GRE

MAR 2016

PROJECT ID: 1491-12-71

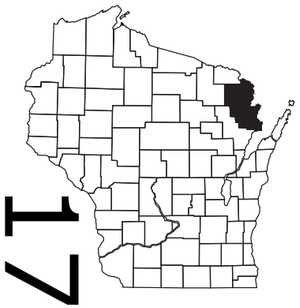
WITH: N/A

COUNTY: MARINETTE

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 = 402



N

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

# VILLAGE OF WAUSAUKEE

(STH 180 - N. VILLAGE LIMITS)

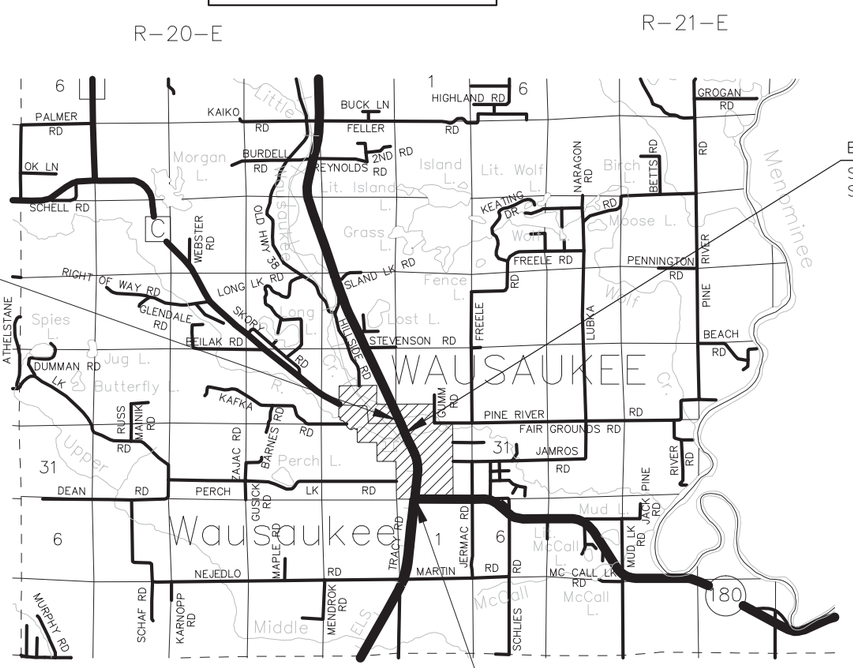
## USH 141

## MARINETTE COUNTY

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 1491-12-71 | WISC 2016059 | 1 |
| | | |
| | | |
| | | |

STATE PROJECT NUMBER

**1491-12-71**




END PROJECT
STA. 113+17.61
Y = 252119.33
X = 719849.13

BEGIN PROJECT
STA. 47+22.72
Y = 245801.53
X = 720779.95

EXCEPTION TO NET CENTERLINE LENGTH
STA. 100+18.74 TO STA. 101+17.51
STRUCTURE B-33-138

LAYOUT
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.230 MI.

-"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MARINETTE COUNTY, NAD 83."

## DESIGN DESIGNATION

| | | | |
|---|---|---|---|
| A.A.D.T. | 2015 | = | 8200 |
| A.A.D.T. | 2035 | = | 9600 |
| D.H.V. | 2035 | = | 1181 |
| D.D. | | = | 63/37 |
| T. ADT. | | = | 13.3% |
| DESIGN SPEED | | = | 50 MPH, 30 MPH, 40 MPH |
| ESALS | | = | 3,182,800 |

## CONVENTIONAL SYMBOLS

### PLAN

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

### PROFILE

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

### UTILITIES

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

ACCEPTED FOR

VILLAGE of WAUSAUKEE

10/22/15 (Date)

(Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

WISCONSIN
TODD M. MULVEY
No. 35977
IRON MOUNTAIN, MICH.
PROFESSIONAL ENGINEER

10-23-2015 (Date)

Todd Mulvey (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | COLEMAN ENGINEERING |
| Designer | COLEMAN ENGINEERING |
| Project Manager | P. ZOELLNER |
| Regional Examiner | |
| Regional Supervisor | D. SEGERSTROM |

APPROVED FOR THE DEPARTMENT

DATE: 10-23-2015

Paul R. Zoellner (Signature)

E

## GENERAL NOTES

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE APPROXIMATE USGS DATUM.

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

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

CURVE DATA IS BASED ON THE ARC DEFINITION.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE RESTORED WITH 6-INCHES OF TOPSOIL, FERTILIZER, SEED AND EROSION MAT OR MULCH.

THE EXACT LOCATIONS AND LIMITS OF ALL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING PAVEMENTS AT REMOVAL LIMITS.

TOP OF CASTING ELEVATIONS SHOWN FOR INLETS REFER TO THE CASTING ELEVATION AT THE FLOWLINE OF GRATE.

ALL STORM SEWER INVERTS, ELEVATIONS, PIPE LENGTHS, AND GRADES ARE COMPUTED CENTER-TO-CENTER OF STRUCTURES.

SILT FENCE IS TO BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND IN PLACE PRIOR TO ANY EXCAVATION.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES AND PIPES SHOWN ON THE PLANS MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS. THE ADJUSTMENTS SHALL REQUIRE THE ENGINEERS APPROVAL.

EROSION CONTROL MEASURES SHALL BE PLACED AS SHOWN ON THE EROSION CONTROL PLAN. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

ADJUSTMENTS TO TRAFFIC CONTROL DEVICES SHALL REQUIRE THE ENGINEERS APPROVAL.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK.

ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

UNLESS OTHERWISE PROVIDED SIDE ROAD EARTHWORK QUANTITIES ARE INCLUDED IN MAINLINE EARTHWORK QUANTITIES.

THE RIGHT OF WAY PLAT INCLUDED IN THE PLANS IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL OBTAIN A COPY OF THE OFFICIAL RECORDED RIGHT OF WAY PLAT FROM THE COUNTY COURTHOUSE PRIOR TO CONSTRUCTION REQUIRING ANY INFORMATION FROM THE PLAT.

ALL PROPOSED INLETS AND MANHOLES INCLUDED IN THIS PLAN DO NOT HAVE A SUMP.

DIGGERS HOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com

## ROAD DESIGNER


COLEMAN ENGINEERING COMPANY
TODD MULVEY
635 CIRCLE DRIVE
IRON MOUNTAIN, MI 49801
PHONE: 906-774-3440
tmulvey@coleman-engineering.com


## STREETSCAPE DESIGNER


STANTEC
LYNELLE CAINE
210 S. US HWY 141, #D
CRIVITZ, WI 54115
PHONE: 715-854-3360
CELL: 920-655-7211
lynelle.caine@stantec.com


## WisDNR


JIM DOPERALSKI
ENVIRONMENTAL ANALYSIS
AND REVIEW SPECIALIST
2984 SHAWANO AVENUE
GREEN BAY WI 54313-6727
PHONE: 920-662-5119
james.doperalski@wisconsin.gov


## STANDARD ABBREVIATIONS

| | |
|---|---|
| ABUT | ABUTMENT |
| AC | ACRE |
| AGG | AGGREGATE |
| AECPRC | APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE |
| AEW | APRON ENDWALL FOR CULVERT PIPE |
| ASPH | ASPHALTIC |
| AVG | AVERAGE |
| ADT | AVERAGE DAILY TRAFFIC |
| BF | BACK FACE |
| BM | BENCH MARK |
| BR | BRIDGE |
| CE | COMMERCIAL ENTRANCE |
| CL OR C/L OR ℄ | CENTER LINE |
| Δ | CENTRAL ANGLE OR DELTA |
| CONC | CONCRETE |
| CPCM | CULVERT PIPE CORRUGATED METAL |
| CPRC | CULVERT PIPE REINFORCED CONCRETE |
| CPRCHE | CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL |
| CR | CREEK |
| CY | CUBIC YARD |
| C & G | CURB AND GUTTER |
| D | DEGREE OF CURVE |
| DHV | DESIGN HOUR VOLUME |
| DISCH | DISCHARGE |
| DG | DITCH GRADE |
| DWY | DRIVEWAY |
| X OR E | EAST GRID COORDINATE |
| EAT | STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL |
| EOR | END POINT OF RADIUS |
| EL | ELEVATION |
| ENT | ENTRANCE |
| ESALS | EQUIVALENT SINGLE AXLE LOADS |
| EXC | EXCAVATION |
| EBS | EXCAVATION BELOW SUBGRADE |
| EXIST | EXISTING |
| FC | FACE OF CURB |
| FF | FACE TO FACE |
| FERT | FERTILIZE |
| FE | FIELD ENTRANCE |
| FL | FLOW LINE |
| FO | FIBER OPTIC |
| CWT | HUNDREDWEIGHT |
| HYD | HYDRANT |
| ID | INSIDE DIAMETER |
| INV | INVERT |
| IP | IRON PIPE ON PIN |
| LHF | LEFT-HAND FORWARD |
| L | LENGTH OF CURVE |
| LF | LINEAR FOOT |
| LC | LONG CHORD OF CURVE |
| LS | LUMP SUM |
| MH | MANHOLE |
| MOR | MID POINT OF RADIUS |
| NC | NORMAL CROWN |
| NO | NUMBER |
| OBLIT | OBLITERATE |
| PAVT | PAVEMENT |
| PE | PRIVATE ENTRANCE |
| PVRC | POINT OF VERTICAL REVERSE CURVE |
| QOR | QUARTER POINT OF RADIUS |
| R | RADIUS |
| REQ'D | REQUIRED |
| RES | RESIDENCE OR RESIDENTIAL |
| RHF | RIGHT-HAND FORWARD |
| R/W | RIGHT-OF-WAY |
| R | RIVER |
| RDWY | ROADWAY |
| R/L OR ℞ | REFERENCE LINE |
| SALV | SALVAGED |
| SAN | SANITARY SEWER |
| SF | SQUARE FEET |
| SY | SQUARE YARD |
| SDD | STANDARD DETAIL DRAWINGS |
| STA | STATION |
| SS | STORM SEWER |
| SSPRC | STORM SEWER PIPE REINFORCED CONCRETE |
| SE | SUPERELEVATION RATE |
| TC | TOP OF CURB |
| T OR TN | TOWN |
| T | TRUCKS (PERCENT OF) |
| ℡ | TANGENT LINE |
| TYP | TYPICAL |
| VAR | VARIABLE |
| VC | VERTICAL CURVE |
| Y OR N | NORTH GRID COORDINATE |
| YD | YARD |

## UTILITIES

WISCONSIN PUBLIC SERVICE
GAS- HOWARD SORENSEN
1717 10TH AVENUE
MENOMINEE, MI 49858
PHONE: 906-863-4359
MOBILE: 715-923-6806
hjsorensen@wisconsinpublicservice.com

VILLAGE OF WAUSAUKEE
SANITARY & WATER-LONNIE BAMBERG
P.O. BOX 475
428 HARRISON AVE.
WAUSAUKEE, WI 54177
PHONE: 715-856-5341
MOBILE: 715-927-1302
utility@villageofwausaukee.com

WISCONSIN PUBLIC SERVICE
ELECTRIC-STEVE VAN CAMPENHOUT
1717 10TH AVENUE
MENOMINEE, MI 49858
PHONE: 877-724-4296 (DAY), 800-450-7260 (AFTER HOURS)
MOBILE: 715-923-0583
SAVanCampenhout@wisconsinpublicservice.com

CENTURYLINK
TELEPHONE- PATRICK TRACY
100 VICKIE DRIVE
P.O. BOX 260
WAUSAUKEE, WI 54143
PHONE: 715-856-9138
MOBILE: 715-927-0970
Patrick.Tracy@centurylink.com

PACKERLAND BROADBAND
FIBER OPTIC-WAYNE CRETTON
105 KENT STREET
IRON MOUNTAIN, MI 49801
PHONE: 906-774-6621 EXT. 2328
MOBILE: 906-282-3768
WAYNE.CRETTON@PACKERLANDBROADBAND.COM

## ESCANABA AND LAKE SUPERIOR RAILROAD CONTACTS

PRIMARY RAIL ROAD CONTACT
TOM KLIMEK, DIR-MARKETING, CUSTOMER SERVICES GREEN BAY OPERATIONS
529 S JEFFERSON STREET SUITE 108
PO BOX 85
GREEN BAY, WI 54304
PHONE 920-435-8006
CELL 920-841-5062
FAX 906-435-6281
EMIAL elsklimek@gmial.com

TRAIN DISPATCH INFORMATION AND FLAGGING CONTACT
610 RAILROAD STREET
CHANNING, MI 49815
PHONE 906-542-3214
FAX 906-542-9811
DISPATCHER 800-200-2360

2

N

TOWN OF WAUSAUKEE

VILLAGE OF WAUSAUKEE

VILLAGE OF WAUSAUKEE

BEGIN PROJECT 1491-12-71
STA. 47+22.72

END PROJECT 1491-12-71
STA. 113+17.61

DETOUR ROUTE

USH 141

1ST ST.

1ST AVE.

STH 180

KENNY DR.

BUTTERNUT AVE.

MONROE AVE.

JACKSON AVE.

VAN BUREN AVE.

HARRISON AVE.

TYLER AVE.

DIVISION ST.

WAUSAUKEE RIVER

CTH C

BEACH AVE.

NORTH AVE.

FAIRGROUNDS RD.

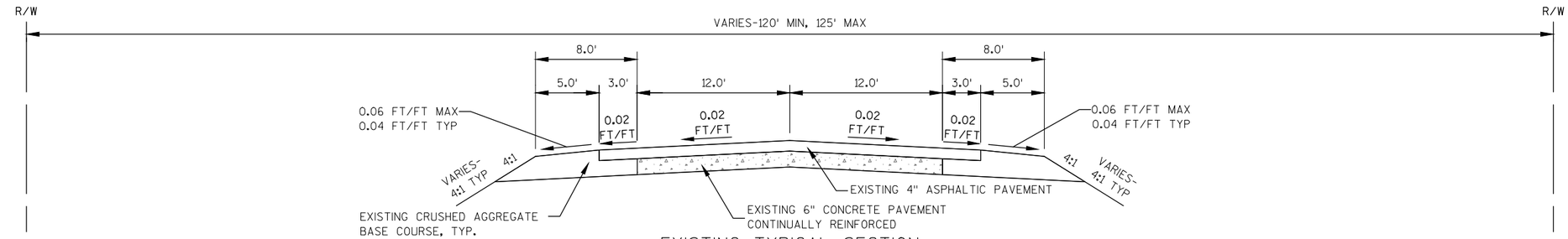
USH 141

PROJECT GAP
STA. 100+18.74 TO STA. 101+17.51
STRUCTURE B-33-138

PROJECT 1491-12-71

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PROJECT OVERVIEW | SCALE, FEET 0 250 500 | SHEET 3 E |
|---|---|---|---|---|---|

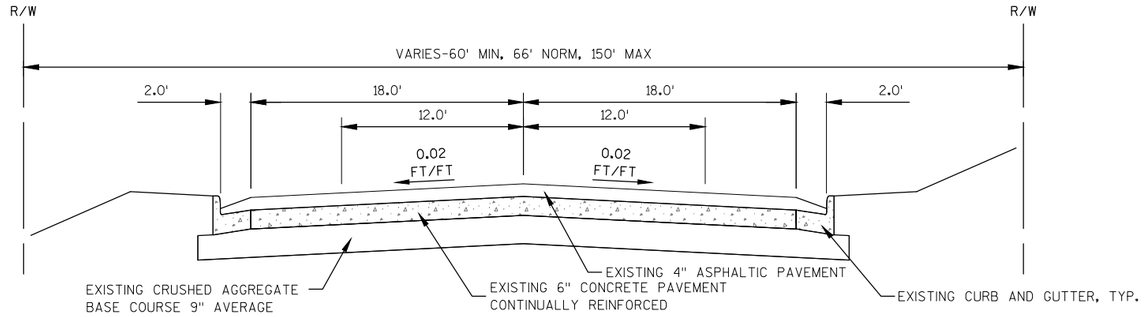
FILE NAME : F:\Data\CAD PROJECTS\CAD08049 Wausaukee\1491-21-71\SheetsPlan\020201_po.dwg PLOT DATE : 8/26/2015 2:08 PM PLOT BY : JEFF GILROY PLOT NAME : ----------PLOT SCALE : 1" = 1'




EXISTING TYPICAL SECTION

USH 141

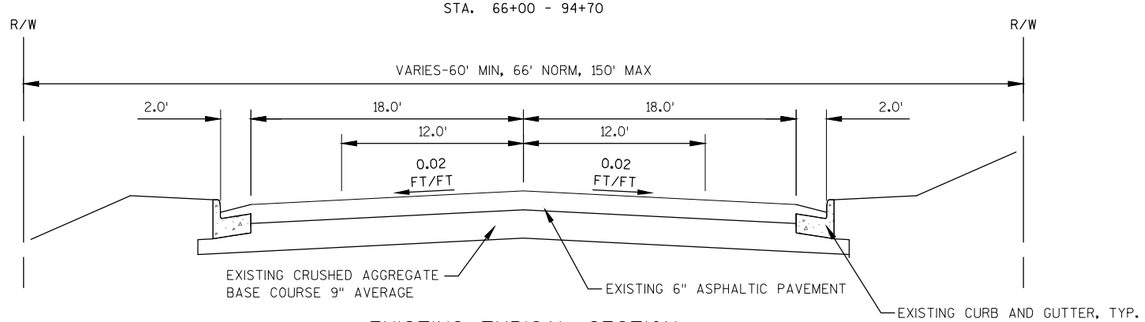
STA. 47+22.72 - 66+00




EXISTING TYPICAL SECTION

USH 141

STA. 66+00 - 94+70



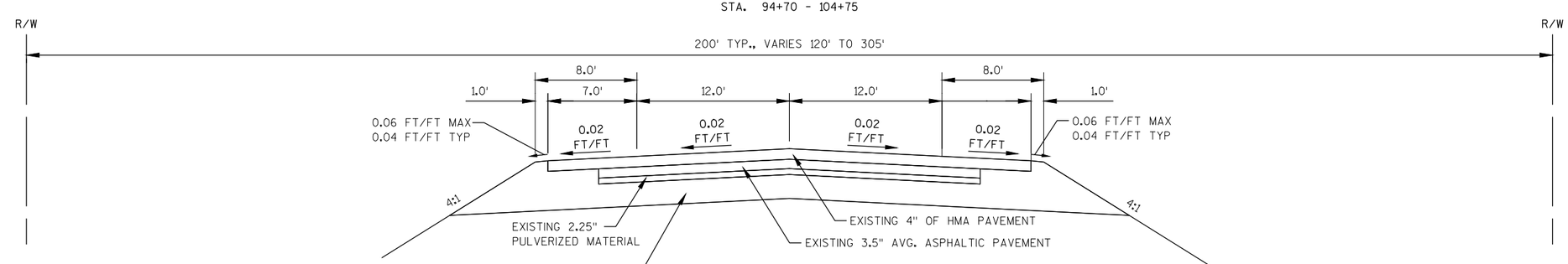

EXISTING TYPICAL SECTION

USH 141

STA. 94+70 - 104+75

NOTE:

IN 2014 UNDER PROJECT ID 1491-12-72 THE BRIDGE APPROACHES WERE RECONSTRUCTED FROM 99+25 - 102+50. ASPHALT CURB WAS INSTALLED WITH 5 INCHES OF ASPHALTIC SURFACE. THE SUBGRADE WAS BUILT TO THE PROFILE OF THIS PROJECT, SO THE DEPTH OF THE BASE AGGREGATE DENSE 1 1/4" VARIES FROM 1.0 FT TO 2.1 FT.

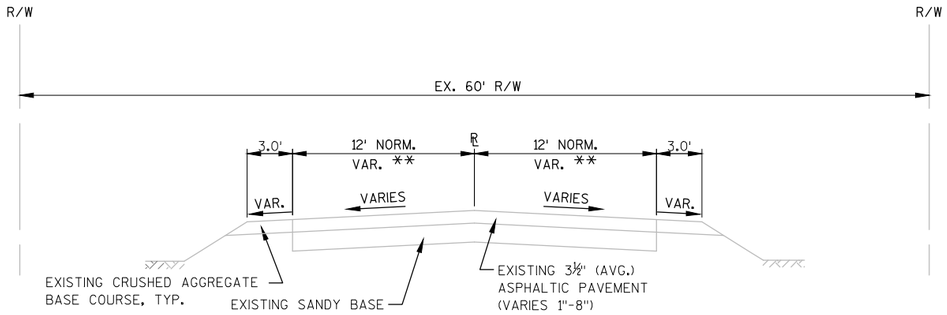



EXISTING TYPICAL SECTION

USH 141

STA. 104+75 - 113+17.61

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TYPICAL SECTIONS | SHEET 4 E |
|---|---|---|---|---|



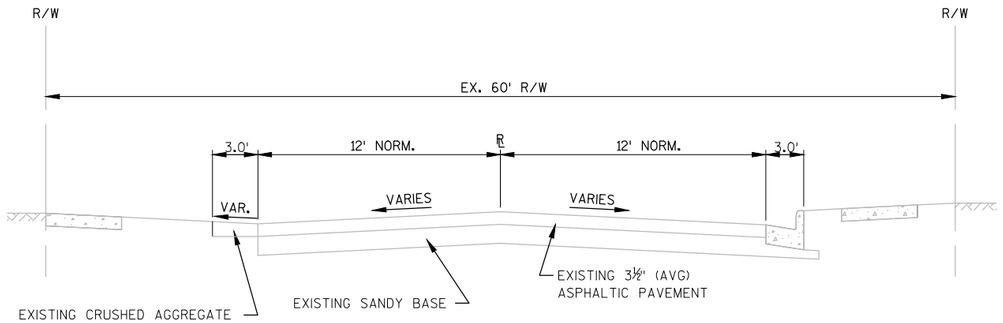

EXISTING TYPICAL SECTION

DETOUR

STA. 9+83.48- 45+91.55 (TRACY RD - CHURCH ST.)
STA. 49+00 - 76+77 (3RD ST. - DIVISION ST.)

** STA. 45+50 - 45+91.55 (LT) = 16' LANE
STA. 50+86.08 - 53+00 (RT) = ADDITIONAL 9' PARKING LANE
STA. 53+00 - 57+50 (LT) = 15' LANE
STA. 69+50 - 76+77 (LT & RT) = 10' LANE

NOTE: EXISTING ASPHALTIC CURB AT STA. 54+21 TO STA. 54+44
LEFT AND RIGHT SIDE OF TRAVEL LANE




EXISTING TYPICAL SECTION

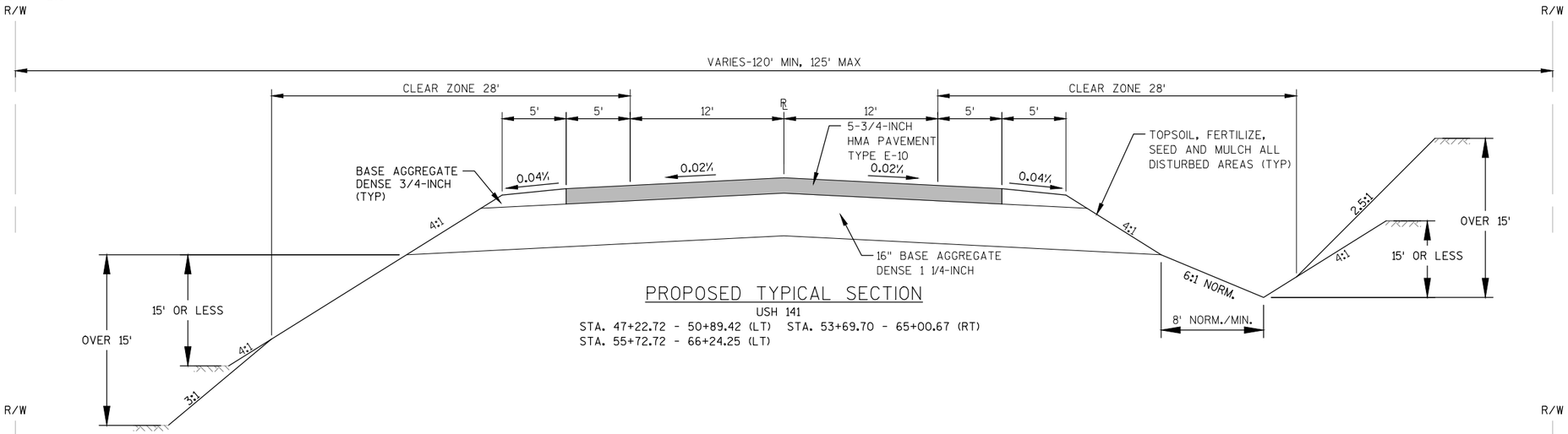
DETOUR

STA. 45+91.55- 49+00 (CHURCH ST. - 3RD ST.)

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TYPICAL SECTIONS | SHEET 5 E |
|---|---|---|---|---|

HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYER THICKNESSES:

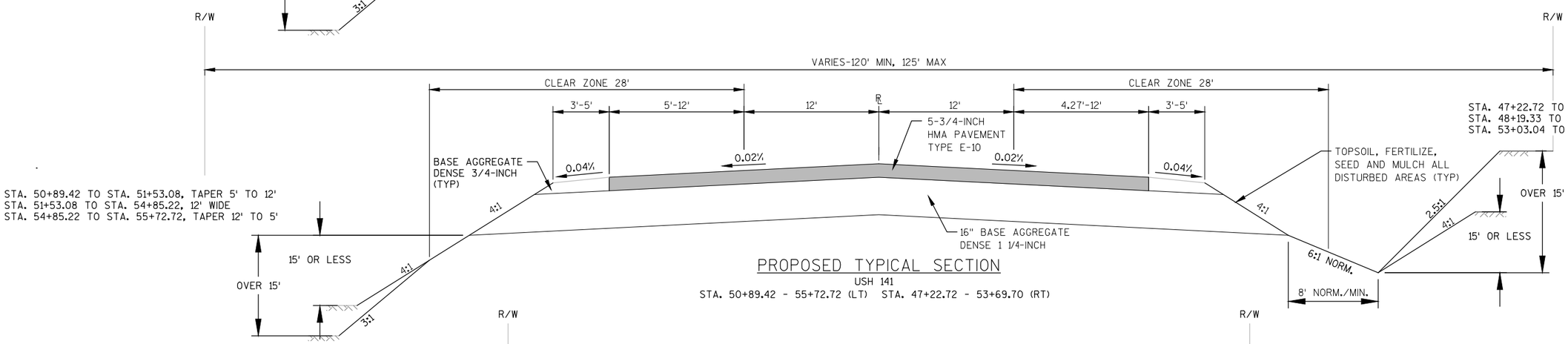
| THICKNESS | 19mm LOWER | 12.5mm LOWER | 12.5mm UPPER |
|---|---|---|---|
| 5.75" | 2.25" | 1.75" | 1.75" |




PROPOSED TYPICAL SECTION

USH 141

STA. 47+22.72 - 50+89.42 (LT) STA. 53+69.70 - 65+00.67 (RT)
STA. 55+72.72 - 66+24.25 (LT)



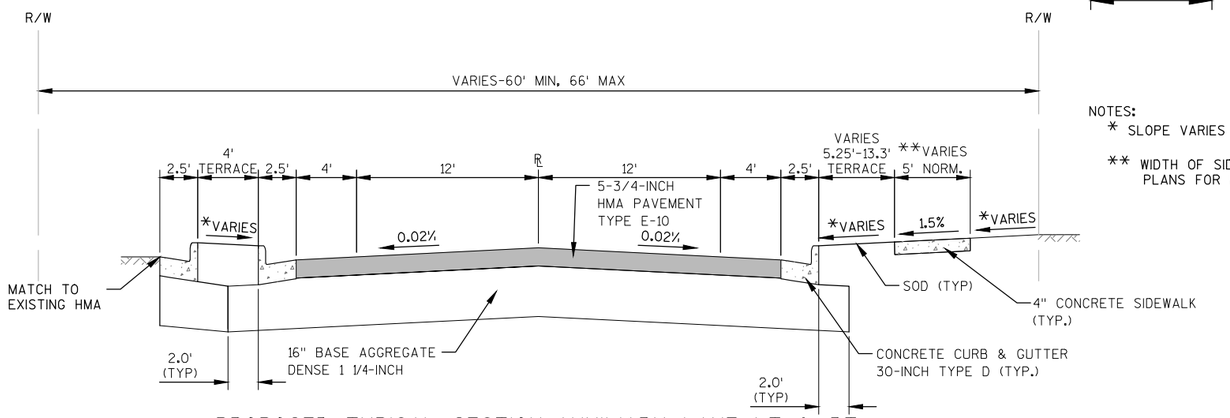

STA. 47+22.72 TO STA. 48+19.33, TAPER 4.27' TO 12'
STA. 48+19.33 TO STA. 53+03.04, 12' WIDE
STA. 53+03.04 TO STA. 53+69.70, TAPER 12' TO 5'

STA. 50+89.42 TO STA. 51+53.08, TAPER 5' TO 12'
STA. 51+53.08 TO STA. 54+85.22, 12' WIDE
STA. 54+85.22 TO STA. 55+72.72, TAPER 12' TO 5'

PROPOSED TYPICAL SECTION

USH 141

STA. 50+89.42 - 55+72.72 (LT) STA. 47+22.72 - 53+69.70 (RT)




PROPOSED TYPICAL SECTION-AUXILIARY LANE LT & RT

USH 141

STA. 66+24.25 - 69+44.66 (LT) STA. 65+00.67 - 71+74.39 (RT)

NOTES:

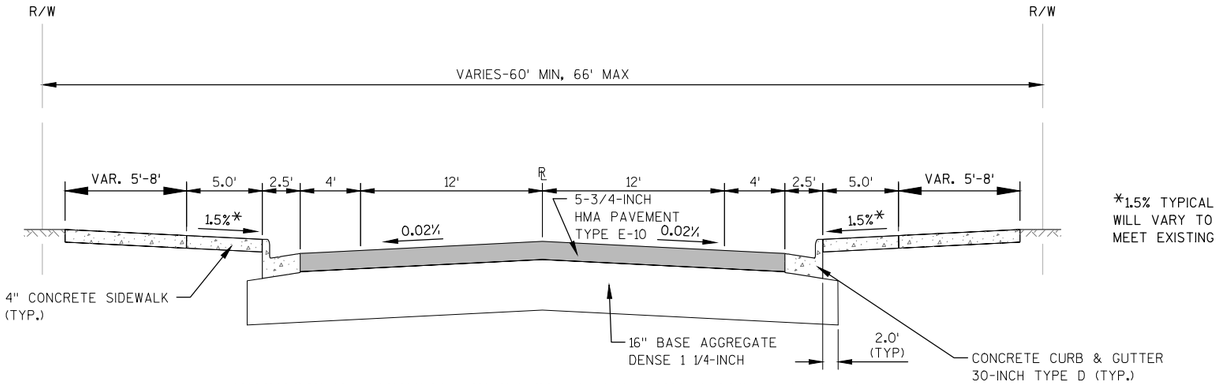
* SLOPE VARIES (SEE CROSS SECTIONS)

** WIDTH OF SIDEWALK VARIES (SEE PLANS FOR WIDTHS AND OFFSETS)

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TYPICAL SECTIONS | SHEET 6 E |
|---|---|---|---|---|

HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYER THICKNESSES:

| THICKNESS | 19mm LOWER | 12.5mm LOWER | 12.5mm UPPER |
|---|---|---|---|
| 5.75" | 2.25" | 1.75" | 1.75" |



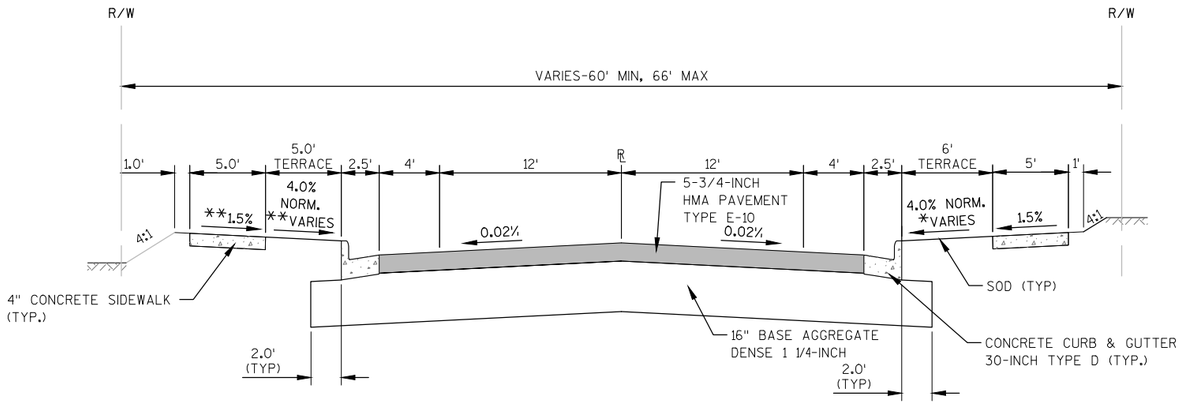

*1.5% TYPICAL
WILL VARY TO
MEET EXISTING

## PROPOSED TYPICAL SECTION-AUXILIARY LANE LT & RT

USH 141

STA. 79+64.29 - 88+71.47 (LT) STA. 71+74.39 - 93+00.00 (RT)

NOTE:
IN 2014 UNDER PROJECT ID 1491-12-72
THE SUBGRADE WAS BUILT TO THE ELEVATION OF
THIS PROJECT FROM STA 99+25 - 102+50.



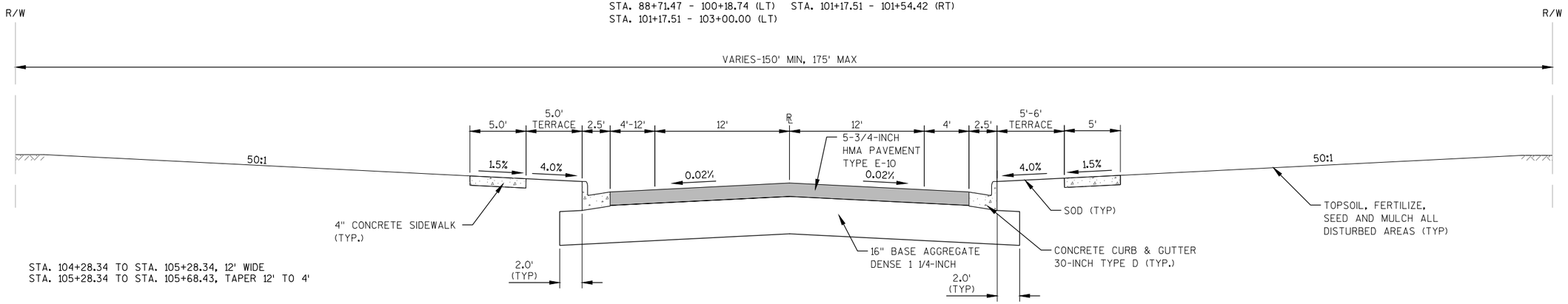

NOTES:
* SLOPE VARIES (SEE CROSS SECTIONS).

** SIDEWALK SLOPE VARIES FROM -1.5%
TO +1.5%. TERRACE SLOPE VARIES FROM
-1.5% TO 10.0% (SEE CROSS SECTIONS).

## PROPOSED TYPICAL SECTION-AUXILIARY LANE LT & RT

USH 141

STA. 64+44.66 - 79+64.29 (LT) STA. 93+00.00 - 100+18.74 (RT)
STA. 88+71.47 - 100+18.74 (LT) STA. 101+17.51 - 101+54.42 (RT)
STA. 101+17.51 - 103+00.00 (LT)




STA. 104+28.34 TO STA. 105+28.34, 12' WIDE
STA. 105+28.34 TO STA. 105+68.43, TAPER 12' TO 4'

## PROPOSED TYPICAL SECTION-AUXILIARY LANE LT & RT

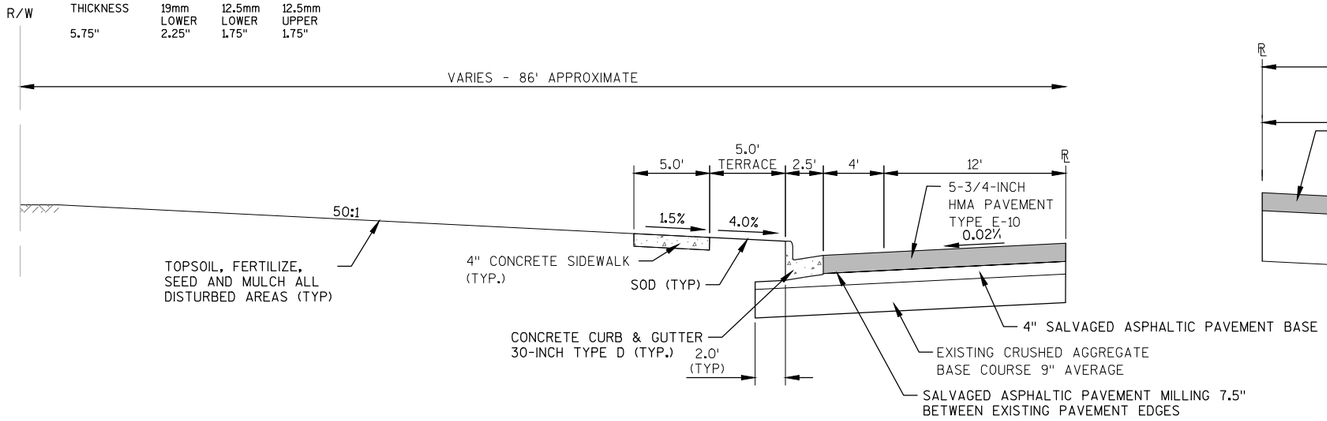
USH 141

STA. 103+00.00 - 109+00 (LT) STA. 101+54.42 - 106+68.90 (RT)

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TYPICAL SECTIONS | SHEET 7 E |
|---|---|---|---|---|

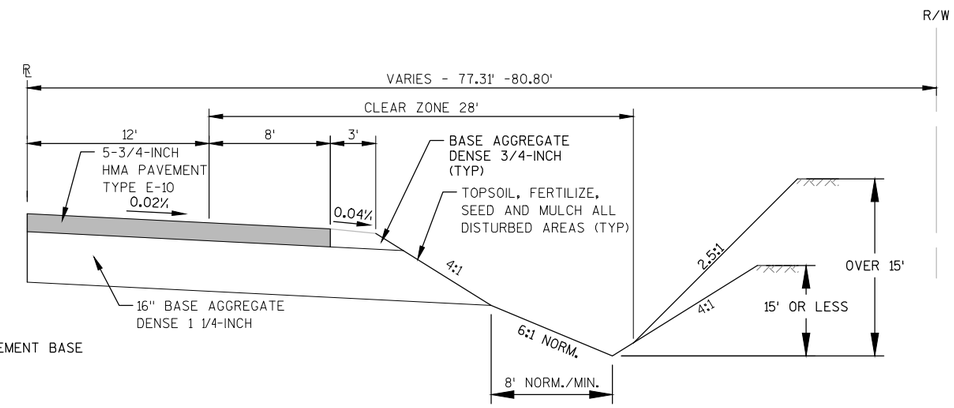
HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYER THICKNESSES:

| THICKNESS | 19mm LOWER | 12.5mm LOWER | 12.5mm UPPER |
|---|---|---|---|
| 5.75" | 2.25" | 1.75" | 1.75" |



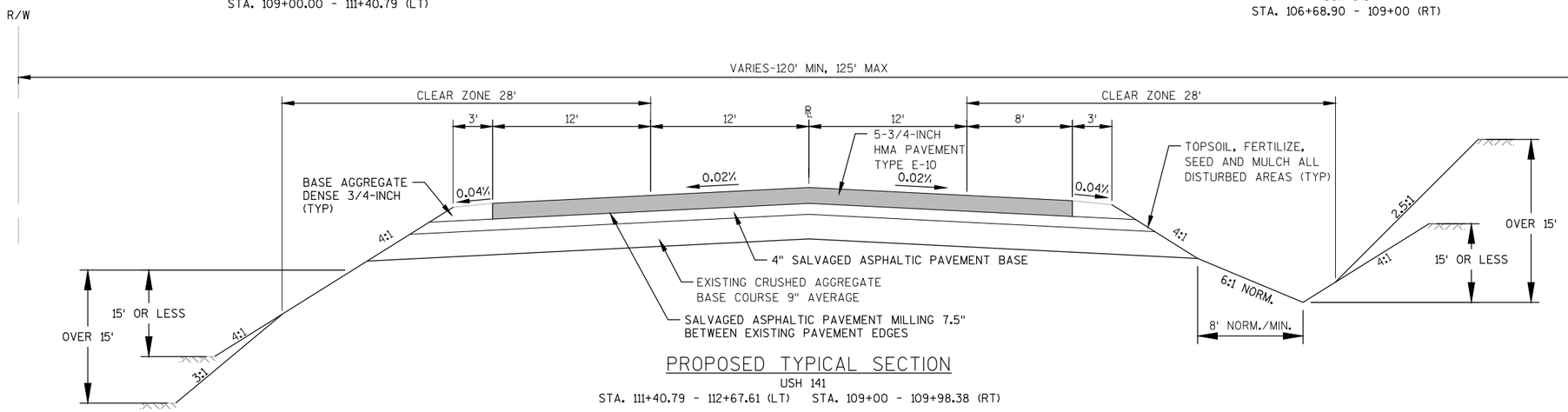

## PROPOSED TYPICAL HALF SECTION-AUXILIARY LANE LT

USH 141
STA. 109+00.00 - 111+40.79 (LT)



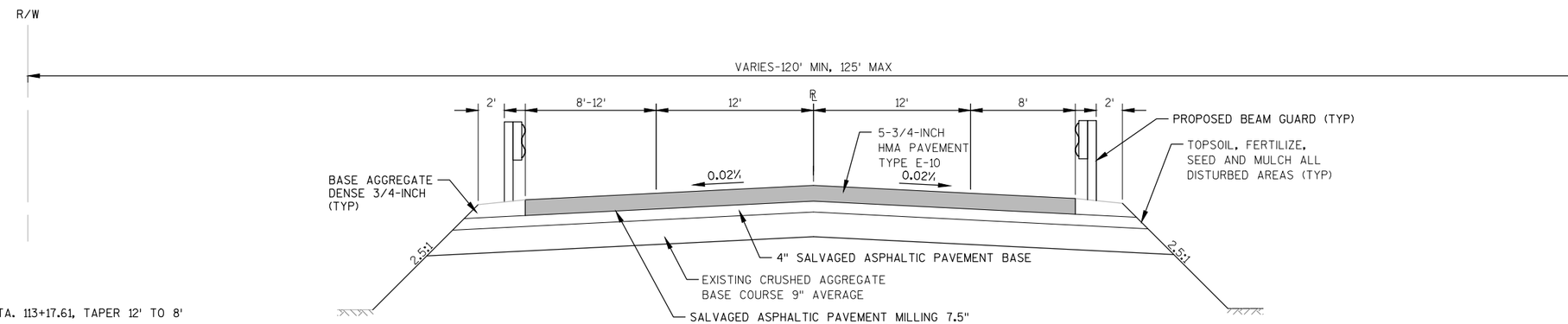

## PROPOSED TYPICAL HALF SECTION

USH 141
STA. 106+68.90 - 109+00 (RT)




## PROPOSED TYPICAL SECTION

USH 141
STA. 111+40.79 - 112+67.61 (LT) STA. 109+00 - 109+98.38 (RT)




STA. 112+67.61 TO STA. 113+17.61, TAPER 12' TO 8'

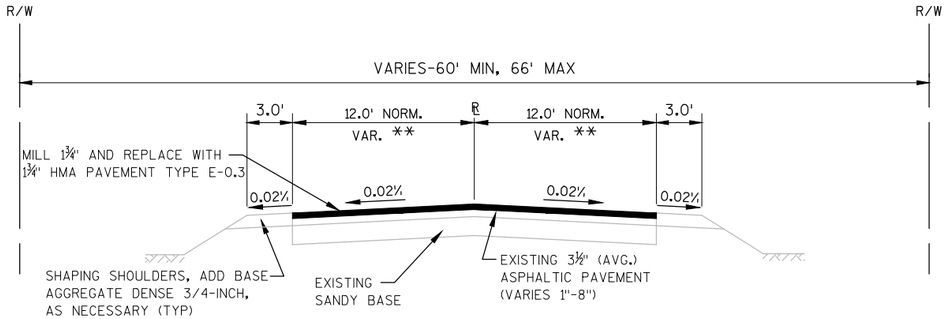
## PROPOSED TYPICAL SECTION

USH 141
STA. 112+67.61 - 113+17.61 (LT) STA. 109+98.38 - 113+17.61 (RT)

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TYPICAL SECTIONS | SHEET 8 E |
|---|---|---|---|---|

HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYER THICKNESSES:

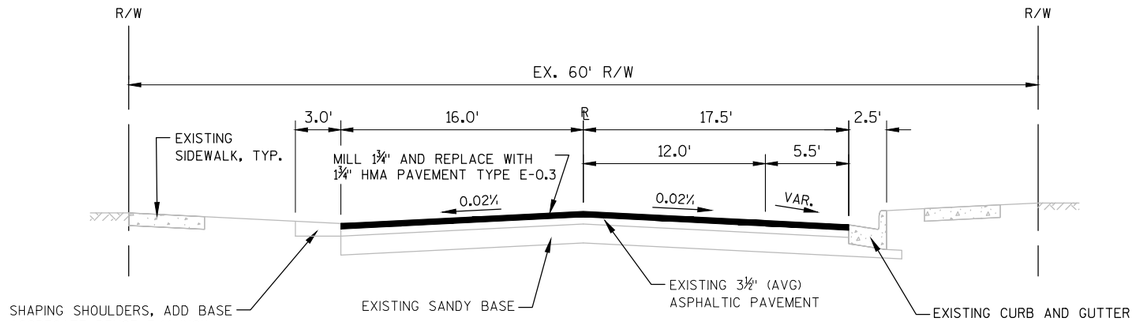
| THICKNESS | 12.5mm UPPER |
|---|---|
| 1.75" | 1.75" |




** STA. 45+50 - 45+91.55 (LT) = 16' LANE
STA. 54+30.22 - 57+50 (LT) = 15' LANE
STA. 69+50 - 76+77 (LT & RT) = 10' LANE

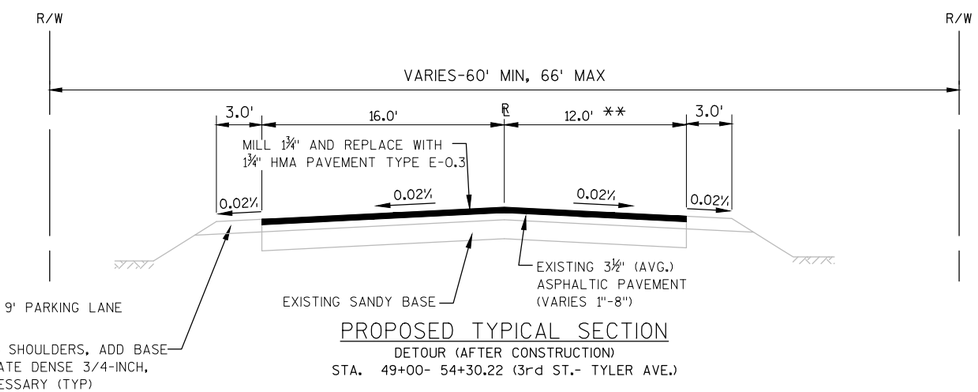
## PROPOSED TYPICAL SECTION

DETOUR (AFTER CONSTRUCTION)
STA. 9+83.48- 45+91.55 (TRACY RD - CHURCH ST.)
STA. 54+30.22 - 76+77 (TYLER AVE. - DIVISION ST.)




## PROPOSED TYPICAL SECTION

DETOUR (AFTER CONSTRUCTION)
STA. 45+91.55- 49+00 (CHURCH ST. - 3RD ST.)



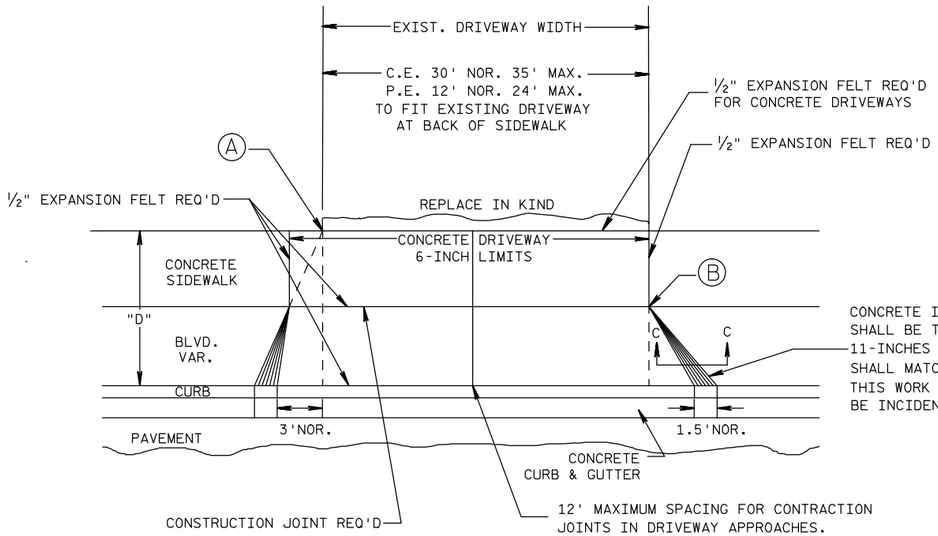

** STA. 41+86.08 - 44+00 (RT) = ADDITIONAL 9' PARKING LANE

## PROPOSED TYPICAL SECTION

DETOUR (AFTER CONSTRUCTION)
STA. 49+00- 54+30.22 (3rd ST.- TYLER AVE.)

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TYPICAL SECTIONS | SHEET 9 E |
|---|---|---|---|---|

# DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

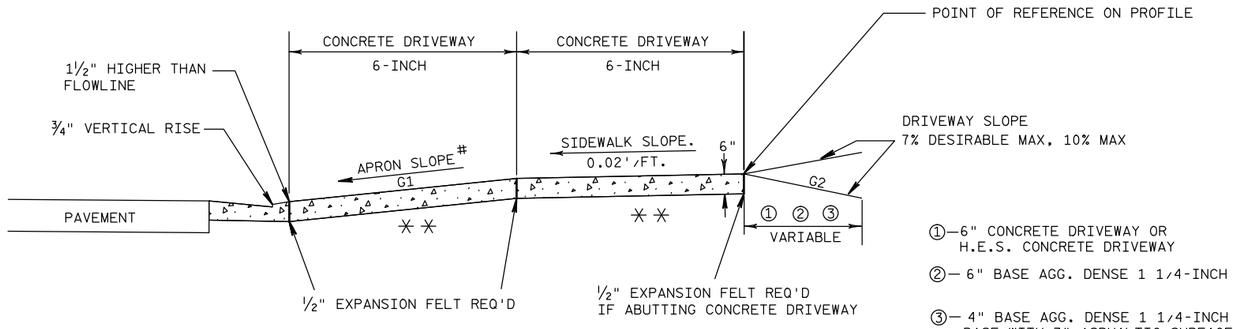



CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

## PLAN VIEW

Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

Ⓑ WHEN "D" IS GREATER THAN 13'. ALIGN TAPER WITH FRONT OF SIDEWALK




① — 6" CONCRETE DRIVEWAY OR H.E.S. CONCRETE DRIVEWAY

② — 6" BASE AGG. DENSE 1 1/4-INCH

③ — 4" BASE AGG. DENSE 1 1/4-INCH BASE WITH 3" ASPHALTIC SURFACE

⁂ = 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

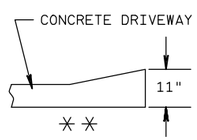
## TYPICAL SIDEWALK SECTION

#

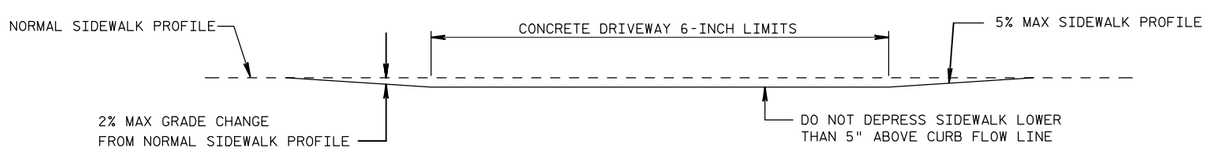
| TERRACE WIDTH | APRON SLOPE (G1) MIN % | DESIRABLE % | MAX % |
|---|---|---|---|
| 3 FT | 7.0 | 8.5 | 9.0 |
| 4 FT | 5.0 | 7.0 | 9.0 |
| 5 FT | 4.0 | 7.0 | 9.0 |
| 6 FT | 4.0 | 7.0 | 9.0 |
| 7 FT | 3.5 | 7.0 | 9.0 |
| 8 FT | 3.0 | 7.0 | 9.0 |

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

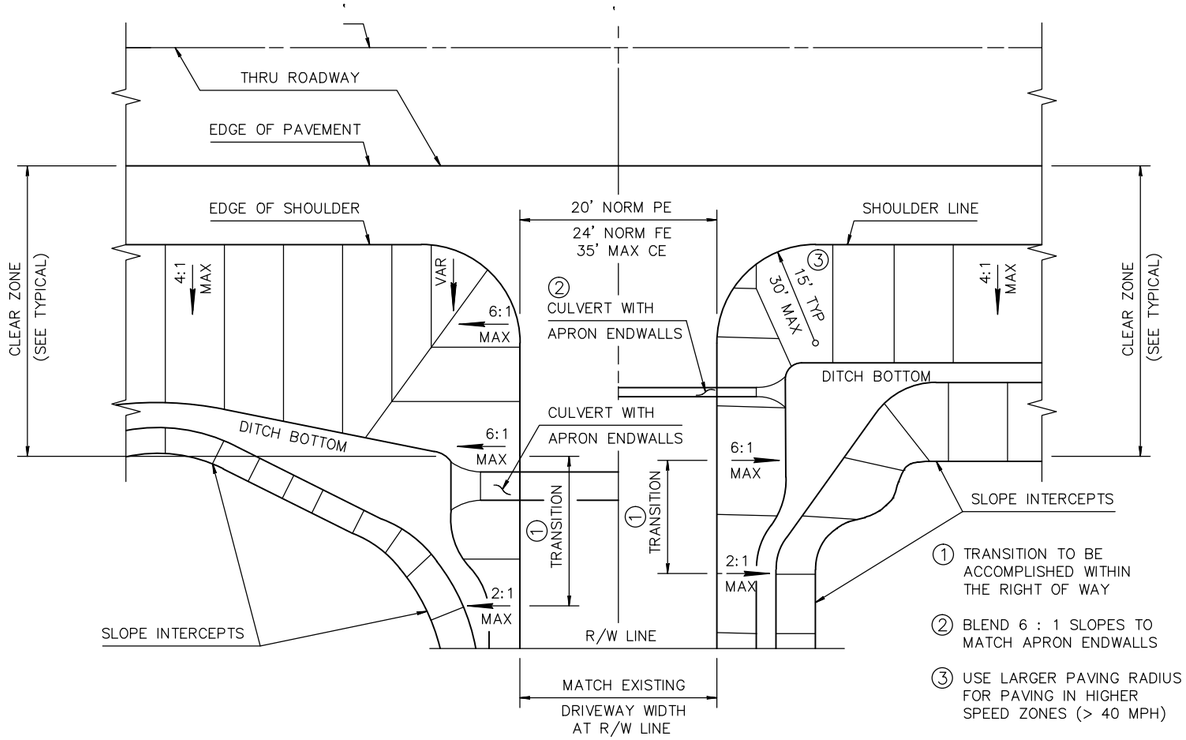
DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE




SECTION C-C




## DEPRESSED SIDEWALK PROFILE DETAIL

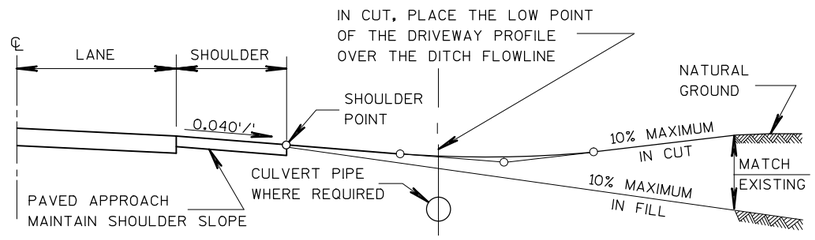



FOR CULVERTS OVER 24" DIAMETER

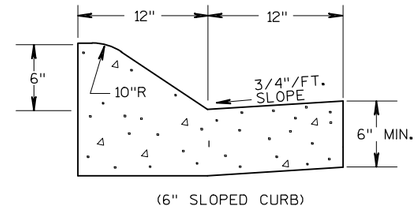
FOR CULVERTS 24" DIAMETER & LESS

PLAN VIEW

RURAL DRIVEWAY GRADING AND/OR PAVING DETAIL

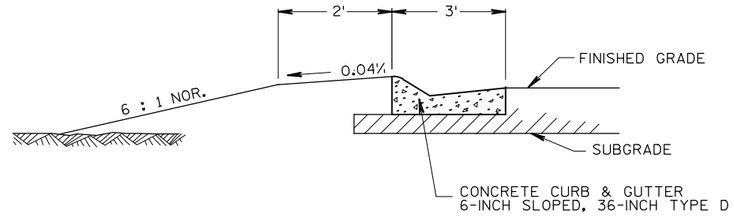



TYPICAL DRIVEWAY PROFILES

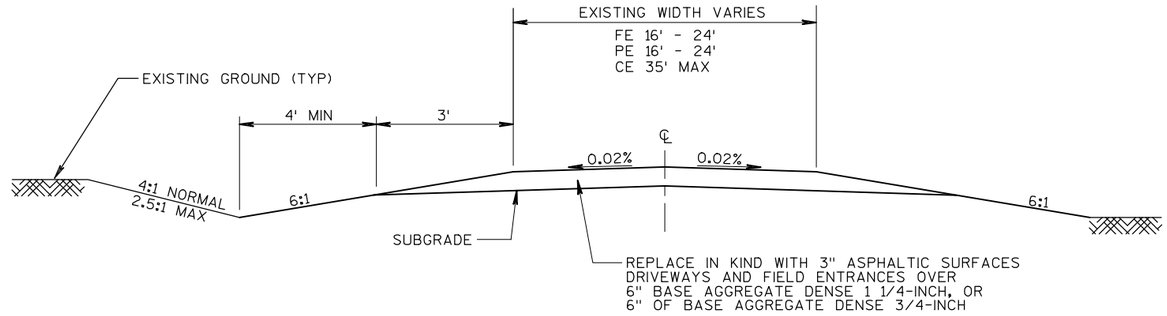



(6" SLOPED CURB)

CONRCETE CURB & GUTTER, 6" SLOPED, 24-INCH TYPE D

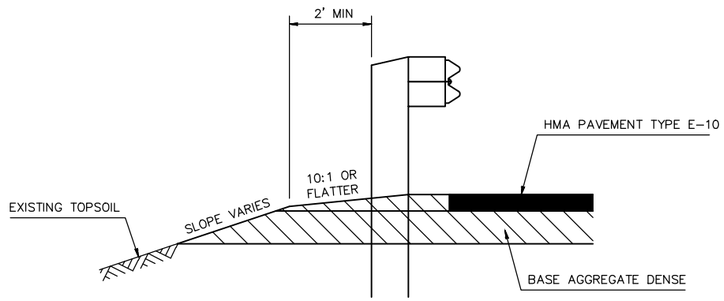



BERM DETAIL BEHIND 36" MOUNTABLE CURB & GUTTER

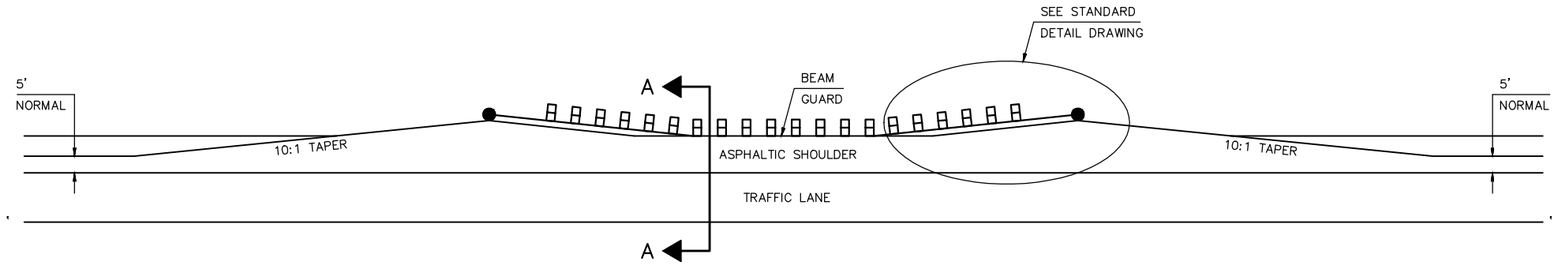



TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE

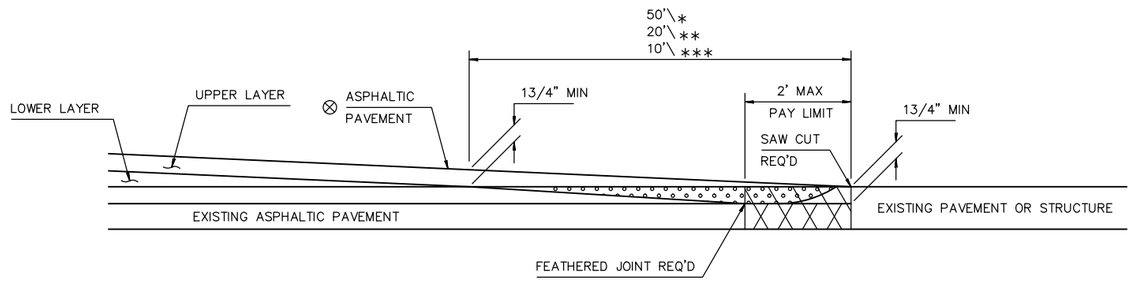
2




SECTION A-A




DETAIL FOR ASPHALTIC SHOULDER AT GUARDRAIL




⊗ SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

REMOVING ASPHALTIC SURFACE, MILLING

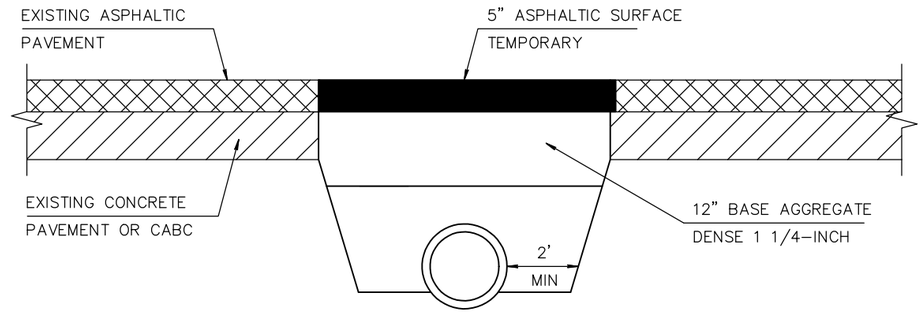
REMOVING ASPHALTIC SURFACE, BUTT JOINTS (FULL DEPTH REMOVAL OPTIONAL)

ASPHALTIC WEDGING (FULL DEPTH REMOVAL OPTION)

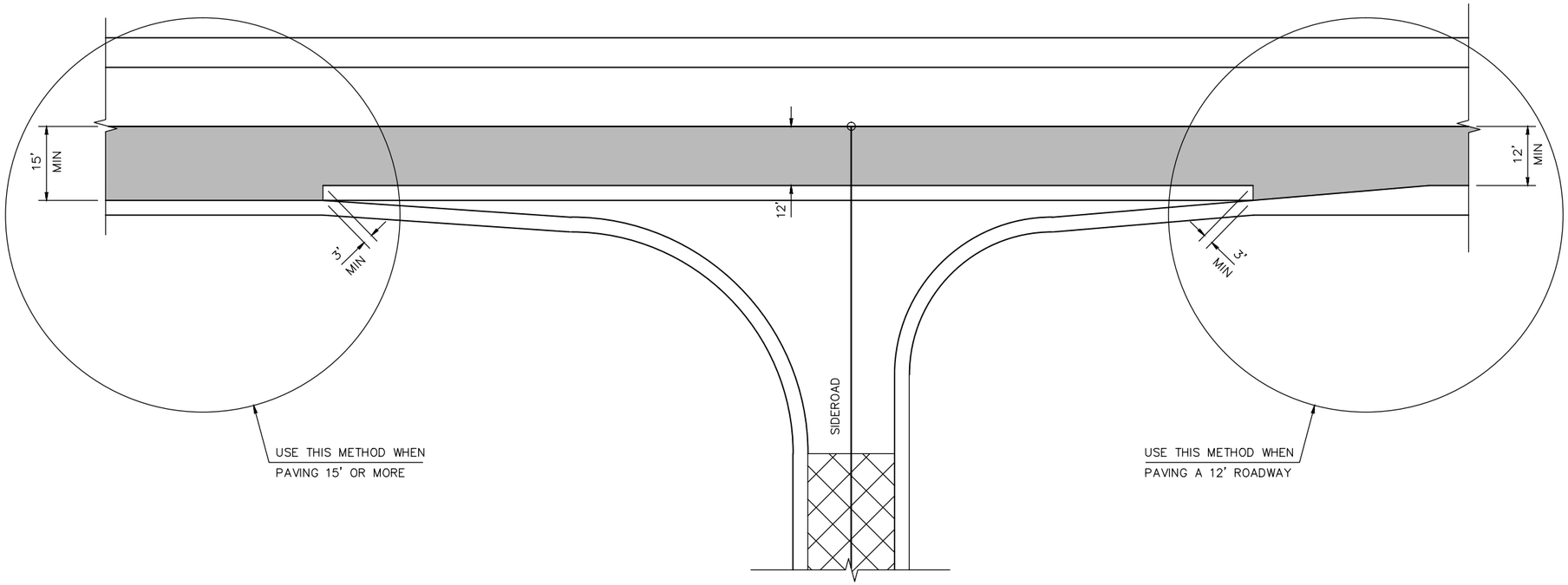
BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES

2

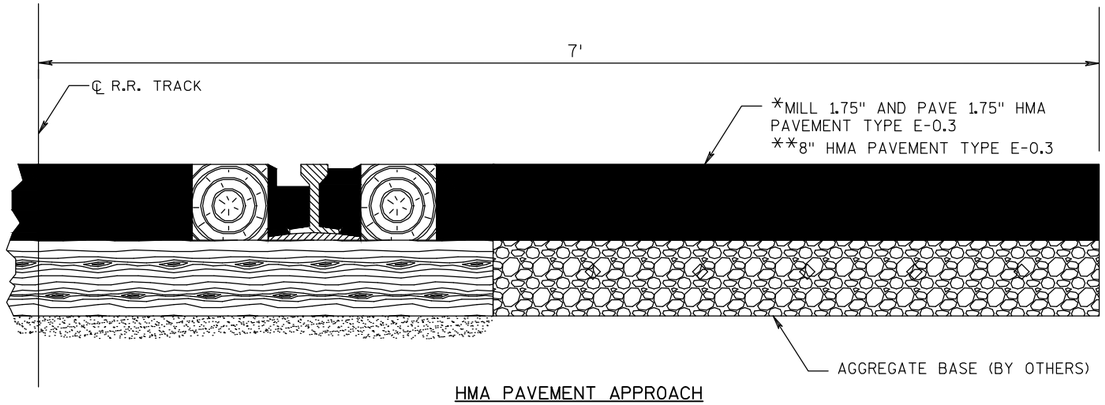



STAGE 2 STORM SEWER LATERAL AND
CULVERT PIPE INSTALLATIONS ALONG WEST SIDE



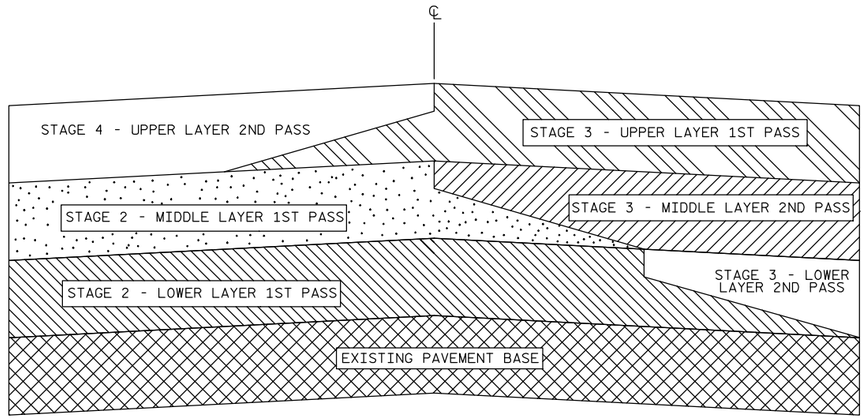

FINAL UPPER LAYER ASPHALTIC CONCRETE PAVING DETAIL AT INTERSECTIONS AND BYPASS LANES

2




HMA PAVEMENT APPROACH

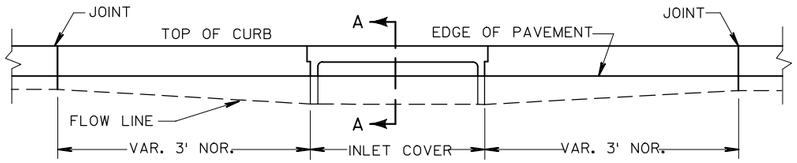
1ST STREET CROSSING *
DIVISION STREET CROSSING **



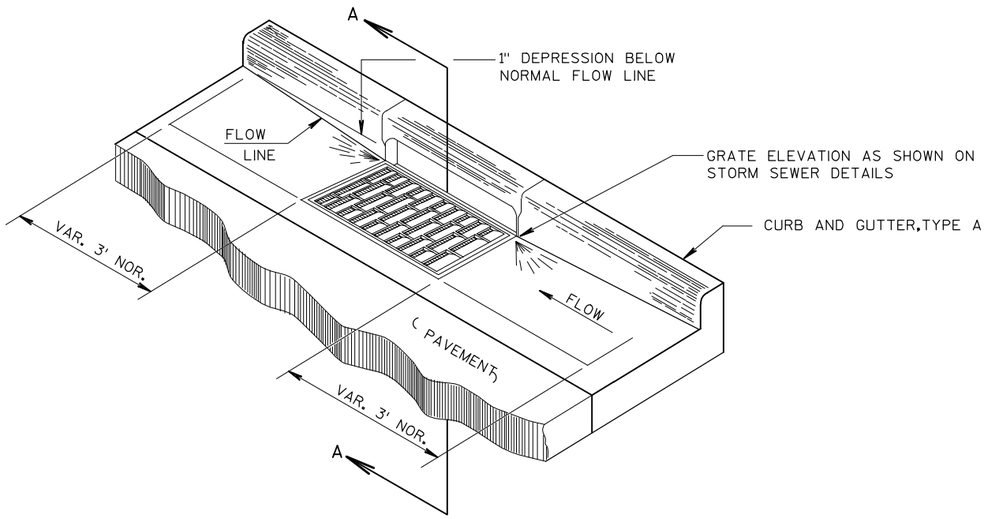

(LOWER AND UPPER LAYERS)

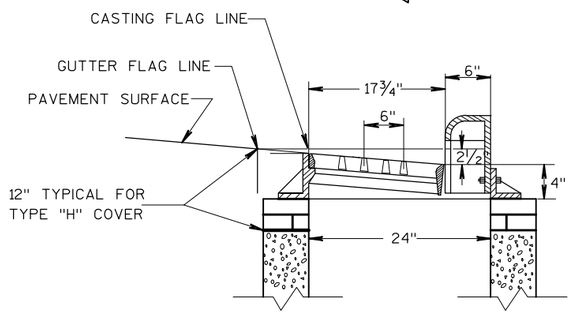
TYPICAL PAVEMENT CROSS SECTIONS OF
TAPERED AND NOTCHED LONGITUDINAL JOINTS

2




ELEVATION

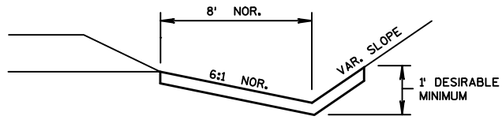


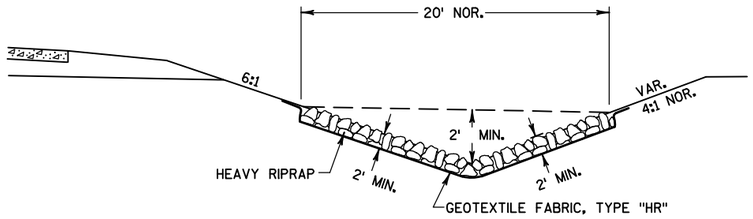

SECTION A-A

## DETAIL OF CURB AND GUTTER AT INLETS

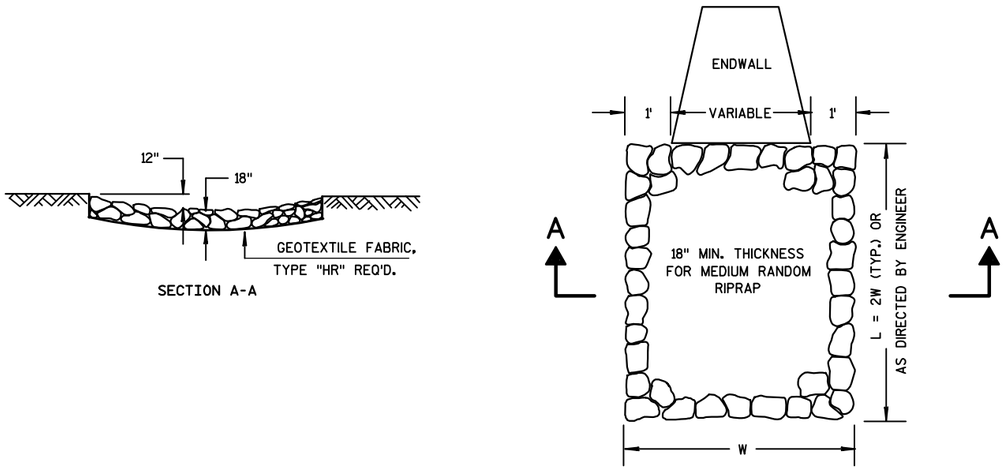
(TYPE 3-H INLET SHOWN)



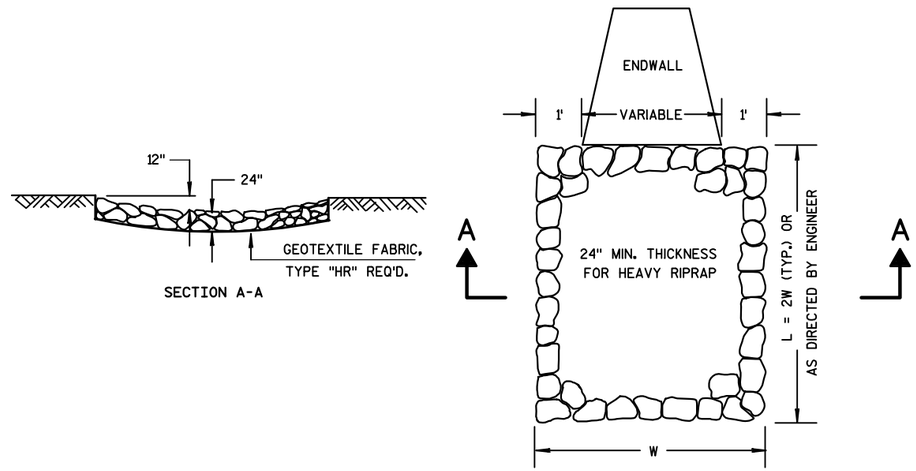

## EROSION MAT DETAIL FOR DITCHES



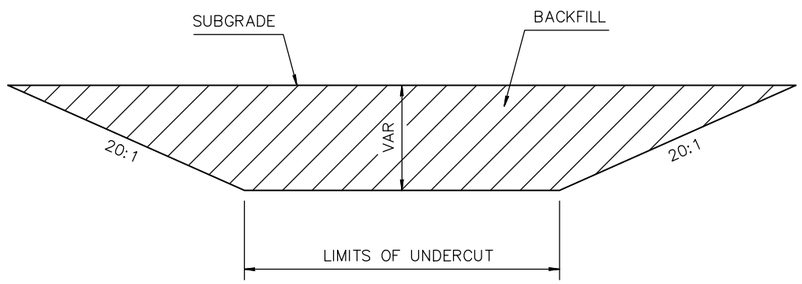

## DETAIL OF HEAVY RIPRAP DITCH



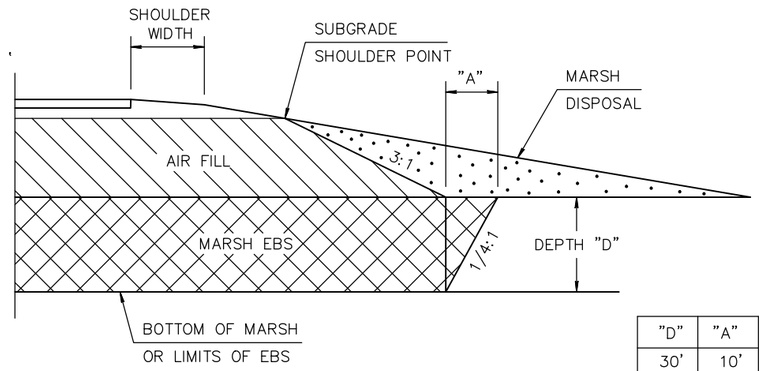

MEDIUM RIPRAP TREATMENT AT CULVERTS




HEAVY RIPRAP TREATMENT AT CULVERTS




LONGITUDINAL SECTION FOR UNDERCUT AREAS (EBS) AND MARSH EXCAVATION

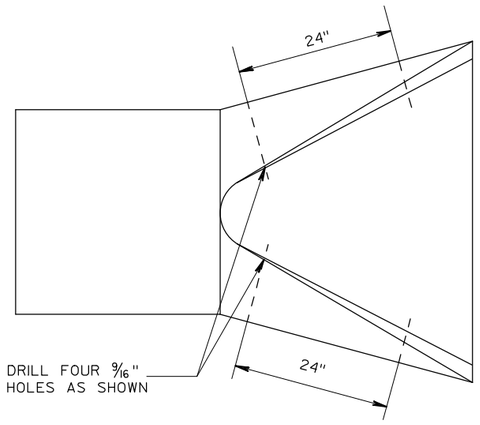


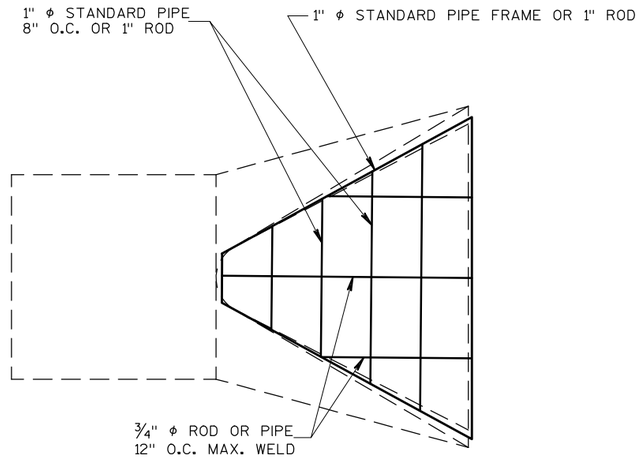

"D" = DEPTH OF MARSH EXCAVATION
"A" = DISTANCE OFFSET OUTSIDE SLOPE INTERCEPT

NOTE: LIMIT OF MARSH EXCAVATION SHOULD EXTEND TO SLOPE INTERCEPT AS A MINIMUM. FOR MARSH DEPTHS GREATER THAN 10-FT SEE TABLE FOR DISTANCE OFFSET.

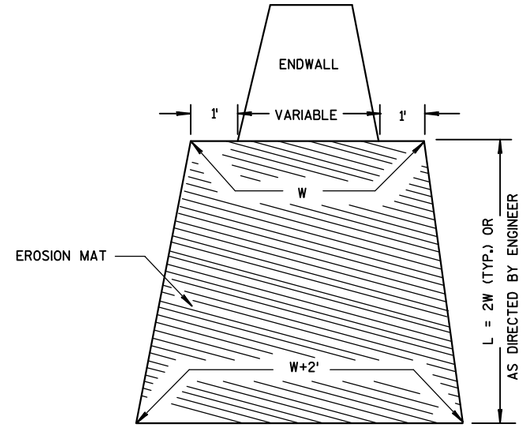
| "D" | "A" |
|---|---|
| 30' | 10' |
| 26' | 8' |
| 22' | 6' |
| 18' | 4' |
| 14' | 2' |
| 10' | 0' |
| <10' | 0' |

TYPICAL MARSH EXCAVATION

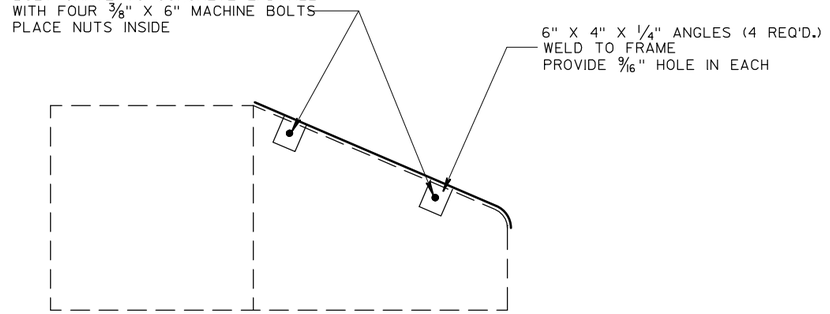


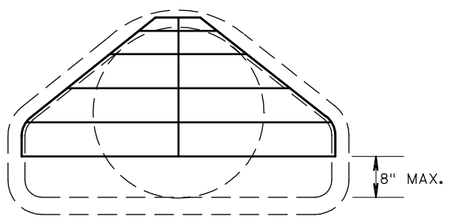




AT EACH PIPE

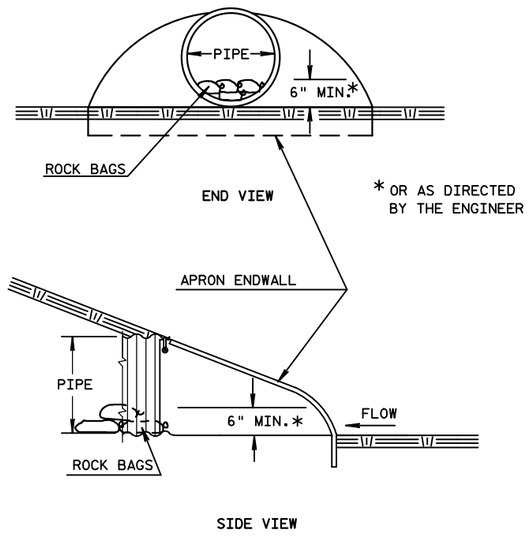



EROSION MAT TREATMENT AT CULVERTS



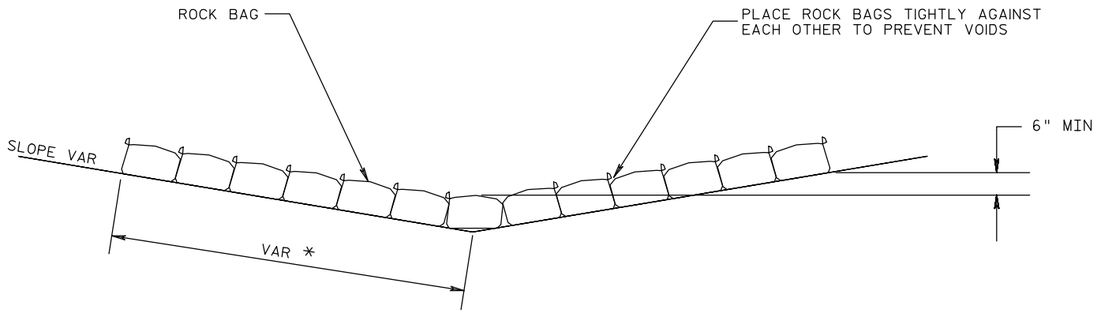




PIPE GRATE DETAIL

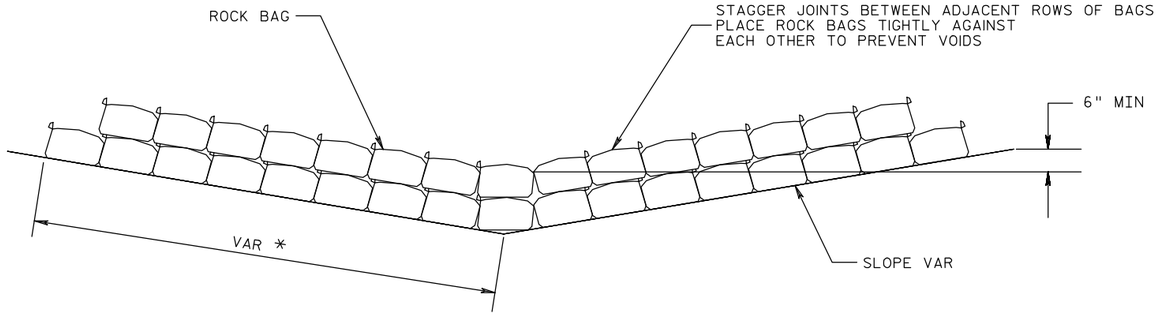



CULVERT PIPE CHECKS

2




SIDE VIEW (SINGLE LAYER)

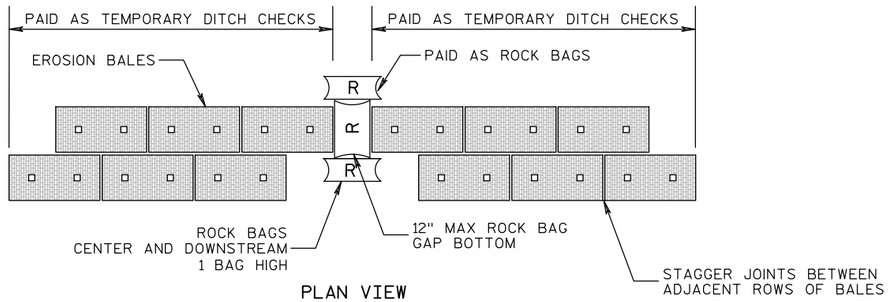



SIDE VIEW (MULTIPLE LAYER)

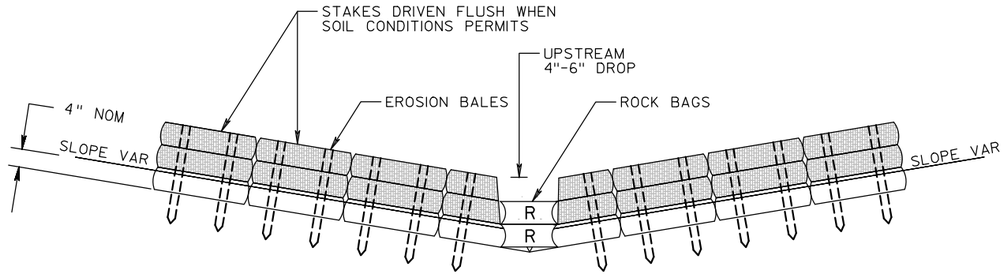
* LENGTH AND NUMBER OF BAGS MAY VARY DEPENDING ON DESIRED DEPTH OF WATER POOL

ROCK BAGS DITCH CHECK

PAID AS ROCK BAGS




PLAN VIEW



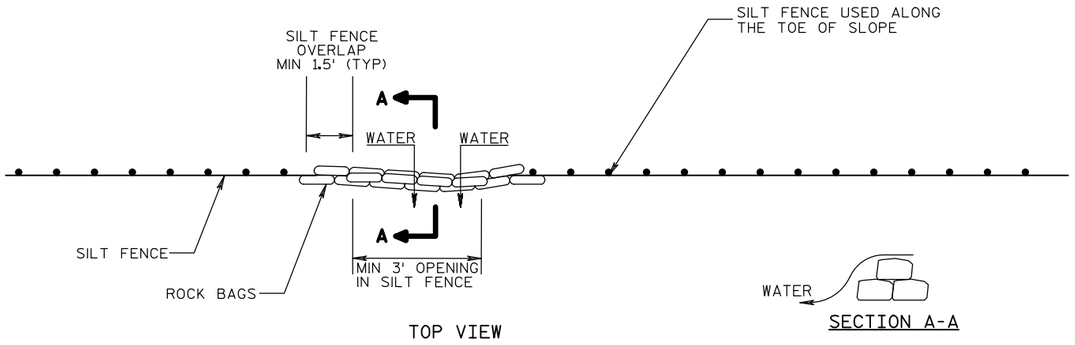

FRONT ELEVATION

STAGGER JOINTS WITH A DOUBLE ROW

GENERAL NOTES

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

TEMPORARY DITCH CHECKS WITH ROCK BAG RELIEF

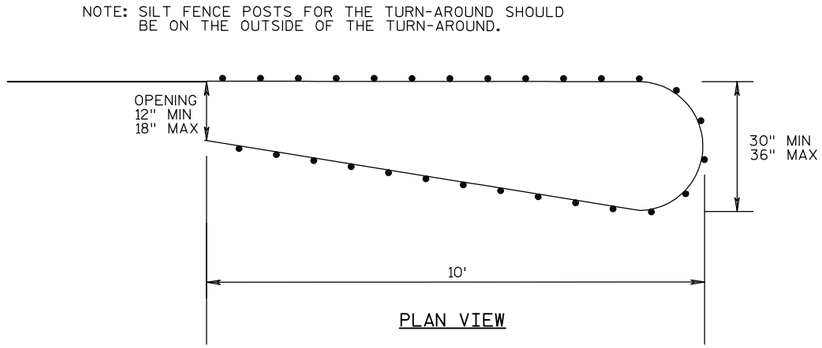



TOP VIEW

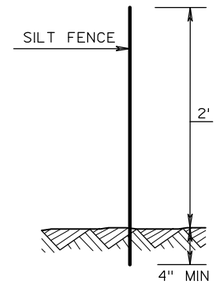
SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

PAID AS ROCK BAGS




PLAN VIEW

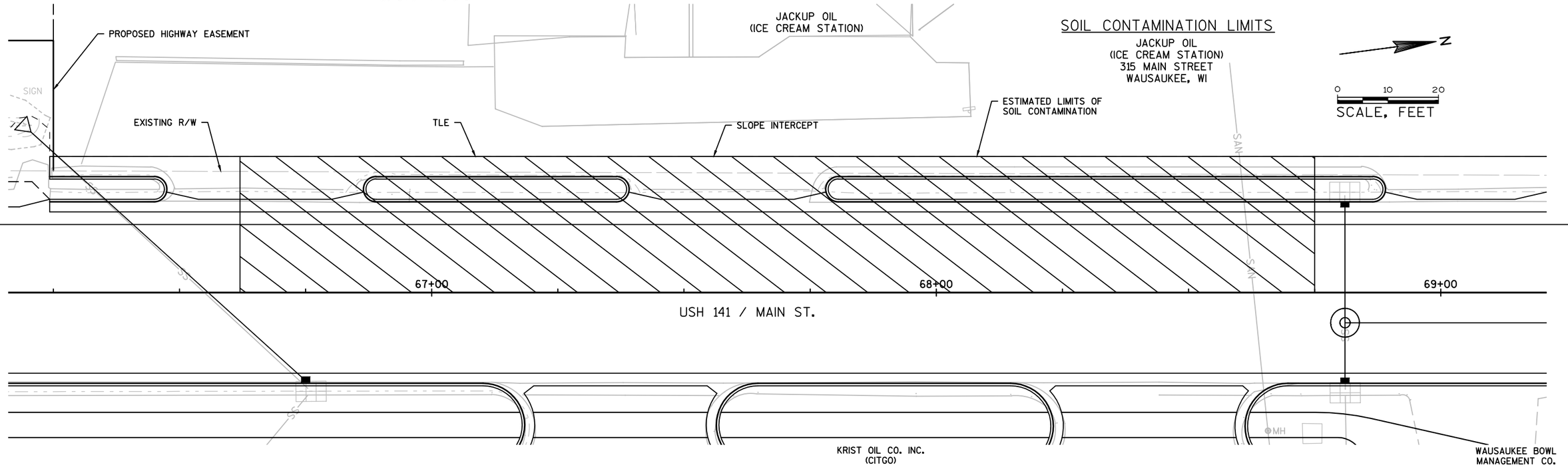


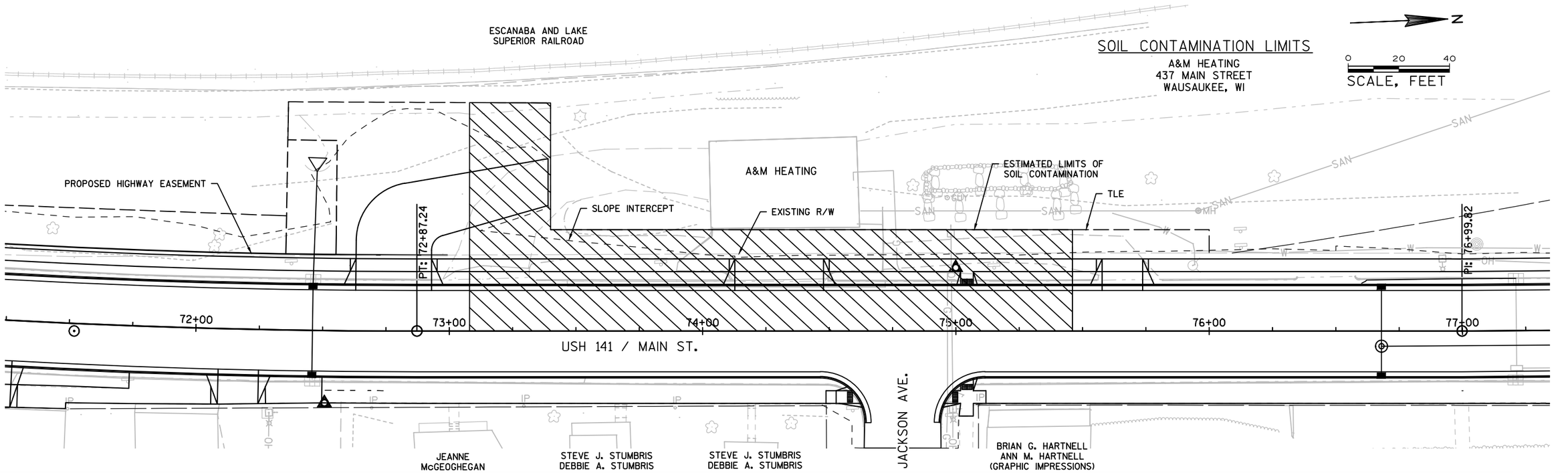

SIDE VIEW

SILT FENCE TURN-AROUND DETAIL

| PROJECT NO:1491-12-71 | HWY: USH 141 | COUNTY:MARINETTE | CONSTRUCTION DETAILS | SHEET 18 E |
|---|---|---|---|---|

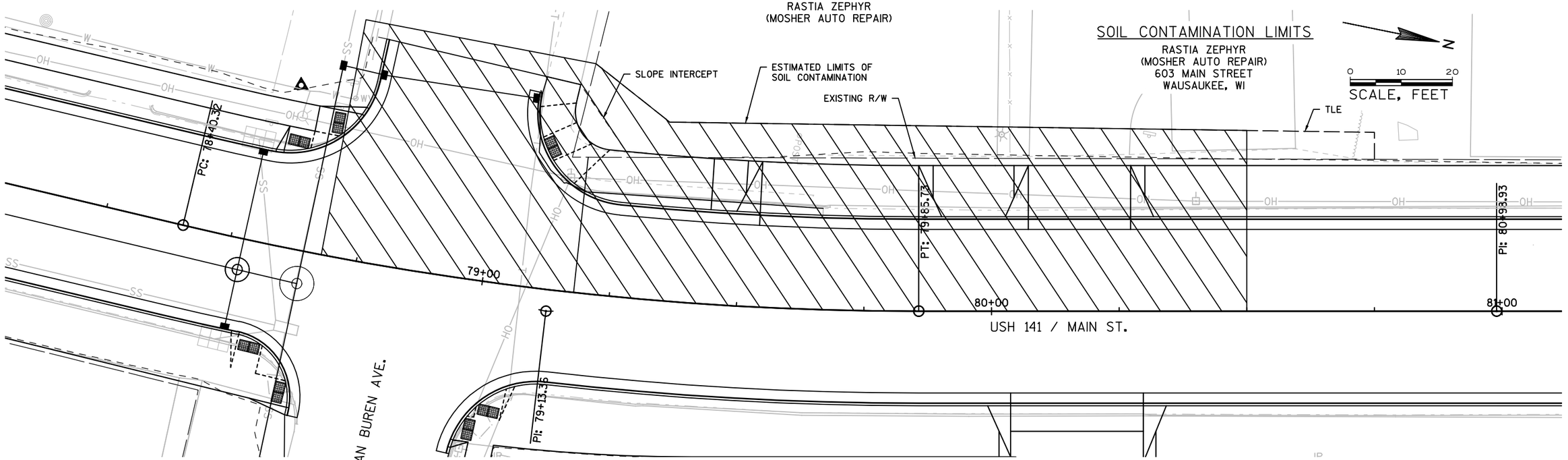
2

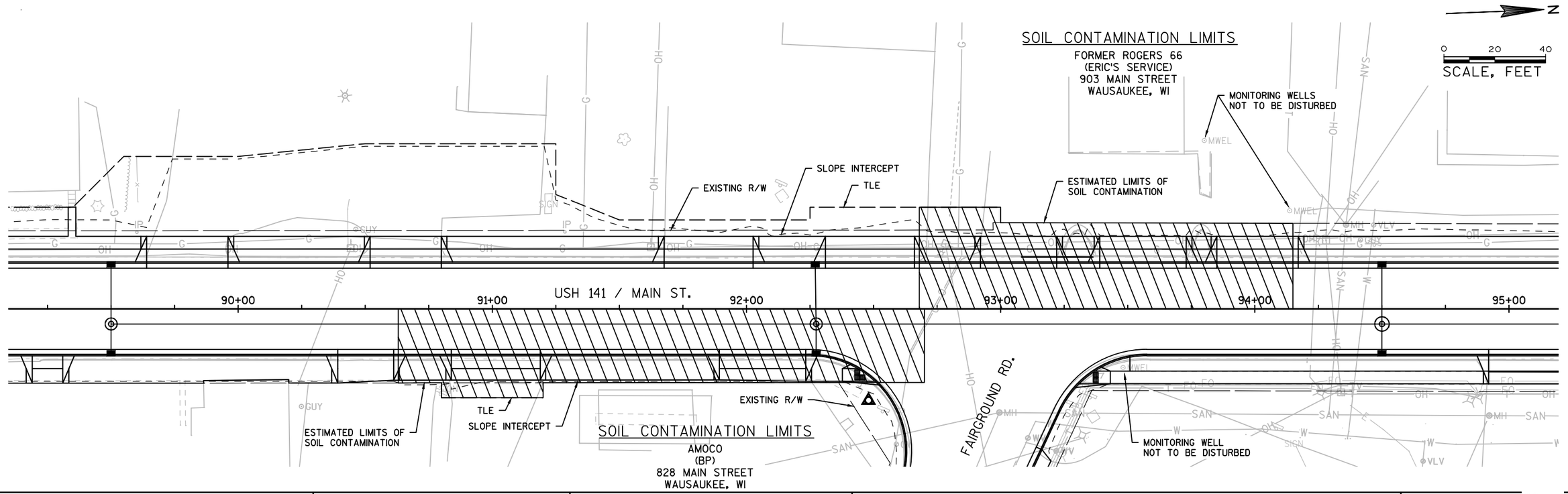



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CONSTRUCTION DETAILS | SHEET 19 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\SHEETSPLAN\021002_CD.DWG PLOT DATE : 8/26/2015 1:55 PM PLOT BY : JEFF GILROY PLOT NAME : ----------
WISDOT/CADDS SHEET 42
DECOR TOOL INC.




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CONSTRUCTION DETAILS | SHEET 20 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\SHEETSPLAN\021002_CD.DWG PLOT DATE : 8/26/2015 1:55 PM PLOT BY : JEFF GILROY PLOT NAME : ----------
WISDOT/CADDS SHEET 42

2

STA. 52+02.27, 65.01' LT
ELEV: 745.69

MATCH EX.
STA. 9+83.48

STA. 52+30.64, 72.21' LT
ELEV: 745.31

STA 51+53.08, 74.00' LT USH 141
STA 9+72.60, 65.00' LT 1ST ST.

STA 52+85.22, 79.00' LT USH 141
STA 9+80.48, 67.00' RT 1ST ST.

EX R/W

R50'

R55'

1ST ST.

H.E.

N

EX R/W

STA. 51+88.57, 37.93' LT
ELEV: 746.91

STA. 52+48.81, 37.78' LT
ELEV: 746.51

STA. 51+53.08, 24.00' LT
ELEV: 748.35

STA. 52+85.22, 24.00' LT
ELEV: 747.70

STA 52+27.13 USH 141=
STA 10+00.00 STH 180

15'

24'

17'

USH 141

51+00 52+00 53+00 54+00 55+00 56+00

STA 52+16.48 USH 141=
STA 9+00.00 1ST ST.

CONCRETE CURB AND GUTTER,
6-INCH SLOPED, 36-INCH TYPE D
(TYP ALL QUAD.)

R40'

R50'

STA. 53+03.04, 24.00' RT
ELEV: 747.36

STA. 51+69.33, 24.00' RT
ELEV: 748.27

STA. 52+65.93, 40.49' RT
ELEV: 747.55

EX R/W

STA. 51+96.14, 34.31' RT
ELEV: 747.87

STA 51+69.33, 64.00' RT USH 141
STA 10+57.80, 64.00' RT STH 180

STH 180

11+00

CURB RAMP
TYPE 4B1

STA 53+03.04, 74.00' RT USH 141
STA 10+81.33, 68.00' LT STH 180

EX R/W

TLE

STA. 52+09.12, 59.94' RT
ELEV: 747.49

STA. 52+53.29, 79.08' RT
ELEV: 747.76

NOTE: STATIONS, OFFSETS AND ELEVATIONS ARE AT THE GUTTER FLANGE UNLESS OTHERWISE NOTED.

MATCH EX.
STA. 11+24.29

N

CONCRETE CURB AND GUTTER,
6-INCH SLOPED, 36-INCH TYPE D
(TYP BOTH QUAD.)

17'

USH 141

57+00 58+00 59+00 60+00 61+00 62+00

STA 60+78.94 USH 141=
STA 20+00.00 KENNY DR.

21'

CURB RAMP
TYPE 4B1
R60'

CURB RAMP
TYPE 4B1
R40'

KENNY DR.

STA. 61+40.27, 21.00' RT
ELEV: 745.76

65.56'

52.5'

STA. 60+11.62, 21.00' RT
ELEV: 745.87

STA. 61+04.99, 42.15' RT
ELEV: 745.48

15'

10'

STA 61+40.27, 61.00' RT USH 141
STA 20+66.77, 55.00' LT KENNY DR.

STA. 60+58.20, 43.19' RT
ELEV: 745.49

TLE

EX R/W

EX R/W

TLE

STA 60+11.62, 81.00' RT USH 141
STA 20+73.94, 75.00' RT KENNY DR.

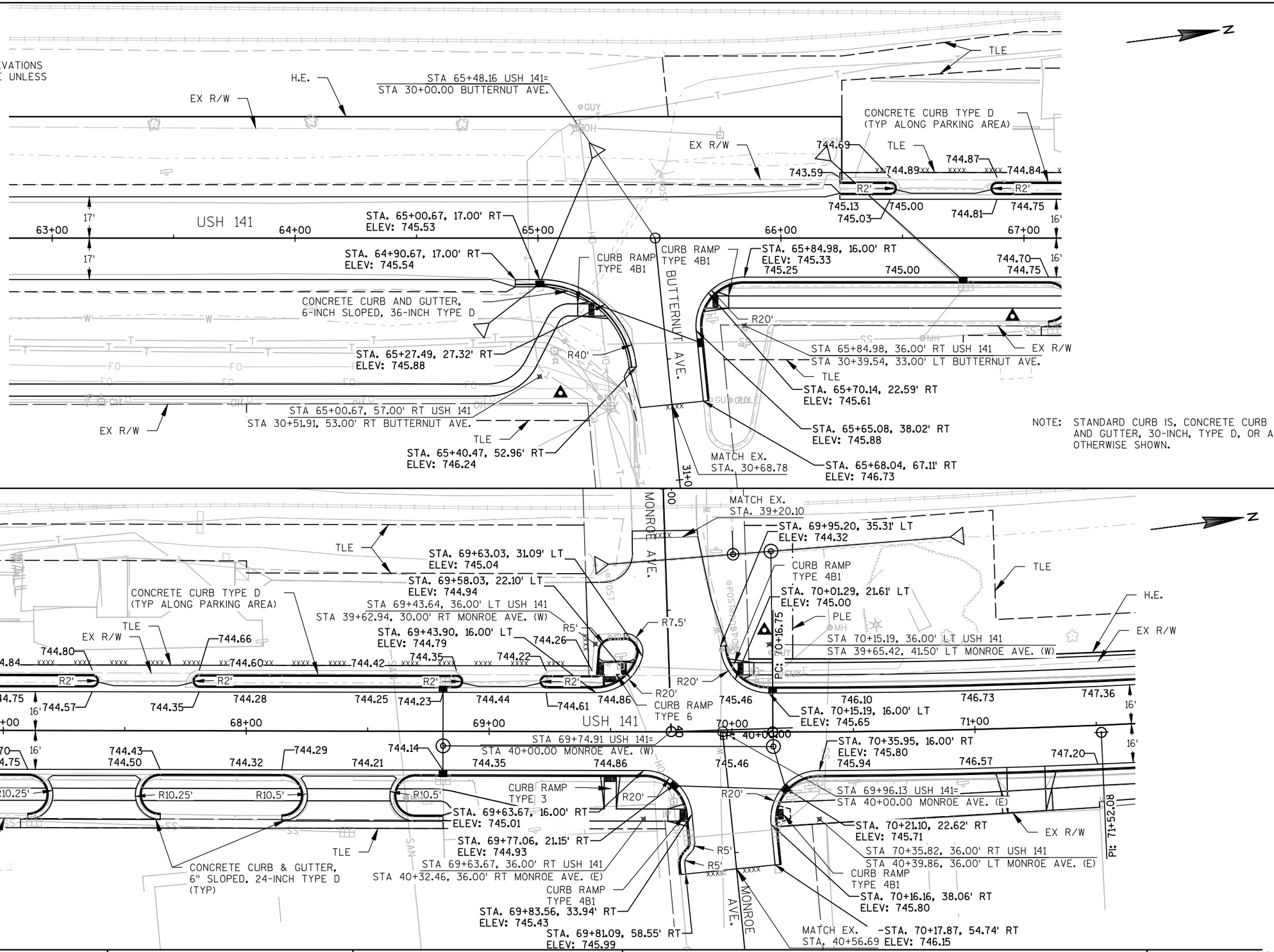
STA. 60+71.32, 75.07' RT
ELEV: 745.67

STA. 61+00.47, 64.96' RT
ELEV: 745.60

MATCH EX.
STA. 20+93.27

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN DETAILS - PAVING GRADES & INTERSECTION DETAILS | SHEET 21 E |
|---|---|---|---|---|

NOTE: STATIONS, OFFSETS AND ELEVATIONS ARE AT THE GUTTER FLANGE UNLESS OTHERWISE NOTED.




NOTE: STANDARD CURB IS, CONCRETE CURB AND GUTTER, 30-INCH, TYPE D, OR AS OTHERWISE SHOWN.

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN DETAILS - PAVING GRADES & INTERSECTION DETAILS | SHEET 22 E |
|---|---|---|---|---|

NOTE: STATIONS, OFFSETS AND ELEVATIONS ARE AT THE GUTTER FLANGE UNLESS OTHERWISE NOTED.

PLE
TLE
TLE
R23'
748.43
745.95
746.32
748.84
748.63
H.E.
PI: 72+87.24
R6'
EX R/W
STA 74+79.14 USH 141=
STA 50+00.00 JACKSON AVE.
EX R/W
PI: 76+99.82
N
747.36 748.00 748.63 749.26 749.70 749.95 750.14 749.88 749.12 747.85 746.08 743.86
16' 72+00 73+00 74+00 USH 141 75+00 76+00 77+00 16'
CURB RAMP TYPE 7
747.20 747.84 748.63 749.26 749.70 749.87 750.06 749.88 749.12 747.77 746.00 743.78
CURB RAMP TYPE 4B1
CURB RAMP TYPE 2
PI: 71+52.08
EX R/W
R20'
R20'
STA. 74+46.51, 16.00' RT
ELEV: 750.05
STA 74+46.51, 36.00' RT USH 141
STA 50+36.12, 32.50' RT JACKSON AVE.
STA. 74+60.68, 21.88' RT
ELEV: 750.29
STA. 74+66.51, 36.07' RT
ELEV: 750.52
MATCH EX.
STA. 50+46.12
JACKSON AVE.
STA. 75+11.51, 16.00' RT
ELEV: 749.75
STA 75+11.51, 36.00' RT USH 141
STA 50+35.88, 32.50' LT JACKSON AVE.
STA. 74+97.40, 21.83' RT
ELEV: 750.02
STA. 74+91.51, 35.93' RT
ELEV: 750.28
EX R/W

STA 69+6
N
STA. 78+75.90, 43.72' LT
ELEV: 736.10
STA. 78+75.41, 35.26' LT
ELEV: 736.02
STA. 78+68.71, 21.55' LT
ELEV: 736.26
STA 78+54.21, 36.00' LT USH 141
STA 59+65.42, 32.00' RT VAN BUREN AVE. (W)
STA. 78+54.21, 16.00' LT
ELEV: 736.83
VAN BUREN AVE.
MATCH EX.
STA. 59+56.95
STA. 79+04.44, 38.35' LT
ELEV: 735.58
STA. 79+09.93, 22.65' LT
ELEV: 734.98
STA 79+25.56, 36.00' LT USH 141
STA 59+60.23, 35.00' LT VAN BUREN AVE. (W)
STA. 79+25.56, 16.00' LT
ELEV: 734.39
PLE
TLE
EX R/W
PI: 76+99.82
PC: 78+40.32
PT: 79+85.73
PI: 80+98.93
PC: 82+20.95
743.86 741.58 739.29 737.02 735.12 733.94 733.30 733.06 732.87 732.83 733.00 733.31 733.75
16' 77+00 78+00 79+00 80+00 USH 141 81+00 82+00 83+00 16'
743.78 741.58 739.29 737.02 735.12 733.85 733.22 732.90 732.79 732.83 732.92 733.23 733.67
CURB RAMP TYPE 2
CURB RAMP TYPE 1-A
CURB RAMP TYPE 2
R20'
R15'
R20'
EX R/W
TLE
STA. 78+55.02, 16.00' RT
ELEV: 736.80
STA 78+55.02, 31.00' RT USH 141
STA 60+32.12, 29.00' RT VAN BUREN AVE. (E)
CURB RAMP TYPE 2
STA. 78+65.36, 20.56' RT
ELEV: 736.18
STA. 78+69.30, 31.39' RT
ELEV: 735.56
PI: 79+13.36
VAN BUREN AVE.
MATCH EX.
STA. 60+43.73
STA. 79+14.66, 16.00' RT
ELEV: 734.68
STA. 79+01.75, 21.24' RT
ELEV: 734.95
STA 79+14.66, 36.00' RT USH 141
STA 60+33.19, 34.00' LT VAN BUREN AVE. (E)
STA. 78+95.81, 34.10' RT
ELEV: 734.69
EX R/W
PI: 82+83.76

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN DETAILS - PAVING GRADES & INTERSECTION DETAILS | SHEET 23 E |
|---|---|---|---|---|

STA. 84+27.96, 35.99' LT
ELEV: 735.27

STA. 84+22.10, 21.86' LT
ELEV: 735.04

STA 84+07.96, 36.00' LT USH 141
STA 69+64.01, 32.50' RT HARRISON AVE.

STA. 84+07.96, 16.00' LT
ELEV: 734.82

TLE

EX R/W

PT: 83+46.12

R20'

733.75 734.29 734.74

16'

83+00

16'

733.67 734.13 734.58

EX R/W

STA. 84+12.57, 16.00' RT
ELEV: 734.74

STA 84+12.57, 31.00' RT USH 141
STA 70+30.89, 28.00' RT HARRISON AVE.

CURB RAMP
TYPE 2

STA. 84+23.16, 20.37' RT
ELEV: 734.80

STA. 84+27.57, 30.94' RT
ELEV: 734.65

HARRISON AVE.

MATCH EX.
STA. 69+53.99

STA. 84+52.96, 36.01' LT
ELEV: 735.76

STA. 84+58.82, 21.86' LT
ELEV: 735.59

STA 84+72.96, 36.00' LT USH 141
STA 69+63.99, 32.50' LT HARRISON AVE.

STA. 84+72.96, 16.00' LT
ELEV: 735.41

R20'

735.20

CURB RAMP
TYPE 2

84+00

STA 84+40.45 USH 141=
STA 70+00.00 HARRISON AVE.

R15'

735.20

STA. 84+68.57, 16.00' RT
ELEV: 735.37

735.66 735.95

TLE

STA 84+68.57, 31.00' RT USH 141
STA 70+31.11, 28.00' LT HARRISON AVE.

CURB RAMP
TYPE 2

STA. 84+57.94, 20.41' RT
ELEV: 735.29

STA. 84+53.57, 31.06' RT
ELEV: 735.22

MATCH EX.
STA. 70+41.67

HARRISON AVE.

85+00

735.66 736.11 736.38 736.64

TLE

EX R/W

USH 141

86+00

736.38 736.64 736.71

TLE

EX R/W

87+00

736.71 736.74

STA. 87+81.43, 36.00' LT
ELEV: 737.16

CURB RAMP
TYPE 4B1

STA 87+61.43, 36.00' LT USH 141
STA 79+64.00, 36.00' RT TYLER AVE.

STA. 87+61.43, 16.00' LT
ELEV: 736.68

TLE

R20'

736.74

STA. 87+75.57, 21.86' LT
ELEV: 736.92

88+00

736.41 736.41

TLE

STA 87+97.42 USH 141=
STA 80+00.00 TYLER AVE.

TYLER AVE.

MATCH EX.
STA. 79+54.00

STA. 88+13.43, 36.00' LT
ELEV: 737.19

STA. 88+19.28, 21.86' LT
ELEV: 736.64

STA 88+33.43, 36.00' LT USH 141
STA 79+64.00, 36.00' LT TYLER AVE

CURB RAMP
TYPE 1

R20'

735.89 735.17

CONCRETE
CURB
PEDESTRIAN

16'

89+00

STA. 88+33.43, 16.00' LT
ELEV: 736.08

735.89 735.17

CURB RAMP
TYPE 3

NOTE: STATIONS, OFFSETS AND ELEVATIONS ARE AT THE GUTTER FLANGE UNLESS OTHERWISE NOTED.

TLE

STA 93+17.39 USH 141=
STA 90+00.00 FAIRGROUND RD.

EX R/W

735.17 734.29 733.37 732.46 731.56 730.74 730.02 729.39 728.86 728.42 728.08 727.81 727.56

16'

89+00 90+00 91+00 92+00 93+00 94+00 95+00

USH 141

EX R/W

TLE

STA. 92+25.01, 16.00' RT
ELEV: 729.69

CURB RAMP
TYPE 4B1

STA. 92+58.75, 34.52' RT
ELEV: 729.04

R40'

STA 92+26.28, 56.35' RT USH 141
STA 90+89.62, 58.70' RT FAIRGROUND RD.

STA. 92+61.25, 72.93' RT
ELEV: 728.38

STA. 92+50.77, 95.35' RT
ELEV: 728.22

MATCH EX.
STA. 91+14.59

FAIRGROUNDS RD.

90+16

CURB RAMP
TYPE 4B1

STA. 93+57.45, 16.00' RT
ELEV: 728.36

EX R/W

R40'

STA. 93+35.97, 22.26' RT
ELEV: 728.50

STA 93+57.45, 56.00' RT USH 141
STA 90+33.78, 60.00' LT FAIRGROUND RD.

STA. 93+21.21, 39.07' RT
ELEV: 728.65

STA. 92+87.01, 112.28' RT
ELEV: 728.25

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN DETAILS - PAVING GRADES & INTERSECTION DETAILS | SHEET 24 E |
|---|---|---|---|---|

2

TLE

EX R/W

727.56 | 727.31 | 727.06 | 726.92 | 726.98 | 727.25 | 727.72 | 728.41 | 729.30 | 730.40

95+00 | 96+00 | 97+00 | USH 141 | 98+00 | 99+00

727.56 | 727.31 | 727.06 | 726.92 | 726.98 | 727.25 | 727.72 | 728.41 | 729.30 | 730.40

EX R/W

NOTE: STATIONS, OFFSETS AND ELEVATIONS ARE AT THE GUTTER FLANGE UNLESS OTHERWISE NOTED.

WAUSAUKEE RIVER

STA. 103+45.80, 136.26' LT
ELEV: 745.53

STA. 103+44.70, 117.56' LT
ELEV: 744.70

STA. 103+34.84, 94.44' LT
ELEV: 743.47

STA. 103+26.13, 70.88' LT
ELEV: 742.40

R515'

MATCH EX.
STA. 18+45.49

EX R/W

STA. 103+73.98, 109.41' LT
ELEV: 745.04

STA 102+64.59, 76.00' LT USH 141
STA 19+45.43, 75.00' RT CTH C

EX R/W

STA 104+28.34, 84.00' LT USH 141
STA 18+76.55, 75.00' LT CTH C

CTH C

19+00

STA. 103+21.20, 56.49' LT
ELEV: 741.82

STA. 103+77.72, 51.79' LT
ELEV: 743.31

STA. 102+99.43, 27.15' LT
ELEV: 740.49

R60'

R60'

CURB RAMP
TYPE 4B1

STA. 104+28.34, 24.00' LT
ELEV: 743.62

STA. 102+64.59, 16.00' LT
ELEV: 739.16

CURB RAMP
TYPE 4B1

PI: 103+00.03

STRUCTURE B-33-138

CURB RAMP
TYPE 3

STA 103+17.71 USH 141=
STA 20+00.00 CTH C

744.23 | 745.64

730.40 | 731.70 | 732.40 | 735.26 | 735.93 | 737.34 | 738.75 | 740.16 | 741.57 | 742.98 | 24'

100+00 | 101+00 | 102+00 | USH 141 | 103+00 | 104+00 | 105+00

731.98 | 730.40 | 731.70 | 734.84 | 735.93 | 737.34 | 738.75 | 740.16 | 741.57 | 742.98 | 744.39 | 745.80

CURB RAMP
TYPE 4B1

STA. 102+14.02, 16.00' RT
ELEV: 737.73

CURB RAMP
TYPE 3

R55'

R50'

STA. 103+49.81, 16.00' RT
ELEV: 741.56

STA. 102+54.22, 33.46' RT
ELEV: 739.36

STA. 103+12.39, 32.84' RT
ELEV: 740.51

STA 102+89.04 USH 141=
STA 10+00.00 BEACH AVE.

STA 103+49.81, 66.00' RT USH 141
STA 10+61.82, 65.00' LT BEACH AVE.

EX R/W

STA 102+14.02, 71.00' RT USH 141
STA 10+75.95, 70.00' RT BEACH AVE.

STA. 102+68.90, 74.75' RT
ELEV: 743.56

STA. 102+99.79, 62.70' RT
ELEV: 742.36

WAUSAUKEE RIVER

BEACH AVE.

11+00

EX R/W

MATCH EX.
STA. 11+21.82

NOTE: STANDARD CURB IS, CONCRETE CURB AND GUTTER, 30-INCH, TYPE D, OR AS OTHERWISE SHOWN.

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN DETAILS - PAVING GRADES & INTERSECTION DETAILS | SHEET 25 E |
|---|---|---|---|---|

NOTE: STATIONS, OFFSETS AND ELEVATIONS ARE AT THE GUTTER FLANGE UNLESS OTHERWISE NOTED.

STA. 108+38.51, 143.71' RT
ELEV: 753.71

MATCH EX.
STA. 28+23.36

28+00

NORTH AVE.

STA. 108+61.54, 137.83' RT
ELEV: 753.80

TLE

STA 107+27.71, 91.00' LT USH 141
STA 29+41.40, 90.00' RT NORTH AVE. (W)

EX R/W

STA. 108+43.22, 90.57' LT
ELEV: 753.35

EX R/W

29+00

STA. 107+95.76, 59.48' LT
ELEV: 753.09

STA 108+90.86, 68.50' LT USH 141
STA 28+93.24, 67.50' LT NORTH AVE. (W)

105+68.43, -16.00' L

105+28.34, -24.00' L

R75'

STA. 107+68.08, 27.80' LT
ELEV: 752.54

STA. 108+46.62, 40.24' LT
ELEV: 753.30

CURB RAMP
TYPE 3

STA. 107+27.71, 16.00' LT
ELEV: 751.99

R52.5'

STA. 108+90.86, 16.00' LT
ELEV: 754.35

CURB RAMP
TYPE 4B1

CURB RAMP
TYPE 4B1

24'

745.64 746.43 747.13 747.72 748.61 750.02 751.33 752.42 753.30 753.97 754.42 754.67 754.70

16'

105+00 106+00 107+00 108+00 109+00 110+00

STA 107+84.74 USH 141=
STA 30+00.00 NORTH AVE. (W)

STA 107+71.11 USH 141=
STA 30+00.00 NORTH AVE. (E)

USH 141

16'

745.80 747.20 748.61 750.02 751.33 752.42 753.30 753.97 754.42 754.67 754.70

20'

CURB RAMP
TYPE 2

STA. 106+68.90, 16.00' RT
ELEV: 750.54

STA. 108+30.30, 21.00' RT
ELEV: 753.63

STA. 108+16.25, 21.00' RT
ELEV: 753.44

STA. 107+11.04, 39.08' RT
ELEV: 751.52

STA. 107+83.94, 30.44' RT
ELEV: 752.76

STA 106+68.90, 66.00' RT USH 141
STA 31+02.85, 65.00' RT NORTH AVE. (E)

31+00

NORTH AVE.

STA. 107+14.27, 87.02' RT
ELEV: 752.50

STA 108+16.25, 81.00' RT USH 141
STA 30+54.53, 75.00' LT NORTH AVE. (E)

TLE

EX R/W

STA. 107+61.80, 55.78' RT
ELEV: 752.27

CONCRETE CURB AND GUTTER,
6-INCH SLOPED, 36-INCH TYPE D.

EX R/W

STA. 107+02.84, 119.96' RT
ELEV: 752.98

MATCH EX.
STA. 31+37.54

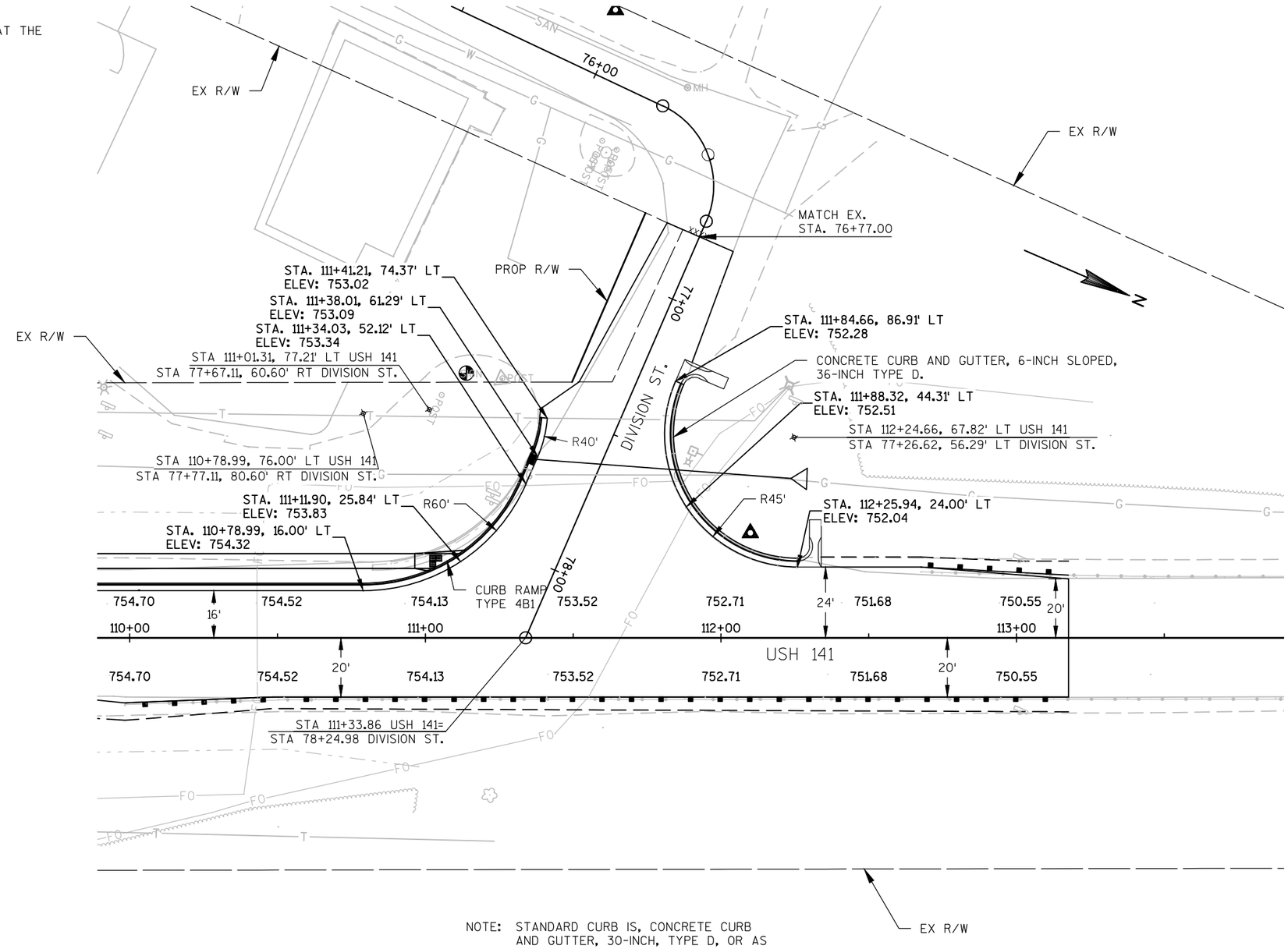
STA. 107+36.25, 99.05' RT
ELEV: 752.61

32+00

NOTE: STANDARD CURB IS, CONCRETE CURB AND GUTTER, 30-INCH, TYPE D, OR AS OTHERWISE SHOWN.

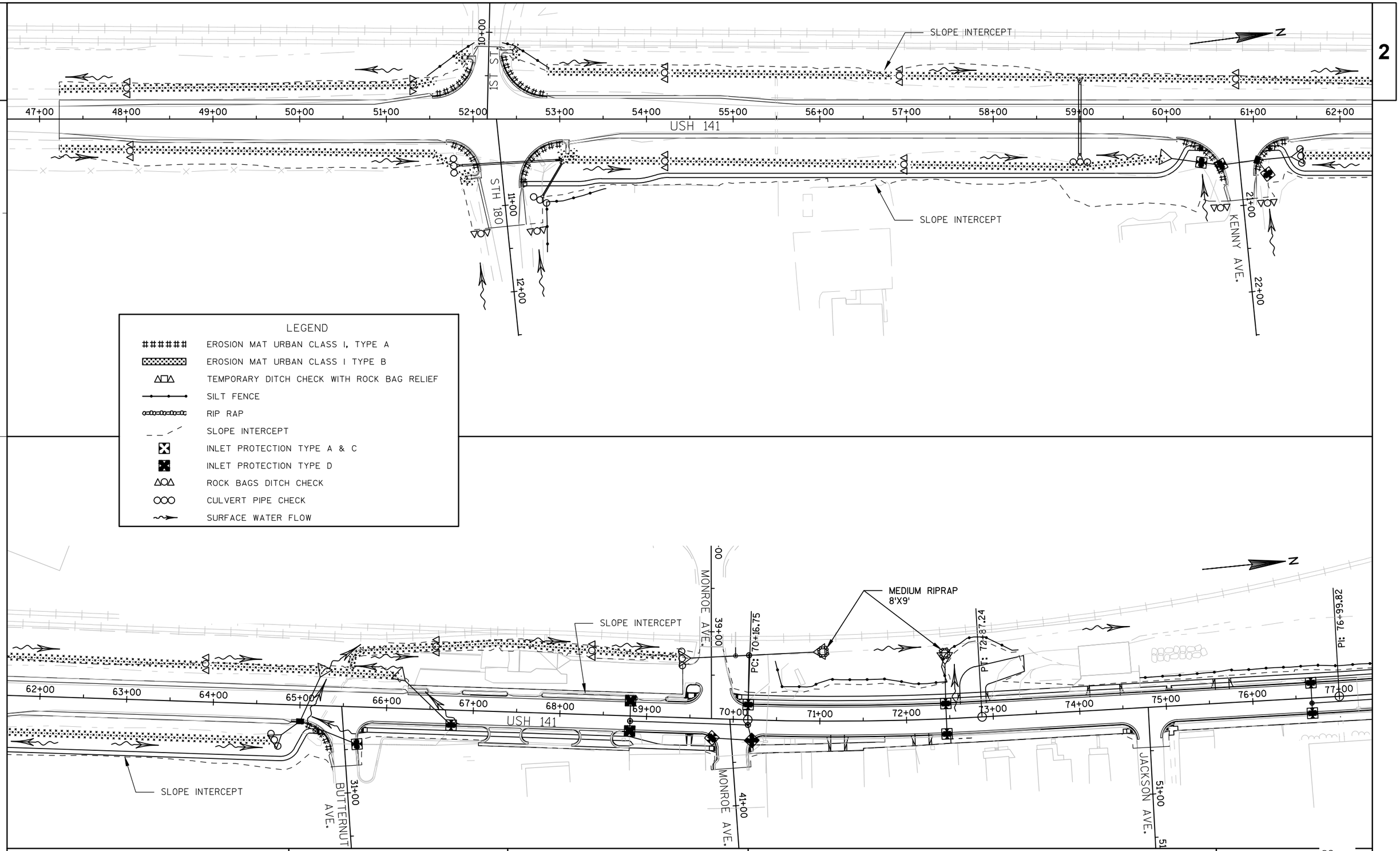
| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN DETAILS - PAVING GRADES & INTERSECTION DETAILS | SHEET 26 E |
|---|---|---|---|---|

NOTE: STATIONS, OFFSETS AND ELEVATIONS ARE AT THE GUTTER FLANGE UNLESS OTHERWISE NOTED.

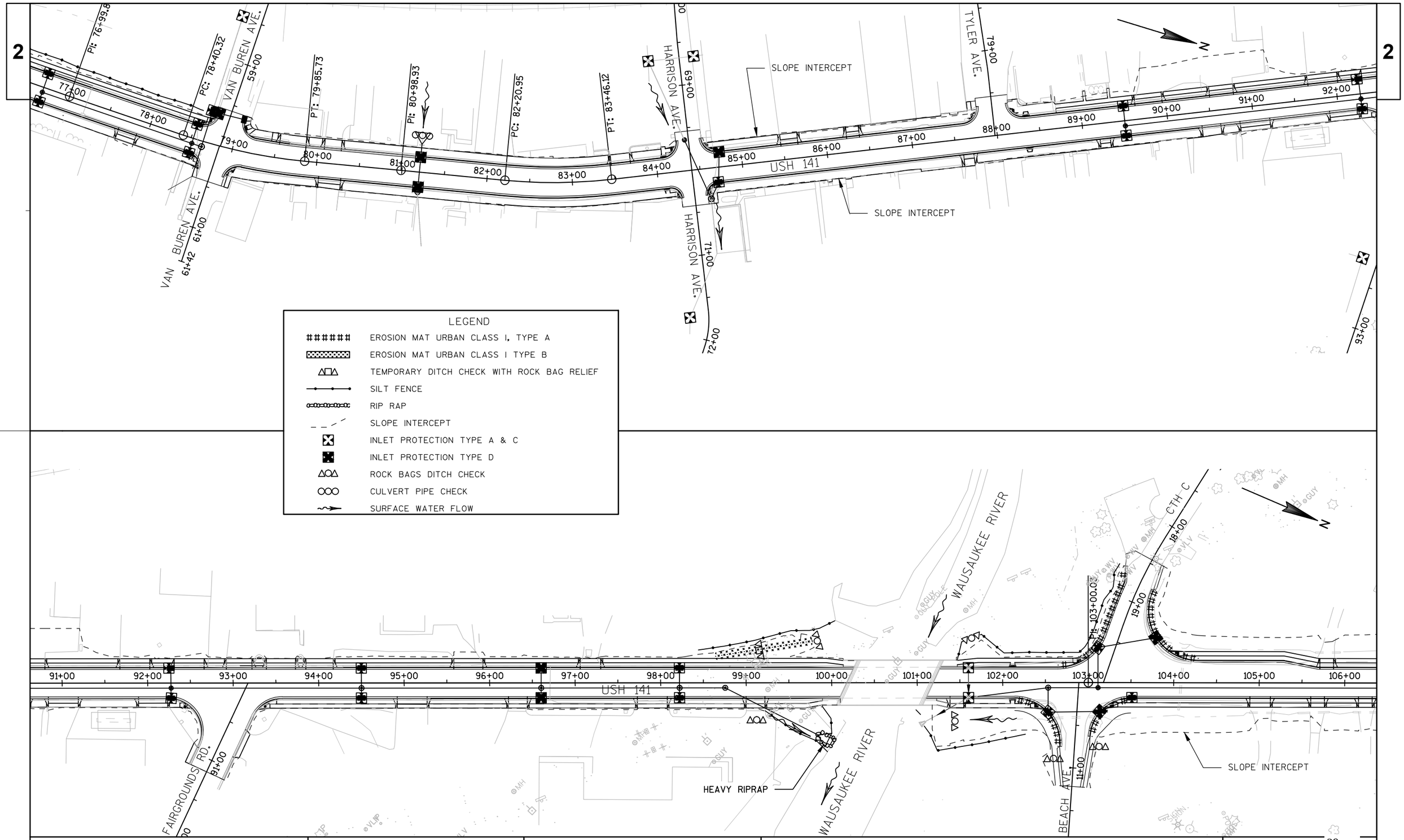



NOTE: STANDARD CURB IS, CONCRETE CURB AND GUTTER, 30-INCH, TYPE D, OR AS OTHERWISE SHOWN.

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN DETAILS - PAVING GRADES & INTERSECTION DETAILS | SHEET 27 E |
|---|---|---|---|---|




| PROJECT NO: 1492-12-71 | HWY: USH 141 | COUNTY: MARINETTE | EROSION CONTROL & LANDSCAPING PLAN | SHEET 28 E |
|---|---|---|---|---|

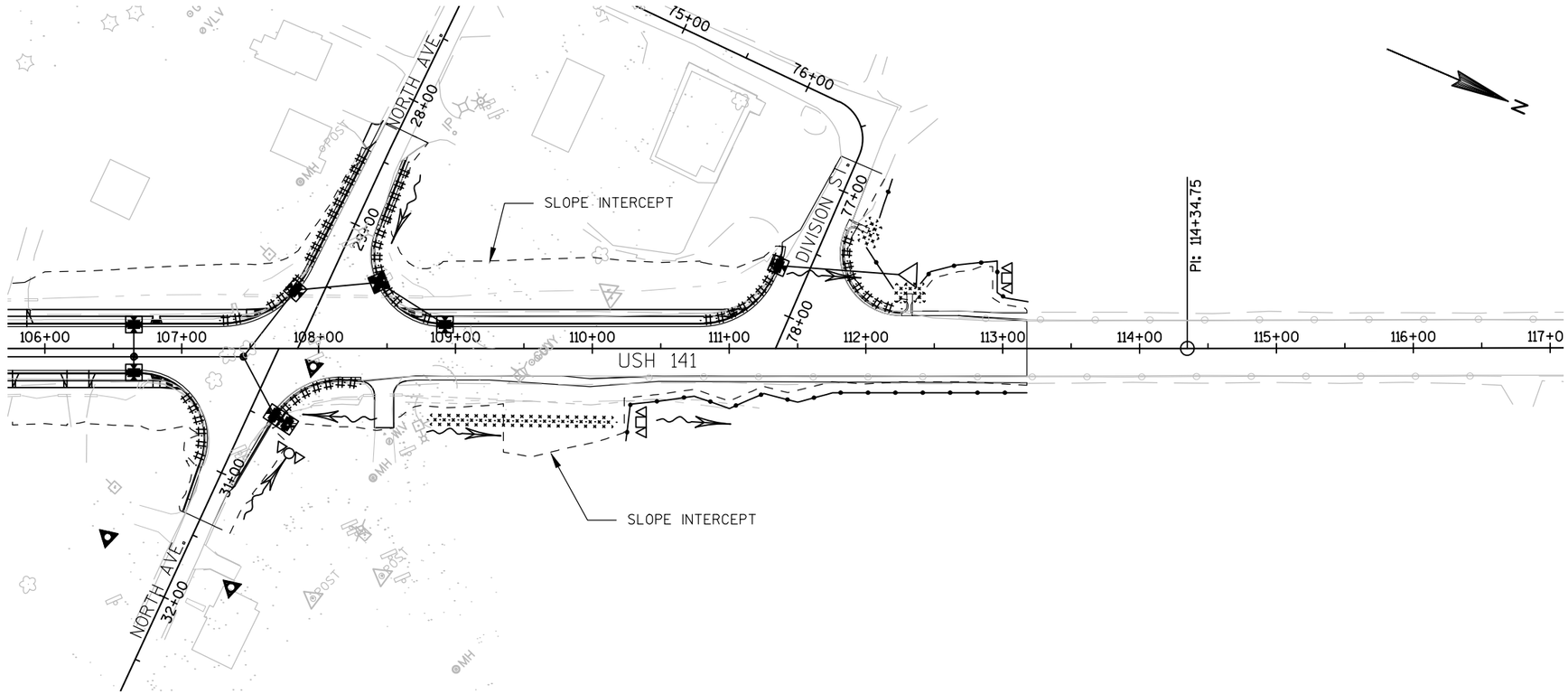



| PROJECT NO: 1492-12-71 | HWY: USH 141 | COUNTY: MARINETTE | EROSION CONTROL & LANDSCAPING PLAN | SHEET 29 E |
|---|---|---|---|---|

2

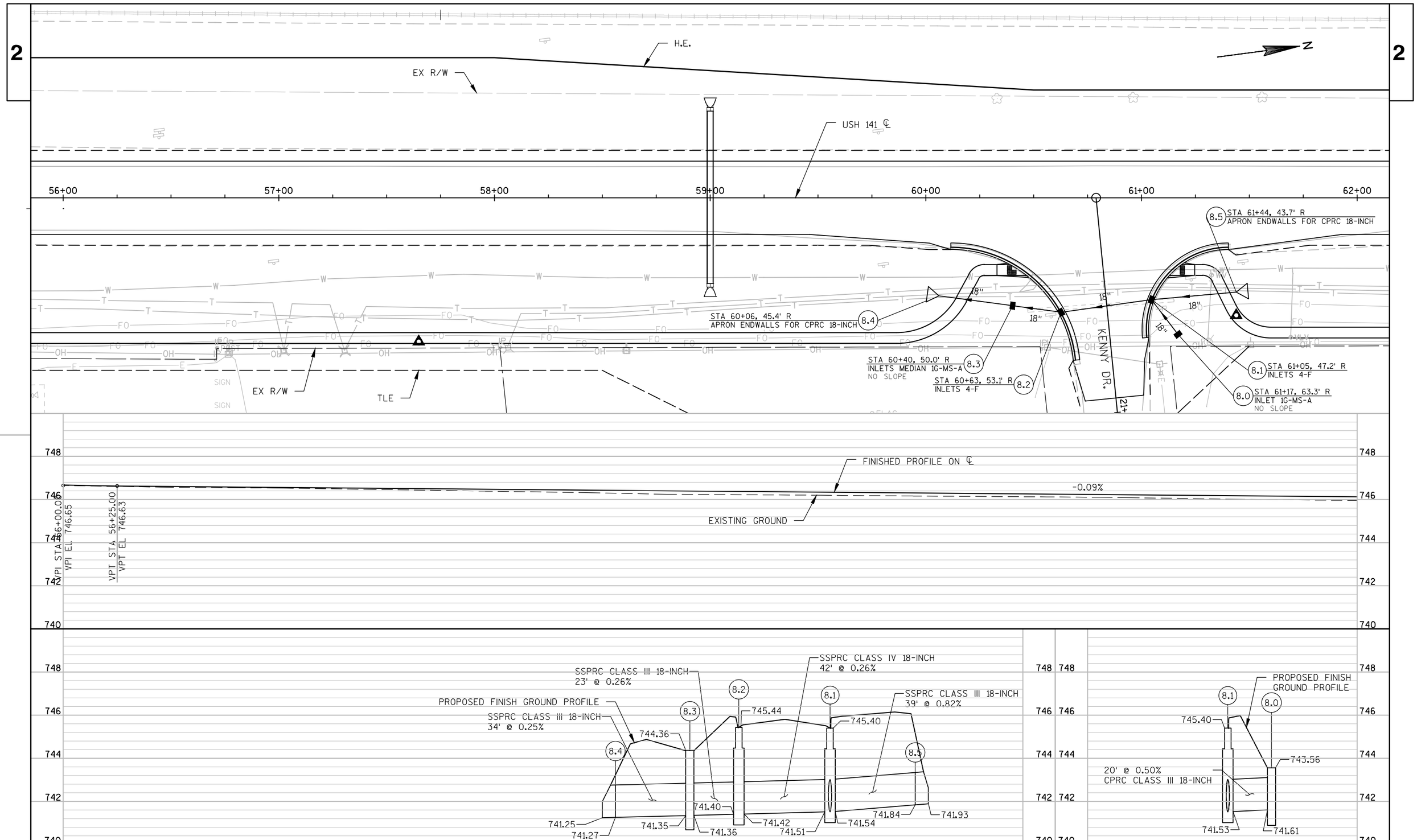
LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT URBAN CLASS I TYPE B
- TEMPORARY DITCH CHECK WITH ROCK BAG RELIEF
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- INLET PROTECTION TYPE A & C
- INLET PROTECTION TYPE D
- ROCK BAGS DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



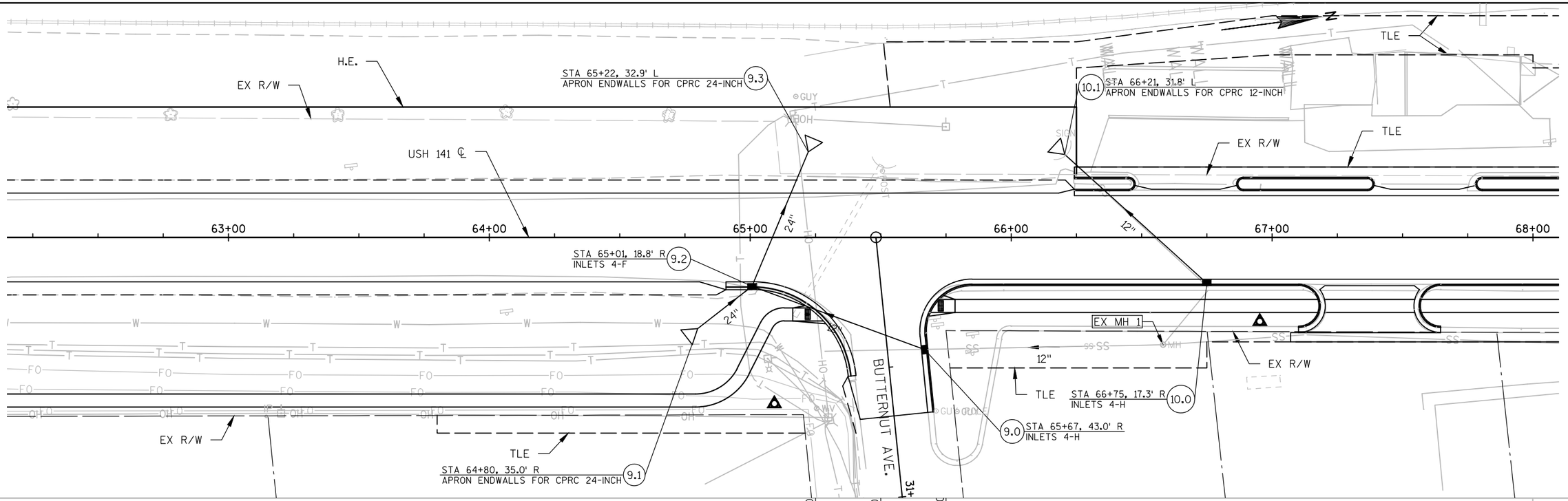

| PROJECT NO: 1492-12-71 | HWY: USH 141 | COUNTY: MARINETTE | EROSION CONTROL & LANDSCAPING PLAN | SHEET 30 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLAN\022001_EC.DWG PLOT DATE : 8/26/2015 1:51 PM PLOT BY : JEFF GILROY PLOT NAME : **** PLOT SCALE : 1" = 100'_XREF




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STORM SEWER PLAN | SHEET 31 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\SHEETSOTHER\022501_SS.DWG PLOT DATE : 8/26/2015 1:39 PM PLOT BY : JEFF GILROY PLOT NAME : ---------- PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 41




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STORM SEWER PLAN | SHEET 32 E |
|---|---|---|---|---|

TLE

STA 69+49, 68.9' L
APRON ENDWALLS FOR CPRC 24-INCH
22.1

24"

MONROE AVE.

STA 70+00, 73.1' L
MANHOLES 4-J
22.3

24"

TLE

STA 70+16, 74.3' L
MANHOLES 5-J
22.0

STA 70+92, 79.4' L
APRON ENDWALLS FOR CPRC 24-INCH
22.2

STA 72+47, 62.6' L
APRON ENDWALLS FOR CPRC 12-INCH
30.2

N

STA 68+81, 17.5' L
INLETS 2x3-H-S
20.1

PLE

STA 70+17, 17.5' L
INLETS 2x3-H
21.1

PC: 70+16.75

STA 72+46, 17.5' L
INLETS 2x3-H
30.1

TLE

EX R/W

H.E.

EX R/W

12"

PI: 72+87.24

68+00

69+00

70+00

71+00

72+00

73+00

74+00

STA 68+81, 6.0' R
MANHOLES 5-J
20.0

12"

24"

PI: 40+00.00

STA 70+17, 6.0' R
MANHOLES 5-J
21.0

USH 141 ℄

12"

12"

12"

MH

TLE

TLE

STA 69+76, 22.3' R
INLET 4-H
21.4

STA 70+22, 23.6' R
INLETS 4-H-S
21.3

PI: 71+52.08

EX R/W

STA 68+81, 17.5' R
INLETS 2x3-H-S
20.2

MONROE AVE.

STA 72+46, 17.5' R
INLETS 2x3-H
30.0

VCL = 200.00

K = 113.22

FINISHED PROFILE ON ℄

1.27%

EXISTING GROUND

VCL = 50.00

K = 65.23

LP STA 68+31.61
LP EL 744.56

VPI STA 68+75.00
VPI EL 744.20

VPT STA 69+75.00
VPT EL 745.47

744.47

740.34

745.86

740.18

748.53

743.36

743.72

741.29

740.32

740.26

740.13

740.09

741.02

740.94

740.02

740.01

SSPRC CLASS IV 24-INCH
136' @ 0.12%

SSPRC CLASS IV 24-INCH
51' @ 1.26%

SSPRC CLASS III 24-INCH
74' @ 0.10%

SSPRC CLASS III 24-INCH
16' @ 1.26%

SSPRC CLASS IV 12-INCH
46' @ 1.00%

744.20

744.47

744.11

740.97

740.92

740.88

740.88

SSPRC CLASS IV 12-INCH
23' @ 0.47%

SSPRC CLASS IV 12-INCH
12' @ 0.52%

744.90

745.69

745.86

745.64

743.72

742.14

741.73

741.63

740.18

741.26

740.15

740.15

740.10

SSPRC CLASS III 12-INCH
18' @ 2.85%

SSPRC CLASS IV 24-INCH
24' @ 0.12%

SSPRC CLASS III 12-INCH
57' @ 0.10%

748.53

748.55

744.38

743.63

743.56

742.54

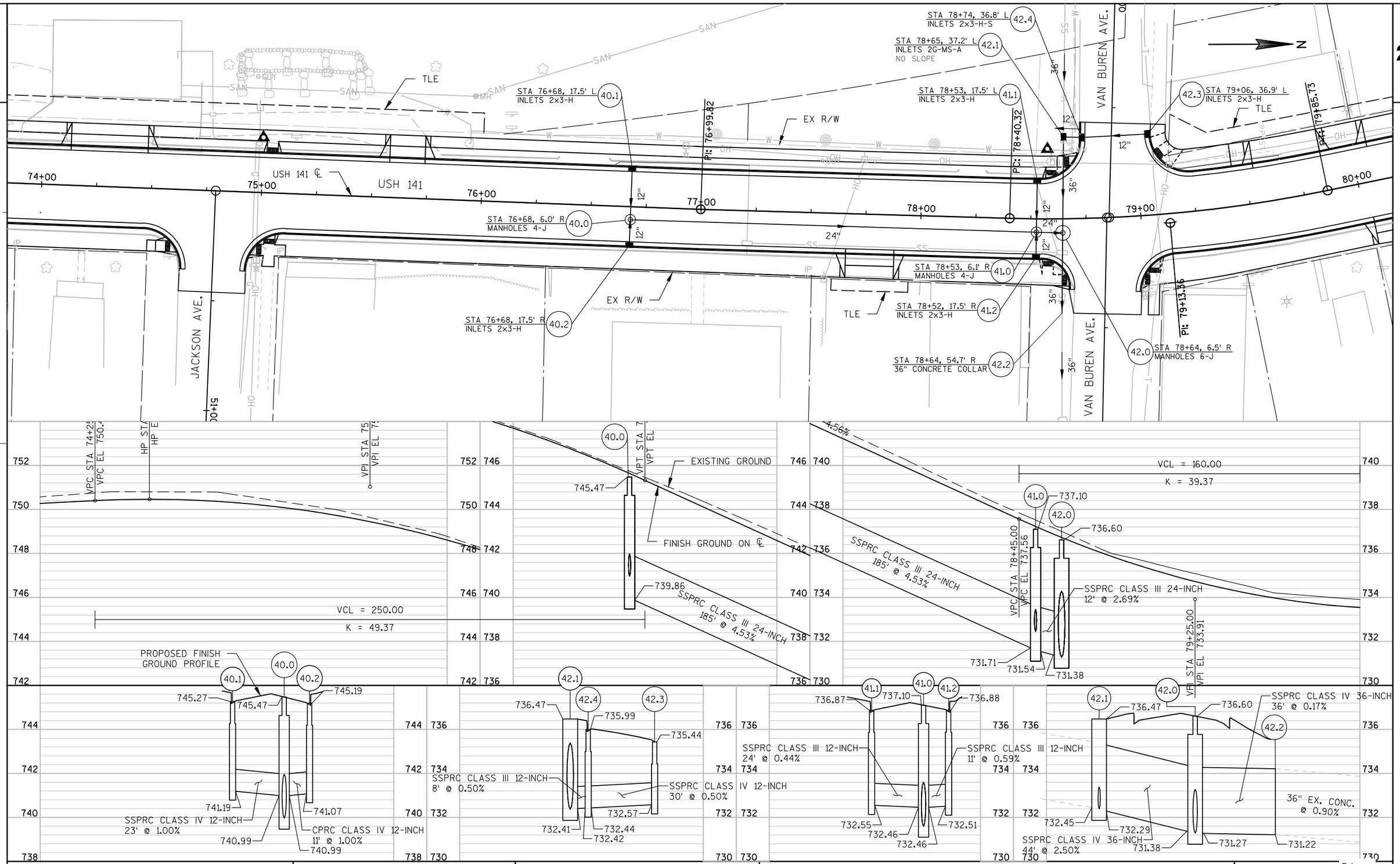
742.34

PROPOSED FINISH
GROUND PROFILE

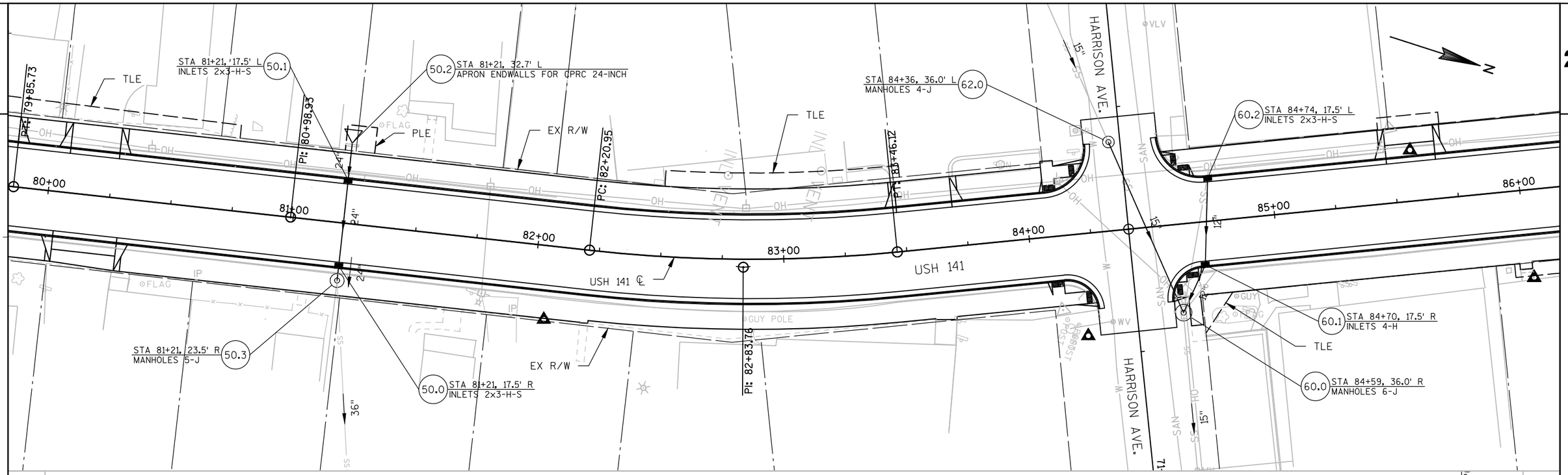
SSPRC CLASS III 12-INCH
45' @ 2.33%

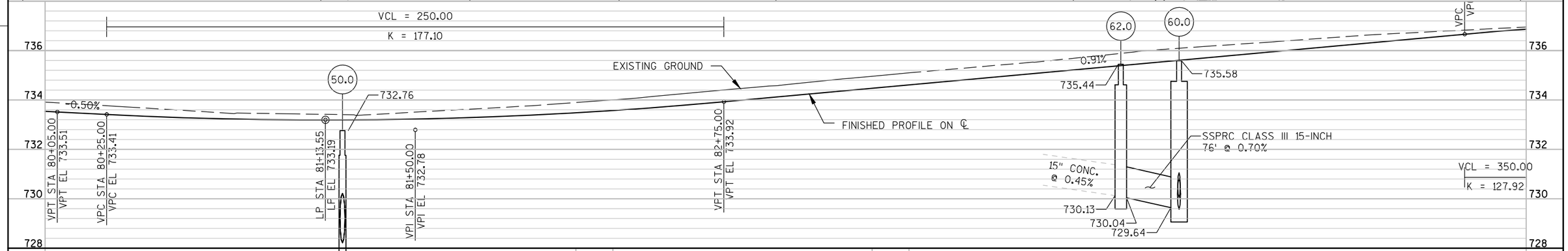
SSPRC CLASS IV 12-INCH
35' @ 2.33%

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STORM SEWER PLAN | SHEET 33 E |
|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STORM SEWER PLAN | SHEET 34 E |
|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STORM SEWER PLAN | SHEET 35 E |
|---|---|---|---|---|

2

TYLER AVE.

TLE

USH 141 ℄

USH 141

70.1 STA 89+50, 17.5' L
INLETS 2x3-H

EX R/W

86+00 87+00 88+00 89+00 90+00 91+00 92+00

12"

12"

24"

TLE TLE TLE

70.0 STA 89+50, 6.0' R
MANHOLES 4-J

70.2 STA 89+50, 17.5' R
INLETS 2x3-H

EX R/W

TLE

2

HP STA 86+91.62
HP EL 737.19

VPI STA 87+50.00
VPI EL 738.25

VCL = 350.00

K = 127.92

VP

70.0

734.49

-1.82%

EXISTING GROUND

FINISH GROUND ON ℄

VPC STA 90+75.00
VPC EL 732.33

729.32

SSPRC CLASS III 24-INCH
277' @ 1.81%

PROPOSED FINISH
GROUND PROFILE

70.1 70.0 70.2

734.26 734.26

734.49

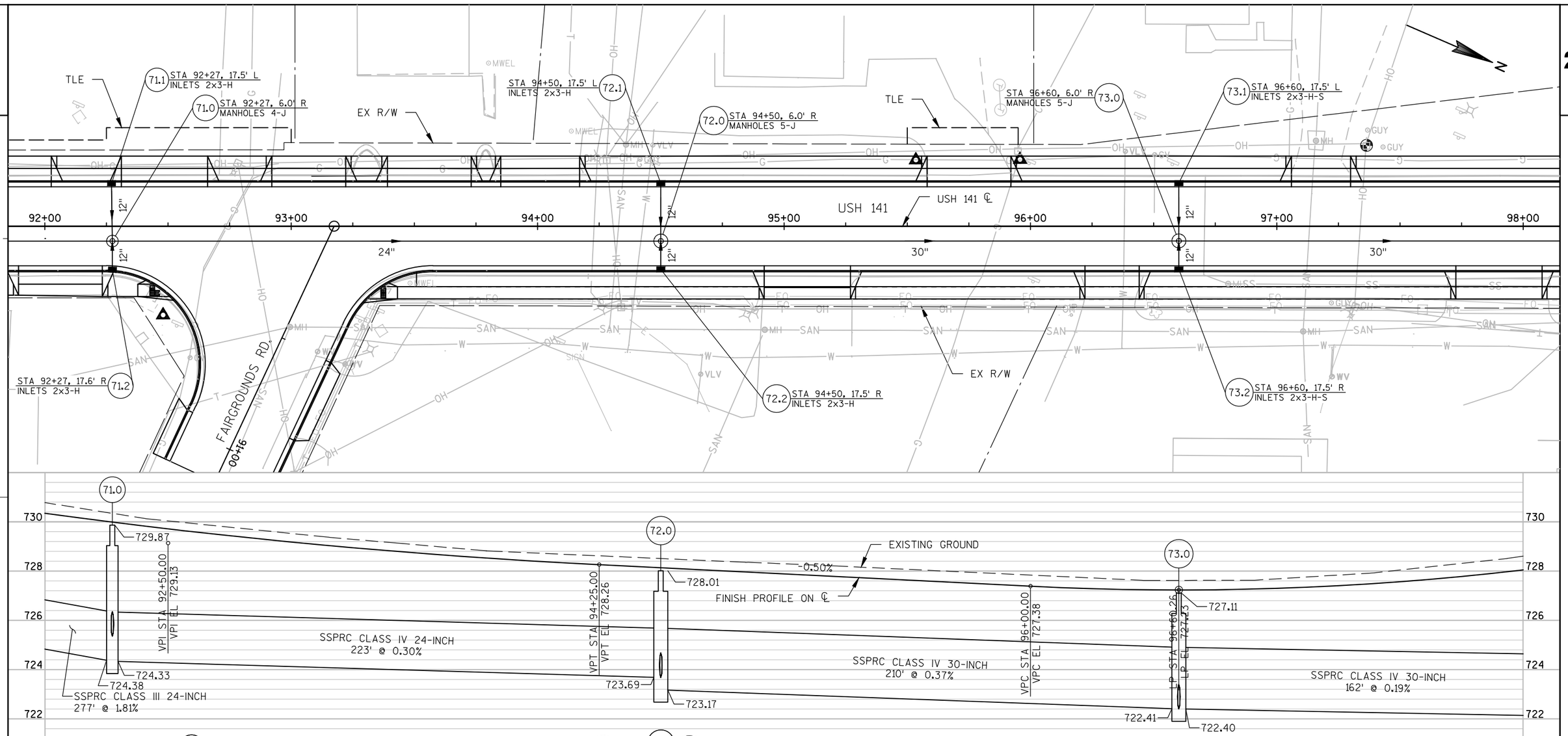
SSPRC CLASS III 12-INCH
23' @ 0.50%

SSPRC CLASS III 12-INCH
12' @ 0.50%

730.47 730.37 730.41 730.37

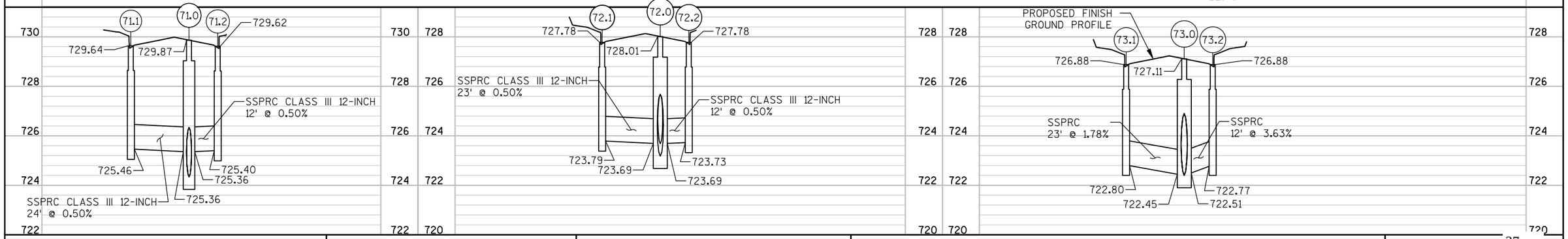
| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STORM SEWER PLAN | SHEET 36 E |
|---|---|---|---|---|

2










| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STORM SEWER PLAN | SHEET 37 E |
|---|---|---|---|---|

EX R/W

74.1 STA 98+22, 17.5' L
INLETS 2x3-H

75.0 STA 98+75, 6.0' R
MANHOLES 5-J

WAUSAUKEE RIVER

STRUCTURE B-33-138

74.0 STA 98+22, 6.0' R
MANHOLES 5-J

USH 141 ℄

USH 141

98+00 99+00 100+00 101+00 102+00 103+00 104+00

12" 12" 30" 30"

74.2 STA 98+22, 17.5' R
INLETS 2x3-H

STA 99+84, 61.1' R
APRON ENDWALLS FOR CPRC 30-INCH

76.0

RIPRAP HEAVY

WAUSAUKEE RIVER

EX R/W

STA 102+53, 34.5' R
INLETS 4-H

81.2

STA 102+53, 6.1' R
MANHOLES 5-J

81.0

STA 103+11, 41.0' L
INLETS 4-H

82.1

N

CTH C

PI: 103+00.03

12" 18" 24" 24" 18" 12"

STA 103+79, 52.6' L
INLETS 4-H-S

82.2

82.0 STA 103+11, 6.1' R
MANHOLES 4-J

81.4 STA 103+51, 17.5' R
INLETS 4-H

81.3 STA 103+14, 33.9' R
INLETS 4-H-S

BEACH AVE.

VPI STA 98+00.00
VPI EL 726.38

730 728 726 724 722 720

74.0 728.20
75.0 729.03
SSPRC CLASS III 30-INCH
53' @ 0.37%
722.10
722.08
721.91
721.89
SSPRC CLASS IV 30-INCH
162' @ 0.19%
76.0 721.51
721.49
SSPRC CLASS III 30-INCH
122' @ 0.32%

EXISTING GROUND

FINISH GROUND ON ℄

738 736 734 732 730

81.0 739.03
81.2 739.26
PROPOSED FINISH GROUND PROFILE
81.3 740.47
741.57
81.4
SSPRC CLASS III 18-INCH
23' @ 2.00%
SSPRC CLASS III 12-INCH
60' @ 2.00%
733.17
734.28
734.38
735.10
SSPRC CLASS III 12-INCH
41' @ 2.00%
732.57
732.10

738 736 734 732 730

SSPRC CLASS III 24-INCH
83' @ 3.17%
728.91
REMOVE BELL PLUG

740 738 736 734 732 730

81.0 739.03
731.62
731.48
82.0 2.82%
740.68
SSPRC CLASS III 24-INCH
58' @ 2.94%
733.33
733.20
SSPRC CLASS III 24-INCH
354' @ 2.94%
82.1
82.2 743.28
PROPOSED FINISH GROUND PROFILE
740.68 741.07
SSPRC CLASS III 12-INCH
69' @ 2.00%
736.53
735.26
734.66
SSPRC CLASS III 18-INCH
47' @ 2.00%
733.81

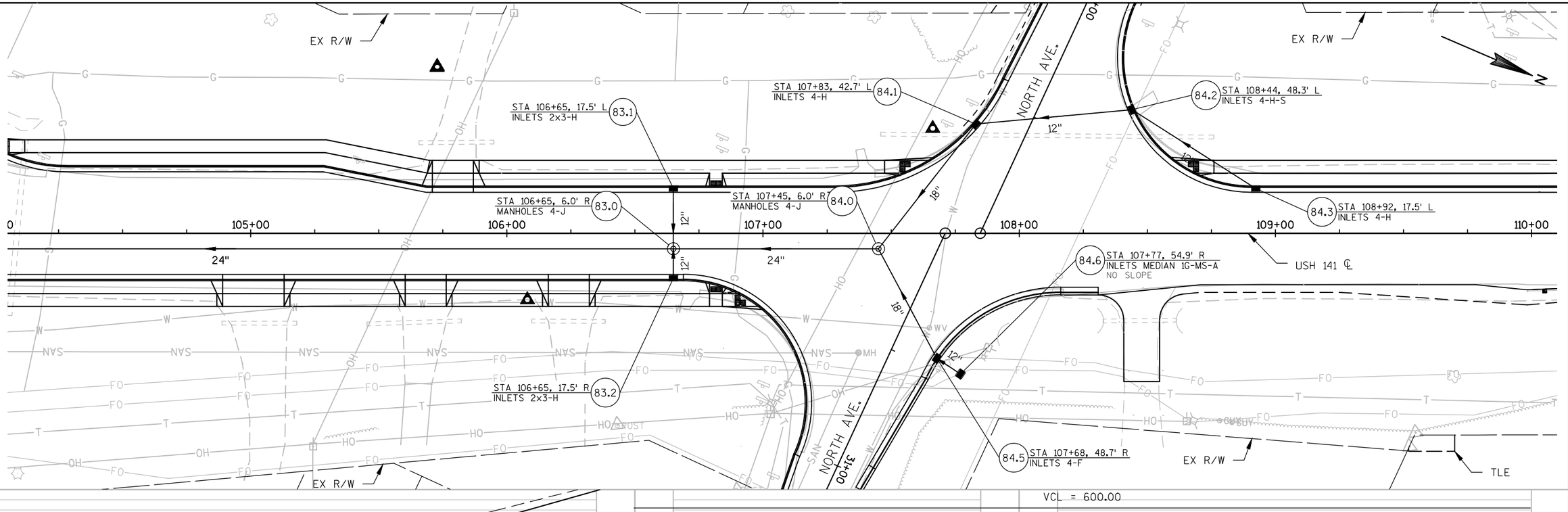
728 726 724 722

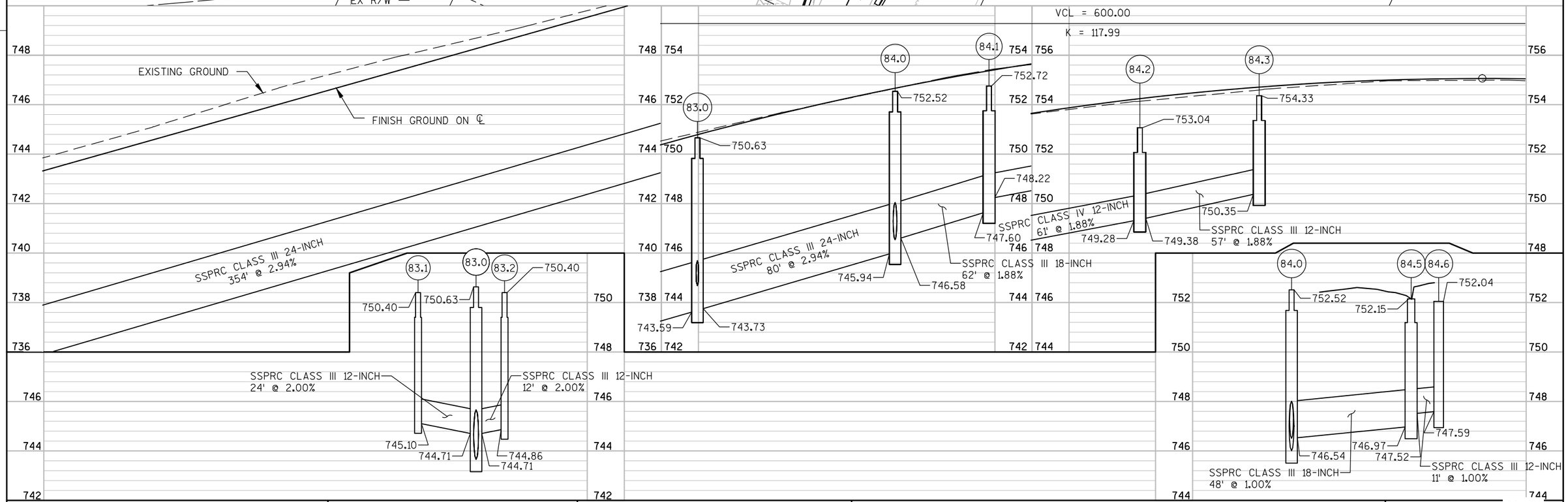
74.1 727.97
74.0 728.20
74.2 727.97
SSPRC CLASS III 12-INCH
23' @ 1.34%
SSPRC CLASS III 12-INCH
12' @ 1.00%
723.89
723.63
723.70
723.62

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STORM SEWER PLAN | SHEET 38 E |
|---|---|---|---|---|

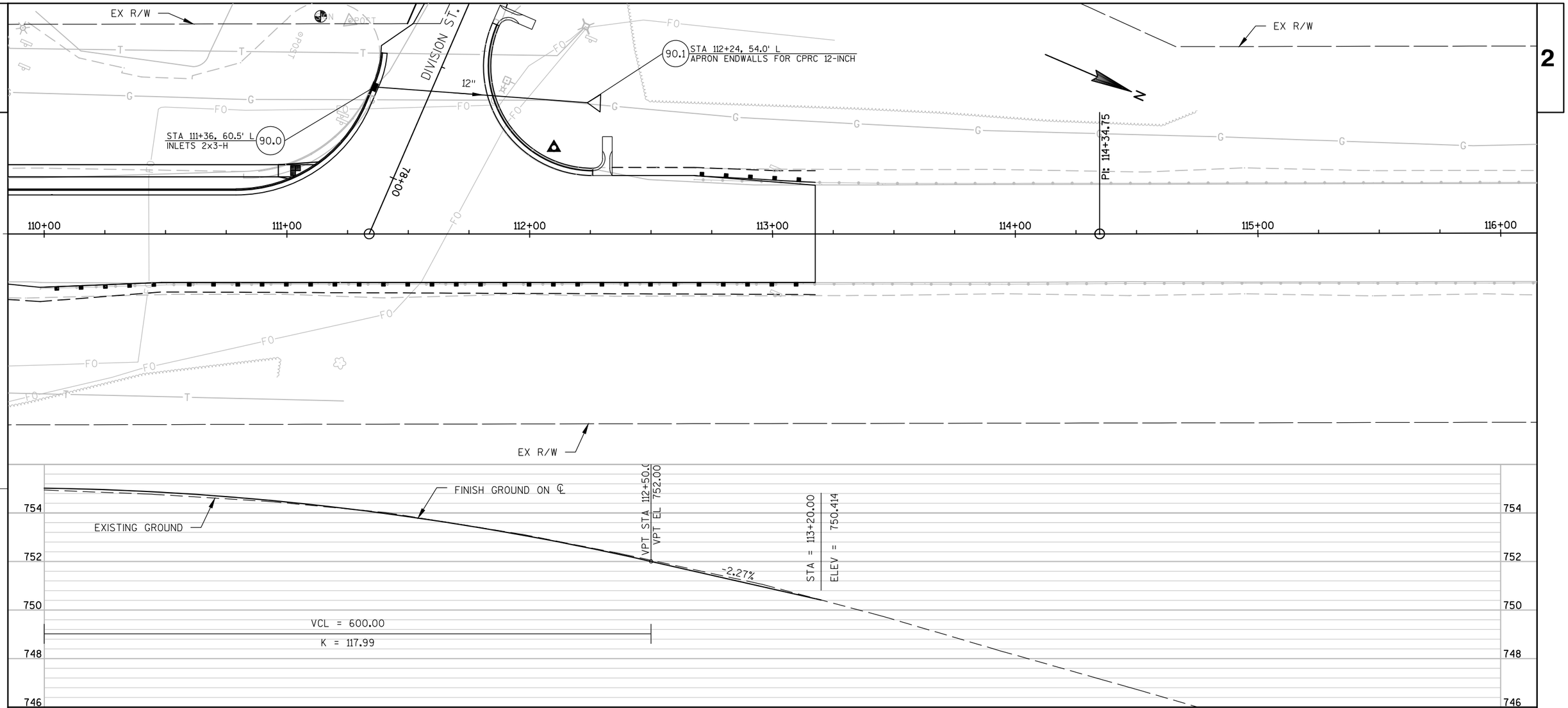
FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\SHEETSOTHER\022501_SS.DWG PLOT DATE : 8/26/2015 1:42 PM PLOT BY : JEFF GILROY PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 41

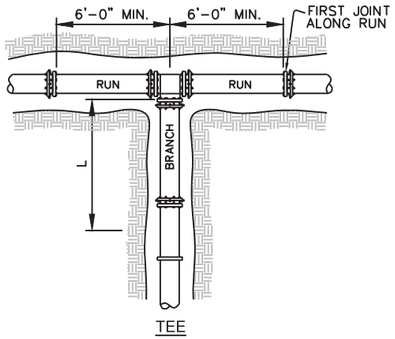


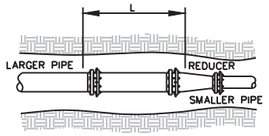

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STORM SEWER PLAN | SHEET 39 E |
|---|---|---|---|---|



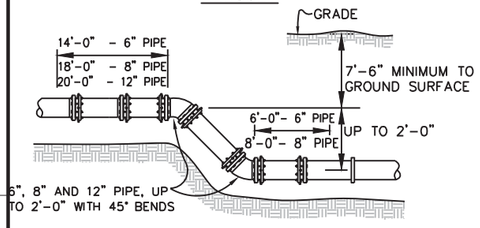

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STORM SEWER PLAN | SHEET 40 E |
|---|---|---|---|---|



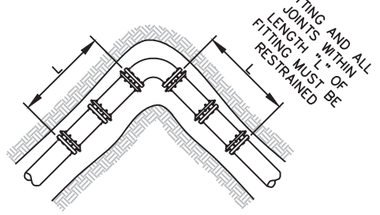

TEE



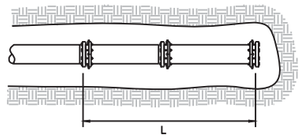

REDUCER




VERTICAL OFFSET




HORIZONTAL BEND




DEAD END

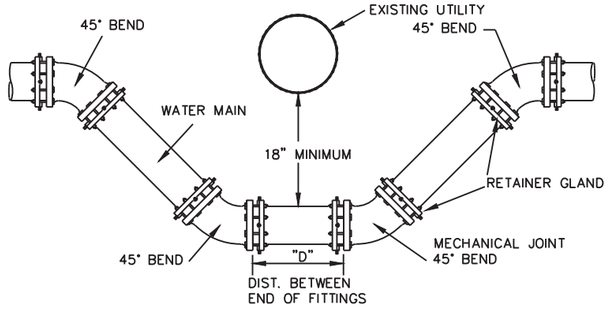
NOTE:

- ALL FITTINGS WILL BE RESTRAINED WITH MEGA-LUG TYPE RESTRAINT.
- FIELD-LOC STYLE GASKET RESTRAINT MAY BE USED AT LOCATIONS OTHER THAN AT FITTINGS.
- INSTALL RESTRAINT AT THE FIRST JOINT EACH WAY OF A FITTING (ALWAYS). FIELD-LOC STYLE GASKETS ARE TYPICALLY USED IN THIS SITUATION.
- THE LENGTH OF PIPE TO FIRST JOINT FROM TEE OR WYE SHALL BE 6'-0" MINIMUM.
- SHUTOFF VALVES TO BE TREATED AS DEAD END
- FOR POLYETHYLENE ENCASEMENT ON DUCTILE IRON PIPE, ADD 50% TO ALL VALUES LISTED IN THIS TABLE.

## PIPE RESTRAINT SCHEDULE – DUCTILE

6", 8" AND 12" DUCTILE WATER MAIN
150 PSI TEST PRESSURE, 7'-6" BURY

| PIPE DIAMETER | LENGTH 'L' | | | | | |
|---|---|---|---|---|---|---|
| | BEND ≤ 22.5° | BEND 22.5° ≤ 45° | BEND 45° ≤ 90° | TEE AND WYE | DEAD END | REDUCER |
| 6" | 3' | 5' | 11' | 4' | 18' | 10' (6"X8") |
| 8" | 3' | 6' | 14' | 10' | 24' | 10' (8"X10") |
| 10" | 4' | 7' | 16' | 15' | 29' | |
| 12" | 4' | 8' | 19' | 20' | 34' | 18' (10"X12") |
| | | | | | | 16' (12"X8") |
| | | | | | | 15' (8"X4") |




ALL JOINTS TO BE MADE UP USING MECHANICAL JOINT FITTING WITH RETAINER GLANDS. THE ENGINEER MAY ALLOW OTHER TYPES OF JOINT RESTRAINTS IF CIRCUMSTANCES WARRANT.

| WATER MAIN DIA. | MINIMUM DIMENSION | | I.D. EXISTING UTILITY | | | |
|---|---|---|---|---|---|---|
| | | | ≤12" | ≤24" | ≤36" | ≤48" |
| 6" | | D | 13" | 17" | 22" | 28" |
| 8" | | D | 14" | 14" | 19" | 25" |
| 10" | | D | 14" | 14" | 16" | 22" |
| 12" | | D | 15" | 15" | 15" | 19" |
| 16" | | D | 15" | 15" | 15" | 19" |

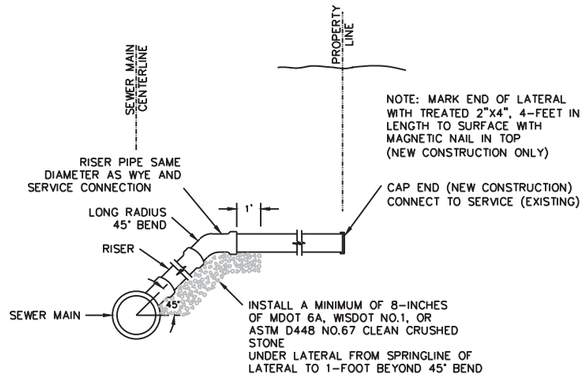
## WATER MAIN CROSSING DETAIL

NO SCALE

WATER MAIN AND SANITARY SEWER NOTES:

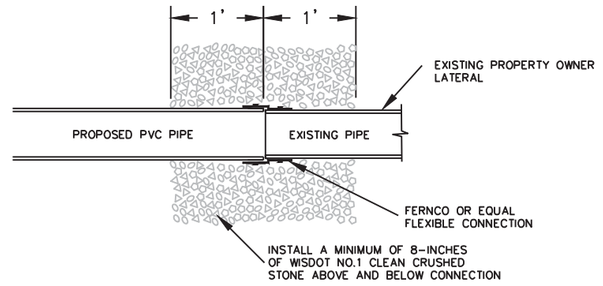
1. THE UTILITIES SHOWN ON THE PLANS ARE INDICATED IN ACCORDANCE WITH AVAILABLE RECORDS (ALL UTILITIES MAY NOT BE SHOWN). THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING EXACT LOCATIONS AND ELEVATIONS OF ALL UTILITIES FROM THE OWNERS OF THE RESPECTIVE UTILITIES. ALL UTILITIES SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO EXCAVATION. WATER SERVICE LINES MAY NOT BE WHERE SHOWN IN PLANS. VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION AND REMOVAL OF SIDEWALKS AND CURBS.
2. WATER MAIN DEPTH OF COVER SHALL BE A MINIMUM OF 6 FEET OR AS NOTED ON THE PLANS. ANY PORTION OF THE WATER MAIN THAT IS INSTALLED AT A DEPTH OF LESS THAN SHALL BE INSULATED WITH A MINIMUM OF 2-INCHES OF RIGID INSULATION FOR EACH FOOT OF DEPTH LESS THAN MINIMUM DEPTH OF COVER.
3. TRENCH DENATURING SHALL BE CONSIDERED INCIDENTAL TO WATER AND SANITARY SEWER CONSTRUCTION AND NO SPECIFIC PAYMENTS SHALL BE MADE FOR DENATURING WORK.
4. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING UTILITIES DURING THE CONSTRUCTION OF THE PROPOSED WORK.
5. FLOW SHALL BE MAINTAINED IN THE EXISTING SEWERS DURING THE CONSTRUCTION OF THE PROJECT BY USE OF SUFFICIENT TEMPORARY BYPASS CONNECTIONS OR BY BYPASS PUMPING. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE FOR RELEVANT ITEMS OF WORK.
6. THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO AFFECTED SEWER AND WATER CUSTOMERS, 24 HOURS PRIOR TO ANY ANTICIPATED SERVICE INTERRUPTION.
7. PAYMENT FOR WATER AND SEWER MAIN ITEMS SHALL INCLUDE THE REMOVAL AND DISPOSAL OF EXISTING MAINS ENCOUNTERED WITHIN THE LIMITS OF TRENCH EXCAVATION.
8. ALL REMOVED HYDRANTS ARE PROPERTY OF THE VILLAGE. REMOVAL AND TRANSPORTING TO A LOCATION SPECIFIED BY THE VILLAGE IS INCLUDED IN PAY ITEM, HYDRANT.
9. ALL WATER AND SANITARY SEWER WORK SHALL BE COMPLETED IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE AND THE LATEST VERSION OF 'STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN', EXCEPT AS MODIFIED IN THE SPECIAL PROVISIONS OR PLANS.



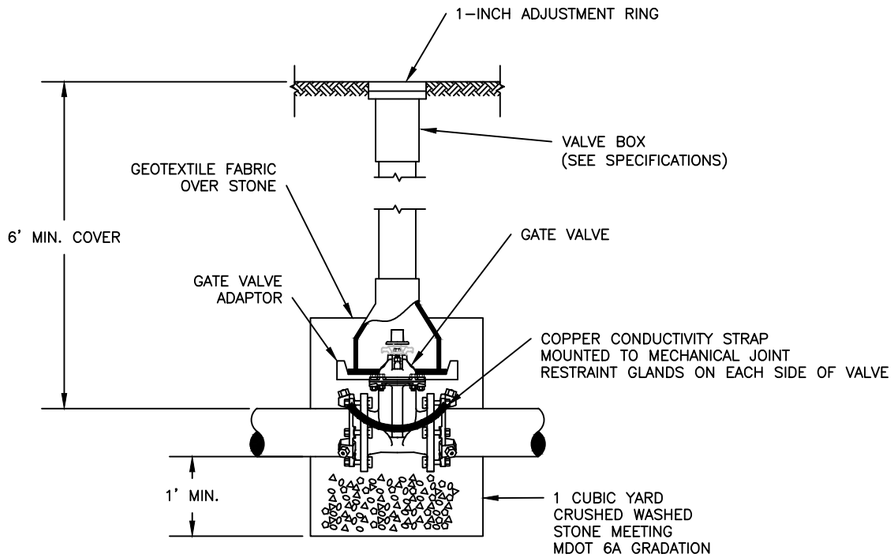

## STANDARD SANITARY LATERAL CONNECTION

NO SCALE



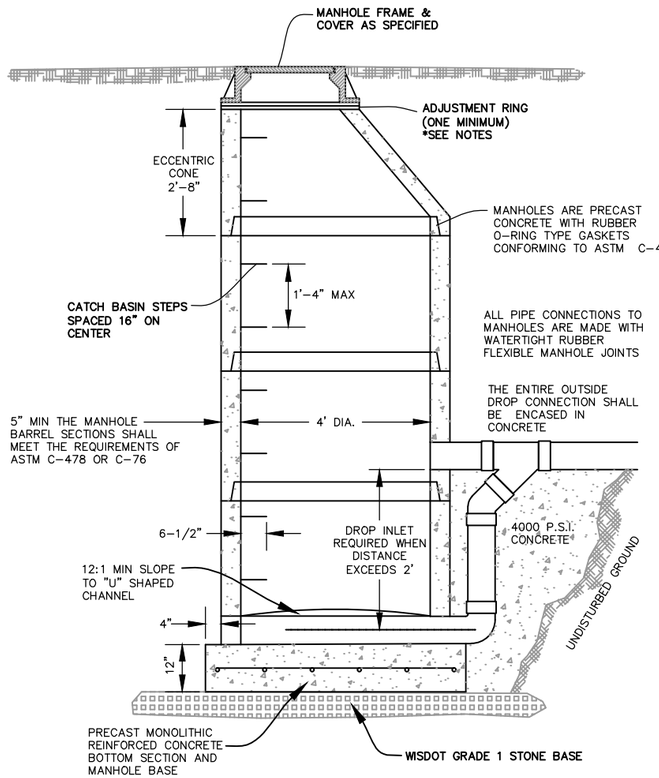

## SANITARY LATERAL PROPERTY OWNER CONNECTION

NO SCALE




## TYPICAL VALVE DETAIL

NO SCALE

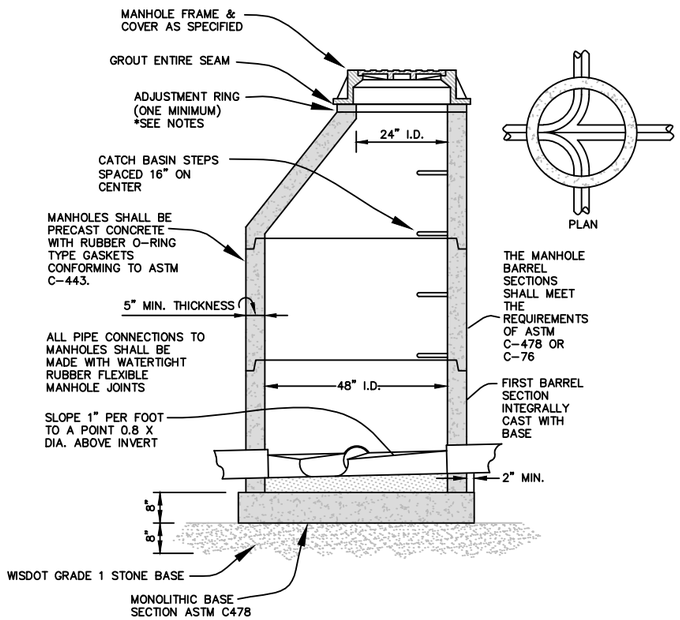



## TYPICAL DROP INLET

NO SCALE

NOTES:

1. MANHOLES SHALL BE CONSTRUCTED SUCH THAT THE TAPERED CONES AND STAIRS ARE ALIGNED PROPERLY TO ALLOW FOR THE COVER LOCATION TO BE POSITIONED OUT THE WHEEL LANE (MANHOLE STEPS SHALL BE ALIGNED WITH THE MAIN FLOW LINE IN MANHOLE).
2. THE MANHOLE ADJUSTMENT RING LOCATED DIRECTLY BENEATH THE MANHOLE CASTING SHALL BE AN APPROVED RUBBER, HDPE, OR COMPOSITE RING. MANHOLE ADJUSTMENT RINGS SHALL BE SEALED WITH AN APPROVED MANHOLE RISER RING SEAL.

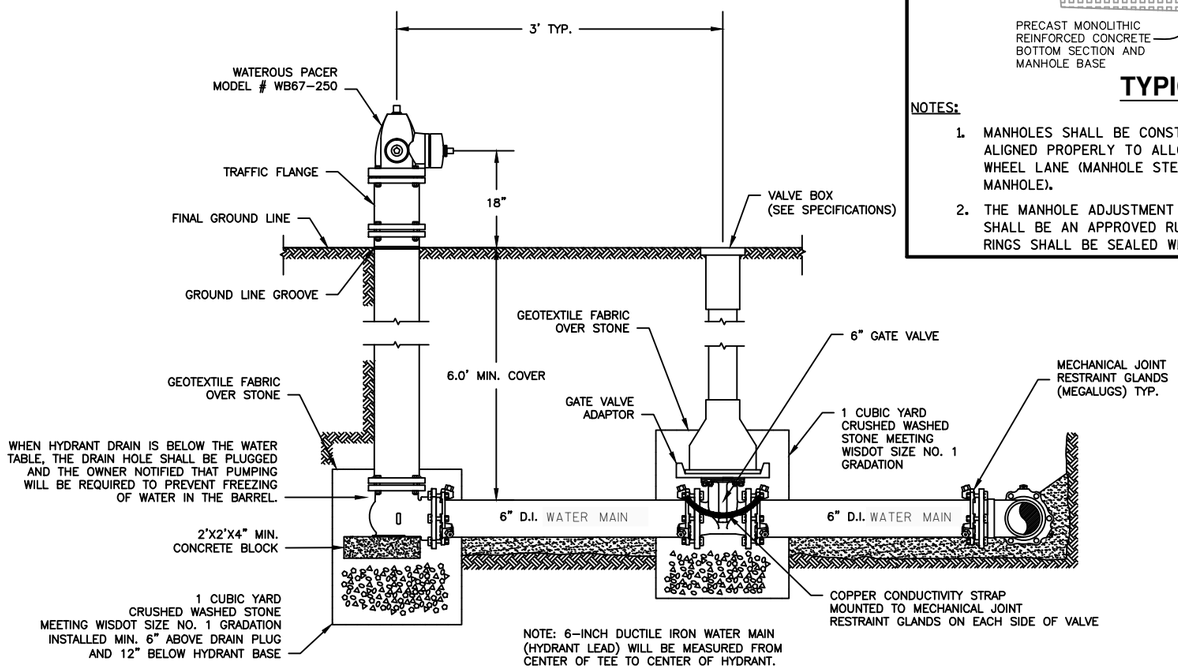



## STANDARD SANITARY MANHOLE SECTION

NO SCALE

NOTES:

1. MANHOLES SHALL BE CONSTRUCTED SUCH THAT THE TAPERED CONES AND STAIRS ARE ALIGNED PROPERLY TO ALLOW FOR THE COVER LOCATION TO BE POSITIONED OUT THE WHEEL LANE (MANHOLE STEPS SHALL BE ALIGNED WITH THE MAIN FLOW LINE IN MANHOLE).
2. THE MANHOLE ADJUSTMENT RING LOCATED DIRECTLY BENEATH THE MANHOLE CASTING SHALL BE AN APPROVED RUBBER, HDPE, OR COMPOSITE RING. MANHOLE ADJUSTMENT RINGS SHALL BE SEALED WITH AN APPROVED MANHOLE RISER RING SEAL.




| STRUCTURE TABLE | |
|---|---|
| STRUCTURE # | STRUCTURE DETAILS |
| PSMH1 | RIM = 729.07<br>8" INV IN = 718.28 (N)<br>8" INV OUT = 718.18 (S) |
| PSMH2<br>(DROP) | RIM = 728.09<br>8" INV IN = 719.30 (N)<br>8" INV OUT = 719.20 (S)<br>8" INV IN = 723.42 (W) |
| PSMH3 | RIM = 727.23<br>8" INV IN = 721.33 (W)<br>8" INV OUT = 721.23 (S) |
| PSMH4<br>(DROP) | RIM = 727.90<br>10" INV IN = 724.80 (W)<br>8" INV OUT = 721.90 (E) |

2

1ST ST.

STH 180

STA 52+88 TO STA 53+92
INSTALL 4' WIDE x 2" THICK RIGID INSULATION
1 FOOT ABOVE WATER MAIN
(112) INSULATION BOARD POLYSTYRENE 2-INCH

STA 53+90 RT, 2 FOOT FILL
(1) HYDRANT EXTENSION, 2-FT

50+00 51+00 52+00 53+00 54+00 55+00 56+00

STA 57+76 TO STA 58+24
INSTALL 4' WIDE x 2" THICK RIGID INSULATION
1 FOOT ABOVE WATER MAIN
(48) INSULATION BOARD POLYSTYRENE 2-INCH

STA 58+92 TO STA 59+08
INSTALL 4' WIDE x 4" THICK RIGID INSULATION
1 FOOT ABOVE WATER MAIN
(16) INSULATION BOARD POLYSTYRENE 4-INCH

STA 59+76 TO STA 60+24
INSTALL 4' WIDE x 2" THICK RIGID
INSULATION 1 FOOT ABOVE WATER MAIN
(48) INSULATION BOARD POLYSTYRENE 2-INCH

STA 61+70 RT, REPLACE WATER SERVICE
CURB BOX
WATER SERVICE CURB BOX IN PROPOSED
SIDEWALK APPROX 0.5' FILL
(1) WATER SERVICE CURB BOX

STA 61+35 RT, REPLACE VALVE BOX,
VALVE BOX IN PROPOSED SIDEWALK
APPROX 1 FOOT FILL
(1) WATER MAIN GATE VALVE BOX 6-INCH

STA 61+33 RT, REPLACE VALVE BOX
VALVE BOX IN PROPOSED SIDEWALK APPROX 1' FILL
(1) WATER MAIN GATE VALVE BOX 6-INCH

56+00 57+00 58+00 59+00 60+00 61+00 62+00

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | SANITARY SEWER AND WATER | SHEET 43 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD15057- WAUSAUKEE - US 141 UTILITY CONFLICT\BASEDATA\15057-SHEETS_RECOVER.DWG
#### - ####
PLOT DATE : 6/26/2015 9:09 AM PLOT BY : JOANN MATONICH PLOT NAME : PLOT SCALE : 1"=40'XREF"
WISDOT/CADDS SHEET 44

STA 61+35 TO STA 64+58
INSTALL 4' WIDE x 2" THICK RIGID INSULATION
1 FOOT ABOVE WATER MAIN
(328) INSULATION BOARD POLYSTYRENE 2-INCH

STA 64+58 TO STA 65+06
INSTALL 4' WIDE x 4" THICK RIGID INSULATION
1 FOOT ABOVE WATER MAIN
(48) INSULATION BOARD POLYSTYRENE 4-INCH

62+00 63+00 64+00 65+00 66+00 67+00 68+00

BUTTERNUT AVE.

POTENTIAL CONSTRUCTION INTERFERENCE WITH 6" SANITARY SEWER LATERAL. APPROX 0.5' TO 1' BELOW PROJECTED SUBBASE CUT

STA 69+95 LOWER WATER MAIN TO 8' BURY FROM FINISHED GRADE UNDER PROPOSED STORM SEWER, INSTALL 4' WIDE x 8' LONG x 2" RIGID INSULATION 1 FOOT ABOVE WATER MAIN BETWEEN WATER MAIN AND STORM SEWER
(4) WATER MAIN BEND 45 DEGREE 6-INCH
(80) WATER MAIN DUCTILE IRON 6-INCH
(1) CONNECT TO EXISTING WATERMAIN
(16) INSULATION BOARD POLYSTYRENE 2-INCH

MONROE AVE.

STA 70+00.16 LT, REMOVE VALVE BOX AND HYDRANT, INSTALL NEW VALVE BOX AND HYDRANT
(1) HYDRANT (STA 70+03.16, 33.92' LT)
(1) WATER MAIN GATE VALVE AND BOX 6-INCH (STA 70+00.16, 33.92' LT)
(11) WATER MAIN DUCTILE IRON 6-INCH
(1) WATER MAIN TEE 6-INCH

PC: 70+16.75

PT: 72+87.24

68+00 69+00 70+00 71+00 72+00 73+00 74+00

(16) INSULATION BOARD POLYSTYRENE 2-INCH

STA 68+66 RT, ADJUST MANHOLE
(1) ADJUSTING MANHOLE COVERS

CONNECT TO EXISTING WATER MAIN, MONROE AVE STA 40+45

MONROE AVE.

NOTE: PROPOSED WATER MAIN IS SHOWN OFFSET FROM ALIGNMENT TO INDICATE THE USE OF 45° BENDS. INSTALL PROPOSED WATER MAIN ALONG EXISTING WATER MAIN HORIZONTAL ALIGNMENT.

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | SANITARY SEWER AND WATER | SHEET 44 | E |
|---|---|---|---|---|---|

2

PROPOSED HYDRANT
(1) HYDRANT (STA 75+87.52, 31.5' LT)
(1) WATER MAIN GATE VALVE AND BOX 6-INCH (STA 75+90.52, 31.5' LT)
(6) WATER MAIN, 6 DUCTILE IRON
(1) CONNECT TO EXISTING WATER MAIN

REMOVE EXISTING HYDRANT
(STA 75+93.5, 25.9' LT)

PROPOSED HYDRANT
(1)-CONNECT TO EXISTING WATERMAIN
(1)-HYDRANT (STA 78+59, 37' LT)
(1) WATER MAIN TEE 6-INCH
(1) WATER MAIN GATE VALVE AND BOX 6-INCH (STA 78+59, 34' LT)
(9) WATER MAIN DUCTILE IRON 6-INCH

REMOVE EXISTING HYDRANT

STA 78+69, 31.32' LT
(1) WATER MAIN GATE VALVE BOX 6-INCH

VAN BUREN AVE.

PI: 76+99.82

PC: 78+40.32

PT: 79+85.73

6'

74+00 75+00 76+00 77+00 78+00 79+00 80+00

51+00

STA 84+30 LOWER WATER MAIN TO 8 FOOT BURY FROM FINISHED GROUND
(4) WATER MAIN BEND 45 DEGREE 6-INCH
(75) WATER MAIN DUCTILE IRON 6-INCH
(1) CONNECT TO EXISTING WATER MAIN

HARRISON AVE.

CONNECT TO EXISTING WATER MAIN (STA 84+30, 32' LT)

PT: 79+85.73

PI: 80+98.93

PC: 82+20.95

PT: 83+46.12

80+00 81+00 82+00 83+00 84+00 85+00 86+00

USH 141

NOTE: PROPOSED WATER MAIN IS SHOWN OFFSET FROM ALIGNMENT TO INDICATE THE USE OF 45° BENDS. INSTALL PROPOSED WATER MAIN ALONG EXISTING WATER MAIN HORIZONTAL ALIGNMENT

STA 84+30 RT, REPLACE VALVE BOX
(1) WATER MAIN GATE VALVE BOX 6-INCH

CONNECTION POINT AT VALVE STA 84+31, 37' RT

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | SANITARY SEWER AND WATER | SHEET 45 | E |
|---|---|---|---|---|---|

PSMH5
STA 94+36.40, 43' LT
RIM=728.83
INV E 8"=719.96
(1) SANITARY SEWER MANHOLE

PSMH2
STA 94+34.38, 6' LT
RIM=728.09
INV N 8"=719.30
INV S 8"=719.20
INV W 8"=719.30
(1) SANITARY SEWER MANHOLE

PSMH1
STA 92+99.43, 6' LT
RIM=729.07
INV N 8"=718.28
INV E 8"=718.18
(1) SANITARY SEWER MANHOLE

REMOVE EXISTING MANHOLE 7367
STA 94+35.82, 33.14' LT
RIM=728.83
INV NW 8"=724.43
INV SW 8"=724.43
INV E 8"=724.23
INV W 4"=724.63

REPLACE EXISTING MANHOLE 8030
PSMH4 (DROP MH)
STA 97+15.92, 34.67' LT
RIM=727.90
INV W 10"=724.80
INV E 8"=721.90
(1) SANITARY SEWER MANHOLE DROP

PSMH3
STA 97+13.98, 6' LT
RIM=727.23
INV W 8"=721.33
INV S 8"=721.23
(1) SANITARY SEWER MANHOLE

8"
4"
8"
33' @ 2.0% 8" PVC
130.95' @ 0.70% 8" PVC
275.61' @ 0.70% 8" PVC
24.74' @ 2.30% 8" PVC
44.40' @ 2.07% 8" PVC

92+00 93+00 94+00 95+00 96+00 97+00 98+00

CONNECT EXISTING SANITARY SEWER LATERALS
INTO PROPOSED SANITARY SEWER PIPE
(2) SANITARY SEWER SERVICE CONNECTION 8-INCH
(1) SANITARY SEWER SERVICE CONNECTION 4-INCH

USH 141

ABANDON EXISTING 10-INCH
SANITARY SEWER PIPE STA
97+11
(1) ABANDONING SEWER

EXISTING MANHOLE 7606
STA 92+99.43, 40.88' RT
RIM=728.76
INV N 8"=717.26
INV S 8"=717.26
INV E 8"=717.06
CORE W 8"=717.26
(1) SANITARY SEWER
MANHOLE, COVER
(1) ADJUSTING MANHOLE
COVERS

FAIRGROUNDS RD
00+16

ABANDON EXISTING
8-INCH SANITARY
SEWER PIPE STA 94+32
(1) ABANDONING SEWER

STA 93+10 RT, REPLACE VALVE BOX
(1) WATER MAIN GATE VALVE BOX
6-INCH

STA 94+47 DIRECTIONAL BORE WATER SERVICE WITH
1 INCH COPPER LINE AND LOWER SERVICE TO 11'
BELOW PROPOSED FINAL GRADE
(1) WATER SERVICE COPPER 1-INCH

EXISTING MANHOLE 7342
STA 94+92.19, 42.66' RT
RIM=728.40
INV N 8"=723.50
INV S 8"=723.40
INV E 6"=723.60

STA 96+38 DIRECTIONAL BORE
WATER SERVICE WITH 1" COPPER
LINE AND LOWER SERVICE TO 11'
BELOW PROPOSED FINAL GRADE
(1) WATER SERVICE COPPER 1-INCH

EXISTING MANHOLE 8259
STA 97+10.56, 42.71' RT
RIM=728.27
INV N 10"=724.27
INV E 8"=724.47
INV S 10"=724.07
INV W 10"=724.17

730 728 726 724 722 720 718 716 715

PSMH1
STA 92+99.43, 6' LT
RIM=729.07
INV N 8"=718.28
INV E 8"=718.18

PSMH2
STA 94+34.38, 6' LT
RIM=728.09
INV N 8"=719.30
INV S 8"=719.20
INV W 8"=719.30

PSMH3
STA 97+13.98, 6' LT
RIM=727.23
INV W 8"=721.33
INV S 8"=721.23

130.95' @ 0.70% 8" PVC
275.61' @ 0.70% 8" PVC
718.28
719.20
719.30
721.23

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | SANITARY SEWER AND WATER | SHEET 46 | E |
|---|---|---|---|---|---|

STA 99+70 RT, POTENTIAL INTERFERENCE WITH PROPOSED STORM SEWER. INSTALL PIPE UNDER PROPOSED STORM WITH TOP OF PIPE ELEVATION OF 720 (18" MIN. CLEARANCE) AND INSULATE 1' ABOVE PIPE WITH 4" OF RIGID INSULATION. BEGIN CONNECTION TO EXISTING PIPE WITH 45° BEND AT APPROX STA 99+50 UNDER PROPOSED STORM, RECONNECT TO EXISTING PIPE AT APPROX STA 99+90

(16) INSULATION BOARD POLYSTYRENE 2-INCH
(4) WATER MAIN BEND 45 DEGREE 6-INCH
(75) WATER MAIN DUCTILE IRON 6-INCH
(1) CONNECT TO EXISTING WATER MAIN

WAUSAUKEE RIVER

STA 102+95 RT, LOCATE AND REPLACE VALVE BOX
(1) WATER MAIN GATE VALVE BOX 6-INCH

CTH C

PI: 103+00.03

USH 141

98+00 99+00 100+00 101+00 102+00 103+00 104+00

STA 99+97 RT, ADJUST MANHOLE
(1) ADJUSTING MANHOLE COVERS

STA 101+58 RT, ADJUST MANHOLE
(1) ADJUSTING MANHOLE COVERS

STA 101+19 RT, ADJUST MANHOLE
(1) ADJUSTING MANHOLE COVERS

STA 102+76 RT, ADJUST SANITARY MANHOLE
(1) ADJUSTING MANHOLE COVERS

BEACH AVE.

NOTE: PROPOSED WATER MAIN IS SHOWN OFFSET FROM ALIGNMENT TO INDICATE THE USE OF 45° BENDS. INSTALL PROPOSED WATER MAIN ALONG EXISTING WATER MAIN HORIZONTAL ALIGNMENT.

WAUSAUKEE RIVER

NORTH AVE.

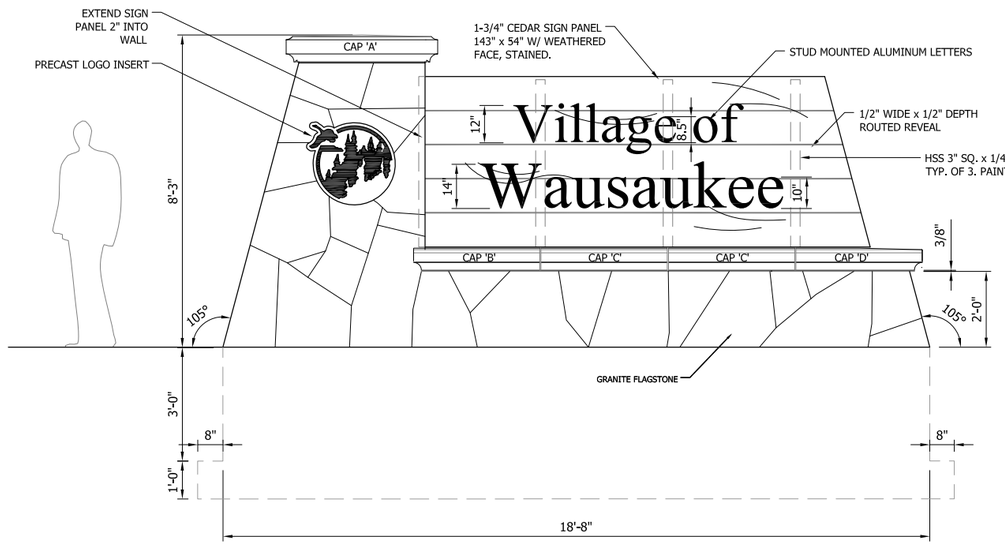
STA 108+57.95 LT, SANITARY MANHOLE, ADJUST

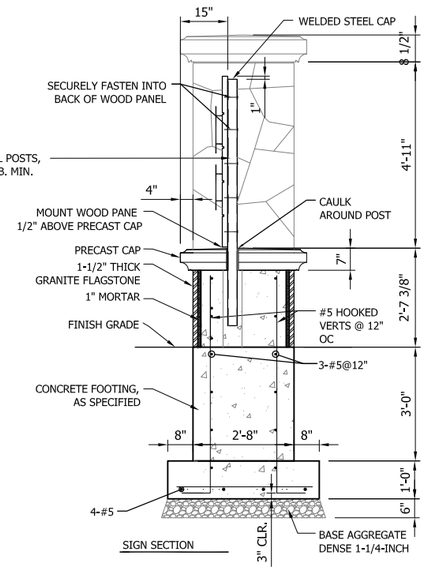
STA 107+64 INTERFERENCE WITH PROPOSED STORM, LOWER WATER MAIN AND VALVE TO 8' BELOW AND ADD 2" OF RIGID INSULATION BETWEEN WATER MAIN AND STORM PIPE
(16) INSULATION BOARD POLYSTYRENE 2-INCH
(6) WATER MAIN BEND 45 DEGREE 6-INCH
(1) WATER MAIN GATE VALVE AND BOX 6-INCH
(1) TEE, 6"
(25) WATER MAIN DUCTILE IRON 6-INCH
(2) CONNECT TO EXISTING WATER MAIN

105+00 106+00 107+00 108+00 109+00 110+00

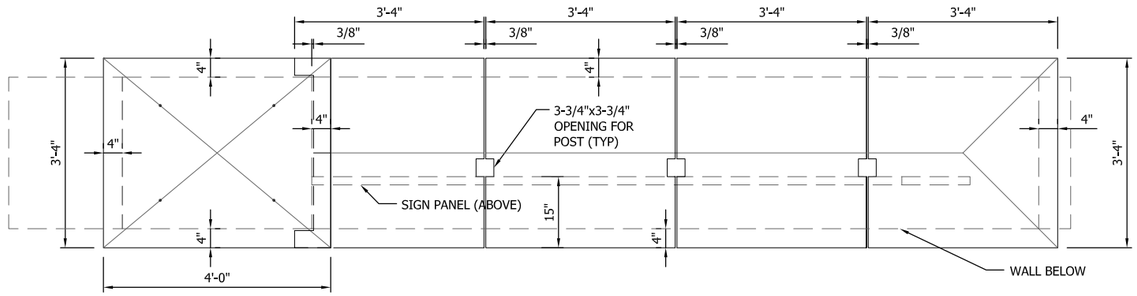
STA 107+37 RT, SANITARY MANHOLE, ADJUST

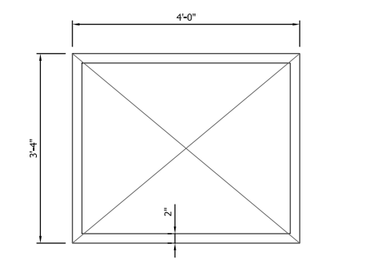
| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | SANITARY SEWER AND WATER | SHEET 47 | E |
|---|---|---|---|---|---|

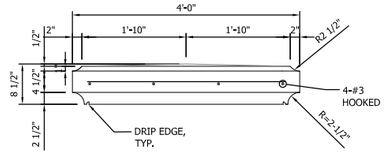


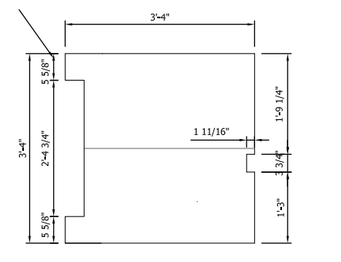



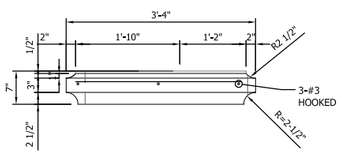

## MONUMENT SIGN
SCALE - 1/4" = 1'-0"

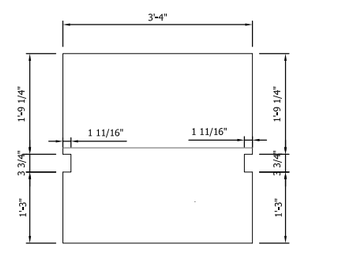


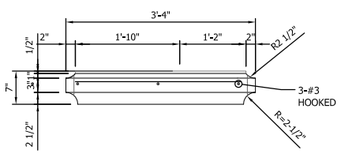



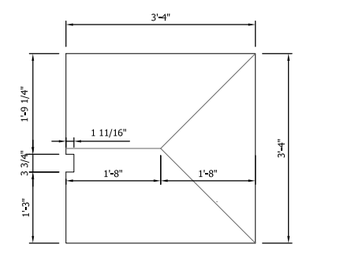



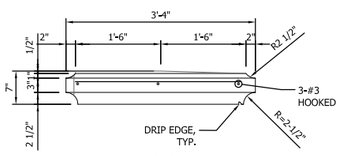



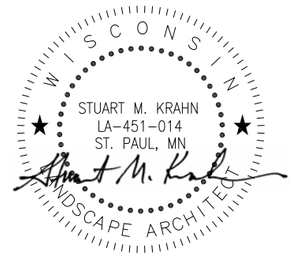




## PRECAST CAPS

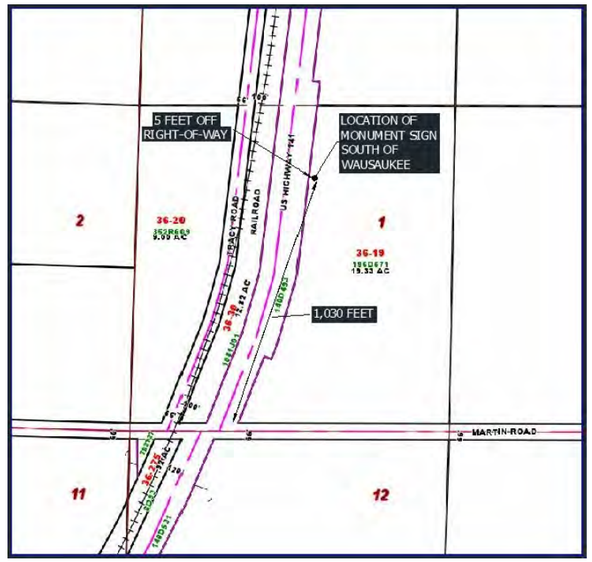



NOTES:
1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR WALL, SIGN, FOOTING, PRECAST CONCRETE CAPS AND SIGN LETTERING.
2. SHOP DRAWINGS SHALL SHOW PAINTED 9" HIGH STAINLESS STEEL OR GALVANIZED STEEL OR ALUMINUM LETTERS. FONT TO BE PROVIDED BY CITY.
3. SHOP DRAWINGS SHALL SHOW LIGHTING FOR WALL.
4. LETTERING FOR WALL ON ONE SIDE ONLY.
5. CONTRACTOR SHALL FIELD VERIFY LOCATION AND OVERALL LENGTH OF MONUMENT SIGN.
6. LETTERING ON SIGNS IS PRELIMINARY AND SHALL BE FINALIZED DURING SHOP DRAWING PROCESS.
7. MONUMENT SIGN LOCATIONS WILL BE FINALIZED IN FIELD. CONTRACTOR SHALL STAKE LOCATIONS FOR VILLAGE AND ENGINEERS APPROVAL PRIOR TO CONSTRUCTION WORK.




## APPROXIMATE NORTH SIGN LOCATION PLAN

** MONUMENT SIGN LOCATIONS WILL BE FINALIZED IN FIELD, CONTRACTOR SHALL STAKE LOCATIONS FOR VILLAGE AND ENGINEERS APPROVAL PRIOR TO CONSTRUCTION WORK.

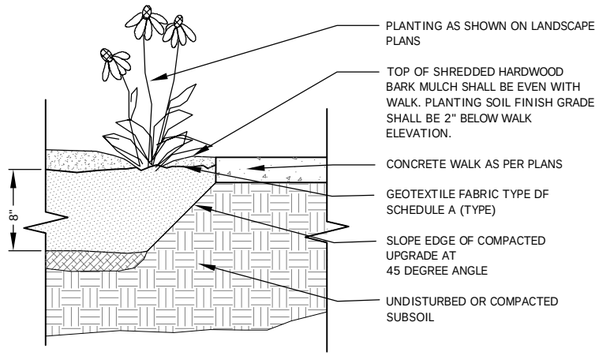



## APPROXIMATE SOUTH SIGN LOCATION PLAN

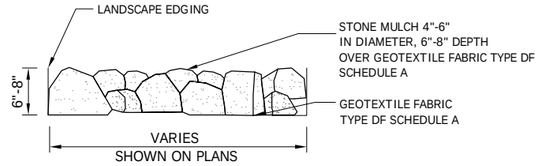
** MONUMENT SIGN LOCATIONS WILL BE FINALIZED IN FIELD, CONTRACTOR SHALL STAKE LOCATIONS FOR VILLAGE AND ENGINEERS APPROVAL PRIOR TO CONSTRUCTION WORK.

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | STREETSCAPE CONSTRUCTION DETAILS | SHEET | E |
|---|---|---|---|---|---|

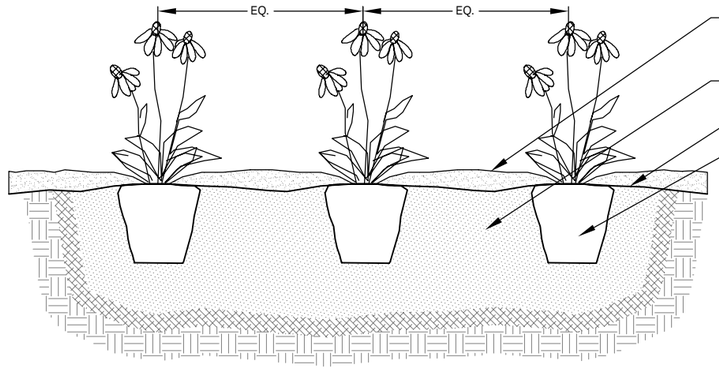
2




## PLANTING BED ADJACENT TO CONCRETE WALK DETAIL




## STONE MULCH




## PERENNIAL PLANTING

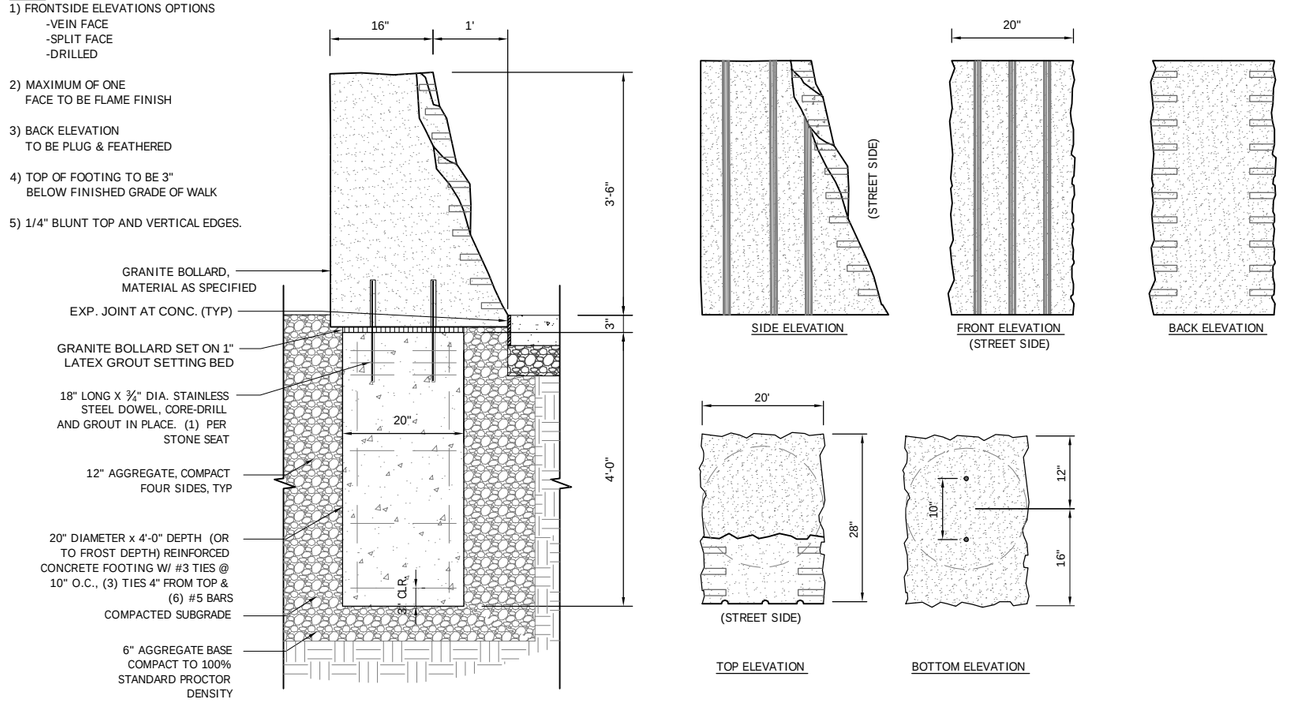
NOTE:
1) FRONTSIDE ELEVATIONS OPTIONS
   -VEIN FACE
   -SPLIT FACE
   -DRILLED

2) MAXIMUM OF ONE FACE TO BE FLAME FINISH

3) BACK ELEVATION TO BE PLUG & FEATHERED

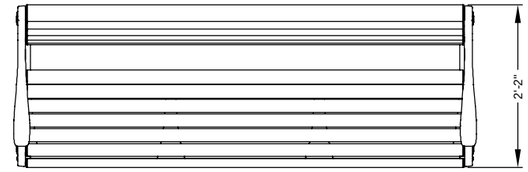
4) TOP OF FOOTING TO BE 3" BELOW FINISHED GRADE OF WALK

5) 1/4" BLUNT TOP AND VERTICAL EDGES.

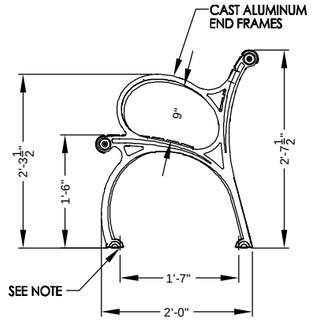



## STONE BOLLARD

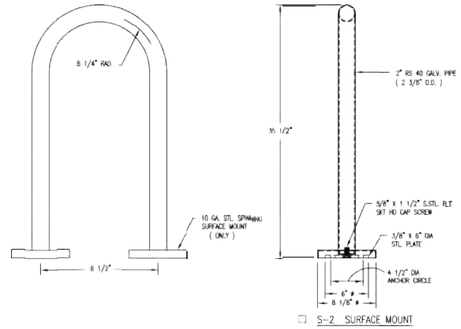
| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | STREETSCAPE CONSTRUCTION DETAILS | SHEET 49 | E |
|---|---|---|---|---|---|

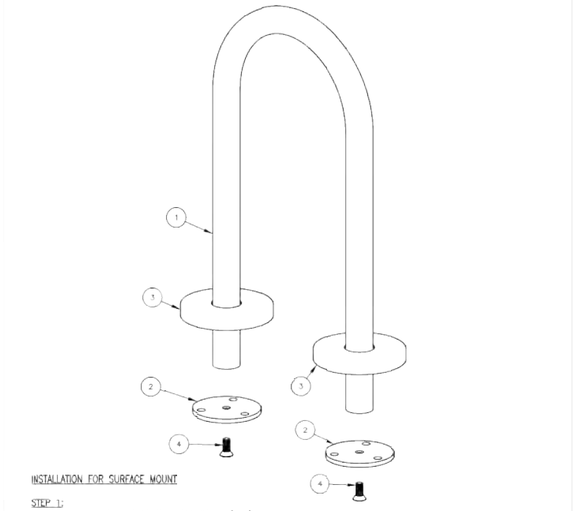



NOTE:
1. SURFACE MOUNT PER MANUFACTURER'S INSTRUCTIONS w/ STAINLESS STEEL OR GALVANIZED FASTENERS. PAINT TO MATCH BENCH COLOR.
2. COLOR TO BE SLECTED FROM MANUFACTURER'S STANDARD OPTIONS DURING SHOP DRAWING REVIEW.
3. SUBMIT SHOP DRAWINGS SHOWING MANUFACTURER'S INFORMATION, MODEL, MATERIALS AND DIMENSIONS FOR APPROVAL.




## BENCH




INSTALLATION FOR SURFACE MOUNT

STEP 1:
USE 1 - PC. BIKE LOOP, SURFACE MOUNT ( 1 )
2 - PCS. 3/8" THK SURFACE MOUNT PLATE ( 2 )
2 - PCS. 10 GA X 8" DIA ANCHOR PLATE COVER ( 3 )
2 - PCS. 5/8" X 1 1/2" SS FLT SKT HD CAP SCREW ( 4 )
SLIDE 10 GA X 8" DIA ANCHOR COVER ( 3 ) OVER BIKE LOOP, SURFACE MOUNT ( 1 ) LEGS. ATTACH 3/8" THK. SURFACE MOUNT PLATE ( 2 ) TO BIKE LOOP, SURFACE MOUNT ( 1 ) USING HARDWARE ( 4 ).

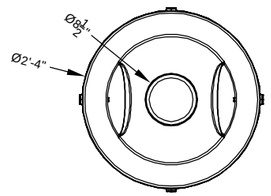
STEP 2:
ANCHOR ACCORDINGLY.

INSTALLATION FOR SUB FLOOR
SAME AS SURFACE MOUNT BUT DO NOT USE 10 GA X 8" DIA ANCHOR PLATE COVER.

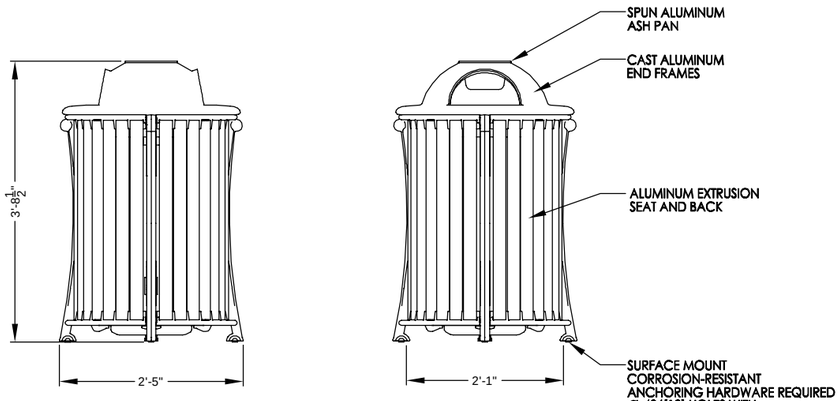
| ITEM | QTY | PART NO | DESCRIPTION |
|---|---|---|---|
| 1 | 1 | 0-83-00-01/S-2 | BIKE LOOP, SURF MOUNT |
| 2 | 2 | 0-83-00-03 | 3/8" THK SURFACE MOUNT PLATE |
| 3 | 2 | 0-83-00-04 | 10 GA X 8" DIA STL ANCHOR PLATE COVER |
| 4 | 2 | 1-12-102 | 5/8" X 1 1/2" SS FLT SKT HD CAP SCR |

NOTES:
A. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR BIKE RACKS, ATTACHMENTS AND FINISHING FOR APPROVAL BY THE VILLAGE.
B. SEE PLANS FOR LOCATION AND ORIENTATION OF BIKE RACKS. CONTRACTOR TO PROVIDE MAP SHOWING LOCATION AND ORIENTATION FOR FINAL APPROVAL BY THE VILLAGE

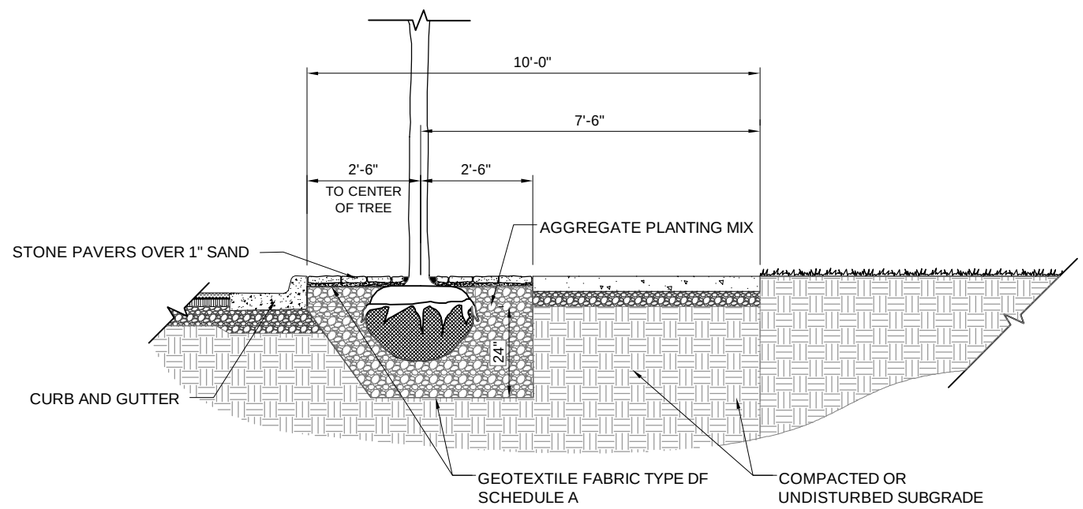
## BIKE RACK



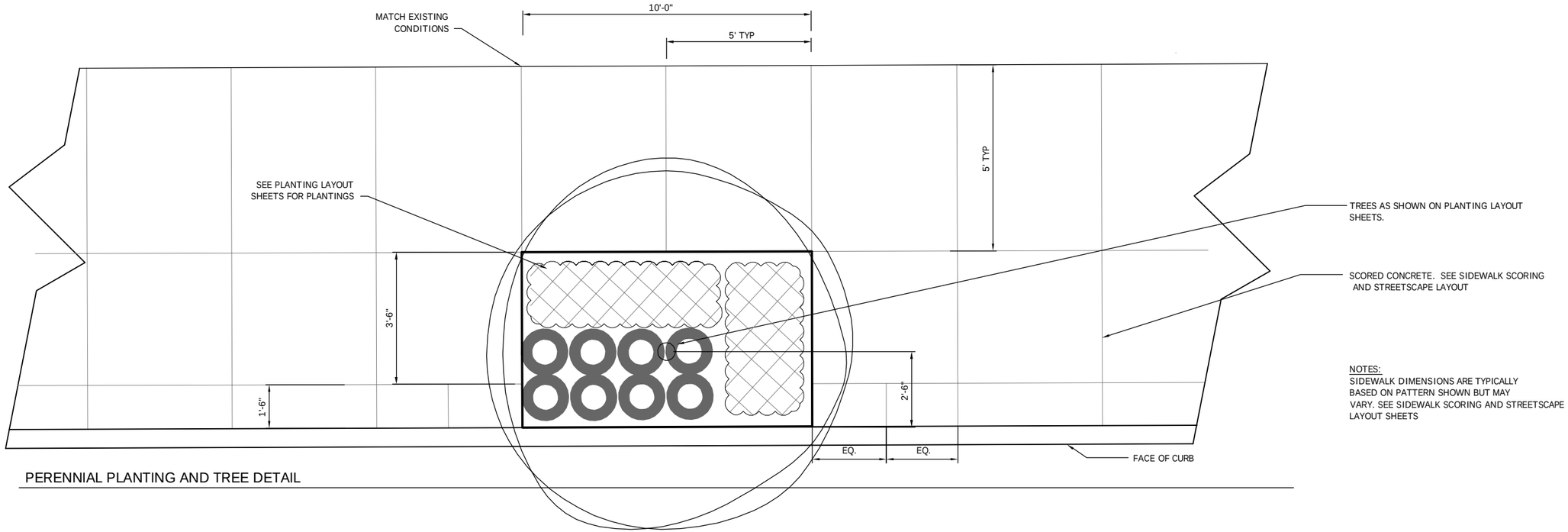

NOTE:
BENCHES, BIKE RACKS AND TRASH RECEPTACLES ALL NEED TO BE PLACED 2' FROM THE FACE OF CURB AND OUTSIDE VISION CORNERS AT INTERSECTION.



