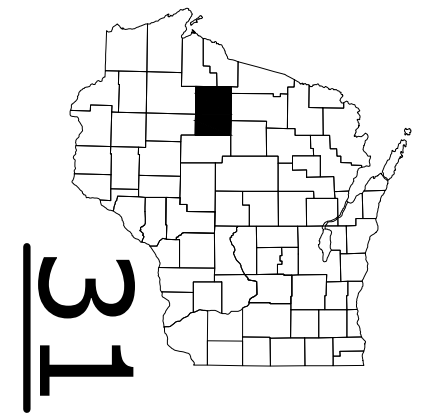


RHI
PROJECT ID: 1580-29-70
COUNTY: PRICE

DECEMBER 2016
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 = 238



| | |
|--------------------|-------------|
| DESIGN DESIGNATION | |
| A.A.D.T. | = 3,100 |
| A.A.D.T. | = 4,100 |
| D.H.V. | = 1,042 |
| D.D. | = 61/39 |
| T. | = 10.5% |
| DESIGN SPEED | = 55 MPH |
| ESALS | = 1,160,700 |

CONVENTIONAL SYMBOLS

| | | | |
|-----------------------------------|---------|--|---------|
| PLAN | | PROFILE | |
| CORPORATE LIMITS | //// | GRADE LINE | — |
| PROPERTY LINE | --- | ORIGINAL GROUND | ~ |
| LOT LINE | --- | MARSH OR ROCK PROFILE (To be noted as such) | ROCK |
| LIMITED HIGHWAY EASEMENT | --- | SPECIAL DITCH | LABEL |
| EXISTING RIGHT OF WAY | --- | GRADE ELEVATION | 95.36 |
| PROPOSED OR NEW R/W LINE | --- | CULVERT (Profile View) | □ |
| SLOPE INTERCEPT | ~ | UTILITIES | |
| REFERENCE LINE | ~ | ELECTRIC | — E — |
| EXISTING CULVERT | — | FIBER OPTIC | — FO — |
| PROPOSED CULVERT (Box or Pipe) | — | GAS | — G — |
| COMBUSTIBLE FLUIDS | CAUTION | SANITARY SEWER | — SAN — |
| MARSH AREA | ~ | STORM SEWER | — SS — |
| WOODED OR SHRUB AREA | ~ | TELEPHONE | — T — |
| | | WATER | — W — |
| | | UTILITY PEDESTAL | ⊕ |
| | | POWER POLE | ⊕ |
| | | TELEPHONE POLE | ⊕ |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

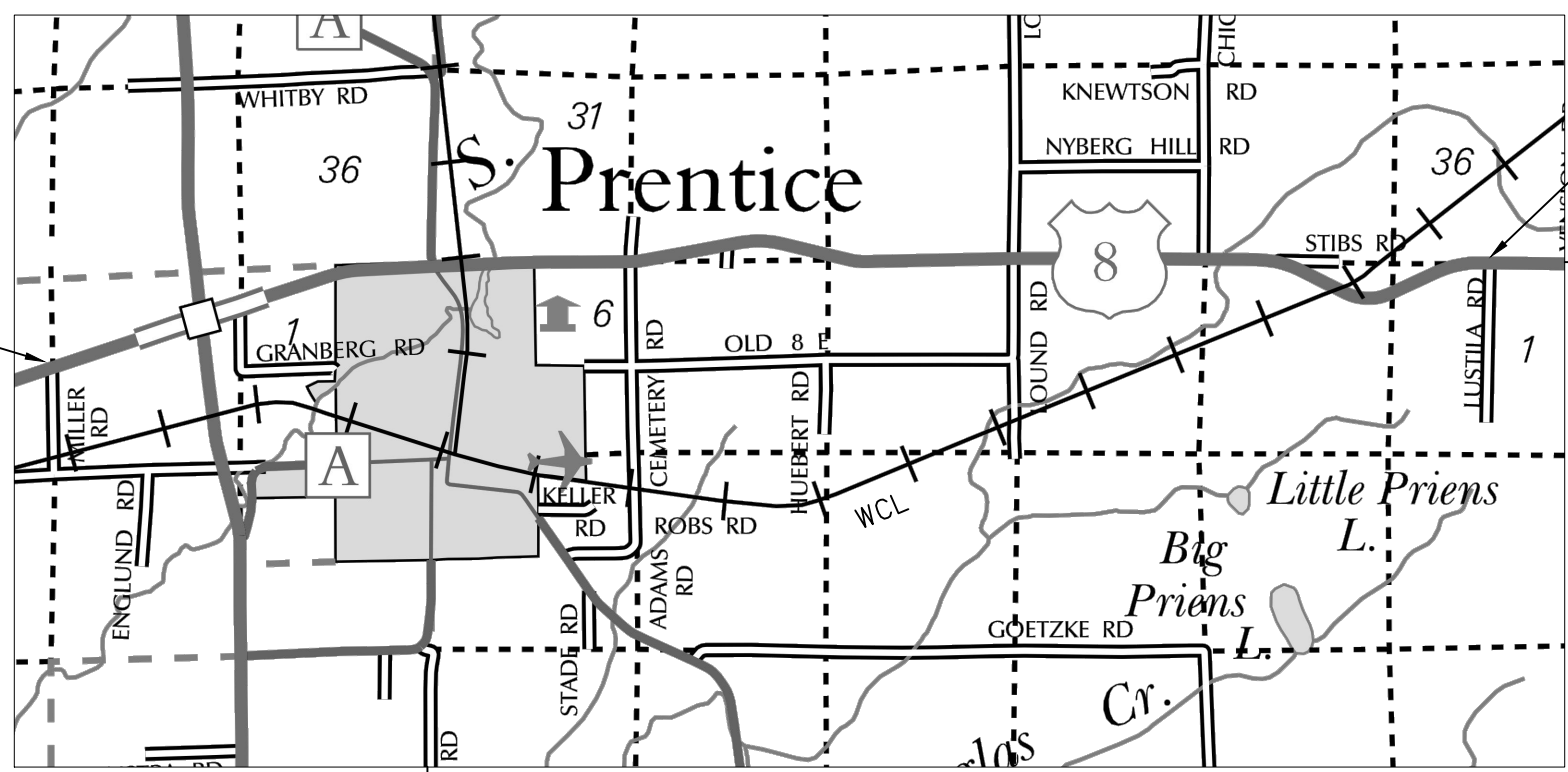
PRENTICE - BRADLEY

MILLER ROAD - LUSTILA ROAD

USH 8
PRICE

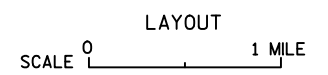
| |
|----------------------|
| STATE PROJECT NUMBER |
| 1580-29-70 |

| STATE PROJECT | FEDERAL PROJECT | |
|---------------|-----------------|----------|
| | PROJECT | CONTRACT |
| 1580-29-70 | WISC 2016491 | 1 |
| | | |
| | | |



BEGIN PROJECT
STA 412+00
USH 8
X=788199.60
Y=390930.61

END PROJECT
STA 816+50
USH 8



TOTAL NET LENGTH OF CENTERLINE = 7.66 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, PRICE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

| | |
|--|-------------------------------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| PREPARED BY | |
| Surveyor | EMCS, INC |
| Designer | KAI M. KILEN |
| Project Manager | MICHAEL G. GRAGE |
| Regional Examiner | CHERYL L. SIMON |
| Regional Supervisor | ROBIN W. STAFFORD |
| APPROVED FOR THE DEPARTMENT | |
| DATE: 7/28/2016 | <i>Michael Grage</i> (Signature) |

UTILITIES

CENTURYLINK - COMMUNICATION

JIM ARQUETTE
PO BOX 14
SHELDON, WI 54766
PHONE: (715) 452-5168 WORK
PHONE: (715) 563-8295 MOBILE
E-MAIL: JIM.ARQUETTE@CENTURYLINK.COM

NORTHERN NATURAL GAS COMPANY - GAS

JEFF TELKER
1995 NNG ROAD
CARLTON, MN 55718
PHONE: (402) 530-3466 WORK
PHONE: (218) 348-3470 MOBILE
E-MAIL: JEFF.TELKER@NNGCO.COM

PACKERLAND BROADBAND - COMMUNICATION

RANDY SIMMS
PO BOX 885
IRON MOUNTAIN, MI 49801
PHONE: (906) 282-3802 MOBILE
E-MAIL: RANDY.SIMMS@CCISYSTEMS.COM

PRICE COUNTY TELEPHONE - COMMUNICATION

JEFF HALLSTRAND
105 N AVON AVE
PHILLIPS, WI 54555
PHONE: (715) 739-2151 WORK
PHONE: (715) 820-1816 MOBILE
E-MAIL: JALLSTRANDJ@PCTCNET.NET

PRICE ELECTRIC COOP - ELECTRICITY

BEN ORYSEN
508 N LAKE AVE
PHILLIPS, WI 54555
PHONE: (715) 339-2155 WORK
PHONE: (715) 820-0200 MOBILE
E-MAIL: BORYSEN@PRICE-ELECTRIC.COM

XCEL ENERGY - ELECTRICITY

ANDY HALOPKA
310 HICKORY HILLS LANE
PHILLIPS, WI 54555
PHONE: (715) 737-2678 WORK
PHONE: (715) 316-1356 MOBILE
E-MAIL: A.HALOPKA@XCELENERGY.COM

XCEL ENERGY - TRANSMISSION

CHARLES DIENGER
1414 WEST HAMILTON
PO BOX 8
EAU CLAIRE, WI 54702
PHONE: (651) 955-1089 MOBILE

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE, SUBBASE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING, SEEDING, AND EMATTING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

MILLING DEPTH INDICATED ON PLAN SHEETS IS THE APPROXIMATE DEPTH AT CENTER OR REFERENCE LINE. MILL THE CROSS SLOPE AS SPECIFIED ON THE PLAN SHEETS. IT IS POSSIBLE THAT NOT ALL OF THE ROADWAY SURFACE WILL BE MILLED. AFTER MILLING PREPARE THE ROADWAY SURFACE FOR PAVING UNDER THE PREPARE FOUNDATION FOR ASPHALTIC PAVING BID ITEM.

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

4 1/2-INCH HMA PAVEMENT SHALL BE CONSTRUCTED IN TWO LAYERS.
THE UPPER LAYER SHALL BE 2.0 INCHES HMA PAVEMENT 4 LT 58-28 S.
THE LOWER LAYER SHALL BE 2.5 INCHES HMA PAVEMENT 3 LT 58-28 S.

4-INCH HMA PAVEMENT SHALL BE CONSTRUCTED IN TWO LAYERS.
THE UPPER LAYER SHALL BE 2.0 INCHES HMA PAVEMENT 4 LT 58-28 S.
THE LOWER LAYER SHALL BE 2.0 INCHES HMA PAVEMENT 3 LT 58-28 S.

6 1/4-INCH HMA PAVEMENT SHALL BE CONSTRUCTED IN THREE LAYERS
THE UPPER LAYER SHALL BE 2.0 INCHES HMA PAVEMENT 4 LT 58-28 S.
THE LOWER LAYERS SHALL BE 2.00 & 2.25 INCHES HMA PAVEMENT 3 LT 58-28 S.

DNR

SHAWN HASELEU
810 W MAPLE STREET
SPOONER, WI 54801
PHONE: (715) 635-4228 WORK
E-MAIL: SHAWN.HASELEU@WISCONSIN.GOV

PAVEMENT BORINGS

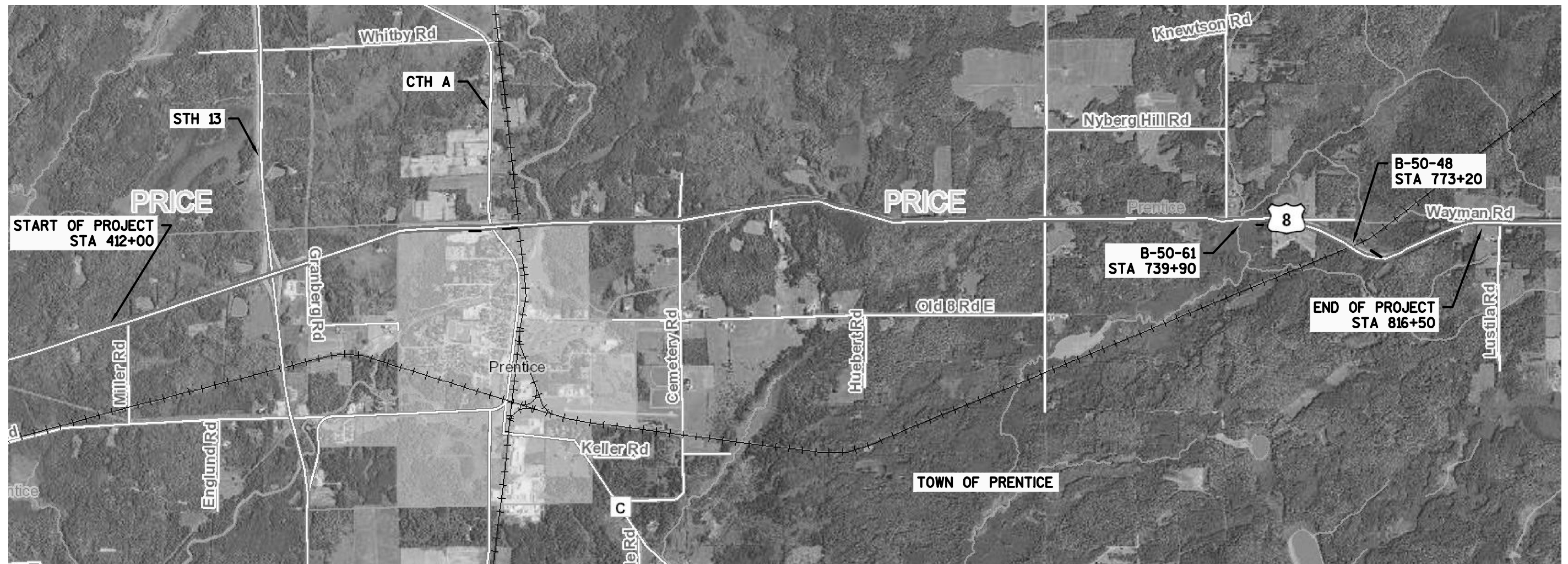
| Location | Offset | HMA Pavement |
|----------|---------|--------------|
| 420+55 | 7.0' LT | 4.5" |
| 435+88 | 6.0' RT | 4.5" |
| 451+53 | 4.0' LT | 8.75" |
| 468+00 | 4.5' LT | 7.25" |
| 482+50 | 6.0' LT | 4.5" |
| 497+97 | 5.0' RT | 4.0" |
| 513+74 | 5.0' LT | 4.5" |
| 528+97 | 5.5' RT | 3.5" |
| 544+57 | 6.0' LT | 4.75" |
| 560+12 | 6.0' RT | 4.5" |
| 575+53 | 6.0' LT | 6.0" |
| 591+14 | 5.5' RT | 4.0" |
| 606+90 | 6.0' LT | 5.75" |
| 621+88 | 6.5' RT | 4.5" |
| 637+46 | 5.0' LT | 6.0" |
| 653+07 | 6.0' RT | 3.75" |
| 668+60 | 6.0' LT | 6.0" |
| 683+90 | 5.5' RT | 5.0" |
| 699+25 | 7.5' LT | 4.5" |
| 715+04 | 5.5' RT | 5.0" |
| 730+36 | 5.5' LT | 4.5" |
| 746+18 | 5.5' RT | 14.0" |
| 762+33 | 6.0' LT | 8.5" |
| 777+23 | 5.5' RT | 6.75" |
| 792+52 | 5.5' LT | 14.0" |
| 807+89 | 5.5' RT | 12.5" |

ALL LOCATIONS AND OFFSETS ARE APPROXIMATE.
OFFSET IS FROM EXISTING CENTERLINE.

DIGGERSHOTLINE

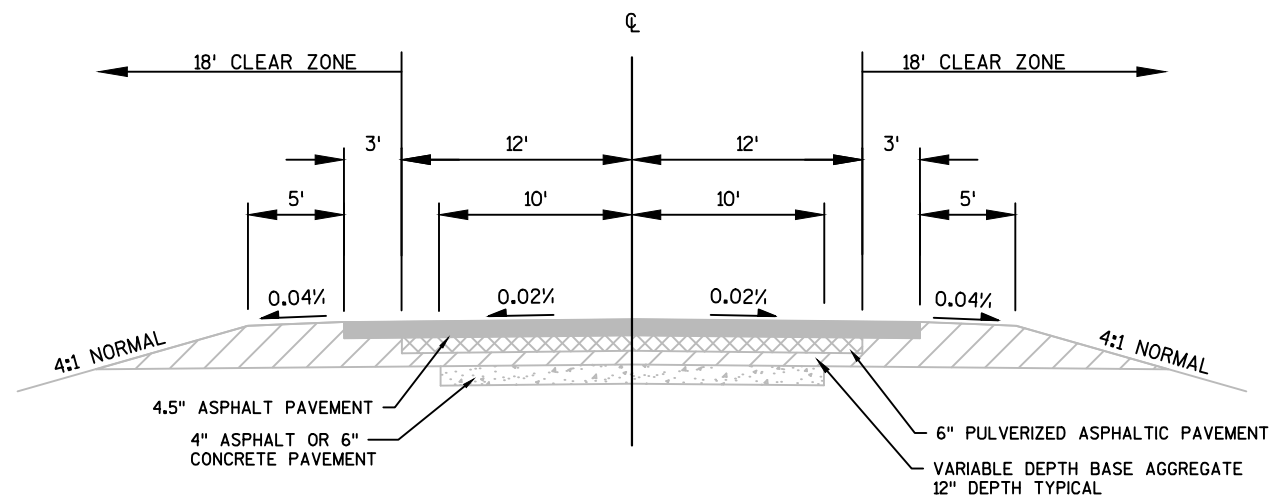
Dial 811 or (800)242-8511

www.DiggersHotline.com



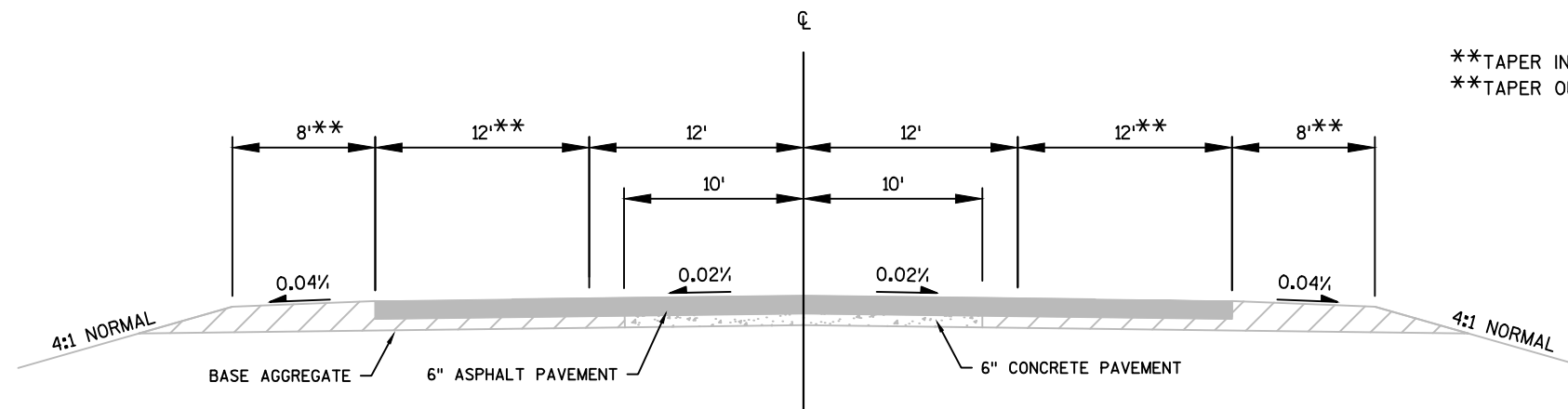
2

2 |



EXISTING TYPICAL SECTION

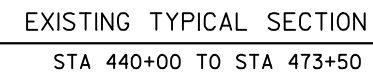
STA 412+00 TO STA 440+00
STA 472+42 TO STA 516+35
STA 525+80 TO STA 739+50

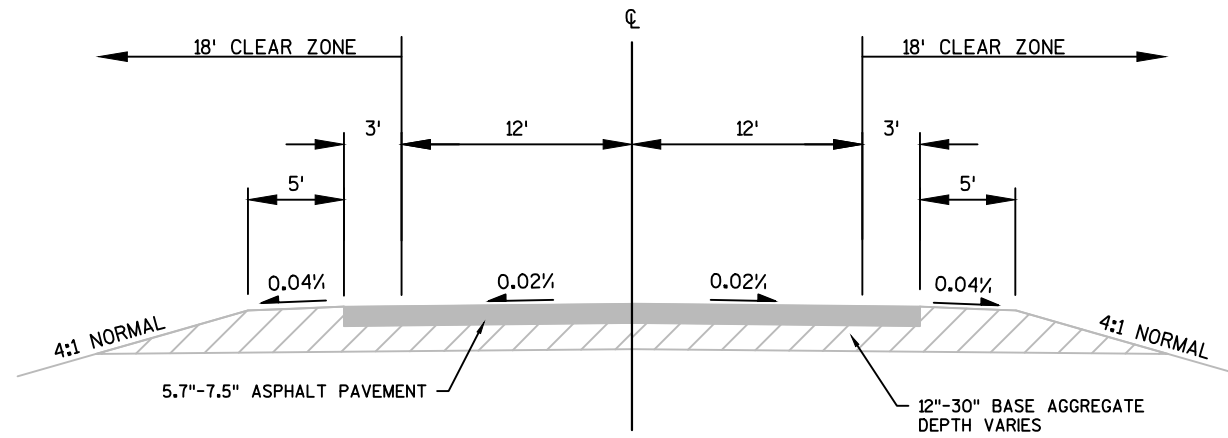


EXISTING TYPICAL SECTION

STA 515+35 TO STA 525+80

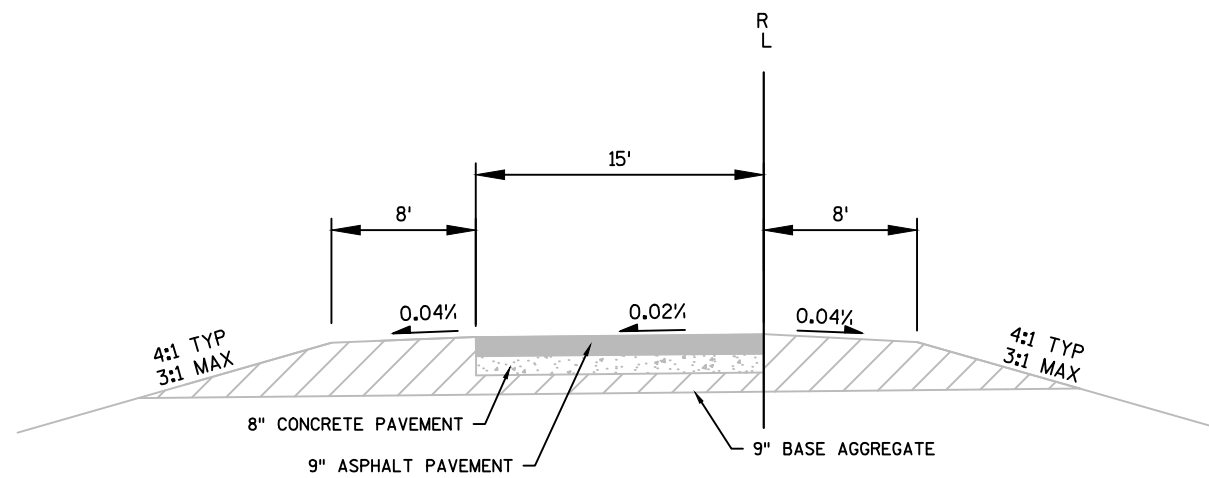
**TAPER INTO FULL SECTION STA 515+35 - 518+25
 **TAPER OUT OF FULL SECTION STA 524+45 - 525+80





EXISTING TYPICAL SECTION

STA 740+30 TO STA 816+50

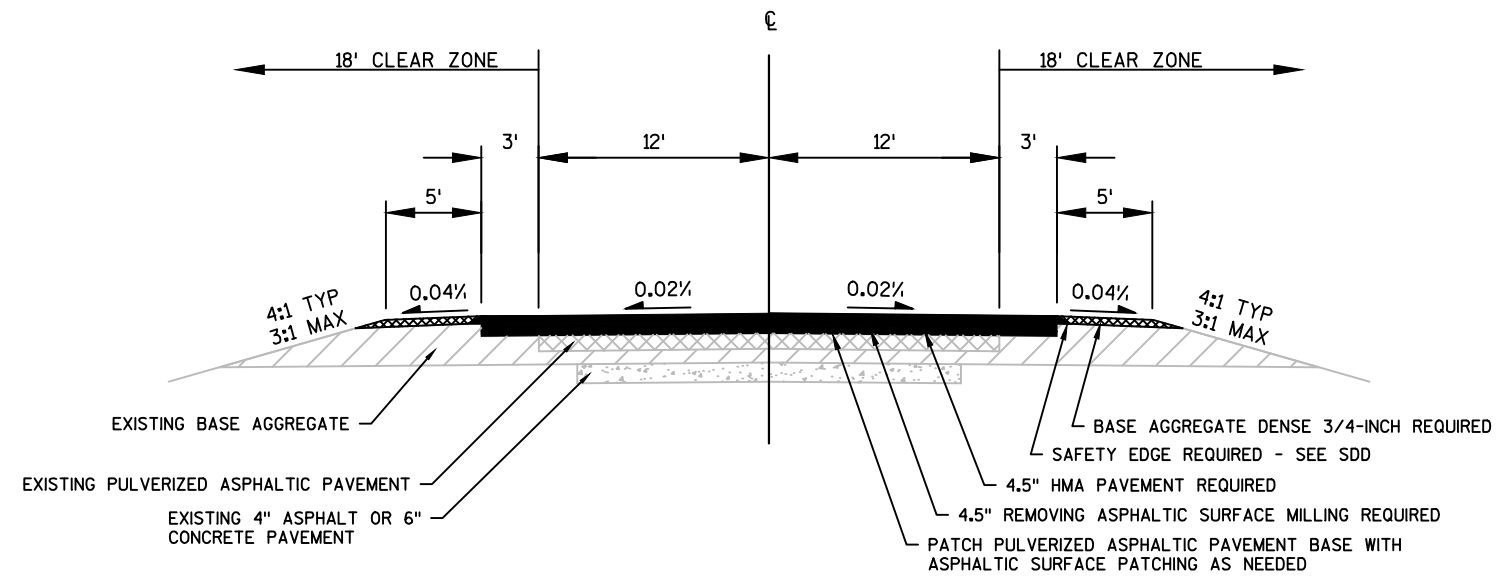


EXISTING TYPICAL RAMP SECTION

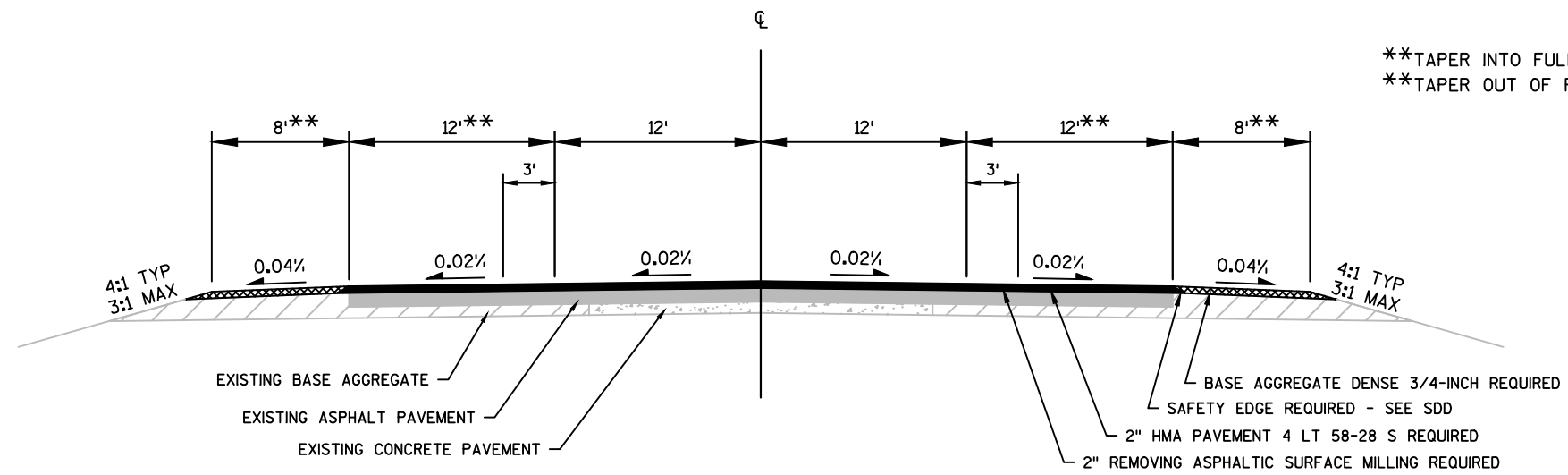
USH 8 @ STH 13

2

2

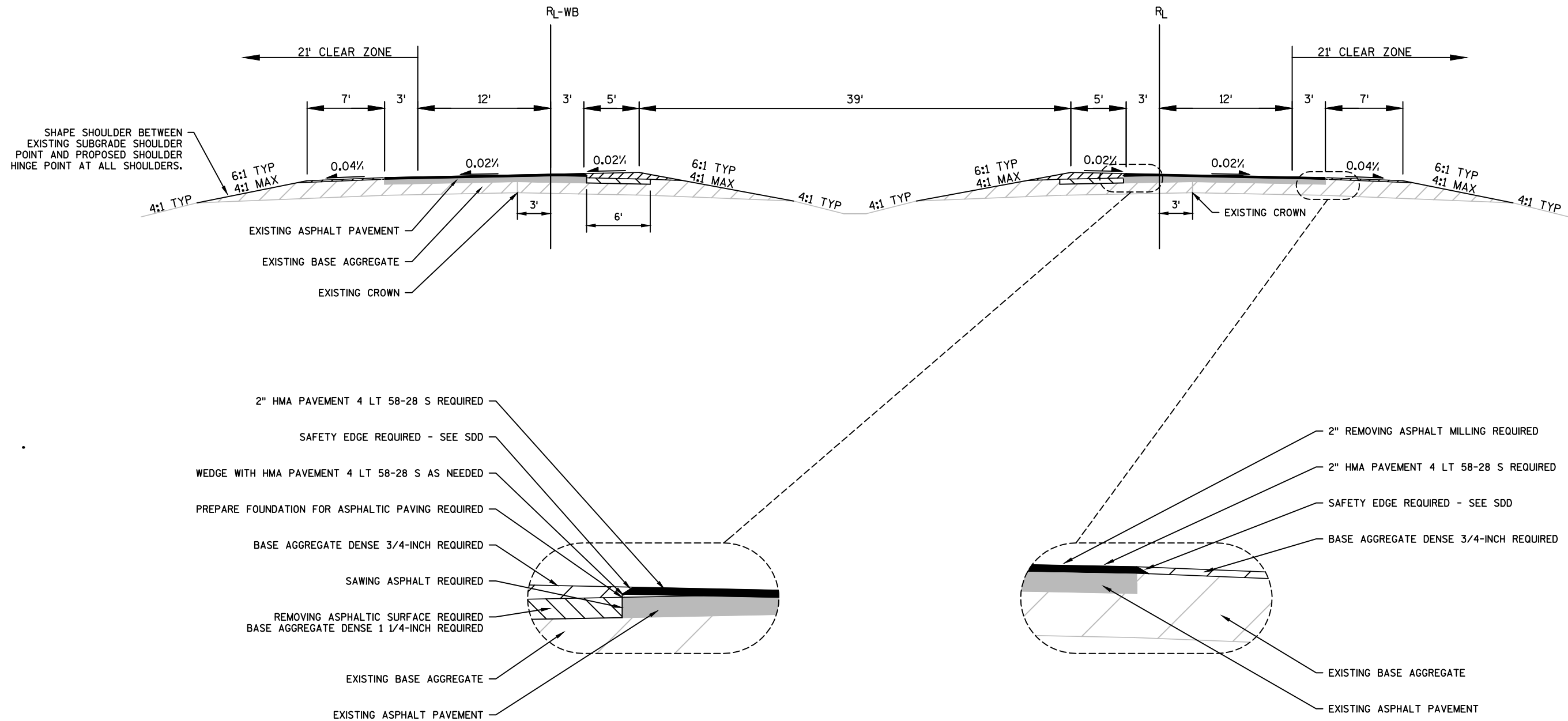


STA 412+00 TO STA 436+60
STA 476+60 TO STA 515+35
STA 542+00 TO STA 739+50

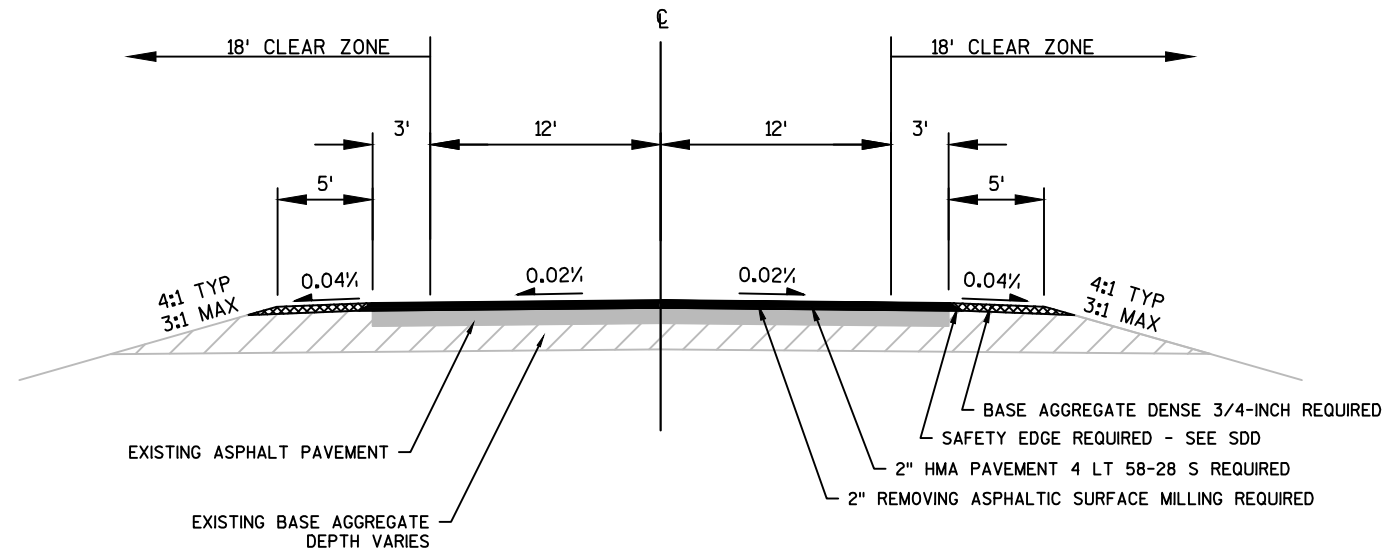


STA 515+35 TO STA 525+80

**TAPER INTO FULL SECTION STA 515+35 - 518+25
 **TAPER OUT OF FULL SECTION STA 524+45 - 525+80

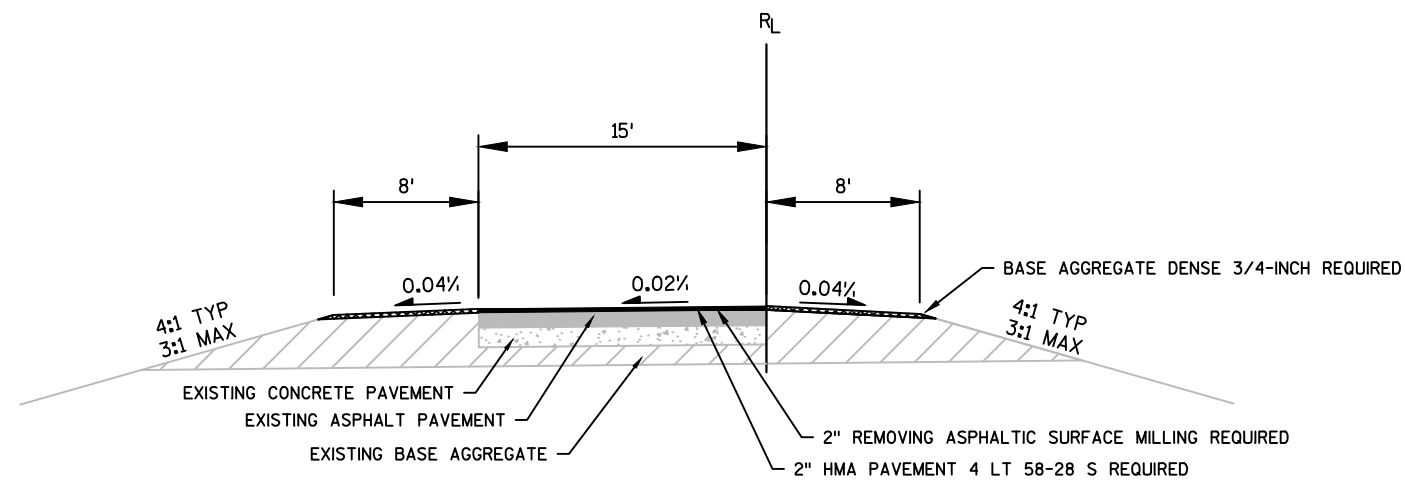


PROPOSED TYPICAL SECTION
STA 436+60 TO STA 476+50



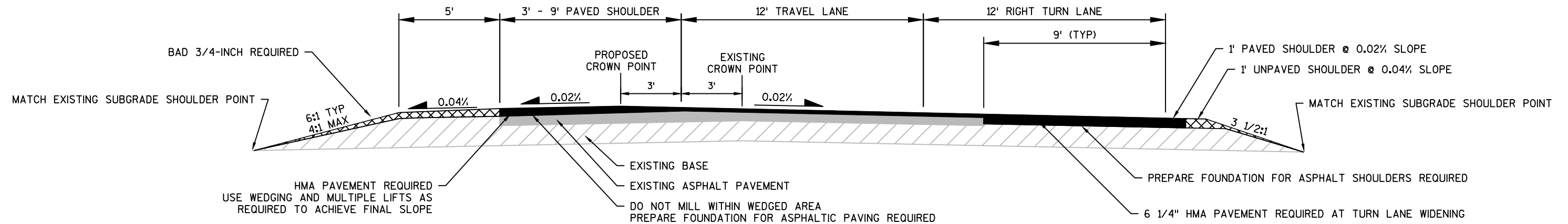
PROPOSED TYPICAL SECTION

STA 740+30 TO STA 772+15
STA 774+38 TO STA 816+50



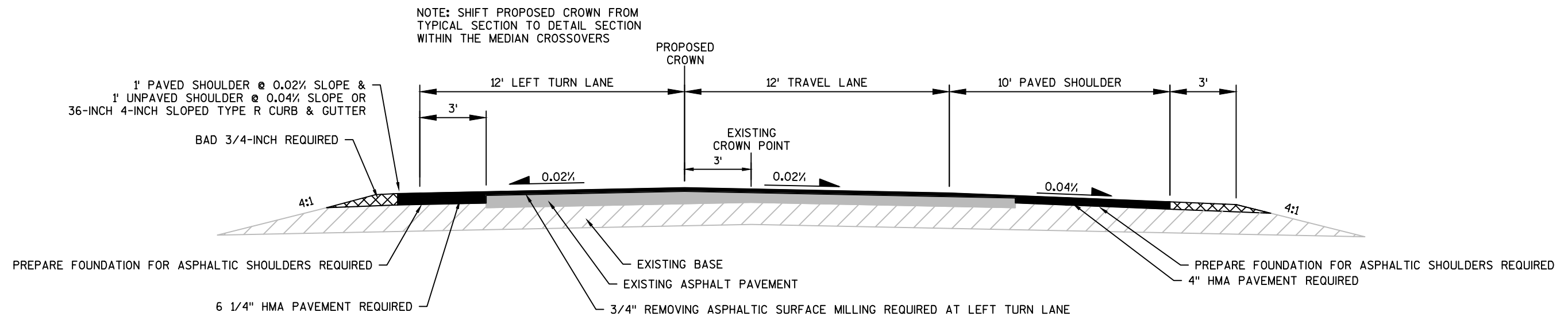
PROPOSED TYPICAL RAMP SECTION

USH 8 @ STH 13



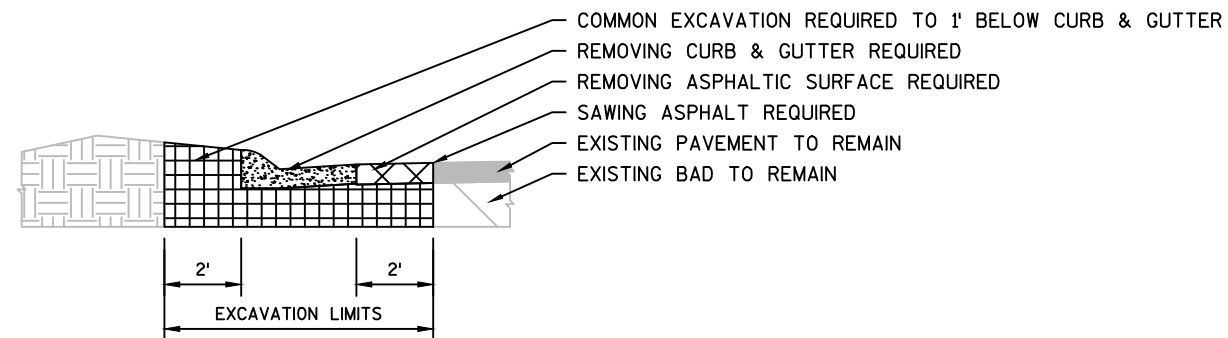
STH 13 INTERCHANGE RIGHT TURN LANE DETAIL

STH 13 SB ON RAMP
STH 13 NB ON RAMP
GRANBERG ROAD



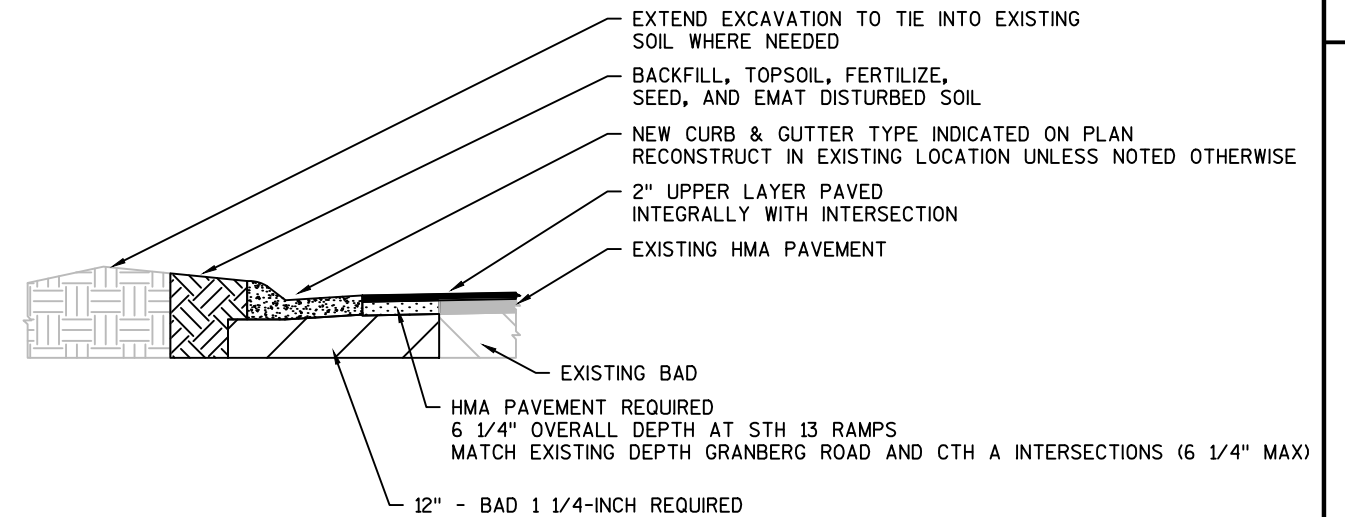
STH 13 INTERCHANGE LEFT TURN LANE DETAIL

STA 454+50 - 459+00

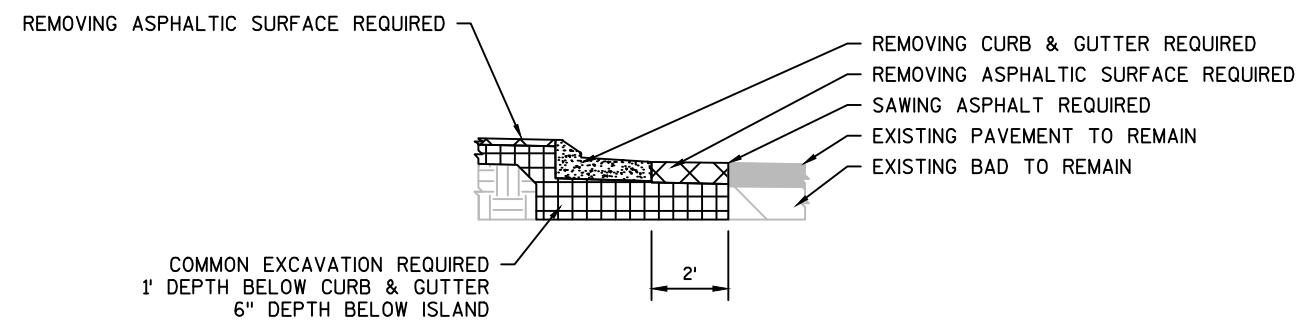


TYPICAL CURB & GUTTER REMOVAL DETAIL

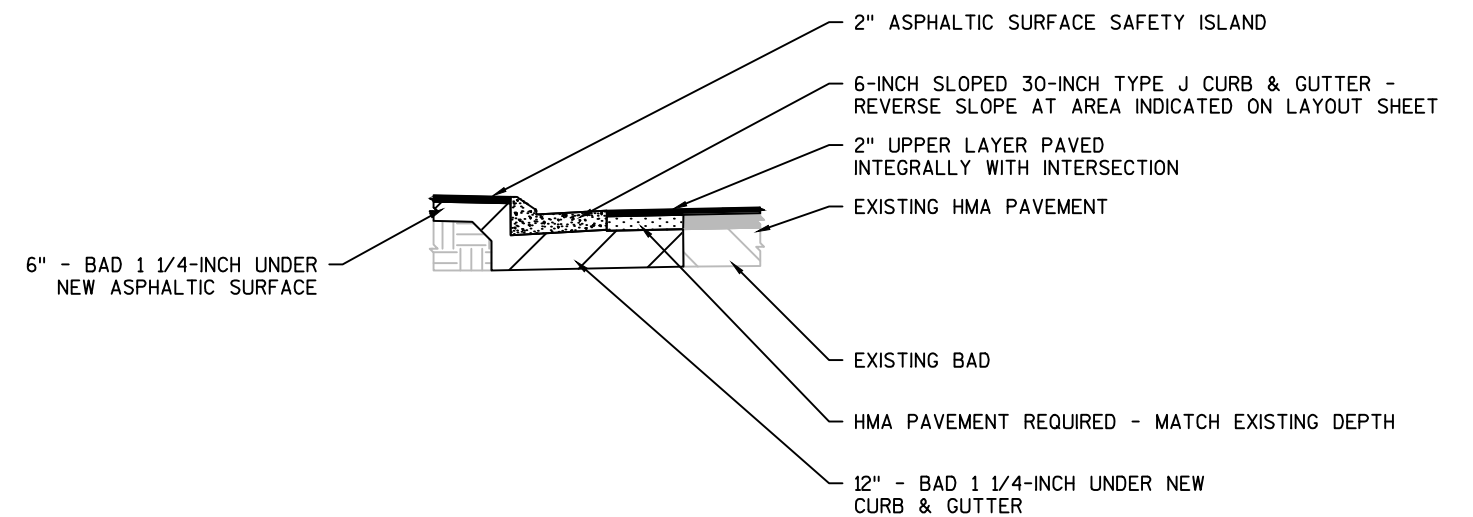
NOTE: AT STH 13 ON RAMPS INCLUDE
 4' WIDE EARTHEN TERRACE BEHIND
 CURB AT +0.04% SLOPE



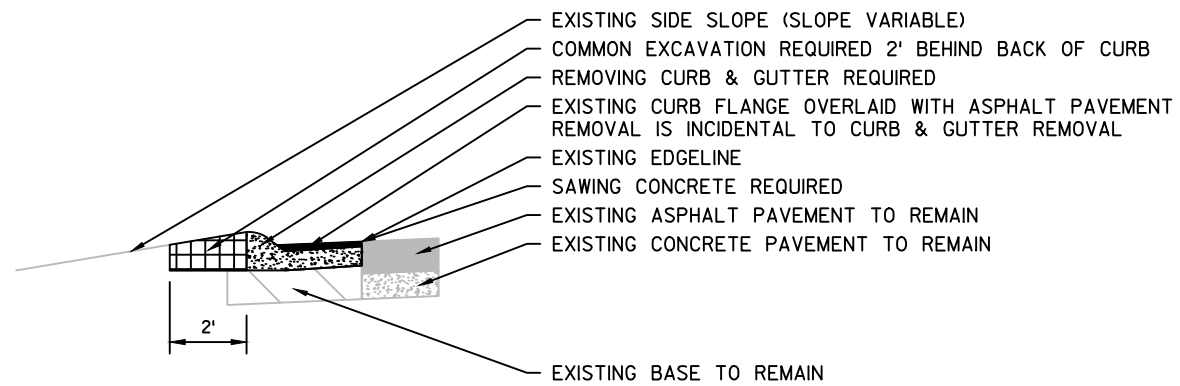
TYPICAL CURB & GUTTER REPLACEMENT DETAIL



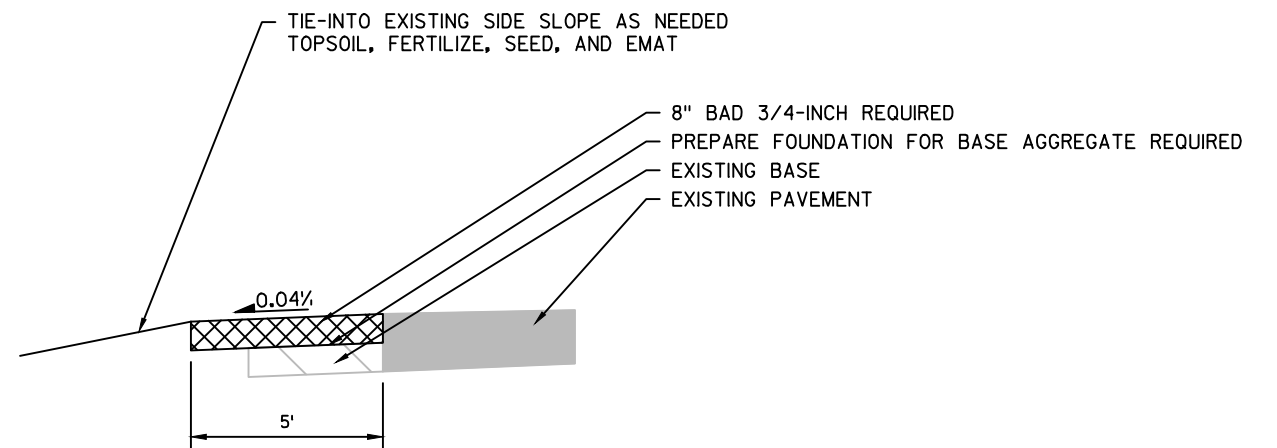
CTH A ISLAND REMOVAL DETAIL



CTH A ISLAND REPLACEMENT DETAIL

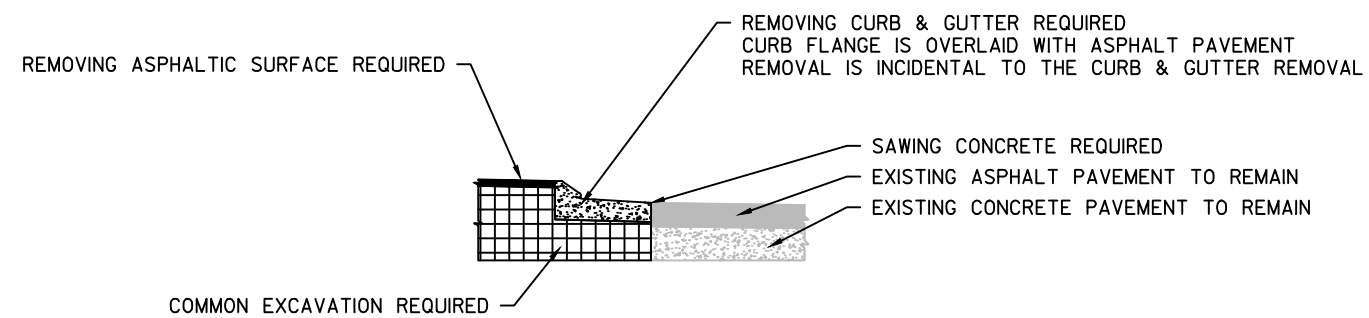


STH 13 OFF RAMP CURB & GUTTER REMOVAL DETAIL

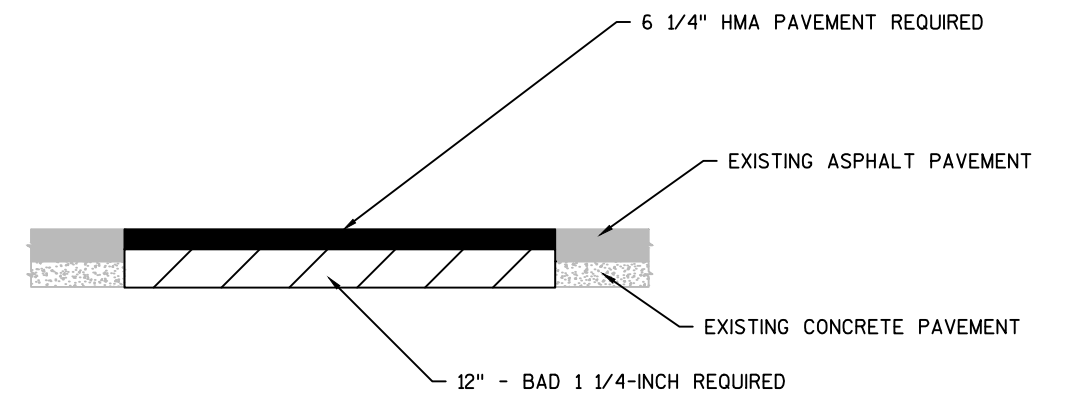


STH 13 OFF RAMP RESTORATION DETAIL

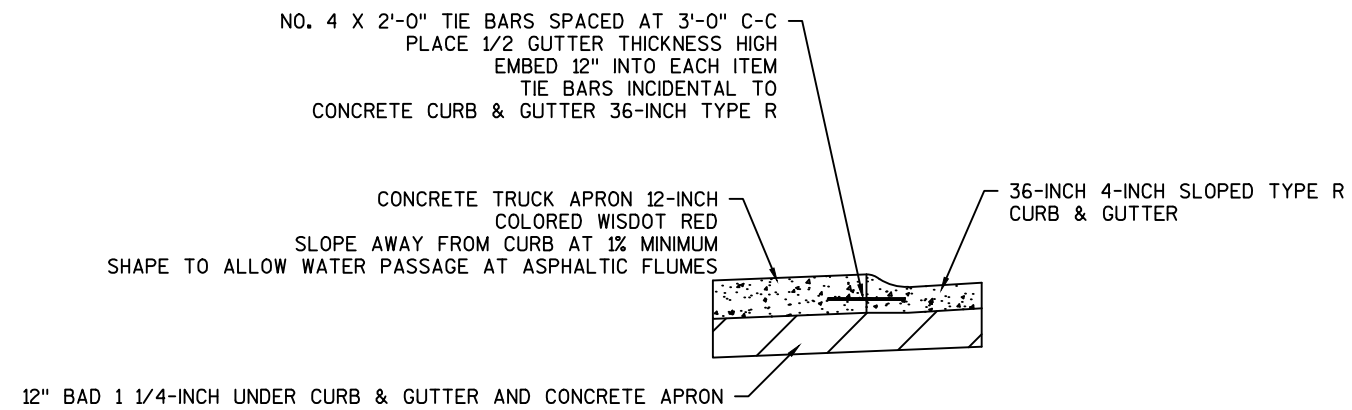
USE AT CURB & GUTTER REMOVAL AREAS



STH 13 OFF RAMP ISLAND REMOVAL DETAIL

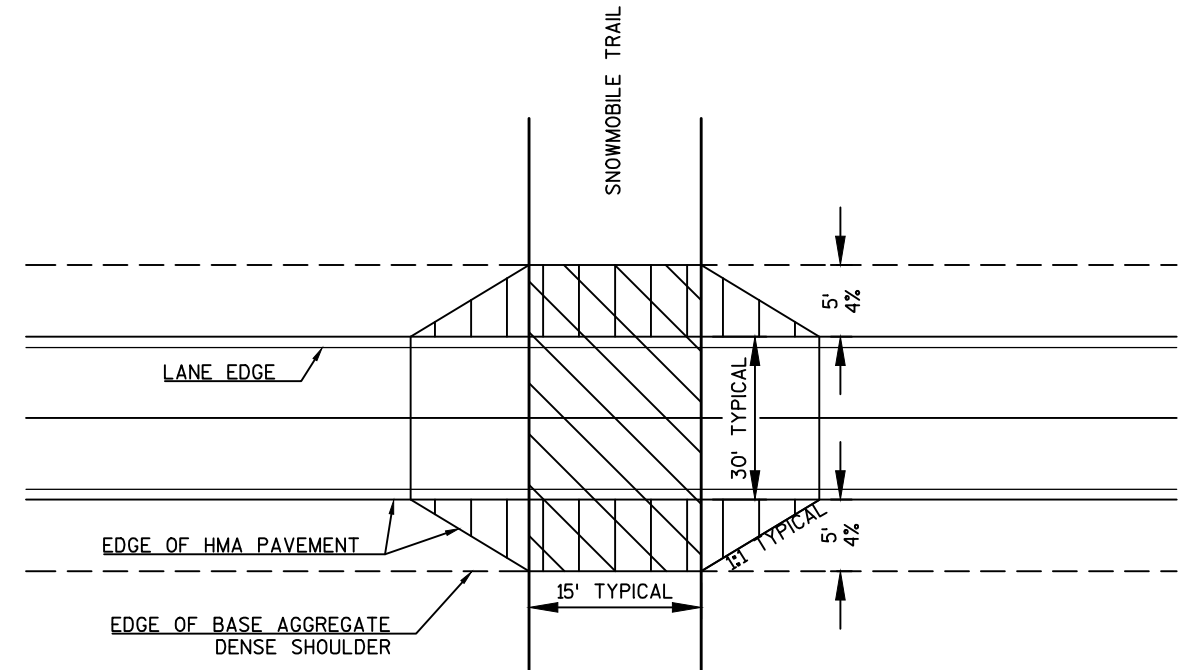


STH 13 OFF RAMP ISLAND RESTORATION DETAIL





CONCRETE TRUCK APRON DETAIL

STH 13 INTERCHANGE - SEE PLANSHEETS FOR EXACT LOCATIONS



SNOWMOBILE TRAIL CROSSING
STA 508+30

| | |
|---|---|
|  | PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE TRAIL CROSSING |
|  | HMA PAVEMENT WIDENING 4.5-INCHES FOR SNOWMOBILE TRAIL CROSSING |

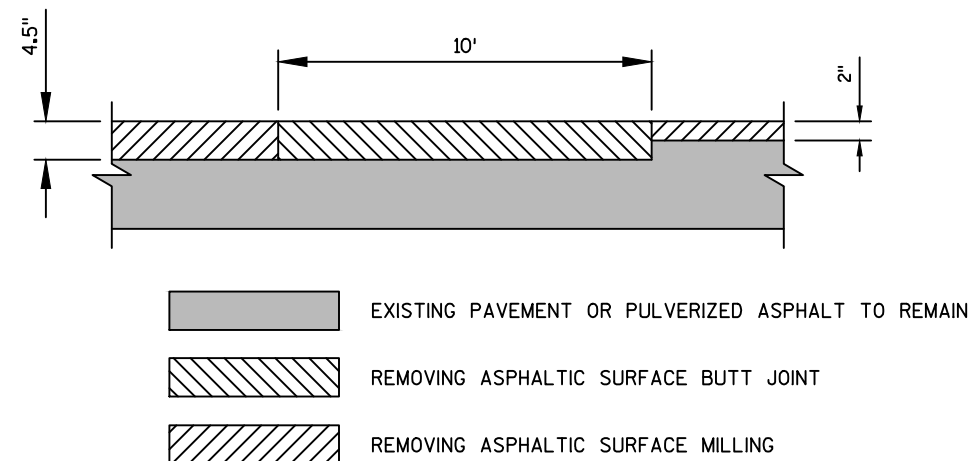
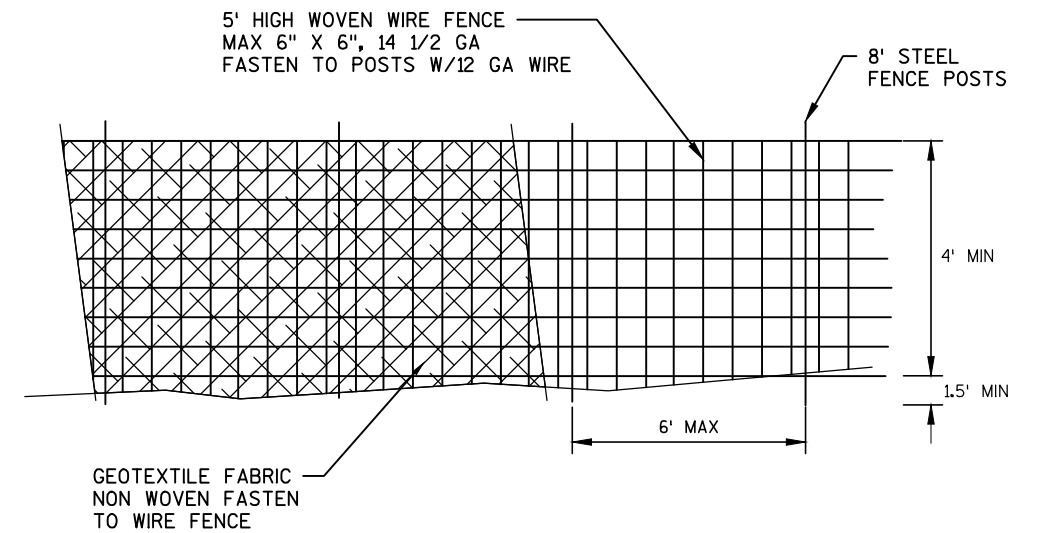
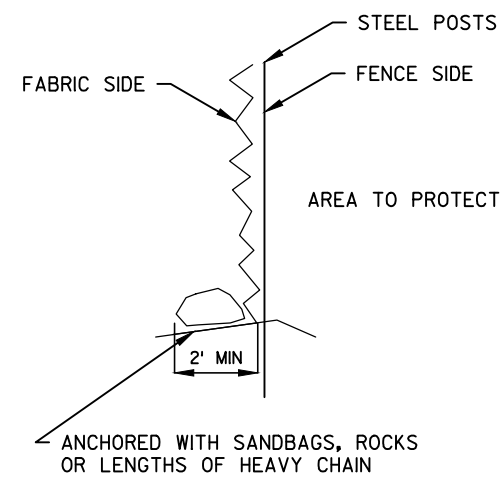
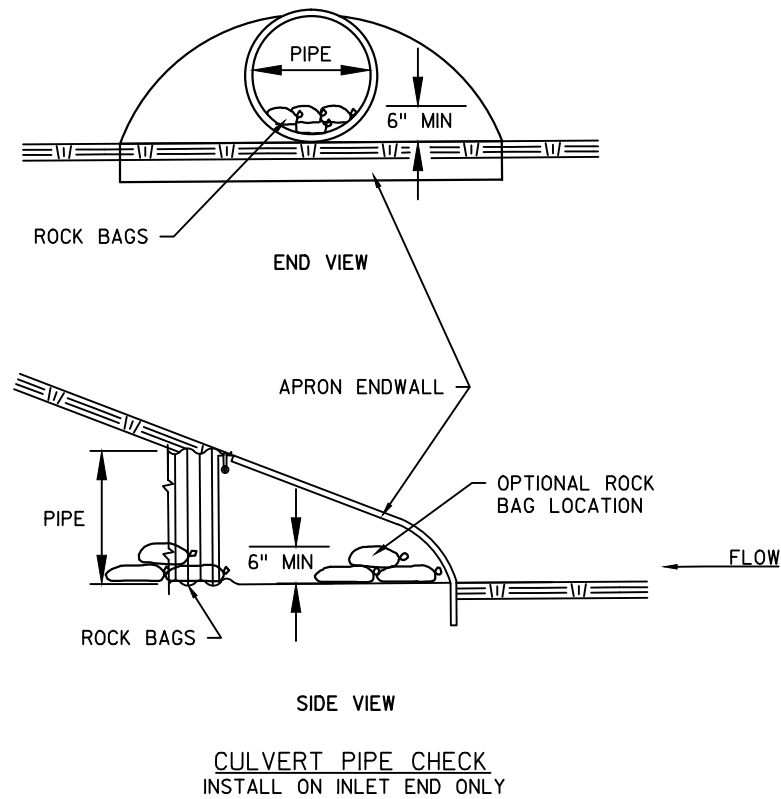
NOTE: PREPARATION FOR PAVEMENT WIDENING
FALLS UNDER PREPARE FOUNDATION
FOR ASPHALTIC SHOULDERS.

EXACT LOCATIONS TO BE MARKED
IN THE FIELD BY THE PROJECT PERSONAL.

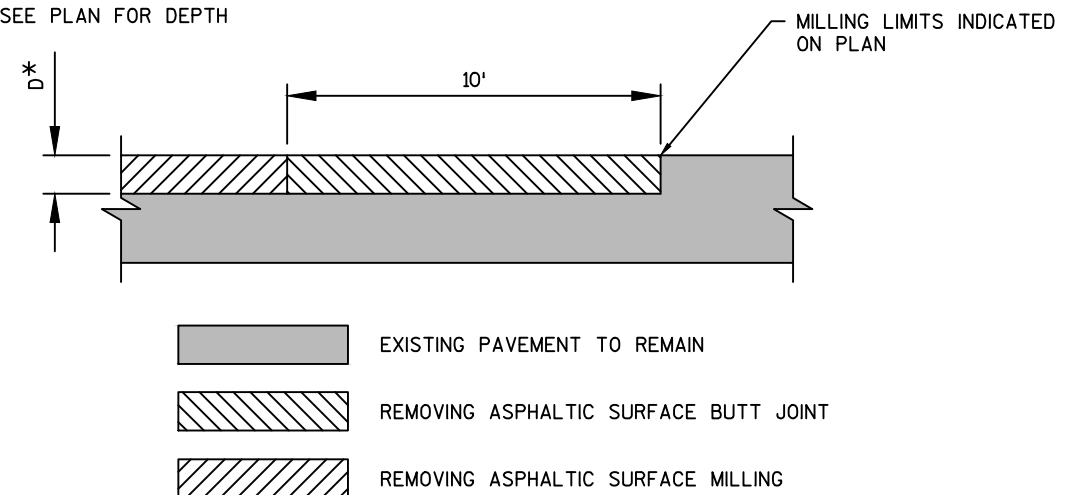
EXACT LOCATIONS TO BE MARKED
IN THE FIELD BY THE PROJECT PERSONAL.

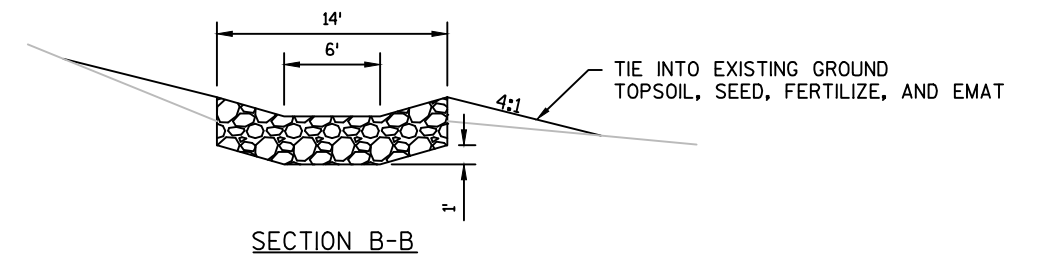
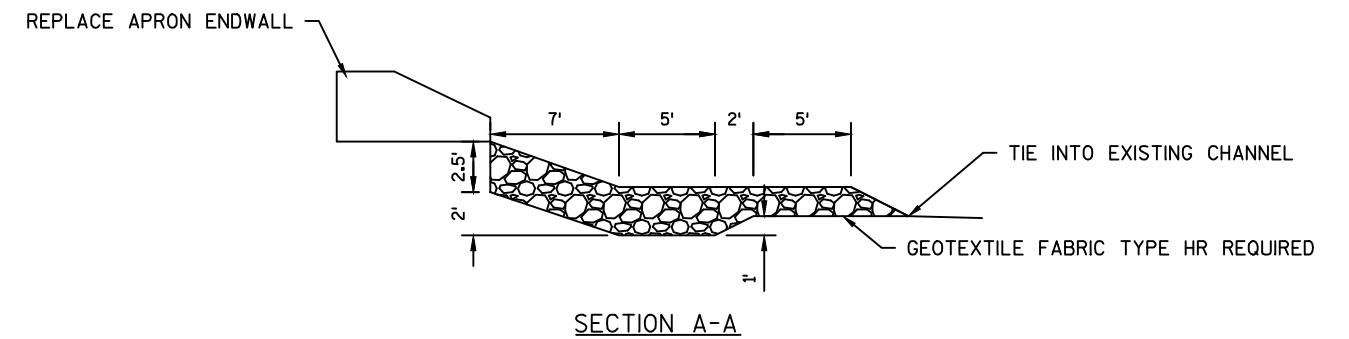
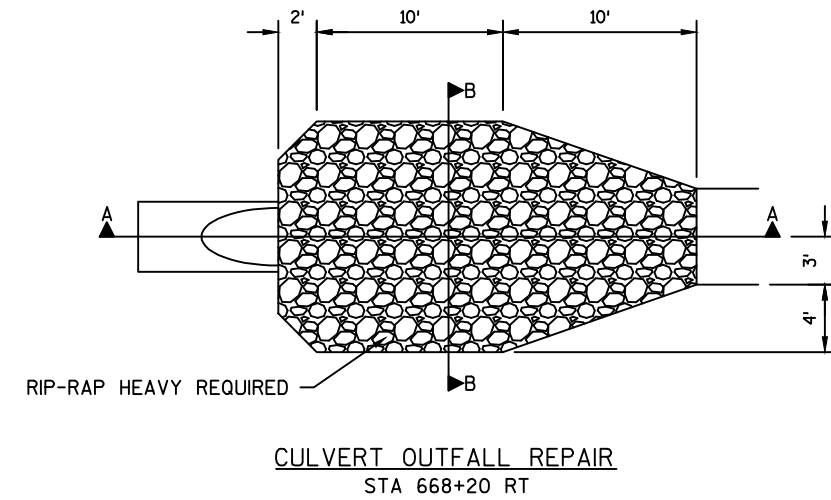
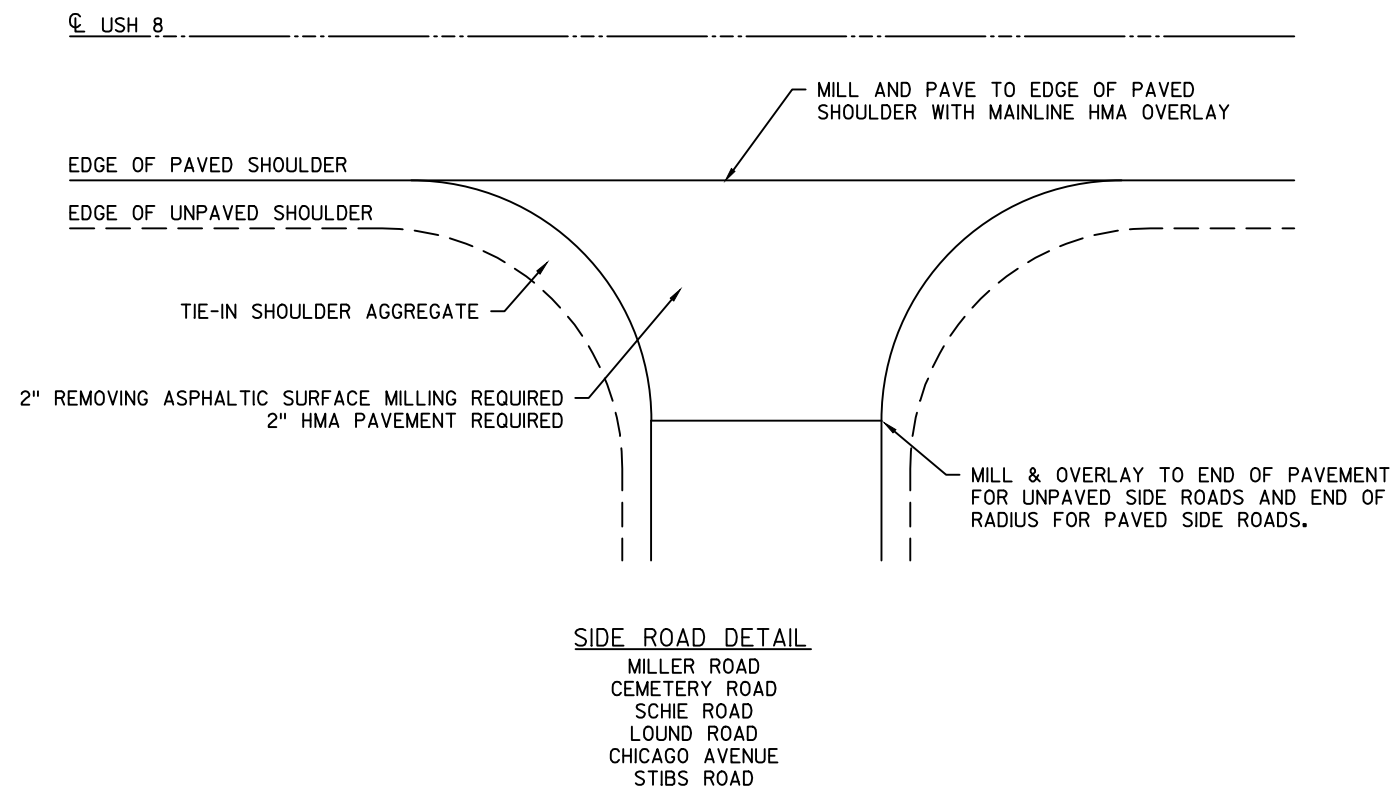
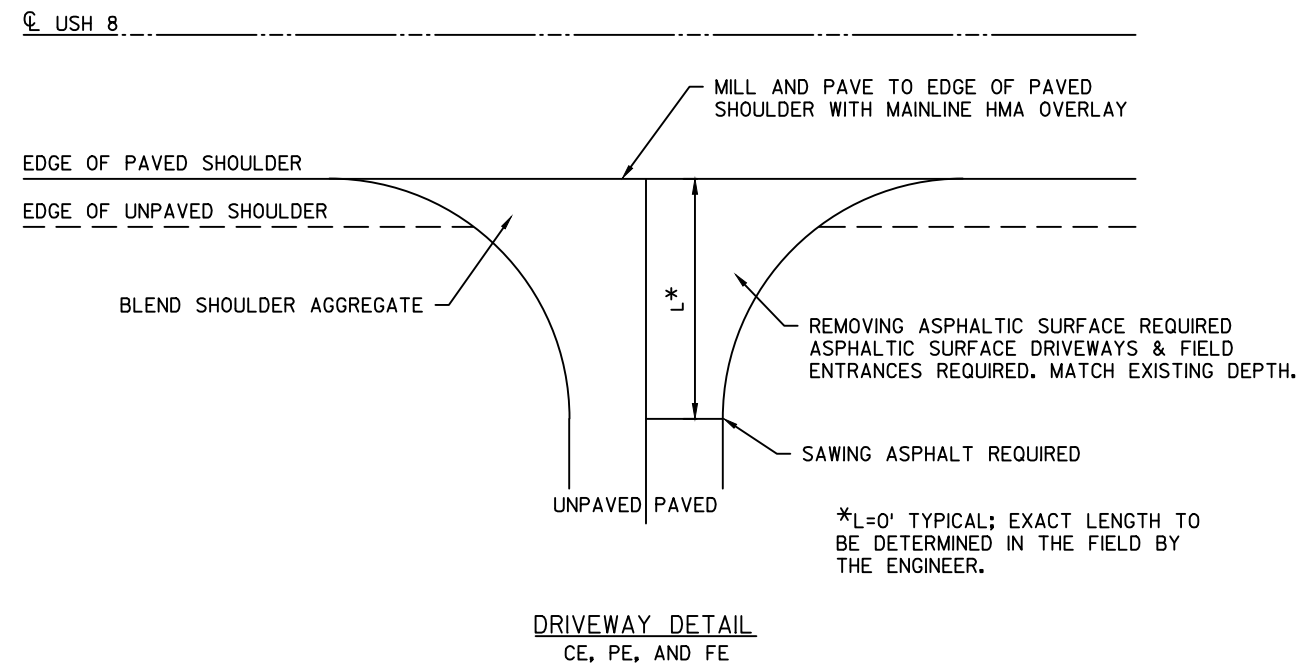
EXACT LOCATIONS TO BE MARKED
IN THE FIELD BY THE PROJECT PERSONAL.

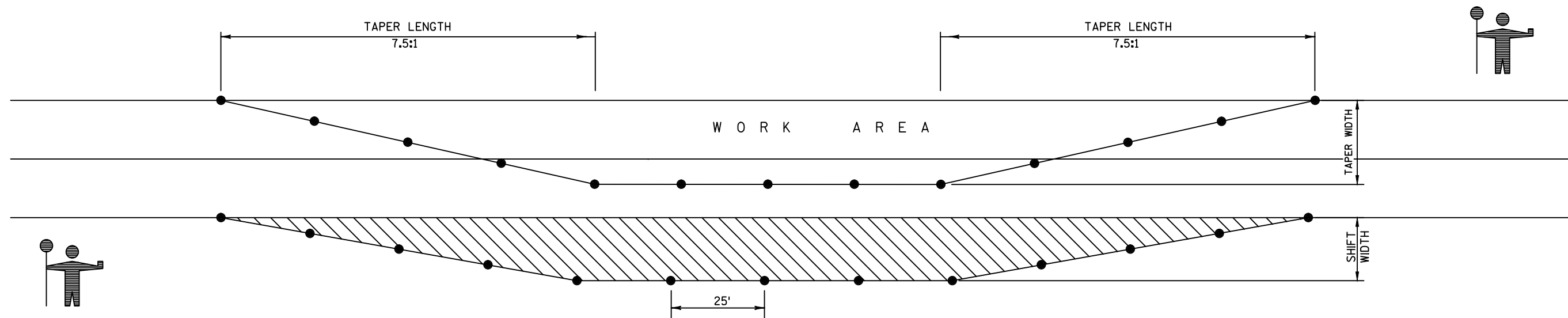
EXACT LOCATIONS TO BE MARKED
IN THE FIELD BY THE PROJECT PERSONAL.



*D = VARIABLE - SEE PLAN FOR DEPTH





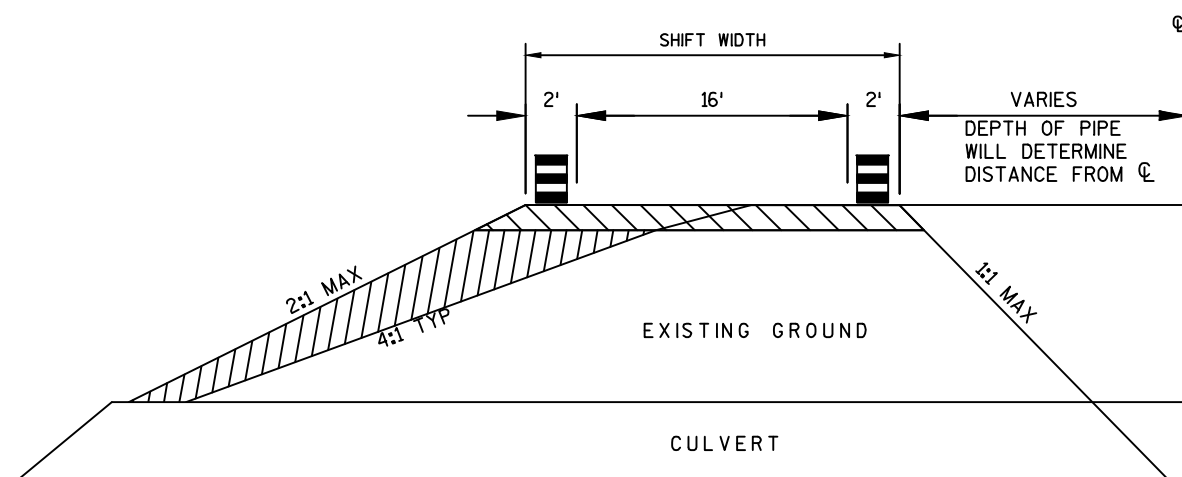


NOTES

1. THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION
2. ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION
3. CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS
4. USE WITH SDD "TRAFFIC CONTROL FOR LANE CLOSURE"
5. FLAGGERS ARE SPECIFIC TO THIS OPERATION

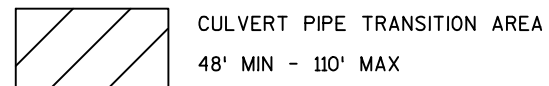
KEY

- TRAFFIC CONTROL DRUM
- ▨ 6" BASE AGGREGATE DENSE 1 1/4 INCH
- INCIDENTAL TO LANE SHIFT ITEM
- ▧ FILL
- INCIDENTAL TO LANE SHIFT ITEM

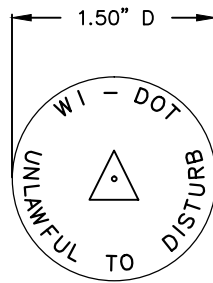


LANE SHIFT DETAIL

CULVERT REPLACEMENTS
STA 610+68
STA 658+80

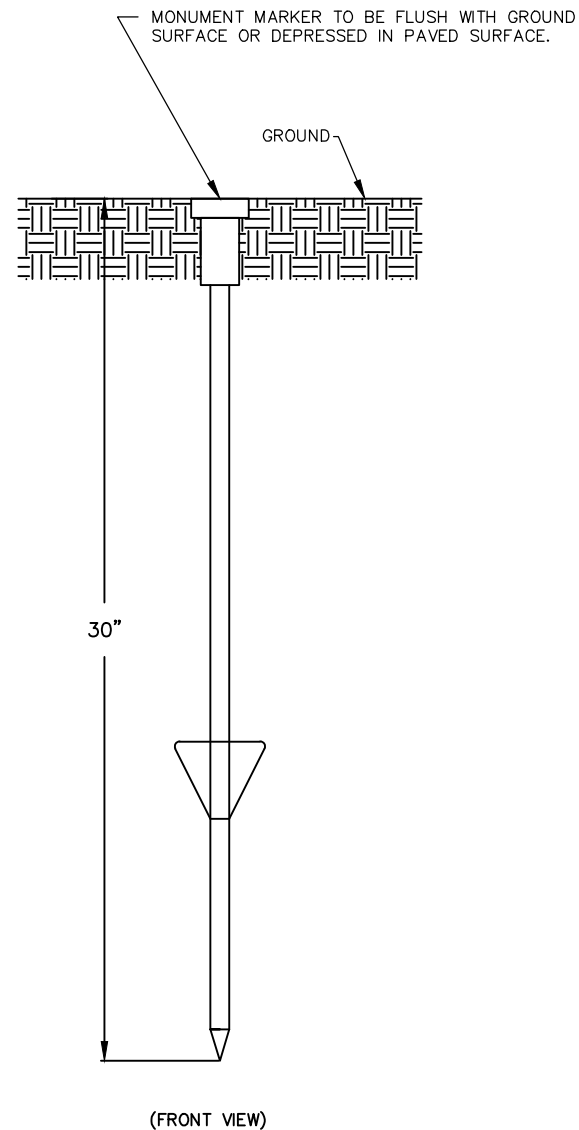


USE AT ALL CULVERT PIPE REPLACEMENTS WHERE ASPHALT PATCH IS
NOT PLACED THE SAME DAY



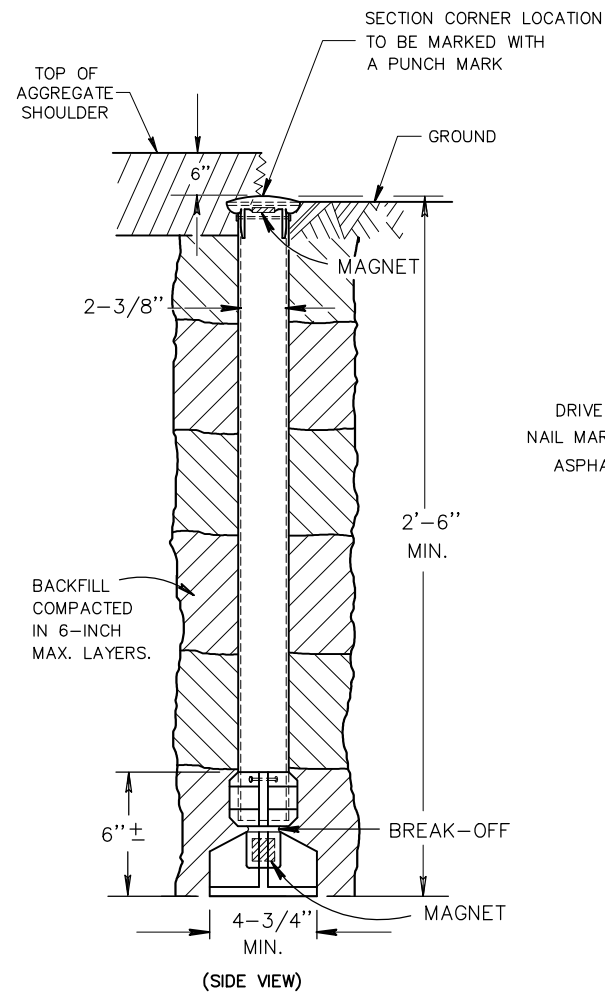
WIS DOT MONUMENT CAP MARKER LOGO (SSDR130)

CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING



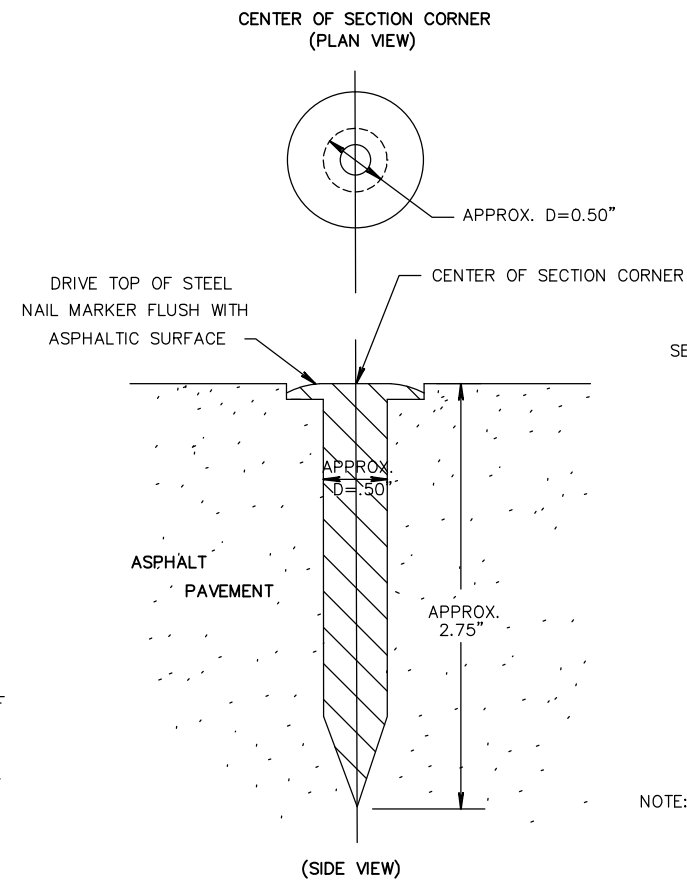
BERNSTEN DRIVABLE MONUMENT SSDR130

LANDMARK REFERENCE MONUMENT (TIES ONLY)



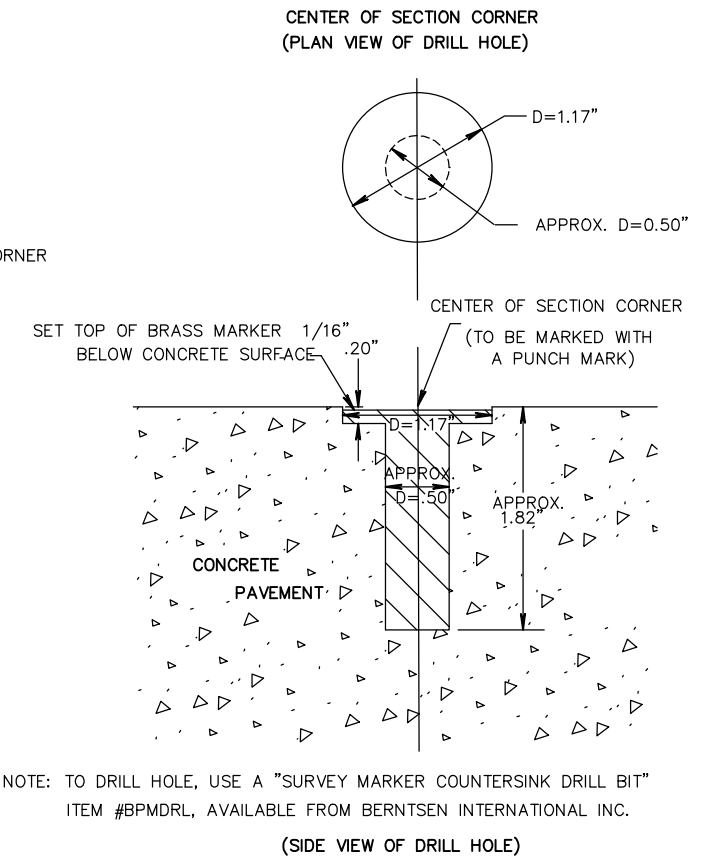
OUTSIDE OF PAVEMENT

BERNTSEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



IN ASPHALTIC PAVEMENT

BERNTSEN SNM1 STEEL NAIL MARKER



IN CONCRETE PAVEMENT

BERNTSEN 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.

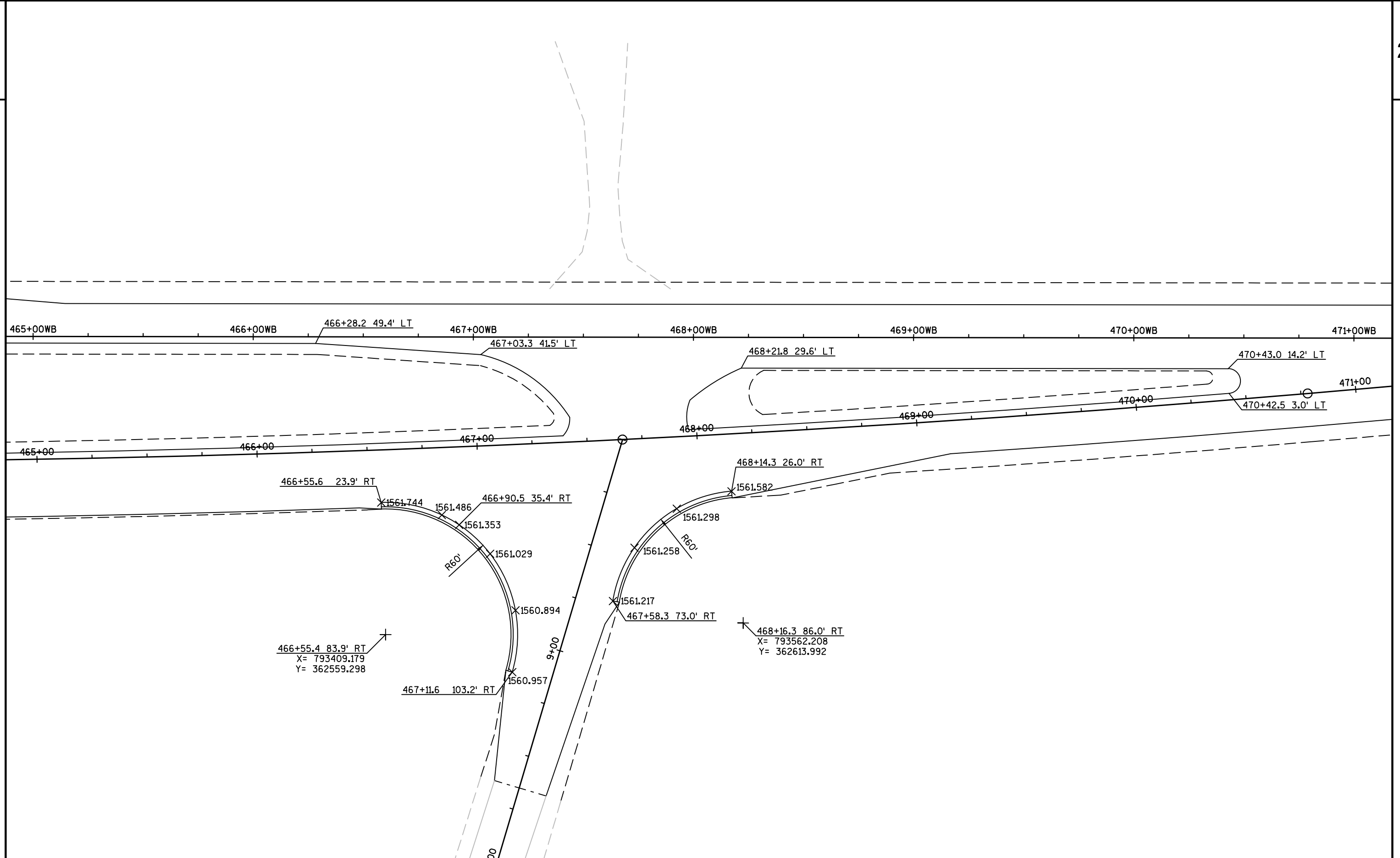
LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER.

CONTRACTOR WILL SUPPLY ALL REQUIRED SURVEY MONUMENTS.

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL

2

2



| | | | | | |
|-----------------------|-----------|--------------|---------------------------|-------|----------|
| PROJECT NO:1580-29-70 | HWY:USH 8 | COUNTY:PRICE | STH 13 INTERCHANGE LAYOUT | SHEET | E |
|-----------------------|-----------|--------------|---------------------------|-------|----------|

FILE NAME : \\RHIRTOP\PLPI01\N3PUBLIC\PDS\C3D\15802930\SHEETSPLAN\021003-CD.DWG
LAYOUT NAME - SHEET - (4)

PLOT DATE : 7/5/2016 1:02 PM

PLOT BY : KILEN, KAI M

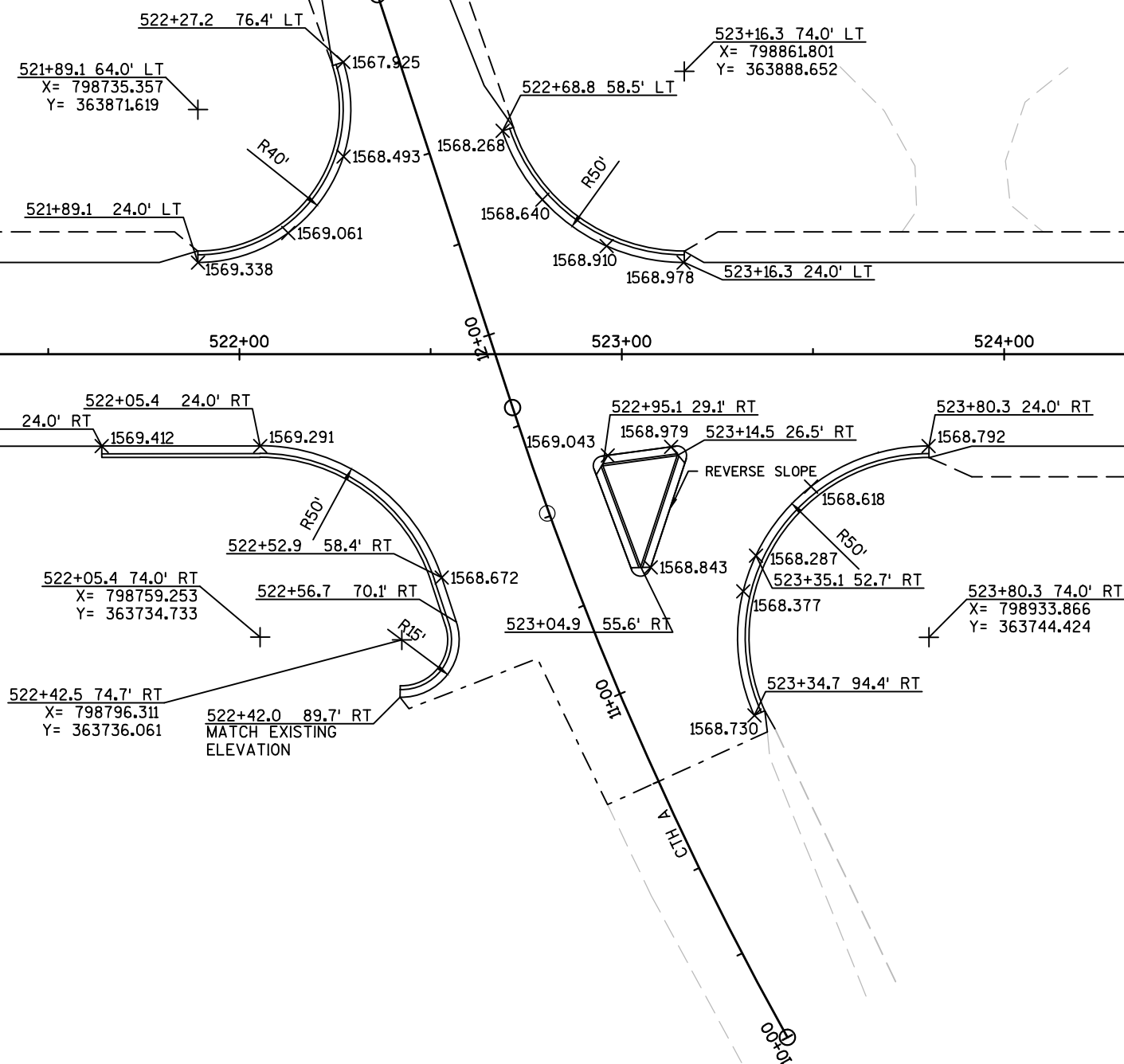
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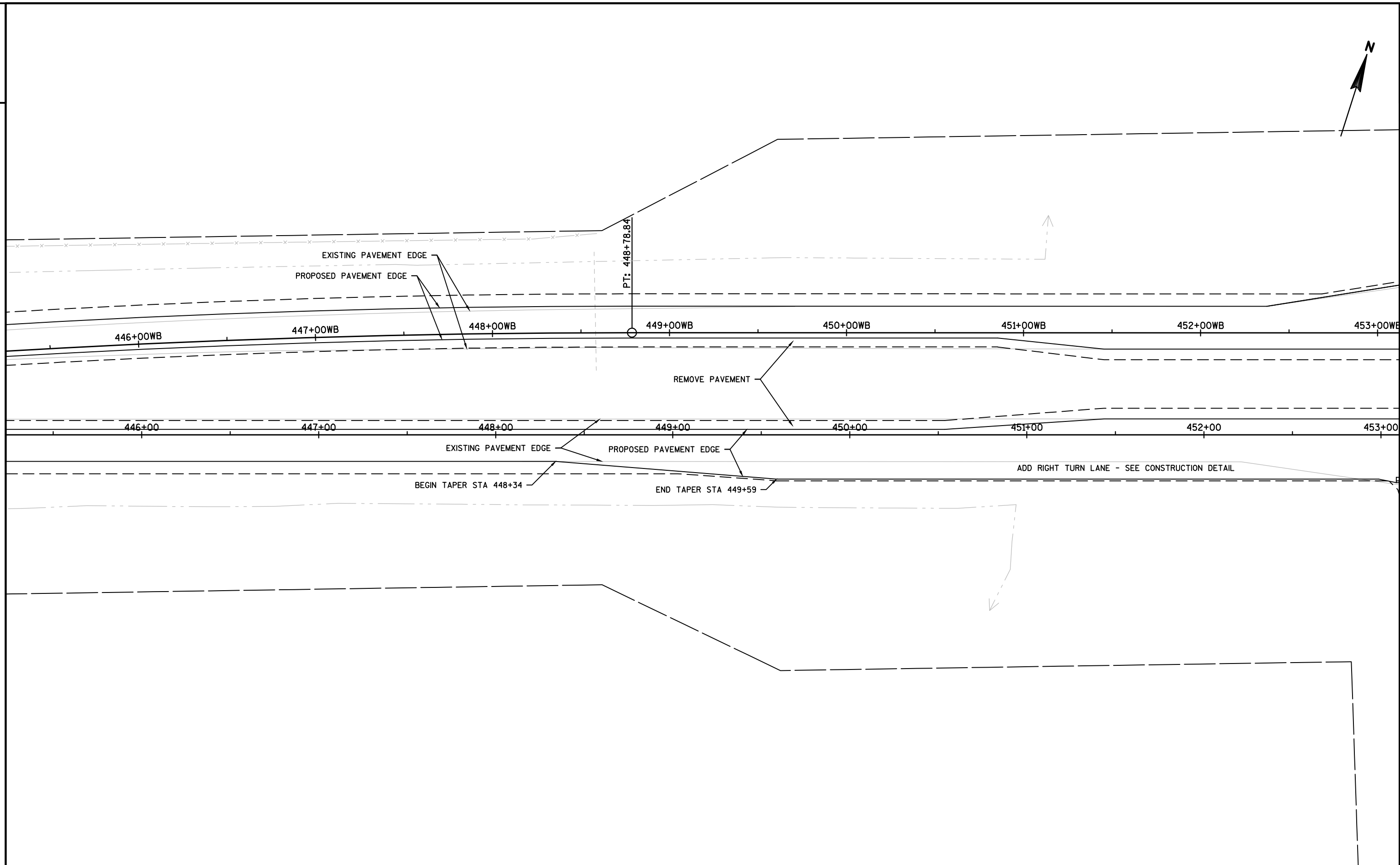
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

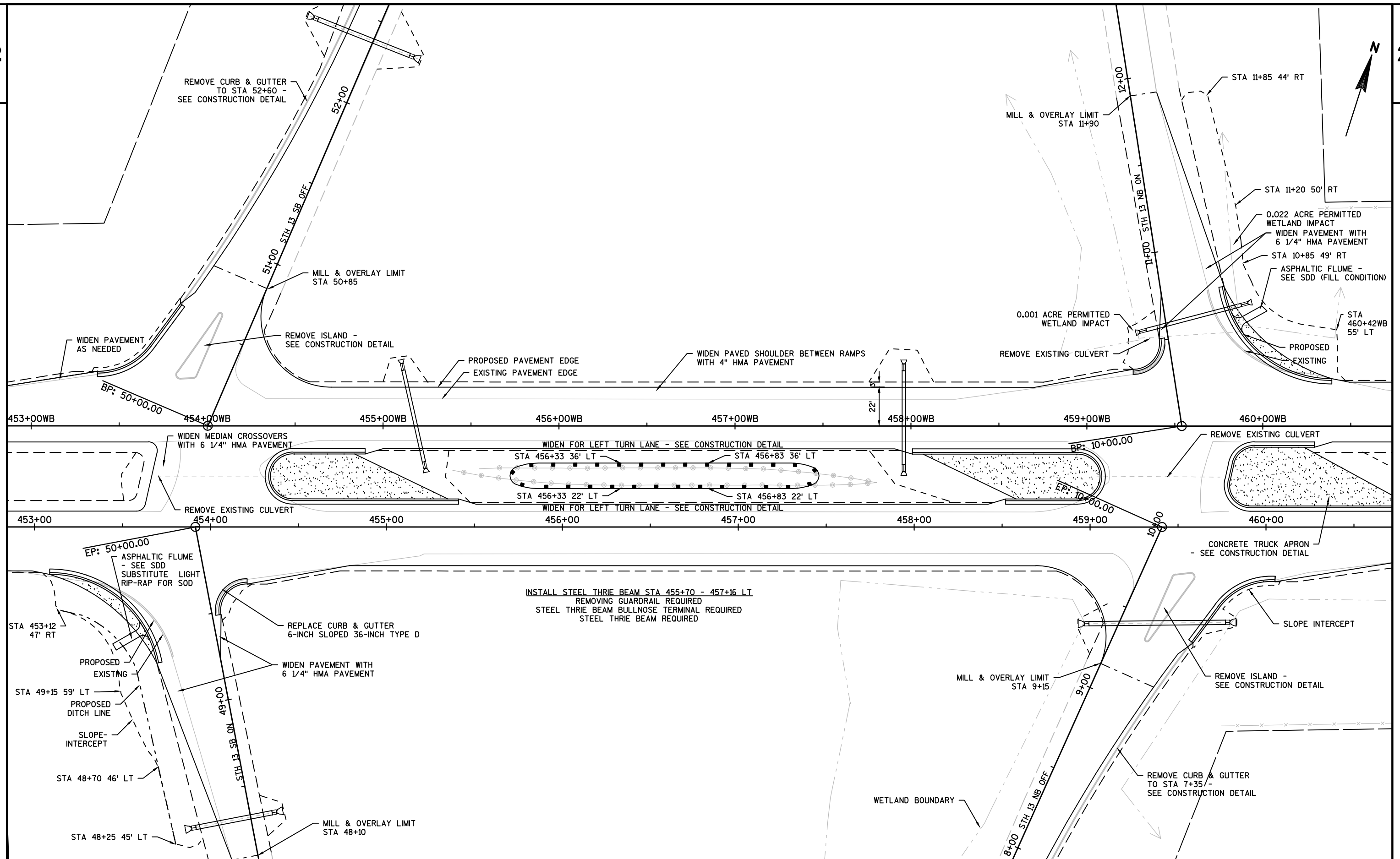


CTH A ISLAND RADII CENTER POINTS
ALL RADII ARE 2.5'
CONSTRUCT ISLAND CORNERS PER SDD
SEE CONSTRUCTION DETAIL FOR
FURTHER INFORMATION





| | | | | | |
|-----------------------|-----------|--------------|---------------------------|-------|---|
| PROJECT NO:1580-29-70 | HWY:USH 8 | COUNTY:PRICE | STH 13 INTERCHANGE DETAIL | SHEET | E |
|-----------------------|-----------|--------------|---------------------------|-------|---|



PROJECT NO:1580-29-70

HWY:USH 8

COUNTY:PRICE

STH 13 INTERCHANGE DETAIL

SHEET

E

FILE NAME : \\RHRTOP\PLPPI01\N3PUBLIC\PD5\C3D\15802930\SHETSPLAN\021201-PD.DWG
LAYOUT NAME - 03

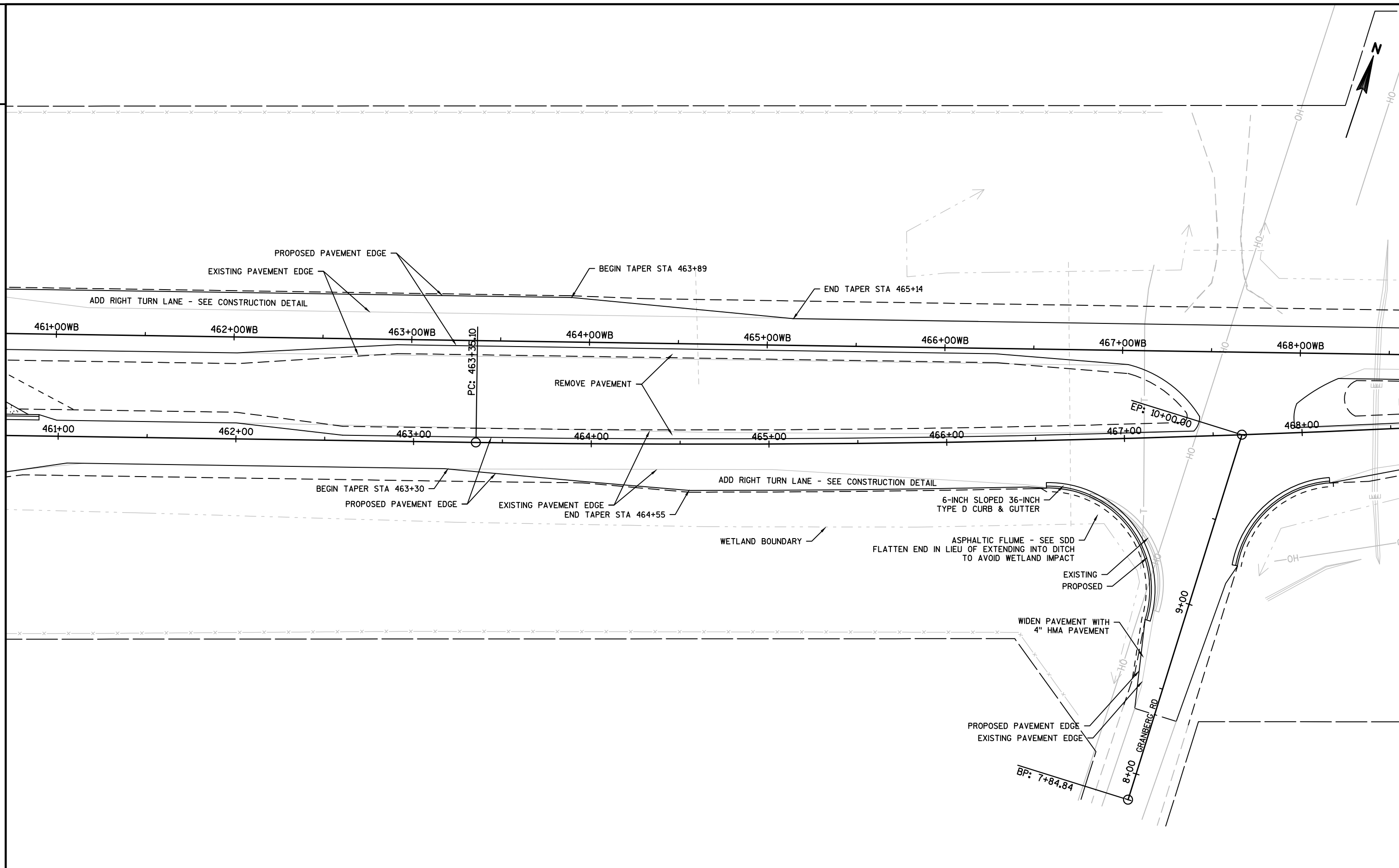
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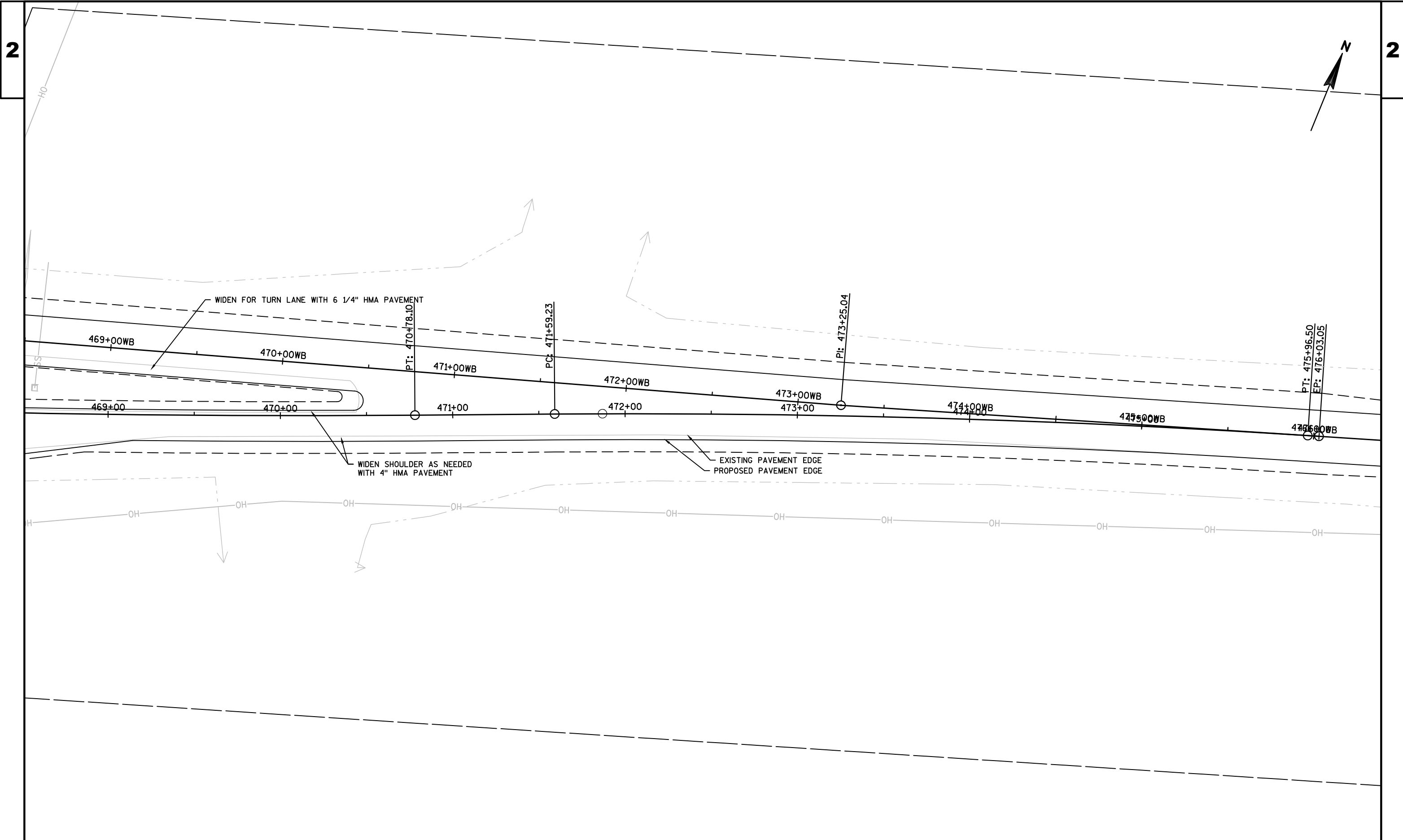
PLOT BY : KILEN, KAI M

PLOT NAME :

PLOT SCALE : 1 IN:50 FT

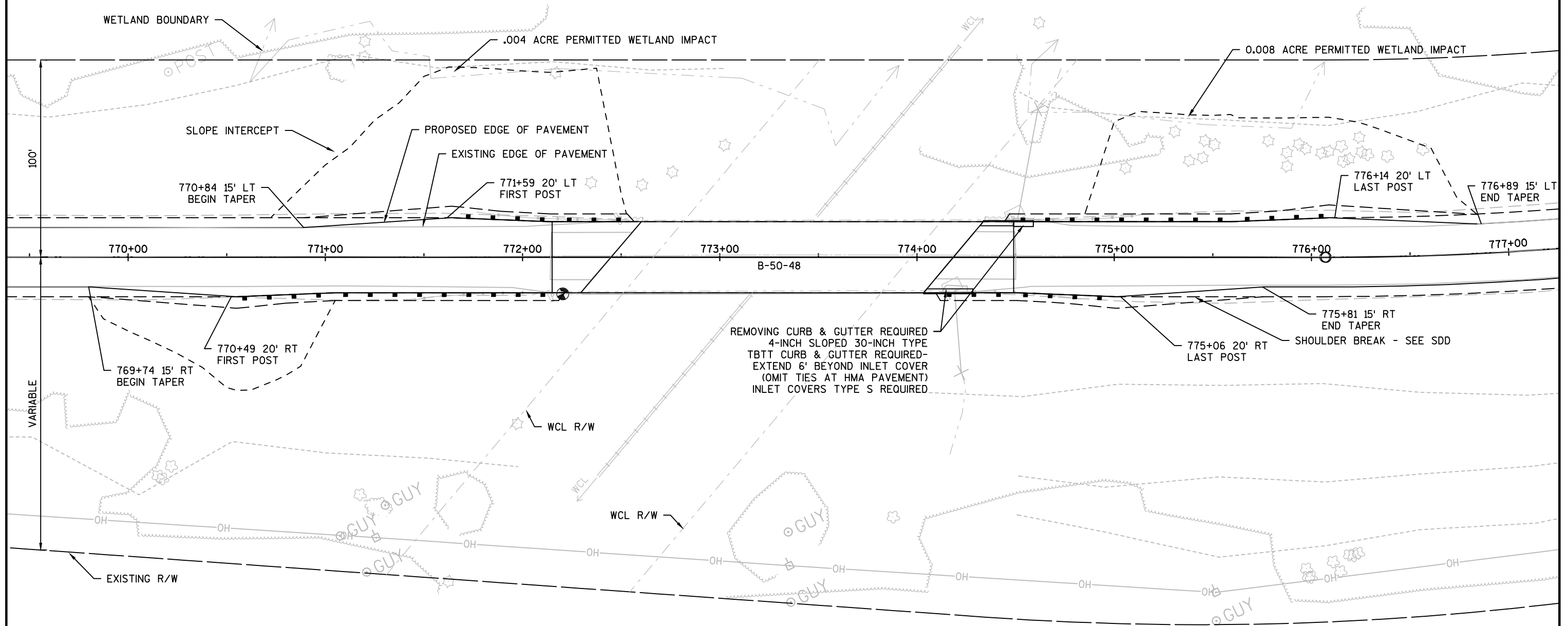
WISDOT/CADD5 SHEET 42





REPLACE BEAMGUARD STA 770+49 - 776+14
REMOVE GUARDRAIL REQUIRED
MGS GUARDRAIL REQUIRED
MGS GUARDRAIL TERMINAL EAT REQUIRED
MGS GUARDRAIL THRIE BEAM TRANSITION REQUIRED
PREPARE BASE FOR ASPHALTIC SHOULDERS REQUIRED AT SHOULDER WIDENINGS
4" HMA PAVEMENT REQUIRED AT SHOULDER WIDENINGS

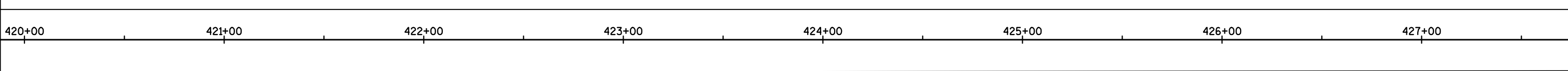
REPLACE CONCRETE APPROACH SLABS B-50-48
REMOVING PAVEMENT REQUIRED
REMOVING ASPHALTIC SURFACE REQUIRED
COMMON EXCAVATION REQUIRED FOR BAD PLACEMENT
1 1/4" BAD REQUIRED (1' DEPTH BELOW NEW SLAB)
CONCRETE PAVEMENT APPROACH SLAB REQUIRED - MATCH EXISTING LENGTH
NEW APPROACH SLABS TO BE FULL WIDTH










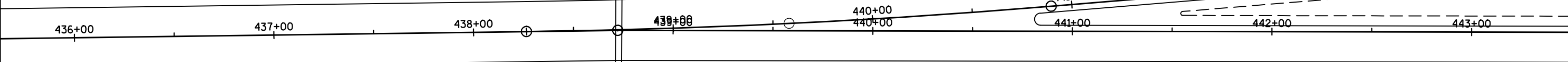
2

SOME CULVERT REPAIR OR REPLACEMENT
LOCATIONS MAY REQUIRE USE OF HEAVY
DUTY SILT FENCE.
USE AS DIRECTED BY ENGINEER.

2



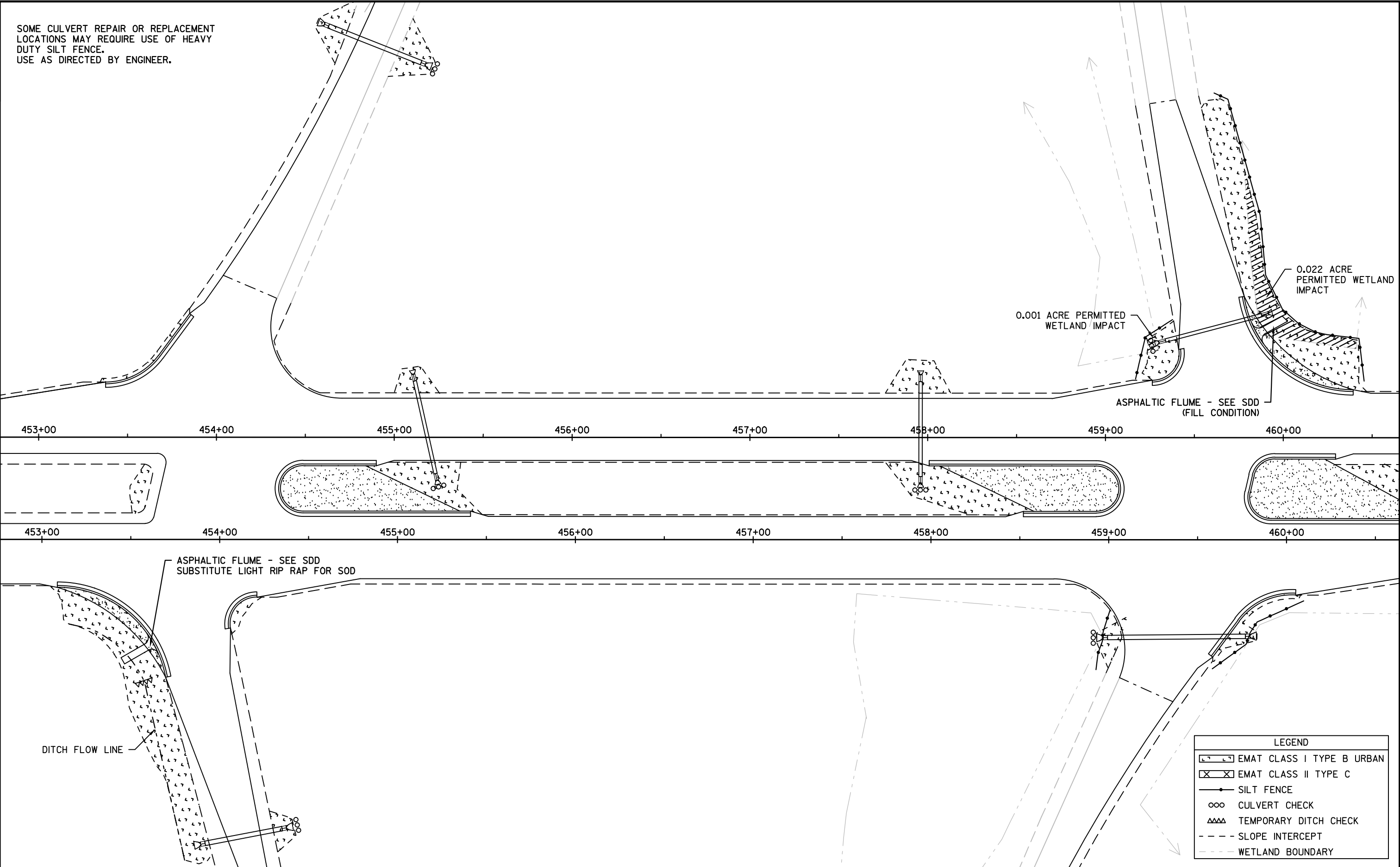
| LEGEND | |
|---|---------------------------|
|  | EMAT CLASS I TYPE B URBAN |
|  | EMAT CLASS II TYPE C |
|  | SILT FENCE |
|  | CULVERT CHECK |
|  | TEMPORARY DITCH CHECK |
|  | SLOPE INTERCEPT |
|  | WETLAND BOUNDARY |



2

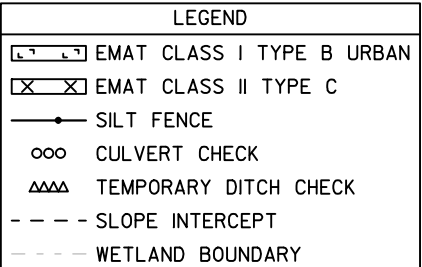
SOME CULVERT REPAIR OR REPLACEMENT
LOCATIONS MAY REQUIRE USE OF HEAVY
DUTY SILT FENCE.
USE AS DIRECTED BY ENGINEER.

2



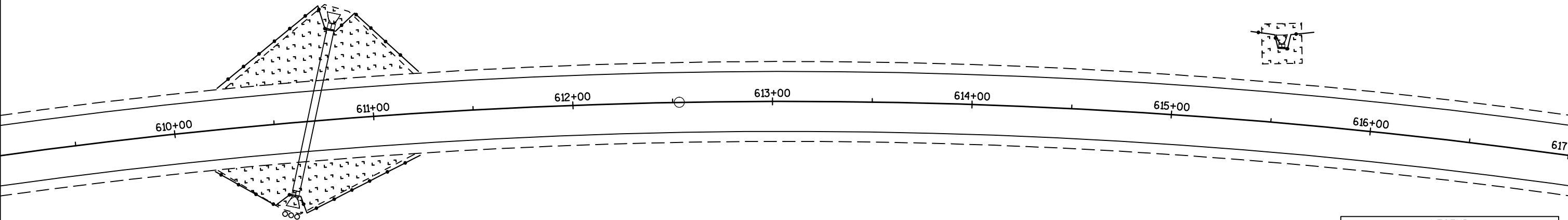
2

SOME CULVERT REPAIR OR REPLACEMENT
LOCATIONS MAY REQUIRE USE OF HEAVY
DUTY SILT FENCE.
USE AS DIRECTED BY ENGINEER.

[illegible]

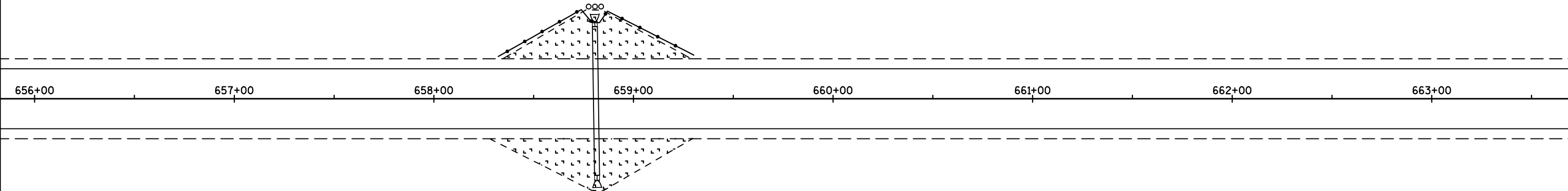
NO EROSION CONTROL ITEMS
STA 526+00 - STA 610+00

SOME CULVERT REPAIR OR REPLACEMENT
LOCATIONS MAY REQUIRE USE OF HEAVY
DUTY SILT FENCE.
USE AS DIRECTED BY ENGINEER.

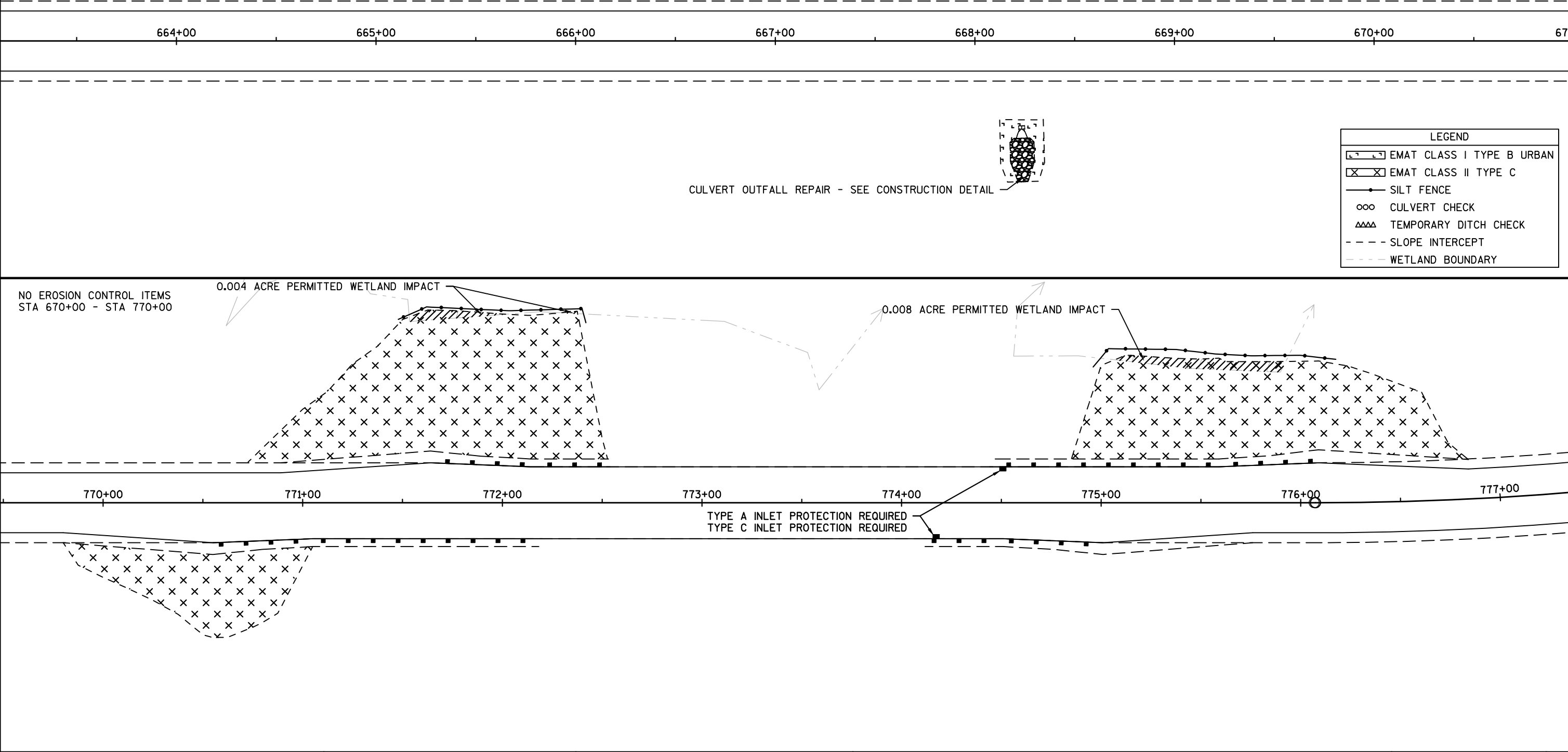


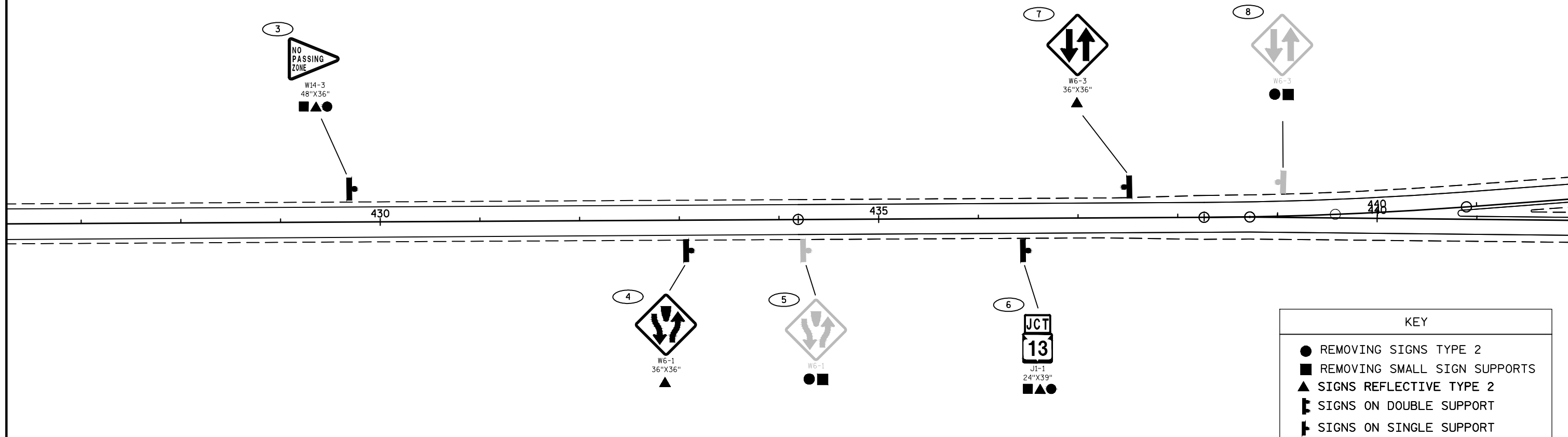
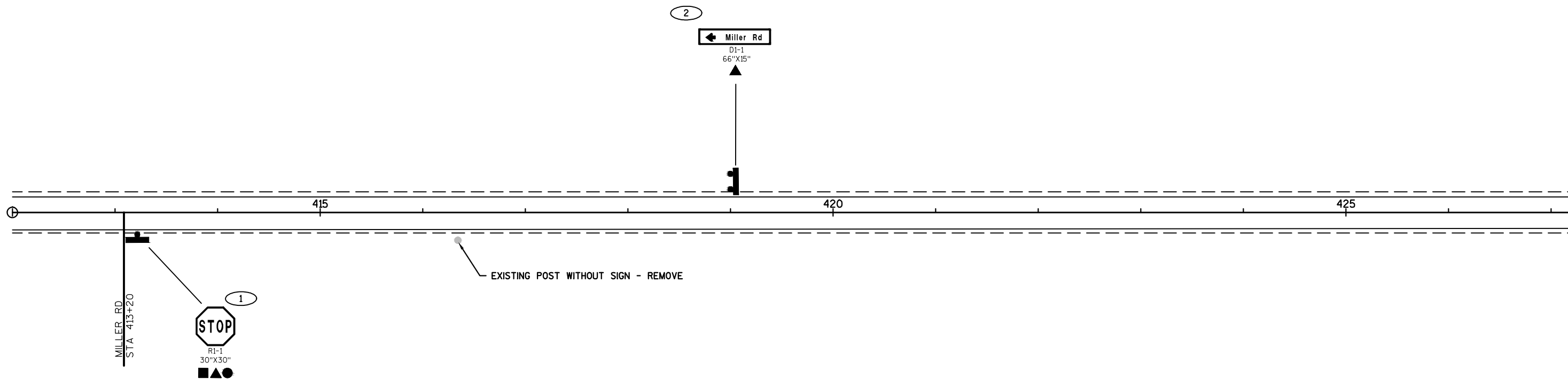
| LEGEND | |
|--------|---------------------------|
| | EMAT CLASS I TYPE B URBAN |
| | EMAT CLASS II TYPE C |
| | SILT FENCE |
| | CULVERT CHECK |
| | TEMPORARY DITCH CHECK |
| | SLOPE INTERCEPT |
| | WETLAND BOUNDARY |

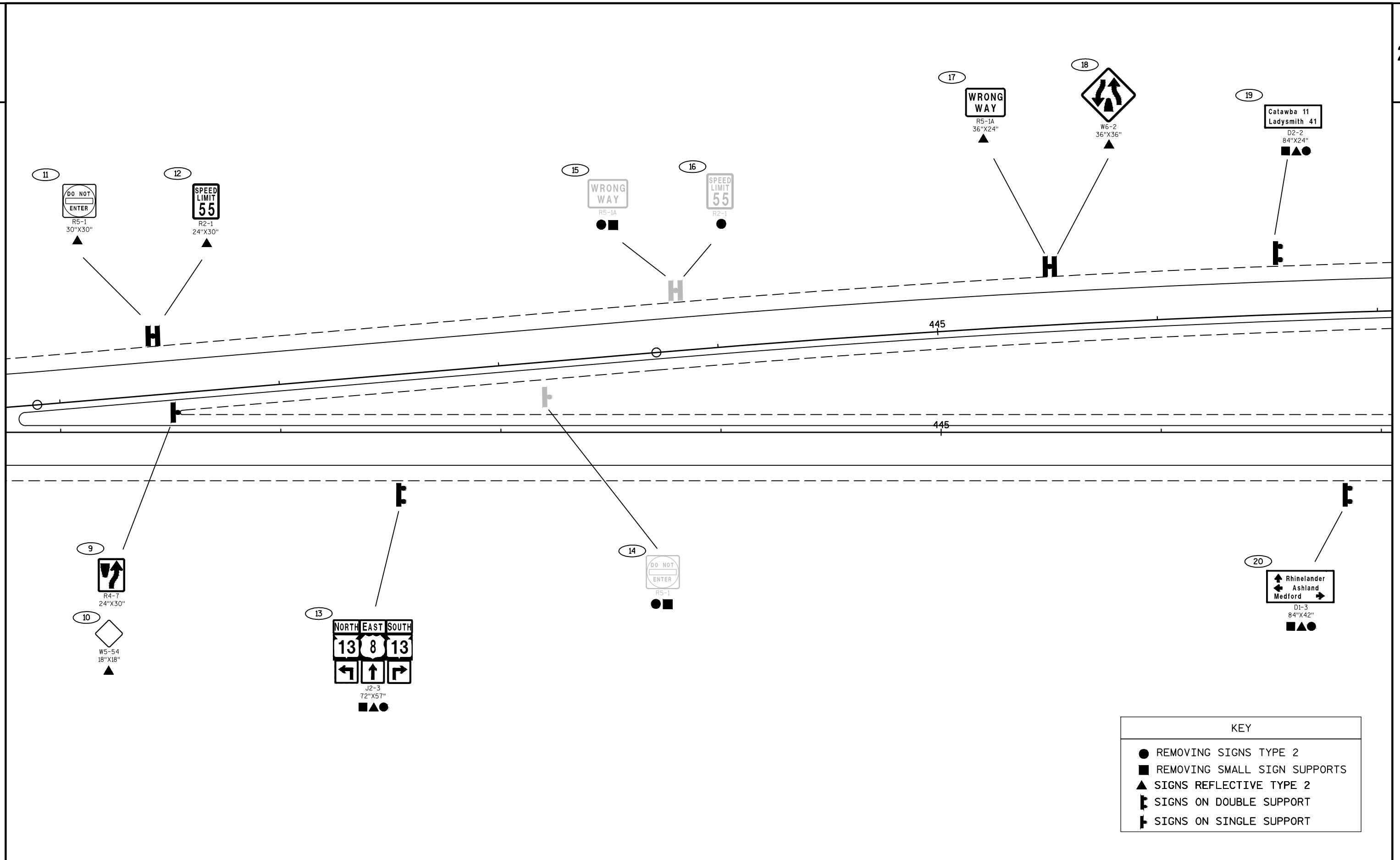
NO EROSION CONTROL ITEMS
STA 617+00 - STA 656+00

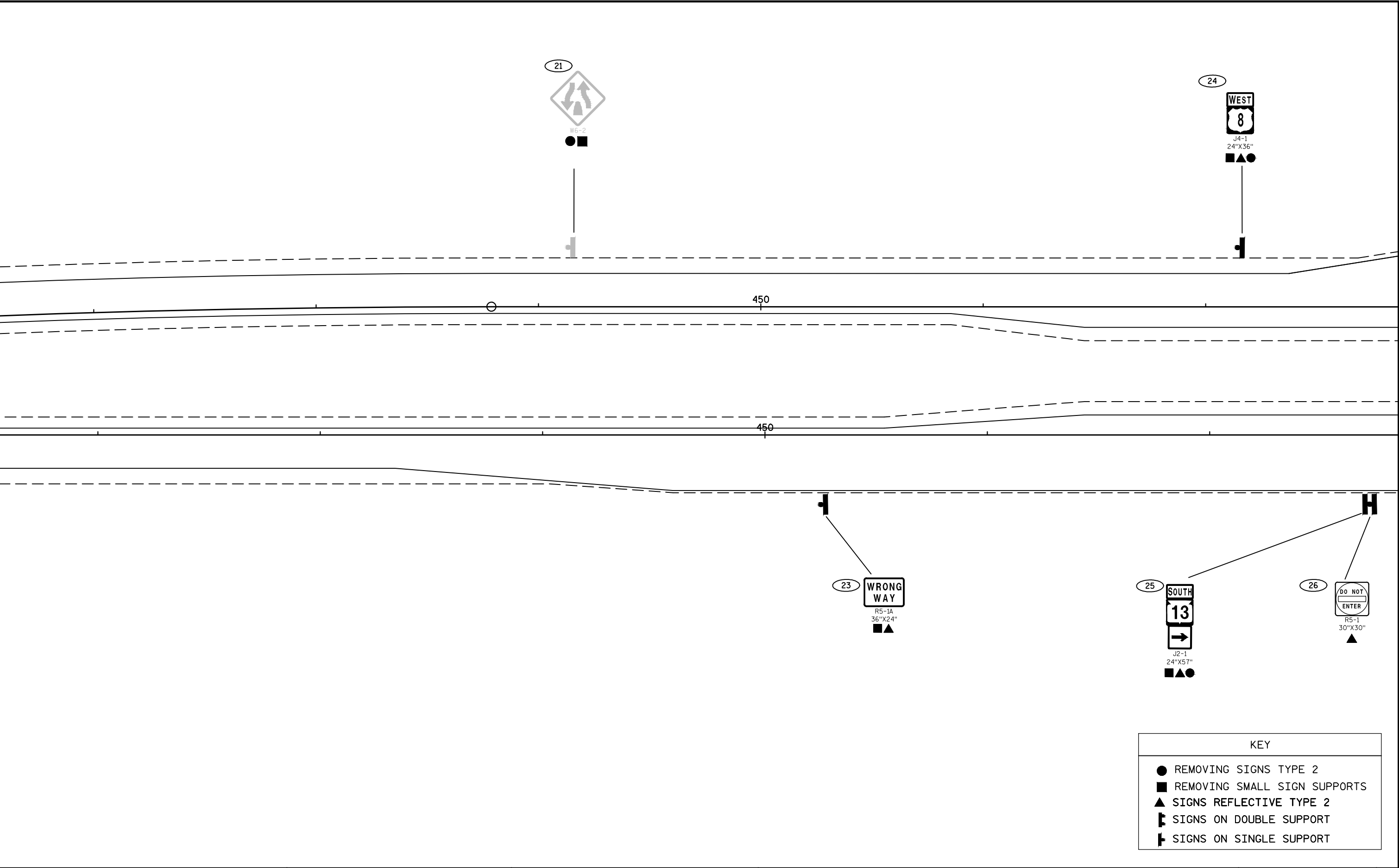


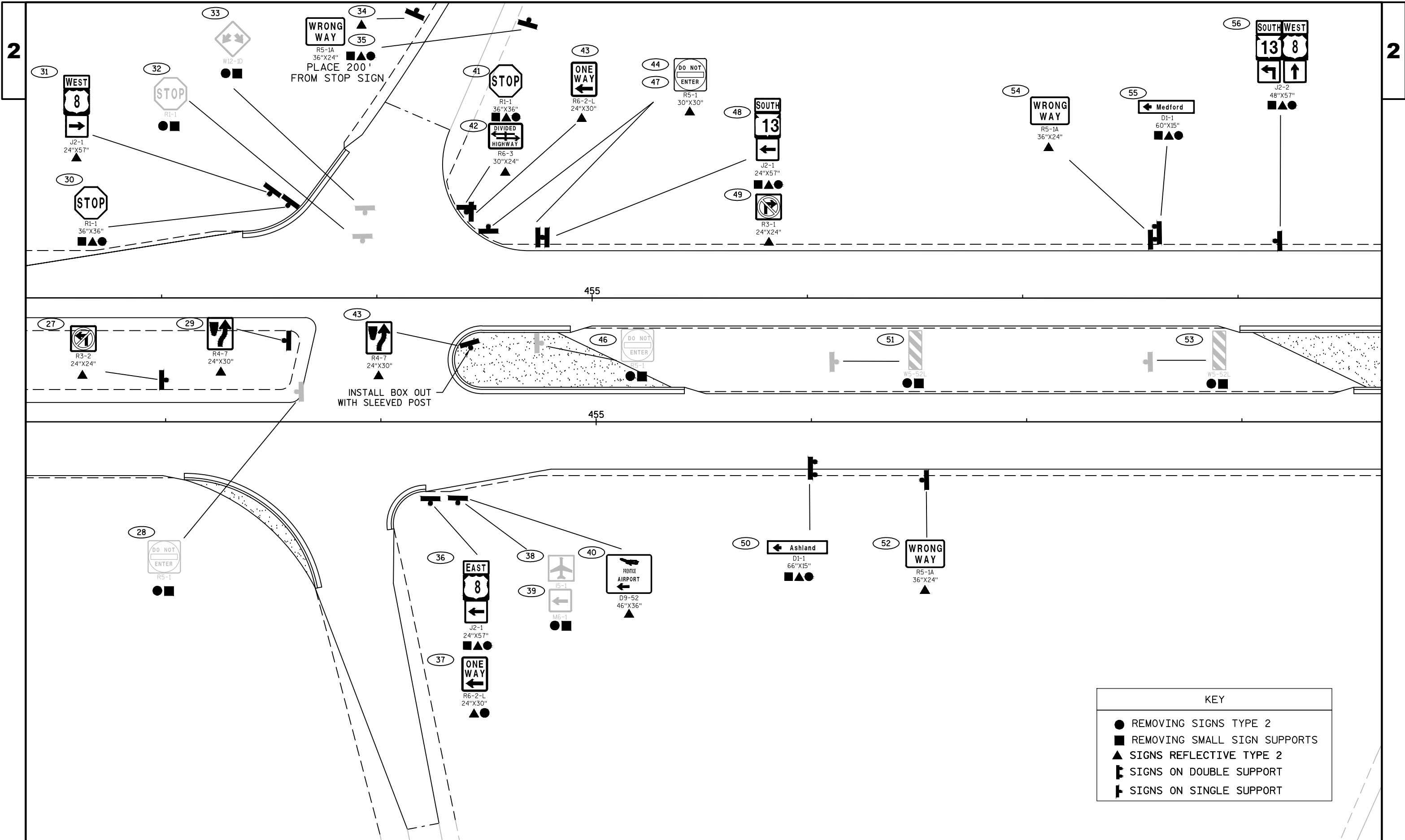
SOME CULVERT REPAIR OR REPLACEMENT
LOCATIONS MAY REQUIRE USE OF HEAVY
DUTY SILT FENCE.
USE AS DIRECTED BY ENGINEER.