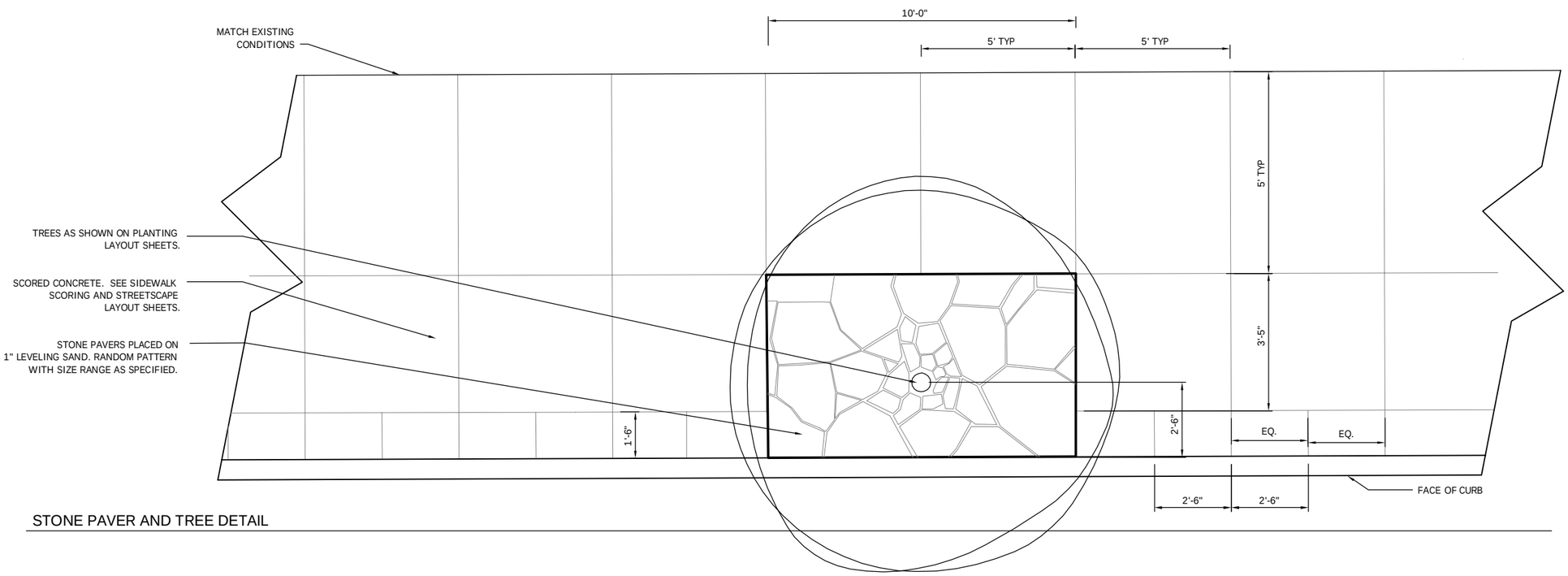

## TRASH RECEPTACLE




## STONE PAVER

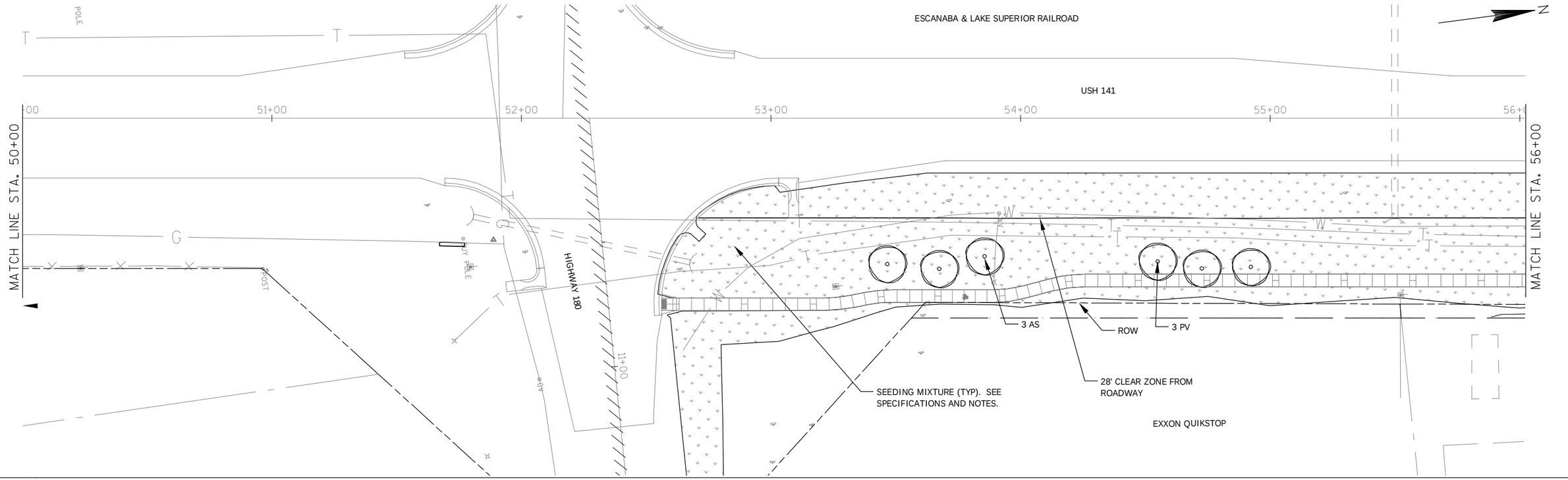



PERENNIAL PLANTING AND TREE DETAIL




STONE PAVER AND TREE DETAIL

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | STREETSCAPE CONSTRUCTION DETAILS | SHEET 51 | E |
|---|---|---|---|---|---|

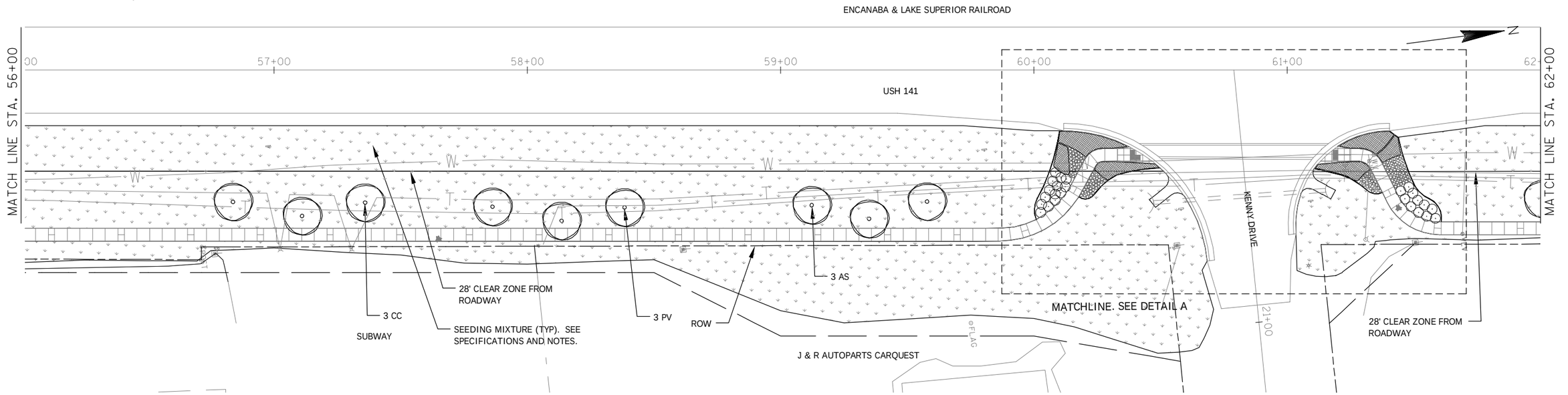


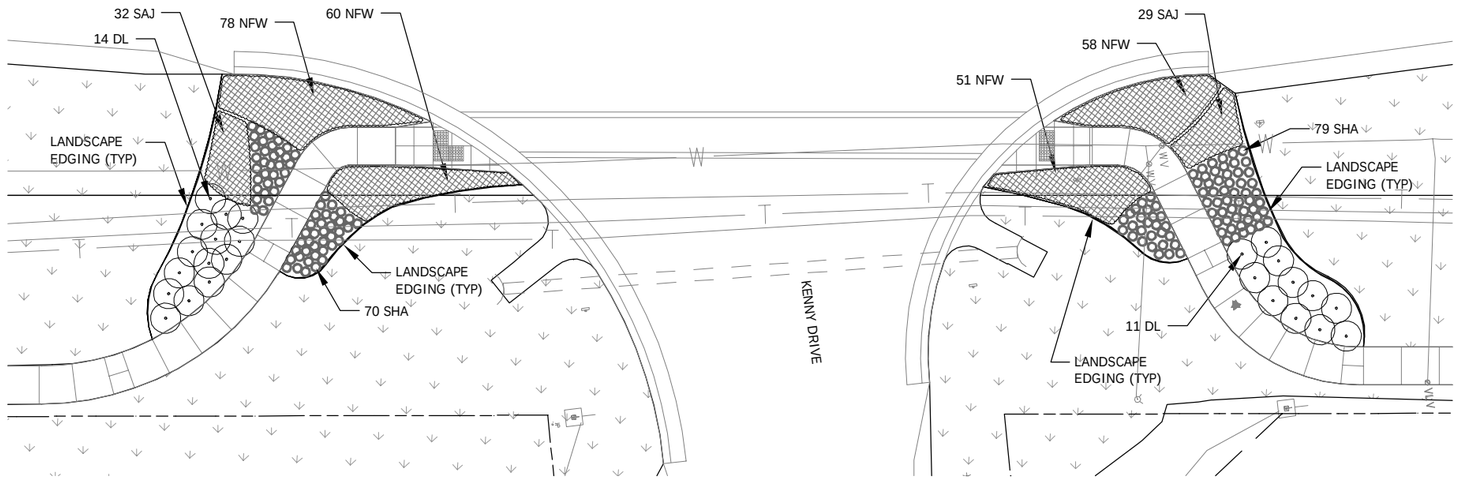

## PLANT LIST

| SYMBOL | BOTANICAL NAME | COMMON NAME | QTY | SIZE | O.C. SPACING |
|---|---|---|---|---|---|
| ORNAMENTAL TREES - SEE B&B TREE PLANTING DETAIL | | | | | |
| AS | AMELANCHIER X GRANDIFLORA | AUTUMN BRILLIANT SERVICEBERRY | 11 | 1.5" CAL. | SEE PLANS |
| CC | CRATAEGUS CRUS-GALLI | COCKSPUR HAWTHORN | 7 | 1.5" CAL. | SEE PLANS |
| GC | GINKGO BILOBA 'CENTURY' | CENTURY GINGKO | 34 | 1.5" CAL. | SEE PLANS |
| MSS | MALUS 'SPRING SNOW' | SPRING SNOW CRABAPPLE | 22 | 1.5" CAL. | SEE PLANS |
| SR | SYRINGA RETICULATA 'IVORY SILK' | 'IVORY SILK' JAPANESE TREE LILAC | 31 | 1.5" CAL. | SEE PLANS |
| PV | PRUNUS VIRGINIANA | CHOKECHERRY | 6 | 1.5" CAL. | SEE PLANS |
| SHRUBS - SEE SHRUB PLANTING DETAIL | | | | | |
| DL | DIERVILLA LONICERA | DWARF BUSH HONEYSUCKLE | 63 | 3 GAL | SEE PLANS |
| PO | PHYSOCARPUS OPULIFOLIUS 'NANUS' | DWARF NINEBARK | 46 | 3 GAL | SEE PLANS |
| RA | RIBES ALPINUM | ALPINE CURRANT | 4 | 3 GAL | SEE PLANS |
| RAG | RHUS AROMATICA 'GROW LOW' | GROW LOW SUMAC | 29 | 3 GAL | SEE PLANS |
| PERENNIALS / GROUNDCOVER - SEE PERENNIAL PLANTING AND SPACING DETAIL | | | | | |
| ANA | ASTER NOVAE ANGLIAE 'PURPLE DOME' | PURPLE DOME ASTER | 106 | 1 GAL | 24" O.C. |
| EP | ECHINECEA PURPUREA | PURPLE CONEFLOWER | 113 | 1 GAL | 24" O.C. |
| CAK | CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' | FEATHER REED GRASS | 330 | 1 GAL | 20" O.C. |
| HM | HEMEROCALLIS 'BAJA' | BAJA DAYLILY | 336 | 1 GAL | 24" O.C. |
| NFW | NEPETA FAASENNII 'WALKERS LOW' | WALKERS LOW CATMINT | 507 | 1 GAL | 24" O.C. |
| PA | PEROVSKIA ATRIPLICIFOLIA | RUSSIAN SAGE | 23 | 1 GAL | 24" O.C. |
| RFG | RUDBECKIA FULGIDA 'GOLDSTRUM' | GOLDSTRUM BLACK-EYED SUSAN | 207 | 1 GAL | 24" O.C. |
| SAJ | SEDUM 'AUTUMN JOY' | AUTUMN JOY SEDUM | 66 | 1 GAL | 24" O.C. |
| SH | SPOROBOLUS HETEROLEPIS | PRAIRIE DROPSEED | 79 | 1 GAL | 24" O.C. |
| SSB | SCHIZACHYRIUM SCOPARIUM 'BLUE HEAVEN' | BLUE HEAVEN LITTLE BLUESTEM | 139 | 1 GAL | 24" O.C. |
| SHA | SPOROBOLUS HETEROLEPIS 'TARA' | TARA PRAIRIE DROPSEED | 202 | 1 GAL | 20" O.C. |

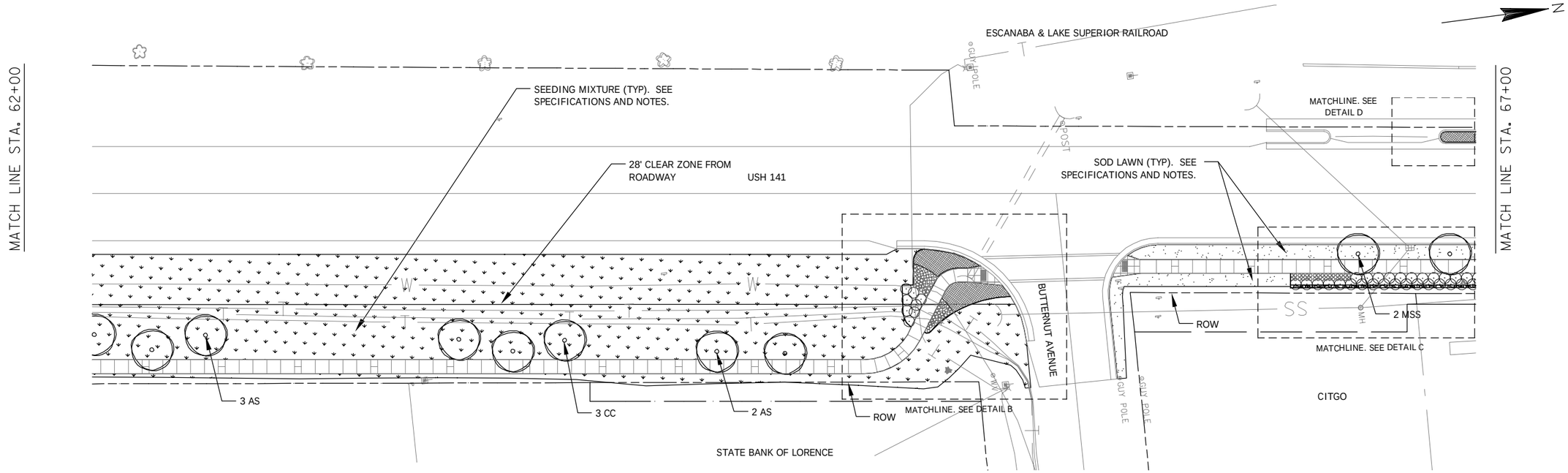
NOTES:

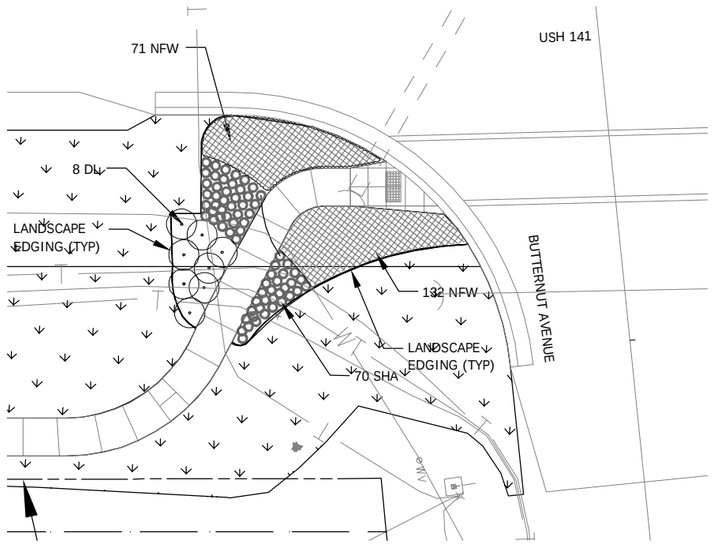
1. VERIFY THAT TREE PROTECTION IS IN PLACE PRIOR TO STARTING PLANTING OPERATIONS.
2. IN GENERAL TREES SHALL BE 10' FROM LIGHTS AND 5' FEET FROM EDGE OF ALL STORM SEWERS, SANITARY SEWERS, WATER AND GAS LINES. VERIFY THE LOCATIONS OF LIGHTS AND UTILITIES PRIOR TO PLANTING AND NOTIFY ENGINEER OF CONFLICTS.
3. ALL PLANT BEDS TO RECEIVE 3" MIN. OF SHREDDED HARDWOOD BARK MULCH AS SPECIFIED.
4. SEEDING MIXTURE AND SOD LAWN TO BE USED IN ALL TURF AREAS WHERE SHOWN ON PLANS.


ENCANABA & LAKE SUPERIOR RAILROAD
MATCH LINE STA. 56+00
57+00
58+00
59+00
60+00
61+00
MATCH LINE STA. 62+00
USH 141
KENNY DRIVE
3 AS
28' CLEAR ZONE FROM ROADWAY
3 CC
SUBWAY
SEEDING MIXTURE (TYP). SEE SPECIFICATIONS AND NOTES.
3 PV
ROW
MATCHLINE. SEE DETAIL A
J & R AUTOPARTS CARQUEST
28' CLEAR ZONE FROM ROADWAY

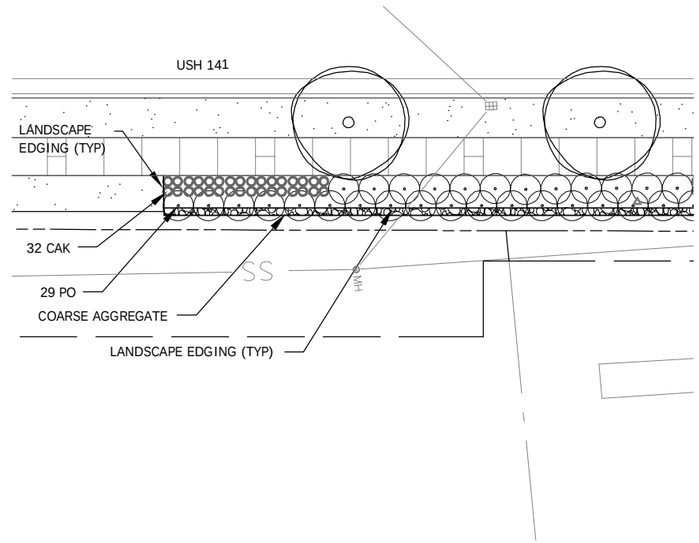

32 SAJ
78 NFW
60 NFW
14 DL
LANDSCAPE EDGING (TYP)
LANDSCAPE EDGING (TYP)
70 SHA
KENNY DRIVE
29 SAJ
58 NFW
51 NFW
79 SHA
LANDSCAPE EDGING (TYP)
11 DL
LANDSCAPE EDGING (TYP)

DETAIL A

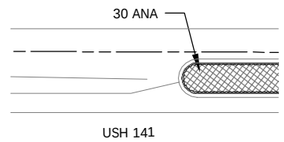



DETAIL B

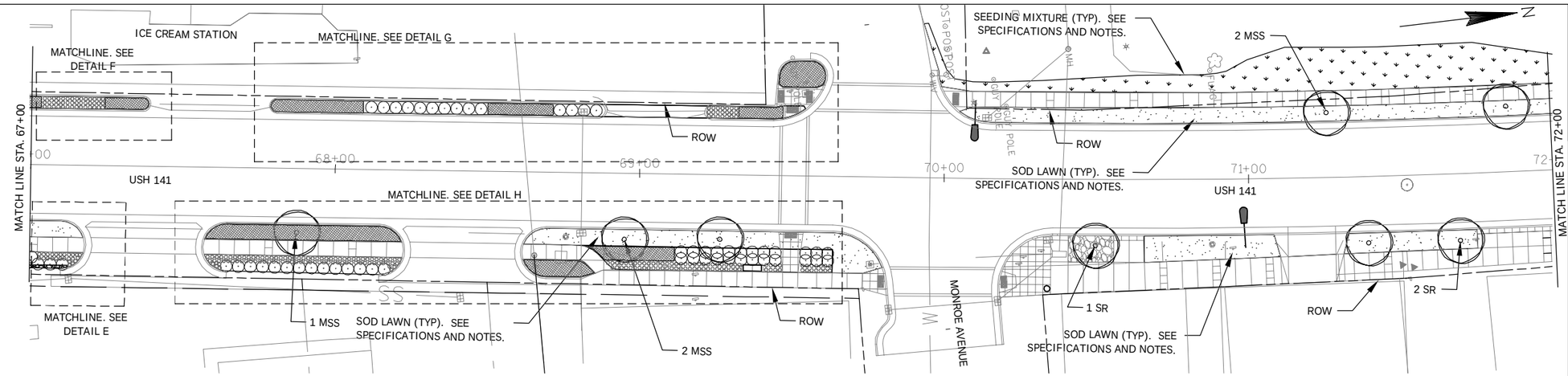


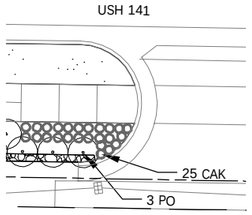

DETAIL C



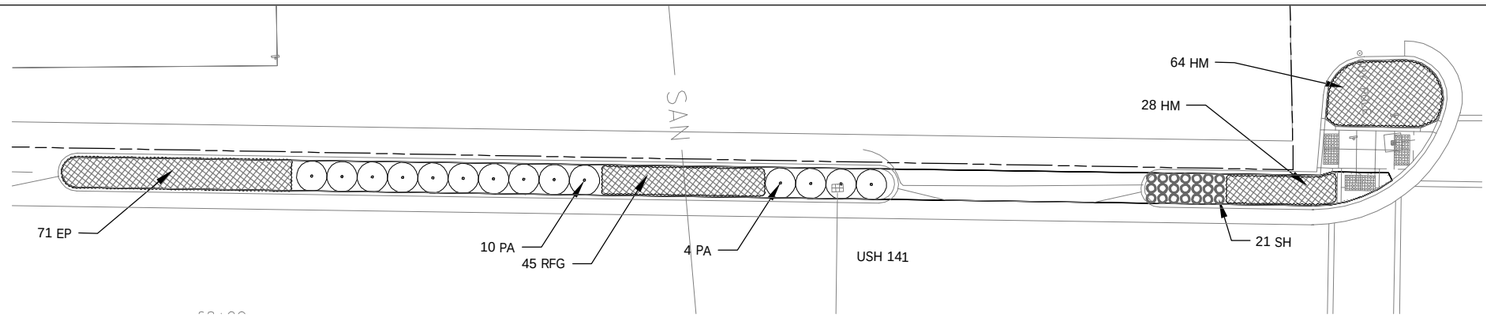

DETAIL D

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | PLANTING LAYOUT | SHEET 54 | E |
|---|---|---|---|---|---|

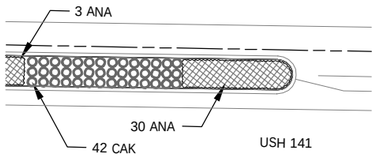


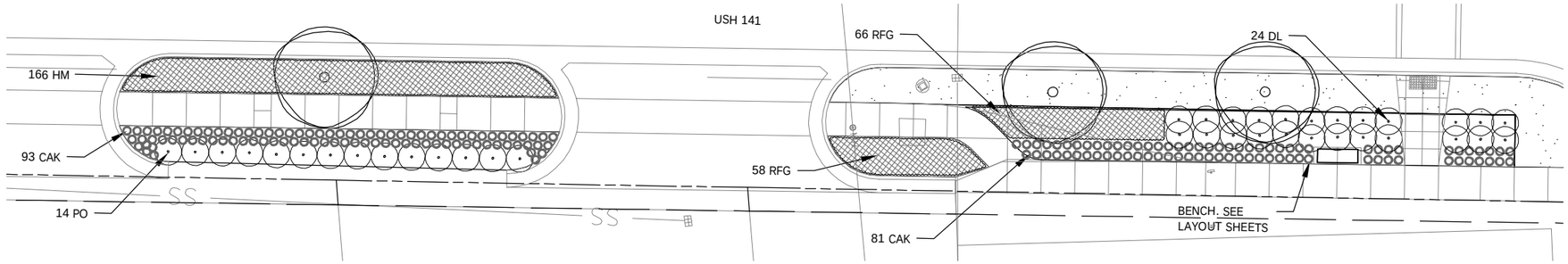

DETAIL E




DETAIL G

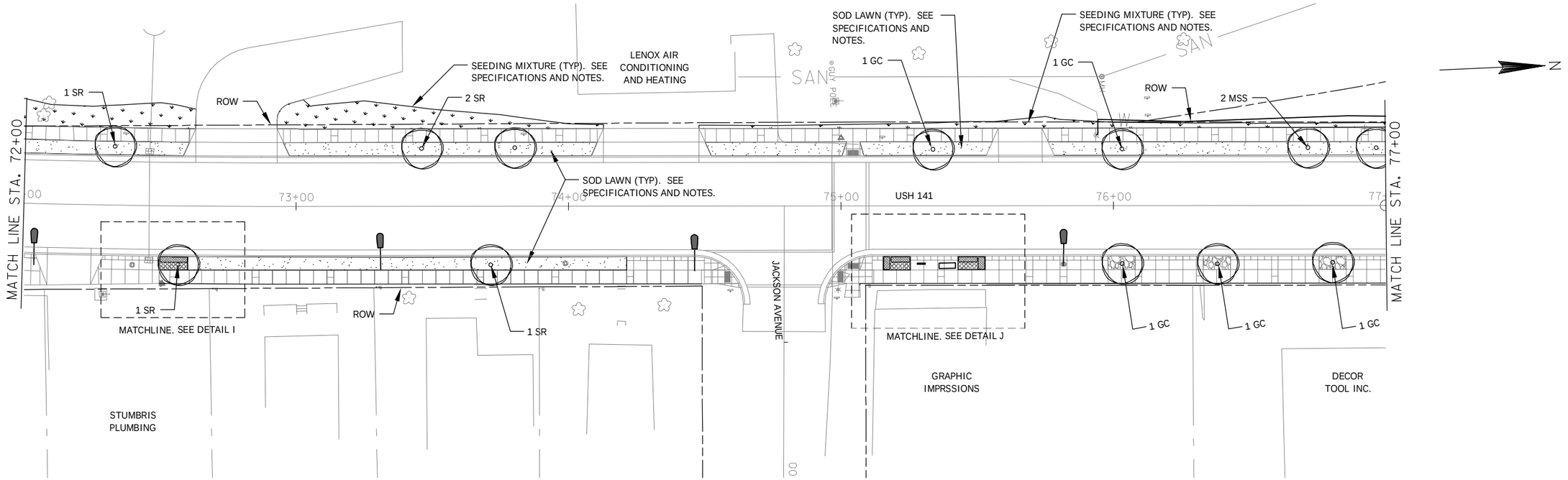


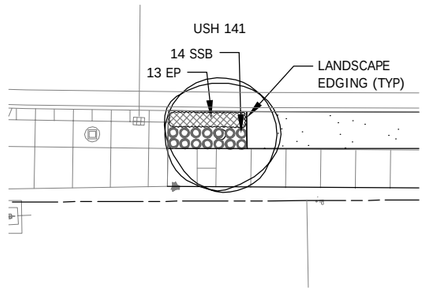

DETAIL F



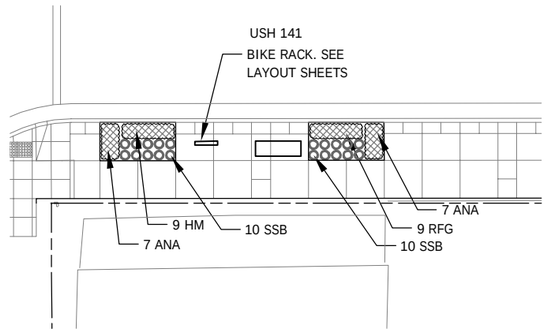

DETAIL H

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | PLANTING LAYOUT | SHEET 55 | E |
|---|---|---|---|---|---|

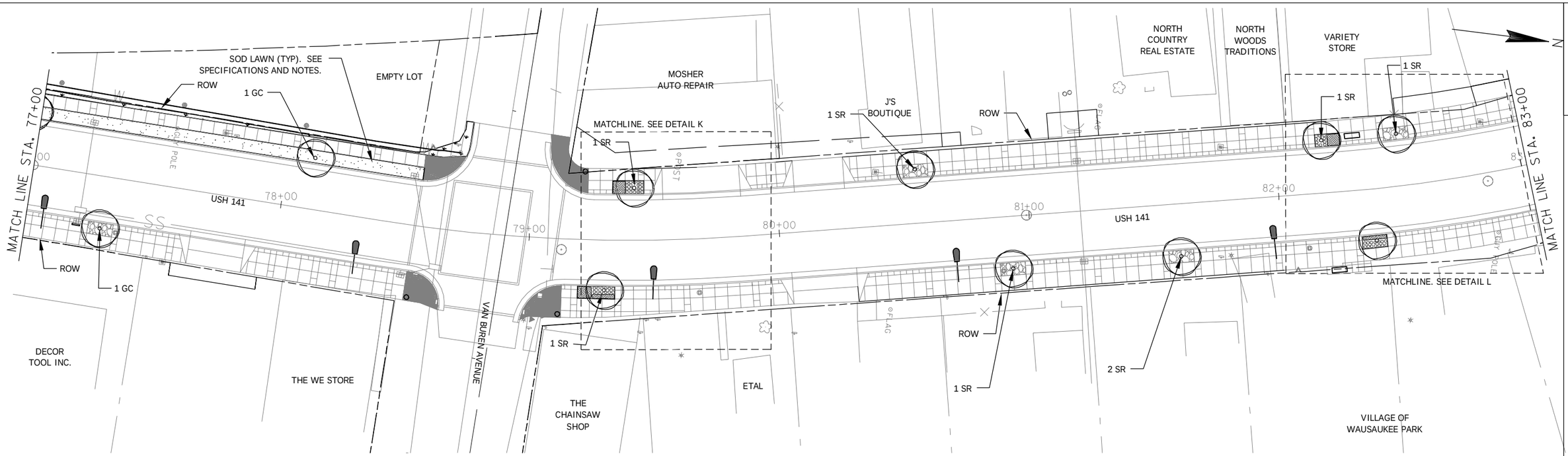


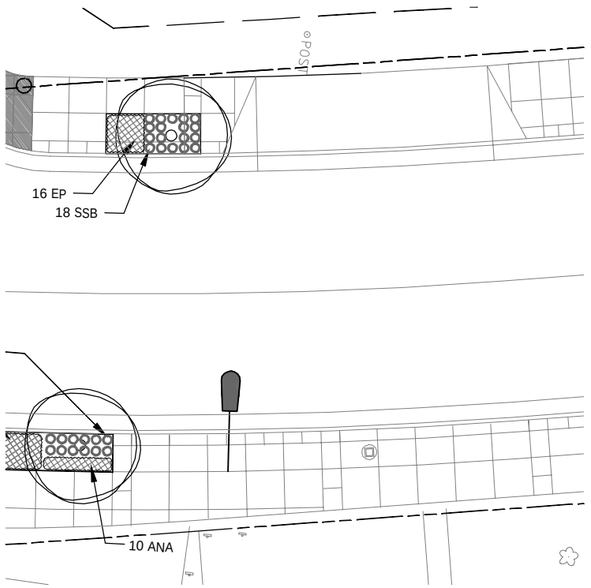




DETAIL I

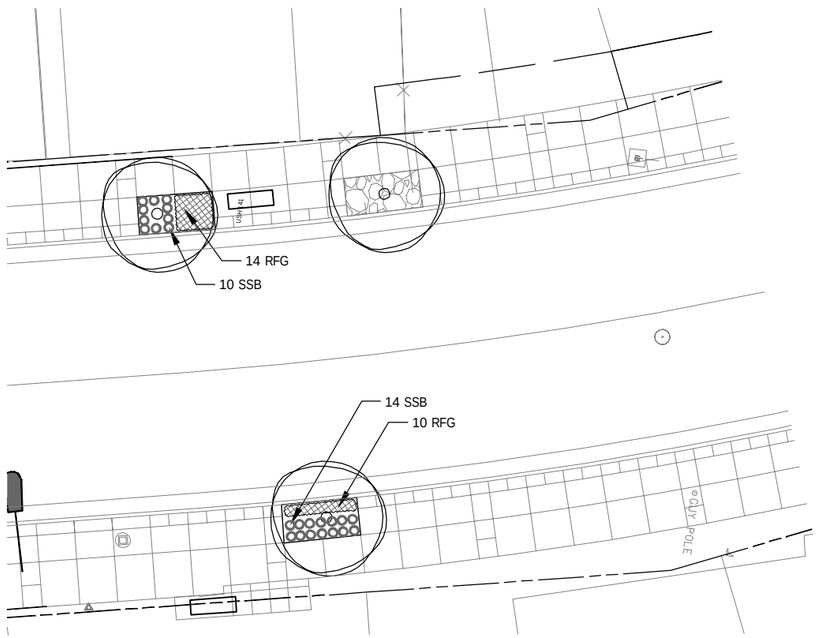



DETAIL J



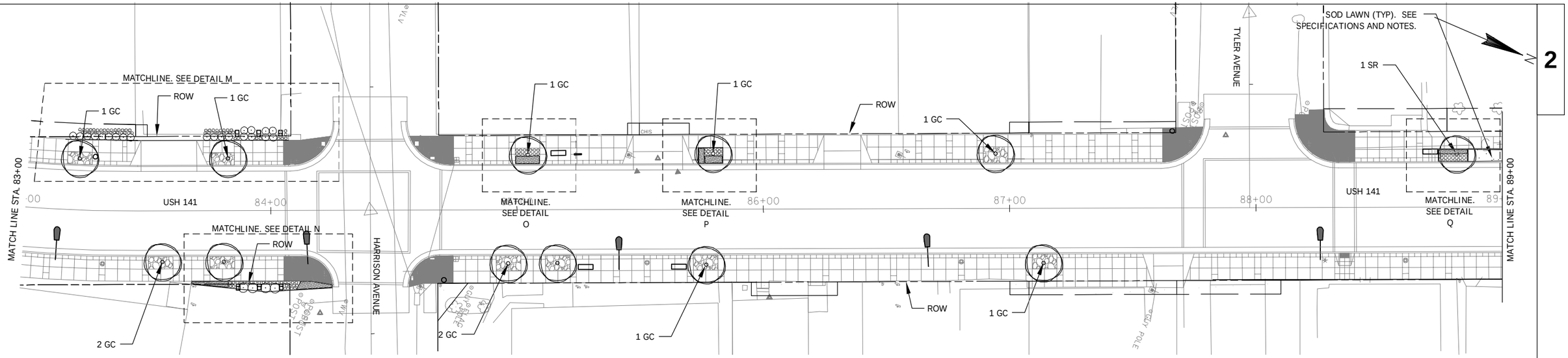

DETAIL K

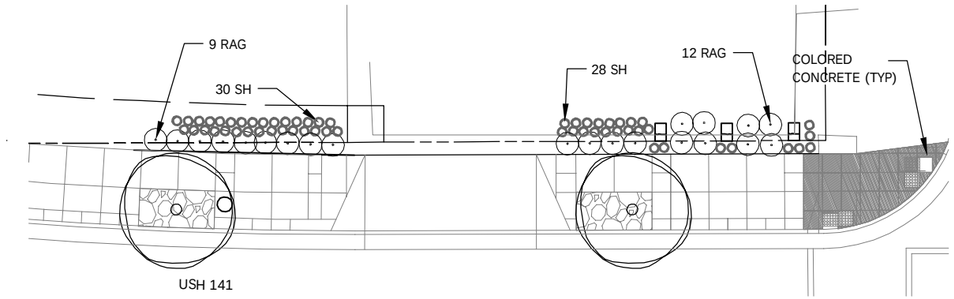



DETAIL L

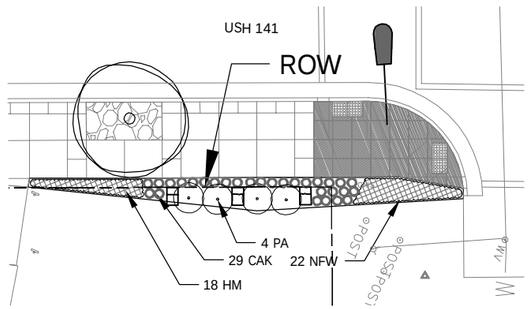
| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | PLANTING LAYOUT | SHEET 57 | E |
|---|---|---|---|---|---|

FILE NAME : V:\1937\ACTIVE\193701479\05_REPORT_DELIV\DELIVERABLES\VILLAGE OF WAUSAUKEE\CAD\193701479L206.DWG PLOT DATE : 7/4/2013 4:33 PM PLOT BY : ROCK, ADAM PLOT NAME : ----------
WISDOT/CADDS SHEET 44

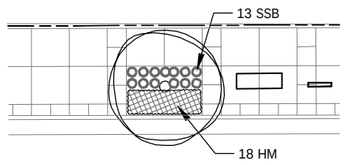


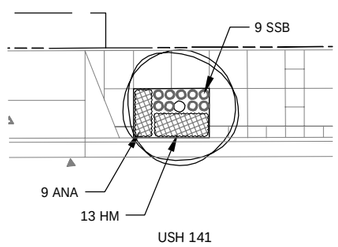

DETAIL M



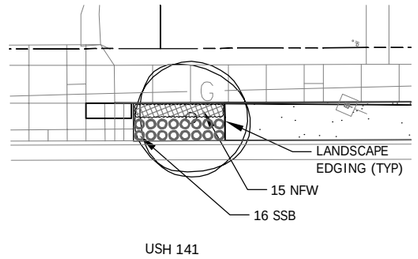

DETAIL N




DETAIL O

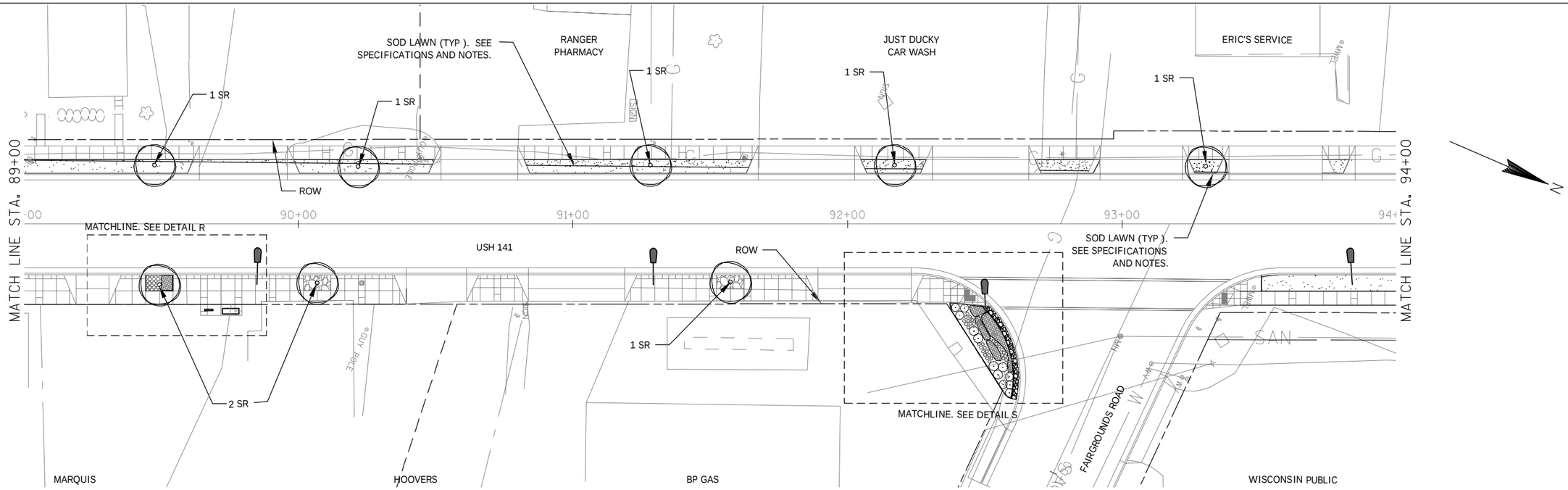


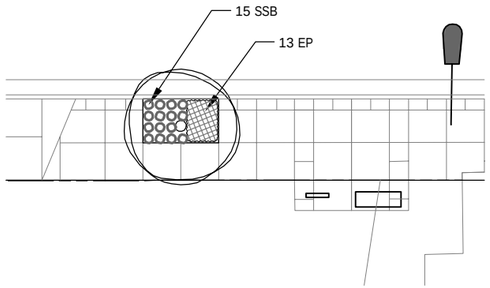

DETAIL P



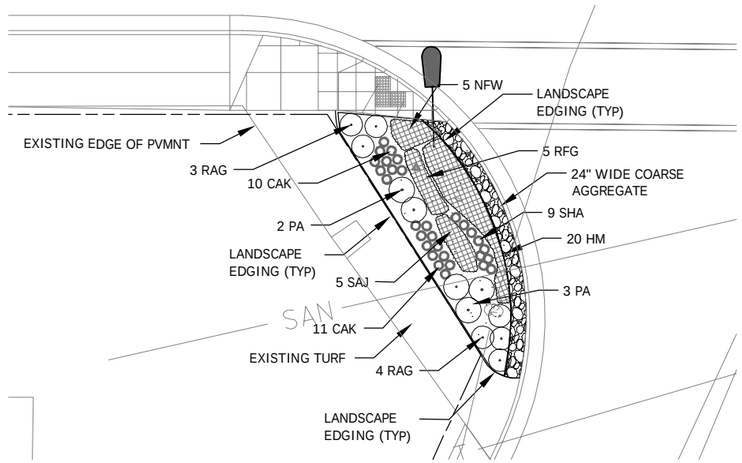

DETAIL Q

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | PLANTING LAYOUT | SHEET 58 | E |
|---|---|---|---|---|---|



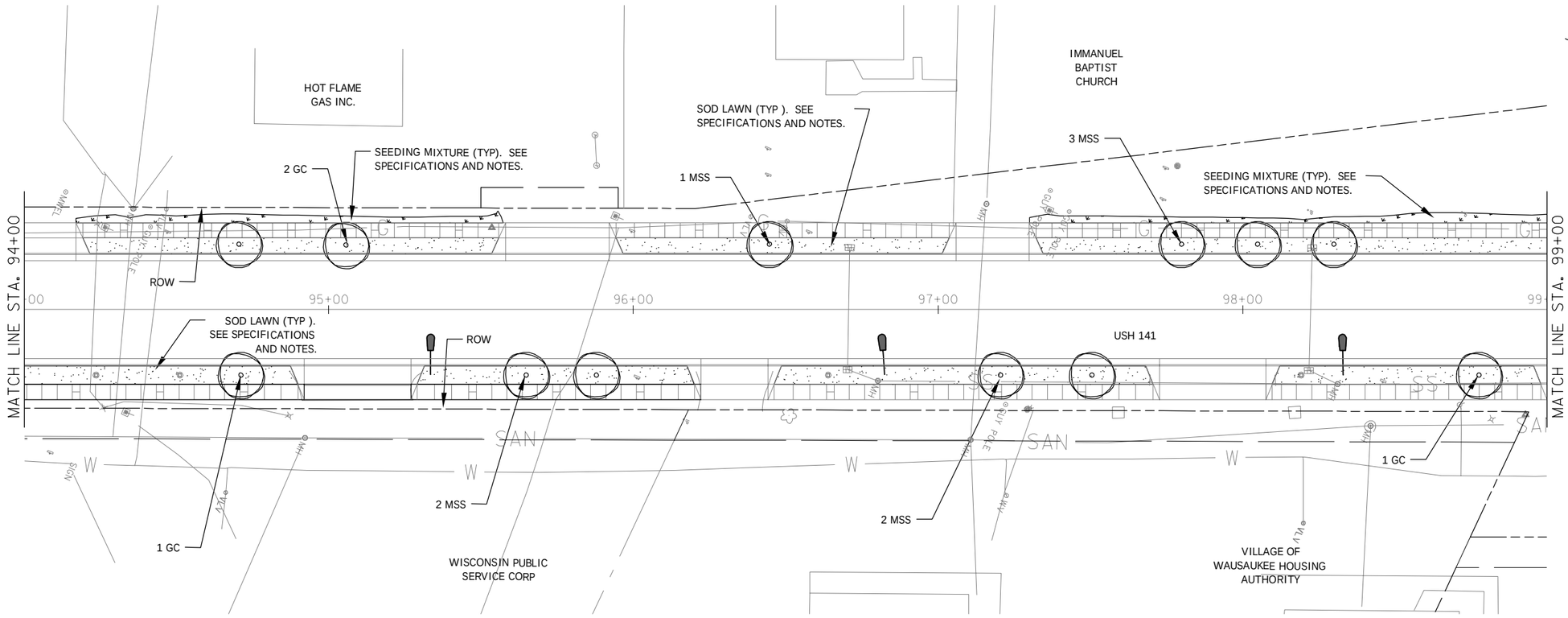




DETAIL R




DETAIL S

2




| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | PLANTING LAYOUT | SHEET 60 | E |
|---|---|---|---|---|---|

2

MATCH LINE STA. 99+00

IMMANUEL BAPTIST CHURCH

SOD LAWN (TYP ). SEE SPECIFICATIONS AND NOTES.

2 GC

USH 141

NEL: 721.46

NEL: 721.44

WAUSAUKEE RANGER STATION

ROW

1 GC

SOD LAWN (TYP SYM). SEE SPECIFICATIONS AND NOTES.

CTHL

19+00

ROW

SEEDING MIXTURE (TYP). SEE SPECIFICATIONS AND NOTES.

1 GC

SOD LAWN (TYP ). SEE SPECIFICATIONS AND NOTES.

MATCH LINE STA. 105+00

100+00

101+00

102+00

104+00

USH 141

SEEDING MIXTURE (TYP). SEE SPECIFICATIONS AND NOTES.

1 GC

2 GC

1 CC

VILLAGE OF WAUSAUKEE HOUSING AUTHORITY

MATCHLINE. SEE DETAIL T

ROW

2 GC

VILLAGE OF WAUSAUKEE

SEEDING MIXTURE (TYP). SEE SPECIFICATIONS AND NOTES.

BEACH AVENUE

11+00

ROW

BENCHES. SEE LAYOUT SHEETS

LANDSCAPE EDGING (TYP)

10 ANA

4 RA

6 DL

LANDSCAPE EDGING (TYP)

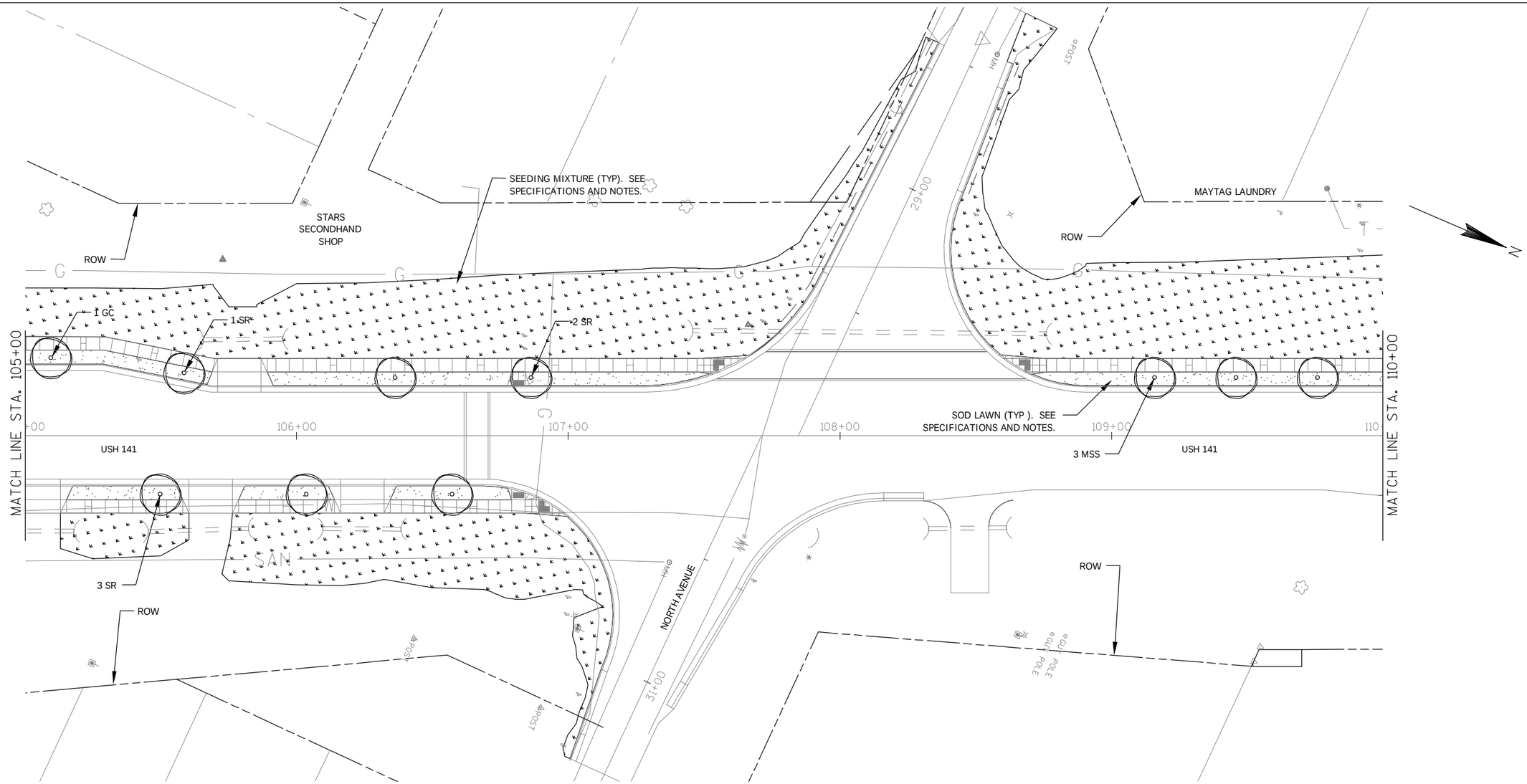
## DETAIL T

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | PLANTING LAYOUT | SHEET 61 | E |
|---|---|---|---|---|---|

FILE NAME : V:\1937\ACTIVE\193701479\05_REPORT_DELIV\DELIVERABLES\VILLAGE OF WAUSAUKEE\CAD\193701479L210.DWG PLOT DATE : 7/4/2013 4:33 PM PLOT BY : ROCK, ADAM PLOT NAME : ----------

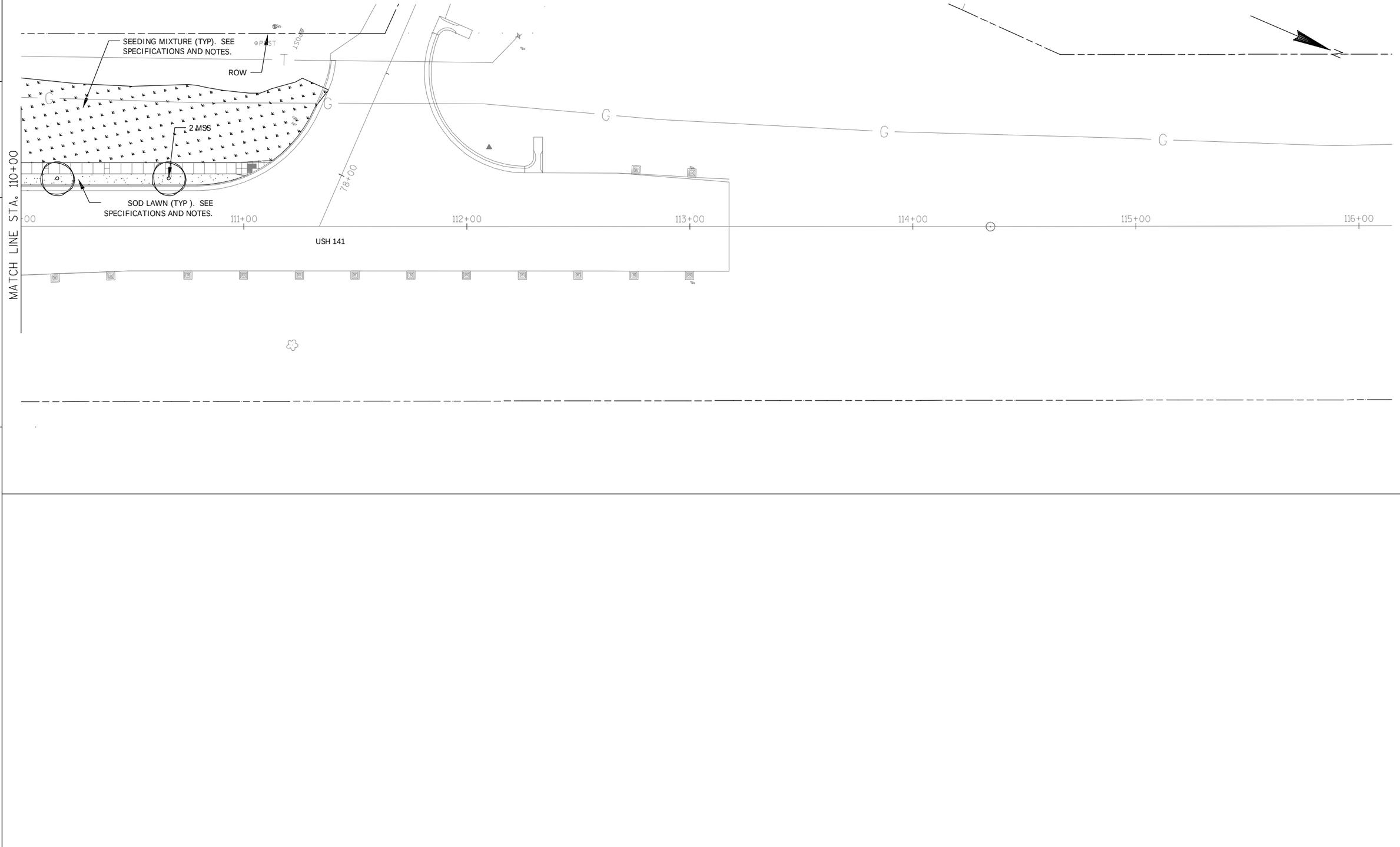
WISDOT/CADDS SHEET 44

2

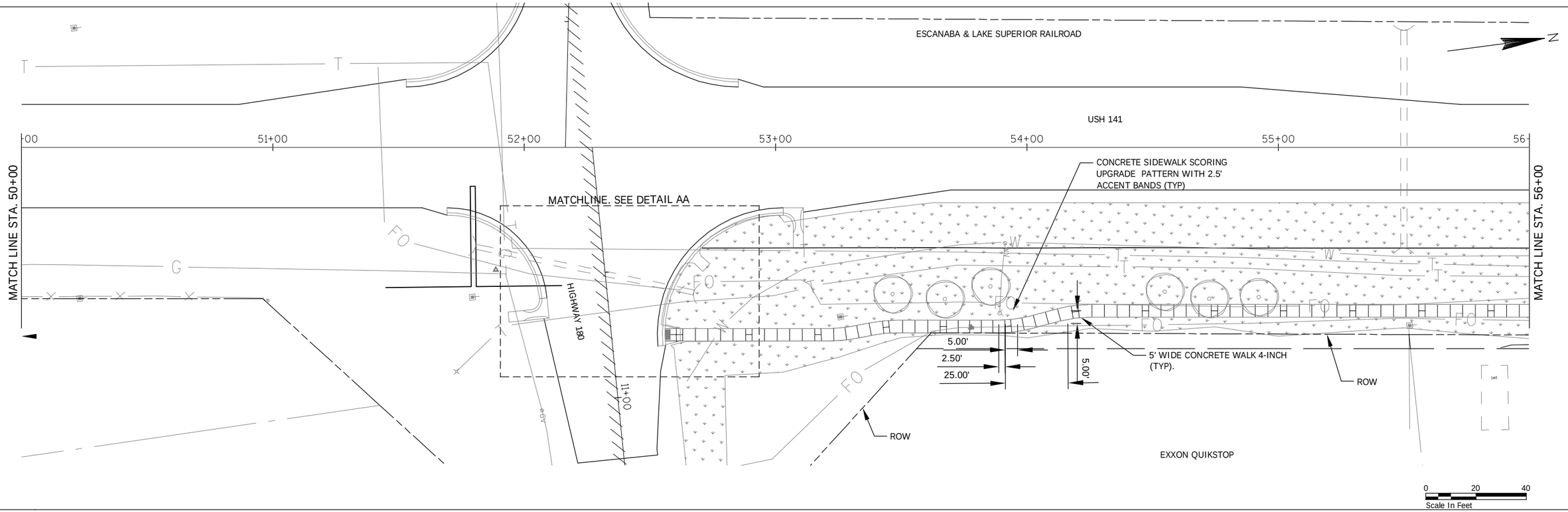


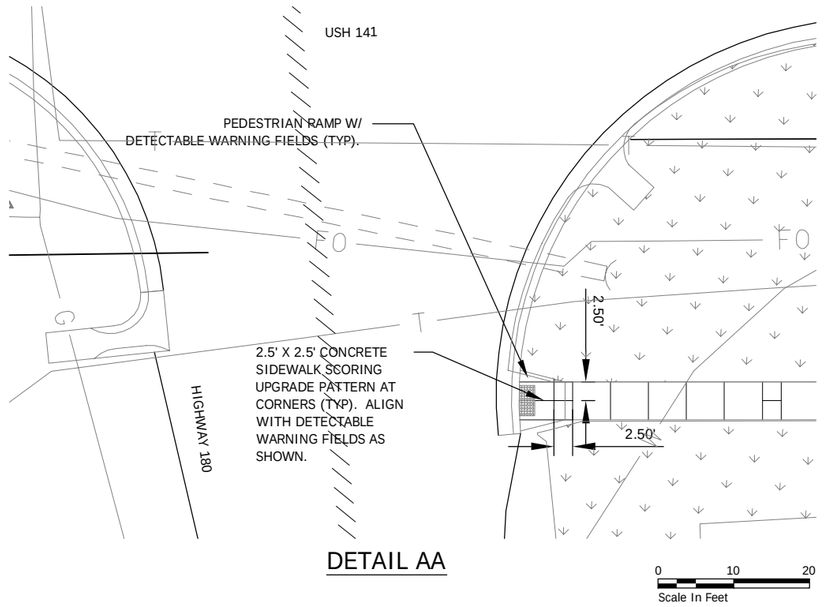

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | PLANTING LAYOUT | SHEET 62 | E |
|---|---|---|---|---|---|

2




| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | PLANTING LAYOUT | SHEET 63 | E |
|---|---|---|---|---|---|



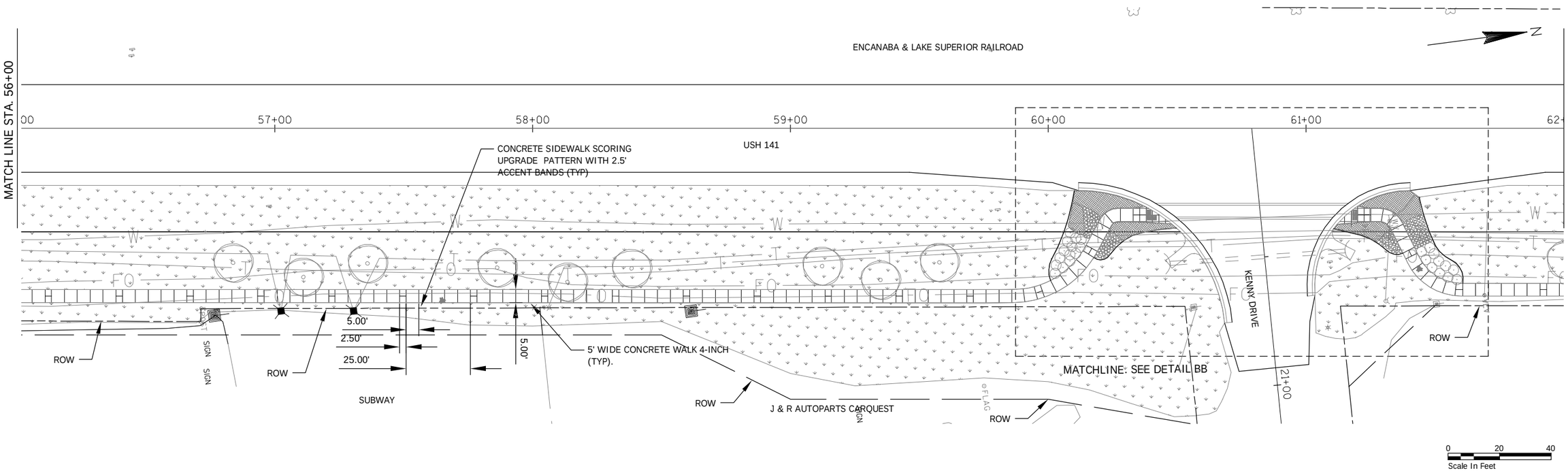




DETAIL AA

NOTES:

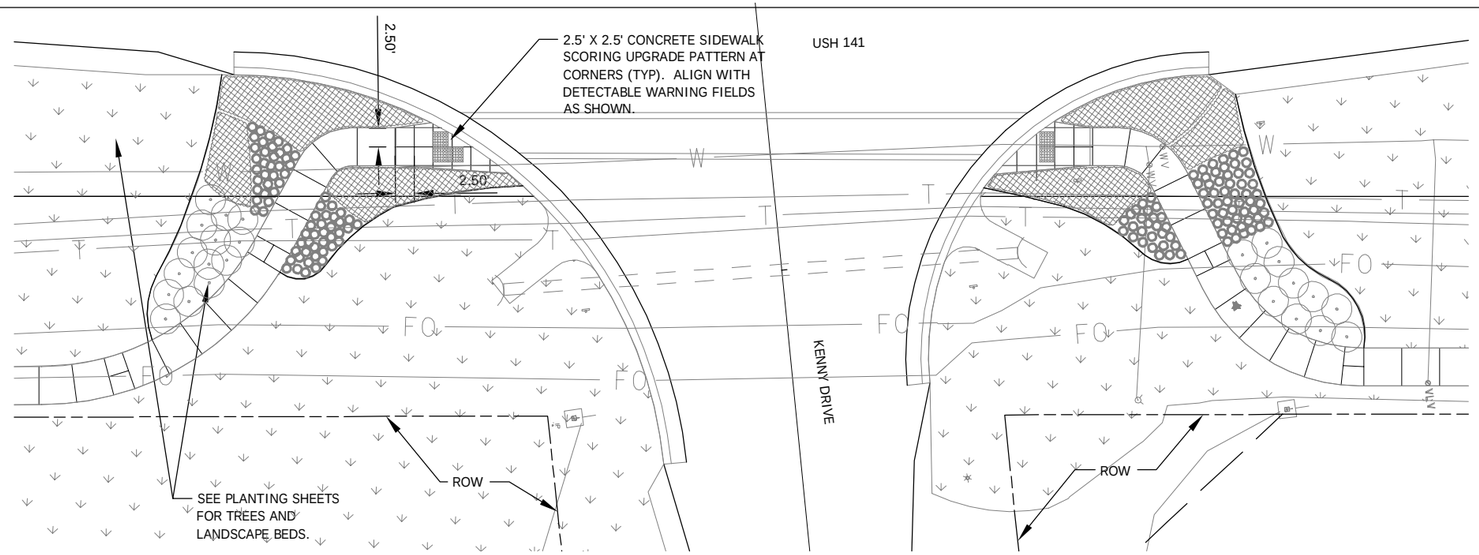
1. PROVIDE EXPANSION JOINTS EVERY 50' MINIMUM ALONG THE LENGTH OF THE WALKWAY.
2. VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION.

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 64 | E |
|---|---|---|---|---|---|




NOTES:

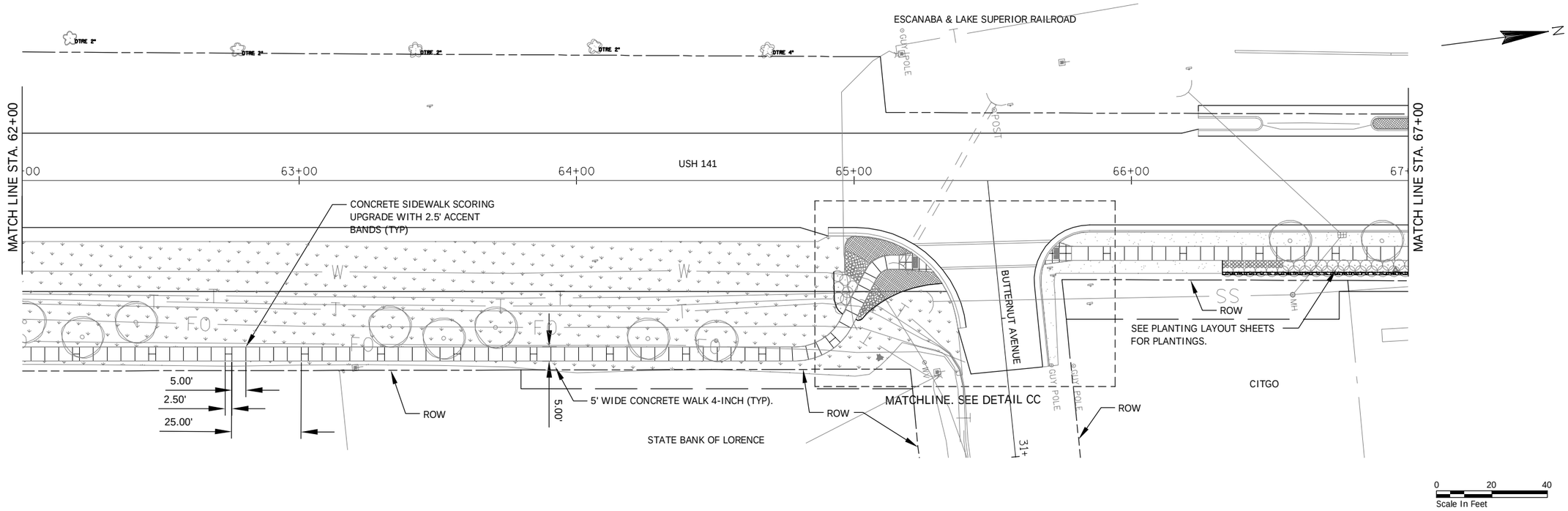
1. PROVIDE EXPANSION JOINTS EVERY 50' MINIMUM ALONG THE LENGTH OF THE WALKWAY.
2. VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION.

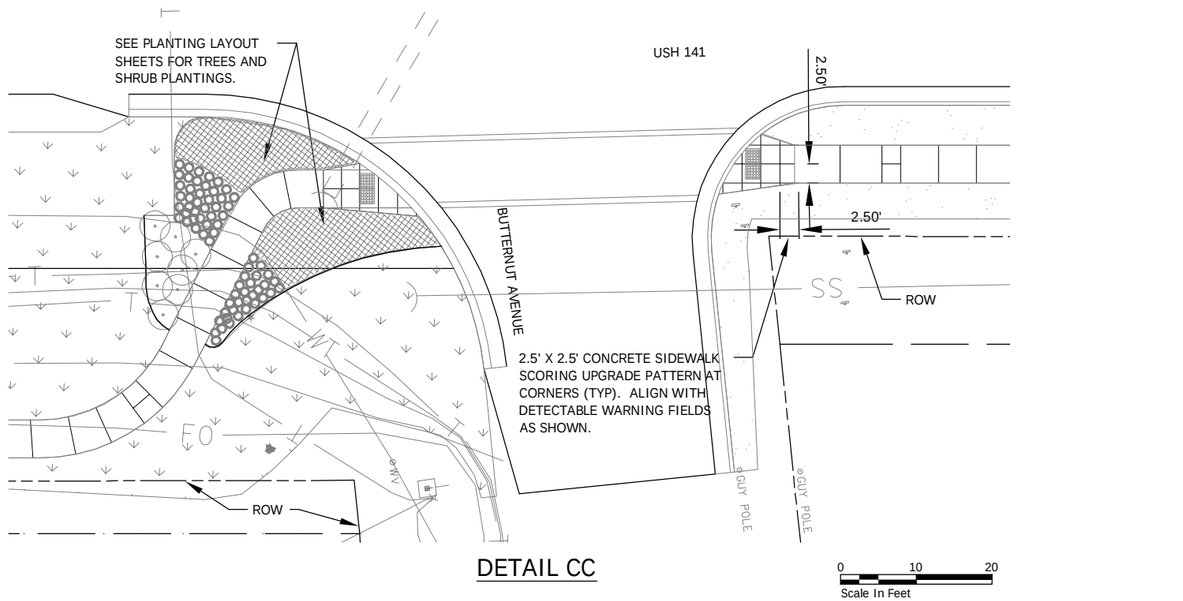



## DETAIL BB

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 65 | E |
|---|---|---|---|---|---|

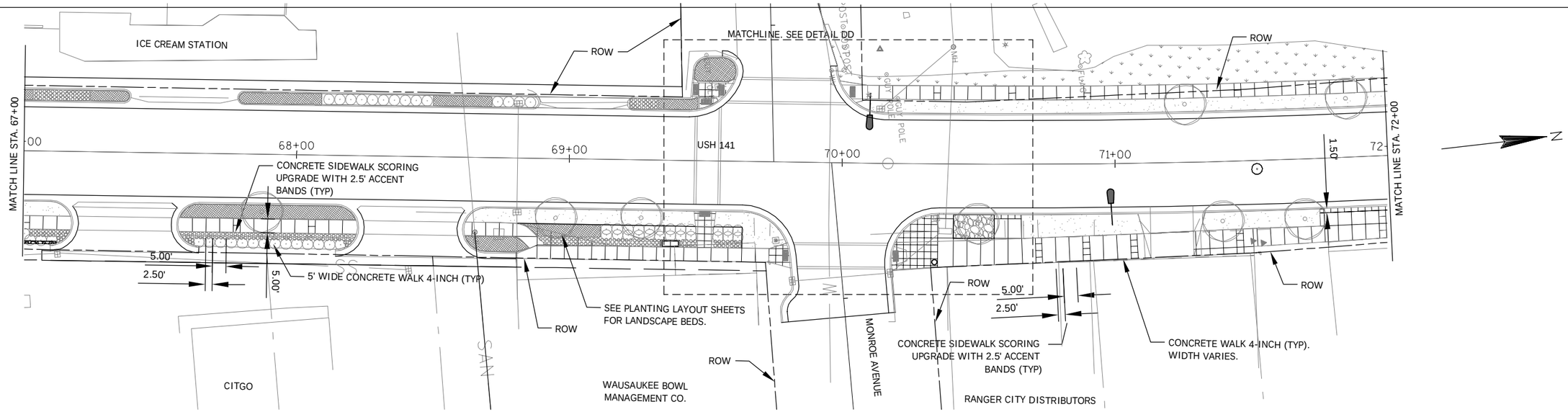
FILE NAME : V:\1937\ACTIVE\193701479\05_REPORT_DELIV\DELIVERABLES\VILLAGE OF WAUSAUKEE\CAD\193701479L102.DWG PLOT DATE : 7/4/2013 4:26 PM PLOT BY : GRESKY, BRIAN PLOT NAME : ----------
WISDOT/CADDS SHEET 44

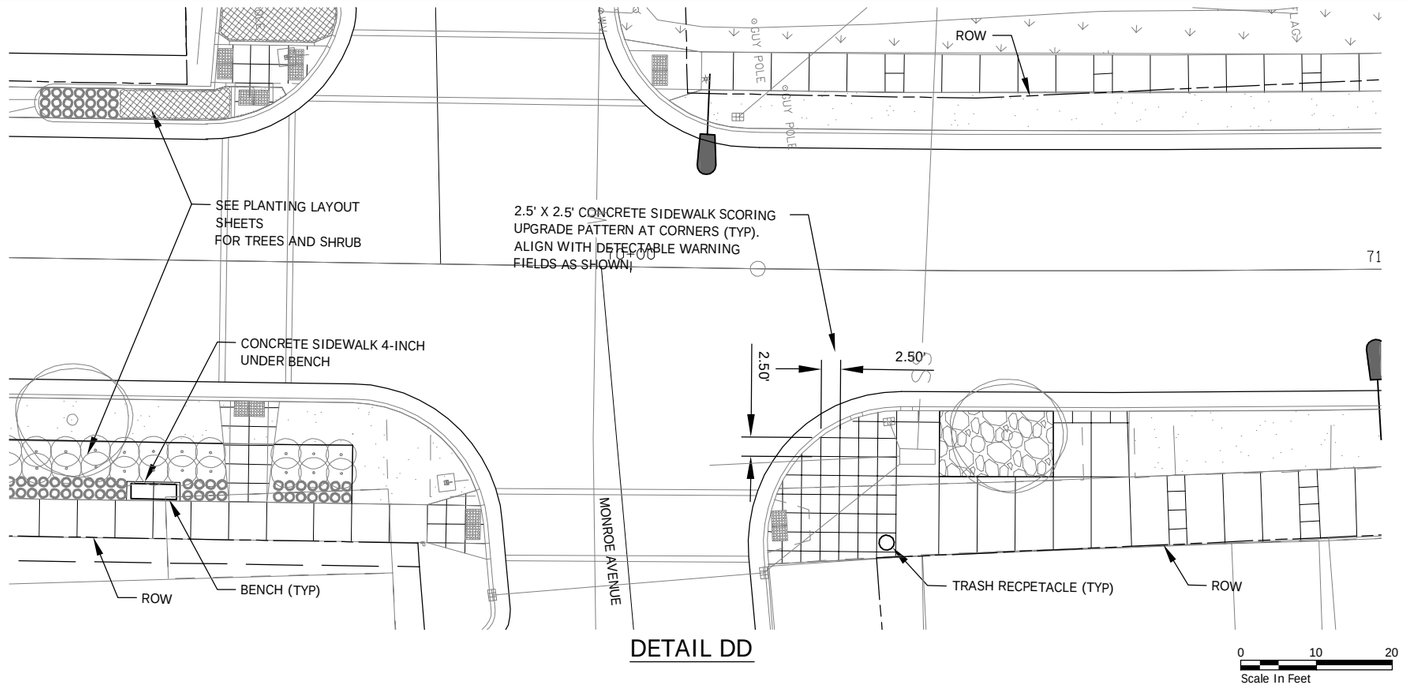



DETAIL CC

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 66 | E |
|---|---|---|---|---|---|

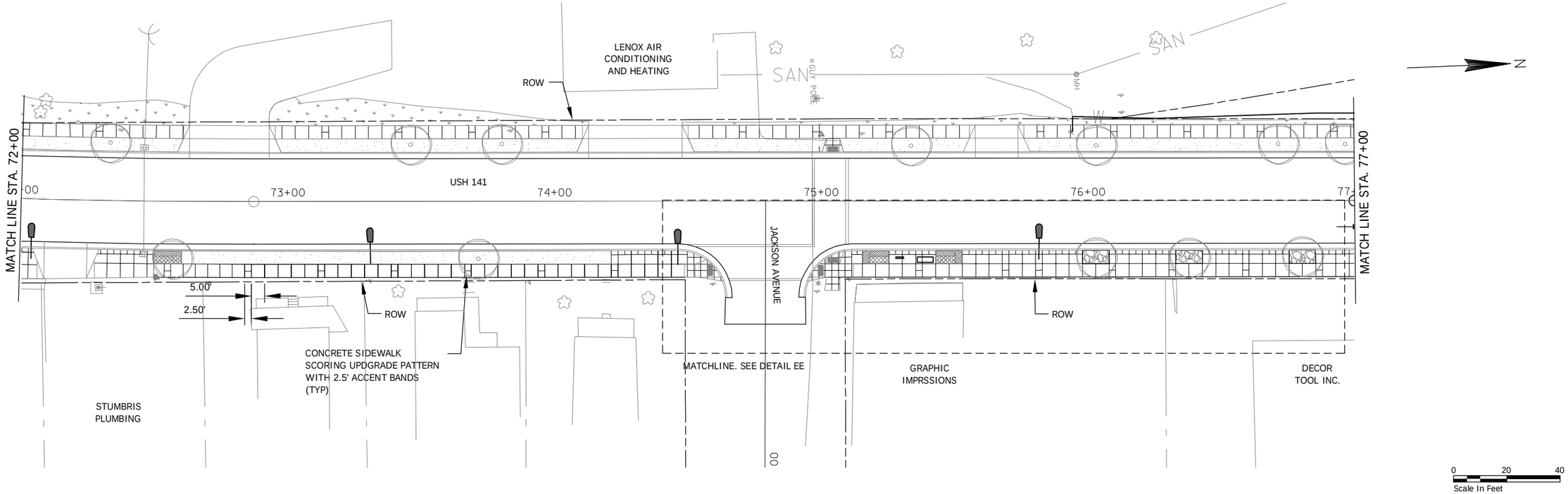


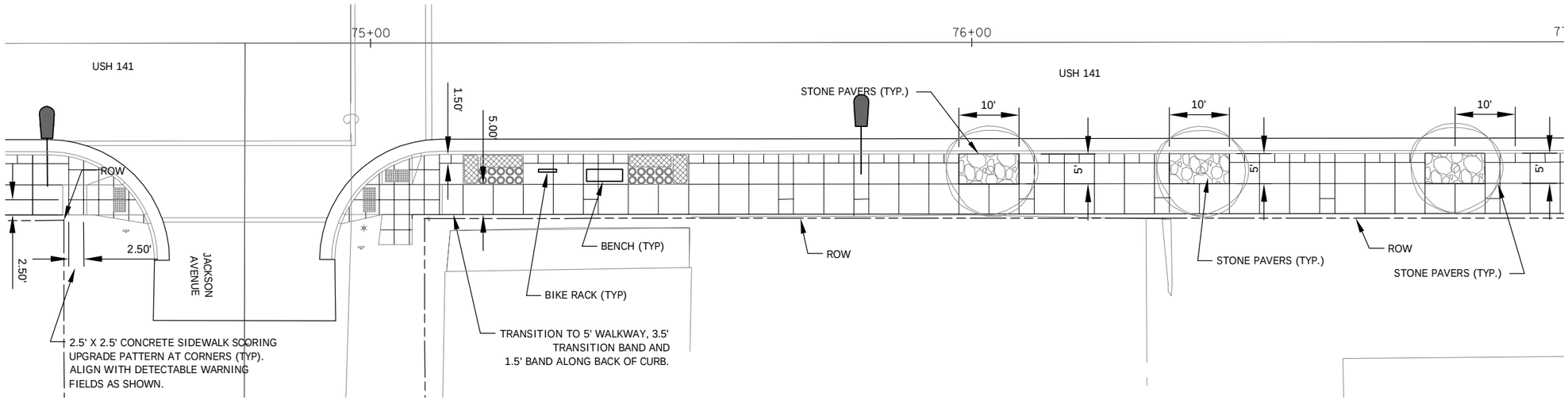




## DETAIL DD

| PROJECT NO:1491-12-71 | HWY: USH 141 | COUNTY:MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 67 | E |
|---|---|---|---|---|---|

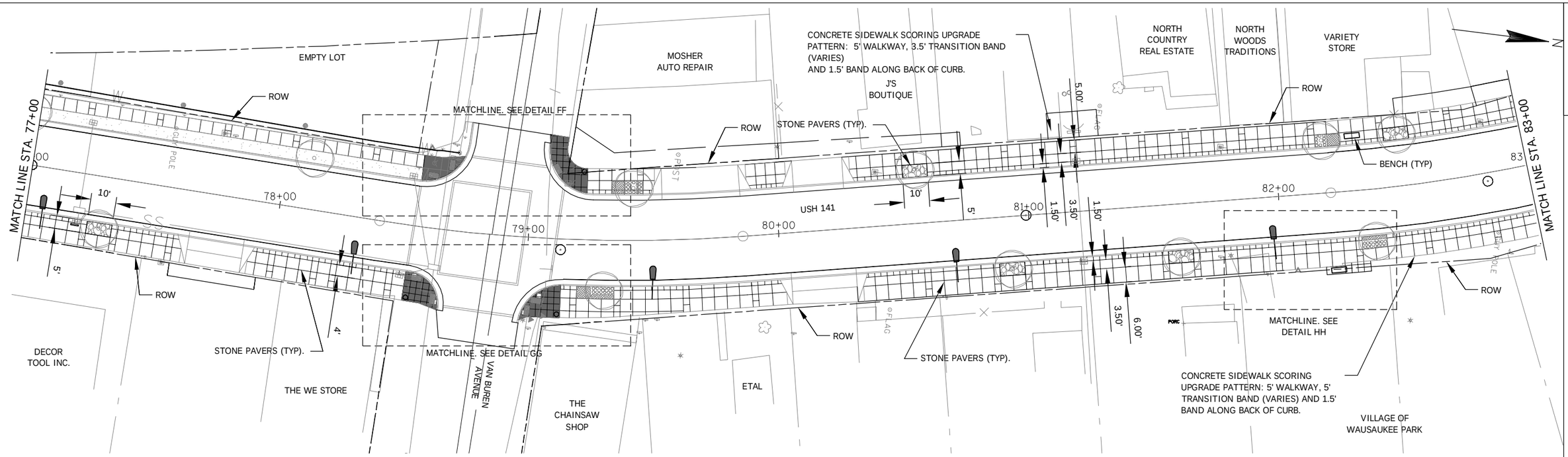
FILE NAME : V:\1937\ACTIVE\193701479\05_REPORT_DELIV\DELIVERABLES\VILLAGE OF WAUSAUKEE\CAD\193701479L104.DWG PLOT DATE : 7/4/2013 4:26 PM PLOT BY : GRESKY, BRIAN PLOT NAME : ----------

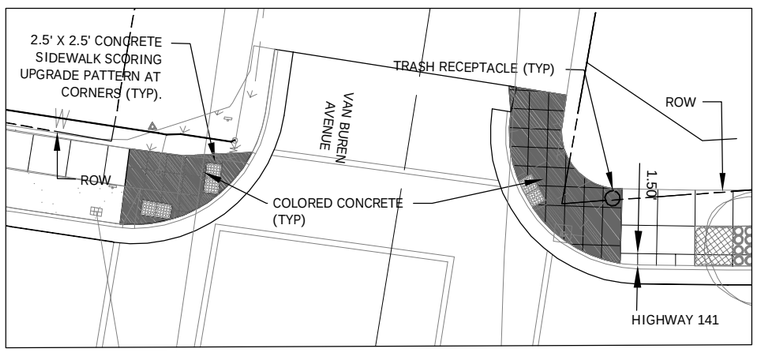


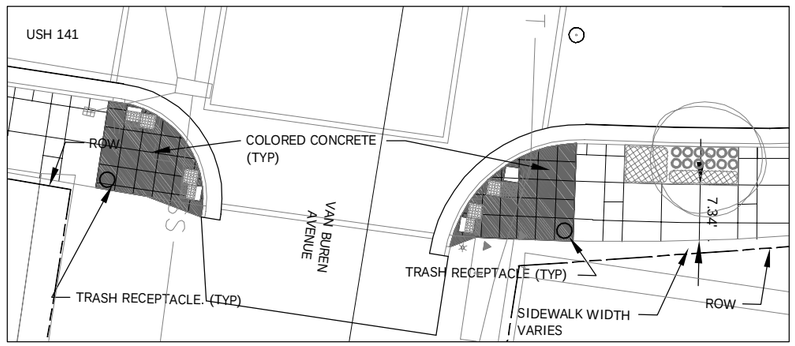

## DETAIL EE

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 68 | E |
|---|---|---|---|---|---|

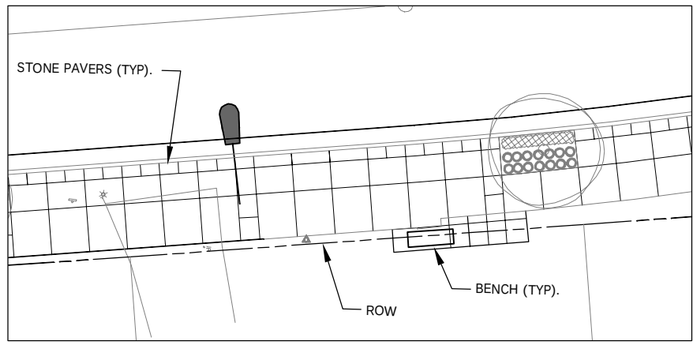



DETAIL FF



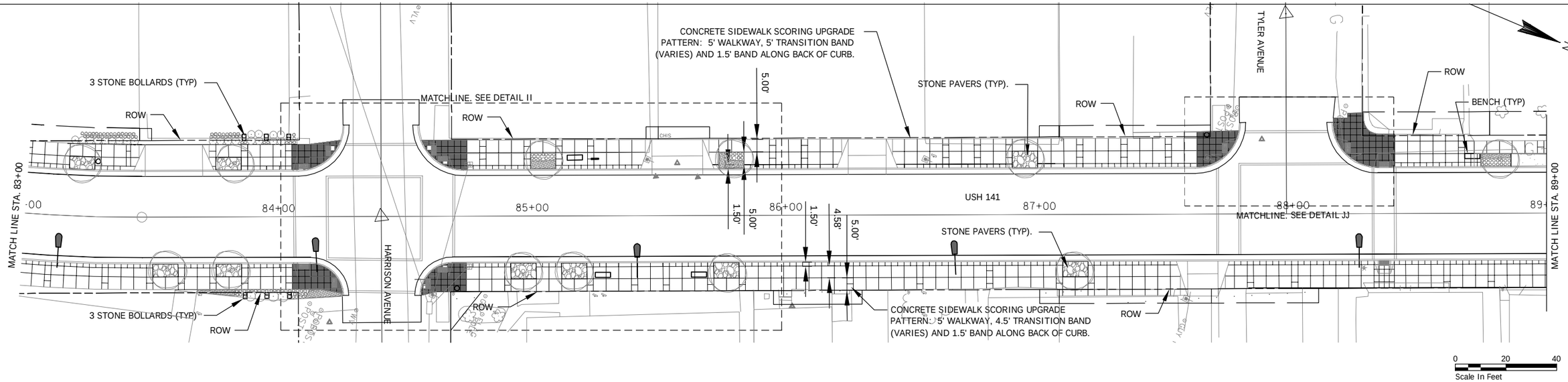

DETAIL GG

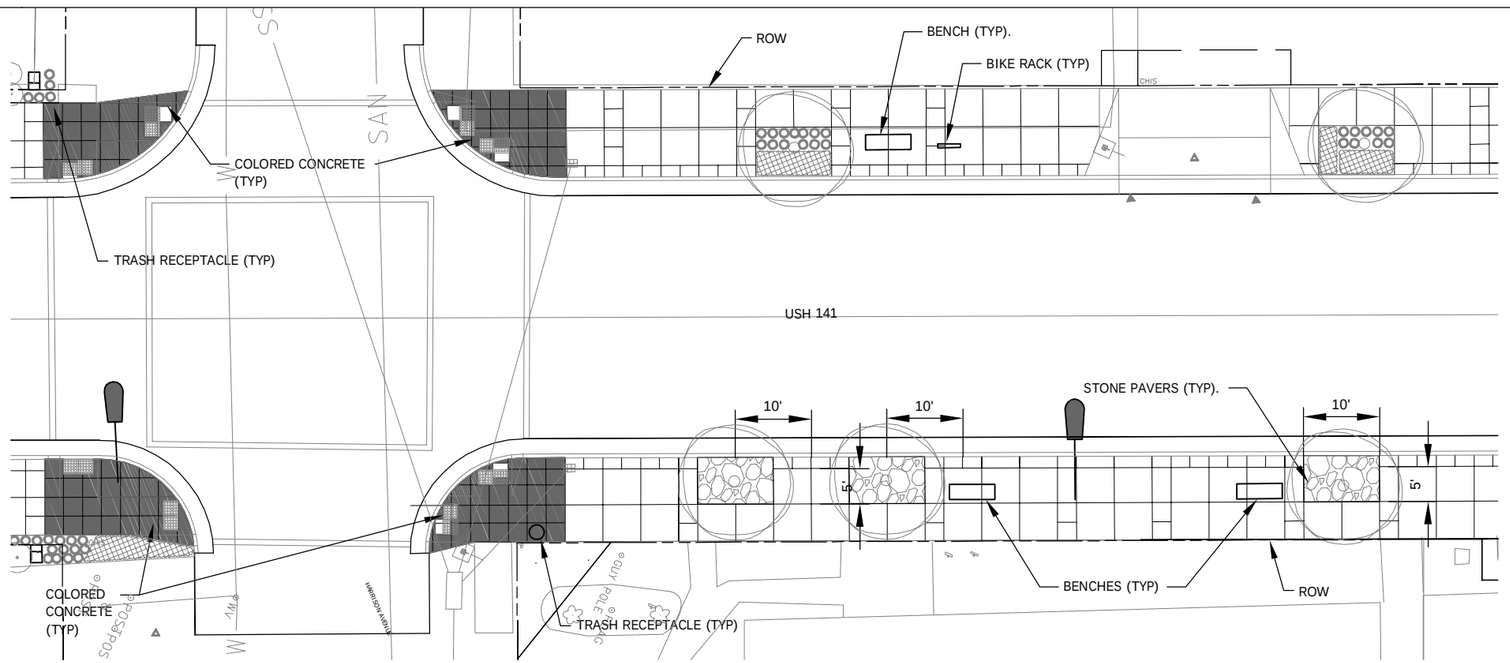



DETAIL HH

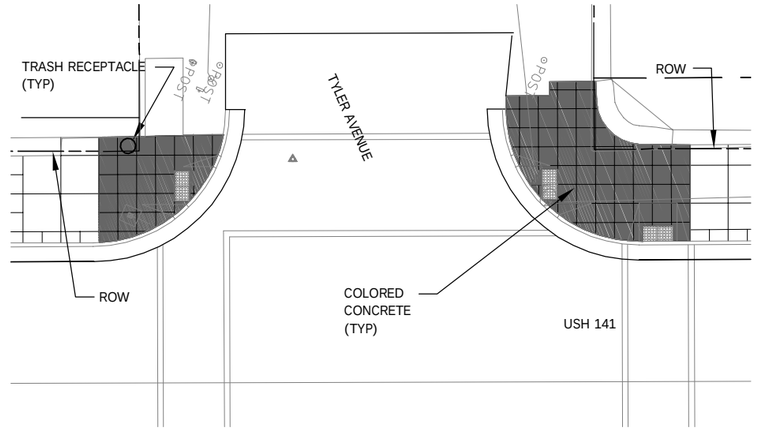
| PROJECT NO:1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 69 | E |
|---|---|---|---|---|---|

FILE NAME : V:\1937\ACTIVE\193701479\05_REPORT_DELIV\DELIVERABLES\VILLAGE OF WAUSAUKEE\CAD\193701479L106.DWG PLOT DATE : 7/4/2013 4:26 PM PLOT BY : GRESKY, BRIAN PLOT NAME : ----------




DETAIL II



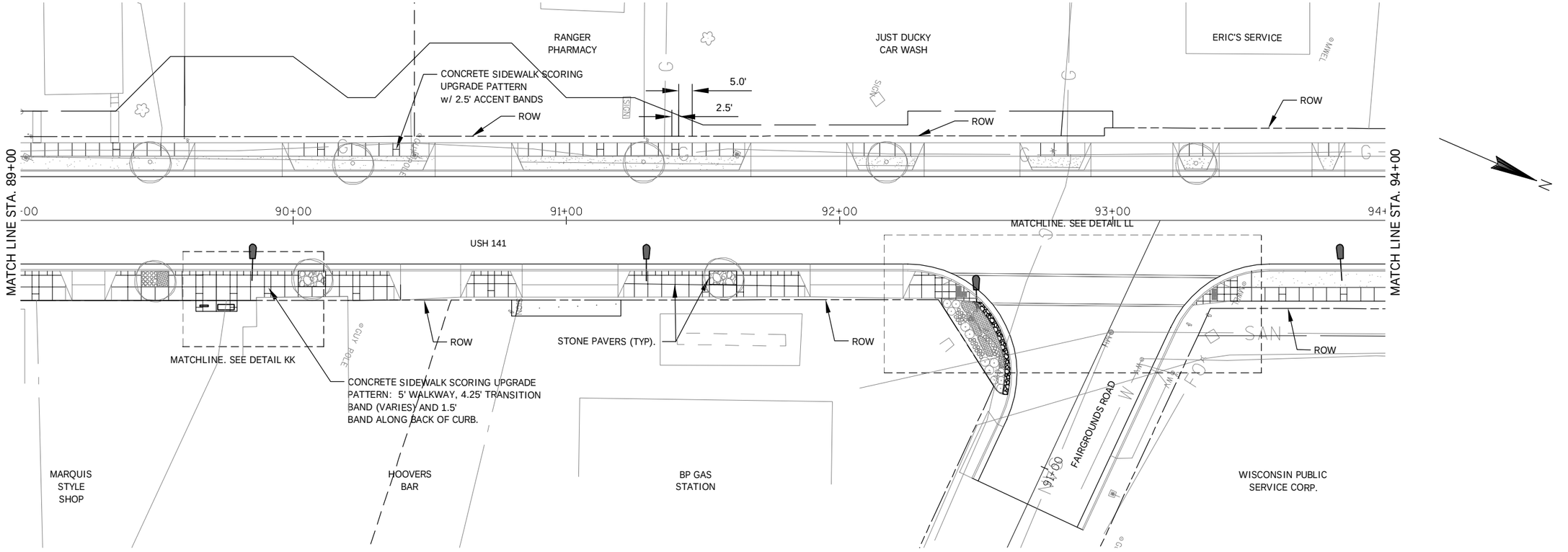

DETAIL JJ

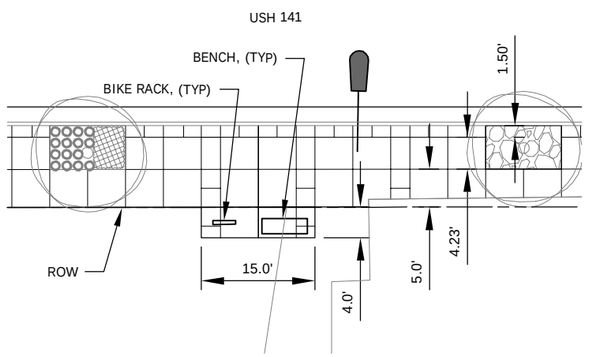
| PROJECT NO:1491-12-71 | HWY: USH 141 | COUNTY:MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 70 | E |
|---|---|---|---|---|---|

FILE NAME : V:\1937\ACTIVE\193701479\05_REPORT_DELIV\DELIVERABLES\VILLAGE OF WAUSAUKEE\CAD\193701479L107.DWG PLOT DATE : 7/4/2013 4:26 PM PLOT BY : GRESKY, BRIAN PLOT NAME : ----------

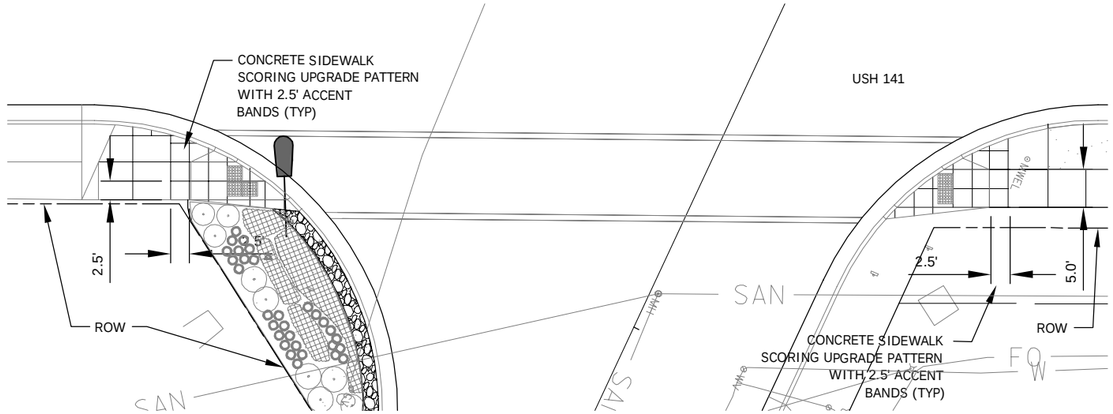
WISDOT/CADDS SHEET 44

2




DETAIL KK



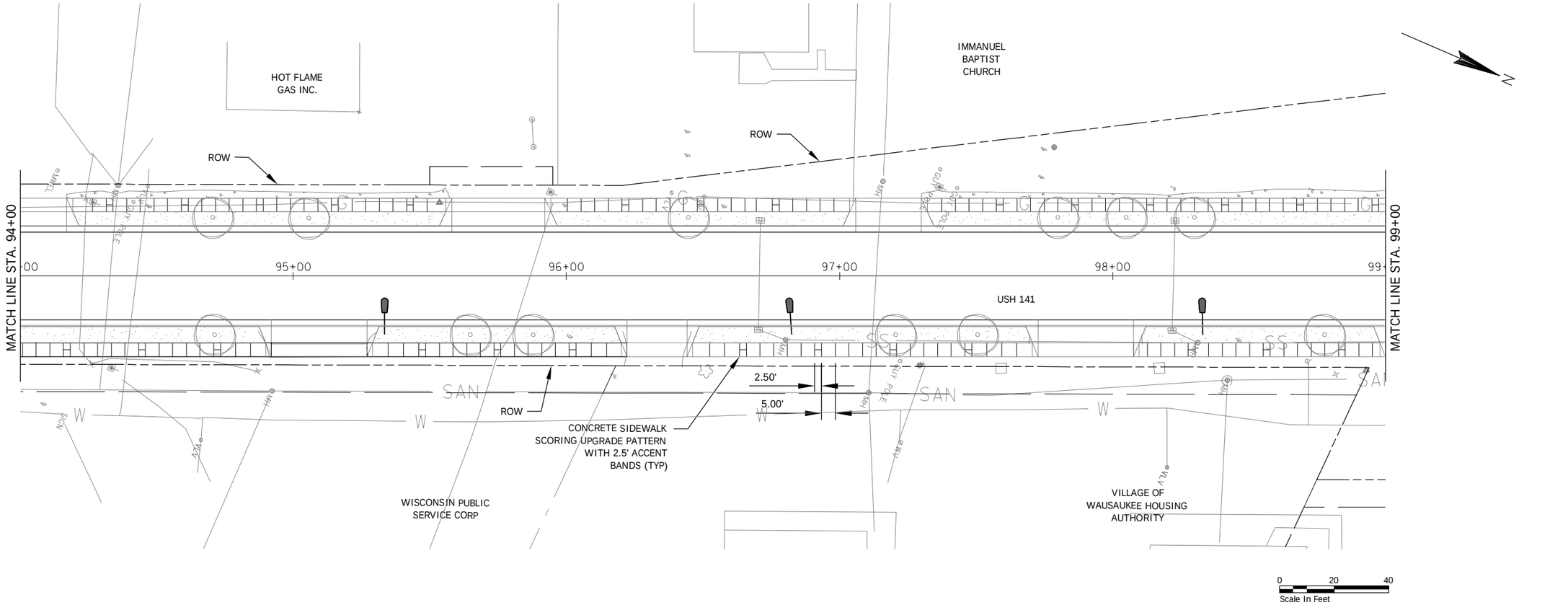

DETAIL LL

0 10 20
Scale In Feet

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 71 | E |
|---|---|---|---|---|---|

FILE NAME : V:\1937\ACTIVE\193701479\05_REPORT_DELIV\DELIVERABLES\VILLAGE OF WAUSAUKEE\CAD\193701479L108.DWG PLOT DATE : 7/4/2013 4:26 PM PLOT BY : GRESKY, BRIAN PLOT NAME : ----------
WISDOT/CADDS SHEET 44

2

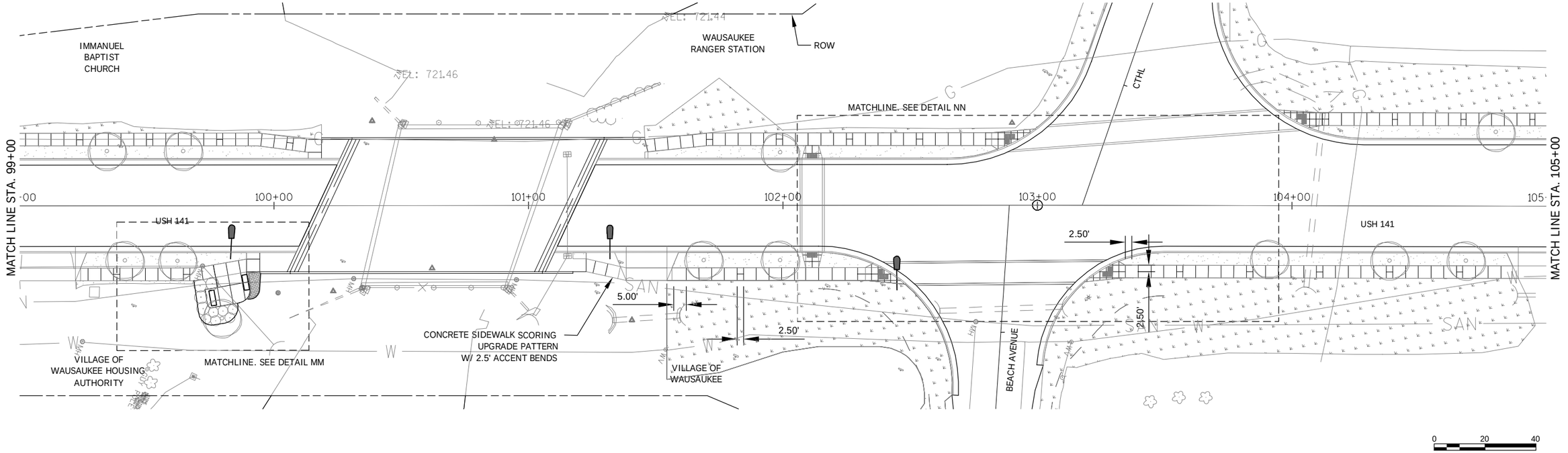


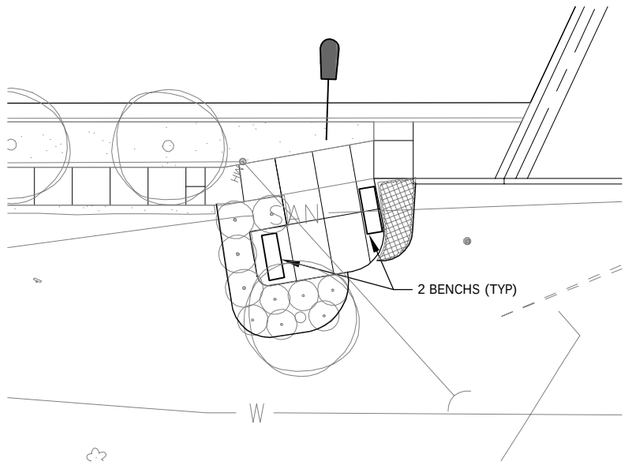

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 72 | E |
|---|---|---|---|---|---|

FILE NAME : V:\1937\ACTIVE\193701479\05_REPORT_DELIV\DELIVERABLES\VILLAGE OF WAUSAUKEE\CAD\193701479L109.DWG PLOT DATE : 7/4/2013 4:26 PM PLOT BY : GRESKY, BRIAN PLOT NAME : ----------

WISDOT/CADDS SHEET 44

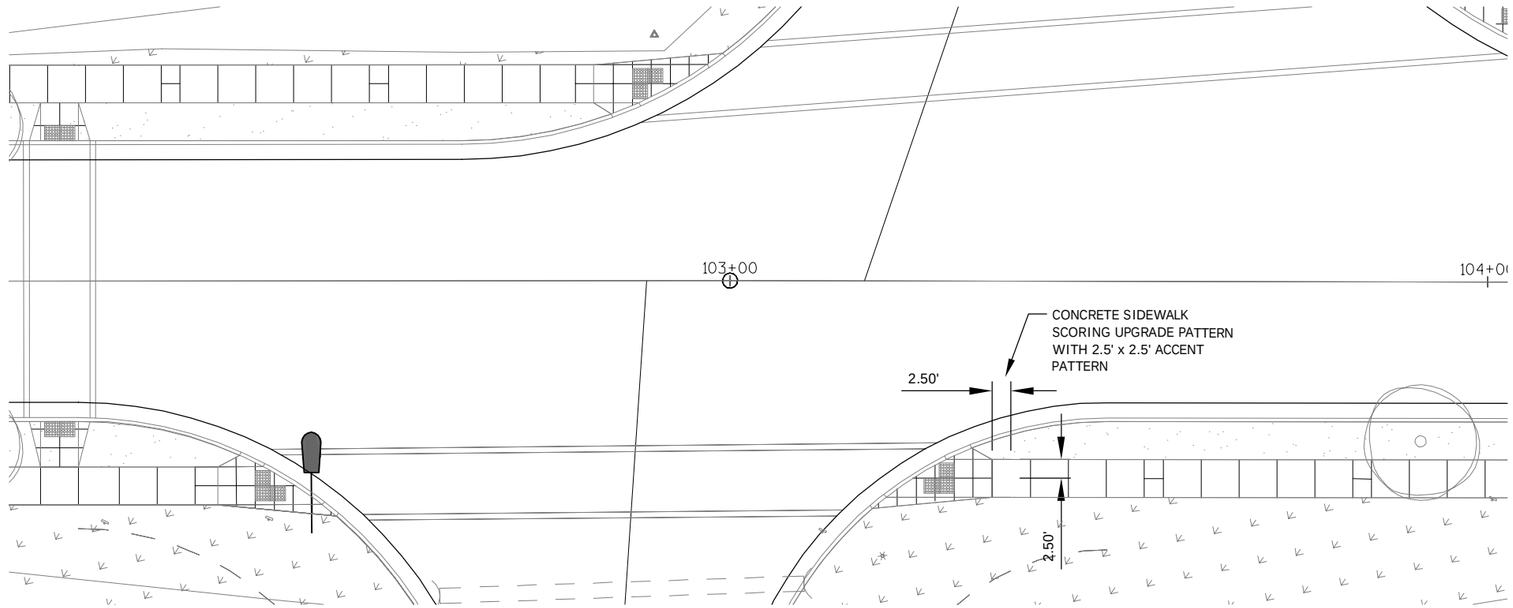
2




DETAIL MM

0 10 20
Scale In Feet




DETAIL NN

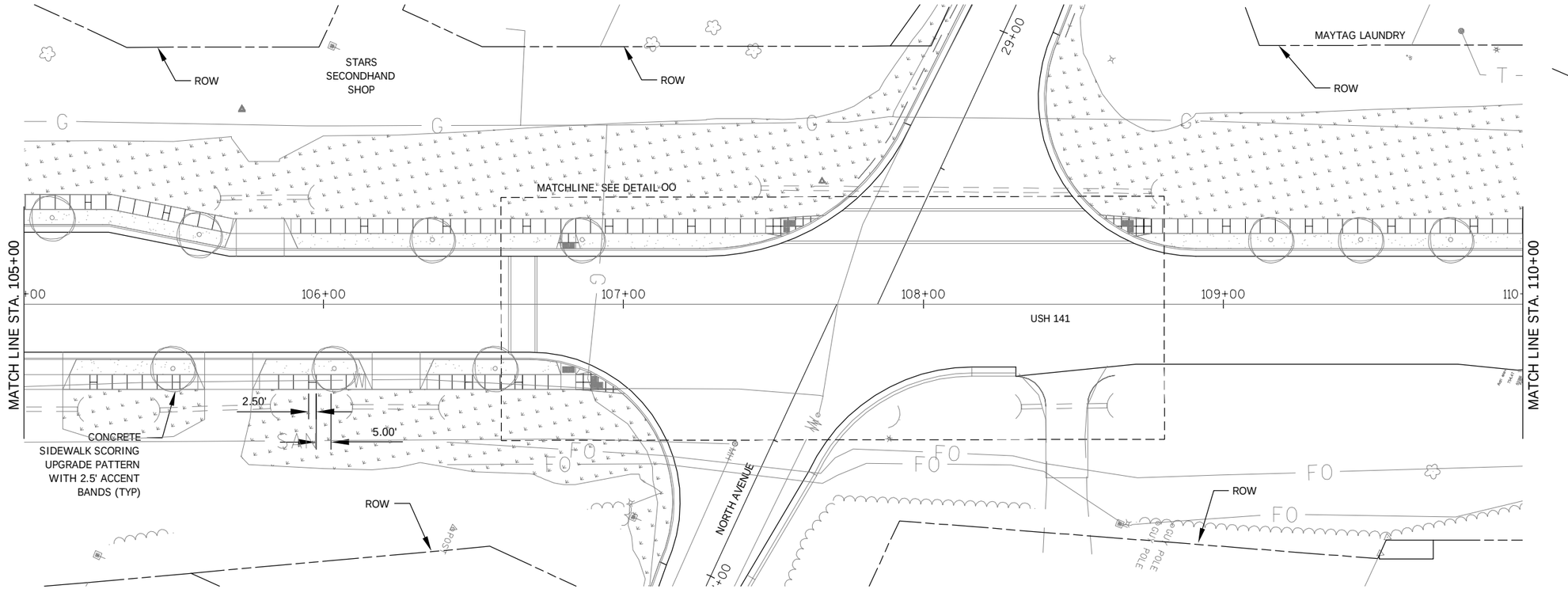
0 10 20
Scale In Feet

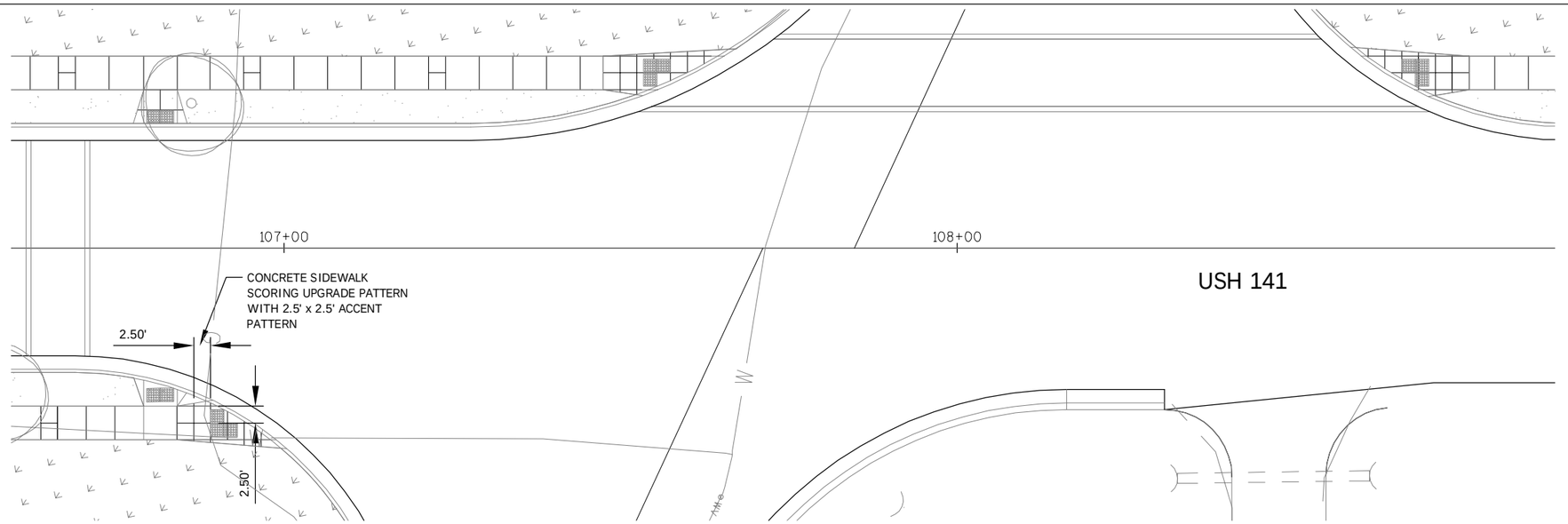
| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 73 | E |
|---|---|---|---|---|---|

FILE NAME : V:\1937\ACTIVE\193701479\05_REPORT_DELIV\DELIVERABLES\VILLAGE OF WAUSAUKEE\CAD\193701479L110.DWG PLOT DATE : 7/4/2013 4:26 PM PLOT BY : GRESKY, BRIAN PLOT NAME : ----------

WISDOT/CADDS SHEET 44

2

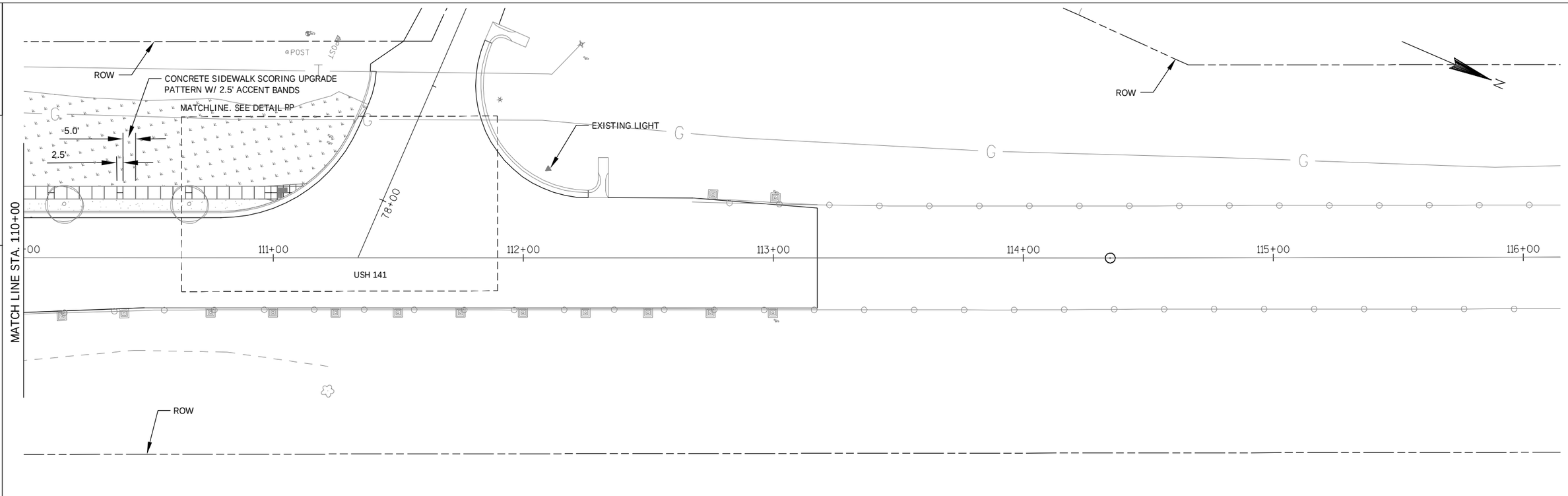


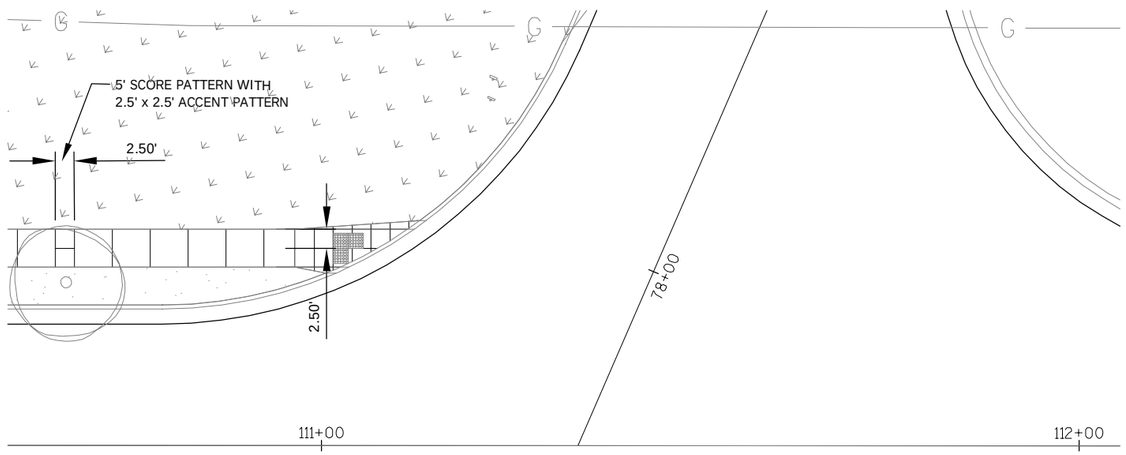




DETAIL OO

| PROJECT NO:1491-12-71 | HWY:USH 141 | COUNTY:MARINETTE | SIDEWALK SCORING AND STREETSCAPE LAYOUT: VILLAGE OF WAUSAUKEE | SHEET 74 | E |
|---|---|---|---|---|---|

FILE NAME : V:\1937\ACTIVE\193701479\05_REPORT_DELIV\DELIVERABLES\VILLAGE OF WAUSAUKEE\CAD\193701479L111.DWG PLOT DATE : 7/4/2013 4:26 PM PLOT BY : GRESKY, BRIAN PLOT NAME : ----------




## DETAIL PP

0 20 40
Scale In Feet

## SIGNING NOTES

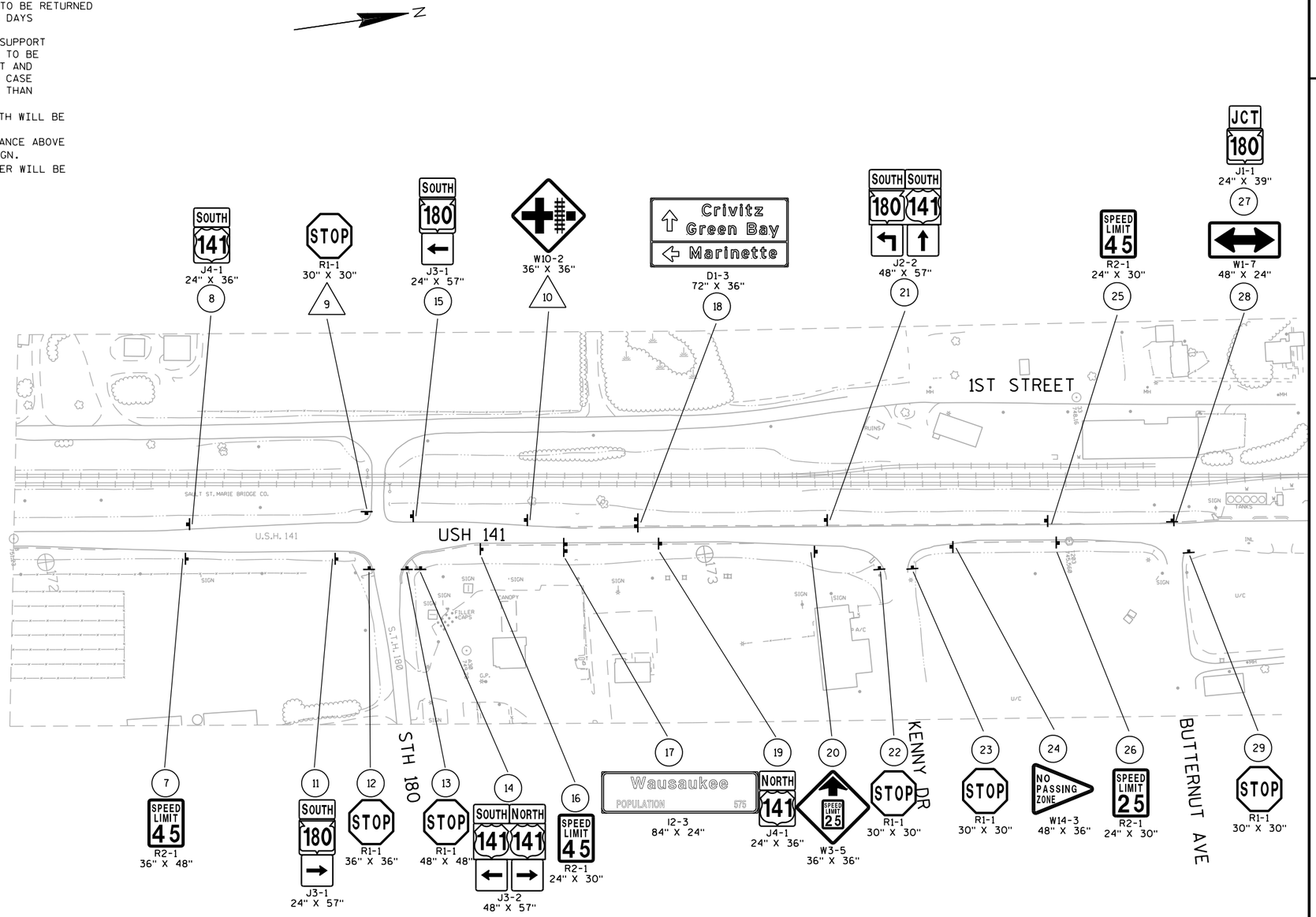
TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THEIR SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. ONLY AND ALL ALUMINUM SIGNS NEED TO BE RETURNED TO REGION. THE REGIONAL TRAFFIC UNIT, 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.




SIGN-REMOVE AND REPLACE

SIGN-MOVE

PLAN SHEET PRODUCED BY WisDOT-NE REGION

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PERMANENT SIGNING PLAN | SHEET 76 E |
|---|---|---|---|---|

## SIGNING NOTES

TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THEIR SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. ONLY AND ALL ALUMINUM SIGNS NEED TO BE RETURNED TO REGION. THE REGIONAL TRAFFIC UNIT, 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

N

NO PASSING ZONE W14-3 — 30
STOP R1-1 30" X 30" — 31
W10-2 36" X 36" — 35
SPEED LIMIT 25 R2-1 24" X 30" — 37
STOP R1-1 30" X 30" — 38
SPEED LIMIT 25 R2-1 24" X 30" — 40A
STOP R1-1 30" X 30" — 41
W11-8 36" X 36" — 43
SPEED LIMIT 25 R2-1 24" X 30" — 44
STOP R1-1 30" X 30" — 45
SPEED LIMIT 25 R2-1 24" X 30" — 48
SOUTH 141 J4-1 24" X 36" — 50

STOP R1-1 30" X 30" — 32
SPEED LIMIT 25 R2-1 24" X 30" — 33
STOP R1-1 30" X 30" — 34
SPEED LIMIT 25 R2-1 24" X 30" — 36
STOP R1-1 30" X 30" — 39
W11-8 36" X 36" — 40
STOP R1-1 30" X 30" — 42
STOP R1-1 30" X 30" — 47
SPEED LIMIT 25 R2-1 24" X 30" — 49

MONROE ST
FIRST ST.
MONROE AVE.
U.S.H. 141
JACKSON ST
JACKSON AVE
VAN BUREN AVE
IST RD
HARRISON AVE
TYLER ST
USH 141
FAIRGROUNDS RD
FAIRGROUND RD.

SIGN-REMOVE AND REPLACE

SIGN-ONLY REMOVE

PLAN SHEET PRODUCED BY WisDOT-NE REGION

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PERMANENT SIGNING PLAN | SHEET 77 | E |
|---|---|---|---|---|---|

FILE NAME : N:\spo\traffic\SIGNING\Projects\1491-12-71 USH 141 - Marinette County\023203_ps.dgn PLOT DATE : 30-JUN-2015 07:17 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 200:1

WISDOT/CADDS SHEET 42

## SIGNING NOTES

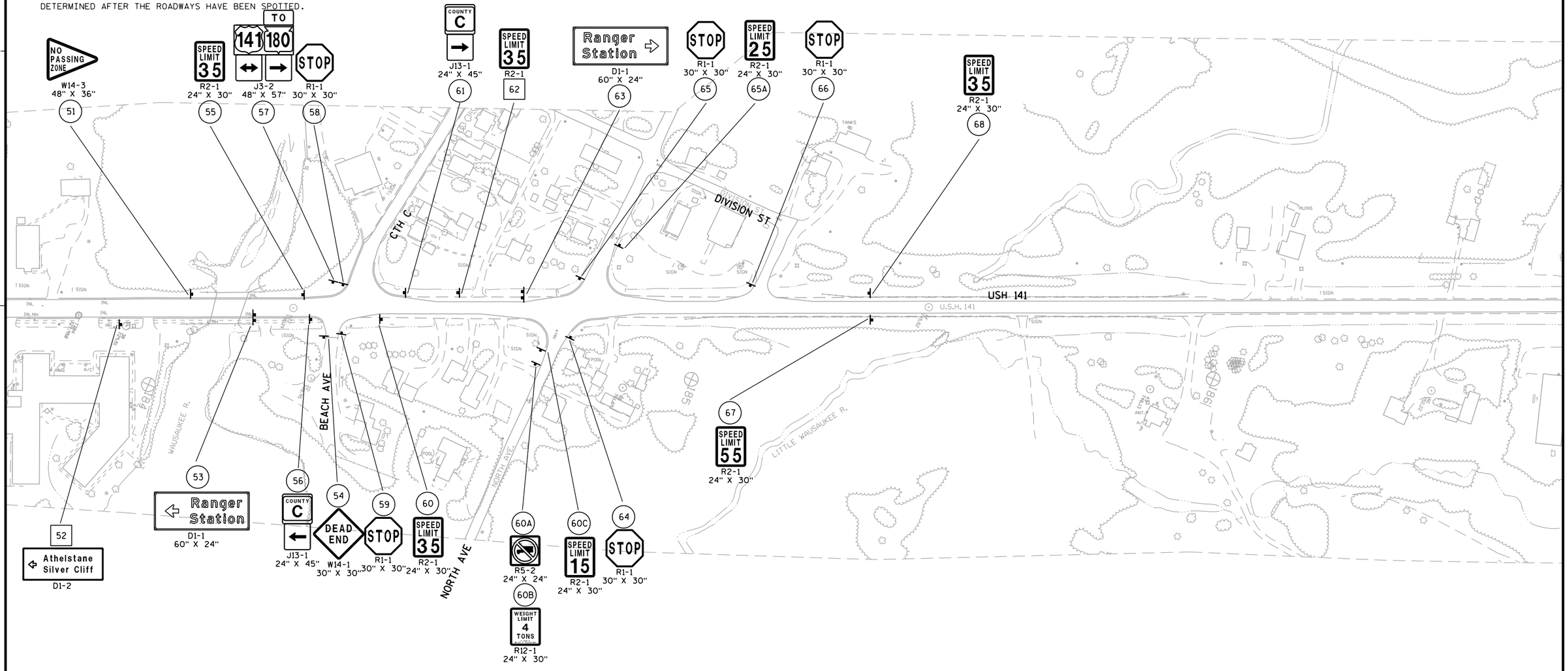
TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THEIR SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. ONLY AND ALL ALUMINUM SIGNS NEED TO BE RETURNED TO REGION. THE REGIONAL TRAFFIC UNIT, 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

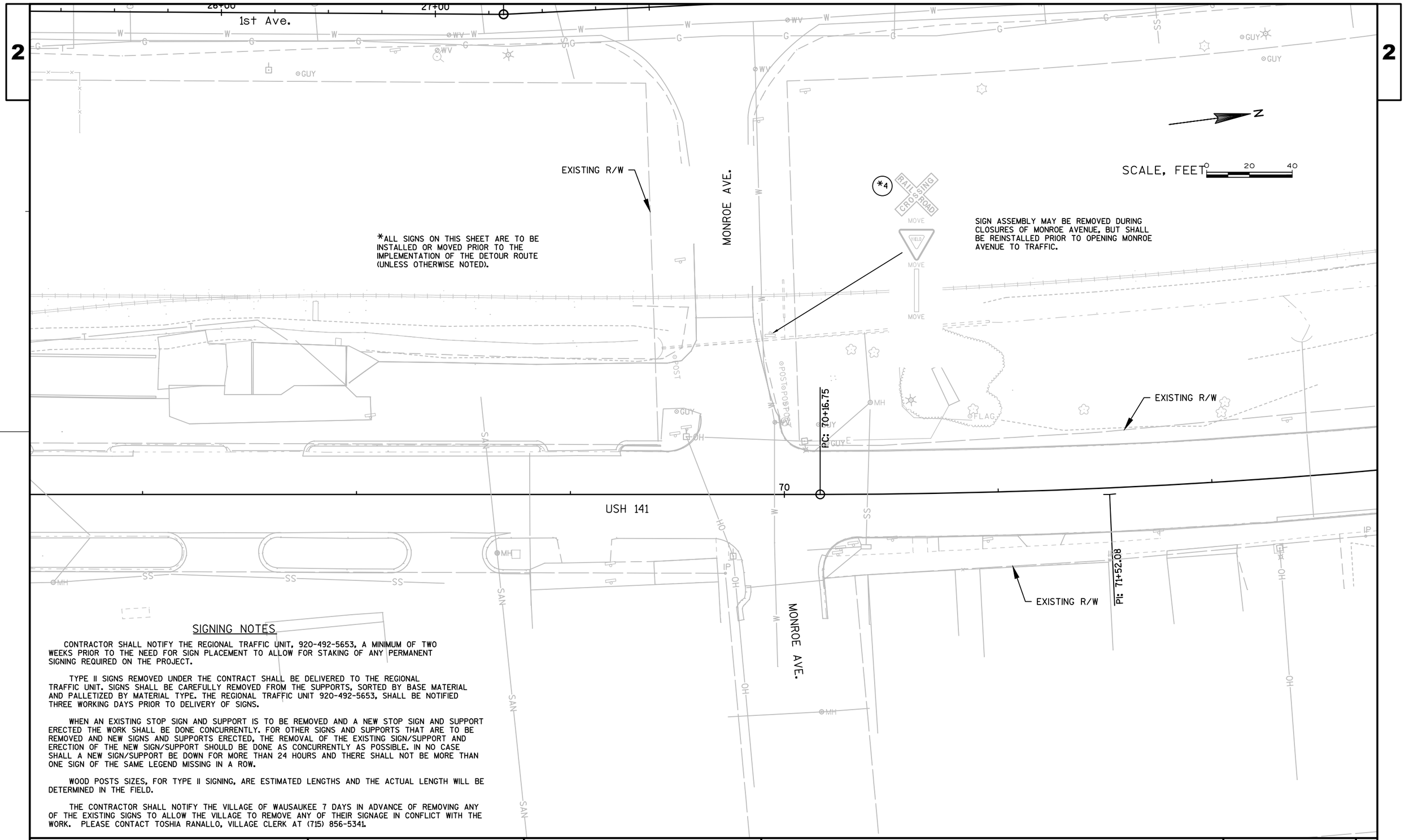



SIGN-REMOVE AND REPLACE

SIGN-ONLY REMOVE

PLAN SHEET PRODUCED BY WisDOT-NE REGION

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PERMANENT SIGNING PLAN | SHEET 78 | E |
|---|---|---|---|---|---|




## SIGNING NOTES

CONTRACTOR SHALL NOTIFY THE REGIONAL TRAFFIC UNIT, 920-492-5653, A MINIMUM OF TWO WEEKS PRIOR TO THE NEED FOR SIGN PLACEMENT TO ALLOW FOR STAKING OF ANY PERMANENT SIGNING REQUIRED ON THE PROJECT.

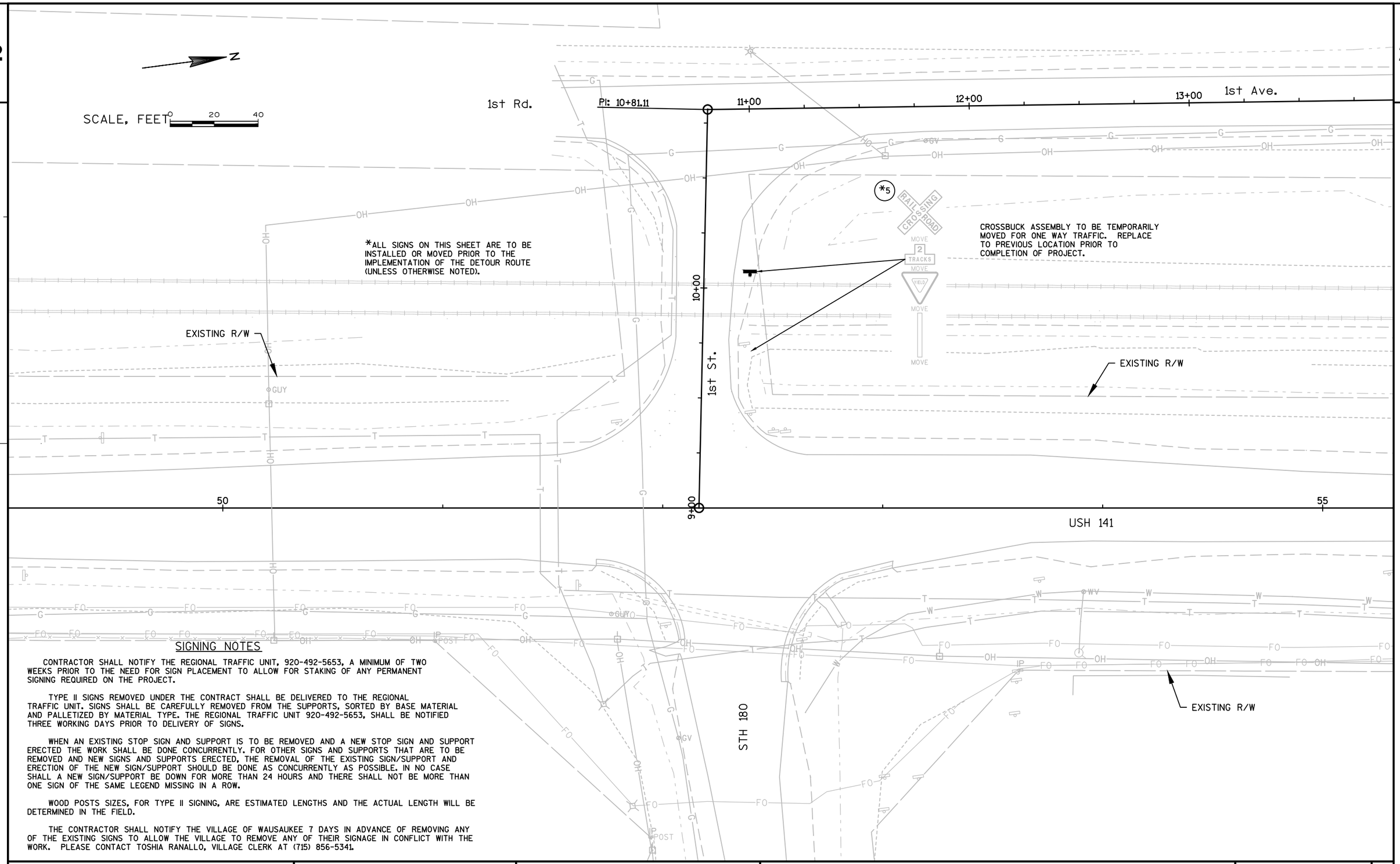
TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF WAUSAUKEE 7 DAYS IN ADVANCE OF REMOVING ANY OF THE EXISTING SIGNS TO ALLOW THE VILLAGE TO REMOVE ANY OF THEIR SIGNAGE IN CONFLICT WITH THE WORK. PLEASE CONTACT TOSHIA RANALLO, VILLAGE CLERK AT (715) 856-5341.

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PERMANENT SIGNING - USH 141 & 1ST STREET | SHEET 79 | E |
|---|---|---|---|---|---|




## SIGNING NOTES

CONTRACTOR SHALL NOTIFY THE REGIONAL TRAFFIC UNIT, 920-492-5653, A MINIMUM OF TWO WEEKS PRIOR TO THE NEED FOR SIGN PLACEMENT TO ALLOW FOR STAKING OF ANY PERMANENT SIGNING REQUIRED ON THE PROJECT.

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF WAUSAUKEE 7 DAYS IN ADVANCE OF REMOVING ANY OF THE EXISTING SIGNS TO ALLOW THE VILLAGE TO REMOVE ANY OF THEIR SIGNAGE IN CONFLICT WITH THE WORK. PLEASE CONTACT TOSHIA RANALLO, VILLAGE CLERK AT (715) 856-5341.

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PERMANENT SIGNING - USH 141 & 1ST STREET | SHEET 80 | E |
|---|---|---|---|---|---|

## SIGNING NOTES

CONTRACTOR SHALL NOTIFY THE REGIONAL TRAFFIC UNIT, 920-492-5653, A MINIMUM OF TWO WEEKS PRIOR TO THE NEED FOR SIGN PLACEMENT TO ALLOW FOR STAKING OF ANY PERMANENT SIGNING REQUIRED ON THE PROJECT.

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF WAUSAUKEE 7 DAYS IN ADVANCE OF REMOVING ANY OF THE EXISTING SIGNS TO ALLOW THE VILLAGE TO REMOVE ANY OF THEIR SIGNAGE IN CONFLICT WITH THE WORK. PLEASE CONTACT TOSHIA RANALLO, VILLAGE CLERK AT (715) 856-5341.

SCALE, FEET 0 20 40

N

PI: 62+91.30

63+00

64+00

65+00

66+00

67+00

68+00

69+00

EXISTING R/W

RAILROAD ST.

DIVISION ST.

RAILROAD ST.

WAUSAUKEE RIVER

RAILROAD R/W

RAIL ROAD CROSSING

MOVE

YIELD

*6

MOVE

MOVE

CROSSBUCK ASSEMBLY TO BE TEMPORARILY MOVED FOR ONE WAY TRAFFIC. REPLACE TO PREVIOUS LOCATION PRIOR TO COMPLETION OF PROJECT.

RAILROAD R/W

WAUSAUKEE RIVER

EXISTING R/W

BARN

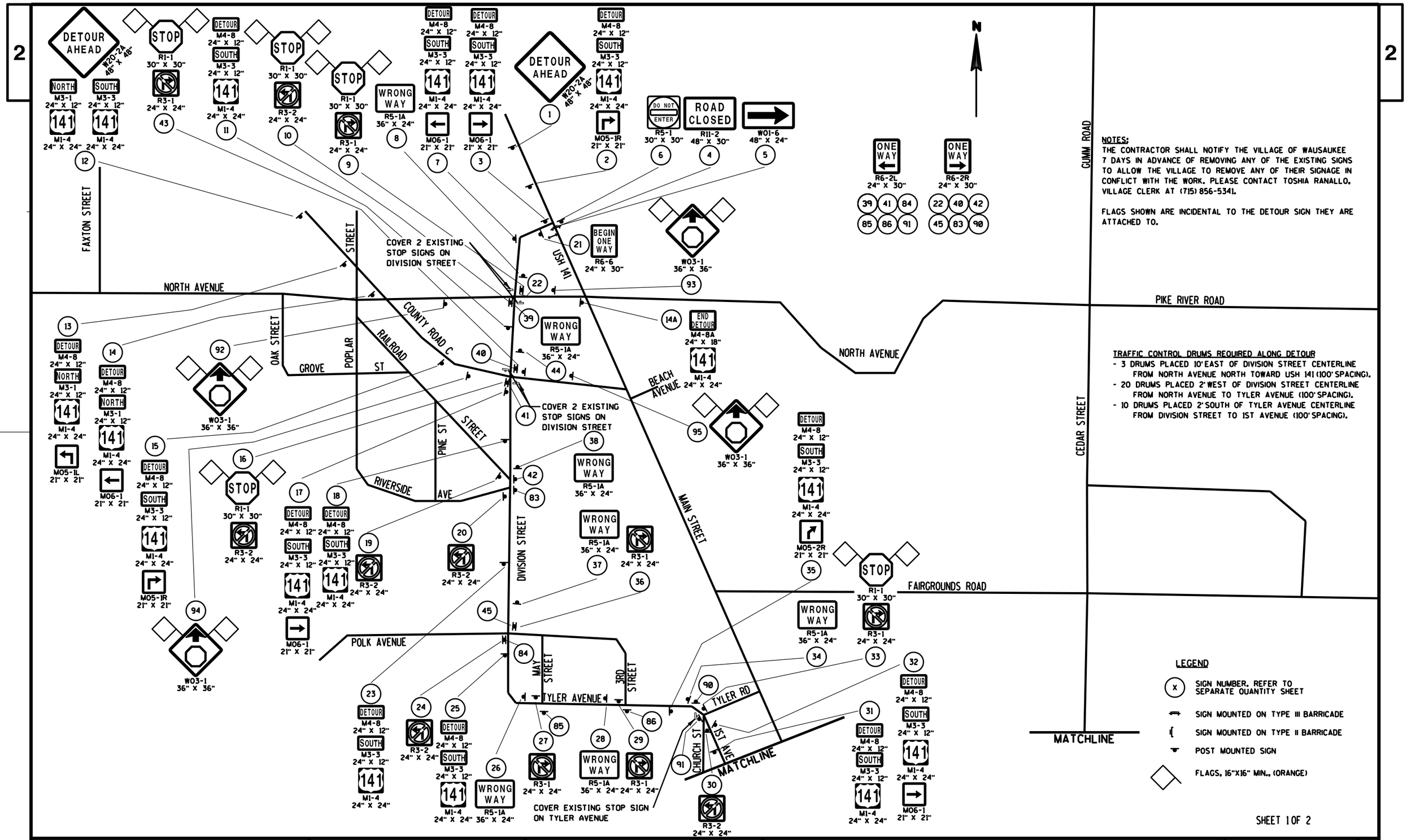
HSE

GUY POLE

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PERMANENT SIGNING - DIVISION ST. & RR CROSSING | SHEET 81 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\SHEETSPLAN\023201_PS.DWG PLOT DATE : 8/26/2015 1:26 PM PLOT BY : JEFF GILROY PLOT NAME :

WISDOT/CADDS SHEET 42

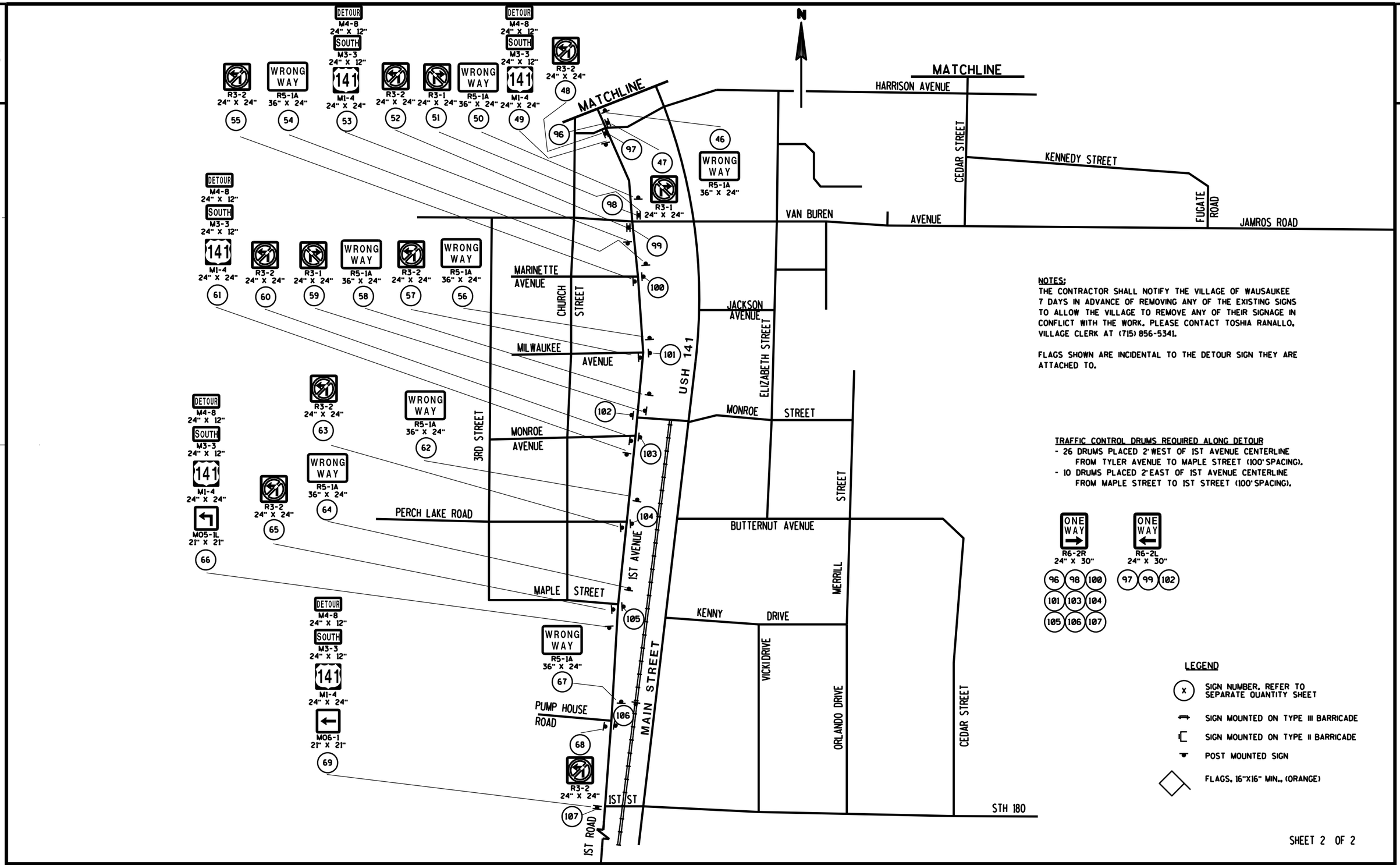



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | DETOUR SIGNING DETAILS | SHEET | E |
|---|---|---|---|---|---|



FILE NAME : F:\Data\CAD PROJECTS\CAD08049 Wausaukee\1491-21-71\SheetsPlan\027001_dt.DGN PLOT DATE : 10/5/2015 PLOT BY : Jeff Gilroy PLOT NAME : PLOT SCALE : 400.00 sf / in.

WISDOT/CADDS SHEET 42




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | DETOUR SIGNING DETAILS | SHEET | E |
|---|---|---|---|---|---|

SCALE, FEET 0 20 40

71 W03-1

## LEGEND

- TYPE II BARRICADE WITH/WITHOUT ATTACHED SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DRUM WITH/WITHOPUT WARNING LIGHT, TYPE C (STEADY-BURN)
- SIGN ON PERMANENT SUPPORT
- FLAGS, 16" X 16" MIN., ORANGE
- XX SIGN NUMBER, REFER TO SEPARATE QUANTITY SHEET

1st Rd.

PI: 10+81.11

11+00 12+00 13+00 1st Ave.

72 STOP R1-1 30"X30"

73 W4-4B 30"X12" (ONCOMING TRAFFIC DOES NOT STOP) R3-27 24"X24"

76 WRONG WAY R5-1A 36"X24"

78 ONLY R3-8 36"X30"

79 RIGHT TURN NO STOP R1-51 30"X18"

END DETOUR M4-8A 24"X18" 141 M1-4 24"X24" 70

80 DO NOT ENTER R5-1 30"X30"

74 WRONG WAY R5-1A 36"X24"

75 DO NOT ENTER R5-1 30"X30"

77 WRONG WAY R5-1A 36"X24"

81 STOP R1-1 30"X30"

82 180 M1-6 24"X24"

W4-4AR 30"X12" (TRAFFIC FROM RIGHT DOES NOT STOP) M06-1 21"X21"

90 DO NOT ENTER R5-1 30"X30"

10+00 1st St.

EXISTING R/W

EXISTING R/W

TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE

TEMPORARY PAVEMENT MARKING STOP LINE 24-INCH REMOVABLE TAPE (TYP)

50+00 51+00 52+00 53+00 54+00 55+00

USH 141

89 R3-2 24"X24"

COVER

COVER

STH 180

87 W4-4AL 30"X12" (TRAFFIC FROM LEFT DOES NOT STOP)

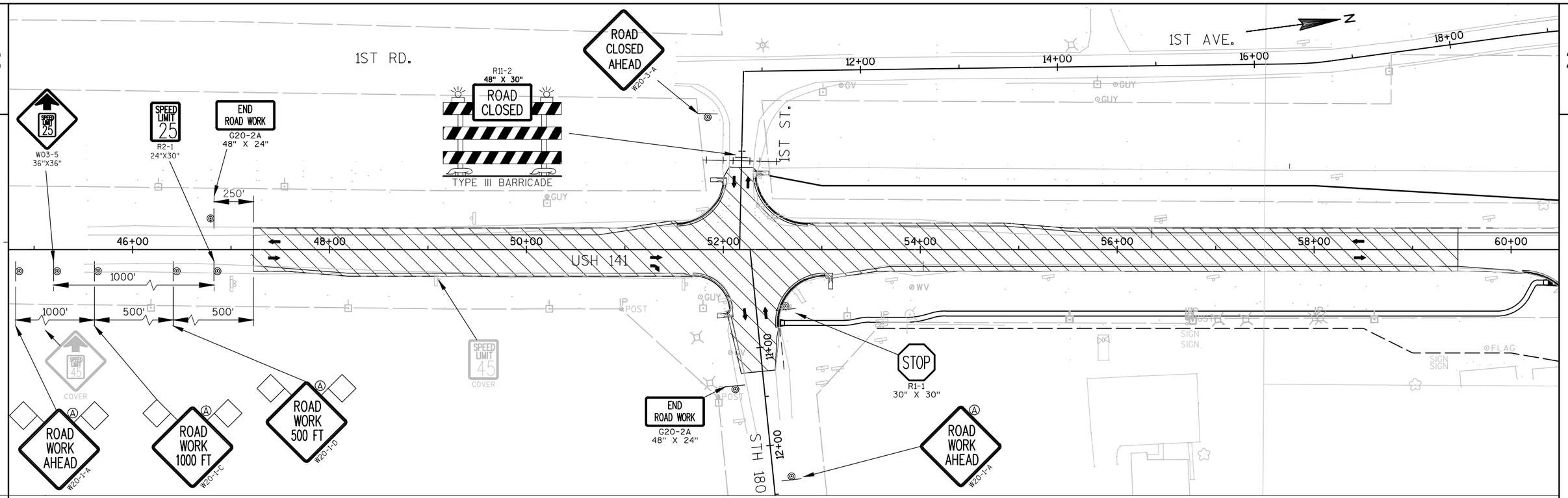
88 ONLY ONLY R3-8F 36"X30"

**NOTES:**

THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF WAUSAUKEE 7 DAYS IN ADVANCE OF REMOVING ANY OF THE EXISTING SIGNS TO ALLOW THE VILLAGE TO REMOVE ANY OF THEIR SIGNAGE IN CONFLICT WITH THE WORK. PLEASE CONTACT TOSHIA RANALLO, VILLAGE CLERK AT (715) 856-5341.

FLAGS SHOWN ARE INCIDENTAL TO THE DETOUR SIGN THEY ARE ATTACHED TO.

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | DETOUR SIGNING - USH 141 & 1ST STREET | SHEET 84 | E |
|---|---|---|---|---|---|




## LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- Ⓐ TYPE A WARNING LIGHT (FLASHING)
- Ⓑ TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- Ⓒ TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- TEMPORARY RAISED PAVEMENT MARKER (TWO WAY REFLECTOR)
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

## GENERAL TRAFFIC CONTROL NOTES

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

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

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

TEMPORARY STOP SIGNS SHALL BE SUPPORTED ON WOOD POSTS, OR AS DIRECTED BY THE ENGINEER.

## STAGING NOTES:

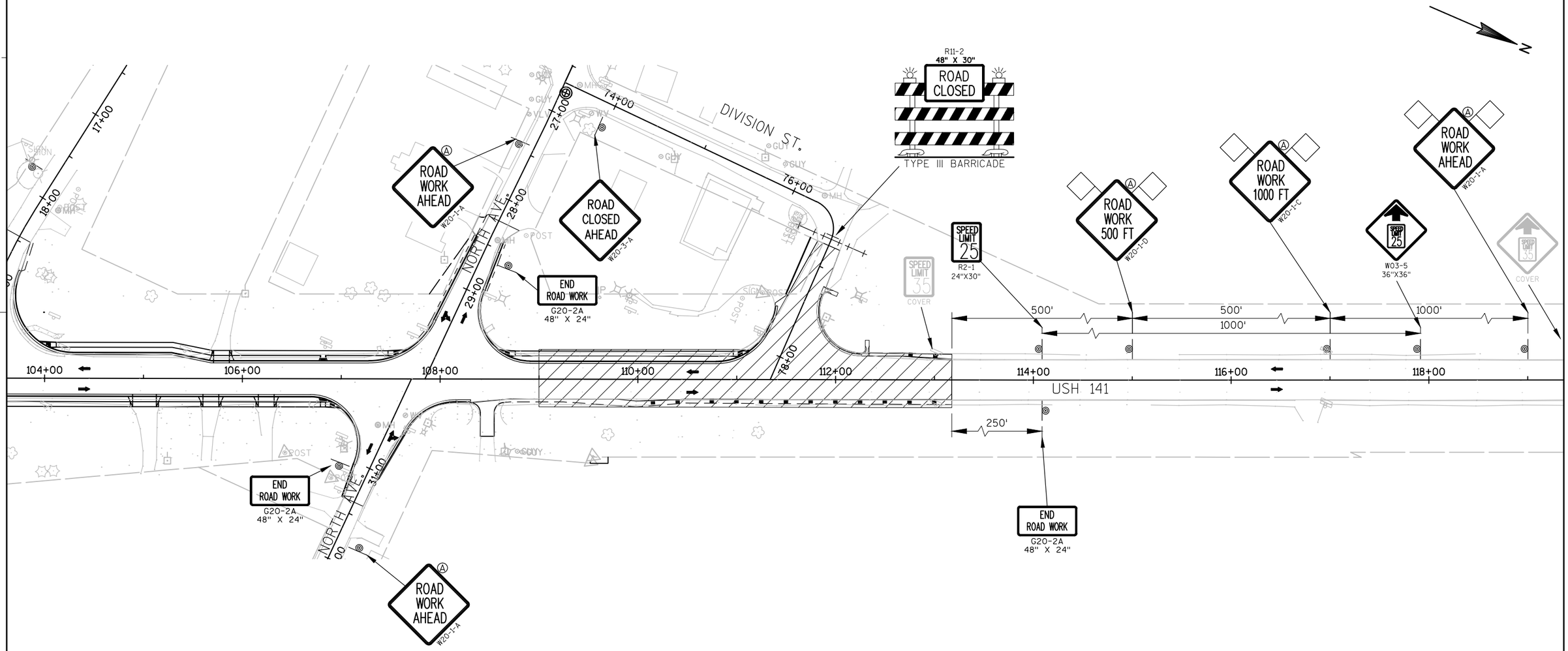
RECONSTRUCTION OF USH 141 AND INTERSECTIONS SHALL BE CONSTRUCTED UNDER FLAGGING OPERATIONS DURING DAYLIGHT HOURS.

WORK MAY BE DONE UNDER FLAGGING CONDITIONS FROM STA. 59+40 TO STA. 109+00 IN STAGE 1. SUCH AS SAW CUTTING, EROSION CONTROL, ETC.

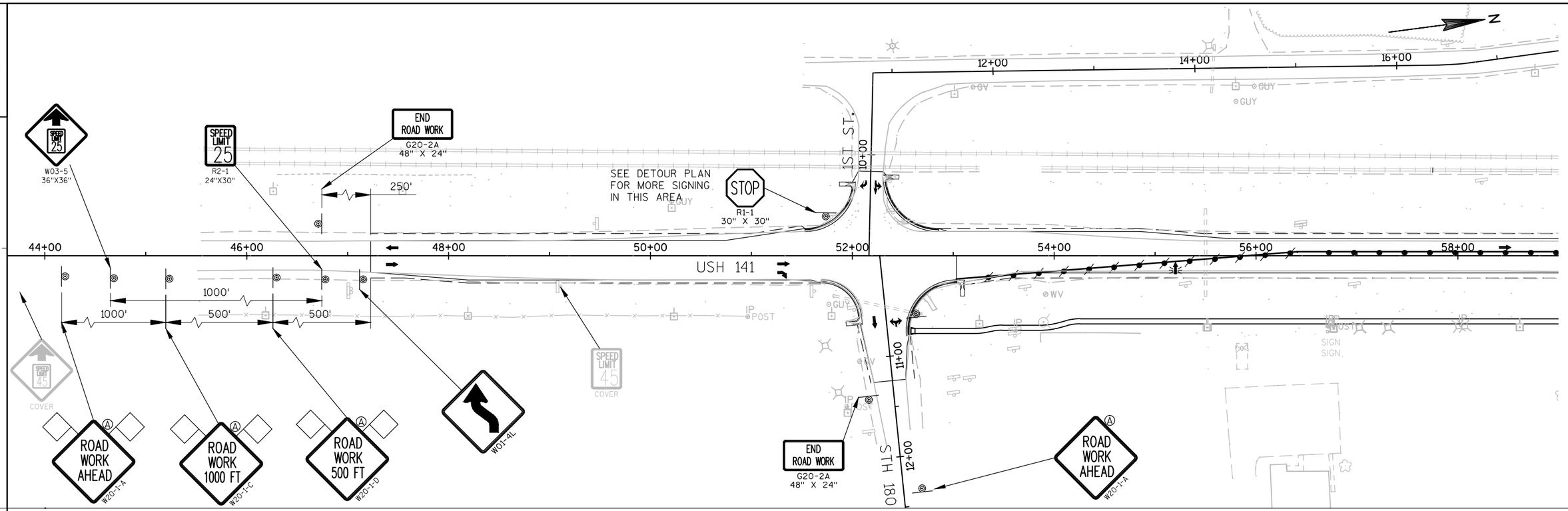
ADVANCED WARNING SIGNING SHALL BE PLACED FOR ALL SIDE ROADS.

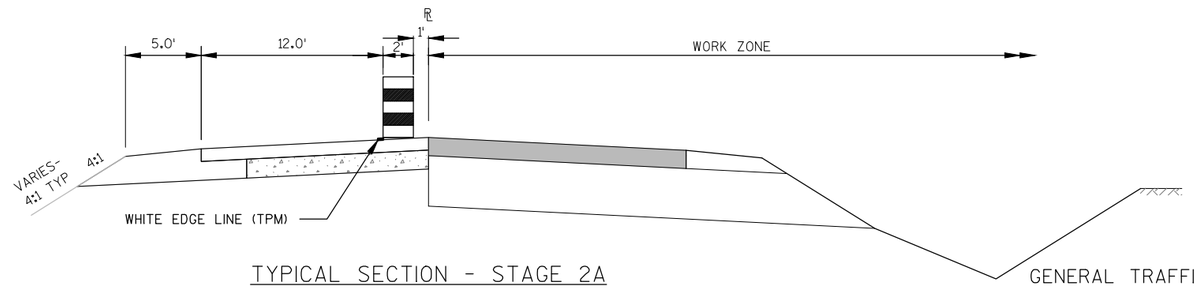
| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TRAFFIC CONTROL/CONST. STAGE 1 | SHEET 85 - E |
|---|---|---|---|---|

2



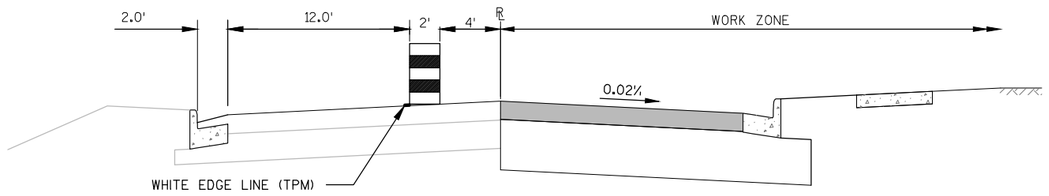

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TRAFFIC CONTROL/CONST. STAGE 1 | SHEET 86 | E |
|---|---|---|---|---|---|




## TYPICAL SECTION - STAGE 2A

USH 141
STA. 58+00 - STA. 66+25




## TYPICAL SECTION - STAGE 2B

USH 141
STA. 66+25 - STA. 109+00

## GENERAL TRAFFIC CONTROL NOTES

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

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

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

TEMPORARY STOP SIGNS SHALL BE SUPPORTED ON WOOD POSTS, OR AS DIRECTED BY THE ENGINEER.

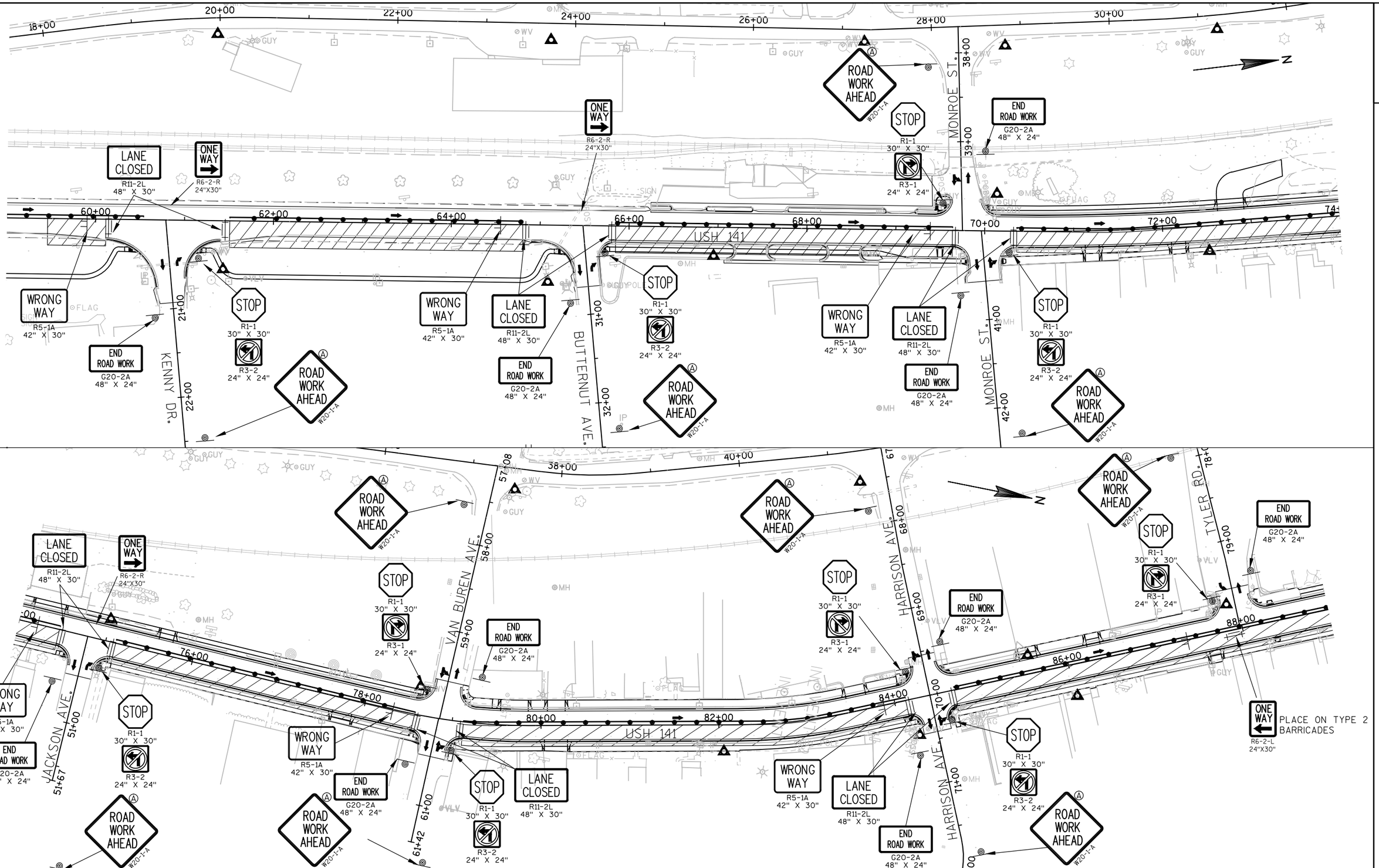
## STAGING NOTES:

APPLY SDD DRAWING 15C3 WHEN CLOSING SIDE STREETS.

## LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- TYPE A WARNING LIGHT (FLASHING)
- TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- TEMPORARY RAISED PAVEMENT MARKER (TWO WAY REFLECTOR)
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC
- PORTABLE CHANGEABLE MESSAGE BOARD

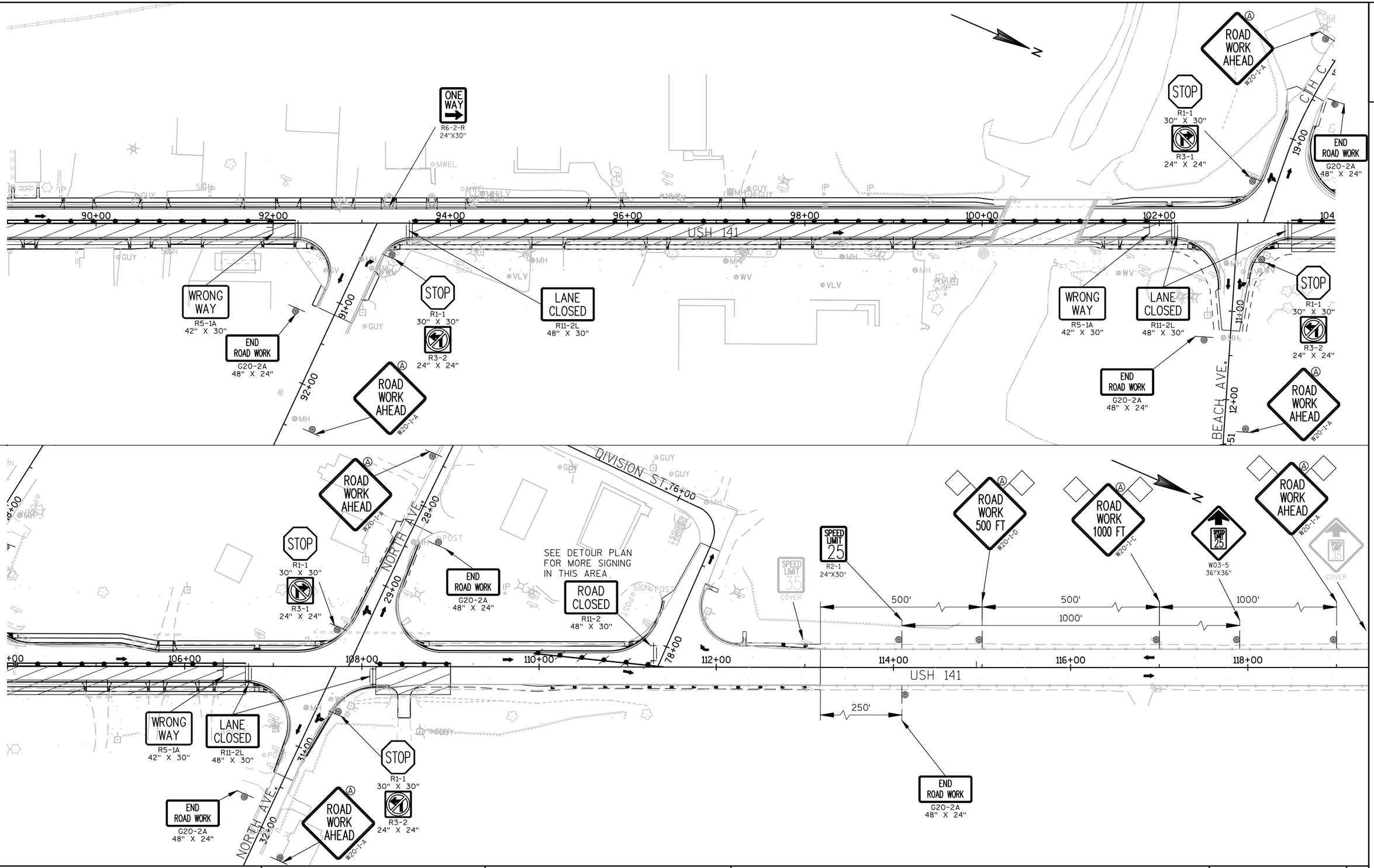
| PROJECT NO:1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TRAFFIC CONTROL/CONST. STAGE 2 & 4 | SHEET 87 | E |
|---|---|---|---|---|---|



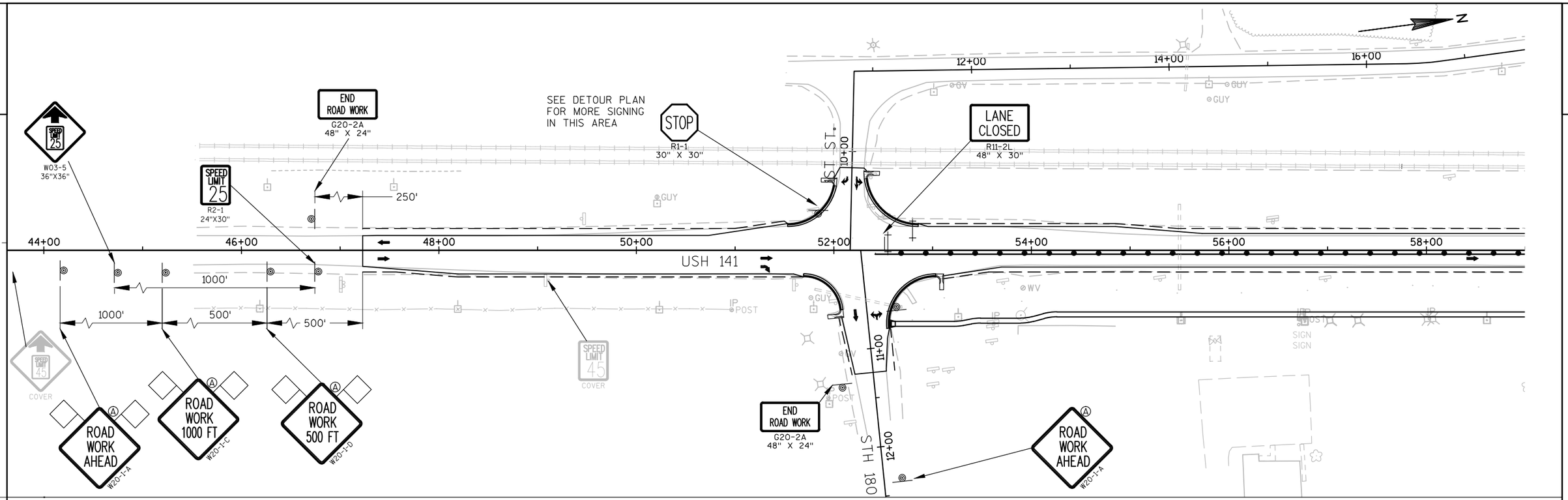

| PROJECT NO:1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TRAFFIC CONTROL/CONST. STAGE 2 & 4 | SHEET 88 | E |
|---|---|---|---|---|---|

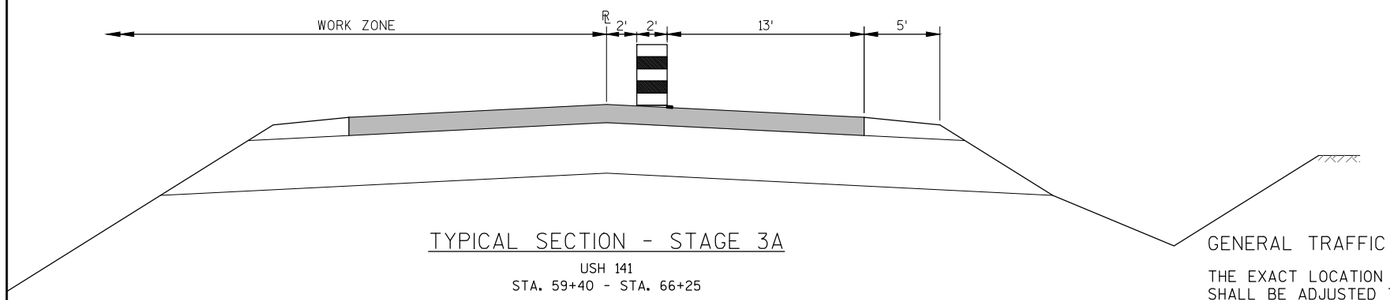
FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLAN\026001_S3.DWG PLOT DATE : 10/5/2015 9:59 AM PLOT BY : JEFF GILROY PLOT NAME : ----------

2



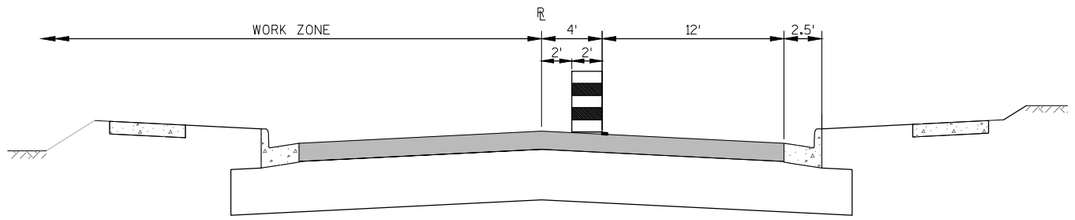

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TRAFFIC CONTROL/CONST. STAGE 2 & 4 | SHEET 89 | E |
|---|---|---|---|---|---|




TYPICAL SECTION - STAGE 3A

USH 141
STA. 59+40 - STA. 66+25




TYPICAL SECTION - STAGE 3B

USH 141
STA. 66+25 - STA. 109+00

## GENERAL TRAFFIC CONTROL NOTES

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

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

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

TEMPORARY STOP SIGNS SHALL BE SUPPORTED ON WOOD POSTS, OR AS DIRECTED BY THE ENGINEER.

## STAGING NOTES:

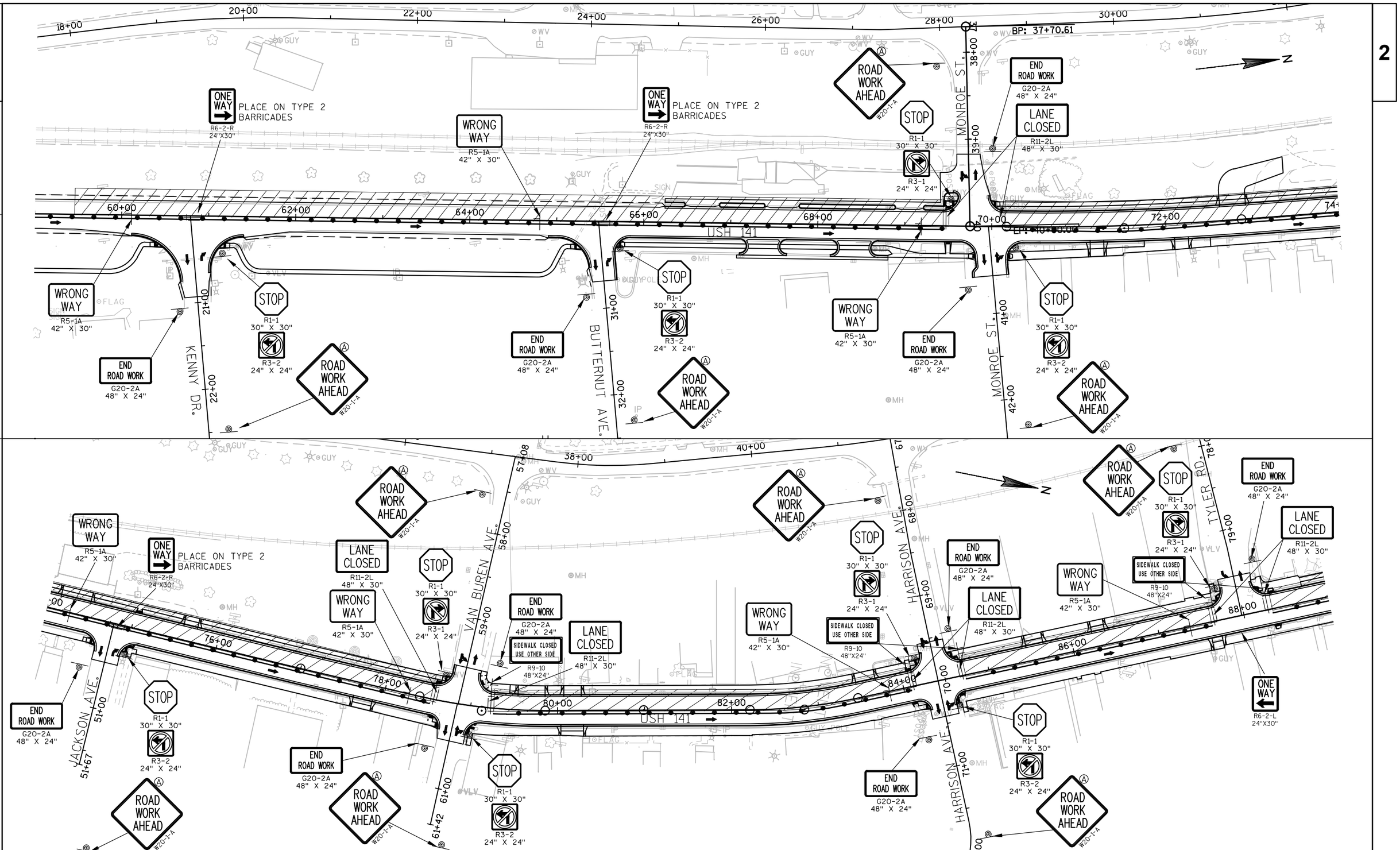
APPLY SDD DRAWING 15C3 WHEN CLOSING SIDE STREETS.

## LEGEND

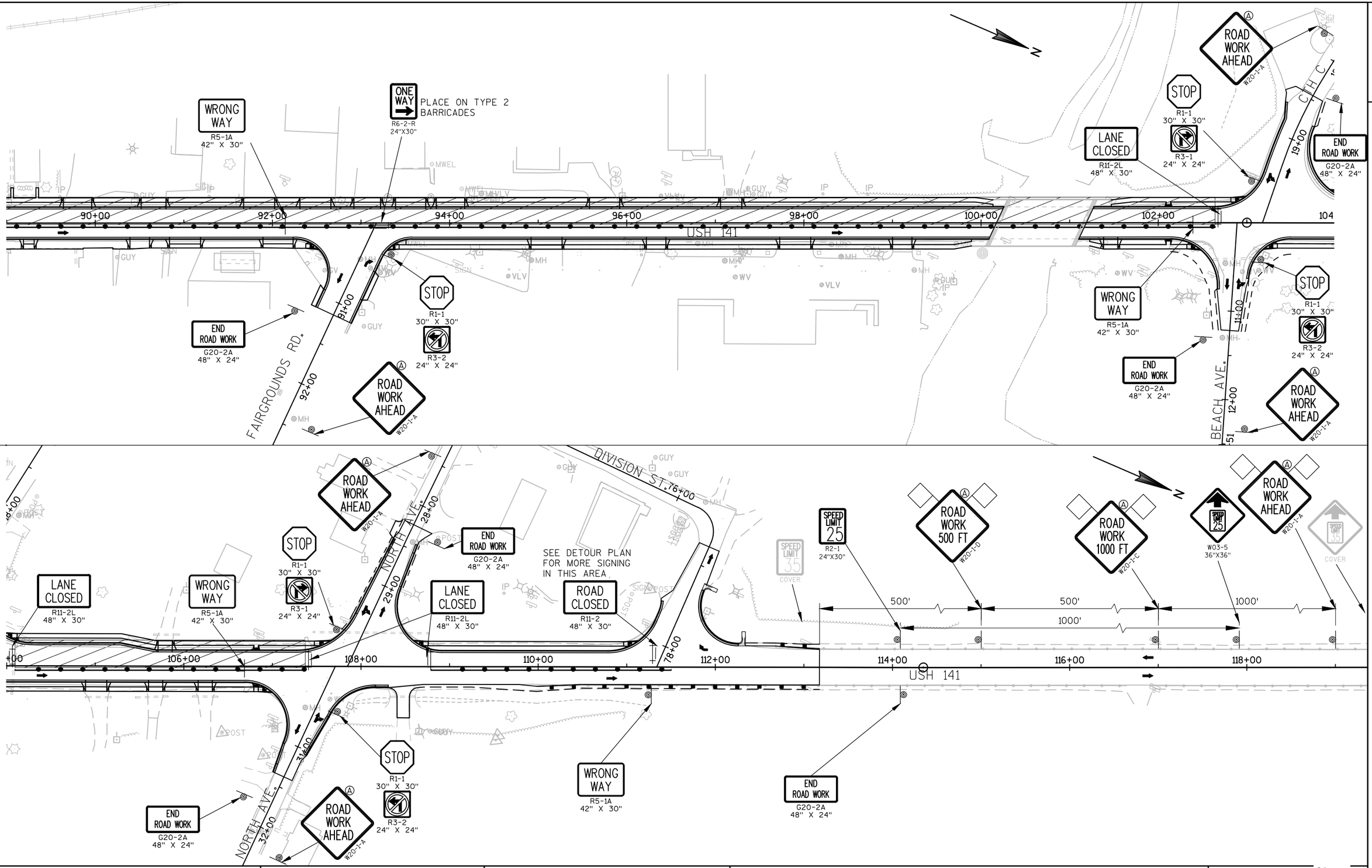
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- Ⓐ TYPE A WARNING LIGHT (FLASHING)
- Ⓑ TYPE B WARNING LIGHT (HIGH INTENSITY FLASHING)
- Ⓒ TYPE C WARNING LIGHT (STEADY BURN)
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- TEMPORARY RAISED PAVEMENT MARKER (TWO WAY REFLECTOR)
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

| PROJECT NO:1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TRAFFIC CONTROL/CONST. STAGE 3 | SHEET 90 | E |
|---|---|---|---|---|---|

2




| PROJECT NO:1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TRAFFIC CONTROL/CONST. STAGE 3 | SHEET 91 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | TRAFFIC CONTROL/CONST. STAGE 3 | SHEET 92 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLAN\026001_S4.DWG PLOT DATE : 10/5/2015 10:00 AM PLOT BY : JEFF GILROY PLOT NAME : ----------

2

N

SEC #500010
BRASS CAP
Y = 246326.00
X = 719616.27

T 33 N R 20 E — 2 1 — T 34 N R 20 E — 35 36

CURVE 2
PI STA = 16+58.87
Y = 246892.465
X = 720733.411
DELTA = 6°56'14"
D = 19°05'55"
T = 18.18'
L = 36.32'
R = 300.00'
PC STA = 16+40.69
Y = 246874.406
X = 720731.279
PT STA = 16+77.01
Y = 246910.648
X = 720733.346
BK = N06°43'59.1"E
AH = N00°12'14.8"W

CURVE 3
PI STA = 19+59.29
Y = 247192.926
X = 720732.341
DELTA = 8°06'43"
D = 4°19'27"
T = 93.95'
L = 187.59'
R = 1325.00'
PC STA = 18+65.33
Y = 247098.972
X = 720732.675
PT STA = 20+52.93
Y = 247285.987
X = 720745.267
BK = N00°12'14.8"W
AH = N07°54'28.4"E

CURVE 4
PI STA = 31+48.09
Y = 248373.282
X = 720872.920
DELTA = 8°34'59"
D = 3°38'16"
T = 118.19'
L = 235.94'
R = 1575.00'
PC STA = 30+29.90
Y = 248255.493
X = 720863.196
PT STA = 32+65.84
Y = 248491.202
X = 720864.957
BK = N04°43'09.7"E
AH = N03°51'48.9"W

PI 10+81.11
N81° 13' 50"W
45 50 55 60 65 70 75 78+00
STA. 47+22.72
Y = 245801.53
X = 720779.96
N6° 43' 59"E 15
CURVE 2
PC PT
N0° 12' 15"W
PC PI 19+59.29 PT
20
1ST AVE.
N7° 54' 28"E 25
℄ DETOUR ROUTE
CURVE 4
N4° 43' 10"E 30
PC PT
35
N3° 51' 49"W
PI 31+48.09
STA 52+16.48 USH 141=
STA 9+00.00 1ST ST.
Y = 246291.04
X = 720844.66
N7° 31' 47"E
PI 16+58.87
STA 52+27.13 USH 141=
STA 10+00.00 STH 180
Y = 246301.59
X = 720846.05
STA 60+78.94 USH 141=
STA 20+00.00 KENNY DR.
Y = 247146.06
X = 720957.67
℄ USH 141
PI 27+31.86
S88° 27' 31"E
STA 69+74.91 USH 141=
STA 40+00.00 MONROE AVE. (W)
Y = 248034.30
X = 721075.08
PC
CURVE 1
PT
N1° 50' 55"E
N2° 21' 49"E
PI 71+52.08
PI 76+99.82
MATCH LINE STA. 78+00
S88° 18' 04"E
S88° 00' 46"E
S88° 15' 56"E
S88° 23' 19"E
STA 74+79.14 USH 141=
STA 50+00.00 JACKSON AVE.
Y = 248536.91
X = 721111.79
STA 65+48.16 USH 141=
STA 30+00.00 BUTTERNUT AVE.
Y = 247611.23
X = 721019.16
STA 69+96.13 USH 141=
STA 40+00.00 MONROE AVE. (E)
Y = 248055.34
X = 721077.86

CURVE 1
PI STA = 71USH 141+52.08
Y = 248209.950
X = 721098.298
DELTA = 5°09'58"
D = 1°54'35"
T = 135.34'
L = 270.49'
R = 3000.00'
PC STA = 70USH 141+16.75
Y = 248075.779
X = 721080.563
PT STA = 72USH 141+87.24
Y = 248345.173
X = 721103.880
BK = N07°31'46.8"E
AH = N02°21'49.1"E

SEC #500000
MAG NAIL
Y = 246263.47
X = 722254.87

T 33 N R 20 E — 1 — T 34 N R 20 E — 36

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | ALIGNMENT PLAN | SHEET 93 E |
|---|---|---|---|---|

2

N

QTR #500005
BRASS CAP
Y = 248995.770
X = 719668.073

CURVE 11
PI STA = 54+60.07
Y = 249764.402
X = 719659.694
DELTA = 89°44'20"
D = 190°59'11"
T = 29.86'
L = 46.99'
R = 30.00'
PC STA = 54+30.21
Y = 249763.613
X = 719689.547
PT STA = 54+77.20
Y = 249794.259
X = 719660.347
BK = N88°29'09.2"W
AH = N01°15'11.1"E

PI 54+60.07
PT
PC
CURVE 11
℄ DETOUR ROUTE
N1° 15' 11"E
DIVISION ST.
PI 62+91.30
S77° 09' 53"E
N1° 44' 35"E
SEC #500003
SURVEY MARKER
Y = 251645.670
X = 719737.955
S88° 57' 06"E
PI 73+24.60
PI 73+43.60
N1° 56' 24"E
PI 27+13.98
S87° 28' 17"E
PI 28+39.24
S88° 27' 34"E
PC
PI 76+54.18
PT
CURVE 13
S89° 51' 25"E

CURVE 13
PI STA = 76+54.18
Y = 251951.045
X = 719739.091
DELTA = 88°12'11"
D = 190°59'11"
T = 29.07'
L = 46.18'
R = 30.00'
PC STA = 76+25.11
Y = 251921.988
X = 719738.107
PT STA = 76+71.29
Y = 251950.973
X = 719768.164
BK = N01°56'23.7"E
AH = S89°51'24.8"E

STA 113+17.61
Y = 252119.33
X = 719849.13

STA 111+33.86 USH 141=
STA 78+24.98 DIVISION ST.
Y = 251950.59
X = 719921.85

STA 107+84.74 USH 141=
STA 30+00.00 NORTH AVE. (W)
Y = 251629.97
X = 720060.02

CURVE 8
PI STA = 38+30.69
Y = 249054.766
X = 720826.897
DELTA = 12°53'48"
D = 11°27'33"
T = 56.51'
L = 112.54'
R = 500.00'
PC STA = 37+74.18
Y = 248998.384
X = 720830.704
PT STA = 38+86.72
Y = 249108.876
X = 720810.601
BK = N03°51'48.9"W
AH = N16°45'36.6"W

CURVE 9
PI STA = 41+55.23
Y = 249365.981
X = 720733.171
DELTA = 6°48'25"
D = 4°40'38"
T = 72.85'
L = 145.53'
R = 1225.00'
PC STA = 40+82.38
Y = 249296.223
X = 720754.180
PT STA = 42+27.91
Y = 249432.757
X = 720704.043
BK = N16°45'36.6"W
AH = N23°34'01.4"W

CURVE 10
PI STA = 45+63.49
Y = 249740.344
X = 720569.872
DELTA = 64°55'08"
D = 57°17'45"
T = 63.61'
L = 113.30'
R = 100.00'
PC STA = 44+99.88
Y = 249682.042
X = 720595.304
PT STA = 46+13.19
Y = 249742.025
X = 720506.287
BK = N23°34'01.4"W
AH = N88°29'09.2"W

CURVE 12
PI STA = 18+72.42
Y = 251191.222
X = 720117.132
DELTA = 13°18'25"
D = 11°27'33"
T = 58.32'
L = 116.12'
R = 500.00'
PC STA = 18+14.09
Y = 251200.242
X = 720059.509
PT STA = 19+30.22
Y = 251195.706
X = 720175.284
BK = S81°06'10.8"E
AH = N85°35'24.3"E

PC
CURVE 12
PI 18+72.42
PT
S88° 06' 11"E
N85° 35' 24"E
STA 103+17.71 USH 141=
STA 20+00.00 CTH C
Y = 251201.07
X = 720244.86
PI 103+00.03
N70° 28' 27"E
N23° 18' 50"W
105
110
115
N23° 26' 06"W
100
95
℄ USH 141
S88° 27' 34"E
35

STA 102+89.04 USH 141=
STA 10+00.00 BEACH AVE.
Y = 251174.75
X = 720256.23

STA 107+71.11 USH 141=
STA 30+00.00 NORTH AVE. (E)
Y = 251617.45
X = 720065.42

STA 93+17.39 USH 141=
STA 90+00.00 FAIRGROUNDS RD.
Y = 250283.25
X = 720642.66

S88° 23' 43"E
95

STA 87+97.42 USH 141=
STA 80+00.00 TYLER AVE.
Y = 249806.18
X = 720849.45

STA 84+40.45 USH 141=
STA 70+00.00 HARRISON AVE.
Y = 249478.65
X = 720991.42

50 N88° 29' 09"W
TYLER AVE.
PI 45+63.49
PT
PC
CURVE 10
CURVE 9
PI 41+55.23
PT
N23° 34' 01"W
N64° 27' 54"E
CURVE 8
PC
PT
1ST AVE.
40
N16° 45' 37"W
PI 38+30.69
S88° 15' 25"E
N68° 32' 09"E
N66° 34' 22"E
PI 68+49.77
N66° 34' 57"E
85
CURVE 6
N11° 28' 54"W
PC
PT
80
PI 82+83.76
N66° 20' 35"E
PC
PI 71+87.37
PT
CURVE 7
CURVE 5
PI 79+13.36
N11° 28' 54"W
PI 80+98.93
S88° 39' 32"E
MATCH LINE STA. 78+00
S88° 12' 26"E
75
PI 79+21.16
90

CURVE 5
PI STA = 79+13.36
Y = 248970.827
X = 721127.784
DELTA = 13°19'50"
D = 9°10'02"
T = 73.04'
L = 145.41'
R = 625.00'
PC STA = 78+40.32
Y = 248897.829
X = 721125.428
PT STA = 79+85.73
Y = 249042.402
X = 721113.246
BK = N01°50'55.5"E
AH = N11°28'54.0"W

CURVE 6
PI STA = 82+83.76
Y = 249334.466
X = 721053.922
DELTA = 11°57'12"
D = 9°32'57"
T = 62.82'
L = 125.17'
R = 600.00'
PC STA = 82+20.95
Y = 249272.907
X = 721066.426
PT STA = 83+46.12
Y = 249392.100
X = 721028.940
BK = N11°28'53.8"W
AH = N23°26'05.7"W

CURVE 7
PI STA = 71+87.37
Y = 249553.833
X = 721163.047
DELTA = 25°27'02"
D = 57°17'45"
T = 22.58'
L = 44.42'
R = 100.00'
PC STA = 71+64.79
Y = 249544.772
X = 721142.363
PT STA = 72+09.21
Y = 249553.127
X = 721185.619
BK = N66°20'32.0"E
AH = S88°12'26.2"E

STA 78+85.52 USH 141=
STA 60+00.00 VAN BUREN AVE. (W)
Y = 248943.02
X = 721125.25

STA 78+84.50 USH 141=
STA 60+00.00 VAN BUREN AVE. (E)
Y = 248942.00
X = 721125.29

CTRS #500001
MAG NAIL
Y = 248907.942
X = 722332.886

SEC #500002
SURVEY MARKER
Y = 251573.820
X = 722410.569

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | ALIGNMENT PLAN | SHEET 94 E |
|---|---|---|---|---|

DATE 06JAN16 E S T I M A T E O F Q U A N T I T I E S

LINE 1491-12-71

| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
|---|---|---|---|---|---|
| 0010 | 201.0105 | Clearing | STA | 5.000 | 5.000 |
| 0020 | 201.0120 | Clearing | ID | 12.000 | 12.000 |
| 0030 | 201.0205 | Grubbing | STA | 5.000 | 5.000 |
| 0040 | 201.0220 | Grubbing | ID | 12.000 | 12.000 |
| 0050 | 203.0100 | Removing Small Pipe Culverts | EACH | 12.000 | 12.000 |
| 0060 | 204.0100 | Removing Pavement | SY | 17,775.000 | 17,775.000 |
| 0070 | 204.0110 | Removing Asphaltic Surface | SY | 1,029.000 | 1,029.000 |
| 0080 | 204.0115 | Removing Asphaltic Surface Butt Joints | SY | 10.000 | 10.000 |
| 0090 | 204.0120 | Removing Asphaltic Surface Milling | SY | 17,646.000 | 17,646.000 |
| 0100 | 204.0150 | Removing Curb & Gutter | LF | 7,950.000 | 7,950.000 |
| 0110 | 204.0155 | Removing Concrete Sidewalk | SY | 3,050.000 | 3,050.000 |
| 0120 | 204.0210 | Removing Manholes | EACH | 9.000 | 9.000 |
| 0130 | 204.0220 | Removing Inlets | EACH | 22.000 | 22.000 |
| 0140 | 204.0245 | Removing Storm Sewer (size) 01. 10-Inch | LF | 1,017.000 | 1,017.000 |
| 0150 | 204.0245 | Removing Storm Sewer (size) 02. 12-Inch | LF | 51.000 | 51.000 |
| 0160 | 204.0245 | Removing Storm Sewer (size) 03. 15-Inch | LF | 75.000 | 75.000 |
| 0170 | 204.0245 | Removing Storm Sewer (size) 04. 18-Inch | LF | 18.000 | 18.000 |
| 0180 | 204.0245 | Removing Storm Sewer (size) 05. 21-Inch | LF | 67.000 | 67.000 |
| 0190 | 204.0245 | Removing Storm Sewer (size) 06. 24-Inch | LF | 188.000 | 188.000 |
| 0200 | 204.0245 | Removing Storm Sewer (size) 07. 36-Inch | LF | 40.000 | 40.000 |
| 0210 | 204.0280 | Sealing Pipes | EACH | 2.000 | 2.000 |
| 0220 | 205.0100 | Excavation Common | CY | 25,655.000 | 25,655.000 |
| 0230 | 205.0400 | Excavation Marsh | CY | 134.000 | 134.000 |
| 0240 | 205.0501.S | Excavation, Hauling, and Disposal of Petroleum Contaminated Soil | TON | 2,800.000 | 2,800.000 |
| 0250 | 208.1100 | Select Borrow | CY | 200.000 | 200.000 |
| 0260 | 213.0100 | Finishing Roadway (project) 01. 1491-12-71 | EACH | 1.000 | 1.000 |
| 0270 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 1,350.000 | 1,350.000 |
| 0280 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 33,565.000 | 33,565.000 |
| 0290 | 305.0500 | Shaping Shoulders | STA | 136.000 | 136.000 |
| 0300 | 306.0115 | Salvaged Asphaltic Pavement Base | CY | 965.000 | 965.000 |
| 0310 | 405.0100 | Coloring Concrete Red | CY | 23.000 | 23.000 |
| 0320 | 416.0160 | Concrete Driveway 6-Inch | SY | 1,390.000 | 1,390.000 |
| 0330 | 440.4410 | Incentive IRI Ride | DOL | 4,920.000 | 4,920.000 |
| 0340 | 455.0105 | Asphaltic Material PG58-28 | TON | 435.000 | 435.000 |
| 0350 | 455.0122 | Asphaltic Material PG64-34 | TON | 302.000 | 302.000 |
| 0360 | 455.0605 | Tack Coat | GAL | 4,399.000 | 4,399.000 |
| 0370 | 460.1100 | HMA Pavement Type E-0.3 | TON | 1,785.000 | 1,785.000 |
| 0380 | 460.1110 | HMA Pavement Type E-10 | TON | 10,498.000 | 10,498.000 |
| 0390 | 460.2000 | Incentive Density HMA Pavement | DOL | 7,860.000 | 7,860.000 |
| 0400 | 460.4000 | HMA Cold Weather Paving | TON | 1,927.000 | 1,927.000 |
| 0410 | 460.4110.S | Reheating HMA Pavement Longitudinal Joints | LF | 26,479.000 | 26,479.000 |
| 0420 | 465.0110 | Asphaltic Surface Patching | TON | 500.000 | 500.000 |
| 0430 | 465.0120 | Asphaltic Surface Driveways and Field Entrances | TON | 259.000 | 259.000 |
| 0440 | 465.0125 | Asphaltic Surface Temporary | TON | 162.000 | 162.000 |
| 0450 | 465.0315 | Asphaltic Flumes | SY | 54.000 | 54.000 |
| 0460 | 490.0200 | Salvaged Asphaltic Pavement Milling | SY | 8,113.000 | 8,113.000 |
| 0470 | 520.8000 | Concrete Collars for Pipe | EACH | 1.000 | 1.000 |
| 0480 | 521.0118 | Culvert Pipe Corrugated Steel 18-Inch | LF | 34.000 | 34.000 |
| 0490 | 521.1018 | Apron Endwalls for Culvert Pipe Steel 18-Inch | EACH | 2.000 | 2.000 |

3

DATE 06JAN16 E S T I M A T E O F Q U A N T I T I E S

LINE 1491-12-71

| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
|---|---|---|---|---|---|
| 0500 | 522.0130 | Culvert Pipe Reinforced Concrete Class III 30-Inch | LF | 80.000 | 80.000 |
| 0510 | 522.0318 | Culvert Pipe Reinforced Concrete Class IV 18-Inch | LF | 108.000 | 108.000 |
| 0520 | 522.1012 | Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch | EACH | 3.000 | 3.000 |
| 0530 | 522.1018 | Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch | EACH | 4.000 | 4.000 |
| 0540 | 522.1024 | Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch | EACH | 5.000 | 5.000 |
| 0550 | 522.1030 | Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch | EACH | 3.000 | 3.000 |
| 0560 | 601.0110 | Concrete Curb Type D | LF | 255.000 | 255.000 |
| 0570 | 601.0411 | Concrete Curb & Gutter 30-Inch Type D | LF | 8,988.000 | 8,988.000 |
| 0580 | 601.0557 | Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D | LF | 715.000 | 715.000 |
| 0590 | 601.0600 | Concrete Curb Pedestrian | LF | 54.000 | 54.000 |
| 0600 | 602.0405 | Concrete Sidewalk 4-Inch | SF | 54,883.000 | 54,883.000 |
| 0610 | 602.0515 | Curb Ramp Detectable Warning Field Natural Patina | SF | 530.000 | 530.000 |
| 0620 | 606.0200 | Riprap Medium | CY | 8.000 | 8.000 |
| 0630 | 606.0300 | Riprap Heavy | CY | 8.000 | 8.000 |
| 0640 | 608.0312 | Storm Sewer Pipe Reinforced Concrete Class III 12-Inch | LF | 700.000 | 700.000 |
| 0650 | 608.0315 | Storm Sewer Pipe Reinforced Concrete Class III 15-Inch | LF | 76.000 | 76.000 |
| 0660 | 608.0318 | Storm Sewer Pipe Reinforced Concrete Class III 18-Inch | LF | 301.000 | 301.000 |
| 0670 | 608.0324 | Storm Sewer Pipe Reinforced Concrete Class III 24-Inch | LF | 1,243.000 | 1,243.000 |
| 0680 | 608.0330 | Storm Sewer Pipe Reinforced Concrete Class III 30-Inch | LF | 175.000 | 175.000 |
| 0690 | 608.0412 | Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch | LF | 384.000 | 384.000 |
| 0700 | 608.0418 | Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch | LF | 42.000 | 42.000 |
| 0710 | 608.0424 | Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch | LF | 525.000 | 525.000 |
| 0720 | 608.0430 | Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch | LF | 372.000 | 372.000 |
| 0730 | 608.0436 | Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch | LF | 80.000 | 80.000 |
| 0740 | 611.0530 | Manhole Covers Type J | EACH | 20.000 | 20.000 |
| 0750 | 611.0615 | Inlet Covers Type F | EACH | 4.000 | 4.000 |
| 0760 | 611.0624 | Inlet Covers Type H | EACH | 28.000 | 28.000 |
| 0770 | 611.0639 | Inlet Covers Type H-S | EACH | 12.000 | 12.000 |
| 0780 | 611.0645 | Inlet Covers Type MS-A | EACH | 5.000 | 5.000 |
| 0790 | 611.2004 | Manholes 4-FT Diameter | EACH | 9.000 | 9.000 |
| 0800 | 611.2005 | Manholes 5-FT Diameter | EACH | 9.000 | 9.000 |
| 0810 | 611.2006 | Manholes 6-FT Diameter | EACH | 2.000 | 2.000 |
| 0820 | 611.3004 | Inlets 4-FT Diameter | EACH | 17.000 | 17.000 |
| 0830 | 611.3230 | Inlets 2x3-FT | EACH | 27.000 | 27.000 |
| 0840 | 611.3901 | Inlets Median 1 Grate | EACH | 3.000 | 3.000 |
| 0850 | 611.3902 | Inlets Median 2 Grate | EACH | 1.000 | 1.000 |
| 0860 | 611.8110 | Adjusting Manhole Covers | EACH | 26.000 | 26.000 |
| 0870 | 611.8115 | Adjusting Inlet Covers | EACH | 2.000 | 2.000 |

3

DATE 06JAN16 E S T I M A T E O F Q U A N T I T I E S

| LINE NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | 1491-12-71 QUANTITY |
|---|---|---|---|---|---|
| 0880 | 611.8120.S | Cover Plates Temporary | EACH | 22.000 | 22.000 |
| 0890 | 611.9710 | Salvaged Inlet Covers | EACH | 12.000 | 12.000 |
| 0900 | 611.9800.S | Pipe Grates | EACH | 1.000 | 1.000 |
| 0910 | 614.0920 | Salvaged Rail | LF | 275.000 | 275.000 |
| 0920 | 614.0925 | Salvaged Guardrail End Treatments | EACH | 2.000 | 2.000 |
| 0930 | 614.2300 | MGS Guardrail 3 | LF | 275.000 | 275.000 |
| 0940 | 614.2610 | MGS Guardrail Terminal EAT | EACH | 2.000 | 2.000 |
| 0950 | 618.0100 | Maintenance And Repair of Haul Roads (project) 01. 1491-12-71 | EACH | 1.000 | 1.000 |
| 0960 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0970 | 624.0100 | Water | MGAL | 800.000 | 800.000 |
| 0980 | 625.0100 | Topsoil | SY | 24,870.000 | 24,870.000 |
| 0990 | 627.0200 | Mulching | SY | 17,140.000 | 17,140.000 |
| 1000 | 628.1504 | Silt Fence | LF | 2,700.000 | 2,700.000 |
| 1010 | 628.1520 | Silt Fence Maintenance | LF | 2,700.000 | 2,700.000 |
| 1020 | 628.1905 | Mobilizations Erosion Control | EACH | 7.000 | 7.000 |
| 1030 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 2.000 | 2.000 |
| 1040 | 628.2006 | Erosion Mat Urban Class I Type A | SY | 1,500.000 | 1,500.000 |
| 1050 | 628.2008 | Erosion Mat Urban Class I Type B | SY | 4,000.000 | 4,000.000 |
| 1060 | 628.7005 | Inlet Protection Type A | EACH | 4.000 | 4.000 |
| 1070 | 628.7015 | Inlet Protection Type C | EACH | 37.000 | 37.000 |
| 1080 | 628.7020 | Inlet Protection Type D | EACH | 12.000 | 12.000 |
| 1090 | 628.7504 | Temporary Ditch Checks | LF | 100.000 | 100.000 |
| 1100 | 628.7555 | Culvert Pipe Checks | EACH | 26.000 | 26.000 |
| 1110 | 628.7570 | Rock Bags | EACH | 400.000 | 400.000 |
| 1120 | 629.0210 | Fertilizer Type B | CWT | 16.000 | 16.000 |
| 1130 | 630.0130 | Seeding Mixture No. 30 | LB | 150.000 | 150.000 |
| 1140 | 630.0140 | Seeding Mixture No. 40 | LB | 290.000 | 290.000 |
| 1150 | 630.0200 | Seeding Temporary | LB | 100.000 | 100.000 |
| 1160 | 631.0300 | Sod Water | MGAL | 50.000 | 50.000 |
| 1170 | 631.1000 | Sod Lawn | SY | 2,250.000 | 2,250.000 |
| 1180 | 632.0101 | Trees (species) (size) (root) 01. Trees (Autumn Brillant Serviceberry, 1.5" Cal. ) | EACH | 11.000 | 11.000 |
| 1190 | 632.0101 | Trees (species) (size) (root) 02. Trees (Cockspur Hawthorn, 1.5" Cal.) | EACH | 7.000 | 7.000 |
| 1200 | 632.0101 | Trees (species) (size) (root) 03. Trees (Century Gingko, 1.5" Cal.) | EACH | 34.000 | 34.000 |
| 1210 | 632.0101 | Trees (species) (size) (root) 04. Trees (Spring Snow Crabapple, 1.5" Cal.) | EACH | 22.000 | 22.000 |
| 1220 | 632.0101 | Trees (species) (size) (root) 05. Trees (Ivory Silk Japanese Tree Lilac, 1.5" Cal.) | EACH | 31.000 | 31.000 |
| 1230 | 632.0101 | Trees (species) (size) (root) 06. Trees (Chokecherry, 1.5" Cal.) | EACH | 6.000 | 6.000 |
| 1240 | 632.0201 | Shrubs (species) (size) (root) 01. Shrubs (Dwarf Bush Honeysuckle, 3 Gal.) | EACH | 63.000 | 63.000 |
| 1250 | 632.0201 | Shrubs (species) (size) (root) 02. Shrubs (Dwarf Ninebark, 3 Gal.) | EACH | 46.000 | 46.000 |
| 1260 | 632.0201 | Shrubs (species) (size) (root) 03. Shrubs (Alpine Currant, 3 Gal.) | EACH | 4.000 | 4.000 |
| 1270 | 632.0201 | Shrubs (species) (size) (root) 04. Shrubs (Grow Low Sumac, 3 Gal.) | EACH | 28.000 | 28.000 |
| 1280 | 632.9101 | Landscape Planting Surveillance and Care Cycles | EACH | 15.000 | 15.000 |
| 1290 | 633.5200 | Markers Culvert End | EACH | 15.000 | 15.000 |

3

DATE 06JAN16 E S T I M A T E O F Q U A N T I T I E S

| LINE NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | 1491-12-71 QUANTITY |
|---|---|---|---|---|---|
| 1300 | 634.0614 | Posts Wood 4x6-Inch X 14-FT | EACH | 46.000 | 46.000 |
| 1310 | 634.0616 | Posts Wood 4x6-Inch X 16-FT | EACH | 11.000 | 11.000 |
| 1320 | 634.0618 | Posts Wood 4x6-Inch X 18-FT | EACH | 5.000 | 5.000 |
| 1330 | 637.2210 | Signs Type II Reflective H | SF | 377.270 | 377.270 |
| 1340 | 637.2230 | Signs Type II Reflective F | SF | 62.250 | 62.250 |
| 1350 | 638.2102 | Moving Signs Type II | EACH | 8.000 | 8.000 |
| 1360 | 638.2602 | Removing Signs Type II | EACH | 61.000 | 61.000 |
| 1370 | 638.3000 | Removing Small Sign Supports | EACH | 64.000 | 64.000 |
| 1380 | 638.4000 | Moving Small Sign Supports | EACH | 8.000 | 8.000 |
| 1390 | 642.5401 | Field Office Type D | EACH | 1.000 | 1.000 |
| 1400 | 643.0100 | Traffic Control (project) 01. 1491-12-71 | EACH | 1.000 | 1.000 |
| 1410 | 643.0300 | Traffic Control Drums | DAY | 36,350.000 | 36,350.000 |
| 1420 | 643.0410 | Traffic Control Barricades Type II | DAY | 4,920.000 | 4,920.000 |
| 1430 | 643.0420 | Traffic Control Barricades Type III | DAY | 10,080.000 | 10,080.000 |
| 1440 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 13,250.000 | 13,250.000 |
| 1450 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 880.000 | 880.000 |
| 1460 | 643.0800 | Traffic Control Arrow Boards | DAY | 88.000 | 88.000 |
| 1470 | 643.0900 | Traffic Control Signs | DAY | 20,708.000 | 20,708.000 |
| 1480 | 643.0920 | Traffic Control Covering Signs Type II | EACH | 11.000 | 11.000 |
| 1490 | 643.1050 | Traffic Control Signs PCMS | DAY | 21.000 | 21.000 |
| 1500 | 643.2000 | Traffic Control Detour (project) 01. 1491-12-71 | EACH | 1.000 | 1.000 |
| 1510 | 643.3000 | Traffic Control Detour Signs | DAY | 37,087.000 | 37,087.000 |
| 1520 | 644.1410.S | Temporary Pedestrian Surface Asphalt | SF | 13,000.000 | 13,000.000 |
| 1530 | 644.1601.S | Temporary Curb Ramp | EACH | 8.000 | 8.000 |
| 1540 | 644.1616.S | Temporary Pedestrian Safety Fence | LF | 5,000.000 | 5,000.000 |
| 1550 | 645.0111 | Geotextile Fabric Type DF Schedule A | SY | 930.000 | 930.000 |
| 1560 | 645.0120 | Geotextile Fabric Type HR | SY | 53.000 | 53.000 |
| 1570 | 646.0106 | Pavement Marking Epoxy 4-Inch | LF | 10,778.000 | 10,778.000 |
| 1580 | 646.0126 | Pavement Marking Epoxy 8-Inch | LF | 600.000 | 600.000 |
| 1590 | 647.0576 | Pavement Marking Stop Line Epoxy 24-Inch | LF | 35.000 | 35.000 |
| 1600 | 647.0766 | Pavement Marking Crosswalk Epoxy 6-Inch | LF | 1,620.000 | 1,620.000 |
| 1610 | 648.0100 | Locating No-Passing Zones | MI | 1.230 | 1.230 |
| 1620 | 649.0400 | Temporary Pavement Marking Removable Tape 4-Inch | LF | 1,700.000 | 1,700.000 |
| 1630 | 649.0402 | Temporary Pavement Marking Paint 4-Inch | LF | 10,000.000 | 10,000.000 |
| 1640 | 649.1400 | Temporary Pavement Marking Stop Line Removable Tape 24-Inch | LF | 40.000 | 40.000 |
| 1650 | 649.1800 | Temporary Pavement Marking Arrows Removable Tape | EACH | 2.000 | 2.000 |
| 1660 | 650.4000 | Construction Staking Storm Sewer | EACH | 91.000 | 91.000 |
| 1670 | 650.4500 | Construction Staking Subgrade | LF | 7,651.000 | 7,651.000 |
| 1680 | 650.5000 | Construction Staking Base | LF | 7,651.000 | 7,651.000 |
| 1690 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 10,072.000 | 10,072.000 |
| 1700 | 650.6000 | Construction Staking Pipe Culverts | EACH | 3.000 | 3.000 |
| 1710 | 650.8000 | Construction Staking Resurfacing Reference | LF | 6,694.000 | 6,694.000 |
| 1720 | 650.9910 | Construction Staking Supplemental Control (project) 01. 1491-12-71 | LS | 1.000 | 1.000 |
| 1730 | 650.9920 | Construction Staking Slope Stakes | LF | 8,067.000 | 8,067.000 |
| 1740 | 690.0150 | Sawing Asphalt | LF | 4,224.000 | 4,224.000 |
| 1750 | 690.0250 | Sawing Concrete | LF | 6,452.000 | 6,452.000 |

3

DATE 06JAN16 E S T I M A T E O F Q U A N T I T I E S

| LINE NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | 1491-12-71 QUANTITY |
|---|---|---|---|---|---|
| 1760 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 2,000.000 | 2,000.000 |
| 1770 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 1,320.000 | 1,320.000 |
| 1780 | SPV.0035 | Special 01. Abandoning Sewer | CY | 7.000 | 7.000 |
| 1790 | SPV.0035 | Special 02. Planting Mixture | CY | 299.000 | 299.000 |
| 1800 | SPV.0035 | Special 03. Aggregate Planting Soil | CY | 88.000 | 88.000 |
| 1810 | SPV.0060 | Special 01. Salvage and Reset Inlets | EACH | 12.000 | 12.000 |
| 1820 | SPV.0060 | Special 02. Sanitary Sewer Manhole | EACH | 4.000 | 4.000 |
| 1830 | SPV.0060 | Special 03. Sanitary Sewer Manhole Drop | EACH | 1.000 | 1.000 |
| 1840 | SPV.0060 | Special 04. Sanitary Sewer Manhole Core | EACH | 1.000 | 1.000 |
| 1850 | SPV.0060 | Special 05. Water Main Gate Valve Box 6-Inch | EACH | 7.000 | 7.000 |
| 1860 | SPV.0060 | Special 06. Water Main Bend 45 Degree 6-Inch | EACH | 22.000 | 22.000 |
| 1870 | SPV.0060 | Special 07. Water Main Bend 22.5 Degree 6-Inch | EACH | 2.000 | 2.000 |
| 1880 | SPV.0060 | Special 08. Water Main Bend 11.25 Degree 6-Inch | EACH | 2.000 | 2.000 |
| 1890 | SPV.0060 | Special 09. Water Main Tee 6-Inch | EACH | 3.000 | 3.000 |
| 1900 | SPV.0060 | Special 10. Water Main Gate Valve and Box 6-Inch | EACH | 5.000 | 5.000 |
| 1910 | SPV.0060 | Special 11. Water Service Curb Box | EACH | 1.000 | 1.000 |
| 1920 | SPV.0060 | Special 12. Water Service Copper 1-Inch | EACH | 2.000 | 2.000 |
| 1930 | SPV.0060 | Special 13. Connect to Existing Water Main | EACH | 9.000 | 9.000 |
| 1940 | SPV.0060 | Special 14. Hydrant | EACH | 3.000 | 3.000 |
| 1950 | SPV.0060 | Special 15. Hydrant Extension 2-Ft | EACH | 1.000 | 1.000 |
| 1960 | SPV.0060 | Special 16. Sanitary Sewer Service Connection 4-Inch | EACH | 1.000 | 1.000 |
| 1970 | SPV.0060 | Special 17. Sanitary Sewer Service Connection 8-Inch | EACH | 2.000 | 2.000 |
| 1980 | SPV.0060 | Special 18. Perennial (Purple Dome Aster)(1 Gal. | EACH | 106.000 | 106.000 |
| 1990 | SPV.0060 | Special 19. Perennial (Purple Coneflower)(1 Gal. | EACH | 113.000 | 113.000 |
| 2000 | SPV.0060 | Special 20. Perennial (Feather Reed Grass)(1 Gal.) | EACH | 323.000 | 323.000 |
| 2010 | SPV.0060 | Special 21. Perennial (Baja Daylily)(1 Gal.) | EACH | 336.000 | 336.000 |
| 2020 | SPV.0060 | Special 22. Perennial (Walkers Low Catmint)( 1 Gal.) | EACH | 507.000 | 507.000 |
| 2030 | SPV.0060 | Special 23. Perennial (Russian Sage)(1Gal.) | EACH | 23.000 | 23.000 |
| 2040 | SPV.0060 | Special 24. Perennial (Goldstrum Black Eyed Susan)(1Gal.) | EACH | 207.000 | 207.000 |
| 2050 | SPV.0060 | Special 25. Perennial (Autumn Joy Sedum)(1 Gal.) | EACH | 66.000 | 66.000 |
| 2060 | SPV.0060 | Special 26. Perennial (Blue Heaven Little Bluestem)(1Gal.) | EACH | 141.000 | 141.000 |
| 2070 | SPV.0060 | Special 27. Perennial (Prairie Dropseed)(1 Gal.) | EACH | 79.000 | 79.000 |
| 2080 | SPV.0060 | Special 28. Perennial (Tara Prairie Dropseed)(1 Gal.) | EACH | 228.000 | 228.000 |
| 2090 | SPV.0060 | Special 29. Bench | EACH | 12.000 | 12.000 |
| 2100 | SPV.0060 | Special 30. Bike Rack | EACH | 4.000 | 4.000 |
| 2110 | SPV.0060 | Special 31. Trash Receptacle | EACH | 7.000 | 7.000 |
| 2120 | SPV.0060 | Special 32. Gateway Sign | EACH | 2.000 | 2.000 |

3

DATE 06JAN16 E S T I M A T E O F Q U A N T I T I E S

| LINE NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | 1491-12-71 QUANTITY |
|---|---|---|---|---|---|
| 2130 | SPV.0060 | Special 33. Stone Bollard | EACH | 6.000 | 6.000 |
| 2140 | SPV.0060 | Special 34. Sod Lawn Surveillance and Care Cycle | EACH | 15.000 | 15.000 |
| 2150 | SPV.0060 | Special 35. Temporary Mailbox | EACH | 5.000 | 5.000 |
| 2160 | SPV.0075 | Special 01. Street Sweeping | HRS | 60.000 | 60.000 |
| 2170 | SPV.0090 | Special 01. Grading and Shaping Ditch | LF | 416.000 | 416.000 |
| 2180 | SPV.0090 | Special 02. Concrete Curb and Gutter 6-Inch Sloped 24-Inch Type D | LF | 114.000 | 114.000 |
| 2190 | SPV.0090 | Special 03. Sanitary Sewer Pipe SDR 35 PVC 8-Inch | LF | 530.000 | 530.000 |
| 2200 | SPV.0090 | Special 04. Water Main Ductile Iron 6-Inch | LF | 326.000 | 326.000 |
| 2210 | SPV.0090 | Special 05. Insulation Board Polystyrene 2-Inch | LF | 576.000 | 576.000 |
| 2220 | SPV.0090 | Special 06. Insulation Board Polystyrene 4-Inch | LF | 96.000 | 96.000 |
| 2230 | SPV.0090 | Special 07. Landscape Edging | LF | 564.000 | 564.000 |
| 2240 | SPV.0105 | Special .01 Construction Staking Water & Sanitary Sewer | LS | 1.000 | 1.000 |
| 2250 | SPV.0120 | Special 01. Water for Seeded Areas | MGAL | 510.000 | 510.000 |
| 2260 | SPV.0165 | Special 01. Scoring Sidewalk | SF | 54,883.000 | 54,883.000 |
| 2270 | SPV.0165 | Special 02. Coarse Aggregate Stone Mulch | SF | 145.000 | 145.000 |
| 2280 | SPV.0165 | Special 03. Stone Pavers | SF | 950.000 | 950.000 |
| 2290 | SPV.0180 | Special 01. Shredded Hardwood Bark Mulch | SY | 702.000 | 702.000 |

3

## Clearing and Grubbing

| STATION | TO | STATION | LOCATION | 201.0105 Clearing STA | 201.0120 Clearing ID | 201.0205 Grubbing STA | 201.0220 Grubbing ID |
|---|---|---|---|---|---|---|---|
| 72+00 | - | 73+00 | USH 141 | 1 | --- | 1 | --- |
| 98+00 | - | 100+00 | USH 141 | 2 | --- | 2 | --- |
| 30+00 | - | 32+00 | NORTH AVE | 2 | --- | 2 | --- |
| 60+35 | | | USH 141 LT | --- | 4 | --- | 4 |
| 61+00 | | | USH 141 LT | --- | 4 | --- | 4 |
| 61+60 | | | USH 141 LT | --- | 4 | --- | 4 |
| CATEGORY 0010 TOTALS | | | | 5 | 12 | 5 | 12 |

## Removing Small Pipe Culverts

| STATION | | LOCATION | 203.0100 EACH | REMARKS |
|---|---|---|---|---|
| 52+24 | RT | USH 141 | 1 | 24" CMCP |
| 20+50 | | KENNY AVE. | 1 | 18" CMCP |
| 55+50 | | USH 141 | 1 | 30" RCCP |
| 65+34 | | USH 141 | 1 | 24" RCCP |
| 102+90 | RT | USH 141 | 1 | 24" CMCP |
| 104+10 | | USH 141 | 1 | 24" RCCP |
| 105+00 | RT | USH 141 | 1 | 18" CMCP |
| 105+65 | RT | USH 141 | 1 | 18" CMCP |
| 105+81 | LT | USH 141 | 1 | 18" CMCP |
| 106+25 | RT | USH 141 | 1 | 18" CMCP |
| 29+55 | | NORTH AVE | 1 | 18" CMCP |
| 108+48 | RT | USH 141 | 1 | 18" CMCP |
| CATEGORY 0010 TOTAL | | | 12 | |

## Removing Concrete Sidewalk

| STATION | TO | STATION | | LOCATION | Cat 0010 204.0155 SY | Cat 0040 204.0155 SY |
|---|---|---|---|---|---|---|
| 68+80 | - | 69+85 | RT | USH 141 | 95 | --- |
| 70+15 | - | 72+00 | RT | USH 141 | 152 | --- |
| 72+00 | - | 77+00 | RT | USH 141 | 244 | 215 |
| 77+00 | - | 83+00 | RT | USH 141 | 470 | 94 |
| 83+00 | - | 89+00 | RT | USH 141 | 483 | 66 |
| 89+00 | - | 94+00 | RT | USH 141 | 138 | 95 |
| 94+00 | - | 99+00 | RT | USH 141 | 124 | 101 |
| 79+05 | - | 83+00 | LT | USH 141 | 198 | 119 |
| 83+00 | - | 89+00 | LT | USH 141 | 435 | --- |
| 89+00 | - | 89+36 | LT | USH 141 | 21 | --- |
| TOTALS | | | | | 2,360 | 690 |

## Removing Manholes & Inlets

| STATION | OFFSET | LOCATION | 204.0210 Manholes EACH | 204.0220 Inlets EACH |
|---|---|---|---|---|
| 66+76 | 20' RT | USH 141 | --- | 1 |
| 67+13 | 37' RT | USH 141 | --- | 1 |
| 68+81 | 20' RT | USH 141 | --- | 1 |
| 68+81 | 20' LT | USH 141 | --- | 1 |
| 69+82 | 44' RT | USH 141 | --- | 1 |
| 70+14 | 20' LT | USH 141 | --- | 1 |
| 70+40 | 43' LT | USH 141 | 1 | --- |
| 70+18 | 40' RT | USH 141 | --- | 1 |
| 70+38 | 24' RT | USH 141 | 1 | --- |
| 70+34 | 20' RT | USH 141 | --- | 1 |
| 72+46 | 20' RT | USH 141 | --- | 1 |
| 72+46 | 20' LT | USH 141 | --- | 1 |
| 77+21 | 20' LT | USH 141 | --- | 1 |
| 77+22 | 20' RT | USH 141 | --- | 1 |
| 77+22 | 15' RT | USH 141 | 1 | --- |
| 78+52 | 19' RT | USH 141 | --- | 1 |
| 78+65 | 13' RT | USH 141 | 1 | --- |
| 78+51 | 21' LT | USH 141 | --- | 1 |
| 81+21 | 20' RT | USH 141 | --- | 1 |
| 81+21 | 20' LT | USH 141 | --- | 1 |
| 84+25 | 42' LT | USH 141 | 1 | --- |
| 84+60 | 35' RT | USH 141 | 1 | --- |
| 84+75 | 19' RT | USH 141 | --- | 1 |
| 84+76 | 21' LT | USH 141 | --- | 1 |
| 96+71 | 19' RT | USH 141 | --- | 1 |
| 96+81 | 22' RT | USH 141 | 1 | --- |
| 96+72 | 21' LT | USH 141 | --- | 1 |
| 98+32 | 23' RT | USH 141 | 1 | --- |
| 98+23 | 19' RT | USH 141 | --- | 1 |
| 98+24 | 21' LT | USH 141 | --- | 1 |
| 99+73 | 23' RT | USH 141 | 1 | --- |
| CATEGORY 0010 TOTALS | | | 9 | 22 |

## Removing Asphaltic Surface Milling

| STATION | TO | STATION | LOCATION | 204.0120 SY | REMARKS |
|---|---|---|---|---|---|
| 9+83.48 | - | 45+91.55 | DETOUR | 9,640 | Stage 5 |
| 45+91.55 | - | 49+00 | DETOUR | 600 | Stage 5 |
| 49+00 | - | 54+30.22 | DETOUR | 1,650 | Stage 5 |
| 54+30.22 | - | 76+77 | DETOUR | 5,756 | Stage 5 |
| CATEGORY 0010 TOTAL | | | | 17,646 | |

## Removing Pavement

| STATION | TO | STATION | LOCATION | 204.0100 SY | REMARKS |
|---|---|---|---|---|---|
| 47+23 | - | 59+40 | USH 141 | 3,246 | STAGE 1 |
| 59+40 | - | 66+00 | USH 141 RT | 1,174 | STAGE 2 |
| 66+00 | - | 94+70 | USH 141 RT | 7,016 | STAGE 2 |
| 59+40 | - | 66+00 | USH 141 LT | 1,321 | STAGE 3 |
| 66+00 | - | 94+70 | USH 141 LT | 4,465 | STAGE 3 |
| 70+82 | | RT | USH 141 | 35 | C.E. |
| 71+20 | | RT | USH 141 | 31 | C.E. |
| 72+17 | | RT | USH 141 | 17 | C.E. |
| 77+77 | | RT | USH 141 | 21 | C.E. |
| 80+17 | | RT | USH 141 | 25 | C.E. |
| 87+63 | | RT | USH 141 | 19 | C.E. |
| 88+67 | | RT | USH 141 | 15 | C.E. |
| 89+16 | | RT | USH 141 | 15 | C.E. |
| 90+50 | | RT | USH 141 | 22 | C.E. |
| 91+01 | | RT | USH 141 | 36 | C.E. |
| 92+06 | | RT | USH 141 | 33 | C.E. |
| 95+09 | | RT | USH 141 | 42 | C.E. |
| 96+33 | | RT | USH 141 | 24 | C.E. |
| 97+90 | | RT | USH 141 | 44 | C.E. |
| 99+12 | | RT | USH 141 | 33 | C.E. |
| 79+90 | | LT | USH 141 | 52 | C.E. |
| 83+01 | | LT | USH 141 | 20 | C.E. |
| 85+57 | | LT | USH 141 | 21 | C.E. |
| 86+32 | | LT | USH 141 | 17 | C.E. |
| 86+83 | | LT | USH 141 | 17 | C.E. |
| 87+17 | | LT | USH 141 | 14 | C.E. |
| CATEGORY 0010 TOTAL | | | | 17,775 | |

## Removing Asphaltic Surface

| STATION | TO | STATION | LOCATION | 204.0110 SY |
|---|---|---|---|---|
| 99+25 | - | 100+18.74 | USH 141 | 425 |
| 101+17.51 | - | 102+50 | USH 141 | 604 |
| CATEGORY 0010 TOTAL | | | | 1,029 |

## Removing Asphaltic Surface Butt Joints

| STATION | LOCATION | 204.0115 SY | REMARKS |
|---|---|---|---|
| 9+83.48 | DETOUR | 5 | Stage 5 |
| 76+77 | DETOUR | 5 | Stage 5 |
| CATEGORY 0010 TOTAL | | 10 | |

3

## Removing Curb and Gutter

| STATION | TO | STATION | | LOCATION | 204.0150 LF | REMARKS |
|---|---|---|---|---|---|---|
| 51+70 | - | 52+08 | RT | USH 141 | 57 | Stage 1 |
| 52+60 | - | 53+10 | RT | USH 141 | 81 | Stage 1 |
| 110+80 | - | 111+40 | LT | USH 141 | 70 | Stage 1 |
| 111+80 | - | 112+25 | LT | USH 141 | 86 | Stage 1 |
| 60+20 | - | 60+75 | RT | USH 141 | 87 | Stage 2 |
| 61+00 | - | 61+40 | RT | USH 141 | 63 | Stage 2 |
| 65+00 | - | 65+40 | RT | USH 141 | 58 | Stage 2 |
| 65+60 | - | 69+85 | RT | USH 141 | 592 | Stage 2 |
| 70+15 | - | 74+65 | RT | USH 141 | 489 | Stage 2 |
| 74+90 | - | 78+75 | RT | USH 141 | 393 | Stage 2 |
| 78+90 | - | 84+35 | RT | USH 141 | 553 | Stage 2 |
| 84+55 | - | 92+65 | RT | USH 141 | 875 | Stage 2 |
| 92+85 | - | 99+25 | RT | USH 141 | 691 | Stage 2 |
| 66+25 | - | 69+60 | LT | USH 141 | 564 | Stage 3 |
| 69+90 | - | 78+75 | LT | USH 141 | 888 | Stage 3 |
| 79+00 | - | 84+35 | LT | USH 141 | 527 | Stage 3 |
| 84+55 | - | 87+85 | LT | USH 141 | 338 | Stage 3 |
| 88+10 | - | 99+00 | LT | USH 141 | 1,141 | Stage 3 |
| 107+40 | - | 107+85 | LT | USH 141 | 52 | Stage 3 |
| 108+35 | - | 108+85 | LT | USH 141 | 87 | Stage 3 |
| 18+65 | - | 19+80 | RT | CTH C | 160 | Stage 3 |
| 18+95 | - | 19+45 | LT | CTH C | 98 | Stage 3 |
| CATEGORY 0010 TOTAL | | | | | 7,950 | |

## Excavation, Hauling, and Disposal of Petroleum Contaminated Soil

| STATION | TO | STATION | LOCATION | 205.0501.S TON | REMARKS |
|---|---|---|---|---|---|
| 65+62 | - | 68+75 | USH 141 LT | 850 | ICE CREAM STATION |
| 73+08 | - | 75+46 | USH 141 LT | 400 | A & M HEATING |
| 78+64 | - | 80+50 | USH 141 LT | 1,050 | MOSHER AUTO REPAIR |
| 90+63 | - | 92+70 | USH 141 RT | 300 | BP |
| 92+68 | - | 94+15 | USH 141 LT | 200 | ERIC'S SERVICE |
| CATEGORY 0010 TOTAL | | | | 2,800 | |

## Shaping Shoulders

| STATION | TO | STATION | | LOCATION | 305.0500 STA |
|---|---|---|---|---|---|
| 110+50 | - | 113+20 | RT | USH 141 | 3 |
| 112+30 | - | 113+20 | LT | USH 141 | 1 |
| 9+83.48 | - | 45+91.55 | LT & RT | DETOUR | 72 |
| 45+91.55 | - | 49+00 | LT | DETOUR | 4 |
| 49+00 | - | 76+77 | LT & RT | DETOUR | 56 |
| CATEGORY 0010 TOTAL | | | | | 136 |

## Base Aggregate Dense

| STATION | TO | STATION | | LOCATION | 305.0110 3/4-INCH TON | 305.0120 1 1/4-INCH TON | REMARKS |
|---|---|---|---|---|---|---|---|
| 47+22.72 | - | 50+00 | | USH 141 | 158 | 1,170 | Stage 1 |
| 50+00 | - | 56+00 | | USH 141 | 245 | 3,116 | Stage 1 |
| 56+00 | - | 59+40 | | USH 141 | 217 | 1,340 | Stage 1 |
| 109+00 | - | 113+17.61 | | USH 141 | 106 | 1,012 | Stage 1 |
| 59+40 | | 62+00 | RT | USH 141 | 40 | 1,127 | Stage 2 |
| 62+00 | - | 67+00 | RT | USH 141 | 96 | 1,751 | Stage 2 |
| 67+00 | - | 72+00 | RT | USH 141 | --- | 1,578 | Stage 2 |
| 72+00 | - | 77+00 | RT | USH 141 | --- | 1,455 | Stage 2 |
| 77+00 | - | 83+00 | RT | USH 141 | --- | 1,729 | Stage 2 |
| 83+00 | - | 89+00 | RT | USH 141 | --- | 1,541 | Stage 2 |
| 89+00 | - | 94+00 | RT | USH 141 | --- | 1,732 | Stage 2 |
| 94+00 | - | 99+00 | RT | USH 141 | --- | 1,249 | Stage 2 |
| 99+00 | - | 105+00 | RT | USH 141 | --- | 1,378 | Stage 2 |
| 105+00 | - | 109+00 | RT | USH 141 | 19 | 1,666 | Stage 2 |
| 59+40.00 | | 62+00 | LT | USH 141 | 83 | 565 | Stage 3 |
| 62+00.00 | - | 67+00 | LT | USH 141 | 136 | 1,058 | Stage 3 |
| 67+00.00 | - | 72+00 | LT | USH 141 | --- | 1,002 | Stage 3 |
| 72+00.00 | - | 77+00 | LT | USH 141 | --- | 946 | Stage 3 |
| 77+00.00 | - | 83+00 | LT | USH 141 | --- | 1,085 | Stage 3 |
| 83+00.00 | - | 89+00 | LT | USH 141 | --- | 1,218 | Stage 3 |
| 89+00.00 | - | 94+00 | LT | USH 141 | --- | 998 | Stage 3 |
| 94+00.00 | - | 99+00 | LT | USH 141 | --- | 867 | Stage 3 |
| 99+00.00 | - | 105+00 | LT | USH 141 | --- | 1,368 | Stage 3 |
| 105+00.00 | - | 109+00 | LT | USH 141 | --- | 1,414 | Stage 3 |
| Temporary Traffic Shifts | | | | USH 141 | --- | 1,000 | Stage 2 |
| Temporary Sidewalks and Driveways | | | | USH 141 | --- | 200 | Stages 1 - 3 |
| Detour Shoulders | | | | Detour | 250 | --- | Stage 5 |
| CATEGORY 0010 TOTALS | | | | | 1,350 | 33,565 | |

## Salvaged Asphaltic Pavement Base and Milling

| STATION | TO | STATION | LOCATION | 306.0115 Salvaged Asphaltic Pavement Base CY | 490.0200 Salvaged Asphaltic Pavement Milling SY | REMARKS |
|---|---|---|---|---|---|---|
| 47+22.72 | - | 59+40 | USH 141 | 853 | 5,797 | Mill 3 Inches |
| 109+00 | - | 113+17.61 | USH 141 | 112 | 2,316 | Mill 7.5 Inches |
| CATEGORY 0010 TOTALS | | | | 965 | 8,113 | |

## Sealing Pipes

| STATION | OFFSET | LOCATION | 204.0280 EACH | Remarks |
|---|---|---|---|---|
| 66+76 | 38' RT | USH 141 | 1 | 10-Inch PVC |
| 68+81 | 42' RT | USH 141 | 1 | 10-Inch RCP |
| CATEGORY 0010 TOTAL | | | 2 | |

3

## Earthwork

| Division | From/To Station | Common Excavation (1) (item # 205.0100) | | Salvaged/ Unusable Pavement Material (4) | Available Material (5) | Marsh Excavation (6) | Reduced Marsh in Fill (8) | Expanded Marsh Backfill (10) | Unexpanded Fill | Expanded Fill (13) | Mass Ordinate +/- (14) | Waste |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Cut (2) | EBS Excavation (3) | | | (item #205.0500) | Factor 0.60 | Factor 1.50 | | Factor 1.25 | | |
| Division 1 | | | | | | | | | | | | |
| USH 141 | 76+77/113+17.61 | 22,104 | 0 | 5,491 | 16,613 | 134 | 80 | 201 | 4,732 | 5,916 | 10,898 | 10,898 |
| ivision 1 Subtotal | | 22,104 | 0 | 5,491 | 16,613 | 134 | 80 | 201 | 4,732 | 5,916 | 10,898 | 10,898 |
| Division 2 | | | | | | | | | | | | |
| STH 180 | 47+22.72/11+24.29 | 516 | 0 | 0 | 516 | 0 | 0 | 0 | 13 | 16 | 500 | 500 |
| ivision 2 Subtotal | | 516 | 0 | 0 | 516 | 0 | 0 | 0 | 13 | 16 | 500 | 500 |
| Division 3 | | | | | | | | | | | | |
| 1ST STREET | 10+24.12/09+83.48 | 229 | 0 | 0 | 229 | 0 | 0 | 0 | 110 | 137 | 92 | 92 |
| ivision 3 Subtotal | | 229 | 0 | 0 | 229 | 0 | 0 | 0 | 110 | 137 | 92 | 92 |
| Division 4 | | | | | | | | | | | | |
| KENNY DR | 09+24.01/20+93.27 | 249 | 0 | 0 | 249 | 0 | 0 | 0 | 39 | 49 | 200 | 200 |
| ivision 4 Subtotal | | 249 | 0 | 0 | 249 | 0 | 0 | 0 | 39 | 49 | 200 | 200 |
| Division 5 | | | | | | | | | | | | |
| FAIRGROUNDS RD | 20+21.1/91+14.59 | 473 | 0 | 0 | 473 | 0 | 0 | 0 | 0 | 0 | 473 | 473 |
| ivision 5 Subtotal | | 473 | 0 | 0 | 473 | 0 | 0 | 0 | 0 | 0 | 473 | 473 |
| Division 6 | | | | | | | | | | | | |
| BEACH AVE | 90+17.66/11+21.82 | 395 | 0 | 0 | 395 | 0 | 0 | 0 | 133 | 167 | 228 | 228 |
| ivision 6 Subtotal | | 395 | 0 | 0 | 395 | 0 | 0 | 0 | 133 | 167 | 228 | 228 |
| Division 7 | | | | | | | | | | | | |
| CTH C | 10+16.04/11+21.82 | 395 | 0 | 0 | 395 | 0 | 0 | 0 | 133 | 167 | 228 | 228 |
| ivision 7 Subtotal | | 395 | 0 | 0 | 395 | 0 | 0 | 0 | 133 | 167 | 228 | 228 |
| Division 8 | | | | | | | | | | | | |
| NORTH AVE | 10+16.04/31+37.54 | 446 | 0 | 0 | 446 | 0 | 0 | 0 | 1 | 1 | 444 | 444 |
| ivision 8 Subtotal | | 446 | 0 | 0 | 446 | 0 | 0 | 0 | 1 | 1 | 444 | 444 |
| Division 9 | | | | | | | | | | | | |
| NORTH AVE | 30+17.63/29+82.37 | 471 | 0 | 0 | 471 | 0 | 0 | 0 | 38 | 48 | 424 | 424 |
| ivision 9 Subtotal | | 471 | 0 | 0 | 471 | 0 | 0 | 0 | 38 | 48 | 424 | 424 |
| Division 10 | | | | | | | | | | | | |
| DIVISION ST | 28+23.36/78+07.54 | 377 | 0 | 0 | 377 | 0 | 0 | 0 | 12 | 16 | 361 | 361 |
| vision 10 Subtotal | | 377 | 0 | 0 | 377 | 0 | 0 | 0 | 12 | 16 | 361 | 361 |
| Grand Total | | 25,655 | 0 | 5,491 | 20,164 | 134 | 80 | 201 | 5,214 | 6,517 | 13,848 | 13,848 |
| | Category 0010 | | 25,655 | | | | | | | | | |

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material
8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.1100
13) Expanded Fill. Factor = 1.25
Expanded Fill = (Unexpanded Fill - Reduced Marsh) * Fill Factor
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within

3

## Removing Storm Sewer

| STATION | TO | STATION | 204.0245.01 10-Inch LF | 204.0245.02 12-Inch LF | 204.0245.03 15-Inch LF | 204.0245.04 18-Inch LF | 204.0245.05 21-Inch LF | 204.0245.06 24-Inch LF | 204.0245.07 36-Inch LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 66+58, 41'RT | - | 65+29, 44'RT | 38 | --- | --- | --- | --- | --- | --- | PVC |
| 66+76, 20'RT | - | 66+19, 33'RT | 76 | --- | --- | --- | --- | --- | --- | RCP |
| 66+76, 20'RT | - | 66+58, 38'RT | 18 | --- | --- | --- | --- | --- | --- | PVC |
| 68+81, 20'LT | - | 68+81, 20'RT | 37 | --- | --- | --- | --- | --- | --- | RCP |
| 68+81, 20'RT | - | 68+81,42'RT | 22 | --- | --- | --- | --- | --- | --- | RCP |
| 69+82, 44'RT | - | 70+18, 40'RT | 34 | --- | --- | --- | --- | --- | --- | RCP |
| 70+14, 20'LT | - | 70+40, 43'LT | 36 | --- | --- | --- | --- | --- | --- | RCP |
| 70+16, 69'LT | - | 70+16, 74'LT | --- | --- | --- | --- | --- | 154 | --- | CMP |
| 70+18, 40'RT | - | 70+38, 24'RT | 25 | --- | --- | --- | --- | --- | --- | RCP |
| 70+34, 20'RT | - | 70+38, 24'RT | 6 | --- | --- | --- | --- | --- | --- | RCP |
| 70+38, 24'RT | - | 70+40, 43'LT | --- | --- | --- | --- | 67 | --- | --- | RCP |
| 70+40, 43'LT | - | 70+40, 49'LT | --- | --- | --- | --- | --- | 34 | --- | CMP |
| 72+46, 20'RT | - | 72+46, 20'LT | 40 | --- | --- | --- | --- | --- | --- | RCP |
| 72+46, 20'LT | - | 72+46, 64'LT | 44 | --- | --- | --- | --- | --- | --- | RCP |
| 77+21, 20'LT | - | 77+22, 15'RT | --- | 35 | --- | --- | --- | --- | --- | RCP |
| 77+22, 20'RT | - | 77+22, 15'RT | --- | 4 | --- | --- | --- | --- | --- | RCP |
| 77+22, 15'RT | - | 78+65, 13'RT | 141 | --- | --- | --- | --- | --- | --- | RCP |
| 78+51, 21'LT | - | 78+65, 13'RT | 36 | --- | --- | --- | --- | --- | --- | RCP |
| 81+21, 21'LT | - | 81+21, 20'LT | --- | --- | --- | 18 | --- | --- | --- | RCP |
| 81+21, 20'LT | - | 81+21, 21'RT | --- | --- | --- | --- | --- | --- | 40 | RCP |
| 84+36, 36'LT | - | 84+60, 35'RT | --- | --- | 75 | --- | --- | --- | --- | RCP |
| 84+76, 21'LT | - | 84+60, 35'RT | 59 | --- | --- | --- | --- | --- | --- | RCP |
| 84+75, 19'RT | - | 84+60, 35'RT | 23 | --- | --- | --- | --- | --- | --- | RCP |
| 96+72, 21'LT | - | 96+71, 19'RT | 40 | --- | --- | --- | --- | --- | --- | RCP |
| 96+71, 19'RT | - | 96+81, 22'RT | --- | 12 | --- | --- | --- | --- | --- | RCP |
| 96+81, 22'RT | - | 98+32, 23'RT | 150 | --- | --- | --- | --- | --- | --- | RCP |
| 98+23, 19'RT | - | 98+32, 23'RT | 12 | --- | --- | --- | --- | --- | --- | RCP |
| 98+24, 21'LT | - | 98+23, 19'RT | 39 | --- | --- | --- | --- | --- | --- | PVC |
| 98+32, 23'RT | - | 99+73, 23'RT | 141 | --- | --- | --- | --- | --- | --- | RCP |
| CATEGORY 0010 TOTALS | | | 1,017 | 51 | 75 | 18 | 67 | 188 | 40 | |

## Riprap

| STATION | OFFSET | LOCATION | 606.0200 Riprap Medium CY | 606.0300 Riprap Heavy CY | 645.0120 Geotextile Fabric Type HR SY |
|---|---|---|---|---|---|
| 71+00 | LT | USH 141 | 4 | --- | 15 |
| 72+50 | LT | USH 141 | 4 | --- | 15 |
| 100+00 | RT | USH 141 | --- | 8 | 23 |
| CATEGORY 0010 TOTAL | | | 8 | 8 | 53 |

## Adjusting Inlet Covers

| STATION | OFFSET | LOCATION | 644.8115 EACH |
|---|---|---|---|
| 101+60 | 17.5' RT | USH 141 | 1 |
| 101+60 | 17.5' LT | USH 141 | 1 |
| CATEGORY 0010 TOTAL | | | 2 |

## Pipe Grates

| STATION | OFFSET | LOCATION | 611.9800.S EACH | Remarks |
|---|---|---|---|---|
| 100+00 | RT | USH 141 | 1 | 30" RCCP Endwall |
| CATEGORY 0010 TOTAL | | | 1 | |

## Culvert Pipes

| STATION | LOCATION | 521.0118 Culvert Pipe Corrugated Steel 18-Inch LF *** | 521.1018 Apron Endwalls for Culvert Pipe Steel 18-Inch EACH *** | 522.0130 Culvert Pipe Reinforced Concrete 30-Inch Class III LF | 522.0318 Culvert Pipe Reinforced Concrete 18-Inch Class IV LF | 522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch EACH* | 522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch EACH* | 650.6000 Const Staking Pipe Culverts EACH | ** Joint Ties Req'd EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 51+88, 53.3' RT | USH 141 | --- | --- | --- | 108 | 2 | --- | 1 | 12 | STH 180 |
| 52+83, 84.4' RT | USH 141 | 34 | 2 | --- | --- | --- | --- | 1 | 12 | STH 180 SIDEWALK |
| 59+00 | USH 141 | --- | --- | 80 | --- | --- | 2 | 1 | 12 | USH 141 |
| CATEGORY 0010 TOTALS | | 34 | 2 | 80 | 108 | 2 | 2 | 3 | 36 | |

* MORE QUANTITY LISTED ELSEWHERE
** NON-BID ITEM (FOR INFORMATION ONLY)
*** MINIMUM WALL THICKNESS = 0.064 INCHES

## Concrete Driveway 6-Inch

| STATION | LOCATION | 416.0160 SY |
|---|---|---|
| 67+37 | USH 141 RT | 40 |
| 68+42 | USH 141 RT | 41 |
| 71+20 | USH 141 RT | 39 |
| 72+17 | USH 141 RT | 29 |
| 77+77 | USH 141 RT | 35 |
| 80+17 | USH 141 RT | 42 |
| 87+63 | USH 141 RT | 31 |
| 89+16 | USH 141 RT | 25 |
| 90+50 | USH 141 RT | 35 |
| 91+01 | USH 141 RT | 46 |
| 92+06 | USH 141 RT | 44 |
| 95+09 | USH 141 RT | 50 |
| 96+33 | USH 141 RT | 35 |
| 97+90 | USH 141 RT | 50 |
| 99+00 | USH 141 RT | 34 |
| 101+46 | USH 141 RT | 28 |
| 105+01 | USH 141 RT | 34 |
| 105+68 | USH 141 RT | 25 |
| 106+24 | USH 141 RT | 24 |
| 72+78 | USH 141 LT | 40 |
| 74+30 | USH 141 LT | 48 |
| 75+66 | USH 141 LT | 25 |
| 79+85 | USH 141 LT | 44 |
| 80+17 | USH 141 LT | 34 |
| 83+01 | USH 141 LT | 36 |
| 85+57 | USH 141 LT | 38 |
| 86+32 | USH 141 LT | 31 |
| 89+80 | USH 141 LT | 41 |
| 90+66 | USH 141 LT | 38 |
| 91+85 | USH 141 LT | 48 |
| 92+49 | USH 141 LT | 46 |
| 93+07 | USH 141 LT | 40 |
| 93+56 | USH 141 LT | 46 |
| 94+01 | USH 141 LT | 44 |
| 95+75 | USH 141 LT | 45 |
| 97+18 | USH 141 LT | 34 |
| 105+77 | USH 141 LT | 25 |
| CATEGORY 0010 TOTALS | | 1,390 |

## Asphaltic Surface Driveways And Field Entrances

| STATION | LOCATION | 465.0120 TONS |
|---|---|---|
| 67+37 | USH 141 RT | 12 |
| 68+42 | USH 141 RT | 12 |
| 70+25 | USH 141 RT | 5 |
| 78+60 | USH 141 RT | 5 |
| 80+17 | USH 141 RT | 1 |
| 84+20 | USH 141 RT | 2 |
| 84+60 | USH 141 RT | 1 |
| 90+50 | USH 141 RT | 1 |
| 91+01 | USH 141 RT | 4 |
| 92+06 | USH 141 RT | 1 |
| 91+02 | FAIRGROUND RT | 3 |
| 90+68 | FAIRGROUND LT | 4 |
| 95+09 | USH 141 RT | 2 |
| 96+33 | USH 141 RT | 1 |
| 97+90 | USH 141 RT | 3 |
| 99+10 | USH 141 RT | 6 |
| 66+67 | USH 141 LT | 9 |
| 67+59 | USH 141 LT | 16 |
| 69+05 | USH 141 LT | 16 |
| 74+30 | USH 141 LT | 7 |
| 79+85 | USH 141 LT | 8 |
| 80+17 | USH 141 LT | 2 |
| 83+01 | USH 141 LT | 1 |
| 84+20 | USH 141 LT | 5 |
| 84+60 | USH 141 LT | 4 |
| 87+75 | USH 141 LT | 2 |
| 88+25 | USH 141 LT | 1 |
| 89+80 | USH 141 LT | 43 |
| 90+66 | USH 141 LT | 43 |
| 91+85 | USH 141 LT | 7 |
| 92+49 | USH 141 LT | 7 |
| 93+07 | USH 141 LT | 4 |
| 93+56 | USH 141 LT | 4 |
| 94+01 | USH 141 LT | 4 |
| 95+75 | USH 141 LT | 6 |
| 18+50 | CTH C RT | 4 |
| 28+10 | North Ave LT | 3 |
| CATEGORY 0010 TOTAL | | 259 |

## Water

| STATION OFFSET | LOCATION | 624.0100 MGAL |
|---|---|---|
| Base Aggregate | USH 141 | 650 |
| Salvaged Base | USH 141 | 50 |
| Dust Control | USH 141 | 100 |
| CATEGORY 0010 TOTAL | | 800 |

## Select Borrow

| STATION TO STATION | LOCATION | 208.1100 CY |
|---|---|---|
| 55+20 - 56+20 | USH 141 LT | 200 |
| CATEGORY 0010 TOTALS | | 200 |

## Salvaged Guardrail

| STATION TO STATION | LOCATION | 614.0920 Salvaged Rail LF | 614.0925 Salvaged Guardrail End Treatments EACH |
|---|---|---|---|
| 110+00 - 113+20 | USH 141 RT | 275 | 1 |
| 112+67 - 113+20 | USH 141 LT | --- | 1 |
| CATEGORY 0010 TOTALS | | 275 | 2 |

## MGS Guardrail

| STATION TO STATION | LOCATION | 614.2300 MGS Guardrail 3 LF | 614.2610 MGS Guardrail Terminal EAT EACH |
|---|---|---|---|
| 110+00 - 113+20 | USH 141 RT | 275 | 1 |
| 112+67 - 113+20 | USH 141 LT | --- | 1 |
| CATEGORY 0010 TOTALS | | 275 | 2 |

## HMA Pavement

| STATION | TO | STATION | | LOCATION | 455.0105 Asphaltic Material PG58-28 TON | 455.0122 Asphaltic Material PG64-34 TON | 455.0605 Tack Coat GAL | 460.1100 HMA Pavement Type E-0.3 TON | 460.1110 HMA Pavement Type E-10 TON | 460.4000 HMA Cold Weather Paving TON | 460.4110.S Reheating HMA Pavement Longitudinal Joints LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 47+22.72 | - | 50+00 | | USH 141 | 17 | 7 | 123 | --- | 406 | 102 | 832 | Stage 1 |
| 50+00 | - | 56+00 | | USH 141 | 48 | 23 | 365 | --- | 1,211 | 303 | 1,800 | Stage 1 |
| 56+00 | - | 59+40 | | USH 141 | 18 | 9 | 129 | --- | 427 | 107 | 1,020 | Stage 1 |
| 109+00 | - | 113+17.61 | | USH 141 | 33 | 15 | 240 | --- | 797 | 200 | 1,253 | Stage 1 |
| 59+40 | | 62+00 | RT | USH 141 | 13 | 6 | 95 | --- | 314 | 24 | 260 | Stages 2 & 4 |
| 62+00 | - | 67+00 | RT | USH 141 | 18 | 9 | 130 | --- | 432 | 33 | 500 | Stages 2 & 4 |
| 67+00 | - | 72+00 | RT | USH 141 | 17 | 7 | 124 | --- | 413 | 32 | 500 | Stages 2 & 4 |
| 72+00 | - | 77+00 | RT | USH 141 | 16 | 7 | 116 | --- | 384 | 30 | 500 | Stages 2 & 4 |
| 77+00 | - | 83+00 | RT | USH 141 | 19 | 9 | 137 | --- | 455 | 35 | 600 | Stages 2 & 4 |
| 83+00 | - | 89+00 | RT | USH 141 | 16 | 7 | 116 | --- | 384 | 30 | 600 | Stages 2 & 4 |
| 89+00 | - | 94+00 | RT | USH 141 | 20 | 9 | 144 | --- | 476 | 37 | 500 | Stages 2 & 4 |
| 94+00 | - | 99+00 | RT | USH 141 | 13 | 5 | 90 | --- | 297 | 23 | 500 | Stages 2 & 4 |
| 99+00 | - | 105+00 | RT | USH 141 | 19 | 9 | 136 | --- | 451 | 35 | 600 | Stages 2 & 4 |
| 105+00 | - | 109+00 | RT | USH 141 | 18 | 9 | 133 | --- | 440 | 34 | 400 | Stages 2 & 4 |
| 59+40 | | 62+00 | LT | USH 141 | 7 | 3 | 49 | --- | 163 | 41 | 520 | Stage 3 |
| 62+00 | - | 67+00 | LT | USH 141 | 13 | 6 | 94 | --- | 311 | 78 | 1,000 | Stage 3 |
| 67+00 | - | 72+00 | LT | USH 141 | 15 | 6 | 106 | --- | 351 | 88 | 1,000 | Stage 3 |
| 72+00 | - | 77+00 | LT | USH 141 | 13 | 5 | 89 | --- | 295 | 74 | 1,000 | Stage 3 |
| 77+00 | - | 83+00 | LT | USH 141 | 16 | 7 | 117 | --- | 389 | 98 | 1,200 | Stage 3 |
| 83+00 | - | 89+00 | LT | USH 141 | 18 | 9 | 131 | --- | 434 | 109 | 1,200 | Stage 3 |
| 89+00 | - | 94+00 | LT | USH 141 | 13 | 5 | 89 | --- | 295 | 74 | 1,000 | Stage 3 |
| 94+00 | - | 99+00 | LT | USH 141 | 13 | 5 | 89 | --- | 295 | 74 | 1,000 | Stage 3 |
| 99+00 | - | 105+00 | LT | USH 141 | 22 | 11 | 175 | --- | 580 | 145 | 1,200 | Stage 3 |
| 105+00 | - | 109+00 | LT | USH 141 | 19 | 9 | 146 | --- | 484 | 121 | 800 | Stage 3 |
| Manhole Adjustments | | | | USH 141 | 1 | --- | --- | --- | 14 | --- | --- | Storm and Sanitary |
| 9+83.48 | - | 45+91.55 | | DETOUR | --- | 57 | 675 | 975 | --- | --- | 3,608 | Stage 5 |
| 45+91.55 | - | 49+00 | | DETOUR | --- | 4 | 42 | 61 | --- | --- | 309 | Stage 5 |
| 49+00 | - | 54+30.22 | | DETOUR | --- | 10 | 116 | 167 | --- | --- | 530 | Stage 5 |
| 54+30.22 | - | 76+77 | | DETOUR | --- | 34 | 403 | 582 | --- | --- | 2,247 | Stage 5 |
| CATEGORY 0010 TOTALS | | | | | 435 | 302 | 4,399 | 1,785 | 10,498 | 1,927 | 26,479 | |

## Asphaltic Surface Patching

| STATION | LOCATION | 465.0110 TON | REMARKS |
|---|---|---|---|
| Undistributed | Detour | 400 | Stages 2, 3, & 4 |
| Undistributed | USH 141 LT | 50 | Stage 2 |
| Undistributed | USH 141 RT | 50 | Stage 3 |
| CATEGORY 0010 TOTAL | | 500 | |

## Asphaltic Flumes

| STATION | | LOCATION | 465.0315 SY | REMARKS |
|---|---|---|---|---|
| 52+00 | LT | USH 141 | 9 | Stage 1 |
| 52+00 | RT | USH 141 | 9 | Stage 1 |
| 52+35 | LT | USH 141 | 9 | Stage 1 |
| 53+05 | RT | USH 141 | 9 | Stage 1 |
| 111+90 | LT | USH 141 | 9 | Stage 1 |
| 112+30 | LT | USH 141 | 9 | Stage 1 |
| CATEGORY 0010 TOTAL | | | 54 | |

## Asphaltic Surface Temporary

| STATION | | LOCATION | 465.0125 TON | REMARKS |
|---|---|---|---|---|
| 65+20 | LT | USH 141 | 9 | Stage 2 Storm Laterals |
| 66+50 | LT | USH 141 | 16 | Stage 2 Storm Laterals |
| 68+81 | LT | USH 141 | 8 | Stage 2 Storm Laterals |
| 70+17 | LT | USH 141 | 9 | Stage 2 Storm Laterals |
| 72+46 | LT | USH 141 | 8 | Stage 2 Storm Laterals |
| 76+68 | LT | USH 141 | 8 | Stage 2 Storm Laterals |
| 78+58 | LT | USH 141 | 16 | Stage 2 Storm Laterals |
| 81+21 | LT | USH 141 | 9 | Stage 2 Storm Laterals |
| 84+47 | LT | USH 141 | 28 | Stage 2 Storm Laterals |
| 84+72 | LT | USH 141 | 11 | Stage 2 Storm Laterals |
| 89+50 | LT | USH 141 | 8 | Stage 2 Storm Laterals |
| 92+27 | LT | USH 141 | 8 | Stage 2 Storm Laterals |
| 94+50 | LT | USH 141 | 8 | Stage 2 Storm Laterals |
| 96+60 | LT | USH 141 | 8 | Stage 2 Storm Laterals |
| 98+22 | LT | USH 141 | 8 | Stage 2 Storm Laterals |
| CATEGORY 0010 TOTAL | | | 162 | |

3

## Concrete Curb Type D

| STATION | TO | STATION | | LOCATION | 601.0110 LF | REMARKS |
|---|---|---|---|---|---|---|
| 66+24.06 | - | 66+47.38 | LT | USH 141 | 29 | STAGE 3 |
| 66+86.09 | - | 67+39.15 | LT | USH 141 | 64 | STAGE 3 |
| 67+77.88 | - | 68+87.15 | LT | USH 141 | 121 | STAGE 3 |
| 69+20.91 | - | 69+43.64 | LT | USH 141 | 41 | STAGE 3 |
| CATEGORY 0010 TOTAL | | | | | 255 | |

## Concrete Curb and Gutter 30-Inch Type D

| STATION | TO | STATION | | LOCATION | 601.0411 LF | REMARKS |
|---|---|---|---|---|---|---|
| 109+00 | - | 111+41.21 | LT | USH 141 | 270 | Stage 1 |
| 65+68.04 | - | 69+81.09 | RT | USH 141 | 492 | Stage 2 |
| 70+17.87 | - | 74+66.51 | RT | USH 141 | 488 | Stage 2 |
| 74+91.51 | - | 78+69.30 | RT | USH 141 | 395 | Stage 2 |
| 78+95.81 | - | 84+27.57 | RT | USH 141 | 548 | Stage 2 |
| 84+53.57 | - | 92+50.77 | RT | USH 141 | 879 | Stage 2 |
| 92+87.01 | - | 100+09.36 | RT | USH 141 | 776 | Stage 2 |
| 101+09.95 | - | 102+68.90 | RT | USH 141 | 192 | Stage 2 |
| 102+99.79 | - | 107+02.84 | RT | USH 141 | 524 | Stage 2 |
| 66+24.06 | - | 69+43.64 | LT | USH 141 | 366 | Stage 3 |
| 69+95.20 | - | 78+75.90 | LT | USH 141 | 903 | Stage 3 |
| 79+04.44 | - | 84+27.96 | LT | USH 141 | 541 | Stage 3 |
| 84+52.96 | - | 87+81.43 | LT | USH 141 | 346 | Stage 3 |
| 88+13.43 | - | 100+25.15 | LT | USH 141 | 1,220 | Stage 3 |
| 101+27.39 | - | 103+45.80 | LT | USH 141 | 293 | Stage 3 |
| 103+73.98 | - | 108+38.51 | LT | USH 141 | 594 | Stage 3 |
| 108+61.54 | - | 109+00 | LT | USH 141 | 161 | Stage 3 |
| CATEGORY 0010 TOTAL | | | | | 8,988 | |

## Concrete Curb and Guttter 6-In Sloped 36-In Type D

| STATION | TO | STATION | | LOCATION | 601.0557 LF | REMARKS |
|---|---|---|---|---|---|---|
| 51+53.08 | - | 52+02.27 | LT | USH 141 | 67 | STAGE 1 |
| 51+69.33 | - | 52+09.12 | RT | USH 141 | 56 | STAGE 1 |
| 52+30.64 | - | 52+82.22 | LT | USH 141 | 77 | STAGE 1 |
| 52+65.93 | - | 53+03.04 | RT | USH 141 | 81 | STAGE 1 |
| 111+84.66 | - | 112+25.94 | LT | USH 141 | 86 | STAGE 1 |
| 60+11.62 | - | 60+71.32 | RT | USH 141 | 86 | STAGE 2 |
| 61+00.47 | - | 61+40.27 | RT | USH 141 | 64 | STAGE 2 |
| 64+90.67 | - | 65+40.47 | RT | USH 141 | 67 | STAGE 2 |
| 107+36.25 | - | 108+30.30 | RT | USH 141 | 131 | STAGE 2 |
| CATEGORY 0010 TOTAL | | | | | 715 | |

## Curb Ramp Detectable Warning Field Natural Patina

| STATION | LOCATION | 602.0515 SF |
|---|---|---|
| 52+55 | USH 141 RT | 10 |
| 60+50 | USH 141 RT | 15 |
| 61+15 | USH 141 RT | 10 |
| 65+25 | USH 141 RT | 10 |
| 65+69 | USH 141 RT | 10 |
| 69+50 | USH 141 RT | 10 |
| 69+84 | USH 141 RT | 10 |
| 70+20 | USH 141 RT | 10 |
| 74+61 | USH 141 RT | 10 |
| 75+00 | USH 141 RT | 20 |
| 78+59 | USH 141 RT | 10 |
| 78+70 | USH 141 RT | 10 |
| 79+00 | USH 141 RT | 10 |
| 79+07 | USH 141 RT | 10 |
| 84+10 | USH 141 RT | 10 |
| 84+25 | USH 141 RT | 10 |
| 84+60 | USH 141 RT | 10 |
| 84+65 | USH 141 RT | 10 |
| 88+25 | USH 141 RT | 10 |
| 92+45 | USH 141 RT | 15 |
| 93+31 | USH 141 RT | 10 |
| 102+12 | USH 141 RT | 10 |
| 102+50 | USH 141 RT | 15 |
| 103+25 | USH 141 RT | 15 |
| 106+81 | USH 141 RT | 10 |
| 107+00 | USH 141 RT | 15 |
| 69+50 | USH 141 LT | 30 |
| 70+00 | USH 141 LT | 10 |
| 75+05 | USH 141 LT | 10 |
| 78+59 | USH 141 LT | 10 |
| 78+70 | USH 141 LT | 10 |
| 79+00 | USH 141 LT | 10 |
| 84+10 | USH 141 LT | 10 |
| 84+25 | USH 141 LT | 10 |
| 84+60 | USH 141 LT | 10 |
| 84+65 | USH 141 LT | 10 |
| 87+75 | USH 141 LT | 10 |
| 88+25 | USH 141 LT | 10 |
| 102+12 | USH 141 LT | 10 |
| 102+92 | USH 141 LT | 15 |
| 104+00 | USH 141 LT | 15 |
| 106+81 | USH 141 LT | 10 |
| 107+58 | USH 141 LT | 15 |
| 108+63 | USH 141 LT | 15 |
| 111+00 | USH 141 LT | 15 |
| CATEGORY 0010 TOTAL | | 530 |

## Concrete Curb and Gutter 6-Inch Sloped 24-Inch Type D

| STATION | | LOCATION | SPV.0090.02 LF | REMARKS |
|---|---|---|---|---|
| 67+12 | RT | USH 141 | 26 | C.E. |
| 67+63 | RT | USH 141 | 25 | C.E. |
| 68+18 | RT | USH 141 | 26 | C.E. |
| 68+68 | RT | USH 141 | 37 | C.E. |
| CATEGORY 0010 TOTAL | | | 114 | |

## Concrete Curb Pedestrian

| STATION | TO | STATION | | LOCATION | 601.0600 LF | REMARKS |
|---|---|---|---|---|---|---|
| 88+25 | - | 88+75 | LT | USH 141 | 54 | STAGE 3 |
| CATEGORY 0010 TOTAL | | | | | 54 | |

## Concrete Sidewalk 4-Inch

| STATION | TO | STATION | | LOCATION | Cat 0020 405.0100 Coloring Concrete Red CY | Cat 0010 602.0405 Concrete Sidewalk 4-Inch SF | Cat 0040 602.0405 Concrete Sidewalk 4-Inch SF | Cat 0020 SPV.0165.01 Scoring Sidewalk SF |
|---|---|---|---|---|---|---|---|---|
| 52+50 | - | 56+50 | RT | USH 141 | --- | 1,770 | --- | 1,770 |
| 56+50 | - | 62+50 | RT | USH 141 | --- | 2,777 | --- | 2,777 |
| 62+50 | - | 67+00 | RT | USH 141 | --- | 2,162 | --- | 2,162 |
| 67+00 | - | 71+50 | RT | USH 141 | --- | 2,865 | --- | 2,865 |
| 71+50 | - | 77+00 | RT | USH 141 | --- | 3,091 | --- | 3,091 |
| 72+50 | - | 74+50 | RT | USH 141 | --- | --- | 1,000 | 1,000 |
| 75+13 | - | 77+00 | RT | USH 141 | --- | --- | 935 | 935 |
| 77+00 | - | 83+00 | RT | USH 141 | 4 | 4,746 | --- | 4,746 |
| 80+30 | - | 82+00 | RT | USH 141 | --- | --- | 850 | 850 |
| 83+00 | - | 89+00 | RT | USH 141 | 4 | 5,577 | --- | 5,577 |
| 87+82 | - | 89+16 | RT | USH 141 | --- | --- | 670 | 670 |
| 89+00 | - | 95+00 | RT | USH 141 | --- | 1,592 | --- | 1,592 |
| 89+36 | - | 90+35 | RT | USH 141 | --- | --- | 495 | 495 |
| 93+44 | - | 94+90 | RT | USH 141 | --- | --- | 730 | 730 |
| 95+00 | - | 99+50 | RT | USH 141 | --- | 1,274 | --- | 1,274 |
| 95+29 | - | 96+20 | RT | USH 141 | --- | --- | 455 | 455 |
| 99+50 | - | 105+00 | RT | USH 141 | --- | 2,262 | --- | 2,262 |
| 105+00 | - | 107+00 | RT | USH 141 | --- | 748 | --- | 748 |
| 69+50 | - | 71+50 | LT | USH 141 | --- | 924 | --- | 924 |
| 71+50 | - | 77+00 | LT | USH 141 | --- | 2,416 | --- | 2,416 |
| 77+00 | - | 83+00 | LT | USH 141 | 4 | 3,056 | --- | 3,056 |
| 80+35 | - | 82+50 | LT | USH 141 | --- | --- | 1,075 | 1,075 |
| 83+00 | - | 89+00 | LT | USH 141 | 11 | 5,003 | --- | 5,003 |
| 89+00 | - | 95+00 | LT | USH 141 | --- | 1,904 | --- | 1,904 |
| 95+00 | - | 99+50 | LT | USH 141 | --- | 1,931 | --- | 1,931 |
| 99+50 | - | 105+00 | LT | USH 141 | --- | 1,946 | --- | 1,946 |
| 105+00 | - | 110+00 | LT | USH 141 | --- | 2,022 | --- | 2,022 |
| 110+00 | - | 111+15 | LT | USH 141 | --- | 607 | --- | 607 |
| TOTALS | | | | | 23 | 48,673 | 6,210 | 54,883 |

## Temporary Pavement Marking

| LOCATION | 649.0400 Temporary Pavement Marking Removable Tape 4-Inch LF | 649.0402 Temporary Pavement Marking 4-Inch LF | 649.1400 Temporary Pavement Marking Stop Line Removable Tape 24-Inch LF | 649.1800 Temporary Pavement Marking Arrows Removable Tape EACH |
|---|---|---|---|---|
| STAGE 2 | 800 | 5,000 | 40 | 2 |
| Stage 3 | 900 | 5,000 | --- | --- |
| CATEGORY 0010 TOTALS | 1,700 | 10,000 | 40 | 2 |

## Manhole Adjustments

| STATION | OFFSET | LOCATION | Cat 0010 611.8110 Adjusting Manhole Covers EACH | Cat 0040 611.8110 Adjusting Manhole Covers EACH | Cat 0010 611.8120.S Cover Plates Temporary EACH | Cat 0040 611.8120.S Cover Plates Temporary EACH |
|---|---|---|---|---|---|---|
| 68+66 | , 29' RT | USH 141 | --- | 1 | --- | --- |
| 68+81 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 70+17 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 76+68 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 78+53 | , 6.1' RT | USH 141 | 1 | --- | 1 | --- |
| 78+64 | , 6.5' RT | USH 141 | 1 | --- | 1 | --- |
| 84+36 | , 36' LT | USH 141 | 1 | --- | 1 | --- |
| 89+50 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 92+27 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 92+99.4 | , 6' LT | USH 141 | --- | 1 | --- | 1 |
| 92+99.4 | , 42.4' RT | USH 141 | --- | 1 | --- | 1 |
| 94+34.4 | , 6' LT | USH 141 | --- | 1 | --- | 1 |
| 94+50 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 96+60 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 97+14 | , 6' LT | USH 141 | --- | 1 | --- | 1 |
| 98+22 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 98+75 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 99+97.6 | , 20' RT | USH 141 | --- | 1 | --- | --- |
| 101+19.1 | , 20' RT | USH 141 | --- | 1 | --- | --- |
| 101+58.4 | , 35' RT | USH 141 | --- | 1 | --- | --- |
| 102+53 | , 6.1' RT | USH 141 | 1 | --- | 1 | --- |
| 102+76 | , 47.3' RT | USH 141 | --- | 1 | --- | 1 |
| 103+11 | , 6.1' RT | USH 141 | 1 | --- | 1 | --- |
| 106+65 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 107+45 | , 6' RT | USH 141 | 1 | --- | 1 | --- |
| 108+58 | , 146' LT | USH 141 | --- | 1 | --- | 1 |
| TOTALS | | | 16 | 10 | 16 | 6 |

3

## Storm Sewer Pipe

| From Struct | To Struct | % SLOPE | INLET ELEV | DISCH ELEV | 608.0312 Storm Sewer Pipe Reinforced Concrete 12-Inch Class III LF | 608.0315 Storm Sewer Pipe Reinforced Concrete 15-Inch Class III LF | 608.0318 Storm Sewer Pipe Reinforced Concrete 18-Inch Class III LF | 608.0324 Storm Sewer Pipe Reinforced Concrete 24-Inch Class III LF | 608.0330 Storm Sewer Pipe Reinforced Concrete 30-Inch Class III LF | 608.0412 Storm Sewer Pipe Reinforced Concrete 12-Inch Class IV LF | 608.0418 Storm Sewer Pipe Reinforced Concrete 18-Inch Class IV LF | 608.0424 Storm Sewer Pipe Reinforced Concrete 24-Inch Class IV LF | 608.0430 Storm Sewer Pipe Reinforced Concrete 30-Inch Class IV LF | 608.0436 Storm Sewer Pipe Reinforced Concrete 36-Inch Class IV LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.0 | 8.1 | 0.50 | 741.61 | 741.53 | --- | --- | 20 | --- | --- | --- | --- | --- | --- | --- |
| 8.1 | 8.2 | 0.26 | 741.51 | 741.42 | --- | --- | --- | --- | --- | --- | 42 | --- | --- | --- |
| 8.2 | 8.3 | 0.26 | 741.40 | 741.36 | --- | --- | 23 | --- | --- | --- | --- | --- | --- | --- |
| 8.3 | 8.4 | 0.25 | 741.35 | 741.27 | --- | --- | 34 | --- | --- | --- | --- | --- | --- | --- |
| 8.5 | 8.1 | 0.82 | 741.84 | 741.54 | --- | --- | 39 | --- | --- | --- | --- | --- | --- | --- |
| EXISTING 12" PVC PIPE | | | | 742.95 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9.0 | 9.2 | 0.50 | 742.93 | 742.61 | --- | --- | --- | --- | --- | 70 | --- | --- | --- | --- |
| 9.1 | 9.2 | 0.30 | 741.91 | 741.84 | --- | --- | --- | 26 | --- | --- | --- | --- | --- | --- |
| 9.2 | 9.3 | 0.30 | 741.83 | 741.67 | --- | --- | --- | --- | --- | --- | --- | 56 | --- | --- |
| 10.0 | 10.1 | 0.30 | 741.94 | 741.73 | --- | --- | --- | --- | --- | 73 | --- | --- | --- | --- |
| 20.1 | 20.0 | 0.47 | 740.97 | 740.88 | --- | --- | --- | --- | --- | 23 | --- | --- | --- | --- |
| 20.2 | 20.0 | 0.52 | 740.92 | 740.88 | --- | --- | --- | --- | --- | 12 | --- | --- | --- | --- |
| 20.0 | 21.0 | 0.12 | 740.34 | 740.18 | --- | --- | --- | --- | --- | --- | --- | 136 | --- | --- |
| 21.4 | 21.3 | 1.00 | 742.14 | 741.73 | --- | --- | --- | --- | --- | 46 | --- | --- | --- | --- |
| 21.3 | 21.0 | 2.85 | 741.63 | 741.26 | 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21.0 | 21.1 | 0.12 | 740.18 | 740.15 | --- | --- | --- | --- | --- | --- | --- | 24 | --- | --- |
| 21.1 | 22.0 | 0.10 | 740.15 | 740.10 | --- | --- | --- | 57 | --- | --- | --- | --- | --- | --- |
| 22.0 | 22.2 | 0.10 | 740.09 | 740.02 | --- | --- | --- | 74 | --- | --- | --- | --- | --- | --- |
| 22.1 | 22.3 | 1.26 | 740.94 | 740.32 | --- | --- | --- | --- | --- | --- | --- | 51 | --- | --- |
| EXISTING 8" Iron Pipe | | | | 741.29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22.3 | 22.0 | 1.26 | 740.26 | 740.13 | --- | --- | --- | 16 | --- | --- | --- | --- | --- | --- |
| 30.0 | 30.1 | 2.33 | 744.38 | 743.63 | --- | --- | --- | --- | --- | 35 | --- | --- | --- | --- |
| 30.1 | 30.2 | 2.33 | 743.56 | 742.54 | 45 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 40.1 | 40.0 | 1.00 | 741.19 | 740.99 | --- | --- | --- | --- | --- | 23 | --- | --- | --- | --- |
| 40.2 | 40.0 | 1.00 | 741.07 | 740.99 | --- | --- | --- | --- | --- | 11 | --- | --- | --- | --- |
| 40.0 | 41.0 | 4.53 | 739.86 | 731.71 | --- | --- | --- | 185 | --- | --- | --- | --- | --- | --- |
| 41.1 | 41.0 | 0.44 | 732.55 | 732.46 | 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 41.2 | 41.0 | 0.59 | 732.51 | 732.46 | 11 | --- | --- | --- | --- | --- | --- | --- | | --- |
| 41.0 | 42.0 | 2.69 | 731.54 | 731.38 | --- | --- | --- | 12 | --- | --- | --- | --- | | --- |
| EXISTING 36" RCP | | | | 732.45 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 42.1 | 42.0 | 2.50 | 732.29 | 731.38 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 44 |
| 42.0 | 42.2 | 0.17 | 731.27 | 731.22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 36 |
| EXISTING 36" RCP | | | | 731.22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 42.3 | 42.4 | 0.50 | 732.57 | 732.44 | --- | --- | --- | --- | --- | 30 | --- | --- | --- | --- |
| 42.4 | 42.1 | 0.50 | 732.42 | 732.41 | 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | | | | | | | | | | | | |
| 50.2 | 50.1 | 1.25 | 728.69 | 728.52 | --- | --- | --- | 15 | --- | --- | --- | --- | --- | --- |
| 50.1 | 50.0 | 0.80 | 728.49 | 728.23 | --- | --- | --- | --- | --- | --- | --- | 35 | --- | --- |
| 50.0 | 50.3 | 0.90 | 728.21 | 728.19 | --- | --- | --- | 6 | --- | --- | --- | --- | --- | --- |
| EXISTING 36" RCP | | | | 728.14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

**Continued**

## Storm Sewer Pipe - Continued

| From Struct | To Struct | % SLOPE | INLET ELEV | DISCH ELEV | 608.0312 Storm Sewer Pipe Reinforced Concrete 12-Inch Class III LF | 608.0315 Storm Sewer Pipe Reinforced Concrete 15-Inch Class III LF | 608.0318 Storm Sewer Pipe Reinforced Concrete 18-Inch Class III LF | 608.0324 Storm Sewer Pipe Reinforced Concrete 24-Inch Class III LF | 608.0330 Storm Sewer Pipe Reinforced Concrete 30-Inch Class III LF | 608.0412 Storm Sewer Pipe Reinforced Concrete 12-Inch Class IV LF | 608.0418 Storm Sewer Pipe Reinforced Concrete 18-Inch Class IV LF | 608.0424 Storm Sewer Pipe Reinforced Concrete 24-Inch Class IV LF | 608.0430 Storm Sewer Pipe Reinforced Concrete 30-Inch Class IV LF | 608.0436 Storm Sewer Pipe Reinforced Concrete 36-Inch Class IV LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING 15" RCP | | | | 730.13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 62.0 | 60.0 | 0.70 | 730.04 | 729.64 | --- | 76 | --- | --- | --- | --- | --- | --- | --- | --- |
| 60.2 | 60.1 | 2.13 | 731.23 | 730.56 | 35 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 60.1 | 60.0 | 2.13 | 730.46 | 730.12 | 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| EXISTING 15" RCP | | | | 729.49 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 70.2 | 70.0 | 0.50 | 730.41 | 730.37 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 70.1 | 70.0 | 0.50 | 730.47 | 730.37 | 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 70.0 | 71.0 | 1.81 | 729.32 | 724.38 | --- | --- | --- | 277 | --- | --- | --- | --- | --- | --- |
| 71.2 | 71.0 | 0.50 | 725.40 | 725.36 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 71.1 | 71.0 | 0.50 | 725.46 | 725.36 | 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 71.0 | 72.0 | 0.30 | 724.33 | 723.69 | --- | --- | --- | --- | --- | --- | --- | 223 | --- | --- |
| 72.2 | 72.0 | 0.50 | 723.73 | 723.69 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 72.1 | 72.0 | 0.50 | 723.79 | 723.69 | 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 72.0 | 73.0 | 0.37 | 723.17 | 722.41 | --- | --- | --- | --- | --- | --- | --- | --- | 210 | --- |
| 73.2 | 73.0 | 3.63 | 722.77 | 722.51 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 73.1 | 73.0 | 1.78 | 722.80 | 722.45 | 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 73.0 | 74.0 | 0.19 | 722.40 | 722.10 | --- | --- | --- | --- | --- | --- | --- | --- | 162 | --- |
| 74.2 | 74.0 | 1.00 | 723.70 | 723.62 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 74.1 | 74.0 | 1.34 | 723.89 | 723.63 | 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 74.0 | 75.0 | 0.37 | 722.08 | 721.91 | --- | --- | --- | --- | 53 | --- | --- | --- | --- | --- |
| 75.0 | 76.0 | 0.32 | 721.89 | 721.51 | --- | --- | --- | --- | 122 | --- | --- | --- | --- | --- |
| 81.4 | 81.3 | 2.00 | 735.10 | 734.38 | 41 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 81.3 | 81.2 | 2.00 | 734.28 | 733.17 | 60 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 81.2 | 81.0 | 2.00 | 732.57 | 732.10 | --- | --- | 28 | --- | --- | --- | --- | --- | --- | --- |
| 81.0 | EXIST | 3.17 | 731.48 | 728.91 | --- | --- | --- | 83 | --- | --- | --- | --- | --- | --- |
| 82.2 | 82.1 | 2.00 | 736.53 | 735.26 | 69 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 82.1 | 82.0 | 2.00 | 734.66 | 733.81 | --- | --- | 47 | --- | --- | --- | --- | --- | --- | --- |
| 82.0 | 81.0 | 2.94 | 733.20 | 731.62 | --- | --- | --- | 58 | --- | --- | --- | --- | --- | --- |
| 83.1 | 83.0 | 2.00 | 745.10 | 744.71 | 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 83.2 | 83.0 | 2.00 | 744.86 | 744.71 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 83.0 | 82.0 | 2.94 | 743.59 | 733.33 | --- | --- | --- | 354 | --- | --- | --- | --- | --- | --- |
| 84.3 | 84.2 | 1.88 | 750.35 | 749.38 | 57 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 84.2 | 84.1 | 1.88 | 749.28 | 748.22 | --- | --- | --- | --- | --- | 61 | --- | --- | --- | --- |
| 84.1 | 84.0 | 1.88 | 747.60 | 746.58 | --- | --- | 62 | --- | --- | --- | --- | --- | --- | --- |
| 84.6 | 84.5 | 1.00 | 747.59 | 747.52 | 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 84.5 | 84.0 | 1.00 | 746.97 | 746.54 | --- | --- | 48 | --- | --- | --- | --- | --- | --- | --- |
| 84.0 | 83.0 | 2.94 | 745.94 | 743.73 | --- | --- | --- | 80 | --- | --- | --- | --- | --- | --- |
| 90.0 | 90.1 | 1.00 | 749.13 | 748.27 | 88 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CATEGORY 0010 TOTALS | | | | | 700 | 76 | 301 | 1,243 | 175 | 384 | 42 | 525 | 372 | 80 |

3

## Storm Sewer Structures

| Struct Number | Location Station, Offset | Casting Flag ELEV | 520.8000 Concrete Collars for Pipe EACH | 522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch EACH | 522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch EACH* | 522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch EACH | 522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch EACH* | 611.0530 Manhole Covers Type J EACH | 611.0615 Inlet Covers Type F EACH | 611.0624 Inlet Covers Type H EACH | 611.0639 Inlet Covers Type H-S EACH | 611.0645 Inlet Covers Type MS-A EACH | 611.2004 Manholes 4-Ft Diameter EACH | 611.2005 Manholes 5 - Ft Diameter EACH | 611.2006 Manholes 6 - Ft Diameter EACH | 611.3004 Inlets 4 - Ft Diameter EACH | 611.3230 Inlets 2x3 EACH | 611.3901 Inlets Median 1 Grate EACH | 611.3902 Inlets Median 2 Grate EACH | 650.4000 Const Staking Storm Sewer EACH* | Joint Ties Req'd EACH* | Disch ELEV | Depth from Flag to Inv FT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.0 | 61+17, 63.3' RT | 743.56 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 1 | --- | 741.61 | 1.95 |
| 8.1 | 61+05, 47.2' RT | 745.40 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 741.51 | 3.89 |
| 8.2 | 60+63, 53.1' RT | 745.44 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 741.40 | 4.04 |
| 8.3 | 60+40, 50.0' RT | 744.36 | --- | --- | --- | --- | --- | --- | | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 1 | --- | 741.35 | 3.01 |
| 8.4 | 60+06, 45.4' RT | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 6 | --- | --- |
| 8.5 | 61+44, 43.7' RT | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 6 | --- | --- |
| 9.0 | 65+67, 43.0' RT | 746.00 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 742.93 | 3.07 |
| 9.1 | 64+80, 35.0' RT | --- | --- | --- | --- | 1 | --- | --- | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 6 | --- | --- |
| 9.2 | 65+01, 18.8' RT | 745.50 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 741.83 | 3.67 |
| 9.3 | 65+22, 32.9' LT | --- | --- | | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 6 | --- | --- |
| 10.0 | 66+75, 17.3' RT | 744.86 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 741.94 | 2.92 |
| 10.1 | 66+21, 31.8' LT | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 6 | --- | --- |
| 20.0 | 68+81, 6.0' RT | 744.47 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 740.34 | 4.13 |
| 20.1 | 68+81, 17.5'LT | 744.20 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 740.97 | 3.23 |
| 20.2 | 68+81, 17.5' RT | 744.11 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 740.92 | 3.19 |
| 21.0 | 70+17, 6.0' RT | 745.86 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 740.18 | 5.68 |
| 21.1 | 70+17, 17.5' LT | 745.64 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 740.15 | 5.49 |
| 21.3 | 70+22, 23.6' RT | 745.69 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 741.63 | 4.06 |
| 21.4 | 69+76, 22.3' RT | 744.90 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 742.14 | 2.76 |
| 22.0 | 70+16, 74.3' LT | 743.72 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 740.09 | 3.63 |
| 22.1 | 69+49, 68.9' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 6 | --- | --- |
| 22.2 | 70+92, 79.4' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 6 | --- | --- |
| 22.3 | 70+00, 73.1' LT | 743.36 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | 740.26 | 3.10 |
| 30.0 | 72+46, 17.5'RT | 748.53 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 744.38 | 4.15 |
| 30.1 | 72+46, 17.5'LT | 748.55 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 743.56 | 4.99 |
| 30.2 | 72+47, 62.6' LT | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 6 | --- | --- |
| 40.0 | 76+68, 6.0'RT | 745.47 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | 739.86 | 5.61 |
| 40.1 | 76+68, 17.5'LT | 745.27 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 741.19 | 4.08 |
| 40.2 | 76+68, 17.5'RT | 745.19 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 741.07 | 4.12 |
| 41.0 | 78+53, 6.1' RT | 737.10 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | 731.54 | 5.56 |
| 41.1 | 78+53, 17.5' LT | 736.87 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 732.55 | 4.32 |
| 41.2 | 78+52, 17.5' RT | 736.88 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 732.51 | 4.37 |
| 42.0 | 78+64, 6.5' RT | 736.60 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | 731.27 | 5.33 |
| 42.1 | 78+65, 37.2' LT | 736.47 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 2 | --- | --- | --- | --- | --- | --- | 1 | 1 | --- | 732.29 | 4.18 |
| 42.2 | 78+64, 54.7' RT | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- |
| 42.3 | 79+06, 36.9' LT | 735.44 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 732.57 | 2.87 |
| 42.4 | 78+74, 36.8' LT | 735.99 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 732.42 | 3.57 |
| 50.0 | 81+21, 17.5' RT | 732.76 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 728.21 | 4.55 |
| 50.1 | 81+21, 17.5' LT | 732.84 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 728.49 | 4.35 |
| 50.2 | 81+21, 32.7' LT | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 4 | --- | --- |
| 50.3 | 81+21, 23.5' RT | 733.35 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | 728.14 | 5.21 |

**Continued**

* MORE QUANTITY SHOWN ELSEWHERE
** NON-BID ITEM (FOR INFORMATION ONLY)

3

**Storm Sewer Structures - Continued**

| Struct Number | Location Station, Offset | Casting Flag ELEV | 520.8000 Concrete Collars for Pipe EACH | 522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch EACH | 522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch EACH* | 522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch EACH | 522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch EACH* | 611.0530 Manhole Covers Type J EACH | 611.0615 Inlet Covers Type F EACH | 611.0624 Inlet Covers Type H EACH | 611.0639 Inlet Covers Type H-S EACH | 611.0645 Inlet Covers Type MS-A EACH | 611.2004 Manholes 4-Ft Diameter EACH | 611.2005 Manholes 5 - Ft Diameter EACH | 611.2006 Manholes 6 - Ft Diameter EACH | 611.3004 Inlets 4 - Ft Diameter EACH | 611.3230 Inlets 2x3 EACH | 611.3901 Inlets Median 1 Grate EACH | 611.3902 Inlets Median 2 Grate EACH | 650.4000 Const Staking Storm Sewer EACH* | Joint Ties Req'd EACH* | Disch ELEV | Depth from Flag to Inv FT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 60.0 | 84+59, 36.0' RT | 735.58 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | 729.49 | 6.09 |
| 60.1 | 84+70, 17.5' RT | 735.35 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 730.26 | 5.09 |
| 60.2 | 84+74, 17.5' LT | 735.39 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 731.23 | 4.16 |
| 62.0 | 84+36, 36.0' LT | 735.44 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | 730.04 | 5.40 |
| 70.0 | 89+50, 6.0'RT | 734.49 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | 729.32 | 5.17 |
| 70.1 | 89+50, 17.5'LT | 734.26 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 730.47 | 3.79 |
| 70.2 | 89+50, 17.5'RT | 734.26 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 730.41 | 3.85 |
| 71.0 | 92+27, 6.0'RT | 729.87 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | 724.33 | 5.54 |
| 71.1 | 92+27, 17.5' LT | 729.64 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 725.46 | 4.18 |
| 71.2 | 92+27, 17.6' RT | 729.62 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 725.40 | 4.22 |
| 72.0 | 94+50, 6.0'RT | 728.01 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 723.17 | 4.84 |
| 72.1 | 94+50, 17.5'LT | 727.78 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 723.79 | 3.99 |
| 72.2 | 94+50, 17.5'RT | 727.78 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 723.73 | 4.05 |
| 73.0 | 96+60, 6.0'RT | 727.11 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 722.40 | 4.71 |
| 73.1 | 96+60, 17.5'LT | 726.88 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 722.80 | 4.08 |
| 73.2 | 96+60, 17.5' RT | 726.88 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 722.77 | 4.11 |
| 74.0 | 98+22, 6.0'RT | 728.20 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 722.08 | 6.12 |
| 74.1 | 98+22, 17.5'LT | 727.97 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 723.89 | 4.08 |
| 74.2 | 98+22, 17.5'RT | 727.97 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 723.70 | 4.27 |
| 75.0 | 98+75, 6.0' RT | 729.03 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 721.89 | 7.14 |
| 76.0 | 99+84, 61.1' RT | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 6 | --- | --- |
| 81.0 | 102+53, 6.1' RT | 739.03 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 731.48 | 7.55 |
| 81.2 | 102+53, 34.5'RT | 739.26 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 732.57 | 6.69 |
| 81.3 | 103+14, 33.9'RT | 740.47 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 734.28 | 6.19 |
| 81.4 | 103+51, 17.5' RT | 741.57 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 735.10 | 6.47 |
| 82.0 | 103+11, 6.1' RT | 740.68 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | 733.20 | 7.48 |
| 82.1 | 103+11, 41.0' LT | 741.07 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 734.66 | 6.41 |
| 82.2 | 103+79, 52.6' LT | 743.28 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 736.53 | 6.75 |
| 83.0 | 106+65, 6.0' RT | 750.63 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | 743.59 | 7.04 |
| 83.1 | 106+65, 17.5' LT | 750.40 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 745.10 | 5.30 |
| 83.2 | 106+65, 17.5' RT | 750.40 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 744.86 | 5.54 |
| 84.0 | 107+45, 6.0' RT | 752.52 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | 745.94 | 6.58 |
| 84.1 | 107+83, 42.7' LT | 752.72 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 747.60 | 5.12 |
| 84.2 | 108+44, 48.3' LT | 753.04 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 749.28 | 3.76 |
| 84.3 | 108+92, 17.5' LT | 754.33 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 750.35 | 3.98 |
| 84.5 | 107+68, 48.7' RT | 752.15 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 1 | --- | 746.97 | 5.18 |
| 84.6 | 107+77, 54.9' RT | 752.04 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | 1 | --- | 747.59 | 4.45 |
| 90.0 | 111+36, 60.5' LT | 753.09 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | --- | 749.13 | 3.96 |
| 90.1 | 112+24, 54.0' LT | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 6 | --- | --- |
| CATEGORY 0010 TOTALS | | | 1 | 3 | 2 | 5 | 1 | 20 | 4 | 28 | 12 | 5 | 9 | 9 | 2 | 17 | 27 | 3 | 1 | 79 | 64 | --- | --- |

* MORE QUANTITY SHOWN ELSEWHERE

** NON-BID ITEM (FOR INFORMATION ONLY)

## Salvage and Reset Inlets

| Struct Number | Stage 2 Temporary Location Station, Offset | Casting Flowline ELEV | 611.9710 Salvaged Inlet Covers EACH | SPV.0060.01 Salvage and Reset Inlets EACH | 650.4000 Const Staking Storm Sewer EACH* | Disch ELEV | Depth from Flag to Inv FT | Remarks |
|---|---|---|---|---|---|---|---|---|
| 20.1 | 68+81, 19.5'LT | 744.34 | 1 | 1 | 1 | 740.98 | 3.36 | MATCH EXISTING CURB LINE |
| 21.1 | 70+17, 19.5' LT | 744.59 | 1 | 1 | 1 | 740.15 | 4.44 | MATCH EXISTING CURB LINE |
| 30.1 | 72+46, 19.5'LT | 747.35 | 1 | 1 | 1 | 743.51 | 3.84 | MATCH EXISTING CURB LINE |
| 40.1 | 76+68, 19.5'LT | 745.26 | 1 | 1 | 1 | 741.21 | 4.05 | MATCH EXISTING CURB LINE |
| 41.1 | 78+53, 19.5' LT | 736.75 | 1 | 1 | 1 | 732.56 | 4.19 | MATCH EXISTING CURB LINE |
| 50.1 | 81+21, 19.5' LT | 732.73 | 1 | 1 | 1 | 728.51 | 4.22 | MATCH EXISTING CURB LINE |
| 60.2 | 84+74, 19.5' LT | 735.40 | 1 | 1 | 1 | 731.27 | 4.13 | MATCH EXISTING CURB LINE |
| 70.1 | 89+50, 19.5'LT | 735.04 | 1 | 1 | 1 | 730.48 | 4.56 | MATCH EXISTING CURB LINE |
| 71.1 | 92+27, 19.5' LT | 729.72 | 1 | 1 | 1 | 725.47 | 4.25 | MATCH EXISTING CURB LINE |
| 72.1 | 94+50, 19.5'LT | 727.92 | 1 | 1 | 1 | 723.80 | 4.12 | MATCH EXISTING CURB LINE |
| 73.1 | 96+60, 19.5'LT | 726.93 | 1 | 1 | 1 | 722.84 | 4.09 | MATCH EXISTING CURB LINE |
| 74.1 | 98+22, 19.5'LT | 727.97 | 1 | 1 | 1 | 723.92 | 4.05 | MATCH EXISTING CURB LINE |
| CATEGORY 0010 TOTALS | | | 12 | 12 | 12 | --- | --- | |

* MORE QUANTITY SHOWN ELSEWHERE
** NON-BID ITEM (FOR INFORMATION ONLY)

## Restoration

| STATION | TO STATION | LOCATION | 625.0100 Topsoil SY | 627.0200 Mulching SY | 629.0210 Fertilizer Type B CWT | 630.0130 Seeding Mixture No. 30 LB | 630.0140 Seeding Mixture No. 40 LB | 630.0200 Seeding Temporary LB | 631.0300 Sod Water MGAL | 631.1000 Sod Lawn SY | SPV.0120.01 Water for Seeded Areas MGAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 47+22 | 50+00 | USH 141 | 1,372 | 442 | 0.9 | 17 | 8 | --- | --- | --- | 31 |
| 50+00 | 56+00 | USH 141 | 4,289 | 3,358 | 2.7 | 38 | 40 | --- | --- | --- | 96 |
| 56+00 | 62+00 | USH 141 | 5,408 | 4,477 | 3.5 | 37 | 62 | --- | --- | --- | 122 |
| 62+00 | 67+00 | USH 141 | 2,938 | 1,934 | 1.9 | 24 | 28 | --- | 3 | 120 | 63 |
| 67+00 | 72+00 | USH 141 | 1,334 | 871 | 0.8 | --- | 19 | --- | 6 | 263 | 24 |
| 72+00 | 77+00 | USH 141 | 790 | 502 | 0.5 | --- | 9 | --- | 6 | 288 | 11 |
| 77+00 | 83+00 | USH 141 | 190 | 73 | 0.1 | --- | 1 | --- | 3 | 117 | 2 |
| 83+00 | 89+00 | USH 141 | 46 | 46 | 0.1 | --- | 1 | --- | --- | --- | 1 |
| 89+00 | 94+00 | USH 141 | 480 | 258 | 0.3 | --- | 5 | --- | 5 | 222 | 6 |
| 94+00 | 99+00 | USH 141 | 755 | 255 | 0.5 | --- | 5 | --- | 10 | 500 | 6 |
| 99+00 | 105+00 | USH 141 | 2,115 | 1,337 | 1.3 | --- | 31 | --- | 9 | 388 | 39 |
| 105+00 | 110+00 | USH 141 | 3,037 | 2,375 | 1.9 | 5 | 46 | --- | 6 | 262 | 62 |
| 110+00 | 113+20 | USH 141 | 1,348 | 967 | 0.8 | 14 | 9 | --- | 1 | 52 | 30 |
| UNDISTRIBUTED | | USH 141 | 768 | 245 | 0.7 | 15 | 26 | 100 | 1 | 38 | 17 |
| CATEGORY 0010 TOTALS | | | 24,870 | 17,140 | 16 | 150 | 290 | 100 | 50 | 2,250 | 510 |

## Inlet Protection

| STATION | | LOCATION | 628.7015 Type C EACH | 628.702 Type D EACH | REMARKS |
|---|---|---|---|---|---|
| 60+63 | RT | USH 141 | 1 | --- | NEW INLET |
| 61+05 | RT | USH 141 | 1 | --- | NEW INLET |
| 65+01 | RT | USH 141 | 1 | --- | NEW INLET |
| 30+45 | LT | BUTTERNUT AVE | 1 | --- | NEW INLET |
| 66+75 | RT | USH 141 | 1 | --- | NEW INLET |
| 68+81 | LT & RT | USH 141 | --- | 2 | NEW INLETS |
| 69+76 | RT | USH 141 | 1 | --- | NEW INLET |
| 70+17 | LT | USH 141 | 1 | --- | NEW INLET |
| 70+22 | RT | USH 141 | --- | 1 | NEW INLET |
| 72+46 | LT & RT | USH 141 | 2 | --- | NEW INLETS |
| 76+68 | LT & RT | USH 141 | 2 | --- | NEW INLETS |
| 78+52 | LT & RT | USH 141 | 2 | --- | NEW INLETS |
| 78+74 | LT | USH 141 | --- | 1 | NEW INLET |
| 79+06 | LT | USH 141 | 1 | --- | NEW INLET |
| 81+21 | LT & RT | USH 141 | --- | 2 | NEW INLETS |
| 84+70 | RT | USH 141 | 1 | --- | NEW INLET |
| 84+74 | LT | USH 141 | --- | 1 | NEW INLET |
| 89+50 | LT & RT | USH 141 | 2 | --- | NEW INLETS |
| 92+27 | LT & RT | USH 141 | 2 | --- | NEW INLETS |
| 94+50 | LT & RT | USH 141 | 2 | --- | NEW INLETS |
| 96+60 | LT & RT | USH 141 | --- | 2 | NEW INLETS |
| 98+22 | LT & RT | USH 141 | 2 | --- | NEW INLETS |
| 102+53 | RT | USH 141 | 1 | --- | NEW INLET |
| 103+11 | LT | USH 141 | 1 | --- | NEW INLET |
| 103+14 | RT | USH 141 | --- | 1 | NEW INLET |
| 103+51 | RT | USH 141 | 1 | --- | NEW INLET |
| 103+79 | LT | USH 141 | --- | 1 | NEW INLET |
| 106+65 | LT & RT | USH 141 | 2 | --- | NEW INLETS |
| 107+68 | RT | USH 141 | 1 | --- | NEW INLET |
| 107+83 | LT | USH 141 | 1 | --- | NEW INLET |
| 108+44 | LT | USH 141 | --- | 1 | NEW INLET |
| 108+92 | LT | USH 141 | 1 | --- | NEW INLET |
| 111+36 | LT | USH 141 | 1 | --- | NEW INLET |
| 58+50 | RT | VAN BUREN AVE | 1 | --- | EXISTING INLET |
| 68+70 | LT & RT | HARRISON AVE | 2 | --- | EXISTING INLETS |
| 71+75 | RT | HARRISON AVE | 1 | --- | EXISTING INLET |
| 92+20 | RT | FAIRGROUNDS RD | 1 | --- | EXISTING INLET |
| CATEGORY 0010 TOTALS | | | 37 | 12 | |

## Inlet Protection

| STATION | | LOCATION | 628.7005 Type A EACH | REMARKS |
|---|---|---|---|---|
| 60+40 | RT | USH 141 | 1 | NEW INLET |
| 61+17 | RT | USH 141 | 1 | NEW INLET |
| 78+65 | LT | USH 141 | 1 | NEW INLET |
| 107+77 | RT | USH 141 | 1 | NEW INLET |
| CATEGORY 0010 TOTALS | | | 4 | |

3

## Erosion Control

| STATION | TO | STATION | LOCATION | 628.1504 Silt Fence LF | 628.1520 Silt Fence Maintenance LF | 628.2006 Erosion Mat Urban Class I Type A SY | 628.2008 Erosion Mat Urban Class I Type B SY | 628.7504 Temporary Ditch Checks LF | 628.7570 Rock Bags EACH |
|---|---|---|---|---|---|---|---|---|---|
| 47+22 | - | 62+00 | USH 141 | 270 | 270 | 388 | 2,404 | --- | 180 |
| 62+00 | - | 77+00 | USH 141 | 550 | 550 | 52 | 1,032 | --- | 45 |
| 77+00 | - | 92+00 | USH 141 | 160 | 160 | --- | --- | --- | --- |
| 92+00 | - | 106+00 | USH 141 | 720 | 720 | 270 | 120 | 15 | 96 |
| 106+00 | - | 113+20 | USH 141 | 510 | 510 | 562 | 167 | 30 | 27 |
| UNDISTRIBUTED | | | USH 141 | 490 | 490 | 228 | 277 | 55 | 52 |
| CATEGORY 0010 TOTALS | | | | 2,700 | 2,700 | 1,500 | 4,000 | 100 | 400 |

## Culvert Pipe Checks

| STATION | | LOCATION | 628.7555 CULVERT PIPE CHECKS EACH |
|---|---|---|---|
| 51+88 | RT | USH 141 | 3 |
| 52+83 | RT | USH 141 | 3 |
| 59+00 | RT | USH 141 | 5 |
| 61+44 | RT | USH 141 | 3 |
| 64+80 | RT | USH 141 | 4 |
| 69+49 | LT | USH 141 | 4 |
| 81+21 | LT | USH 141 | 4 |
| CATEGORY 0010 TOTAL | | | 26 |

## Markers Culvert End

| STATION | OFFSET | LOCATION | 204.0280 EACH |
|---|---|---|---|
| 51+88 | RT | USH 141 | 1 |
| 52+96 | RT | USH 141 | 1 |
| 52+81 | RT | USH 141 | 1 |
| 59+00 | LT | USH 141 | 1 |
| 59+00 | RT | USH 141 | 1 |
| 60+06 | RT | USH 141 | 1 |
| 61+44 | RT | USH 141 | 1 |
| 64+80 | RT | USH 141 | 1 |
| 65+22 | LT | USH 141 | 1 |
| 66+21 | LT | USH 141 | 1 |
| 72+47 | LT | USH 141 | 1 |
| 69+49 | LT | USH 141 | 1 |
| 70+92 | LT | USH 141 | 1 |
| 81+21 | LT | USH 141 | 1 |
| 112+24 | LT | USH 141 | 1 |
| CATEGORY 0010 TOTAL | | | 15 |

## Locating No-Passing Zones

| STATION | TO | STATION | LOCATION | 648.0100 MI | REMARKS |
|---|---|---|---|---|---|
| 47+22.72 | - | 64+00 | USH 141 | 0.32 | 45 mph |
| 64+00 | - | 94+50 | USH 141 | 0.56 | 25 mph |
| 94+50 | - | 113+17.61 | USH 141 | 0.35 | 35 mph |
| CATEGORY 0010 TOTAL | | | | 1.23 | |

## Pavement Marking Epoxy

| STATION | TO | STATION | LOCATION | 646.0106 Pavement Marking Epoxy 4-Inch LF | 646.0126 Pavement Marking Epoxy 8-Inch LF | 647.0576 Stop Line 24-Inch LF | REMARKS |
|---|---|---|---|---|---|---|---|
| 47+22.72 | - | 113+17.61 | USH 141 | 6,595 | --- | --- | CENTERLINE |
| 112+25 | - | 113+00 | USH 141 LT | 75 | --- | --- | WHITE EDGE LINE |
| 108+25 | - | 113+17.61 | USH 141 RT | 493 | --- | --- | WHITE EDGE LINE |
| 47+22.72 | - | 51+50 | USH 141 LT | 427 | --- | --- | WHITE EDGE LINE |
| 47+22.72 | - | 51+50 | USH 141 RT | 427 | --- | --- | WHITE EDGE LINE |
| 53+00 | - | 66+25 | USH 141 LT | 1,325 | --- | --- | WHITE EDGE LINE |
| 53+00 | - | 60+12 | USH 141 RT | 712 | --- | --- | WHITE EDGE LINE |
| 61+41 | - | 64+88 | USH 141 RT | 347 | --- | --- | WHITE EDGE LINE |
| 52+85 | - | 54+85 | USH 141 LT | --- | 200 | --- | RIGHT TURN LANE |
| 48+69 | - | 51+69 | USH 141 RT | --- | 300 | --- | RIGHT TURN LANE |
| 104+25 | - | 105+25 | USH 141 LT | --- | 100 | --- | RIGHT TURN LANE |
| 10+00 | - | 11+24.29 | STH 180 | 124 | --- | --- | CENTERLINE |
| 10+75 | - | 11+24.29 | STH 180 LT | 49 | --- | --- | WHITE EDGE LINE |
| 10+75 | - | 11+24.29 | STH 180 RT | 49 | --- | --- | WHITE EDGE LINE |
| 18+45.49 | - | 20+00 | CTH C | 155 | --- | --- | CENTERLINE |
| 10+45 | | | STH 180 | --- | --- | 35 | CENTERLINE & STOP |
| CATEGORY 0010 TOTALS | | | | 10,778 | 600 | 35 | |

## Pavement Marking Crosswalk Epoxy 6-Inch

| STATION | LOCATION | 647.0766 LF | REMARKS |
|---|---|---|---|
| 69+50 | USH 141 | 80 | --- |
| 69+75 | USH 141 LT | 80 | --- |
| 74+75 | USH 141 RT | 80 | --- |
| 75+00 | USH 141 | 80 | --- |
| --- | VAN BUREN | 320 | ALL FOUR |
| --- | HARRISON | 320 | ALL FOUR |
| --- | TYLER | 160 | --- |
| --- | CTH C | 420 | --- |
| 106+70 | USH 141 | 80 | --- |
| CATEGORY 0010 TOTAL | | 1,620 | |

## Traffic Control Items

| LOCATION | NO. of Service Days | 643.0300 Traffic Control Drums** NO. | 643.0300 DAYS | 643.0410 Traffic Control Barricades Type II** NO. | 643.0410 DAYS | 643.0420 Traffic Control Barricades Type III** NO. | 643.0420 DAYS | 643.0705 Traffic Control Warning Lights Type A** NO. | 643.0705 DAYS | 643.0715 Traffic Control Warning Lights Type C NO. | 643.0715 DAYS | 643.0800 Traffic Control Arrow Boards NO. | 643.0800 DAYS | 643.0900 Traffic Control Signs NO. | 643.0900 DAYS | 643.0920 Traffic Control Covering Signs Type II** EACH | 643.1050 Traffic Control Signs PCMS NO. | 643.1050 DAYS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRIOR TO START | 7 | 6 | 42 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 2 | 14 | |
| STAGE 1 | 40 | 100 | 4,000 | --- | --- | 8 | 320 | 11 | 440 | --- | --- | --- | --- | 50 | 2,000 | 4 | 1 | 7 | PCMS PRIOR TO DETOUR |
| STAGE 2 | 80 | 118 | 9,440 | 5 | 400 | 60 | 4,800 | 80 | 6,400 | 10 | 800 | 1 | 80 | 121 | 9,680 | --- | --- | --- | |
| STAGE 3 | 70 | 120 | 8,400 | 8 | 560 | 50 | 3,500 | 70 | 4,900 | --- | --- | --- | --- | 115 | 8,050 | --- | --- | --- | |
| STAGE 4 | 8 | 118 | 944 | 5 | 40 | 60 | 480 | 80 | 640 | 10 | 80 | 1 | 8 | 111 | 888 | --- | --- | --- | |
| STAGE 5 | 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 30 | 90 | --- | --- | --- | |
| CATEGORY 0010 TOTALS | | | 22,826 | | 1,000 | | 9,100 | | 12,380 | | 880 | | 88 | | 20,708 | 4 | | 21 | |

**MORE QUANTITY LISTED ELSEWHERE

3

3

## ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

| SIGN NO. | LOCATION | SIGN CODE | W X H | 637.2210 SIGNS TYPE II REFLECTIVE H S.F. | 637.2230 SIGNS TYPE II REFLECTIVE F S.F. | 634.0614 POSTS WOOD 4x6x14 EACH | 634.0616 POSTS WOOD 4x6x16 EACH | 634.0618 POSTS WOOD 4x6x18 EACH | 638.2102 MOVING TYPE II SIGNS EACH | 638.4000 MOVING SMALL SIGN SUPPORTS EACH | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1->3 | VACANT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| 4 | MONROE ST | --- | --- | --- | --- | --- | --- | --- | 2 | 2 | --- | --- | MOVE RXR CROSSBUCK AND YIELD AS SHOWN ON PLAN |
| 5 | 1st STREET @ STH 180 | --- | --- | --- | --- | --- | --- | --- | 2 | 2 | --- | --- | MOVE RXR CROSSBUCK AND YIELD AS SHOWN ON PLAN |
| 6 | DIVISION ST @ RAILROAD ST | --- | --- | --- | --- | --- | --- | --- | 2 | 2 | --- | --- | MOVE RXR CROSSBUCK AND YIELD AS SHOWN ON PLAN |
| 7 | S. OF STH 180 | R2-1 | 36" X 48" | 12.00 | --- | --- | 1 | --- | --- | --- | 1 | 1 | 45 MPH |
| 8 | " | J4-1 | 24" X 36" | 6.00 | --- | --- | 1 | --- | --- | --- | 1 | 1 | SOUTH USH 141 |
| 9 | S. OF STH 180 | R1-1 | 30" X 30" | --- | --- | --- | --- | --- | 1 | 1 | --- | --- | WILL NEED TO BE MOVED FOR INTERSECTION RECONSTRUCT |
| 10 | " | W10-2 | 36" X 36" | --- | --- | --- | --- | --- | 1 | 1 | --- | --- | WILL NEED TO BE MOVED FOR RECONSTRUCTION GRADING |
| 11 | " | J3-1 | 24" X 57" | 9.50 | --- | --- | --- | 1 | --- | --- | 1 | 1 | SOUTH STH 180, SEE PLAN SHEET |
| 12 | STH 180, AT USH 141 INTERSECTION | R1-1 | 36" X 36" | 7.46 | --- | --- | 1 | --- | --- | --- | 1 | 1 | |
| 13 | " | R1-1 | 48" X 48" | 13.25 | --- | --- | 1 | --- | --- | --- | --- | 1 | PART OF REMOVAL FOR SIGN #14 |
| 14 | " | J3-2 | 48" X 57" | 19.00 | --- | --- | --- | 1 | --- | --- | 1 | 1 | SOUTH USH 141, NORTH USH 141, SEE PLAN SHEET |
| 15 | N. OF STH 180 | J3-1 | 24" X 57" | 9.50 | --- | --- | --- | 1 | --- | --- | 1 | 1 | SOUTH STH 180, SEE PLAN SHEET |
| 16 | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 45 MPH |
| 17 | " | I2-3 | 84" X 24" | 14.00 | --- | 1 | --- | --- | --- | --- | 1 | 2 | SEE SIGN DETAIL SHEET |
| 18 | " | D1-3 | 72" X 36" | 18.00 | --- | 1 | 1 | --- | --- | --- | 1 | 2 | SEE SIGN DETAIL SHEET |
| 19 | S. OF KENNY DR | J4-1 | 24" X 36" | 6.00 | --- | --- | 1 | --- | --- | --- | 1 | 1 | USH 141 |
| 20 | " | W3-5 | 36" X 36" | --- | 9.00 | --- | 1 | --- | --- | --- | 1 | 1 | 25 MPH |
| 21 | " | J2-2 | 48" X 57" | 19.00 | --- | --- | 1 | --- | --- | --- | 1 | 1 | STH 180, USH 141, SEE PLAN SHEET |
| 22 | KENNY DR | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 23 | " | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 24 | N. OF KENNY DR | W14-3 | 48" X 36" | --- | 6.00 | 1 | --- | --- | --- | --- | 1 | 1 | |
| 25 | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 45 MPH |
| 26 | S. OF BUTTERNUT AVE | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 25 MPH |
| 27 | BUTTERNUT AVE | J1-1 | 24" X 39" | 6.50 | --- | --- | --- | 1 | --- | --- | 1 | 1 | STH 180, SEE PLAN SHEET |
| 28 | " | W1-7 | 48" X 24" | --- | 8.00 | --- | --- | --- | --- | --- | --- | --- | MOUNT BELOW SIGN #27, PART OF REMOVAL FOR SIGN #27 |
| 29 | BUTTERNUT AVE AT USH 141 | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 30 | S. OF MONROE ST | W14-3 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 | |
| 31 | MONROE ST | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 32 | " | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 33 | N. OF MONROE ST | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 25 MPH |
| 34 | JACKSON ST | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 35 | N. OF JACKSON ST | W10-2 | 36" X 36" | --- | 9.00 | 1 | --- | --- | --- | --- | 1 | 1 | |
| 36 | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 25 MPH |
| 37 | S. OF VAN BUREN AVE | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 25 MPH |
| | PAGE SUBTOTALS | | | 201.29 | 32.00 | 16 | 8 | 4 | 8 | 8 | 27 | 30 | |

PLAN SHEET PRODUCED
BY WisDOT - NE REGION

## ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

| SIGN NO. | LOCATION | SIGN CODE | W X H | 637.2210 SIGNS TYPE II REFLECTIVE H S.F. | 637.2230 SIGNS TYPE II REFLECTIVE F S.F. | 634.0614 POSTS WOOD 4x6x14 EACH | 634.0616 POSTS WOOD 4x6x16 EACH | 634.0618 POSTS WOOD 4x6x18 EACH | 638.2102 MOVING TYPE II SIGNS EACH | 638.4000 MOVING SMALL SIGN SUPPORTS EACH | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38 | VAN BUREN AVE | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 39 | " | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 40 | N. OF VAN BUREN AVE | W11-8 | 36" X 36" | --- | 9.00 | 1 | --- | --- | --- | --- | 1 | --- | MOUNTED TO GUY POLE |
| 40A | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 41 | HARRISON AVE | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 42 | " | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 43 | N. OF HARRISON AVE | W11-8 | 36" X 36" | --- | 9.00 | 1 | --- | --- | --- | --- | 1 | --- | MOUNTED TO POWER POLE |
| 44 | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 25 MPH |
| 45 | TYLER ST | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 46 | VACANT | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| 47 | FAIRGROUNDS RD | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 48 | N. OF FAIRGROUNDS RD | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 25 MPH |
| 49 | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 25 MPH |
| 50 | " | J4-1 | 24" X 36" | 6.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | USH 141, SEE PLAN SHEET |
| 51 | S. OF CTH C | W14-3 | 48" X 36" | --- | 6.00 | 1 | --- | --- | --- | --- | 1 | 1 | |
| 52 | " | D1-2 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 | |
| 53 | " | D1-1 | 60" X 24" | 10.00 | --- | 2 | --- | --- | --- | --- | 1 | 2 | SEE SIGN DETAIL SHEET |
| 54 | BEECH AVE | W14-1 | 30" X 30" | --- | 6.25 | 1 | --- | --- | --- | --- | 1 | 1 | |
| 55 | S. OF CTH C | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 35 MPH |
| 56 | " | J13-1 | 24" X 45" | 7.50 | --- | --- | 1 | --- | --- | --- | 1 | 1 | CTH C, SEE PLAN SHEET |
| 57 | CTH C | J3-2 | 48" X 57" | 19.00 | --- | --- | 1 | --- | --- | --- | 1 | 1 | USH 141, STH 180, SEE PLAN SHEET |
| 58 | " | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 59 | BEECH AVE | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 60 | N. OF CTH C | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 35 MPH |
| 60A | NORTH AVE | R5-2 | 24" X 24" | 4.00 | --- | --- | --- | 1 | --- | --- | 1 | 1 | |
| 60B | " | R12-1 | 24" X 30" | 5.00 | --- | --- | --- | --- | --- | --- | --- | --- | PART OF REMOVAL FOR SIGN #60A, LOCATION BASED |
| 60C | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 15 MPH |
| 61 | N. OF CTH C | J13-1 | 24" X 45" | 7.50 | --- | --- | 1 | --- | --- | --- | 1 | 1 | CTH C, SEE PLAN SHEET |
| 62 | " | R2-1 | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 | |
| 63 | " | D1-1 | 60" X 24" | 10.00 | --- | 2 | --- | --- | --- | --- | 1 | 2 | RANGER STATION, SEE SIGN DETAIL SHEET |
| 64 | NORTH AVE | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 65 | " | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 65A | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 25 MPH |
| 66 | DIVISION ST | R1-1 | 30" X 30" | 5.18 | --- | 1 | --- | --- | --- | --- | 1 | 1 | |
| 67 | N. OF NORTH AVE | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 55 MPH |
| 68 | " | R2-1 | 24" X 30" | 5.00 | --- | 1 | --- | --- | --- | --- | 1 | 1 | 35 MPH |
| | PAGE SUBTOTALS | | | 175.98 | 30.25 | 30 | 3 | 1 | 0 | 0 | 34 | 34 | |
| | **PROJECT TOTALS** | | | **377.27** | **62.25** | **46** | **11** | **5** | **8** | **8** | **61** | **64** | |

PLAN SHEET PRODUCED
BY WisDOT - NE REGION

## Detour Traffic Control

| SIGN NO. | LOCATION | SIGN CODE | SIZE W X H | 196 Number in Service | Approx. Service Period DAYS | 643.3000 Detour Signs DAYS | 643.0300 Traffic Control Drums DAY ** | 643.0410 Barricades Type II DAY ** | 643.0420 Barricades Type III DAY ** | 643.0705 Warning Lights Type A DAY ** | 643.0920 Covering Signs Type II EACH ** | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | BACK SIDE OF NO-PASSING PENNANT | W20-2-A | 48"x48" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 2 | LEFT OF J1 (JCT C) | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO5-1-R | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 3 | NW QUAD OF USH 141 & DIVISION ST. INTERSECT. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO6-1 | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | RIGHT |
| 4 | SW QUAD OF DIVISION ST. & USH 141 INTERSECT. | R11-2 | 48"x30" | 1 | 196 | 196 | --- | --- | 196 | 145 | --- | |
| 5 | RT OF SIGN # 4 | WO1-6 | 48"x24" | 1 | 196 | 196 | --- | --- | 196 | 290 | --- | RIGHT |
| | WITH 4 & 5 TO CLOSE SB LANE | --- | --- | 3 | --- | --- | --- | --- | 588 | 435 | --- | |
| 6 | ACROSS FROM SIGN # 4 | R5-1 | 30"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 7 | LEFT OF UTILITY PEDESTAL | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO6-1 | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | LEFT |
| 8 | 50' N OF SIGN # 9 | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 9 | NE QUAD OF NORTH AVE. & DIVISION ST. INTERSECT. | R1-1 | 30"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | R3-1 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 10 | SW QUAD OF NORTH AVE. & DIVISION ST. INTERSECT. | R1-1 | 30"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | COVER STOP SIGNS AT NORTH AVE. & DIVISION ST. INTERSECT. | --- | --- | 2 | --- | --- | --- | --- | --- | --- | 2 | 2 SIGNS X 1 CYCLE |
| 11 | 100' S OF NORTH AVE. & DIVISION ST. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 12 | 500' NW OF COUNTY RD. C & POPLAR ST. INTERSECT. | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | W20-2-A | 48"x48" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-1 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 13 | 50' NW OF COUNTY RD. C & POPLAR ST. INTERSECT. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-1 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO5-1-L | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 14 | NW QUAD OF COUNTY RD. C & NORTH AVE. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-1 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO6-1 | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | LEFT |
| 14A | RIGHT OF STOP SIGN | M4-8-A | 24"x18" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 15 | 300' W OF DIVISION ST. & CTH C INTERSECT. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO5-1-R | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | SUBTOTAL THIS SHEET | --- | --- | 48 | --- | 8,428 | 0 | 0 | 980 | 870 | 2 | |

**MORE QUANTITY LISTED ELSEWHERE

## Detour Traffic Control

| SIGN NO. | LOCATION | SIGN CODE | SIZE W X H | 196 Number in Service | Approx. Service Period DAYS | 643.3000 Detour Signs DAYS | 643.0300 Traffic Control Drums DAY ** | 643.0410 Barricades Type II DAY ** | 643.0420 Barricades Type III DAY ** | 643.0705 Warning Lights Type A DAY ** | 643.0920 Covering Signs Type II EACH ** | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | SW QUAD OF CTH C & DIVISION ST. INTERSECT. | R1-1 | 30"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | COVER STOP SIGNS AT COUNTY RD. C & DIVISION ST. INTERSECT. | --- | --- | 2 | --- | --- | --- | --- | --- | --- | 2 | 2 SIGNS X 1 CYCLE |
| 17 | RT OF SIGN # 16 | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO6-1 | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | RIGHT |
| 18 | LEFT OF RAIL ROAD SIGN | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 19 | SW QUAD OF RAILROAD ST. & DIVISION ST. INTERSECT. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 20 | SW QUAD OF RIVERSIDE AVE. & DIVISION ST. INTERSECT. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 21 | SW QUAD OF USH 141 & DIVISION ST. INTERSECT. | R6-6 | 24"x30" | 1 | 145 | 145 | --- | --- | --- | --- | --- | |
| 22 | BACK SIDE OF SIGN #9 | R6-2-R | 12"x36" | 1 | 145 | 145 | --- | --- | --- | --- | --- | |
| 23 | 100' S OF RIVERSIDE AVE. & DIVISION ST. INTERSECT. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 24 | SW QUAD OF POLK AVE. & DIVISION ST. INTERSECT. | R3-2 | 24"X24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 25 | 100' S OF POLK AVE. & DIVISION ST. INTERSECT. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 26 | 100' W OF SIGN # 27 | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 27 | NW QUAD OF MAY ST & TYLER AVE. INTERSECT. | R3-1 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 28 | 100' W OF SIGN # 29 | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 29 | NE QUAD OF 3RD ST & TYLER AVE. INTERSECT. | R3-1 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 30 | SE QUAD OF CHURCH ST. & TYLER AVE. INTERSECT. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 31 | 100' S OF GORE OF CHURCH ST & DIVISION ST. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 32 | 75' W OF YIELD SIGN | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO6-1 | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | RIGHT |
| 33 | NE QUAD OF TYLER RD & TYLER AVE. INTERSECT. | R1-1 | 30"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | R3-1 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | COVER STOP SIGN AT TYLER AVE. & CHURCH ST. INTERSECT. | --- | --- | 1 | --- | --- | --- | --- | --- | --- | 1 | 1 SIGN X 1 CYCLE |
| 34 | 100' W OF SIGN # 33 | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 35 | 150' W OF STOP SIGN | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO5-2-R | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 36 | NE QUAD OF POLK AVE & DIVISION ST. INTERSECT. | R3-1 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | SUBTOTAL THIS SHEET | --- | --- | 43 | --- | 7,738 | 0 | 0 | 0 | 0 | 3 | |

**MORE QUANTITY LISTED ELSEWHERE

## Detour Traffic Control

| SIGN NO. | LOCATION | SIGN CODE | SIZE W X H | 196 Number in Service | Approx. Service Period DAYS | 643.3000 Detour Signs DAYS | 643.0300 Traffic Control Drums DAY ** | 643.0410 Barricades Type II DAY ** | 643.0420 Barricades Type III DAY ** | 643.0705 Warning Lights Type A DAY ** | 643.0920 Covering Signs Type II EACH ** | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 | 100' N OF SIGN # 36 | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 38 | 100' N OF RAILROAD AVE. & DIVISION ST. INTERSECT. | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 39 | BACK SIDE OF SIGN #10 | R6-2-L | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 40 | BACK SIDE OF SIGN #43 | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 41 | BACK SIDE OF SIGN #16 | R6-2-L | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 42 | EAST SIDE DIVISION ST. & RAILROAD ST. INTERSECT. | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 43 | NE QUAD OF CTH C & DIVISION ST. INTERSECT. | R1-1 | 30"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | R3-1 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 44 | 100' N OF SIGN # 43 | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 45 | BACK SIDE OF SIGN #36 | R6-2-R | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 46 | 100' N OF SIGN # 47 | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 47 | NE QUAD OF HARRISON AVE. & 1ST ST. | R3-1 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 48 | SW QUAD OF HARRISON AVE. & 1ST ST. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 49 | 50' S OF HARRISON AVE. & 1ST ST. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 50 | 100' N OF SIGN # 51 | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 51 | NE QUAD OF VAN BUREN AVE & 1ST ST. INTERSECT. | R3-1 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 52 | SW QUAD OF VAN BUREN AVE & 1ST ST. INTERSECT. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 53 | 150' S VAN BUREN AVE. & 1ST ST. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 54 | 100' N OF MARINETTE AVE. INTERSECTION ON 1ST ST | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 55 | SW QUAD OF MARINETTE AVE. & 1ST ST. INTERSECT. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 56 | 100' N OF MILWAUKEE AVE INTERSECTION ON 1ST ST | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 57 | SW QUAD OF MILWAUKEE AVE. & 1ST ST. INTERSECT. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 58 | 100' N OF SIGN # 59 | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 59 | NE QUAD OF MONROE ST. & 1ST ST. INTERSECT. | R3-1 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 60 | SW QUAD OF MONROE AVE. & 1ST ST. INTERSECT. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 61 | 50' S OF MONROE AVE (EAST) & 1ST ST. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 62 | 100' N OF PERCH LAKE RD INTERSECTION ON 1ST ST | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 63 | SW QUAD OF PERCH LAKE RD & 1ST ST. INTERSECT. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 64 | 100' N OF MAPLE ST INTERSECTION ON 1ST ST | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 65 | SW QUAD OF MAPLE ST & 1ST ST. INTERSECT. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | SUBTOTAL THIS SHEET | --- | --- | 36 | --- | 7,056 | 0 | 0 | 0 | 0 | 0 | |

**MORE QUANTITY LISTED ELSEWHERE

## Detour Traffic Control

| SIGN NO. | LOCATION | SIGN CODE | SIZE W X H | 196 Number in Service | Approx. Service Period DAYS | 643.3000 Detour Signs DAYS | 643.0300 Traffic Control Drums DAY ** | 643.0410 Barricades Type II DAY ** | 643.0420 Barricades Type III DAY ** | 643.0705 Warning Lights Type A DAY ** | 643.0920 Covering Signs Type II EACH ** | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 66 | 200' S OF LAKE RD & 1ST ST. | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO5-1-L | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 67 | 100' N OF PUMP HOUSE RD INTERSECTION ON 1ST ST | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 68 | SW QUAD OF PUMP HOUSE RD & 1ST ST. INTERSECT. | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 69 | LEFT OF LIGHT POLE | M4-8 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M3-3 | 24"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| | " | MO6-1 | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | LEFT |
| 70 | RIGHT OF STOP SIGN | M4-8-A | 24"x18" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | M1-4 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 141 |
| 71 | 150' S OF 1ST ST. & 1ST AVE. INTERSECT. | WO3-1 | 36"x36" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 72 | SE QUAD OF 1ST ST. & 1ST AVE. INTERSECT. | R1-1 | 30"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | W4-4-B | 30"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 73 | RT OF SIGN # 72 | R3-27 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 74 | STATION 12+00 LT | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 75 | STATION 12+00 RT | R5-1 | 30"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 76 | STATION 10+25 LT | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 77 | STATION 10+25 RT | R5-1-A | 36"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 78 | STATION 9+75 LT | R3-8 | 36"X30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 79 | SW QUAD OF 1ST ST./SR 180 & US 41 INTERSECT. | R1-51 | 30"x18" | 1 | 145 | 145 | --- | --- | --- | --- | --- | SEE REMOVALS |
| 80 | SW QUAD OF 1ST ST./SR 180 & US 41 INTERSECT. | R5-1 | 30"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 81 | NW QUAD OF 1ST ST./SR 180 & US 41 INTERSECT. | R1-1 | 30"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | " | W4-4-AR | 30"x12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 82 | NW QUAD OF 1ST ST./SR 180 & US 41 INTERSECT. | M1-6 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | 180 |
| | " | MO6-1 | 21"x21" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 83 | EAST SIDE DIVISION ST. & RIVERSIDE AVE. INTERSECT. | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 84 | BACK SIDE OF SIGN #24 | R6-2-L | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 85 | SOUTH SIDE TYLER AVE. & MAY ST. INTERSECT. | R6-2-L | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 86 | SOUTH SIDE TYLER AVE. & 3RD ST. INTERSECT | R6-2-L | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 87 | NE QUAD OF 1ST ST./SR 180 & US 41 INTERSECT. | W4-4-AL | 30"X12" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 88 | 100' E OF SIGN # 87 | R3-8F | 36"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 89 | STATION 51+00 RT | R3-2 | 24"x24" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 90 | NORTH SIDE TYLER ROAD (BETWEEN SIGN #33 & #34) | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 91 | CHURCH STREET, NEXT TO COVERED EXISTING STOP SIGN | R6-2-L | 24"x30" | --- | --- | --- | --- | --- | --- | --- | --- | |
| 92 | 150' W OF NORTH AVE. & DIVISION ST. INTERSECT. | WO3-1 | 36"x36" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 93 | 150' E OF NORTH AVE. & DIVISION ST. INTERSECT. | WO3-1 | 36"x36" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 94 | 150' W OF COUNTY RD. C & DIVISION ST. INTERSECT. | WO3-1 | 36"x36" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 95 | 150' E OF COUNTY RD. C & DIVISION ST. INTERSECT. | WO3-1 | 36"x36" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 96 | BACK SIDE OF SIGN #47 | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 97 | BACK SIDE OF SIGN #48 | R6-2-L | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 98 | BACK SIDE OF SIGN #51 | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | SUBTOTAL THIS SHEET | --- | --- | 42 | --- | 8,181 | 0 | 0 | 0 | 0 | 0 | |

**MORE QUANTITY LISTED ELSEWHERE

## Detour Traffic Control

| SIGN NO. | LOCATION | SIGN CODE | SIZE W X H | 196 Number in Service | Approx. Service Period DAYS | 643.3000 Detour Signs DAYS | 643.0300 Traffic Control Drums DAY ** | 643.0410 Barricades Type II DAY ** | 643.0420 Barricades Type III DAY ** | 643.0705 Warning Lights Type A DAY ** | 643.0920 Covering Signs Type II EACH ** | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 99 | BACK SIDE OF SIGN #52 | R6-2-L | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 100 | EAST SIDE 1ST AVE. & MARINETTE AVE. INTERSECT. | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 101 | EAST SIDE 1ST AVE. & MILWAUKEE AVE. INTERSECT. | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 102 | WEST SIDE 1ST AVE. & MONROE ST. INTERSECT. | R6-2-L | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 103 | EAST SIDE 1ST AVE. & MONROE AVE. INTERSECT. | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 104 | EAST SIDE 1ST AVE. & PERCH LAKE RD. INTERSECT. | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 105 | EAST SIDE 1ST AVE. & MAPLE ST. INTERSECT. | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 106 | EAST SIDE 1ST AVE. & PUMP HOUSE RD. INTERSECT. | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| 107 | BACK SIDE OF SIGN #69 | R6-2-R | 24"x30" | 1 | 196 | 196 | --- | --- | --- | --- | --- | |
| | TRAFFIC CONTROL DRUMS THROUGHOUT DETOUR ROUTE | --- | --- | 69 | 196 | --- | 13,524 | --- | --- | --- | --- | |
| | UNDISTRIBUTED | R3-1 | 24"x24" | 10 | 196 | 1,960 | --- | 1,960 | --- | --- | --- | FOR DRIVEWAYS |
| | UNDISTRIBUTED | R3-2 | 24"x24" | 10 | 196 | 1,960 | --- | 1,960 | --- | --- | --- | FOR DRIVEWAYS |
| | ON USH 141 NORTHBOUND SOUTH OF STH 180 | W10-2 | 36"x36" | --- | --- | --- | --- | --- | --- | --- | 1 | 1 SIGN X 1 CYCLE |
| | ON STH 180 EASTBOUND WEST OF USH 141 | W10-2 | 36"x36" | --- | --- | --- | --- | --- | --- | --- | 1 | 1 SIGN X 1 CYCLE |
| | | | | | | | | | | | | |
| | SUBTOTAL THIS SHEET | --- | --- | 98 | --- | 5,684 | 13,524 | 3,920 | 0 | 0 | 2 | |
| | **CATEGORY 0010 TOTALS** | **---** | **---** | **267** | **---** | **37,087** | **13,524** | **3,920** | **980** | **870** | **7** | |

**MORE QUANTITY LISTED ELSEWHERE

## Construction Staking

| STATION | TO | STATION | LOCATION | 650.4500 Subgrade LF | 650.5000 Base LF | 650.8000 Resurf Reference LF | 650.9920 Slope Stakes LF |
|---|---|---|---|---|---|---|---|
| 47+22.72 | - | 100+18.74 | USH 141 | 5,296 | 5,296 | --- | 5,296 |
| 101+17.51 | - | 113+17.61 | USH 141 | 1,200 | 1,200 | --- | 1,200 |
| 9+00 | - | 9+83.48 | 1ST ST. | 84 | 84 | --- | 84 |
| 10+00 | - | 11+24.29 | STH 180 | 124 | 124 | --- | 124 |
| 20+00 | - | 20+93.27 | KENNY AVE | 93 | 93 | --- | 93 |
| 90+00 | - | 91+14.59 | FAIRGROUNDS RD | 115 | 115 | --- | 115 |
| 10+00 | - | 11+21.82 | BEACH AVE | 122 | 122 | --- | 122 |
| 18+45.49 | - | 20+00 | CTH C | 155 | 155 | --- | 155 |
| 28+23.36 | - | 31+37.54 | NORTH AVE | 314 | 314 | --- | 314 |
| 76+77 | - | 78+24.98 | DIVISION ST | 148 | 148 | --- | 148 |
| 1+00 | - | 5+16 | ICE CREAM STATION | --- | --- | --- | 416 |
| 9+83.48 | - | 76+77 | DETOUR | --- | --- | 6,694 | --- |
| CATEGORY 0010 TOTALS | | | | 7,651 | 7,651 | 6,694 | 8,067 |

## Construction Staking Curb Gutter and Curb & Gutter

| STATION | OFFSET | LOCATION | 650.5500 LF |
|---|---|---|---|
| Project | | USH 141 | 10,072 |
| CATEGORY 0010 TOTAL | | | 10,072 |

## Temporary Pedestrian Surface Asphalt

| STA to STA | LOCATION | 644.1410.S SF |
|---|---|---|
| Crossings | USH 141 | 1,000 |
| 70+00 - 102+00 | USH 141 | 12,000 |
| CATEGORY 0010 TOTAL | | 13,000 |

## Temporary Curb Ramp

| STATION | OFFSET | LOCATION | 644.1601.S EACH |
|---|---|---|---|
| UNDISTRIBUTED | | USH 141 | 8 |
| CATEGORY 0010 TOTAL | | | 8 |

## Temporary Pedestrian Safety Fence

| STATION | LOCATION | 644.1616.S LF | REMARKS |
|---|---|---|---|
| UNDISTRIBUTED | USH 141 | 5,000 | PROTECTION FOR PEDESTRIANS |
| CATEGORY 0010 TOTAL | | 5,000 | |

## Sawing Asphalt

| STATION | TO | STATION | LOCATION | 690.0150 LF | REMARKS |
|---|---|---|---|---|---|
| 47+22.72 | | | USH 141 | 9 | LIMITS |
| 59+40 | | | USH 141 | 10 | STAGE 1 LIMITS |
| 94+70 | - | 100+19 | USH 141 | 549 | 4' LT |
| 101+18 | - | 109+00 | USH 141 | 782 | 4' LT |
| 109+00 | | | USH 141 | 38 | STAGE 1 LIMITS |
| 113+17.61 | | | USH 141 | 40 | LIMITS |
| 65+08 | | | USH 141 LT | 22 | SS LATERAL |
| 9+84 | | | 1ST ST. | 27 | LIMITS |
| 11+24 | | | STH 180 | 30 | LIMITS |
| 20+93.27 | | | KENNY DR | 29 | LIMITS |
| 30+68.78 | | | BUTTERNUT AVE | 25 | LIMITS |
| 39+20.10 | | | MONROE AVE | 27 | LIMITS |
| 40+00 | | | MONROE AVE | 56 | LIMITS |
| 50+46.12 | | | JACKSON AVE | 30 | LIMITS |
| 59+56.95 | | | VAN BUREN AVE | 30 | LIMITS |
| 60+43.73 | | | VAN BUREN AVE | 60 | LIMITS |
| 69+53.99 | | | HARRISON AVE | 60 | LIMITS |
| 70+41.67 | | | HARRISON AVE | 44 | LIMITS |
| 91+14.59 | | | FAIRGROUNDS RD | 47 | LIMITS |
| 90+74 | - | 91+14.59 | FAIRGROUNDS RD | 26 | CE RT |
| 90+68 | - | 90+74 | FAIRGROUNDS RD | 30 | CE LT |
| 18+45.49 | | | CTH C | 49 | LIMITS |
| 11+21.82 | | | BEACH AVE | 21 | LIMITS |
| 28+23.36 | | | NORTH AVE | 35 | LIMITS |
| 31+37.54 | | | NORTH AVE | 22 | LIMITS |
| 76+77 | | | DIVISION ST | 24 | LIMITS |
| 66+25 | - | 69+42 | USH 141 LT | 347 | CE & PARKING LOT |
| 73+97 | - | 74+71 | USH 141 LT | 73 | CE & PARKING LOT |
| 79+13 | - | 80+00 | USH 141 LT | 87 | CE & PARKING LOT |
| 80+06 | - | 80+26 | USH 141 LT | 20 | CE LT |
| 83+47 | - | 83+71 | USH 141 LT | 24 | CE LT |
| 84+08 | | | USH 141 LT | 11 | PARKING LOT |
| 89+75 | - | 91+20 | USH 141 LT | 147 | CE & PARKING LOT |
| 91+68 | - | 92+72 | USH 141 LT | 104 | CE & PARKING LOT |
| 92+92 | - | 94+18 | USH 141 LT | 124 | CE & PARKING LOT |
| 95+50 | - | 95+85 | USH 141 LT | 34 | CE LT |
| 67+07 | - | 68+83 | USH 141 RT | 184 | CE RT |
| 77+60 | - | 77+95 | USH 141 RT | 35 | CE RT |
| 80+03 | - | 80+30 | USH 141 RT | 27 | CE RT |
| 83+68 | - | 84+61 | USH 141 RT | 62 | PARKING LOT |
| 90+25 | - | 92+28 | USH 141 RT | 201 | CE'S & SIDEWALK |
| 94+91 | - | 95+27 | USH 141 RT | 36 | CE RT |
| 96+24 | - | 96+45 | USH 141 RT | 21 | CE RT |
| 97+70 | - | 98+12 | USH 141 RT | 42 | CE RT |
| 98+91 | - | 99+27 | USH 141 RT | 35 | CE RT |
| 9+83.48 | | | DETOUR | 24 | LIMITS |
| 76+77 | | | DETOUR | 24 | LIMITS |
| Manhole Adjustments | | | USH 141 | 440 | LIMITS |
| CATEGORY 0010 TOTALS | | | | 4,224 | |

## Sawing Concrete

| STATION | TO | STATION | LOCATION | 690.0250 LF | REMARKS |
|---|---|---|---|---|---|
| 47+22.72 | | | USH 141 | 24 | LIMITS |
| 47+22.72 | - | 59+40 | USH 141 | 1,217 | CENTERLINE |
| 59+40 | | | USH 141 | 24 | STAGE 1 LIMITS |
| 59+40 | - | 94+70 | USH 141 | 3,530 | 4' LT |
| 65+08 | | | USH 141 LT | 22 | SS LATERAL |
| 66+55 | | | USH 141 LT | 32 | SS LATERAL |
| 68+81 | | | USH 141 LT | 28 | SS LATERAL |
| 70+16 | | | USH 141 LT | 32 | SS LATERAL |
| 72+46 | | | USH 141 LT | 32 | SS LATERAL |
| 76+68 | | | USH 141 LT | 32 | SS LATERAL |
| 78+53 | | | USH 141 LT | 32 | SS LATERAL |
| 81+21 | | | USH 141 LT | 32 | SS LATERAL |
| 84+72 | | | USH 141 LT | 32 | SS LATERAL |
| 89+50 | | | USH 141 LT | 32 | SS LATERAL |
| 92+25 | | | USH 141 LT | 32 | SS LATERAL |
| 94+50 | | | USH 141 LT | 32 | SS LATERAL |
| 96+60 | | | USH 141 LT | 32 | SS LATERAL |
| 98+22 | | | USH 141 LT | 32 | SS LATERAL |
| 30+68.78 | | | BUTTERNUT AVE | 3 | LIMITS |
| 40+00 | | | MONROE AVE | 8 | LIMITS |
| 59+56.95 | | | VAN BUREN AVE | 11 | LIMITS |
| 70+41.67 | | | HARRISON AVE | 5 | LIMITS |
| 91+14.59 | | | FAIRGROUNDS RD | 5 | LIMITS |
| 80+35 | - | 80+61 | USH 141 LT | 25 | COMMERCIAL SIDEWALK |
| 80+96 | - | 81+16 | USH 141 LT | 22 | COMMERCIAL SIDEWALK |
| 81+48 | - | 81+52 | USH 141 LT | 4 | COMMERCIAL SIDEWALK |
| 81+82 | - | 82+04 | USH 141 LT | 22 | COMMERCIAL SIDEWALK |
| 82+30 | - | 82+50 | USH 141 LT | 20 | COMMERCIAL SIDEWALK |
| 83+20 | - | 83+28 | USH 141 LT | 8 | COMMERCIAL SIDEWALK |
| 84+72 | - | 87+09 | USH 141 LT | 258 | CE'S & SIDEWALK |
| 87+37 | - | 87+67 | USH 141 LT | 30 | COMMERCIAL SIDEWALK |
| 88+27 | - | 88+72 | USH 141 LT | 51 | COMMERCIAL SIDEWALK |
| 89+05 | - | 89+09 | USH 141 LT | 4 | PRIVATE SIDEWALK |
| 89+33 | - | 89+36 | USH 141 LT | 4 | PRIVATE SIDEWALK |
| 67+07 | - | 68+83 | USH 141 RT | 8 | CE RT |
| 68+81 | - | 69+75 | USH 141 RT | 116 | COMMERCIAL SIDEWALK |
| 70+37 | - | 71+50 | USH 141 RT | 113 | CE & SIDEWALK |
| 71+78 | - | 72+10 | USH 141 RT | 32 | COMMERCIAL SIDEWALK |
| 73+00 | | | USH 141 RT | 4 | PRIVATE SIDEWALK |
| 73+68 | | | USH 141 RT | 4 | PRIVATE SIDEWALK |
| 74+20 | | | USH 141 RT | 4 | PRIVATE SIDEWALK |
| 75+00 | - | 76+29 | USH 141 RT | 134 | COMMERCIAL SIDEWALK |
| 78+05 | - | 78+51 | USH 141 RT | 46 | COMMERCIAL SIDEWALK |
| 79+08 | - | 79+47 | USH 141 RT | 39 | COMMERCIAL SIDEWALK |
| 80+74 | - | 80+77 | USH 141 RT | 3 | PRIVATE SIDEWALK |
| 80+30 | - | 80+37 | USH 141 RT | 7 | COMMERCIAL SIDEWALK |
| 81+03 | - | 81+09 | USH 141 RT | 6 | PRIVATE SIDEWALK |
| 81+63 | - | 81+72 | USH 141 RT | 8 | PRIVATE SIDEWALK |
| 82+20 | - | 82+23 | USH 141 RT | 3 | PRIVATE SIDEWALK |
| 83+59 | - | 83+68 | USH 141 RT | 9 | COMMERCIAL SIDEWALK |
| 85+10 | - | 85+23 | USH 141 RT | 13 | COMMERCIAL SIDEWALK |
| 85+81 | - | 85+86 | USH 141 RT | 5 | PRIVATE SIDEWALK |
| 86+00 | - | 86+05 | USH 141 RT | 5 | PRIVATE SIDEWALK |
| 86+17 | - | 86+24 | USH 141 RT | 7 | PRIVATE SIDEWALK |
| 86+69 | - | 86+74 | USH 141 RT | 5 | COMMERCIAL SIDEWALK |
| 87+05 | - | 87+70 | USH 141 RT | 67 | CE & SIDEWALK |
| 87+82 | - | 88+04 | USH 141 RT | 22 | COMMERCIAL SIDEWALK |
| 88+28 | - | 88+62 | USH 141 RT | 34 | COMMERCIAL SIDEWALK |
| 88+83 | - | 88+90 | USH 141 RT | 7 | COMMERCIAL SIDEWALK |
| 89+73 | - | 89+80 | USH 141 RT | 7 | COMMERCIAL SIDEWALK |
| 89+85 | - | 90+20 | USH 141 RT | 35 | COMMERCIAL SIDEWALK |
| CATEGORY 0010 TOTALS | | | | 6,452 | |

## Abandoning Sewer

| STATION | OFFSET | LOCATION | Cat 0010 SPV.0035.01 Abandoning Sewer CY | Cat 0040 SPV.0035.01 Abandoning Sewer CY | REMARKS |
|---|---|---|---|---|---|
| 94+32 | | USH 141 | --- | 1 | 8-Inch Sanitary |
| 97+13 | | USH 141 | --- | 1 | 10-Inch Sanitary |
| 99+75 | , RT | USH 141 | 5 | --- | 24" Storm Sewer |
| TOTALS | | | 5 | 2 | |

## Sanitary Sewer Connections

| Location | SPV.0060.16 4-Inch EACH | SPV.0060.17 8-Inch EACH |
|---|---|---|
| 94+36, 33 'LT | 1 | 2 |
| TOTAL CATEGORY 0040 | 1 | 2 |

## Sanitary Sewer

| STRUCTURE NUMBER | LOCATION | CASTING RIM ELEV. | SPV.0060.02 Sanitary Sewer Manhole EACH | SPV.0060.03 Sanitary Sewer Manhole Drop EACH | DEPTH IN FEET | SPV.0060.04 Sanitary Sewer Manhole Core EACH | SPV.0090.03 Sanitary Sewer Pipe SDR 35 PVC 8-Inch LF | FROM STRUCT | TO STRUCT | % SLOPE | INLET ELEV | DROP INLET ELEV | OUTLET ELEV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EX. 7606 | 92+99.43, 40.88' RT | 728.76 | --- | --- | 11.70 | 1 | 49 | 7606 | PSMH1 | 2.07 | 717.26 | --- | 717.06 |
| PSMH1 | 92+99.43, 6' LT | 729.07 | 1 | --- | 10.89 | --- | 135 | PSMH1 | PSMH2 | 0.70 | 718.28 | --- | 718.18 |
| PSMH2 | 94+34.38, 6' LT | 728.09 | 1 | --- | 8.89 | --- | 280 | PSMH2 | PSMH3 | 0.70 | 719.30 | 723.42 | 719.20 |
| PSMH3 | 97+13.98, 6' LT | 727.23 | 1 | --- | 6.00 | --- | 29 | PSMH3 | PSMH4 | 2.30 | 721.33 | --- | 721.23 |
| PSMH4 | 97+15.92, 34.67' LT | 727.90 | --- | 1 | 6.00 | --- | --- | --- | --- | --- | --- | 724.80 | 721.90 |
| PSMH5 | 94+36.40, 43' LT | 728.83 | 1 | --- | 8.87 | --- | 37 | PSMH5 | PSMH2 | 2.00 | 719.96 | --- | 719.30 |
| TOTAL CATEGORY 0040 | | | 4 | 1 | | 1 | 530 | | | | | | |

## Temporary Mailbox

| STATION | OFFSET | LOCATION | SPV.0060.35 EACH |
|---|---|---|---|
| UNDISTRIBUTED | | DETOUR | 5 |
| CATEGORY 0010 TOTAL | | | 5 |

## Street Sweeping

| STATION | OFFSET | LOCATION | SPV.0075.01 HRS |
|---|---|---|---|
| UNDISTRIBUTED | | USH 141 | 60 |
| CATEGORY 0010 TOTAL | | | 60 |

## Grading and Shaping Ditch

| STATION | TO | STATION | LOCATION | SPV.0090.01 LF |
|---|---|---|---|---|
| 1+00 | - | 5+16 | ICE CREAM STATION | 416 |
| CATEGORY 0010 TOTAL | | | | 416 |

## Water Items

| LOCATION | SPV.0060.05 Water Main Gate Valve Box 6-Inch EACH | SPV.0060.06 Water Main Bend 45 Degree 6-Inch EACH | SPV.0060.07 Water Main Bend 22.5 Degree 6-Inch EACH | SPV.0060.08 Water Main Bend 11.25 Degree 6-Inch EACH | SPV.0060.09 Water Main Tee 6-Inch EACH | SPV.0060.10 Water Main Gate Valve and Box 6- Inch EACH | SPV.0060.11 Water Service Curb Box EACH | SPV.0060.12 Water Service Copper 1-Inch EACH | SPV.0060.13 Connect to Existing Water Main EACH | SPV.0060.14 Hydrant EACH | SPV.0060.15 Hydrant Extension 2-Ft EACH | SPV.0090.04 Water Main Ductile Iron 6-Inch LF | SPV.0090.05 Insulation Board Polystyrene 2-Inch LF | SPV.0090.06 Insulation Board Polystyrene 4-Inch LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 52+88 - 53+92 | | | | | | | | | | | | | 104 | |
| 53+89, 65.9' RT | | | | | | | | | | | 1 | | | |
| 57+76 - 58+24 | | | | | | | | | | | | | 48 | |
| 58+92 - 59+08 | | | | | | | | | | | | | | 16 |
| 59+76 - 60+24 | | | | | | | | | | | | | 48 | |
| 61+35 - 64+58 | | | | | | | | | | | | | 328 | |
| 61+33.1, 37.2' RT | 1 | | | | | | | | | | | | | |
| 64+34.8, 34.8' RT | 1 | | | | | | | | | | | | | |
| 61+69.9, 66.1' RT | | | | | | | 1 | | | | | | | |
| 64+58 - 65+06 | | | | | | | | | | | | | | 48 |
| 68+66, 29' RT | | | | | | | | | | | | | | |
| 69+95 | | 4 | | | | | | | 1 | | | 80 | 16 | |
| 70+03.83, 33' LT | | | | | 1 | 1 | | | | 1 | | 11 | | |
| 75+87.5, 31.5' LT | | | | | | 1 | | | 1 | 1 | | 6 | | |
| 78+59, 37' LT | | | | | 1 | 1 | | | 1 | 1 | | 9 | | |
| 78+69, 31.3' LT | 1 | | | | | | | | | | | | | |
| 84+30 | | 4 | | | | | | | 1 | | | 70 | | |
| 84+30.4, 38.3' RT | 1 | | | | | | | | | | | | | |
| 92+99.4, 42.4' RT | | | | | | | | | | | | | | |
| 92+99.43 - 94+34.38 | | | | | | | | | | | | | | |
| 94+35.38, 6' LT | | | | | | | | | | | | | | |
| 94+34.38 - 97+13.98 | | | | | | | | | | | | | | |
| 97+13.95 - 97+15.92 | | | | | | | | | | | | | | |
| 94+32 | | | | | | | | | | | | | | |
| 97+13 | | | | | | | | | | | | | | |
| 93+10, 52.3' RT | 1 | | | | | | | | | | | | | |
| 94+47 | | | | | | | | 1 | | | | | | |
| 96+38 | | | | | | | | 1 | | | | | | |
| 99+70, 58' RT | | 4 | | | | | | | 1 | | | 75 | | 16 |
| 99+97.60, 20' RT | | | | | | | | | | | | | | |
| 101+19.07, 20' RT | | | | | | | | | | | | | | |
| 101+58.42, 35' RT | | | | | | | | | | | | | | |
| 102+76, 47.3' RT | | | | | | | | | | | | | | |
| 102+95, 57' RT | 1 | | | | | | | | | | | | | |
| 107+37, 48.1' RT | | | | | | | | | | | | | | |
| 107+64 | | 6 | | | 1 | 1 | | | 2 | | | 25 | 16 | |
| UNDISTRIBUTED | 1 | 4 | 2 | 2 | | 1 | | | 2 | | | 50 | 16 | 16 |
| CATEGORY 0040 TOTALS | 7 | 22 | 2 | 2 | 3 | 5 | 1 | 2 | 9 | 3 | 1 | 326 | 576 | 96 |

## Trees

| STATION | TO | STATION | LOCATION | 632.0101.01 Trees (Autumn Brillant Serviceberry, 1.5" Cal.) EACH | 632.0101.02 Trees (Cockspur Hawthorn, 1.5" Cal.) EACH | 632.0101.03 Trees (Century Gingko, 1.5" Cal.) EACH | 632.0101.04 Trees (Spring Snow Crabapple, 1.5" Cal.) EACH | 632.0101.05 Trees (Ivory Silk Japanese Tree Lilac, 1.5" Cal.) EACH | 632.0101.06 Trees (Chokecherry, 1.5" Cal.) EACH | SPV.00035.02 Planting Mixture CY* |
|---|---|---|---|---|---|---|---|---|---|---|
| 50+00 | - | 56+00 | USH 141 | 3 | --- | --- | --- | --- | 3 | --- |
| 56+00 | - | 62+00 | USH 141 | 3 | 3 | --- | --- | --- | 3 | 18 |
| 62+00 | - | 67+00 | USH 141 | 5 | 3 | --- | 2 | --- | --- | 20 |
| 67+00 | - | 72+00 | USH 141 | --- | --- | --- | 5 | 3 | --- | 16 |
| 72+00 | - | 77+00 | USH 141 | --- | --- | 5 | 2 | 5 | --- | 18 |
| 77+00 | - | 83+00 | USH 141 | --- | --- | 2 | --- | 8 | --- | 10 |
| 83+00 | - | 89+00 | USH 141 | --- | --- | 11 | --- | 1 | --- | 6 |
| 89+00 | - | 94+00 | USH 141 | --- | --- | --- | --- | 8 | --- | 12 |
| 94+00 | - | 99+00 | USH 141 | --- | --- | 4 | 8 | --- | --- | 24 |
| 99+00 | - | 105+00 | USH 141 | --- | 1 | 11 | --- | --- | --- | 24 |
| 105+00 | - | 110+00 | USH 141 | --- | --- | 1 | 3 | 6 | --- | 20 |
| 110+00 | - | 112+00 | USH 141 | --- | --- | --- | 2 | --- | --- | 4 |
| CATEGORY 0030 TOTALS | | | | 11 | 7 | 34 | 22 | 31 | 6 | 172 |

*MORE QUANTITY SHOWN ELSEWHERE

## Shrubs

| STATION | TO | STATION | LOCATION | 632.0201.01 Shrubs (Dwarf Bush Honeysuckle, 3 Gal.) EACH | 632.0201.02 Shrubs (Dwarf Ninebark, 3 Gal.) EACH | 632.0201.03 Shrubs (Alpine Currant, 3 Gal.) EACH | 632.0201.04 Shrubs (Grow Low Sumac, 3 Gal.) EACH | 645.0111 Geotextile Fabric Type DF Schedule A SY* | SPV.0035.02 Planting Mixture CY* |
|---|---|---|---|---|---|---|---|---|---|
| 50+00 | - | 56+00 | USH 141 | --- | --- | --- | --- | --- | --- |
| 56+00 | - | 62+00 | USH 141 | 25 | --- | --- | --- | 116 | 26 |
| 62+00 | - | 67+00 | USH 141 | 8 | 29 | --- | --- | 98 | 22 |
| 67+00 | - | 72+00 | USH 141 | 24 | 17 | --- | --- | 343 | 46 |
| 72+00 | - | 77+00 | USH 141 | --- | --- | --- | --- | 17 | 4 |
| 77+00 | - | 83+00 | USH 141 | --- | --- | --- | --- | 27 | 6 |
| 83+00 | - | 89+00 | USH 141 | --- | --- | --- | 21 | 34 | 8 |
| 89+00 | - | 94+00 | USH 141 | --- | --- | --- | 7 | 45 | 10 |
| 94+00 | - | 99+00 | USH 141 | --- | --- | --- | --- | --- | --- |
| 99+00 | - | 105+00 | USH 141 | 6 | --- | 4 | --- | 22 | 5 |
| 105+00 | - | 110+00 | USH 141 | --- | --- | --- | --- | --- | --- |
| 110+00 | - | 112+00 | USH 141 | --- | --- | --- | --- | --- | --- |
| CATEGORY 0030 TOTALS | | | | 63 | 46 | 4 | 28 | 702 | 127 |

*MORE QUANTITY SHOWN ELSEWHERE

## Perennials

| STATION TO STATION | LOCATION | SPV.0060.18 Perennial (Purple Dome Aster, 1 Gal.) EACH | SPV.0060.19 Perennial (Purple Coneflower, 1 Gal.) EACH | SPV.0060.20 Perennial (Feather Reed Grass, 1 Gal.) EACH | SPV.0060.21 Perennial (Baja Daylily, 1 Gal.) EACH | SPV.0060.22 Perennial (Walkers Low Catmint, 1 Gal.) EACH | SPV.0060.23 Perennial (Russian Sage, 1 Gal.) EACH | SPV.0060.24 Perennial (Goldstrum Black Eyed Susan, 1 Gal.) EACH | SPV.0060.25 Perennial (Autumn Joy Sedum, 1 Gal.) EACH | SPV.0060.26 Perennial (Blue Heaven Little Bluestem, 1 Gal.) EACH | SPV.0060.27 Perennial (Prairie Dropseed, 1 Gal.) EACH | SPV.0060.28 Perennial (Tara Prairie Dropseed, 1 Gal.) EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50+00 - 56+00 | USH 141 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 56+00 - 62+00 | USH 141 | --- | --- | --- | --- | 247 | --- | --- | 61 | --- | --- | 149 |
| 62+00 - 67+00 | USH 141 | 30 | --- | 32 | --- | 203 | --- | --- | --- | --- | --- | 70 |
| 67+00 - 72+00 | USH 141 | 33 | 71 | 241 | 258 | --- | 14 | 169 | --- | --- | 21 | --- |
| 72+00 - 77+00 | USH 141 | 14 | 13 | --- | 9 | --- | --- | 9 | --- | 34 | --- | --- |
| 77+00 - 83+00 | USH 141 | 10 | 16 | --- | --- | 15 | --- | 24 | --- | 54 | --- | --- |
| 83+00 - 89+00 | USH 141 | 9 | --- | 29 | 49 | 37 | 4 | --- | --- | 38 | 58 | --- |
| 89+00 - 94+00 | USH 141 | --- | 13 | 21 | 20 | 5 | 5 | 5 | 5 | 15 | --- | 9 |
| 94+00 - 99+00 | USH 141 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 99+00 - 105+00 | USH 141 | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 105+00 - 110+00 | USH 141 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 110+00 - 112+00 | USH 141 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CATEGORY 0030 TOTALS | | 106 | 113 | 323 | 336 | 507 | 23 | 207 | 66 | 141 | 79 | 228 |

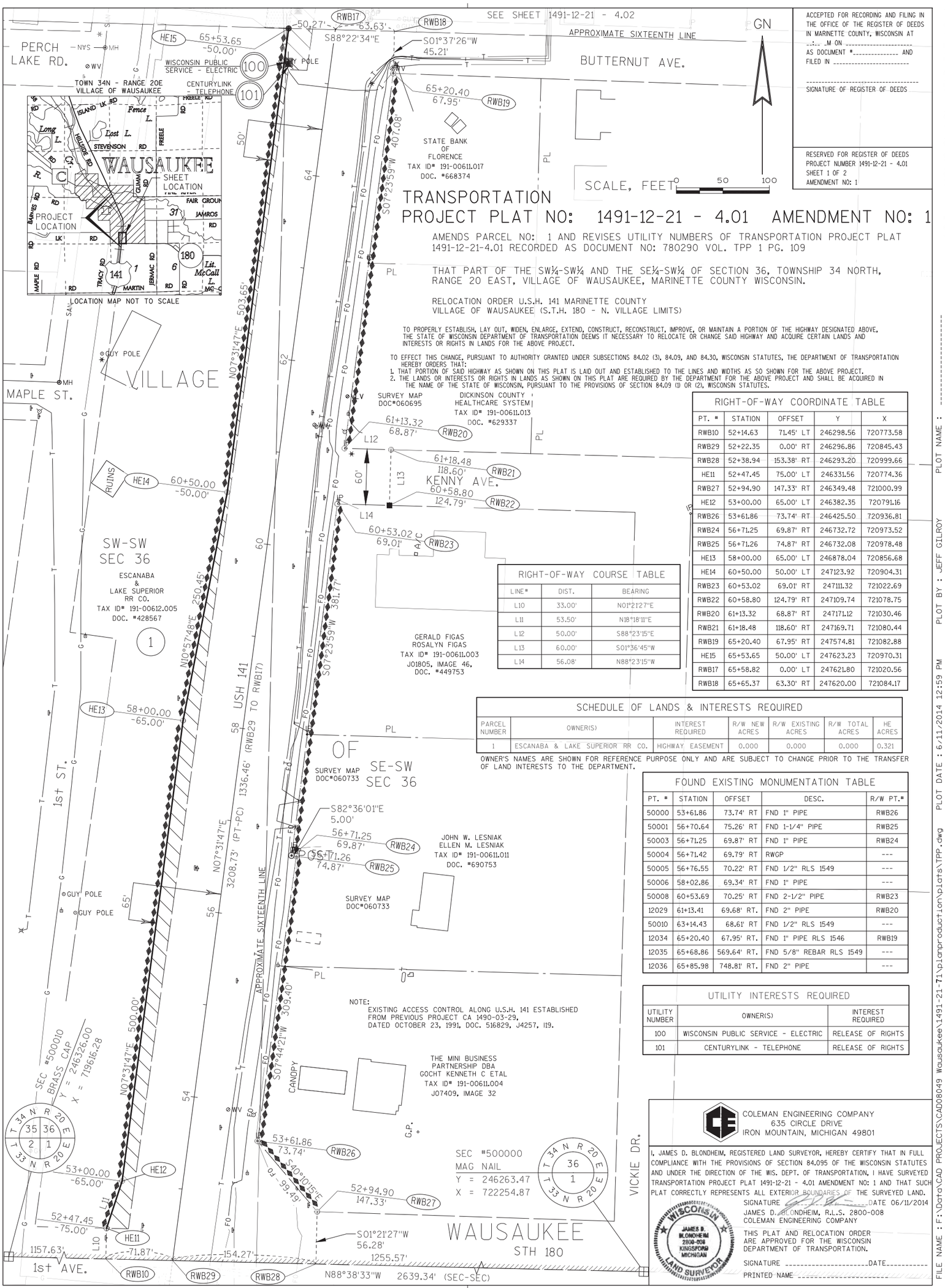
## Streetscape Items

| STATION TO STATION | LOCATION | SPV.0060.29 Bench EA | SPV.0060.30 Bike Rack EA | SPV.0060.31 Trash Receptacle EA | SPV.0060.32 Gateway Sign EA | SPV.0090.07 Landscape Edging LF | SPV.0165.02 Coarse Aggregate Stone Mulch SF | SPV.0165.03 Stone Pavers SF | SPV.0035.03 Aggregate Planting Soil CY | 645.0111 Fabric Type DF Schedule A SY* | SPV.0180.01 Shredded Hardwood Bark Mulch SY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 50+00 - 56+00 | USH 141 | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| 56+00 - 62+00 | USH 141 | --- | --- | --- | --- | 142 | --- | --- | --- | --- | 116 |
| 62+00 - 67+00 | USH 141 | --- | --- | --- | --- | 123 | 74 | --- | --- | --- | 98 |
| 67+00 - 72+00 | USH 141 | 1.0 | --- | 1 | --- | 83 | --- | --- | --- | --- | 343 |
| 72+00 - 77+00 | USH 141 | 1 | 1 | --- | --- | --- | --- | 150 | 14 | 36 | 17 |
| 77+00 - 83+00 | USH 141 | 2 | 1 | 3 | --- | --- | --- | 250 | 23 | 60 | 27 |
| 83+00 - 89+00 | USH 141 | 5 | 1.0 | 3 | --- | --- | --- | 450 | 42 | 108 | 34 |
| 89+00 - 94+00 | USH 141 | 1 | 1 | --- | --- | 81 | 71 | 100 | 9 | 24 | 45 |
| 94+00 - 99+00 | USH 141 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 99+00 - 105+00 | USH 141 | 2 | --- | --- | --- | 85 | --- | --- | --- | --- | 22 |
| 105+00 - 110+00 | USH 141 | --- | --- | --- | --- | 50 | --- | --- | --- | --- | --- |
| 110+00 - 112+00 | USH 141 | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- |
| CATEGORY 0020 TOTALS | | 12 | 4 | 7 | 2 | 564 | 145 | 950 | 88 | 228 | 702 |

*MORE QUANTITY SHOWN ELSEWHERE

## Stone Bollard

| STATION TO STATION | LOCATION | SPV.0060.33 Stone Bollard EA |
|---|---|---|
| 83+00 - 89+00 | USH 141 | 6 |
| CATEGORY 0040 TOTALS | | 6 |




ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARINETTE COUNTY, WISCONSIN AT ..:.. .M ON _____ AS DOCUMENT #_____ AND FILED IN _____

_____
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1491-12-21 - 4.01
SHEET 1 OF 2
AMENDMENT NO: 1

# TRANSPORTATION PROJECT PLAT NO: 1491-12-21 - 4.01 AMENDMENT NO: 1

AMENDS PARCEL NO: 1 AND REVISES UTILITY NUMBERS OF TRANSPORTATION PROJECT PLAT 1491-12-21-4.01 RECORDED AS DOCUMENT NO: 780290 VOL. TPP 1 PG. 109

THAT PART OF THE SW¼-SW¼ AND THE SE¼-SW¼ OF SECTION 36, TOWNSHIP 34 NORTH, RANGE 20 EAST, VILLAGE OF WAUSAUKEE, MARINETTE COUNTY WISCONSIN.

RELOCATION ORDER U.S.H. 141 MARINETTE COUNTY
VILLAGE OF WAUSAUKEE (S.T.H. 180 - N. VILLAGE LIMITS)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

## RIGHT-OF-WAY COORDINATE TABLE

| PT. # | STATION | OFFSET | Y | X |
|---|---|---|---|---|
| RWB10 | 52+14.63 | 71.45' LT | 246298.56 | 720773.58 |
| RWB29 | 52+22.35 | 0.00' RT | 246296.86 | 720845.43 |
| RWB28 | 52+38.94 | 153.38' RT | 246293.20 | 720999.66 |
| HE11 | 52+47.45 | 75.00' LT | 246331.56 | 720774.36 |
| RWB27 | 52+94.90 | 147.33' RT | 246349.48 | 721000.99 |
| HE12 | 53+00.00 | 65.00' LT | 246382.35 | 720791.16 |
| RWB26 | 53+61.86 | 73.74' RT | 246425.50 | 720936.81 |
| RWB24 | 56+71.25 | 69.87' RT | 246732.72 | 720973.52 |
| RWB25 | 56+71.26 | 74.87' RT | 246732.08 | 720978.48 |
| HE13 | 58+00.00 | 65.00' LT | 246878.04 | 720856.68 |
| HE14 | 60+50.00 | 50.00' LT | 247123.92 | 720904.31 |
| RWB23 | 60+53.02 | 69.01' RT | 247111.32 | 721022.69 |
| RWB22 | 60+58.80 | 124.79' RT | 247109.74 | 721078.75 |
| RWB20 | 61+13.32 | 68.87' RT | 247171.12 | 721030.46 |
| RWB21 | 61+18.48 | 118.60' RT | 247169.71 | 721080.44 |
| RWB19 | 65+20.40 | 67.95' RT | 247574.81 | 721082.88 |
| HE15 | 65+53.65 | 50.00' LT | 247623.23 | 720970.31 |
| RWB17 | 65+58.82 | 0.00' LT | 247621.80 | 721020.56 |
| RWB18 | 65+65.37 | 63.30' RT | 247620.00 | 721084.17 |

## RIGHT-OF-WAY COURSE TABLE

| LINE# | DIST. | BEARING |
|---|---|---|
| L10 | 33.00' | N01°21'27"E |
| L11 | 53.50' | N18°18'11"E |
| L12 | 50.00' | S88°23'15"E |
| L13 | 60.00' | S01°36'45"W |
| L14 | 56.08' | N88°23'15"W |

## SCHEDULE OF LANDS & INTERESTS REQUIRED

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | R/W NEW ACRES | R/W EXISTING ACRES | R/W TOTAL ACRES | HE ACRES |
|---|---|---|---|---|---|---|
| 1 | ESCANABA & LAKE SUPERIOR RR CO. | HIGHWAY EASEMENT | 0.000 | 0.000 | 0.000 | 0.321 |

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

## FOUND EXISTING MONUMENTATION TABLE

| PT. # | STATION | OFFSET | DESC. | R/W PT.# |
|---|---|---|---|---|
| 50000 | 53+61.86 | 73.74' RT | FND 1" PIPE | RWB26 |
| 50001 | 56+70.64 | 75.26' RT | FND 1-1/4" PIPE | RWB25 |
| 50003 | 56+71.25 | 69.87' RT | FND 1" PIPE | RWB24 |
| 50004 | 56+71.42 | 69.79' RT | RWGP | --- |
| 50005 | 56+76.55 | 70.22' RT | FND 1/2" RLS 1549 | --- |
| 50006 | 58+02.86 | 69.34' RT | FND 1" PIPE | --- |
| 50008 | 60+53.69 | 70.25' RT | FND 2-1/2" PIPE | RWB23 |
| 12029 | 61+13.41 | 69.68' RT. | FND 2" PIPE | RWB20 |
| 50010 | 63+14.43 | 68.61' RT | FND 1/2" RLS 1549 | --- |
| 12034 | 65+20.40 | 67.95' RT. | FND 1" PIPE RLS 1546 | RWB19 |
| 12035 | 65+68.86 | 569.64' RT. | FND 5/8" REBAR RLS 1549 | --- |
| 12036 | 65+85.98 | 748.81' RT. | FND 2" PIPE | --- |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| 100 | WISCONSIN PUBLIC SERVICE - ELECTRIC | RELEASE OF RIGHTS |
| 101 | CENTURYLINK - TELEPHONE | RELEASE OF RIGHTS |

NOTE:
EXISTING ACCESS CONTROL ALONG U.S.H. 141 ESTABLISHED FROM PREVIOUS PROJECT CA 1490-03-29, DATED OCTOBER 23, 1991, DOC. 516829, J4257, I19.

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JAMES D. BLONDHEIM, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1491-12-21 - 4.01 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 06/11/2014
JAMES D. BLONDHEIM, R.L.S. 2800-008
COLEMAN ENGINEERING COMPANY

WISCONSIN JAMES D. BLONDHEIM 2800-008 KINGSFORD MICHIGAN LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE _____ DATE _____
PRINTED NAME _____

FILE NAME : F:\Data\CAD PROJECTS\CAD08049 Wausaukee\1491-12-21\planproduction\plats\TPP.dwg
PLOT DATE : 6/11/2014 12:59 PM
PLOT BY : JEFF GILROY
PLOT NAME : ----------
1491-12-21 4.01 AMENDMENT NO: 1
1:0.5
APPRAISAL PLAT DATE : ----------

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

### TRANSPORTATION PROJECT PLAT TITLE SHEET

# PROJECT NO. 1491-12-21

**STH 180 - N. VILLAGE LIMITS**

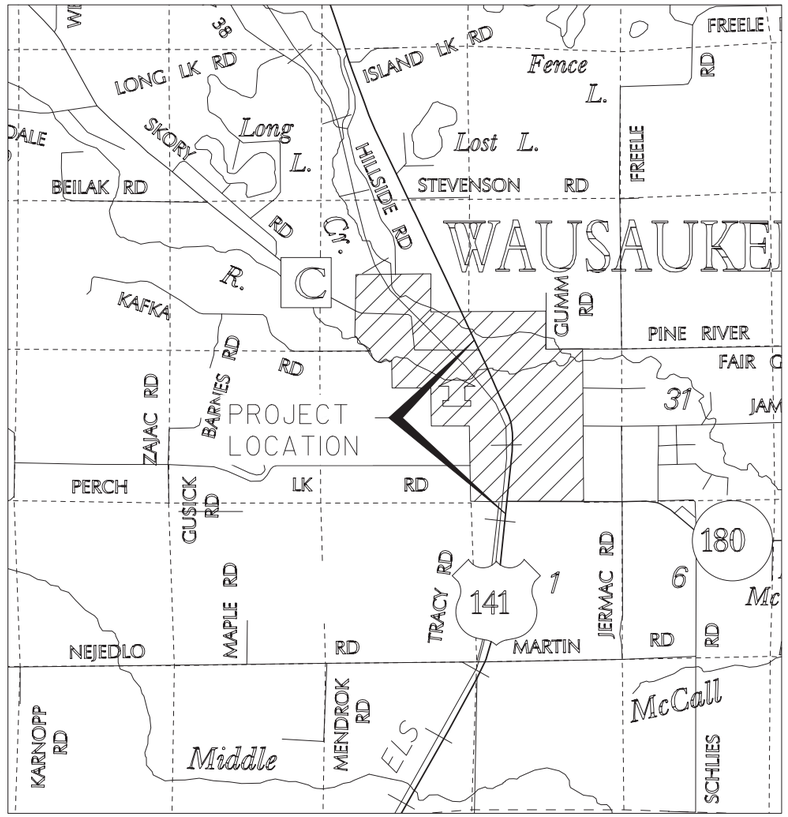
## USH 141

## MARINETTE COUNTY



R-20-E R-21-E

T-34-N T-34-N




R-20-E R-21-E

T-33-N

N

LAYOUT
SCALE 0 1/2 MI.

## CONVENTIONAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| ACCESS POINT/ DRIVEWAY CONNECTION | AP | REFERENCE LINE | R/L |
| ACCESS RIGHTS | AR | RELEASE OF RIGHTS | ROR |
| ACRES | AC. | REMAINING | REM. |
| AND OTHERS | ET.AL. | RIGHT-OF-WAY | R/W |
| CENTERLINE | C/L | SECTION | SEC. |
| CERTIFIED SURVEY MAP | CSM | STATION | STA. |
| CORNER | COR. | TEMPORARY LIMITED EASEMENT | TLE |
| DOCUMENT | DOC. | VOLUME | V. |
| EASEMENT | EASE. | **CURVE DATA** | |
| HIGHWAY EASEMENT | HE | LONG CHORD | LCH |
| LAND CONTRACT | LC | LONG CHORD BEARING | LCB |
| MONUMENT | MON. | RADIUS | R |
| PAGE | P. | DEGREE OF CURVE | D |
| PERMANENT LIMITED EASEMENT | PLE | CENTRAL ANGLE OR DELTA | DELTA |
| PROPERTY LINE | PL | LENGTH OF CURVE | L |
| RECORDED AS | (100') | TANGENT | T |

## CONVENTIONAL SYMBOLS

| | | | |
|---|---|---|---|
| FOUND IRON PIPE/PIN | IP (1" UNLESS NOTED) | PROPOSED R/W LINE | |
| R/W OR HE MONUMENT (SET) | (1" IP W/CAP) | EXISTING H.E. LINE | |
| R/W OR HE MONUMENT (SET) | (3" SURVEY SPIKE) | PROPERTY LINE | |
| FOUND R/W MONUMENT | | LOT & TIE LINES | |
| SIGN | ISIGN | SLOPE INTERCEPTS | |
| SECTION CORNER MONUMENT | | CORPORATE LIMITS | |
| SECTION CORNER SYMBOL | | RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL) | |
| FEE OR HE (HATCH VARIES) | | RESTRICTED ACCESS (BY ACQUISITION) | |
| TEMPORARY LIMITED EASEMENT | | NO ACCESS (BY STATUTORY AUTHORITY) | |
| PERMANENT LIMITED EASEMENT | | SECTION LINE | |
| R/W BOUNDARY POINT | RWB20 | QUARTER LINE | |
| PARCEL NUMBER | 2 | SIXTEENTH LINE | |
| UTILITY PARCEL NUMBER | 60 | EXISTING CENTERLINE | |
| SIGN NUMBER (OFF PREMISE) | 21-1 | PROPOSED REFERENCE LINE | |
| BUILDING | | PARALLEL OFFSET | |

## CONVENTIONAL UTILITY SYMBOLS

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

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MARINETTE COUNTY, NAD 83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR U.S.H. 141 ESTABLISHED FROM PREVIOUS PROJECT S 0102(9) AND DIVISION JOB NO. 3572.
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY MONUMENT (SET) IS A 1"X18" LONG IRON PIPE WITH A WISDOT CAP, OR COUNTERSUNK A 3" STEEL SURVEY SPIKE WITH A 1" DIMPLED HEAD.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

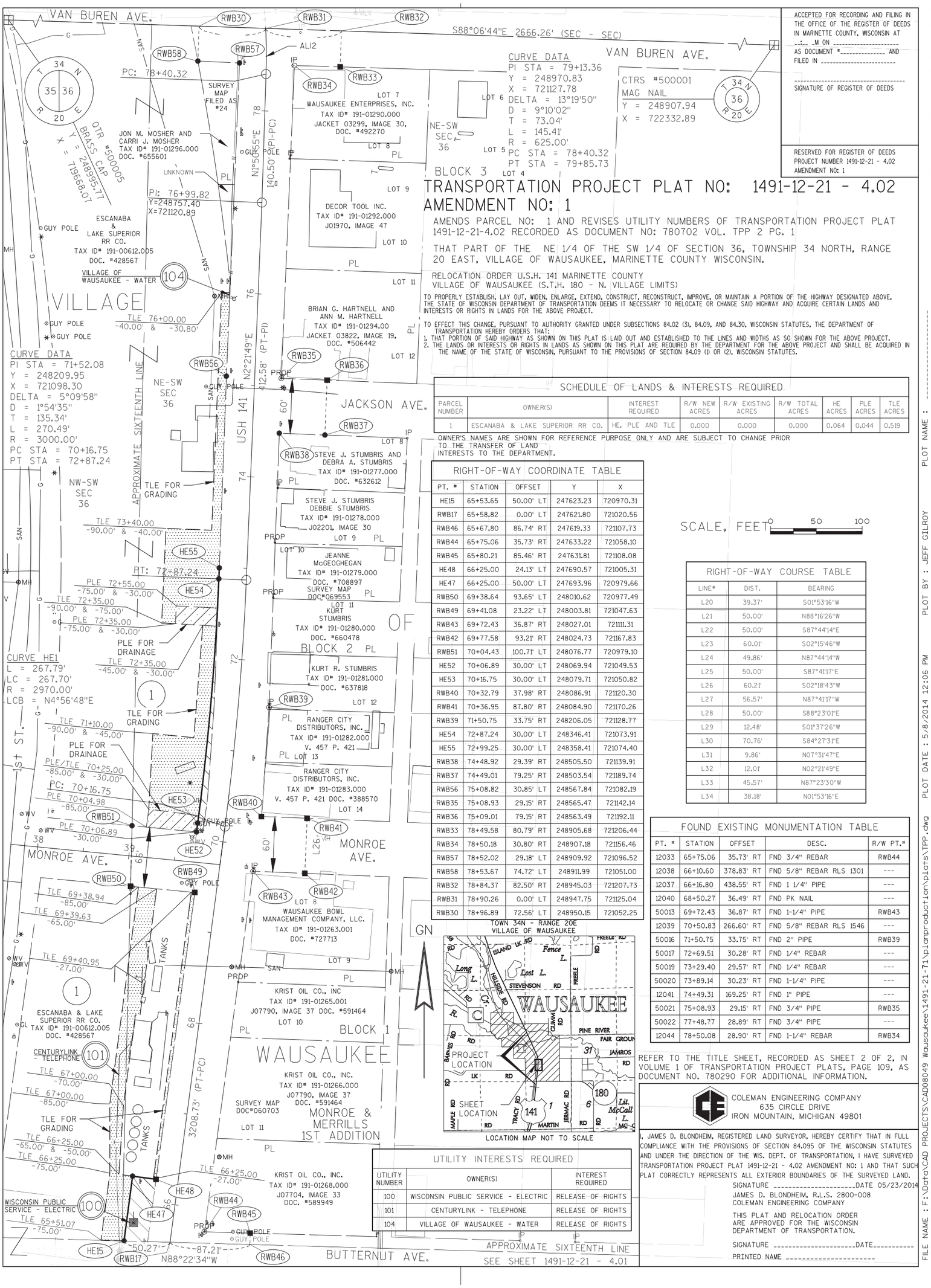
A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

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


COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801


PROJECT NUMBER 1491-12-21 - 4.01
SHEET 2 OF 2
AMENDMENT NO: 1




ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARINETTE COUNTY, WISCONSIN AT ..:.. .M ON _____ AS DOCUMENT #_____ AND FILED IN _____

_____
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1491-12-21 - 4.02 AMENDMENT NO: 1

# TRANSPORTATION PROJECT PLAT NO: 1491-12-21 - 4.02 AMENDMENT NO: 1

AMENDS PARCEL NO: 1 AND REVISES UTILITY NUMBERS OF TRANSPORTATION PROJECT PLAT 1491-12-21-4.02 RECORDED AS DOCUMENT NO: 780702 VOL. TPP 2 PG. 1

THAT PART OF THE NE 1/4 OF THE SW 1/4 OF SECTION 36, TOWNSHIP 34 NORTH, RANGE 20 EAST, VILLAGE OF WAUSAUKEE, MARINETTE COUNTY WISCONSIN.

RELOCATION ORDER U.S.H. 141 MARINETTE COUNTY
VILLAGE OF WAUSAUKEE (S.T.H. 180 - N. VILLAGE LIMITS)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

## SCHEDULE OF LANDS & INTERESTS REQUIRED

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | R/W NEW ACRES | R/W EXISTING ACRES | R/W TOTAL ACRES | HE ACRES | PLE ACRES | TLE ACRES |
|---|---|---|---|---|---|---|---|---|
| 1 | ESCANABA & LAKE SUPERIOR RR CO. | HE, PLE AND TLE | 0.000 | 0.000 | 0.000 | 0.064 | 0.044 | 0.519 |

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

## RIGHT-OF-WAY COORDINATE TABLE

| PT. # | STATION | OFFSET | Y | X |
|---|---|---|---|---|
| HE15 | 65+53.65 | 50.00' LT | 247623.23 | 720970.31 |
| RWB17 | 65+58.82 | 0.00' LT | 247621.80 | 721020.56 |
| RWB46 | 65+67.80 | 86.74' RT | 247619.33 | 721107.73 |
| RWB44 | 65+75.06 | 35.73' RT | 247633.22 | 721058.10 |
| RWB45 | 65+80.21 | 85.46' RT | 247631.81 | 721108.08 |
| HE48 | 66+25.00 | 24.13' LT | 247690.57 | 721005.31 |
| HE47 | 66+25.00 | 50.00' LT | 247693.96 | 720979.66 |
| RWB50 | 69+38.64 | 93.65' LT | 248010.62 | 720977.49 |
| RWB49 | 69+41.08 | 23.22' LT | 248003.81 | 721047.63 |
| RWB43 | 69+72.43 | 36.87' RT | 248027.01 | 721111.31 |
| RWB42 | 69+77.58 | 93.21' RT | 248024.73 | 721167.83 |
| RWB51 | 70+04.43 | 100.71' LT | 248076.77 | 720979.10 |
| HE52 | 70+06.89 | 30.00' LT | 248069.94 | 721049.53 |
| HE53 | 70+16.75 | 30.00' LT | 248079.71 | 721050.82 |
| RWB40 | 70+32.79 | 37.98' RT | 248086.91 | 721120.30 |
| RWB41 | 70+36.95 | 87.80' RT | 248084.90 | 721170.26 |
| RWB39 | 71+50.75 | 33.75' RT | 248206.05 | 721128.77 |
| HE54 | 72+87.24 | 30.00' LT | 248346.41 | 721073.91 |
| HE55 | 72+99.25 | 30.00' LT | 248358.41 | 721074.40 |
| RWB38 | 74+48.92 | 29.39' RT | 248505.50 | 721139.91 |
| RWB37 | 74+49.01 | 79.25' RT | 248503.54 | 721189.74 |
| RWB56 | 75+08.82 | 30.85' LT | 248567.84 | 721082.19 |
| RWB35 | 75+08.93 | 29.15' RT | 248565.47 | 721142.14 |
| RWB36 | 75+09.01 | 79.15' RT | 248563.49 | 721192.11 |
| RWB33 | 78+49.58 | 80.79' RT | 248905.68 | 721206.44 |
| RWB34 | 78+50.18 | 30.80' RT | 248907.18 | 721156.46 |
| RWB57 | 78+52.02 | 29.18' LT | 248909.92 | 721096.52 |
| RWB58 | 78+53.67 | 74.72' LT | 248911.99 | 721051.00 |
| RWB32 | 78+84.37 | 82.50' RT | 248945.03 | 721207.73 |
| RWB31 | 78+90.26 | 0.00' LT | 248947.75 | 721125.04 |
| RWB30 | 78+96.89 | 72.56' LT | 248950.15 | 721052.25 |

SCALE, FEET 0 50 100

## RIGHT-OF-WAY COURSE TABLE

| LINE# | DIST. | BEARING |
|---|---|---|
| L20 | 39.37' | S01°53'16"W |
| L21 | 50.00' | N88°16'26"W |
| L22 | 50.00' | S87°44'14"E |
| L23 | 60.01' | S02°15'46"W |
| L24 | 49.86' | N87°44'14"W |
| L25 | 50.00' | S87°41'17"E |
| L26 | 60.21' | S02°18'43"W |
| L27 | 56.57' | N87°41'17"W |
| L28 | 50.00' | S88°23'01"E |
| L29 | 12.48' | S01°37'26"W |
| L30 | 70.76' | S84°27'31"E |
| L31 | 9.86' | N07°31'47"E |
| L32 | 12.01' | N02°21'49"E |
| L33 | 45.57' | N87°23'30"W |
| L34 | 38.18' | N01°53'16"E |

## FOUND EXISTING MONUMENTATION TABLE

| PT. # | STATION | OFFSET | DESC. | R/W PT.# |
|---|---|---|---|---|
| 12033 | 65+75.06 | 35.73' RT | FND 3/4" REBAR | RWB44 |
| 12038 | 66+10.60 | 378.83' RT | FND 5/8" REBAR RLS 1301 | --- |
| 12037 | 66+16.80 | 438.55' RT | FND 1 1/4" PIPE | --- |
| 12040 | 68+50.27 | 36.49' RT | FND PK NAIL | --- |
| 50013 | 69+72.43 | 36.87' RT | FND 1-1/4" PIPE | RWB43 |
| 12039 | 70+50.83 | 266.60' RT | FND 5/8" REBAR RLS 1546 | --- |
| 50016 | 71+50.75 | 33.75' RT | FND 2" PIPE | RWB39 |
| 50017 | 72+69.51 | 30.28' RT | FND 1/4" REBAR | --- |
| 50019 | 73+29.40 | 29.57' RT | FND 1/4" REBAR | --- |
| 50020 | 73+89.14 | 30.23' RT | FND 1-1/4" PIPE | --- |
| 12041 | 74+49.31 | 169.25' RT | FND 1" PIPE | --- |
| 50021 | 75+08.93 | 29.15' RT | FND 3/4" PIPE | RWB35 |
| 50022 | 77+48.77 | 28.89' RT | FND 3/4" PIPE | --- |
| 12044 | 78+50.08 | 28.90' RT | FND 1-1/4" REBAR | RWB34 |

TOWN 34N - RANGE 20E
VILLAGE OF WAUSAUKEE




LOCATION MAP NOT TO SCALE

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 1 OF TRANSPORTATION PROJECT PLATS, PAGE 109, AS DOCUMENT NO. 780290 FOR ADDITIONAL INFORMATION.

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JAMES D. BLONDHEIM, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1491-12-21 - 4.02 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____DATE 05/23/2014
JAMES D. BLONDHEIM, R.L.S. 2800-008
COLEMAN ENGINEERING COMPANY

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE _____DATE_____
PRINTED NAME _____

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| 100 | WISCONSIN PUBLIC SERVICE - ELECTRIC | RELEASE OF RIGHTS |
| 101 | CENTURYLINK - TELEPHONE | RELEASE OF RIGHTS |
| 104 | VILLAGE OF WAUSAUKEE - WATER | RELEASE OF RIGHTS |

1491-12-21 4.02 AMENDMENT NO: 1
PLOT NAME : ----------
PLOT BY : JEFF GILROY
PLOT DATE : 5/8/2014 12:06 PM
FILE NAME : F:\Data\CAD PROJECTS\CAD08049 Wausaukee\1491-12-21-T1\plproduction\plats\TPP.dwg
APPRAISAL PLAT DATE : ----------

DOC. #: 780703
RENEE MILLER
MARINETTE COUNTY
REGISTER OF DEEDS
December 27, 2013 8:31 AM
Fee Amount: $25.00

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARINETTE COUNTY, WISCONSIN AT 8:31AM ON December 27 2013 AS DOCUMENT # 780703 AND FILED IN Vol TPP2 pg 2
Becky S Chaney Deputy
SIGNATURE OF REGISTER OF DEEDS

Vol TPP2 Pg 2

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1491-12-21 - 4.03
AMENDMENT NO:___

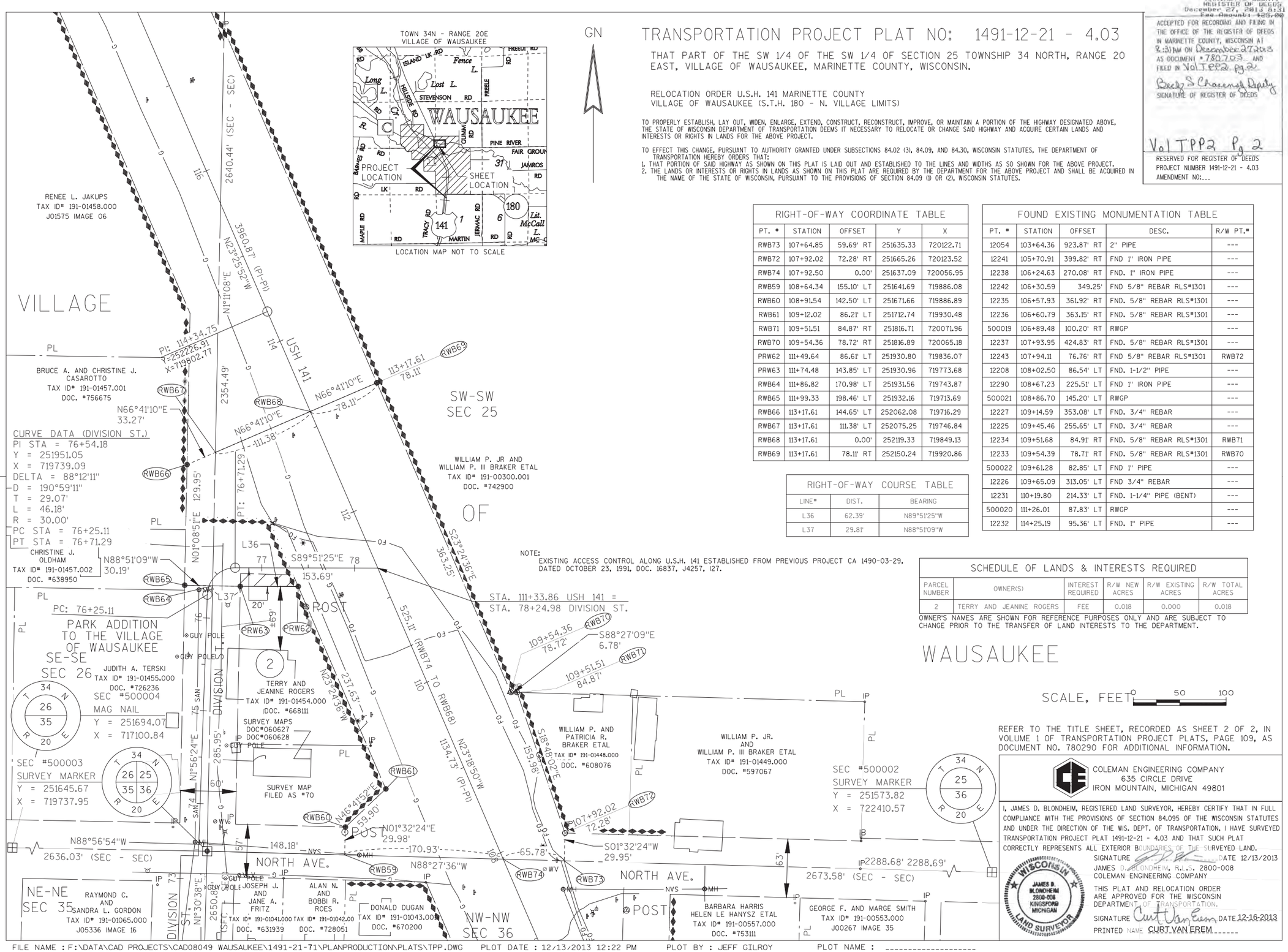
# TRANSPORTATION PROJECT PLAT NO: 1491-12-21 - 4.03

THAT PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 25 TOWNSHIP 34 NORTH, RANGE 20 EAST, VILLAGE OF WAUSAUKEE, MARINETTE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 141 MARINETTE COUNTY
VILLAGE OF WAUSAUKEE (S.T.H. 180 - N. VILLAGE LIMITS)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.




NOTE:
EXISTING ACCESS CONTROL ALONG U.S.H. 141 ESTABLISHED FROM PREVIOUS PROJECT CA 1490-03-29, DATED OCTOBER 23, 1991, DOC. 16837, J4257, I27.

## RIGHT-OF-WAY COORDINATE TABLE

| PT. # | STATION | OFFSET | Y | X |
|---|---|---|---|---|
| RWB73 | 107+64.85 | 59.69' RT | 251635.33 | 720122.71 |
| RWB72 | 107+92.02 | 72.28' RT | 251665.26 | 720123.52 |
| RWB74 | 107+92.50 | 0.00' | 251637.09 | 720056.95 |
| RWB59 | 108+64.34 | 155.10' LT | 251641.69 | 719886.08 |
| RWB60 | 108+91.54 | 142.50' LT | 251671.66 | 719886.89 |
| RWB61 | 109+12.02 | 86.21' LT | 251712.74 | 719930.48 |
| RWB71 | 109+51.51 | 84.87' RT | 251816.71 | 720071.96 |
| RWB70 | 109+54.36 | 78.72' RT | 251816.89 | 720065.18 |
| PRW62 | 111+49.64 | 86.61' LT | 251930.80 | 719836.07 |
| PRW63 | 111+74.48 | 143.85' LT | 251930.96 | 719773.68 |
| RWB64 | 111+86.82 | 170.98' LT | 251931.56 | 719743.87 |
| RWB65 | 111+99.33 | 198.46' LT | 251932.16 | 719713.69 |
| RWB66 | 113+17.61 | 144.65' LT | 252062.08 | 719716.29 |
| RWB67 | 113+17.61 | 111.38' LT | 252075.25 | 719746.84 |
| RWB68 | 113+17.61 | 0.00' | 252119.33 | 719849.13 |
| RWB69 | 113+17.61 | 78.11' RT | 252150.24 | 719920.86 |

## RIGHT-OF-WAY COURSE TABLE

| LINE# | DIST. | BEARING |
|---|---|---|
| L36 | 62.39' | N89°51'25"W |
| L37 | 29.81' | N88°51'09"W |

## FOUND EXISTING MONUMENTATION TABLE

| PT. # | STATION | OFFSET | DESC. | R/W PT.# |
|---|---|---|---|---|
| 12054 | 103+64.36 | 923.87' RT | 2" PIPE | --- |
| 12241 | 105+70.91 | 399.82' RT | FND 1" IRON PIPE | --- |
| 12238 | 106+24.63 | 270.08' RT | FND. 1" IRON PIPE | --- |
| 12242 | 106+30.59 | 349.25' | FND 5/8" REBAR RLS#1301 | --- |
| 12235 | 106+57.93 | 361.92' RT | FND. 5/8" REBAR RLS#1301 | --- |
| 12236 | 106+60.79 | 363.15' RT | FND. 5/8" REBAR RLS#1301 | --- |
| 500019 | 106+89.48 | 100.20' RT | RWGP | --- |
| 12237 | 107+93.95 | 424.83' RT | FND. 5/8" REBAR RLS#1301 | --- |
| 12243 | 107+94.11 | 76.76' RT | FND 5/8" REBAR RLS#1301 | RWB72 |
| 12208 | 108+02.50 | 86.54' LT | FND. 1-1/2" PIPE | --- |
| 12290 | 108+67.23 | 225.51' LT | FND 1" IRON PIPE | --- |
| 500021 | 108+86.70 | 145.20' LT | RWGP | --- |
| 12227 | 109+14.59 | 353.08' LT | FND. 3/4" REBAR | --- |
| 12225 | 109+45.46 | 255.65' LT | FND. 3/4" REBAR | --- |
| 12234 | 109+51.68 | 84.91' RT | FND. 5/8" REBAR RLS#1301 | RWB71 |
| 12233 | 109+54.39 | 78.71' RT | FND. 5/8" REBAR RLS#1301 | RWB70 |
| 500022 | 109+61.28 | 82.85' LT | FND 1" PIPE | --- |
| 12226 | 109+65.09 | 313.05' LT | FND 3/4" REBAR | --- |
| 12231 | 110+19.80 | 214.33' LT | FND. 1-1/4" PIPE (BENT) | --- |
| 500020 | 111+26.01 | 87.83' LT | RWGP | --- |
| 12232 | 114+25.19 | 95.36' LT | FND. 1" PIPE | --- |

## SCHEDULE OF LANDS & INTERESTS REQUIRED

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | R/W NEW ACRES | R/W EXISTING ACRES | R/W TOTAL ACRES |
|---|---|---|---|---|---|
| 2 | TERRY AND JEANINE ROGERS | FEE | 0.018 | 0.000 | 0.018 |

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN VOLUME 1 OF TRANSPORTATION PROJECT PLATS, PAGE 109, AS DOCUMENT NO. 780290 FOR ADDITIONAL INFORMATION.

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JAMES D. BLONDHEIM, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1491-12-21 - 4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 12/13/2013
JAMES D. BLONDHEIM, R.L.S. 2800-008
COLEMAN ENGINEERING COMPANY

WISCONSIN JAMES D. BLONDHEIM 2800-008 KINGSFORD MICHIGAN LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE Curt Van Erem DATE 12-16-2013
PRINTED NAME CURT VAN EREM

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLATS\TPP.DWG PLOT DATE : 12/13/2013 12:22 PM PLOT BY : JEFF GILROY PLOT NAME : _____
APPRAISAL PLAT DATE : _____

| R/W PROJECT NUMBER | SHEET NUMBER | TOTAL SHEETS |
|---|---|---|
| 1491-12-21 | | |
| FEDERAL PROJECT NUMBER | 4.04 | 8 |

PLAT OF RIGHT-OF-WAY REQUIRED FOR

# VILLAGE OF WAUSAUKEE

(STH 180 - N. VILLAGE LIMITS)

USH 141 — MARINETTE COUNTY

CONSTRUCTION PROJECT NUMBER
1491-12-71

## CONVENTIONAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| ACCESS POINT/ DRIVEWAY CONNECTION | AP | REFERENCE LINE | R/L |
| ACCESS RIGHTS | AR | RELEASE OF RIGHTS | ROR |
| ACRES | AC. | REMAINING | REM. |
| AND OTHERS | ET.AL. | RIGHT-OF-WAY | R/W |
| CENTERLINE | C/L | SECTION | SEC. |
| CERTIFIED SURVEY MAP | CSM | STATION | STA. |
| CORNER | COR. | TEMPORARY LIMITED EASEMENT | TLE |
| DOCUMENT | DOC. | VOLUME | V. |
| EASEMENT | EASE. | **CURVE DATA** | |
| HIGHWAY EASEMENT | H.E. | LONG CHORD | LCH |
| LAND CONTRACT | LC | LONG CHORD BEARING | LCB |
| MONUMENT | MON. | RADIUS | R |
| PAGE | P. | DEGREE OF CURVE | D |
| PERMANENT LIMITED EASEMENT | PLE | CENTRAL ANGLE OR DELTA | DELTA |
| PROPERTY LINE | PL | LENGTH OF CURVE | L |
| RECORDED AS | (100') | TANGENT | T |

## CONVENTIONAL SYMBOLS

| | | | |
|---|---|---|---|
| FOUND IRON PIPE/PIN | (1" UNLESS NOTED) | PROPOSED R/W LINE | |
| R/W MONUMENT (SET) | (1" IP W/CAP) | EXISTING H.E. LINE | |
| R/W MONUMENT (SET) | (3" SURVEY SPIKE) | PROPERTY LINE | |
| FOUND R/W MONUMENT | | LOT & TIE LINES | |
| SIGN | SIGN | SLOPE INTERCEPTS | |
| SECTION CORNER MONUMENT | | CORPORATE LIMITS | |
| SECTION CORNER SYMBOL | | RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL) | |
| FEE (HATCH VARIES) | | RESTRICTED ACCESS (BY ACQUISTION) | |
| TEMPORARY LIMITED EASEMENT | | NO ACCESS (BY STATUTORY AUTHORITY) | |
| PERMANENT LIMITED EASEMENT | | SECTION LINE | |
| R/W BOUNDARY POINT | RWB20 | QUARTER LINE | |
| PARCEL NUMBER | 2 | SIXTEENTH LINE | |
| UTILITY PARCEL NUMBER | 60 | EXISTING CENTERLINE | |
| SIGN NUMBER (OFF PREMISE) | 21-1 | PROPOSED REFERENCE LINE | |
| BUILDING | | PARALLEL OFFSET | |

## CONVENTIONAL UTILITY SYMBOLS

| | |
|---|---|
| WATER | W |
| GAS | G |
| TELEPHONE | T |
| OVERHEAD | OH |
| TRANSMISSION LINES | |
| ELECTRIC | E |
| FIBER OPTIC | FO |
| CABLE TELEVISION | TV |
| SANITARY SEWER | SAN |
| STORM SEWER | SS |

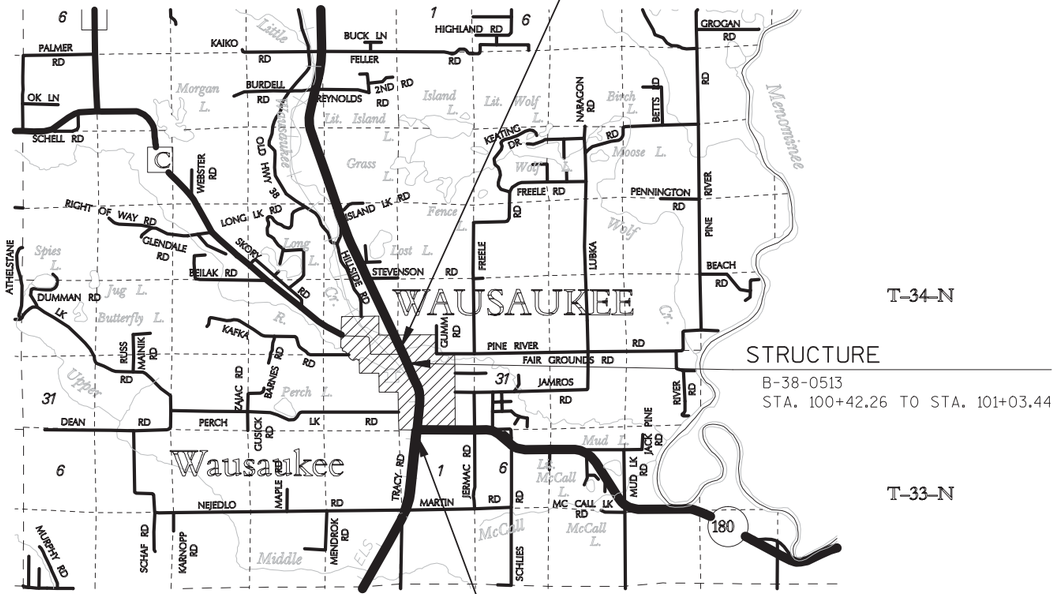
| | NON COMPENSABLE | COMPENSABLE |
|---|---|---|
| POWER POLE | | |
| TELEPHONE POLE | | |
| TELEPHONE PEDESTAL | | |
| ELECTRIC TOWER | | |

## END RELOCATION ORDER

PROJECT 1491-12-21
STA. 113+17.61
486.53 FEET N13°12'34"E OF THE NORTHWEST QUARTER CORNER OF SECTION 36, TOWNSHIP 34 NORTH, RANGE 20 EAST, MARINETTE COUNTY, WISCONSIN.
N = 252119.33
E = 719849.13

R-20-E R-21-E

T-34-N T-34-N T-33-N T-33-N




## STRUCTURE

B-38-0513
STA. 100+42.26 TO STA. 101+03.44

## BEGIN RELOCATION ORDER

PROJECT 1491-12-21
STA. 52+22.36
1229.50 FEET S88°38'33"E OF THE SOUTHWEST QUARTER CORNER OF SECTION 36, TOWNSHIP 34 NORTH, RANGE 20 EAST, MARINETTE COUNTY, WISCONSIN.
N = 246296.87
E = 720845.43

N

LAYOUT
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.303 MI.

## NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MARINETTE COUNTY, NAD 83 1991 IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.


COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801


| REVISION | DATE |
|---|---|
| | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT

DATE: _____ _____ (Signature)

131 E

# SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSED ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

4

## SCHEDULE OF LANDS & INTERESTS REQUIRED

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | R/W NEW ACRES | R/W EXISTING ACRES | R/W TOTAL ACRES | TLE/PLE SF |
|---|---|---|---|---|---|---|
| 3 | GERALD FIGAS ROSALYN FIGAS | TLE | 0.00 | 0.00 | 0.00 | 7475.83 |
| 4 | DICKINSON COUNTY HEALTHCARE SYSTEM | TLE | 0.00 | 0.00 | 0.00 | 571.07 |
| 6 | STATE BANK OF FLORENCE | TLE | 0.00 | 0.00 | 0.00 | 970.13 |
| 7 | KRIST OIL CO., INC. | TLE | 0.00 | 0.00 | 0.00 | 2056.60 |
| 8 | WAUSAUKEE BOWL MANAGEMENT COMPANY, LLC. | TLE | 0.00 | 0.00 | 0.00 | 403.36 |
| 11 | WAUSAUKEE ENTERPRISES, INC. | TLE | 0.00 | 0.00 | 0.00 | 174.61 |
| 12 | JON M. MOSHER AND CARRI J. MOSHER | TLE | 0.00 | 0.00 | 0.00 | 652.18 |
| 13 | RALPH M. LANICH ELIZABETH J L LANICH | TLE | 0.00 | 0.00 | 0.00 | 374.69 |
| 14 | DOUGLAS M. SCHLIES SR. VNE TAMMY L. SCHLIES VNE ETAL | PLE | 0.00 | 0.00 | 0.00 | 86.35 |
| 16 | PETER L. LUND | PLE | 0.00 | 0.00 | 0.00 | 78.63 |
| 18 | FD WAUSAUKEE WI SWS OF HARRISON AVE AND MAIN STREET LLC. | TLE | 0.00 | 0.00 | 0.00 | 604.37 |
| 19 | PEMBINE-WAUSAUKEE BANK AKA BANK NORTH | TLE | 0.00 | 0.00 | 0.00 | 94.18 |
| 21 | WAUSAUKEE LUMBER CO., INC. | TLE | 0.00 | 0.00 | 0.00 | 150.66 |
| 22 | CHRISTOPHER A. CARRIVEAU VNE MISTY M. CARRIVEAU VNE ETAL | TLE | 0.00 | 0.00 | 0.00 | 189.55 |
| 23 | DARRYL R. NEWINGHAM LAURA J. NEWINGHAM | TLE | 0.00 | 0.00 | 0.00 | 42.21 |
| 24 | N.M.G. PROPERTIES LLC. | TLE | 0.00 | 0.00 | 0.00 | 267.16 |
| 26 | DARRYL R. NEWINGHAM | TLE | 0.00 | 0.00 | 0.00 | 331.89 |
| 27 | SLOBODAN SUSIC VNE CHERI J. LACOY-FREELAND VNR ETAL | TLE | 0.00 | 0.00 | 0.00 | 236.13 |

## SCHEDULE OF LANDS & INTERESTS REQUIRED

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | R/W NEW ACRES | R/W EXISTING ACRES | R/W TOTAL ACRES | TLE/PLE SF |
|---|---|---|---|---|---|---|
| 28 | S&J CHIPPEWA, LLC. | TLE | 0.00 | 0.00 | 0.00 | 468.12 |
| 29 | JOHN L. BENJAMIN APRIL S. BENJAMIN | TLE | 0.00 | 0.00 | 0.00 | 1071.08 |
| 31 | LEC GROUP, LLC. | TLE | 0.00 | 0.00 | 0.00 | 5358.82 |
| 32 | PERRY J. ZEUTZIUS AND CAROL J. ZEUTZIUS | TLE | 0.00 | 0.00 | 0.00 | 11.96 |
| 33 | WAUSAUKEE - LA FAIVE CORP. | TLE | 0.00 | 0.00 | 0.00 | 222.70 |
| 34 | ROGER MCCLELLAN AND BARBARA MCCLELLAN | TLE | 0.00 | 0.00 | 0.00 | 992.02 |
| 36 | ERIC J. KEYZERS | TLE | 0.00 | 0.00 | 0.00 | 157.63 |
| 37 | HOT FLAME GAS, INC. | TLE | 0.00 | 0.00 | 0.00 | 302.02 |
| 38 | DONALD DUGAN | TLE | 0.00 | 0.00 | 0.00 | 376.67 |
| 39 | WILLIAM P. JR AND WILLIAM P. III BRAKER ETAL | TLE | 0.00 | 0.00 | 0.00 | 107.26 |
| 41 | THE MINI BUSINESS PARTNERSHIP DBA GOCHT KENNETH C ETAL | TLE | 0.00 | 0.00 | 0.00 | 1143.04 |
| 42 | JOHN W. LESNIAK ELLEN M. LESNIAK | TLE | 0.00 | 0.00 | 0.00 | 1993.08 |
| 100 | WISCONSIN PUBLIC SERVICE - ELECTRIC | RELEASE OF RIGHTS | 0.00 | 0.00 | 0.00 | 0.00 |
| 101 | CENTURYLINK - TELEPHONE | RELEASE OF RIGHTS | 0.00 | 0.00 | 0.00 | 0.00 |
| 102 | VILLAGE OF WAUSAUKEE - SEWER | RELEASE OF RIGHTS | 0.00 | 0.00 | 0.00 | 0.00 |
| 103 | WISCONSIN PUBLIC SERVICE - GAS | RELEASE OF RIGHTS | 0.00 | 0.00 | 0.00 | 0.00 |

4

REVISION DATE

DATE _____

SCALE, FEET
0 --- N/A

HWY: USH 141

COUNTY: MARINETTE

STATE R/W PROJECT NUMBER 1491-12-21

CONSTRUCTION PROJECT NUMBER 1491-12-71

PLAT SHEET 405

PS&E SHEET 132

E

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLATS\RWPLAT.DWG

PLOT DATE : 4/16/2014 10:50 AM

PLOT BY : JEFF GILROY

PLOT NAME : _____

R-20-E

N

TOWN

OF

WAUSAUKEE

VILLAGE

OF

WAUSAUKEE

4

4

T-33-N

T-34-N

NW-NW SEC 1

NE-NW SEC 1

SW-NW SEC 36

NW-SW SEC 36

SE-NW SEC 36

NE-SW SEC 36

SE-SW SEC 36

NE-NE SEC 35

SE-NE SEC 35

NW-NW SEC 36

SW-NW SEC 36

NE-NW SEC 36

SE-NW SEC 36

SW-SW SEC 25

SE-SW SEC 25

SE-SE SEC 26

1ST RD.

1ST ST.

CHURCH ST.

DIVISION ST.

ELIZABETH ST.

CEDAR ST.

POPLAR ST.

BEACH AVE.

VICKIE DR.

KENNY DR.

PUMP HOUSE RD.

MAPLE AVE.

PERCH LAKE RD.

MONROE AVE.

MILWAUKEE AVE.

MARINETTE AVE.

VAN BUREN AVE.

BUTTERNUT AVE.

JACKSON AVE.

TYLER AVE.

POLK AVE.

HARRISON AVE.

FAIRGROUNDS RD.

NORTH AVE.

CTH C

WAUSAUKEE RIVER

EVERGREEN LAKE

USH 141

STH 180

50

60

70

80

90

100

110

120

1 2 3 4 6 7 8 11 12 13 14 16 18 19 21 22 23 24 26 27 28 29 31 32 33 34 36 37 38 39 41 42

R-20-E

| REVISION DATE | DATE | NOT TO SCALE | HWY: USH 141 | STATE R/W PROJECT NUMBER 1491-12-21 | PLAT SHEET 4.06 | |
|---|---|---|---|---|---|---|
| | | | COUNTY: MARINETTE | CONSTRUCTION PROJECT NUMBER 1491-12-71 | PS&E SHEET 133 | E |

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLATS\040103_RP.DWG PLOT DATE : 4/16/2014 11:31 AM PLOT BY : JEFF GILROY PLOT NAME :

WISDOT/CADDS SHEET 70

SEC #500010
BRASS CAP
Y = 246326.00
X = 719616.27

NOTE:
EXISTING ACCESS CONTROL ALONG U.S.H. 141 ESTABLISHED FROM PREVIOUS PROJECT CA 1490-03-29, DATED OCTOBER 23, 1991, DOC. 516829, J4257, I19.

VILLAGE OF WAUSAUKEE

PUMP HOUSE RD.

CHURCH ST.

MAPLE ST.

LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
DUTTONS ORIGINAL PLAT OF THE VILLAGE OF WAUSAUKEE
BLOCK 3

PERCH LAKE RD.

1st ST.

APPROXIMATE SIXTEENTH LINE

RUINS

SW-SW SEC 36

ESCANABA & LAKE SUPERIOR RR CO.

1st AVE.

N1°21'27"E 33.00'

BEGIN RELOCATION ORDER
STA. =52+22.36
N = 246296.87
E = 720845.43

EXISTING R/W

N7°41'42"E 44.84'

N7°51'00"E 1259.57'

S87°59'18"E 20.17'

24.46'

S88°22'34"E 70.71'

S1°36'59"W 45.26'

N88°38'33"W 2639.34' (SEC - SEC)

N88°38'33"E 94.10'

54 56 N7°31'47"E 3208.73' (PI-PC) 58 USH 141 60 62 64 66

1291.48'

S88°23'15"E 31.30'

S7°44'21"W 309.40'

S7°23'59"W 50.77'

S7°23'59"W 407.08'

S82°36'01"E 5.00'

S6°47'02"E 60.65'

EXISTING R/W

S40°10'15"E 99.49'

N1°21'27"W 56.28'

CANOPY

80'

105'

75'

WISCONSIN PUBLIC SERVICE - ELECTRIC

CENTURYLINK - TELEPHONE

JOHN W. LESNIAK
ELLEN M. LESNIAK

G.P.
THE MINI BUSINESS PARTNERSHIP DBA
GOCHT KENNETH C ETAL

TLE 53+56.17 80.00'
TLE 58+50.00 80.00'
TLE 59+00.00 105.00'
TLE 60+00.00 105.00'
TLE 60+57.78 115.00'
TLE 61+16.55 100.00'
TLE 61+50.00 68.79'
TLE 63+80.00 75.00' & 68.27'
TLE 65+21.08 75.00'

N88°23'15"W 46.24'

GERALD FIGAS
ROSALYN FIGAS

KENNY AVE.

S88°23'15"E

DICKINSON COUNTY HEALTHCARE SYSTEM

STATE BANK OF FLORENCE

BUTTERNUT AVE.

N87°59'18"W 7.08'

SE-SW SEC 36

TOWN OF WAUSAUKEE

STH 180

VICKIE DR.

SEC #500000
MAG NAIL
Y = 246263.47
X = 722254.87

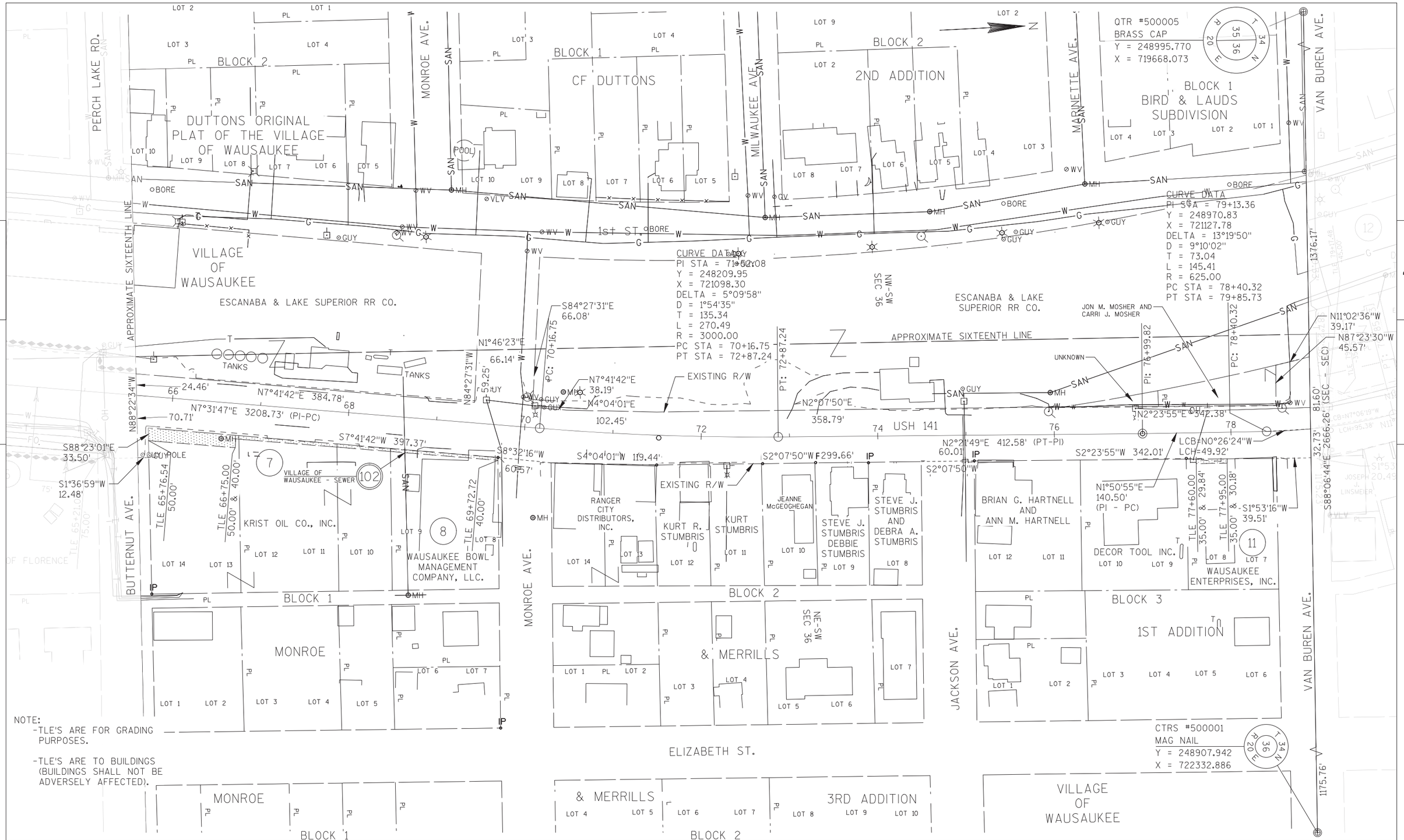
NOTE:
TLE'S ARE FOR GRADING PURPOSES.

VILLAGE OF WAUSAUKEE

| REVISION DATE | DATE | SCALE, FEET | HWY: USH 141 | STATE R/W PROJECT NUMBER 1491-12-21 | PLAT SHEET 4.07 | |
|---|---|---|---|---|---|---|
| | GRID FACTOR | 0 50 100 | COUNTY: MARINETTE | CONSTRUCTION PROJECT NUMBER 1491-12-71 | PS&E SHEET 134 | E |

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLATS\RWPLAT.DWG PLOT DATE : 4/16/2014 10:53 AM PLOT BY : JEFF GILROY PLOT NAME : _____ PLOT SCALE : 1" = 100'_XREF

WISDOT/CADDS SHEET 75

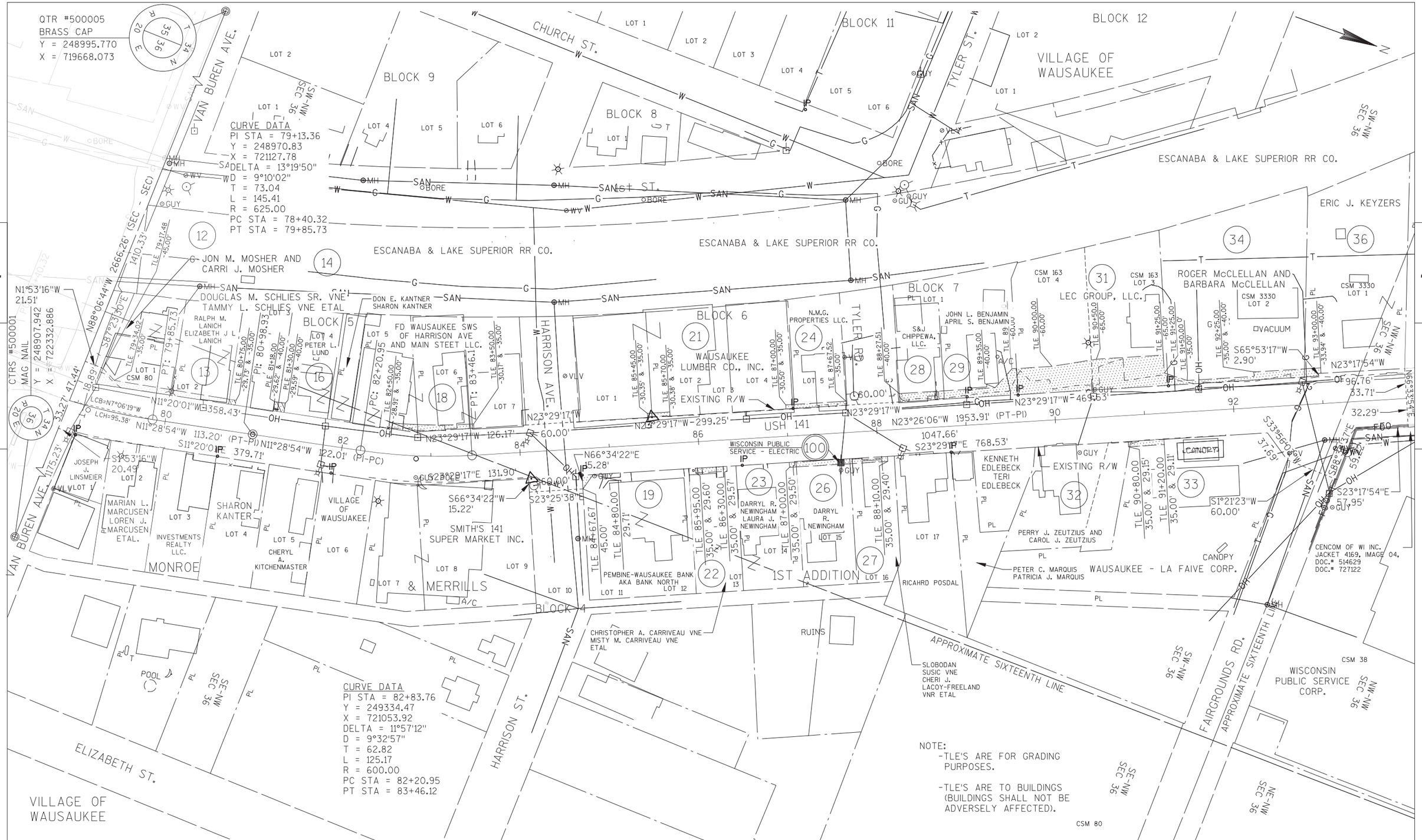



NOTE:
-TLE'S ARE FOR GRADING PURPOSES.

-TLE'S ARE TO BUILDINGS (BUILDINGS SHALL NOT BE ADVERSELY AFFECTED).

| | | | | | |
|---|---|---|---|---|---|
| REVISION DATE | DATE | SCALE, FEET 0 50 100 | HWY: USH 141 | STATE R/W PROJECT NUMBER 1491-12-21 | PLAT SHEET 408 |
| | GRID FACTOR | | COUNTY: MARINETTE | CONSTRUCTION PROJECT NUMBER 1491-12-71 | PS&E SHEET 135 E |

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLATS\RWPLAT.DWG PLOT DATE : 4/16/2014 10:53 AM PLOT BY : JEFF GILROY PLOT NAME : _____PLOT SCALE : 1" = 100'_XREF




| REVISION DATE | DATE | SCALE, FEET | HWY: USH 141 | STATE R/W PROJECT NUMBER 1491-12-21 | PLAT SHEET 409 | |
|---|---|---|---|---|---|---|
| | GRID FACTOR | 0 50 100 | COUNTY: MARINETTE | CONSTRUCTION PROJECT NUMBER 1491-12-71 | PS&E SHEET 136 | E |

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLATS\RWPLAT.DWG PLOT DATE : 4/16/2014 11:52 AM PLOT BY : JEFF GILROY PLOT NAME : _____PLOT SCALE : 1" = 100'_XREF

WISDOT/CADDS SHEET 75

ESCANABA AND LAKE SUPERIOR RAILROAD

VILLAGE OF WAUSAUKEE

ASSESSORS PLAT

BLOCK 1

BLOCK 2

BLOCK 3
SEC #500003
SURVEY MARKER
Y = 251645.670
X = 719737.955

RUDOLPH AND ANN MESSAR

STATE OF WISCONSIN
WAUSAUKEE RANGER STATION AKA

IMMANUEL BAPTIST CHURCH

APPROXIMATE SIXTEENTH LINE

TANKS

HOT FLAME GAS, INC.

WISCONSIN PUBLIC SERVICE - GAS
SHAWN HYDE

LOT 16
JOHN J. AND TOSHIA J. RANALLO

DAVID G. MESSAR

LOT 15

WESTFIELD 4TH STREET LLC.

LOT 14

BEACH & BISHOPS ADDITION

JOSEPH J. AND JANE A. FRITZ

LOT 1

LOT 2
ALAN N. AND BOBBI R. ROES

LOT 13
MONTY AND KAREN BETTS

LOT 12

DONALD DUGAN

LOT 3

LOT 11
CHERYL L. NELSON

LOT 4

LOT 5

LOT 6

LOT 7

WAUSAUKEE RIVER

EXISTING R/W

USH 141

CTH C

DIVISION ST

NORTH AVE.

BEACH AVE.

N30°18'08"W 352.55'

N23°24'36"W 237.30'

N60°00'50"W 203.83'

N23°24'36"W 64.15'

N23°24'36"W 149.71'

N88°27'09"W 22.93'

N23°17'54"W 226.60'

N23°26'06"W 1953.91' (PT-PI)

N23°18'50"W 1134.73' (PI-PI)

S23°17'54"E 500.20'

S23°22'13"E 295.56'

S0°00'00"E 92.84'

S17°56'59"E 45.45'

S28°26'47"E 232.29'

N28°26'47"W 100.02'

S1°32'51"W 143.97'

S1°32'51"W 33.07'

N1°32'24"E 27.02'

N1°32'51"E 20.00'

N1°32'51"E 29.27'

N1°32'51"E 106.84'

N21°38'42"W 93.90'

S66°33'54"W 83.71'

S66°33'54"W 32.29'

N88°27'09"W 169.12'

S88°27'36"E 2673.58' (SEC - SEC)

S88°27'36"E 780.89'

N1°32'24"E 150.00'

S88°27'09"E 86.83'

2173.58'

2277.58'

906.25'

492.47'

CENCOM OF WI INC.
JACKET 4169, IMAGE 04,
DOC. #514629
DOC. #727122

CENCOM OF WI INC.
JACKET 4169, IMAGE 06,
DOC#514630

CENCOM OF WI INC.
JACKET 4169, IMAGE 06,
DOC. #514630

CSM 38
WISCONSIN PUBLIC SERVICE CORP.

THE HOUSING AUTHORITY OF THE VILLAGE OF WAUSAUKEE

VILLAGE OF WAUSAUKEE

TRENT S. AND BECKY A. MAYE

JOSEPH D. WOMACK

BARBARA HARRIS
HELEN LE HANYSZ ETAL

ALBERT R. AND MARIE D. MAYE

(POOL)
GEORGE F. AND MARGE SMITH

WILLIAN P. AND PATRICIA R. BRAKER ETAL

EXISTING PLATTED RIGHT-OF-WAY

EVERGREEN LAKE

NW-NW SEC 36

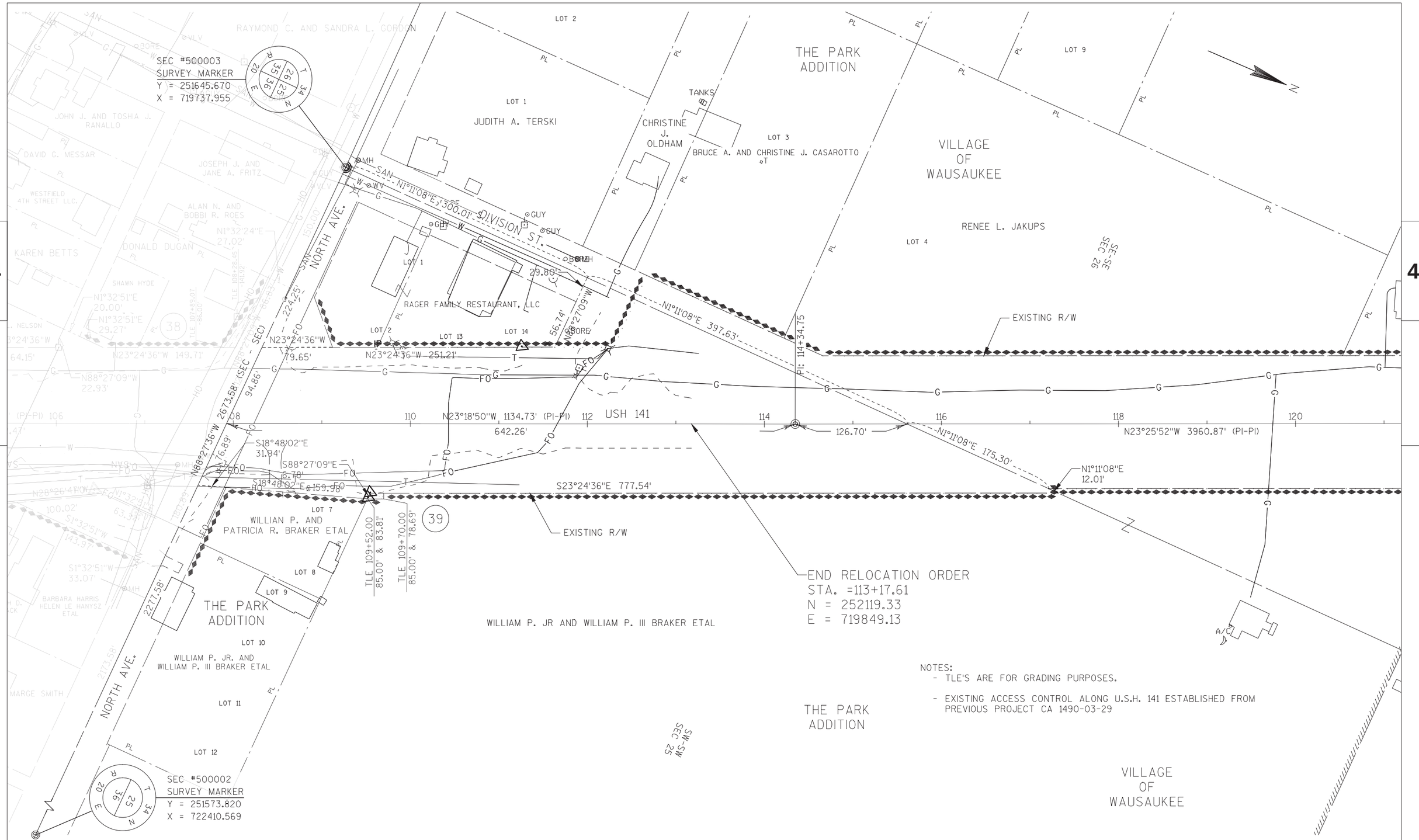
NOTES:
- TLE'S ARE FOR GRADING PURPOSES.

-EXISTING ACCESS CONTROL ALONG U.S.H. 141 ESTABLISHED FROM PREVIOUS PROJECT CA 1490-03-29

SEC #500002
SURVEY MARKER
Y = 251573.820
X = 722410.569

| REVISION DATE | DATE | SCALE, FEET | HWY: USH 141 | STATE R/W PROJECT NUMBER 1491-12-21 | PLAT SHEET 4.10 | |
|---|---|---|---|---|---|---|
| | GRID FACTOR | 0 50 100 | COUNTY: MARINETTE | CONSTRUCTION PROJECT NUMBER 1491-12-71 | PS&E SHEET 137 | E |

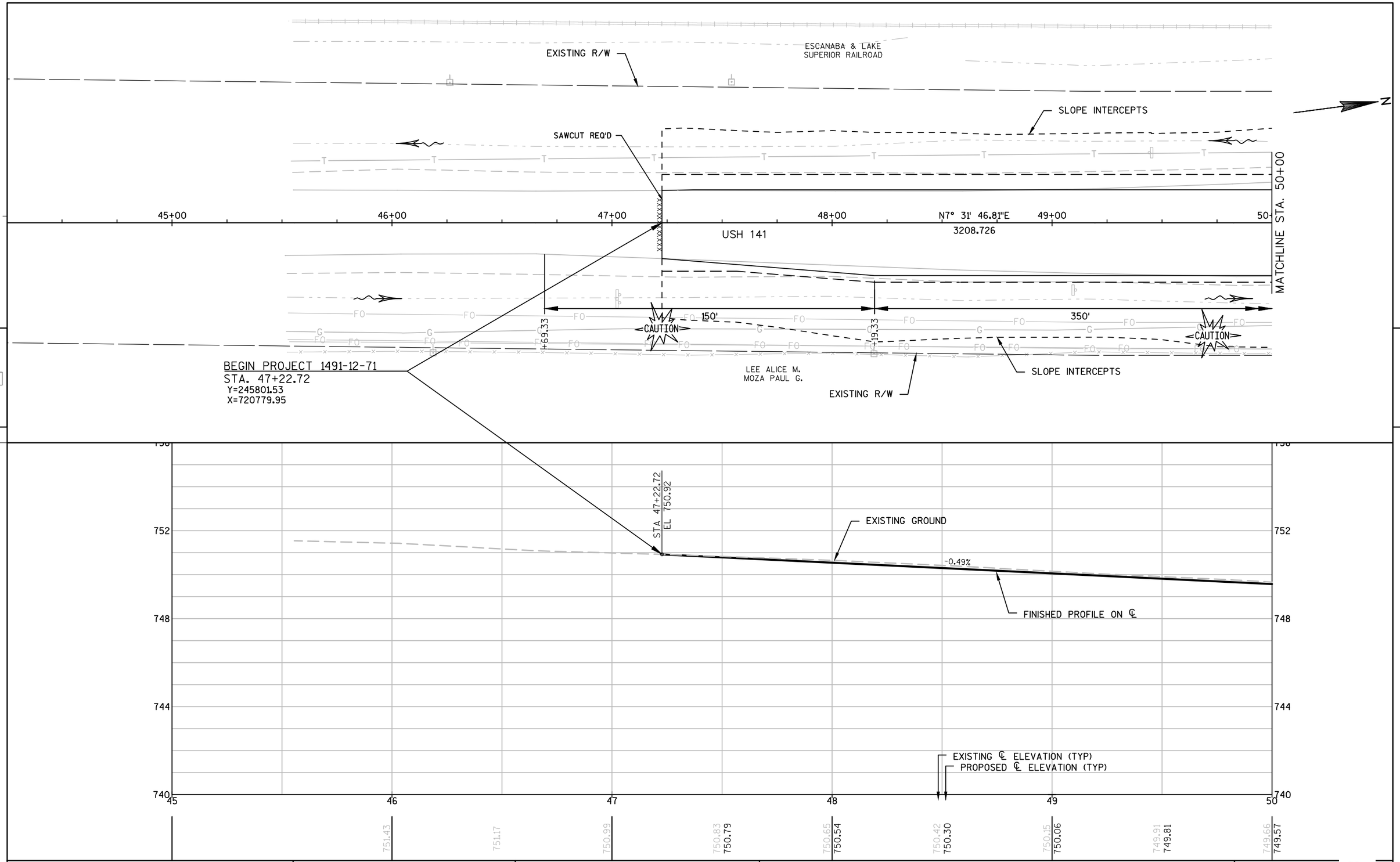
FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLATS\RWPLAT.DWG PLOT DATE : 4/16/2014 11:27 AM PLOT BY : JEFF GILROY PLOT NAME : _____PLOT SCALE : 1" = 100'_XREF




NOTES:
- TLE'S ARE FOR GRADING PURPOSES.
- EXISTING ACCESS CONTROL ALONG U.S.H. 141 ESTABLISHED FROM PREVIOUS PROJECT CA 1490-03-29

| | | | | | |
|---|---|---|---|---|---|
| REVISION DATE | DATE | SCALE, FEET 0 50 100 | HWY: USH 141 | STATE R/W PROJECT NUMBER 1491-12-21 | PLAT SHEET 4.11 |
| | GRID FACTOR | | COUNTY: MARINETTE | CONSTRUCTION PROJECT NUMBER 1491-12-71 | PS&E SHEET 138 E |

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLATS\RWPLAT.DWG PLOT DATE : 4/16/2014 11:28 AM PLOT BY : JEFF GILROY PLOT NAME : _____PLOT SCALE : 1" = 100'_XREF




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 139 E |
|---|---|---|---|---|

ESCANABA AND LAKE SUPERIOR RAILROAD

CONSTRUCTION LIMITS
STA. 9+83.48
SAWCUT REQ'D

CAUTION

EXISTING R/W

R50'

15'

1ST ST.

10+

+73.08

+53.08

80'

GUY

R55'

+85.22

ESCANABA AND LAKE SUPERIOR RAILROAD

PROPOSED HE

REMOVING SMALL PIPE CULVERTS

SLOPE INTERCEPTS

N

EXISTING R/W

200'

+85.22

87.50'

+72.72

MATCH LINE STA. 50+00

MATCH LINE STA. 56+00

USH 141 STA. 52+16.48 =
1ST ST. STA 9+00.00
TYPE "B1" MODIFIED
INTERSECTION REQ'D

00 51+00 52+00 53+00 N7° 31' 46.81"E 54+00 55+00 56+

3208.726

USH 141

USH 141 STA. 52+27.13 =
STH 180 STA. 10+00.00
TYPE "A2" INTERSECTION REQ'D

108 LF - CPRC 18-INCH
2 EA - AECPRC 18-INCH

+03.04

66.67'

52+95.67, 47.41' R
53+02.27, 51.65' R

+69.70

R45'

+89.15
68.74'

+00.64
67.25'

+11.72
64.32'

+25.76
62.50'

CAUTION

350'

+69.33

R40'

R50'

+29.94
71.24'

+38.36
69.67'

+48.43
68.74'

+21.70
72.00'

51+87.85, 53.32' R

REMOVING SMALL PIPE CULVERTS

CONSTRUCTION LIMITS
(SEE STH 180 PLAN
AND PROFILE SHEET)

STH 180

R45'

R55'

EXISTING R/W

LEE ALICE M.
MOZA PAUL G.

42 LF - CSCP 18-INCH
2 EA - AEW 18-INCH

52+81.11, 87.79' R

R55'

SLOPE INTERCEPTS

THE MINI BUSINESS PARTNERSHIP DBA
GOCHT KENNETH C. ETAL
(EXXON QUIKSTOP)

EXISTING R/W

TLE FOR GRADING

VCL = 50.00
K = 125.24

-0.49%

℄ 1ST ST.

℄ STH 180

FINISHED PROFILE ON ℄

EXISTING GROUND

CPCS 18-INCH
42' @ 2.80%

CPRC CLASS IV 18-INCH
108' @ 0.72%

744.59

744.38

744.34

743.56

743.52

743.42

VPC STA 55+75.00
VPC EL 746.77

VPI STA 56+00.00
VPI EL 746.65

EXISTING ℄ ELEVATION (TYP)
PROPOSED ℄ ELEVATION (TYP)

752 748 744 740 736

50 51 52 53 54 55 56

749.66 749.57 | 749.39 749.33 | 749.11 749.09 | 748.84 748.84 | 748.57 748.60 | 748.25 748.36 | 747.99 748.11 | 747.72 747.87 | 747.46 747.63 | 747.23 747.38 | 746.99 747.14 | 746.77 746.90 | 746.65 746.68

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 140 E |
|---|---|---|---|---|

ESCANABA AND LAKE SUPERIOR RAILROAD

N

PROPOSED HE

80 LF - CPRC 30-INCH
2 EA - AECPRC 36-INCH

SLOPE INTERCEPTS

EXISTING R/W

USH 141 STA. 60+78.94 =
KENNY AVE. STA 20+00.00
TYPE "D" MODIFIED
INTERSECTION REQ'D

59+00.00, -40.21' L
INV = 740.44

MATCH LINE STA. 56+00

MATCH LINE STA. 62+00

00 | 57+00 | 58+00 | 59+00 | N7° 31' 46.81"E | 60+00 | 61+00 | 62

USH 141

3208.726

REMOVING SMALL
PIPE CULVERTS

+11.62

+27.14
31.00'

R8'

65.56'

+20.12
35.18'

+14.33
45.80'

R32'

+86.23
62.50'

+46.06

59+00.00, 39.75' R
INV = 740.54

R10'

+28.28
31.00'

+40.27

52.50'

+37.23
36.55'

+43.93
50.01'

R18'

+60.05
60.00'

+92.77

KENNY AVE.

CAUTION

SLOPE INTERCEPTS

JOHN W. LESNIAK
ELLEN M. LESNIAK
(SUBWAY)

TLE FOR GRADING

EXISTING R/W

GERALD FIGAS
ROSALYN FIGAS
(J&R AUTO PARTS CARQUEST)

TLE FOR GRADING

CONSTRUCTION LIMITS
STA. 20+93.27
SAWCUT REQ'D

VCL = 50.00
K = 125.24

748

744

740

736

EXISTING GROUND

FINISHED PROFILE ON ℄

℄ KENNY AVE.

-0.09%

VPI STA 56+00.00
VPI EL 746.65

VPT STA 56+25.00
VPT EL 746.63

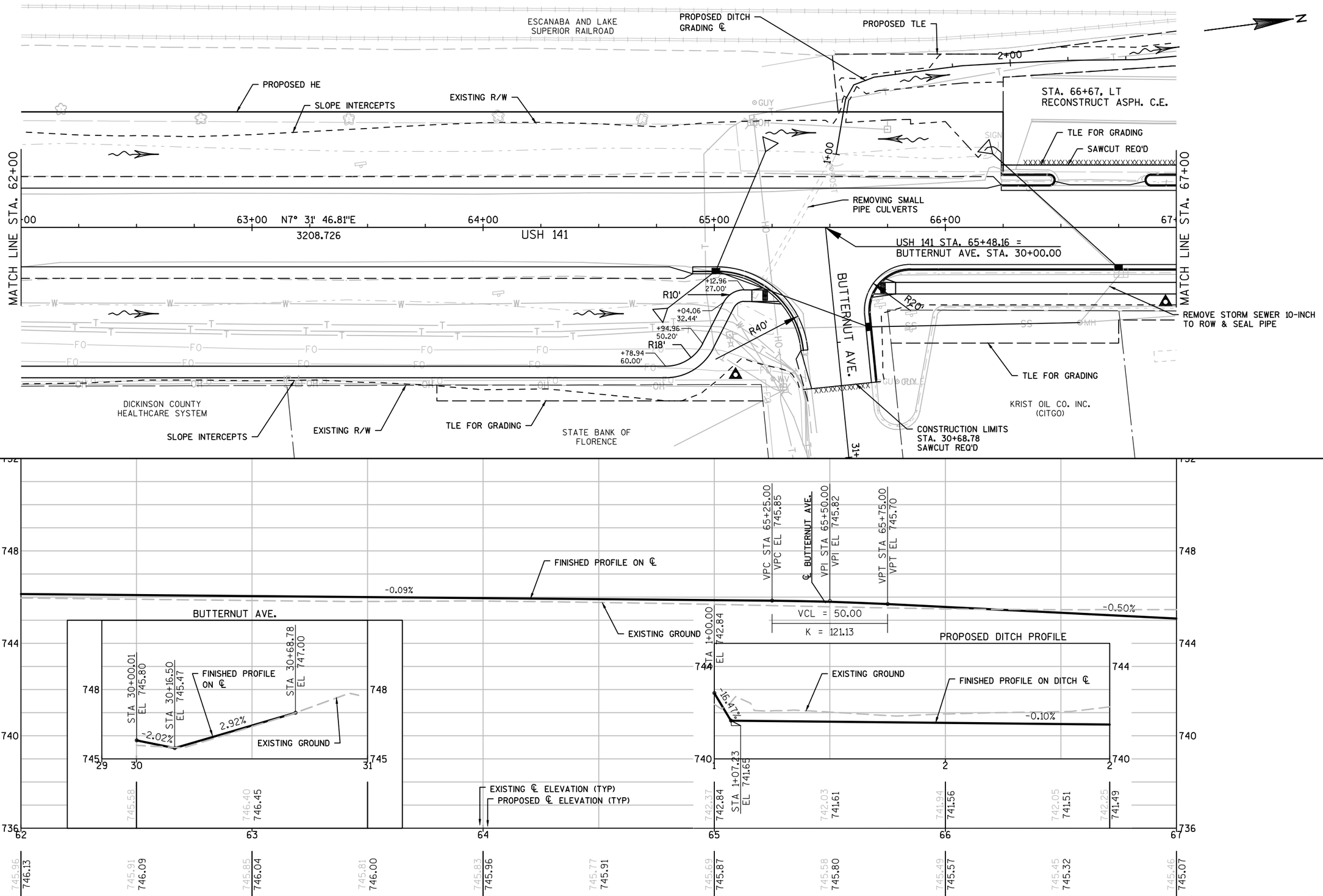
CPRC CLASS III 30-INCH
80' @ 0.12%

EXISTING ℄ ELEVATION (TYP)
PROPOSED ℄ ELEVATION (TYP)

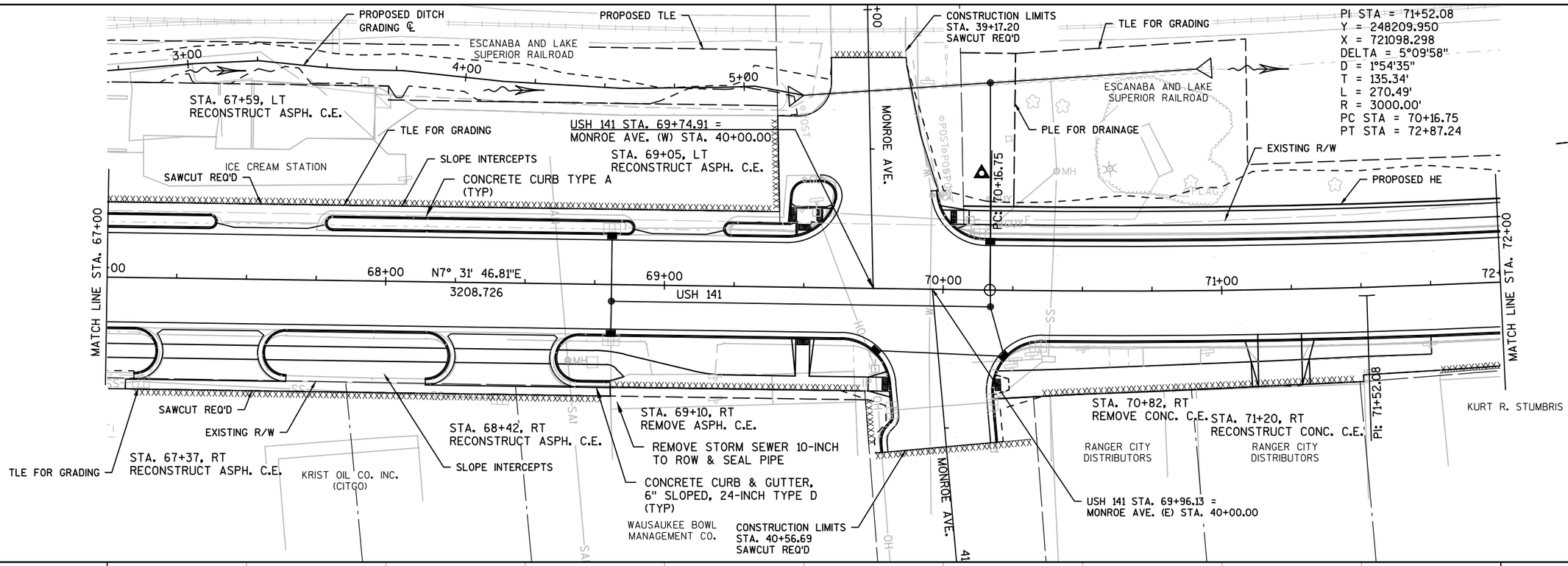
56 | 57 | 58 | 59 | 60 | 61 | 62

| 746.65 | 746.57 | 746.53 | 746.47 | 746.39 | 746.31 | 746.23 | 746.20 | 746.16 | 746.13 | 746.08 | 746.01 | 745.96 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 746.68 | 746.61 | 746.57 | 746.52 | 746.48 | 746.43 | 746.39 | 746.35 | 746.30 | 746.26 | 746.22 | 746.17 | 746.13 |

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 141 E |
|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 142 E |
|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 143 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLANPROFILE\050101 PP.DWG PLOT DATE : 8/26/2015 11:43 AM PLOT BY : JEFF GILROY PLOT NAME : _____ PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

PLE FOR DRAINAGE

STA. 72+78, LT
CONSTRUCT GR. C.E.

ESCANABA AND LAKE SUPERIOR RAILROAD

CAUTION

TLE FOR GRADING

EXISTING R/W

STA. 75+66, LT
RECONSTRUCT GR. C.E.

SLOPE INTERCEPTS

STA. 76+50, LT
REMOVE GR. F.E.

PROPOSED HE

LENNOX AIR CONDITIONING AND HEATING

STA. 74+30, LT
RECONSTRUCT ASPH. C.E.

PT: 72+87.24

STA. 73+17, LT
REMOVE GR. C.E.

MATCH LINE STA. 72+00

MATCH LINE STA. 77+00

73+00 74+00 75+00 76+00

N2° 21' 49.14"E
412.577

USH 141

R20'

R20'

STA. 72+17, RT
RECONSTRUCT GR. C.E.

EXISTING R/W

KURT R. STUMBRIS
(STUMBRIS PLUMBING)

JEANNE
McGEOGHEGAN

STEVE J. STUMBRIS
DEBBIE A. STUMBRIS

STEVE J. STUMBRIS
DEBBIE A. STUMBRIS

CONSTRUCTION LIMITS
STA. 50+46.12
SAWCUT REQ'D

JACKSON AVE.

CAUTION

BRIAN G. HARTNELL
ANN M. HARTNELL
(GRAPHIC IMPRESSIONS)

USH 141 STA. 74+79.14 =
JACKSON AVE. STA. 50+00.00

DECOR TOOL INC.

N

VPC STA 73+00.00
VPC EL 749.58

VPI STA 73+25.00
VPI EL 749.90

VPT STA 73+50.00
VPT EL 750.02

VPC STA 74+25.00
VPC EL 750.40

HP STA 74+49.69
HP EL 750.46

℄ JACKSON AVE.

VPI STA 75+50.00
VPI EL 751.02

VPT STA 76+75.00
VPT EL 745.32

1.27%

0.50%

-4.56%

JACKSON AVE.

FINISHED PROFILE ON ℄

EXISTING GROUND

VCL = 50.00
K = 65.23

VCL = 250.00
K = 49.37

STA 50+00.00
EL 750.37

STA 50+16.00
EL 750.05

STA 50+46.12
EL 750.67

-2.00%

2.04%

FINISHED PROFILE ON ℄

EXISTING GROUND

EXISTING ℄ ELEVATION (TYP)

PROPOSED ℄ ELEVATION (TYP)

752 752 752 752 752 752 752 752 752 752 752 752

748 748 748 748 748 748 748 748 748 748 748 748

744 744 744 744 744 744 744 744 744 744 744 744

740 740 740 740 740 740 740 740 740 740 740 740

72 73 74 75 76 77

748.14 748.32 748.76 748.95 749.40 749.58 750.05 750.02 750.57 750.27 750.80 750.46 750.50 750.20 749.63 749.44 748.27 748.17 746.46 746.40 744.42 744.18

750.79 750.37 750.68 751.15

49 50 50

749 749

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 144 E |
|---|---|---|---|---|

CONSTRUCTION LIMITS
STA. 59+56.95
SAWCUT REQ'D

USH 141 STA. 78+85.52 =
VAN BUREN AVE. (W) STA. 60+00.00

PI STA = 79+13.36
Y = 248970.827
X = 721127.784
DELTA = 13°19'50"
D = 9°10'02"
T = 73.04'
L = 145.41'
R = 625.00'
PC STA = 78+40.32
PT STA = 79+85.73

PI STA = 82+83.76
Y = 249334.466
X = 721053.922
DELTA = 11°57'12"
D = 9°32'57"
T = 62.82'
L = 125.17'
R = 600.00'
PC STA = 82+20.95
PT STA = 83+46.12

N

JON M. MOSHER
CARRI J. MOSHER
(EMPTY LOT)

RALPH M. LANICH
ELIZABETH J. LANICH
(J's BOUTIQUE)

JOHN M. GUARISCO
DEBORAH J. GUARISCO
(NORTH COUNTY REAL ESTATE)

PETER L. LUND

DON E. KANTNER
SHARON KANTNER
(NORTHWOODS TRADITIONS)

FAMILY DOLLAR

SLOPE INTERCEPTS
STA. 78+23, LT
REMOVE GR. F.E.

BENJAMIN A. SHERRI NKA
MARTIN A. SHERRI FKA
(MOSHER AUTO REPAIR)

TLE FOR GRADING
STA. 79+85, LT
RECONSTRUCT ASPH. C.E.

EXISTING R/W

TLE FOR GRADING
STA. 80+17, LT
RECONSTRUCT ASPH. C.E.

PLE
FOR DRAINAGE

TLE FOR GRADING

MATCH LINE STA. 77+00

MATCH LINE STA. 83+00

PI: 76+99.82

PC: 78+40.32

PI: 79+85.73

PI: 80+98.93

PC: 82+20.95

PI: 82+83.76

R23

R20

R24

R15

N1° 50' 55.49"E
140.504

78+00

79+00

80+00 N11° 28' 54.03"W
113.200

81+00

N11° 28' 53.84"W
122.013

82+00

USH 141

TLE FOR GRADING
STA. 77+77, RT
RECONSTRUCT CONC. C.E.

DECOR TOOL INC.

WAUSAUKEE
ENTERPRISES INC.
(THE WE STORE)

USH 141 STA. 78+84.50 =
VAN BUREN AVE. (E) STA. 60+00.00

VAN BUREN AVE. (E)

VAN BUREN AVE. (W)

PI: 79+13.36

R20

CONSTRUCTION LIMITS
STA. 60+43.73
SAWCUT REQ'D

SLOPE INTERCEPTS

STA. 80+17, RT
RECONSTRUCT ASPH. C.E.