PROJECT NO:1580-29-70

HWY:USH 8

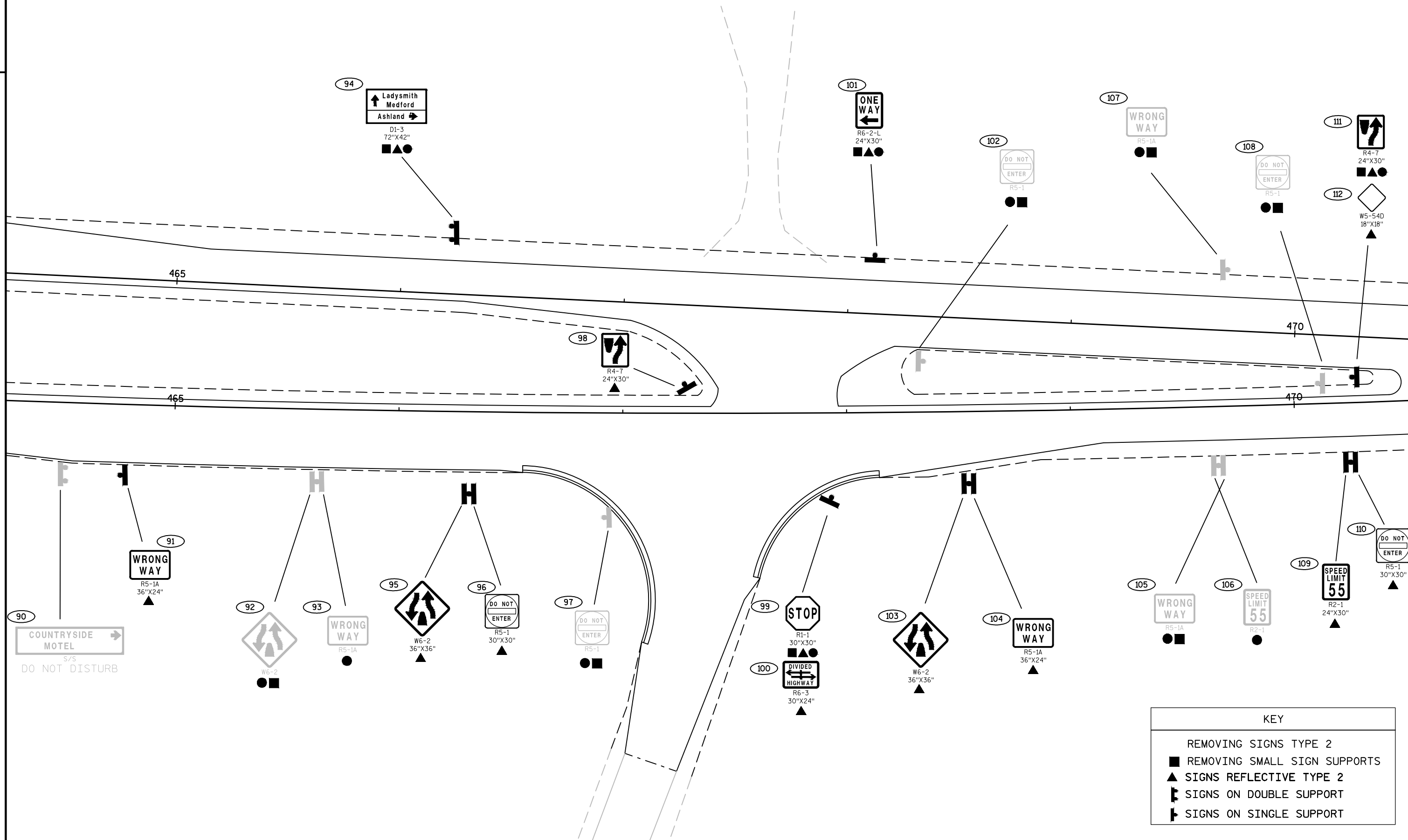
COUNTY:PRICE

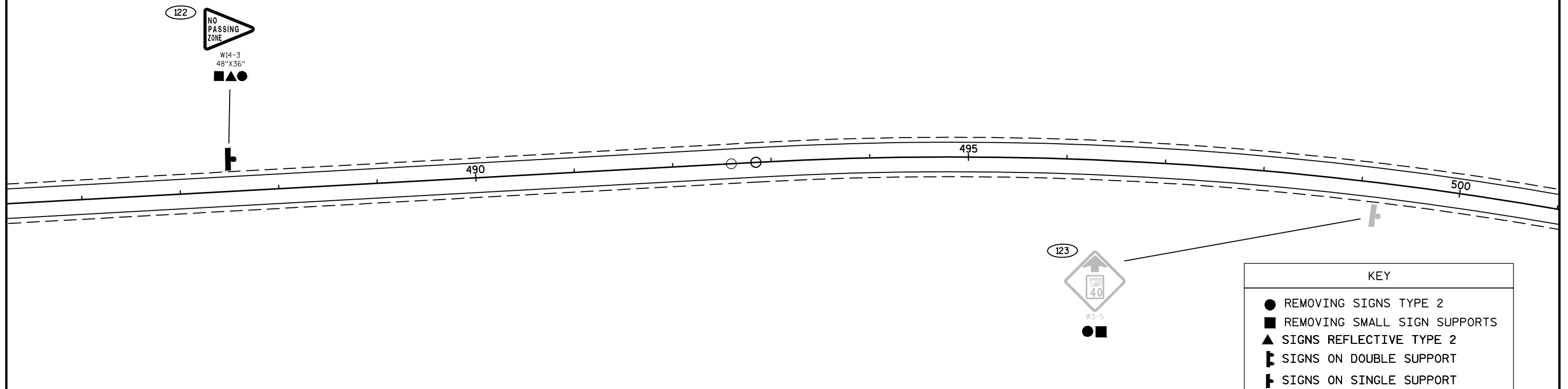
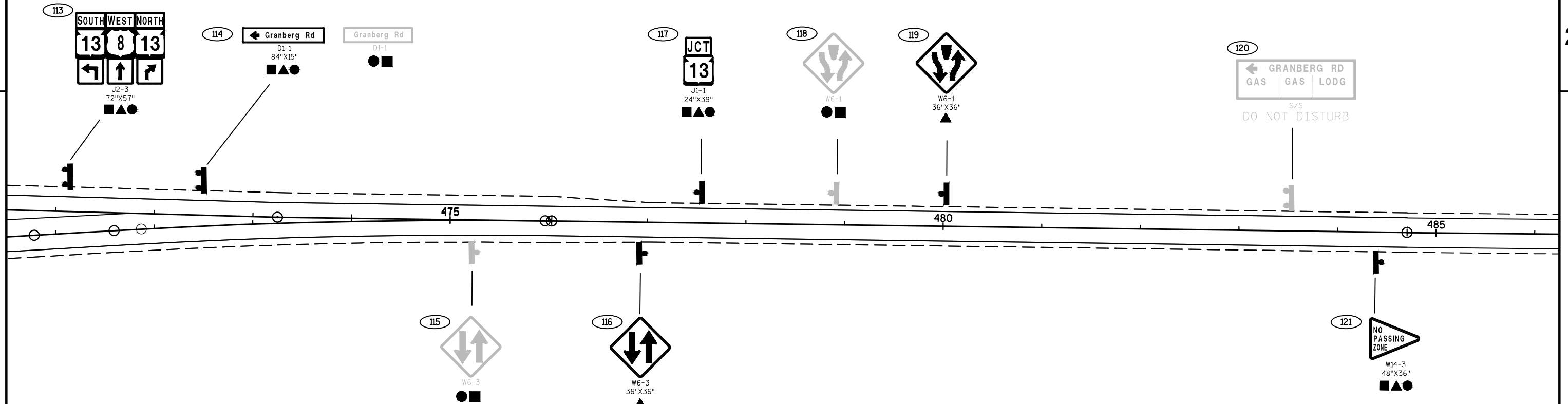
PERMANENT SIGNING

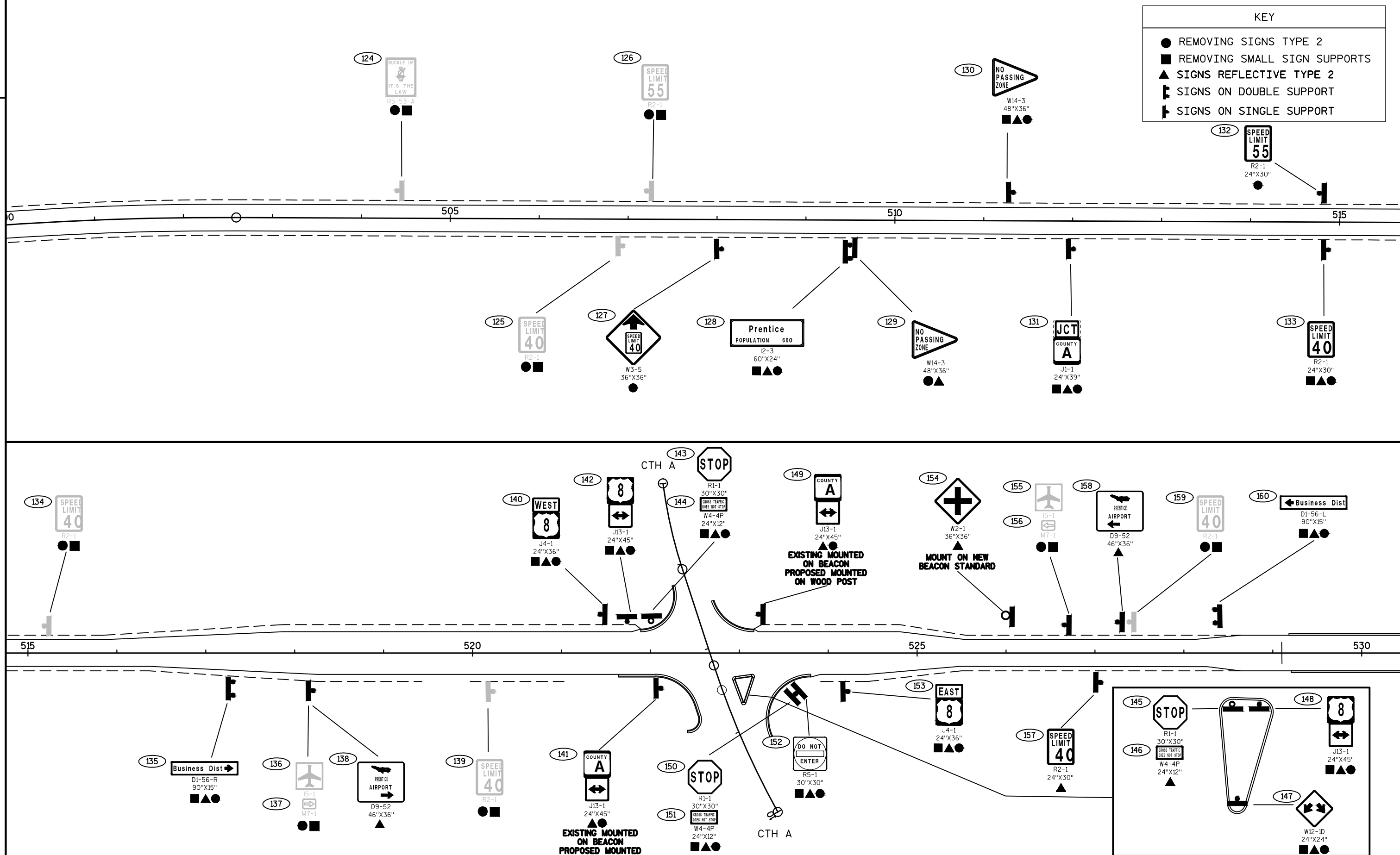
SHEET

E









PROJECT NO:1580-29-70

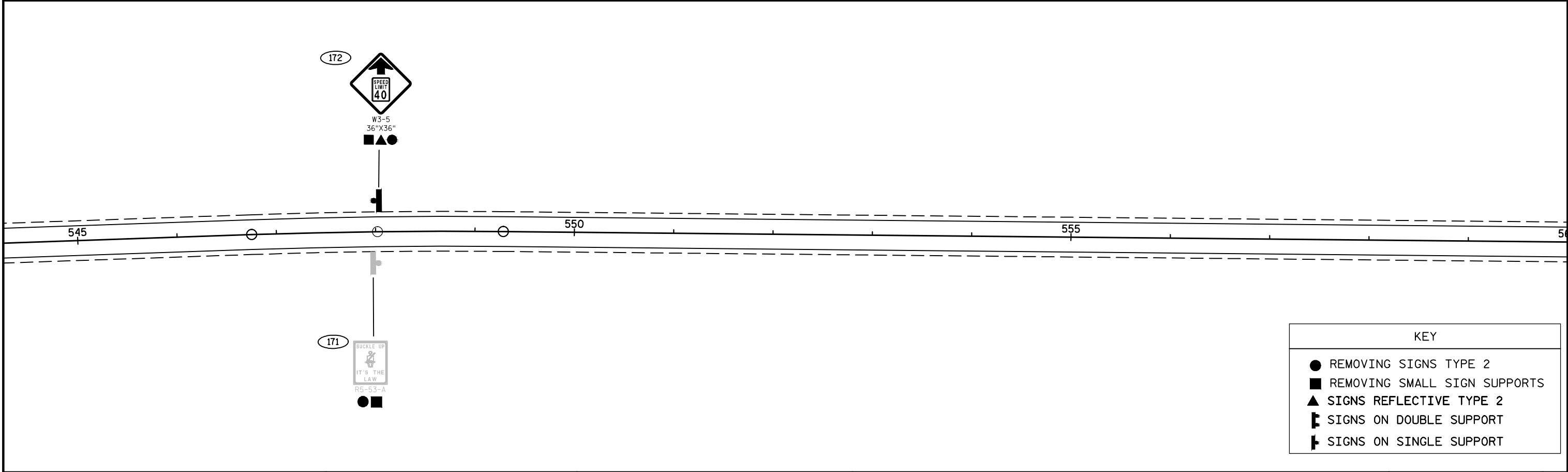
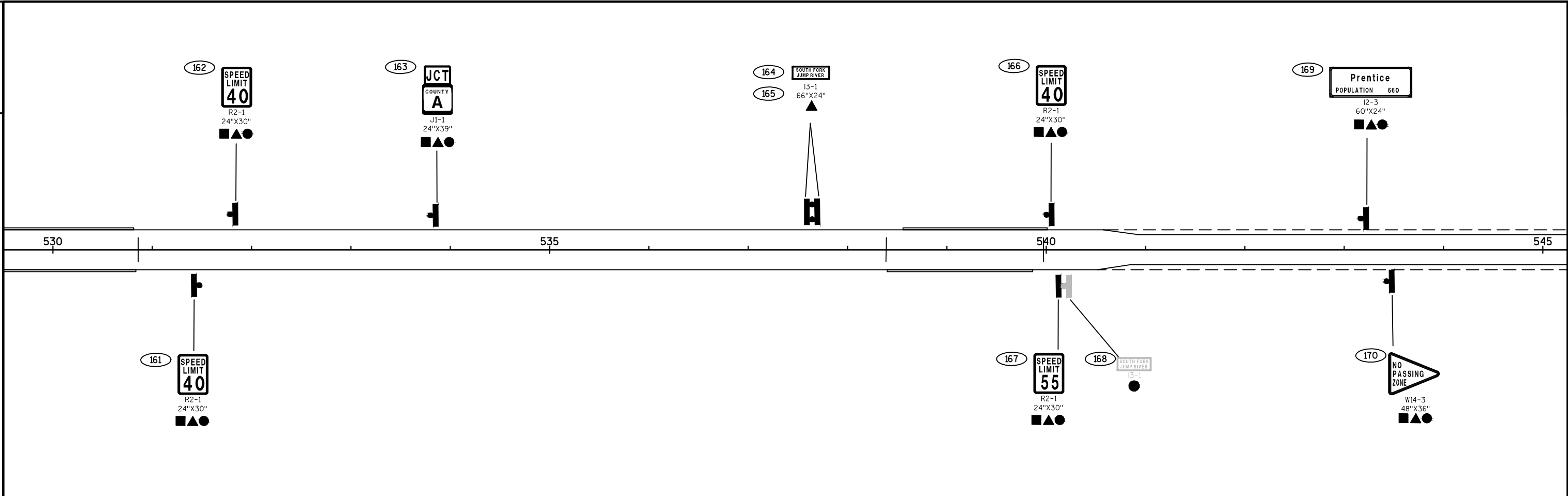
HWY:USH 8

COUNTY:PRICE

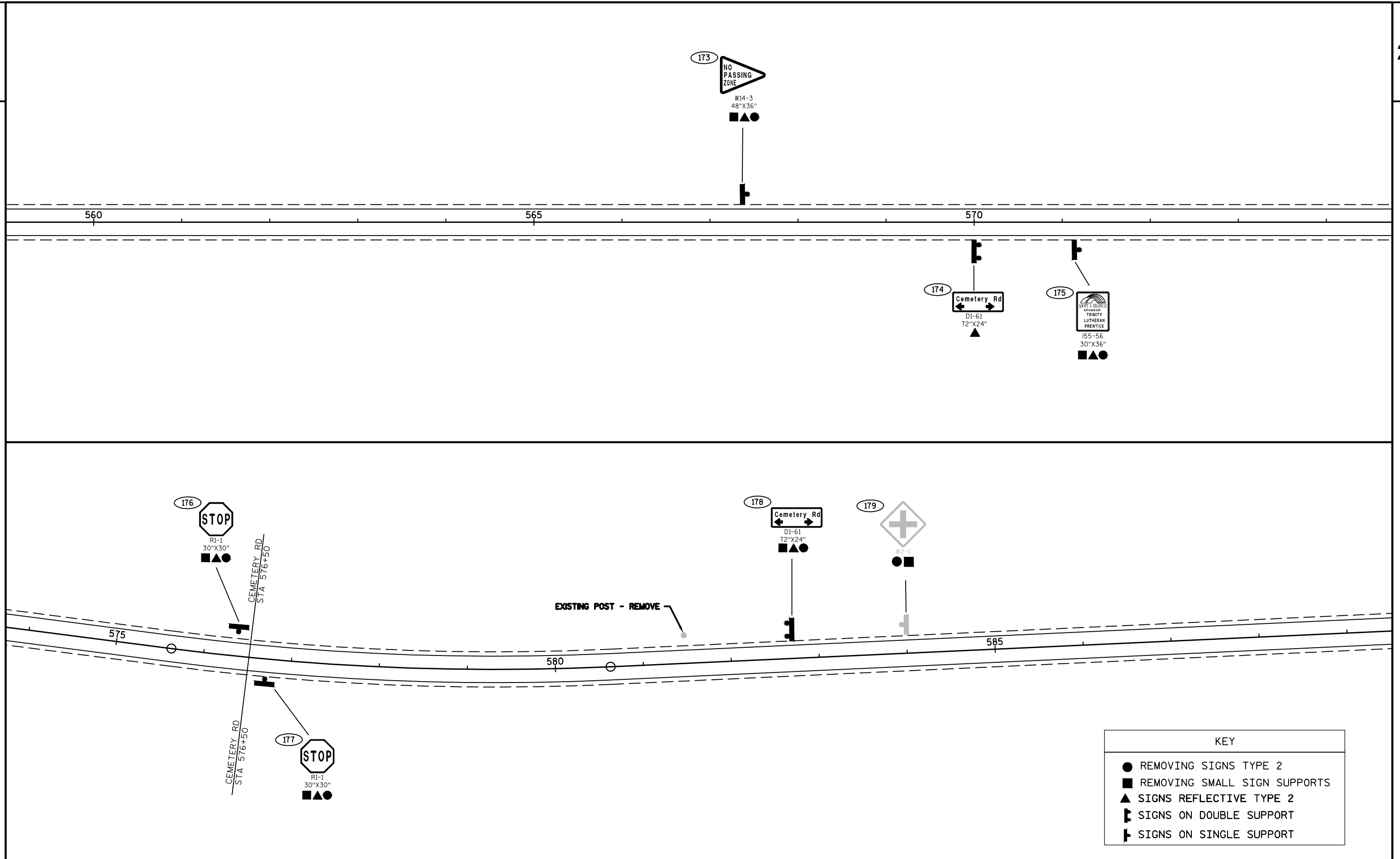
PERMANENT SIGNING

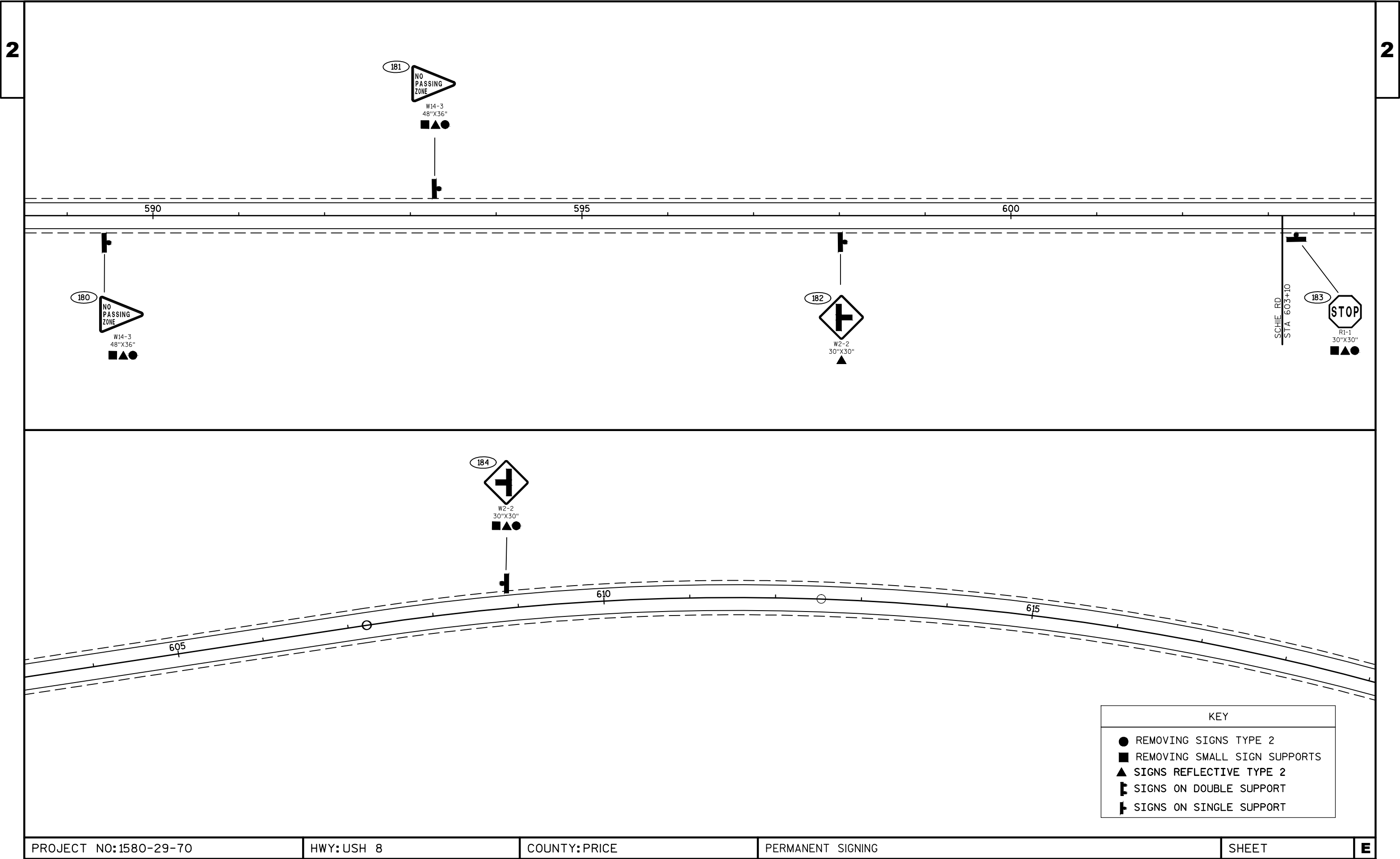
SHEET

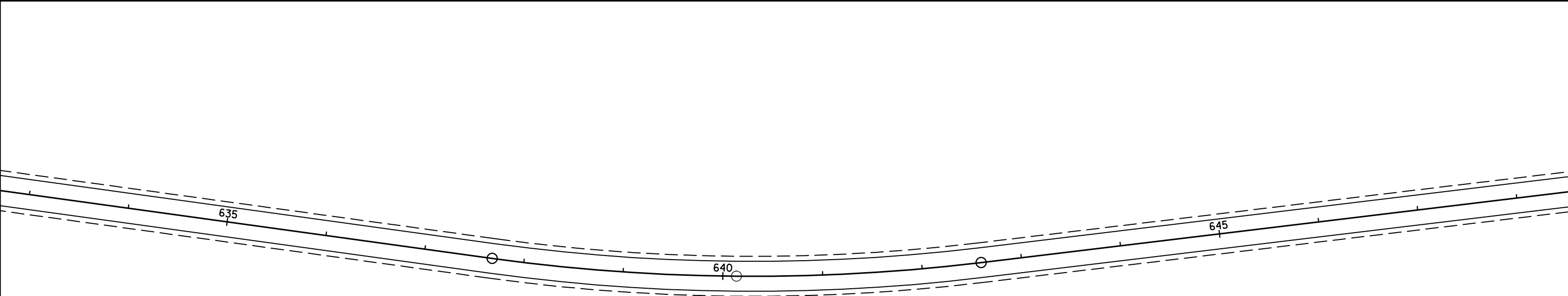
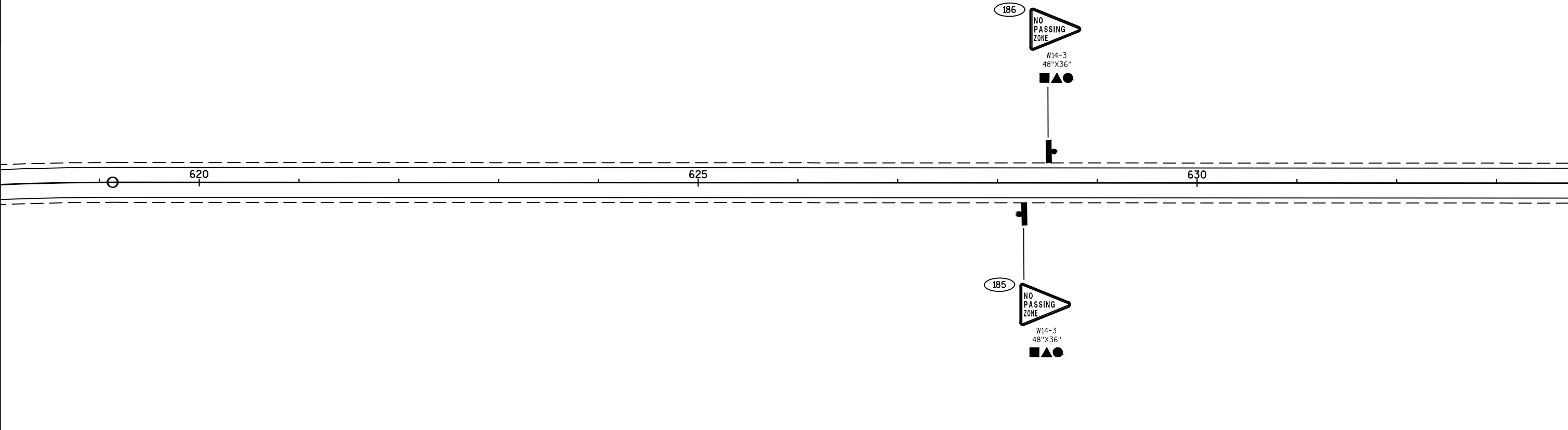
E



| KEY | |
|-----|------------------------------|
| ● | REMOVING SIGNS TYPE 2 |
| ■ | REMOVING SMALL SIGN SUPPORTS |
| ▲ | SIGNS REFLECTIVE TYPE 2 |
| ┌ | SIGNS ON DOUBLE SUPPORT |
| └ | SIGNS ON SINGLE SUPPORT |



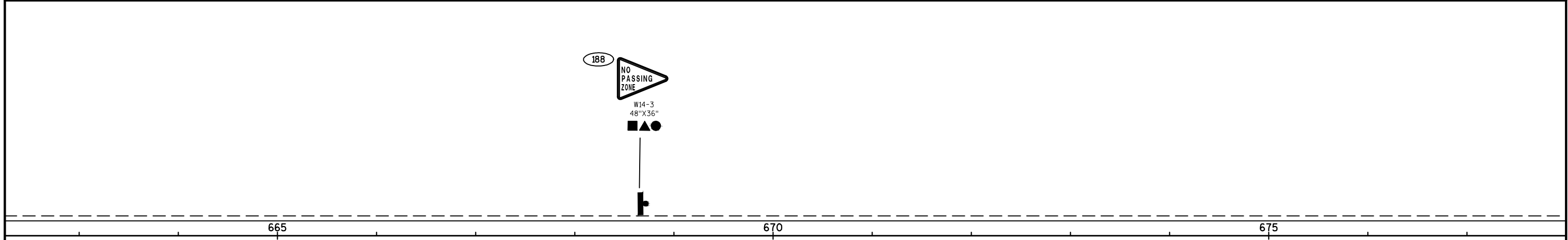
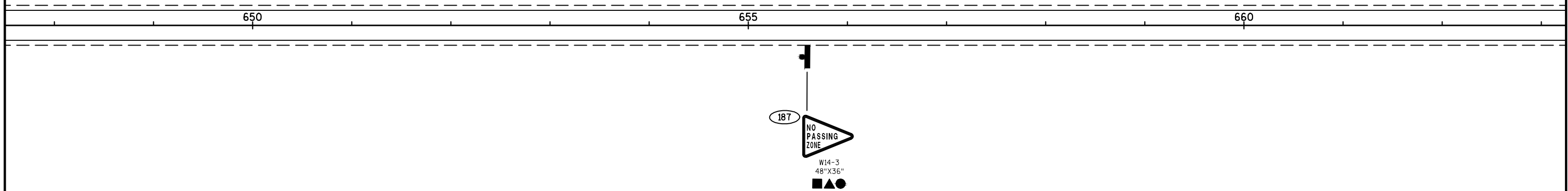




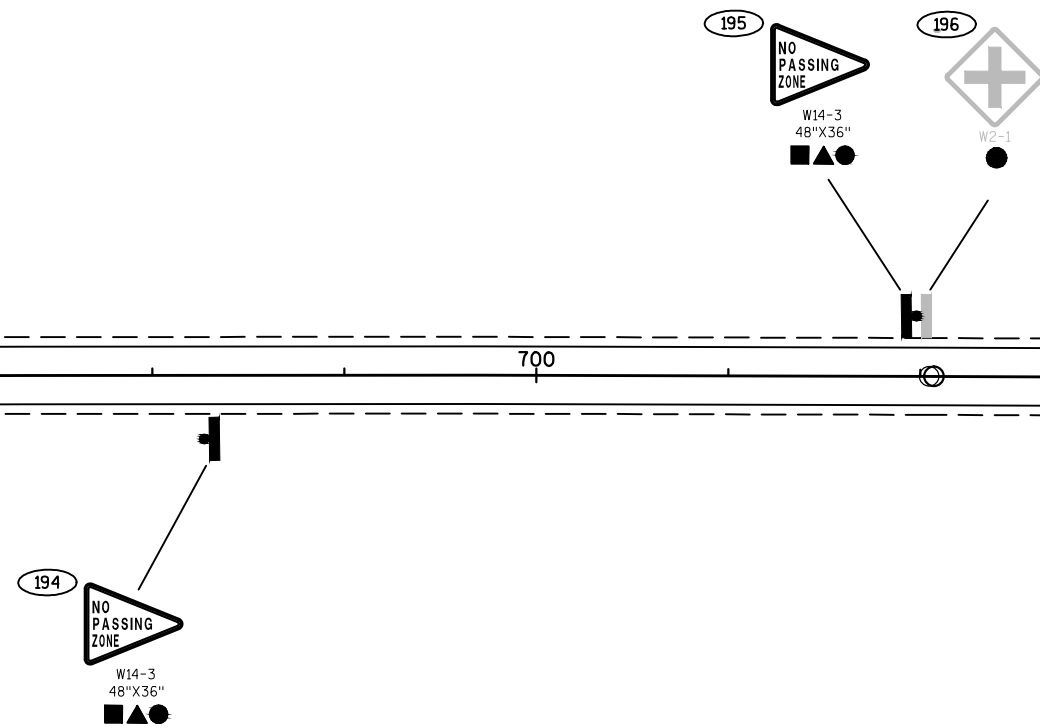
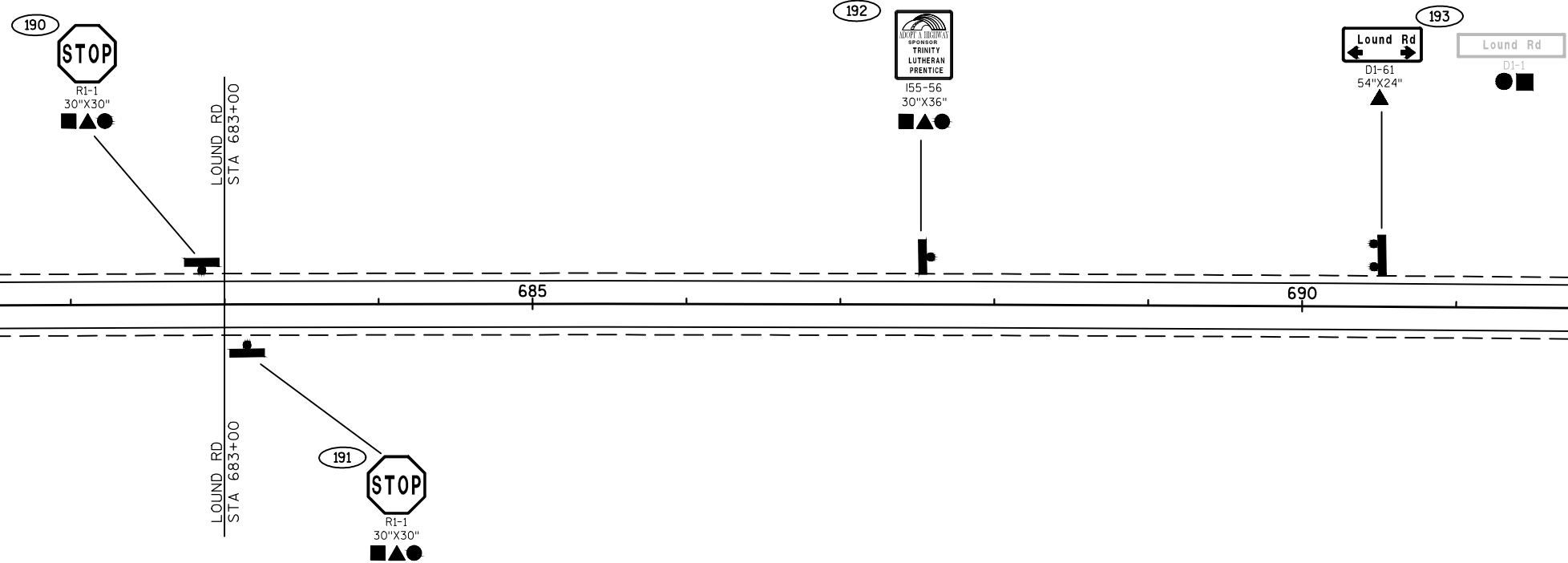
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|-----|------------------------------|
| ● | REMOVING SIGNS TYPE 2 |
| ■ | REMOVING SMALL SIGN SUPPORTS |
| ▲ | SIGNS REFLECTIVE TYPE 2 |
| ⌋ | SIGNS ON DOUBLE SUPPORT |
| ⌋ | SIGNS ON SINGLE SUPPORT |

2

2

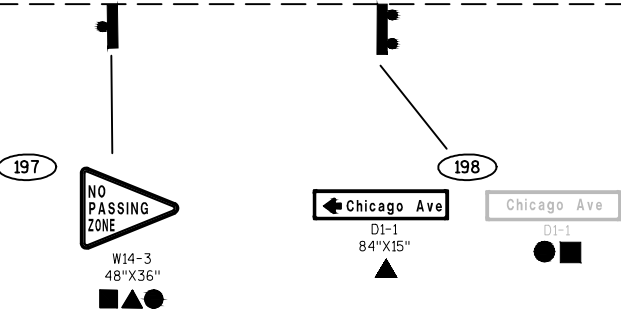
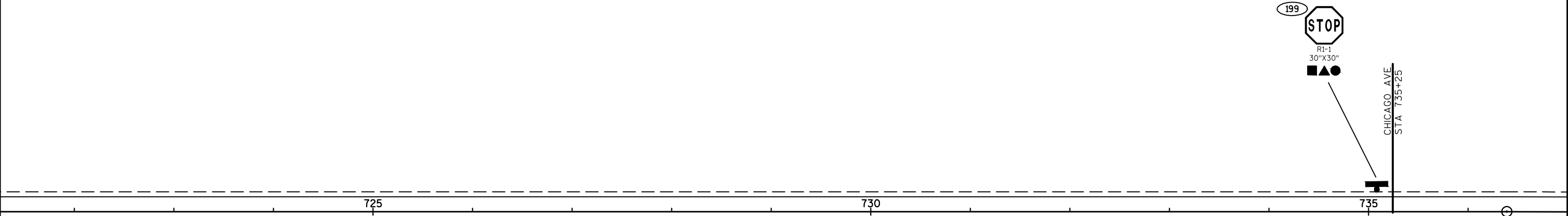
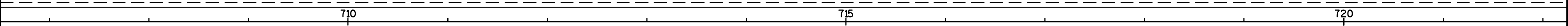


| | | | | | |
|-----------------------|-----------|--------------|-------------------|-------|----------|
| PROJECT NO:1580-29-70 | HWY:USH 8 | COUNTY:PRICE | PERMANENT SIGNING | SHEET | E |
|-----------------------|-----------|--------------|-------------------|-------|----------|

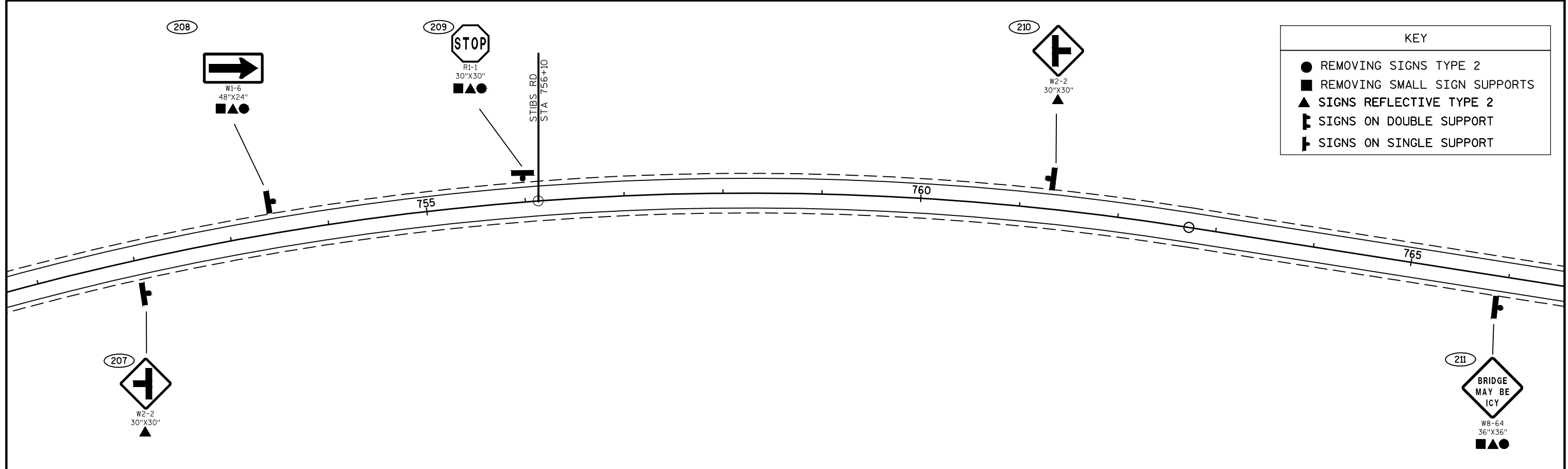
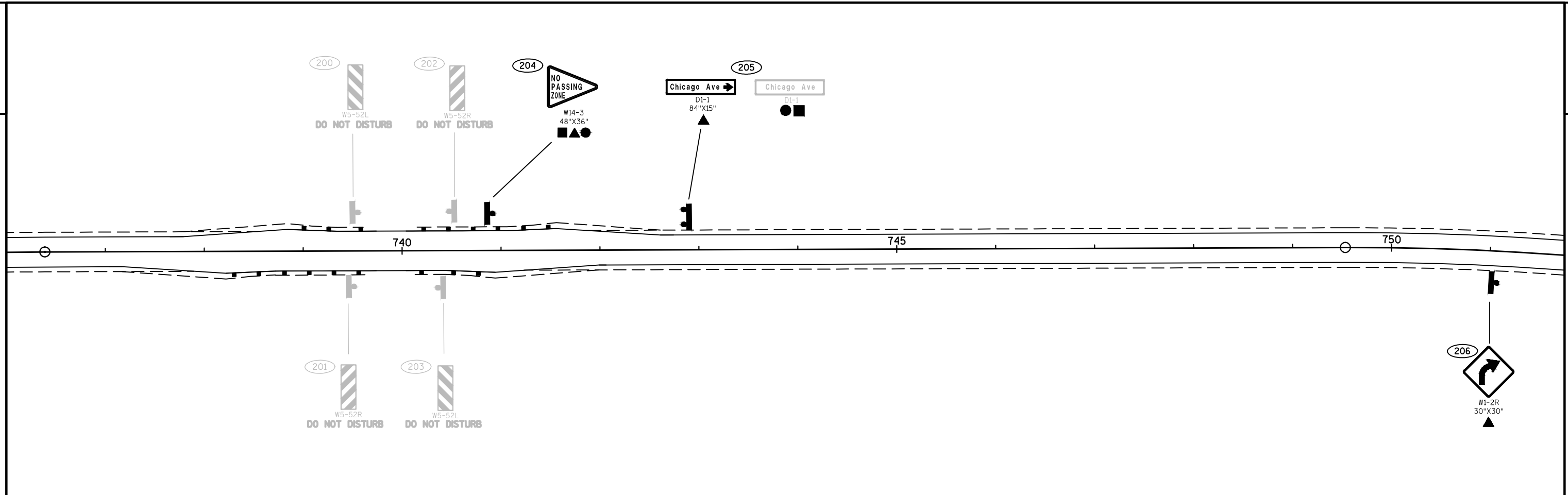


KEY

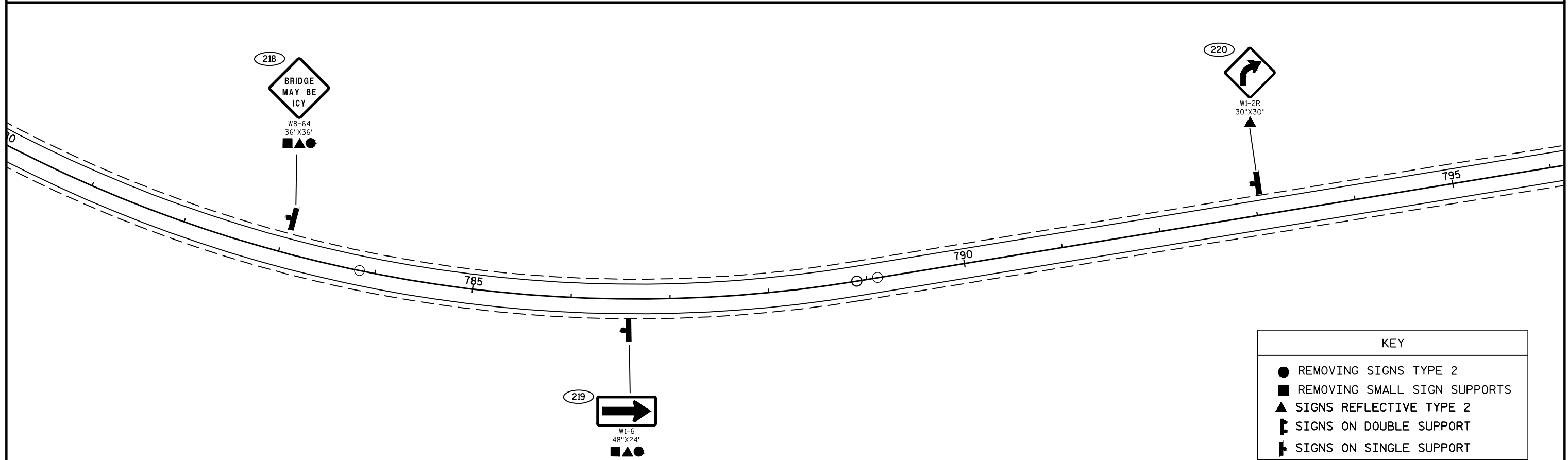
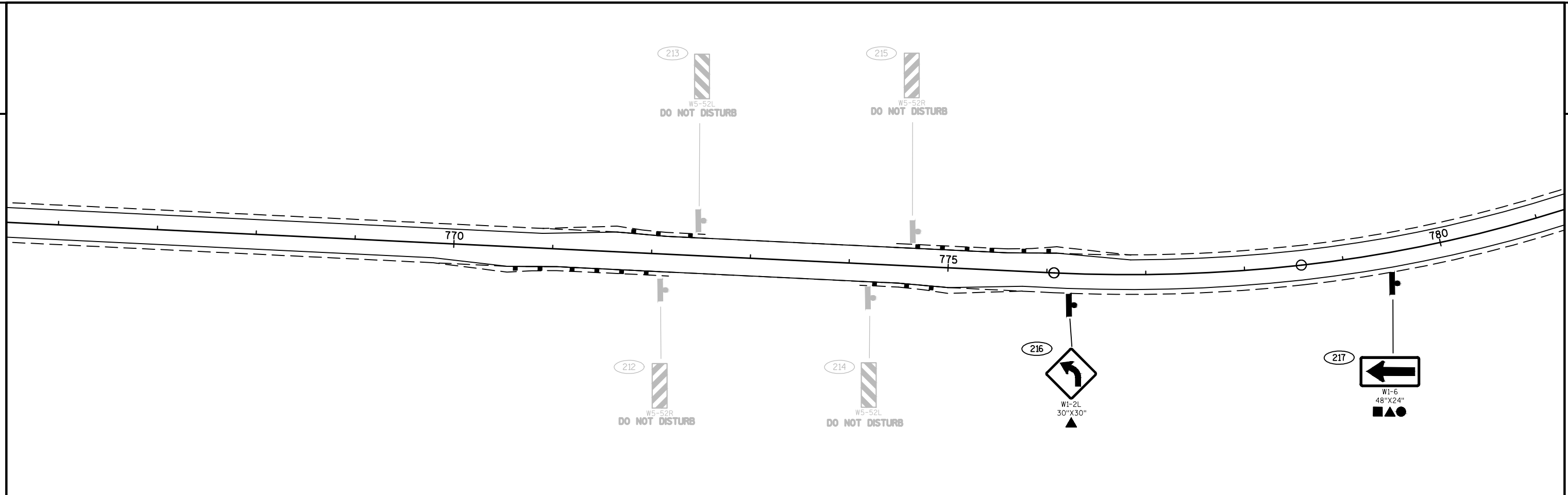
- REMOVING SIGNS TYPE 2
- REMOVING SMALL SIGN SUPPORTS
- ▲ SIGNS REFLECTIVE TYPE 2
- ⌋ SIGNS ON DOUBLE SUPPORT
- ⌋ SIGNS ON SINGLE SUPPORT



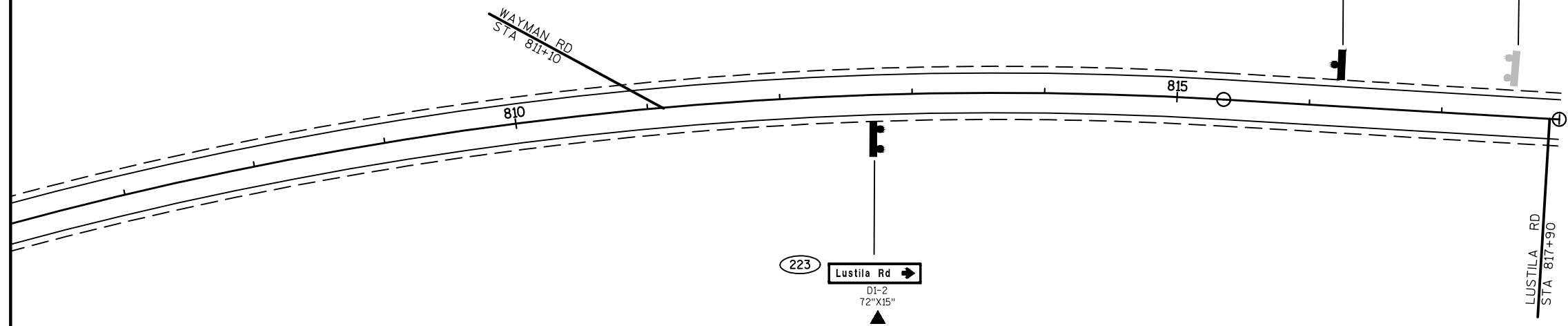
| KEY | |
|-----|------------------------------|
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| ▲ | SIGNS REFLECTIVE TYPE 2 |
| ⌋ | SIGNS ON DOUBLE SUPPORT |
| ⌋ | SIGNS ON SINGLE SUPPORT |



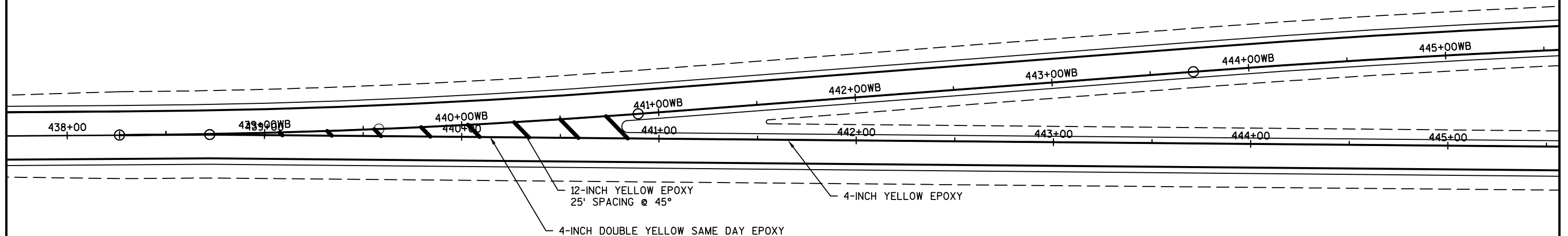
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| ┌ | SIGNS ON DOUBLE SUPPORT |
| └ | SIGNS ON SINGLE SUPPORT |

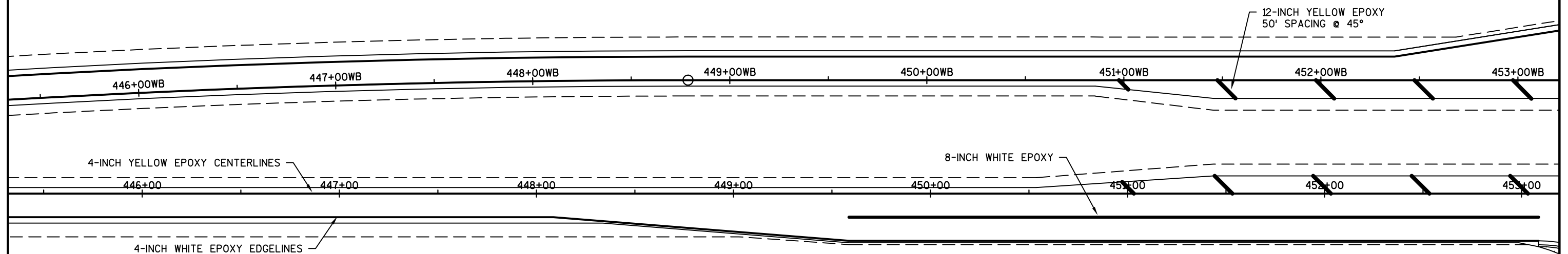


| KEY | |
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| ⌋ | SIGNS ON DOUBLE SUPPORT |
| └ | SIGNS ON SINGLE SUPPORT |

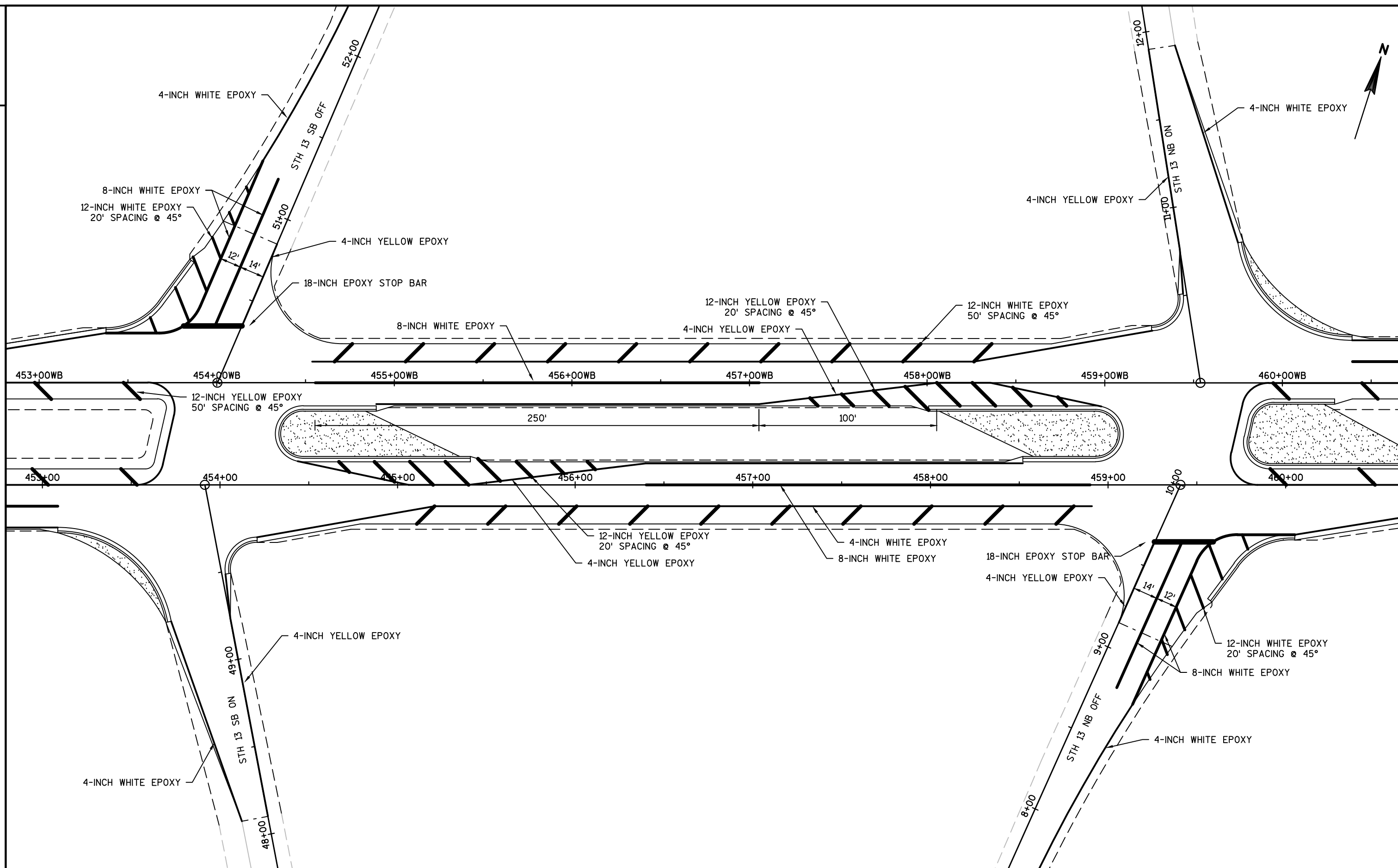


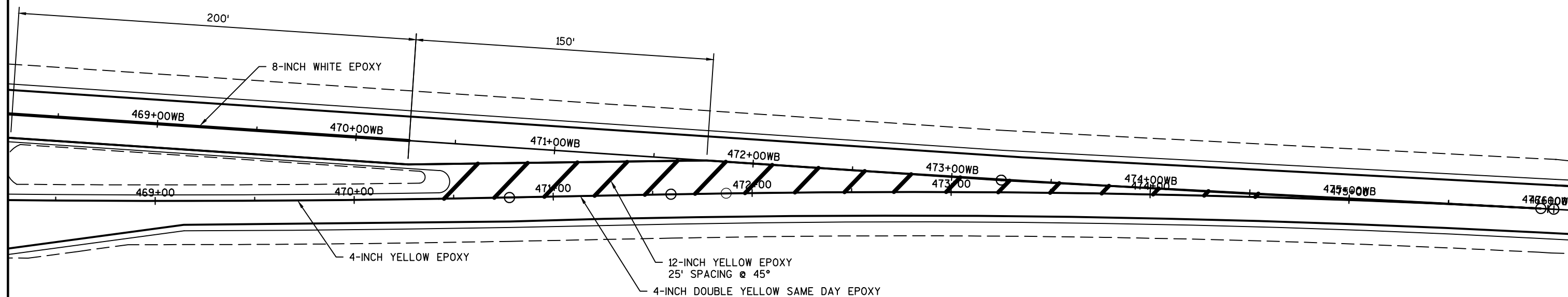
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| ⚡ | SIGNS ON SINGLE SUPPORT |

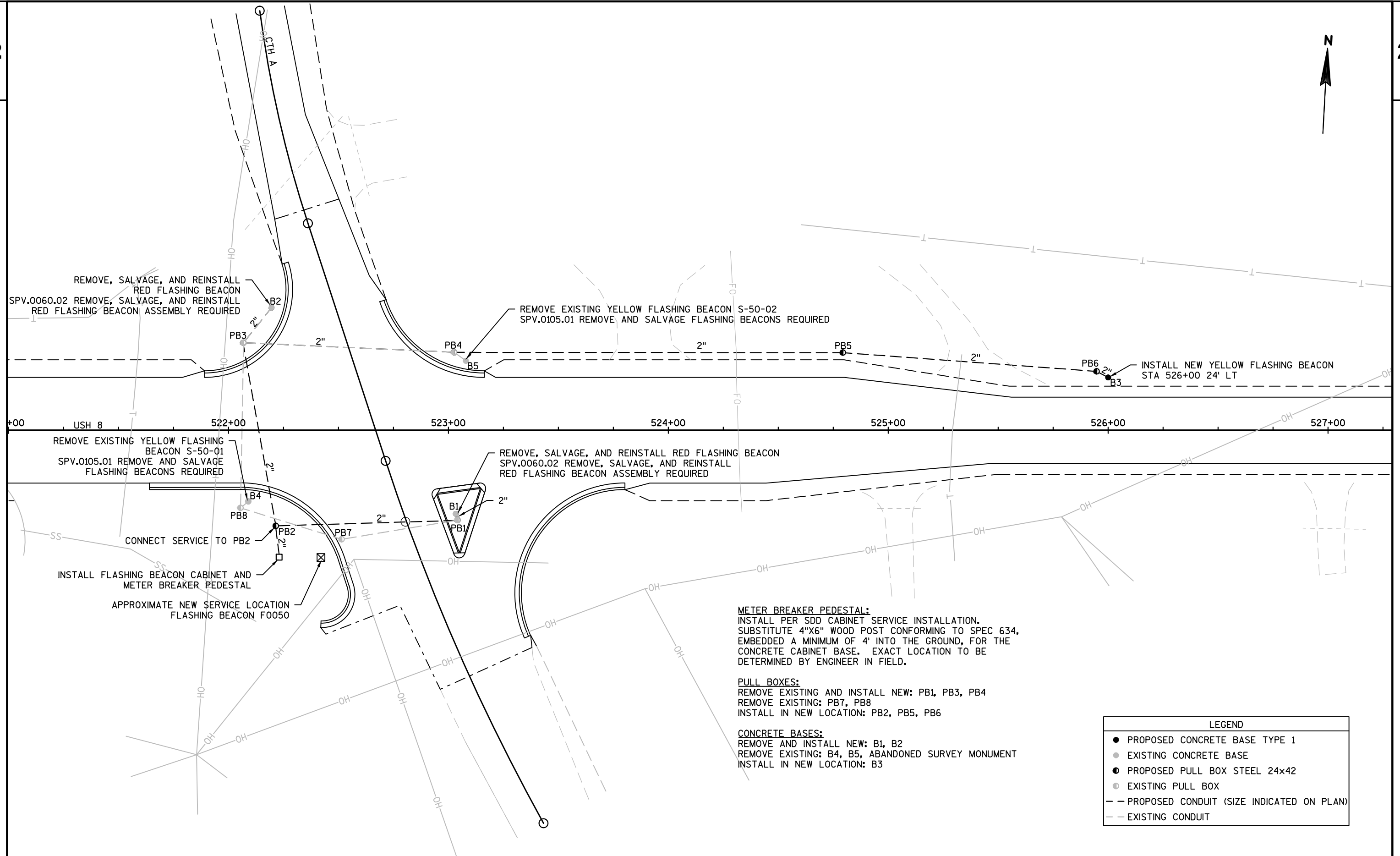


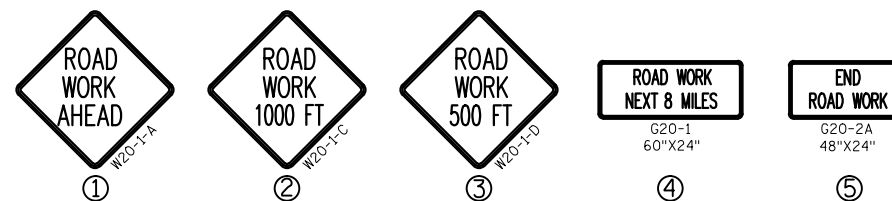


| | | | | | |
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| PROJECT NO:1580-29-70 | HWY:USH 8 | COUNTY:PRICE | STH 13 INTERCHANGE PAVEMENT MARKING | SHEET | E |
|-----------------------|-----------|--------------|-------------------------------------|-------|---|

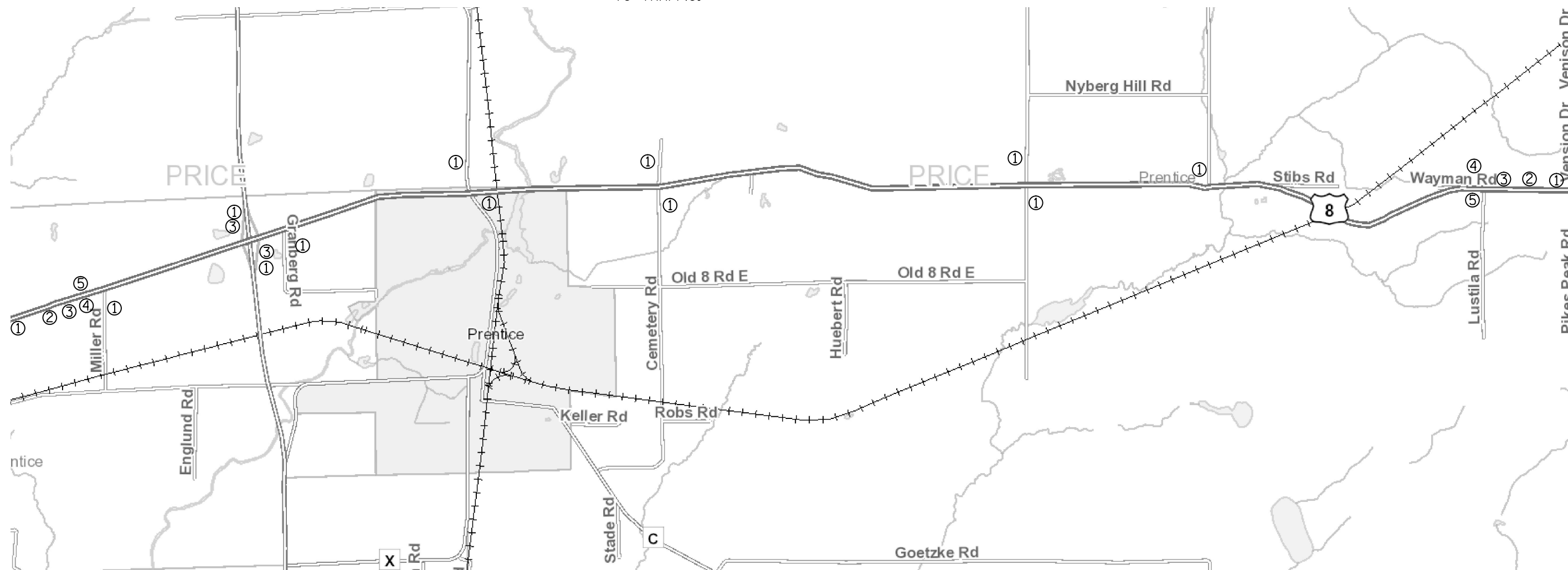








THE EXACT NUMBER, LOCATION, AND SPACING OF DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
FURTHER INFORMATION AVAILABLE IN SDD 15C4:
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45
M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC.

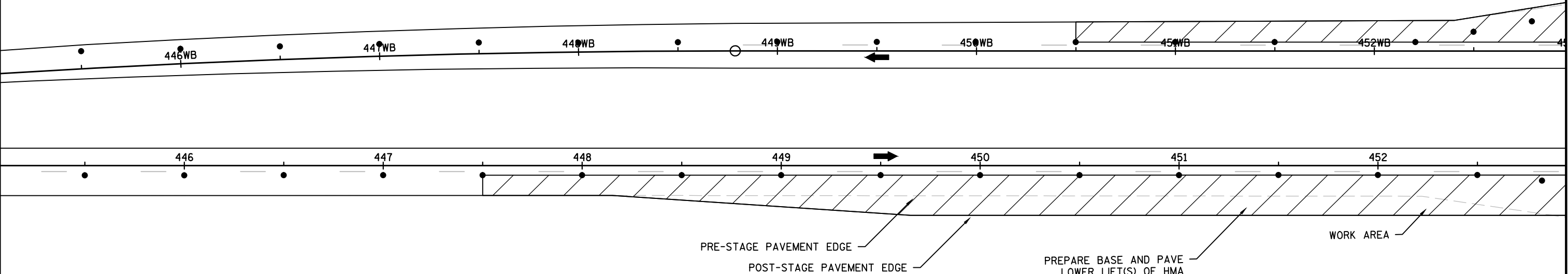
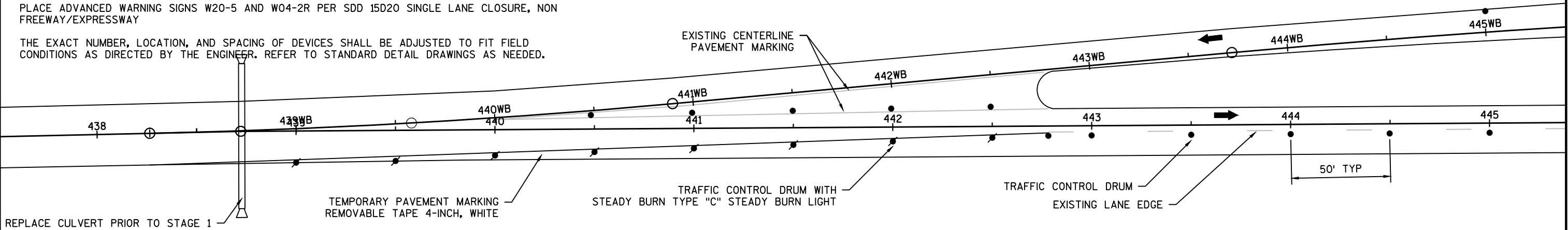


STAGE 1 NOTES:
- CONSTRUCT WIDENINGS FOR RIGHT TURN LANES
- REMOVE AND RECONSTRUCT CURB & GUTTER AT RAMPS; PAVE BASE COURSES AT PATCH
- REMOVE ISLANDS AND RESTORE PAVEMENT
- REPLACE CULVERTS ON RAMPS

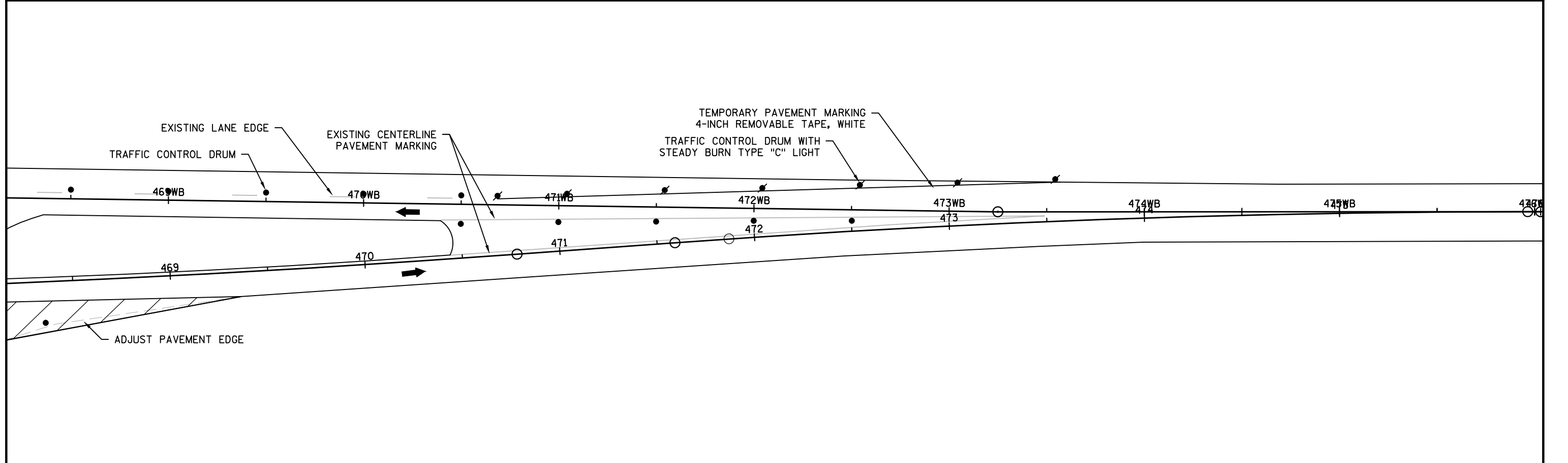
UTILIZE EXTRA TRAFFIC CONTROL DRUMS AND W01-4R/L SIGNS TO DIRECT TRAFFIC AROUND WORK AREA WHILE REMOVING ISLANDS AND REPLACING RAMP CULVERTS. REMOVE FROM ROADWAY WHEN WORK IS COMPLETE.

PLACE ADVANCED WARNING SIGNS W20-5 AND W04-2R PER SDD 15D20 SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY

THE EXACT NUMBER, LOCATION, AND SPACING OF DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. REFER TO STANDARD DETAIL DRAWINGS AS NEEDED.



2



FILE NAME : \\RHIRTOP\PLPPI01\N3PUBLIC\PDS\C3D\15802930\SHEETSP\AN\025002-TC.DWG
LAYOUT NAME - 03

PLOT DATE : 6/2/2016 11:14 AM

PLOT BY : KILEN, KAI M

PLOT NAME :

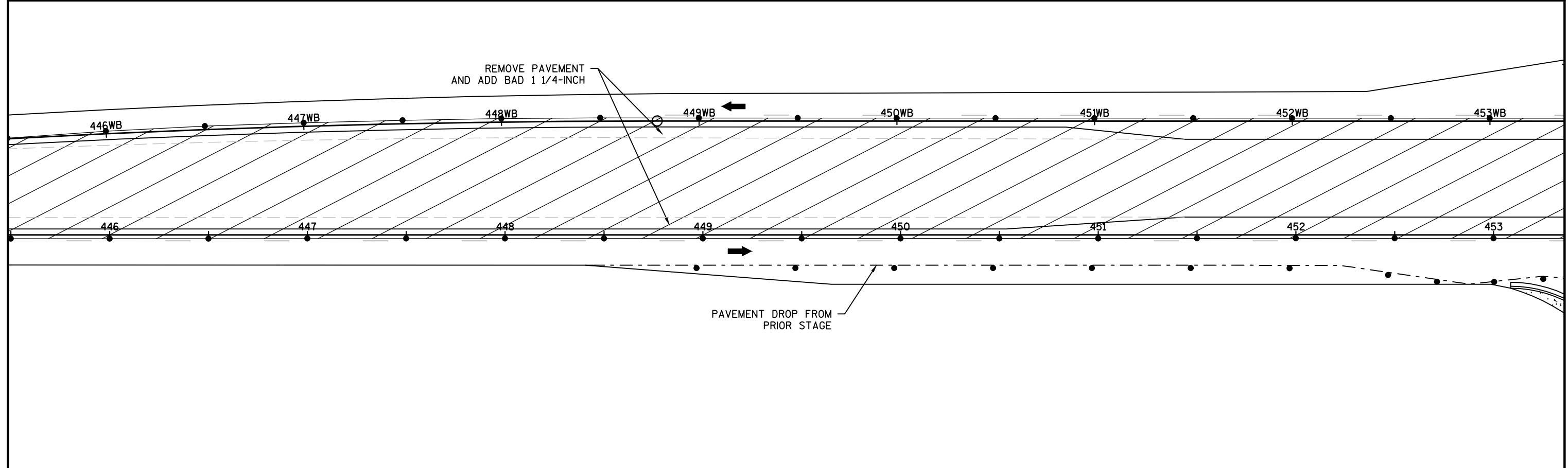
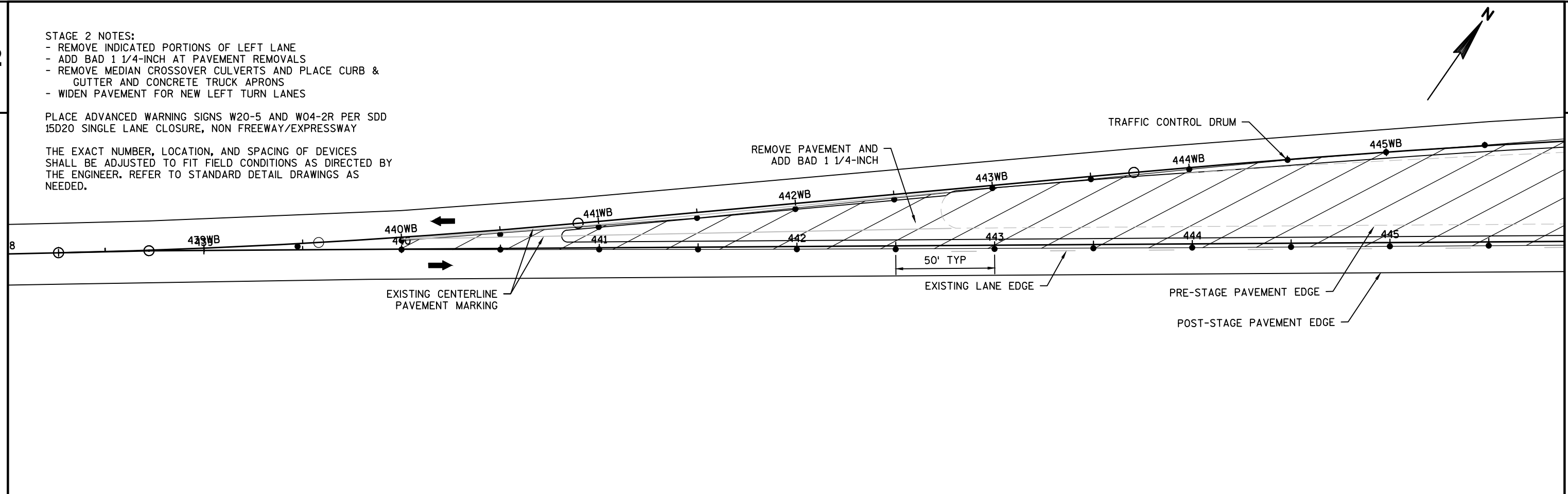
PLOT SCALE : 1 IN:50 FT

WISDOT/CADDs SHEET 44

2

- REMOVE INDICATED PORTIONS OF LEFT LANE
- ADD BAD 1 1/4-INCH AT PAVEMENT REMOVALS
- REMOVE MEDIAN CROSSOVER CULVERTS AND PLACE CURB & GUTTER AND CONCRETE TRUCK APRONS
- WIDEN PAVEMENT FOR NEW LEFT TURN LANES

THE EXACT NUMBER, LOCATION, AND SPACING OF DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. REFER TO STANDARD DETAIL DRAWINGS AS NEEDED.



| |
|-----------------------|
| PROJECT NO:1580-29-70 |
|-----------------------|

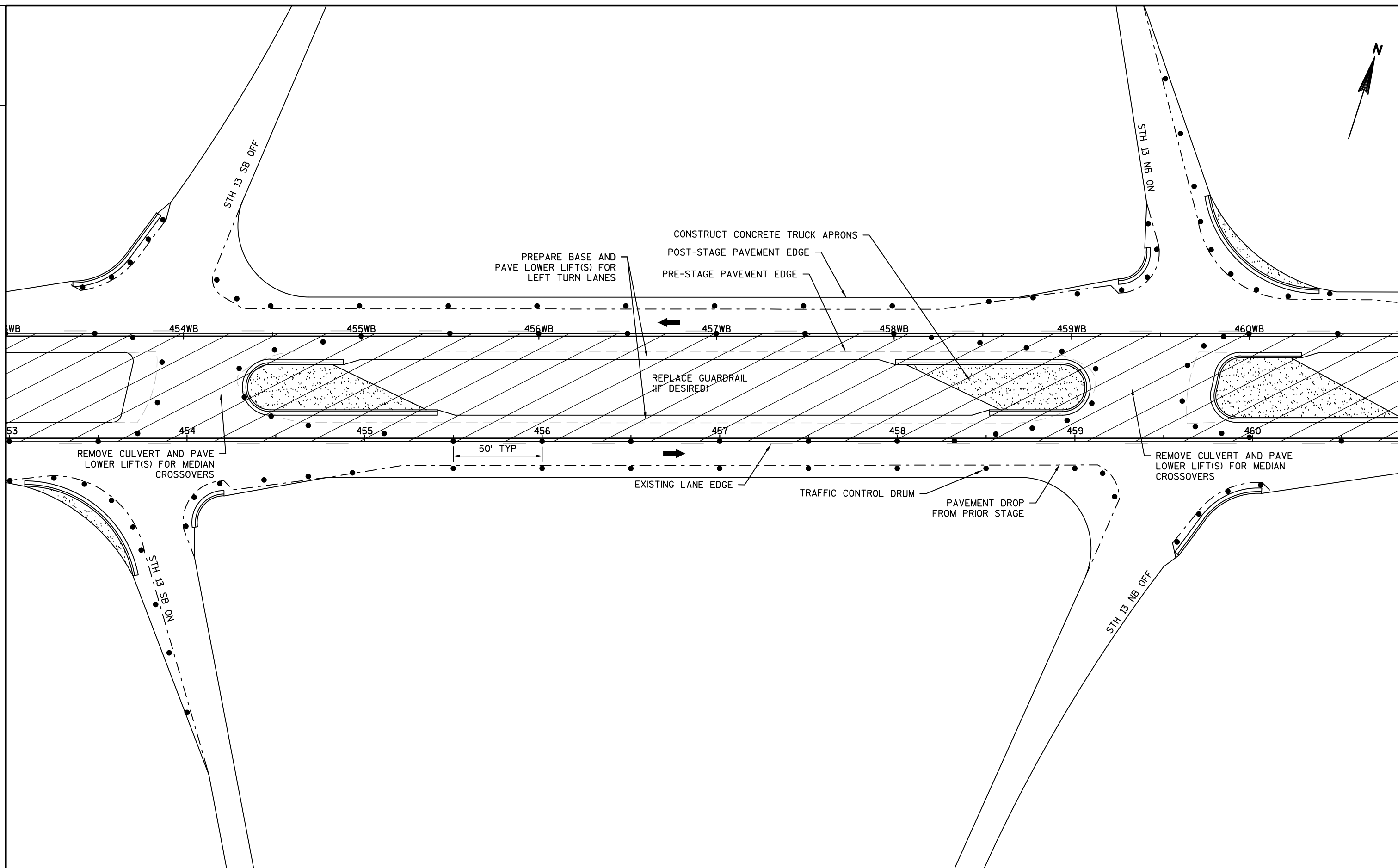
| |
|------------|
| HWY: USH 8 |
|------------|

| COUNTY:PRICE |
|--------------|
|--------------|

STH 13 INTERCHANGE STAGE 2 TRAFFIC CONTROL

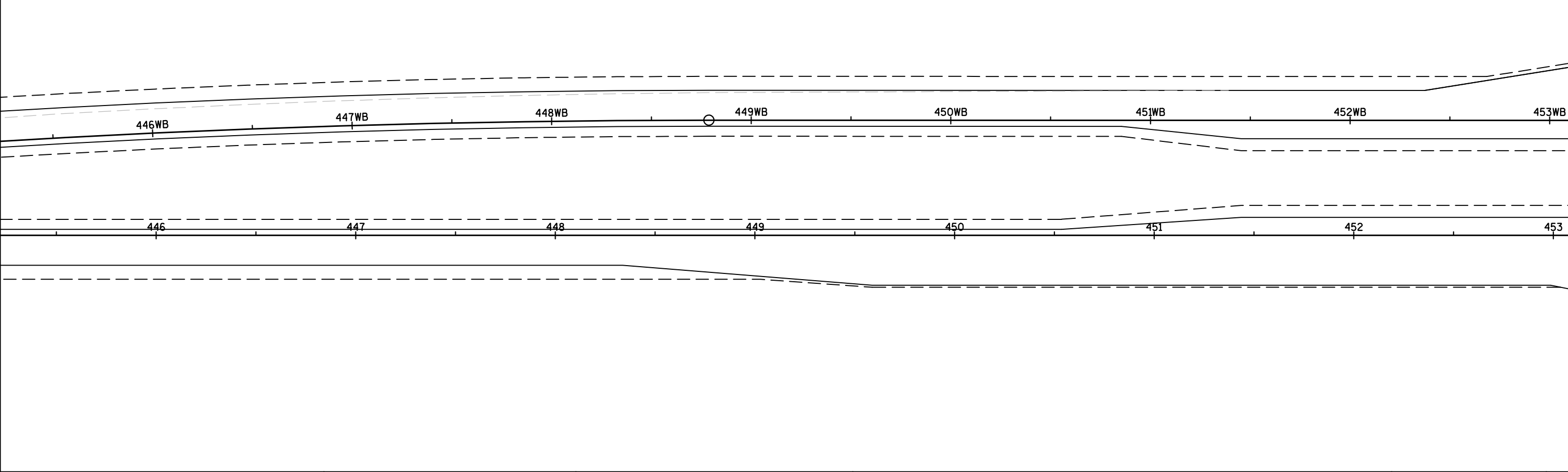
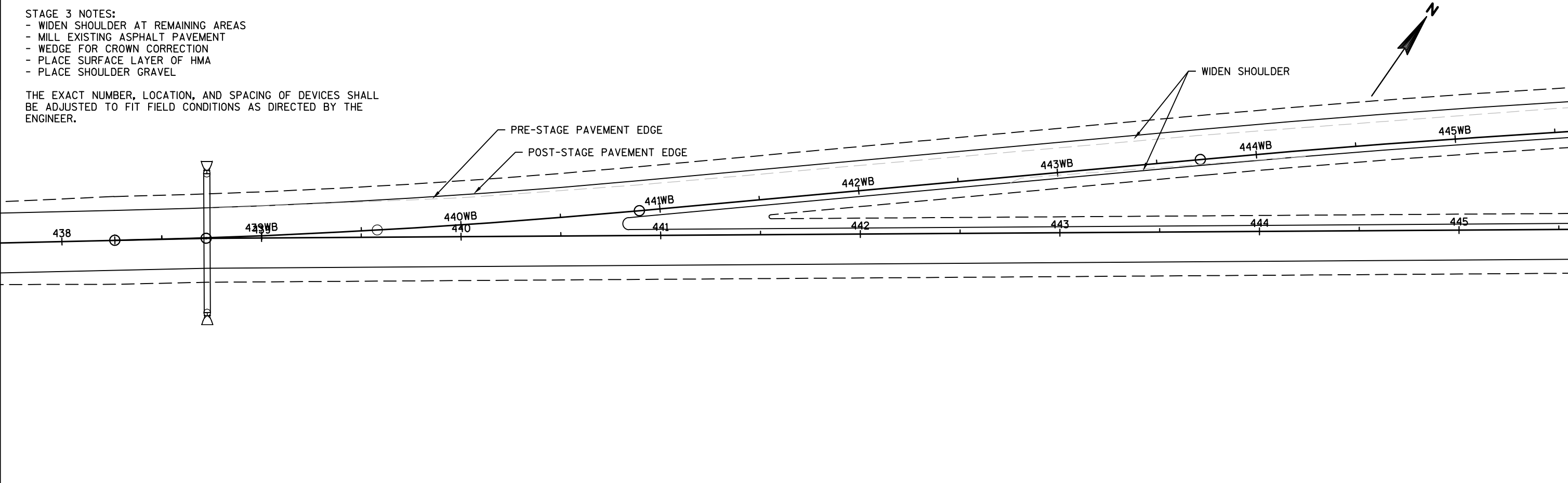
SHEET

2



STAGE 3 NOTES:
- WIDEN SHOULDER AT REMAINING AREAS
- MILL EXISTING ASPHALT PAVEMENT
- WEDGE FOR CROWN CORRECTION
- PLACE SURFACE LAYER OF HMA
- PLACE SHOULDER GRAVEL

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

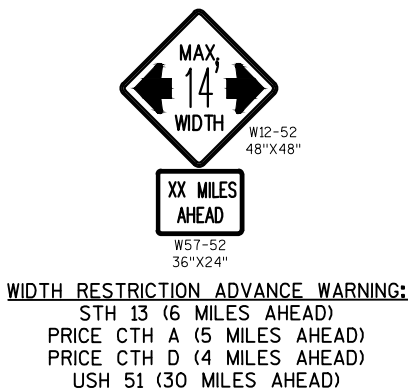
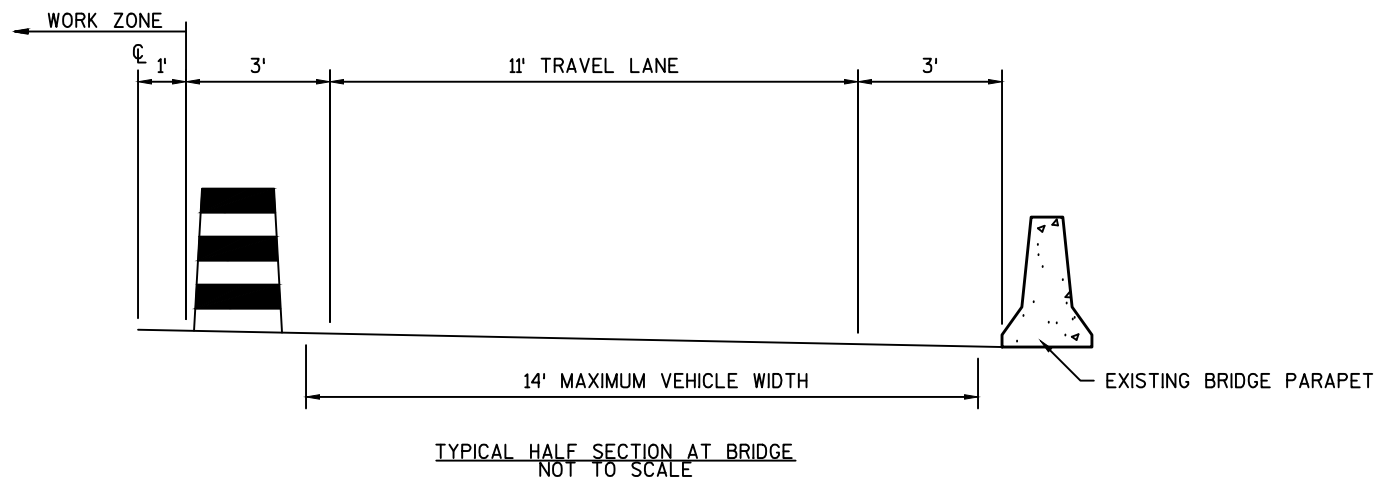


| | | | | | |
|-----------------------|-----------|--------------|--|-------|---|
| PROJECT NO:1580-29-70 | HWY:USH 8 | COUNTY:PRICE | STH 13 INTERCHANGE STAGE 3 TRAFFIC CONTROL | SHEET | E |
|-----------------------|-----------|--------------|--|-------|---|

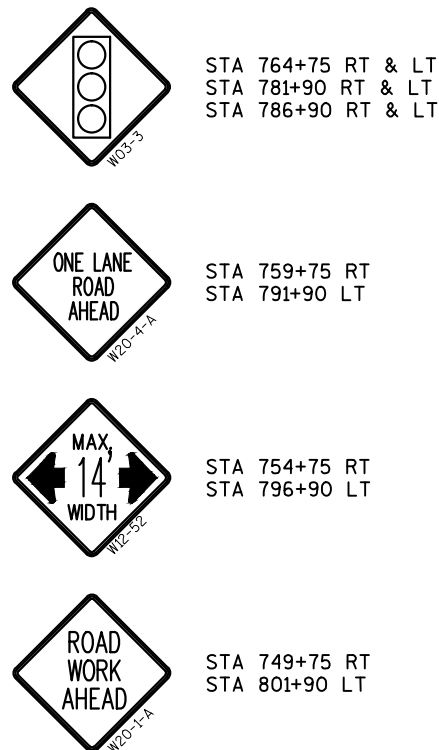
GENERAL NOTES:
THE EXACT NUMBER, LOCATION, AND SPACING OF DEVICES SHALL
BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE
ENGINEER

REFER TO SDD 15D33 ONE LANE ROAD WITH TEMPORARY SIGNALS
FOR ADDITIONAL DETAILS, INCLUDING ADVANCE WARNING SIGNAGE

MIRROR LAYOUT AS NEEDED FOR WESTBOUND LANE CLOSURE



ADVANCE WARNING SIGN LOCATIONS:



TEMPORARY TRAFFIC SIGNAL TIMING

ALL TIMES LISTED IN SECONDS

SEQUENCE 1 : 6:00 AM TO 8:00 PM

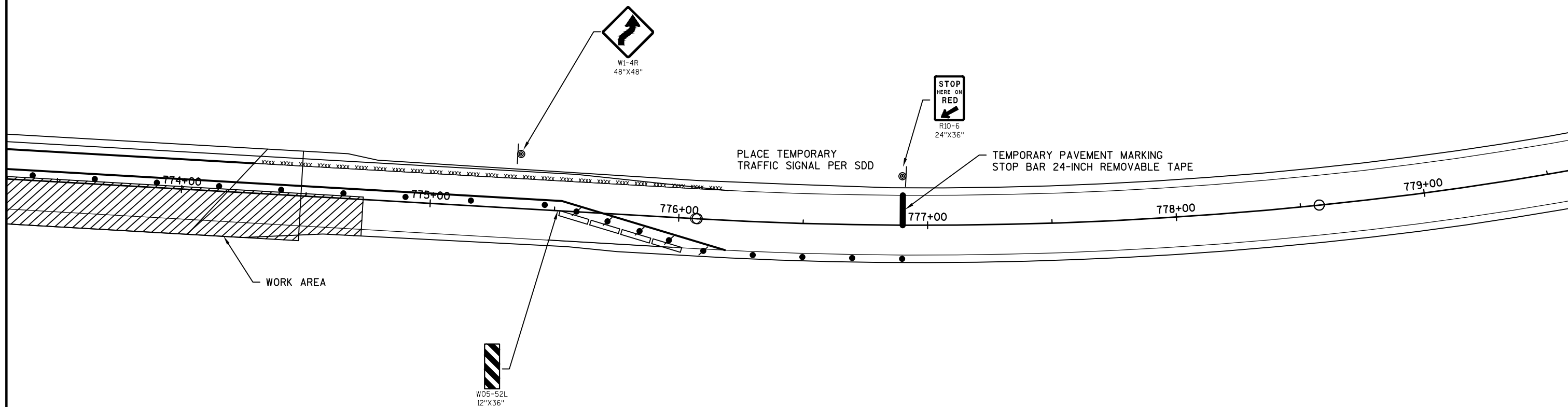
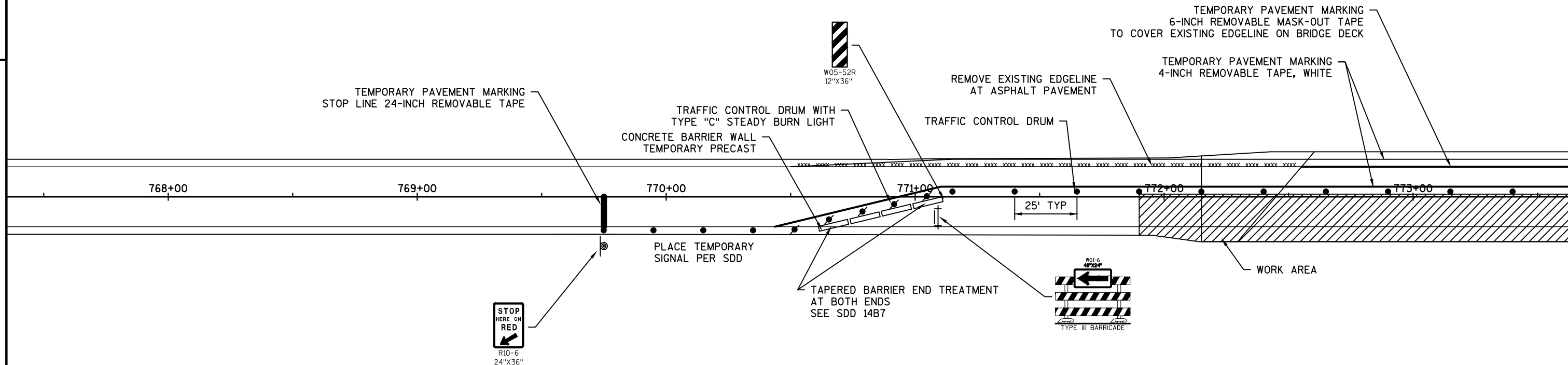
TOTAL CYCLE TIME = 124.0

| EASTBOUND | WESTBOUND | YELLOW | ALL RED | GREEN |
|-----------|-----------|--------|---------|-------|
| RED | RED | | 23.0 | |
| GREEN | RED | | | 34.0 |
| YELLOW | RED | 5.0 | | |
| RED | RED | | 23.0 | |
| RED | GREEN | | | 34.0 |
| RED | YELLOW | 5.0 | | |
| TOTAL: | | 10.0 | 46.0 | 68.0 |

SEQUENCE 2: 8:00 PM TO 6:00 AM

TOTAL CYCLE TIME = 88.0

| EASTBOUND | WESTBOUND | YELLOW | ALL RED | GREEN |
|-----------|-----------|--------|---------|-------|
| RED | RED | | 23.0 | |
| GREEN | RED | | | 16.0 |
| YELLOW | RED | 5.0 | | |
| RED | RED | | 23.0 | |
| RED | GREEN | | | 16.0 |
| RED | YELLOW | 5.0 | | |
| TOTAL: | | 10.0 | 46.0 | 32.0 |



| DATE 13OCT16 | | E S T I M A T E O F Q U A N T I T I E S | | | |
|--------------|------------|--|------|-------------|-------------|
| LINE | | | | 1580-29-70 | |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTI TY |
| 0010 | 201.0105 | Clearing | STA | 3.000 | 3.000 |
| 0020 | 201.0205 | Grubbing | STA | 3.000 | 3.000 |
| 0030 | 203.0100 | Removing Small Pipe Culverts | EACH | 9.000 | 9.000 |
| 0040 | 204.0100 | Removing Pavement | SY | 1,145.000 | 1,145.000 |
| 0050 | 204.0110 | Removing Asphaltic Surface | SY | 2,075.000 | 2,075.000 |
| 0060 | 204.0115 | Removing Asphaltic Surface Butt Joints | SY | 830.000 | 830.000 |
| 0070 | 204.0120 | Removing Asphaltic Surface Milling | SY | 142,010.000 | 142,010.000 |
| 0080 | 204.0150 | Removing Curb & Gutter | LF | 1,600.000 | 1,600.000 |
| 0090 | 204.0165 | Removing Guardrail | LF | 1,080.000 | 1,080.000 |
| 0100 | 204.0180 | Removing Delineators and Markers | EACH | 32.000 | 32.000 |
| 0110 | 204.0195 | Removing Concrete Bases | EACH | 5.000 | 5.000 |
| 0120 | 204.9060.S | Removing (item description) 01. Apron Endwalls | EACH | 2.000 | 2.000 |
| 0130 | 205.0100 | Excavation Common | CY | 1,248.000 | 1,248.000 |
| 0140 | 208.0100 | Borrow | CY | 1,079.000 | 1,079.000 |
| 0150 | 211.0100 | Prepare Foundation for Asphaltic Paving (project) 01. 1580-29-70 | LS | 1.000 | 1.000 |
| 0160 | 211.0400 | Prepare Foundation for Asphaltic Shoulders | STA | 80.000 | 80.000 |
| 0170 | 211.0500 | Prepare Foundation for Base Aggregate | STA | 4.000 | 4.000 |
| 0180 | 213.0100 | Finishing Roadway (project) 01. 1580-29-70 | EACH | 1.000 | 1.000 |
| 0190 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 6,200.000 | 6,200.000 |
| 0200 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 3,210.000 | 3,210.000 |
| 0210 | 305.0500 | Shaping Shoulders | STA | 866.000 | 866.000 |
| 0220 | 405.0100 | Coloring Concrete WisDOT Red | CY | 247.000 | 247.000 |
| 0230 | 415.0410 | Concrete Pavement Approach Slab | SY | 237.000 | 237.000 |
| 0240 | 416.0512 | Concrete Truck Apron 12-Inch | SY | 743.000 | 743.000 |
| 0250 | 440.4410 | Incentive IRI Ride | DOL | 29,520.000 | 29,520.000 |
| 0260 | 450.4000 | HMA Cold Weather Paving | TON | 3,030.000 | 3,030.000 |
| 0270 | 455.0605 | Tack Coat | GAL | 9,209.000 | 9,209.000 |
| 0280 | 460.2000 | Incentive Density HMA Pavement | DOL | 19,410.000 | 19,410.000 |
| 0290 | 460.4110.S | Reheating HMA Pavement Longitudinal Joints | LF | 35,900.000 | 35,900.000 |
| 0300 | 460.5223 | HMA Pavement 3 LT 58-28 S | TON | 13,705.000 | 13,705.000 |
| 0310 | 460.5224 | HMA Pavement 4 LT 58-28 S | TON | 16,612.000 | 16,612.000 |
| 0320 | 465.0110 | Asphaltic Surface Patching | TON | 200.000 | 200.000 |
| 0330 | 465.0120 | Asphaltic Surface Driveways and Field Entrances | TON | 50.000 | 50.000 |
| 0340 | 465.0305 | Asphaltic Surface Safety Islands | TON | 5.000 | 5.000 |
| 0350 | 465.0315 | Asphaltic Flumes | SY | 40.000 | 40.000 |
| 0360 | 465.0475 | Asphalt Center Line Rumble Strips 2-Lane Rural | LF | 33,663.000 | 33,663.000 |
| 0370 | 522.0124 | Culvert Pipe Reinforced Concrete Class III 24-Inch | LF | 74.000 | 74.000 |
| 0380 | 522.0136 | Culvert Pipe Reinforced Concrete Class III 36-Inch | LF | 83.000 | 83.000 |
| 0390 | 522.0318 | Culvert Pipe Reinforced Concrete Class IV 18-Inch | LF | 164.000 | 164.000 |
| 0400 | 522.0324 | Culvert Pipe Reinforced Concrete Class IV 24-Inch | LF | 178.000 | 178.000 |
| 0410 | 522.0330 | Culvert Pipe Reinforced Concrete Class IV 30-Inch | LF | 70.000 | 70.000 |
| 0420 | 522.1018 | Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch | EACH | 6.000 | 6.000 |

| DATE 13OCT16 | | E S T I M A T E O F Q U A N T I T I E S | | | |
|--------------|-----------|---|------|-------------|-------------|
| LINE | | | | | 1580-29-70 |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
| 0430 | 522. 1024 | Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch | EACH | 8. 000 | 8. 000 |
| 0440 | 522. 1030 | Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch | EACH | 3. 000 | 3. 000 |
| 0450 | 522. 1036 | Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch | EACH | 3. 000 | 3. 000 |
| 0460 | 524. 0124 | Culvert Pipe Salvaged 24-Inch | LF | 8. 000 | 8. 000 |
| 0470 | 524. 0624 | Apron Endwalls for Culvert Pipe Salvaged 24-Inch | EACH | 5. 000 | 5. 000 |
| 0480 | 601. 0415 | Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J | LF | 79. 000 | 79. 000 |
| 0490 | 601. 0557 | Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D | LF | 740. 000 | 740. 000 |
| 0500 | 601. 0580 | Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R | LF | 720. 000 | 720. 000 |
| 0510 | 601. 0586 | Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type TBTT | LF | 47. 000 | 47. 000 |
| 0520 | 603. 8000 | Concrete Barrier Temporary Precast Delivered | LF | 100. 000 | 100. 000 |
| 0530 | 603. 8125 | Concrete Barrier Temporary Precast Installed | LF | 200. 000 | 200. 000 |
| 0540 | 606. 0100 | Riprap Light | CY | 9. 000 | 9. 000 |
| 0550 | 606. 0300 | Riprap Heavy | CY | 20. 000 | 20. 000 |
| 0560 | 611. 0651 | Inlet Covers Type S | EACH | 2. 000 | 2. 000 |
| 0570 | 614. 0220 | Steel Thrie Beam Bulldnose Terminal | EACH | 2. 000 | 2. 000 |
| 0580 | 614. 0230 | Steel Thrie Beam | LF | 100. 000 | 100. 000 |
| 0590 | 614. 2300 | MGS Guardrail 3 | LF | 275. 000 | 275. 000 |
| 0600 | 614. 2500 | MGS Thrie Beam Transition | LF | 315. 200 | 315. 200 |
| 0610 | 614. 2610 | MGS Guardrail Terminal EAT | EACH | 8. 000 | 8. 000 |
| 0620 | 618. 0100 | Maintenance And Repair of Haul Roads (project) 01. 1580-29-70 | EACH | 1. 000 | 1. 000 |
| 0630 | 619. 1000 | Mobilization | EACH | 1. 000 | 1. 000 |
| 0640 | 621. 0100 | Landmark Reference Monuments | EACH | 20. 000 | 20. 000 |
| 0650 | 624. 0100 | Water | MGAL | 150. 000 | 150. 000 |
| 0660 | 625. 0100 | Topsoil | SY | 5, 730. 000 | 5, 730. 000 |
| 0670 | 628. 1504 | Silt Fence | LF | 2, 115. 000 | 2, 115. 000 |
| 0680 | 628. 1520 | Silt Fence Maintenance | LF | 2, 115. 000 | 2, 115. 000 |
| 0690 | 628. 1905 | Mobilizations Erosion Control | EACH | 6. 000 | 6. 000 |
| 0700 | 628. 1910 | Mobilizations Emergency Erosion Control | EACH | 2. 000 | 2. 000 |
| 0710 | 628. 2008 | Erosion Mat Urban Class I Type B | SY | 3, 420. 000 | 3, 420. 000 |
| 0720 | 628. 2027 | Erosion Mat Class II Type C | SY | 2, 560. 000 | 2, 560. 000 |
| 0730 | 628. 7005 | Inlet Protection Type A | EACH | 2. 000 | 2. 000 |
| 0740 | 628. 7015 | Inlet Protection Type C | EACH | 2. 000 | 2. 000 |
| 0750 | 628. 7504 | Temporary Ditch Checks | LF | 70. 000 | 70. 000 |
| 0760 | 628. 7555 | Culvert Pipe Checks | EACH | 76. 000 | 76. 000 |
| 0770 | 628. 7570 | Rock Bags | EACH | 50. 000 | 50. 000 |
| 0780 | 629. 0210 | Fertilizer Type B | CWT | 4. 370 | 4. 370 |
| 0790 | 630. 0120 | Seeding Mixture No. 20 | LB | 103. 600 | 103. 600 |
| 0800 | 631. 0300 | Sod Water | MGAL | 130. 000 | 130. 000 |
| 0810 | 633. 0100 | Delineator Posts Steel | EACH | 42. 000 | 42. 000 |
| 0820 | 633. 0500 | Delineator Reflectors | EACH | 42. 000 | 42. 000 |
| 0830 | 633. 5200 | Markers Culvert End | EACH | 52. 000 | 52. 000 |
| 0840 | 634. 0616 | Posts Wood 4x6-Inch X 16-FT | EACH | 129. 000 | 129. 000 |
| 0850 | 634. 0618 | Posts Wood 4x6-Inch X 18-FT | EACH | 17. 000 | 17. 000 |
| 0860 | 634. 0812 | Posts Tubular Steel 2x2-Inch X 12-FT | EACH | 3. 000 | 3. 000 |

| DATE 13OCT16 | | E S T I M A T E O F Q U A N T I T I E S | | | |
|--------------|----------|--|------|-------------|-------------|
| LINE | | | | 1580-29-70 | |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
| 0870 | 637.2210 | Signs Type II Reflective H | SF | 902.570 | 902.570 |
| 0880 | 637.2230 | Signs Type II Reflective F | SF | 290.750 | 290.750 |
| 0890 | 638.2602 | Removing Signs Type II | EACH | 133.000 | 133.000 |
| 0900 | 638.3000 | Removing Small Sign Supports | EACH | 134.000 | 134.000 |
| 0910 | 642.5201 | Field Office Type C | EACH | 1.000 | 1.000 |
| 0920 | 643.0100 | Traffic Control (project) 01. 1580-29-70 | EACH | 1.000 | 1.000 |
| 0930 | 643.0300 | Traffic Control Drums | DAY | 7,570.000 | 7,570.000 |
| 0940 | 643.0420 | Traffic Control Barricades Type III | DAY | 21.000 | 21.000 |
| 0950 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 465.000 | 465.000 |
| 0960 | 643.0900 | Traffic Control Signs | DAY | 2,990.000 | 2,990.000 |
| 0970 | 645.0120 | Geotextile Type HR | SY | 26.000 | 26.000 |
| 0980 | 645.0130 | Geotextile Type R | SY | 27.000 | 27.000 |
| 0990 | 646.0106 | Pavement Marking Epoxy 4-Inch | LF | 128,750.000 | 128,750.000 |
| 1000 | 646.0126 | Pavement Marking Epoxy 8-Inch | LF | 2,480.000 | 2,480.000 |
| 1010 | 646.0406 | Pavement Marking Same Day Epoxy 4-Inch | LF | 42,895.000 | 42,895.000 |
| 1020 | 646.0600 | Removing Pavement Markings | LF | 790.000 | 790.000 |
| 1030 | 647.0566 | Pavement Marking Stop Line Epoxy 18-Inch | LF | 175.000 | 175.000 |
| 1040 | 647.0726 | Pavement Marking Diagonal Epoxy 12-Inch | LF | 1,005.000 | 1,005.000 |
| 1050 | 647.0803 | Pavement Marking Aerial Enforcement Bars Epoxy 24-Inch | LF | 60.000 | 60.000 |
| 1060 | 648.0100 | Locating No-Passing Zones | MI | 7.660 | 7.660 |
| 1070 | 649.0400 | Temporary Pavement Marking Removable Tape 4-Inch | LF | 3,050.000 | 3,050.000 |
| 1080 | 649.0402 | Temporary Pavement Marking Paint 4-Inch | LF | 39,870.000 | 39,870.000 |
| 1090 | 649.0506 | Temporary Pavement Marking Removable Mask-Out Tape 6-Inch | LF | 350.000 | 350.000 |
| 1100 | 649.1300 | Temporary Pavement Marking Stop Line 24-Inch | LF | 24.000 | 24.000 |
| 1110 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 1,539.000 | 1,539.000 |
| 1120 | 650.6000 | Construction Staking Pipe Culverts | EACH | 9.000 | 9.000 |
| 1130 | 650.8000 | Construction Staking Resurfacing Reference | LF | 40,450.000 | 40,450.000 |
| 1140 | 650.9910 | Construction Staking Supplemental Control (project) 01. 1580-29-70 | LS | 1.000 | 1.000 |
| 1150 | 650.9920 | Construction Staking Slope Stakes | LF | 870.000 | 870.000 |
| 1160 | 652.0225 | Conduit Rigid Nonmetallic Schedule 40 2-Inch | LF | 350.000 | 350.000 |
| 1170 | 652.0605 | Conduit Special 2-Inch | LF | 260.000 | 260.000 |
| 1180 | 653.0140 | Pull Boxes Steel 24x42-Inch | EACH | 6.000 | 6.000 |
| 1190 | 653.0905 | Removing Pull Boxes | EACH | 5.000 | 5.000 |
| 1200 | 654.0101 | Concrete Bases Type 1 | EACH | 3.000 | 3.000 |
| 1210 | 655.0305 | Cable Type UF 2-12 AWG Grounded | LF | 785.000 | 785.000 |
| 1220 | 656.0200 | Electrical Service Meter Breaker Pedestal (location) 01. USH 8 & CTH A | LS | 1.000 | 1.000 |
| 1230 | 657.0100 | Pedestal Bases | EACH | 1.000 | 1.000 |
| 1240 | 657.0420 | Traffic Signal Standards Aluminum 13-FT | EACH | 1.000 | 1.000 |
| 1250 | 658.0103 | Traffic Signal Face 1-12 Inch Vertical | EACH | 1.000 | 1.000 |
| 1260 | 658.0210 | Backplates Signal Face 1 Section 12-Inch | EACH | 1.000 | 1.000 |
| 1270 | 658.0605 | Led Modules 12-Inch Yellow Ball | EACH | 1.000 | 1.000 |
| 1280 | 658.5069 | Signal Mounting Hardware (location) 01. STA 526+00 LT | LS | 1.000 | 1.000 |
| 1290 | 661.0100 | Temporary Traffic Signals for Bridges (structure) 01. B-50-48 | LS | 1.000 | 1.000 |
| 1300 | 690.0150 | Sawing Asphalt | LF | 3,885.000 | 3,885.000 |

| DATE 13OCT16 | | E S T I M A T E O F Q U A N T I T I E S | | | |
|--------------|----------|---|------|-----------|------------|
| LINE | | | | | 1580-29-70 |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
| 1310 | 690.0250 | Sawing Concrete | LF | 1,135.000 | 1,135.000 |
| 1320 | 715.0415 | Incentive Strength Concrete Pavement | DOL | 500.000 | 500.000 |
| 1330 | ASP.1T0A | On-the-Job Training Apprentice at \$5.00/HR | HRS | 1,200.000 | 1,200.000 |
| 1340 | ASP.1T0G | On-the-Job Training Graduate at \$5.00/HR | HRS | 600.000 | 600.000 |
| 1350 | SPV.0060 | Special 01. Lane Shift | EACH | 2.000 | 2.000 |
| 1360 | SPV.0060 | Special 02. Remove, Salvage, and Reinstall Red Flashing Beacon Assembly | EACH | 2.000 | 2.000 |
| 1370 | SPV.0060 | Special 03. Reestablish Section Corner Monuments | EACH | 5.000 | 5.000 |
| 1380 | SPV.0090 | Special 01. Heavy Duty Silt Fence | LF | 250.000 | 250.000 |
| 1390 | SPV.0090 | Special 02. Railing Steel Type "W" Modified | LF | 91.000 | 91.000 |
| 1400 | SPV.0105 | Special 01. Remove and Salvage Flashing Beacons | LS | 1.000 | 1.000 |
| 1410 | SPV.0180 | Special 01. Protective Thermoplastic Coating at Snowmobile Crossings | SY | 67.000 | 67.000 |

EARTHWORK SUMMARY

| DIVISION | STATION | LOCATION | 205.0100 | | UNUSABLE PAVEMENT MATERIAL | AVAILABLE MATERIAL (3) | UNEXPANDED FILL | EXPANDED | MASS ORDINATE | WASTE | 208.0100 |
|----------|-----------------|----------------------------|-----------------------|-----|----------------------------------|---------------------------|--------------------|------------|---------------|-------|----------|
| | | | EXCAVATION COMMON (1) | | | | | FILL | +/- | | BORROW |
| | | | CUT (2) | EBS | | | | FACTOR (4) | (5) | | |
| | | | | | | | | 1.25 | | | |
| 1 | 438+78 | CULVERT TRANSITION | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | | STH 13 SB ON RAMP C&G | 19 | 0 | 0 | 11 | 119 | 149 | -138 | 0 | 138 |
| 1 | | STH 13 SB OFF RAMP C&G | 84 | 0 | 0 | 47 | 0 | 0 | 47 | 47 | 0 |
| 1 | | STH 13 RAMP MEDIAN X-OVERS | 0 | 0 | 0 | 0 | 40 | 50 | -50 | 0 | 50 |
| 1 | | STH 13 NB ON RAMP C&G | 20 | 0 | 0 | 11 | 55 | 69 | -57 | 0 | 57 |
| 1 | | STH 13 NB OFF RAMP C&G | 83 | 0 | 0 | 46 | 0 | 0 | 46 | 46 | 0 |
| 1 | | GRANBERG ROAD C&G | 132 | 0 | 0 | 73 | 0 | 0 | 73 | 73 | 0 |
| 1 | | CTH A C&G | 271 | 0 | 0 | 151 | 0 | 0 | 151 | 151 | 0 |
| 1 | 610+68 | CULVERT TRANSTION | 142 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 658+80 | CULVERT TRANSTION | 370 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 770+25 - 776+50 | B-50-48 BEAMGUARD | 0 | 0 | 0 | 0 | 667 | 833 | -833 | 0 | 833 |
| 1 | 772+15 - 774+48 | B-50-48 APPROACH SLAB | 79 | 0 | 0 | 79 | 0 | 0 | 79 | 79 | 0 |
| TOTAL: | | | 1248 | | 0 | 417 | 881 | 1101 | -683 | 396 | 1079 |

NOTES:

- 1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS
- 2) UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT
- 3) AVAILABLE MATERIAL = CUT - UNUSABLE PAVEMENT MATERIAL (* 5/9 AT CURB & GUTTER REPLACEMENTS)
- 4) EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
- 5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE

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| CLEARING & GRUBBING | | | | |
|---------------------|------------------|----------|----------|--|
| | | 201.0105 | 201.0205 | |
| | | CLEARING | GRUBBING | |
| STATION TO | STATION LOCATION | STATIONS | STATIONS | |
| 771+50 | - 772+50 LT | 1 | 1 | |
| 774+75 | - 776+75 LT | 2 | 2 | |
| TOTAL: | | 3 | 3 | |

| REMOVING PAVEMENT | | 204.0100 |
|-----------------------------------|--|----------|
| LOCATION | | SY |
| CULVERT REPLACEMENT STA 438+75 | | 240 |
| STH 13 SB OFF RAMP CURB REMOVAL | | 15 |
| STH 13 SB ON RAMP CURB REMOVAL | | 15 |
| STH 13 NB OFF RAMP CURB REMOVAL | | 15 |
| STH 13 NB ON RAMP CURB REMOVAL | | 15 |
| CULVERT REPLACEMENT STA 610+68 | | 340 |
| CULVERT REPLACEMENT STA 658+80 | | 340 |
| B-50-48 APPROACH SLAB REPLACEMENT | | 165 |
| TOTAL: | | 1145 |

| REMOVING ASPHALTIC SURFACE | | 204.0110 |
|------------------------------------|--|----------|
| LOCATION | | SY |
| STH 13 INTERCHANGE RECONFIGURATION | | 1590 |
| ISLAND REMOVALS | | 80 |
| GRANBERG RD CURB & GUTTER REMOVAL | | 30 |
| CTH A CURB & GUTTER REMOVAL | | 105 |
| B-50-48 APPROACH SLAB REPLACEMENT | | 70 |
| DRIVEWAYS | | 200 |
| TOTAL: | | 2075 |

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| REMOVING ASPHALTIC SURFACE BUTT JOINT | | 204.0115 |
|---------------------------------------|--|----------|
| LOCATION | | SY |
| STA 412+00 - 412+10 | | 35 |
| STA 476+50 - 476+60 | | 35 |
| STA 515+25 - 515+35 | | 35 |
| STA 525+70 - 525+80 | | 35 |
| STA 526+90 - 527+00 | | 35 |
| B-50-61 | | 90 |
| B-50-48 | | 75 |
| STA 816+40 - 816+50 | | 35 |
| STH 13 RAMPS | | 110 |
| CTH A INTERSECTION | | 105 |
| REMAINING SIDEROADS | | 240 |
| TOTAL: | | 830 |

| REMOVING ASPHALTIC SURFACE MILLING | | 204.0120 |
|------------------------------------|-------------------|----------|
| STATION TO | STATION LOCATION | SY |
| 413+00 | - 816+50 MAINLINE | 136160 |
| STH 13 RAMPS | | 2380 |
| GRANBERG RD | | 720 |
| CTH A | | 1120 |
| SIDE ROADS | | 1430 |
| BEAMGUARD | | 200 |
| TOTAL: | | 142010 |

| REMOVING CURB & GUTTER | | 204.015 |
|------------------------|--|---------|
| LOCATION | | LF |
| STH 13 SB OFF RAMP | | 355 |
| STH 13 SB ON RAMP | | 100 |
| STH 13 NB ON RAMP | | 105 |
| STH 13 NB OFF RAMP | | 355 |
| GRANBERG ROAD | | 160 |
| CTH A | | 495 |

| REMOVING GUARDRAIL | | 204.0165 |
|--------------------|---------------------|----------|
| STATION TO | STATION LOCATION | LF |
| 455+37 | - 457+79 MD B-50-27 | 469 |
| 738+95 | - 739+75 RT B-50-61 | 80 |
| 738+95 | - 739+75 LT B-50-61 | 80 |
| 740+05 | - 740+81 RT B-50-61 | 76 |
| 740+05 | - 740+81 LT B-50-61 | 76 |
| 771+45 | - 772+20 RT B-50-48 | 75 |
| 771+76 | - 772+54 LT B-50-48 | 78 |
| 774+11 | - 774+83 RT B-50-48 | 72 |
| 774+44 | - 775+18 LT B-50-48 | 74 |
| TOTAL: | | 1080 |

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE

| PREPARE FOUNDATION FOR BASE AGGREGATE | | 211.0500 |
|---------------------------------------|--|----------|
| LOCATION | | STA |
| STH 13 SB OFF RAMP CURB REMOVAL | | 2 |
| STH 13 NB OFF RAMP CURB REMOVAL | | 2 |
| TOTAL: | | 4 |

| PREPARE FOUNDATION FOR ASPHALTIC PAVING | | 211.0100 |
|---|---|-------------------------------|
| LS | | NOTES |
| PROJECT 1580-29-70 | 1 | PREPARE SURFACE AFTER MILLING |
| TOTAL: | | 1 |

| SHAPING SHOULDERS | | 305.0500 |
|-------------------|-------------|----------|
| STATION TO | STATION STA | |
| 412+00 | - 442+00 | 60 |
| 442+00 | - 470+50 | 114 |
| 470+50 | - 816+50 | 692 |
| TOTAL: | | 866 |

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| PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS | | | | |
|--|----------|----------------------------------|----------|-----|
| STATION TO | STATION | REMARKS | 211.0400 | STA |
| 48+10 | - 49+30 | SB ON RAMP WIDENING | 2 | |
| 10+75 | - 11+90 | NB ON RAMP WIDENING | 2 | |
| 439+45 | - 449+60 | WB - LT 3' PAVED SHOULDER | 11 | |
| 442+75 | - 444+70 | WB - RT 3' PAVED SHOULDER | 2 | |
| 448+35 | - 453+00 | EB - RT RIGHT TURN LANE WIDENING | 5 | |
| 454+20 | - 458+70 | WB - LT 10' PAVED SHOULDER | 5 | |
| 454+80 | - 459+25 | EB - RT 10' PAVED SHOULDER | 5 | |
| 454+85 | - 458+40 | WB - RT LEFT TURN LANE WIDENING | 4 | |
| 455+00 | - 458+60 | EB - LT LEFT TURN LANE WIDENING | 4 | |
| 460+50 | - 465+15 | WB - LT RIGHT TURN LANE WIDENING | 5 | |
| 463+20 | - 466+55 | EB - RT RIGHT TURN LANE WIDENING | 4 | |
| 468+20 | - 470+50 | WB - RT LEFT TURN LANE WIDENING | 3 | |
| 468+00 | - 470+45 | EB - LT 3' PAVED SHOULDER | 3 | |
| 469+15 | - 475+35 | EB - RT 3' PAVED SHOULDER | 7 | |
| 508+18 | - 508+43 | LT SNOWMOBILE CROSSING | 1 | |
| 508+18 | - 508+43 | RT SNOWMOBILE CROSSING | 1 | |
| 737+76 | - 739+38 | LT BEAMGUARD | 2 | |
| 737+14 | - 739+38 | RT BEAMGUARD | 3 | |
| 740+41 | - 742+64 | LT BEAMGUARD | 3 | |
| 740+41 | - 742+02 | RT BEAMGUARD | 2 | |
| 770+84 | - 772+15 | LT BEAMGUARD | 2 | |
| 769+74 | - 772+11 | RT BEAMGUARD | 3 | |
| 774+59 | - 776+89 | LT BEAMGUARD | 3 | |
| 774+39 | - 775+81 | RT BEAMGUARD | 2 | |
| TOTAL: | | | 80 | |

| FLUMES | | | |
|-------------------|--------------------------------------|------------------------------------|---|
| LOCATION | 465.0315 ASPHALTIC FLUME SY | 606.0100 LIGHT RIP-RAP CY | 645.0130 GEOTEXTILE FABRIC TYPE R SY |
| STH 13 SB ON RAMP | 10 | 3 | 9 |
| STH 13 NB ON RAMP | 9 | - | - |
| CTH A - NE QUAD | 11 | 3 | 9 |
| CTH A - SE QUAD | 10 | 3 | 9 |
| TOTAL: | 40 | 9 | 27 |

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE

| BASE AGGREGATE DENSE | | | | |
|---------------------------------------|----------|-----------|-----------------------------|-------------------------------|
| STATION TO | STATION | LOCATION | 305.0110 3/4-INCH TON | 305.0120 1 1/4-INCH TON |
| 412+00 | - 441+50 | SHOULDERS | 400 | - |
| 441+50 | - 470+50 | SHOULDERS | 1060 | - |
| 470+50 | - 816+50 | SHOULDERS | 4420 | - |
| CONCRETE TRUCK APRONS | | | - | 250 |
| CURB & GUTTER REMOVALS & REPLACEMENTS | | | - | 585 |
| CULVERT REPLACEMENTS (MAINLINE) | | | 150 | 735 |
| CULVERT REPLACEMENTS (STH 13 RAMPS) | | | 120 | 300 |
| STH 13 INTERCHANGE RECONFIGURATION | | | - | 1250 |
| STH 13 RAMP SHOULDERS | | | 50 | - |
| B-50-48 APPROACH SLAB REPLACEMENT | | | - | 90 |
| TOTAL: | | | 6200 | 3210 |

| CONCRETE PAVEMENT APPROACH SLAB | | | |
|---------------------------------|----------|----------|----------------|
| STATION TO | STATION | LOCATION | 415.0410 SY |
| 772+15 | - 772+45 | B-50-48 | 120 |
| 774+18 | - 774+48 | B-50-48 | 117 |
| TOTAL: | | | 237 |

| HMA PAVEMENT | | | | |
|----------------------|----------|--------------------|--|--|
| STATION TO | STATION | LOCATION | 460.5223 3 LT 58-28 S HMA PAVEMENT TON | 460.5224 4 LT 58-28 S HMA PAVEMENT TON |
| 412+00 | - 438+26 | MAINLINE | 1240 | 990 |
| 438+26 | - 476+03 | STH 13 INTERCHANGE | 650 | 2580 |
| 476+03 | - 515+80 | MAINLINE | 1870 | 1500 |
| 515+80 | - 525+80 | MAINLINE | 0 | 550 |
| 542+00 | - 739+50 | MAINLINE | 9340 | 7500 |
| 739+50 | - 772+15 | MAINLINE | 0 | 1230 |
| 774+48 | - 816+50 | MAINLINE | 0 | 1580 |
| CULVERT REPLACEMENTS | | | 400 | 0 |
| C&G REPLACEMENT | | | 140 | 0 |
| STH 13 RAMPS | | | 0 | 270 |
| GRANBERG ROAD INT | | | 0 | 90 |
| CTH A INT | | | 0 | 130 |
| OTHER SIDE ROAD INT | | | 0 | 170 |
| 739+00 | - 741+00 | WEDGING @ B-50-61 | 65 | 0 |
| TOTAL: | | | 13705 | 16590 |

| CONCRETE TRUCK APRONS | | |
|-----------------------|--|--|
| LOCATION | 405.0100 COLORING CONCRETE WISDOT RED CY | 416.0512 CONCRETE TRUCK APRON 12-INCH SY |
| STH 13 SB ON RAMP | 13 | 38 |
| WEST MEDIAN X-OVER | 67 | 203 |
| EAST MEDIAN X-OVER | 154 | 464 |
| STH 13 NB ON RAMP | 13 | 38 |
| TOTAL: | 247 | 743 |

| MISCELLANEOUS PAVEMENT ITEMS | | | | |
|------------------------------|---|--|---|--|
| LOCATION | 460.4110.S REHEATING PAVEMENT LONGITUDINAL JOINT LF | 450.4000 HMA COLD WEATHER PAVING TON | 465.0110 ASPHALTIC SURFACE PATCHING TON | 465.0120 ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES TON |
| STA 412+00 - 816+50 | 35900 | - | - | - |
| UNDISTRIBUTED | - | 3030 | 200 | 50 |
| TOTAL: | 35900 | 3030 | 200 | 50 |

| RUMBLE STRIPS | | |
|---------------|----------|--|
| STATION TO | STATION | 465.0475 ASPHALTIC CENTER-LINE RUMBLE STRIPS 2-LANE RURAL LF |
| 412+00 | - 440+00 | 2400 |
| 474+50 | - 515+00 | 4050 |
| 542+00 | - 816+50 | 27213 |
| TOTALS: | | 33663 |

| CULVERT ITEMS | | | | | | | | | | | | | | | | | |
|---------------|---------------|------------|------------|-----------|----------|----------|----------|----------|----------------|----------|----------|----------|--------------|----------------|----------|----------|----------|
| STATION | LOCATION | 203.0100 | 204.9060.S | 522.0124 | 522.0136 | 522.0318 | 522.0324 | 522.0330 | 522.1018 | 522.1024 | 522.1030 | 522.1036 | 524.0124 | 524.0624 | 633.5200 | 650.6000 | |
| | | REMOVING | REMOVING | RCCP | | RCCP | | | APRON ENDWALLS | | | | CULVERT PIPE | SALVAGED RCCP | MARKERS | STAKING | |
| | | SMALL PIPE | APRON | CLASS III | | CLASS IV | | | FOR RCCP | | | | SALVAGED | APRON ENDWALLS | JOINT | CULVERT | PIPE |
| | | CULVERTS | ENDWALLS | 24-INCH | 36-INCH | 18-INCH | 24-INCH | 30-INCH | 18-INCH | 24-INCH | 30-INCH | 36-INCH | 24-INCH | 24-INCH | TIES | END | CULVERTS |
| | | EACH | EACH | LF | LF | LF | LF | LF | EACH | EACH | EACH | EACH | LF | EACH | EACH* | EACH | EACH |
| 423+70 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 4** | 2 | - |
| 438+75 | USH 8 | 1 | - | - | - | - | - | 70 | - | - | 2 | - | - | - | 20*** | 2 | 1 |
| 448+60 | USH 8 WB | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| 455+17 | USH 8 WB | 1 | - | - | - | 54 | - | - | 2 | - | - | - | - | - | 18*** | 2 | 1 |
| 52+38 | STH 13 SB OFF | 1 | - | - | - | - | 56 | - | - | 2 | - | - | - | - | 16*** | 2 | 1 |
| 48+32 | STH 13 SB ON | 1 | - | - | - | - | 44 | - | - | 2 | - | - | - | - | 14*** | 2 | 1 |
| 10+60 | STH 13 NB ON | 1 | - | - | - | 56 | - | - | 2 | - | - | - | - | - | 16*** | 2 | 1 |
| 9+49 | STH 13 NB OFF | 1 | - | - | - | - | 78 | - | - | 2 | - | - | - | - | 22*** | 2 | 1 |
| 457+95 | USH 8 WB | 1 | - | - | - | 54 | - | - | 2 | - | - | - | - | - | 18*** | 2 | 1 |
| 468+57 | USH 8 WB | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| 478+60 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 2** | 2 | - |
| 483+65 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 2** | 2 | - |
| 503+60 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | 8 | 1 | 4** | 2 | - |
| 553+23 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| 569+22 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| 587+09 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| 595+03 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| 610+68 | USH 8 | 1 | - | - | 83 | - | - | - | - | - | - | 2 | - | - | 8 | 2 | 1 |
| 615+55 | USH 8 | - | 1 | - | - | - | - | - | - | - | 1 | - | - | - | 2** | 2 | - |
| 632+08 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| 658+80 | USH 8 | 1 | - | 74 | - | - | - | - | - | 2 | - | - | - | - | 8 | 2 | 1 |
| 668+20 | USH 8 | - | 1 | - | - | - | - | - | - | - | - | 1 | - | - | 2** | 2 | - |
| 674+75 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| 693+95 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| 707+53 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| 734+45 | USH 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - |
| TOTAL: | | 9 | 2 | 74 | 83 | 164 | 178 | 70 | 6 | 8 | 3 | 3 | 8 | 5 | 206 | 52 | 9 |

* NOT A BID ITEM, FOR INFORMATIONAL PURPOSES ONLY. TOTALS ARE APPROXIMATE.
** MAY NEED TO DRILL HOLES FOR TIES IN EXSITNG PIPE SECTIONS AND ENDWALLS, DRILLING IS INCIDENTAL TO CULVERT & ENDWALL ITEMS
*** TIES REQUIRED AT EVERY JOINT

3

| CONCRETE CURB & GUTTER | | | | | |
|------------------------|----------------|----------------|----------------|-------------------|----------|
| | 601.0415 | 601.0557 | 601.0580 | 601.0586 | 650.5500 |
| | 6-INCH SLOPED | 6-INCH SLOPED | 4-INCH SLOPED | 4-INCH SLOPED | STAKING |
| | 30-INCH TYPE J | 36-INCH TYPE D | 36-INCH TYPE R | 30-INCH TYPE TBTT | |
| LOCATION | LF | LF | | LF | LF |
| STH 13 SB OFF RAMP | - | 65 | - | - | 65 |
| STH 13 SB ON RAMP | - | 28 | 90 | - | 118 |
| WEST MEDIAN X-OVER | - | - | 180 | - | 180 |
| EAST MEDIAN X-OVER | - | - | 360 | - | 360 |
| STH 13 NB OFF RAMP | - | 65 | - | - | 65 |
| STH 13 NB ON RAMP | - | 28 | 90 | - | 118 |
| GRANBERG RD | - | 186 | - | - | 186 |
| CTH A NW QUAD | - | 72 | - | - | 72 |
| CTH A NE QUAD | - | 61 | - | - | 61 |
| CTH A SW QUAD | - | 139 | - | - | 139 |
| CTH A SE QUAD | - | 96 | - | - | 96 |
| CTH A ISLAND | 79 | - | - | - | 79 |
| B-50-61 APPROACH SLAB | - | - | - | 47 | - |
| TOTAL: | 79 | 740 | 720 | 47 | 1539 |

| TEMPORARY PRECAST CONCRETE BARRIER | | |
|------------------------------------|-----------|-----------|
| | 603.8000 | 603.8125 |
| | DELIVERED | INSTALLED |
| LOCATION | LF | LF |
| B-50-48 | 100 | 200 |
| TOTAL: | 100 | 200 |

| HEAVY RIP-RAP | | |
|------------------------------|----------|------------|
| | 606.0300 | 645.01200 |
| | RIP-RAP | GEOTEXTILE |
| | HEAVY | FABRIC |
| | TYPE HR | |
| LOCATION | CY | SY |
| STA 668+20 RT CULVERT REPAIR | 20 | 26 |
| TOTAL: | 20 | 26 |

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| INLETS | | | |
|-----------------------|----------|------------|------------|
| | 611.0651 | 628.7005 | 628.7015 |
| | COVER | PROTECTION | PROTECTION |
| | TYPE S | TYPE A | TYPE C |
| LOCATION | EACH | EACH | EACH |
| B-50-61 APPROACH SLAB | 2 | 2 | 2 |
| TOTAL: | 2 | 2 | 2 |

| BEAM GUARD | | | | | | | | | |
|------------|----------|---------------|----------|-----|-------------|------------|-----------|----------|--|
| | | 614.0220 | 614.0230 | | 614.2300 | 614.2500 | 614.2610 | | |
| | | STEEL THRIE | STEEL | | MGS | MGS | MGS | | |
| | | BEAM BULLNOSE | THRIE | | THRIE BEAM | THRIE BEAM | GUARDRAIL | | |
| | | TERMINAL | BEAM | | GUARDRAIL 3 | TRANSITION | TERMINAL | | |
| | | EACH | LF | | LF | LF | EAT | | |
| STATION TO | STATION | LOCATION | | | | | BEAM | TERMINAL | |
| 456+00 | - 457+36 | MD MEDIAN | 2 | 100 | - | - | - | - | |
| 738+19 | 739+74 | RT B-50-61 | - | - | 62.5 | 39.4 | 1 | | |
| 738+81 | 739+74 | LT B-50-61 | - | - | - | 39.4 | 1 | | |
| 740+04 | 740+97 | RT B-50-61 | - | - | - | 39.4 | 1 | | |
| 740+04 | 741+59 | LT B-50-61 | - | - | 62.5 | 39.4 | 1 | | |
| 770+49 | 772+20 | RT B-50-48 | - | - | 75 | 39.4 | 1 | | |
| 771+59 | 772+54 | LT B-50-48 | - | - | - | 39.4 | 1 | | |
| 774+11 | 775+06 | RT B-50-48 | - | - | - | 39.4 | 1 | | |
| 774+44 | 776+14 | LT B-50-48 | - | - | 75 | 39.4 | 1 | | |
| TOTALS: | | | 2 | 100 | 275 | 315.2 | 8 | | |

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| PERMANENT SIGNING | | | | | | | | | | | | | | | | |
|--|-----|----------|------------|--------------|--------------|---------------|-----------------|-----------------|--------------|--------------|--------------------------|----------------|-------------------------|--|------------------------|---|
| | | 638.2602 | 638.3000 | 637.2210 | 637.2230 | 634.0616 | 634.0618 | 634.0812 | | | | | | | | |
| | | REMOVING | REMOVING | SIGNS | SIGNS | POSTS WOOD | POSTS WOOD | POSTS | MOUNT | | | | | | | |
| | | SIGNS | SMALL SIGN | TYPE II | TYPE II | 4X6-INCH | 4X6-INCH | TUBULAR STEEL | ON SAME | | | | | | | |
| | | TYPE II | SUPPORTS | REFLECTIVE H | REFLECTIVE F | X 16-FT | X 18-FT | STEEL 2"x2"X12' | POST AS | | | | | | | |
| STATION | LOC | SIGN # | SIGN CODE | W x H | TYPE II EACH | SUPPORTS EACH | REFLECTIVE H SF | REFLECTIVE F SF | X 16-FT EACH | X 18-FT EACH | STEEL 2"x2"X12' EACH | POST AS SIGN # | DESCRIPTION | COMMENTS | | |
| 413+25 | RT | 1 | R1-1 | 30 x 30 | 1 | 1 | 5.180 | - | 1 | - | - | | STOP | ON MILLER ROAD | | |
| 416+25 | RT | - | - | | - | 1 | - | - | - | - | - | | | POST ONLY - REMOVE | | |
| 419+00 | LT | 2 | D1-1 | 66 x 15 | - | - | 6.875 | - | 2 | - | - | | DESTINATION | MILLER RD (LA) | | |
| 429+83 | LT | 3 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | | NO PASSING | | | |
| 433+00 | RT | 4 | W6-1 | 36 x 36 | - | - | - | 9.000 | 1 | - | - | | DIVIDED HIGHWAY AHEAD | NEW LOCATION | | |
| 434+32 | RT | 5 | W6-1 | | 1 | 1 | - | - | - | - | - | | | REMOVE | | |
| 436+43 | RT | 6 | J1-1 | 24 x 39 | 1 | 1 | 6.500 | - | 1 | - | - | | JUNCTION ASSEMBLY | | | |
| | | | M2-1 | 21 x 15 | | | | | | | | | JCT | | | |
| | | | M1-6 | 24 x 24 | | | | | | | | | STH 13 | | | |
| 437+50 | LT | 7 | W6-3 | 36 x 36 | - | - | - | 9.000 | 1 | - | - | | TWO-WAY TRAFFIC | NEW LOCATION | | |
| BEGIN DIVIDED SECTION | | | | | | | | | | | | | | | | |
| 439+00 | WB | LT | 8 | W6-3 | 1 | 1 | - | - | - | - | - | | TWO-WAY TRAFFIC | REMOVE | | |
| 441+50 | EB | LT | 9 | R4-7 | 24 x 30 | - | - | 5.000 | - | 1 | - | - | KEEP RIGHT | NEW | | |
| 441+50 | EB | LT | 10 | W5-54 | 18 x 18 | - | - | - | 2.250 | - | - | - | 9 | OBJECT IN ROAD MARKER | MOUNT UNDER KEEP RIGHT | |
| 441+50 | WB | LT | 11 | R5-1 | 36 x 36 | - | - | 9.000 | - | 1 | - | - | | DO NOT ENTER | NEW | |
| 441+50 | WB | LT | 12 | R2-1 | 24 x 30 | - | - | 5.000 | - | - | - | - | 11 | SPEED LIMIT | 55 - NEW LOCATION | |
| 441+84 | EB | RT | 13 | J2-3 | 72 x 57 | 1 | 2 | 28.500 | - | - | 2 | - | DIRECTIONAL J-ASSEMBLY | | | |
| | | | | M3-1 | 24 | | | | | | | | 12 | NORTH | | |
| | | | | M1-6 | 24 | | | | | | | | 24 | STH 13 | | |
| | | | | M5-1L | 21 | | | | | | | | 21 | LA | | |
| | | | | M3-2 | 24 | | | | | | | | 12 | EAST | | |
| | | | | M1-4 | 24 | | | | | | | | 24 | USH 8 | | |
| | | | | M6-1 | 21 | | | | | | | | 21 | UA | | |
| | | | | M3-3 | 24 | | | | | | | | 12 | SOUTH | | |
| | | | | M1-6 | 24 | | | | | | | | 24 | STH 13 | | |
| M5-1R | 21 | 21 | RA | | | | | | | | | | | | | |
| 443+30 | EB | LT | 14 | R5-1 | 1 | 1 | - | - | - | - | - | | DO NOT ENTER | REMOVE | | |
| 443+82 | WB | LT | 15 | R5-1A | 1 | 1 | - | - | - | - | - | | WRONG WAY | REMOVE | | |
| 443+82 | WB | LT | 16 | R2-1 | 1 | - | - | - | - | - | - | | SPEED LIMIT | REMOVE | | |
| 445+50 | WB | LT | 17 | R5-1A | 36 x 24 | - | - | 6.000 | - | 1 | - | - | WRONG WAY | NEW | | |
| 445+50 | WB | LT | 18 | W6-2 | 36 x 36 | - | - | - | 9.000 | - | - | - | 17 | UNDIVIDED HIGHWAY AHEAD | NEW | |
| 446+45 | WB | LT | 19 | D2-2 | 84 x 24 | 1 | 2 | 14.000 | - | 2 | - | - | DISTANCE | CATAWBA 11 / LADYSMITH 41 | | |
| 447+00 | EB | RT | 20 | D1-3 | 84 x 42 | 1 | 2 | 24.500 | - | - | 2 | - | DESTINATION | RHINELANDER (UA) / ASHLAND (LA) / MEDFORD (RA) | | |
| 449+24 | WB | LT | 21 | W6-2 | 1 | 1 | - | - | - | - | - | | UNDIVIDED HIGHWAY AHEAD | REMOVE | | |
| 450+29 | EB | RT | 23 | R5-1A | 36 x 24 | - | 1 | 6.000 | - | - | - | - | WRONG WAY | NEW | | |
| SHEET TOTAL: | | | | | 12 | 16 | 116.555 | 35.250 | 12 | 4 | 0 | | | | | |
| ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE | | | | | | | | | | | | | | | | |
| PROJECT NO: 1580-29-70 | | | | | HWY: USH 8 | | | COUNTY: PRICE | | | MISCELLANEOUS QUANTITIES | | | SHEET: | | E |

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| PERMANENT SIGNING (CONTINUED) | | | | | | | | | | | | | | | |
|--|-----|----------|------|------------|------------|----------|---------|---------------|------|--------------|--------------------------|--------------|------------------------|---|-------------------------------|
| | | 638.2602 | | 638.3000 | | 637.2210 | | 637.2230 | | 634.0616 | | 634.0618 | | 634.0812 | |
| | | REMOVING | | REMOVING | | SIGNS | | SIGNS | | POSTS WOOD | | POSTS WOOD | | POSTS MOUNT | |
| | | SIGNS | | SMALL SIGN | | TYPE II | | TYPE II | | 4X6-INCH | | 4X6-INCH | | TUBULAR STEEL ON SAME | |
| | | SIGN | | SIZE | | TYPE II | | SUPPORTS | | REFLECTIVE H | | REFLECTIVE F | | X 16-FT X 18-FT STEEL 2"x2"x12' POST AS | |
| STATION | LOC | SIGN # | CODE | W x H | EACH | EACH | SF | SF | EACH | EACH | EACH | SIGN # | DESCRIPTION | COMMENTS | |
| 452+27 | WB | LT | 24 | J4-1 | 24 x 36 | 1 | 1 | 6.000 | - | 1 | - | - | REASSURANCE J-ASSEMBLY | | |
| | | | | M3-4 | 24 x 12 | | | | | | | | WEST | | |
| | | | | M1-4 | 24 x 24 | | | | | | | | USH 8 | | |
| 452+80 | EB | RT | 25 | J2-1 | 24 x 57 | 1 | 1 | 9.500 | - | - | 1 | - | DIRECTIONAL J-ASSEMBLY | | |
| | | | | M3-3 | 24 x 12 | | | | | | | | SOUTH | | |
| | | | | M1-6 | 24 x 24 | | | | | | | | STH 13 | | |
| | | | | M6-1 | 21 x 21 | | | | | | | | RA | | |
| 452+80 | EB | RT | 26 | R5-1 | 30 x 30 | - | - | 6.250 | - | - | - | - | 25 | DO NOT ENTER | NEW |
| 453+00 | EB | LT | 27 | R3-2 | 24 x 24 | - | - | 4.000 | - | 1 | - | - | | NO LEFT TURN | |
| 453+60 | EB | LT | 28 | R5-1 | | 1 | 1 | - | - | - | - | - | | DO NOT ENTER | REMOVE |
| 453+75 | WB | RT | 29 | R4-7 | 24 x 30 | - | - | 5.000 | - | 1 | - | - | | KEEP RIGHT | |
| 453+86 | WB | LT | 30 | R1-1 | 36 x 36 | 1 | 1 | 7.460 | - | - | - | - | | STOP | |
| 453+89 | WB | LT | 31 | J2-1 | 24 x 57 | - | - | 9.500 | - | - | 1 | - | DIRECTIONAL J-ASSEMBLY | | |
| | | | | M3-4 | 24 x 12 | | | | | | | | WEST | | |
| | | | | M1-4 | 24 x 24 | | | | | | | | USH 8 | | |
| | | | | M6-1 | 21 x 21 | | | | | | | | RA | | |
| 454+12 | WB | LT | 32 | R1-1 | | 1 | 1 | - | - | - | - | - | | STOP | REMOVE |
| 454+12 | WB | LT | 33 | W12-1D | | 1 | 1 | - | - | - | - | - | | DOUBLE DOWN ARROW | REMOVE |
| 454+25 | WB | LT | 34 | R5-1A | 36 x 24 | - | - | 6.000 | - | - | - | - | | WRONG WAY | PLACE ON RAMP 200' FROM STOP |
| 454+25 | WB | LT | 35 | R5-1A | 36 x 24 | - | - | 6.000 | - | - | - | - | | WRONG WAY | PLACE ON RAMP 200' FROM STOP |
| 454+38 | EB | RT | 36 | J2-1 | 24 x 57 | 1 | 1 | 9.500 | - | - | 1 | - | DIRECTIONAL J-ASSEMBLY | | |
| | | | | M3-2 | 24 x 12 | | | | | | | | EAST | | |
| | | | | M1-4 | 24 x 24 | | | | | | | | USH 8 | | |
| | | | | M6-1 | 21 x 21 | | | | | | | | LA | | |
| 454+38 | EB | RT | 37 | R6-2L | 24 x 30 | - | - | 5.000 | - | - | - | - | 36 | ONE WAY (LEFT) | MOUNT ON SIDE OF STOP POST |
| 454+43 | EB | RT | 38 | I5-1 | 24 x 24 | 1 | 1 | - | - | - | - | - | | AIRPORT TRAILBLAZER | |
| 454+43 | EB | RT | 39 | M6-1 | 21 x 21 | - | - | - | - | - | - | - | 38 | RIGHT ARROW | WHITE TEXT & GREEN BACKGROUND |
| 454+43 | EB | RT | 40 | D9-52 | 46 x 36 | - | - | 11.500 | - | 1 | - | - | | AIRPORT | PRENTICE |
| 454+50 | WB | LT | 41 | R1-1 | 36 x 36 | 1 | 1 | 7.460 | - | 1 | - | - | | STOP | |
| 454+50 | WB | LT | 42 | R6-3 | 30 x 24 | 1 | - | 5.000 | - | - | - | - | 41 | DIVIDED HIGHWAY | MOUNT UNDER STOP |
| 454+50 | WB | LT | 43 | R2-6L | 24 x 30 | - | - | 5.000 | - | - | - | - | 41 | ONE WAY (LEFT) | MOUNT ON SIDE OF STOP POST |
| 454+52 | WB | LT | 44 | R5-1 | 30 x 30 | - | - | 6.250 | - | 1 | - | - | | DO NOT ENTER | |
| 454+55 | WB | RT | 45 | R4-7 | 24 x 30 | - | - | 5.000 | - | - | - | 1 | | KEEP RIGHT | BOX OUT W/ SLEEVED POST |
| 454+68 | EB | LT | 46 | R5-1 | | 1 | 1 | - | - | - | - | - | | DO NOT ENTER | REMOVE |
| 454+91 | WB | LT | 47 | R5-1 | 30 x 30 | - | - | 6.250 | - | - | - | - | | DO NOT ENTER | |
| SHEET TOTAL: | | | | | 11 | 10 | 120.670 | 0.000 | 6 | 3 | 1 | | | | |
| ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE | | | | | | | | | | | | | | | |
| PROJECT NO: 1580-29-70 | | | | | HWY: USH 8 | | | COUNTY: PRICE | | | MISCELLANEOUS QUANTITIES | | | SHEET: E | |

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| PERMANENT SIGNING (CONTINUED) | | | | | | | | | | | | | | | | | | | |
|--|-----|----------|------------|--------------|--------------|---------------|-----------------|-----------------|---------------|--------------|----------------------|--------|--------------------------|------------------------|------------------------------|--|--------|--|---|
| | | 638.2602 | 638.3000 | 637.2210 | 637.2230 | 634.0616 | 634.0618 | 634.0812 | | | | | | | | | | | |
| | | REMOVING | REMOVING | SIGNS | SIGNS | POSTS WOOD | POSTS WOOD | POSTS | MOUNT | | | | | | | | | | |
| | | SIGNS | SMALL SIGN | TYPE II | TYPE II | 4X6-INCH | 4X6-INCH | TUBULAR STEEL | ON SAME | | | | | | | | | | |
| | | TYPE II | SUPPORTS | REFLECTIVE H | REFLECTIVE F | X 16-FT | X 18-FT | STEEL 2"x2"x12' | POST AS | | | | | | | | | | |
| STATION | LOC | SIGN # | SIGN CODE | W x H | TYPE II EACH | SUPPORTS EACH | REFLECTIVE H SF | REFLECTIVE F SF | X 16-FT EACH | X 18-FT EACH | STEEL 2"x2"x12' EACH | SIGN # | DESCRIPTION | COMMENTS | | | | | |
| 454+91 | WB | LT | 48 | J2-1 | 24 x 57 | 1 | 1 | 9.500 | - | - | 1 | - | 47 | DIRECTIONAL J-ASSEMBLY | | | | | |
| | | | | M3-3 | 24 x 12 | | | | | | | | | SOUTH | | | | | |
| | | | | M1-6 | 24 x 24 | | | | | | | | | STH 13 | | | | | |
| | | | | M6-1 | 21 x 21 | | | | | | | | | LA | | | | | |
| 454+91 | WB | LT | 49 | R3-1 | 24 x 24 | - | - | 4.000 | - | - | - | - | | NO RIGHT TURN | | | | | |
| 456+00 | EB | RT | 50 | D1-1 | 66 x 15 | 1 | 2 | 6.875 | - | 2 | - | - | | DESTINATION | ASHLAND (LA) | | | | |
| 456+36 | EB | LT | 51 | W5-52L | 12 x 36 | 1 | 1 | - | - | - | - | - | | BRIDGE HASHMARK | REMOVE | | | | |
| 456+61 | EB | RT | 52 | R5-1A | 36 x 24 | - | - | 6.000 | - | 1 | - | - | | WRONG WAY | | | | | |
| 457+55 | EB | LT | 53 | W5-52L | 12 x 36 | 1 | 1 | - | - | - | - | - | | BRIDGE HASHMARK | REMOVE | | | | |
| 457+55 | WB | LT | 54 | R5-1A | 36 x 24 | - | - | 6.000 | - | - | - | - | 55 | WRONG WAY | | | | | |
| 457+55 | WB | LT | 55 | D1-1 | 60 x 15 | 1 | 1 | 6.250 | - | 2 | - | - | | DESTINATION | MEDFORD (LA) | | | | |
| 458+25 | WB | LT | 56 | J2-2 | 48 x 57 | 1 | 1 | 19.000 | - | - | 1 | - | | DIRECTIONAL J-ASSEMBLY | | | | | |
| | | | | M3-3 | 24 x 12 | | | | | | | | | SOUTH | | | | | |
| | | | | M1-6 | 24 x 24 | | | | | | | | | STH 13 | | | | | |
| | | | | M5-1L | 21 x 21 | | | | | | | | | ALA | | | | | |
| | | | | M3-4 | 24 x 12 | | | | | | | | | WEST | | | | | |
| | | | | M1-4 | 24 x 24 | | | | | | | | | USH 8 | | | | | |
| | | | | M6-1 | 21 x 21 | | | | | | | | | UA | | | | | |
| 458+61 | EB | RT | 57 | J2-1 | 24 x 57 | 1 | 1 | 9.500 | - | - | 1 | - | | DIRECTIONAL J-ASSEMBLY | | | | | |
| | | | | M3-1 | 24 x 12 | | | | | | | | | NORTH | | | | | |
| | | | | M1-6 | 24 x 24 | | | | | | | | | STH 13 | | | | | |
| | | | | M6-1 | 21 x 21 | | | | | | | | | LA | | | | | |
| 458+61 | EB | RT | 58 | R3-1 | 24 x 24 | - | - | 4.000 | - | - | - | - | 57 | NO RIGHT TURN | MOUNT UNDER J-ASSY | | | | |
| 458+61 | EB | RT | 59 | R5-1 | 30 x 30 | - | - | 6.250 | - | - | - | - | 57 | DO NOT ENTER | | | | | |
| 458+65 | EB | LT | 60 | R5-1A | | 1 | 1 | - | - | - | - | - | | WRONG WAY | REMOVE | | | | |
| 458+65 | EB | LT | 61 | R5-1 | | 1 | - | - | - | - | - | - | | DO NOT ENTER | REMOVE | | | | |
| 458+75 | EB | LT | 62 | R4-7 | 24 x 30 | - | - | 5.000 | - | - | - | 1 | | KEEP RIGHT | BOX OUT W/ SLEEVED POST | | | | |
| 458+95 | EB | RT | 63 | R5-1 | 30 x 30 | 1 | 1 | - | - | 1 | - | - | | DO NOT ENTER | | | | | |
| 459+05 | EB | RT | 64 | R1-1 | 36 x 36 | - | - | 7.460 | - | 1 | - | - | | STOP | | | | | |
| 459+05 | EB | RT | 65 | R6-3 | 30 x 24 | - | - | 5.000 | - | - | - | - | 64 | DIVIDED HIGHWAY | MOUNT UNDER STOP | | | | |
| 459+05 | EB | RT | 66 | R2-6L | 24 x 30 | - | - | 5.000 | - | - | - | - | 64 | ONE WAY (LEFT) | MOUNT ON SIDE OF STOP POST | | | | |
| 459+10 | EB | RT | 67 | R5-1A | 36 x 24 | - | - | 6.000 | - | 1 | - | - | | WRONG WAY | PLACE ON RAMP 200' FROM STOP | | | | |
| 459+10 | EB | RT | 68 | R5-1A | 36 x 24 | - | - | 6.000 | - | 1 | - | - | | WRONG WAY | PLACE ON RAMP 200' FROM STOP | | | | |
| SHEET TOTAL: | | | | | | 10 | 10 | 111.835 | 0.000 | 9 | 3 | 1 | | | | | | | |
| ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE | | | | | | | | | | | | | | | | | | | |
| PROJECT NO: 1580-29-70 | | | | | HWY: USH 8 | | | | COUNTY: PRICE | | | | MISCELLANEOUS QUANTITIES | | | | SHEET: | | E |