EXISTING R/W

JOSEPH J. LINSMEIER
(CHAIN SAW SHOP)

MARIAN L. MARCUSEN
LOREN J. MARCUSEN
ETAL

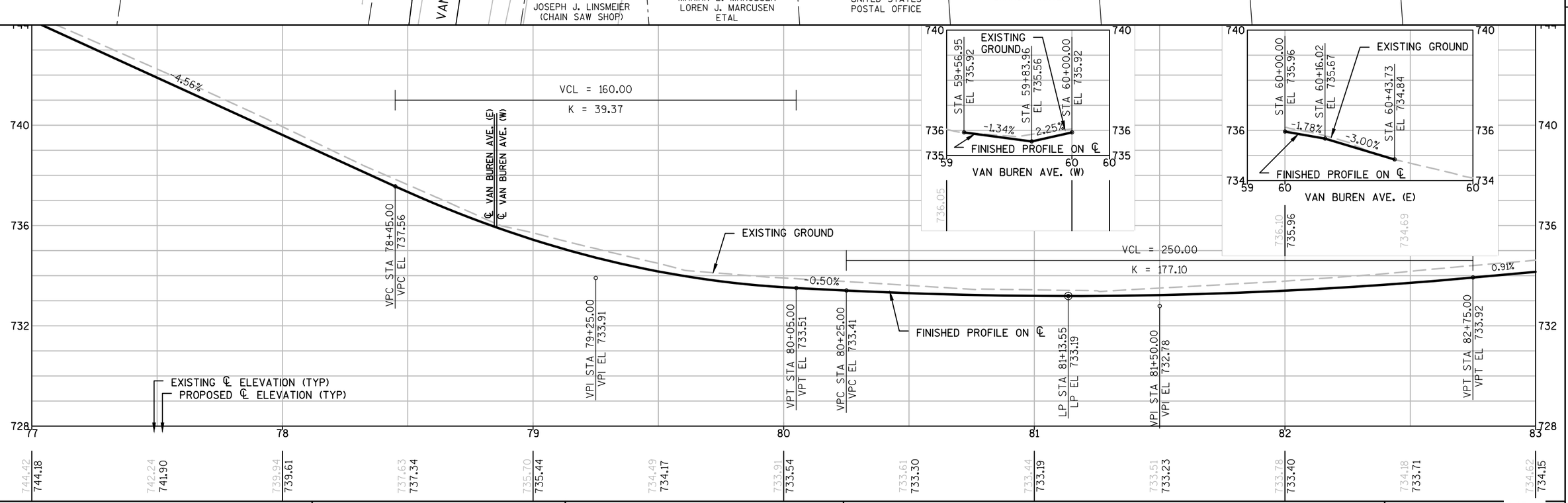
UNITED STATES
POSTAL OFFICE

SHARON KANTER

CHERYL A. KITCHMASTER

VILLAGE OF
WAUSAUKEE
(PARK)

SMITHS 141 SUPER
MARKET INC.










| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 145 E |
|---|---|---|---|---|

PI STA = 82+83.76
Y = 249334.466
X = 721053.922
DELTA = 11°57'12"
D = 9°32'57"
T = 62.82'
L = 125.17'
R = 600.00'
PC STA = 82+20.95
PT STA = 83+46.12

STA. 83+01, LT
RECONSTRUCT ASPH. C.E.

TLE FOR GRADING

FAMILY DOLLAR

PT 83+46.12

HARRISON AVE. (W)

CONSTRUCTION LIMITS
STA. 69+53.99
SAWCUT REQ'D

WAUSAUKEE
LUMBER CO.
(PUBLIC LIBRARY)

STA. 85+57, LT
RECONSTRUCT CONC. C.E.

STA. 86+32, LT
RECONSTRUCT CONC. C.E.

EXISTING R/W

WAUSAUKEE
LUMBER CO.

REBECCA J. LACOY VNE
THOMAS M. DELEBREAU VNR
ETAL.
(BECCA'S ANTIQUES AND
TRADING POST)

CONSTRUCTION LIMITS
STA. 79+54.00
SAWCUT REQ'D

TYLER AVE.

PI: 79+21.16

S&J CHIPPEWA LLC. VNE
KIM E. ORLANDO VNR
ETAL.
(CHIPPEWA BAR)

CAUTION

CONCRETE CURB
PEDESTIAN

MATCH LINE STA. 83+00

84+00 85+00 86+00 87+00 88+00 89+

N23° 26' 05.73"W
1953.908

USH 141

MATCH LINE STA. 89+00

SMITHS 141 SUPER
MARKET INC.

USH 141 STA. 84+40.45 =
HARRISON AVE. (E&W) STA. 70+00.00

HARRISON AVE. (E)

CONSTRUCTION LIMITS
STA. 70+41.67
SAWCUT REQ'D

TLE FOR GRADING

BANK NORTH

DOUGLAS J. CARRIVEAU
JOYCE M. CARRIVEAU

DARRYL R. NEWINGHAM
LAURA J. NEWINGHAM

EXISTING R/W

STA. 87+63, RT
RECONSTRUCT CONC. C.E.

TLE FOR GRADING

TLE FOR GRADING

DARRYL R. NEWINGHAM
(NEWINGHAMS SUPPER CLUB)

USH 141 STA. 87+97.42 =
TYLER AVE. STA. 80+00.00

SUSIE SLOBODAN VNE
CHERI J. LACOY-FREELAND VNR
ETAL
(BAKE SHOPPE)

MAIN STREET FLORAL

N

EXISTING GROUND

FINISHED PROFILE ON ℄

0.91%

℄ HARRISON AVE.

VPC STA 85+75.00
VPC EL 736.66

HP STA 86+91.62
HP EL 737.19

VPI STA 87+50.00
VPI EL 738.25

℄ TYLER AVE.

VCL = 350.00
K = 127.92

EXISTING ℄ ELEVATION (TYP)
PROPOSED ℄ ELEVATION (TYP)

740 736 732 728 726

83 84 85 86 87 88 89

734.62 734.15 | 735.10 734.61 | 735.53 735.06 | 736.02 735.52 | 736.37 735.98 | 736.70 736.43 | 736.95 736.86 | 737.12 737.12 | 737.30 737.19 | 737.39 737.06 | 737.39 736.73 | 736.91 736.21 | 736.11 735.49

HARRISON AVE. (W & E)

| STA 69+54.00 | STA 69+84.01 | STA 70+00.00 | STA 70+16.01 | STA 70+41.67 |
|---|---|---|---|---|
| EL 735.57 | EL 735.11 | EL 735.43 | EL 735.11 | EL 734.77 |

-1.53% 2.00% -1.99% -1.35%

735.46 735.93 735.43 734.46

TYLER AVE.

| STA 79+54.26 | STA 79+84.01 | STA 80+00.00 |
|---|---|---|
| EL 737.39 | EL 736.43 | EL 736.75 |

-3.20% 2.00%

737.42

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 146 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLANPROFILE\050101 PP.DWG PLOT DATE : 10/12/2015 8:38 AM PLOT BY : JEFF GILROY PLOT NAME : _____ PLOT SCALE : 1:40_XREF

JOHN L. BENJAMIN
APRIL S. BENJAMIN

LEC GROUP LLC.
(RANGER PHARMACY)

ROGER McCLELLEN
BARBARA McCLELLEN
(JUST DUCKY CAR WASH)

ERIC J. KEYZERS
(ERIC'S SERVICE)

SLOPE INTERCEPTS

TLE FOR GRADING

EXISTING R/W

STA. 89+80, LT
RECONSTRUCT ASPH. C.E.

STA. 90+66, LT
RECONSTRUCT ASPH. C.E.

STA. 91+85, LT
RECONSTRUCT ASPH. C.E.

STA. 92+49, LT
RECONSTRUCT ASPH. C.E.

STA. 93+07, LT
RECONSTRUCT ASPH. C.E.

STA. 93+56, LT
RECONSTRUCT ASPH. C.E.

CAUTION

MATCH LINE STA. 89+00

MATCH LINE STA. 94+00

90+00 91+00 N23° 26' 05.73"W 92+00 93+00

1953.908

USH 141

STA. 89+16, RT
RECONSTRUCT GR. C.E.

EXISTING R/W

STA. 90+50, RT
RECONSTRUCT ASPH. C.E.

STA. 91+01, RT
RECONSTRUCT ASPH. C.E.

TLE FOR GRADING

STA. 92+06, RT
RECONSTRUCT ASPH. C.E.

PETER C. MARQUIS
PATRICIA J. MARQUIS
(MARQUIS STYLE SHOP)

KENNETH EDLEBECK
TERI EDLEBECK
(EMPTY LOT)

PERRY J. ZEUTZIUS
CAROL J. ZEUTZIUS
(HOOVERS BAR)

WAUSAUKEE
LAFAIVE CORP.
(BP GAS STATION)

STA. 91+02, RT
RECONSTRUCT ASPH. C.E.

FAIRGROUNDS RD.

00+16

SLOPE INTERCEPTS

WISCONSIN PUBLIC SERVICE CORP.

USH 141 STA. 93+17.39 =
FAIRGROUND RD. STA. 90+00.00

CONSTRUCTION LIMITS
STA. 91+14.59
SAWCUT REQ'D

STA. 90+68, LT
RECONSTRUCT ASPH. C.E.

VCL = 350.00
K = 264.28

VPT STA 89+25.00
VPT EL 735.06

-1.82%

VCL = 350.00
K = 127.92

FINISHED PROFILE ON ℄
EXISTING GROUND

℄ FAIRGROUND RD.

VPC STA 90+75.00
VPC EL 732.33

VPI STA 92+50.00
VPI EL 729.13

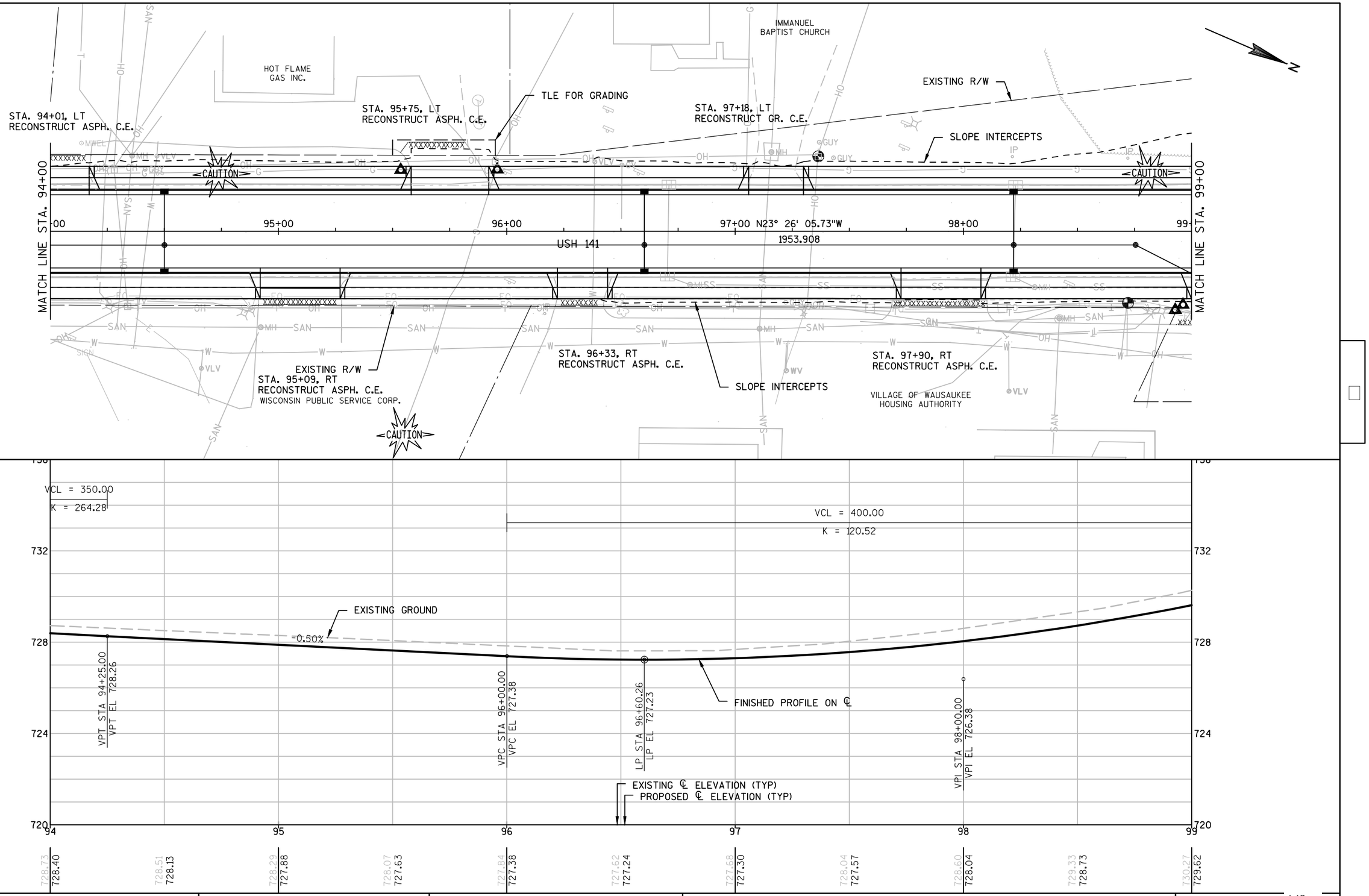
EXISTING ℄ ELEVATION (TYP)
PROPOSED ℄ ELEVATION (TYP)

736
732
728
724

89 90 91 92 93 94

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 736.11 | 735.49 | 735.28 | 734.61 | 734.39 | 733.69 | 733.57 | 732.78 | 732.61 | 731.88 | 731.61 | 731.06 | 730.78 | 730.34 | 730.03 | 729.71 | 729.53 | 729.18 | 729.07 | 728.74 | 728.73 | 728.40 |

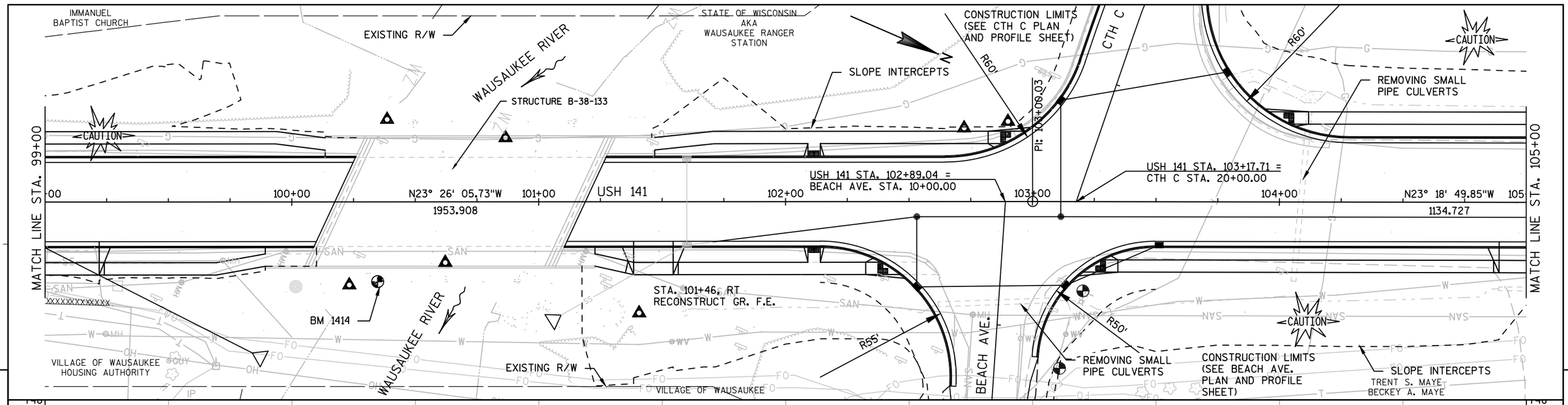
| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 147 E |
|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 148 E |
|---|---|---|---|---|

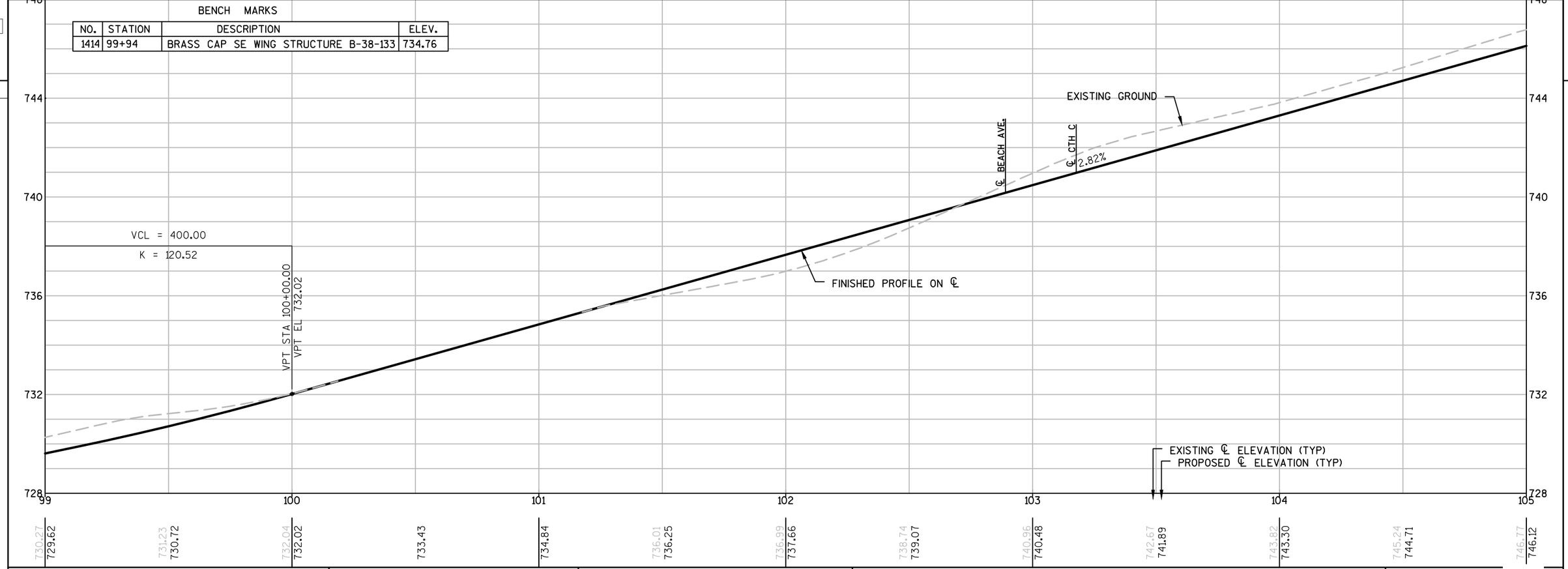
FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLANPROFILE\050101 PP.DWG PLOT DATE : 8/26/2015 11:44 AM PLOT BY : JEFF GILROY PLOT NAME : _____ PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44




BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 1414 | 99+94 | BRASS CAP SE WING STRUCTURE B-38-133 | 734.76 |




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: VILLAGE OF WAUSAUKEE | SHEET 149 E |
|---|---|---|---|---|

CHERYL L. NELSON
EXISTING R/W
SHAWN HYDE
(STARS SECONDHAND SHOPE)
TLE FOR GRADING
DONALD DUGAN
SPECIAL DITCH
R75'
NORTH AVE. (W)
00+62
CONSTRUCTION LIMITS
(SEE NORTH AVE. PLAN
AND PROFILE SHEET)
SPECIAL DITCH
816 NORTH AVE.
(MAYTAG LAUNDRY)
EXISTING R/W
CAUTION
USH 141 STA. 107+84.74 =
NORTH AVE. (W) STA. 30+00.00
R52.5'
CAUTION
STA. 105+77, LT
RECONSTRUCT GR. P.E.
REMOVING SMALL
PIPE CULVERTS
SLOPE INTERCEPTS
REMOVING SMALL
PIPE CULVERTS
MATCH LINE STA. 105+00
+00
N23° 18' 49.85"W
106+00
USH 141
107+00
108+00
109+00
110
MATCH LINE STA. 110+00
1134.727
STA. 106+24, RT
RECONSTRUCT GR. P.E.
R50'
STA. 105+01, RT
RECONSTRUCT GR. P.E.
REMOVING SMALL
PIPE CULVERTS
REMOVING SMALL
PIPE CULVERTS
REMOVING SMALL
PIPE CULVERTS
R60'
REMOVING SMALL
PIPE CULVERTS
STA. 108+50, RT
RECONSTRUCT GR. F.E.
STA. 105+68, RT
RECONSTRUCT GR. P.E.
JOSEPH D. WOMACK
BARBARA HARRIS
HELEN HANYSZ
LE ETAL
CONSTRUCTION LIMITS
(SEE NORTH AVE.
PLAN AND PROFILE
SHEET)
CAUTION
NORTH AVE. (E)
31+00
USH 141 STA. 107+71.11 =
NORTH AVE. (E) STA. 30+00.00
WILLIAM P. BRAKER PATRICIA R. BRAKER
ETAL
EXISTING R/W
SLOPE INTERCEPTS
TLE FOR GRADING
EXISTING R/W

VPI STA 109+50.00
VPI EL 758.80
HP STA 109+82.59
HP EL 755.03
℄ NORTH AVE. (E)
℄ NORTH AVE. (W)
FINISHED PROFILE ON ℄
VPC STA 106+50.00
VPC EL 750.34
EXISTING GROUND
2.82%
2.82%
VCL = 600.00
K = 117.99
EXISTING ℄ ELEVATION (TYP)
PROPOSED ℄ ELEVATION (TYP)

| | | | | |
|---|---|---|---|---|
| 756 | | | | 756 |
| 752 | | | | 752 |
| 748 | | | | 748 |
| 744 | | | | 744 |
| 105 | 106 | 107 | 108 | 109 | 110 |
| 746.77 / 746.12 | 748.06 / 747.52 | 749.26 / 748.93 | 750.50 / 750.34 | 751.67 / 751.65 | 752.74 / 752.74 | 753.59 / 753.62 | 754.17 / 754.29 | 754.64 / 754.74 | 754.94 / 754.99 | 754.94 / 755.02 |

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 150 E |

RANGER FAMILY RESTAURANT

PROPOSED R/W

EXISTING R/W

BM 604

DIVISION ST.

CONSTRUCTION LIMITS (SEE DIVISION ST. PLAN AND PROFILE SHEET)

BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 604 | 111+14.88 | PAINT MARK TOP SE BOLT ON CONCRETE SIGN BASE FOR RANGER CITY RESTAURANT | 758.25 |

CAUTION

SLOPE INTERCEPTS

MGS GUARDRAIL TERMINAL EAT

CONNECT RAIL TO EXISTING

PI: 114+34.75

CAUTION

MATCH LINE STA. 110+00

78+00

111+00

112+00

113+00

N23° 18' 49.85"W
1134.727

114+00

115+00

116+00

CONNECT RAIL TO EXISTING

275 LF OF MGS GUARDRAIL 3

END PROJECT 1491-12-71
STA. 113+17.61

NOTE:
STA. 110+00 - STA. 113+20 RT
SALVAGE GUARDRAIL AND END TREATMENT

STA. 112+67 - STA. 113+20 LT
SALVAGE END TREATMENT

SLOPE INTERCEPTS

USH 141 STA. 111+33.86 =
DIVISION ST. STA. 78+24.98

MGS GUARDRAIL TERMINAL EAT

EXISTING R/W

℄ DIVISION ST.

FINISHED PROFILE ON ℄

VPT STA 112+50.00
VPT EL 752.00

STA 113+20.00
EL 750.41

-2.27%

EXISTING GROUND

VCL = 600.00

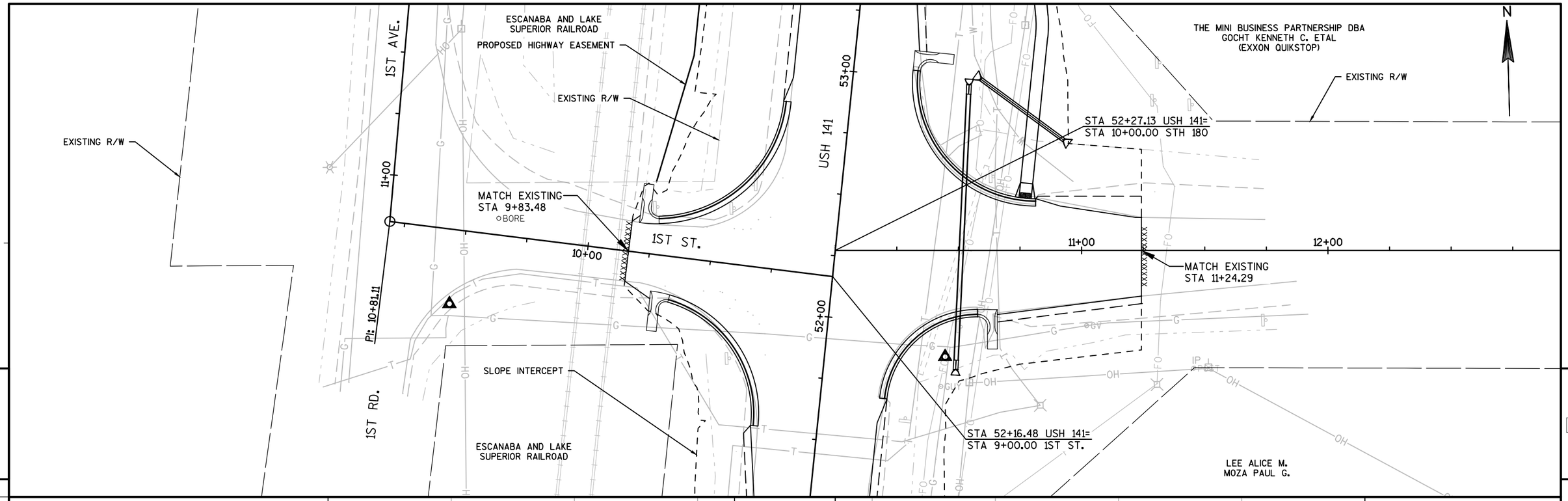
K = 117.99

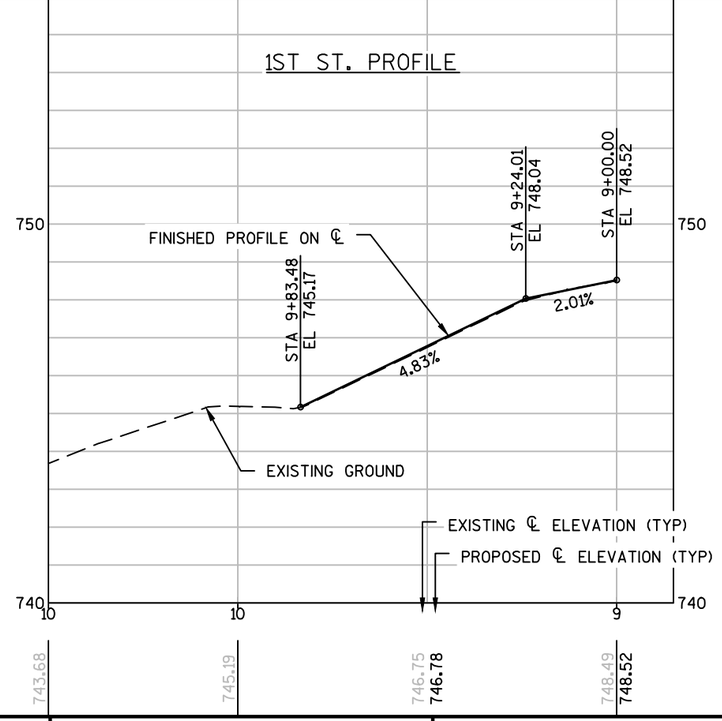
EXISTING ℄ ELEVATION (TYP)

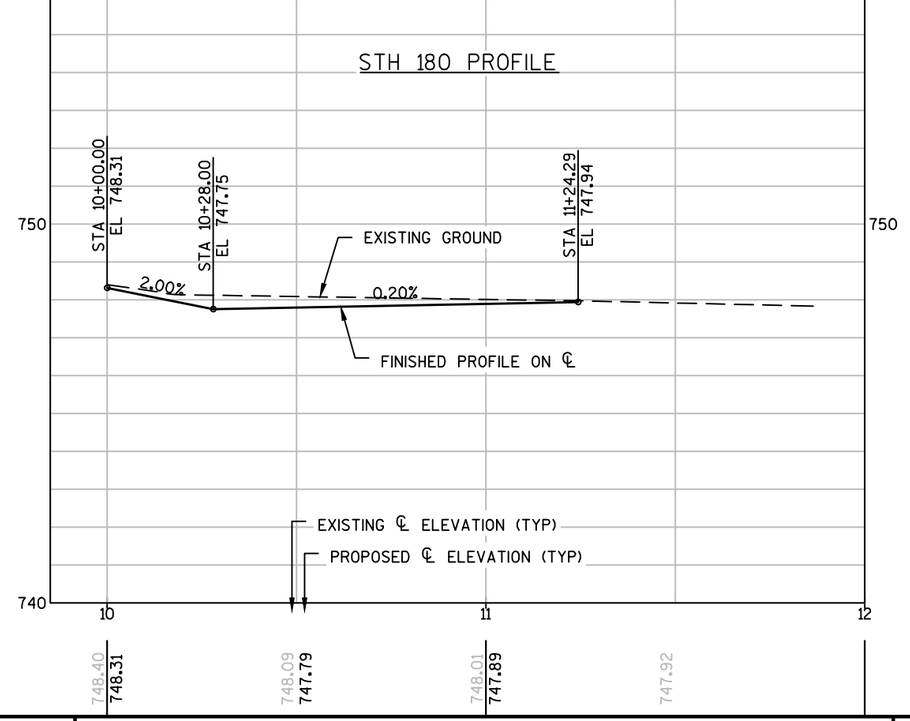
PROPOSED ℄ ELEVATION (TYP)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110 | 111 | 112 | 113 | 114 | 115 | 116 | | | | | | |
| 754.94 | 754.73 | 754.40 | 753.87 | 753.06 | 751.54 | 750.94 | 749.61 | 748.14 | 746.73 | 745.31 | 744.18 | 743.20 |
| 755.02 | 754.84 | 754.45 | 753.84 | 753.03 | 752.00 | 750.87 | | | | | | |

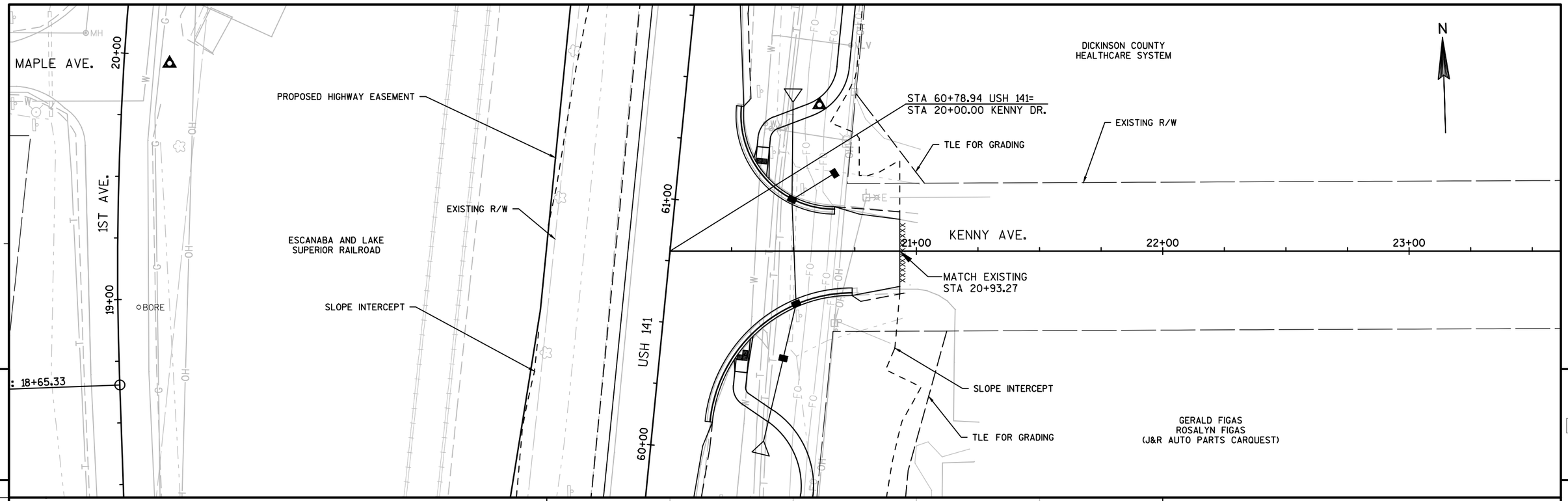
| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: USH 141 | SHEET 151 E |
|---|---|---|---|---|

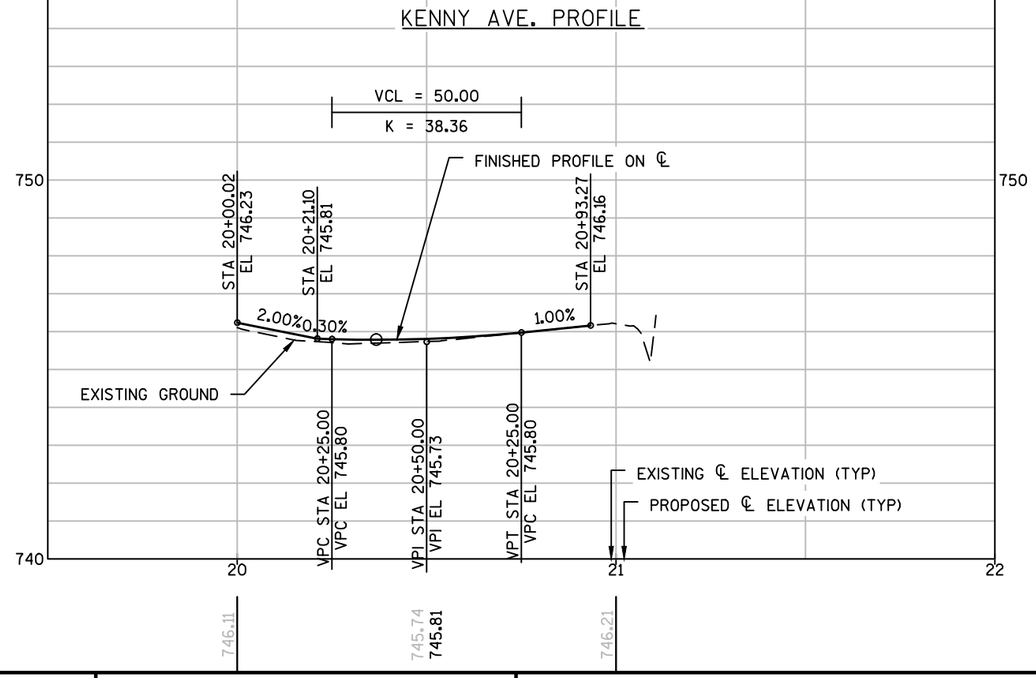


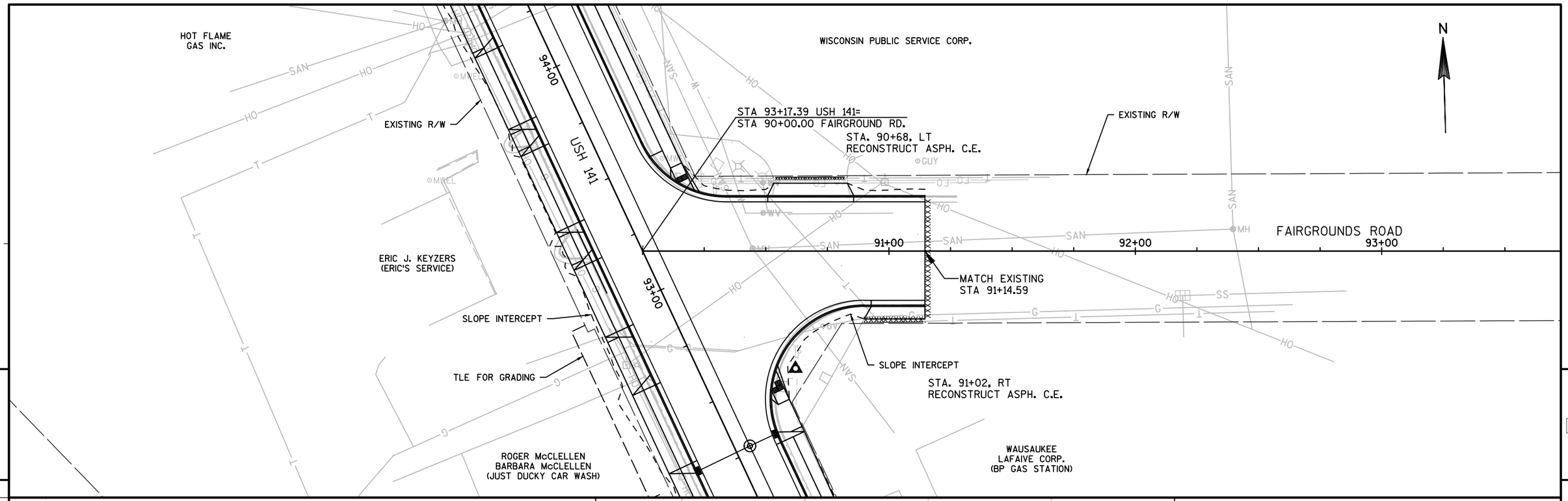



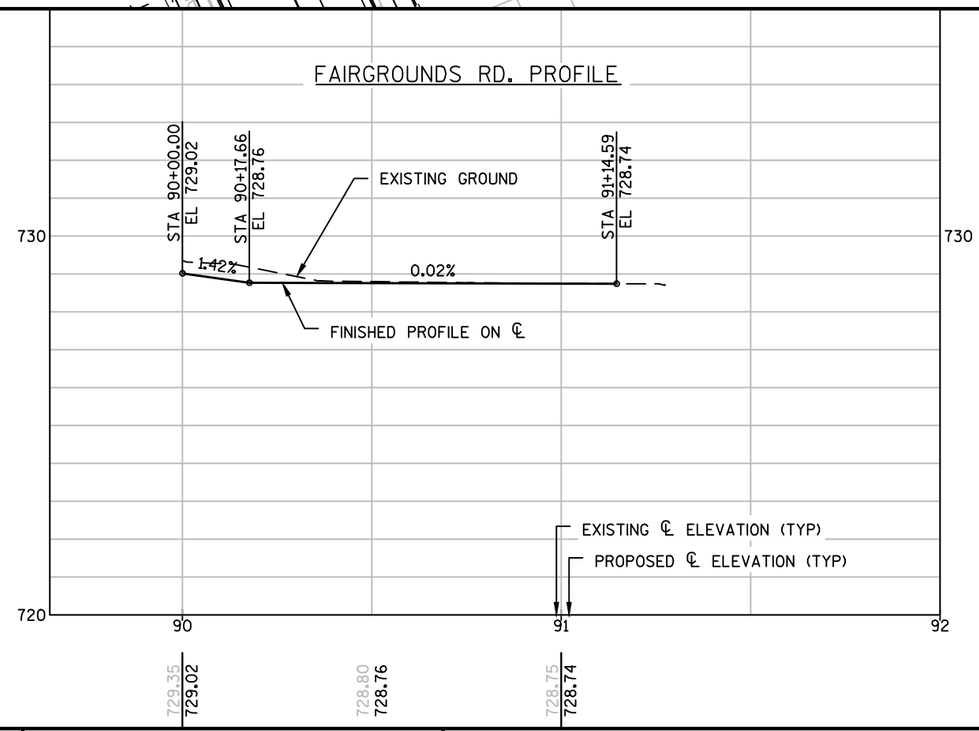

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: STH 180 / 1ST STREET | SHEET 152 E |
|---|---|---|---|---|



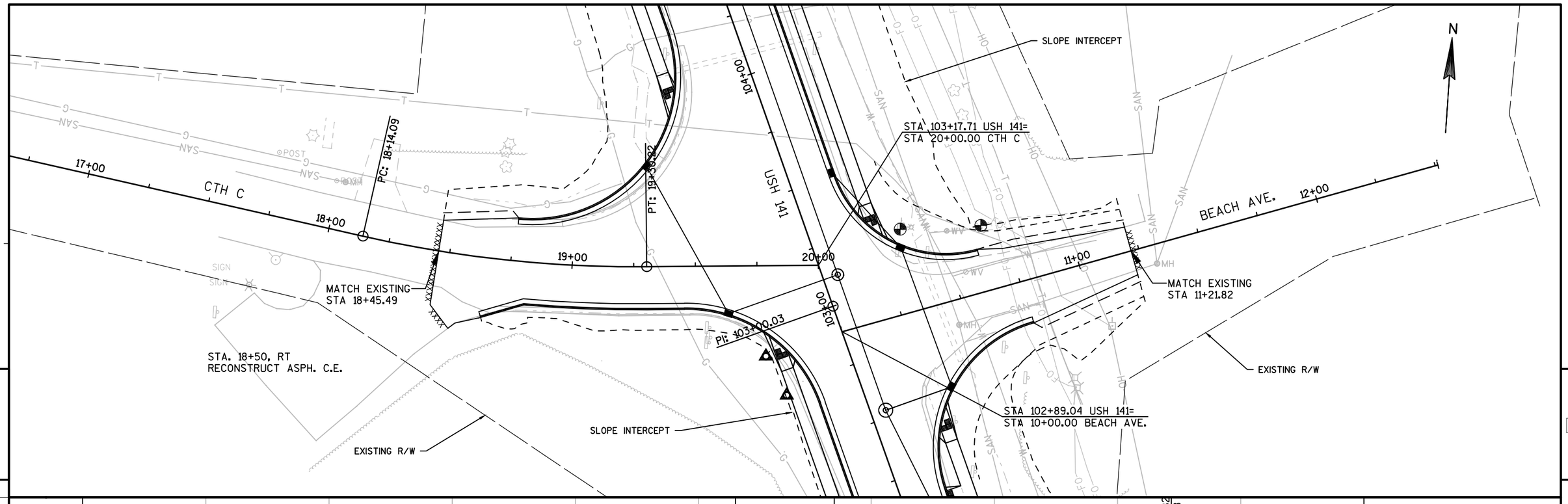



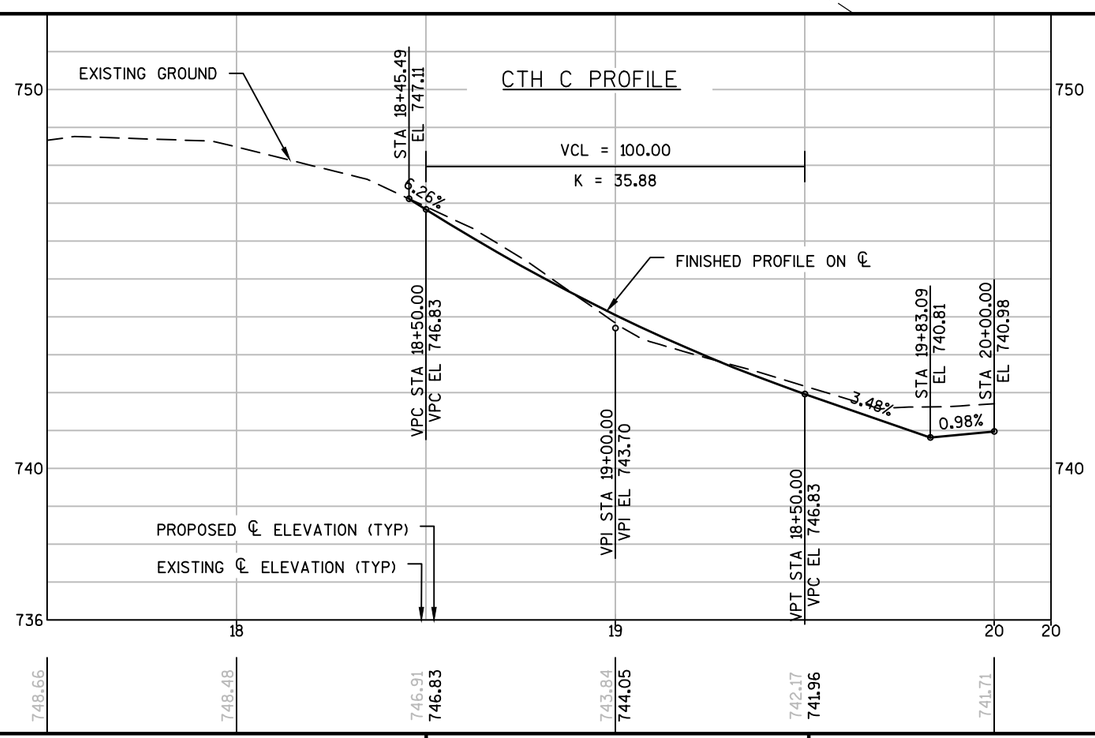

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: KENNY AVE. | SHEET 153 | E |
|---|---|---|---|---|---|

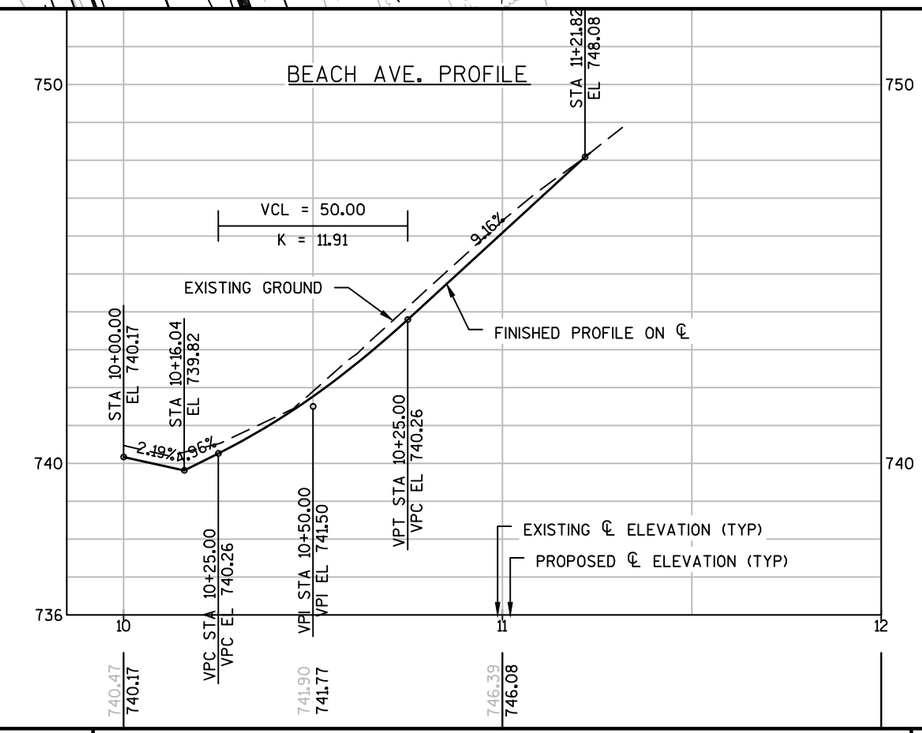


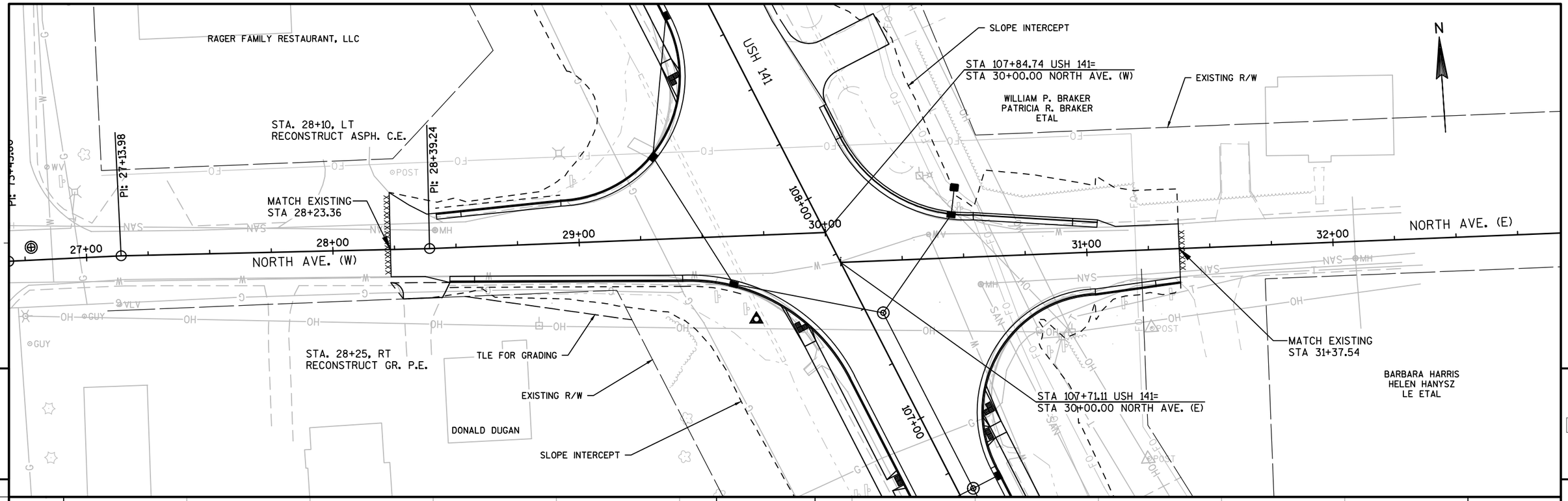

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: FAIRGROUNDS ROAD | SHEET 154 | E |
|---|---|---|---|---|---|

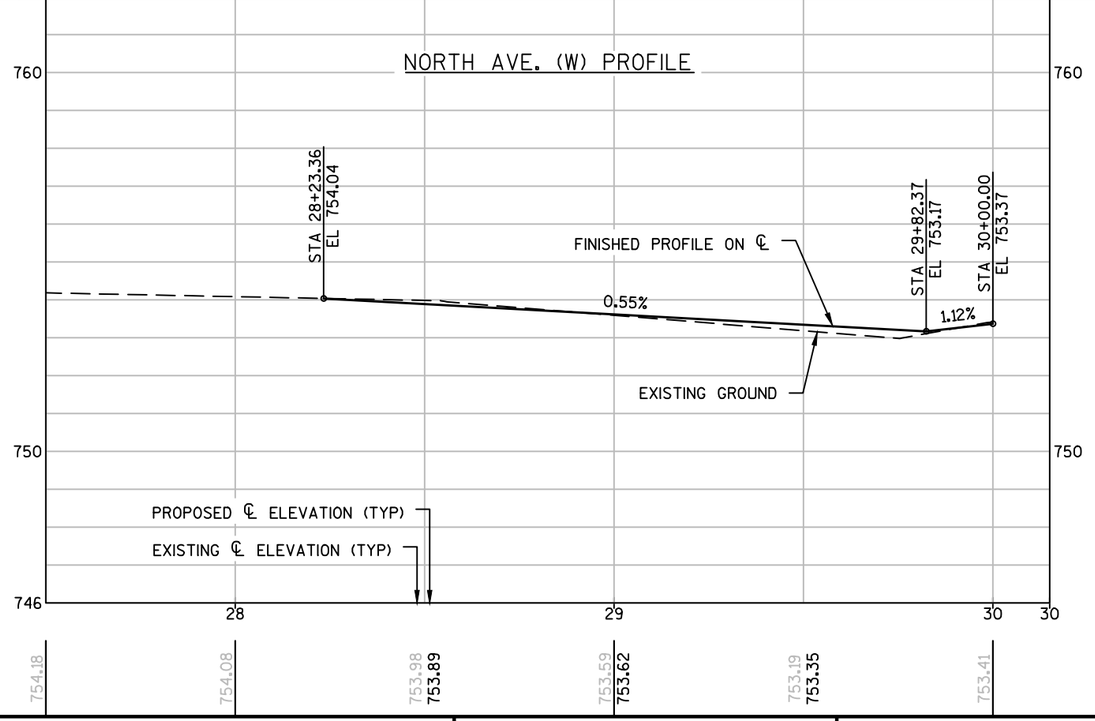


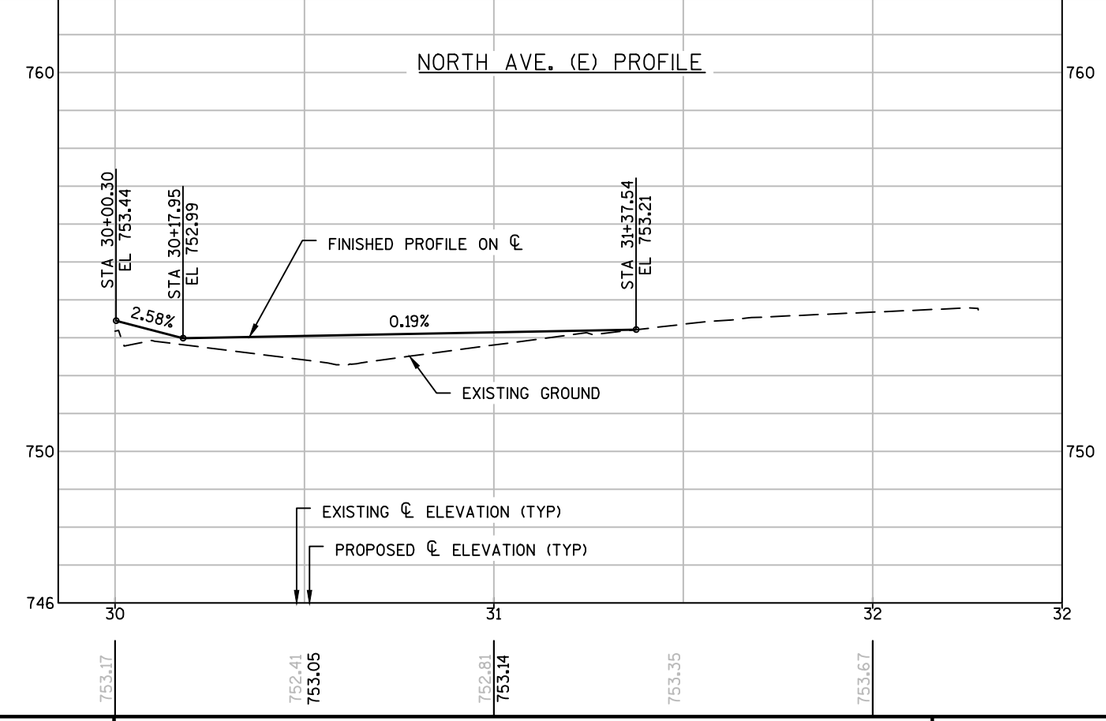




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: CTH C / BEACH AVE. | SHEET 155 E |
|---|---|---|---|---|



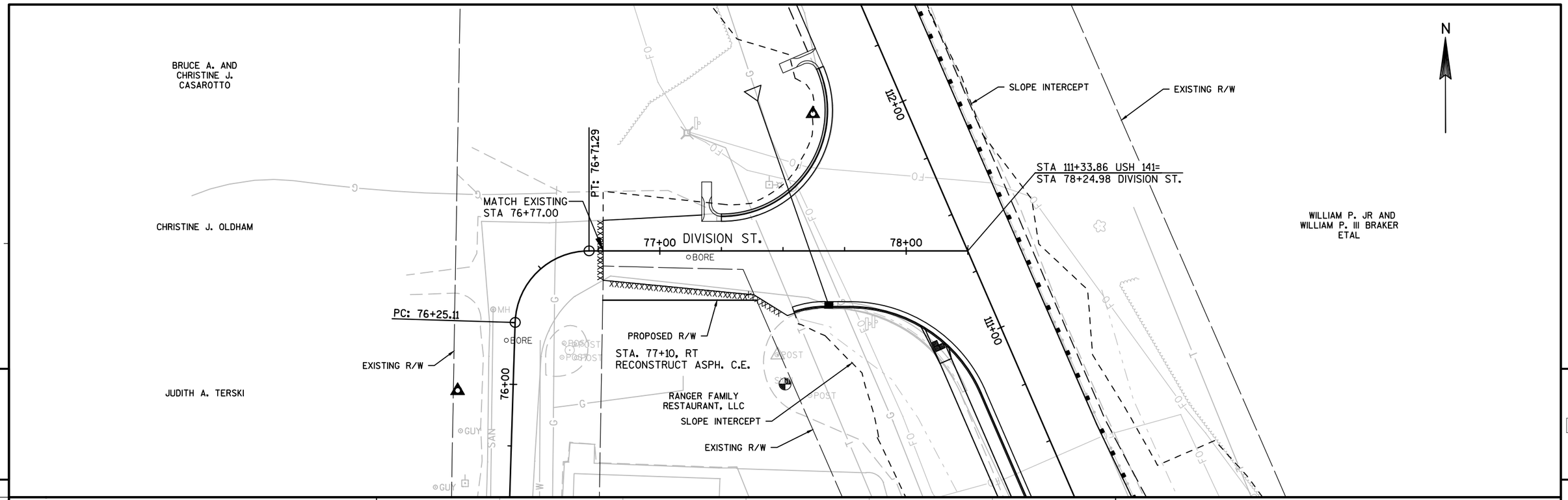



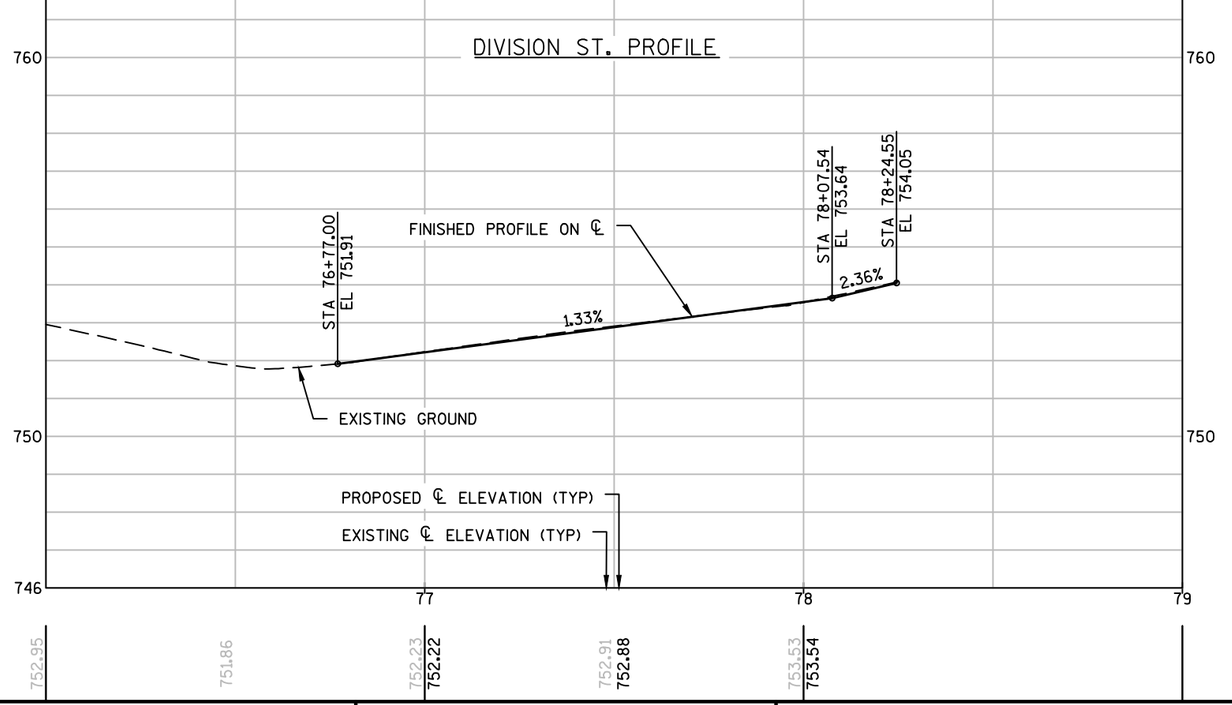




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: NORTH AVE. (E & W) | SHEET E |
|---|---|---|---|---|



FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\PLANPROFILE\050102_PP.DWG PLOT DATE : 8/26/2015 11:54 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1" = 40'_XREF



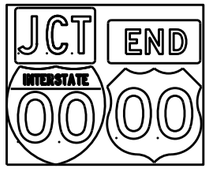




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | PLAN AND PROFILE: DIVISION ST. | SHEET 157 | E |
|---|---|---|---|---|---|

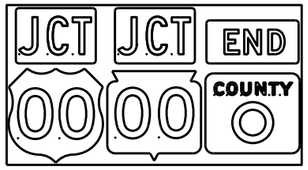
## TYPICAL ASSEMBLIES



J1-1



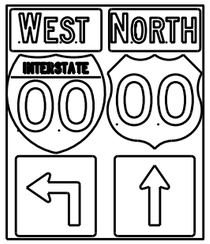
J1-2



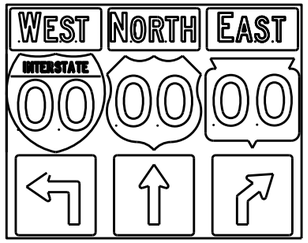
J1-3



J2-1



J2-2

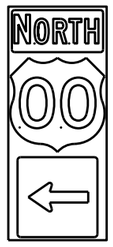


J2-3

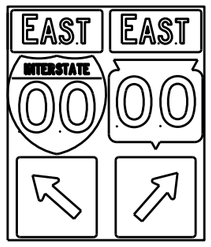


JV

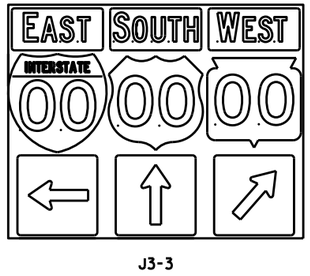
( Typical Vertical J-Assembly
See Note 10 and 11 )



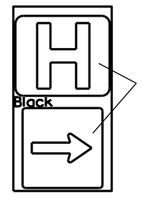
J3-1



J3-2



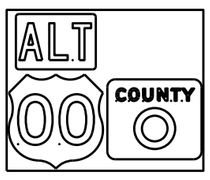
J3-3



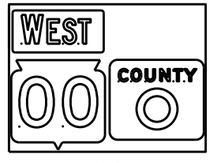
JH-1



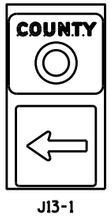
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

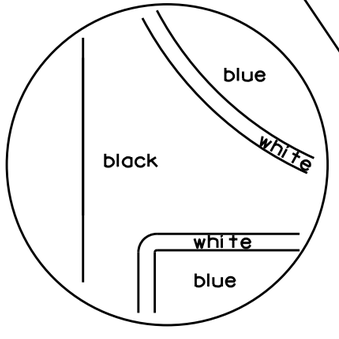


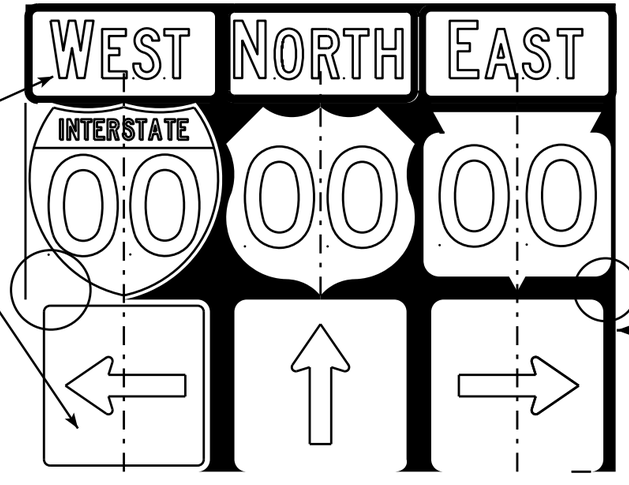
J23-1

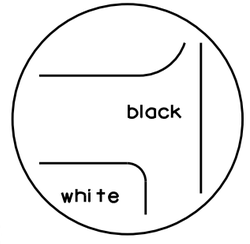


J22-1

[blue background with interstate]




[black background]

### NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. 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.
7. 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.
8. 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.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (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.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

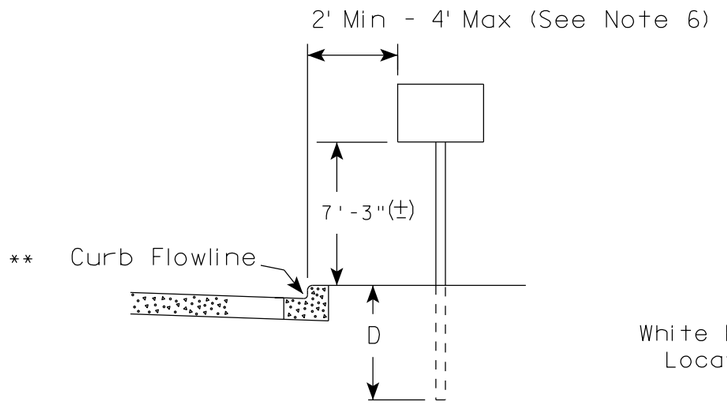


PROJECT NO: | SHEET NO: E

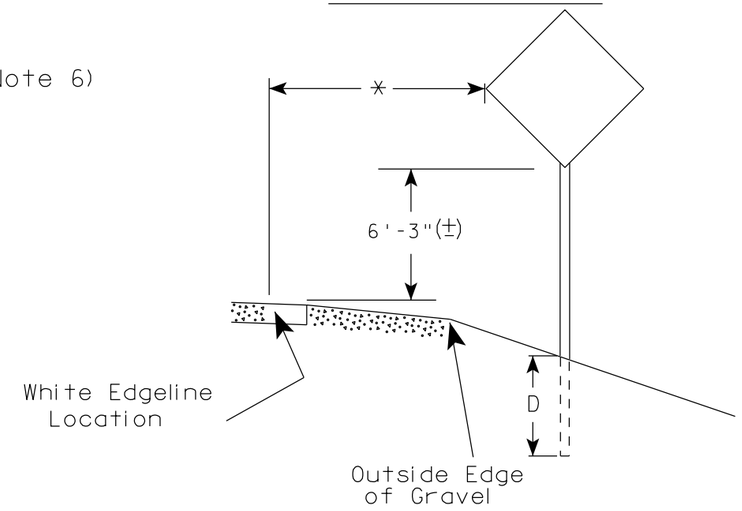


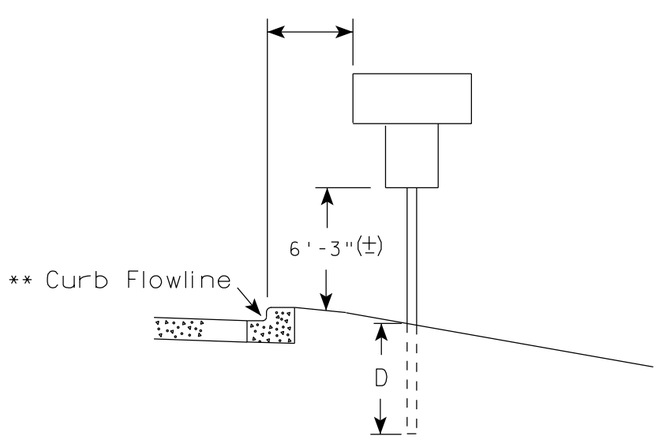
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :
WISDOT/CADDS SHEET 42

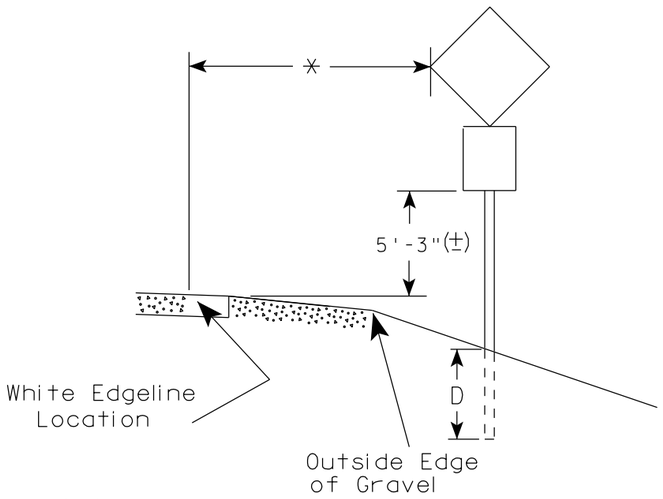
## URBAN AREA




## RURAL AREA (See Note 2)




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

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

### POST EMBEDMENT DEPTH

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

## GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on 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 directd 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" (±).

# TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

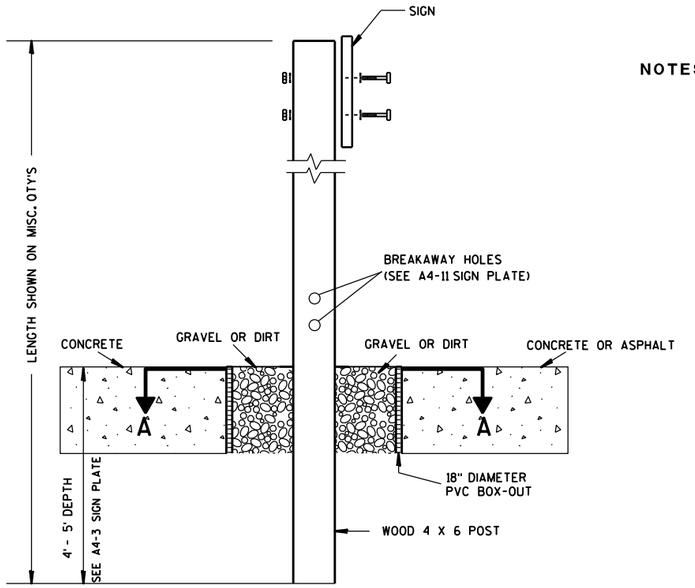
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

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



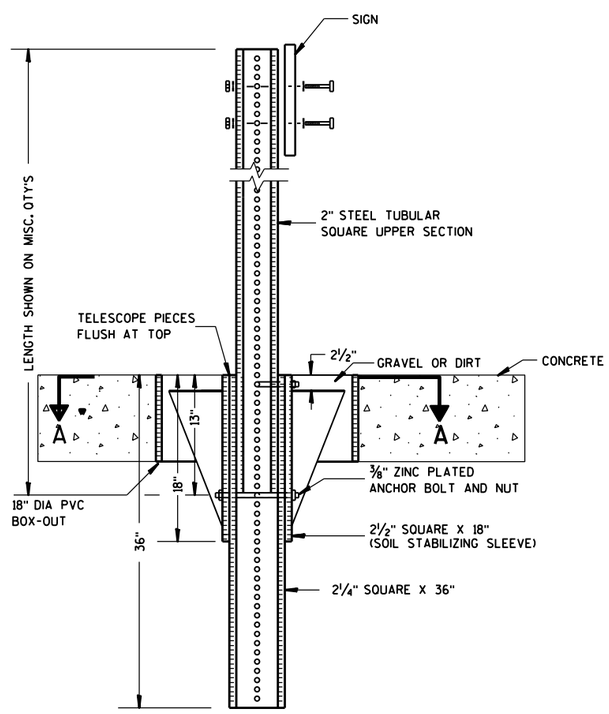
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

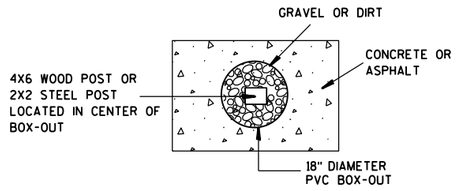
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

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




**ELEVATION VIEW**

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




**PLAN VIEW**

**FOR NEW CONCRETE/ASPHALT INSTALLATIONS**

# SIGN POST BOX-OUTS A4-3B

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

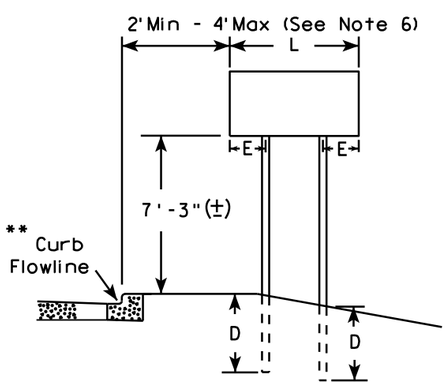
DATE 1/27/14 PLATE NO. A4-3B.1

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

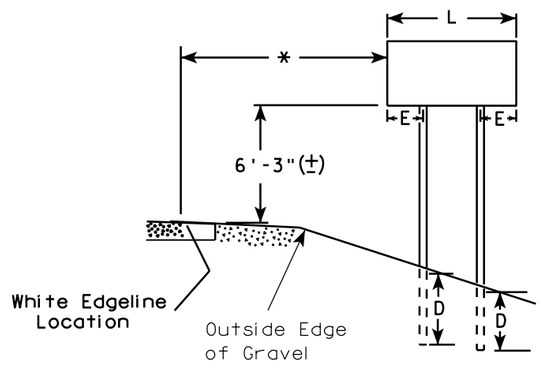


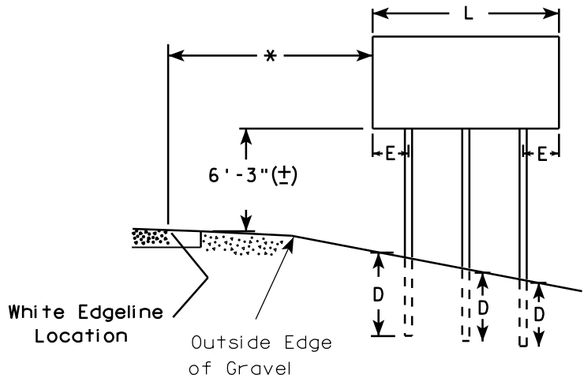
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

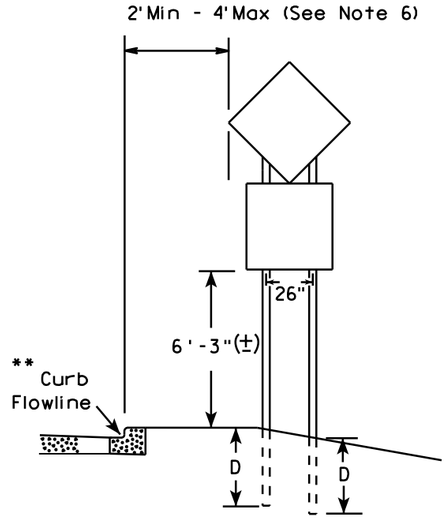
## URBAN AREA



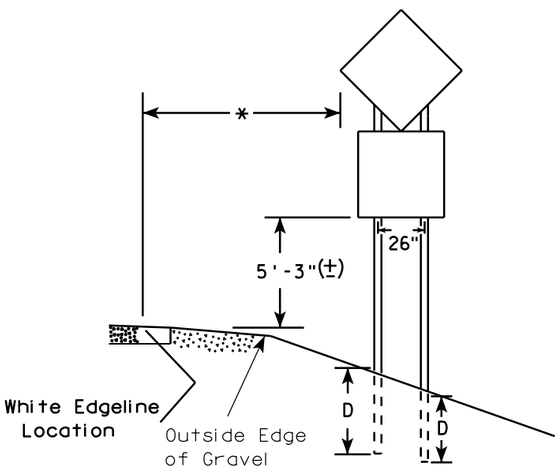

## RURAL AREA (See Note 3)




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

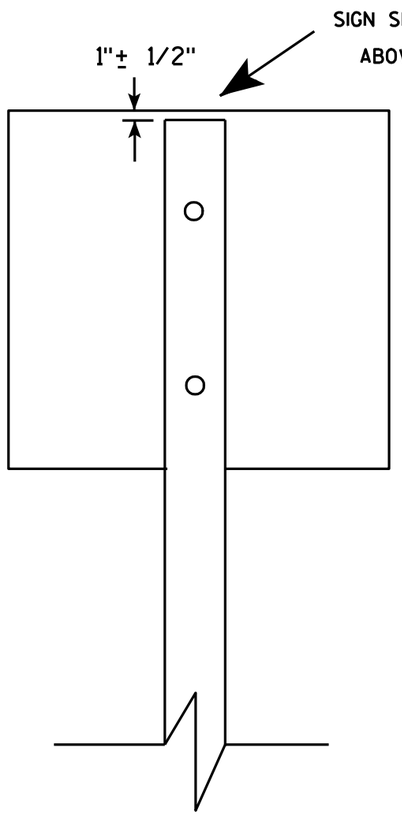
APPROVED Matthew R Rauch
for State Traffic Engineer

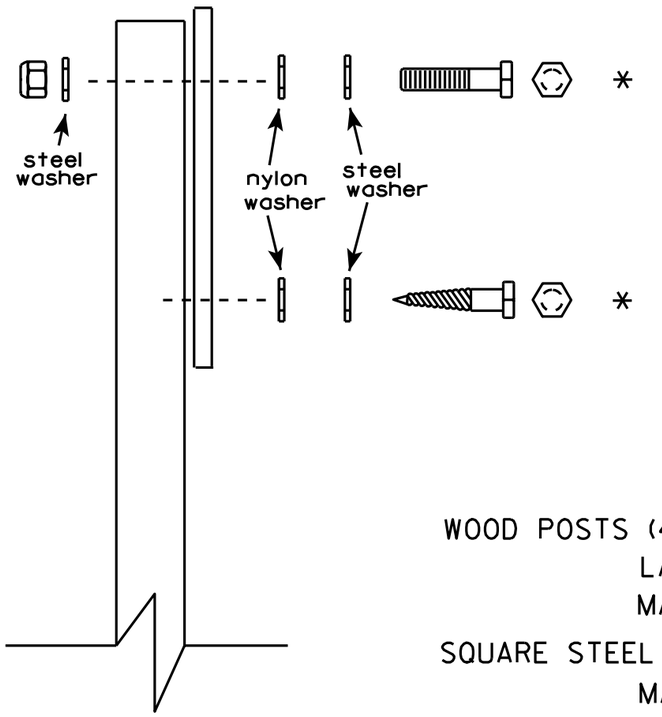
DATE 7/23/15 PLATE NO. A4-4 14



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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 23-JUL-2015 15:23 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000 WISDOT/CADDS SHEET 42




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

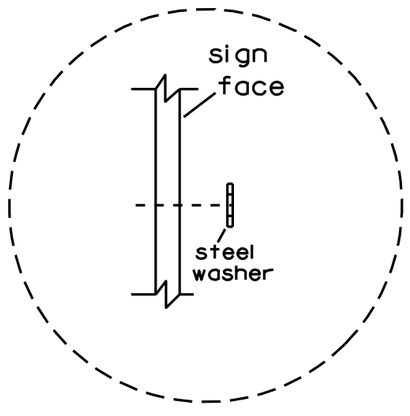
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.




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

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

# ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

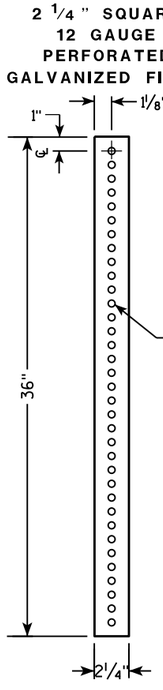
7

PROJECT NO:

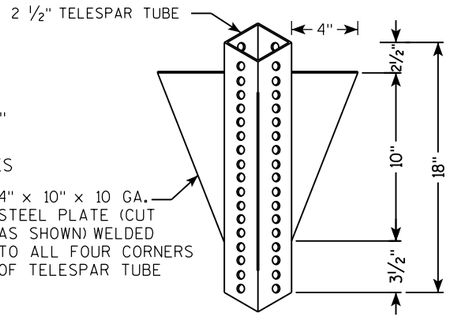
SHEET NO: 162 E

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

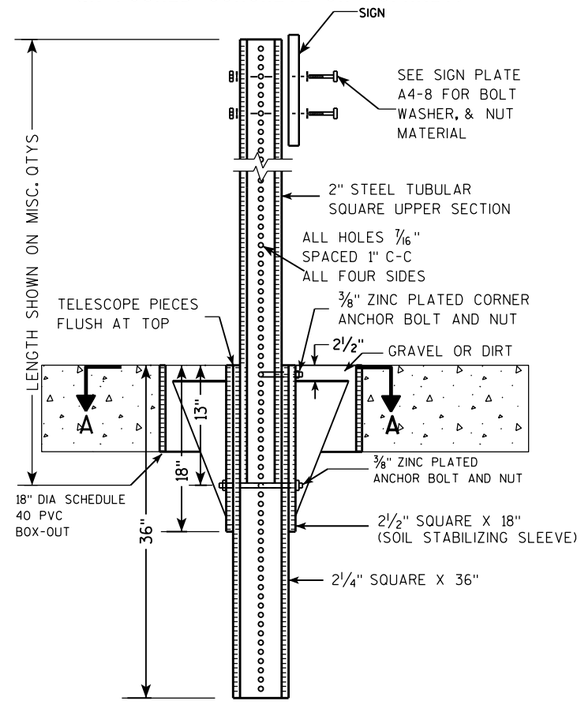
**2 1/4 " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



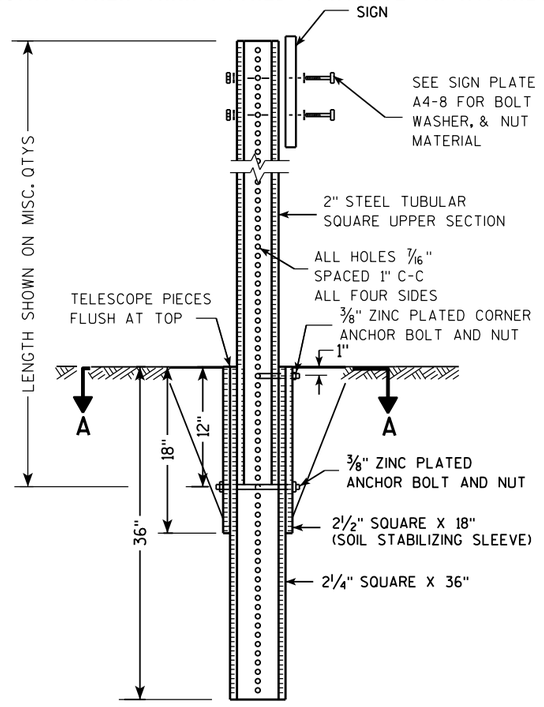

**2 1/2 " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

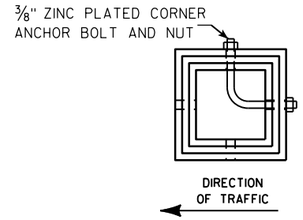



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




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




**SECTION A-A**

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

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

TUBULAR STEEL
SIGN POST
A4-9

*WISCONSIN DEPT OF TRANSPORTATION*

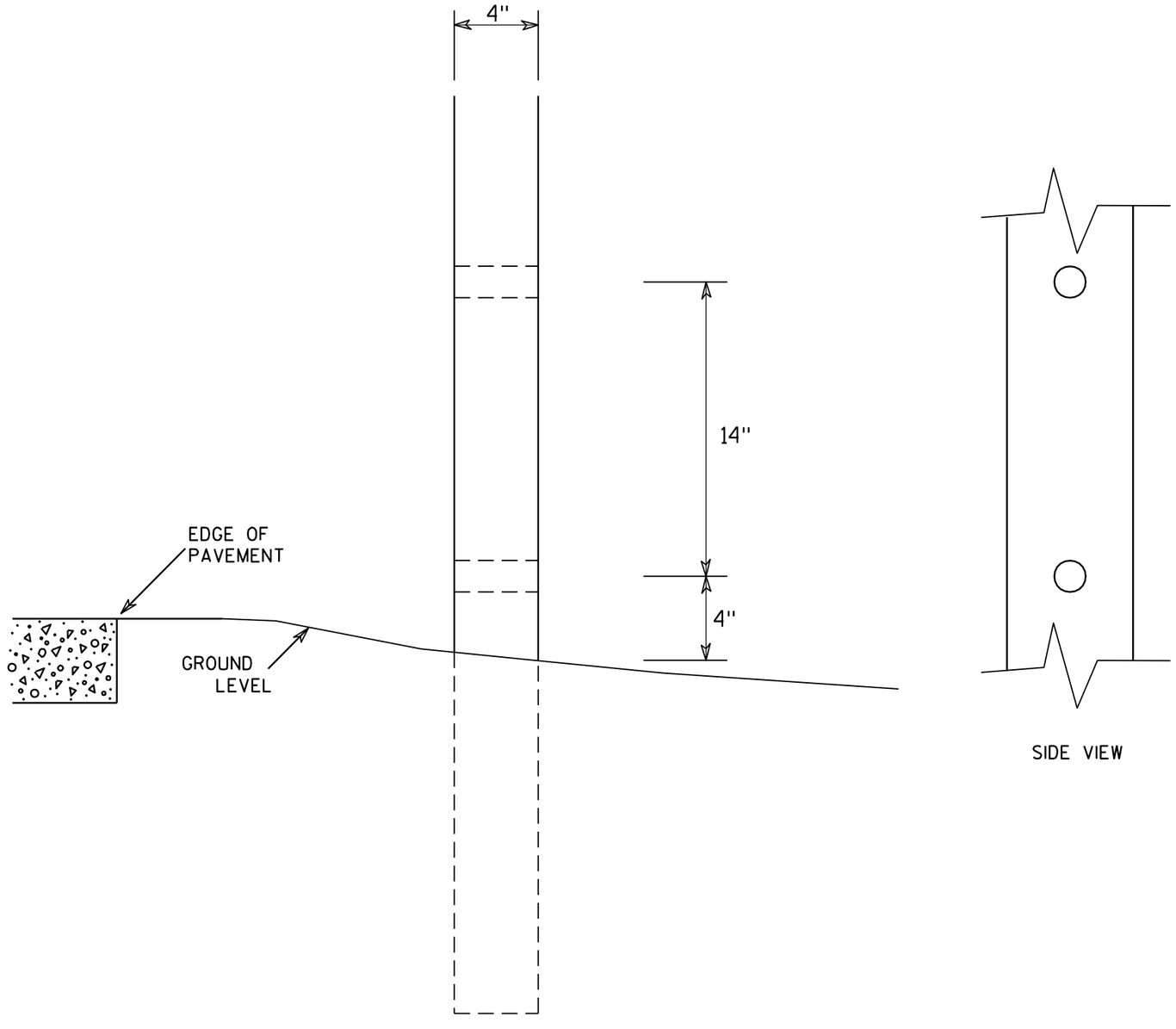
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

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



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






SIDE VIEW

GENERAL NOTES

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

7

7

# 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

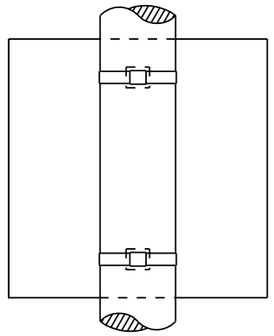
APPROVED Chester J Spang for State Traffic Engineer

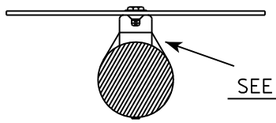
DATE 3/27/97 PLATE NO. A4-11.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 164 | E |
|---|---|---|---|---|---|

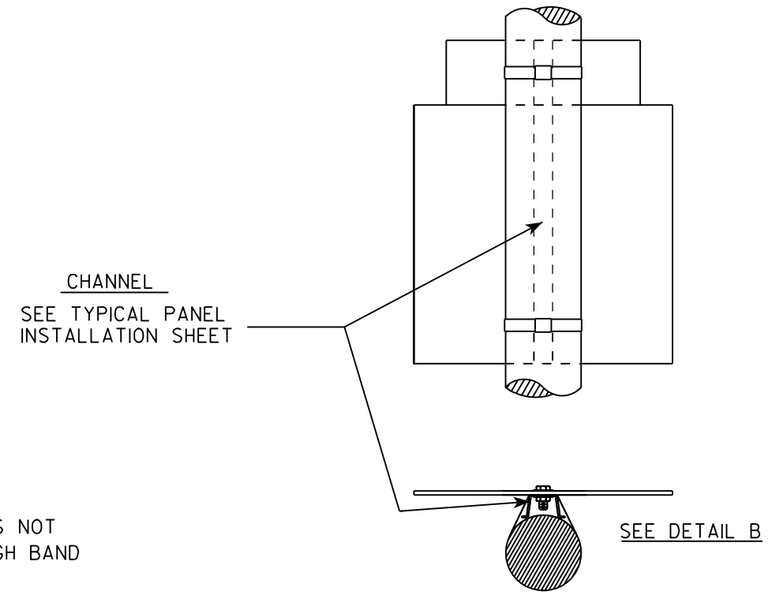
# BANDING

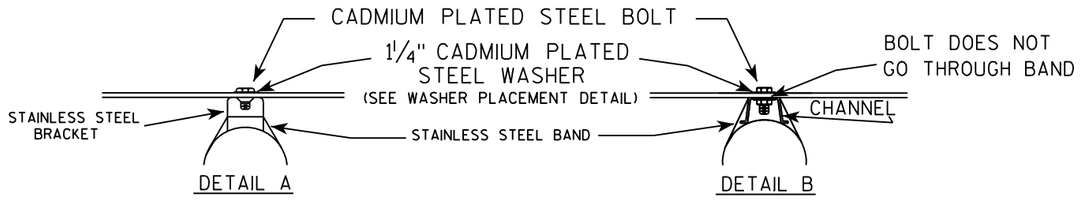
SINGLE SIGN



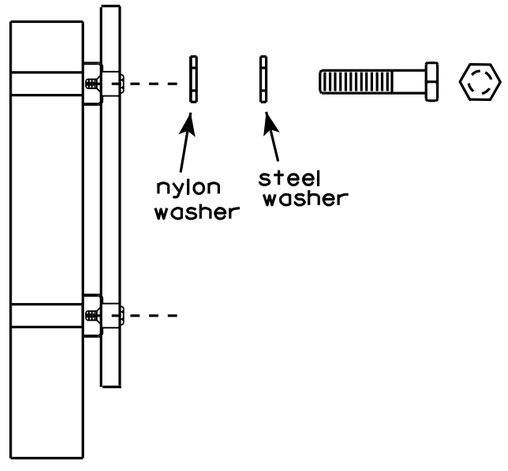



"J" ASSEMBLY




WASHER PLACEMENT




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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

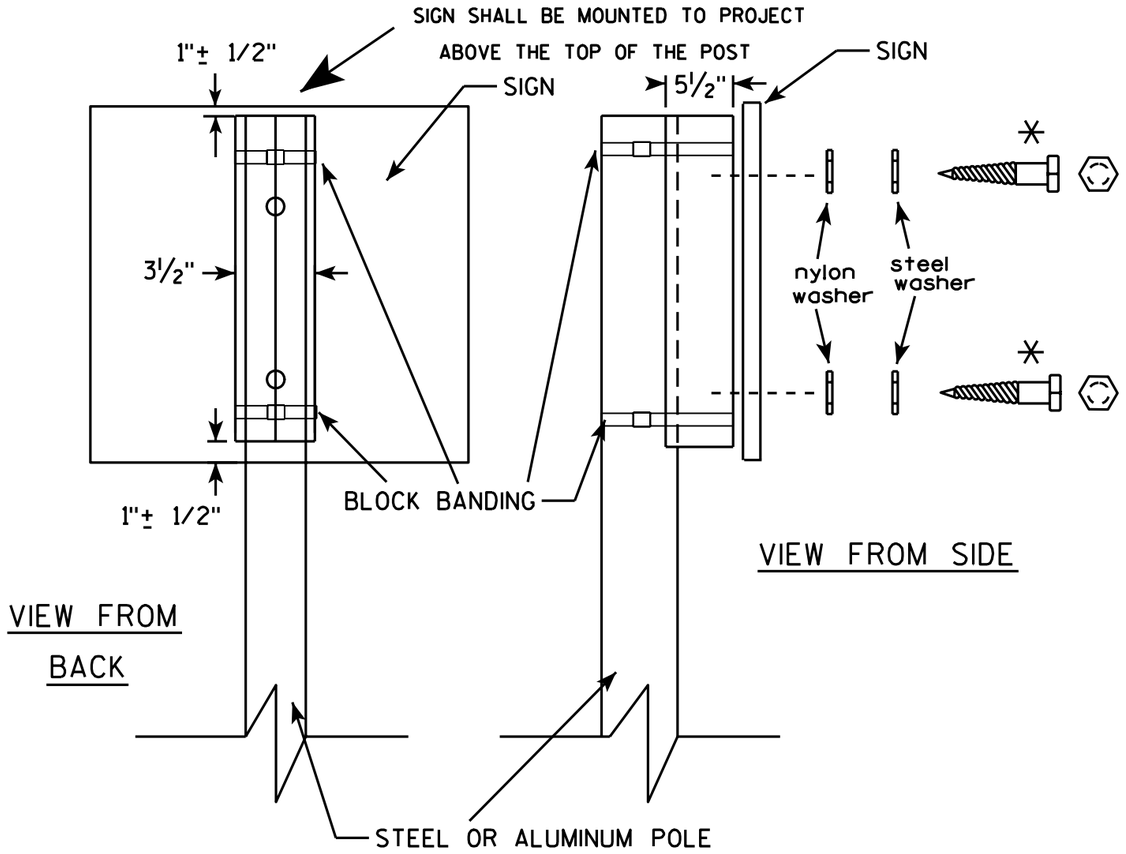
STANDARD SIGN
SIGN BANDING DETAILS

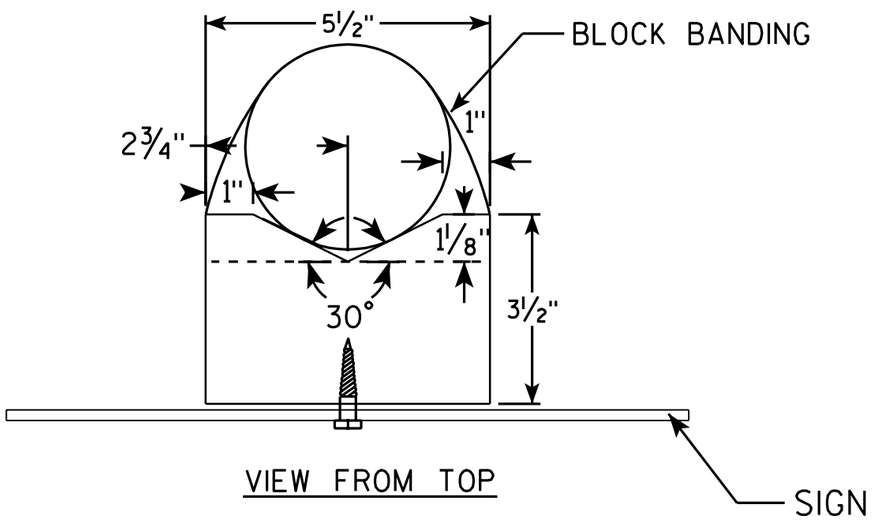
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 165 | E |
|---|---|---|---|---|---|




## GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

# BLOCK BANDING DETAIL ( V-BLOCK OPTION )

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

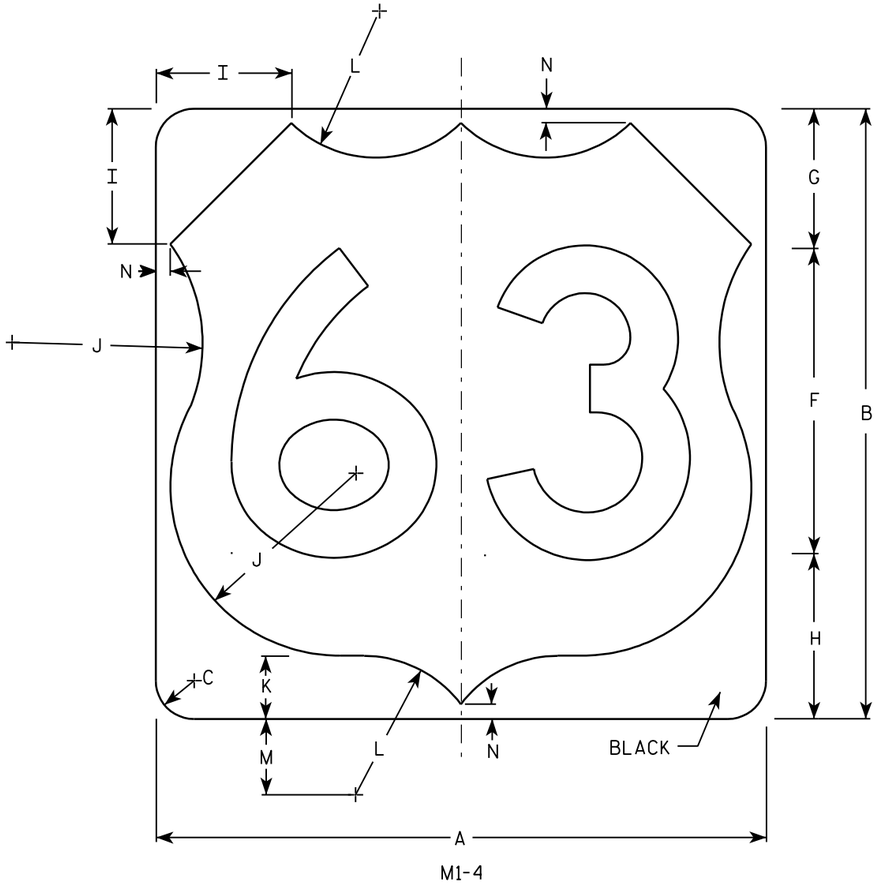
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

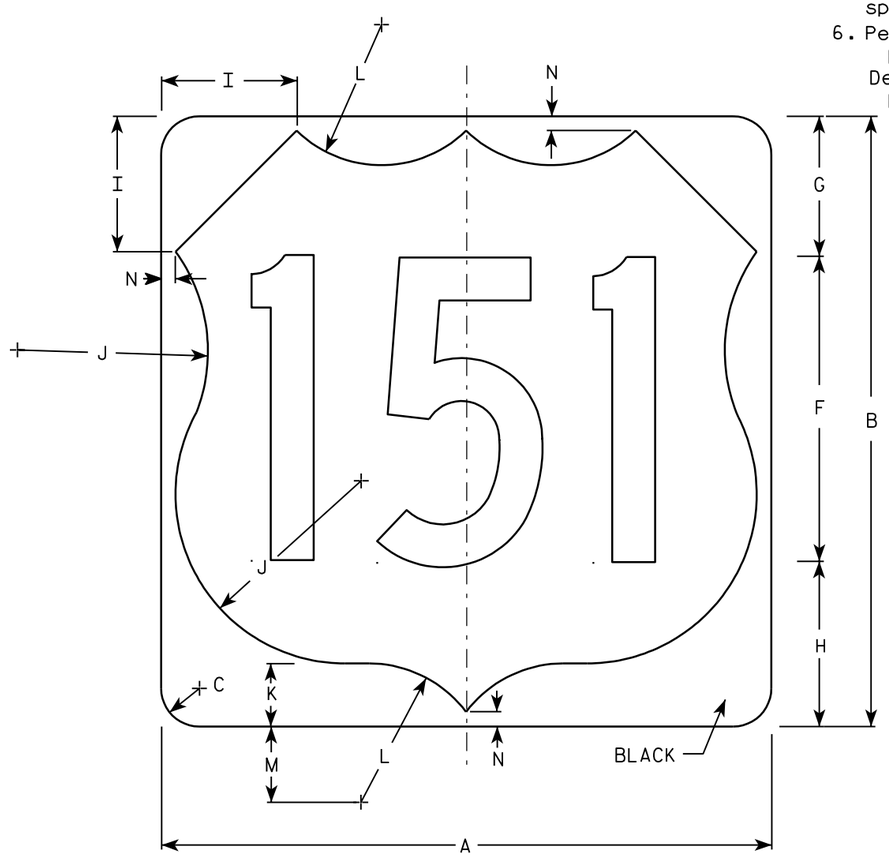
SHEET NO: 166 E

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




M1-4




M1-4

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 m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

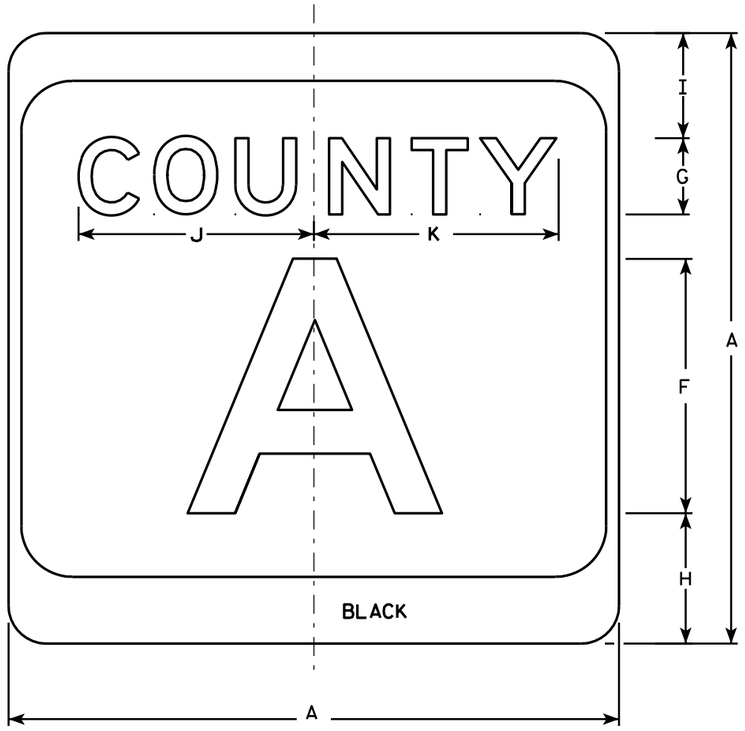
# USH MARKER
# M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

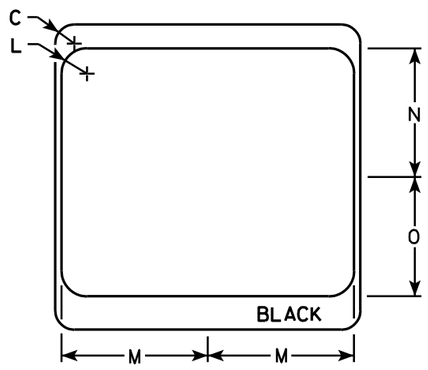
APPROVED Matthew R Rauch
for State Traffic Engineer

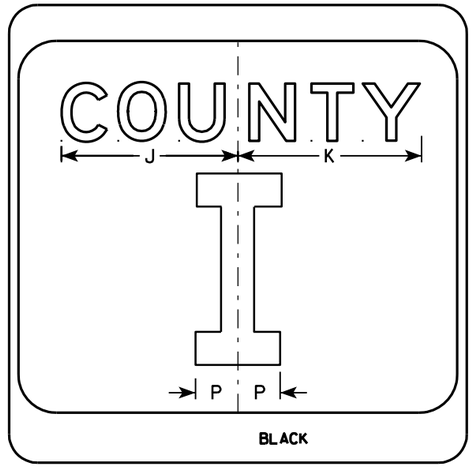
DATE 08/25/05 PLATE NO. M1-4.9

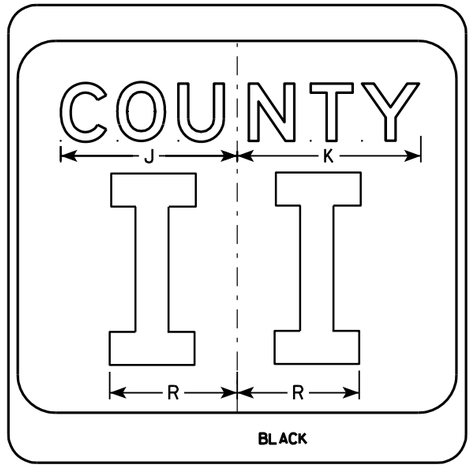
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 167 | E




M1-5A




NOTES

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

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

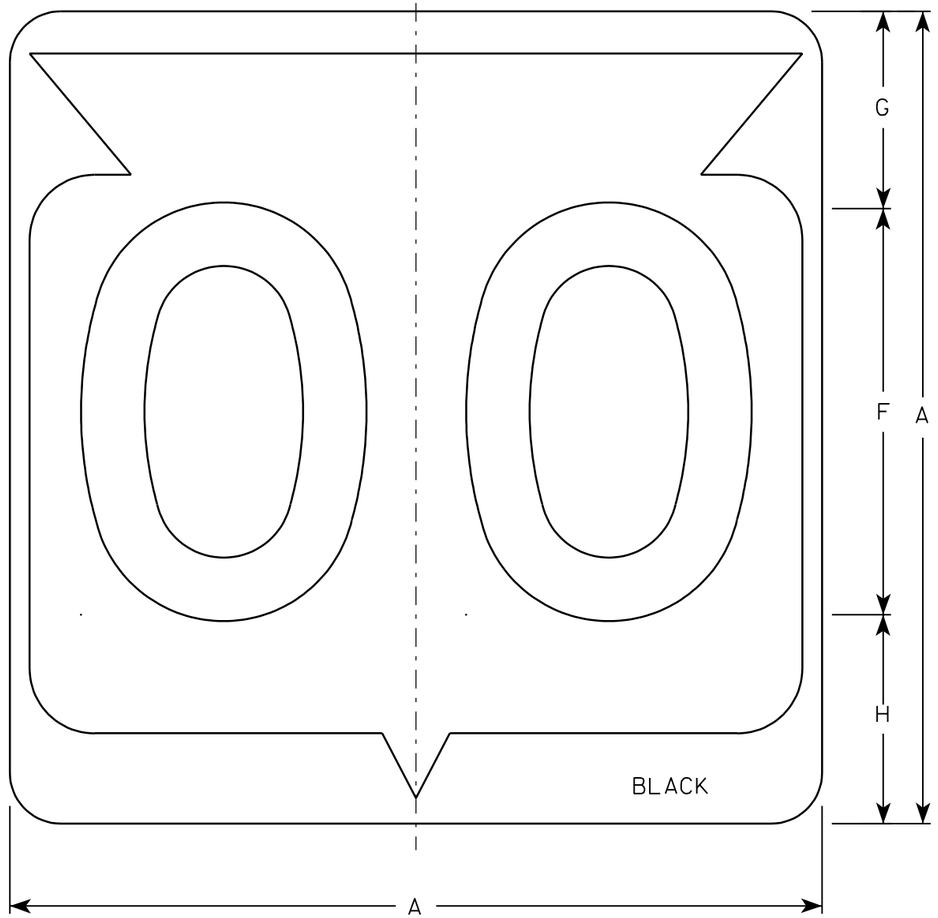
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

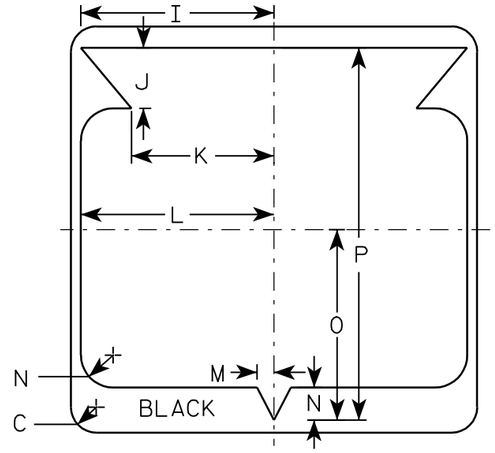
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 168 | E |
|---|---|---|---|---|---|




M1-6

## 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




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 m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

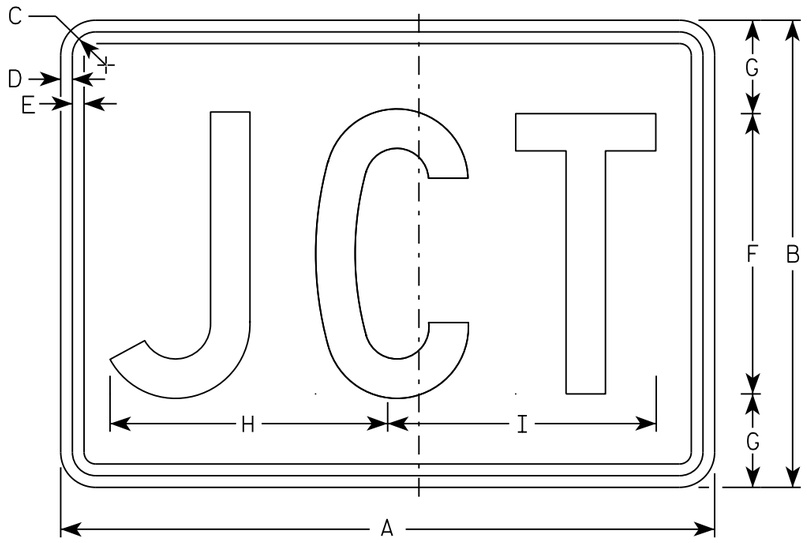
# STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

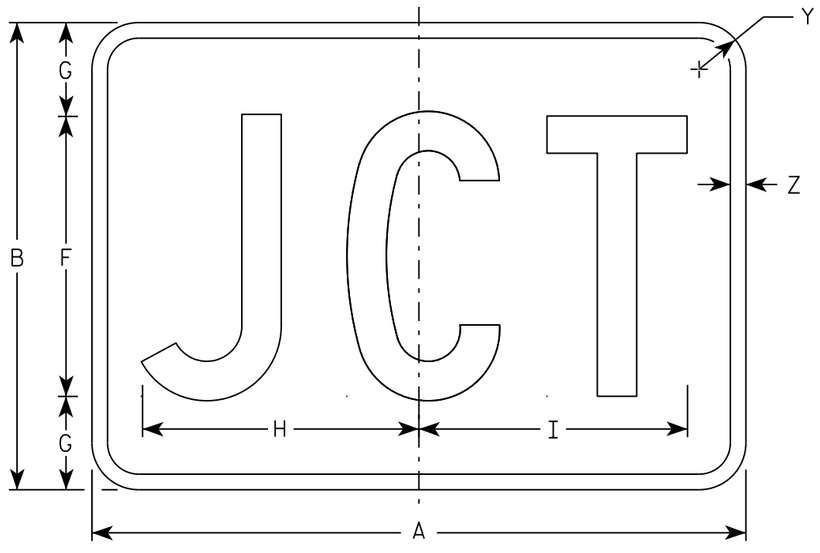
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 169 | E |
|---|---|---|---|---|---|




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

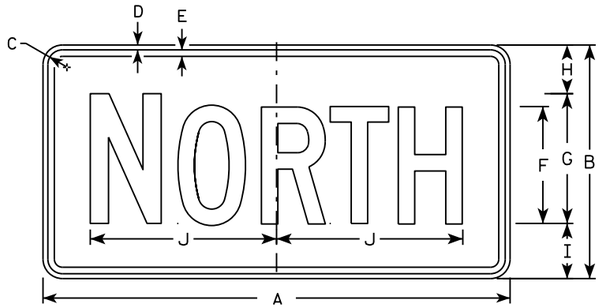
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 170 12-1.12

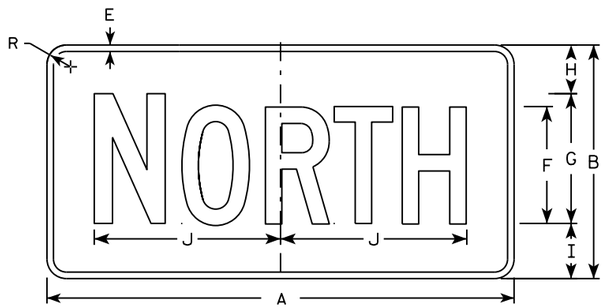
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000




M3-1
MM3-1
MP3-1



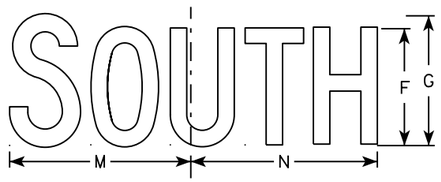

MB3-1
MK3-1
MN3-1



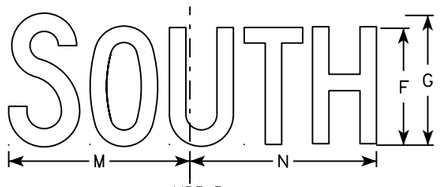

M3-2
MM3-2
MP3-2



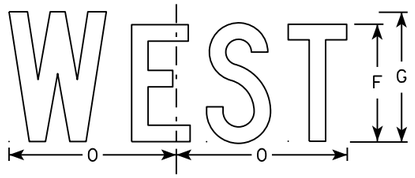

MB3-2
MK3-2
MN3-2



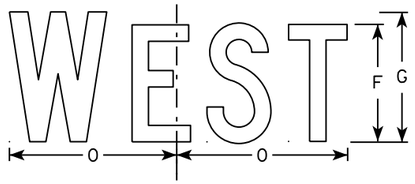

M3-3
MM3-3
MP3-3




MB3-3
MK3-3
MN3-3




M3-4
MM3-4
MP3-4




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 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

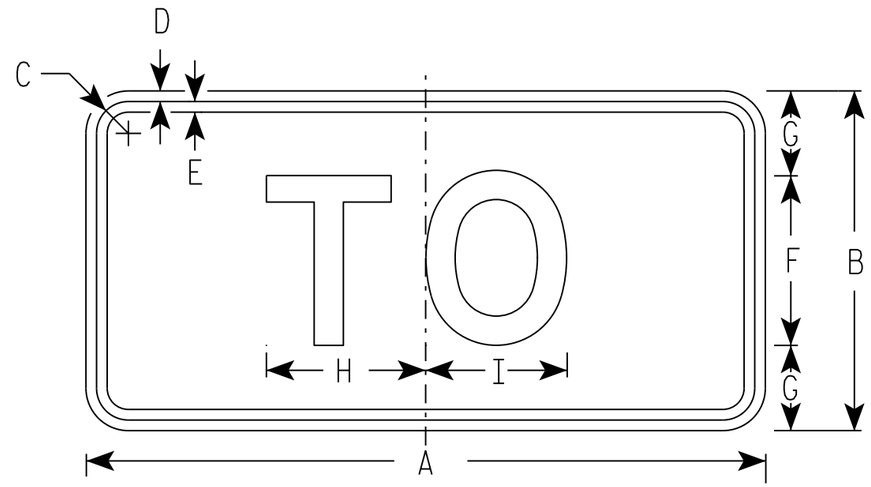
APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

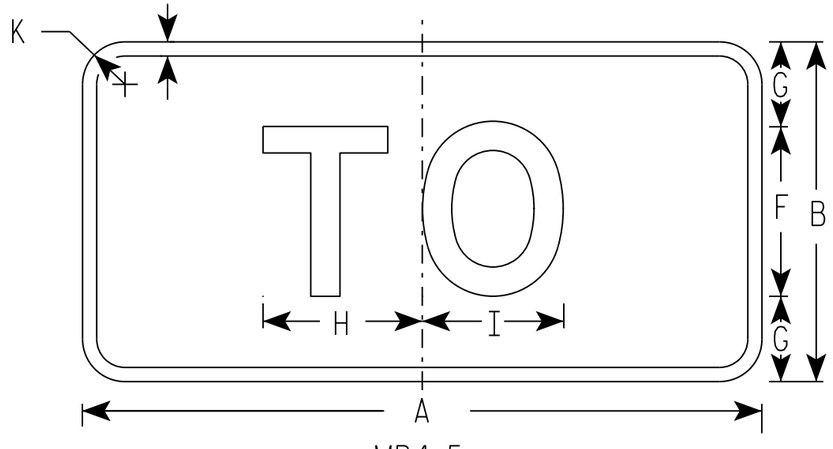


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000




M4-5
MM4-5
MP4-5




MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
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. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

| 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 | 3 | 5 3/8 | 5 1/4 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 3/8 | 3/8 | 1/2 | 9 | 4 1/2 | 8 1/4 | 8 3/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 3/8 | 3/8 | 1/2 | 9 | 4 1/2 | 8 1/4 | 8 3/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 3/8 | 3/8 | 1/2 | 9 | 4 1/2 | 8 1/4 | 8 3/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |

STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

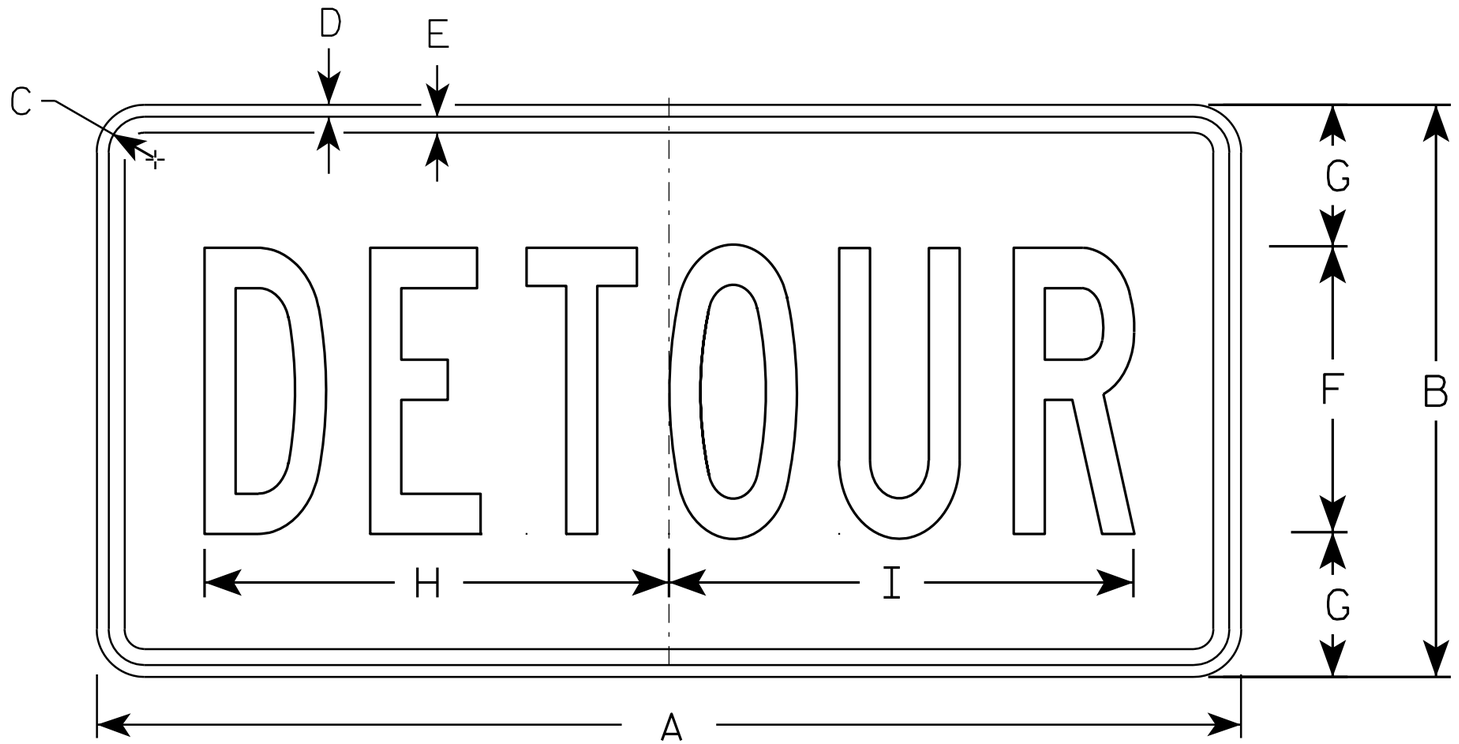
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 172 M4-5.8

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



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M45.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000




M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 3 | 10 | 10 1/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

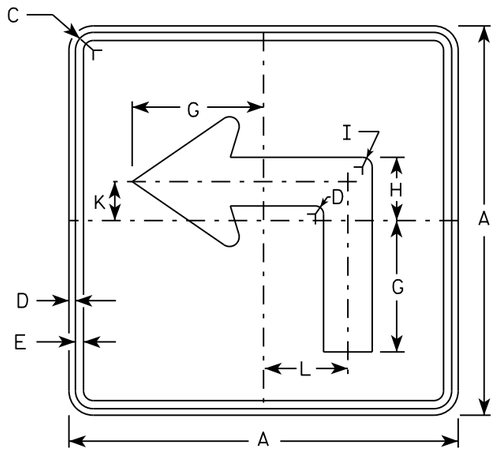
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

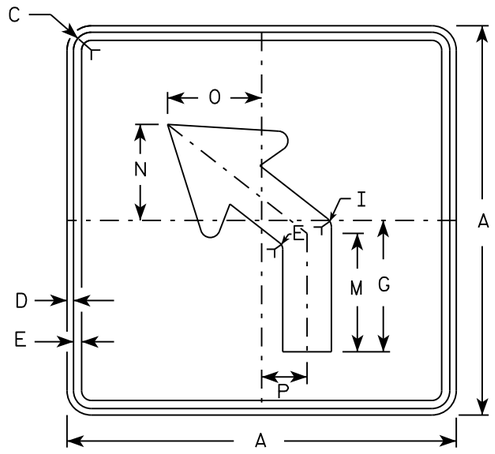
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

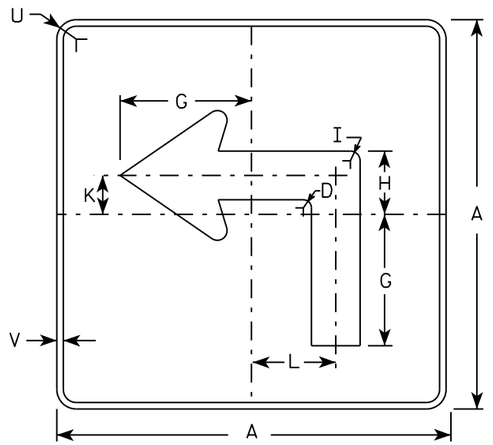
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 173 | E |
|---|---|---|---|---|---|



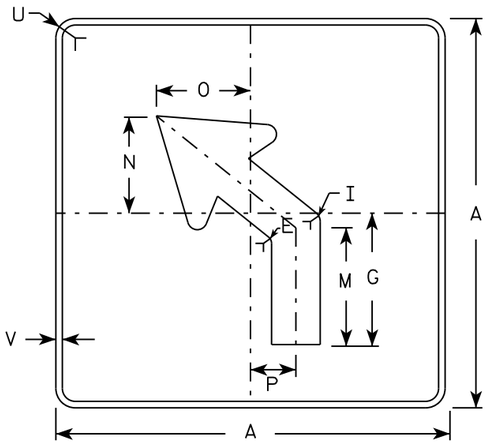

M5-1L
MM5-1L
MO5-1L
MP5-1L



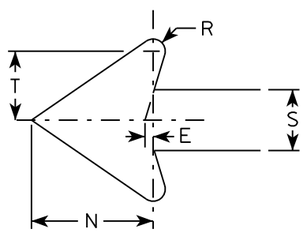

M5-2L
MM5-2L
MO5-2L
MP5-2L




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




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




NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   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. 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
   MO5-1 and MO5-2 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
5. M5-1R same as M5-1L except arrow points right.
6. 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 |

STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

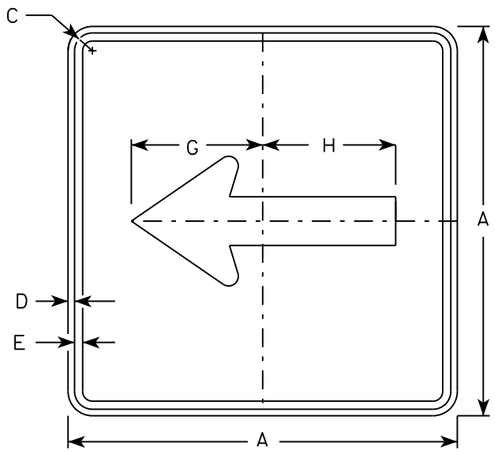
APPROVED Matthew R Rauch
for State Traffic Engineer

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

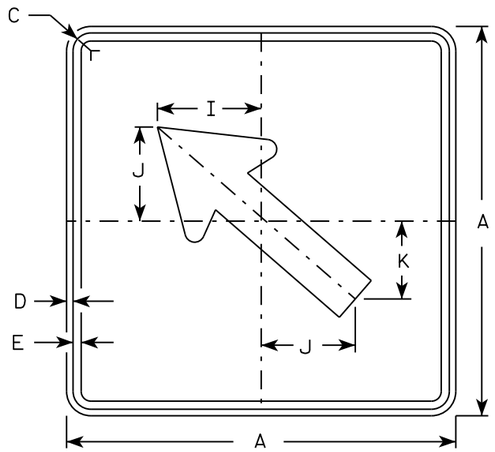


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



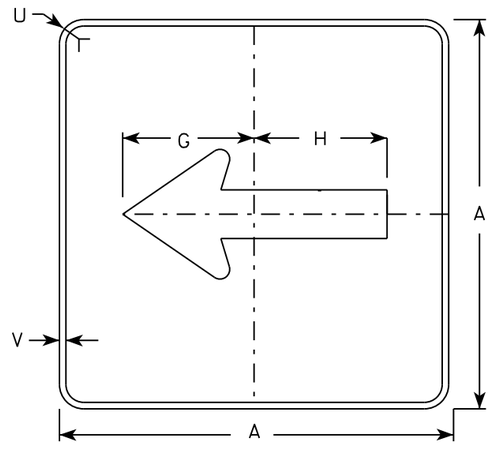

M6-1
MM6-1
MO6-1
MP6-1



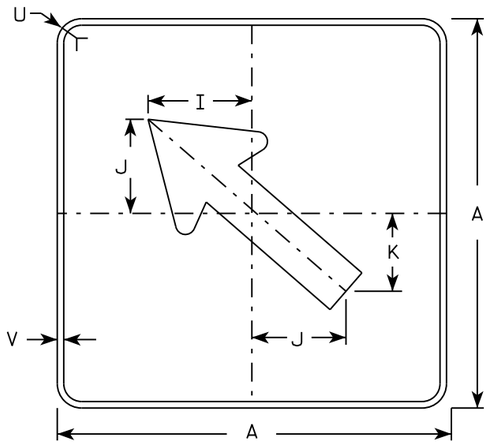

M6-2
MM6-2
MO6-2
MP6-2

NOTES

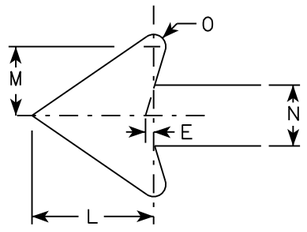
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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
   MO6-1 and MO6-2 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




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




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




| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 |

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

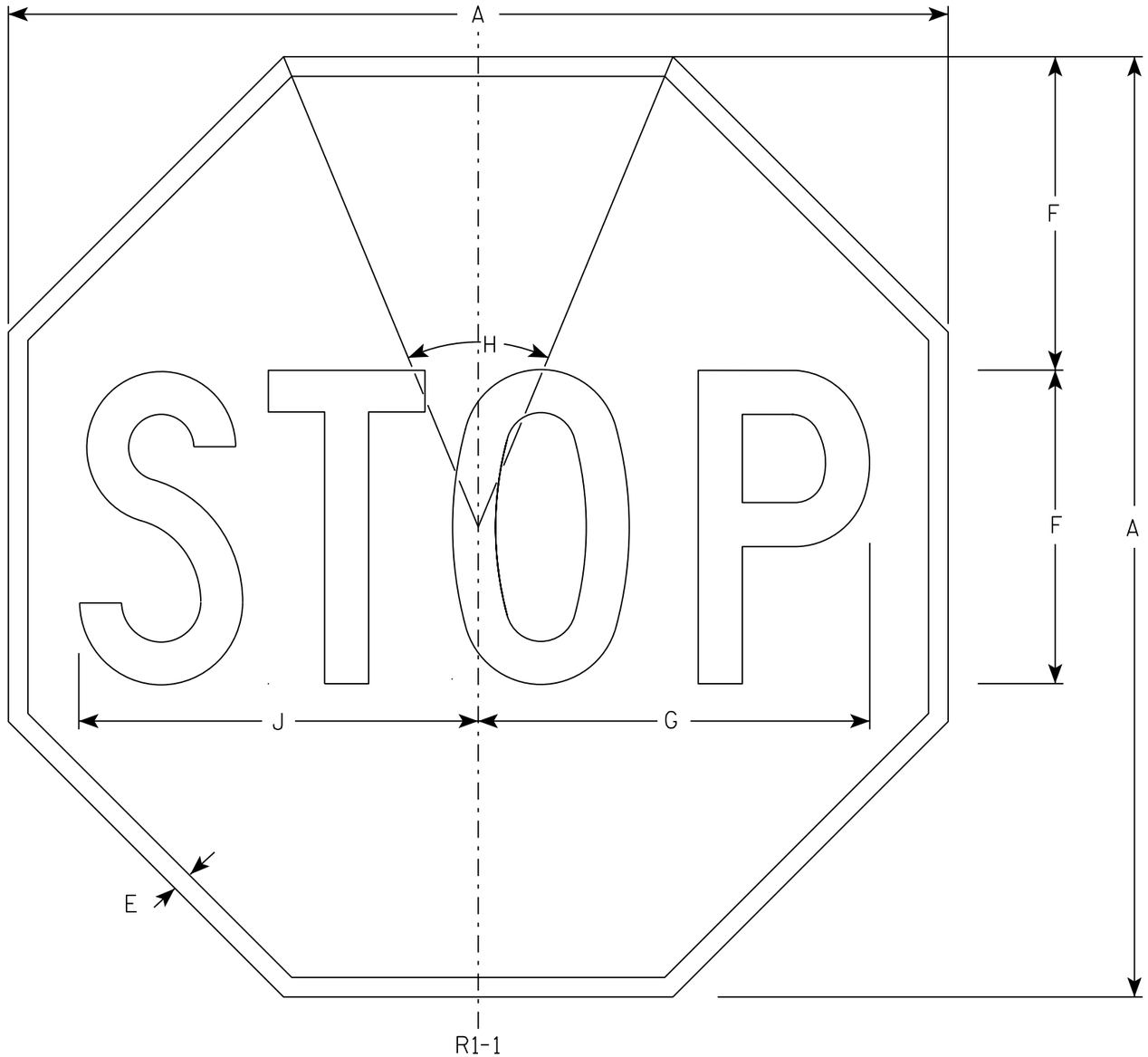
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 175 M6-1.15

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



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000




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

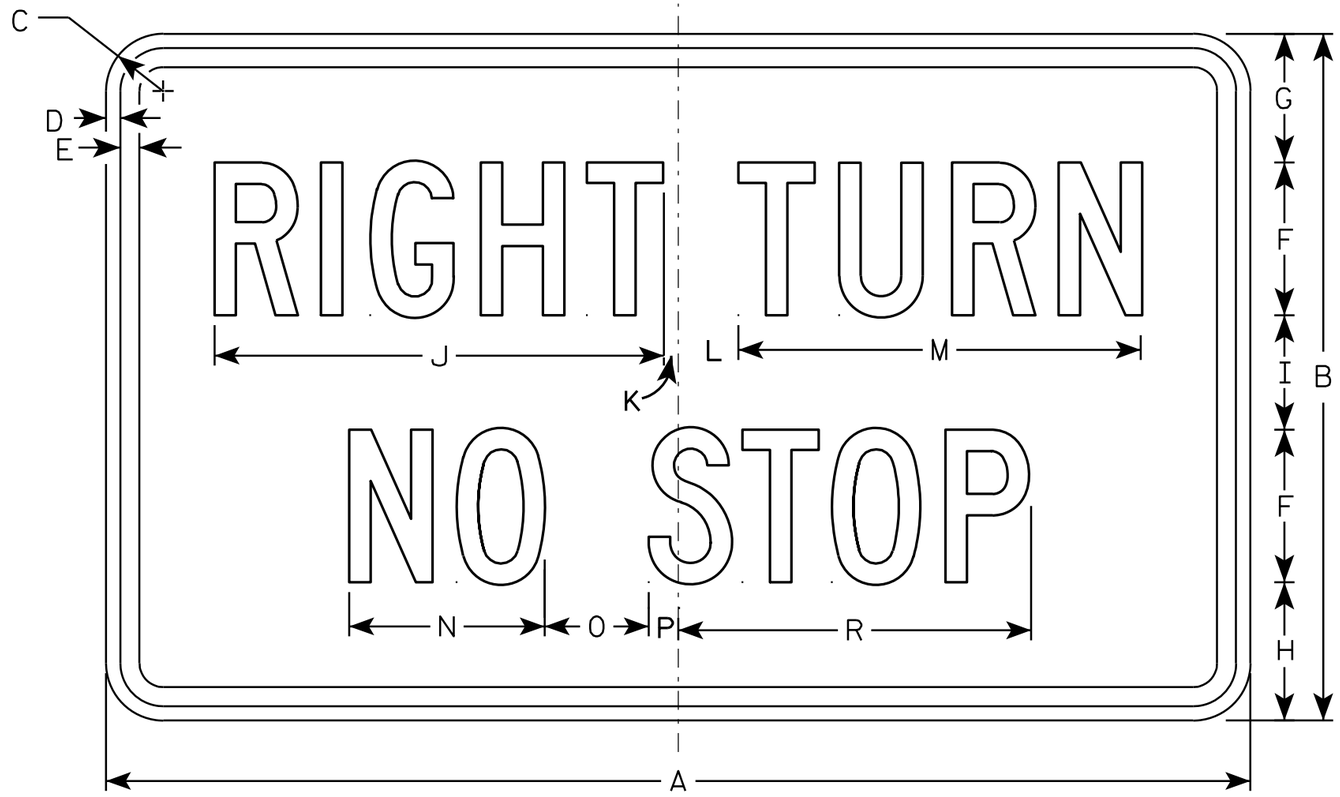
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE R1-1.13



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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000




R1-51

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 - 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 4 | 3 3/8 | 3 5/8 | 3 | 11 3/4 | 3/8 | 1 5/8 | 10 1/2 | 5 1/8 | 2 3/4 | 3/4 | | 9 1/4 | | | | | | | | | 3.75 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 4 | 4 | 4 | 18 3/4 | 1 | 3 | 16 3/4 | 8 | 5 | 5/8 | | 14 5/8 | | | | | | | | | 8.00 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

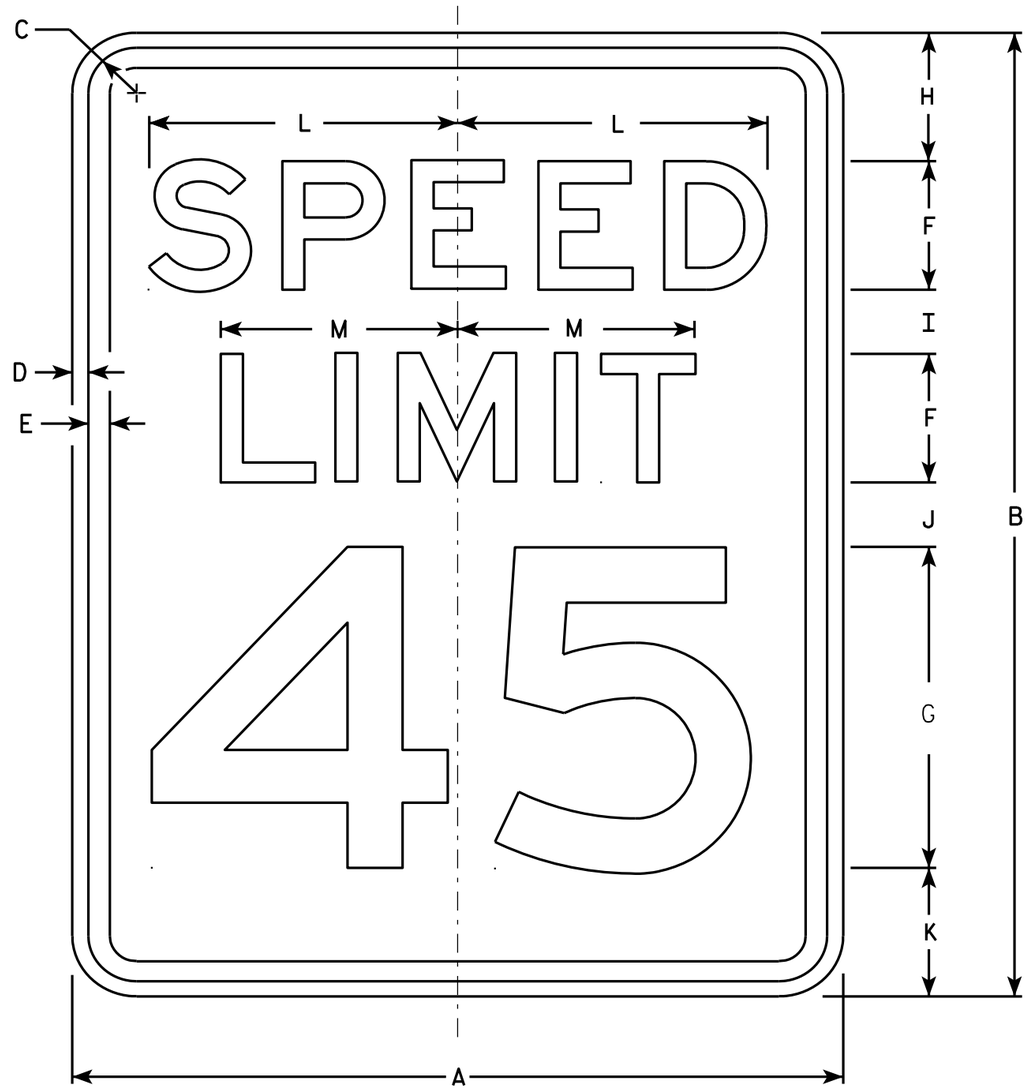
STANDARD SIGN
R1-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/11 PLATE NO. R1-51.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 177 | E |
|---|---|---|---|---|---|




R2-1

NOTES

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

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

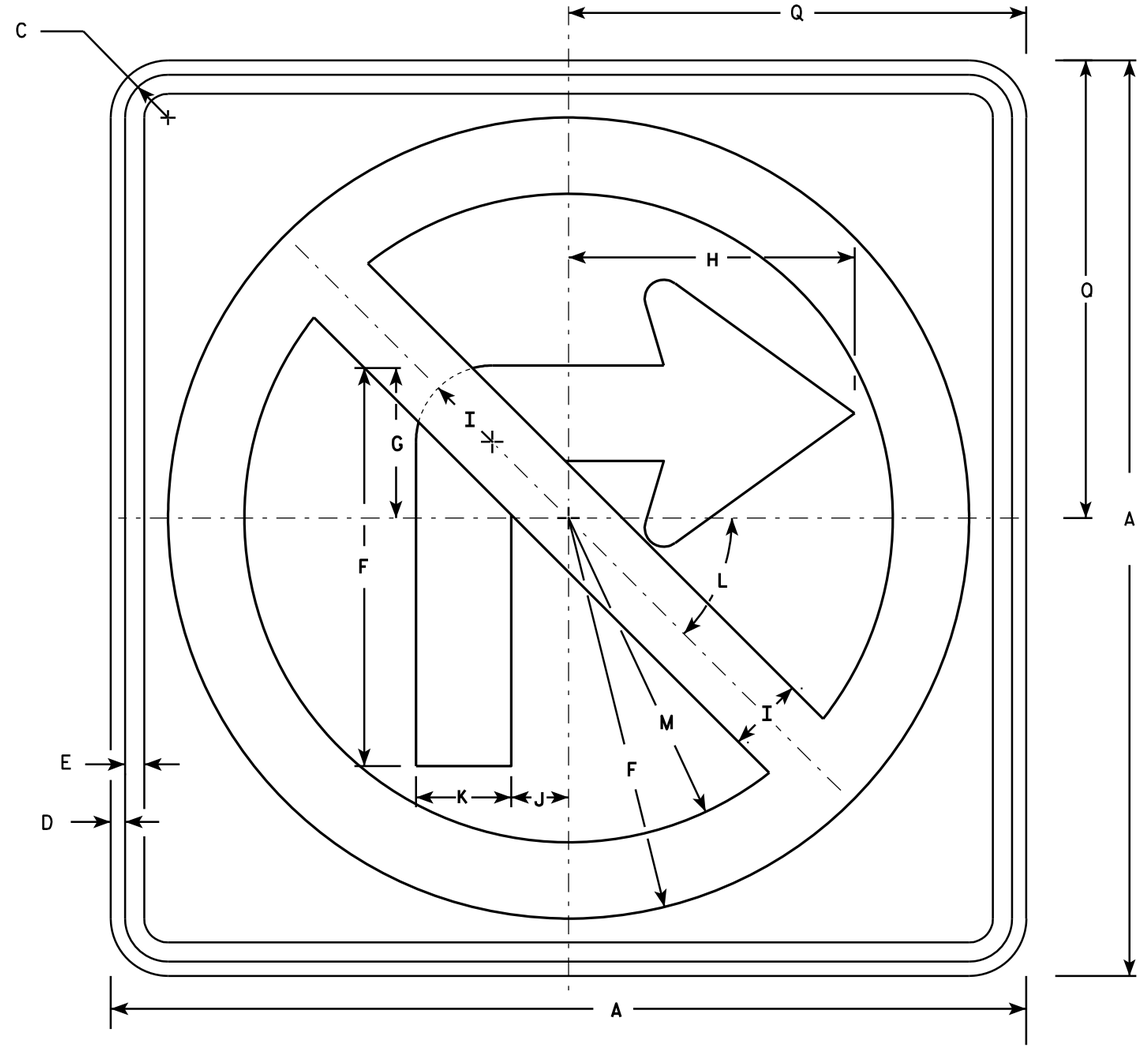
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

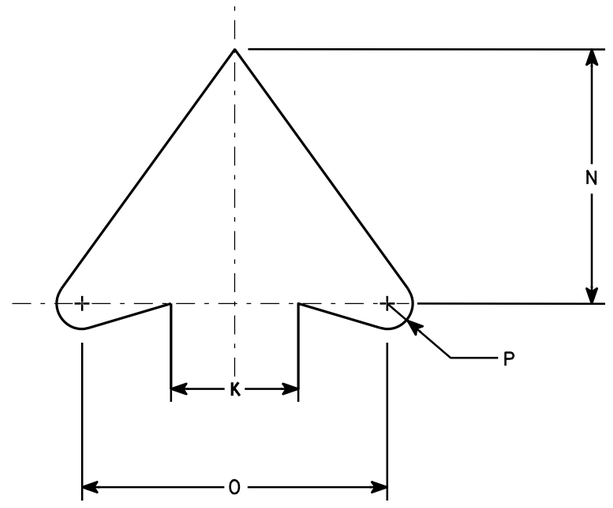
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 178 | E




R3-1

## 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 - 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 |

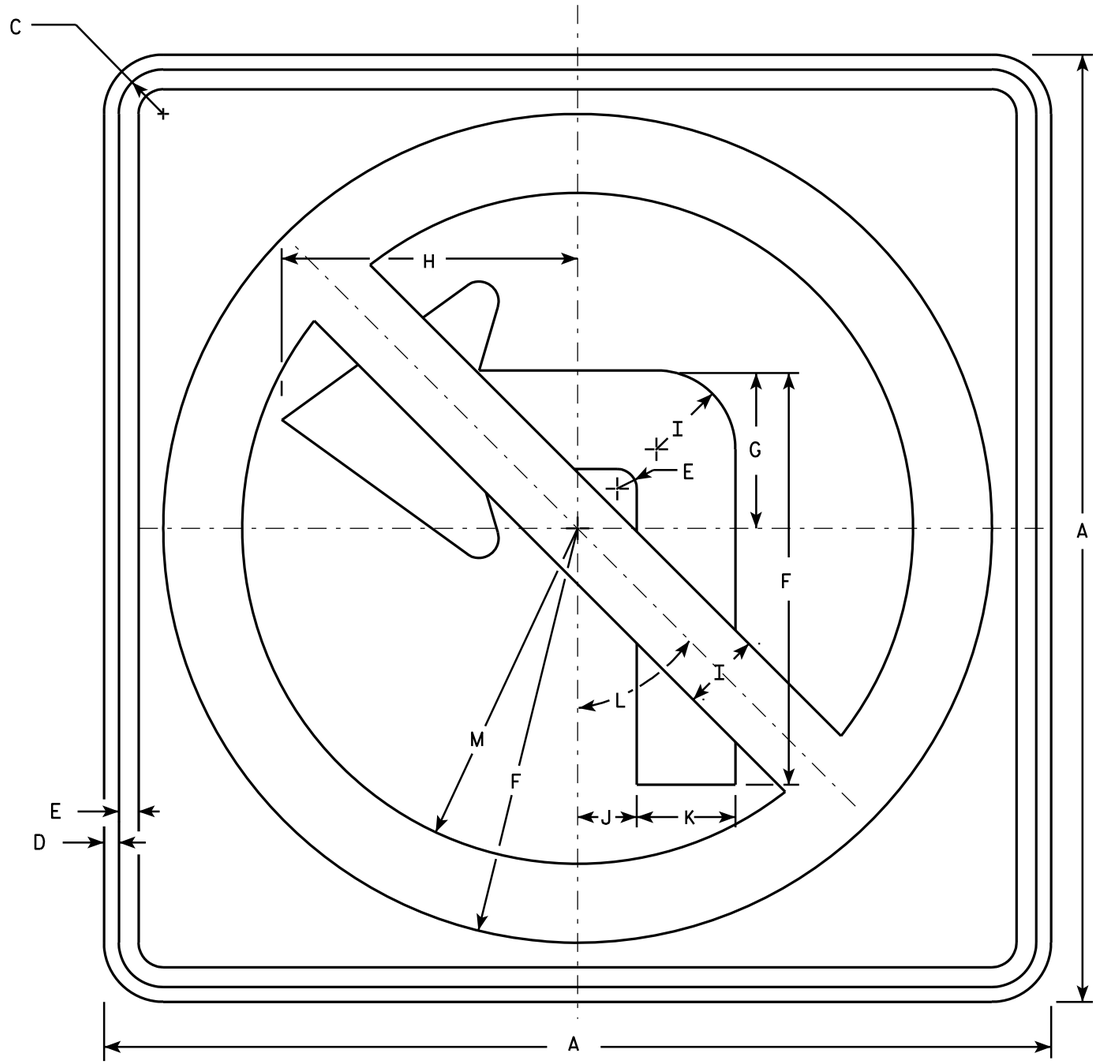
# STANDARD SIGN
# R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

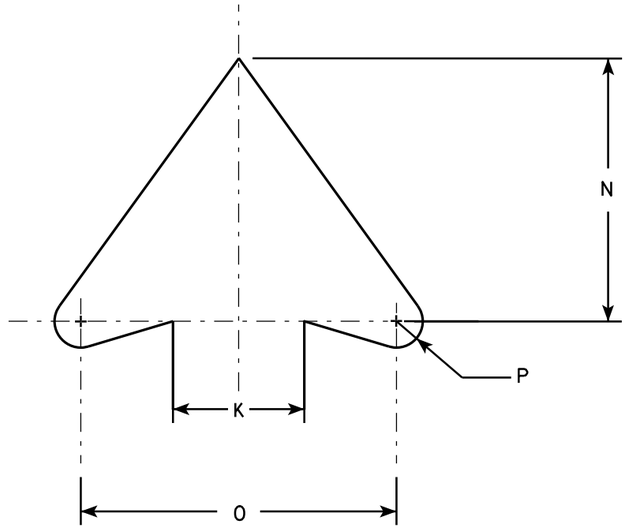
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 179 | E |
|---|---|---|---|---|---|




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 |

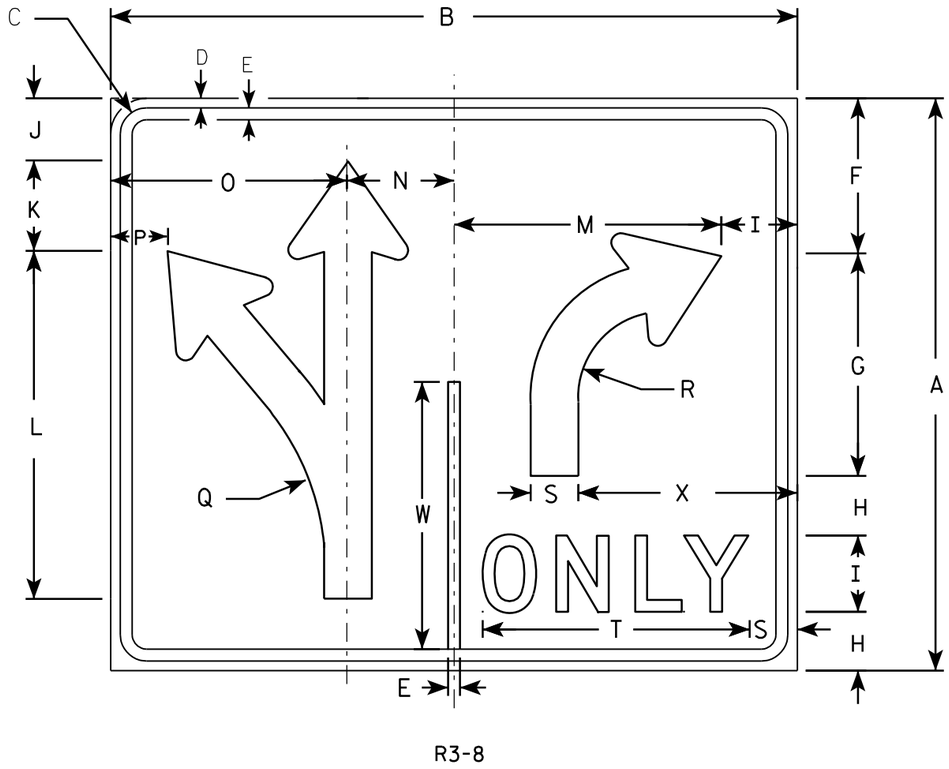
# STANDARD SIGN
# R3-2

WISCONSIN DEPT OF TRANSPORTATION

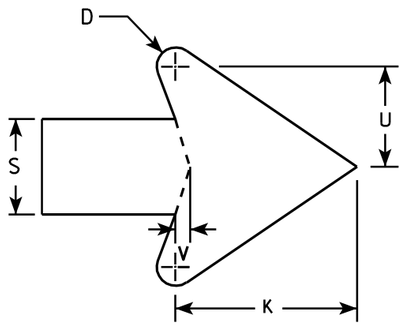
APPROVED Matthew R Rauch
for State Traffic Engineer

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

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 180 | E |
|---|---|---|---|---|---|



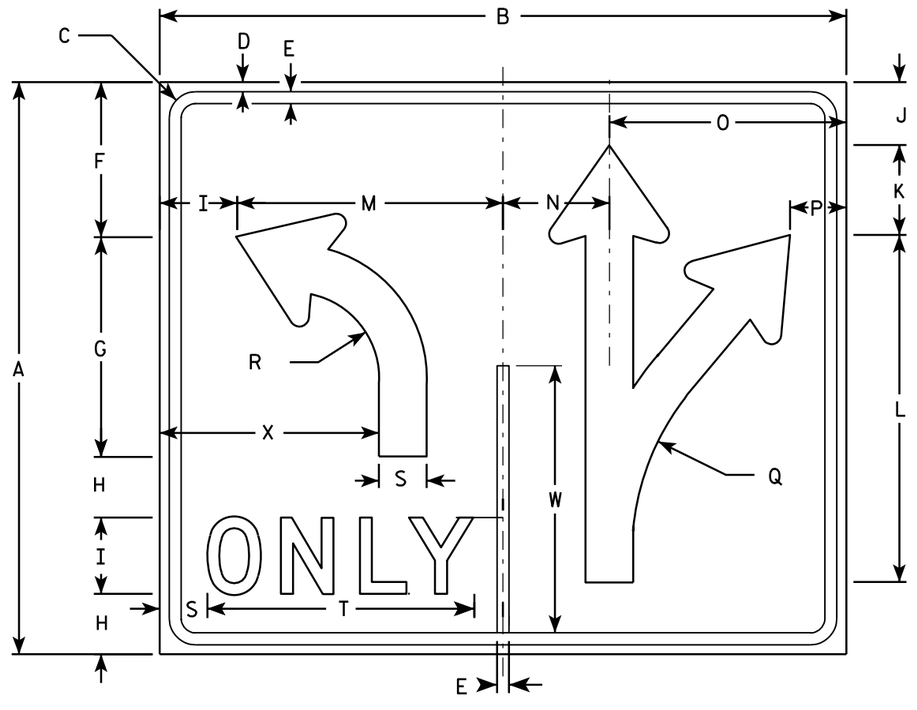

R3-8




ARROW DETAIL

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.




R3-8A

| 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 | 36 | 1 3/8 | 1/2 | 5/8 | 8 1/8 | 11 5/8 | 3 1/8 | 4 | 3 1/4 | 4 3/4 | 18 1/4 | 14 | 5 5/8 | 12 3/8 | 3 | 13 1/4 | 4 1/2 | 2 1/2 | 14 | 2 5/8 | 3/8 | 14 | 11 1/2 | | | 7.5 |
| 2M | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 8 1/8 | 11 5/8 | 3 1/8 | 4 | 3 1/4 | 4 3/4 | 18 1/4 | 14 | 5 5/8 | 12 3/8 | 3 | 13 1/4 | 4 1/2 | 2 1/2 | 14 | 2 5/8 | 3/8 | 14 | 11 1/2 | | | 7.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | 54 | 2 1/4 | 3/4 | 1 | 13 1/4 | 18 1/2 | 5 1/8 | 6 | 5 1/4 | 7 1/8 | 29 1/8 | 21 | 8 3/8 | 18 5/8 | 4 3/8 | 21 7/8 | 7 1/4 | 3 3/4 | 20 5/8 | 4 | 5/8 | 22 3/8 | 17 1/4 | | | 18.0 |
| 5 | 48 | 54 | 2 1/4 | 3/4 | 1 | 13 1/4 | 18 1/2 | 5 1/8 | 6 | 5 1/4 | 7 1/8 | 29 1/8 | 21 | 8 3/8 | 18 5/8 | 4 3/8 | 21 7/8 | 7 1/4 | 3 3/4 | 20 5/8 | 4 | 5/8 | 22 3/8 | 17 1/4 | | | 18.0 |

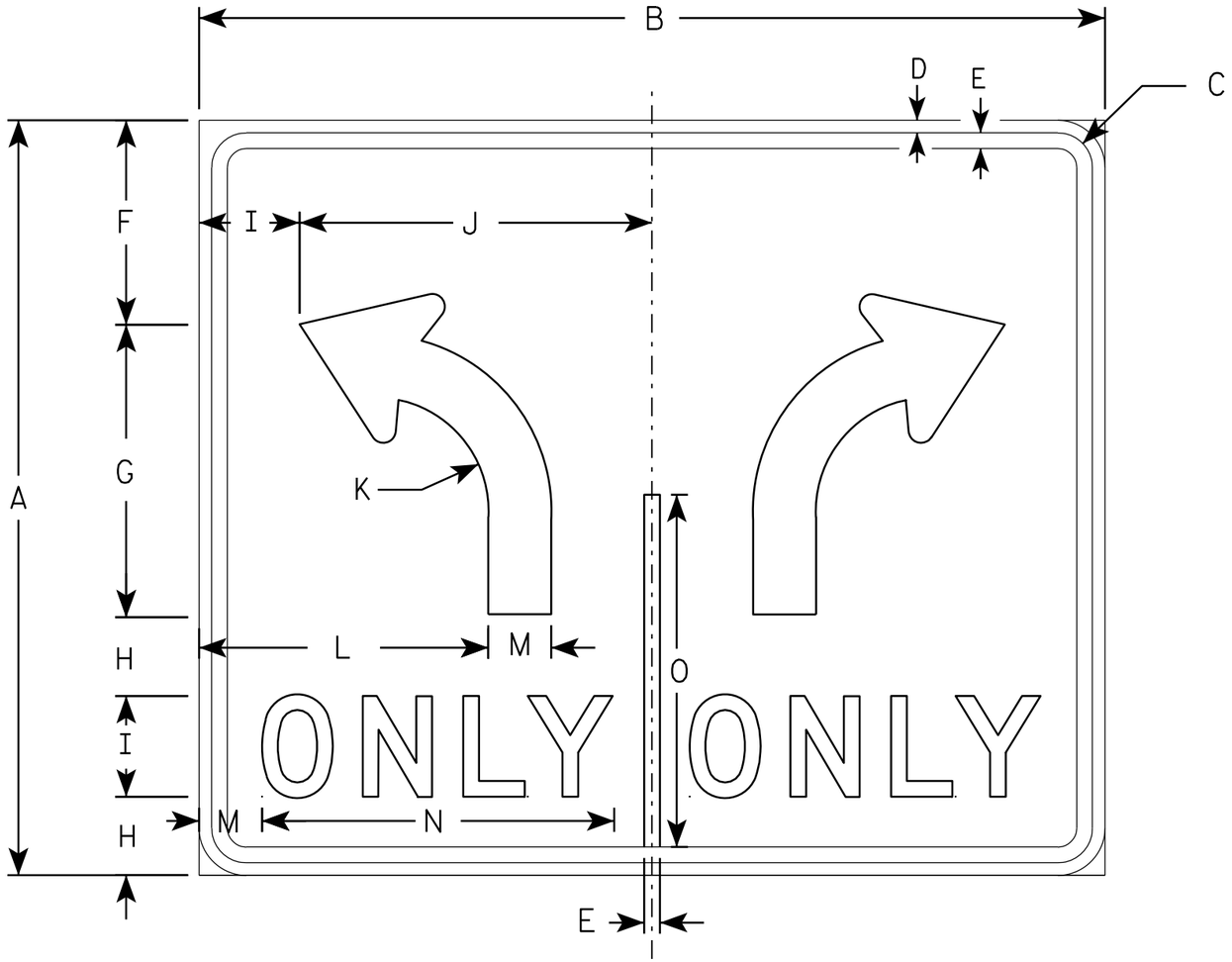
# STANDARD SIGN
# R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

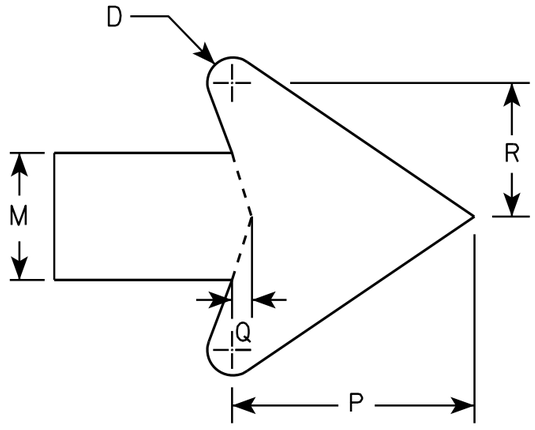
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 181 | E |
|---|---|---|---|---|---|




R3-8F

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 | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 8 1/8 | 11 5/8 | 3 1/8 | 4 | 14 | 4 1/2 | 11 1/2 | 2 1/2 | 14 | 14 | 4 3/4 | 3/8 | 2 5/8 | | | | | | | | | 7.5 |
| 2M | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 8 1/8 | 11 5/8 | 3 1/8 | 4 | 14 | 4 1/2 | 11 1/2 | 2 1/2 | 14 | 14 | 4 3/4 | 3/8 | 2 5/8 | | | | | | | | | 7.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | 54 | 2 1/4 | 3/4 | 1 | 13 1/4 | 18 1/2 | 5 1/8 | 6 | 21 | 7 1/4 | 17 1/4 | 3 3/4 | 20 5/8 | 22 3/8 | 7 1/8 | 5/8 | 4 | | | | | | | | | 18.0 |
| 5 | 48 | 54 | 2 1/4 | 3/4 | 1 | 13 1/4 | 18 1/2 | 5 1/8 | 6 | 21 | 7 1/4 | 17 1/4 | 3 3/4 | 20 5/8 | 22 3/8 | 7 1/8 | 5/8 | 4 | | | | | | | | | 18.0 |

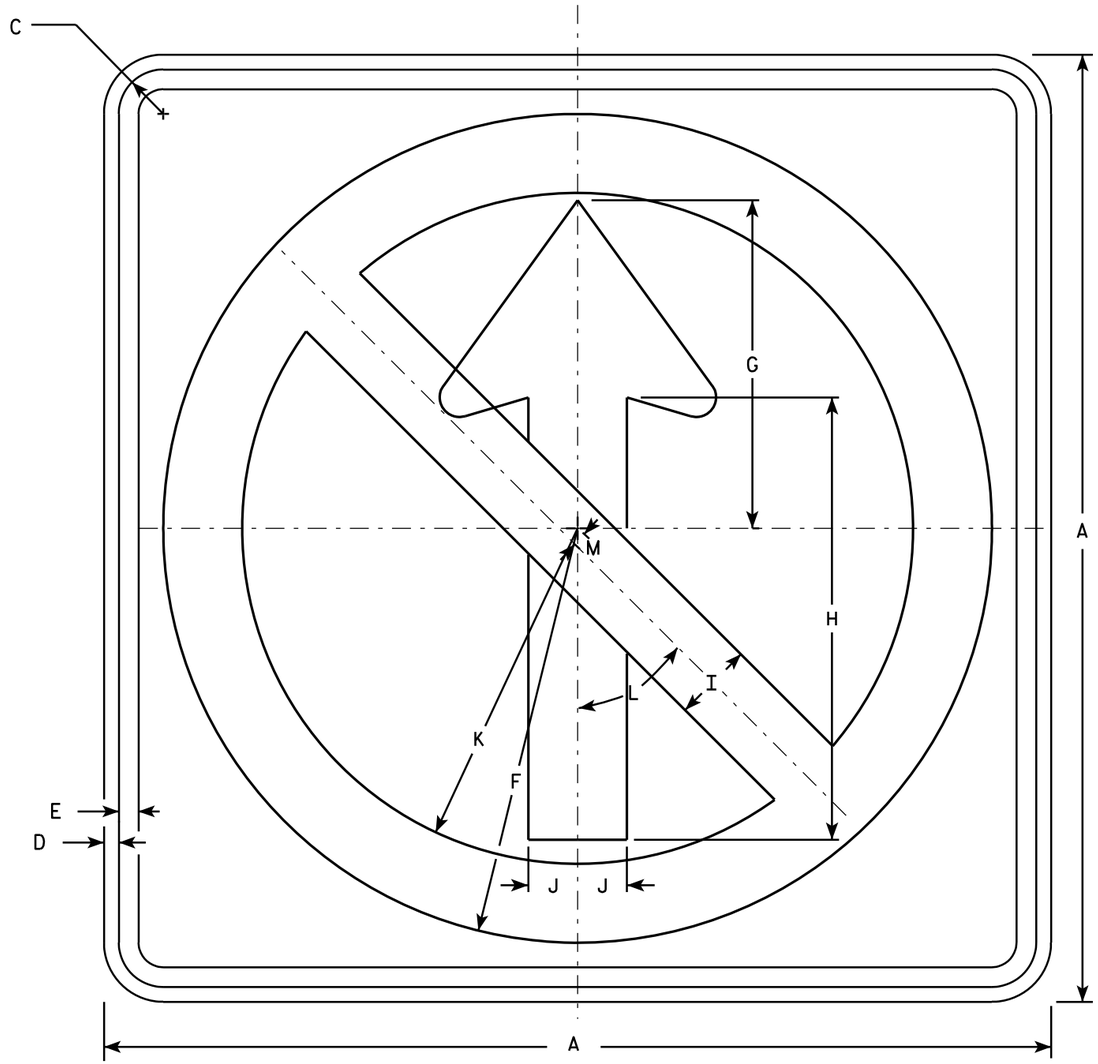
STANDARD SIGN
R3-8F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8F.2

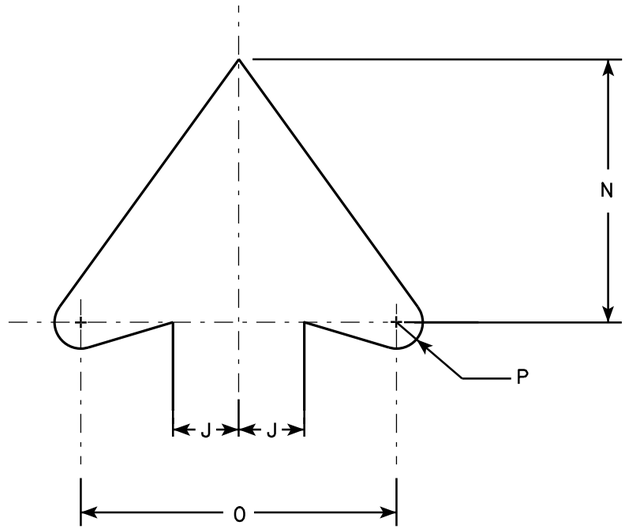
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 182 | E




R3-27

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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 8 3/8 | 11 1/4 | 2 | 1 1/4 | 8 1/2 | 45° | 3/8 | 5 | 6 | 1/2 | | | | | | | | | | | 4.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 12 1/2 | 16 3/4 | 3 | 1 7/8 | 12 3/4 | 45° | 1/2 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 12 1/2 | 16 3/4 | 3 | 1 7/8 | 12 3/4 | 45° | 1/2 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 21 | 16 5/8 | 22 3/8 | 4 | 2 1/2 | 17 | 45° | 3/4 | 10 | 12 | 1 | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

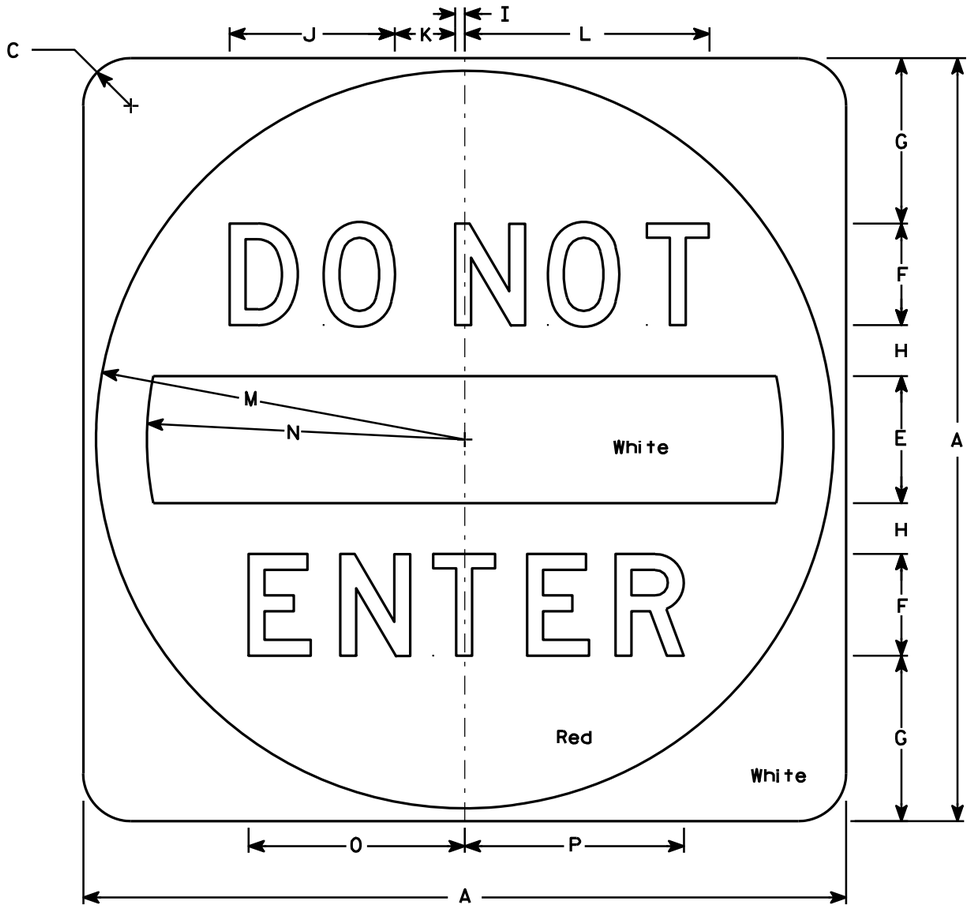
# STANDARD SIGN
# R3-27

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/07/10 PLATE NO. R3-27.1

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 183 | E |
|---|---|---|---|---|---|




R5-1

## NOTES

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

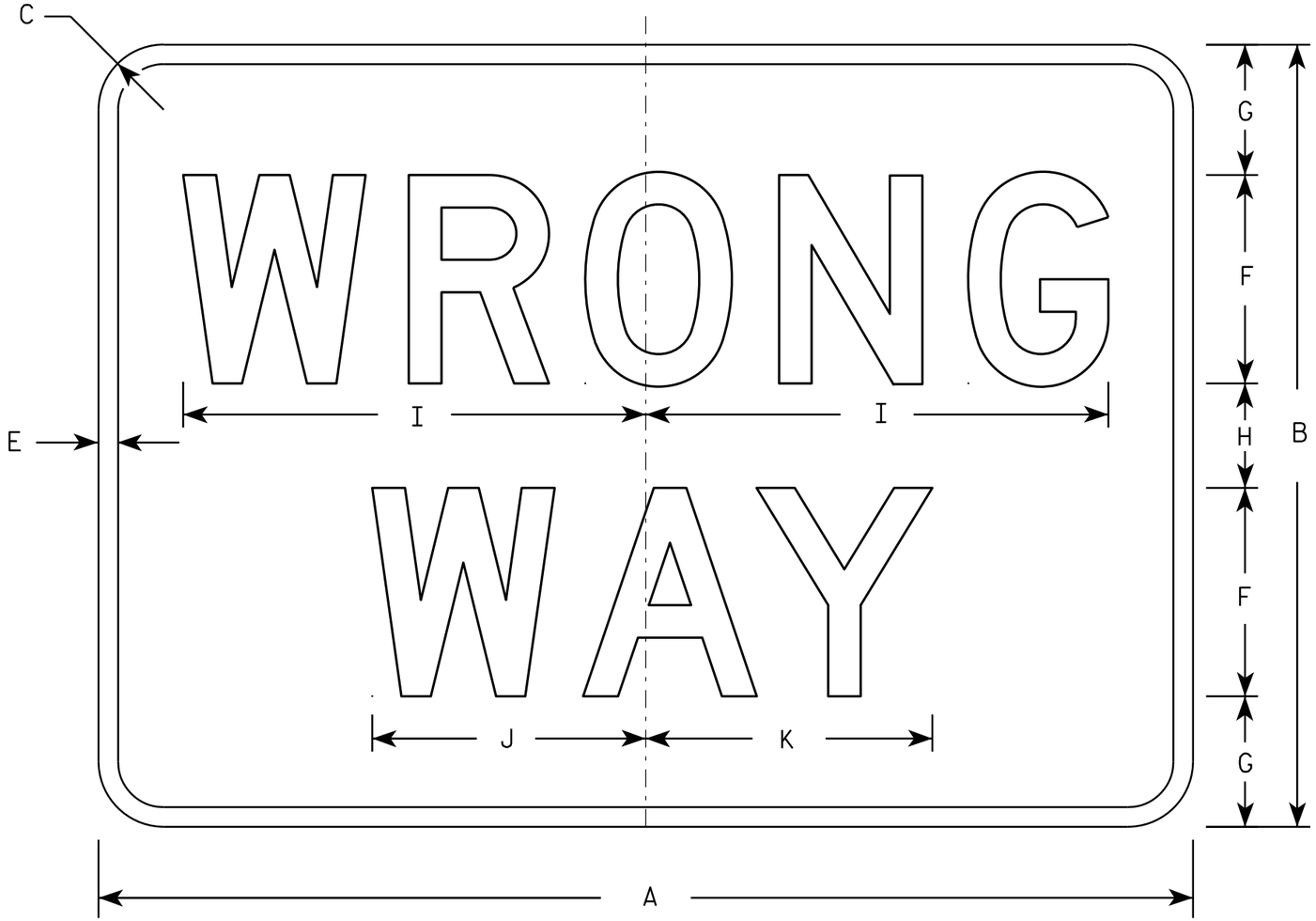
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 184 | 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 |

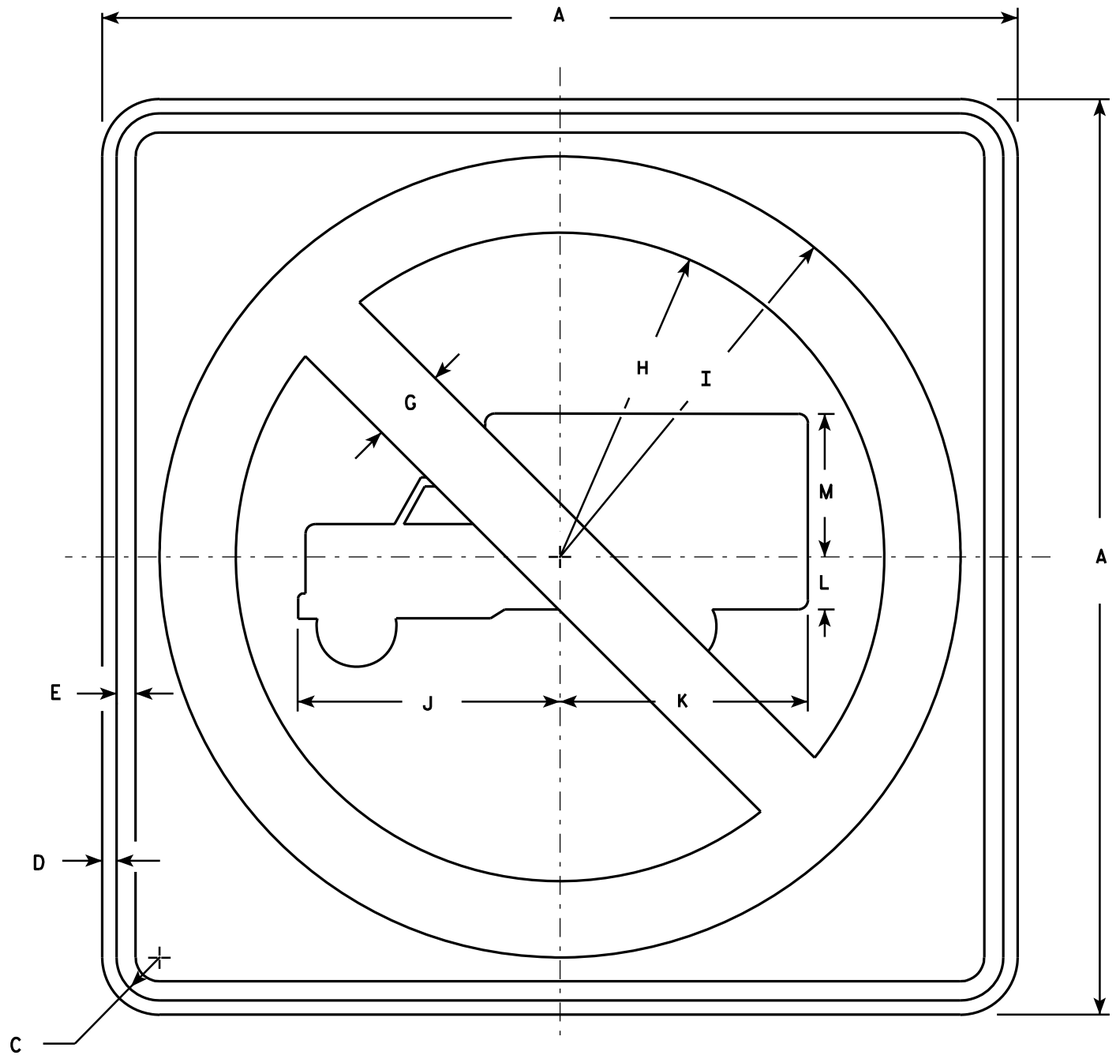
STANDARD SIGN
R5-1A

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: 185 | E |
|---|---|---|---|---|---|




R5-2

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. Circle & Diagonal - Reflective red.
   Truck Symbol & Border - Non-reflective black.

| 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 | 3/8 | 1/2 | | 2 | 8 1/2 | 10 1/2 | 6 7/8 | 6 1/2 | 1 3/8 | 3 3/4 | | | | | | | | | | | | | | 4.0 |
| 2M | 24 | | 1 1/8 | 3/8 | 1/2 | | 2 | 8 1/2 | 10 1/2 | 6 7/8 | 6 1/2 | 1 3/8 | 3 3/4 | | | | | | | | | | | | | | 4.0 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 2 1/2 | 10 5/8 | 13 1/8 | 8 1/2 | 8 1/8 | 1 5/8 | 4 3/4 | | | | | | | | | | | | | | 6.25 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | | 3 | 12 3/4 | 15 3/4 | 10 1/4 | 9 3/4 | 2 | 5 3/4 | | | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 4 | 17 | 21 | 13 5/8 | 13 | 2 5/8 | 7 5/8 | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

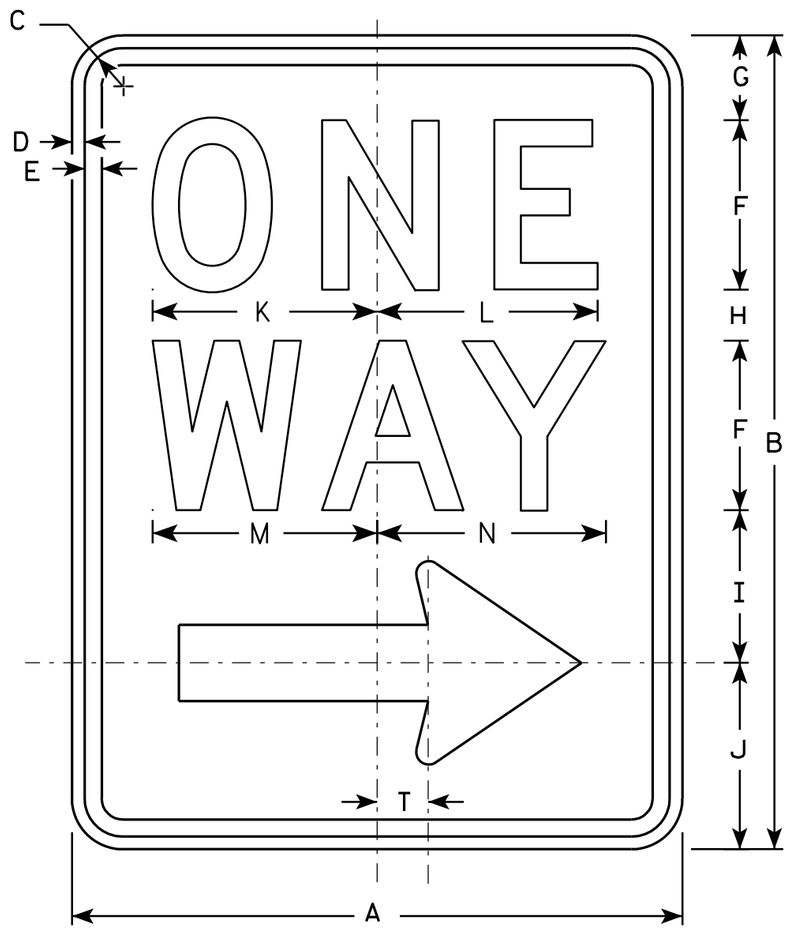
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 186 | E |
|---|---|---|---|---|---|

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R52.DGN PLOT DATE : 29-MAR-2011 11:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

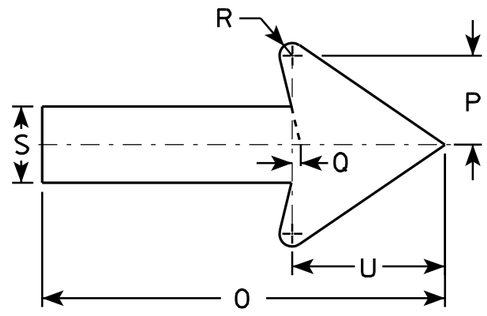
7




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 | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 187 | E |
|---|---|---|---|---|---|




R6-6

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 except Line 1 is 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 6 | 3 1/2 | 2 1/2 | 9 1/8 | 8 1/8 | 8 1/2 | | | | | | | | | | | | | | | |
| 2M | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 3 1/4 | 2 3/4 | 12 1/4 | 10 1/2 | 11 1/2 | | | | | | | | | | | | | | | |
| 3 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 10 | 5 1/4 | 3 1/4 | 15 1/4 | 12 3/4 | 13 3/8 | | | | | | | | | | | | | | | |
| 4 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 10 | 5 1/4 | 3 1/4 | 15 1/4 | 12 3/4 | 13 3/8 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | |

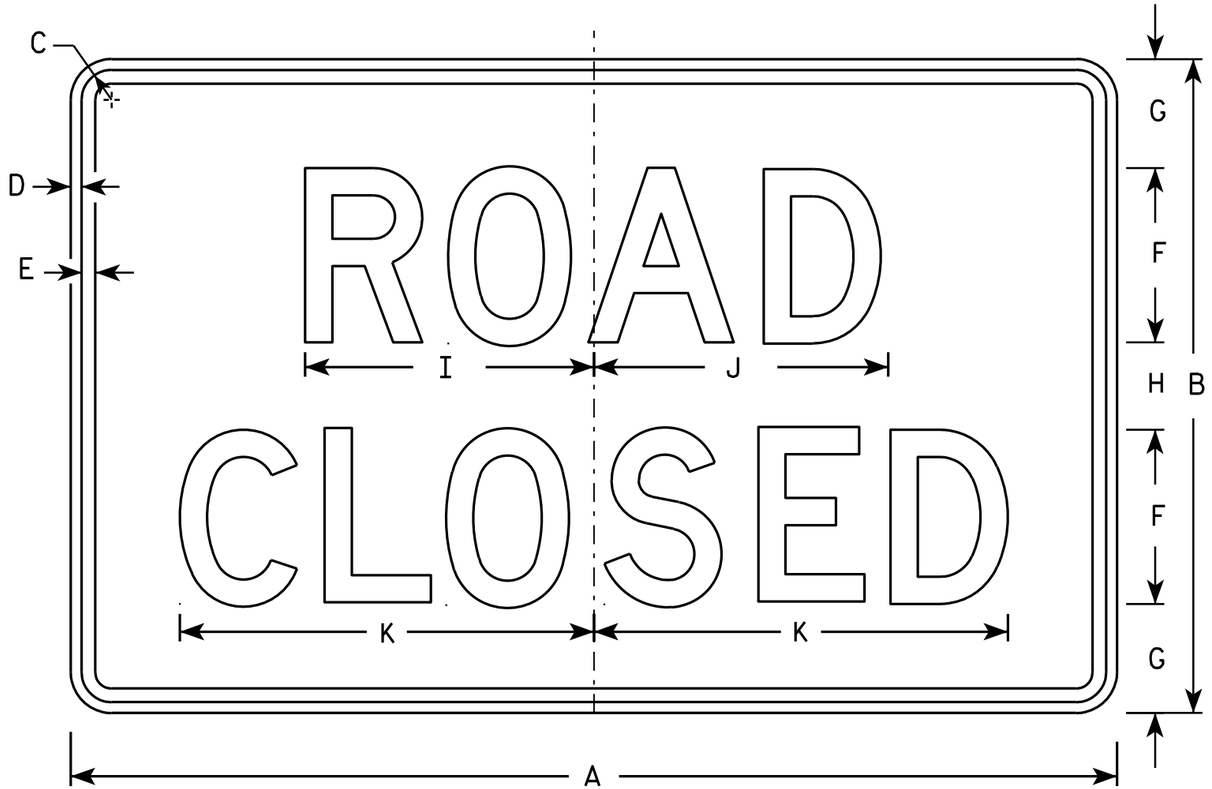
STANDARD SIGN
R6-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-6.1

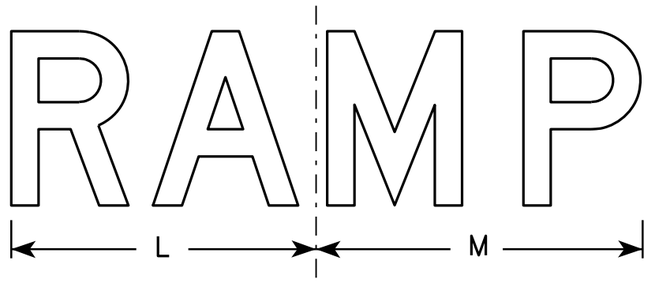
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 188 | E |
|---|---|---|---|---|---|



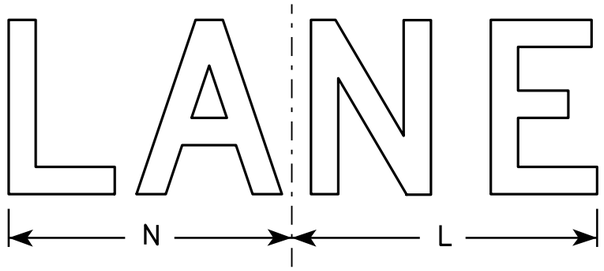

R11-2

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 - 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. Modify the message as required.




R11-2R




R11-2L

| 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 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 2M | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 3 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 4 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 5 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |

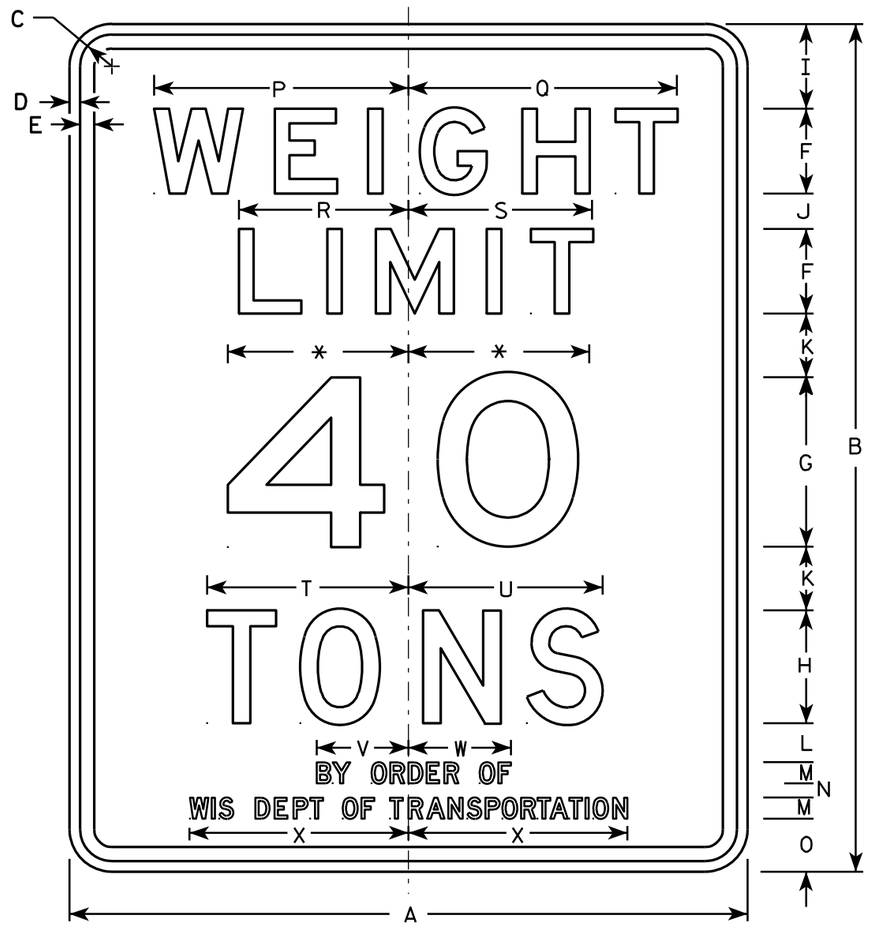
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 189 | E




R12-1

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 - 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. Lines 1, 2 & 3 are series E
   Lines 4, 5, & 6 are series D.
6. Substitute appropriate numeral and optically adjust spacing to achieve proper balance.
7. Substitute name of county or town on County Trunk and Town Highways respectively. Community name on City or Village Streets including Connecting Highways is optional.

* Varies (see note 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 | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 3 | 6 | 4 | 3 | 1 1/4 | 2 1/4 | 1 3/8 | 3/4 | 1/2 | 1 7/8 | 9 | 9 1/2 | 6 | 6 1/2 | 7 1/8 | 6 7/8 | 3 1/4 | 3 5/8 | 7 3/4 | | | 5.0 |
| 2S | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 3 | 6 | 4 | 3 | 1 1/4 | 2 1/4 | 1 3/8 | 3/4 | 1/2 | 1 7/8 | 9 | 9 1/2 | 6 | 6 1/2 | 7 1/8 | 6 7/8 | 3 1/4 | 3 5/8 | 7 3/4 | | | 5.0 |
| 2M | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 3 | 6 | 4 | 3 | 1 1/4 | 2 1/4 | 1 3/8 | 3/4 | 1/2 | 1 7/8 | 9 | 9 1/2 | 6 | 6 1/2 | 7 1/8 | 6 7/8 | 3 1/4 | 3 5/8 | 7 3/4 | | | 5.0 |
| 3 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 6 | 10 | 8 | 4 1/2 | 2 1/2 | 2 1/4 | 1 1/2 | 3/4 | 1/2 | 3 | 13 1/2 | 14 1/4 | 9 | 9 3/4 | 10 5/8 | 10 1/4 | 3 1/4 | 3 5/8 | 7 3/4 | | | 12.0 |
| 4 | 48 | 60 | 2 1/4 | 3/4 | 1 | 6 | 12 | 8 | 6 | 2 1/2 | 4 1/2 | 2 3/4 | 1 1/2 | 1 | 3 3/4 | 18 | 19 | 12 | 13 | 14 1/4 | 13 3/4 | 6 1/2 | 7 1/4 | 15 1/2 | | | 20.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

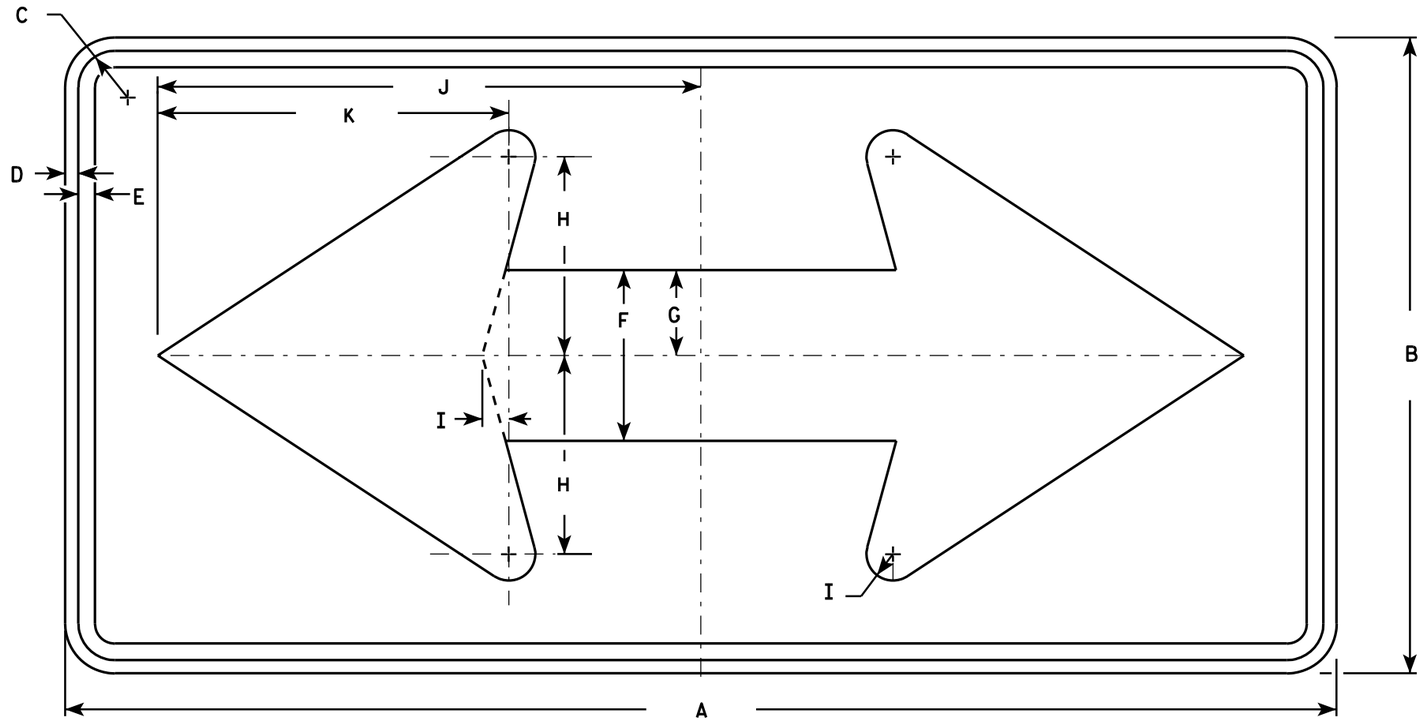
STANDARD SIGN
R12-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R12-1.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 190 | E




W1-7

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

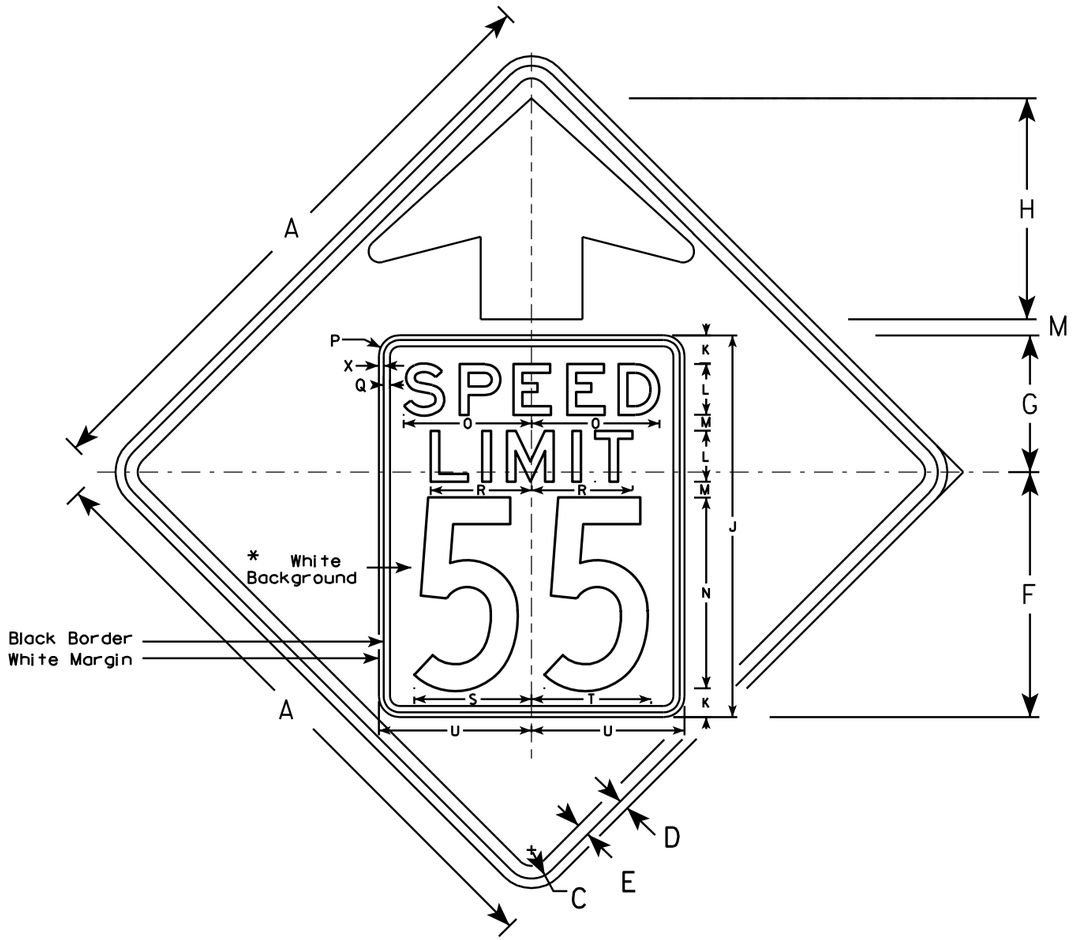
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 191 | E

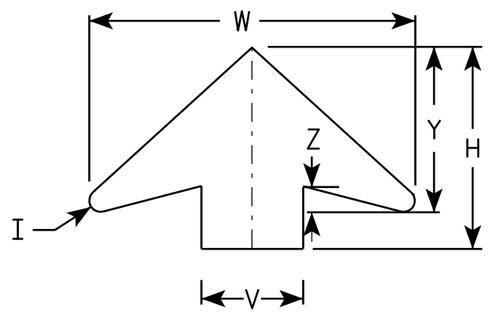



W3-5

NOTES

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

*Speed Limit Sign shall have a White Background




ARROW DETAIL

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

STANDARD SIGN
W3-5

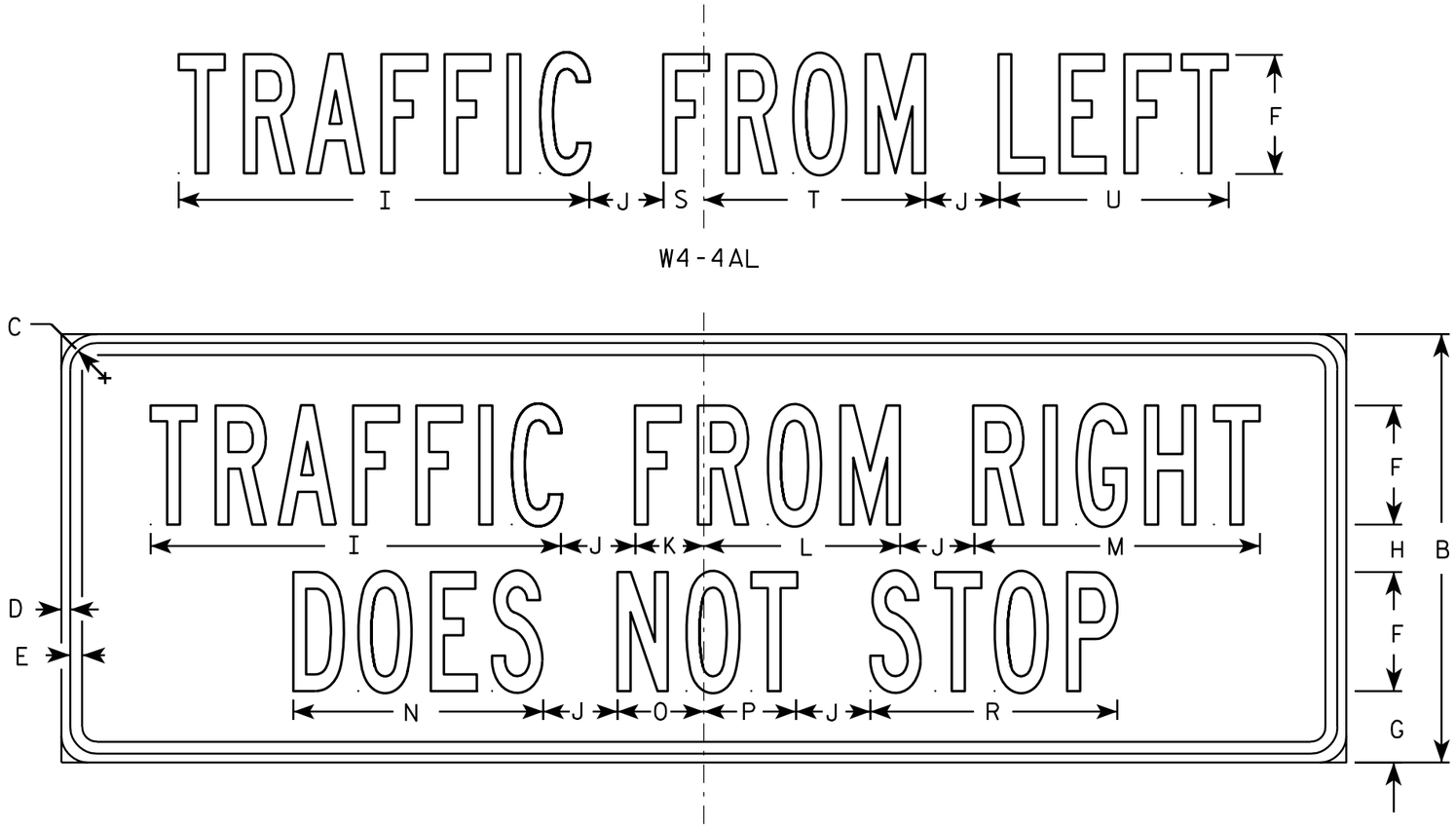
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 192 E




W4-4AL




W4-4AR

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 | 30 | 12 | 1 1/8 | 3/8 | 3/8 | 3 | 2 1/4 | 1 1/2 | 10 3/8 | 1 1/2 | 1 3/4 | 4 7/8 | 7 1/4 | 6 1/4 | 2 1/4 | 2 1/4 | | 6 1/4 | 1 | 5 5/8 | 5 3/4 | | | | | | 2.5 |
| 2M | 30 | 12 | 1 1/8 | 3/8 | 3/8 | 3 | 2 1/4 | 1 1/2 | 10 3/8 | 1 1/2 | 1 3/4 | 4 7/8 | 7 1/4 | 6 1/4 | 2 1/4 | 2 1/4 | | 6 1/4 | 1 | 5 5/8 | 5 3/4 | | | | | | 2.5 |
| 3 | 42 | 15 | 1 1/8 | 3/8 | 1/2 | 4 | 2 5/8 | 1 3/4 | 13 7/8 | 2 3/8 | 2 1/8 | 6 3/4 | 9 3/4 | 8 3/8 | 2 3/4 | 3 3/8 | | 8 3/8 | 1 1/8 | 7 3/4 | 7 3/4 | | | | | | 4.4 |
| 4 | 54 | 18 | 1 1/8 | 3/8 | 1/2 | 5 | 3 | 2 | 17 1/4 | 3 1/8 | 2 7/8 | 8 1/4 | 12 | 10 1/2 | 3 5/8 | 3 7/8 | | 10 3/8 | 1 3/4 | 9 3/8 | 9 5/8 | | | | | | 6.8 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W4-4AL & W4-4AR

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 193 | E




W4-4B

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 | 30 | 12 | 1 1/8 | 3/8 | 1/2 | 3 | 2 1/4 | 1 1/2 | 12 3/8 | 5/8 | 1 1/2 | 10 3/8 | 6 1/4 | 2 1/4 | 2 1/4 | 6 1/4 | | | | | | | | | | | 2.5 |
| 2M | 30 | 12 | 1 1/8 | 3/8 | 1/2 | 3 | 2 1/4 | 1 1/2 | 12 3/8 | 5/8 | 1 1/2 | 10 3/8 | 6 1/4 | 2 1/4 | 2 1/4 | 6 1/4 | | | | | | | | | | | 2.5 |
| 3 | 42 | 15 | 1 1/8 | 3/8 | 1/2 | 4 | 2 5/8 | 1 3/4 | 16 7/8 | 5/8 | 2 3/8 | 13 7/8 | 8 3/8 | 3 | 3 1/8 | 8 3/8 | | | | | | | | | | | 4.17 |
| 4 | 48 | 18 | 1 1/8 | 3/8 | 1/2 | 5 | 3 | 2 | 21 | 5/8 | 3 1/8 | 17 1/4 | 10 1/2 | 3 5/8 | 3 7/8 | 10 3/8 | | | | | | | | | | | 6.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

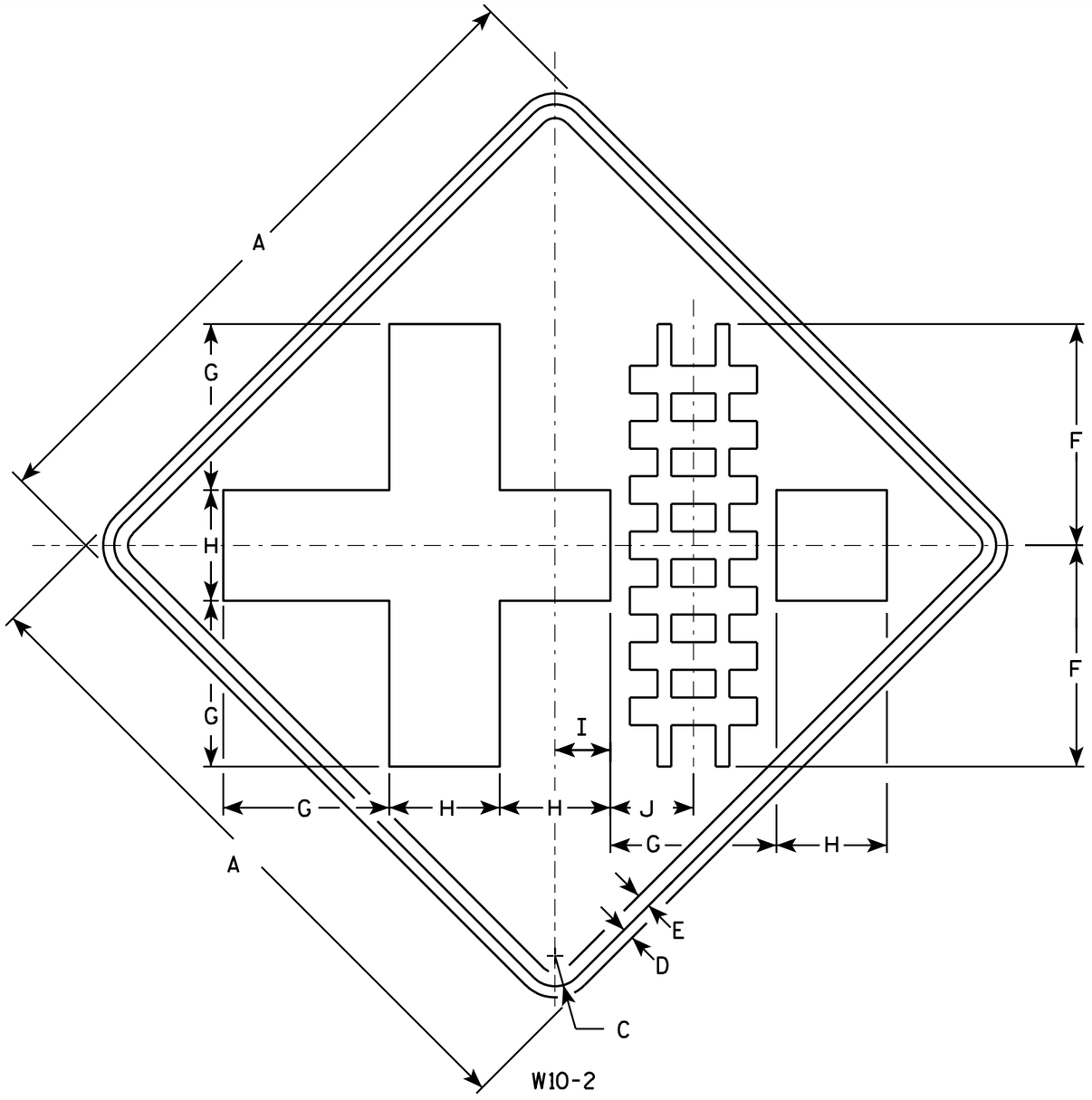
STANDARD SIGN
W4-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

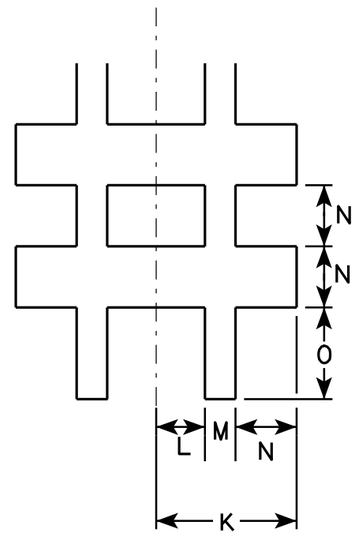
DATE 03/12/13 PLATE NO. W4-4B.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 194 | 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.




| 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 | 10 | 7 1/2 | 5 | 2 1/2 | 3 3/4 | 2 7/8 | 1 | 5/8 | 1 1/4 | 1 7/8 | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 9 | 6 | 3 | 4 1/2 | 3 3/8 | 1 1/8 | 3/4 | 1 1/2 | 2 1/4 | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 9 | 6 | 3 | 4 1/2 | 3 3/8 | 1 1/8 | 3/4 | 1 1/2 | 2 1/4 | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 9 | 6 | 3 | 4 1/2 | 3 3/8 | 1 1/8 | 3/4 | 1 1/2 | 2 1/4 | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 12 | 8 | 4 | 6 | 4 1/2 | 1 1/2 | 1 | 2 | 3 | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

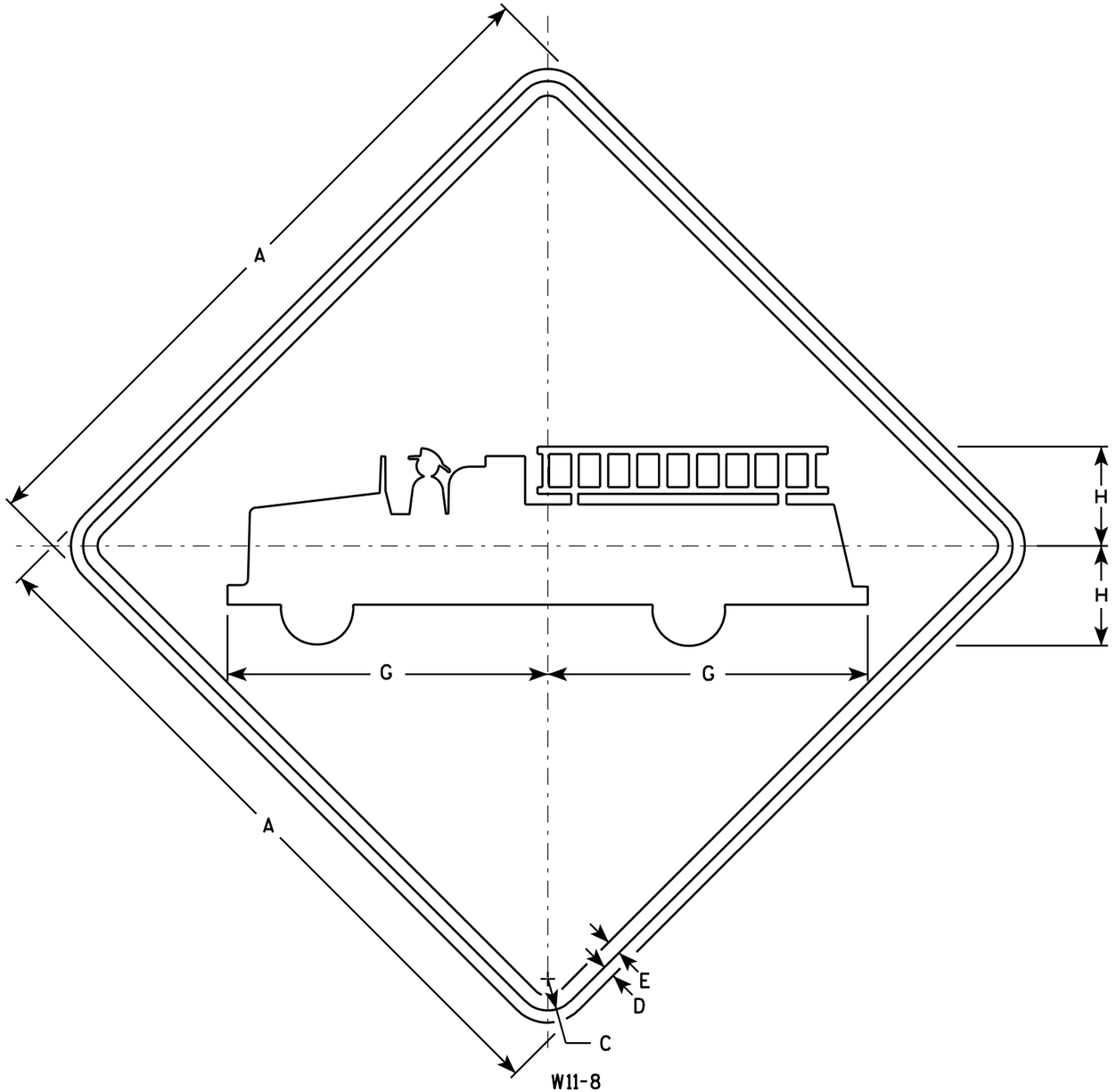
STANDARD SIGN
W10-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-2.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 195 | E




W11-8

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 | | 11 | 3 3/8 | | | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | | 13 3/4 | 4 3/8 | | | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | | 13 3/4 | 4 3/8 | | | | | | | | | | | | | | | | | | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 16 1/2 | 5 1/4 | | | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 22 | 7 | | | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W11-8

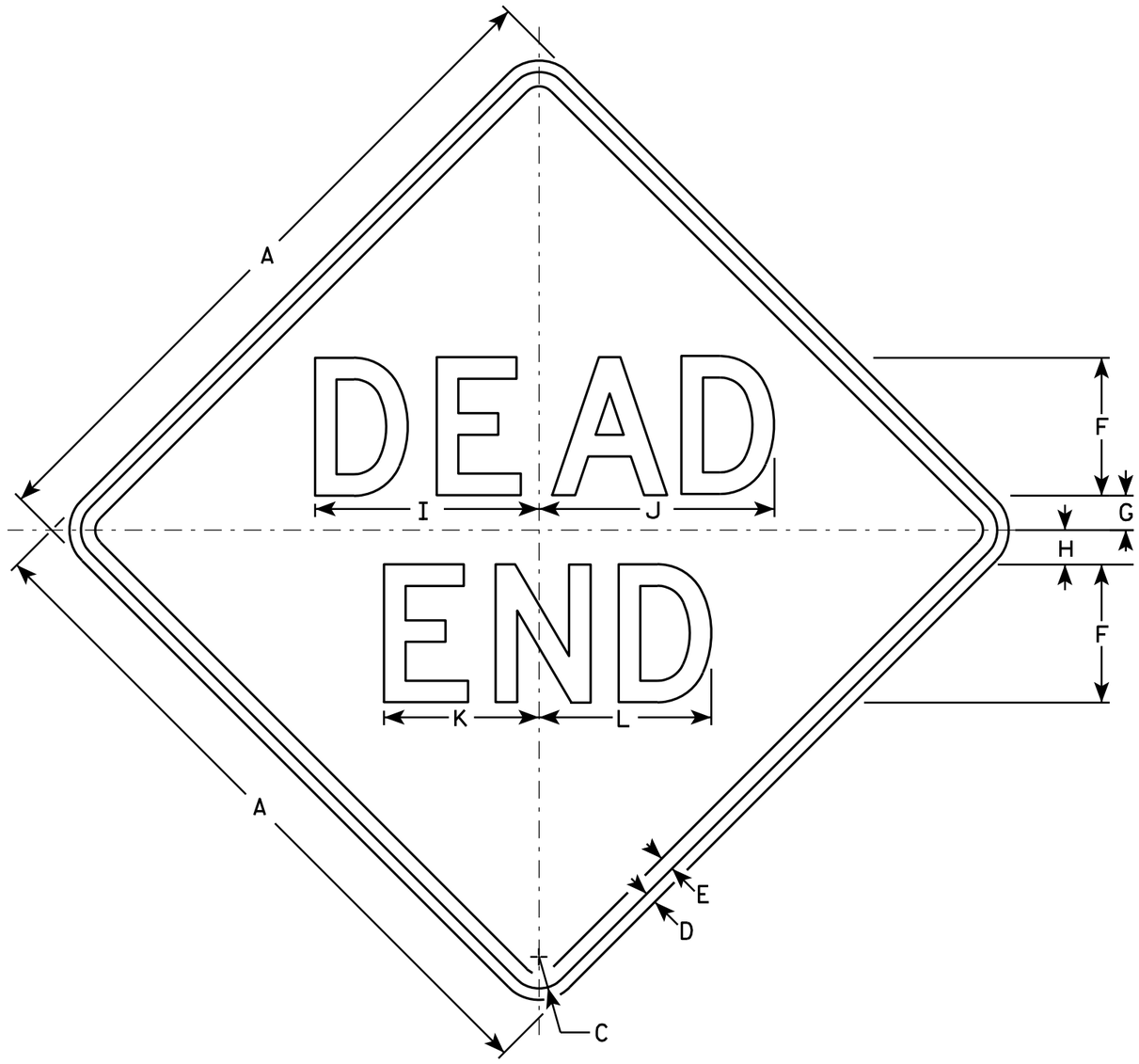
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-8.7

PROJECT NO:

SHEET NO: 196 E




W14-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. 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 | 24 | | 1 1/8 | 3/8 | 1/2 | 5 | 1 | 2 | 8 1/4 | 8 5/8 | 5 5/8 | 6 1/4 | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 6 | 1 1/2 | 2 1/2 | 9 3/4 | 10 1/4 | 6 3/4 | 7 1/2 | | | | | | | | | | | | | | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | 6 | 1 1/2 | 2 1/2 | 9 3/4 | 10 1/4 | 6 3/4 | 7 1/2 | | | | | | | | | | | | | | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 7 | 2 | 3 | 11 3/8 | 12 | 7 7/8 | 8 3/4 | | | | | | | | | | | | | | | 9.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

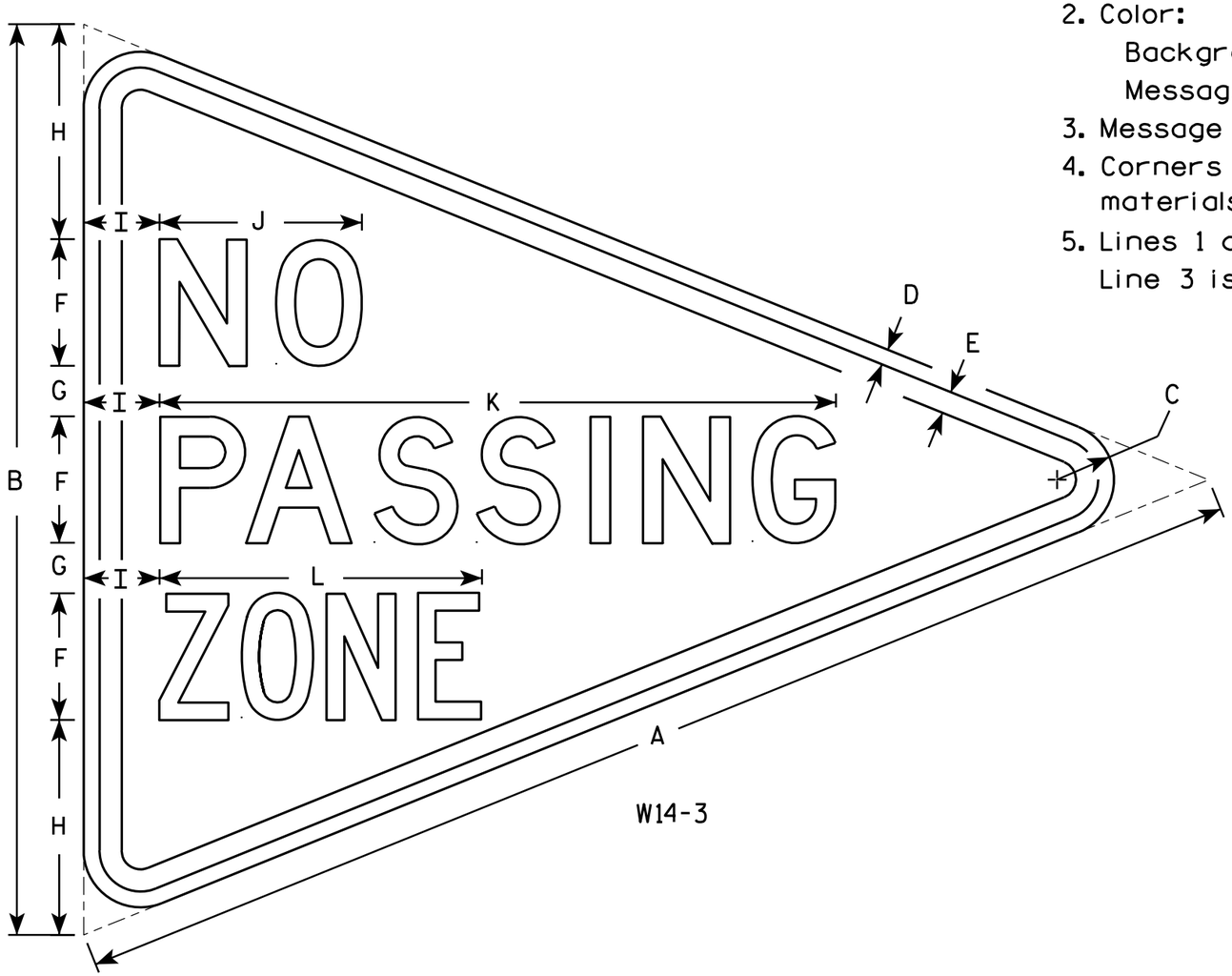
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W14-1.7

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 197 | 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 | O | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

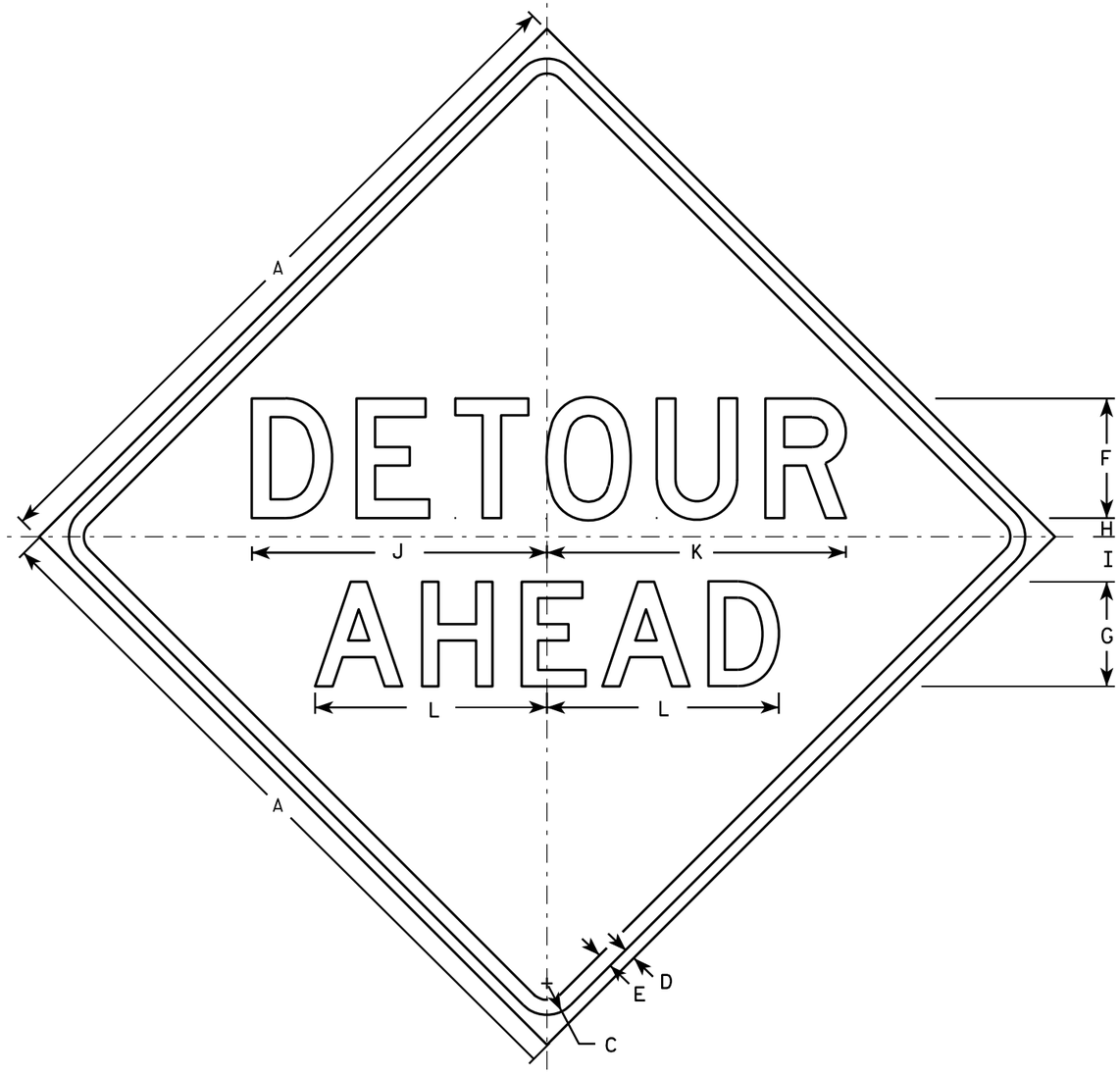
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

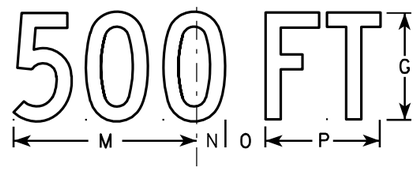
APPROVED Matthew R Rauch
for State Traffic Engineer

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

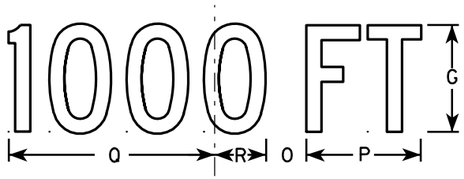
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 198 | E |
|---|---|---|---|---|---|



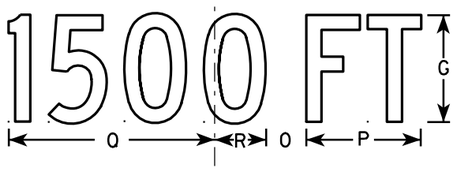

W20-2A



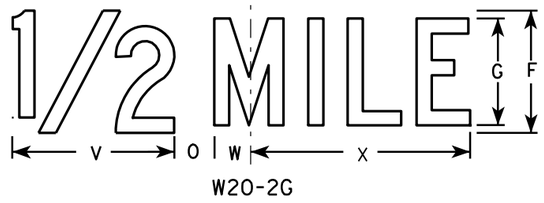

W20-2D




W20-2C




W20-2B




W20-2G




W20-2F

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 - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

| 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 | 6 | 5 | 1 | 2 1/4 | 14 3/4 | 15 | 11 5/8 | 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 | 8 | 1 3/4 | 10 3/4 | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

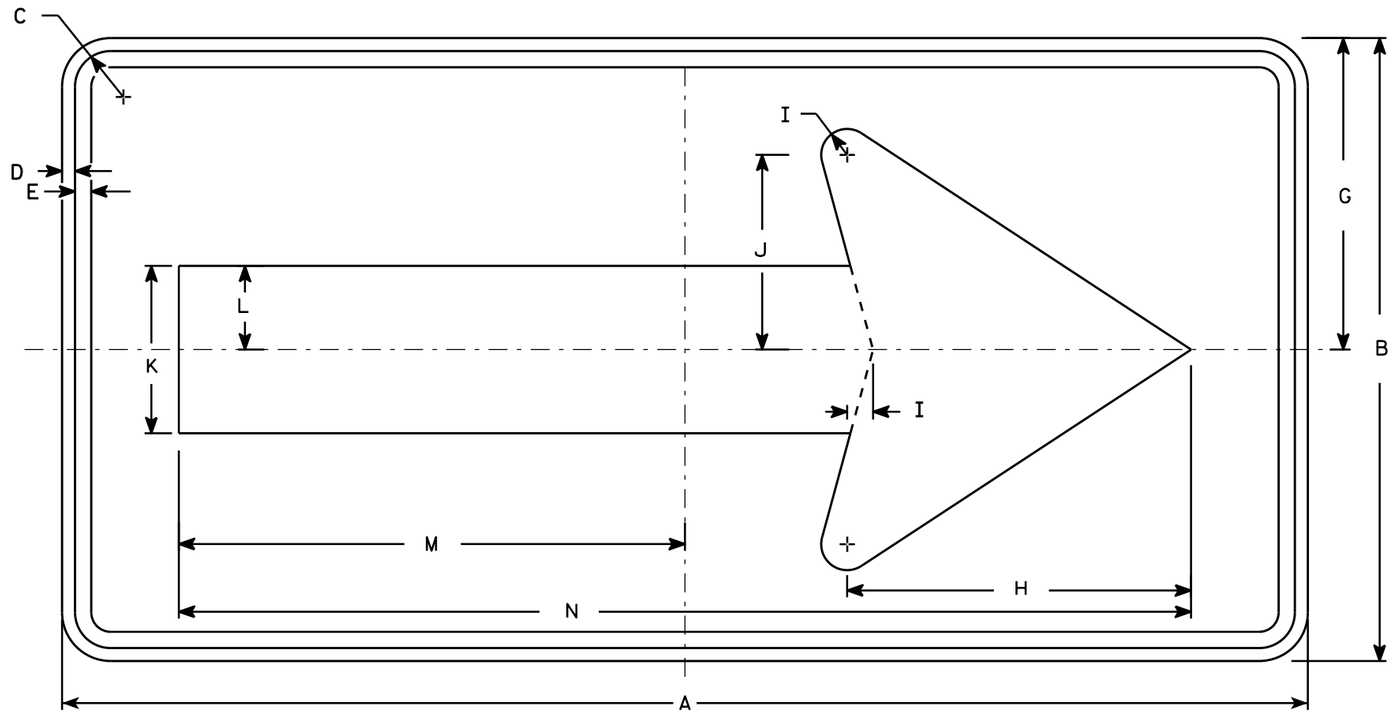
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 199 | E


7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42




W01-6

## NOTES

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

| 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

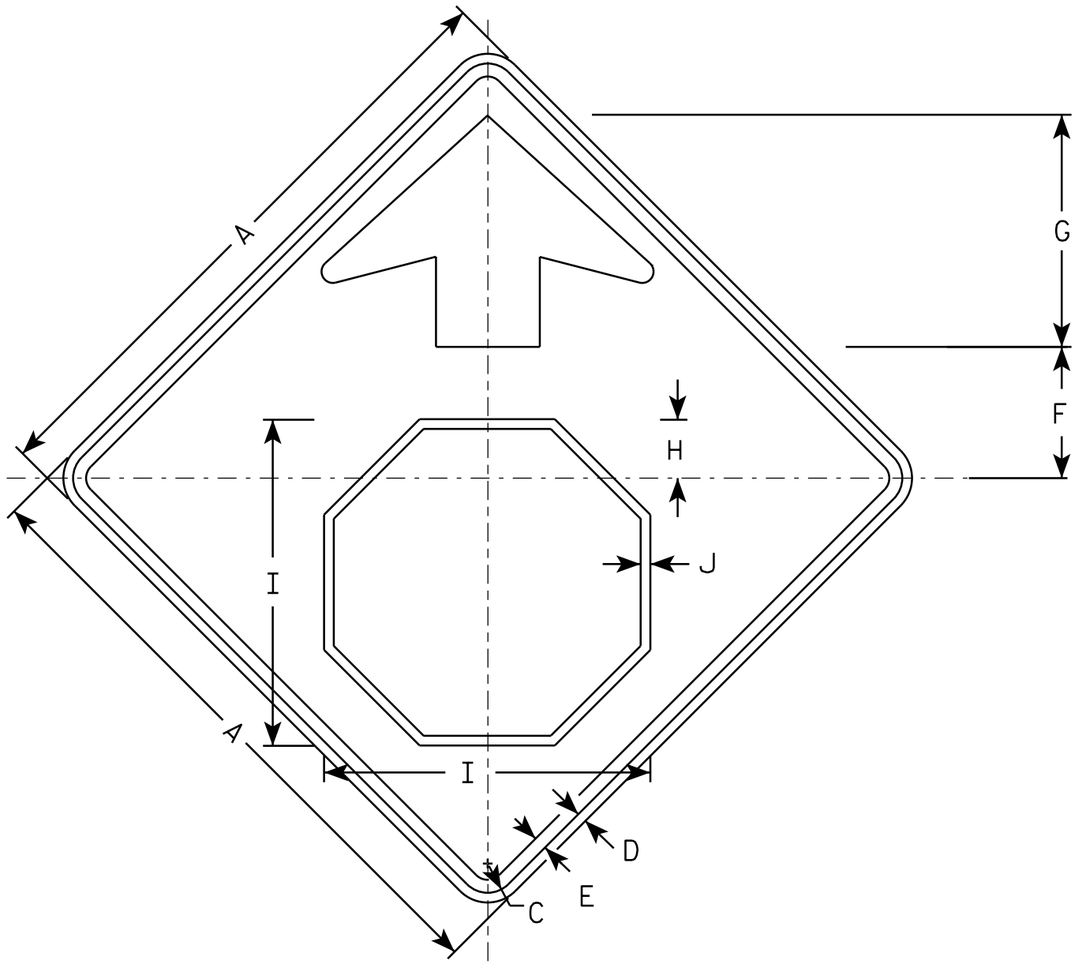
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-6.1



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

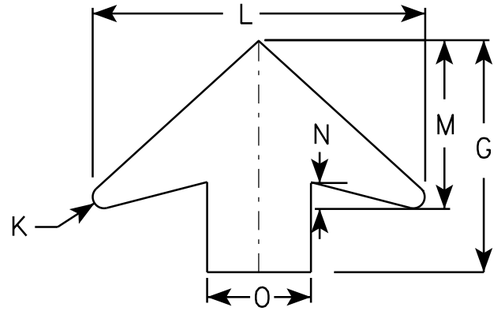
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42




W03-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND




ARROW DETAIL

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

STANDARD SIGN
W03-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 201 03-1.1

PROJECT NO: | SHEET NO: E

7 7

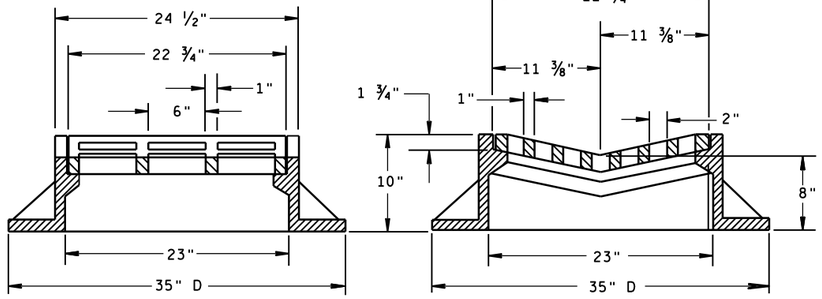
# Standard Detail Drawing List

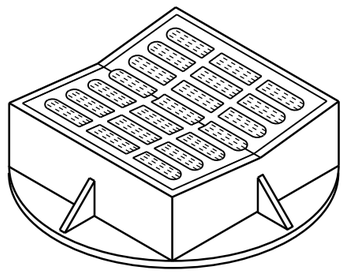
| | |
|---|---|
| 08A05-19B | INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM |
| 08A05-19C | INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S |
| 08A05-19D | INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M |
| 08B09-01 | MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER |
| 08B11-01 | MANHOLES VARIABLE TEE AND SPECIAL 4-FT DIAMETER |
| 08C06-01 | INLETS 3-FT AND 4-FT DIAMETER |
| 08C07-01 | INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT |
| 08C08-01 | INLETS MEDIAN 1 AND 2 GRATE |
| 08D01-18 | CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES |
| 08D04-05 | CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES |
| 08D05-16A | CURB RAMPS TYPES 1 AND 1-A |
| 08D05-16B | CURB RAMPS TYPES 2 AND 3 |
| 08D05-16C | CURB RAMPS TYPES 4A AND 4A1 |
| 08D05-16D | CURB RAMPS TYPE 4B AND 4B1 |
| 08D05-16E | CURB RAMPS TYPES 5, 6, 7A, 7B & 8 |
| 08D15-04A | EDGEDRAIN OUTLET AND OUTFALL MARKERS |
| 08D15-04B | EDGEDRAIN AND BASE AGGREGATE OPEN  GRADED |
| 08E08-03 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E09-06 | SILT FENCE |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 08E14-01 | TRACKING PAD |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F02-01 | APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE |
| 08F04-07 | JOINT TIES FOR CONCRETE PIPE  AND CONCRETE COLLAR DETAIL |
| 08F06-04 | REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN |
| 09B02-09 | CONDUIT |
| 09B04-11 | PULL BOX |
| 09C02-07 | CONCRETE BASES, TYPES 1, 2,  5, & 6 |
| 09C03-04 | TRANSFORMER/PEDESTAL BASES |
| 09C06-07 | CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL |
| 09C12-06A | CONCRETE BASE TYPE 13 |
| 09C12-06B | CONCRETE BASE TYPE 13 |
| 09C13-02 | CONCRETE BASE TYPE 10 & TYPE 13 EXTENSION |
| 09D01-05 | CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL) |
| 09D02-03 | SIGNAL CONTROL CABINET |
| 09E01-14B | POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY) |
| 09E01-14D | POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET) |
| 09E01-14G | HARDWARE DETAILS FOR POLE MOUNTINGS |
| 09E03-05 | NON-FREEWAY LIGHTING UNIT POLE WIRING |
| 09E06-05 | TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT. |
| 09E07-05 | TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL  MOUNTING DETAILS |
| 09E08-07C | TYPE 12 POLE 35'-55' MONOTUBE ARM |
| 09E08-07D | TYPE 13 POLE 35'-55' MONOTBE ARM |
| 09E08-07E | GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS |
| 09F15-04A | LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1) |
| 09F15-04B | LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2) |
| 11B01-05 | CONCRETE CORRUGATED MEDIAN |
| 11B02-02 | CONCRETE MEDIAN NOSE |
| 13A03-06 | CONCRETE PAVEMENT SHOULDERS |
| 13C01-18 | CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES |
| 13C11-11A | RURAL DOWELED CONCRETE PAVEMENT |
| 13C11-11B | RURAL DOWELED CONCRETE PAVEMENT |
| 13C18-03A | CONCRETE PAVEMENT JOINTING |
| 13C18-03B | CONCRETE PAVEMENT STEEL REINFORCEMENT |
| 13C18-03C | CONCRETE PAVEMENT JOINT TIES |
| 13C18-03D | CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES |
| 15A03-02A | FLEXIBLE MARKER POST FOR CULVERT END |
| 15A03-02B | FLEXIBLE MARKER POST FOR CULVERT END |
| 15B01-08A | FENCE WOVEN WIRE |
| 15B01-08B | FENCE WOVEN WIRE |
| 15C02-05A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-05B | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-05C | DETOUR SIGNING FOR MAINLINE CLOSURES |
| 15C03-03 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C04-02 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC |
| 15C07-12B | PAVEMENT MARKING WORDS |
| 15C07-12C | PAVEMENT MARKING ARROWS |


6

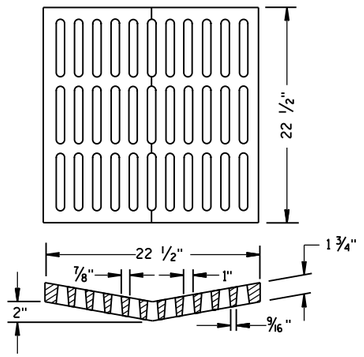
# Standard Detail Drawing List

| | |
|---|---|
| 15C08-16A | PAVEMENT MARKING (MAINLINE) |
| 15C08-16B | PAVEMENT MARKING (INTERSECTIONS) |
| 15C08-16E | PAVEMENT MARKING (LEFT TURN LANE) |
| 15C08-16F | PAVEMENT MARKING (ISLANDS) |
| 15C11-06 | FLEXIBLE TUBULAR MARKER POST |
| 15C12-04 | TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS) |
| 15C18-03 | MEDIAN ISLAND MARKING |
| 15C21-06 | SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS |
| 15C29-03A | BICYCLE LANE MARKING |
| 15C29-03B | BICYCLE LANE MARKING |
| 15C33-01 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15D06-03 | TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION |
| 15D20-03 | TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY |
| 15D21-03 | TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE |
| 15D29-03 | TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD |



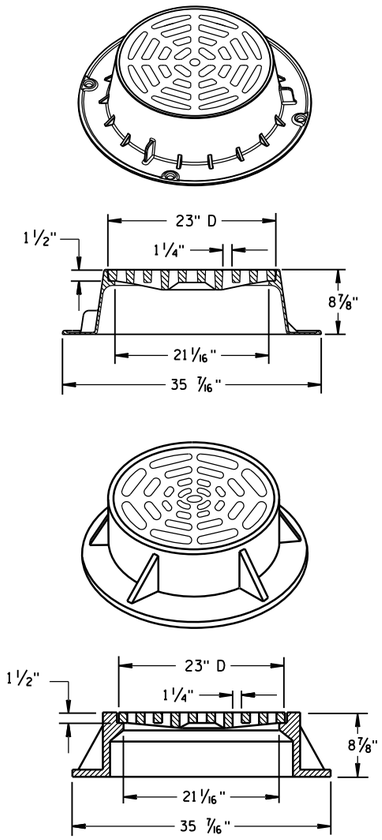



TYPE "B"




ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE




TYPE "C"

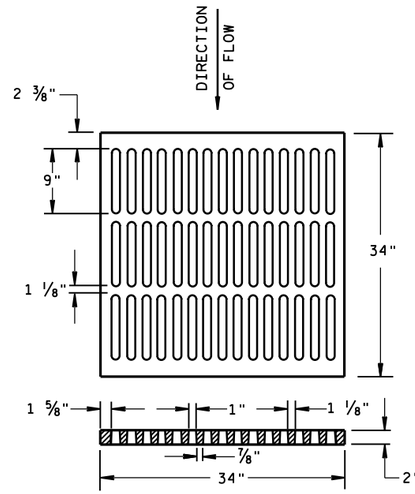
NOTE: EITHER CASTING IS ACCEPTABLE

## 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.

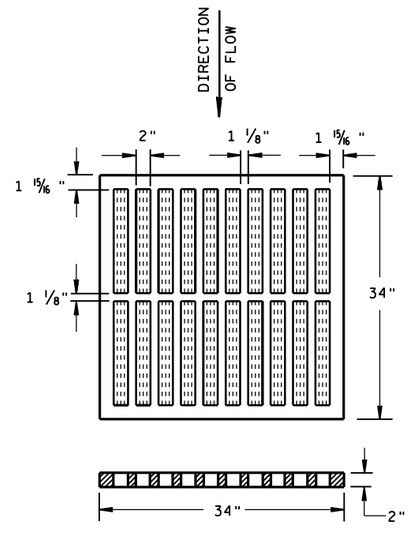
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



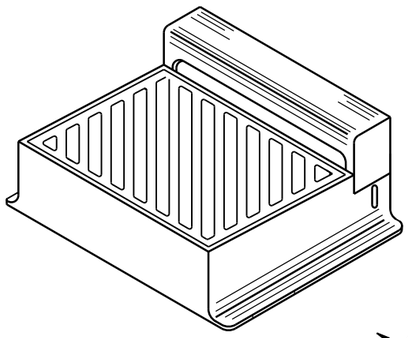

ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



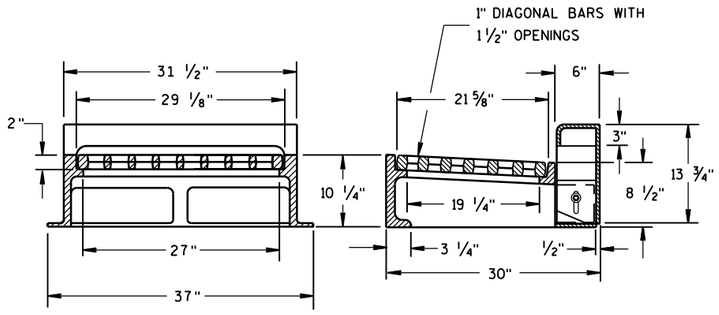

TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE






DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.




NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

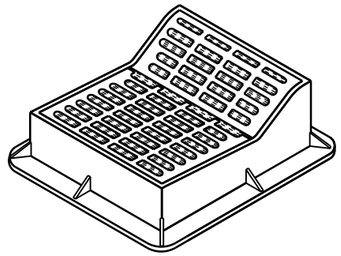
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

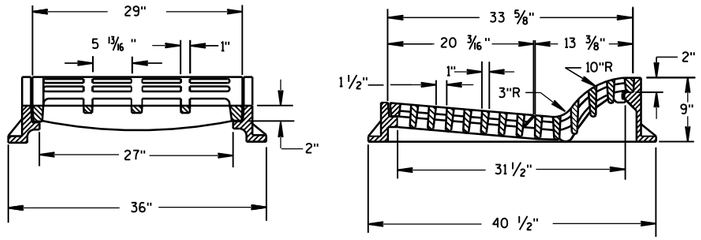
APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



6

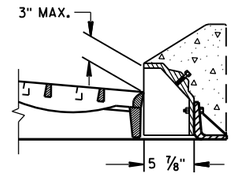
S.D.D. 8 A 5-19b






## TYPE "F"

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




## ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

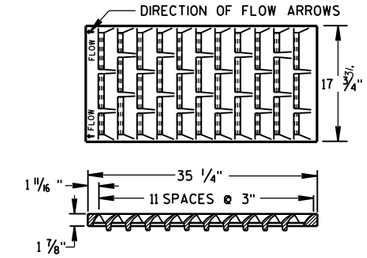
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

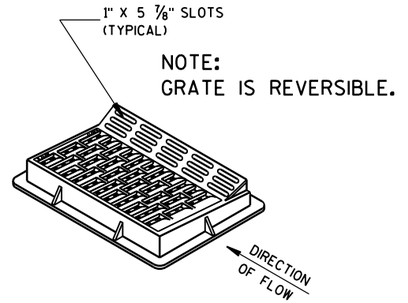
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

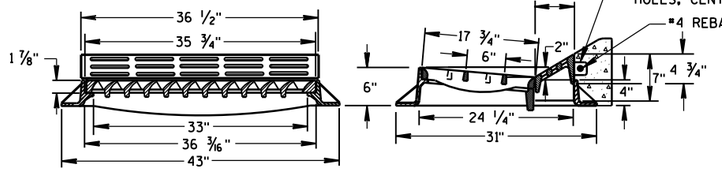
## GENERAL NOTES

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.



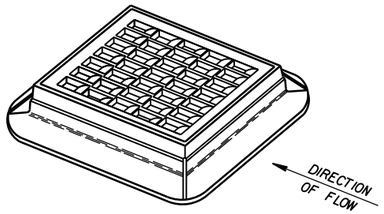



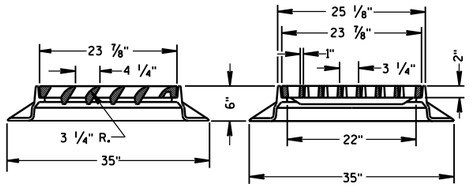




## TYPE "HM"

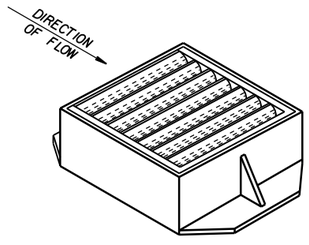
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

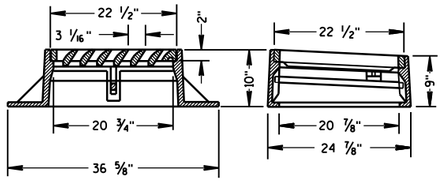
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



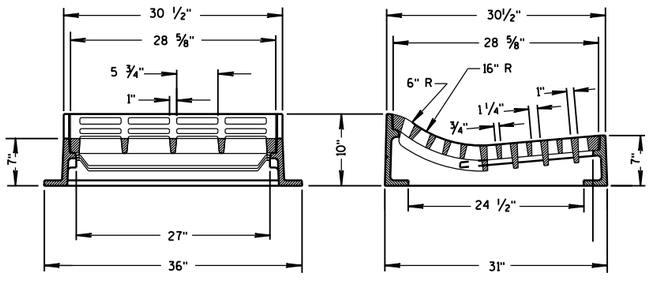



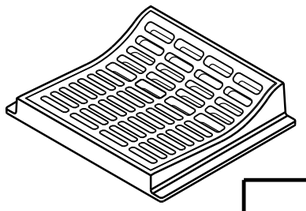

## TYPE "S"




## TYPE "V"



## TYPE "T"

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

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

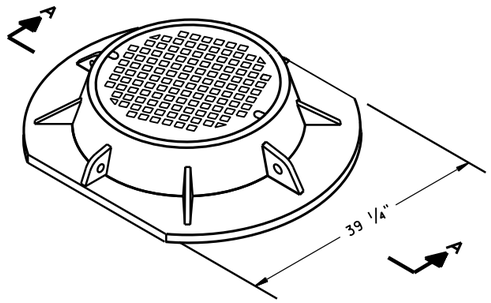
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

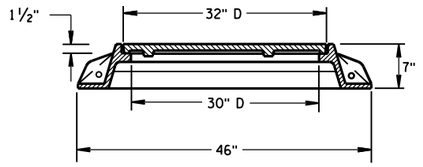
APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA



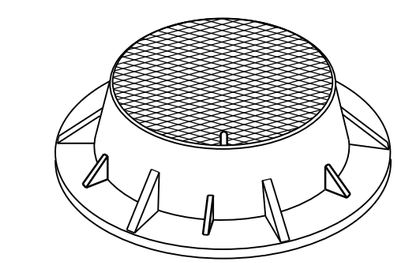

6

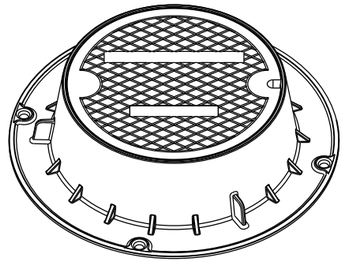

S.D.D. 8 A 5-19c

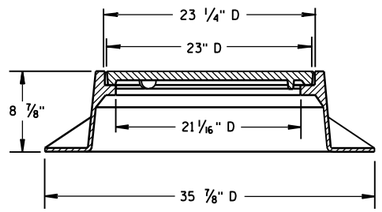


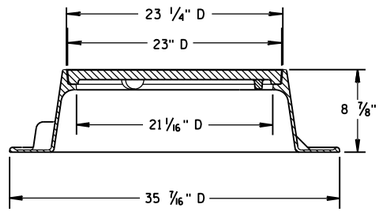




SECTION A-A
TYPE "K"







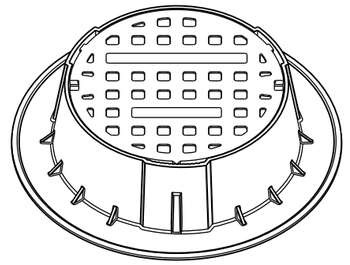

TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

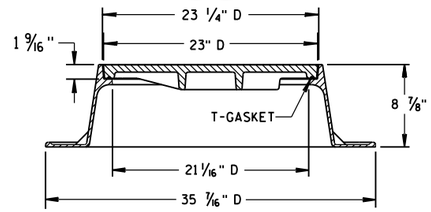
## GENERAL NOTES

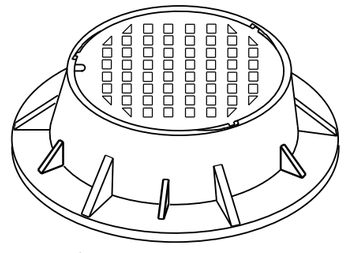
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

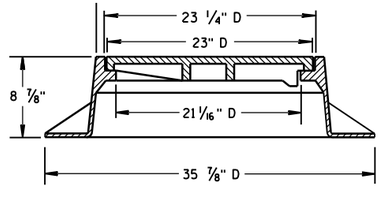
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

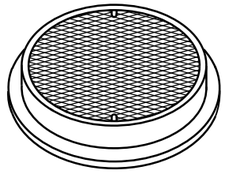


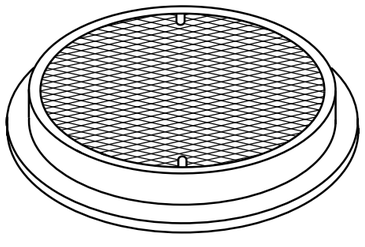


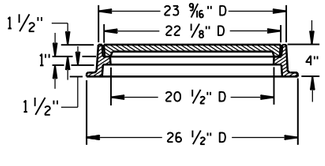





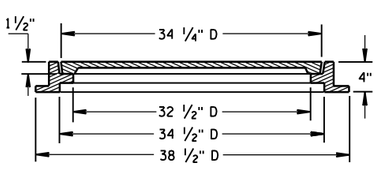

TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



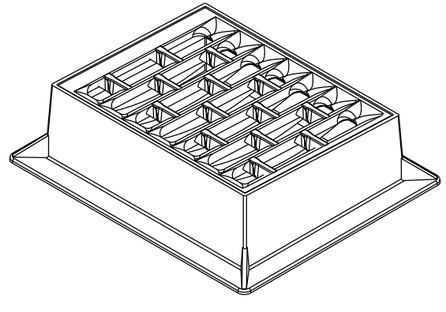


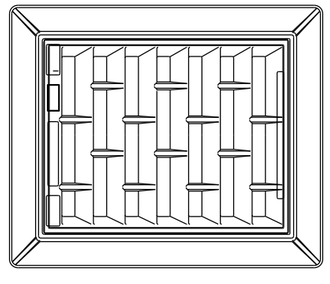


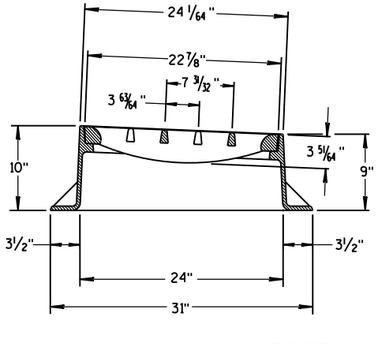

TYPE "L"

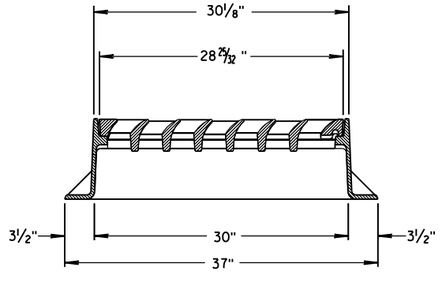



TYPE "M"








INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

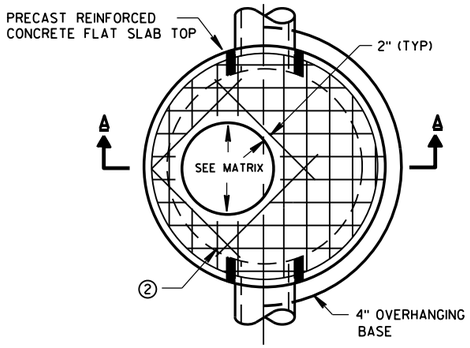
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER



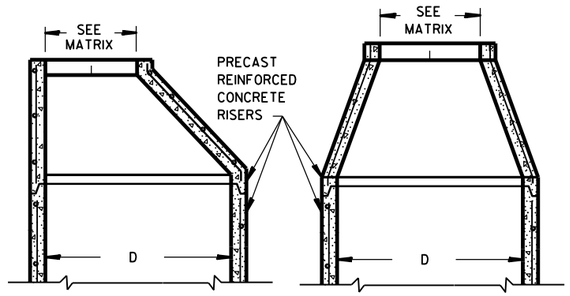


6

S.D.D. 8 A 5-19d

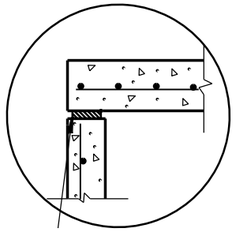



PLAN VIEW CIRCULAR OPENING

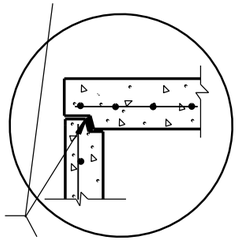



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

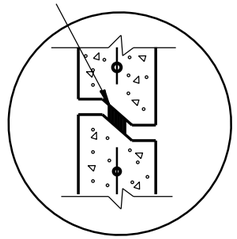


TOP WITH PLAIN END JOINT



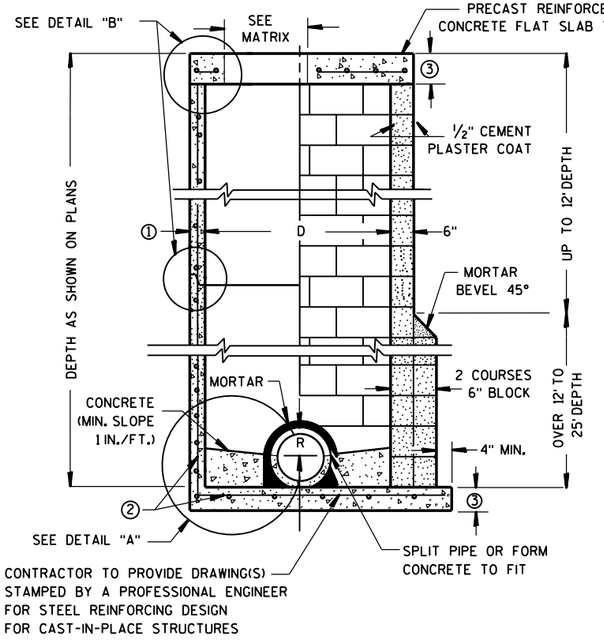
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



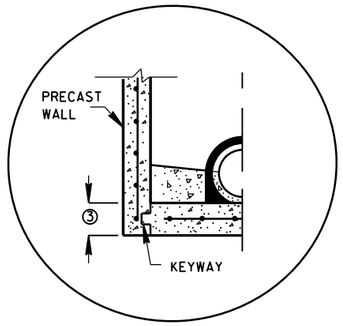
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

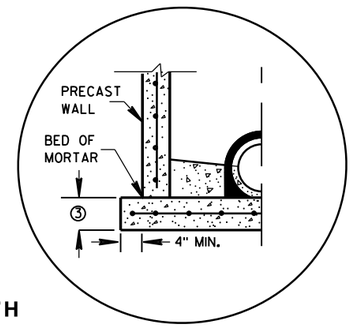



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

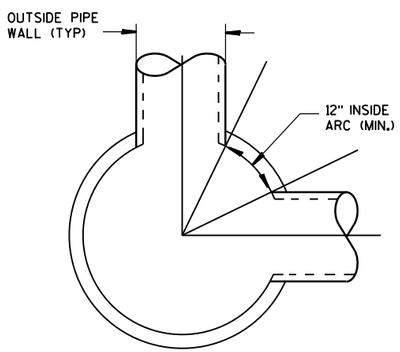



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION




SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"




DETAIL "C"

## 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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

## MANHOLE COVER OPENING MATRIX

| MANHOLE COVER TYPE | C | ALL J'S | K | L | M |
|---|---|---|---|---|---|
| OPENING SIZE (FT) | | | | | |
| 2 DIA. | X | X | | X | |
| 3 DIA. | | | X | | X |

## PIPE MATRIX

| MANHOLE SIZE | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | |
|---|---|---|
| | 180° SEPARATION (IN) | 90° SEPARATION (IN) |
| 3-FT | 15 | 12 |
| 4-FT | 24 | 18 |
| 5-FT | 36 | 24 |
| 6-FT | 42 | 36 |
| 7-FT | 48 | 36 |
| 8-FT | 60 | 42 |

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



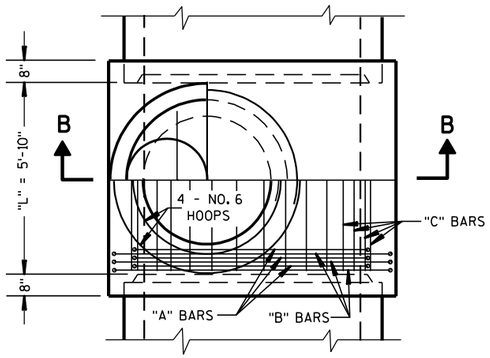




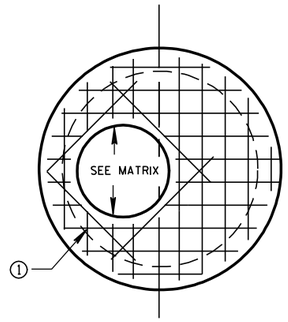
6

S.D.D. 8 B 9-1

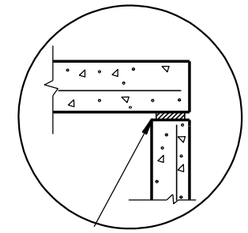
6



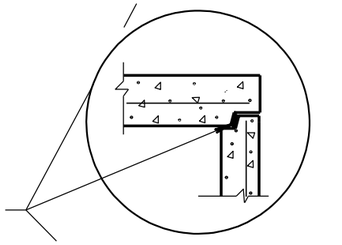

HALF SECTION A-A



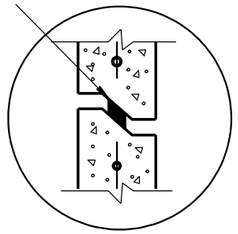

PLAN VIEW PRECAST REINFORCED CONCRETE FLAT SLAB TOP WITH ECCENTRIC OPENING



TOP WITH PLAIN END JOINT




TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 4T-L", "MANHOLES 4S-M", ETC. THE VARIABLE TEE IS DENOTED BY 4T AND THE VARIABLE SPECIAL IS DENOTED BY 4S. THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF $\frac{1}{2}$ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

PRECAST SECTIONS SHALL BE INSTALLED ON A BED OF MORTAR.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE OR CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

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

ALL PRECAST MANHOLES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

① FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE WITH AASHTO M 199.

## MANHOLE COVER OPENING MATRIX

| MANHOLE COVER TYPE | C | ALL J'S | K | L | M |
|---|---|---|---|---|---|
| OPENING SIZE (FT) | | | | | |
| 2 DIA. | X | X | | X | |
| 3 DIA. | | | X | | X |

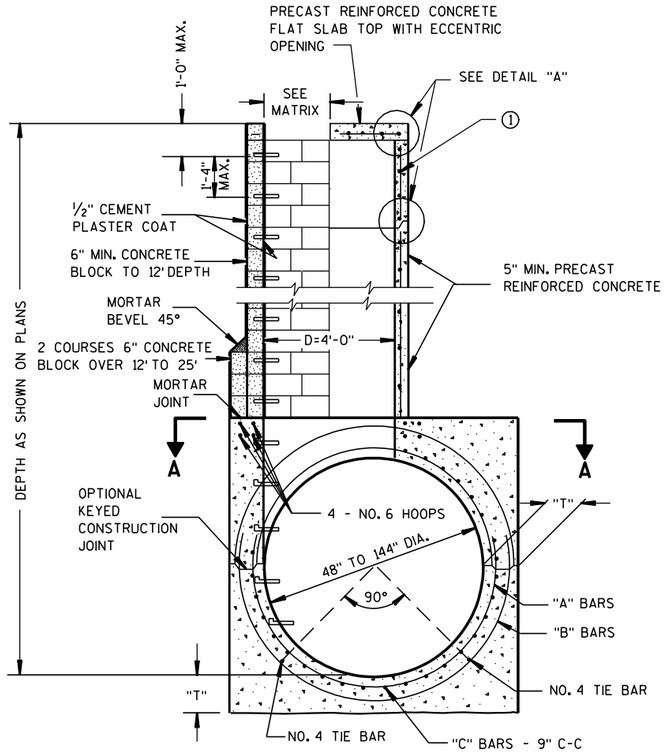
## NOTES FOR MANHOLE VARIABLE SPECIAL 4-FT DIAMETER

NOTE: ALL "A", "B", AND "C" BAR STEEL REINFORCING IS THE SAME DIAMETER WHICH VARIES WITH DEPTH.
NO. 5 BARS TO 20' DEPTH
NO. 6 BARS OVER 20' TO 30' DEPTH
NO. 7 BARS OVER 30' TO 40' DEPTH

THE "A" AND "B" BARS MAY BE PLACED IN ONE OR TWO SEGMENTS, AND SHALL LAP 24 BAR DIAMETERS.

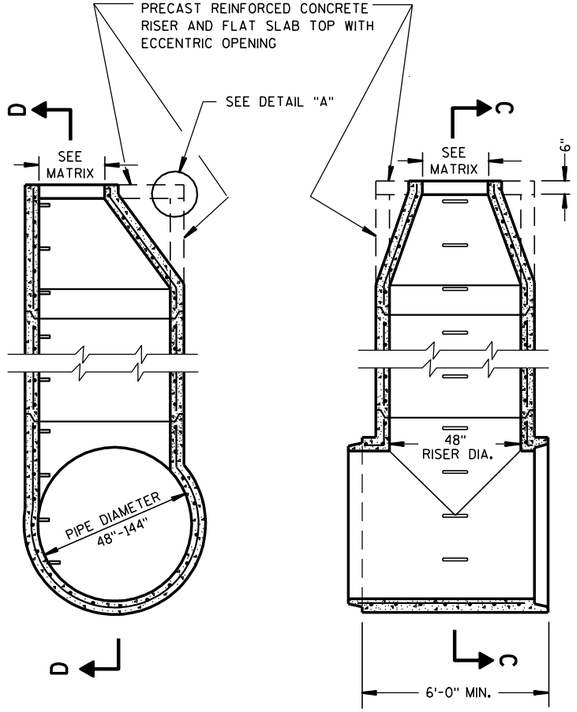
"C" BARS SHALL HAVE STANDARD HOOKED ENDS.

NOTE: "T" THROUGHOUT LENGTH "L" SHALL BE 13" FOR PIPE DIAMETER 48" TO 84" AND 15" FOR PIPE DIAMETER GREATER THAN 84".




SECTION B-B

MANHOLE VARIABLE SPECIAL 4-FT DIAMETER

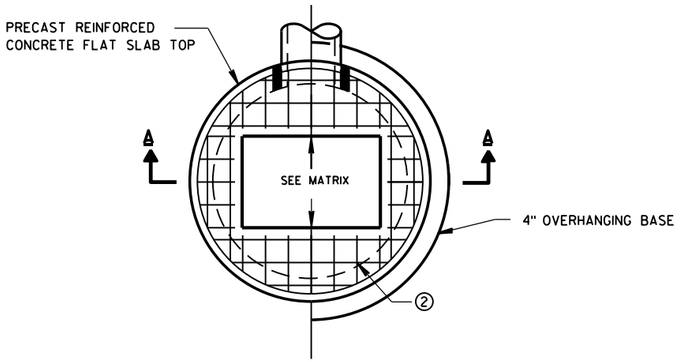



SECTION C-C

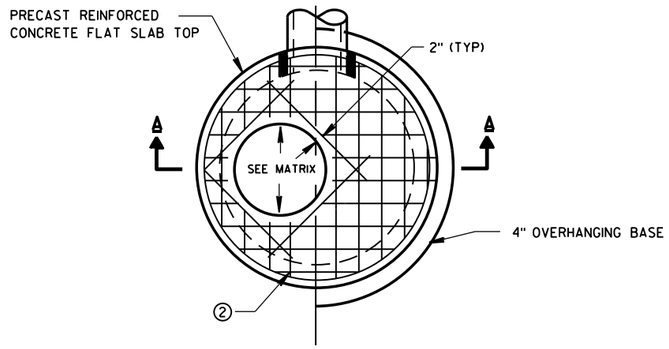
SECTION D-D

MANHOLE VARIABLE TEE 4-FT DIAMETER

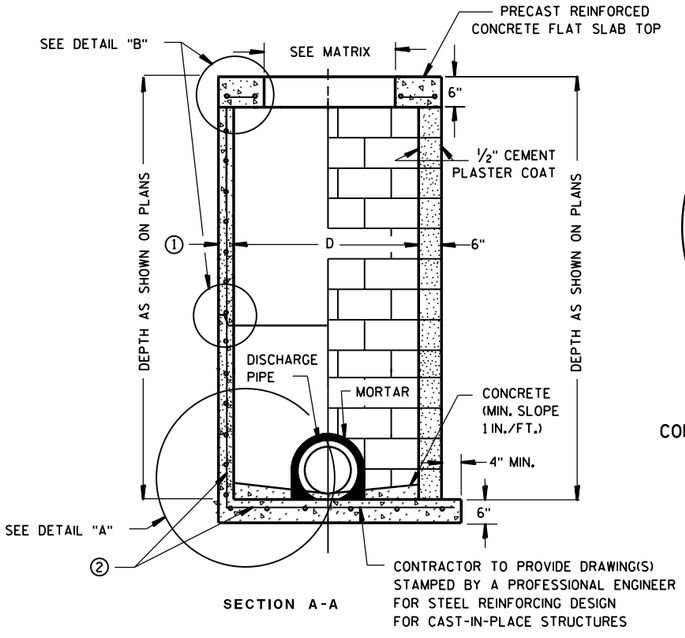
| MANHOLE VARIABLE TEE AND SPECIAL 4-FT DIAMETER | |
|---|---|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED | |
| 6/5/2012 DATE | /S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER |
| FHWA | 208 |




PLAN VIEW RECTANGULAR OPENING




PLAN VIEW CIRCULAR OPENING

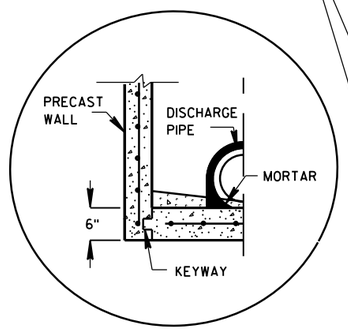



SECTION A-A

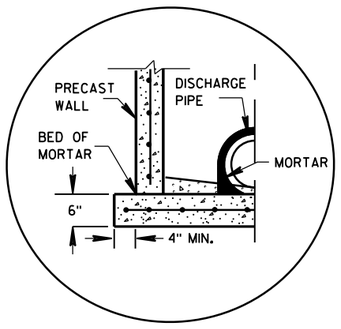
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

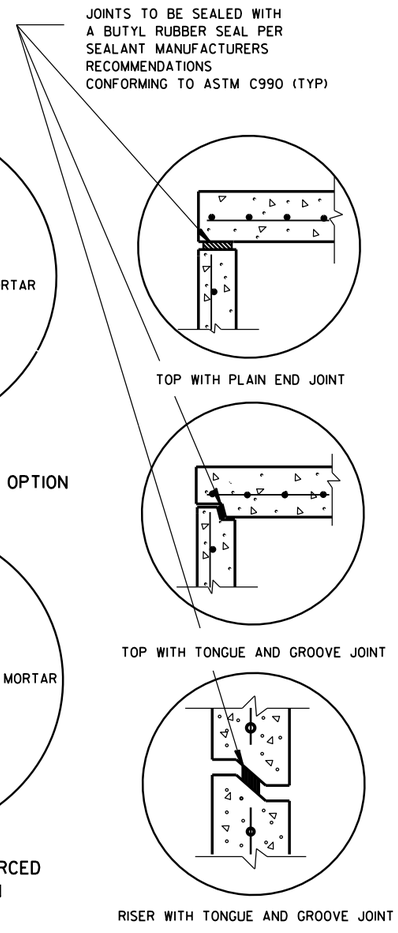



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION




SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"




DETAIL "B"

## 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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

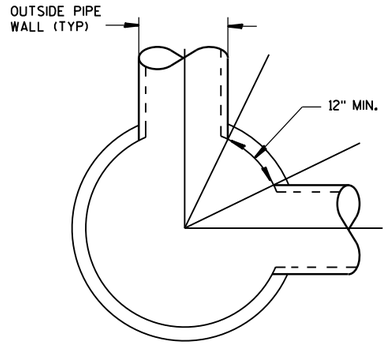
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

## INLET COVER OPENING MATRIX

| | INLET COVER TYPE | ALL A'S | ALL B'S | BW | C | F | ALL H'S | S | T | V | WM | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| INLET SIZE | OPENING SIZE (FT) | | | | | | | | | | | |
| 3-FT | 2 DIA. | | | | X | | | | | | | X |
| | 2X2 | X | X | | | | | X | | X | | |
| 4-FT | 2 DIA. | | | | X | | | | | | | X |
| | 2X2 | X | X | | | | | X | | X | | |
| | 2X2.5 | | | X | | | | X | X | X | X | |
| | 2X3 | | | | | | X | | | | | |
| | 2.5X3 | | | | | X | | | | | | |




DETAIL "C"

## PIPE MATRIX

| INLET SIZE | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | |
|---|---|---|
| | 180° SEPARATION (IN) | 90° SEPARATION (IN) |
| 3-FT | 15 | 12 |
| 4-FT | 24 | 18 |

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

INLETS 3-FT AND 4-FT DIAMETER

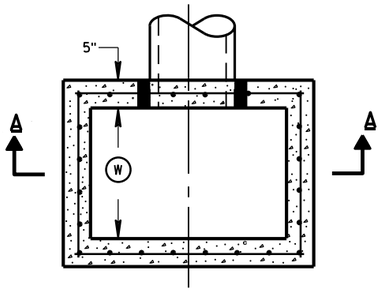


6

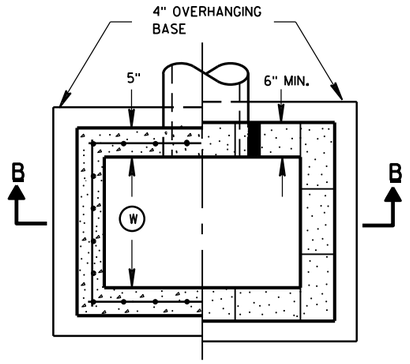
S.D.D. 8 C 6-1

6

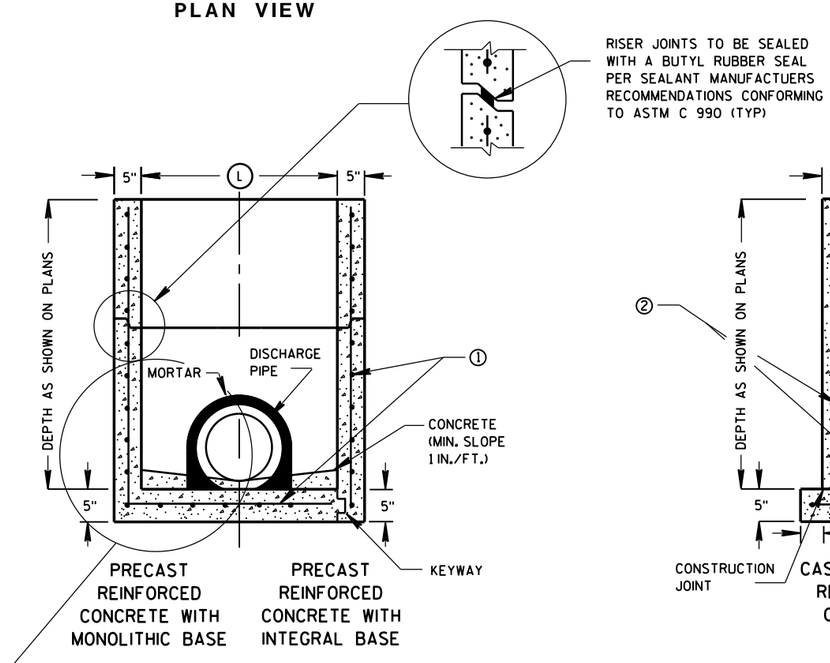
S.D.D. 8 C 6-1



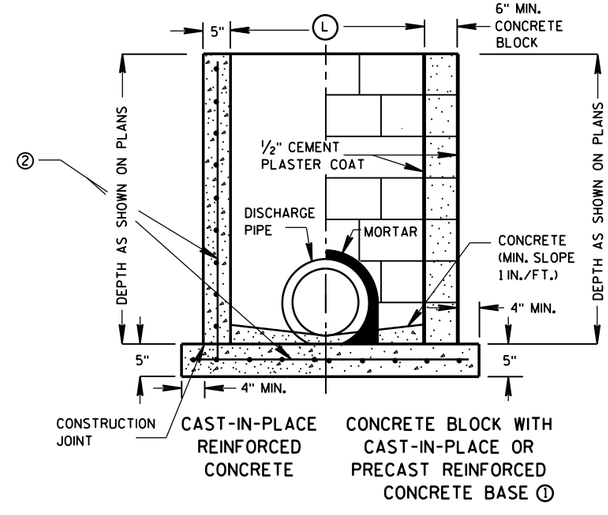

PLAN VIEW



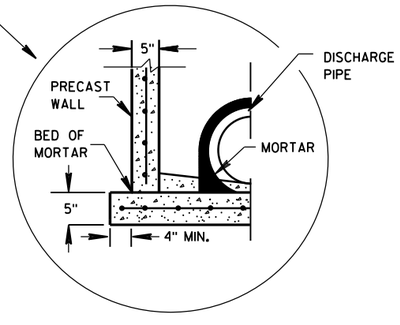

PLAN VIEW




SECTION A-A




SECTION B-B




SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

## 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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

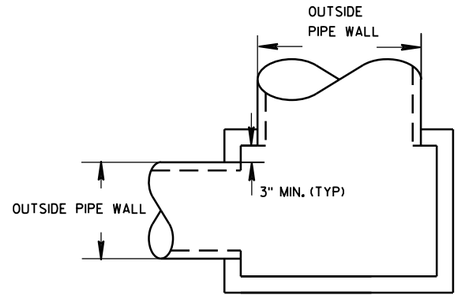
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

## INLET COVER MATRIX

| INLET SIZE | | INLET COVER TYPE | ALL A'S | ALL B'S | BW | F | ALL H'S | S | T | V | WM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | WIDTH (W) (FT) | LENGTH (L) (FT) | | | | | | | | | |
| 2X2-FT | 2 | 2 | X | X | | | | X | | X | |
| 2X2.5-FT | 2 | 2.5 | | | X | | | X | X | X | X |
| 2X3-FT | 2 | 3 | | | | | X | | | | |
| 2.5X3-FT | 2.5 | 3 | | | | X | | | | | |

## PIPE MATRIX

| INLET SIZE | MAXIMUM INSIDE PIPE DIAMETER | |
|---|---|---|
| | WIDTH (IN) | LENGTH (IN) |
| 2X2-FT | 12 | 12 |
| 2X2.5-FT | 12 | 18 |
| 2X3-FT | 12 | 24 |
| 2.5X3-FT | 18 | 24 |




DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

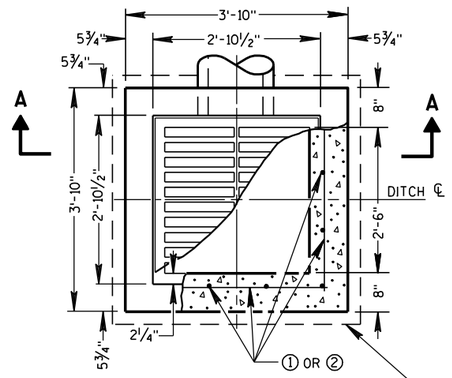
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DE ENGINEER
FHWA

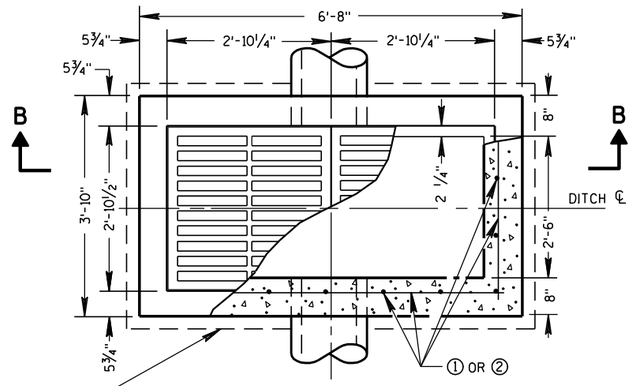



6

S.D.D. 8 C 7-1

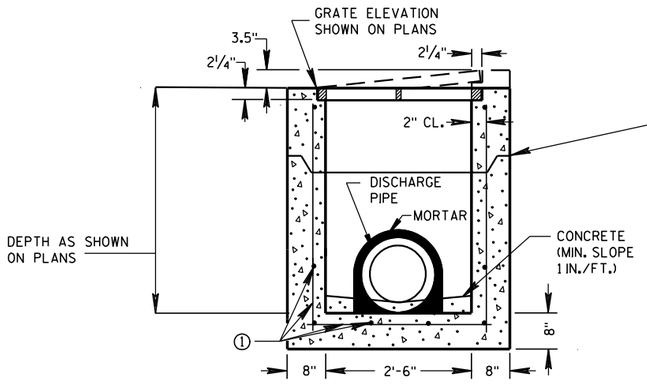



PLAN VIEW

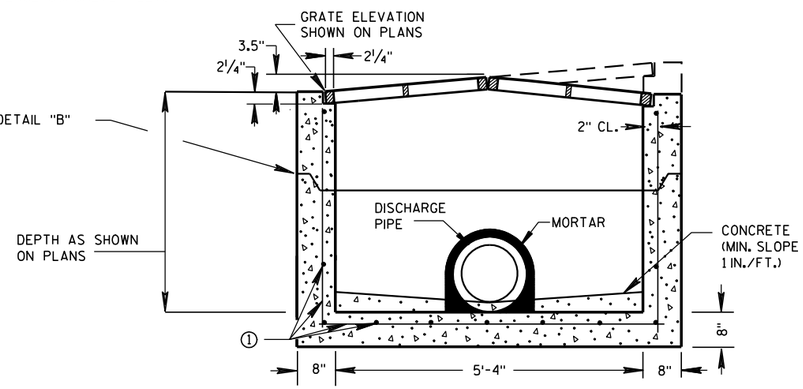



PLAN VIEW

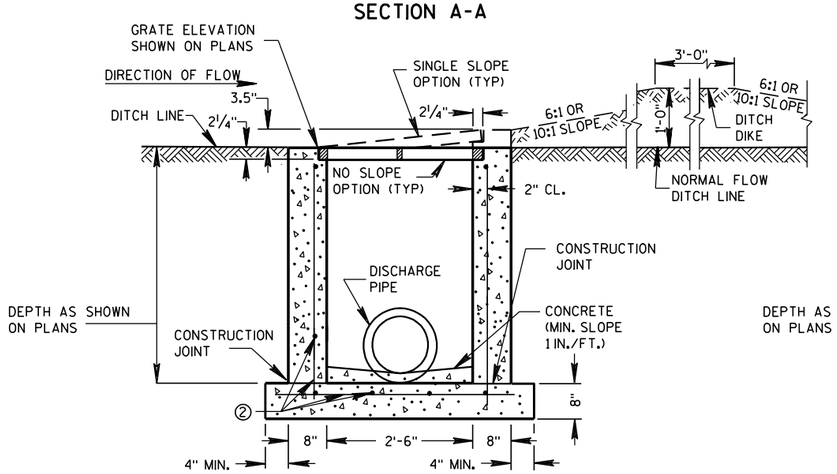
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



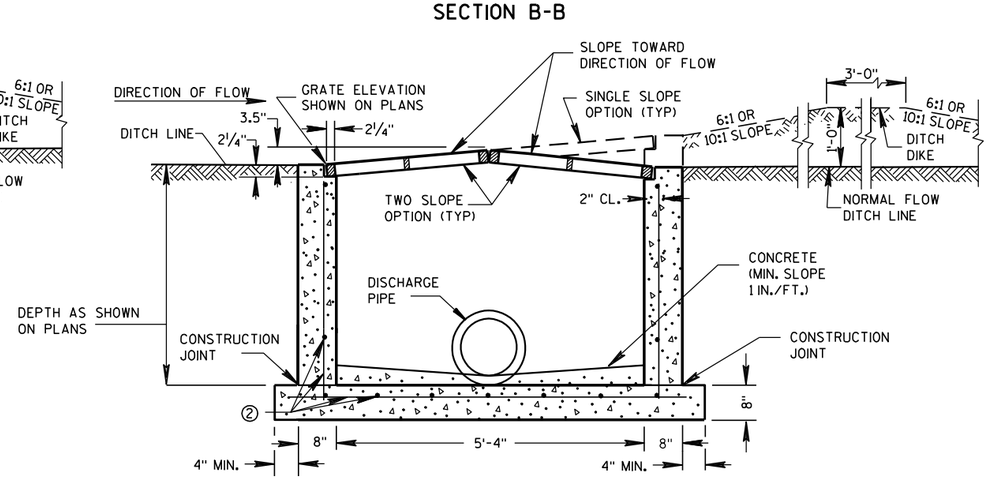

PRECAST REINFORCED CONCRETE SECTION A-A




PRECAST REINFORCED CONCRETE SECTION B-B




REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A




REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

**INLETS MEDIAN 1 GRATE**

**INLETS MEDIAN 2 GRATE**

## 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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

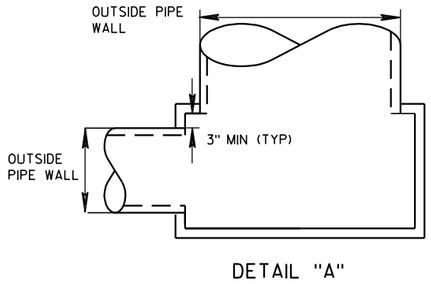
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

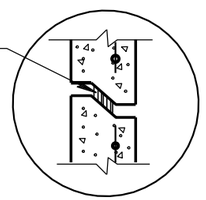
### PIPE MATRIX

| | MAXIMUM INSIDE PIPE DIAMETER | |
|---|---|---|
| INLET SIZE | WIDTH (IN) | LENGTH (IN) |
| 1 GRATE | 18 | 18 |
| 2 GRATE | 18 | 42 |




DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

**INLETS MEDIAN 1 AND 2 GRATE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

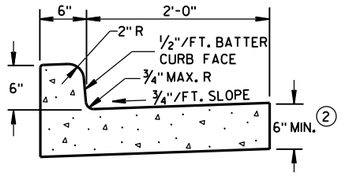


6

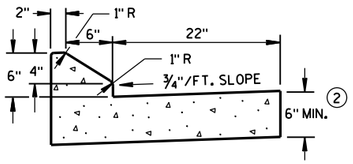
S.D.D. 8 C 8-1

6

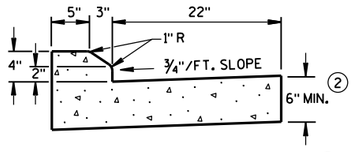
S.D.D. 8 C 8-1




TYPES A & D ①

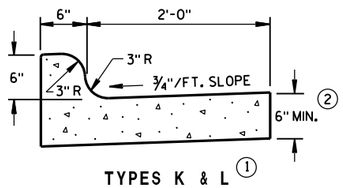



6" SLOPED CURB TYPES G & J ①

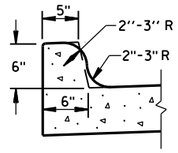



4" SLOPED CURB TYPES G & J ①

## CONCRETE CURB & GUTTER 30"

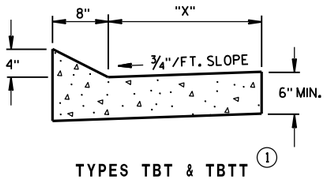



TYPES K & L ①




OPTIONAL CURB SHAPE FOR TYPES K & L ①

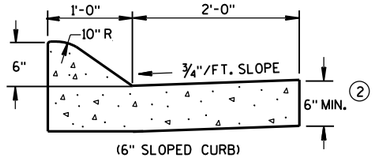
## CONCRETE CURB & GUTTER 30"



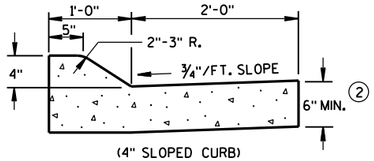

TYPES TBT & TBTT ①

## CONCRETE CURB & GUTTER

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

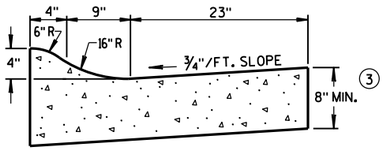



(6" SLOPED CURB)




(4" SLOPED CURB)

TYPES A & D ①




4" SLOPED CURB TYPES R & T ① ④

## CONCRETE CURB & GUTTER 36"

## 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.

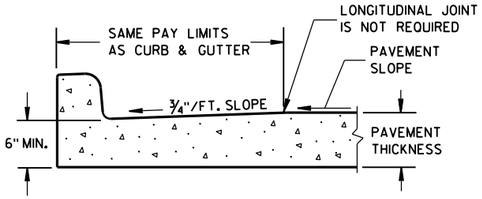
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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.

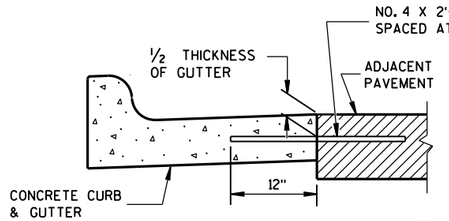
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

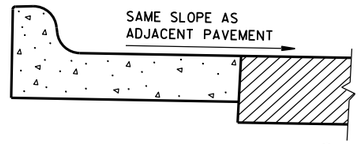
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



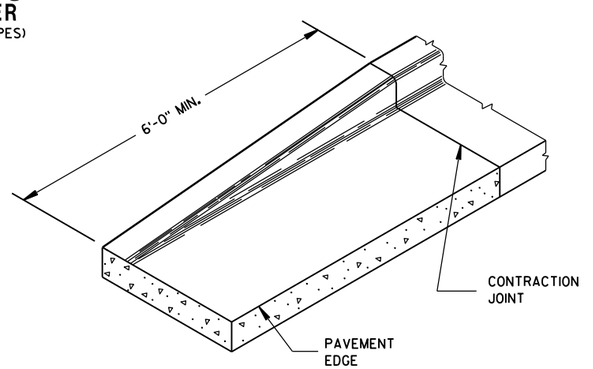

## PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



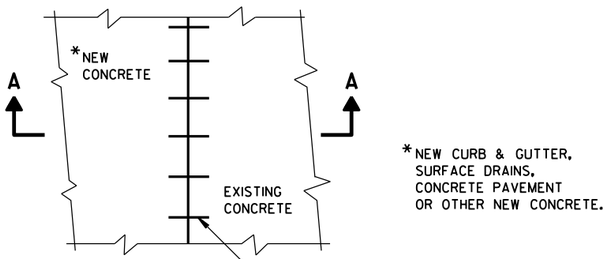

## TYPICAL TIE BAR LOCATION ①




## REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)

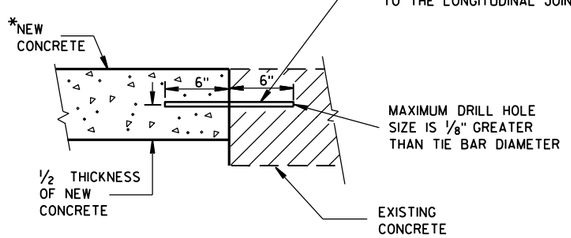



## END SECTION CURB & GUTTER



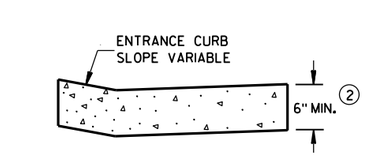

PLAN VIEW

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

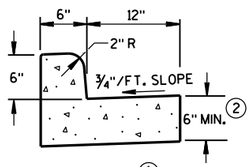



SECTION A-A

## TIE BARS DRILLED INTO EXISTING PAVEMENT

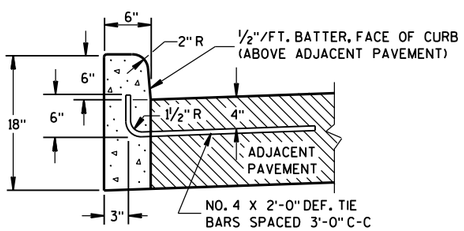



## DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

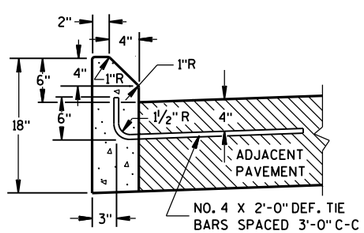



① TYPES A & D

## CONCRETE CURB & GUTTER 18"




① TYPES A & D




① TYPES G & J

## CONCRETE CURB

## CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

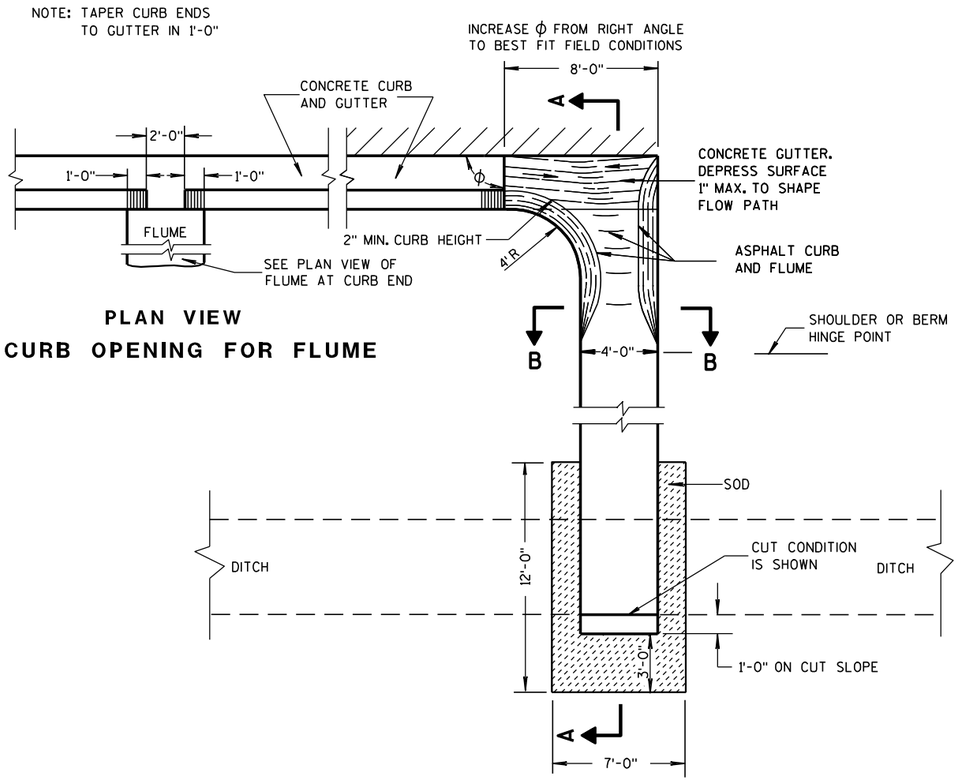
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



6

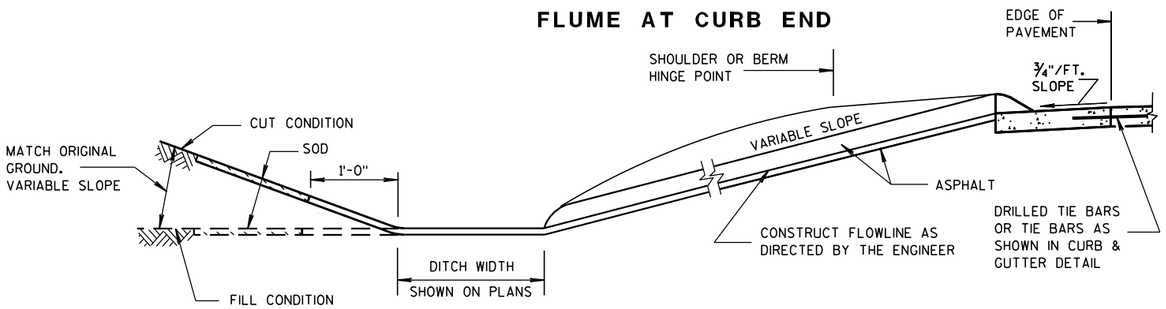
S.D.D. 8 D 1-18

## ASPHALTIC FLUME

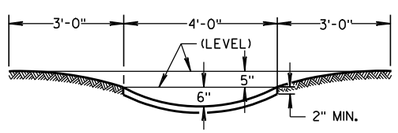



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END




SECTION A-A




SECTION B-B

## GENERAL NOTES

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

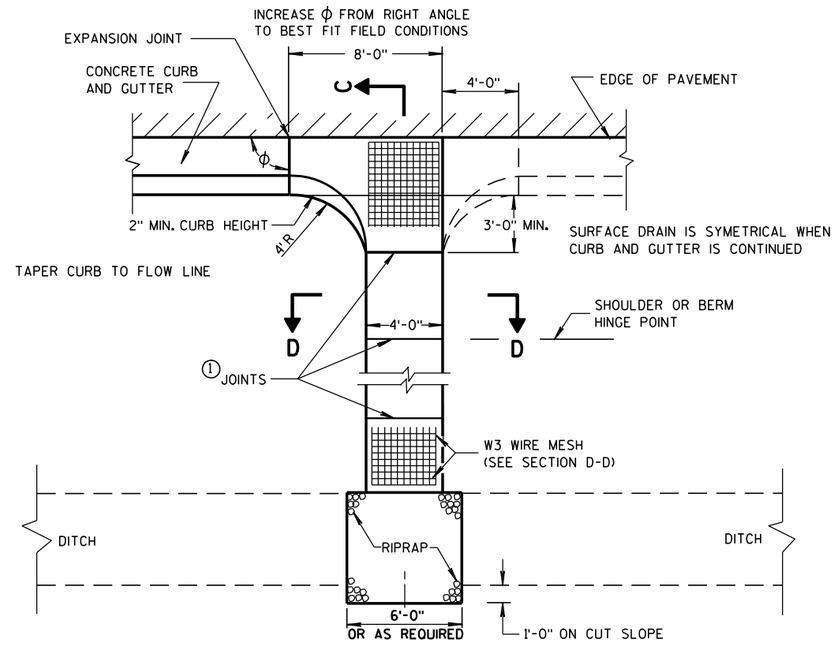
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

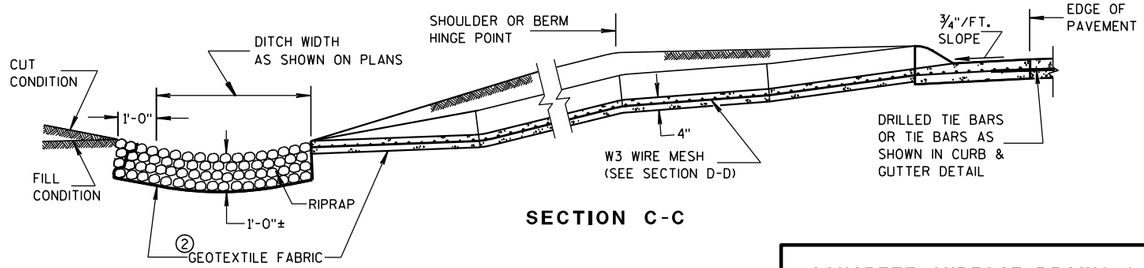
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

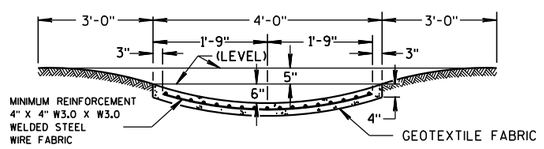
## ③ CONCRETE SURFACE DRAIN




PLAN VIEW




SECTION C-C




SECTION D-D

## CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
MENT
FHWA

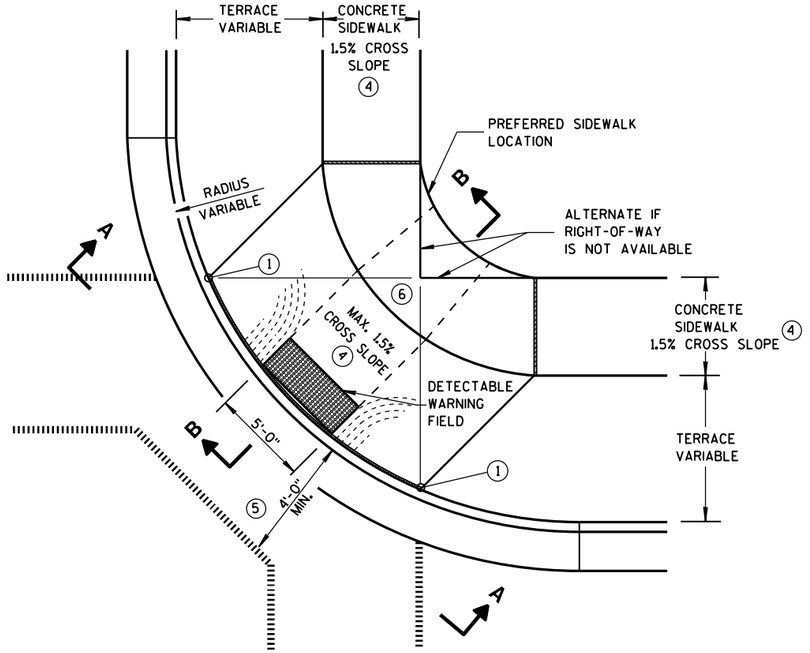


6

S.D.D. 8 D 4-5

6

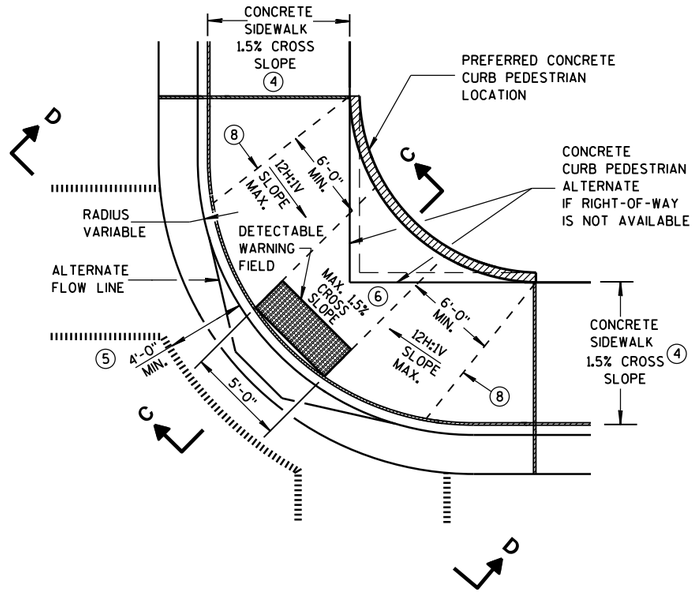
S.D.D. 8 D 4-5




PLAN VIEW

## TYPE 1 RAMP

(CENTER OF CORNER RADIUS)




PLAN VIEW

## TYPE 1-A RAMP

(NO TERRACE)

## 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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN $\frac{1}{4}$-INCH ARE ALLOWED.

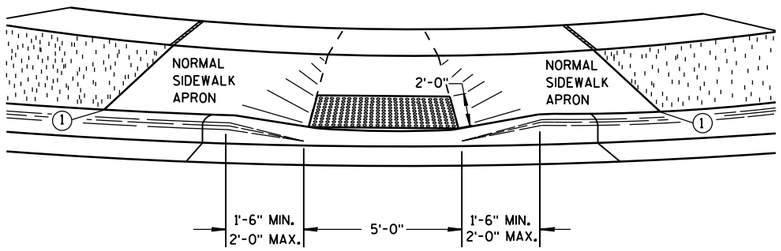
(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

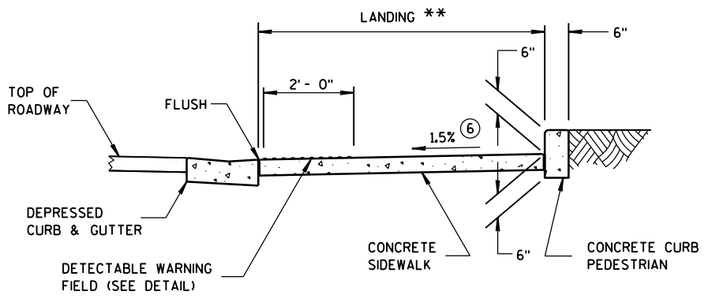
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.




VIEW A-A

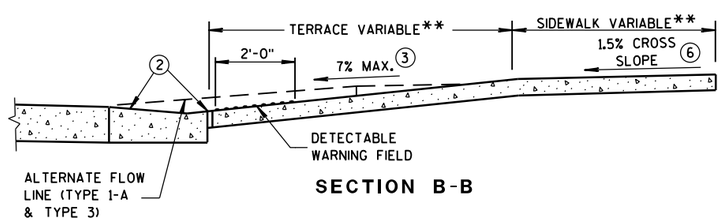
** WIDTH SHOWN ELSEWHERE IN THE PLANS



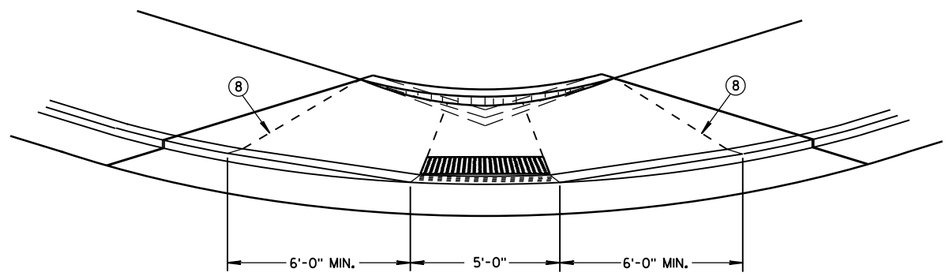

SECTION C-C

### LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT




SECTION B-B




VIEW D-D

## CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

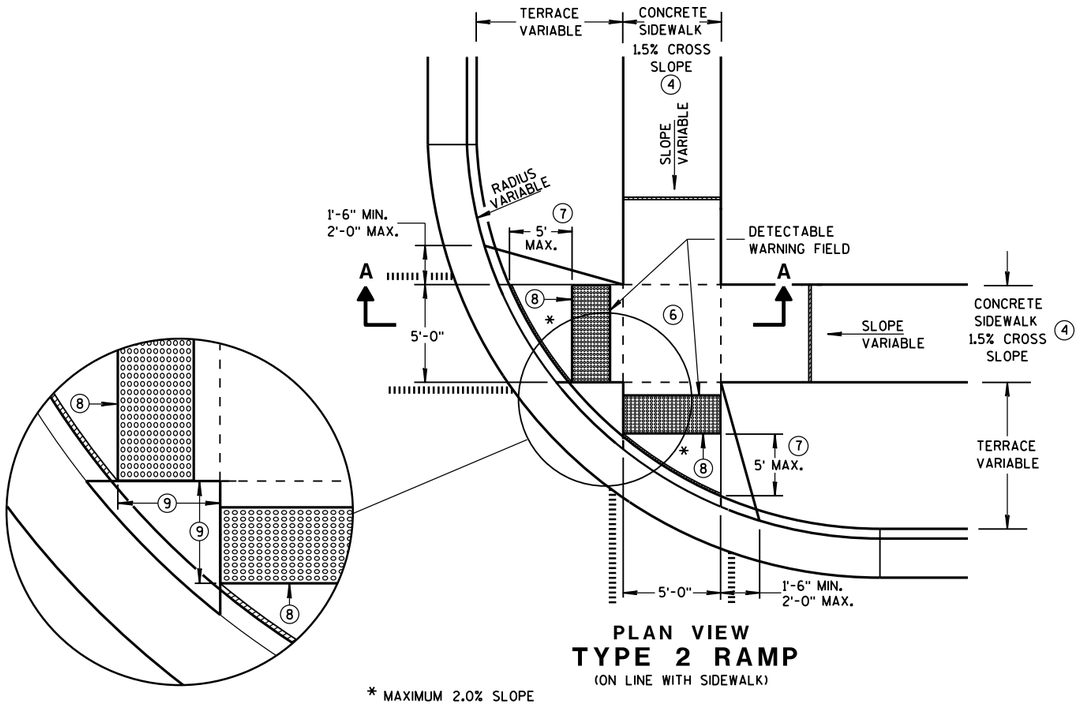




6



S.D.D. 8 D 5-16a

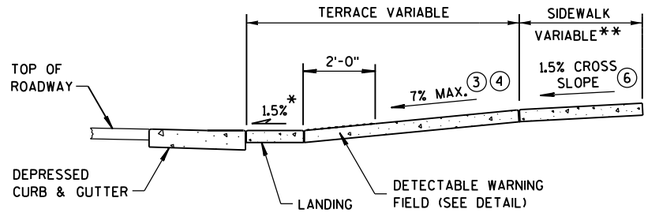



PLAN VIEW

## TYPE 2 RAMP

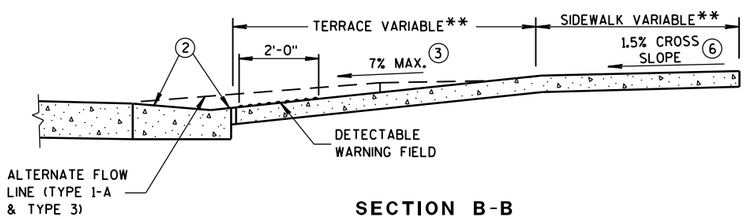
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK




SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS




SECTION B-B

## GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

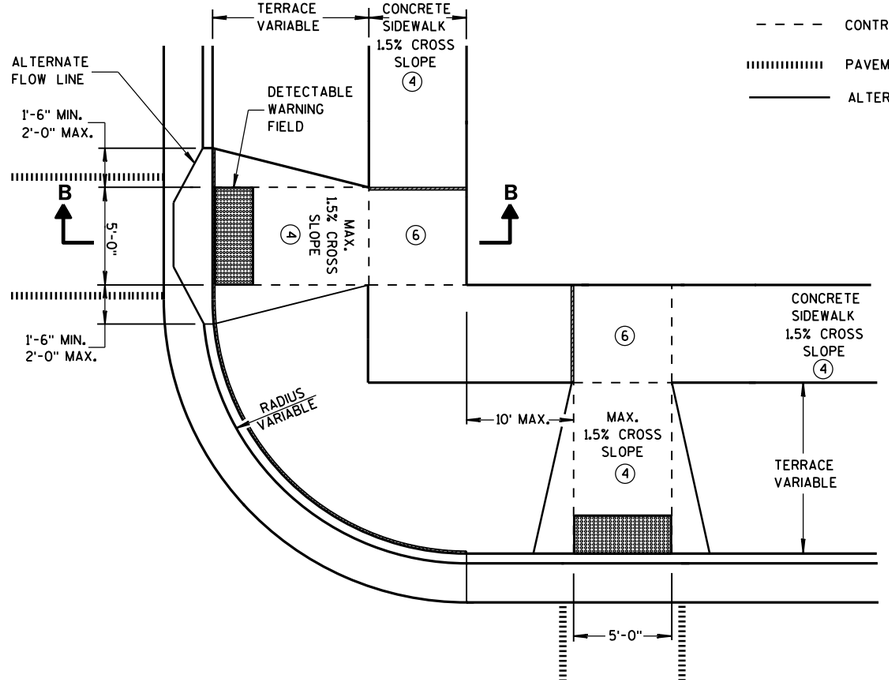
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. 2" MINIMUM CURB HEIGHT.

### LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT




PLAN VIEW

## TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS TYPES 2 AND 3**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

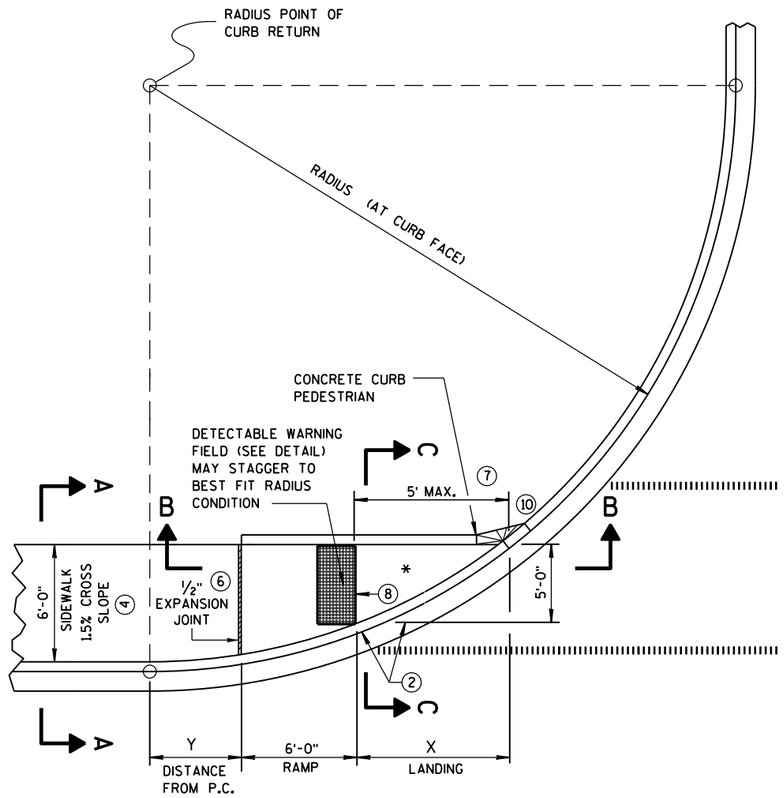






6

S.D.D. 8 D 5-16b

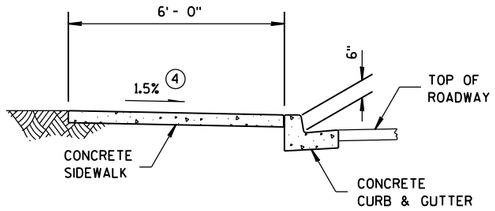



CURB RAMP TYPE 4A

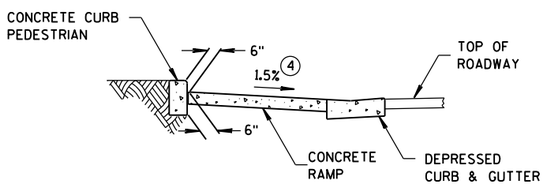
PLAN VIEW

| RADIUS (AT CURB FACE) | X | Y |
|---|---|---|
| 20 FEET | 6'-1¾" | 2'-7¼" |
| 30 FEET | 7'-11¾" | 4'-8¼" |
| 40 FEET | 9'-5¼" | 6'-5" |
| 50 FEET | 10'-8¾" | 7'-11¼" |
| 60 FEET | 11'-10¼" | 9'-3½" |

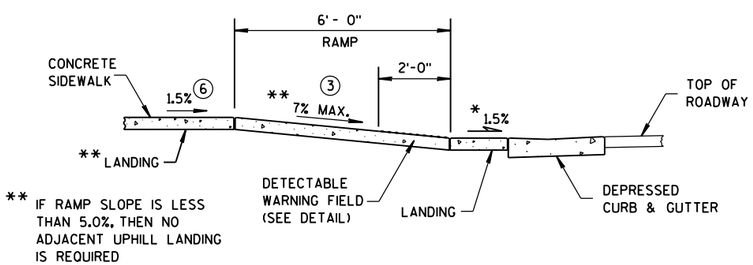
INTERMEDIATE RADII CAN BE INTERPOLATED




SECTION A-A FOR TYPE 4A

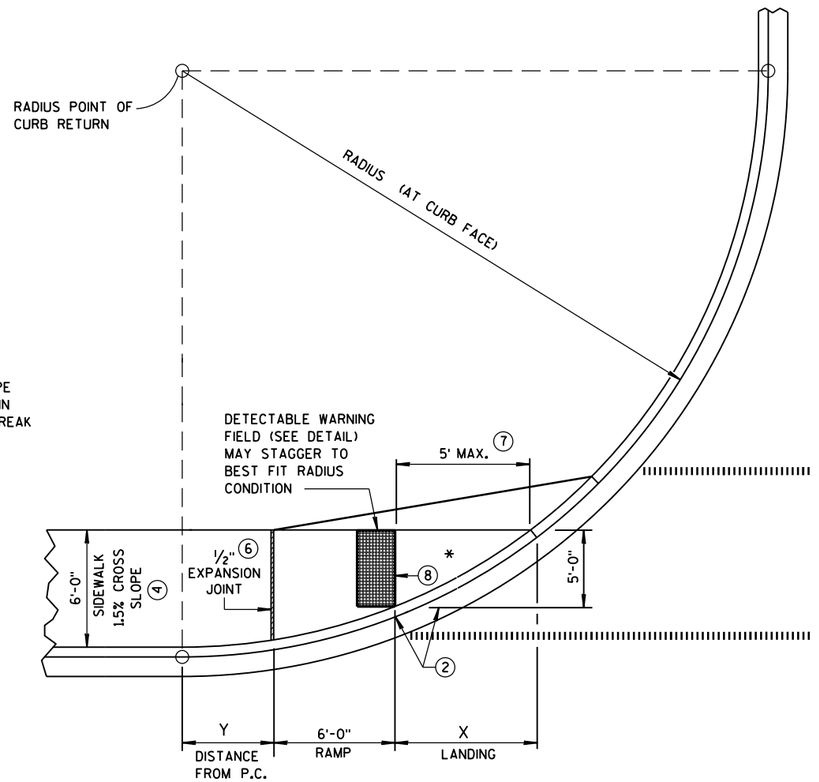



SECTION C-C FOR TYPE 4A




SECTION B-B FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK




CURB RAMP TYPE 4A1

PLAN VIEW

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

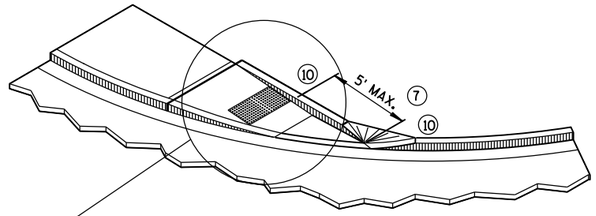
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

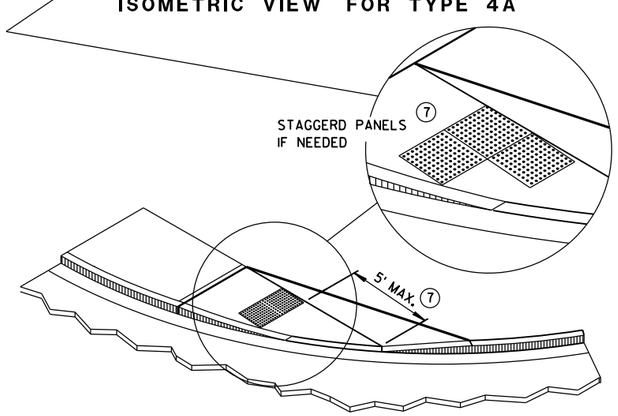
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.




ISOMETRIC VIEW FOR TYPE 4A




ISOMETRIC VIEW FOR TYPE 4A1

**LEGEND**

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS TYPES 4A AND 4A1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

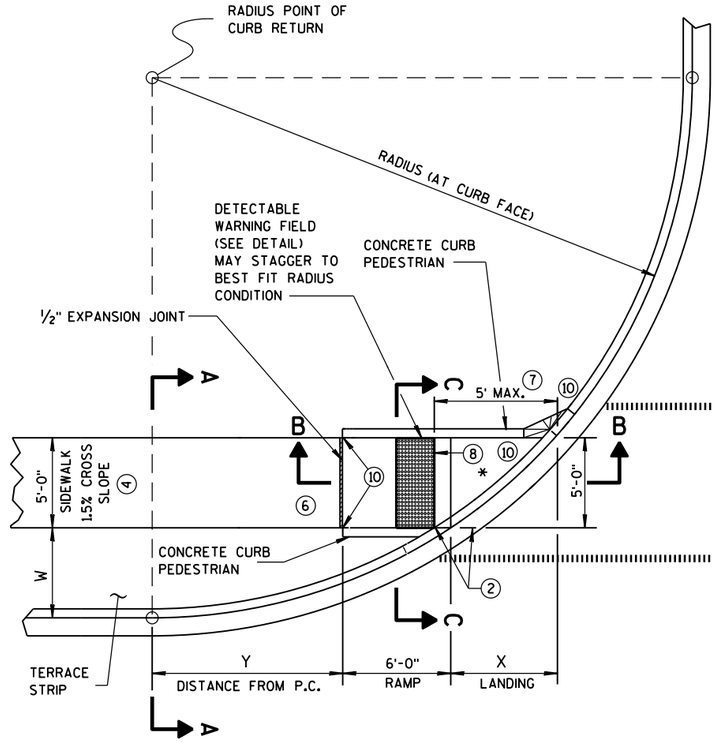




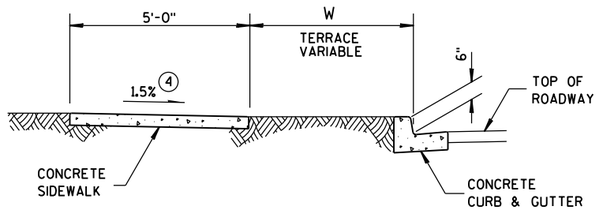
6



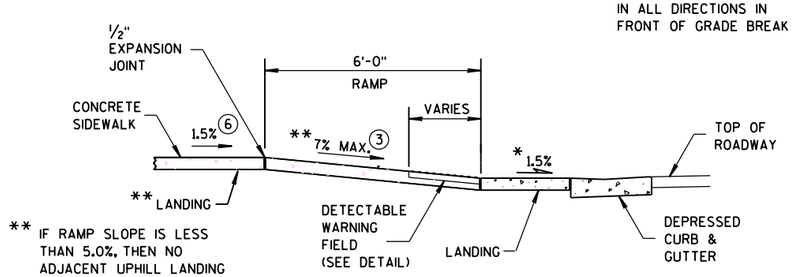
S.D.D. 8 D 5-16c




## CURB RAMP TYPE 4B
### PLAN VIEW




## SECTION A-A FOR TYPE 4B



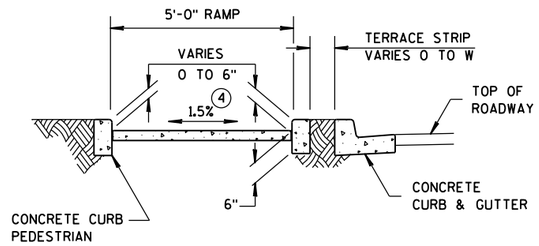

## SECTION B-B FOR TYPE 4B

## LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)




## SECTION C-C FOR TYPE 4B

| RADIUS (AT CURB FACE) | W = 3'-0" | | W = 4'-0" | | W = 5'-0" | | W = 6'-0" | | W = 7'-0" | |
|---|---|---|---|---|---|---|---|---|---|---|
| | X | Y | X | Y | X | Y | X | Y | X | Y |
| 20 FEET | 5'-5½" | 4'-6½" | 4'-8½" | 6'-0" | 4'-1" | 7'-2¾" | 3'-7" | 8'-3½" | 3'-1½" | 9'-2½" |
| 30 FEET | 7'-3¾" | 7'-1" | 6'-5½" | 8'-11½" | 5'-9¼" | 10'-7" | 5'-2½" | 12'-0" | 4'-8¾" | 13'-3¼" |
| 40 FEET | 8'-9½" | 9'-2½" | 7'-10" | 11'-5¼" | 7'-1" | 13'-4½" | 6'-5¾" | 15'-¾" | 5'-11½" | 16'-7¼" |
| 50 FEET | 10'-¾" | 11'-¾" | 9'-¼" | 13'-7¼" | 8'-2½" | 15'-9½" | 7'-6½" | 17'-9" | 6'-11¾" | 19'-6¼" |
| 60 FEET | 11'-2½" | 12'-8¾" | 10'-¾" | 15'-6½" | 9'-2¼" | 17'-11¾" | 8'-5¾" | 20'-1¾" | 7'-10½" | 22'-1½" |

INTERMEDIATE RADII CAN BE INTERPOLATED

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

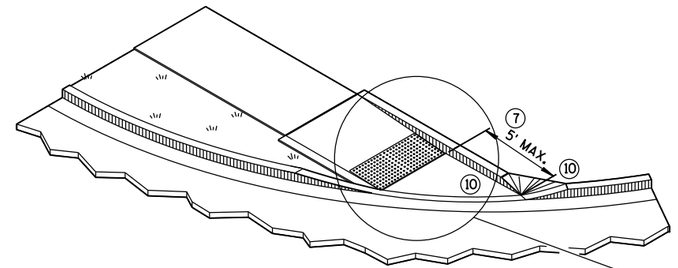
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

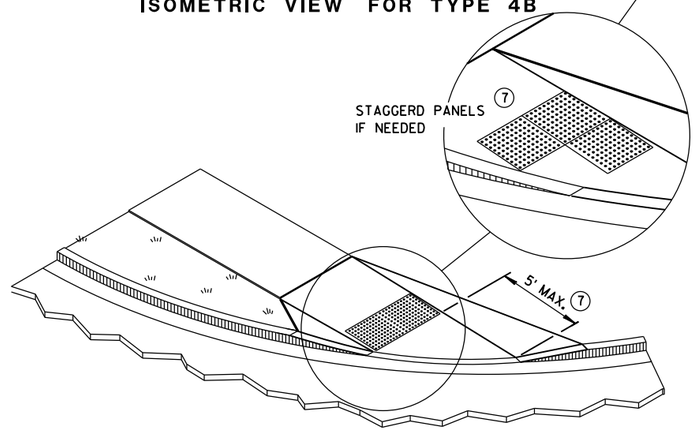
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

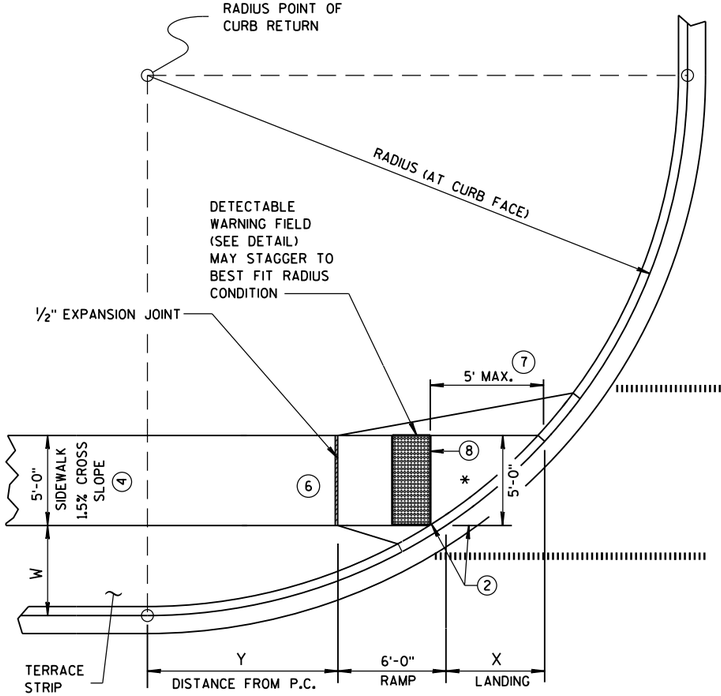
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.




## ISOMETRIC VIEW FOR TYPE 4B




## ISOMETRIC VIEW FOR TYPE 4B1




## CURB RAMP TYPE 4B1
### PLAN VIEW

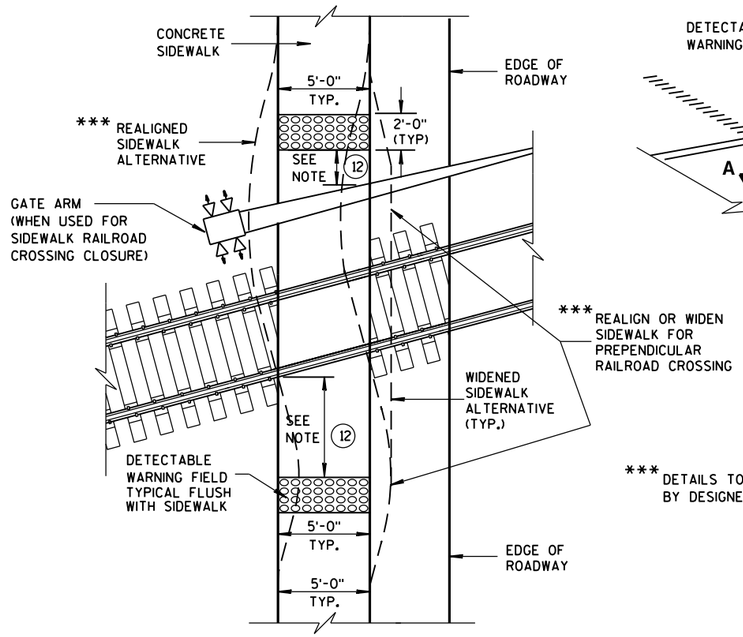
**CURB RAMPS**
**TYPE 4B AND 4B1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



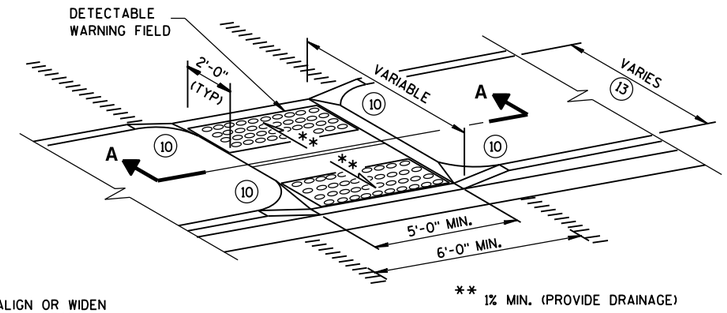
6

S.D.D. 8 D 5-16d




## TYPE 8
### DETECTABLE WARNINGS AT RAILROAD CROSSING

*** DETAILS TO BE DETERMINED BY DESIGNER




** 1% MIN. (PROVIDE DRAINAGE)

## MEDIAN ISLAND NON-ELEVATED CROSSING
## TYPE 5

## GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

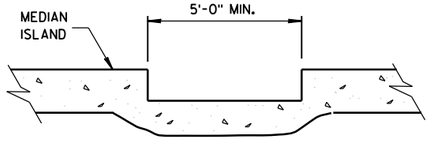
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

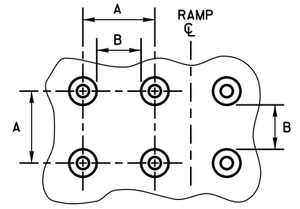
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



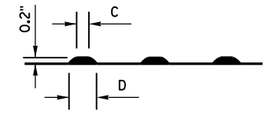

## SECTION A-A

| | MIN. | MAX. |
|---|---|---|
| A | 1.6" | 2.4" |
| B | 0.65" | 1.5" |
| C | * | * |
| D | 0.9" | 1.4" |

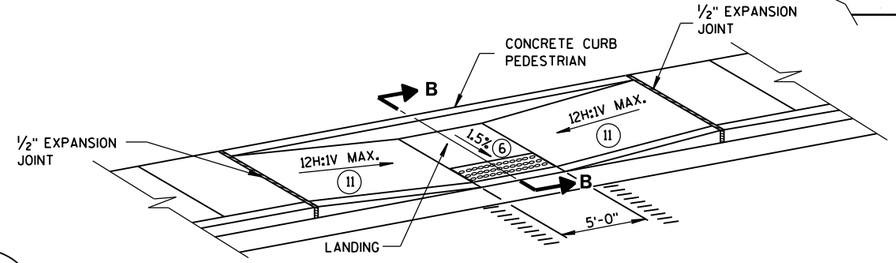
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



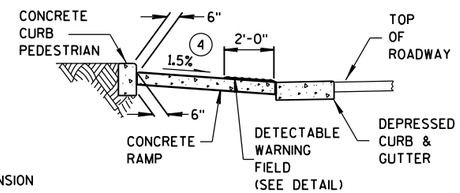

## PLAN VIEW



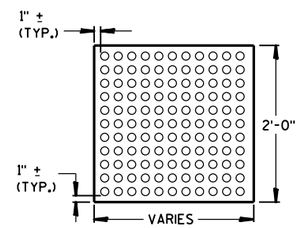

## ELEVATION VIEW
## TRUNCATED DOMES
### DETECTABLE WARNING PATTERN DETAIL




## MID-BLOCK CROSSING
## TYPE 7A

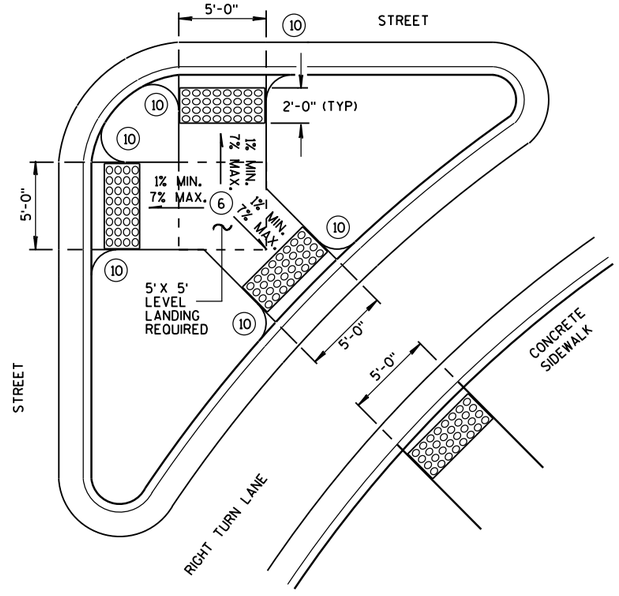



## SECTION B-B

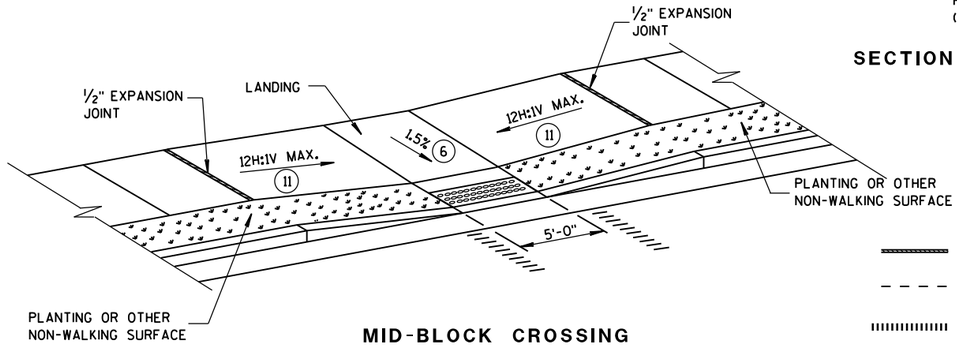



## PLAN VIEW
## DETECTABLE WARNING FIELD (TYPICAL)

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS




## TYPE 6
### DETECTABLE WARNING AT ISLANDS




## MID-BLOCK CROSSING
## TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

### LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

## CURB RAMPS TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



6

S.D.D. 8 D 5-16e

6

S.D.D. 8 D 5-16e

# 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) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

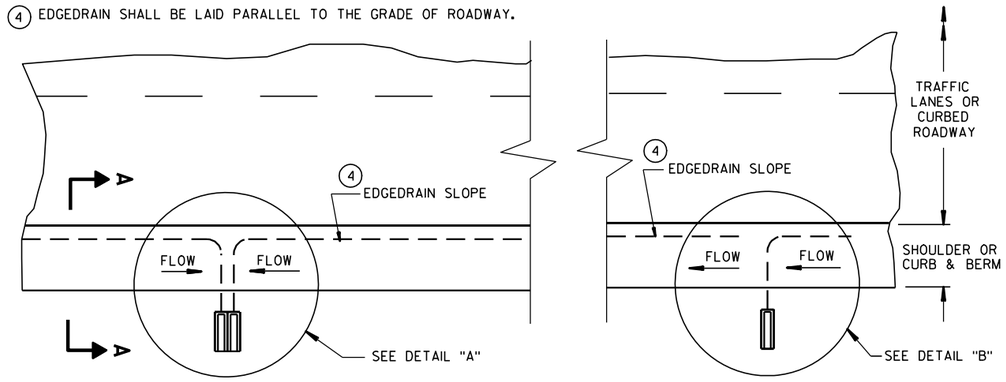
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

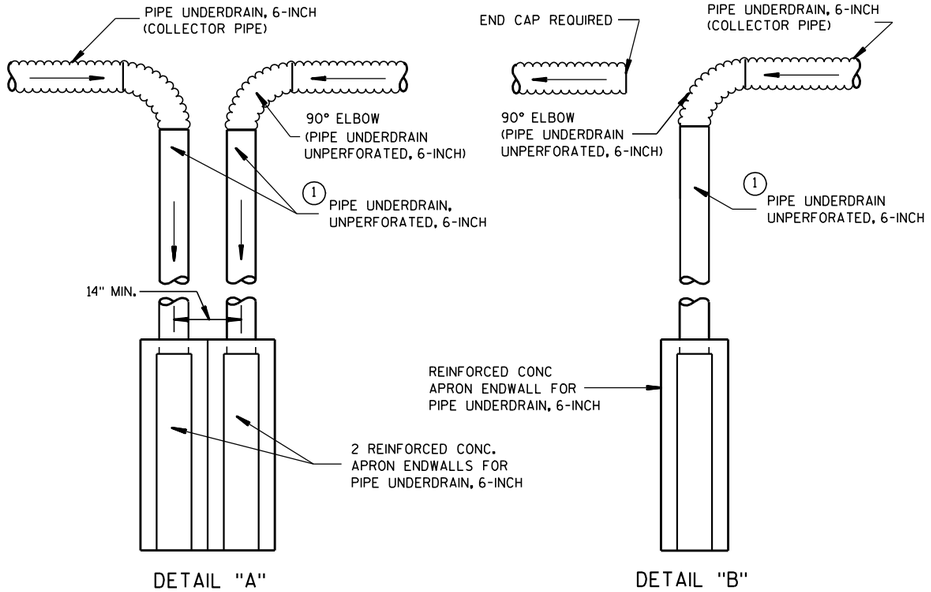
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.




PLAN VIEW

## ROADWAY WITH SHOULDERS OR CURBS

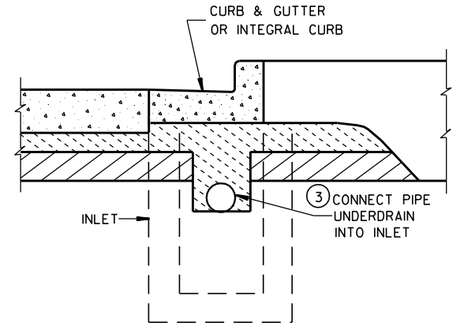
(EDGEDRAIN OUTLETS TO ROADSIDE) (2)




DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

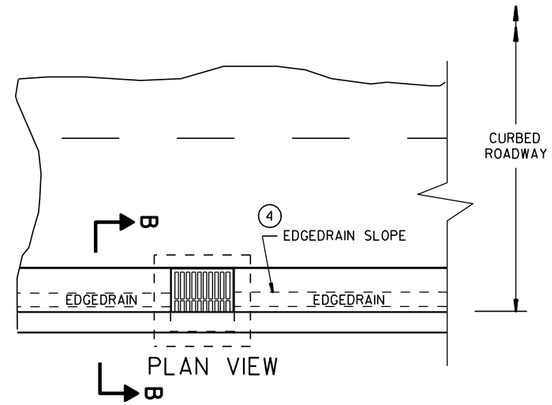
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

## TYPICAL DRAIN OUT DETAILS




SECTION B-B

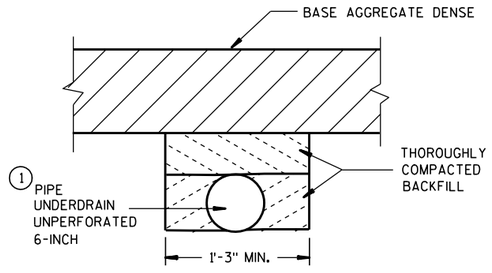
## URBAN CROSS SECTION




PLAN VIEW

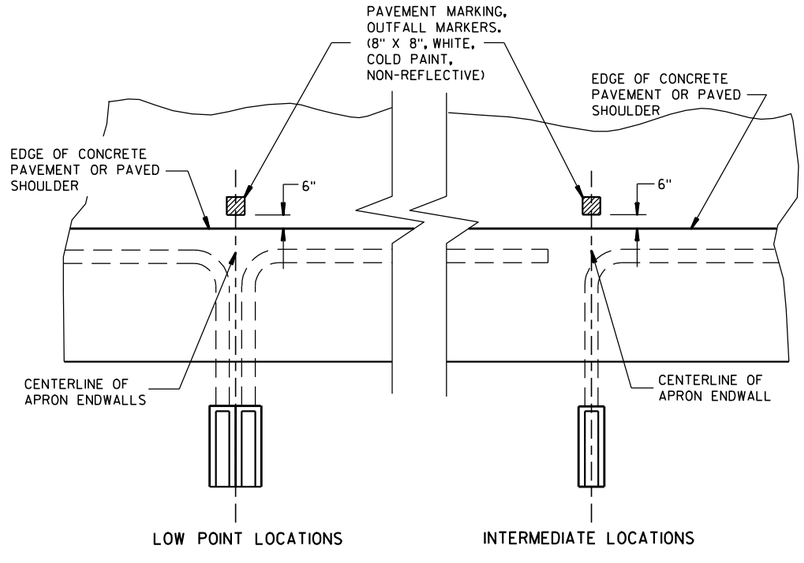
## ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



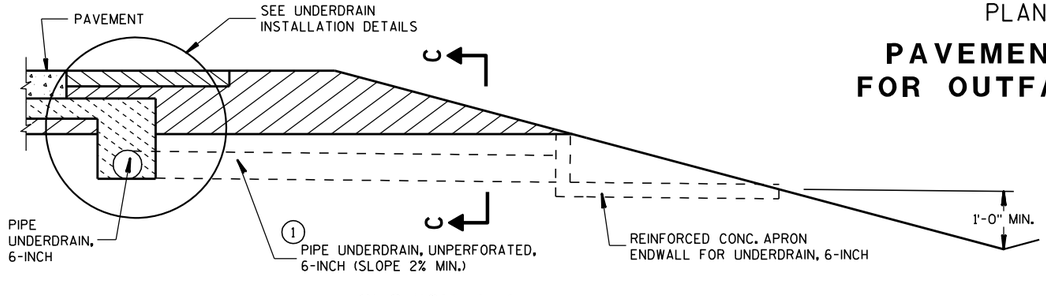

SECTION C-C

## (TRENCH FOR OUTFALL PIPE)




PLAN VIEW

## PAVEMENT MARKING FOR OUTFALL MARKERS




SECTION A-A

## RURAL CROSS SECTION

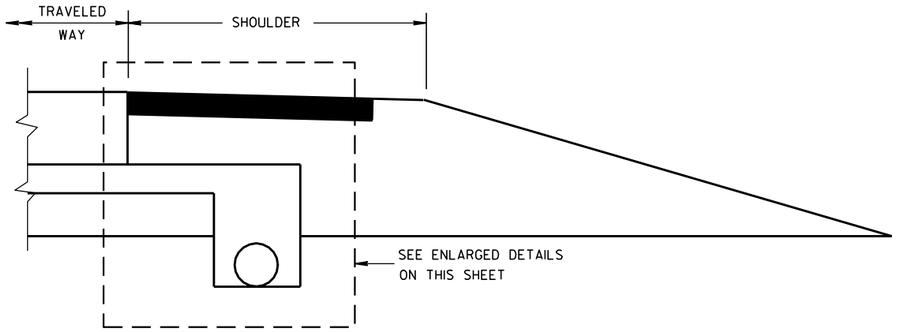
**EDGEDRAIN OUTLET AND OUTFALL MARKERS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




6


S.D.D. 8 D 15-4a




## RURAL CROSS SECTION

## GENERAL NOTES

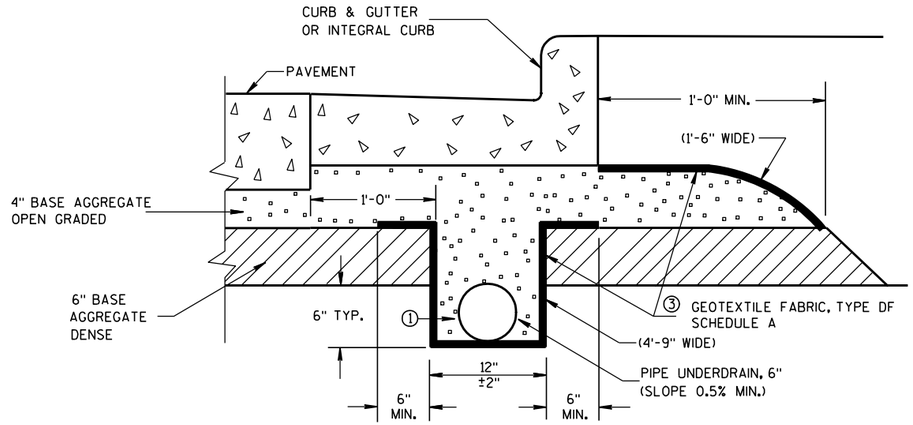
THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

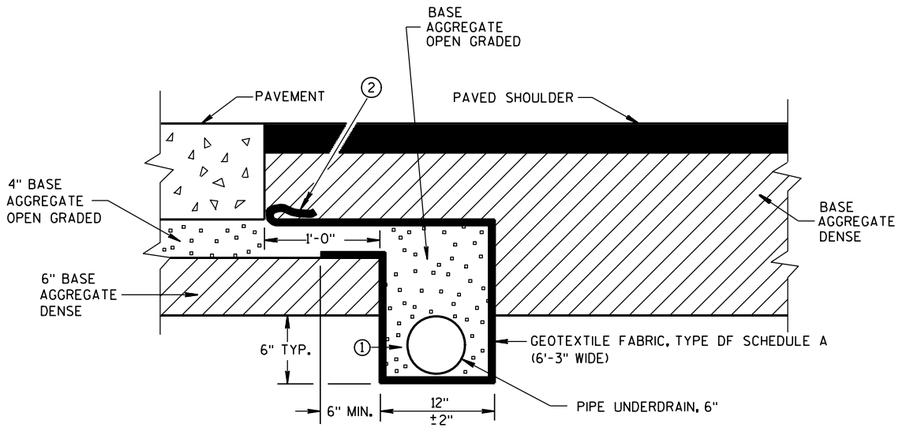
① TRENCH BACKFILL WILL BE PAID FOR AS BASE AGGREGATE OPEN GRADED.

② FOLD OVER EXCESS GEOTEXTILE FABRIC AT THIS LOCATION.

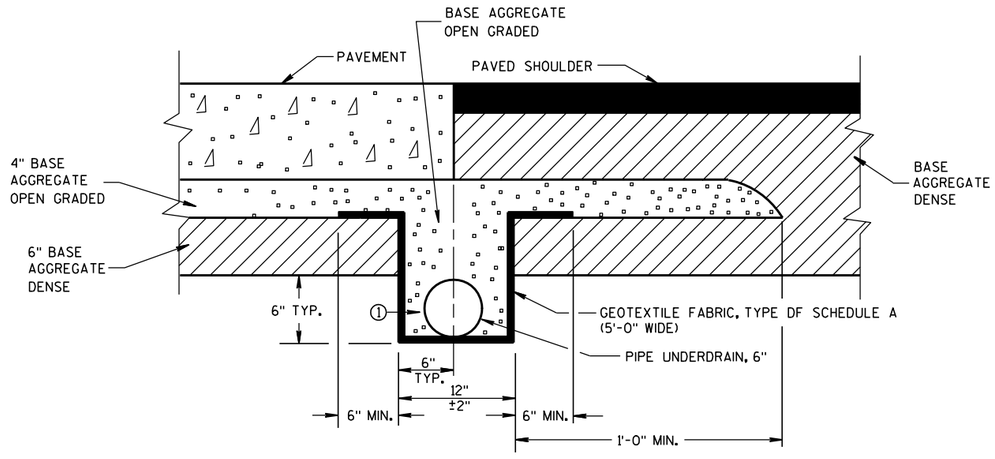
③ TOTAL FABRIC WIDTH IS 6'-3" FOR PAYMENT.




## EDGEDRAIN IN URBAN ROADWAY




**POST PAVING INSTALLATION**
(QUANTITIES ARE BASED ON THIS DETAIL)




**PRE-PAVING INSTALLATION ALTERNATE**

## EDGEDRAIN IN RURAL ROADWAY

**EDGEDRAIN AND BASE AGGREGATE OPEN GRADED**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

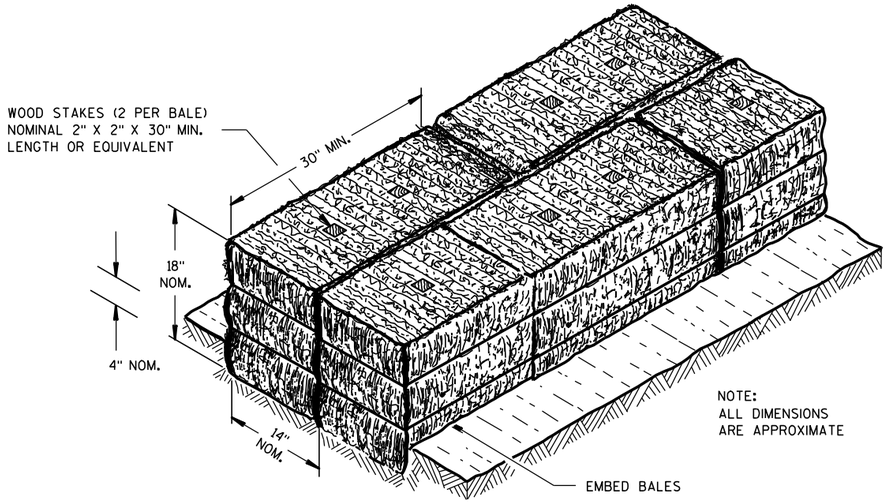
3/21/07 DATE — /S/ Steven W. [illegible] CHIEF MATERIALS MANAGER

FHWA

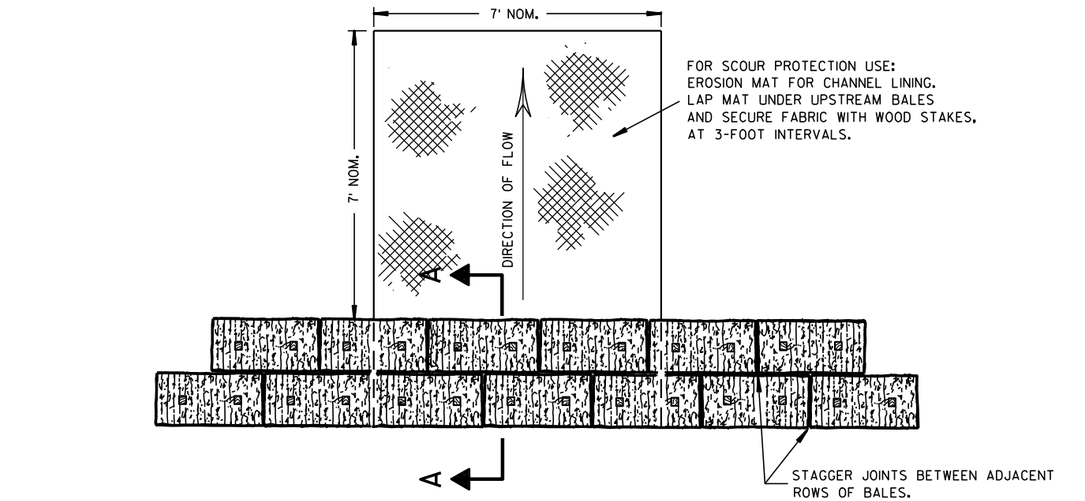



6

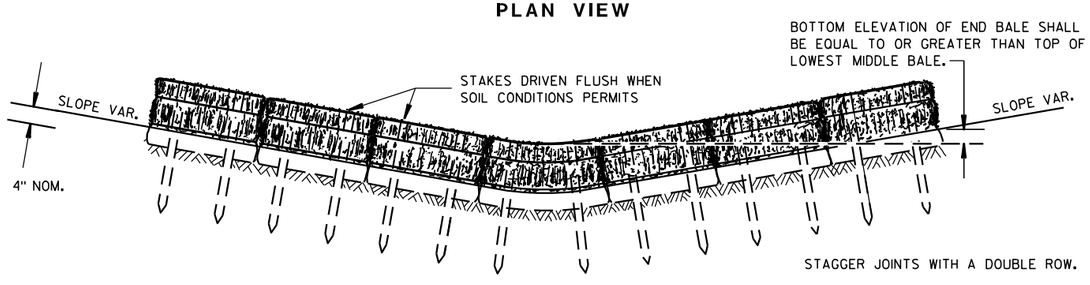
S.D.D. 8 D 15-4b




**SECTION A-A**




**PLAN VIEW**



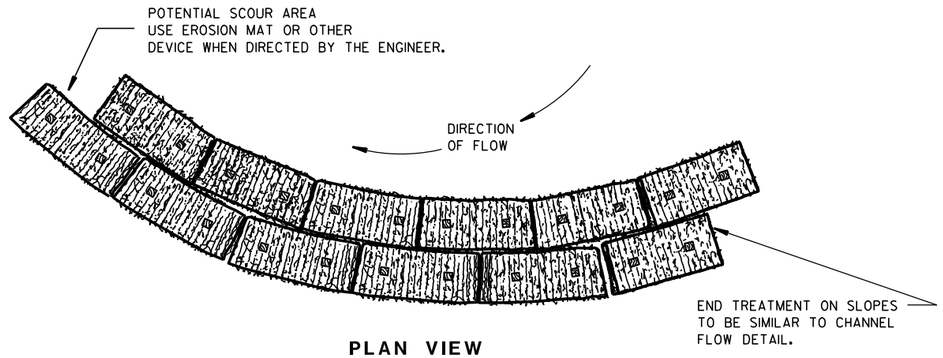

**FRONT ELEVATION**

## TEMPORARY DITCH CHECK USING EROSION BALES ①

## GENERAL NOTES

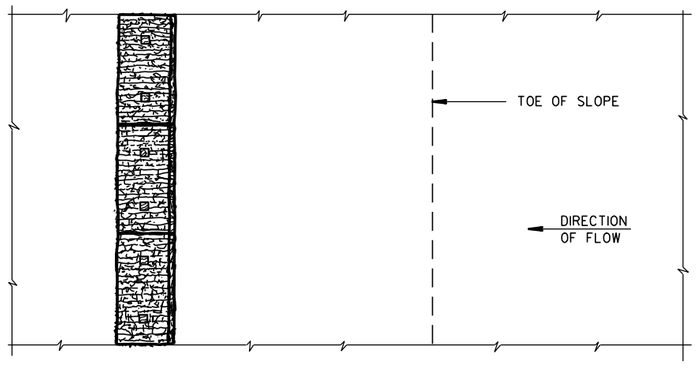
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

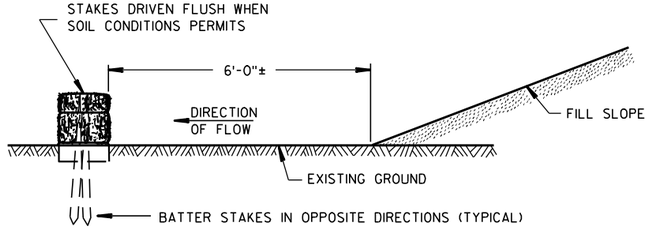



**PLAN VIEW**

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 Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

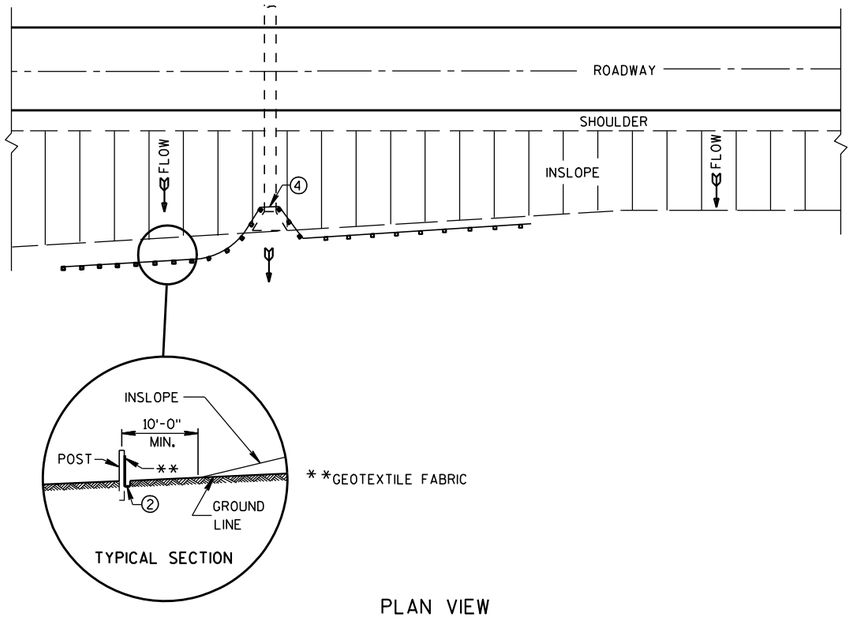


6

S.D.D. 8 E 8-3

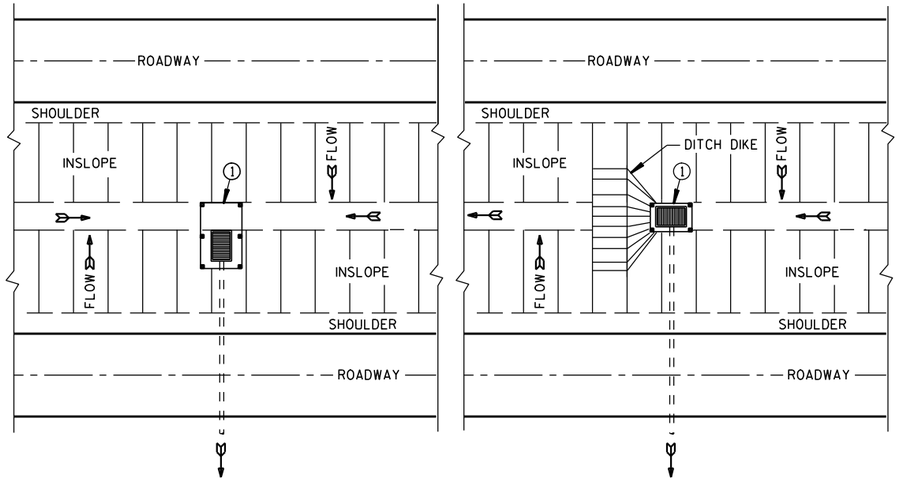
6

S.D.D. 8 E 8-3




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE




PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

## GENERAL NOTES

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

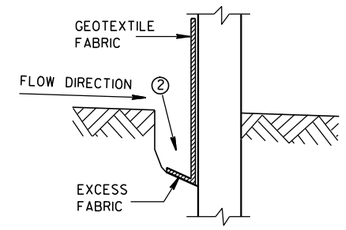
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

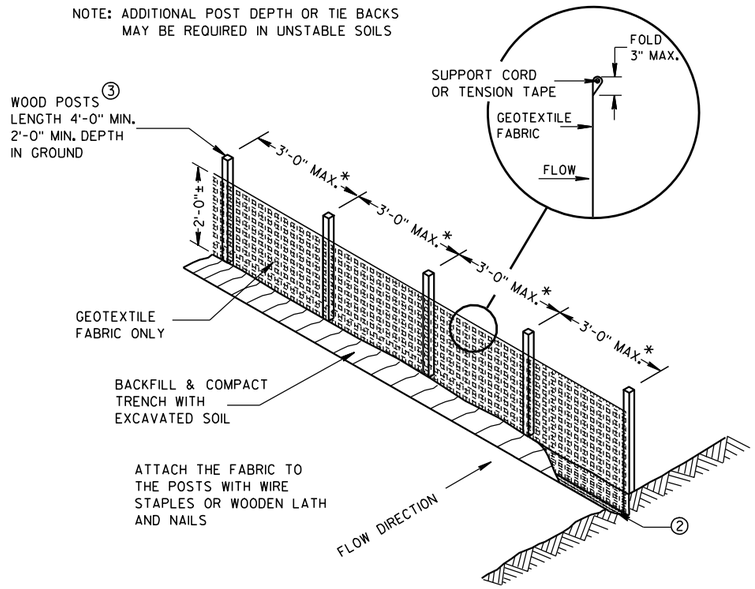
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

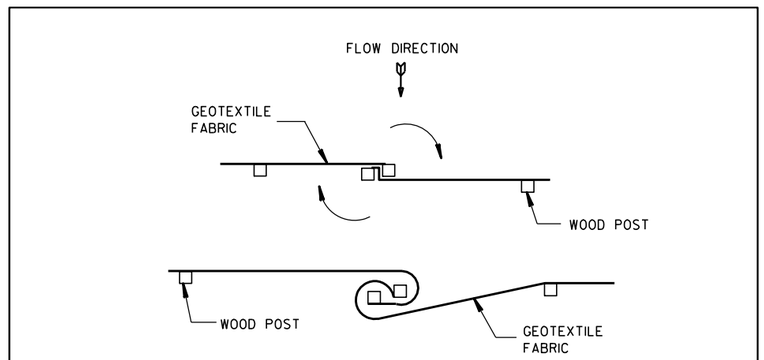
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



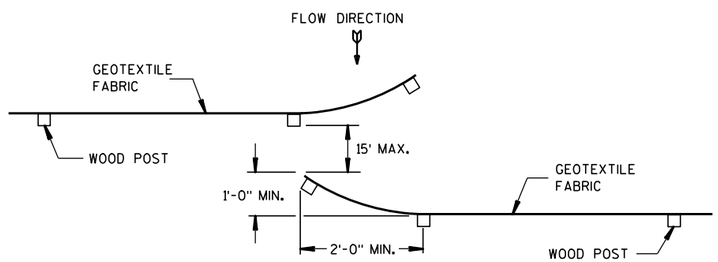

## TRENCH DETAIL




## SILT FENCE

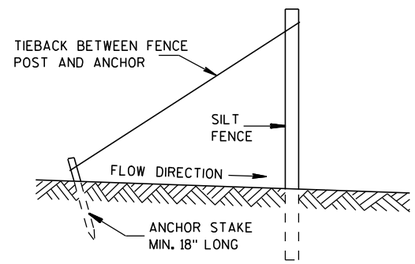



TWIST METHOD




HOOK METHOD

## JOINING TWO LENGTHS OF SILT FENCE ⑤




## SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

**SILT FENCE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

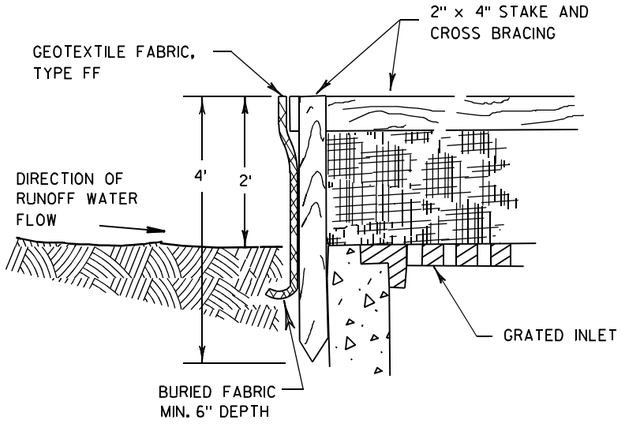


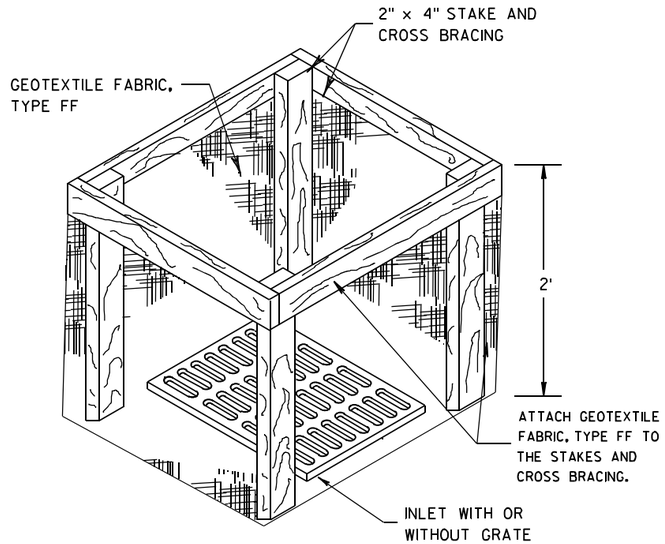
6

S.D.D. 8 E 9-6

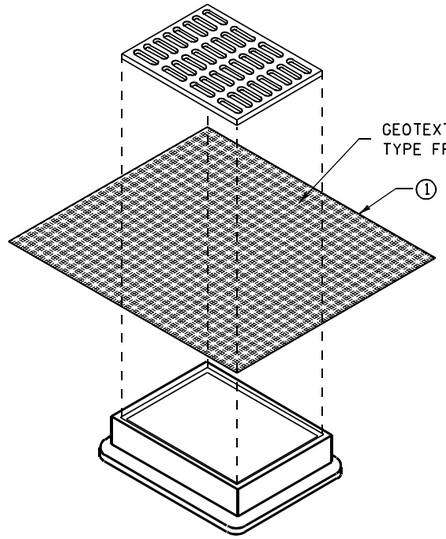
6

S.D.D. 8 E 9-6



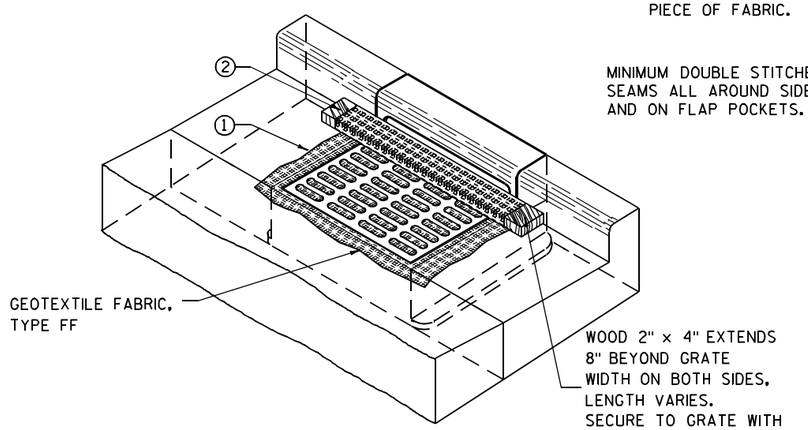




## INLET PROTECTION, TYPE A

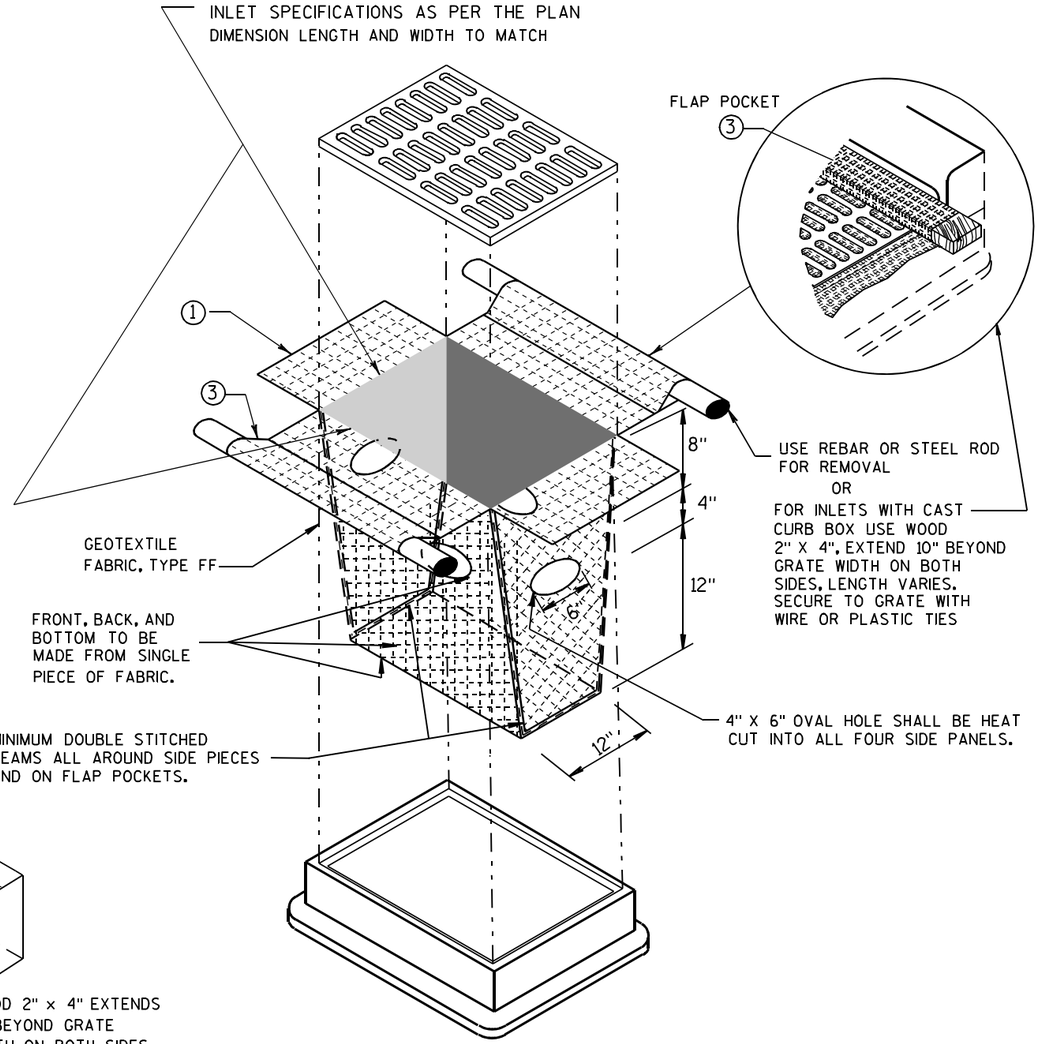



## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

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




## INLET PROTECTION, TYPE C (WITH CURB BOX)




## INLET PROTECTION, TYPE D

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

## 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.

## 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 A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

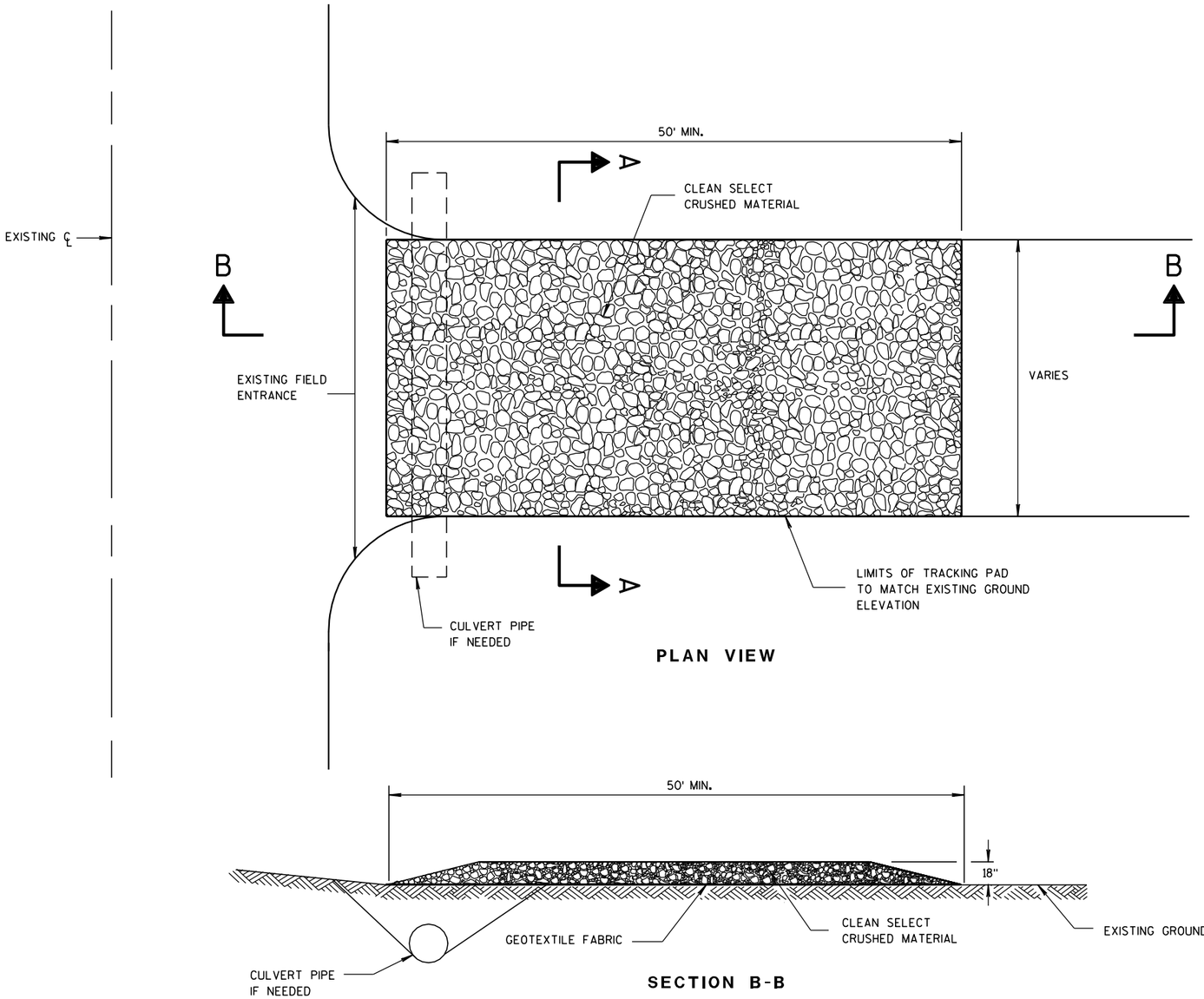


6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2




PLAN VIEW




SECTION B-B

## 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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

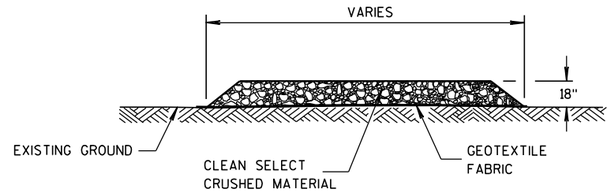
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.




SECTION A-A

# TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

| 3/24/2011 | /S/ Jerry H. Zoda | |
|---|---|---|
| DATE | ROADWAY STANDARDS ENGINEER | ENT |

FHWA

224

6

S.D.D. 8 E 14-1

## METAL APRON ENDWALLS

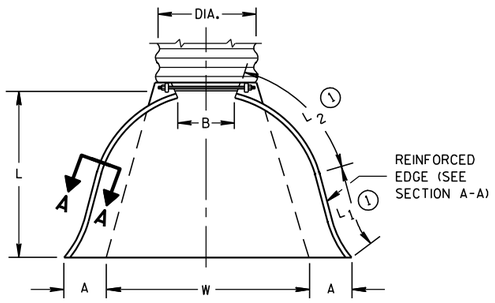
| PIPE DIA. (IN.) | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | .064 | .060 | 6 | 6 | 6 | 21 | 12 | 17 1/2 | 24 | 2 1/2 to 1 | 1 Pc. |
| 15 | .064 | .060 | 7 | 8 | 6 | 26 | 14 | 21 3/4 | 30 | 2 1/2 to 1 | 1 Pc. |
| 18 | .064 | .060 | 8 | 10 | 6 | 31 | 15 | 28 1/4 | 36 | 2 1/2 to 1 | 1 Pc. |
| 21 | .064 | .060 | 9 | 12 | 6 | 36 | 18 | 29 5/8 | 42 | 2 1/2 to 1 | 1 Pc. |
| 24 | .064 | .075 | 10 | 13 | 6 | 41 | 18 | 37 1/4 | 48 | 2 1/2 to 1 | 1 Pc. |
| 30 | .079 | .075 | 12 | 16 | 8 | 51 | 18 | 52 1/4 | 60 | 2 1/2 to 1 | 1 Pc. |
| 36 | .079 | .105 | 14 | 19 | 9 | 60 | 24 | 59 3/4 | 72 | 2 1/2 to 1 | 2 Pc. |
| 42 | .109 | .105 | 16 | 22 | 11 | 69 | 24 | 75 5/8 | 84 | 2 1/2 to 1 | 2 Pc. |
| 48 | .109 | .105 | 18 | 27 | 12 | 78 | 24 | 81 | 90 | 2 1/4 to 1 | 3 Pc. |
| 54 | .109 | .105 | 18 | 30 | 12 | 84 | 30 | 85 1/2 | 102 | 2 1/4 to 1 | 3 Pc. |
| 60 | .109× | .105× | 18 | 33 | 12 | 87 | — | — | 114 | 2 to 1 | 3 Pc. |
| 66 | .109× | .105× | 18 | 36 | 12 | 87 | — | — | 120 | 2 to 1 | 3 Pc. |
| 72 | .109× | .105× | 18 | 39 | 12 | 87 | — | — | 126 | 2 to 1 | 3 Pc. |
| 78 | .109× | .105× | 18 | 42 | 12 | 87 | — | — | 132 | 1 1/2 to 1 | 3 Pc. |
| 84 | .109× | .105× | 18 | 45 | 12 | 87 | — | — | 138 | 1 1/2 to 1 | 3 Pc. |
| 90 | .109× | .105× | 18 | 37 | 12 | 87 | — | — | 144 | 1 1/2 to 1 | 3 Pc. |
| 96 | .109× | .105× | 18 | 35 | 12 | 87 | — | — | 150 | 1 1/2 to 1 | 3 Pc. |

× EXCEPT CENTER PANEL SEE GENERAL NOTES

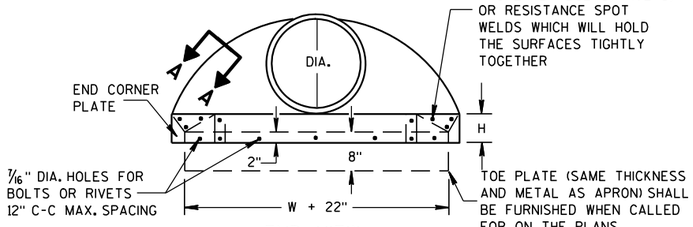
## REINFORCED CONCRETE APRON ENDWALLS

| PIPE DIA. (IN.) | DIMENSIONS (Inches) T | A | B | C | D | E | G | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|
| 12 | 2 | 4 | 24 | 48 7/8 | 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 1/4 - ** 35 | * 98 1/4 - ** 100 | 90 | 5 1/2 | 2 2/5 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 |

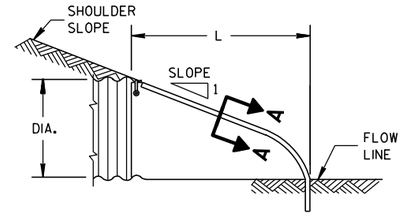
*MINIMUM
**MAXIMUM




PLAN VIEW

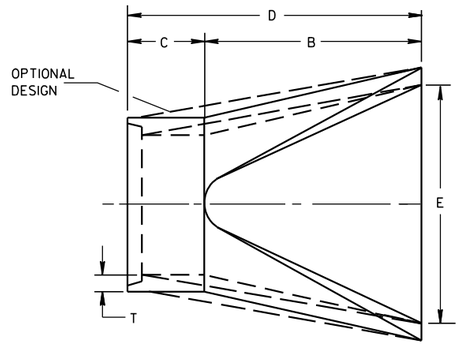



END VIEW

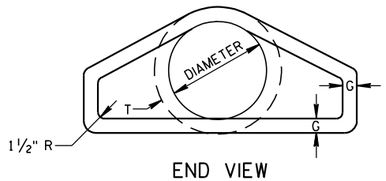



SIDE ELEVATION

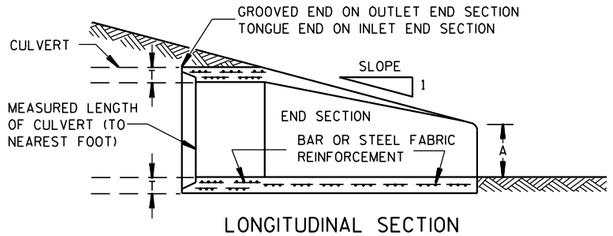
## METAL ENDWALLS




PLAN

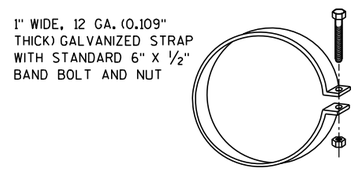



END VIEW



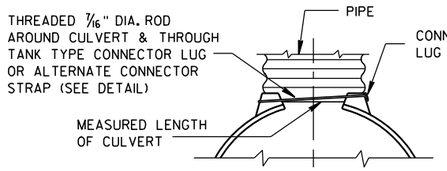

LONGITUDINAL SECTION

## CONCRETE ENDWALLS

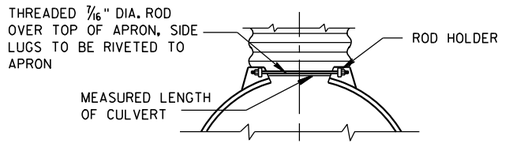



ALTERNATE FOR TYPE 1 CONNECTION

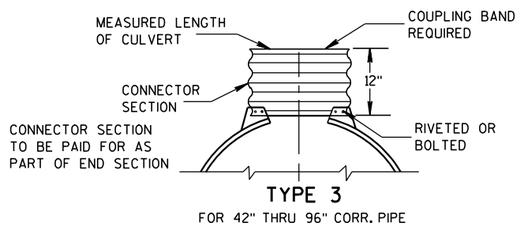
## END SECTION CONNECTOR STRAP



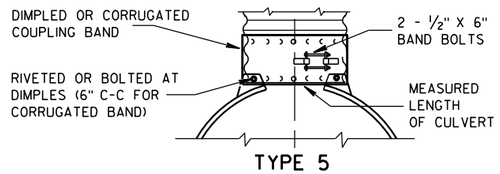

TYPE 1
FOR 12" THRU 24" CORR. PIPE




TYPE 2
FOR 30" THRU 96" CORR. PIPE




TYPE 3
FOR 42" THRU 96" CORR. PIPE




TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

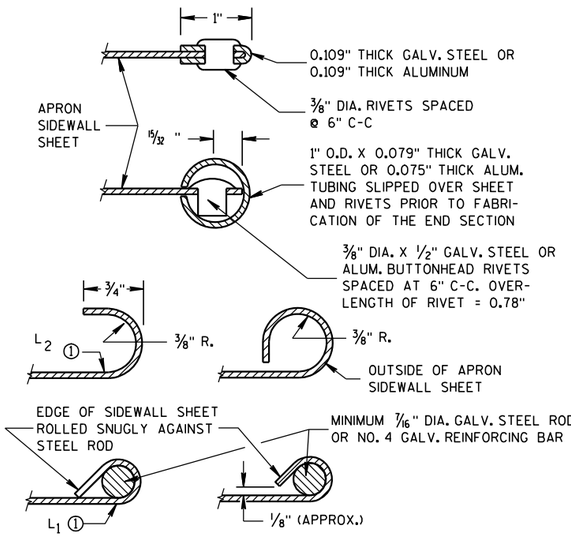
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

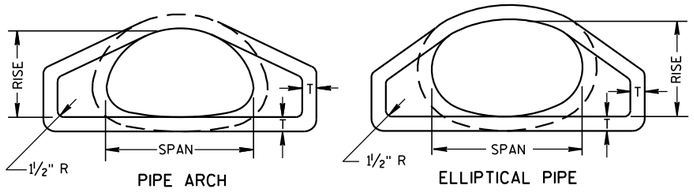
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

# APRON ENDWALLS FOR CULVERT PIPE

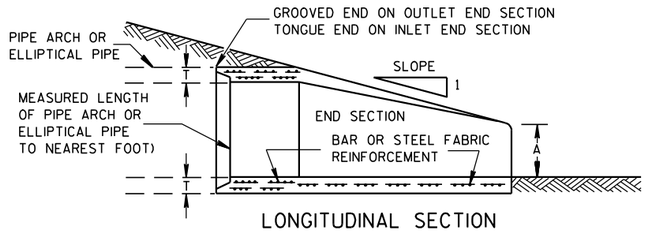
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP 225 NEER
FHWA

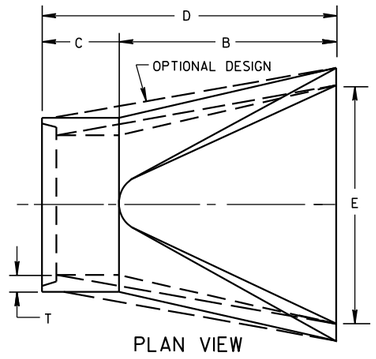

6
S.D.D. 8 F 1-11




END VIEW

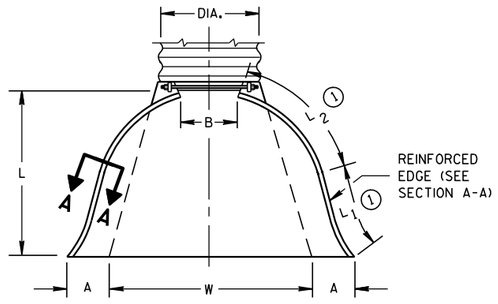



LONGITUDINAL SECTION

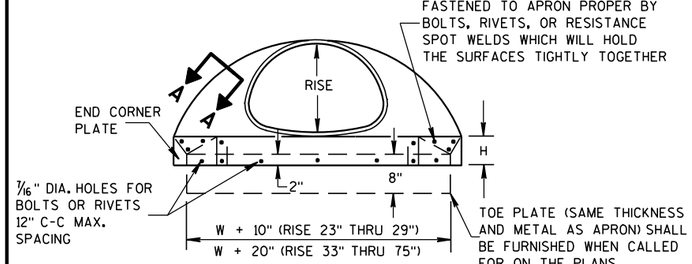



PLAN VIEW

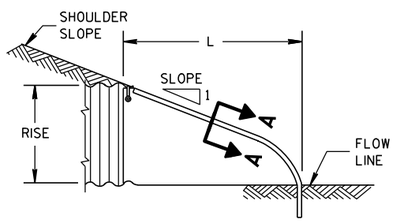
# CONCRETE ENDWALLS




PLAN VIEW

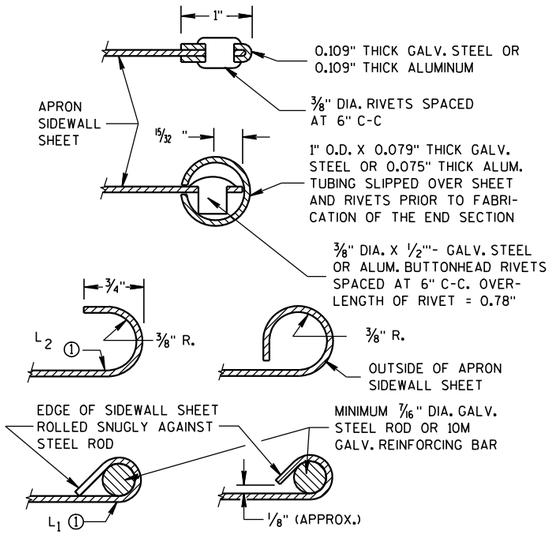



END VIEW




SIDE ELEVATION

# METAL ENDWALLS




SECTION A-A

## 2- 2/3" X 1/2" CORRUGATIONS

| EQUIV. DIA. (Inches) | (Inches) SPAN | (Inches) RISE | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 17 | 13 | .064 | .060 | 7 | 9 | 6 | 19 | 14 | 16 | 30 | 2½ to 1 | 1 Pc. |
| 18 | 21 | 15 | .064 | .060 | 7 | 10 | 6 | 23 | 14 | 19⅜ | 36 | 2½ to 1 | 1 Pc. |
| 21 | 24 | 18 | .064 | .060 | 8 | 12 | 6 | 28 | 18 | 21¾ | 42 | 2½ to 1 | 1 Pc. |
| 24 | 28 | 20 | .064 | .060 | 9 | 14 | 6 | 32 | 18 | 27½ | 48 | 2½ to 1 | 1 Pc. |
| 30 | 35 | 24 | .079 | .075 | 10 | 16 | 6 | 39 | 18 | 37⅝ | 60 | 2½ to 1 | 1 Pc. |
| 36 | 42 | 29 | .079 | .075 | 12 | 18 | 8 | 46 | 24 | 45⅜ | 75 | 2½ to 1 | 1 Pc. |
| 42 | 49 | 33 | .109 | .105 | 13 | 21 | 9 | 53 | 24 | 54¾ | 85 | 2½ to 1 | 2 Pc. |
| 48 | 57 | 38 | .109 | .105 | 18 | 26 | 12 | 63 | 24 | 68 | 90 | 2½ to 1 | 3 Pc. |
| 54 | 64 | 43 | .109 | .105 | 18 | 30 | 12 | 70 | 24 | 72¾ | 102 | 2¼ to 1 | 3 Pc. |
| 60 | 71 | 47 | .109* | .105* | 18 | 33 | 12 | 77 | 30 | 82¼ | 114 | 2¼ to 1 | 3 Pc. |
| 66 | 77 | 52 | .109* | .105* | 18 | 36 | 12 | 77 | — | — | 126 | 2 to 1 | 3 Pc. |
| 72 | 83 | 57 | .109* | .105* | 18 | 39 | 12 | 77 | — | — | 138 | 2 to 1 | 3 Pc. |

## 3" X 1" CORRUGATIONS

| EQUIV. DIA. (Inches) | (Inches) SPAN | (Inches) RISE | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 48 | 53 | 41 | .109 | .105 | 18 | 26 | 12 | 63 | 24 | 72¾ | 90 | 2½ to 1 | 2 Pc. |
| 54 | 60 | 46 | .109 | .105 | 18 | 30 | 12 | 70 | 30 | 82¼ | 102 | 2 to 1 | 2 Pc. |
| 60 | 66 | 51 | .109* | .105* | 18 | 33 | 12 | 77 | — | — | 114 | 1½ to 1 | 3 Pc. |
| 66 | 73 | 55 | .109* | .105* | 18 | 36 | 12 | 77 | — | — | 126 | 1½ to 1 | 3 Pc. |
| 72 | 81 | 59 | .109* | .105* | 18 | 39 | 12 | 77 | — | — | 138 | 2 to 1 | 3 Pc. |
| 78 | 87 | 63 | .109* | .105* | 22 | 38 | 12 | 77 | — | — | 148 | 1½ to 1 | 3 Pc. |
| 84 | 95 | 67 | .109* | .105* | 22 | 34 | 12 | 77 | — | — | 162 | 1½ to 1 | 3 Pc. |
| 90 | 103 | 71 | .109* | .105* | 22 | 38 | 12 | 77 | — | — | 174 | 1½ to 1 | 3 Pc. |
| 96 | 112 | 75 | .109* | .105* | 24 | 40 | 12 | 77 | — | — | 174 | 1½ to 1 | 3 Pc. |

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

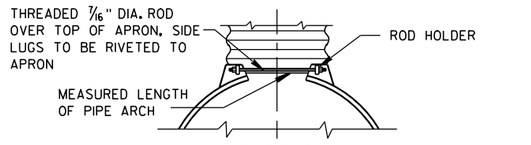
## REINFORCED CONCRETE PIPE ARCH

| EQUIV. DIA. (Inches) | DIMENSIONS (Inches) ** SPAN | ** RISE | T | A | B | C | D | E | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|---|
| 24 | 29 | 18 | 3 | 8½ | 39 | 33 | 72 | 48 | 3 to 1 |
| 30 | 36 | 22 | 3½ | 9½ | 50 | 46 | 96 | 60 | 3 to 1 |
| 36 | 44 | 27 | 4 | 11⅛ | 60 | 36 | 96 | 72 | 3 to 1 |
| 42 | 51 | 31 | 4½ | 15 13/16 | 60 | 36 | 96 | 78 | 3 to 1 |
| 48 | 58 | 36 | 5 | 21 | 60 | 36 | 96 | 84 | 3 to 1 |
| 54 | 65 | 40 | 5½ | 25½ | 60 | 36 | 96 | 90 | 3 to 1 |
| 60 | 73 | 45 | 6 | 31 | 60 | 36 | 96 | 96 | 3 to 1 |
| 72 | 88 | 54 | 7 | 31 | 60 | 39 | 99 | 120 | 2 to 1 |
| 84 | 102 | 62 | 8 | 28½ | 83 | 19 | 102 | 144 | 2 to 1 |

## REINFORCED CONCRETE ELLIPTICAL PIPE

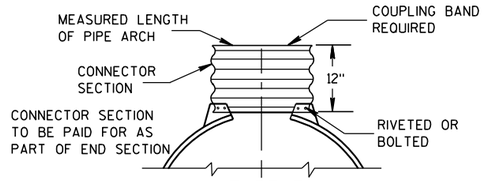
| EQUIV. DIA. (Inches) | DIMENSIONS (Inches) ** SPAN | ** RISE | T | A | B | C | D | E | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|---|
| 24 | 30 | 19 | 3¼ | 8½ | 39 | 33 | 72 | 48 | 3 to 1 |
| 30 | 38 | 24 | 3¾ | 9½ | 54 | 18 | 72 | 60 | 3 to 1 |
| 36 | 45 | 29 | 4½ | 11⅛ | 60 | 24 | 84 | 72 | 2½ to 1 |
| 42 | 53 | 34 | 5 | 15¾ | 60 | 36 | 96 | 78 | 2½ to 1 |
| 48 | 60 | 38 | 5½ | 21 | 60 | 36 | 96 | 84 | 2½ to 1 |
| 54 | 68 | 43 | 6 | 25½ | 60 | 36 | 96 | 90 | 2½ to 1 |
| 60 | 76 | 48 | 6½ | 30 | 60 | 36 | 96 | 96 | 2½ to 1 |

**NOMINAL SIZE



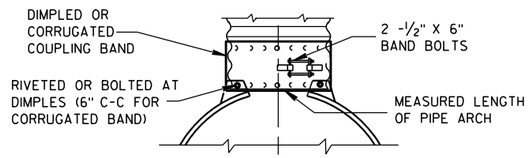

TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH




TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH




TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

# CONNECTION DETAILS

# GENERAL NOTES

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

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH 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 ARCH 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 77" X 52" THROUGH 112" X 75" 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 ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

**APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

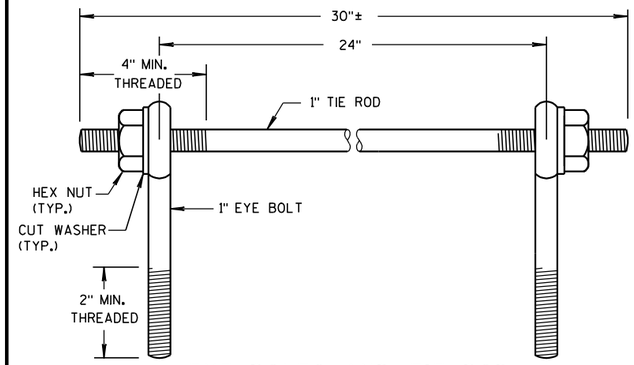


6

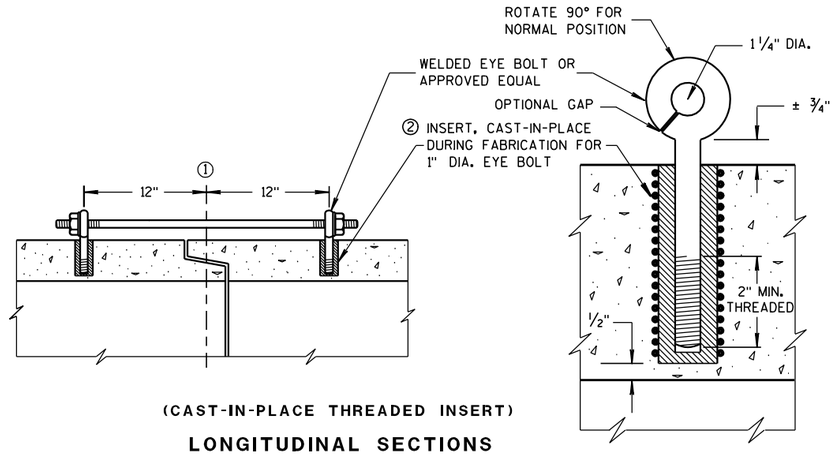
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1




EYE BOLTS AND TIE ROD




(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

# EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 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 APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

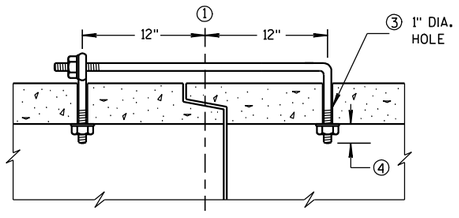
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

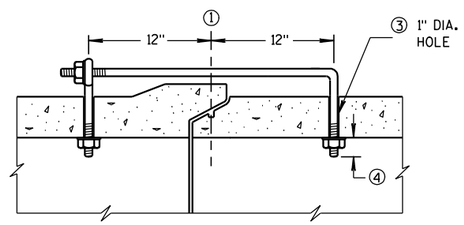
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.




(TONGUE & GROOVE PIPE)

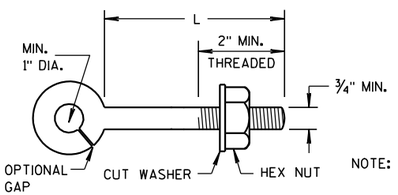



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

**EYE BOLT DIMENSION TABLE**

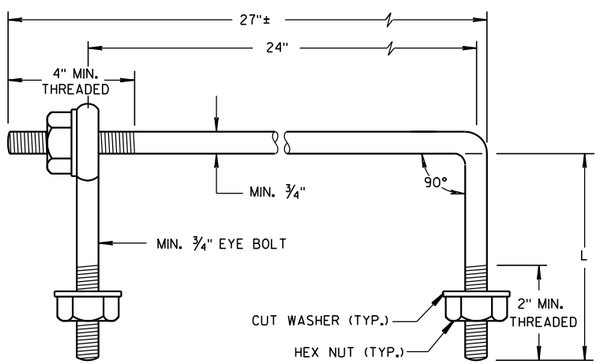
| PIPE SIZE | L = LENGTH | |
|---|---|---|
| | TONGUE & GROOVE PIPE | MODIFIED BELL PIPE |
| 18" TO 24" | 4 1/2" | 6 1/4" |
| 30" | 5" | 7" |
| 36" | 5 1/2" | 7" |
| 42" | 6" | |
| 48" | 6 1/2" | |
| 60" | 7 1/2" | |
| 66" | 8" | |




NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.




EYE BOLT AND TIE ROD

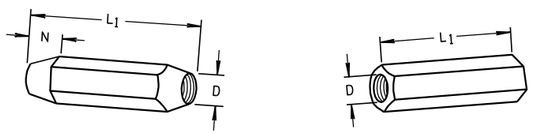
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

# EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

**ADJUSTABLE TIE ROD TABLE**

| PIPE DIAMETER | TIE ROD DIAMETER | D | $L_1$ | N |
|---|---|---|---|---|
| 12-60 | 5/8 | 5/8 | 5 | 1/2 |
| 66-84 | 3/4 | 3/4 | 5 | 1/2 |
| 90-108 | 1 | 1 | 7 | 1 1/16 |

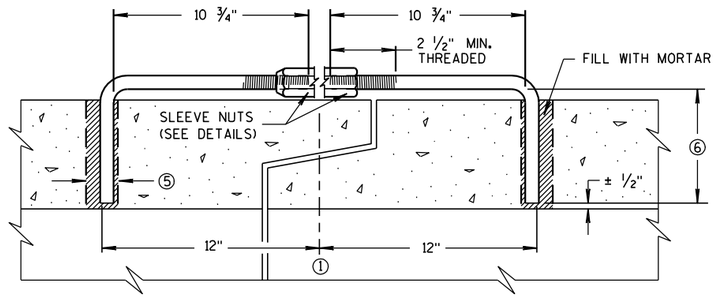
DIMENSIONS SHOWN ARE IN INCHES




TAPERED PLAIN

RIGHT AND LEFT THREADS

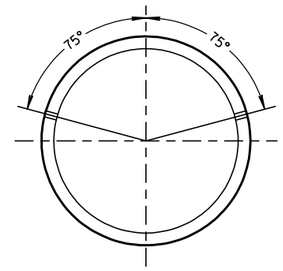
SLEEVE NUTS




LONGITUDINAL SECTION

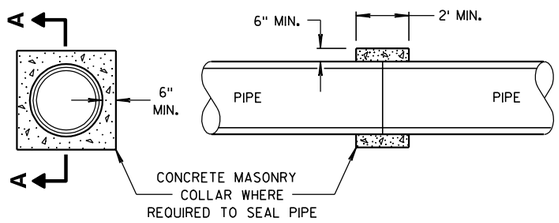
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

# ADJUSTABLE TIE ROD (ALTERNATE NO. 3)




PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION




SECTION A-A

# CONCRETE COLLAR DETAIL

**JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

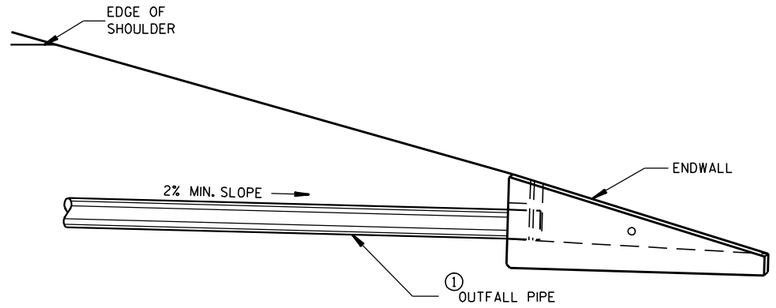
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
227
FHWA

6

S.D.D. 8 F 4-7

| DIMENSIONS IN INCHES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PIPE DIA. | A | B | C | D | E | F | G | H | J | L | Z |
| **4 | 6 | 12 | 5 1/4 | 9 | 8 | 32 | 36 | 11 | 2 3/8 | 6 1/2 | 4 |
| 6 | 8 | 14 | 7 1/4 | 11 | 10 | 42 | 44 | 13 | 3 5/8 | 8 1/2 | 6 |

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)




INSTALLATION DETAIL

## 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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

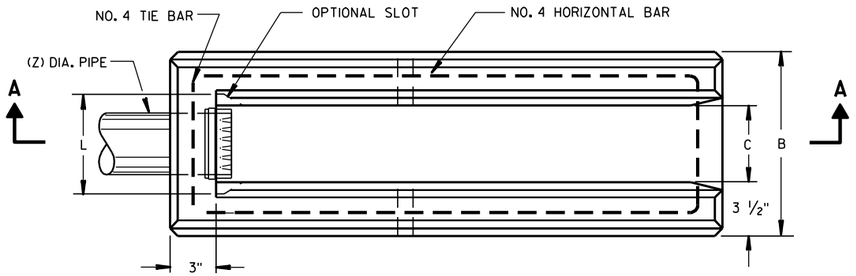
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

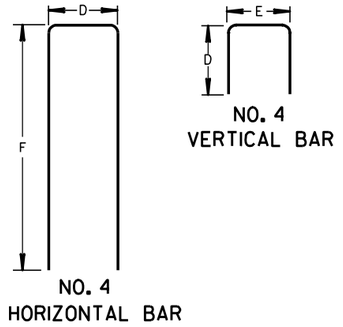
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



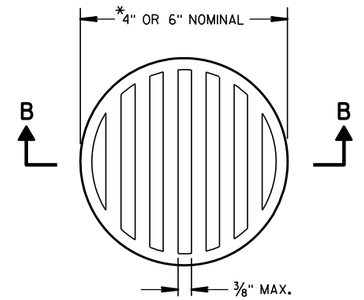

PLAN VIEW



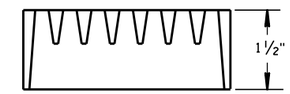




BAR STEEL REINFORCEMENT DETAILS



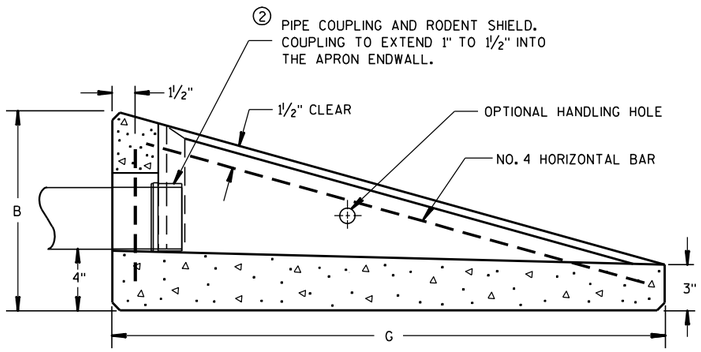

NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.



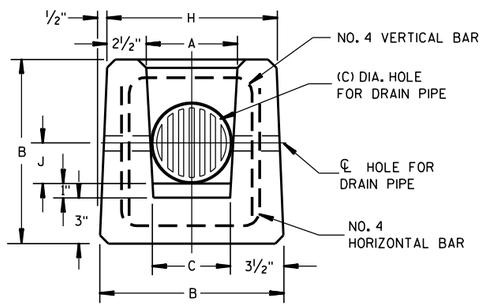

SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.




SECTION A-A




END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

**REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN**

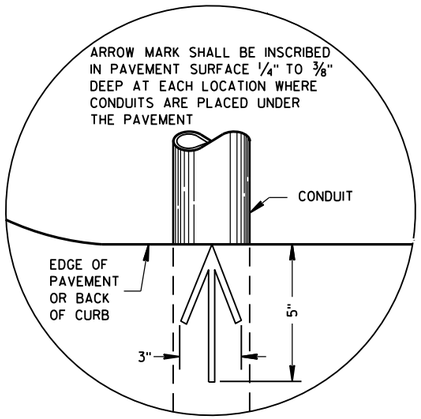
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



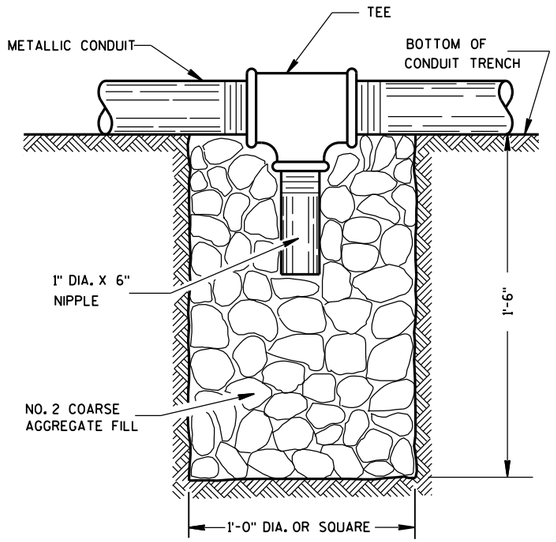

6

S.D.D. 8 F 6-4



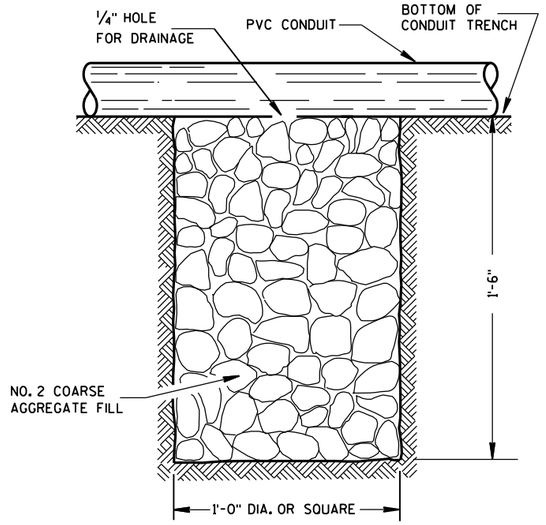

PLAN VIEW

**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.

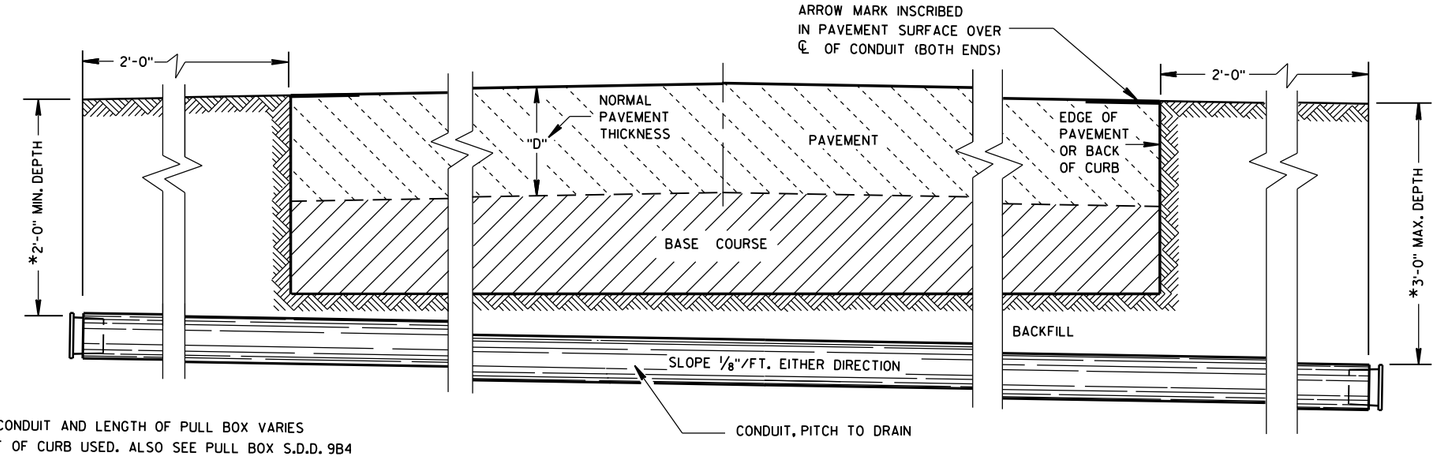
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA





6

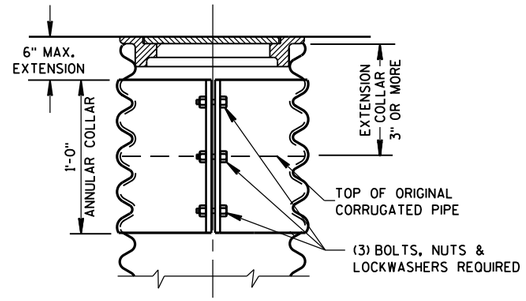
S.D.D. 9 B 2-9

## TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

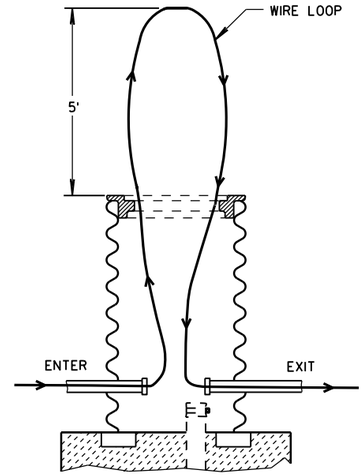
| DIMENSION IN INCHES | | CORRUGATED STEEL PIPE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PIPE DIAMETER (INSIDE) | A | 12 | 12 | 12 | 18 | 18 | 18 | 24 | 24 | 24 |
| PIPE LENGTH ** | B | 24 | 30 | 36 | 24 | 30 | 36 | 36 | 42 | 48 |
| WALL THICKNESS | C | 0.064 | 0.064 | 0.064 | 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.

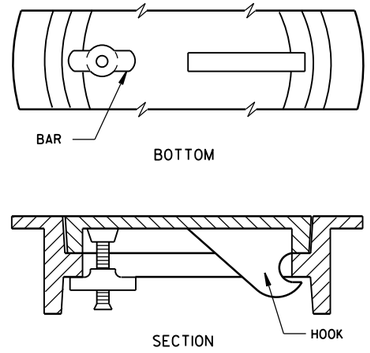
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.




CORRUGATED PIPE EXTENDER

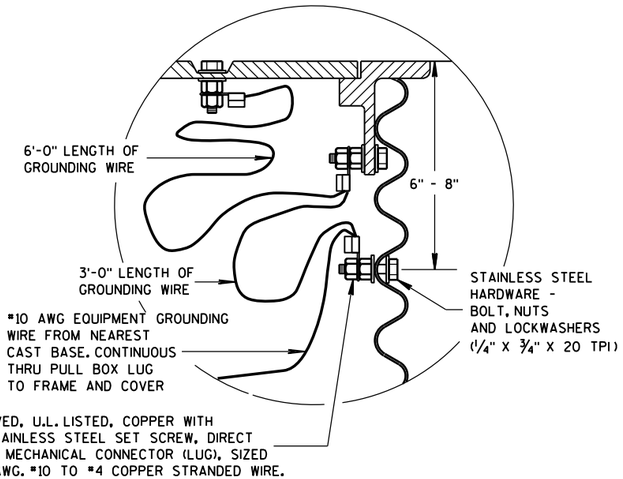



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

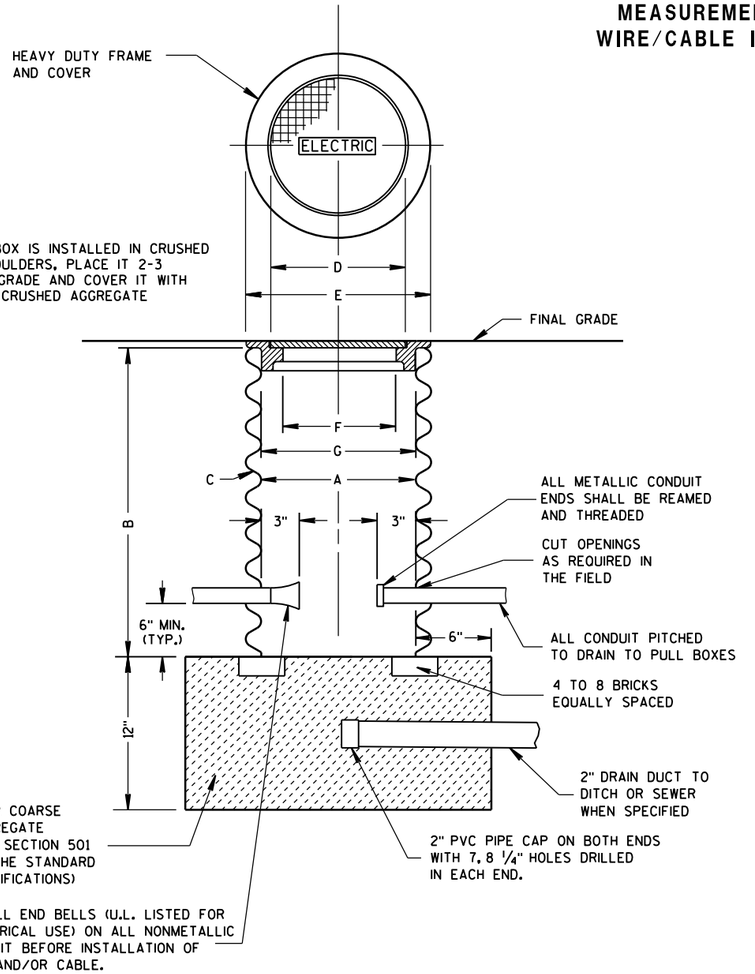



ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE




EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES




PULL BOX

## 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.

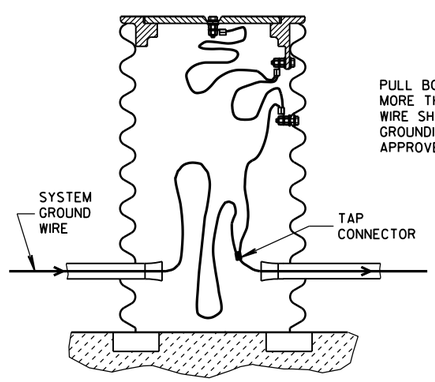
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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 TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

**PULL BOX**

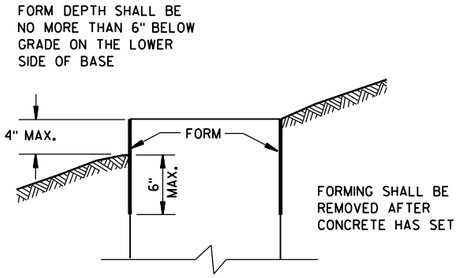
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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




6


S.D.D. 9 B 4-11




## 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.

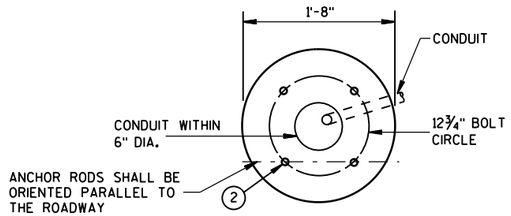
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

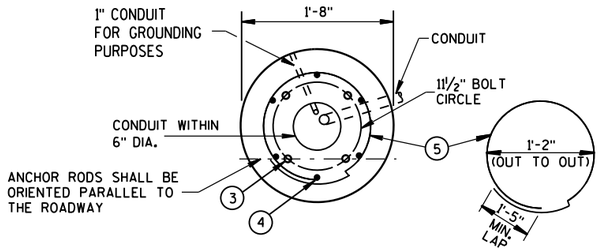
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

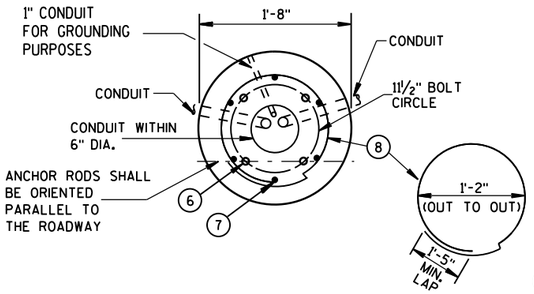
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

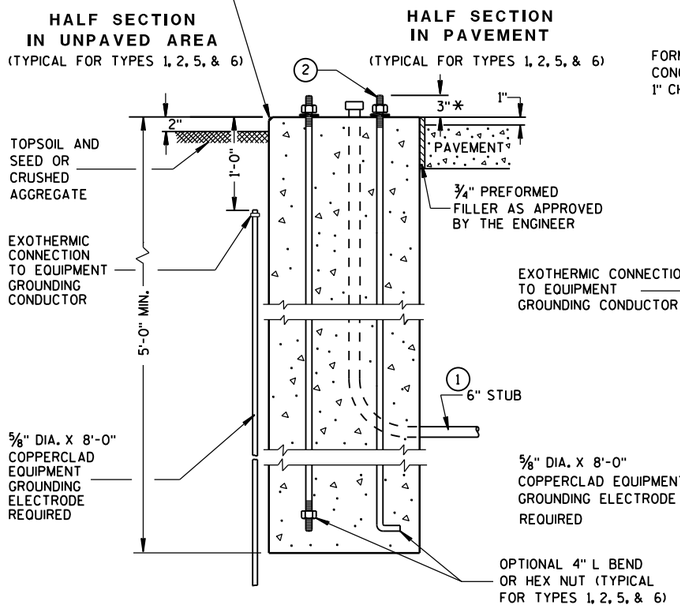


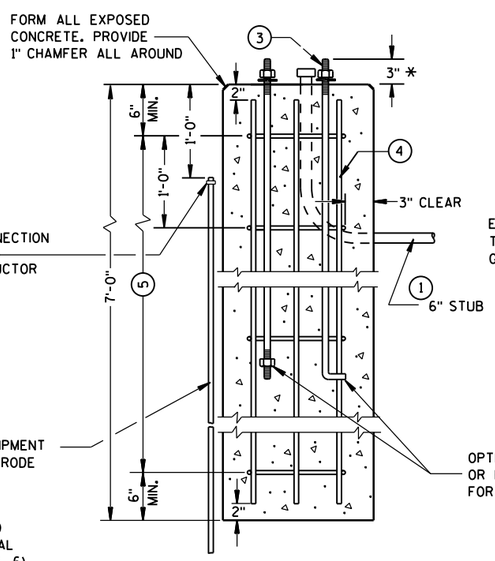

### HALF SECTION IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

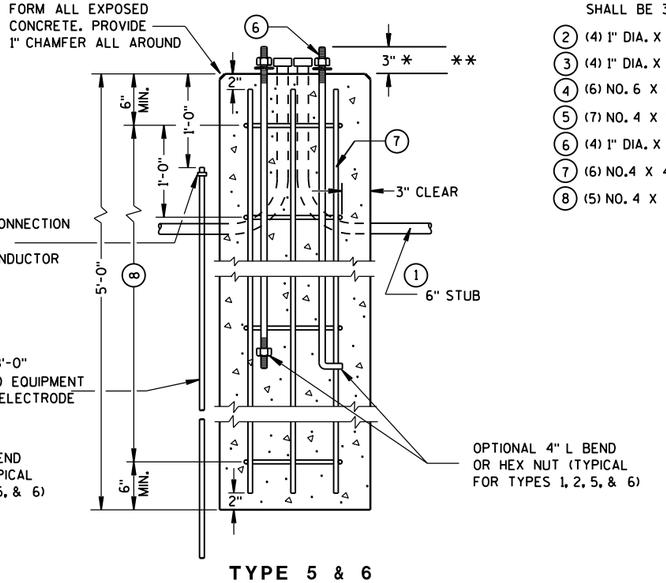



### HALF SECTION IN PAVEMENT

(TYPICAL FOR TYPES 1, 2, 5, & 6)




TYPE 2




TYPE 5 & 6

## CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± 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
FHWA




6

S.D.D. 9 C 2-7

## 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.

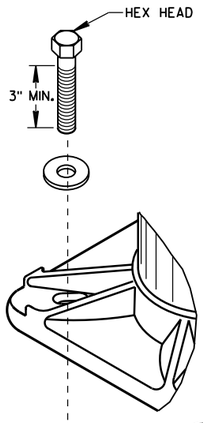
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

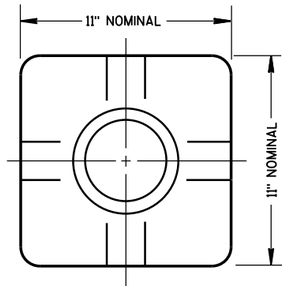
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

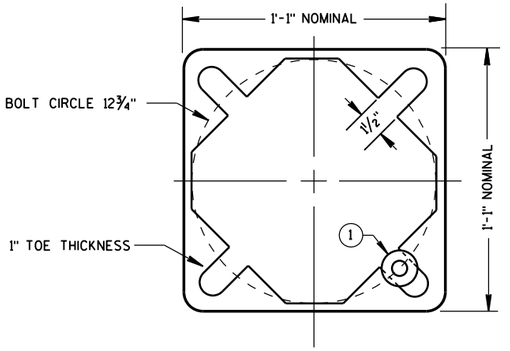
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

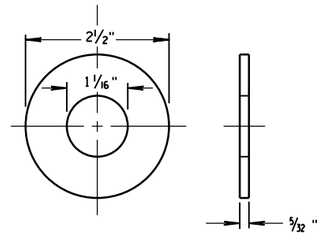



TOP VIEW
(PEDESTAL BASE)

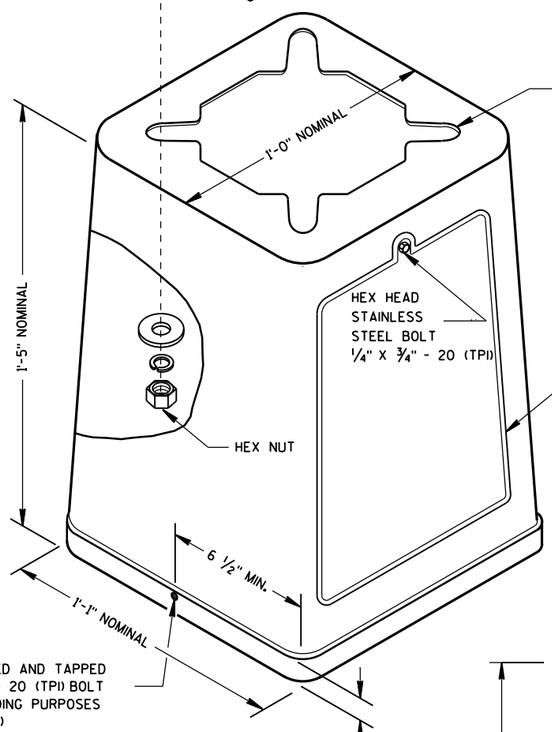



BOTTOM VIEW
(PEDESTAL BASE)

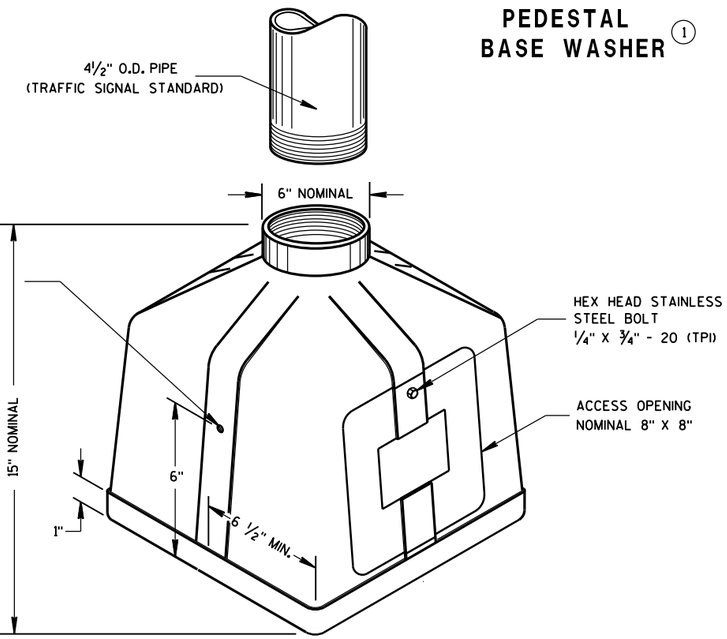



ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

**PEDESTAL BASE WASHER** (1)

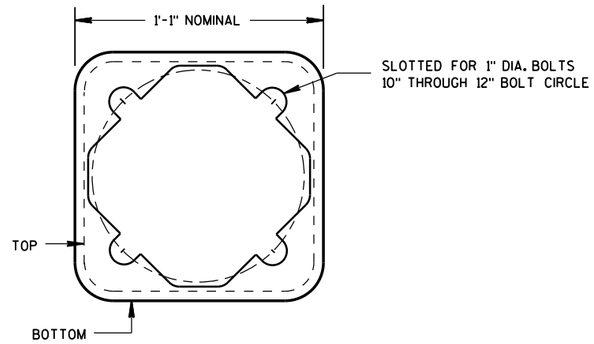



ISOMETRIC VIEW

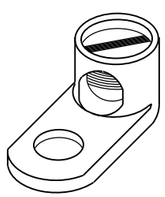



ISOMETRIC VIEW

**PEDESTAL BASE**




BOTTOM VIEW
(TRANSFORMER BASE)

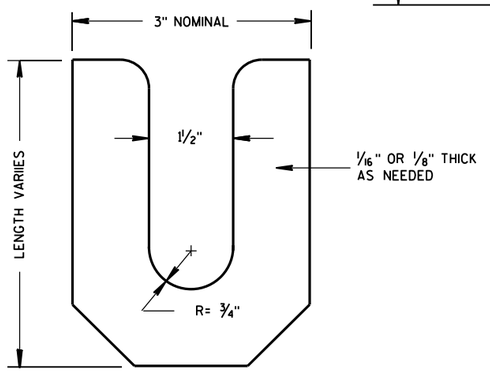


**TYPICAL MECHANICAL CONNECTOR LUG**

TO BE FURNISHED WITH EACH BASE

**TRANSFORMER BASE**

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




**LEVELING SHIM**

**TRANSFORMER/PEDESTAL BASES**

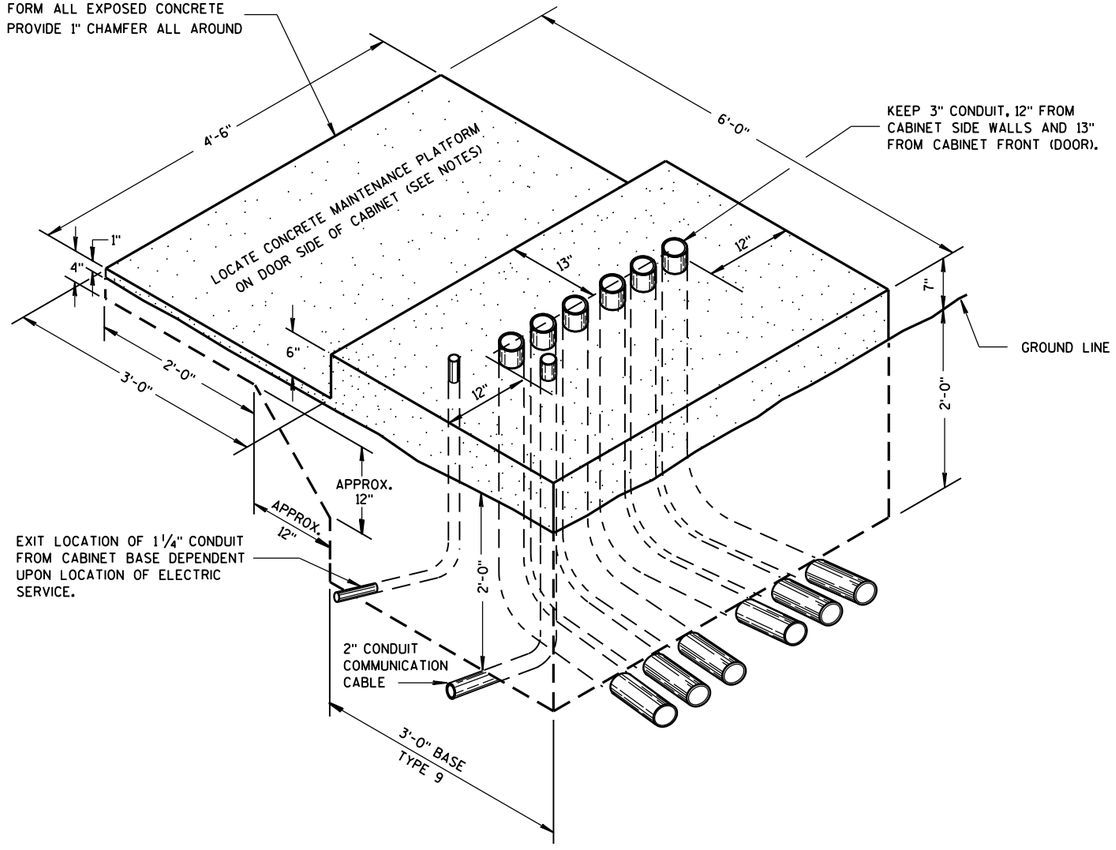
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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




6

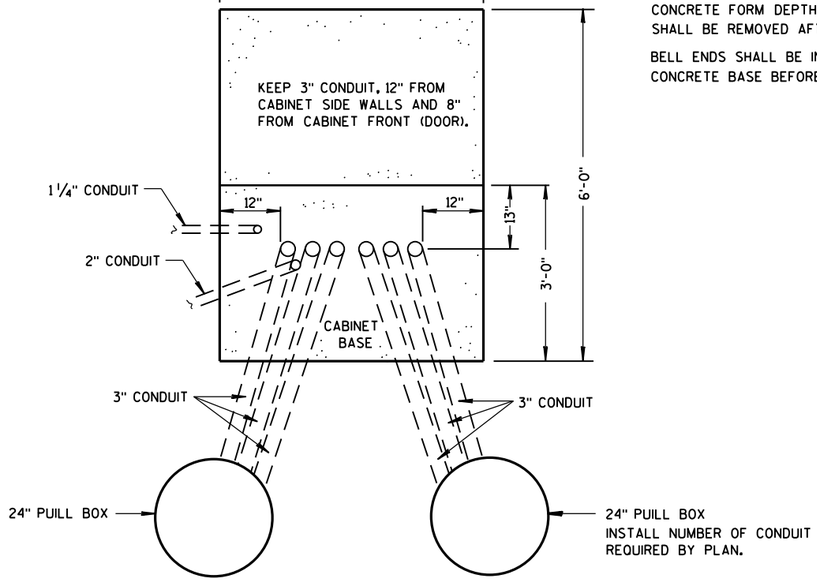

S.D.D. 9 C 3-4




ISOMETRIC VIEW

**TYPE 9, SPECIAL**

( C.Y. CONCRETE = APPROX. 1.56)




PLAN VIEW

**CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL**

## GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

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 BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

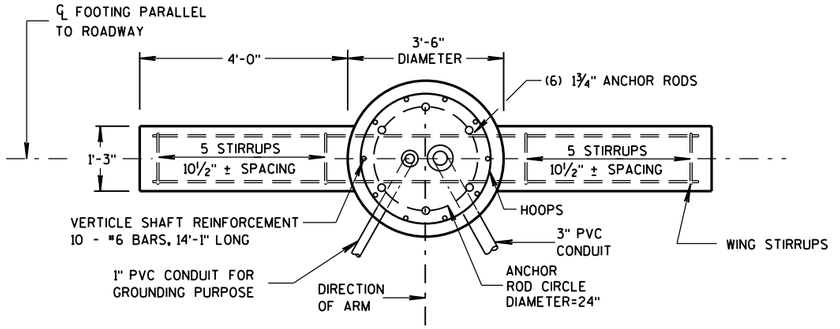
CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

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

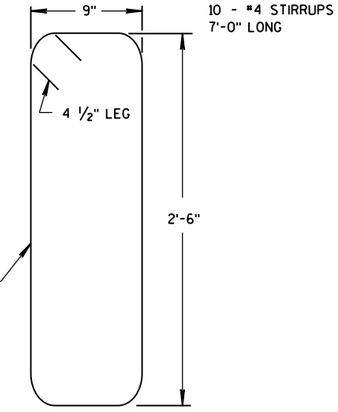
**CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

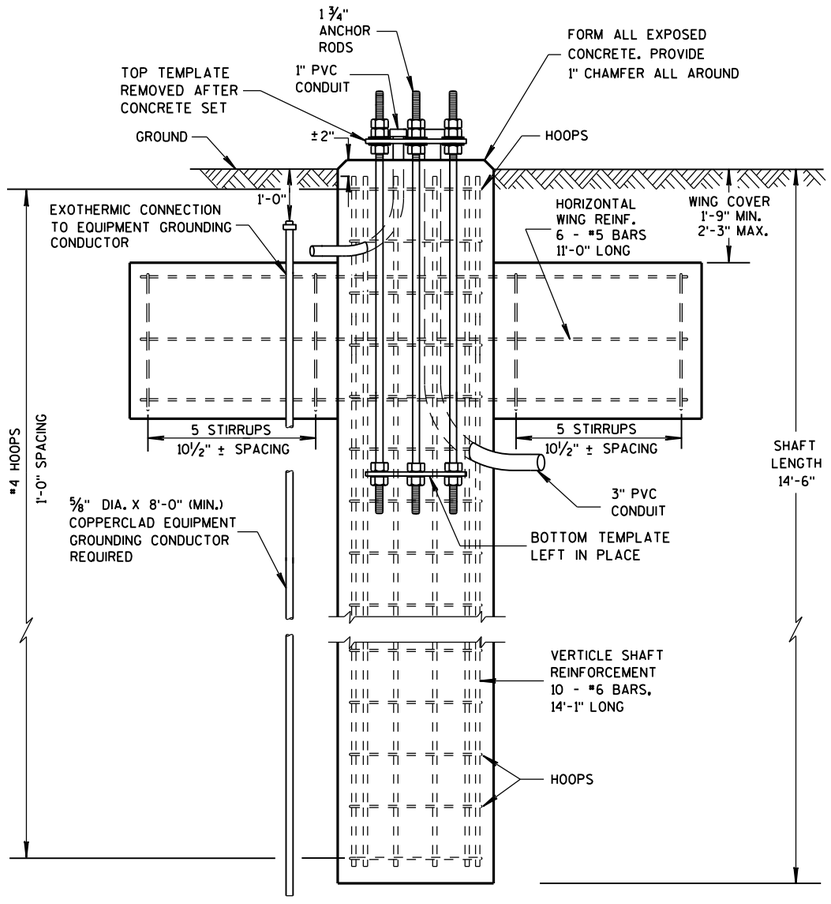
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 233
FHWA



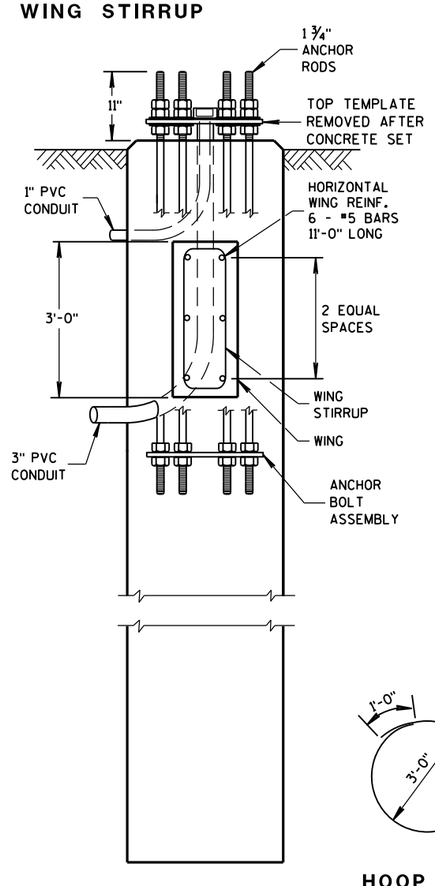

PLAN VIEW




WING STIRRUP

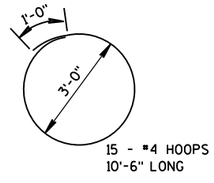



ELEVATION VIEW




SIDE VIEW

DOES NOT SHOW HOOPS OR VERTICAL SHAFT REINFORCEMENT




15 - #4 HOOPS 10'-6" LONG

HOOP DETAIL

## GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

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

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

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

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

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE 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.

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

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE 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.

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

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL 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, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

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

| | |
|---|---|
| CONCRETE MASONRY | fc=3,500 p.s.i. |
| HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 | fy=60,000 p.s.i. |
| ANCHOR RODS, AASHTO M314 GRADE 55 | fy=55,000 p.s.i. |
| TEMPLATES, ASTM A709 GRADE 36 | fy=36,000 p.s.i. |

**(FOR TYPE 12 & 13 POLES)**

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 433 LBS.

**TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.**
**SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.**

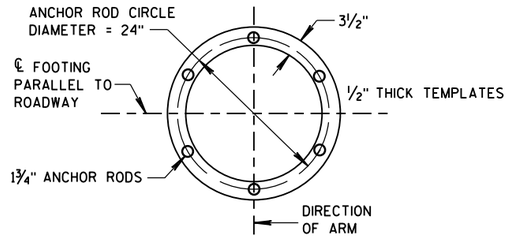
# CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

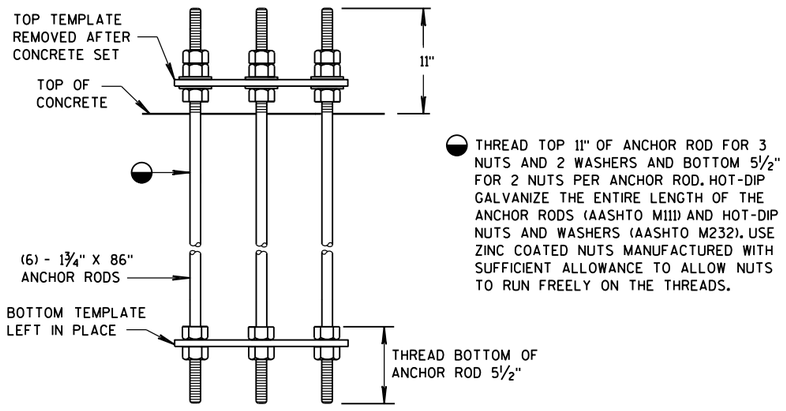




6
S.D.D. 9 C 12-6a

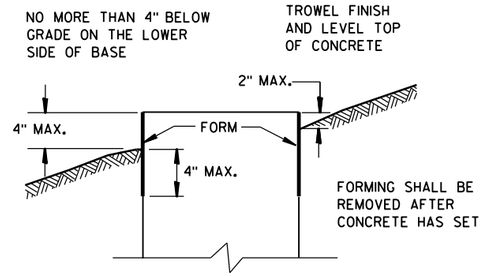



**TOP AND BOTTOM TEMPLATES**




**ANCHOR BOLT ASSEMBLY DETAIL**

# CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY




**FORMING DETAIL**

| CONCRETE BASE TYPE 13 | |
|---|---|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>Feb. 2015<br>DATE<br>FHWA | /S/ Ahmet Demirbilek<br>STATE ELECTRICAL |

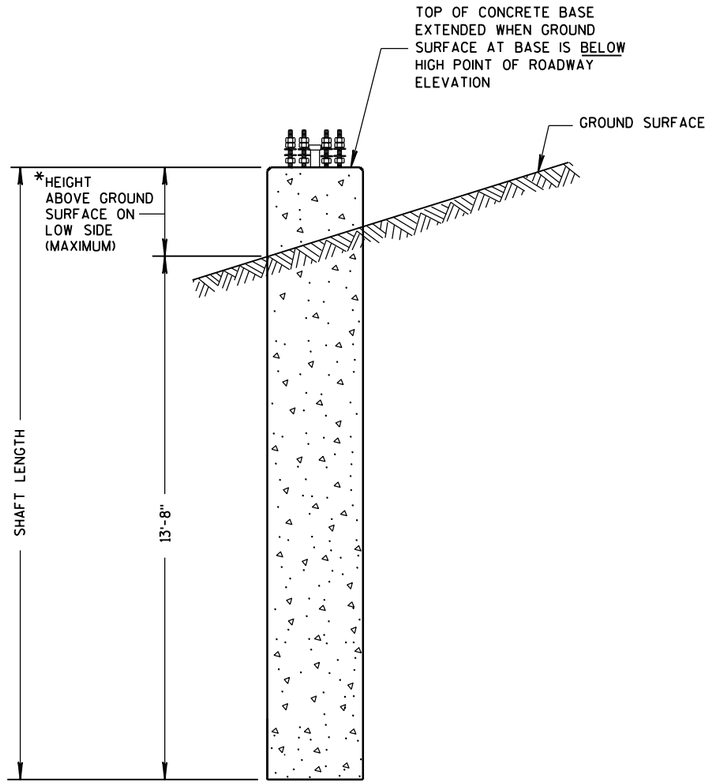



6


S.D.D. 9 C 12-6b

## REINFORCEMENT AND CONCRETE QUANTITIES
## ADJUSTED FOR EXTENDED TYPE 10 CONCRETE BASE

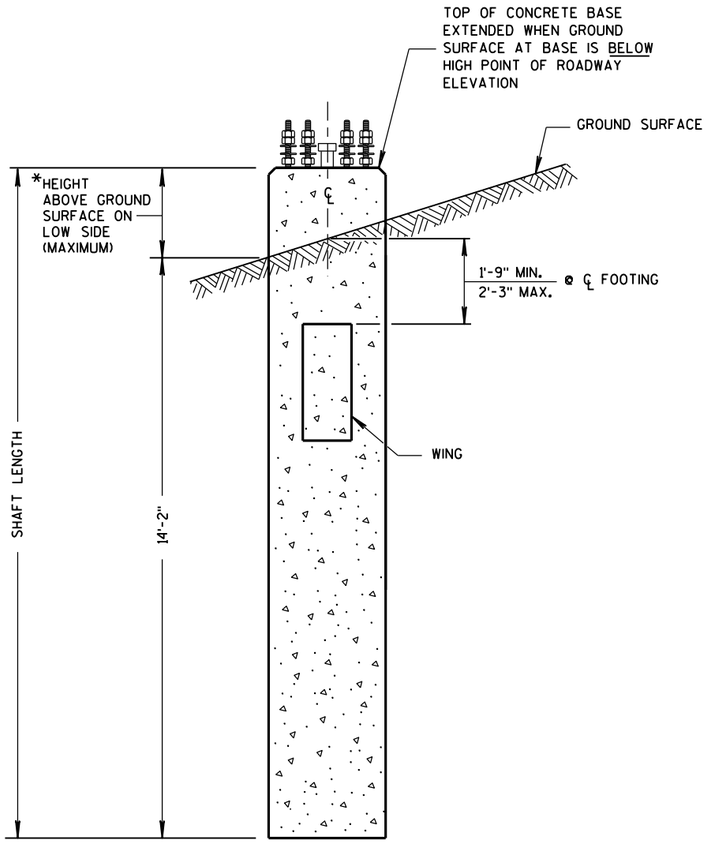
| HEIGHT INCREASE REQUIRED | * HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM) | SHAFT LENGTH | LENGTH OF #6 VERTICAL REINF. | NO. OF #4 HOOPS | C.Y. OF CONCRETE | LBS. OF HOOP BAR STEEL | LBS. OF VERTICAL BAR STEEL |
|---|---|---|---|---|---|---|---|
| >0" TO 6" | 10" | 14'-6" | 14'-1" | 16 | 2.6 | 78 | 127 |
| >6" TO 1'-0" | 1'-4" | 15'-0" | 14'-7" | 16 | 2.7 | 78 | 131 |
| >1'-0" TO 1'-6" | 1'-10" | 15'-6" | 15'-1" | 17 | 2.8 | 83 | 136 |
| >1'-6" TO 2'-0" | 2'-4" | 16'-0" | 15'-7" | 17 | 2.9 | 83 | 141 |




CONCRETE BASE TYPE 10 (EXTENDED)

## REINFORCEMENT AND CONCRETE QUANTITIES
## ADJUSTED FOR EXTENDED TYPE 13 CONCRETE BASE

| HEIGHT INCREASE REQUIRED | * HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM) | SHAFT LENGTH | LENGTH OF #6 VERTICAL REINF. | NO. OF #4 HOOPS | C.Y. OF CONCRETE | LBS. OF H.S. BAR STEEL |
|---|---|---|---|---|---|---|
| >0" TO 6" | 10" | 15'-0" | 14'-7" | 16 | 6.5 | 447 |
| >6" TO 1'-0" | 1'-4" | 15'-6" | 15'-1" | 16 | 6.6 | 454 |
| >1'-0" TO 1'-6" | 1'-10" | 16'-0" | 15'-7" | 17 | 6.8 | 469 |
| >1'-6" TO 2'-0" | 2'-4" | 16'-6" | 16'-1" | 17 | 7.0 | 476 |




CONCRETE BASE TYPE 13 (EXTENDED)

CONCRETE BASE
TYPE 10 & TYPE 13 EXTENSION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-26-2013 DATE
/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA

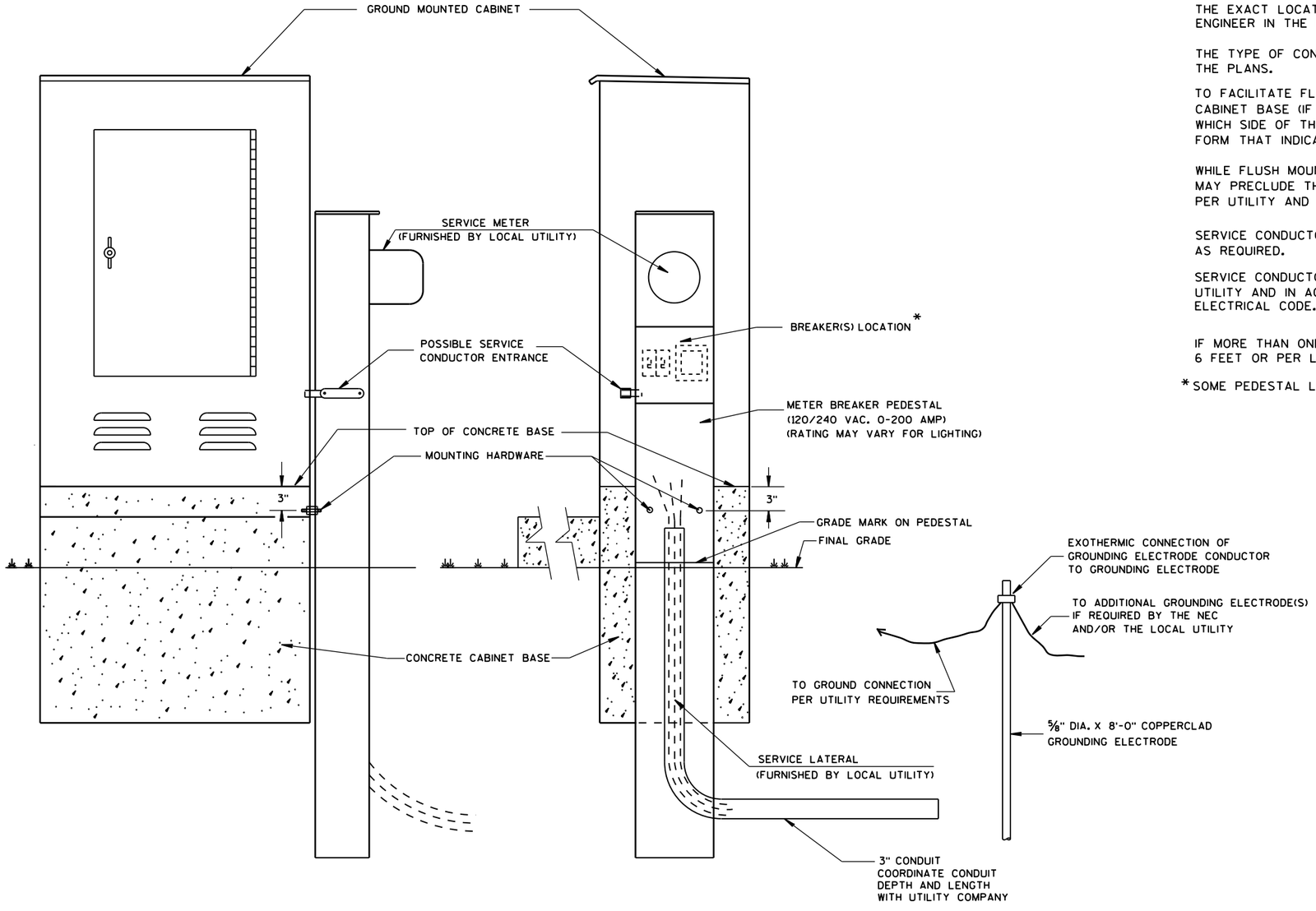


6

S.D.D. 9 C 13-2

6

S.D.D. 9 C 13-2




**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.

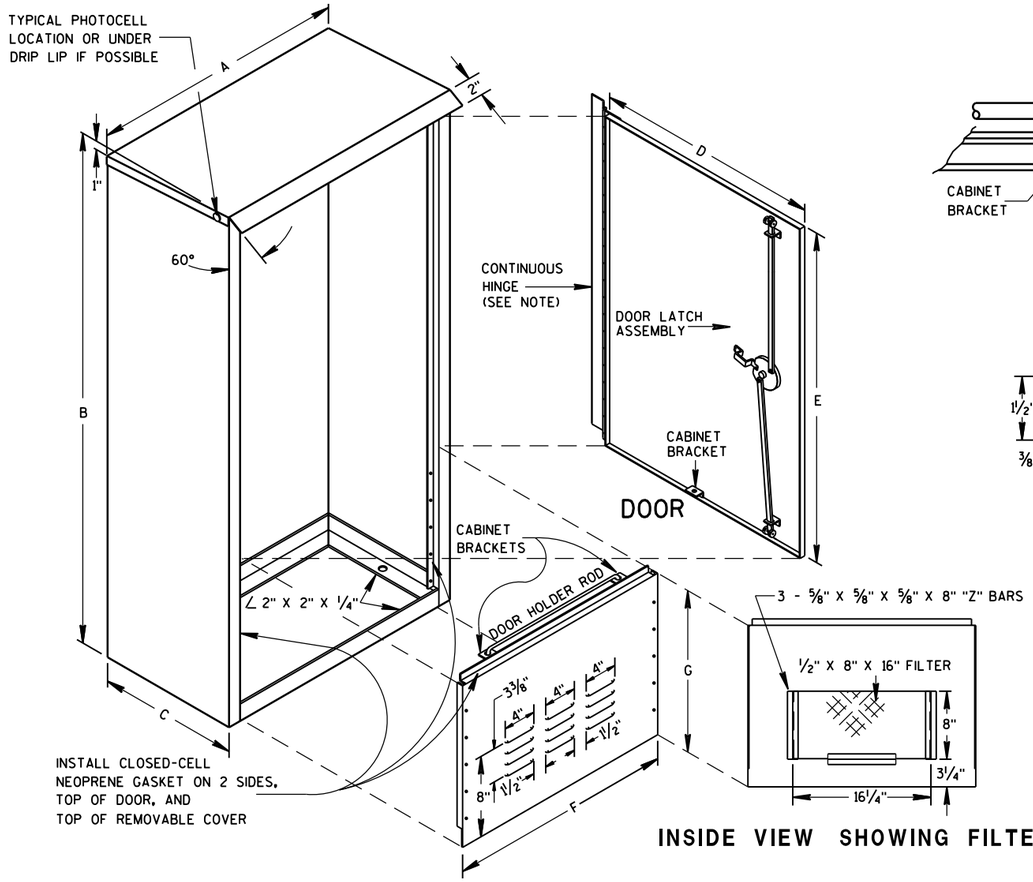
**CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

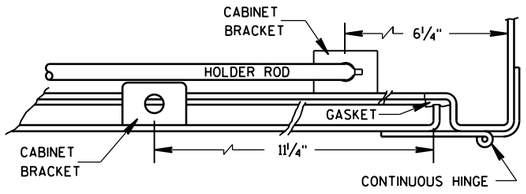



6
S.D.D. 9 D 1-5

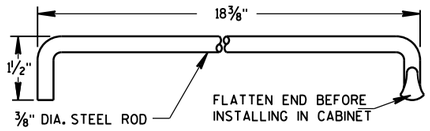



INSIDE VIEW SHOWING FILTER

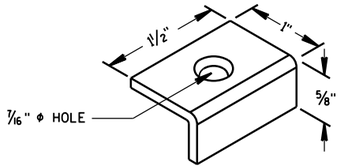
REMOVABLE COVER



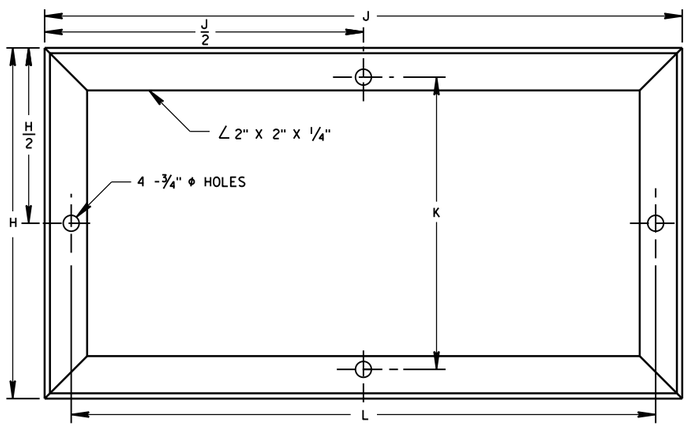

HINGE & DOOR HOLDER




HOLDER ROD




CABINET BRACKET




MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

| MARK | CABINET TYPE | | |
|---|---|---|---|
| | 3060 | 3860 | 3866 |
| A | 30 | 38 | 38 |
| B | 60 | 60 | 66 |
| C | 16 1/2 | 16 1/2 | 24 |
| D | 26 1/2 | 34 3/4 | 33 3/4 |
| E | 38 3/4 | 38 3/4 | 38 3/4 |
| F | 26 1/2 | 34 3/4 | 33 3/4 |
| G | 19 | 19 | 25 |
| H | 16 1/2 | 16 1/2 | 24 |
| H/2 | 8 1/4 | 8 1/4 | 12 |
| J | 30 | 38 | 38 |
| J/2 | 15 | 19 | 19 |
| K | 13 3/4 | 13 3/4 | 21 1/4 |
| L | 27 1/2 | 35 1/2 | 35 1/2 |

## GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

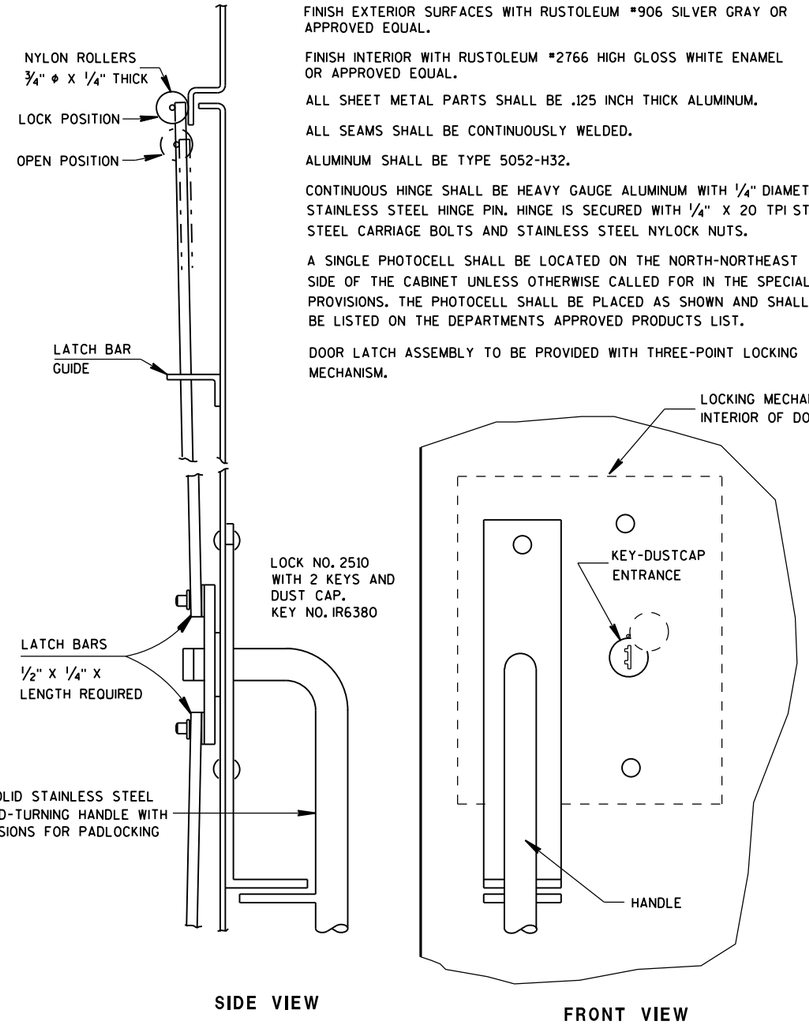
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

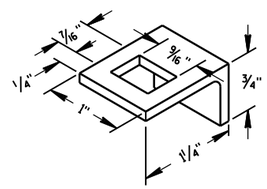
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.




SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY




LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

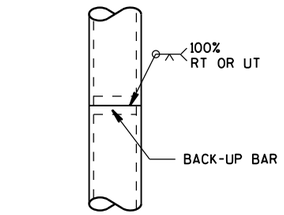


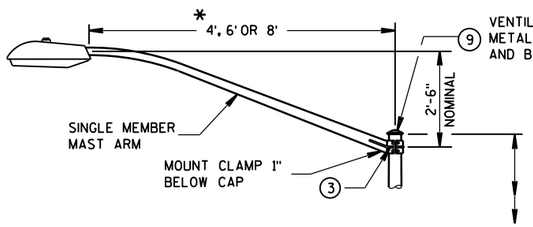

6
S.D.D. 9 D 2-3

## FOR MANUFACTURERS USE ONLY

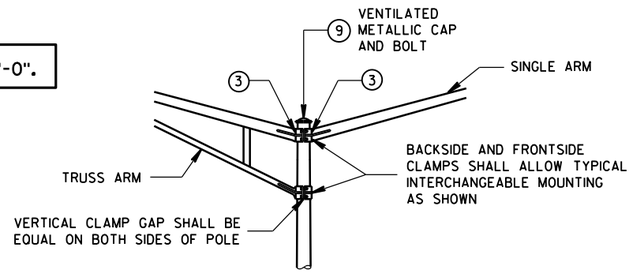
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.

*RISE FOR 4' ARM SHALL BE 2'-0".