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| PERMANENT SIGNING (CONTINUED) | | | | | | | | | | | | | | | | | | | | |
|--|-----|--------|------|----------|------------|------------|----------|--------------|--------------|---------------|---------|-----------------|-------------------------|--|--|--|--|--------|-----------------------------------|---|
| | | | | 638.2602 | 638.3000 | 637.2210 | 637.2230 | 634.0616 | 634.0618 | 634.0812 | | | | | | | | | | |
| | | | | REMOVING | REMOVING | SIGNS | SIGNS | POSTS WOOD | POSTS WOOD | POSTS | MOUNT | | | | | | | | | |
| | | | | SIGNS | SMALL SIGN | TYPE II | TYPE II | 4X6-INCH | 4X6-INCH | TUBULAR STEEL | ON SAME | | | | | | | | | |
| | | | | SIGN | SIZE | TYPE II | SUPPORTS | REFLECTIVE H | REFLECTIVE F | X 16-FT | X 18-FT | STEEL 2"x2"x12' | POST AS | | | | | | | |
| STATION | LOC | SIGN # | CODE | W x H | EACH | EACH | SF | SF | EACH | EACH | EACH | SIGN # | DESCRIPTION | COMMENTS | | | | | | |
| 459+40 | WB | LT | 69 | J2-1 | 24 x 57 | 1 | 1 | 9.500 | - | - | 1 | - | DIRECTIONAL J-ASSEMBLY | | | | | | | |
| | | | | M3-4 | 24 x 12 | | | | | | | | WEST | | | | | | | |
| | | | | M1-4 | 24 x 24 | | | | | | | | USH 8 | | | | | | | |
| | | | | M6-1 | 21 x 21 | | | | | | | | LA | | | | | | | |
| 459+40 | WB | LT | 70 | R6-2L | 24 x 30 | 1 | - | 5.000 | - | - | - | - | 69 | ONE WAY (LEFT) | | | | | | |
| 459+53 | EB | RT | 71 | R1-1 | | 1 | 1 | - | - | - | - | - | STOP | REMOVE | | | | | | |
| 459+53 | EB | RT | 72 | W12-1D | | 1 | 1 | - | - | - | - | - | DOUBLE DOWN ARROW | REMOVE | | | | | | |
| 459+67 | WB | RT | 73 | R5-1 | | 1 | 1 | - | - | - | - | - | DO NOT ENTER | REMOVE | | | | | | |
| 459+70 | EB | LT | 74 | R4-7 | 24 x 30 | - | - | 5.000 | - | - | - | 1 | KEEP RIGHT | BOX OUT W/ SLEEVED POST | | | | | | |
| 459+79 | EB | LT | 75 | I5-1 | 24 x 24 | 1 | 1 | - | - | - | - | - | AIRPORT TRAILBLAZER | REMOVE | | | | | | |
| 459+79 | EB | LT | 76 | M6-1 | 21 x 21 | 1 | - | - | - | - | - | 75 | RIGHT ARROW | REMOVE | | | | | | |
| 459+93 | EB | RT | 77 | R1-1 | 36 x 36 | 1 | 1 | 7.460 | - | 1 | - | - | STOP | | | | | | | |
| 459+96 | EB | RT | 78 | J2-1 | 24 x 57 | - | - | 9.500 | - | - | 1 | - | DIRECTIONAL J-ASSEMBLY | | | | | | | |
| | | | | M3-2 | 24 x 12 | | | | | | | | EAST | | | | | | | |
| | | | | M1-4 | 24 x 24 | | | | | | | | USH 8 | | | | | | | |
| | | | | M6-1 | 21 x 21 | | | | | | | | RA | | | | | | | |
| 459+99 | EB | RT | 79 | D9-52 | 46 x 36 | - | - | 11.500 | - | 1 | - | - | AIRPORT | PRENTICE | | | | | | |
| 460+25 | WB | RT | 80 | R3-2 | 24 x 24 | - | - | 4.000 | - | 1 | - | - | NO LEFT TURN | | | | | | | |
| 460+99 | WB | LT | 81 | R5-1A | | 1 | 1 | - | - | - | - | - | WRONG WAY | REMOVE | | | | | | |
| 460+99 | WB | LT | 82 | R5-1 | 30 x 30 | - | - | 6.250 | - | - | 1 | - | DO NOT ENTER | | | | | | | |
| 460+99 | WB | LT | 83 | J2-1 | 24 x 57 | 1 | - | 9.500 | - | - | - | - | 82 | DIRECTIONAL J-ASSEMBLY | | | | | | |
| | | | | M3-1 | 24 x 12 | | | | | | | | NORTH | | | | | | | |
| | | | | M1-6 | 24 x 24 | | | | | | | | STH 13 | | | | | | | |
| | | | | M6-1 | 21 x 21 | | | | | | | | RA | | | | | | | |
| 461+00 | EB | RT | 84 | D2-3 | | 1 | 2 | - | - | - | - | - | DIRECTIONAL | REMOVE | | | | | | |
| 461+00 | EB | RT | 85 | J4-1 | 24 x 36 | 1 | - | 6.000 | - | 1 | - | - | REASSURANCE J-ASSEMBLY | | | | | | | |
| | | | | M3-2 | 24 x 12 | | | | | | | | EAST | | | | | | | |
| | | | | M1-4 | 24 x 24 | | | | | | | | USH 8 | | | | | | | |
| 462+30 | EB | RT | 86 | D2-3 | 90 x 36 | - | - | 22.500 | - | - | 2 | - | DIRECTIONAL | PRENTICE 1 / TRIPOLI 15 / RHINELANDER 46 | | | | | | |
| 463+36 | EB | RT | 87 | D1-1 | 84 x 15 | 1 | 2 | 8.750 | - | 2 | - | - | DESTINATION | GRANBERG RD (RA) | | | | | | |
| 464+00 | WB | LT | 88 | R5-1A | 36 x 24 | - | - | 6.000 | - | 1 | - | - | WRONG WAY | | | | | | | |
| 464+00 | WB | LT | 89 | I55-56 | 30 x 36 | 1 | 1 | 7.500 | - | - | - | - | 88 | ADOPT A HIGHWAY | | | | | BOY SCOUTS TROOP 583 PRENTICE, WI | |
| 464+42 | EB | RT | 90 | | | - | - | - | - | - | - | - | SIS SIGN | DO NOT DISTURB | | | | | | |
| 464+75 | EB | RT | 91 | R5-1A | 36 x 24 | - | - | 6.000 | - | 1 | - | - | WRONG WAY | | | | | | | |
| 465+60 | EB | RT | 92 | W6-2 | | 1 | 1 | - | - | - | - | - | UNDIVIDED HIGHWAY AHEAD | REMOVE | | | | | | |
| SHEET TOTAL: | | | | | | 15 | 13 | 124.460 | 0.000 | 8 | 5 | 1 | | | | | | | | |
| ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE | | | | | | | | | | | | | | | | | | | | |
| PROJECT NO: 1580-29-70 | | | | | | HWY: USH 8 | | | | COUNTY: PRICE | | | | MISCELLANEOUS QUANTITIES | | | | SHEET: | | E |

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| PERMANENT SIGNING (CONTINUED) | | | | | | | | | | | | | | | | | | | | |
|--|-----|----------|-----------|------------|--------------|---------------|-----------------|-----------------|--------------|---------------|----------------------|----------------|-------------------------|--------------------------|---------------------------------------|------------------------|--|--------|--|---|
| | | 638.2602 | | 638.3000 | | 637.2210 | | 637.2230 | | 634.0616 | | 634.0618 | | 634.0812 | | | | | | |
| | | REMOVING | | REMOVING | | SIGNS | | SIGNS | | POSTS WOOD | | POSTS WOOD | | POSTS | | MOUNT | | | | |
| | | SIGNS | | SMALL SIGN | | TYPE II | | TYPE II | | 4X6-INCH | | 4X6-INCH | | TUBULAR STEEL | | ON SAME | | | | |
| | | TYPE II | | SUPPORTS | | REFLECTIVE H | | REFLECTIVE F | | X 16-FT | | X 18-FT | | STEEL 2"x2"x12' | | POST AS | | | | |
| STATION | LOC | SIGN # | SIGN CODE | SIZE W x H | TYPE II EACH | SUPPORTS EACH | REFLECTIVE H SF | REFLECTIVE F SF | X 16-FT EACH | X 18-FT EACH | STEEL 2"x2"x12' EACH | POST AS SIGN # | DESCRIPTION | | COMMENTS | | | | | |
| 465+60 | EB | RT | 93 | R5-1A | 1 | - | - | - | - | - | - | - | WRONG WAY | | REMOVE | | | | | |
| 466+25 | WB | LT | 94 | D1-3 | 60 x 45 | 1 | 2 | 18.750 | - | 2 | - | - | DESTINATION | | LADYSMITH/MEDFORD (UA) / ASHLAND (RA) | | | | | |
| 466+30 | EB | RT | 95 | W6-2 | 36 x 36 | - | - | - | 9.000 | 1 | - | - | UNDIVIDED HIGHWAY AHEAD | | NEW | | | | | |
| 466+30 | EB | RT | 96 | R5-1 | 30 x 30 | - | - | 6.250 | - | - | - | - | 95 | DO NOT ENTER | | NEW | | | | |
| 466+70 | EB | RT | 97 | R5-1 | 1 | 1 | - | - | - | - | - | - | DO NOT ENTER | | REMOVE | | | | | |
| 467+20 | EB | LT | 98 | R4-7 | 24 x 30 | - | - | 5.000 | - | 1 | - | - | KEEP RIGHT | | SKEW TO GRANBERG RD | | | | | |
| 467+98 | EB | RT | 99 | R1-1 | 30 x 30 | 1 | 1 | 5.180 | 1.000 | - | - | - | STOP | | ON GRANBERG ROAD | | | | | |
| 467+98 | EB | RT | 100 | R6-3 | 30 x 24 | - | - | 5.000 | - | - | - | - | 99 | DIVIDED HIGHWAY | | MOUNT UNDER STOP | | | | |
| 468+11 | WB | LT | 101 | R6-2L | 24 x 30 | 1 | 1 | 5.000 | - | 1 | - | - | ONE WAY (LEFT) | | FACE GRANBERG ROAD | | | | | |
| 468+25 | EB | LT | 102 | R5-1 | 1 | 1 | - | - | - | - | - | - | DO NOT ENTER | | REMOVE | | | | | |
| 468+60 | EB | RT | 103 | W6-2 | 36 x 36 | - | - | - | 9.000 | 1 | - | - | UNDIVIDED HIGHWAY AHEAD | | | | | | | |
| 468+60 | EB | RT | 104 | R5-1A | 36 x 24 | - | - | 6.000 | - | - | - | - | 103 | WRONG WAY | | | | | | |
| 469+69 | EB | RT | 105 | R2-1 | 1 | 1 | - | - | - | - | - | - | SPEED LIMIT | | REMOVE | | | | | |
| 469+69 | EB | RT | 106 | R5-1A | 1 | - | - | - | - | - | - | - | WRONG WAY | | REMOVE | | | | | |
| 469+69 | WB | LT | 107 | R5-1A | 1 | 1 | - | - | - | - | - | - | WRONG WAY | | REMOVE | | | | | |
| 470+10 | WB | RT | 108 | R5-1 | 1 | 1 | - | - | - | - | - | - | DO NOT ENTER | | REMOVE | | | | | |
| 470+15 | EB | RT | 109 | R2-1 | 24 x 30 | - | - | 5.000 | - | 1 | - | - | SPEED LIMIT | | 55 | | | | | |
| 470+15 | EB | RT | 110 | R5-1 | 36 x 36 | - | - | 9.000 | - | - | - | - | 109 | DO NOT ENTER | | | | | | |
| 470+30 | WB | RT | 111 | R4-7 | 24 x 30 | 1 | 1 | 5.000 | - | 1 | - | - | KEEP RIGHT | | | | | | | |
| 470+30 | WB | RT | 112 | W5-54 | 18 x 18 | - | - | - | 2.250 | - | - | - | 111 | OBJECT IN ROAD MARKER | | MOUNT BELOW KEEP RIGHT | | | | |
| 471+15 | WB | LT | 113 | J2-3 | 72 x 57 | 1 | 2 | 28.500 | - | - | 2 | - | DIRECTIONAL J-ASSEMBLY | | | | | | | |
| | | | | M3-2 | 24 x 12 | | | | | | | | SOUTH | | | | | | | |
| | | | | M1-6 | 24 x 24 | | | | | | | | STH 13 | | | | | | | |
| | | | | M5-1L | 21 x 21 | | | | | | | | LA | | | | | | | |
| | | | | M3-4 | 24 x 12 | | | | | | | | WEST | | | | | | | |
| | | | | M1-4 | 24 x 24 | | | | | | | | USH 8 | | | | | | | |
| | | | | M6-1 | 21 x 21 | | | | | | | | UA | | | | | | | |
| | | | | M3-1 | 24 x 12 | | | | | | | | NORTH | | | | | | | |
| | | | | M4-6 | 24 x 24 | | | | | | | | STH 13 | | | | | | | |
| | | | | M5-2R | 21 x 21 | | | | | | | | RA | | | | | | | |
| 472+15 | WB | LT | 114 | D1-1 | 84 x 15 | 1 | 1 | 8.750 | - | 2 | - | - | GRANBERG RD (LA) | | | | | | | |
| 475+37 | EB | RT | 115 | W6-3 | 1 | 1 | - | - | - | - | - | - | TWO-WAY TRAFFIC | | REMOVE | | | | | |
| END DIVIDED SECTION | | | | | | | | | | | | | | | | | | | | |
| 477+00 | | RT | 116 | W6-3 | 36 x 36 | - | - | - | 9.000 | 1 | - | - | TWO-WAY TRAFFIC | | NEW LOCATION | | | | | |
| SHEET TOTAL: | | | | | 14 | 14 | 107.430 | 30.250 | 11 | 2 | 0 | | | | | | | | | |
| ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE | | | | | | | | | | | | | | | | | | | | |
| PROJECT NO: 1580-29-70 | | | | | | | HWY: USH 8 | | | COUNTY: PRICE | | | | MISCELLANEOUS QUANTITIES | | | | SHEET: | | E |

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| PERMANENT SIGNING (CONTINUED) | | | | | | | | | | | | | | | | |
|--|-----|--------|--------|----------|------------|--------------|--------------|---------------|------------|-----------------|--------------------------|--------|------------------------|--------------------|--|---|
| | | | | 638.2602 | 638.3000 | 637.2210 | 637.2230 | 634.0616 | 634.0618 | 634.0812 | | | | | | |
| | | | | REMOVING | REMOVING | SIGNS | SIGNS | POSTS WOOD | POSTS WOOD | POSTS | MOUNT | | | | | |
| | | | | SIGNS | SMALL SIGN | TYPE II | TYPE II | 4X6-INCH | 4X6-INCH | TUBULAR STEEL | ON SAME | | | | | |
| | | | | TYPE II | SUPPORTS | REFLECTIVE H | REFLECTIVE F | X 16-FT | X 18-FT | STEEL 2"x2"X12' | POST AS | | | | | |
| STATION | LOC | SIGN # | CODE | W x H | EACH | EACH | SF | SF | EACH | EACH | EACH | SIGN # | DESCRIPTION | COMMENTS | | |
| 477+48 | LT | 117 | J1-1 | 24 x 39 | 1 | 1 | 6.500 | - | 1 | - | - | | JUNCTION J-ASSEMBLY | | | |
| | | | M2-1 | 21 x 15 | | | | | | | | | JCT | | | |
| | | | M1-6 | 24 x 24 | | | | | | | | | STH 13 | | | |
| 478+98 | LT | 118 | W6-1 | | 1 | 1 | - | - | - | - | - | | DIVIDED HIGHWAY AHEAD | REMOVE | | |
| 479+98 | LT | 119 | W6-1 | 36 x 36 | - | - | - | 9.000 | 1 | - | - | | DIVIDED HIGHWAY AHEAD | NEW LOCATION | | |
| 483+55 | LT | 120 | | | - | - | - | - | - | - | - | | SIS SIGN | DO NOT DISTURB | | |
| 484+08 | RT | 121 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | | NO PASSING | | | |
| 487+52 | LT | 122 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | | NO PASSING | | | |
| 499+00 | RT | 123 | W3-5 | 36 x 36 | 1 | 1 | - | - | - | - | - | | SPEED REDUCTION AHEAD | REMOVE | | |
| 504+45 | LT | 124 | R5-53A | 18 x 24 | 1 | 1 | - | - | - | - | - | | BUCKLE UP | REMOVE | | |
| 506+92 | RT | 125 | R2-1 | 24 x 30 | 1 | 1 | - | - | - | - | - | | SPEED LIMIT | REMOVE | | |
| 507+15 | LT | 126 | R2-1 | 24 x 30 | 1 | 1 | - | - | - | - | - | | SPEED LIMIT | REMOVE | | |
| 508+00 | RT | 127 | W3-5 | 36 x 36 | - | - | 9.000 | - | 1 | - | - | | SPEED REDUCTION AHEAD | 40 | | |
| 509+42 | RT | 128 | I2-3 | 60 x 24 | 1 | 1 | 10.000 | - | 2 | - | - | | CITY & POPULATION | PRENTICE 660 | | |
| 509+42 | RT | 129 | W14-3 | 48 x 36 | 1 | - | - | 6.000 | - | - | - | 128 | NO PASSING | | | |
| 511+28 | LT | 130 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | | NO PASSING | | | |
| 511+94 | RT | 131 | J1-1 | 24 x 39 | 1 | 1 | 6.500 | - | 1 | - | - | | JUNCTION ASSEMBLY | | | |
| | | | M2-1 | 24 x 12 | | | | | | | | | JCT | | | |
| | | | M1-5A | 24 x 24 | | | | | | | | | CTH A | | | |
| 515+00 | LT | 132 | R2-1 | 24 x 30 | - | - | 5.000 | - | 1 | - | - | | SPEED LIMIT | 55 | | |
| 515+00 | RT | 133 | R2-1 | 24 x 30 | 1 | 1 | 5.000 | - | 1 | - | - | | SPEED LIMIT | 40 | | |
| 515+25 | LT | 134 | R2-1 | 24 x 30 | 1 | 1 | - | - | - | - | - | | SPEED LIMIT | 40 | | |
| 517+21 | RT | 135 | D1-56R | 90 x 15 | 1 | 2 | 9.375 | - | 2 | - | - | | BUSINESS DISTRICT (RA) | | | |
| 518+27 | RT | 136 | I5-1 | 24 x 24 | - | - | - | - | - | - | - | | AIRPORT TRAILBLAZER | REMOVE | | |
| 518+27 | RT | 137 | M7-1 | 12 x 9 | - | - | - | - | - | - | - | | RIGHT ARROW | REMOVE | | |
| 518+27 | RT | 138 | D9-52 | 46 x 36 | - | - | 11.500 | - | 1 | - | - | | AIRPORT | PRENTICE | | |
| 520+38 | RT | 139 | R2-1 | 24 x 30 | 1 | 1 | - | - | - | - | - | | SPEED LIMIT | REMOVE | | |
| 521+44 | LT | 140 | J4-1 | 24 x 36 | 1 | 1 | 6.000 | - | 1 | - | - | | REASSURANCE J ASSEMBLY | | | |
| | | | M3-4 | 24 x 12 | | | | | | | | | WEST | | | |
| | | | M1-4 | 24 x 24 | | | | | | | | | USH 8 | | | |
| 522+00 | RT | 141 | J13-1 | 24 x 45 | 1 | - | 7.500 | - | 1 | - | - | | DIRECTIONAL J-ASSEMBLY | MOUNT ON WOOD POST | | |
| | | | M1-5A | 24 x 24 | | | | | | | | | CTH A | | | |
| | | | M6-4 | 21 x 21 | | | | | | | | | BA | | | |
| 522+50 | LT | 142 | J13-1 | 24 x 45 | 1 | 1 | 7.500 | - | 1 | - | - | | DIRECTIONAL J-ASSEMBLY | | | |
| | | | M1-4 | 24 x 24 | | | | | | | | | USH 8 | | | |
| | | | M6-4 | 21 x 21 | | | | | | | | | BA | | | |
| SHEET TOTAL: | | | | | 18 | 17 | 77.375 | 33.000 | 16 | 0 | 0 | | | | | |
| ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE | | | | | | | | | | | | | | | | |
| PROJECT NO: 1580-29-70 | | | | | HWY: USH 8 | | | COUNTY: PRICE | | | MISCELLANEOUS QUANTITIES | | | SHEET: | | E |

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| PERMANENT SIGNING (CONTINUED) | | | | | | | | | | | | | | | |
|--|-----|----------|------------|--------------|--------------|------------|--------------|-----------------|---------|---------|--------------------------|---------|-----------------------------|-------------------------|--|
| | | 638.2602 | 638.3000 | 637.2210 | 637.2230 | 634.0616 | 634.0618 | 634.0812 | | | | | | | |
| | | REMOVING | REMOVING | SIGNS | SIGNS | POSTS WOOD | POSTS WOOD | POSTS | MOUNT | | | | | | |
| | | SIGNS | SMALL SIGN | TYPE II | TYPE II | 4X6-INCH | 4X6-INCH | TUBULAR STEEL | ON SAME | | | | | | |
| | | TYPE II | SUPPORTS | REFLECTIVE H | REFLECTIVE F | X 16-FT | X 18-FT | STEEL 2"x2"x12' | POST AS | | | | | | |
| STATION | LOC | SIGN # | CODE | W x H | TYPE II | SUPPORTS | REFLECTIVE H | REFLECTIVE F | X 16-FT | X 18-FT | STEEL 2"x2"x12' | POST AS | DESCRIPTION | COMMENTS | |
| 522+55 | LT | 143 | R1-1 | 30 x 30 | - | - | 5.180 | - | - | - | - | - | STOP | ON FLASHING BEACON POST | |
| 522+55 | LT | 144 | W4-4P | 24 x 12 | - | - | 2.000 | - | - | - | - | 143 | CROSS TRAFFIC DOES NOT STOP | MOUNTED BELOW STOP | |
| 523+00 | RT | 145 | R1-1 | 30 x 30 | 1 | - | 5.180 | - | - | - | - | - | STOP | ON FLASHING BEACON POST | |
| 523+00 | RT | 146 | W4-4P | 24 x 12 | 1 | - | 2.000 | - | - | - | - | 145 | CROSS TRAFFIC DOES NOT STOP | MOUNTED BELOW STOP | |
| 523+00 | RT | 147 | W12-1D | 24 x 24 | 1 | 1 | - | 4.000 | 1 | - | - | - | | | |
| 523+05 | RT | 148 | J13-1 | 24 x 45 | 1 | 1 | 7.500 | - | 1 | - | - | - | DIRECTIONAL J-ASSEMBLY | | |
| | | | M1-4 | 24 x 24 | | | | | | | | | USH 8 | | |
| | | | M6-4 | 21 x 21 | | | | | | | | | BA | | |
| 523+25 | LT | 149 | J13-1 | 24 x 45 | 1 | - | 7.500 | - | 1 | - | - | - | DIRECTIONAL J-ASSEMBLY | MOUNT ON WOOD POST | |
| | LT | | M1-5A | 24 x 24 | | | | | | | | | CTH A | | |
| | LT | | M6-4 | 21 x 21 | | | | | | | | | BA | | |
| 523+30 | RT | 150 | R1-1 | 30 x 30 | 1 | 1 | 5.180 | - | 1 | - | - | - | STOP | ON CTH A | |
| 523+30 | RT | 151 | W4-4P | 24 x 12 | | | 2.000 | - | - | - | - | 150 | CROSS TRAFFIC DOES NOT STOP | MOUNTED BELOW STOP | |
| 523+30 | RT | 152 | R5-1 | 30 x 30 | | | 6.250 | - | - | - | - | 150 | DO NOT ENTER | MOUNTED ON BACK OF STOP | |
| 523+82 | RT | 153 | J4-1 | 24 x 36 | 1 | 1 | 6.000 | - | 1 | - | - | - | REASSURANCE J-ASSEMBLY | | |
| | | | M3-2 | 24 x 12 | | | | | | | | | EAST | | |
| | | | M1-4 | 24 x 24 | | | | | | | | | USH 8 | | |
| 526+00 | LT | 154 | W2-1 | 36 x 36 | - | - | - | 9.000 | - | - | - | - | CROSSROAD WARNING | MOUNT ON BEACON | |
| 526+55 | LT | 155 | I5-1 | 24 x 24 | - | - | - | - | - | - | - | - | AIRPORT TRAILBLAZER | REMOVE | |
| 526+55 | LT | 156 | M7-1 | 12 x 9 | - | - | - | - | - | - | - | - | LEFT ARROW | REMOVE | |
| 527+00 | RT | 157 | R2-1 | 24 x 30 | - | - | 5.000 | - | 1 | - | - | - | SPEED LIMIT | 40 | |
| 527+25 | LT | 158 | R2-1 | 24 x 30 | 1 | 1 | - | - | - | - | - | - | SPEED LIMIT | REMOVE | |
| 527+40 | LT | 159 | D9-52 | 46 x 36 | - | - | 11.500 | - | 1 | - | - | - | AIRPORT | PRENTICE | |
| 528+35 | LT | 160 | D1-56L | 90 x 15 | 1 | 1 | 9.375 | - | 2 | - | - | - | BUSINESS DISTRICT (LA) | | |
| 531+48 | RT | 161 | R2-1 | 24 x 30 | 1 | 1 | 5.000 | - | 1 | - | - | - | SPEED LIMIT | 40 | |
| 531+95 | LT | 162 | R2-1 | 24 x 30 | 1 | 1 | 5.000 | - | 1 | - | - | - | SPEED LIMIT | 40 | |
| 533+85 | LT | 163 | J1-1 | 24 x 39 | 1 | 1 | 6.500 | - | 1 | - | - | - | JUNCTION ASSEMBLY | | |
| | | | M2-1 | 21 x 15 | | | | | | | | | JCT | | |
| | | | M1-5A | 24 x 24 | | | | | | | | | CTH A | | |
| 537+75 | LT | 164 | I3-1 | 60 x 24 | - | - | 10.000 | - | 2 | - | - | - | SOUTH FORK JUMP RIVER | NEW | |
| 537+75 | LT | 165 | I3-1 | 60 x 24 | - | - | 10.000 | - | - | - | - | 164 | SOUTH FORK JUMP RIVER | NEW | |
| 540+00 | LT | 166 | R2-1 | 24 x 30 | 1 | 1 | 5.000 | - | 1 | - | - | - | SPEED LIMIT | 40 | |
| 540+05 | RT | 167 | R2-1 | 24 x 30 | 1 | 1 | 5.000 | - | 1 | - | - | - | SPEED LIMIT | 55 | |
| 540+05 | RT | 168 | I3-1 | | 1 | - | - | - | - | - | - | - | SOUTH FORK JUMP RIVER | REMOVE | |
| 543+15 | LT | 169 | I2-3 | 60 x 24 | 1 | 1 | 10.000 | - | 1 | - | - | - | CITY & POPULATION | PRENTICE 660 | |
| SHEET TOTAL: | | | | | 16 | 12 | 131.165 | 13.000 | 17 | 0 | 0 | | | | |
| ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE | | | | | | | | | | | | | | | |
| PROJECT NO: 1580-29-70 | | | | | HWY: USH 8 | | | COUNTY: PRICE | | | MISCELLANEOUS QUANTITIES | | | SHEET: E | |

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| PERMANENT SIGNING (CONTINUED) | | | | | | | | | | | | | | | | | | | | | |
|--|-----|----------|--------|------------|------------|----------|--------|----------|---------------|--------------|------|--------------|--------------------------|---------------------------|--|---------|--------|-----------------|---|---------|--|
| | | 638.2602 | | 638.3000 | | 637.2210 | | 637.2230 | | 634.0616 | | 634.0618 | | 634.0812 | | | | | | | |
| | | REMOVING | | REMOVING | | SIGNS | | SIGNS | | POSTS WOOD | | POSTS WOOD | | POSTS | | MOUNT | | | | | |
| | | SIGNS | | SMALL SIGN | | TYPE II | | TYPE II | | 4X6-INCH | | 4X6-INCH | | TUBULAR STEEL | | ON SAME | | | | | |
| | | SIGN | | SIZE | | TYPE II | | SUPPORTS | | REFLECTIVE H | | REFLECTIVE F | | X 16-FT | | X 18-FT | | STEEL 2"x2"x12' | | POST AS | |
| STATION | LOC | SIGN # | CODE | W x H | EACH | EACH | SF | SF | EACH | EACH | EACH | SIGN # | DESCRIPTION | COMMENTS | | | | | | | |
| 543+22 | RT | 170 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 547+95 | RT | 171 | R5-53A | 18 x 24 | 1 | 1 | - | - | - | - | - | - | BUCKLE UP | REMOVE | | | | | | | |
| 548+00 | LT | 172 | W3-5 | 36 x 36 | 1 | 1 | - | 9.000 | 1 | - | - | - | SPEED ZONE AHEAD | 40 | | | | | | | |
| 567+50 | LT | 173 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 570+00 | RT | 174 | D1-61 | 72 x 24 | - | - | 12.000 | - | 2 | - | - | - | CEMETERY RD (LA) | NEW | | | | | | | |
| 571+10 | RT | 175 | I55-56 | 30 x 36 | 1 | 1 | 7.500 | - | 1 | - | - | - | ADOPT A HIGHWAY | TRINITY LUTHERAN PRENTICE | | | | | | | |
| 576+25 | LT | 176 | R1-1 | 30 x 30 | 1 | 1 | 5.180 | - | 1 | - | - | - | STOP | ON CEMETERY RD | | | | | | | |
| 576+35 | RT | 177 | R1-1 | 30 x 30 | 1 | 1 | 5.180 | - | 1 | - | - | - | STOP | ON CEMETERY RD | | | | | | | |
| 581+60 | | | | | - | 1 | - | - | - | - | - | - | | POST ONLY - REMOVE | | | | | | | |
| 582+75 | LT | 178 | D1-61 | 72 x 24 | 1 | 2 | 12.000 | - | 2 | - | - | - | CEMETERY RD (LA) | | | | | | | | |
| 584+00 | LT | 179 | W2-1 | 30 x 30 | 1 | 1 | - | - | - | - | - | - | CROSSROAD | REMOVE | | | | | | | |
| 589+30 | RT | 180 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 593+25 | LT | 181 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 598+00 | RT | 182 | W2-2 | 30 x 30 | - | - | - | 6.250 | 1 | - | - | - | CROSSROAD (RIGHT) | NEW | | | | | | | |
| 603+25 | RT | 183 | R1-1 | 30 x 30 | 1 | 1 | 5.180 | - | 1 | - | - | - | STOP | ON SCHIE RD | | | | | | | |
| 609+75 | LT | 184 | W2-2 | 30 x 30 | - | - | - | 6.250 | 1 | - | - | - | CROSSROAD (LEFT) | NEW | | | | | | | |
| 628+20 | RT | 185 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 628+60 | LT | 186 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 655+60 | RT | 187 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 668+80 | LT | 188 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 675+70 | RT | 189 | D1-61 | 54 x 24 | 1 | 2 | 9.000 | - | 2 | - | - | - | LOUND RD (BA) | | | | | | | | |
| 682+75 | LT | 190 | R1-1 | 30 x 30 | 1 | 1 | 5.180 | - | 1 | - | - | - | STOP | ON LOUND RD | | | | | | | |
| 683+06 | RT | 191 | R1-1 | 30 x 30 | 1 | 1 | 5.180 | - | 1 | - | - | - | STOP | ON LOUND RD | | | | | | | |
| 687+40 | LT | 192 | I55-56 | 30 x 36 | 1 | 1 | 7.500 | - | 1 | - | - | - | ADOPT A HIGHWAY | TRINITY LUTHERAN PRENTICE | | | | | | | |
| 690+40 | LT | 193 | D1-61 | 54 x 24 | 1 | 2 | 9.000 | - | 2 | - | - | - | LOUND RD (BA) | | | | | | | | |
| 698+31 | RT | 194 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 701+90 | LT | 195 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 701+90 | LT | 196 | W2-1 | | 1 | - | - | - | - | - | - | - | CROSSROAD | REMOVE | | | | | | | |
| 728+25 | RT | 197 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | - | NO PASSING | | | | | | | | |
| 729+60 | RT | 198 | D1-1 | 84 x 15 | 1 | 2 | 8.750 | - | 2 | - | - | - | CHICAGO AVE (LA) | | | | | | | | |
| 735+15 | LT | 199 | R1-1 | 30 x 30 | 1 | 1 | - | - | 1 | - | - | - | STOP | ON CHICAGO AVE | | | | | | | |
| 739+50 | LT | 200 | W5-52L | 12 x 36 | - | - | - | - | - | - | - | - | BRIDGE HASHMARK | DO NOT DISTURB | | | | | | | |
| 739+50 | RT | 201 | W5-52R | 12 x 36 | - | - | - | - | - | - | - | - | BRIDGE HASHMARK | DO NOT DISTURB | | | | | | | |
| 740+60 | LT | 202 | W5-52R | 12 x 36 | - | - | - | - | - | - | - | - | BRIDGE HASHMARK | DO NOT DISTURB | | | | | | | |
| 740+60 | RT | 203 | W5-52L | 12 x 36 | - | - | - | - | - | - | - | - | BRIDGE HASHMARK | DO NOT DISTURB | | | | | | | |
| SHEET TOTAL: | | | | | 27 | 31 | 91.650 | 87.500 | 32 | 0 | 0 | | | | | | | | | | |
| ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE | | | | | | | | | | | | | | | | | | | | | |
| PROJECT NO: 1580-29-70 | | | | | HWY: USH 8 | | | | COUNTY: PRICE | | | | MISCELLANEOUS QUANTITIES | | | | SHEET: | | E | | |

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| PERMANENT SIGNING (CONTINUED) | | | | | | | | | | | | | | |
|-------------------------------|-----|----------|------------|--------------|--------------|------------|------------|-----------------|---------|------|------|--------|---------------------|----------------|
| | | 638.2602 | 638.3000 | 637.2210 | 637.2230 | 634.0616 | 634.0618 | 634.0812 | | | | | | |
| | | REMOVING | REMOVING | SIGNS | SIGNS | POSTS WOOD | POSTS WOOD | POSTS | MOUNT | | | | | |
| | | SIGNS | SMALL SIGN | TYPE II | TYPE II | 4X6-INCH | 4X6-INCH | TUBULAR STEEL | ON SAME | | | | | |
| | | TYPE II | SUPPORTS | REFLECTIVE H | REFLECTIVE F | X 16-FT | X 18-FT | STEEL 2"x2"X12' | POST AS | | | | | |
| STATION | LOC | SIGN # | CODE | W x H | EACH | EACH | SF | SF | EACH | EACH | EACH | SIGN # | DESCRIPTION | COMMENTS |
| 740+85 | LT | 204 | W14-3 | 48 x 36 | 1 | 1 | - | 6.000 | 1 | - | - | | NO PASSING | |
| 742+70 | LT | 205 | D1-1 | 84 x 15 | 1 | 2 | 8.750 | - | 2 | - | - | | CHICAGO AVE (RA) | |
| 750+25 | RT | 206 | W1-2L | 30 x 30 | - | - | - | 6.250 | 1 | - | - | | CURVE WARNING | |
| 751+75 | RT | 207 | W2-2 | 30 x 30 | - | - | - | 6.250 | 1 | - | - | | CROSSROAD (LEFT) | NEW |
| 754+25 | LT | 208 | W1-6 | 48 x 24 | 1 | 1 | - | 8.000 | 1 | - | - | | NIGHT ARROW (RIGHT) | |
| 755+75 | LT | 209 | R1-1 | 30 x 30 | 1 | 1 | 5.180 | - | 1 | - | - | | STOP | ON STIBS RD |
| 761+10 | LT | 210 | W2-2 | 30 x 30 | - | - | - | 6.250 | 1 | - | - | | CROSSROAD (RIGHT) | NEW |
| 765+75 | RT | 211 | W8-64 | 36 x 36 | 1 | 1 | - | 9.000 | 1 | - | - | | BRIDGE MAY BE ICY | |
| 772+10 | RT | 212 | W5-52R | 12 x 36 | - | - | - | - | - | - | - | | BRIDGE HASHMARK | DO NOT DISTURB |
| 772+35 | LT | 213 | W5-52L | 12 x 36 | - | - | - | - | - | - | - | | BRIDGE HASHMARK | DO NOT DISTURB |
| 774+75 | RT | 214 | W5-52L | 12 x 36 | - | - | - | - | - | - | - | | BRIDGE HASHMARK | DO NOT DISTURB |
| 774+85 | LT | 215 | W5-52R | 12 x 36 | - | - | - | - | - | - | - | | BRIDGE HASHMARK | DO NOT DISTURB |
| 776+25 | RT | 216 | W1-2R | 30 x 30 | - | - | - | 6.250 | 1 | - | - | | CURVE WARNING | |
| 779+50 | RT | 217 | W1-6 | 48 x 24 | 1 | 1 | - | 8.000 | 1 | - | - | | NIGHT ARROW (LEFT) | |
| 783+00 | RT | 218 | W8-64 | 36 x 36 | 1 | 1 | - | 9.000 | 1 | - | - | | BRIDGE MAY BE ICY | |
| 786+60 | LT | 219 | W1-6 | 48 x 24 | 1 | 1 | - | 8.000 | 1 | - | - | | NIGHT ARROW (RIGHT) | |
| 790+00 | LT | 220 | W1-2R | 30 x 30 | - | - | - | 6.250 | 1 | - | - | | CURVE WARNING | |
| 804+05 | RT | 221 | D1-1 | | 1 | 1 | - | - | - | - | - | | WAYMAN RD | REMOVE |
| 806+10 | RT | 222 | W2-2 | 30 x 30 | - | - | - | 6.250 | 1 | - | - | | CROSSROAD (LEFT) | |
| 812+90 | RT | 223 | D1-1 | 72 x 15 | - | - | 7.500 | - | 2 | - | - | | LUSTILA RD (RA) | NEW |
| 816+10 | LT | 224 | W2-2 | 30 x 30 | - | - | - | 6.250 | 1 | - | - | | CROSSROAD (RIGHT) | NEW |
| 817+60 | LT | 225 | D1-1 | | 1 | 1 | - | - | - | - | - | | WYMAN RD | REMOVE |
| SHEET TOTAL: | | | | | 10 | 11 | 21.430 | 91.750 | 18 | 0 | 0 | | | |
| TOTAL: | | | | | 133 | 134 | 902.570 | 290.750 | 129 | 17 | 3 | | | |

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE

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| TRAFFIC CONTROL | | | | | | | |
|----------------------------|--|-------------------|------------------------------------|---|-------------------|--|--|
| | 643.0100 TRAFFIC CONTROL 1580-29-70 | 643.0300 DRUMS | 643.0420 BARRICADES TYPE III | 643.0705 WARNING LIGHTS TYPE A | 643.0900 SIGNS | 646.0600 REMOVING PAVEMENT MARKINGS | 649.0402 TEMPORARY PAINT 4-INCH |
| LOCATION | EACH | DAYS | DAYS | DAYS | DAYS | LF | LF |
| PROJECT | 1 | - | - | - | - | - | 39870 |
| ADVANCE WARNING | - | - | - | - | 2116 | - | - |
| STH 13 INTERCHANGE STAGE 1 | - | 2475 | - | 255 | 120 | - | - |
| STH 13 INTERCHANGE STAGE 2 | - | 2520 | - | - | - | - | - |
| STH 13 INTERCHANGE STAGE 3 | - | 250 | - | - | - | - | - |
| CTH A INTERSECTION | - | 630 | - | - | - | - | - |
| B-50-48 | - | 945 | 21 | 210 | 504 | 790 | - |
| CULVERT REPLACEMENTS | - | 750 | - | - | 250 | - | - |
| TOTAL: | 1 | 7570 | 21 | 465 | 2990 | 790 | 39870 |

| TEMPORARY PAVEMENT MARKING REMOVABLE TAPE | | | |
|---|-----------------------------|-------------------------------|---------------------------------|
| | 649.0400 4-INCH WHITE | 649.0506 6-INCH MASKOUT | 649.1400 24-INCH STOP BAR |
| LOCATION | LF | LF | LF |
| STH 13 INTERCHANGE STAGE 1 | 750 | - | - |
| B-50-48 | 2300 | 350 | 24 |
| TOTAL: | 3050 | 350 | 24 |

| TEMPORARY TRAFFIC SIGNAL FOR BRIDGES | |
|--------------------------------------|----------------|
| | 661.0100 LS |
| B-50-48 | 1 |
| TOTAL: | 1 |

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| CONCRETE BASES | | |
|----------------|---|---|
| | 204.0195 REMOVING CONCRETE BASES | 654.0101 CONCRETE BASES TYPE I |
| LOCATION | EACH | EACH |
| B1 | 1 | 1 |
| B2 | 1 | 1 |
| B3 | - | 1 |
| B4 | 1 | - |
| B5 | 1 | - |
| MONUMENT | 1 | - |
| TOTAL: | 5 | 3 |

| FLASHING BEACON CABLE & CONDUIT | | | | | |
|---------------------------------|-----|---|--|--|--|
| | | 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH | 652.0605 CONDUIT SPECIAL 2-INCH | 655.0305 CABLE TYPE UF 2-12 AWG GROUNDED | |
| FROM | TO | LF | LF | LF | |
| B1 | PB1 | 5 | - | 20 | |
| PB1 | PB2 | - | 80 | 95 | |
| BREAKER | PB2 | 25 | - | 80 | |
| PB2 | PB3 | - | 85 | 100 | |
| PB3 | PB4 | - | 95 | 110 | |
| PB4 | B2 | 20 | - | 35 | |
| PB4 | PB5 | 175 | - | 190 | |
| PB5 | PB6 | 115 | - | 130 | |
| PB6 | B3 | 10 | - | 25 | |
| TOTAL: | | 350 | 260 | 785 | |

| PULL BOXES | | |
|------------|------------------------------------|---|
| | 653.0905 REMOVING PULL BOXES | 653.0140 PULL BOXES STEEL 24x42-INCH |
| LOCATION | EACH | EACH |
| PB1 | 1 | 1 |
| PB2 | - | 1 |
| PB3 | 1 | 1 |
| PB4 | 1 | 1 |
| PB5 | - | 1 |
| PB6 | - | 1 |
| PB7 | 1 | - |
| PB8 | 1 | - |
| TOTAL: | 5 | 6 |

| YELLOW FLASHING BEACON | | | | | | | |
|--------------------------|--|--|--|---|---|--|--|
| | 656.0200 METER BREAKER PEDESTAL | 657.0100 PEDESTAL BASE TYPE I | 657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT | 658.0103 TRAFFIC SIGNAL FACE 12-INCH VERTICAL | 658.0210 BACKPLATES SIGNAL FACE 1 SECTION 12-INCH | 658.0605 LED MODULES 12-INCH YELLOW BALL | 658.5069 SIGNAL MOUNTING HARDWARE |
| LOCATION | LS | EACH | EACH | EACH | EACH | EACH | LS |
| STA 526+00 YELLOW BEACON | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL: | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 010 UNLESS NOTED OTHERWISE

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| SURVEY | | | |
|--------------------|-------------|--------------|----------|
| | 650.8000 | 650.9910 | 650.9920 |
| | RESUFRACING | SUPPLEMENTAL | SLOPE |
| | REFERENCE | CONTROL | STAKES |
| LOCATION | LF | LS | LF |
| PROJECT 1580-29-70 | 40450 | 1 | - |
| STH 13 SB ON RAMP | - | - | 175 |
| STH 13 NB ON RAMP | - | - | 175 |
| B-50-48 | - | - | 520 |
| TOTALS: | 40450 | 1 | 870 |

REFERENCE MONUMENTS

| | | 621.0100 | SPV.0060.03 |
|--|---------------------|-----------|-------------|
| | | LANDMARK | REESTABLISH |
| | | REFERENCE | SECTION |
| | | MONUMENTS | CORNER |
| | | EACH | MONUMENTS |
| LOCATION | APPROXIMATE STATION | | EACH |
| NE CORNER, SECTION 6, T35N R2E | 576+50 | 4 | 1 |
| NE CORNER OF NW 1/4, SECTION 4, T35N R25 | 656+50 | 4 | 1 |
| NE CORNER, SECTION 4, T35N R2E | 683+00 | 4 | 1 |
| NE CORNER OF NW 1/4, SECTION 3, T35N R25 | 709+15 | 4 | 1 |
| NE CORNER, SECTION 3, T35N R2E | 735+25 | 4 | 1 |
| TOTAL: | | 20 | 5 |

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SAWING ASPHALT

| | 690.0150 |
|-----------------------------------|----------|
| LOCATION | LF |
| INTERCHANGE REMOVAL | 3030 |
| GRANBERG RD CURB & GUTTER REMOVAL | 180 |
| CTH A CURB & GUTTER REMOVAL | 525 |
| DRIVEWAYS | 150 |
| TOTAL: | 3885 |

SAWING CONCRETE

| | 690.0250 |
|---------------------------------|----------|
| LOCATION | LF |
| CULVERT REPLACEMENT STA 438+75 | 60 |
| STH 13 SB OFF RAMP CURB REMOVAL | 365 |
| STH 13 SB ON RAMP CURB REMOVAL | 110 |
| STH 13 NB OFF RAMP CURB REMOVAL | 365 |
| STH 13 NB ON RAMP CURB REMOVAL | 115 |
| CULVERT REPLACEMENT STA 610+68 | 60 |
| CULVERT REPLACEMENT STA 658+80 | 60 |
| TOTAL: | 1135 |

HEAVY DUTY SILT FENCE

| | SPV.0090.01 | |
|---------------|-------------|---------------------------------------|
| LOCATION | LF | REMARKS |
| UNDISTRIBUTED | 250 | USE AS NEEDED AT CULVERT REPLACEMENTS |
| TOTAL: | 250 | |

LANE SHIFT

| | SPV.0060.01 |
|--------------------|-------------|
| | EA |
| CULVERT STA 610+68 | 1 |
| CULVERT STA 658+80 | 1 |
| TOTAL: | 2 |

REMOVE, SALVAGE, AND REINSTALL
FLASHING RED BEACON ASSEMBLY

| | SPV.0060.02 |
|----------|-------------|
| | EA |
| CTH A NB | 1 |
| CTH A SB | 1 |
| TOTAL: | 2 |

REMOVE AND SALVAGE
FLASHING BEACONS

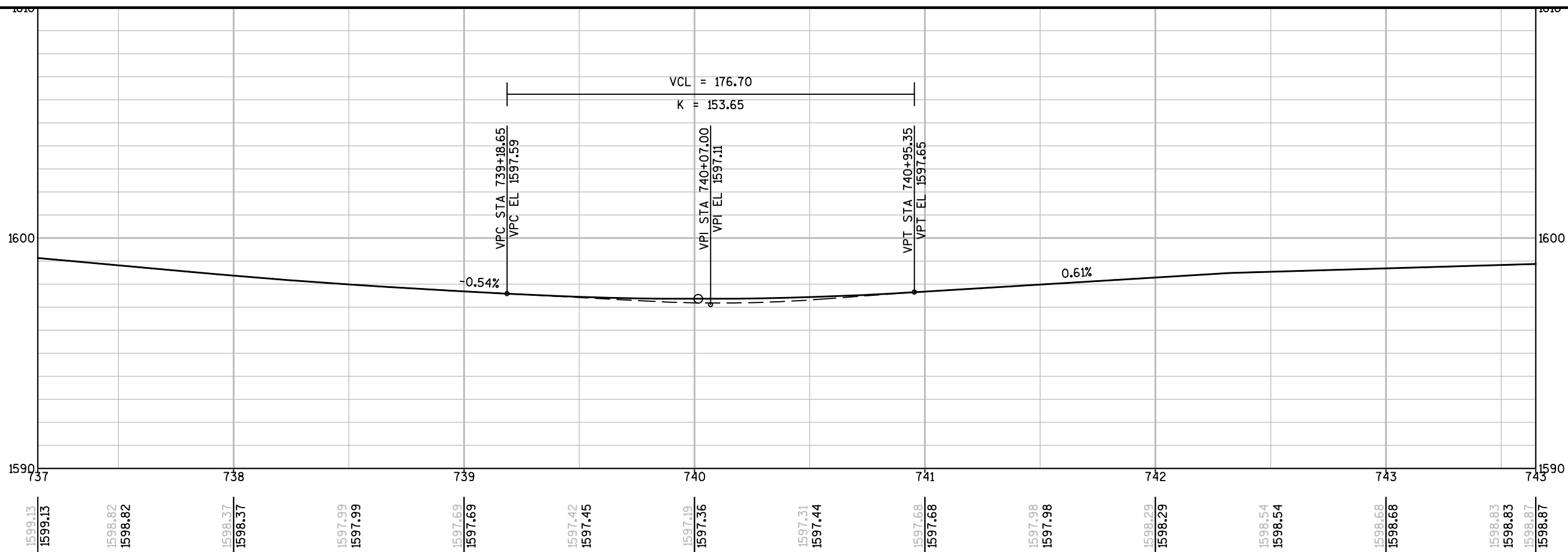
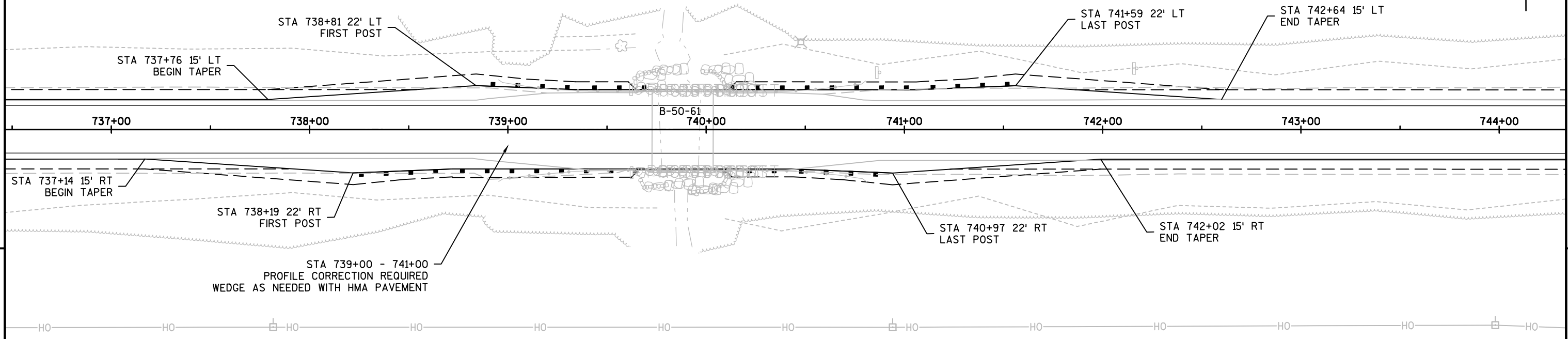
| | SPV.0105.01 |
|---------------|-------------|
| | LS |
| USH 8 & CTH A | 1 |
| TOTAL: | 1 |

PROTECTIVE THERMOPLASTIC COATING
AT SNOWMOBILE CROSSINGS

| | SPV.0180.01 |
|------------|-------------|
| LOCATION | SY |
| STA 508+30 | 67 |
| TOTAL: | 67 |

ALL ITEMS AND QUANTITIES ON
THIS SHEET ARE CATEGORY 010
UNLESS NOTED OTHERWISE

REPLACE BEAMGUARD STA 738+19 - 741+59
REMOVE GUARDRAIL REQUIRED
MGS GUARDRAIL REQUIRED
MGS GUARDRAIL TERMINAL EAT REQUIRED
MGS GUARDRAIL THRIE BEAM TRANSITION REQUIRED
PREPARE BASE FOR ASPHALTIC SHOULDERS REQUIRED AT SHOULDER WIDENINGS
4" HMA PAVEMENT REQUIRED AT SHOULDER WIDENINGS



5

BEGIN PROJECT
STA 412+00
1580-29-70

BEGIN CENTERLINE RUMBLE STRIPS
STA 412+00

PE (LT)
BAD
STA 416+40

PE (LT)
BAD
STA 422+70

STA 423+70 CULVERT 50-008-042
24" RCCP
RELAY APRON ENDWALL - RT & LT SIDES
APRON ENDWALLS FOR CULVERT PIPE
SALVAGED 24-INCH REQUIRED

PE (LT)
BAD
STA 435+15

FE (RT)
BAD
STA 430+89

END CENTERLINE RUMBLE STRIPS
BEGIN DIVIDED HIGHWAY
SEE STH 13 INTERCHANGE DETAIL
STA 436+60
STA 436+60WB

CURVE D1
PI STA 439+70WB
DELTA 4°46'10" RT
T 239'
L 263'
R 5988'
SE 3.3%

STA 438+75 CULVERT 50-008-043
REMOVING SMALL PIPE CULVERTS REQUIRED
EXISTING 30" x 73' CMCP
CULVERT PIPE RCCP CLASS IV 30-INCH REQUIRED
APRON ENDWALLS FOR RCCP 30-INCH REQUIRED
CULVERT TRANSITION REQUIRED - SEE DETAIL

440WB

PT 440+90WB

5

MILLER ROAD
STA 413+20 RT RESTORE
SEE SIDE ROAD DETAIL

| STH 13 INTERCHANGE CULVERT REPLACEMENT INFORMATION | | | | | | | |
|--|---------------|-----------------|-----------|---------|-------------------|-----------|---------|
| STATION | LOCATION | UPSTREAM INVERT | | | DOWNSTREAM INVERT | | |
| | | STATION | OFFSET | ELEV. | STATION | OFFSET | ELEV. |
| 438+75 | USH 8 | 438+72.0 | 32.42' LT | 1553.17 | 438+72.0 | 37.20' RT | 1553.05 |
| 455+17 | USH 8 | 455+21.4 | 37.10' LT | 1559.60 | 455+09.7 | 89.20' LT | 1556.30 |
| 52+38 | STH 13 SB OFF | 52+38.8 | 22.21' RT | 1558.37 | 52+37.2 | 33.36' LT | 1558.26 |
| 48+32 | STH 13 SB ON | 48+32.2 | 12.48' RT | 1559.05 | 48+32.1 | 31.59' LT | 1558.92 |
| 10+60 | STH 13 NB ON | 10+57.1 | 11.58' LT | 1558.83 | 10+62.9 | 44.01' RT | 1558.72 |
| 9+49 | STH 13 NB OFF | 9+32.9 | 15.36' LT | 1557.90 | 9+65.3 | 55.04' RT | 1557.70 |
| 457+95 | USH 8 | 457+94.6 | 35.50' LT | 1559.60 | 457+94.6 | 88.90' LT | 1559.20 |

PLACE 12" OF BAD 1 1/4-INCH AND 6 1/4" OF HMA PAVEMENT OVER ALL CULVERT REPLACEMENTS AND REMOVALS

BENCHMARK
WISDOT BRASS CAP
STA 456+76.63 28.46' LT
X= 79244L766
Y= 36236L377
EL= 1565.788'

CURVE D2
PI STA 444+13WB
DELTA 4°46'10" LT
T 318'
L 507'
R 5988'
SE 2.6%

STA 52+38 SB OFF RAMP CULVERT REPLACEMENT
REMOVING SMALL PIPE CULVERTS REQUIRED
EXISTING 24" x 66' CMCP
CULVERT PIPE RCCP CLASS IV 24-INCH REQUIRED
APRON ENDWALLS FOR RCCP 24-INCH REQUIRED

STA 10+58 NB ON RAMP CULVERT REPLACEMENT
REMOVING SMALL PIPE CULVERTS REQUIRED
EXISTING 24" x 59' CMCP
CULVERT PIPE RCCP CLASS IV 18-INCH REQUIRED
APRON ENDWALLS FOR RCCP 18-INCH REQUIRED

PE (LT)
BAD
STA 467+90WB

470WB

STA 468+60WB
18" RCCP TO REMAIN
MEDIAN INLET

STA 464+60WB 50-008-045
24" RCCP TO REMAIN

STA 466+70
30" RCCP TO REMAIN

STA 457+95 CULVERT
CULVERT PIPE RCCP CLASS IV 18-INCH REQUIRED
APRON ENDWALLS FOR RCCP 18-INCH REQUIRED

STA 455+17 CULVERT
CULVERT PIPE RCCP CLASS IV 18-INCH REQUIRED
APRON ENDWALLS FOR RCCP 18-INCH REQUIRED

REPLACE GUARDRAIL
SEE STH 13 INTERCHANGE DETAIL

STA 454+06 MEDIAN CULVERT
REMOVING SMALL PIPE CULVERTS REQUIRED
EXISTING 18" x 70' CMCP

STA 459+40 MEDIAN CULVERT
REMOVING SMALL PIPE CULVERTS REQUIRED
EXISTING 18" x 70' CMCP

STA 48+32 SB ON RAMP CULVERT REPLACEMENT
REMOVING SMALL PIPE CULVERTS REQUIRED
EXISTING 24" x 48' CMCP
CULVERT PIPE RCCP CLASS IV 24-INCH REQUIRED
APRON ENDWALLS FOR RCCP 24-INCH REQUIRED

STA 9+40 NB OFF RAMP CULVERT REPLACEMENT
REMOVING SMALL PIPE CULVERTS REQUIRED
EXISTING 24" x 82' CMCP
CULVERT PIPE RCCP CLASS IV 24-INCH REQUIRED
APRON ENDWALLS FOR RCCP 24-INCH REQUIRED

CURVE D3
PI STA 467+07
DELTA 4°46'10" LT
T 318'
L 743'
R 8602'
SE 2.6%

GRANBERG ROAD
STA 467+50 RT

PT 470+78

PC 471+59

PC 463+35

STA 459+60 RT
STH 13 NB OFF RAMP

STA 453+90 RT
STH 13 SB ON RAMP

STA 453+90WB LT
STH 13 SB OFF RAMP

STA 459+60WB LT
STH 13 NB ON RAMP

PT 448+79WB

440-800-05

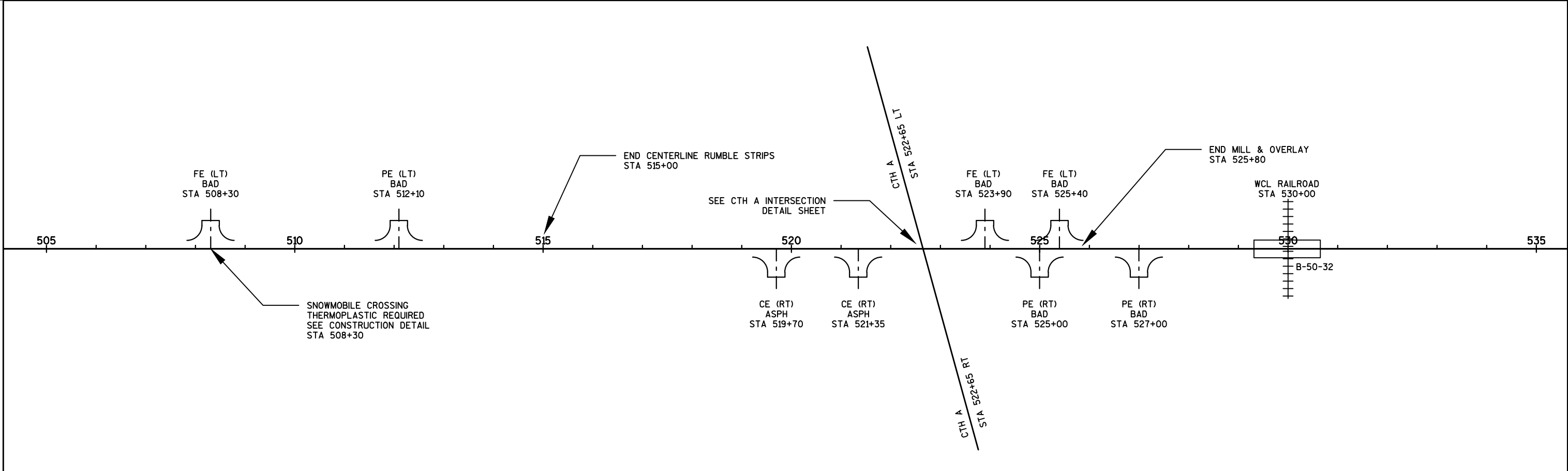
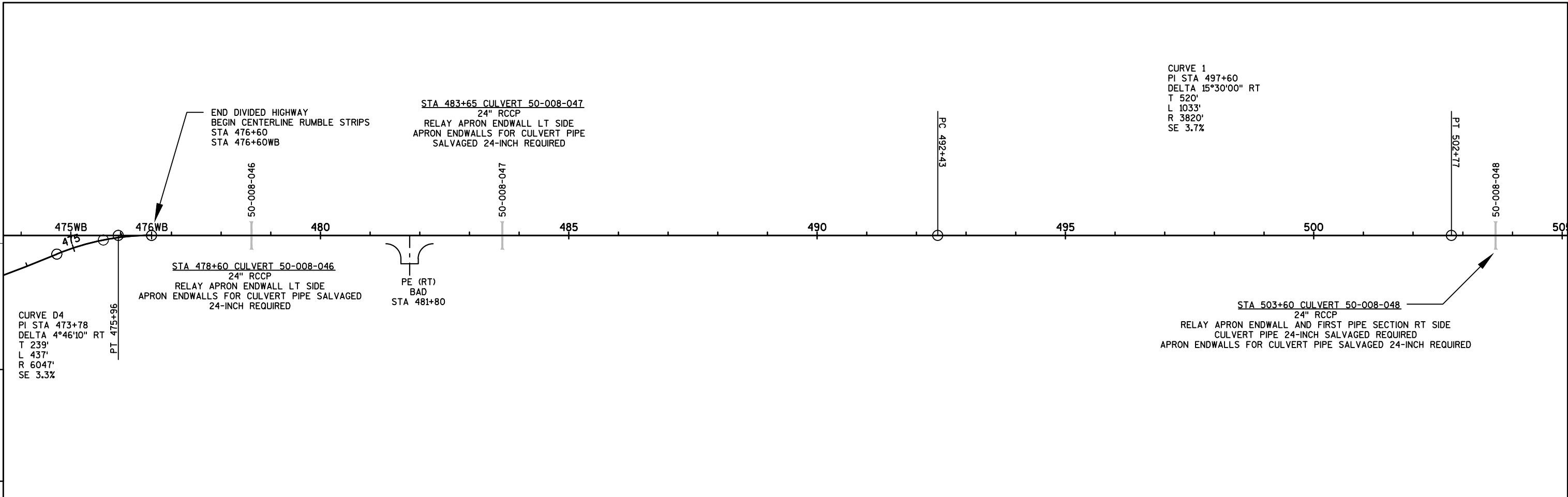
STA 448+60WB 50-008-044
24" TO REMAIN

445WB

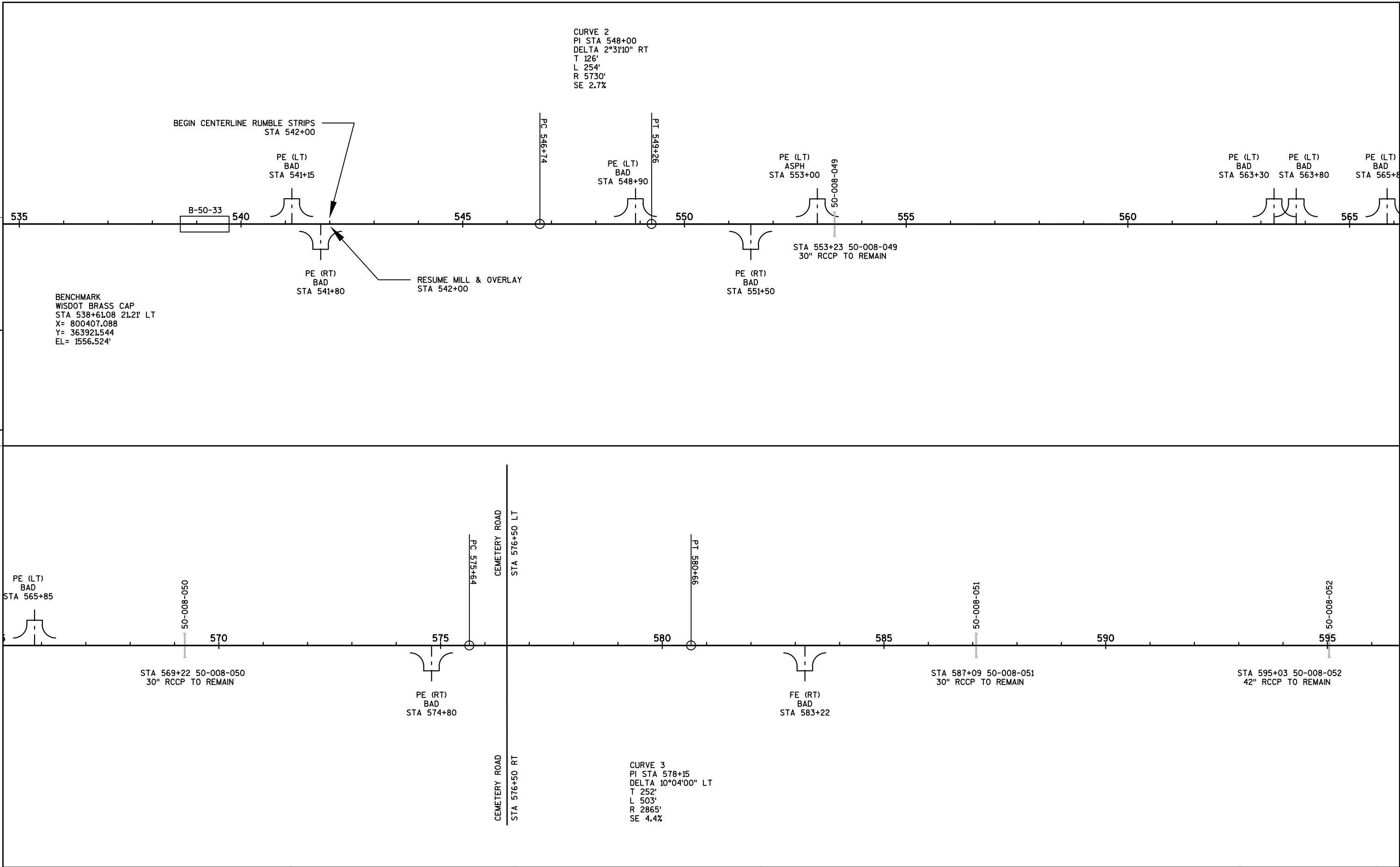
PC 443+72WB

5

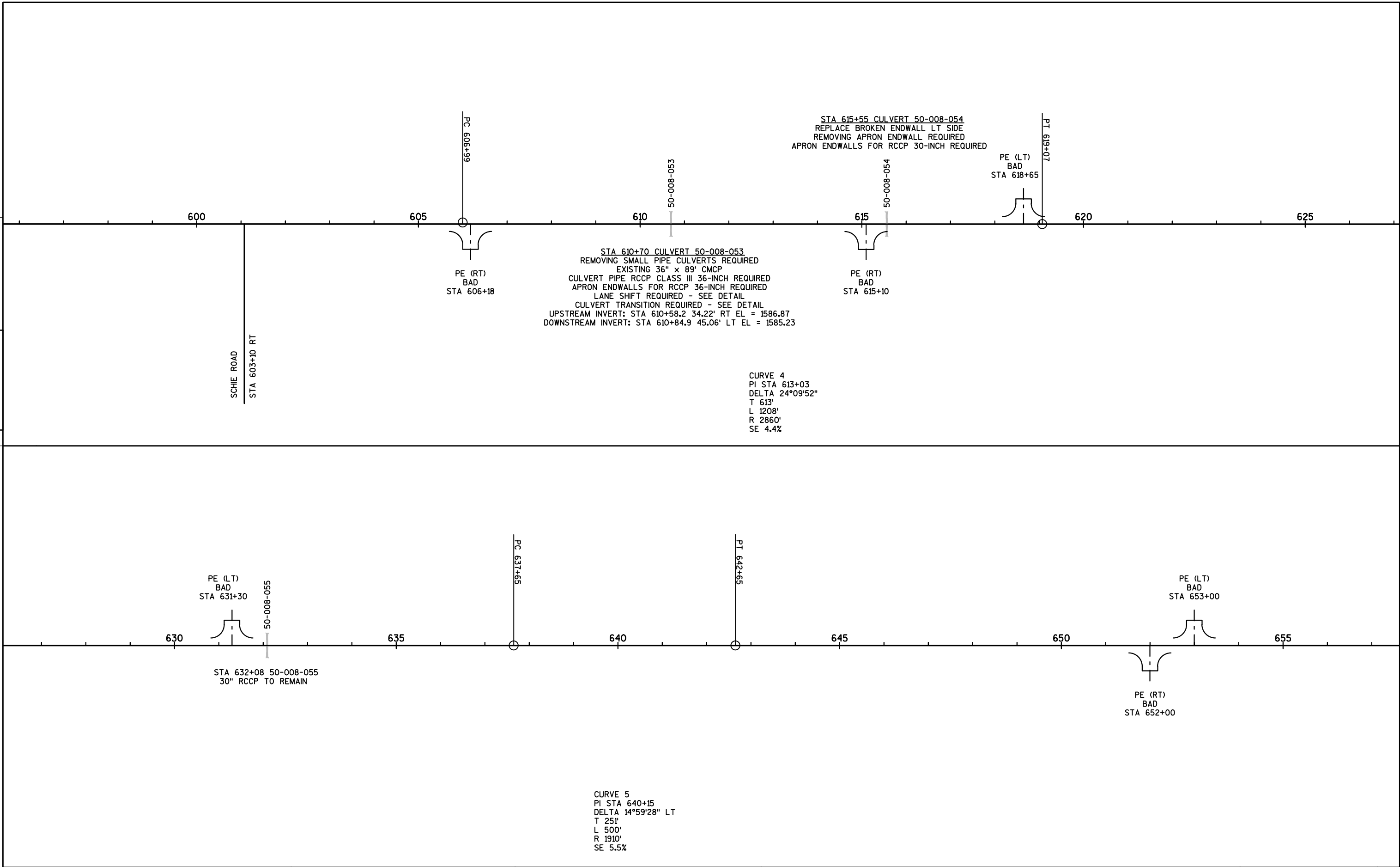
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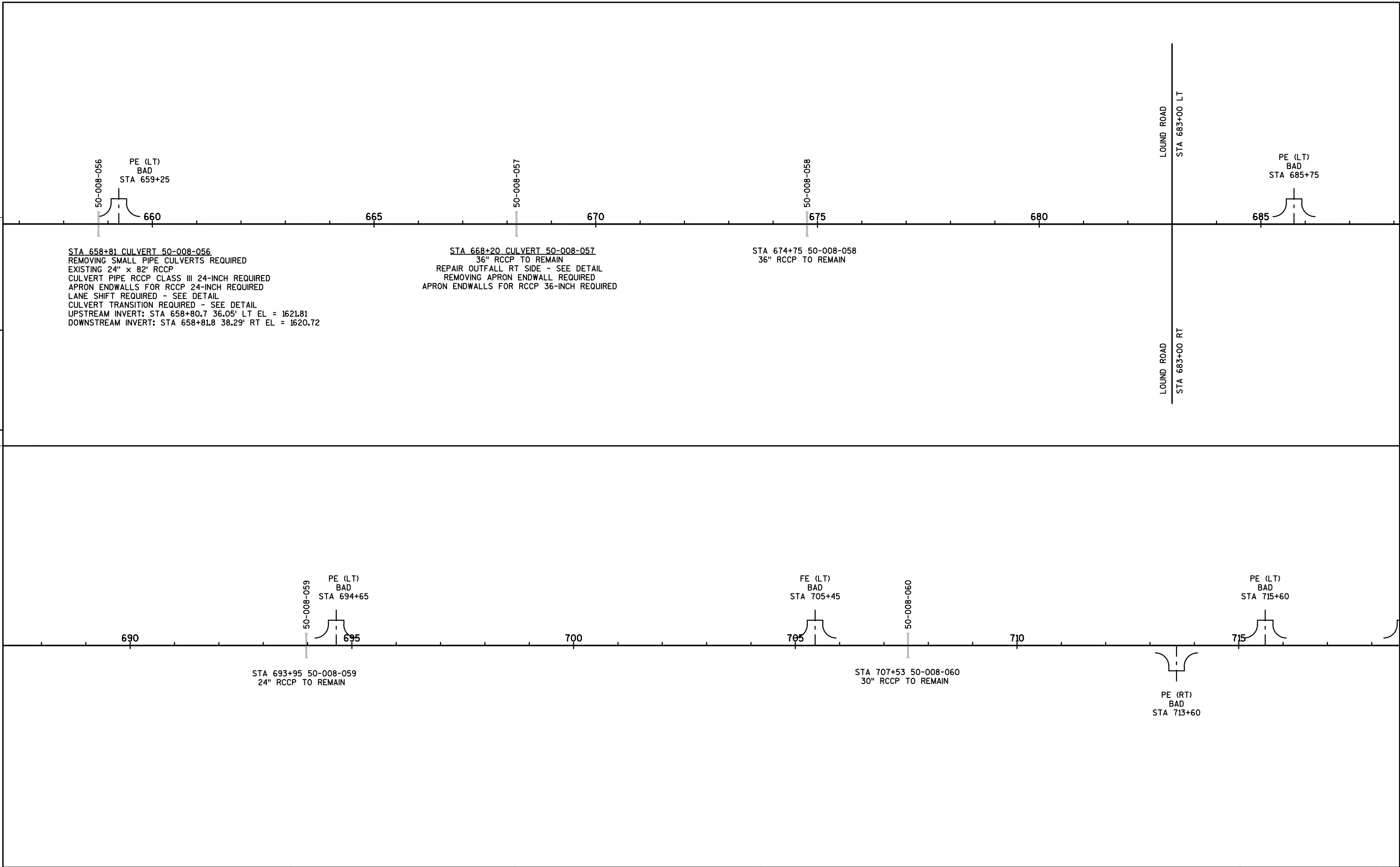
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| PROJECT NO:1580-29-70 | HWY:USH 8 | COUNTY:PRICE | PLAN: LINE DIAGRAM | SHEET | E |
|-----------------------|-----------|--------------|--------------------|-------|---|



| | | | | | |
|-----------------------|-----------|--------------|--------------------|-------|---|
| PROJECT NO:1580-29-70 | HWY:USH 8 | COUNTY:PRICE | PLAN: LINE DIAGRAM | SHEET | E |
|-----------------------|-----------|--------------|--------------------|-------|---|

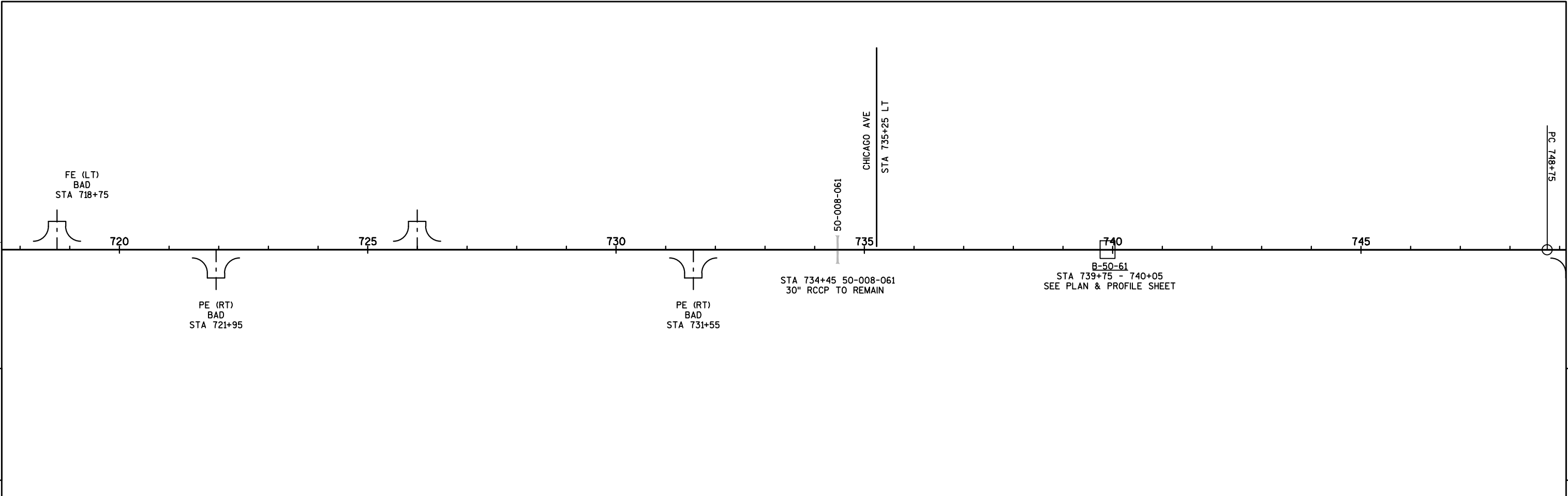


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|-----------------------|-----------|--------------|--------------------|-------|---|

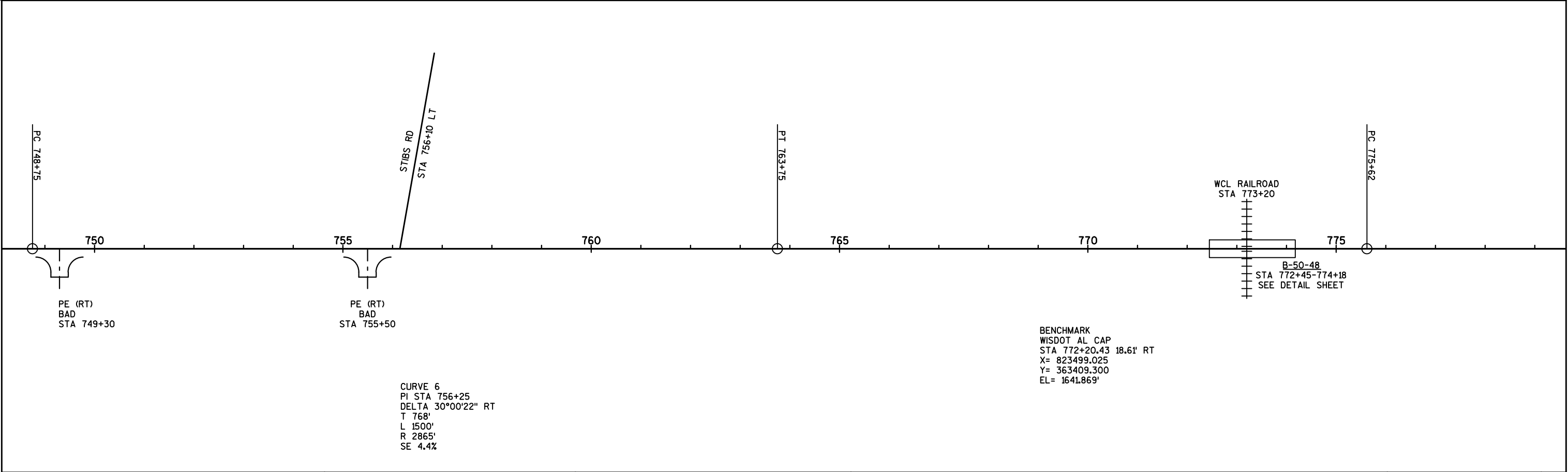


| | | | | | |
|-----------------------|-----------|--------------|--------------------|-------|---|
| PROJECT NO:1580-29-70 | HWY:USH 8 | COUNTY:PRICE | PLAN: LINE DIAGRAM | SHEET | E |
|-----------------------|-----------|--------------|--------------------|-------|---|

5



5



| | | | | | |
|-----------------------|-----------|--------------|--------------------|-------|---|
| PROJECT NO:1580-29-70 | HWY:USH 8 | COUNTY:PRICE | PLAN: LINE DIAGRAM | SHEET | E |
|-----------------------|-----------|--------------|--------------------|-------|---|

CURVE 7
PI STA 782+58
DELTA 55°32'24" LT
T 754'
L 1392'
R 1432'
SE 5.9%

WAYMAN ROAD
STA 811+10 LT

780 785 790 795 800 805 810

PE (RT)
BAD
STA 783+95

PE (LT)
BAD
STA 802+55

PE (RT)
BAD
STA 802+65

CE (RT)
BAD
STA 806+10

CURVE 8
PI STA 809+02
DELTA 25°33'46" RT
T 653'
L 1285'
R 2865'
SE 4.4%

WAYMAN ROAD
STA 811+10 LT

END PROJECT
STA 816+50
1580-29-70

PE (LT)
BAD
STA 802+55

805

810

PE (LT)
BAD
STA 815+30

815

FE (LT)
BAD
STA 817+90

820

822

PE (RT)
BAD
STA 802+65

CE (RT)
BAD
STA 806+10

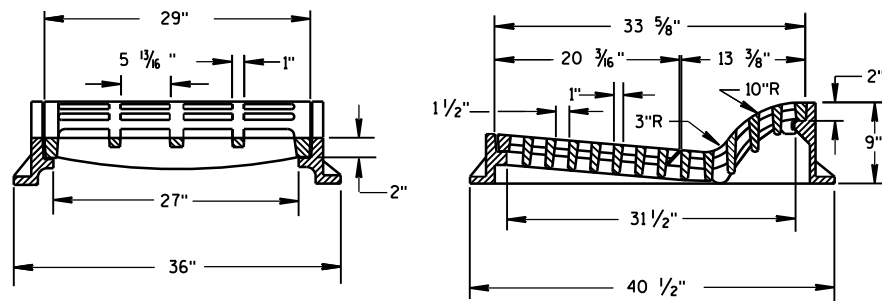
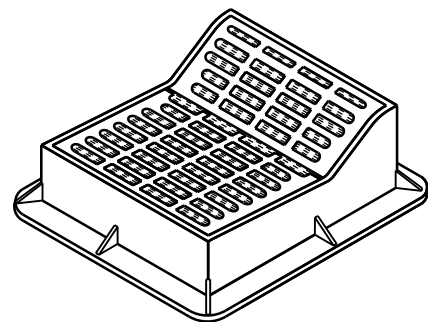
END CENTERLINE RUMBLE STRIPS
STA 816+50

LUSTILA ROAD
STA 817+90 RT

CURVE 8
PI STA 809+02
DELTA 25°33'46" RT
T 653'
L 1285'
R 2865'
SE 4.4%

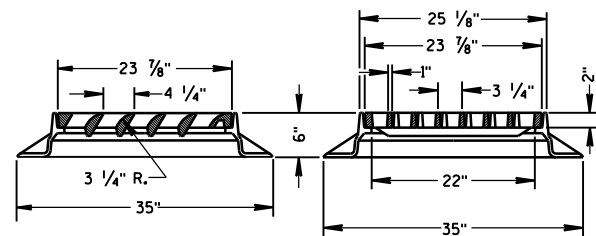
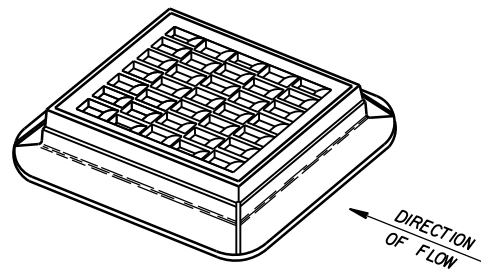
Standard Detail Drawing List

| | |
|-----------|--|
| 08A05-19C | INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S |
| 08D01-18 | CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES |
| 08E08-03 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E09-06 | SILT FENCE |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F04-07 | JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL |
| 09A01-13A | AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE |
| 09B02-09 | CONDUIT |
| 09B04-11 | PULL BOX |
| 09C02-07 | CONCRETE BASES, TYPES 1, 2, 5, & 6 |
| 09C03-04 | TRANSFORMER/PEDESTAL BASES |
| 09D01-05 | CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL) |
| 09E07-05 | TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS |
| 09G02-03A | BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION |
| 09G02-03B | BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION |
| 09G02-03C | BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION |
| 13A11-02A | 2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING |
| 13A11-02B | 2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING |
| 13B02-08A | CONCRETE PAVEMENT APPROACH SLAB |
| 14B07-14A | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6" |
| 14B07-14B | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6" |
| 14B07-14C | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6" |
| 14B07-14D | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6" |
| 14B07-14E | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6" |
| 14B07-14F | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6" |
| 14B07-14G | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6" |
| 14B07-14H | CONCRETE BARRIER TEMPORARY PRECAST, 12' -6" |
| 14B26-03A | STEEL THREE BEAM BULLNOSE TERMINAL |
| 14B26-03B | STEEL THREE BEAM BULLNOSE TERMINAL |
| 14B26-03C | STEEL THREE BEAM BULLNOSE TERMINAL |
| 14B26-03D | STEEL THREE BEAM BULLNOSE TERMINAL |
| 14B26-03E | STEEL THREE BEAM BULLNOSE TERMINAL |
| 14B29-01 | SAFETY EDGE |
| 14B42-03A | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-03B | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-03C | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B44-02A | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B44-02B | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B44-02C | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B45-04A | MIDWEST GUARDRAIL SYSTEM THREE BEAM TRANSITION (MGS) |
| 14B45-04B | MIDWEST GUARDRAIL SYSTEM THREE BEAM TRANSITION (MGS) |
| 14B45-04C | MIDWEST GUARDRAIL SYSTEM THREE BEAM TRANSITION (MGS) |
| 14B45-04F | MIDWEST GUARDRAIL SYSTEM THREE BEAM TRANSITION (MGS) |
| 14B45-04G | MIDWEST GUARDRAIL SYSTEM THREE BEAM TRANSITION (MGS) |
| 15A02-08 | DELINEATOR POST, DELINEATOR, AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING |
| 15A03-02A | FLEXIBLE MARKER POST FOR CULVERT END |
| 15A03-02B | FLEXIBLE MARKER POST FOR CULVERT END |
| 15C04-02 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC |
| 15C08-16A | PAVEMENT MARKING (MAINLINE) |
| 15C08-16B | PAVEMENT MARKING (INTERSECTIONS) |
| 15C08-16F | PAVEMENT MARKING (ISLANDS) |
| 15C12-04 | TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS) |
| 15C14-01 | AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS |
| 15C27-01 | DOUBLE ARROW WARNING SIGN PLACEMENT |
| 15C33-01 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15D20-03 | TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY |
| 15D28-03 | TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY |
| 15D33-03 | TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS |

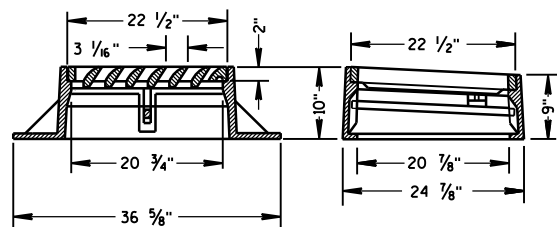
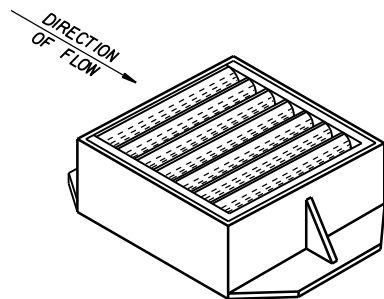


TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



TYPE "S"

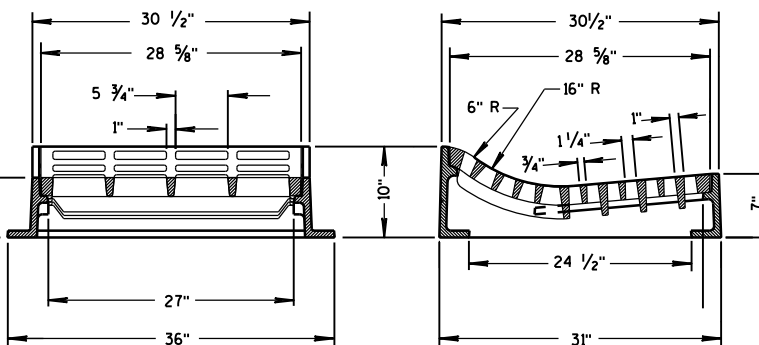


TYPE "V"

ALTERNATIVE CURB BOX
FOR TYPE "HM" COVER

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE



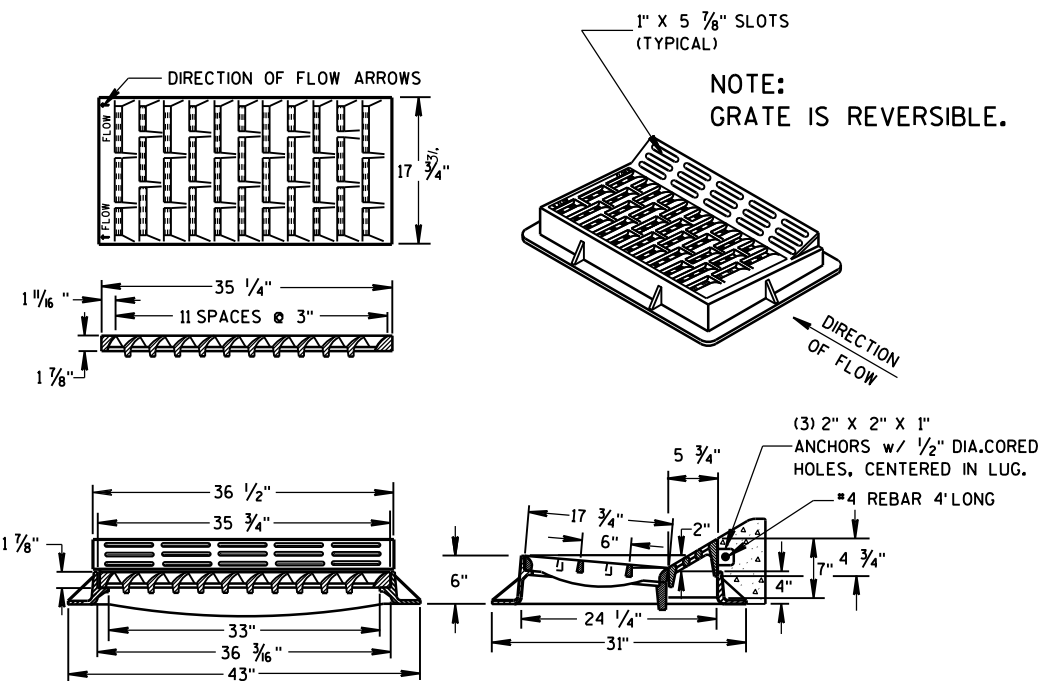
TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "HM"

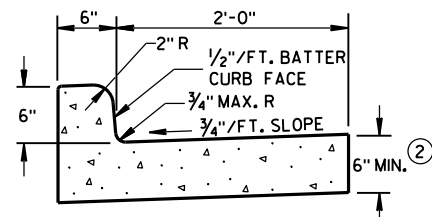
USE WITH TYPES A & D CONCRETE
CURB & GUTTER, 36 INCH.

NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE

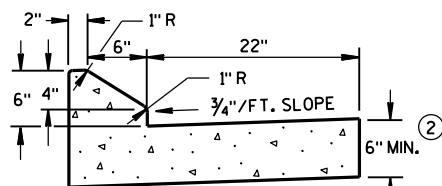
INLET COVERS
TYPE F, HM, HM-S, S, T, V,
HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

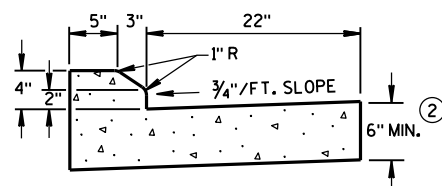
APPROVED
11/27/2013
DATE /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



TYPES A & D ①

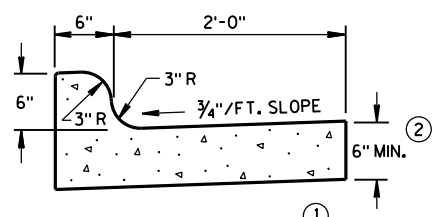


6" SLOPED CURB TYPES G & J ①



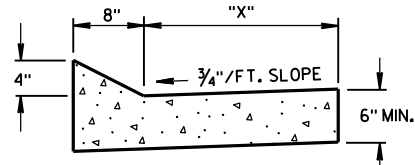
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



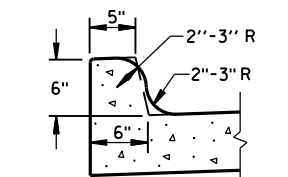
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

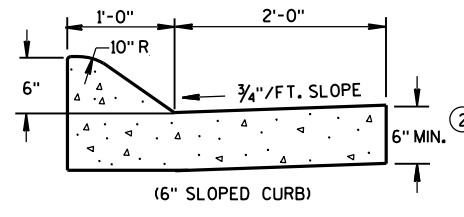


TYPES TBT & TBT ①
CONCRETE CURB & GUTTER

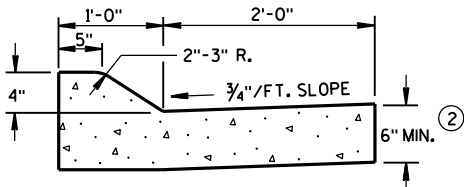
| TBT & TBT | "X" |
|-----------|-----|
| 30" | 22" |
| 36" | 28" |



OPTIONAL CURB SHAPE
FOR TYPES K & L ①

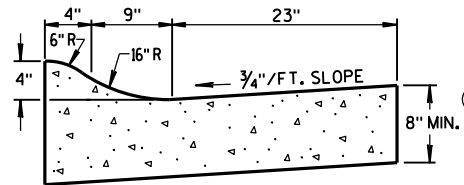


(6" SLOPED CURB)



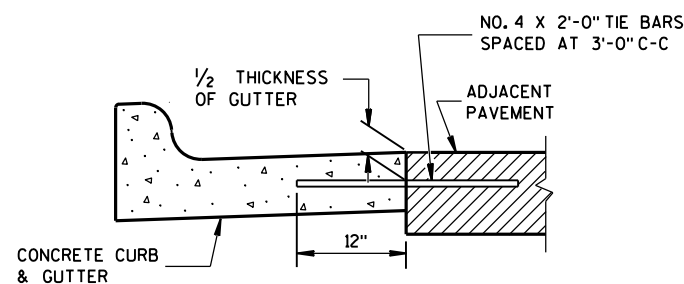
(4" SLOPED CURB)

TYPES A & D ①

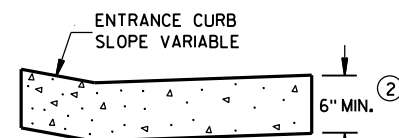


4" SLOPED CURB TYPES R & T ① ④

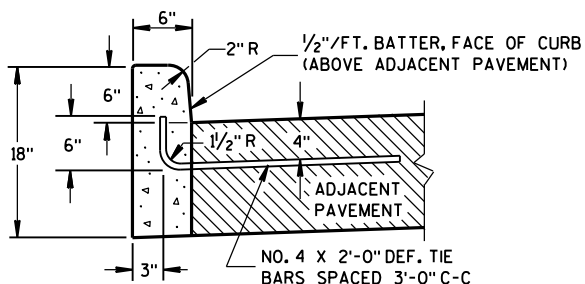
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

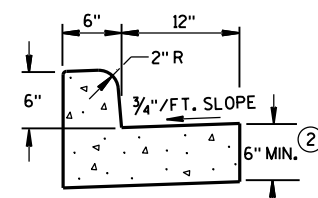


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

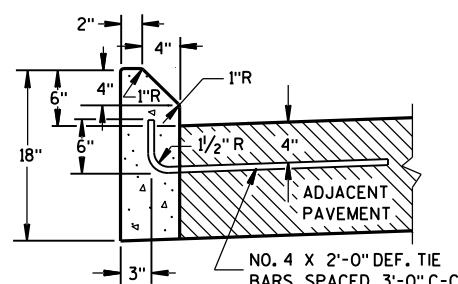


TYPES A & D ①

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.

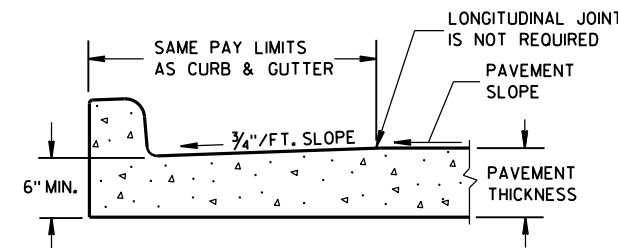
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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.

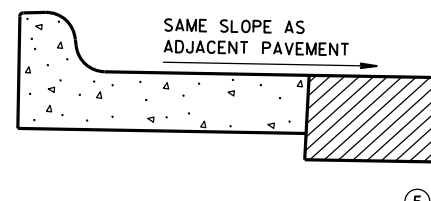
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

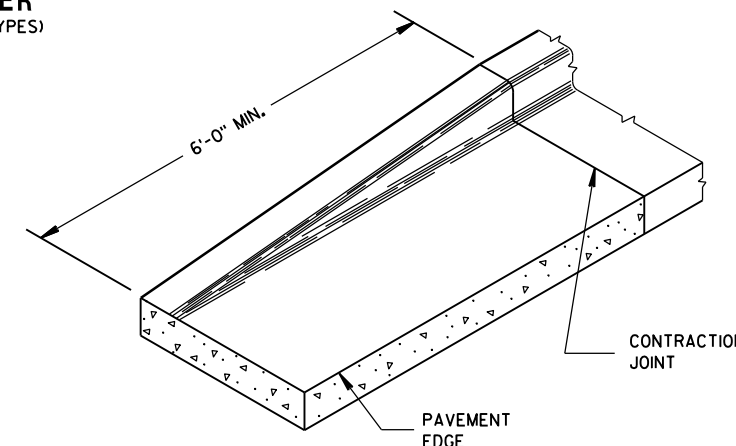
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED 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.



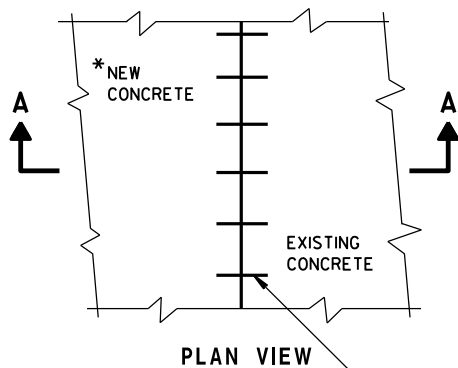
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)



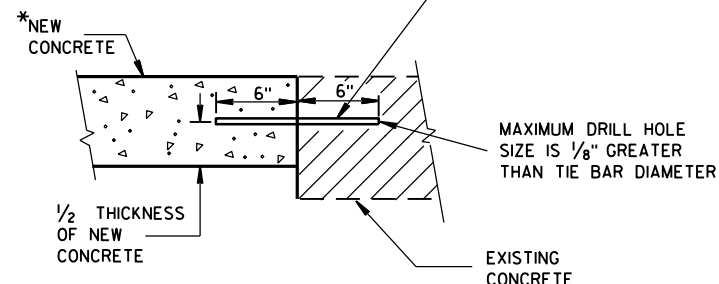
END SECTION CURB & GUTTER



PLAN VIEW

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

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



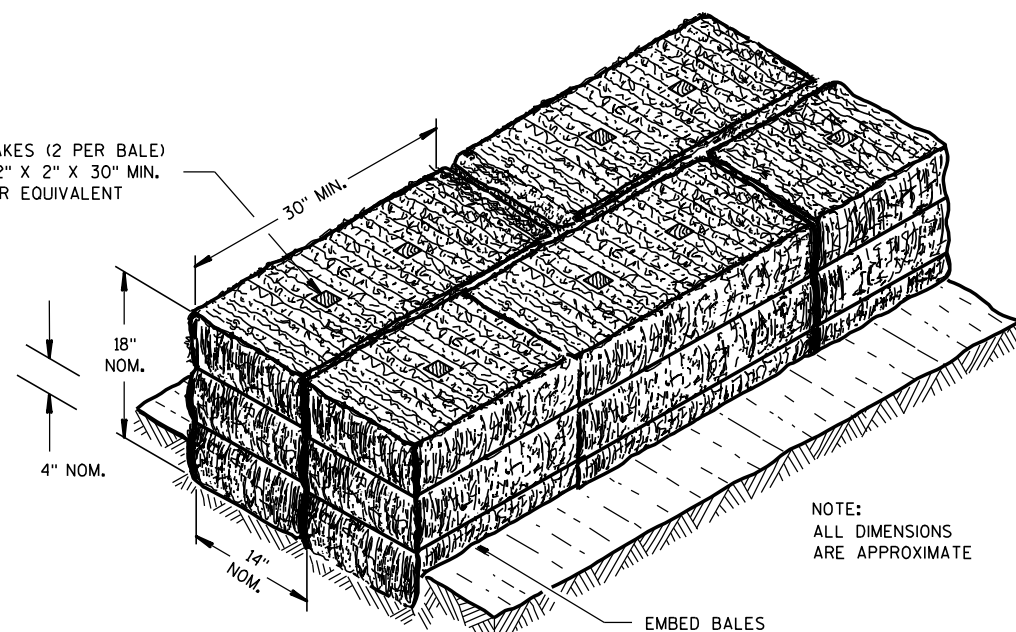
SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

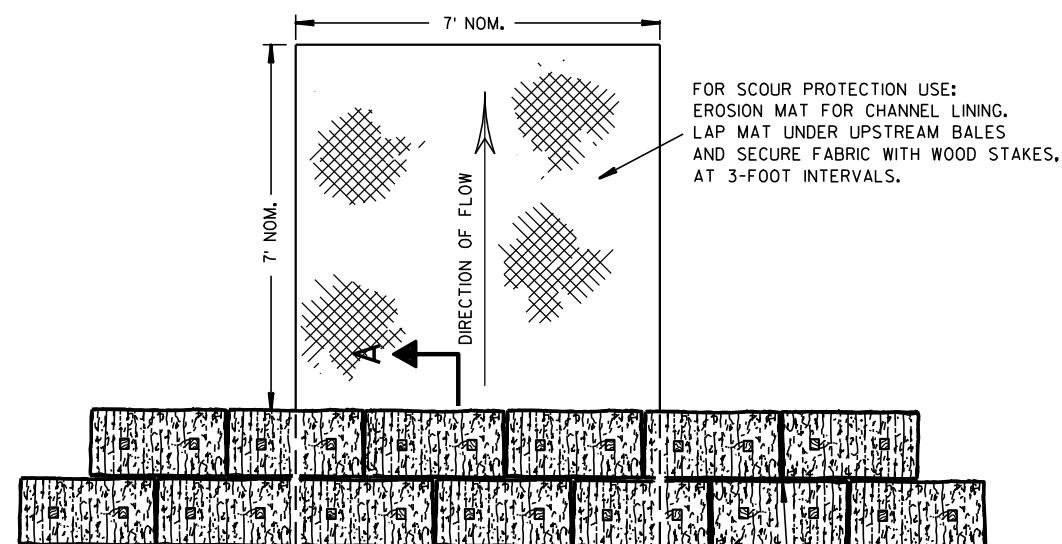
APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



NOTE:
ALL DIMENSIONS
ARE APPROXIMATE

SECTION A-A

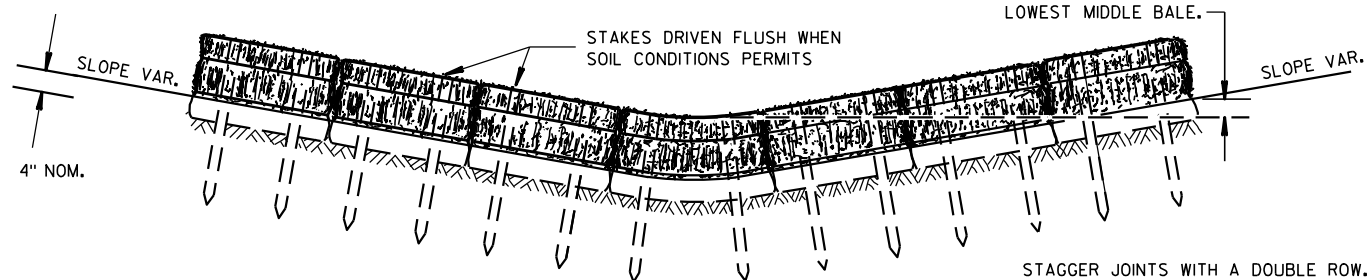


FOR SCOUR PROTECTION USE:
EROSION MAT FOR CHANNEL LINING.
LAP MAT UNDER UPSTREAM BALES
AND SECURE FABRIC WITH WOOD STAKES,
AT 3-FOOT INTERVALS.

PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT
ROWS OF BALES.

BOTTOM ELEVATION OF END BALE SHALL
BE EQUAL TO OR GREATER THAN TOP OF
LOWEST MIDDLE BALE.



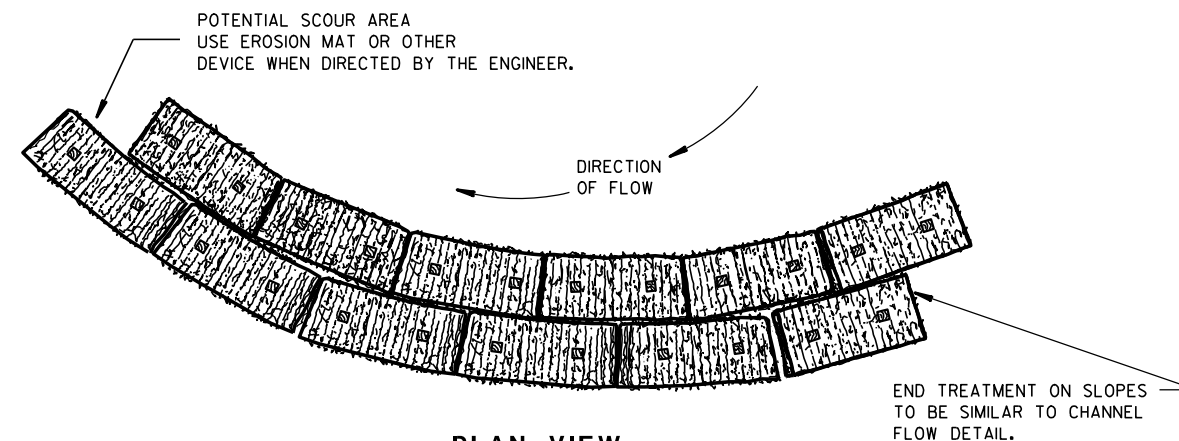
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

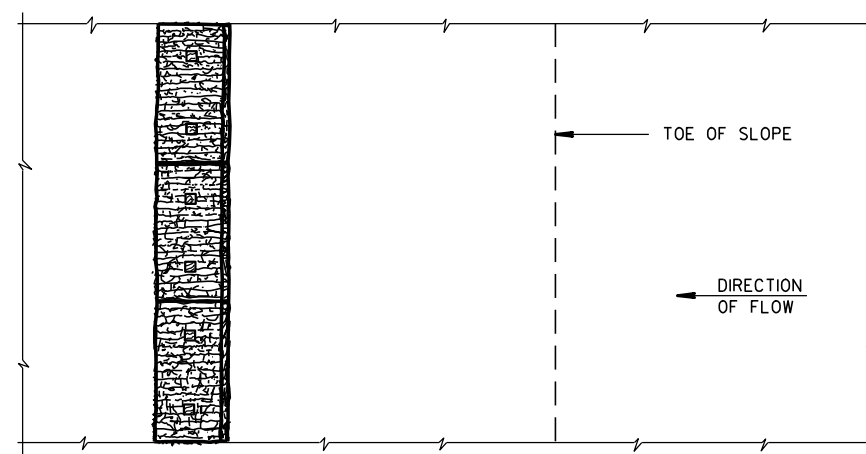
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

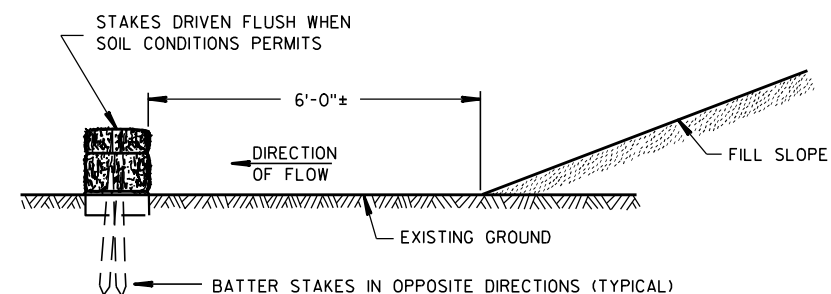


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

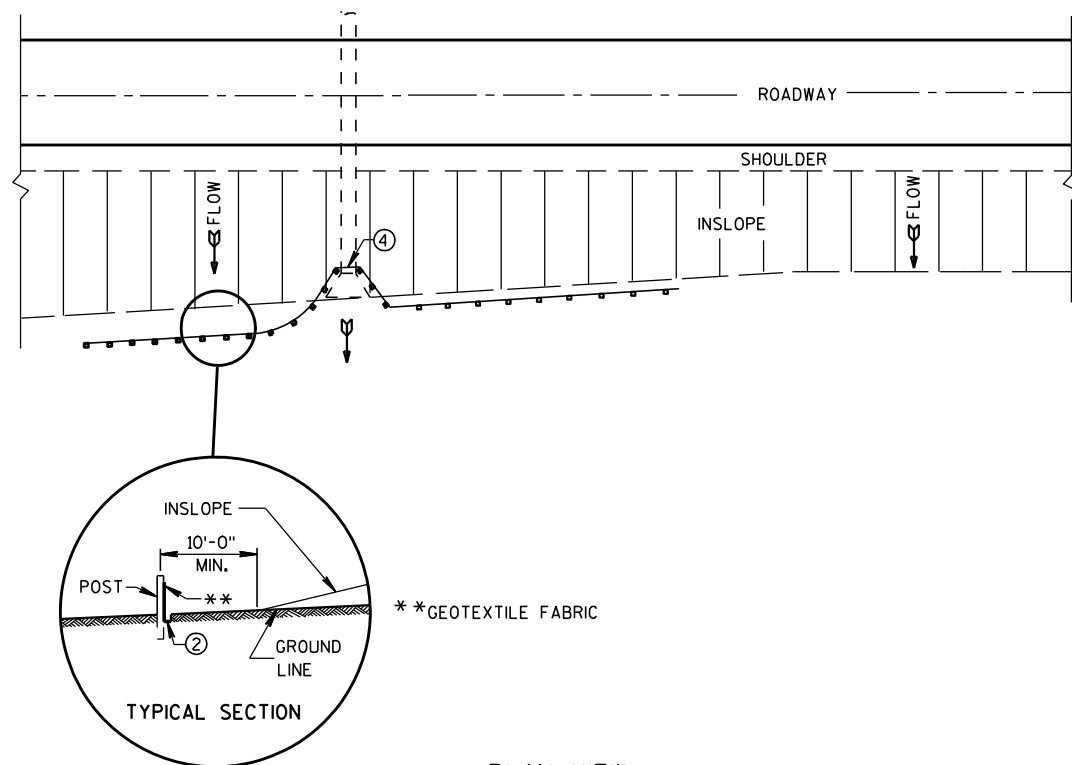
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

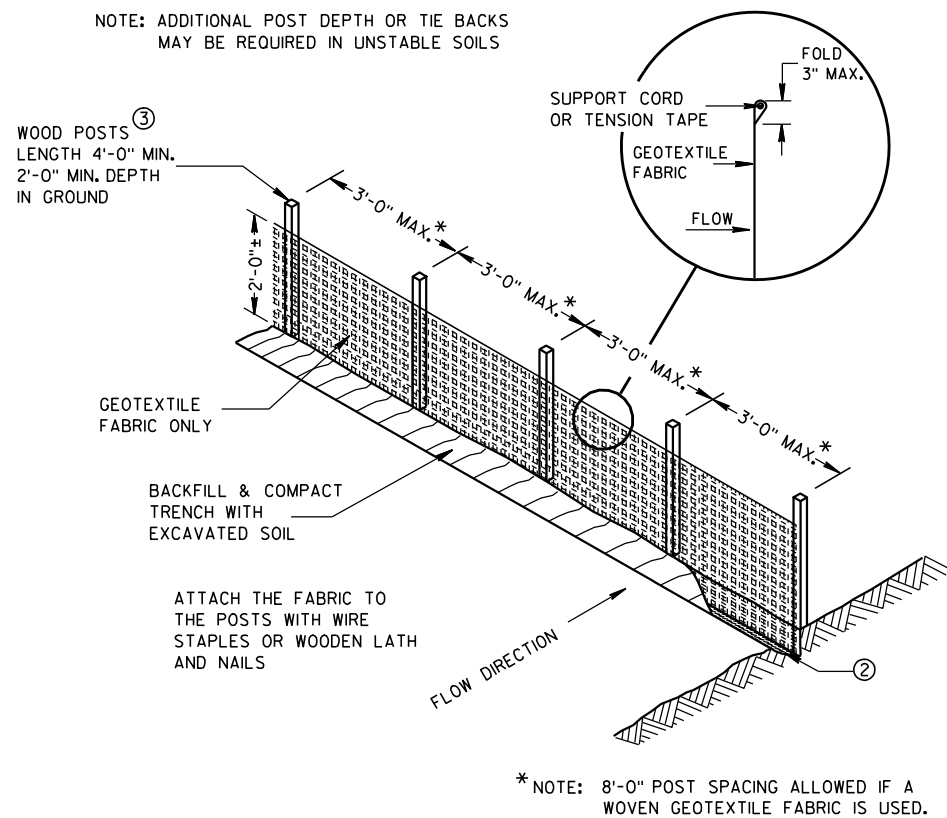
/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

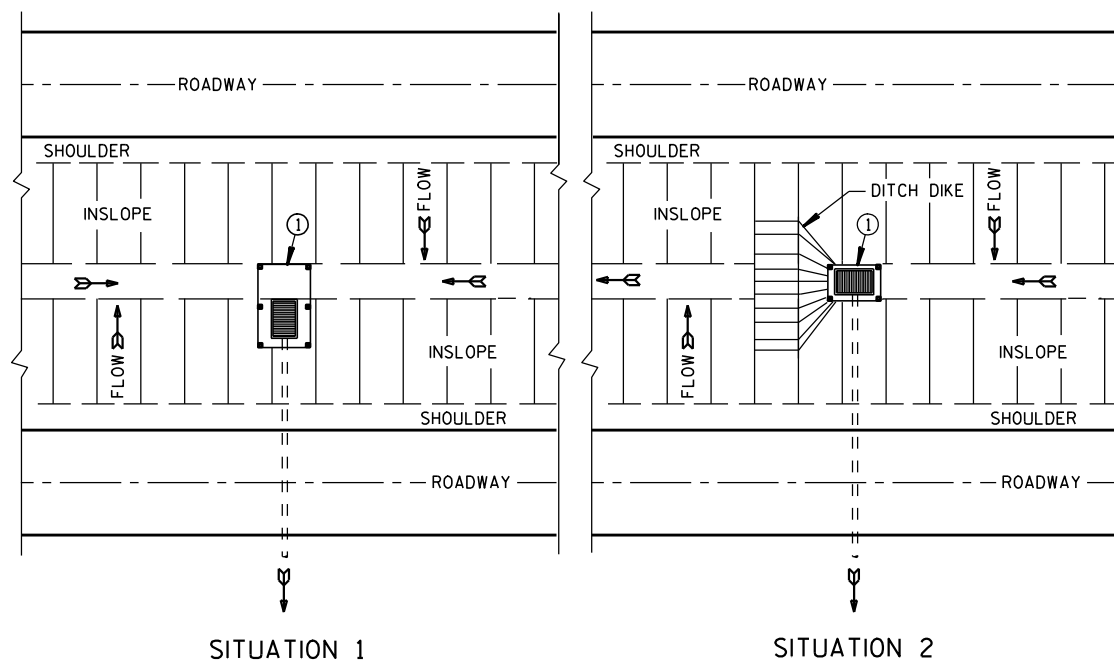


PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

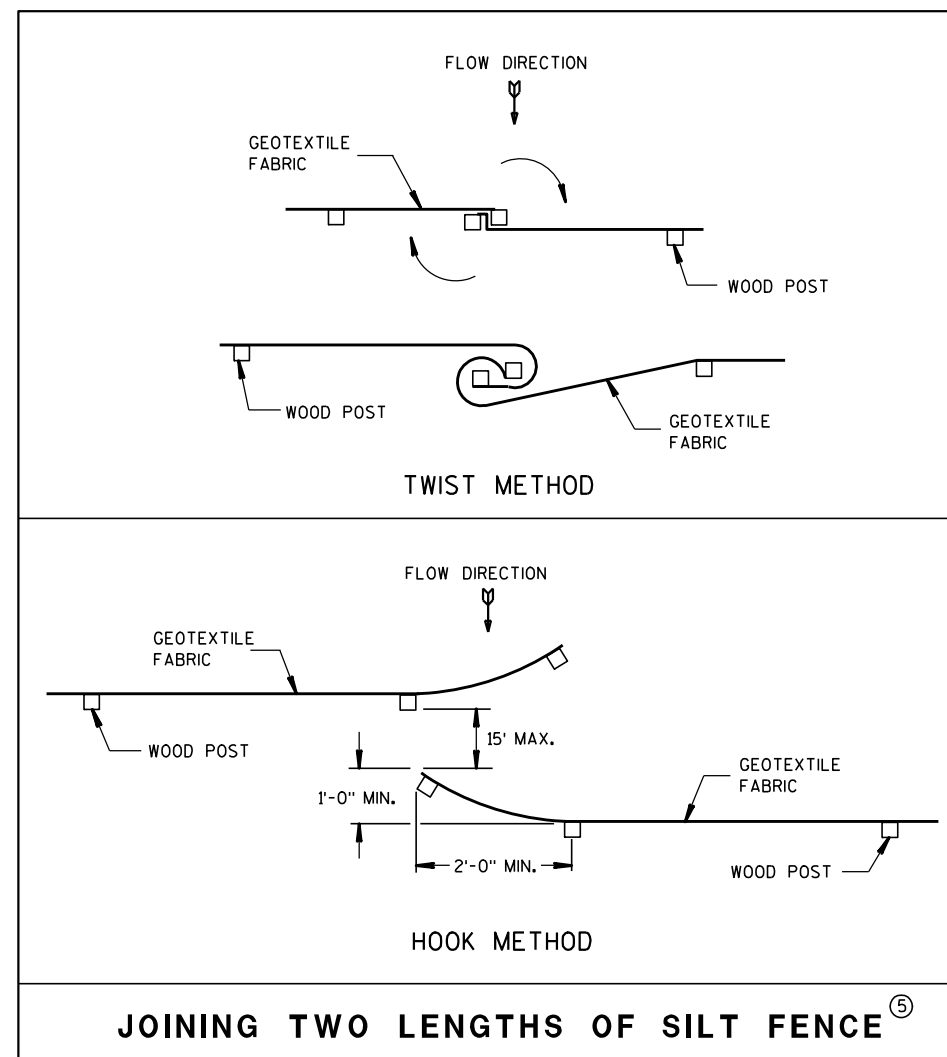
NOTE: ADDITIONAL POST DEPTH OR TIE BACKS
MAY BE REQUIRED IN UNSTABLE SOILS



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

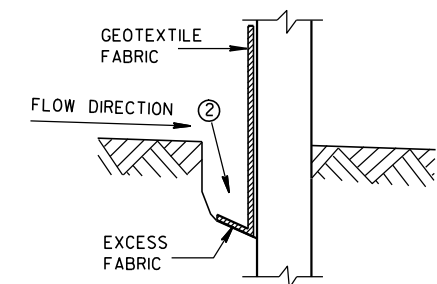


JOINING TWO LENGTHS OF SILT FENCE^⑤

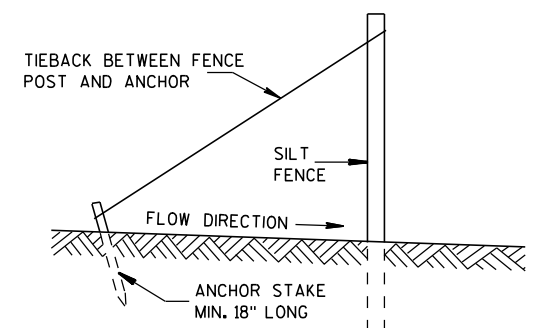
GENERAL NOTES

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

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05
DATE

FHWA

/S/ Beth Cannestra
CHIEF ROADWAY 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.



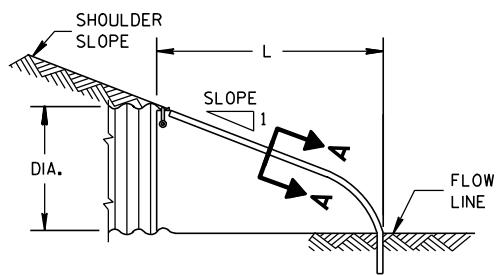
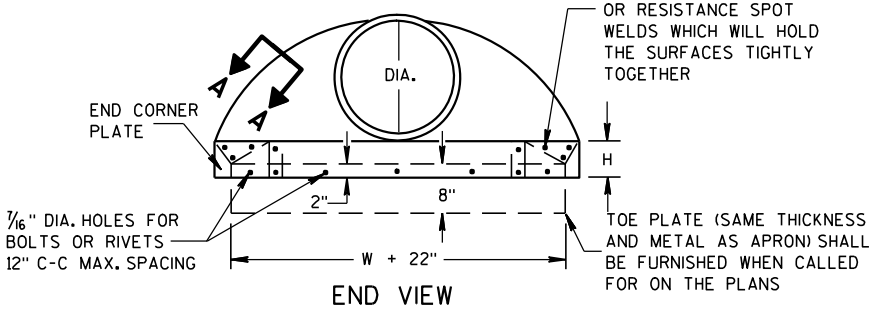
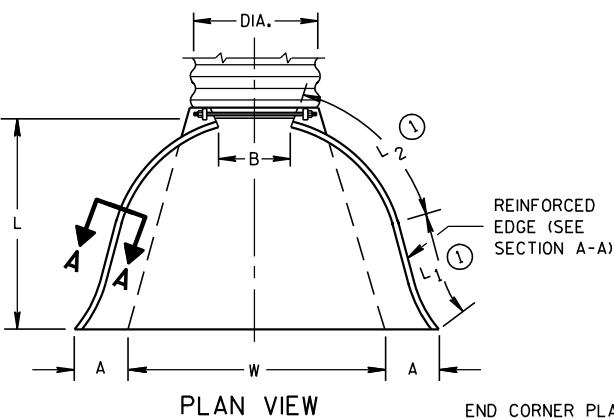
INLET PROTECTION, TYPE D

(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 DATE | /S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER |
| FHWA | |

| METAL APRON ENDWALLS | | | | | | | | | | | | |
|----------------------|-------------------------|-------|---------------------|-------------|------------|-------------|---------------------|---------------------|------------|------------------|-------|--|
| PIPE DIA. (IN.) | MIN. THICK. (Inches) | | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE | BODY | |
| | STEEL | ALUM. | A (±1") | B (MAX.) | H (±1") | L (±1½") | L ₁ ① | L ₂ ① | W (±2") | | | |
| 12 | .064 | .060 | 6 | 6 | 6 | 21 | 12 | 17½ | 24 | 2½ to 1 | 1 Pc. | |
| 15 | .064 | .060 | 7 | 8 | 6 | 26 | 14 | 21¾ | 30 | 2½ to 1 | 1 Pc. | |
| 18 | .064 | .060 | 8 | 10 | 6 | 31 | 15 | 28¼ | 36 | 2½ to 1 | 1 Pc. | |
| 21 | .064 | .060 | 9 | 12 | 6 | 36 | 18 | 29⅝ | 42 | 2½ to 1 | 1 Pc. | |
| 24 | .064 | .075 | 10 | 13 | 6 | 41 | 18 | 37¼ | 48 | 2½ to 1 | 1 Pc. | |
| 30 | .079 | .075 | 12 | 16 | 8 | 51 | 18 | 52¼ | 60 | 2½ to 1 | 1 Pc. | |
| 36 | .079 | .105 | 14 | 19 | 9 | 60 | 24 | 59¾ | 72 | 2½ to 1 | 2 Pc. | |
| 42 | .109 | .105 | 16 | 22 | 11 | 69 | 24 | 75⅝ | 84 | 2½ to 1 | 2 Pc. | |
| 48 | .109 | .105 | 18 | 27 | 12 | 78 | 24 | 81 | 90 | 2¼ to 1 | 3 Pc. | |
| 54 | .109 | .105 | 18 | 30 | 12 | 84 | 30 | 85½ | 102 | 2¼ to 1 | 3 Pc. | |
| 60 | .109x | .105x | 18 | 33 | 12 | 87 | — | — | 114 | 2 to 1 | 3 Pc. | |
| 66 | .109x | .105x | 18 | 36 | 12 | 87 | — | — | 120 | 2 to 1 | 3 Pc. | |
| 72 | .109x | .105x | 18 | 39 | 12 | 87 | — | — | 126 | 2 to 1 | 3 Pc. | |
| 78 | .109x | .105x | 18 | 42 | 12 | 87 | — | — | 132 | 1½ to 1 | 3 Pc. | |
| 84 | .109x | .105x | 18 | 45 | 12 | 87 | — | — | 138 | 1½ to 1 | 3 Pc. | |
| 90 | .109x | .105x | 18 | 37 | 12 | 87 | — | — | 144 | 1½ to 1 | 3 Pc. | |
| 96 | .109x | .105x | 18 | 35 | 12 | 87 | — | — | 150 | 1½ to 1 | 3 Pc. | |

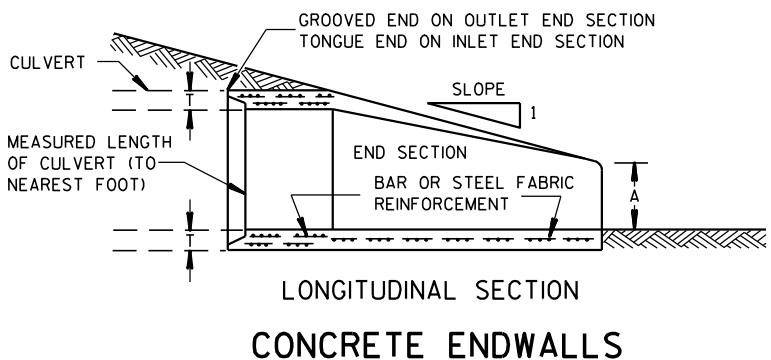
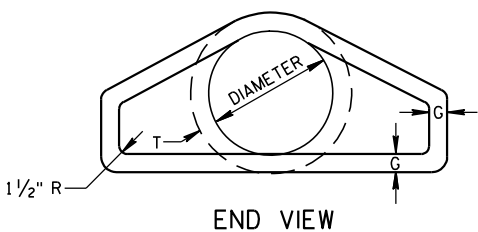
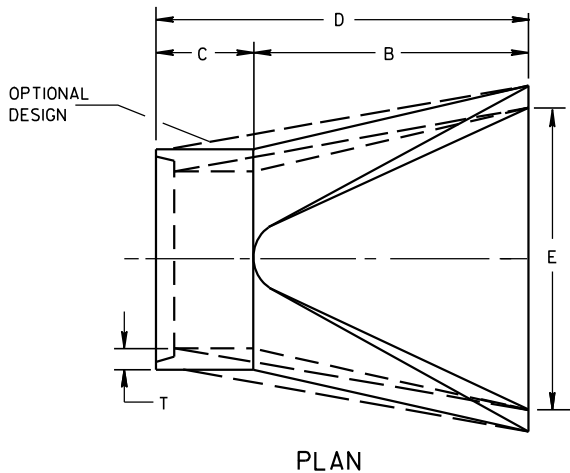
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



SIDE ELEVATION
METAL ENDWALLS

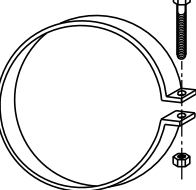
| REINFORCED CONCRETE APRON ENDWALLS | | | | | | | | |
|------------------------------------|-------------------------------|---|---|---|--|-----|-------------------------------|------------------------------------|
| PIPE DIA. (IN.) | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE |
| | T | A | B | C | D | E | G | |
| 12 | 2 | 4 | 24 | 48 ¹ / ₈ | 72 ¹ / ₈ | 24 | 2 | 3 to 1 |
| 15 | 2 ¹ / ₄ | 6 | 27 | 46 | 73 | 30 | 2 ¹ / ₄ | 3 to 1 |
| 18 | 2 ¹ / ₂ | 9 | 27 | 46 | 73 | 36 | 2 ¹ / ₂ | 3 to 1 |
| 21 | 2 ³ / ₄ | 9 | 36 | 37 ¹ / ₂ | 73 ¹ / ₂ | 42 | 2 ³ / ₄ | 3 to 1 |
| 24 | 3 | 9 ¹ / ₂ | 43 ¹ / ₂ | 30 | 73 ¹ / ₂ | 48 | 3 | 3 to 1 |
| 27 | 3 ¹ / ₄ | 10 ¹ / ₂ | 49 ¹ / ₂ | 24 | 73 ¹ / ₂ | 54 | 3 ¹ / ₄ | 3 to 1 |
| 30 | 3 ¹ / ₂ | 12 | 54 | 19 ³ / ₄ | 73 ¹ / ₂ | 60 | 3 ¹ / ₂ | 3 to 1 |
| 36 | 4 | 15 | 63 | 34 ³ / ₄ | 97 ³ / ₄ | 72 | 4 | 3 to 1 |
| 42 | 4 ¹ / ₂ | 21 | 63 | 35 | 98 | 78 | 4 ¹ / ₂ | 3 to 1 |
| 48 | 5 | 24 | 72 | 26 | 98 | 84 | 5 | 3 to 1 |
| 54 | 5 ¹ / ₂ | 27 | 65 | ^{**} / ₃₃ - ^{**} / ₃₅ | ^{**} / ₉₈ - ^{**} / ₁₀₀ | 90 | 5 ¹ / ₂ | 2 ¹ / ₅ to 1 |
| 60 | 6 | ^{**} / ₃₀ - ^{**} / ₃₅ | 60 | 39 | 99 | 96 | 5 | 2 to 1 |
| 66 | 6 ¹ / ₂ | ^{**} / ₂₄ - ^{**} / ₃₀ | ^{**} / ₇₂ - ^{**} / ₇₈ | ^{**} / ₂₁ - ^{**} / ₂₇ | 99 | 102 | 5 ¹ / ₂ | 2 to 1 |
| 72 | 7 | ^{**} / ₂₄ - ^{**} / ₃₆ | 78 | 21 | 99 | 108 | 6 | 2 to 1 |
| 78 | 7 ¹ / ₂ | ^{**} / ₂₄ - ^{**} / ₃₆ | 78 | 21 | 99 | 114 | 6 ¹ / ₂ | 2 to 1 |
| 84 | 8 | 36 | 90 ¹ / ₂ | 21 | 111 ¹ / ₂ | 120 | 6 ¹ / ₂ | 1 ¹ / ₂ to 1 |
| 90 | 8 ¹ / ₂ | 41 | 87 ¹ / ₂ | 24 | 111 ¹ / ₂ | 132 | 6 ¹ / ₂ | 1 ¹ / ₂ to 1 |

*MINIMUM
**MAXIMUM

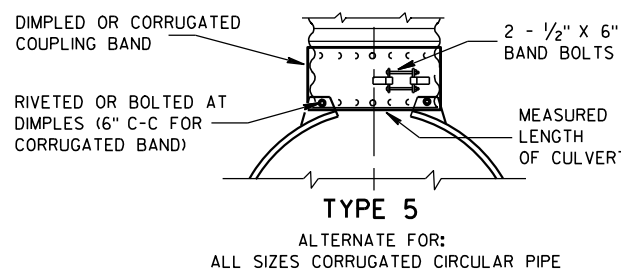
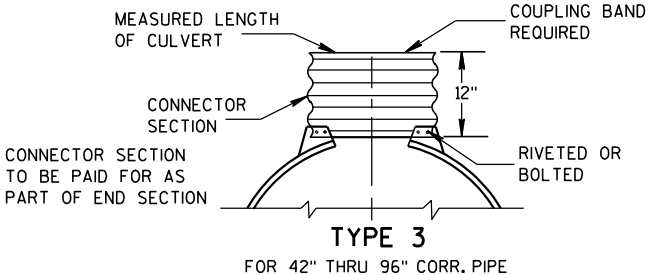
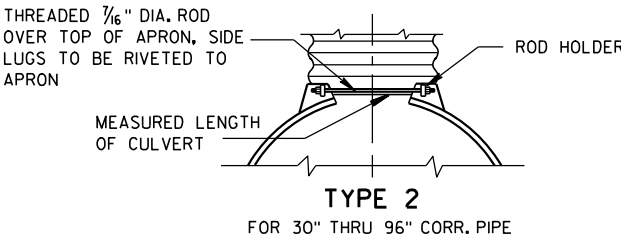
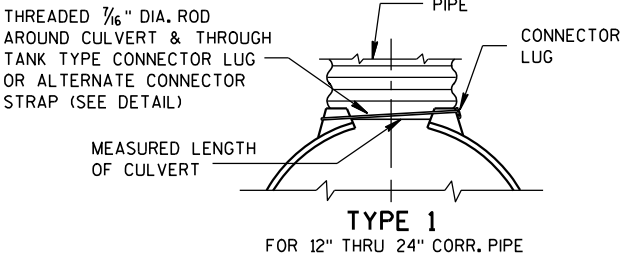


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



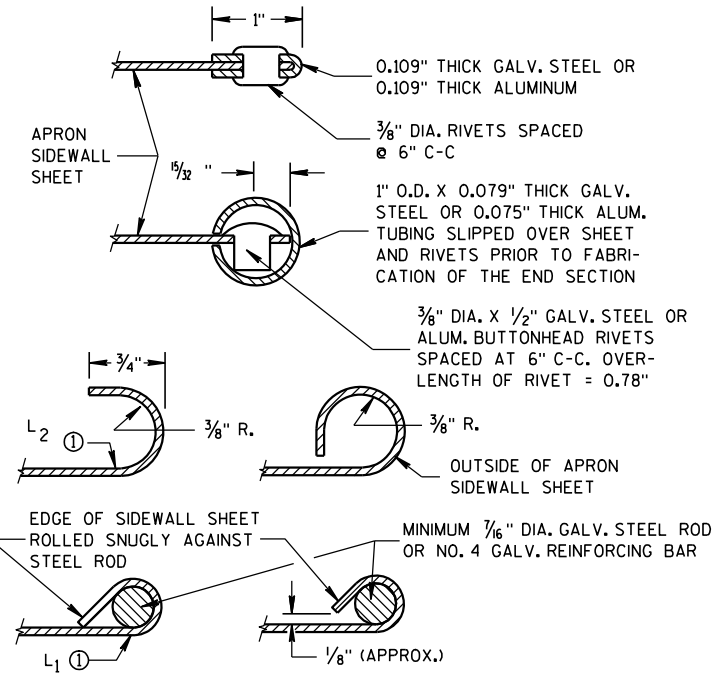
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

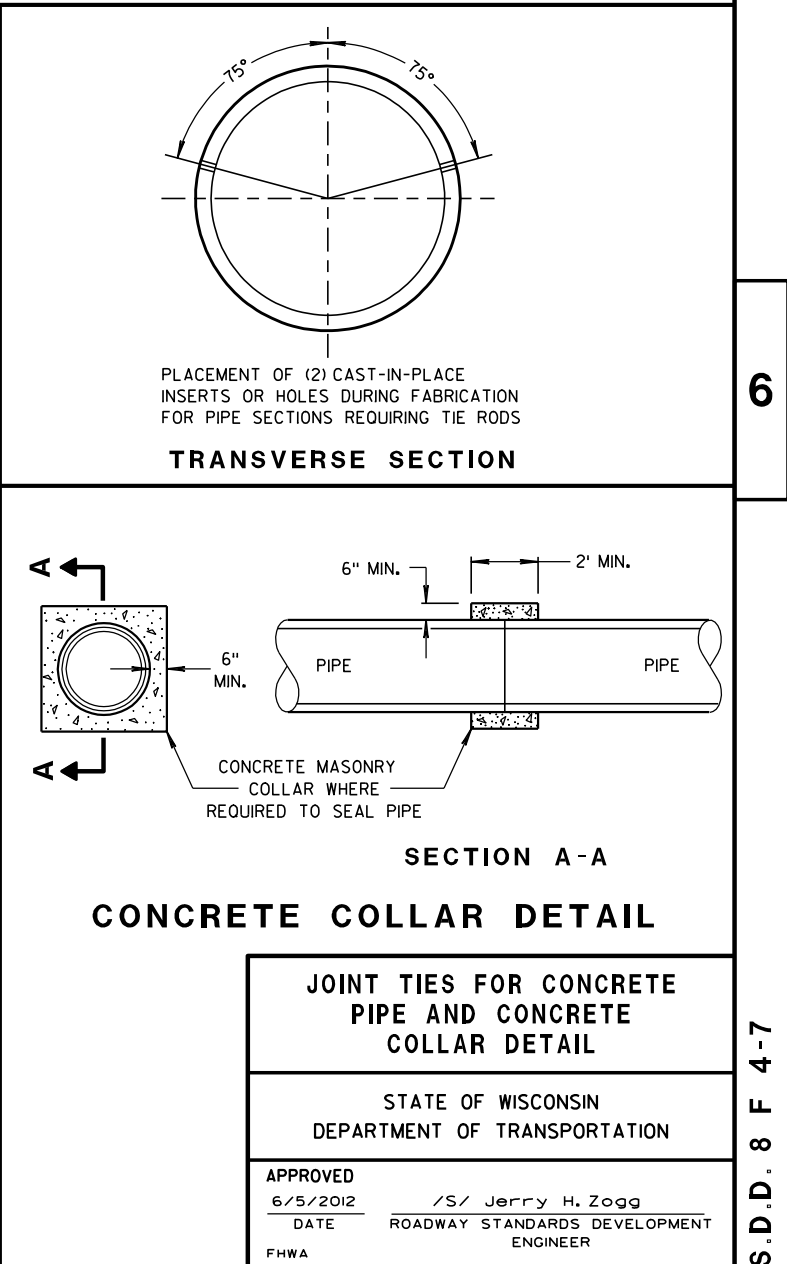
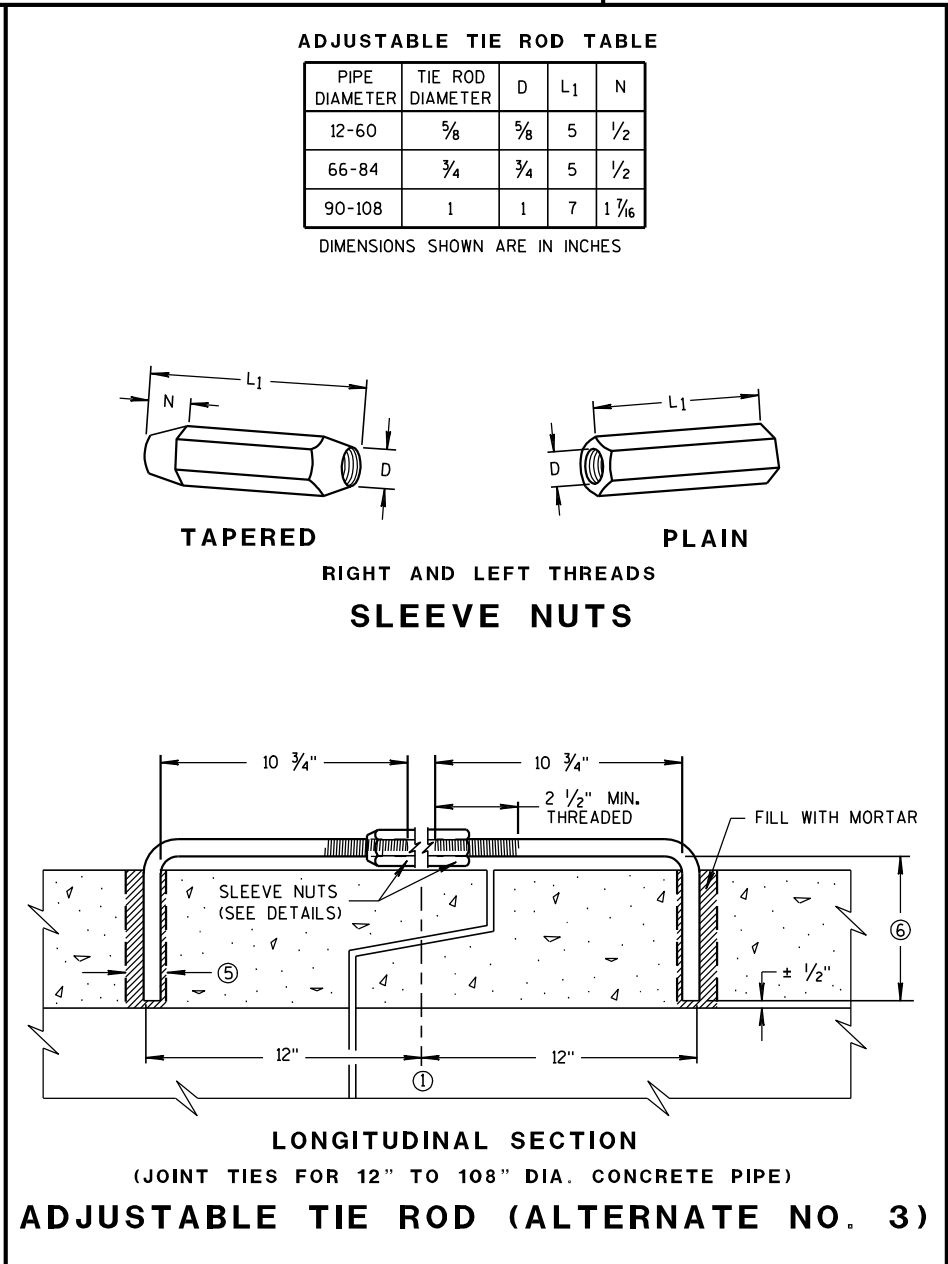
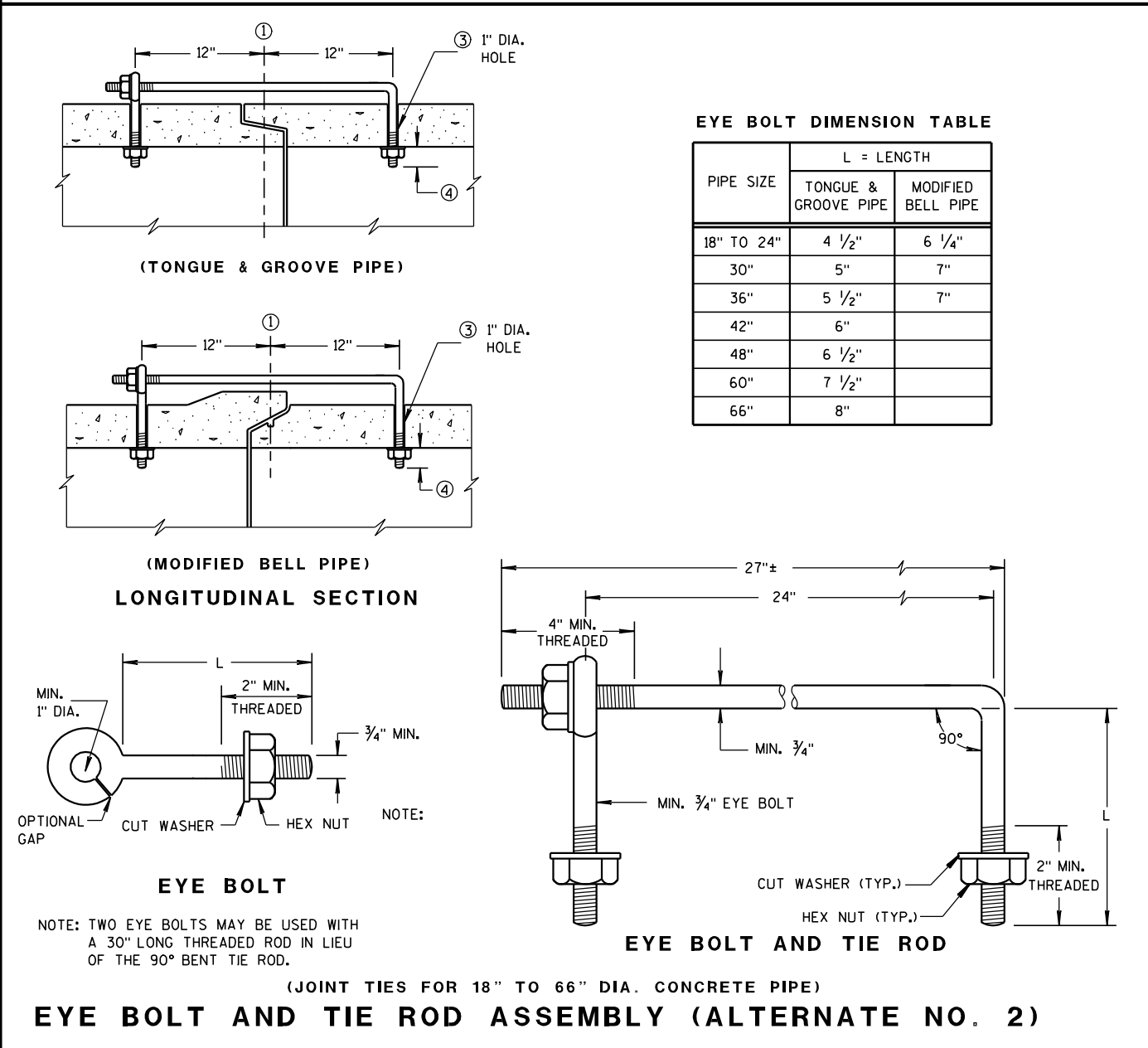
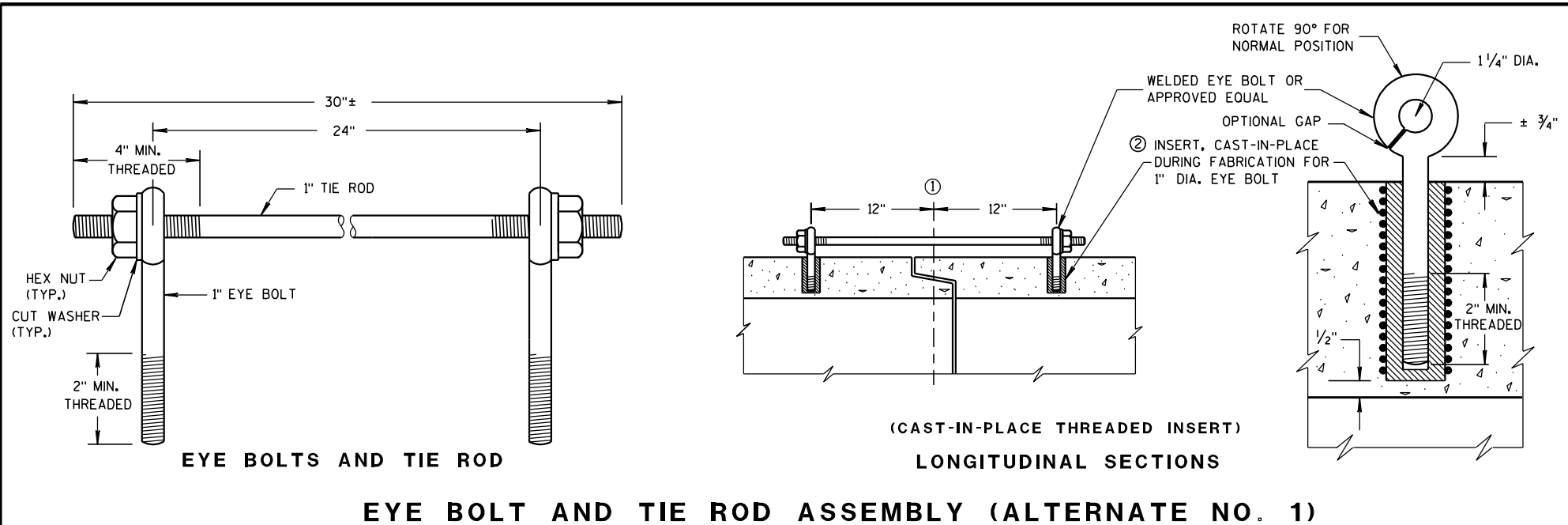
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

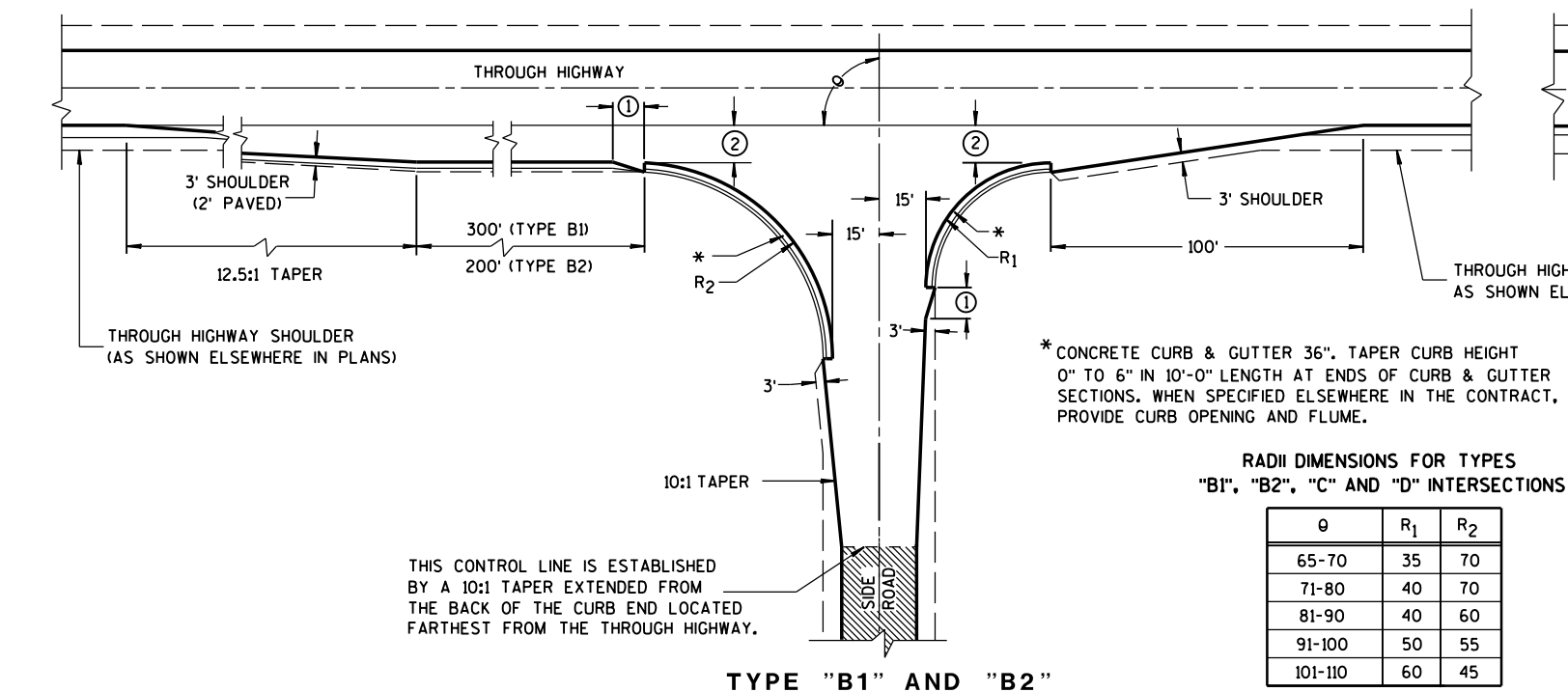
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR
CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94
DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA





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.