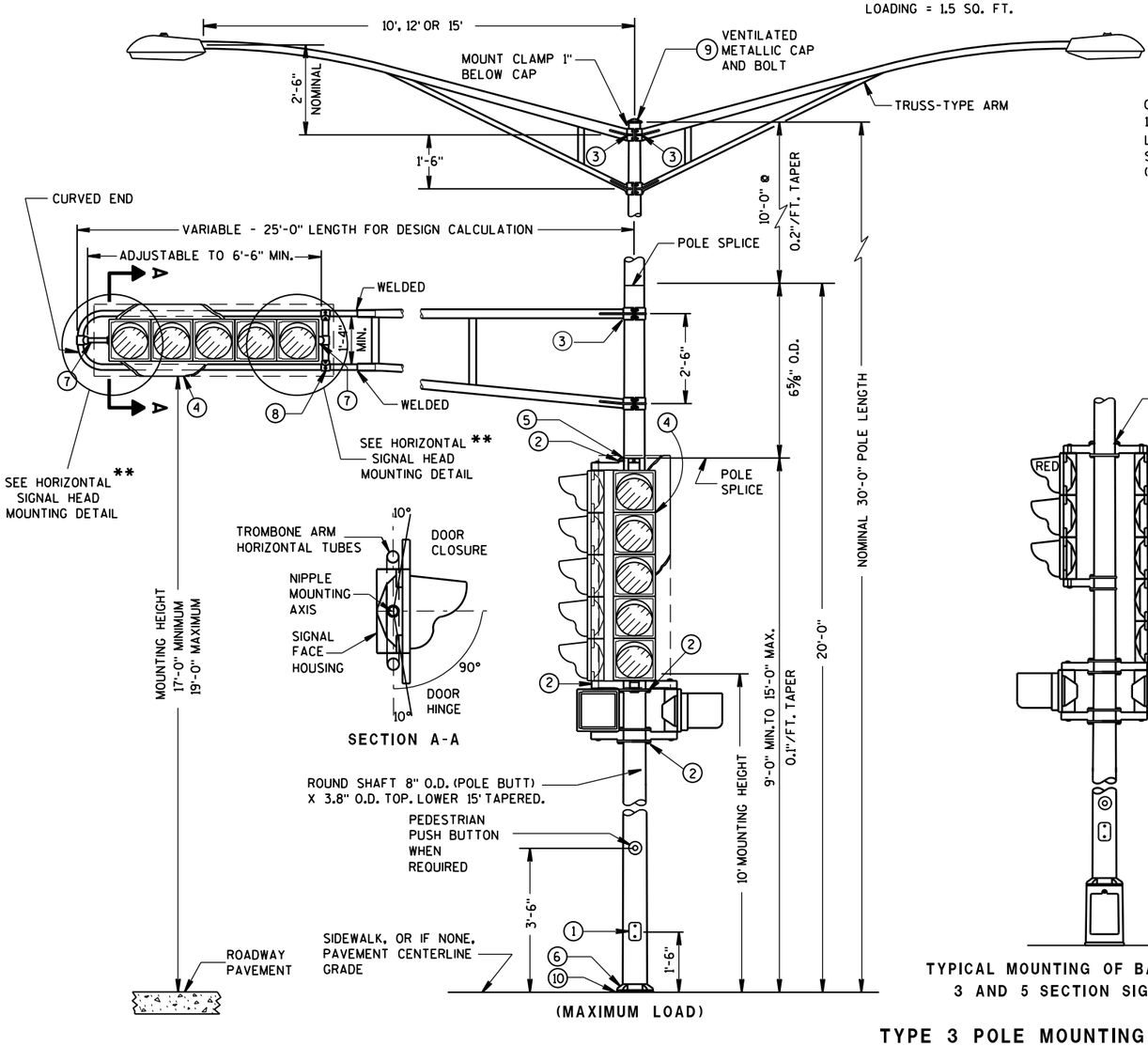

### POLE SPLICE DETAIL

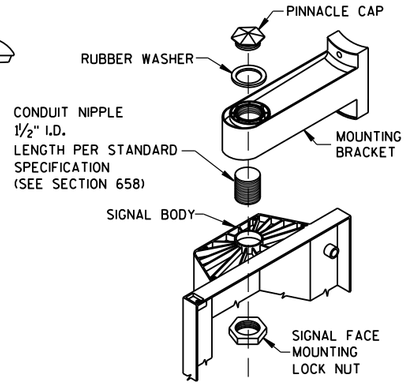



### INTERCHANGEABLE MOUNTING DETAIL

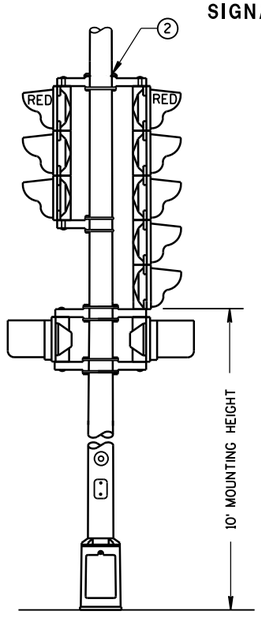
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

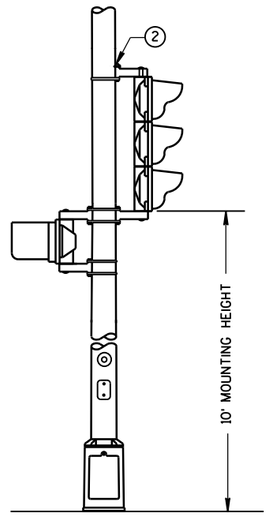



### SIGNAL FACE MOUNTING DETAIL
(BANDED)




TYPICAL MOUNTING OF BACK TO BACK
3 AND 5 SECTION SIGNAL FACES




TYPICAL MOUNTING OF 3 SECTION
SIGNAL FACE

## GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.

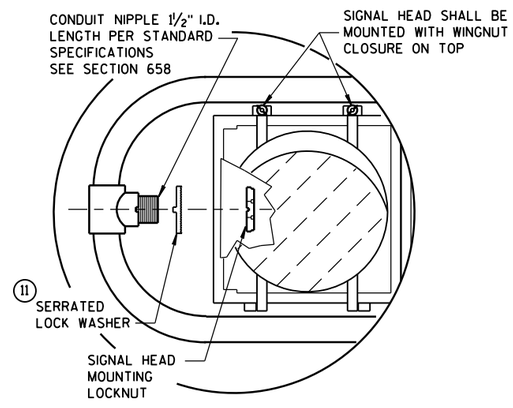
(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.




### HORIZONTAL SIGNAL HEAD MOUNTING DETAIL **

** SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR

## TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR
TRAFFIC SIGNALS AND
LIGHTING UNITS, TYPE 3
(HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

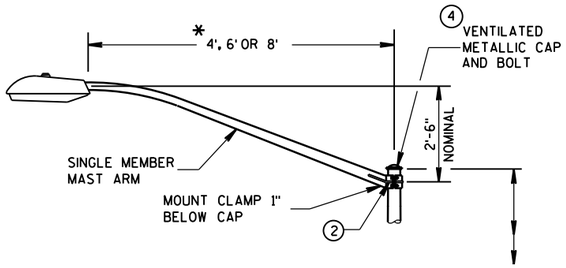


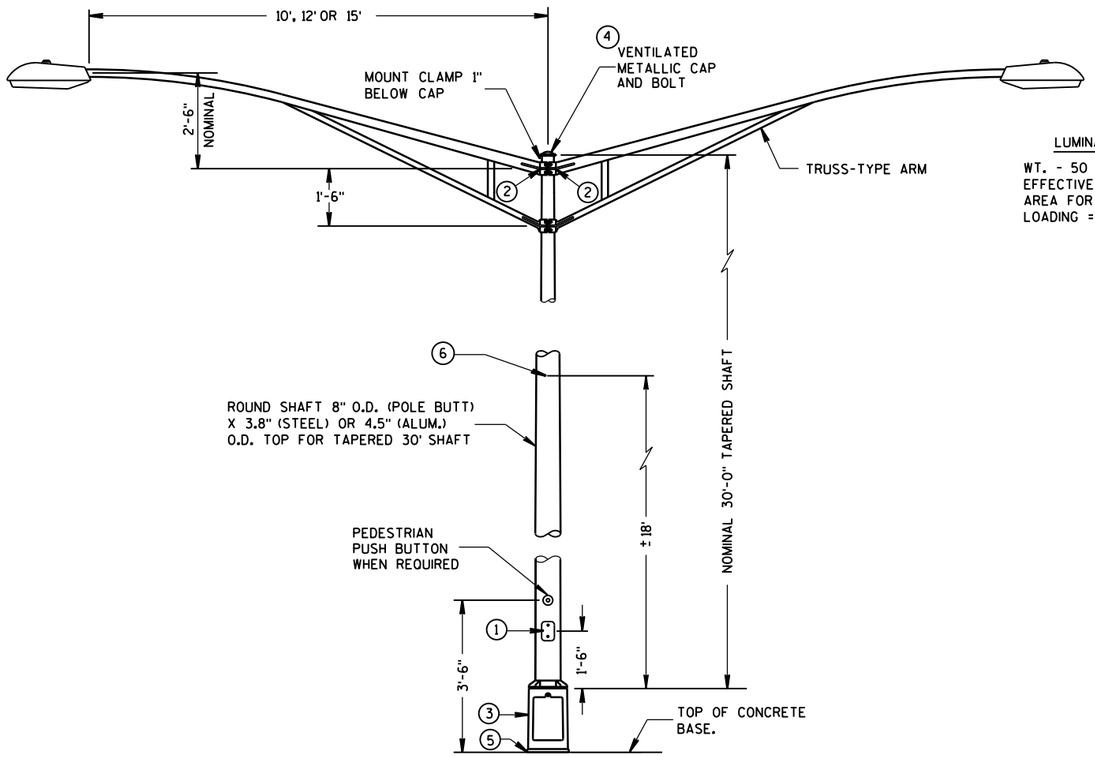


6

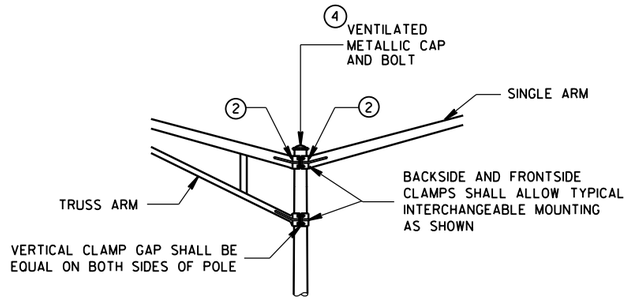
S.D.D. 9 E 1-14b

*RISE FOR 4' ARM SHALL BE 2'-0".




TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY




INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

## GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

S.D.D. 9 E 1-14d

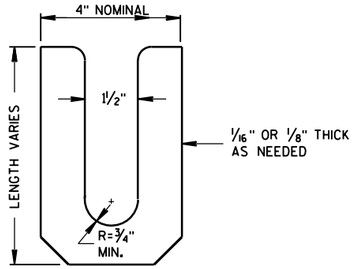
POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



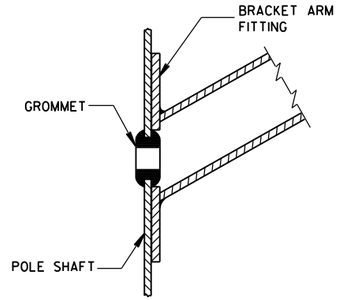
6

S.D.D. 9 E 1-14d

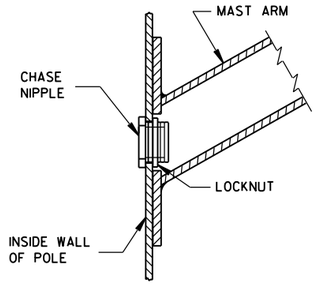



**LEVELING SHIM** (13)

SHALL BE ALUMINUM




**TYPICAL APPLICATION OF GROMMET IN POLE SHAFT**




**TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT**

## GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

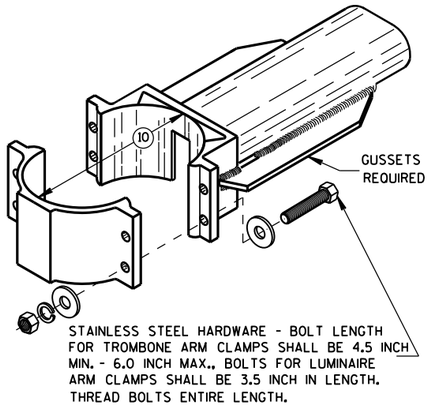
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

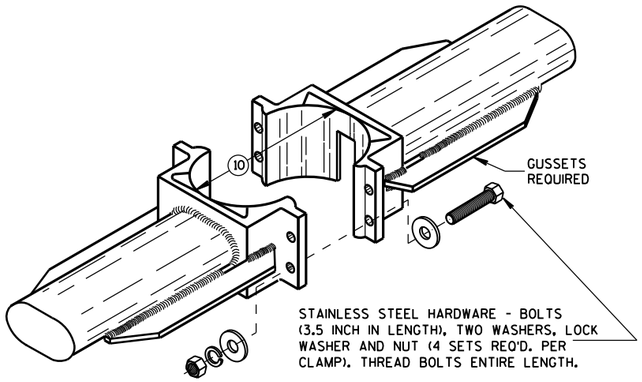
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

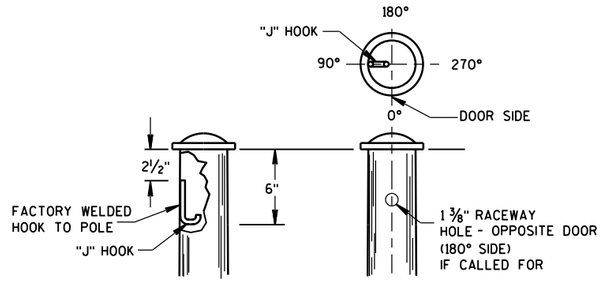
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



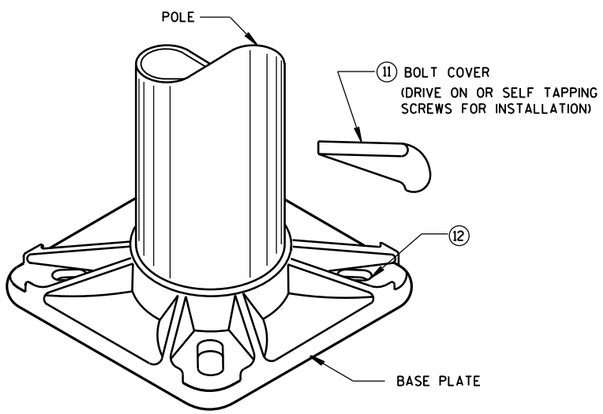

**TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP**



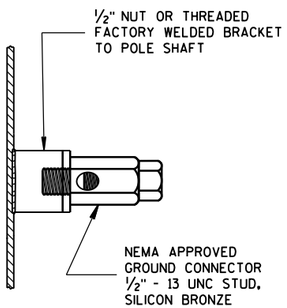

**TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS**

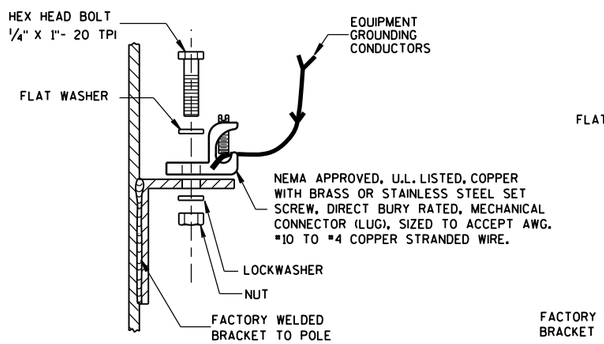


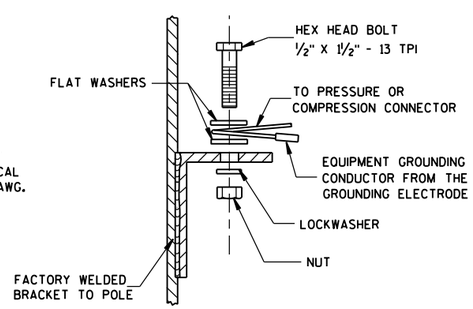

**TYPICAL "J" HOOK LOCATION**




**BASE PLATE**




**TYPICAL GROUNDING CONNECTIONS**

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

**HARDWARE DETAILS FOR POLE MOUNTINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015
DATE

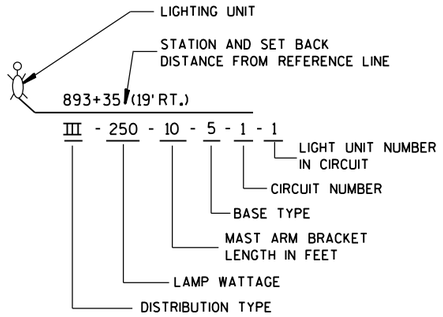
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

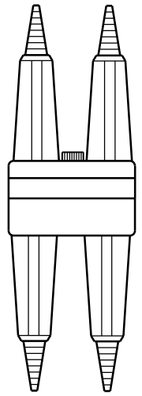



6

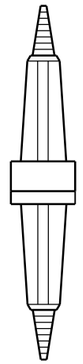

S.D.D. 9 E 1-14g



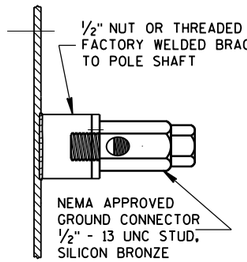

## LIGHTING UNIT CODE
(TYPICAL)

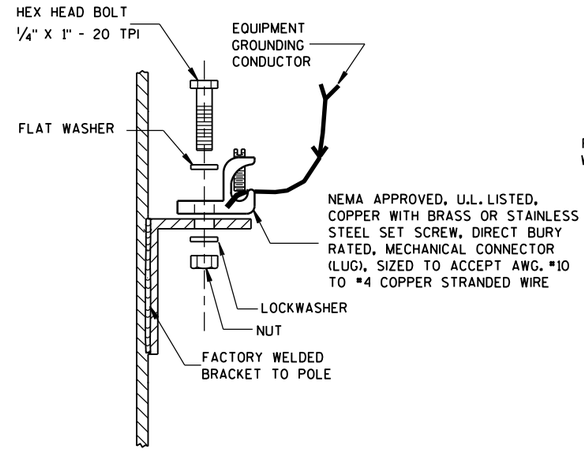


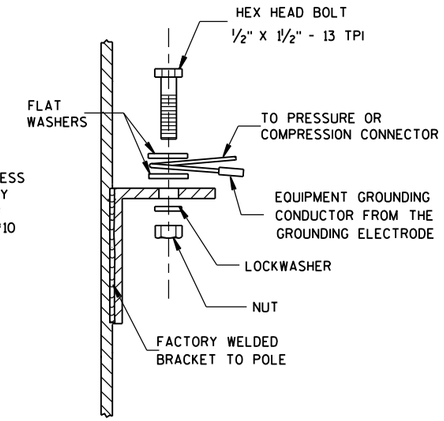
## DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



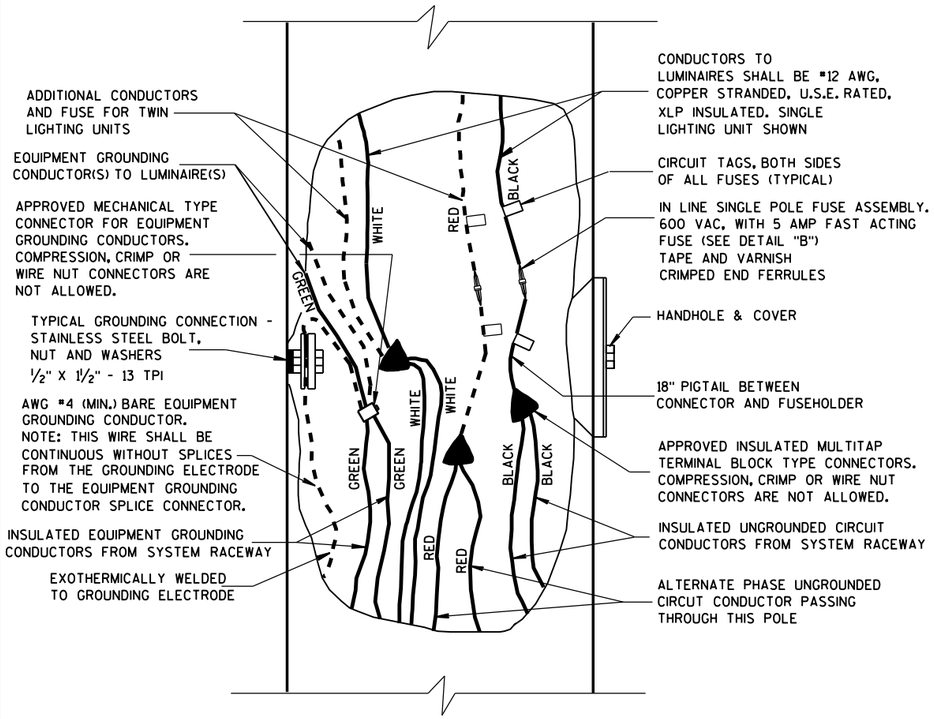
## DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



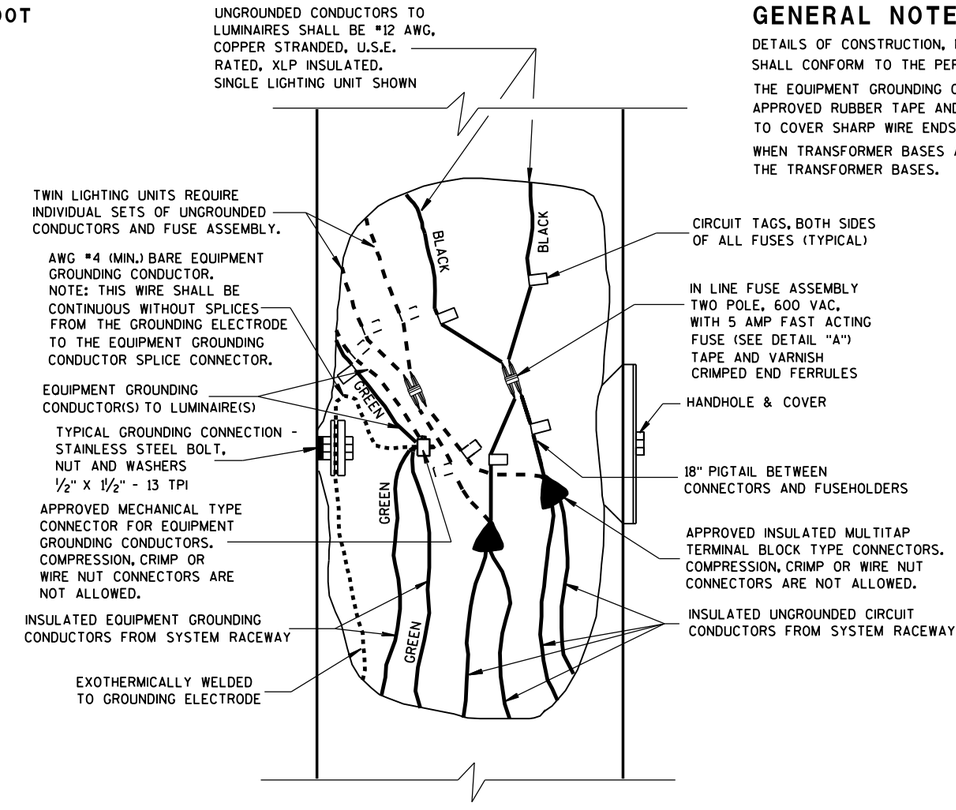




## TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL




## 3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR




## 2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

## GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

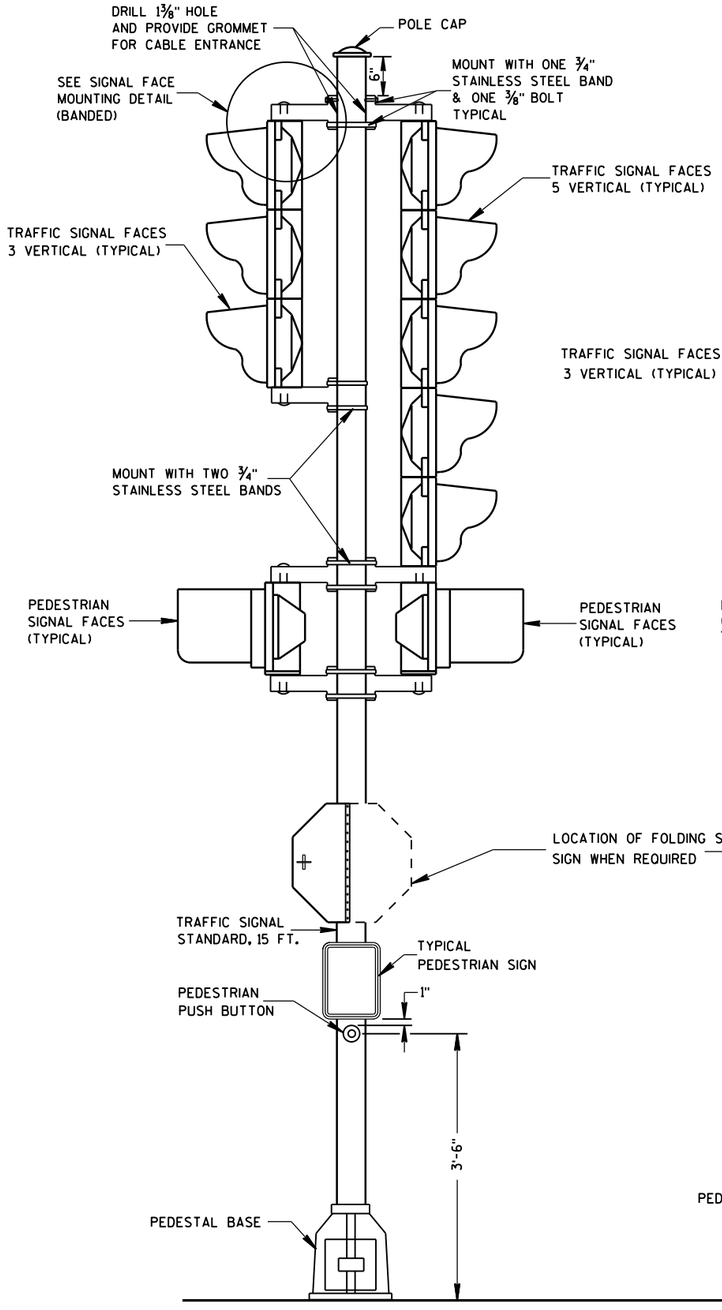
# NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

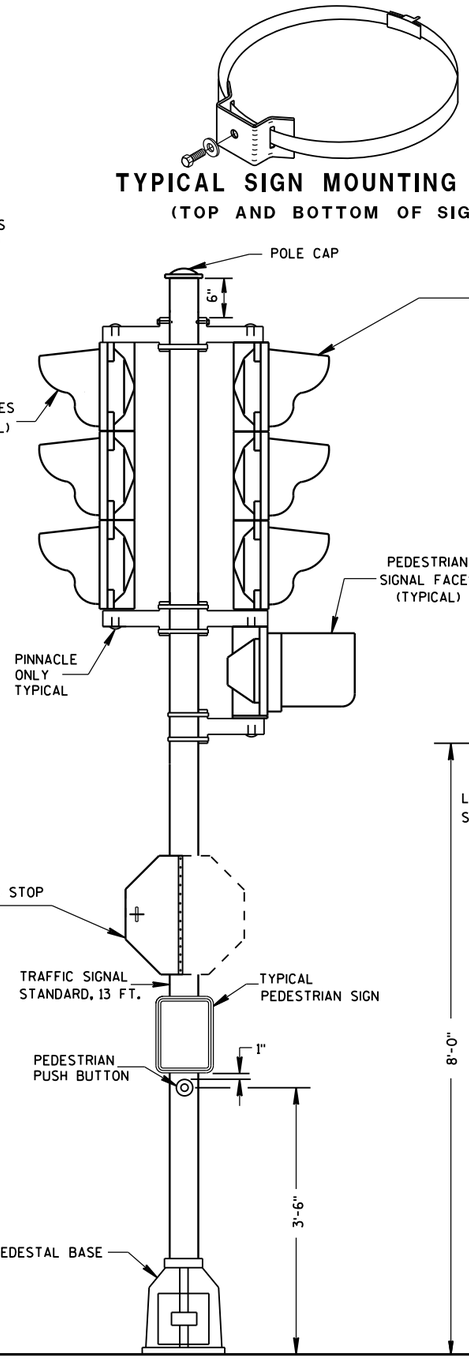
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA




6
S.D.D. 9 E 3-5

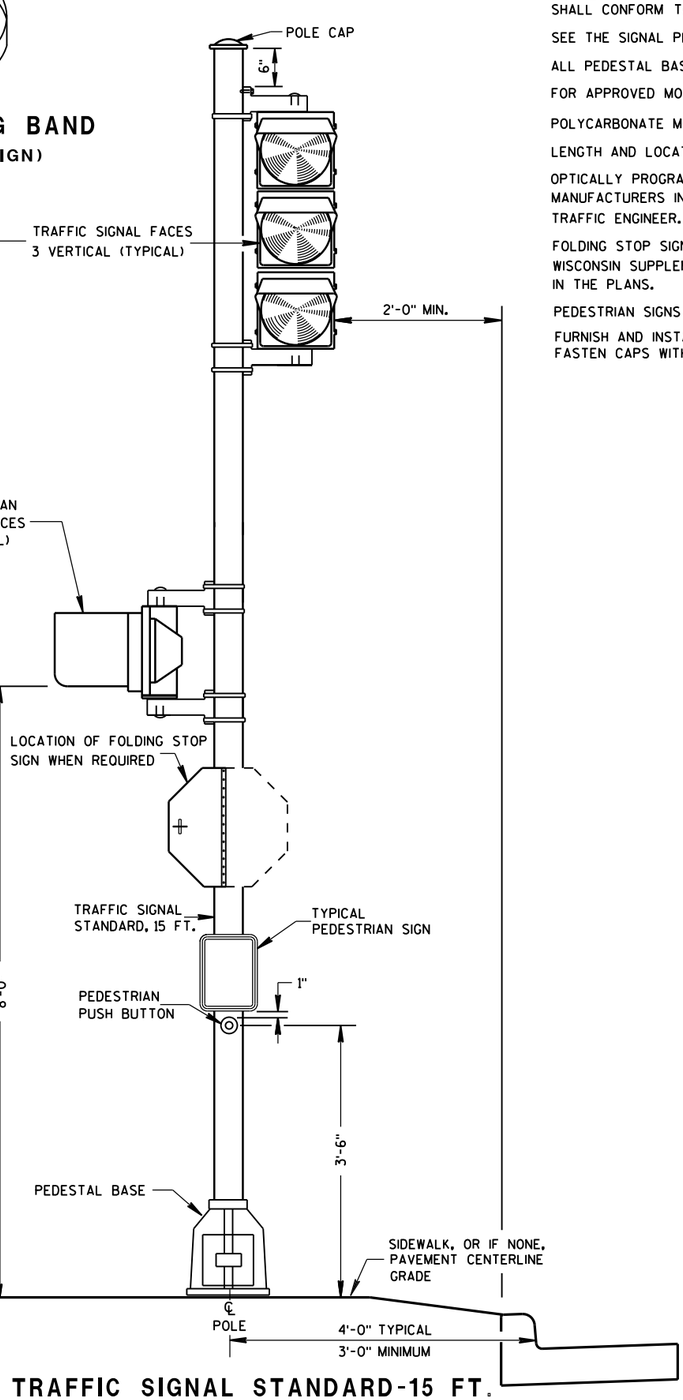



TRAFFIC SIGNAL STANDARD-15 FT.




TRAFFIC SIGNAL STANDARD-13 FT.

## TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)




TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

## 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.

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

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

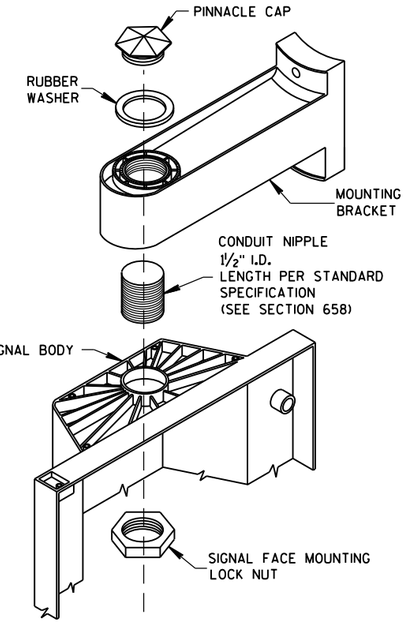
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.




## SIGNAL FACE MOUNTING DETAIL
(BANDED)

**TRAFFIC SIGNAL STANDARD**
**POLY BRACKET MOUNTINGS**
**(TYPICAL) 13 FT. OR 15 FT.**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

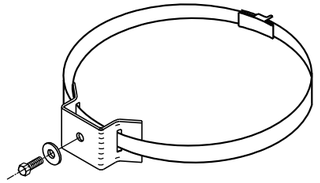
FHWA



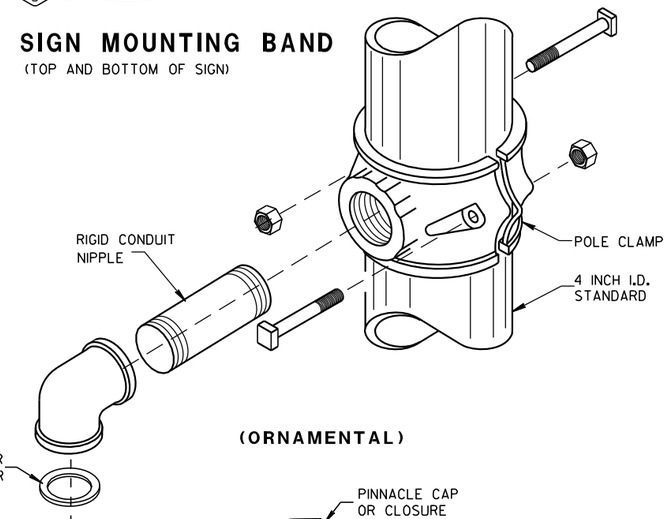


6

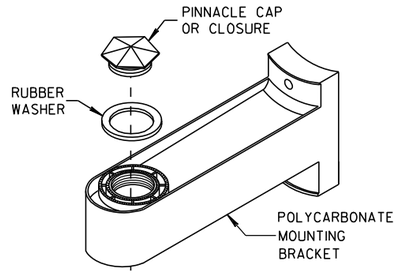
S.D.D. 9 E 6-5



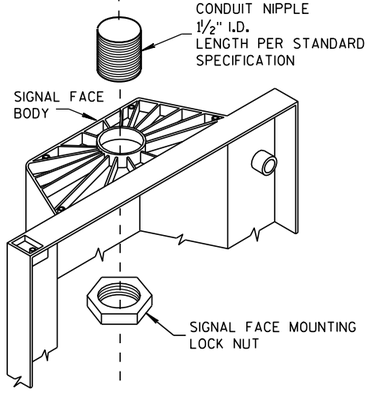
## TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



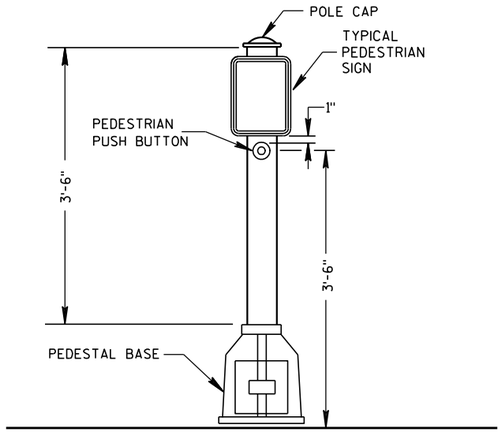

(ORNAMENTAL)



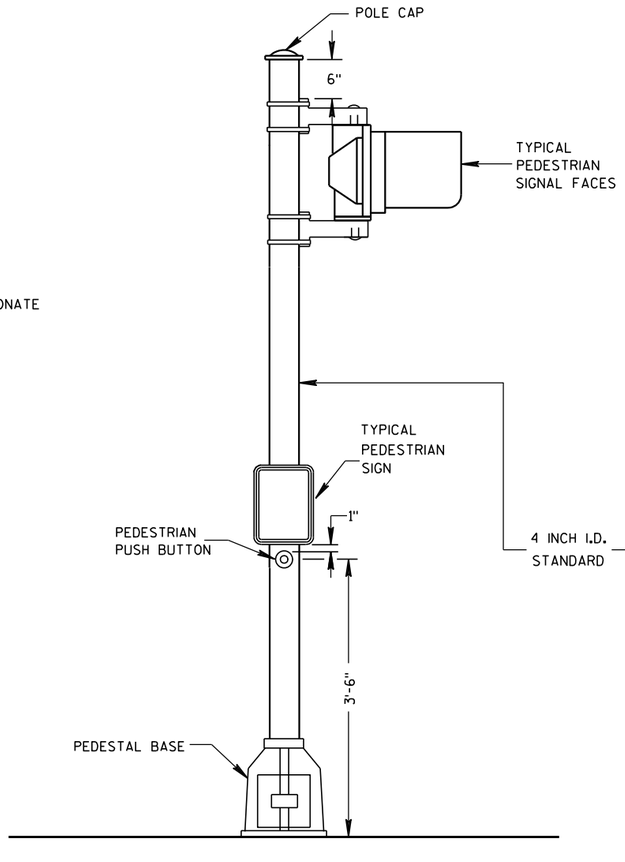

(BANDED)



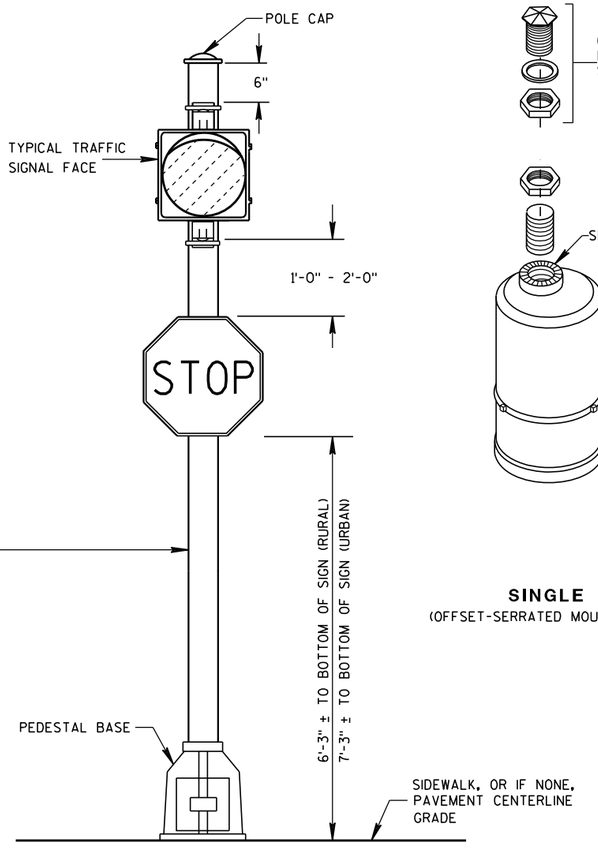

## SIGNAL FACE MOUNTING DETAILS



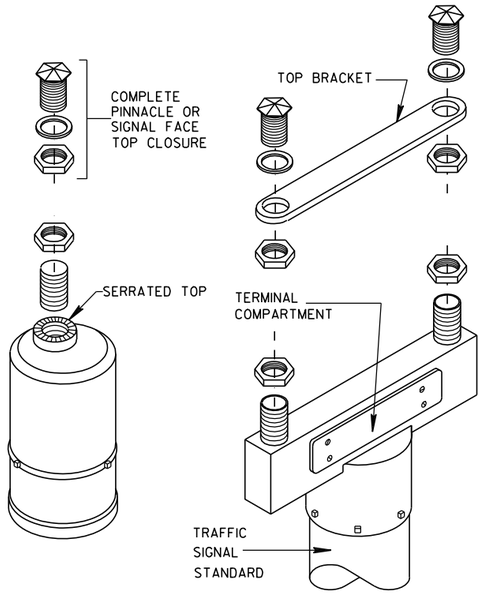

## PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING




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




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




**SINGLE**
(OFFSET-SERRATED MOUNTING)

**DOUBLE**
(SERRATED MOUNTING)

## SLIPFITTERS

## 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.

# 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 ENGI

FHWA



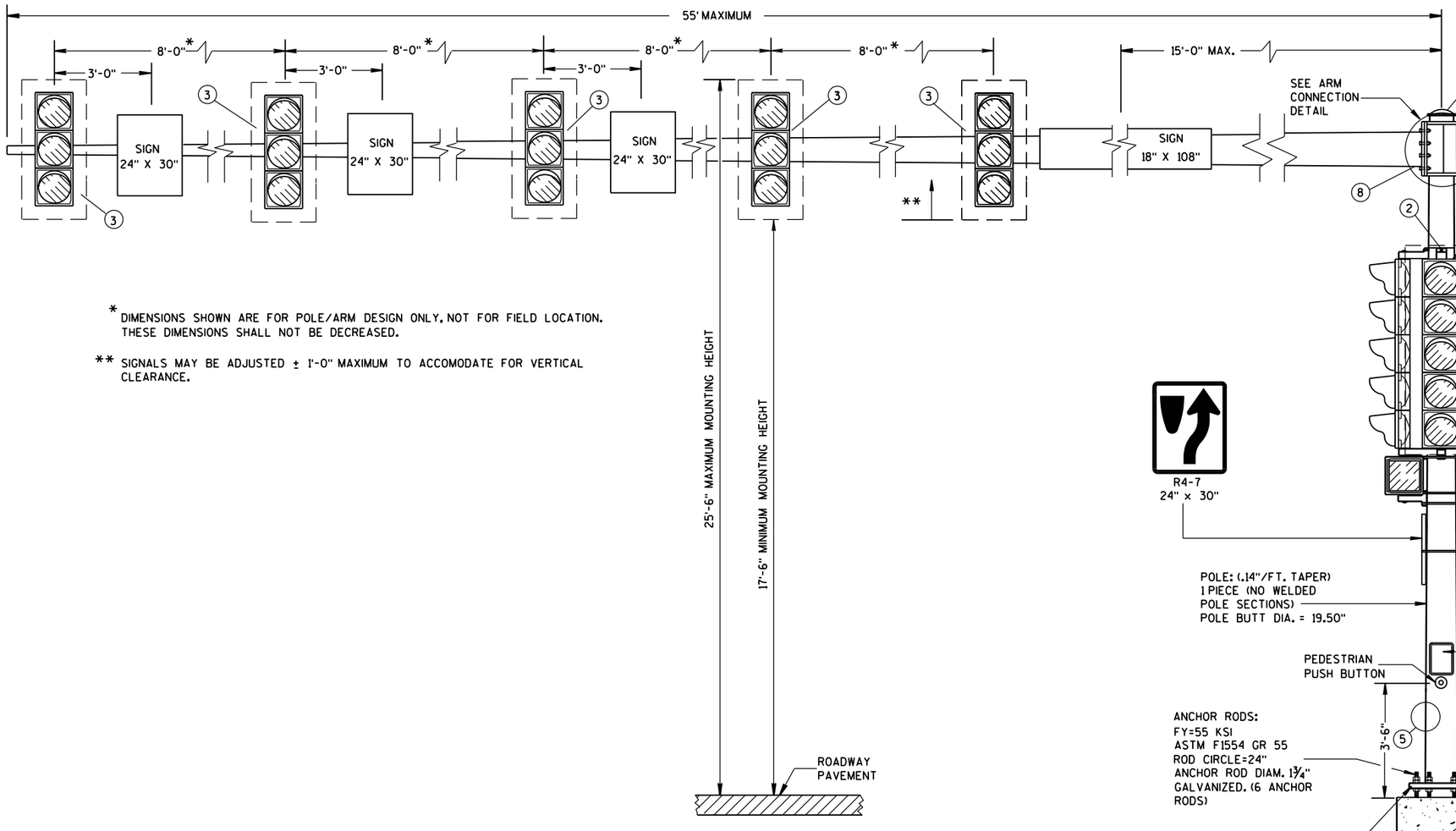
HWYS

6

S.D.D. 9 E 7-5

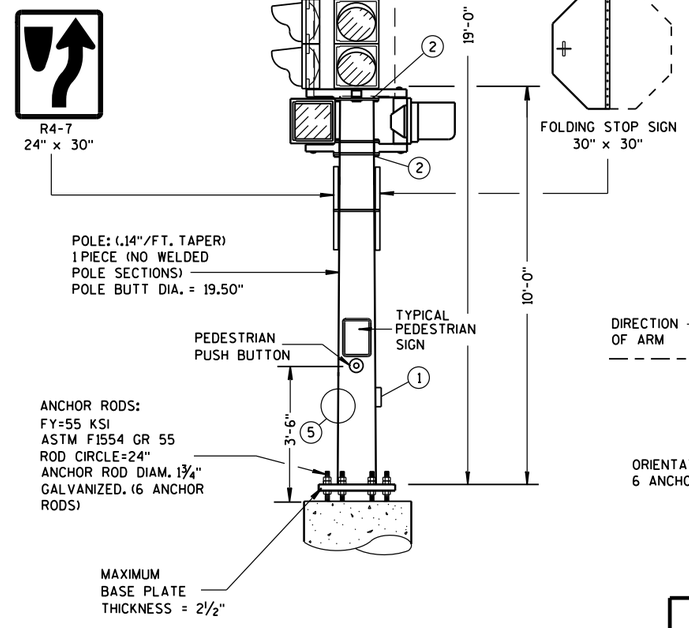
6

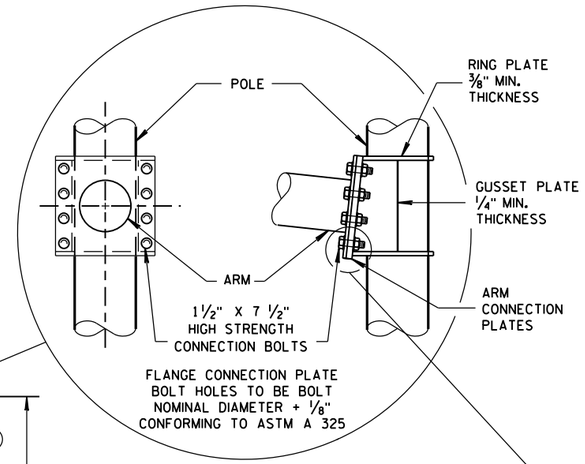
S.D.D. 9 E 7-5



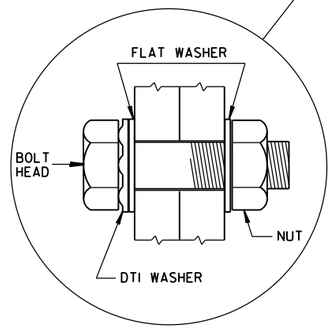

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

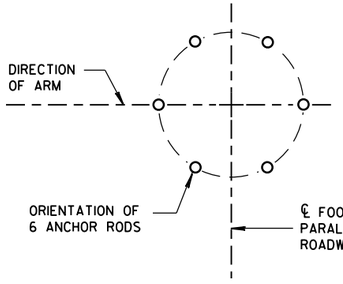



**8 BOLT ARM CONNECTION DETAIL**




**RECOMMENDED BOLT ASSEMBLY DETAIL**




**ANCHOR ROD LOCATION**

(MAXIMUM LOAD)

# TYPE 12 POLE 35'- 55' MONOTUBE ARM

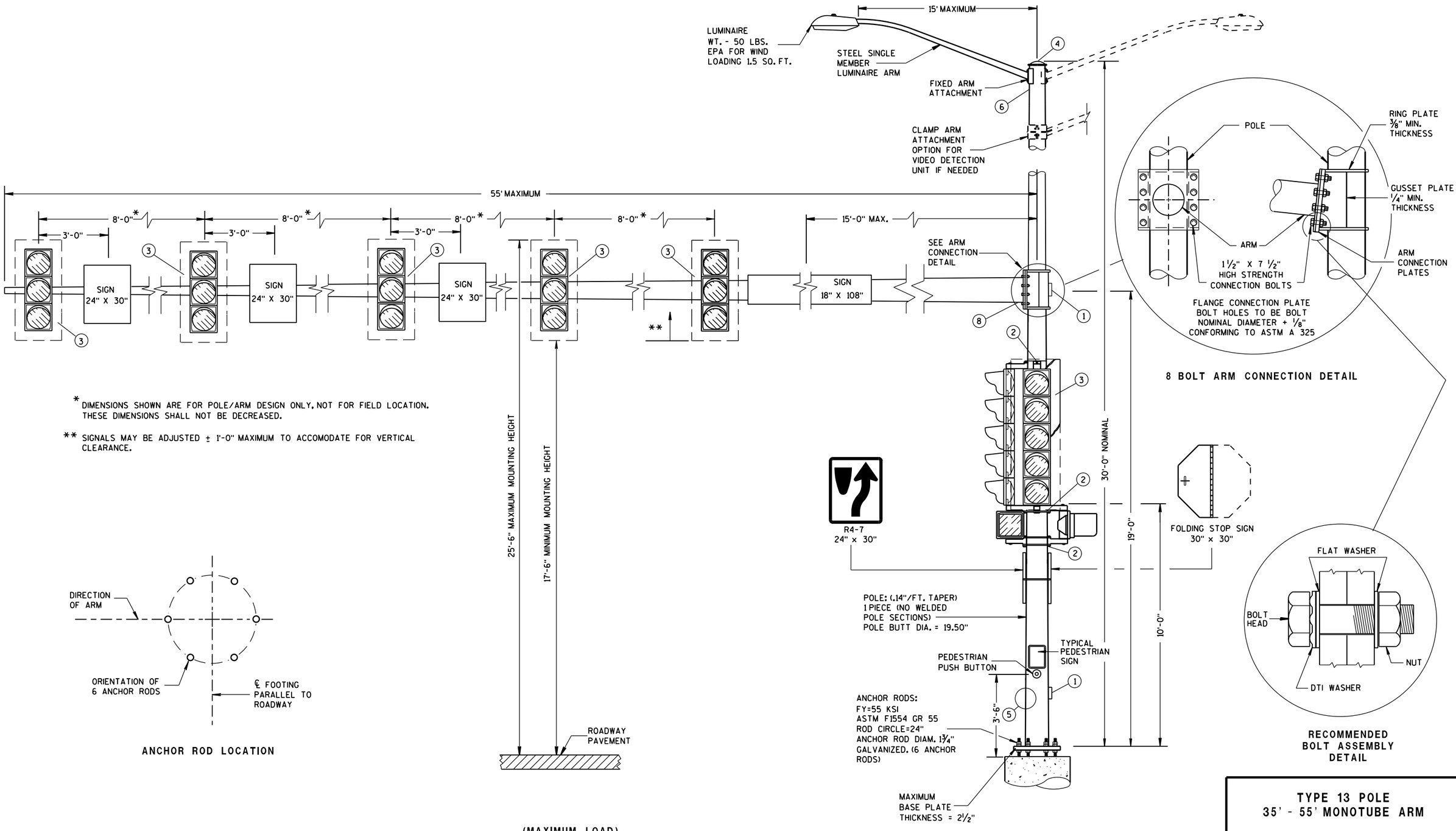
**TYPE 12 POLE**
**35' - 55' MONOTUBE ARM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
245
FHWA

6

S.D.D. 9 E 8-7c




* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.




ANCHOR ROD LOCATION

(MAXIMUM LOAD)

# TYPE 13 POLE 35'- 55' MONOTUBE ARM

| TYPE 13 POLE<br>35' - 55' MONOTUBE ARM | |
|---|---|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>June, 2015<br>DATE | /S/ Ahmet Demirbilek<br>STATE ELECTRICAL |
| FHWA | |





6



S.D.D. 9 E 8-7d

## GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS ( AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS ( AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT ( NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

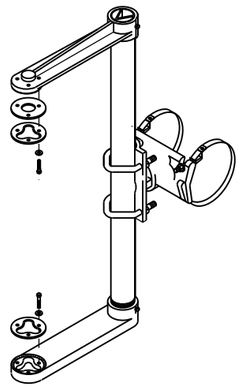
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

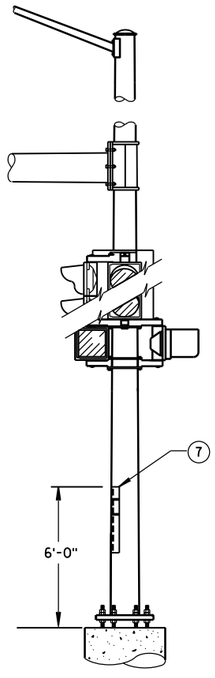
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

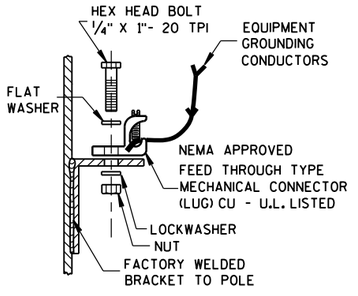


SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

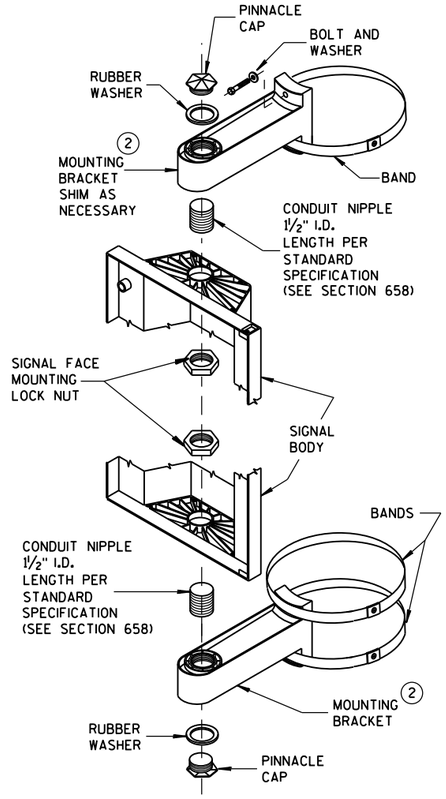



STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT

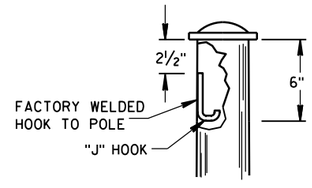



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL




SIGNAL FACE VERTICAL MOUNTING DETAIL




"J" HOOK WIRE SUPPORT (6)

# GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

247

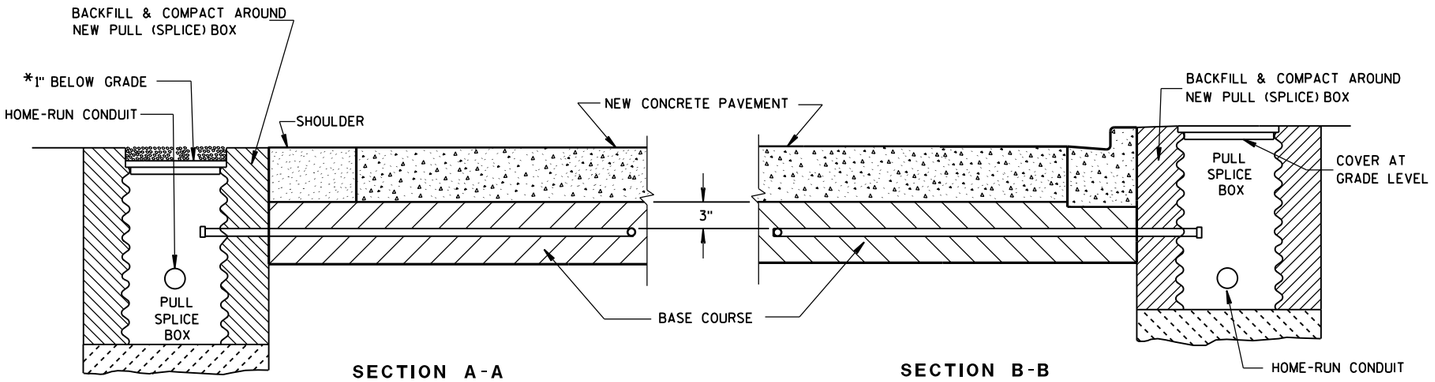
FHWA

6

S.D.D. 9 E 8-7e

6

S.D.D. 9 E 8-7e




**SECTION A-A**
**NO CURB & GUTTER**

**SECTION B-B**
**CURB & GUTTER**

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

## LOOP DETECTOR INSTALLATION DETAIL

## GENERAL NOTES

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

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

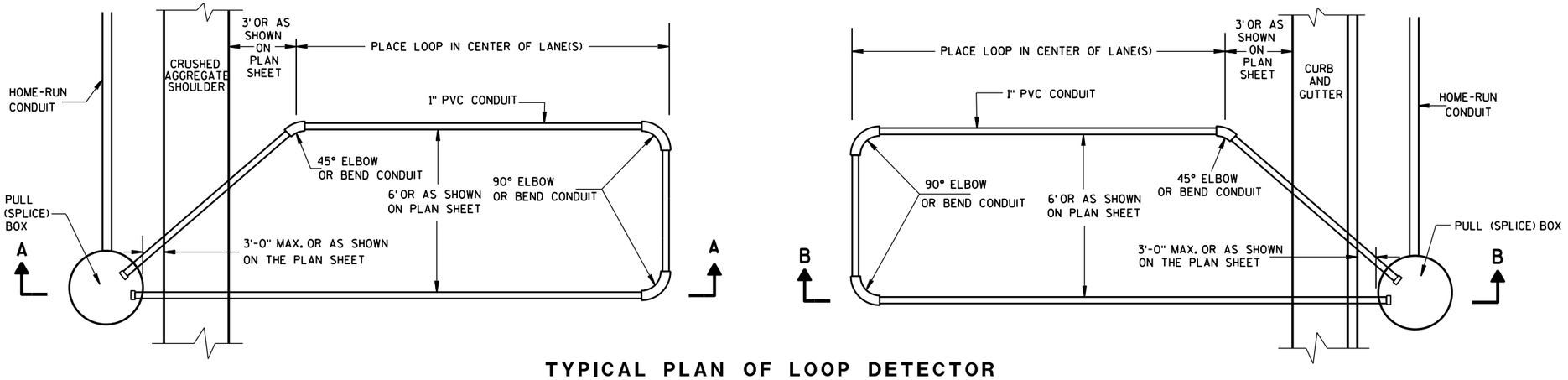
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICE CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE, SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.




## TYPICAL PLAN OF LOOP DETECTOR WITH 18" OR 24" PULL (SPLICE) BOX

**LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

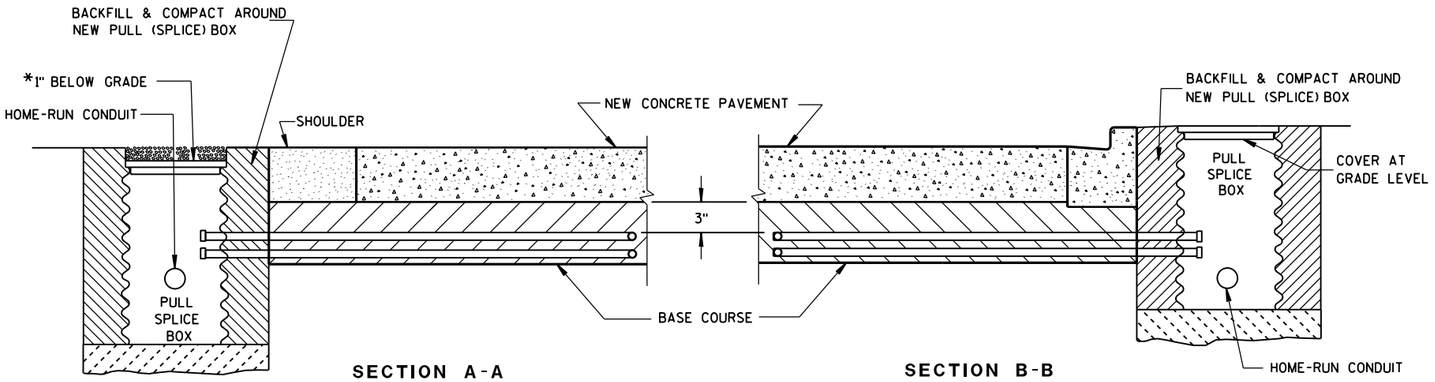


6

S.D.D. 9 F 15-4a

6

S.D.D. 9 F 15-4a




**SECTION A-A**
**NO CURB & GUTTER**

**SECTION B-B**
**CURB & GUTTER**

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

## LOOP DETECTOR INSTALLATION DETAIL

## GENERAL NOTES

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

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

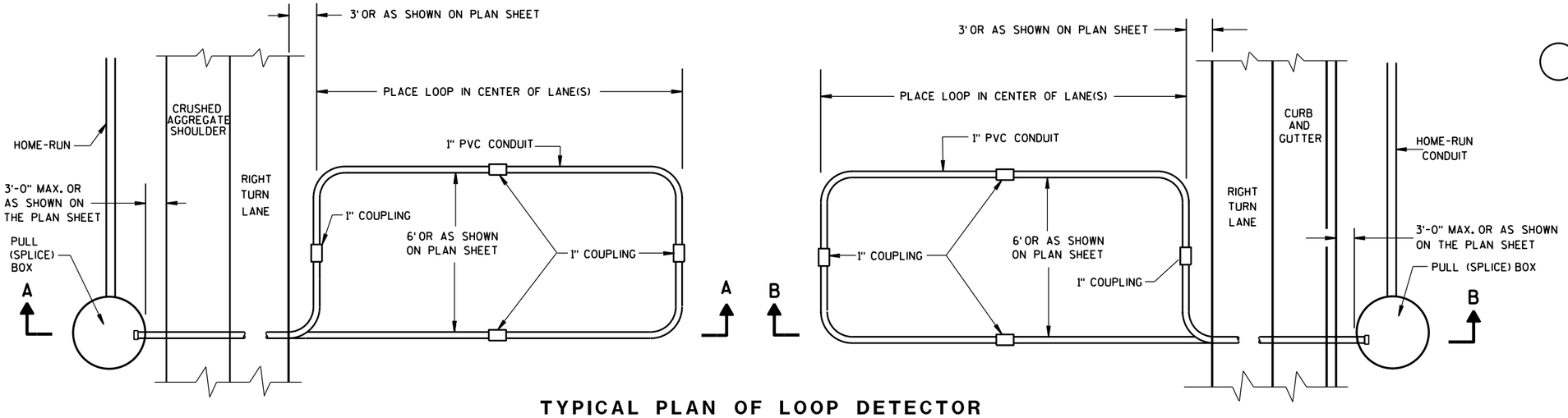
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

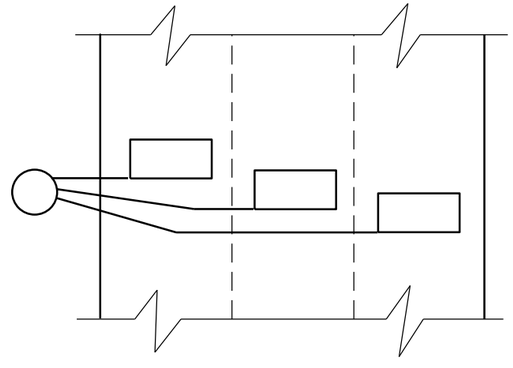
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.




## TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



## MULTI-LANE INSTALLATION

**LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

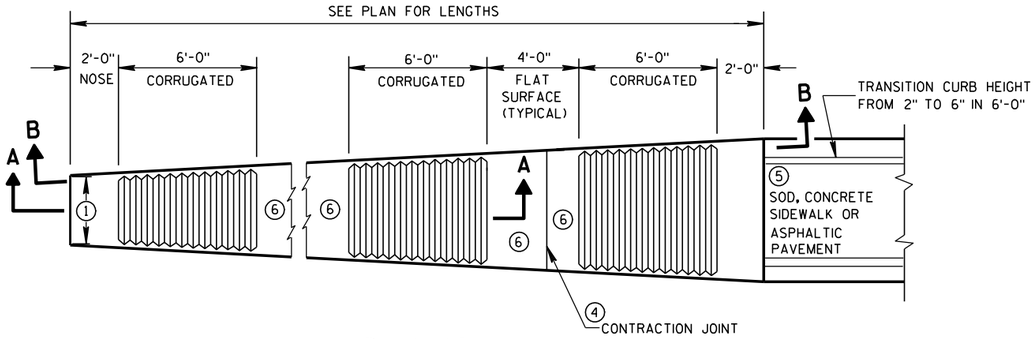


6

S.D.D. 9 F 15-4b

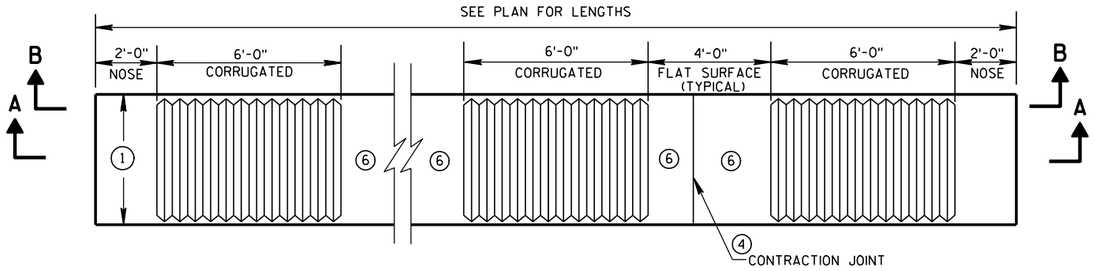
6

S.D.D. 9 F 15-4b



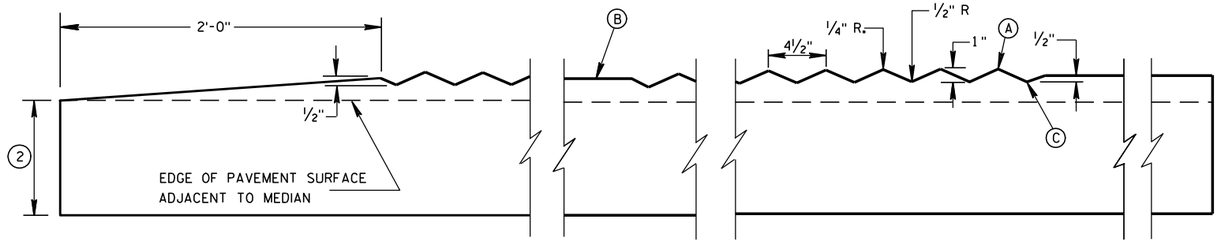

PLAN VIEW

## VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN




PLAN VIEW

## UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN




SECTION A-A

## LONGITUDINAL SECTION

## GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.

(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

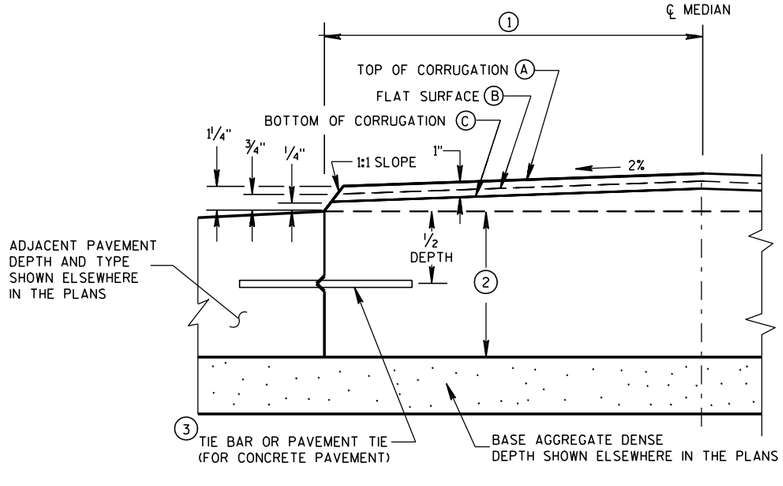
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

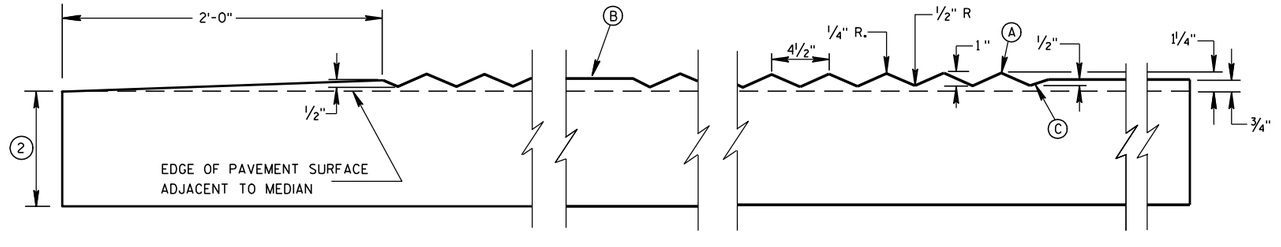
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.




HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT




SECTION B-B

## LONGITUDINAL SECTION

## CONCRETE CORRUGATED MEDIAN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

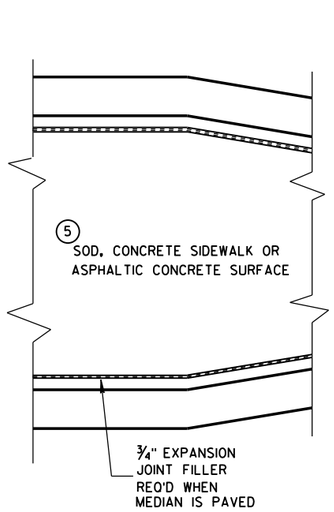
APPROVED

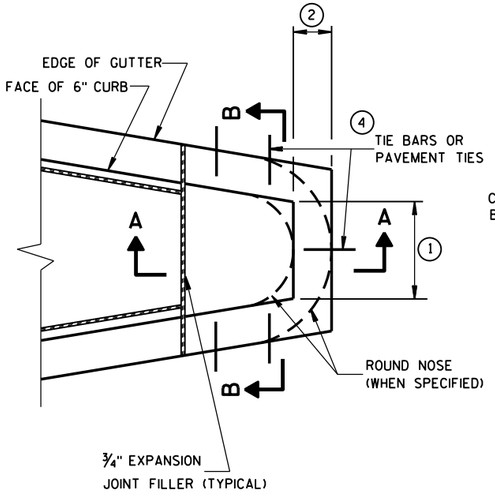
12/17/07
DATE

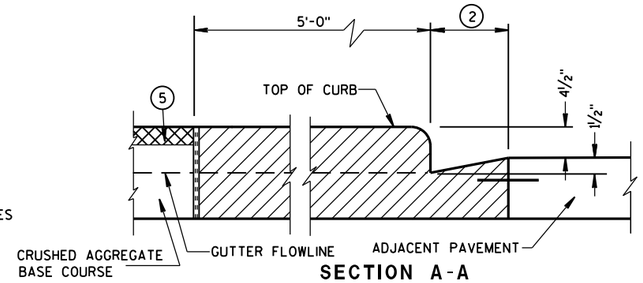
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

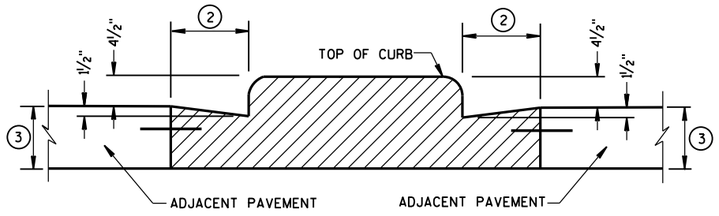

6
S.D.D. 11 B 1-5




SECTION A-A




SECTION B-B

## CONCRETE MEDIAN BLUNT NOSE DETAIL

## 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) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

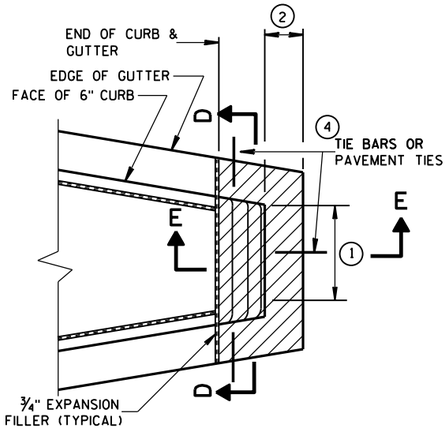
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

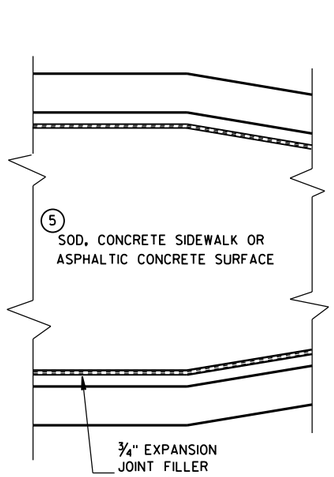
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

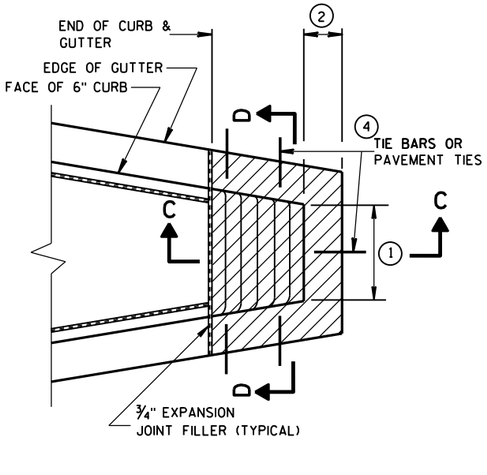
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

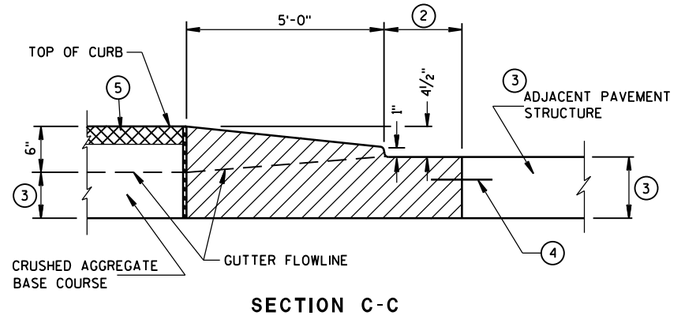
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



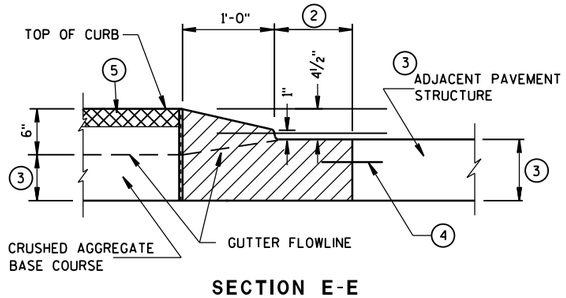




## CONCRETE MEDIAN SLOPED NOSE TYPE 1

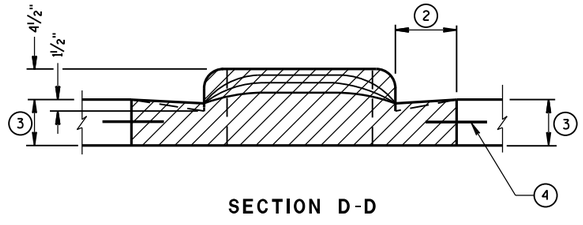



SECTION C-C




SECTION E-E

## CONCRETE MEDIAN SLOPED NOSE TYPE 2




SECTION D-D

CONCRETE MEDIAN NOSE

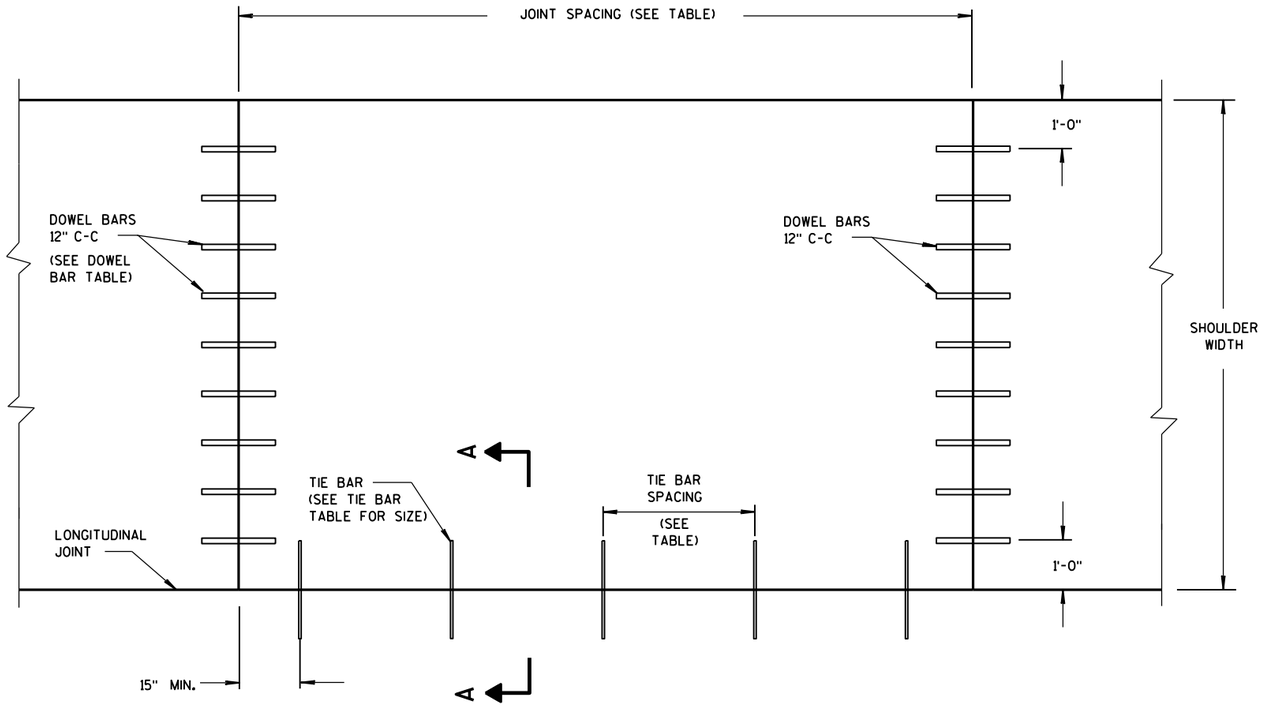
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA




6


S.D.D. 11 B 2-2




PLAN VIEW

## CONCRETE PAVEMENT SHOULDER

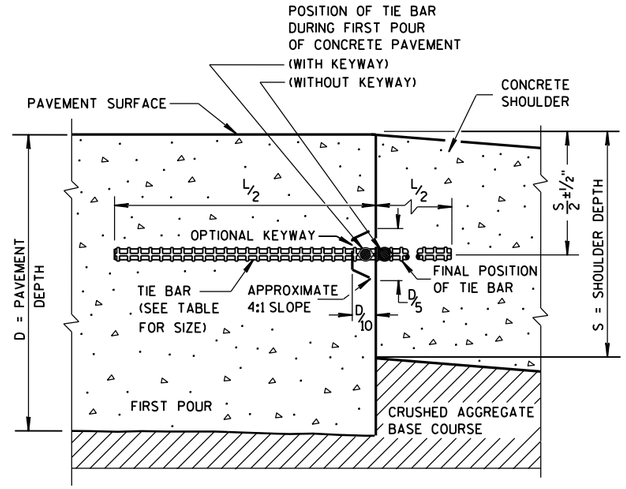
## GENERAL NOTES

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.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.




SECTION A-A

## LONGITUDINAL CONSTRUCTION JOINT

### TIE BAR TABLE

| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 ½" | NO. 4 | 30" | 36" |
| ≥ 10 ½" | NO. 5 | 36" | 36" |
| | NO. 4* | 30" | 24"** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

### PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

| PAVEMENT DEPTH (D) | DOWEL BAR DIAMETER*** | CONTRACTION JOINT SPACING |
|---|---|---|
| 5 ½", 6", 6 ½" | NONE | 12' |
| 7", 7 ½" | 1" | 14' |
| 8", 8 ½" | 1 ¼" | 15' |
| 9", 9 ½" | 1 ¼" | 15' |
| 10" & ABOVE | 1 ½" | 15' |

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

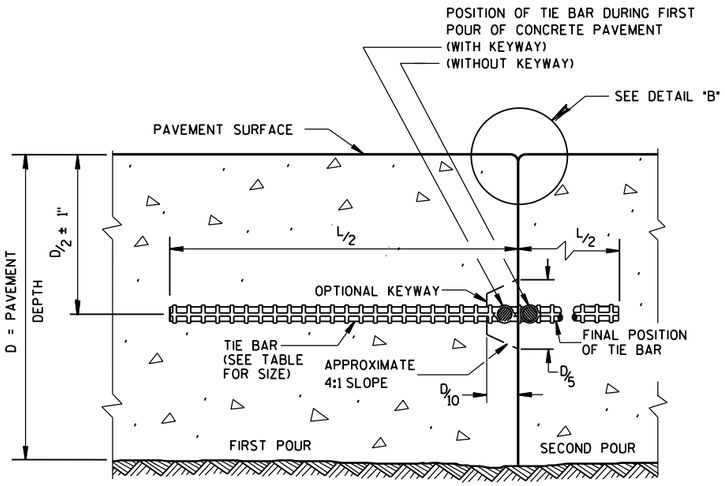


6

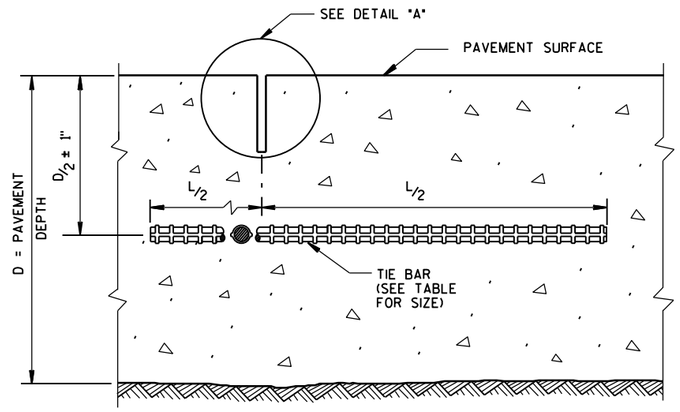
S.D.D. 13 A 3-6

6

S.D.D. 13 A 3-6




## CONSTRUCTION JOINT




## SAWED JOINT

## GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

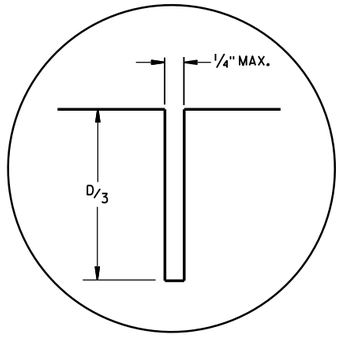



PLAN VIEW

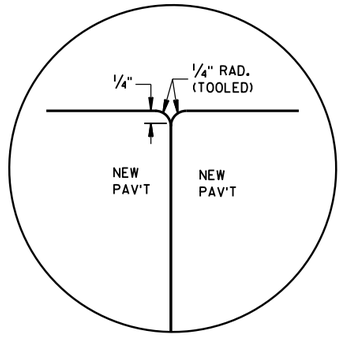



SECTION A-A

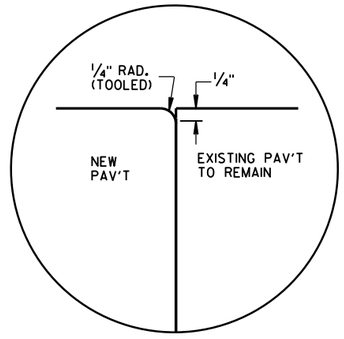
## LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT




DETAIL "A"




DETAIL "B"



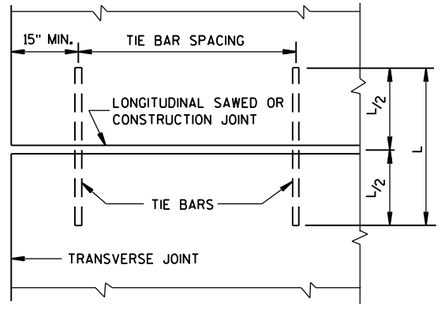

DETAIL "C"

### TIE BAR TABLE

| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 1/2" | NO. 4 | 30" | 36" |
| ≥ 10 1/2" | NO. 5 | 36" | 36" |
| | NO. 4 * | 30" | 24"** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.




PLAN VIEW
SHOWING LOCATION OF TIE BARS

## CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

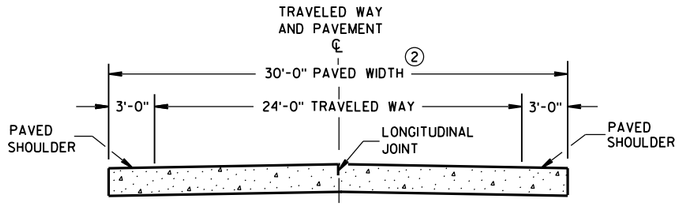
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



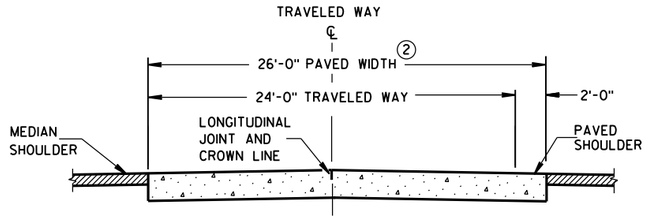

6

S.D.D. 13 C 1-18

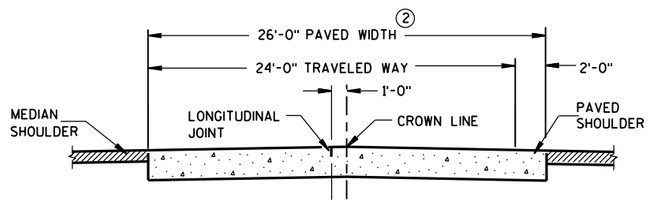



SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY




SECTION B-B




ALTERNATIVE SECTION B-B ①

DIVIDED HIGHWAY

## GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

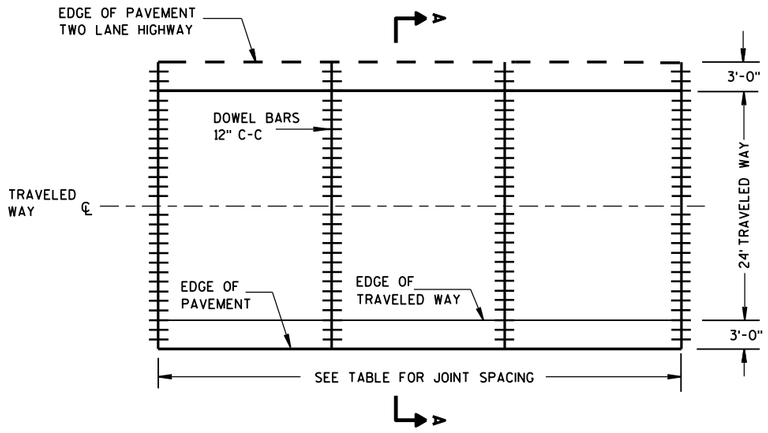
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

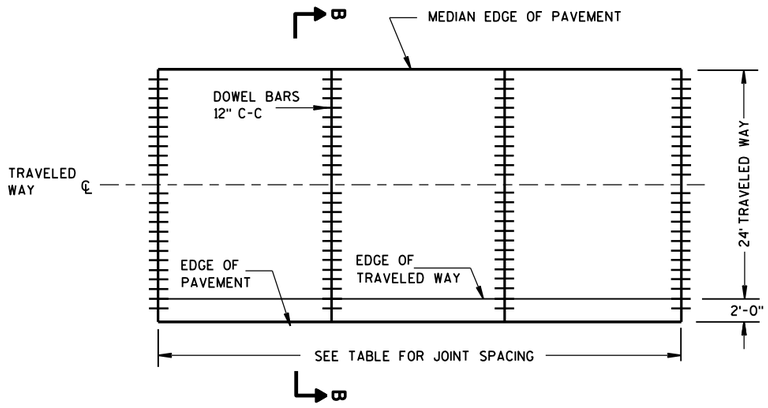
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

### PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

| PAVEMENT DEPTH (D) | DOWEL BAR DIAMETER | CONTRACTION JOINT SPACING |
|---|---|---|
| 5 ½", 6", 6 ½" | NONE | 12' |
| 7", 7 ½" | 1" | 14' |
| 8", 8 ½" | 1 ¼" | 15' |
| 9", 9 ½" | 1 ¼" | 15' |
| 10" & ABOVE | 1 ½" | 15' |




CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY




CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

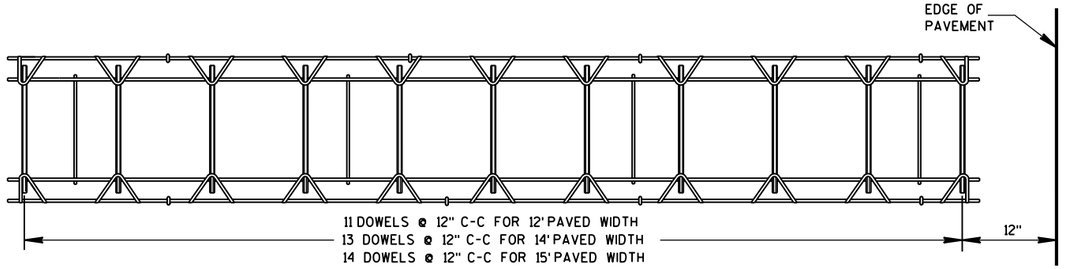
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 254

6

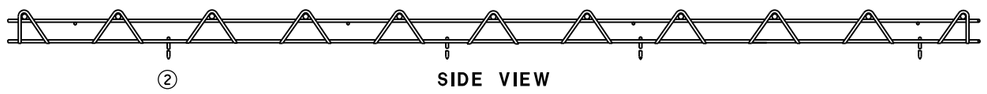
S.D.D. 13 C 11-11a

6

S.D.D. 13 C 11-11a



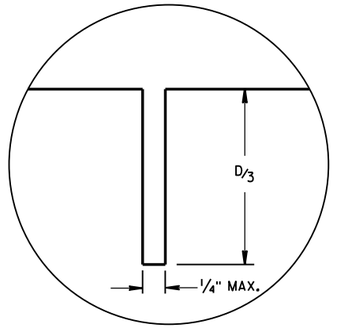

PLAN VIEW




SIDE VIEW

(NORMAL TO CENTERLINE)

## CONTRACTION JOINT DOWEL ASSEMBLY ①




JOINT DETAIL

## GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

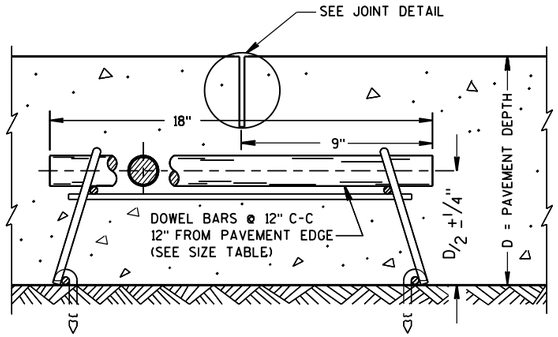
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

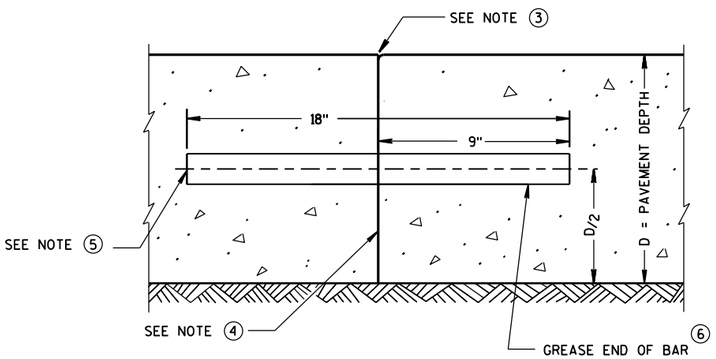
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

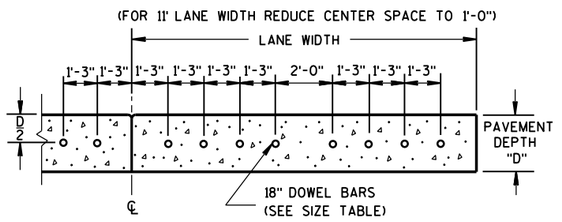
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.




DOWELED CONTRACTION JOINT




TRANSVERSE CONSTRUCTION JOINT




DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

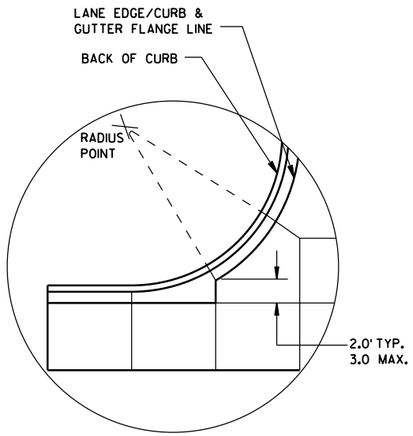
APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE 255 NEER
FHWA

6

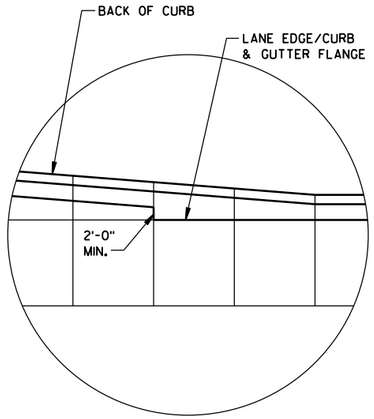
S.D.D. 13 C 11-11b

6

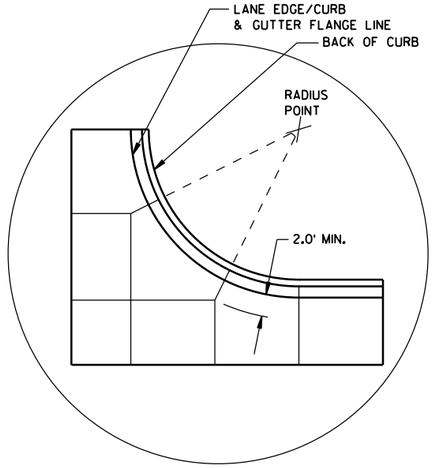
S.D.D. 13 C 11-11b



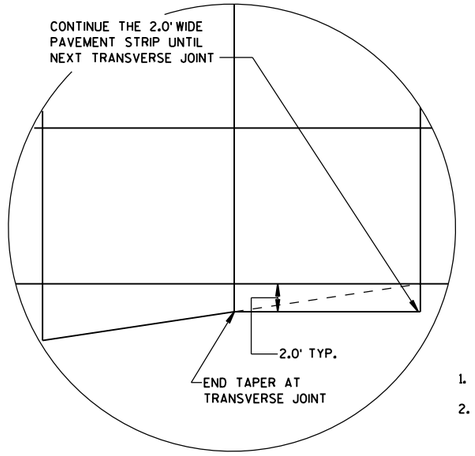

DETAIL "A"




DETAIL "B"




DETAIL "C"




DETAIL "D"

## GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

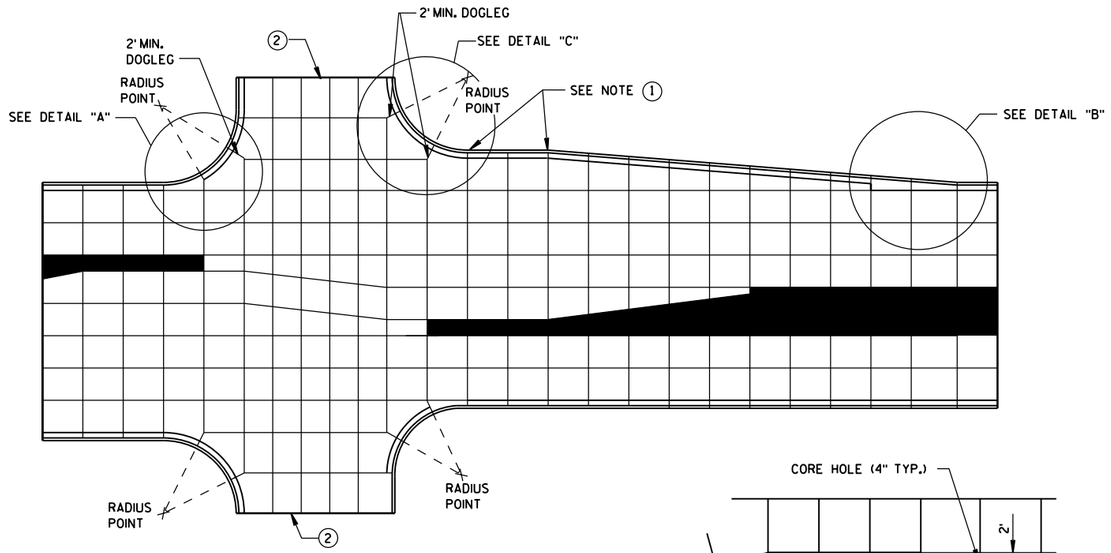
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

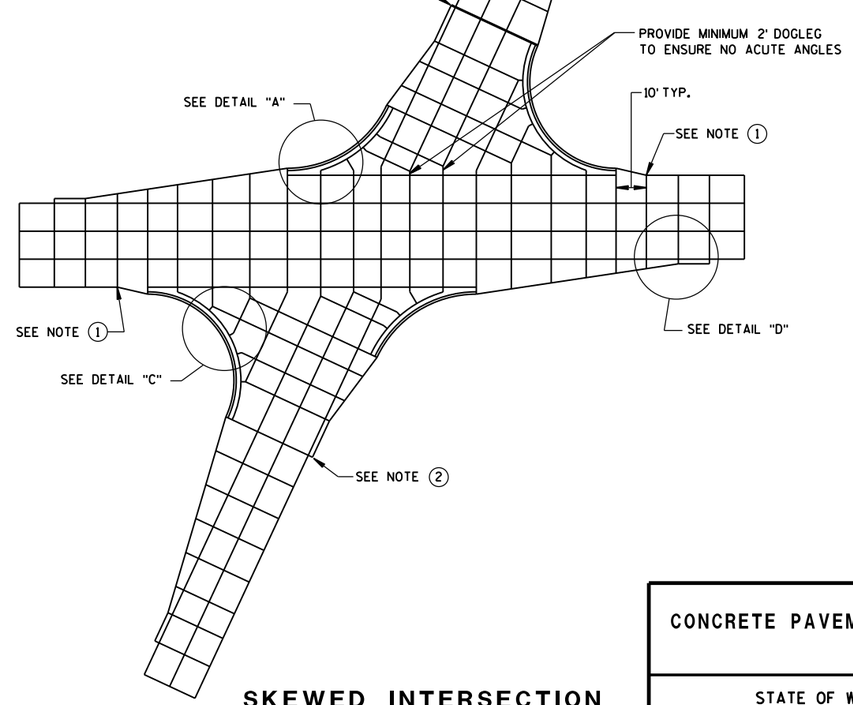
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



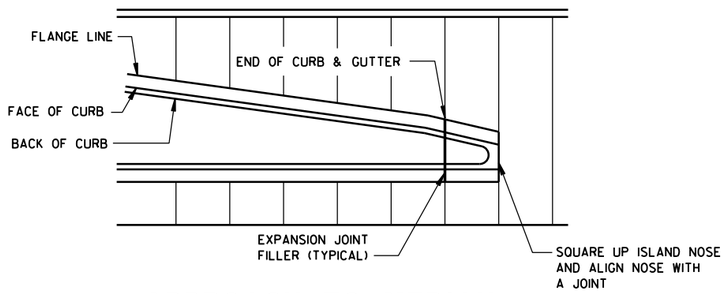

STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

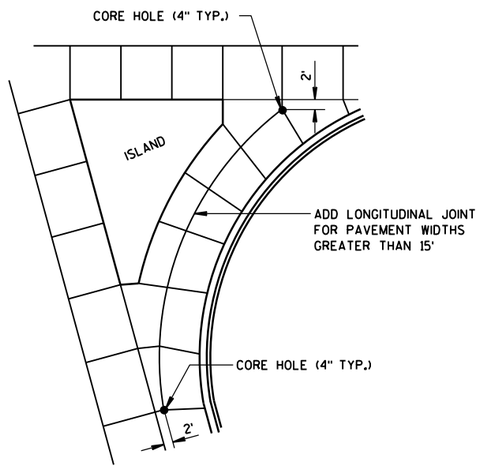
| PAVEMENT DEPTH (D) | CONTRACTION JOINT SPACING |
|---|---|
| 6", 6½" | 12' |
| 7", 7½" | 14' |
| 8" & ABOVE | 15' |




SKEWED INTERSECTION




APPROACH TO MEDIAN




LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 256

6

S.D.D. 13 C 18-3a

6

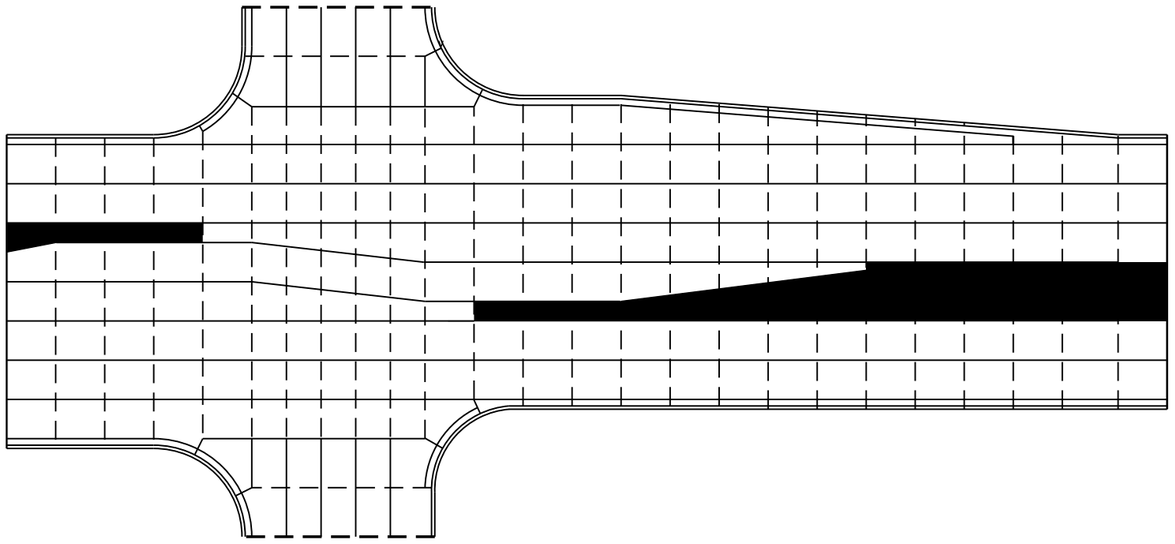
S.D.D. 13 C 18-3a

## LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

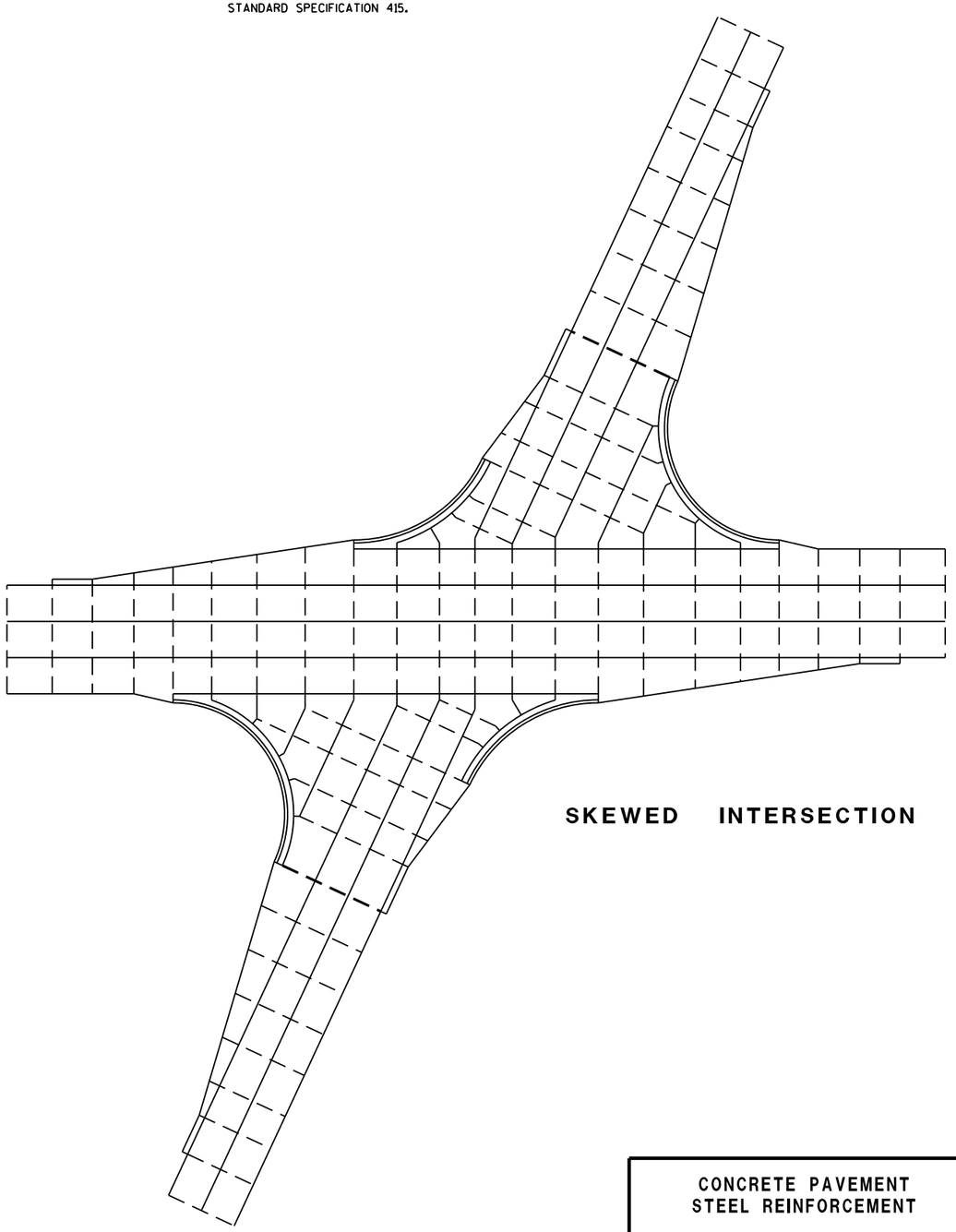
TIED JOINT



STANDARD INTERSECTION

## GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

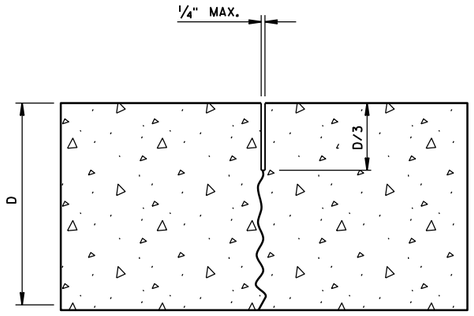


6

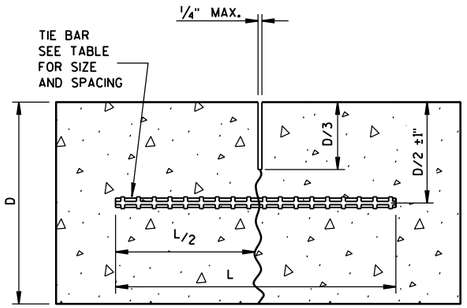
S.D.D. 13 C 18-3b

6

S.D.D. 13 C 18-3b




UNDOWELED-TRANSVERSE




TIED LONGITUDINAL

## TIE BAR TABLE

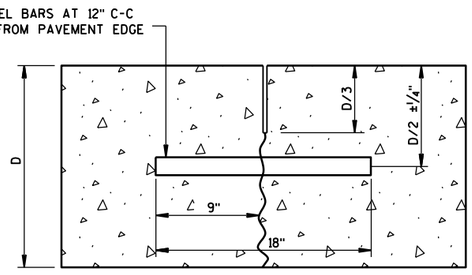
| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 1/2" | NO. 4 | 30" | 36" |
| ≥ 10 1/2" | NO. 5 | 36" | 36" |
| | NO. 4* | 30" | 24"** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

## GENERAL NOTES

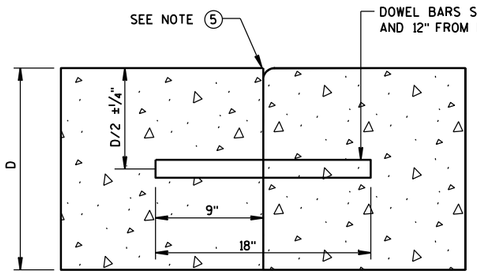
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



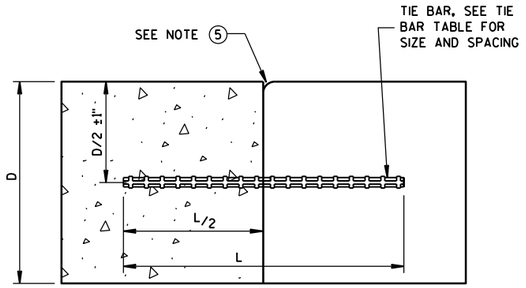

DOWELED-TRANSVERSE

## CONTRACTION JOINTS

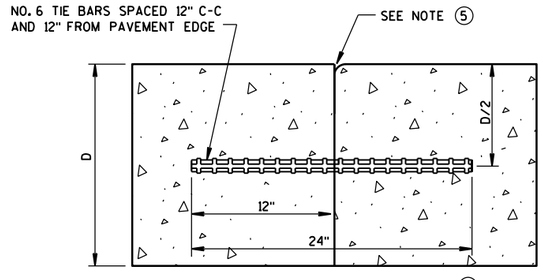
SEE NOTE (2)




DOWELED TRANSVERSE (3)

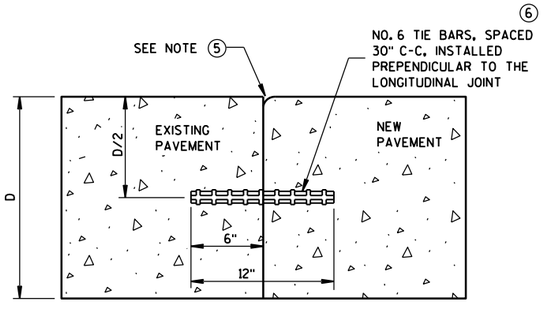



TIED LONGITUDINAL




TIED TRANSVERSE (3)

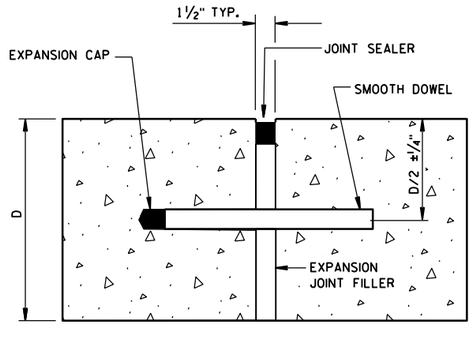
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)




TIED LONGITUDINAL TO EXISTING

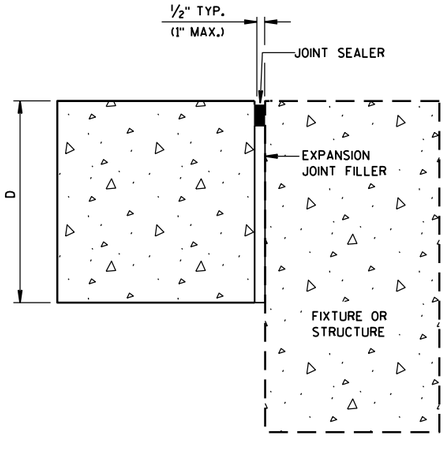
## CONSTRUCTION JOINTS

SEE NOTE (4)




DOWELED-TRANSVERSE

SEE NOTE (1)




UNTIED-LONGITUDINAL

## EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

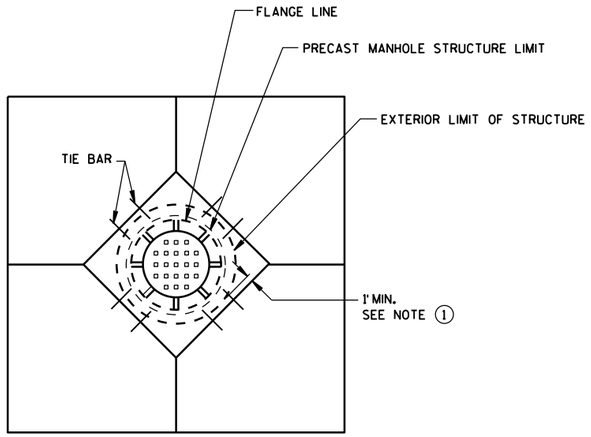




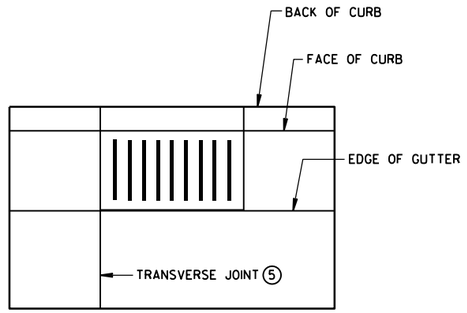
6



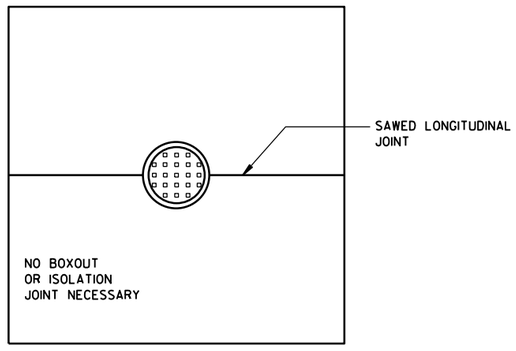
S.D.D. 13 C 18-3c



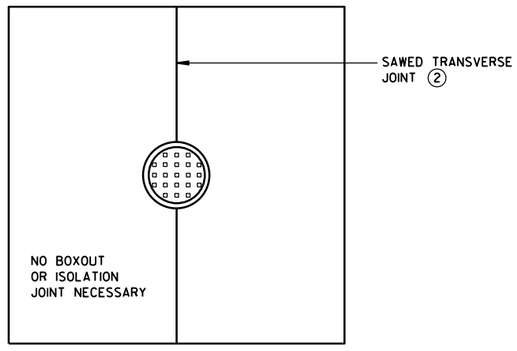

## DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



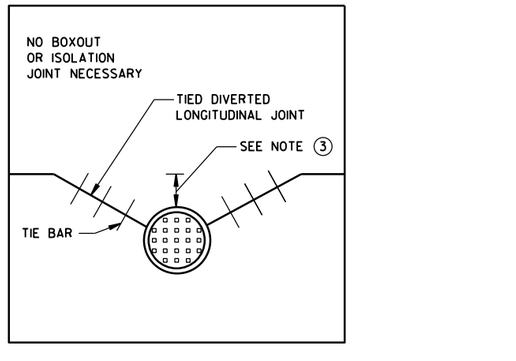

## INLET WITH TRANSVERSE JOINT



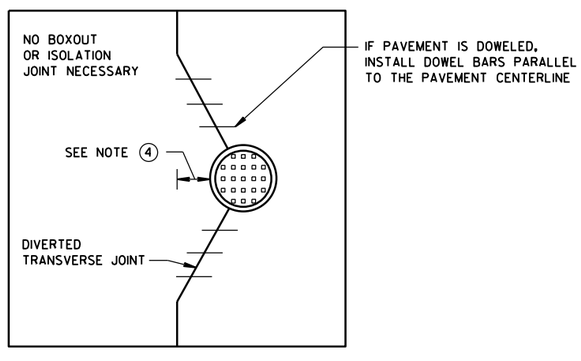

## MANHOLE WITH LONGITUDINAL JOINT




## MANHOLE WITH TRANSVERSE JOINT




## MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT




## MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

## GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

# CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

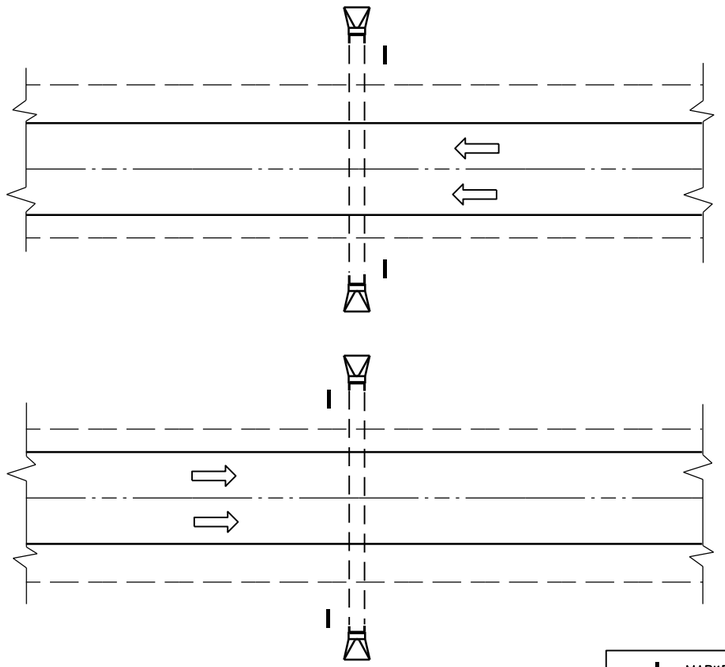
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



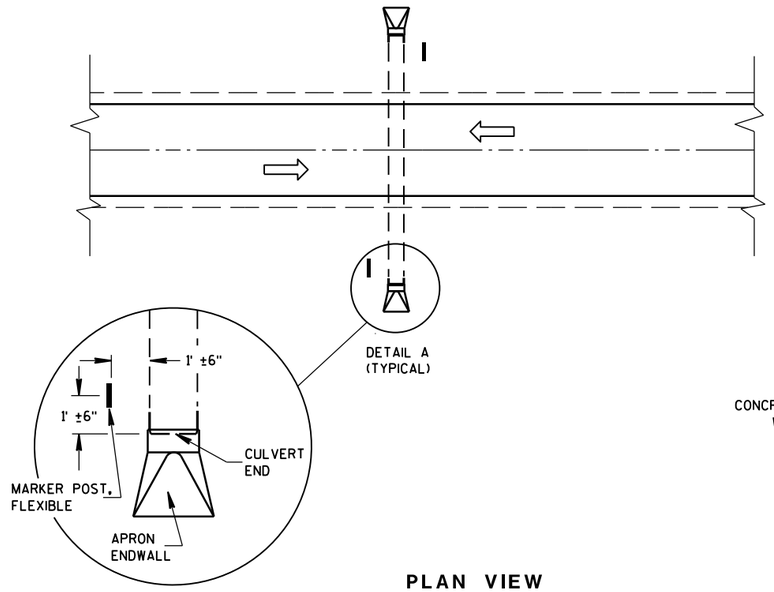

6


S.D.D. 13 C 18-3d



PLAN VIEW

**DIVIDED HIGHWAY**




**DETAIL A**
(TYPICAL)

PLAN VIEW

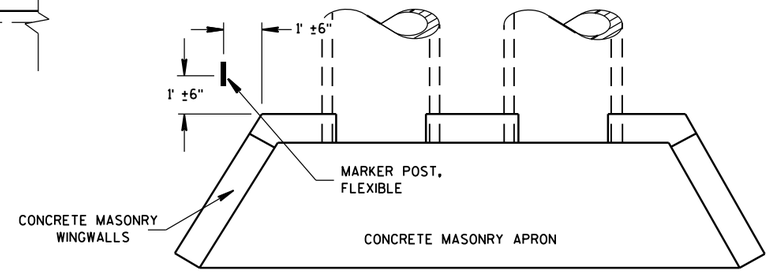
**UNDIVIDED HIGHWAY**

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

## GENERAL NOTES

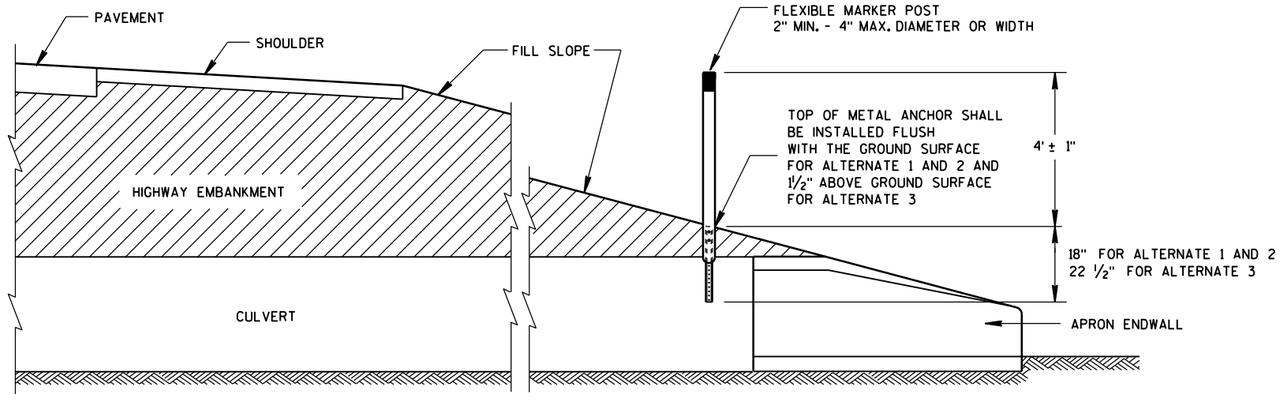
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.




PLAN VIEW

**CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH**

## FLEXIBLE MARKER POST LOCATION




CROSS SECTION

**FLEXIBLE MARKER POST**

**FLEXIBLE MARKER POST FOR CULVERT END**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

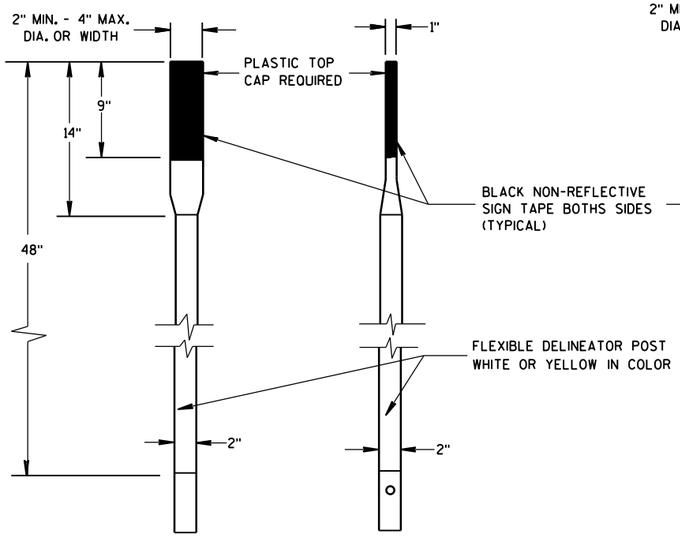


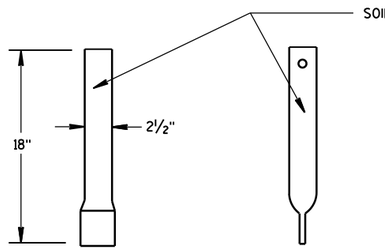
6

S.D.D. 15 A 3-2a

6

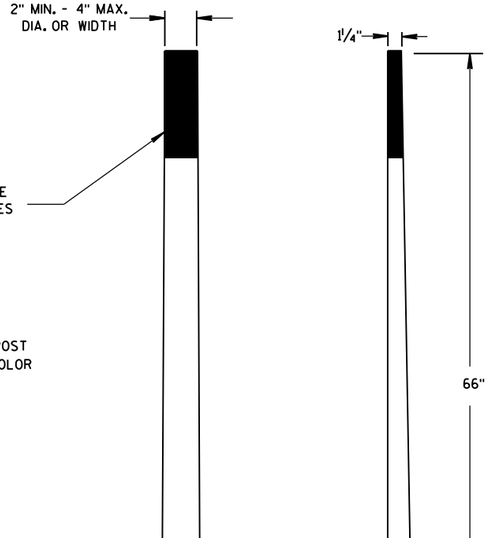
S.D.D. 15 A 3-2a



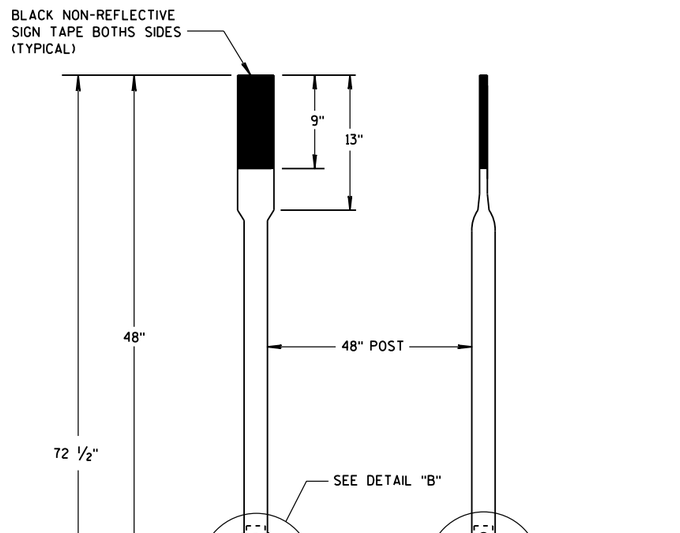

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

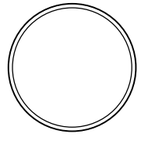
ALTERNATE 2



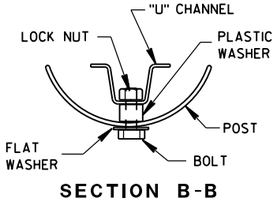

FRONT VIEW SIDE VIEW

ALTERNATE 3

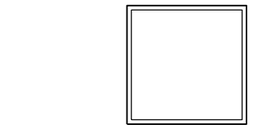
## FLEXIBLE MARKER POSTS



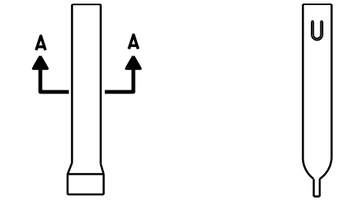
SECTION A-A




SECTION B-B

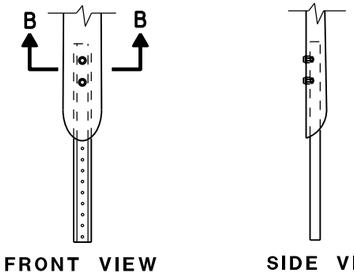


SECTION C-C



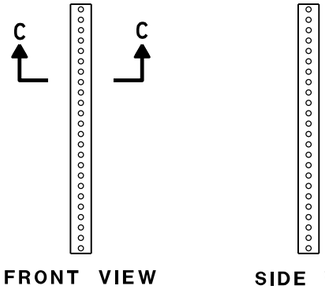

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

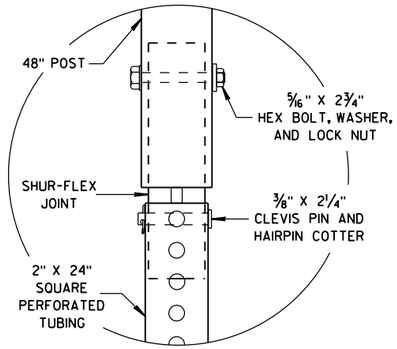
ALTERNATE 2



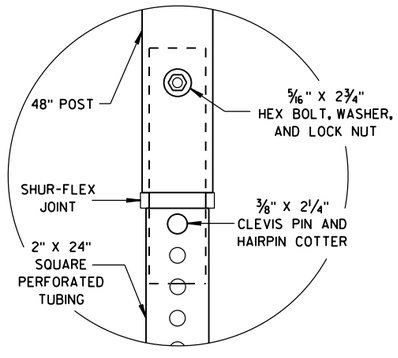

FRONT VIEW SIDE VIEW

ALTERNATE 3

## FLEXIBLE MARKER POST ANCHORS




DETAIL B




DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



6

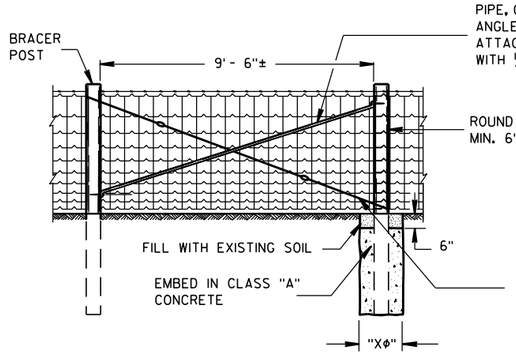
S.D.D. 15 A 3-2b

6

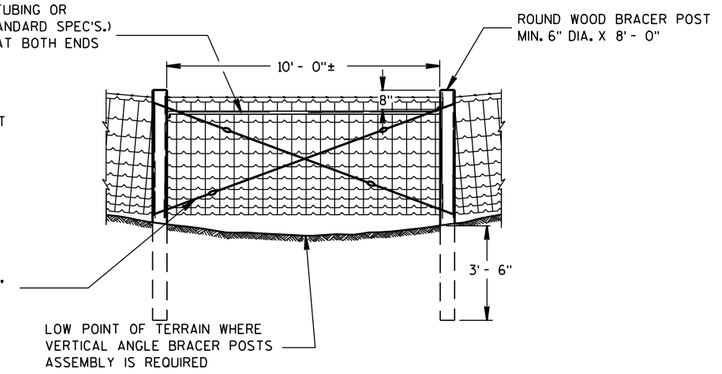
S.D.D. 15 A 3-2b

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.




PULL OR STRETCHER POSTS ASSEMBLY




VERTICAL ANGLE BRACER POSTS ASSEMBLY

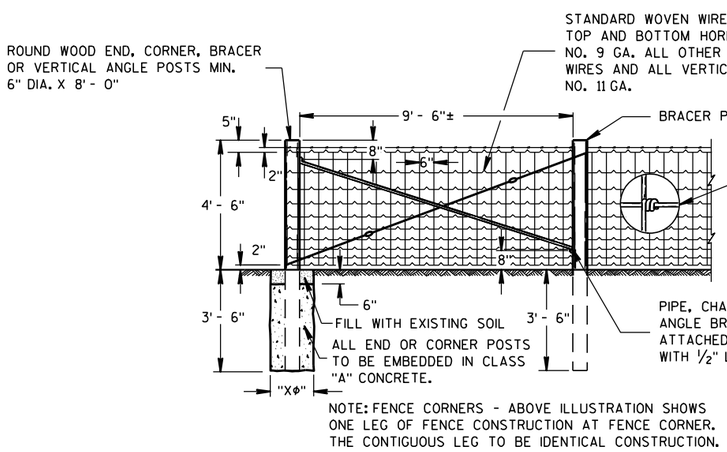
## GENERAL NOTES

"XΦ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

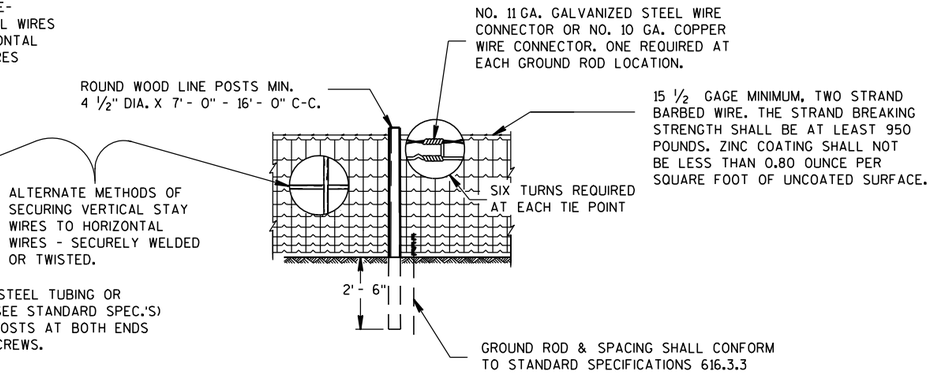
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



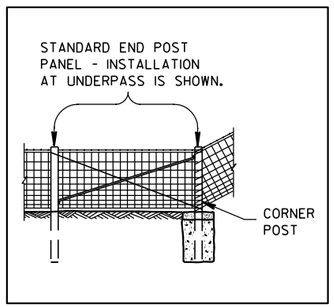

NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

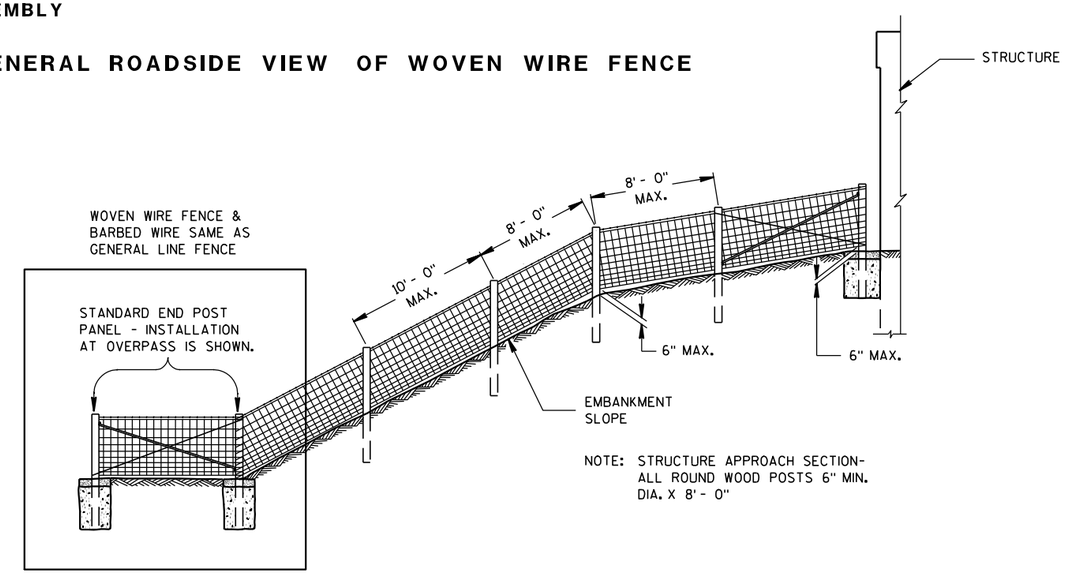



LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE




ALTERNATE FENCE DESIGN AT STRUCTURE




NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 6" MIN. DIA. X 8' - 0"

FENCE DESIGN AT STRUCTURE APPROACH

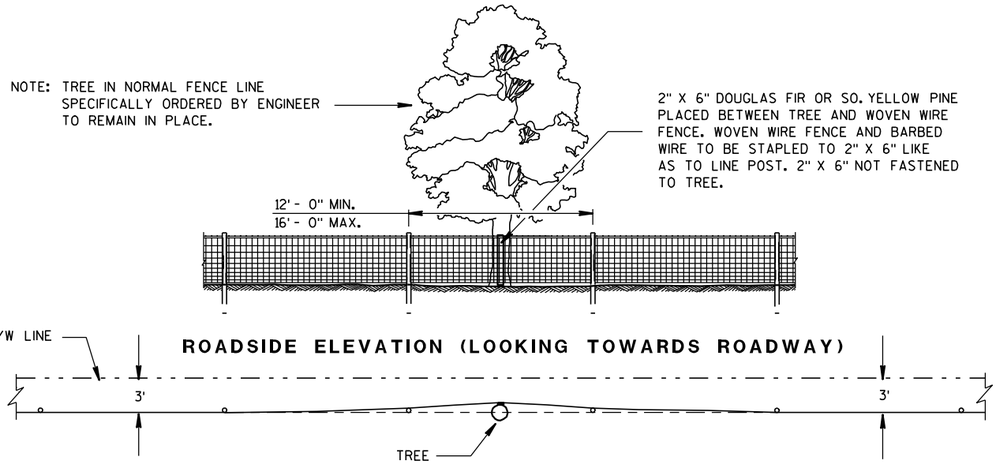
FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



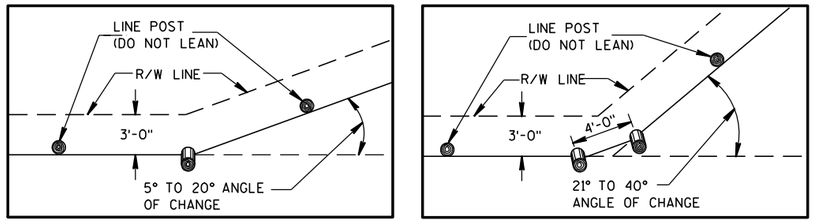

6

S.D.D. 15 B 1-8a




**PLAN VIEW**

**FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE**



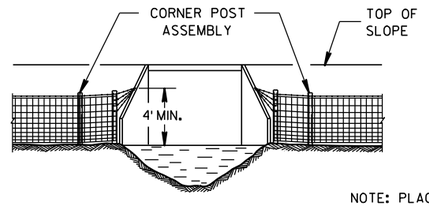

**PLAN VIEW SINGLE POST CORNER**

**PLAN VIEW DOUBLE POST CORNER**

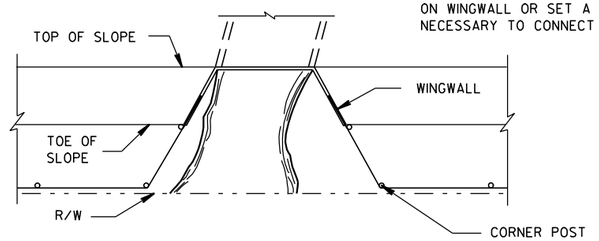
## RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

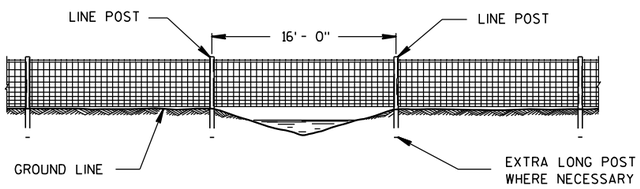
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



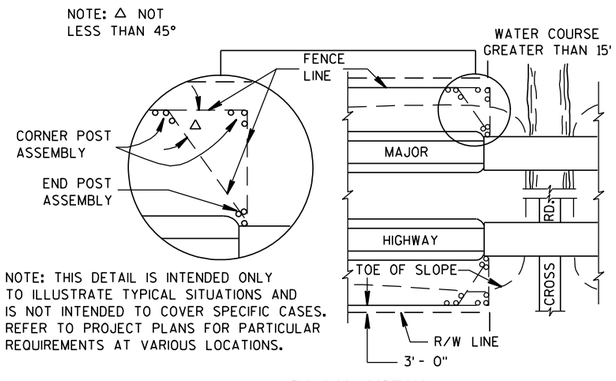

NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.




**FENCE INSTALLATION TO WINGWALLS**

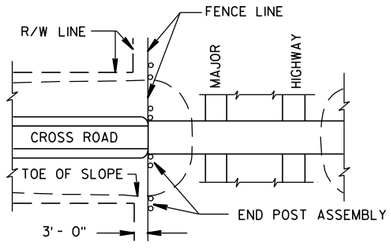



**FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH**




**PLAN VIEW**

**MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH**

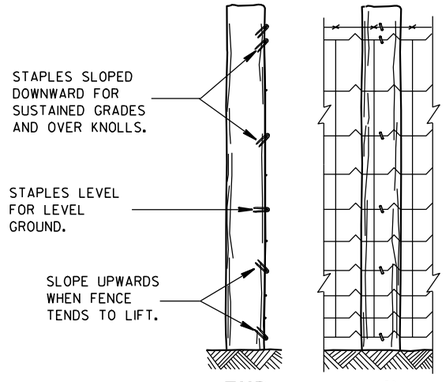



**PLAN VIEW**

**MAJOR HIGHWAY UNDERPASS**

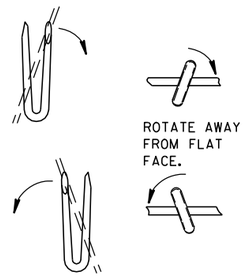
**FENCE LOCATION AT STRUCTURES**

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.




**END ELEVATION** **FARM SIDE ELEVATION**

**FENCE MOUNTING DETAIL**




**LINE POST**

**FENCE WOVEN WIRE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

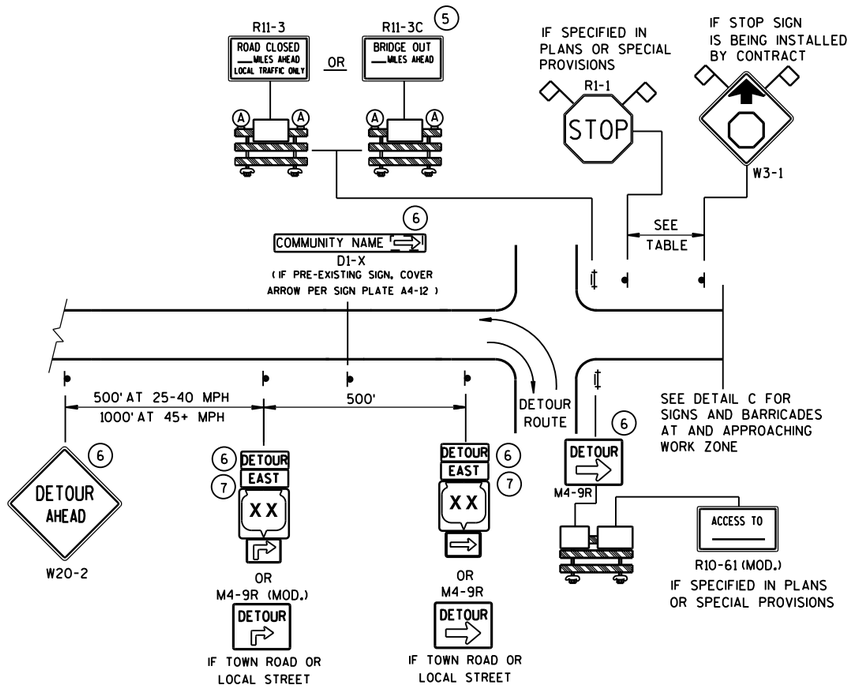
APPROVED
4/4/2008 DATE
/S/ Jerry H. ---
ROADWAY STANDARDS ENGINEER
FHWA





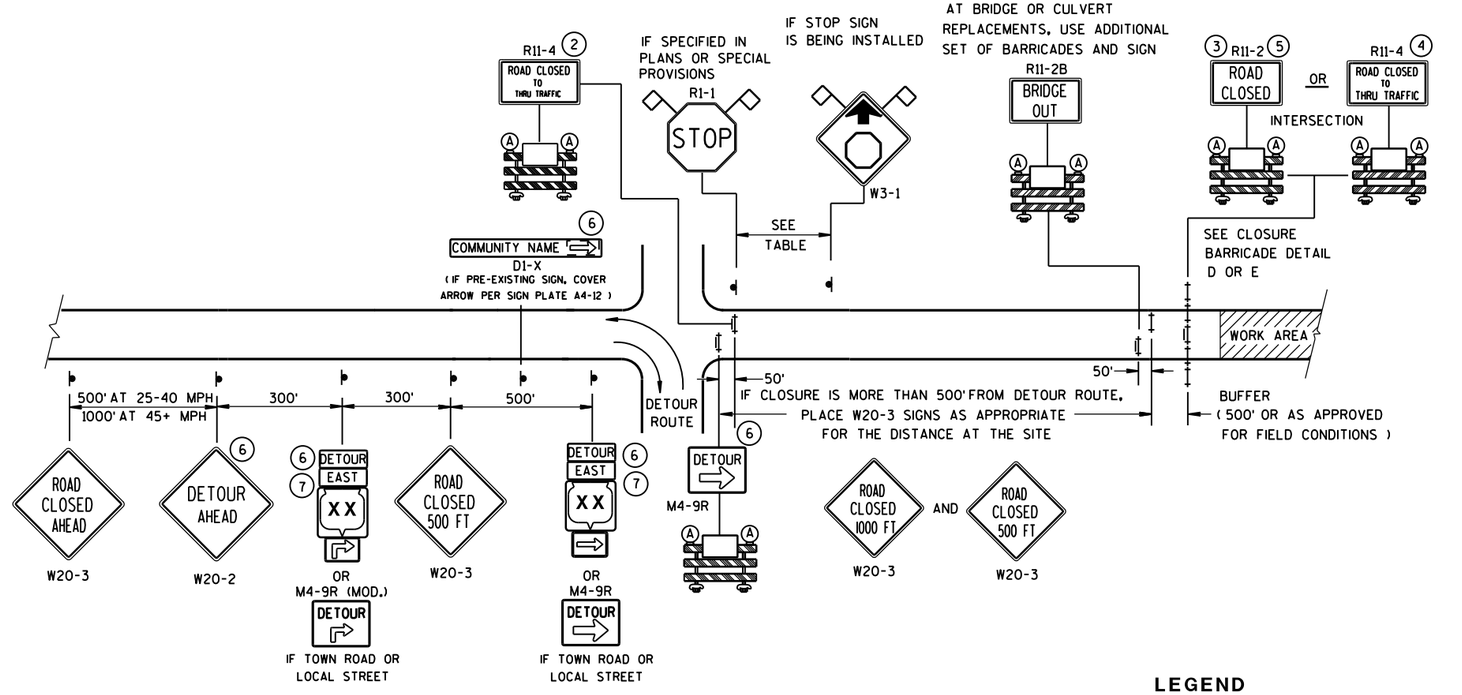
6

S.D.D. 15 B 1-8b



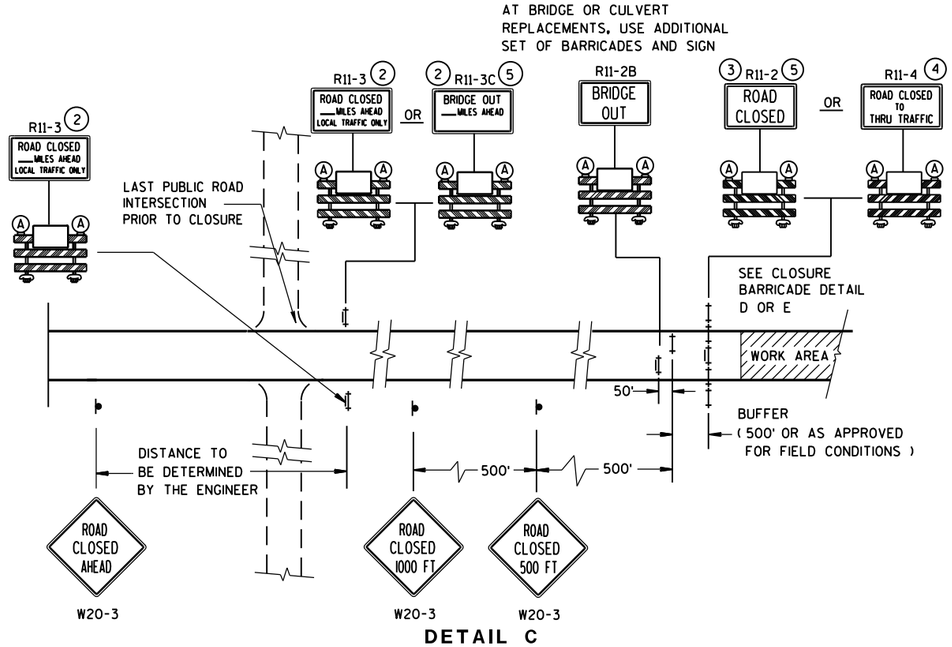

## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR

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




## DETAIL B
## MAINLINE CLOSURE WITH POSTED DETOUR

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




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

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

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

### LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

**BARRICADES AND SIGNS FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

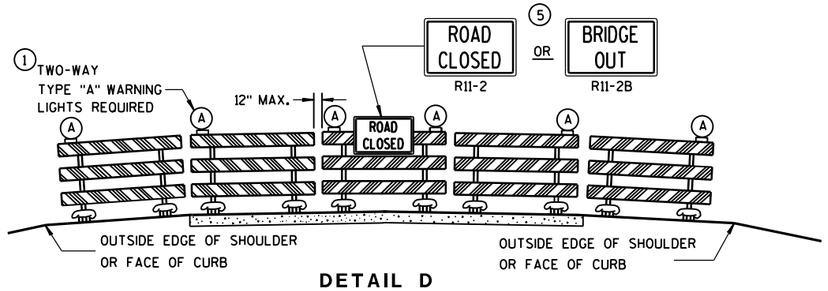


6

S.D.D. 15 C 2-5a

6

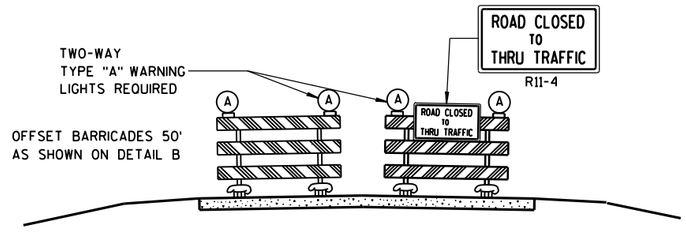
S.D.D. 15 C 2-5a




**DETAIL D**

## ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW




**DETAIL E**

## LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

## GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

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

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

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

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

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

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

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

**BARRICADES AND SIGNS FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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




6


S.D.D. 15 C 2-5b

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

## GENERAL NOTES

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

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

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

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

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

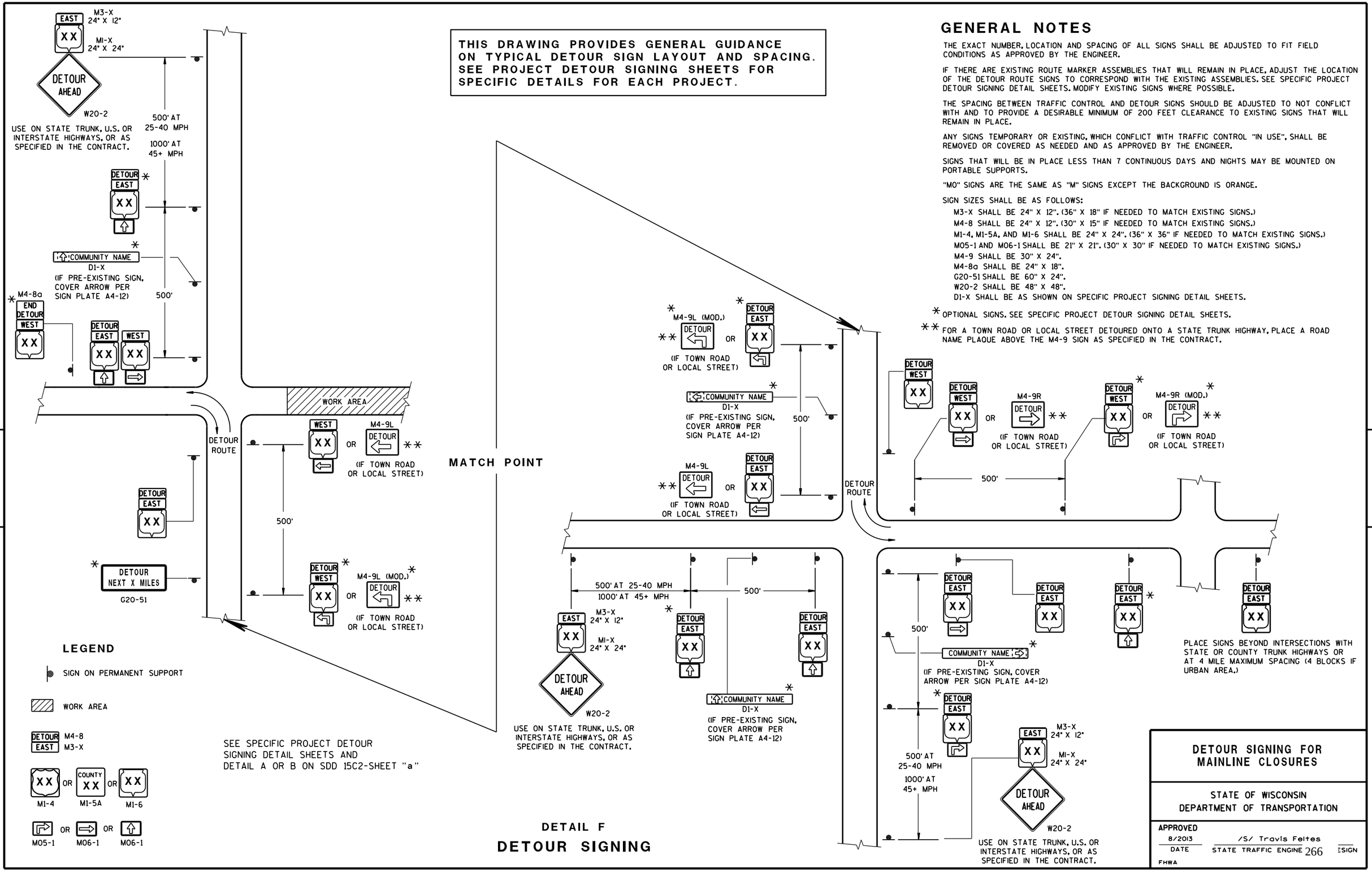
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

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

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

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




### LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8, M3-X
- XX OR COUNTY XX OR XX — M1-4, M1-5A, M1-6
- M05-1 OR M06-1 OR M06-1

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

**DETAIL F**

**DETOUR SIGNING**

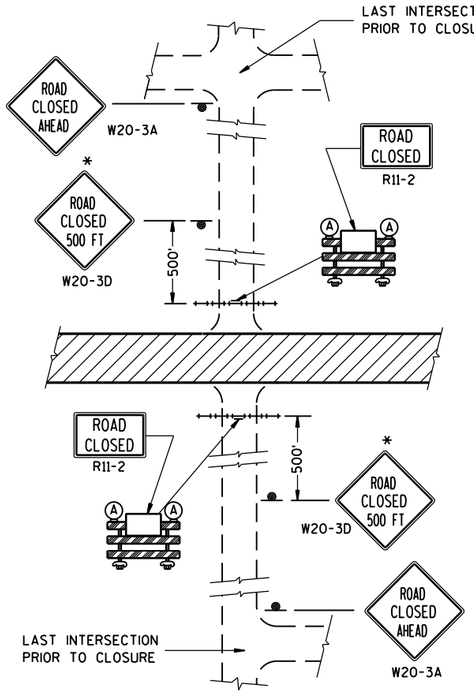
**DETOUR SIGNING FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

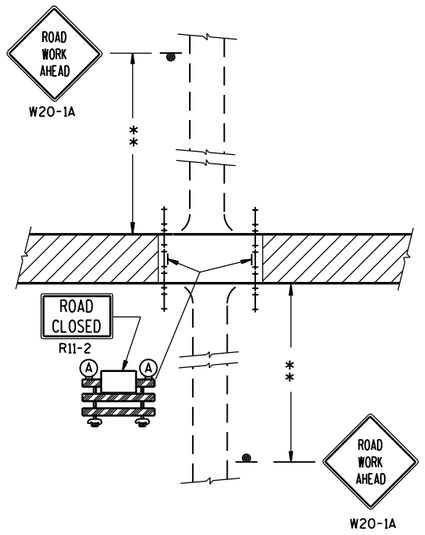


S.D.D. 15 C 2-5c



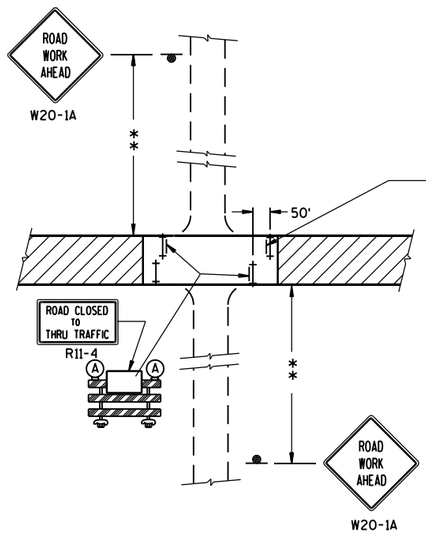

**DETAIL 1**

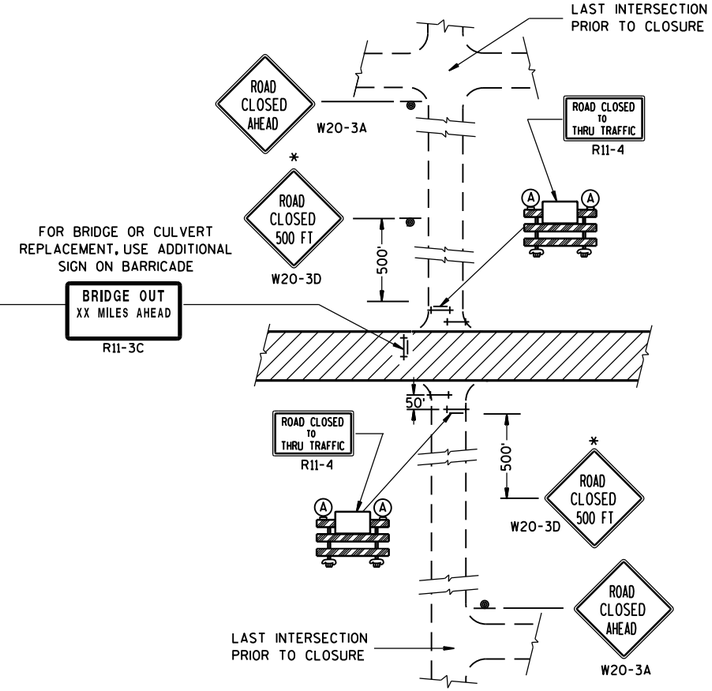
(NO ACCESS TO PROJECT)




**DETAIL 2**

(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).




**DETAIL 3**

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

**DETAIL 4**

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

## GENERAL NOTES

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

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

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

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.

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

**BARRICADES AND SIGNS FOR SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI... — FHWA

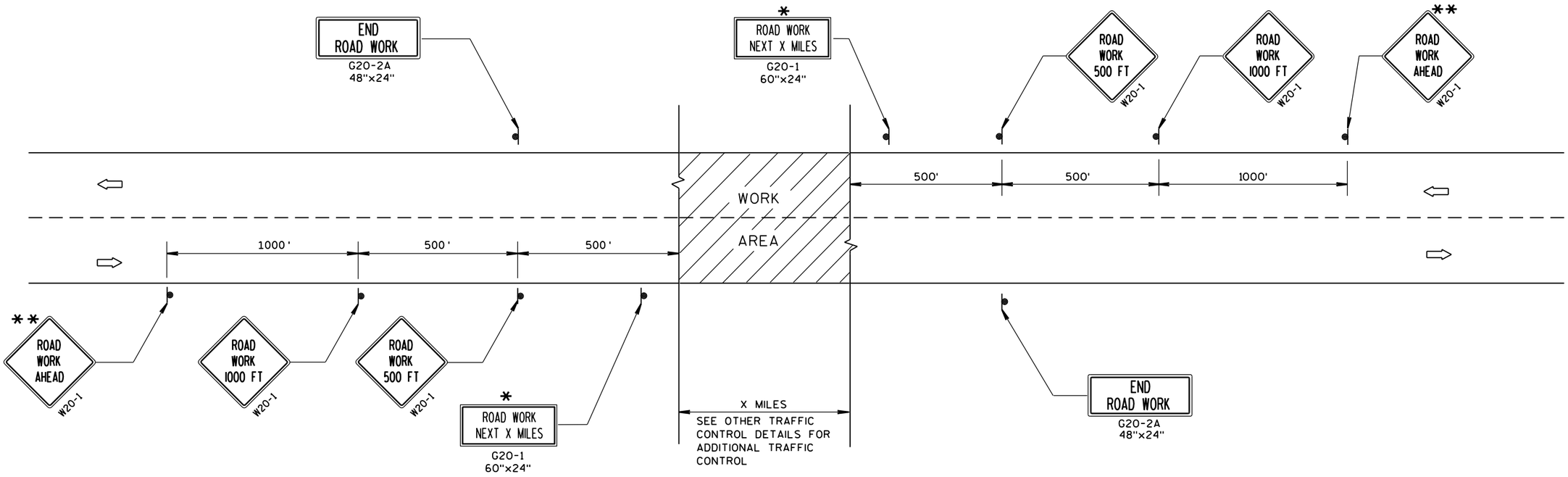


6

S.D.D. 15 C 3-3

6

S.D.D. 15 C 3-3






# 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.

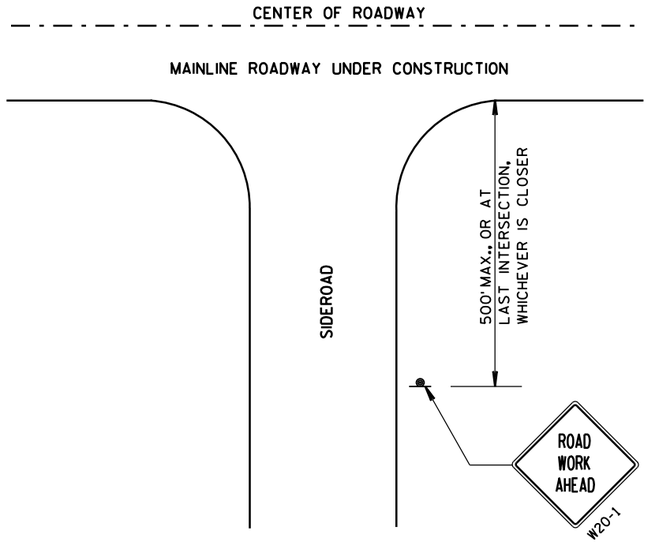
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA





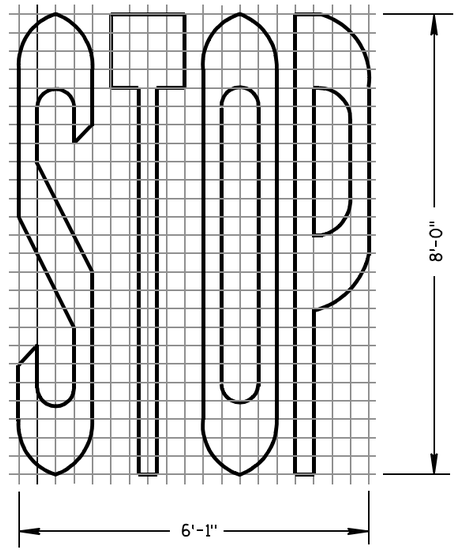
6

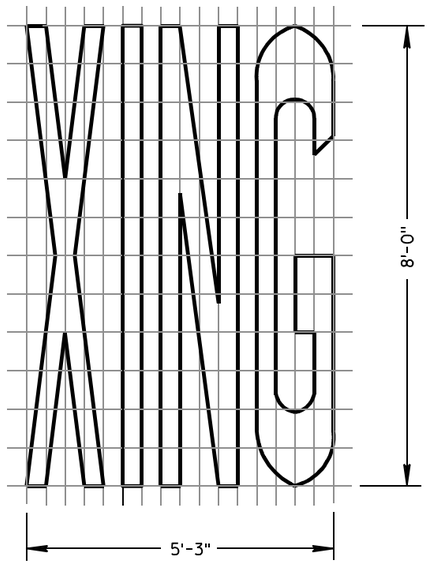
S.D.D. 15 C 4-2

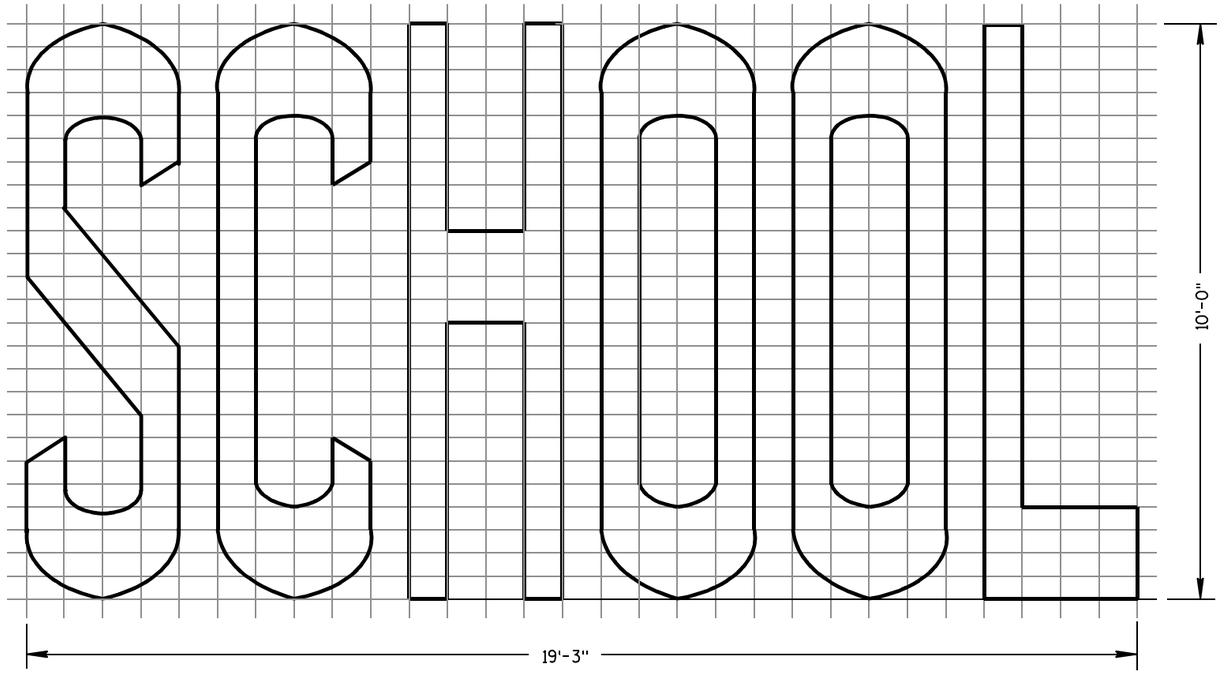
## GENERAL NOTES

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

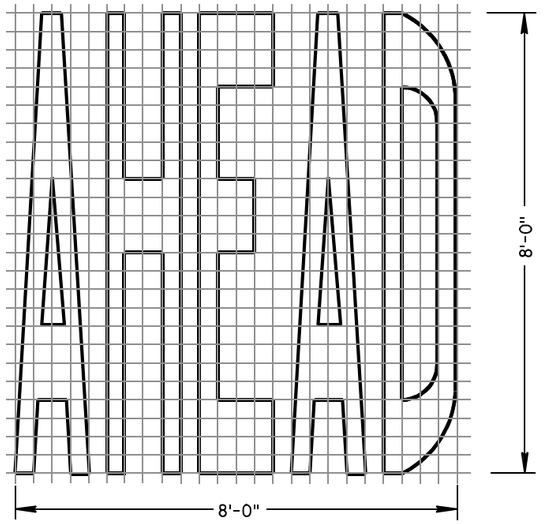
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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

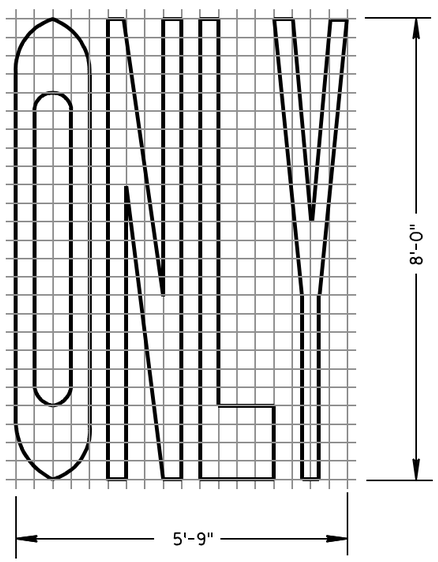


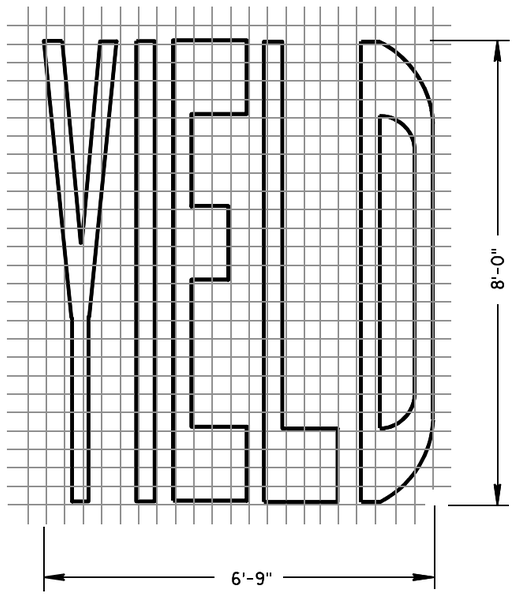



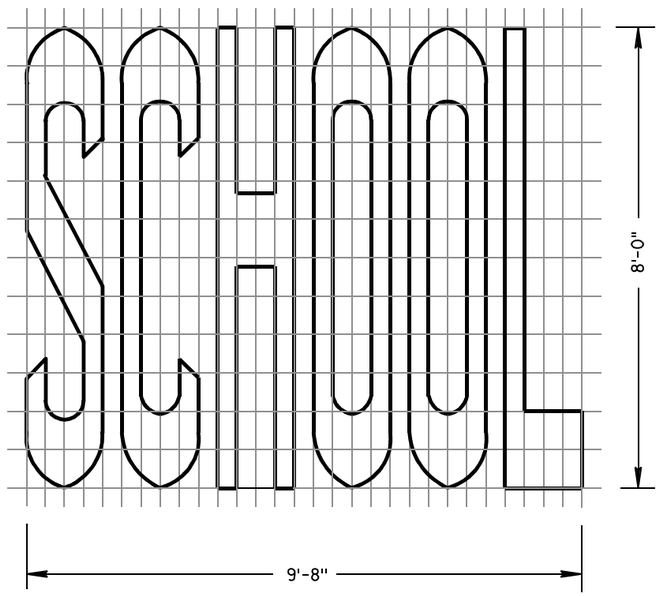




**TWO-LANE**




**SINGLE-LANE**

**PAVEMENT MARKING WORDS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE — /S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER — IGN

FHWA



S.D.D. 15 C 7-12b

6

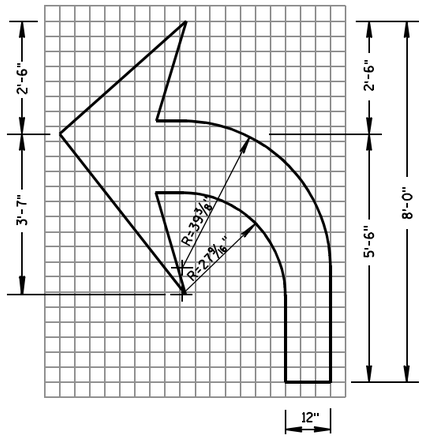
S.D.D. 15 C 7-12b

6

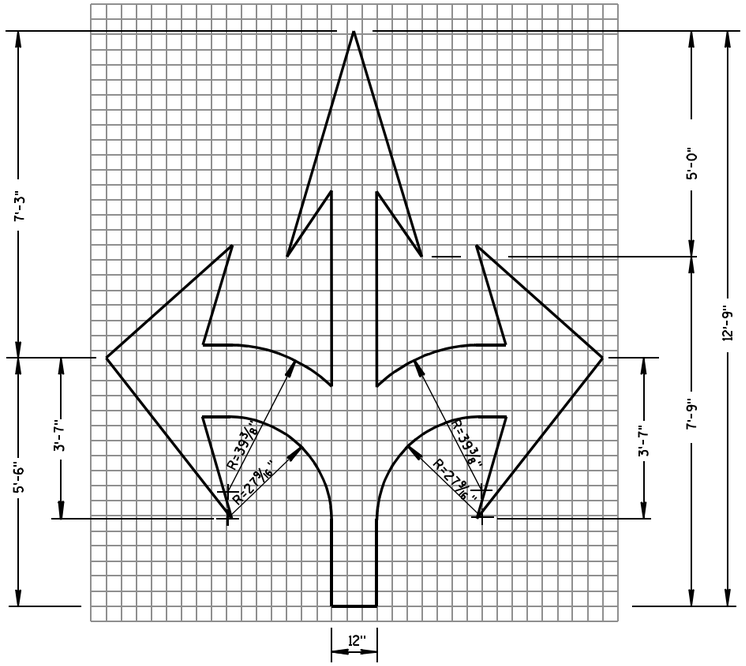
## GENERAL NOTES

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

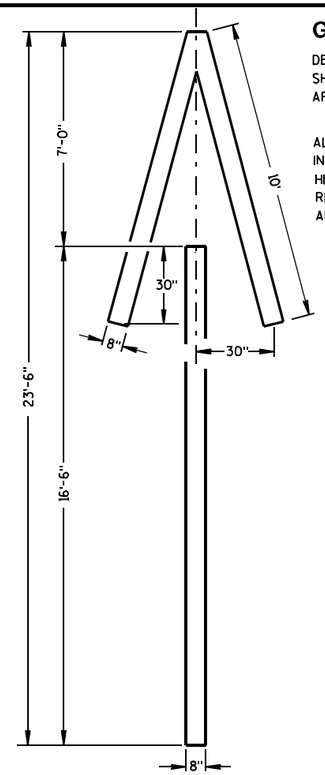
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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



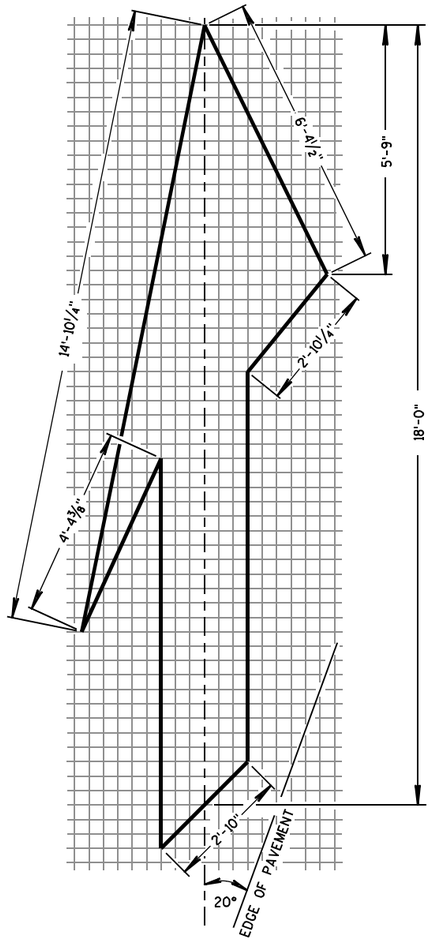

TYPE 2



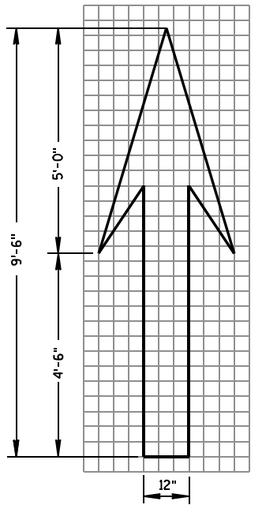

TYPE 6



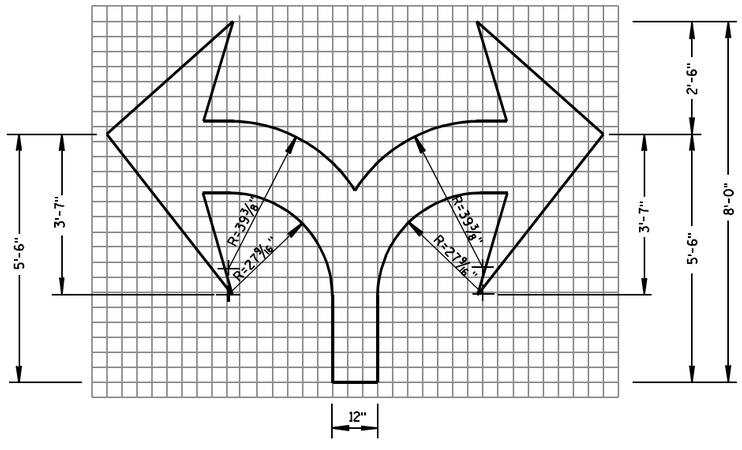

TYPE 4



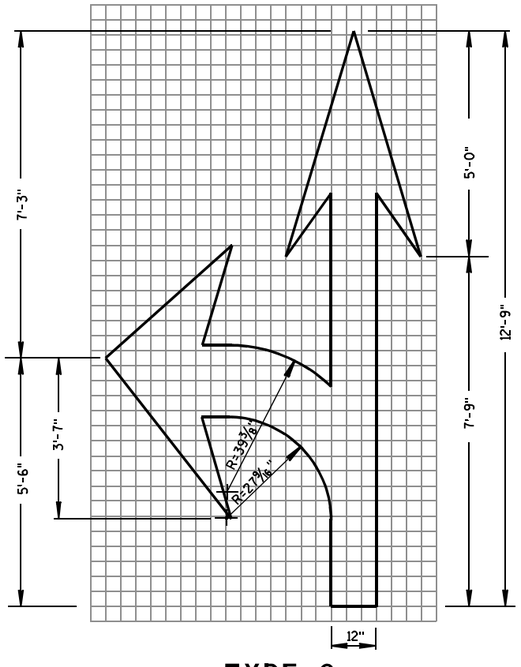

TYPE 5 LANE DROP ARROW




TYPE 1




TYPE 7




TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nathaam — STATE TRAFFIC ENGINEER

FHWA

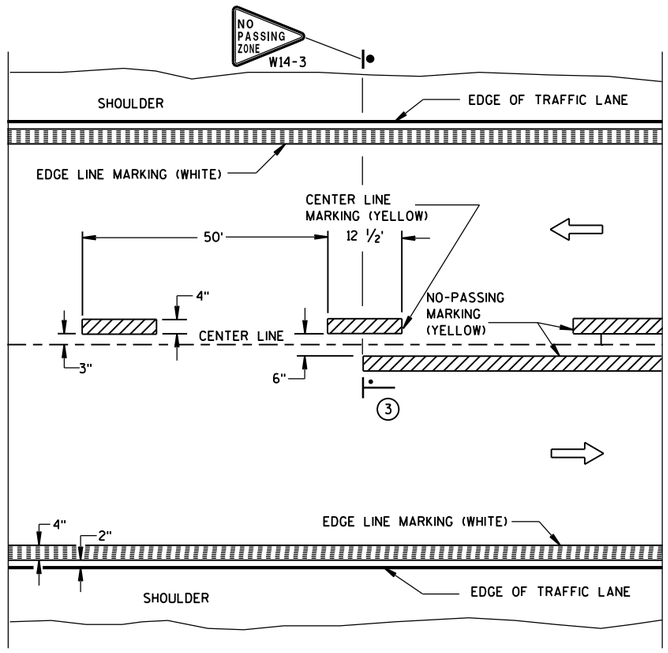


6

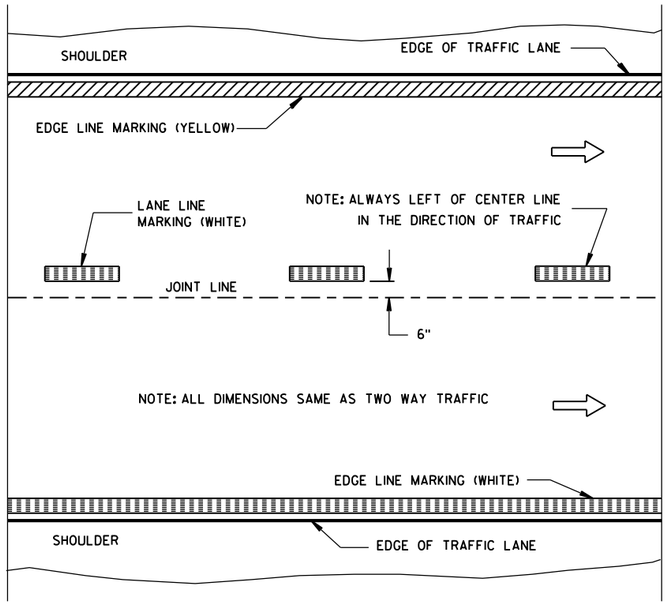
S.D.D. 15 C 7-12c

6

S.D.D. 15 C 7-12c

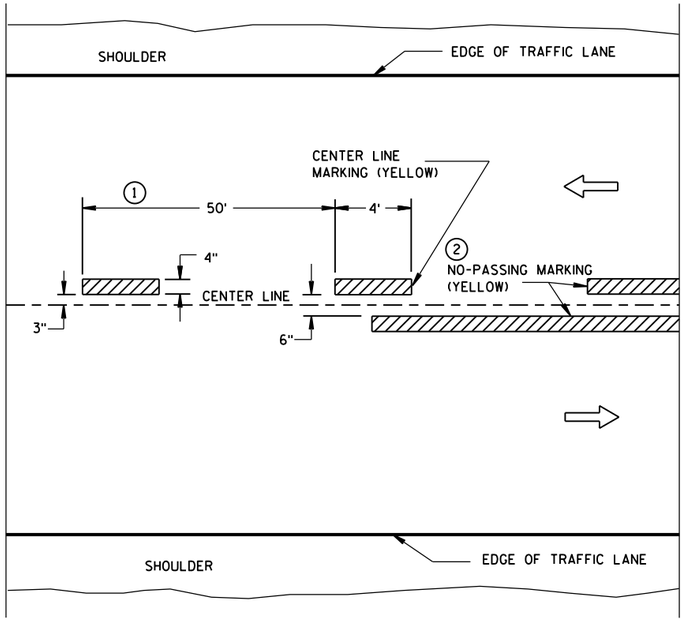



TWO WAY TRAFFIC

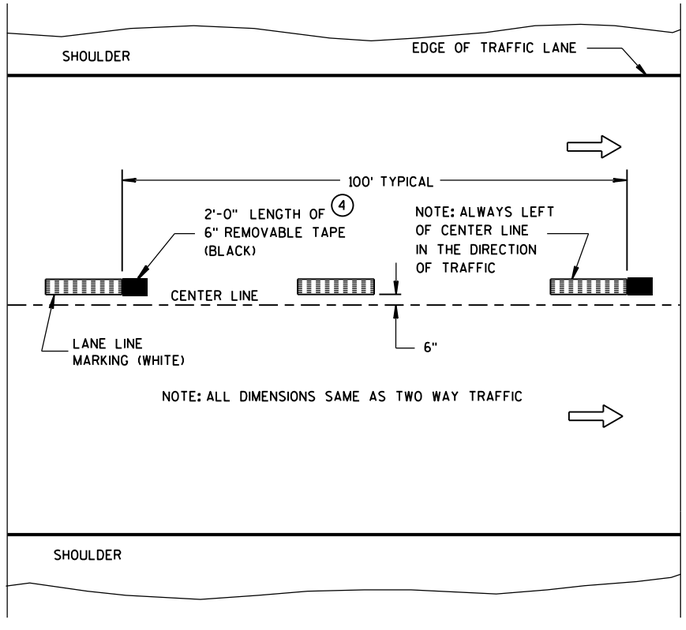



ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING




TWO WAY TRAFFIC




ONE WAY TRAFFIC

## TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

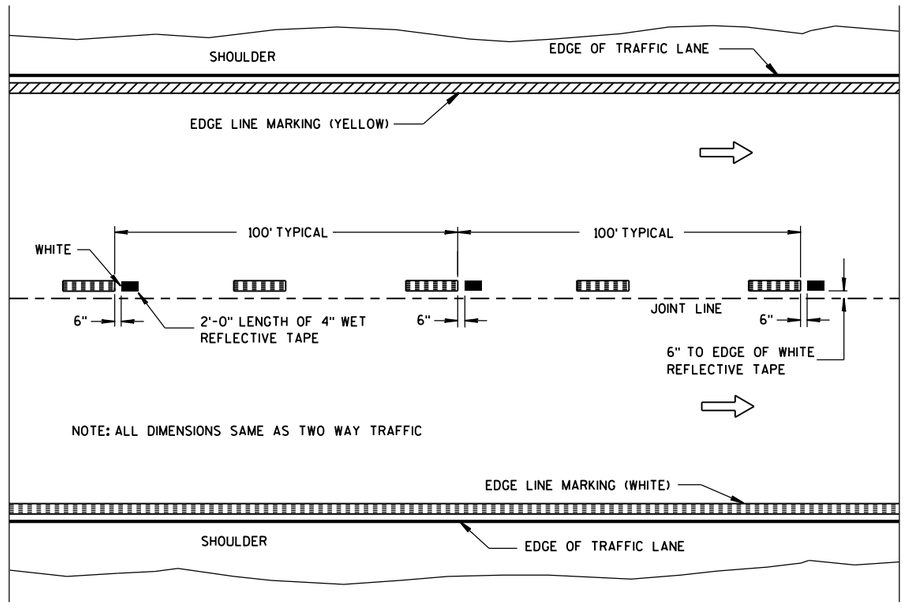
## GENERAL NOTES

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

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

## NOTE

ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL




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

**LEGEND**

"T" MARKING

POST MOUNTED SIGN

**PAVEMENT MARKING (MAINLINE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

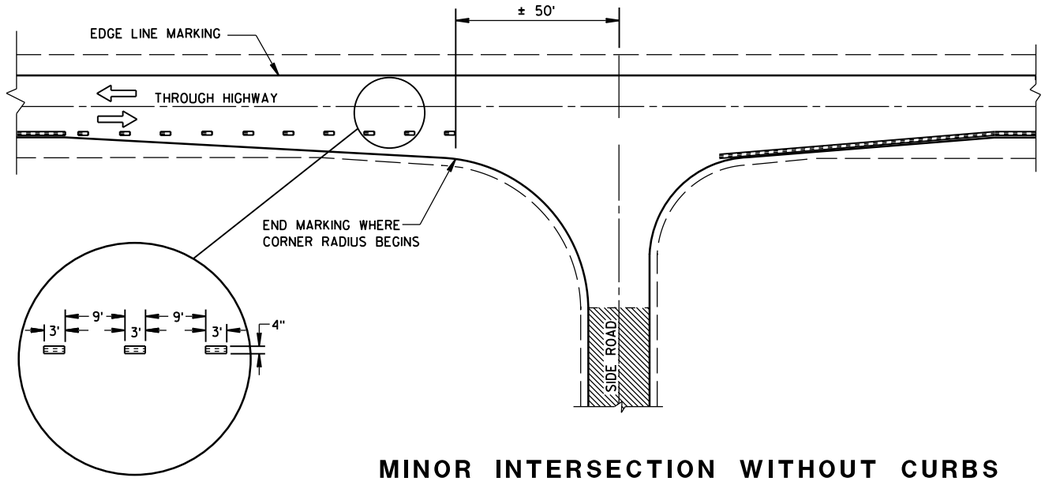


6

S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a




## MINOR INTERSECTION WITHOUT CURBS

## 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.

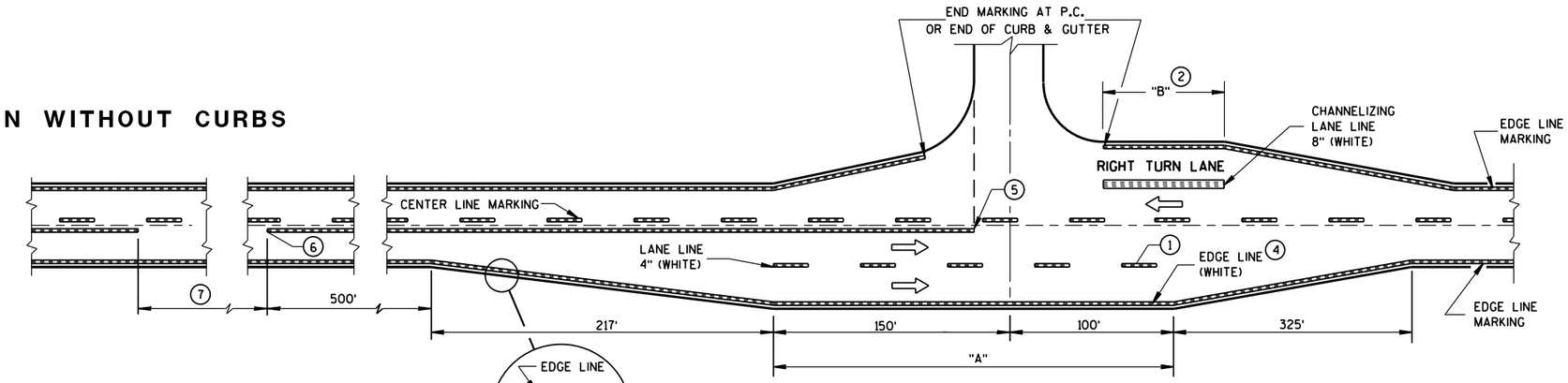
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL

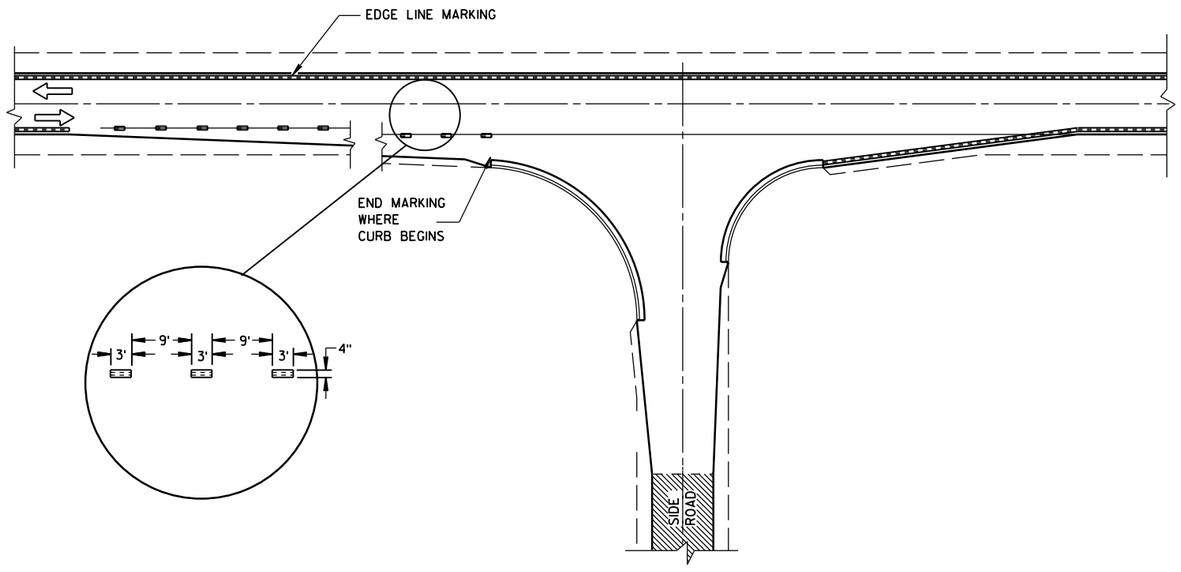
(7)

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



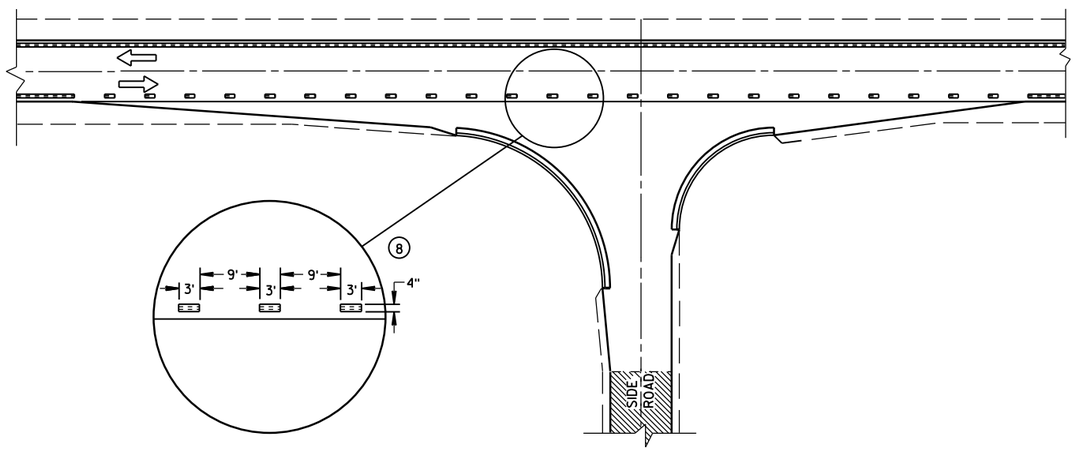

## MAJOR INTERSECTIONS

(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)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

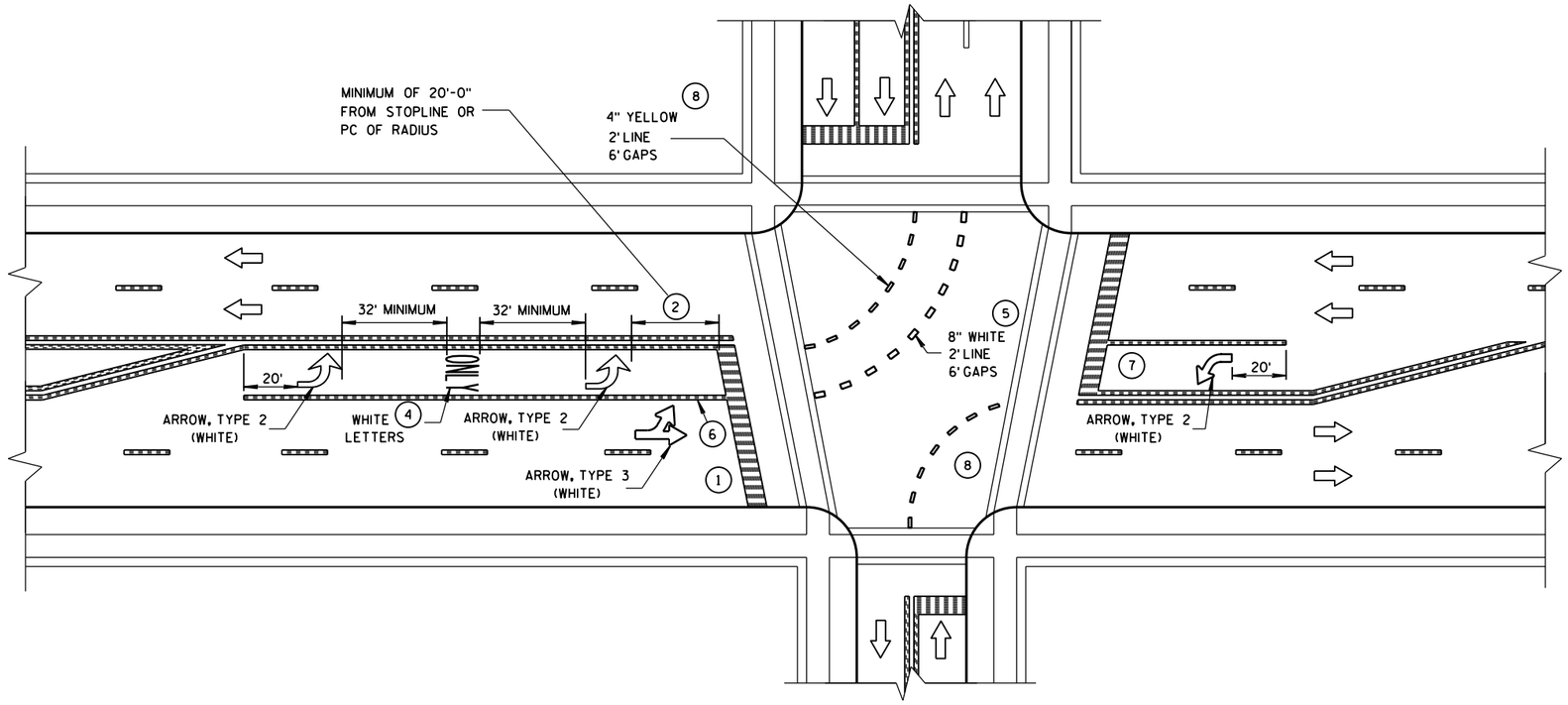


6

S.D.D. 15 C 8-16b

6

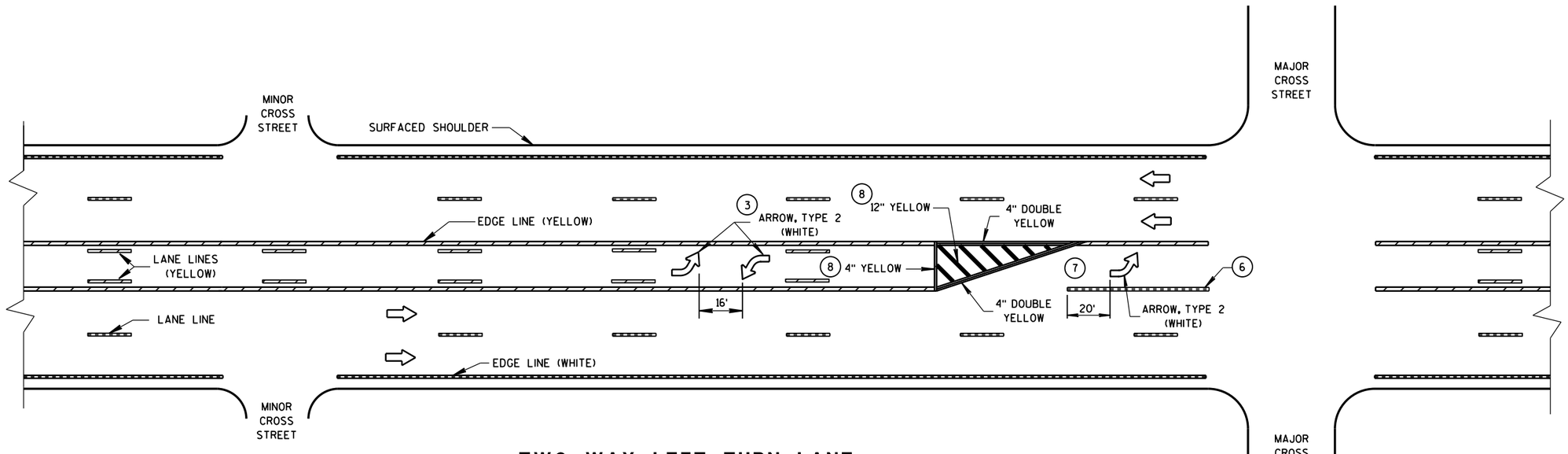
S.D.D. 15 C 8-16b




## GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL ( ⇨ )
SHOWS DIRECTION OF TRAVEL




## TWO WAY LEFT TURN LANE

**PAVEMENT MARKING (LEFT TURN LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

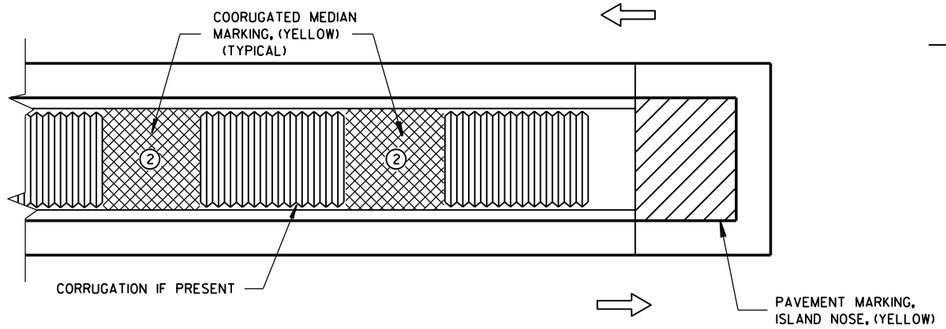


6

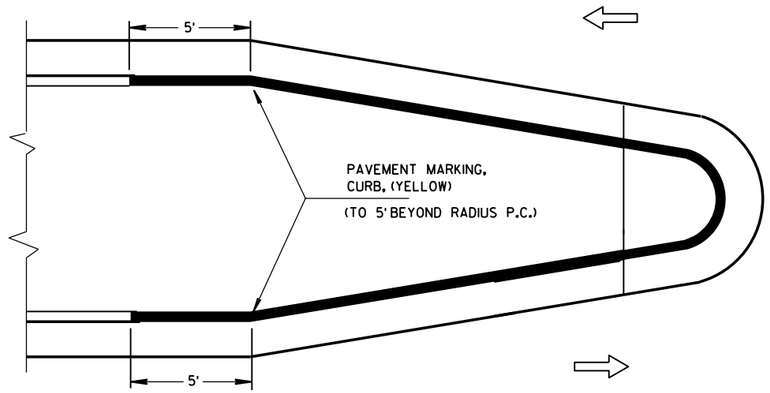
S.D.D. 15 C 8-16e

6

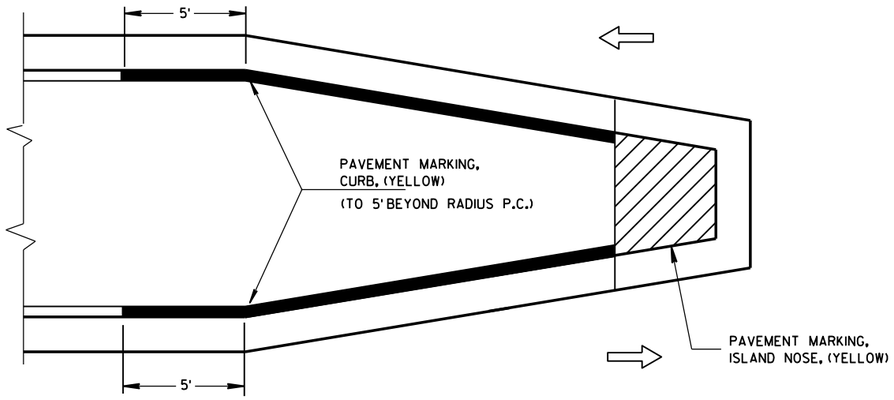
S.D.D. 15 C 8-16e




MEDIAN ISLAND WITH SQUARE BLUNT NOSE

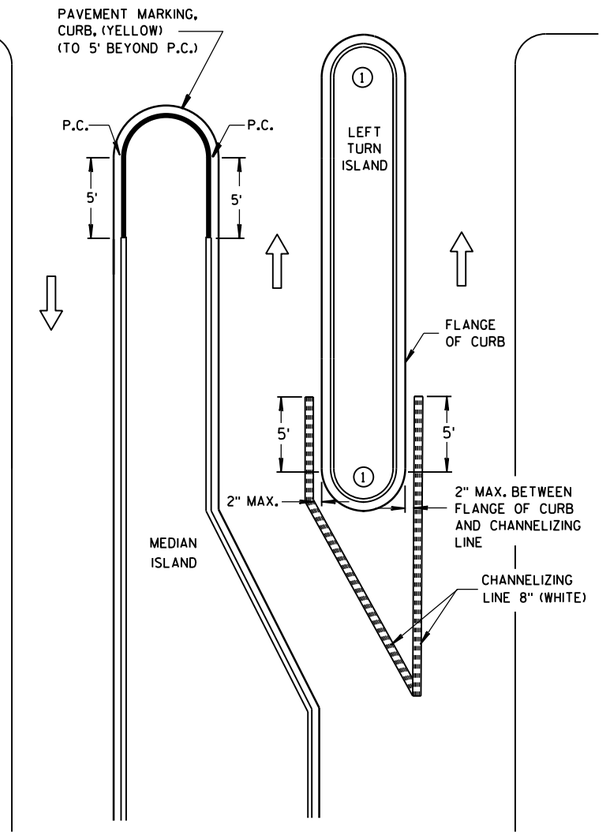



MEDIAN ISLAND WITH ROUND BLUNT NOSE




MEDIAN ISLAND WITH SLOPED NOSE

## TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

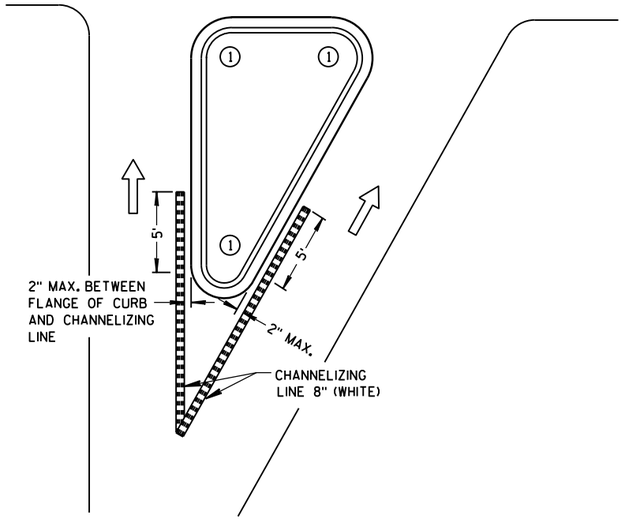



LEFT TURN & MEDIAN ISLAND

## GENERAL NOTES

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

2. 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 TRANSPOI

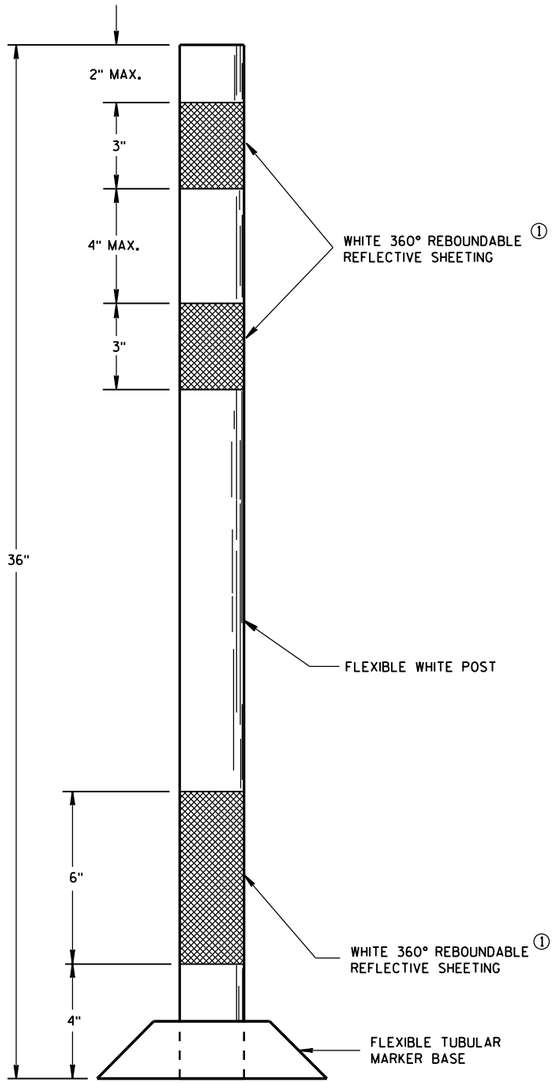


6

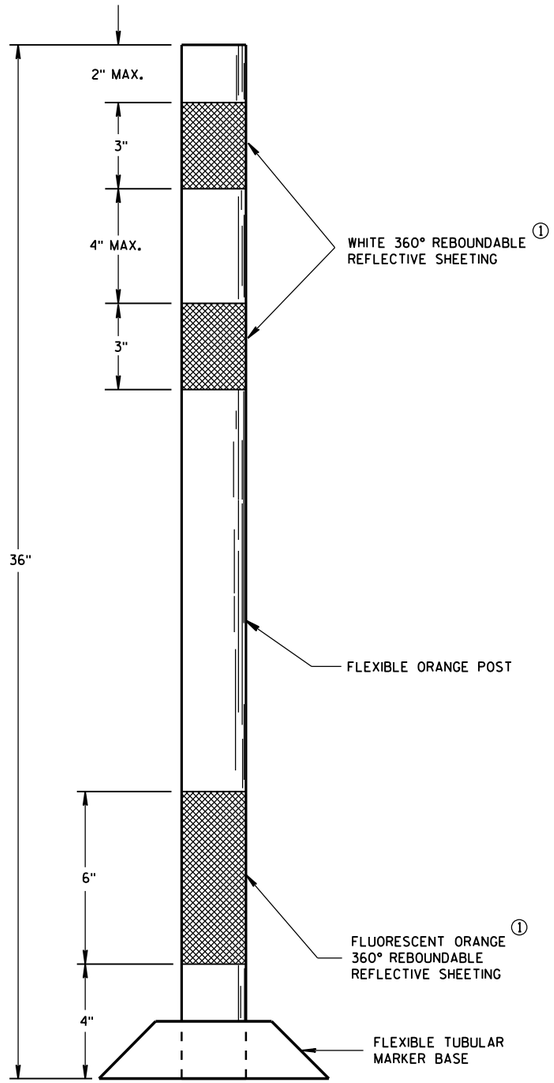
S.D.D. 15 C 8-16f

6

S.D.D. 15 C 8-16f




**FLEXIBLE**
**TUBULAR MARKER POST**
**PERMANENT CROSSOVER**




**FLEXIBLE**
**TUBULAR MARKER POST**
**WORK ZONE**

## GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

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

FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-16-2015
DATE
FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON
SAFETY ENGINE




6


S.D.D. 15 C 11-6

## LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

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

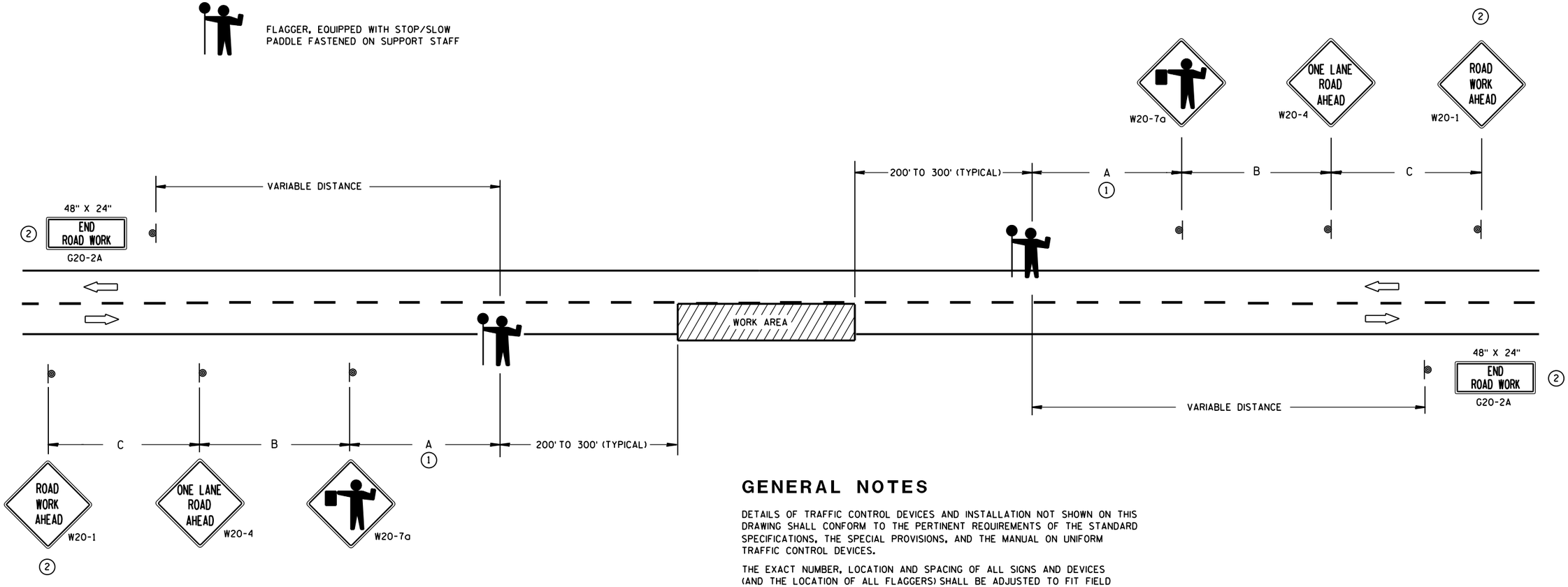
## SIGN SPACING TABLE

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




W3-4

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.




(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.

## 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.

# TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

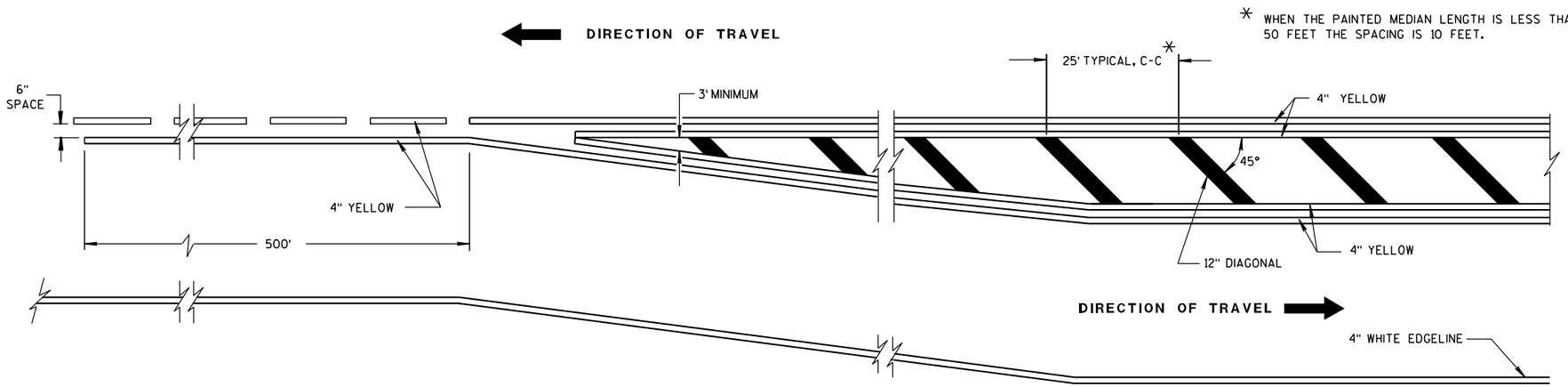


6

S.D.D. 15 C 12-4

6

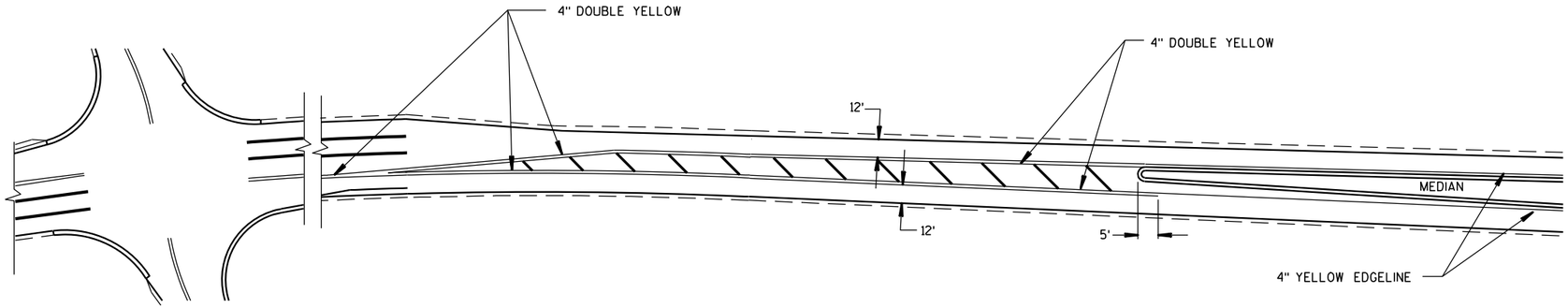
S.D.D. 15 C 12-4



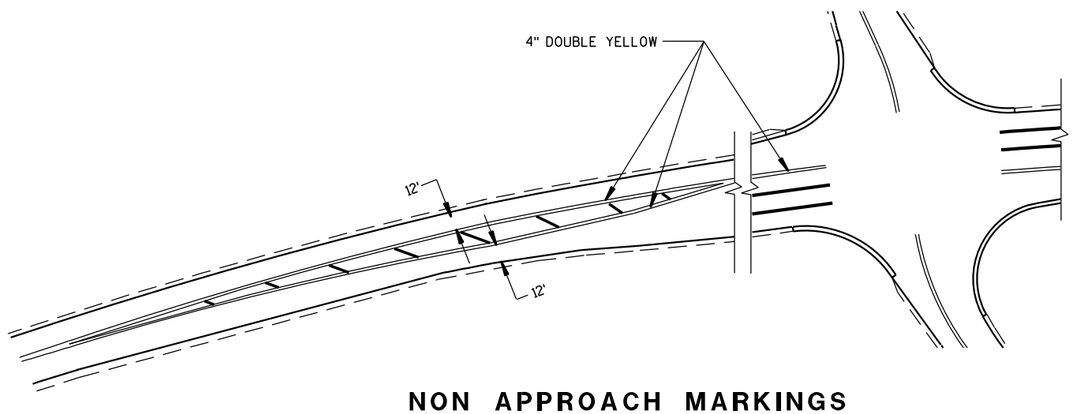

## MEDIAN ISLAND DETAIL

## GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.




## APPROACH MARKINGS FOR OTHER MEDIAN TYPES




## NON APPROACH MARKINGS

6

6

S.D.D. 15 C 18-3

S.D.D. 15 C 18-3

**MEDIAN ISLAND MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-5-09 DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER 277 IGN

FHWA

## GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

**A** DISTANCE DEPENDENT ON SPEED (SEE TABLE)

(1) WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12

(2) OPTIONAL - USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

### SYMBOLS

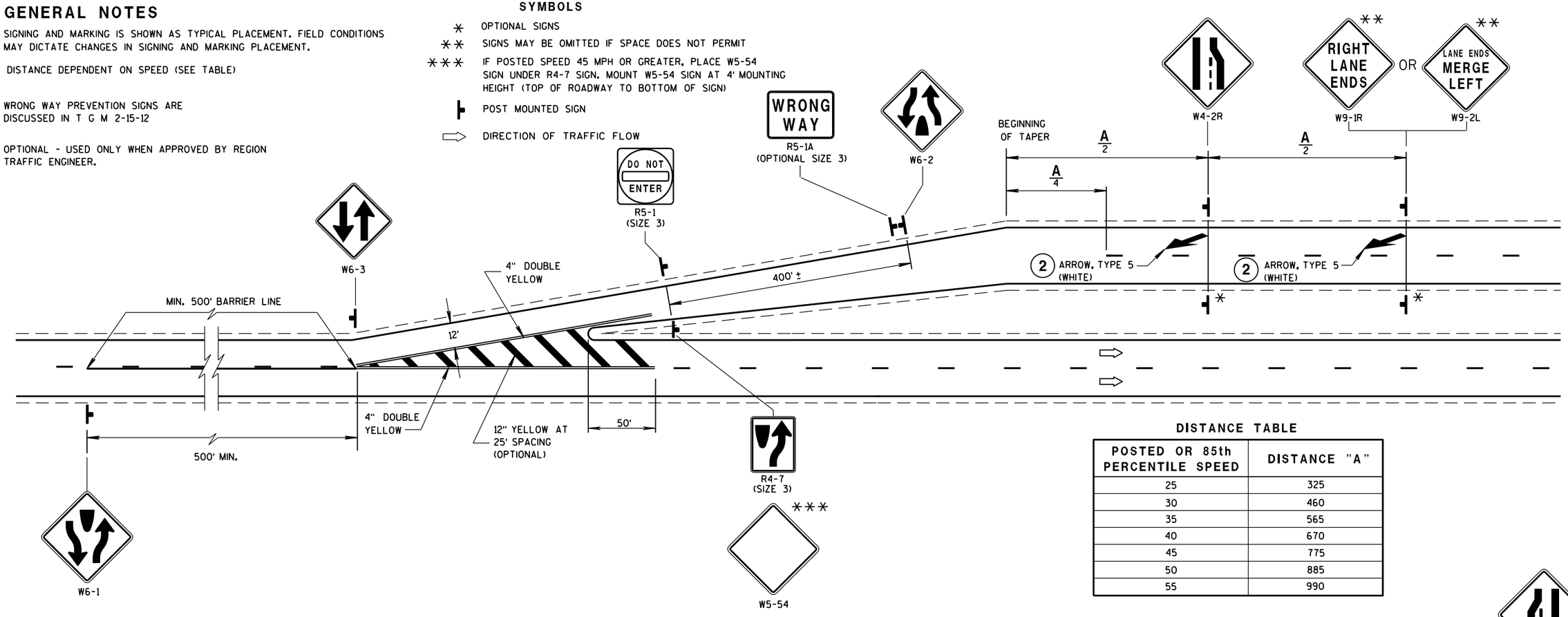
* OPTIONAL SIGNS

** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT

*** IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW




### DISTANCE TABLE

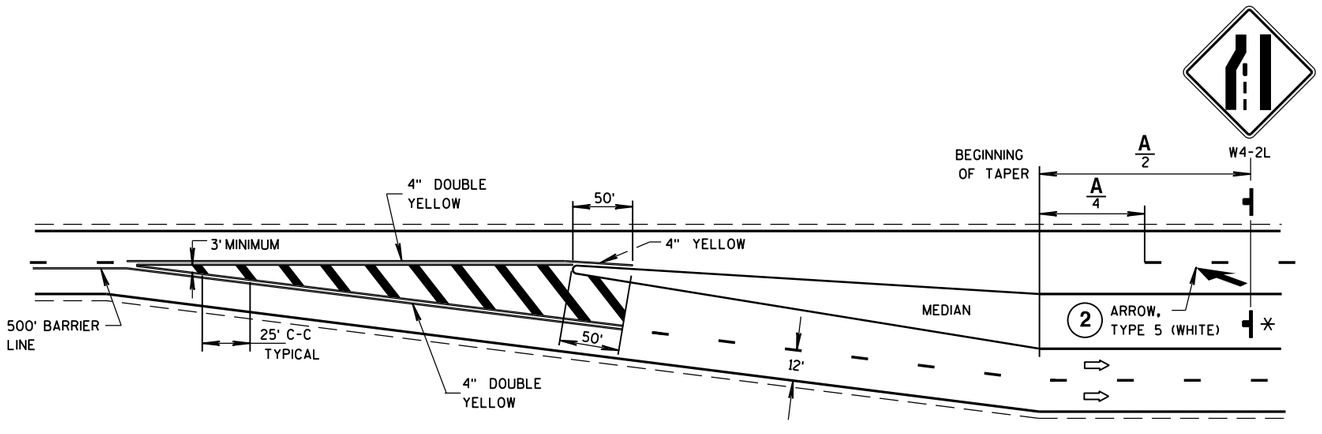
| POSTED OR 85th PERCENTILE SPEED | DISTANCE "A" |
|---|---|
| 25 | 325 |
| 30 | 460 |
| 35 | 565 |
| 40 | 670 |
| 45 | 775 |
| 50 | 885 |
| 55 | 990 |

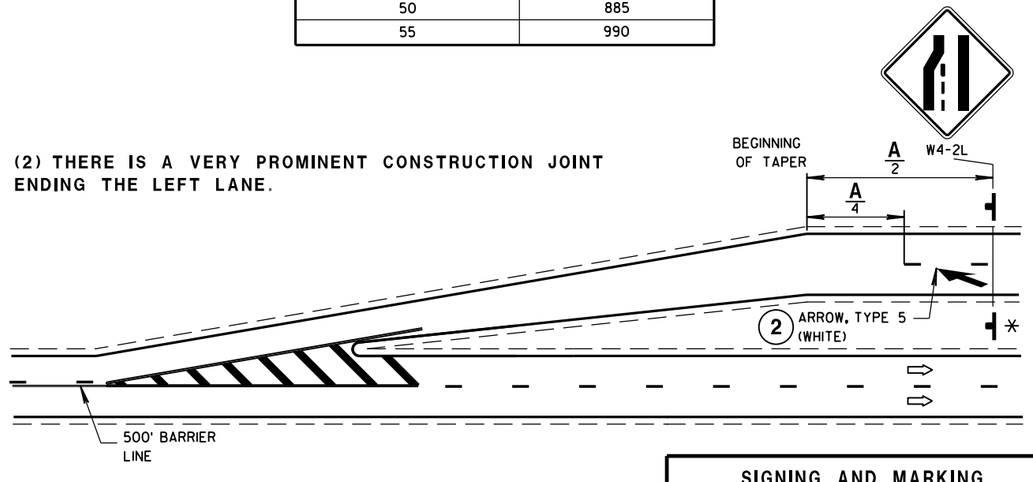
**USE W4-2L IF :**

**(1) THE LEFT LANE IS PUSHED TO THE RIGHT:**

OR

**(2) THERE IS A VERY PROMINENT CONSTRUCTION JOINT ENDING THE LEFT LANE.**




**SIGNING AND MARKING**
**TWO LANE TO FOUR LANE**
**DIVIDED TRANSITIONS**

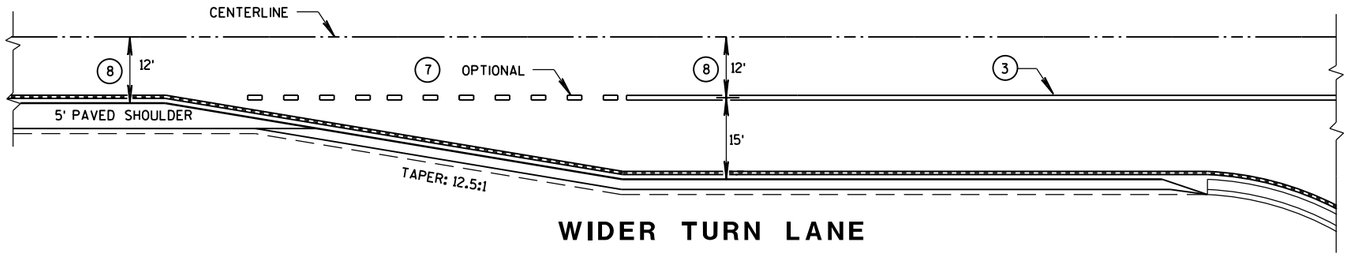
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

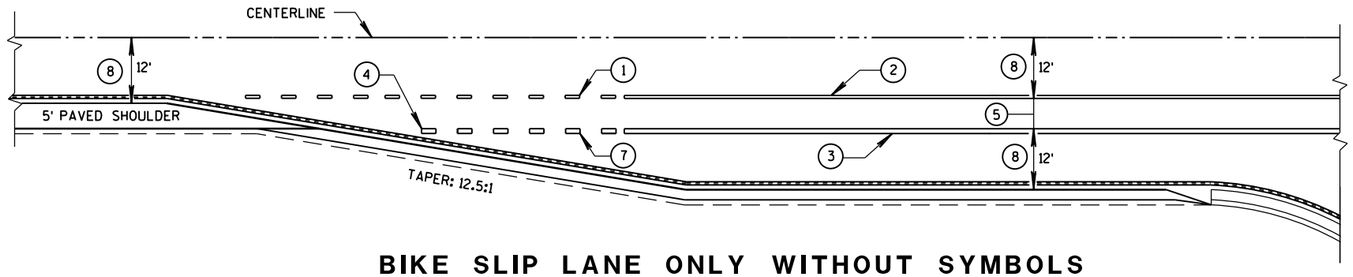



6

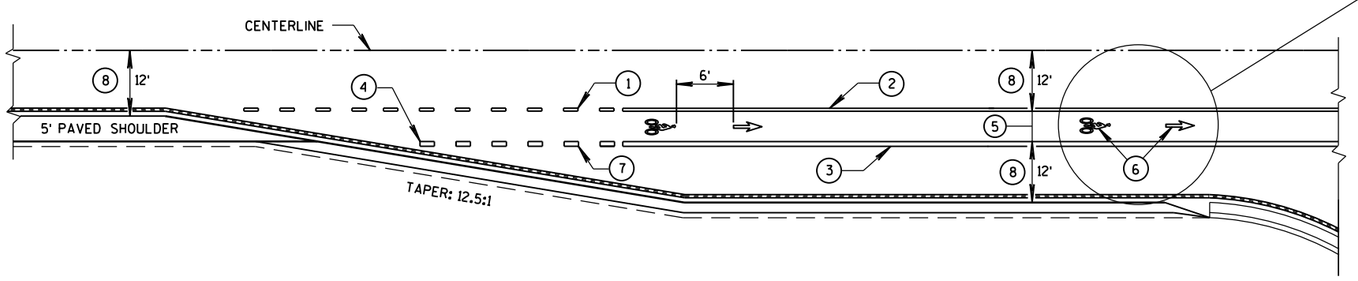

S.D.D. 15 C 21-6



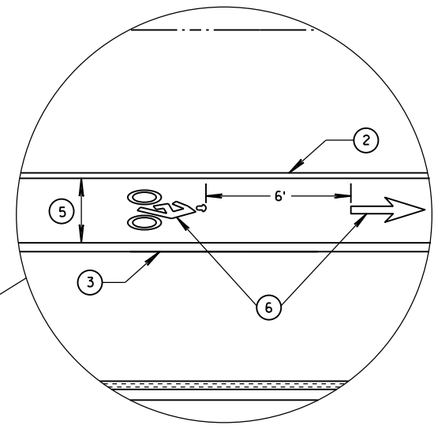

WIDER TURN LANE




BIKE SLIP LANE ONLY WITHOUT SYMBOLS




BIKE LANE WITH SYMBOLS




## GENERAL NOTES

1. 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.
2. 4-INCH, WHITE.
3. 8-INCH, WHITE.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMMODATION FOR CONCRETE PAVEMENT IS 5' WIDE. BIKE ACCOMMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4', 5' AT ≥ 45 MPH.
6. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
7. 3' LINE, 9' GAP - 8-INCH WIDE, WHITE.
8. REFER TO CONTRACT PLANS.