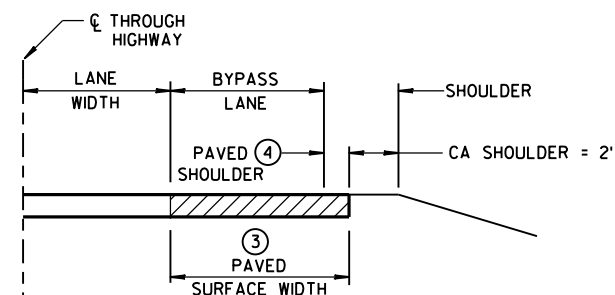
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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

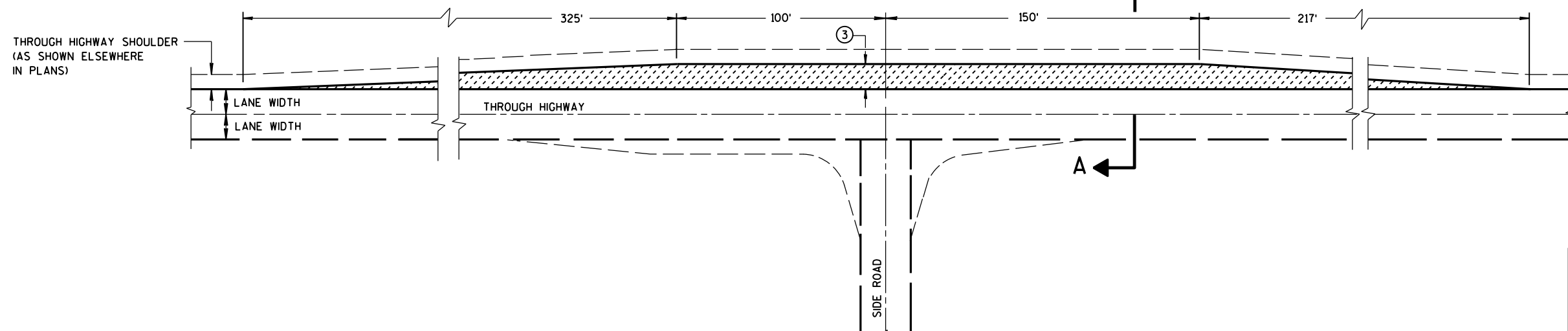
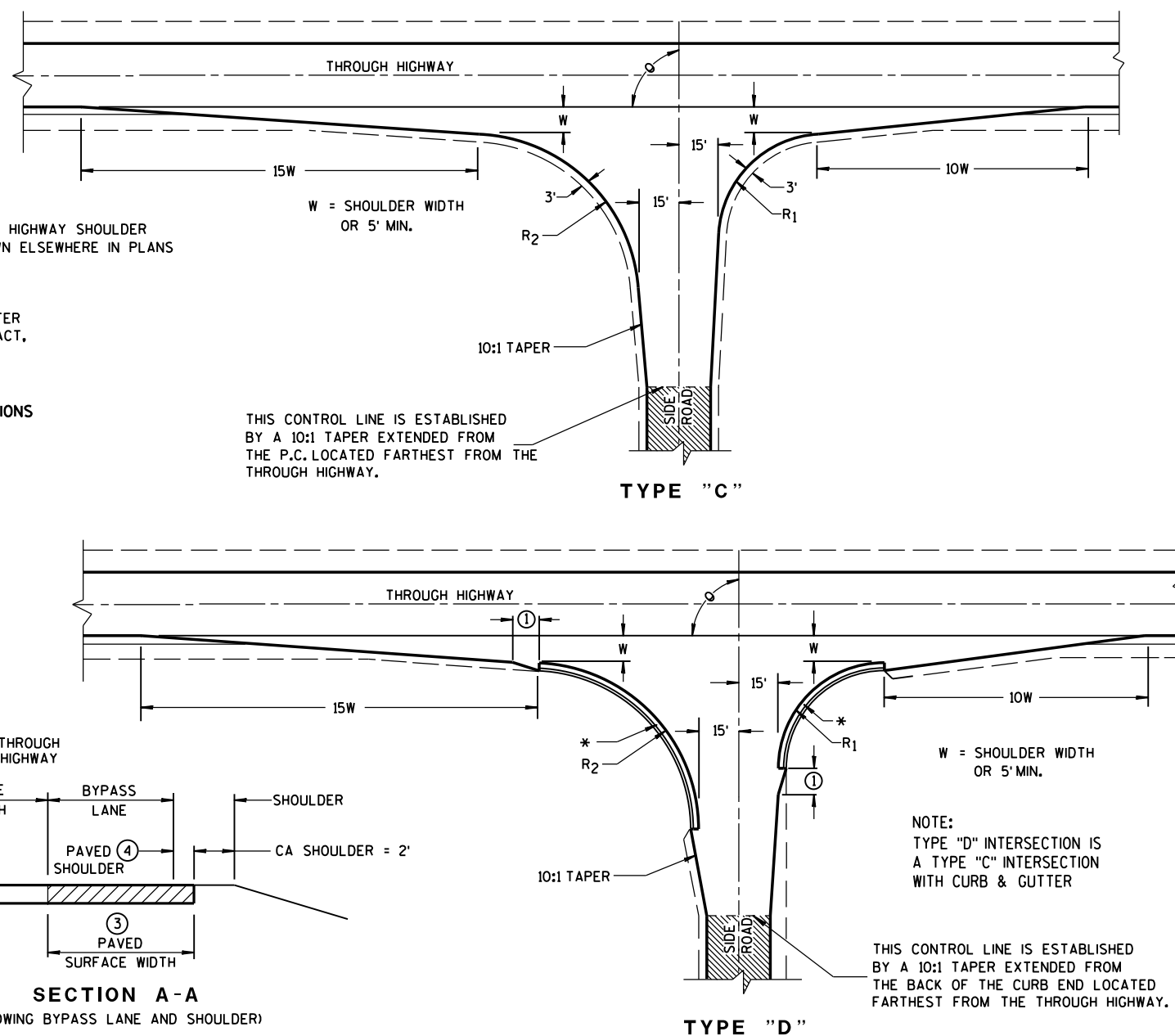
EXISTING PAVED SURFACE

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.



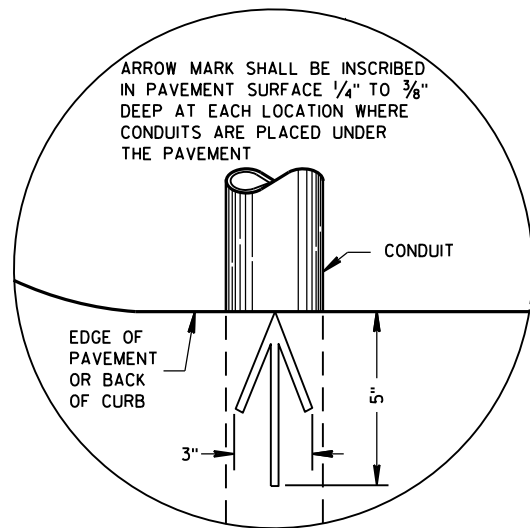
SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



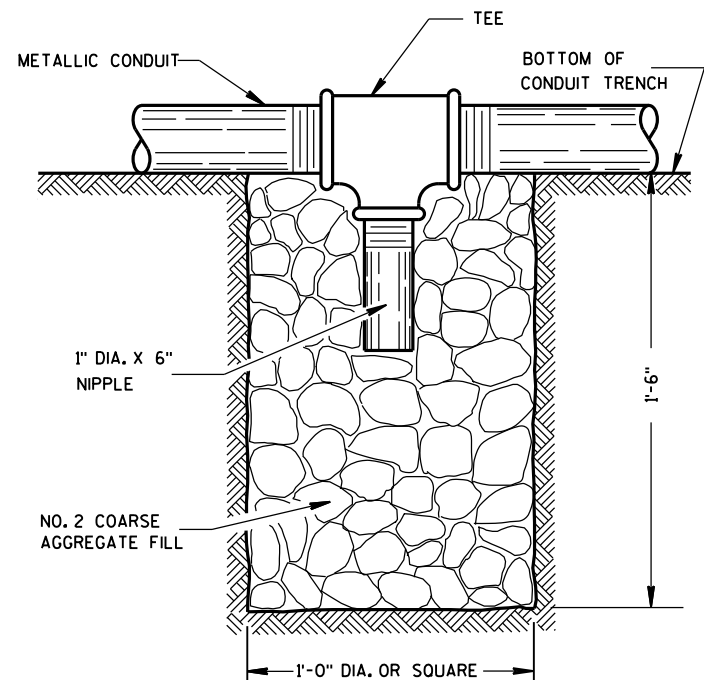
TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

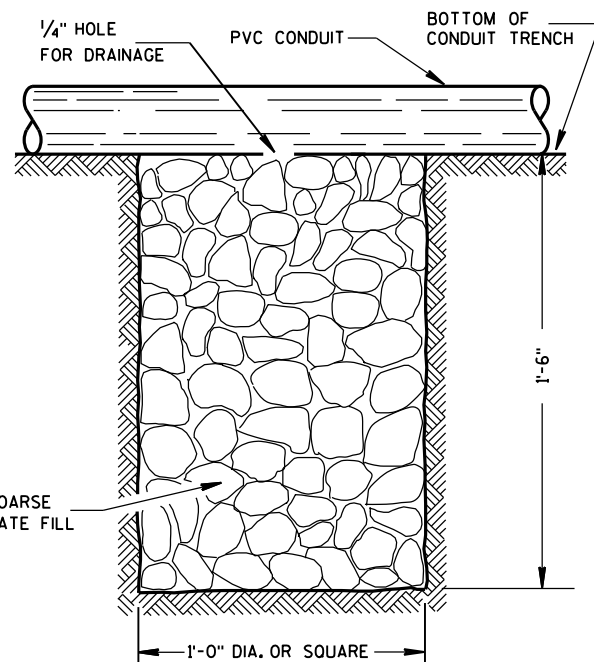


PLAN VIEW
ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

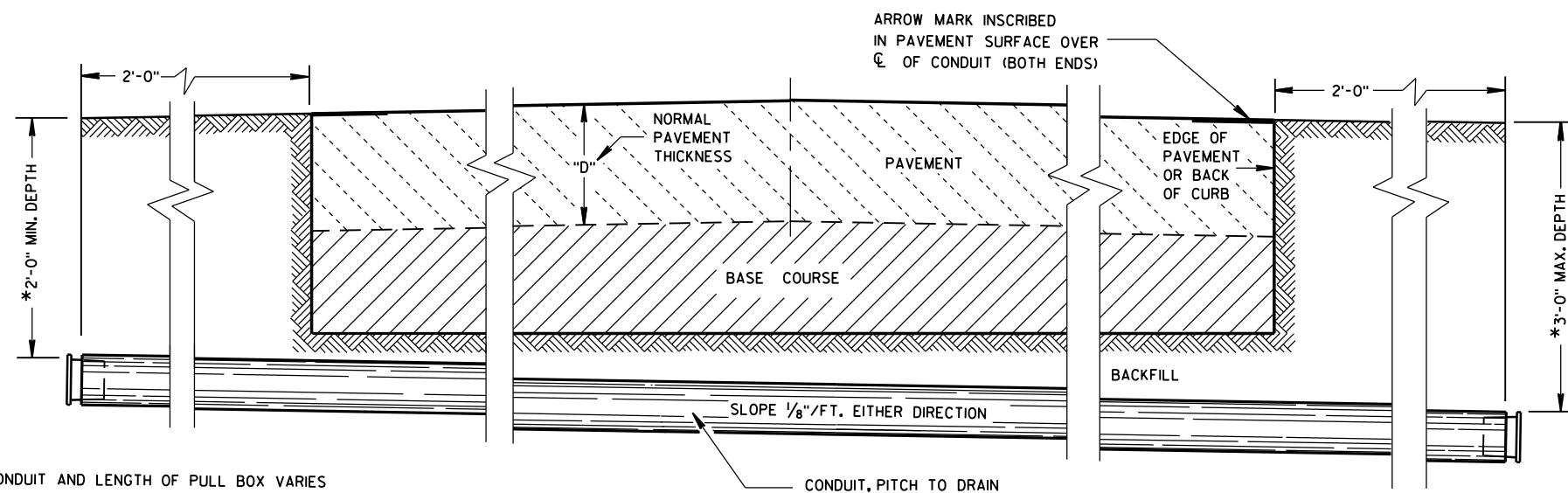
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER
FHWA

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

| DIMENSION IN INCHES | | CORRUGATED STEEL PIPE | | | | | | | | |
|---------------------------|---|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| PIPE DIAMETER (INSIDE) | A | 12 | 12 | 12 | 18 | 18 | 18 | 24 | 24 | 24 |
| PIPE LENGTH ** | B | 24 | 30 | 36 | 24 | 30 | 36 | 36 | 42 | 48 |
| WALL THICKNESS | C | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 |
| COVER | D | 10 1/4 | 10 1/4 | 10 1/4 | 16 1/4 | 16 1/4 | 16 1/4 | 22 1/4 | 22 1/4 | 22 1/4 |
| FRAME | E | 14 1/2 | 14 1/2 | 14 1/2 | 20 1/2 | 20 1/2 | 20 1/2 | 26 1/2 | 26 1/2 | 26 1/2 |
| FRAME | F | 8 1/2 | 8 1/2 | 8 1/2 | 14 1/2 | 14 1/2 | 14 1/2 | 20 1/2 | 20 1/2 | 20 1/2 |
| FRAME | G | 11 1/2 | 11 1/2 | 11 1/2 | 17 1/2 | 17 1/2 | 17 1/2 | 23 1/2 | 23 1/2 | 23 1/2 |
| WEIGHT IN POUNDS * | | | | | | | | | | |
| FRAME AND COVER | | 60 | 60 | 60 | 110 | 110 | 110 | 155 | 155 | 155 |

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

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

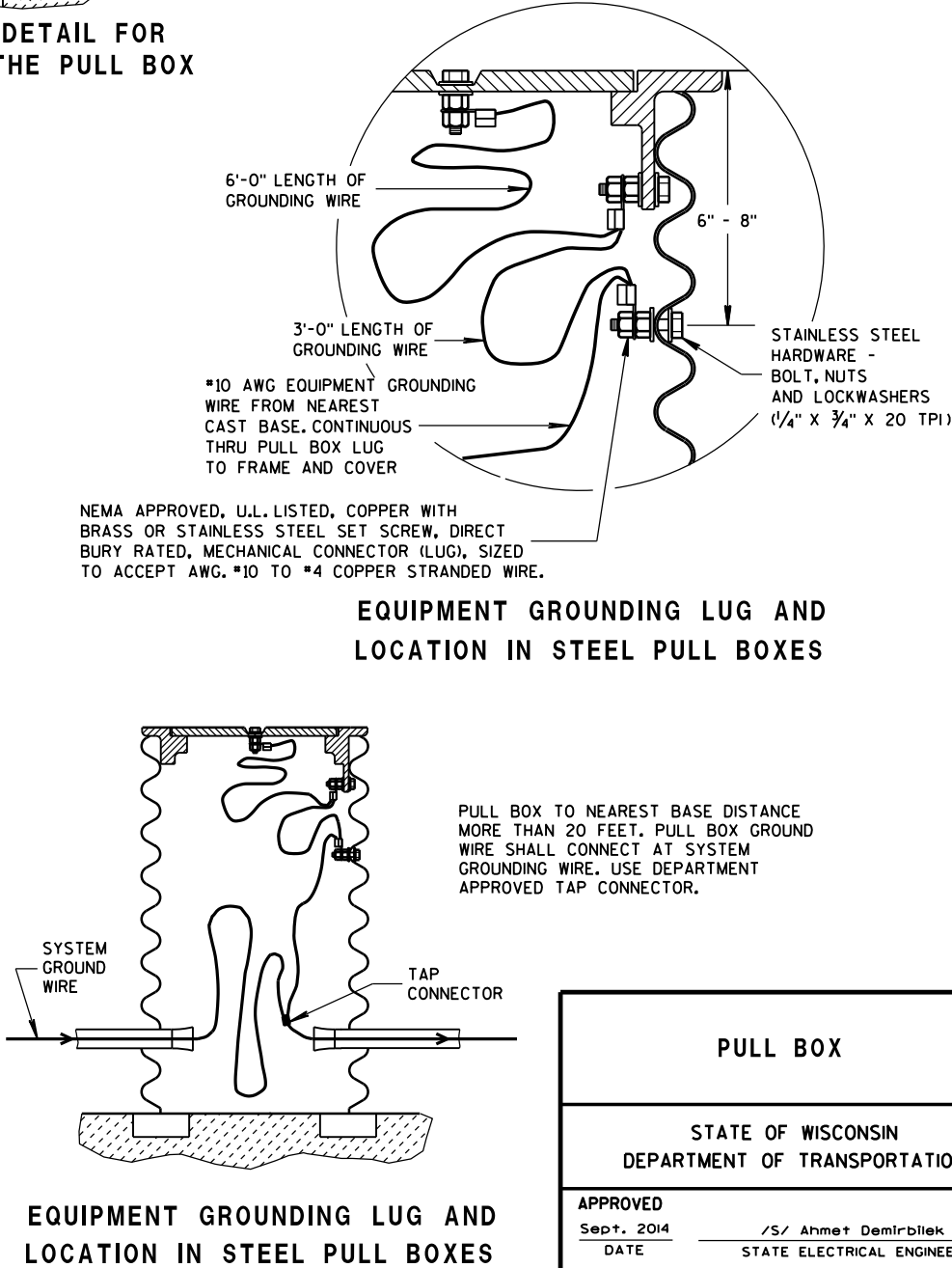
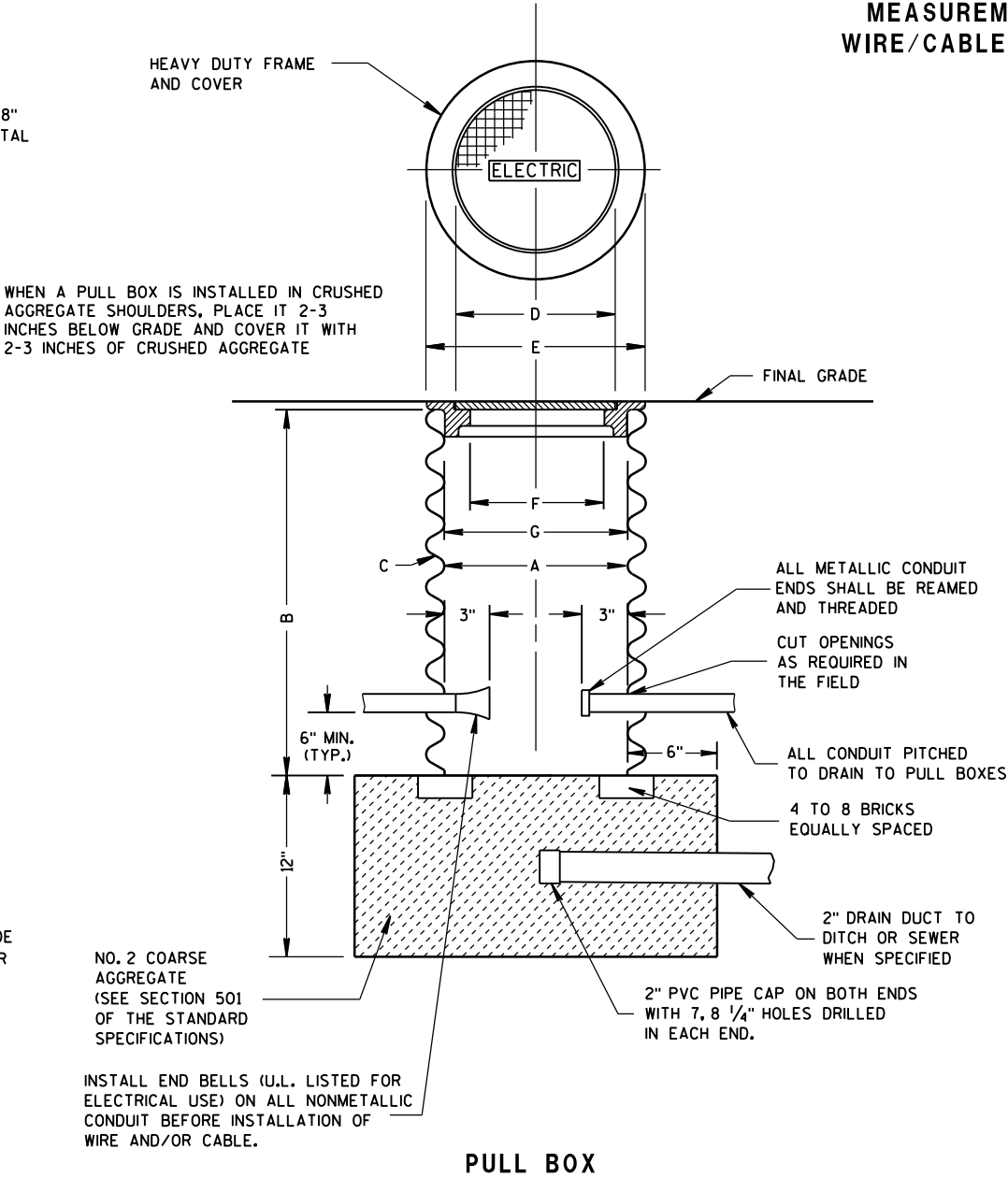
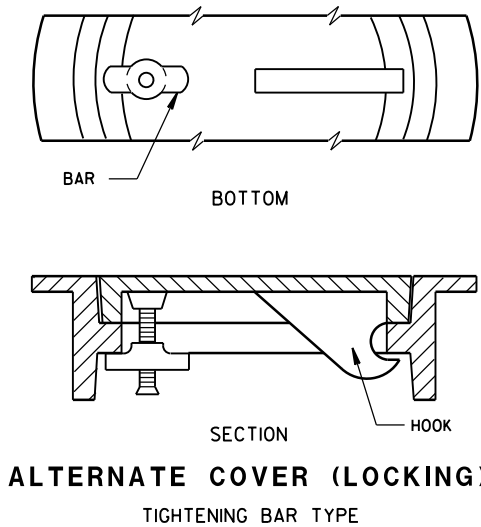
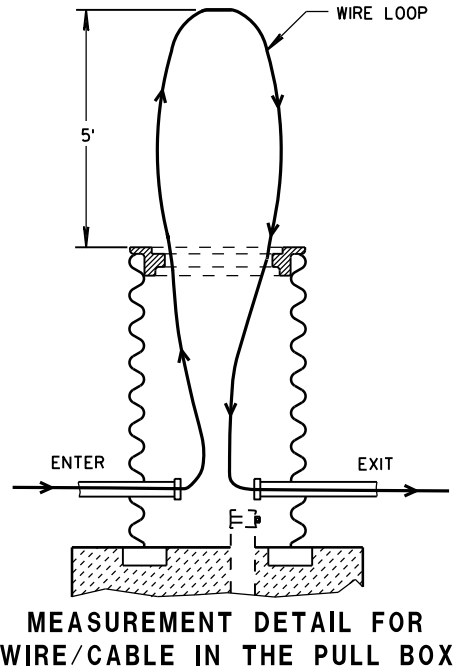
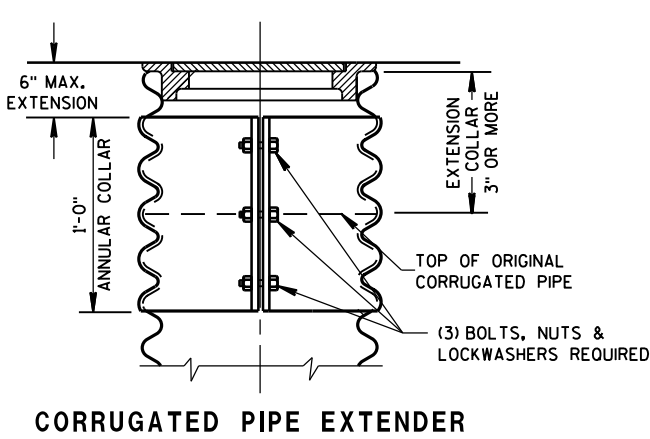
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

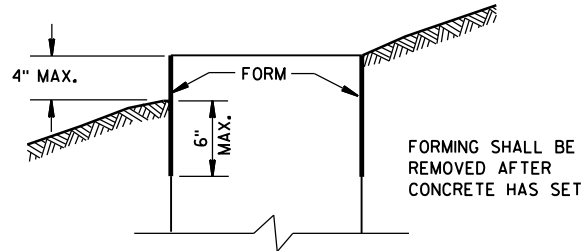
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



| | |
|--|---|
| PULL BOX | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED Sept. 2014 DATE | /S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER |
| FHWA | |

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

| QUANTITY REQUIREMENTS | CONCRETE BASE TYPE | | |
|---------------------------------|--------------------|------|-------|
| | 1 | 2 | 5 & 6 |
| APPROX. CUBIC YARDS OF CONCRETE | 0.40 | 0.57 | 0.40 |
| LBS. OF HOOP BAR STEEL | NONE | 23 | 16 |
| LBS. OF VERTICAL BAR STEEL | NONE | 60 | 18 |

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

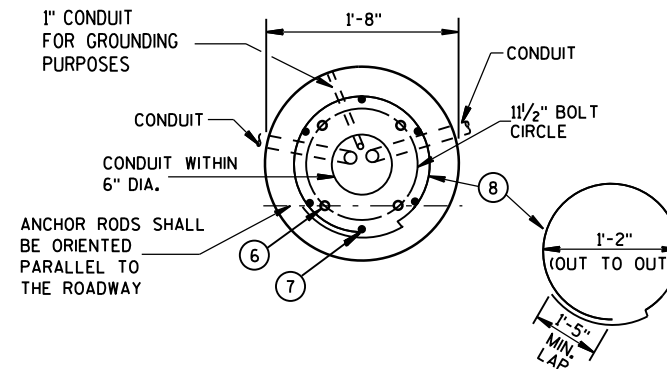
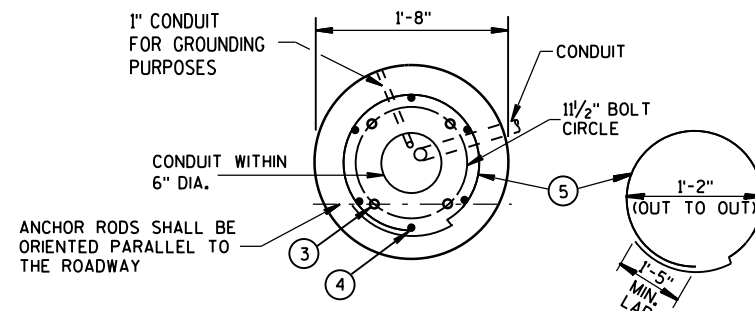
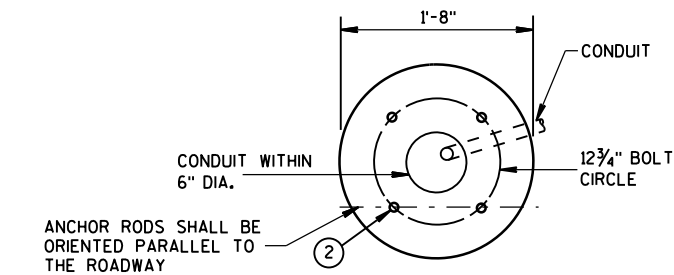
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

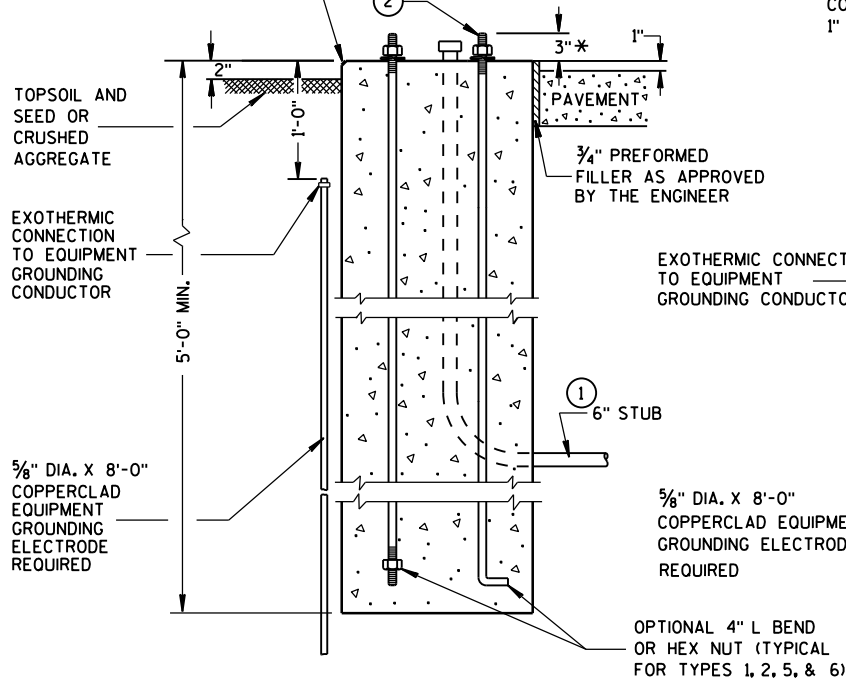
- 1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

- 2 (4) 1" DIA. X 3'-6" ANCHOR RODS.
3 (4) 1" DIA. X 5'-0" ANCHOR RODS.
4 (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.
5 (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.
6 (4) 1" DIA. X 3'-6" ANCHOR RODS.
7 (6) NO. 4 X 4'-8" BAR STEEL REINFORCEMENT.
8 (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

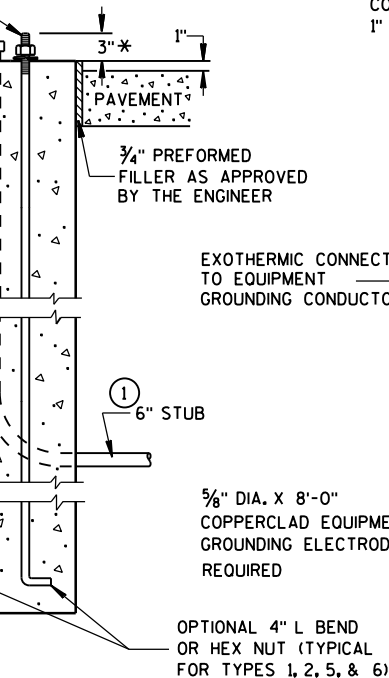


FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

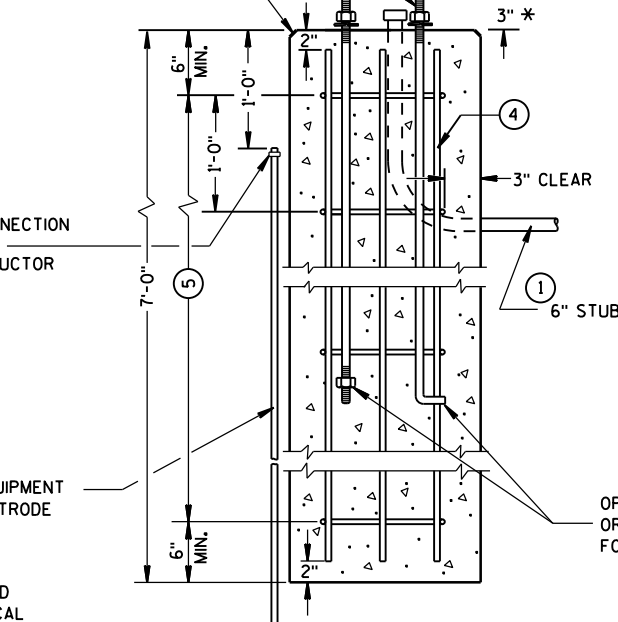
HALF SECTION IN UNPAVED AREA (TYPICAL FOR TYPES 1, 2, 5, & 6)



HALF SECTION IN PAVEMENT (TYPICAL FOR TYPES 1, 2, 5, & 6)



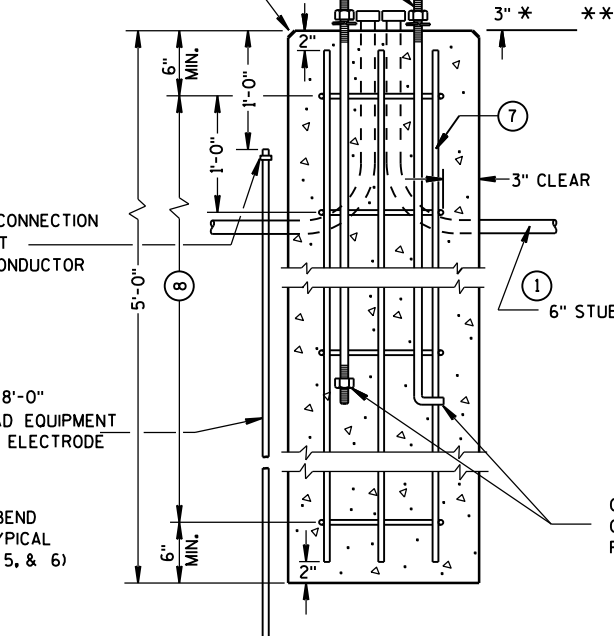
FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 2

CONCRETE BASES

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 5 & 6

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 3/4" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014

DATE

/S/ Ahmet Demirbilek

STATE ELECTRICAL ENGINEER

FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

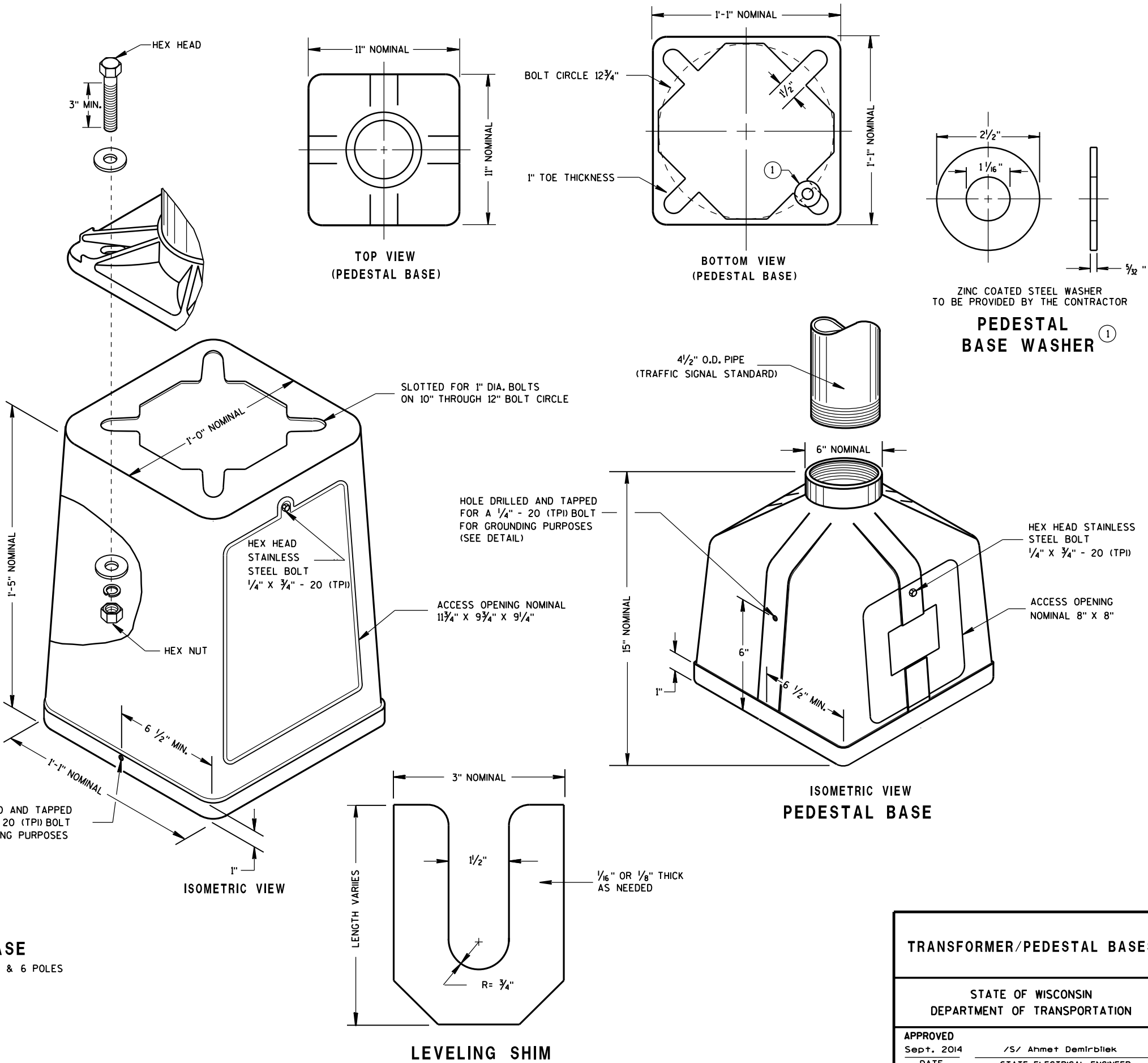
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.



TYPICAL MECHANICAL
CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES

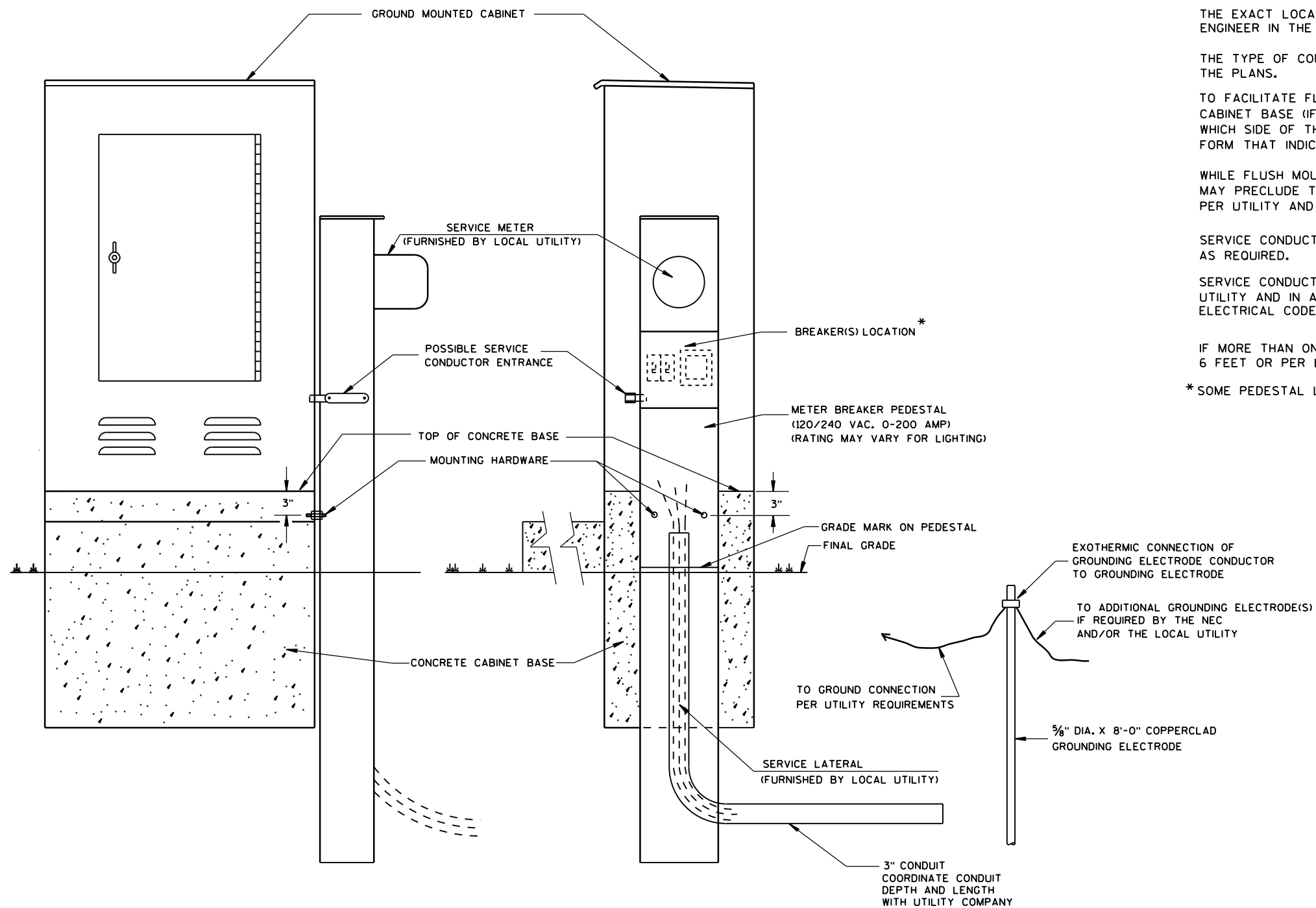
ISOMETRIC VIEW
PEDESTAL BASE

LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER
FHWA



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE, CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH, THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

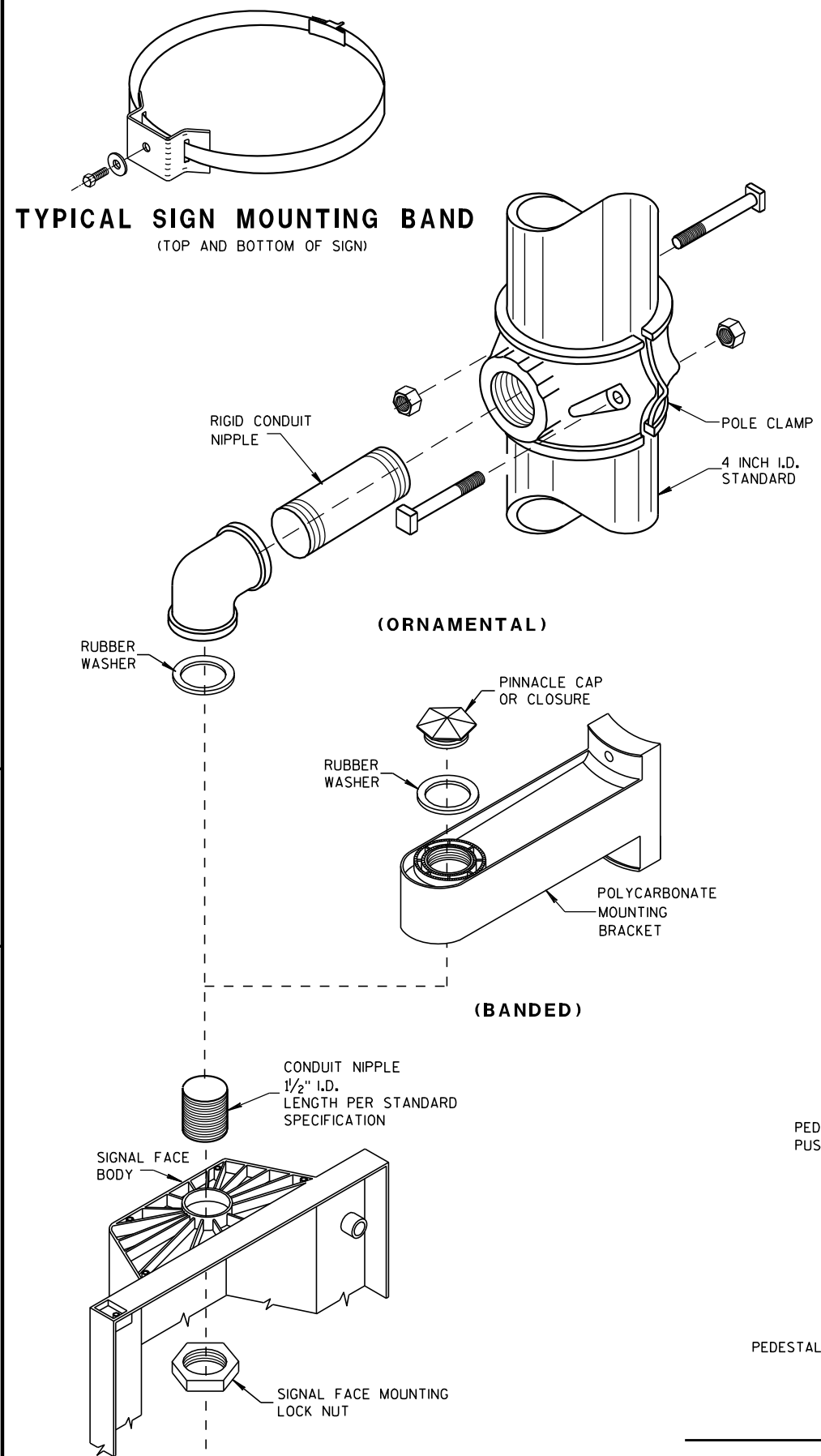
CABINET SERVICE INSTALLATION
(METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

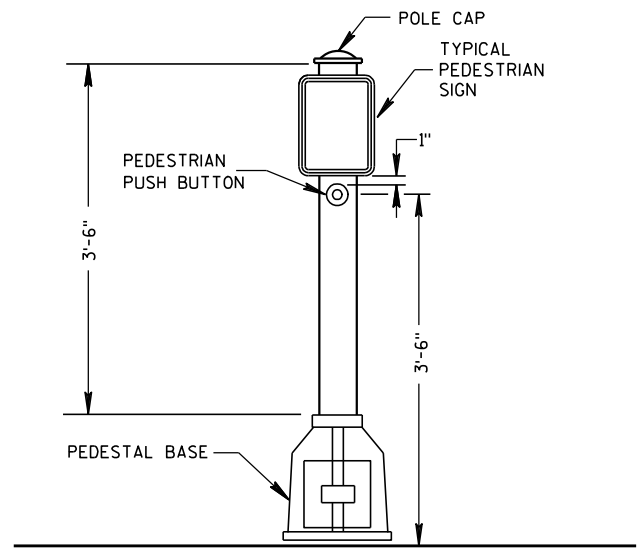
APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

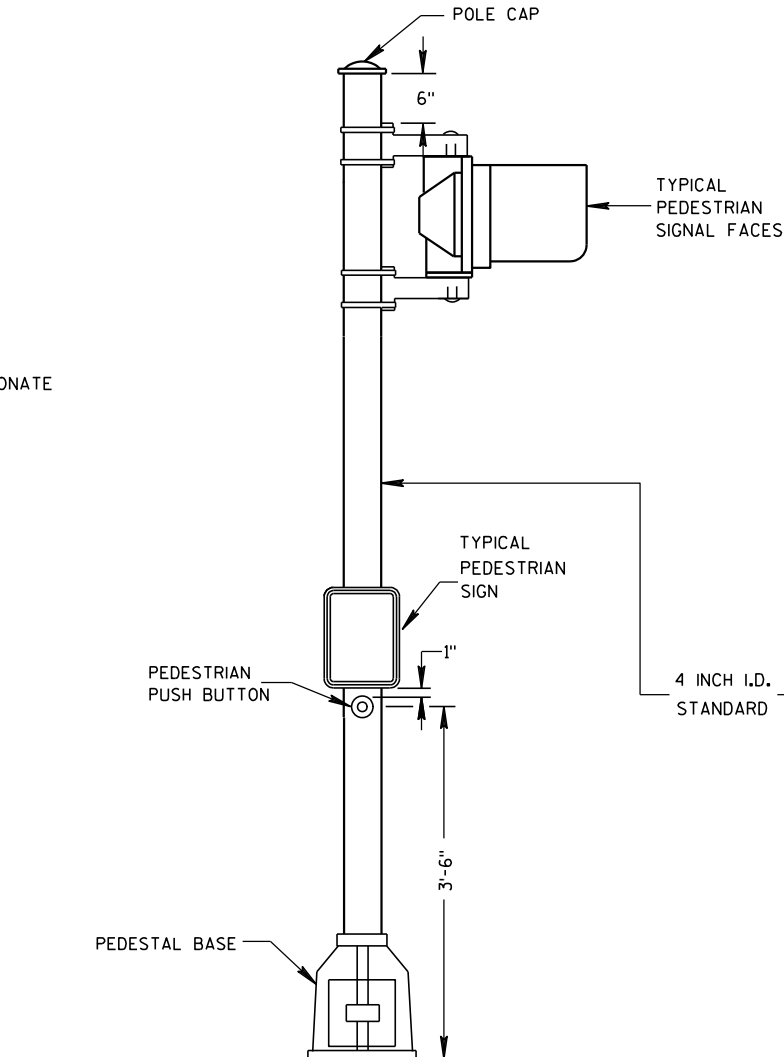
FHWA



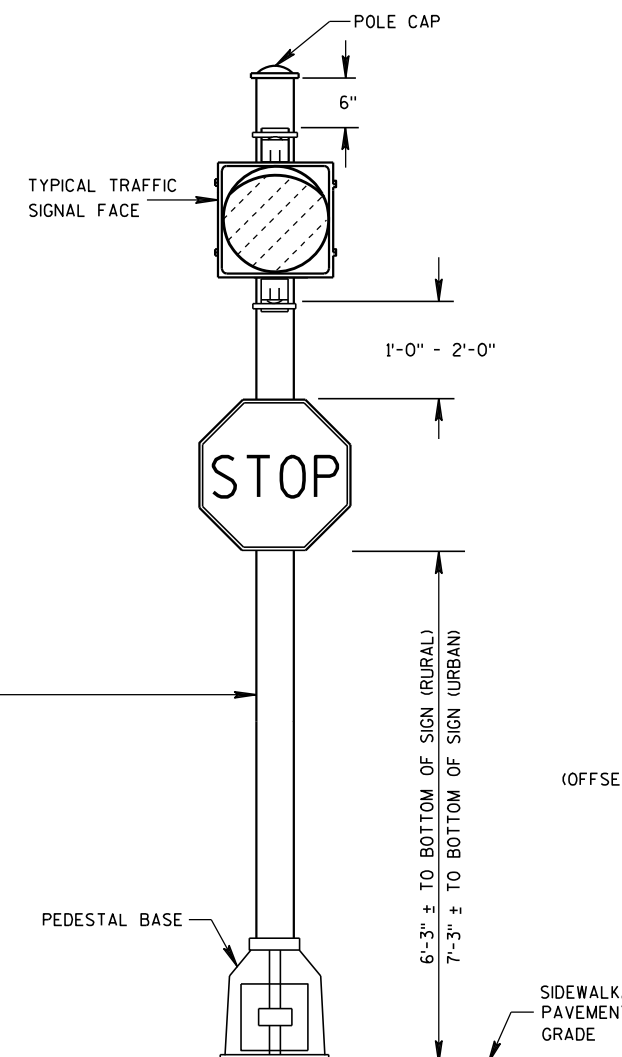
SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON
TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

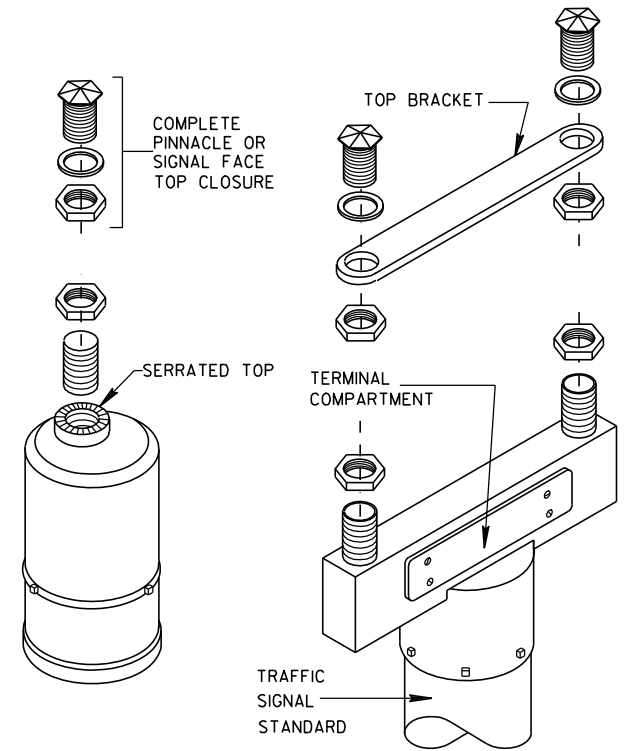
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

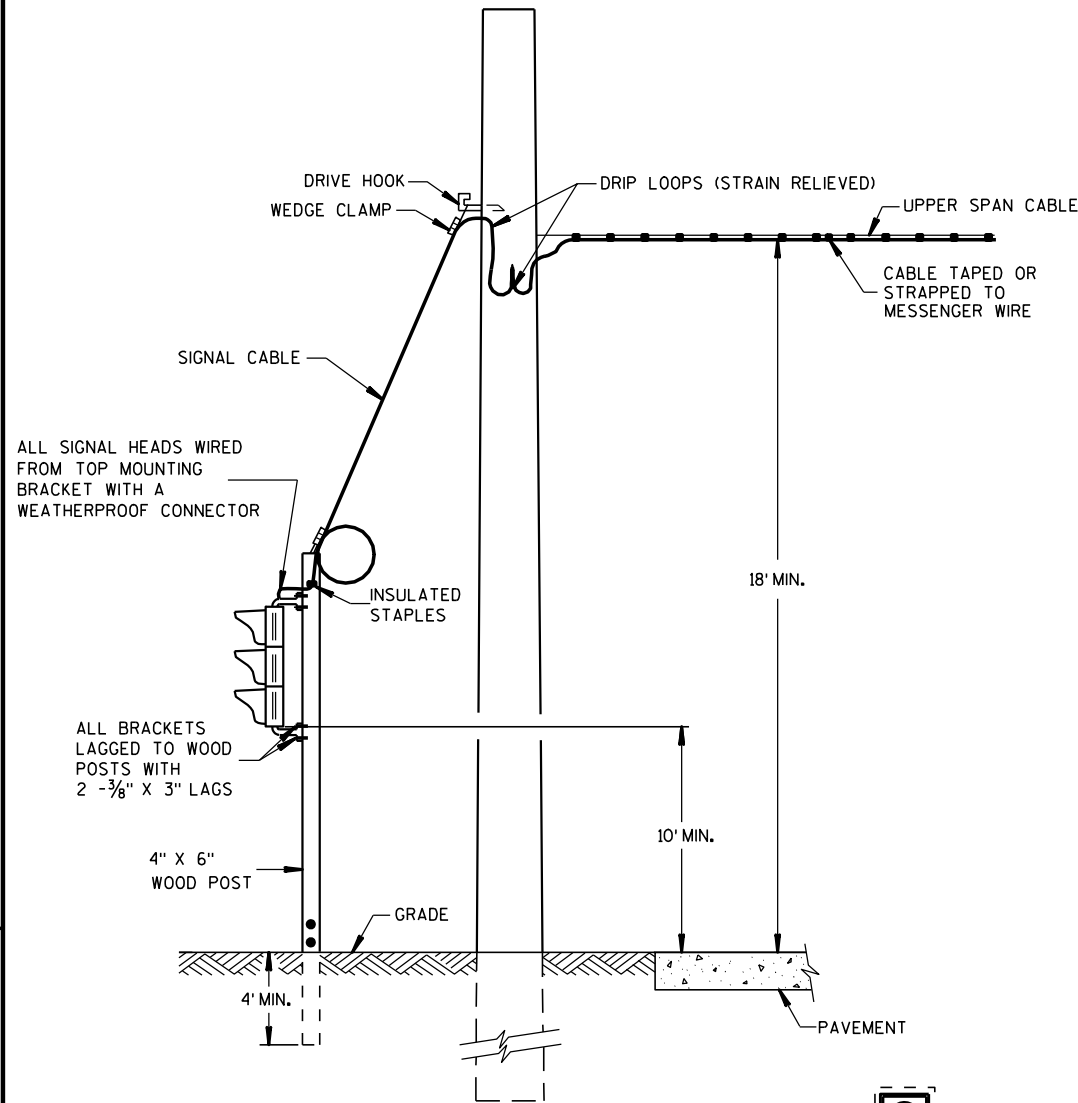
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SLIPFITTERS

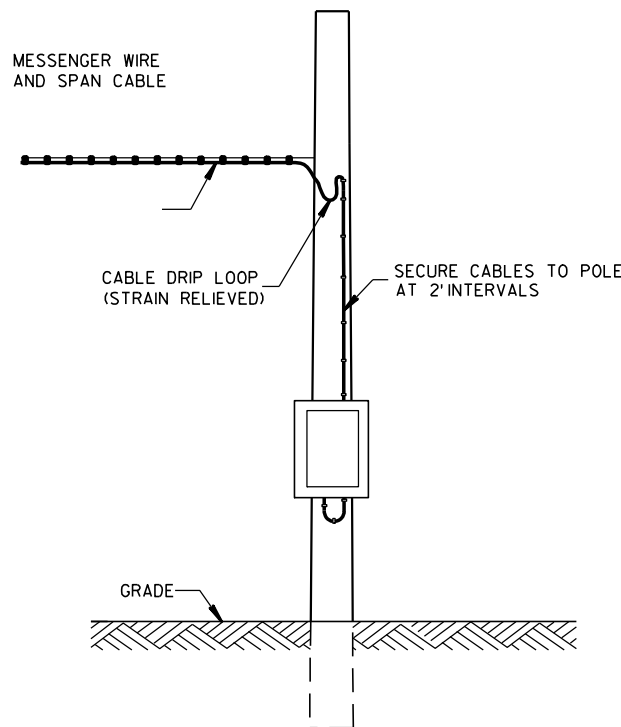
| | |
|--|---|
| TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 5/11/10 DATE | /S/ John Corbin STATE ELECTRICAL ENGINEER FOR HWYS |
| FHWA | |



TYPICAL DROP TO TRAFFIC SIGNAL FACE

| OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES | |
|---|-------------------|
| SPEED LIMIT | OFFSET DISTANCE** |
| GREATER THAN 45 MPH | 18 FT |
| 45 MPH OR LESS | 12 FT |
| 45 MPH OR LESS W/ CURBS | 2 FT |
| **NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE. | |

| MINIMUM POLE LENGTHS | CLASS | MINIMUM BURIAL DEPTHS |
|----------------------|-------|-----------------------|
| 25 FEET | V | 5 FEET |
| 30 FEET | V | 6 FEET |
| 35 FEET | IV | 7 FEET |
| 40 FEET | IV | 8 FEET |
| 45 FEET | IV | 9 FEET |



POLE MOUNT CABINET INSTALLATION

GENERAL NOTES

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

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAYBE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY PLOES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

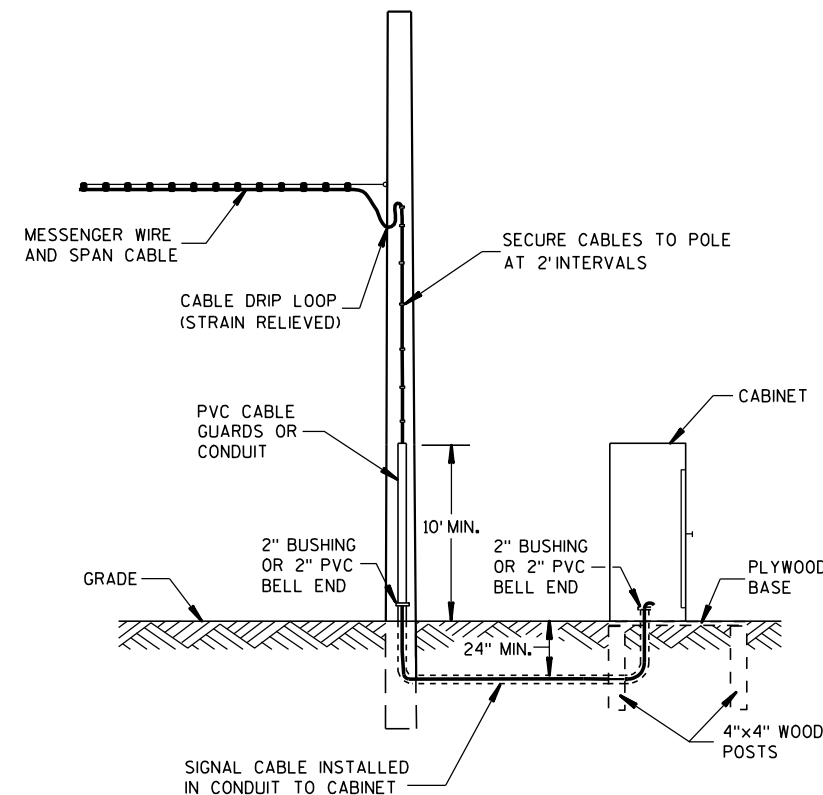
WOOD POLES (NONBREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAMGUARD, ETC.).

WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

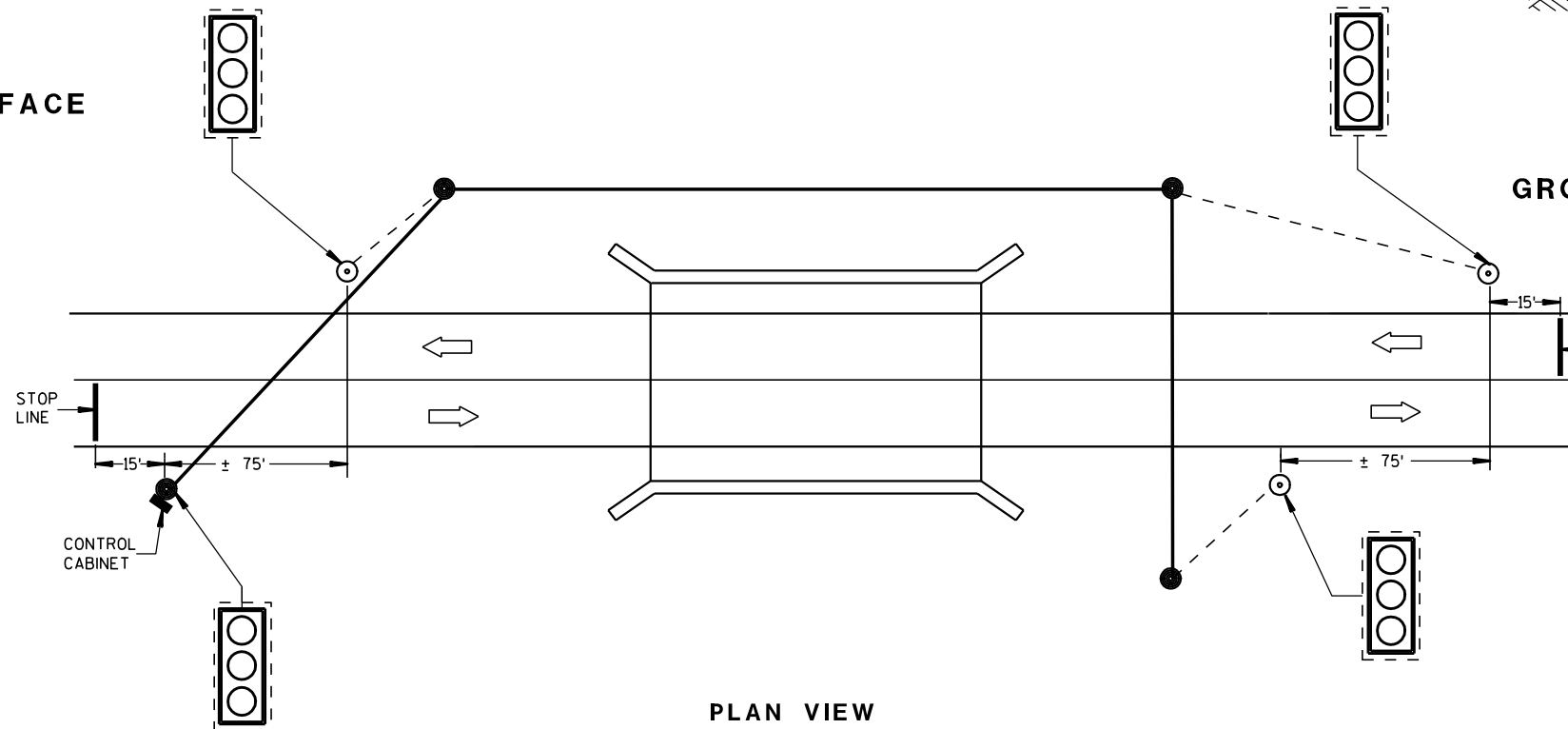
EACH TRAFFIC SIGNAL FACE SHALL HAVE A BACKPLATE.



GROUND MOUNT CABINET INSTALLATION

LEGEND

- WOOD POLE (NONBREAKAWAY)
- WOOD POST (BREAKAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- LED TRAFFIC SIGNAL FACE WITH BACKPLATE
- DIRECTION OF TRAFFIC

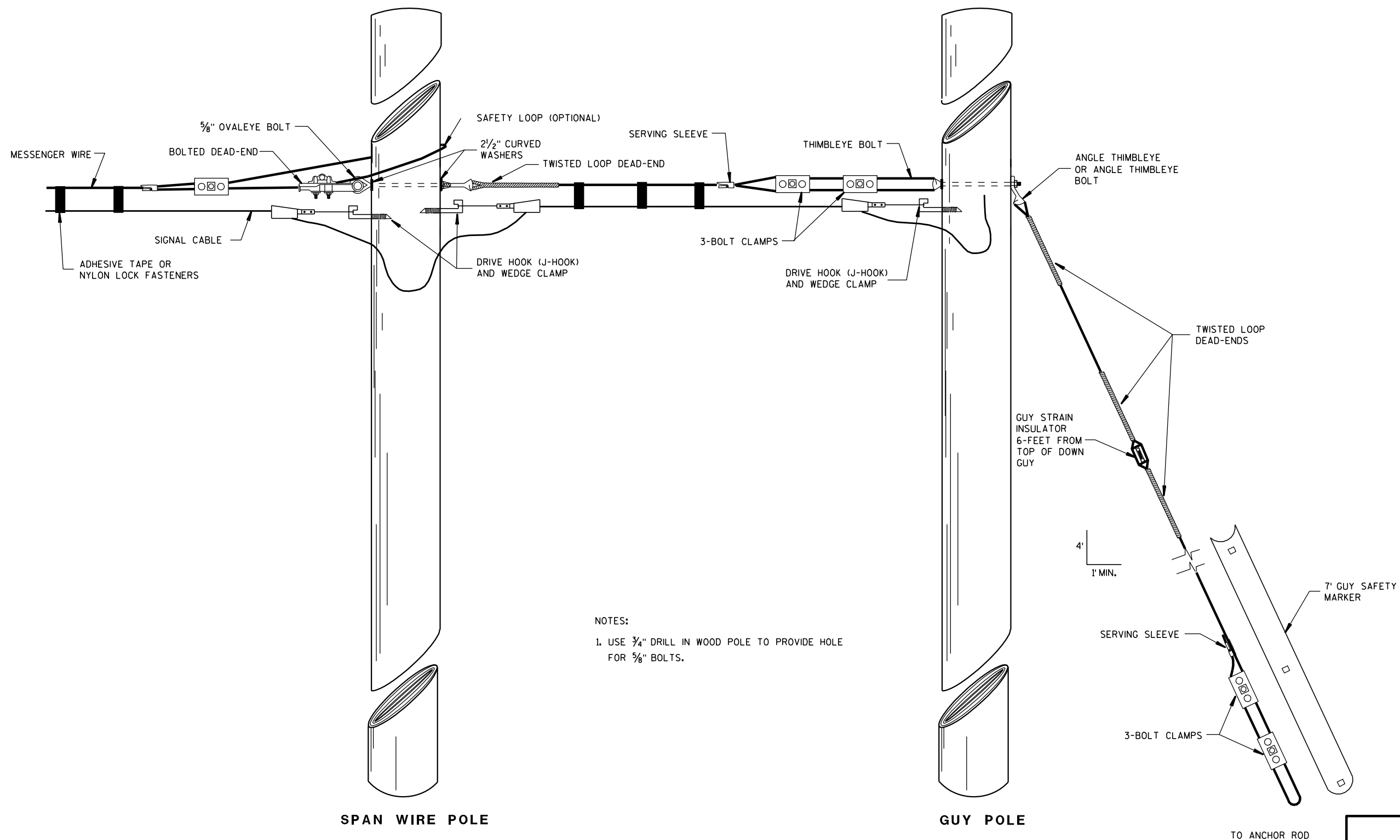


PLAN VIEW
TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/2/2011 DATE /S/ Thomas J. Goring
STATE ELECTRICAL ENGINEER FOR HWYS
FHWA



NOTES:
1. USE 3/4" DRILL IN WOOD POLE TO PROVIDE HOLE FOR 5/8" BOLTS.

TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

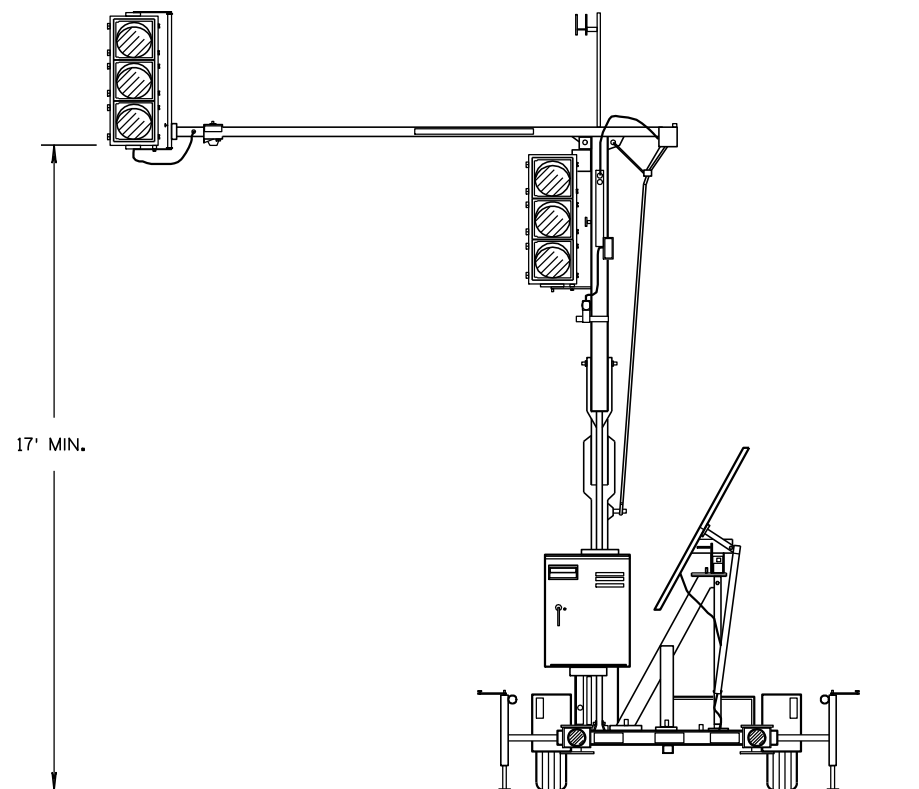
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011
DATE

/S/ Thomas J. Goring
STATE ELECTRICAL ENGINEER FOR HWYS

FHWA

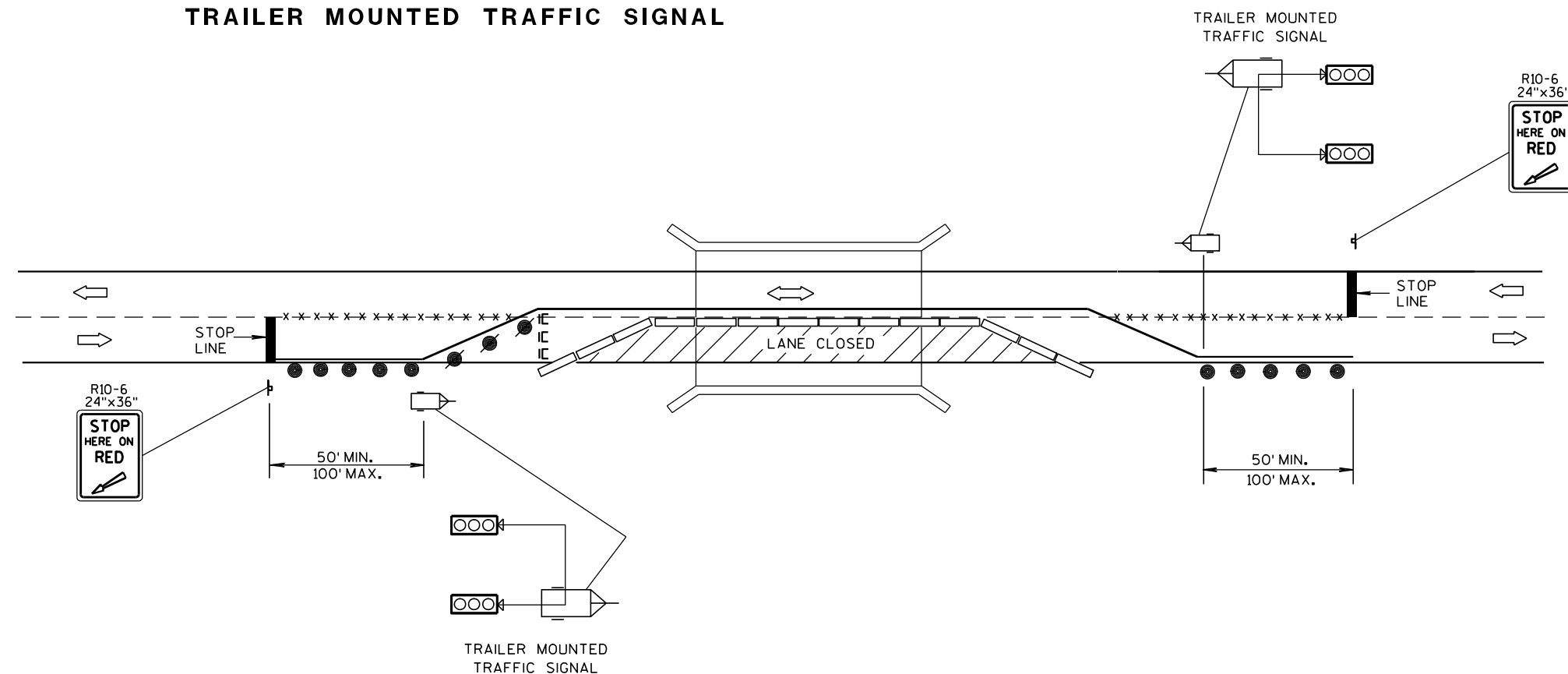


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

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

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15 D 33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- ⌵ POST MOUNTED SIGN
- *-x-* REMOVING PAVEMENT MARKING
- IC TYPE III BARRICADE WITH SIGN
- /● DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- ▬ TEMPORARY PRECAST CONCRETE BARRIER
- ⌵ TRAILER MOUNTED TRAFFIC SIGNAL
- ➡ DIRECTION OF TRAFFIC FLOW

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/2/2011 /S/ Thomas J. Goring
DATE STATE ELECTRICAL ENGINEER FOR HWYS
FHWA

GENERAL NOTES

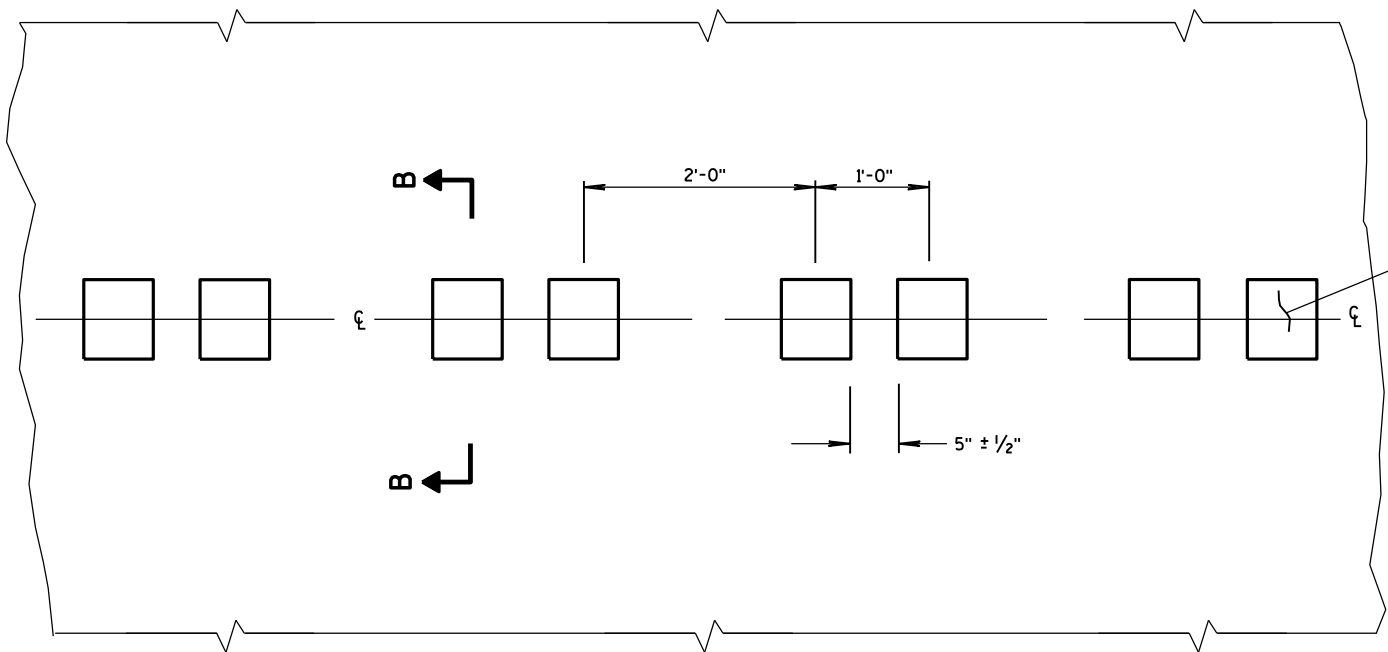
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

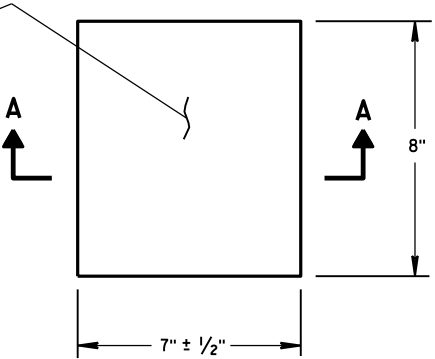
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

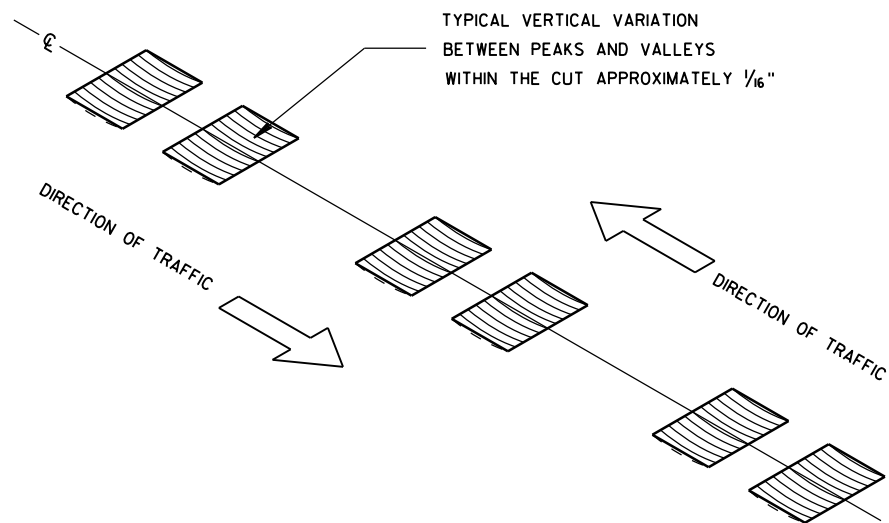
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



PLAN VIEW
CENTER LINE WITH GROOVES

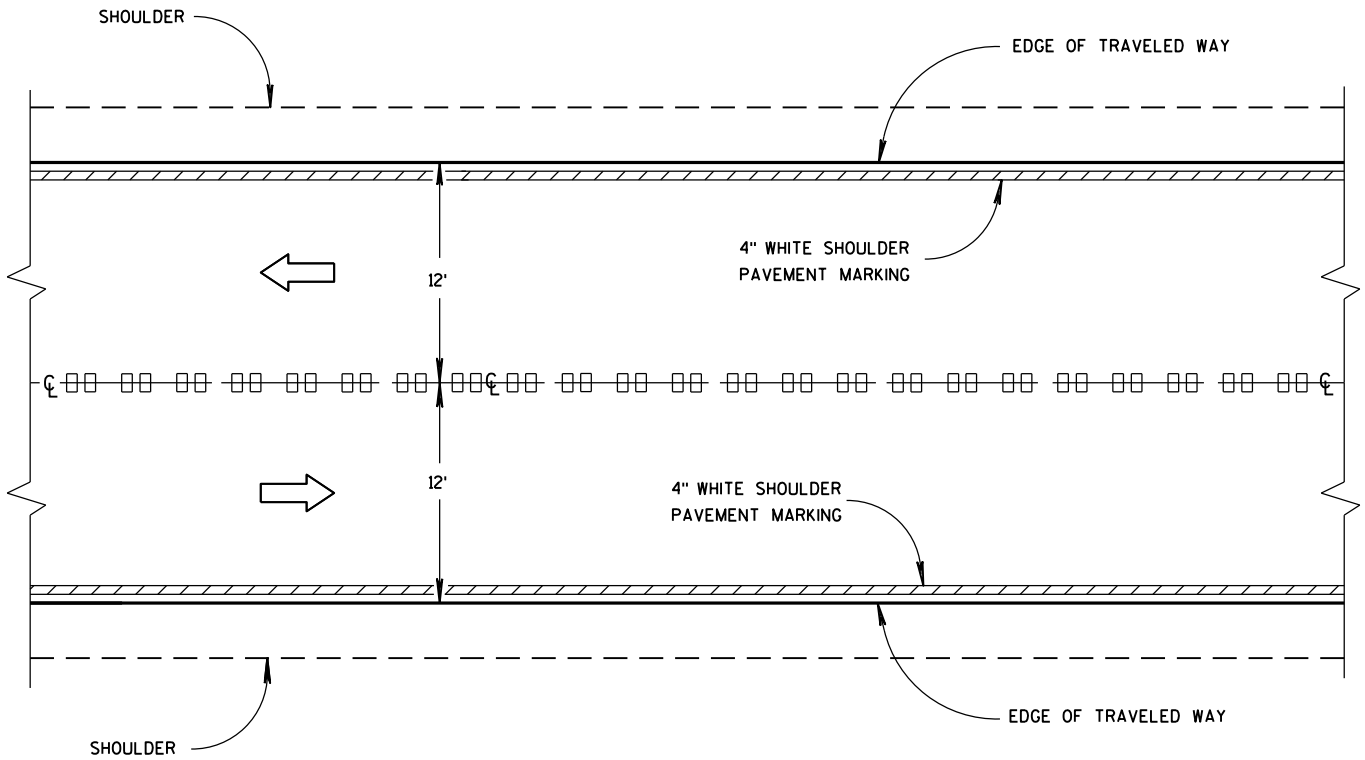


PLAN VIEW
(SINGLE GROOVE)

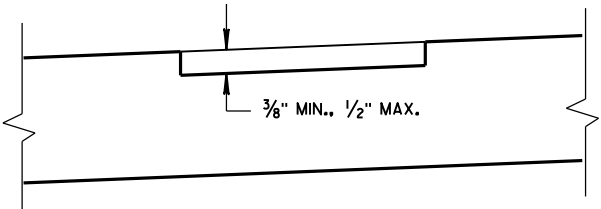


ISOMETRIC

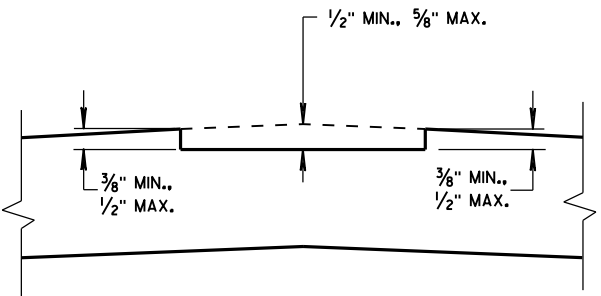
PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



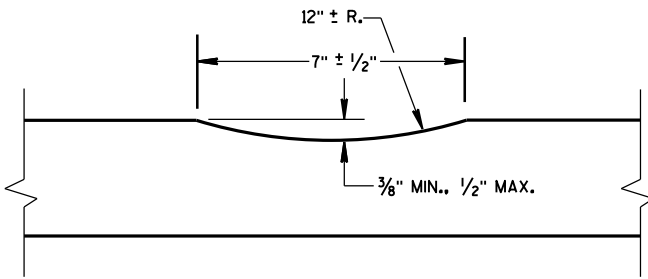
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



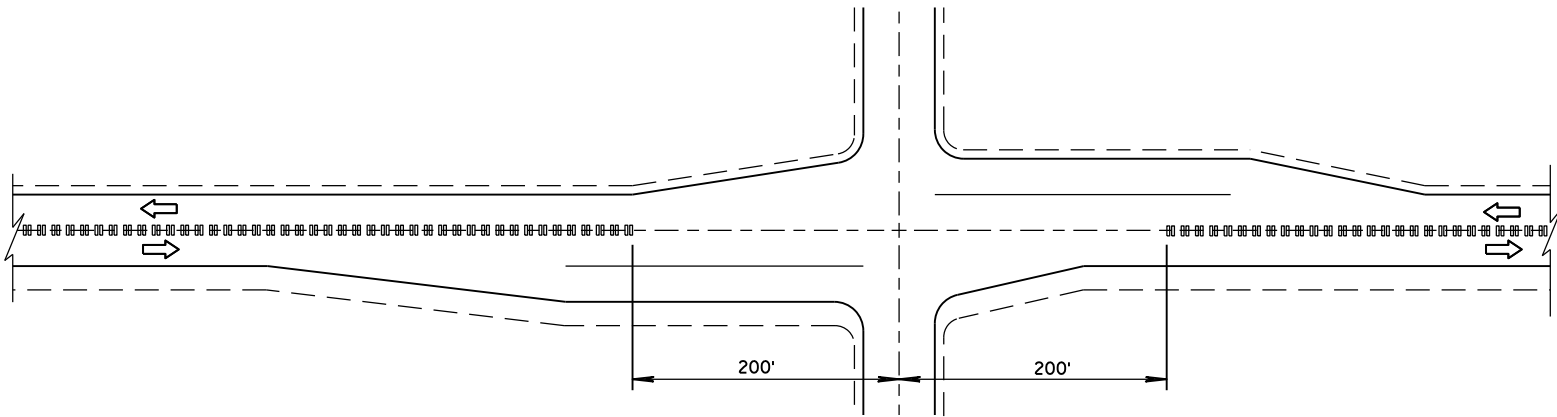
SECTION B-B
CROWNED ROADWAY



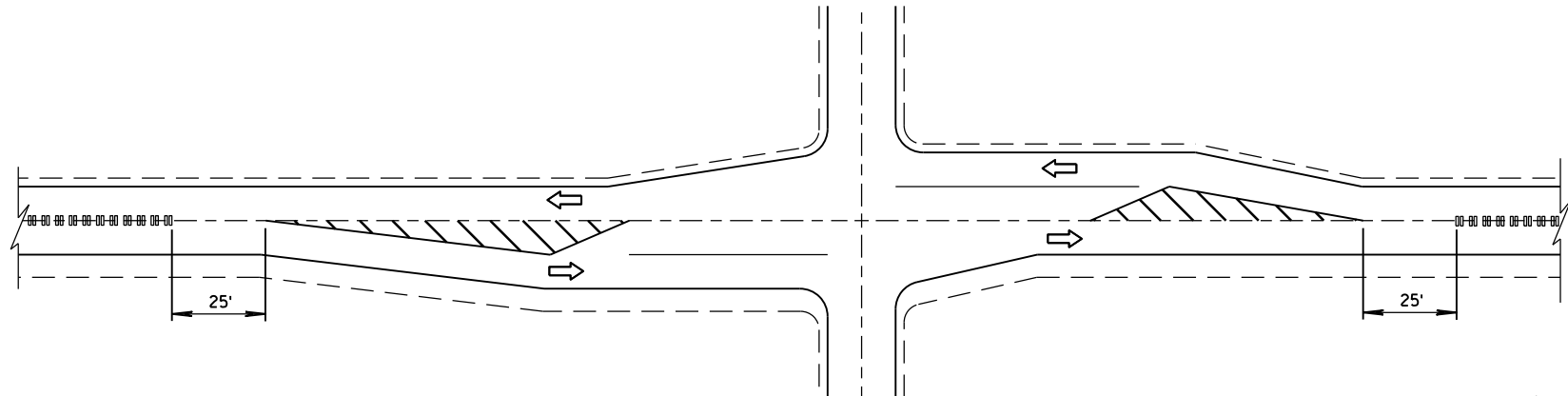
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

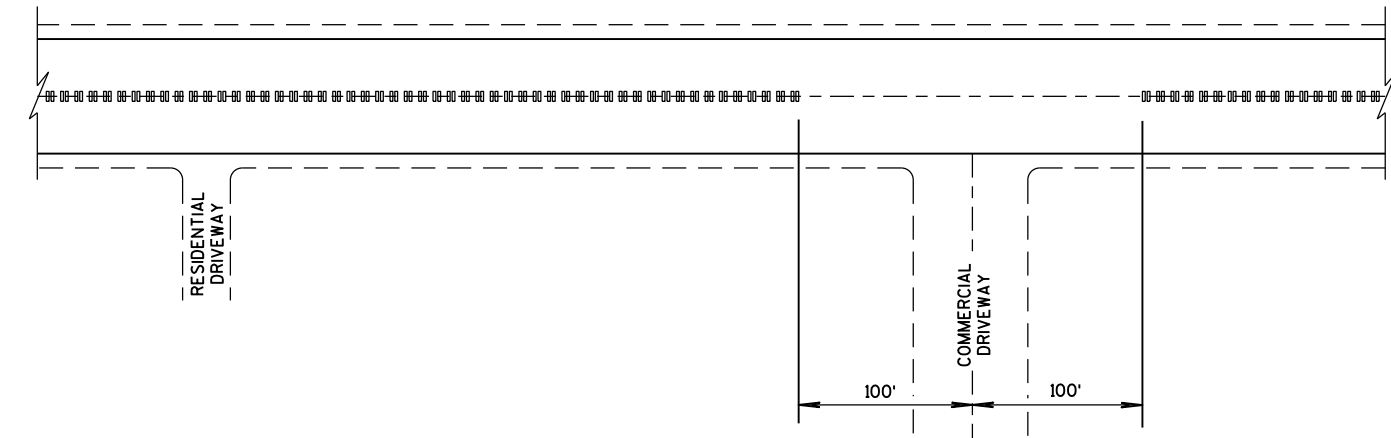
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

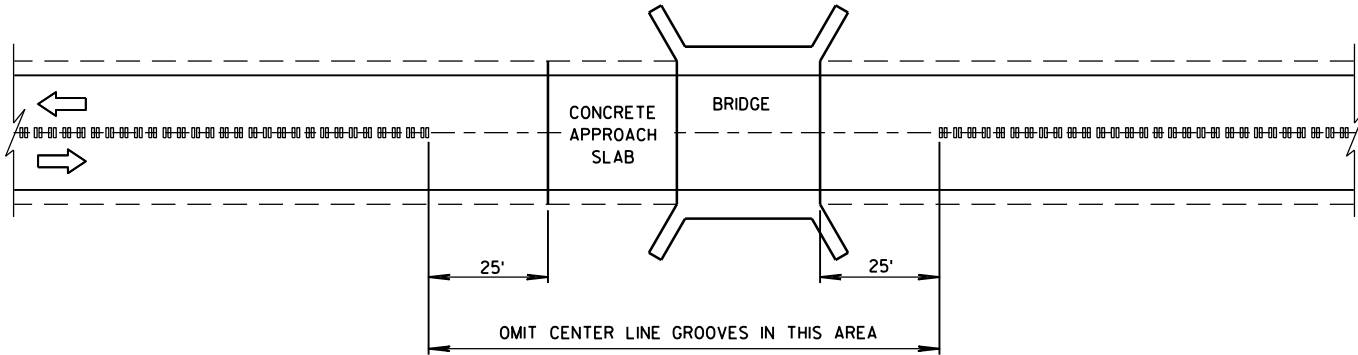


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

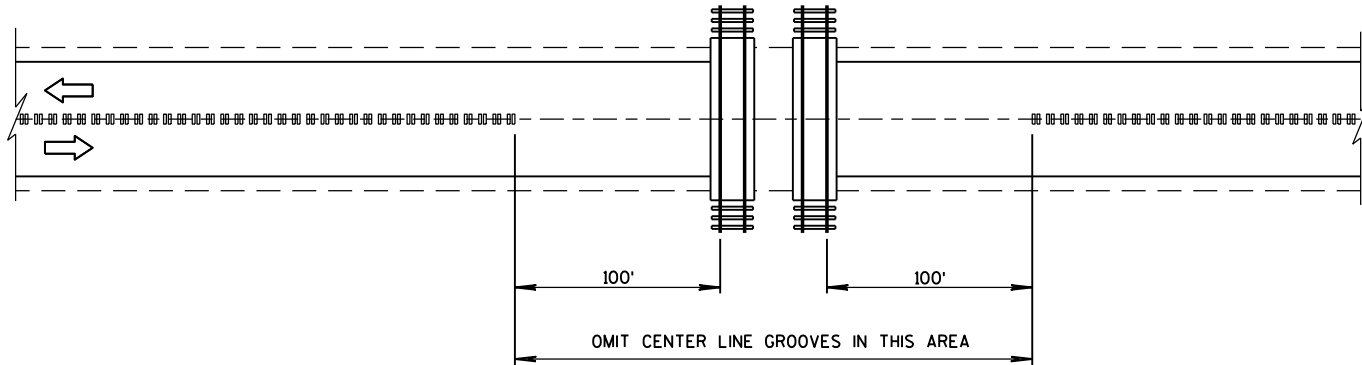


CENTER LINE GROOVES AT DRIVEWAYS¹

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

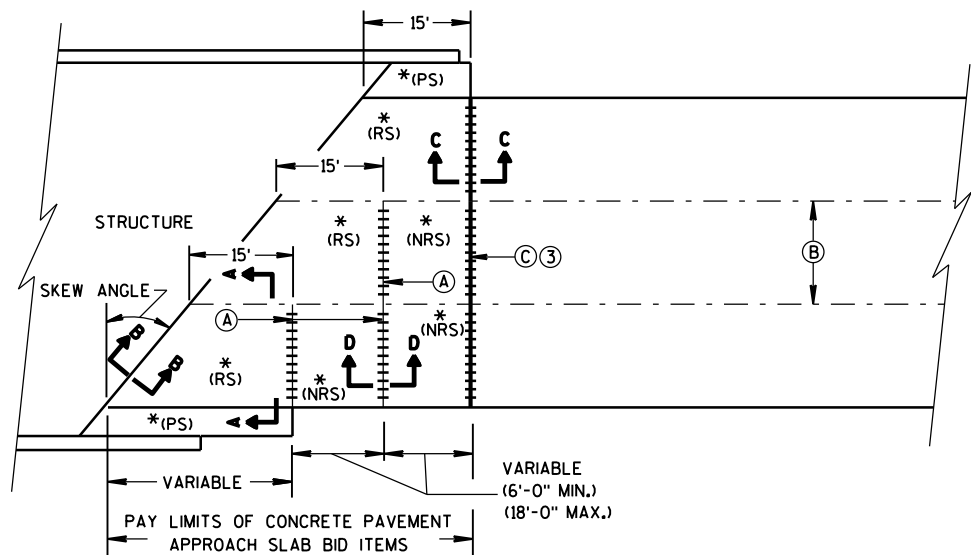


CENTER LINE GROOVES AT BRIDGES

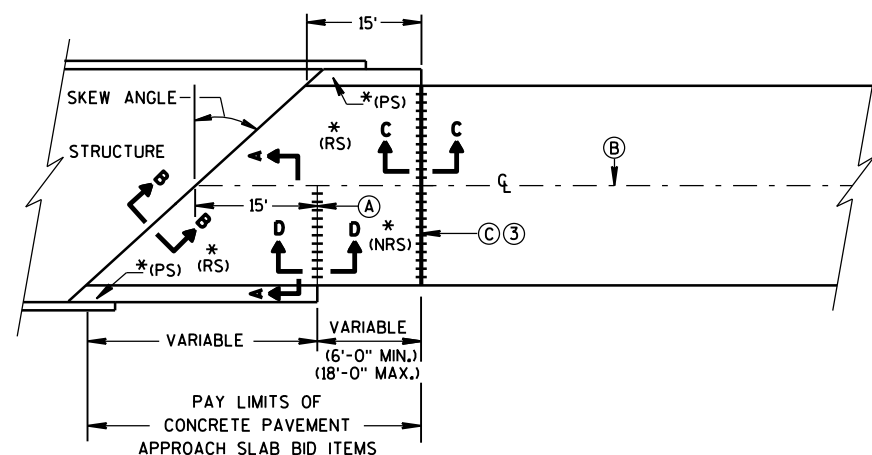


CENTER LINE GROOVES AT RAILROADS

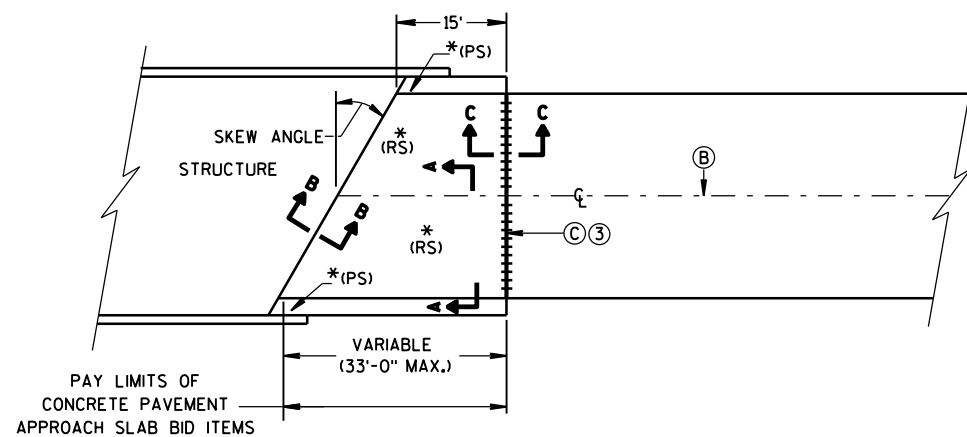
| | |
|--|--|
| 2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 5/15/2013 DATE | /S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER |
| FHWA | |



**SKewed APPROACH
(PAVEMENT MORE THAN 2 LANES)**



**SKews > 20°
(PAVEMENT WIDTH ≤ 30')**

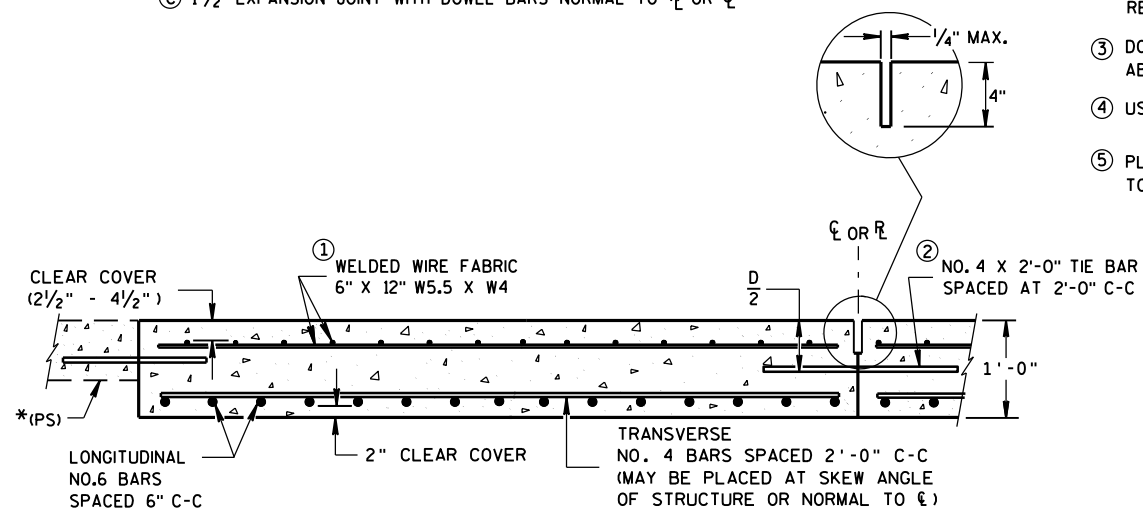


**SKews ≤ 20°
(PAVEMENT WIDTH ≤ 30')
APPROACH SLAB AND ADJACENT PAVEMENT**

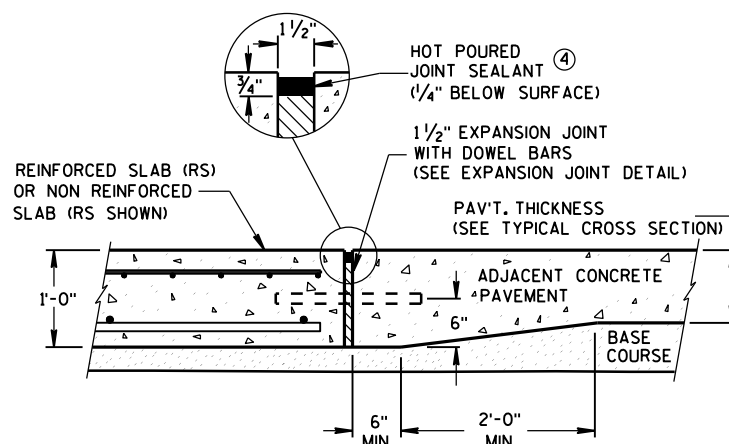
* (RS) = REINFORCED CONCRETE SLAB
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
* (NRS) = NON-REINFORCED CONCRETE SLAB

*** STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

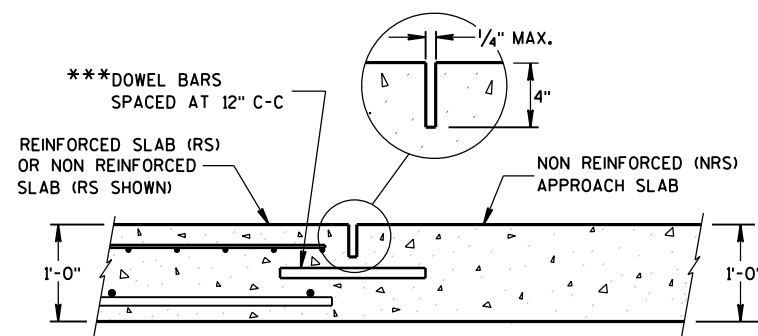
- (A) STANDARD CONTRACTION JOINT NORMAL TO ℓ OR ℓ_c
(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.
(C) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℓ OR ℓ_c



**SECTION A-A
REINFORCEMENT POSITIONING DETAIL**



**SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT**



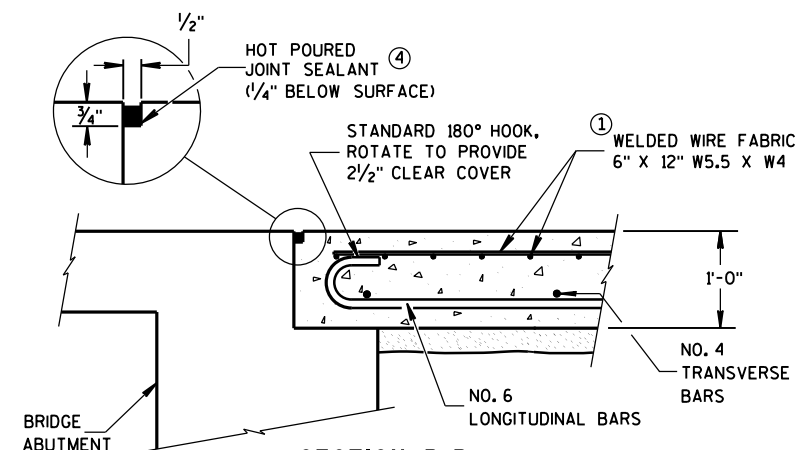
**SECTION D-D
CONTRACTION JOINT**

GENERAL NOTES

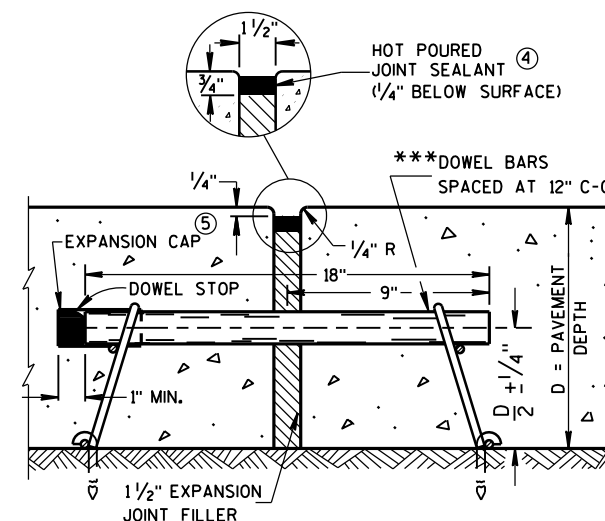
THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

- THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
- THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
- DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.
- USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.
- PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.



**SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT**

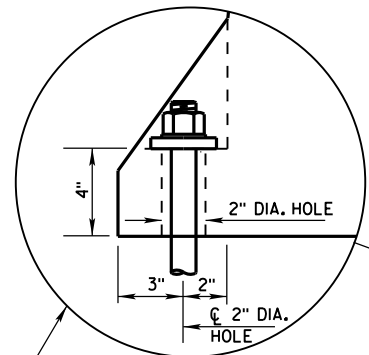


EXPANSION JOINT DETAIL

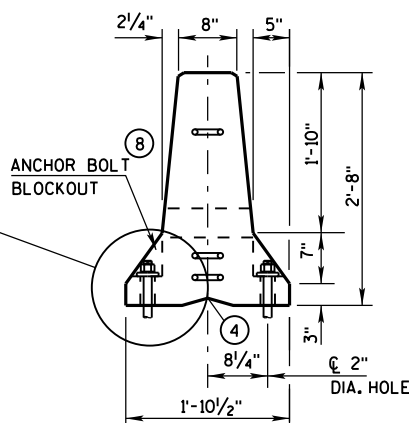
**CONCRETE PAVEMENT
APPROACH SLAB**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

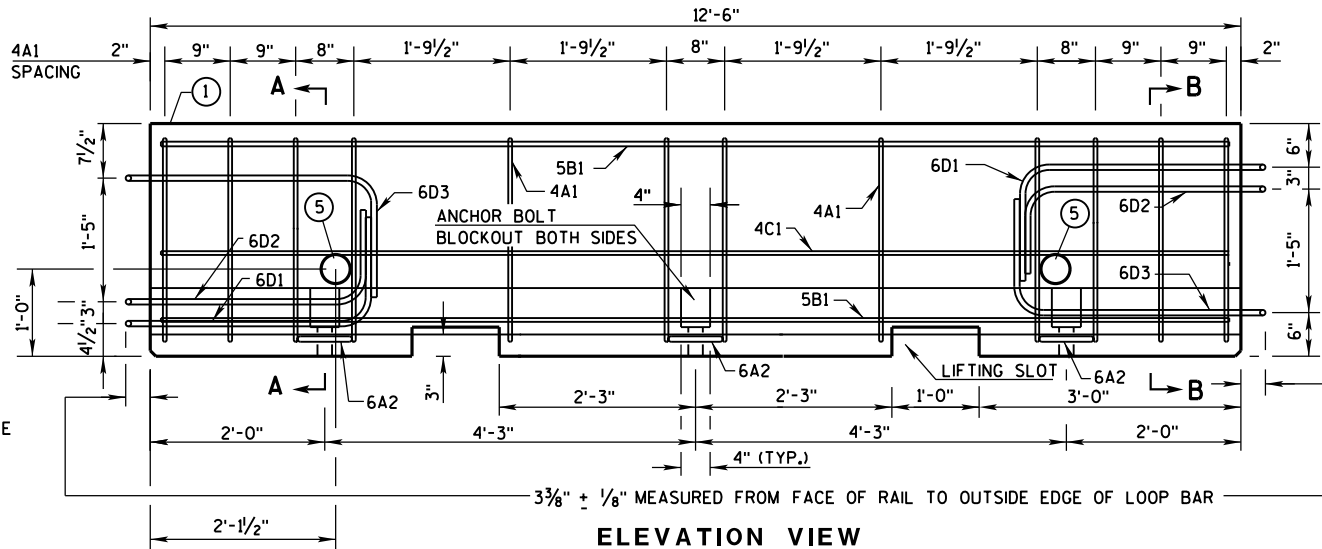
APPROVED
June, 2015 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPERVISOR
FHWA



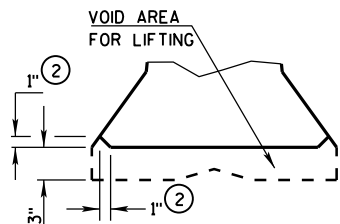
ANCHOR ON TRAFFIC SIDE (8)
ONLY WHEN REQUIRED
(SEE SHEET D FOR ADDITIONAL
ANCHOR DETAIL)



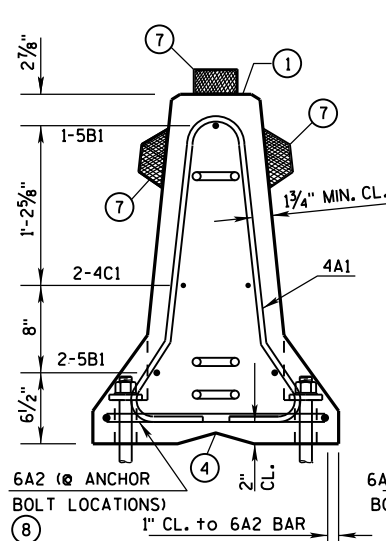
END VIEW



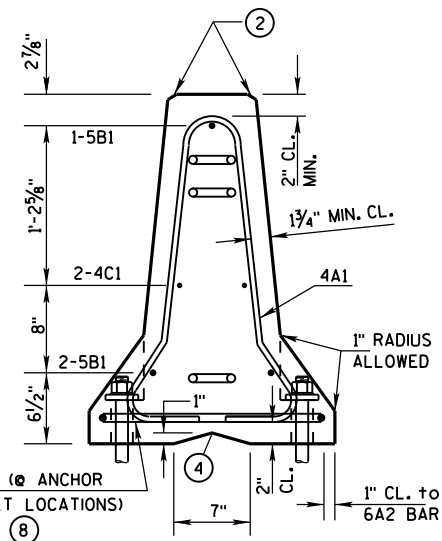
ELEVATION VIEW



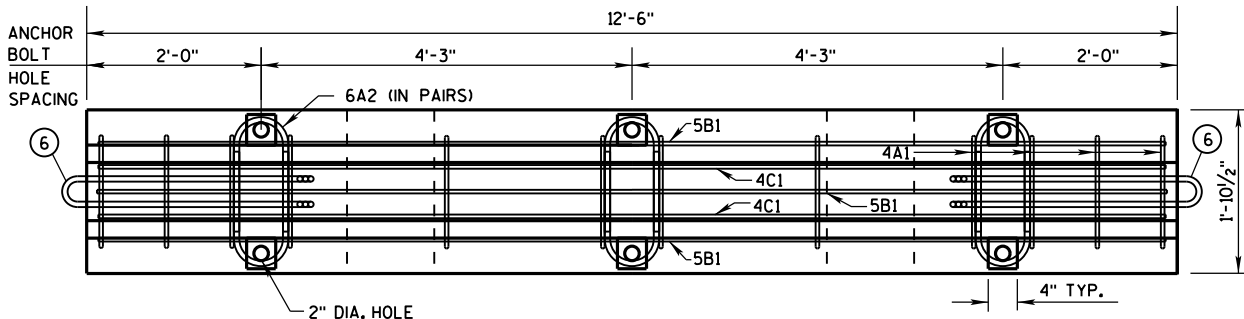
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

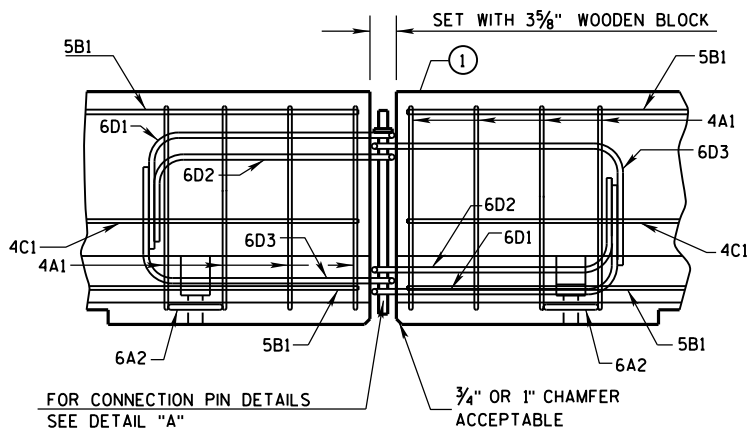


SECTION B-B
(STIRRUP PLACEMENT)

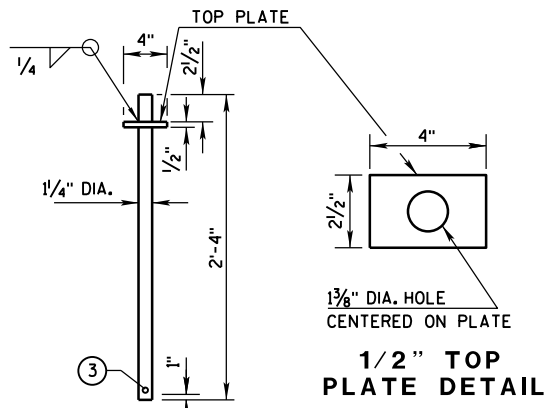


PLAN VIEW

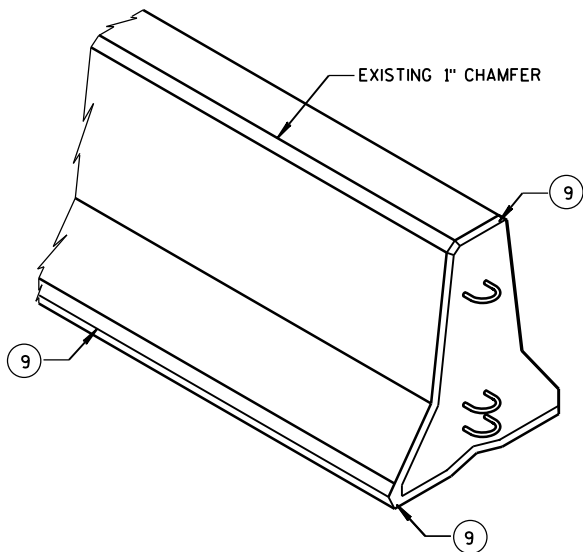
DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(g) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

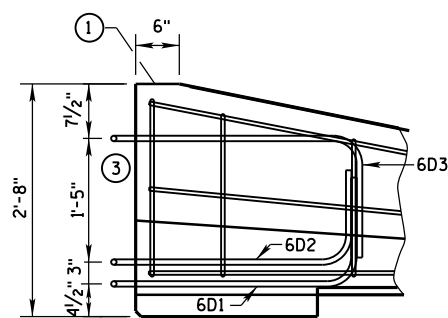
LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE 3/4" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-1/2" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN 1/8" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

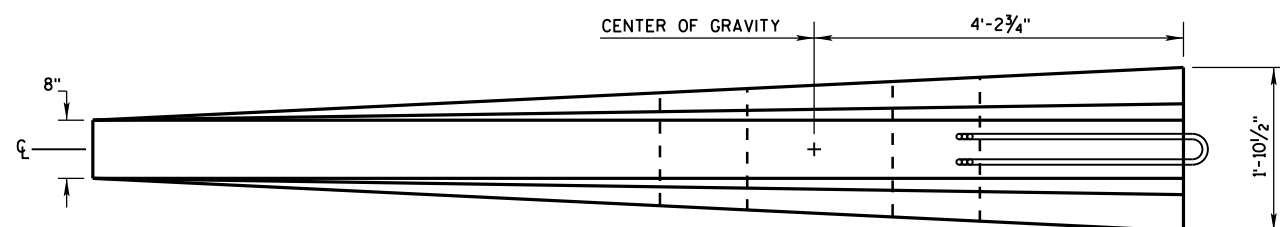
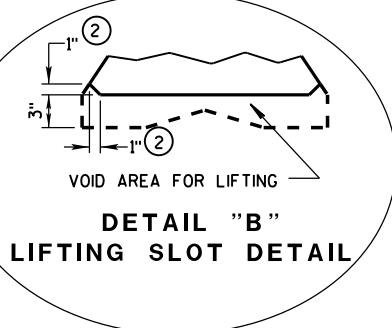
INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

- MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - TYPE: WICBTP
 - MANUFACTURER
 - DATE MANUFACTURED (MONTH AND YEAR)
- 1" CHAMFER TO PREVENT SPALLING.
- A 3/8" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..
- "V" NOTCH IS OPTIONAL.
- THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).
- NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.
- USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURER'S INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.
- SEE SHEET D FOR ANCHORING CRITERIA.
- 1" CHAMFER OPTIONAL.



- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)



**CHAMFER
DETAIL**

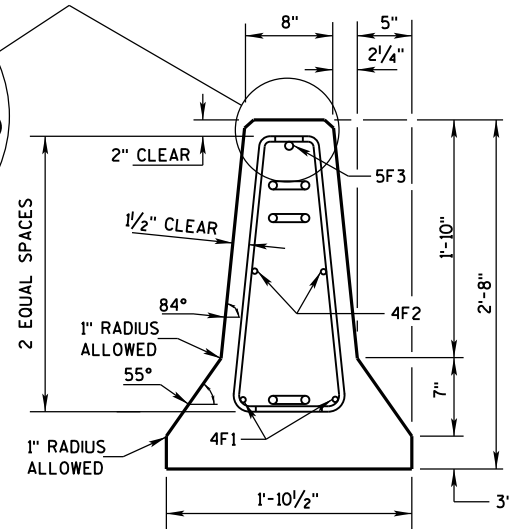


Diagram illustrating the barrier on a curve. The diagram shows a cross-section of a barrier with a 10"± OFFSET and a 5°± MAX. angle. The barrier is divided into sections with dimensions of 12'-6" and 12'-6". The text "BARRIER ON CURVE" is prominently displayed. The "END SECTION" is also indicated.

FLARE AT BARRIER END

| POSTED SPEED, (MPH) | FLARE RATE |
|------------------------|---------------|
| 40 OR LESS | 6:1 |
| 45 OR GREATER | 8:1 |

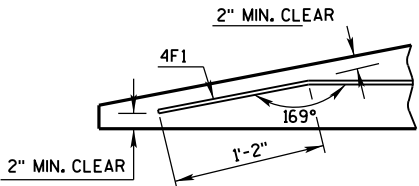
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

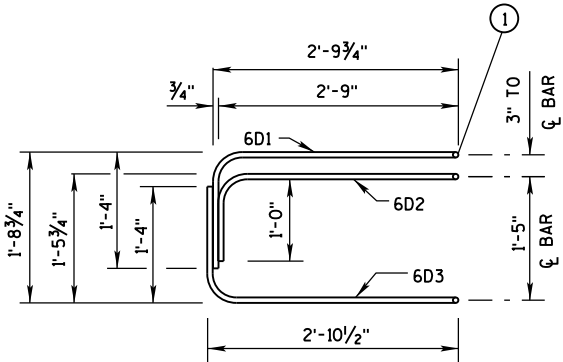
BARRIER TAPER SECTION
BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

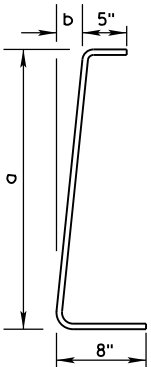
| BAR | BAR SIZE | NO. OF BARS | LENGTH FT. |
|---------------|----------|-------------|------------|
| 4V1 | 4 | 2 | 1'-11" |
| 4V2 | 4 | 2 | 2'-2" |
| 4V3 | 4 | 2 | 2'-6" |
| 4V4 | 4 | 2 | 2'-9" |
| 4V5 | 4 | 2 | 3'-2" |
| 4V6 | 4 | 2 | 3'-4" |
| 4F1 | 4 | 2 | 12'-0" |
| 4F2 | 4 | 2 | 7'-6" |
| 5F3 | 5 | 1 | 11'-9" |
| LOOP ASSEMBLY | | | |
| 6D1 | 6 | 1 | 8'-5" |
| 6D2 | 6 | 1 | 7'-7" |
| 6D3 | 6 | 1 | 8'-6" |



DETAIL "C"
BENT BAR DETAIL



ELEVATION
LOOP BAR ASSEMBLY



| BAR | a | b |
|-----|-----------|--------|
| V1 | 10" | 1" |
| V2 | 1'-1" | 1 1/4" |
| V3 | 1'-5" | 1 5/8" |
| V4 | 1'-8" | 1 7/8" |
| V5 | 2'-0 1/2" | 2 3/8" |
| V6 | 2'-3" | 2 3/4" |

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

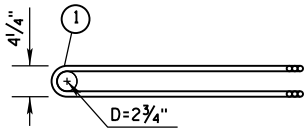
GENERAL NOTES

① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

BARRIER SECTION
BILL OF MATERIALS

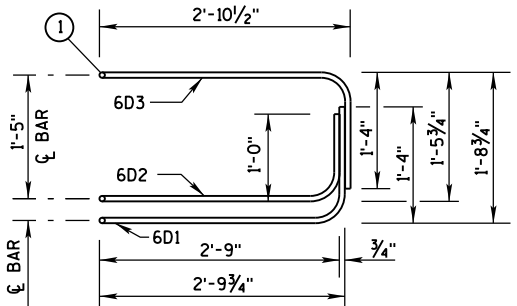
(PER 12'-6" BARRIER SECTION)

| BAR | BAR SIZE | NO. OF BARS | LENGTH FT. |
|---------------|----------|-------------|------------|
| 4A1 | 4 | 12 | 6'-0" |
| 6A2 | 6 | 6 | 2'-11" |
| 5B1 | 5 | 3 | 12'-2" |
| 4C1 | 4 | 2 | 12'-2" |
| LOOP ASSEMBLY | | | |
| 6D1 | 6 | 2 | 8'-5" |
| 6D2 | 6 | 2 | 7'-7" |
| 6D3 | 6 | 2 | 8'-6" |

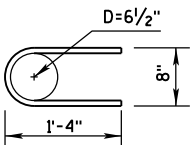


PLAN VIEW
LOOP BAR ASSEMBLY

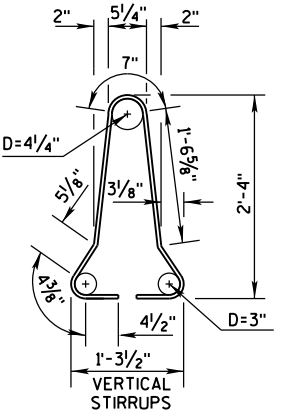
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2

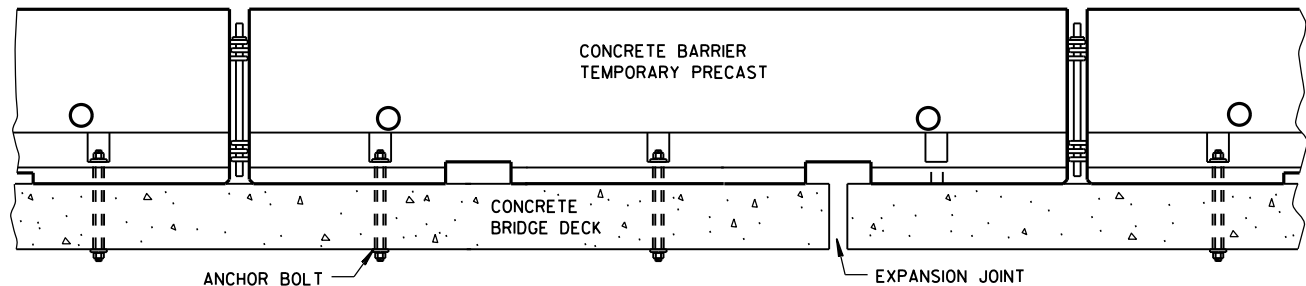
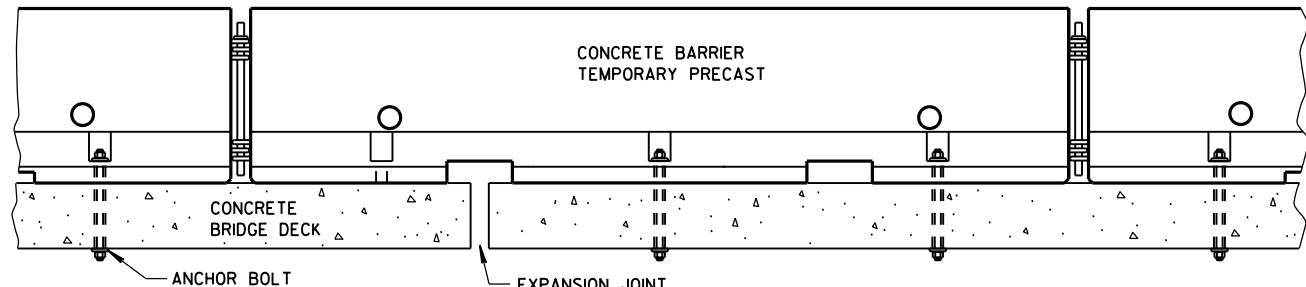


4A1

BARRIER SECTION

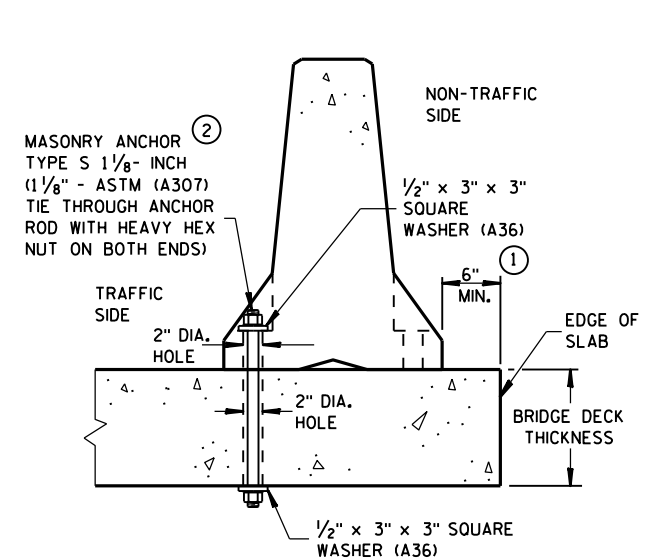
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



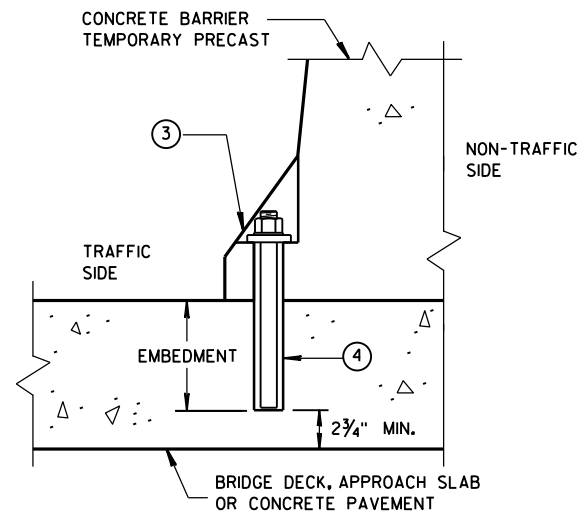
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



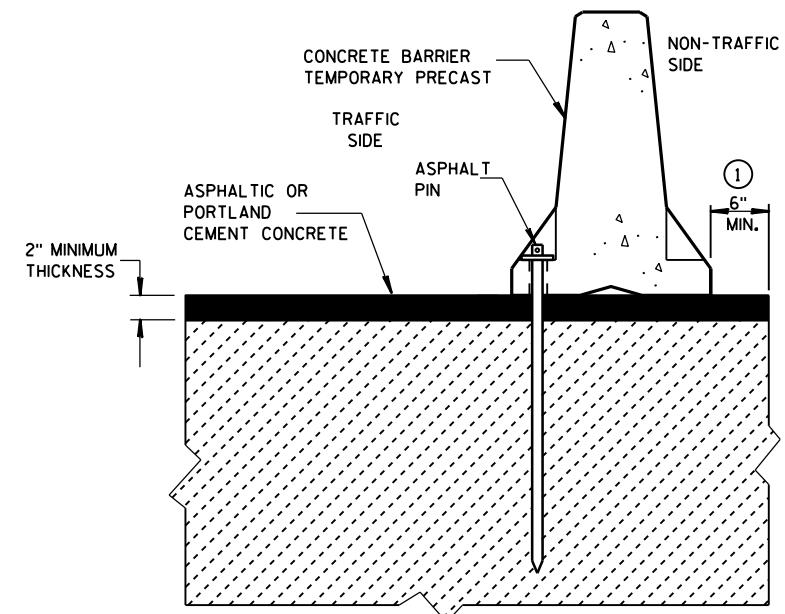
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



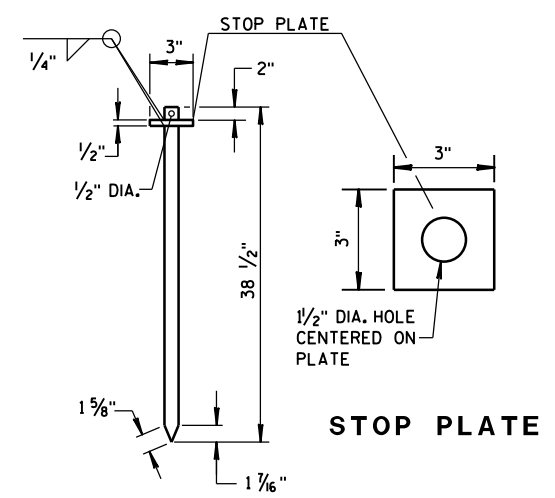
REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

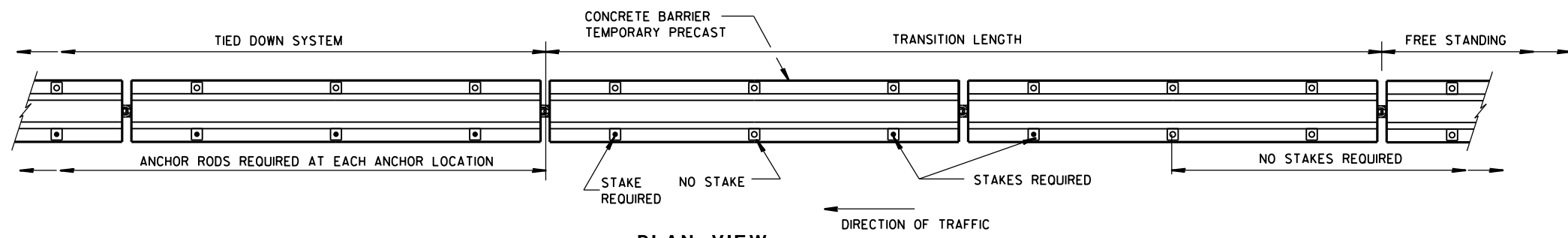


STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



ASPHALT PIN
(ASTM A36 STEEL)



PLAN VIEW FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

GENERAL NOTES

- ① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V,
FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT,
IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF
AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

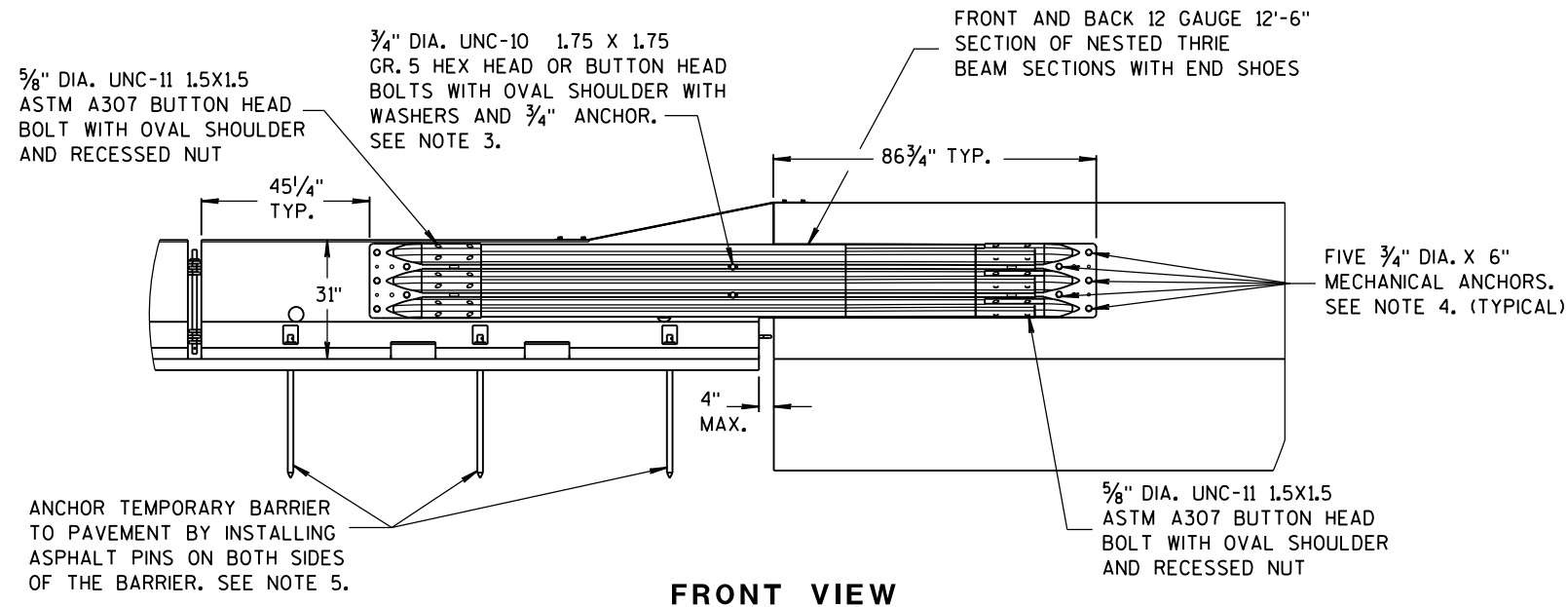
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V,
FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT,
IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF
AND THE POSTED SPEED IS 40 MPH OR LESS.
- ② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED ANCHOR BOLT
INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE
BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE
S 1 1/8"-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE
ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY
FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CON-
CRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERCIAL GROUT OR MATERIAL
IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.
- ③ 1/8" DIAMETER A307 THREADED ROD, 1/2" x 3" x 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL,
ASTM A563A HEAVY HEX NUT.
- ④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5/4" EMBEDMENT. SEE 603.2
AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

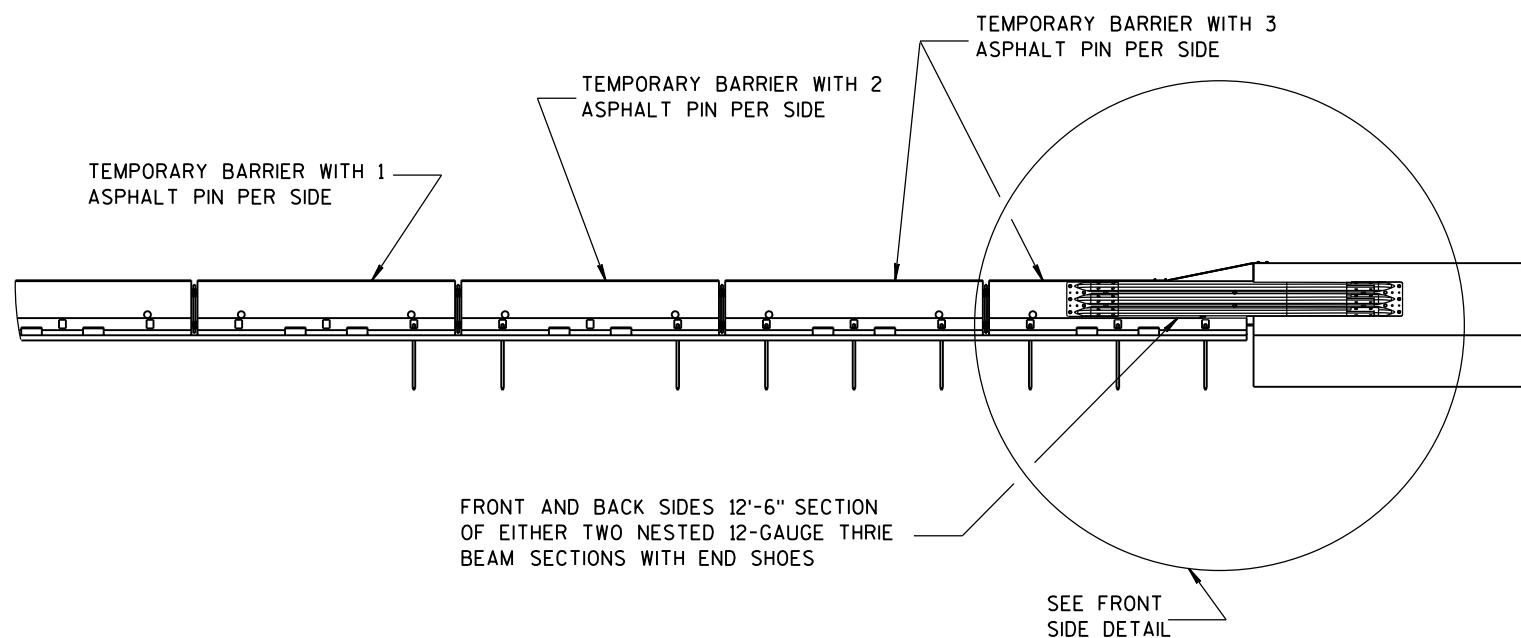
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FRONT VIEW

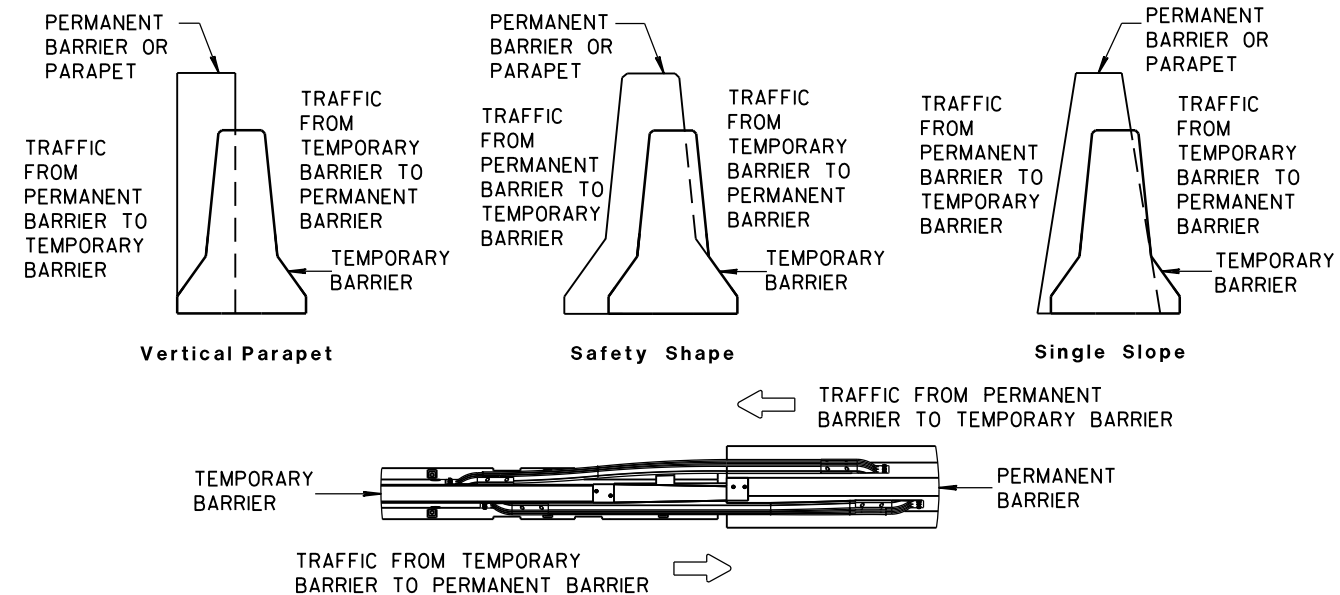
NOTES

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

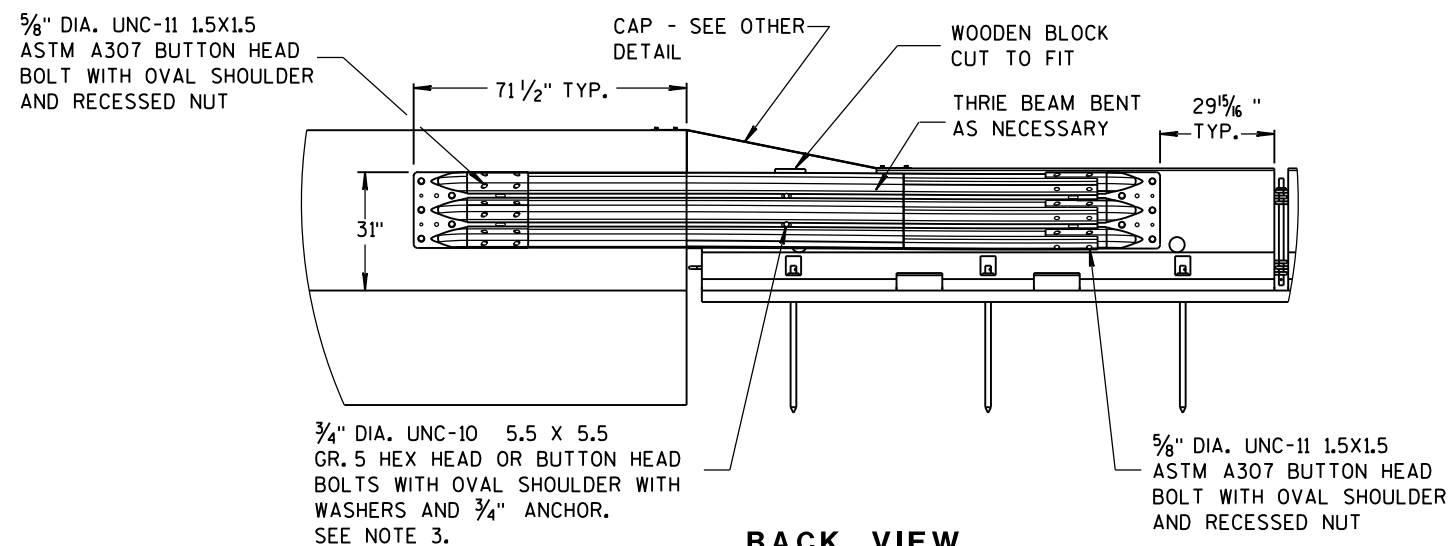


FRONT VIEW

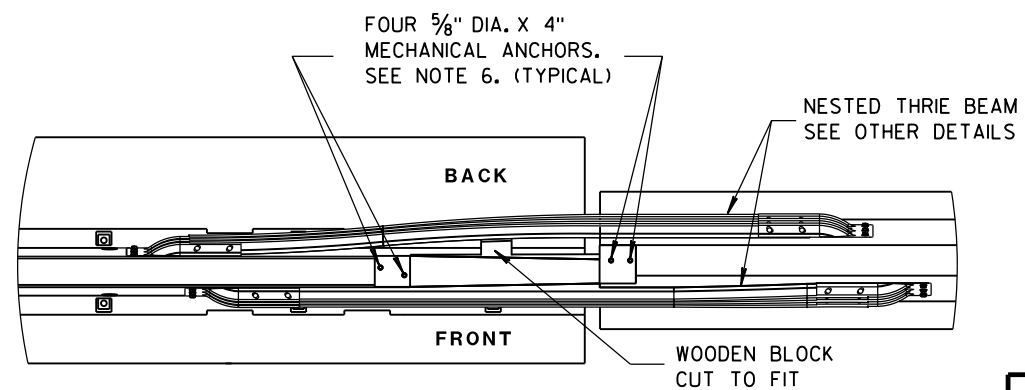
BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



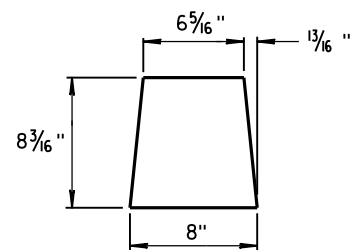
BACK VIEW



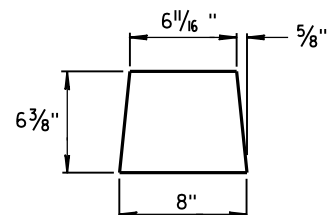
PLAN VIEW

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

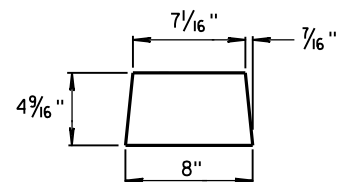
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



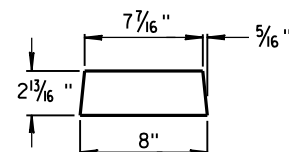
GUSSET 1



GUSSET 2

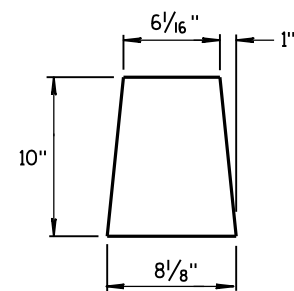


GUSSET 3

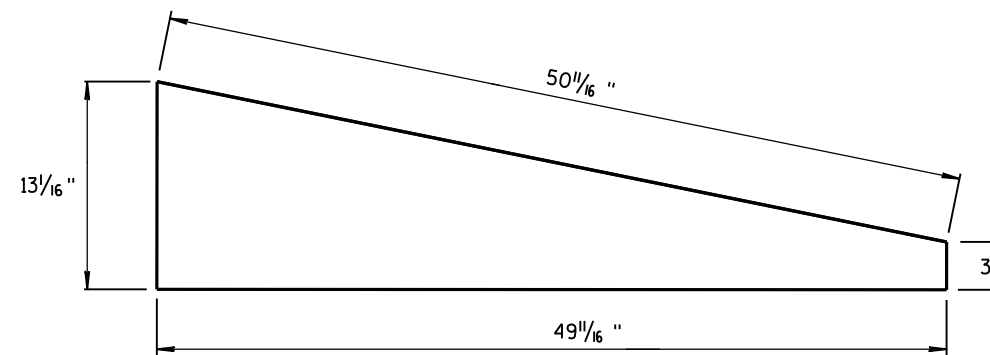


GUSSET 4

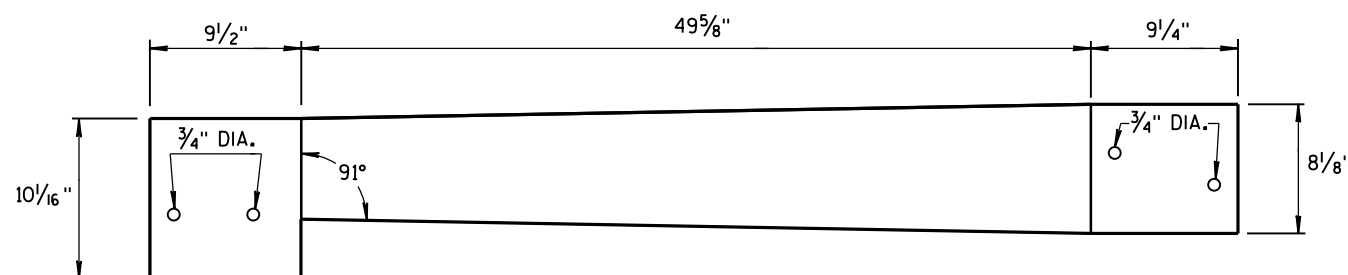
GUSSETS



END PLATE



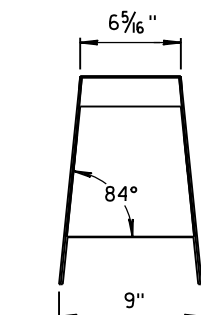
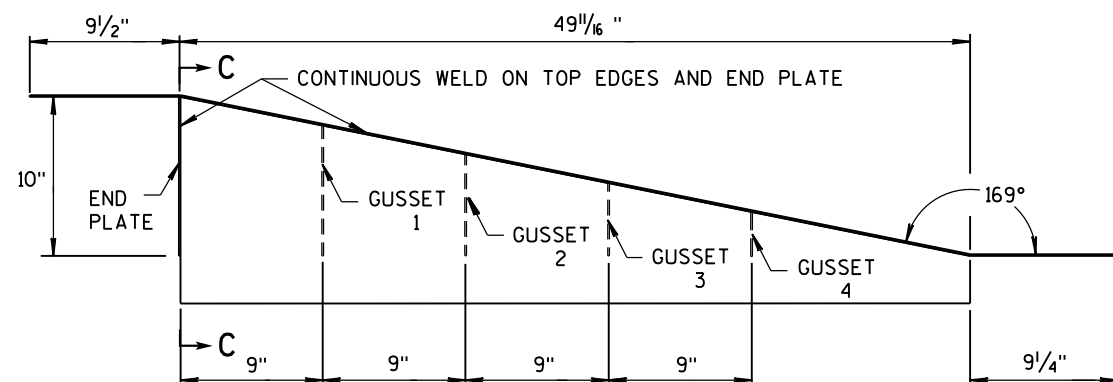
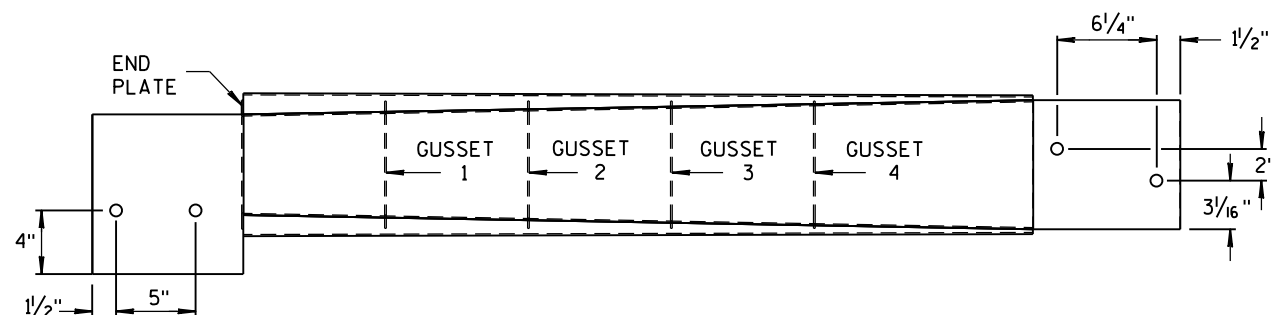
SIDE PLATE



TOP PLATE

**SIDE, TOP AND END PLATES FOR CAP
FROM TEMPORARY CONCRETE BARRIER
TO 42" PERMANENT CONCRETE BARRIER**

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.



SECTION C-C

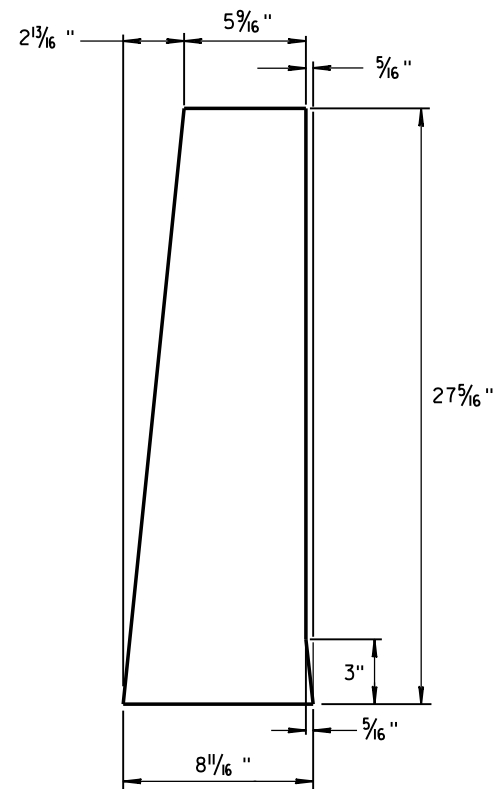
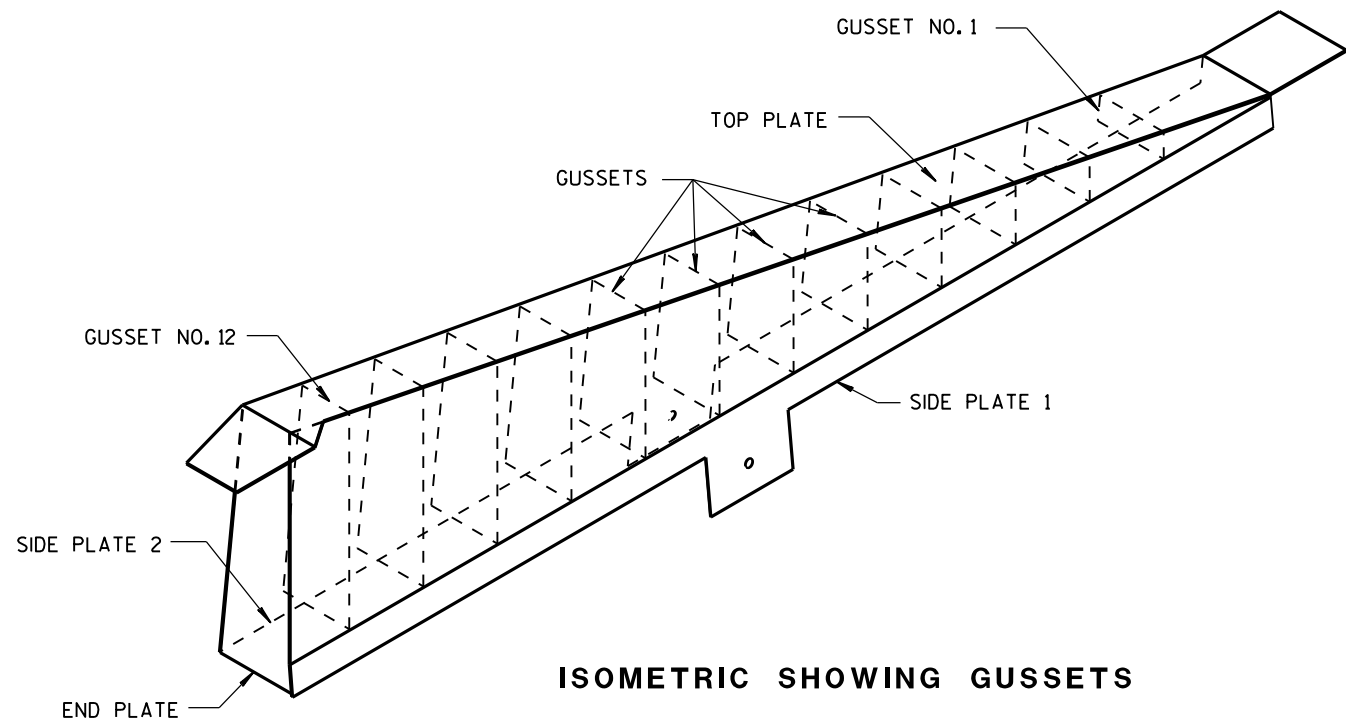
NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

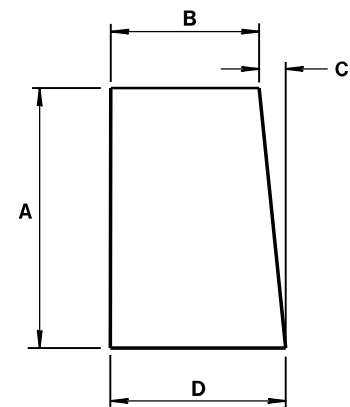
**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 42" PERMANENT CONCRETE BARRIER**

**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



END PLATE
1/8" STEEL PLATE

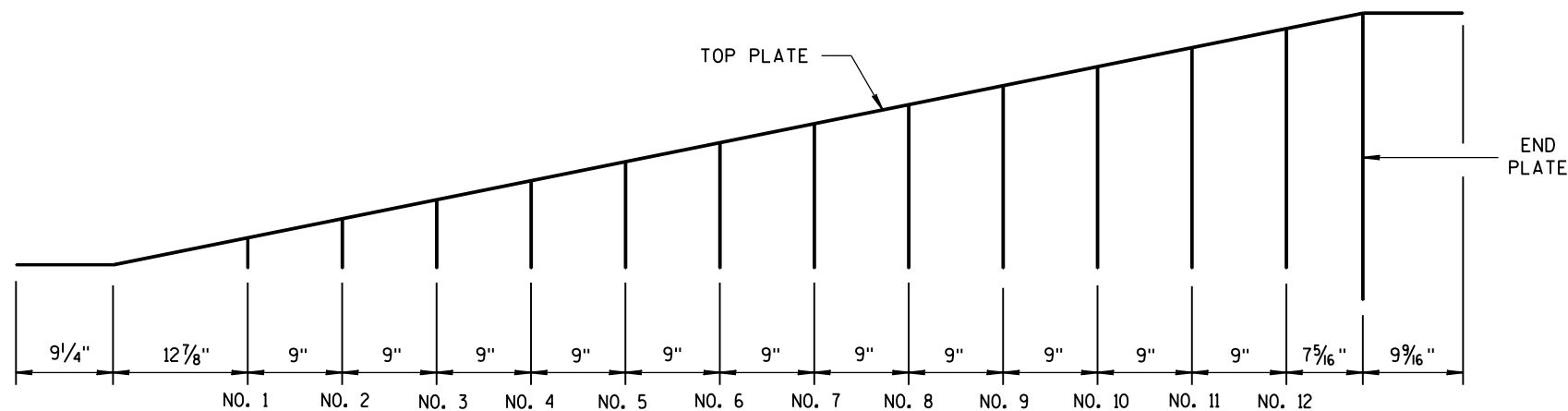


GUSSETS 1 - 12
ALL GUSSETS 1/8" STEEL PLATE

| GUSSET DIMENSIONS | | | | |
|-------------------|------------|-----------|-----------|----------|
| GUSSET NO. | A | B | C | D |
| 1 | 2 7/8" | 7 3/4" | 1/4" | 8 |
| 2 | 4 1/16 " | 7 9/16 " | 1/2" | 8 |
| 3 | 6 1/2" | 7 3/8 " | 11/16 " | 8 1/16 " |
| 4 | 8 5/16 " | 7 3/16 " | 7/8" | 8 1/16 " |
| 5 | 10 1/8 " | 7" | 1 1/16 " | 8 1/16 " |
| 6 | 11 5/16 " | 6 13/16 " | 1 1/4" | 8 1/16 " |
| 7 | 13 3/4" | 6 5/8 " | 1 7/16 " | 8 1/16 " |
| 8 | 15 9/16 " | 6 7/16 " | 1 9/16 " | 8 1/16 " |
| 9 | 17 3/8" | 6 1/4" | 1 13/16 " | 8 1/16 " |
| 10 | 19 3/16 " | 6 1/16 " | 1 15/16 " | 8 1/16 " |
| 11 | 21" | 5 7/8 " | 2 3/16 " | 8 1/16 " |
| 12 | 22 13/16 " | 5 11/16 " | 2 5/16 " | 8 1/16 " |

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

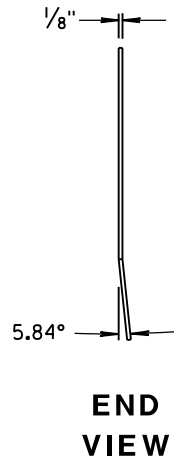
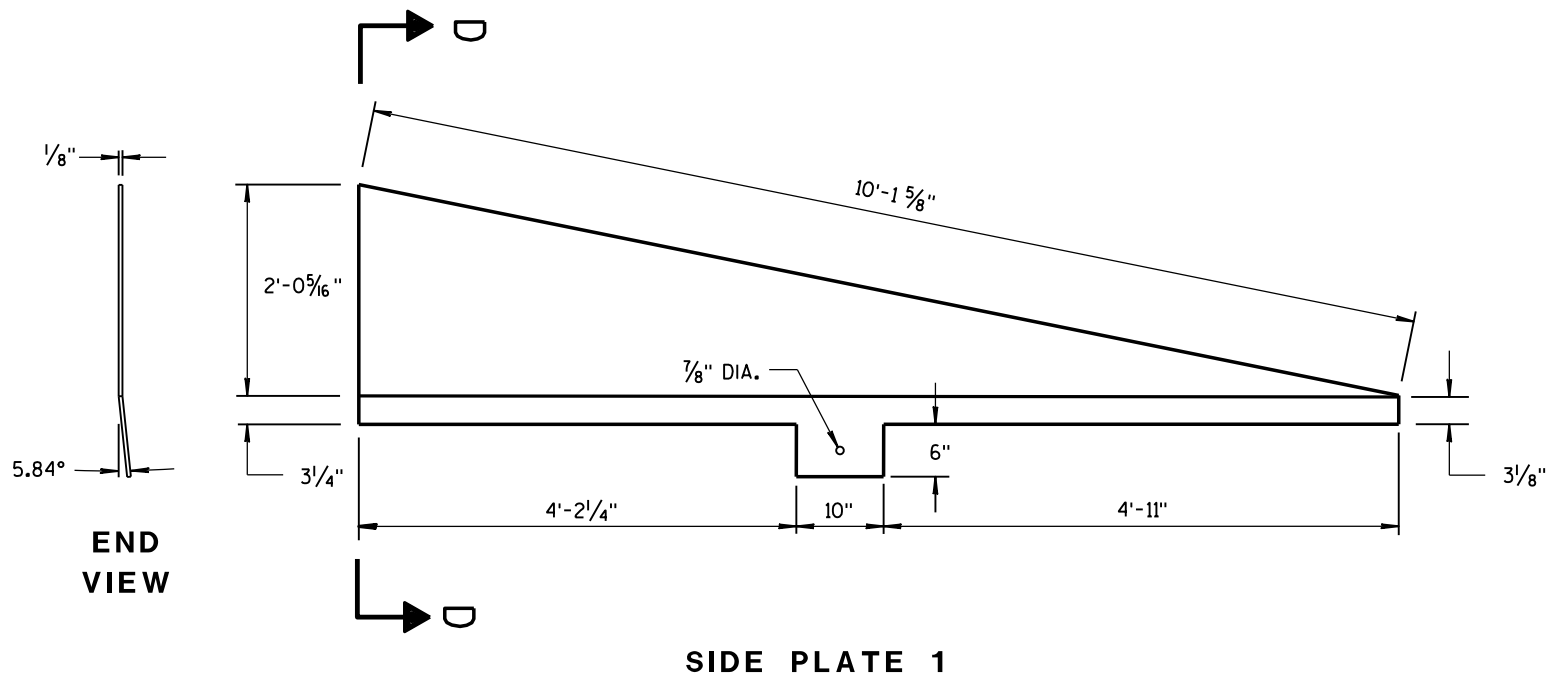
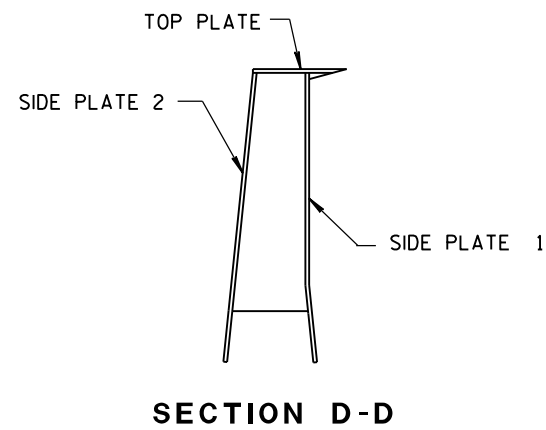
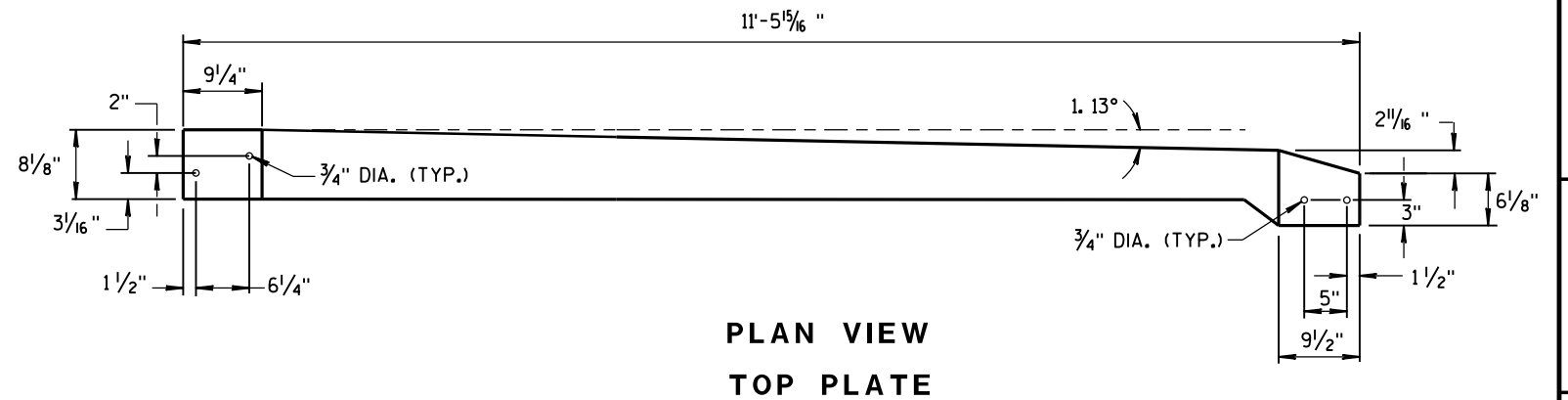
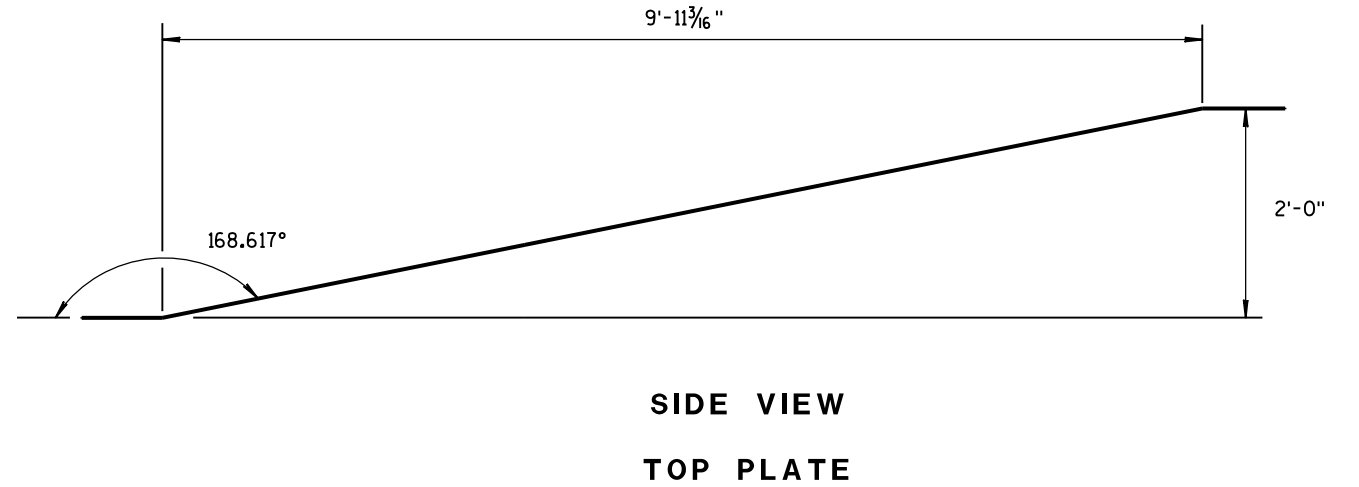
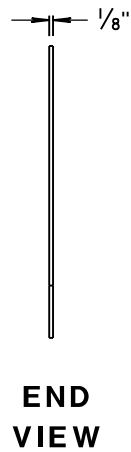
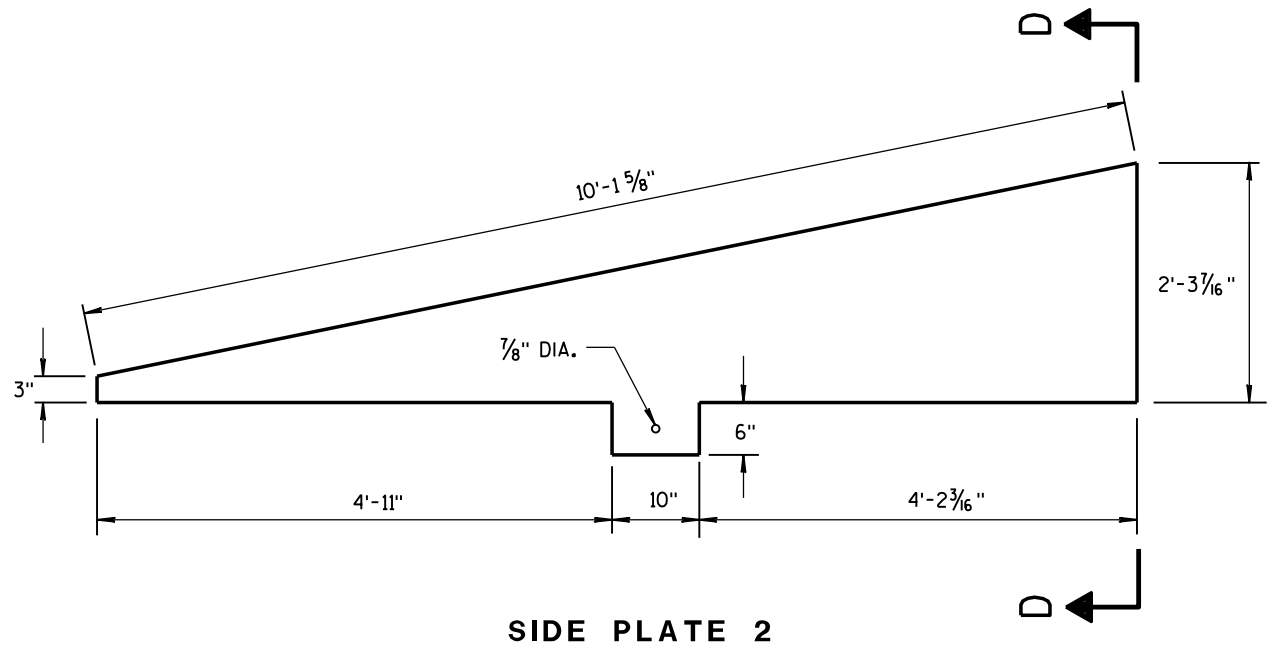
GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

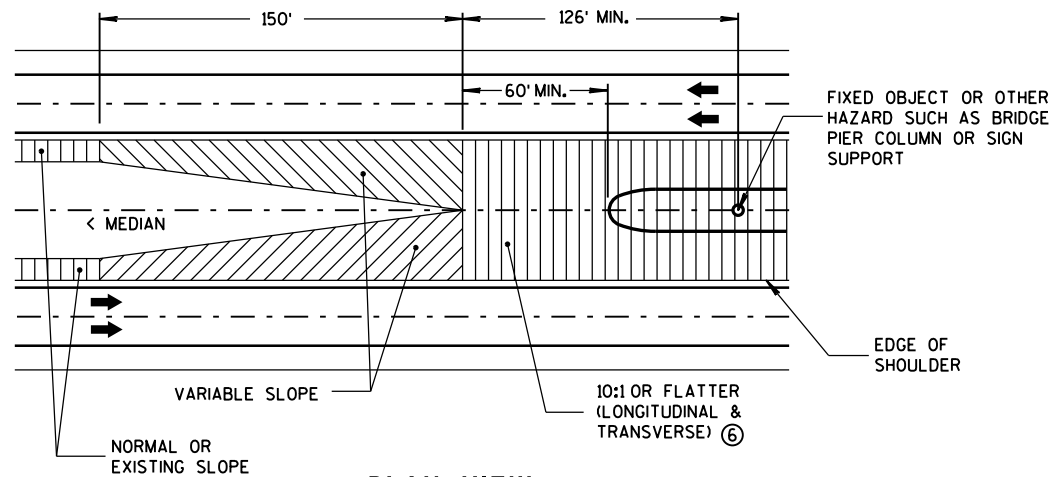
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

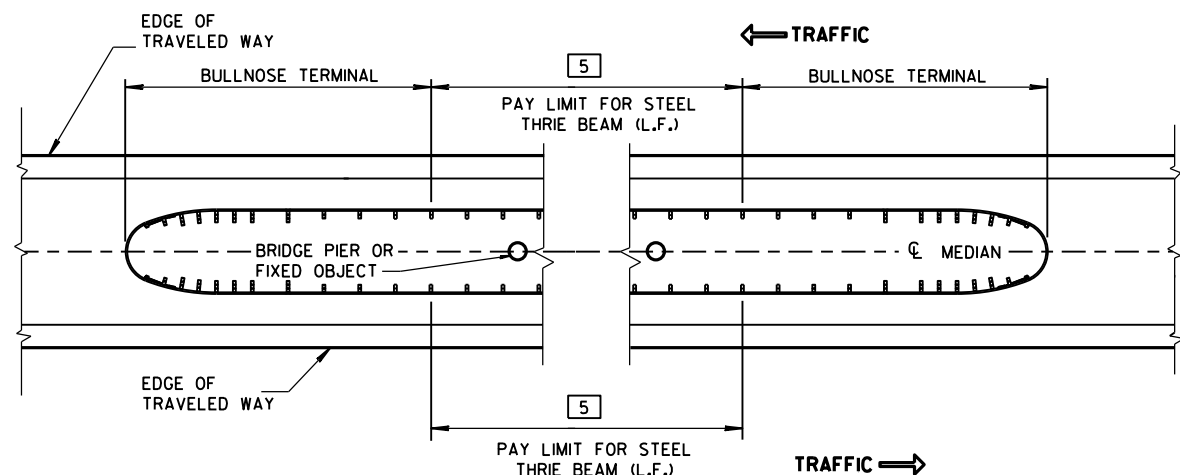


CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 56" PERMANENT CONCRETE BARRIER

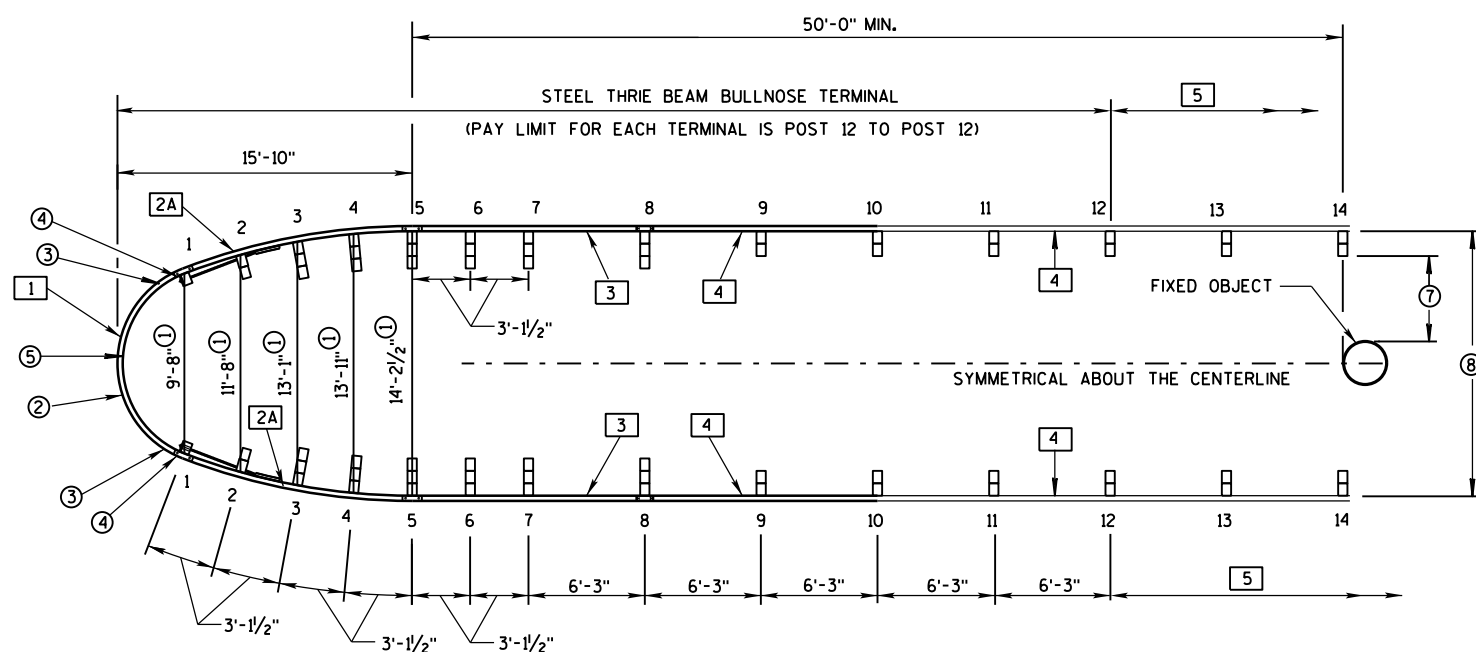
| | |
|--|---|
| CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED June 2014 DATE | /S/ Jerry H. Zogg ROADWAY STANDARD DEVELOPMENT ENGINEER |
| FHWA | |



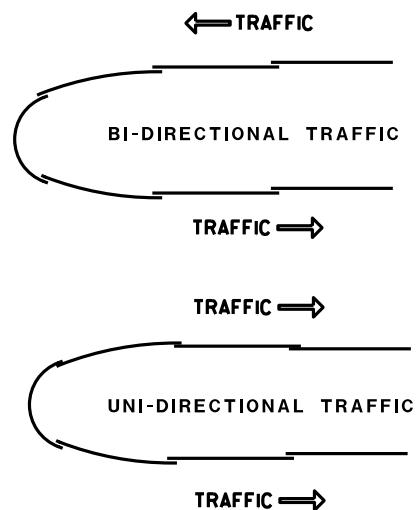
**PLAN VIEW
GRADING AT BULLNOSE
(ALL INSTALLATIONS)**



MEDIAN HAZARD PROTECTION PAY LIMITS



**PLAN VIEW
TYPICAL BULLNOSE LAYOUT**



**LAPPING DETAIL
(ALL INSTALLATIONS)**

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

PUNCHING, DRILLING, CUTTING OR WELDING IS NOT PERMITTED ON ANY GALVANIZED THRIE BEAM ACCESSORY OR TERMINAL ACCESSORY.

OTHER ANCHOR CABLE ASSEMBLIES HAVING 40,000 LBS. MIN. BREAKING STRENGTH MAY BE USED.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

THE USE OF STEEL POSTS ON THE BULLNOSE IS NOT ALLOWED.

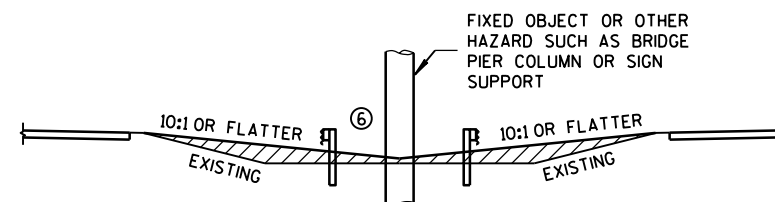
BOLTS AND ALL NECESSARY HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

ALL THRIE BEAM SHALL BE 12-GAUGE.

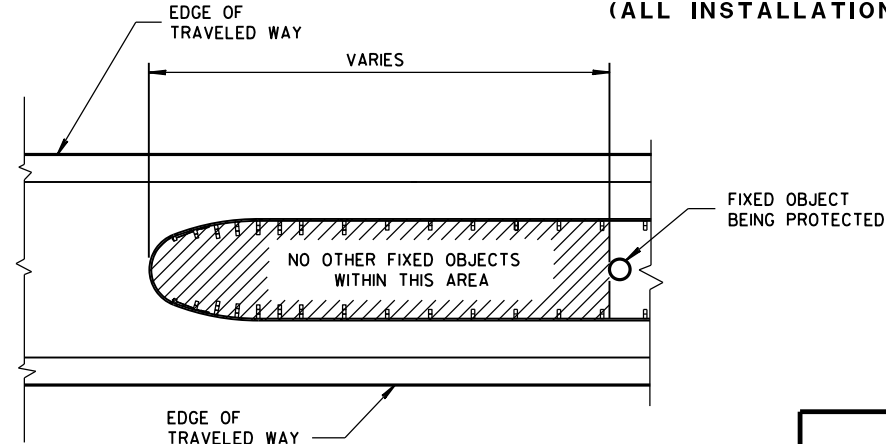
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2" AND 12" DIAMETER AROUND POST. SEE SDD 14B15 OR SDD 14B42 FOR MORE INFORMATION.

- 1 SLOTTED THRIE BEAM RAIL NO.1. (POST 1 TO POST 1)
- 2A SLOTTED THRIE BEAM RAIL NO.2A. (POST 1 TO POST 5)
- 3 SLOTTED THRIE BEAM RAIL NO.3. (POST 5 TO POST 8)
- 4 UNBENT STANDARD THRIE-BEAM RAIL NO.4. (POST 8 TO POST 10 & POST 10 TO POST 12)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO.5.

- ① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.
- ② U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.
- ③ NOSE CABLE W/SWAGGED END BUTTONS.
- ④ NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).
- ⑤ THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO.1 ON EITHER SIDE OF THE NOSE.
- ⑥ PROVIDE SUITABLE DRAINAGE WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.
- ⑦ 2'-6" MINIMUM LATERAL DISTANCE BETWEEN BACK OF POST AND FACE OF FIXED OBJECT.
- ⑧ MAXIMUM WIDTH OF SYSTEM IS 14'-2 1/2" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



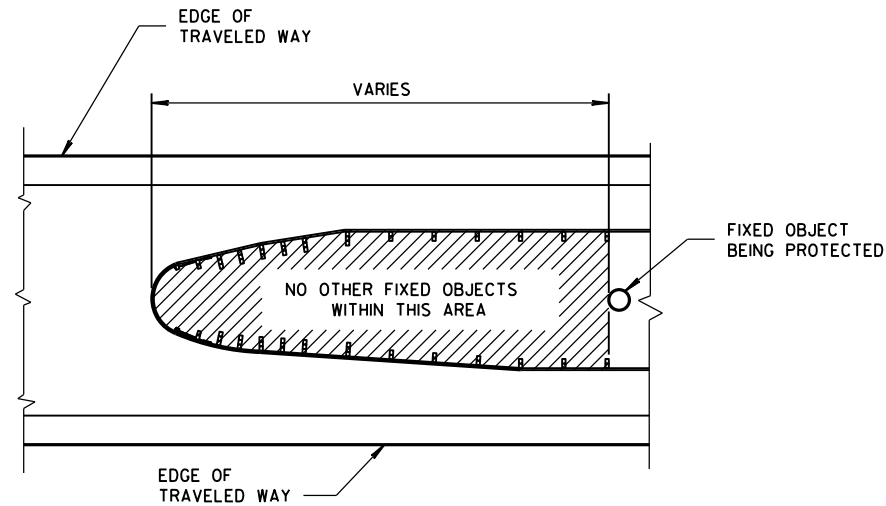
**MEDIAN GRADING SECTION
(ALL INSTALLATIONS)**



**HAZARD FREE
AREA INSIDE BULLNOSE**

**STEEL THRIE BEAM
BULLNOSE TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



HAZARD FREE AREA INSIDE BULLNOSE

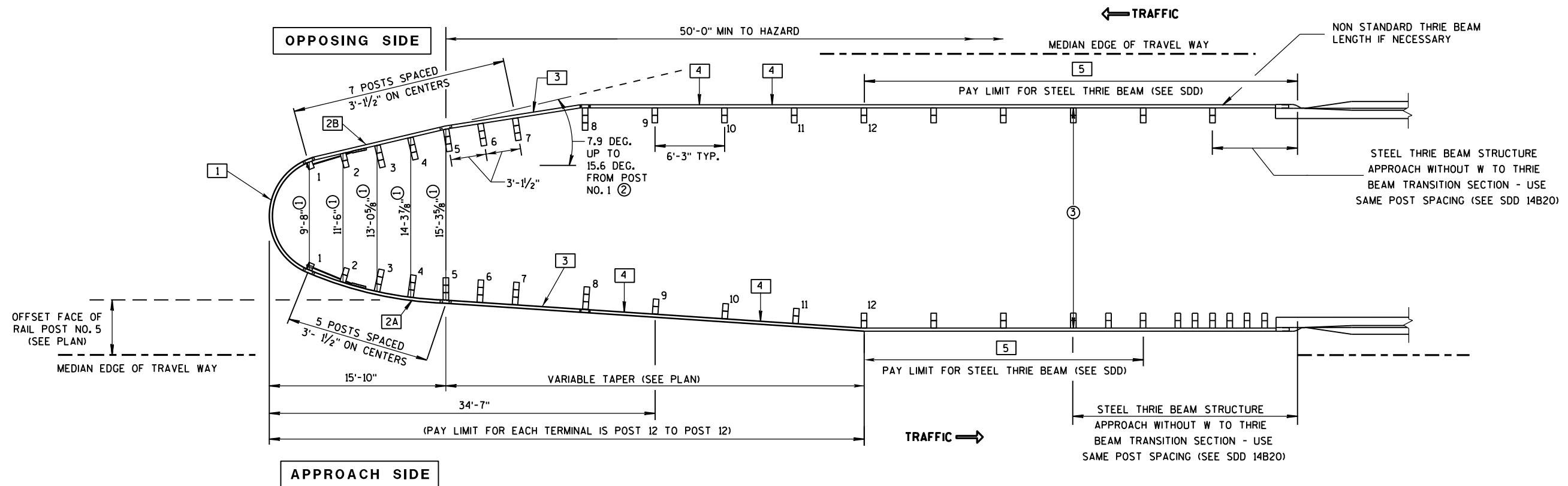
GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

- [1] SLOTTED THRIE BEAM RAIL NO. 1, (POST 1 TO POST 1)
- [2A] SLOTTED THRIE BEAM RAIL NO. 2A, (POST 1 TO POST 5)
- [2B] SLOTTED THRIE BEAM RAIL NO. 2B, (POST 1 TO POST 5)
- [3] SLOTTED THRIE BEAM RAIL NO. 3, (POST 5 TO POST 8)
- [4] UNBENT STANDARD THRIE-BEAM RAIL NO. 4, (POST 8 TO POST 10 & POST 10 TO POST 12)
- [5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

- ① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST.
- ② TAPER BEGINNING AT POST NO. 1 MUST CONTINUE TO POST NO. 5. PAST POST NO. 5 TAPER MAY END OR BE EXTENDED UP TO 15.6 DEGREES TO FIT VARIABLE MEDIAN WIDTHS. (SEE PLAN)
- ③ FOR MEDIANS WIDER THAN 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



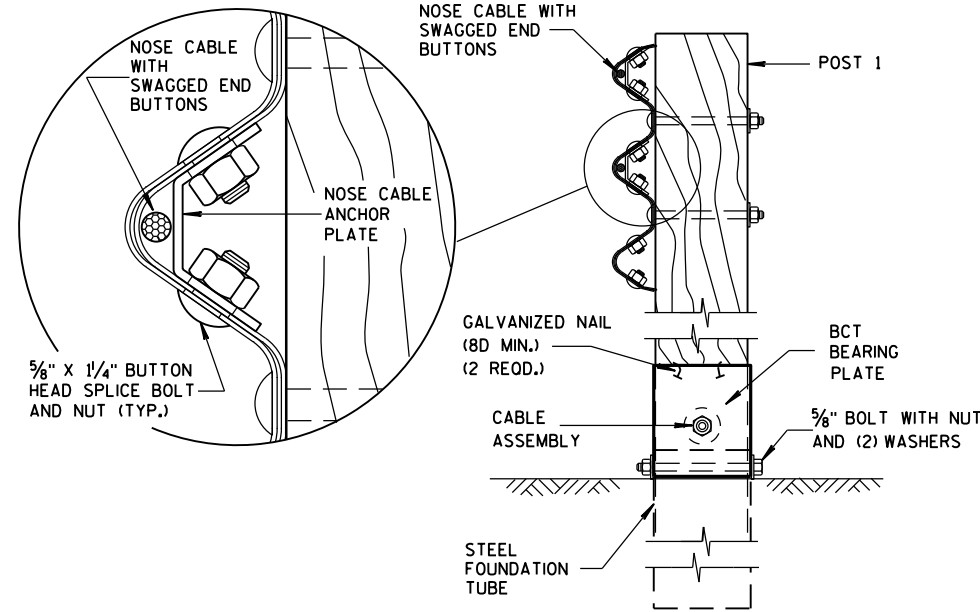
PLAN VIEW

WIDENED BULLNOSE DESIGN

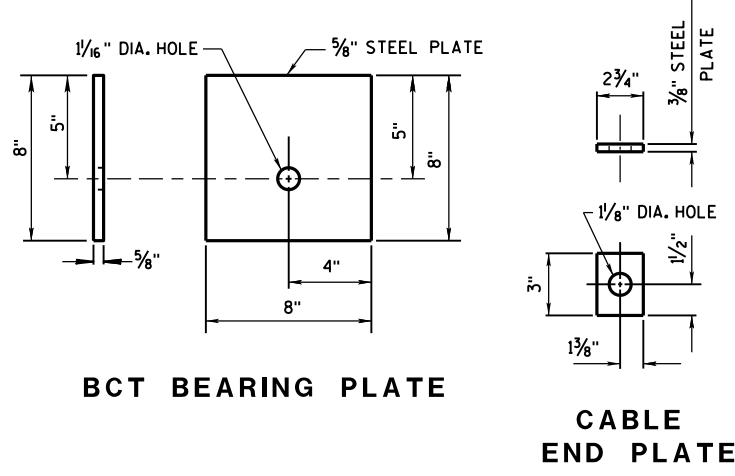
(INSTALLATION AT TWIN BRIDGES WITH BI-DIRECTIONAL TRAFFIC SHOWN)

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

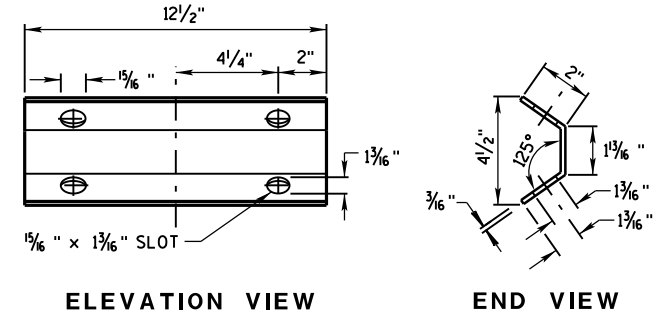


NOSE CABLE ASSEMBLY AT POST NO. 1



BCT BEARING PLATE

CABLE END PLATE

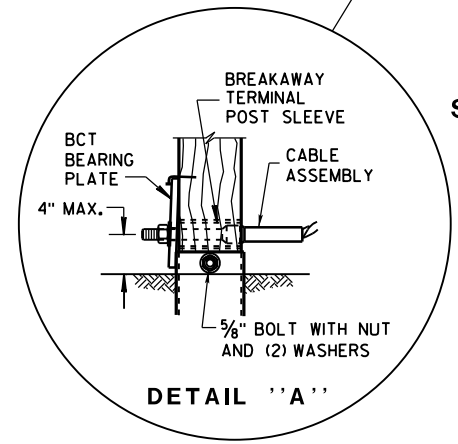


ELEVATION VIEW

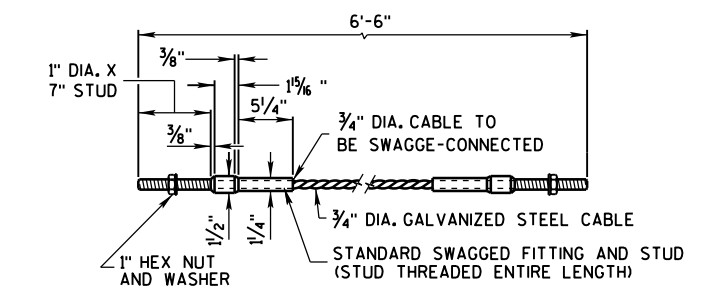
END VIEW

NOSE CABLE ANCHOR PLATE

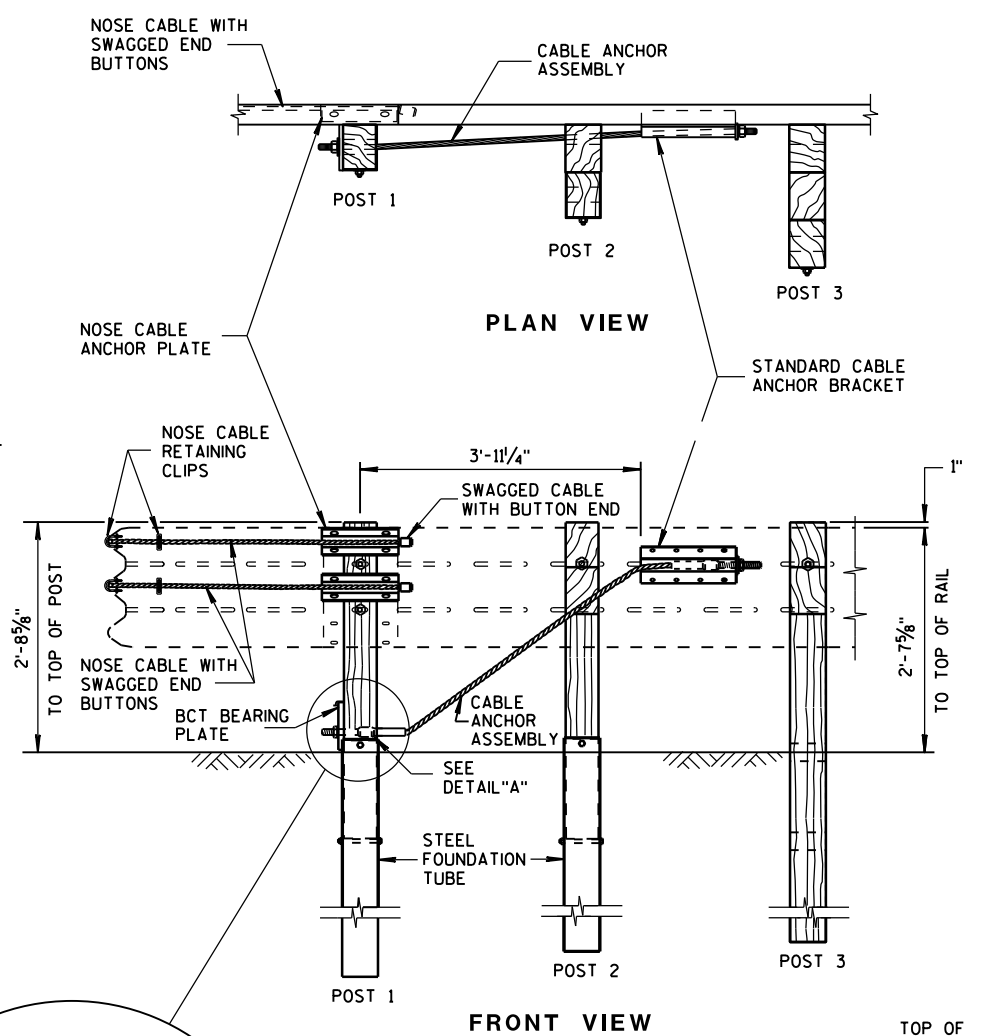
NOTE: 12 1/2" x 5 13/16" x 3/16" STEEL PLATE (A306)



DETAIL 'A'



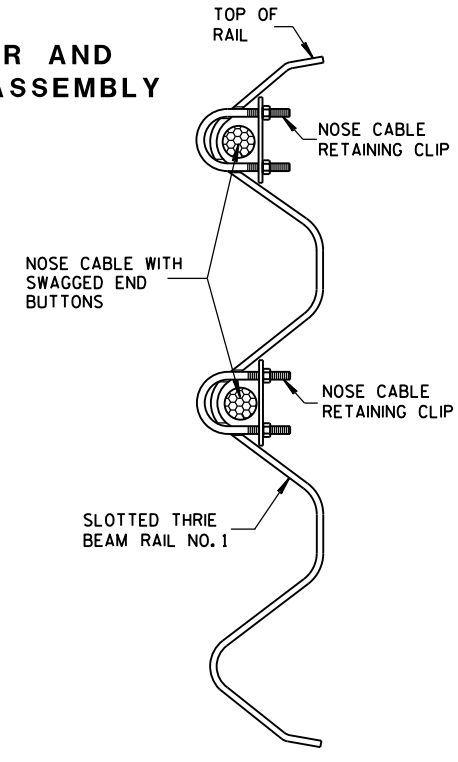
DETAILS OF CABLE ANCHOR ASSEMBLY



PLAN VIEW

FRONT VIEW

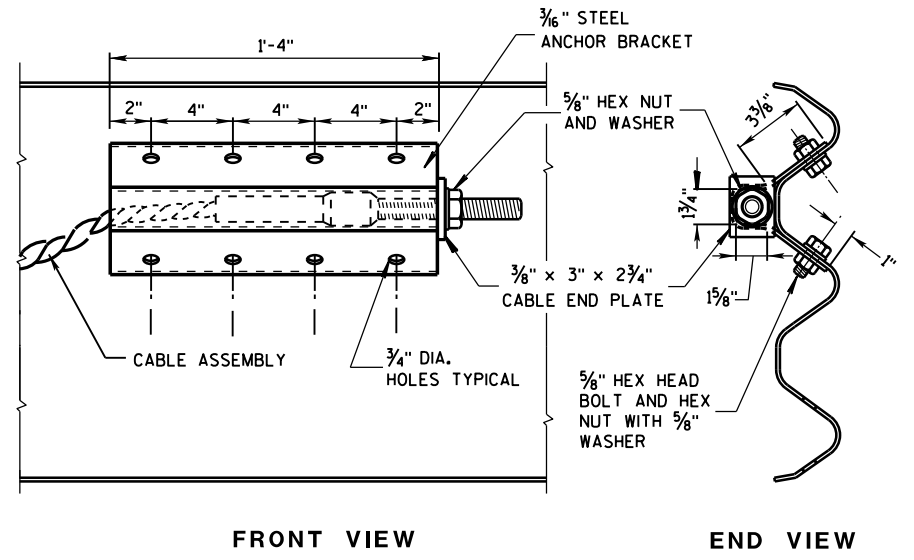
NOSE CABLE ANCHOR AND STANDARD BRACKET ASSEMBLY



PLACEMENT OF NOSE CABLE RETAINING CLIP

GENERAL NOTES

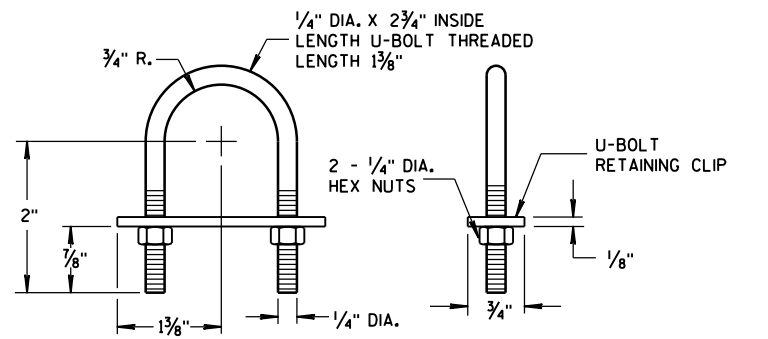
SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



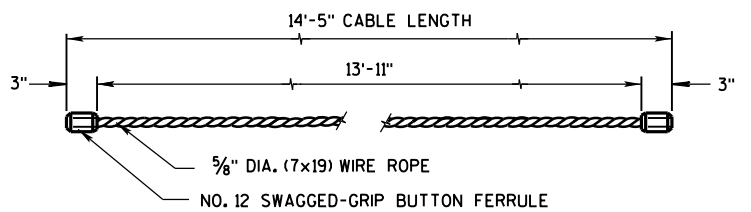
FRONT VIEW

END VIEW

DETAILS OF CABLE ANCHOR BRACKET



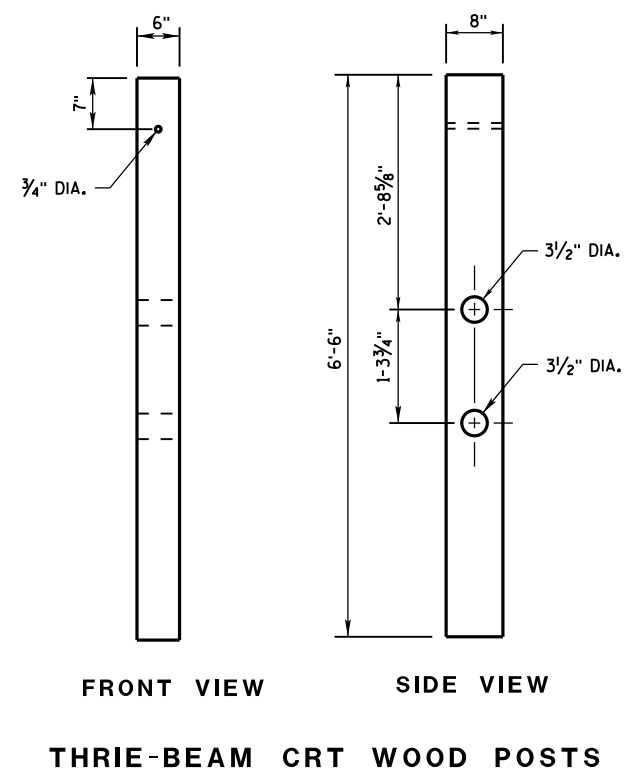
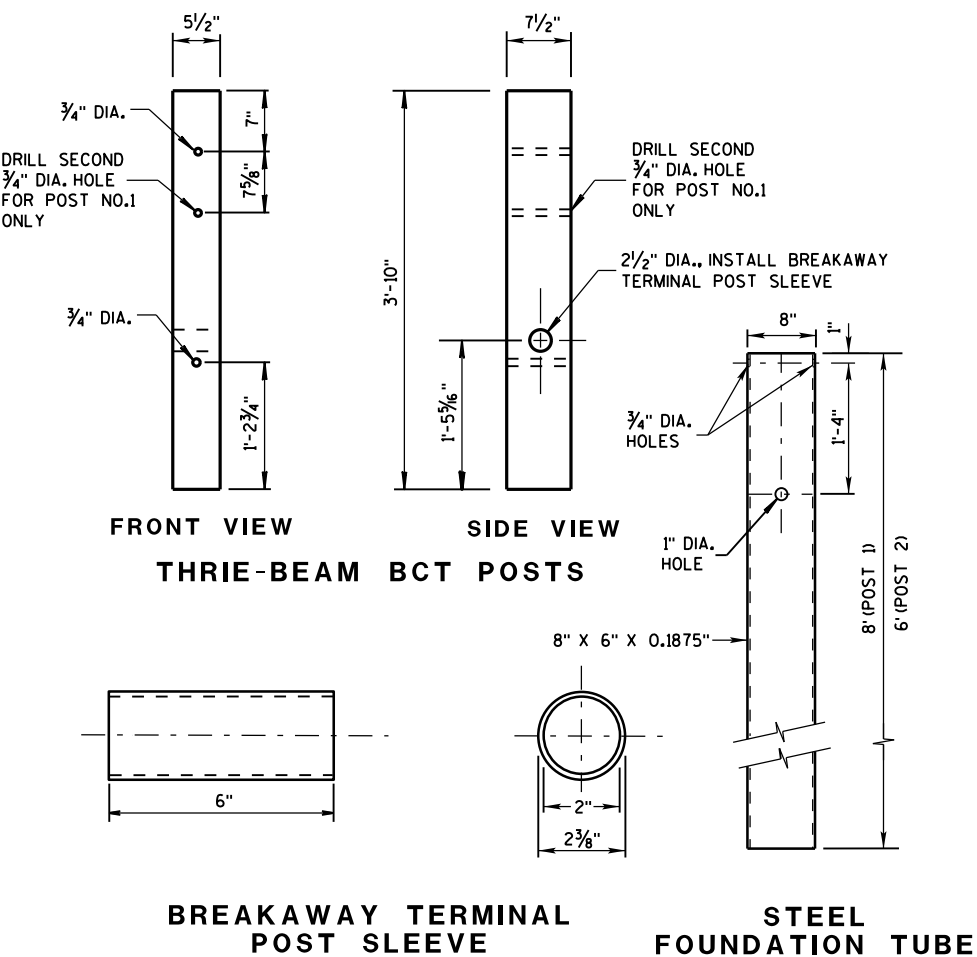
NOSE CABLE RETAINING CLIP



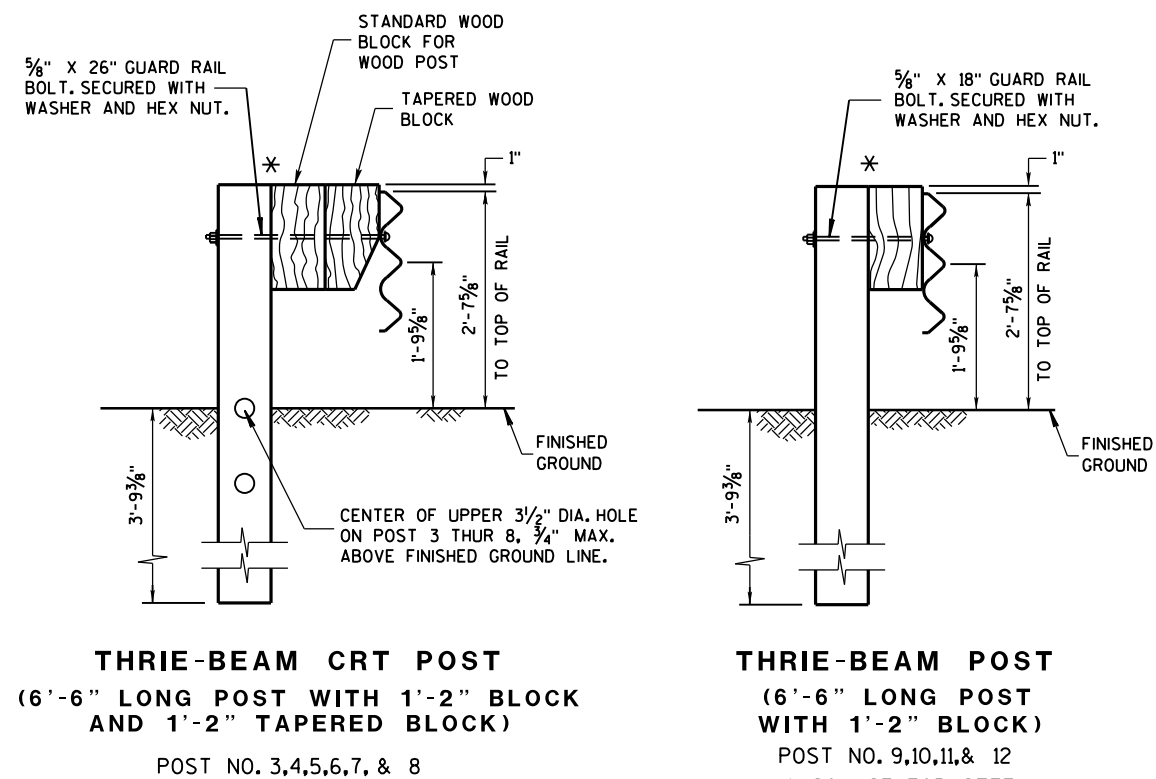
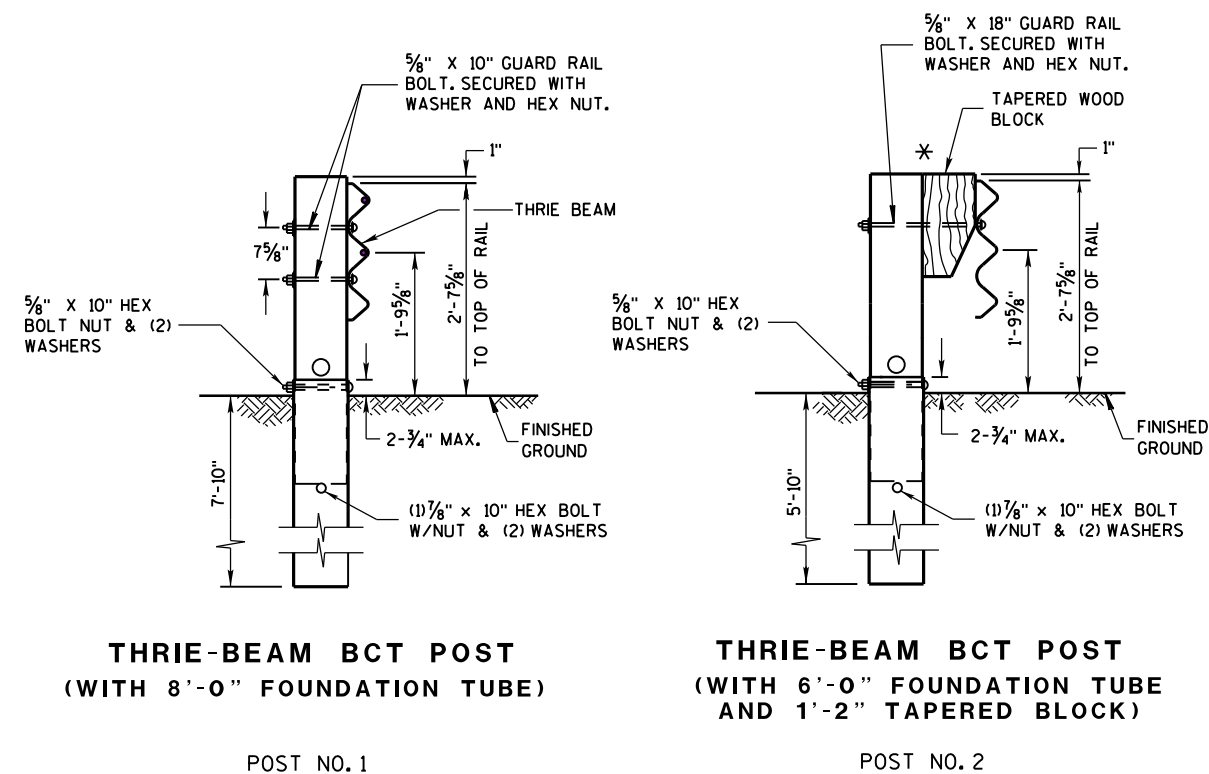
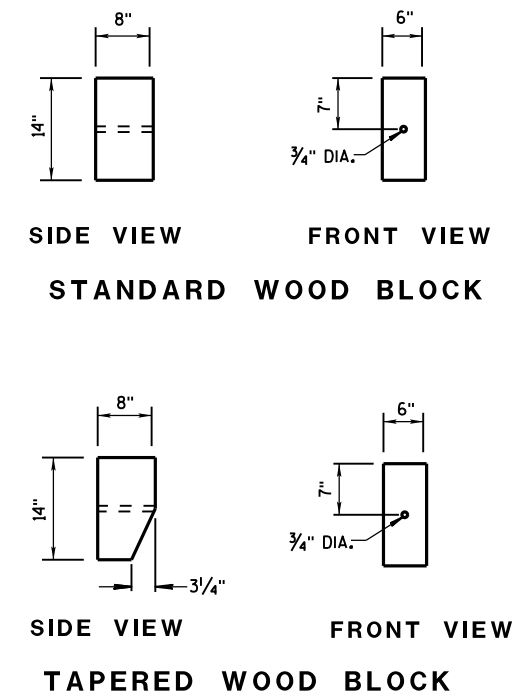
NOSE CABLE WITH SWAGGED END BUTTONS

TO PULL OFF SWAGGED GRIP BUTTON FERRULE FROM WIRE ROPE REQUIRES A FORCE EQUAL TO 98% OF THE WIRE ROPE'S BREAKING STRENGTH.

| |
|--|
| STEEL THRIE BEAM BULLNOSE TERMINAL |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION |

**GENERAL NOTES**

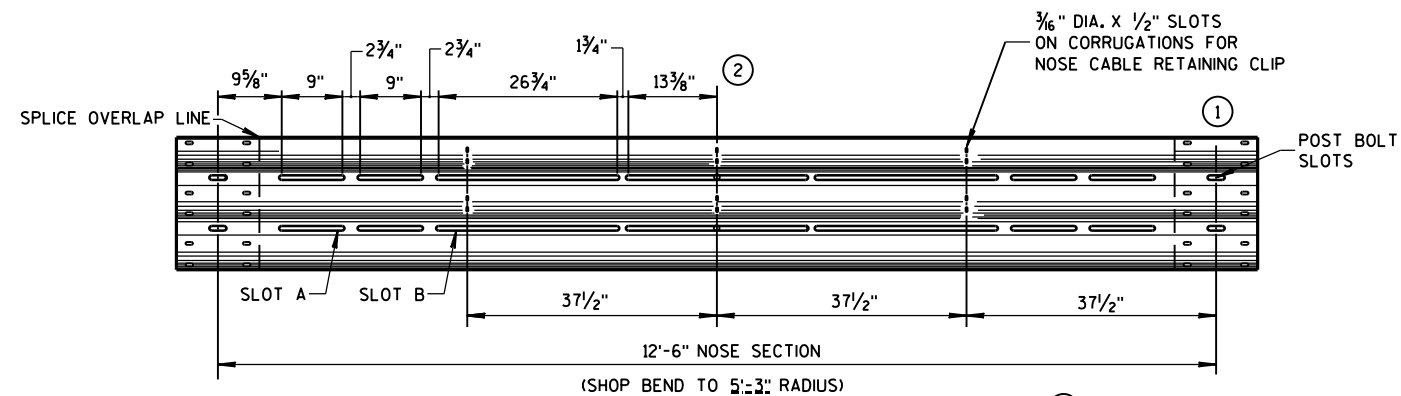
SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



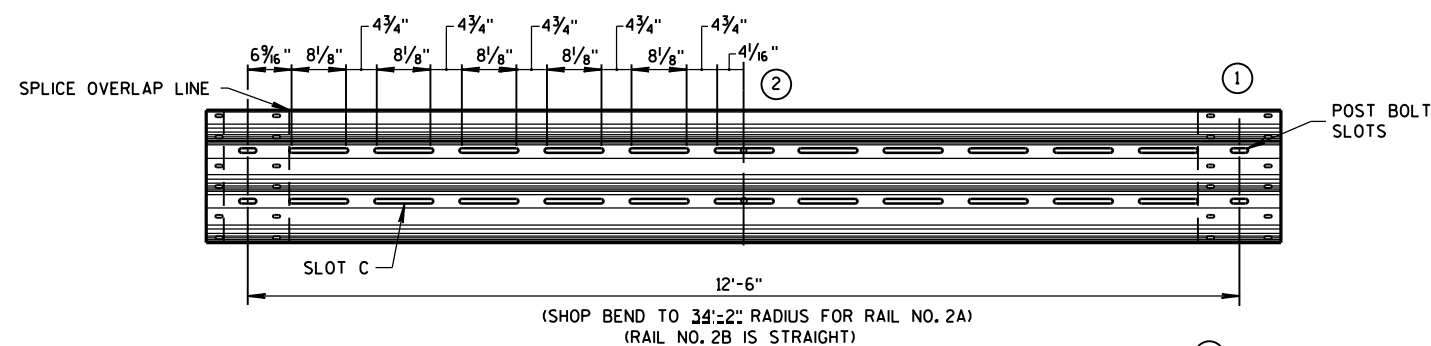
* IF NEEDED DUE TO AN UNDERGROUND OBSTACLE ADD 1 ADDITIONAL STANDARD BLOCKOUT TO POST.

STEEL THRIE BEAM BULLNOSE TERMINAL

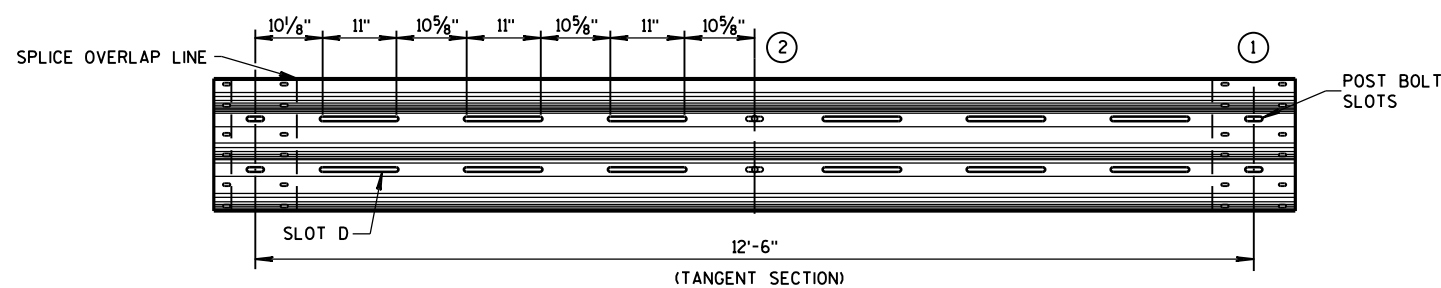
**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**



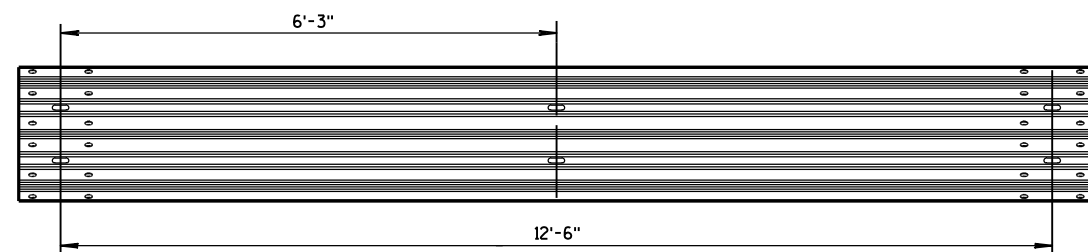
SLOTTED THRIE BEAM RAIL NO. 1 ③



SLOTTED THRIE BEAM RAILS NO. 2A AND NO. 2B ④



SLOTTED THRIE BEAM RAIL NO. 3 ⑤

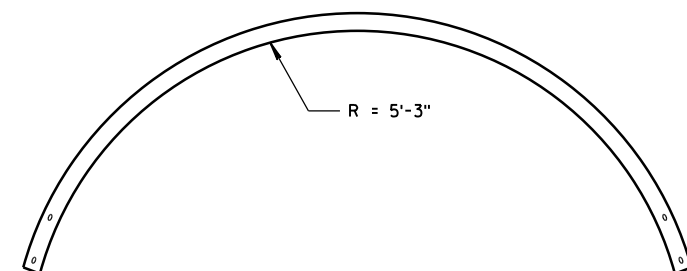


UNBENT STANDARD THRIE BEAM RAIL NO. 4 AND NO. 5

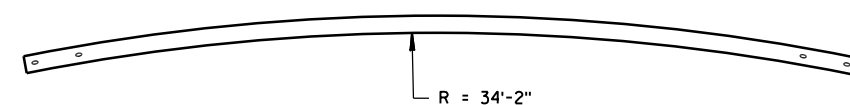
GENERAL NOTES

SEE STANADRD DETAIL DRAWINGS 14 B 26a-e.

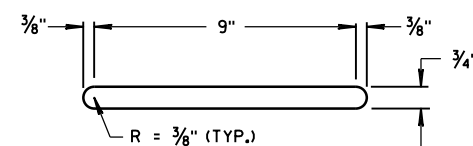
- ① SLOTTED THRIE BEAM RAIL DIMENSIONS SHOWN ARE BEFORE BENDING TO THE RADIUS SHOWN.
- ② SLOT SIZE AND SPACING SYMMETRIC.
- ③ SLOTTED THRIE BEAM RAIL NO. 1, 12'-6", SHOP BEND TO R=5'-3".
- ④ SLOTTED THRIE BEAM RAIL NO. 2A, 12'-6", SHOP BEND TO R=34'-2".
SLOTTED THRIE BEAM RAIL NO. 2B, 12'-6", RAIL IS STRAIGHT.
- ⑤ SLOTTED THRIE BEAM RAIL NO. 3, 12'-6", TANGENT.



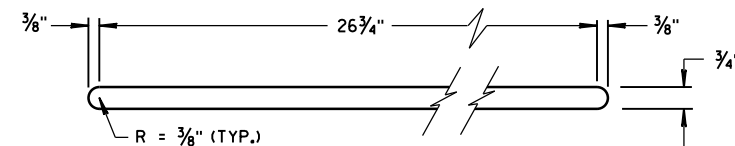
**PLAN VIEW
SLOTTED THRIE BEAM RAIL NO. 1**



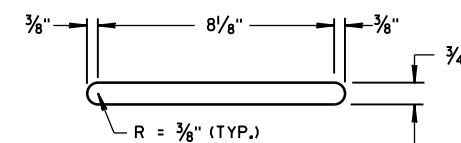
**PLAN VIEW
SLOTTED THRIE BEAM RAIL NO. 2A**



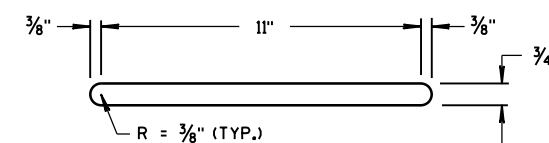
SLOT A



SLOT B



SLOT C



SLOT D

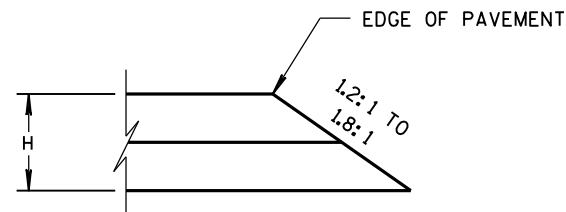
SLOT DETAILS

**STEEL THRIE BEAM
BULLNOSE TERMINAL**

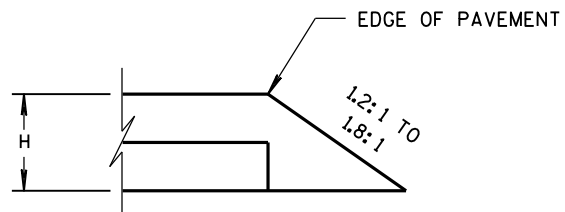
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
FHWA

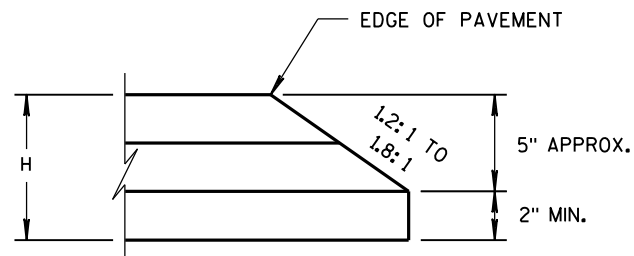
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



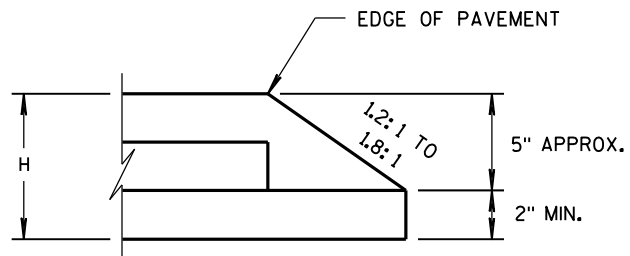
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

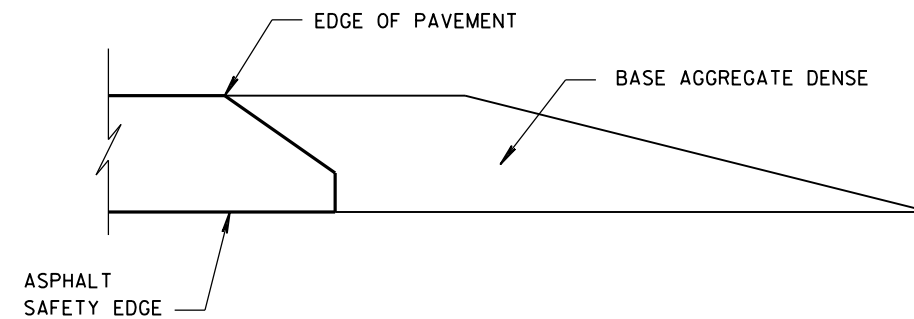


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS

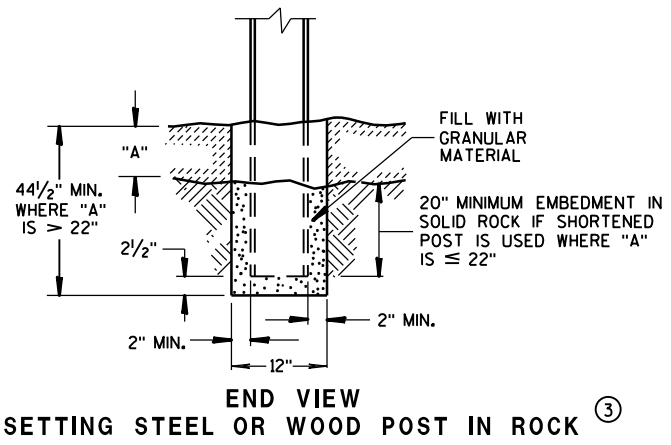


FINISHED SHOULDER AGGREGATE PLACEMENT

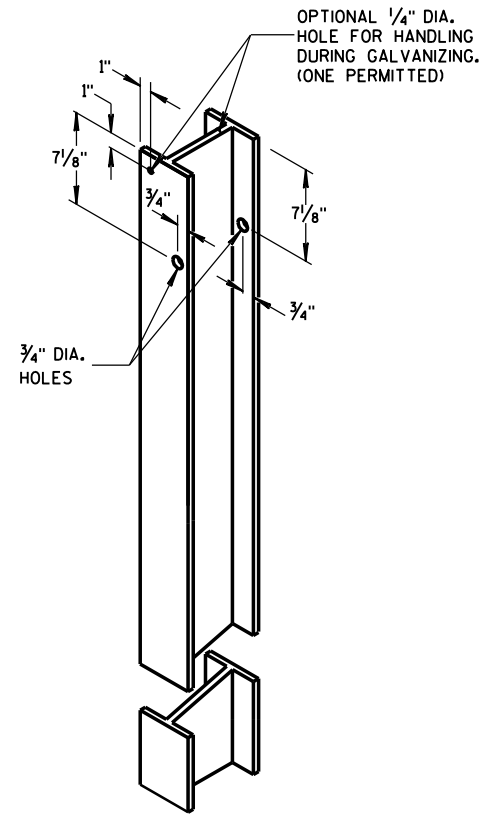
| | |
|--|--|
| SAFETY EDGE _{SM} | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED DATE 11/30/2012 | /S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER FHWA |

GENERAL NOTES

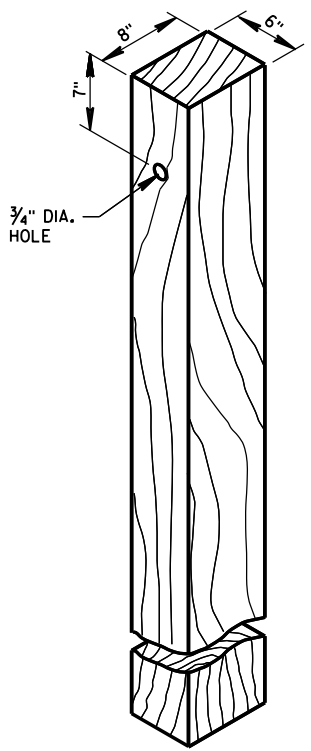
- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2 INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AND AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- ④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- ⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 3/4" TO 32".
- ⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



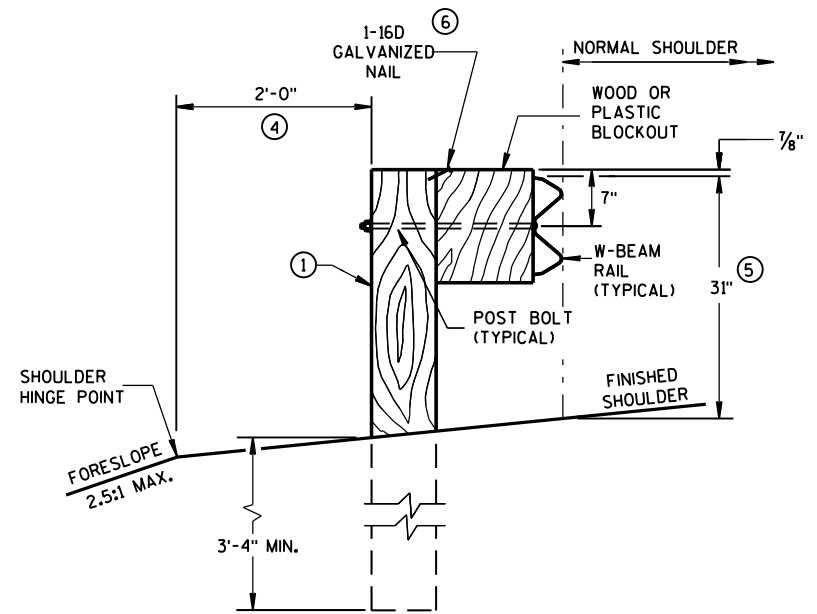
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ③



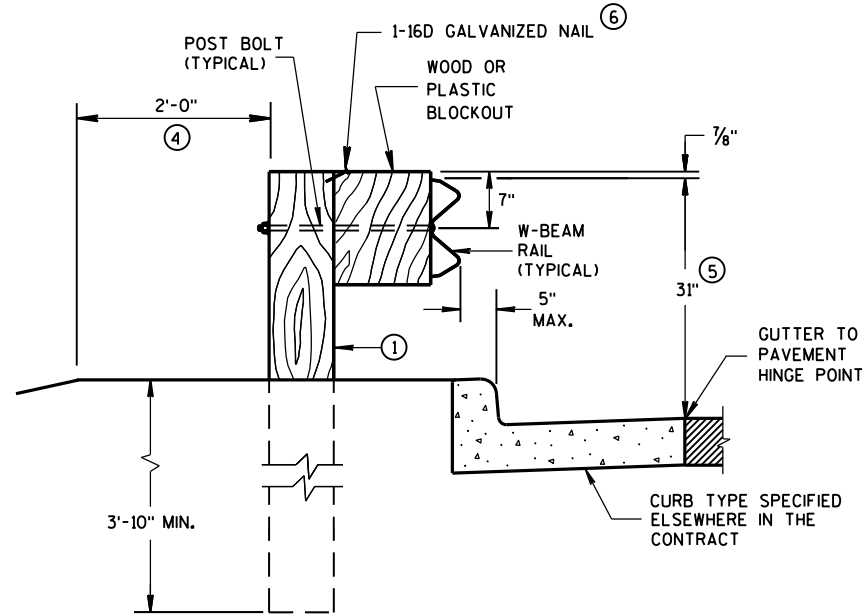
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



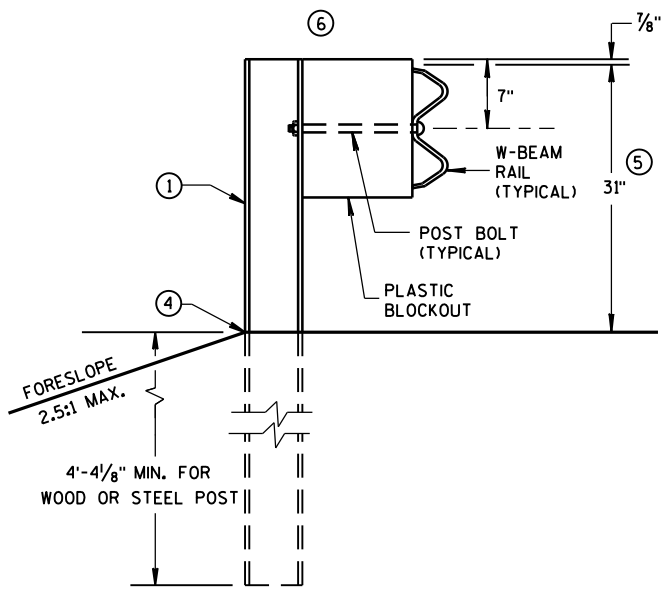
WOOD POST
(6" X 8") NOMINAL ①



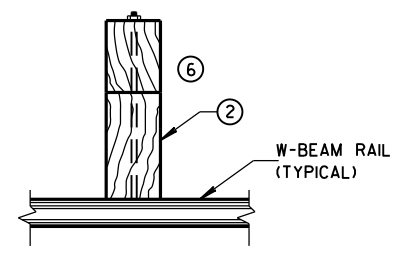
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



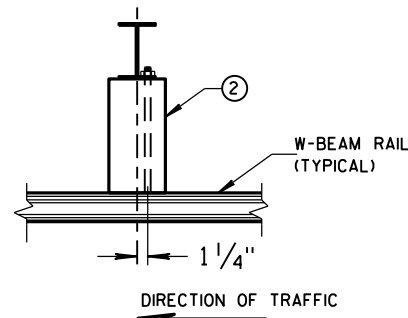
END VIEW
LOCATED ALONG A CURBED ROADWAY



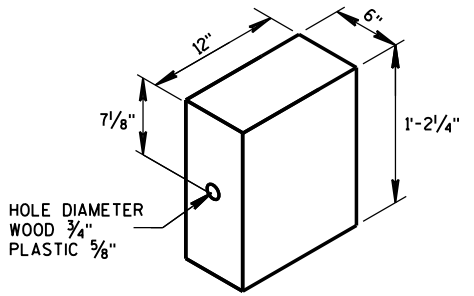
END VIEW
MGS LONGER POST AT HALFPST SPACING W BEAM (K)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



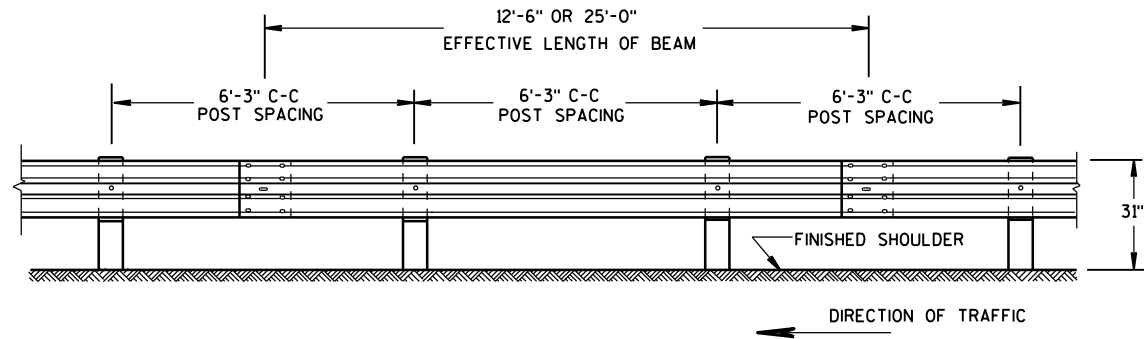
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

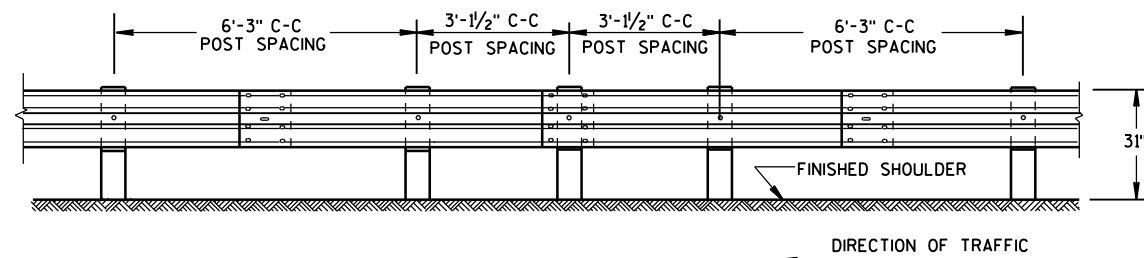
MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



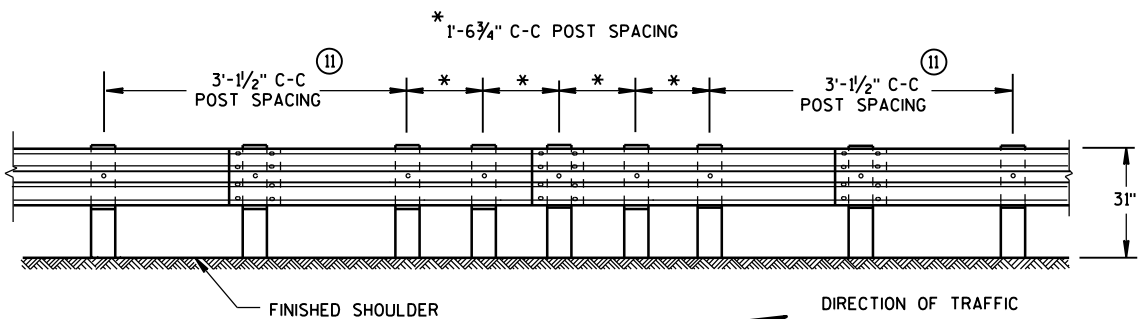
FRONT VIEW

POST SPACING STANDARD INSTALLATION



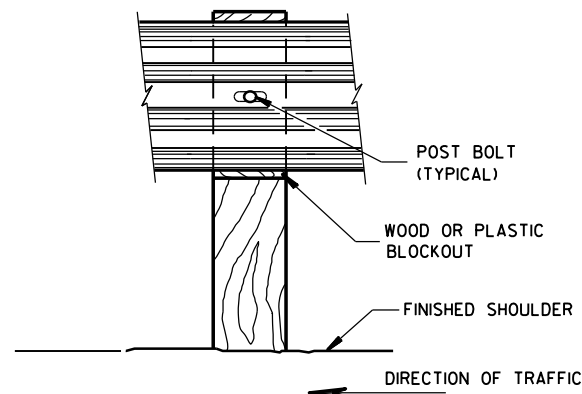
FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

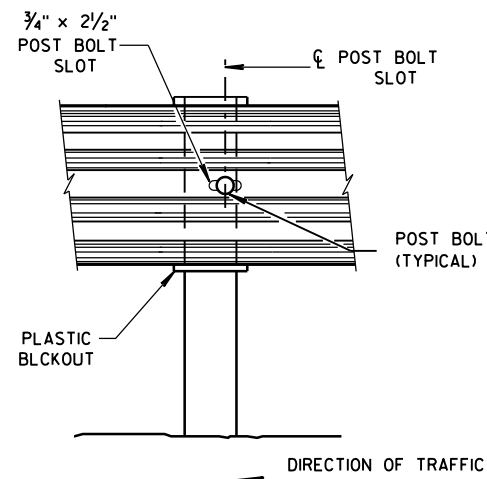


FRONT VIEW

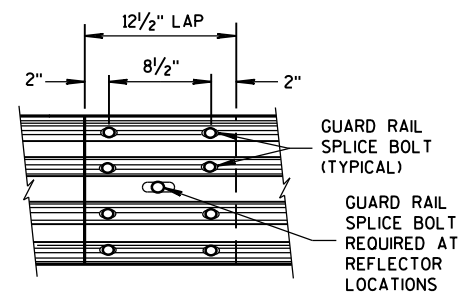
QUARTER POST SPACING (QS)



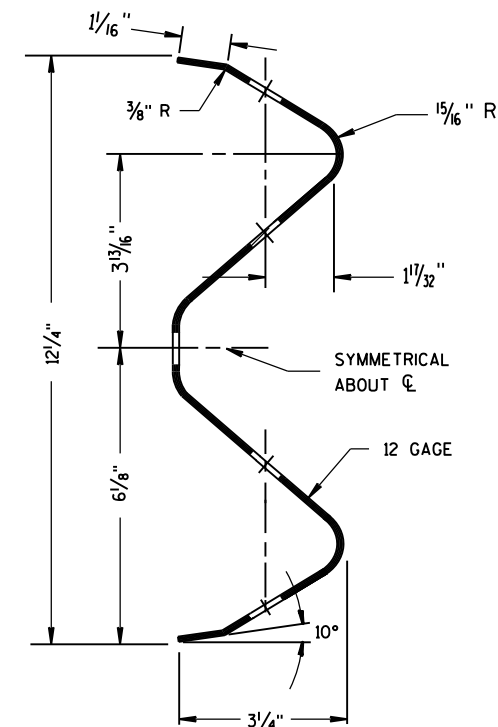
FRONT VIEW AT WOOD POST



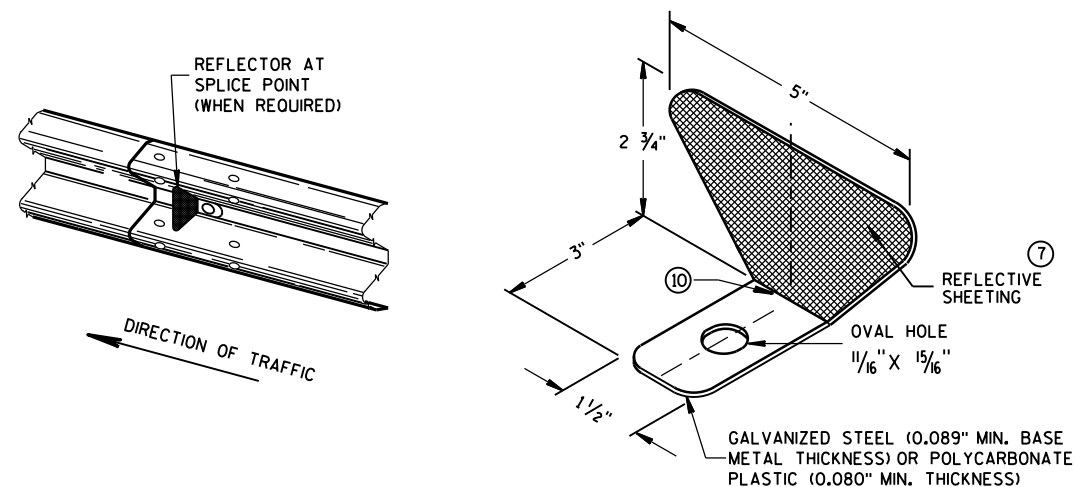
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

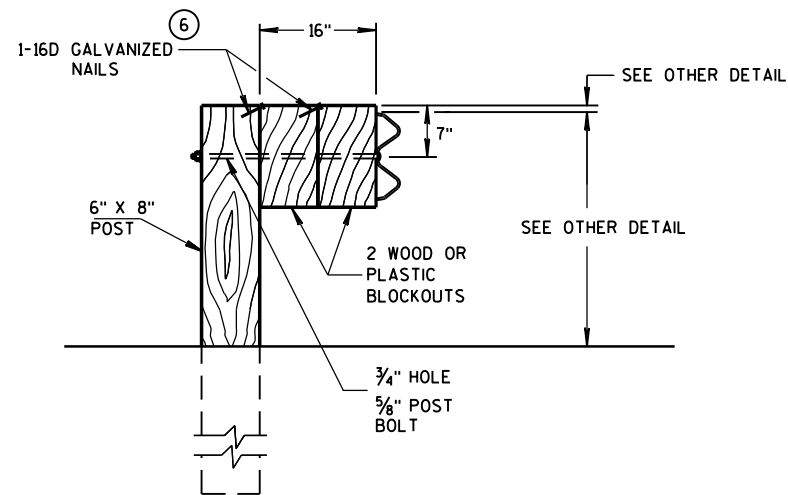
GENERAL NOTES

- ⑦ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.
 - ⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
 - ⑨ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
 - ⑩ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
 - ⑪ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.
- POST BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND $\frac{5}{8}$ " DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.
- GUARD RAIL SPLICE BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

| REFLECTOR SPACING ^⑧ | | | | |
|--------------------------------|-------------------|-------------------|----------------------------|---------------------|
| | BEAM GUARD LENGTH | REFLECTOR SPACING | NO. SURFACES REFLECTORIZED | MIN. NO. REFLECTORS |
| ONE WAY TRAFFIC | < 200' | 50' C-C | 1 | 3 |
| | > 200' | 100' C-C | 1 | |
| TWO WAY TRAFFIC | < 200' | 25' C-C | 1 ^⑨ | 6 |
| | > 200' | 50' C-C | 1 | |
| TWO WAY TRAFFIC | < 200' | 50' C-C | 2 ^⑩ | 3 |
| | > 200' | 100' C-C | 2 | |

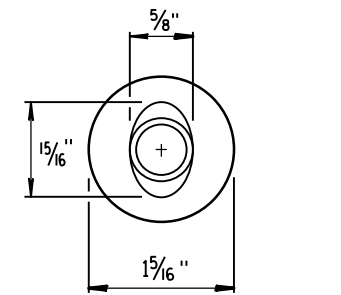
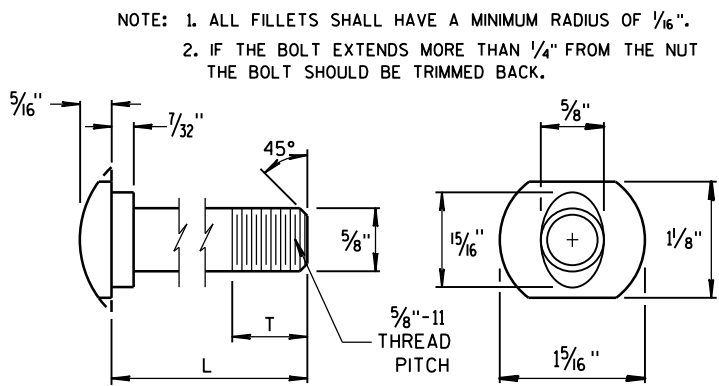
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

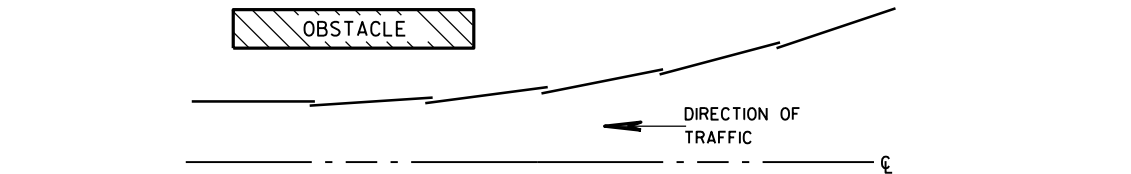


DETAIL FOR 16" BLOCKOUT DEPTH

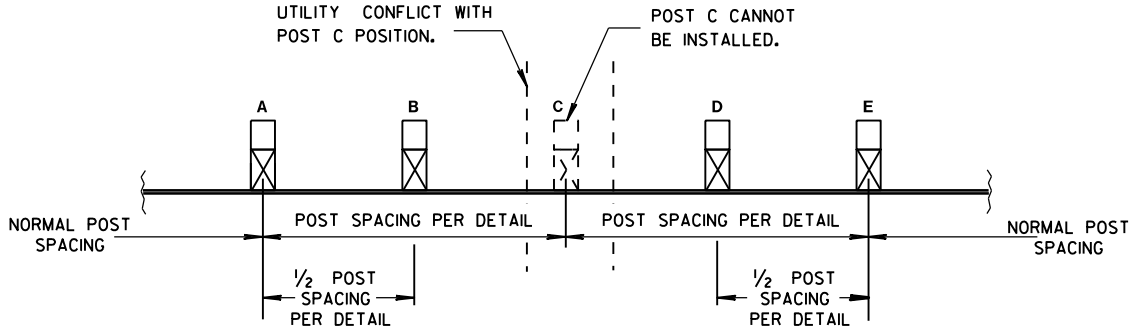
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



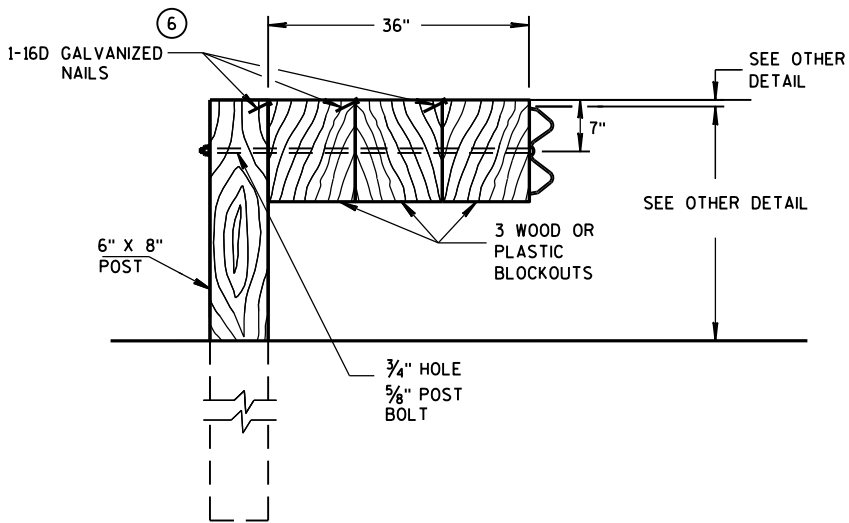
ALTERNATE BOLT HEAD



PLAN VIEW
BEAM LAPPING DETAIL



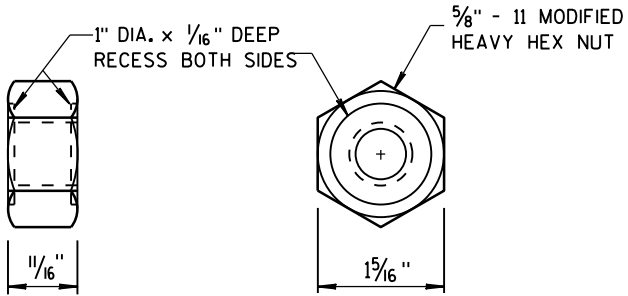
POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



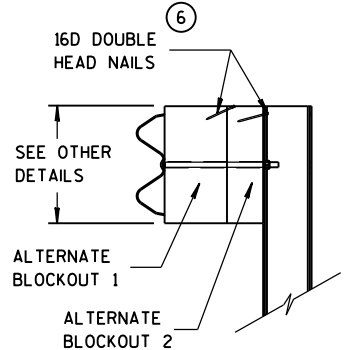
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

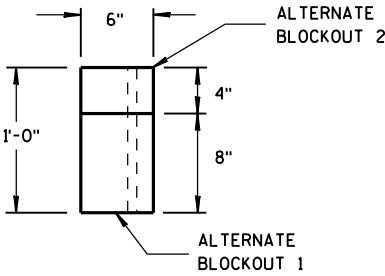
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



POST BOLT
AND RECESS NUT



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.
- (D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.
- (F) $\frac{1}{2}$ " DIAMETER X 3" LONG LAG BOLT AND WASHER.
- (H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.
- (I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

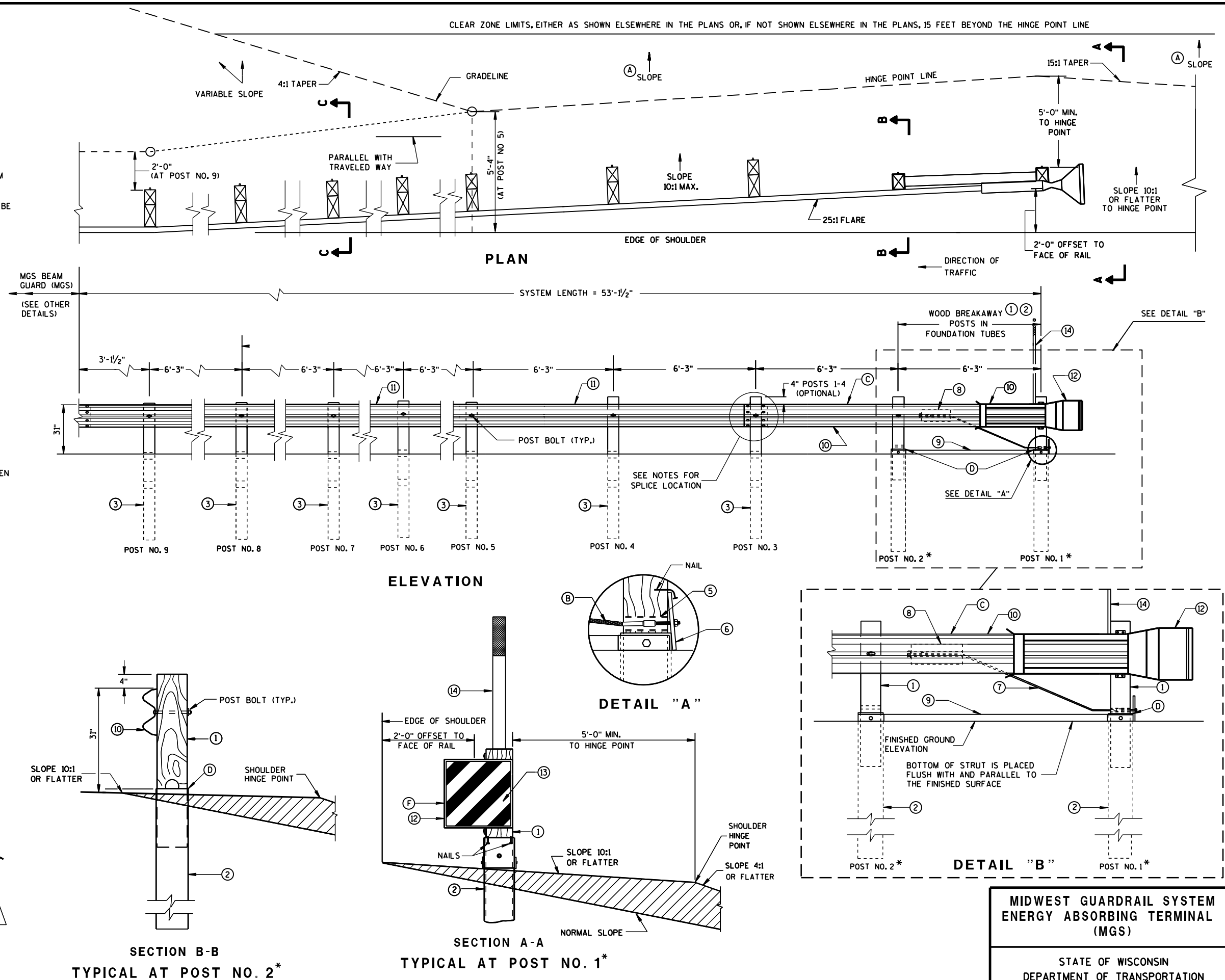
SEE SDD 14B42 FOR MORE INFORMATION.

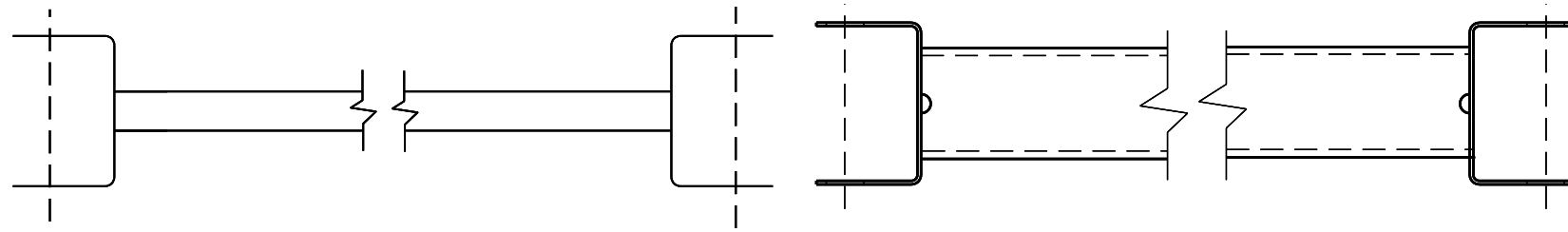
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

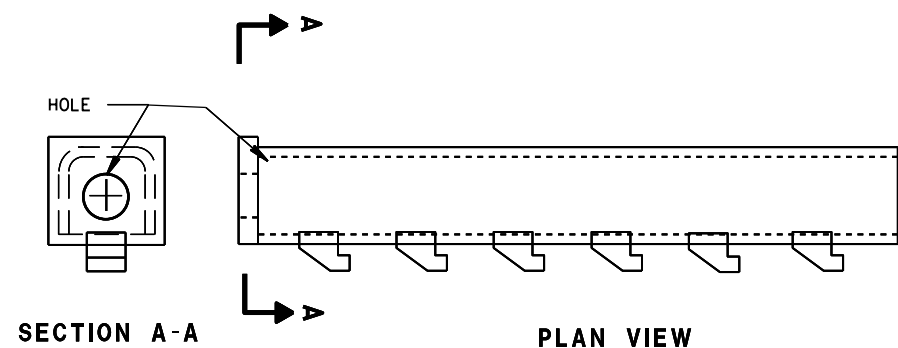
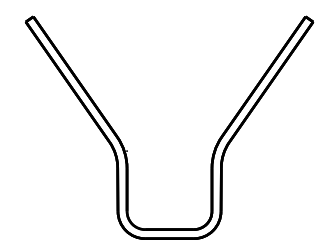
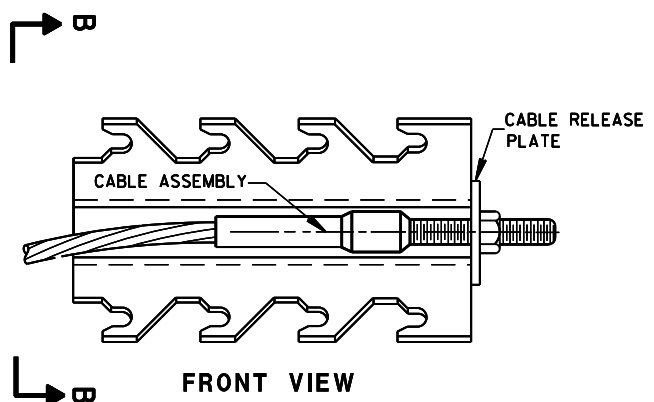
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER $\frac{3}{4}$ " DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.





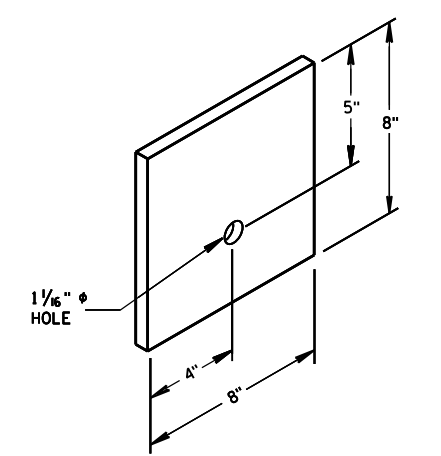
9 H
GENERIC GROUND STRUT



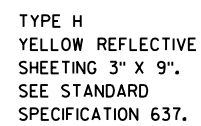
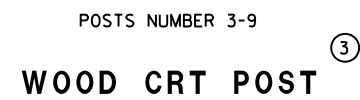
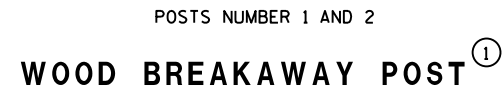
8 H
GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

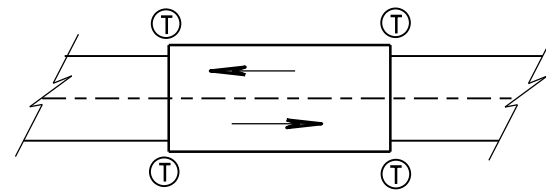
| PART NO. | DESCRIPTION |
|--|--|
| MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION. | |
| ① | WOOD BREAKAWAY POST |
| ② | 6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2 |
| ③ | WOOD CRT |
| ④ | WOOD BLOCKOUT |
| ⑤ | PIPE SLEEVE |
| ⑥ | BEARING PLATE |
| ⑦ | BCT CABLE ASSEMBLY |
| ⑧ | ANCHOR CABLE BOX |
| ⑨ | GROUND STRUT |
| ⑩ | PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG. |
| ⑪ | STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH. |
| ⑫ | END SECTION EAT |
| ⑬ | 0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS |
| ⑭ | EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST) |



⑥
BEARING PLATE

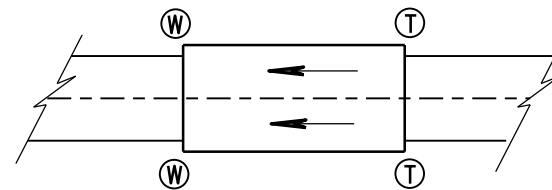


| | |
|---|---|
| <p>MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)</p> | |
| <p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p> | |
| <p>APPROVED June 2014</p> | <p>/S/ Jerry H. Zogg</p> |
| <p>DATE</p> | <p>ROADWAY STANDARDS DEVELOPMENT ENGINEER</p> |
| <p>FHWA</p> | |



TWO WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION



ONE WAY TRAFFIC

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

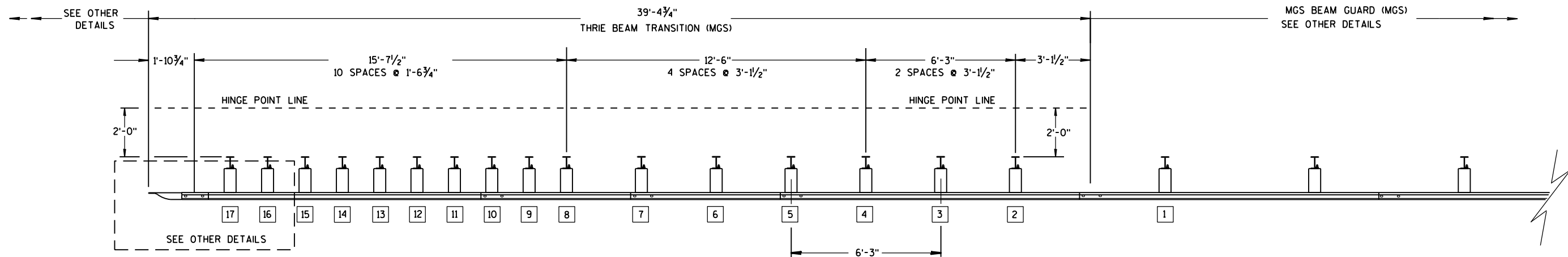
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

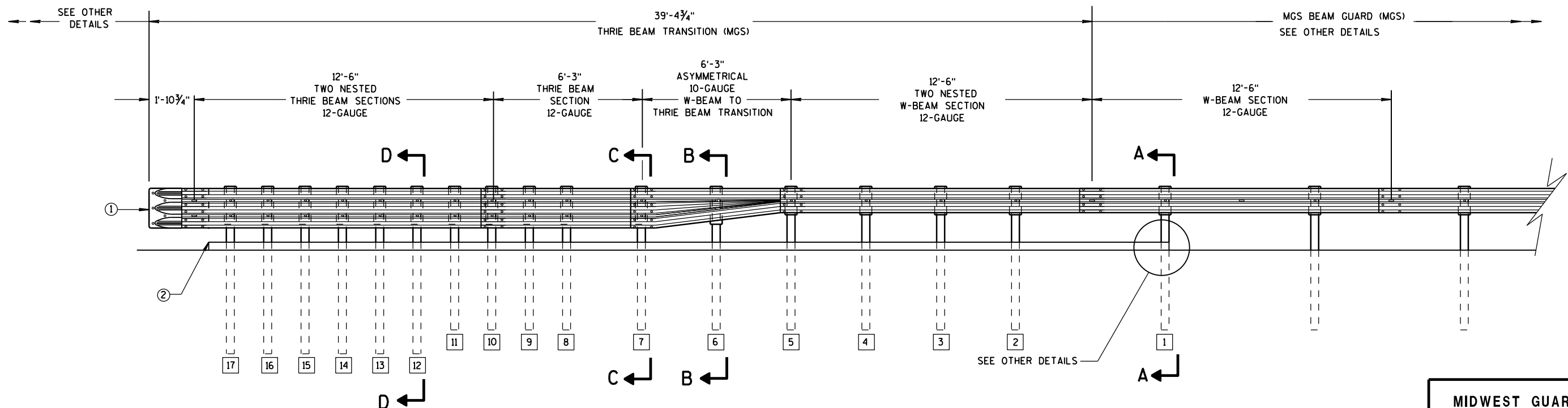
① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE



PLAN VIEW



ELEVATION VIEW

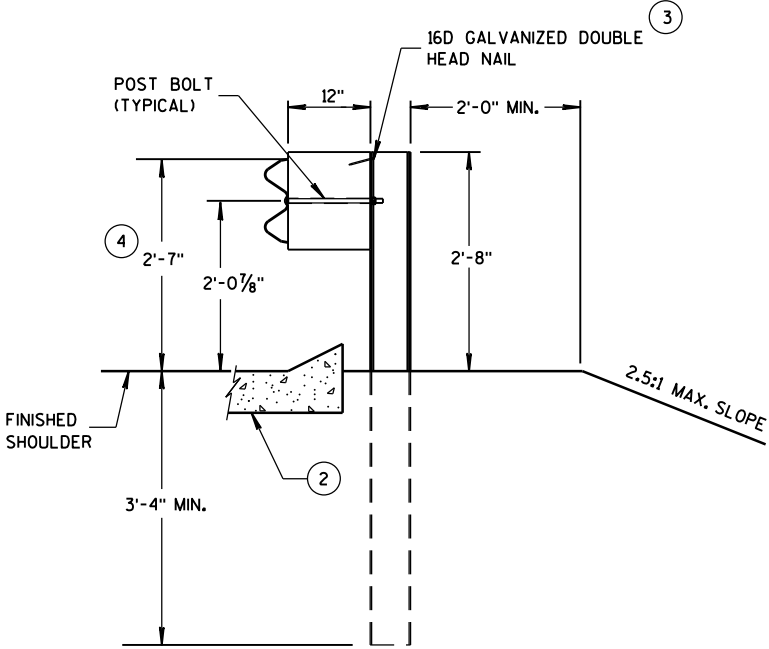
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

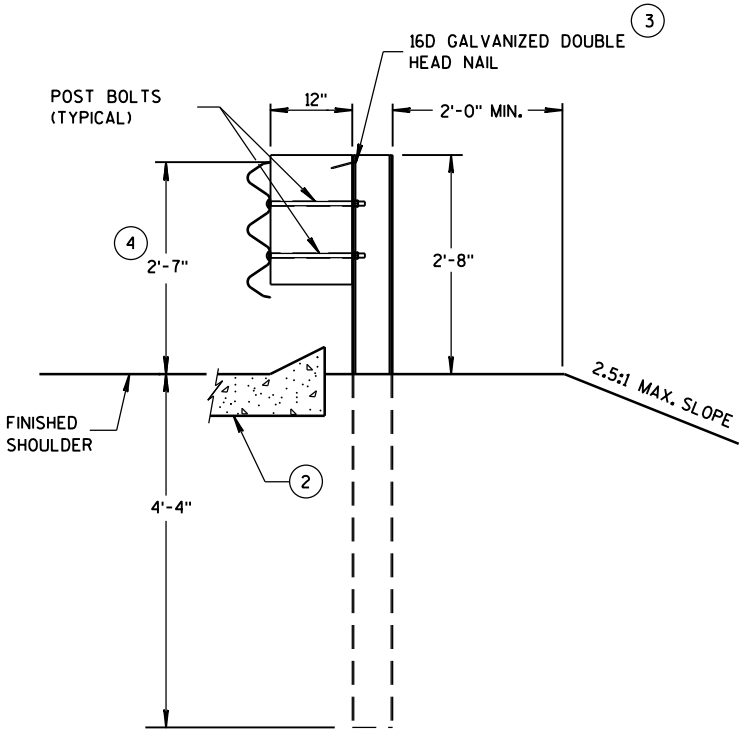
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

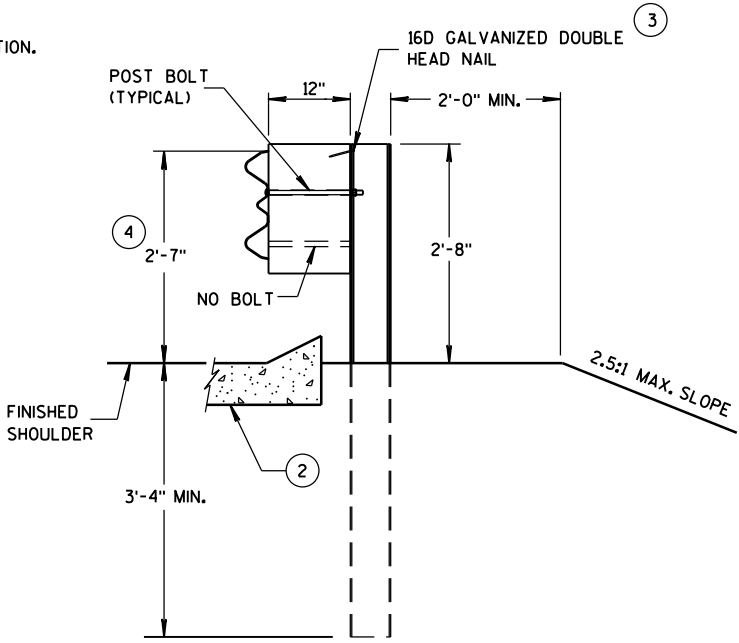
- 2 OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- 3 WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
- 4 TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



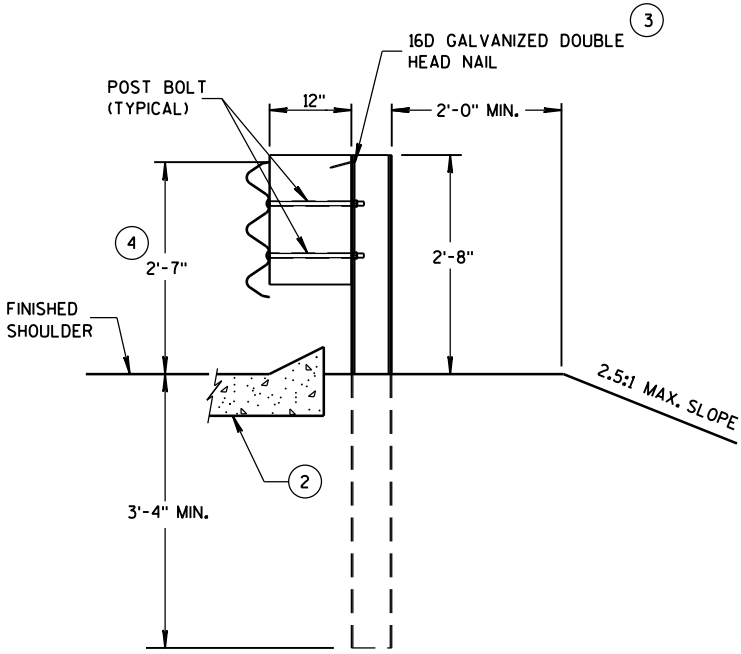
SECTION A-A
POSTS 1-5



SECTION D-D
POSTS 12-17



SECTION B-B
POST 6



SECTION C-C
POSTS 7-11

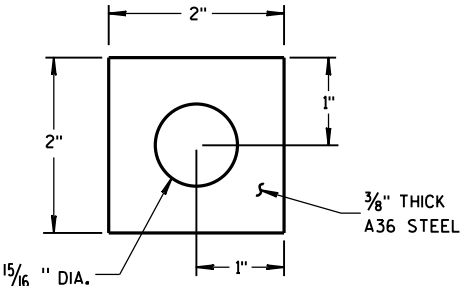
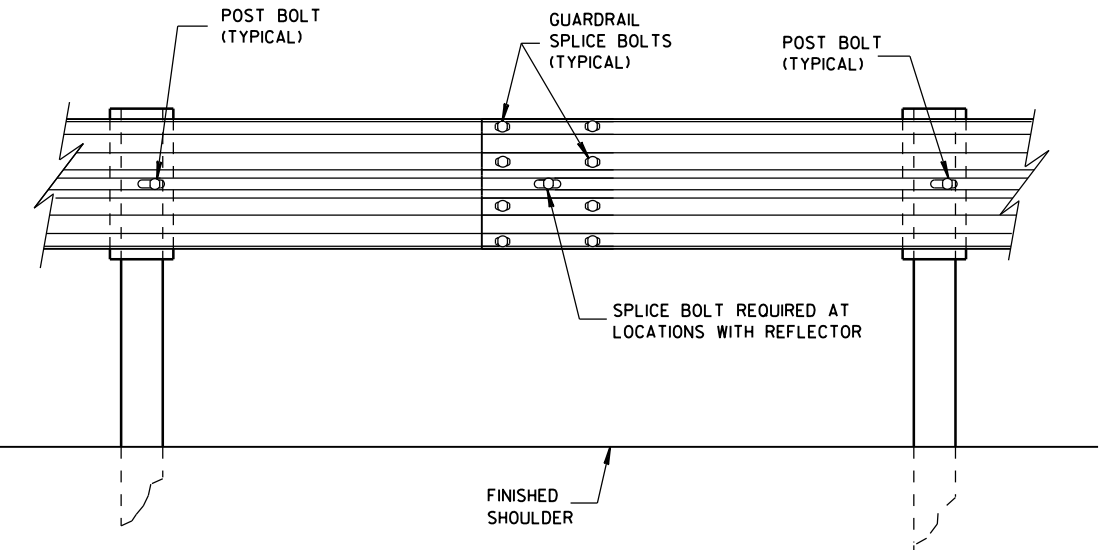
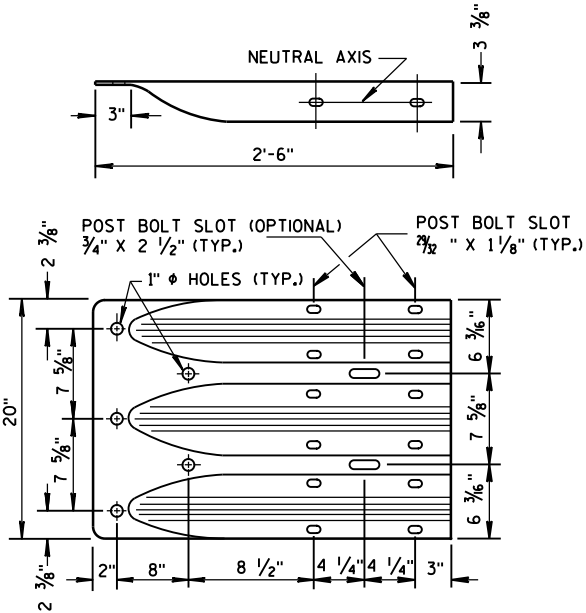


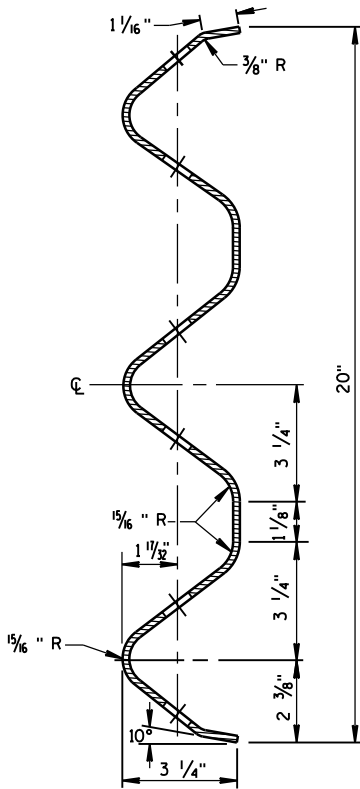
PLATE WASHER DETAIL



SPlice DETAIL



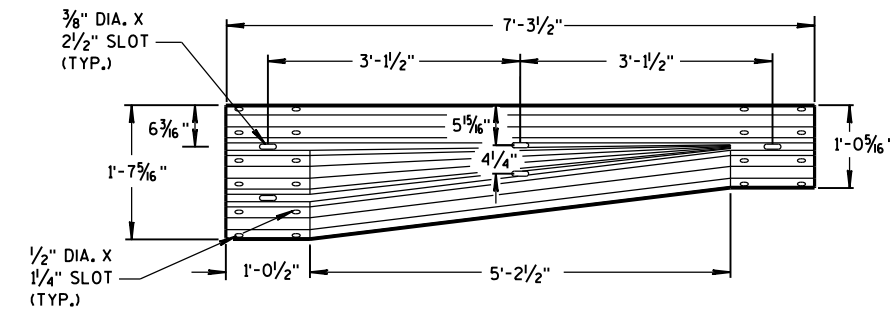
THRIE BEAM
TERMINAL CONNECTOR



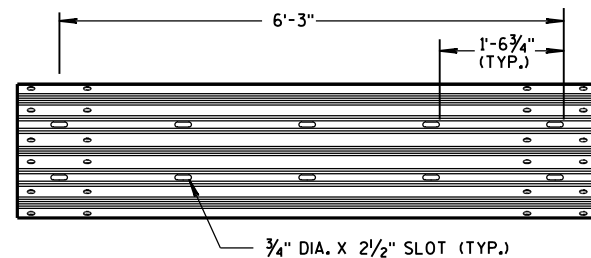
SECTION THRU THRIE
BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

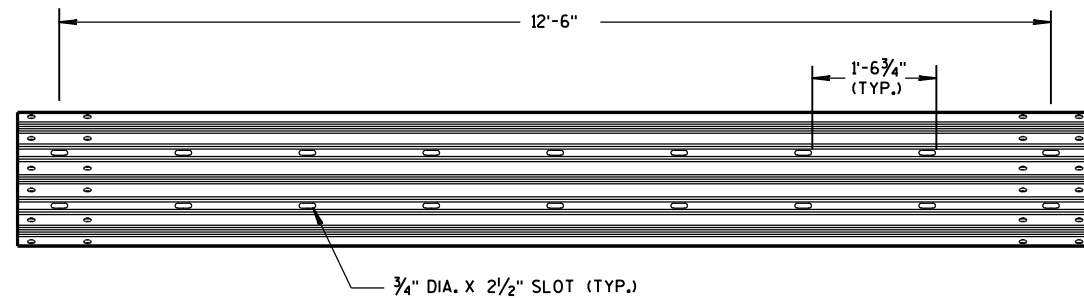
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



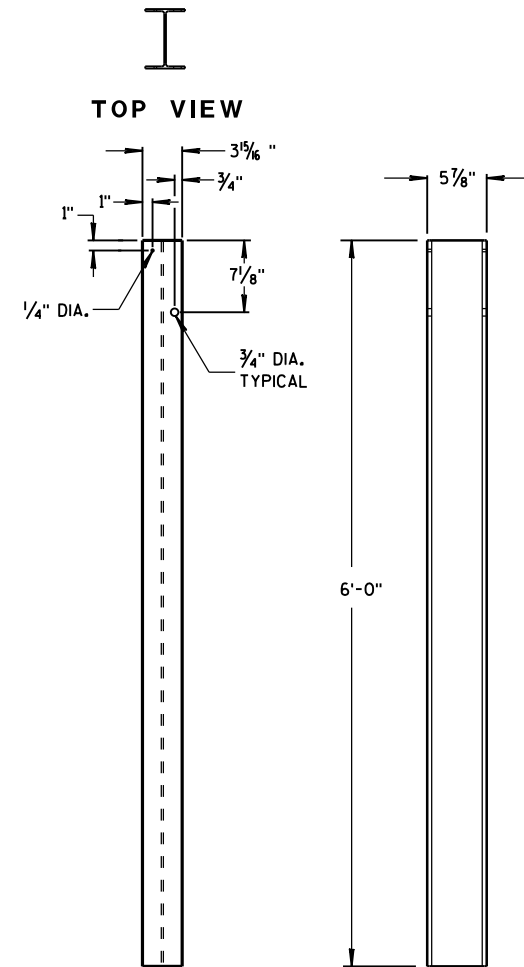
W-BEAM TO THRIE BEAM TRANSITION SECTION



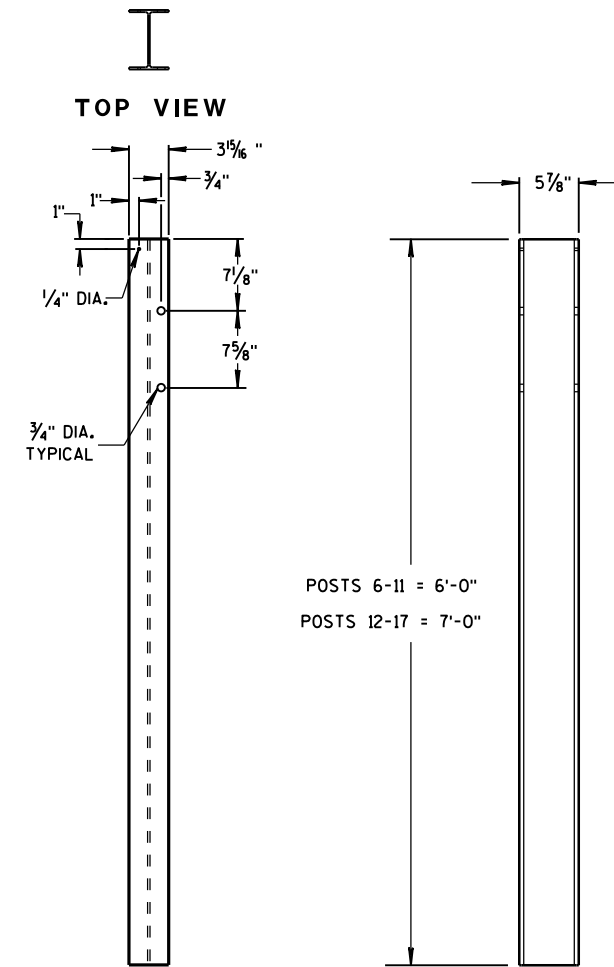
6'-3" THRIE BEAM SECTION



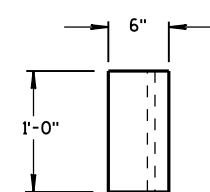
12'-6" THRIE BEAM SECTION



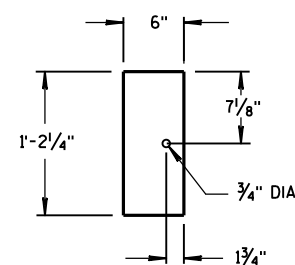
STEEL POSTS 1-5



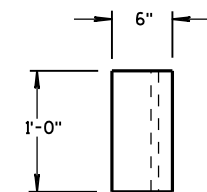
STEEL POSTS 6-17



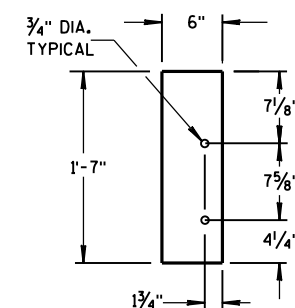
TOP VIEW



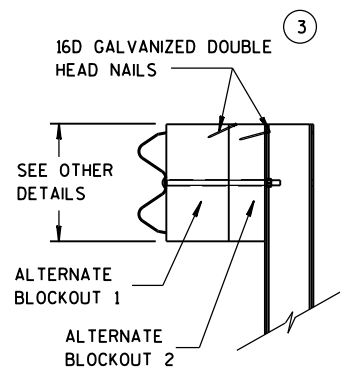
FRONT VIEW
BLOCKOUT
POSTS 1-5



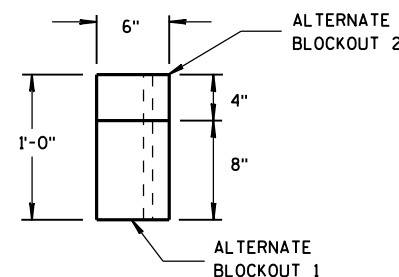
TOP VIEW



FRONT VIEW
BLOCKOUT
POSTS 6-17



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

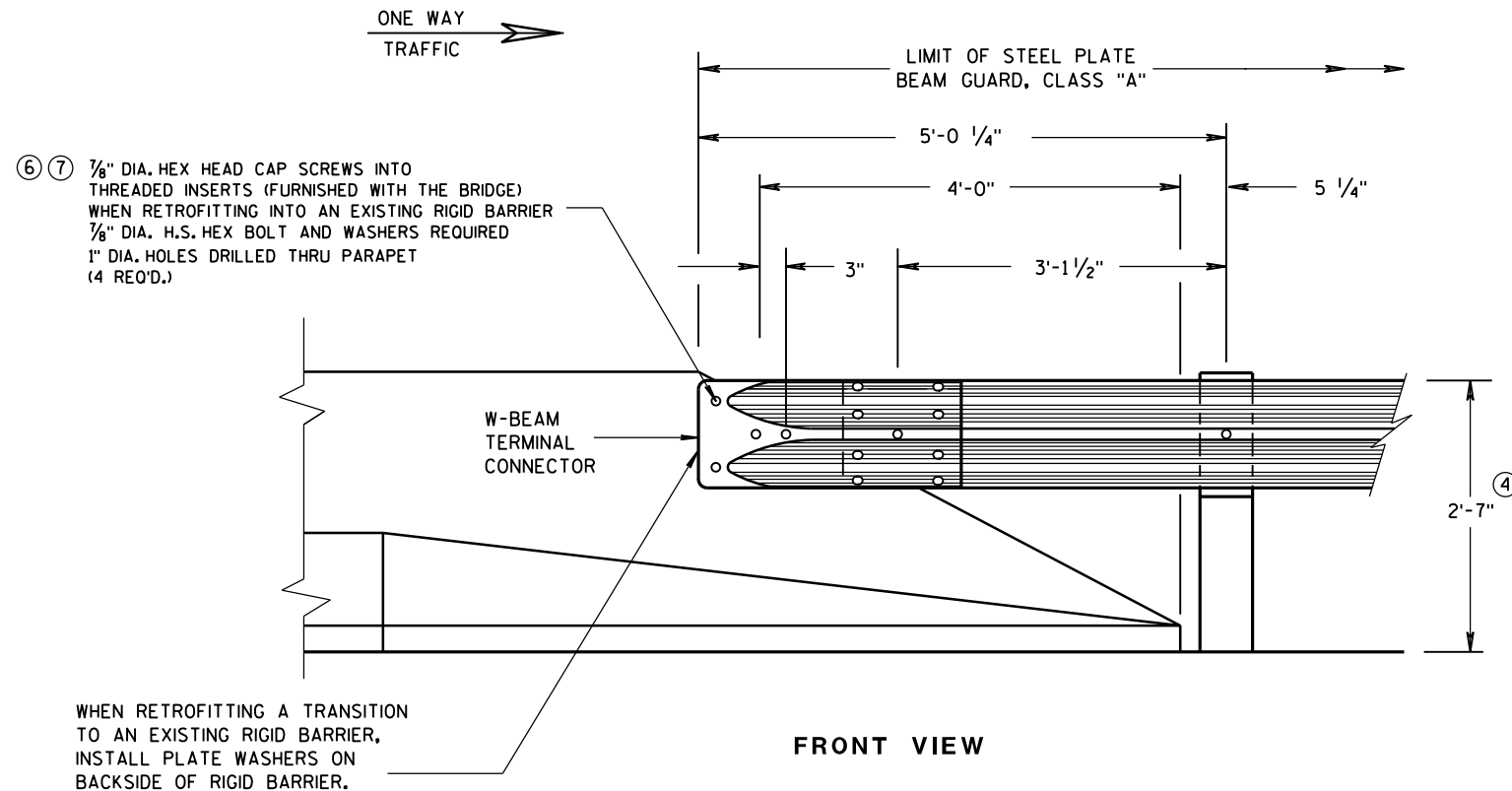
BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

③ WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

⑤ WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

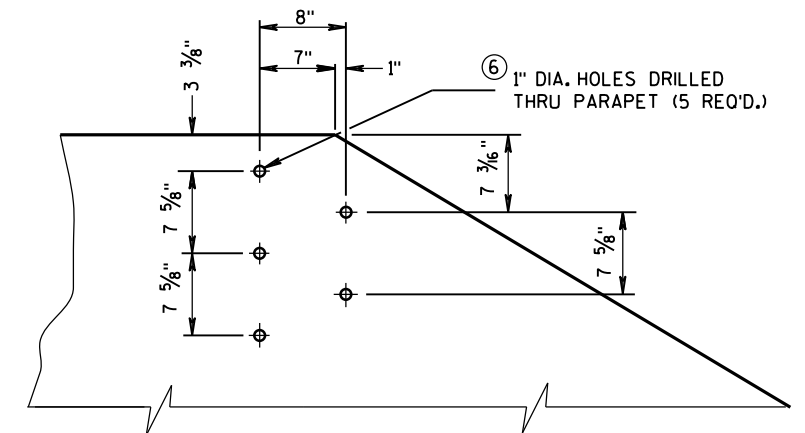
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

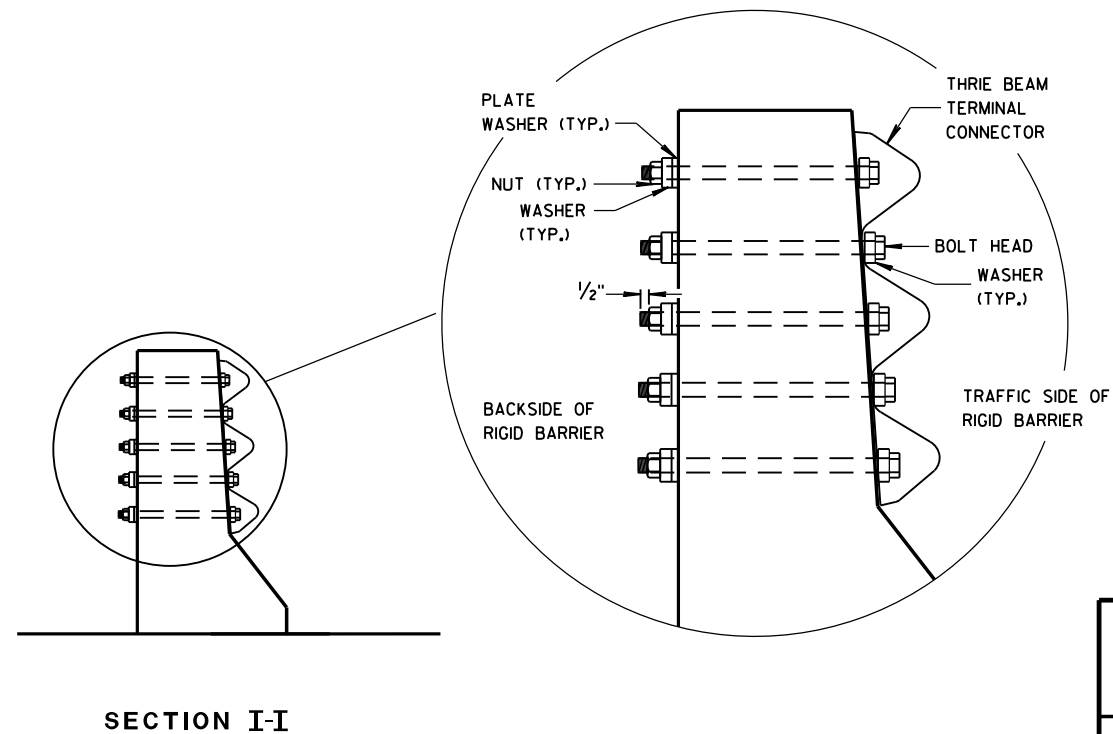
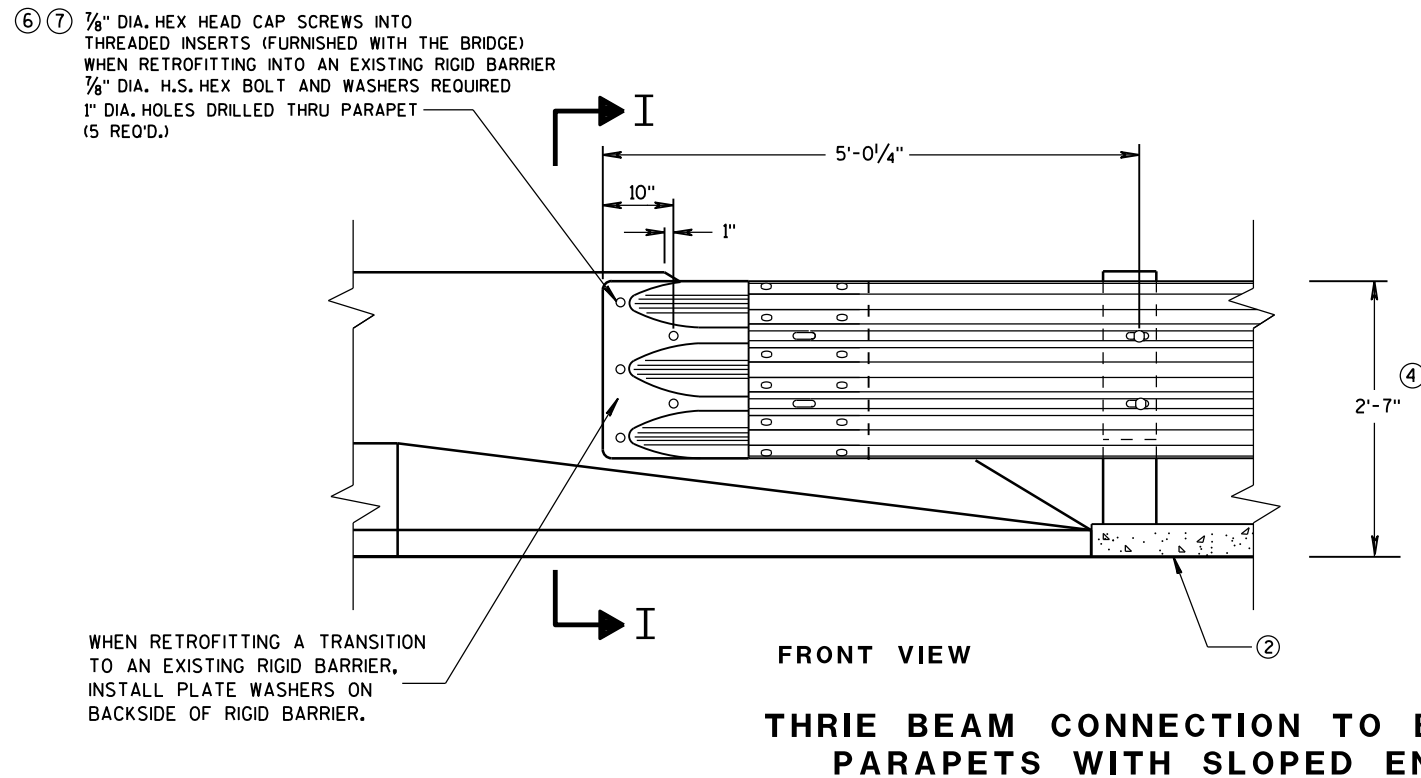


GENERAL NOTES

- ② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION

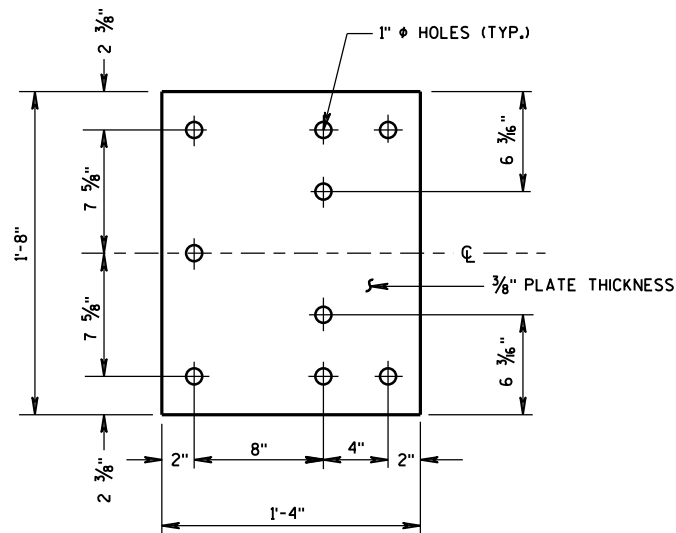


MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

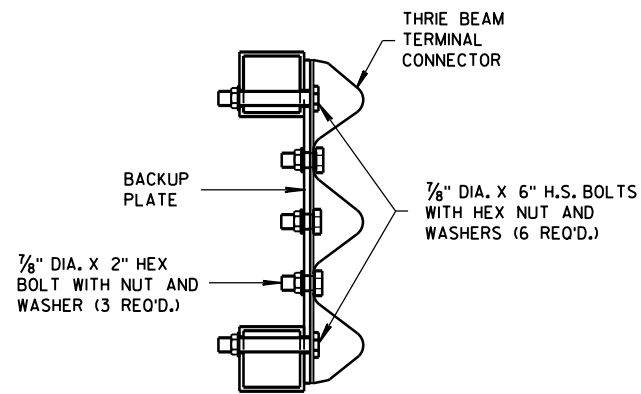
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
FHWA

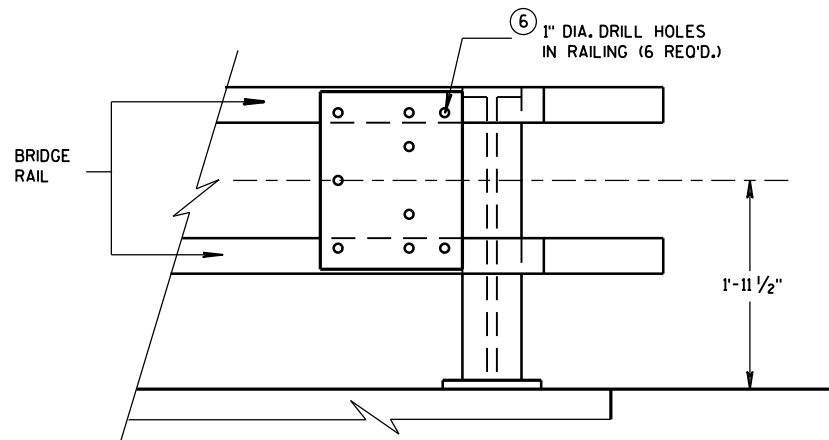
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



BACK-UP PLATE DETAIL



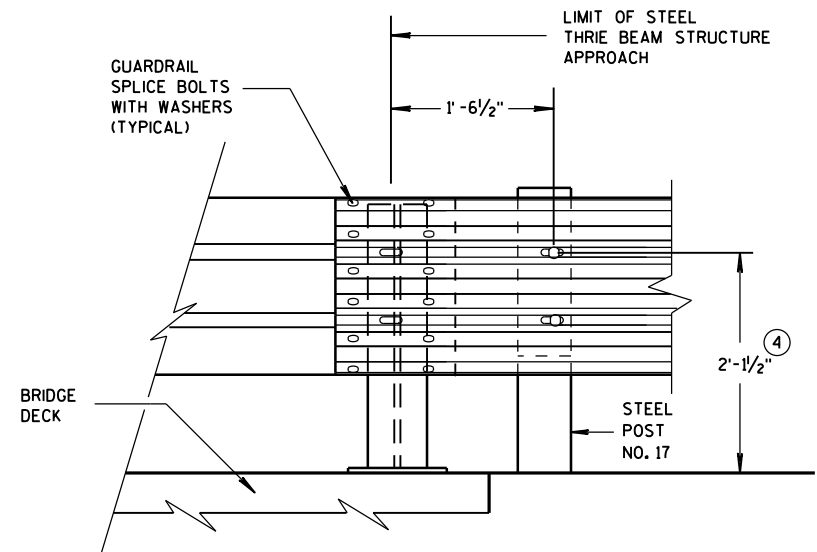
SECTION J-J



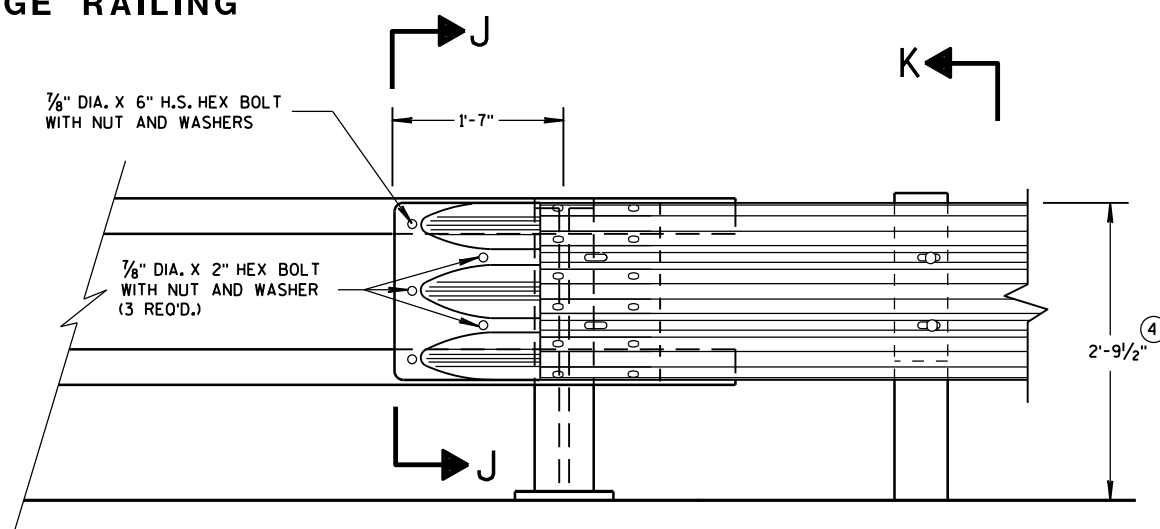
BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

- ④ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.
- ⑥ DRILLING HOLES THROUGH THE PAPER, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

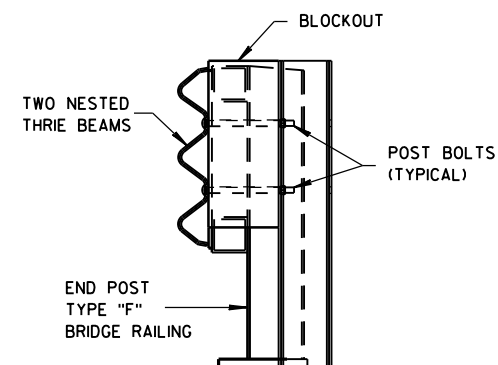


FRONT VIEW
THRIE BEAM CONNECTION TO
STEEL RAILING TYPE "W"



FRONT VIEW

THRIE BEAM CONNECTION TO
TUBULAR RAILING TYPE "F"

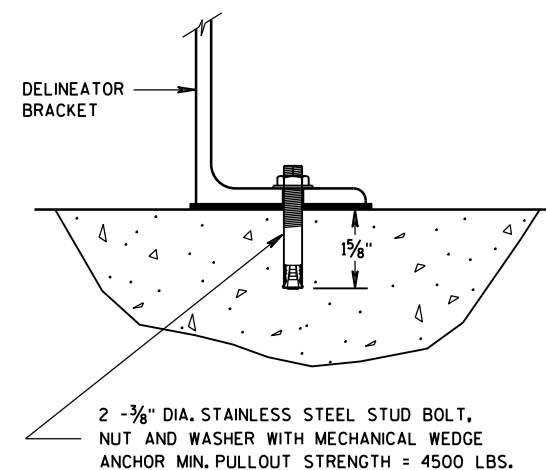
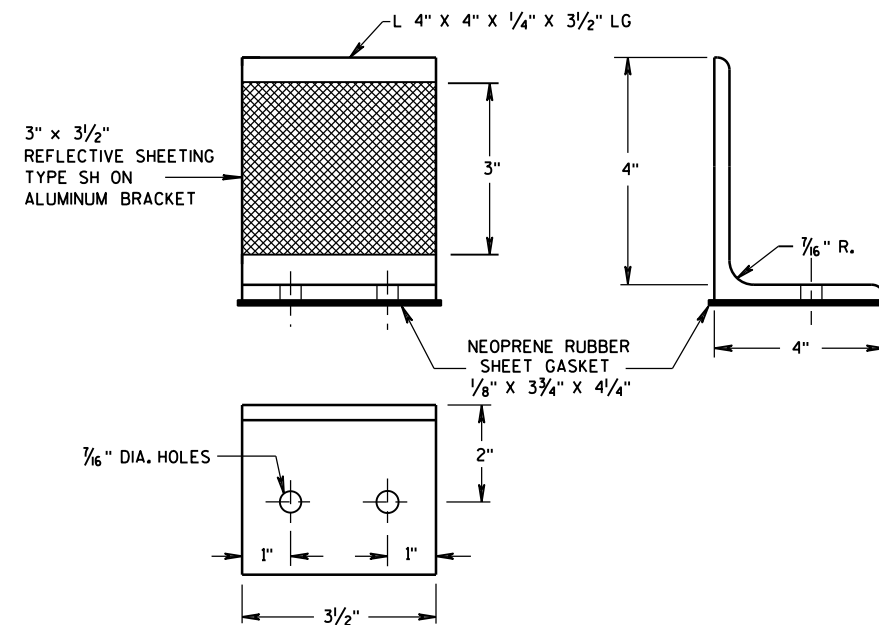
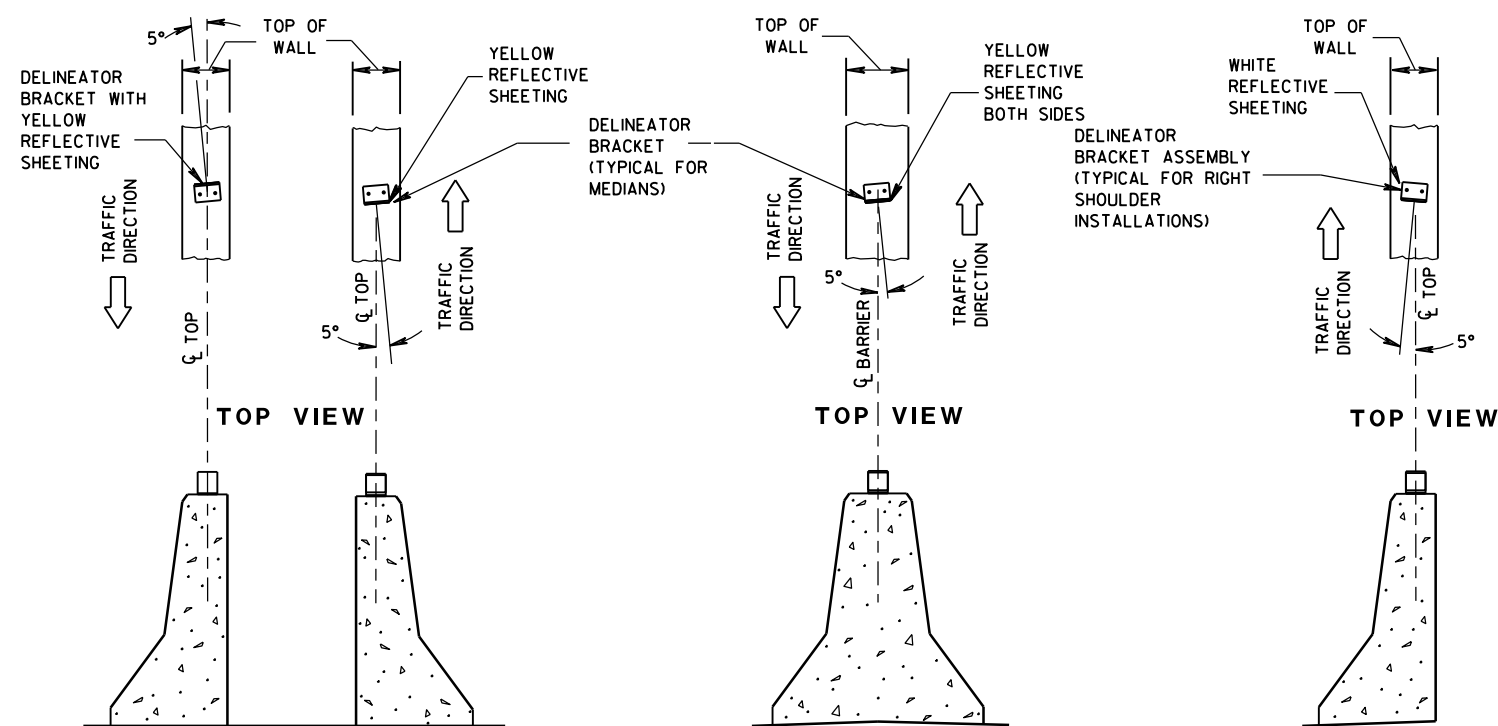
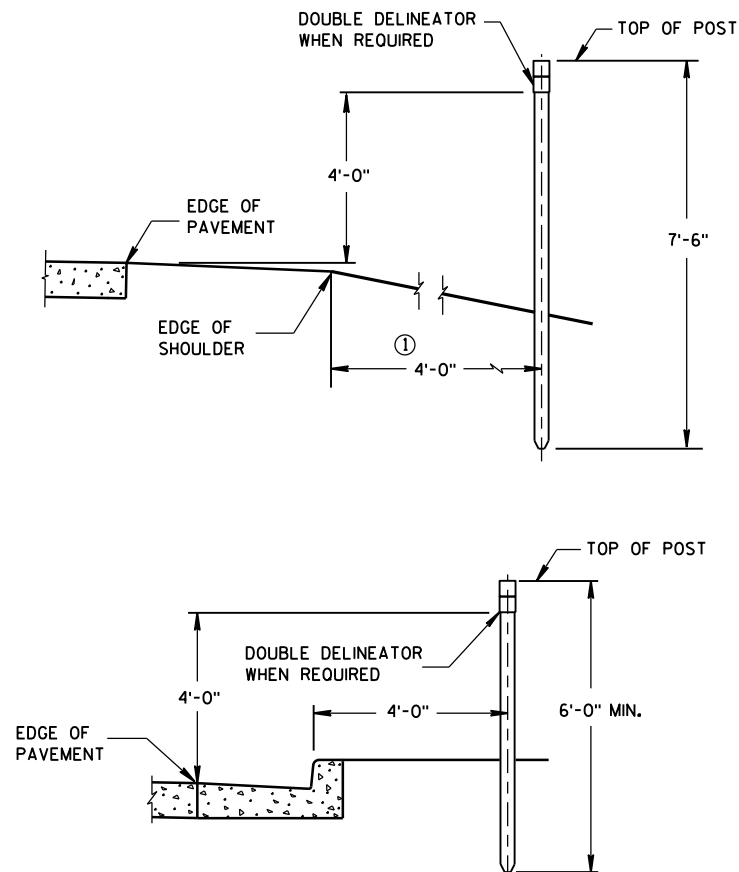
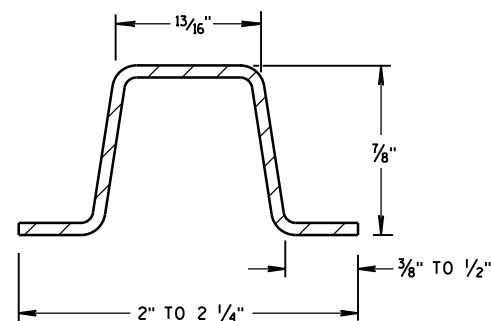
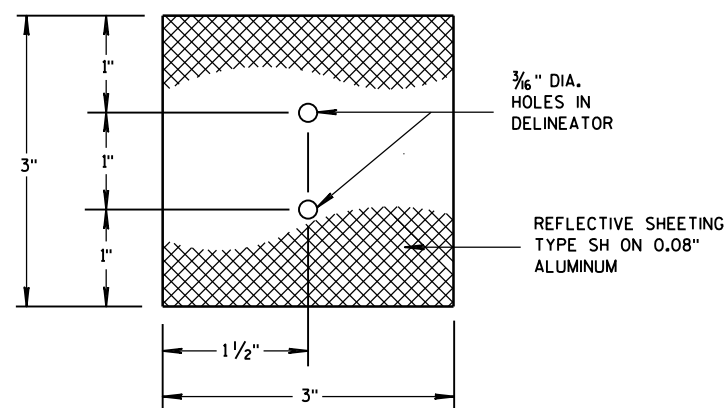
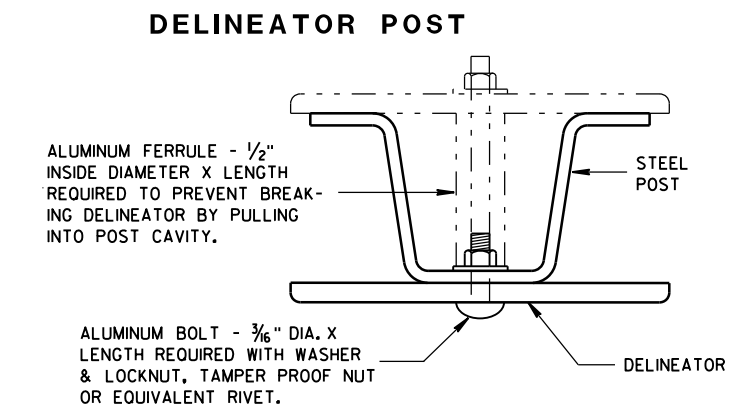


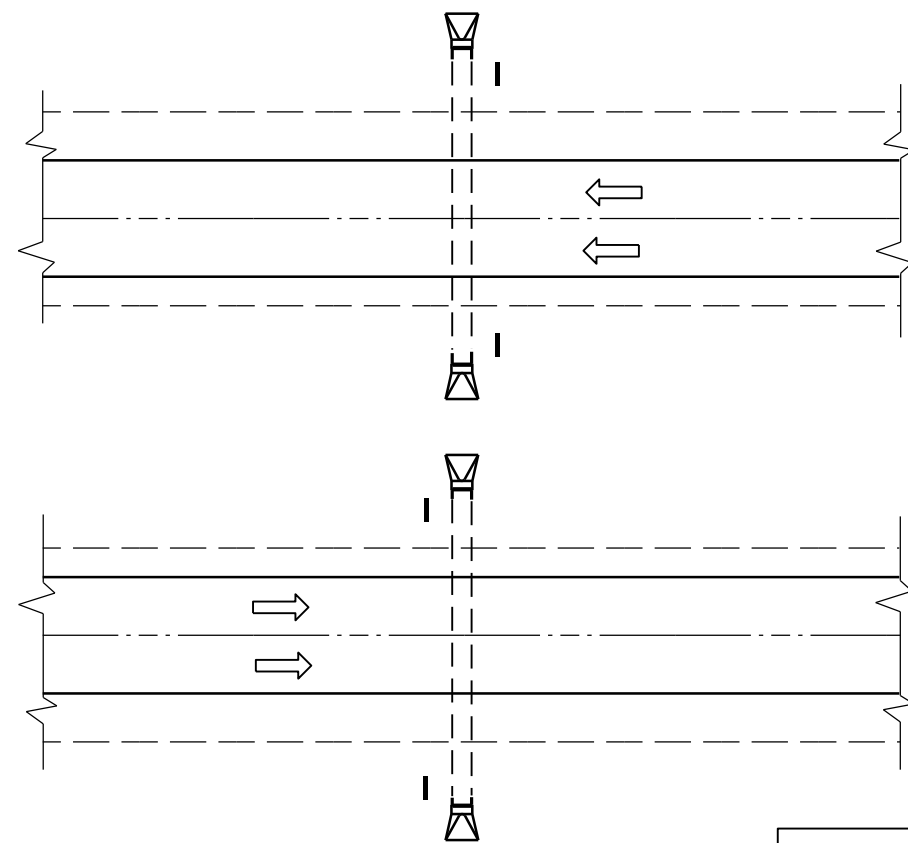
SECTION K-K

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

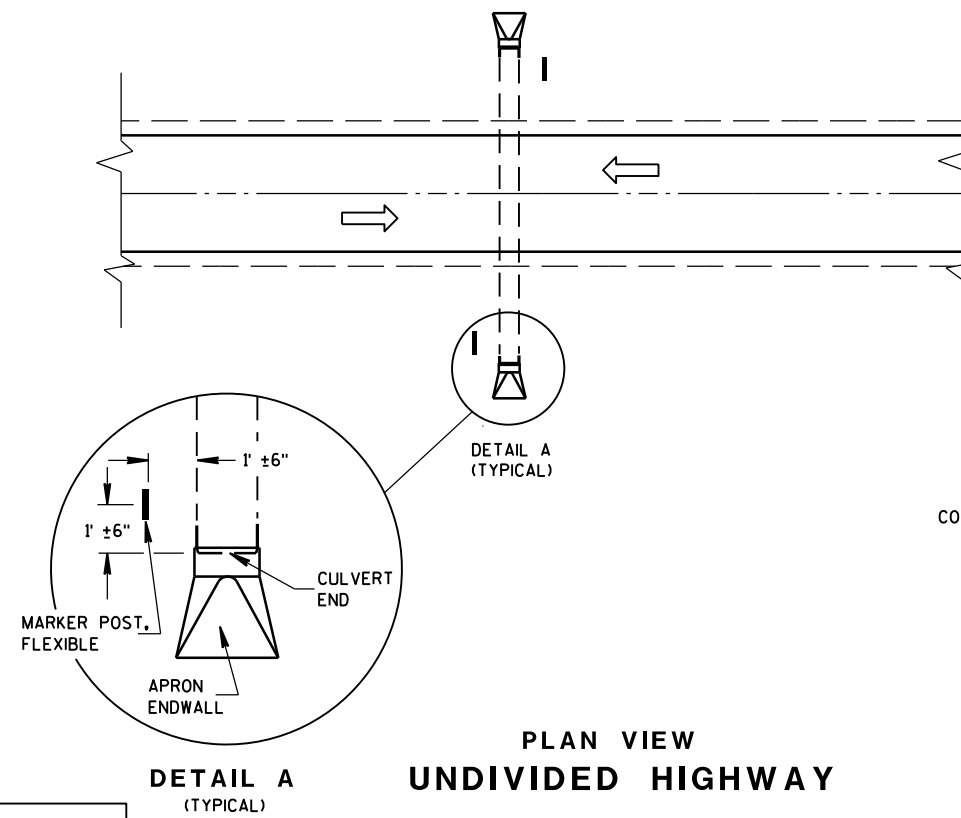
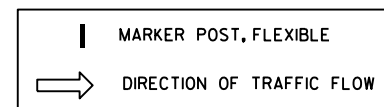
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

| | |
|------------------------|---|
| APPROVED June, 2015 | /S/ Jerry H. Zogg |
| DATE | ROADWAY STANDARDS DEVELOPMENT ENGINEER |
| FHWA | |





PLAN VIEW
DIVIDED HIGHWAY

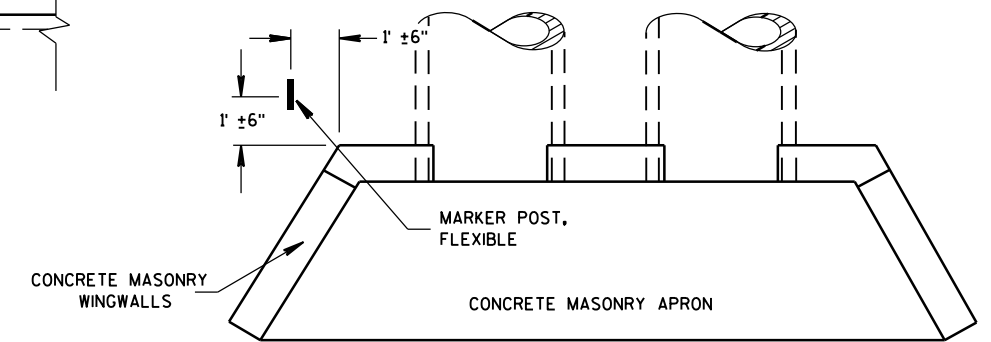


PLAN VIEW
UNDIVIDED HIGHWAY

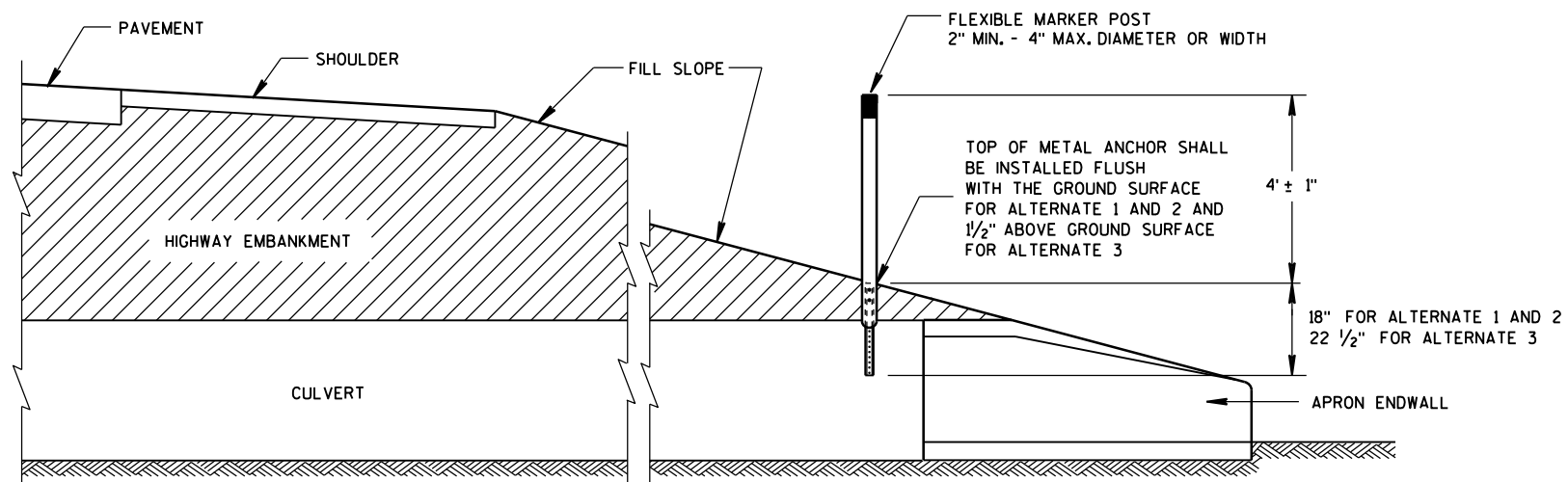
FLEXIBLE MARKER POST LOCATION

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.



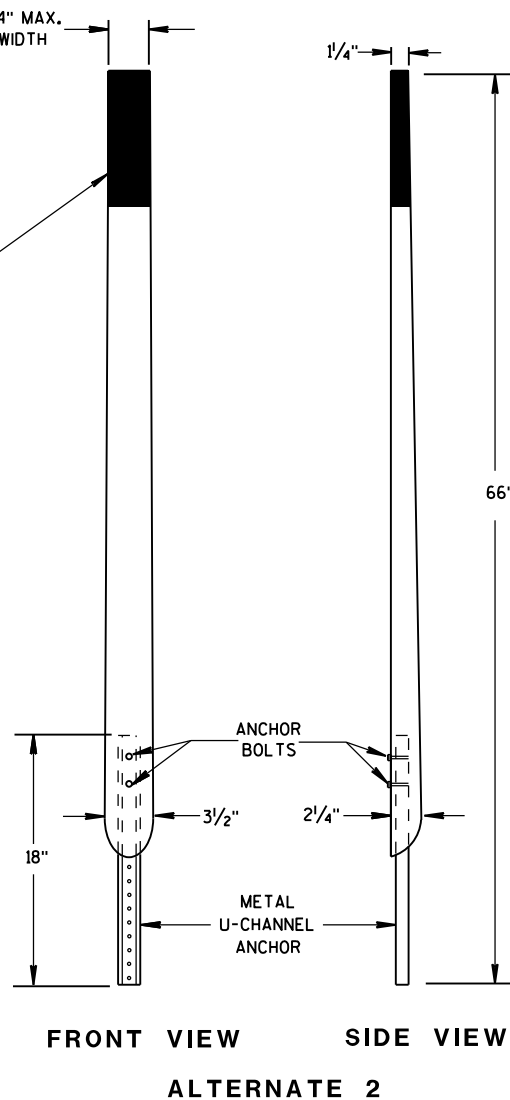
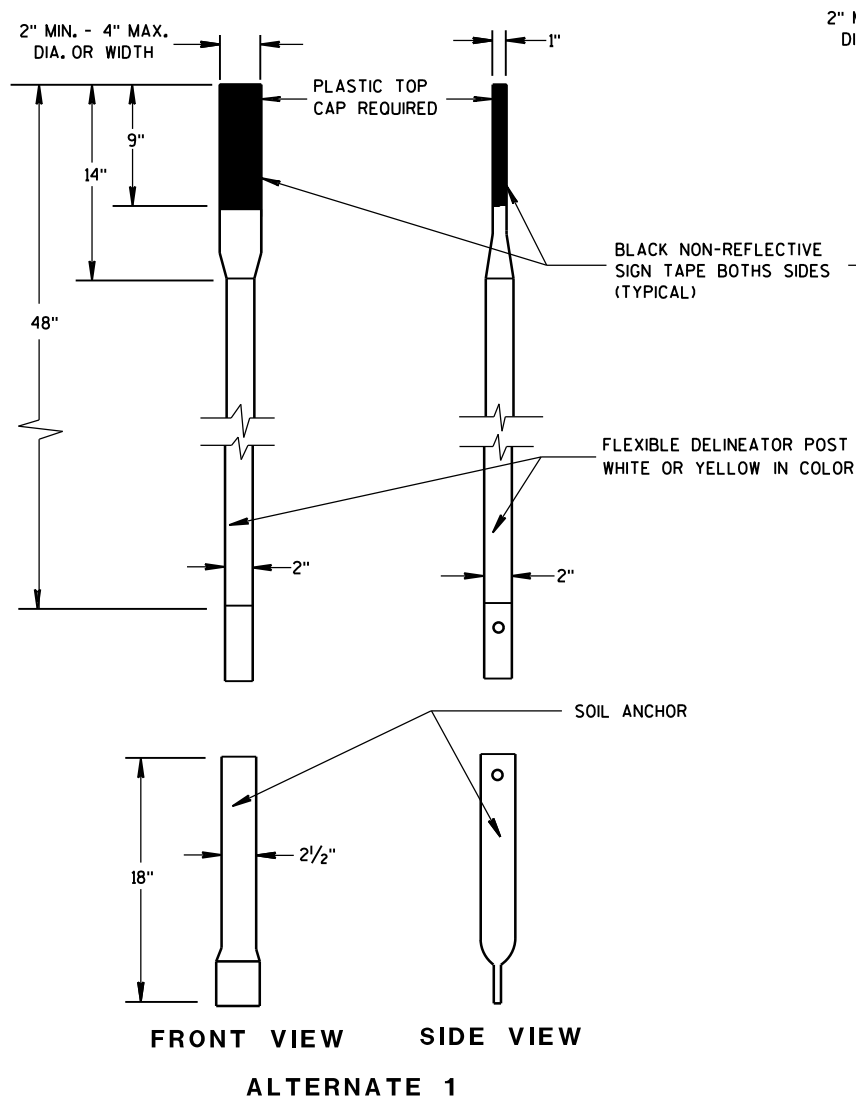
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



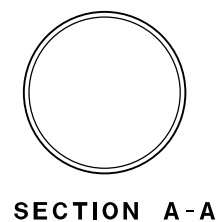
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

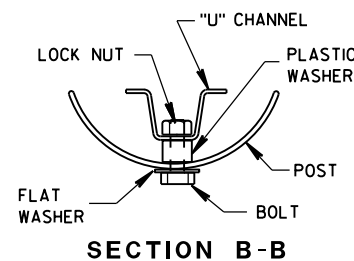
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



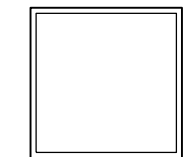
FLEXIBLE MARKER POSTS



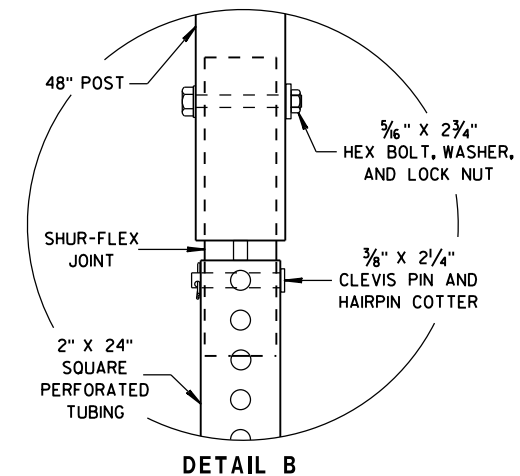
SECTION A-A



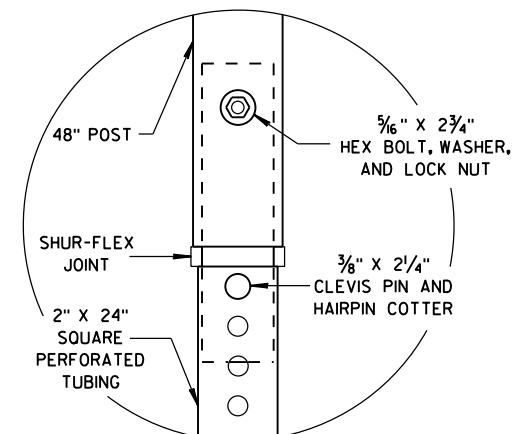
SECTION B-B



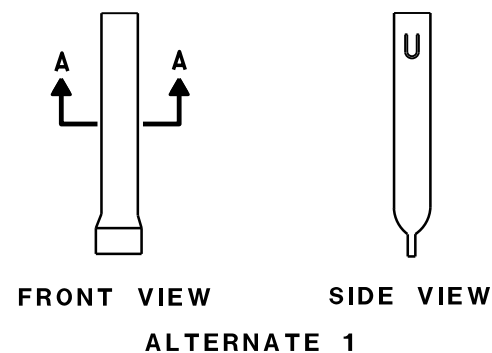
SECTION C-C



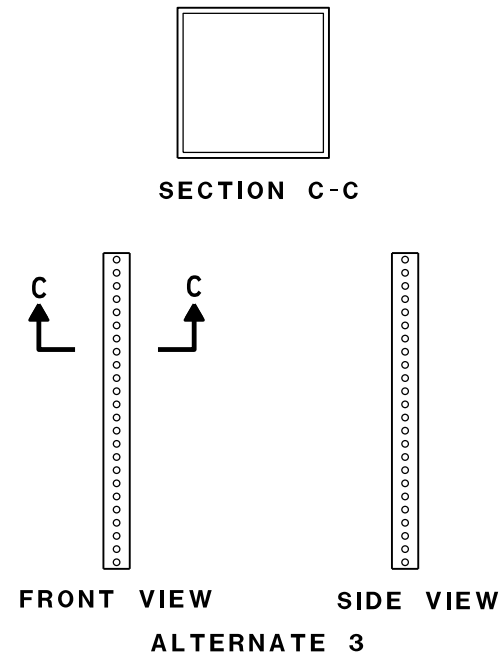
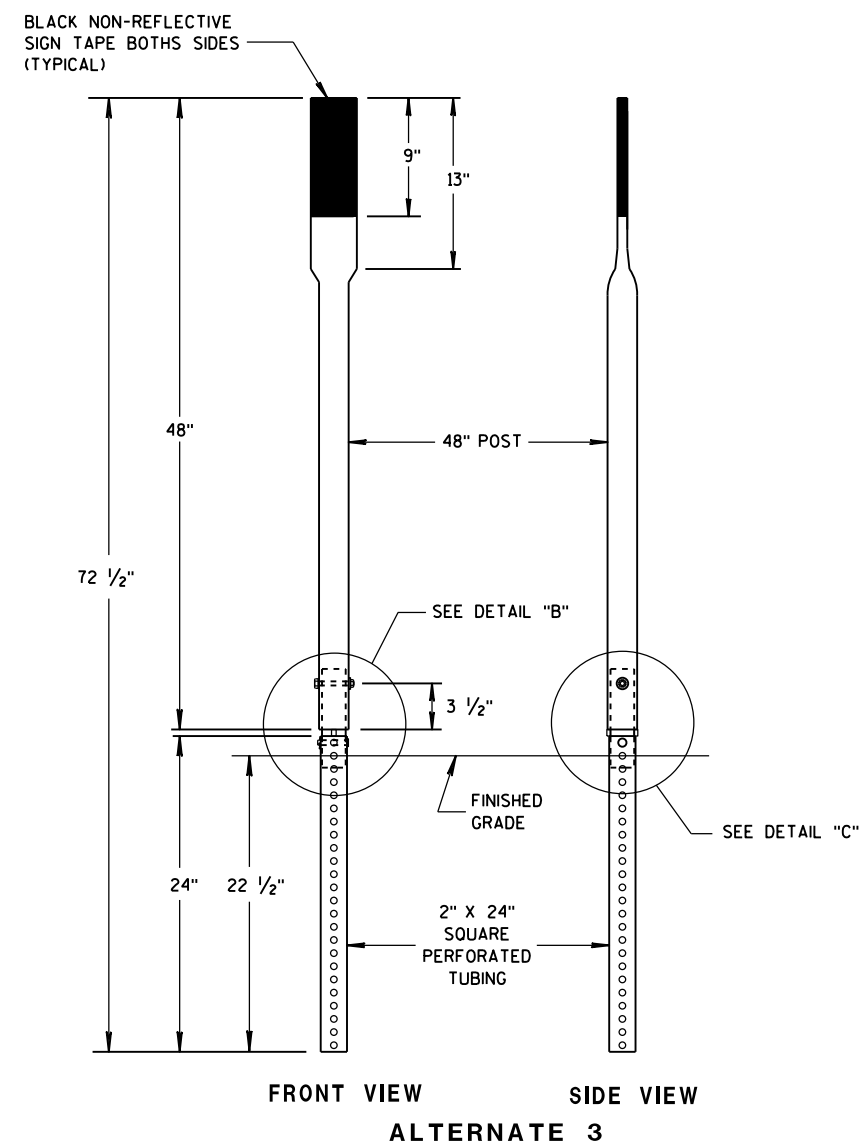
DETAIL B



DETAIL C



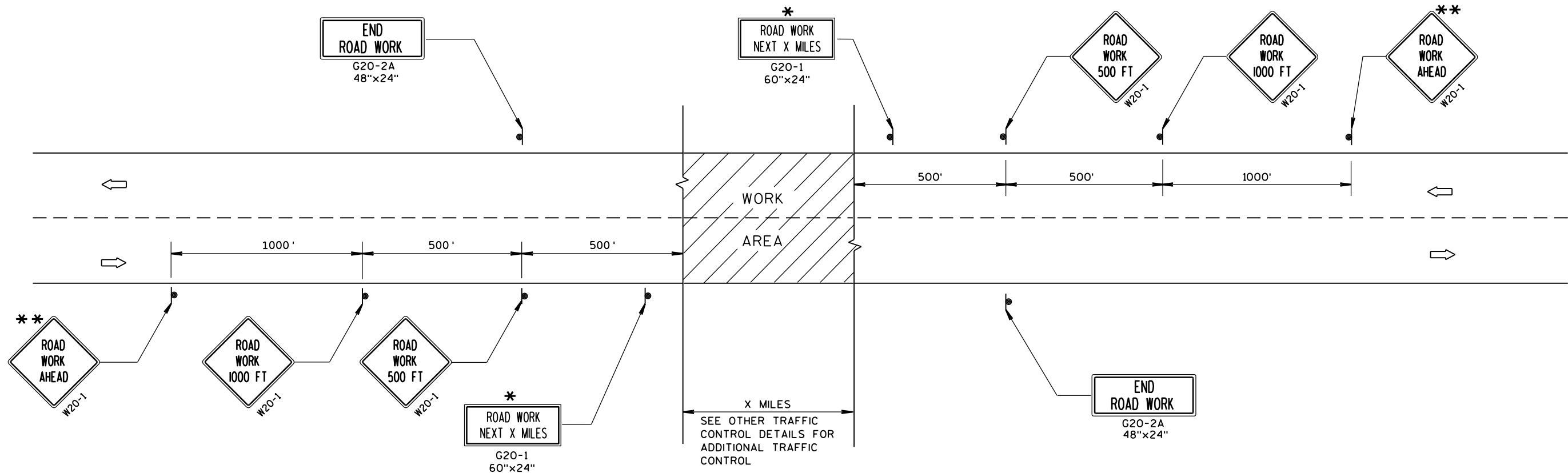
FLEXIBLE MARKER POST ANCHORS



FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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 MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

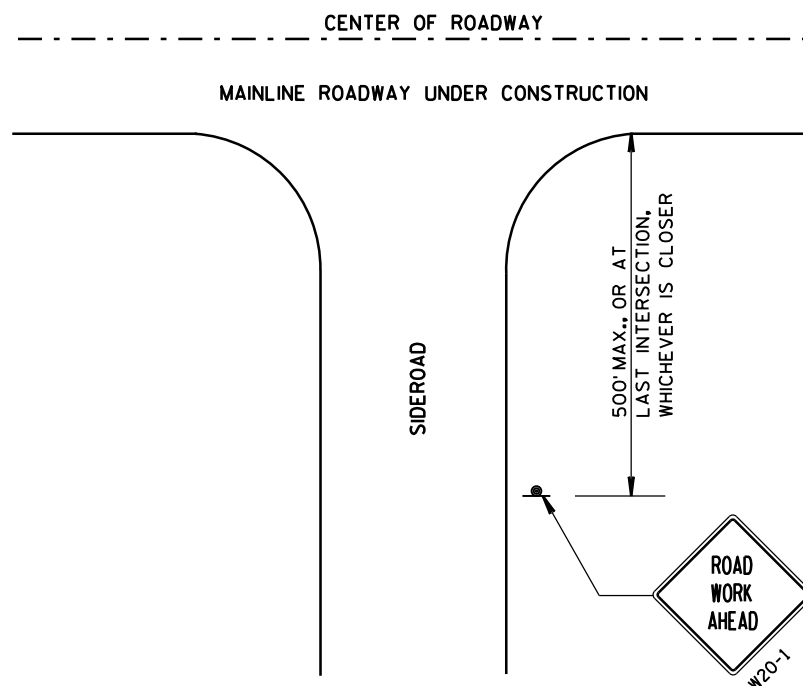
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

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

TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

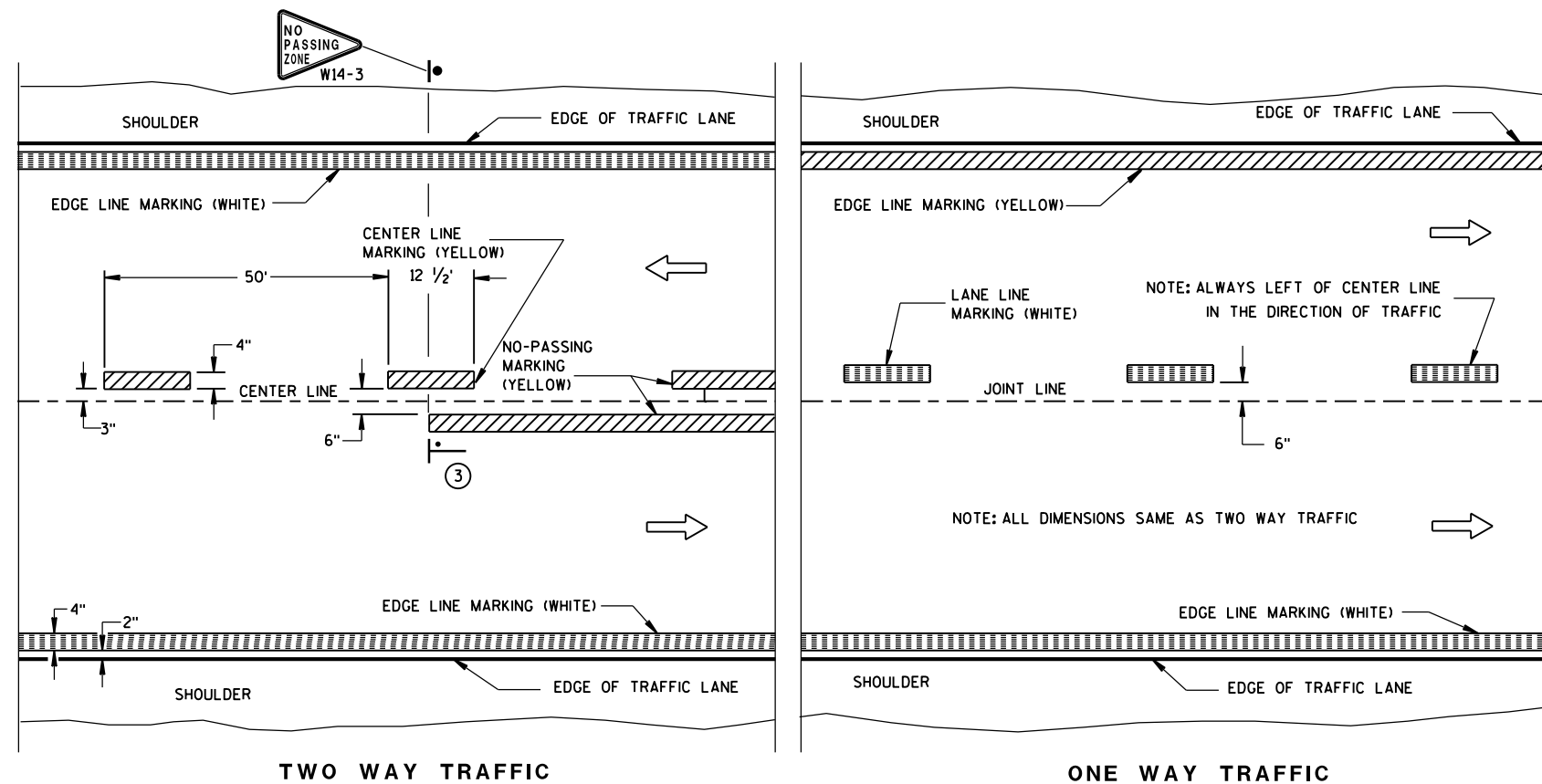
APPROVED

8/2013

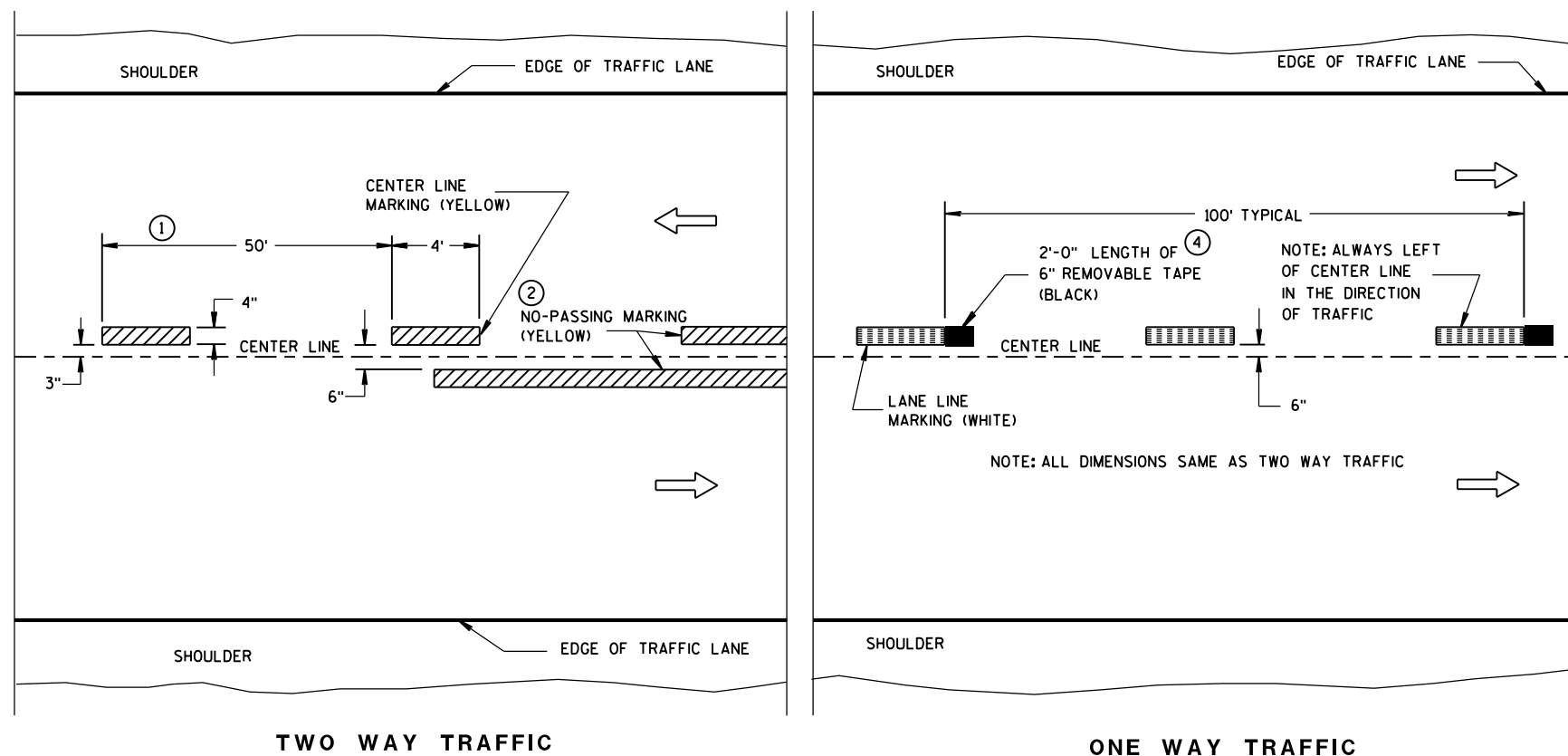
DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN



PERMANENT PAVEMENT MARKING




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

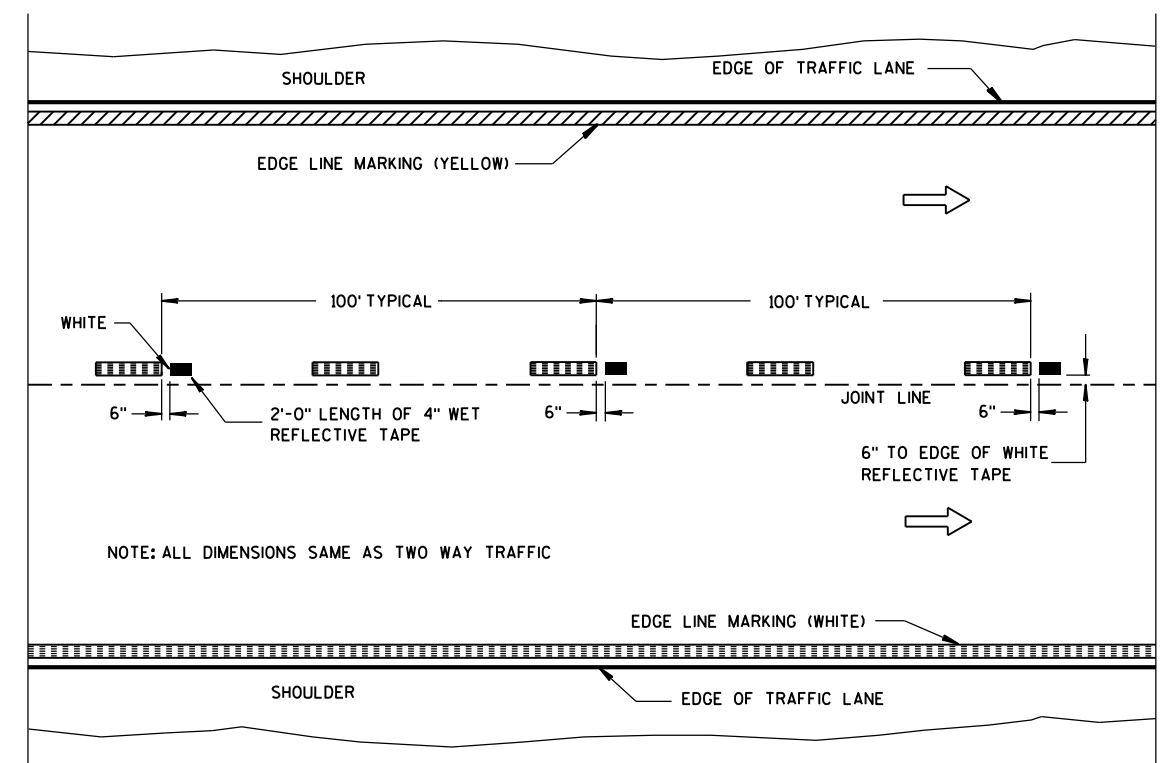
GENERAL NOTES

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)

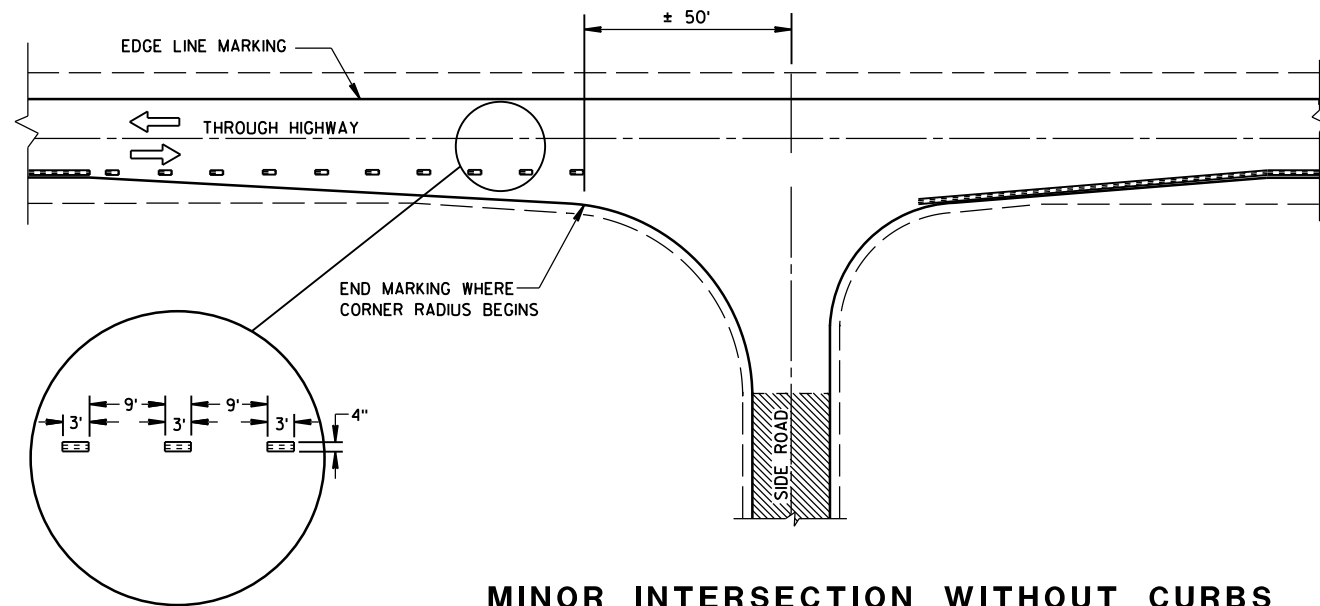
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

FHWA

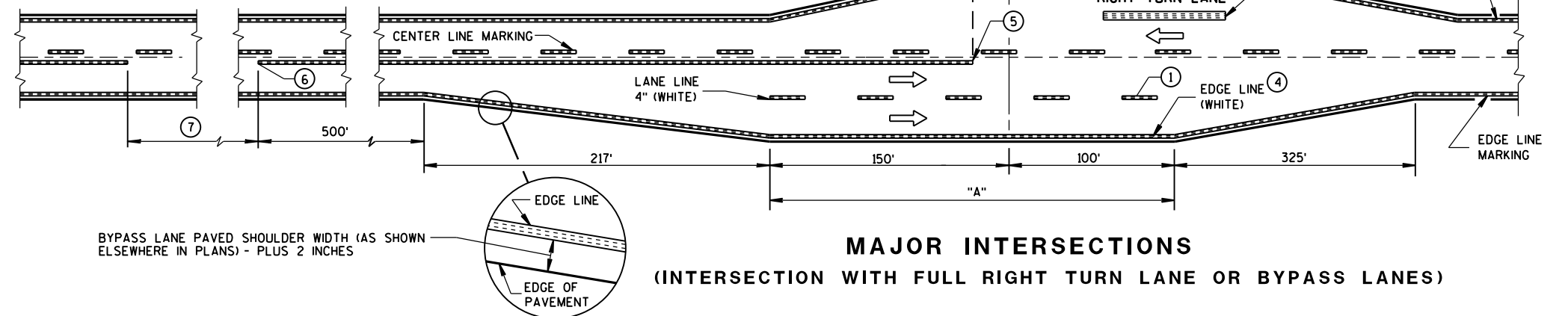
/S/ Travis Feltes
STATE TRAFFIC ENGINEER



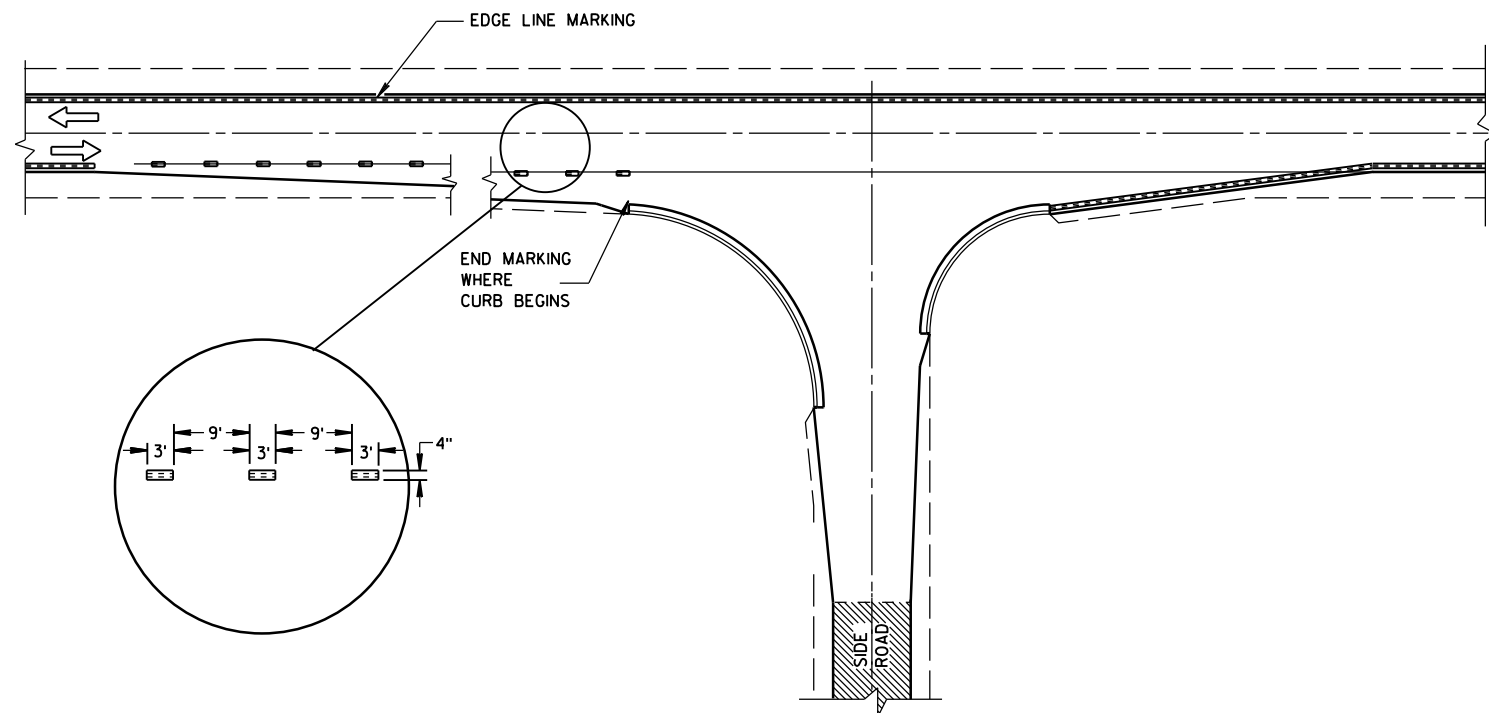
MINOR INTERSECTION WITHOUT CURBS

⑦

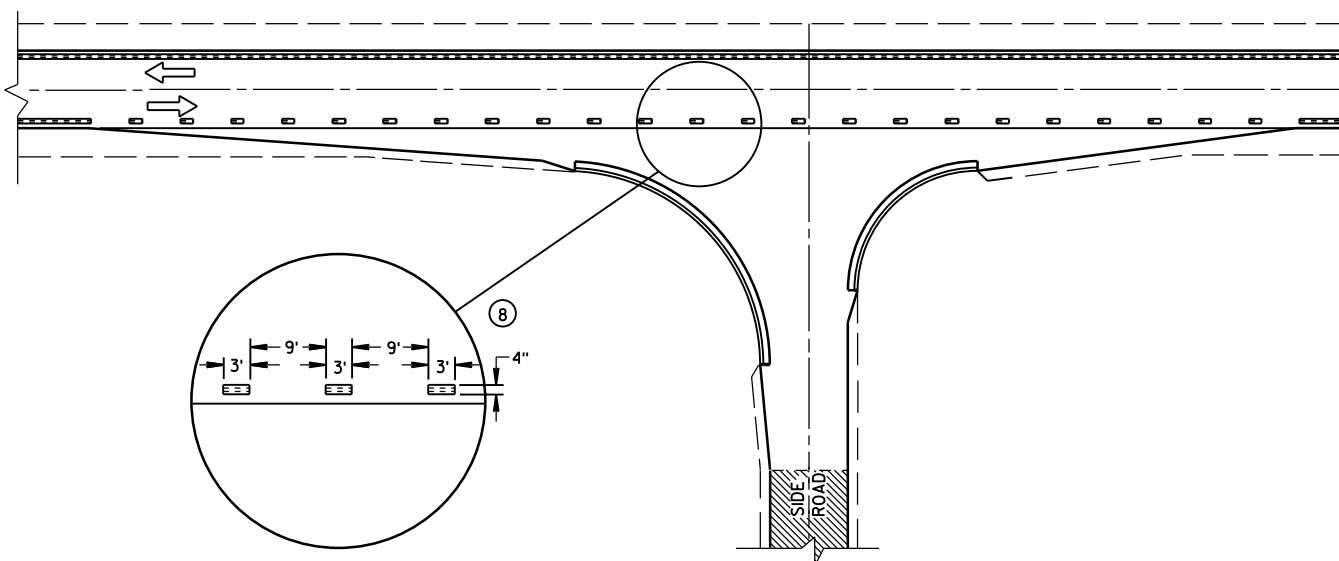
| POSTED SPEED (MPH) | MINIMUM DISTANCE BETWEEN ZONES (FEET) |
|--------------------|---------------------------------------|
| 25 - 30 | 528 |
| 35 - 40 | 528 |
| 45 - 50 | 686 |
| 55 | 792 |



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



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



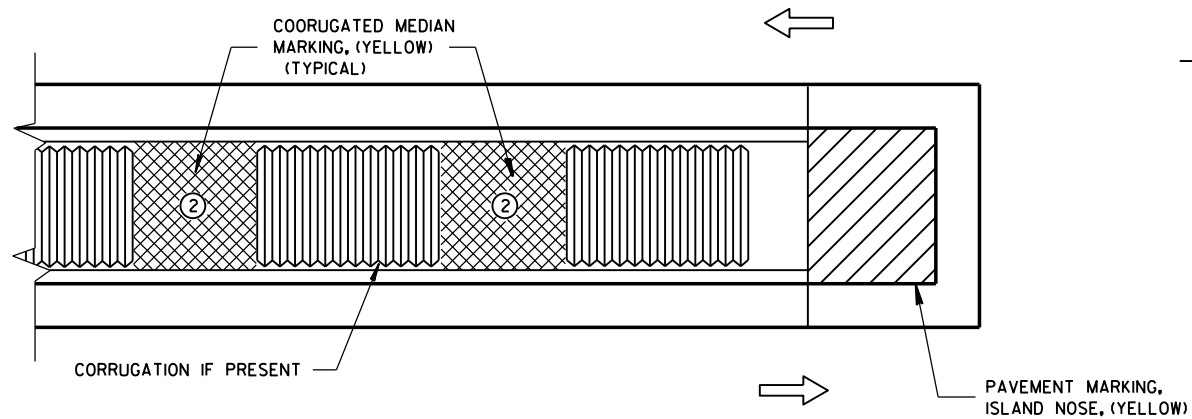
MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

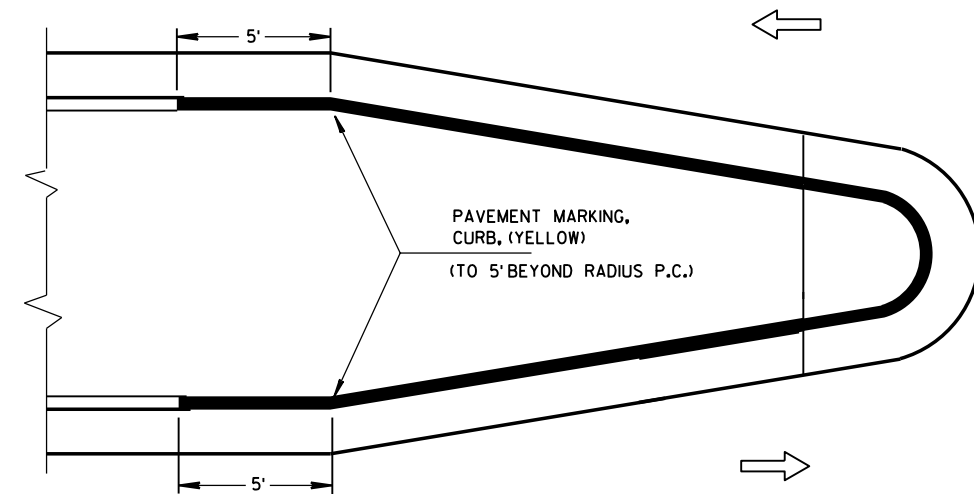
- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE 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)

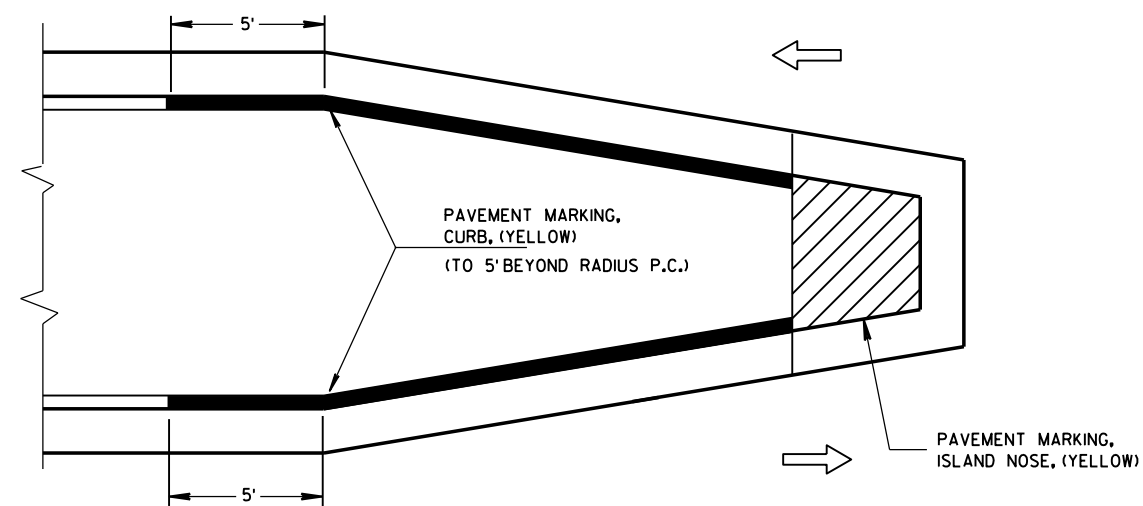
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

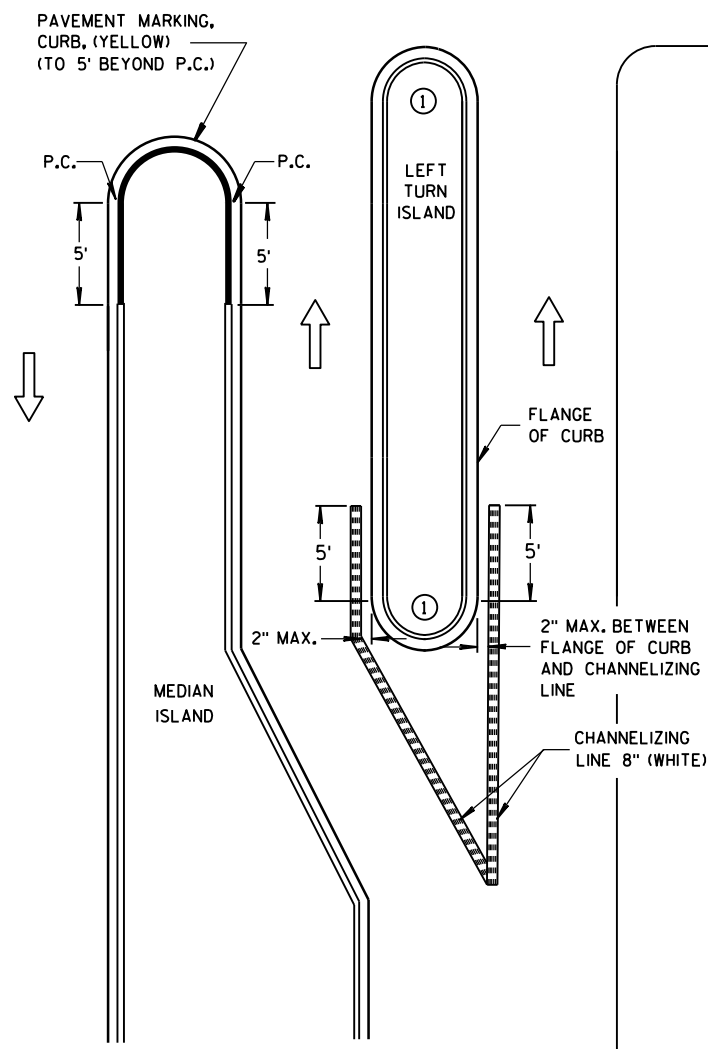


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

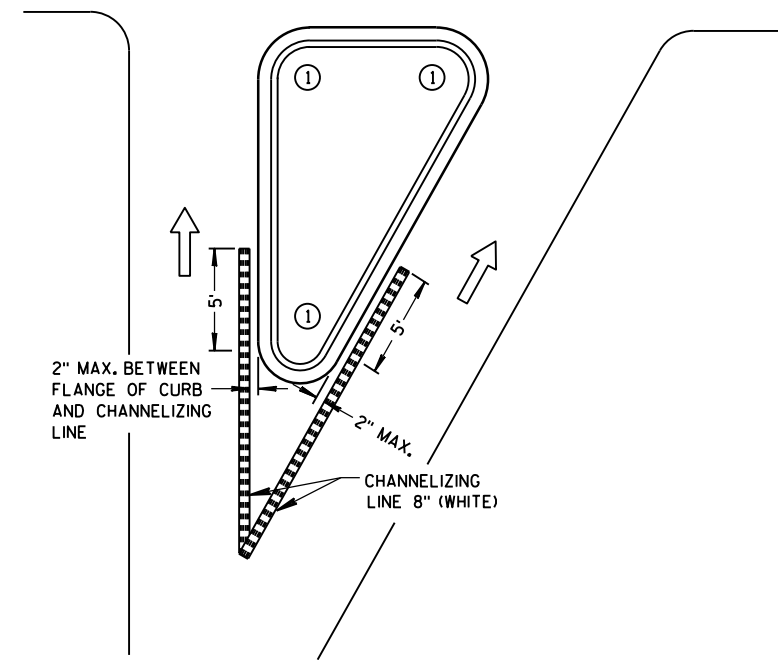
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

- DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- 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

PAVEMENT MARKING (ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

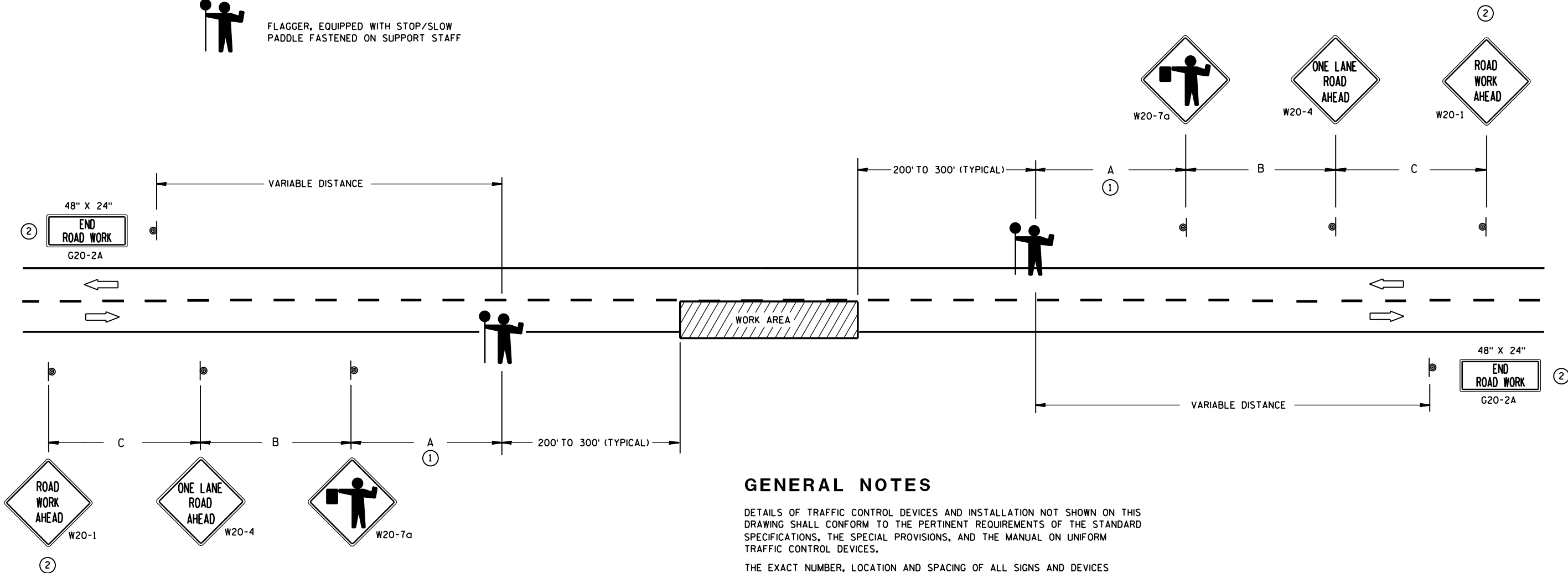
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

| SPEED LIMIT | SIGN SPACING A,B,C |
|-------------|-----------------------|
| 25-35 MPH | 200' |
| 35-40 MPH | 350' |
| 45-55 MPH | 500' |



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, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

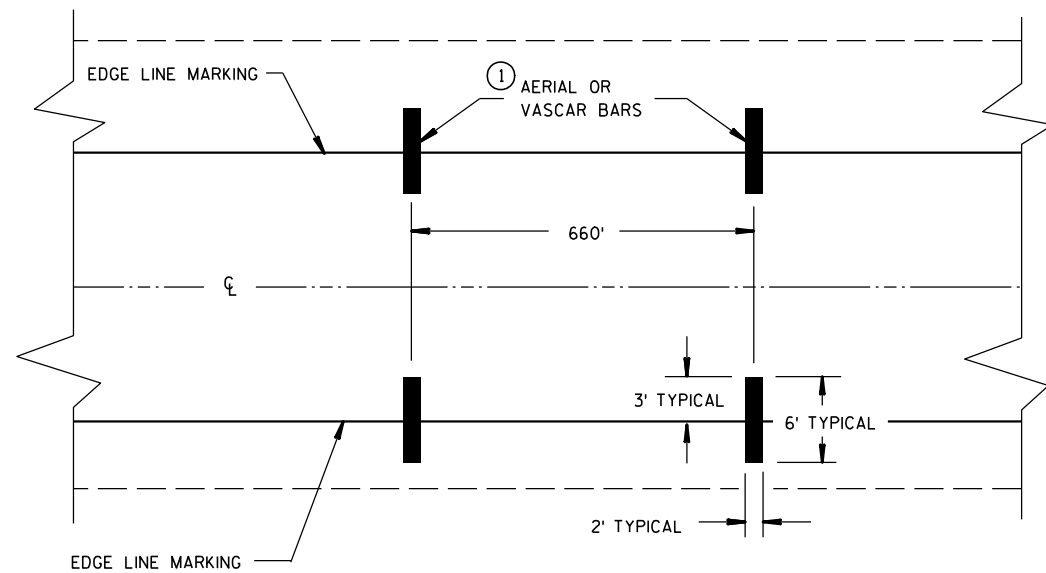
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- 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.

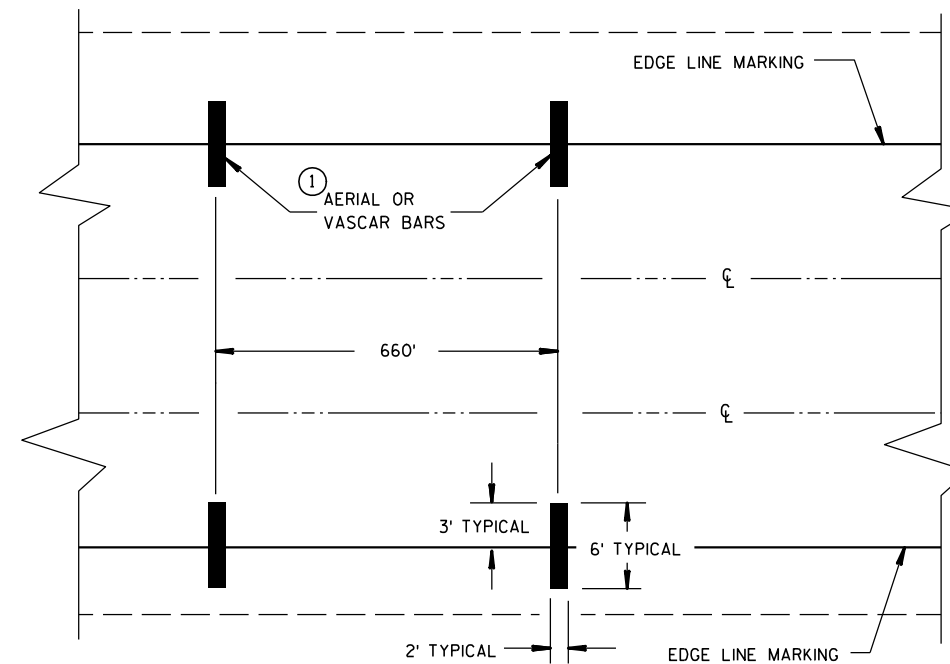
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

GENERAL NOTES

- ① NUMBER OF VASCAR OR AERIAL BARS SHALL BE A MINIMUM OF 2 OR A MAXIMUM OF 5 AT 660' SPACING.

A CAR CAN BE PROVIDED BY THE WISCONSIN STATE PATROL FOR TRAFFIC CONTROL.

AERIAL ENFORCEMENT BARS
PAVEMENT MARKING DETAILS

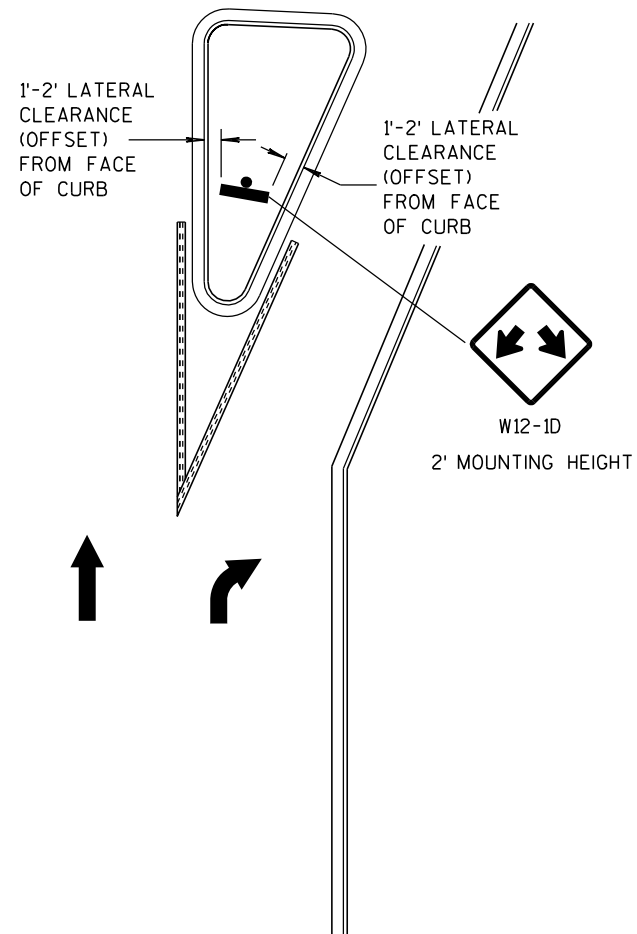
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

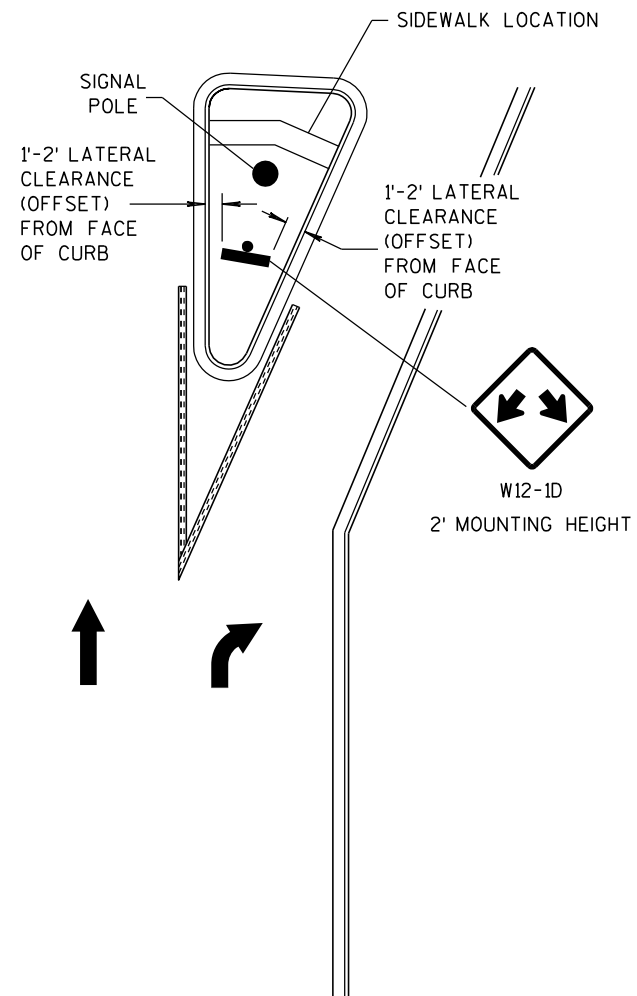
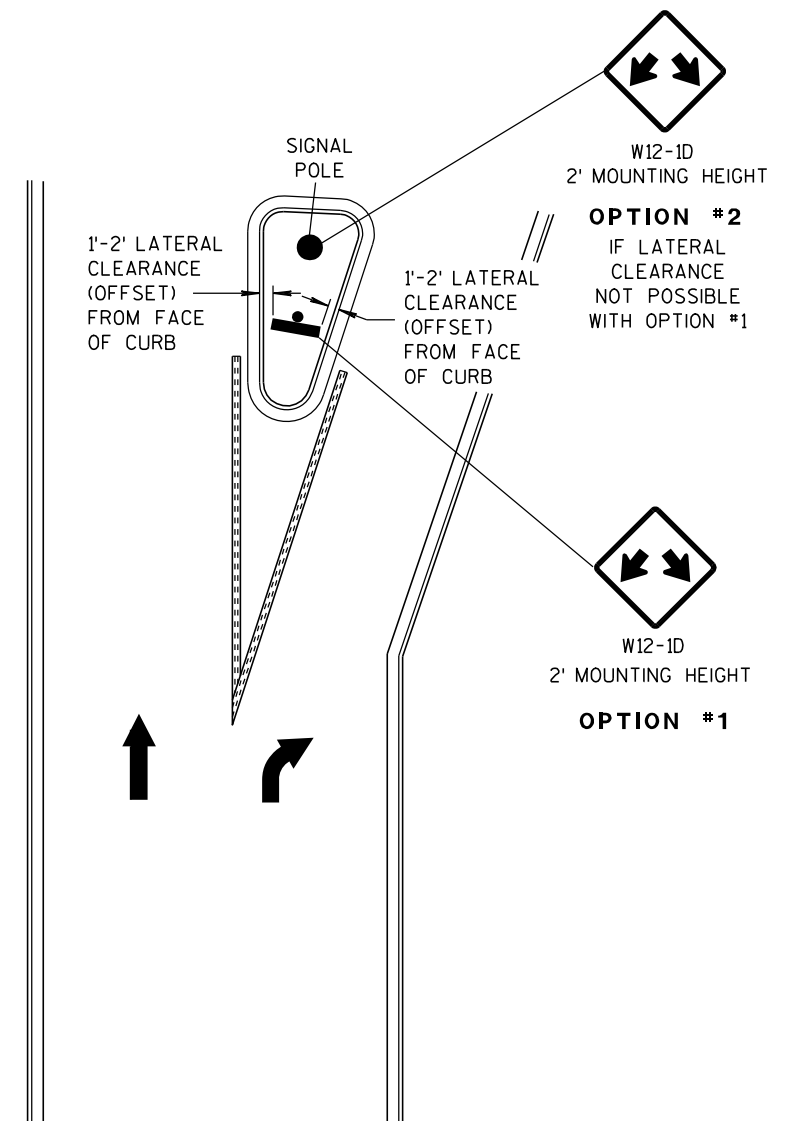
4/23/01
DATE

/S/ Chester J. Spang
CHIEF SIGNS AND MARKING ENGINEER

FHWA



LARGE RIGHT TURN ISLAND

LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE

SMALL RIGHT TURN ISLAND

GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

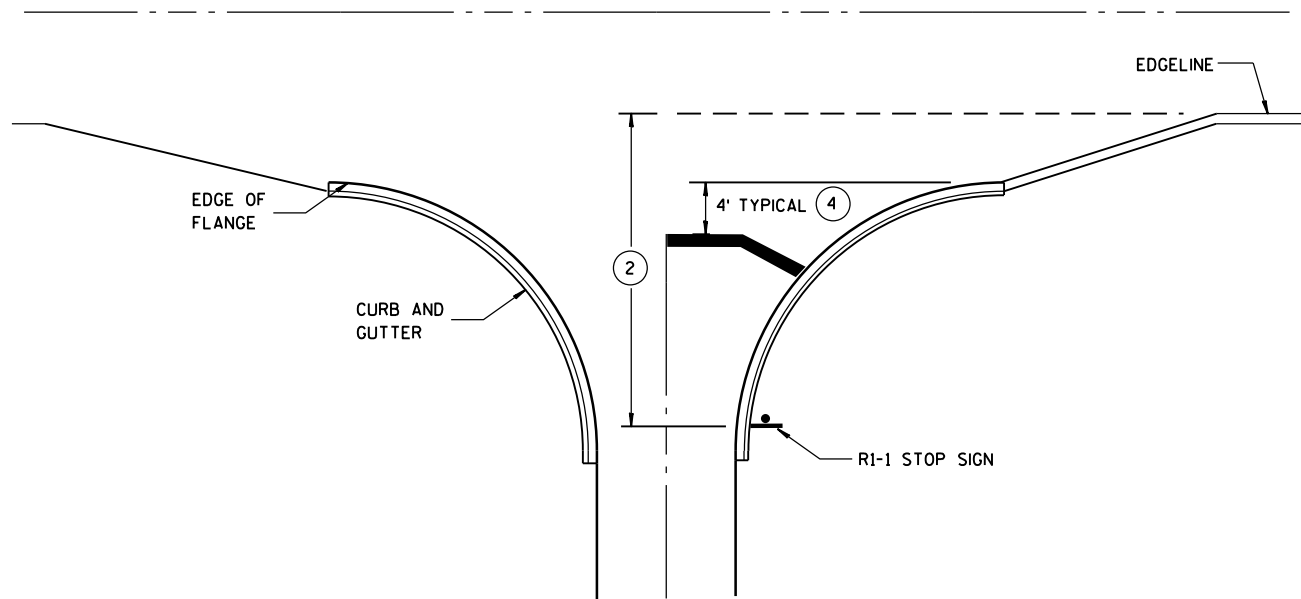
DOUBLE ARROW WARNING SIGN PLACEMENT**DOUBLE ARROW
WARNING SIGN PLACEMENT**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

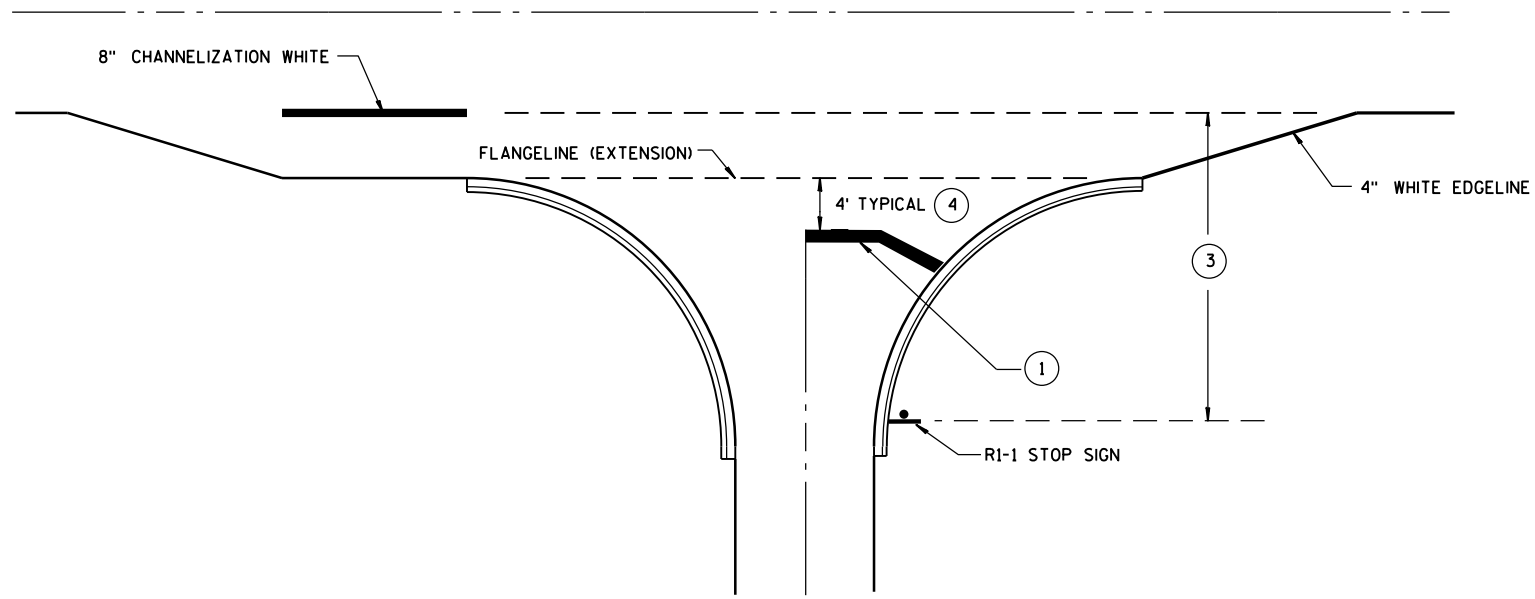
10-22-08
DATE

FHWA

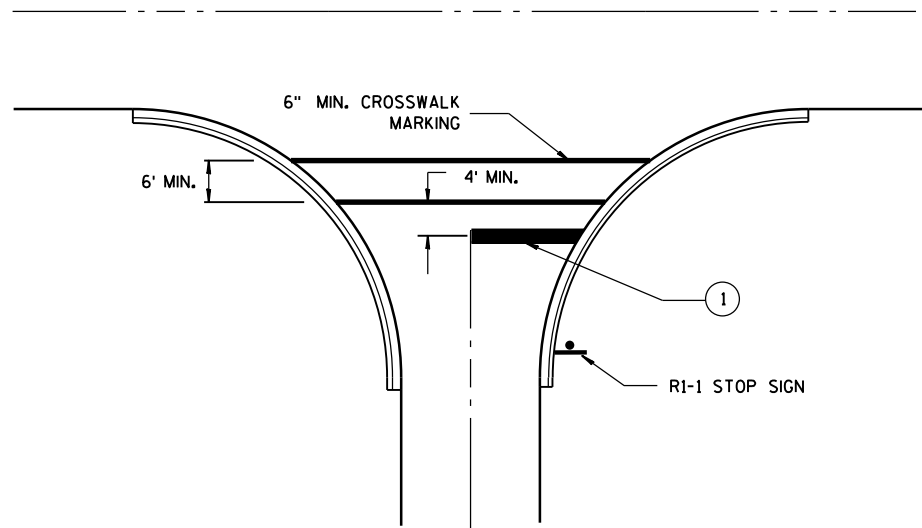
/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN



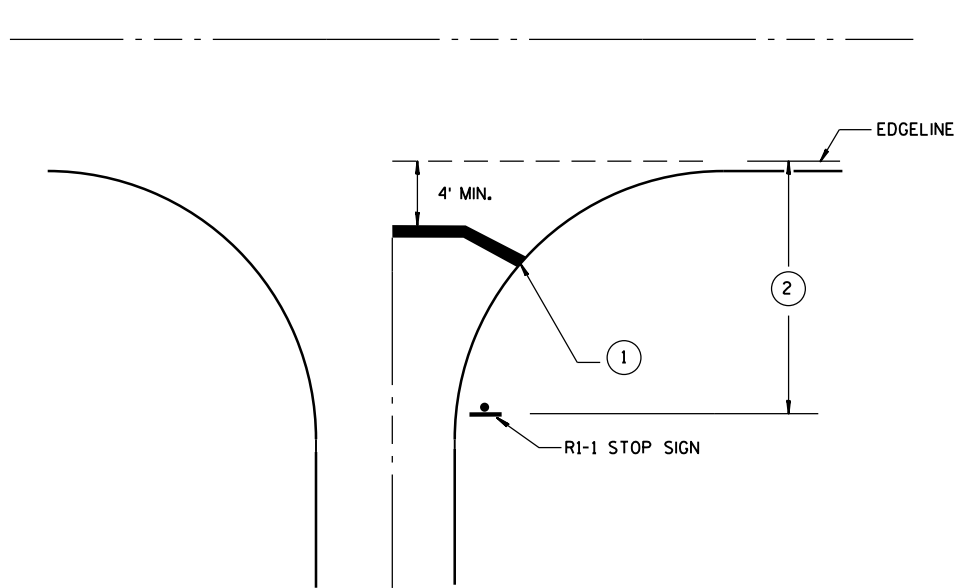
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

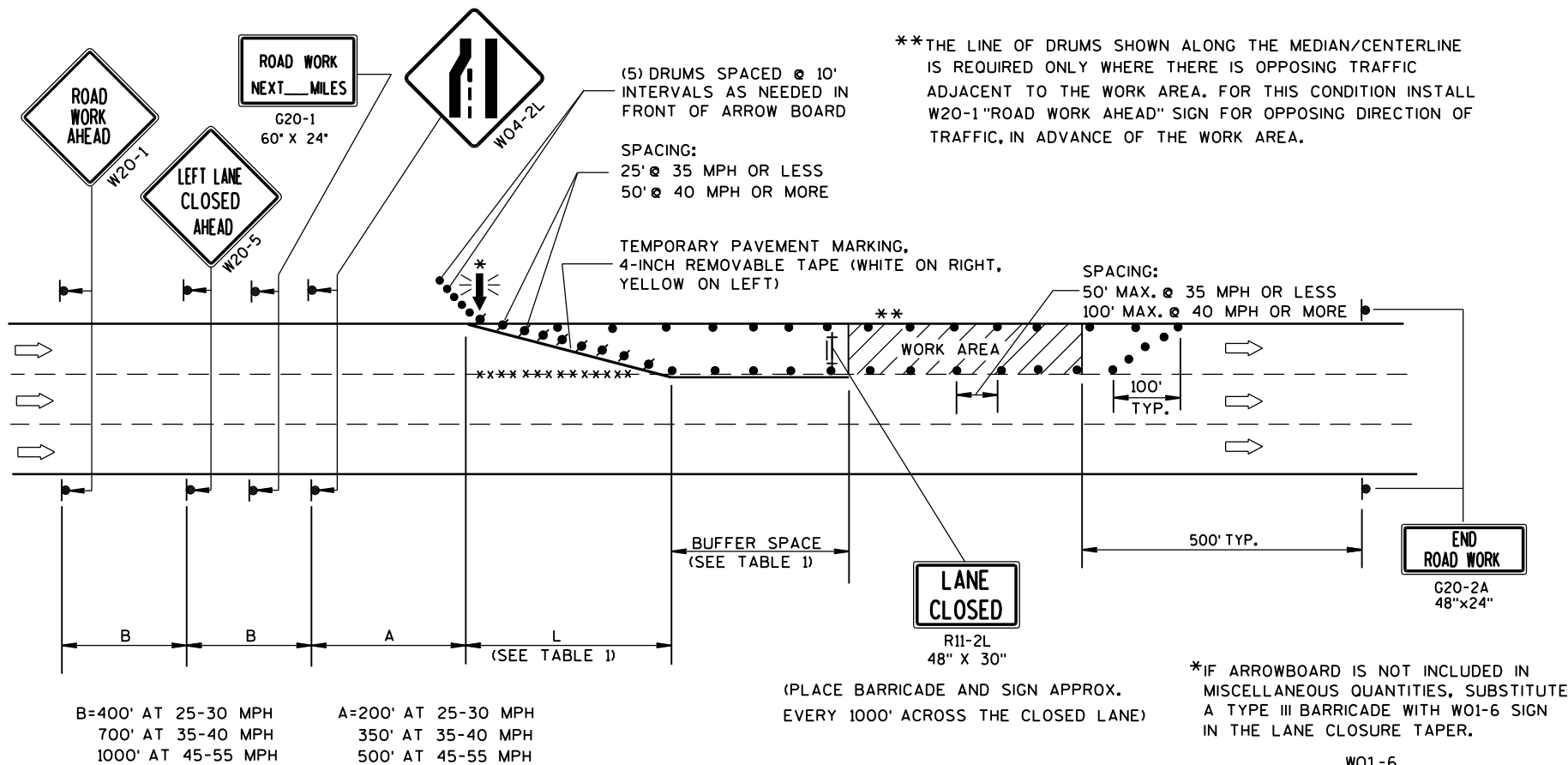
GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013 DATE /S/ Travis Feltz
STATE TRAFFIC ENGINEER
FHWA



GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

ALL SIGNS ARE 48"x48" 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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

BARRICADES IN A CLOSED LANE 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.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

| S | L | BUFFER SPACE |
|----|------|--------------|
| 25 | 125' | 55' |
| 30 | 180' | 85' |
| 35 | 245' | 120' |
| 40 | 320' | 170' |
| 45 | 540' | 220' |
| 50 | 600' | 280' |
| 55 | 660' | 335' |

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER
L = $\frac{WS^2}{60}$ AT 40 MPH OR LESS
L = TAPER LENGTH IN FEET
S = NON-CONSTRUCTION SPEED LIMIT (MPH)
W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

TRAFFIC CONTROL,
SINGLE LANE CLOSURE,
NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 /S/ Travis Feltes
DATE 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.

W20-1A 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

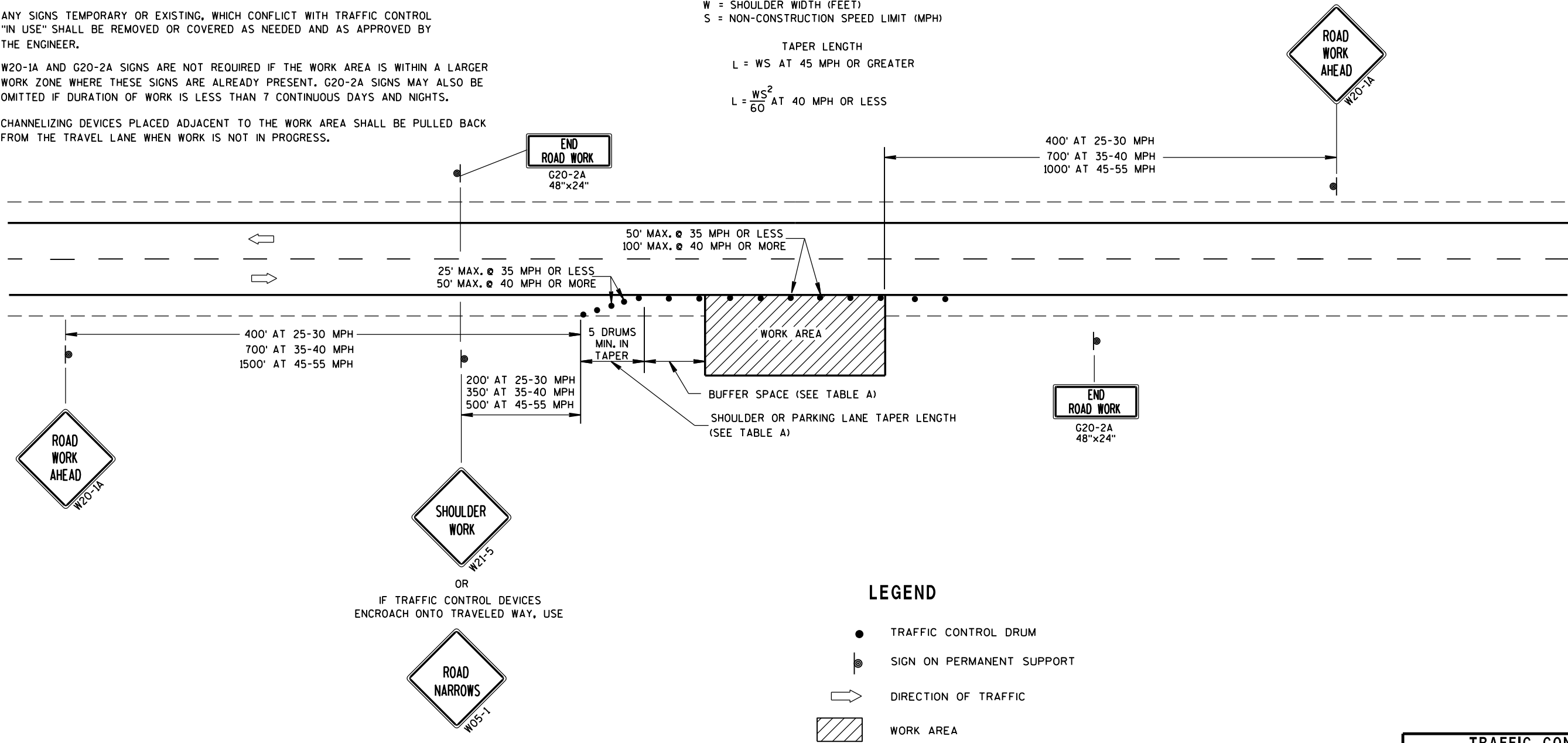
| SHOULDER TAPER LENGTH (FEET) | | | | | BUFFER SPACE (FEET) |
|------------------------------|----|-----|-----|-----|---------------------|
| S \ W | 4 | 6 | 8 | 10 | |
| 30 | 20 | 30 | 40 | 50 | 200 |
| 35 | 30 | 45 | 55 | 70 | 250 |
| 40 | 40 | 55 | 75 | 90 | 305 |
| 45 | 60 | 90 | 120 | 150 | 360 |
| 50 | 70 | 100 | 135 | 170 | 425 |
| 55 | 75 | 110 | 150 | 185 | 495 |

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

TAPER LENGTH
L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

| | |
|---|---|
| TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED July 14, 2015 DATE | /S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER |
| FHWA | |

LEGEND

- SIGN ON PERMANENT SUPPORT
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH ATTACHED SIGN
- CONCRETE BARRIER TEMPORARY PRECAST
- FLAGS, 16" x 16" MIN., (ORANGE)
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ASPHALTIC PAVEMENT WIDENING
- DIRECTION OF TRAFFIC
- 4" X 6" WOOD POST
- TEMPORARY SIGNAL WITH BACKPLATE AND 12-INCH LENSES ON BREAKAWAY POLE



INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1-FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET.)

GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

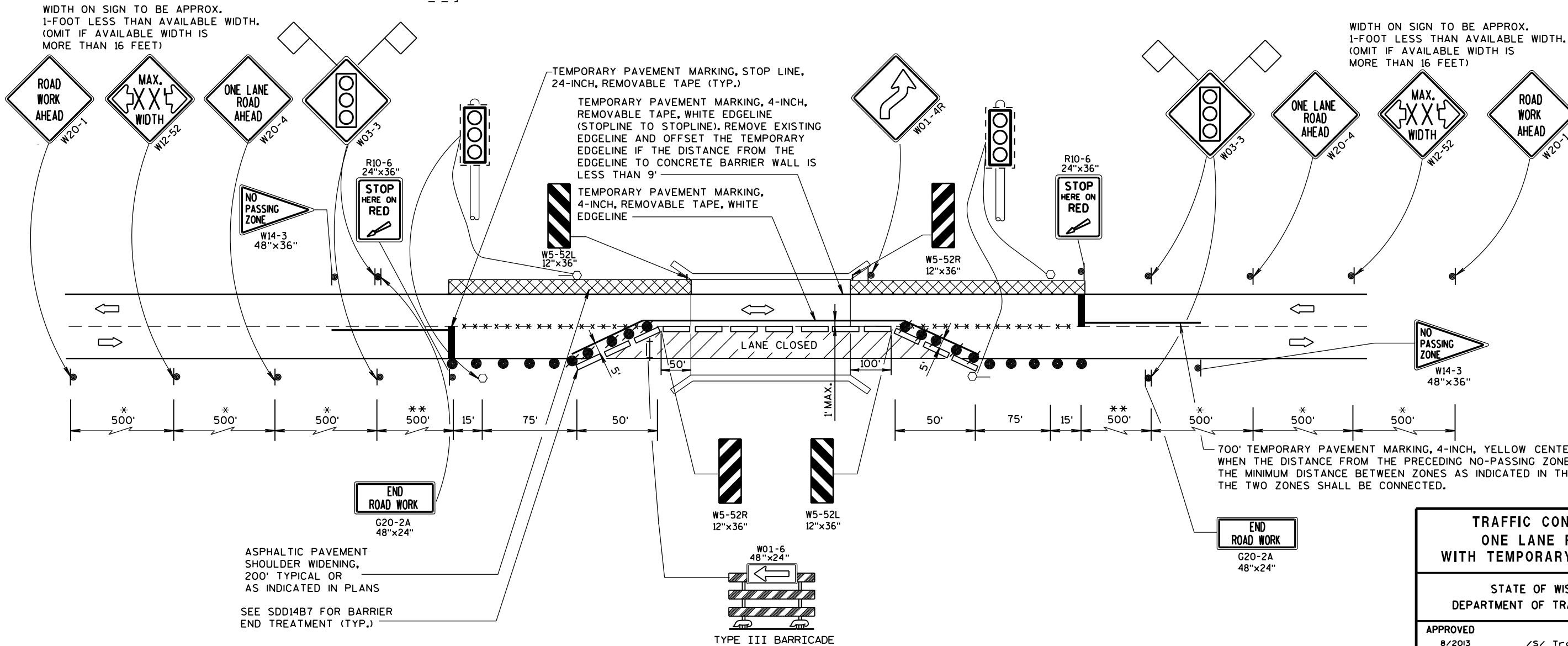
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE, AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

* 500-FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350-FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200-FOOT TYPICAL SPACING.

** USE 300' SPACING IF PRE-CONSTRUCTION REGULATORY SPEED LIMIT IS 35 MPH OR LESS.

6



6

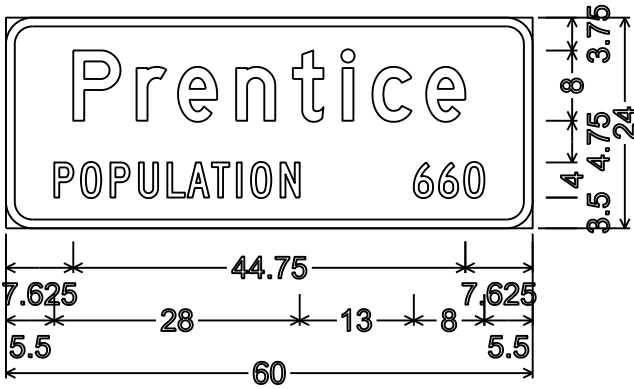
TRAFFIC CONTROL,
ONE LANE ROAD
WITH TEMPORARY SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

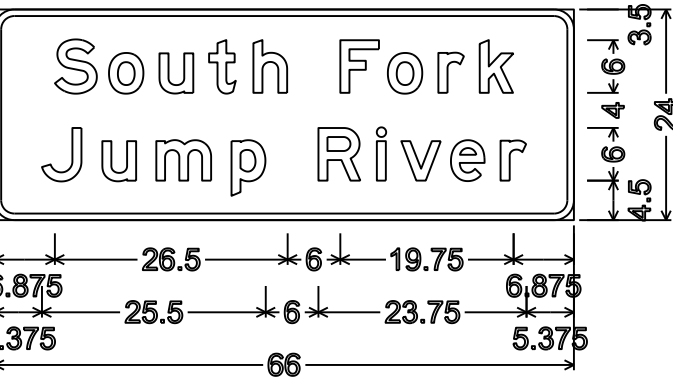
APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

S.D.D. 15 D 33-3

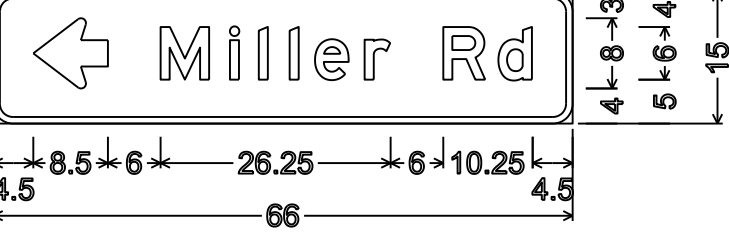
S.D.D. 15 D 33-3



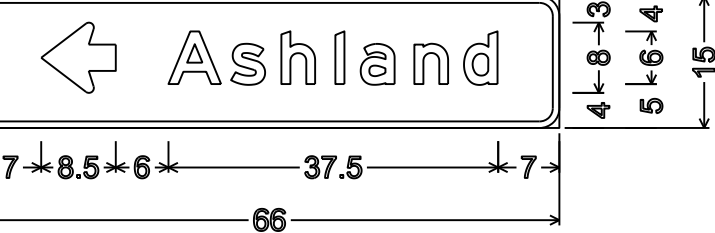
I2-3;
3.000" Radius, 1.000" Border,
"Prentice" D; "POPULATION" C ; "660" C;



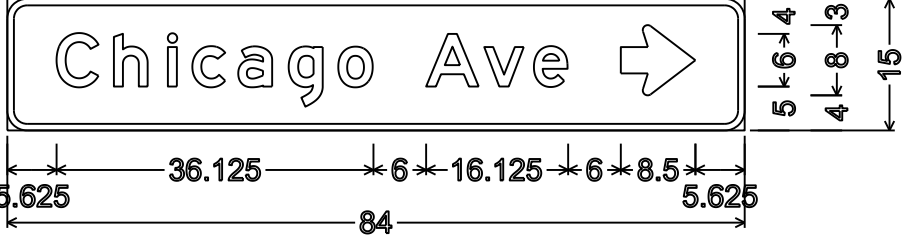
I3-1;
2.250" Radius, 0.750" Border



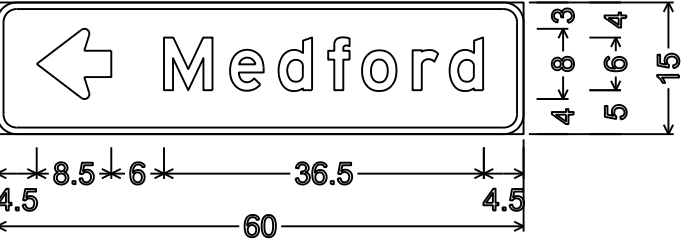
D1-1;
2.250" Radius, 0.750" Border



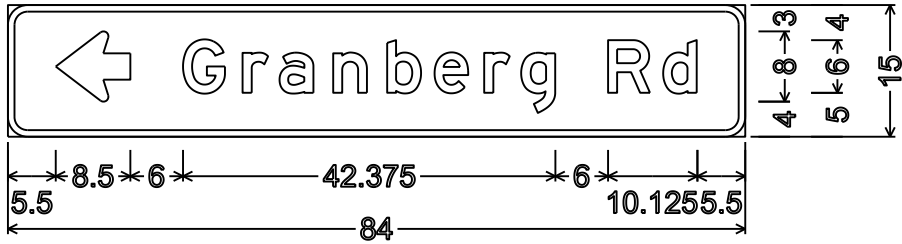
D1-1;
2.250" Radius, 0.750" Border



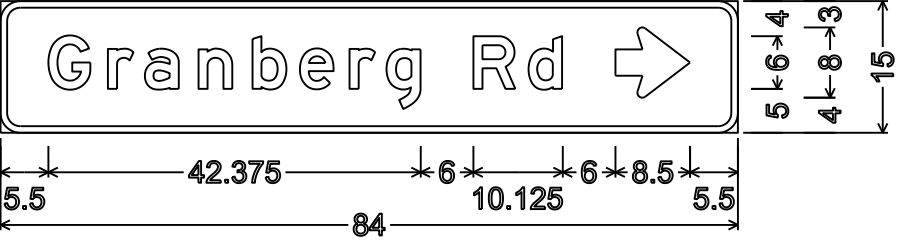
D1-1;
2.250" Radius, 0.750" Border



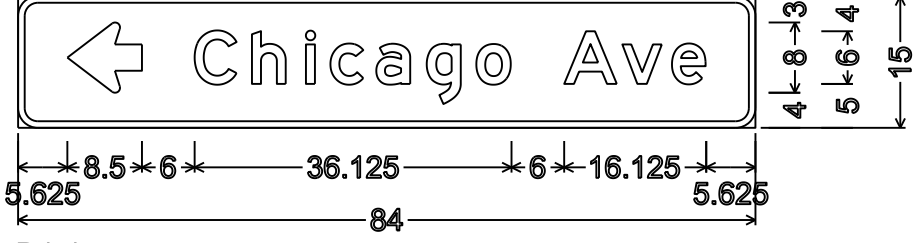
D1-1;
2.250" Radius, 0.750" Border



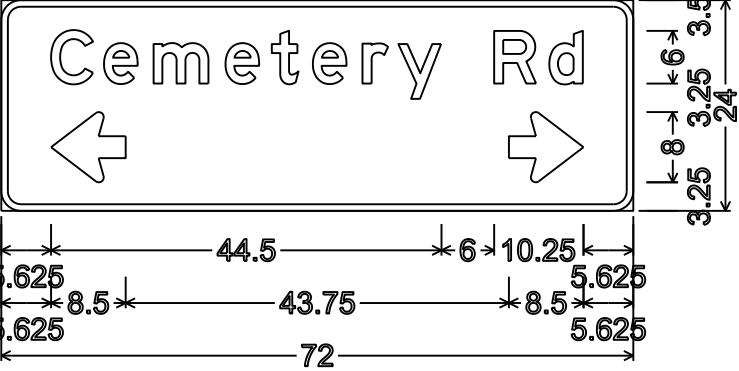
D1-1;
2.250" Radius, 0.750" Border



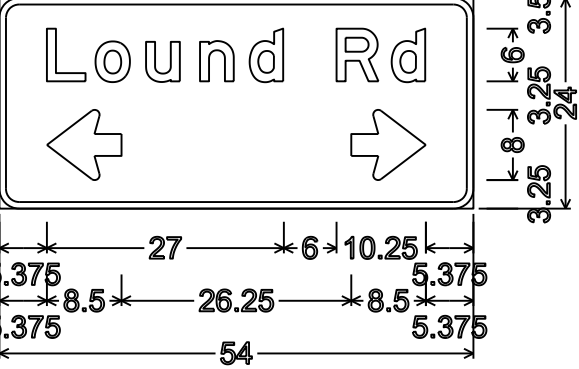
D1-1;
2.250" Radius, 0.750" Border



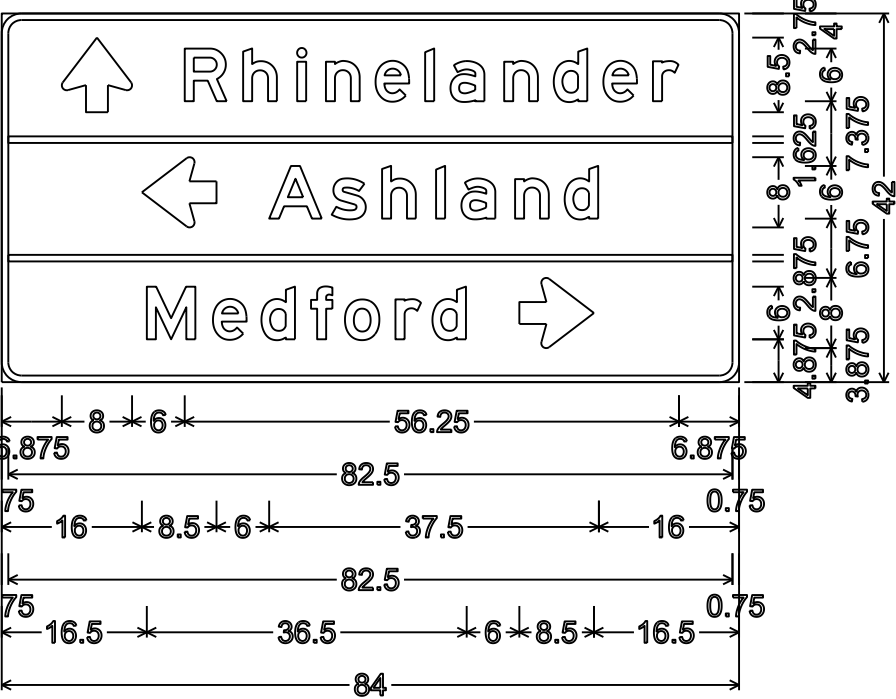
D1-1;
2.250" Radius, 0.750" Border



D1-61;
2.250" Radius, 0.750" Border



D1-61;
2.250" Radius, 0.750" Border



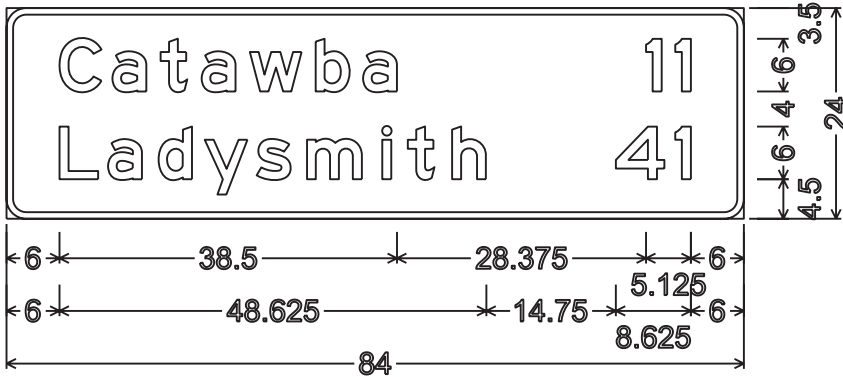
D1-3;
2.250" Radius, 0.750" Border

NOTES

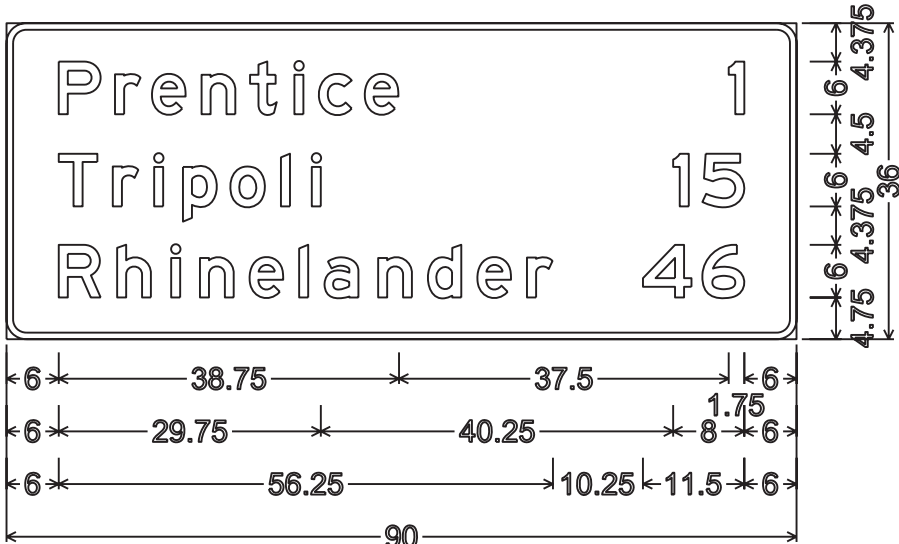
- 1. All Signs Type II - Type H Reflective
- 2. Color:
Background - Green
Message - White
- 3. Message Series - E except as noted

NOTES

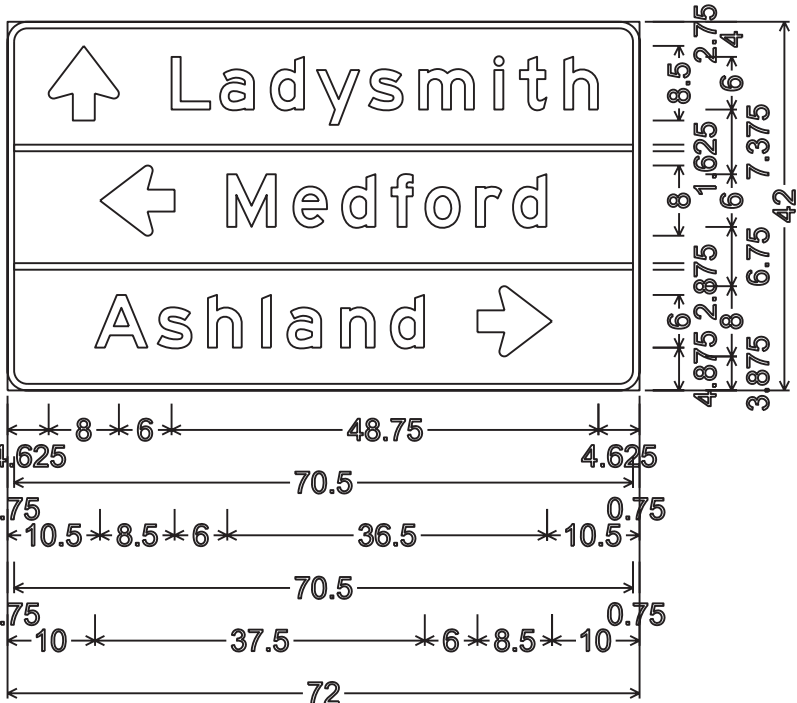
- 1. All Signs Type II - Type H Reflective
- 2. Color:
Background - Green
Message - White
- 3. Message Series - E except as noted



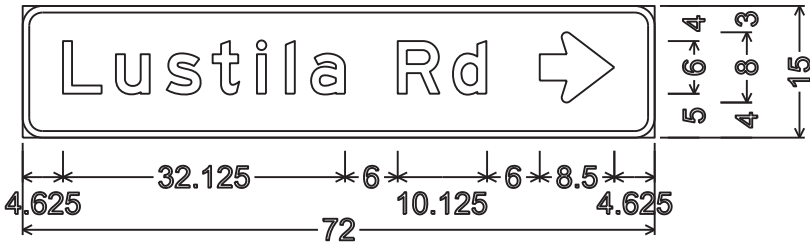
D2-2;
2.250" Radius, 0.750" Border



D2-3; 2.250" Radius, 0.750" Border

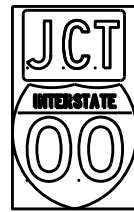


D1-3;
2.250" Radius, 0.750" Border

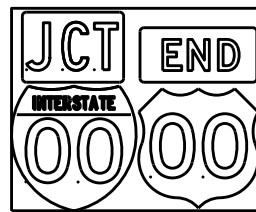


D1-1;
2.250" Radius, 0.750" Border

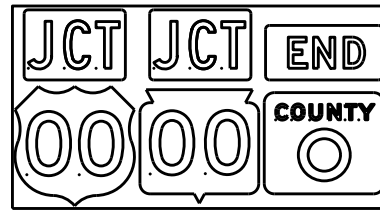
TYPICAL ASSEMBLIES



J1-1



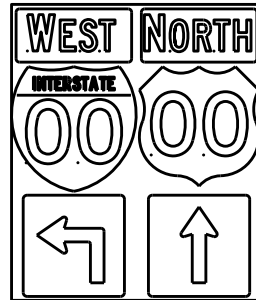
J1-2



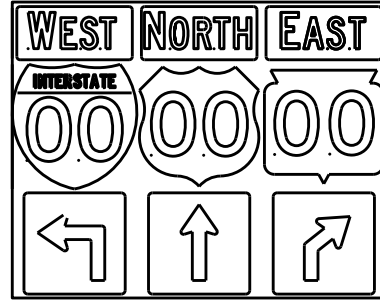
J1-3



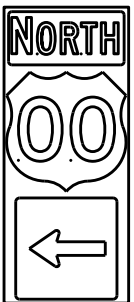
J2-1



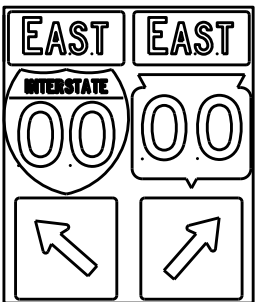
J2-2



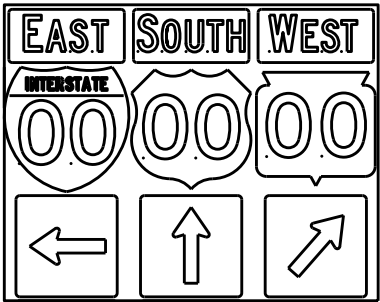
J2-3



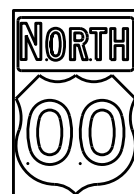
J3-1



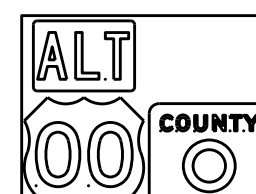
J3-2



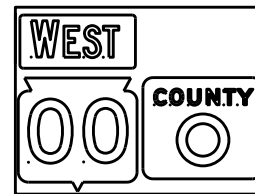
J3-3



J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

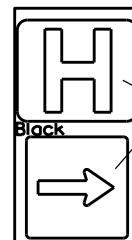


J22-1



JV

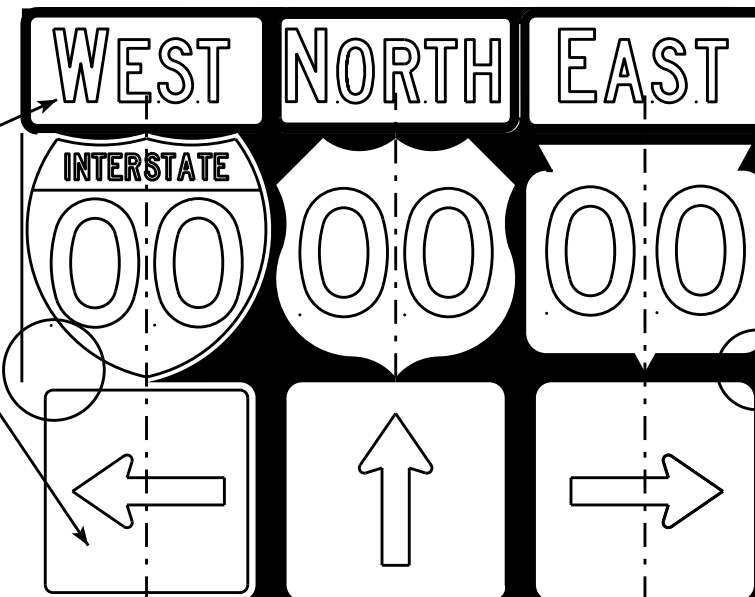
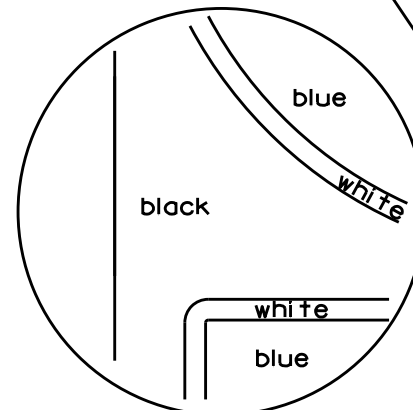
(Typical Vertical J-Assembly
See Note 10 and 11)



JH-1

Blue Background

[blue background
with interstate]



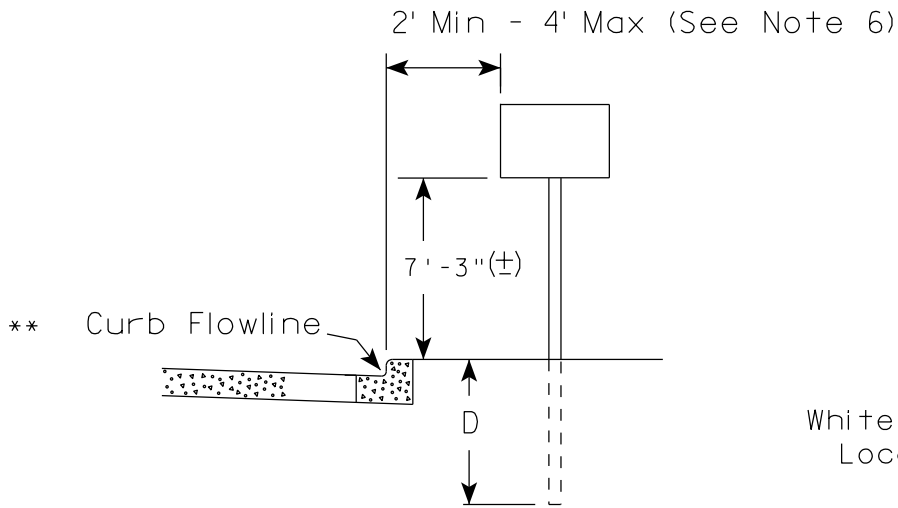
[black background]

| | |
|---|---|
| ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> For State Traffic Engineer |
| DATE 2/06/14 | PLATE NO. A2-1S.8 |

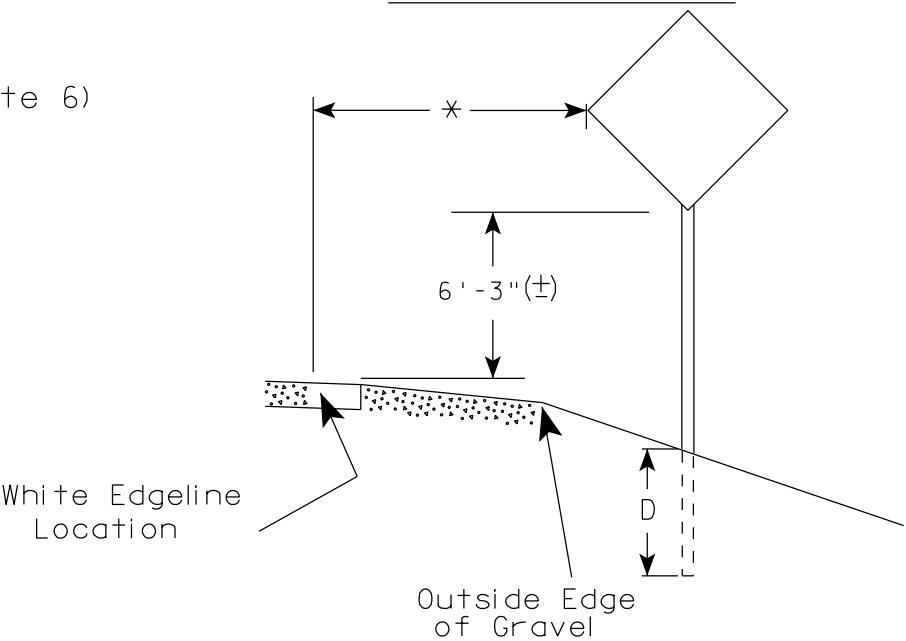
NOTES

- 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 or rounded if base material is plywood. If base material is metal the corners shall be rounded.
- 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.
- All Vertical J Assemblies are given a Sign Code of JV
- For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

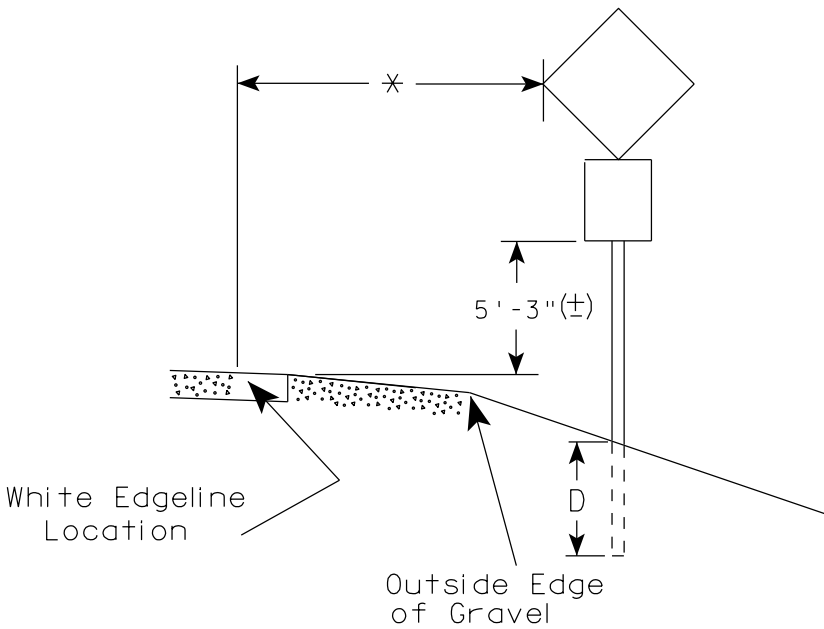
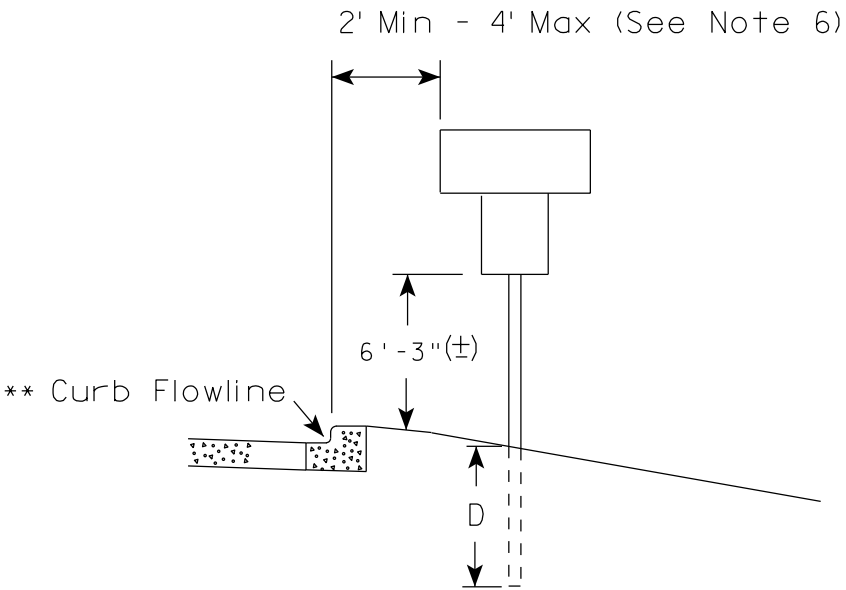
URBAN AREA



RURAL AREA (See Note 2)



- GENERAL NOTES
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
 2. If signs are mounted on barrier wall, see A4-10 sign plate.
 3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
 4. Minimum mounting height for J assemblies (A2-1S) 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 signs 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), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).



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.

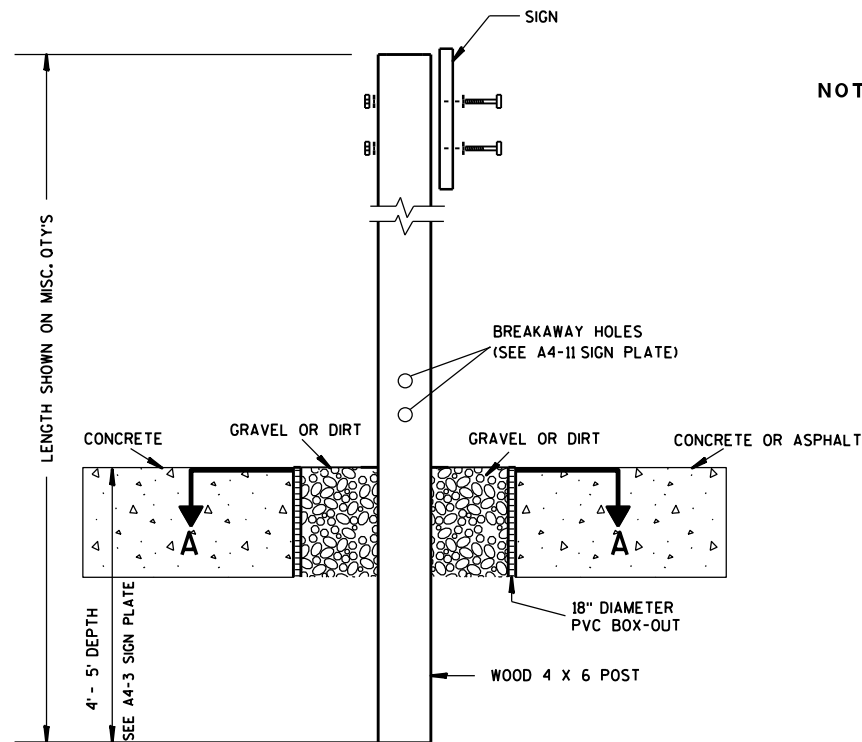
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

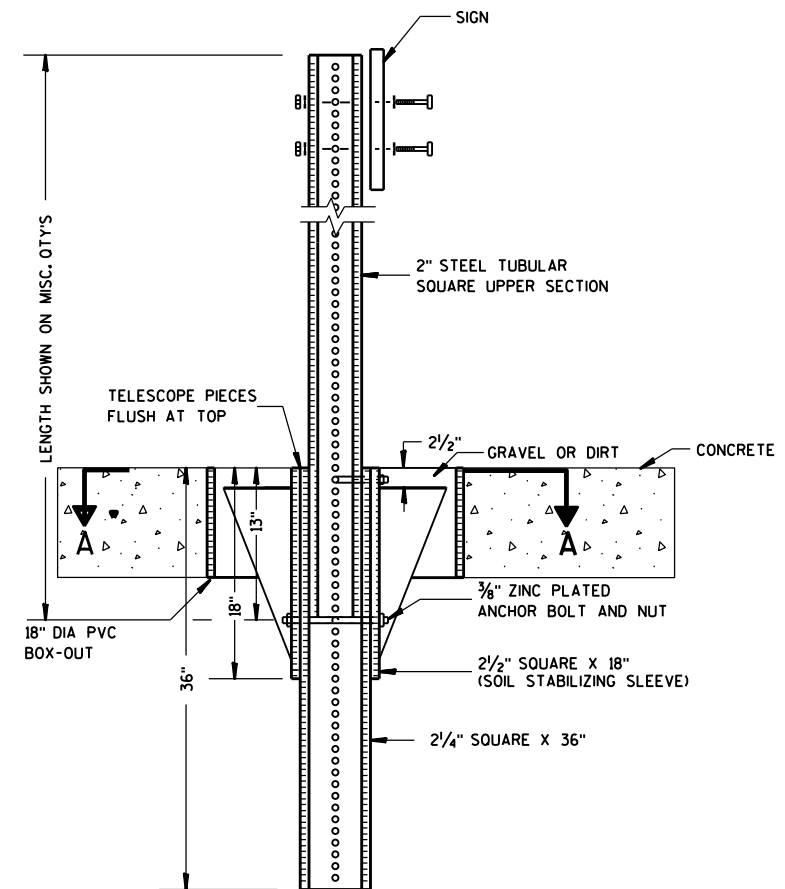
DATE 7/23/15 PLATE NO. A4-3.20



ELEVATION VIEW

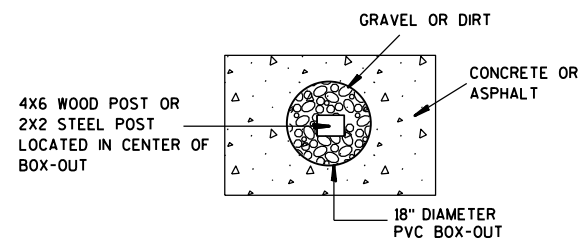
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

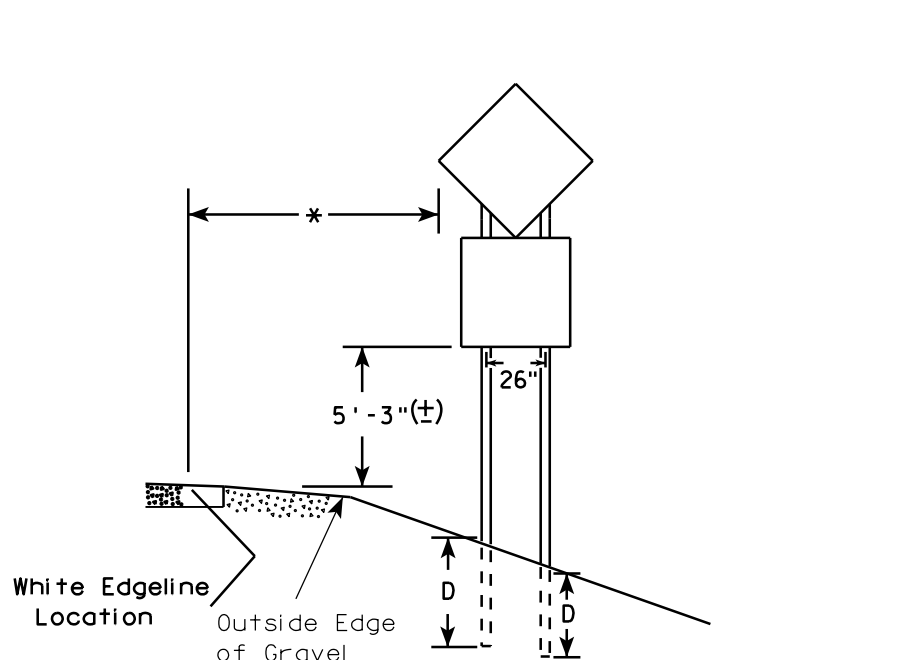
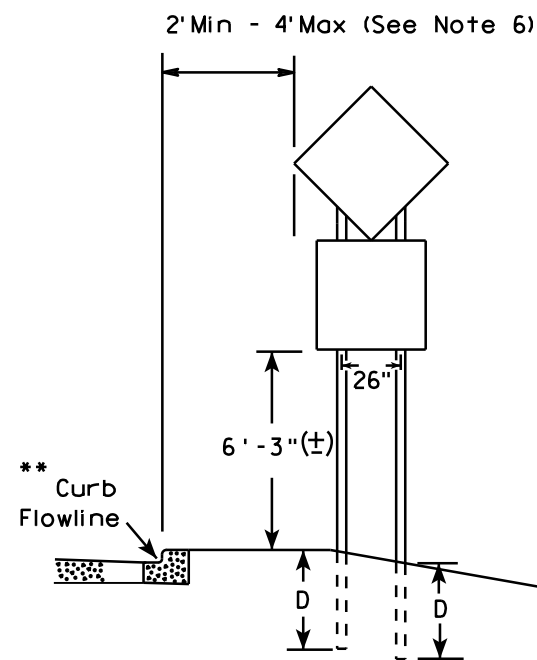
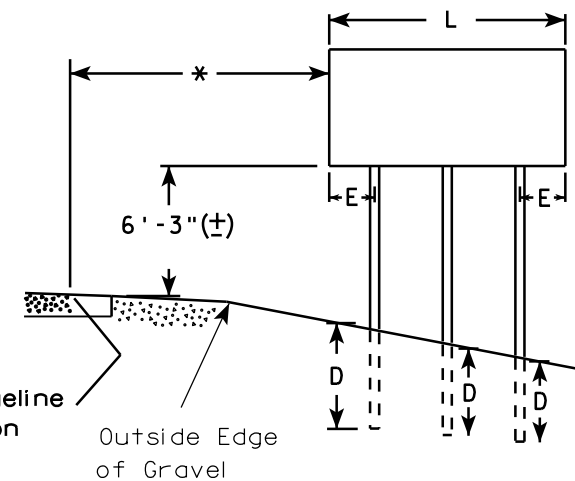
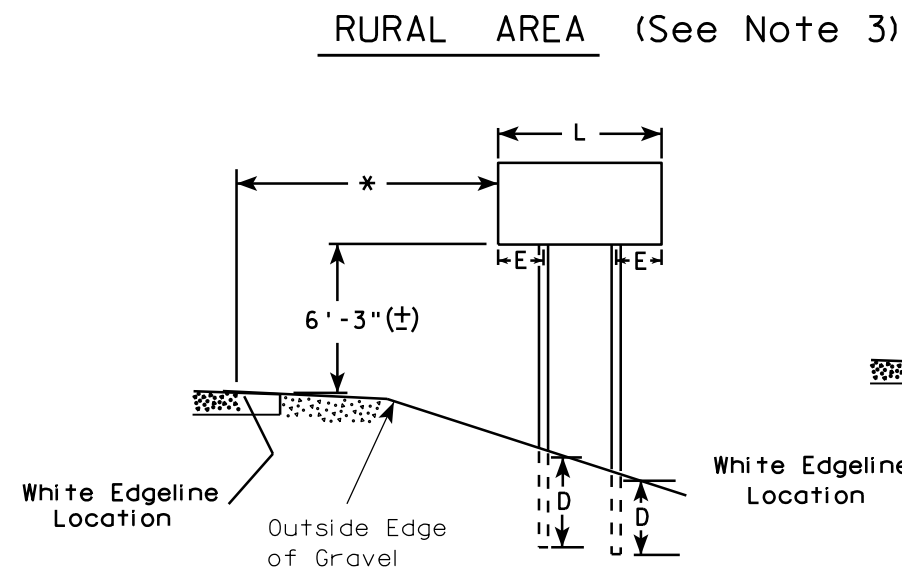
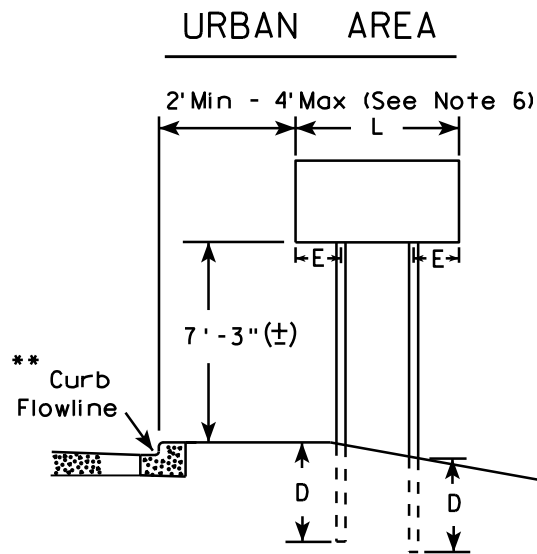
FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

- GENERAL NOTES**
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 2. See tables below for required number of posts.
 3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 4. The (±) tolerance for mounting height is 3 inches.
 5. Minimum mounting height for J assemblies (A2-1S) 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 signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

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

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

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

| 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

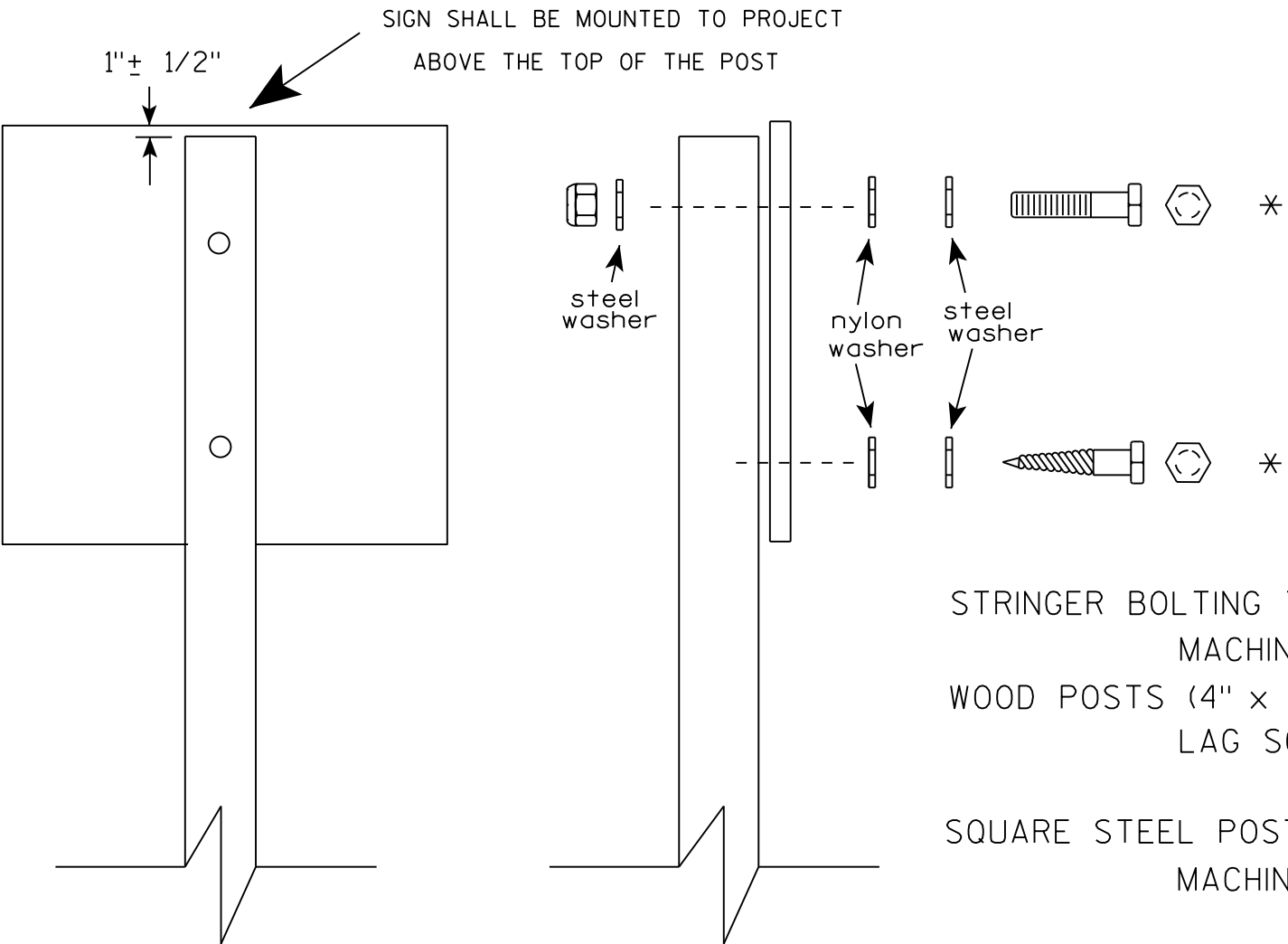
| Area of Sign Installation (Sq. Ft.) | D (Min) |
|---|--------------|
| 20 or Less | 4' |
| Greater than 20 | 5' |

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4.14



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

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

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

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
 - 3/8" X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 - 3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
 - 1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

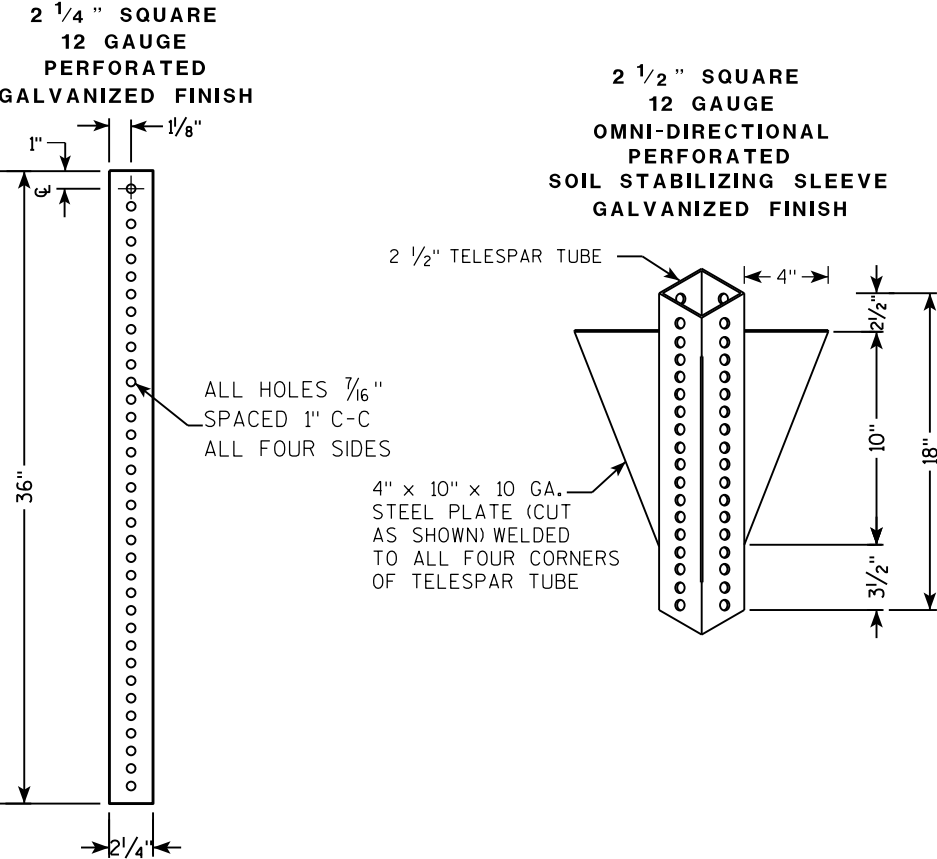
ATTACHMENT OF SIGNS
TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

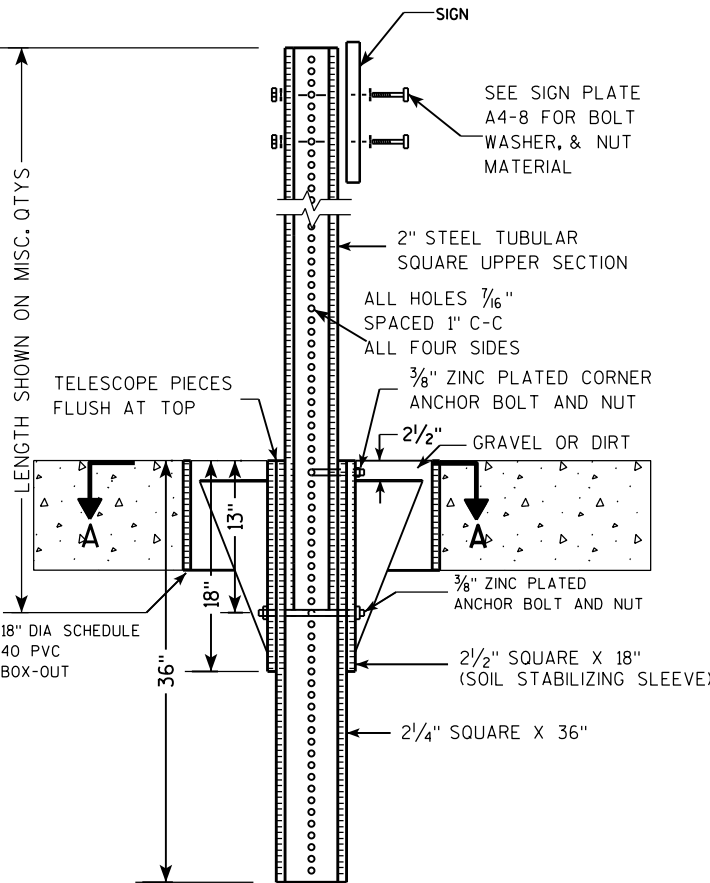
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

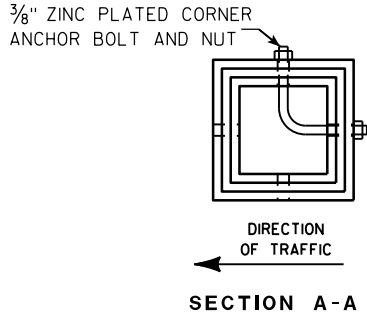
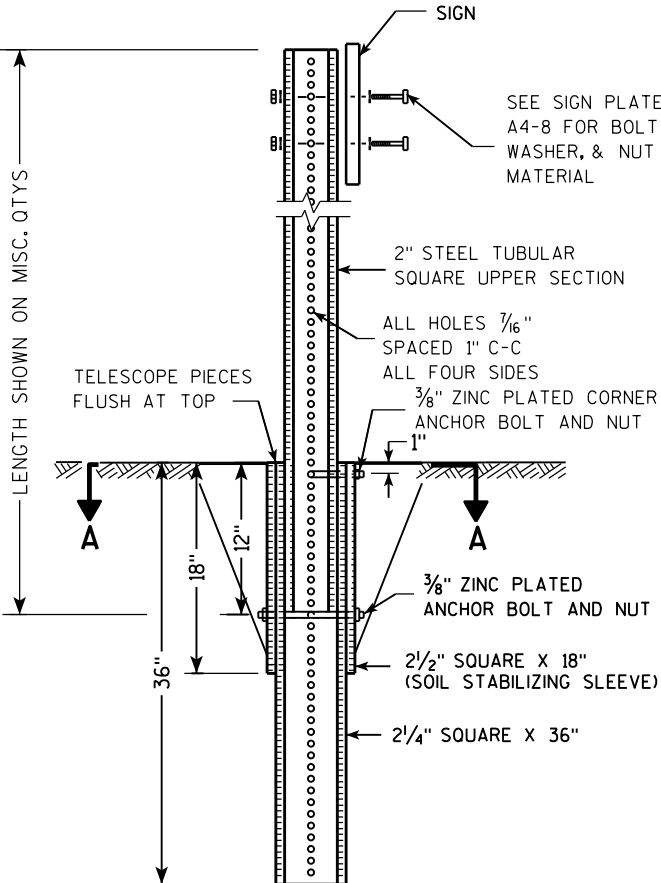
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)



| Area of Sign Installation (Sq. Ft.) | Number of Required Posts |
|--|--------------------------|
| 9 or less | 1 |
| Greater than 9 less than or equal to 18 | 2 |
| Greater than 18 less than or equal to 27 | 3 |

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

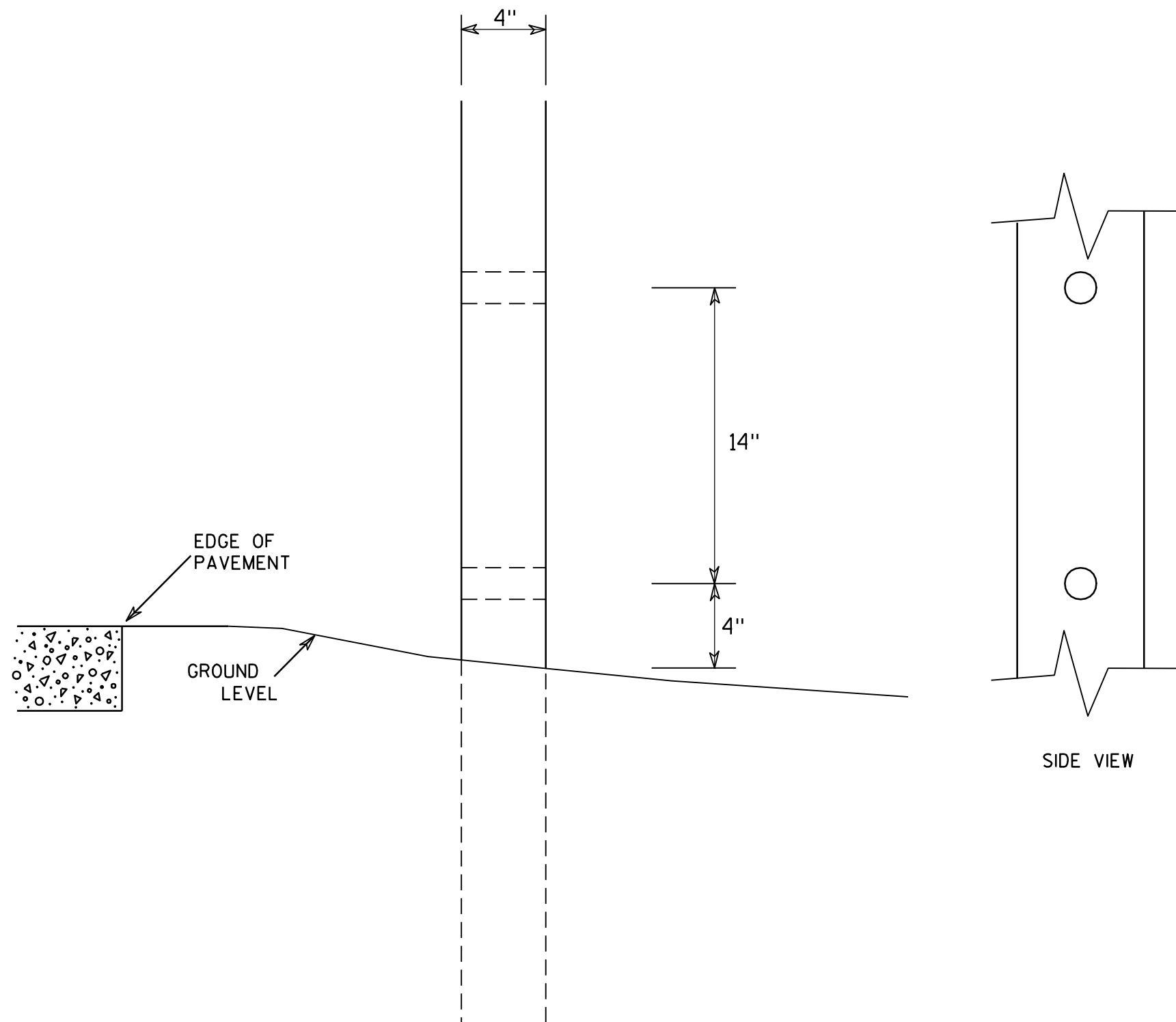
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

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

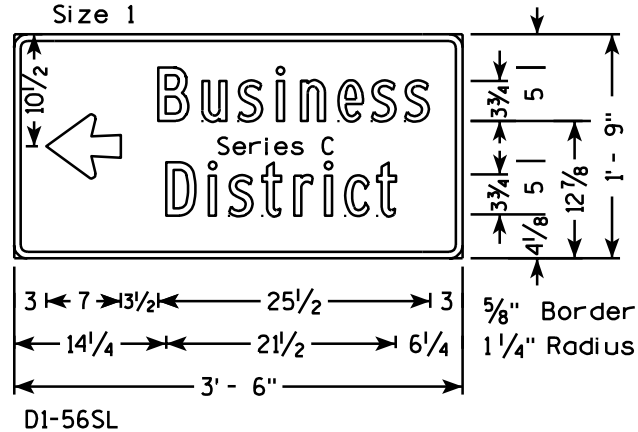
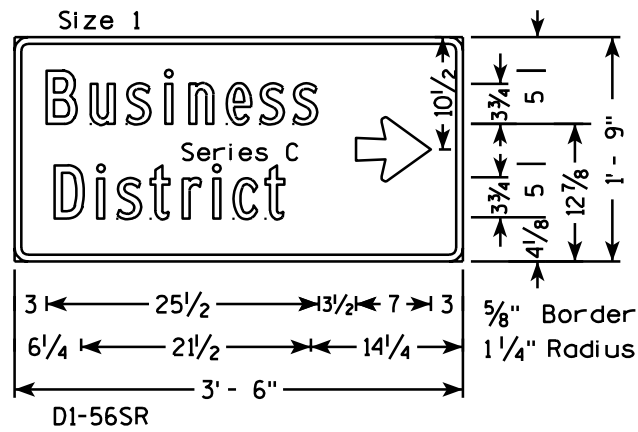
PROJECT NO:

HWY:

COUNTY:

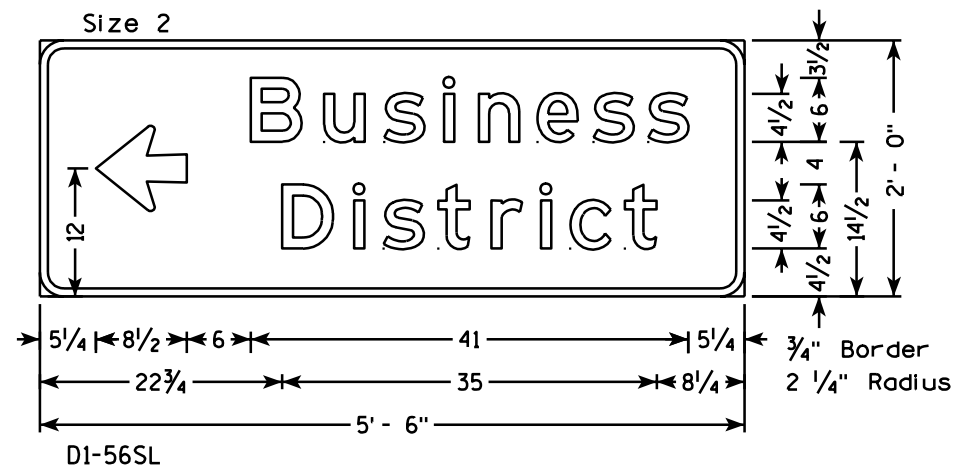
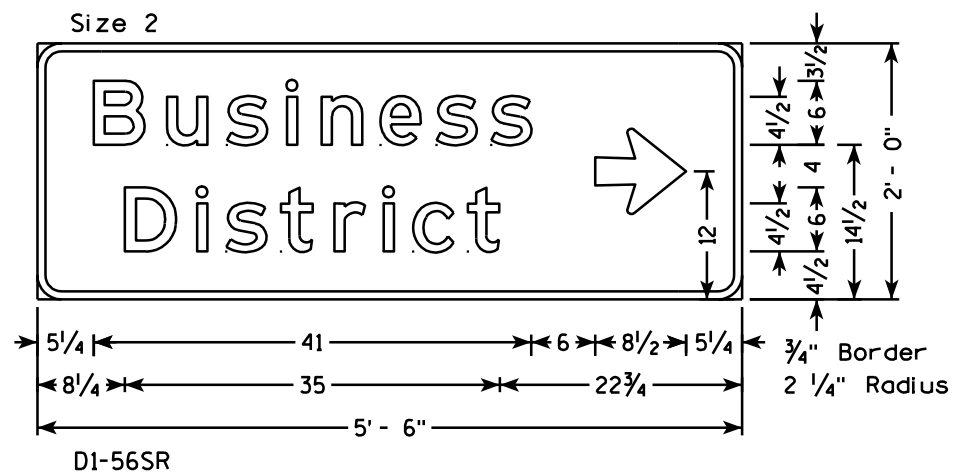
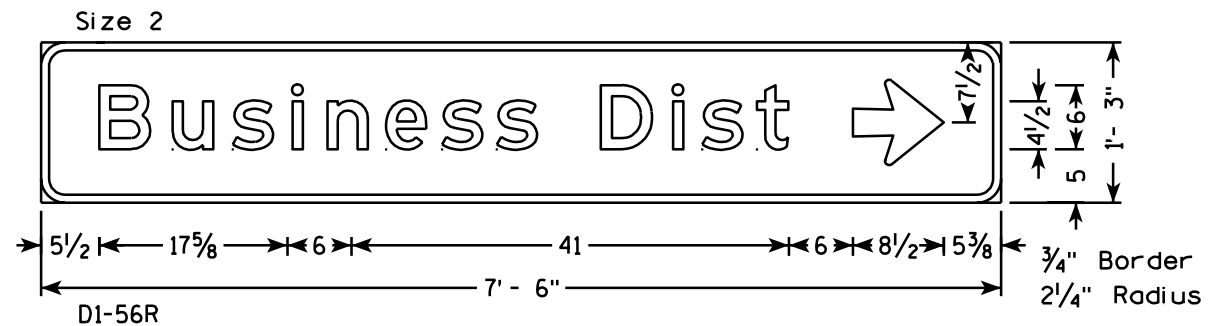
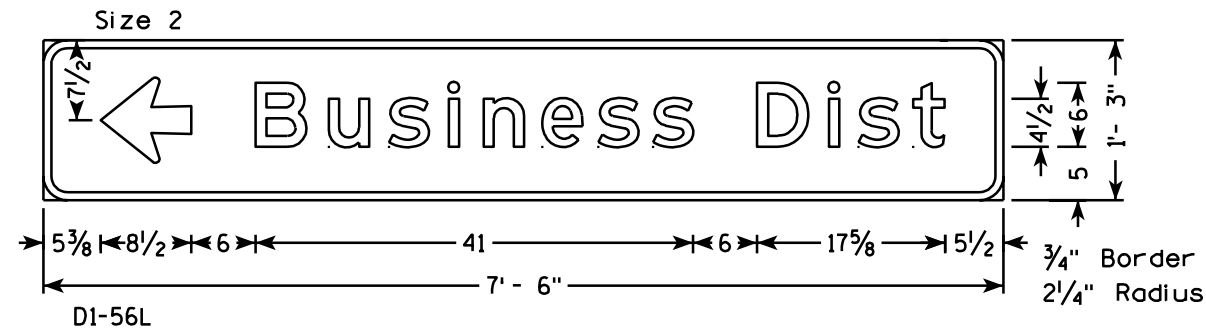
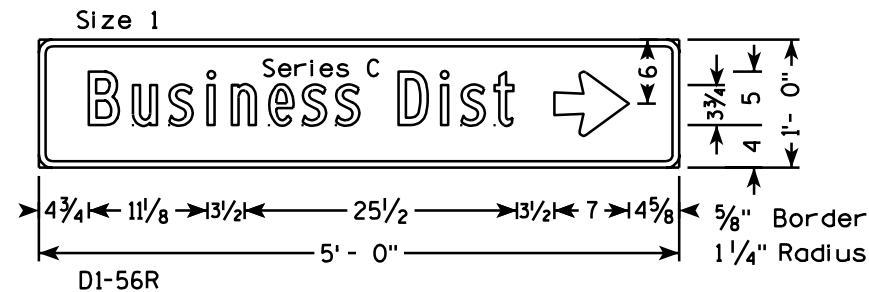
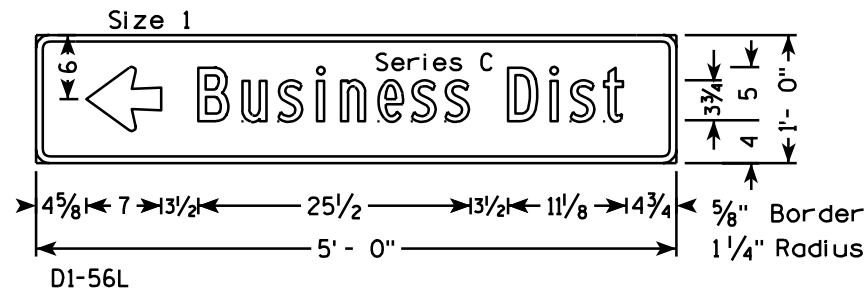
SHEET NO:

E



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 - E except as noted
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.



TYPICAL STANDARD
D1-56L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/19/08 PLATE NO. D1-56.1

PROJECT NO:

HWY:

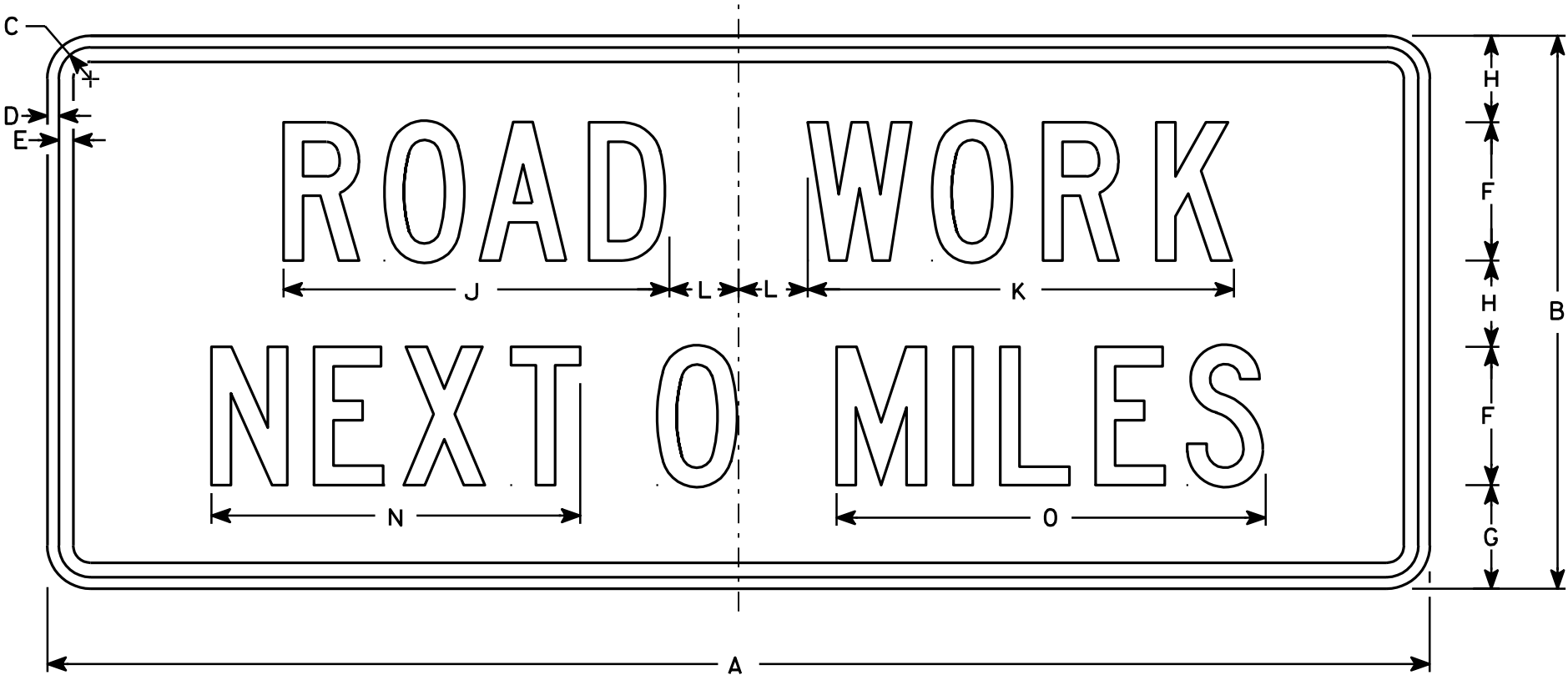
COUNTY:

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 - Orange
 - Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance



G20-1

Metric equivalent
for this sign is:

| SIZE | |
|------|------------------|
| 1 | |
| 2 | 1500 mm X 600 mm |
| 3 | |
| 4 | 1500 mm X 600 mm |
| 5 | |

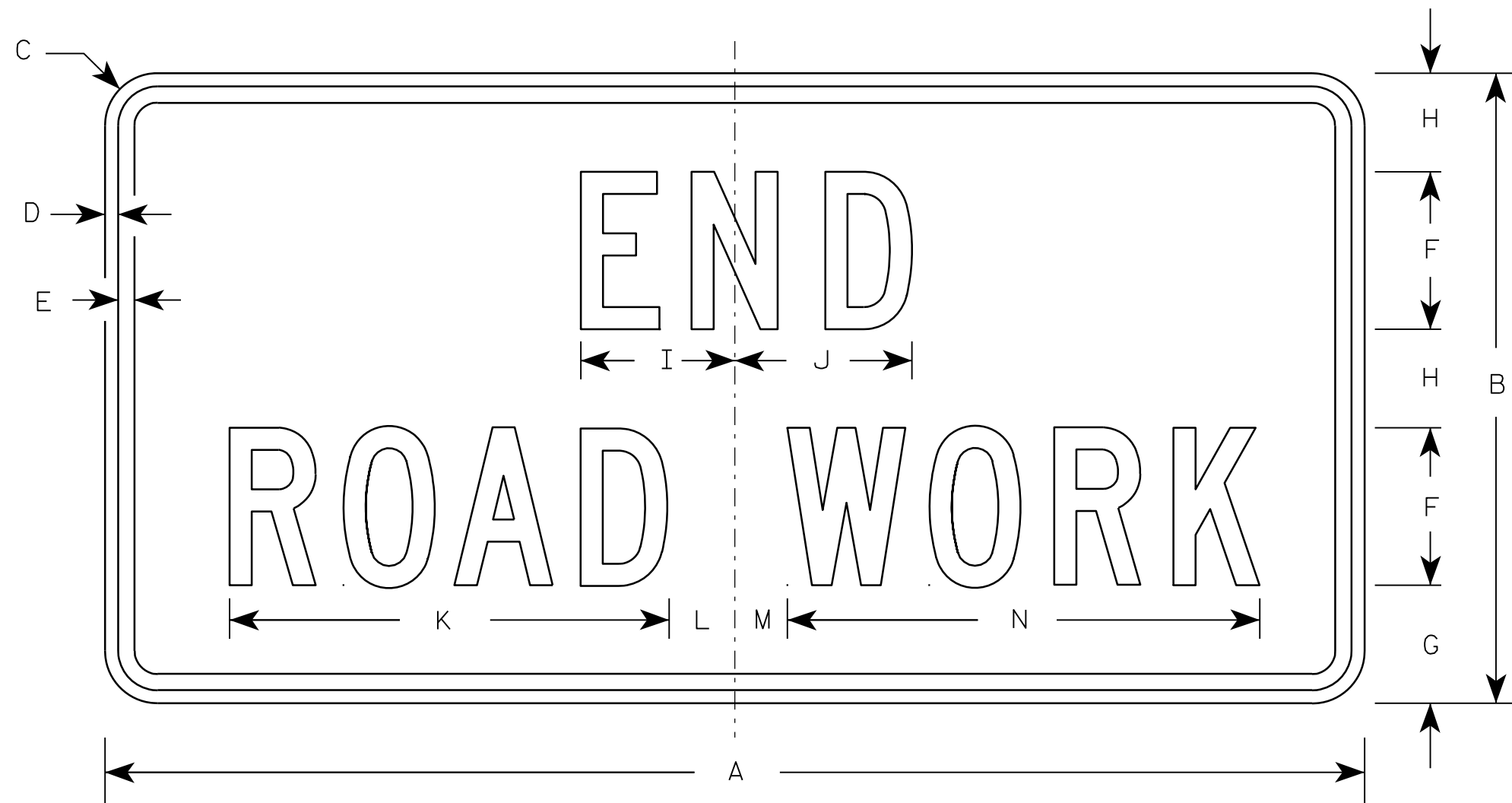
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m ² |
|------|----|----|-------|-----|-----|---|-------|-------|---|--------|--------|---|---|----|--------|---|---|---|---|---|---|---|---|---|---|---|-----------------|------------------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 60 | 24 | 1 3⁄8 | 1⁄2 | 5⁄8 | 6 | 4 1⁄2 | 3 3⁄4 | | 16 3⁄4 | 18 1⁄2 | 3 | | 16 | 18 5⁄8 | | | | | | | | | | | | 10 | .90 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 60 | 24 | 1 3⁄8 | 1⁄2 | 5⁄8 | 6 | 4 1⁄2 | 3 3⁄4 | | 16 3⁄4 | 18 1⁄2 | 3 | | 16 | 18 5⁄8 | | | | | | | | | | | | 10 | .90 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chris J. Spay
State Traffic Engineer
DATE 4/8/97 PLATE NO. G20-1.7

7



G20-2A

Metric equivalent
for this sign is:

| SIZE | |
|------|------------------|
| 1 | 900 mm X 450 mm |
| 2 | 1200 mm X 600 mm |
| 3 | 1200 mm X 600 mm |
| 4 | 1200 mm X 600 mm |
| 5 | 1200 mm X 600 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m ² |
|------|----|----|-------|-----|-----|---|-------|-------|-------|-------|--------|-------|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|------------------------|
| 1 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 4 | 3 3/4 | 2 1/2 | 4 1/8 | 4 1/8 | 11 1/8 | 2 | 1 | 12 1/8 | | | | | | | | | | | | | 4.5 | 0.41 |
| 2 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 3 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 4 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 5 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |

NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- 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.

7

PROJECT NO:

HWY:

COUNTY:

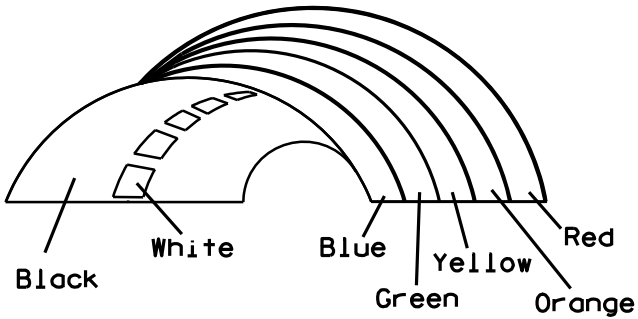
SHEET NO:

E



* VARIES

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - White
Message - (See Note 5)
- 3. Message Series - (See Note 6)
- 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. Border - Blue
Line 1- Red
Line 2 - Black
Line 3-5 - Blue
- 6. Line 1- Dutch 8011L
Line 2 - Series E
Line 3-5 - Series C
- 7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 30 | 36 | 1 1/2 | 1/2 | 5/8 | 3 | 2 | 3 1/2 | 2 7/8 | 1 | 8 | 2 1/8 | 11 1/4 | 11 1/8 | 9 3/8 | 1 1/4 | | 3/4 | 12 5/8 | 7 1/2 | | | | | | | 7.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

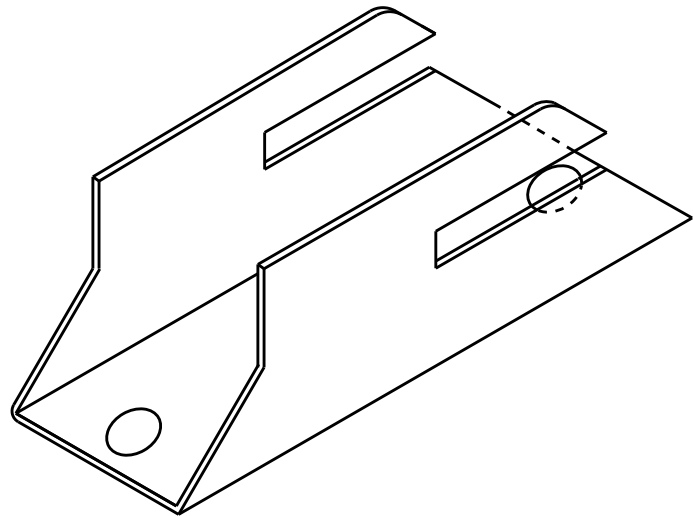
STANDARD SIGN
I55-56

WISCONSIN DEPT OF TRANSPORTATION

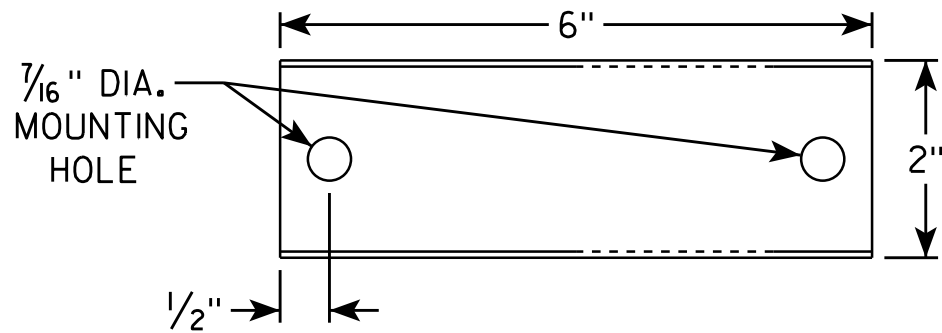
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/27/11 PLATE NO. I55-56.3

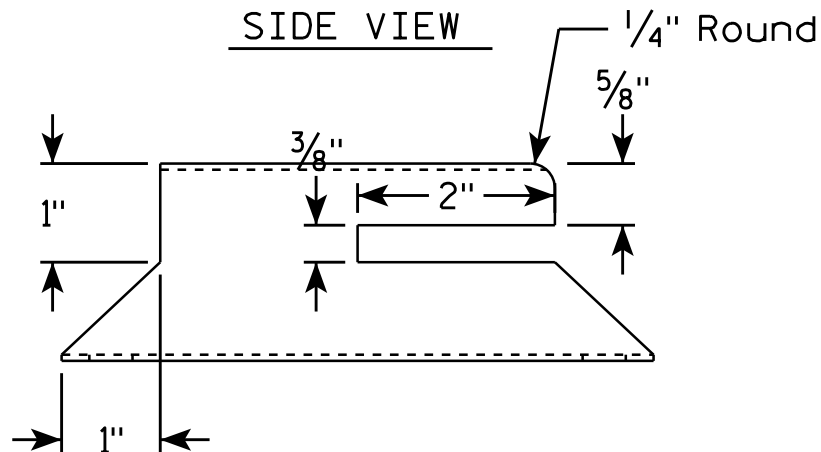
ISOMETRIC VIEW



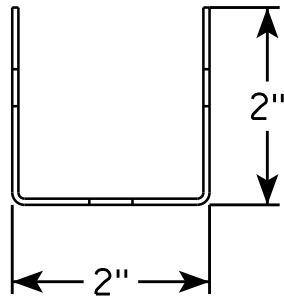
TOP VIEW



SIDE VIEW



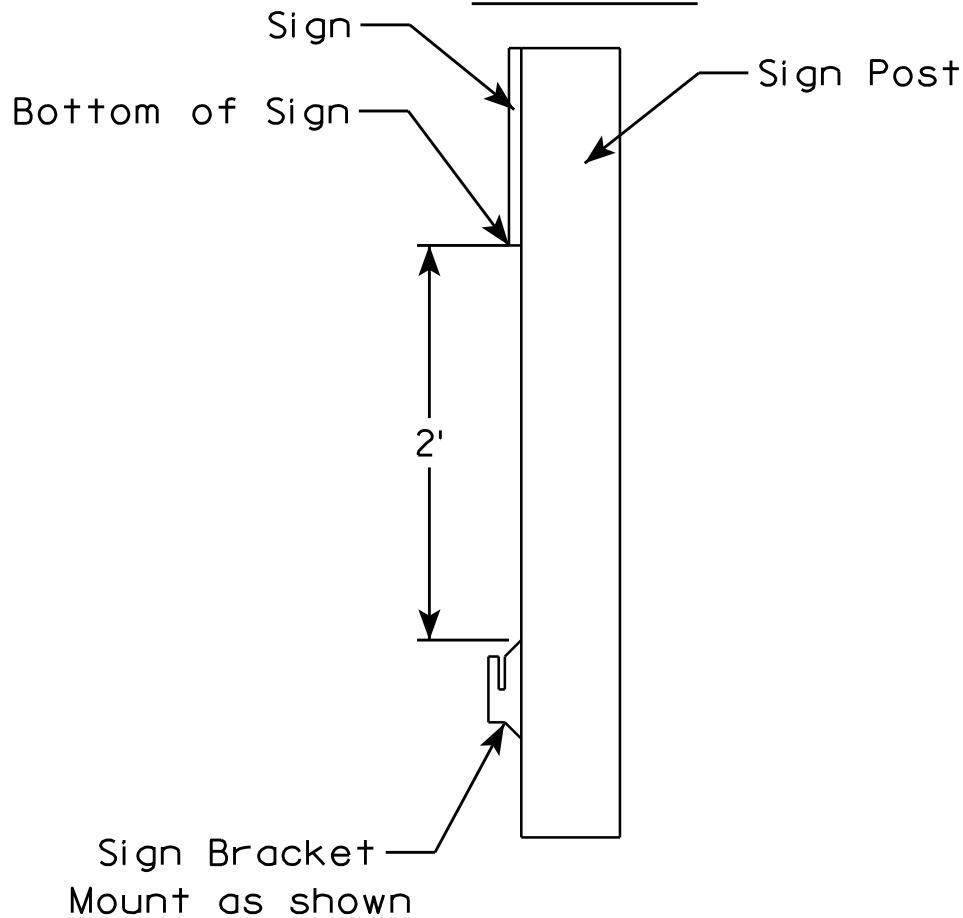
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/26/16 PLATE NO. I55-56B.2

PROJECT NO:

HWY:

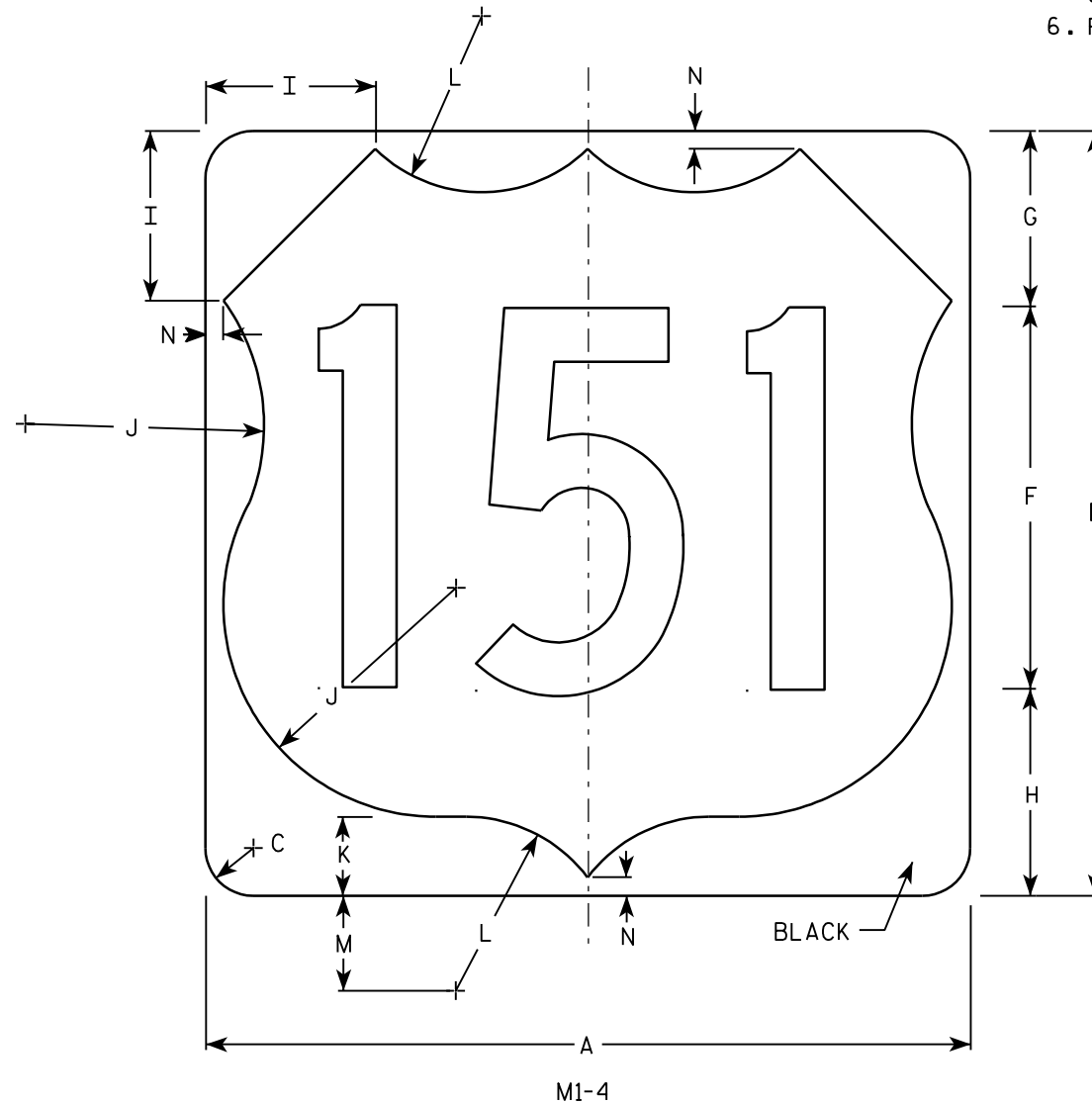
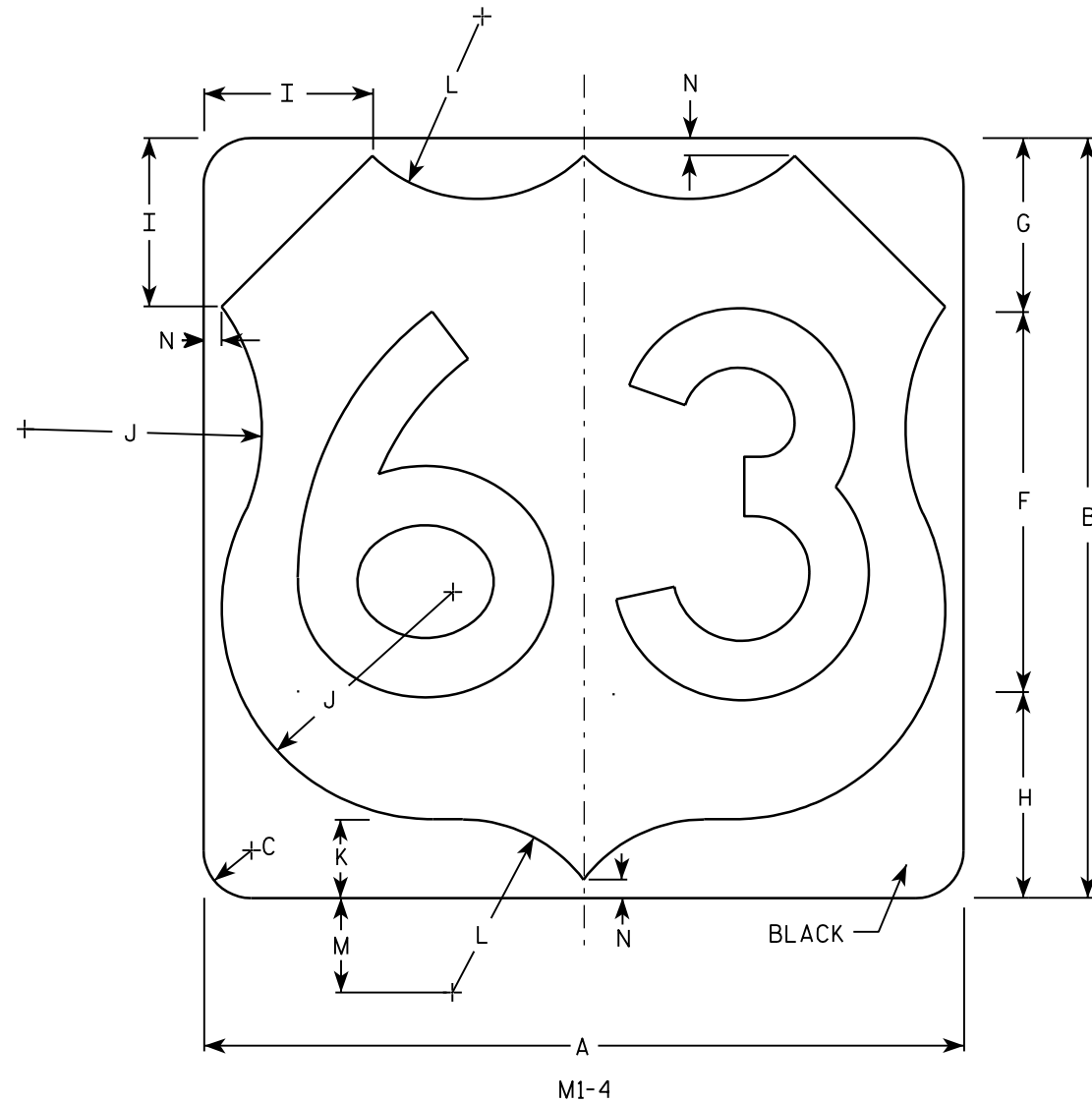
COUNTY:

SHEET NO:

E

NOTES

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



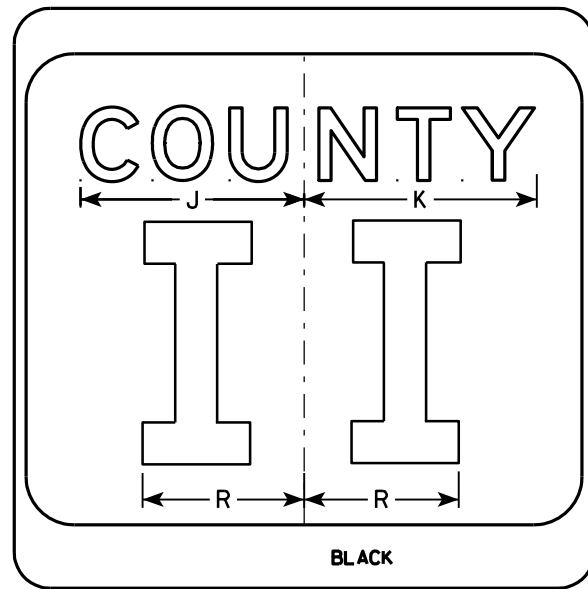
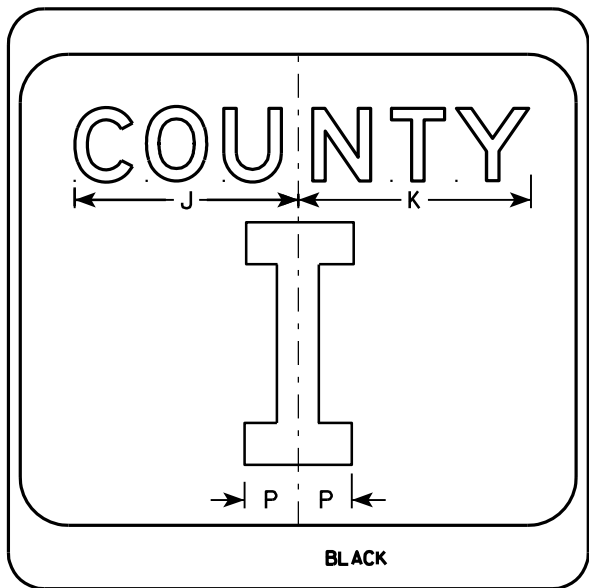
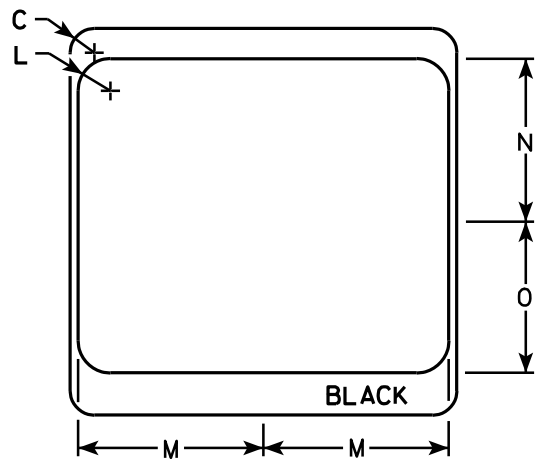
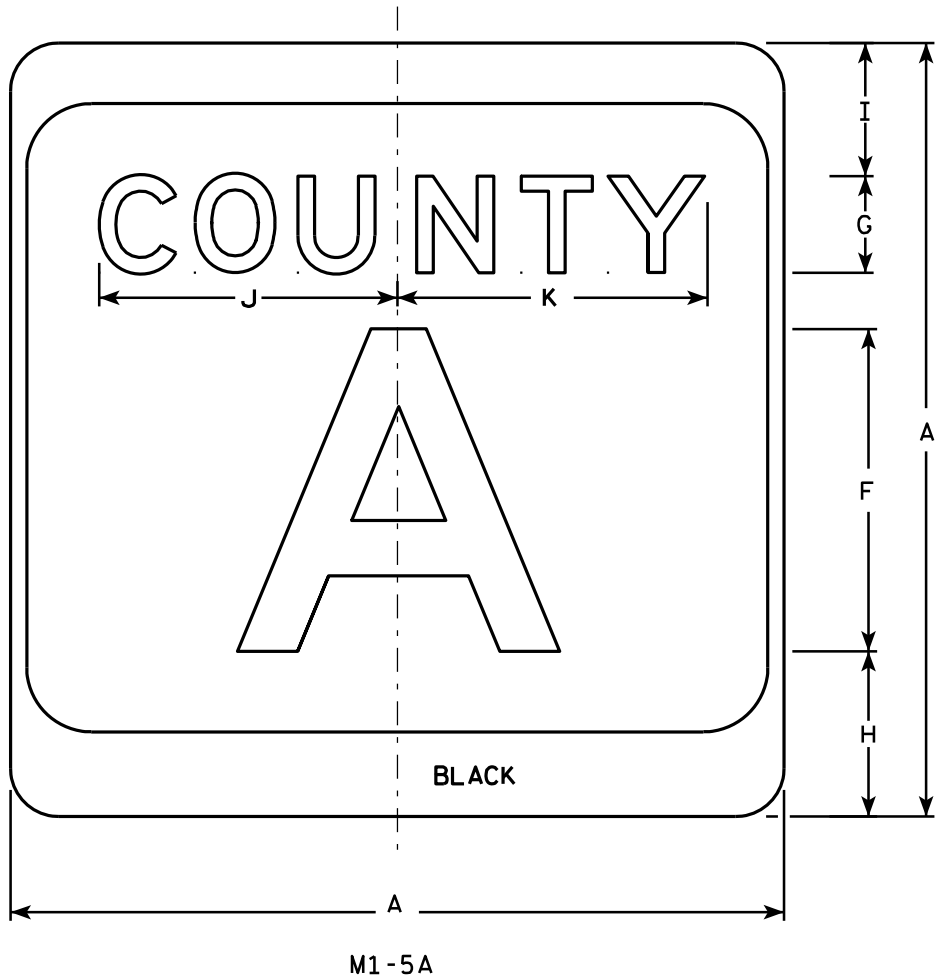
Metric equivalent
for this sign is:

| 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 | Areq sq. ft. | Areq m ² |
|------|----|----|-------|---|---|----|-------|-------|-------|--------|-------|-------|-------|-----|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|------------------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 24 | 1 1/2 | | | 12 | 5 1/2 | 6 1/2 | 5 | 7 1/2 | 2 1/2 | 5 1/2 | 3 | 1/2 | | | | | | | | | | | | | 4.0 | .36 |
| 3 | 36 | 36 | 2 1/4 | | | 18 | 8 1/4 | 9 1/4 | 7 1/4 | 11 1/4 | 3 3/4 | 8 1/4 | 4 1/2 | 3/4 | | | | | | | | | | | | | 9.0 | .81 |
| 4 | 36 | 36 | 2 1/4 | | | 18 | 8 1/4 | 9 1/4 | 7 1/4 | 11 1/4 | 3 3/4 | 8 1/4 | 4 1/2 | 3/4 | | | | | | | | | | | | | 9.0 | .81 |
| 5 | 36 | 36 | 2 1/4 | | | 18 | 8 1/4 | 9 1/4 | 7 1/4 | 11 1/4 | 3 3/4 | 8 1/4 | 4 1/2 | 3/4 | | | | | | | | | | | | | 9.0 | .81 |

PROJECT NO: HWY: COUNTY: SHEET NO: E

7



NOTES

- Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White & Black - See Note 7
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.
- Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
- Substitute appropriate letters & optically center to achieve proper balance.
- Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

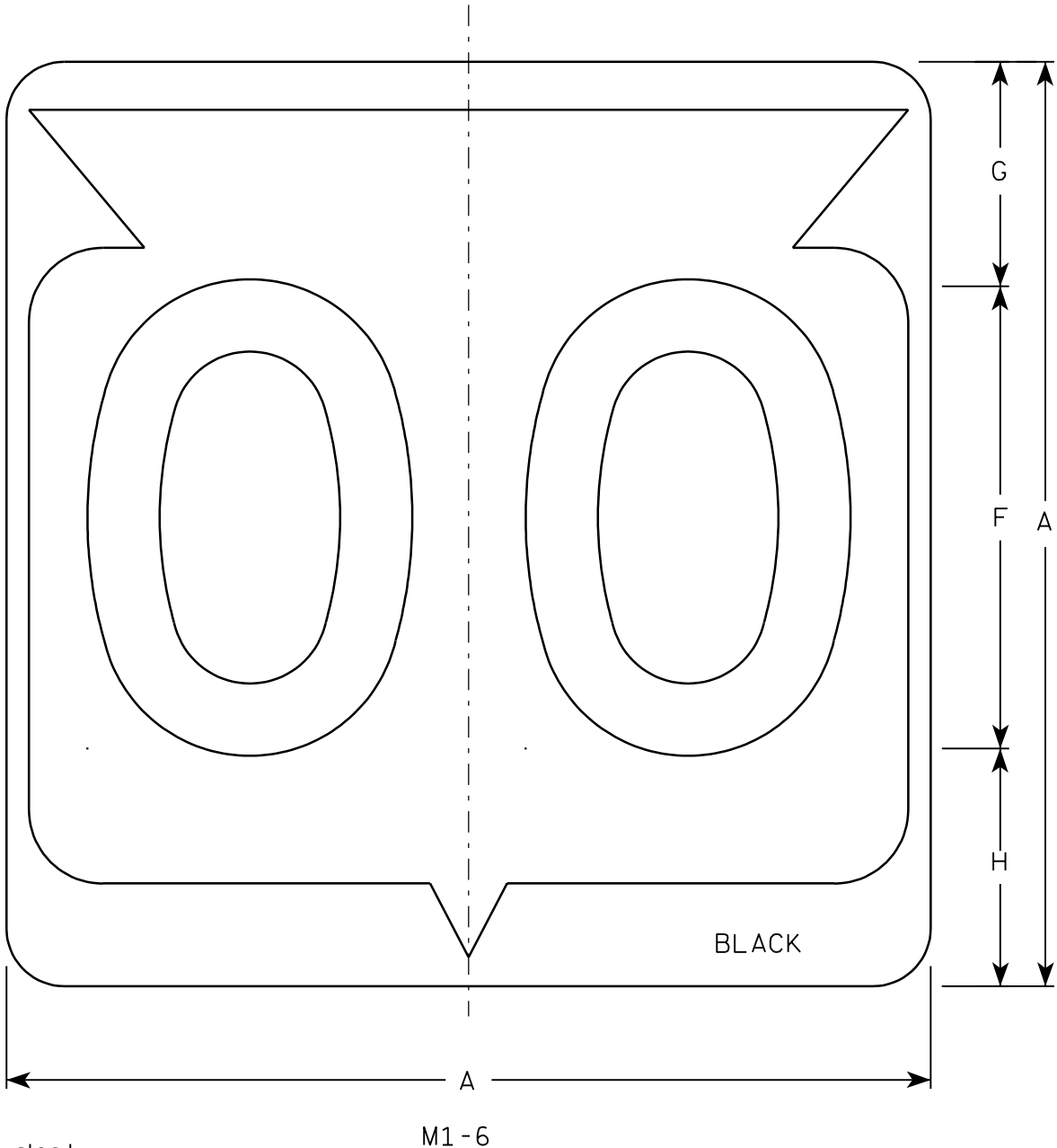
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|---|---|----|---|-------|-------|--------|--------|---|--------|--------|-------|-------|---|-------|---|---|---|---|---|---|---|---|-----------------|
| 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 | <i>Matthew R. Rauch</i> For State Traffic Engineer |
| DATE 9/27/11 | PLATE NO. M1-5A.8 |

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

7

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:

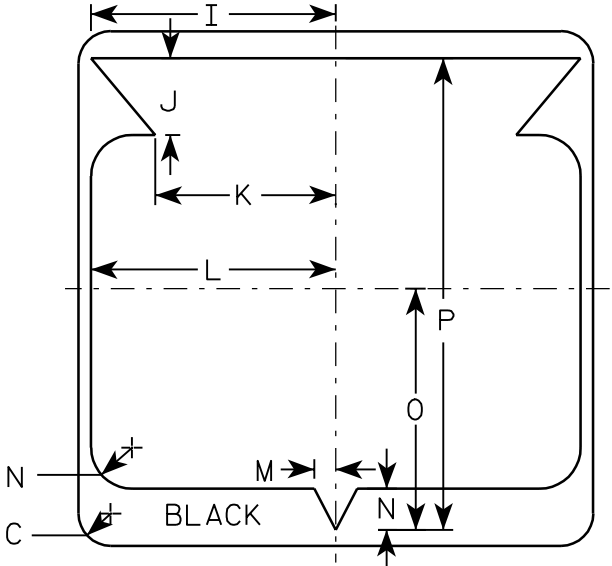
COUNTY:

SHEET NO:

E

NOTES

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

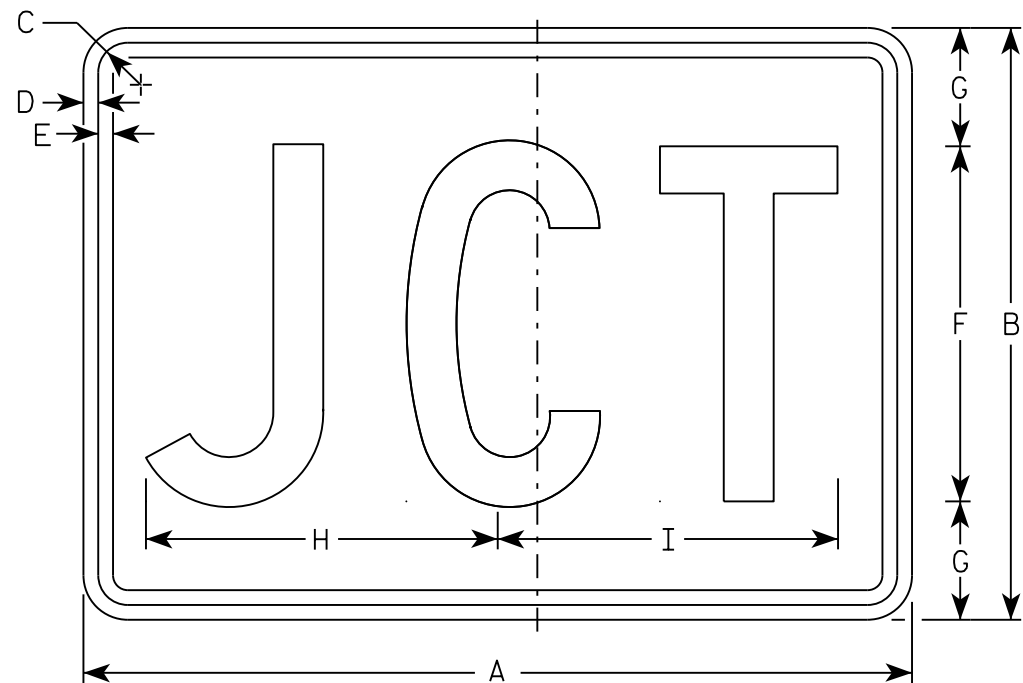
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

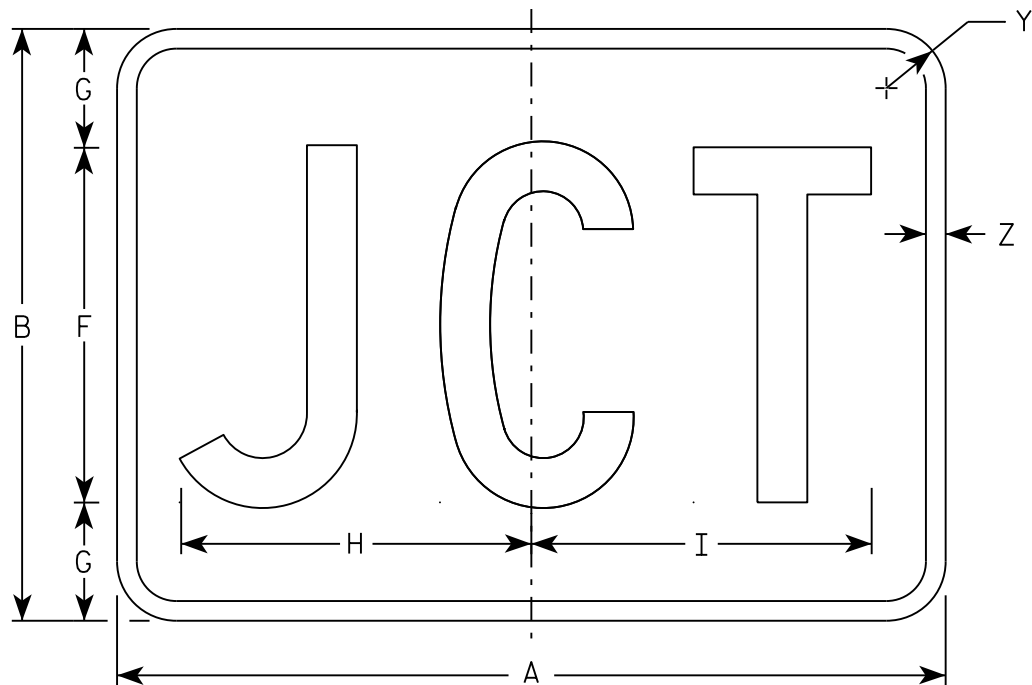
Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

PLATE NO. M1-6.9



M2-1
MM2-1
MP2-1



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

NOTES

- 1. Sign is Type II - Type H
- 2. Color:
 - Background - See note 5
 - Message - See note 5
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M2-1 Background - White
 Message - Black
 MB2-1 Background - Blue
 Message - White
 MK2-1 Background - Green
 Message - White
 MM2-1 Background - White
 Message - Green
 MN2-1 Background - Brown
 Message - White
 MP2-1 Background - White
 Message - Blue
 MR2-1 Background - Brown
 Message - Yellow

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

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

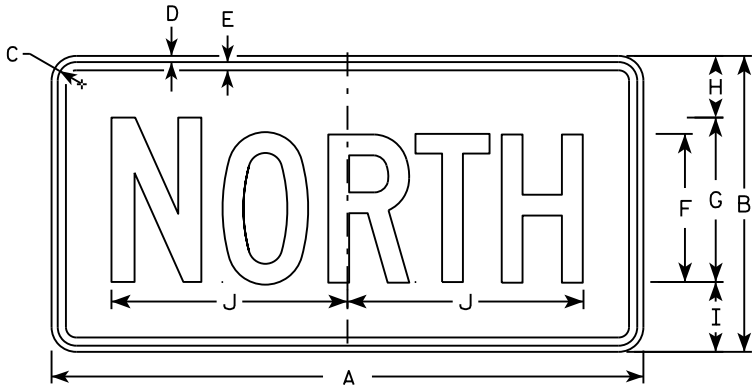
APPROVED

Matthew R. Rauch

For State Traffic Engineer

DATE 10/15/15

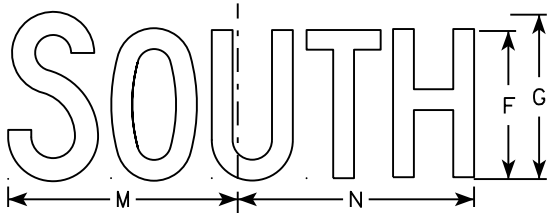
PLATE NO. M2-1.12



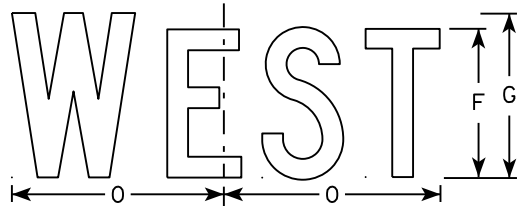
M3-1
MM3-1
MP3-1



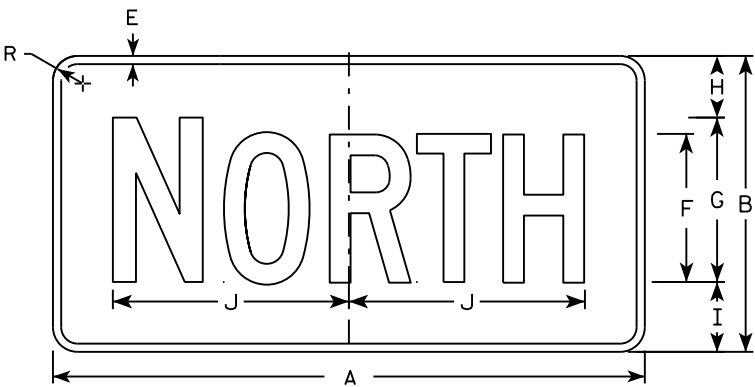
M3-2
MM3-2
MP3-2



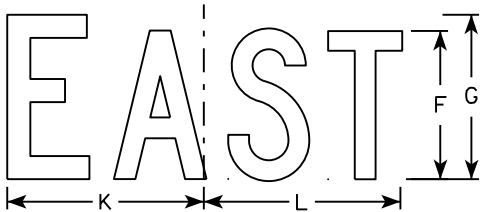
M3-3
MM3-3
MP3-3



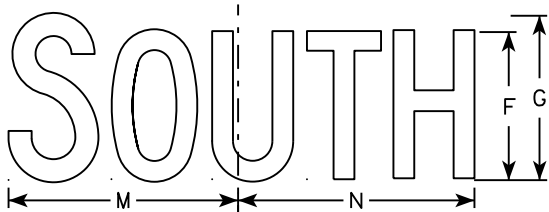
M3-4
MM3-4
MP3-4



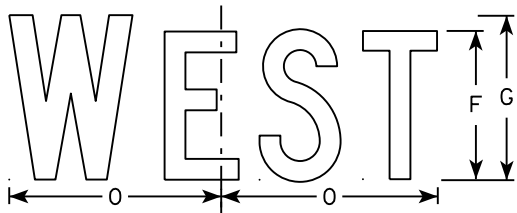
MB3-1
MK3-1
MN3-1



MB3-2
MK3-2
MN3-2



MB3-3
MK3-3
MN3-3



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
MP3-1 thru MP3-4 Background - White
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

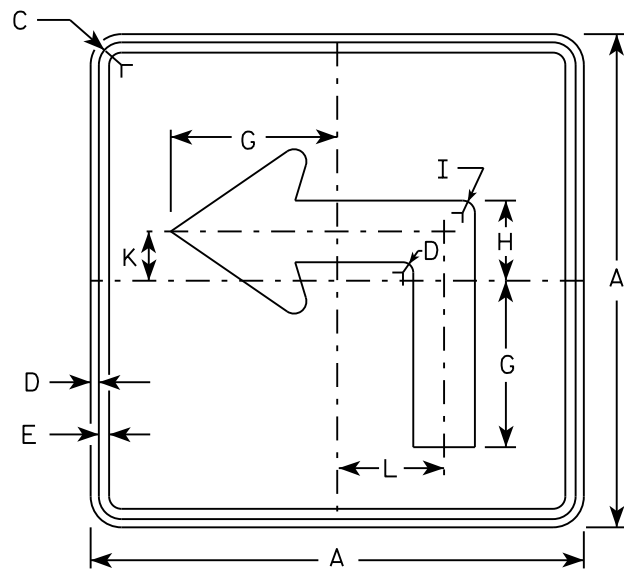
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|----|-------|-------|--------|-------|--------|--------|--------|-------|---|---|-------|---|---|---|---|---|---|---|---|-----------------|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

STANDARD SIGNS
M3-1 thru M3-4
SERIES

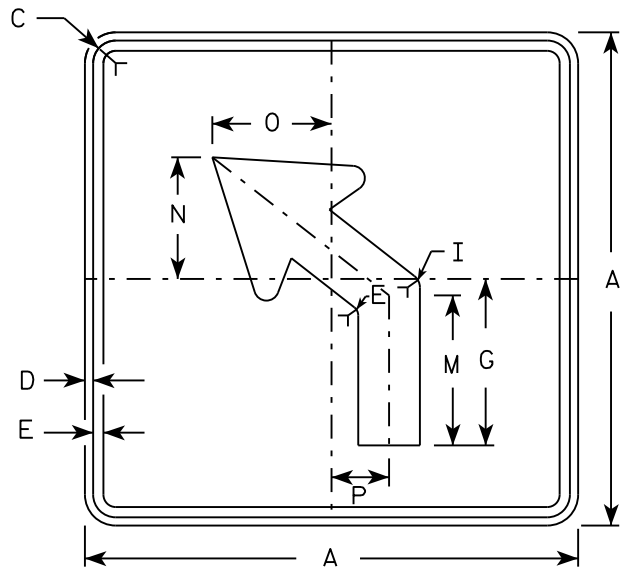
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

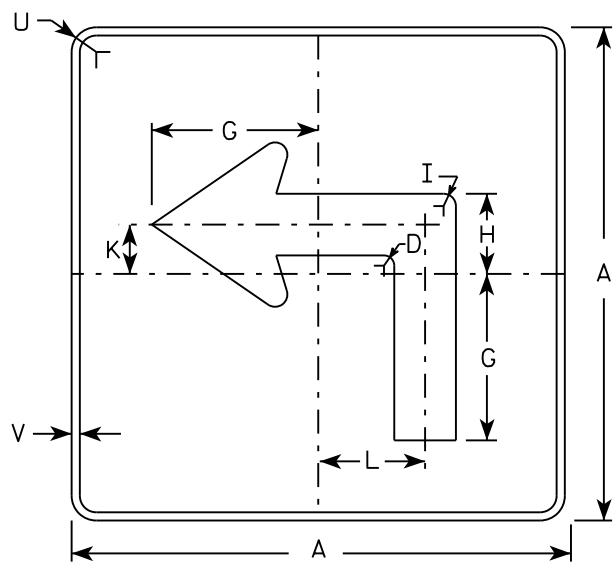
DATE 10/15/15 PLATE NO. M3-1.14



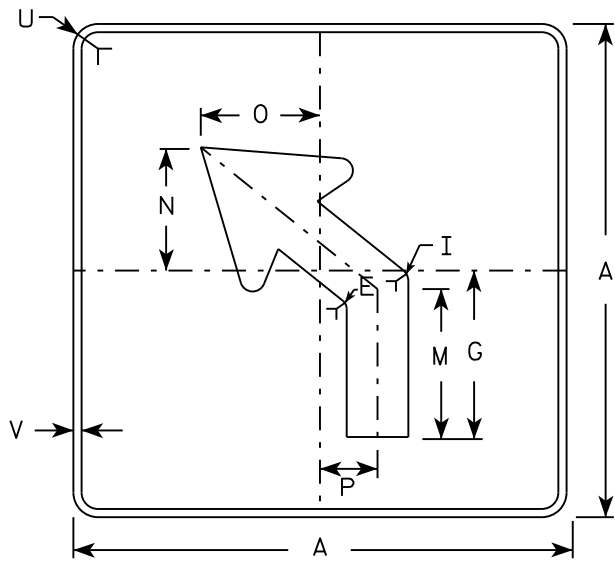
M5-1L
MM5-1L
M05-1L
MP5-1L



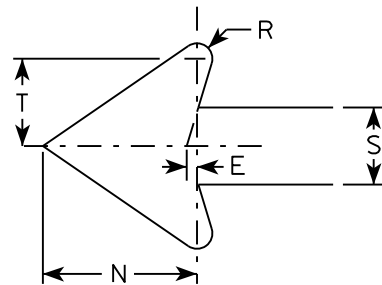
M5-2L
MM5-2L
M05-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- | | |
|-----------------|---|
| M5-1 and M5-2 | Background - White |
| | Message - Black |
| MB5-1 and MB5-2 | Background - Blue |
| | Message - White |
| MK5-1 and MK5-2 | Background - Green |
| | Message - White |
| MM5-1 and MM5-2 | Background - White |
| | Message - Green |
| MN5-1 and MN5-2 | Background - Brown |
| | Message - White |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
| | Message - Black |
| MP5-1 and MP5-2 | Background - White - Type H Reflective |
| | Message - Blue |
| MR5-1 and MR5-2 | Background - Brown |
| | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|--------|-------|-----|---|-------|-------|-------|-------|-------|-------|---|-----|-------|-------|-------|-----|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 | 3 3/8 | 5/8 | | 2 1/8 | 4 1/2 | 6 3/8 | 5 1/4 | 5 | 2 1/2 | | 1/2 | 2 5/8 | 3 | 1 1/2 | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |

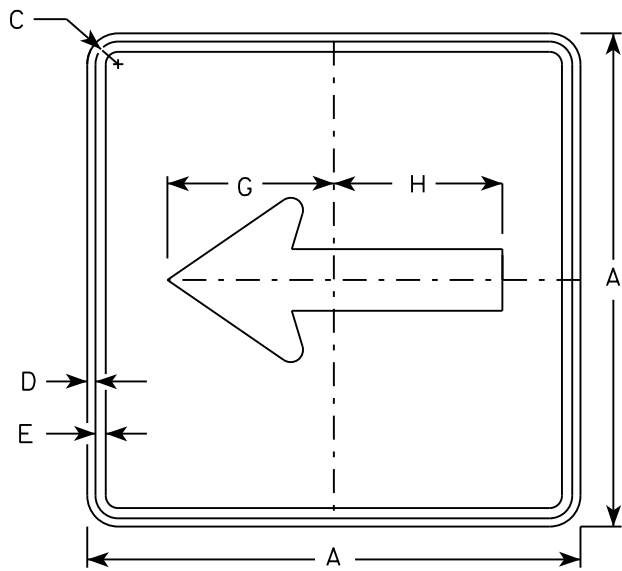
| | | | | |
|-------------|------|---------|-----------|---|
| PROJECT NO: | HWY: | COUNTY: | SHEET NO: | E |
|-------------|------|---------|-----------|---|

STANDARD SIGN
M5-1 & M5-2

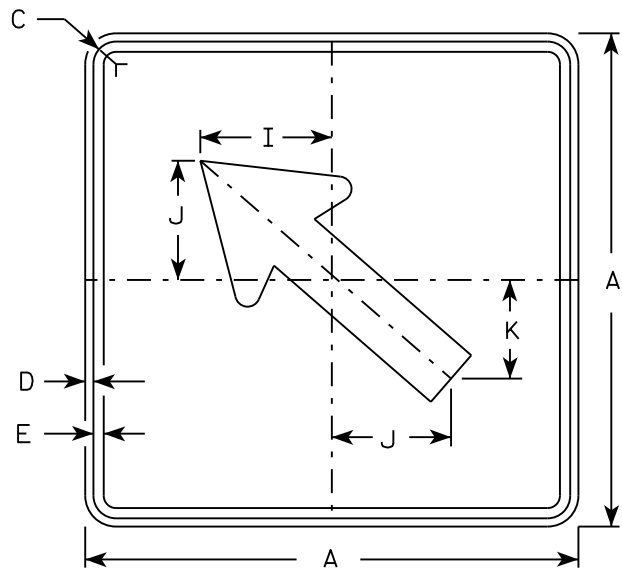
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

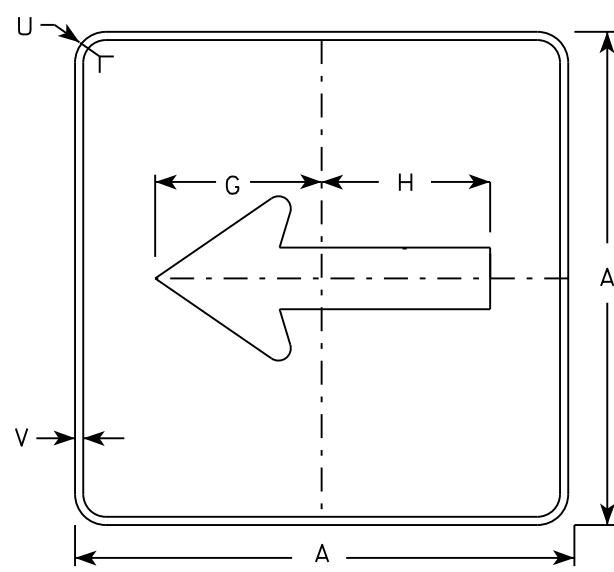
DATE 10/15/15 PLATE NO. M5-1.13



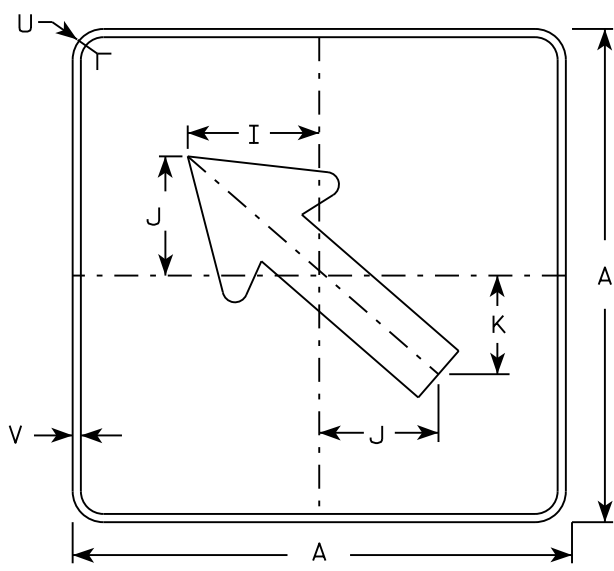
M6 - 1
MM6 - 1
M06 - 1
MP6 - 1



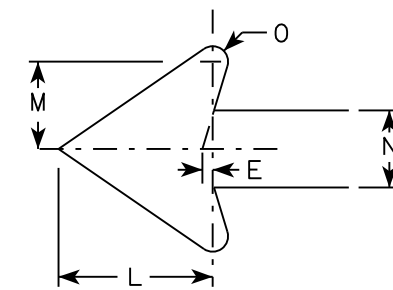
M6 - 2
MM6 - 2
M06 - 2
MP6 - 2



MB6 - 1
MK6 - 1
MN6 - 1
MR6 - 1



MB6 - 2
MK6 - 2
MN6 - 2
MR6 - 2



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

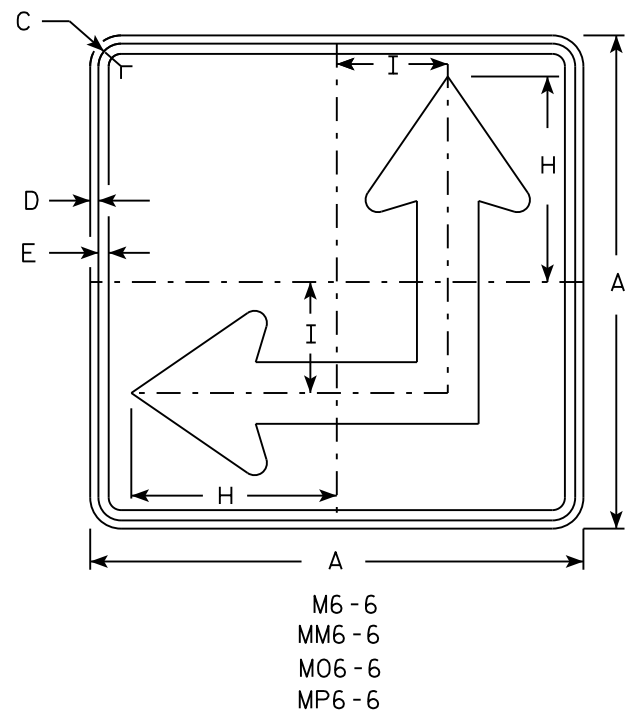
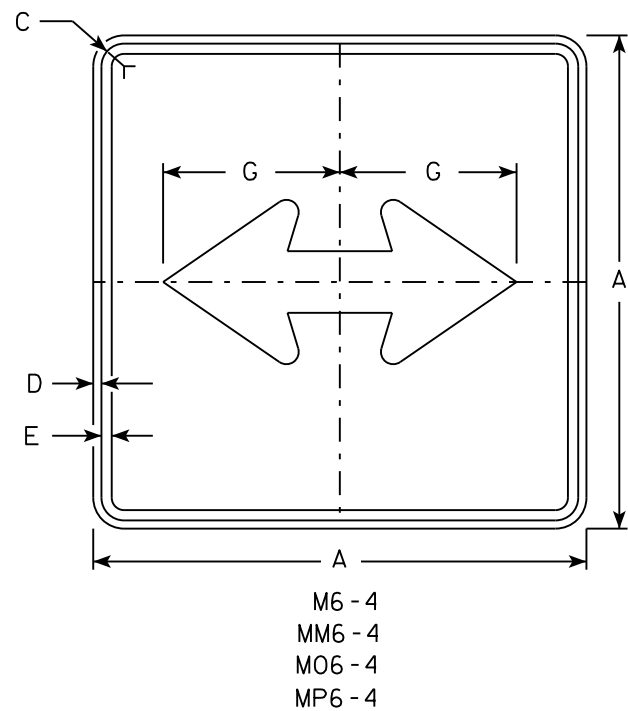
E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

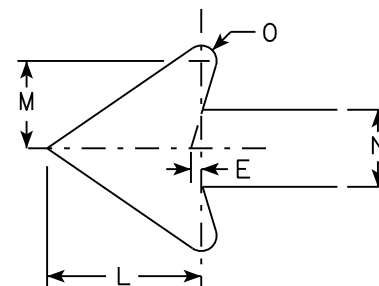
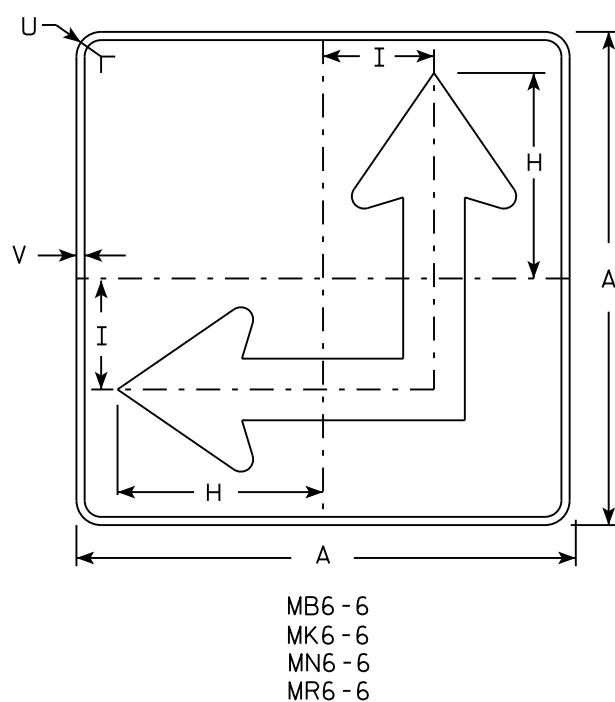
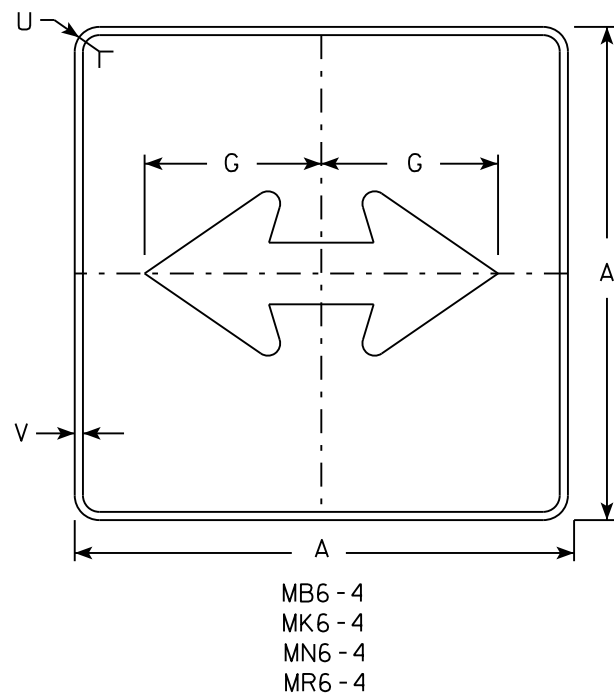
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15



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



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

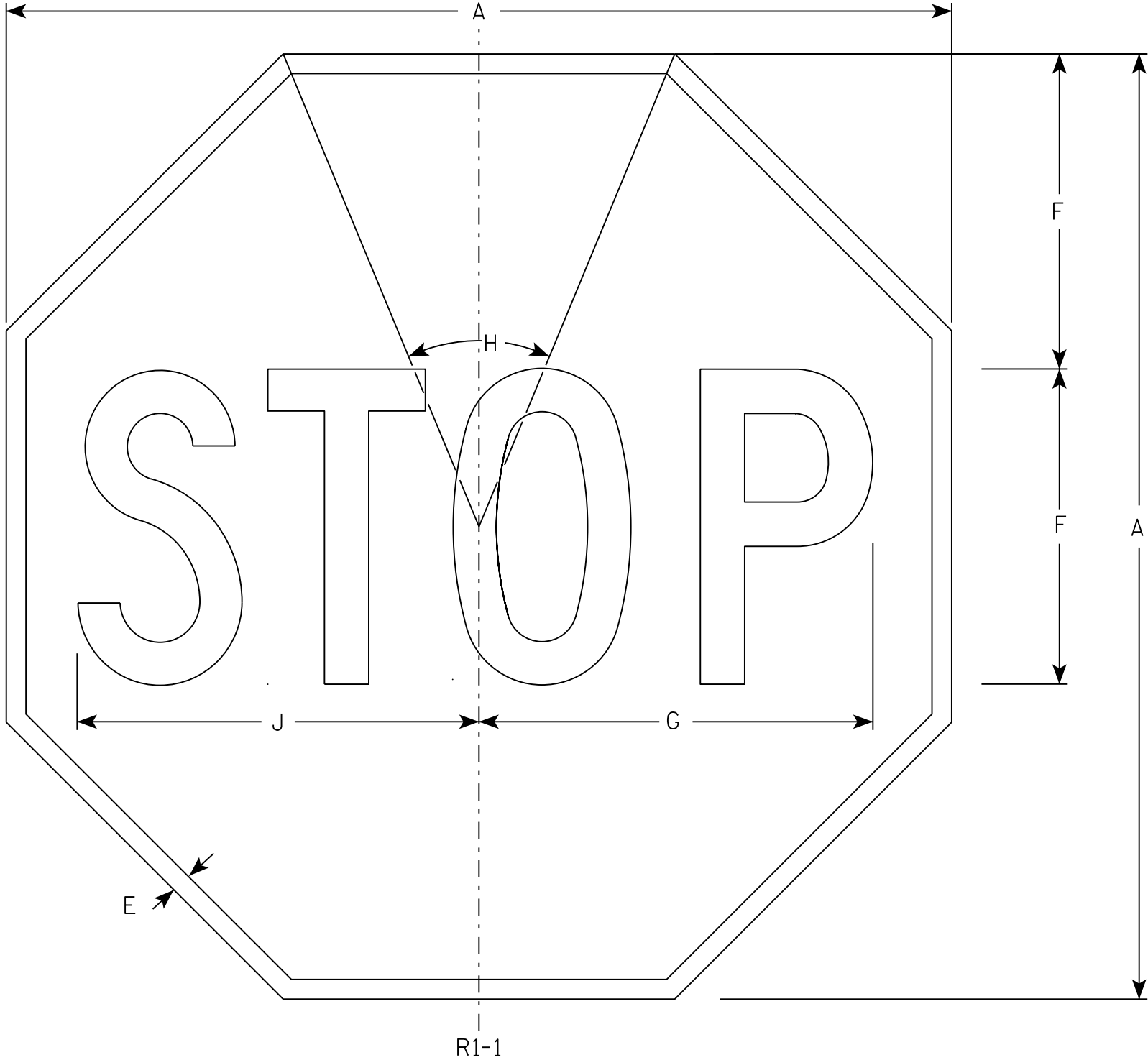
| | | | | |
|-------------|------|---------|-----------|---|
| PROJECT NO: | HWY: | COUNTY: | SHEET NO: | E |
|-------------|------|---------|-----------|---|

STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-4.10



NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|---|---|-----|----|--------|-----|---|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 30 | | | | 5/8 | 10 | 12 1/2 | 45° | | 12 3/4 | | | | | | | | | | | | | | | | | 5.18 |
| 2S | 30 | | | | 5/8 | 10 | 12 1/2 | 45° | | 12 3/4 | | | | | | | | | | | | | | | | | 5.18 |
| 2M | 36 | | | | 3/4 | 12 | 15 | 45° | | 15 3/8 | | | | | | | | | | | | | | | | | 7.46 |
| 3 | 36 | | | | 3/4 | 12 | 15 | 45° | | 15 3/8 | | | | | | | | | | | | | | | | | 7.46 |
| 4 | 48 | | | | 1 | 16 | 20 | 45° | | 20 1/2 | | | | | | | | | | | | | | | | | 13.25 |
| 5 | 48 | | | | 1 | 16 | 20 | 45° | | 20 1/2 | | | | | | | | | | | | | | | | | 13.25 |
| 6 | 18 | | | | 3/8 | 6 | 7 3/4 | 45° | | 7 3/4 | | | | | | | | | | | | | | | | | 1.86 |
| 7 | 12 | | | | 1/4 | 4 | 5 | 45° | | 5 1/8 | | | | | | | | | | | | | | | | | 0.78 |

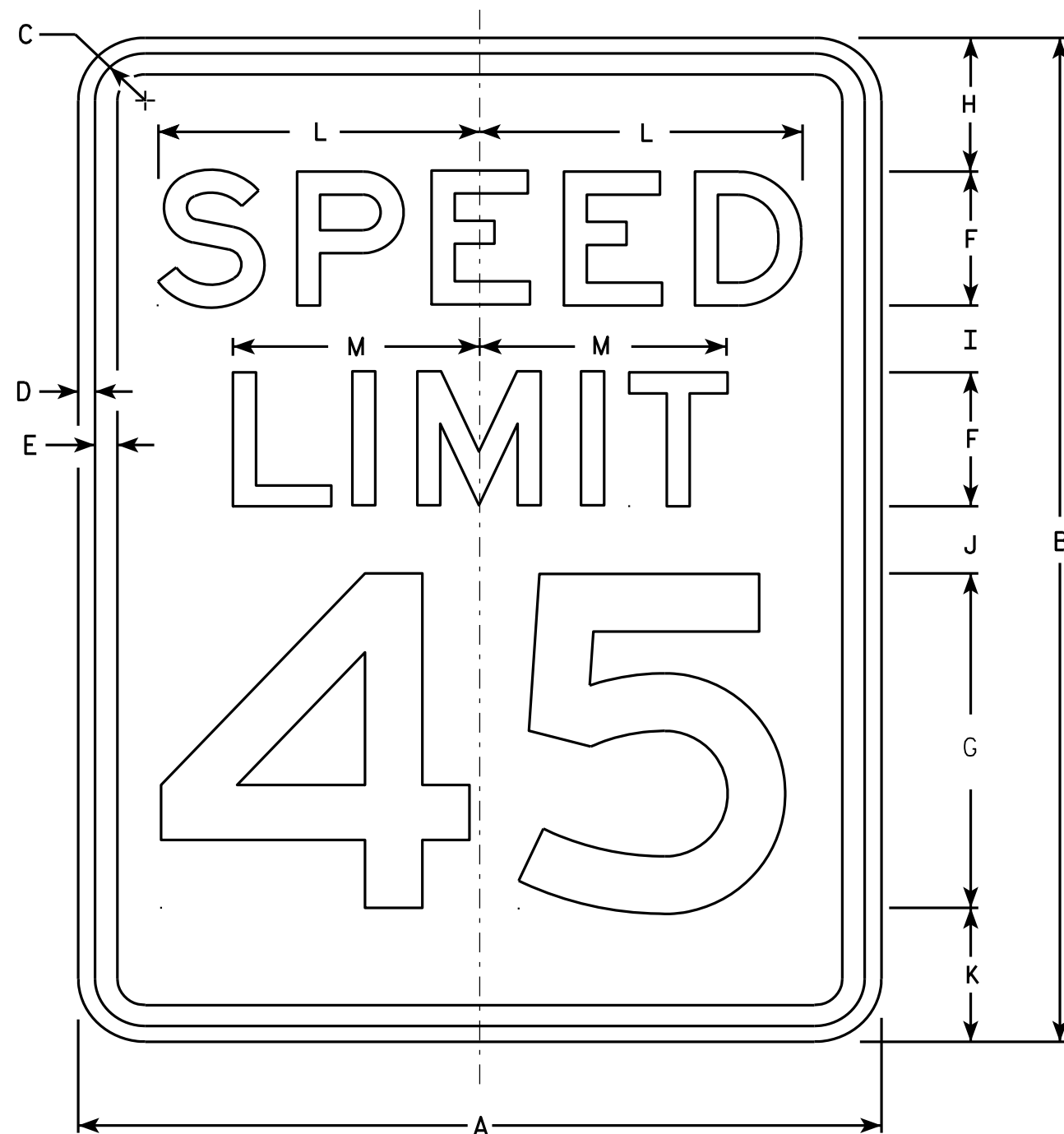
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



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



R2-6P

NOTES

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

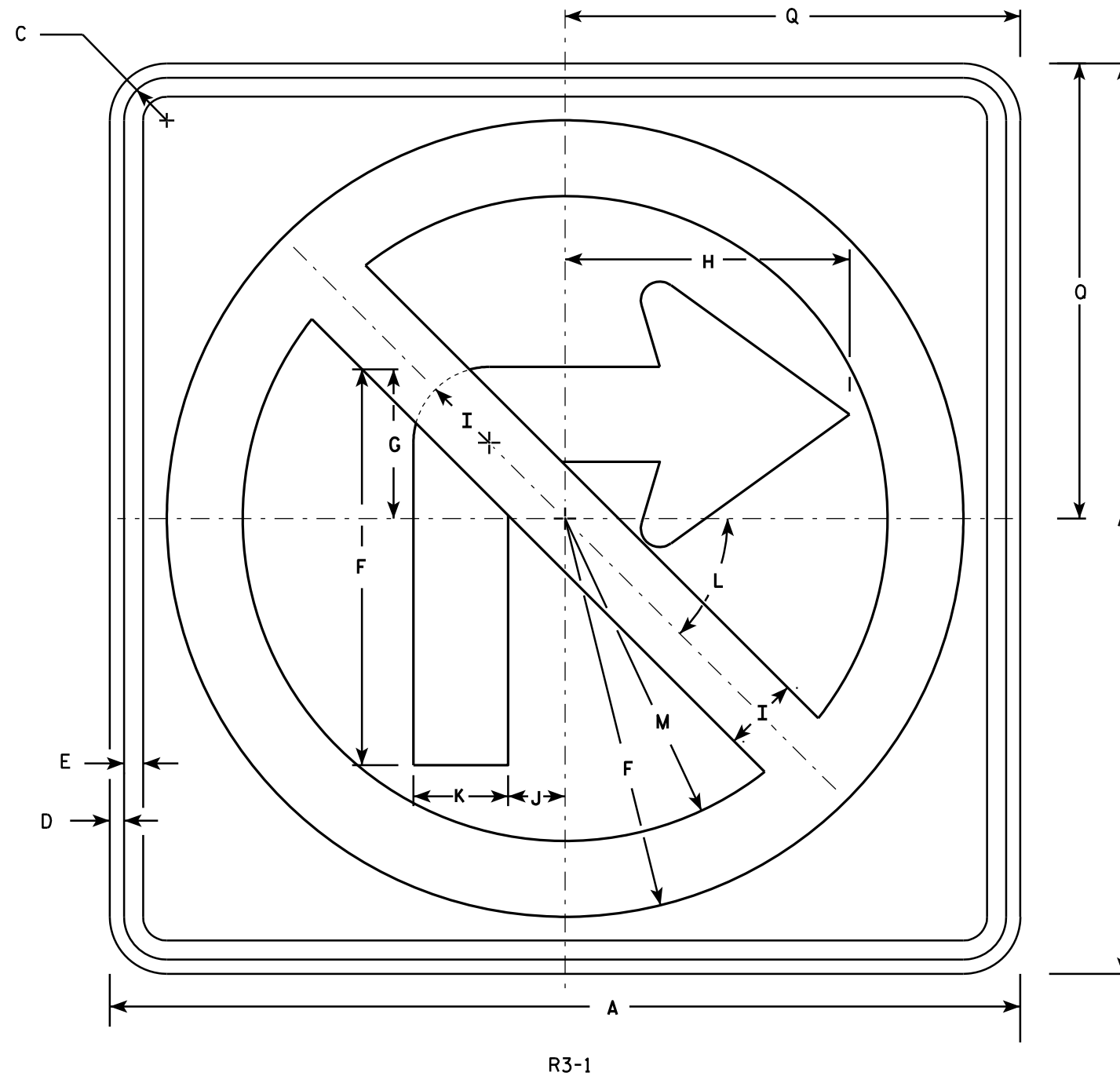
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|-------|-------|--------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 18 | 1 1/8 | 3/8 | 3/8 | 4 | 3 1/2 | 3 | 7 5/8 | 9 1/4 | | | | | | | | | | | | | | | | | 3.0 |
| 2M | 24 | 18 | 1 1/8 | 3/8 | 3/8 | 4 | 3 1/2 | 3 | 7 5/8 | 9 1/4 | | | | | | | | | | | | | | | | | 3.0 |
| 3 | 36 | 24 | 1 1/8 | 3/8 | 1/2 | 6 | 4 1/8 | 3 3/4 | 12 | 14 | | | | | | | | | | | | | | | | | 6.0 |
| 4 | 36 | 24 | 1 1/8 | 3/8 | 1/2 | 6 | 4 1/8 | 3 3/4 | 12 | 14 | | | | | | | | | | | | | | | | | 6.0 |
| 5 | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7 | 6 | 15 1/8 | 19 | | | | | | | | | | | | | | | | | 12.0 |

STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

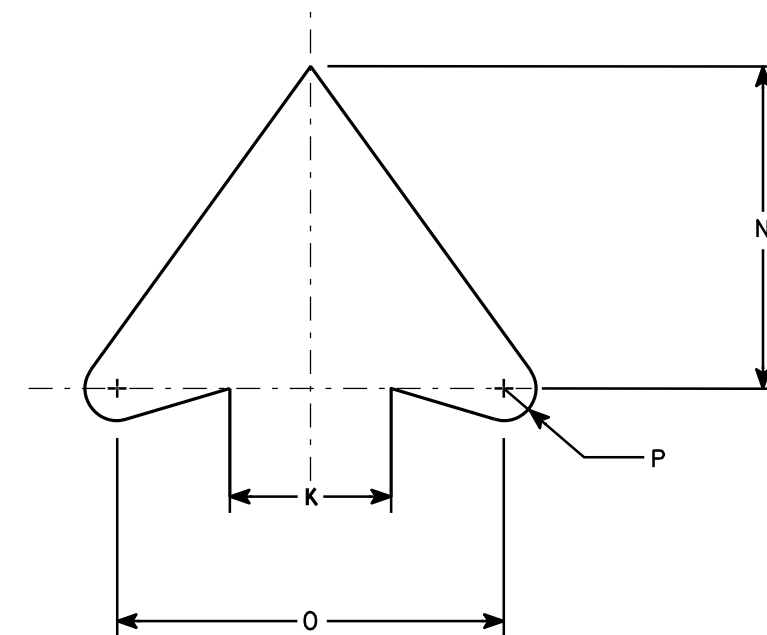
APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|--------|---|--------|---|-------|-------|-----|--------|-------|----|-----|----|---|---|---|---|---|---|---|---|---|--------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45 | 8 1/2 | 5 | 6 | 1/2 | 12 | | | | | | | | | | 4.0 |
| 2S | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45° | 8 1/2 | 5 | 6 | 1/2 | 12 | | | | | | | | | | 4.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45 | 12 3/4 | 7 1/2 | 9 | 3/4 | 18 | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45 | 12 3/4 | 7 1/2 | 9 | 3/4 | 18 | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | 18 | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 21 | 8 | 15 | 4 | 3 | 5 | 45° | 17 | 10 | 12 | 1 | 24 | | | | | | | | | | 16.0 |

STANDARD SIGN

R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

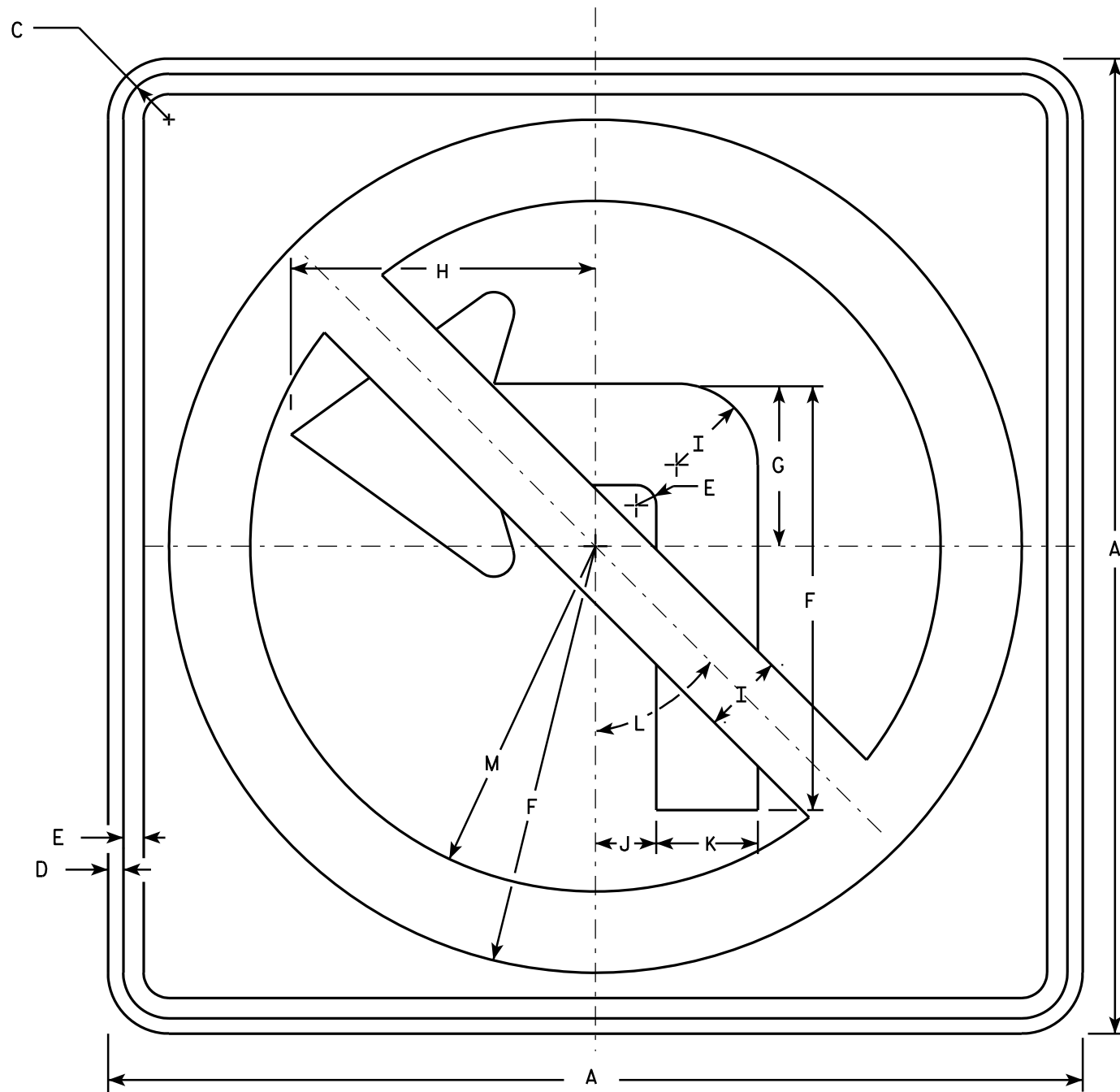
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

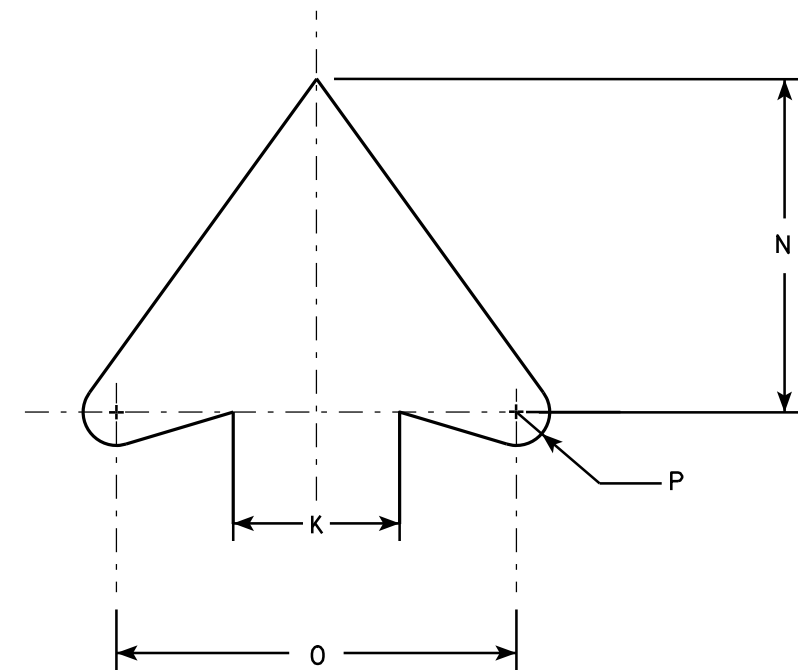
E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|--------|---|--------|---|-------|-------|-----|--------|-------|----|-----|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45° | 8 1/2 | 5 | 6 | 1/2 | | | | | | | | | | | 4.0 |
| 2S | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45° | 8 1/2 | 5 | 6 | 1/2 | | | | | | | | | | | 4.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 21 | 8 | 15 | 4 | 3 | 5 | 45° | 17 | 10 | 12 | 1 | | | | | | | | | | | 16.0 |

STANDARD SIGN R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:

HWY:

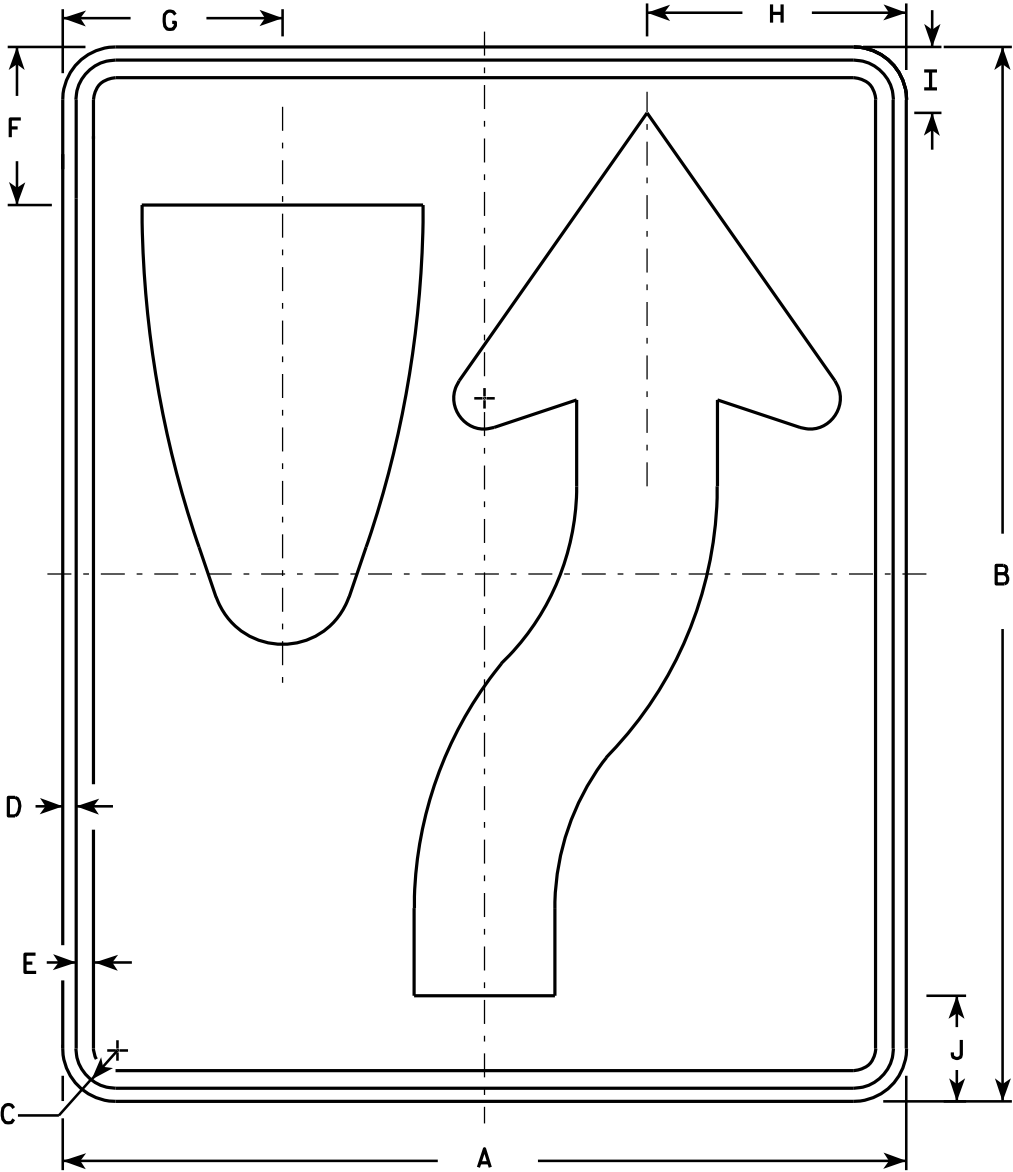
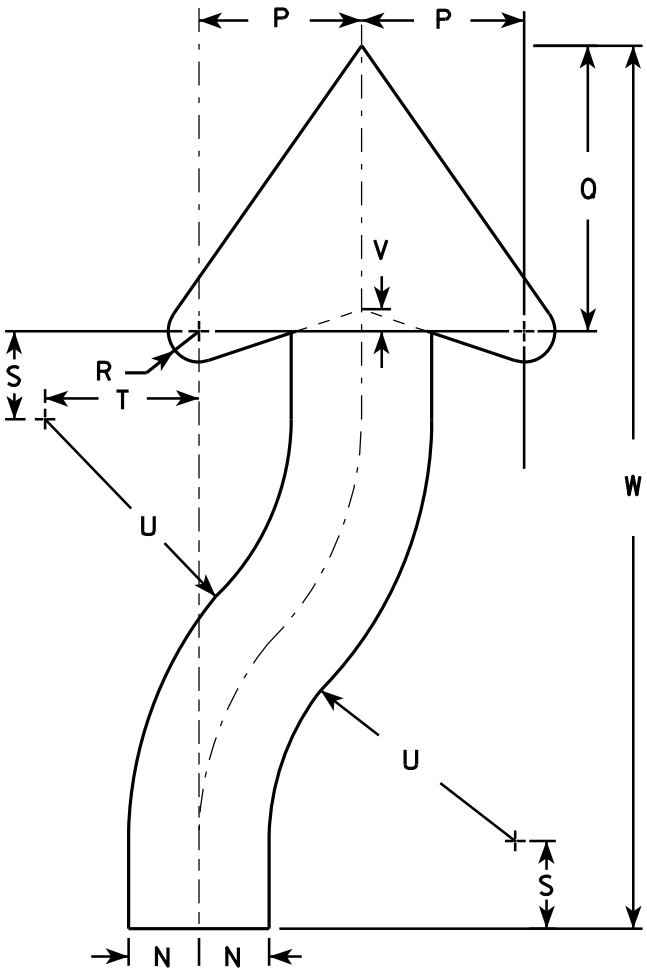
COUNTY:

SHEET NO:

E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
Background - White
Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|-------|--------|--------|-------|-------|----|---|--------|-------|--------|-------|--------|-------|-------|-------|--------|-------|--------|---|---|---|-----------------|
| 1 | 18 | 24 | 1 1/8 | 3/8 | 1/2 | 3 3/8 | 4 3/4 | 5 1/2 | 1 3/8 | 2 1/4 | 6 | 3 | 9 3/8 | 1 1/2 | 22 1/2 | 3 1/2 | 6 1/8 | 5/8 | 1 7/8 | 3 1/4 | 6 3/4 | 1/2 | 20 3/8 | | | | 3.0 |
| 2S | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 4 1/2 | 6 1/4 | 7 3/8 | 1 7/8 | 3 | 8 | 4 | 12 1/2 | 2 | 30 | 4 5/8 | 8 1/8 | 7/8 | 2 1/2 | 4 3/8 | 9 | 5/8 | 25 1/8 | | | | 5.0 |
| 2M | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 4 1/2 | 6 1/4 | 7 3/8 | 1 7/8 | 3 | 8 | 4 | 12 1/2 | 2 | 30 | 4 5/8 | 8 1/8 | 7/8 | 2 1/2 | 4 3/8 | 9 | 5/8 | 25 1/8 | | | | 5.0 |
| 3 | 36 | 48 | 1 3/4 | 1/2 | 5/8 | 6 3/4 | 9 3/8 | 11 1/8 | 2 7/8 | 4 1/2 | 12 | 6 | 18 3/4 | 3 | 45 | 6 7/8 | 12 1/4 | 1 1/4 | 3 3/4 | 6 5/8 | 13 1/2 | 1 | 40 3/4 | | | | 12.0 |
| 4 | 36 | 48 | 1 3/4 | 1/2 | 5/8 | 6 3/4 | 9 3/8 | 11 1/8 | 2 7/8 | 4 1/2 | 12 | 6 | 18 3/4 | 3 | 45 | 6 7/8 | 12 1/4 | 1 1/4 | 3 3/4 | 6 5/8 | 13 1/2 | 1 | 40 3/4 | | | | 12.0 |
| 5 | 48 | 60 | 2 1/4 | 3/4 | 1 | 9 | 12 1/2 | 14 3/4 | 3 3/4 | 6 | 16 | 8 | 25 | 4 | 60 | 9 1/4 | 16 1/4 | 1 5/8 | 5 | 8 3/4 | 18 | 1 1/4 | 50 1/4 | | | | 20.0 |

STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

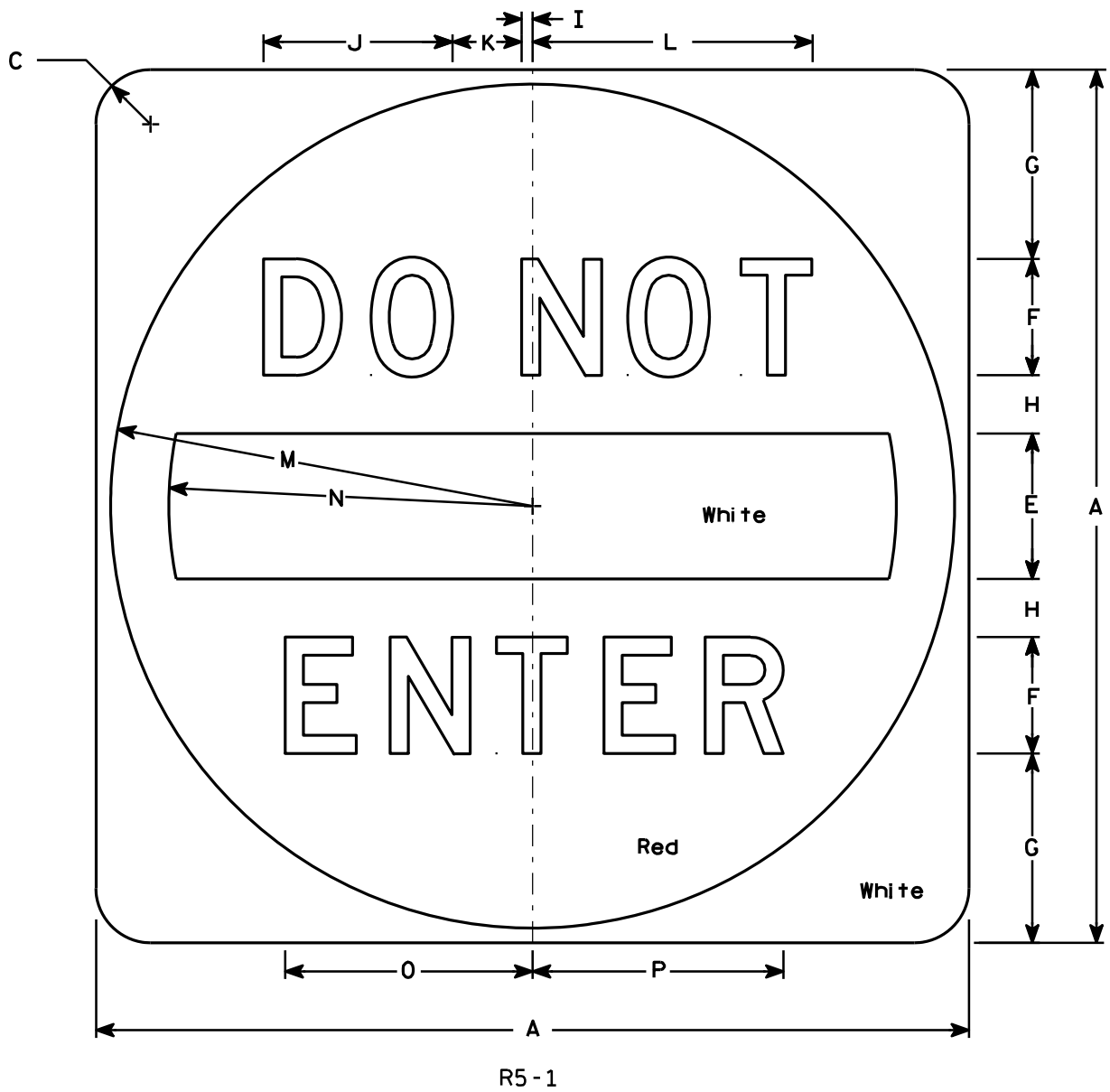
DATE 3/25/2011 PLATE NO. R4-7.8

NOTES

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

Background - See detail

Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the corners shall be rounded.



| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|---|---|---|-------|-------|-----|-------|-------|--------|--------|--------|--------|--------|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | | 1 7⁄8 | | 5 | 4 | 6 1⁄2 | 2 | 3⁄8 | 6 1⁄2 | 2 3⁄8 | 9 5⁄8 | 14 1⁄2 | 12 1⁄2 | 8 1⁄2 | 8 5⁄8 | | | | | | | | | | | 6.26 |
| 2M | 36 | | 2 1⁄4 | | 6 | 5 | 7 1⁄2 | 2 1⁄2 | 1⁄2 | 8 1⁄8 | 3 | 12 1⁄8 | 17 1⁄2 | 15 | 10 5⁄8 | 10 3⁄4 | | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1⁄4 | | 6 | 5 | 7 1⁄2 | 2 1⁄2 | 1⁄2 | 8 1⁄8 | 3 | 12 1⁄8 | 17 1⁄2 | 15 | 10 5⁄8 | 10 3⁄4 | | | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1⁄4 | | 6 | 5 | 7 1⁄2 | 2 1⁄2 | 1⁄2 | 8 1⁄8 | 3 | 12 1⁄8 | 17 1⁄2 | 15 | 10 5⁄8 | 10 3⁄4 | | | | | | | | | | | 9.0 |
| 5 | 48 | | 3 | | 8 | 6 | 11 | 3 | 5⁄8 | 9 3⁄4 | 3 5⁄8 | 14 1⁄2 | 23 1⁄2 | 20 | 12 3⁄4 | 12 7⁄8 | | | | | | | | | | | 16.0 |

STANDARD SIGN

R5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch

for State Traffic Engineer

DATE 12/17/10PLATE NO. R5-1.15

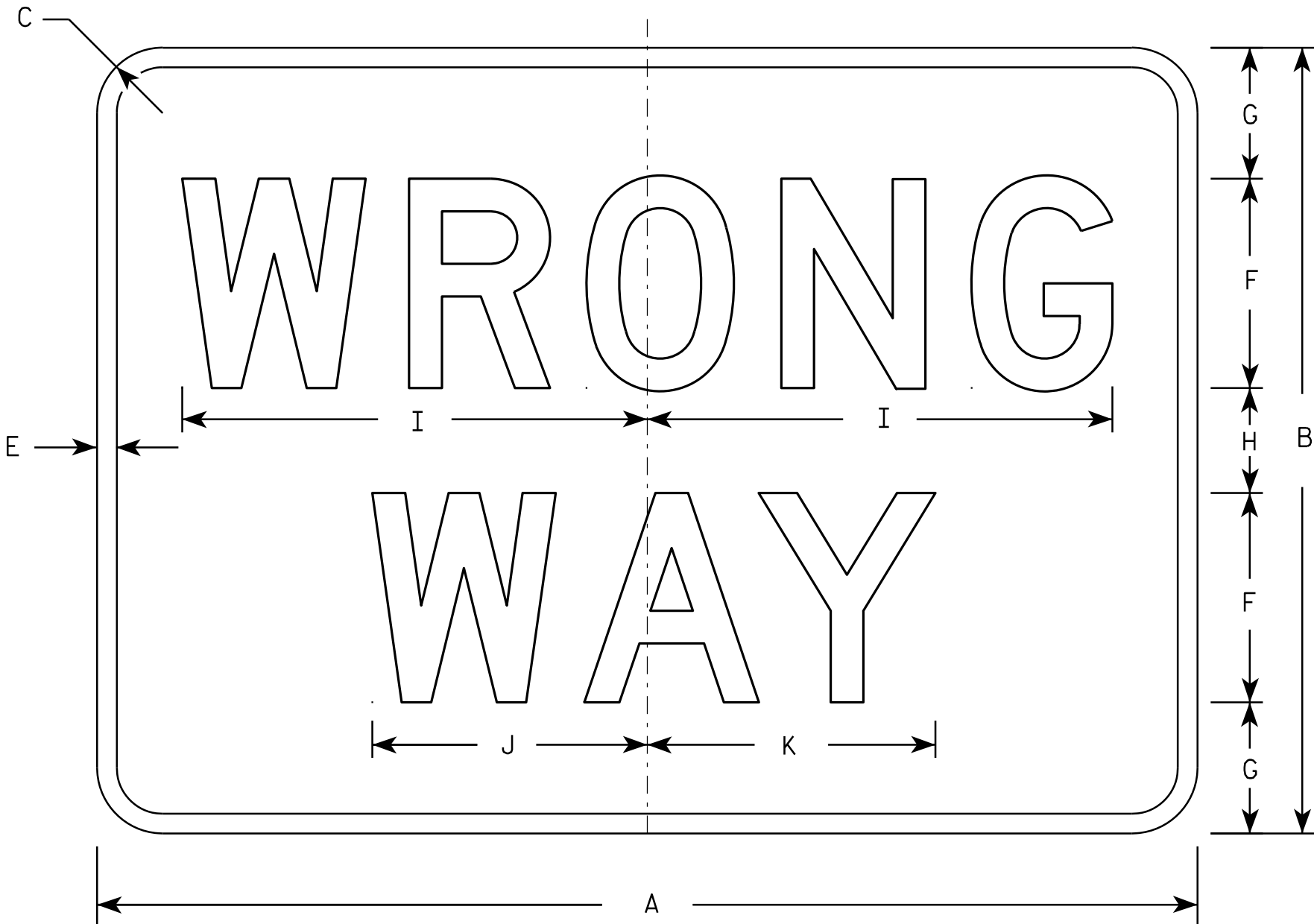
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



R5-1A

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 - 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.

| 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 | 18 | 1 1/2 | | 1/2 | 5 | 3 | 2 | 11 | 6 1/2 | 6 7/8 | | | | | | | | | | | | | | | | 3.75 |
| 2S | 36 | 24 | 2 | | 5/8 | 6 | 4 1/2 | 3 | 13 1/4 | 7 7/8 | 8 1/4 | | | | | | | | | | | | | | | | 6.00 |
| 2M | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 3 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 4 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 5 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 12/17/10

PLATE NO. R5-1A.2

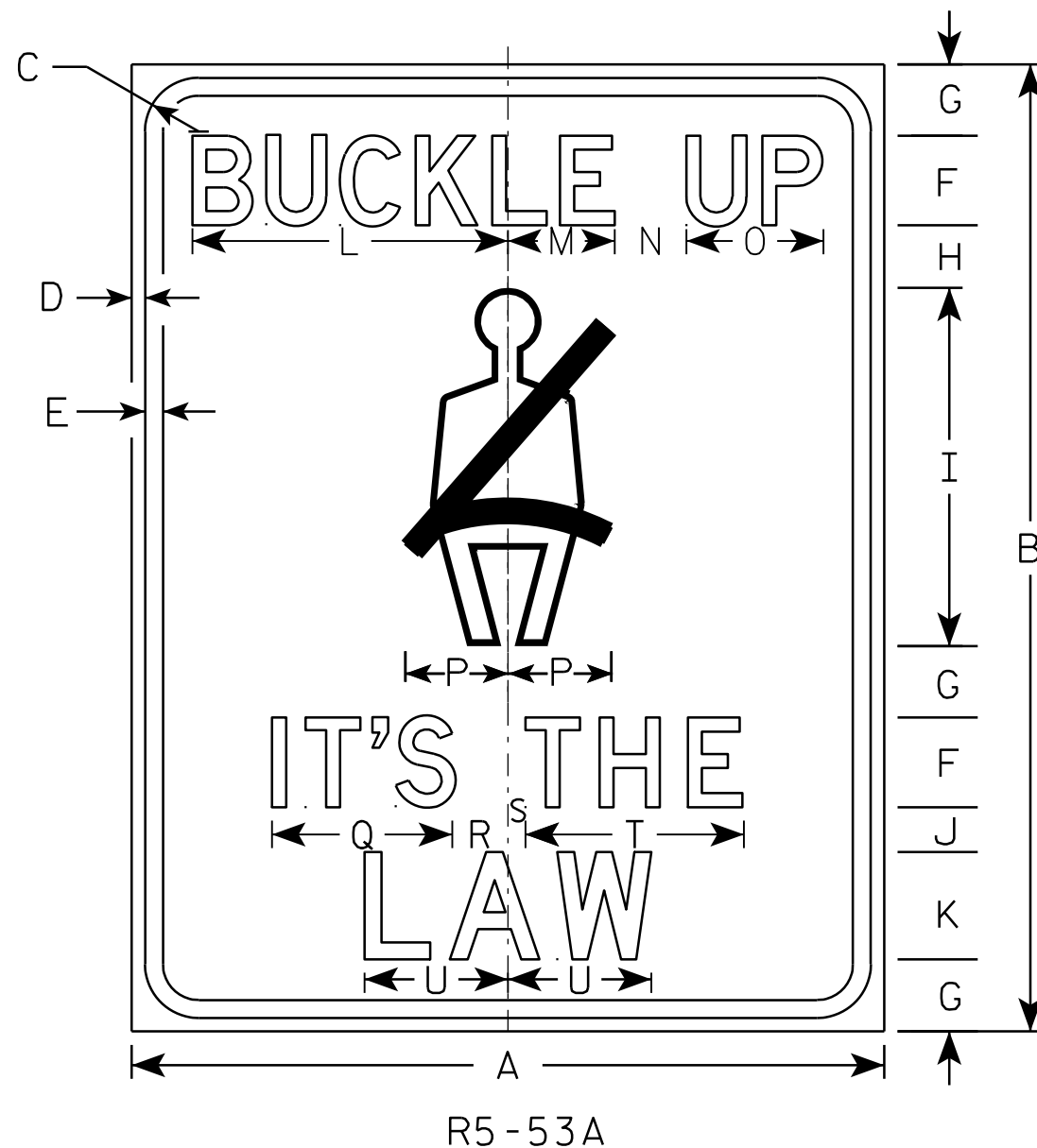
PROJECT NO:

HWY:

COUNTY:

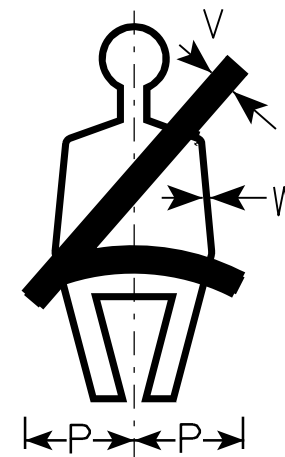
SHEET NO:

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 - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|-------|-------|----|-------|---|--------|-------|-------|-------|-------|-------|-------|-----|--------|-------|-------|-----|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 18 | 24 | 1 1/8 | 3/8 | 3/8 | 2 | 1 3/4 | 1 1/2 | 9 | 1 1/4 | 3 | 6 3/4 | 2 1/4 | 1 1/2 | 2 7/8 | 2 1/2 | 3 7/8 | 1 1/4 | 3/8 | 4 5/8 | 3 7/8 | 5/8 | 1/8 | | | | 3.00 |
| 2M | 18 | 24 | 1 1/8 | 3/8 | 3/8 | 2 | 1 3/4 | 1 1/2 | 9 | 1 1/4 | 3 | 6 3/4 | 2 1/4 | 1 1/2 | 2 7/8 | 2 1/2 | 3 7/8 | 1 1/4 | 3/8 | 4 5/8 | 3 7/8 | 5/8 | 1/8 | | | | 3.00 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 42 | 54 | 2 1/4 | 3/4 | 1 | 5 | 4 | 3 1/2 | 20 | 2 1/2 | 6 | 17 5/8 | 6 | 4 | 7 5/8 | 5 3/4 | 10 | 3 1/2 | 1 | 12 1/4 | 8 | 1 1/2 | 3/8 | | | | 15.75 |

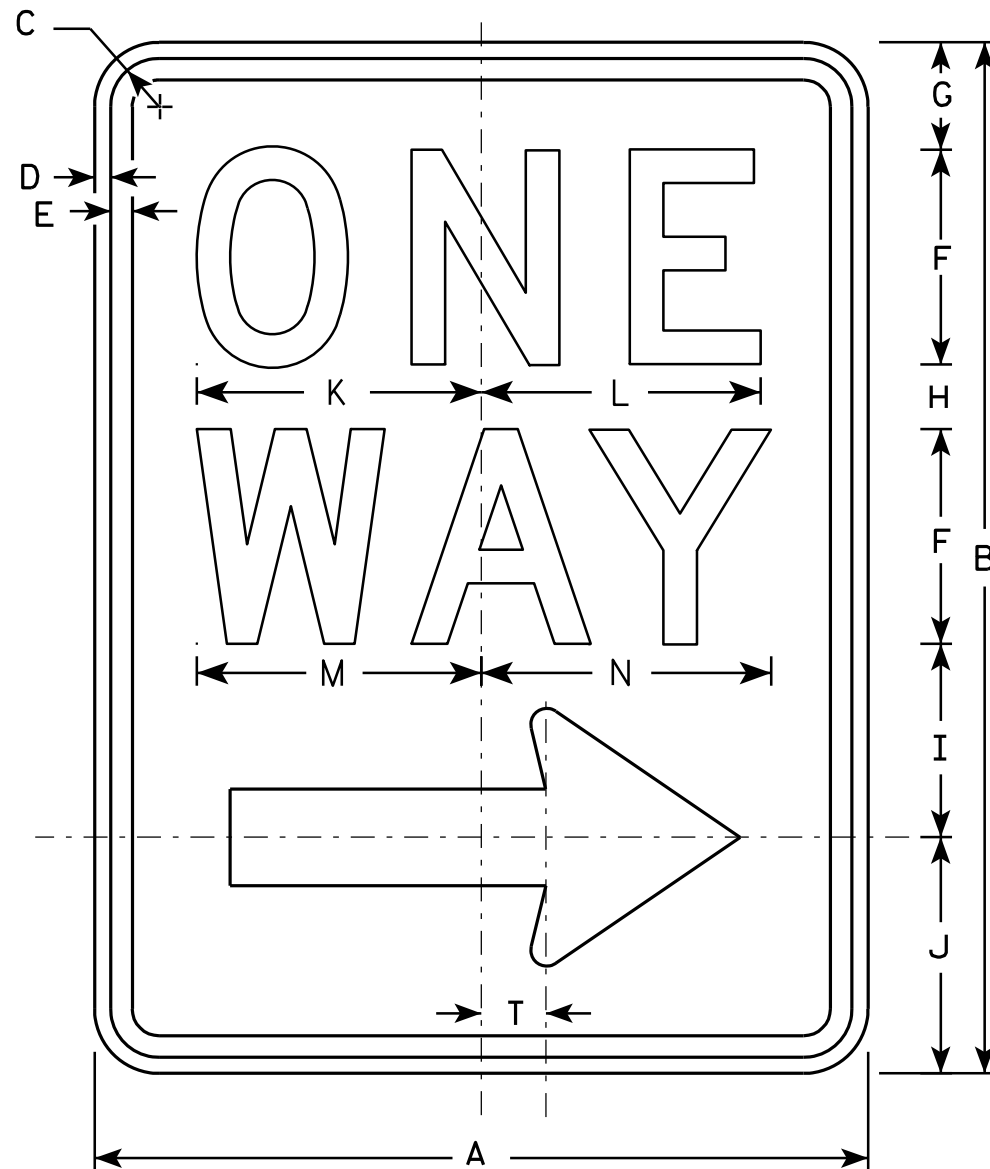
| | | | | |
|-------------|------|---------|-----------|---|
| PROJECT NO: | HWY: | COUNTY: | SHEET NO: | E |
|-------------|------|---------|-----------|---|

STANDARD SIGN
R5-53A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

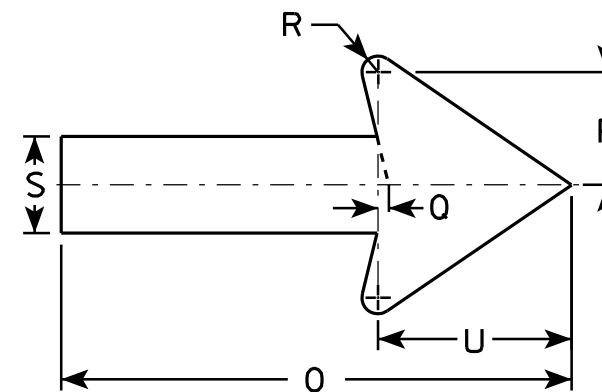
DATE 3/29/2011 PLATE NO. R5-53A.5



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z |
|------|----|----|-------|-----|-----|----|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-----|-----|-------|-------|-------|---|---|---|---|---|
| 1 | 18 | 24 | 1 1/8 | 3/8 | 1/2 | 5 | 2 1/2 | 1 1/2 | 4 1/2 | 5 1/2 | 6 5/8 | 6 1/2 | 6 5/8 | 6 3/4 | 11 7/8 | 2 5/8 | 1/4 | 3/8 | 2 1/4 | 1 1/2 | 4 1/2 | | | | | |
| 2S | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 6 | 3 | 2 1/2 | 5 1/2 | 7 | 8 1/8 | 8 1/8 | 8 1/2 | 8 5/8 | 16 | 3 1/2 | 3/8 | 1/2 | 3 | 2 | 6 | | | | | |
| 2M | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 2 1/2 | 2 5/8 | 6 7/8 | 8 | 10 1/2 | 10 1/2 | 11 1/4 | 11 1/4 | 20 | 4 3/8 | 1/2 | 5/8 | 3 3/4 | 2 1/2 | 7 1/2 | | | | | |
| 3 | 36 | 48 | 1 7/8 | 1/2 | 5/8 | 10 | 5 1/4 | 3 1/4 | 9 | 10 1/2 | 12 3/4 | 12 3/4 | 13 1/4 | 13 1/2 | 24 | 5 5/8 | 1/2 | 3/4 | 4 3/4 | 3 | 9 | | | | | |
| 4 | 36 | 48 | 1 7/8 | 1/2 | 5/8 | 10 | 5 1/4 | 3 1/4 | 9 | 10 1/2 | 12 3/4 | 12 3/4 | 13 1/4 | 13 1/2 | 24 | 5 5/8 | 1/2 | 3/4 | 4 3/4 | 3 | 9 | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

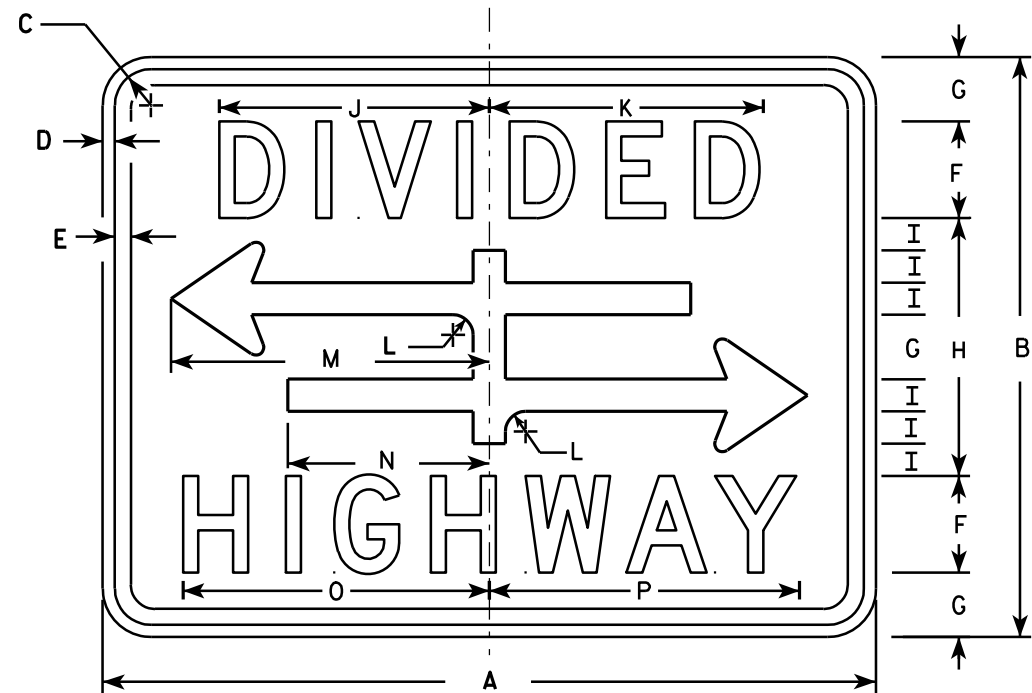
STANDARD SIGN

R6-2 R&L

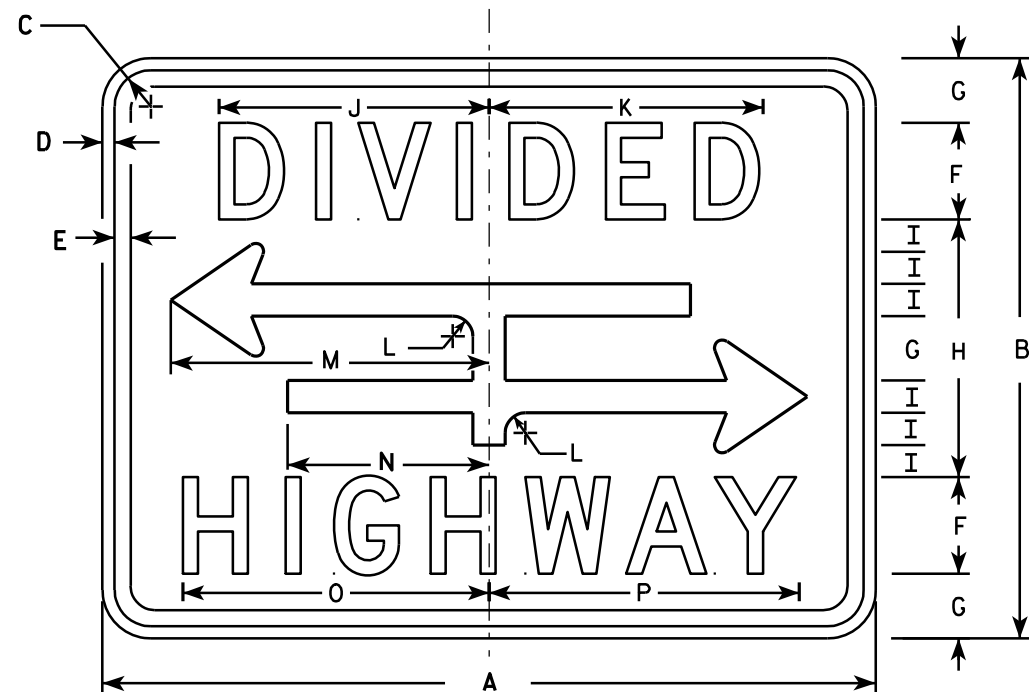
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8



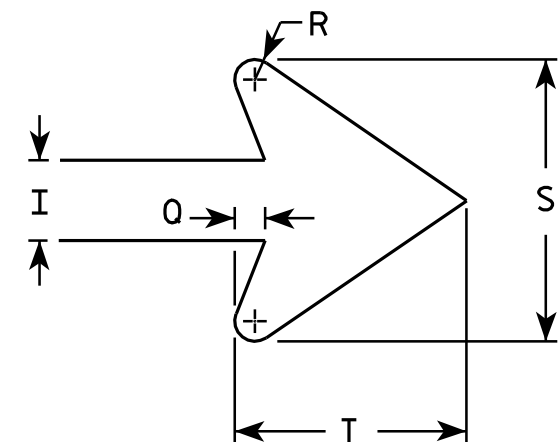
R6-3



R6-3A

NOTES

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



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 | 18 | 1 1/8 | 3/8 | 3/8 | 3 | 2 | 8 | 1 | 8 3/8 | 8 1/2 | 5/8 | 9 7/8 | 6 1/4 | 9 1/2 | 9 5/8 | 3/8 | 1/4 | 3 1/2 | 2 3/4 | | | | | | | 3.0 |
| 2S | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 4 | 2 5/8 | 10 3/4 | 1 3/8 | 10 1/2 | 10 5/8 | 7/8 | 12 1/2 | 7 7/8 | 12 1/4 | 12 3/8 | 1/2 | 3/8 | 4 5/8 | 3 5/8 | | | | | | | 5.0 |
| 2M | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 4 | 2 5/8 | 10 3/4 | 1 3/8 | 10 1/2 | 10 5/8 | 7/8 | 12 1/2 | 7 7/8 | 12 1/4 | 12 3/8 | 1/2 | 3/8 | 4 5/8 | 3 5/8 | | | | | | | 5.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

PROJECT NO:

STANDARD SIGN
R6-3 & R6-3A

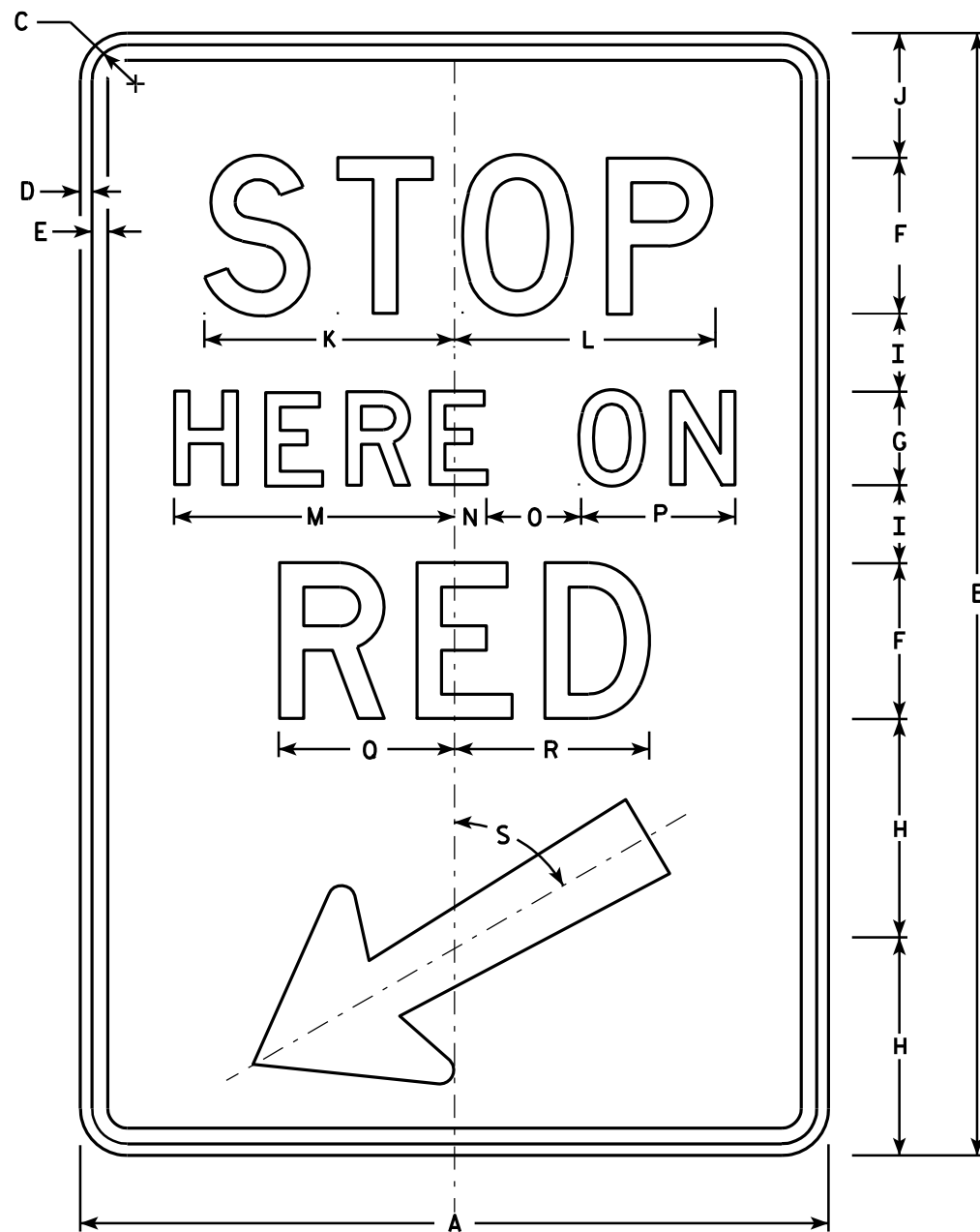
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

SHEET NO:

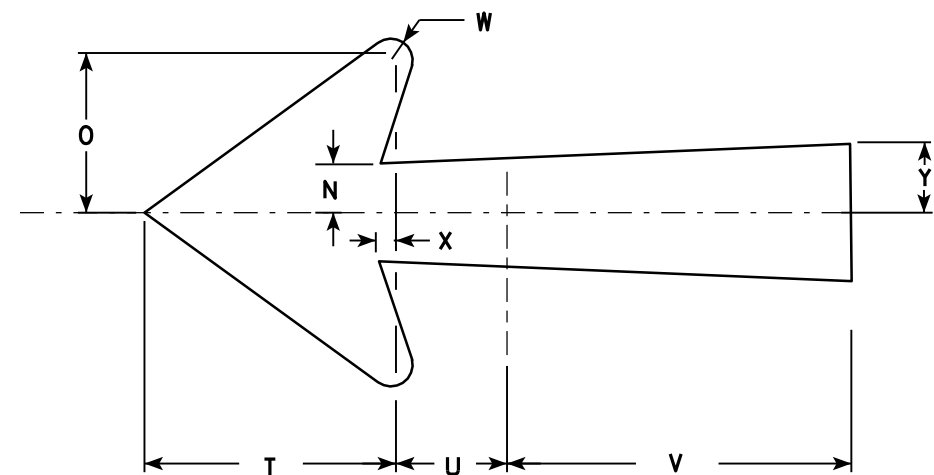
E



R10-6

NOTES

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



Arrow Detail

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|---|---|-------|---|---|-------|---|---|---|---|-------|-------|-----|-------|-------|-------|-----|-----|-------|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 5 | 3 | 7 | 2 1/2 | 4 | 8 | 8 3/8 | 9 | 1 | 3 | 5 | 5 5/8 | 6 1/4 | 60° | 5 1/4 | 2 1/4 | 7 1/8 | 1/2 | 3/8 | 1 3/8 | | 6.0 |
| 2M | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 5 | 3 | 7 | 2 1/2 | 4 | 8 | 8 3/8 | 9 | 1 | 3 | 5 | 5 5/8 | 6 1/4 | 60° | 5 1/4 | 2 1/4 | 7 1/8 | 1/2 | 3/8 | 1 3/8 | | 6.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN R10-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-6.6

PROJECT NO:

HWY:

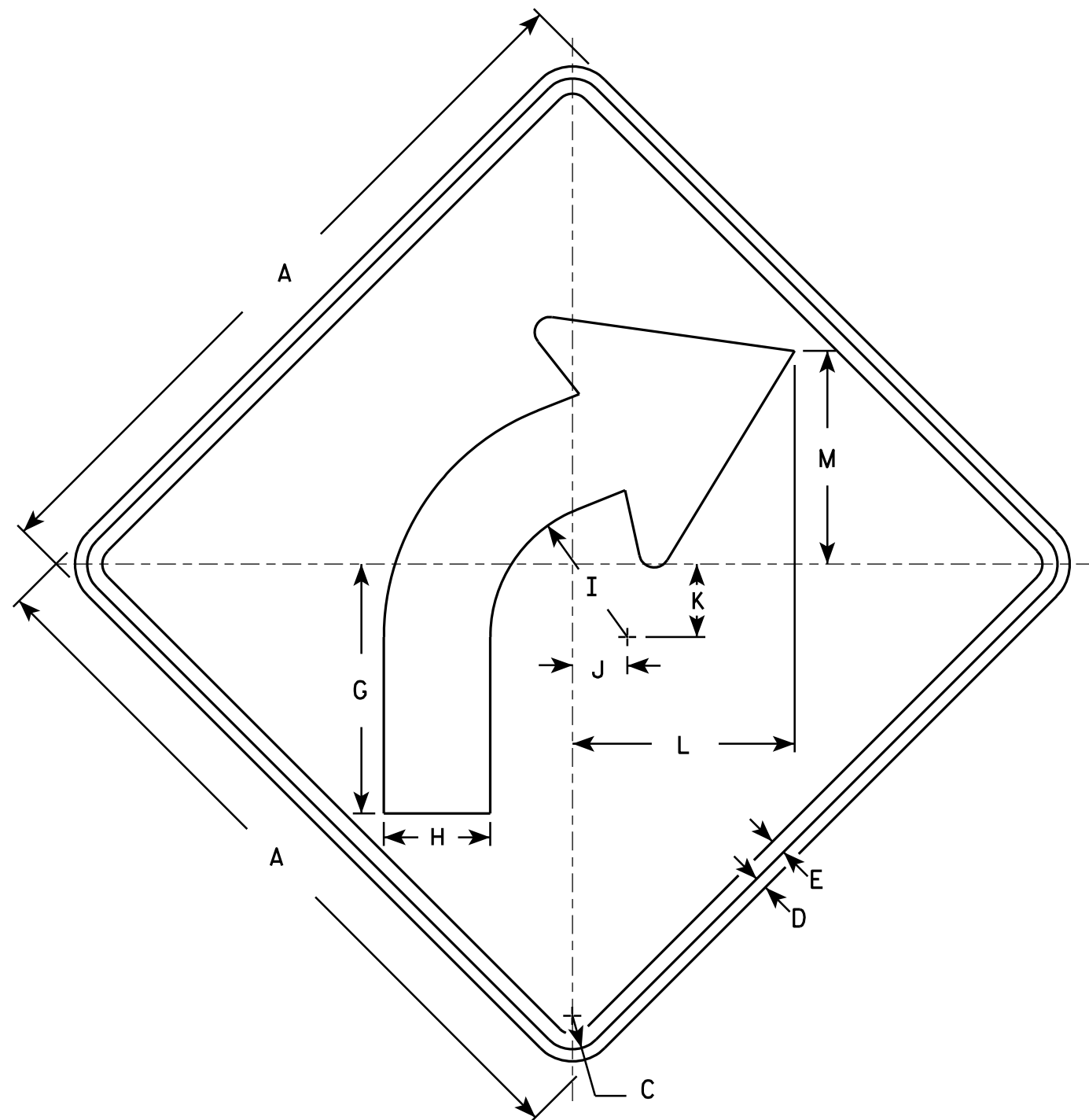
COUNTY:

SHEET NO:

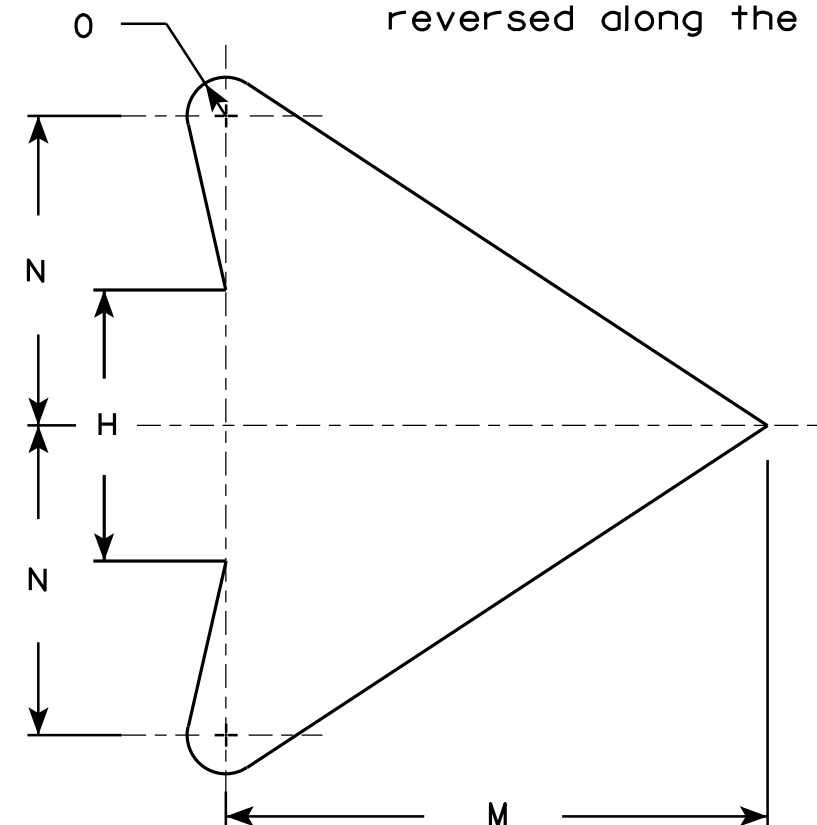
E

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

PROJECT NO:

HWY:

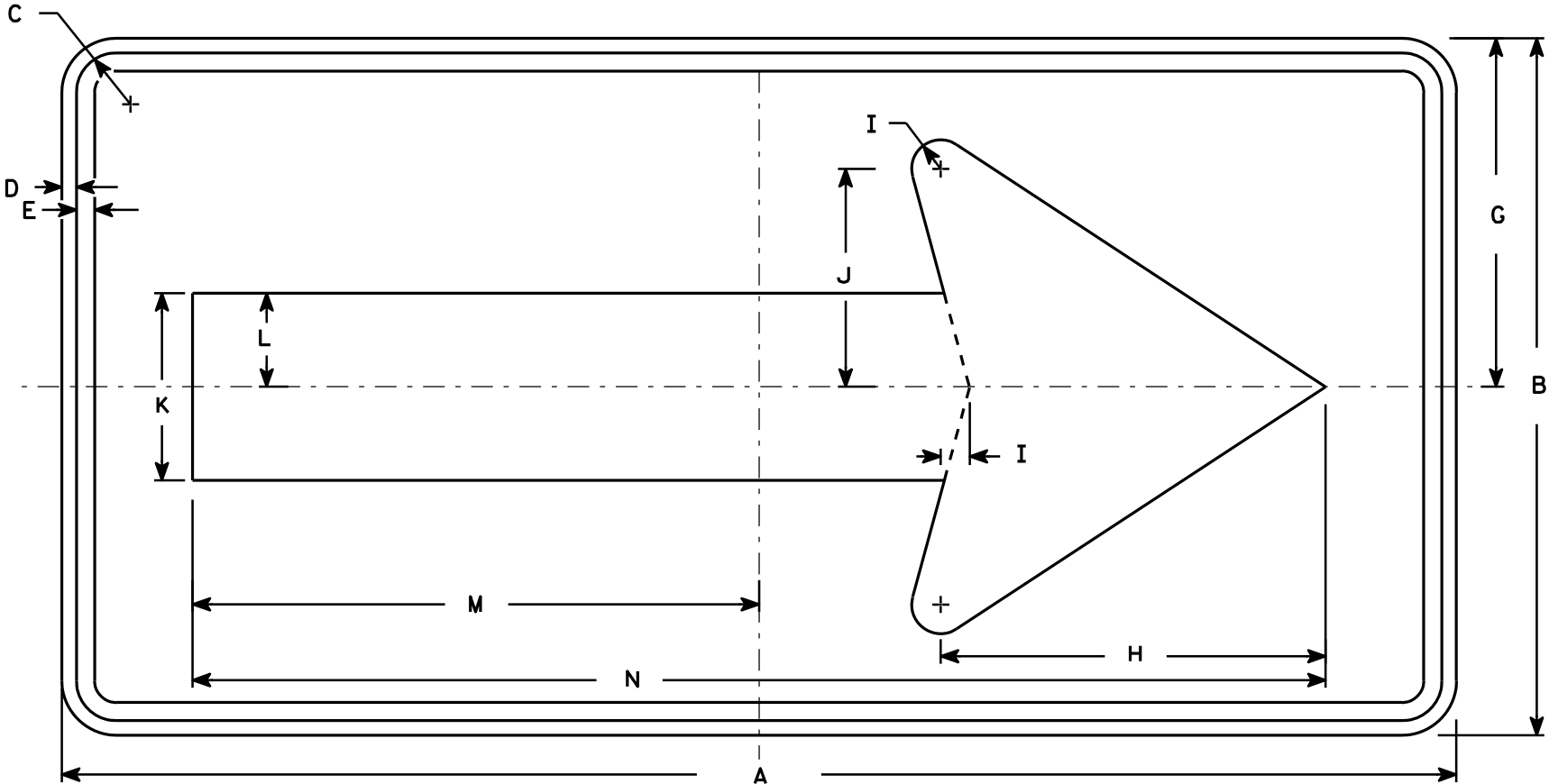
COUNTY:

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.



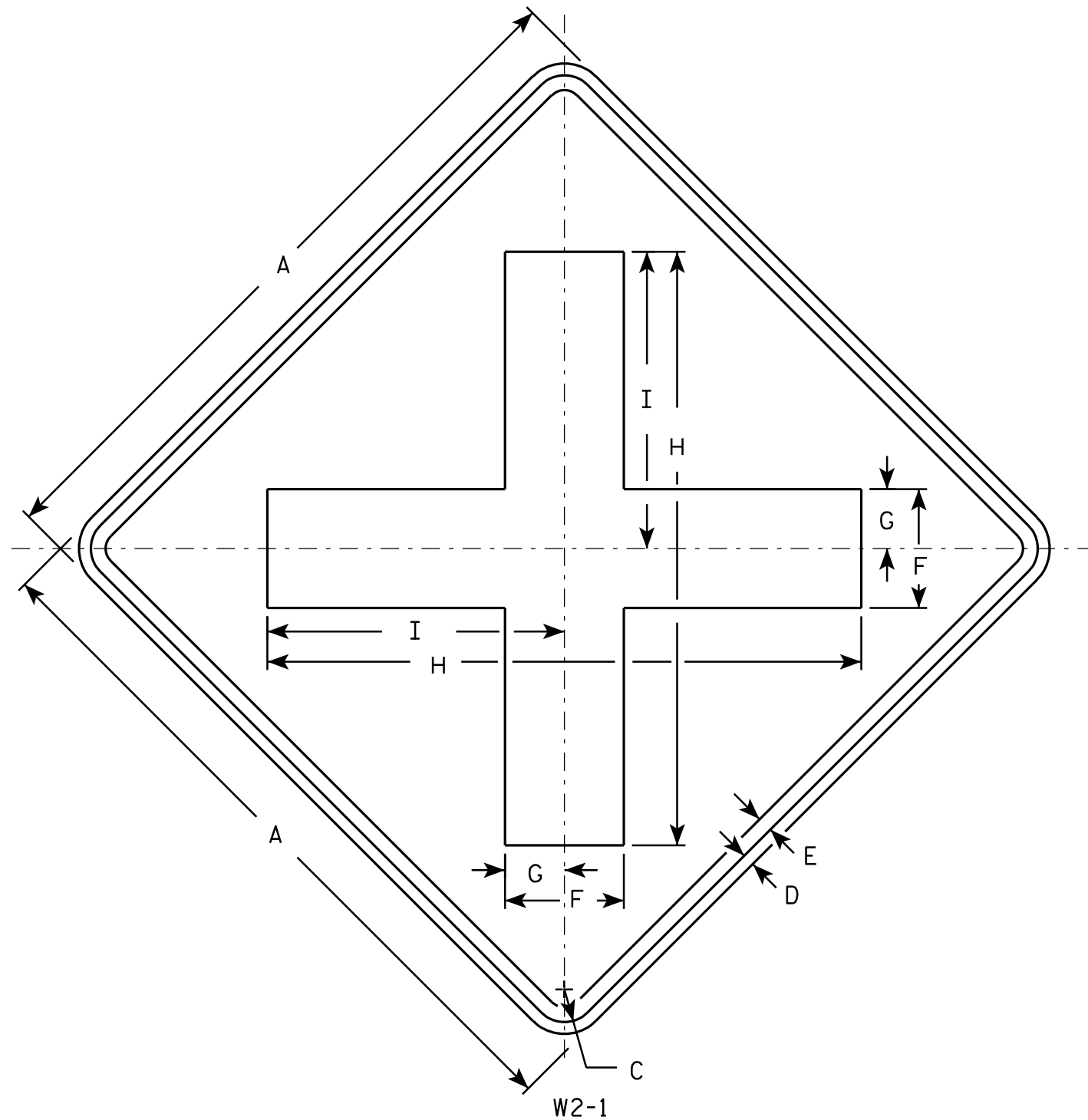
W1-6

| 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



NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|-------|----|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 4 | 2 | 20 | 10 | | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 1/2 | 25 | 12 1/2 | | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 1/2 | 25 | 12 1/2 | | | | | | | | | | | | | | | | | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 3 | 30 | 15 | | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 4 | 40 | 20 | | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN

W2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-1.9

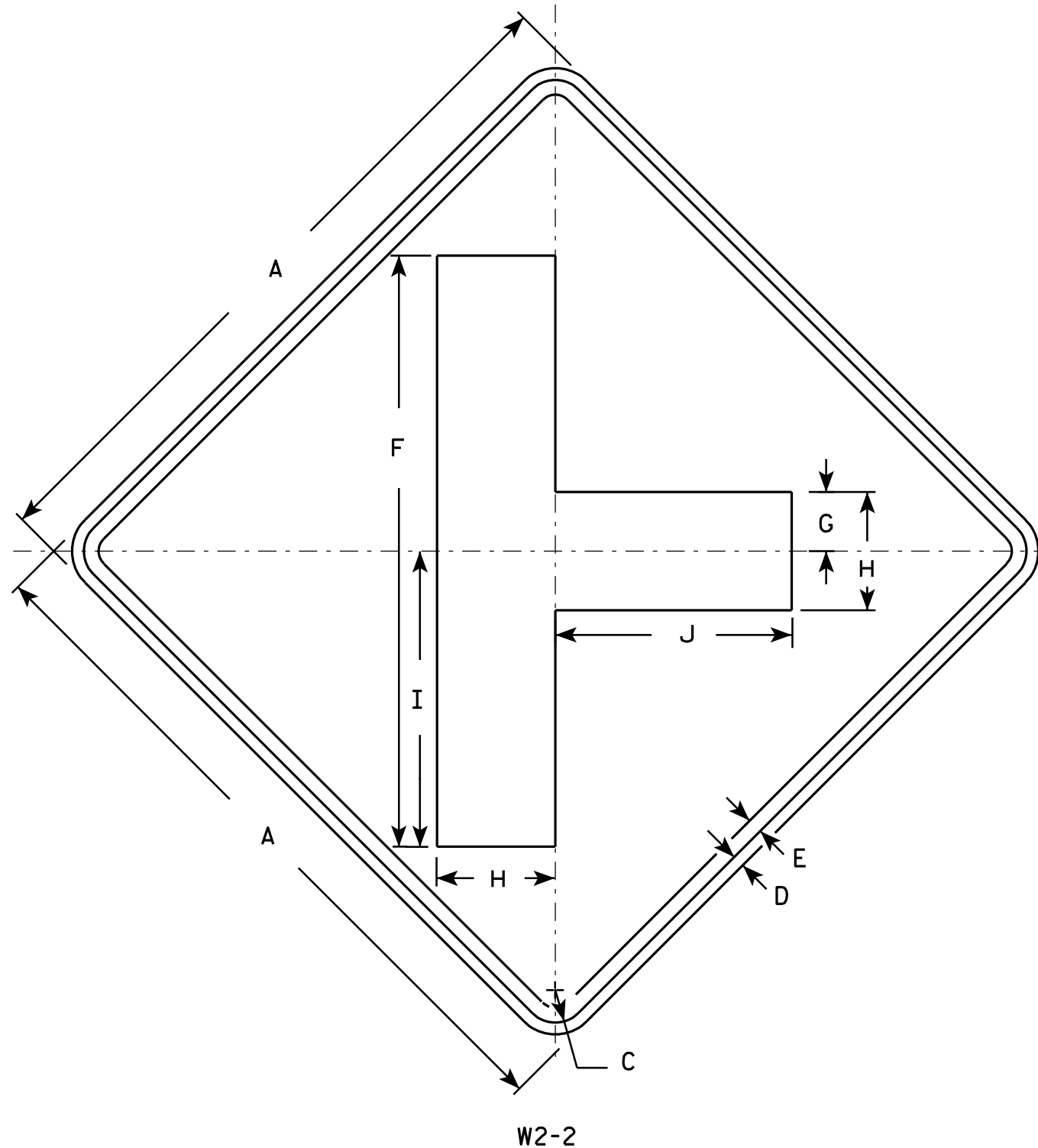
PROJECT NO:

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.

W2-2

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|----|-------|---|--------|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 20 | 2 | 4 | 10 | 8 | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 25 | 2 1/2 | 5 | 12 1/2 | 10 | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | 25 | 2 1/2 | 5 | 12 1/2 | 10 | | | | | | | | | | | | | | | | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 30 | 3 | 6 | 15 | 12 | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 40 | 4 | 8 | 20 | 16 | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

PROJECT NO: HWY: COUNTY: SHEET NO: E



W4-4P

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 - B
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|-------|-------|--------|-------|-----|--------|--------|-------|-------|--------|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 3 | 2 1/4 | 1 1/2 | 8 | 1 1/2 | 3/8 | 10 | 6 1/4 | 2 1/4 | 2 1/4 | 6 1/4 | | | | | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 3 | 2 1/4 | 1 1/2 | 8 | 1 1/2 | 3/8 | 10 | 6 1/4 | 2 1/4 | 2 1/4 | 6 1/4 | | | | | | | | | | | 2.0 |
| 3 | 36 | 15 | 1 1/8 | 3/8 | 1/2 | 4 | 2 5/8 | 1 3/4 | 10 3/4 | 2 3/8 | 3/8 | 13 1/2 | 8 3/8 | 3 | 3 1/8 | 8 3/8 | | | | | | | | | | | 3.75 |
| 4 | 42 | 18 | 1 1/8 | 3/8 | 1/2 | 5 | 3 | 2 | 13 3/8 | 3 1/8 | 3/8 | 16 7/8 | 10 1/2 | 3 5/8 | 3 7/8 | 10 3/8 | | | | | | | | | | | 5.25 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W4-4P

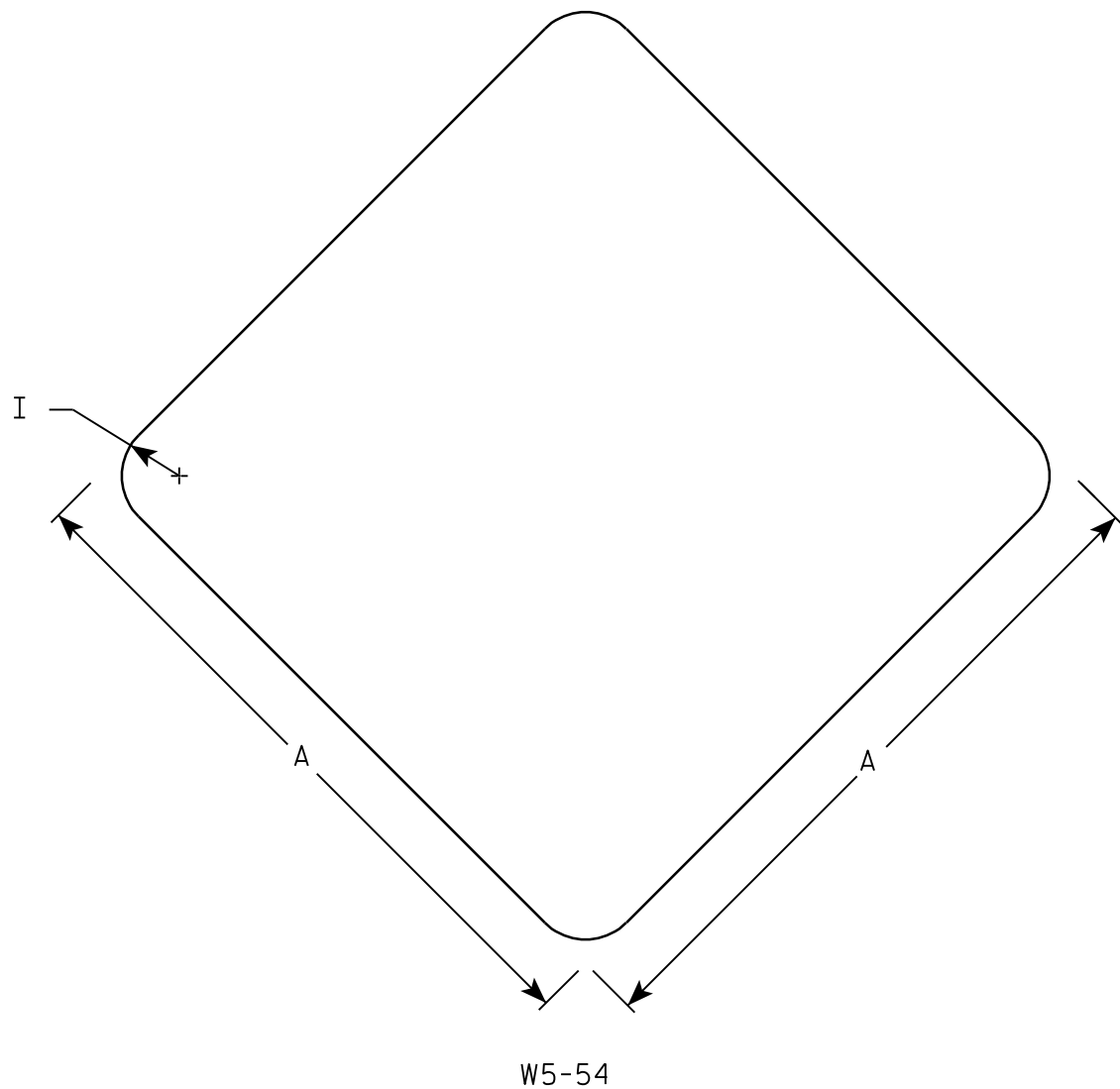
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rasch*
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-4P.2

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

7



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
- 3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

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 | 12 | | | | | | | | 1 | | | | | | | | | | | | | | | | | | 1.0 |
| 2S | 18 | | | | | | | | 1 1/2 | | | | | | | | | | | | | | | | | | 2.25 |
| 2M | 18 | | | | | | | | 1 1/2 | | | | | | | | | | | | | | | | | | 2.25 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

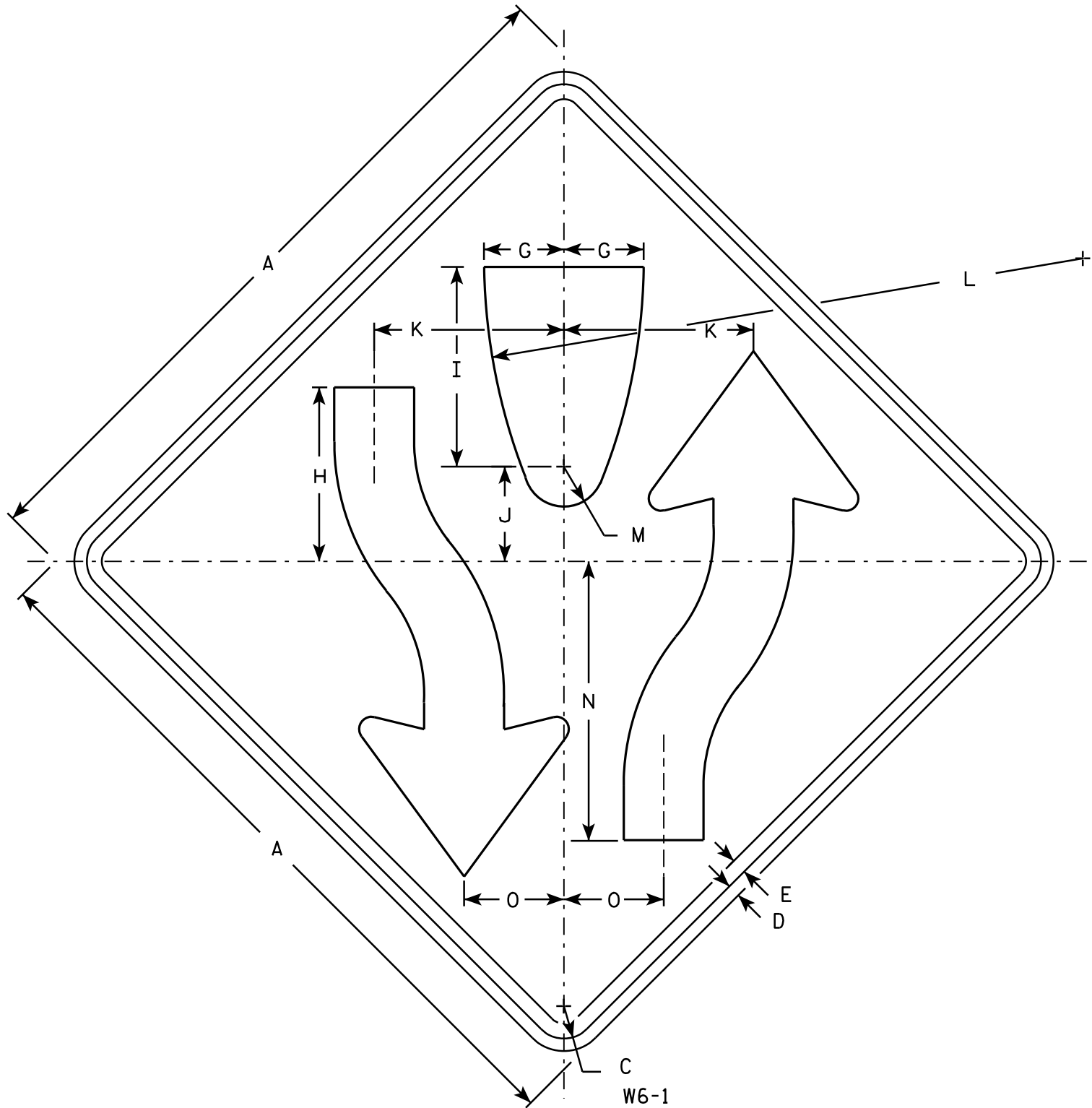
STANDARD SIGN

W5-54

WISCONSIN DEPT OF TRANSPORTATION

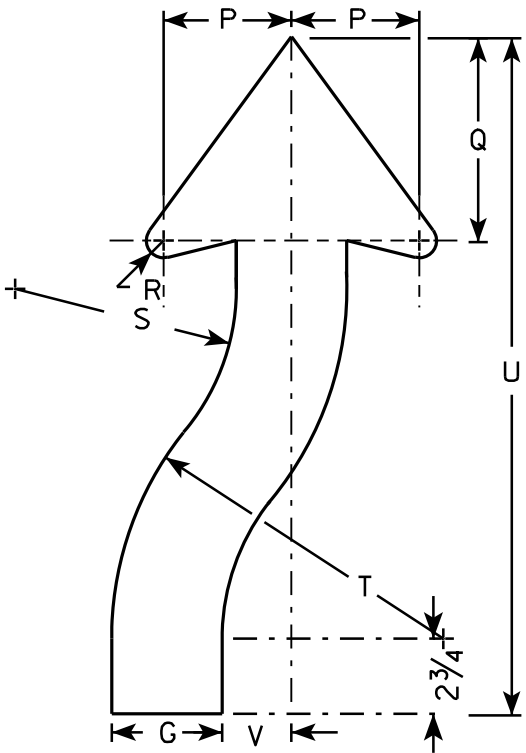
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8



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. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

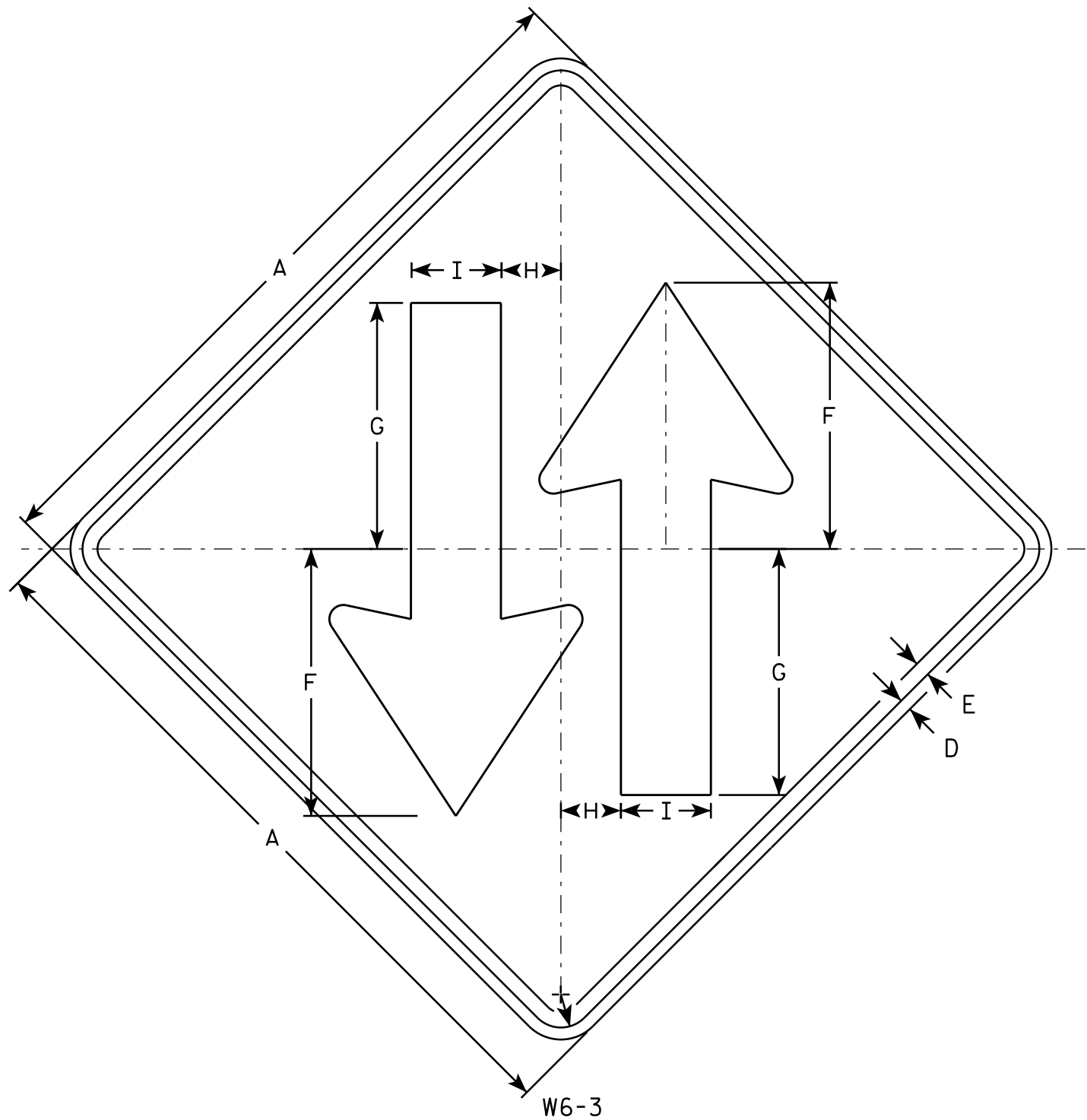
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|-------|--------|--------|-------|--------|----|-------|--------|-------|-------|-------|-------|--------|-------|--------|-------|---|---|---|---|-----------------|
| 1 | 30 | | 1 3⁄8 | 1⁄2 | 5⁄8 | | 3 1⁄4 | 8 | 8 1⁄4 | 4 1⁄8 | 7 7⁄8 | 25 | 1 3⁄4 | 11 5⁄8 | 4 1⁄8 | 3 7⁄8 | 6 3⁄4 | 5⁄8 | 6 5⁄8 | 9 7⁄8 | 21 5⁄8 | 2 | | | | | 6.25 |
| 2S | 36 | | 1 5⁄8 | 5⁄8 | 3⁄4 | | 4 | 8 3⁄4 | 10 | 4 3⁄4 | 9 1⁄2 | 30 | 2 | 14 | 5 | 4 5⁄8 | 7 3⁄8 | 7⁄8 | 8 | 12 | 24 1⁄2 | 2 1⁄2 | | | | | 9.0 |
| 2M | 36 | | 1 5⁄8 | 5⁄8 | 3⁄4 | | 4 | 8 3⁄4 | 10 | 4 3⁄4 | 9 1⁄2 | 30 | 2 | 14 | 5 | 4 5⁄8 | 7 3⁄8 | 7⁄8 | 8 | 12 | 24 1⁄2 | 2 1⁄2 | | | | | 9.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | 2 1⁄4 | 3⁄4 | 1 | | 5 3⁄8 | 11 5⁄8 | 13 3⁄8 | 6 3⁄8 | 12 5⁄8 | 40 | 2 5⁄8 | 18 5⁄8 | 6 5⁄8 | 6 1⁄4 | 9 7⁄8 | 1 1⁄4 | 10 5⁄8 | 16 | 32 5⁄8 | 3 3⁄8 | | | | | 16.0 |
| 5 | 48 | | 2 1⁄4 | 3⁄4 | 1 | | 5 3⁄8 | 11 5⁄8 | 13 3⁄8 | 6 3⁄8 | 12 5⁄8 | 40 | 2 5⁄8 | 18 5⁄8 | 6 5⁄8 | 6 1⁄4 | 9 7⁄8 | 1 1⁄4 | 10 5⁄8 | 16 | 32 5⁄8 | 3 3⁄8 | | | | | 16.0 |

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

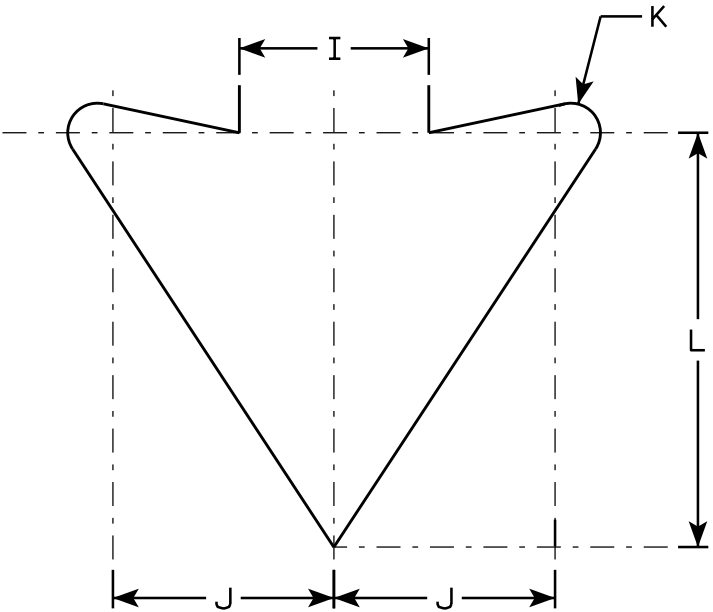
DATE 03/12/13 PLATE NO. W6-1.14



W6-3

NOTES

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



ARROW DETAIL

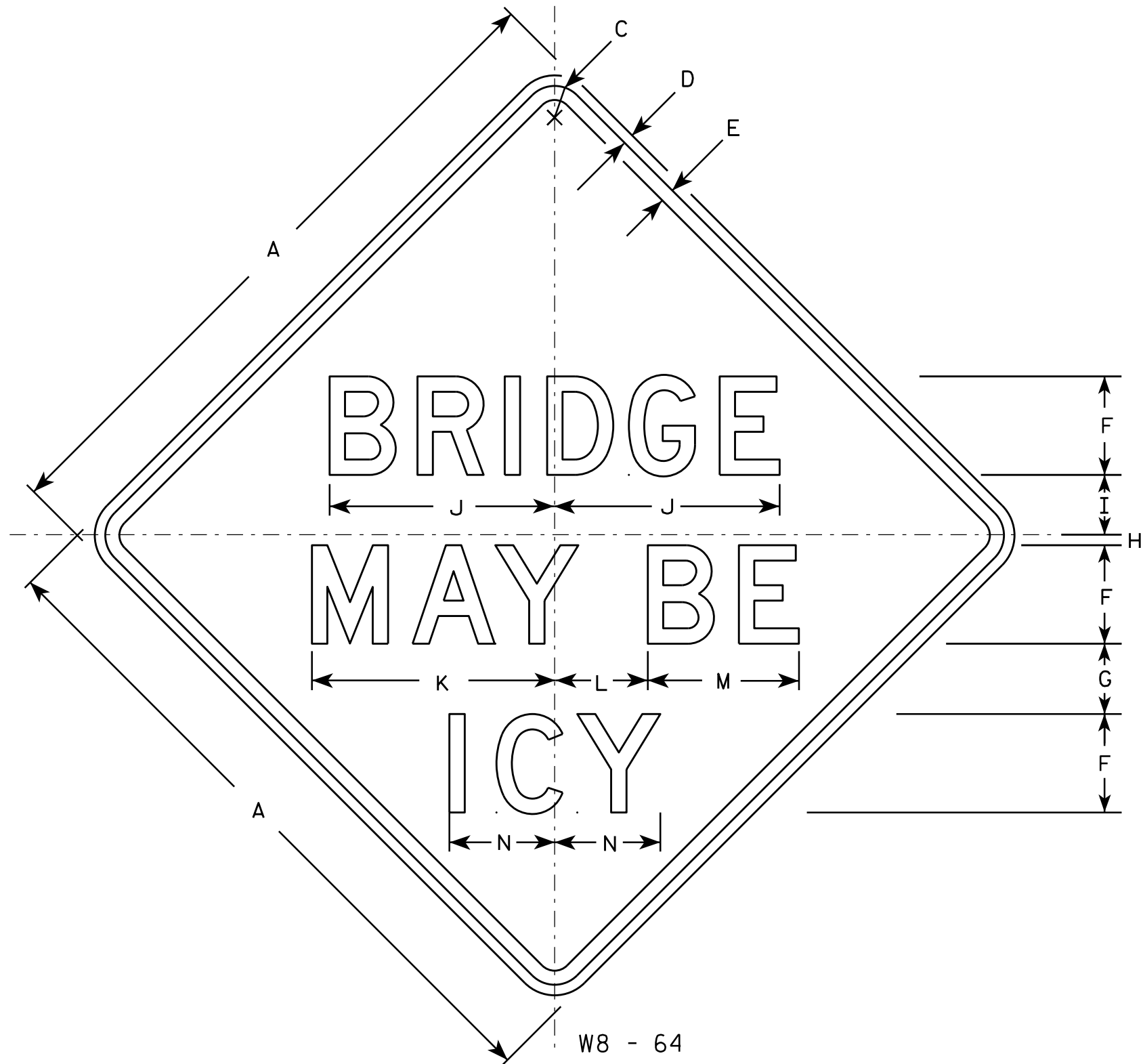
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|--------|--------|-------|-------|-------|-----|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 11 1/8 | 10 1/4 | 2 1/2 | 3 3/4 | 4 3/8 | 5/8 | 8 1/4 | | | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 13 3/8 | 12 1/4 | 3 | 4 1/2 | 5 1/4 | 3/4 | 9 7/8 | | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 13 3/8 | 12 1/4 | 3 | 4 1/2 | 5 1/4 | 3/4 | 9 7/8 | | | | | | | | | | | | | | | 9.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 17 3/4 | 16 3/8 | 4 | 6 | 7 | 1 | 13 1/8 | | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 17 3/4 | 16 3/8 | 4 | 6 | 7 | 1 | 13 1/8 | | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 3/10/16 PLATE NO. W6-3.11



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 - 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.

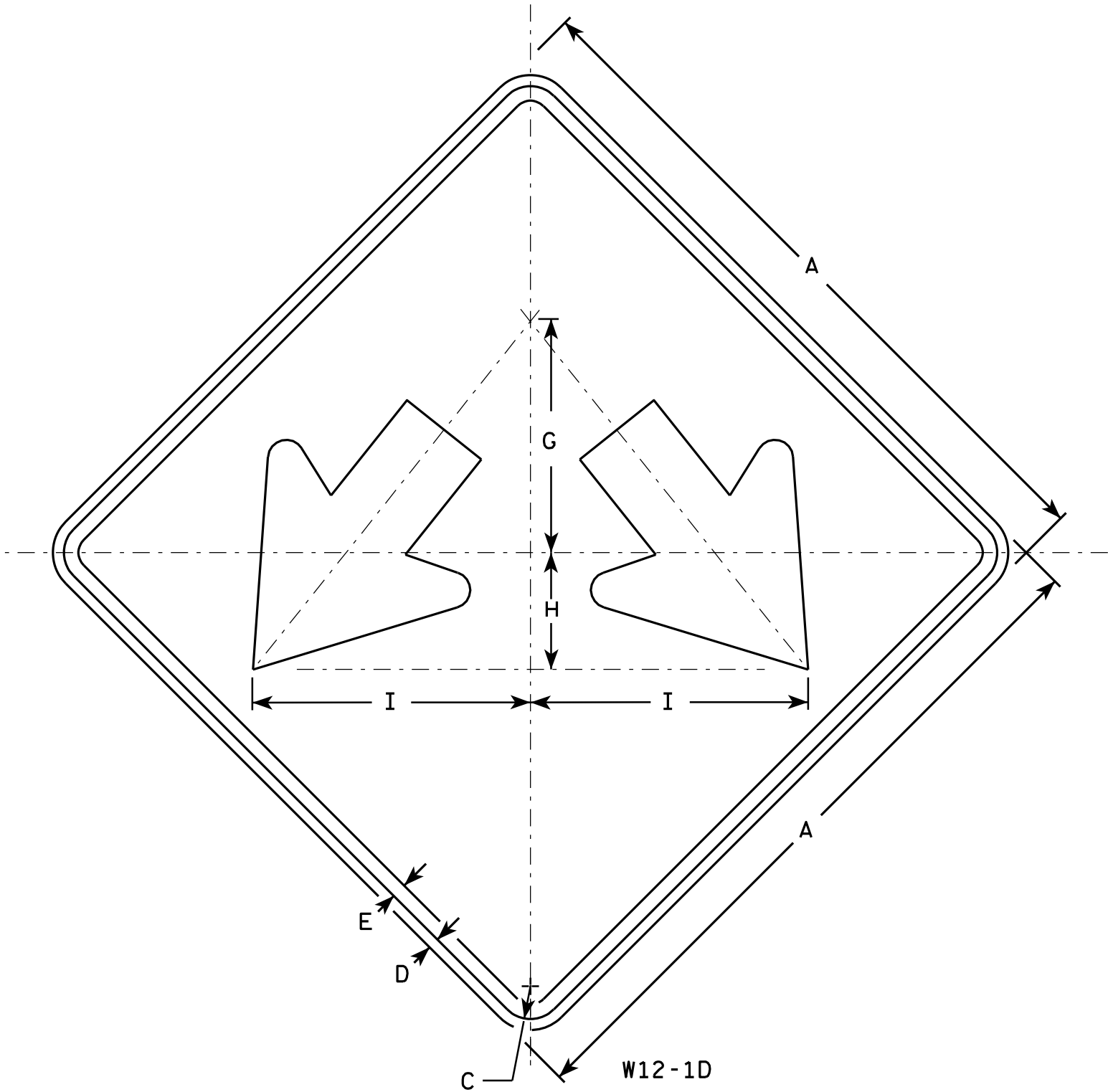
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|-------|-----|-------|----|--------|-------|--------|-------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 5 | 3 3/4 | 5/8 | 3 1/8 | 12 | 13 | 5 | 8 | 5 5/8 | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 5 | 3 3/4 | 5/8 | 3 1/8 | 12 | 13 | 5 | 8 | 5 5/8 | | | | | | | | | | | | | 9.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 | 3/4 | 4 1/4 | 16 | 17 1/4 | 6 5/8 | 10 3/4 | 7 1/2 | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 | 3/4 | 4 1/4 | 16 | 17 1/4 | 6 5/8 | 10 3/4 | 7 1/2 | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W8-64

WISCONSIN DEPT OF TRANSPORTATION

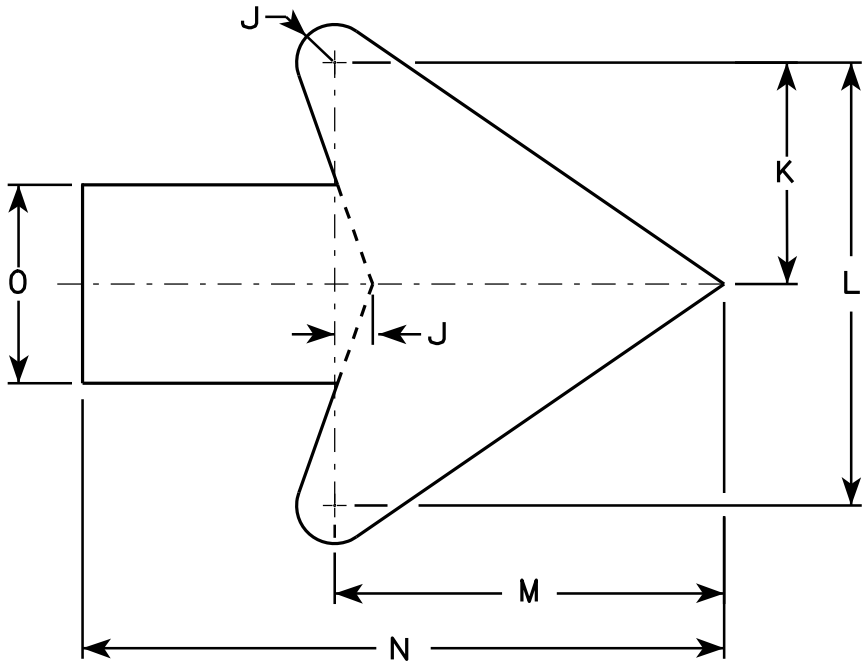
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 03/14/13 PLATE NO. W8-64.6



NOTES

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



Arrow Detail

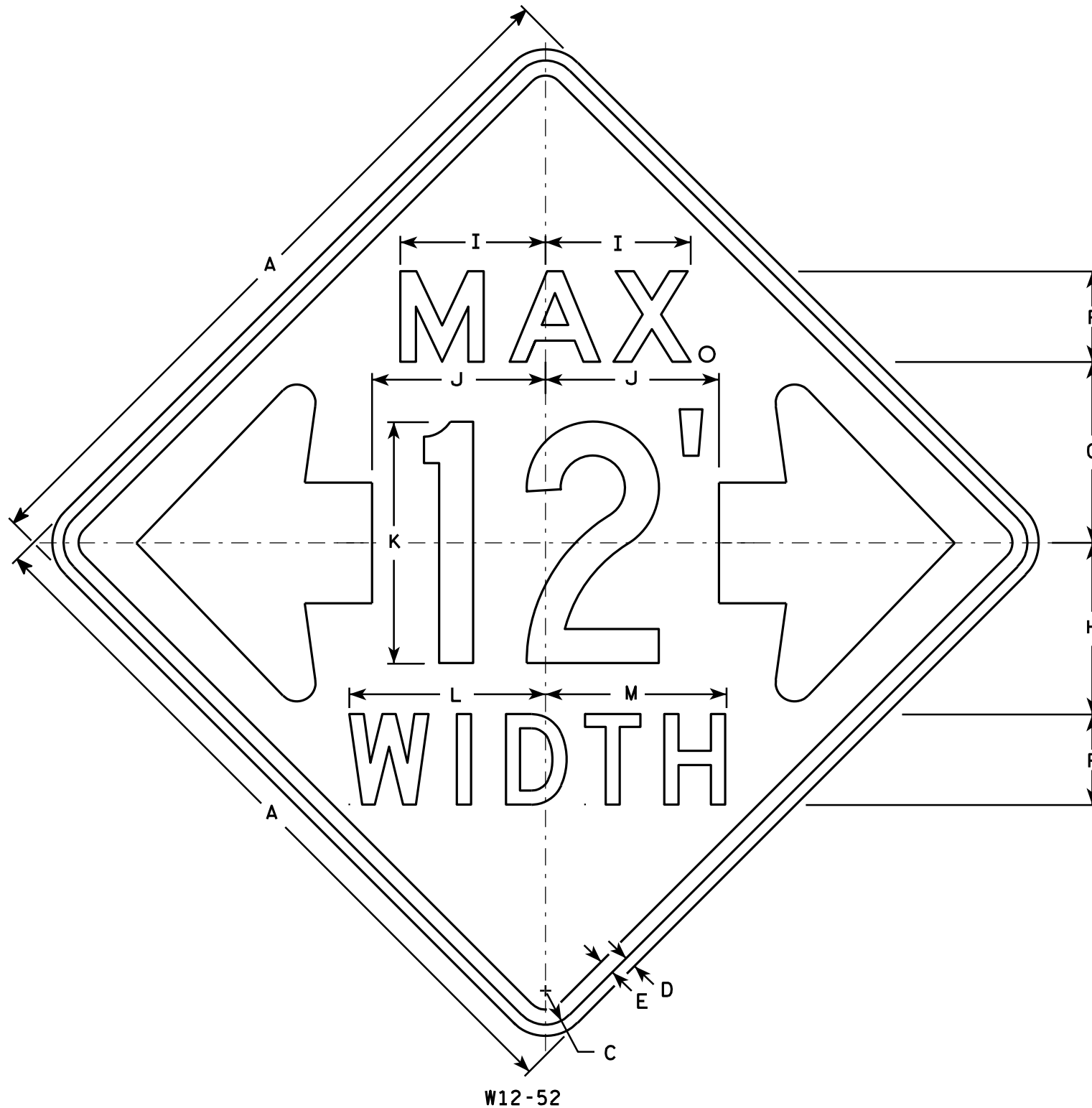
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|----|---|--------|-------|-------|--------|--------|--------|-------|---|---|---|---|---|---|---|---|---|---|---|--------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | | 1 1/8 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 2M | 24 | | 1 1/8 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 | 5 | 11 7/8 | 3/4 | 4 1/2 | 9 | 7 7/8 | 13 | 4 | | | | | | | | | | | | 6.25 |
| 4 | 36 | | 1 3/8 | 1/2 | 5/8 | | 12 | 6 | 14 1/4 | 1 | 5 1/2 | 10 7/8 | 9 5/8 | 15 3/4 | 4 3/4 | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 16 | 8 | 19 | 1 1/4 | 7 1/4 | 14 1/2 | 12 3/4 | 21 | 6 1/4 | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

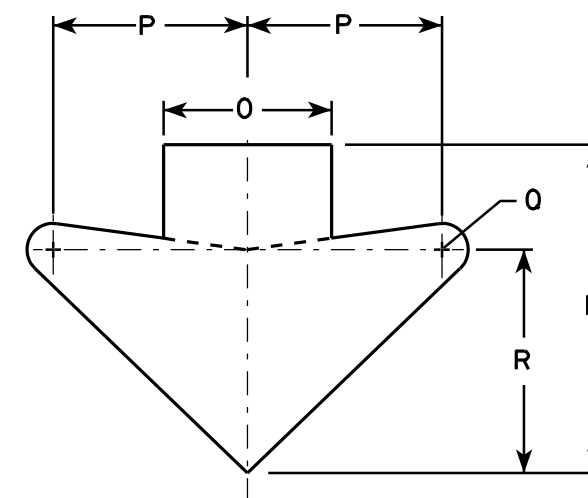
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
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.
- The top line is series E, the numerals are series C, and the bottom line is series D.
- Substitute appropriate numerals and adjust spacing as required.



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 | 48 | | 2 1/4 | 3/4 | 1 | 6 | 12 | 11 3/8 | 9 5/8 | 11 1/2 | 16 | 13 | 12 | 15 5/8 | 8 | 9 1/4 | 1 1/4 | 10 5/8 | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 6 | 12 | 11 3/8 | 9 5/8 | 11 1/2 | 16 | 13 | 12 | 15 5/8 | 8 | 9 1/4 | 1 1/4 | 10 5/8 | | | | | | | | | 16.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO:

HWY:

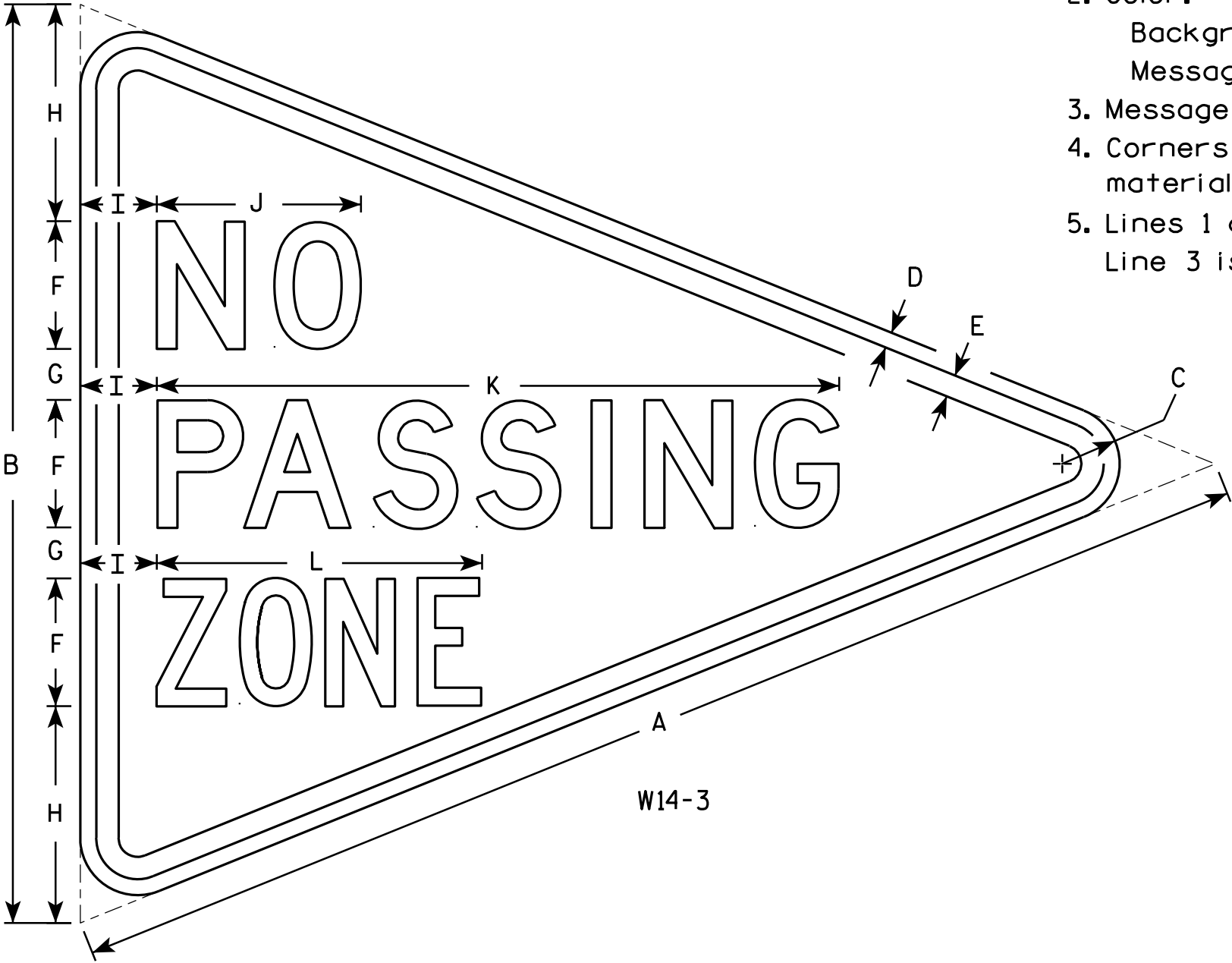
COUNTY:

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. 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

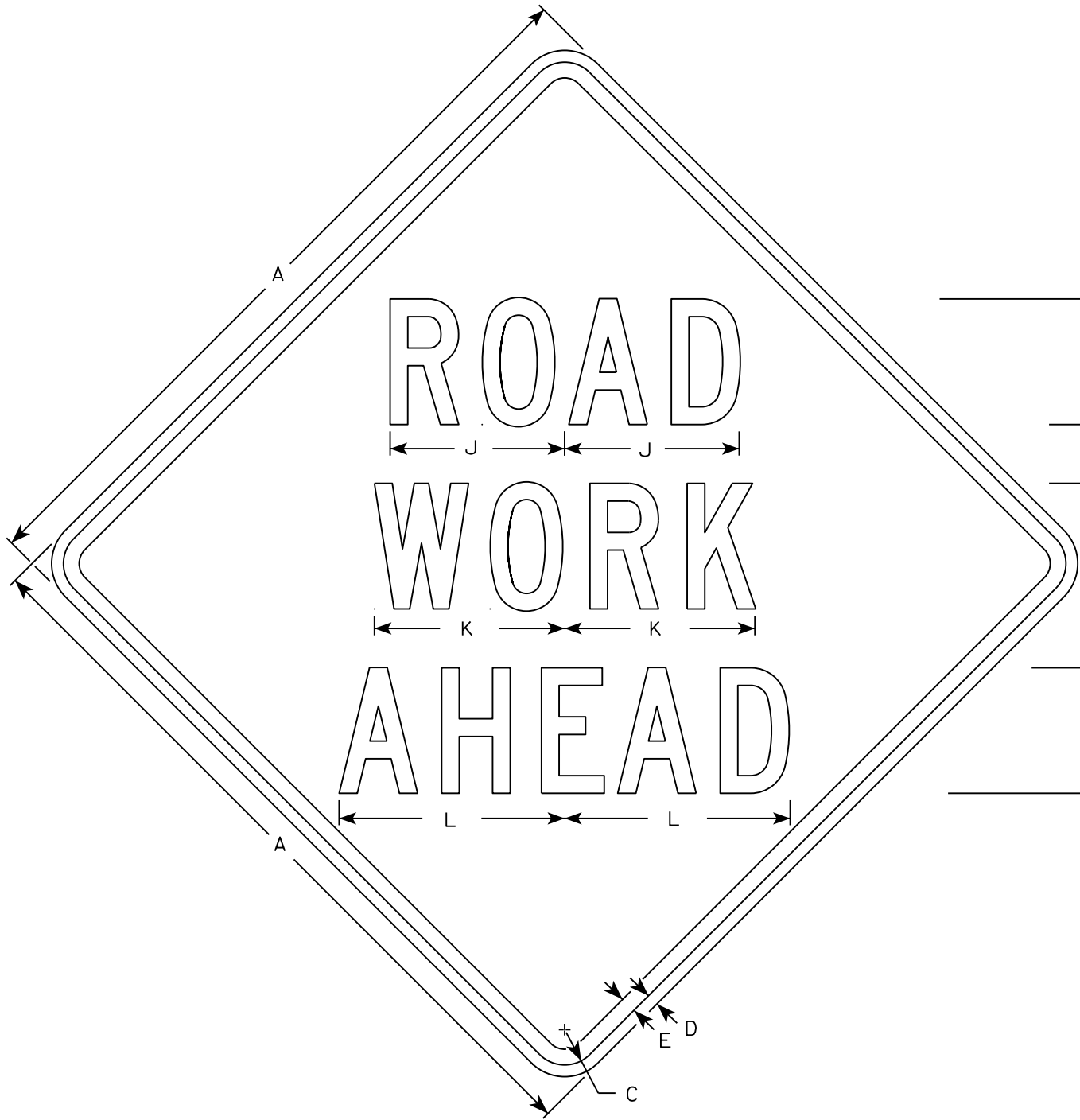
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-------|---|---|-------|---|--------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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

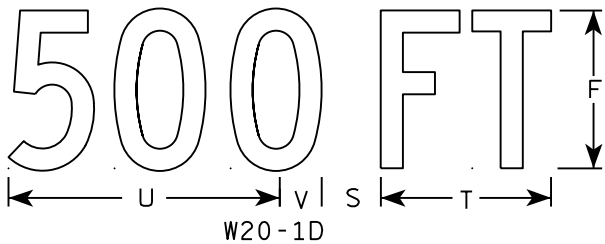
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

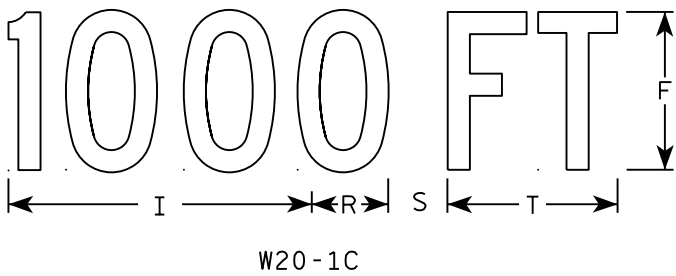
DATE 6/7/10 PLATE NO. W14-3.9



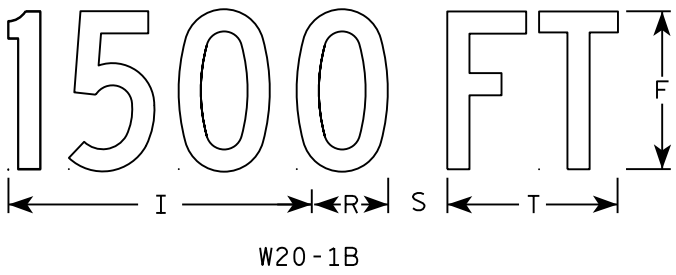
W20-1A



W20-1D



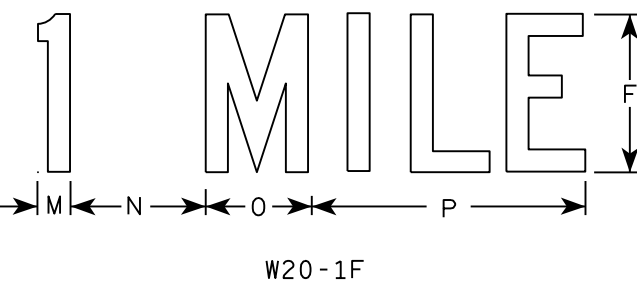
W20-1C



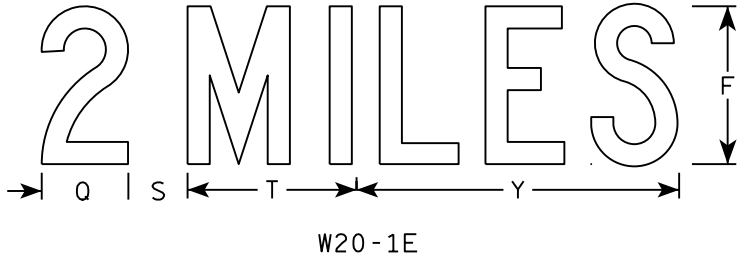
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

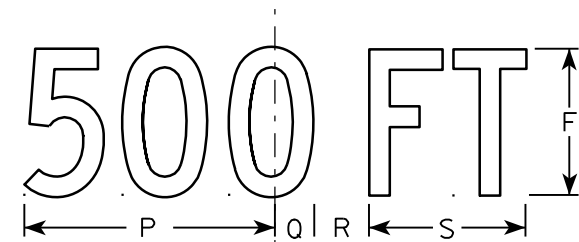
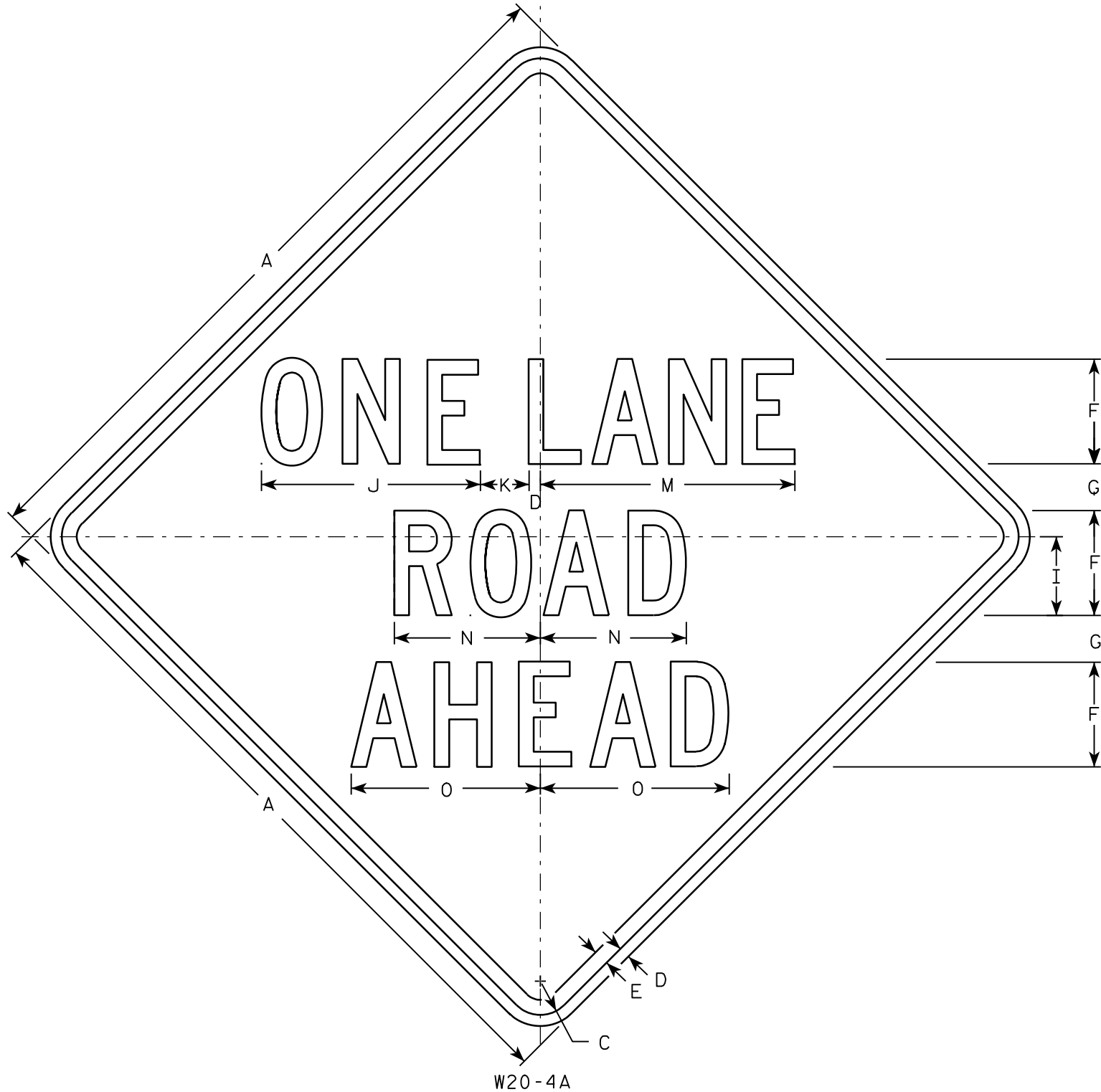
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|-------|-------|--------|--------|--------|--------|-------|-------|-------|--------|-------|-------|-------|-------|--------|-------|--------|-------|--------|---|-----------------|
| 1 | 36 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 5/8 | 3 1/4 | 10 1/8 | 7 | 7 5/8 | 8 7/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | | 2 1/2 | 2 1/4 | 5 5/8 | 9 | 1 3/8 | 8 | 1 3/4 | 10 3/4 | 6 | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |

STANDARD SIGN
W20-1A, B, C, D, F & G

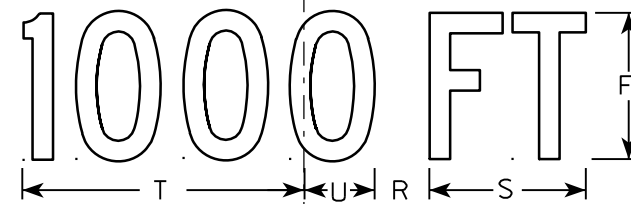
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

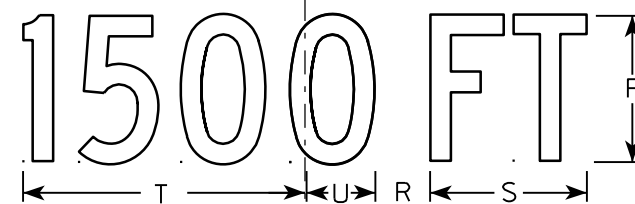
DATE 5/07/15 PLATE NO. W20-1.10



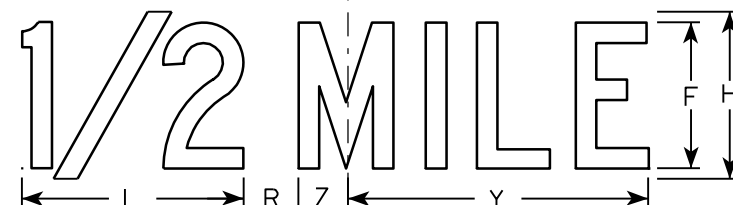
W20-4D



W20-4C



W20-4B



W20-4G



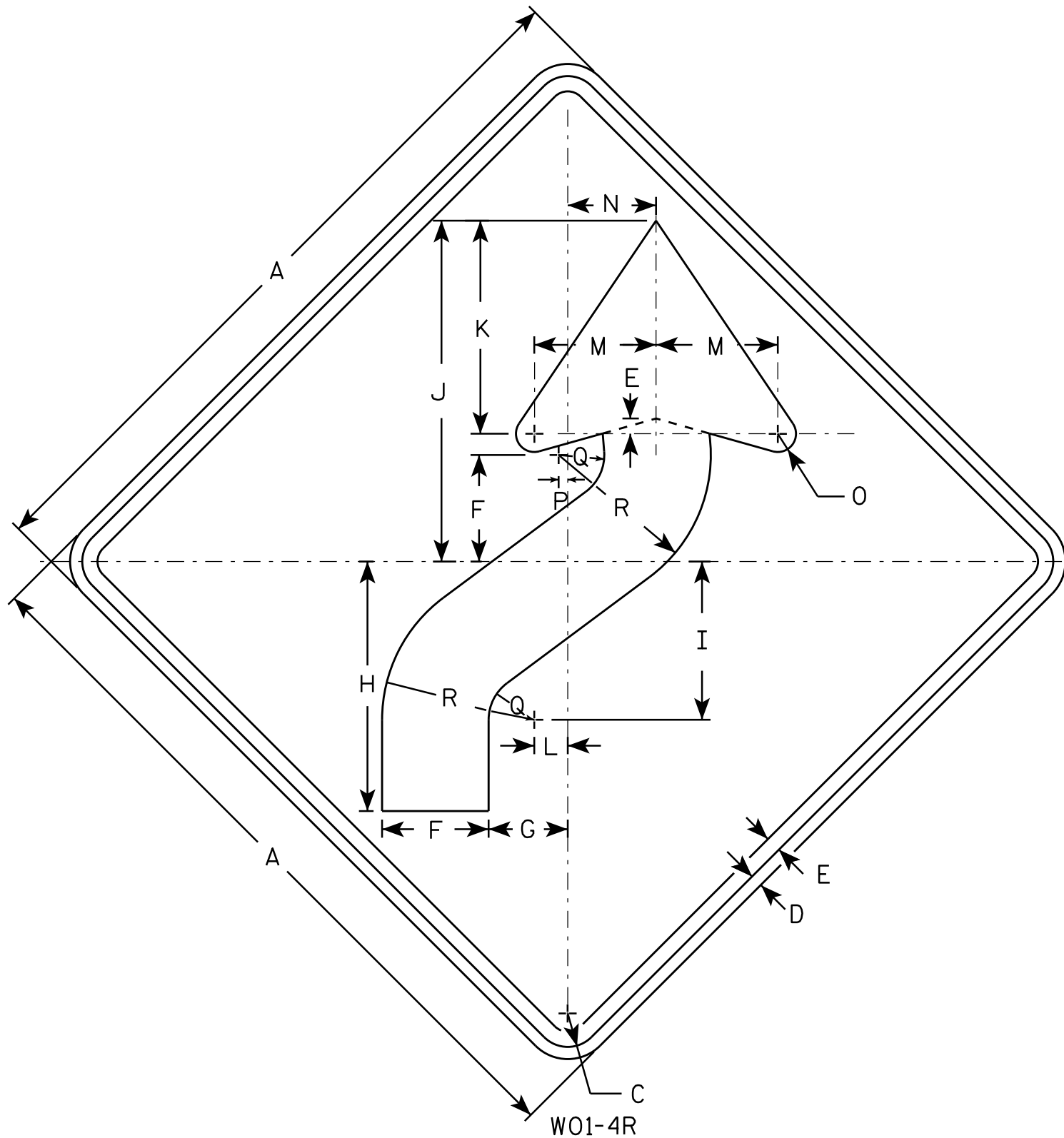
W20-4F

NOTES

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

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

| | |
|----------------------------------|---|
| STANDARD SIGN | |
| W20-4A, B, C, D, F & G | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> for State Traffic Engineer |
| DATE 3/18/11 | PLATE NO. W20-4.9 |



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|-------|-------|--------|--------|--------|--------|-------|---|-------|-------|-----|-------|-------|---|---|---|---|---|---|---|---|-----------------|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |

STANDARD SIGN W01-4

WISCONSIN DEPT OF TRANSPORTATION

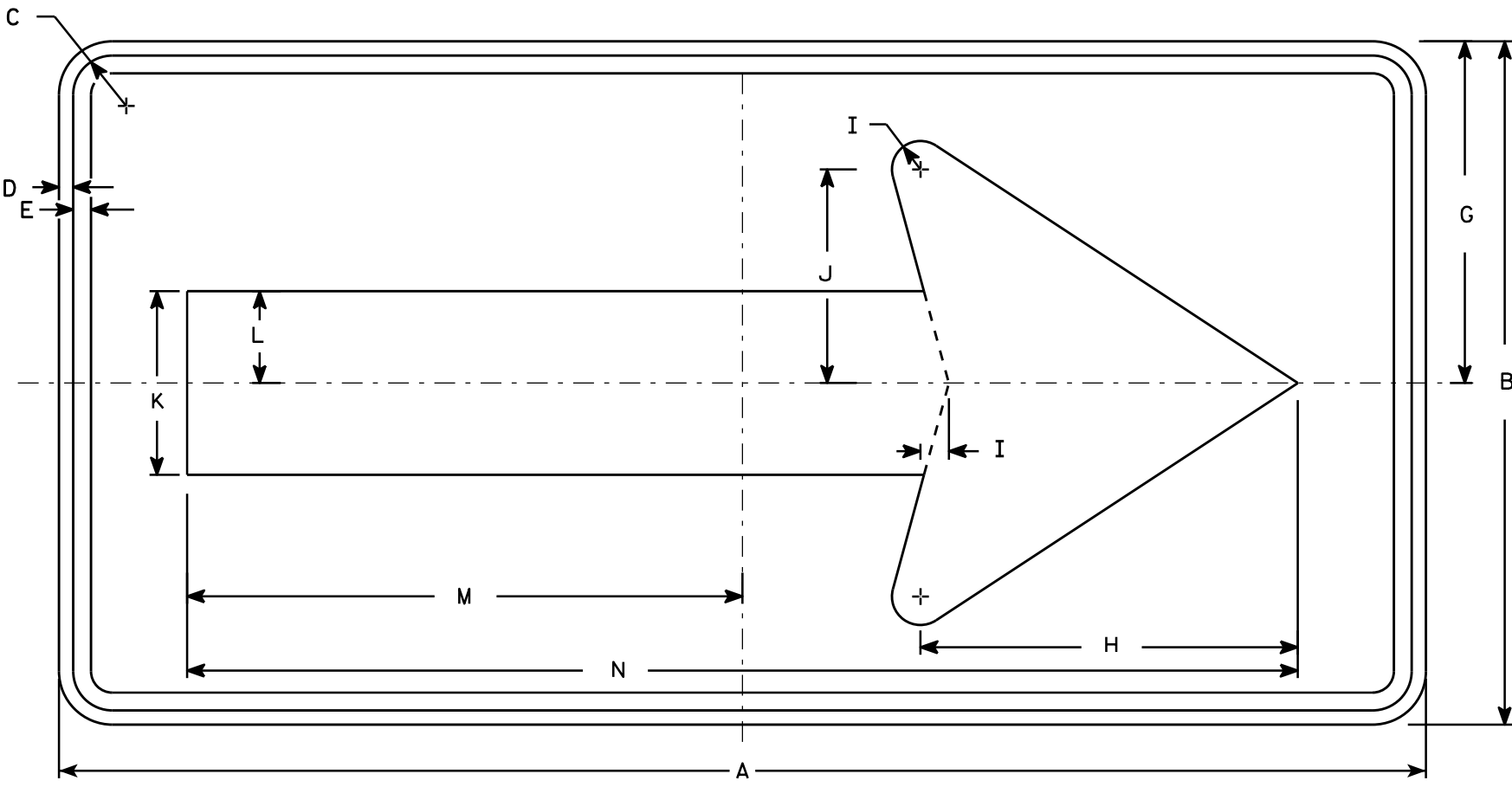
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-4.1

PROJECT NO: HWY: COUNTY: SHEET NO: E

NOTES

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



W01-6

| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 24 | 1 3⁄8 | 1⁄2 | 5⁄8 | | 12 | 13 1⁄4 | 1 | 7 1⁄2 | 6 1⁄2 | 3 1⁄4 | 19 1⁄2 | 39 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3⁄8 | 1⁄2 | 5⁄8 | | 12 | 13 1⁄4 | 1 | 7 1⁄2 | 6 1⁄2 | 3 1⁄4 | 19 1⁄2 | 39 | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3⁄8 | 1⁄2 | 5⁄8 | | 15 | 16 1⁄4 | 1 1⁄4 | 9 1⁄4 | 8 | 4 | 24 3⁄8 | 48 3⁄4 | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3⁄8 | 1⁄2 | 5⁄8 | | 15 | 16 1⁄4 | 1 1⁄4 | 9 1⁄4 | 8 | 4 | 24 3⁄8 | 48 3⁄4 | | | | | | | | | | | | | 12.5 |
| 5 | 60 | 30 | 1 3⁄8 | 1⁄2 | 5⁄8 | | 15 | 16 1⁄4 | 1 1⁄4 | 9 1⁄4 | 8 | 4 | 24 3⁄8 | 48 3⁄4 | | | | | | | | | | | | | 12.5 |

STANDARD SIGN

W01-6

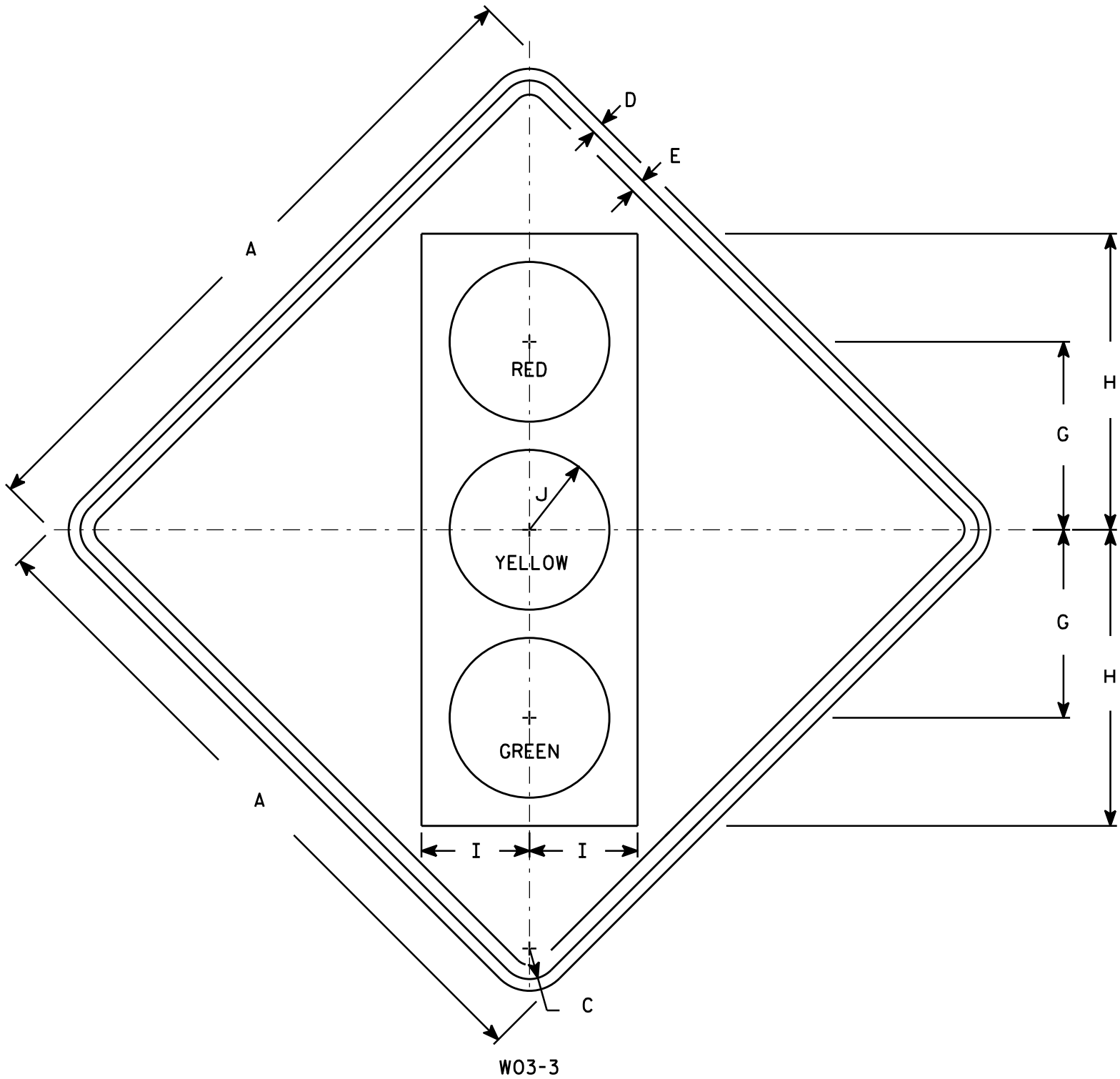
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 11/18/13

PLATE NO. W01-6.1



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
Top circle - Type H ReflectORIZED Red
Center circle - Same as background
Bottom circle - Type H ReflectORIZED Green

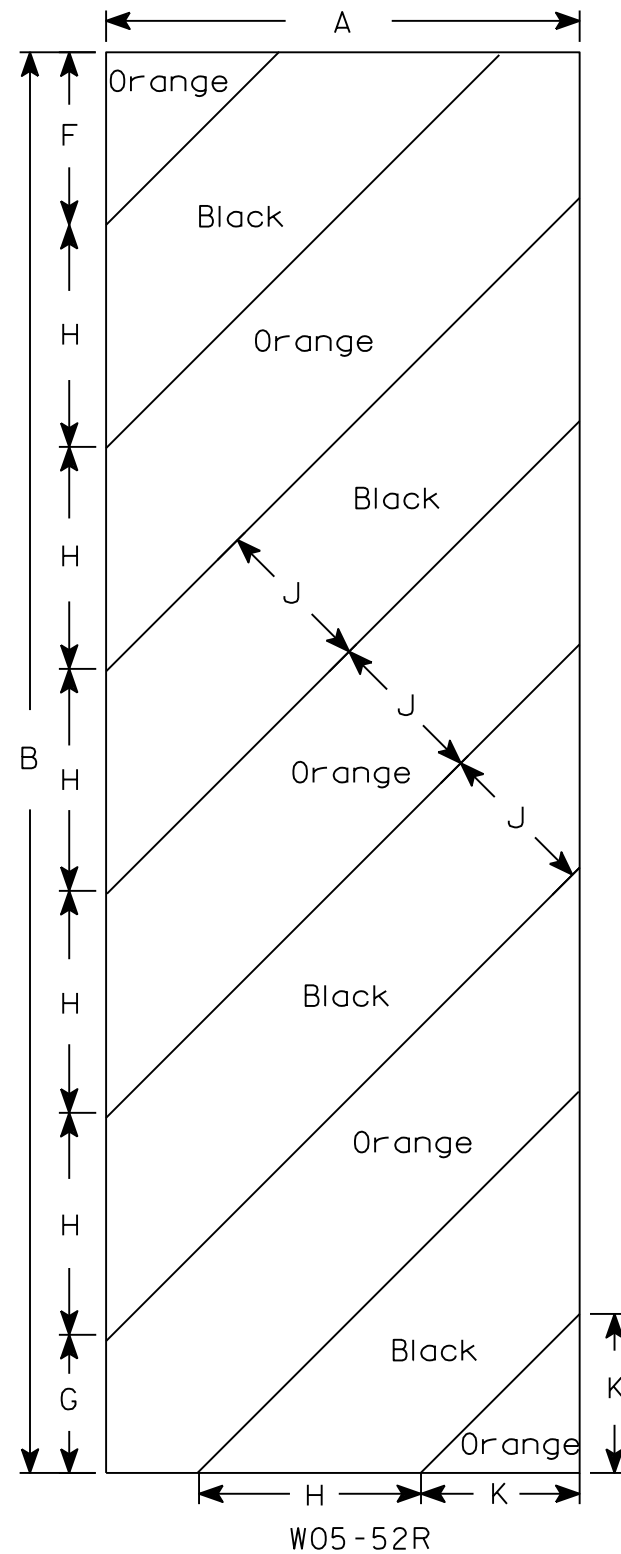
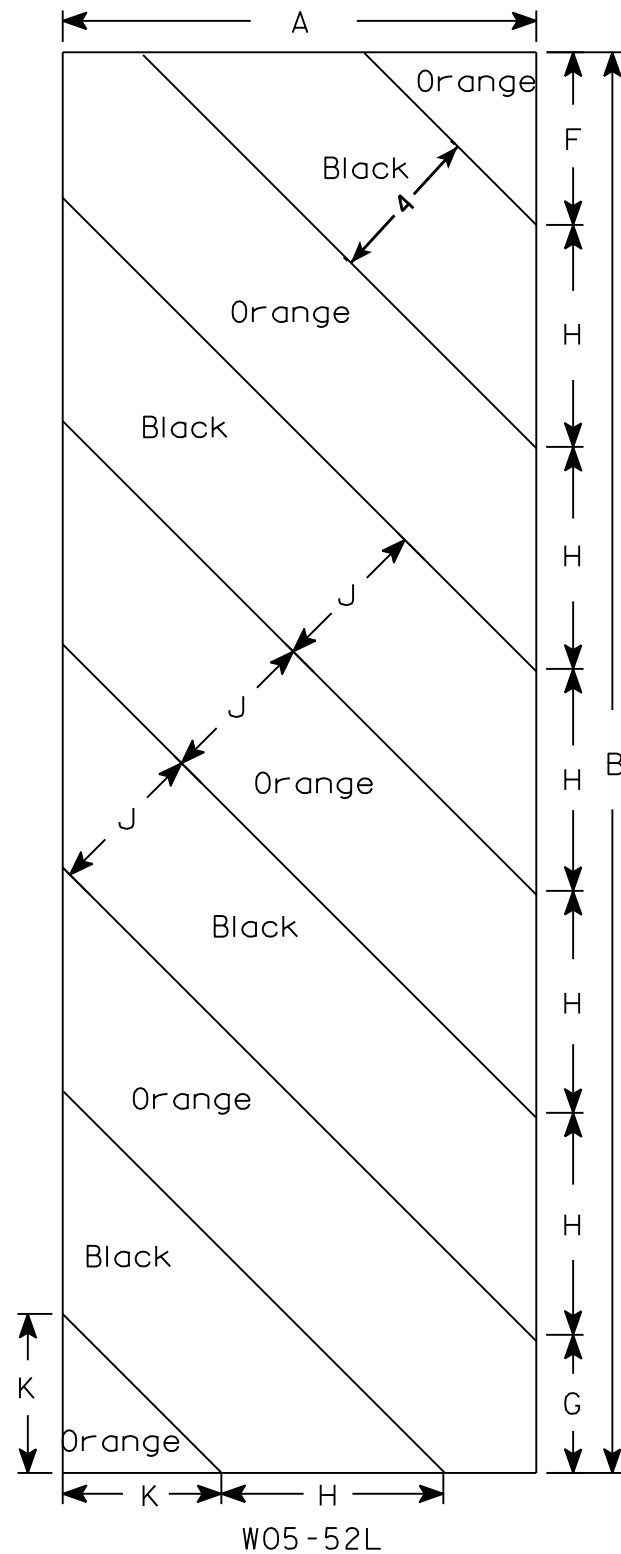
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|--------|--------|-------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | | 10 | 15 3/4 | 5 3/4 | 4 1/4 | | | | | | | | | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | | 12 1/2 | 20 | 7 1/2 | 5 | | | | | | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | | 12 1/2 | 20 | 7 1/2 | 5 | | | | | | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | | 12 1/2 | 20 | 7 1/2 | 5 | | | | | | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 12 1/2 | 20 | 7 1/2 | 5 | | | | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 12 1/2 | 20 | 7 1/2 | 5 | | | | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W03-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W03-3.1



NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|---|---|---|-------|-------|-------|-----|---|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 12 | 36 | | | | 4 3/8 | 3 1/2 | 5 5/8 | 45° | 4 | 4 | | | | | | | | | | | | | | | | 3.0 |
| 2M | 12 | 36 | | | | 4 3/8 | 3 1/2 | 5 5/8 | 45° | 4 | 4 | | | | | | | | | | | | | | | | 3.0 |
| 3 | 18 | 54 | | | | 6 | 5 1/2 | 8 1/2 | 45° | 6 | 6 9/16 | | | | | | | | | | | | | | | | 6.75 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

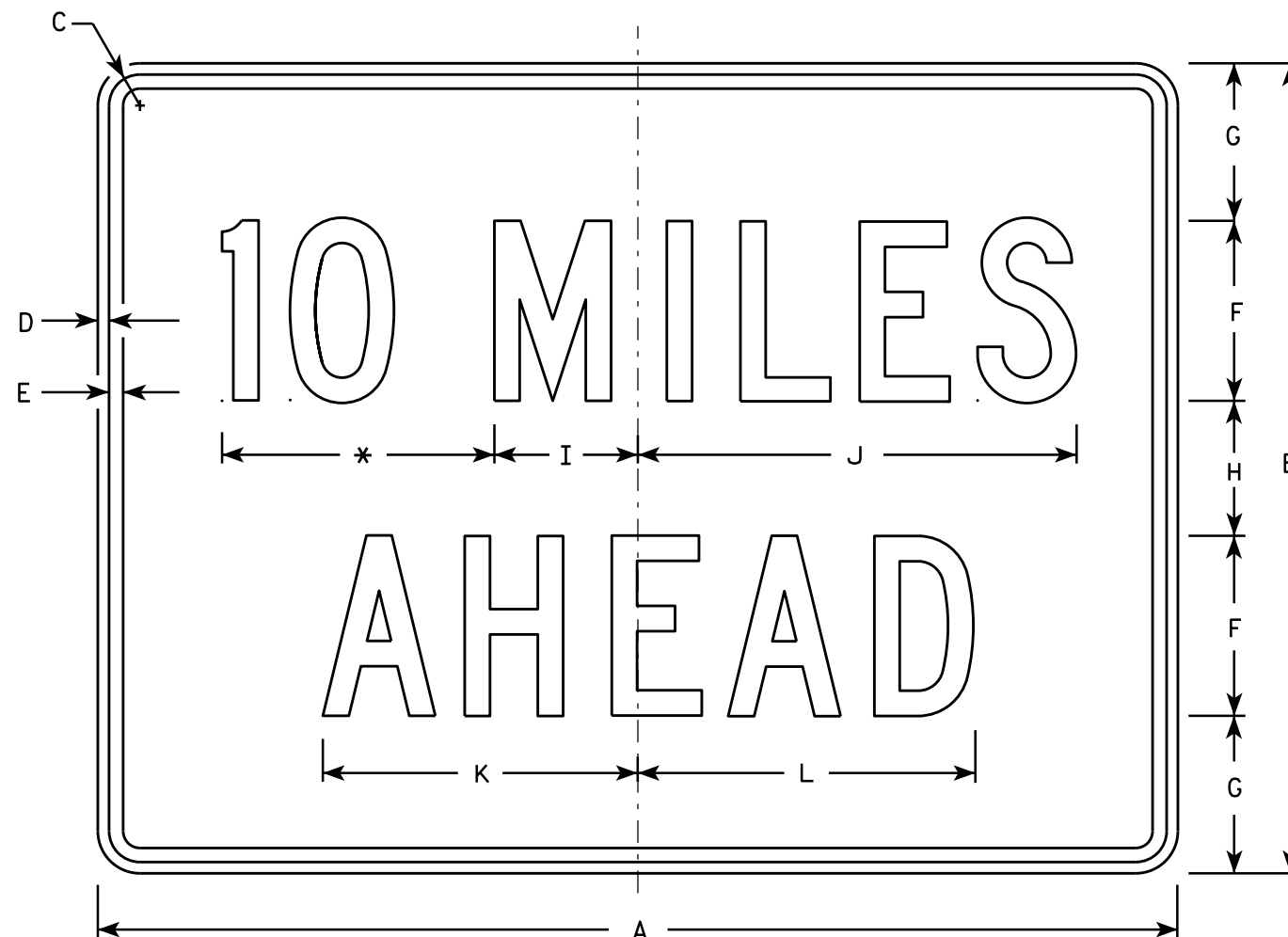
STANDARD SIGN

W05-52L & W05-52R

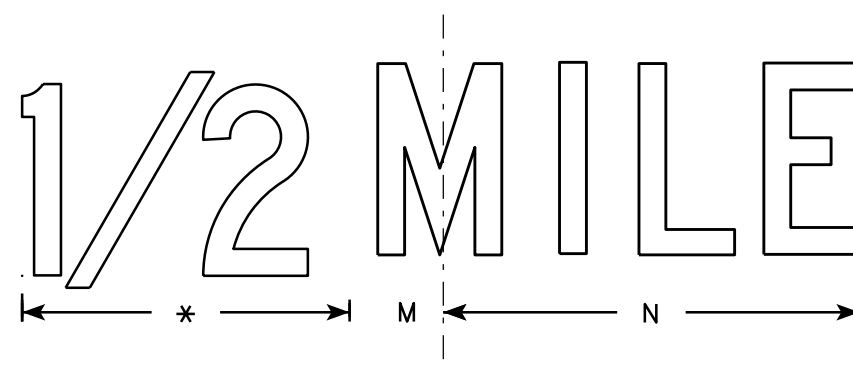
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W05-52.1



W057-52



* See note 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 - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
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 | 36 | 24 | 1 1/8 | 3/8 | 1/2 | 6 | 4 1/2 | 3 | 4 3/4 | 14 5/8 | 10 5/8 | 11 3/8 | 2 | 13 | | | | | | | | | | | | | 6.0 |
| 2S | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7 | 6 | 6 3/8 | 19 1/2 | 14 | 15 | 2 3/4 | 17 3/8 | | | | | | | | | | | | | 12.0 |
| 2M | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7 | 6 | 6 3/8 | 19 1/2 | 14 | 15 | 2 3/4 | 17 3/8 | | | | | | | | | | | | | 12.0 |
| 3 | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7 | 6 | 6 3/8 | 19 1/2 | 14 | 15 | 2 3/4 | 17 3/8 | | | | | | | | | | | | | 12.0 |
| 4 | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7 | 6 | 6 3/8 | 19 1/2 | 14 | 15 | 2 3/4 | 17 3/8 | | | | | | | | | | | | | 12.0 |
| 5 | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7 | 6 | 6 3/8 | 19 1/2 | 14 | 15 | 2 3/4 | 17 3/8 | | | | | | | | | | | | | 12.0 |

STANDARD SIGN W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 11/20/13

PLATE NO. W057-52.1

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

DESIGN DATA

LIVE LOAD:
INVENTORY RATING: HS-25
OPERATIONAL RATING: HS-42
MAXIMUM STANDARD OPERATING VEHICLE LOAD: 190KIPS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
STAGE 1 AND STAGE 2 DESIGNATIONS FOR CONSTRUCTION ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT INDICATIVE OF THE ORDER IN WHICH WORK MUST BE PERFORMED. FIELD ENGINEER WILL DETERMINE ORDER IN WHICH WORK SHALL BE PERFORMED.
ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY AT THE ABUTMENTS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "HMA PAVEMENT 4 MT 58-34 S".
THE PLAN QUANTITY FOR THE BID ITEM "HMA PAVEMENT 4 MT 58-34 S" IS BASED ON THE AVERAGE OVERLAY THICKNESS.
PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 3" PLACED ABOVE THE MILLED SURFACE. IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN 1/2" CONTACT THE STRUCTURES DESIGN SECTION.

TOTAL ESTIMATED QUANTITIES

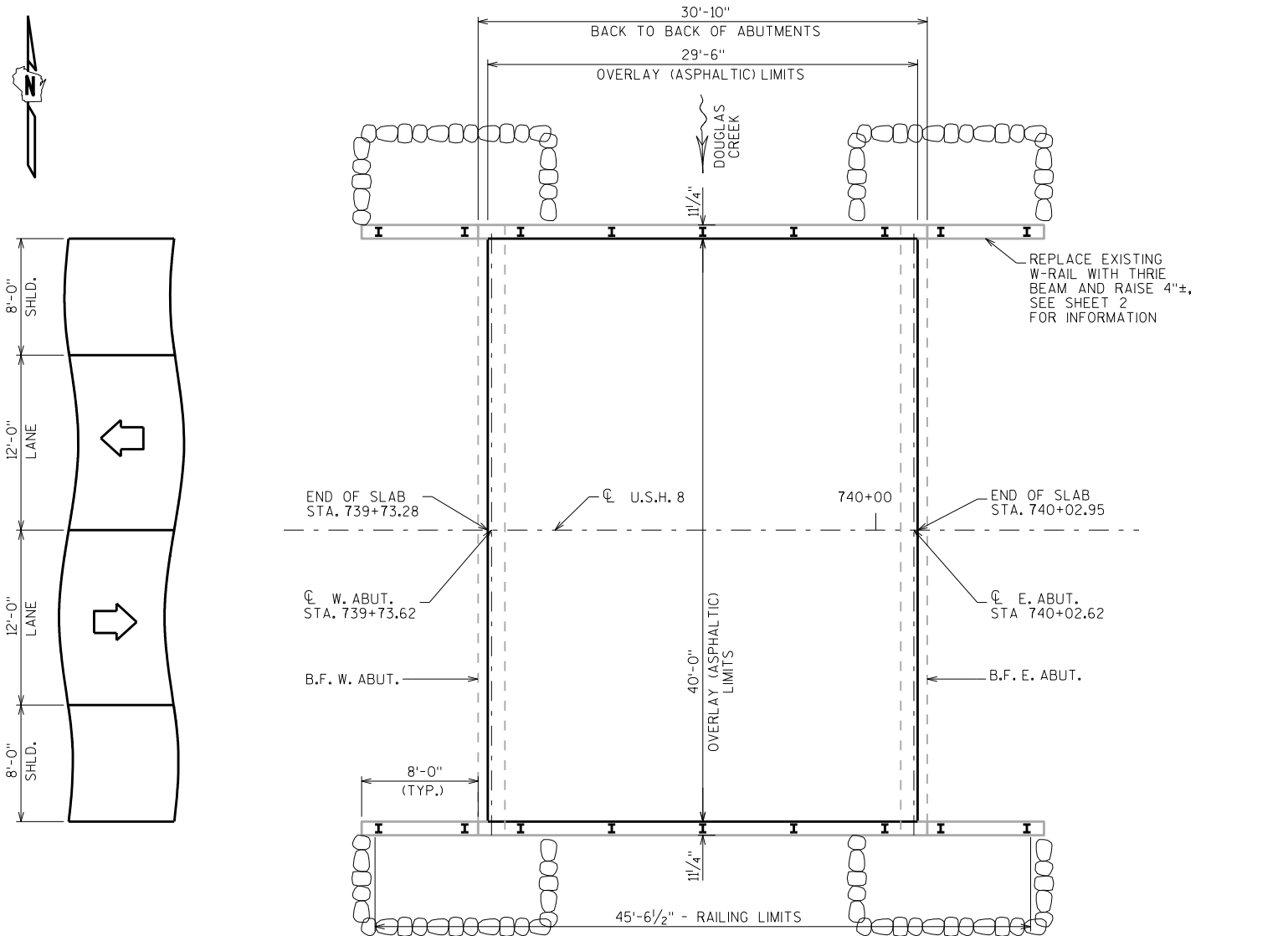
| BID ITEM NUMBER | BID ITEMS | UNIT | TOTAL |
|-----------------|--|------|-------|
| 455.0605 | TACK COAT | GAL | 4 |
| 460.5224 | HMA PAVEMENT 4 LT 58-28 S | TON | 22 |
| SPV.0090 | RAILING STEEL TYPE "W" MODIFIED, B-50-61 | LF | 91 |

STRUCTURES DESIGN CONTACTS:
CARLA PRINCIPE (608) 261-6110
AARON BONK (608) 261-0261

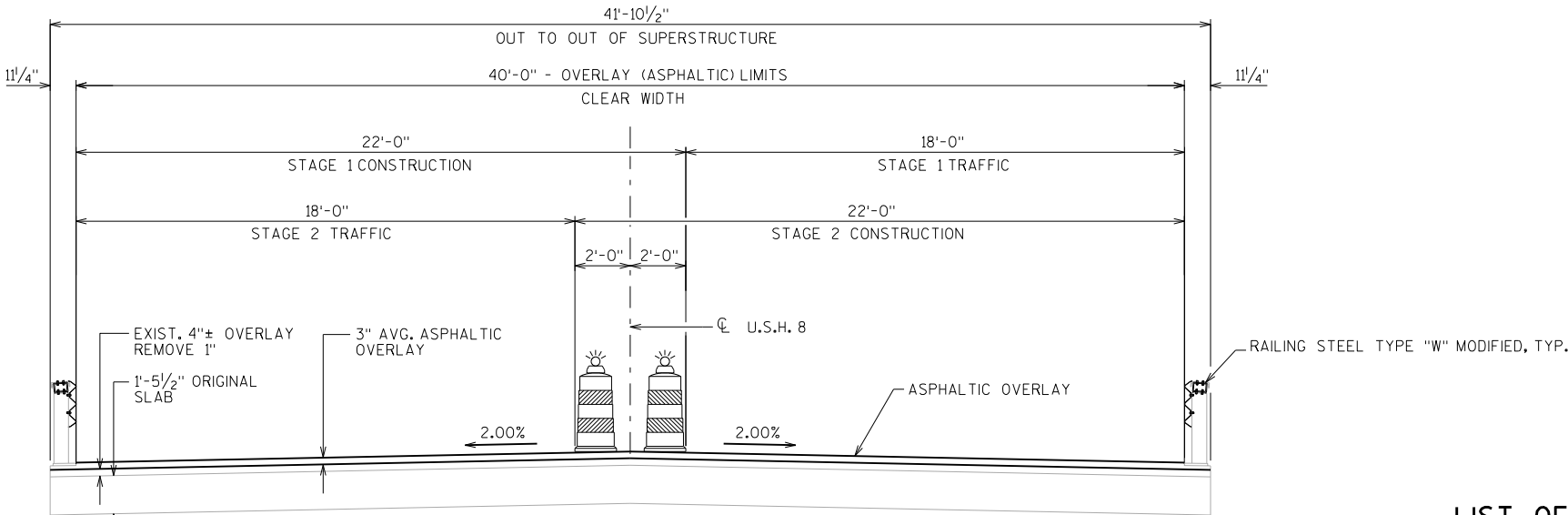
| | | | |
|--|-------|-------------------|--------------|
| NO. | DATE | REVISION | BY |
| <div>Plans Prepared By WISDOT BUREAU OF STRUCTURES ACCEPTED <i>William C. Diche</i> 7/25/16 CHIEF STRUCTURES DESIGN ENGINEER DATE</div> | | | |
| STRUCTURE B-50-61 | | | |
| U.S.H. 8 OVER DOUGLAS CREEK | | | |
| COUNTY | PRICE | TOWN/CITY/VILLAGE | PRENTICE |
| DESIGN SPEC. | | | |
| DESIGNED BY | CSP | DESIGN CK'D. | ABS |
| DRAWN BY | CSP | PLANS CK'D. | ABS |
| ASPHALTIC OVERLAY | | | SHEET 1 OF 2 |

LIST OF DRAWINGS

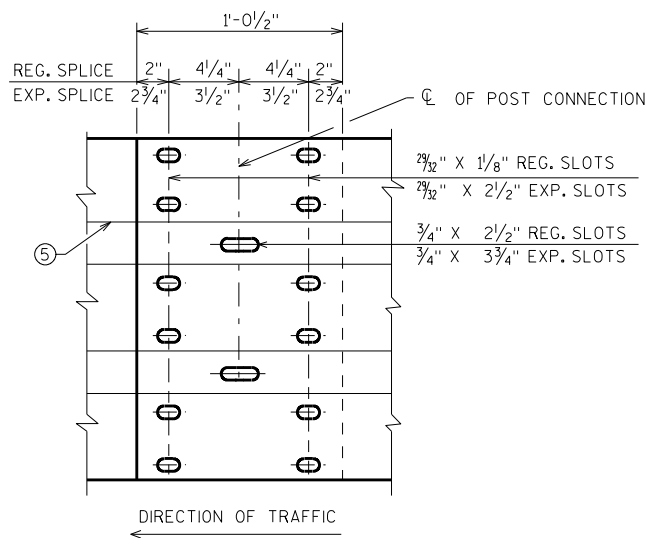
- ASPHALTIC OVERLAY
- RAILING TYPE W DETAILS



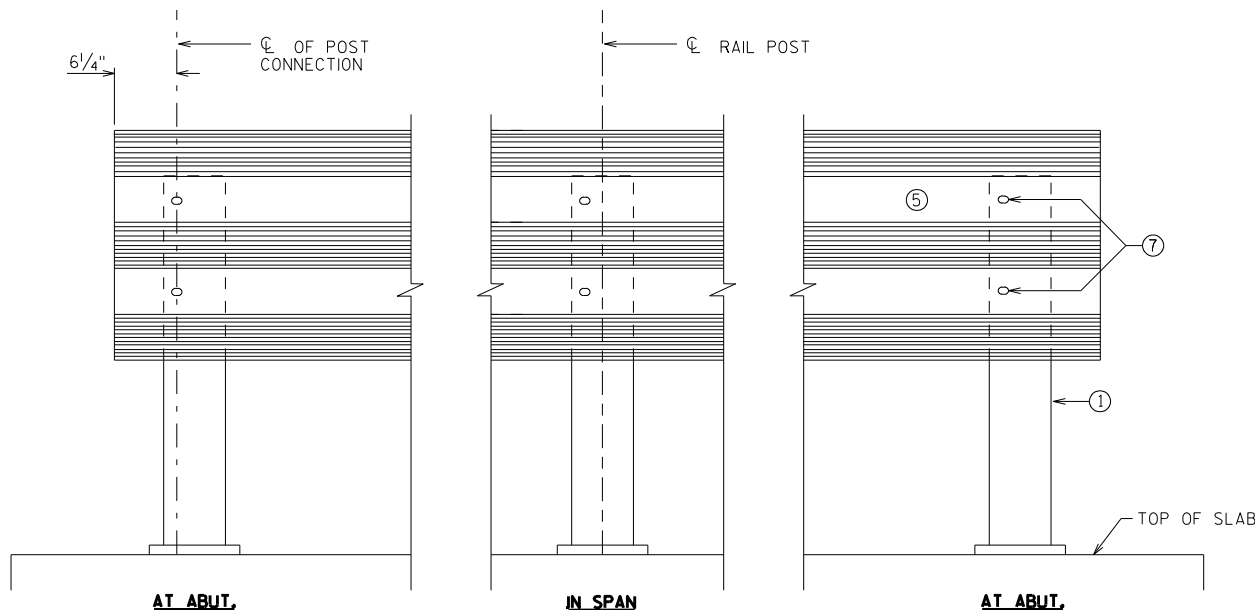
PLAN



CROSS SECTION THRU ROADWAY
(LOOKING EAST)

**RAIL MEMBER SPLICE**

5/8" DIA. BUTTON HEAD OVAL SHOULDER BOLTS WITH HEX NUTS AT ALL SLOTS.

**ELEVATION****LEGEND**

- ① EXISTING W6 X 25. DRILL (2) 3/4" DIA. HOLES FOR BOLT NO. 7
- ② EXISTING C8 X 11.5. WITH 13/16" DIA. HOLES, ATTACH TO NO.4 WITH BOLTS NO. 8
- ③ EXISTING PLATE 1/2" X 5 3/4" X 6" WITH 1/4" DIA. HOLE FOR BOLTS NO. 8
- ④ STRUCTURAL TUBE 6" X 4" X 3/8" WITH 13/16" DIA. HOLES, 6" LONG, ATTACH TO NO. 3 WITH BOLTS NO. 8
- ⑤ NEW THRIE BEAM. ATTACH TO NO.1 WITH BOLTS NO. 7
- ⑥ 1 3/4" X 3" MOUNTING BOLT WASHER, EIGHT GAGE GALVANIZED.
- ⑦ 5/8" DIA. BUTTON HEAD RAIL MOUNTING BOLT WITH ROUND WASHER AND NUT, 2 PER POST.
- ⑧ 5/8" DIA. X 2" LG. HEX. BOLTS WITH NUT AND TWO WASHERS EACH, 4 REQUIRED PER POST CONNECTION, 8 REQUIRED PER SPLICE CONNECTION.
- ⑨ EXISTING PLATE 1/2" X 5 3/4" X 11 1/2" WITH 1/4" DIA. HOLES FOR BOLTS NO. 8.

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE "W" MODIFIED, B-50-61" WHICH SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY TO RAISE ITEMS NO.2 & NO.5 BETWEEN THE LONGIT. LIMITS OF RAILING AS SHOWN IN ELEVATION.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

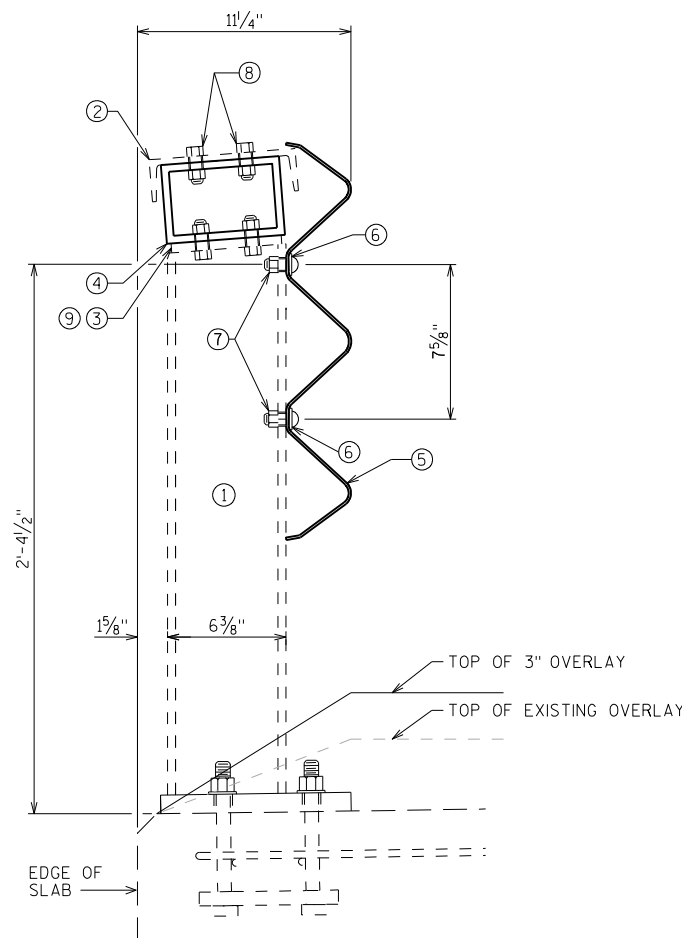
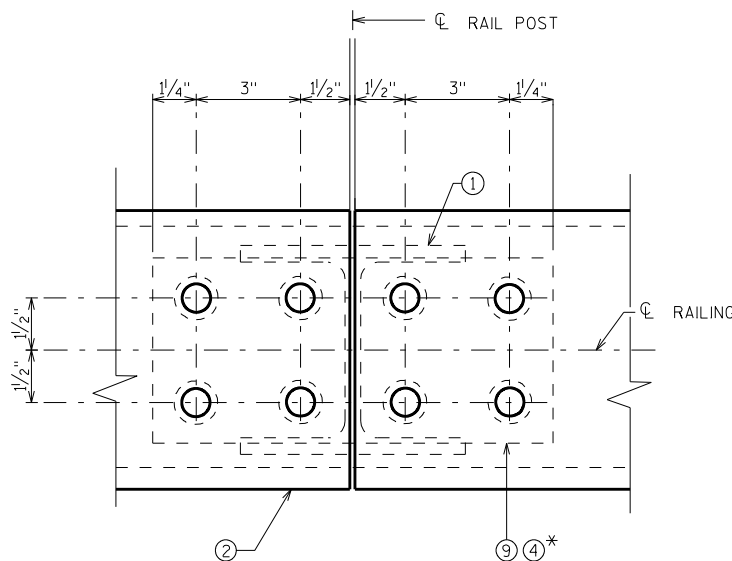
SHIM PLATES 6" X 1/6" X 6" MAY BE USED BETWEEN TOP OF POST AND CHANNEL MEMBER TO ACHIEVE VERTICAL ALIGNMENT.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION.

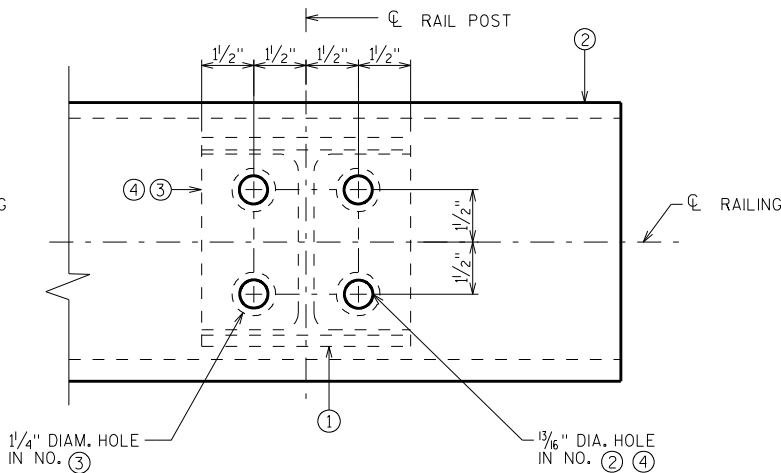
PRIOR TO GALVANIZING, ALL STEEL STRUCTURAL TUBE SHALL BE GIVEN A NO.6 BLAST CLEANING BY S.S.P.C SPECIFICATIONS.

RAIL MEMBERS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC AND THE UPPER RAIL SHALL LAP THE LOWER RAIL.

NEW BOLTS AND REFLECTORS SHALL BE FURNISHED AND USED TO RESET THE STRUCTURAL TUBES AND W-RAIL.

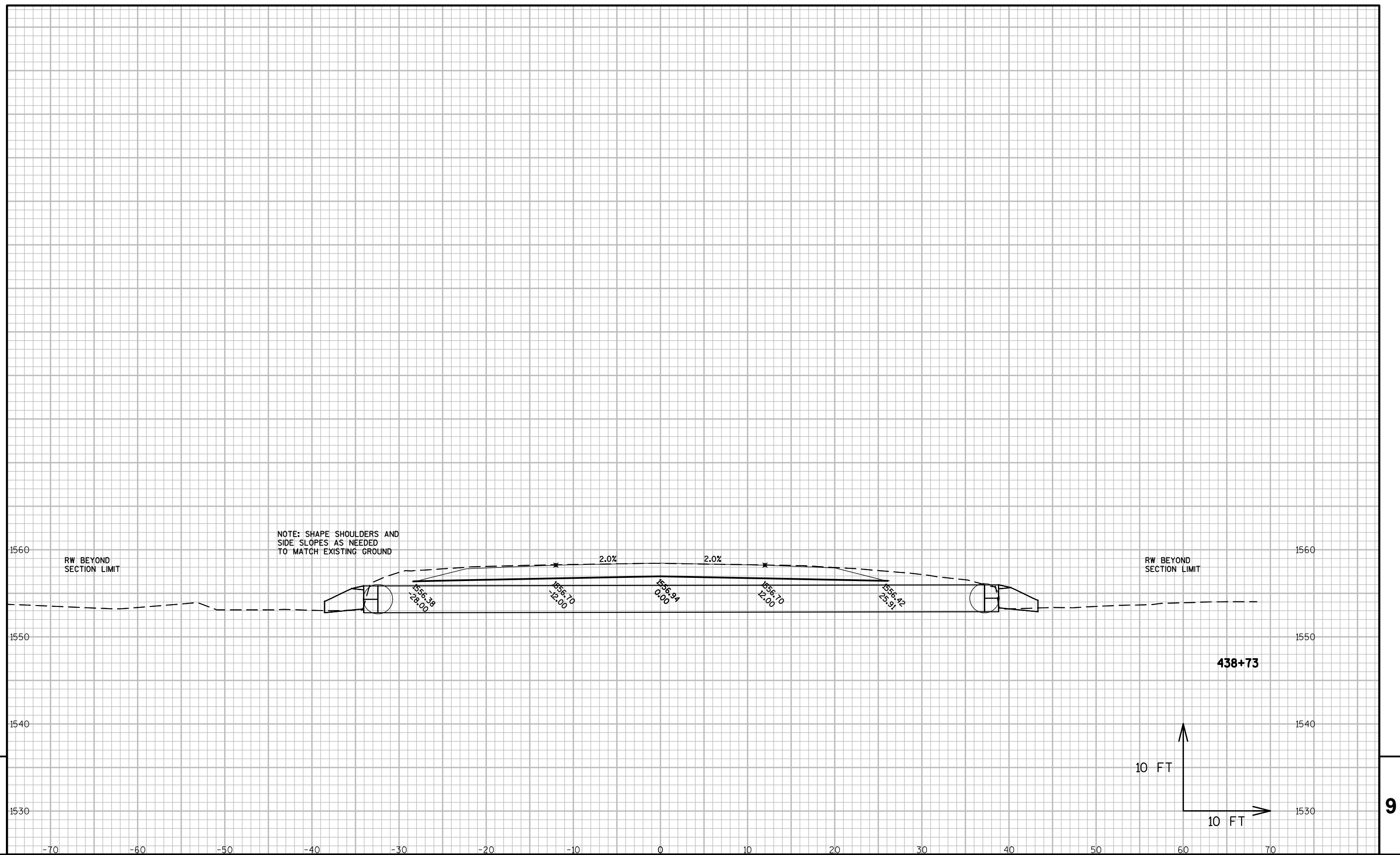
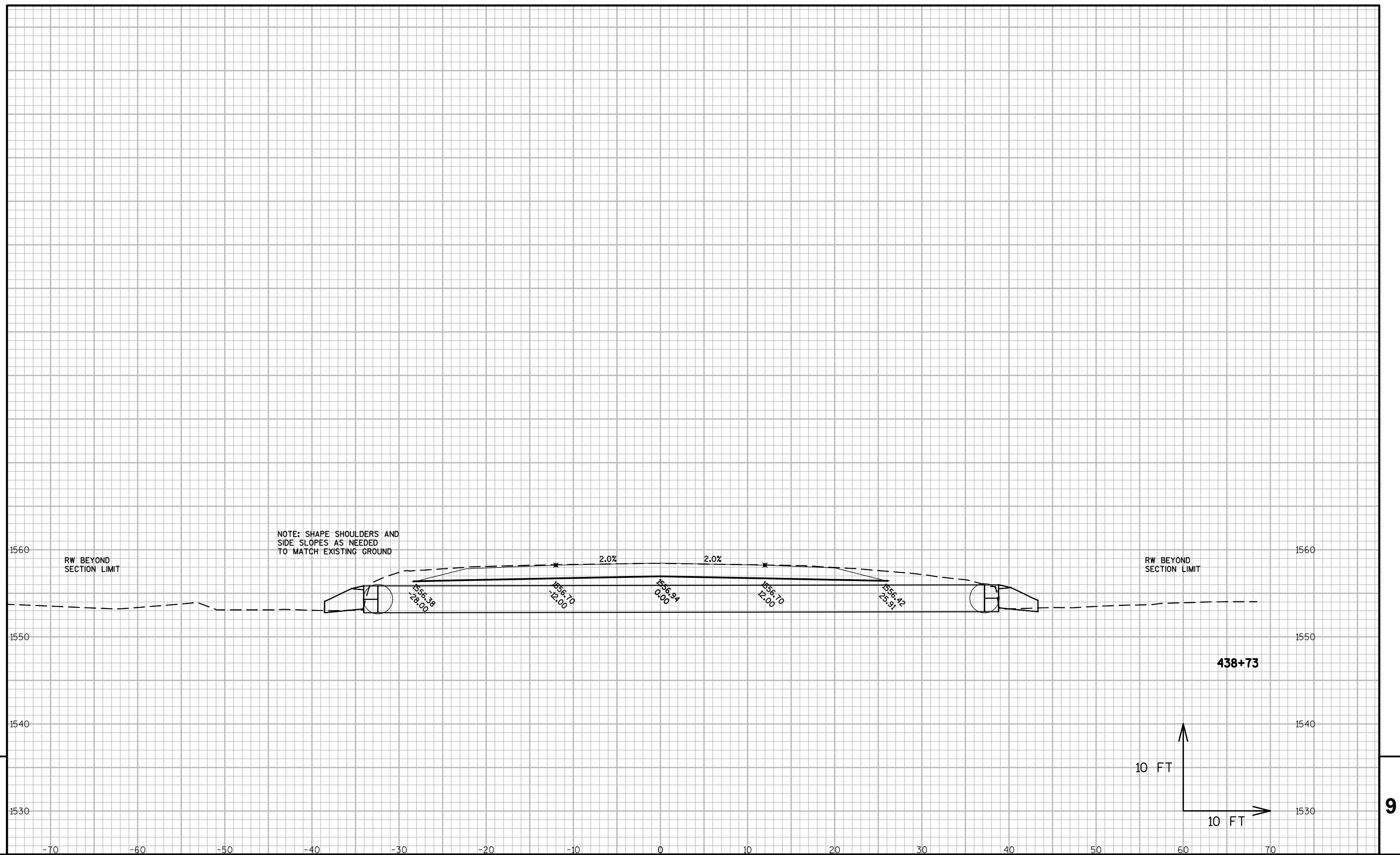
**SECTION THRU RAILING****TYPICAL SPLICE**

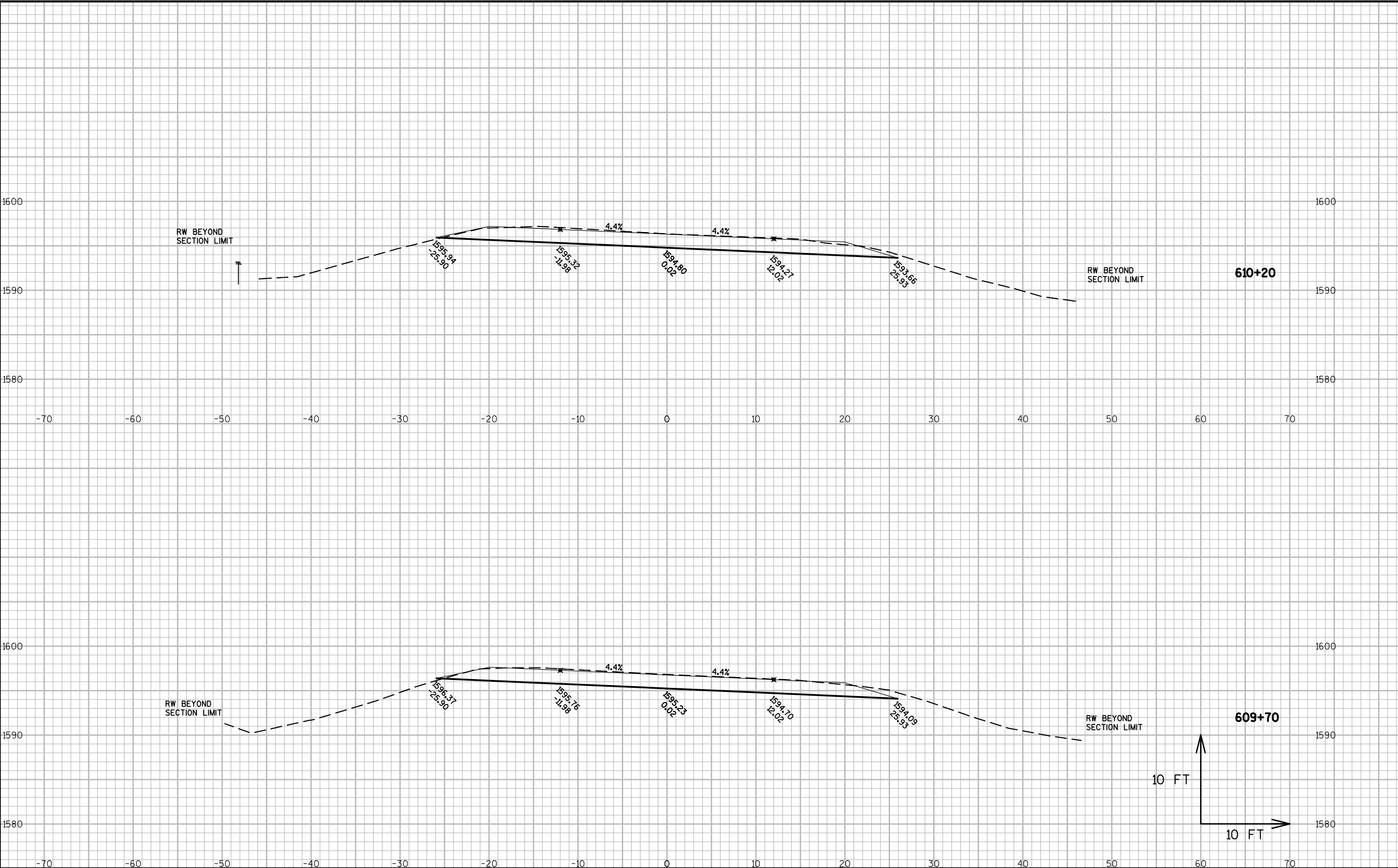
* INSTALL (2) NO.4 STRUCTURAL TUBES OR (1) MODIFIED NO.4, 11 1/2" LONG.

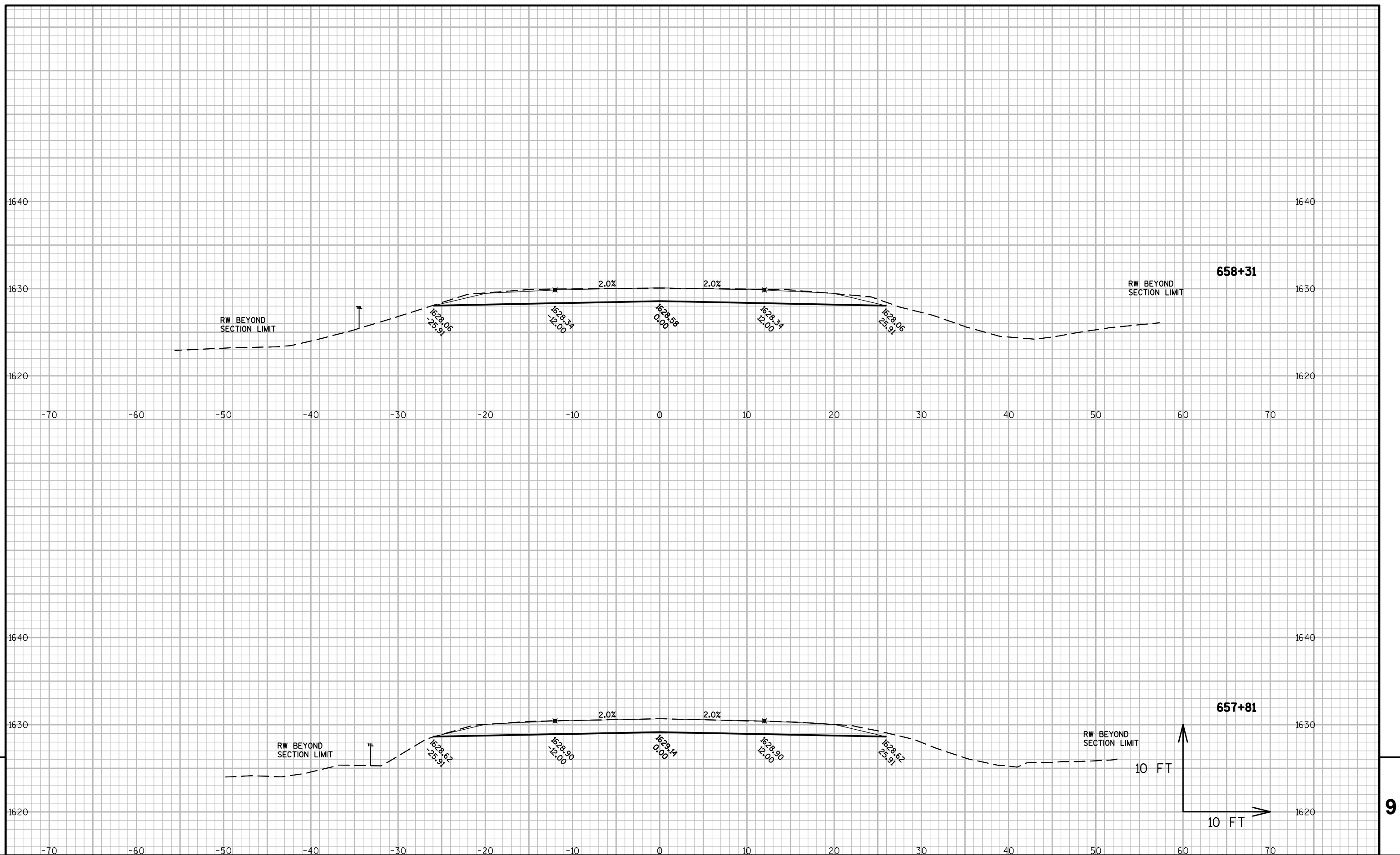
**AT POST CONNECTION****CHANNEL MEMBER DETAILS**

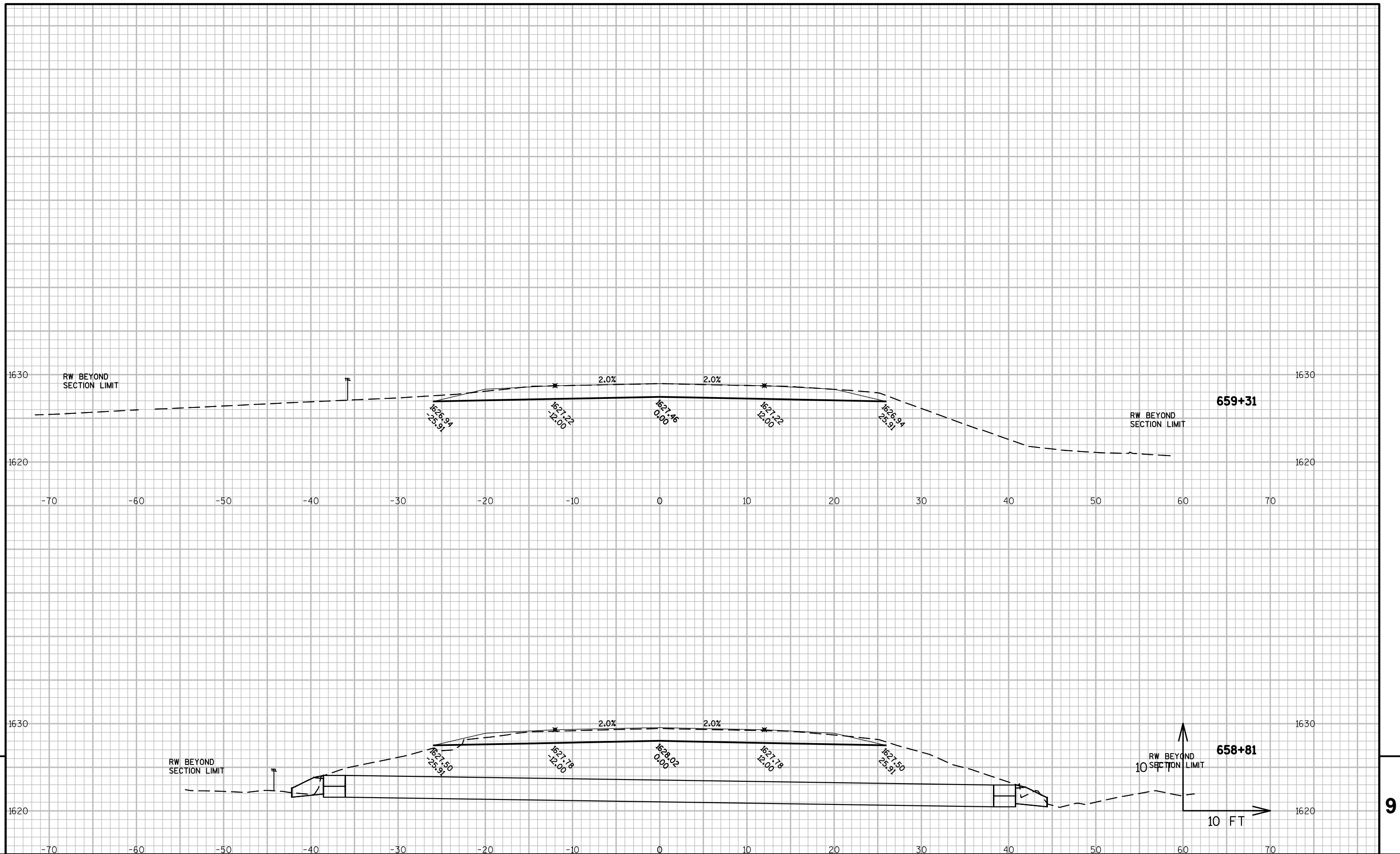
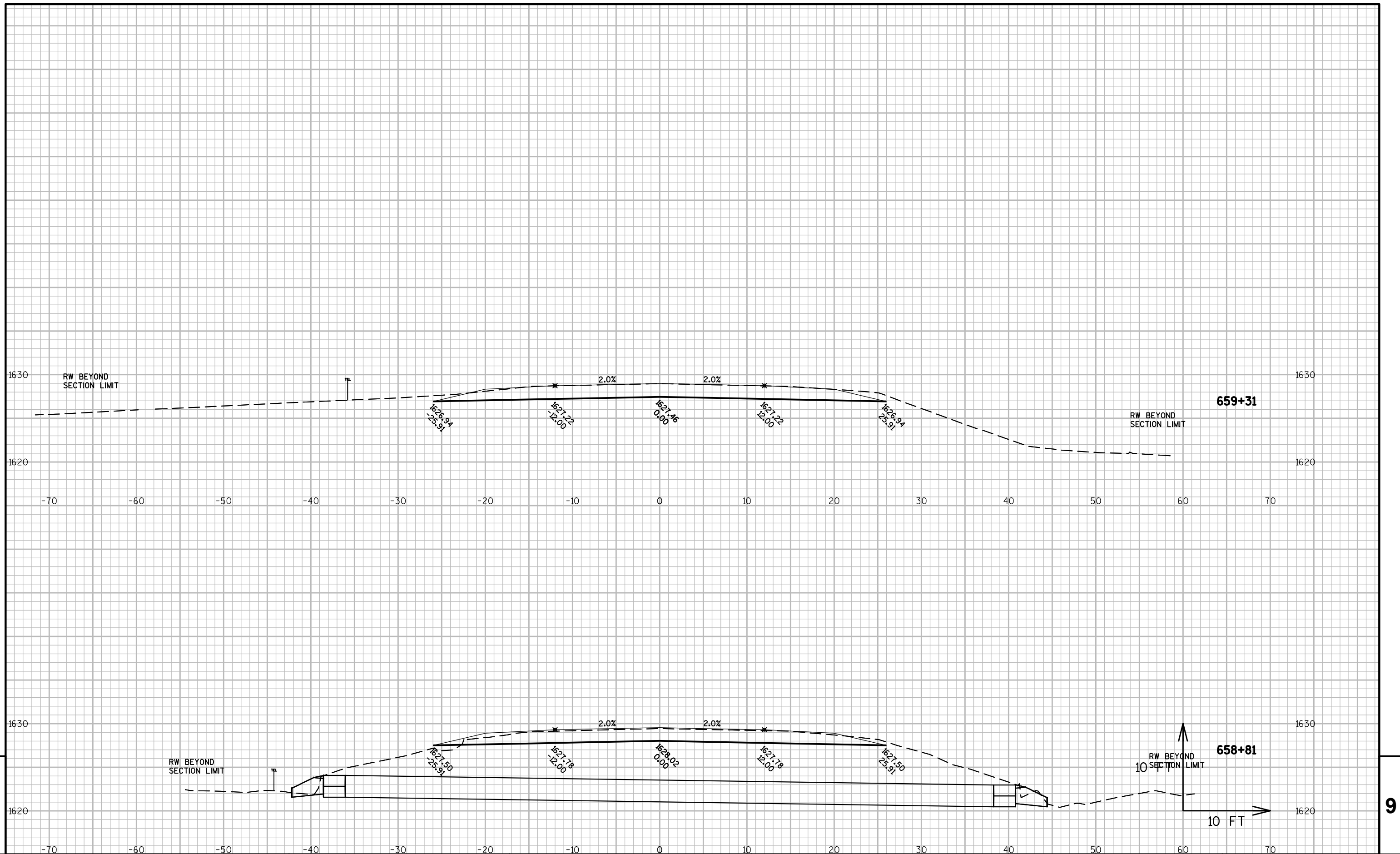
| | | | |
|---|------|----------|-------------|
| NO. | DATE | REVISION | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-50-61 | | | |
| DRAWN BY | | CSP | PLANS CK'D. |
| RAILING TYPE W DETAILS | | SHEET 2 | |

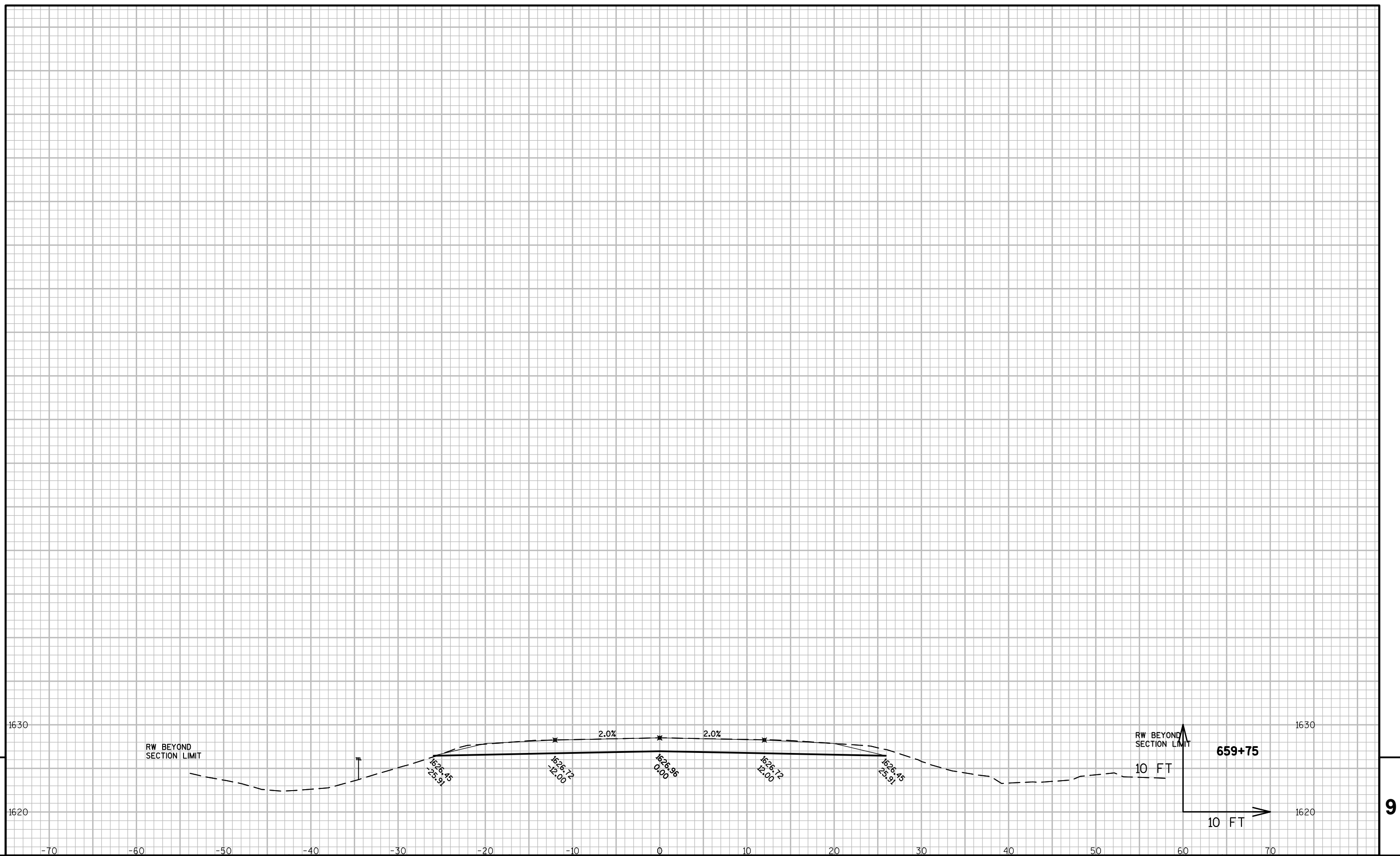
| STATION | DISTANCE | AREA (SF) | | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | | CUMULATIVE VOLUME (CY) | | MASS ORDNATE |
|---------|----------|-----------|----------------------------|------|---------|-----------------------------------|----------------------------|------|-----|------------------------|-----------------------|--------------|
| | | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | EBS | CUT | UNUSABLE PAVEMENT MATERIAL | FILL | EBS | CUT 1.00 | EXPANDED FILL 1.25 | |
| | | | | | | | | | | | | |
| 770+25 | - | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 770+50 | 25 | 0 | 0 | 35 | 0 | 0 | 0 | 23 | 0 | 0 | 29 | -29 |
| 770+54 | 4 | 0 | 0 | 42 | 0 | 0 | 0 | 6 | 0 | 0 | 7 | -36 |
| 770+75 | 21 | 0 | 0 | 27 | 0 | 0 | 0 | 27 | 0 | 0 | 33 | -69 |
| 771+00 | 25 | 0 | 0 | 7 | 0 | 0 | 0 | 15 | 0 | 0 | 19 | -88 |
| 771+25 | 25 | 0 | 0 | 27 | 0 | 0 | 0 | 15 | 0 | 0 | 19 | -108 |
| 771+50 | 25 | 0 | 0 | 82 | 0 | 0 | 0 | 50 | 0 | 0 | 63 | -170 |
| 771+64 | 14 | 0 | 0 | 124 | 0 | 0 | 0 | 53 | 0 | 0 | 67 | -237 |
| 771+75 | 11 | 0 | 0 | 109 | 0 | 0 | 0 | 47 | 0 | 0 | 59 | -296 |
| 772+00 | 25 | 0 | 0 | 76 | 0 | 0 | 0 | 86 | 0 | 0 | 107 | -403 |
| 772+14 | 14 | 0 | 0 | 71 | 0 | 0 | 0 | 38 | 0 | 0 | 47 | -451 |
| 772+25 | 11 | 0 | 0 | 84 | 0 | 0 | 0 | 32 | 0 | 0 | 39 | -490 |
| 772+50 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 0 | 49 | -539 |
| 775+25 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -539 |
| 775+50 | 25 | 0 | 0 | 59 | 0 | 0 | 0 | 27 | 0 | 0 | 34 | -573 |
| 775+59 | 9 | 0 | 0 | 65 | 0 | 0 | 0 | 21 | 0 | 0 | 26 | -599 |
| 775+75 | 16 | 0 | 0 | 55 | 0 | 0 | 0 | 36 | 0 | 0 | 45 | -644 |
| 776+00 | 25 | 0 | 0 | 69 | 0 | 0 | 0 | 57 | 0 | 0 | 72 | -716 |
| 776+09 | 9 | 0 | 0 | 74 | 0 | 0 | 0 | 24 | 0 | 0 | 30 | -746 |
| 776+25 | 16 | 0 | 0 | 50 | 0 | 0 | 0 | 37 | 0 | 0 | 46 | -792 |
| 776+50 | 25 | 0 | 0 | 22 | 0 | 0 | 0 | 33 | 0 | 0 | 42 | -833 |
| | | | | | TOTALS: | 0 | 0 | 667 | 0 | | | |

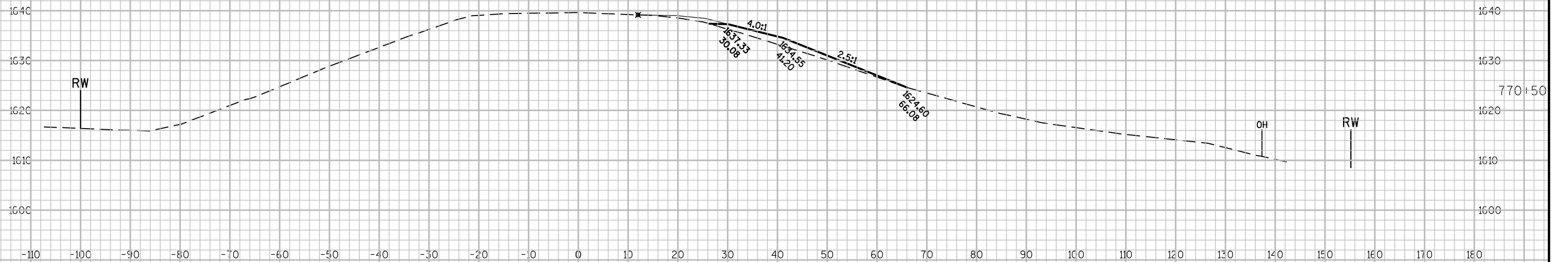












PROJECT NO:1580-29-70

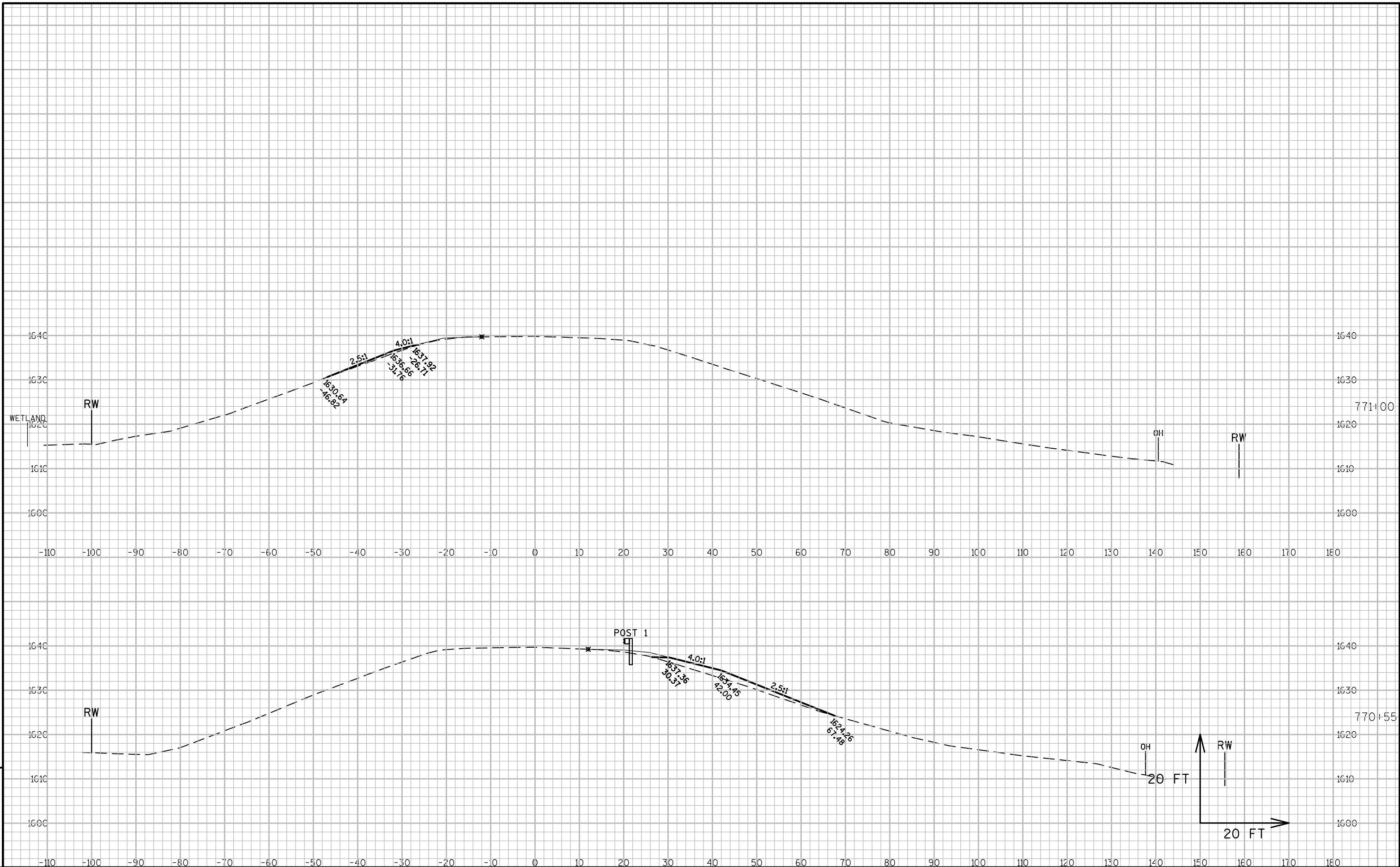
HWY: USH 8

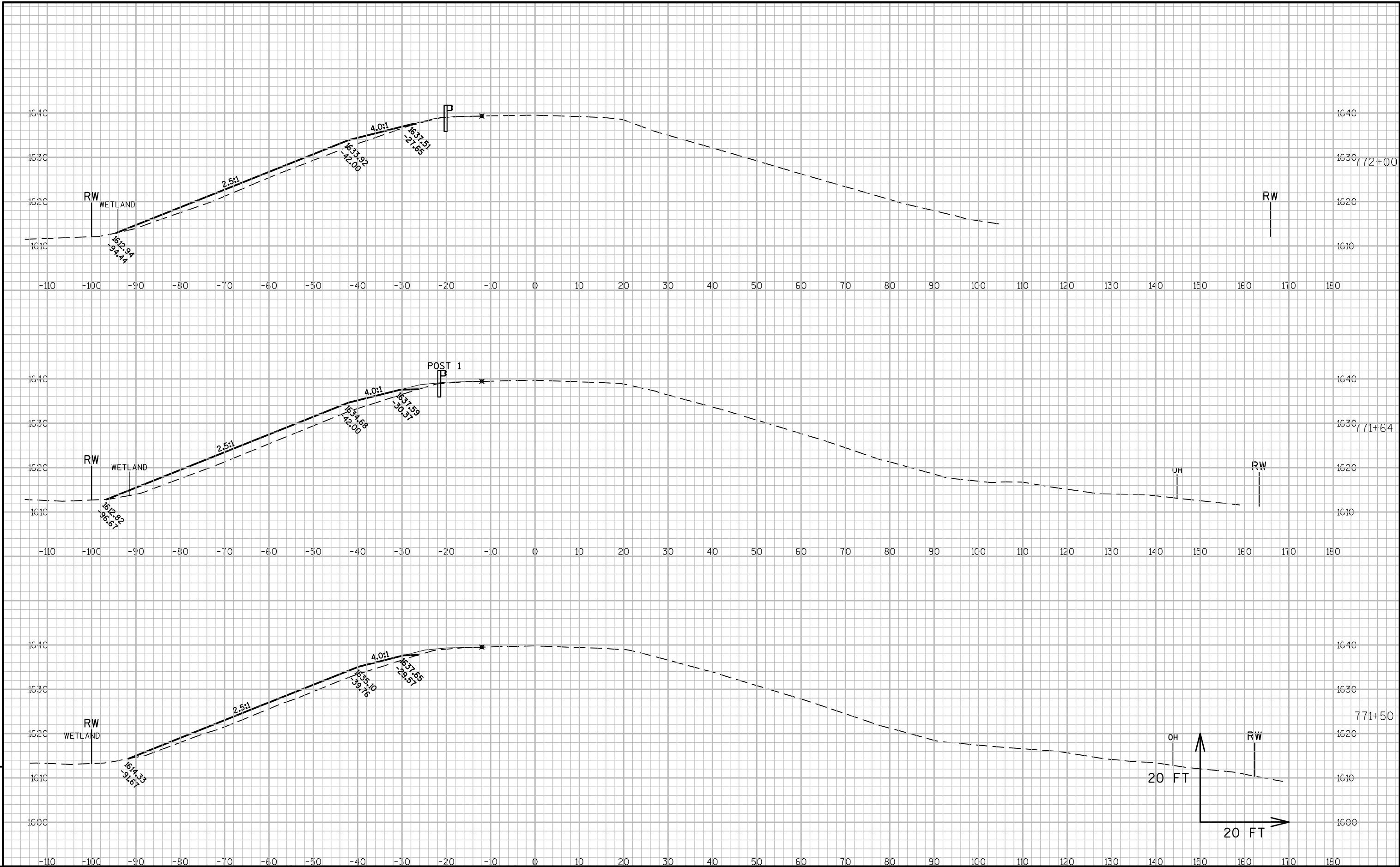
COUNTY: PRICE

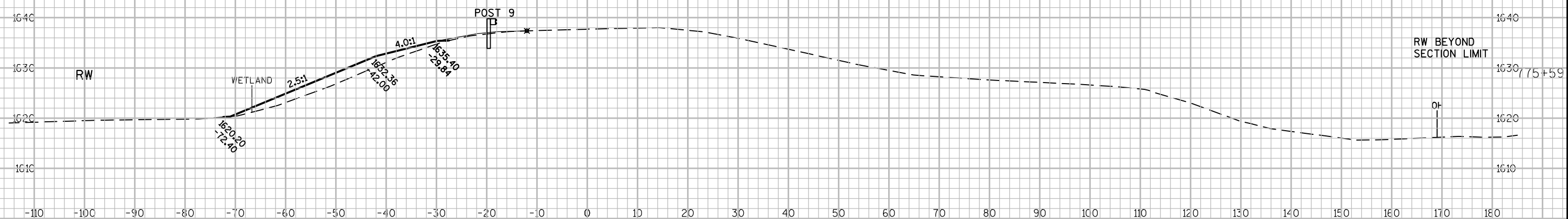
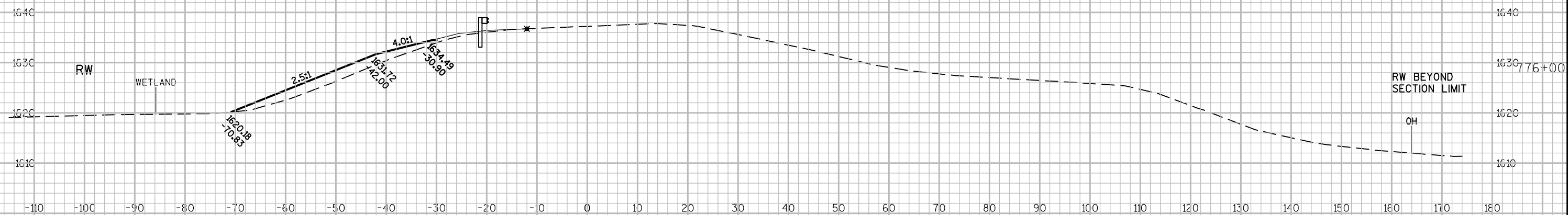
CROSS SECTIONS: USH 8

SHEET

| | |
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PROJECT NO:1580-29-70

HWY: USH 8

COUNTY: PRICE

CROSS SECTIONS: USH 8

SHEET

| | |
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| | |
|--|--|

FILE NAME : \\RHIRTOPFLPPI01\N3PUBLIC\PDS\C3D\15802930\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (5)

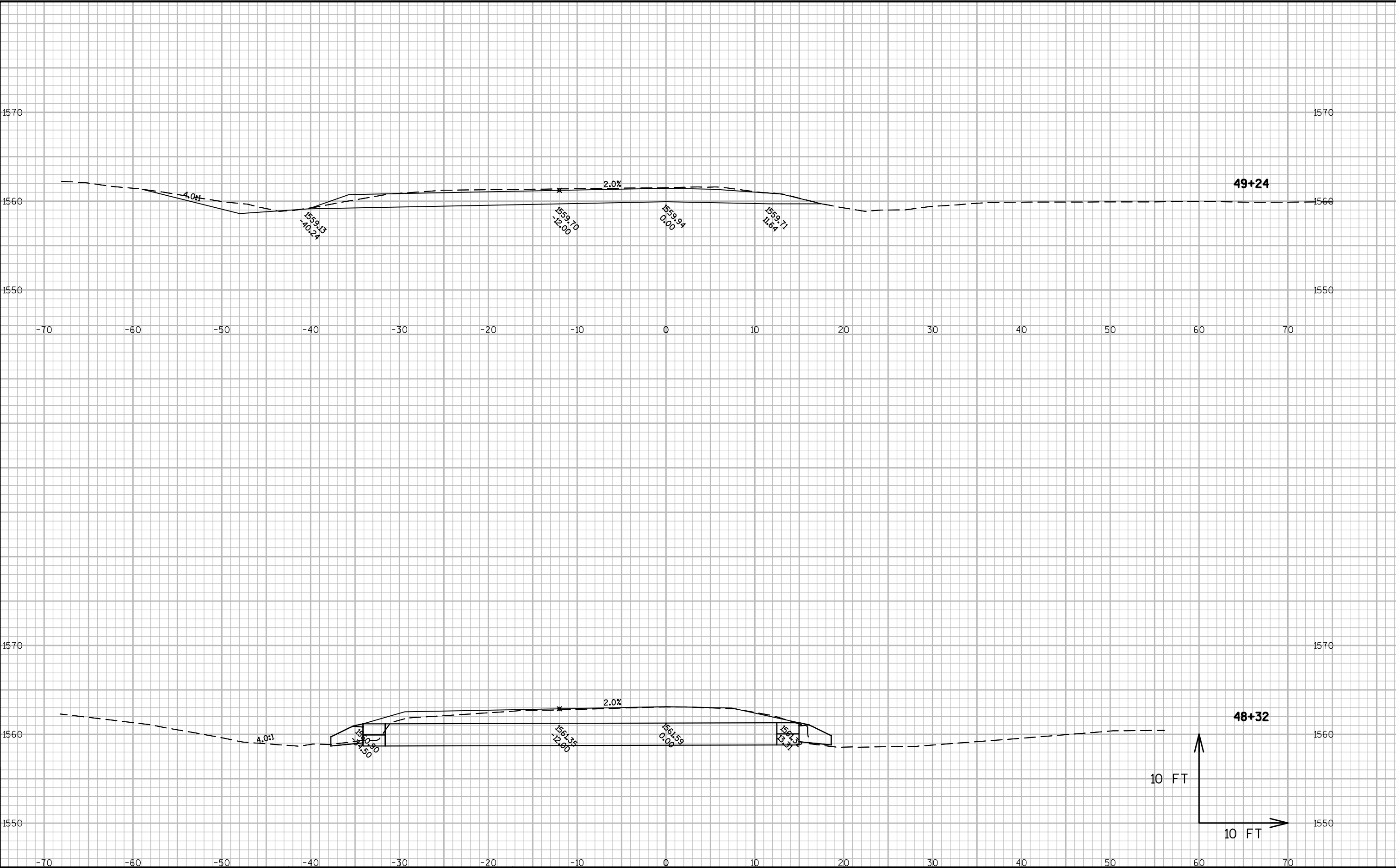
PLOT DATE : 2/3/2016 6:04 AM

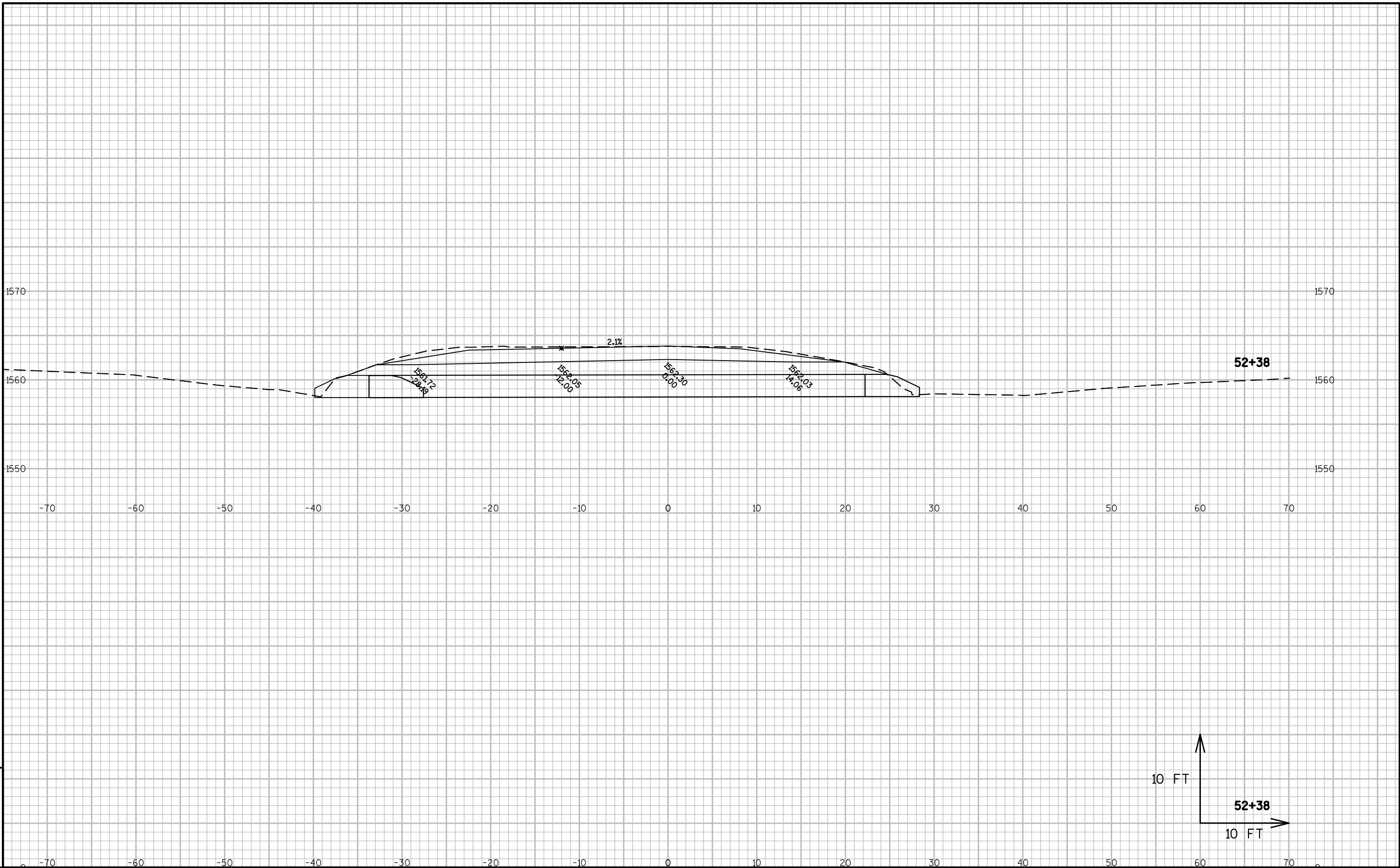
PLOT BY : KILEN, KAI M

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





9

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Notes



Wisconsin Department of Transportation

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through innovation and exceptional service.

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