6

S.D.D. 15 C 29-3a

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

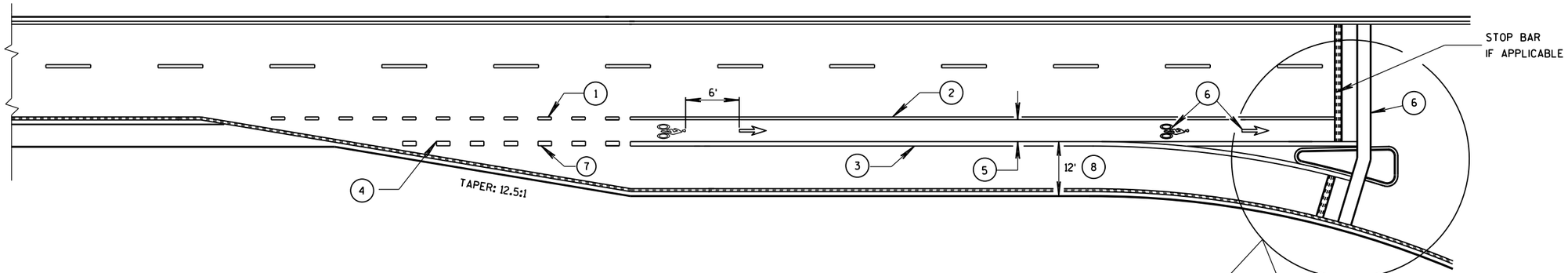


6

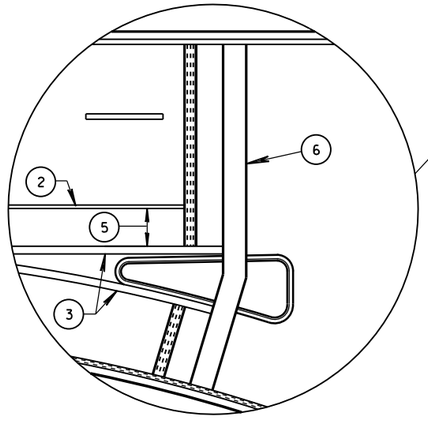
S.D.D. 15 C 29-3a

## GENERAL NOTES

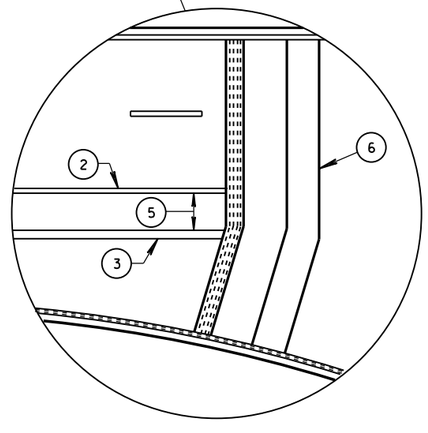
1. 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.
2. 4-INCH, WHITE.
3. 8-INCH, WHITE.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. 5' TYPICAL.
6. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
7. 3' LINE, 9' GAP - 8-INCH WIDE, WHITE.
8. REFER TO CONTRACT PLANS.




## BIKE LANE - 4-LANE DIVIDED WITH RIGHT TURN LANE




4 LANE DIVIDED WITH ISLAND




4 LANE DIVIDED WITHOUT ISLAND

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC E
FHWA

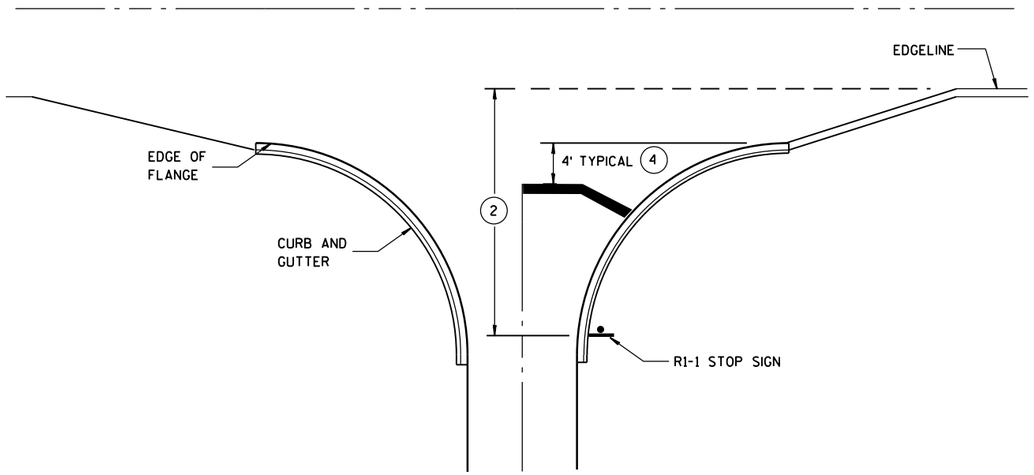


6

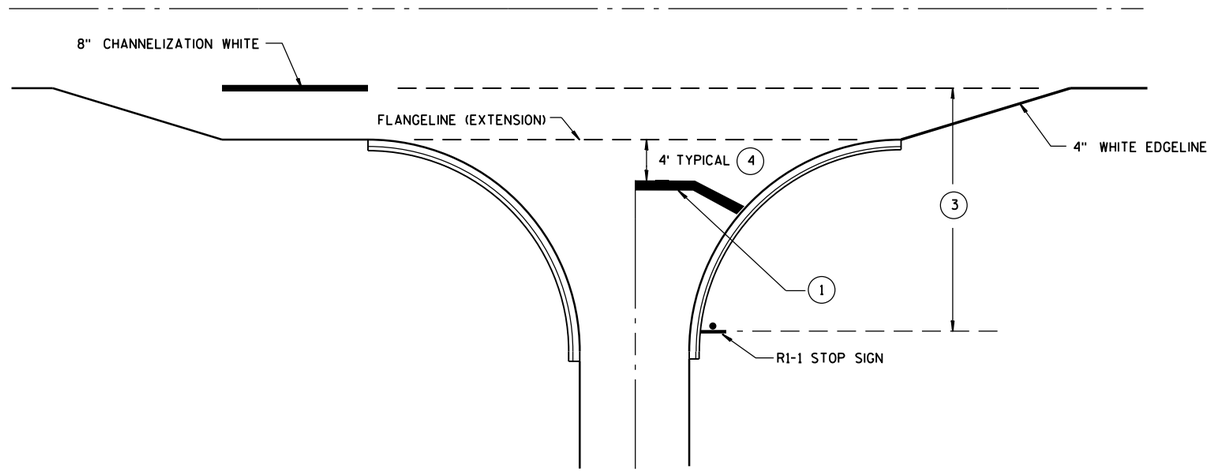
S.D.D. 15 C 29-3b

6

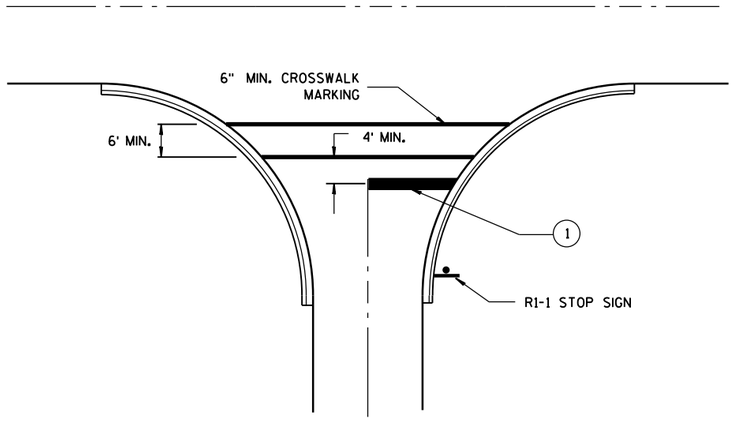
S.D.D. 15 C 29-3b



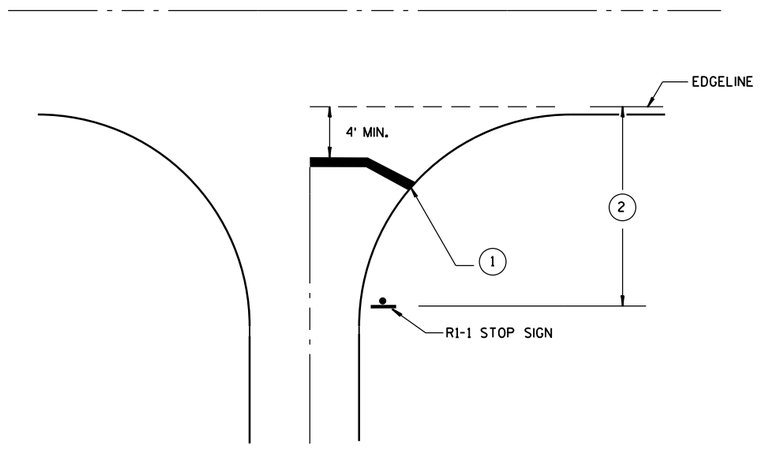

**TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER**




**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 EDGELINE 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 Feltes
STATE TRAFFIC E

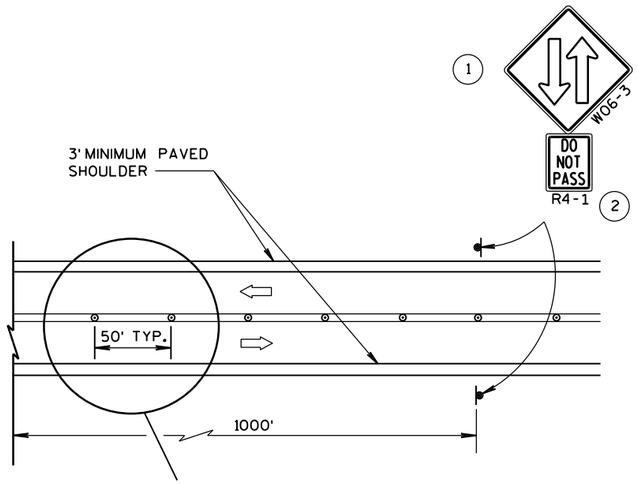
FHWA



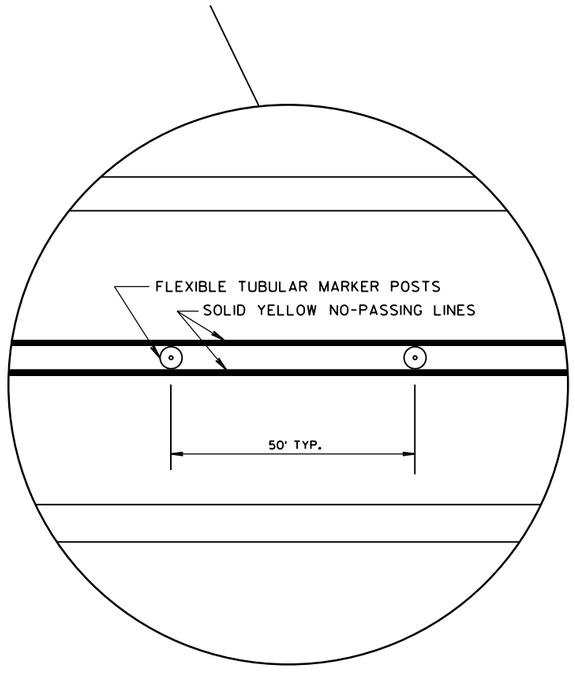
6



S.D.D. 15 C 33-1




## TWO LANE, TWO WAY OPERATION




### LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

## GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50-FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.




THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500 FEET BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

(2) CONVENTIONAL: 24"x30"
FREEWAY AND EXPRESSWAY: 36"x48"

**TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION**

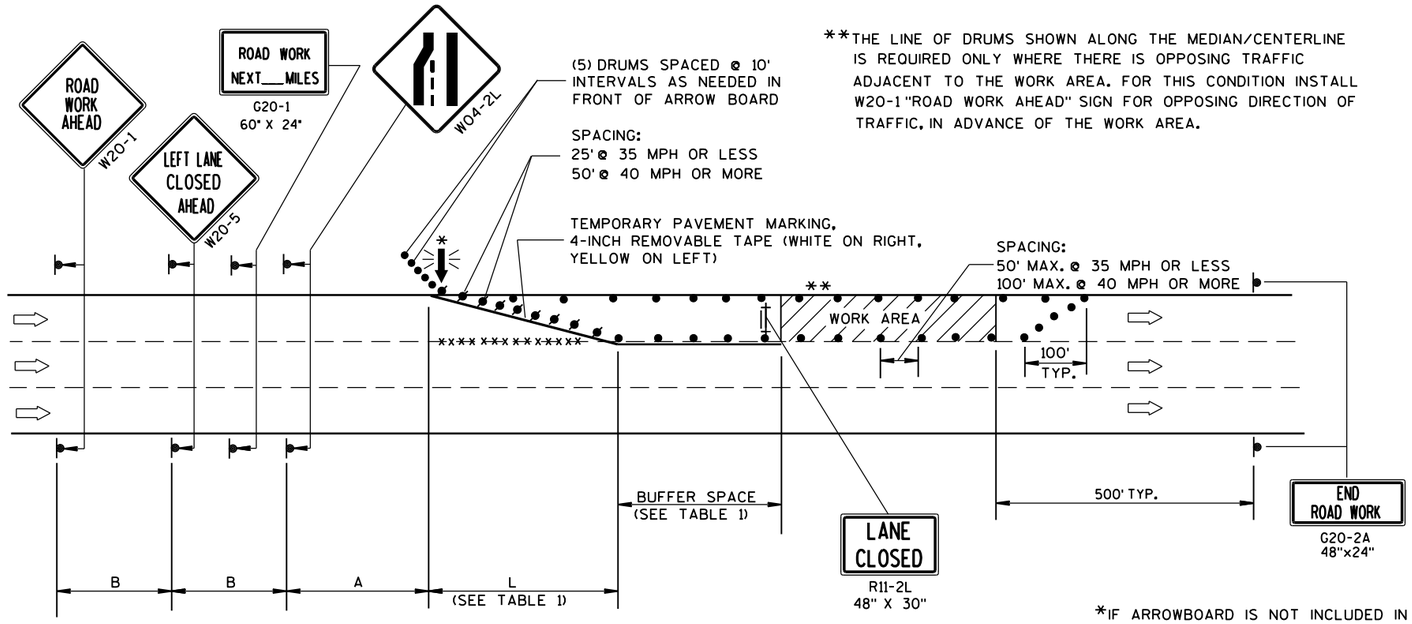
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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




6

S.D.D. 15 D 6-3




**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

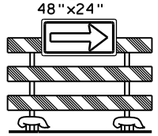


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

| 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

## 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.

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

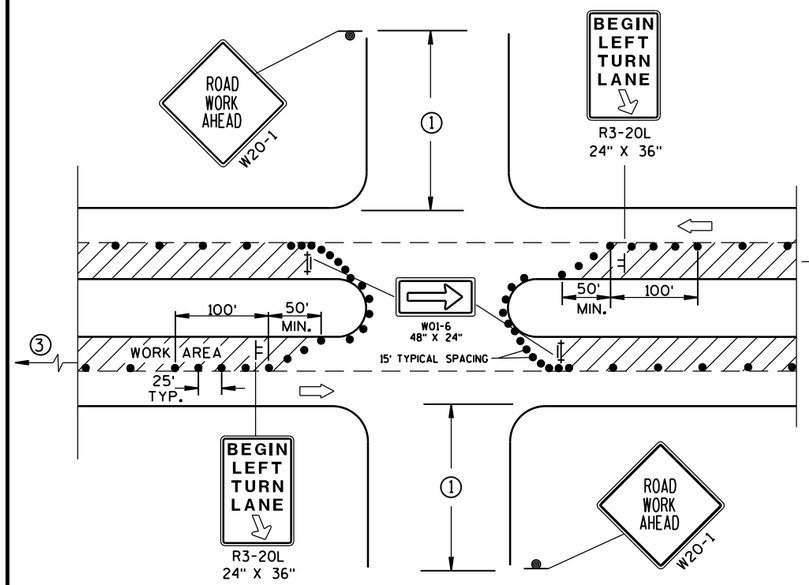
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA




6

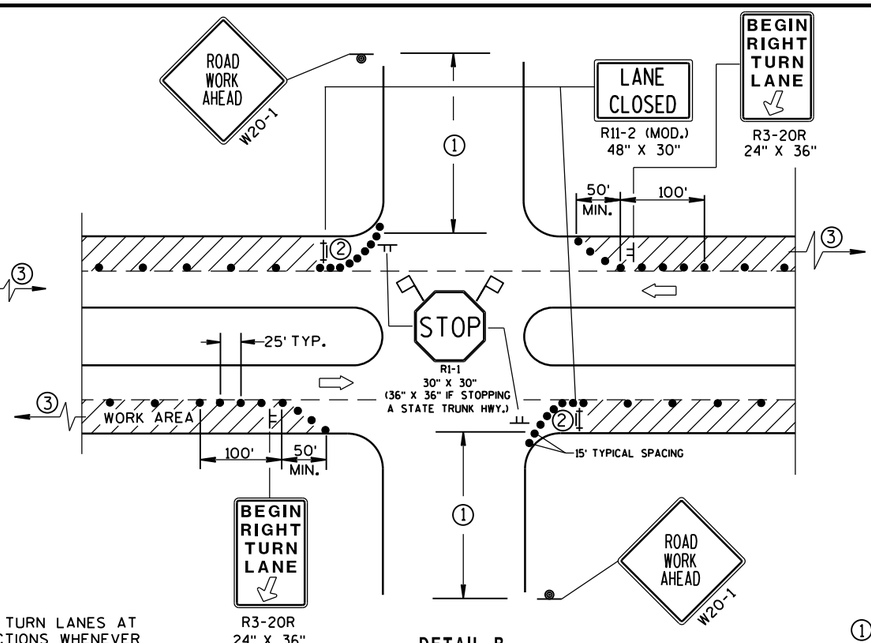

S.D.D. 15 D 20-3




DETAIL A

## FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.




DETAIL B

## FOR RIGHT LANE CLOSURE AT INTERSECTION

## 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.

THE SPACING BETWEEN 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.

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

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.

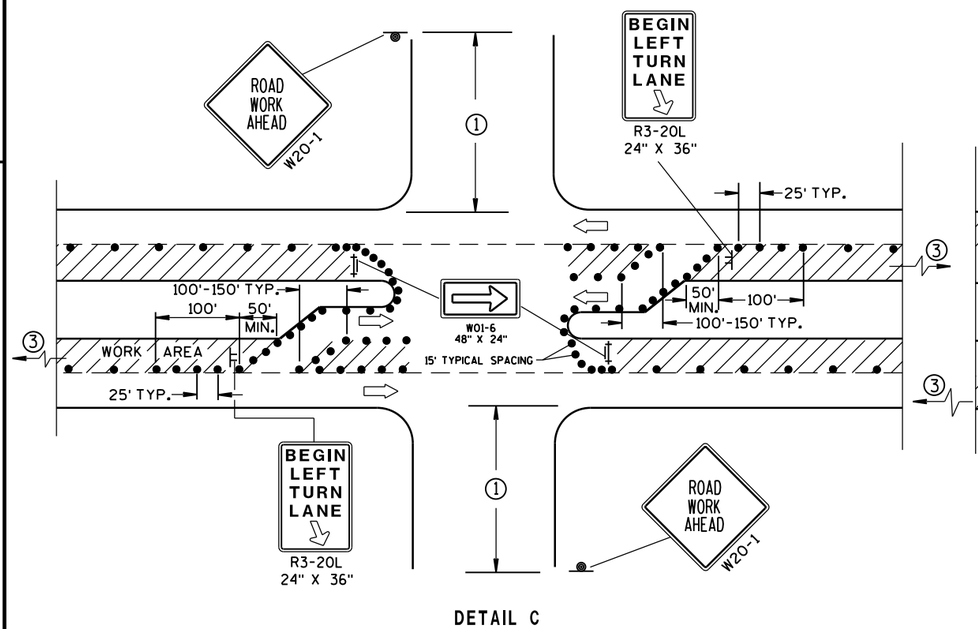
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

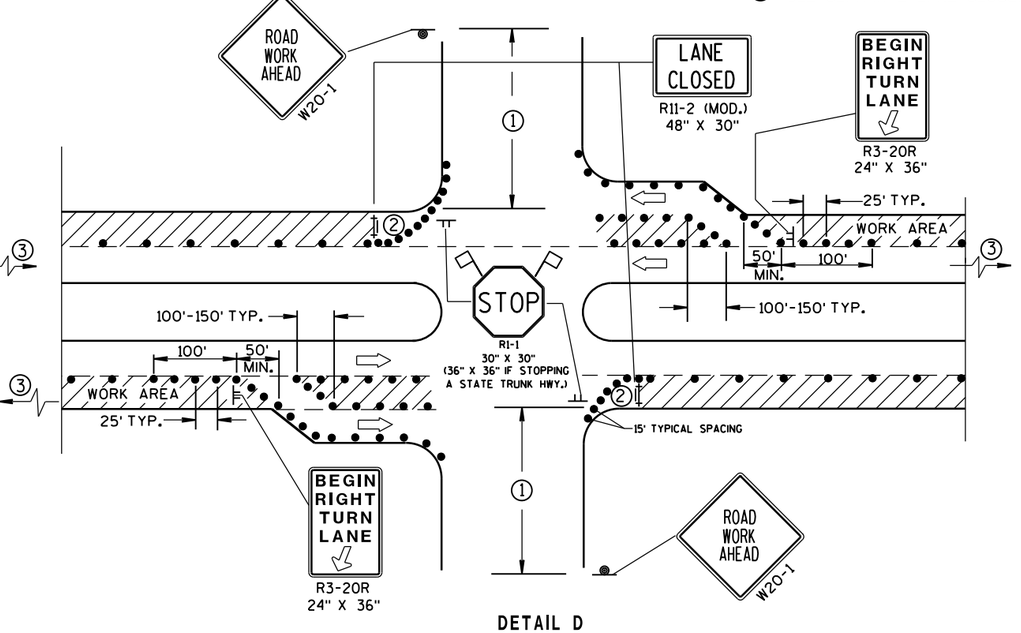
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.




DETAIL C

## FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)




DETAIL D

## FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

## LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

**TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE**

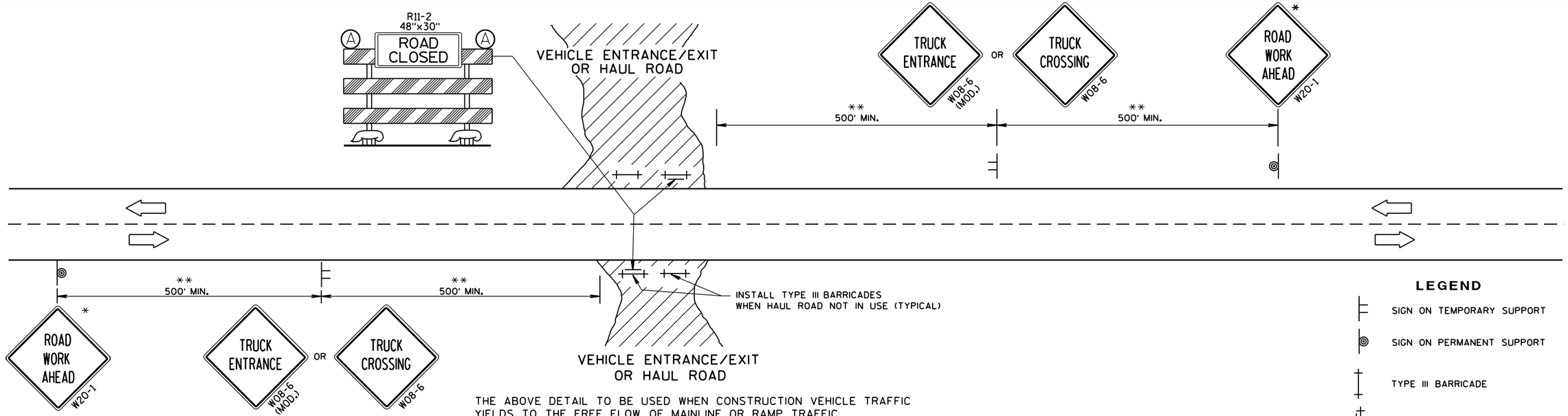
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA




6


S.D.D. 15 D 21-3




THE ABOVE DETAIL TO BE USED WHEN CONSTRUCTION VEHICLE TRAFFIC YIELDS TO THE FREE FLOW OF MAINLINE OR RAMP TRAFFIC

**LEGEND**

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

## GENERAL NOTES

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

WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.

WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

* THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE ENTRANCE/EXIT CONDITIONS ARE SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.

** 500 FEET SHOWN IS FOR ROADWAYS WITH A NON-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FEET. FOR 25-30 MPH, USE 200 FEET. USE 1000 FEET/1500 FEET FOR EXPRESSWAY/FREEWAY.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

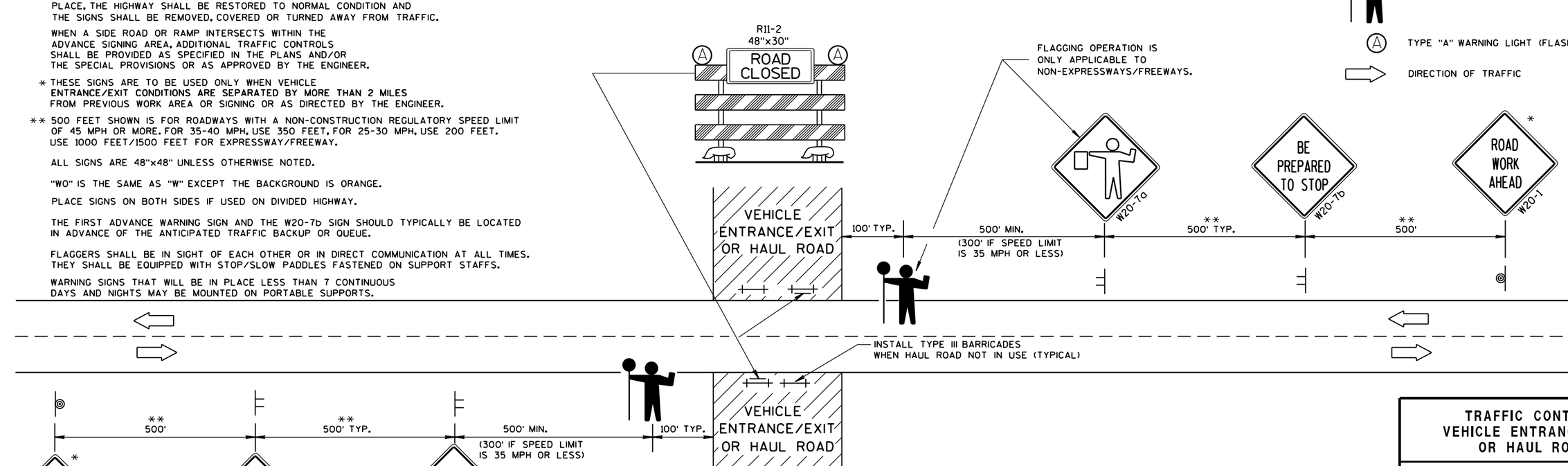
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.

THE FIRST ADVANCE WARNING SIGN AND THE W20-7b SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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.

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




THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

# TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
IGN
FHWA

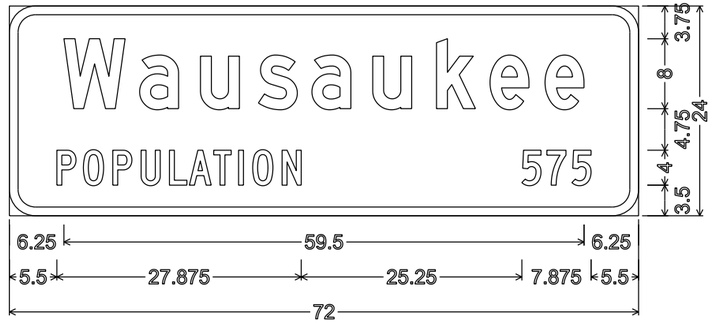



6

S.D.D. 15 D 29-3

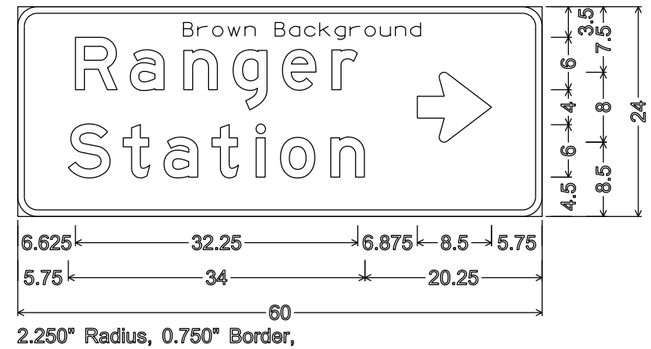
NOTES

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



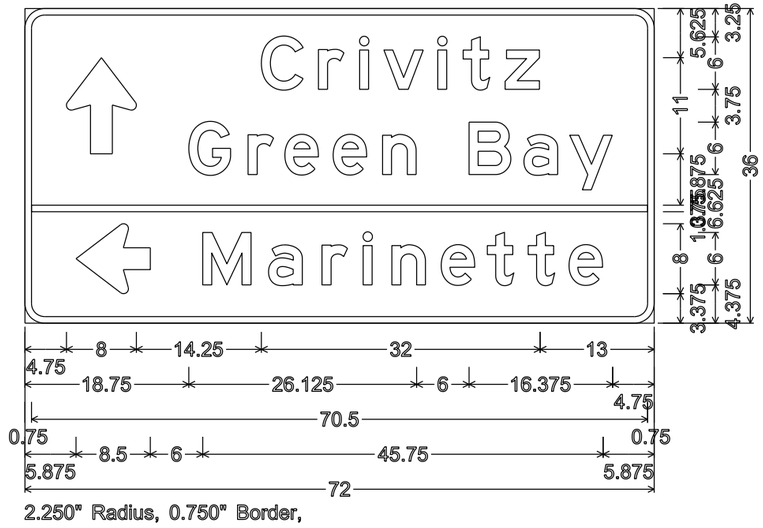

3.000" Radius, 1.000" Border,
"Wausaukee" D; "POPULATION" C 125% spacing; "575" C;

(17)



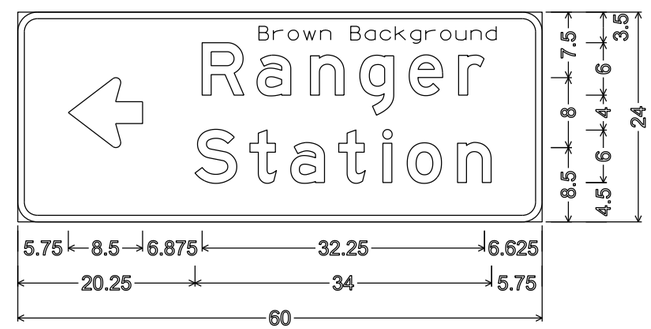

2.250" Radius, 0.750" Border,

(60)




2.250" Radius, 0.750" Border,

(18)




2.250" Radius, 0.750" Border,

(53)

7

7

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | SIGN DETAILS | SHEET NO: 286 | E |
|---|---|---|---|---|---|

| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1 Note 1 | 1 | 2 Note 4 | 1 | 1 Note 5 | 1 Note 6 | 1 Note 7 | Note 8 |
| 47+22.72 | 4,723 | 0 | 100 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 47+50 | 4,750 | 27 | 105 | 24 | 0 | 0 | 0 | 0 | 104 | 24 | 0 | 0 | 0 | 0 | 104 | 0 | 0 | 0 | 0 | 0 | 0 | 79 |
| 48+00 | 4,800 | 50 | 116 | 24 | 1 | 0 | 0 | 0 | 205 | 44 | 1 | 0 | 0 | 0 | 309 | 1 | 0 | 0 | 0 | 0 | 0 | 239 |
| 48+50 | 4,850 | 50 | 121 | 24 | 0 | 0 | 0 | 0 | 219 | 44 | 1 | 0 | 0 | 0 | 528 | 2 | 0 | 0 | 0 | 0 | 0 | 412 |
| 49+00 | 4,900 | 50 | 121 | 24 | 1 | 0 | 0 | 0 | 224 | 44 | 1 | 0 | 0 | 0 | 751 | 3 | 0 | 0 | 0 | 0 | 0 | 591 |
| 49+50 | 4,950 | 50 | 127 | 24 | 0 | 0 | 0 | 0 | 230 | 44 | 1 | 0 | 0 | 0 | 981 | 4 | 0 | 0 | 0 | 0 | 0 | 775 |
| 50+00 | 5,000 | 50 | 138 | 24 | 0 | 0 | 0 | 0 | 246 | 44 | 0 | 0 | 0 | 0 | 1,226 | 4 | 0 | 0 | 0 | 0 | 0 | 976 |
| 50+50 | 5,050 | 50 | 141 | 24 | 0 | 0 | 0 | 0 | 259 | 44 | 0 | 0 | 0 | 0 | 1,485 | 4 | 0 | 0 | 0 | 0 | 0 | 1,190 |
| 51+00 | 5,100 | 50 | 137 | 24 | 0 | 0 | 0 | 0 | 258 | 44 | 0 | 0 | 0 | 0 | 1,743 | 4 | 0 | 0 | 0 | 0 | 0 | 1,404 |
| 51+50 | 5,150 | 50 | 120 | 24 | 2 | 0 | 0 | 0 | 239 | 44 | 2 | 0 | 0 | 0 | 1,981 | 6 | 0 | 0 | 0 | 0 | 0 | 1,595 |
| 52+00 | 5,200 | 50 | 82 | 24 | 0 | 0 | 0 | 0 | 188 | 44 | 2 | 0 | 0 | 0 | 2,169 | 9 | 0 | 0 | 0 | 0 | 0 | 1,736 |
| 52+16.48 | 5,216 | 16 | 86 | 24 | 0 | 0 | 0 | 0 | 51 | 15 | 0 | 0 | 0 | 0 | 2,220 | 9 | 0 | 0 | 0 | 0 | 0 | 1,773 |
| 52+27.13 | 5,227 | 11 | 85 | 24 | 0 | 0 | 0 | 0 | 34 | 9 | 0 | 0 | 0 | 0 | 2,254 | 9 | 0 | 0 | 0 | 0 | 0 | 1,797 |
| 52+50 | 5,250 | 23 | 85 | 24 | 0 | 0 | 0 | 0 | 72 | 20 | 0 | 0 | 0 | 0 | 2,326 | 9 | 0 | 0 | 0 | 0 | 0 | 1,848 |
| 53+00 | 5,300 | 50 | 108 | 24 | 42 | 0 | 0 | 0 | 178 | 44 | 38 | 0 | 0 | 0 | 2,504 | 57 | 0 | 0 | 0 | 0 | 0 | 1,934 |
| 53+50 | 5,350 | 50 | 113 | 24 | 60 | 0 | 0 | 0 | 204 | 44 | 94 | 0 | 0 | 0 | 2,708 | 175 | 0 | 0 | 0 | 0 | 0 | 1,976 |
| 54+00 | 5,400 | 50 | 93 | 24 | 78 | 0 | 0 | 0 | 191 | 44 | 128 | 0 | 0 | 0 | 2,899 | 335 | 0 | 0 | 0 | 0 | 0 | 1,963 |
| 54+50 | 5,450 | 50 | 85 | 24 | 110 | 0 | 0 | 0 | 165 | 44 | 174 | 0 | 0 | 0 | 3,065 | 552 | 0 | 0 | 0 | 0 | 0 | 1,867 |
| 55+00 | 5,500 | 50 | 83 | 24 | 139 | 0 | 0 | 0 | 156 | 44 | 230 | 0 | 0 | 0 | 3,220 | 839 | 0 | 0 | 0 | 0 | 0 | 1,690 |
| 55+50 | 5,550 | 50 | 82 | 24 | 177 | 0 | 0 | 0 | 153 | 44 | 292 | 0 | 0 | 0 | 3,373 | 1,205 | 0 | 0 | 0 | 0 | 0 | 1,433 |
| 56+00 | 5,600 | 50 | 86 | 24 | 96 | 0 | 0 | 0 | 156 | 44 | 253 | 0 | 0 | 0 | 3,529 | 1,521 | 0 | 0 | 0 | 0 | 0 | 1,229 |
| 56+50 | 5,650 | 50 | 91 | 24 | 65 | 0 | 0 | 0 | 164 | 44 | 149 | 0 | 0 | 0 | 3,694 | 1,708 | 0 | 0 | 0 | 0 | 0 | 1,162 |
| 57+00 | 5,700 | 50 | 99 | 24 | 22 | 0 | 0 | 0 | 176 | 44 | 80 | 0 | 0 | 0 | 3,870 | 1,808 | 0 | 0 | 0 | 0 | 0 | 1,193 |
| 57+50 | 5,750 | 50 | 159 | 24 | 7 | 0 | 0 | 0 | 239 | 44 | 26 | 0 | 0 | 0 | 4,109 | 1,841 | 0 | 0 | 0 | 0 | 0 | 1,355 |
| 58+00 | 5,800 | 50 | 200 | 24 | 6 | 0 | 0 | 0 | 333 | 44 | 11 | 0 | 0 | 0 | 4,442 | 1,855 | 0 | 0 | 0 | 0 | 0 | 1,629 |
| 58+50 | 5,850 | 50 | 118 | 24 | 12 | 0 | 0 | 0 | 295 | 44 | 16 | 0 | 0 | 0 | 4,737 | 1,876 | 0 | 0 | 0 | 0 | 0 | 1,859 |
| 59+00 | 5,900 | 50 | 85 | 24 | 68 | 0 | 0 | 0 | 188 | 44 | 75 | 0 | 0 | 0 | 4,925 | 1,969 | 0 | 0 | 0 | 0 | 0 | 1,909 |
| 59+50 | 5,950 | 50 | 94 | 24 | 122 | 0 | 0 | 0 | 166 | 44 | 176 | 0 | 0 | 0 | 5,090 | 2,190 | 0 | 0 | 0 | 0 | 0 | 1,810 |
| 60+00 | 6,000 | 50 | 112 | 24 | 93 | 0 | 0 | 0 | 190 | 44 | 199 | 0 | 0 | 0 | 5,281 | 2,438 | 0 | 0 | 0 | 0 | 0 | 1,707 |
| 60+50 | 6,050 | 50 | 91 | 24 | 0 | 0 | 0 | 0 | 188 | 44 | 86 | 0 | 0 | 0 | 5,468 | 2,546 | 0 | 0 | 0 | 0 | 0 | 1,743 |
| 60+78.94 | 6,079 | 29 | 94 | 24 | 0 | 0 | 0 | 0 | 99 | 26 | 0 | 0 | 0 | 0 | 5,567 | 2,546 | 0 | 0 | 0 | 0 | 0 | 1,816 |
| 61+00 | 6,100 | 21 | 85 | 24 | 0 | 0 | 0 | 0 | 70 | 19 | 0 | 0 | 0 | 0 | 5,637 | 2,546 | 0 | 0 | 0 | 0 | 0 | 1,867 |
| 61+50 | 6,150 | 50 | 134 | 24 | 0 | 0 | 0 | 0 | 203 | 44 | 0 | 0 | 0 | 0 | 5,841 | 2,546 | 0 | 0 | 0 | 0 | 0 | 2,026 |
| 62+00 | 6,200 | 50 | 125 | 24 | 0 | 0 | 0 | 0 | 240 | 44 | 0 | 0 | 0 | 0 | 6,081 | 2,546 | 0 | 0 | 0 | 0 | 0 | 2,222 |
| 62+50 | 6,250 | 50 | 111 | 24 | 1 | 0 | 0 | 0 | 218 | 44 | 1 | 0 | 0 | 0 | 6,299 | 2,548 | 0 | 0 | 0 | 0 | 0 | 2,394 |
| 63+00 | 6,300 | 50 | 101 | 24 | 1 | 0 | 0 | 0 | 196 | 44 | 2 | 0 | 0 | 0 | 6,495 | 2,550 | 0 | 0 | 0 | 0 | 0 | 2,542 |
| 63+50 | 6,350 | 50 | 110 | 24 | 2 | 0 | 0 | 0 | 195 | 44 | 2 | 0 | 0 | 0 | 6,690 | 2,553 | 0 | 0 | 0 | 0 | 0 | 2,690 |
| 64+00 | 6,400 | 50 | 120 | 24 | 0 | 0 | 0 | 0 | 213 | 44 | 1 | 0 | 0 | 0 | 6,902 | 2,555 | 0 | 0 | 0 | 0 | 0 | 2,856 |
| 64+50 | 6,450 | 50 | 137 | 24 | 0 | 0 | 0 | 0 | 238 | 44 | 0 | 0 | 0 | 0 | 7,140 | 2,555 | 0 | 0 | 0 | 0 | 0 | 3,049 |
| 65+00 | 6,500 | 50 | 89 | 24 | 29 | 0 | 0 | 0 | 210 | 44 | 27 | 0 | 0 | 0 | 7,350 | 2,589 | 0 | 0 | 0 | 0 | 0 | 3,181 |
| 65+48.16 | 6,548 | 48 | 166 | 24 | 1 | 0 | 0 | 0 | 227 | 43 | 26 | 0 | 0 | 0 | 7,577 | 2,622 | 0 | 0 | 0 | 0 | 0 | 3,332 |
| 65+50 | 6,550 | 2 | 166 | 24 | 1 | 0 | 0 | 0 | 11 | 2 | 0 | 0 | 0 | 0 | 7,589 | 2,622 | 0 | 0 | 0 | 0 | 0 | 3,342 |
| 66+00 | 6,600 | 50 | 89 | 24 | 0 | 0 | 0 | 0 | 236 | 44 | 2 | 0 | 0 | 0 | 7,824 | 2,624 | 0 | 0 | 0 | 0 | 0 | 3,531 |
| 66+50 | 6,650 | 50 | 75 | 36 | 1 | 0 | 0 | 0 | 152 | 56 | 1 | 0 | 0 | 0 | 7,976 | 2,626 | 0 | 0 | 0 | 0 | 0 | 3,626 |
| 66+66.94 | 6,667 | 17 | 79 | 36 | 0 | 0 | 0 | 0 | 48 | 23 | 0 | 0 | 0 | 0 | 8,025 | 2,626 | 0 | 0 | 0 | 0 | 0 | 3,651 |
| 67+00 | 6,700 | 33 | 95 | 36 | 0 | 0 | 0 | 0 | 106 | 44 | 0 | 0 | 0 | 0 | 8,131 | 2,627 | 0 | 0 | 0 | 0 | 0 | 3,713 |
| 67+37.41 | 6,737 | 37 | 86 | 36 | 0 | 0 | 0 | 0 | 126 | 50 | 0 | 0 | 0 | 0 | 8,257 | 2,627 | 0 | 0 | 0 | 0 | 0 | 3,789 |
| 67+50 | 6,750 | 13 | 96 | 36 | 0 | 0 | 0 | 0 | 43 | 17 | 0 | 0 | 0 | 0 | 8,299 | 2,627 | 0 | 0 | 0 | 0 | 0 | 3,815 |
| 67+58.59 | 6,759 | 9 | 83 | 36 | 0 | 0 | 0 | 0 | 28 | 11 | 0 | 0 | 0 | 0 | 8,328 | 2,627 | 0 | 0 | 0 | 0 | 0 | 3,832 |
| 68+00 | 6,800 | 41 | 122 | 36 | 0 | 0 | 0 | 0 | 157 | 55 | 0 | 0 | 0 | 0 | 8,485 | 2,627 | 0 | 0 | 0 | 0 | 0 | 3,934 |
| 68+42.1 | 6,842 | 42 | 118 | 36 | 0 | 0 | 0 | 0 | 187 | 56 | 0 | 0 | 0 | 0 | 8,672 | 2,627 | 0 | 0 | 0 | 0 | 0 | 4,064 |
| 68+50 | 6,850 | 8 | 118 | 36 | 0 | 0 | 0 | 0 | 34 | 11 | 0 | 0 | 0 | 0 | 8,706 | 2,627 | 0 | 0 | 0 | 0 | 0 | 4,088 |
| 69+00 | 6,900 | 50 | 108 | 36 | 1 | 0 | 0 | 0 | 209 | 67 | 1 | 0 | 0 | 0 | 8,916 | 2,628 | 0 | 0 | 0 | 0 | 0 | 4,230 |
| 69+08.37 | 6,908 | 8 | 105 | 36 | 1 | 0 | 0 | 0 | 33 | 11 | 0 | 0 | 0 | 0 | 8,949 | 2,628 | 0 | 0 | 0 | 0 | 0 | 4,252 |
| 69+50 | 6,950 | 42 | 98 | 36 | 0 | 0 | 0 | 0 | 156 | 56 | 0 | 0 | 0 | 0 | 9,105 | 2,629 | 0 | 0 | 0 | 0 | 0 | 4,352 |
| 69+74.91 | 6,975 | 25 | 145 | 36 | 0 | 0 | 0 | 0 | 112 | 33 | 0 | 0 | 0 | 0 | 9,217 | 2,629 | 0 | 0 | 0 | 0 | 0 | 4,431 |
| 69+96.13 | 6,996 | 21 | 178 | 36 | 0 | 0 | 0 | 0 | 127 | 28 | 0 | 0 | 0 | 0 | 9,344 | 2,629 | 0 | 0 | 0 | 0 | 0 | 4,529 |
| 70+00 | 7,000 | 4 | 166 | 36 | 0 | 0 | 0 | 0 | 25 | 5 | 0 | 0 | 0 | 0 | 9,369 | 2,629 | 0 | 0 | 0 | 0 | 0 | 4,549 |
| 70+16.75 | 7,017 | 17 | 132 | 36 | 3 | 0 | 0 | 0 | 93 | 22 | 1 | 0 | 0 | 0 | 9,462 | 2,630 | 0 | 0 | 0 | 0 | 0 | 4,618 |
| 70+50 | 7,050 | 33 | 60 | 36 | 6 | 0 | 0 | 0 | 118 | 44 | 6 | 0 | 0 | 0 | 9,580 | 2,637 | 0 | 0 | 0 | 0 | 0 | 4,685 |
| 71+00 | 7,100 | 50 | 67 | 36 | 11 | 0 | 0 | 0 | 117 | 67 | 16 | 0 | 0 | 0 | 9,697 | 2,657 | 0 | 0 | 0 | 0 | 0 | 4,716 |
| 71+20.38 | 7,120 | 20 | 69 | 36 | 20 | 0 | 0 | 0 | 51 | 27 | 12 | 0 | 0 | 0 | 9,749 | 2,672 | 0 | 0 | 0 | 0 | 0 | 4,725 |
| 71+50 | 7,150 | 30 | 60 | 36 | 21 | 0 | 0 | 0 | 71 | 39 | 22 | 0 | 0 | 0 | 9,820 | 2,700 | 0 | 0 | 0 | 0 | 0 | 4,729 |
| 72+00 | 7,200 | 50 | 68 | 36 | 19 | 0 | 0 | 0 | 119 | 67 | 37 | 0 | 0 | 0 | 9,938 | 2,746 | 0 | 0 | 0 | 0 | 0 | 4,735 |
| 72+17.1 | 7,217 | 17 | 70 | 36 | 8 | 0 | 0 | 0 | 44 | 23 | 9 | 0 | 0 | 0 | 9,982 | 2,757 | 0 | 0 | 0 | 0 | 0 | 4,744 |
| 72+50 | 7,250 | 33 | 68 | 36 | 17 | 0 | 0 | 0 | 84 | 44 | 16 | 0 | 0 | 0 | 10,065 | 2,776 | 0 | 0 | 0 | 0 | 0 | 4,765 |
| 72+78 | 7,278 | 28 | 62 | 36 | 83 | 0 | 0 | 0 | 67 | 37 | 52 | 0 | 0 | 0 | 10,133 | 2,841 | 0 | 0 | 0 | 0 | 0 | 4,730 |
| 72+87.24 | 7,287 | 9 | 62 | 36 | 80 | 0 | 0 | 0 | 21 | 12 | 28 | 0 | 0 | 0 | 10,154 | 2,876 | 0 | 0 | 0 | 0 | 0 | 4,704 |
| 73+00 | 7,300 | 13 | 66 | 36 | 56 | 0 | 0 | 0 | 30 | 17 | 32 | 0 | 0 | 0 | 10,185 | 2,916 | 0 | 0 | 0 | 0 | 0 | 4,678 |
| 73+50 | 7,350 | 50 | 74 | 36 | 9 | 0 | 0 | 0 | 129 | 67 | 60 | 0 | 0 | 0 | 10,314 | 2,991 | 0 | 0 | 0 | 0 | 0 | 4,665 |
| 74+00 | 7,400 | 50 | 89 | 36 | 0 | 0 | 0 | 0 | 151 | 67 | 9 | 0 | 0 | 0 | 10,465 | 3,002 | 0 | 0 | 0 | 0 | 0 | 4,738 |
| 74+30.3 | 7,430 | 30 | 100 | 36 | 0 | 0 | 0 | 0 | 106 | 40 | 0 | 0 | 0 | 0 | 10,571 | 3,002 | 0 | 0 | 0 | 0 | 0 | 4,804 |
| 74+50 | 7,450 | 20 | 96 | 36 | 0 | 0 | 0 | 0 | 71 | 26 | 0 | 0 | 0 | 0 | 10,642 | 3,002 | 0 | 0 | 0 | 0 | 0 | 4,849 |
| 74+79.14 | 7,479 | 29 | 143 | 36 | 0 | 0 | 0 | 0 | 129 | 39 | 0 | 0 | 0 | 0 | 10,771 | 3,002 | 0 | 0 | 0 | 0 | 0 | 4,939 |
| 75+00 | 7,500 | 21 | 100 | 36 | 1 | 0 | 0 | 0 | 94 | 28 | 0 | 0 | 0 | 0 | 10,865 | 3,003 | 0 | 0 | 0 | 0 | 0 | 5,005 |

| | | | AREA (SF) | | | | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATION | Real Station | Distance | Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1<br>Note 1 | 1 | 2<br>Note 4 | 1 | 1<br>Note 5 | 1<br>Note 6 | 1<br>Note 7 | Note 8 |
| 75+50 | 7,550 | 50 | 86 | 36 | 1 | 0 | 0 | 0 | 173 | 67 | 1 | 0 | 0 | 0 | 11,037 | 3,004 | 0 | 0 | 0 | 0 | 0 | 5,109 |
| 76+00 | 7,600 | 50 | 81 | 36 | 2 | 0 | 0 | 0 | 155 | 67 | 2 | 0 | 0 | 0 | 11,192 | 3,007 | 0 | 0 | 0 | 0 | 0 | 5,194 |
| 76+50 | 7,650 | 50 | 79 | 36 | 2 | 0 | 0 | 0 | 148 | 67 | 4 | 0 | 0 | 0 | 11,340 | 3,012 | 0 | 0 | 0 | 0 | 0 | 5,271 |
| 76+99.82 | 7,700 | 50 | 88 | 36 | 0 | 0 | 0 | 0 | 154 | 66 | 2 | 0 | 0 | 0 | 11,493 | 3,015 | 0 | 0 | 0 | 0 | 0 | 5,355 |
| 77+00 | 7,700 | 0 | 89 | 36 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 11,494 | 3,015 | 0 | 0 | 0 | 0 | 0 | 5,355 |
| 77+50 | 7,750 | 50 | 94 | 36 | 0 | 0 | 0 | 0 | 169 | 67 | 0 | 0 | 0 | 0 | 11,663 | 3,015 | 0 | 0 | 0 | 0 | 0 | 5,457 |
| 77+77.13 | 7,777 | 27 | 100 | 36 | 0 | 0 | 0 | 0 | 97 | 36 | 0 | 0 | 0 | 0 | 11,761 | 3,015 | 0 | 0 | 0 | 0 | 0 | 5,518 |
| 78+00 | 7,800 | 23 | 93 | 36 | 0 | 0 | 0 | 0 | 82 | 30 | 0 | 0 | 0 | 0 | 11,843 | 3,015 | 0 | 0 | 0 | 0 | 0 | 5,570 |
| 78+40.32 | 7,840 | 40 | 86 | 36 | 1 | 0 | 0 | 0 | 134 | 54 | 0 | 0 | 0 | 0 | 11,977 | 3,016 | 0 | 0 | 0 | 0 | 0 | 5,650 |
| 78+50 | 7,850 | 10 | 87 | 36 | 0 | 0 | 0 | 0 | 31 | 13 | 0 | 0 | 0 | 0 | 12,008 | 3,016 | 0 | 0 | 0 | 0 | 0 | 5,668 |
| 78+84.5 | 7,884 | 34 | 169 | 36 | 0 | 0 | 0 | 0 | 163 | 46 | 0 | 0 | 0 | 0 | 12,171 | 3,016 | 0 | 0 | 0 | 0 | 0 | 5,785 |
| 78+85.52 | 7,886 | 1 | 169 | 36 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 12,178 | 3,016 | 0 | 0 | 0 | 0 | 0 | 5,790 |
| 79+00 | 7,900 | 14 | 147 | 36 | 3 | 0 | 0 | 0 | 85 | 19 | 1 | 0 | 0 | 0 | 12,262 | 3,017 | 0 | 0 | 0 | 0 | 0 | 5,855 |
| 79+50 | 7,950 | 50 | 88 | 36 | 0 | 0 | 0 | 0 | 218 | 67 | 2 | 0 | 0 | 0 | 12,480 | 3,020 | 0 | 0 | 0 | 0 | 0 | 6,003 |
| 79+84.71 | 7,985 | 35 | 93 | 36 | 0 | 0 | 0 | 0 | 116 | 46 | 0 | 0 | 0 | 0 | 12,597 | 3,020 | 0 | 0 | 0 | 0 | 0 | 6,073 |
| 79+85.73 | 7,986 | 1 | 95 | 36 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 12,600 | 3,020 | 0 | 0 | 0 | 0 | 0 | 6,075 |
| 80+00 | 8,000 | 14 | 95 | 36 | 0 | 0 | 0 | 0 | 50 | 19 | 0 | 0 | 0 | 0 | 12,650 | 3,020 | 0 | 0 | 0 | 0 | 0 | 6,106 |
| 80+16.74 | 8,017 | 17 | 93 | 36 | 5 | 0 | 0 | 0 | 58 | 22 | 2 | 0 | 0 | 0 | 12,709 | 3,022 | 0 | 0 | 0 | 0 | 0 | 6,140 |
| 80+17.24 | 8,017 | 0 | 93 | 36 | 6 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 12,710 | 3,022 | 0 | 0 | 0 | 0 | 0 | 6,141 |
| 80+50 | 8,050 | 33 | 94 | 36 | 0 | 0 | 0 | 0 | 113 | 44 | 3 | 0 | 0 | 0 | 12,824 | 3,026 | 0 | 0 | 0 | 0 | 0 | 6,207 |
| 80+98.93 | 8,099 | 49 | 95 | 36 | 0 | 0 | 0 | 0 | 171 | 65 | 0 | 0 | 0 | 0 | 12,995 | 3,026 | 0 | 0 | 0 | 0 | 0 | 6,313 |
| 81+00 | 8,100 | 1 | 95 | 36 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 12,999 | 3,026 | 0 | 0 | 0 | 0 | 0 | 6,315 |
| 81+50 | 8,150 | 50 | 92 | 36 | 0 | 0 | 0 | 0 | 173 | 67 | 0 | 0 | 0 | 0 | 13,172 | 3,026 | 0 | 0 | 0 | 0 | 0 | 6,421 |
| 82+00 | 8,200 | 50 | 94 | 36 | 0 | 0 | 0 | 0 | 172 | 67 | 0 | 0 | 0 | 0 | 13,344 | 3,026 | 0 | 0 | 0 | 0 | 0 | 6,527 |
| 82+20.95 | 8,221 | 21 | 94 | 36 | 0 | 0 | 0 | 0 | 73 | 28 | 0 | 0 | 0 | 0 | 13,417 | 3,026 | 0 | 0 | 0 | 0 | 0 | 6,572 |
| 82+50 | 8,250 | 29 | 95 | 36 | 0 | 0 | 0 | 0 | 102 | 39 | 0 | 0 | 0 | 0 | 13,519 | 3,026 | 0 | 0 | 0 | 0 | 0 | 6,635 |
| 82+65.41 | 8,265 | 15 | 95 | 36 | 0 | 0 | 0 | 0 | 54 | 21 | 0 | 0 | 0 | 0 | 13,573 | 3,026 | 0 | 0 | 0 | 0 | 0 | 6,669 |
| 83+00 | 8,300 | 35 | 100 | 36 | 0 | 0 | 0 | 0 | 125 | 46 | 0 | 0 | 0 | 0 | 13,698 | 3,026 | 0 | 0 | 0 | 0 | 0 | 6,748 |
| 83+01.04 | 8,301 | 1 | 100 | 36 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 13,702 | 3,026 | 0 | 0 | 0 | 0 | 0 | 6,750 |
| 83+46.12 | 8,346 | 45 | 93 | 36 | 0 | 0 | 0 | 0 | 161 | 60 | 0 | 0 | 0 | 0 | 13,864 | 3,027 | 0 | 0 | 0 | 0 | 0 | 6,851 |
| 83+50 | 8,350 | 4 | 93 | 36 | 0 | 0 | 0 | 0 | 13 | 5 | 0 | 0 | 0 | 0 | 13,877 | 3,027 | 0 | 0 | 0 | 0 | 0 | 6,860 |
| 84+00 | 8,400 | 50 | 93 | 36 | 0 | 0 | 0 | 0 | 173 | 67 | 0 | 0 | 0 | 0 | 14,050 | 3,027 | 0 | 0 | 0 | 0 | 0 | 6,965 |
| 84+40.45 | 8,440 | 40 | 187 | 36 | 0 | 0 | 0 | 0 | 210 | 54 | 0 | 0 | 0 | 0 | 14,260 | 3,027 | 0 | 0 | 0 | 0 | 0 | 7,122 |
| 84+50 | 8,450 | 10 | 188 | 36 | 0 | 0 | 0 | 0 | 66 | 13 | 0 | 0 | 0 | 0 | 14,326 | 3,027 | 0 | 0 | 0 | 0 | 0 | 7,175 |
| 85+00 | 8,500 | 50 | 99 | 36 | 0 | 0 | 0 | 0 | 266 | 67 | 0 | 0 | 0 | 0 | 14,592 | 3,027 | 0 | 0 | 0 | 0 | 0 | 7,375 |
| 85+50 | 8,550 | 50 | 86 | 36 | 0 | 0 | 0 | 0 | 172 | 67 | 0 | 0 | 0 | 0 | 14,764 | 3,027 | 0 | 0 | 0 | 0 | 0 | 7,480 |
| 85+57.25 | 8,557 | 7 | 90 | 36 | 0 | 0 | 0 | 0 | 24 | 10 | 0 | 0 | 0 | 0 | 14,788 | 3,027 | 0 | 0 | 0 | 0 | 0 | 7,494 |
| 86+00 | 8,600 | 43 | 85 | 36 | 0 | 0 | 0 | 0 | 139 | 57 | 0 | 0 | 0 | 0 | 14,927 | 3,027 | 0 | 0 | 0 | 0 | 0 | 7,576 |
| 86+32.13 | 8,632 | 32 | 78 | 36 | 0 | 0 | 0 | 0 | 97 | 43 | 0 | 0 | 0 | 0 | 15,024 | 3,027 | 0 | 0 | 0 | 0 | 0 | 7,630 |
| 86+50 | 8,650 | 18 | 79 | 36 | 0 | 0 | 0 | 0 | 52 | 24 | 0 | 0 | 0 | 0 | 15,076 | 3,027 | 0 | 0 | 0 | 0 | 0 | 7,658 |
| 87+00 | 8,700 | 50 | 86 | 36 | 0 | 0 | 0 | 0 | 153 | 67 | 0 | 0 | 0 | 0 | 15,229 | 3,028 | 0 | 0 | 0 | 0 | 0 | 7,744 |
| 87+13.83 | 8,714 | 14 | 90 | 36 | 0 | 0 | 0 | 0 | 45 | 18 | 0 | 0 | 0 | 0 | 15,274 | 3,028 | 0 | 0 | 0 | 0 | 0 | 7,771 |
| 87+50 | 8,750 | 36 | 85 | 36 | 0 | 0 | 0 | 0 | 117 | 48 | 0 | 0 | 0 | 0 | 15,392 | 3,028 | 0 | 0 | 0 | 0 | 0 | 7,840 |
| 87+62.85 | 8,763 | 13 | 99 | 36 | 0 | 0 | 0 | 0 | 44 | 17 | 0 | 0 | 0 | 0 | 15,435 | 3,028 | 0 | 0 | 0 | 0 | 0 | 7,866 |
| 87+97.42 | 8,797 | 35 | 161 | 36 | 0 | 0 | 0 | 0 | 167 | 46 | 0 | 0 | 0 | 0 | 15,602 | 3,028 | 0 | 0 | 0 | 0 | 0 | 7,986 |
| 88+00 | 8,800 | 3 | 160 | 36 | 0 | 0 | 0 | 0 | 15 | 3 | 0 | 0 | 0 | 0 | 15,617 | 3,028 | 0 | 0 | 0 | 0 | 0 | 7,998 |
| 88+50 | 8,850 | 50 | 118 | 36 | 0 | 0 | 0 | 0 | 257 | 67 | 0 | 0 | 0 | 0 | 15,875 | 3,028 | 0 | 0 | 0 | 0 | 0 | 8,189 |
| 89+00 | 8,900 | 50 | 113 | 36 | 0 | 0 | 0 | 0 | 214 | 67 | 0 | 0 | 0 | 0 | 16,088 | 3,028 | 0 | 0 | 0 | 0 | 0 | 8,336 |
| 89+15.61 | 8,916 | 16 | 114 | 36 | 0 | 0 | 0 | 0 | 66 | 21 | 0 | 0 | 0 | 0 | 16,154 | 3,028 | 0 | 0 | 0 | 0 | 0 | 8,381 |
| 89+50 | 8,950 | 34 | 118 | 36 | 0 | 0 | 0 | 0 | 148 | 46 | 0 | 0 | 0 | 0 | 16,302 | 3,028 | 0 | 0 | 0 | 0 | 0 | 8,483 |
| 89+79.99 | 8,980 | 30 | 127 | 36 | 0 | 0 | 0 | 0 | 136 | 40 | 0 | 0 | 0 | 0 | 16,438 | 3,028 | 0 | 0 | 0 | 0 | 0 | 8,579 |
| 90+00 | 9,000 | 20 | 118 | 36 | 0 | 0 | 0 | 0 | 91 | 27 | 0 | 0 | 0 | 0 | 16,528 | 3,028 | 0 | 0 | 0 | 0 | 0 | 8,643 |
| 90+50 | 9,050 | 50 | 127 | 36 | 0 | 0 | 0 | 0 | 226 | 67 | 0 | 0 | 0 | 0 | 16,754 | 3,028 | 0 | 0 | 0 | 0 | 0 | 8,802 |
| 90+65.89 | 9,066 | 16 | 140 | 36 | 0 | 0 | 0 | 0 | 79 | 21 | 0 | 0 | 0 | 0 | 16,833 | 3,028 | 0 | 0 | 0 | 0 | 0 | 8,860 |
| 91+00 | 9,100 | 34 | 138 | 36 | 0 | 0 | 0 | 0 | 176 | 45 | 0 | 0 | 0 | 0 | 17,009 | 3,028 | 0 | 0 | 0 | 0 | 0 | 8,990 |
| 91+01.34 | 9,101 | 1 | 138 | 36 | 0 | 0 | 0 | 0 | 7 | 2 | 0 | 0 | 0 | 0 | 17,016 | 3,028 | 0 | 0 | 0 | 0 | 0 | 8,995 |
| 91+50 | 9,150 | 49 | 103 | 36 | 0 | 0 | 0 | 0 | 218 | 65 | 0 | 0 | 0 | 0 | 17,233 | 3,028 | 0 | 0 | 0 | 0 | 0 | 9,148 |
| 91+85.08 | 9,185 | 35 | 96 | 36 | 0 | 0 | 0 | 0 | 129 | 47 | 0 | 0 | 0 | 0 | 17,363 | 3,028 | 0 | 0 | 0 | 0 | 0 | 9,230 |
| 92+00 | 9,200 | 15 | 92 | 36 | 0 | 0 | 0 | 0 | 52 | 20 | 0 | 0 | 0 | 0 | 17,415 | 3,028 | 0 | 0 | 0 | 0 | 0 | 9,262 |
| 92+06.33 | 9,206 | 6 | 81 | 36 | 0 | 0 | 0 | 0 | 20 | 8 | 0 | 0 | 0 | 0 | 17,435 | 3,028 | 0 | 0 | 0 | 0 | 0 | 9,274 |
| 92+48.55 | 9,249 | 42 | 77 | 36 | 0 | 0 | 0 | 0 | 123 | 56 | 0 | 0 | 0 | 0 | 17,558 | 3,028 | 0 | 0 | 0 | 0 | 0 | 9,341 |
| 92+50 | 9,250 | 1 | 77 | 36 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 17,562 | 3,028 | 0 | 0 | 0 | 0 | 0 | 9,343 |
| 93+00 | 9,300 | 50 | 77 | 36 | 0 | 0 | 0 | 0 | 142 | 67 | 0 | 0 | 0 | 0 | 17,705 | 3,029 | 0 | 0 | 0 | 0 | 0 | 9,419 |
| 93+07.07 | 9,307 | 7 | 77 | 36 | 0 | 0 | 0 | 0 | 20 | 9 | 0 | 0 | 0 | 0 | 17,725 | 3,029 | 0 | 0 | 0 | 0 | 0 | 9,429 |
| 93+17.39 | 9,317 | 10 | 78 | 36 | 0 | 0 | 0 | 0 | 30 | 14 | 0 | 0 | 0 | 0 | 17,755 | 3,029 | 0 | 0 | 0 | 0 | 0 | 9,445 |
| 93+50 | 9,350 | 33 | 59 | 36 | 3 | 0 | 0 | 0 | 83 | 43 | 2 | 0 | 0 | 0 | 17,837 | 3,031 | 0 | 0 | 0 | 0 | 0 | 9,482 |
| 93+56.01 | 9,356 | 6 | 59 | 36 | 1 | 0 | 0 | 0 | 13 | 8 | 0 | 0 | 0 | 0 | 17,850 | 3,031 | 0 | 0 | 0 | 0 | 0 | 9,487 |
| 94+00 | 9,400 | 44 | 68 | 36 | 0 | 0 | 0 | 0 | 103 | 59 | 1 | 0 | 0 | 0 | 17,954 | 3,032 | 0 | 0 | 0 | 0 | 0 | 9,531 |

| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1<br>Note 1 | 1 | 2<br>Note 4 | 1 | 1<br>Note 5 | 1<br>Note 6 | 1<br>Note 7 | Note 8 |
| 94+01.06 | 9,401 | 1 | 70 | 36 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 17,956 | 3,032 | 0 | 0 | 0 | 0 | 0 | 9,532 |
| 94+50 | 9,450 | 49 | 67 | 36 | 0 | 0 | 0 | 0 | 125 | 65 | 0 | 0 | 0 | 0 | 18,081 | 3,032 | 0 | 0 | 0 | 0 | 0 | 9,591 |
| 95+00 | 9,500 | 50 | 68 | 0 | 0 | 0 | 0 | 0 | 125 | 33 | 0 | 0 | 0 | 0 | 18,206 | 3,032 | 0 | 0 | 0 | 0 | 0 | 9,683 |
| 95+09.46 | 9,509 | 9 | 69 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 18,230 | 3,032 | 0 | 0 | 0 | 0 | 0 | 9,707 |
| 95+50 | 9,550 | 41 | 68 | 0 | 0 | 0 | 0 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 18,333 | 3,032 | 0 | 0 | 0 | 0 | 0 | 9,810 |
| 95+75.08 | 9,575 | 25 | 70 | 0 | 0 | 0 | 0 | 0 | 64 | 0 | 0 | 0 | 0 | 0 | 18,397 | 3,033 | 0 | 0 | 0 | 0 | 0 | 9,874 |
| 96+00 | 9,600 | 25 | 73 | 0 | 0 | 0 | 0 | 0 | 66 | 0 | 0 | 0 | 0 | 0 | 18,463 | 3,033 | 0 | 0 | 0 | 0 | 0 | 9,940 |
| 96+33.14 | 9,633 | 33 | 90 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 18,563 | 3,033 | 0 | 0 | 0 | 0 | 0 | 10,040 |
| 96+50 | 9,650 | 17 | 87 | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 0 | 0 | 0 | 0 | 18,618 | 3,033 | 0 | 0 | 0 | 0 | 0 | 10,095 |
| 97+00 | 9,700 | 50 | 86 | 0 | 0 | 0 | 0 | 0 | 160 | 0 | 1 | 0 | 0 | 0 | 18,778 | 3,033 | 0 | 0 | 0 | 0 | 0 | 10,254 |
| 97+17.95 | 9,718 | 18 | 91 | 0 | 0 | 0 | 0 | 0 | 59 | 0 | 0 | 0 | 0 | 0 | 18,837 | 3,033 | 0 | 0 | 0 | 0 | 0 | 10,313 |
| 97+50 | 9,750 | 32 | 91 | 0 | 0 | 0 | 0 | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 18,945 | 3,034 | 0 | 0 | 0 | 0 | 0 | 10,420 |
| 97+90.17 | 9,790 | 40 | 96 | 0 | 0 | 0 | 0 | 0 | 139 | 0 | 0 | 0 | 0 | 0 | 19,083 | 3,034 | 0 | 0 | 0 | 0 | 0 | 10,558 |
| 98+00 | 9,800 | 10 | 97 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 19,118 | 3,034 | 0 | 0 | 0 | 0 | 0 | 10,593 |
| 98+50 | 9,850 | 50 | 94 | 0 | 1 | 0 | 0 | 0 | 176 | 0 | 1 | 0 | 0 | 0 | 19,295 | 3,035 | 0 | 0 | 0 | 0 | 0 | 10,769 |
| 99+00 | 9,900 | 50 | 106 | 0 | 2 | 0 | 0 | 0 | 185 | 0 | 2 | 0 | 0 | 0 | 19,480 | 3,038 | 0 | 0 | 0 | 0 | 0 | 10,951 |
| 99+10.97 | 9,911 | 11 | 106 | 0 | 3 | 0 | 0 | 0 | 43 | 0 | 1 | 0 | 0 | 0 | 19,523 | 3,039 | 0 | 0 | 0 | 0 | 0 | 10,993 |
| 99+50 | 9,950 | 39 | 122 | 0 | 1 | 0 | 0 | 0 | 165 | 0 | 3 | 0 | 0 | 0 | 19,687 | 3,043 | 0 | 0 | 0 | 0 | 0 | 11,153 |
| 99+89.27 | 9,989 | 39 | 59 | 0 | 1 | 0 | 0 | 0 | 132 | 0 | 2 | 0 | 0 | 0 | 19,819 | 3,045 | 0 | 0 | 0 | 0 | 0 | 11,283 |
| 100+00 | 10,000 | 11 | 57 | 0 | 1 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 19,843 | 3,046 | 0 | 0 | 0 | 0 | 0 | 11,306 |
| 100+10.21 | 10,010 | 10 | 68 | 0 | 1 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 19,866 | 3,046 | 0 | 0 | 0 | 0 | 0 | 11,329 |
| 100+13.52 | 10,014 | 3 | 54 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 19,874 | 3,046 | 0 | 0 | 0 | 0 | 0 | 11,337 |
| 100+18.74 | 10,019 | 5 | 33 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 19,882 | 3,046 | 0 | 0 | 0 | 0 | 0 | 11,345 |
| 100+18.75 | 10,019 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | #VALUE! | 3,046 | #VALUE! | 0 | #VALUE! | #VALUE! | #VALUE! | #VALUE! |
| 101+17.51 | 10,118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19,882 | 3,046 | 0 | 0 | 0 | 0 | 0 | 11,345 |
| 101+22.74 | 10,123 | 5 | 81 | 0 | 16 | 0 | 0 | 0 | 8 | 0 | 2 | 0 | 0 | 0 | 19,890 | 3,048 | 0 | 0 | 0 | 0 | 0 | 11,351 |
| 101+26.04 | 10,126 | 3 | 86 | 0 | 14 | 0 | 0 | 0 | 10 | 0 | 2 | 0 | 0 | 0 | 19,900 | 3,050 | 0 | 0 | 0 | 0 | 0 | 11,359 |
| 101+46.99 | 10,147 | 21 | 61 | 0 | 27 | 0 | 0 | 0 | 57 | 0 | 16 | 0 | 0 | 0 | 19,957 | 3,070 | 0 | 0 | 0 | 0 | 0 | 11,396 |
| 101+50 | 10,150 | 3 | 55 | 0 | 42 | 0 | 0 | 0 | 6 | 0 | 4 | 0 | 0 | 0 | 19,964 | 3,075 | 0 | 0 | 0 | 0 | 0 | 11,398 |
| 102+00 | 10,200 | 50 | 34 | 0 | 41 | 0 | 0 | 0 | 82 | 0 | 77 | 0 | 0 | 0 | 20,046 | 3,172 | 0 | 0 | 0 | 0 | 0 | 11,384 |
| 102+50 | 10,250 | 50 | 42 | 0 | 5 | 0 | 0 | 0 | 71 | 0 | 42 | 0 | 0 | 0 | 20,117 | 3,225 | 0 | 0 | 0 | 0 | 0 | 11,401 |
| 102+89.04 | 10,289 | 39 | 57 | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 3 | 0 | 0 | 0 | 20,189 | 3,229 | 0 | 0 | 0 | 0 | 0 | 11,469 |
| 103+00 | 10,300 | 11 | 63 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 20,213 | 3,229 | 0 | 0 | 0 | 0 | 0 | 11,493 |
| 103+00.03 | 10,300 | 0 | 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20,213 | 3,229 | 0 | 0 | 0 | 0 | 0 | 11,493 |
| 103+17.71 | 10,318 | 18 | 71 | 0 | 0 | 0 | 0 | 0 | 44 | 0 | 0 | 0 | 0 | 0 | 20,257 | 3,229 | 0 | 0 | 0 | 0 | 0 | 11,537 |
| 103+50 | 10,350 | 32 | 80 | 0 | 87 | 0 | 0 | 0 | 90 | 0 | 52 | 0 | 0 | 0 | 20,347 | 3,294 | 0 | 0 | 0 | 0 | 0 | 11,562 |
| 104+00 | 10,400 | 50 | 71 | 0 | 76 | 0 | 0 | 0 | 140 | 0 | 152 | 0 | 0 | 0 | 20,487 | 3,484 | 0 | 0 | 0 | 0 | 0 | 11,512 |
| 104+50 | 10,450 | 50 | 91 | 0 | 123 | 0 | 0 | 0 | 150 | 0 | 184 | 0 | 0 | 0 | 20,638 | 3,714 | 0 | 0 | 0 | 0 | 0 | 11,433 |
| 105+00 | 10,500 | 50 | 103 | 0 | 54 | 0 | 0 | 0 | 180 | 0 | 163 | 0 | 0 | 0 | 20,817 | 3,918 | 0 | 0 | 0 | 0 | 0 | 11,408 |
| 105+01.03 | 10,501 | 1 | 102 | 0 | 54 | 0 | 0 | 0 | 4 | 0 | 2 | 0 | 0 | 0 | 20,821 | 3,920 | 0 | 0 | 0 | 0 | 0 | 11,410 |
| 105+50 | 10,550 | 49 | 88 | 0 | 75 | 0 | 0 | 0 | 173 | 0 | 117 | 0 | 0 | 0 | 20,994 | 4,066 | 0 | 0 | 0 | 0 | 0 | 11,437 |
| 105+68.32 | 10,568 | 18 | 79 | 0 | 39 | 0 | 0 | 0 | 57 | 0 | 39 | 0 | 0 | 0 | 21,051 | 4,115 | 0 | 0 | 0 | 0 | 0 | 11,445 |
| 105+77.29 | 10,577 | 9 | 77 | 0 | 25 | 0 | 0 | 0 | 26 | 0 | 11 | 0 | 0 | 0 | 21,077 | 4,128 | 0 | 0 | 0 | 0 | 0 | 11,458 |
| 106+00 | 10,600 | 23 | 73 | 0 | 139 | 0 | 0 | 0 | 63 | 0 | 69 | 0 | 0 | 0 | 21,140 | 4,214 | 0 | 0 | 0 | 0 | 0 | 11,435 |
| 106+24.19 | 10,624 | 24 | 70 | 0 | 85 | 0 | 0 | 0 | 64 | 0 | 100 | 0 | 0 | 0 | 21,204 | 4,339 | 0 | 0 | 0 | 0 | 0 | 11,374 |
| 106+50 | 10,650 | 26 | 63 | 0 | 155 | 0 | 0 | 0 | 64 | 0 | 114 | 0 | 0 | 0 | 21,268 | 4,482 | 0 | 0 | 0 | 0 | 0 | 11,294 |
| 107+00 | 10,700 | 50 | 57 | 0 | 93 | 0 | 0 | 0 | 111 | 0 | 229 | 0 | 0 | 0 | 21,379 | 4,769 | 0 | 0 | 0 | 0 | 0 | 11,119 |
| 107+50 | 10,750 | 50 | 50 | 0 | 0 | 0 | 0 | 0 | 99 | 0 | 86 | 0 | 0 | 0 | 21,477 | 4,876 | 0 | 0 | 0 | 0 | 0 | 11,111 |
| 107+71.11 | 10,771 | 21 | 40 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 21,513 | 4,876 | 0 | 0 | 0 | 0 | 0 | 11,146 |
| 107+84.74 | 10,785 | 14 | 46 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 21,534 | 4,876 | 0 | 0 | 0 | 0 | 0 | 11,167 |
| 108+00 | 10,800 | 15 | 44 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 21,560 | 4,876 | 0 | 0 | 0 | 0 | 0 | 11,193 |
| 108+47.84 | 10,848 | 48 | 38 | 0 | 8 | 0 | 0 | 0 | 73 | 0 | 8 | 0 | 0 | 0 | 21,633 | 4,885 | 0 | 0 | 0 | 0 | 0 | 11,257 |
| 108+50 | 10,850 | 2 | 35 | 0 | 8 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 21,636 | 4,886 | 0 | 0 | 0 | 0 | 0 | 11,259 |
| 109+00 | 10,900 | 50 | 51 | 0 | 118 | 0 | 0 | 0 | 79 | 0 | 117 | 0 | 0 | 0 | 21,715 | 5,032 | 0 | 0 | 0 | 0 | 0 | 11,192 |
| 109+50 | 10,950 | 50 | 30 | 0 | 105 | 0 | 0 | 0 | 75 | 0 | 206 | 0 | 0 | 0 | 21,790 | 5,290 | 0 | 0 | 0 | 0 | 0 | 11,009 |
| 110+00 | 11,000 | 50 | 47 | 0 | 112 | 0 | 0 | 0 | 72 | 0 | 201 | 0 | 0 | 0 | 21,862 | 5,542 | 0 | 0 | 0 | 0 | 0 | 10,829 |
| 110+50 | 11,050 | 50 | 20 | 0 | 98 | 0 | 0 | 0 | 62 | 0 | 195 | 0 | 0 | 0 | 21,924 | 5,785 | 0 | 0 | 0 | 0 | 0 | 10,648 |
| 111+00 | 11,100 | 50 | 16 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 91 | 0 | 0 | 0 | 21,958 | 5,899 | 0 | 0 | 0 | 0 | 0 | 10,567 |
| 111+33.86 | 11,134 | 34 | 19 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 21,980 | 5,900 | 0 | 0 | 0 | 0 | 0 | 10,589 |
| 111+50 | 11,150 | 16 | 19 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 21,991 | 5,900 | 0 | 0 | 0 | 0 | 0 | 10,600 |
| 112+00 | 11,200 | 50 | 18 | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 22,025 | 5,900 | 0 | 0 | 0 | 0 | 0 | 10,634 |
| 112+50 | 11,250 | 50 | 12 | 0 | 6 | 0 | 0 | 0 | 28 | 0 | 6 | 0 | 0 | 0 | 22,053 | 5,908 | 0 | 0 | 0 | 0 | 0 | 10,654 |
| 113+00 | 11,300 | 50 | 26 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 6 | 0 | 0 | 0 | 22,088 | 5,915 | 0 | 0 | 0 | 0 | 0 | 10,682 |
| 113+17.61 | 11,318 | 18 | 21 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 22,104 | 5,916 | 0 | 0 | 0 | 0 | 0 | 10,697 |
| | | | | | | | | | 22,104 | 5,491 | 4,732 | 0 | 0 | 0 | | | | | | | | |

## STH 180

| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1.00 Note 1 | 1.25 | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 10+24.12 | 1024.12 | 0.00 | 236.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 10+50 | 1050.00 | 25.88 | 136.11 | 0.00 | 3.71 | 0.00 | 0.00 | 0.00 | 179 | 0 | 2 | 0 | 0 | 0 | 179 | 2 | 0 | 0 | 0 | 0.00 | 0.00 | 176.52 |
| 10+57.8 | 1057.80 | 7.80 | 141.97 | 0.00 | 14.05 | 0.00 | 0.00 | 0.00 | 40 | 0 | 3 | 0 | 0 | 0 | 219 | 5 | 0 | 0 | 0 | 0.00 | 0.00 | 213.47 |
| 10+81.33 | 1081.33 | 23.53 | 120.74 | 0.00 | 2.59 | 0.00 | 0.00 | 0.00 | 114 | 0 | 7 | 0 | 0 | 0 | 333 | 14 | 0 | 0 | 0 | 0.00 | 0.00 | 318.88 |
| 11+00 | 1100.00 | 18.67 | 116.99 | 0.00 | 0.63 | 0.00 | 0.00 | 0.00 | 82 | 0 | 1 | 0 | 0 | 0 | 416 | 16 | 0 | 0 | 0 | 0.00 | 0.00 | 399.69 |
| 11+24.29 | 1124.29 | 24.29 | 106.76 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 101 | 0 | 0 | 0 | 0 | 0 | 516 | 16 | 0 | 0 | 0 | 0.00 | 0.00 | 499.97 |
| | | | | | | | | | 516 | 0 | 13 | 0 | 0 | 0 | | | | | | | | |

## 1st Street

| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1.00 Note 1 | 1.25 | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 09+24.01 | 924.01 | 0.00 | 210.85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 09+50 | 950.00 | 25.99 | 81.62 | 0.00 | #### | 0.00 | 0.00 | 0.00 | 141 | 0 | 58 | 0 | 0 | 0 | 141 | 72 | 0 | 0 | 0 | 0.00 | 0.00 | 68.87 |
| 09+72.66 | 972.66 | 22.66 | 70.54 | 0.00 | 2.57 | 0.00 | 0.00 | 0.00 | 64 | 0 | 51 | 0 | 0 | 0 | 205 | 136 | 0 | 0 | 0 | 0.00 | 0.00 | 68.69 |
| 09+80.48 | 980.48 | 7.82 | 57.84 | 0.00 | 3.44 | 0.00 | 0.00 | 0.00 | 19 | 0 | 1 | 0 | 0 | 0 | 223 | 137 | 0 | 0 | 0 | 0.00 | 0.00 | 86.19 |
| 09+83.48 | 983.48 | 3.00 | 44.41 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 6 | 0 | 0 | 0 | 0 | 0 | 229 | 137 | 0 | 0 | 0 | 0.00 | 0.00 | 91.62 |
| | | | | | | | | | 229 | 0 | 110 | 0 | 0 | 0 | | | | | | | | |

## Kenny Drive

| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1.00 Note 1 | 1.25 | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 20+21.1 | 2021.10 | 0.00 | 173.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 20+50 | 2050.00 | 28.90 | 74.87 | 0.00 | 39.03 | 0.00 | 0.00 | 0.00 | 133 | 0 | 21 | 0 | 0 | 0 | 133 | 26 | 0 | 0 | 0 | 0.00 | 0.00 | 106.89 |
| 20+66.77 | 2066.77 | 16.77 | 69.43 | 0.00 | 13.15 | 0.00 | 0.00 | 0.00 | 45 | 0 | 16 | 0 | 0 | 0 | 178 | 46 | 0 | 0 | 0 | 0.00 | 0.00 | 131.44 |
| 20+73.94 | 2073.94 | 7.18 | 70.32 | 0.00 | 1.23 | 0.00 | 0.00 | 0.00 | 19 | 0 | 2 | 0 | 0 | 0 | 196 | 49 | 0 | 0 | 0 | 0.00 | 0.00 | 147.63 |
| 20+93.27 | 2093.27 | 19.32 | 77.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 53 | 0 | 0 | 0 | 0 | 0 | 249 | 49 | 0 | 0 | 0 | 0.00 | 0.00 | 199.89 |
| | | | | | | | | | 249 | 0 | 39 | 0 | 0 | 0 | | | | | | | | |

## Fairgrounds Road

| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1.00 Note 1 | 1.25 | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 90+17.66 | 9017.66 | 0.00 | 232.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 90+33.78 | 9033.78 | 16.12 | 114.14 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 103 | 0 | 0 | 0 | 0 | 0 | 103 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 103.38 |
| 90+50 | 9050.00 | 16.22 | 167.40 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 85 | 0 | 0 | 0 | 0 | 0 | 188 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 187.93 |
| 90+89.84 | 9089.84 | 39.84 | 99.38 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 197 | 0 | 0 | 0 | 0 | 0 | 385 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 384.69 |
| 91+00 | 9100.00 | 10.16 | 97.40 | 0.00 | 0.23 | 0.00 | 0.00 | 0.00 | 37 | 0 | 0 | 0 | 0 | 0 | 422 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 421.66 |
| 91+14.59 | 9114.59 | 14.59 | 93.51 | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 | 52 | 0 | 0 | 0 | 0 | 0 | 473 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 473.08 |
| | | | | | | | | | 473 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |

## Beach Ave

| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1.00 Note 1 | 1.25 | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 10+16.04 | 1016.04 | 0.00 | 232.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 10+50 | 1050.00 | 33.96 | 71.74 | 0.00 | #### | 0.00 | 0.00 | 0.00 | 191 | 0 | 97 | 0 | 0 | 0 | 191 | 121 | 0 | 0 | 0 | 0.00 | 0.00 | 70.18 |
| 10+61.82 | 1061.82 | 11.82 | 70.72 | 0.00 | 5.94 | 0.00 | 0.00 | 0.00 | 31 | 0 | 35 | 0 | 0 | 0 | 222 | 165 | 0 | 0 | 0 | 0.00 | 0.00 | 57.61 |
| 10+75.95 | 1075.95 | 14.13 | 77.28 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 39 | 0 | 2 | 0 | 0 | 0 | 261 | 167 | 0 | 0 | 0 | 0.00 | 0.00 | 94.36 |
| 11+00 | 1100.00 | 24.05 | 90.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 75 | 0 | 0 | 0 | 0 | 0 | 336 | 167 | 0 | 0 | 0 | 0.00 | 0.00 | 168.93 |
| 11+21.82 | 1121.82 | 21.82 | 55.72 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 59 | 0 | 0 | 0 | 0 | 0 | 395 | 167 | 0 | 0 | 0 | 0.00 | 0.00 | 227.93 |
| | | | | | | | | | 395 | 0 | 133 | 0 | 0 | 0 | | | | | | | | |

## CTH C

| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1.00 Note 1 | 1.25 | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 10+16.04 | 1016.04 | 0.00 | 232.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 10+50 | 1050.00 | 33.96 | 71.74 | 0.00 | #### | 0.00 | 0.00 | 0.00 | 191 | 0 | 97 | 0 | 0 | 0 | 191 | 121 | 0 | 0 | 0 | 0.00 | 0.00 | 70.18 |
| 10+61.82 | 1061.82 | 11.82 | 70.72 | 0.00 | 5.94 | 0.00 | 0.00 | 0.00 | 31 | 0 | 35 | 0 | 0 | 0 | 222 | 165 | 0 | 0 | 0 | 0.00 | 0.00 | 57.61 |
| 10+75.95 | 1075.95 | 14.13 | 77.28 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 39 | 0 | 2 | 0 | 0 | 0 | 261 | 167 | 0 | 0 | 0 | 0.00 | 0.00 | 94.36 |
| 11+00 | 1100.00 | 24.05 | 90.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 75 | 0 | 0 | 0 | 0 | 0 | 336 | 167 | 0 | 0 | 0 | 0.00 | 0.00 | 168.93 |
| 11+21.82 | 1121.82 | 21.82 | 55.72 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 59 | 0 | 0 | 0 | 0 | 0 | 395 | 167 | 0 | 0 | 0 | 0.00 | 0.00 | 227.93 |
| | | | | | | | | | 395 | 0 | 133 | 0 | 0 | 0 | | | | | | | | |

## North Ave East

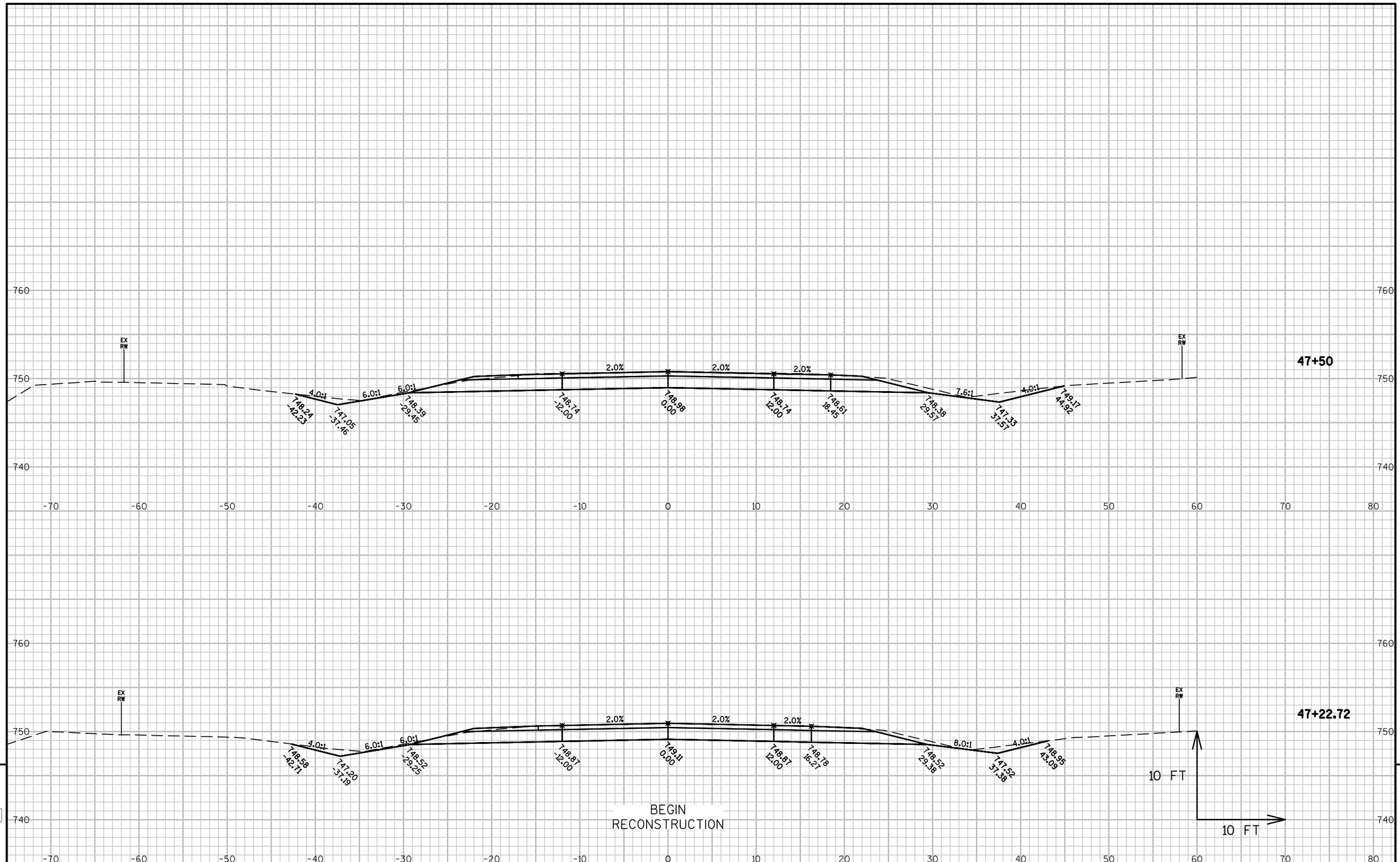
| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1.00 Note 1 | 1.25 | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 30+17.63 | 3017.63 | 0.00 | 213.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 30+50 | 3050.00 | 32.37 | 105.74 | 0.00 | 1.71 | 0.00 | 0.00 | 0.00 | 191 | 0 | 1 | 0 | 0 | 0 | 191 | 1 | 0 | 0 | 0 | 0.00 | 0.00 | 189.95 |
| 30+54.53 | 3054.53 | 4.53 | 106.86 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 18 | 0 | 0 | 0 | 0 | 0 | 209 | 1 | 0 | 0 | 0 | 0.00 | 0.00 | 207.59 |
| 31+00 | 3100.00 | 45.47 | 70.74 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 150 | 0 | 0 | 0 | 0 | 0 | 359 | 1 | 0 | 0 | 0 | 0.00 | 0.00 | 357.14 |
| 31+02.62 | 3102.62 | 2.62 | 69.80 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7 | 0 | 0 | 0 | 0 | 0 | 365 | 1 | 0 | 0 | 0 | 0.00 | 0.00 | 363.95 |
| 31+37.54 | 3137.54 | 34.92 | 54.52 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 80 | 0 | 0 | 0 | 0 | 0 | 446 | 1 | 0 | 0 | 0 | 0.00 | 0.00 | 444.36 |
| | | | | | | | | | 446 | 0 | 1 | 0 | 0 | 0 | | | | | | | | |

## North Ave West

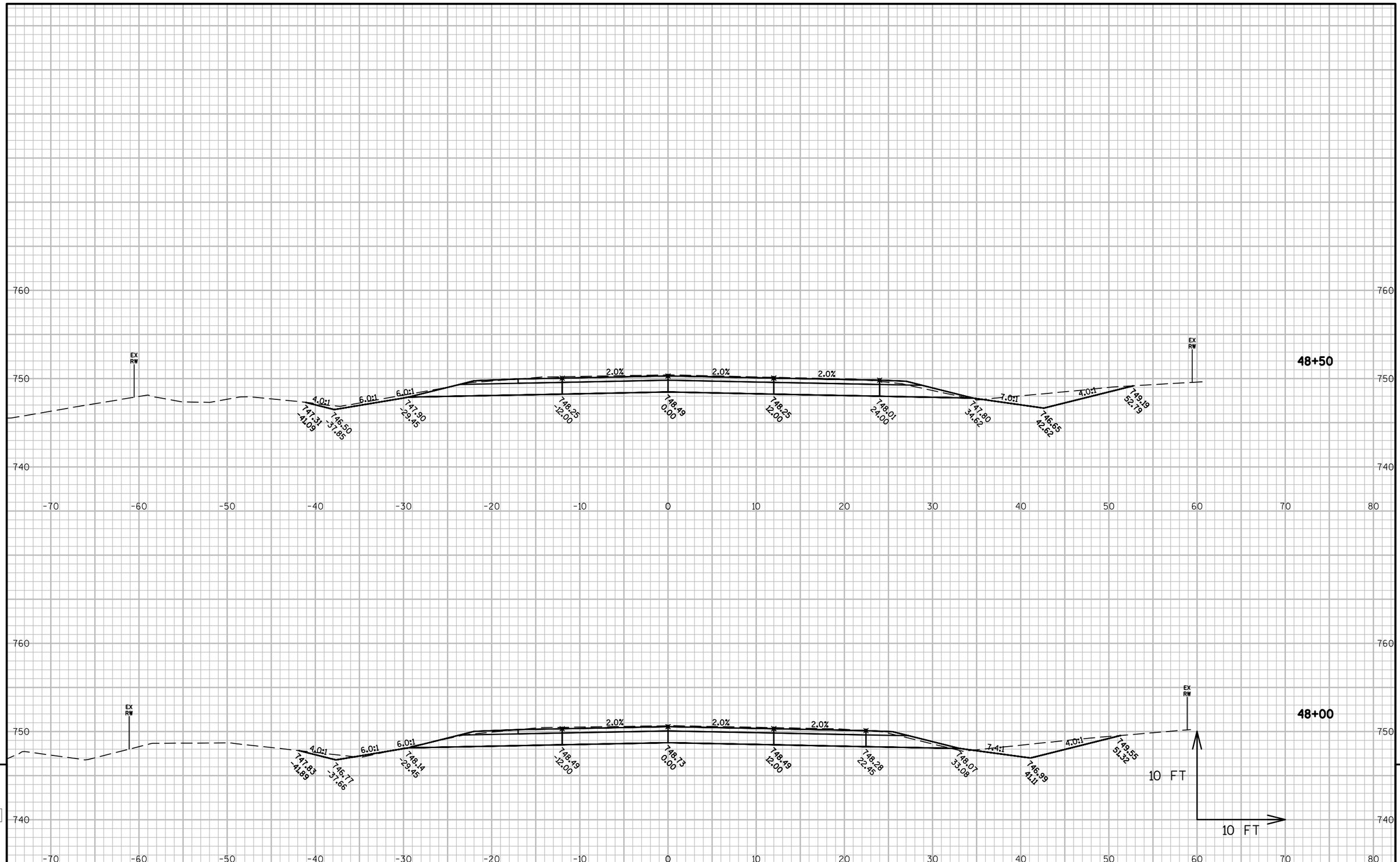
| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1.00 Note 1 | 1.25 | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 28+23.36 | 2823.36 | 0.00 | 39.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 28+39.24 | 2839.24 | 15.87 | 43.77 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 24.36 |
| 28+50 | 2850.00 | 10.76 | 57.81 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20 | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 44.60 |
| 28+93.24 | 2893.24 | 43.24 | 44.54 | 0.00 | 4.44 | 0.00 | 0.00 | 0.00 | 82 | 0 | 4 | 0 | 0 | 0 | 127 | 4 | 0 | 0 | 0 | 0.00 | 0.00 | 122.12 |
| 29+00 | 2900.00 | 6.76 | 43.94 | 0.00 | 11.38 | 0.00 | 0.00 | 0.00 | 11 | 0 | 2 | 0 | 0 | 0 | 138 | 7 | 0 | 0 | 0 | 0.00 | 0.00 | 130.72 |
| 29+41.4 | 2941.40 | 41.40 | 109.79 | 0.00 | 12.36 | 0.00 | 0.00 | 0.00 | 118 | 0 | 18 | 0 | 0 | 0 | 255 | 30 | 0 | 0 | 0 | 0.00 | 0.00 | 225.83 |
| 29+50 | 2950.00 | 8.60 | 94.44 | 0.00 | 16.40 | 0.00 | 0.00 | 0.00 | 33 | 0 | 5 | 0 | 0 | 0 | 288 | 35 | 0 | 0 | 0 | 0.00 | 0.00 | 252.63 |
| 29+82.37 | 2982.37 | 32.37 | 211.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 183 | 0 | 10 | 0 | 0 | 0 | 471 | 48 | 0 | 0 | 0 | 0.00 | 0.00 | 423.54 |
| | | | | | | | | | 471 | 0 | 38 | 0 | 0 | 0 | | | | | | | | |

## Division Street

| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Incremental Vol (CY) (Unadjusted) Cut | Salvaged / Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cumulative Vol (CY) Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | 1.00 Note 1 | 1.25 | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 76+77 | 7677.00 | 0.00 | 40.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 77+00 | 7700.00 | 23.00 | 45.47 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 | 37 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 36.63 |
| 77+25 | 7725.00 | 25.00 | 51.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 45 | 0 | 0 | 0 | 0 | 0 | 82 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 81.43 |
| 77+50 | 7750.00 | 25.00 | 76.62 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 59 | 0 | 0 | 0 | 0 | 0 | 141 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 140.69 |
| 77+77.11 | 7777.11 | 27.11 | 138.14 | 0.00 | 6.53 | 0.00 | 0.00 | 0.00 | 108 | 0 | 3 | 0 | 0 | 0 | 249 | 4 | 0 | 0 | 0 | 0.00 | 0.00 | 244.31 |
| 78+00 | 7800.00 | 22.89 | 69.44 | 0.00 | 10.76 | 0.00 | 0.00 | 0.00 | 88 | 0 | 7 | 0 | 0 | 0 | 337 | 14 | 0 | 0 | 0 | 0.00 | 0.00 | 323.15 |
| 78+07.54 | 7807.54 | 7.54 | 218.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 40 | 0 | 2 | 0 | 0 | 0 | 377 | 16 | 0 | 0 | 0 | 0.00 | 0.00 | 361.45 |
| | | | | | | | | | 377 | 0 | 12 | 0 | 0 | 0 | | | | | | | | |




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 292 | E |
|---|---|---|---|---|---|

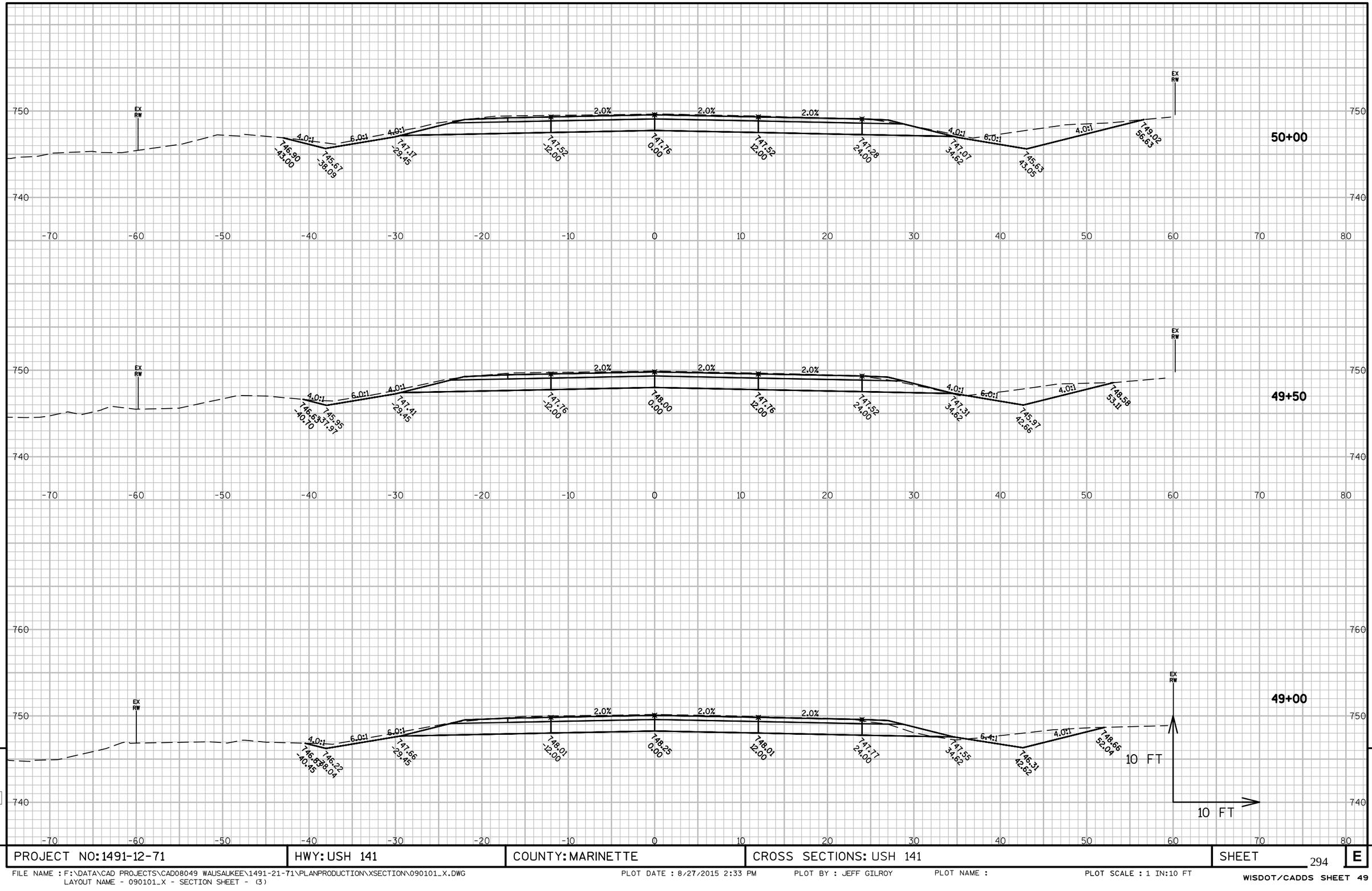



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 293 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (2)

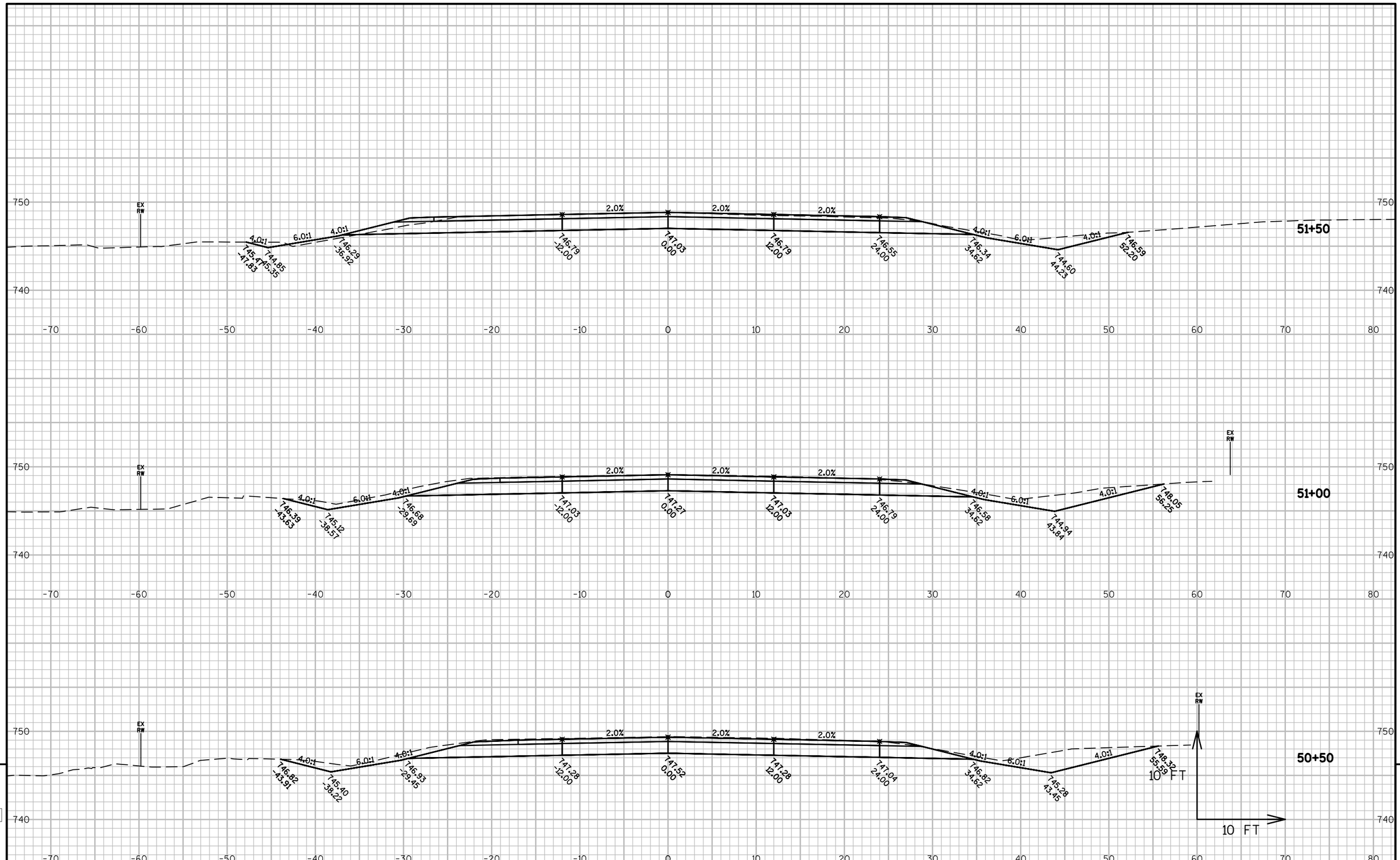
PLOT DATE : 8/27/2015 2:32 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



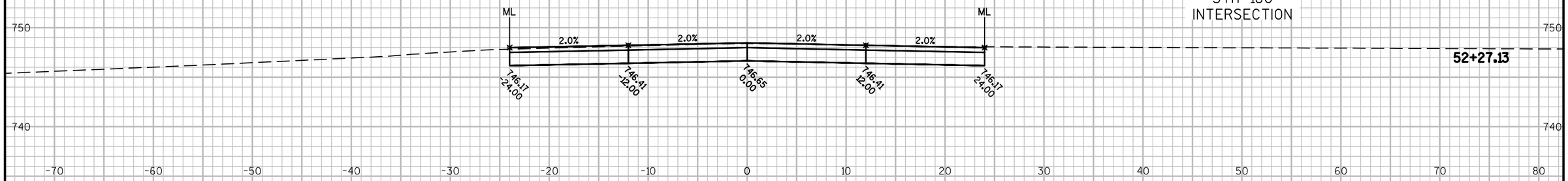

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 294 | E |
|---|---|---|---|---|---|


FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (3)
PLOT DATE : 8/27/2015 2:33 PM
PLOT BY : JEFF GILROY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

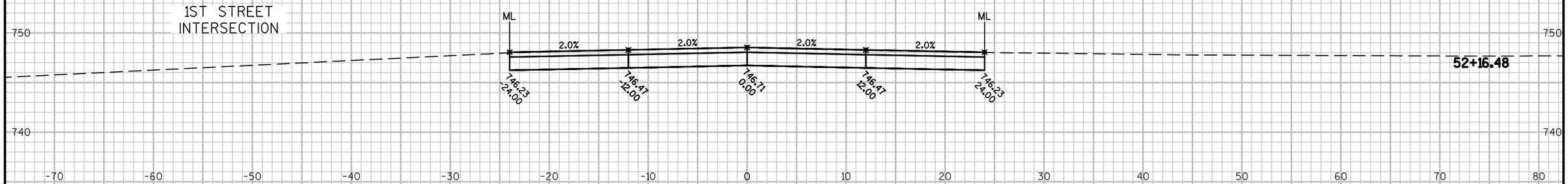


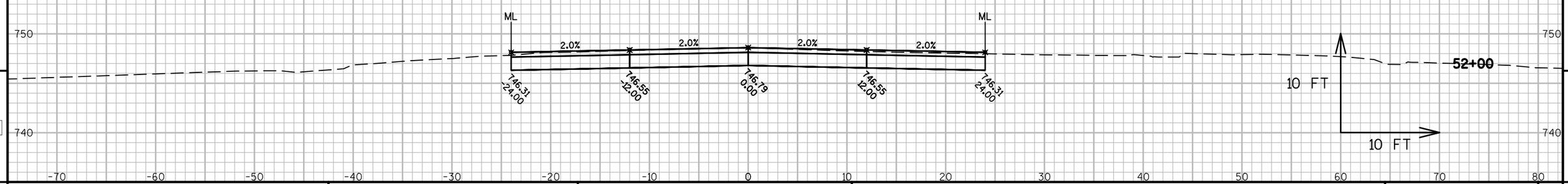

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 295 | E |
|---|---|---|---|---|---|

STH 180
INTERSECTION

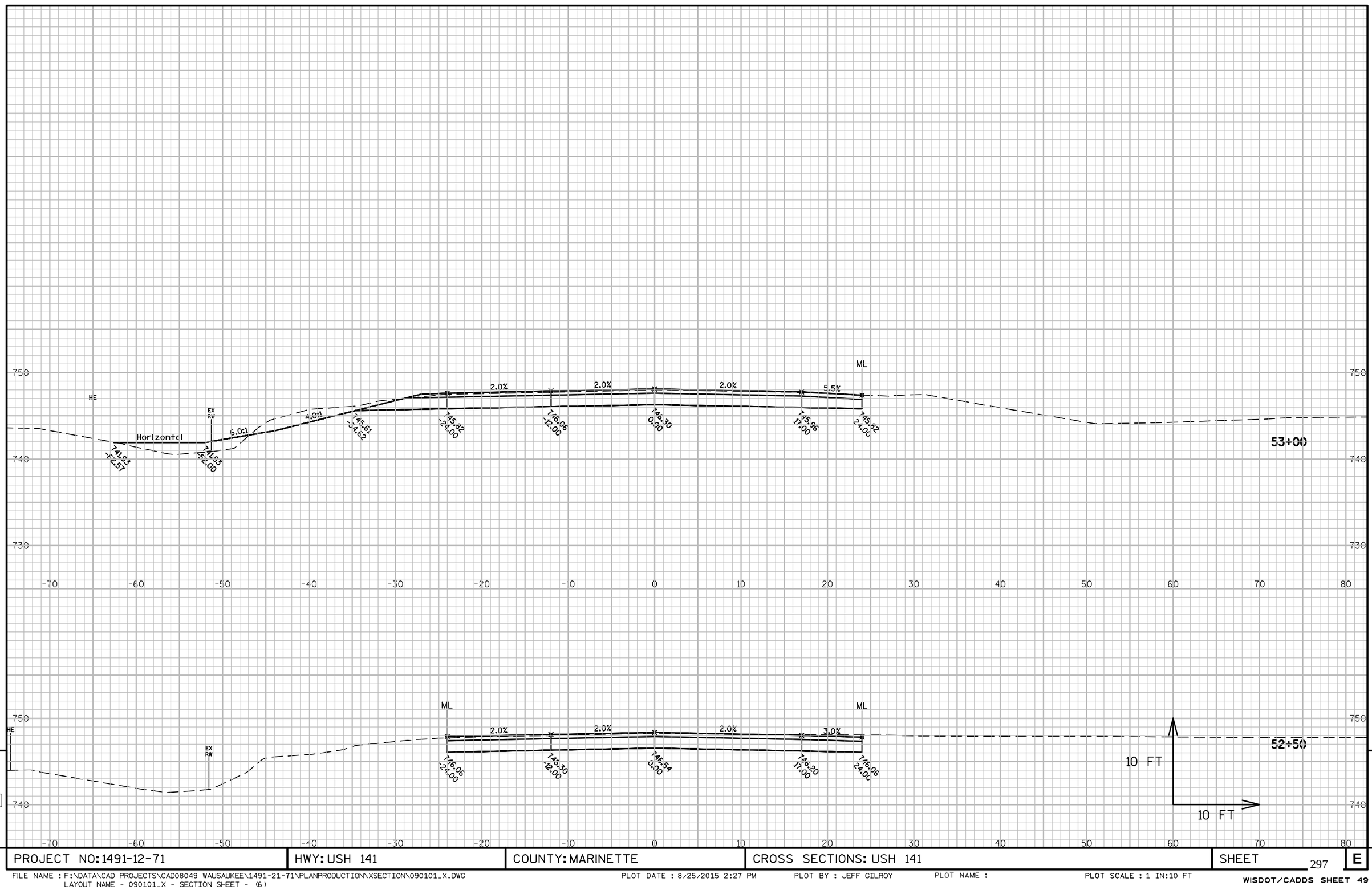



1ST STREET
INTERSECTION

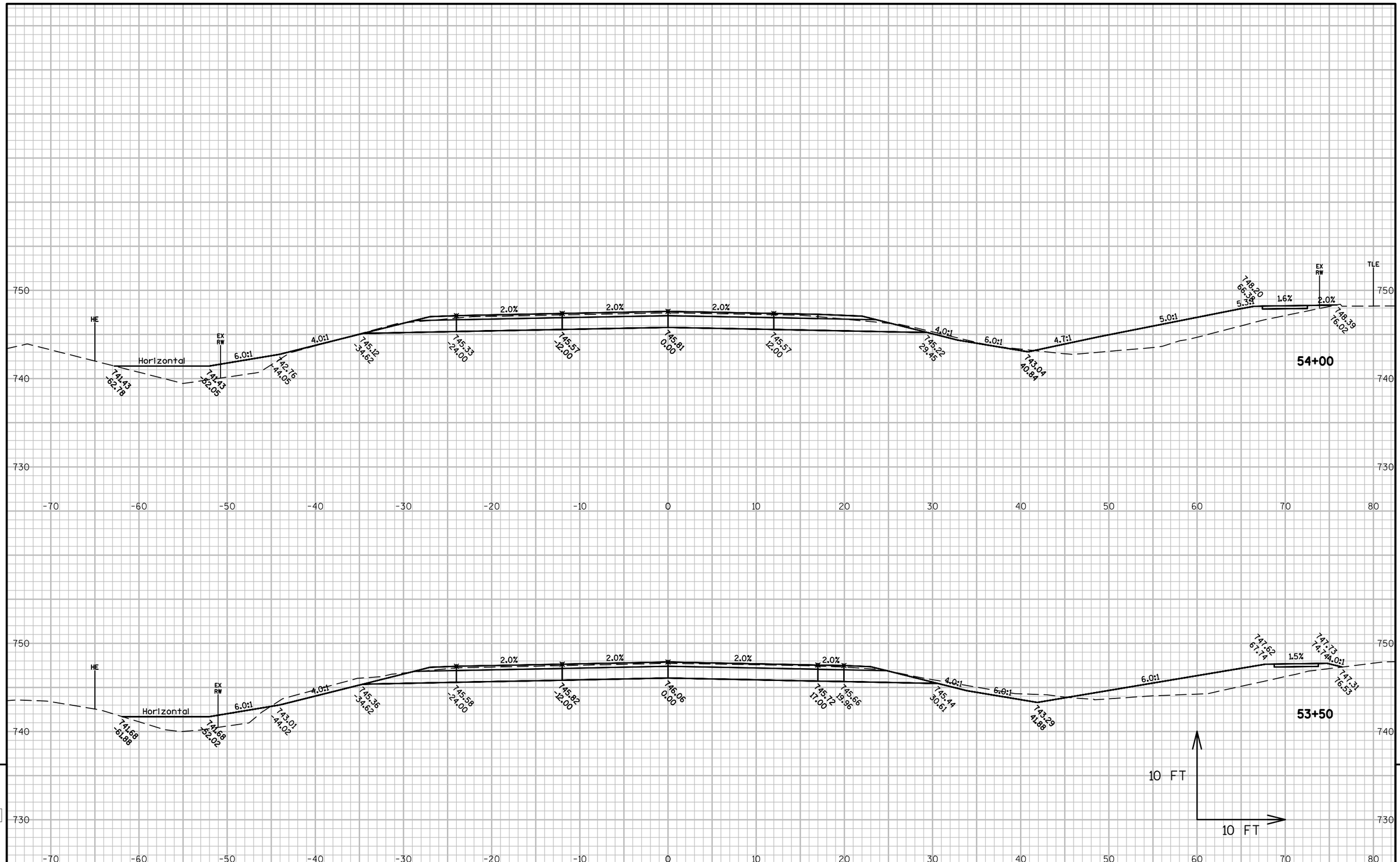



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 296 | E |
|---|---|---|---|---|---|



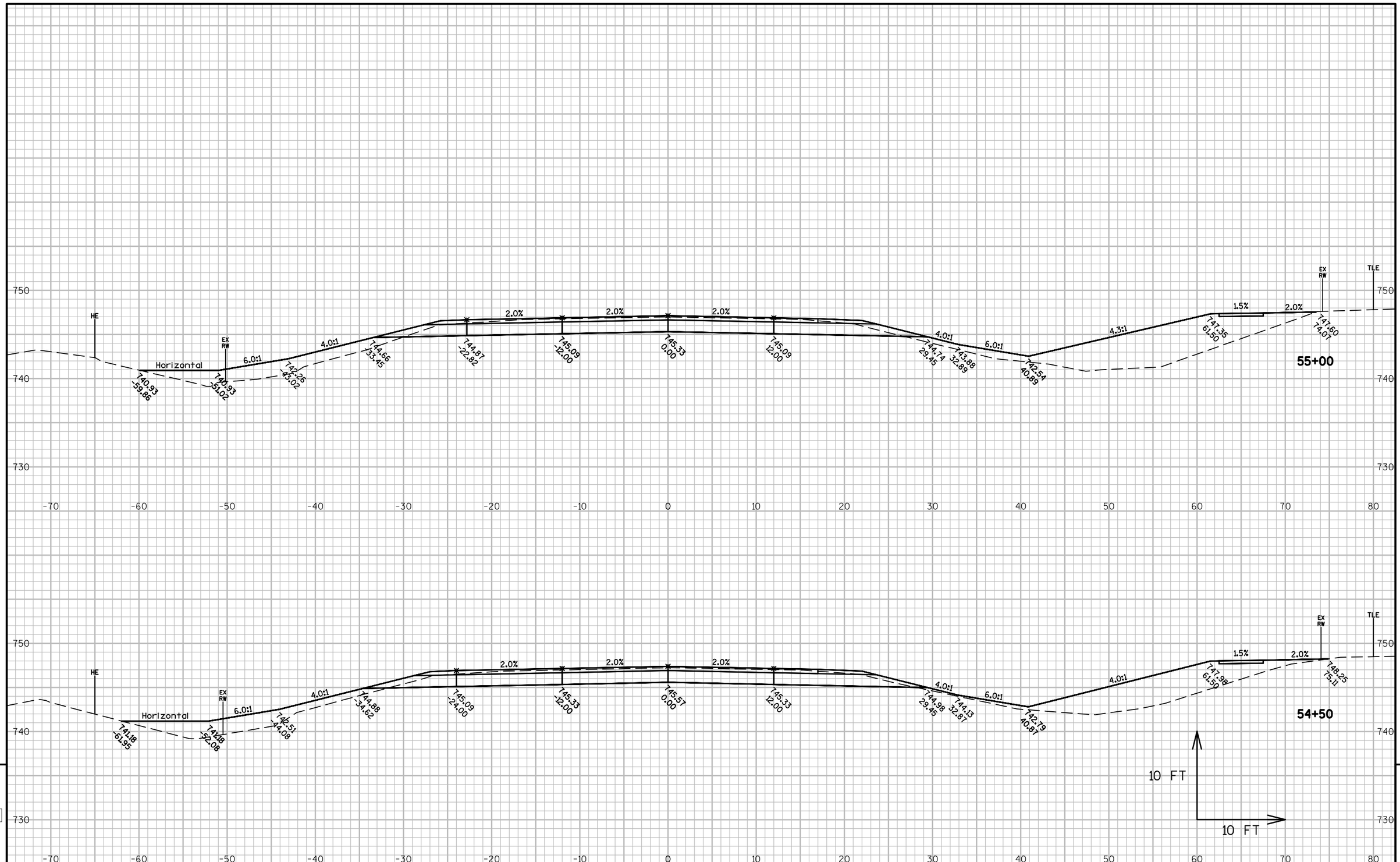

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 297 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 298 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (7)

PLOT DATE : 8/25/2015 2:28 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

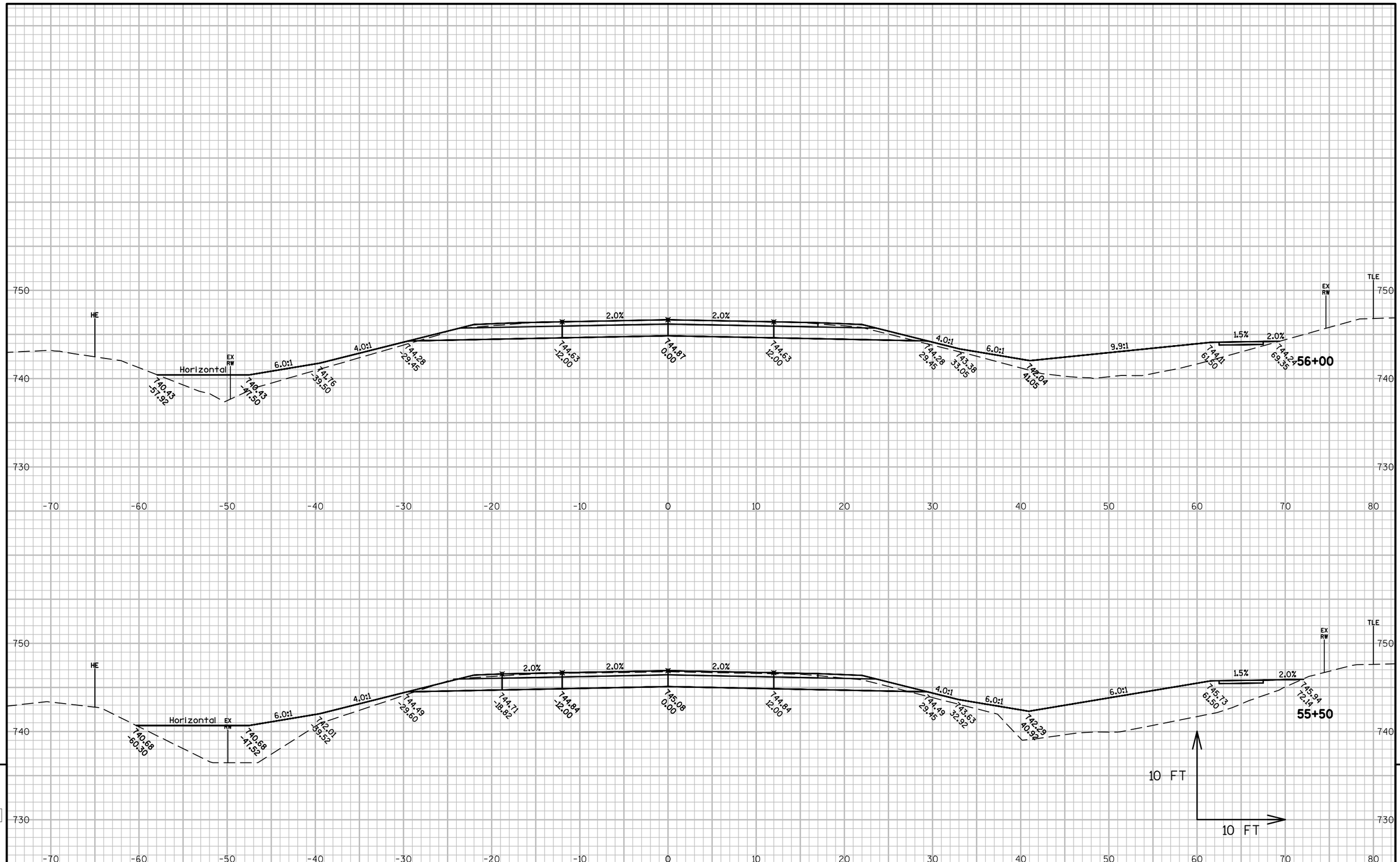



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 299 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (8)

PLOT DATE : 8/25/2015 2:29 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

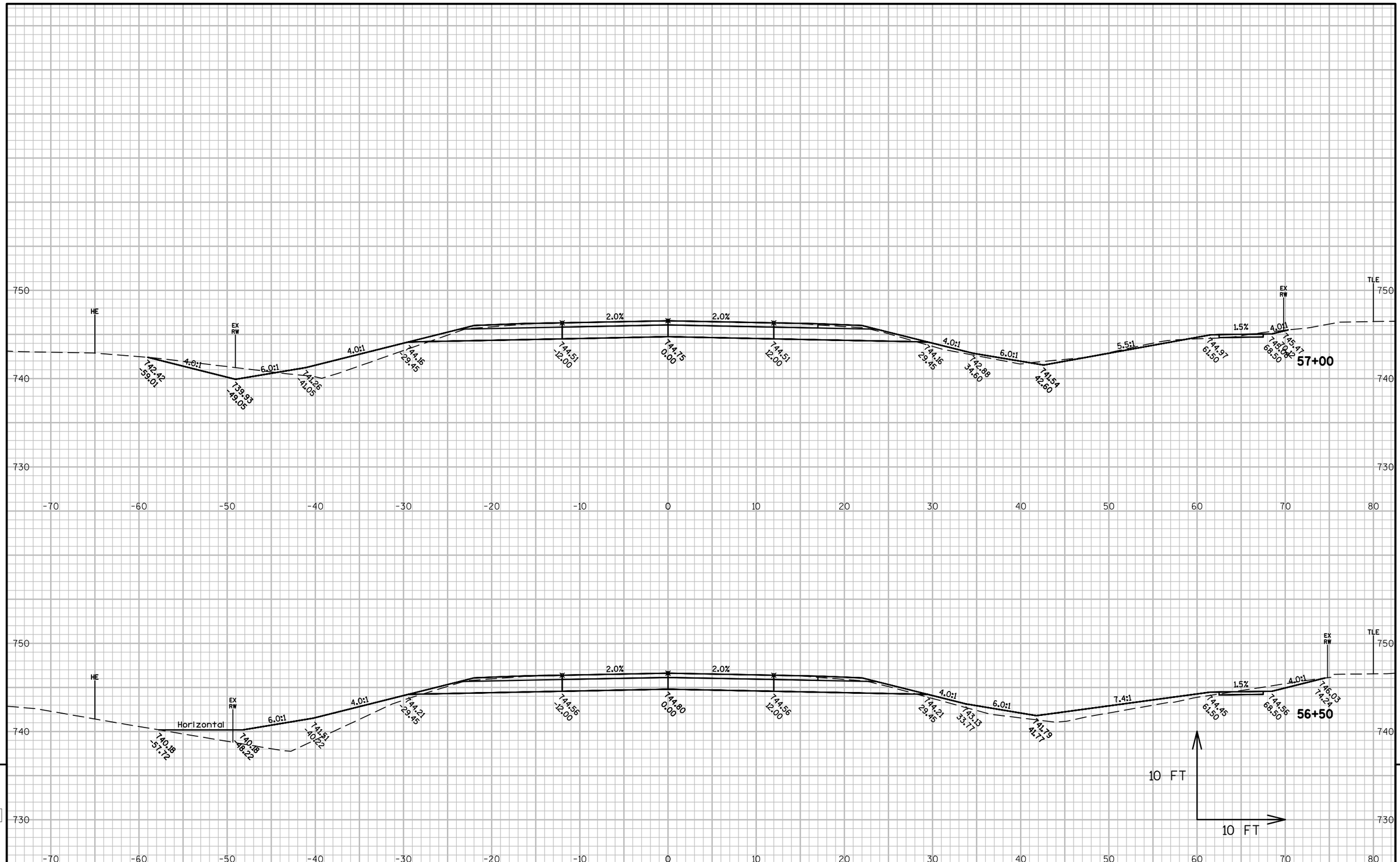
WISDOT/CADDS SHEET 49




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 300 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (9)

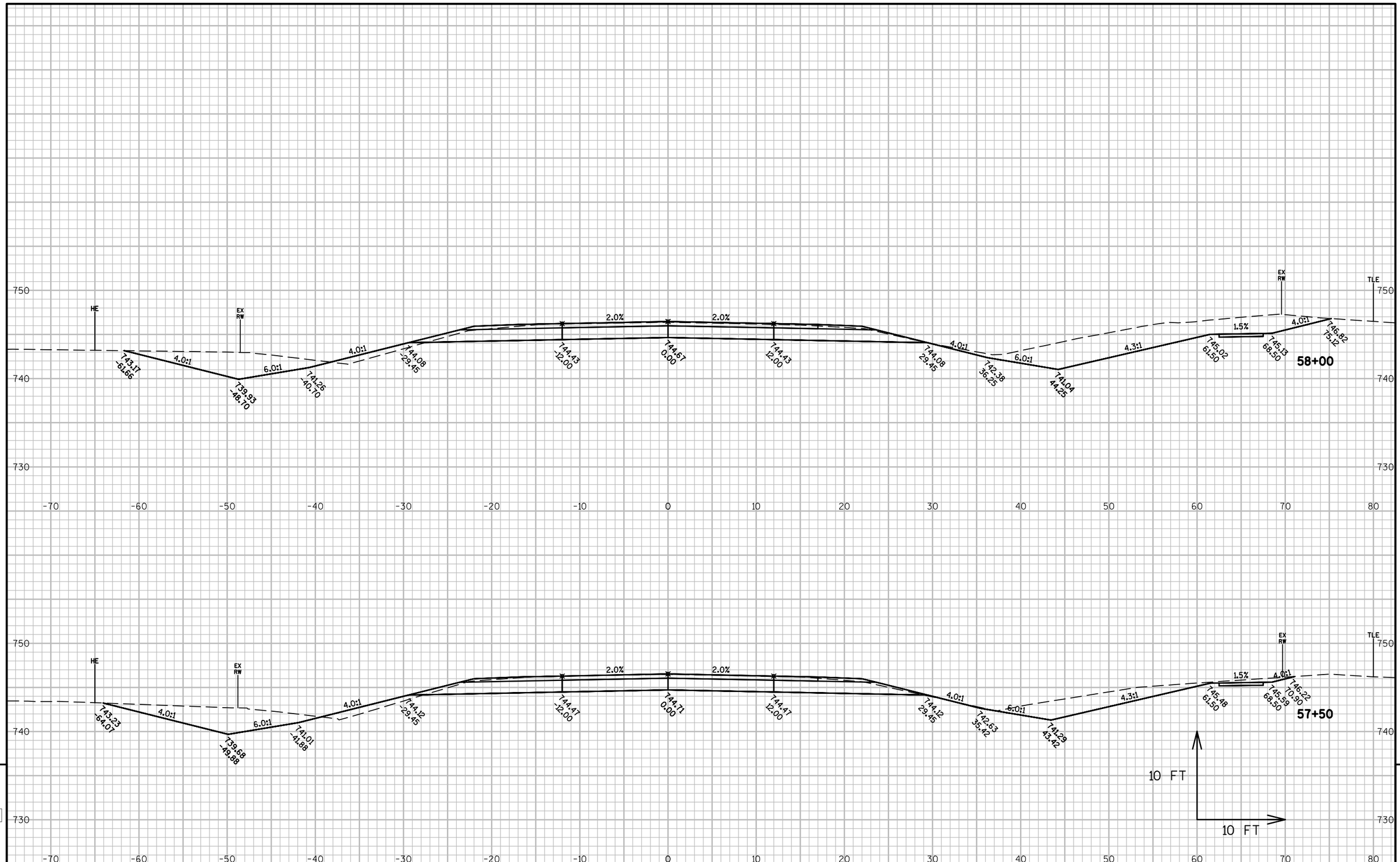
PLOT DATE : 8/25/2015 2:29 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 301 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (10)

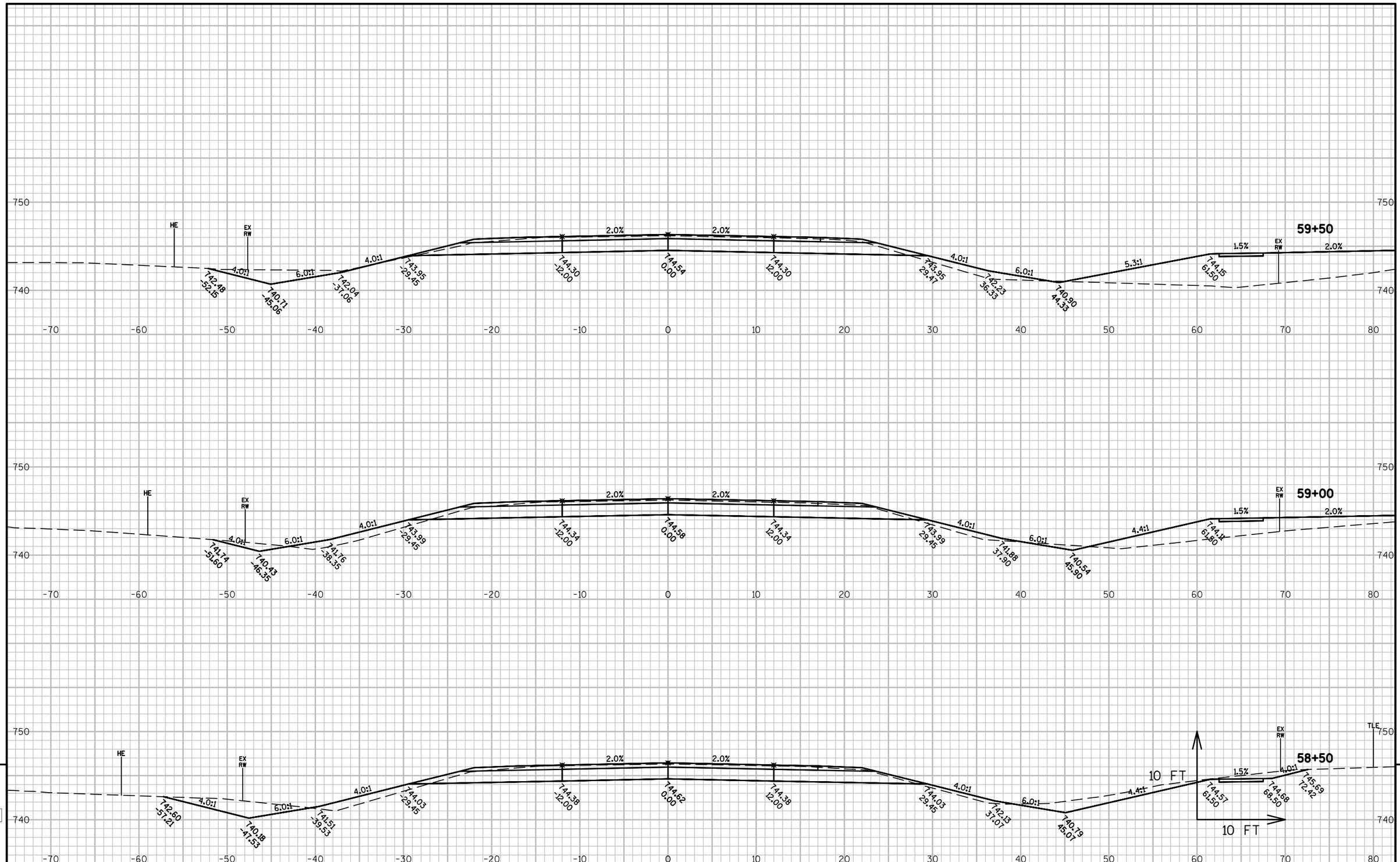
PLOT DATE : 8/25/2015 2:30 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 302 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (11)

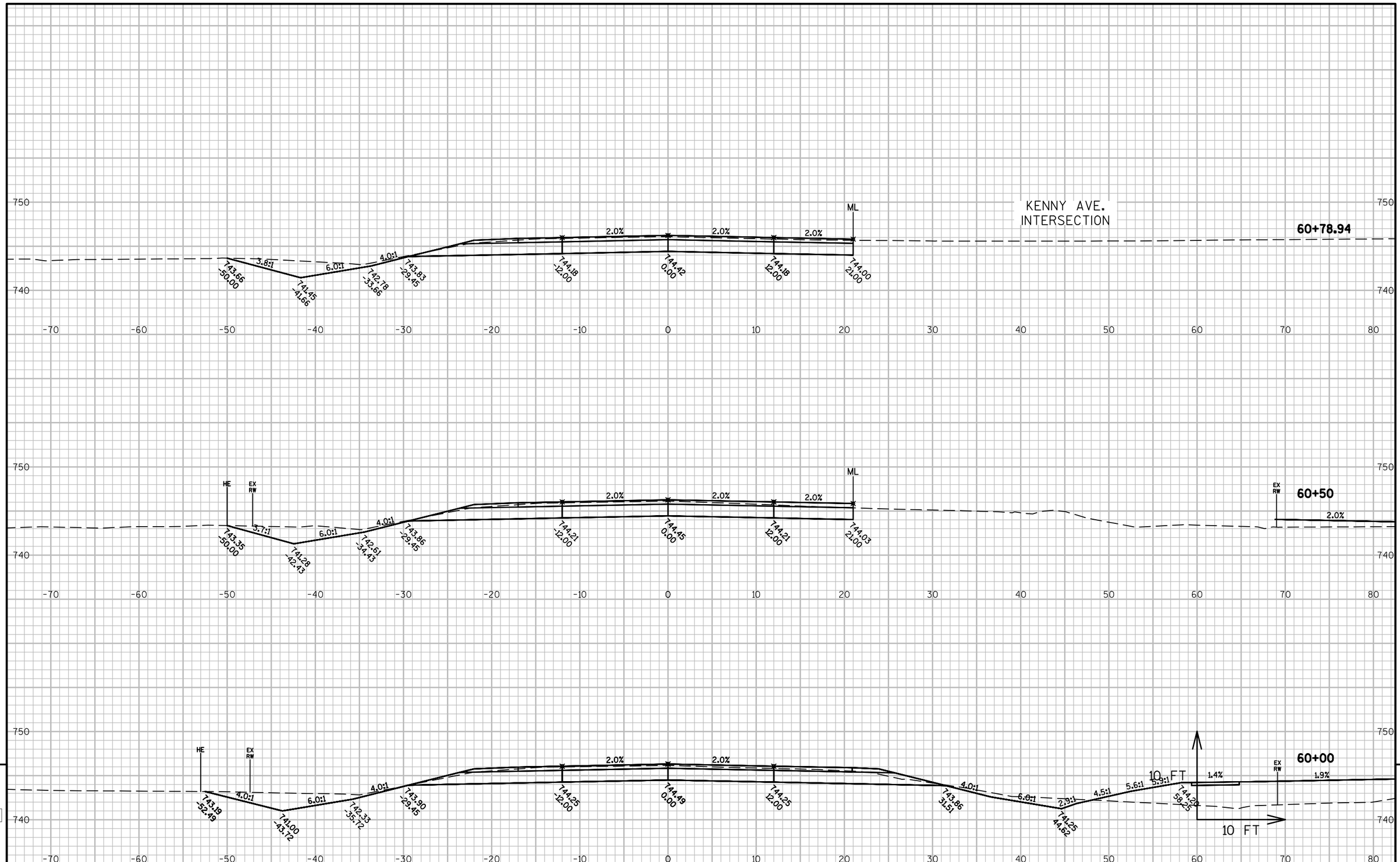
PLOT DATE : 8/25/2015 2:31 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 303 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (12)

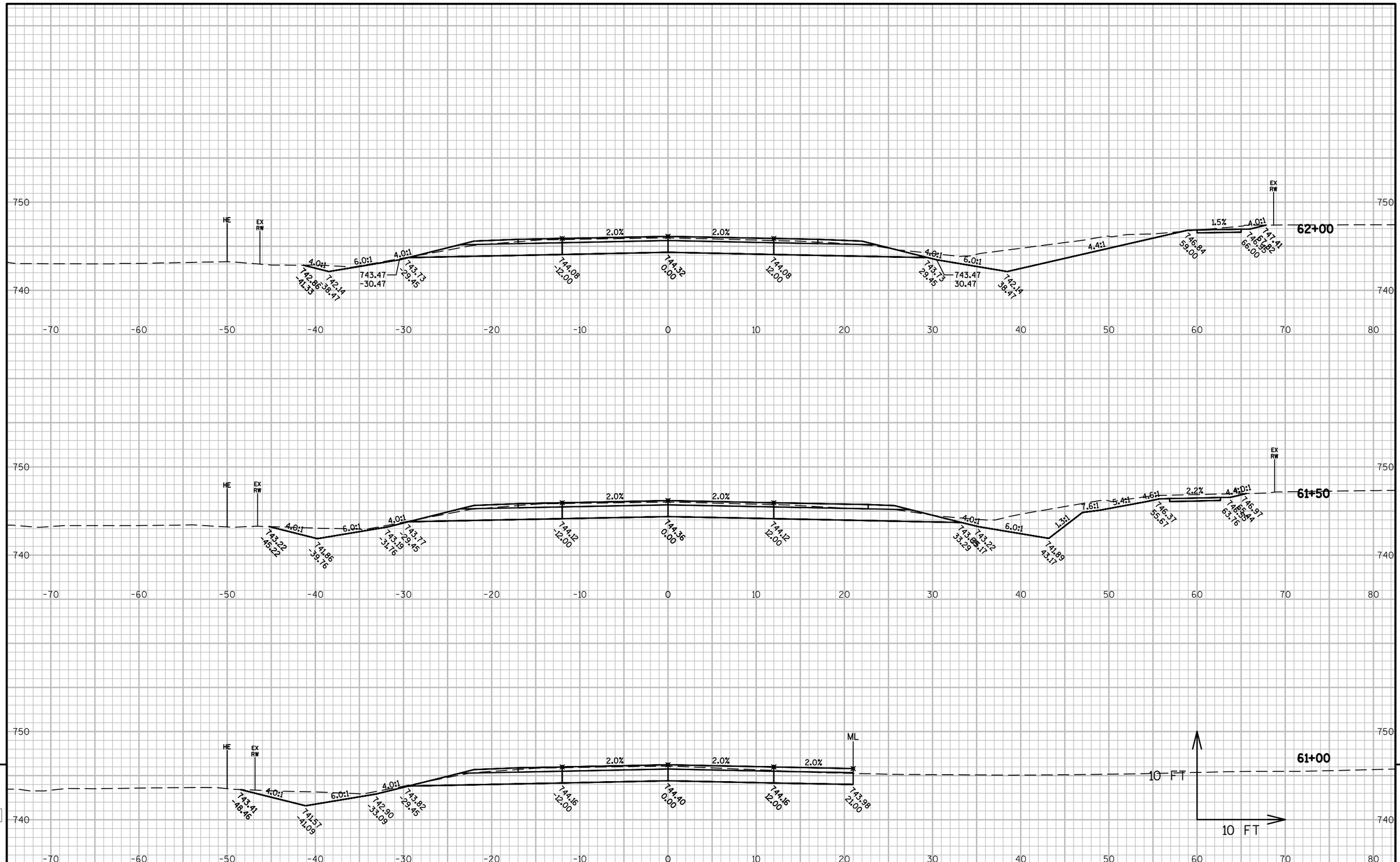
PLOT DATE : 8/25/2015 2:32 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT



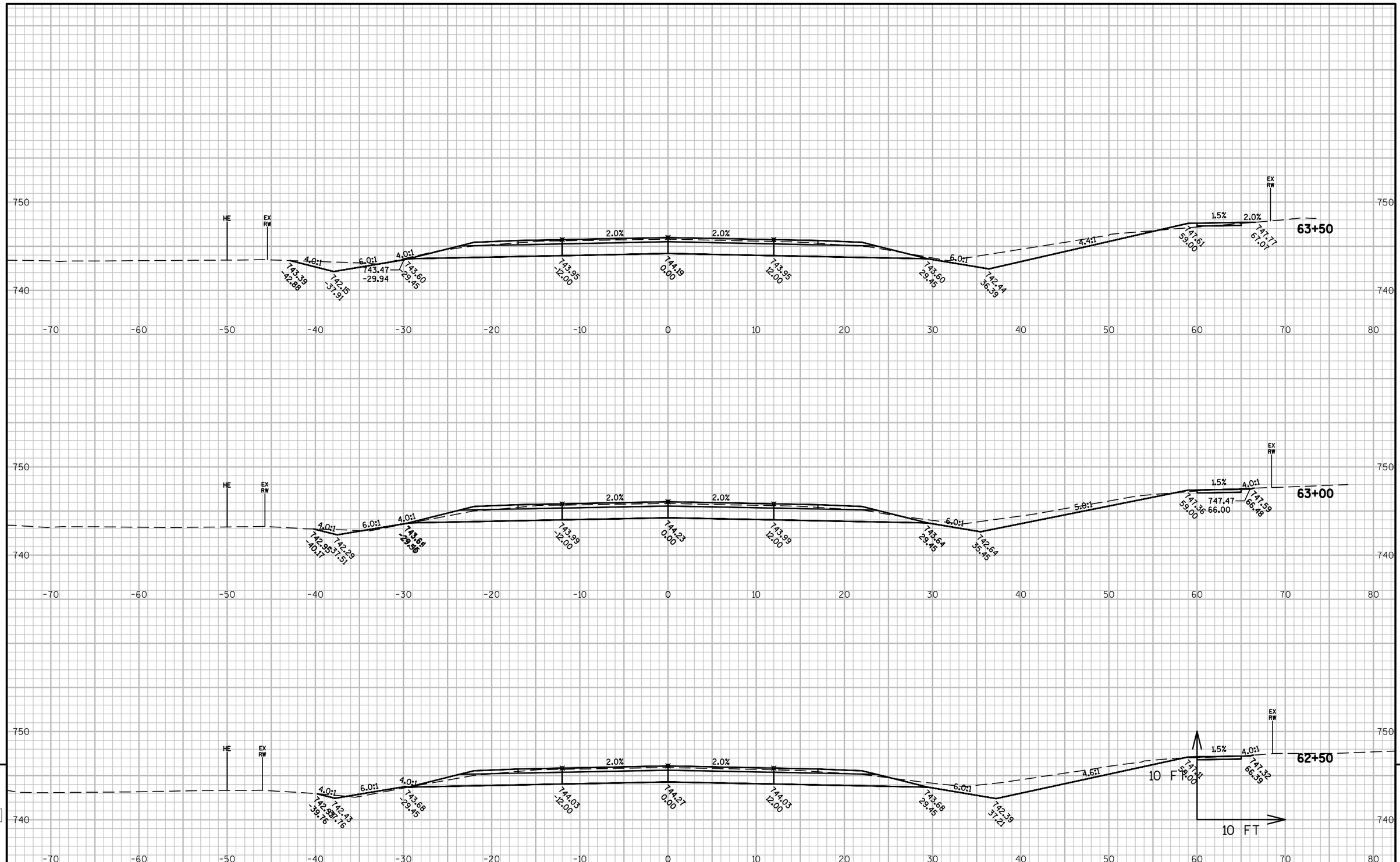

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 304 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (13)

PLOT DATE : 8/25/2015 2:33 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

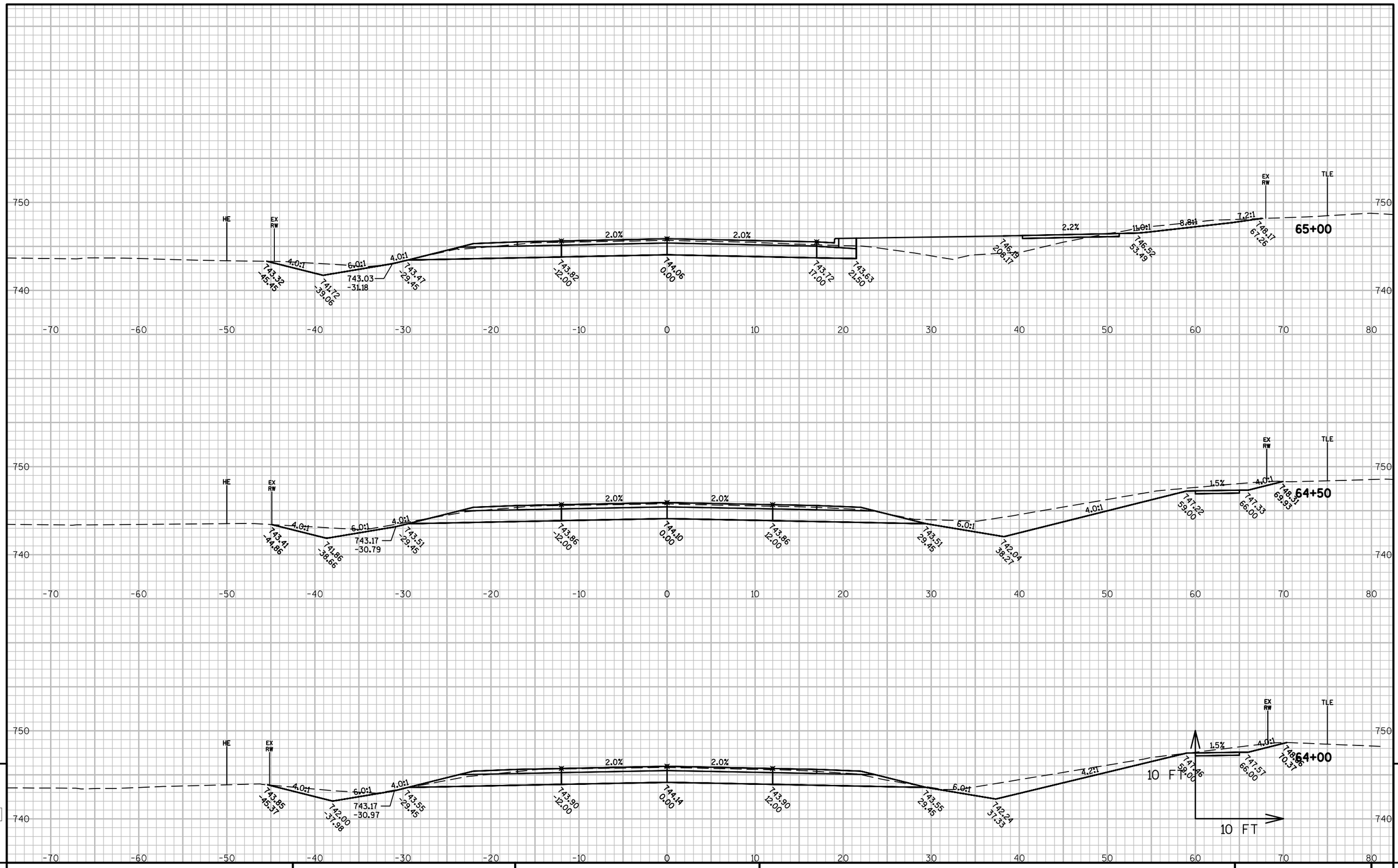



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 305 | E |
|---|---|---|---|---|---|



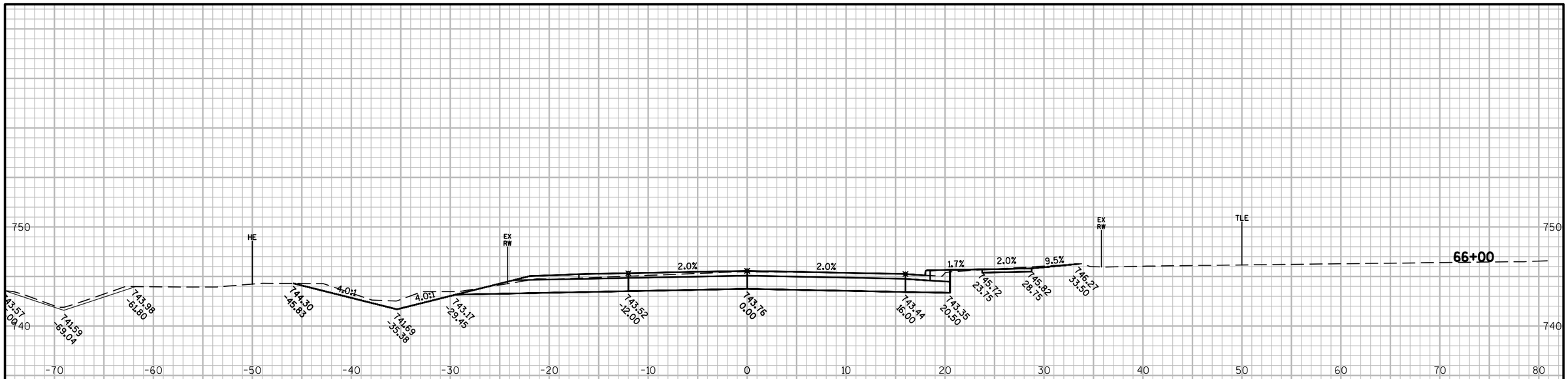

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 306 | E |
|---|---|---|---|---|---|

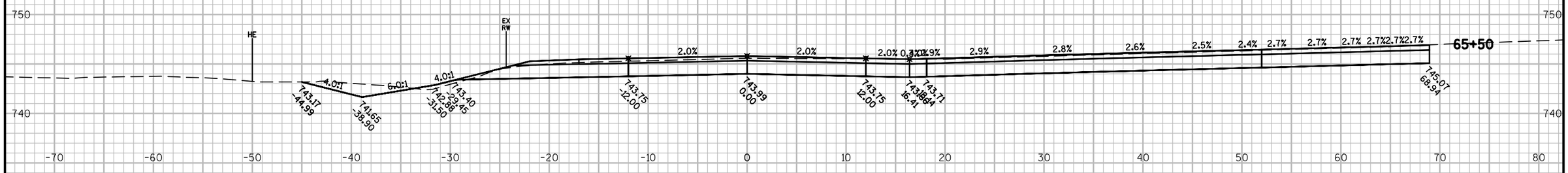
FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (15)
PLOT DATE : 8/25/2015 2:34 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

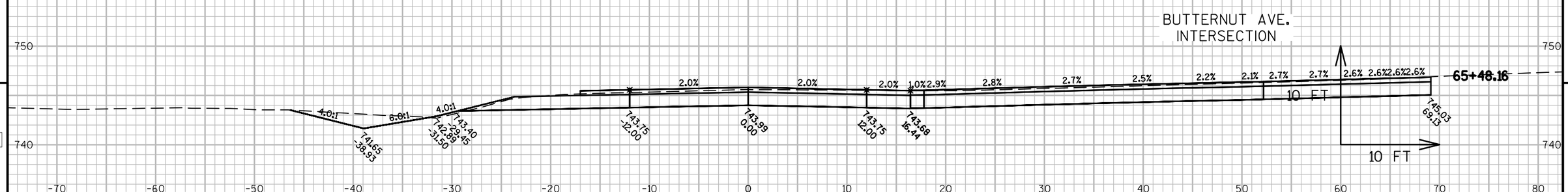



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 307 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (16)
PLOT DATE : 8/25/2015 2:35 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



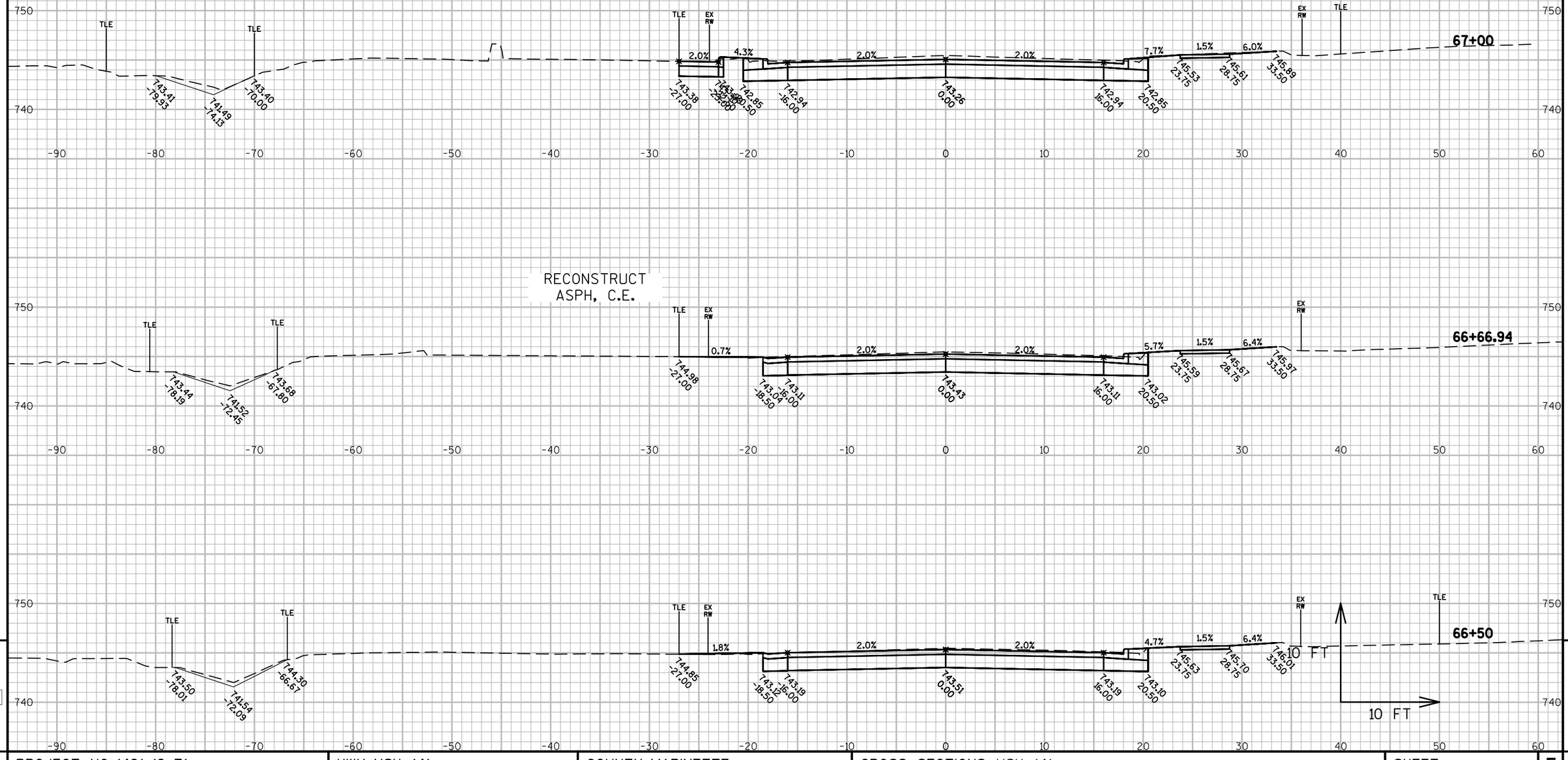




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 308 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (17)

PLOT DATE : 8/25/2015 2:36 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

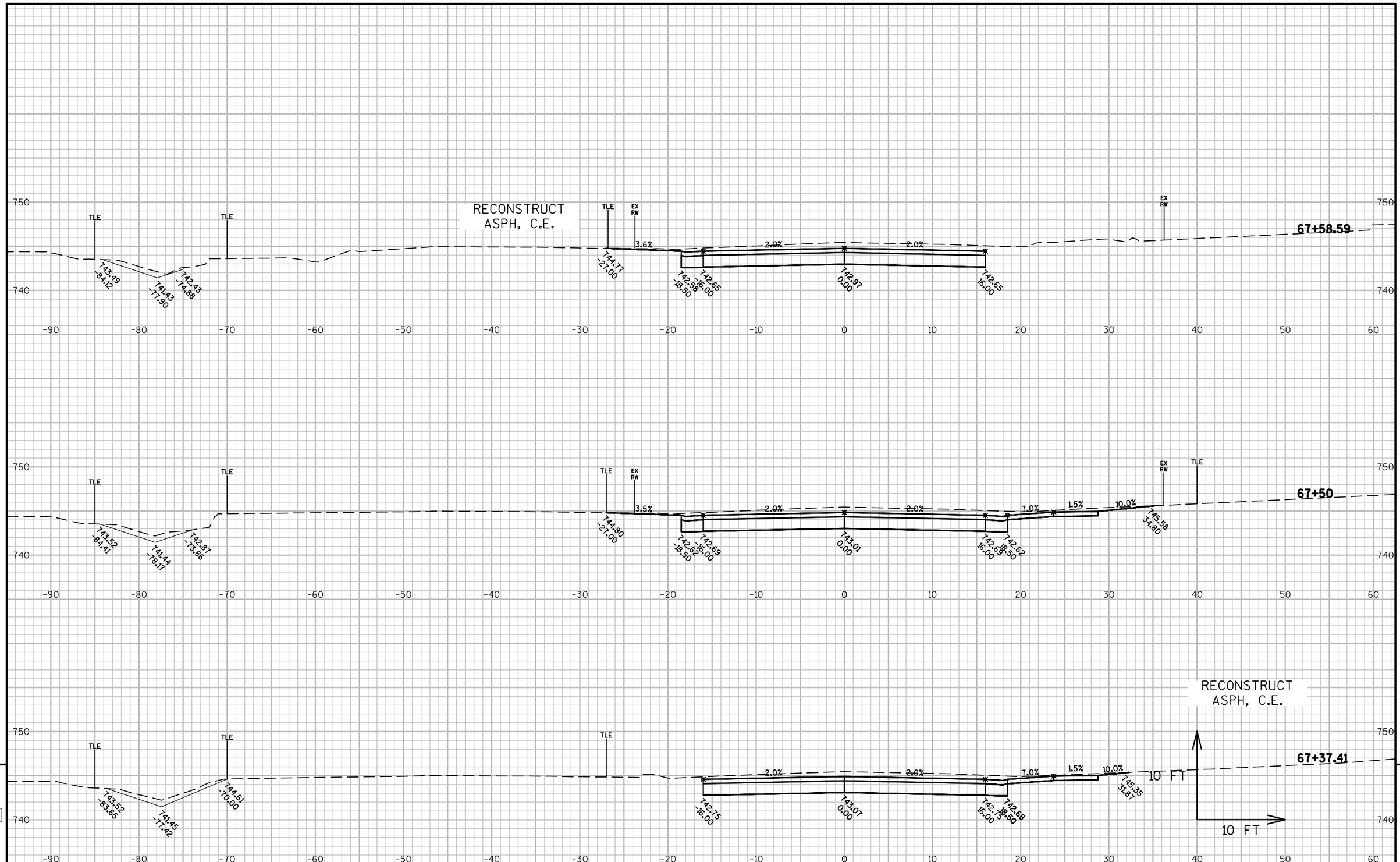
WISDOT/CADDS SHEET 49




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 309 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (18)

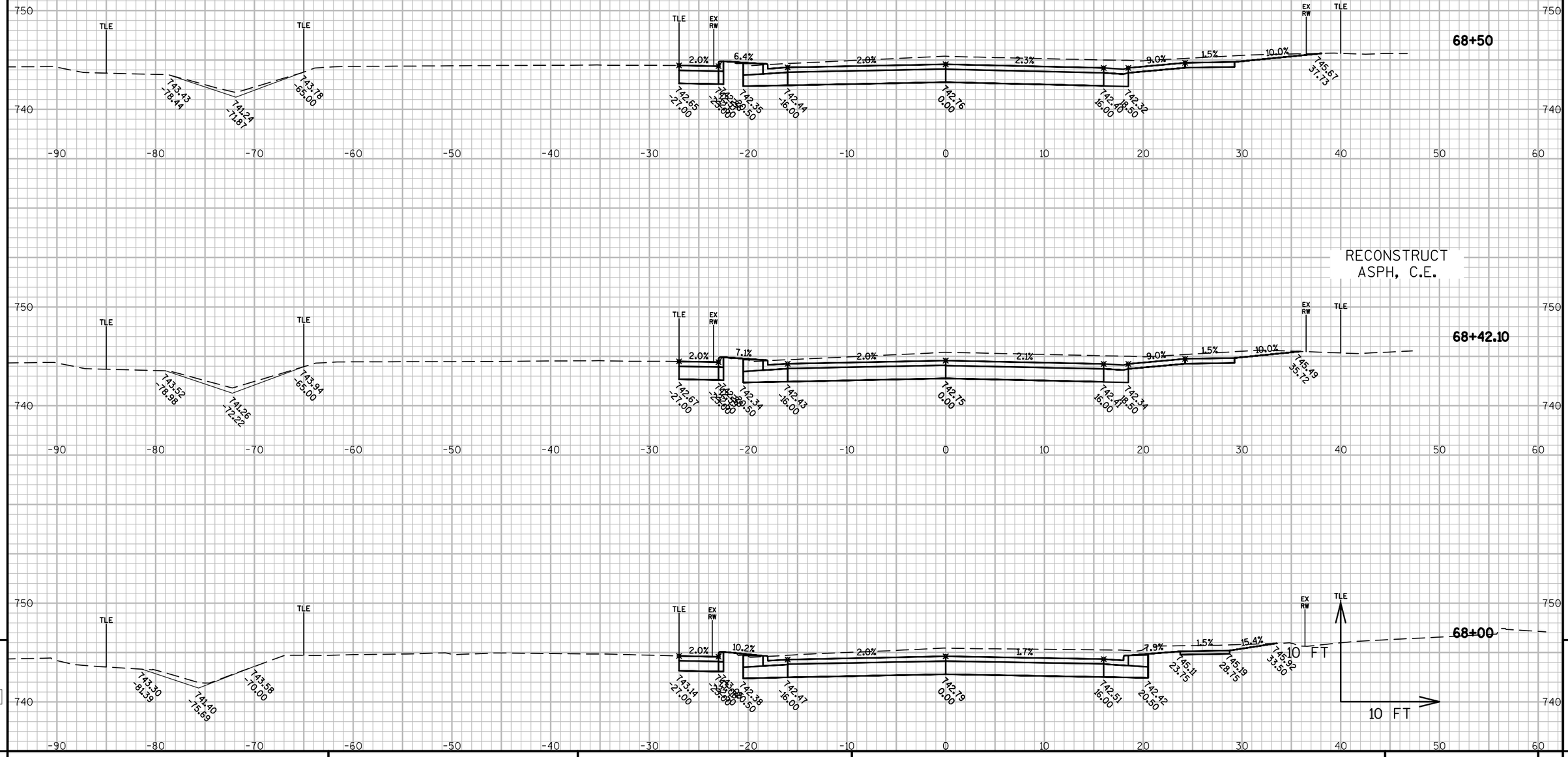
PLOT DATE : 8/25/2015 2:37 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 310 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (19)

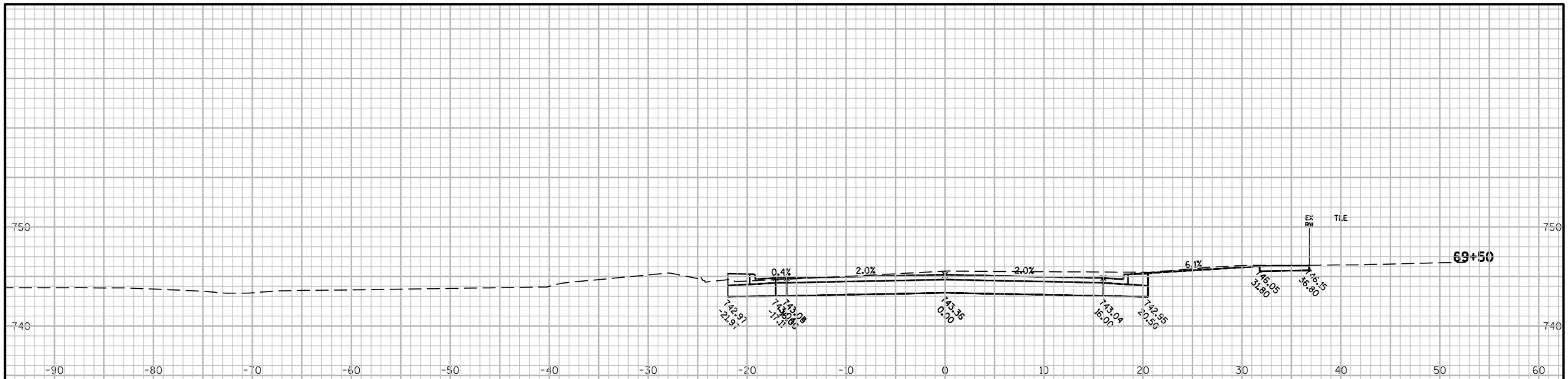
PLOT DATE : 8/25/2015 2:38 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

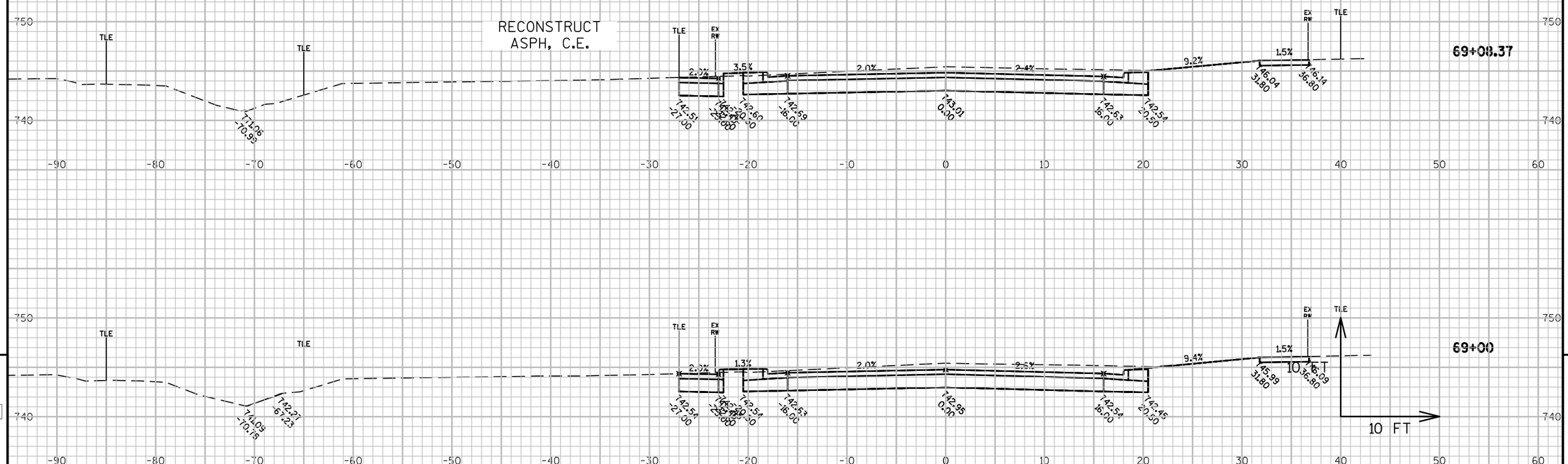



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 311 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (20)

PLOT DATE : 8/25/2015 2:39 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

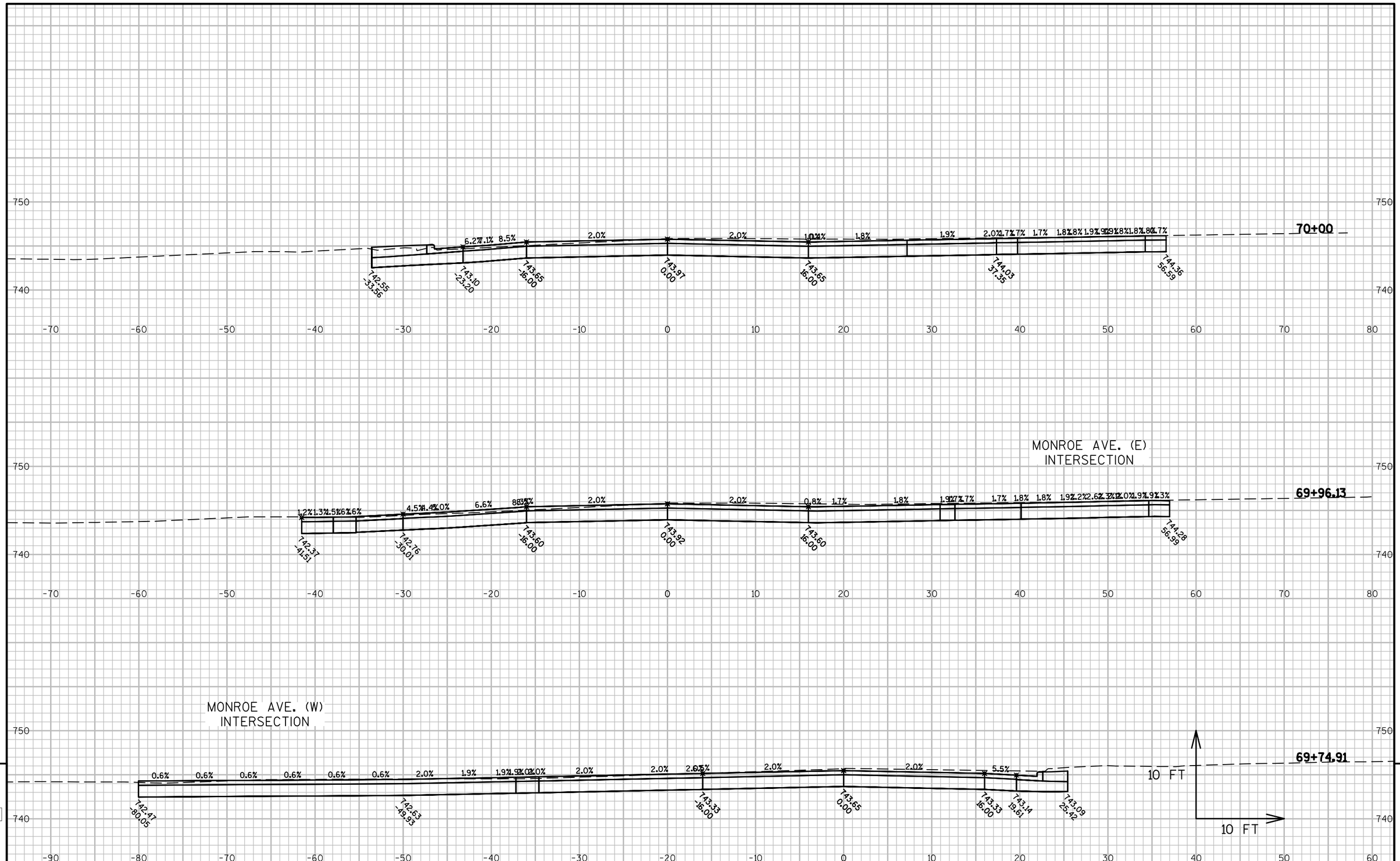


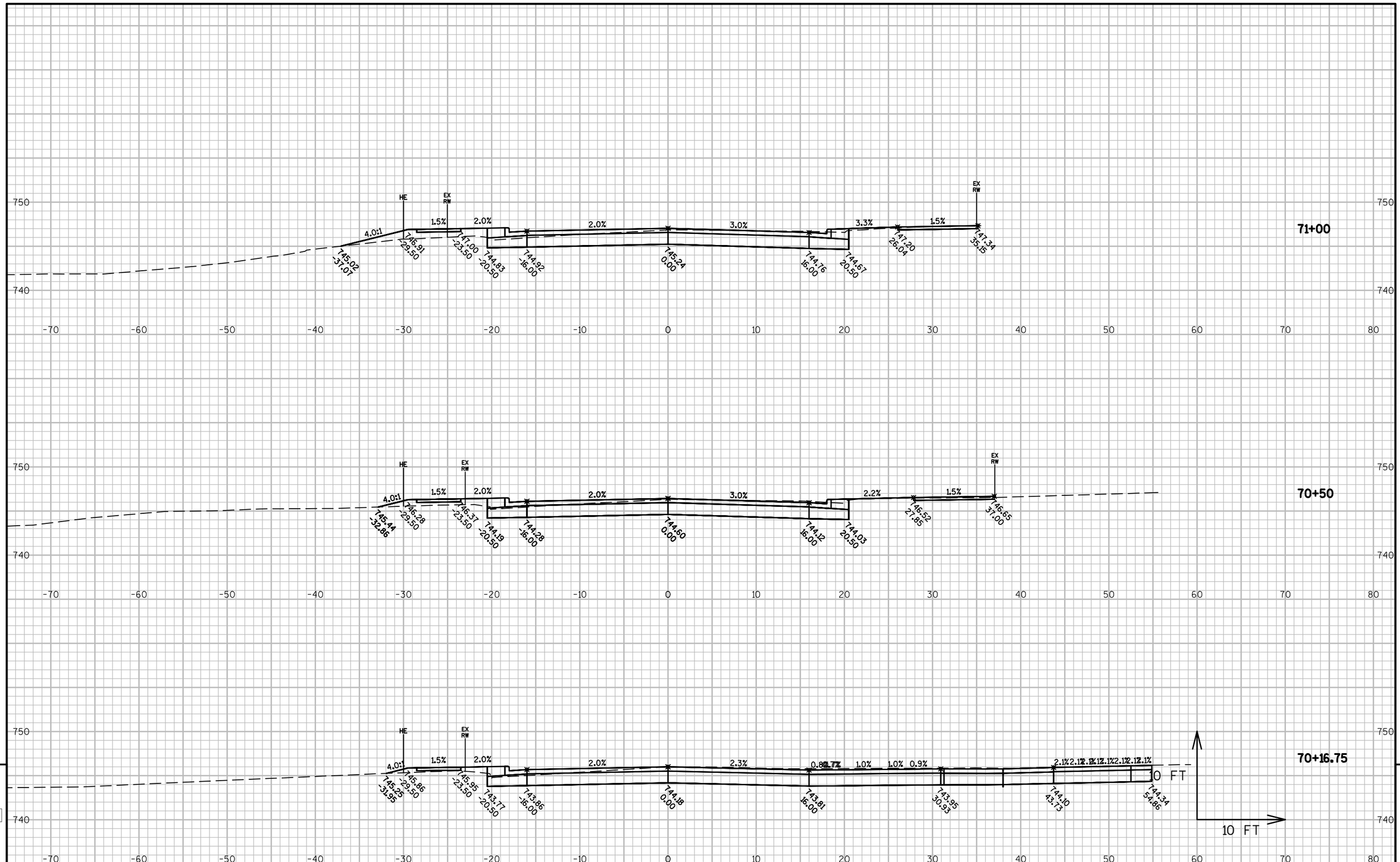

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 312 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (21)

PLOT DATE : 8/25/2015 2:39 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 313 | E |
|---|---|---|---|---|---|

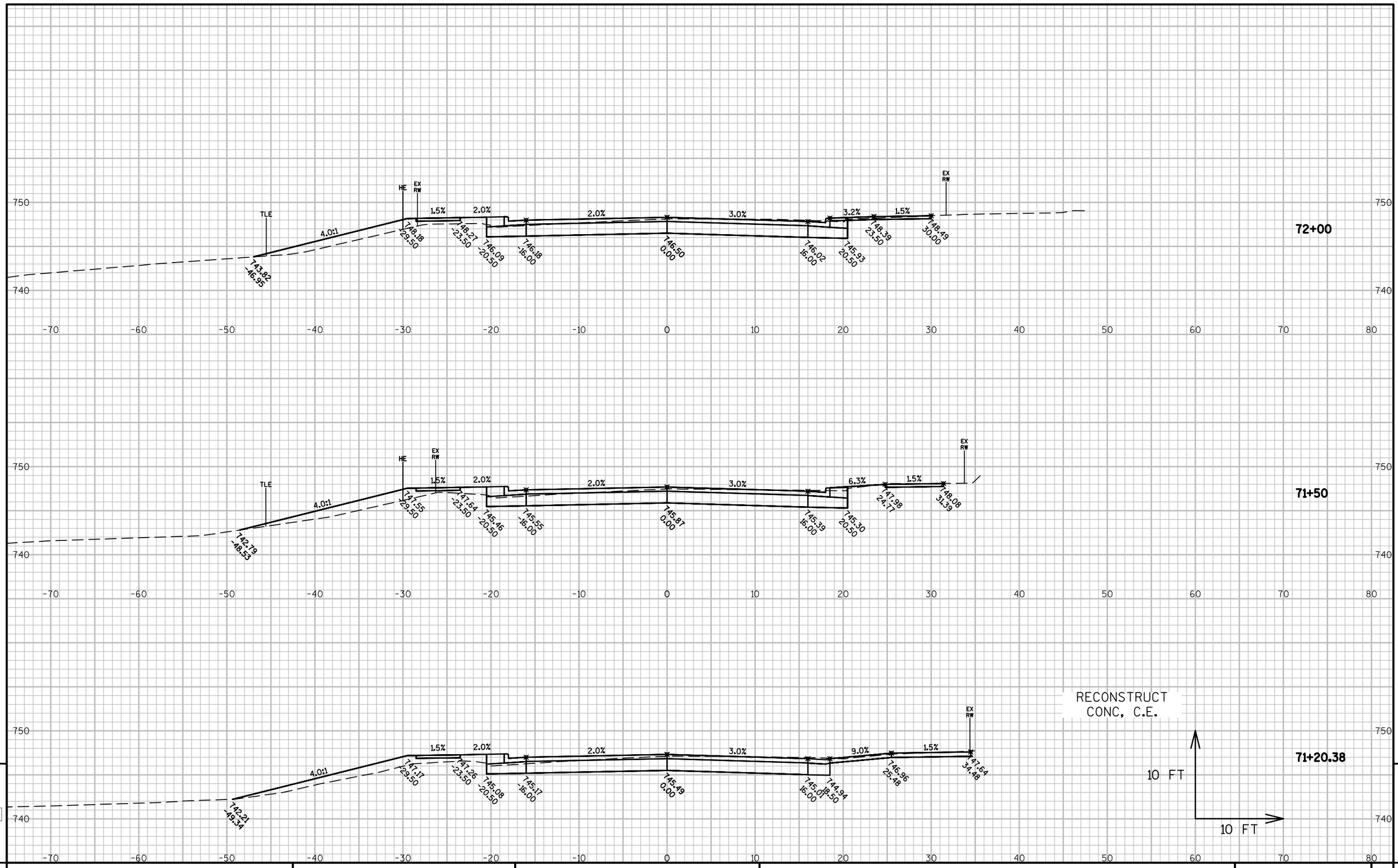



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 314 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (23)

PLOT DATE : 8/25/2015 2:41 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 315 | E |
|---|---|---|---|---|---|

RECONSTRUCT
GRAVEL, C.E.

748.45
-57.00
4.0:1
2.4%
2.2%
2.3%
2.3%
2.2%
2.1%
1.7%
1.5%
7.0%
2.0%
2.0%
2.3%
1.5%
4.0:1
4.0:1
740.98
-87.08
747.95
-51.00
748.49
-31.89
748.83
-23.50
747.50
-18.50
747.17
-16.00
747.49
0.00
747.17
16.50
747.08
20.50
749.14
23.50
749.55
28.49
72+78

HEX RW
EX RW
4.0:1
1.5%
2.0%
2.0%
2.0%
3.1%
1.5%
746.55
-42.55
746.81
-29.50
748.90
-23.50
746.13
-20.50
746.32
-16.00
747.14
0.00
746.82
16.00
746.13
20.50
748.86
23.50
749.26
28.50
72+50

EX RW
4.0:1
2.0%
2.7%
3.8%
1.5%
746.62
-36.50
748.40
-29.50
748.49
-23.50
746.31
-20.50
746.40
-16.00
746.12
0.00
746.23
16.00
746.22
18.50
748.10
23.50
748.69
29.51
72+17.10

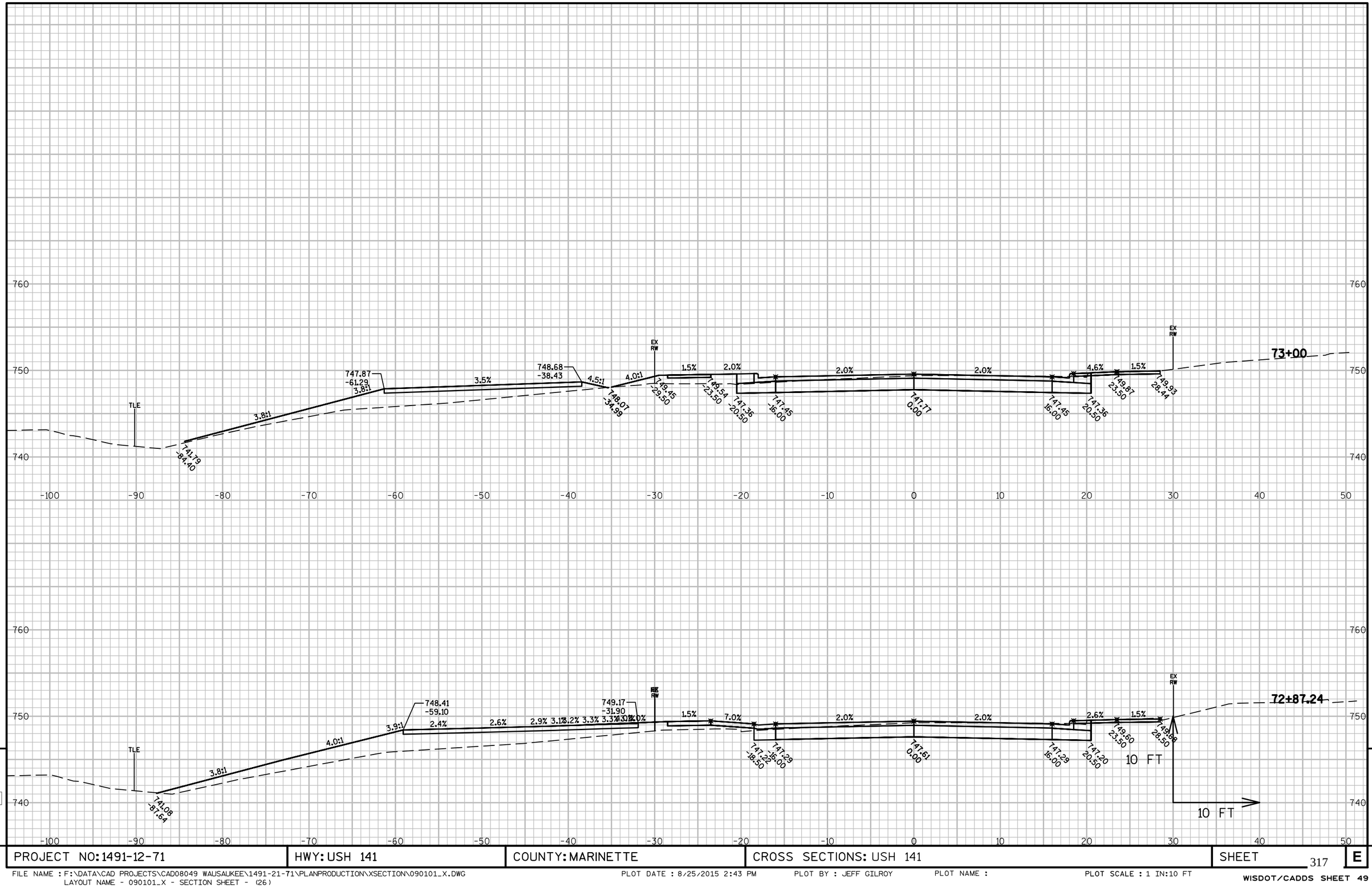
RECONSTRUCT
GRAVEL, C.E.

10 FT
10 FT

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 316 | E |
|---|---|---|---|---|---|

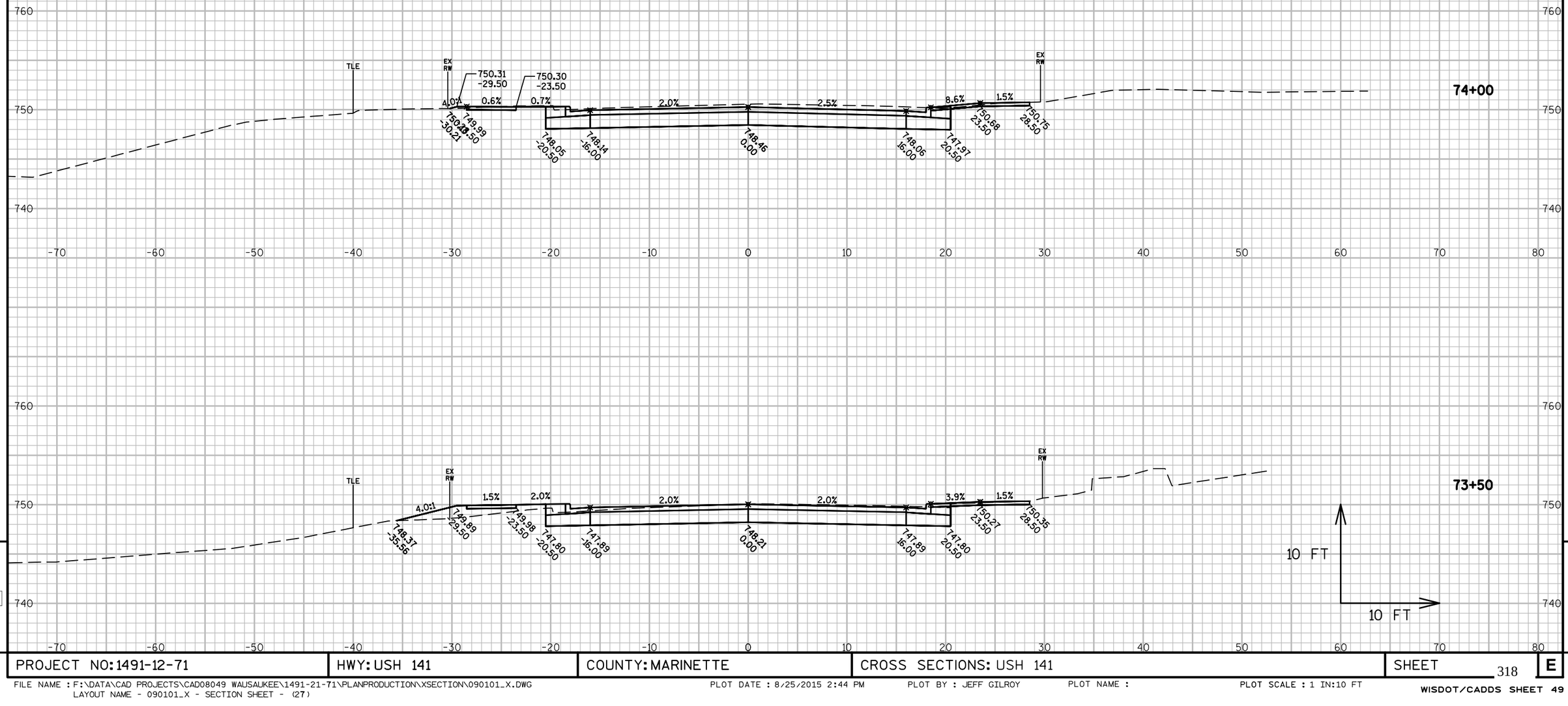
FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (25)

PLOT DATE : 8/25/2015 2:43 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 317 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (26)
PLOT DATE : 8/25/2015 2:43 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 318 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (27)

PLOT DATE : 8/25/2015 2:44 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

760
750
740
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

TLE
EX RW
4.0:1
1.7%
0.3%
2.0%
2.5%
12.0%
1.5%
6.0:1
750.75
28.91
750.25
-29.65
750.50
750.35
28.50
748.24
-20.50
748.33
-16.00
748.65
0.00
748.30
16.00
748.22
20.94
74+50

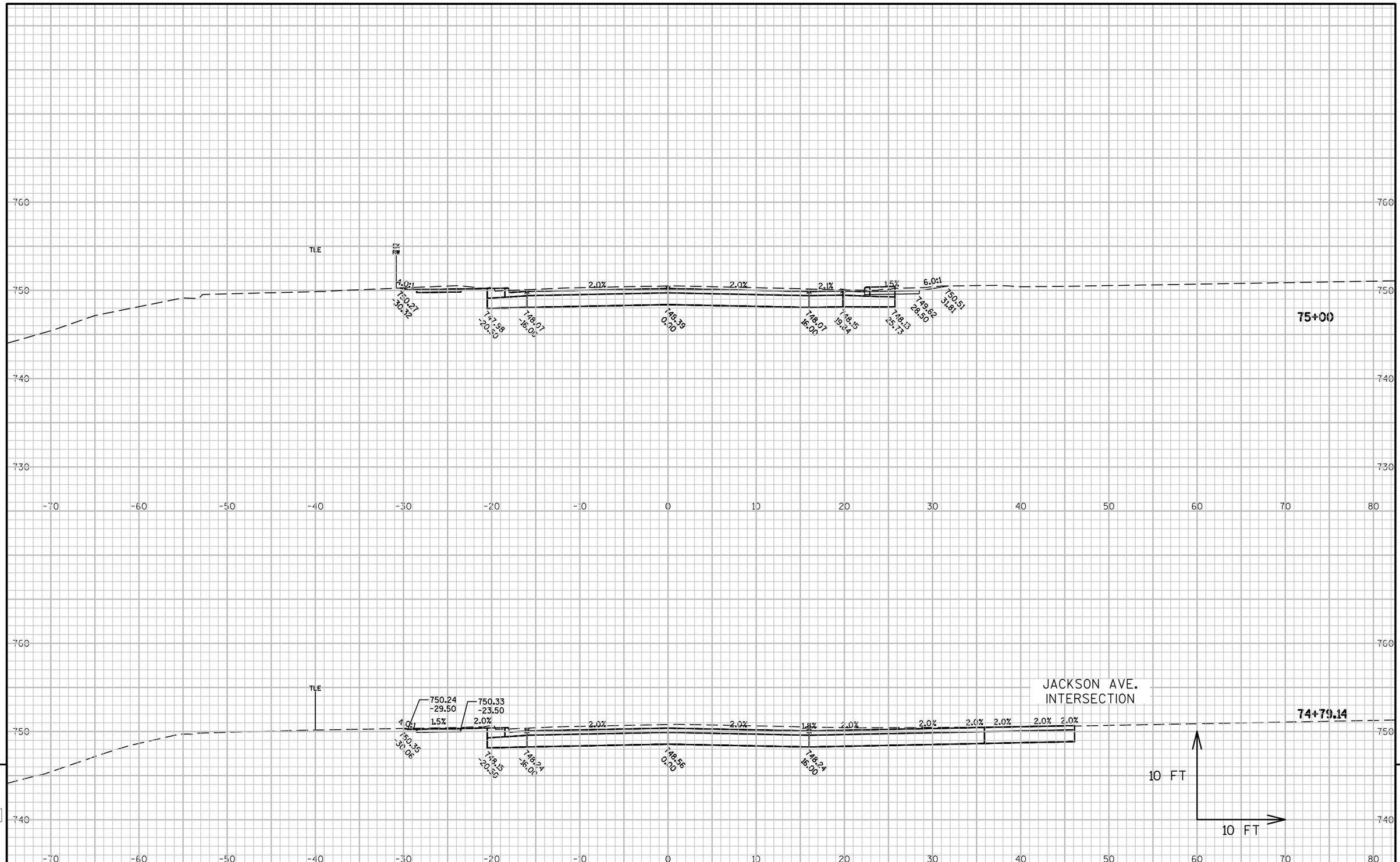
RECONSTRUCT
ASPH, C.E.

TLE
750.45
-28.50
10.0:1
1.5%
5.5%
2.0%
2.5%
3.3%
1.5%
EX RW
750.56
23.50
750.60
-30.00
750.38
-23.50
748.22
-18.50
748.29
-16.00
748.61
0.00
748.21
16.00
748.12
20.50
750.64
28.50
74+30.30

10 FT
10 FT

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 319 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (28)
PLOT DATE : 8/25/2015 2:45 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

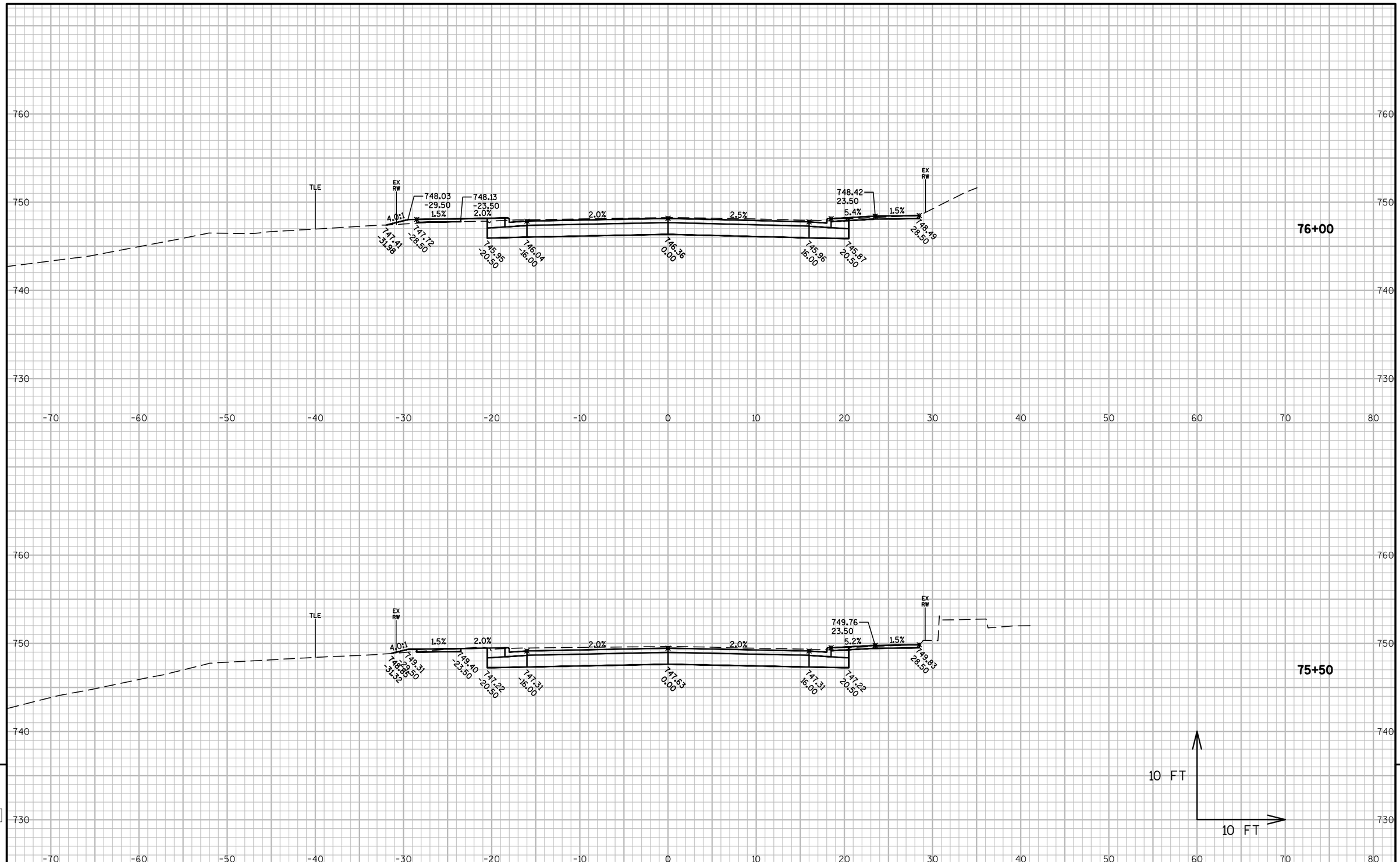



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 320 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (29)

PLOT DATE : 8/25/2015 2:46 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

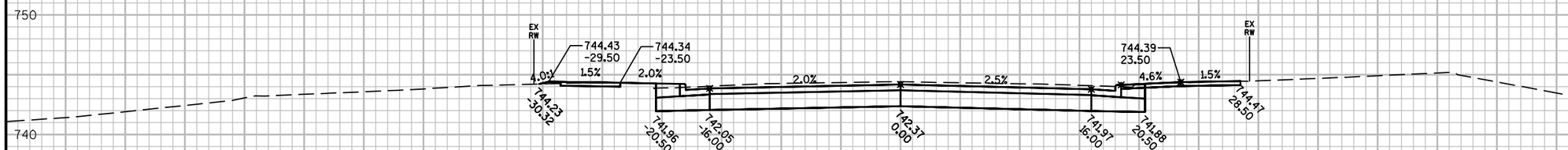
WISDOT/CADDS SHEET 49

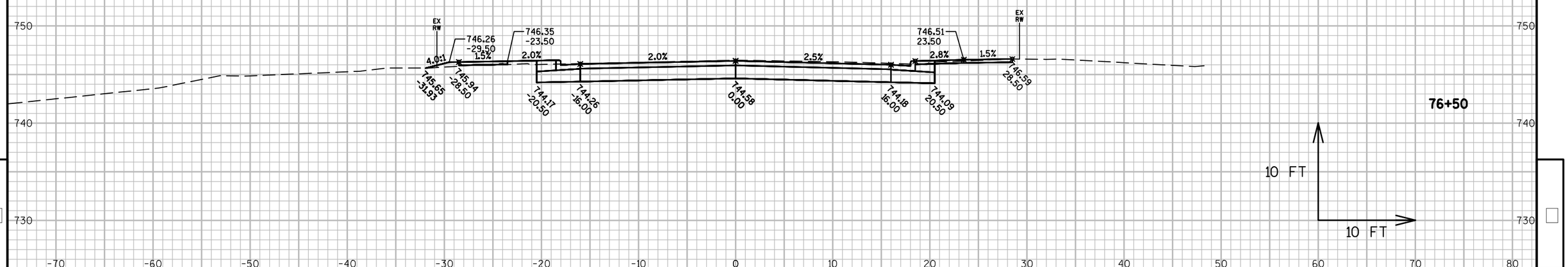



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 321 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (30)

PLOT DATE : 8/25/2015 2:47 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

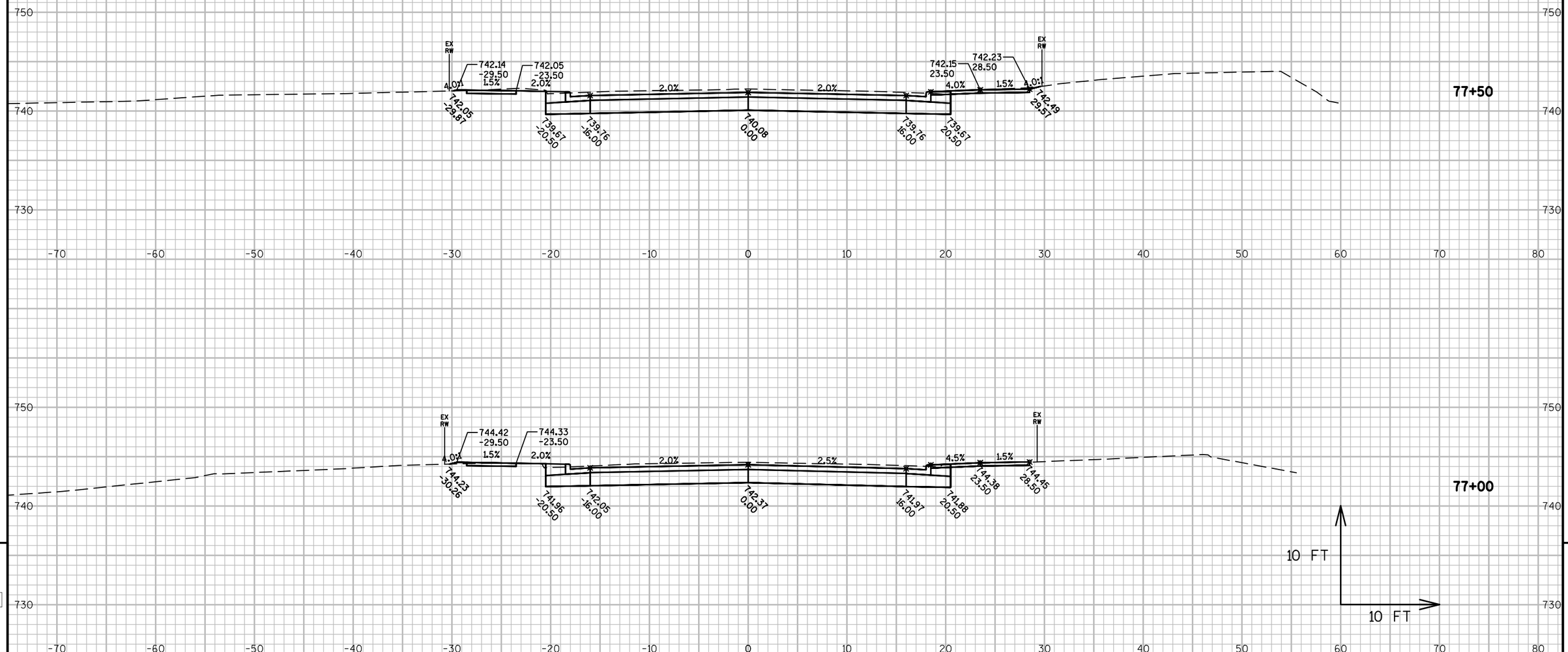



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 322 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (31)

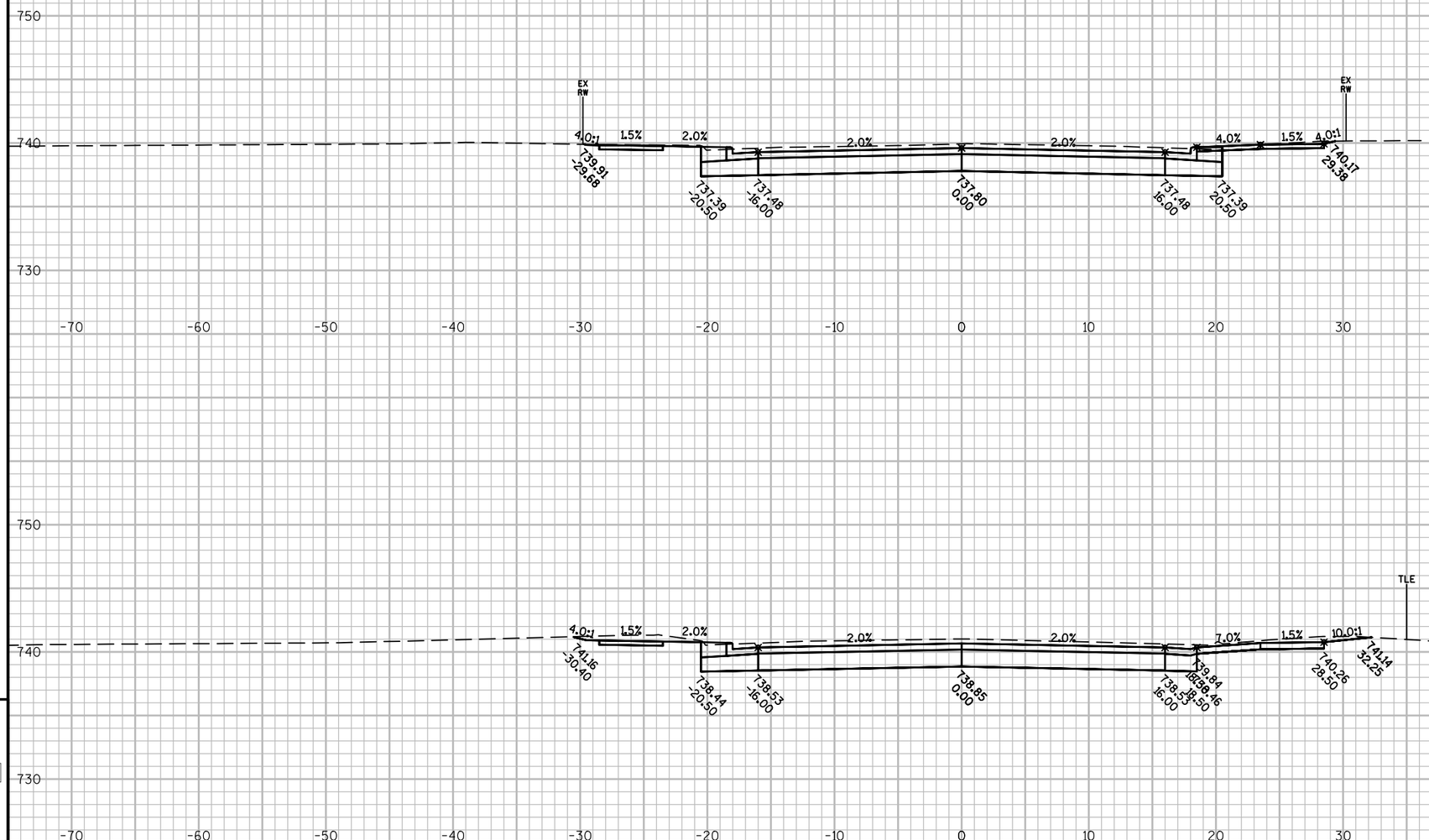
PLOT DATE : 8/25/2015 2:47 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 323 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (32)

PLOT DATE : 8/25/2015 2:48 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT



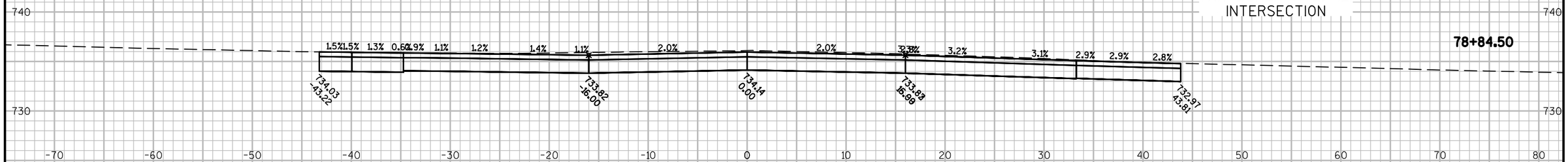


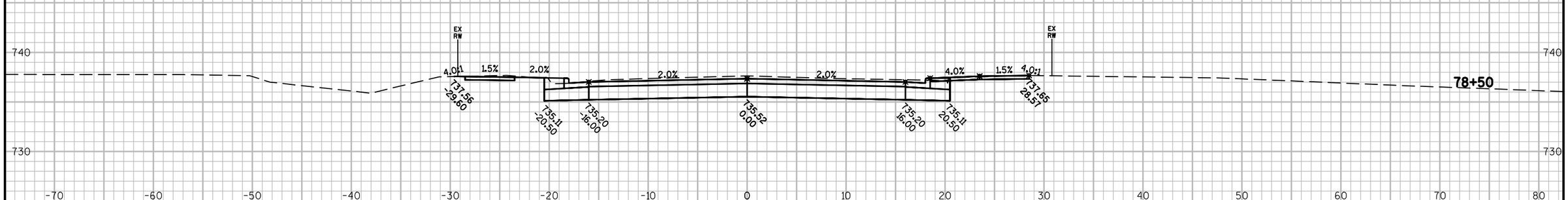


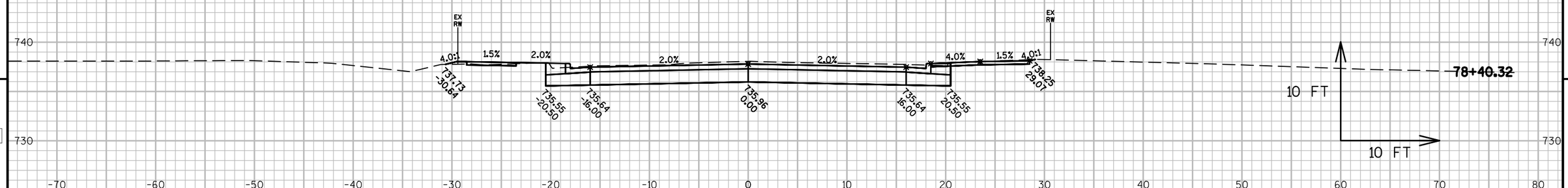
| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 324 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (33)
PLOT DATE : 8/25/2015 2:49 PM
PLOT BY : JEFF GILROY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

VAN BUREN AVE. (E)
INTERSECTION



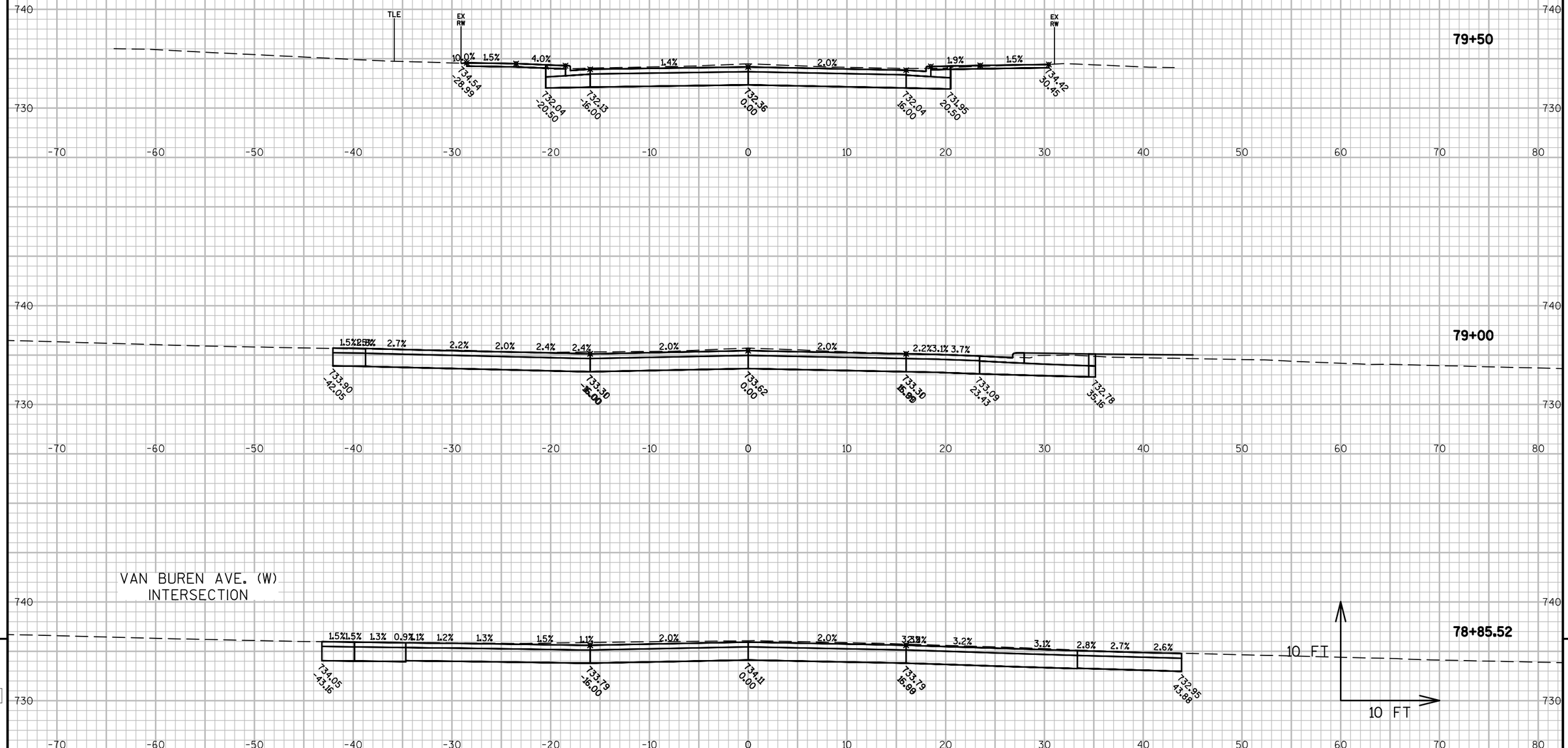



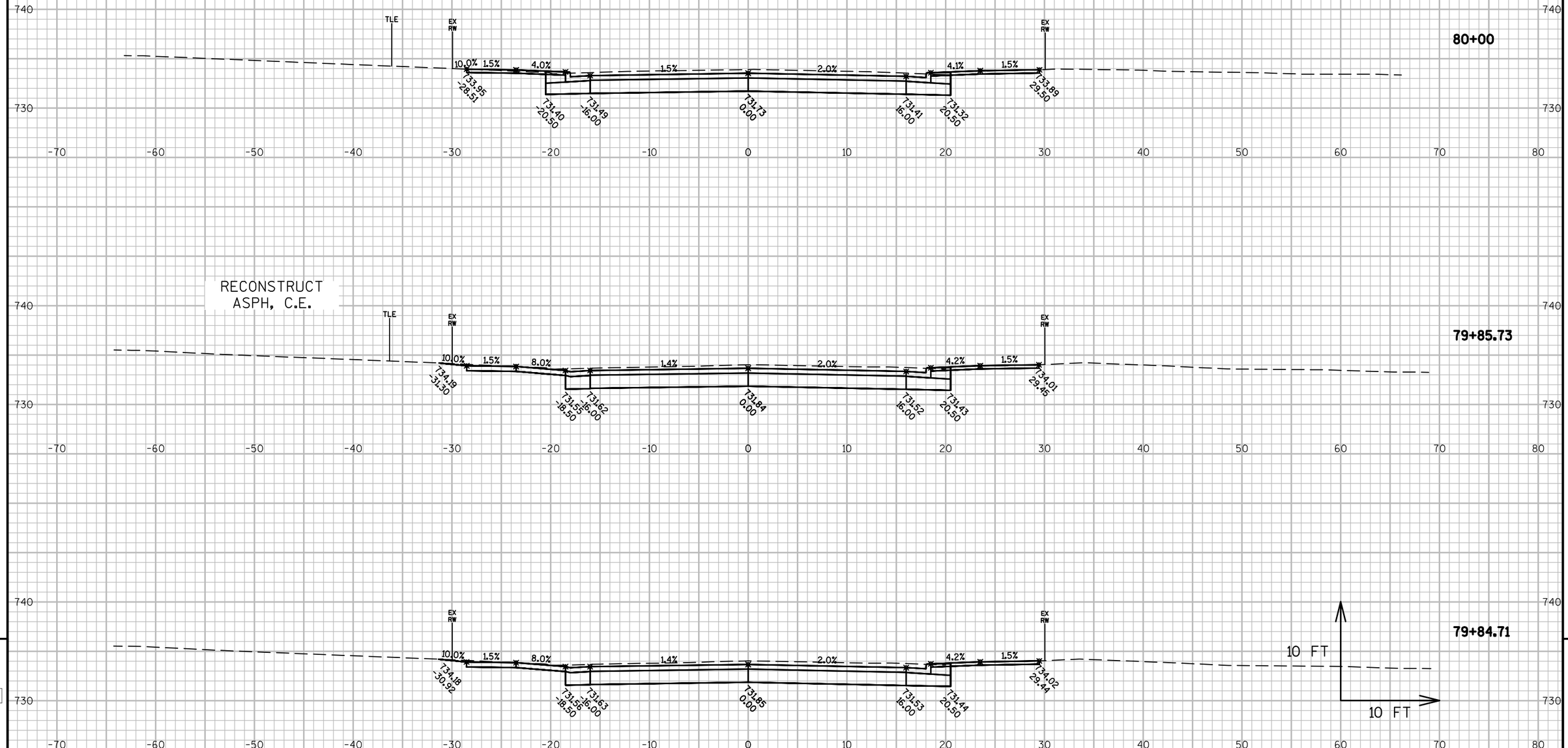

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 325 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (34)

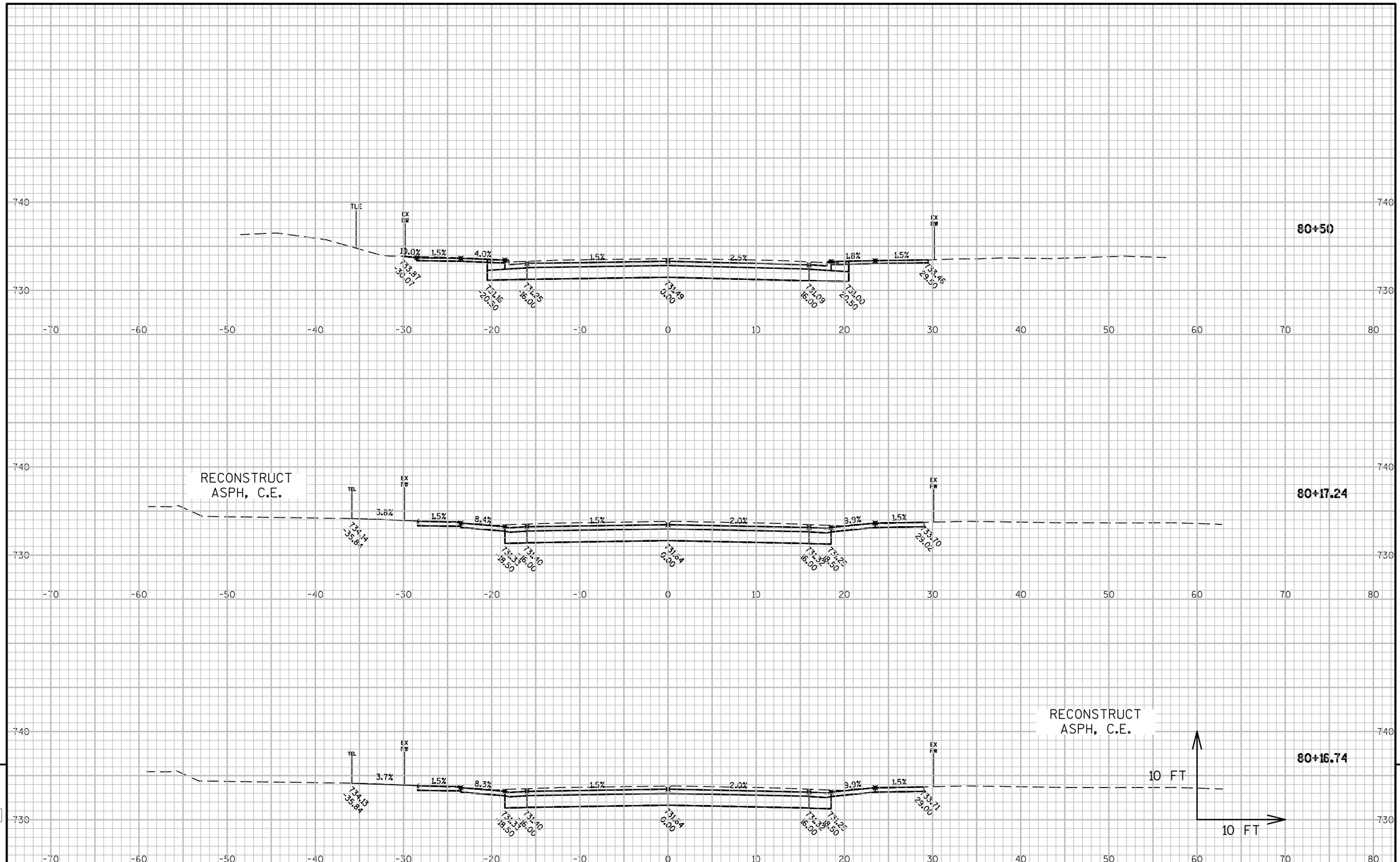
PLOT DATE : 8/25/2015 2:50 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT



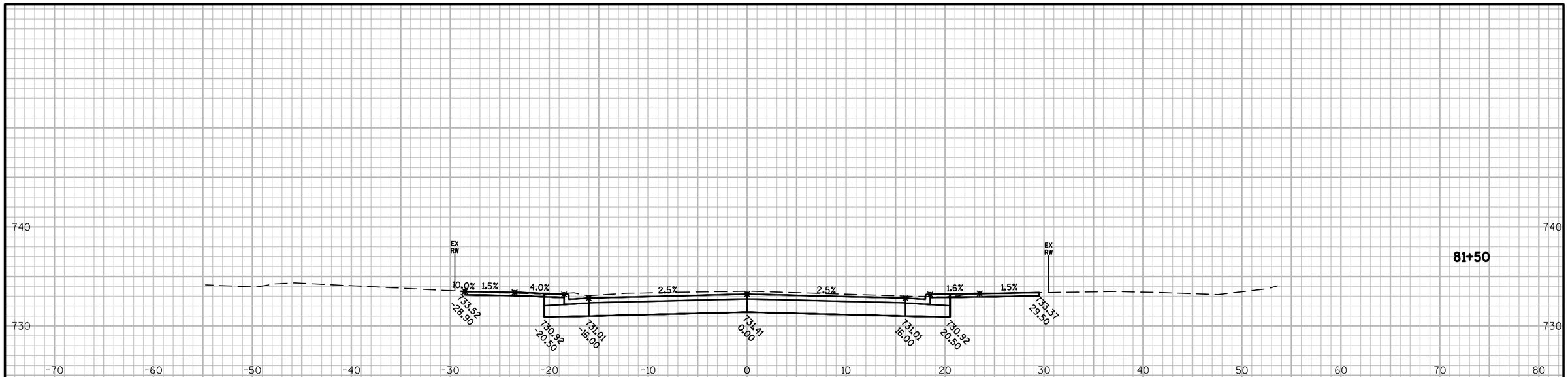

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 326 | E |
|---|---|---|---|---|---|

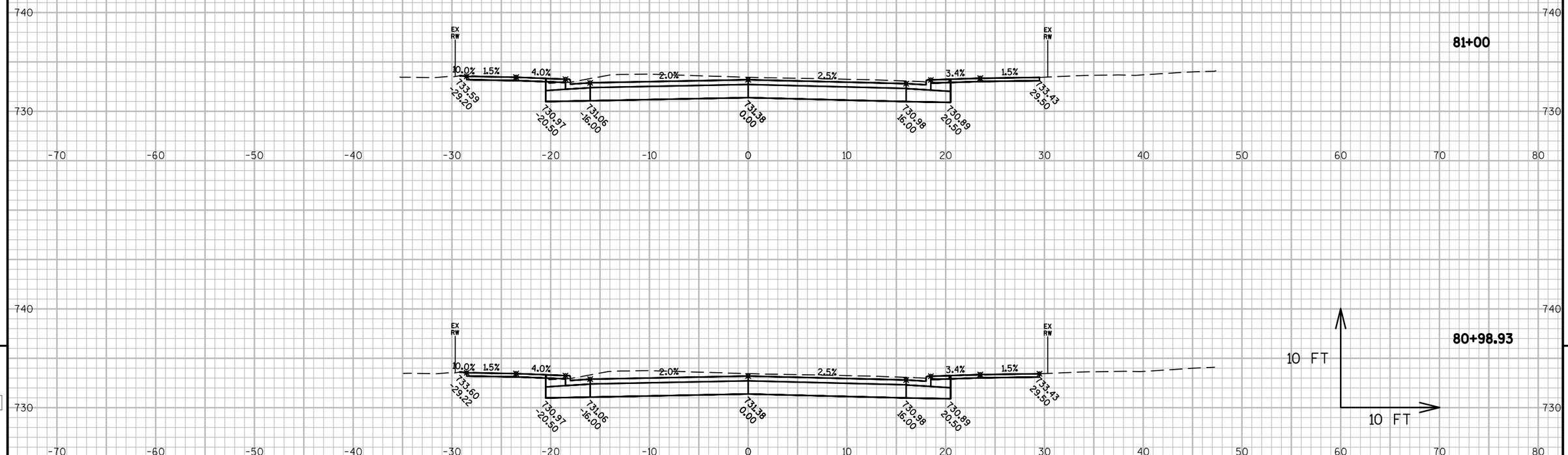



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 327 E |
|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 328 | E |
|---|---|---|---|---|---|

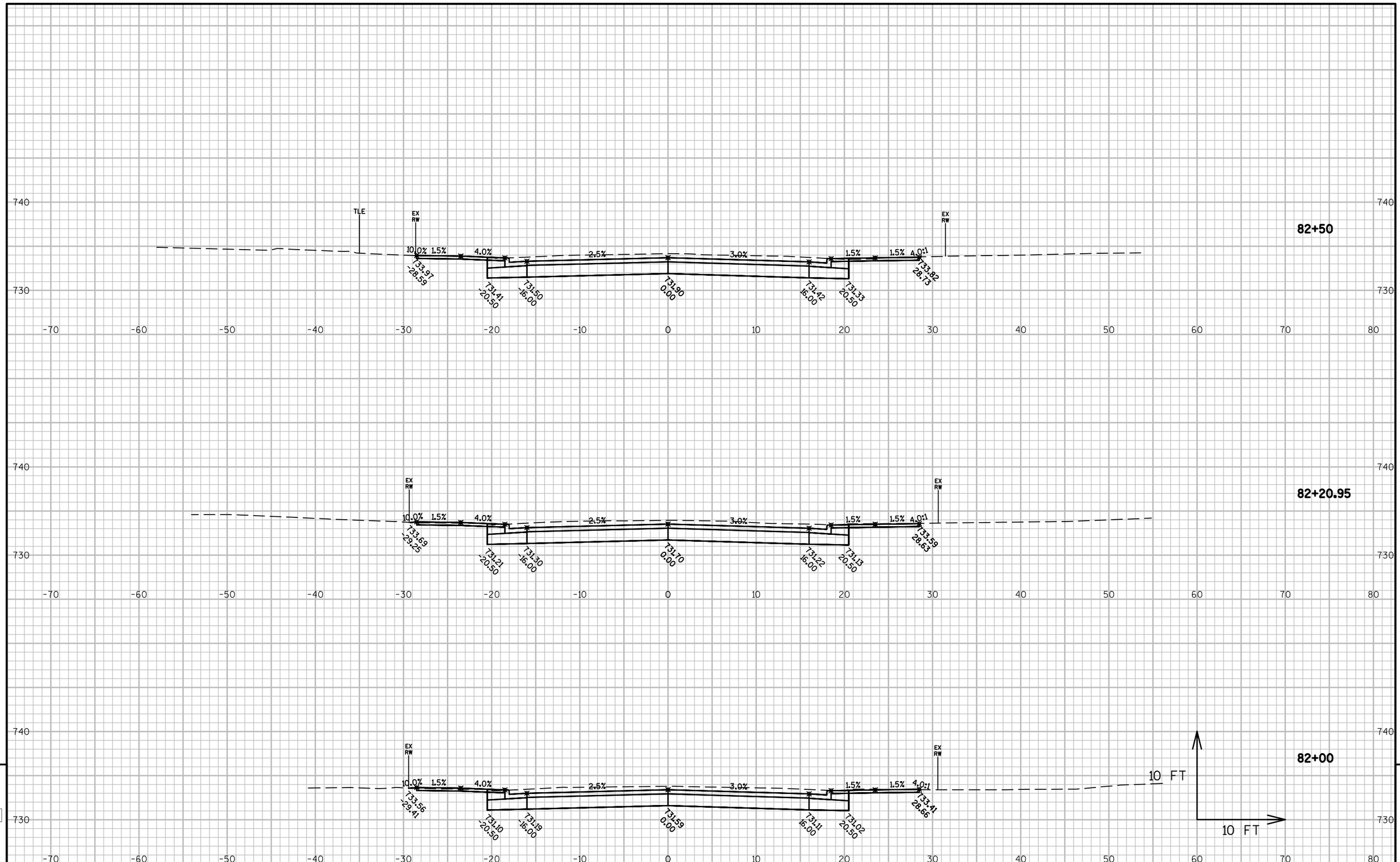




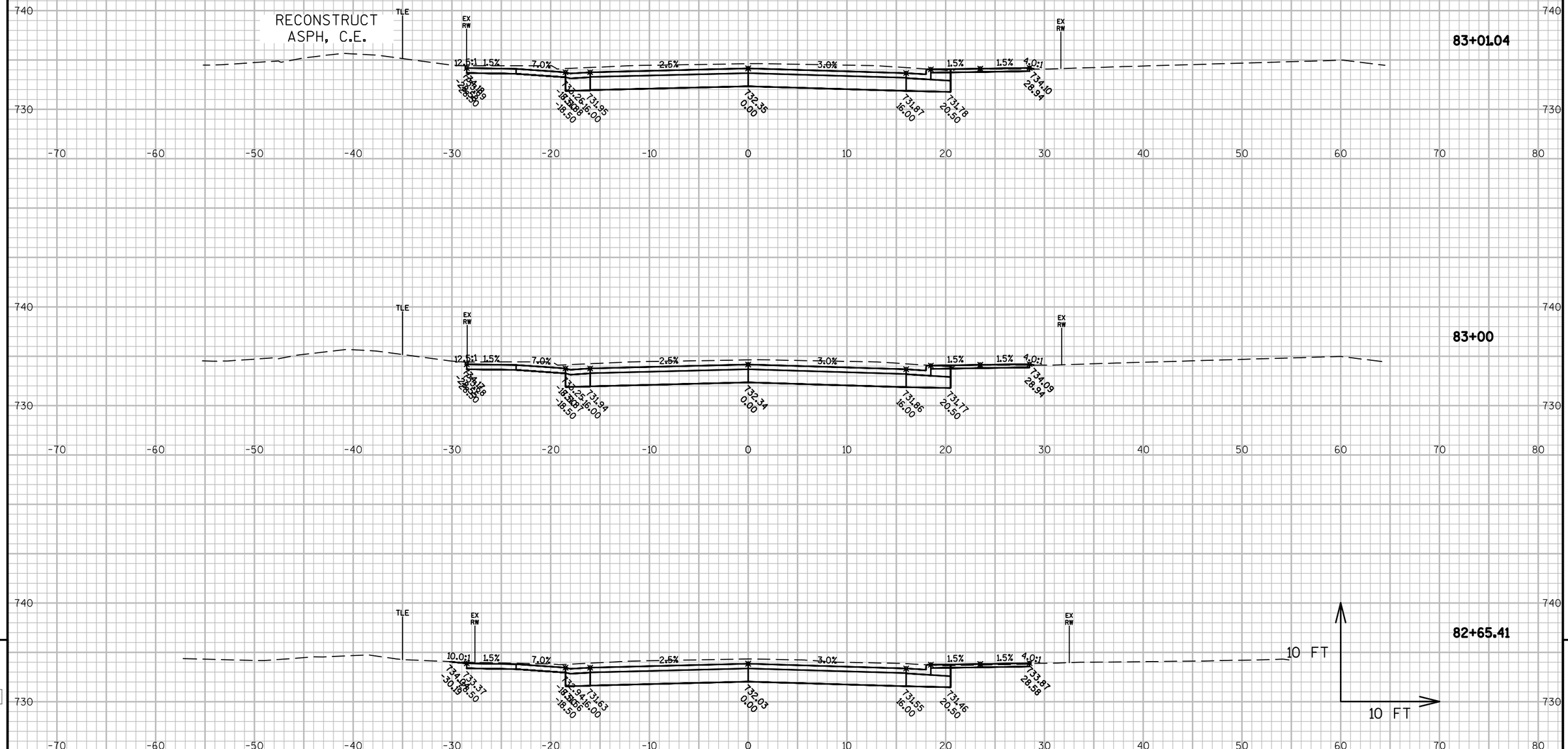


| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 329 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 330 E |
|---|---|---|---|---|

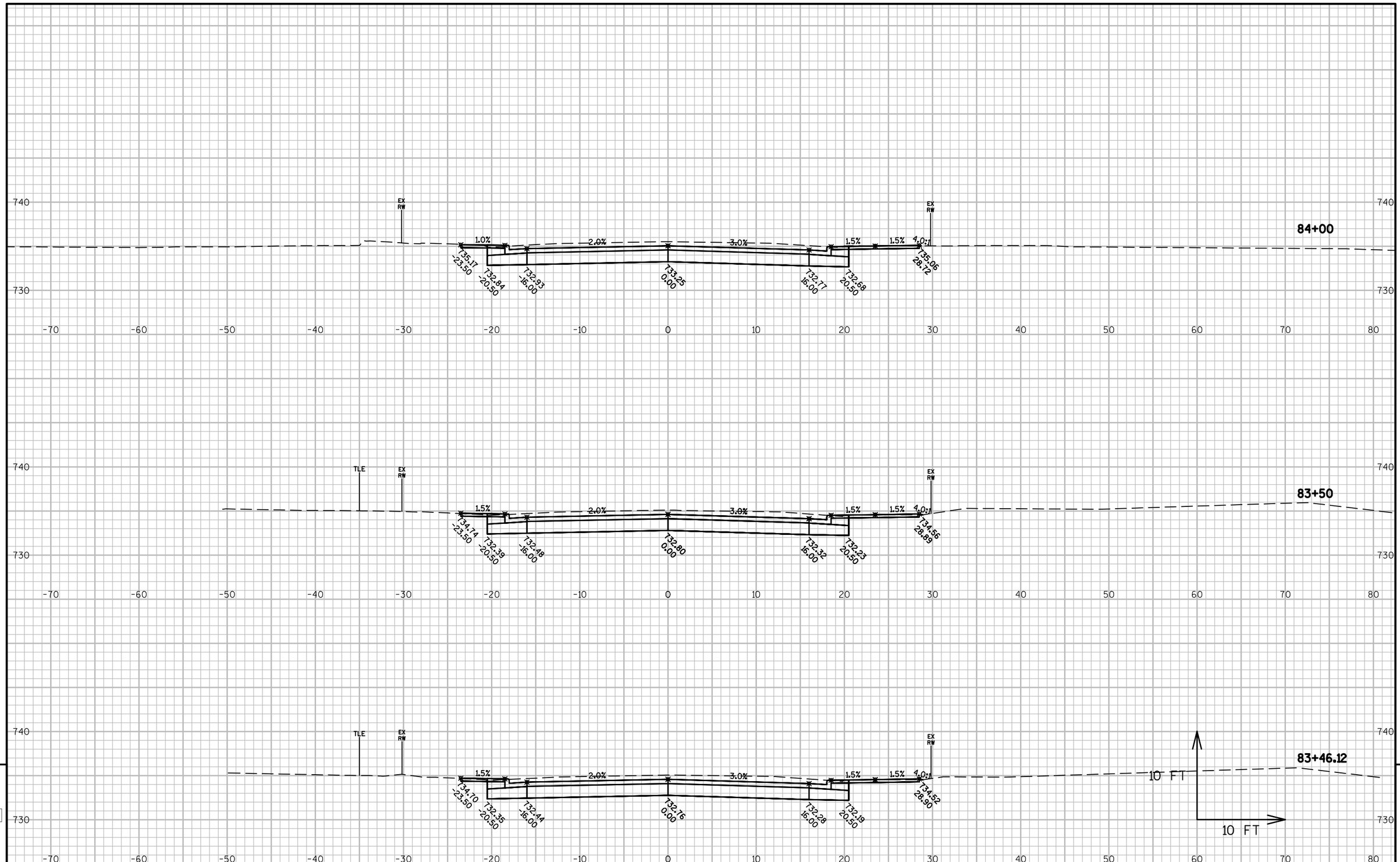
FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (39)
PLOT DATE : 8/25/2015 2:54 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



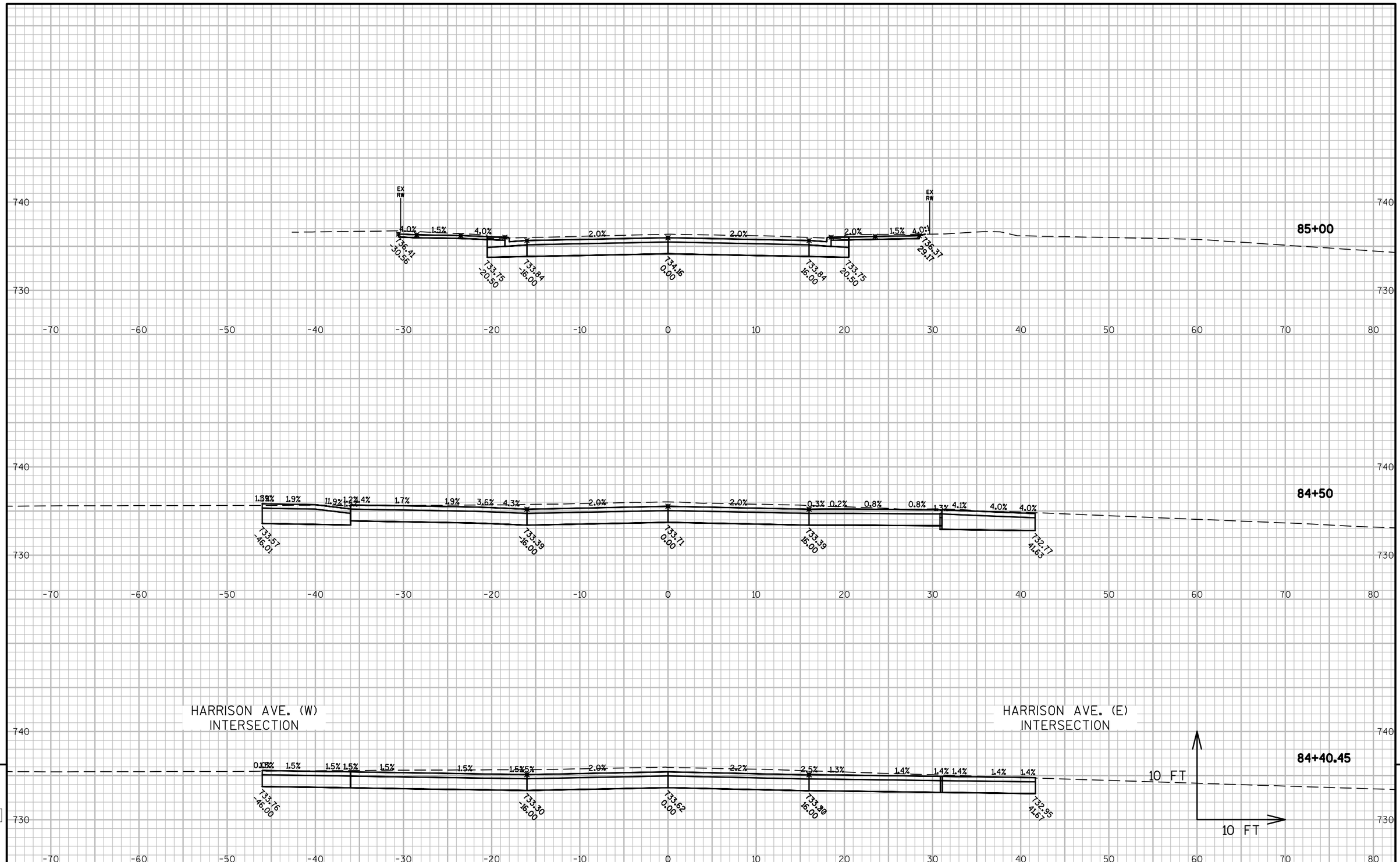

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 331 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (40)

PLOT DATE : 8/25/2015 2:55 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

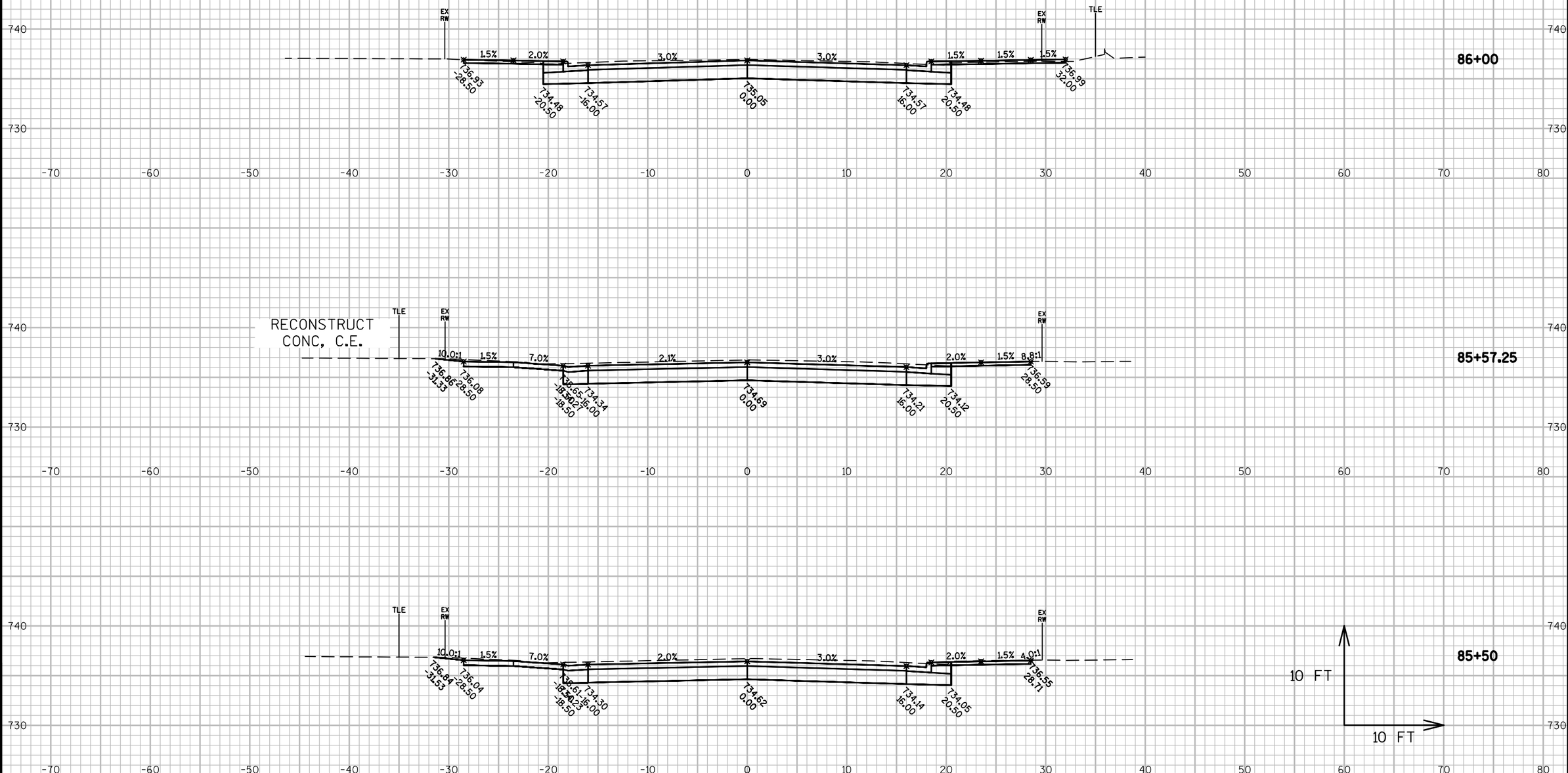



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 332 | E |
|---|---|---|---|---|---|



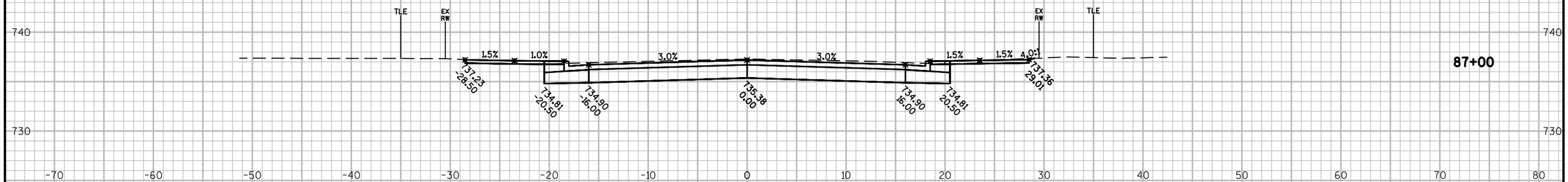

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 333 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (42)
PLOT DATE : 8/25/2015 2:56 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

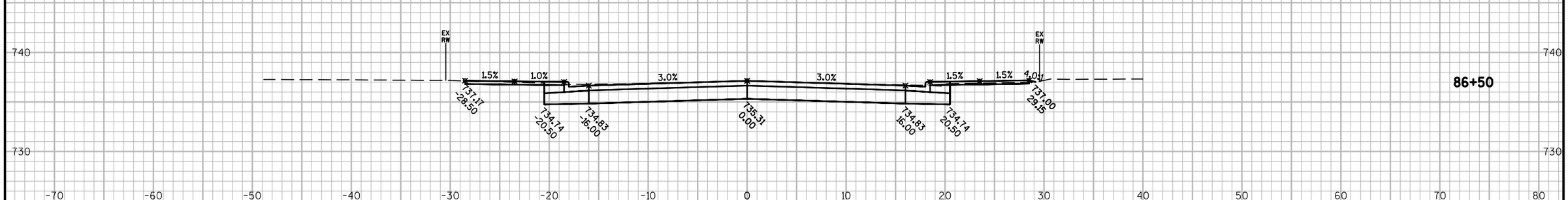



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 334 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (43)
PLOT DATE : 8/25/2015 2:57 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

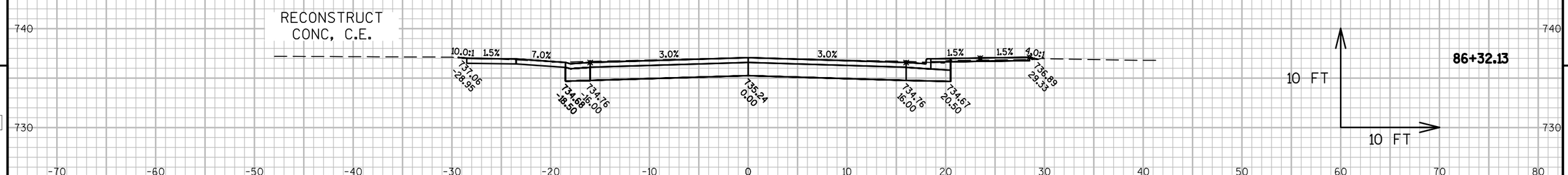



87+00




86+50

RECONSTRUCT CONC, C.E.



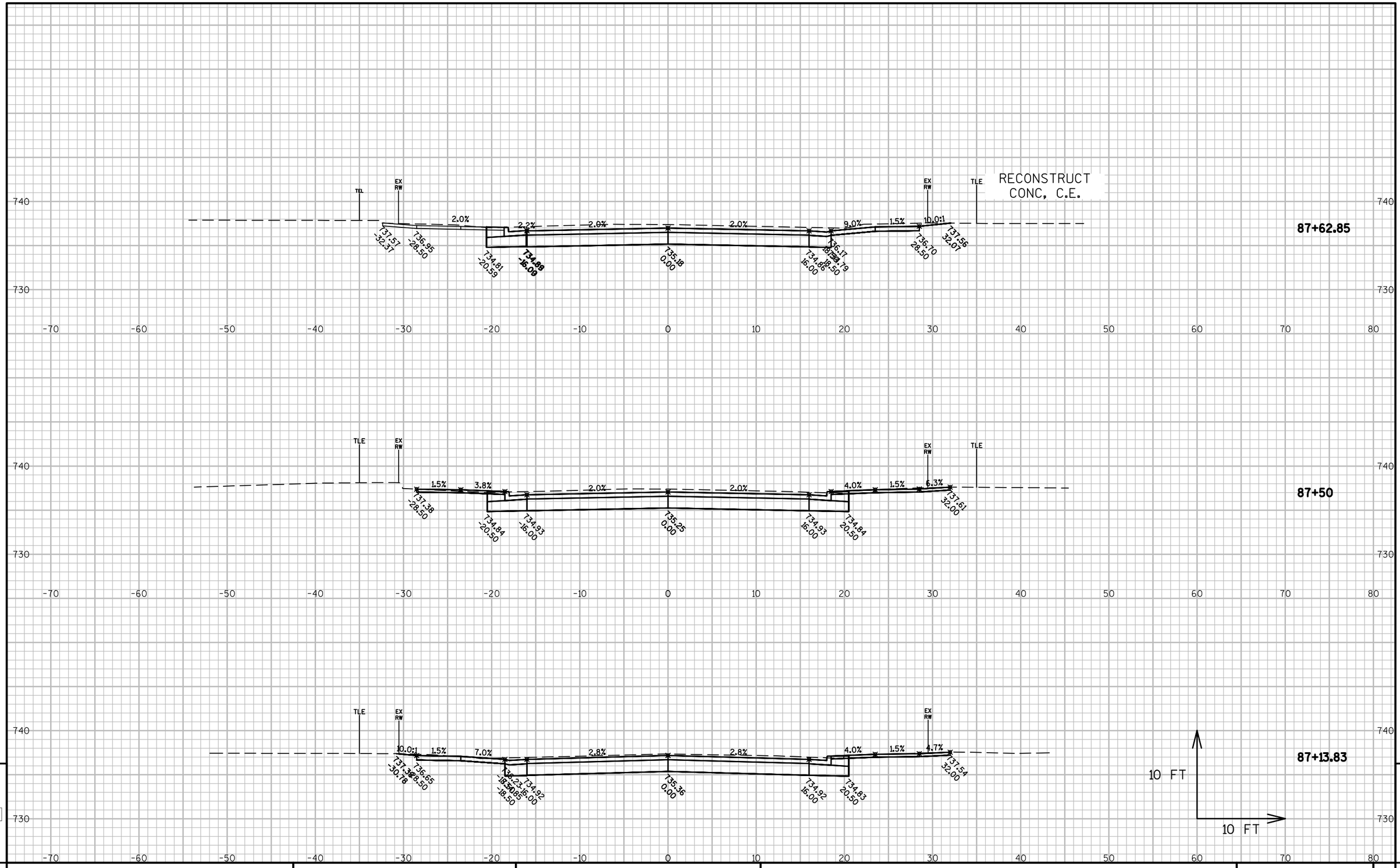

86+32.13




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 335 E |
|---|---|---|---|---|

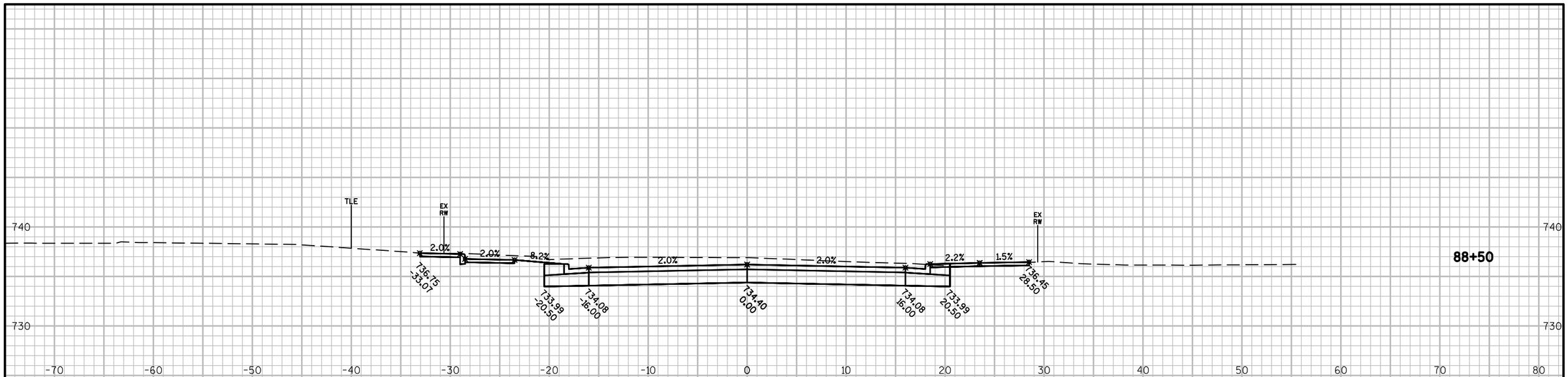
FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (44)

PLOT DATE : 8/25/2015 2:58 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 336 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (45)
PLOT DATE : 8/25/2015 2:59 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

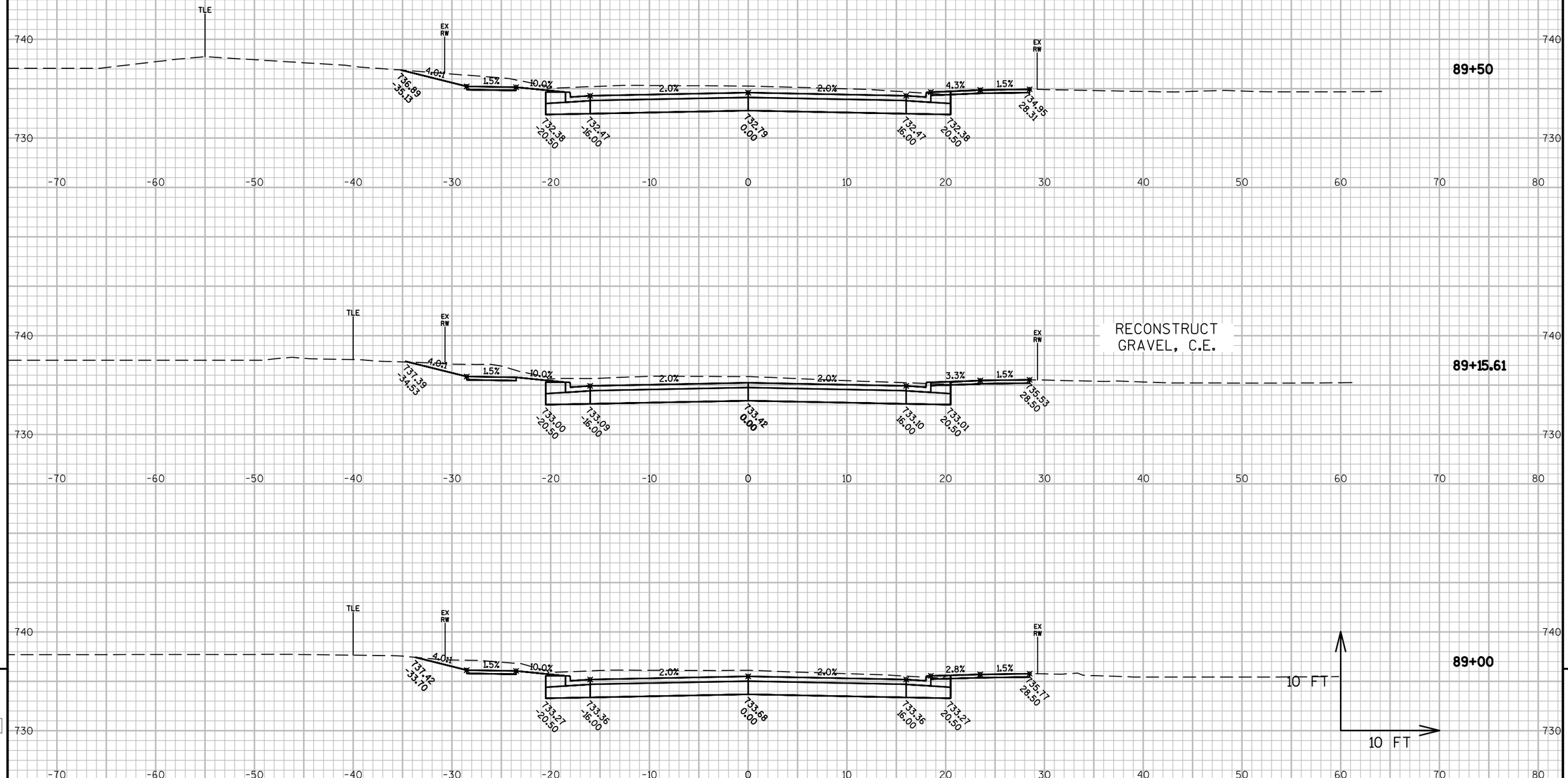




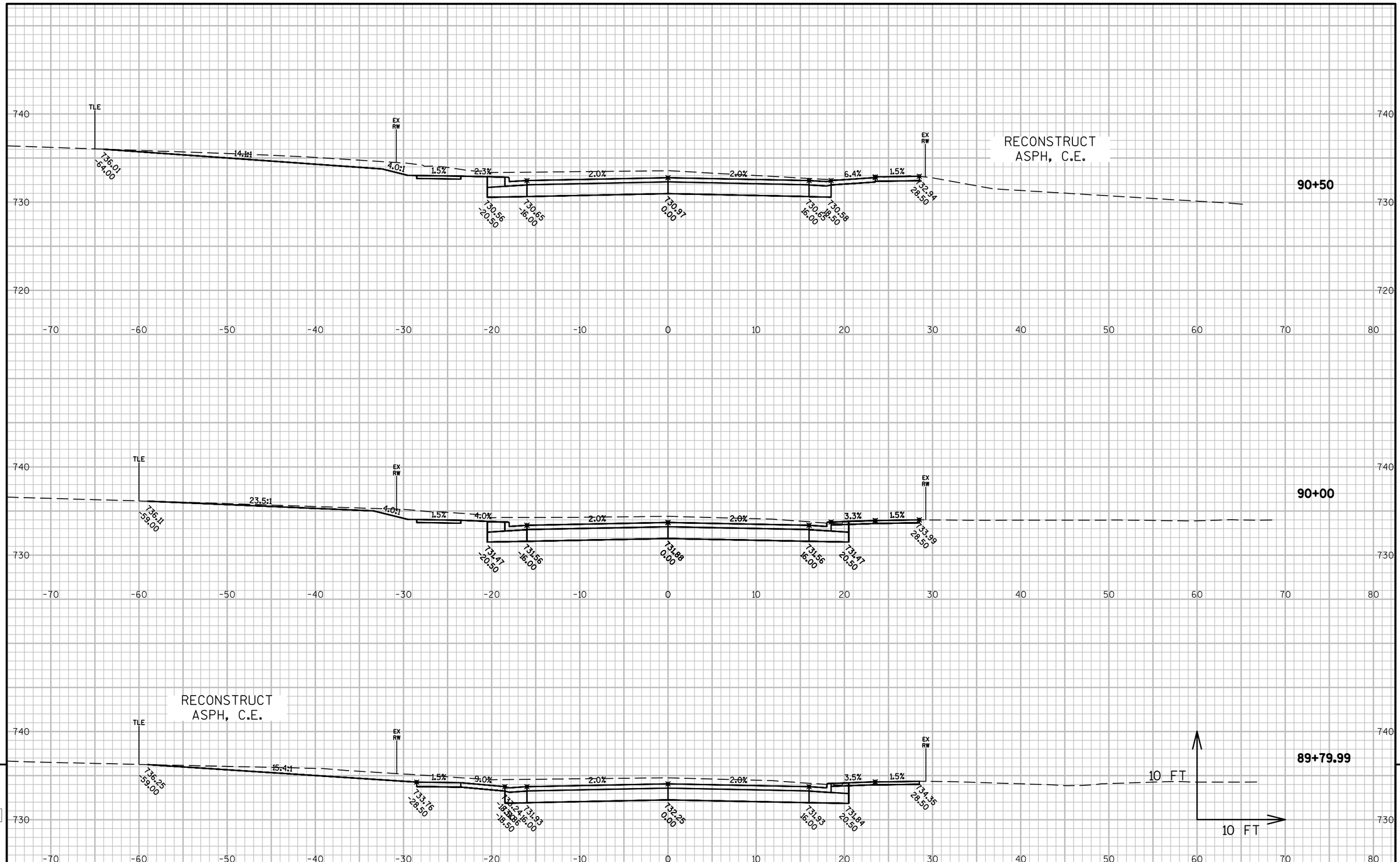





| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 337 E |
|---|---|---|---|---|



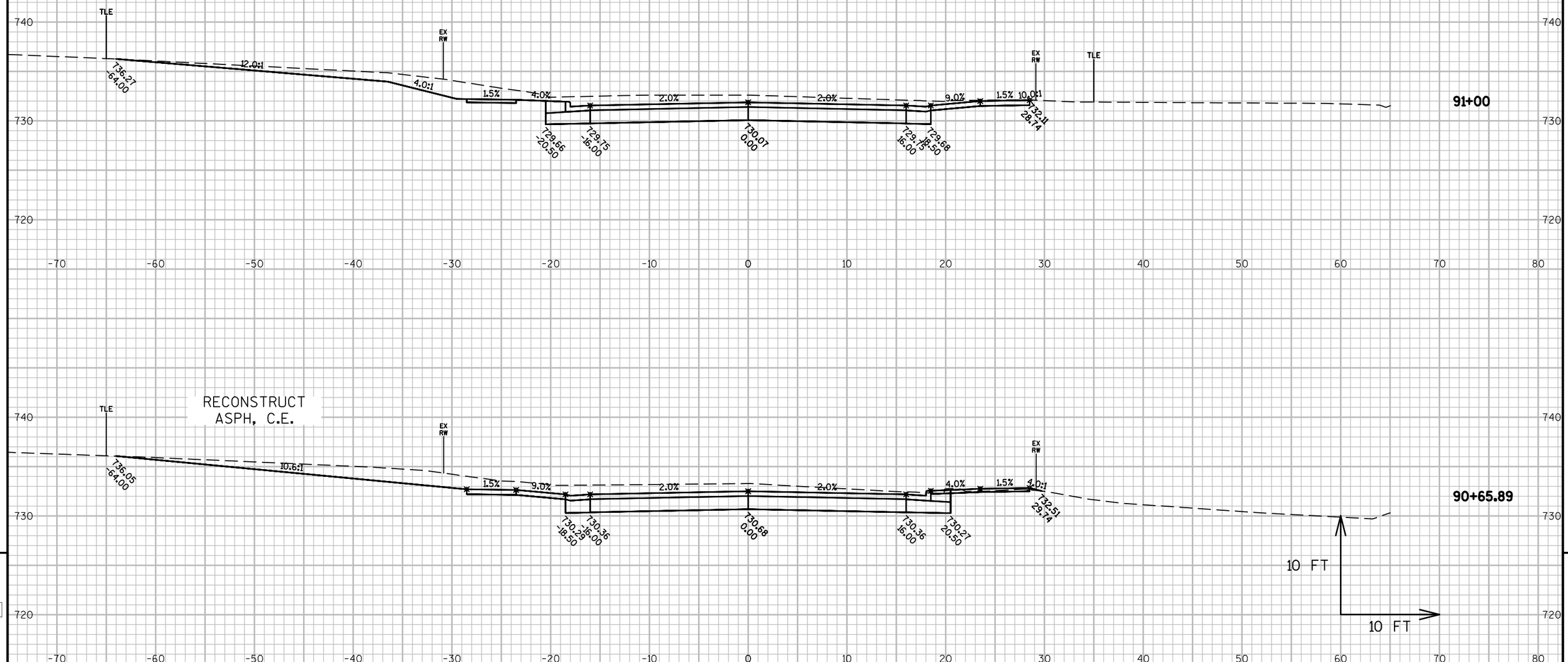

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 338 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 339 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (48)

PLOT DATE : 8/25/2015 3:01 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

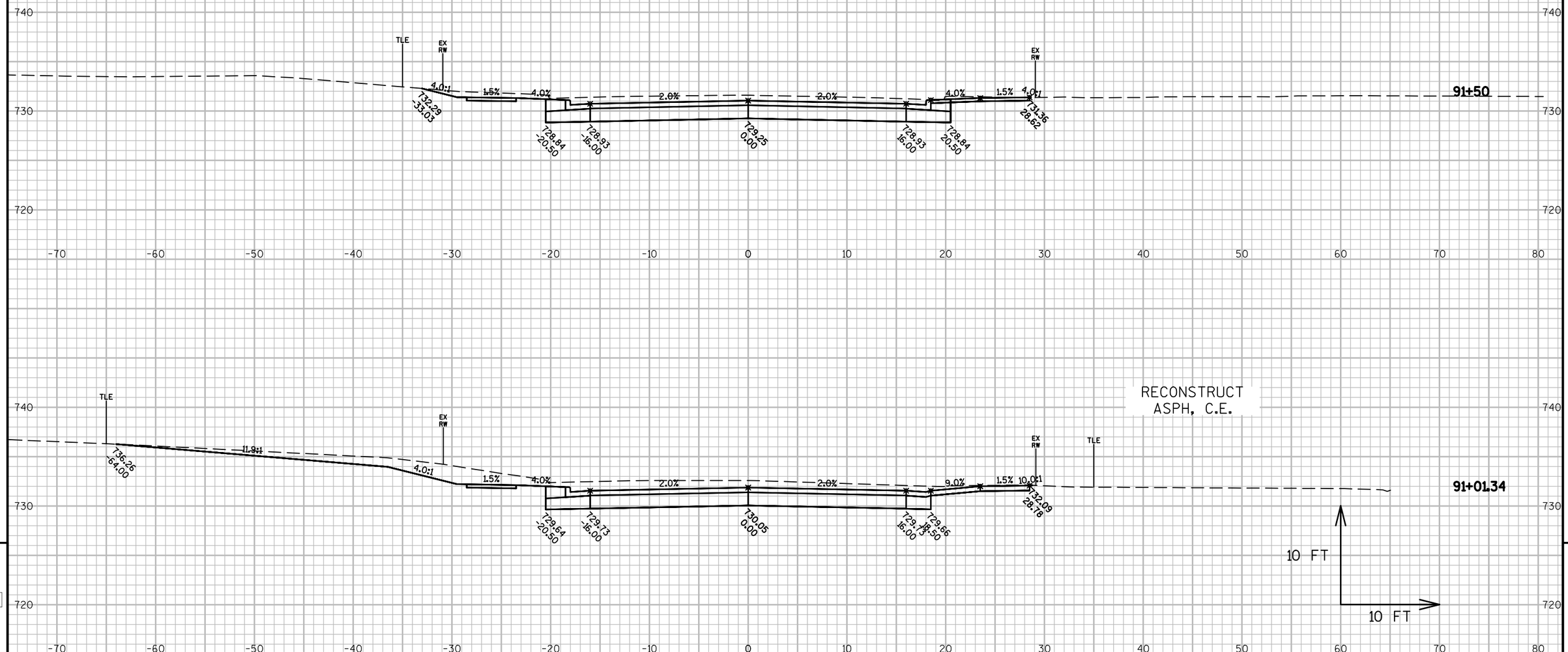



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 340 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (49)

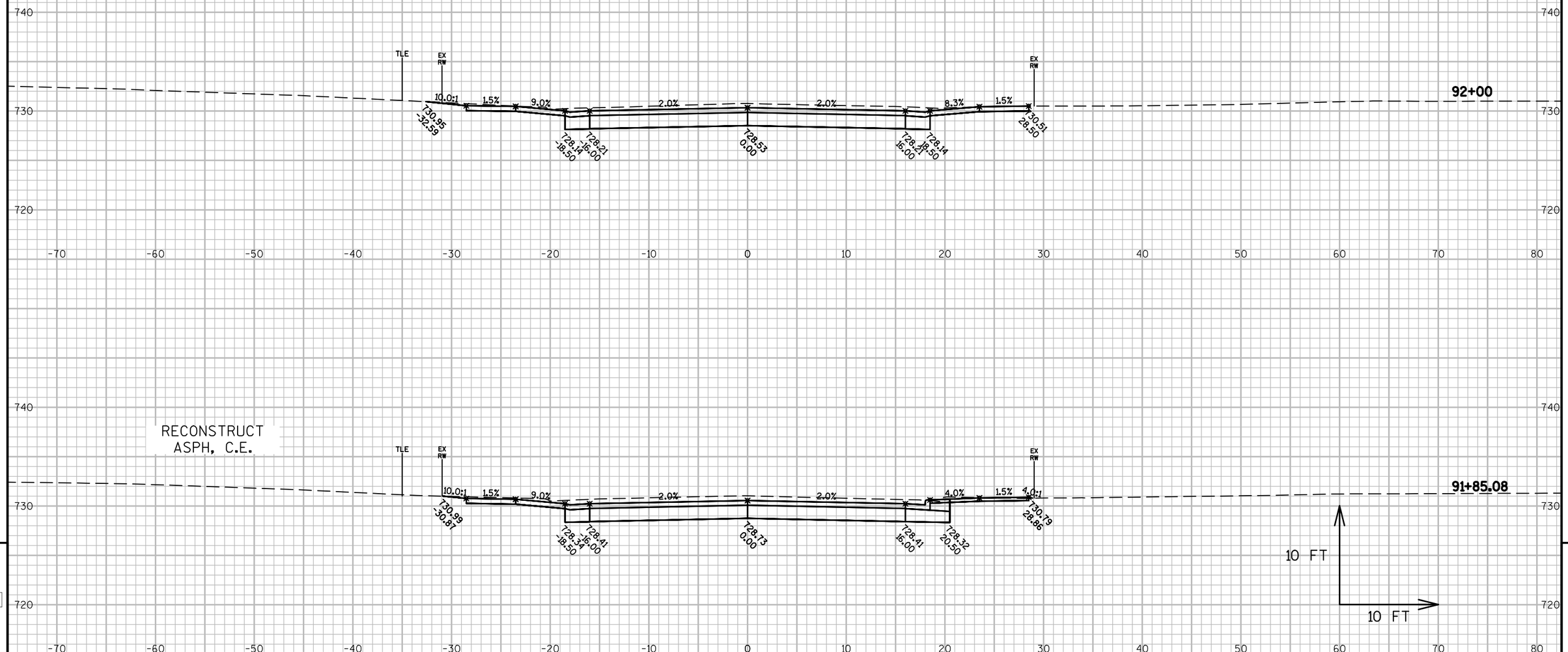
PLOT DATE : 8/25/2015 3:02 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 341 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (50)
PLOT DATE : 8/25/2015 3:03 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 342 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (51)

PLOT DATE : 8/25/2015 3:04 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

RECONSTRUCT
ASPH, C.E.

TLE

EX RW

10.0:1

1.5%

9.0%

2.0%

2.0%

ML

EX RW

**92+48.55**

730.43
-33.41

721.53
-18.50

727.60
-16.00

727.92
0.00

727.60
16.00

740

730

720

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

TLE

EX RW

10.0:1

1.5%

3.1%

2.0%

2.0%

8.0%

1.5%

EX RW

RECONSTRUCT
ASPH, C.E.

**92+06.33**

730.91
-32.22

728.03
-20.50

728.12
-16.00

728.44
0.00

728.12
16.00

728.05
18.50

730.41
28.50

10 FT

10 FT

740

730

720

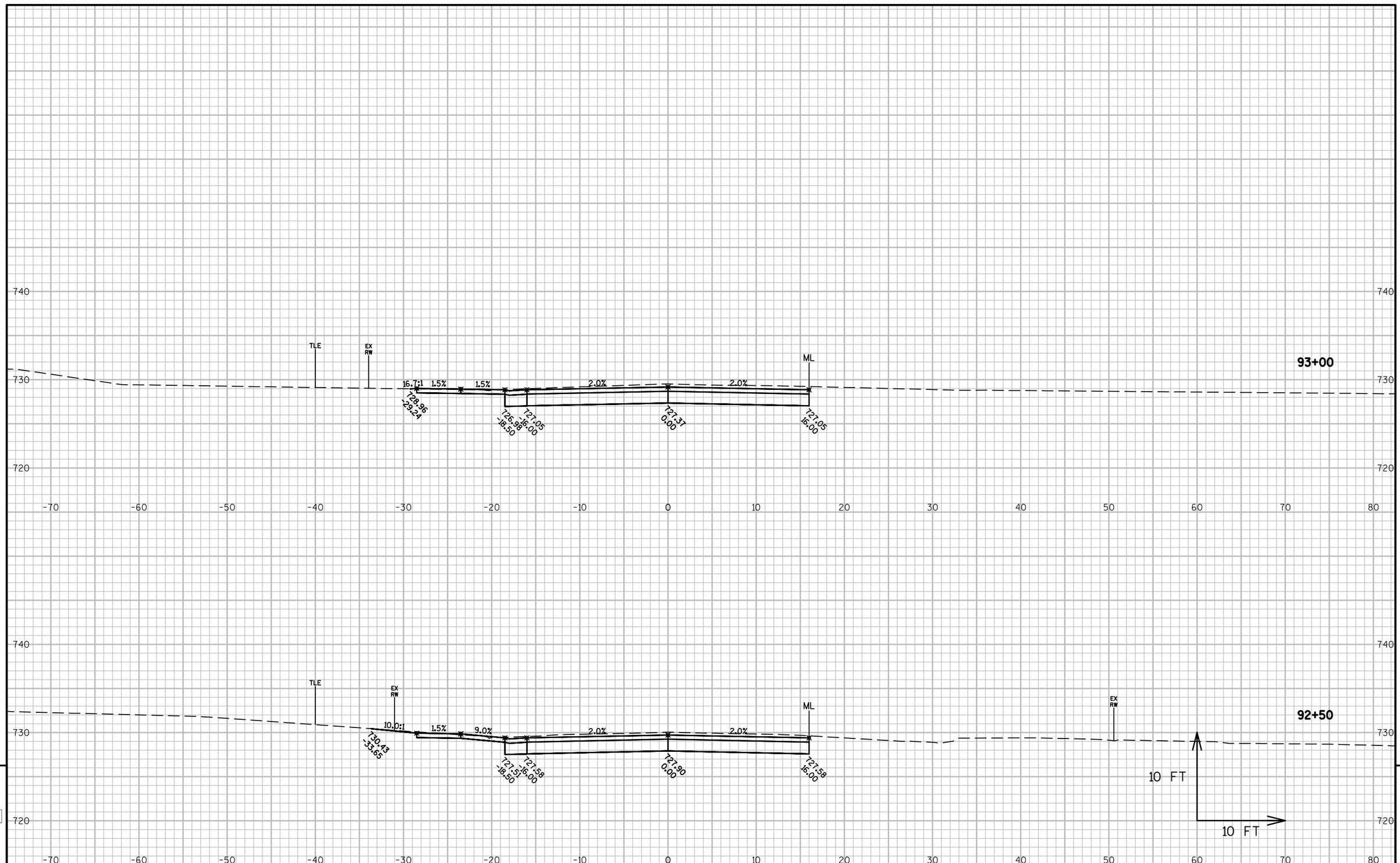
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 343 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (52)

PLOT DATE : 8/25/2015 3:05 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



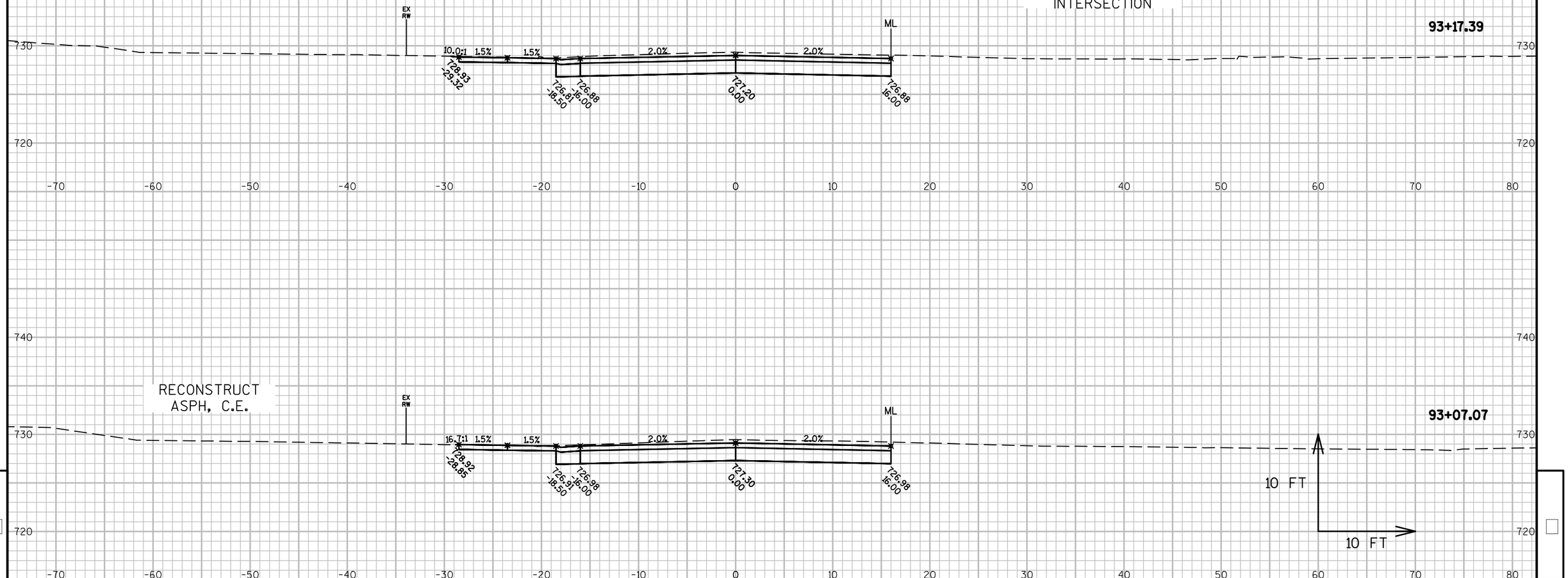

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 344 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (53)

PLOT DATE : 8/25/2015 3:05 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

FAIRGROUNDS RD.
INTERSECTION

93+17.39




RECONSTRUCT
ASPH, C.E.

93+07.07



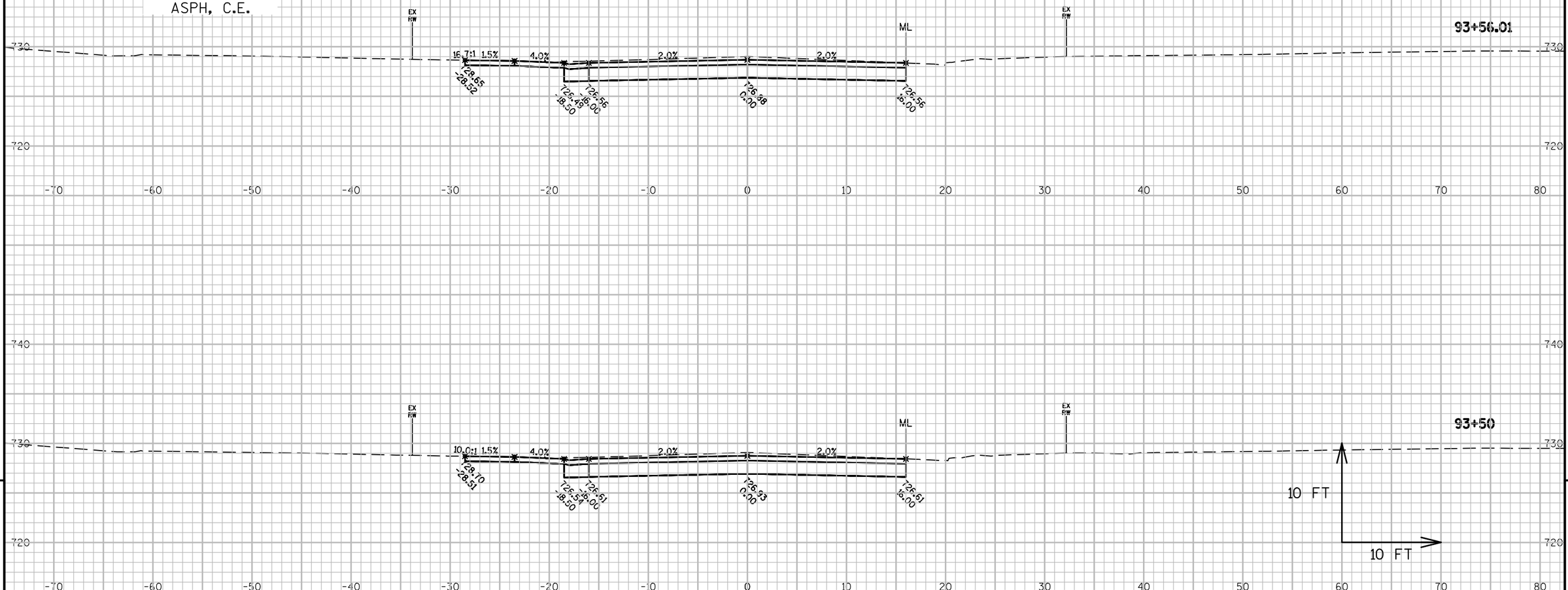

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 345 E |
|---|---|---|---|---|


FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (54)

PLOT DATE : 8/25/2015 3:06 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

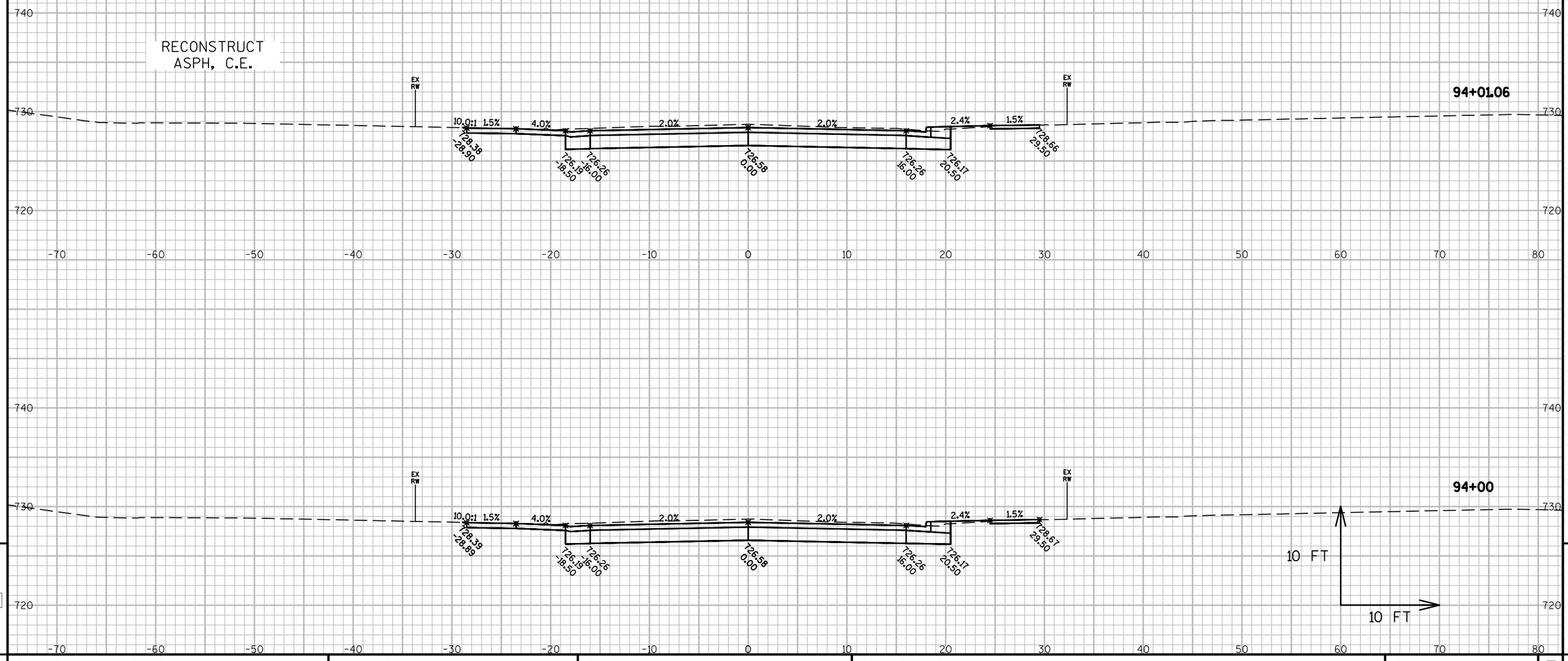
RECONSTRUCT
ASPH, C.E.




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 346 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (55)
PLOT DATE : 8/25/2015 3:07 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

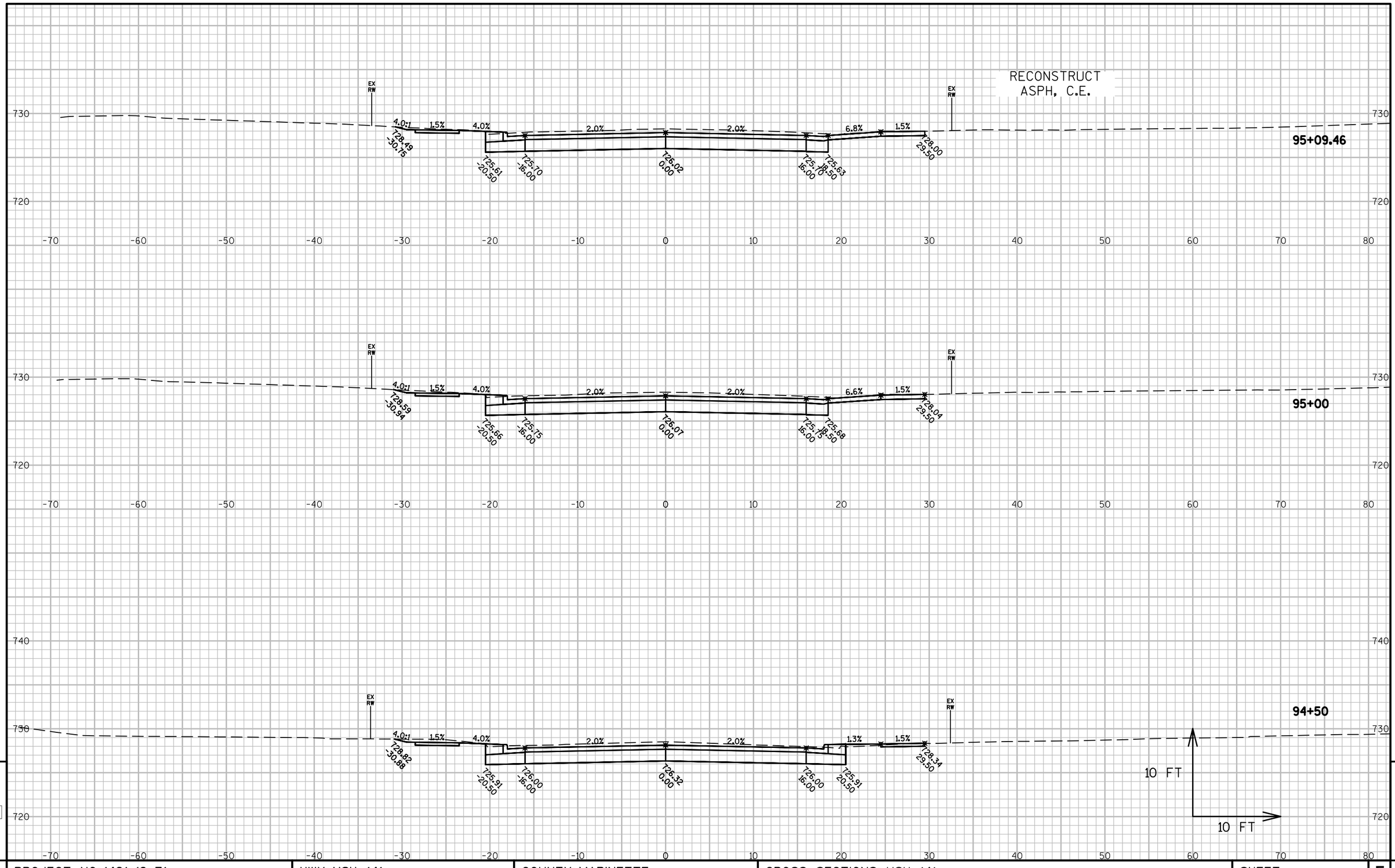
RECONSTRUCT
ASPH, C.E.




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 347 | E |
|---|---|---|---|---|---|

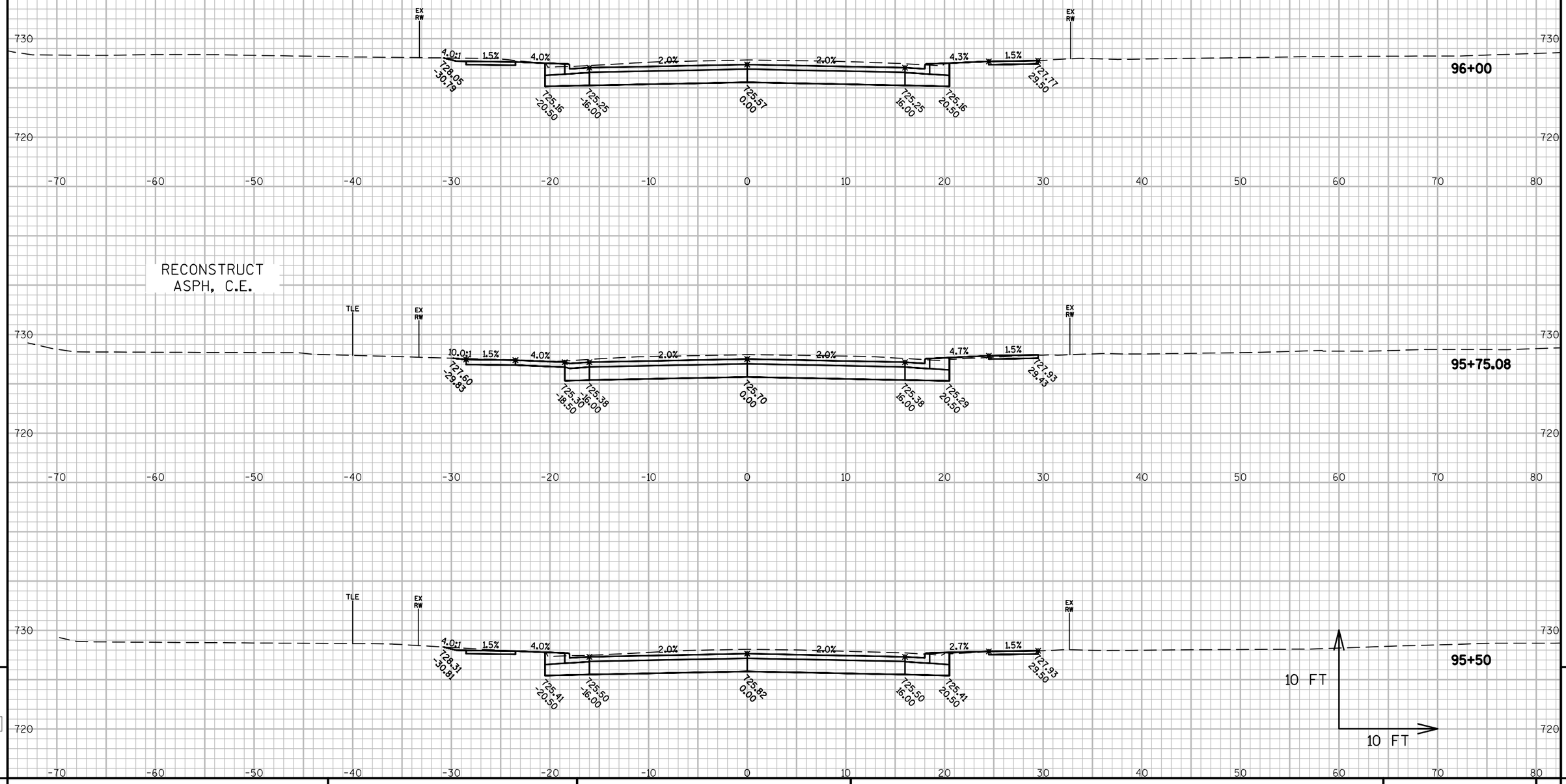
FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (56)

PLOT DATE : 8/25/2015 3:08 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT



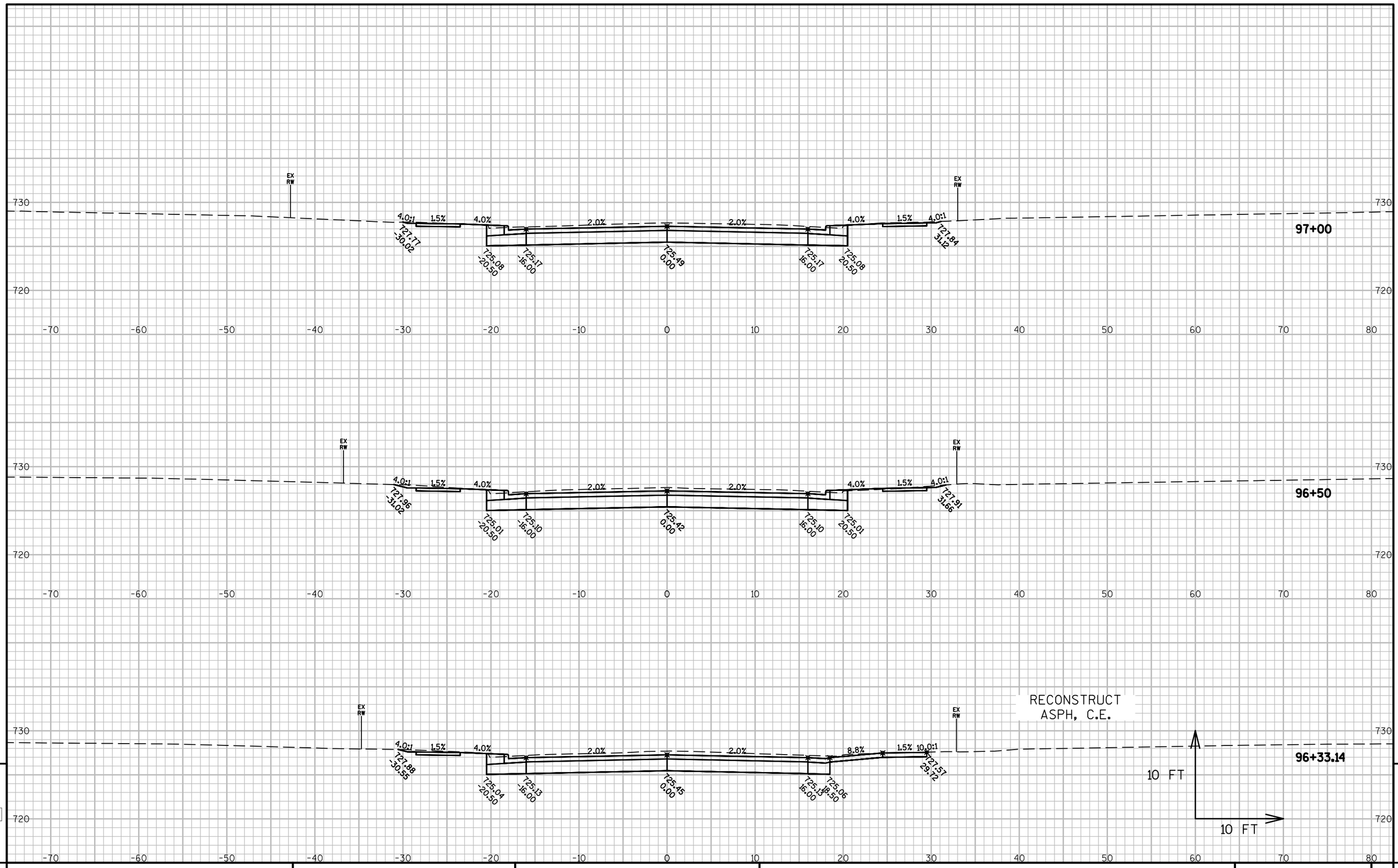

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 348 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (57)
PLOT DATE : 8/25/2015 3:09 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 349 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (58)
PLOT DATE : 8/25/2015 3:10 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

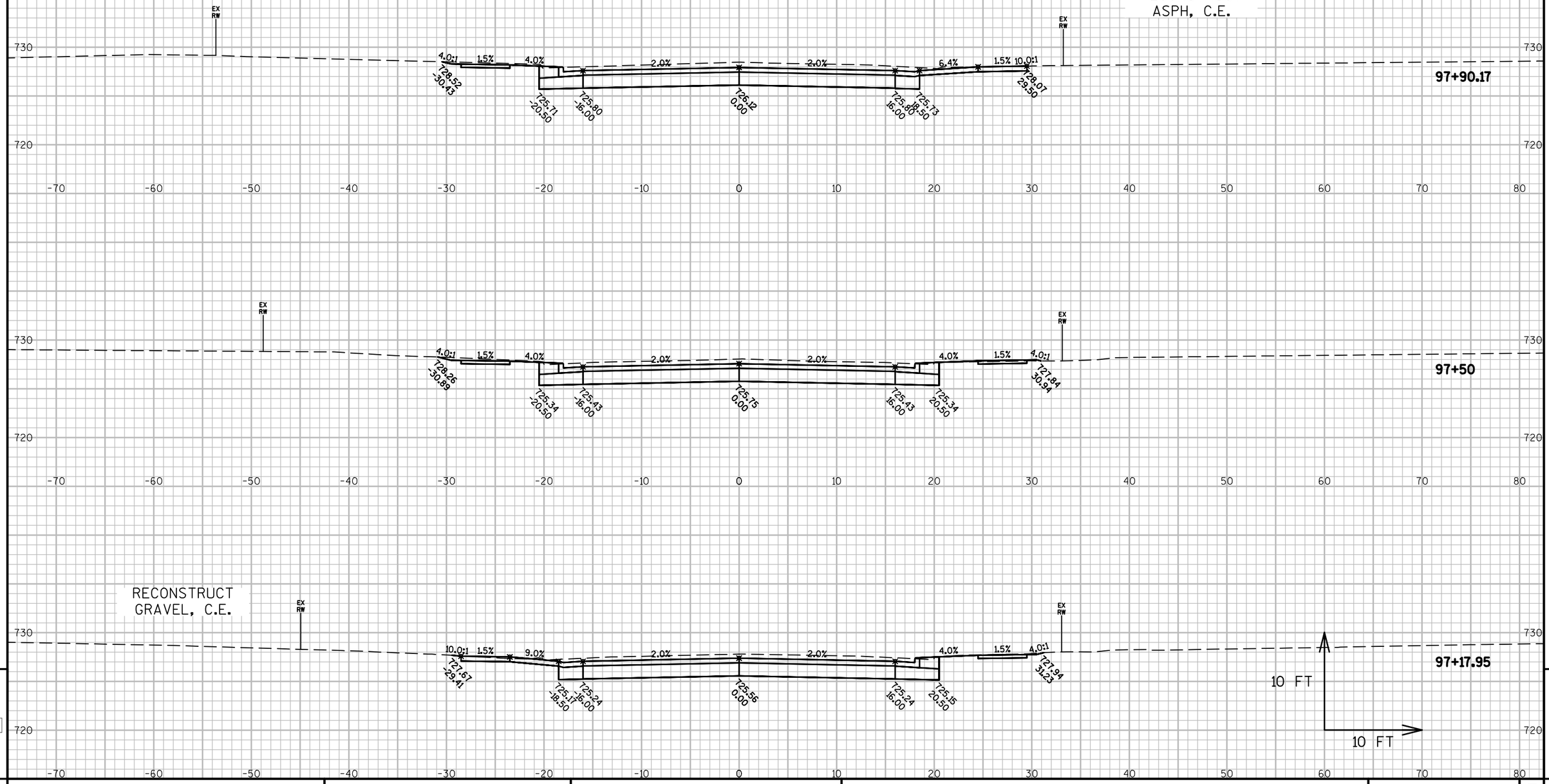



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 350 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (59)

PLOT DATE : 8/25/2015 3:10 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

RECONSTRUCT
ASPH, C.E.




**97+90.17**




**97+50**

RECONSTRUCT
GRAVEL, C.E.



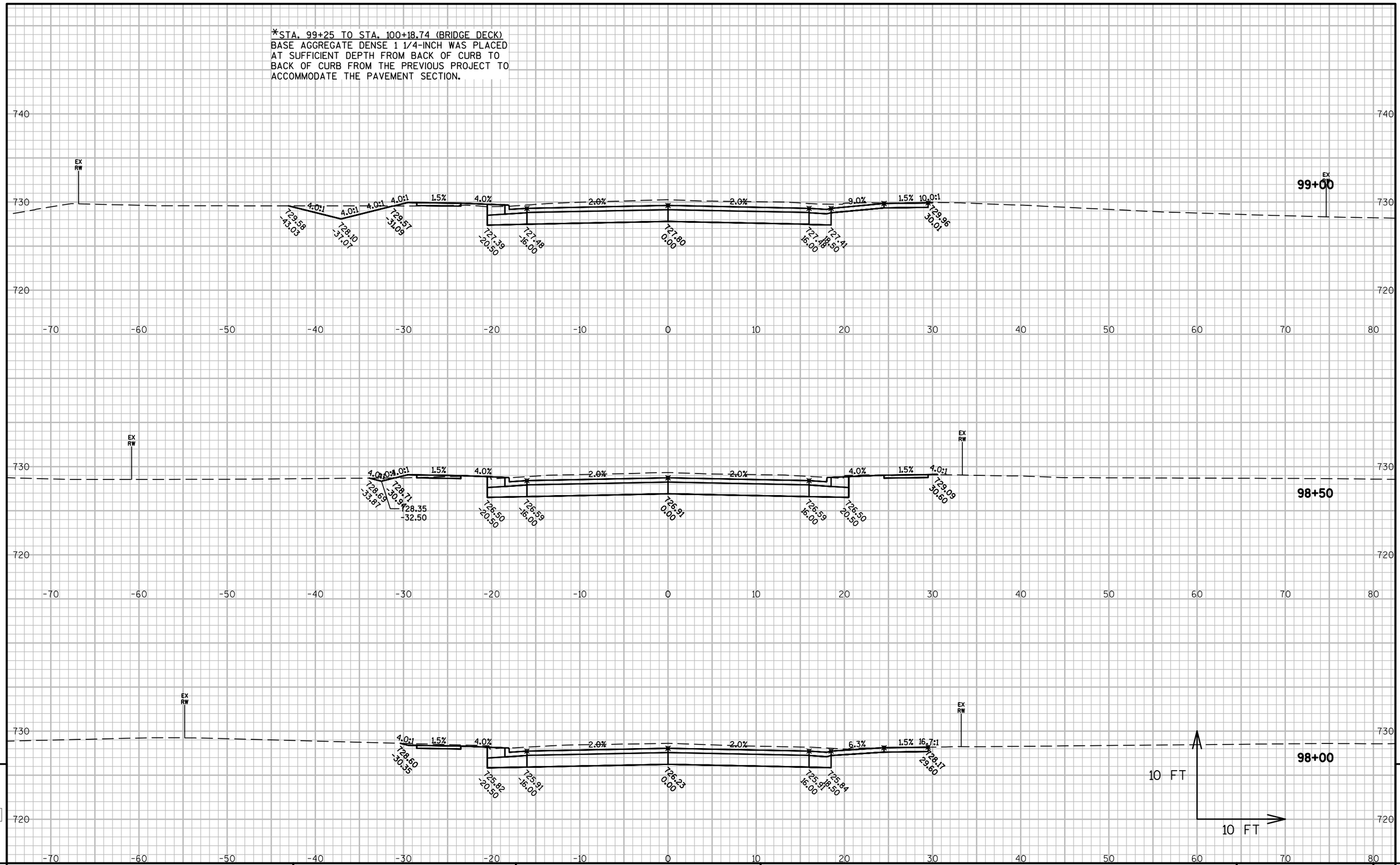

**97+17.95**

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 351 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (60)

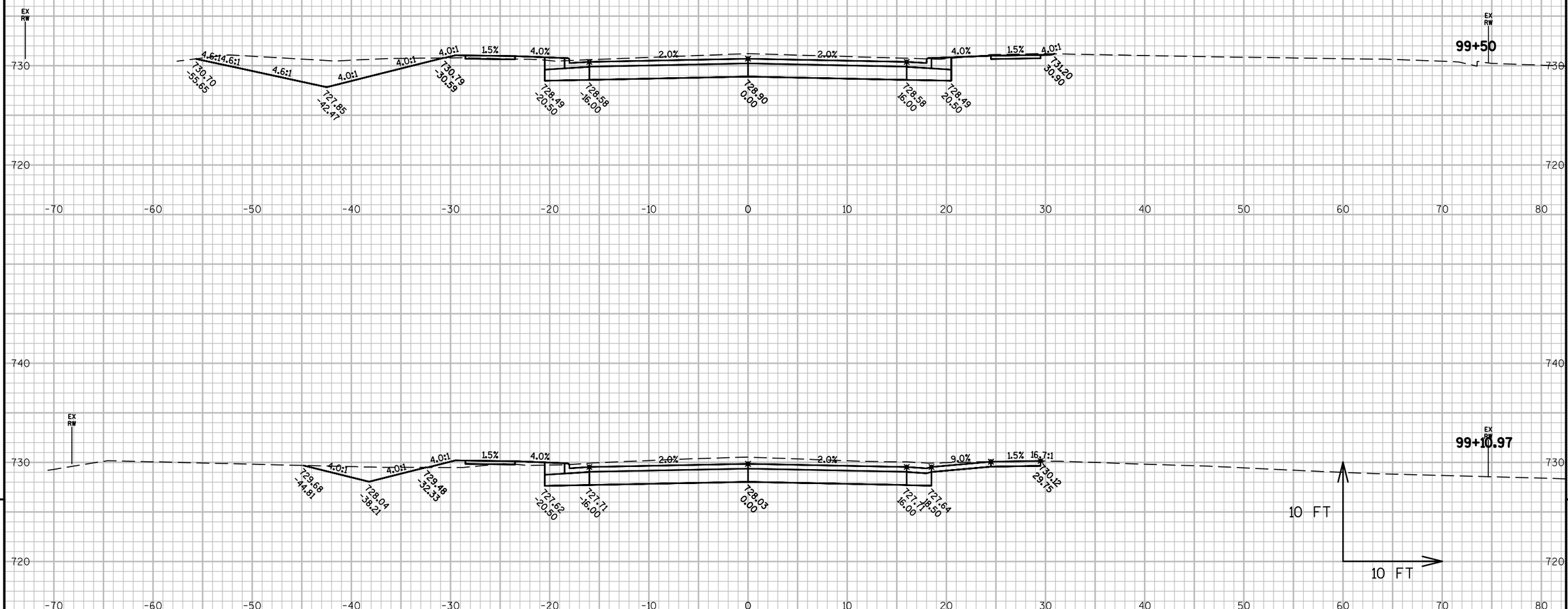
PLOT DATE : 8/25/2015 3:11 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

*STA. 99+25 TO STA. 100+18.74 (BRIDGE DECK)
BASE AGGREGATE DENSE 1 1/4-INCH WAS PLACED AT SUFFICIENT DEPTH FROM BACK OF CURB TO BACK OF CURB FROM THE PREVIOUS PROJECT TO ACCOMMODATE THE PAVEMENT SECTION.




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 352 | E |
|---|---|---|---|---|---|

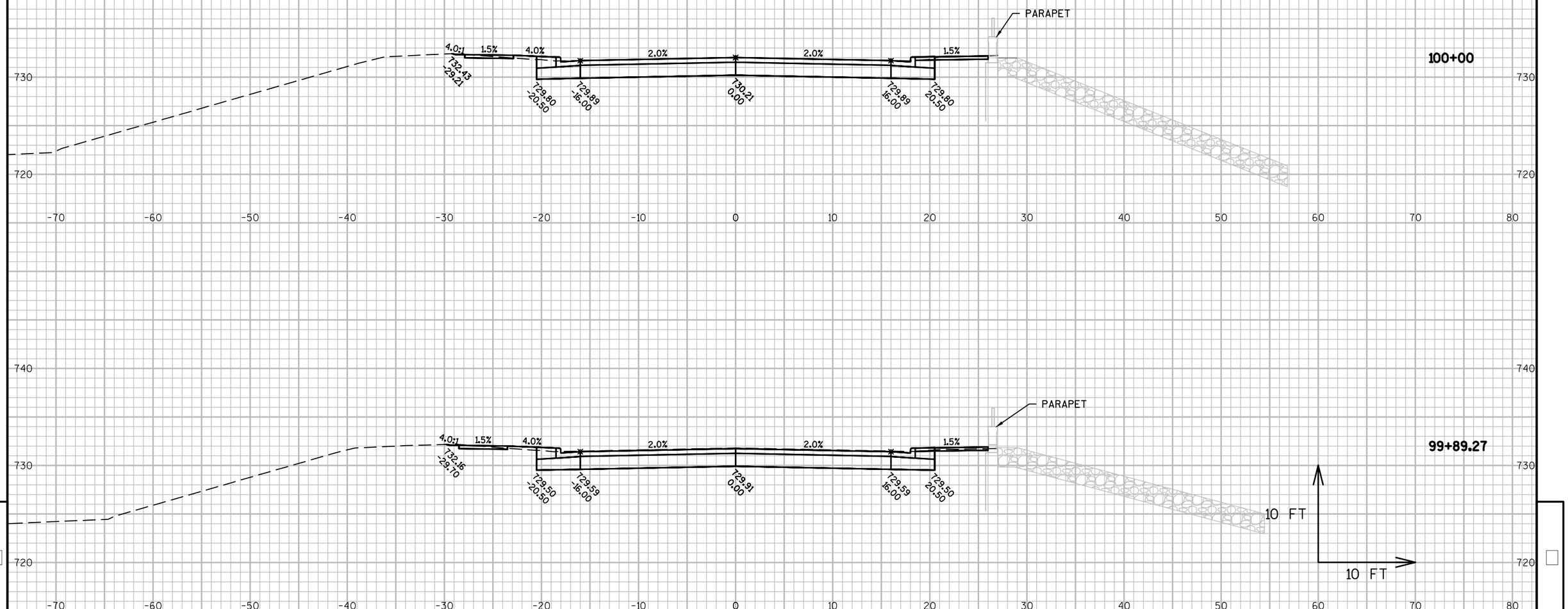
*STA. 99+25 TO STA. 100+18.74 (BRIDGE DECK)
BASE AGGREGATE DENSE 1 1/4-INCH WAS PLACED AT SUFFICIENT DEPTH FROM BACK OF CURB TO BACK OF CURB FROM THE PREVIOUS PROJECT TO ACCOMMODATE THE PAVEMENT SECTION.




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 353 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (62)
PLOT DATE : 8/25/2015 3:13 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

*STA. 99+25 TO STA. 100+18.74 (BRIDGE DECK)
BASE AGGREGATE DENSE 1 1/4-INCH WAS PLACED AT SUFFICIENT DEPTH FROM BACK OF CURB TO BACK OF CURB FROM THE PREVIOUS PROJECT TO ACCOMMODATE THE PAVEMENT SECTION.



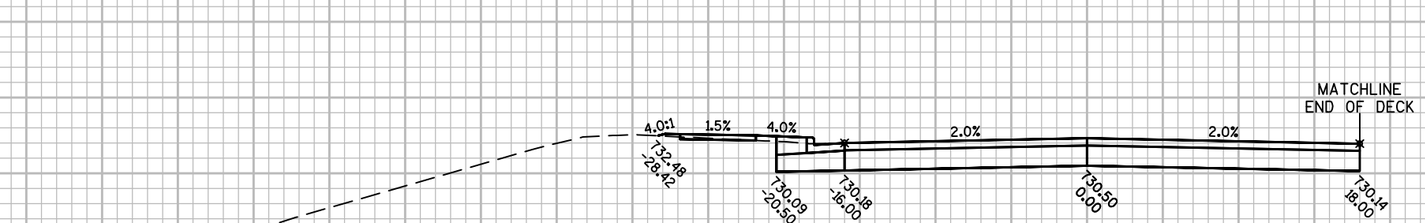

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 354 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (63)
PLOT DATE : 8/25/2015 3:14 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

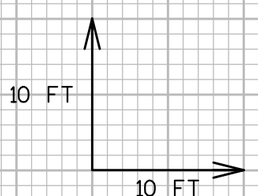



100+13.52

*STA. 99+25 TO STA. 100+18.74 (BRIDGE DECK)
BASE AGGREGATE DENSE 1 1/4-INCH WAS PLACED AT SUFFICIENT DEPTH FROM BACK OF CURB TO BACK OF CURB FROM THE PREVIOUS PROJECT TO ACCOMMODATE THE PAVEMENT SECTION.

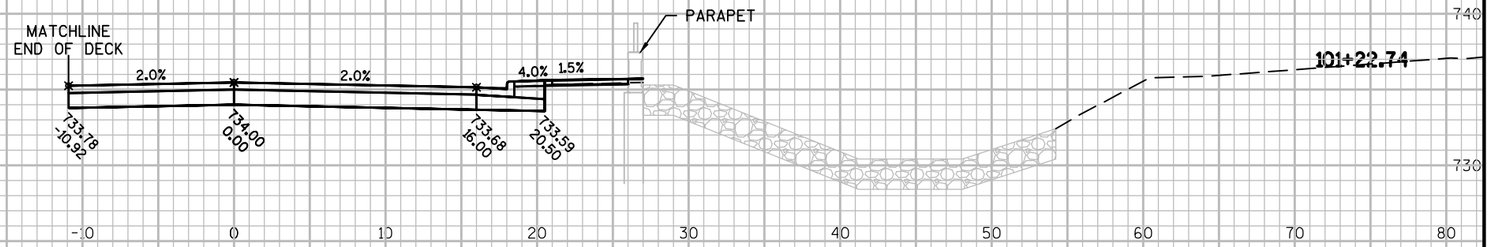



100+10.21

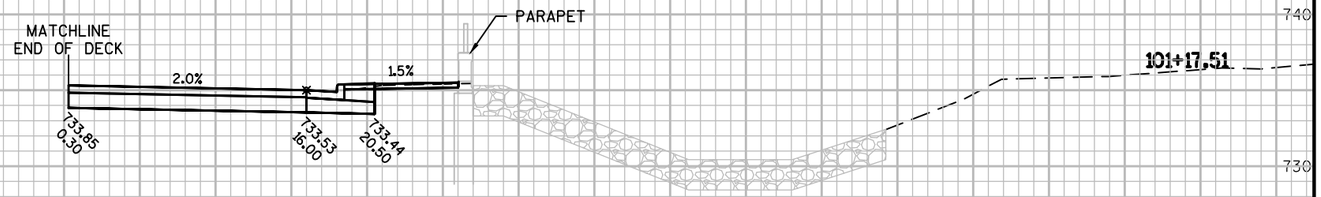


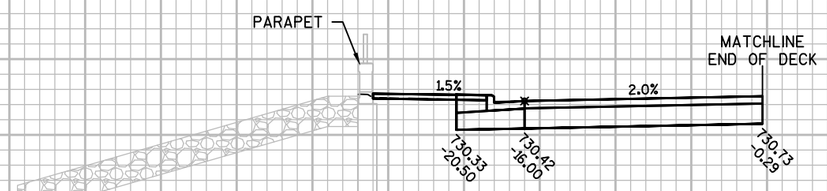

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 355 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (64)
PLOT DATE : 8/25/2015 3:15 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

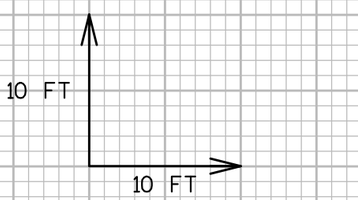



*STA. 101+17.51 (BRIDGE DECK) TO STA. 102+50
BASE AGGREGATE DENSE 1 1/4-INCH WAS PLACED AT SUFFICIENT DEPTH FROM BACK OF CURB TO BACK OF CURB FROM THE PREVIOUS PROJECT TO ACCOMMODATE THE PAVEMENT SECTION.



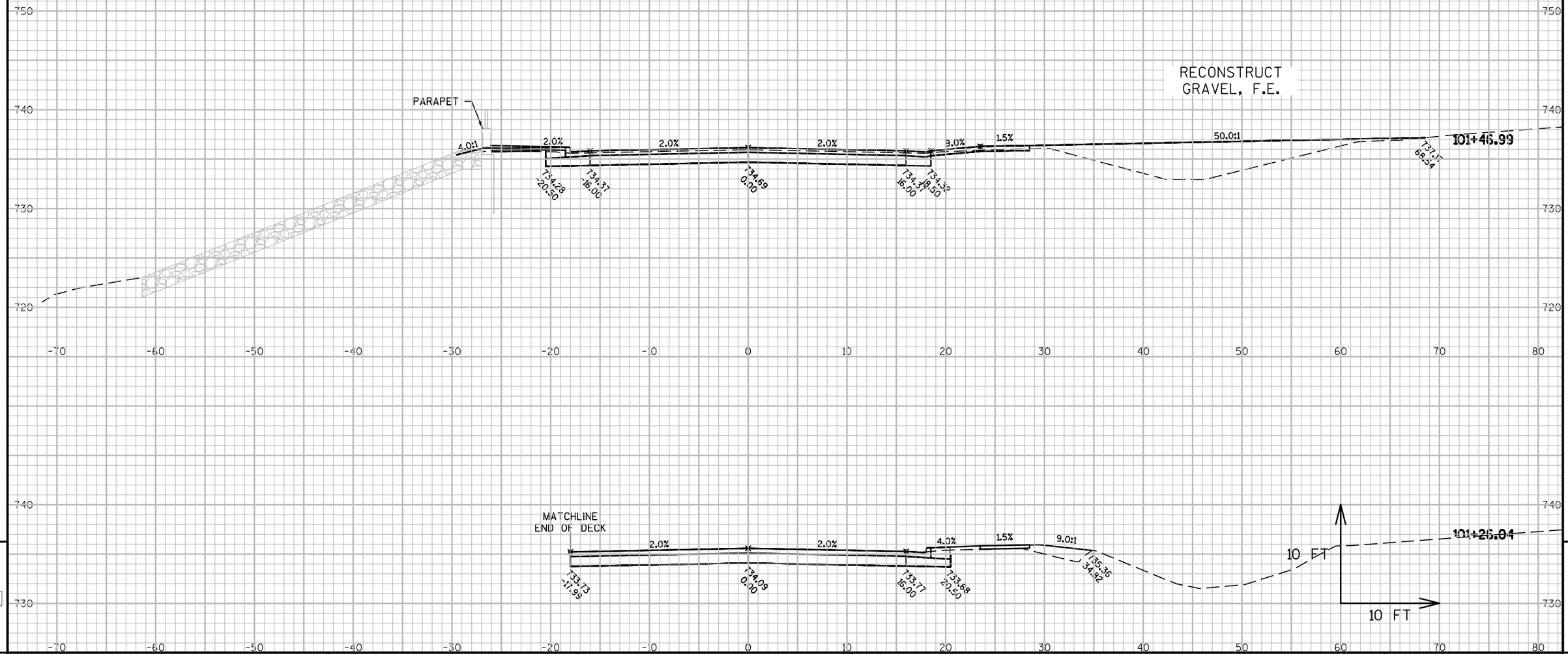




*STA. 99+25 TO STA. 100+18.74 (BRIDGE DECK)
BASE AGGREGATE DENSE 1 1/4-INCH WAS PLACED AT SUFFICIENT DEPTH FROM BACK OF CURB TO BACK OF CURB FROM THE PREVIOUS PROJECT TO ACCOMMODATE THE PAVEMENT SECTION.



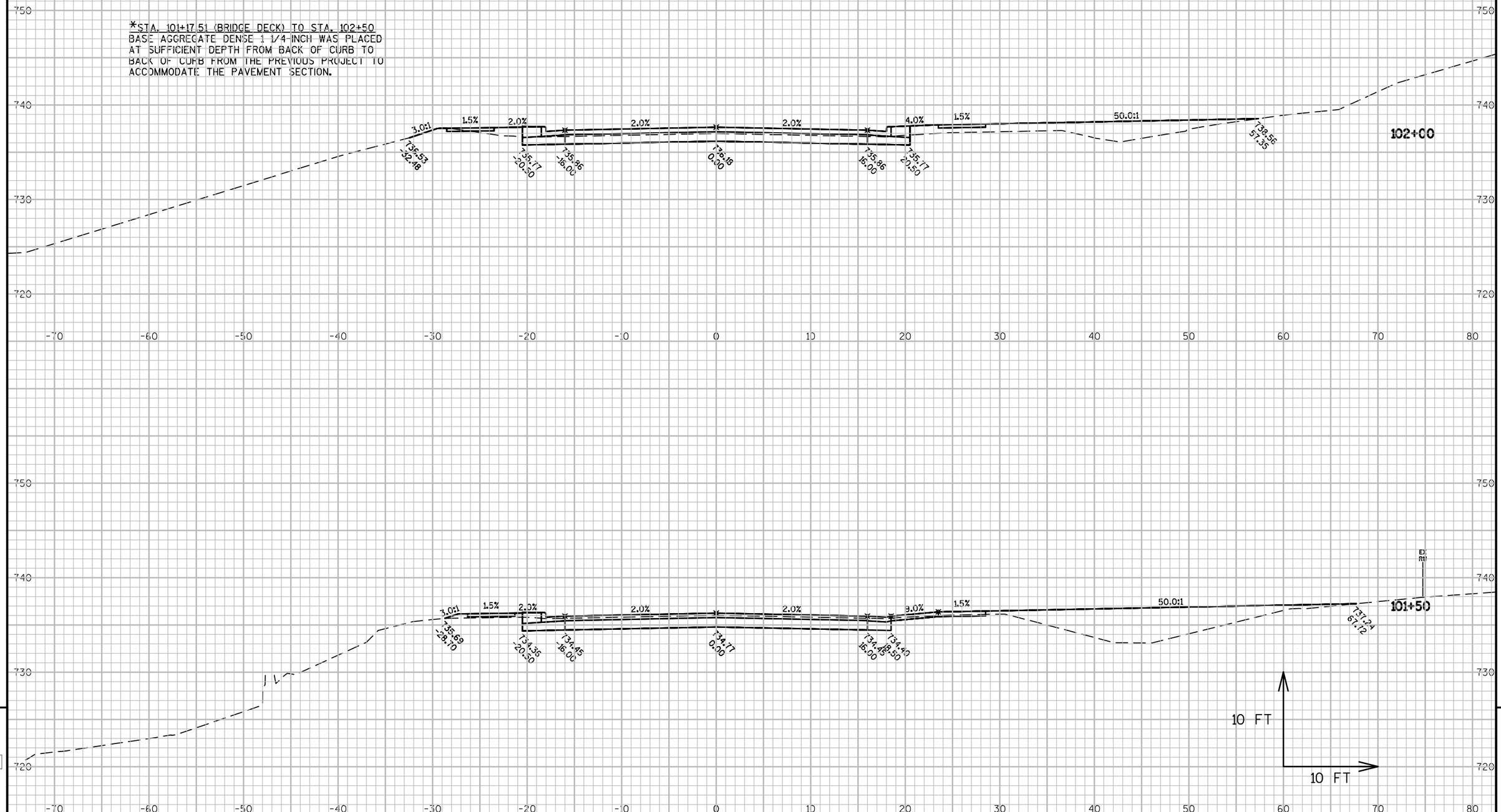

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 356 | E |
|---|---|---|---|---|---|

*STA. 101+17.51 (BRIDGE DECK) TO STA. 102+50 BASE AGGREGATE DENSE 1 1/4-INCH WAS PLACED AT SUFFICIENT DEPTH FROM BACK OF CURB TO BACK OF CURB FROM THE PREVIOUS PROJECT TO ACCOMMODATE THE PAVEMENT SECTION.




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 357 | E |
|---|---|---|---|---|---|

*STA. 101+17.51 (BRIDGE DECK) TO STA. 102+50
BASE AGGREGATE DENSE 1 1/4-INCH WAS PLACED AT SUFFICIENT DEPTH FROM BACK OF CURB TO BACK OF CURB FROM THE PREVIOUS PROJECT TO ACCOMMODATE THE PAVEMENT SECTION.




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 358 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (67)
PLOT DATE : 8/25/2015 3:17 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

BEACH AVE.
INTERSECTION

ML

2.0%

2.0%

ML

738.37
-16.00

738.69
0.00

738.37
16.00

**102+89.04**

*STA. 101+17.51 (BRIDGE DECK) TO STA. 102+50
BASE AGGREGATE DENSE 1 1/4-INCH WAS PLACED AT SUFFICIENT DEPTH FROM BACK OF CURB TO BACK OF CURB FROM THE PREVIOUS PROJECT TO ACCOMMODATE THE PAVEMENT SECTION.

4.0:1

1.5%

4.0%

2.0%

2.0%

ML

739.28
-30.05

737.18
-20.50

737.27
-16.00

737.59
0.00

737.27
16.00

**102+50**

10 FT

10 FT

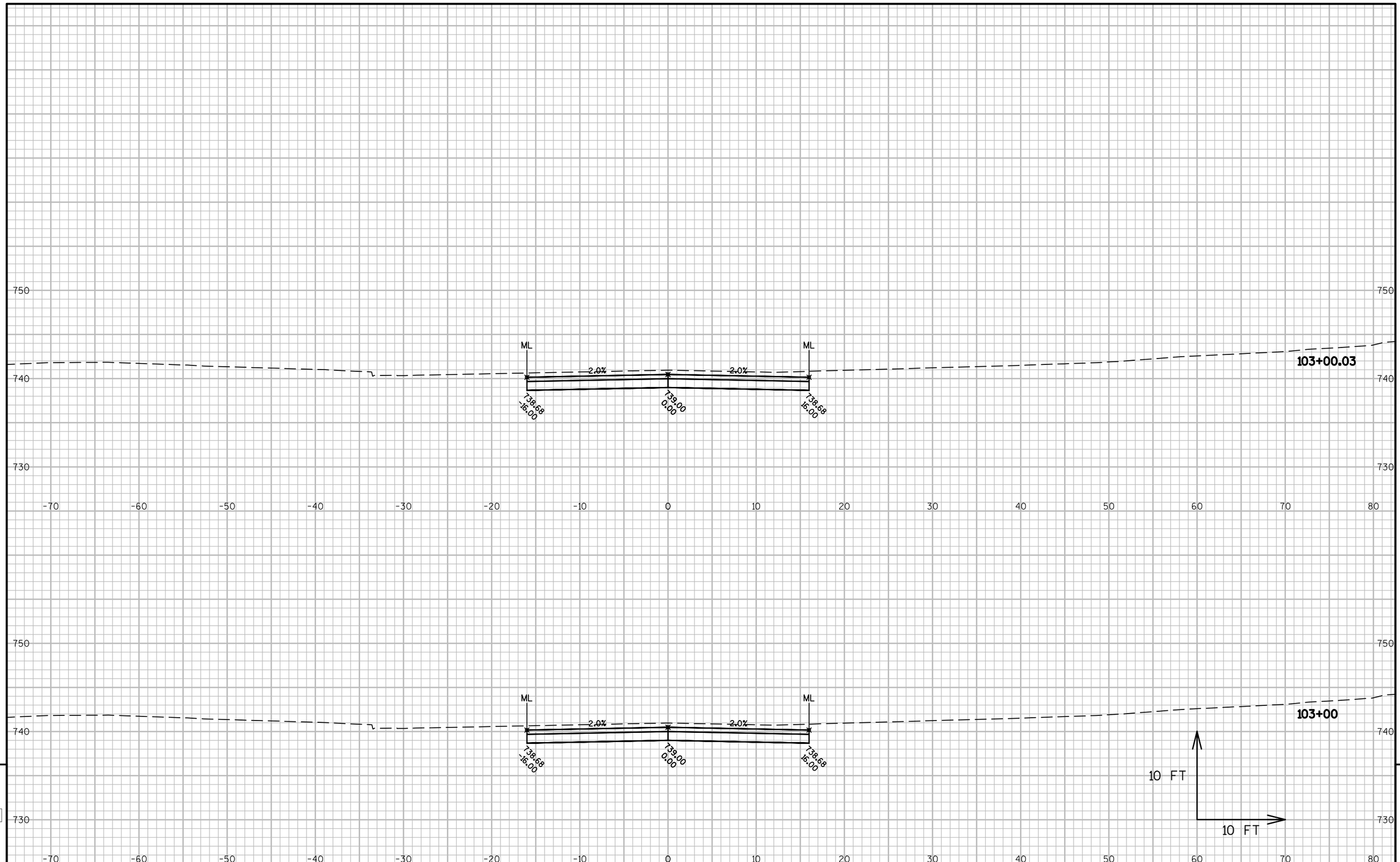
750 740 730 720

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 359 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (68)

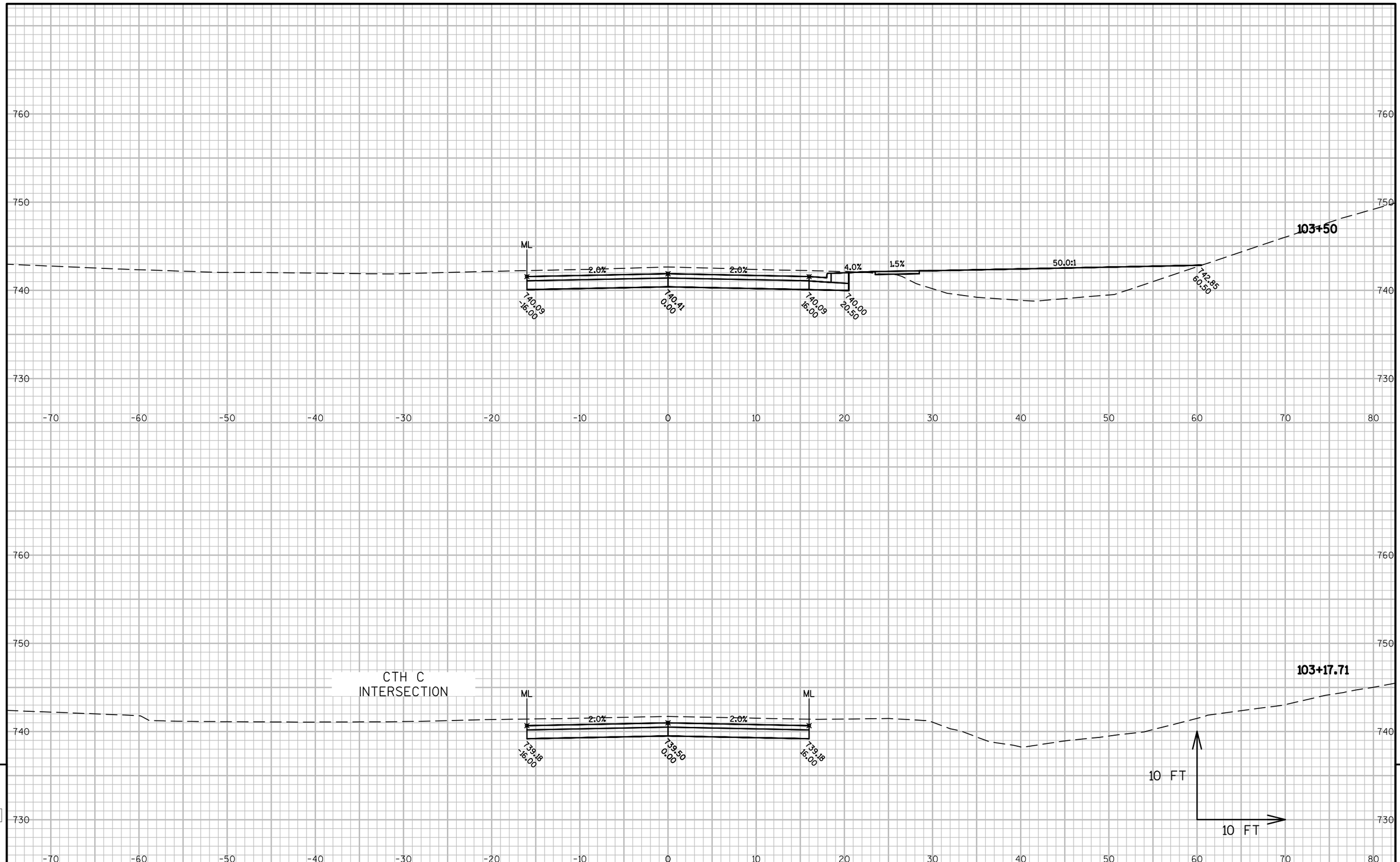
PLOT DATE : 8/25/2015 3:18 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 360 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (69)

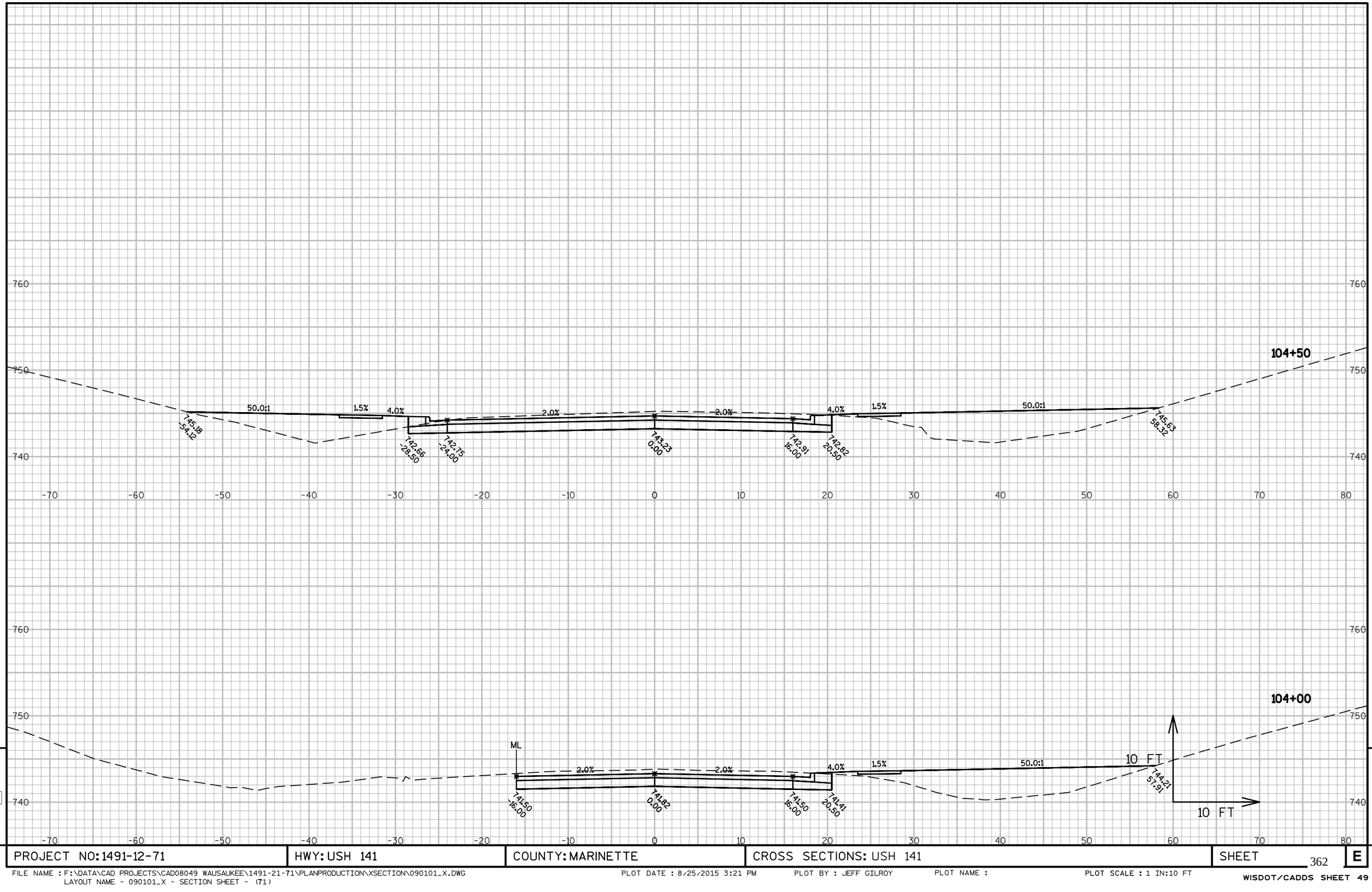
PLOT DATE : 8/25/2015 3:19 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 361 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (70)

PLOT DATE : 8/25/2015 3:20 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 362 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (71)

PLOT DATE : 8/25/2015 3:21 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

RECONSTRUCT
GRAVEL, P.E.

105+01.03

760
750
740

50.0:1 1.5% 4.0% 2.0% 2.0% 9.0% 50.0:1

746.60 -52.92 | 744.10 -28.50 | 744.19 -24.00 | 744.67 0.00 | 744.35 16.00 | 744.30 18.50 | 746.60 41.23

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

760
750
740

105+00

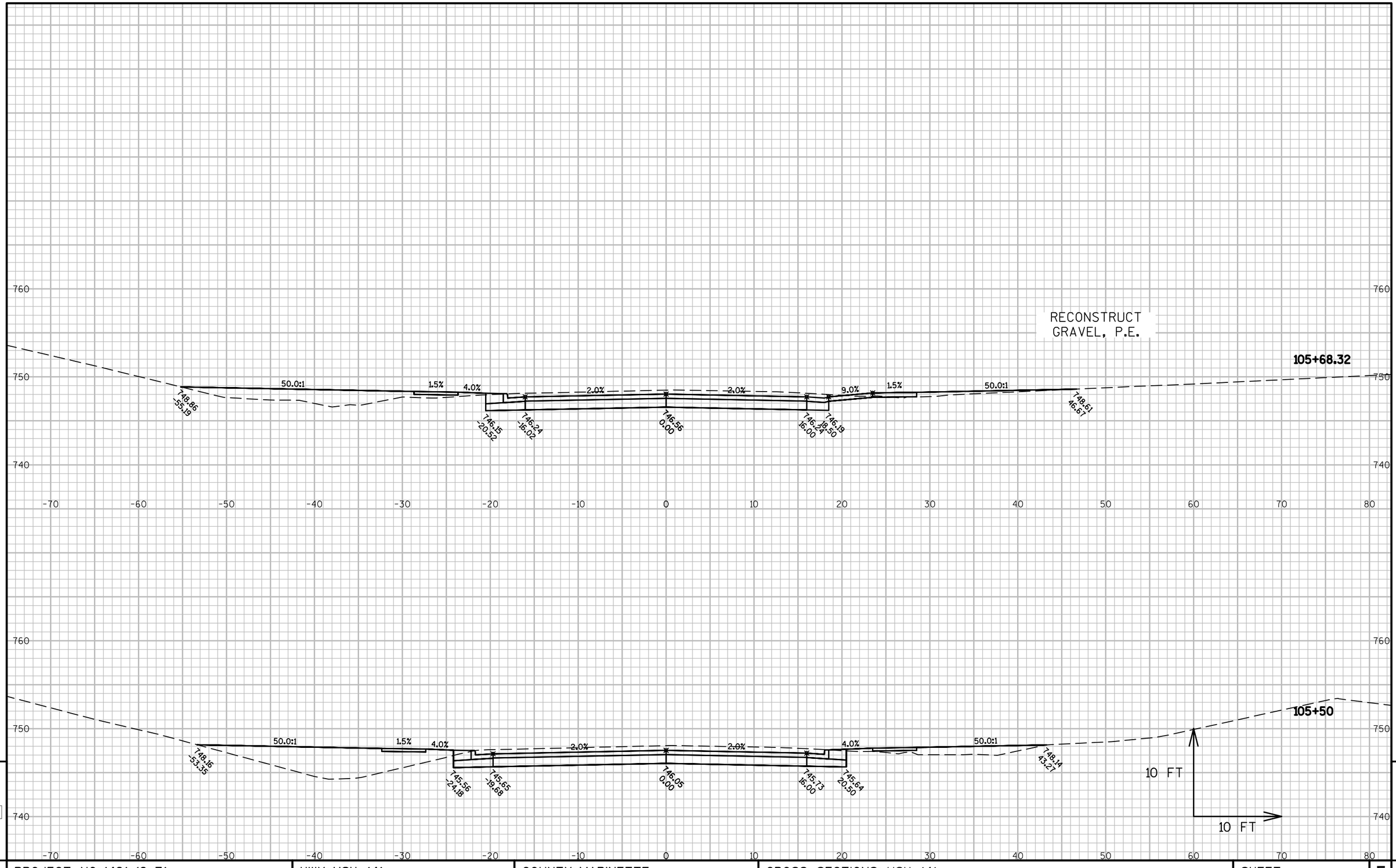
50.0:1 1.5% 4.0% 2.0% 2.0% 9.0% 1.5% 50.0:1

746.57 -52.91 | 744.07 -28.50 | 744.15 -24.00 | 744.64 0.00 | 744.32 16.00 | 744.27 18.50 | 746.57 41.15

10 FT
10 FT

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 363 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 364 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (73)

PLOT DATE : 8/25/2015 3:23 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

760
750
740
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

106+00

50.0:1 1.5% 4.0% 2.0% 2.0% 4.0% 1.5% 50.0:1

749.75 -55.90 | 747.04 -20.50 | 747.13 -16.00 | 747.45 0.00 | 747.13 16.00 | 747.04 20.50 | 749.78 54.71

760
750
740
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

RECONSTRUCT
GRAVEL, P.E.

105+77.29

50.0:1 1.5% 9.0% 2.0% 2.0% 4.0% 1.5% 50.0:1

748.86 -46.59 | 746.44 -16.50 | 746.49 -16.00 | 746.81 0.00 | 746.49 16.00 | 746.40 20.50 | 749.16 55.38

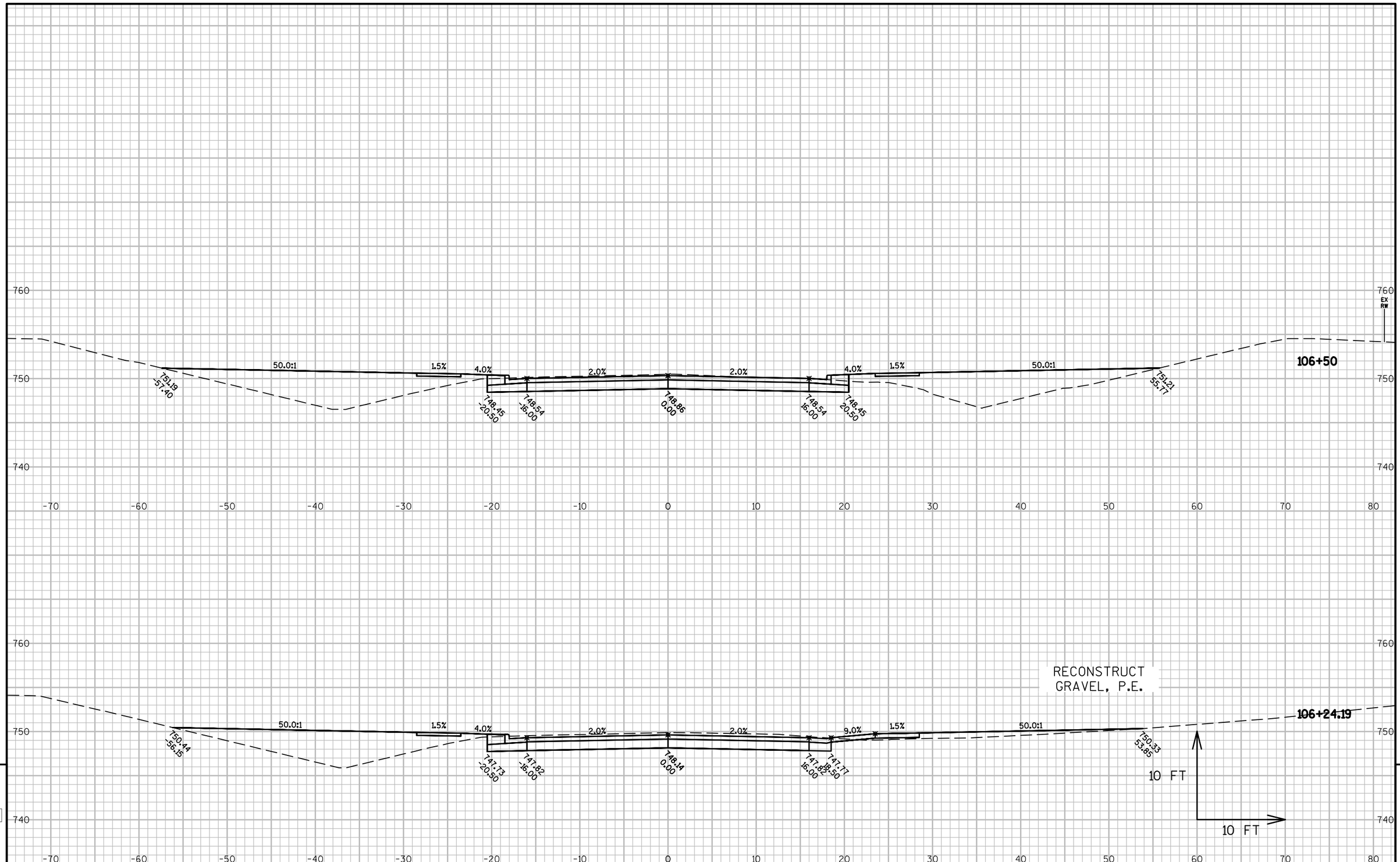
10 FT

10 FT

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 365 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (74)

PLOT DATE : 8/25/2015 3:24 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 366 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (75)

PLOT DATE : 8/25/2015 3:25 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

NORTH AVE. (E)
INTERSECTION

107+71.11

760
750
ML
2.0%
2.0%
ML
751.34
-16.00
751.66
0.00
751.34
16.00
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

107+50

760
750
ML
2.0%
2.0%
ML
750.94
-16.00
751.26
0.00
750.94
16.00
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

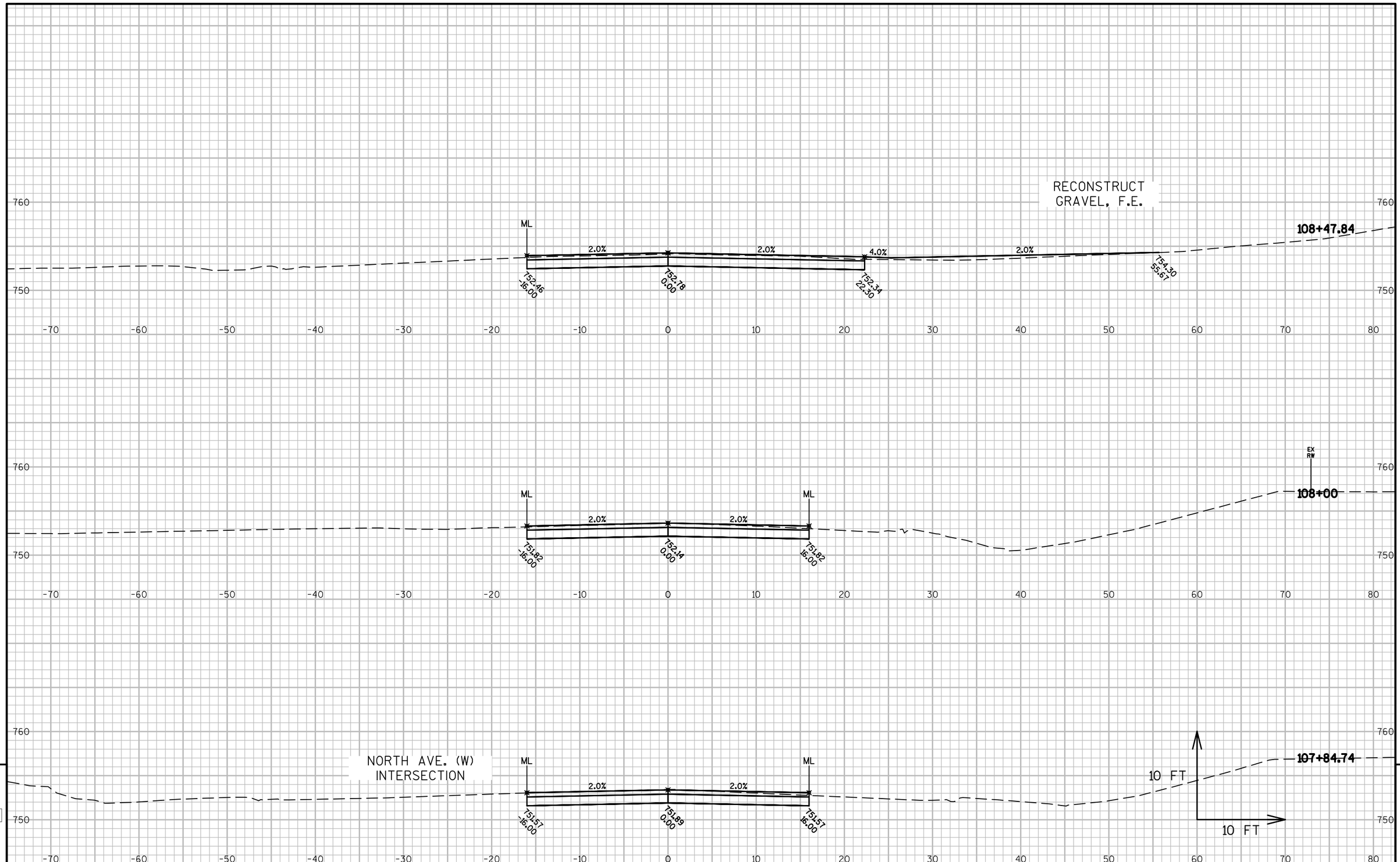
107+00

760
750
740
50.0:1
1.5%
4.0%
2.0%
2.0%
ML
752.55
-60.20
749.76
-20.50
749.85
-16.00
750.17
0.00
749.85
16.00
10 FT
10 FT
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 367 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (76)

PLOT DATE : 8/25/2015 3:25 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 368 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (77)

PLOT DATE : 8/25/2015 3:26 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

END
RECONSTRUCTION

109+00

EX RW

760
750
770

50.0:1
1.5%
4.0%
2.0%
2.0%
4.0:1

755.78 -63.68
752.85 -20.50
752.94 -16.00
753.26 0.00
752.86 20.00
752.68 29.17
751.34 34.53
751.34 43.01

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

108+50

EX RW

ML

2.0%
2.0%
4.0%
2.0%

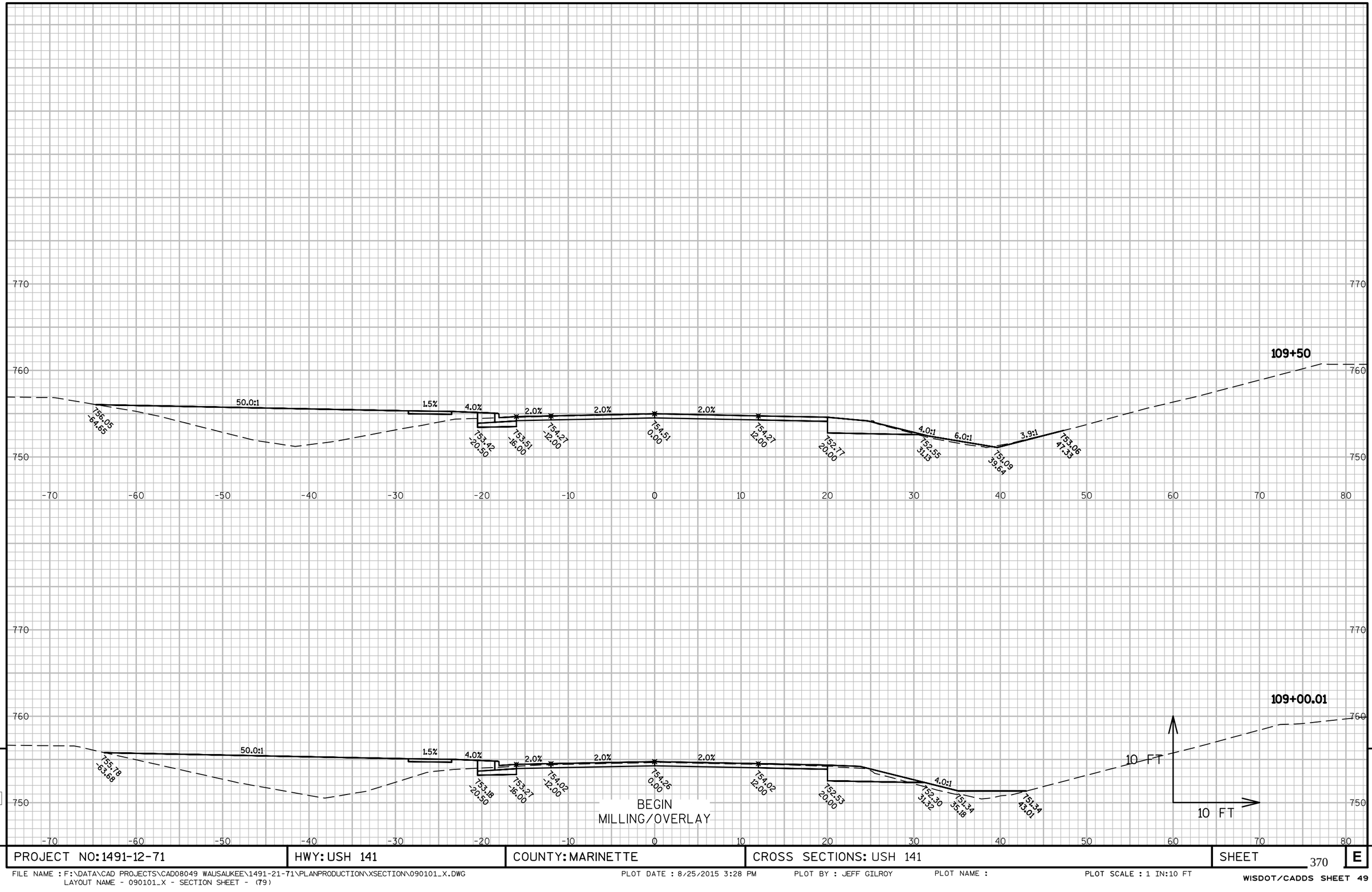
752.49 -16.00
752.81 0.00
752.37 22.08
754.26 51.55

10 FT
10 FT

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 369 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (78)

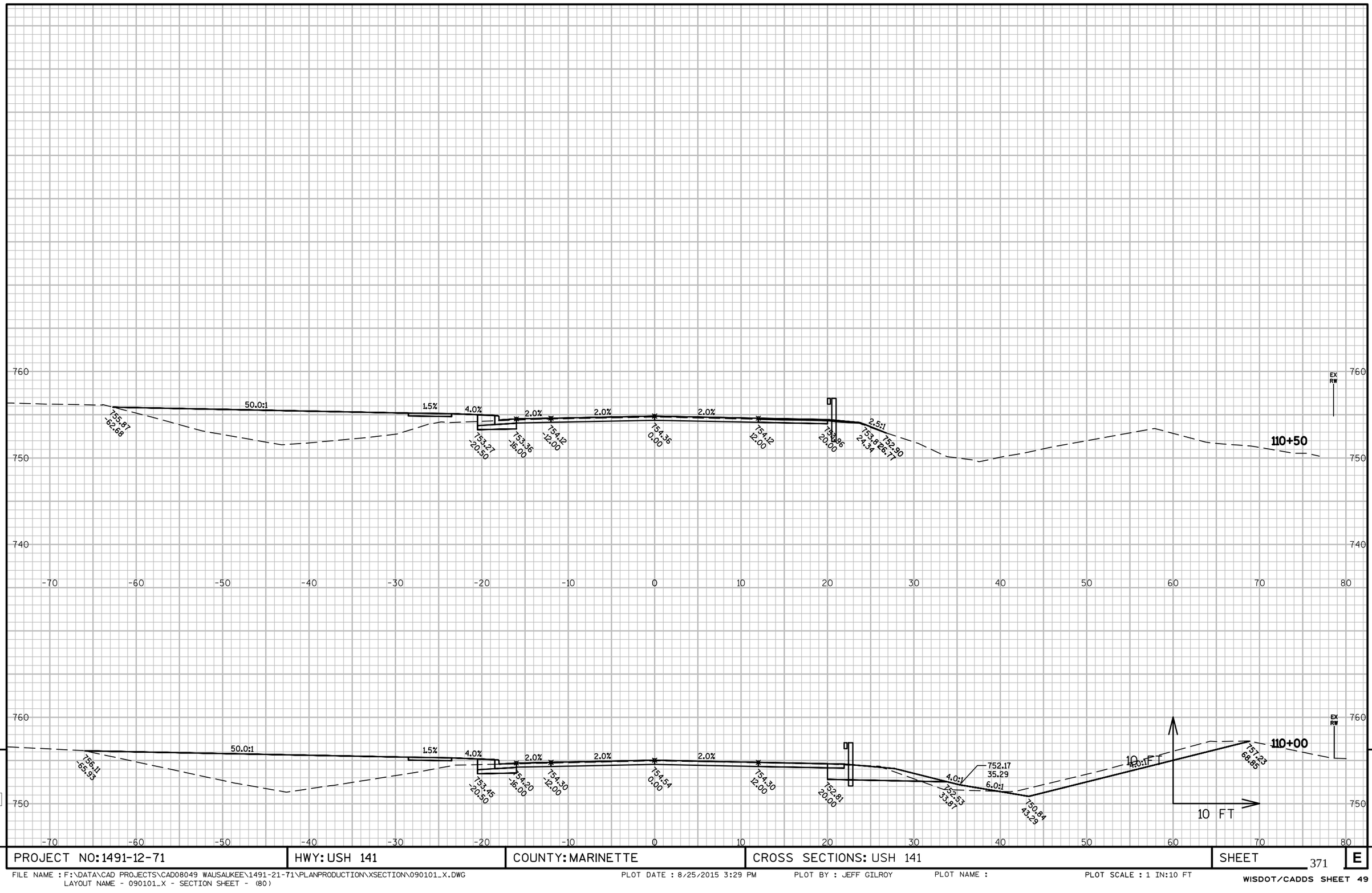
PLOT DATE : 8/25/2015 3:27 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 370 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (79)

PLOT DATE : 8/25/2015 3:28 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

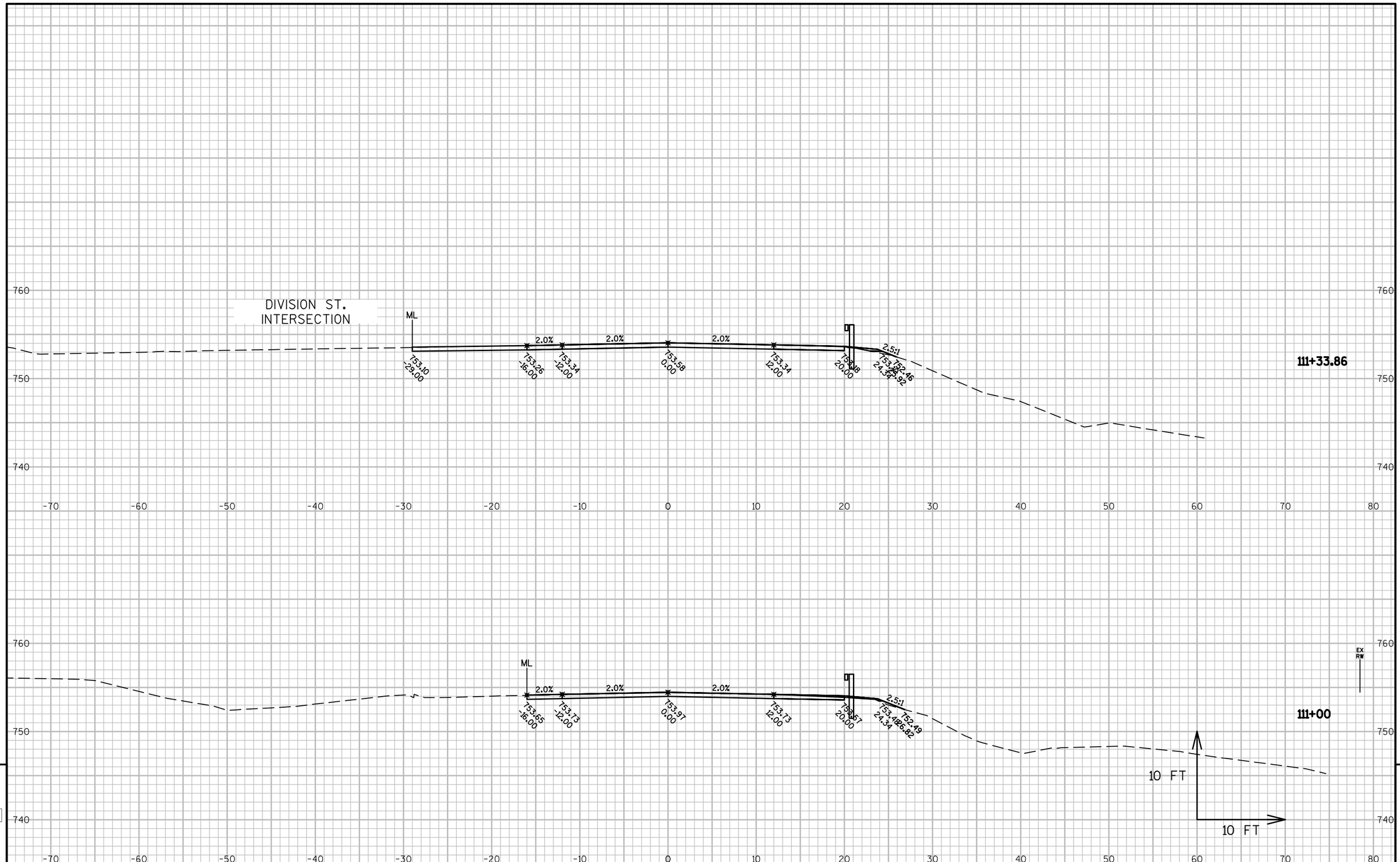



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 371 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (80)

PLOT DATE : 8/25/2015 3:29 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

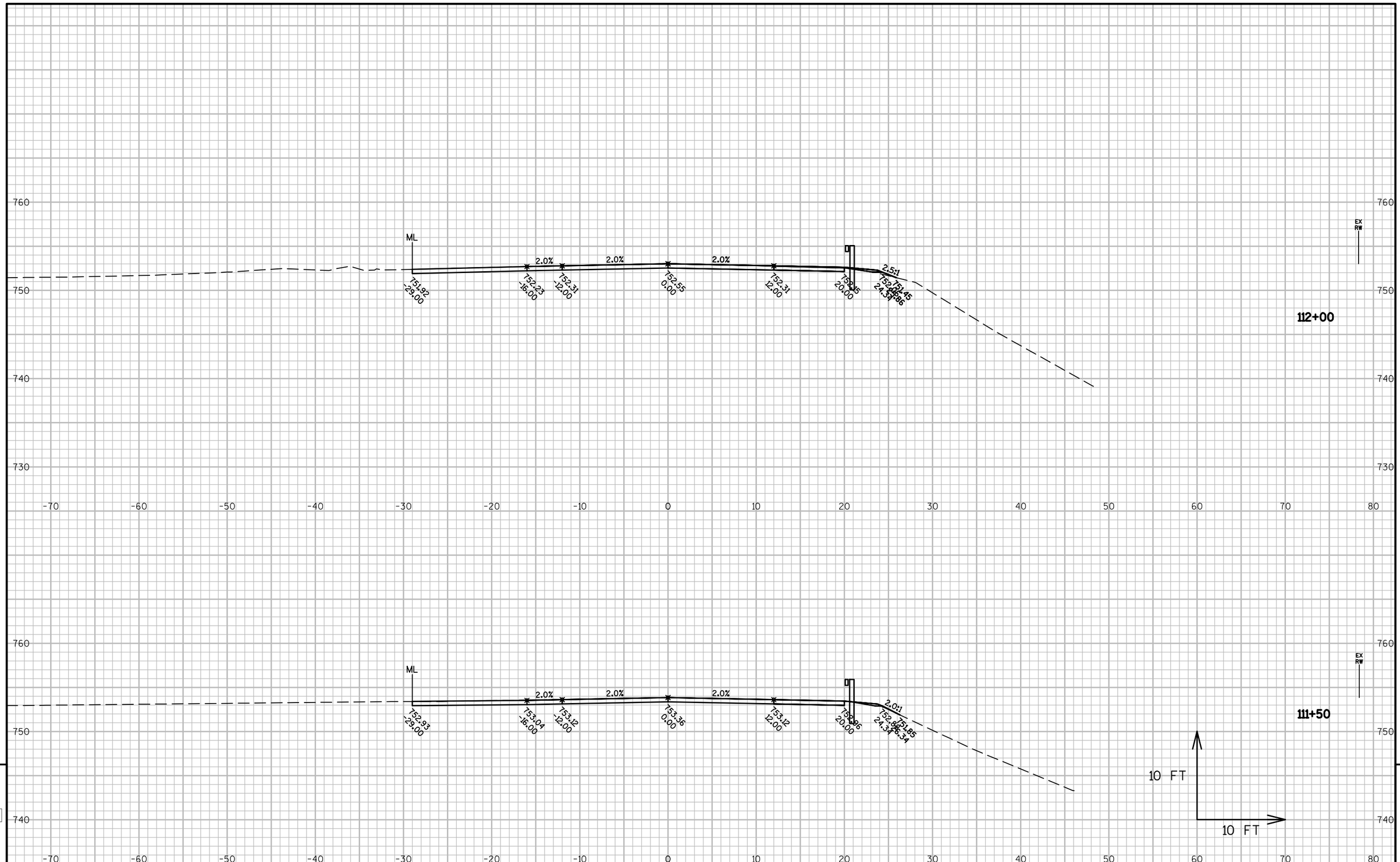
WISDOT/CADDS SHEET 49




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 372 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (81)

PLOT DATE : 8/25/2015 3:30 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

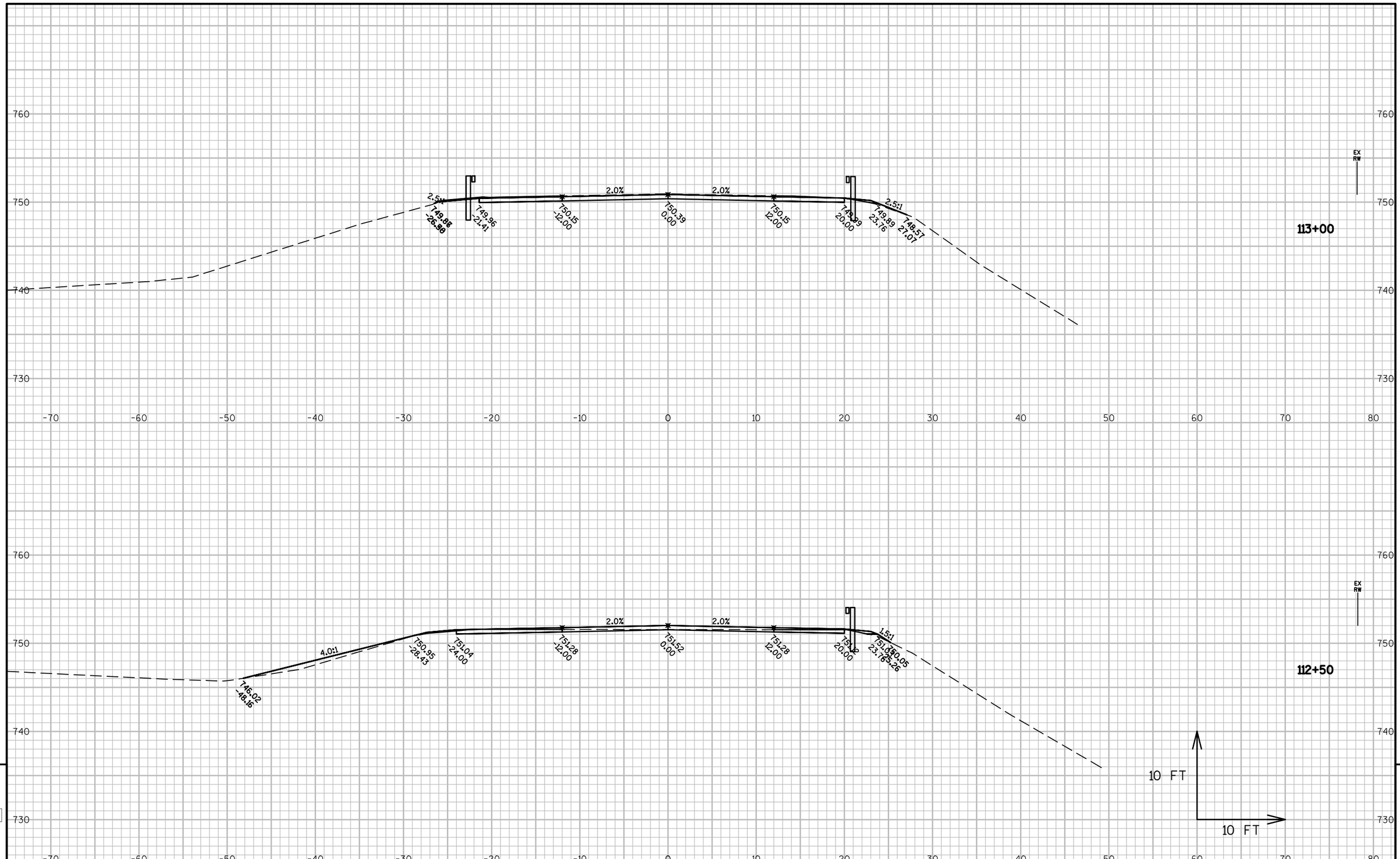



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 373 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (82)

PLOT DATE : 8/25/2015 3:31 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

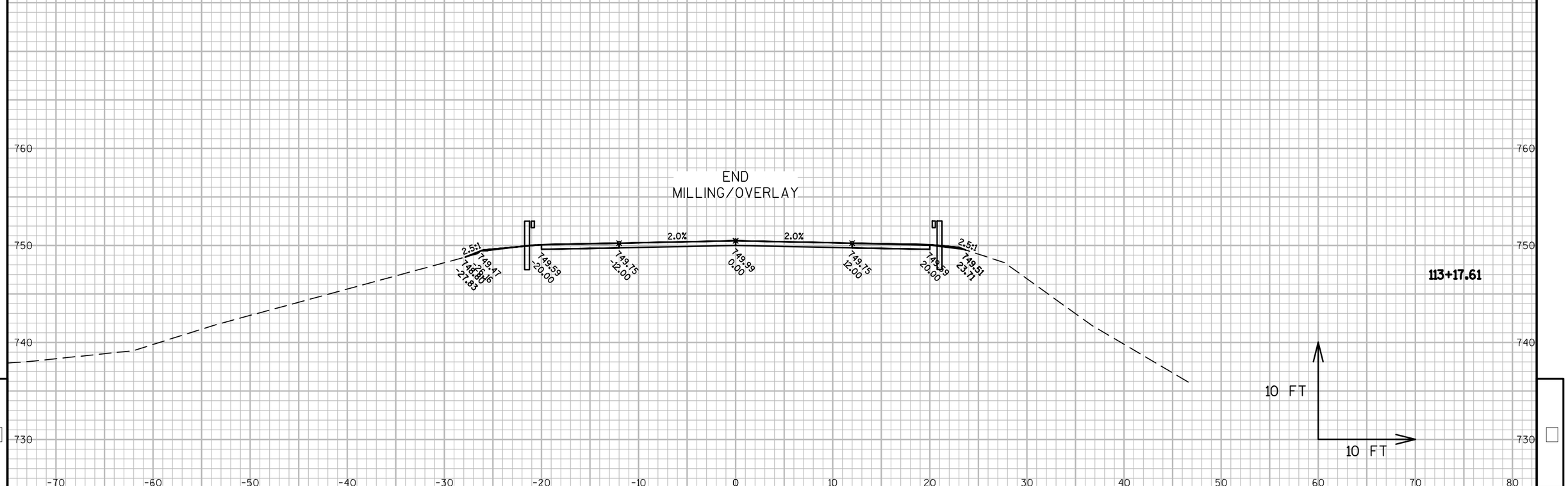



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 374 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (83)

PLOT DATE : 8/25/2015 3:31 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

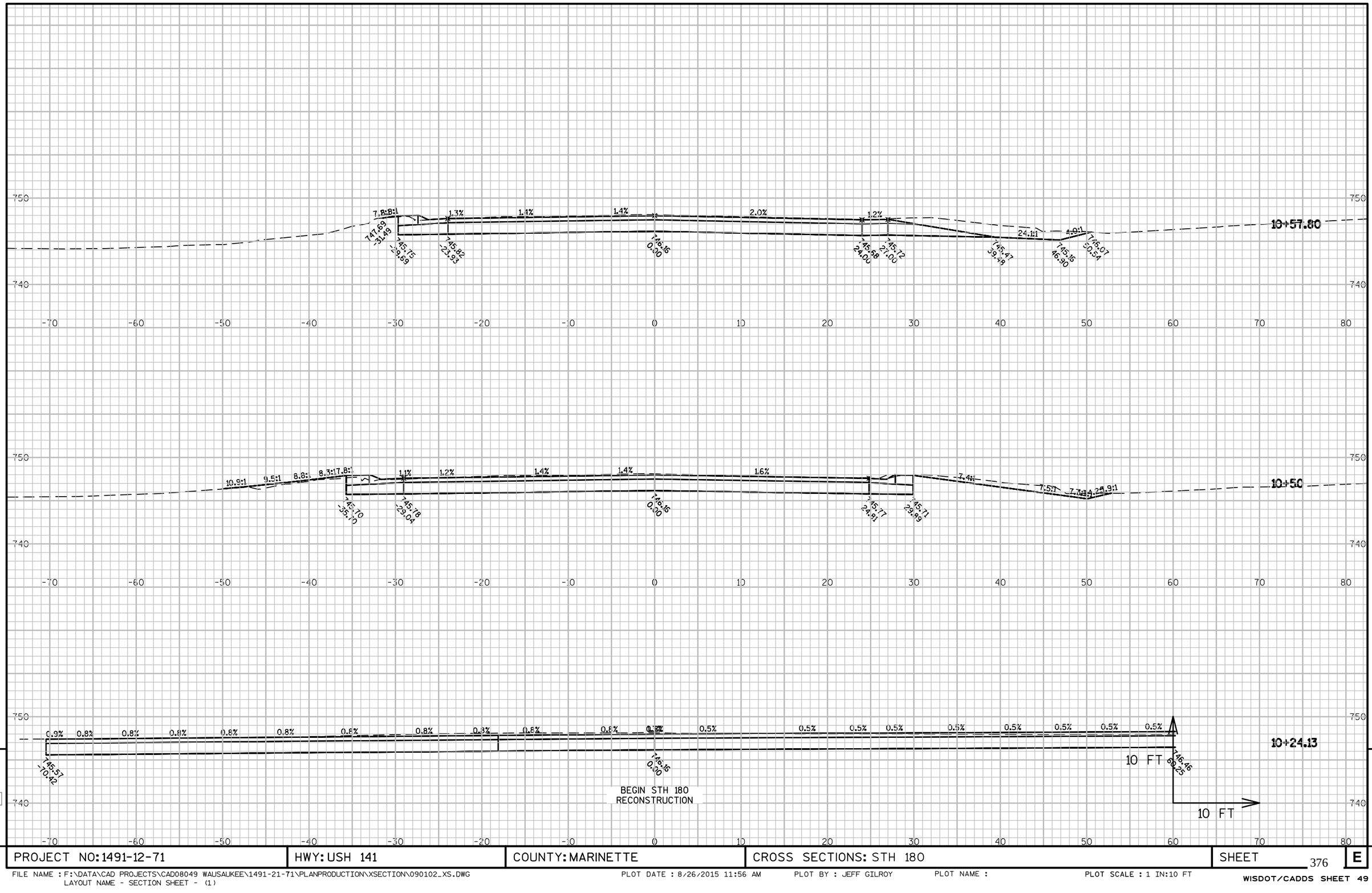
END
MILLING/OVERLAY




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: USH 141 | SHEET 375 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090101_X.DWG
LAYOUT NAME - 090101_X - SECTION SHEET - (84)

PLOT DATE : 8/25/2015 3:32 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT



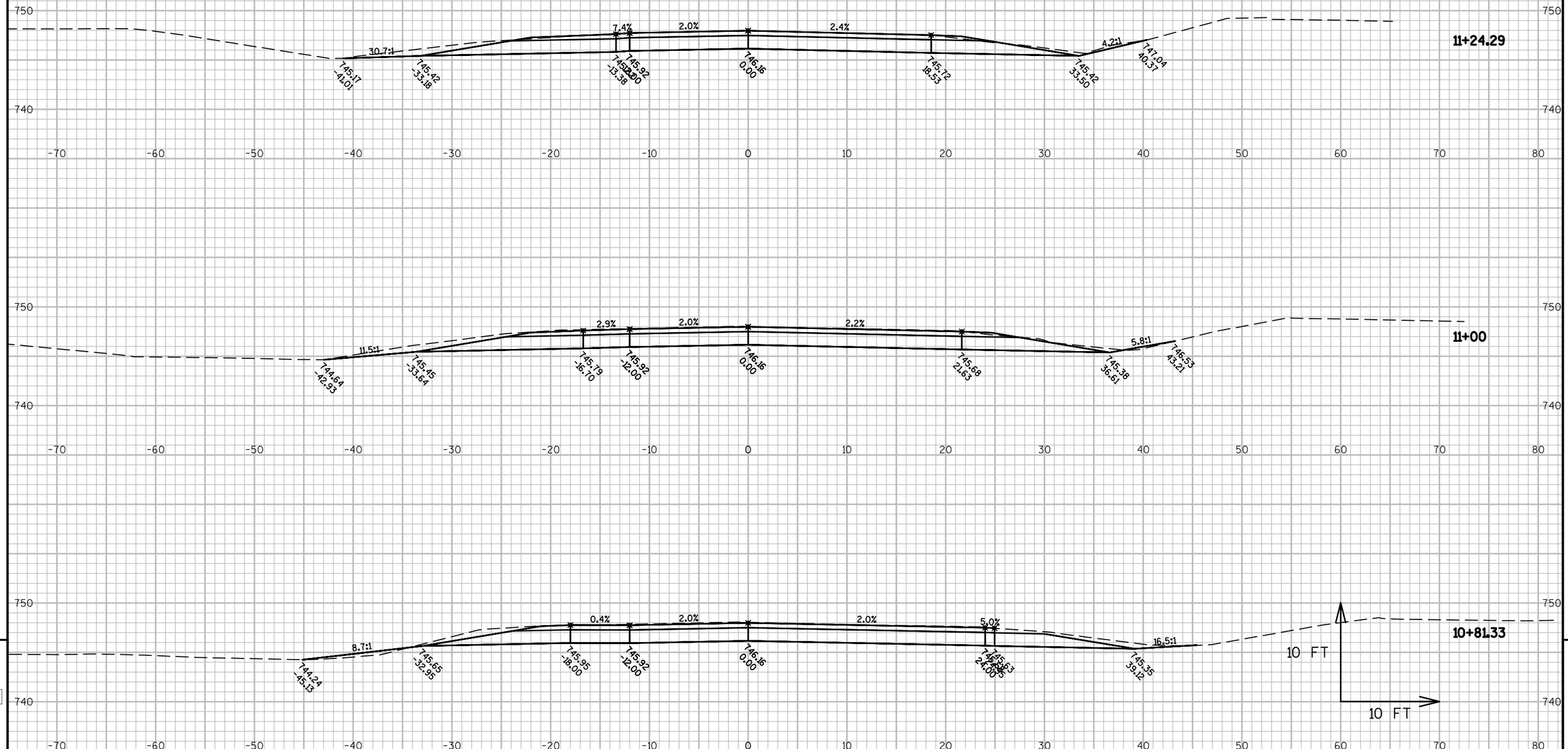

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: STH 180 | SHEET 376 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090102_XS.DWG
LAYOUT NAME - SECTION SHEET - (1)

PLOT DATE : 8/26/2015 11:56 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

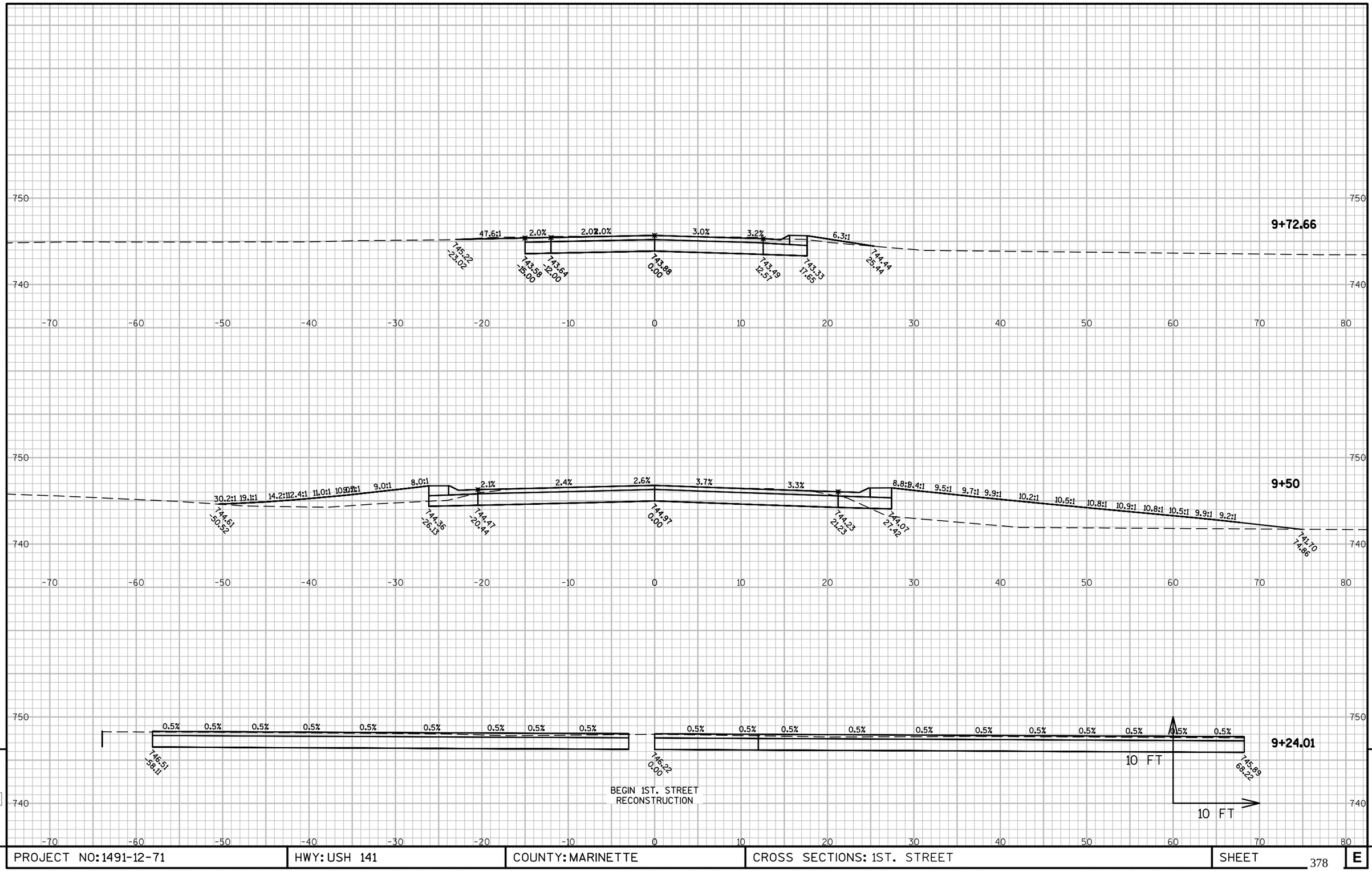
END STH 180
RECONSTRUCTION




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: STH 180 | SHEET 377 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090102_XS.DWG
LAYOUT NAME - SECTION SHEET - (2)

PLOT DATE : 8/26/2015 11:56 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

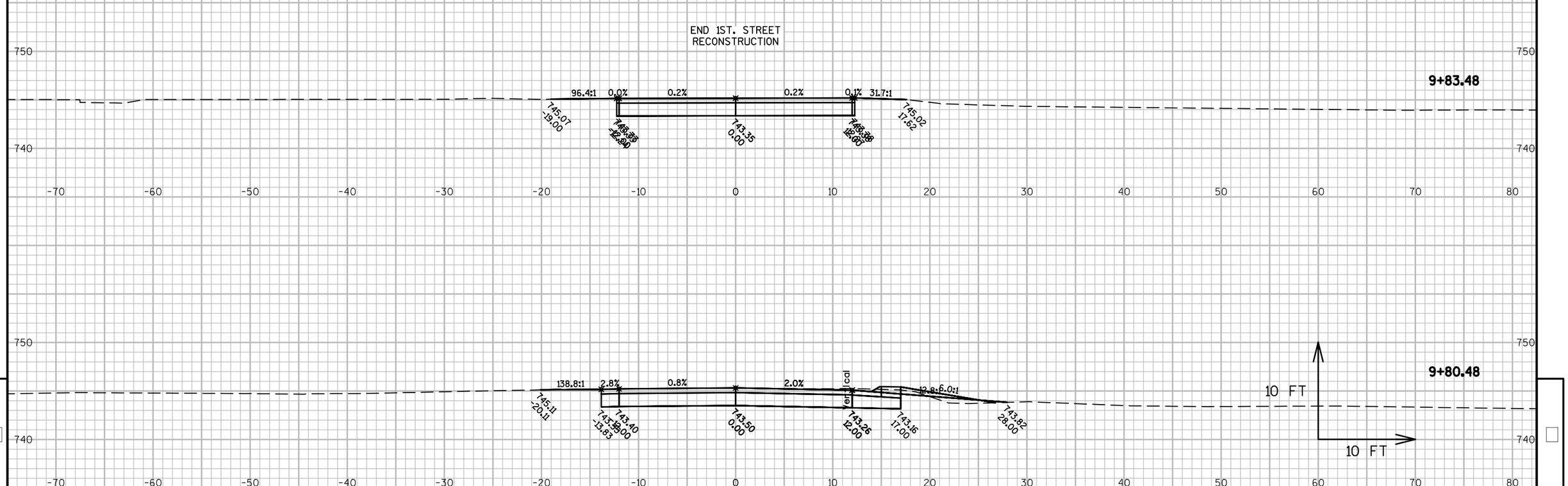



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: 1ST. STREET | SHEET 378 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090102_XS.DWG
LAYOUT NAME - SECTION SHEET - (3)

PLOT DATE : 8/26/2015 11:56 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

END 1ST. STREET
RECONSTRUCTION

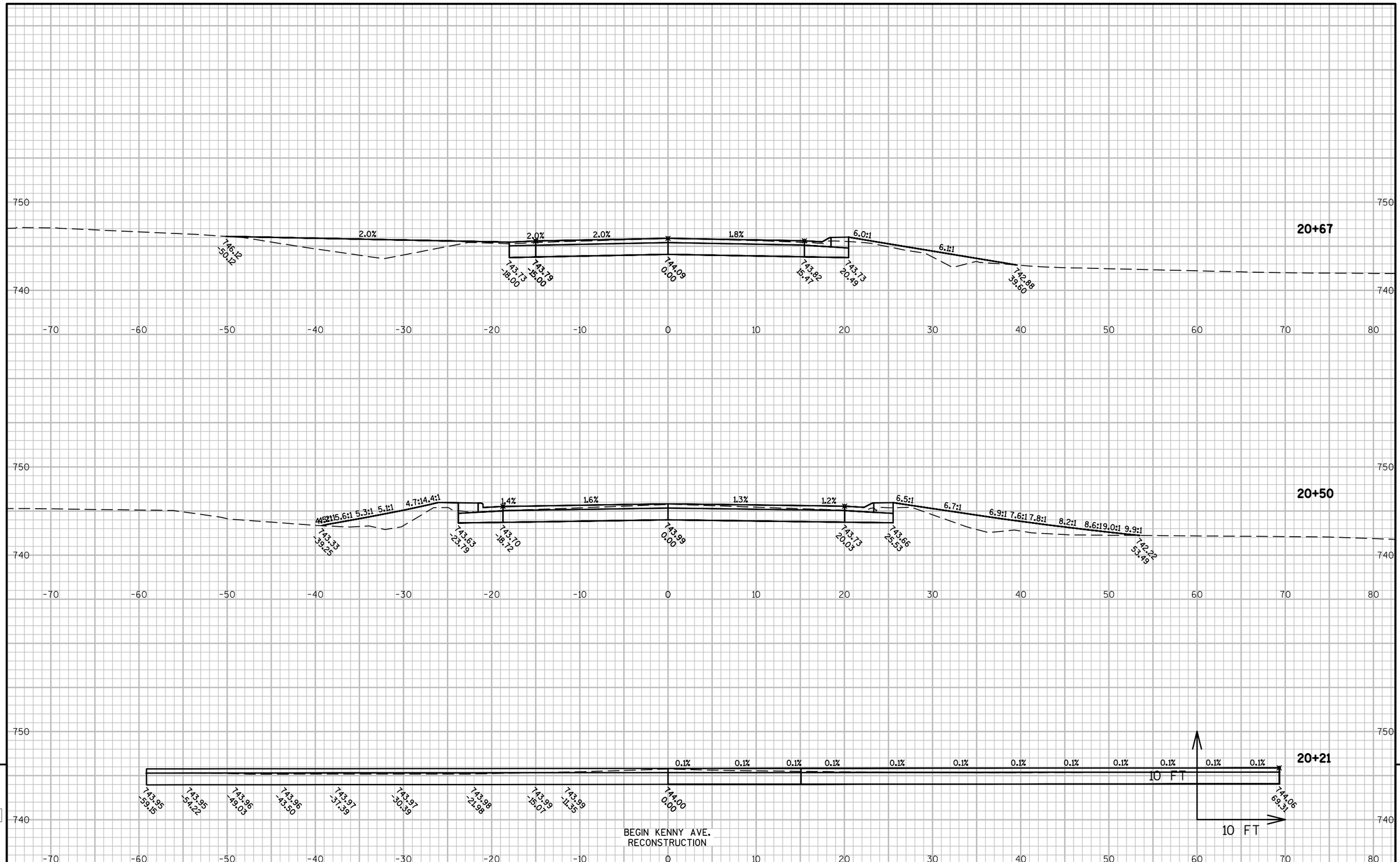



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: 1ST. STREET | SHEET 379 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090102_XS.DWG
LAYOUT NAME - SECTION SHEET - (4)

PLOT DATE : 8/26/2015 11:56 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



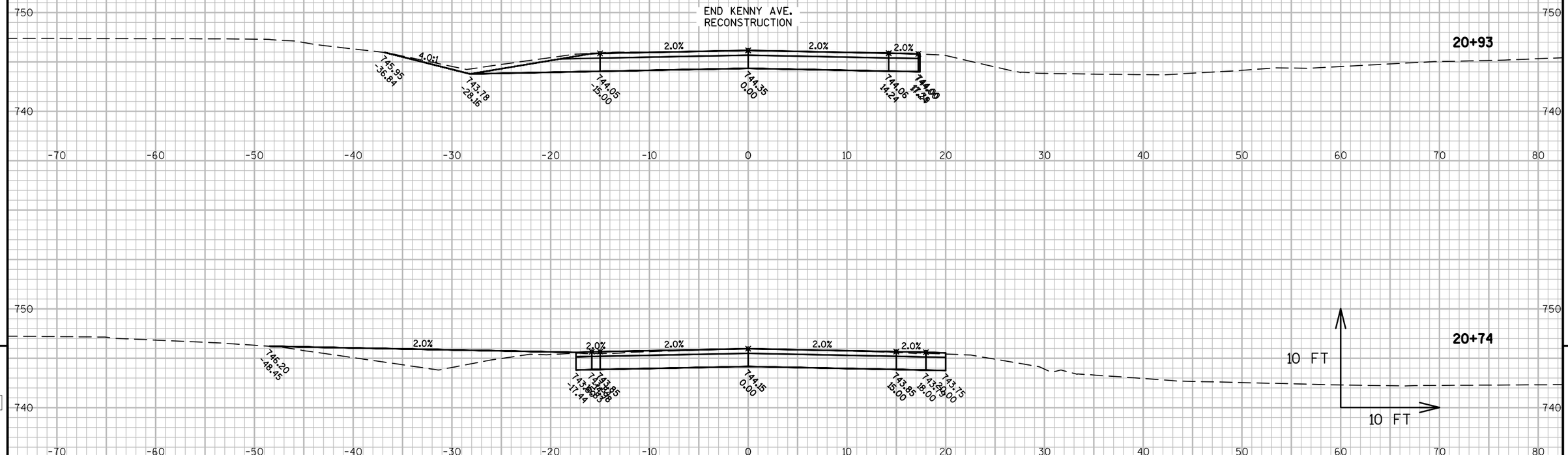

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: KENNY AVE. | SHEET 380 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090103_XS.DWG
LAYOUT NAME - SECTION SHEET - (1)

PLOT DATE : 8/26/2015 11:57 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

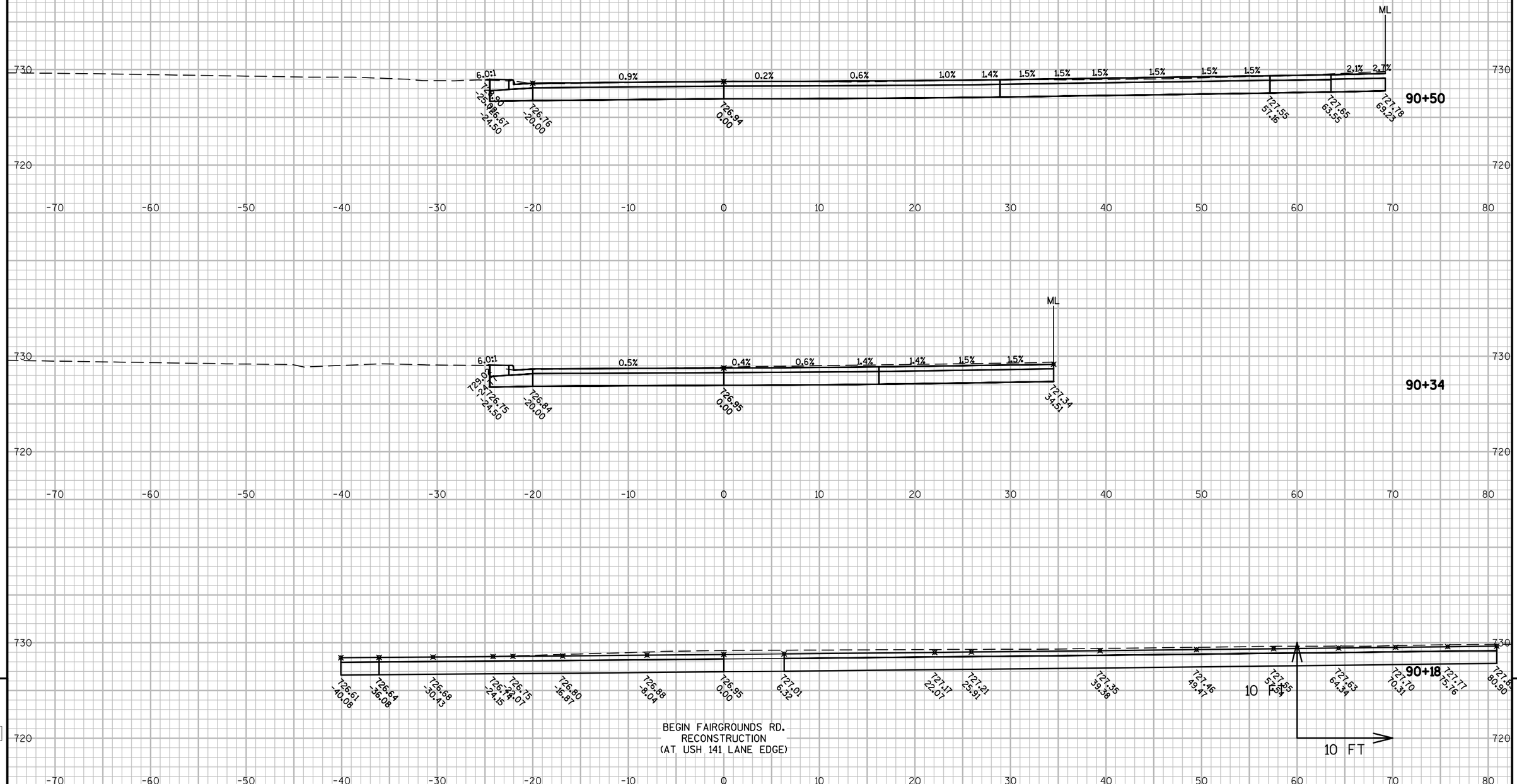
END KENNY AVE.
RECONSTRUCTION



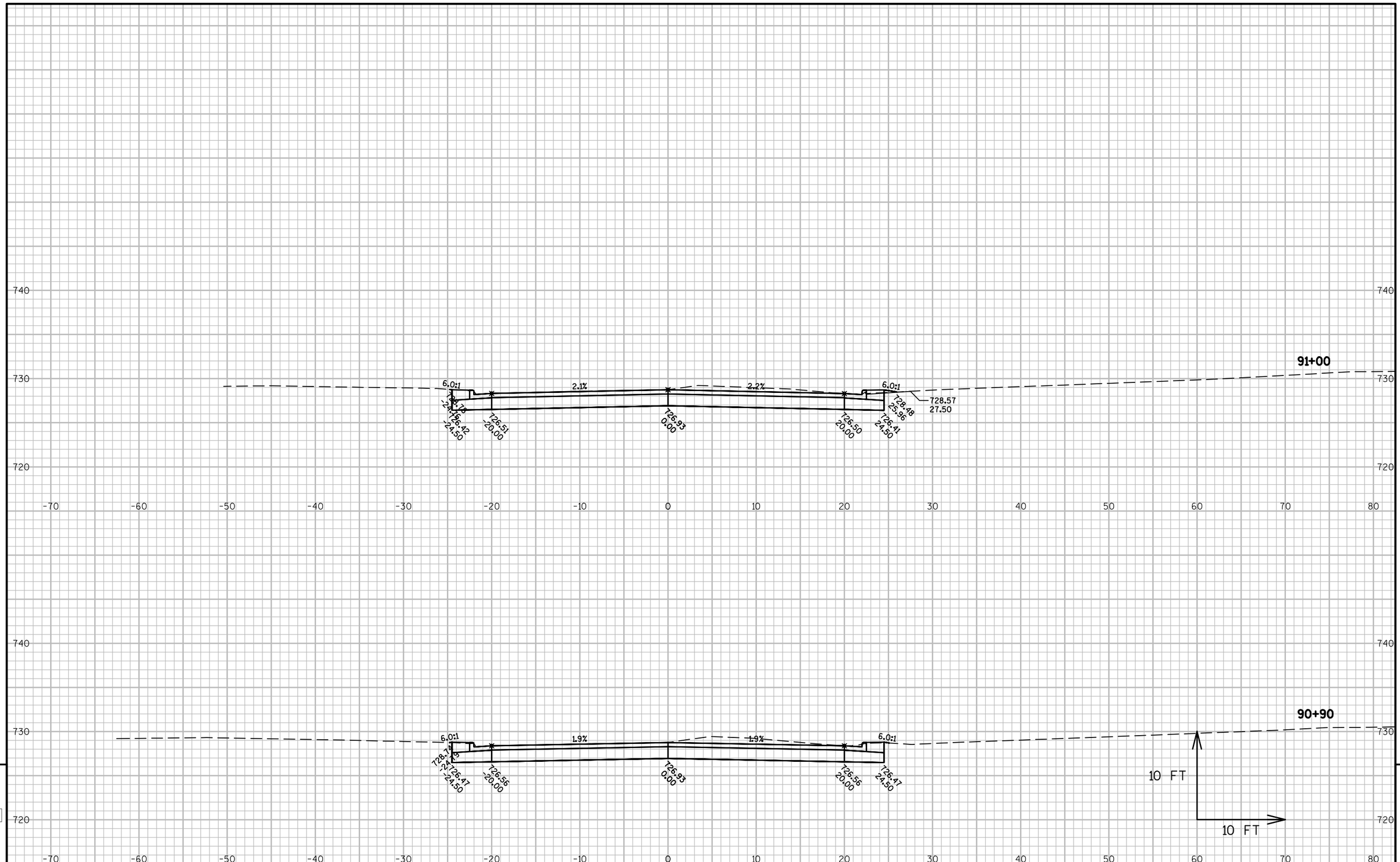

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: KENNY AVE. | SHEET 381 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090103_XS.DWG
LAYOUT NAME - SECTION SHEET - (2)

PLOT DATE : 8/26/2015 11:57 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT



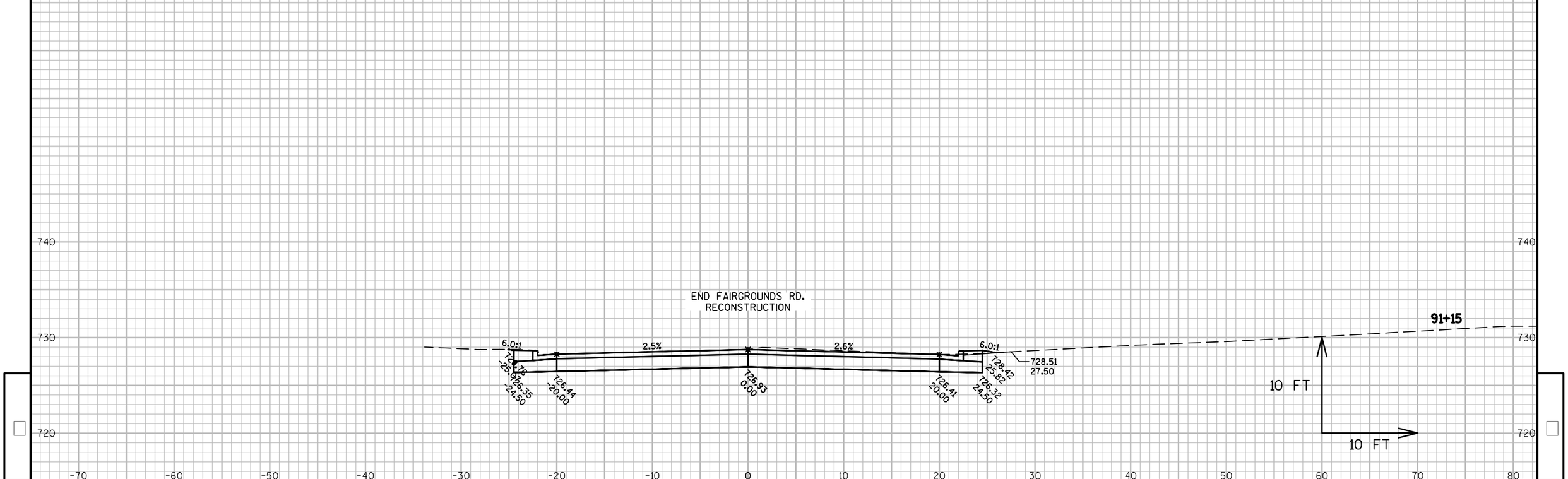

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: FAIRGROUNDS RD. | SHEET 382 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: FAIRGROUNDS RD. | SHEET 383 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090104_XS.DWG
LAYOUT NAME - SECTION SHEET - (2)

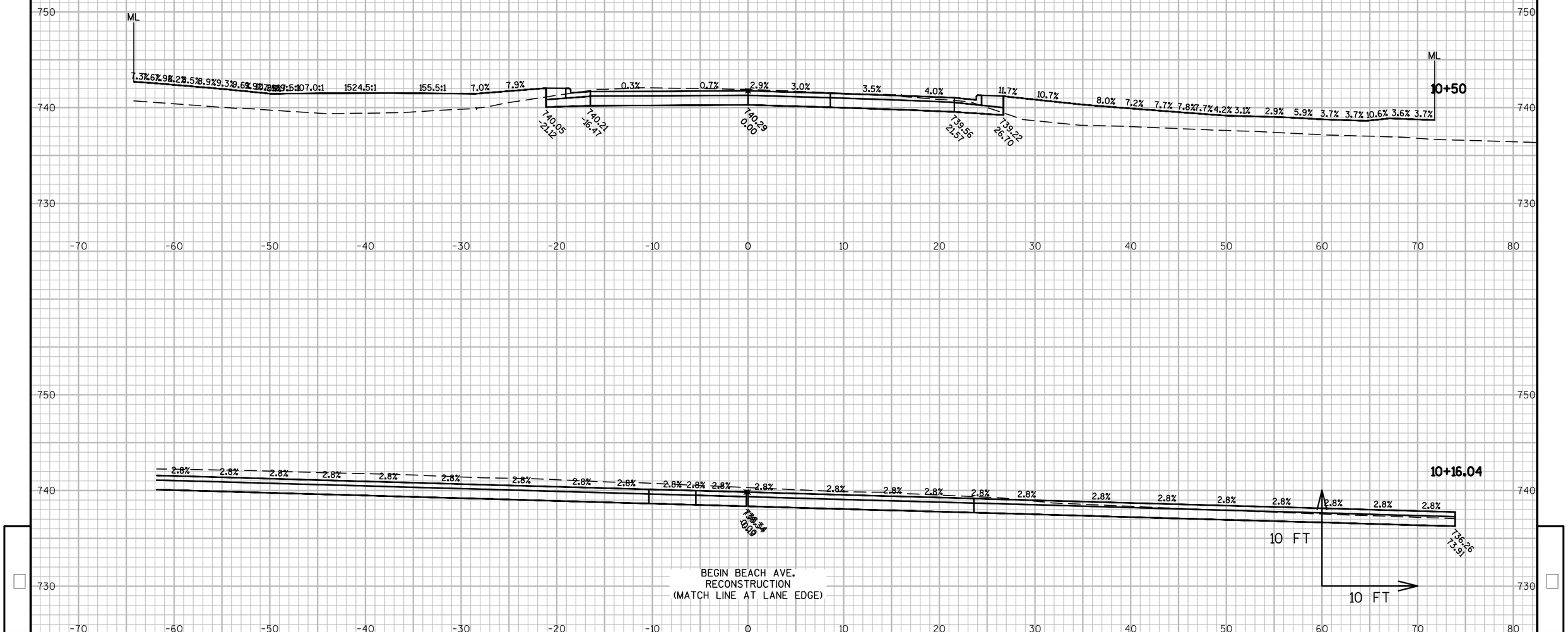
PLOT DATE : 8/26/2015 11:57 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: FAIRGROUNDS RD. | SHEET 384 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090104_XS.DWG
LAYOUT NAME - SECTION SHEET - (3)

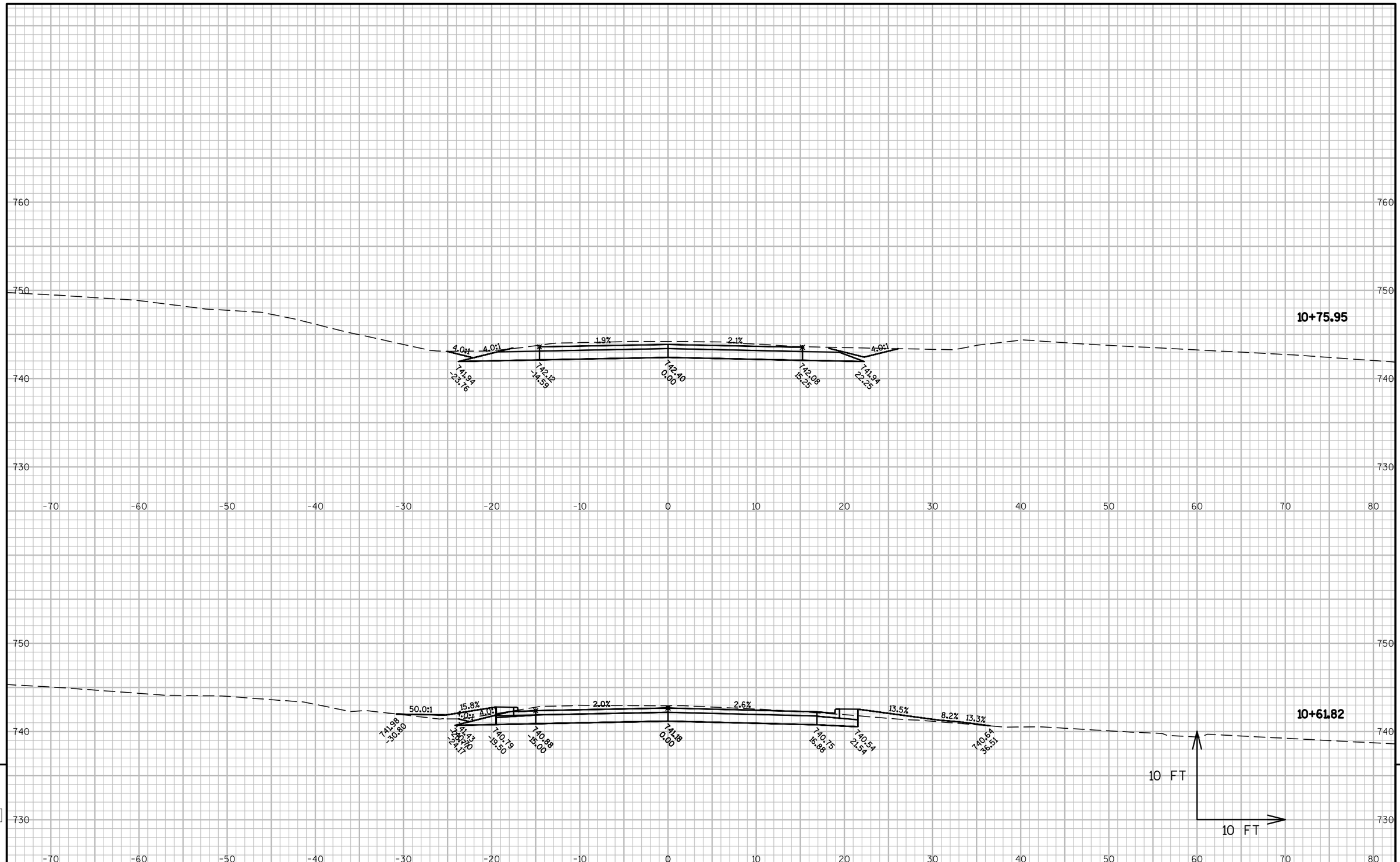
PLOT DATE : 8/26/2015 11:58 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: BEACH AVE. | SHEET 385 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (1)

PLOT DATE : 8/26/2015 11:58 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

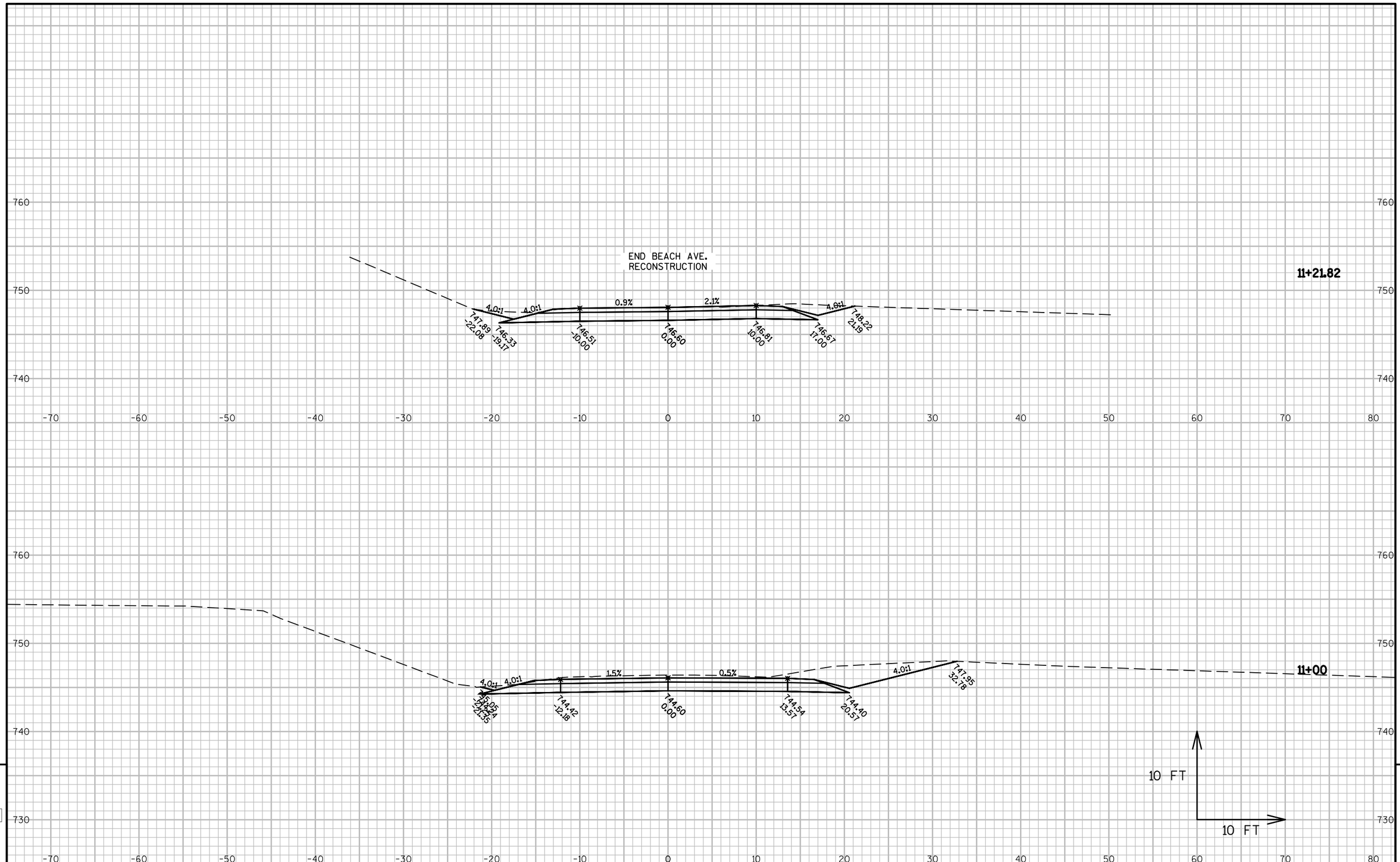



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: BEACH AVE. | SHEET 386 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (2)

PLOT DATE : 8/26/2015 11:58 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

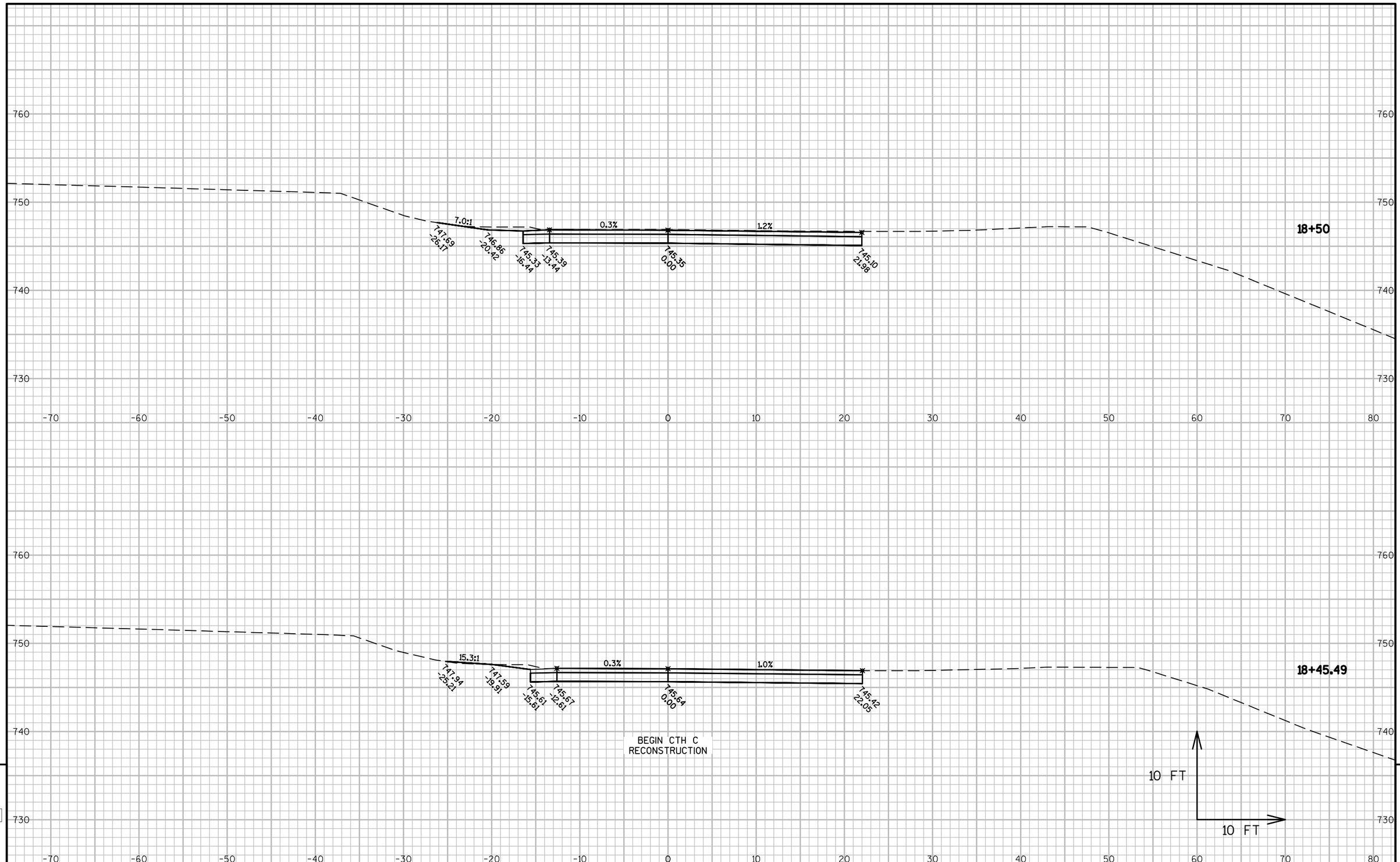



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: BEACH AVE. | SHEET 387 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (3)

PLOT DATE : 8/26/2015 11:58 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

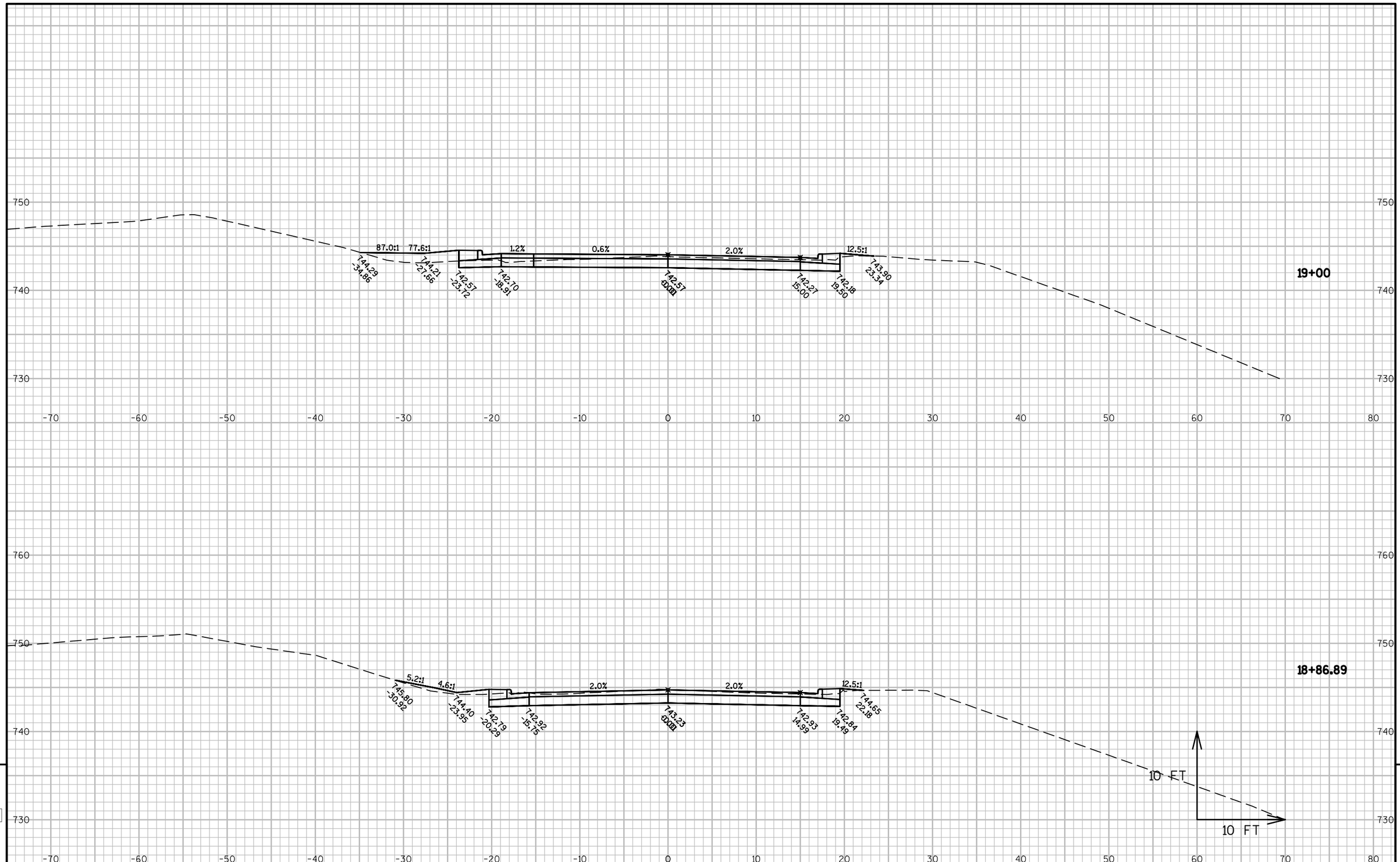



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: CTH C | SHEET 388 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (4)

PLOT DATE : 8/26/2015 11:59 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

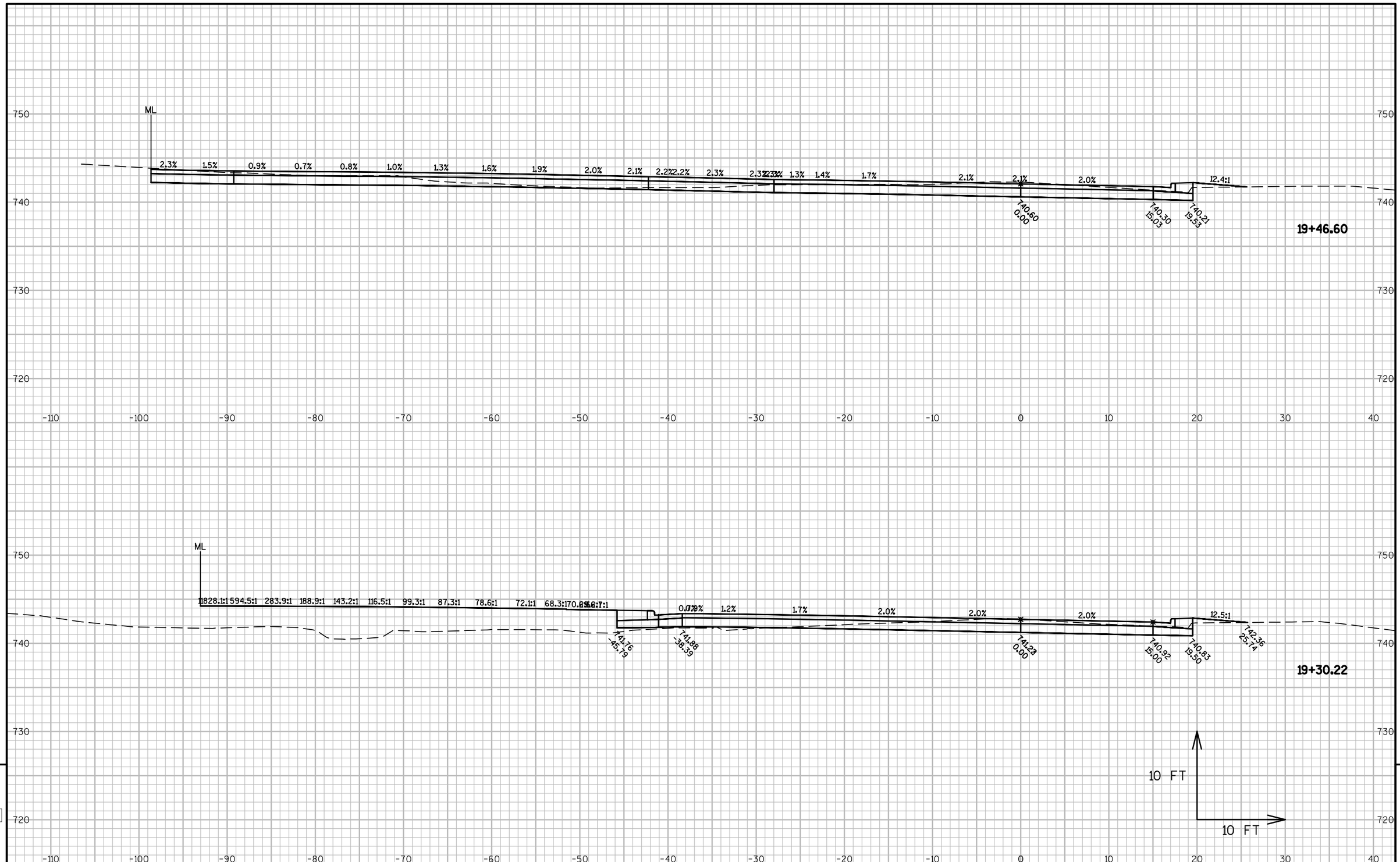



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: CTH C | SHEET 389 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (5)

PLOT DATE : 8/26/2015 11:59 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: CTH C | SHEET 390 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (6)

PLOT DATE : 8/26/2015 11:59 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

END CTH C
RECONSTRUCTION
(MATCH LINE AT LANE EDGE)

19+83.08

2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.8% 2.7% 2.8%

739.33
0.00

739.04
10.49

738.37
34.11

737.71
51.73

750
740
730

-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60

ML

19+50

3.0% 2.5% 1.7% 1.3% 1.2% 1.2% 1.4% 1.6% 1.8% 2.0% 2.1% 2.1% 2.1% 2.2% 2.2% 2.2% 2.2% 1.4% 1.5% 1.8% 2.1% 2.0% 12.0:1

740.48
0.00

740.18
15.21

740.08
19.71

741.62
25.48

750
740
730
720

-110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40

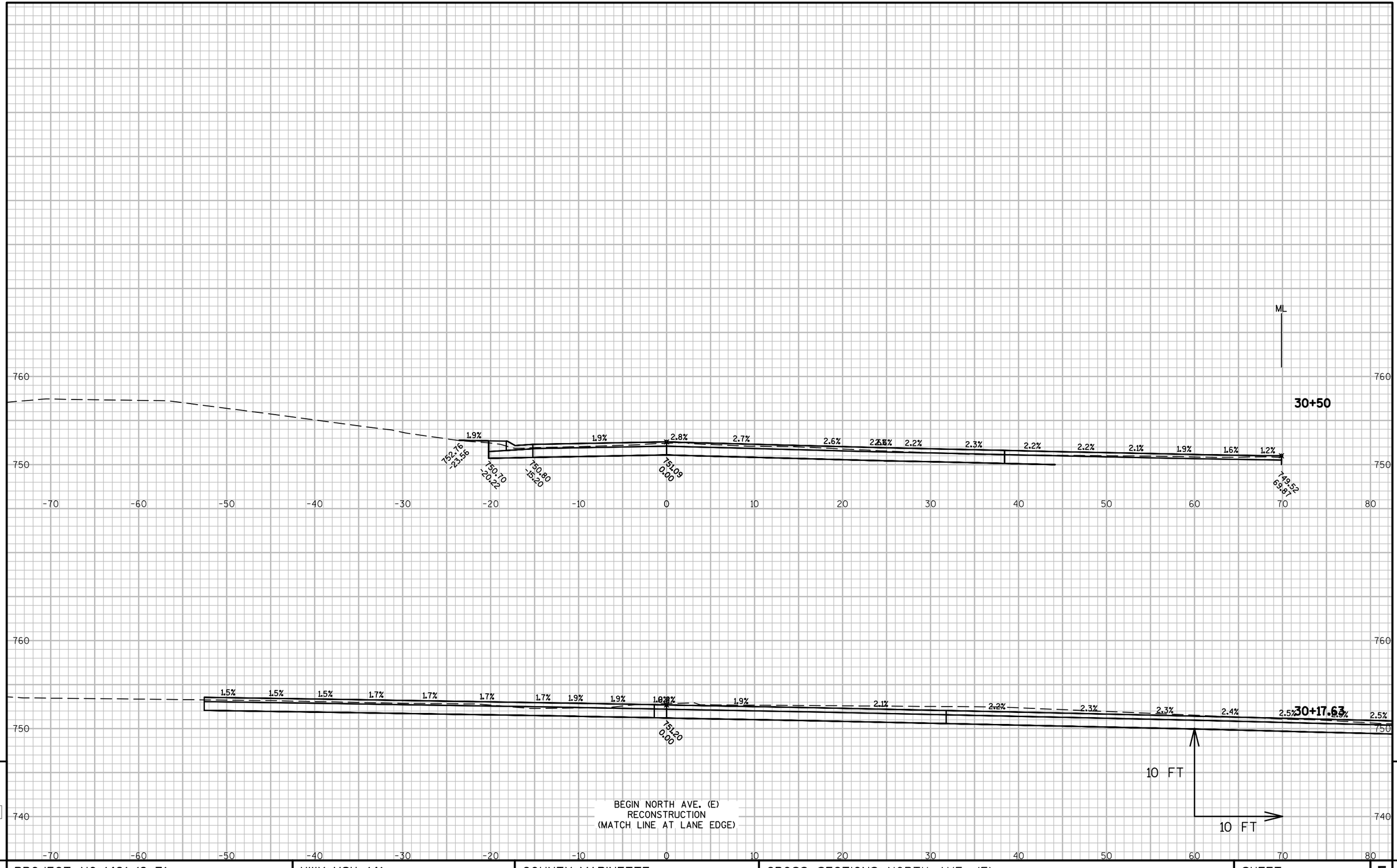
10 FT

10 FT

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: CTH C | SHEET 391 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (7)

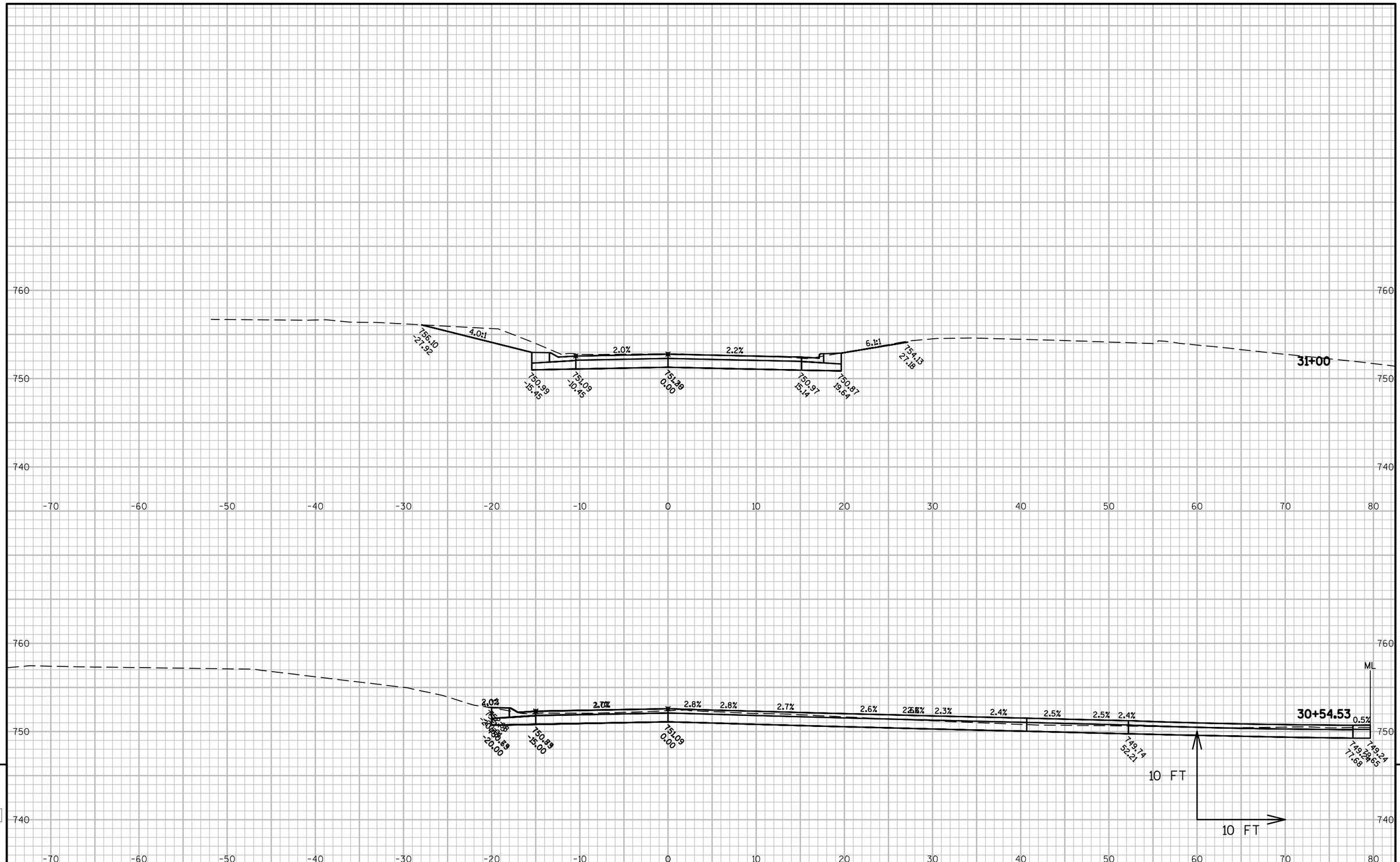
PLOT DATE : 8/26/2015 11:59 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: NORTH AVE. (E) | SHEET 392 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (8)

PLOT DATE : 8/26/2015 11:59 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

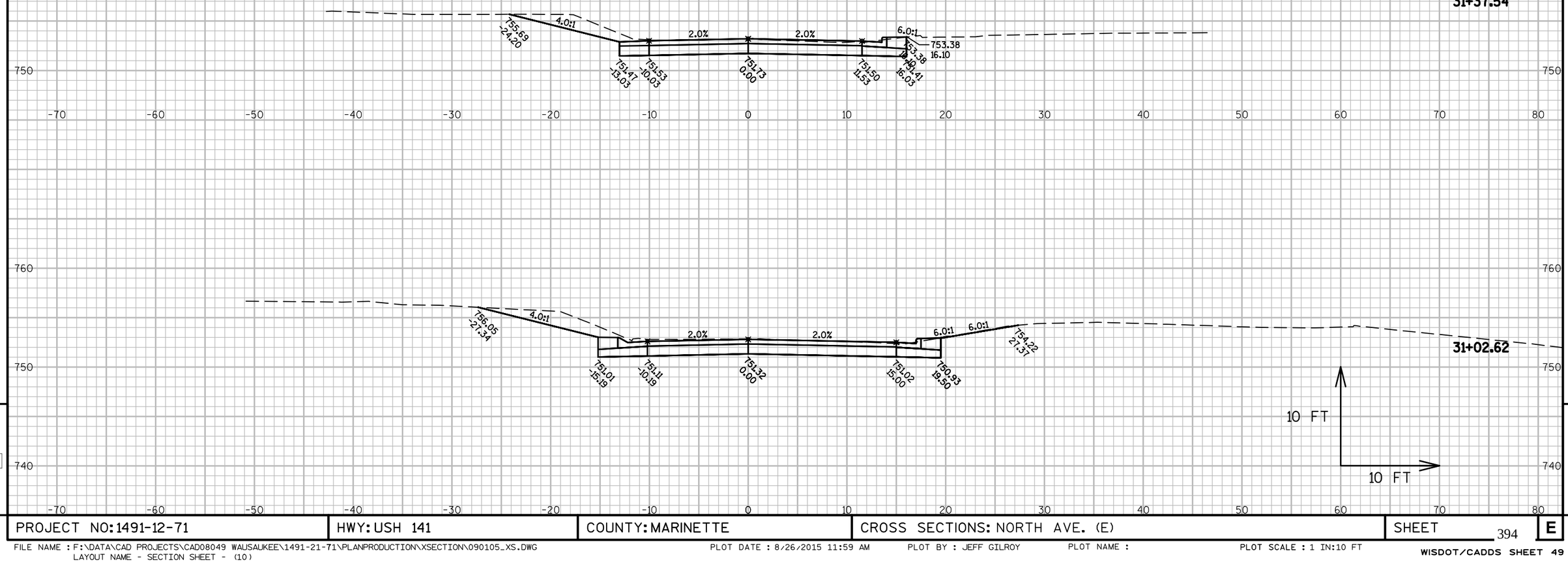



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: NORTH AVE. (E) | SHEET 393 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (9)

PLOT DATE : 8/26/2015 11:59 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

END NORTH AVE. (E)
RECONSTRUCTION

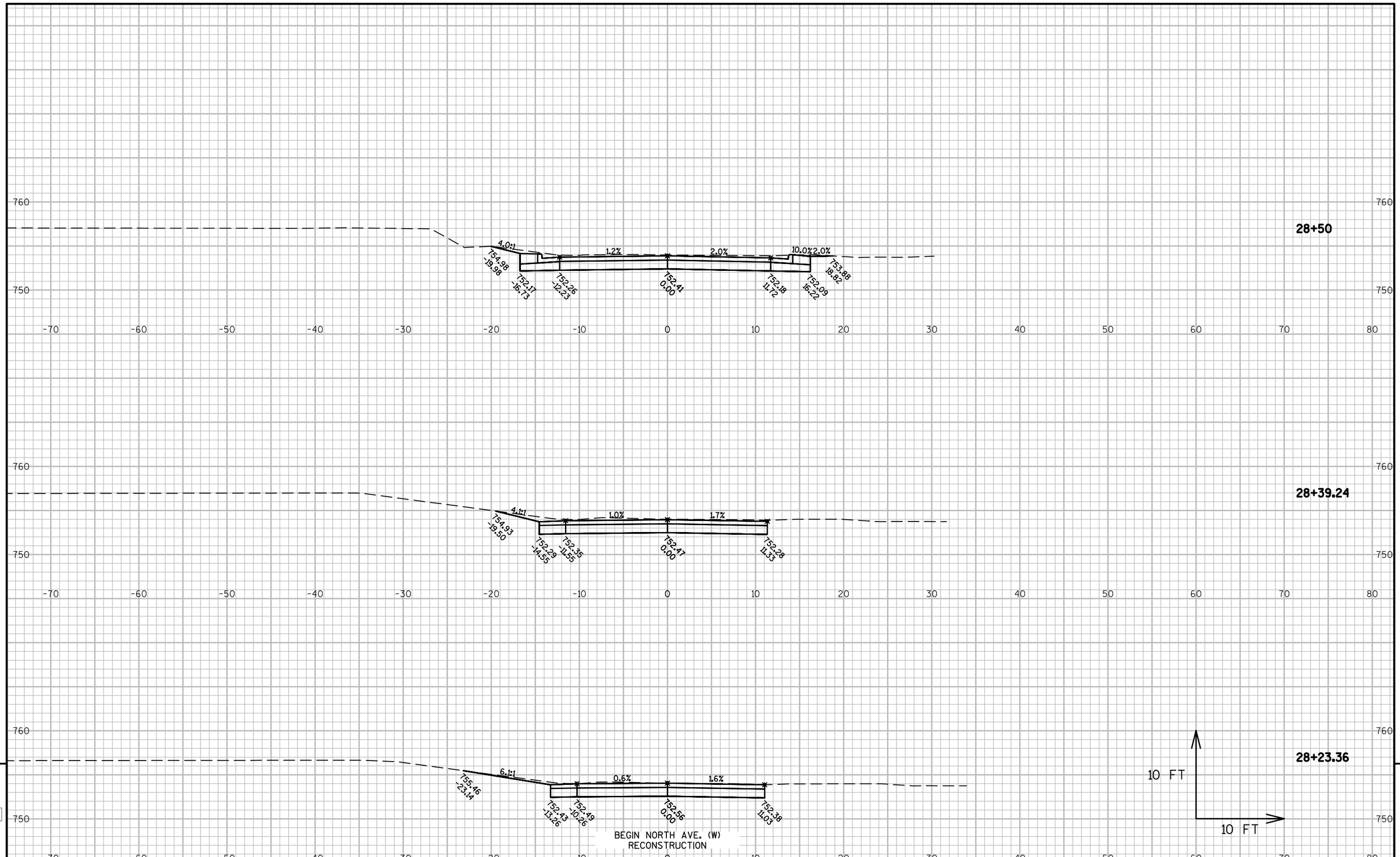



| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: NORTH AVE. (E) | SHEET 394 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (10)

PLOT DATE : 8/26/2015 11:59 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

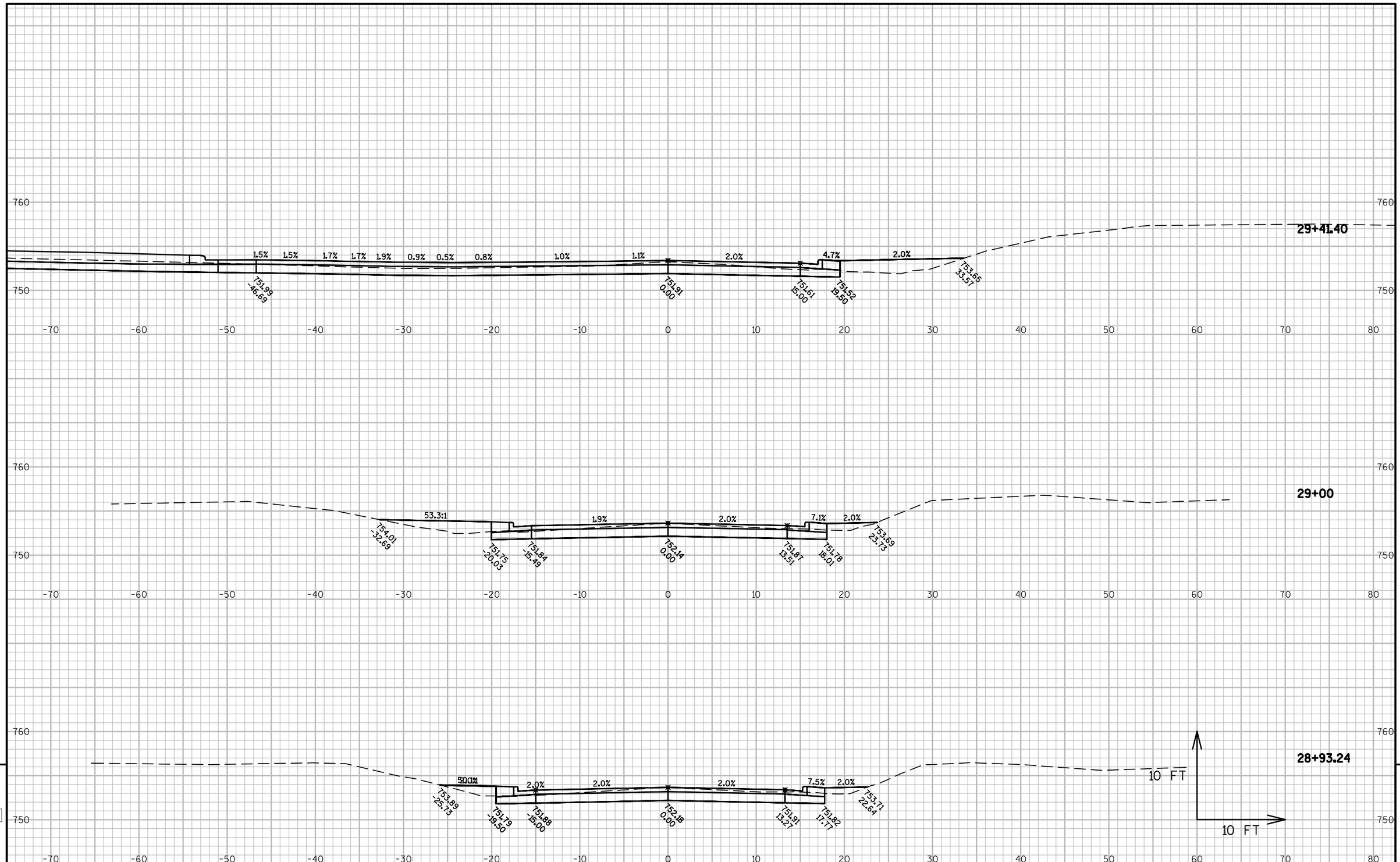
WISDOT/CADDS SHEET 49




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: NORTH AVE. (W) | SHEET 395 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (11)

PLOT DATE : 8/26/2015 11:59 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT



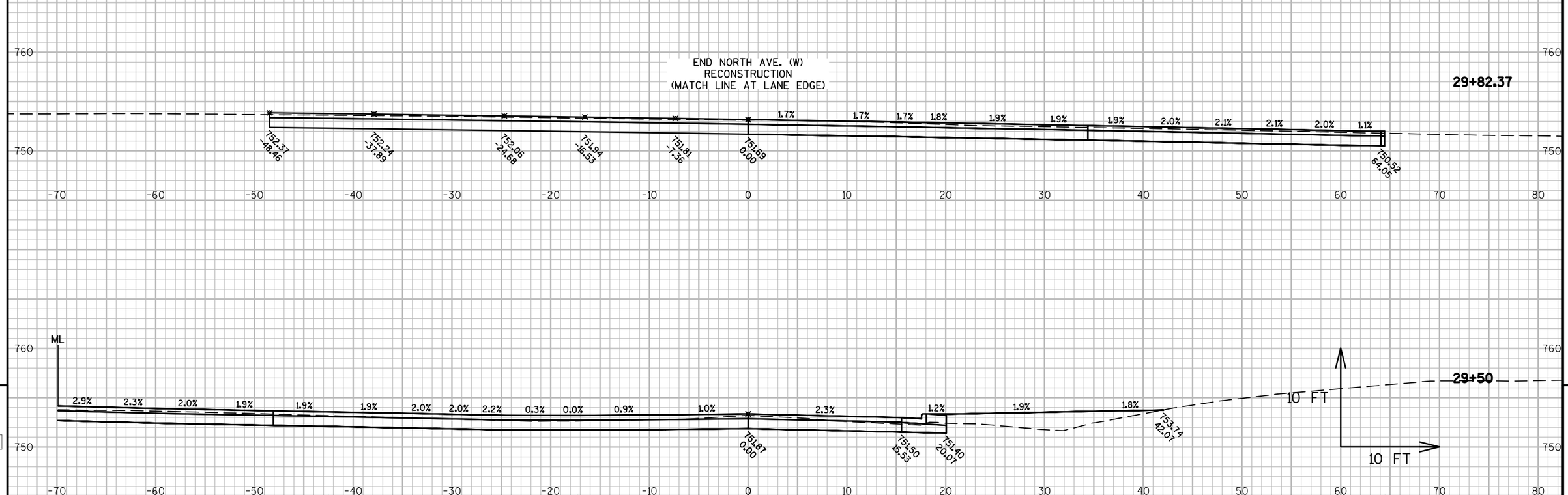

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: NORTH AVE. (W) | SHEET 396 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (12)

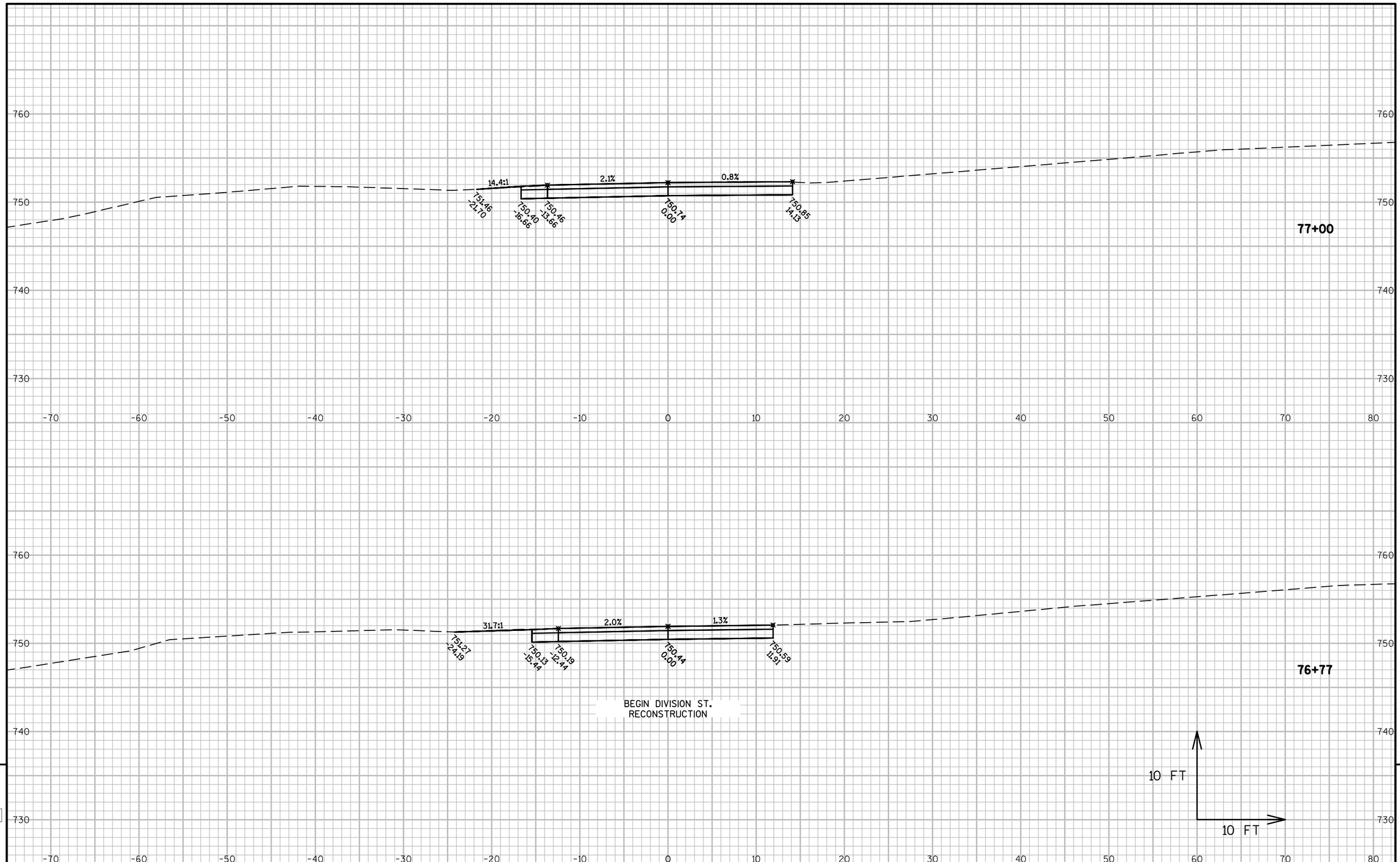
PLOT DATE : 8/26/2015 12:00 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

END NORTH AVE. (W)
RECONSTRUCTION
(MATCH LINE AT LANE EDGE)




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: NORTH AVE. (W) | SHEET 397 | E |
|---|---|---|---|---|---|




| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: DIVISION ST. | SHEET 398 E |
|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (14)

PLOT DATE : 8/26/2015 12:00 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

760

750

740

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

5.3:1 2.1% 2.5% 2.6% 0.1% 1.3%

752.68 -26.94 750.86 -25.82 750.94 -19.65 751.40 0.00 751.42 18.95 751.49 25.08

**77+50**

760

750

740

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

7.1:1 2.2% 0.4%

752.27 -18.00 750.69 -18.00 750.75 -15.00 751.07 0.00 751.13 16.54

**77+25.03**

10 FT

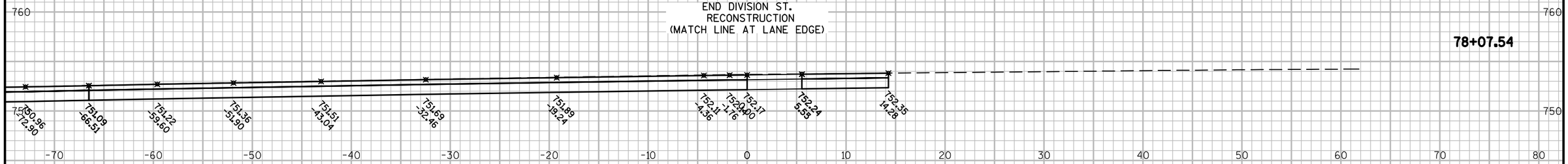
10 FT

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: DIVISION ST. | SHEET 399 | E |
|---|---|---|---|---|---|

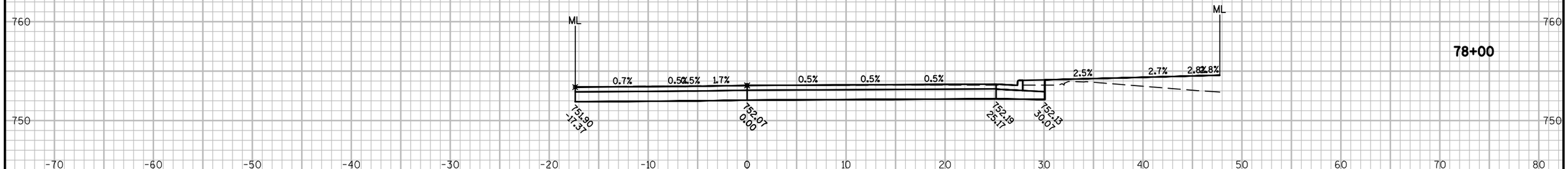
FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (15)

PLOT DATE : 8/26/2015 12:00 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

END DIVISION ST.
RECONSTRUCTION
(MATCH LINE AT LANE EDGE)




**78+07.54**




**78+00**




**77+77.11**

| PROJECT NO: 1491-12-71 | HWY: USH 141 | COUNTY: MARINETTE | CROSS SECTIONS: DIVISION ST. | SHEET 400 | E |
|---|---|---|---|---|---|

FILE NAME : F:\DATA\CAD PROJECTS\CAD08049 WAUSAUKEE\1491-21-71\PLANPRODUCTION\XSECTION\090105_XS.DWG
LAYOUT NAME - SECTION SHEET - (16)

PLOT DATE : 8/26/2015 12:00 PM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1 IN:10 FT

Notes

**Wisconsin Department of Transportation**

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov