NCL MAR 11

PROJECT ID: 6676-03-73 & 6999-13-71

COUNTY: MARATHON

ORDER OF SHEETS


| | | |
|---|---|---|
| Section No. | 1 | Title |
| Section No. | 2 | Typical Sections and Details (Includes Erosion Control) |
| 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 = 252

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 6676-03-73 | | |
| 6999-13-70 | WISC 2011135 | 1 |
| | | |
| | | |

## ROSS AVE - NORTHWESTERN AVE

CAMP PHILLIPS ROAD, EAU CLAIRE RIVER

LOCAL STREET

MARATHON COUNTY

STATE PROJECT NUMBER
**6676-03-73**

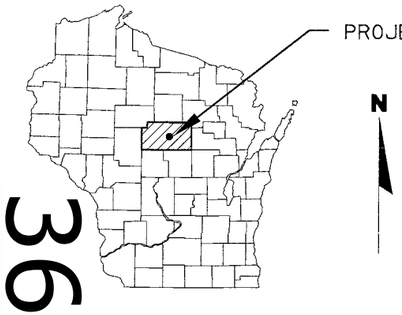
## CAMP PHILLIPS RD (CTH X), WESTON

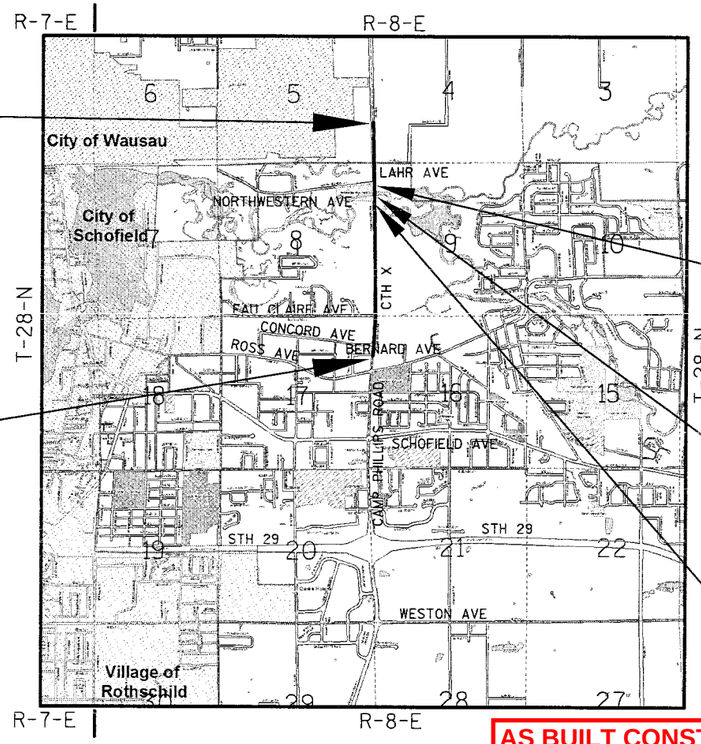
BERNARD AVE - NORTHWESTERN AVE

LOCAL STREET

MARATHON COUNTY

STATE PROJECT NUMBER
**6999-13-70**




**END PROJECT 6999-13-70**
**STA 79+10**
Y=192295.019
X=296159.375

**BEGIN PROJECT 6999-13-70**
**STA 0+00**
Y=185019.325
X=296185.356

**END NET EXCEPTION TO C/L LENGTH**
**PROJECT 6999-13-70**
**END PROJECT 6676-03-73**
**STA 57+25**
Y=190740.676
X=296212.420

**STRUCTURE B-37-295**

**BEGIN NET EXCEPTION TO C/L LENGTH**
**PROJECT 6999-13-70**
**BEGIN PROJECT 6676-03-73**
**STA 54+20**
Y=190435.798
X=296221.065

DESIGN DESIGNATION

| | | ROSS AVE TO NORTHWESTERN AVE | NORTHWESTERN AVE TO CTH N |
|---|---|---|---|
| A.A.D.T. (2011) | = | 9,400 | 5,900 |
| A.A.D.T. (2031) | = | 16,100 | 10,200 |
| D.H.V. (2031) | = | 2.9 | 3.2 |
| D.D. | = | 59/41 | 59/41 |
| T. | = | 3.6% | 4.0% |
| DESIGN SPEED | = | 40 MPH | 40 MPH |
| ESALS | = | 978,200 | 722,700 |

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
- FLOW DIRECTION

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

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

LAYOUT SCALE 0 1/2 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.440 MI. PROJECT 6999-13-70
TOTAL NET LENGTH OF CENTERLINE = 0.058 MI. PROJECT 6676-03-73
TOTAL = 1.498 MI. PROJECT

"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), 'MARATHON' COUNTY."

**AS BUILT CONSTRUCTION PLAN**
Supervisor: Mike Roberts & Mike Novey, DAAR Engineering
Project Leader: Tim Schoenherr, QUEST Civil Engineers
Contractor: S & N Incorporated
Work Started-Completed: June 2, 2011 to October 29, 2012

ACCEPTED FOR
County of Marathon
DATE: 11/23/10 James W. Lenhart
Highway Commissioner

ORIGINAL PLANS PREPARED BY

CWE, Inc
5707 SCHOFIELD AVE.
WESTON, WISCONSIN
54476
PHONE: (715) 359-9400
FAX: (715) 355-4199
WISCONSIN PROFESSIONAL ENGINEER
JAY R. KNOKE E-25023 WAUSAU, WI
DATE: 11/22/10
Jay Knoke, PE


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor: CWE, Inc
Designer: CWE, Inc
Management Consultant: Cedar Corporation
C.O. Examiner:

APPROVED FOR THE DEPARTMENT
DATE: 12-9-10
(Management Consultant Signature)

E

# GENERAL NOTES

NO TREES (AND/OR SHRUBS) SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

DISTURBED AREAS WITHIN PROJECT LIMITS ARE TO BE RESTORED WITH 4" MIN. TOPSOIL, SEED (METHOD B), FERTILIZER, AND EROSION MAT AS DIRECTED BY THE ENGINEER.

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

HMA PAVEMENT, WHEN INDICATED ON THE PLANS, SHALL CONSIST OF COURSES AS FOLLOWS UNLESS OTHERWISE NOTED ON THE PLANS.

| 5 1/2" TOTAL DEPTH | TYPE | NOMINAL MAX SIZE GRADATION | PERFORMANCE GRADE |
|---|---|---|---|
| 3 1/2" LOWER | E-1 | 19.0 MM | PG64-22 |
| 2" UPPER | E-1 | 12.5 MM | PG64-34 |

THE TACK COAT FOR HMA PAVEMENT HAS BEEN ESTIMATED AT AN APPLICATION RATE OF 0.025 GALS/SY AND SHALL BE PLACED BETWEEN LAYERS OF HMA PAVEMENT.

ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM THE ABANDONMENT OR REMOVAL OF EXISTING PIPES, MANHOLES, INLETS, OR CATCH BASINS SHALL BE BACKFILLED WITH GRANULAR MATERIAL. THIS WORK SHALL BE INCIDENTAL TO THE COST OF THE REMOVAL ITEM.

THE CONTRACTOR SHALL NOTIFY DIGGER'S HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS AS NEEDED. ALL EROSION MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

ALL RADII DIMENSIONS AND STAKEOUT DATA ARE MEASURED TO THE FLANGE OF CURB UNLESS OTHERWISE NOTED.

ALL GRADES PROVIDED ALONG CURVE RADII LOCATED ALONG THE TOP OF CURB.

EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADII POINTS IN THE CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN.

CONTRACTOR IS RESPONSIBLE FOR RESHAPING AND FINISHING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE THE NORMAL CONSTRUCTION LIMITS.

THE CONTRACTORS HMA PAVING OPERATION SHALL BE CONSISTANT WITH THE TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, OR PARKING LANE.

REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALT SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DIRECTED BY THE ENGINEER.

SIDEROAD PAVEMENT STRUCTURE SHALL BE THE SAME AS THE MAINLINE UNLESS OTHERWISE NOTED.

THE EXACT LOCATION OF DRIVEWAYS IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER. ALL DRIVEWAYS ARE TO BE REPLACED IN KIND.

CONTRACTOR IS ADVISED THE RIGHT OF WAY PLAT AND BRIDGE STRUCTURE DRAWINGS ARE IN METRIC UNITS.

BENCH MARKS ARE REFERENCED TO NAVD88 DATUM.

MAPPING & UTILITIES
THE BASE MAPPING AND UTILITIES SHOWN ON THIS PLAN, ARE IN PART, COMPILED FROM INFORMATION FURNISHED BY OTHERS.
CWE, INC. WILL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT. ALL UTILITIES SHALL BE FIELD LOCATED PRIOR TO EXCAVATION.

# UTILITIES

WESTON UTILITIES AND
VILLAGE OF WESTON
5500 SCHOFIELD AVENUE
WESTON, WI. 54476
PHONE: (715) 359-6114
KEITH DONNER, P.E., PUBLIC WORKS DIRECTOR
kdonner@westonwisconsin.org

FRONTIER COMMUNICATIONS
1851 N 14TH AVENUE
WAUSAU, WI. 54401
PHONE: (715) 847-1525
CAL KLADE

CHARTER COMMUNICATIONS
853 MCINTOSH STREET
WAUSAU, WI. 54403
PHONE: (715) 301-4075
JEFF KULAF
Jkulaf@chartercom.com

ANR PIPELINE
2375 NORTH 2ND DRIVE
STEVENS POINT, WI. 54481
PHONE: (715) 295-3143
DUANE PRONDZINSKI

⚹ KENTUCKY DATA LINK (KDL, INC)/NORLIGHT
13935 BISHOPS DRIVE
BROOKFIELD, WI. 53005
PHONE: (262) 792-7938
JIM KOSTUCH
jkostuch@kdlinc.com

WISCONSIN PUBLIC SERVICE
P.O. BOX 1166
WAUSAU, WI. 54402-1166
PHONE: (715) 848-7471
MICHAEL BOSI
REGIONAL ENGINEER (NATURAL GAS)
mabosi@wisconsinpublicservice.com

WISCONSIN PUBLIC SERVICE
P.O. BOX 1166
WAUSAU, WI. 54402-1166
PHONE: (715) 848-7317
CLAY VIRCKS
REGIONAL ENGINEER (ELECTRIC)
chvircks@wisconsinpublicservice.com

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

⚹ DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS.

# SECTION 2 SHEET ORDER

GENERAL NOTES, STANDARD ABBREVIATIONS, UTILITIES, AND LEGEND
CONTROL POINT TIES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
EROSION CONTROL
STORM SEWER
UTILITY PLAN
PERMANENT SIGNING
PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENT DIAGRAM

# STANDARD ABBREVIATIONS

| | | | |
|---|---|---|---|
| AGG | Aggregate | LB | Pound |
| AADT | Annual Average Daily Traffic | PE | Private Entrance |
| ASPH | Asphaltic | R | Radius |
| BM | Bench Mark | RR | Railroad |
| CL or C/L | Center Line | R | Range |
| CE | Commercial Entrance | RL or R/L | Reference Line |
| CPCS | Culvert Pipe Corrugated Steel | REQD | Required |
| CTH | County Trunk Highway | RT | Right |
| CY or CU YD | Cubic Yard | R/W | Right-of-Way |
| CPRC | Culvert Pipe Reinforced Concrete | S | South |
| DHV | Design Hour Volume | SF or SQ SF | Square Foot |
| E | East | SY or SQ YD | Square Yard |
| X | East Grid Coordinate | STA | Station |
| EL or ELEV | Elevation | TI | Temporary Interest |
| ESALS | Equivalent Single Axle Loads | T or TN | Town |
| EBS | Excavation Below Subgrade | T | Trucks (percent of) |
| CWT | Hundredweight | TYP | Typical |
| LT | Left | V | Velocity or Design Speed |
| LIN FT or LF | Linear Foot | VPC | Vertical Point of Curve |
| LS | Lump Sum | VPI | Vertical Point of Intersection |
| N | North | VPT | Vertical Point of Tangency |
| Y | North Grid Coordinate | WM | Water Main |
| NO | Number | W | West |
| PLE | Permanent Limited Easement | | |

# DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
473 GRIFFITH AVE.
WISCONSIN RAPIDS, WI 54494
ANTHONY FISCHER
PHONE: (715) 421-7867
anthony.fischer@dnr.state.wi.us

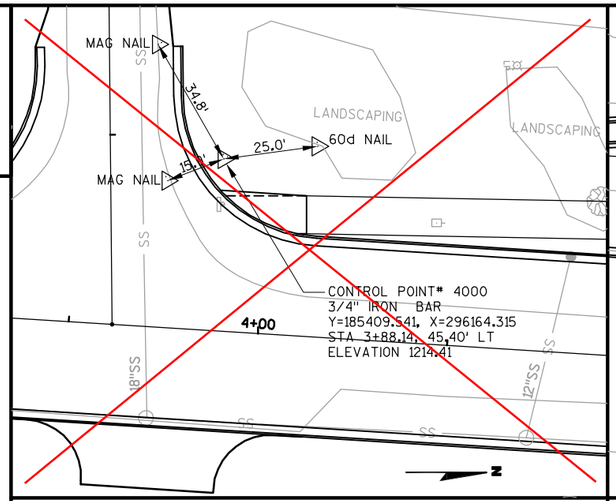
CANADIAN NATIONAL RAILROAD
1625 DEPOT STREET
STEVENS POINT, WI. 54481
JACQULINE MODER
PHONE: (715) 345-2503
jacqueline.moder@cn.ca

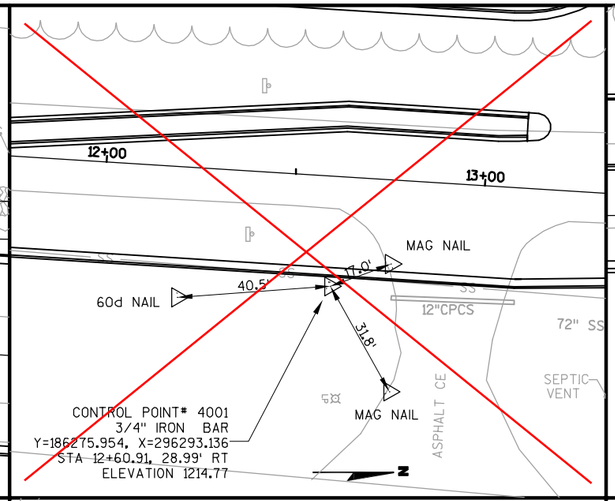
# DESIGN CONTACT

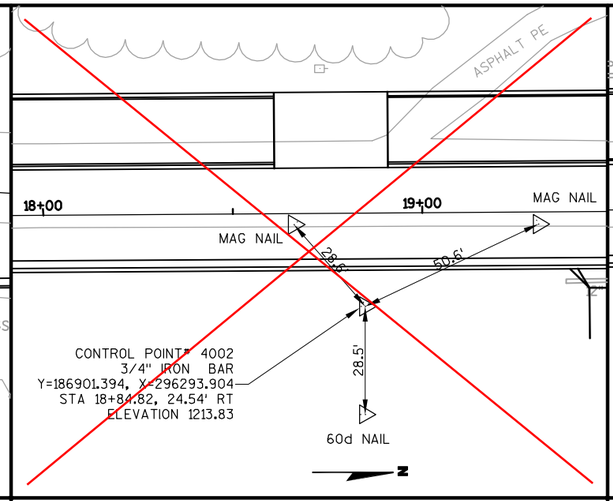
CWE, Inc.
JAY KNOKE, P.E.
P.O. BOX 107
5707 SCHOFIELD AVENUE
WESTON, WIS. 54476
PHONE: (715) 359-9400
jknoke@cwengineers.com

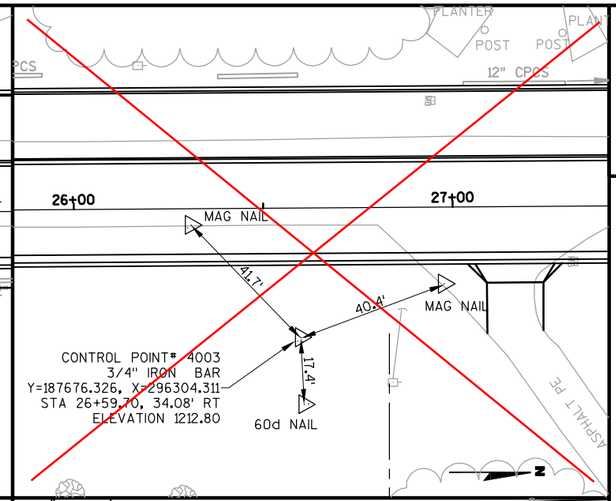
# CONTROL POINTS

| POINT | LOCATION | Y | X | ELEVATION | DESCRIPTION |
|---|---|---|---|---|---|
| ~~4000~~ | ~~Sta 3+88.14 45.40'LT~~ | ~~185409.541~~ | ~~296164.315~~ | ~~1214.41~~ | ~~3/4" IRON BAR~~ |
| ~~4001~~ | ~~Sta 12+60.91 28.99'RT~~ | ~~186275.954~~ | ~~296293.136~~ | ~~1214.77~~ | ~~3/4" IRON BAR~~ |
| ~~4002~~ | ~~Sta 18+84.82 24.54'RT~~ | ~~186901.394~~ | ~~296299.904~~ | ~~1213.83~~ | ~~3/4" IRON BAR~~ |
| ~~4003~~ | ~~Sta 26+59.70 34.08'RT~~ | ~~187676.326~~ | ~~296304.311~~ | ~~1212.80~~ | ~~3/4" IRON BAR~~ |
| ~~4004~~ | ~~Sta 33+08.01 46.96'LT~~ | ~~188324.081~~ | ~~296218.979~~ | ~~1199.88~~ | ~~3/4" IRON BAR~~ |
| 4005 | Sta 42+38.13 39.68'RT | 189255.525 | 296294.228 | 1201.63 | 3/4" IRON BAR |
| ~~4006~~ | ~~Sta 49+31.97 25.85'LT~~ | ~~190007.209~~ | ~~296207.358~~ | ~~1185.40~~ | ~~3/4" IRON BAR~~ |
| 4007 | Sta 57+66.15 32.33'RT | 190782.721 | 296243.574 | 1183.01 | 3/4" IRON BAR |
| ~~4008~~ | ~~Sta 62+62.56 47.62'LT~~ | ~~191276.683~~ | ~~296150.177~~ | ~~1186.04~~ | ~~3/4" IRON BAR~~ |
| ~~4009~~ | ~~Sta 71+91.47 29.25'RT~~ | ~~192207.273~~ | ~~296203.948~~ | ~~1237.29~~ | ~~3/4" IRON BAR~~ |
| 4010 | Sta 77+49.33 51.49'LT | 192763.284 | 296111.321 | 1199.78 | LANDSCAPE SPIKE |

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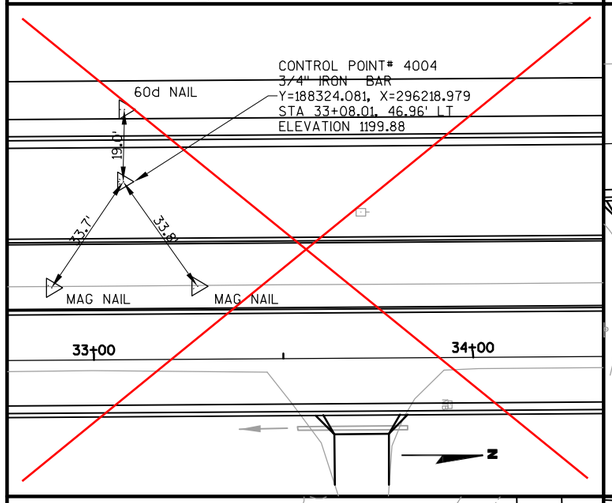
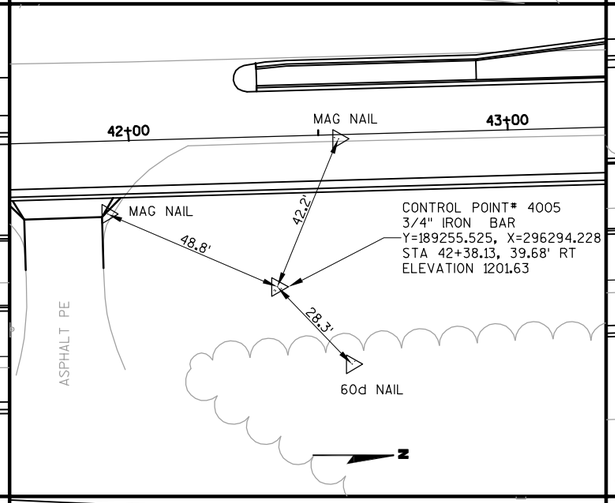
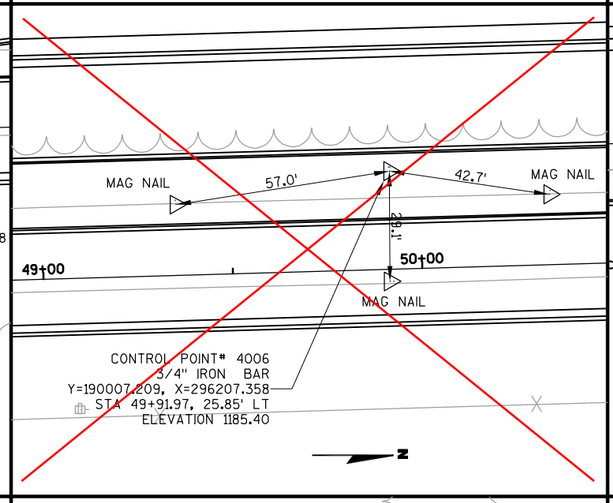
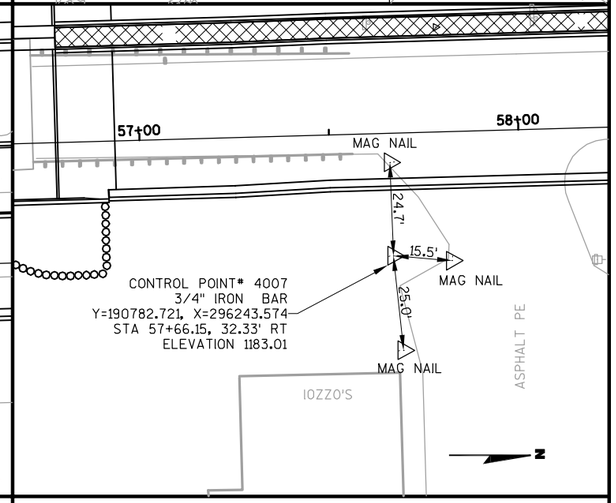
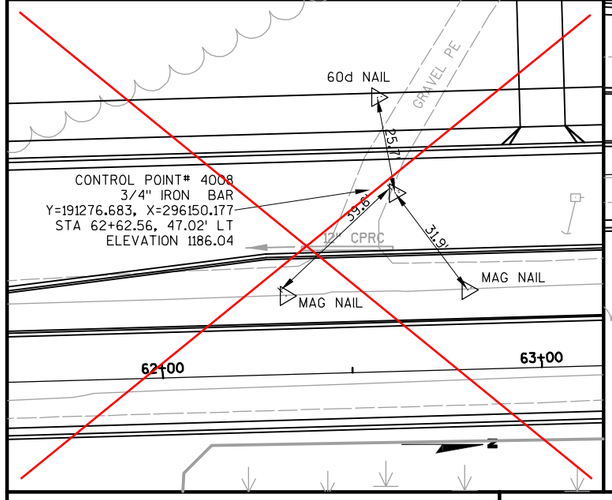
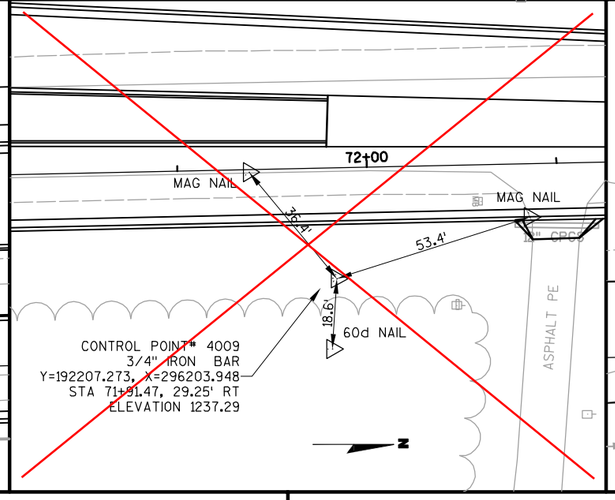


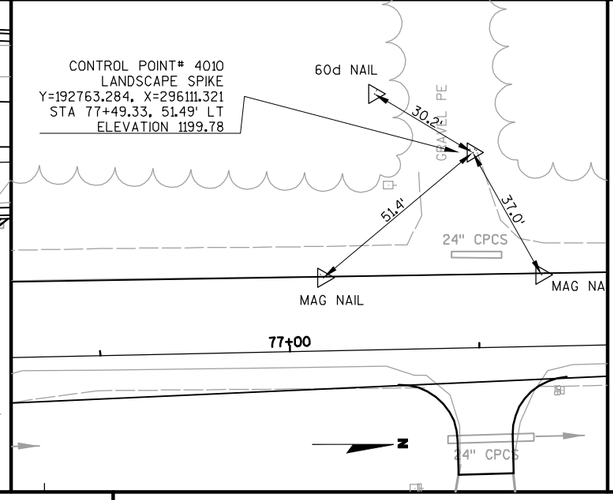



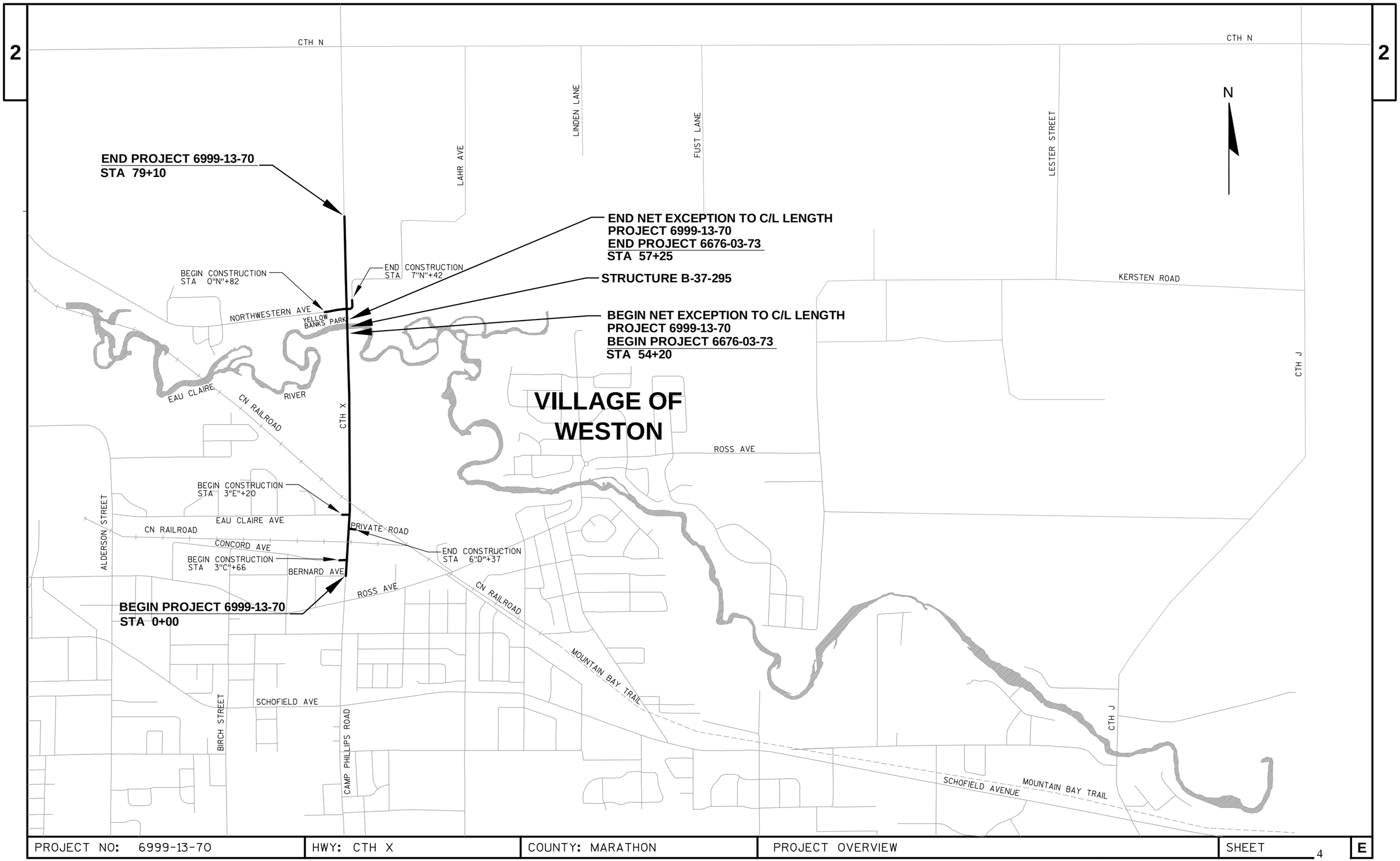



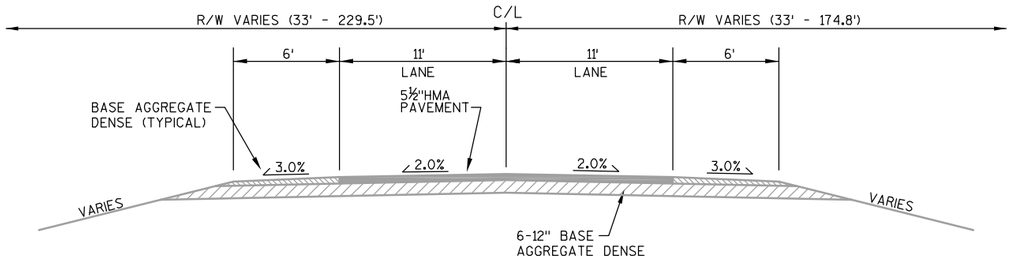




| STATE PROJECT NUMBER: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CONTROL POINT TIES | SHEET NO: 3 | E |
|---|---|---|---|---|---|



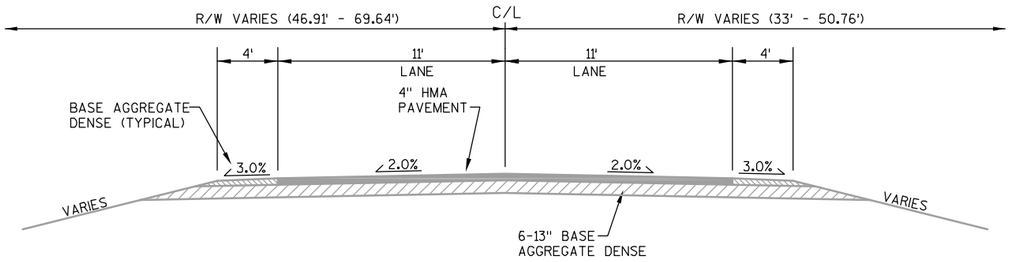

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PROJECT OVERVIEW | SHEET 4 | E |
|---|---|---|---|---|---|

2



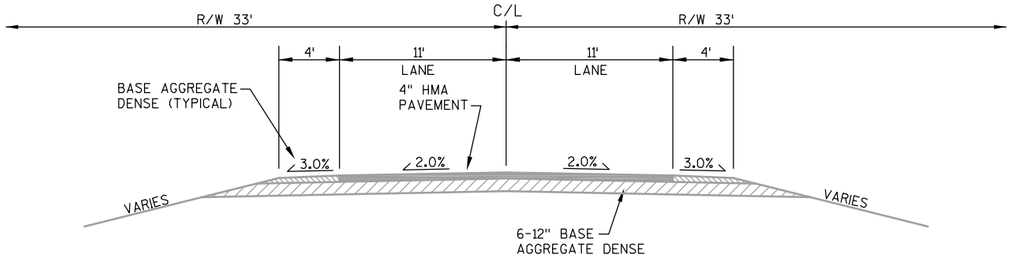

## TYPICAL EXISTING SECTION - CTH X

STA 0+00 - STA 79+10



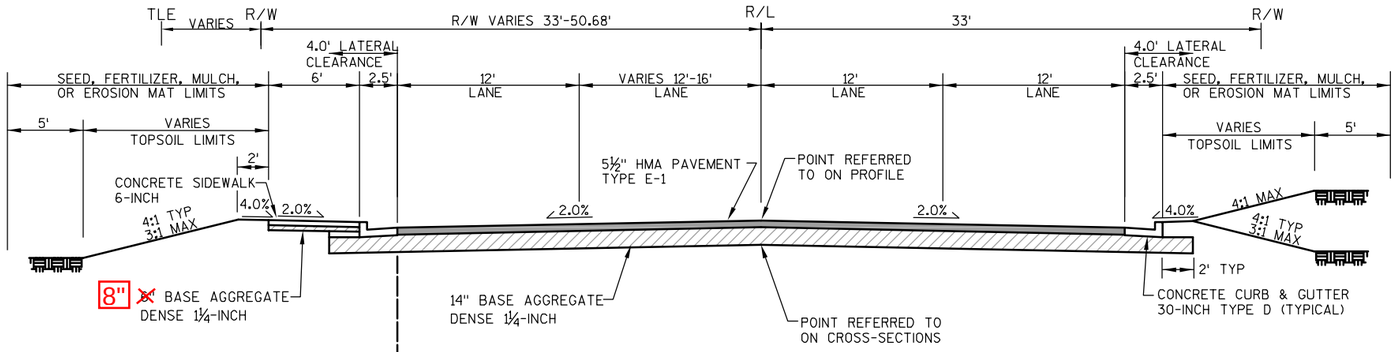

## TYPICAL EXISTING SECTION - NORTHWESTERN AVENUE/LAHR AVENUE

STA 0N+82 - 7N+50



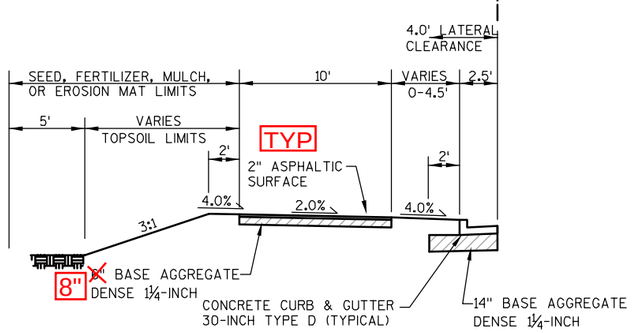

## TYPICAL EXISTING SECTION

CONCORD AVENUE STA 3C+66 - 4C+76
PRIVATE ROAD STA 5D+24 - 6D+35
EAU CLAIRE AVENUE STA 3E+20 - 4E+51



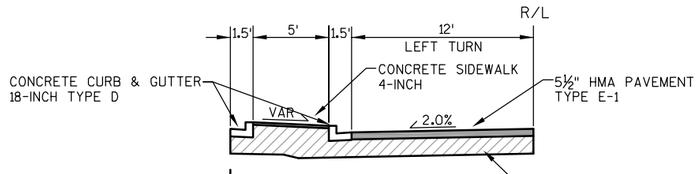

## TYPICAL FINISHED SECTION - CTH X

STA 0+00 - 6+00



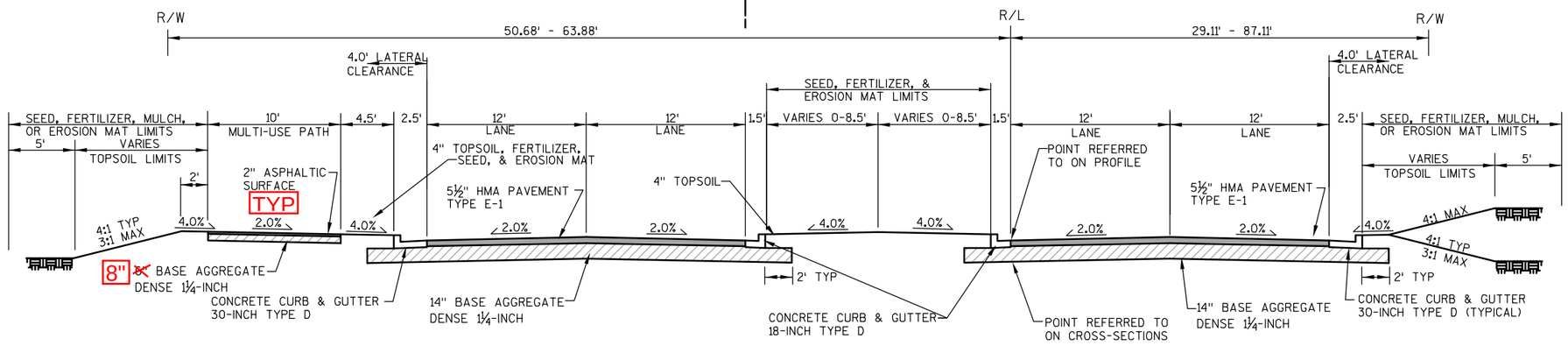

## MULTI-USE PATH

STA 3+87 - 6+00




## LEFT TURN LANE

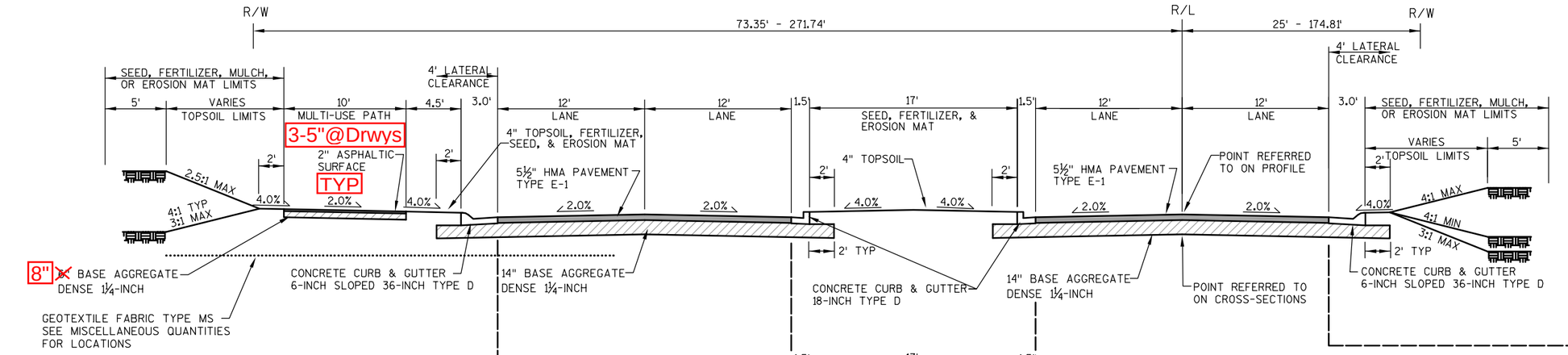
NB SHOWN - MIRROR IMAGE FOR SB
STA 11+03.94 - 11+53.94
STA 12+62.84 - 13+13.46
STA 14+18.94 - 14+25

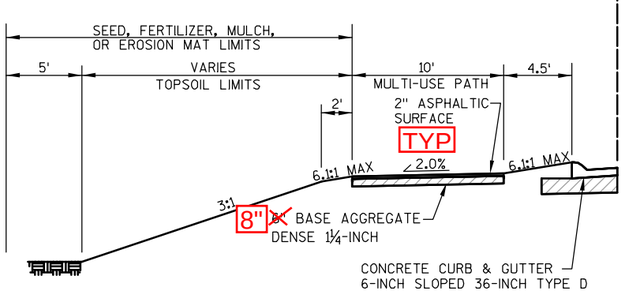



## TYPICAL FINISHED SECTION - CTH X

STA 6+00 - 14+25

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | TYPICAL SECTIONS | SHEET 6 | E |
|---|---|---|---|---|---|



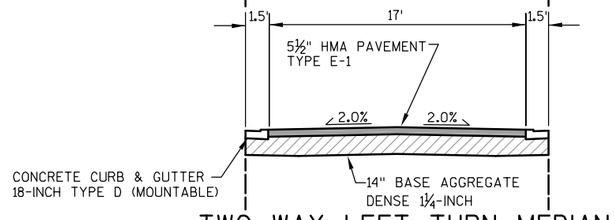




## REVERSE SLOPE MULTI-USE PATH

STA 45+00 - 54+20
STA 57+50 - 66+50

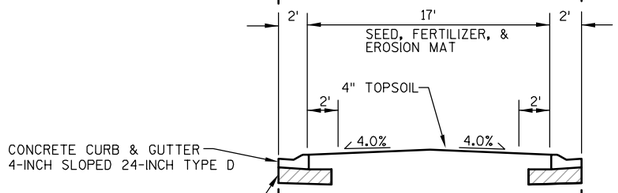
## NOTE

STA 60+17 TO 69+00 LEFT MULTI-USE PATH NOT PART OF THIS CONTRACT. GRADE TO FINISHED GRADE WITH TOPSOIL. SEED, FERTILIZER, AND MULCH AS REQUIRED.



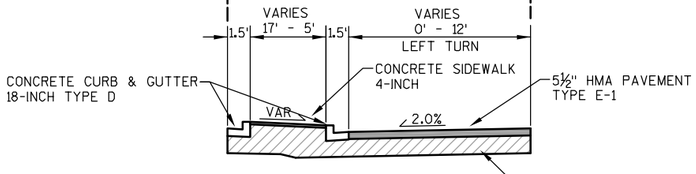

## TWO WAY LEFT TURN MEDIAN

STA 18+91- 36+53



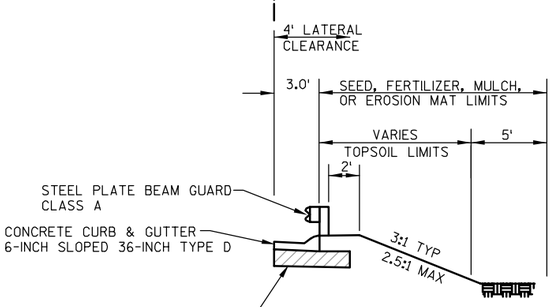

## MOUNTABLE MEDIAN

STA 44+12.18- 53+35.90



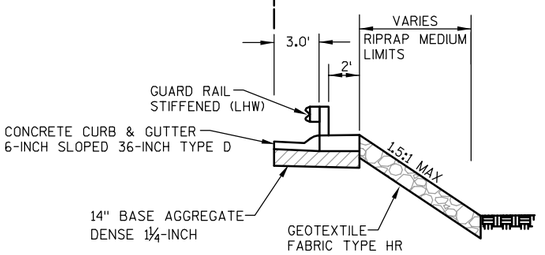

## LEFT TURN LANE

NB SHOWN - MIRROR IMAGE FOR SB
STA 14+25 - 15+97.07
STA 42+31.60 - 44+12.18
STA 53+35.90 - 54+55.90
STA 60+23.75- 62+28




## BEAM GUARD

STA 52+00 - 53+45
STA 53+85 - 54+50
STA 62+76 - 63+82



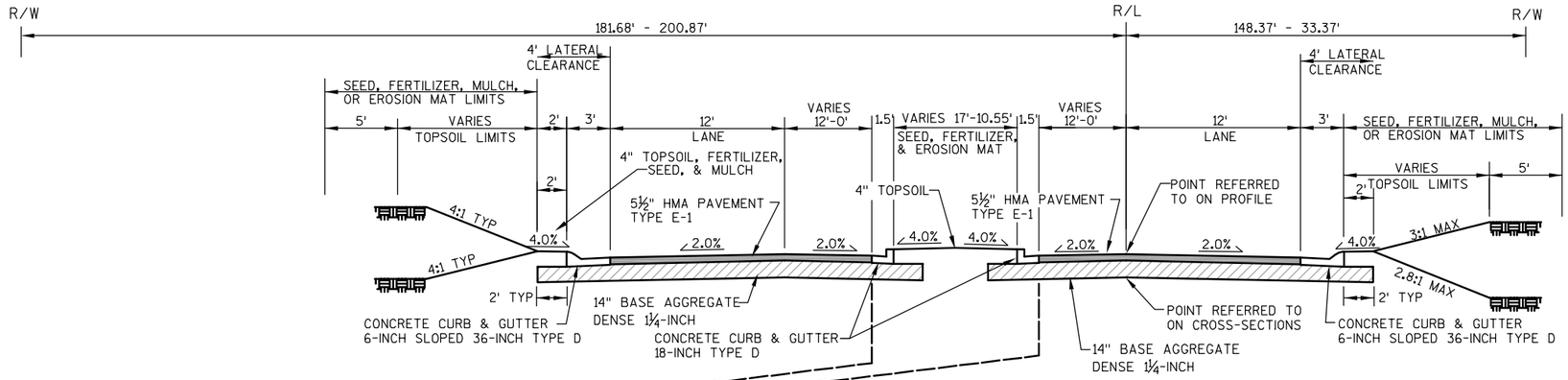

## RIPRAP SLOPE

STA 53+45 - 53+85
STA 63+26 - 63+76

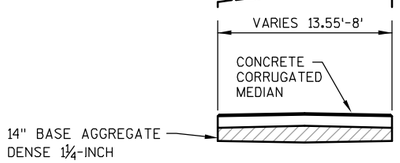
## TYPICAL FINISHED SECTION - CTH X

STA 14+25 - 69+00

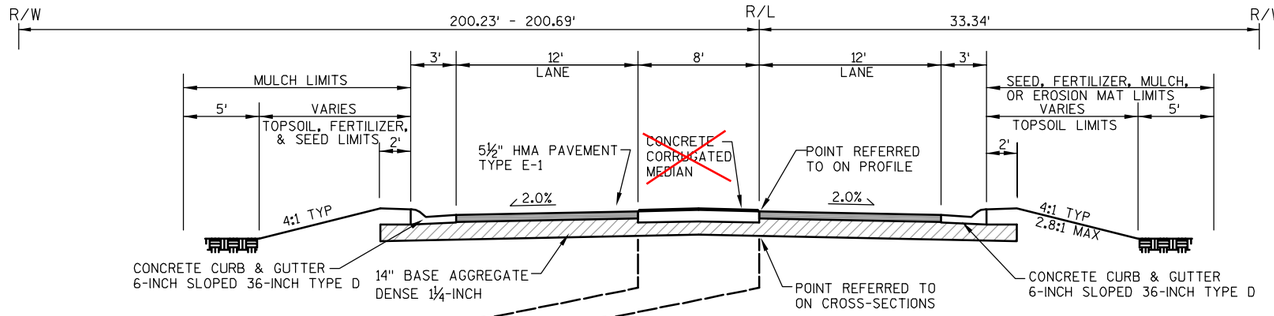
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | TYPICAL SECTIONS | SHEET 7 | E |
|---|---|---|---|---|---|



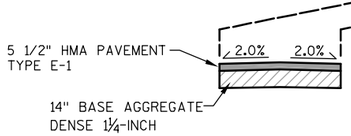

## TYPICAL FINISHED SECTION - CTH X
STA 69+00 - 74+40



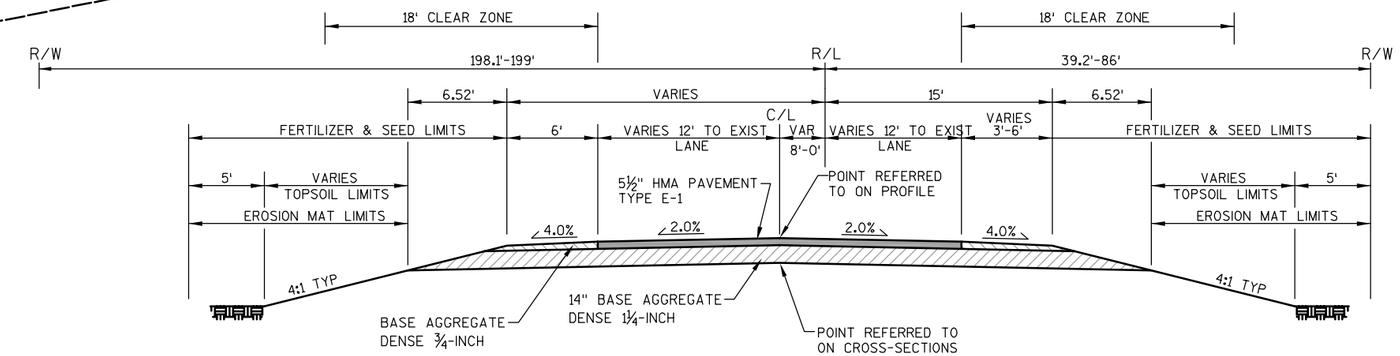

## CONCRETE CORRUGATED MEDIAN
STA 71+89.4 - ~~74+40~~ 72+20




## TYPICAL FINISHED SECTION - CTH X
STA 74+40 - 78+00

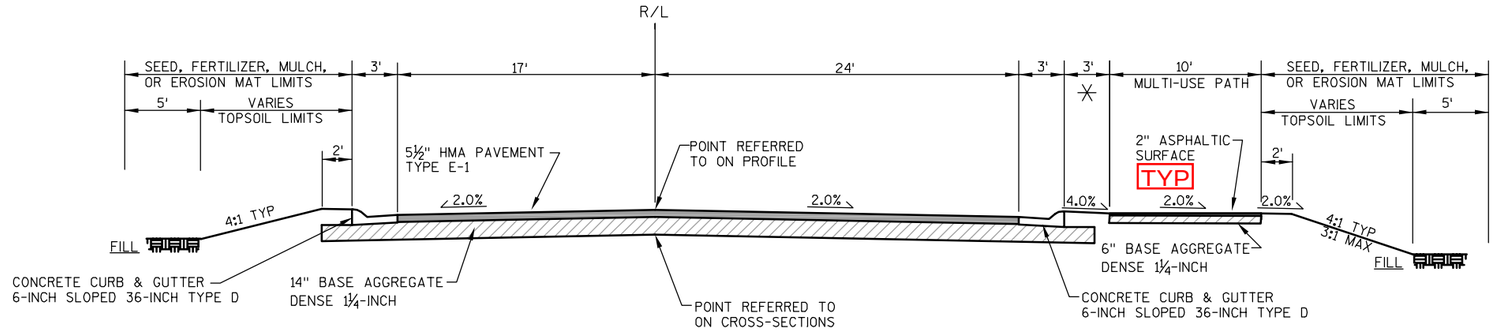



## HMA PAVEMENT MEDIAN
STA ~~75+50~~ - 78+00
72+20




## TYPICAL FINISHED SECTION - CTH X
STA 78+00 - 79+10

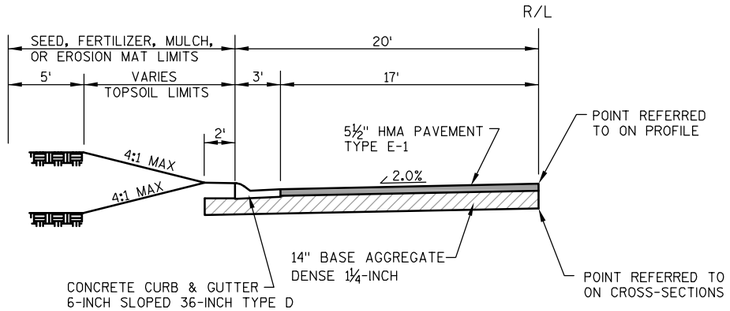
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | TYPICAL SECTIONS | SHEET 8 | E |
|---|---|---|---|---|---|




## TYPICAL FINISHED SECTION - NORTHWESTERN AVENUE

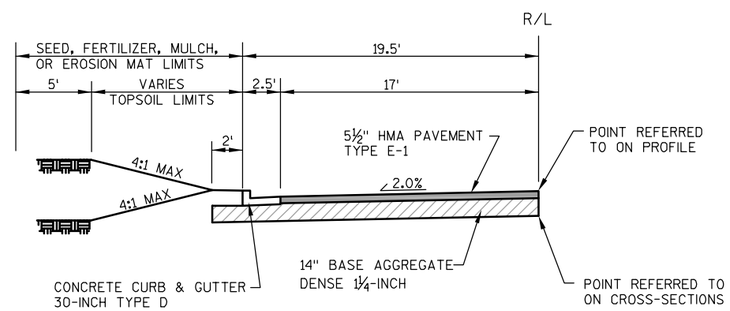
STA 3N+28 - 4N+44

✳ 4" TOPSOIL, SEED, FERTILIZER, & MULCH




## TYPICAL FINISHED HALF SECTION - SIDE ROADS

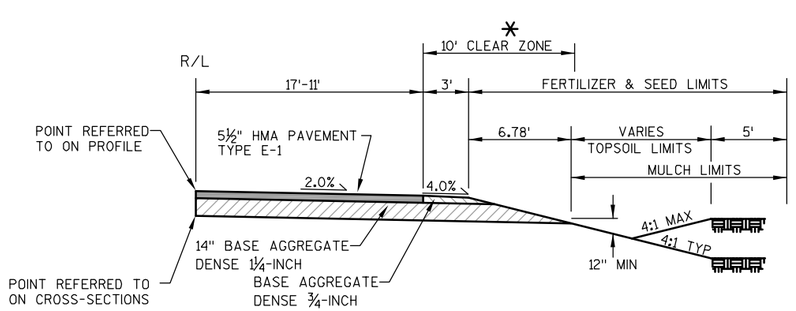
NORTHWESTERN AVENUE STA 1N+15 - 3N+28 RT
LAHR AVENUE STA 5N+12 - 5N+55




## TYPICAL FINISHED HALF SECTION - SIDE ROADS

CONCORD AVENUE STA 4C+27 - 4C+76
PRIVATE ROAD STA 5D+24 - 5D+73
EAU CLAIRE AVENUE STA 4E+04 - 4E+52

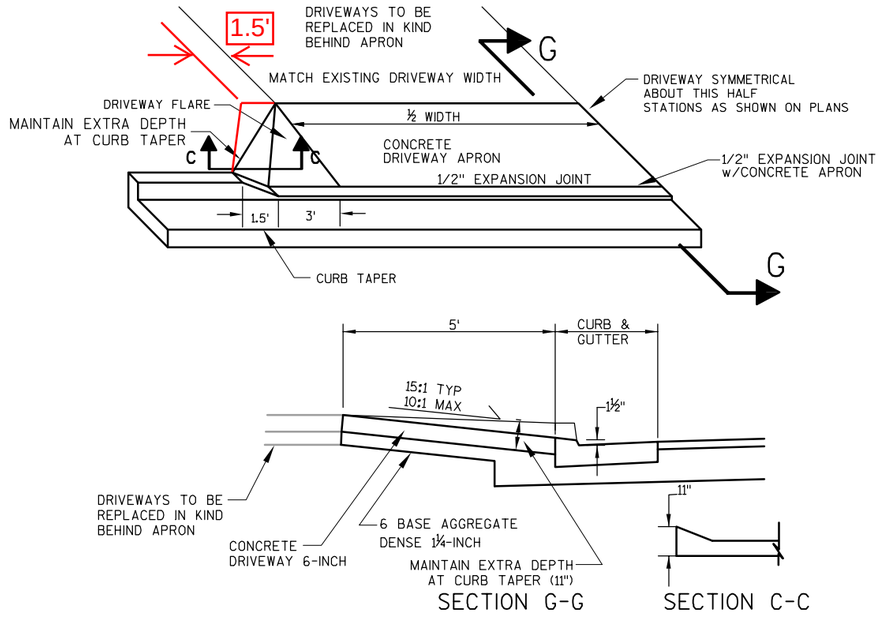
✳ 18' CLEAR ZONE REQUIRED ON NORTHWESTERN AVENUE.



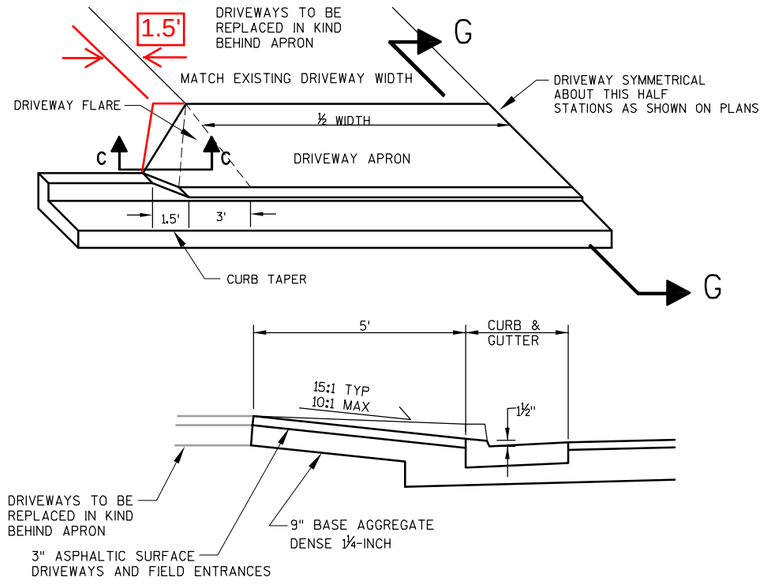

## TYPICAL FINISHED HALF SECTION - SIDE ROADS

CONCORD AVENUE STA 3C+66 - 4C+27
PRIVATE ROAD STA 5D+73 - 6D+35.87
EAU CLAIRE AVENUE STA 3E+20 - 4E+04
NORTHWESTERN AVENUE STA ON+83.18 - 1N+15 RT
NORTHWESTERN AVENUE STA ON+83.18 - 3N+28 LT
LAHR AVENUE STA 5N+55 - 7N+50

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | TYPICAL SECTIONS | SHEET 9 | E |
|---|---|---|---|---|---|

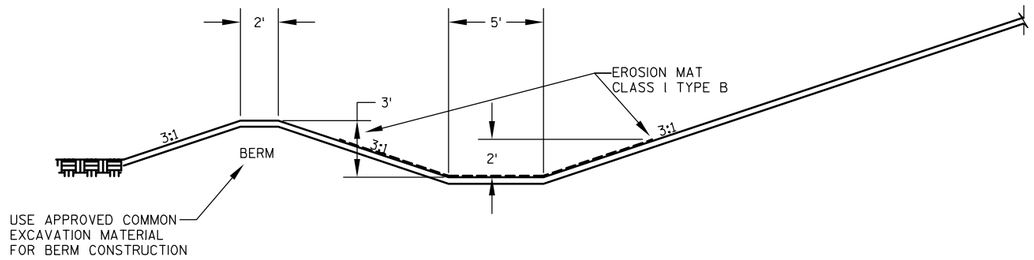



## TYPICAL CONCRETE APRON




SECTION G-G

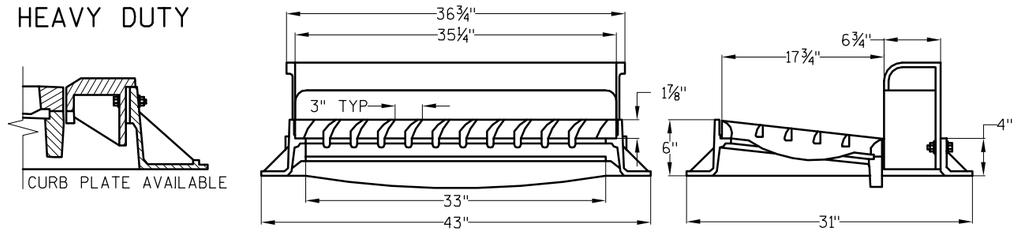
## TYPICAL ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES




## DRAINAGE SWALE

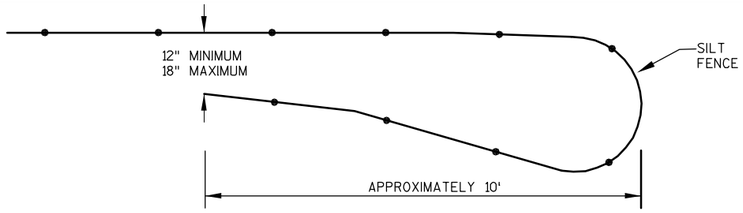
STA 47+50 - STA 53+00 LT

HEAVY DUTY




## INLET COVERS TYPE H-SP

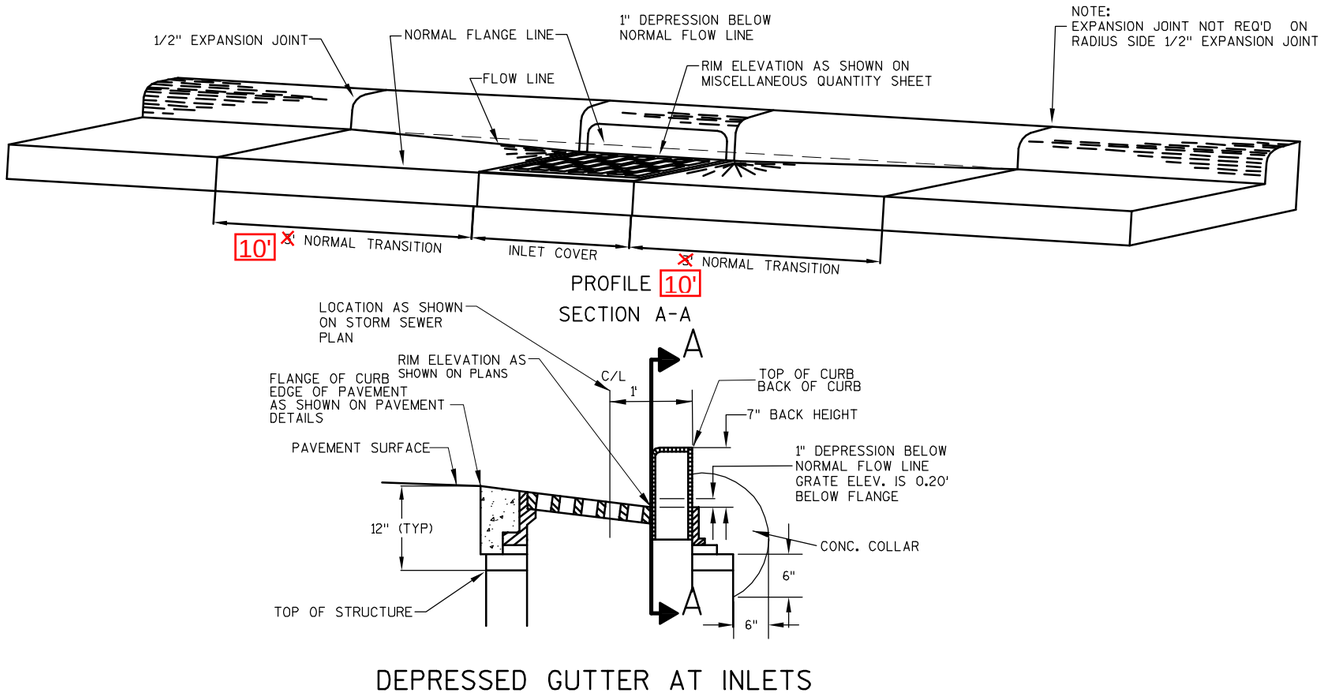
NOTE:
CURB PLATE REQUIRED AT CURB AND GUTTER 18-INCH TYPE D (MOUNTABLE) LOCATIONS.
STA 18+91-36+54 MEDIAN CURB.



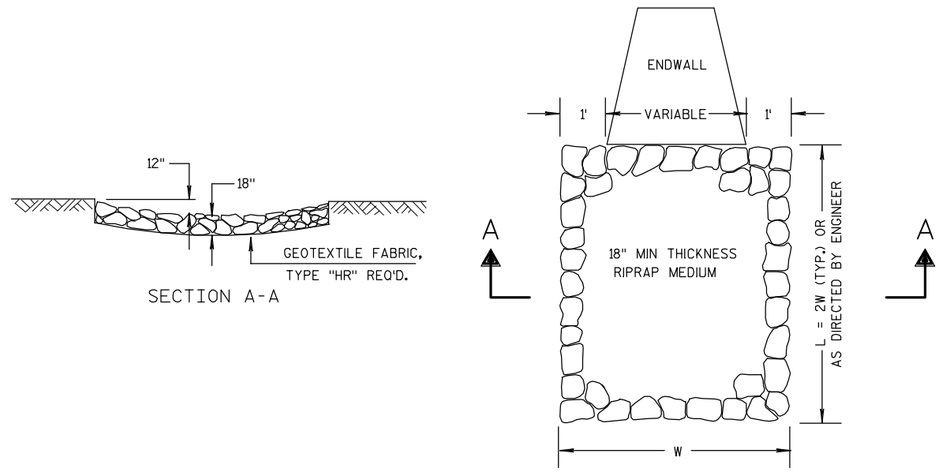

NOTE:
TO BE MEASURED AND PAID FOR AS SILT FENCE.

## SNAKE/TURTLE TURN-AROUND DETAIL

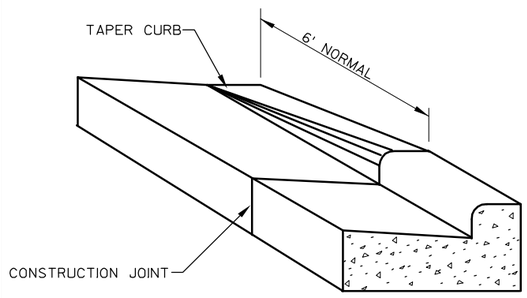
| | |
|---|---|
| STA 43+45 LT | STA 71+00 LT |
| STA 44+70 RT | STA 77+40 LT |
| STA 55+00 LT & RT | STA 77+60 LT & RT |
| STA 56+50 LT & RT | STA 79+10 LT & RT |
| STA 57+70 RT | STA 1N+60 RT |
| STA 62+95 LT | STA 1N+90 RT |
| STA 63+15 LT | STA 6N+30 RT |
| STA 66+00 RT | STA 7N+50 LT & RT |
| STA 66+40 LT | |




DEPRESSED GUTTER AT INLETS

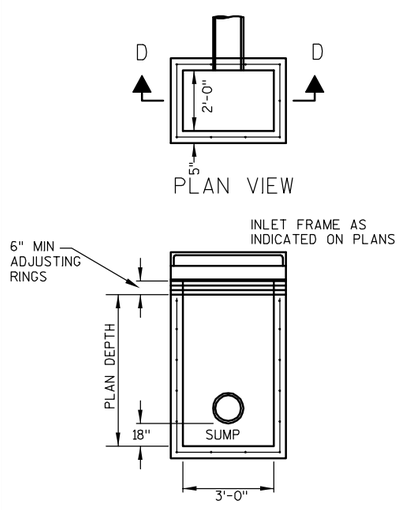



RIPRAP MEDIUM TREATMENT AT CULVERTS




## END SECTION CURB & GUTTER

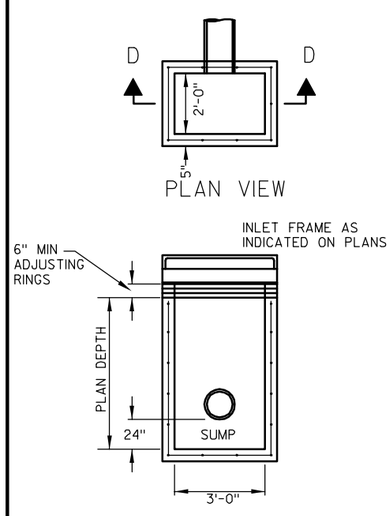
STA 0+12, LT
STA 4C+30, LT & RT
STA 5D+70, LT & RT
STA 4E+05, LT & RT
STA 1N+20, RT
STA 3N+30, LT
STA 5N+55, LT & RT
STA 78+00, LT & RT




SECTION D-D

## INLET TYPE 3 MODIFIED

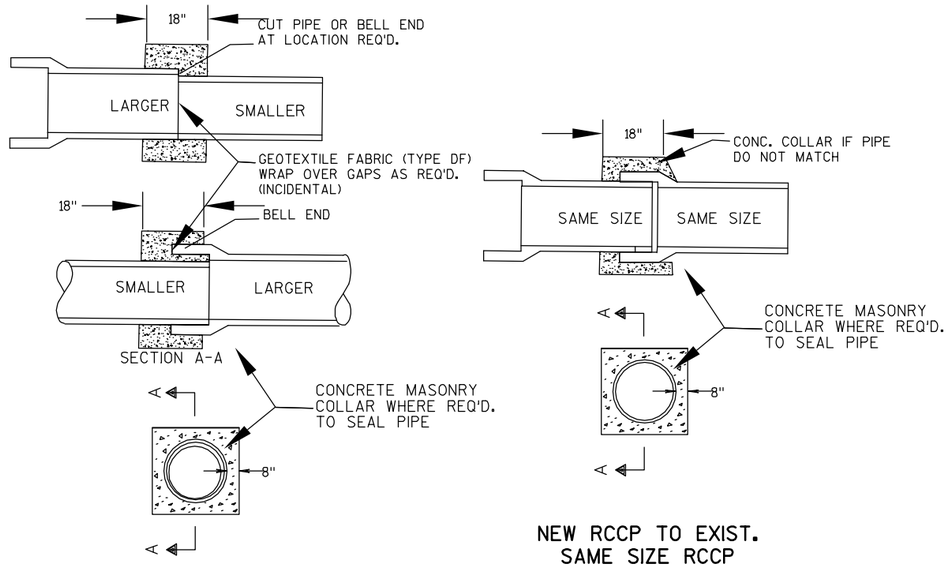
(PRECAST REINFORCED CONCRETE)




SECTION D-D

## INLET TYPE 3 MODIFIED 2

(PRECAST REINFORCED CONCRETE)

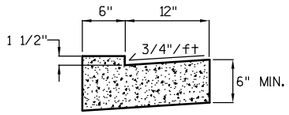



CONCRETE COLLAR DETAIL

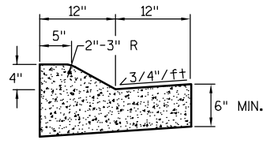
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CONSTRUCTION DETAILS | SHEET 11 | E |
|---|---|---|---|---|---|

2

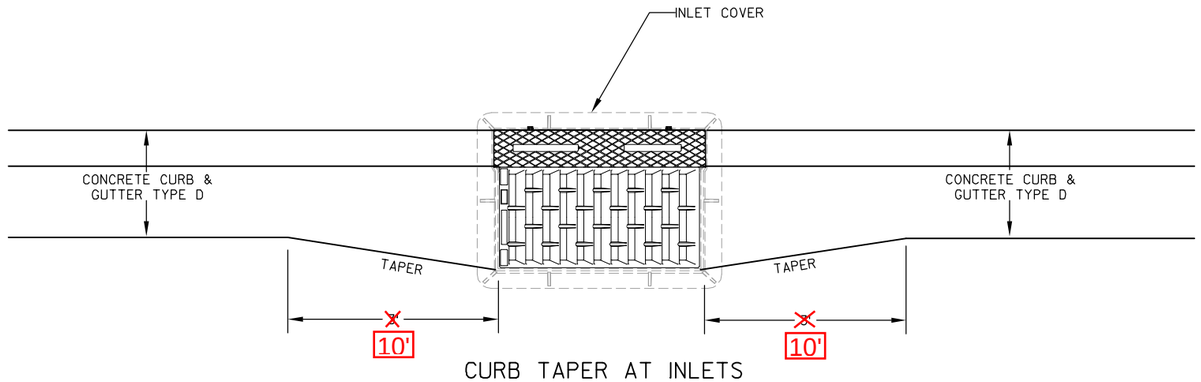
NOTE:
TO BE PAID FOR AS CONCRETE
CURB & GUTTER 18-INCH TYPE D



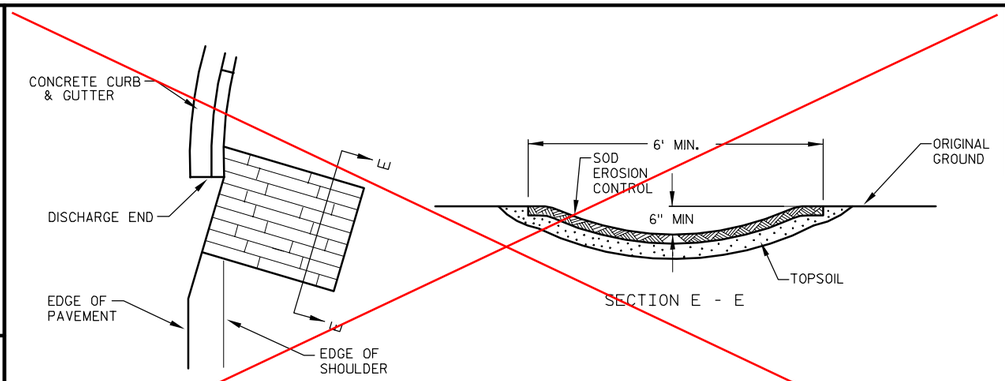

CONCRETE CURB & GUTTER
18-INCH TYPE D (MOUNTABLE)



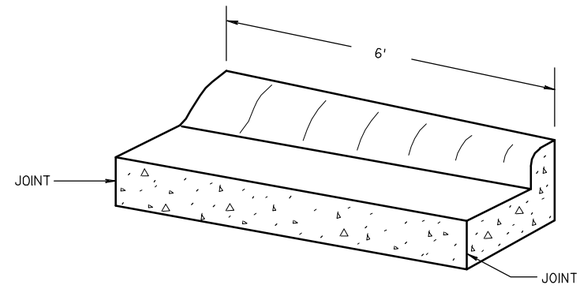

CONCRETE CURB & GUTTER
4-INCH SLOPED 24-INCH TYPE D




CURB TAPER AT INLETS
NOT TO SCALE

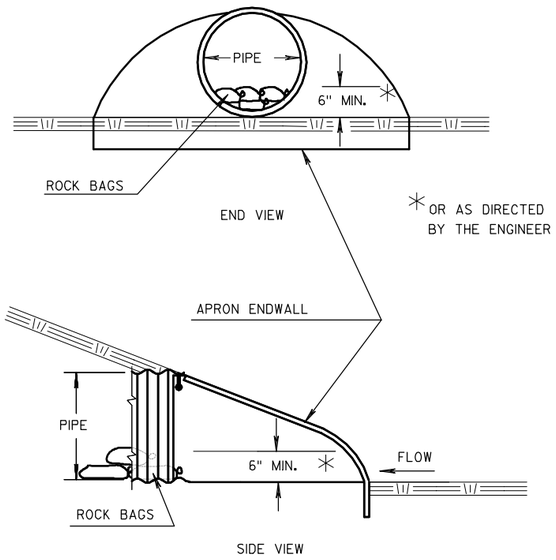



SOD FLUME AT CURB ENDS DETAIL
STA 4C+25, LT & RT

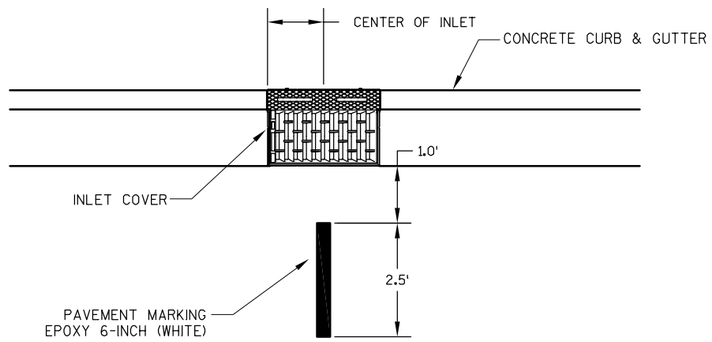



TRANSITION TO BE MEASURED AND PAID FOR AS
THE WIDER SIZED CONCRETE CURB & GUTTER.

TRANSITION DETAIL
STA 14+25 - 14+31 LT & RT
STA 44+12.18 - 44+18.18 LT
STA 53+29.90 - 53+35.90 LT

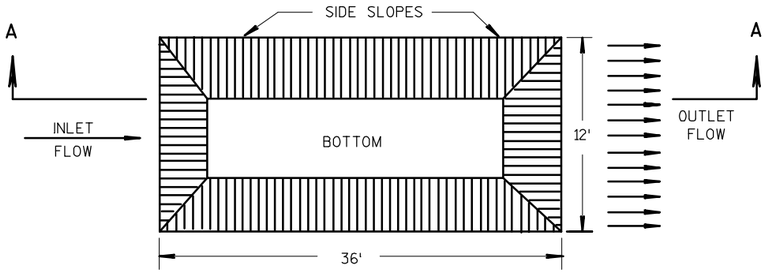



CULVERT PIPE DITCH CHECK

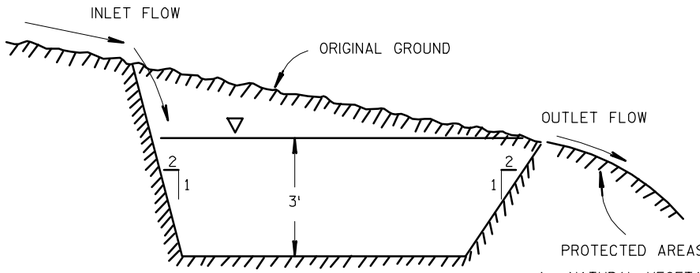



PAVEMENT MARKING AT INLETS

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CONSTRUCTION DETAILS | SHEET 12 | E |
|---|---|---|---|---|---|




PLAN VIEW




1. NATURAL VEGETATION
2. GRASS
3. RIPRAP
4. EROSION MAT CLASS I, TYPE B

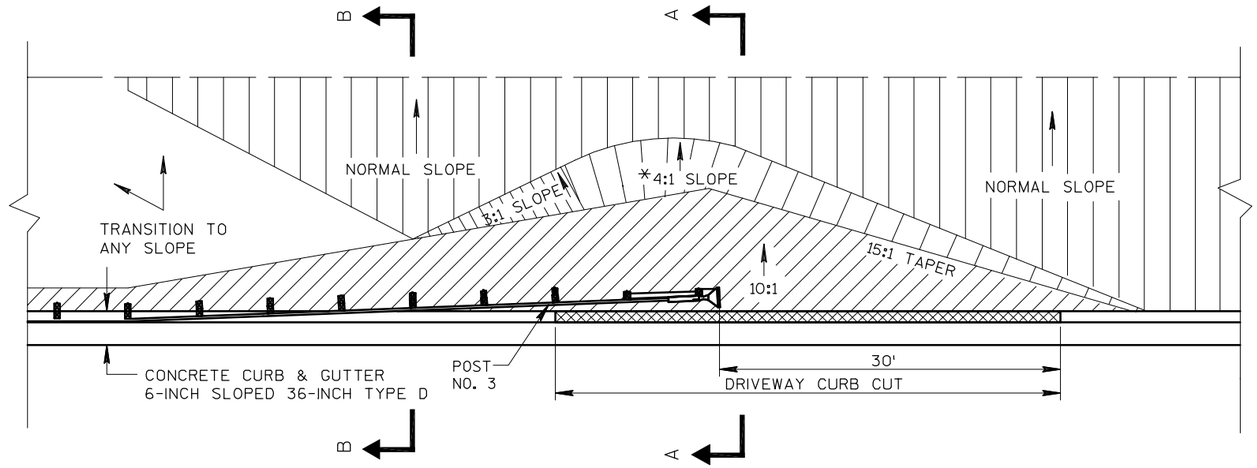
SECTION A-A

## TYPICAL EXCAVATED SEDIMENT TRAP

## RUNOFF COEFFICENT TABLE

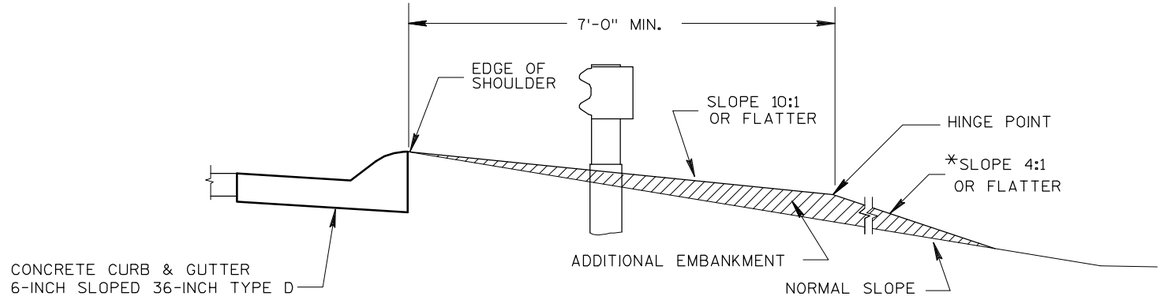
| | HYDROLOGIC SOIL GROUP | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | | | B | | | C | | | D | | |
| | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | |
| LAND USE : | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER |
| MEDIAN STRIP-TURF | .19 | .20 | .24 | .19 | .22 | .26 | .20 | .25 | .30 | .20 | .25 | .30 |
| | .24 | .26 | .30 | .25 | .28 | .33 | .26 | .30 | .37 | .27 | .32 | .38 |
| SIDE SLOPE-TURF | | | .25 | | | .27 | | | .28 | | | .30 |
| | | | .32 | | | .34 | | | .36 | | | .38 |
| PAVEMENT : | | | | | | | | | | | | |
| ASPHALT | .70 - .95 | | | | | | | | | | | |
| CONCRETE | .80 - .95 | | | | | | | | | | | |
| BRICK | .70 - .80 | | | | | | | | | | | |
| DRIVES, WALKS | .75 - .85 | | | | | | | | | | | |
| ROOFS | .75 - .95 | | | | | | | | | | | |
| GRAVEL ROADS, SHOULDERS | .70 - .60 | | | | | | | | | | | |

TOTAL PROJECT AREA = 38.6 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 23.3 ACRES

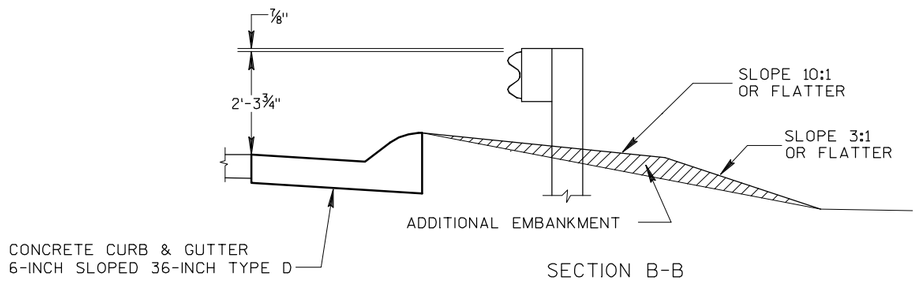



PLAN VIEW

*A 3:1 MAXIMUM SLOPE MAY BE USED FOR INSTALLATIONS ON EXISTING HIGHWAYS.




SECTION A-A




SECTION B-B

## FILL AREA AT BEAM GUARD

BOTTOM EL 1193.00
N = 188196.593
E= 296149.279

BOTTOM EL 1192.50
N = 188306.099
E= 296148.554

AREA TO BE OVEREXCAVATED
3 FEET AND BACKFILLED WITH
SELECT BORROW MATERIAL
WITH P200>20%

BOTTOM EL 1192.00
N = 188415.658
E= 296155.829

BOTTOM EL 1192.00
N = 188415.605
E= 296147.829

FRED DEHNEL

BOTTOM EL 1192.50
N = 188306.152
E= 296156.554

R/W

STA 31+88.53
-124.24'LT

STA 32+06.42
-123.95'LT

DETENTION BASIN
8' x 220' BOTTOM
4:1 SIDESLOPES

RIPRAP
MEDIUM

STA 32+06.31
-106.47'LT

IE 1194.89

IE 1194.40

IE 1197.00

SLOPE
INTERCEPT

MULTI-USE PATH

BOTTOM EL 1193.00
N = 188196.646
E= 296157.279

CTH X

CGS-36

CGM-18

REMOVING SMALL
PIPE CULVERTS

32+00

33+00

34+00

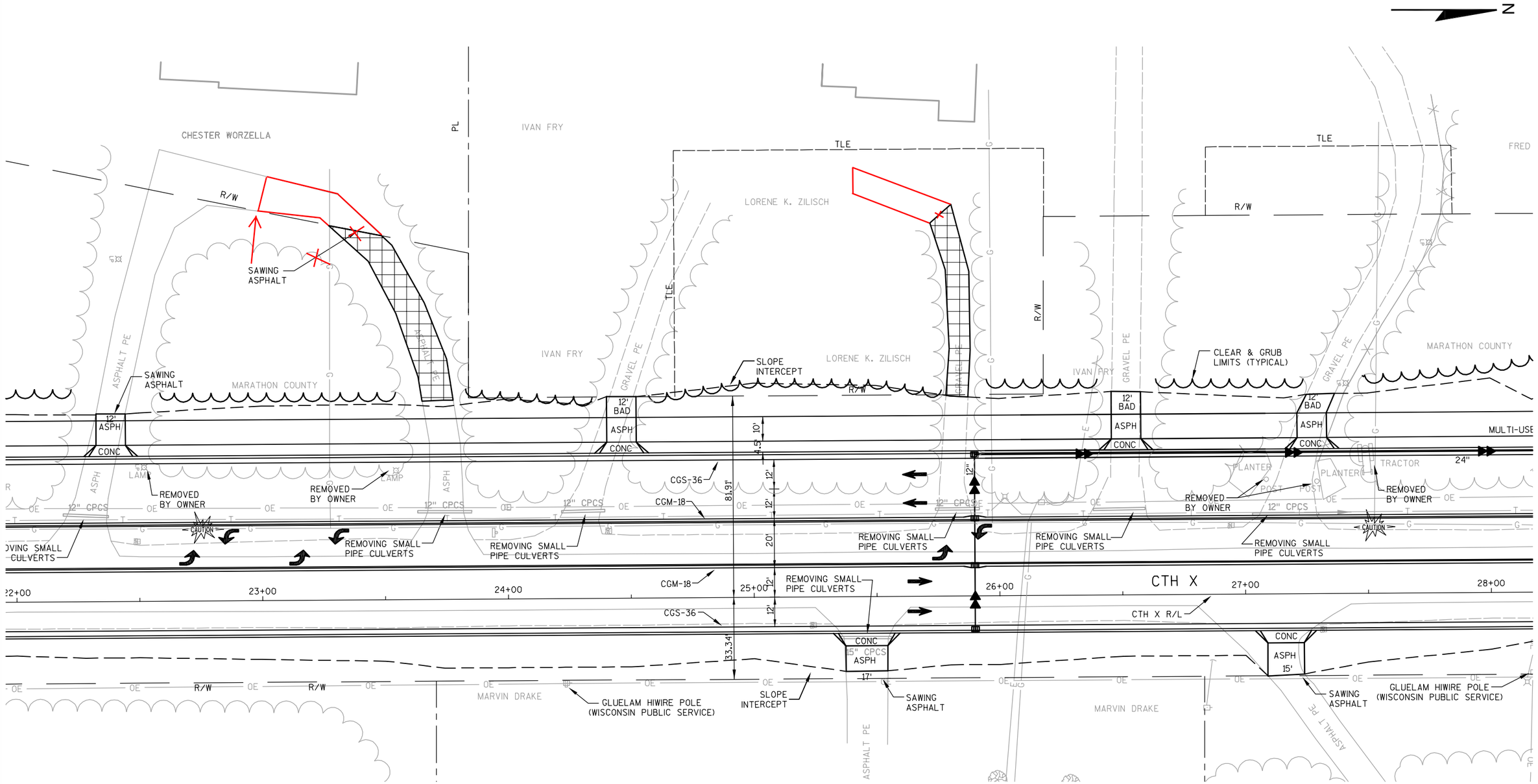
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CONSTRUCTION DETAILS | SHEET 14 | E |
|---|---|---|---|---|---|

FILE NAME : J:\DRAFT\18520801 Camp Phillips Road\CAD\021001_cd.dwg POND

PLOT DATE : Jan 12, 2011 - 10:24am

PLOT BY : 005

2




## OBLITERATE OLD ROAD (DRIVEWAY)

LEGEND

OBLITERATING OLD ROAD (DRIVEWAY)

TRAFFIC FLOW DIRECTION

CG-18 = CURB & GUTTER 18-INCH TYPE D
CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)
CG-30 = CURB & GUTTER 30-INCH TYPE D
CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CONSTRUCTION DETAILS | SHEET 15 | E |
|---|---|---|---|---|---|

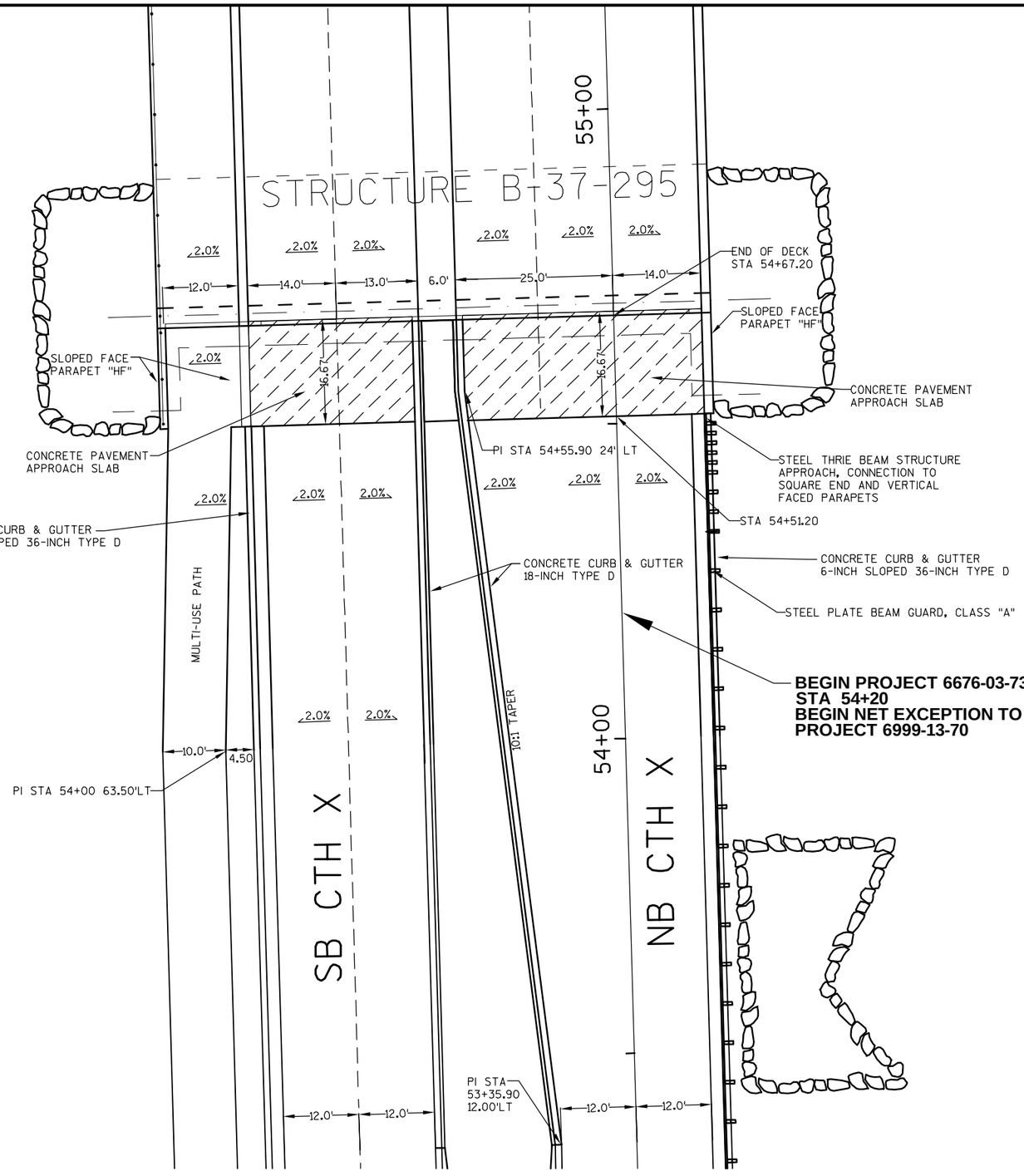
2

N

## LEGEND

- DRAINAGE FLOW DIRECTION
- X 1213.82 — FINISH PAVEMENT ELEVATION
- DESIGN LANE LINE
- SEE STANDARD DETAIL DRAWING CONCRETE PAVEMENT APPROACH SLAB FOR MORE INFORMATION
- DRIVEWAY CURB
- RIPRAP

NOTES:
SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.




SOUTH BRIDGE APPROACH

| PROJECT NO: 6676-03-73 | HWY: CTH X | COUNTY: MARATHON | CONSTRUCTION DETAILS | SHEET 16 | E |
|---|---|---|---|---|---|

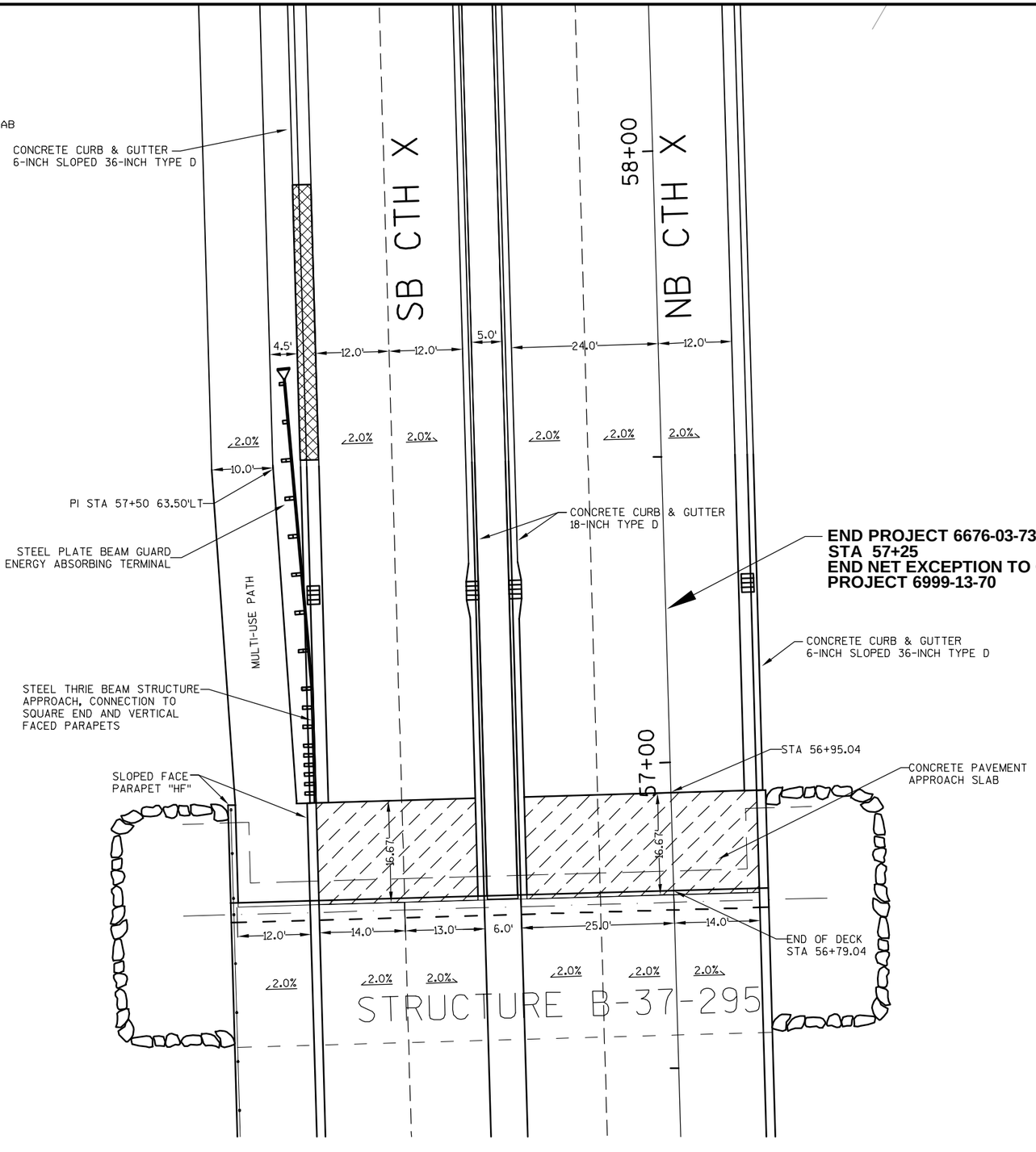
2

N

LEGEND

- DRAINAGE FLOW DIRECTION
- X 1213.82 FINISH PAVEMENT ELEVATION
- DESIGN LANE LINE
- SEE STANDARD DETAIL DRAWING CONCRETE PAVEMENT APPROACH SLAB FOR MORE INFORMATION
- DRIVEWAY CURB
- RIPRAP

NOTES:
SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.




NORTH BRIDGE APPROACH

| PROJECT NO: 6676-03-73 | HWY: CTH X | COUNTY: MARATHON | CONSTRUCTION DETAILS | SHEET 17 | E |
|---|---|---|---|---|---|

2

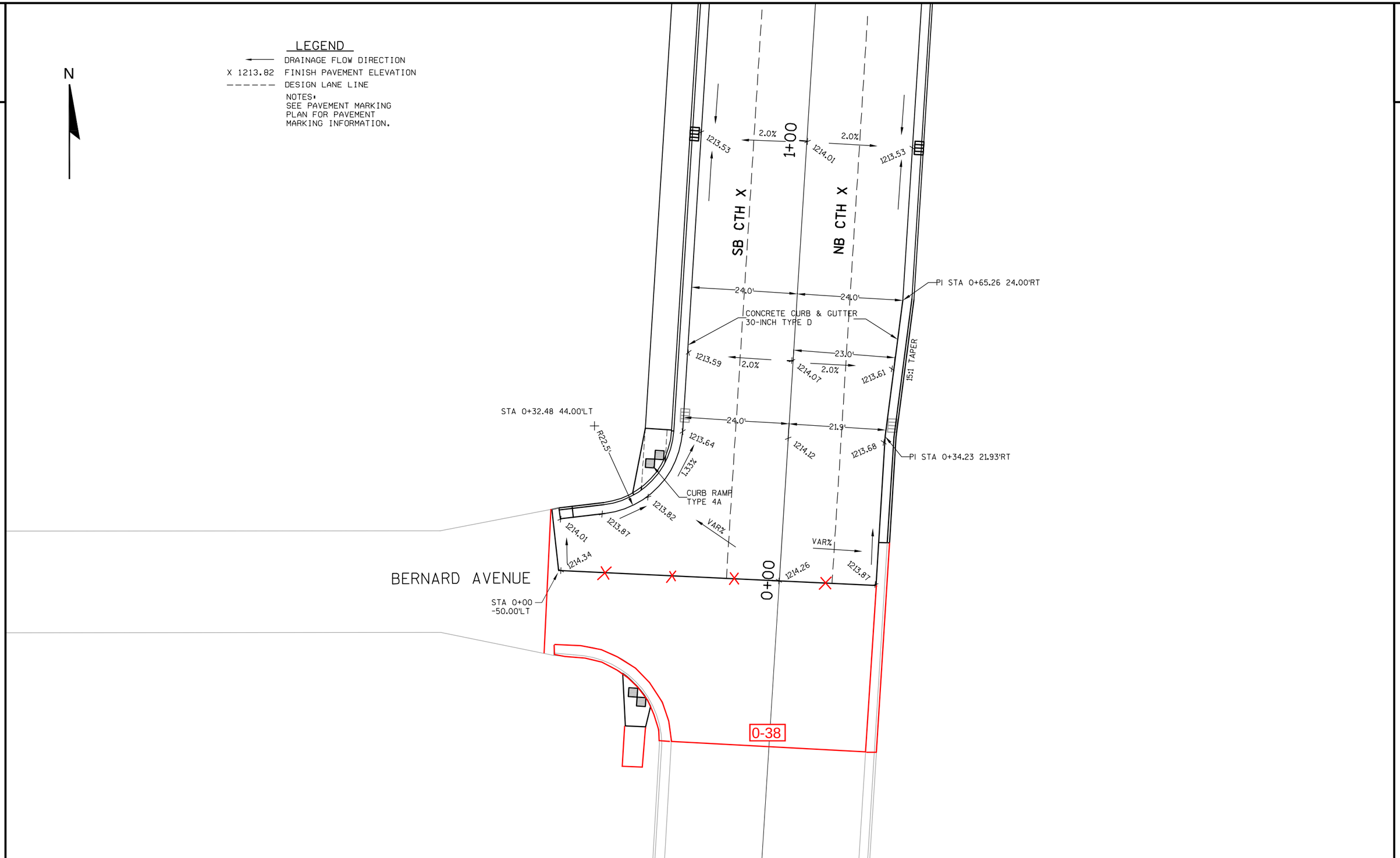
2

N

## LEGEND

| | |
|---|---|
| ← | DRAINAGE FLOW DIRECTION |
| X 1213.82 | FINISH PAVEMENT ELEVATION |
| – – – – – – | DESIGN LANE LINE |

NOTES:
SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | INTERSECTION DETAILS | SHEET 18 | E |
|---|---|---|---|---|---|

2

N

LEGEND

DRAINAGE FLOW DIRECTION

X 1213.82 FINISH PAVEMENT ELEVATION

DESIGN LANE LINE

NOTES:
SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.

CONCRETE CURB & GUTTER 30-INCH TYPE D

STA 4+14.33 27.24'LT

CURB RAMP TYPE 4A

STA 4C+39.95 56.86'LT
STA 4+13.87 64.00'LT

R40.0'

1214.85

2.0%

24.0'

CONCRETE CURB & GUTTER 30-INCH TYPE D

4+00

1215.26

1214.78

R15.0'

SEE SOD FLUMES AT CURB END DETAIL

1214.43

1.40%

1214.01

2.0%

0.5%

STA ~~3C+66.00~~
3C+55

4C+00

16.88'

17.12'

0.70%

1213.82

CONCORD AVENUE

1214.35

1214.59

STA 3+61.50 =
STA 50+00

1215.07

1214.59

1215.01

1214.53

SB CTH X

NB CTH X

4:1

1213.96

1214.12

0.49%

SEE SOD FLUMES AT CURB END DETAIL

CURB RAMP TYPE 4A

CONCRETE CURB & GUTTER 30-INCH TYPE D

R40.0'

STA 2+99.58 -64.00'LT
STA 4C+31.69 57.12'RT

1214.28

3+00

1214.76

24.0'

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | INTERSECTION DETAILS | SHEET 19 | E |
|---|---|---|---|---|---|

N

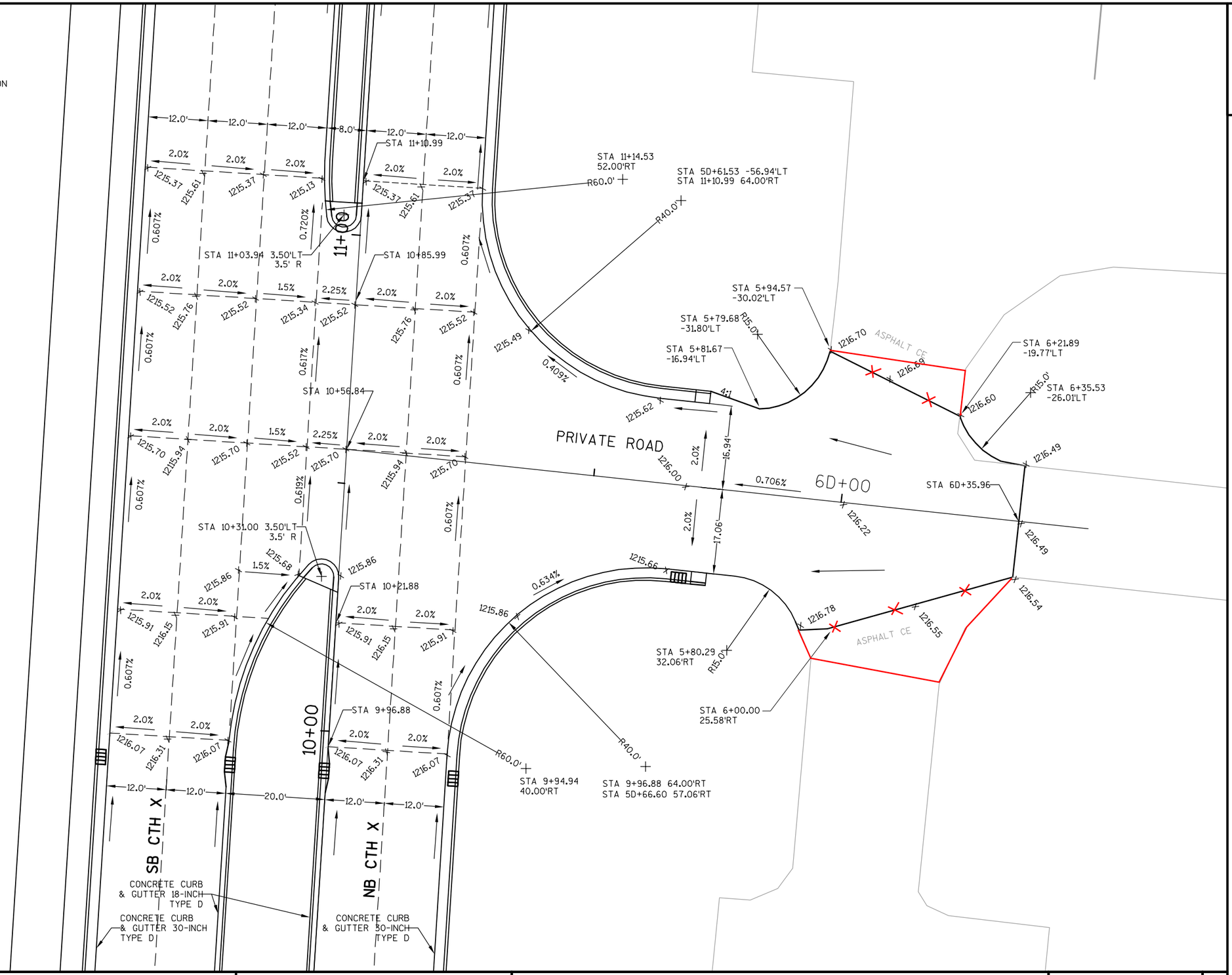
LEGEND

DRAINAGE FLOW DIRECTION

X 1213.82 FINISH PAVEMENT ELEVATION

DESIGN LANE LINE

NOTES:
SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | INTERSECTION DETAILS | SHEET 20 | E |
|---|---|---|---|---|---|

2

LEGEND

DRAINAGE FLOW DIRECTION

X 1213.82 FINISH PAVEMENT ELEVATION

DESIGN LANE LINE

NOTES:
SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.

N

EAU CLAIRE AVENUE

SB CTH X

NB CTH X

ASPHALT PARKING LOT

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

SEE CURB & GUTTER TRANSITION DETAIL

CONCRETE CURB & GUTTER 30-INCH TYPE D

CURB RAMP TYPE 2

CONCRETE CURB & GUTTER 18-INCH TYPE D

STA 4E+12.06 57.00'LT
STA 14+18.63 91.84'LT

STA 14+23.36
-68.1'LT

STA 14+19.20
11.76'LT
3.5' R

14+18.63
(1213.51)

14+00
(1213.66)

STA 14+29.97
43.70'RT

STA 14+01.45 35.16'RT

STA 13+68.14
(1213.81)

13+35.80
(1214.01)

STA 13+37.60 39.58'RT

STA 13+34.76 79.04'RT

STA 13+12.84 16.41'LT
3.5' R

13+04.89

PI STA 13+04.89 24.00'RT

STA 13+09.58
40.00'RT

STA 13+04.89 -84.00'LT
STA 4E+11.64 57.00'RT

STA 13+02.76
-72.00'LT

PI STA 12+99.47 51.00'LT

STA 3+92.81
16.01'RT

PI STA 12+62.84
20.00'LT

PI STA 12+62.84 12.00'LT

3E+20

4E+00

14+00

13+00

R60.0'

R40.0'

R15.0'

R54'

R20'

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | INTERSECTION DETAILS | SHEET 21 | E |
|---|---|---|---|---|---|

2

N

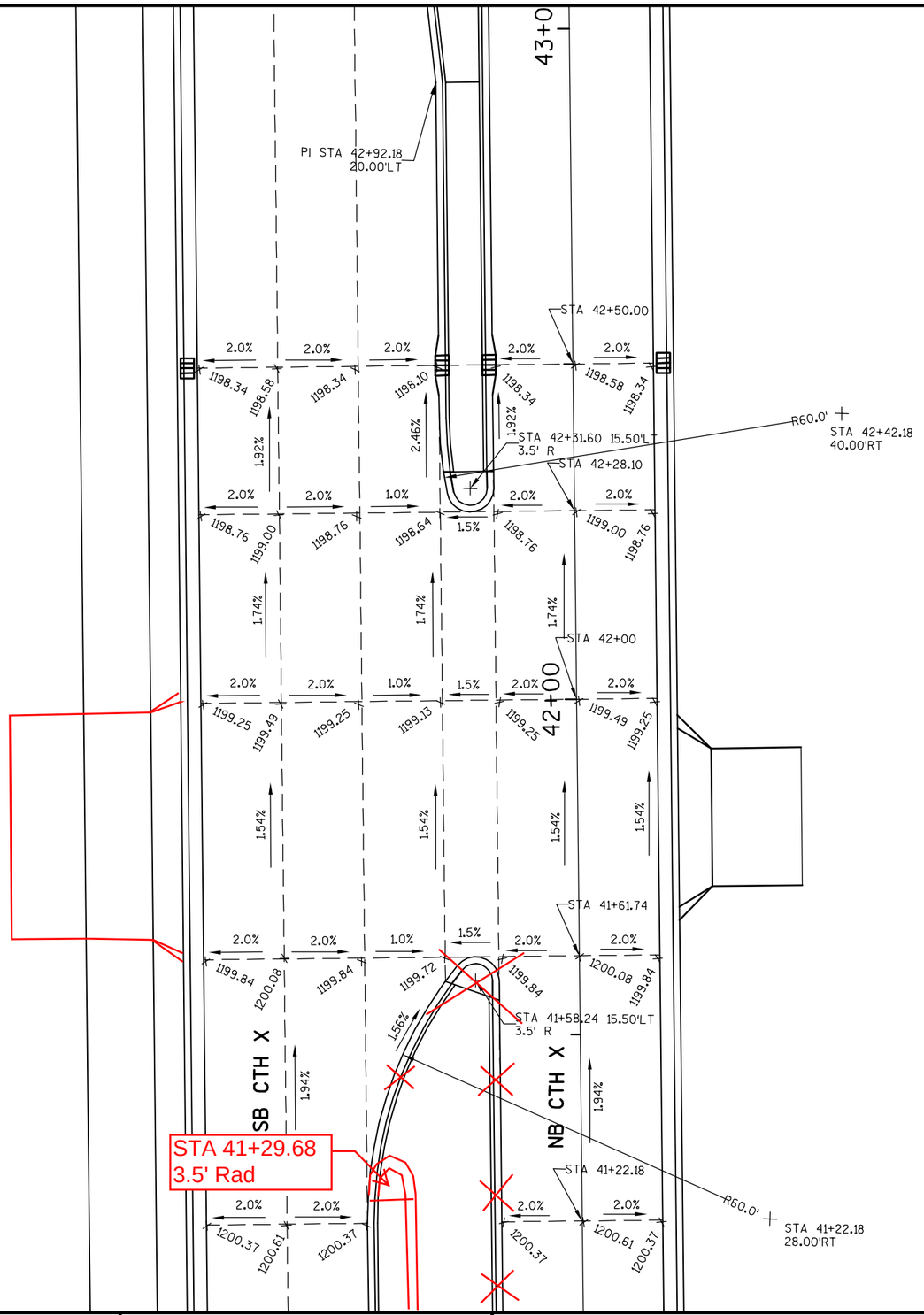
LEGEND

DRAINAGE FLOW DIRECTION

X 1213.82 FINISH PAVEMENT ELEVATION

DESIGN LANE LINE

NOTES:
SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | INTERSECTION DETAILS | SHEET 22 | E |
|---|---|---|---|---|---|

2

2

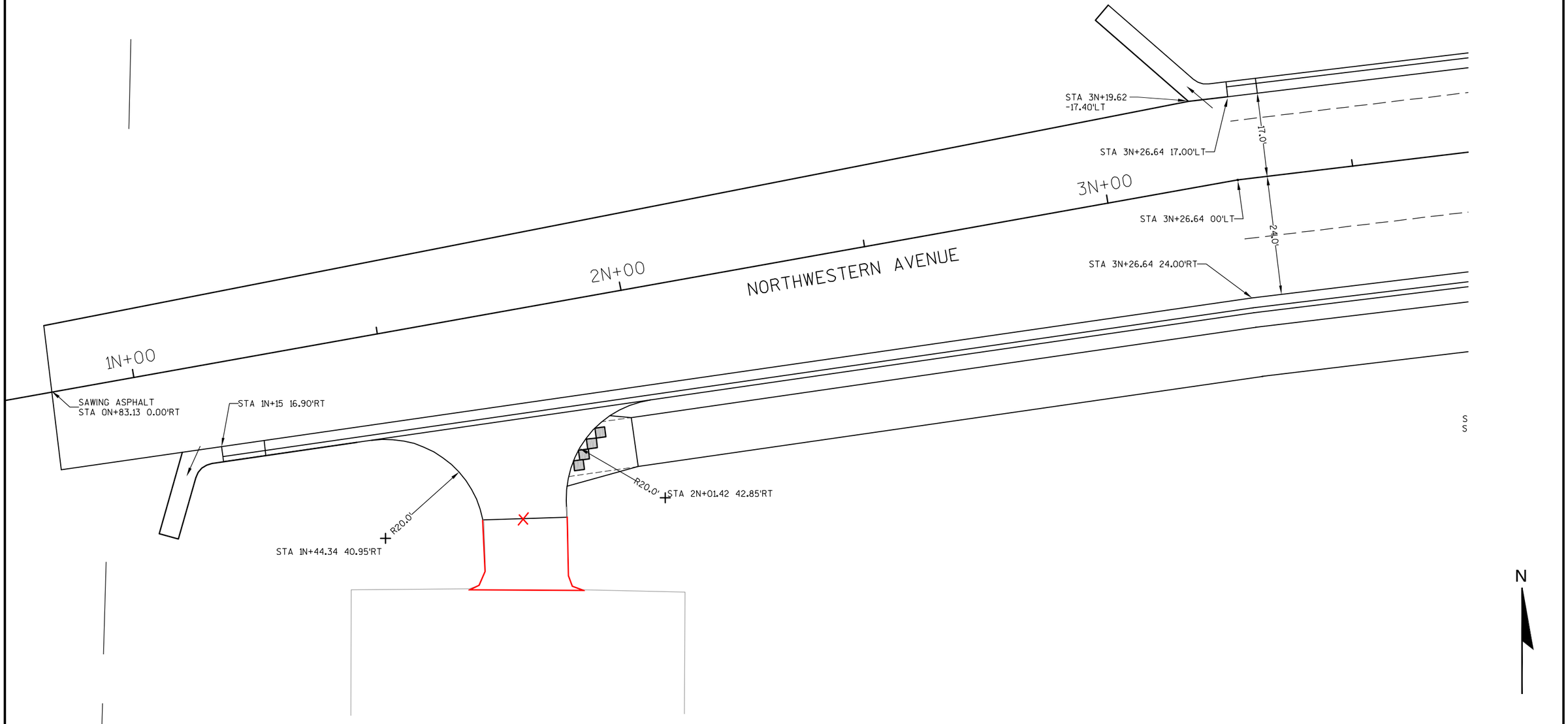
LEGEND

DRAINAGE FLOW DIRECTION

X 1213.82 FINISH PAVEMENT ELEVATION

DESIGN LANE LINE

NOTES:
SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | INTERSECTION DETAILS | SHEET 23 | E |
|---|---|---|---|---|---|

2

CONCRETE CURB & GUTTER18-INCH TYPE D

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

STA 60+30.16 -72.00'LT R60.0'

STA 60+29.90

STA 60+32.85 40.00'RT R60.0'

STA 5N+52.23 57.00'LT STA 60+29.90 52.00'RT

STA 6N+59.60 51.00'LT R40'

STA 5N+74.26 50.00'LT R50'

STA 5N+81.16 42.93'LT R60'

STA 4N+09.01 57.00'LT STA 60+24.91 96.00'LT R40.0'

FUTURE CURB RAMP TYPE 2

STA 60+24.13 15.82'LT 3.5' R

STA 60+04.90

60+00

STA 6N+30.43 28.72'RT R15.0'

6N+00

NORTHWESTERN AVENUE

4N+00

5N+00

LAHR DRIVE

SB CTH X

NB CTH X

STA 59+72.69

STA 59+40.90

STA 59+17.86 28.27'LT 3.5' R

STA 59+15.90

ASPHALT PARKING LOT

ASPHALT OE

HP 1186.34

R40.0'

STA 5N+81.99 57.07'RT

CURB RAMP TYPE 1

STA 59+03.29 97.50'LT STA 3N+96.40 64.00RLT

STA 59+08.55 -84.00'LT R24.0' R40.0' R60.0'

STA 59+03.43 96.00'LT STA 3N+97.90 64.00'RT

STA 59+12.80 28.00'RT R60.0'

STA 59+15.90 52.00'RT STA 5N+51.77 57.00'RT

STA 58+95 LP

STA 58+70 VPC

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

CONCRETE CURB & GUTTER18-INCH TYPE D

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

## LEGEND

| | |
|---|---|
| ← | DRAINAGE FLOW DIRECTION |
| X 1213.82 | FINISH PAVEMENT ELEVATION |
| ------- | DESIGN LANE LINE |

NOTES:
SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.

N

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | INTERSECTION DETAILS | SHEET 24 | E |
|---|---|---|---|---|---|

2

## LEGEND

- INLET PROTECTION
- SILT FENCE
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- EROSION MAT

E-MAT

E-MAT

E-MAT

E-MAT

SLOPE INTERCEPT

SLOPE INTERCEPT

CTH X

CTH X

0+00 1+00 2+00 3+00 4+00 5+00

4+00

4.5' WIDE TYPICAL

MATCH LINE STA 5+50

TLE

R/W

SS

REGRADE DETENTION BASIN

1212

1214

HIGHWAY EASEMENT

RR

100'

CN

CN RAILROAD

PLE

6+00 7+00 8+00 9+00 10+00 11+00

MATCH LINE STA 5+50

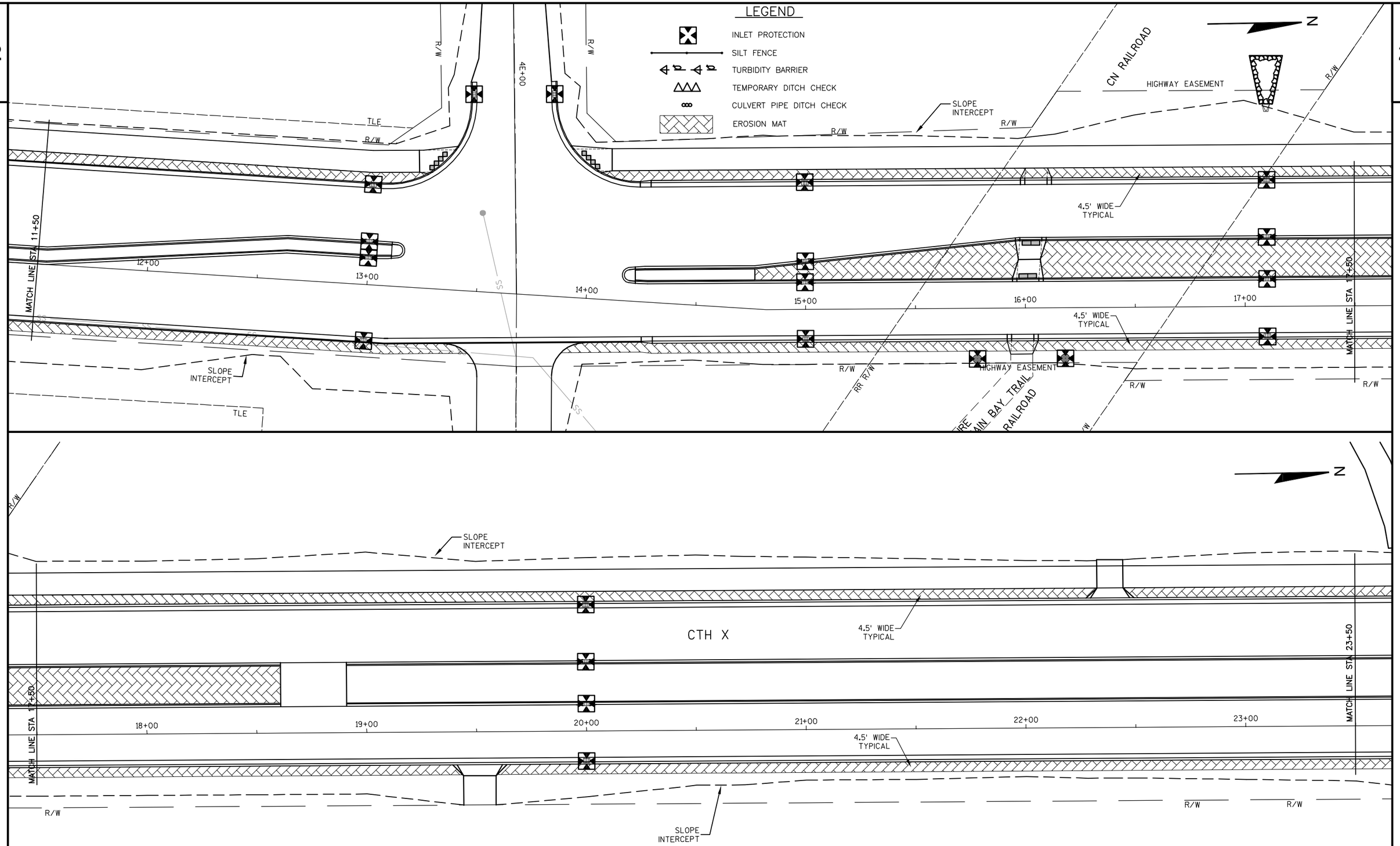
MATCH LINE STA 11+50

4.5' WIDE TYPICAL

SLOPE INTERCEPT

SLOPE INTERCEPT

| PROJECT NO: | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 25 | E |
|---|---|---|---|---|---|




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 26 | E |
|---|---|---|---|---|---|

2

2

SLOPE INTERCEPT

R/W

E-MAT

N

4.5' WIDE TYPICAL

MATCH LINE STA 23+50

24+00

25+00

26+00

CTH X

27+00

28+00

29+00

MATCH LINE STA 29+50

SLOPE INTERCEPT

R/W

R/W

TLE

## LEGEND

- INLET PROTECTION
- SILT FENCE
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- EROSION MAT

1200 1199 1198 1197 1196 1195 1194 1193

N

E-MAT

SLOPE INTERCEPT

E-MAT

4.5' WIDE TYPICAL

MATCH LINE STA 29+50

30+00

31+00

CTH X

32+00

33+00

34+00

35+00

MATCH LINE STA 35+50

R/W

R/W

SLOPE INTERCEPT

R/W

R/W

TLE

TLE

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 27 | E |
|---|---|---|---|---|---|

2

E-MAT

SLOPE INTERCEPT

E-MAT

R/W

R/W

N

4.5' WIDE TYPICAL

MATCH LINE STA 35+50

36+00

37+00

38+00

CTH X

39+00

40+00

41+00

MATCH LINE STA 41+50

SLOPE INTERCEPT

R/W

R/W

## LEGEND

- INLET PROTECTION
- SILT FENCE
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- EROSION MAT

R/W

R/W

SEE SNAKE/TURTLE TURN-AROUND DETAIL

R/W

N

SLOPE INTERCEPT

E-MAT

MATCH LINE STA 41+50

4.5' WIDE TYPICAL

MATCH LINE STA 47+50

42+00

43+00

CTH X

44+00

45+00

46+00

47+00

SLOPE INTERCEPT

R/W

SEE SNAKE/TURTLE TURN-AROUND DETAIL

R/W

R/W

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 28 | E |
|---|---|---|---|---|---|

2

2

LEGEND

- INLET PROTECTION
- SILT FENCE
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- EROSION MAT

N

R/W

R/W

PL

SLOPE INTERCEPT

E-MAT

4.5' WIDE TYPICAL

CTH X

MATCH LINE STA 47+50

MATCH LINE STA 53+50

48+00 49+00 50+00 51+00 52+00 53+00

CTH X

4.5' WIDE TYPICAL

SLOPE INTERCEPT

R/W

R/W

R/W

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 29 | E |
|---|---|---|---|---|---|

2

2

LEGEND

INLET PROTECTION

SILT FENCE

TURBIDITY BARRIER

TEMPORARY DITCH CHECK

CULVERT PIPE DITCH CHECK

EROSION MAT

N

Turb. Barrier - Stage 3

Turb. Barrier - Stage 1

Turb. Barrier - Stage 2

E-MAT

E-MAT

E-MAT

RIP RAP

RIP RAP

SEE SNAKE/TURTLE TURN-AROUND DETAIL

SEE SNAKE/TURTLE TURN-AROUND DETAIL

SEE SNAKE/TURTLE TURN-AROUND DETAIL

SEE SNAKE/TURTLE TURN-AROUND DETAIL

SLOPE INTERCEPT

SLOPE INTERCEPT

EAU CLAIRE RIVER

CTH X

R/W

R/W

R/W

R/W

R/W

R/W

TLE

PL

4.5' WIDE TYPICAL

MATCH LINE STA 53+50

MATCH LINE STA 59+50

54+00

55+00

56+00

57+00

58+00

59+00

**BEGIN PROJECT 6676-03-73**
**STA 54+20**
**BEGIN NET EXCEPTION TO C/L LENGTH**
**PROJECT 6999-13-70**

**END PROJECT 6676-03-73**
**STA 57+25**
**END NET EXCEPTION TO C/L LENGTH**
**PROJECT 6999-13-70**

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 30 | E |
|---|---|---|---|---|---|

2

2

N

LEGEND

INLET PROTECTION

SILT FENCE

TURBIDITY BARRIER

TEMPORARY DITCH CHECK

CULVERT PIPE DITCH CHECK

EROSION MAT

3N+00

4N+00

5N+00

R/W

R/W

SEE SNAKE/TURTLE TURN-AROUND DETAIL

SLOPE INTERCEPT

E-MAT

E-MAT

E-MAT

4.5' WIDE TYPICAL

MATCH LINE STA 59+50

MATCH LINE STA 65+50

60+00

61+00

CTH X

62+00

63+00

64+00

65+00

SLOPE INTERCEPT

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 31 | E |
|---|---|---|---|---|---|

2

2

R/W

N

## LEGEND

- INLET PROTECTION
- SILT FENCE
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- EROSION MAT

SEE SNAKE/TURTLE TURN-AROUND DETAIL

SLOPE INTERCEPT

4.5' WIDE TYPICAL

SEE SNAKE/TURTLE TURN-AROUND DETAIL

MATCH LINE STA 65+50

MATCH LINE STA 71+50

66+00 67+00 CTH X 68+00 69+00 70+00 71+00

4.5' WIDE TYPICAL

SLOPE INTERCEPT

SEE SNAKE/TURTLE TURN-AROUND DETAIL

R/W

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 32 | E |
|---|---|---|---|---|---|

2

2

R/W

R/W

## LEGEND

N

- INLET PROTECTION
- SILT FENCE
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- EROSION MAT

RIP RAP

SLOPE INTERCEPT

SEE SNAKE/TURTLE TURN-AROUND DETAIL

MATCH LINE STA 71+50

CTH X

72+00

73+00

74+00

75+00

4.5' WIDE TYPICAL

76+00

CTH X

77+00

MATCH LINE

SLOPE INTERCEPT

R/W

R/W

R/W

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 33 | E |
|---|---|---|---|---|---|

2

2

R/W

N

## LEGEND

- INLET PROTECTION
- SILT FENCE
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- EROSION MAT

SEE SNAKE/TURTLE TURN-AROUND DETAIL

SLOPE INTERCEPT

CREEK

MATCH LINE STA 77+30

4.5' WIDE TYPICAL

78+00

CTH X

79+00

80+00

EOP STA 80+45.14

SEE SNAKE/TURTLE TURN-AROUND DETAIL

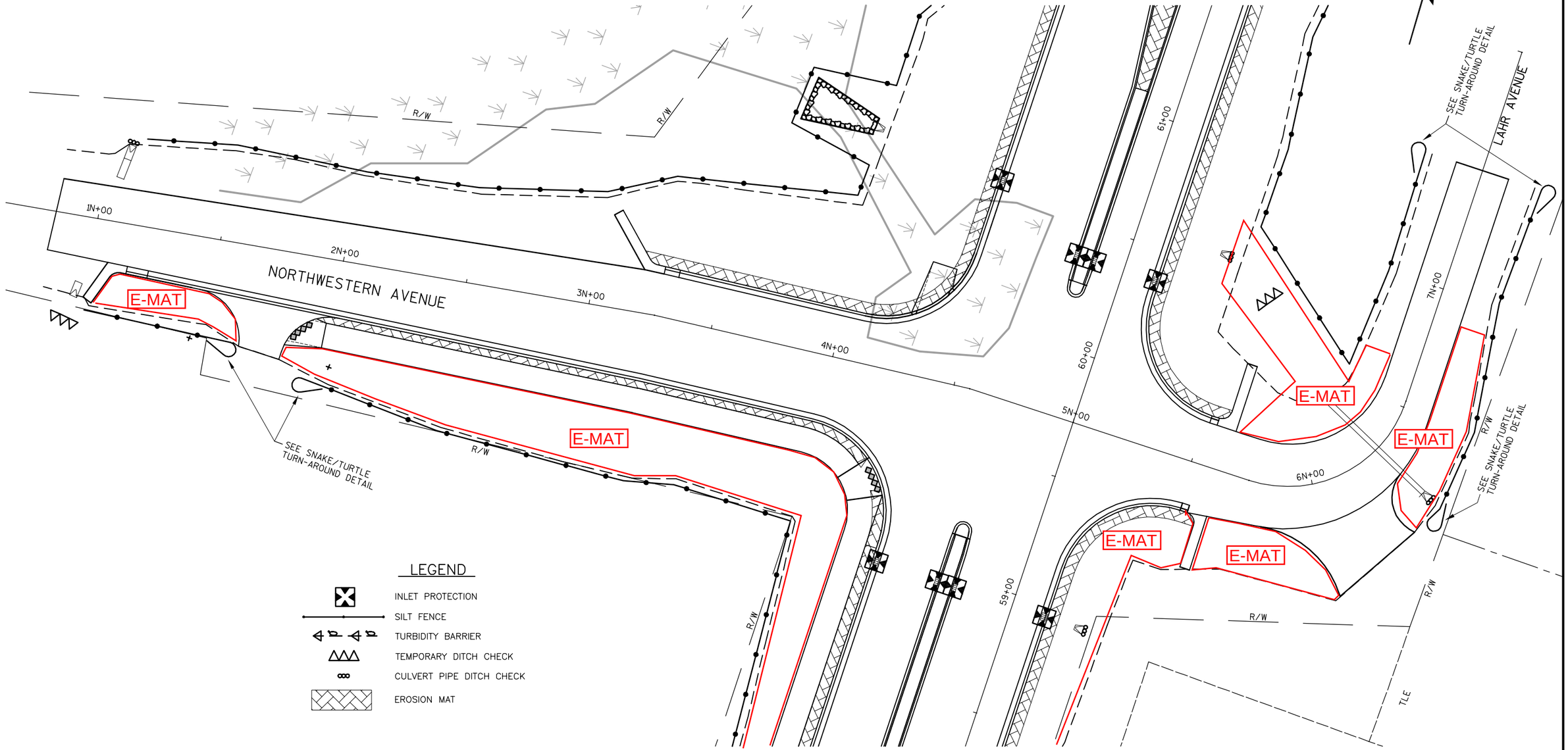
SLOPE INTERCEPT

SEE SNAKE/TURTLE TURN-AROUND DETAIL

R/W

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 34 | E |
|---|---|---|---|---|---|

2




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EROSION CONTROL PLAN | SHEET 35 | E |
|---|---|---|---|---|---|

2

N

CTH X

REMOVING STORM SEWER

REMOVING CATCH BASINS

1A STA 1+00 25.5' LT
3H INLET, MODIFIED 2

PAUL'S PAINT CENTER

TLE

R/W

TO REMAIN 12"SS

REMOVING INLETS

0+00

1+00

2+00

3+00

4+00

INLET TO REMAIN

12"

8" SAN

72" SS TO REMAIN

CURB BOX

ADJUST MH COVER

REMOVING STORM SEWER

REMOVING CATCH BASINS

1 STA 1+00 25.5' RT
3H INLET, MODIFIED 2

**BEGIN PROJECT 6999-13-70**
**STA 0+00**
Y=185019.325
X=296185.356

G & B PRODUCTS

ROBERT LOESEL

2A STA 4+20 25.5' LT
3H INLET, MODIFIED 2

LANDSCAPING

REMOVING CATCH BASINS

6" SEPTIC

TO REMAIN 18"SS

MANHOLE TO REMAIN

RECONSTRUCT MH

REMOVING STORM SEWER

15"

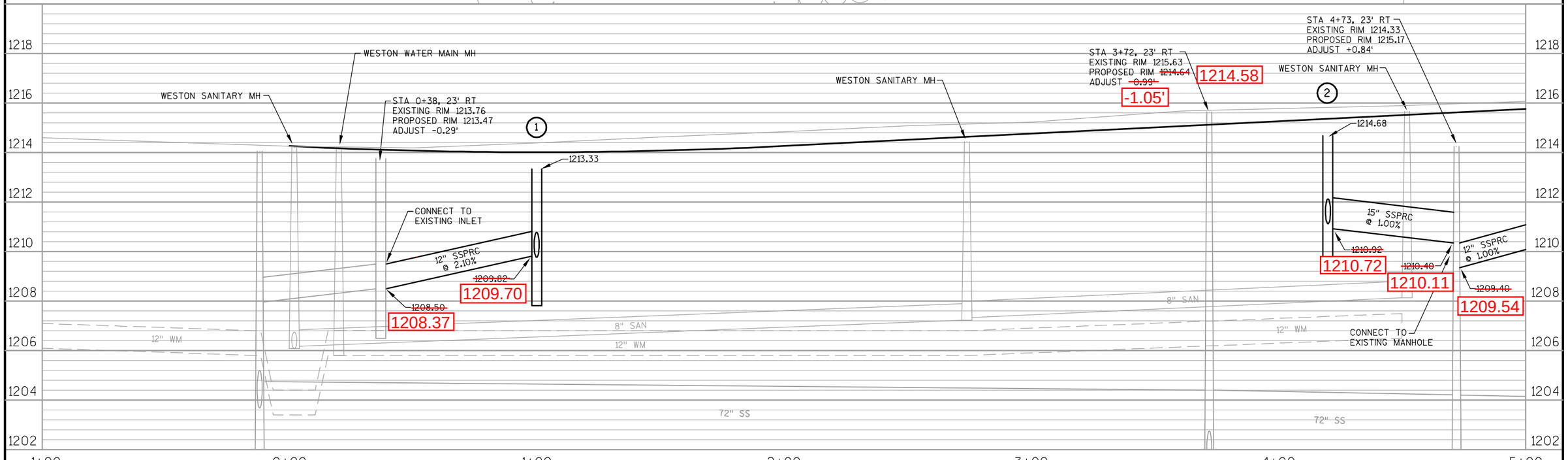
2 STA 4+20 25.5' RT
3H INLET, MODIFIED 2

MANHOLE TO REMAIN

NEW MH J-COVER

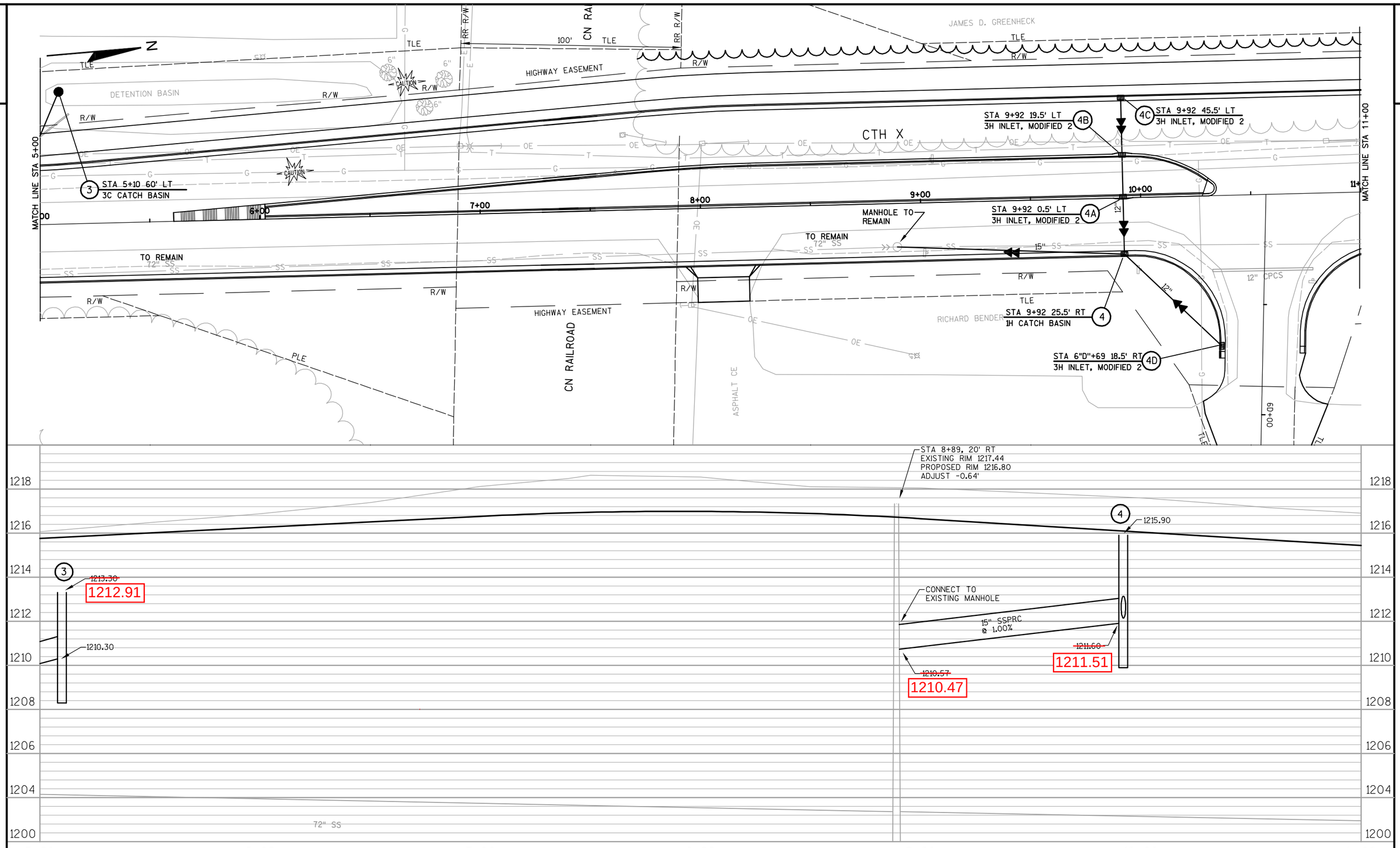
MATCH LINE STA 5+00

GRAVEL




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 36 | E |
|---|---|---|---|---|---|

2




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 37 | E |
|---|---|---|---|---|---|

2

N

JAMES D. GREENHECK

STA 4"E"+03 18.5' RT
3H INLET, MODIFIED 2
5D

STA 13+00 45.5' LT
3H INLET, MODIFIED 2
5C

STA 13+00 19.5' LT
3H INLET, MODIFIED 2
5B

STA 13+00 12.5' LT
3H INLET, MODIFIED 2
5A

STA 13+00 25.5' RT
1H CATCH BASIN
5

STA 4"E"+03 18.5' LT
3H INLET, MODIFIED 2
5E

GUY ANCHORS

CHESTER J. CHEREK
MARY J. CHEREK

SEPTIC VENT

STA 15+00 57.5' LT
3HM INLET, MODIFIED 2
6C

STA 15+00 22' LT
3H INLET, MODIFIED 2
6B

STA 15+00 13.5' LT
3H INLET, MODIFIED 2
6A

STA 15+00 13.5' RT
1HM CATCH BASIN
6

STA 15+78 23' RT
3C CATCH BASIN
6D

STA 16+18 23' RT
3C CATCH BASIN
6E

CN RAILROAD

HIGHWAY EASEMENT

EXISTING MANHOLE
NEW MANHOLE COVER TYPE J

REMOVING CATCH BASINS

REMOVING STORM SEWER

MANHOLE TO REMAIN

REMOVING CATCH BASIN
STA 13+70, 28' RT

TO REMAIN

MATCH LINE STA 11+00

MATCH LINE STA 17+00

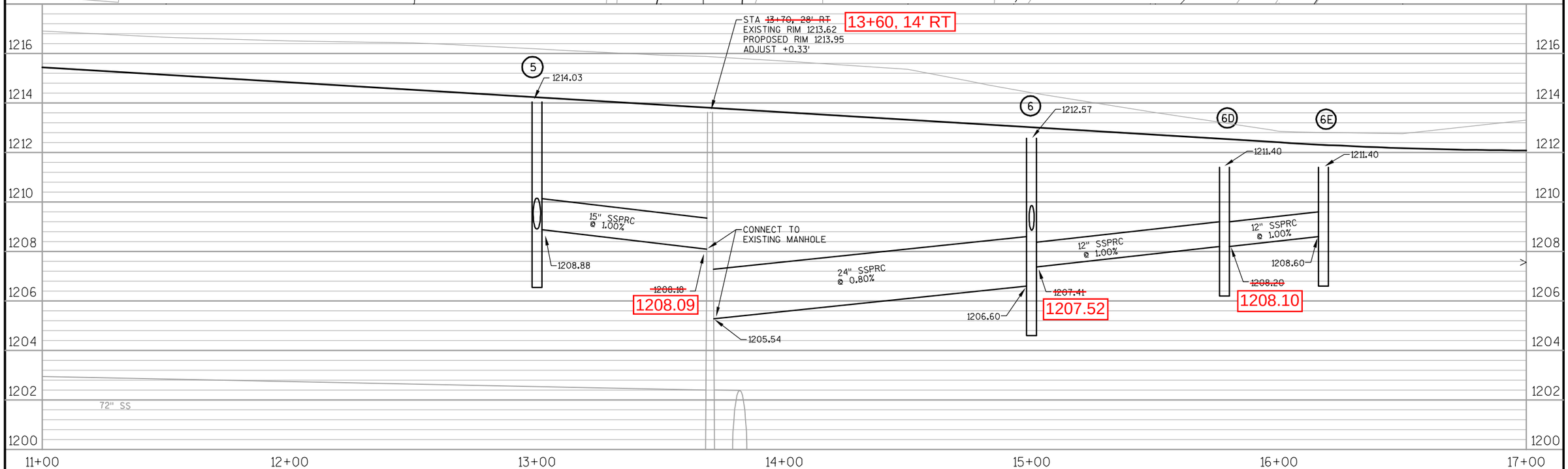
RICHARD BENDER

ARVILLA BENDER

ASPHALT CE

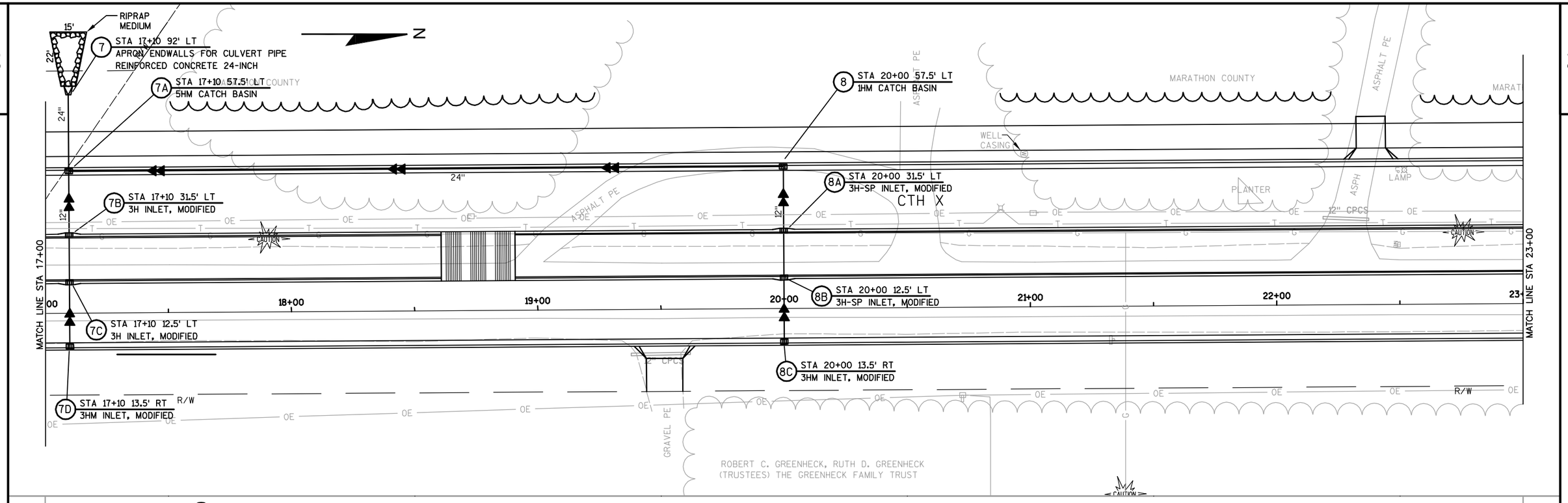
FUTURE MOUNTAIN BAY TRAIL
CN RAILROAD

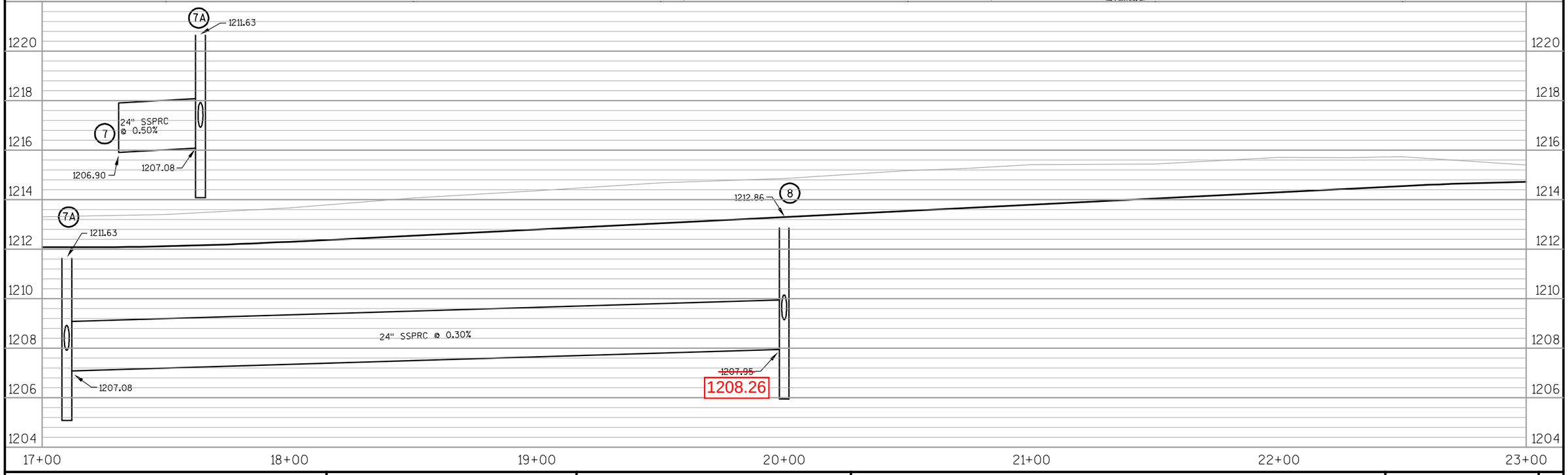
12+00 13+00 14+00 15+00 16+00 17+00




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 38 | E |
|---|---|---|---|---|---|

2




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 39 | E |
|---|---|---|---|---|---|

2

N

ASPHALT PE

IVAN FRY

GRAVEL PE

LORENE K. ZILISCH

R/W

MARATHON COUNTY

STA 25+90 57.5' LT
1HM CATCH BASIN (9)

STA 25+90 31.5' LT
3H-SP INLET, MODIFIED (9A)

STA 25+90 12.5' LT
3H-SP INLET, MODIFIED (9B)

STA 25+90 13.5' RT
3HM INLET, MODIFIED (9C)

LAMP

ASPH

12" CPCS

15" CPCS

24"

PLANTER

POST

TRACTOR

CAUTION

MATCH LINE STA 23+00

MATCH LINE STA 29+00

24+00

25+00

26+00

CTH X

27+00

28+00

OE

MARVIN DRAKE

TLE

ROBERT C. GREENHECK, RUTH D. GREE
(TRUSTEES) THE GREENHECK FAMILY TI

1214
1212
1210
1208
1206
1204
1202
1200
1198

9

1211.80

~~1207.09~~

1207.30

24" SSPRC @ -2.24%

23+00 24+00 25+00 26+00 27+00 28+00 29+00

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 40 | E |
|---|---|---|---|---|---|

2

N

MARATHON COUNTY

STA 31+82 103' LT (11)
APRON ENDWALLS FOR CULVERT PIPE
REINFORCED CONCRETE 24-INCH

RIPRAP MEDIUM

RIPRAP MEDIUM

12"
MARATHON COUNTY

(10) STA 29+36 57.5' LT
1HM CATCH BASIN

STA 31+50 57.5' LT (11A)
5HM CATCH BASIN

STA 33+25 101' LT (12)
APRON ENDWALLS FOR CULVERT PIPE
REINFORCED CONCRETE 24-INCH

(12E) STA 33+25 57.5' LT
5HM CATCH BASIN

(14) STA 34+24 111' LT
APRON ENDWALLS FOR CULVERT PIPE
REINFORCED CONCRETE 12-INCH

(10A) STA 29+36 31.5' LT
3H-SP INLET, MODIFIED

(11B) STA 31+50 31.5' LT
3H-SP INLET, MODIFIED

STA 33+15 57.5' LT (12A)
3HM INLET MODIFIED

(12F) STA 33+25 31.5' LT
3H-SP INLET, MODIFIED

STA 33+15 31.5' LT (12B)
3H-SP INLET, MODIFIED

15"

(10B) STA 29+36 12.5' LT
3H-SP INLET, MODIFIED

CTH X

STA 33+15 12.5' LT (12C)
3H-SP INLET, MODIFIED

(12G) STA 33+25 12.5' LT
3H-SP INLET, MODIFIED

(11C) STA 31+50 12.5' LT
3H-SP INLET, MODIFIED

(10C) STA 29+36 13.5' RT
3HM INLET, MODIFIED

STA 33+15 13.5' RT (12D)
3HM INLET, MODIFIED

(11D) STA 31+50 13.5' RT
3HM INLET, MODIFIED

STA 33+25 13.5' RT (12H)
3HM INLET, MODIFIED

MATCH LINE STA 29+00

MATCH LINE STA 35+00

29+00 30+00 31+00 32+00 33+00 34+00 35+00

18" CPCS

GRAVEL PE

ASPHALT PE

SCOTT L. & MARY R. TURNER

SCOTT L. & MARY R. TURNER

R/W R/W

TLE TLE

CAUTION

1206 1204 1202 1200 1198 1196 1194 1192 1190

(10) 1204.06

1199.69

1199.35

1199.68

24" SSPRC @ -1.93%

(11A) 1199.85

1208.09

24" SSPRC @ -1.00%

(11) 1195.21

1195.36

1194.65

1194.75

(12E) 1198.80

(12) 24" SSPRC @ 0.50%

1194.40

1194.84

1194.62

1194.84

(14) 1197.00

1196.94

12" SSPRC @ -0.50%

24" SSPRC @ 0.30%

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 41 | E |
|---|---|---|---|---|---|

2

N

MARATHON COUNTY

GRAVEL PE

MARATHON COUNTY

R/W

12"

12"

12"

13A STA 35+50 57.5' LT
1HM CATCH BASIN

15 STA 36+50 57.5' LT
1HM CATCH BASIN

16 STA 39+00 57.5' LT
1HM CATCH BASIN

13B STA 35+50 31.5' LT
3H-SP INLET, MODIFIED

13C STA 35+50 12.5' LT
3H-SP INLET, MODIFIED

13D STA 35+50 13.5' RT
3HM INLET, MODIFIED

CAUTION

MATCH LINE STA 35+00

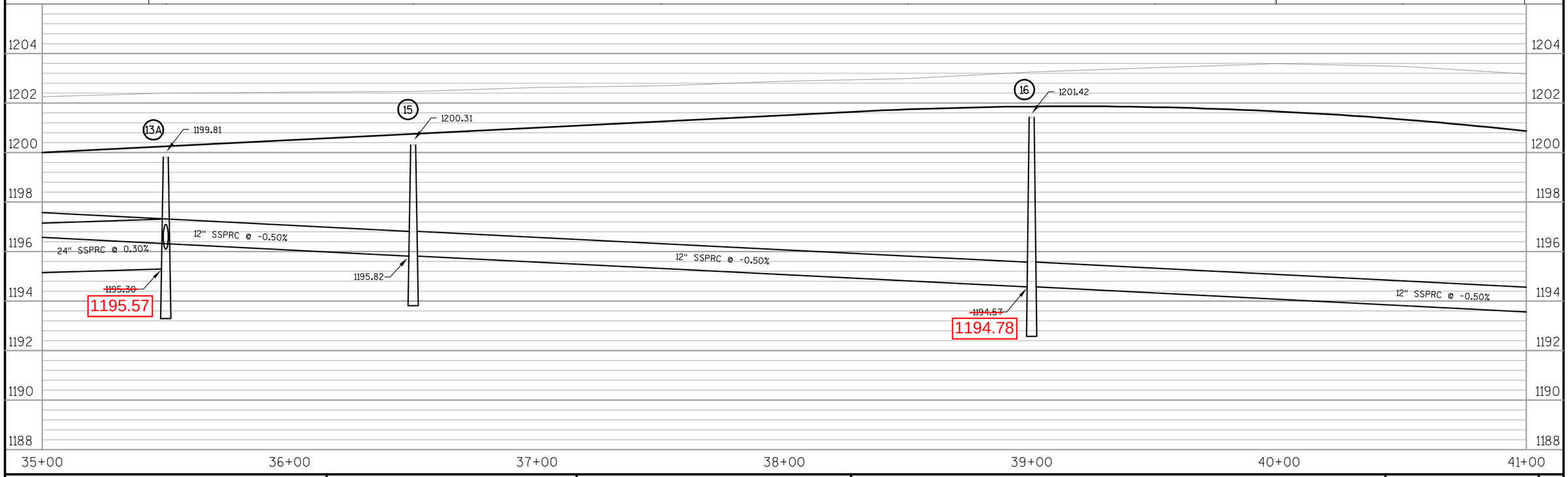
MATCH LINE STA 41+00

00 36+00 37+00 38+00 CTH X 39+00 40+00 41+

OE R/W OE OE OE OE OE OE OE OE OE OE OE OE R/W OE

ROBERT C. GREENHECK, RUTH D. GREENHECK
(TRUSTEES) THE GREENHECK FAMILY TRUST

MARATHON DISTRICT OF SAMOSET COUNCIL
BOY SCOUTS OF AMERICA




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 42 | E |
|---|---|---|---|---|---|

2

N

FRED DEHNEL

R/W

STA 42+50 57.5' LT
1HM CATCH BASIN (17)

STA 44+60 57.5' LT
1HM CATCH BASIN (18)

12"

24"

STA 42+50 19.5' LT
3H INLET, MODIFIED (17A)

CAUTION

STA 44+60 31.5' LT
3HM INLET, MODIFIED (18A)

MATCH LINE STA 41+00

MATCH LINE STA 46+00

CTH X

42+00

43+00

44+00

45+00

STA 42+50 12.5' LT
3H INLET, MODIFIED (17B)

STA 44+60 12.5' LT
3HM INLET, MODIFIED (18B)

STA 42+50 13.5' RT
3HM INLET, MODIFIED (17C)

STA 44+60 13.5' RT
3HM INLET, MODIFIED (18C)

R/W

MARATHON DISTRICT OF SAMOSET COUNCIL
BOY SCOUTS OF AMERICA

MARATHON DISTRICT OF SAMOSET COUNCIL
BOY SCOUTS OF AMERICA

1198.14 (17)

1192.82

1191.85

24" SSPRC @ -1.80%

1192.78 (18)

~~1188.07~~ 1188.18

1188.14

1187.66

24" SSPRC @ -2.74%

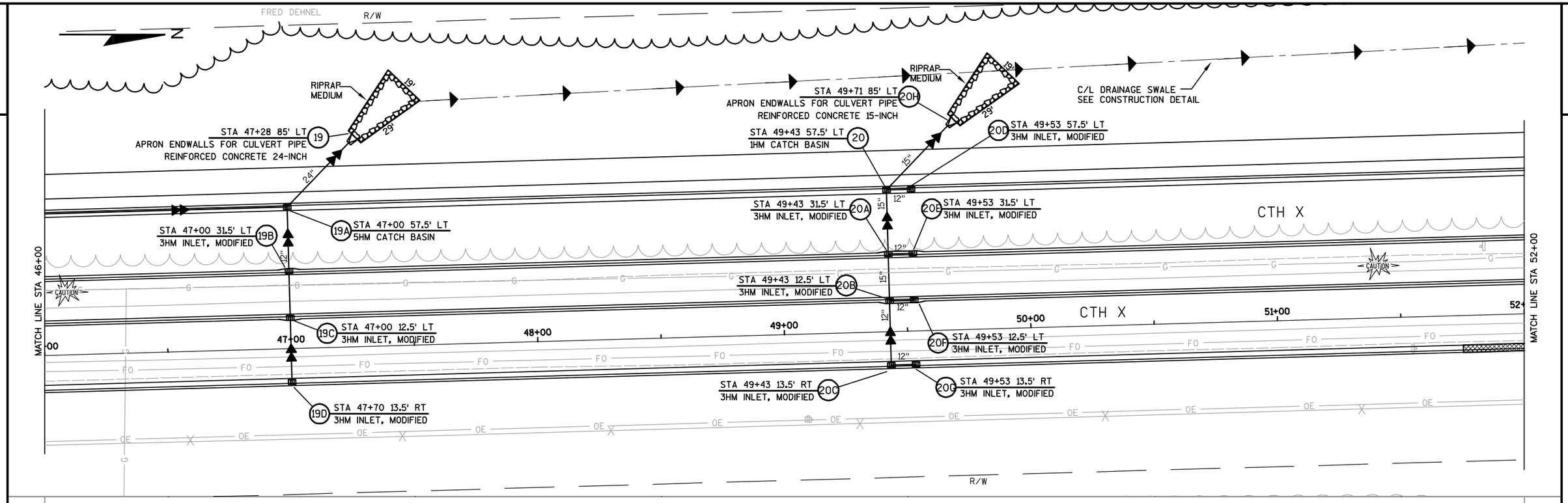
24" SSPRC @ -2.74%

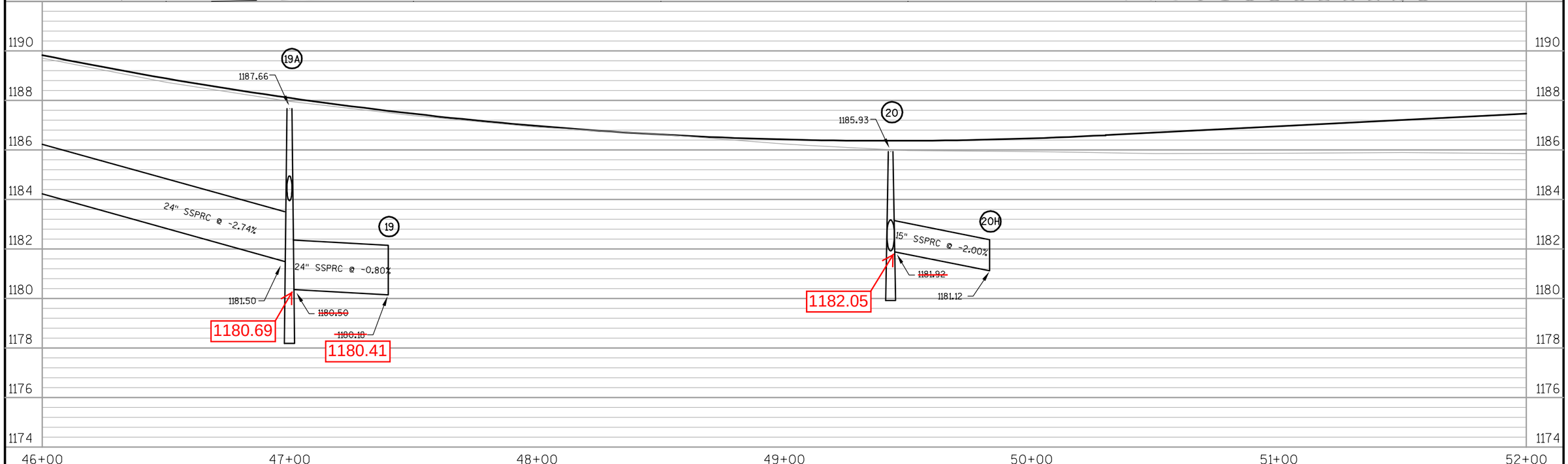
1198 1196 1194 1192 1190 1188 1186 1184 1182

41+00 42+00 43+00 44+00 45+00 46+00 47+00

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 43 | E |
|---|---|---|---|---|---|

2




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 44 | E |
|---|---|---|---|---|---|

2

N

EAU CLAIRE RIVER

R/W

MATCH LINE STA 53+00

MATCH LINE STA 59+00

CTH X

54+00

55+00

56+00

57+00

58+00

21 STA 57+29 57.5' LT
1HM CATCH BASIN

STA 58+95 57.5' LT 22
1HM CATCH BASIN

21A STA 57+29 31.5' LT
3H INLET, MODIFIED

STA 58+95 31.5' LT 22A
3H INLET, MODIFIED

21B STA 57+29 24.5' LT
3H INLET, MODIFIED

STA 58+95 24.5' LT 22B
3H INLET, MODIFIED

21C STA 57+29 13.5' RT
3HM INLET, MODIFIED

STA 58+95 13.5' RT 22C
3HM INLET, MODIFIED

STA 58+95 30' RT 22D
APRON ENDWALLS FOR CULVERT PIPE
REINFORCED CONCRETE 12-INCH

JAMES IOZZO

IOZZO'S

TLE

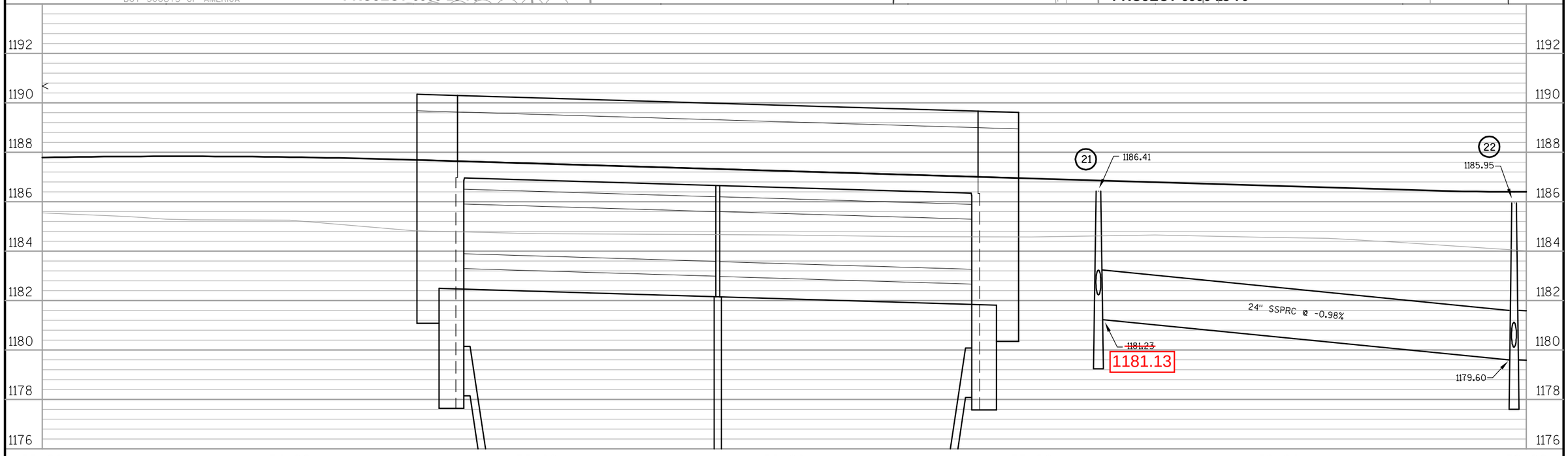
ASPHALT PE

CAUTION

MARATHON DISTRICT OF SAMOSET COUNCIL
BOY SCOUTS OF AMERICA

**BEGIN PROJECT 6676-03-73**
**STA 54+20**
**BEGIN NET EXCEPTION TO C/L LENGTH**
**PROJECT 6999-13-70**

**END PROJECT 6676-03-73**
**STA 57+25**
**END NET EXCEPTION TO C/L LENGTH**
**PROJECT 6999-13-70**




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 45 | E |
|---|---|---|---|---|---|

2

N

RIPRAP MEDIUM

20'

29'

36"

23 STA 60+61 112' LT
APRON ENDWALLS FOR CULVERT PIPE
REINFORCED CONCRETE 36-INCH

23A STA 60+56 57.5' LT
5HM CATCH BASIN

23B STA 60+56, 38.5' RT
APRON ENDWALLS FOR CULVERT PIPE
REINFORCED CONCRETE 36-INCH

23C STA 60+37 19.5' LT
3H INLET, MODIFIED

23D STA 60+37 12.5' LT
3H INLET, MODIFIED

23E STA 60+37 13.5' RT
3HM INLET, MODIFIED

82'

STA 62+30 ~~32'~~ LT 24
APRON ENDWALLS FOR CULVERT PIPE
REINFORCED CONCRETE 24-INCH

RIPRAP MEDIUM

15"

22'

24" CPRC

24A STA 62+40 57.5' LT
5HM CATCH BASIN

24B STA 62+40 31.5' LT
3H INLET, MODIFIED

24C STA 62+40 12.5' LT
3H INLET, MODIFIED

24D STA 62+36 13.5' RT
3HM INLET, MODIFIED

25 STA 64+75 57.5' LT
1HM CATCH BASIN

25A STA 64+75 31.5' LT
3H INLET, MODIFIED

25B STA 64+75 12.5' LT
3H INLET, MODIFIED

25C STA 64+75 13.5' RT
3HM INLET, MODIFIED

CTH X

MATCH LINE STA 59+00

MATCH LINE STA 65+00

59+00 60+00 61+00 62+00 63+00 64+00 65+00

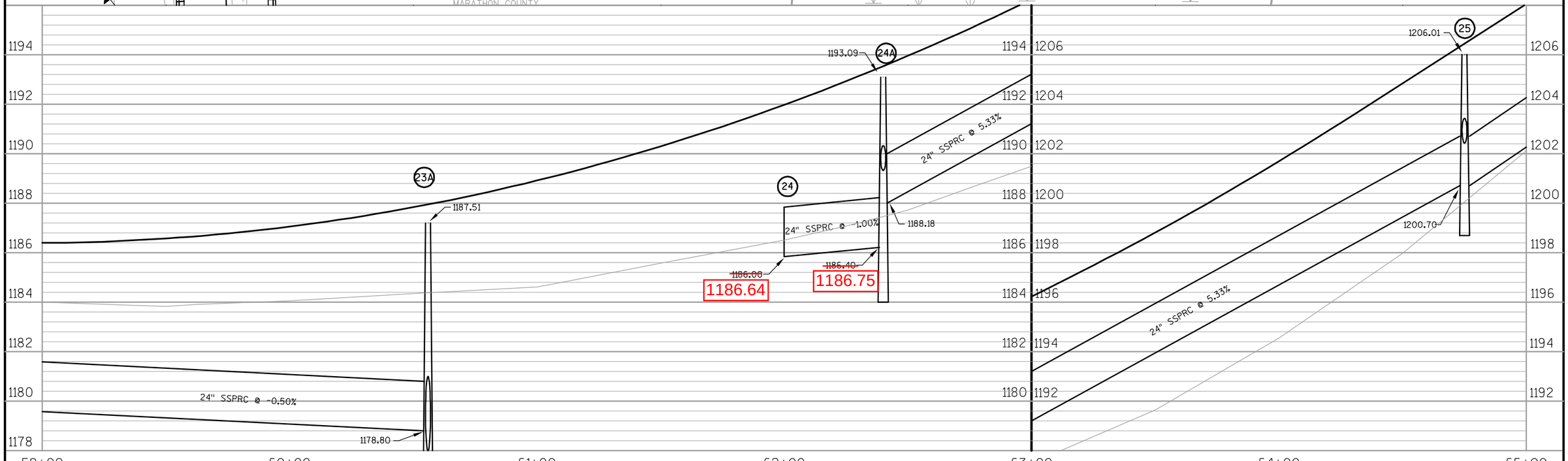
4N+00 5N+00

24" CPCS

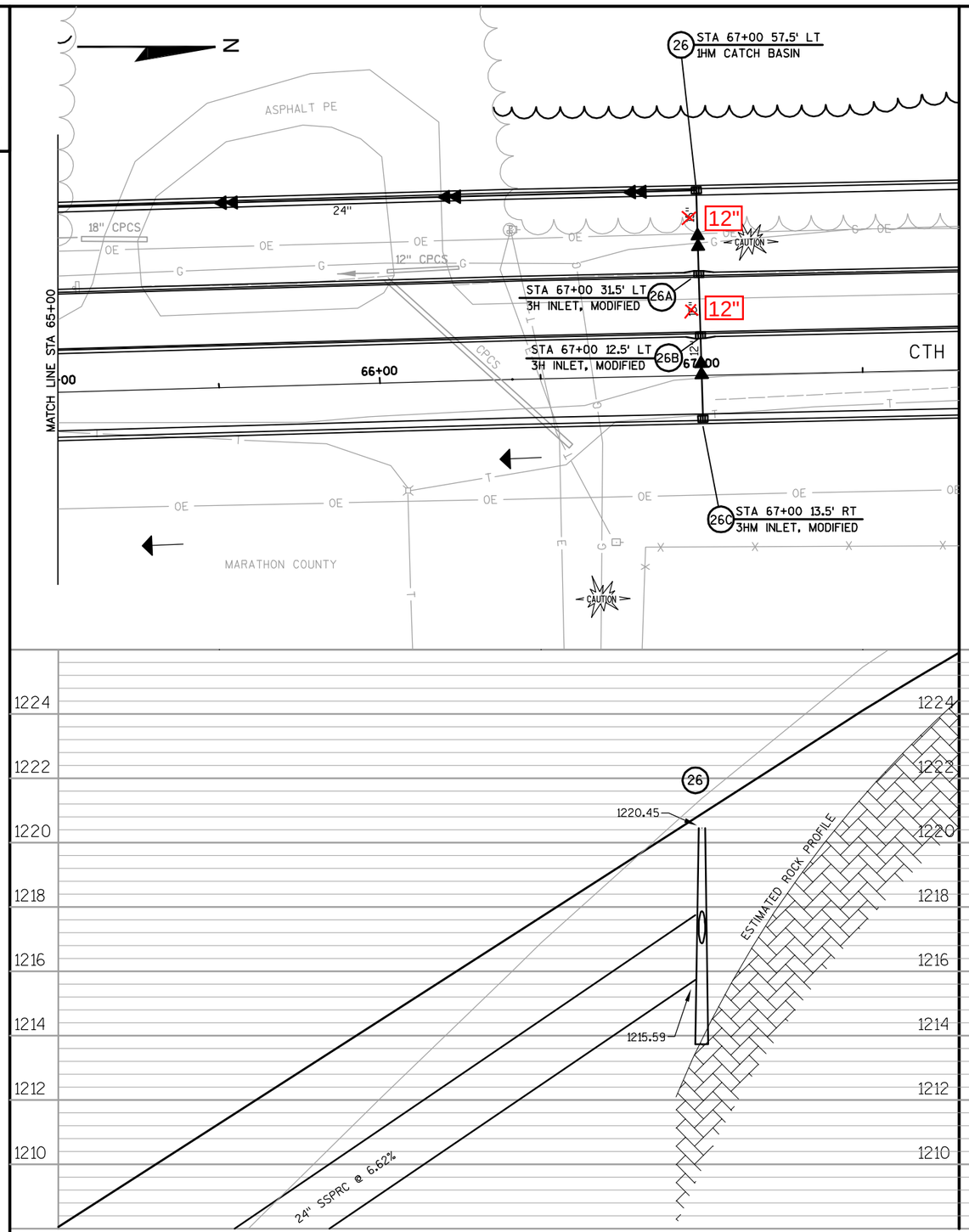
GRAVEL FE

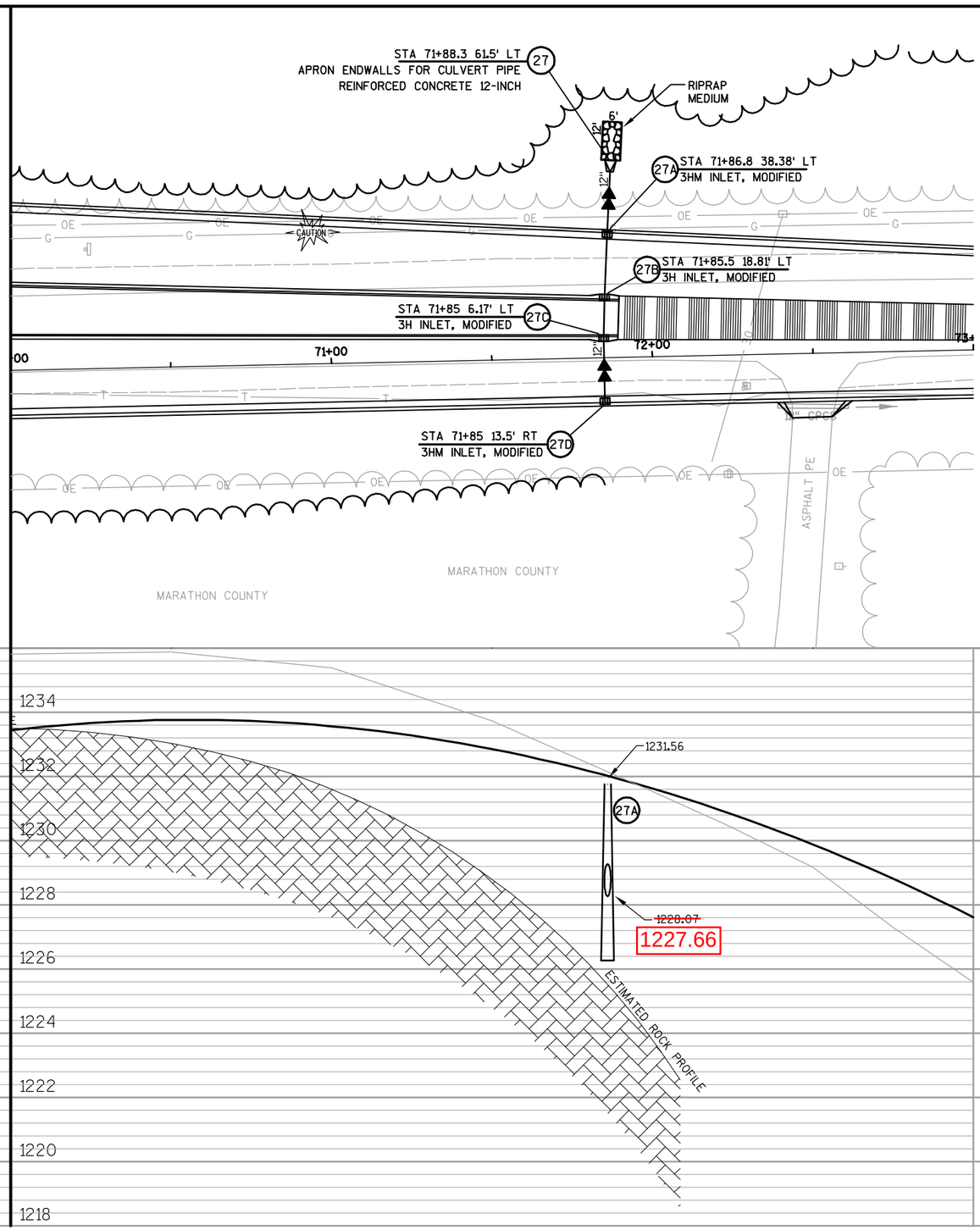
CAUTION

MARATHON COUNTY




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 46 | E |
|---|---|---|---|---|---|



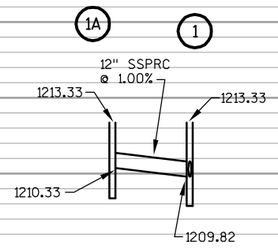



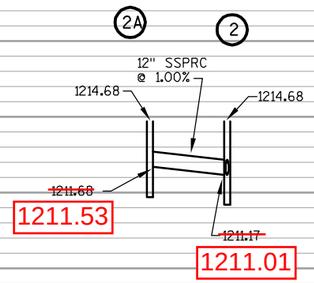


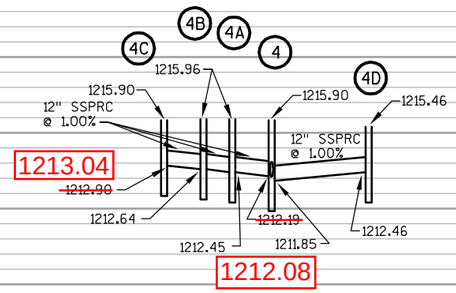


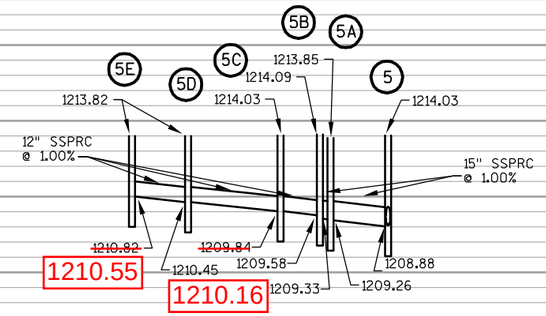


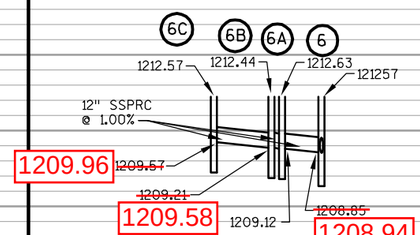

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER PLAN | SHEET 47 | E |
|---|---|---|---|---|---|

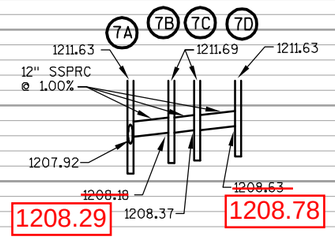


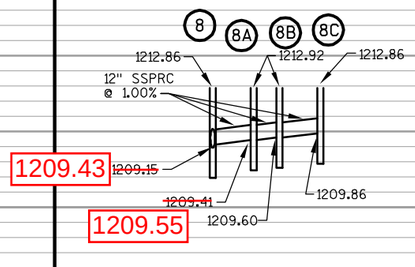



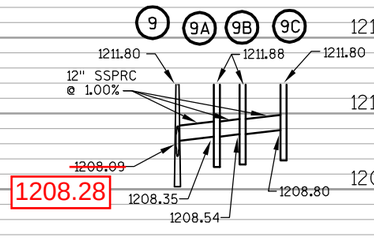



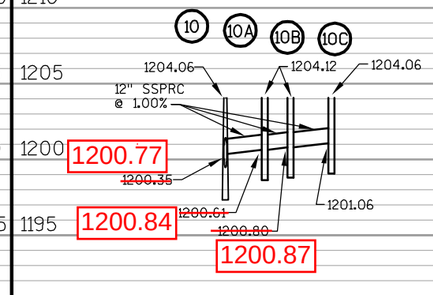



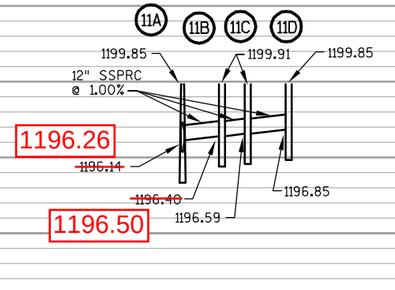



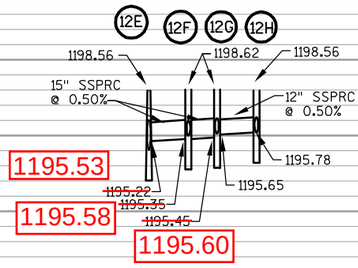



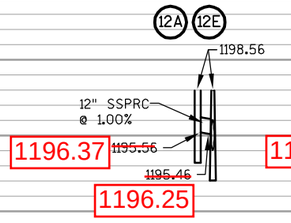



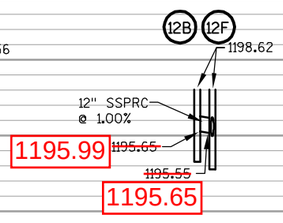



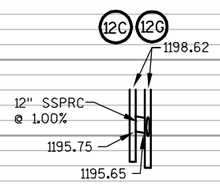



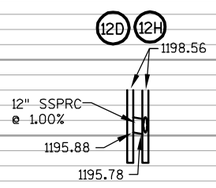



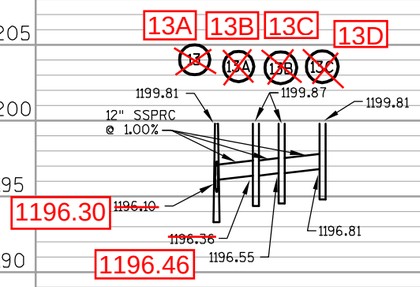



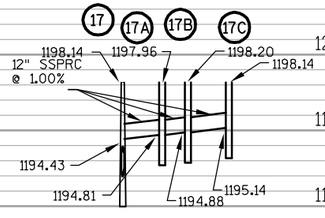



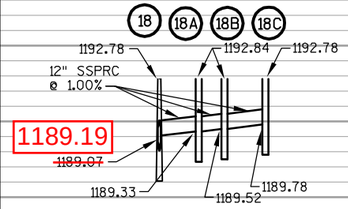



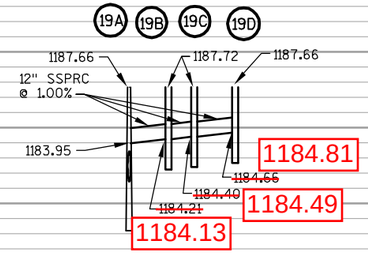



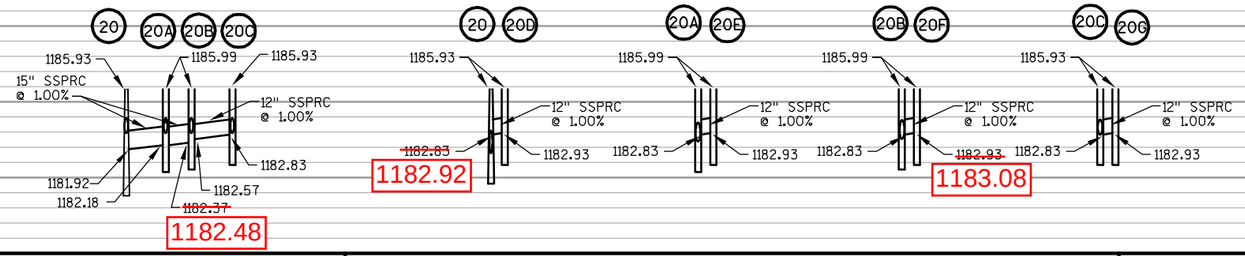



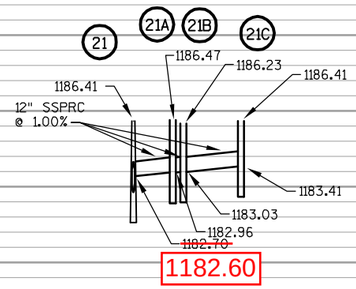



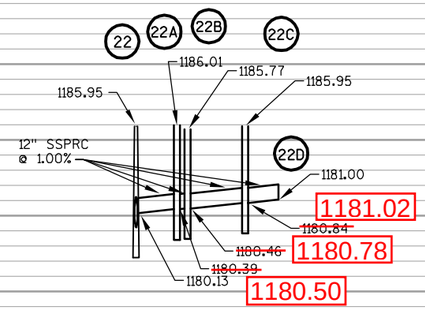



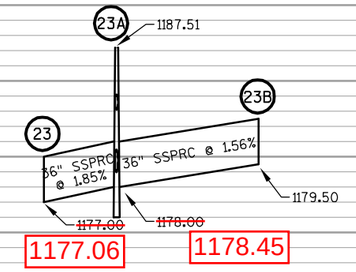



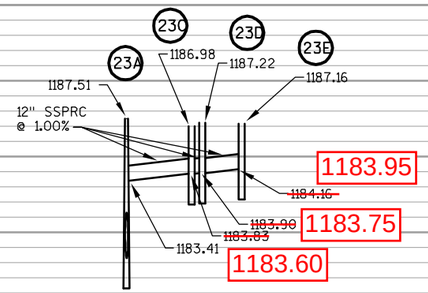

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER | SHEET 48 | E |
|---|---|---|---|---|---|

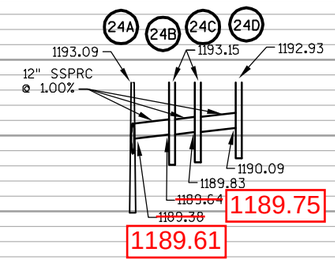


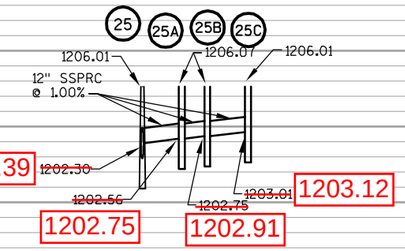



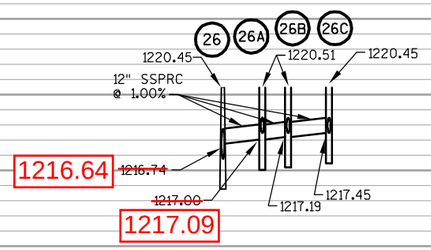



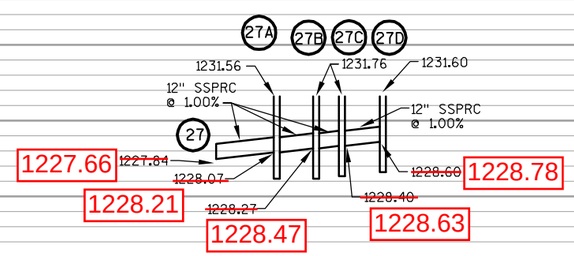




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | STORM SEWER | SHEET 49 | E |
|---|---|---|---|---|---|

2

NOTES:
ALL SIGNS NOT SHOWN SHALL BE REMOVED AND REPLACED BY OTHERS. COORDINATE WITH MARATHON COUNTY HIGHWAY DEPTARTMENT.

SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.

LEGEND

1-1 EXISTING SIGN ON WOOD POST(S)

PROPOSED SIGN ON WOOD POST(S)

DESIGNATES SIGN ITEM NUMBER

BERNARD AVENUE

CONCORD AVENUE

4C+00

0+00 1+00 2+00 3+00 4+00 5+00

CTH X

MATCH LINE STA 5+50

1-1 STOP
R1-1
30" X 30"
4C+52, 30' RT

REMOVE
4C+48, RT

1-11 STOP
R1-1
18" X 18"
4+00, 40' LT

1-3 END
M4-6
24" X 12"

1-2 BIKE ROUTE
D11-1
24" X 18"
5+00, 44' LT

1-4 BIKE ROUTE
D11-1
24" X 18"
5+00, 27' LT

WARNING
SCHOOL AREA
ENGINE BRAKE USE PROHIBITED

MOVING
2+42, LT
TO ~~5+25, LT~~
5+00, LT

40 TON BRIDGE
1.2 MILES AHEAD

REMOVE
-4+80, RT

N

1-7 SPEED LIMIT 35
R2-1
24" X 30"
9+00, 49' LT

SPEED LIMIT 35
REMOVE
9+05, LT

1-8
R4-7
24" X 30"
10+23, 6' LT

CTH X

MATCH LINE STA 5+50

MATCH LINE STA 11+50

6+00 7+00 8+00 9+00 10+00 11+00

1-5
W6-1
48" X 48"
~~6+12, 3' LT~~
-1+00, RT

R4-7, 24" x 30"
6+12, 3' LT

1-6 SPEED LIMIT 35
R2-1
24" X 30"
9+00, 29' RT

SPEED LIMIT 45
REMOVE
9+00, RT

PRIVATE ROAD

STOP
REMOVE
5D+48, LT

1-9 STOP
R1-1
30" X 30"
5D+43, 30' LT

1-10
R4-7
24" X 30"
11+09, 3.5' LT

N

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PERMANENT SIGNING | SHEET 50 | E |
|---|---|---|---|---|---|

NOTES:
ALL SIGNS NOT SHOWN SHALL BE REMOVED AND REPLACED BY OTHERS. COORDINATE WITH MARATHON COUNTY HIGHWAY DEPTARTMENT.

SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.

LEGEND

EXISTING SIGN ON WOOD POST(S)

PROPOSED SIGN ON WOOD POST(S)

1-1 DESIGNATES SIGN ITEM NUMBER

N

EAU CLAIRE AVENUE

4E+00

MATCH LINE STA 11+50

12+00

13+00

14+00

15+00

16+00

17+00

MATCH LINE STA 17+50

CTH X

2-1 R4-7
24" X 30"
13+06, 16' LT

2-2 D11-1
24" X 18"
13+00, 64' LT

2-3 R1-1
30" X 30"
4E+23, 25' RT

REMOVE
4E+62, RT

2-4 R4-7
24" X 30"
14+25, 12' LT

2-5 D11-1
24" X 18"
14+25, 58' LT

2-6 R3-55L
24" X 30"
15+95, 27' LT

2-8 R1-1
18" X 18"
13+13, 50' LT

2-9 R1-1
18" X 18"
13+97, 72' LT

R5-2, 24" x 24" (NEW)
NEIGHBORHOOD
CRIME WATCH (MOVE)

FUTURE MOUNTAIN BAY TRAIL

N

MATCH LINE STA 17+50

18+00

19+00

20+00

21+00

22+00

23+00

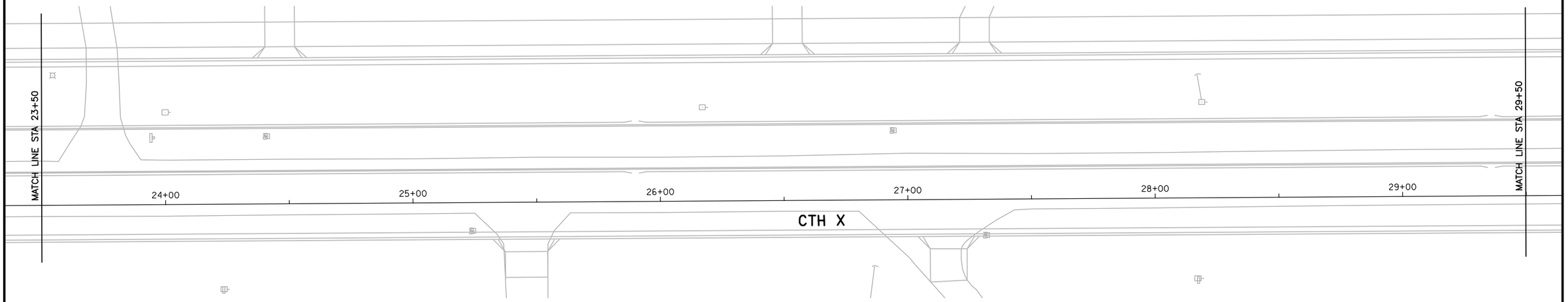
MATCH LINE STA 23+50

CTH X

2-7 R2-1
24" X 30"
21+34, 19' RT

REMOVE
21+34, RT

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PERMANENT SIGNING | SHEET 51 | E |
|---|---|---|---|---|---|



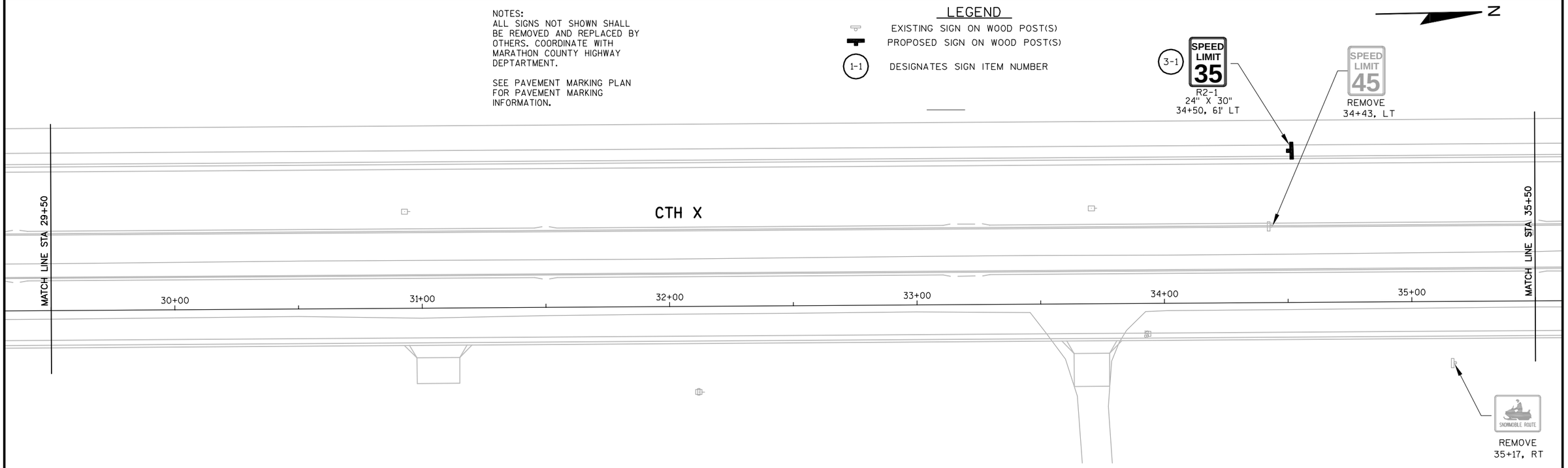

2

NOTES:
ALL SIGNS NOT SHOWN SHALL BE REMOVED AND REPLACED BY OTHERS. COORDINATE WITH MARATHON COUNTY HIGHWAY DEPTARTMENT.

SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.

LEGEND

- EXISTING SIGN ON WOOD POST(S)
- PROPOSED SIGN ON WOOD POST(S)
- (1-1) DESIGNATES SIGN ITEM NUMBER




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PERMANENT SIGNING | SHEET 52 | E |
|---|---|---|---|---|---|

NOTES:
ALL SIGNS NOT SHOWN SHALL BE REMOVED AND REPLACED BY OTHERS. COORDINATE WITH MARATHON COUNTY HIGHWAY DEPTARTMENT.

SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.

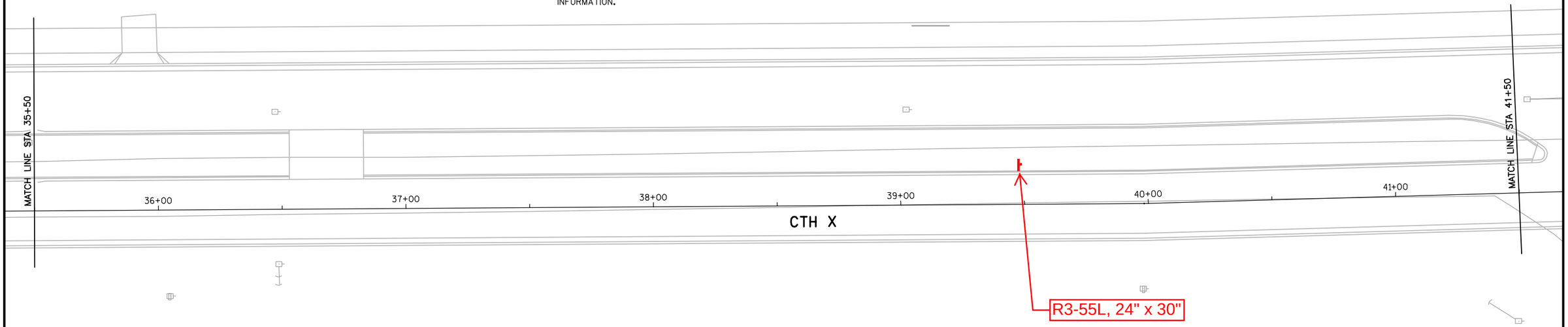
LEGEND

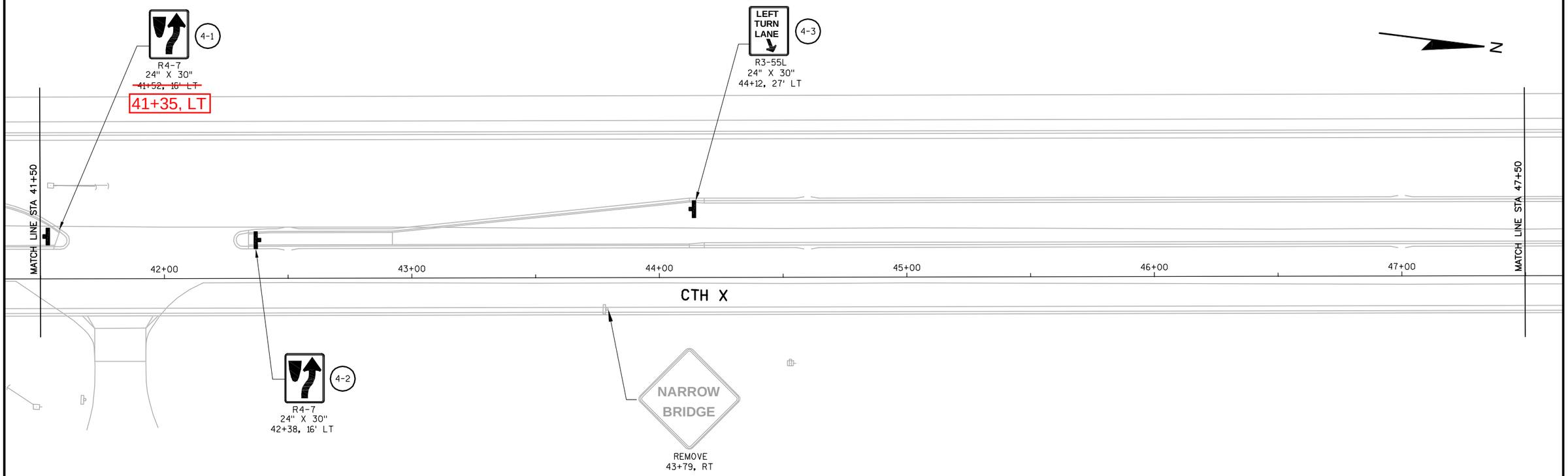
EXISTING SIGN ON WOOD POST(S)

PROPOSED SIGN ON WOOD POST(S)

1-1 DESIGNATES SIGN ITEM NUMBER

N




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PERMANENT SIGNING | SHEET 53 | E |
|---|---|---|---|---|---|

NOTES:
ALL SIGNS NOT SHOWN SHALL BE REMOVED AND REPLACED BY OTHERS. COORDINATE WITH MARATHON COUNTY HIGHWAY DEPTARTMENT.

SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.

LEGEND

EXISTING SIGN ON WOOD POST(S)

PROPOSED SIGN ON WOOD POST(S)

1-1 DESIGNATES SIGN ITEM NUMBER

N

CTH X

MATCH LINE STA 47+50

48+00 49+00 50+00 51+00 52+00 53+00

MATCH LINE STA 53+50

NO PARKING ANY TIME
REMOVE
51+83, LT

5-8
W2-1
30" X 30"
51+50, 19' RT

REMOVE
51+56, RT

5-1
LEFT TURN LANE
R3-55L
24" X 30"
53+36, 16' LT

WEIGHT LIMIT 40 TONS
REMOVE
53+38, RT

5-6
OM3-L
6" X 18"
54+53, 70' LT

5-7
OM3-R
6" X 18"
56+93, 70' LT

EAU CLAIRE RIVER

5-2
COUNTY X
M1-5A
24" X 24"
57+52, 61' LT

H
WEIGHT LIMIT 40 TONS
MOVING
58+05, LT
REMOVE

5-3
SPEED LIMIT 35
R2-1
24" X 30"
58+50, 61' LT

ADOPT-A-HIGHWAY SPONSOR COVENANT COMMUNITY PRESBYTERIAN CHURCH
MOVING
58+86, LT

5-4
BIKE ROUTE
D11-1
24" X 18"
59+00, 77' LT

5-5
R4-7
24" X 30"
59+11, 28' LT

MATCH LINE STA 53+50

54+00 55+00 56+00 57+00 58+00 59+00

CTH X

MATCH LINE STA 59+50

BEGIN PROJECT 6676-03-73
STA 54+20
BEGIN NET EXCEPTION TO C/L LENGTH
PROJECT 6999-13-70

END PROJECT 6676-03-73
STA 57+25
END NET EXCEPTION TO C/L LENGTH
PROJECT 6999-13-70

NO PARKING ANY TIME
SNOWMOBILE ROUTE
REMOVE
57+61, LT

SPEED LIMIT 45
REMOVE
58+50, LT

NO PARKING ANY TIME
REMOVE
58+71, RT

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PERMANENT SIGNING | SHEET 54 | E |
|---|---|---|---|---|---|

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PERMANENT SIGNING | SHEET 55 | E |
|---|---|---|---|---|---|

NOTES:
ALL SIGNS NOT SHOWN SHALL BE REMOVED AND REPLACED BY OTHERS. COORDINATE WITH MARATHON COUNTY HIGHWAY DEPTARTMENT.

SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.

LEGEND

EXISTING SIGN ON WOOD POST(S)

PROPOSED SIGN ON WOOD POST(S)

1-1 DESIGNATES SIGN ITEM NUMBER

N

MATCH LINE STA 71+50

72+00 73+00 74+00 75+00 76+00 77+00

CTH X

MATCH LINE STA 77+50

CT

7-1 W6-2
48" X 48"
71+50, 19' RT

7-2 WRONG WAY R5-1A
36" X 24"
71+50, 19' RT BACK SIDE

7-3 R4-7
24" X 30"
75+45, 4' LT

7-4 DO NOT ENTER R5-1
30" X 30"
75+45, 19' RT

7-5 SPEED LIMIT 35 R2-1
24" X 30"
76+00, 26' LT

7-8 W6-1
48" X 48"
83+25, 32' LT

7-9 SPEED LIMIT 35 W3-5
36" X 36"
84+00, 32' LT

N

40 TON BRIDGE
1.2 MILES AHEAD
REMOVE
119+30, LT

MATCH LINE STA 77+50

CTH X

78+00 79+00 80+00

EOP STA 80+45.14

7-6 W6-3
48" X 48"
79+00, 17' RT

7-7 SPEED LIMIT 45 R2-1
24" X 30"
79+00, 17' RT

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PERMANENT SIGNING | SHEET 56 | E |
|---|---|---|---|---|---|

NOTES:
ALL SIGNS NOT SHOWN SHALL BE REMOVED AND REPLACED BY OTHERS. COORDINATE WITH MARATHON COUNTY HIGHWAY DEPTARTMENT.

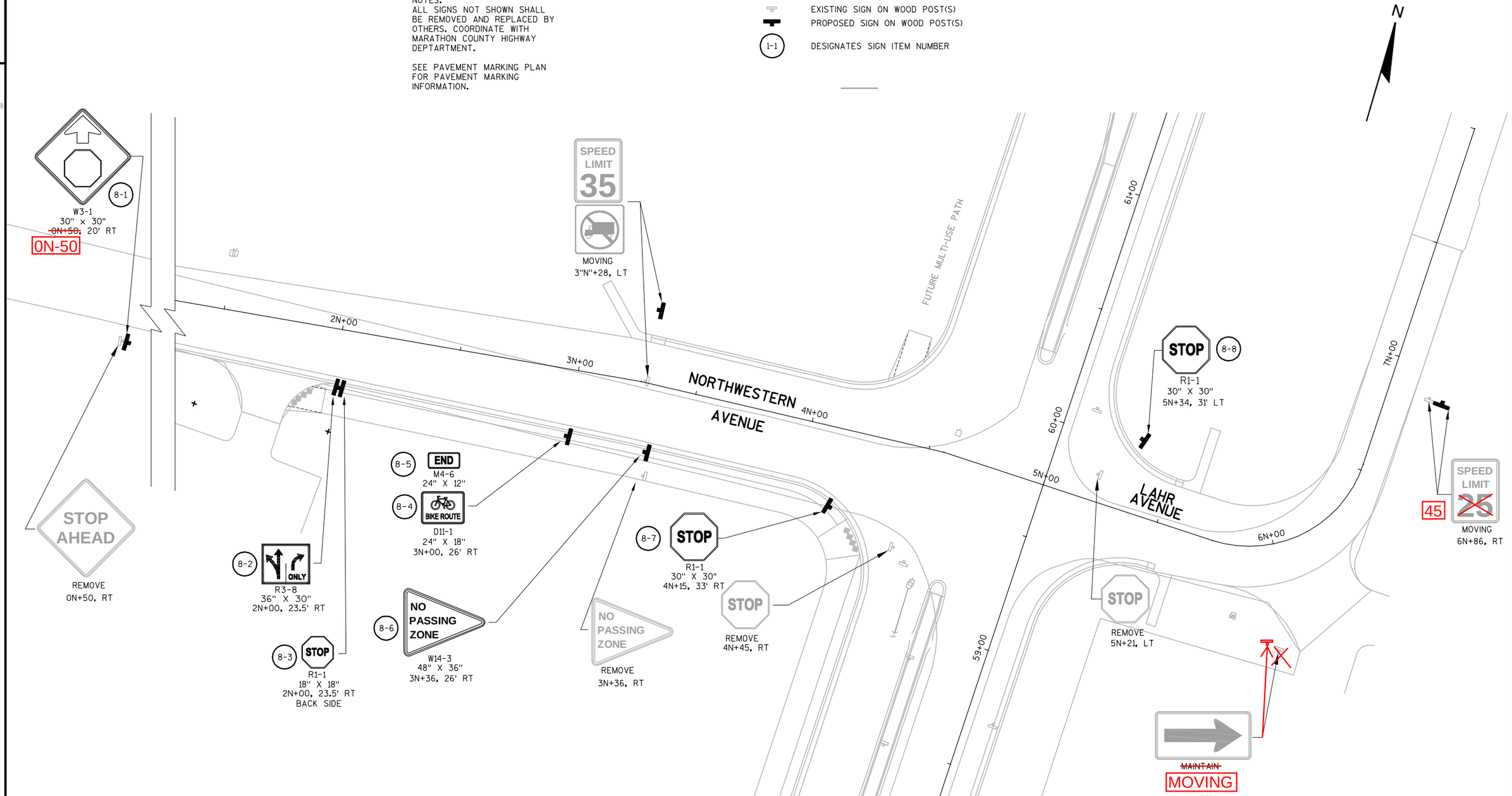
SEE PAVEMENT MARKING PLAN FOR PAVEMENT MARKING INFORMATION.

LEGEND

EXISTING SIGN ON WOOD POST(S)

PROPOSED SIGN ON WOOD POST(S)

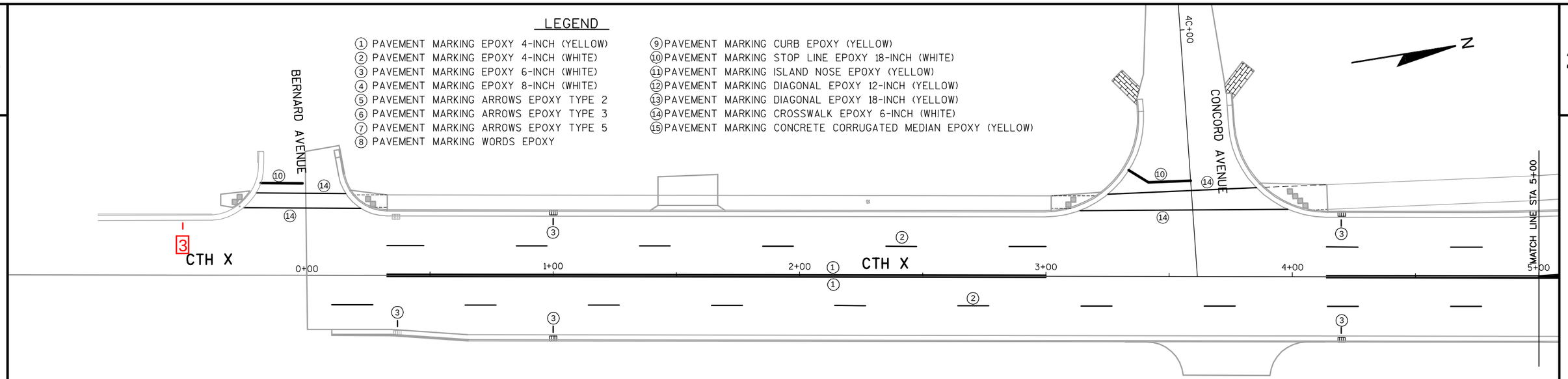
1-1 DESIGNATES SIGN ITEM NUMBER

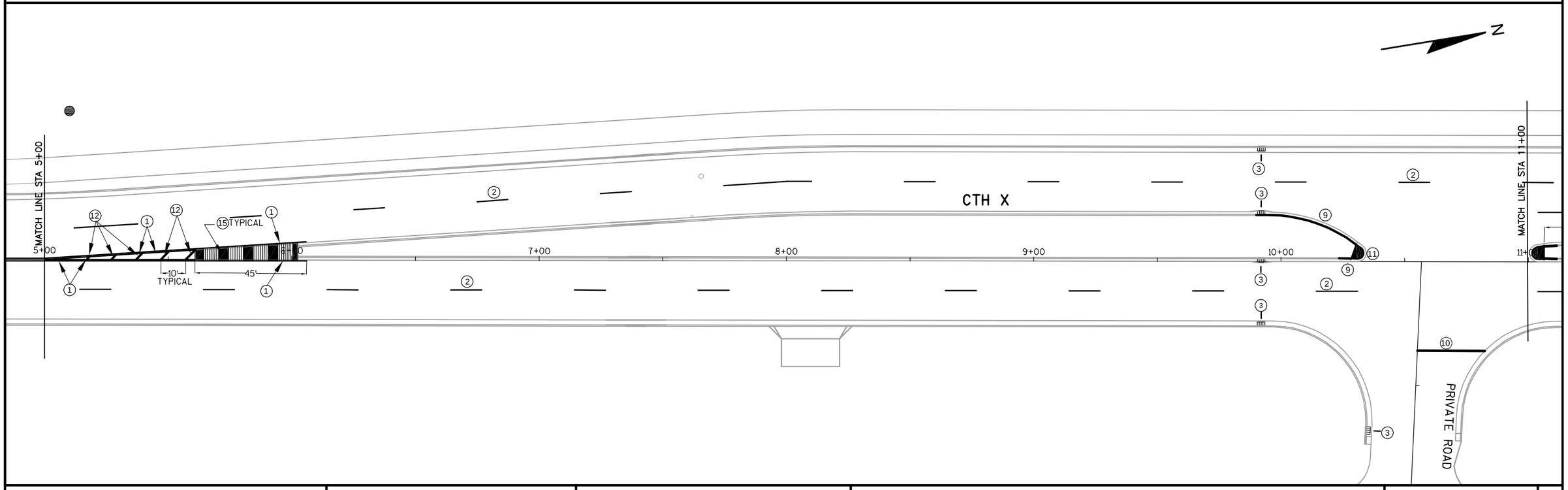



| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PERMANENT SIGNING | SHEET 57 | E |
|---|---|---|---|---|---|

## LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 6-INCH (WHITE)
4. PAVEMENT MARKING EPOXY 8-INCH (WHITE)
5. PAVEMENT MARKING ARROWS EPOXY TYPE 2
6. PAVEMENT MARKING ARROWS EPOXY TYPE 3
7. PAVEMENT MARKING ARROWS EPOXY TYPE 5
8. PAVEMENT MARKING WORDS EPOXY
9. PAVEMENT MARKING CURB EPOXY (YELLOW)
10. PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
13. PAVEMENT MARKING DIAGONAL EPOXY 18-INCH (YELLOW)
14. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
15. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)



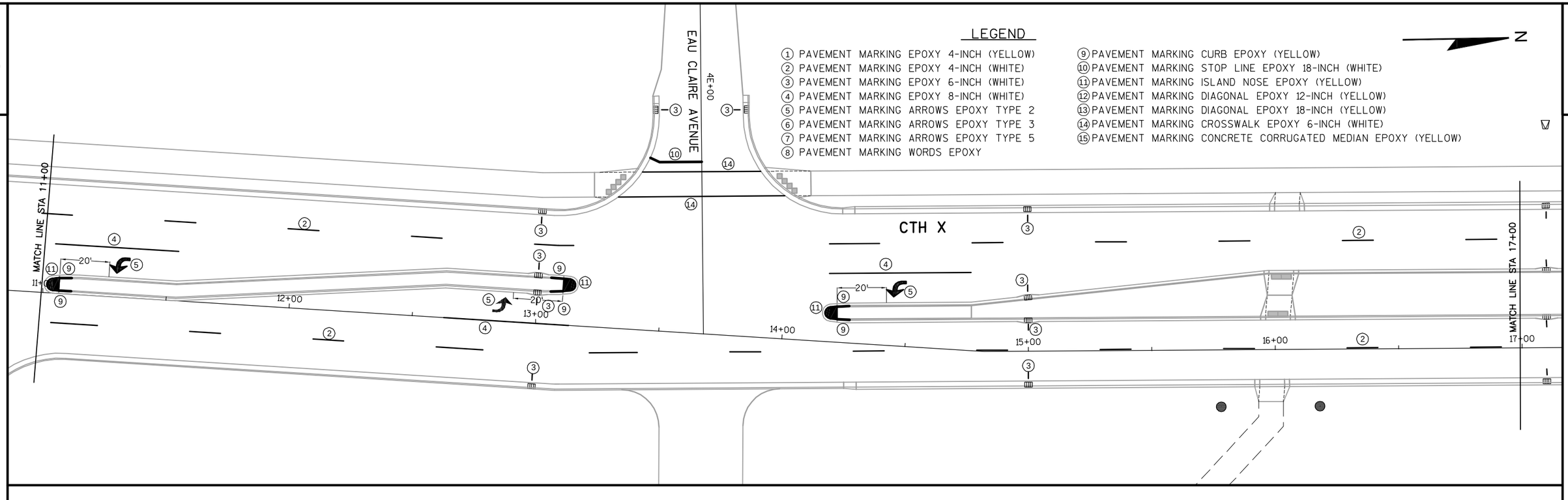

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PAVEMENT MARKINGS | SHEET 58 | E |
|---|---|---|---|---|---|

2

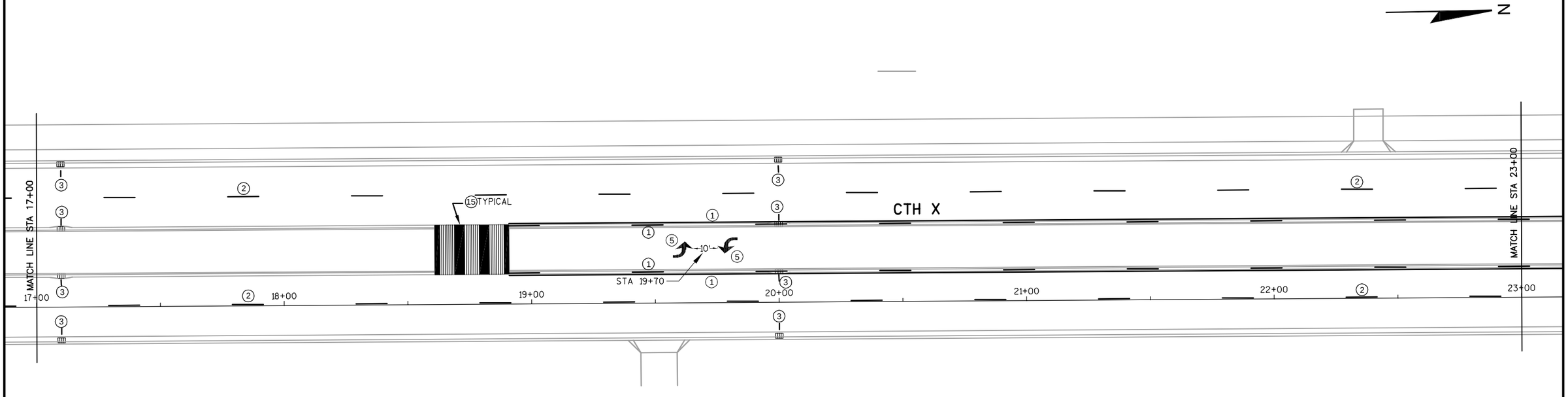
## LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 6-INCH (WHITE)
4. PAVEMENT MARKING EPOXY 8-INCH (WHITE)
5. PAVEMENT MARKING ARROWS EPOXY TYPE 2
6. PAVEMENT MARKING ARROWS EPOXY TYPE 3
7. PAVEMENT MARKING ARROWS EPOXY TYPE 5
8. PAVEMENT MARKING WORDS EPOXY
9. PAVEMENT MARKING CURB EPOXY (YELLOW)
10. PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
13. PAVEMENT MARKING DIAGONAL EPOXY 18-INCH (YELLOW)
14. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
15. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)

N




N

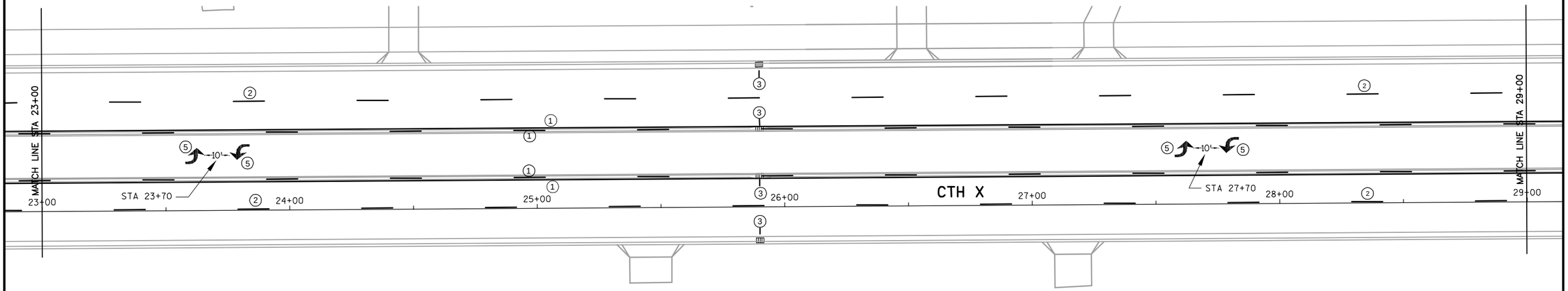


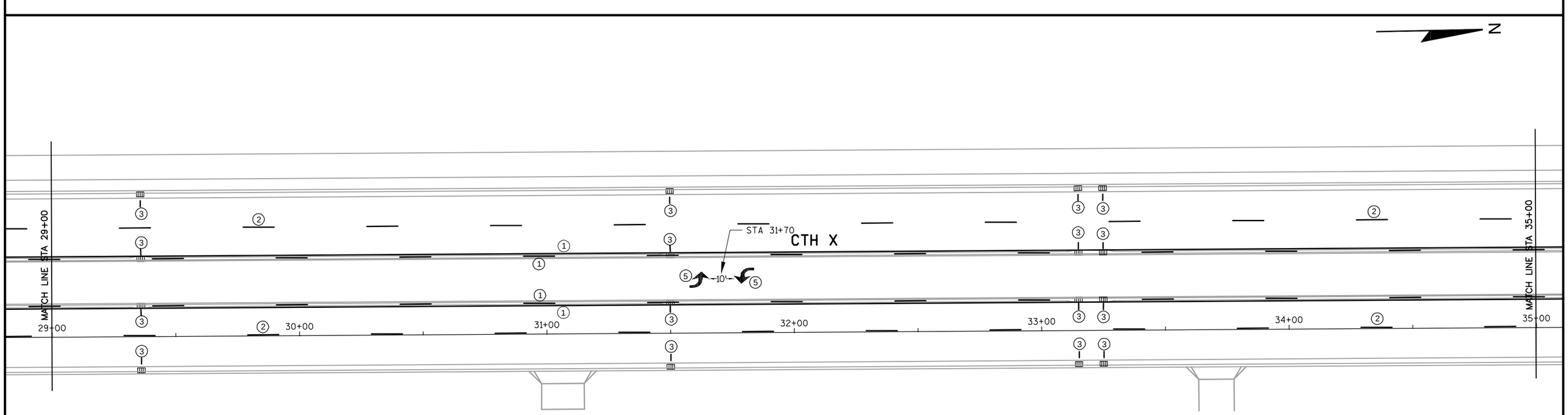

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PAVEMENT MARKINGS | SHEET 59 | E |
|---|---|---|---|---|---|

2

## LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 6-INCH (WHITE)
4. PAVEMENT MARKING EPOXY 8-INCH (WHITE)
5. PAVEMENT MARKING ARROWS EPOXY TYPE 2
6. PAVEMENT MARKING ARROWS EPOXY TYPE 3
7. PAVEMENT MARKING ARROWS EPOXY TYPE 5
8. PAVEMENT MARKING WORDS EPOXY
9. PAVEMENT MARKING CURB EPOXY (YELLOW)
10. PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
13. PAVEMENT MARKING DIAGONAL EPOXY 18-INCH (YELLOW)
14. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
15. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)

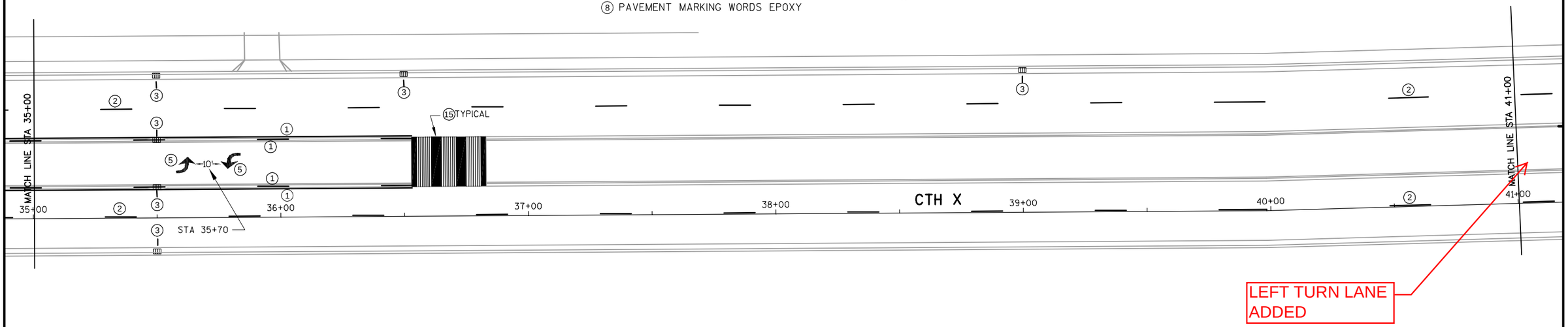


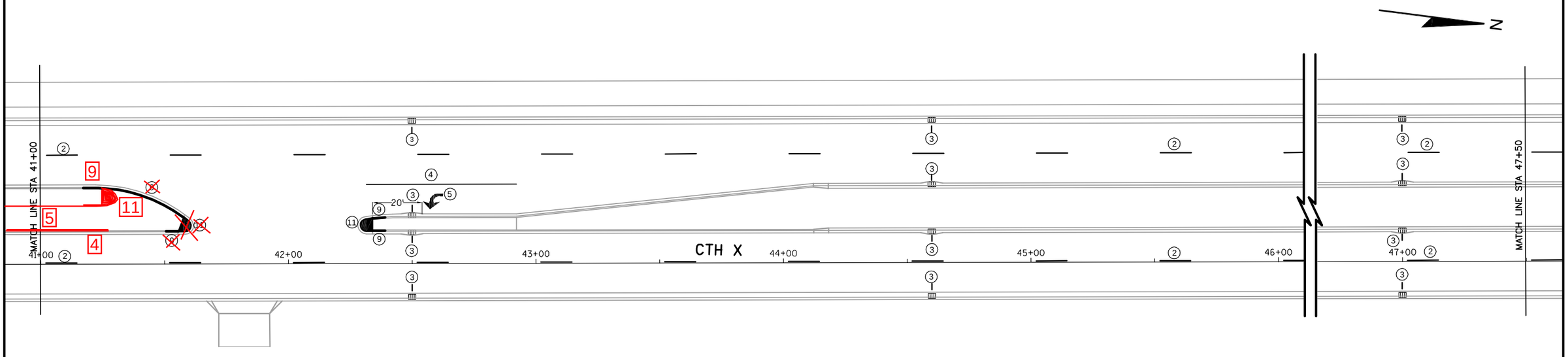




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PAVEMENT MARKINGS | SHEET 60 | E |
|---|---|---|---|---|---|

## LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 6-INCH (WHITE)
4. PAVEMENT MARKING EPOXY 8-INCH (WHITE)
5. PAVEMENT MARKING ARROWS EPOXY TYPE 2
6. PAVEMENT MARKING ARROWS EPOXY TYPE 3
7. PAVEMENT MARKING ARROWS EPOXY TYPE 5
8. PAVEMENT MARKING WORDS EPOXY
9. PAVEMENT MARKING CURB EPOXY (YELLOW)
10. PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
13. PAVEMENT MARKING DIAGONAL EPOXY 18-INCH (YELLOW)
14. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
15. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)



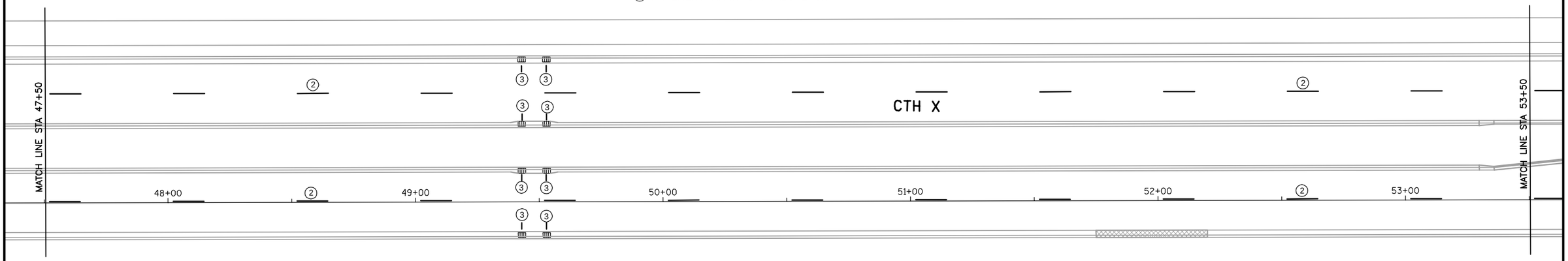



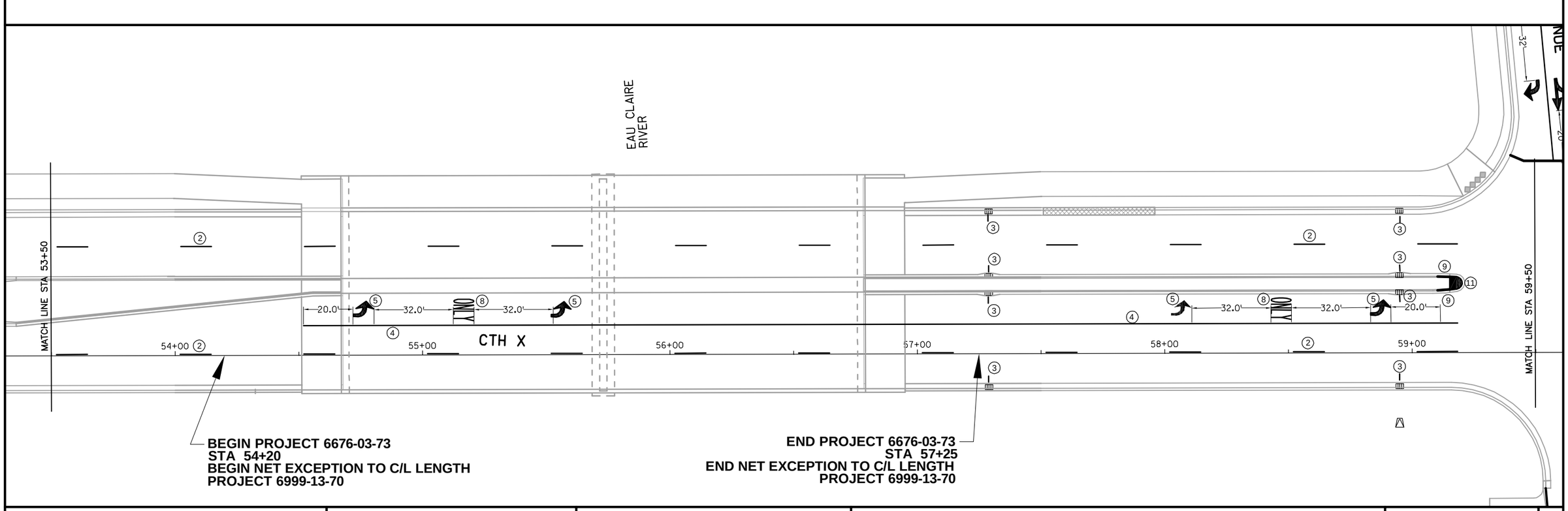

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PAVEMENT MARKINGS | SHEET 61 | E |
|---|---|---|---|---|---|

## LEGEND

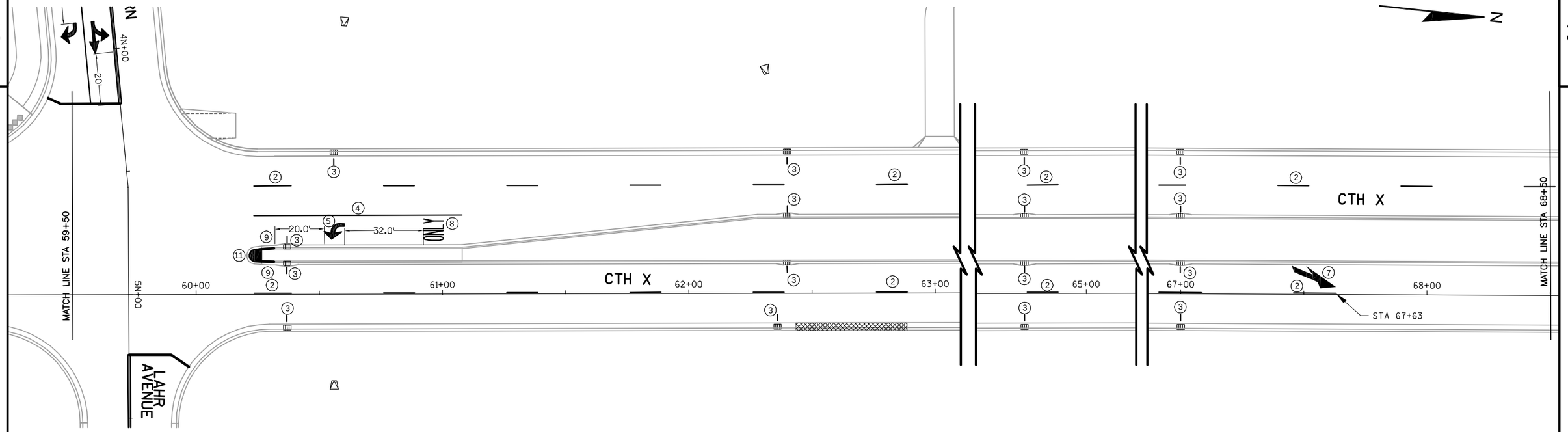
1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 6-INCH (WHITE)
4. PAVEMENT MARKING EPOXY 8-INCH (WHITE)
5. PAVEMENT MARKING ARROWS EPOXY TYPE 2
6. PAVEMENT MARKING ARROWS EPOXY TYPE 3
7. PAVEMENT MARKING ARROWS EPOXY TYPE 5
8. PAVEMENT MARKING WORDS EPOXY
9. PAVEMENT MARKING CURB EPOXY (YELLOW)
10. PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
13. PAVEMENT MARKING DIAGONAL EPOXY 18-INCH (YELLOW)
14. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
15. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)

N



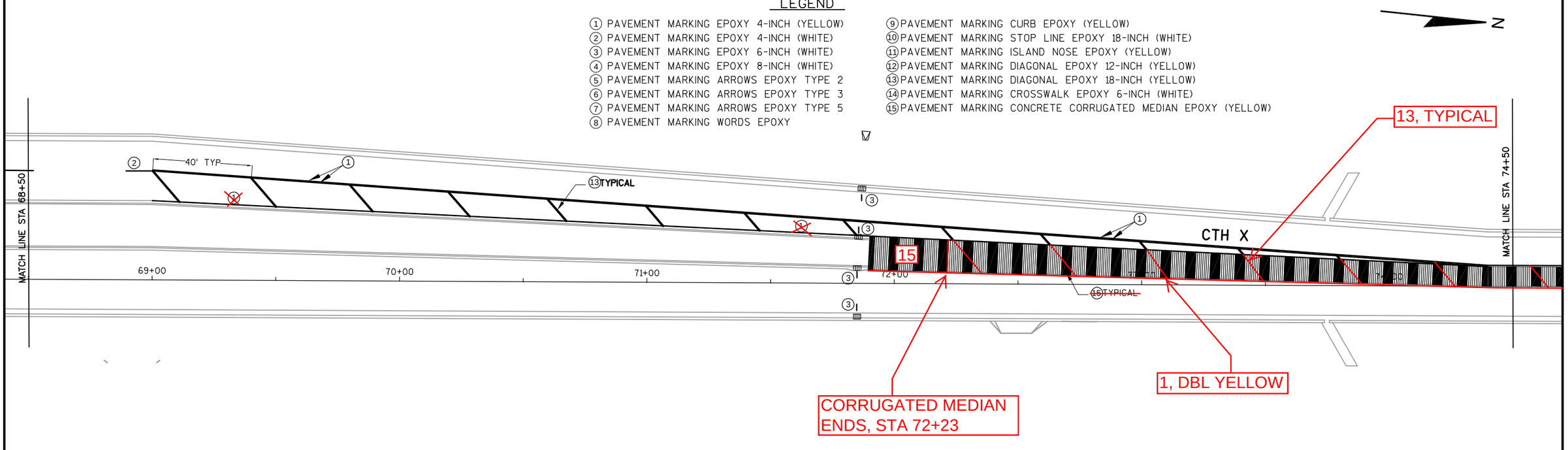

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PAVEMENT MARKINGS | SHEET 62 | E |
|---|---|---|---|---|---|




2

LEGEND

| | |
|---|---|
| (1) PAVEMENT MARKING EPOXY 4-INCH (YELLOW) | (9) PAVEMENT MARKING CURB EPOXY (YELLOW) |
| (2) PAVEMENT MARKING EPOXY 4-INCH (WHITE) | (10) PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE) |
| (3) PAVEMENT MARKING EPOXY 6-INCH (WHITE) | (11) PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW) |
| (4) PAVEMENT MARKING EPOXY 8-INCH (WHITE) | (12) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| (5) PAVEMENT MARKING ARROWS EPOXY TYPE 2 | (13) PAVEMENT MARKING DIAGONAL EPOXY 18-INCH (YELLOW) |
| (6) PAVEMENT MARKING ARROWS EPOXY TYPE 3 | (14) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE) |
| (7) PAVEMENT MARKING ARROWS EPOXY TYPE 5 | (15) PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW) |
| (8) PAVEMENT MARKING WORDS EPOXY | |

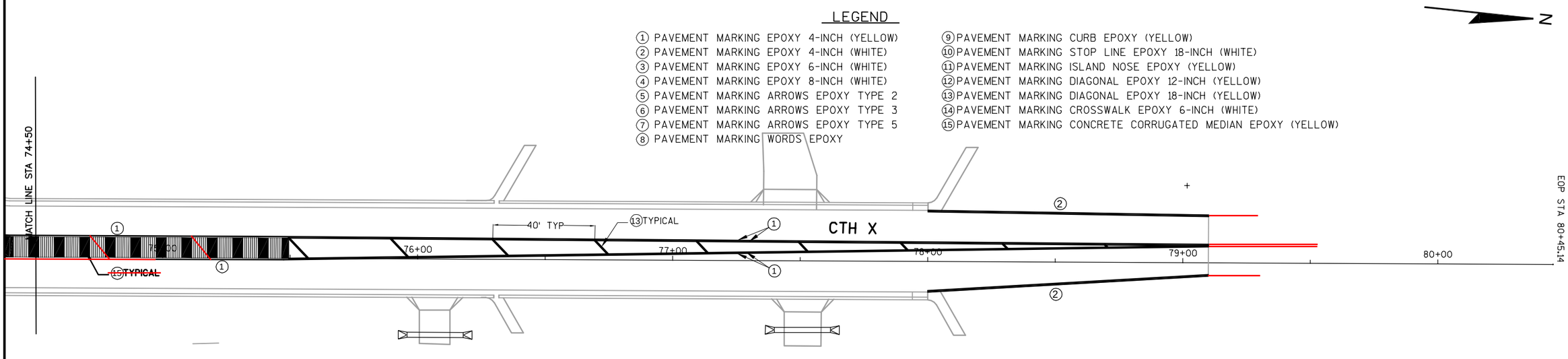



| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PAVEMENT MARKINGS | SHEET 63 | E |
|---|---|---|---|---|---|

2

## LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 6-INCH (WHITE)
4. PAVEMENT MARKING EPOXY 8-INCH (WHITE)
5. PAVEMENT MARKING ARROWS EPOXY TYPE 2
6. PAVEMENT MARKING ARROWS EPOXY TYPE 3
7. PAVEMENT MARKING ARROWS EPOXY TYPE 5
8. PAVEMENT MARKING WORDS EPOXY
9. PAVEMENT MARKING CURB EPOXY (YELLOW)
10. PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
13. PAVEMENT MARKING DIAGONAL EPOXY 18-INCH (YELLOW)
14. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
15. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)

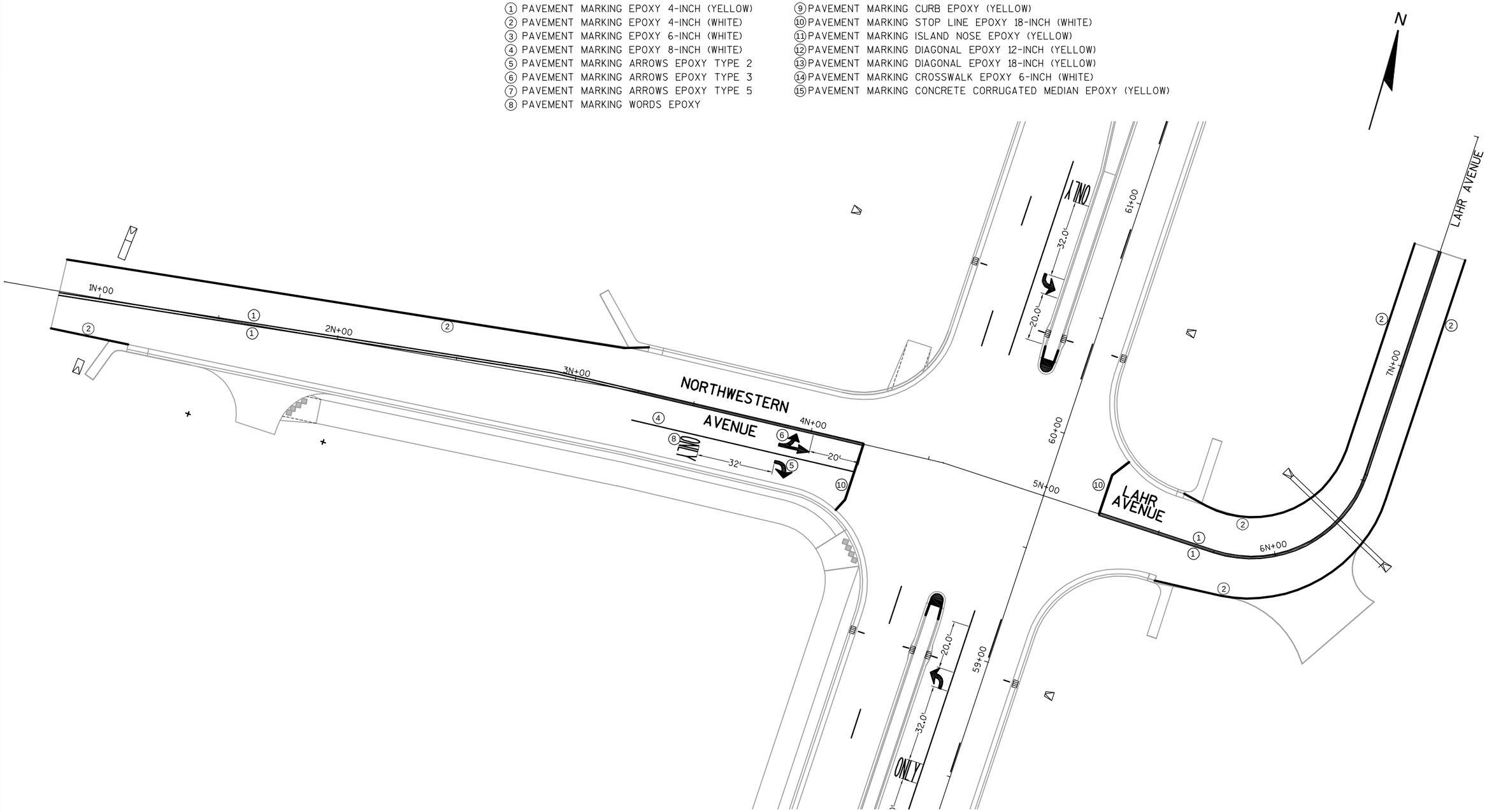



| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PAVEMENT MARKINGS | SHEET 64 | E |
|---|---|---|---|---|---|

2

## LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
2. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 6-INCH (WHITE)
4. PAVEMENT MARKING EPOXY 8-INCH (WHITE)
5. PAVEMENT MARKING ARROWS EPOXY TYPE 2
6. PAVEMENT MARKING ARROWS EPOXY TYPE 3
7. PAVEMENT MARKING ARROWS EPOXY TYPE 5
8. PAVEMENT MARKING WORDS EPOXY
9. PAVEMENT MARKING CURB EPOXY (YELLOW)
10. PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
12. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
13. PAVEMENT MARKING DIAGONAL EPOXY 18-INCH (YELLOW)
14. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
15. PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PAVMENT MARKINGS | SHEET 65 | E |
|---|---|---|---|---|---|

2

ROAD CLOSED
2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60" X 30"

ROAD CLOSED
1 MILE AHEAD
LOCAL TRAFFIC ONLY
R11-3
60" X 30"

ROAD CLOSED
2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60" X 30"

GRAND AVENUE
TOWNLINE ROAD
CTH "N"
CTH X
TIMBER LANE
LAHR AVE
NORTHWESTERN AVE
EAU CLAIRE RIVER
ALDERSON ST
EAU CLAIRE AVE
CONCORD AVE
BERNARD AVE
PRIVATE ROAD
ROSS AVE
BIRCH ST

DETAIL D
DETAIL 4
DETAIL 4
BARRICADES
ONLY
DETAIL D
DETAIL 4
BARRICADES
ONLY

LEGEND

- DETOUR ROUTE
- TRAFFIC CONTROL SIGN
- TYPE III BARRICADE WITH SIGN & TYPE A LIGHT
- WORK ZONE

NOTES

SEE SDD 15C2-4a,b,c AND 15C3-1 FOR DETAILS (A THRU E) AND (1 THRU 4) RESPECTIVELY.

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE PLANS, SPECIFICATIONS, CONTRACT AND APPLICABLE STANDARD DETAIL DRAWINGS.

CONTRACTOR TO MAINTAIN ACCESS TO BUSINESSES AND RESIDENTS DURING CONSTRUCTION.

N

1 DETOUR AHEAD W020-2

DETOUR M04-8 24"X12"

COUNTY X M01-5A 24"X24"

NORTH M03-1 24"X12"

M06-1 21"X21"

SOUTH M03-3 24"X12"

M05-1R 21"X21"

2 END DETOUR M04-8A 24"X18"

M05-1L 21"X21"

3 DETOUR SOUTH COUNTY X

4 DETOUR SOUTH COUNTY X

5 DETOUR SOUTH COUNTY X

10 DETOUR NORTH COUNTY X

11 DETOUR NORTH COUNTY X

12 DETOUR NORTH COUNTY X

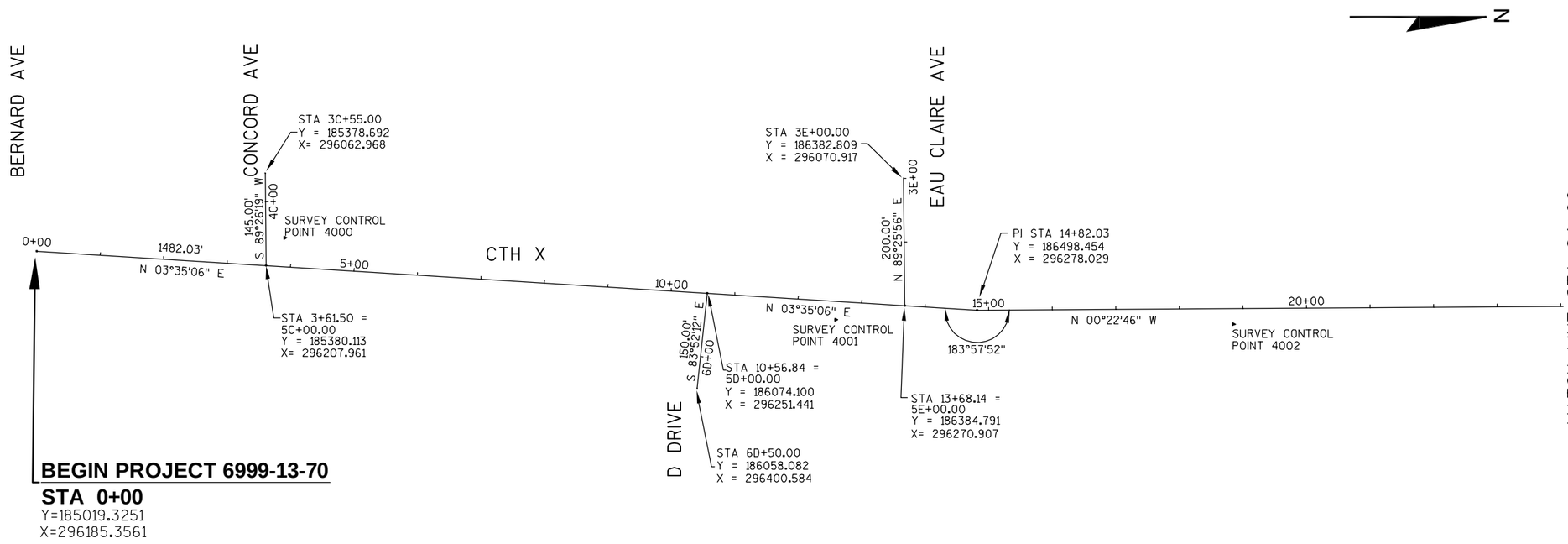
13 ROAD CLOSED AHEAD W020-3

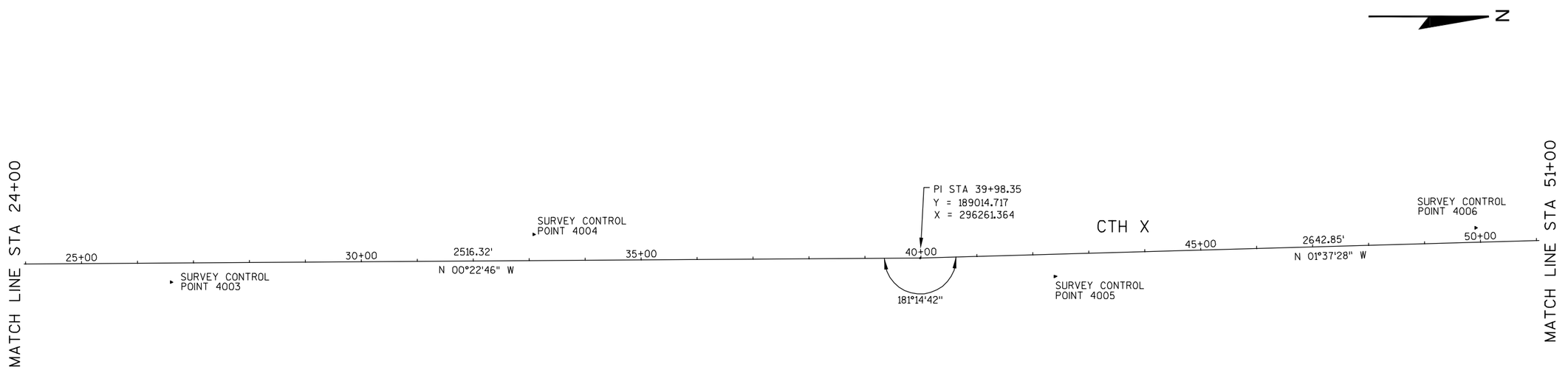
14 ROAD CLOSED 1000 FT W020-3C

15 ROAD CLOSED 500 FT W020-3D

16 ROAD CLOSED 250 FT W020-3

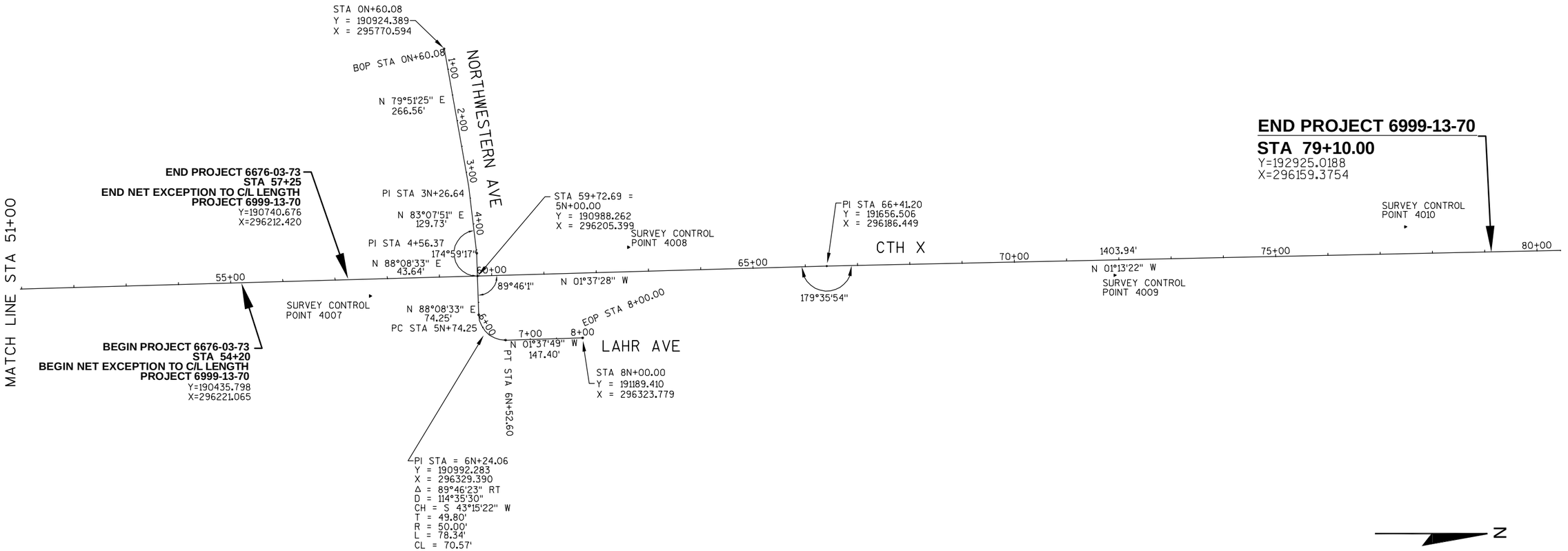
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | TRAFFIC CONTROL PLAN - DETOUR ROUTE | SHEET 66 | E |
|---|---|---|---|---|---|




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | ALIGNMENT DIAGRAM | SHEET 67 | E |
|---|---|---|---|---|---|

2




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | ALIGNMENT DIAGRAM | SHEET 68 | E |
|---|---|---|---|---|---|

DATE 25JAN11 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 | 6676-03-73 QUANTITY | 6999-13-70 QUANTITY |
|---|---|---|---|---|---|---|
| 0010 | 201.0105 | CLEARING | STA | 48.250 | 0.800 | 47.450 |
| 0020 | 201.0120 | CLEARING | ID | 173.000 | 27.000 | 146.000 |
| 0030 | 201.0205 | GRUBBING | STA | 48.250 | 0.800 | 47.450 |
| 0040 | 201.0220 | GRUBBING | ID | 173.000 | 27.000 | 146.000 |
| 0050 | 203.0100 | REMOVING SMALL PIPE CULVERTS | EACH | 27.000 | | 27.000 |
| 0060 | 203.0600.S | REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STATION) 01. STATION 55+73 | LS | 1.000 | 1.000 | |
| 0070 | 204.0110 | REMOVING ASPHALTIC SURFACE | SY | 325.000 | | 325.000 |
| 0080 | 204.0150 | REMOVING CURB & GUTTER | LF | 105.000 | | 105.000 |
| 0090 | 204.0165 | REMOVING GUARDRAIL | LF | 336.000 | 212.000 | 124.000 |
| 0100 | 204.0215 | REMOVING CATCH BASINS | EACH | 4.000 | | 4.000 |
| 0110 | 204.0220 | REMOVING INLETS | EACH | 1.000 | | 1.000 |
| 0120 | 204.0245 | REMOVING STORM SEWER (SIZE) 01. 12-INCH | LF | 195.000 | | 195.000 |
| 0130 | 205.0100 | EXCAVATION COMMON | CY | 45,410.000 | | 45,410.000 |
| 0140 | 205.0200 | EXCAVATION ROCK | CY | 810.000 | | 810.000 |
| 0150 | 206.1000 | EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-37-295 | LS | 1.000 | 1.000 | |
| 0160 | 208.0100 | BORROW | CY | 37,200.000 | 5,900.000 | 31,300.000 |
| 0170 | 208.1100 | SELECT BORROW | CY | 1,960.000 | | 1,960.000 |
| 0180 | 210.0100 | BACKFILL STRUCTURE | CY | 1,170.000 | 1,170.000 | |
| 0190 | 213.0100 | FINISHING ROADWAY (PROJECT) 01. 6676-03-73 | EACH | 1.000 | 1.000 | |
| 0200 | 213.0100 | FINISHING ROADWAY (PROJECT) 02. 6999-13-70 | EACH | 1.000 | | 1.000 |
| 0210 | 214.0100 | OBLITERATING OLD ROAD | STA | 1.800 | | 1.800 |
| 0220 | 305.0110 | BASE AGGREGATE DENSE 3/4-INCH | TON | 390.000 | | 390.000 |
| 0230 | 305.0120 | BASE AGGREGATE DENSE 1 1/4-INCH | TON | 53,485.000 | 685.000 | 52,800.000 |
| 0240 | 415.2000.S | INCENTIVE STRENGTH CONCRETE PAVEMENT | DOL | 500.000 | 500.000 | |
| 0250 | 416.0050 | CONCRETE PAVEMENT APPROACH SLAB | SY | 238.000 | 238.000 | |
| 0260 | 416.0160 | CONCRETE DRIVEWAY 6-INCH | SY | 193.000 | | 193.000 |
| 0270 | 455.0115 | ASPHALTIC MATERIAL PG64-22 | TON | 591.000 | 6.000 | 585.000 |
| 0280 | 455.0122 | ASPHALTIC MATERIAL PG64-34 | TON | 338.000 | 3.000 | 335.000 |
| 0290 | 455.0605 | TACK COAT | GAL | 1,221.000 | 11.000 | 1,210.000 |
| 0300 | 460.1101 | HMA PAVEMENT TYPE E-1 | TON | 15,365.000 | 140.000 | 15,225.000 |
| 0310 | 460.2000 | INCENTIVE DENSITY HMA PAVEMENT | DOL | 9,840.000 | 90.000 | 9,750.000 |
| 0320 | 465.0105 | ASPHALTIC SURFACE | TON | 697.000 | 12.000 | 685.000 |
| 0330 | 465.0120 | ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES | TON | 155.000 | | 155.000 |
| 0340 | 465.0315 | ASPHALTIC FLUMES | SY | 110.000 | | 110.000 |
| 0350 | 502.0100 | CONCRETE MASONRY BRIDGES | CY | 1,163.000 | 1,163.000 | |
| 0360 | 502.0400.S | INCENTIVE STRENGTH CONCRETE STRUCTURES | DOL | 11,630.000 | 11,630.000 | |
| 0370 | 502.3200 | PROTECTIVE SURFACE TREATMENT | SY | 2,366.000 | 2,366.000 | |
| 0380 | 503.0155 | PRESTRESSED GIRDER TYPE I 54W-INCH | LF | 1,670.000 | 1,670.000 | |
| 0390 | 505.0405 | BAR STEEL REINFORCEMENT HS BRIDGES | LB | 7,860.000 | 7,860.000 | |
| 0400 | 505.0605 | BAR STEEL REINFORCEMENT HS COATED BRIDGES | LB | 166,830.000 | 166,830.000 | |
| 0410 | 506.2605 | BEARING PADS ELASTOMERIC NON-LAMINATED | EACH | 32.000 | 32.000 | |
| 0420 | 506.4000 | STEEL DIAPHRAGMS (STRUCTURE) 01. B-37-295 | EACH | 28.000 | 28.000 | |
| 0430 | 511.2105 | PILING STEEL DELIVERED AND DRIVEN HP 10-INCH X 42 LB | LF | 3,230.000 | 3,230.000 | |
| 0440 | 511.3000 | PILE POINTS | EACH | 75.000 | 75.000 | |
| 0450 | 516.0500 | RUBBERIZED MEMBRANE WATERPROOFING | SY | 40.000 | 40.000 | |
| 0460 | 520.0118 | CULVERT PIPE CLASS III 18-INCH | LF | 52.000 | | 52.000 |

3

204.0100 REMOVING PAVEMENT 290 SY

3

416.0180 CONCRETE DRIVEWAY 8-INCH 35 SY

DATE 25JAN11 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 | 6676-03-73 QUANTITY | 6999-13-70 QUANTITY |
|---|---|---|---|---|---|---|
| 0470 | 520.0124 | CULVERT PIPE CLASS III 24-INCH | LF | 48.000 | | 48.000 |
| 0480 | 520.1018 | APRON ENDWALLS FOR CULVERT PIPE 18-INCH | EACH | 2.000 | | 2.000 |
| 0490 | 520.1024 | APRON ENDWALLS FOR CULVERT PIPE 24-INCH | EACH | 4.000 | | 4.000 |
| 0500 | 520.8000.S | CULVERT PIPE CONCRETE COLLAR | EACH | 2.000 | | 2.000 |
| 0510 | 522.0136 | CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH | LF | 8.000 | | 8.000 |
| 0520 | 522.1012 | APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH | EACH | 3.000 | | 3.000 |
| 0530 | 522.1015 | APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH | EACH | 1.000 | | 1.000 |
| 0540 | 522.1024 | APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH | EACH | 5.000 | | 5.000 |
| 0550 | 522.1036 | APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH | EACH | 4.000 | | 4.000 |
| 0560 | 601.0407 | CONCRETE CURB & GUTTER 18-INCH TYPE D | LF | 10,038.000 | 190.000 | 9,848.000 |
| 0570 | 601.0411 | CONCRETE CURB & GUTTER 30-INCH TYPE D | LF | 2,910.000 | | 2,910.000 |
| 0580 | 601.0557 | CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D | LF | 12,642.000 | 122.000 | 12,520.000 |
| 0590 | 602.0405 | CONCRETE SIDEWALK 4-INCH | SF | 4,606.000 | 186.000 | 4,420.000 |
| 0600 | 602.0415 | CONCRETE SIDEWALK 6-INCH | SF | 1,210.000 | | 1,210.000 |
| 0610 | 602.0505 | CURB RAMP DETECTABLE WARNING FIELD YELLOW | SF | 136.000 | | 136.000 |
| 0620 | 606.0200 | RIPRAP MEDIUM | CY | 232.000 | | 232.000 |
| 0630 | 606.0300 | RIPRAP HEAVY | CY | 960.000 | 960.000 | |
| 0640 | 608.0324 | STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH | LF | 2,642.000 | | 2,642.000 |
| 0650 | 608.0336 | STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH | LF | 150.000 | | 150.000 |
| 0660 | 608.0412 | STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH | LF | 2,832.000 | | 2,832.000 |
| 0670 | 608.0415 | STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH | LF | 400.000 | | 400.000 |
| 0680 | 611.0101 | CATCH BASINS TYPE 1 | EACH | 16.000 | | 16.000 |
| 0690 | 611.0105 | CATCH BASINS TYPE 3 | EACH | 3.000 | | 3.000 |
| 0700 | 611.0107 | CATCH BASINS TYPE 5 | EACH | 6.000 | | 6.000 |
| 0710 | 611.0612 | INLET COVERS TYPE C | EACH | 3.000 | | 3.000 |
| 0720 | 611.0624 | INLET COVERS TYPE H | EACH | 35.000 | | 35.000 |
| 0730 | 611.0627 | INLET COVERS TYPE HM | EACH | 52.000 | | 52.000 |
| 0740 | 611.8110 | ADJUSTING MANHOLE COVERS | EACH | 4.000 | | 4.000 |
| 0750 | 611.8115 | ADJUSTING INLET COVERS | EACH | 1.000 | | 1.000 |
| 0760 | 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | 254.000 | 254.000 | |
| 0770 | 614.0115 | ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2 | EACH | 1.000 | | 1.000 |
| 0780 | 614.0150 | ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD | EACH | 2.000 | 2.000 | |
| 0790 | 614.0200 | STEEL THRIE BEAM STRUCTURE APPROACH | LF | 42.000 | 42.000 | |
| 0800 | 614.0305 | STEEL PLATE BEAM GUARD CLASS A | LF | 225.000 | 12.000 | 213.000 |
| 0810 | 614.0370 | STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL | EACH | 3.000 | | 3.000 |
| 0820 | 614.0396 | GUARDRAIL MOW STRIP ASPHALT | SY | 173.000 | 20.000 | 153.000 |
| 0830 | 614.0515 | GUARDRAIL STIFENED LHW | LF | 100.000 | | 100.000 |
| 0840 | 616.0208 | FENCE CHAIN LINK 8-FT | LF | 244.000 | 244.000 | |
| 0850 | 619.1000 | MOBILIZATION | EACH | 0.950 | 0.300 | 0.650 |
| 0860 | 620.0100 | CONCRETE CORRUGATED MEDIAN | SF | 5,000.000 | | 5,000.000 |
| 0870 | 620.0300 | CONCRETE MEDIAN SLOPED NOSE | SF | 294.000 | | 294.000 |
| 0880 | 624.0100 | WATER | MGAL | 802.000 | 10.000 | 792.000 |

611.0530 MANHOLE COVERS TYPE J 2 EACH

611.0420 RECONSTRUCTING MANHOLES 1 EACH

3

DATE 25JAN11 — 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 | 6676-03-73 QUANTITY | 6999-13-70 QUANTITY |
|---|---|---|---|---|---|---|
| 0890 | 625.0100 | TOPSOIL | SY | 44,685.000 | 500.000 | 44,185.000 |
| 0900 | 627.0200 | MULCHING | SY | 40,380.000 | 620.000 | 39,760.000 |
| 0910 | 628.1104 | EROSION BALES | EACH | 125.000 | 25.000 | 100.000 |
| 0920 | 628.1504 | SILT FENCE | LF | 7,765.000 | 500.000 | 7,265.000 |
| 0930 | 628.1520 | SILT FENCE MAINTENANCE | LF | 7,765.000 | 500.000 | 7,265.000 |
| 0940 | 628.1905 | MOBILIZATIONS EROSION CONTROL | EACH | 4.000 | 2.000 | 2.000 |
| 0950 | 628.1910 | MOBILIZATIONS EMERGENCY EROSION CONTROL | EACH | 7.000 | 3.000 | 4.000 |
| 0960 | 628.2004 | EROSION MAT CLASS I TYPE B | SY | 1,210.000 | | 1,210.000 |
| 0970 | 628.2008 | EROSION MAT URBAN CLASS I TYPE B | SY | 14,820.000 | 70.000 | 14,750.000 |
| 0980 | 628.6005 | TURBIDITY BARRIERS | SY | 750.000 | 750.000 | |
| 0990 | 628.7005 | INLET PROTECTION TYPE A | EACH | 104.000 | | 104.000 |
| 1000 | 628.7015 | INLET PROTECTION TYPE C | EACH | 101.000 | | 101.000 |
| 1010 | 628.7020 | INLET PROTECTION TYPE D | EACH | 1.000 | | 1.000 |
| 1020 | 628.7504 | TEMPORARY DITCH CHECKS | LF | 110.000 | | 110.000 |
| 1030 | 628.7555 | CULVERT PIPE CHECKS | EACH | 6.000 | | 6.000 |
| 1040 | 628.7570 | ROCK BAGS | EACH | 300.000 | | 300.000 |
| 1050 | 629.0210 | FERTILIZER TYPE B | CWT | 38.000 | 1.000 | 37.000 |
| 1060 | 630.0140 | SEEDING MIXTURE NO. 40 | LB | 1,027.000 | 17.000 | 1,010.000 |
| 1070 | 630.0200 | SEEDING TEMPORARY | LB | 1,541.000 | 26.000 | 1,515.000 |
| 1080 | 631.1100 | SOD EROSION CONTROL | SY | 17.000 | | 17.000 |
| 1090 | 634.0410 | POSTS WOOD 4X4-INCH X 10-FT | EACH | 11.000 | 2.000 | 9.000 |
| 1100 | 634.0614 | POSTS WOOD 4X6-INCH X 14-FT | EACH | 32.000 | | 32.000 |
| 1110 | 634.0616 | POSTS WOOD 4X6-INCH X 16-FT | EACH | 9.000 | | 9.000 |
| 1120 | 634.0618 | POSTS WOOD 4X6-INCH X 18-FT | EACH | 4.000 | | 4.000 |
| 1130 | 634.0620 | POSTS WOOD 4X6-INCH X 20-FT | EACH | 2.000 | | 2.000 |
| 1140 | 637.0202 | SIGNS REFLECTIVE TYPE II | SF | 343.340 | 1.500 | 341.840 |
| 1150 | 638.2102 | MOVING SIGNS TYPE II | EACH | 8.000 | | 8.000 |
| 1160 | 638.2602 | REMOVING SIGNS TYPE II | EACH | 28.000 | | 28.000 |
| 1170 | 638.3000 | REMOVING SMALL SIGN SUPPORTS | EACH | 26.000 | | 26.000 |
| 1180 | 642.5001 | FIELD OFFICE TYPE B 01. 6676-03-73 | EACH | 1.000 | 1.000 | |
| 1190 | 642.5001 | FIELD OFFICE TYPE B 02. 6999-13-70 | EACH | 1.000 | | 1.000 |
| 1200 | 643.0100 | TRAFFIC CONTROL (PROJECT) 02. 6999-13-70 | EACH | 1.000 | | 1.000 |
| 1210 | 643.0420 | TRAFFIC CONTROL BARRICADES TYPE III | DAY | 4,275.000 | | 4,275.000 |
| 1220 | 643.0705 | TRAFFIC CONTROL WARNING LIGHTS TYPE A | DAY | 5,130.000 | | 5,130.000 |
| 1230 | 643.0900 | TRAFFIC CONTROL SIGNS | DAY | 4,788.000 | | 4,788.000 |
| 1240 | 643.2000 | TRAFFIC CONTROL DETOUR (PROJECT) 02. 6999-13-70 | EACH | 1.000 | | 1.000 |
| 1250 | 643.3000 | TRAFFIC CONTROL DETOUR SIGNS | DAY | 14,700.000 | | 14,700.000 |
| 1260 | 645.0120 | GEOTEXTILE FABRIC TYPE HR | SY | 1,984.000 | 1,312.000 | 672.000 |
| 1270 | 645.0125 | GEOTEXTILE FABRIC TYPE MS | SY | 2,699.000 | 314.000 | 2,385.000 |
| 1280 | 646.0106 | PAVEMENT MARKING EPOXY 4-INCH | LF | 13,763.000 | 160.000 | 13,603.000 |
| 1290 | 646.0116 | PAVEMENT MARKING EPOXY 6-INCH | LF | 255.000 | | 255.000 |
| 1300 | 646.0126 | PAVEMENT MARKING EPOXY 8-INCH | LF | 873.000 | 273.000 | 600.000 |
| 1310 | 647.0166 | PAVEMENT MARKING ARROWS EPOXY TYPE 2 | EACH | 20.000 | 2.000 | 18.000 |
| 1320 | 647.0176 | PAVEMENT MARKING ARROWS EPOXY TYPE 3 | EACH | 1.000 | | 1.000 |
| 1330 | 647.0196 | PAVEMENT MARKING ARROWS EPOXY TYPE 5 | EACH | 1.000 | | 1.000 |
| 1340 | 647.0356 | PAVEMENT MARKING WORDS EPOXY | EACH | 4.000 | 1.000 | 3.000 |
| 1350 | 647.0456 | PAVEMENT MARKING CURB EPOXY | LF | 170.000 | | 170.000 |
| 1360 | 647.0566 | PAVEMENT MARKING STOP LINE EPOXY 18-INCH | LF | 146.000 | | 146.000 |
| 1370 | 647.0606 | PAVEMENT MARKING ISLAND NOSE EPOXY | EACH | 8.000 | | 8.000 |
| 1380 | 647.0726 | PAVEMENT MARKING DIAGONAL EPOXY 12-INCH | LF | 18.000 | | 18.000 |
| 1390 | 647.0736 | PAVEMENT MARKING DIAGONAL EPOXY 18-INCH | LF | 175.000 | | 175.000 |
| 1400 | 647.0766 | PAVEMENT MARKING CROSSWALK EPOXY 6-INCH | LF | 345.000 | | 345.000 |

643.0300 TRAFFIC CONTROL DRUMS 10,000 DAYS

3

DATE 25JAN11 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 | 6676-03-73 QUANTITY | 6999-13-70 QUANTITY |
|---|---|---|---|---|---|---|
| 1410 | 647.0856 | PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY | SF | 2,025.000 | | 2,025.000 |
| 1420 | 650.4000 | CONSTRUCTION STAKING STORM SEWER SYSTEM | EACH | 134.000 | | 134.000 |
| 1430 | 650.4500 | CONSTRUCTION STAKING SUBGRADE | LF | 8,625.000 | 95.000 | 8,530.000 |
| 1440 | 650.5000 | CONSTRUCTION STAKING BASE | LF | 8,625.000 | 95.000 | 8,530.000 |
| 1450 | 650.5500 | CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER | LF | 27,390.000 | 260.000 | 27,130.000 |
| 1460 | 650.6000 | CONSTRUCTION STAKING PIPE CULVERTS | EACH | 4.000 | | 4.000 |
| 1470 | 650.6500 | CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-37-295 | LS | 1.000 | 1.000 | |
| 1480 | 650.9910 | CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 6676-03-73 | LS | 1.000 | 1.000 | |
| 1490 | 650.9910 | CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 02. 6999-13-70 | LS | 1.000 | | 1.000 |
| 1500 | 650.9920 | CONSTRUCTION STAKING SLOPE STAKES | LF | 8,625.000 | 95.000 | 8,530.000 |
| 1510 | 690.0150 | SAWING ASPHALT | LF | 635.000 | | 635.000 |
| 1520 | ASP.1T0A | ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR | HRS | 2,000.000 | | 2,000.000 |
| 1530 | ASP.1T0G | ON-THE-JOB TRAINING GRADUATE AT $5.00/HR | HRS | 1,200.000 | | 1,200.000 |
| 1830 | SPV.0060 | SPECIAL 30. INLETS TYPE 3 MODIFIED | EACH | 63.000 | | 63.000 |
| 1840 | SPV.0060 | SPECIAL 31. INLETS TYPE 3 MODIFIED 2 | EACH | 16.000 | | 16.000 |
| 1850 | SPV.0060 | SPECIAL 32. INLET COVER H-SP | EACH | 14.000 | | 14.000 |
| 1860 | SPV.0060 | SPECIAL 33. EXCAVATION SEDIMENT TRAPS | EACH | 10.000 | | 10.000 |
| 1970 | SPV.0090 | SPECIAL 11. CONCRETE CURB AND GUTTER 4-INCH SLOPED 24-INCH TYPE D | LF | 1,848.000 | | 1,848.000 |

3

3

800.0005 NON-PERFORMANCE OF QMP (ANCILLARY CONCRETE) 906 DOL

800.0005 NON-PERFORMANCE OF QMP (BASE AGGREGATE DENSE 1 1/4-INCH) 520 DOL

805.3105 SPLICES HP PILING 10-INCH X 42 LB 1,485 DOL

SPV.0195 SPECIAL 01. DISINTEGRATED GRANITE BASE AGGREGATE 23 TON

3

## CLEARING AND GRUBBING

| STATION | TO | STATION | LOCATION | 201.0105 CLEARING STA | 201.0205 GRUBBING STA | 201.0120 CLEARING ID | 201.0220 GRUBBING ID |
|---|---|---|---|---|---|---|---|
| 04+88 | - | - | 40' LT | - | - | 6 | 6 |
| 06+75 | - | - | 50' LT | - | - | 6 | 6 |
| 07+75 | - | 13+25 | LT | 5.50 | 5.50 | - | - |
| 13+25 | - | 14+00 | RT | 0.75 | 0.75 | - | - |
| 14+12 | - | - | 72' LT | - | - | 20 | 20 |
| 14+22 | - | - | 62' LT | - | - | 10 | 10 |
| 14+32 | - | - | 58' LT | - | - | 20 | 20 |
| 15+12 | - | - | 57' LT | - | - | 24 | 24 |
| 15+31 | - | - | 73' LT | - | - | 14 | 14 |
| 15+55 | - | - | 74' LT | - | - | 14 | 14 |
| 15+68 | - | - | 43' LT | - | - | 4 | 4 |
| 17+50 | - | 19+25 | LT | 1.75 | 1.75 | - | - |
| 20+75 | - | 29+50 | LT | 8.75 | 8.75 | - | - |
| 44+75 | - | 54+20 | LT | 9.45 | 9.45 | - | - |
| 58+86 | - | - | 88' LT | - | - | 12 | 12 |
| 58+92 | - | - | 88' LT | - | - | 10 | 10 |
| 58+96 | - | - | 83' LT | - | - | 6 | 6 |
| 60+00 | - | 65+00 | LT | 5.00 | 5.00 | - | - |
| 66+50 | - | 76+50 | LT | 10.00 | 10.00 | - | - |
| 69+25 | - | 71+75 | RT | 2.50 | 2.50 | - | - |
| 78+00 | - | 78+75 | LT | 0.75 | 0.75 | - | - |
| 1N+00 | - | 4N+00 | LT | 3.00 | 3.00 | - | - |
| | | | **TOTAL** | **47.45** | **47.45** | **146** | **146** |

## 203.0100 REMOVING SMALL PIPE CULVERTS

| STATION | LOCATION | EACH | COMMENTS |
|---|---|---|---|
| 10+50 | 34' RT | 1 | CTH X |
| 12+95 | 30' RT | 1 | CTH X |
| 14+50 | 20' RT | 1 | CTH X |
| 16+18 | C/L | 1 | CTH X |
| 19+50 | 18' RT | 1 | CTH X |
| 22+30 | 35' LT | 1 | CTH X |
| 23+75 | 35' LT | 1 | CTH X |
| 24+30 | 35' LT | 1 | CTH X |
| 25+45 | 16' RT | 1 | CTH X |
| 25+85 | 35' LT | 1 | CTH X |
| 26+50 | 35' LT | 1 | CTH X |
| 27+20 | 33' LT | 1 | CTH X |
| 31+10 | 18' RT | 1 | CTH X |
| 33+70 | 18' RT | 1 | CTH X |
| 35+95 | 36' LT | 1 | CTH X |
| 59+70 | 26' RT | 1 | CTH X |
| 60+60 | C/L | 1 | CTH X |
| 62+50 | 32' LT | 1 | CTH X |
| 65+15 | 46' LT | 1 | CTH X |
| 66+15 | 35' LT | 1 | CTH X |
| 66+37 | C/L | 1 | CTH X |
| 72+50 | 15' RT | 1 | CTH X |
| 75+20 | 21' RT | 1 | CTH X |
| 76+05 | 23' RT | 1 | CTH X |
| 77+50 | 24' LT | 1 | CTH X |
| 77+50 | 24' RT | 1 | CTH X |
| 6N+17 | C/L | 1 | LAHR AVENUE |
| | **TOTAL** | **27** | |

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

## 204.0110 REMOVING ASPHALTIC SURFACE

| STATION | LOCATION | SY | COMMENTS |
|---|---|---|---|
| 12+95 | RT | 70 | DRIVEWAY |
| 57+95 | RT | 80 | DRIVEWAY |
| 65+50 | LT | 145 | DRIVEWAY |
| 75+15 | RT | 30 | DRIVEWAY |
| | **TOTAL** | **325** | |

## 204.0150 REMOVING CURB & GUTTER

| STATION | TO | STATION | LOCATION | LF | COMMENTS |
|---|---|---|---|---|---|
| 00+10 | - | 00+51 | RT | 45 | CTH X |
| 00+12 | - | 00+51 | LT | 60 | CTH X |
| | | | **TOTAL** | **105** | |

## 204.0165 REMOVING GUARDRAIL

| STATION | TO | STATION | LOCATION | LF | COMMENTS |
|---|---|---|---|---|---|
| 53+90 | - | 54+20 | LT | 30 | CTH X |
| 53+90 | - | 54+20 | RT | 30 | CTH X |
| 57+25 | - | 57+57 | LT | 32 | CTH X |
| 57+25 | - | 57+57 | RT | 32 | CTH X |
| | | | **TOTAL** | **124** | |

## 204.0215 REMOVING CATCH BASINS

| STATION | LOCATION | EACH | COMMENTS |
|---|---|---|---|
| 00+60 | 31' LT | 1 | CTH X |
| 00+85 | 30' RT | 1 | CTH X |
| 04+80 | 26' LT | 1 | CTH X |
| 13+51 | 36' LT | 1 | CTH X |
| | **TOTAL** | **4** | |

## 204.0220 REMOVING INLETS

| STATION | LOCATION | EACH | COMMENTS |
|---|---|---|---|
| 00+36 | 23' LT | 1 | CTH X |
| | **TOTAL** | **1** | |

## 204.0245 REMOVING STORM SEWER

| STATION | TO | STATION | LOCATION | LF | SIZE |
|---|---|---|---|---|---|
| 00+36 | - | 00+60 | LT | 25 | 12-INCH |
| 00+36 | - | 00+85 | RT | 50 | 12-INCH |
| 04+72 | - | 04+81 | LT, RT | 50 | 12-INCH |
| 13+51 | - | 13+71 | LT, RT | 70 | 12-INCH |
| | | | **TOTAL** | **195** | |

## EXCAVATION

| STATION | TO | STATION | 205.0100 COMMON CY + | 205.0200 ROCK CY + | FILL CY + | WASTE CY + | 208.0100 BORROW CY + | 208.1100 SELECT BORROW CY + |
|---|---|---|---|---|---|---|---|---|
| 00+00 | - | 54+20 | 33,900 | - | 29,000 | 4,950 | - | - |
| 57+25.00 | - | 79+10 | 5,900 | 810 | 33,300 | - | 28,500 | - |
| CONCORD AVENUE | | | 220 | - | 10 | 210 | - | - |
| PRIVATE ROAD | | | 250 | - | 10 | 245 | - | - |
| EAU CLAIRE AVENUE | | | 490 | - | 5 | 485 | - | - |
| NORTHWESTERN AVENUE | | | 360 | - | 2,700 | - | 2,500 | - |
| LAHR AVENUE | | | 170 | - | 390 | - | 300 | - |
| BASINS | | | 4,120 | - | - | - | - | 1,960 |
| | | **TOTAL** | **45,410** | **810** | **65,415** | **5,890** | **31,300** | **1,960** |

NOTES: + SEE EARTHWORK SHEET

## 214.0100 OBLITERATING OLD ROAD

| STATION | LOCATION | STA | COMMENTS |
|---|---|---|---|
| 13+00 | RT | 0.30 | DRIVEWAY |
| 23+75 | LT | 0.75 | DRIVEWAY |
| 25+80 | LT | 0.75 | DRIVEWAY |
| | **TOTAL** | **1.80** | |

## 416.0160 CONCRETE DRIVEWAY 6-INCH

| STATION | LOCATION | SY | COMMENTS |
|---|---|---|---|
| 01+56 | LT | 17 | CTH X |
| 08+10 | RT | 16 | CTH X |
| 19+50 | RT | 11 | CTH X |
| 22+38 | LT | 9 | CTH X |
| 24+47 | LT | 9 | CTH X |
| 25+45 | RT | 12 | CTH X |
| 26+52 | LT | 9 | CTH X |
| 27+16 | RT | 11 | CTH X |
| 27+28 | LT | 9 | CTH X |
| 31+06 | RT | 12 | CTH X |
| 33+70 | RT | 11 | CTH X |
| 35+92 | LT | 10 | CTH X |
| 41+82 | RT | 14 | CTH X |
| 72+50 | RT | 10 | CTH X |
| 76+07 | RT | 9 | CTH X |
| 77+50 | LT | 14 | CTH X |
| 77+50 | RT | 10 | CTH X |
| | **TOTAL** | **193** | |

## BASE AGGREGATE DENSE

| STATION | TO | STATION | LOCATION | 305.0110 3/4-INCH TON | 305.0120 1 1/4-INCH TON | COMMENT |
|---|---|---|---|---|---|---|
| 00+00 | - | 54+20 | LT, RT | 40 | 36,400 | MAINLINE |
| 57+25 | - | 79+10 | LT, RT | 150 | 13,700 | MAINLINE |
| 00+00 | - | 54+20 | LT | - | 2,050 | SIDE WALK & MULTI-USE PATH |
| 57+25 | - | 1N+97 | LT | - | 200 | MULTI-USE PATH |
| DRIVEWAYS | | | LT, RT | 200 | 450 | THROUGHOUT |
| | | | **TOTAL** | **390** | **52,800** | |

## ASPHALTIC PAVEMENT

| STATION | TO | STATION | LOCATION | 455.0115 ASPHALTIC MATERIAL PG64-22 TON | 455.0122 ASPHALTIC MATERIAL PG64-34 TON | 455.0605 TACK COAT GAL | 460.1101 HMA PAVEMENT TYPE E-1 TON | 460.2000 INCENTIVE DENSITY HMA PAVEMENT DOL | 465.0105 ASPHALTIC SURFACE TON | 465.0120 ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES TON | 465.0315 ASPHALTIC FLUMES SY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 00+00 | - | 54+20 | MAINLINE | 385 | 220 | 800 | 10,070 | - | - | - | - |
| 57+25 | - | 79+10 | MAINLINE | 160 | 90 | 325 | 4,100 | - | - | - | - |
| 04+15 | - | 54+67 | MULTI-USE PATH | - | - | - | - | - | 630 | - | - |
| 59+00 | - | 69+00 | MULTI-USE PATH | - | - | - | - | - | 55 | - | - |
| 18+91 | - | 36+54 | MEDIAN | 40 | 25 | 85 | 1,055 | - | - | - | - |
| DRIVEWAYS | | - | - | - | - | - | - | - | - | 155 | - |
| PROJECT | | - | - | - | - | - | - | 9,750 | - | - | 110 |
| | | | **TOTAL** | **585** | **335** | **1,210** | **15,225** | **9,750** | **685** | **155** | **110** |

## CULVERT PIPE

| STATION | LOCATION | CULVERT PIPE CLASS III 520.0118 18-INCH LF | CULVERT PIPE CLASS III 520.0124 24-INCH LF | APRON ENDWALLS FOR CULVERT PIPE 520.1018 18-INCH EACH | APRON ENDWALLS FOR CULVERT PIPE 520.1024 24-INCH EACH | CULVERT PIPE REINFORCED CONCRETE CLASS III 522.0136 36-INCH LF | APRON ENDWALLS FOR REINFORCED CULVERT PIPE 522.1036 + 36-INCH EACH | THICKNESS (INCHES) STEEL | THICKNESS (INCHES) ALUMINUM | CULVERT PIPE CONCRETE COLLAR 520.8000.S EACH |
|---|---|---|---|---|---|---|---|---|---|---|
| 76+07 | 32' RT | - | 24 | - | 2 | - | - | 0.064 | 0.075 | - |
| 77+50 | 27' RT | - | 24 | - | 2 | - | - | 0.064 | 0.075 | - |
| 1N+03 | LT & RT | - | - | - | - | 8 | 2 | - | - | 2 |
| 6N+30 | C/L | 52 | - | 2 | - | - | - | 0.064 | 0.060 | - |
| | **TOTAL** | **52** | **48** | **2** | **4** | **8** | **2** | | | **2** |

NOTES: + BID ITEM SHOWN ELSEWHERE

3

## CONCRETE CURB & GUTTER

| STATION | TO | STATION | LOCATION | 601.0407 18-INCH TYPE D LF | 601.0411 30-INCH TYPE D LF | 601.0557 6-INCH SLOPED 36-INCH TYPE D LF | SPV.0090.11 4-INCH SLOPED 24-INCH TYPE D LF |
|---|---|---|---|---|---|---|---|
| 00+00 | - | 54+20 | LT, RT | 7,141 | 2,910 | 7,990 | 1,848 |
| 57+25 | - | 79+10 | LT, RT | 2,707 | - | 4,530 | - |
| | | | **TOTAL** | **9,848** | **2,910** | **12,520** | **1,848** |

## CONCRETE SIDEWALK

| STATION | TO | STATION | LOCATION | 602.0405 4-INCH SF | 602.0415 6-INCH SF | 602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF |
|---|---|---|---|---|---|---|
| 00+33 | - | 01+43 | LT | 660 | - | - |
| 01+67 | - | 03+02 | LT | 810 | - | - |
| 11+07 | - | 13+10 | MEDIAN | 1,020 | - | - |
| 14+21 | - | 14+76 | MEDIAN | 275 | - | - |
| 42+34 | - | 42+92 | MEDIAN | 290 | - | - |
| 57+25 | - | 59+15 | MEDIAN | 955 | - | - |
| 60+27 | - | 61+08 | MEDIAN | 410 | - | - |
| -0+27 | - | - | RT | - | 50 | 8 |
| 00+26 | - | - | LT | - | 70 | 8 |
| 03+09 | - | - | LT | - | 85 | 8 |
| 04+07 | - | - | LT | - | 210 | 16 |
| 13+25 | - | - | LT | - | 130 | 16 |
| 14+01 | - | - | LT | - | 140 | 16 |
| 16+00 | - | - | LT | - | 205 | 32 |
| 59+27 | - | - | LT | - | 190 | 16 |
| 60+14 | - | - | LT | - | - | - |
| 1N+90 | - | - | RT | - | 130 | 16 |
| | | | **TOTAL** | **4,420** | **1,210** | **136** |

## RIPAP

| STATION | LOCATION | 606.0200 RIPRAP MEDIUM CY | 645.0120 GEOTEXTILE FABRIC TYPE HR SY |
|---|---|---|---|
| 17+10 | 92' LT | 13 | 42 |
| 31+83 | 105' LT | 26 | 72 |
| 33+15 | 105' LT | 20 | 61 |
| 47+28 | 85' LT | 20 | 61 |
| 49+71 | 85' LT | 20 | 61 |
| 53+50 | 20' RT | 45 | 122 |
| 60+56 | 111' LT | 20 | 61 |
| 62+30 | 92' LT | 13 | 42 |
| 63+50 | 20' RT | 50 | 132 |
| 71+88 | 62' LT | 5 | 18 |
| | **TOTAL** | **232** | **672** |

## ADJUSTING COVERS

| STATION | LOCATION | 611.8110 MANHOLE EACH | 611.8115 INLET EACH | COMMENT |
|---|---|---|---|---|
| 03+72 | 23' RT | 1 | - | STORM |
| 04+73 | 23' RT | 1 | - | STORM |
| 08+89 | 20' RT | 1 | - | STORM |
| 13+70 | 28' RT | 1 | - | STORM |
| 00+38 | 23' RT | - | 1 | STORM |
| | **TOTAL** | **4** | **1** | |

## SEMI-RIGID BARRIER SYSTEMS

| STATION | TO | STATION | LOCATION | 614.0115 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2 EACH | 614.0200 STEEL THRIE BEAM STRUCTURE APPROACH LF | 614.0305 STEEL PLATE BEAM GUARD CLASS A LF | 614.0370 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL EACH | 614.0396 GUARDRAIL MOW STRIP ASPHALT SY | 614.0515 GUARDRAIL STIFFENED LHW LF |
|---|---|---|---|---|---|---|---|---|---|
| 52+07 | - | 54+20 | RT | - | - | 163 | 1 | 80 | - |
| 57+25 | - | 57+64 | LT | - | - | - | 1 | 20 | - |
| 62+76 | - | 63+82 | RT | 1 | - | 50 | 1 | 53 | - |
| 53+36 | - | 53+86 | RT | - | - | - | - | - | 50 |
| 63+26 | - | 63+76 | RT | - | - | - | - | - | 50 |
| | | | **TOTAL** | **1** | **0** | **213** | **3** | **153** | **100** |

## CONCRETE MEDIAN

| STATION | TO | STATION | LOCATION | 620.0100 CONCRETE CORRUGATED MEDIAN SF | 620.0300 SLOPED NOSE SF |
|---|---|---|---|---|---|
| 05+60 | - | 06+02 | LT | 225 | - |
| 18+61 | - | 18+91 | LT | 600 | - |
| 36+54 | - | 36+74 | LT | 600 | - |
| 71+90 | - | 75+50 | LT | 3,575 | - |
| 10+30 | - | - | LT | - | 33 |
| 11+05 | - | - | LT | - | 38 |
| 13+10 | - | - | LT | - | 38 |
| 14+21 | - | - | LT | - | 38 |
| 41+56 | - | - | LT | - | 33 |
| 42+34 | - | - | LT | - | 38 |
| 59+15 | - | - | LT | - | 38 |
| 60+27 | - | - | LT | - | 38 |
| | | | **TOTAL** | **5,000** | **294** |

## 624.0100 WATER

| PROJECT | MGAL |
|---|---|
| 6999-13-70 | 792 |
| **TOTAL** | **792** |

BASED ON 15 GAL/TON OF BASE

## FINISHING ITEMS

| STATION | TO | STATION | LOCATION | 625.0100 TOPSOIL SY | 627.0200 MULCHING SY | 628.2004 EROSION MAT CLASS I, TYPE B SY | 628.2008 EROSION MAT URBAN CLASS I, TYPE B SY | 629.0210 FERTILIZER TYPE B CWT | 630.0140 SEEDING MIXTURE NO. 40 LB | 630.0200 SEEDING TEMPORARY LB |
|---|---|---|---|---|---|---|---|---|---|---|
| 00+00 | - | 54+20 | LT | 18,710 | 15,260 | - | 7,760 | 16 | 440 | 660 |
| 00+00 | - | 54+20 | RT | 9,175 | 9,670 | - | 2,580 | 8 | 220 | 330 |
| 57+25 | - | 79+10 | LT | 10,800 | 9,140 | - | 3,280 | 8 | 225 | 340 |
| 57+25 | - | 79+10 | RT | 5,500 | 5,690 | - | 1,130 | 5 | 125 | 185 |
| 47+50 | - | 53+00 | LT, SWALE | - | - | 1,210 | - | - | - | - |
| | | | **TOTAL** | **44,185** | **39,760** | **1,210** | **14,750** | **37** | **1,010** | **1,515** |

NOTES: APPLICATION RATES: FERTILIZER = 7LB/1000 SF, SEEDING MIXTURE NO 40 = 2LB/1000 SF, & SEEDING TEMPORARY = 3LB/1000SF

| STATION | TO | STATION | LOCATION | 628.1104 EROSION BALES EACH | 628.1504 SILT FENCE LF | 628.1520 SILT FENCE MAINTENANCE LF | 628.1905 MOBILIZATIONS EACH | 628.1910 MOBILIZATIONS EMERGENCY EACH | 628.7570 ROCK BAGS EACH | 631.1100 SOD EROSION CONTROL SY | SPV.0060.33 EXCAVATION SEDIMENTATION TRAPS EA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28+50 | - | 30+50 | RT | - | 200 | 200 | - | - | - | - | - |
| 28+50 | - | 32+85 | LT | - | 500 | 500 | - | - | - | - | - |
| 43+50 | - | 54+20 | LT | - | 1,110 | 1,110 | - | - | - | - | - |
| 44+65 | - | 54+20 | RT | - | 980 | 980 | - | - | - | - | - |
| 56+50 | - | 59+00 | LT | - | 270 | 270 | - | - | - | - | - |
| 56+50 | - | 57+75 | RT | - | 150 | 150 | - | - | - | - | - |
| 60+25 | - | 66+50 | LT | - | 650 | 650 | - | - | - | - | - |
| 60+25 | - | 66+00 | RT | - | 600 | 600 | - | - | - | - | - |
| 71+00 | - | 79+10 | LT | - | 840 | 840 | - | - | - | - | - |
| 77+60 | - | 79+10 | RT | - | 165 | 165 | - | - | - | - | - |
| 4C+25 | - | - | LT | - | - | - | - | - | - | 9 | - |
| 4C+25 | - | - | RT | - | - | - | - | - | - | 8 | - |
| 1N+00 | - | 4N+00 | LT | - | 280 | 280 | - | - | - | - | - |
| 1N+00 | - | 4N+00 | RT | - | 270 | 270 | - | - | - | - | - |
| 6N+50 | - | 7N+50 | LT | - | 100 | 100 | - | - | - | - | - |
| 6N+25 | - | 7N+50 | RT | - | 150 | 150 | - | - | - | - | - |
| UNDISTRIBUTED | | | | - | 100 | 1,000 | 1,000 | - | - | 300 | - | 10 |
| PROJECT: 6999-13-70 | | | | - | - | - | - | 2 | 4 | - | - | - |
| | | | **TOTAL** | **100** | **7,265** | **7,265** | **2** | **4** | **300** | **17** | **10** |

## INLET PROTECTION

| STATION | LOCATION | 628.7005 TYPE A EACH | 628.7015 TYPE C EACH | 628.7020 TYPE D EACH |
|---|---|---|---|---|
| 00+36 | RT | - | - | 1 |
| 01+00 | LT, RT | 2 | 2 | - |
| 04+20 | LT, RT | 2 | 2 | - |
| 05+10 | LT | 1 | - | - |
| 09+92 | LT, RT | 4 | 4 | - |
| 13+00 | LT, RT | 4 | 4 | - |
| 15+00 | LT, RT | 4 | 4 | - |
| 15+78 | RT | 1 | - | - |
| 16+18 | RT | 1 | - | - |
| 17+10 | LT, RT | 4 | 4 | - |
| 20+00 | LT, RT | 4 | 4 | - |
| 25+90 | LT, RT | 4 | 4 | - |
| 29+36 | LT, RT | 4 | 4 | - |
| 31+50 | LT, RT | 4 | 4 | - |
| 33+15 | LT, RT | 4 | 4 | - |
| 33+25 | LT, RT | 4 | 4 | - |
| 35+50 | LT, RT | 4 | 4 | - |
| 36+50 | LT | 1 | 1 | - |
| 39+00 | LT | 1 | 1 | - |
| 42+50 | LT, RT | 4 | 4 | - |
| 44+60 | LT, RT | 4 | 4 | - |
| 47+00 | LT, RT | 4 | 4 | - |
| 49+43 | LT, RT | 4 | 4 | - |
| 49+53 | LT, RT | 4 | 4 | - |
| 57+29 | LT, RT | 4 | 4 | - |
| 58+95 | LT, RT | 4 | 4 | - |
| 60+37 | LT, RT | 3 | 3 | - |
| 60+56 | LT | 1 | 1 | - |
| 62+36 | RT | 1 | 1 | - |
| 62+40 | LT, RT | 3 | 3 | - |
| 64+75 | LT, RT | 4 | 4 | - |
| 67+00 | LT, RT | 4 | 4 | - |
| 71+85 | LT, RT | 4 | 4 | - |
| 6D+69 | RT | 1 | 1 | - |
| 4E+09 | LT, RT | 2 | 2 | - |
| | **TOTAL** | **104** | **101** | **1** |

## DITCH CHECKS

| STATION | LOCATION | 628.7504 TEMPORARY LF | 628.7555 CULVERT PIPE EACH |
|---|---|---|---|
| 49+00 | LT | 15 | - |
| 51+00 | LT | 15 | - |
| 53+00 | LT | 15 | - |
| 60+50 | RT | 14 | - |
| 77+00 | RT | 10 | - |
| 79+00 | RT | 15 | - |
| 1N+00 | RT | 10 | - |
| 4C+00 | LT | 8 | - |
| 4C+00 | RT | 8 | - |
| 58+95 | 32' RT | - | 1 |
| 60+56 | 38' RT | - | 1 |
| 75+90 | 30' RT | - | 1 |
| 77+35 | 28' RT | - | 1 |
| 1N+08 | 30' RT | - | 1 |
| 6N+30 | 30' RT | - | 1 |
| | **TOTAL** | **110** | **6** |

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

## PERMANENT SIGNS

| SIGN NUMBER | STATION | LOCATION | SIGN CODE | DESCRIPTION | SIZE IN X IN | 634.0410 POSTS WOOD 4X4-INCH X 10-FT EACH | 634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH | 634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH | 634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH | 634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH | 637.0202 SIGNS REFLECTIVE TYPE II SF |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-1 | 4C+52 | 30' RT | R1-1 | STOP | 30 X 30 | - | 1 | - | - | - | 5.18 |
| 1-2 | 5+00 | 44' LT | D11-1 | BIKE ROUTE | 24 X 18 | 1 | - | - | - | - | 3.00 |
| 1-3 | 5+00 | 44' LT | M4-6 | END | 12 X 6 | - | - | - | - | - | 0.50 |
| 1-4 | 5+00 | 27' LT | D11-1 | BIKE ROUTE | 24 X 18 | 1 | - | 1 | - | - | 3.00 |
| 1-5 | 6+12 | 3' LT | W6-1 | DIVIDED HIGHWAY AHEAD | 48 X 48 | - | 1 | - | - | - | 16.00 |
| 1-6 | 9+00 | 29' RT | R2-1 | SPEED LIMIT 35 | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 1-7 | 9+00 | 49' LT | R2-1 | SPEED LIMIT 35 | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 1-8 | 10+23 | 6' LT | R4-7 | KEEP RIGHT | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 1-9 | 5D+43 | 30' LT | R1-1 | STOP | 30 X 30 | - | 1 | - | - | - | 5.18 |
| 1-10 | 11+09 | 3.5' LT | R4-7 | KEEP RIGHT | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 1-11 | 4+00 | 40' LT | R1-1 | STOP | 18 X 18 | 1 | - | - | - | - | 1.86 |
| 2-1 | 13+06 | 16' LT | R4-7 | KEEP RIGHT | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 2-2 | 13+00 | 64' LT | D11-1 | BIKE ROUTE | 24 X 18 | 1 | - | - | - | - | 3.00 |
| 2-3 | 4E+23 | 25' RT | R1-1 | STOP | 30 X 30 | - | 1 | - | - | - | 5.18 |
| 2-4 | 14+25 | 12' LT | R4-7 | KEEP RIGHT | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 2-5 | 14+25 | 58' LT | D11-1 | BIKE ROUTE | 24 X 18 | 1 | - | - | - | - | 3.00 |
| 2-6 | 15+95 | 27' LT | R3-55L | LEFT TURN LANE WITH DOWN RIGHT ARROW | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 2-7 | 21+34 | 19' RT | R2-1 | SPEED LIMIT 35 | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 2-8 | 13+13 | 50' LT | R1-1 | STOP | 18 X 18 | 1 | - | - | - | - | 1.86 |
| 2-9 | 13+97 | 72' LT | R1-1 | STOP | 18 X 18 | 1 | - | - | - | - | 1.86 |
| 3-1 | 34+50 | 61' LT | R2-1 | SPEED LIMIT 35 | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 4-1 | 41+52 | 16' LT | R4-7 | KEEP RIGHT | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 4-2 | 42+38 | 16' LT | R4-7 | KEEP RIGHT | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 4-3 | 44+12 | 27' LT | R3-55L | LEFT TURN LANE WITH DOWN RIGHT ARROW | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 5-1 | 53+36 | 16' LT | R3-55L | LEFT TURN LANE WITH DOWN RIGHT ARROW | 24 X 30 | - | 1 | 1 | 1 | 1 | 5.00 |
| 5-2 | 57+52 | 61' LT | M1-5A | CTH X | 24 X 24 | - | 1 | - | - | - | 4.00 |
| 5-3 | 58+50 | 61' LT | R2-1 | SPEED LIMIT 35 | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 5-4 | 59+00 | 77' LT | D11-1 | BIKE ROUTE | 24 X 18 | 1 | - | - | - | - | 3.00 |
| 5-5 | 59+11 | 28' LT | R4-7 | KEEP RIGHT | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 5-8 | 51+50 | 19' RT | W2-1 | INTERSECTION | 30 X 30 | - | - | 1 | - | - | 6.25 |
| 6-1 | 60+31 | 16' LT | R4-7 | KEEP RIGHT | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 6-2 | 61+00 | 19' RT | M1-5A | CTH X | 24 X 24 | - | 1 | - | - | - | 4.00 |
| 6-3 | 61+50 | 19' RT | R2-1 | SPEED LIMIT 35 | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 6-4 | 62+28 | 27' LT | R3-55L | LEFT TURN LANE WITH DOWN RIGHT ARROW | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 6-5 | 63+50 | 19' RT | W9-1L | LEFT LANE ENDS | 48 X 48 | - | - | - | 1 | - | 16.00 |
| 6-6 | 63+50 | 17' LT | W9-1L | LEFT LANE ENDS | 48 X 48 | - | - | - | 1 | - | 16.00 |
| 6-7 | 65+50 | 61' LT | W2-1 | INTERSECTION | 30 X 30 | - | - | 1 | - | - | 6.25 |
| 6-8 | 66+25 | 19' RT | W4-2L | LANE ENDS | 36 X 36 | - | - | 1 | - | - | 9.00 |
| 6-9 | 66+25 | 17' LT | W4-2L | LANE ENDS | 36 X 36 | - | - | 1 | - | - | 9.00 |
| 6-10 | 69+54 | 19' RT | S3-1 | SCHOOL BUS STOP AHEAD ** | 36 X 36 | - | - | 1 | - | - | 9.00 |
| 7-1 | 71+50 | 19' RT | W6-2 | DIVIDED HIGHWAY ENDS | 48 X 48 | - | - | - | 1 | - | 16.00 |
| 7-2 | 71+50 | 19' RT | R5-1A | WRONG WAY | 36 X 24 | - | - | - | - | - | 6.00 |
| 7-3 | 75+45 | 4' LT | R4-7 | KEEP RIGHT | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 7-4 | 75+45 | 19' RT | R5-1 | DO NOT ENTER | 30 X 30 | - | 1 | - | - | - | 6.25 |
| 7-5 | 76+00 | 26' LT | R2-1 | SPEED LIMIT 35 | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 7-6 | 79+00 | 17' RT | W6-3 | TWO-WAY TRAFFIC | 48 X 48 | - | - | 1 | - | - | 16.00 |
| 7-7 | 79+00 | 17' RT | R2-1 | SPEED LIMIT 45 | 24 X 30 | - | 1 | - | - | - | 5.00 |
| 7-8 | 83+25 | 32' LT | W6-1 | DIVIDED HIGHWAY AHEAD | 48 X 48 | - | - | - | - | 1 | 16.00 |
| 7-9 | 84+00 | 32' LT | W3-5 | SPEED LIMIT 35 AHEAD (ARROW) | 36 X 36 | - | - | - | - | - | 9.00 |
| 8-1 | 0N+50 | 20' RT | W3-1 | STOP AHEAD * | 30 X 30 | - | - | 1 | - | - | 6.25 |
| 8-2 | 2N+00 | 23.5' RT | R3-8 | LEFT AHEAD / RIGHT ONLY | 36 X 30 | - | 1 | - | - | - | 7.50 |
| 8-3 | 2N+00 | 23.5' RT | R1-1 | STOP | 18 X 18 | - | - | - | - | - | 1.86 |
| 8-3 | 3N+00 | 26' RT | D11-1 | BIKE ROUTE | 24 X 18 | 1 | - | - | - | - | 3.00 |
| 8-4 | 3N+00 | 26' RT | M4-6 | EHD | 12 X 6 | - | - | - | - | - | 0.50 |
| 8-5 | 3N+36 | 26' RT | W14-3 | NO PASSING ZONE * | 48 X 36 | - | 1 | - | - | - | 6.00 |
| 8-6 | 4N+15 | 33' RT | R1-1 | STOP | 30 X 30 | - | 1 | - | - | - | 5.18 |
| 8-7 | 5N+34 | 31' LT | R1-1 | STOP | 30 X 30 | - | 1 | - | - | - | 5.18 |
| | | | | **TOTAL** | | **9** | **32** | **9** | **4** | **2** | **341.84** |

NOTE : * FLUORESCENT YELLOW SHEETING ** FLUORESCENT YELLOW - GREEN SHEETING

## MOVING AND REMOVING SIGNS

| STATION | LOCATION | 638.2102 MOVING SIGNS TYPE II EA | 638.2602 REMOVING SIGNS TYPE II EA | 638.3000 REMOVING SMALL SIGN SUPPORTS EA |
|---|---|---|---|---|
| 02+24 | LT | 1 | - | - |
| 4C+48 | RT | - | 1 | 1 |
| 09+00 | RT | - | 1 | 1 |
| 09+05 | LT | - | 1 | 1 |
| 5D+48 | LT | - | 1 | 1 |
| 4E+62 | RT | - | 1 | 1 |
| 21+34 | RT | - | 1 | 1 |
| 34+43 | LT | - | 1 | 1 |
| 35+17 | RT | - | 1 | 1 |
| 43+79 | RT | - | 1 | 1 |
| 51+56 | RT | - | 1 | 1 |
| 51+83 | LT | - | 1 | 1 |
| 53+38 | RT | - | 1 | 1 |
| 57+61 | LT | - | 1 | 1 |
| 57+61 | LT | - | 1 | - |
| 57+61 | LT | - | 1 | - |
| 58+05 | LT | 2 | 1 | 1 |
| 58+50 | LT | - | 1 | 1 |
| 58+71 | RT | - | 1 | 1 |
| 58+86 | LT | 1 | - | - |
| 60+30 | RT | 1 | - | - |
| 61+46 | RT | - | 1 | 1 |
| 62+00 | LT | - | 1 | 1 |
| 65+06 | LT | 1 | - | - |
| 68+63 | LT | - | 1 | 1 |
| 69+54 | RT | - | 1 | 1 |
| 70+24 | LT | - | 1 | 1 |
| 0N+50 | RT | - | 1 | 1 |
| 3N+28 | LT | 1 | - | - |
| 3N+36 | RT | - | 1 | 1 |
| 4N+45 | RT | - | 1 | 1 |
| 6N+86 | RT | 1 | - | - |
| -4+80 * | RT | - | 1 | 1 |
| 119+30 * | LT | - | 1 | 1 |
| | **TOTAL** | **8** | **28** | **26** |

NOTE: * REFERS TO THE THE BRIDGE WEIGHT LIMIT SIGNS OUTSIDE OF THE PROJECT LIMITS

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

## TRAFFIC CONTROL ITEMS

| LOCATION | ESTIMATED CONTRACT TIME FOR COMPLETION DAYS | 643.0100 TRAFFIC CONTROL (6999-13-70) EACH | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS | 643.0900 TRAFFIC CONTROL SIGNS DAYS | 643.2000 TRAFFIC CONTROL DETOUR (6999-13-70) EACH | 643.3000 TRAFFIC CONTROL DETOUR SIGNS DAYS |
|---|---|---|---|---|---|---|---|
| PROJECT | 171 | 1 | 4,275 | 5,130 | 4,788 | 1 | 14,700 |
| | **PROJECT TOTALS** | **1** | **4,275** | **5,130** | **4,788** | **1** | **14,700** |

NOTES: BASED ON 171 CALENDAR DAYS (95 WORKING DAYS)

## 645.0125 GEOTEXTILE FABRIC TYPE MS

| STATION | TO | STATION | LOCATION | SY |
|---|---|---|---|---|
| 53+00 | - | 53+35 | LT | 215 |
| 59+80 | - | 60+50 | LT | 380 |
| 62+00 | - | 64+00 | RT | 660 |
| 63+25 | - | 64+60 | LT | 965 |
| 1N+00 | - | 2N+00 | LT | 165 |
| | | | **TOTAL** | **2,385** |

3

## PAVEMENT MARKING

| STATION | TO | STATION | 646.0106 EPOXY 4-INCH (YELLOW) LF | 646.0106 EPOXY 4-INCH (WHITE) LF | 646.0126 EPOXY 8-INCH (WHITE) LF | COMMENTS |
|---|---|---|---|---|---|---|
| 00+32 | - | 03+00 | 540 | - | - | DOUBLE CENTERLINE |
| 04+12 | - | 05+00 | 176 | - | - | DOUBLE CENTERLINE |
| 05+00 | - | 05+61 | 246 | - | - | DOUBLE SOLID FOR MEDIAN |
| 05+61 | - | 06+06 | 91 | - | - | SINGLE SOLID FOR MEDIAN |
| 18+91 | - | 36+53 | 3,525 | - | - | SINGLE SOLID FOR MEDIAN |
| 18+91 | - | 36+53 | 885 | - | - | SINGLE DASH FOR MEDIAN |
| 69+00 | - | 71+90 | 290 | - | - | SINGLE SOLID FOR MEDIAN |
| 69+00 | - | 74+40 | 1,080 | - | - | SINGLE SOLID FOR MEDIAN |
| 74+40 | - | 75+50 | 110 | - | - | SINGLE SOLID FOR MEDIAN |
| 74+98 | - | 75+50 | 55 | - | - | SINGLE SOLID FOR MEDIAN |
| 75+50 | - | 79+10 | 1,440 | - | - | DOUBLE SOLID FOR MEDIAN |
| 0N+83 | - | 4N+22 | 680 | - | - | DOUBLE CENTERLINE NORTHWESTERN |
| 5N+24 | - | 7N+50 | 455 | - | - | DOUBLE CENTERLINE LAHR AVENUE |
| 00+00 | - | 10+30 | - | 260 | - | SINGLE DASH FOR NORTH BOUND |
| 00+32 | - | 03+00 | - | 70 | - | SINGLE DASH FOR SOUTH BOUND |
| 04+12 | - | 13+10 | - | 225 | - | SINGLE DASH FOR SOUTH BOUND |
| 11+00 | - | 54+20 | - | 1,080 | - | SINGLE DASH FOR NORTH BOUND |
| 14+15 | - | 54+20 | - | 1,000 | - | SINGLE DASH FOR SOUTH BOUND |
| 57+25 | - | 59+19 | - | 50 | - | SINGLE DASH FOR NORTH BOUND |
| 57+25 | - | 59+19 | - | 50 | - | SINGLE DASH FOR SOUTH BOUND |
| 60+24 | - | 69+00 | - | 220 | - | SINGLE DASH FOR SOUTH BOUND |
| 60+24 | - | 67+63 | - | 185 | - | SINGLE DASH FOR NORTH BOUND |
| 78+00 | - | 79+10 | - | 110 | - | EDGELINE FOR SOUTH BOUND |
| 78+00 | - | 79+10 | - | 110 | - | EDGELINE FOR NORTH BOUND |
| 0N+83 | - | 1N+15 | - | 35 | - | EDGELINE NORTHWESTERN |
| 0N+83 | - | 3N+26 | - | 245 | - | EDGELINE NORTHWESTERN |
| 5N+55 | - | 7N+50 | - | 195 | - | EDGELINE FOR LAHR |
| 5N+55 | - | 7N+50 | - | 195 | - | EDGELINE FOR LAHR |
| 11+03 | - | 11+55 | - | - | 52 | TURN LANE |
| 12+62 | - | 13+14 | - | - | 52 | TURN LANE |
| 14+15 | - | 14+75 | - | - | 60 | TURN LANE |
| 42+32 | - | 42+92 | - | - | 60 | TURN LANE |
| 57+25 | - | 59+19 | - | - | 195 | TURN LANE |
| 60+24 | - | 61+08 | - | - | 85 | TURN LANE |
| 3N+26 | - | 4N+22 | - | - | 96 | TURN LANE |
| **SUBTOTAL** | | | **9,573** | **4,030** | **-** | |
| | | **TOTAL** | **13,603** | | **600** | |

## PAVEMENT MARKING

| STATION | LOCATION | 646.0116 EPOXY 6-INCH (WHITE, INLETS) LF | 647.0456 CURB EPOXY (YELLOW) LF | 647.0606 ISLAND NOSE EPOXY EACH |
|---|---|---|---|---|
| 00+36 | RT | 2.5 | - | - |
| 01+00 | LT, RT | 5 | - | - |
| 04+20 | LT, RT | 5 | - | - |
| 09+92 | LT, RT | 10 | - | - |
| 13+00 | LT, RT | 10 | - | - |
| 15+00 | LT, RT | 10 | - | - |
| 17+10 | LT, RT | 10 | - | - |
| 20+00 | LT, RT | 10 | - | - |
| 25+90 | LT, RT | 10 | - | - |
| 29+36 | LT, RT | 10 | - | - |
| 31+50 | LT, RT | 10 | - | - |
| 33+15 | LT, RT | 10 | - | - |
| 33+25 | LT, RT | 10 | - | - |
| 35+50 | LT, RT | 10 | - | - |
| 36+50 | LT, RT | 2.5 | - | - |
| 39+00 | LT, RT | 2.5 | - | - |
| 42+50 | LT, RT | 10 | - | - |
| 44+60 | LT, RT | 10 | - | - |
| 47+00 | LT, RT | 10 | - | - |
| 49+43 | LT, RT | 10 | - | - |
| 49+53 | LT, RT | 10 | - | - |
| 57+29 | LT, RT | 10 | - | - |
| 58+95 | LT, RT | 10 | - | - |
| 60+37 | LT, RT | 7.5 | - | - |
| 60+56 | LT, RT | 2.5 | - | - |
| 62+36 | RT | 2.5 | - | - |
| 62+50 | LT | 7.5 | - | - |
| 64+75 | LT, RT | 10 | - | - |
| 67+00 | LT, RT | 10 | - | - |
| 71+85 | LT, RT | 10 | - | - |
| 6D+ 69 | RT | 2.5 | - | - |
| 4E+09 | LT, RT | 5 | - | - |
| 10+30 | LT | - | 55 | 1 |
| 11+05 | LT | - | 10 | 1 |
| 13+14 | LT | - | 10 | 1 |
| 14+15 | LT | - | 10 | 1 |
| 41+55 | LT | - | 55 | 1 |
| 42+32 | LT | - | 10 | 1 |
| 59+19 | LT | - | 10 | 1 |
| 60+24 | LT | - | 10 | 1 |
| | **TOTAL** | **255** | **170** | **8** |

## PAVEMENT MARKING

| STATION | LOCATION | 647.0166 ARROWS EPOXY TYPE 2 EACH | 647.0176 ARROWS EPOXY TYPE 3 EACH | 647.0196 ARROWS EPOXY TYPE 5 EACH | 647.0356 WORDS EPOXY EACH |
|---|---|---|---|---|---|
| 11+30 | LT | 1 | - | - | - |
| 12+85 | LT | 1 | - | - | - |
| 14+45 | LT | 1 | - | - | - |
| 19+70 | LT | 2 | - | - | - |
| 23+70 | LT | 2 | - | - | - |
| 27+70 | LT | 2 | - | - | - |
| 31+70 | LT | 2 | - | - | - |
| 35+70 | LT | 2 | - | - | - |
| 42+60 | LT | 1 | - | - | - |
| 58+07 | LT | 1 | - | - | - |
| 58+87 | LT | 1 | - | - | - |
| 60+55 | LT | 1 | - | - | - |
| 3N+93 | RT | 1 | 1 | - | - |
| 67+55 | LT | - | - | 1 | - |
| 58+47 | LT | - | - | - | 1 |
| 60+97 | LT | - | - | - | 1 |
| 3N+52 | RT | - | - | - | 1 |
| | **TOTAL** | **18** | **1** | **1** | **3** |

## PAVEMENT MARKING

| STATION | TO | STATION | 647.0566 STOPLINE 18-INCH (WHITE) LF | 647.0726 DIAGONAL EPOXY 12-INCH (YELLOW) LF | 647.0736 DIAGONAL EPOXY 18-INCH (YELLOW) LF | 647.0766 CROSSWALK EPOXY 6-INCH LF | 647.0856 CONCRETE CORRUGATED MEDIAN EPOXY SF |
|---|---|---|---|---|---|---|---|
| 05+00 | - | 05+61 | - | 18 | - | - | - |
| 69+00 | - | 74+40 | - | - | 121 | - | - |
| 75+50 | | 79+10 | - | - | 54 | - | - |
| 05+61 | - | 06+06 | - | - | - | - | 95 |
| 18+61 | - | 18+91 | - | - | - | - | 240 |
| 36+53 | - | 36+83 | - | - | - | - | 240 |
| 71+90 | - | 75+50 | - | - | - | - | 1,450 |
| BERNARD AVENUE | | | 18 | - | - | 85 | - |
| CONCORD AVENUE | | | 26 | - | - | 145 | - |
| PRIVATE ROAD | | | 26 | - | - | - | - |
| EAU CLAIRE AVENUE | | | 21 | - | - | 115 | - |
| NORTHWESTERN AVENUE | | | 30 | - | - | - | - |
| LAHR AVENUE | | | 25 | - | - | - | - |
| | | **TOTAL** | **146** | **18** | **175** | **345** | **2,025** |

## 690.0150 SAWING ASPHALT

| STATION | LOCATION | LF |
|---|---|---|
| 00+00 | C/L | 86 |
| 01+54 | LT | 24 |
| 08+10 | RT | 24 |
| 12+90 | RT | 66 |
| 22+40 | LT | 12 |
| 25+45 | RT | 17 |
| 27+16 | RT | 15 |
| 33+71 | RT | 15 |
| 41+82 | RT | 21 |
| 57+95 | RT | 38 |
| 72+50 | RT | 12 |
| 75+16 | RT | 10 |
| 76+07 | RT | 10 |
| 77+50 | RT | 15 |
| 79+10 | C/L | 24 |
| 3C+66 | C/L | 22 |
| 6D+10 | LT | 28 |
| 6D+10 | RT | 45 |
| 6D+36 | C/L | 22 |
| 3E+20 | C/L | 22 |
| 0N+83 | C/L | 28 |
| 1N+75 | RT | 17 |
| 6N+00 | RT | 40 |
| 7N+75 | C/L | 22 |
| | **TOTAL** | **635** |

## CONSTRUCTION STAKING

| STATION | TO | STATION | 650.4000 STORM SEWER EACH | 650.4500 SUBGRADE LF | 650.5000 BASE LF | 650.5500 CURB GUTTER AND CURB & GUTTER LF | 650.6000 PIPE CULVERTS EACH | 650.9910 SUPPLEMENTAL CONTROL (PROJECT) LS | 650.9920 SLOPE STAKES LF |
|---|---|---|---|---|---|---|---|---|---|
| 00+00 | - | 54+20 | - | 5,420 | 5,420 | 19,890 | - | - | 5,420 |
| 57+25 | - | 79+10 | - | 2,185 | 2,185 | 7,240 | - | - | 2,185 |
| 3C+66 | - | 4C+60 | - | 95 | 95 | - | - | - | 95 |
| 5D+20 | - | 6D+36 | - | 120 | 120 | - | - | - | 120 |
| 3E+20 | - | 4E+40 | - | 120 | 120 | - | - | - | 120 |
| 0N+83 | - | 4N+40 | - | 360 | 360 | - | - | - | 360 |
| 5N+20 | - | 7N+50 | - | 230 | 230 | - | - | - | 230 |
| 6999-13-70 | | | 134 | - | - | - | 4 | 1 | - |
| | | | **134** | **8,530** | **8,530** | **27,130** | **4** | **1** | **8,530** |

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

## STORM SCHEDULE

| | | | Storm Sewer Pipe Reinforced Concrete | | | | | | Apron Endwalls for Culvert Pipe Reinforced Concrete | | | | Catch Basins | | | Inlet Covers | | | | SPV.0060.30 | SPV.0060.31 | STRUCTURE SUMMARY (1) Depth = (Casting Elevation - Discharge Elevation) - (Casting Height + 6" Adjustment)+Sump Depth | | | | | ADDITIONAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 608.0324 | 608.0336 | 608.0412 | 608.0415 | | | 522.1012 | 522.1015 | 522.1024 | 522.1036 + | 611.0101 | 611.0105 | 611.0107 | 611.0612 | 611.0624 | 611.0627 | SPV.0060.32 | Inlets Type 3 | Inlets Type 3 | | | | | |
| | | | Class III | Class III | Class IV | Class IV | | | 12-INCH | 15-INCH | 24-INCH | 36-INCH | Type 1 | Type 3 | Type 5 | Type C | Type H | Type HM | Type H-SP | Modified | Modified 2 | DEPTH[1] | FROM | TO | INLET | DISCHARGE | INLET |
| STRUCTURE NUMBER | LOCATION | CASTING RIM ELEVATION | 24-INCH LF | 36-INCH LF | 12-INCH LF | 15-INCH LF | PERCENT SLOPE | PIPE TIES REQUIRED | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | (FEET) | STRUCTURE | STRUCTURE | ELEVATION | ELEVATION | ELEVATION |
| 1 | 1+00, 25.5' RT | 1213.33 | - | - | 63 | - | 2.10 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.68 | 1A | EXIST | 1209.82 | 1209.82 | - |
| 1A | 1+00, 25.5' LT | 1213.33 | - | - | 51 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.17 | - | 1 | - | 1210.33 | - |
| 2 | 4+20, 25.5' RT | 1214.68 | - | - | - | 52 | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.93 | 2A | EXIST | 1211.17 | 1210.92 | - |
| 2A | 4+20, 25.5' LT | 1214.68 | - | - | 51 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.17 | - | 2 | - | 1211.68 | - |
| 3 | 5+10, 60.0' LT | 1213.30 | - | - | 91 | - | 1.00 | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 3.25 | - | EXIST | - | 1210.30 | - |
| 4 | 9+92, 25.5' RT | 1215.90 | - | - | - | 103 | 1.00 | - | - | - | - | - | 1 | - | - | - | 1 | - | - | - | - | 5.47 | 4A, 4D | EXIST | 1212.19 | 1211.60 | 1211.85 |
| 4A | 9+92, 0.5' LT | 1215.96 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.68 | 4B | 4 | 1212.45 | 1212.45 | - |
| 4B | 9+92, 19.5' LT | 1215.96 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.49 | 4C | 4A | 1212.64 | 1212.64 | - |
| 4C | 9+92, 45.5' LT | 1215.90 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.17 | - | 4B | - | 1212.90 | - |
| 4D | 6"D"+69, 18.5' RT | 1215.46 | - | - | 61 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.17 | - | 4 | - | 1212.46 | - |
| 5 | 13+00, 25.5' RT | 1214.03 | - | - | - | 70 | 1.00 | - | - | - | - | - | 1 | - | - | - | 1 | - | - | - | - | 6.32 | 5A | EXIST | 1208.88 | 1208.88 | - |
| 5A | 13+00, 12.5' LT | 1213.85 | - | - | - | 38 | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 5.76 | 5B | 5 | 1209.26 | 1209.26 | - |
| 5B | 13+00, 19.5' LT | 1214.09 | - | - | - | 7 | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 5.93 | 5C | 5A | 1209.58 | 1209.33 | - |
| 5C | 13+00, 45.5' LT | 1214.03 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 5.36 | 5D | 5B | 1209.84 | 1209.84 | - |
| 5D | 4"E"+09, 18.5' RT | 1213.82 | - | - | 61 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.54 | 5E | 5C | 1210.45 | 1210.45 | - |
| 5E | 4"E"+09, 18.5' LT | 1213.82 | - | - | 37 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.17 | - | 5D | - | 1210.82 | - |
| 6 | 15+00, 13.5' RT | 1212.57 | 132 | - | - | - | 0.80 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 6.64 | 6A, 6D | EXIST | 1208.85 | 1206.60 | 1207.41 |
| 6A | 15+00, 13.5' LT | 1212.63 | - | - | 27 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.68 | 6B | 6 | 1209.12 | 1209.12 | - |
| 6B | 15+00, 22' LT | 1212.44 | - | - | 9 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | - | 1 | 4.40 | 6C | 6A | 1209.21 | 1209.21 | - |
| 6C | 15+00, 57.5' LT | 1212.57 | - | - | 36 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | 4.17 | - | 6B | - | 1209.57 | - |
| 6D | 15+78, 23.0' RT | 1211.40 | - | - | 79 | - | 1.00 | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 3.45 | 6E | 6 | 1208.20 | 1208.20 | - |
| 6E | 16+18, 23.0' RT | 1211.40 | - | - | 40 | - | 1.00 | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 3.05 | - | 6D | - | 1208.60 | - |
| 7 | 17+10, 92' LT | - | - | - | - | - | - | 2 | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 7A | - | - | 1206.90 | - |
| 7A | 17+10, 57.5' LT | 1211.63 | 36 | - | - | - | 0.50 | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | 5.22 | 7B, 8 | 7 | 1207.92 | 1207.08 | 1207.08 |
| 7B | 17+10, 31.5' LT | 1211.69 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 4.18 | 7C | 7A | 1208.18 | 1208.18 | - |
| 7C | 17+10, 12.5' LT | 1211.69 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 3.99 | 7D | 7B | 1208.37 | 1208.37 | - |
| 7D | 17+10, 13.5' RT | 1211.63 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 7C | - | 1208.63 | - |
| 8 | 20+00, 57.5' LT | 1212.86 | 290 | - | - | - | 0.30 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 5.58 | 8A | 7A | 1209.15 | 1207.95 | - |
| 8A | 20+00, 31.5' LT | 1212.92 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 4.18 | 8B | 8 | 1209.41 | 1209.41 | - |
| 8B | 20+00, 12.5' LT | 1212.92 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 3.99 | 8C | 8A | 1209.60 | 1209.60 | - |
| 8C | 20+00, 13.5' RT | 1212.86 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 8B | - | 1209.86 | - |
| 9 | 25+90, 57.5' LT | 1211.80 | 346 | - | | - | 2.24 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 5.38 | 9A | 10 | 1208.09 | 1207.09 | - |
| 9A | 25+90, 31.5' LT | 1211.86 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 4.18 | 9B | 9 | 1208.35 | 1208.35 | - |
| 9B | 25+90, 12.5' LT | 1211.86 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 3.99 | 9C | 9A | 1208.54 | 1208.54 | - |
| 9C | 25+90, 13.5' RT | 1211.80 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 9B | - | 1208.80 | - |
| 10 | 29+36, 57.5' LT | 1204.06 | 214 | - | - | - | 1.93 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 5.38 | 9 | 11A | 1199.35 | 1199.35 | - |
| 10A | 29+36, 31.5' LT | 1204.12 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 4.18 | 10B | 10 | 1200.61 | 1200.61 | - |
| 10B | 29+36, 12.5' LT | 1204.12 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 3.99 | 10C | 10A | 1200.80 | 1200.80 | - |
| 10C | 29+36, 13.5' RT | 1204.06 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 10B | 1201.06 | 1201.06 | - |
| 11 | 31+82, 103' LT | - | - | - | - | - | - | 2 | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 11A | - | - | 1194.65 | - |
| 11A | 31+50, 57.5' LT | 1199.85 | 56 | - | - | - | 1.00 | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | 5.31 | 10, 11B | 11 | 1195.21 | 1195.21 | 1196.14 |
| 11B | 31+50, 31.5' LT | 1199.91 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 4.18 | 11C | 11A | 1196.40 | 1196.40 | - |
| 11C | 31+50, 12.5' LT | 1199.91 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 3.99 | 11D | 11B | 1196.59 | 1196.59 | - |
| 11D | 31+50, 13.5' RT | 1199.85 | - | | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 11C | - | 1196.85 | - |
| 12 | 33+25, 101' LT | - | - | - | - | - | - | 2 | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 12E | - | - | 1194.40 | - |
| 12A | 33+15, 57.5' LT | 1198.80 | - | - | 10 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.37 | - | 12E | - | 1196.10 | - |
| 12B | 33+15, 31.5' LT | 1198.86 | - | - | 10 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 3.86 | - | 12F | - | 1195.67 | - |
| 12C | 33+15, 12.5' LT | 1198.86 | - | - | 10 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 3.76 | - | 12G | - | 1195.77 | - |
| 12D | 33+15, 13.5' RT | 1198.80 | - | - | 10 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.57 | - | 12H | - | 1195.90 | - |
| 12E | 33+25, 57.5' LT | 1198.80 | 44 | - | - | - | 0.50 | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | 4.85 | 12F, 12A | 12 | 1195.24 | 1194.62 | 1194.62, 1196.00 |
| 12F | 33+25, 31.5' LT | 1198.86 | - | - | - | 26 | 0.50 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 4.16 | 12G, 12B | 12E | 1195.37 | 1195.37 | 1195.57 |
| 12G | 33+25, 12.5' LT | 1198.86 | - | - | - | 19 | 0.50 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 4.06 | 12H, 12C | 12F | 1195.67 | 1195.47 | 1195.67 |
| 12H | 33+25, 13.5' RT | 1198.80 | - | - | 26 | - | 0.50 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | 12D | 12G | 1195.80 | 1195.80 | - |
| 13A | 35+50, 57.5'LT | 1199.81 | 225 | - | - | - | 0.30 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 5.18 | 13B | 12E | 1196.10 | 1195.30 | - |
| 13B | 35+50, 31.5' LT | 1199.87 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 4.18 | 13C | 13A | 1196.36 | 1196.36 | - |
| 13C | 35+50, 12.5' LT | 1199.87 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 3.99 | 13D | 13B | 1196.55 | 1196.55 | - |
| 13D | 35+50, 13.5' RT | 1199.81 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 13C | - | 1196.81 | - |
| 14 | 34+24, 111' LT | - | - | - | 236 | - | 0.50 | 2 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 15 | 1197.00 | - | - |
| 15 | 36+50, 57.5' LT | 1200.31 | - | - | 250 | - | 0.50 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 5.16 | 14 | 16 | 1195.82 | 1195.82 | - |

NOTES: + BID ITEM SHOWN ESLEWHERE. STRUCTURE NUMBERS 1 - 6E HAVE A 2 FOOT SUMP PER VILLAGE OF WESTON REQUEST, THE REMAINING HAVE A 1.5 FOOT SUMP

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

## STORM SCHEDULE CONTINUED

| | | | Storm Sewer Pipe Reinforced Concrete | | | | | | Apron Endwalls for Culvert Pipe Reinforced Concrete | | | | Catch Basins | | | Inlet Covers | | | | SPV.0060.30 | SPV.0060.31 | STRUCTURE SUMMARY (1) Depth = (Casting Elevation - Discharge Elevation) - (Casting Height + 6" Adjustment)+Sump Depth | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 608.0324 | 608.0336 | 608.0412 | 608.0415 | | | 522.1012 | 522.1015 | 522.1024 | 522.1036 + | 611.0101 | 611.0105 | 611.0107 | 611.0612 | 611.0624 | 611.0627 | SPV.0060.32 | Inlets Type 3 | Inlets Type 3 | | | | | |
| STRUCTURE NUMBER | LOCATION | CASTING RIM ELEVATION | Class III 24-INCH LF | Class III 36-INCH LF | Class IV 12-INCH LF | Class IV 15-INCH LF | PERCENT SLOPE | PIPE TIES REQUIRED | 12-INCH EA | 15-INCH EA | 24-INCH EA | 36-INCH EA | Type 1 EA | Type 3 EA | Type 5 EA | Type C EA | Type H EA | Type HM EA | Type H-SP EA | Modified EA | Modified 2 EA | DEPTH[1] (FEET) | FROM STRUCTURE | TO STRUCTURE | INLET ELEVATION | DISCHARGE ELEVATION | ADDITIONAL INLET ELEVATION |
| 16 | 39+00, 57.5' LT | 1201.42 | - | - | 350 | - | 0.50 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 7.52 | 15 | 17 | 1194.57 | 1194.57 | - |
| 17 | 42+50, 57.5' LT | 1198.14 | 210 | - | - | - | 1.80 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 6.96 | 16, 17A | 18 | 1192.82 | 1191.85 | 1194.43 |
| 17A | 42+50, 19.5' LT | 1197.96 | - | - | 38 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 3.82 | 17B | 17 | 1194.81 | 1194.81 | - |
| 17B | 42+50, 12.5' LT | 1198.20 | - | - | 7 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 3.99 | 17C | 17A | 1194.88 | 1194.88 | - |
| 17C | 42+50, 13.5' RT | 1198.14 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 17B | - | 1195.14 | - |
| 18 | 44+60, 57.5' LT | 1192.78 | 240 | - | - | - | 2.74 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 5.38 | 17, 18A | 19A | 1188.07 | 1188.07 | 1189.07 |
| 18A | 44+60, 31.5' LT | 1192.84 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 4.18 | 18B | 18 | 1189.33 | 1189.33 | - |
| 18B | 44+60, 12.5' LT | 1192.84 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.99 | 18C | 18A | 1189.52 | 1189.52 | - |
| 18C | 44+60, 13.5' RT | 1192.78 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 18B | - | 1189.78 | - |
| 19 | 47+28, 85' LT | - | - | - | - | - | - | 2 | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 19A | - | - | 1180.18 | - |
| 19A | 47+00, 57.5' LT | 1187.66 | 40 | - | - | - | 0.80 | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | 7.83 | 18, 19B | 19 | 1181.50 | 1180.50 | 1183.95 |
| 19B | 47+00, 31.5' LT | 1187.72 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 4.18 | 19C | 19A | 1184.21 | 1184.21 | - |
| 19C | 47+00, 12.5' LT | 1187.72 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.99 | 19D | 19B | 1184.40 | 1184.40 | - |
| 19D | 47+00, 13.5' RT | 1187.66 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 19C | - | 1184.66 | - |
| 20 | 49+43, 57.5' LT | 1185.93 | - | - | - | 40 | 2.00 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 4.68 | 20A, 20D | 20H | 1181.92 | 1181.92 | 1182.83 |
| 20A | 49+43, 31.5' LT | 1185.99 | - | - | - | 26 | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 4.48 | 20B, 20E | 20 | 1182.18 | 1182.18 | 1182.83 |
| 20B | 49+43, 12.5' LT | 1185.99 | - | - | - | 19 | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 4.29 | 20C, 20F | 20A | 1182.57 | 1182.37 | 1182.83 |
| 20C | 49+43, 13.5' RT | 1185.93 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.77 | 20G | 20B | 1182.83 | 1182.83 | - |
| 20D | 49+53, 57.5' LT | 1185.93 | - | - | 10 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 20 | - | 1182.93 | - |
| 20E | 49+53, 31.5' LT | 1185.99 | - | - | 10 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.73 | - | 20A | - | 1182.93 | - |
| 20F | 49+53, 12.5' LT | 1185.99 | - | - | 10 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.73 | - | 20B | - | 1182.93 | - |
| 20G | 49+53, 13.5' RT | 1185.93 | - | - | 10 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 20C | - | 1182.93 | - |
| 20H | 49+71, 85' LT | - | - | - | - | - | - | 2 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | 20 | - | - | 1181.12 | - |
| 21 | 57+29, 57.5' LT | 1186.41 | 166 | - | - | - | 0.98 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 5.85 | 21A | 22 | 1182.70 | 1181.23 | - |
| 21A | 57+29, 31.5' LT | 1186.47 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 4.18 | 21B | 21 | 1182.96 | 1182.96 | - |
| 21B | 57+29, 24.5' LT | 1186.23 | - | - | 7 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 3.87 | 21C | 21A | 1183.03 | 1183.03 | - |
| 21C | 57+29, 13.5' RT | 1186.41 | - | - | 38 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 21B | - | 1183.41 | - |
| 22 | 58+95, 57.5' LT | 1185.95 | 143 | - | - | - | 0.30 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 7.02 | 22A | 23A | 1180.13 | 1179.60 | 1179.60 |
| 22A | 58+95, 31.5' LT | 1186.01 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 6.29 | 22B | 22 | 1180.39 | 1180.39 | - |
| 22B | 58+95, 14.5' LT | 1185.77 | - | - | 7 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 5.98 | 22C | 22A | 1180.46 | 1180.46 | - |
| 22C | 58+95, 13.5' RT | 1185.95 | - | - | 38 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 5.78 | 22D | 22B | 1180.84 | 1180.84 | - |
| 22D | 58+95, 30' RT | - | - | - | 16 | - | 1.00 | 2 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 22C | 1181.00 | - | - |
| 23 | 60+61, 112' LT | - | - | - | - | - | - | 2 | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | 23A | - | - | 1177.00 | - |
| 23A | 60+56, 57.5' LT | 1187.51 | - | 54 | - | - | 1.85 | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | 10.18 | 23B, 22, 23E | 23 | 1178.00 | 1178.00 | 1178.80, 1183.41 |
| 23B | 60+56, 38' RT | - | - | 96 | - | - | 1.56 | 2 | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 23A | 1179.50 | - | - |
| 23C | 60+37, 19.5' LT | 1186.98 | - | - | 42 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 3.82 | 23D | 23A | 1183.83 | 1183.83 | - |
| 23D | 60+37, 12.5' LT | 1187.22 | - | - | 7 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 3.99 | 23E | 23C | 1183.90 | 1183.90 | - |
| 23E | 60+37, 13.5' RT | 1187.16 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 23D | - | 1184.16 | - |
| 24 | 62+30, 92' LT | - | - | - | - | - | | 2 | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 24A | - | - | 1186.00 | - |
| 24A | 62+40, 57.5' LT | 1193.09 | 40 | - | - | - | 1.00 | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | 7.36 | 25, 24B | 24 | 1188.18 | 1186.40 | 1189.38 |
| 24B | 62+40, 31.5' LT | 1193.15 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 4.18 | 24C | 24A | 1189.64 | 1189.64 | - |
| 24C | 62+40, 12.5' LT | 1193.15 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 3.99 | 24D | 24B | 1189.83 | 1189.83 | - |
| 24D | 62+36, 13.5' RT | 1192.93 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.51 | - | 24C | - | 1190.09 | - |
| 25 | 64+75, 57.5' LT | 1206.01 | 235 | - | - | - | 5.33 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 5.98 | 26, 25A | 24A | 1200.70 | 1200.70 | 1202.30 |
| 25A | 64+75, 31.5' LT | 1206.07 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 4.18 | 25B | 25 | 1202.56 | 1202.56 | - |
| 25B | 64+75, 12.5' LT | 1206.07 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 3.99 | 25C | 25A | 1202.75 | 1202.75 | - |
| 25C | 64+75, 13.5' RT | 1206.01 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 25B | - | 1203.01 | - |
| 26 | 67+00, 57.5' LT | 1220.45 | 225 | - | - | - | 6.62 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | 5.53 | 26A | 25 | 1216.74 | 1215.59 | - |
| 26A | 67+00, 31.5' LT | 1220.51 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 4.18 | 26B | 26 | 1217.00 | 1217.00 | - |
| 26B | 67+00, 12.5' LT | 1220.51 | - | - | 19 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 3.99 | 26C | 26A | 1217.19 | 1217.19 | - |
| 26C | 67+00, 13.5' RT | 1220.45 | - | - | 26 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 26B | - | 1217.45 | - |
| 27 | 71+88.3, 61.5' LT | - | - | - | - | - | - | 2 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | 27A | - | - | 1227.84 | - |
| 27A | 71+86.8, 38.38' LT | 1231.56 | - | - | 23 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 4.16 | 27B | 27 | 1228.07 | 1228.07 | - |
| 27B | 71+85.5, 18.81' LT | 1231.76 | - | - | 20 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 4.16 | 27C | 27A | 1228.27 | 1228.27 | - |
| 27C | 71+85, 6.17' RT | 1231.76 | - | - | 13 | - | 1.00 | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | 4.03 | 27D | 27B | 1228.40 | 1228.40 | - |
| 27D | 71+85, 13.5' RT | 1231.60 | - | - | 20 | - | 1.00 | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.67 | - | 27C | - | 1228.60 | - |
| | **TOTAL** | | **2,642** | **150** | **2,832** | **400** | | | **3** | **1** | **5** | **2** | **16** | **3** | **6** | **3** | **35** | **52** | **14** | **63** | **16** | | | | | | |

NOTES: + BID ITEM SHOWN ESLEWHERE. STRUCTURE NUMBERS 1 - 6E HAVE A 2 FOOT SUMP PER VILLAGE OF WESTON REQUEST, THE REMAINING HAVE A 1.5 FOOT SUMP

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

3

## CLEARING AND GRUBBING

| STATION | TO | STATION | LOCATION | 201.0105 CLEARING STA | 201.0205 GRUBBING STA | 201.0120 CLEARING ID | 201.0220 GRUBBING ID |
|---|---|---|---|---|---|---|---|
| 54+20 | - | 55+00 | LT | 0.80 | 0.80 | - | - |
| 56+78 | - | - | 70' LT | - | - | 6 | 6 |
| 56+81 | - | - | 43' LT | - | - | 6 | 6 |
| 56+87 | - | - | 55' LT | - | - | 6 | 6 |
| 57+00 | - | - | 46' LT | - | - | 9 | 9 |
| | | | **TOTAL** | **0.80** | **0.80** | **27** | **27** |

## 204.0165 REMOVING GUARDRAIL

| STATION | TO | STATION | LOCATION | LF | COMMENTS |
|---|---|---|---|---|---|
| 54+20 | - | 54+73 | LT | 53 | CTH X |
| 54+20 | - | 54+73 | RT | 53 | CTH X |
| 56+72 | - | 57+25 | LT | 53 | CTH X |
| 56+72 | - | 57+25 | RT | 53 | CTH X |
| | | | **TOTAL** | **212** | |

## EXCAVATION

| STATION | TO | STATION | 205.0100 COMMON CY + | 205.0200 ROCK CY + | FILL CY + | WASTE CY + | 208.0100 BORROW CY + |
|---|---|---|---|---|---|---|---|
| 54+20.00 | - | 54+67.80 | 0 | 0 | 4,000 | 0 | 4,000 |
| 56+78.40 | - | 57+25.00 | 0 | 0 | 1,900 | 0 | 1,900 |
| | | **TOTAL** | **0** | **0** | **5,900** | **0** | **5,900** |

NOTES: + SEE EARTHWORK SHEET

## 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH

| STATION | TO | STATION | LOCATION | TON | COMMENT |
|---|---|---|---|---|---|
| 54+20 | - | 57+25 | LT, RT | 650 | MAINLINE |
| 54+20 | - | 57+25 | LT | 35 | MULTI-USE PATH |
| | | | **TOTAL** | **685** | |

## CONCRETE PAVEMENT

| STATION | TO | STATION | LOCATION | 415.2000.S INCENTIVE STRENGTH CONCRETE PAVEMENT DOL | 416.0050 CONCRETE PAVEMENT APPROACH SLAB SY | COMMENTS |
|---|---|---|---|---|---|---|
| 54+51.20 | - | 54+67.87 | LT, RT | - | 119 | B-37-295 |
| 56+78.37 | - | 56+95.04 | LT, RT | - | 119 | B-37-295 |
| PROJECT | | | - | 500 | - | - |
| | | | **TOTAL** | **500** | **238** | |

## ASPHALTIC PAVEMENT

| STATION | TO | STATION | LOCATION | 455.0115 ASPHALTIC MATERIAL PG64-22 TON | 455.0122 ASPHALTIC MATERIAL PG64-34 TON | 455.0605 TACK COAT GAL | 460.1101 HMA PAVEMENT TYPE E-1 TON | 460.2000 INCENTIVE DENSITY HMA PAVEMENT DOL | 465.0105 ASPHALTIC SURFACE TON |
|---|---|---|---|---|---|---|---|---|---|
| 54+20 | - | 57+25 | LT, RT | 6 | 3 | 11 | 140 | - | 12 |
| PROJECT | | | | - | - | - | - | 90 | - |
| | | | **TOTAL** | **6** | **3** | **11** | **140** | **90** | **12** |

## CONCRETE CURB & GUTTER

| STATION | TO | STATION | LOCATION | 601.0407 18-INCH TYPE D LF | 601.0557 6-INCH SLOPED 36-INCH TYPE D LF |
|---|---|---|---|---|---|
| 54+20 | - | 57+25 | LT, RT | 190 | 122 |
| | | | **TOTAL** | **190** | **122** |

## 602.0405 CONCRETE SIDEWALK 4-INCH

| STATION | TO | STATION | LOCATION | SF |
|---|---|---|---|---|
| 54+51 | - | 54+68 | MEDIAN | 81 |
| 56+78 | - | 57+25 | MEDIAN | 105 |
| | | | **TOTAL** | **186** |

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6676-03-73 UNLESS OTHERWISE NOTED

## SEMI-RIGID BARRIER SYSTEMS

| STATION | TO | STATION | LOCATION | 614.0200 STEEL THRIE BEAM STRUCTURE APPROACH LF | 614.0305 STEEL PLATE BEAM GUARD CLASS A LF | 614.0396 GUARDRAIL MOW STRIP ASPHALT SY |
|---|---|---|---|---|---|---|
| 54+20 | - | 54+32 | RT | - | 12 | - |
| 54+32 | - | 54+53 | RT | 21 | - | - |
| 54+20 | - | 54+51 | RT | - | - | 10 |
| 56+93 | - | 57+14 | LT | 21 | - | - |
| 57+14 | - | 57+25 | LT | - | - | - |
| 56+95 | - | 57+25 | LT | - | - | 10 |
| | | | **TOTAL** | **42** | **12** | **20** |

## 624.0100 WATER

| PROJECT | MGAL |
|---|---|
| 6676-03-73 | 10 |
| **TOTAL** | **10** |

BASED ON 15 GAL/TON OF BASE

## EROSION CONTROL

| STATION | TO | STATION | LOCATION | 628.1104 EROSION BALES EACH | 628.1504 SILT FENCE LF | 628.1520 SILT FENCE MAINTENANCE LF | 628.1905 MOBILIZATIONS EACH | 628.1910 MOBILIZATIONS EMERGENCY EACH | 628.6005 TURBIDITY BARRIERS SY |
|---|---|---|---|---|---|---|---|---|---|
| 54+20 | - | 55+00 | LT | - | 100 | 100 | - | - | - |
| 54+20 | - | 55+00 | RT | - | 100 | 100 | - | - | - |
| 56+50 | - | 57+25 | LT | - | 100 | 100 | - | - | - |
| 56+50 | - | 57+25 | RT | - | 100 | 100 | - | - | - |
| 55+45 | - | - | LT, RT | - | - | - | - | - | 300 |
| 55+60 | - | - | LT, RT | - | - | - | - | - | 450 |
| UNDISTRIBUTED | | | | - | 25 | 100 | 100 | - | - |
| PROJECT: 6676-03-73 | | | | - | - | - | - | 2 | 3 |
| | | | **TOTAL** | **25** | **500** | **500** | **2** | **3** | **750** |

## FINISHING ITEMS

| STATION | TO | STATION | LOCATION | 625.0100 TOPSOIL SY | 627.0200 MULCHING SY | 628.2008 EROSION MAT URBAN CLASS I TYPE B SY | 629.0210 FERTILIZER TYPE B CWT | 630.0140 SEEDING MIXTURE NO. 40 LB | 630.0200 SEEDING TEMPORARY LB |
|---|---|---|---|---|---|---|---|---|---|
| 54+20 | - | 57+25 | LT | 260 | 340 | 36 | 0.5 | 8.5 | 13 |
| 54+20 | - | 57+25 | RT | 240 | 280 | 34 | 0.5 | 8.5 | 13 |
| | | | **TOTAL** | **500** | **620** | **70** | **1** | **17** | **26** |

NOTES: APPLICATION RATES: FERTILIZER = 7LB/1000 SF, SEEDING MIXTURE NO 40 = 2LB/1000 SF, & SEEDING TEMPORARY = 3LB/1000

## PERMANENT SIGNS

| SIGN NUMBER | STATION | LOCATION | SIGN CODE | DESCRIPTION | SIZE IN X IN | 634.0410 POSTS WOOD 4X4-INCH X 10-FT EACH | 637.0202 SIGNS REFLECTIVE TYPE II SF |
|---|---|---|---|---|---|---|---|
| 5-6 | 54+53 | 70' LT | OM3-L | OBJECT MARKER | 6 X 18 | 1 | 0.75 |
| 5-7 | 56+93 | 70' LT | OM3-R | OBJECT MARKER | 6 X 18 | 1 | 0.75 |
| | | | | **TOTAL** | | **2** | **1.50** |

## 645.0125 GEOTEXTILE FABRIC TYPE MS

| STATION | TO | STATION | LOCATION | SY |
|---|---|---|---|---|
| 54+37 | - | 54+92 | LT, RT | 314 |
| | | | **TOTAL** | **314** |

## PAVEMENT MARKING

| STATION | TO | STATION | 646.0106 EPOXY 4-INCH (WHITE) LF | 646.0126 EPOXY 8-INCH (WHITE) LF | COMMENT |
|---|---|---|---|---|---|
| 54+20 | - | 57+25 | 80 | - | CENTERLINE NORTH BOUND |
| 54+20 | - | 57+25 | 80 | - | CENTERLINE SOUTH BOUND |
| 54+52 | - | 57+25 | - | 273 | TURN LANE |
| | | **TOTAL** | **160** | **273** | |

## PAVEMENT MARKING

| STATION | LOCATION | 647.0166 ARROWS EPOXY TYPE 2 EACH | 647.0356 WORDS EPOXY EACH |
|---|---|---|---|
| 54+75 | LT | 1 | - |
| 55+55 | LT | 1 | - |
| 55+17 | LT | - | 1 |
| | **TOTAL** | **2** | **1** |

## CONSTRUCTION STAKING

| STATION | TO | STATION | 650.4500 SUBGRADE LF | 650.5000 BASE LF | 650.5500 CURB GUTTER AND CURB & GUTTER LF | 650.6500 STRUCTURE LAYOUT EACH | 650.9910 SUPPLEMENTAL CONTROL (PROJECT) LS | 650.9920 SLOPE STAKES LF |
|---|---|---|---|---|---|---|---|---|
| 54+20 | - | 54+68 | 48 | 48 | - | - | - | 48 |
| 56+78 | - | 57+25 | 47 | 47 | - | - | - | 47 |
| 54+20 | - | 57+25 | - | - | 260 | - | - | - |
| B-37-295 | | | - | - | - | 1 | - | - |
| 6676-03-73 | | | - | - | - | - | 1 | - |
| | | **TOTAL** | **95** | **95** | **260** | **1** | **1** | **95** |

## CONVENTIONAL SIGNS AND ABBREVIATIONS

LIMITED HIGHWAY EASEMENT

PROPERTY LINE

LOT LINE

EXISTING RIGHT OF WAY

NEW RIGHT OF WAY

REFERENCE LINE

SLOPE INTERCEPT

SECTION LINE

NO ACCESS BY AQUISITION

NO ACCESS BY PREVIOUS AQUISITION

SECTION CORNER

TEMPORARY INTEREST EASEMENT

SET 3/4" X 24" IRON ROD
WEIGHING 1.50 LBS/LIN. FT.

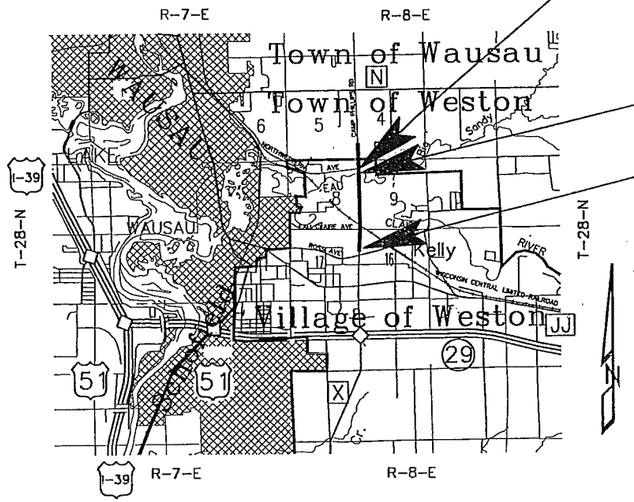
| | |
|---|---|
| A.P. | ACCESS POINT |
| A.C. | ACRE |
| E | EAST |
| X | EAST GRID COORDINATE |
| FND | FOUND |
| GAR | GARAGE |
| ha | HECACRE |
| km | KILOMETER |
| m | METER |
| N | NORTH |
| Y | NORTH GRID COORDINATE |
| P | PAGE |
| PLE | PERMANANT LIMITED EASEMENT |
| P/L | PROPERTY LINE |
| P.I. | POINT OF INTERSECTION |
| P.O.T. | POINT ON TANGENT |
| R | RANGE |
| RT | RIGHT |
| R/W | RIGHT OF WAY |
| SEC | SECTION |
| S | SOUTH |
| SF | SQUARE FOOT |
| sm | SQUARE METER |
| STA | STATION |
| TEMP | TEMPORARY |
| TI | TEMPORARY INTEREST EASEMENT |
| T | TOWN |
| VOL | VOLUME |
| W | WEST |

| R/W PROJECT NUMBER | SHEET NUMBER | TOTAL SHEETS |
|---|---|---|
| 6676-03-01 | 4.0 | 9 |
| FEDERAL PROJECT NUMBER | | |

PLAT OF RIGHT OF WAY REQUIRED FOR

# CAMP PHILLIPS ROAD
(ROSS AVENUE TO NORTHWESTERN AVENUE)

CAMP PHILLIPS ROAD — MARATHON COUNTY




END RELOCATION ORDER
PROJECT 6676-03-01
STA. 1+822.616
201.45 m SOUTH AND 8.90 m EAST OF THE S/W CORNER OF SEC. 4, T28N, R8E
PROJECT COORDINATES
Y = 121,862.830
X = 24,160.154

STRUCTURE
B-37-295

BEGIN RELOCATION ORDER
PROJECT 6676-03-01
STA. 0+000
395.93 m NORTH AND 23.67 m EAST OF THE WEST 1/4 CORNER OF SEC. 16, T28N, R8E

| STATE PLANE COORDINATES (METERS) | | PROJECT COORDINATES (METERS) |
|---|---|---|
| Y = 120,068.57 | EQUALS | Y = 120,041.348 |
| X = 643,367.85 | | X = 24,159.303 |

NOTES:

STATE PLANE COORDINATES WERE SCALED FROM U.S.G.S. TOPOGRAPHIC MAP "WAUSAU EAST, WISCONSIN" QUADRANGLE, FOR IDENTIFICATION ONLY.

PROJECT COORDINATES WERE TRANSFERED FROM THE FOTH & VAN DYKE REPORT, EASTERN ARTERIAL, (CAMP PHILLIPS ROAD – 41 ST STREET) RIGHT-OF-WAY DETERMINATION, SCOPE ID : 91M34.

THE N.E. CORNER OF SEC. 17, T28N, R8E SET AS Y= 395,201.36 FT., X= 2,079,344.30 FT., X 2,000,000 FT. WAS DROPPED FOR EASE OF HANDLING.

METRIC CONVERSION, Y=120,457.616 m, X=24,184.191 m

RIGHT OF WAY BOUNDARIES ARE REFERENCED TO THE U.S. PUBLIC LAND SURVEY.

STA. 0+000 – 0+100
℄ = ℄ = SECTION LINE

STA. 0+180 – 0+417
℄ = FLAG RT MEDIAN C&G = SECTION LINE

STA. 0+451 – END
℄ = ℄ NORTH BOUND LANES

LAYOUT
0 1.6 km

TOTAL NET LENGTH OF CENTERLINE = 1.823 km URBAN

WISCONSIN
RONALD K. JACOBSON
S-2059
WESTON, WI
LAND SURVEYOR
12-06-10

ACCEPTED FOR
MARATHON COUNTY
BY
DATE: (GLENN SPEICH, HIGHWAY COMMISSIONER)

ORIGINAL PLANS PREPARED BY
CENTRAL WISCONSIN ENGINEERS & ARCHITECTS, INC.

WISCONSIN
ROBERT D. ENGELMAN
S-1694
SCHOFIELD
WI
LAND SURVEYOR

DATE: 6/29/99 (Signature)

| REVISION DATE: | |
|---|---|
| 10/02/01 | 12/09/09 |
| 8/20/09 | 12/06/10 |
| 9/22/09 | 1/19/11 |
| 9/25/09 | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR DISTRICT OFFICE:
DATE: 6/10/99 (Signature)



M

# SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

| PARCEL NUMBER | SHEET NUMBER | OWNER(S) | INTEREST REQUIRED | TOTAL AREA | NEW | R/W AREA REQ'D. OR EXISTING | TOTAL | TOTAL AREA REMAINING | T.I. AREA | P.L.E. AREA |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.3 | JEAN A. KRUNCOS REVOCABLE TRUST | FEE, TI & ACCESS RIGHTS | 0.971 ha (2.40 AC) | 0.005 ha (0.01 AC) | --- | 0.005 ha (0.01 AC) | 0.966 ha (2.39 AC) | 0.027 ha (0.07 AC) | --- |
| 2 | 4.3 | G & B PRODUCE, INC | PLE, TI & ACCESS RIGHTS | 4.719 ha (11.66 AC) | --- | --- | --- | --- | 0.059 ha (0.15 AC) | 0.044 ha (0.12 AC) |
| 3 | 4.3 | ROBERT LOESEL | FEE, TI & ACCESS RIGHTS | 2.007 ha (4.96 AC) | 0.044 ha (0.11 AC) | --- | 0.044 ha (0.11 AC) | 1.963 ha (4.85 AC) | 0.062 ha (0.15 AC) | --- |
| 4 | 4.3 – 4.4 | JAMES D. GREENHECK | FEE, PLE, TI & ACCESS RIGHTS | 4.264 ha (10.536 AC) | 0.157 ha (0.39 AC) | --- | 0.157 ha (0.39 AC) | 4.107 ha (10.146 AC) | 0.040 ha (0.10 AC) | 0.030 ha (0.07 AC) |
| 5 | 4.3 | RICHARD BENDER | FEE, TI & ACCESS RIGHTS | 3.476 ha (8.589 AC) | 0.033 ha (0.082 AC) | --- | 0.033 ha (0.082 AC) | 3.443 ha (8.507 AC) | 0.036 ha (0.089 AC) | --- |
| 6 | 4.3 – 4.4 | ARVILLA A. BENDER | FEE, TI & ACCESS RIGHTS | 0.871 ha (2.152 AC) | 0.014 ha (0.035 AC) | --- | 0.014 ha (0.035 AC) | 0.857 ha (2.12 AC) | 0.157 ha (0.388 AC) | --- |
| 7 | 4.4 | CHESTER J. CHEREK & MARY J. CHEREK | FEE & ACCESS RIGHTS | 1.012 ha (2.50 AC) | 0.067 ha (0.17 AC) | --- | 0.067 ha (0.17 AC) | 0.945 ha (2.33 AC) | --- | --- |
| 8 | 4.4 | BETTY R. SCHEEL (n/k/a BETTY R. BESSETTE) | FEE & ACCESS RIGHTS | 1.582 ha (3.91 AC) | 0.181 ha (0.45 AC) | --- | 0.181 ha (0.45 AC) | 1.400 ha (3.46 AC) | --- | --- |
| 9 | 4.4 – 4.5 | ROBERT C. & RUTH D. GREENHECK (TRUSTEES) THE GREENHECK FAMILY TRUST | PLE & ACCESS RIGHTS | 13.497 ha (33.35 AC) | --- | --- | --- | 13.497 ha (33.35 AC) | --- | 0.177 ha (0.44 AC) |
| 10 | 4.4 – 4.5 | THE ESTATE OF GLADYS ROLOFF | FEE & ACCESS RIGHTS | 1.578 ha (3.90 ac) | 0.076 ha (0.19 AC) | --- | 0.076 ha (0.19 AC) | 1.502 ha (3.71 AC) | --- | --- |
| 11 | 4.5 | LORENE K. ZILISCH | FEE, TI & ACCESS RIGHTS | 0.652 ha (1.61 AC) | 0.089 ha (0.22 AC) | --- | 0.089 ha (0.22 AC) | 0.563 ha (1.39 AC) | 0.139 ha (0.34 AC) | --- |
| 12 | 4.5 | FRED NOVAK | FEE, TI & ACCESS RIGHTS | 0.939 ha (2.32 AC) | 0.084 ha (0.21 AC) | --- | 0.084 ha (0.21 AC) | 0.855 ha (2.11 AC) | 0.121 ha (0.30 AC) | --- |
| 13 | 4.5 | MARVIN E. DRAKE & GAIL L. DRAKE | ACCESS RIGHTS | 1.821 ha (4.50 AC) | --- | --- | --- | 1.821 ha (4.50 AC) | --- | --- |
| 14 | 4.5 – 4.6 | ROBERT C. & RUTH D. GREENHECK (TRUSTEES) THE GREENHECK FAMILY TRUST | TI & ACCESS RIGHTS | 37.693 ha (93.14 AC) | --- | --- | --- | 37.693 ha (93.14 AC) | 0.063 ha (0.16 AC) | --- |
| 15 | 4.5 – 4.6 | SCOTT L. & MARY R. TURNER | ACCESS RIGHTS | 5.325 ha (13.16 AC) | --- | --- | --- | 5.326 ha (13.16 AC) | --- | --- |
| 16 | 4.5 – 4.7 | FRED J. DEHNEL & DONNA M. DEHNEL | FEE, TI & ACCESS RIGHTS | 38.199 ha (94.39 AC) | 0.923 ha (2.28 AC) | --- | 0.923 ha (2.28 AC) | 37.276 ha (92.11 AC) | 0.522 ha (1.29 AC) | --- |
| 17 | 4.6 – 4.8 | MARATHON DISTRICT OF SAMOSET, BOYS SCOUTS OF AMERICA | TI & ACCESS RIGHTS | 13.699 ha (33.85 AC) | --- | --- | --- | 13.699 ha (33.85 AC) | 0.252 ha (0.62 AC) | --- |
| 18 | 4.7 – 4.8 | VILLAGE OF WESTON | FEE, PLE, TI & ACCESS RIGHTS | 6.244 ha (15.43 AC) | 0.136 ha (0.34 AC) | --- | 0.136 ha (0.34 AC) | 6.108 ha (15.09 AC) | 0.359 ha (0.89 AC) | 0.103 ha (0.25 AC) |
| 19 | 4.8 | JAMES IOZZO | TI & ACCESS RIGHTS | 0.377 ha (0.931 AC) | --- | --- | --- | 0.377 ha (0.931 AC) | 0.060 ha (0.15 AC) | --- |
| 20 | 4.8 | JAMES IOZZO | FEE | 8.701 ha (21.50 AC) | 0.065 ha (0.16 AC) | --- | 0.065 ha (0.16 AC) | 8.636 ha (21.34 AC) | 0.032 ha (0.08 AC) | --- |
| 21 | | | | | | | | | | |
| 22 | 4.4 – 4.5 | BETTY R. SCHEEL (n/k/a BETTY R. BESSETTE) | FEE | 1.400 ha (3.46 AC) | 0.526 ha (1.30 AC) | --- | --- | 0.874 ha (2.16 AC) | --- | --- |
| 23 | 4.4 – 4.5 | THE ESTATE OF GLADYS ROLOFF | FEE | 1.502 ha (3.71 AC) | 0.146 ha (0.36 AC) | --- | --- | 1.363 ha (3.35 AC) | --- | --- |
| 24 | 4.5 | LORENE K. ZILISCH | FEE | 0.567 ha (1.40 AC) | 0.157 ha (0.39 AC) | --- | --- | 0.410 ha (1.01 AC) | --- | --- |
| 25 | 4.5 | FRED NOVAK | FEE | 0.855 ha (2.11 AC) | 0.147 ha (0.36 AC) | --- | --- | 0.708 ha (1.75 AC) | --- | --- |
| 26 | 4.5 – 4.6 | FRED J. DEHNEL & DONNA M. DEHNEL | FEE & ACCESS RIGHTS | 37.276 ha (92.11 AC) | 0.788 ha (1.95 AC) | --- | --- | 36.684 ha (90.16 AC) | --- | --- |
| 27 | 4.5 | JOSEPH J. & MARGARET L. JORDAN | FEE | 2.565 ha (6.34 AC) | 0.171 ha (0.07 AC) | --- | 0.171 ha (0.070 AC) | 2.394 ha (6.27 AC) | --- | --- |
| 28 | 4.7 | FRED J. DEHNEL & DONNA M. DEHNEL | FEE | 38.199 ha (94.39 AC) | 0.417 ha (1.03 AC) | --- | 0.417 ha (1.03 AC) | 37.782 ha (93.36 AC) | --- | --- |
| 29 | 4.7 – 4.8 | VILLAGE OF WESTON | FEE | 6.244 ha (15.43 AC) | 0.2622 ha (0.65 AC) | --- | 0.2622 ha (0.65 AC) | 5.982 ha (14.78 AC) | --- | --- |
| 30 | 4.7 – 4.8 | MARATHON DISTRICT OF SAMOSET, BOYS SCOUTS OF AMERICA | FEE | 13.699 ha (33.85 AC) | 0.252 ha (0.62 AC) | --- | 0.252 ha (0.62 AC) | 13.447 ha (33.23 AC) | --- | --- |
| 31 | | | | | | | | | | |
| 32 | | | | | | | | | | |
| 33 | 4.3 | WISCONSIN CENTRAL LIMITED RAILROAD | HIGHWAY EASEMENT | --- | 0.009 ha (0.02 AC) | 0.061 ha (0.15 AC) | 0.070 ha (0.17 AC) | --- | --- | --- |
| 34 | 4.3 | WISCONSIN CENTRAL LIMITED RAILROAD | HIGHWAY EASEMENT | --- | 0.025 ha (0.06 AC) | --- | 0.025 ha (0.06 AC) | --- | 0.012 ha (0.03 AC) | --- |
| 35 | 4.4 | WISCONSIN CENTRAL LIMITED RAILROAD | HIGHWAY EASEMENT | --- | 0.065 ha (0.16 AC) | 0.080 ha (0.20 AC) | 0.145 ha (0.36 AC) | --- | --- | --- |
| 36 | | | | | | | | | | |
| 37 | 4.4 | WISCONSIN PUBLIC SERVICE CORPORATION | RELEASE OF RIGHTS | --- | --- | --- | --- | --- | --- | --- |
| 38 | 4.4 – 4.5 | WISCONSIN PUBLIC SERVICE CORPORATION | RELEASE OF RIGHTS | --- | --- | --- | --- | --- | --- | --- |
| 39 | 4.5 | WISCONSIN PUBLIC SERVICE CORPORATION | RELEASE OF RIGHTS | --- | --- | --- | --- | --- | --- | --- |
| 40 | 4.5 | WISCONSIN PUBLIC SERVICE CORPORATION | RELEASE OF RIGHTS | --- | --- | --- | --- | --- | --- | --- |
| 41 | 4.6 | WISCONSIN PUBLIC SERVICE CORPORATION | RELEASE OF RIGHTS | --- | --- | --- | --- | --- | --- | --- |
| 42 | 4.7 | WISCONSIN PUBLIC SERVICE CORPORATION | RELEASE OF RIGHTS | --- | --- | --- | --- | --- | --- | --- |
| 43 | 4.7 | WISCONSIN PUBLIC SERVICE CORPORATION | RELEASE OF RIGHTS | --- | --- | --- | --- | --- | --- | --- |
| 44 | 4.8 | WISCONSIN PUBLIC SERVICE CORPORATION | RELEASE OF RIGHTS | --- | --- | --- | --- | --- | --- | --- |

| REVISION DATE | DATE | SCALE, METERS | HWY: CAMP PHILLIPS ROAD | FEDERAL PROJECT NO: | | |
|---|---|---|---|---|---|---|
| 10/02/01 9/22/09 12/06/10 8/20/09 12/09/09 1/19/11 | 6-10-99 | | COUNTY: MARATHON | STATE R/W PROJECT NO: 6676-03-01 | SHEET NO: 4.1 | 81 IVI |
| | GRID FACTOR | | | | | |

T 28 N

R 8 E

TOWN OF WESTON

VILLAGE OF WESTON

BEGIN RELOCATION ORDER
STA. 0+000

END RELOCATION ORDER
STA. 1+822.616

BERNARD AVENUE

CONCORD AVENUE

RUSS AVENUE

EAU CLAIRE AVENUE

WISCONSIN CENTRAL LIMITED RAILROAD

"D" DRIVE

54.36 AC REMAINING

37.75 AC REMAINING

EAU CLAIRE RIVER

NORTHWESTERN AVENUE

LAHR AVENUE

CAMP PHILLIPS ROAD

0+000 0+200 0+400 0+600 0+800 1+000 1+200 1+400 1+600 1+800

| | | | | | | |
|---|---|---|---|---|---|---|
| REVISION DATE 10/02/01 8/20/09 | DATE 6-10-99 GRID FACTOR | NOT TO SCALE | HWY: CAMP PHILLIPS ROAD | FEDERAL PROJECT NO: | | |
| | | | COUNTY: MARATHON | STATE R/W PROJECT NO: 6676-03-01 | SHEET NO: 4.2 | M |

VILLAGE OF WESTON

BERNARD AVENUE

CONCORD AVENUE

N 89°21' 59"E

S 89°52' 32"W

NE/NE SEC. 17

NW/NW SEC. 16

PAUL'S PAINT CENTER
4710

FOUND RAILROAD SPIKE
(STERNBERG AVE.)
Y= 119,645.417
X= 24,135.629

1 JEAN A. KRUNCOS REVOCABLE TRUST
PARCEL -2-
C.S.M. 7006
VOL. 26 P. 199

2 G & B PRODUCE, INC.
PARCEL -1-
CSM 6043
VOL. 22, P. 121

3 ROBERT LOESEL
C.S.M. 6847, VOL. 26 P. 40

4 JAMES D. GREENHECK

5 RICHARD A. BENDER
PARCEL -2-
C.S.M. 8531, VOL. 33 P. 99

33 HIGHWAY EASEMENT

34 HIGHWAY EASEMENT

WISCONSIN CENTRAL LIMITED RAILROAD

P.L.

S 84°03' 45"E

N 84°03' 45"W

Y=120,140.975
X=24,145.190
0+098.607
20.033 m
65.71')

Y=120,131.104
X=24,154.592

0+089.315
10.06 m
(33.0')

N43°36' 21"W
13.633 m
(44.72')

0+092.110
13.0 m
(42.65')

SLOPE INTERCEPT

0+009.364
13.0 m
(42.65')

1 A.P.
STA. 0+047
12.0 m MAX.

N 03°25' 18"E
89.738 m (294.42')
89.765 m (294.50')

0+009.550
10.06 m

0+099.315
10.06 m

10.00 m
(32.81')

396.637 m (1,301.30')
N 03° 25' 18" E

0+040 SECTION LINE N 03°25' 18"E
813.649 m (2669.45')

0+010.796
10.06 m

P.O.T. STA.
0+110.113=
0"C"+500.00

0+120

SECTION LINE & REFERENCE LINE

CAMP PHILLIPS ROAD

209.838 m (688.44')

0+011.003
13.0 m
(42.65')

SLOPE INTERCEPT

1 A.P.
STA. 0+114
36 m MAX.

209.709 m (688.02')
N 03°25' 18"E

0+160.845
10.06 m (33.00')
Y=120,201.306
X=24,178.942

N 23°49' 14"E PLE 51.43 m (168.69')

BEGIN RELOCATION ORDER
STA. 0+000=0"B"+500
Y = 120,041.348
X = 24,159.303

PROPOSED BERNARD AVENUE

66'

33'

0+118.778
20.033 m (65.72')
Y = 120,161.110
X = 24,146.393

13.544 m
(44.42')
N 39°01' 07"E

0+119.485
10.06 m

0+129.791
12.15 m
(39.85')
Y = 120,171.632
X = 24,154.920

N 01°35' 06" E 92.56 m (303.67') TI

N 00°05' 12"W 81.398 m (268.99')

91.237 m (299.33')

0+200

0+211.034
17.155 m
(56.27')
Y = 120,253.030
X = 24,154.773

0+211.291
23.00 m
(75.44')

SLOPE INTERCEPT

0+210.722
FND 75IN IR
7.103 m
(23.30')

N 00°05' 58"W
30.697 m
(100.69')

0+209.838
10.06 m

2.944 m
(9.66')

STA. 0+225.535

0+209.709
13.0 m
(42.65')

0+209.051
27.985 m (91.79')
Y=120,248.356
X=24,159.714

50'

50'

0+240.348
10.06 m

2.944 m
(9.66')

30.51 m
(100.10')

0+240.219
13.0 m
(42.65')

1 A.P.
STA. 0+247
12 m MAX.

59.652 m (195.71')
62.143 m (203.88')
N 03°25' 18"E

0+241.232
10.06 m

9.400 m
(30.84')

0+241.644
19.45 m
(63.80')
Y = 120,283.723
X = 24,154.309

0+241.758
23.00 m (72.16')

N23°49' 41"E 42.23 m (138.51')

0+242.291
34.178 m (112.10')
Y=120,285.247
X=24,139.648

0+281.874
19.45 m (63.80')
Y=120,323.880
X=24,156.710

N 03°25' 18"E
156.444 m (513.14')

1 A.P.
STA. 0+322
37 m MAX.

164.964 m (541.22')

MATCH LINE STA. 0+337

N 03°25' 18"E 0+280

33'

P.O.T. STA.
0+322.107=
0"D"+500

Y = 120,340.213
X = 24,187.247
0+320.00
10.06 m

37.0 m
(121.39')

Y = 120,376.989
X = 24,189.446
0+337.00
10.06 m

0+301.995
13.0 m
(42.65')

16.702 m
(54.80')

14.670 m
(48.13')

5.446 m
(17.87')

17.922 m
(58.78')

N 67°28' 08"W

N 05°58' 00"E
20.116 m
(66.0')

0+310.878
26.099 m
(85.60')
Y = 120,350.115
X = 24,203.909

0+330.975
26.992 m
(88.53')
Y = 120,370.122
X = 24,206.000

S 84°02' 00"E

N75°15' 13"E
16.957 m
(55.62')

N63°27' 56"W
16.957 m
(55.62')

Y=120,354.431
X=24,220.307
0+316.166
42.211 m
(138.45')

N06°04' 27"E
8.162 m
(26.77')

Y=120,362.547
X=24,221.171
0+324.319
42.589 m
(139.69')

S 84°56' 42"E

P/L

"D" DRIVE

BUILDING
4605

G & B PRODUCE, INC.
4970

| REVISION DATE | DATE | SCALE, METERS | HWY: CAMP PHILLIPS ROAD | FEDERAL PROJECT NO: | | |
|---|---|---|---|---|---|---|
| 10/02/01 | 6-10-99 | 0 20 m 40 m | COUNTY: MARATHON | STATE R/W PROJECT NO: 6676-03-01 | SHEET NO: 4.3 | M |
| | GRID FACTOR | | | | | |

VILLAGE OF WESTON

NE/NE SEC. 17

SE/SE SEC. 8

NW/NW SEC. 16

SW/SW SEC. 9

EAU CLAIRE AVENUE

WISCONSIN CENTRAL LIMITED RAILROAD

P.L.

P.L.

P.L.

S 89°50'17" W

THE ESTATE OF GLADYS ROLOFF
C.S.M. 2112, VOL. 8 P. 196

PROPOSED FRONTAGE ROAD R.O.W.
BETTY R. SCHEEL (n/k/a BETTY R. BESSETTE)

FOUND PK NAIL
STA. 0+417.011, ON REF. LINE
Y= 120,457.616
X= 24,184.191

33' 33'

N 89°16'07" E

S 89°16'07" W

N 89°16'07" E

N 55°37'30"W

31.06' 55° S

N 00°32'34" W 111.760 m (366.67')

0+555.240
67.00 m
(219.82')

0+665.70
67.00 m
(219.82')

0+665.99
55.540 m
(182.22')

(4) JAMES D. GREENHECK

(7) CHESTER J. CHEREK
MARY J. CHEREK

(37) WISCONSIN PUBLIC SERVICE CORP.
EASEMENT 8151X, VOL. 83 P.320

(35) HIGHWAY EASEMENT

(22)

(23)

(10)

HOUSE 4016

HOUSE 4320

GAR.

1 A.P.
STA. 0+590
20 m MAX.

Y=120439.888
X= 24163.646

0+398.089
19.45 m
(63.80')

SLOPE INTERCEPT

N 34°59'59"W
8.962 m
(29.40')

Y = 120,447.229
X = 24,158.506

0+405.110
25.019 m
(82.08')

156.444 m (513.14')

15.0 m (49.21')

MATCH LINE STA. 0+337

0+406.196
10.06 m

0+360

N 03°25'18"E

33'

0+337.000
10.06 m

0+417.359
10.06 m
Y=120,457.363
X=24,194.252

80.517m (264.16')

N 03°25'18" E
48.91 m (160.47')

0+334.090
18.00 m
(59.06')

0+383
18.0 m (59.06')

1 A.P.
STA. 0+409
16 m MAX.

0+383
43.727 m (143.46')

N 89°32'34" W
104.10'

N 00°16'26" E
36.157 m (118.60')

4601

HOFFERS, INC

0+419.102
41.742 m (136.91')
Y=120,457.212
X=24,225.983

40 LINE

P.L.
71.967 m (236.06')

S 55°37'30"E

0+421.311
81.917 m (268.69')
Y=120,457.019
X=24,266.219

(6) ARVILLA A. BENDER
C.S.M. 8531, VOL. 33 P. 99
PARCEL -1-

Y = 120,467.355
X = 24,159.153

0+425.239
25.575 m
(83.89')

N 4421'44" E
5.666 m (18.58')

N 0210'56" W

21.804 m (71.52')

57.688 m (189.22')

0+488.749
25 m (82.02')
Y=120,529.052
X=24,160.917

0+492.239
30.00 m (98.40')
Y=120,532.495
X=24,155.885

0+529.411
30.00 m (98.40')
Y=120,563.666
X=24,155.553

6.098 m
(20.00')

N 00°32'34"W

51.221 m (168.05')

44.587 m (146.04')

42.001 m (137.80')

30.541 m (100.26')

1 A.P.
STA. 0+590
20 m MAX.

SLOPE INTERCEPT

N 00°32'34" W 272.140 m (892.62')

0+525.921
25.00 m (82.02')
Y = 120,556.223
X = 24,160.565

148.535 m (487.32')

0+665.70
12.46 m

14.887 m (48.83')

0+429.519
21.862 m (71.72')
Y=120,471.406
X=24,163.115

STA. 0+480.085
FND IRON PIPE
Y=120,520.511
X=24,173.847

GUY POLES

52.877 m (173.48')

37.172 m (121.92')

15.289 m (50.16')

15.290 m (50.16')

0+517.169
12.46 m

0+426.317
10.728 m
(35.20')

P.O.T. STA.
0+417.011=
0+440

Y = 120,492.266
X = 24,186.263

P.I. STA.
0+451.724

0+479.997
12.46 m

P.O.T. STA.
0+489.883

0+520

REFERENCE LINE

0+465.954
7.653 m
(25.11')

N 00°32'34"W
49.207 m (161.44')

0+501.419
10.17 m

CAMP PHILLIPS ROAD

33'

41.25'

2.40 m (8.0')

N 00°32'34"W

0+600

SECTION LINE N 00°32'34"W
801.579 m (2629.85')

0+680

N 00°32'34" W 221.122 m (725.46')

(38) WISCONSIN PUBLIC SERVICE CORP.
EASEMENT 8266X, VOL. 90 P. 460

(9)

87.759 m (287.89')

DRAINAGE EASEMENT
30.480 m (100.0')

50'

50'

60.783 m (199.42')

N 55°37'30"W

(9) ROBERT C. GREENHECK
RUTH D. GREENHECK
(TRUSTEES)
THE GREENHECK FAMILY TRUST

HOUSE 4319

SHED

GAR.

BARN

MATCH LINE STA. 0+680

VILLAGE OF WESTON

camprow2.S70

| REVISION DATE | DATE 6-10-99 | SCALE, METERS | HWY: CAMP PHILLIPS ROAD | FEDERAL PROJECT NO: | | |
|---|---|---|---|---|---|---|
| 10/02/01 12/06/10 1/19/11 | GRID FACTOR | 0 20 m 40 m | COUNTY: MARATHON | STATE R/W PROJECT NO: 6676-03-01 | SHEET NO: 4.4 | M |

VILLAGE OF WESTON

SEC. 8 SE/SE

SEC. 8 NE/SE

SEC. 9 SW/SW

SEC. 9 NW/SW

C.S.M. VOL. 23 P. 93

JOSEPH J. & MARGARET L. JORDAN ROADWAY C.S.M. 6259, VOL. 23 P. 85

THE ESTATE OF GLADYS ROLOFF
C.S.M. 2112, VOL. 8 P. 196

LORENE K. ZILISCH
PARCEL –2–
C.S.M. 1950, VOL. 8 P. 34

FRED P. NOVAK
C.S.M. 6147, VOL. 22 P. 225

FRED J. DEHNEL & DONNA M. DEHNEL

PROPOSED FRONTAGE ROAD R.O.W.

HOUSE 4210

HOUSE 4106

GAR.

HOUSE 4040

HOUSE 4107

HOUSE 4021

P.L.

S 89°50'17" W

N 89°50'17"E

P.L

S 89°50'17" W

40 LINE N 89°22'00" E

FOUND PK NAIL
STA. 1+218.674, 2.4 m LT
Y= 121,259.159
X= 24,176.596

SECTION LINE N 00°32'34"W

SECTION LINE N 01°47'16"W

REFERENCE LINE N 00°32'34"W

REFERENCE LINE N 01°47'16"W

N 88°50'05" E
2.4001 m (7.874')

P.I. STA.
1+218.699
Y= 121,259.208
X= 24,178.996

1+000

0+752.341
55.48 m
(182.02')

0+726.898
47.640 m
(156.30')

65.326 m (214.62')
N 11°06'56"E

4.022 m
(13.19')

37.664 m (123.54')

0+726.867
42.978 m
(141.00')

17.379 m (57.03')

1 A.P.
STA.0+682
10 m MAX.

1 A.P.
STA. 0+740
10 m MAX.

30.480 m (100.0')

45.720 m (150.0')

N 00°32'34"W
68.208 m (223.78')

0+798.264
55.48 m
(182.02')

0+798.208
47.00 m
(154.20')

33.69 m (110.53')

20.116 m (66.00')

SLOPE INTERCEPT

272.140 m (892.62')

Y=120,838.351
X=24,157.985

0+798.061
25.0 m
(82.00')

N 44°39'51" E
2.819 m (9.25')

Y=120,838.386
X=24,170.399

0+797.978
FND 1IN IP

0+798.020
12.46 m

0+818.095
12.46 m

0+818.381
55.48 m
(182.02')

0+818.325
47.00 m
(154.20')

0+818.192
27.0 m
(88.58')

Y=120,858.462
X=24,155.794

Y=120,860.467
X=24,157.775

0+820.178
25.0 m
(82.00')

30.480 m (100.0')

N 00°32'34"W
67.056 m (220.00')

0+848.861
55.48 m
(182.02')

0+860
36.00 m
(118.08')

0+860
25.00 m
(82.00')

67.056 m (220.00')

0+885.151
12.46 m

N 00°32'34"W
202.944 m (605.71')

SLOPE INTERCEPT

120.0 m (393.70')

0+980
36.00 m
(118.08')

0+960
25.00 m
(82.00')

N 00°32'34"W
398.250 m (1,306.26')

333.549 m (1094.32')

N 00°32'34"W

1+000

MATCH LINE STA. 1+000

0+680

N 00°32'34"W

2.40 m (8.0')

0+760

SECTION LINE N 00°32'34"W

0+840

0+920

REFERENCE LINE

41.25'

33'

0+722.541
10.17 m

221.122 m (725.46')

95.403 m (313.00')

0+817.944
10.17 m

0+860.000

CAMP PHILLIPS ROAD

121.855 m (399.79')

80.0 m (262.40')

0+860
18.00 m
(59.04')

7.829 m (25.68')

0+940
18.00 m
(59.04')

Y=120,980.410
X=24,191.803
0+939.793
FND 1IN IP

139.485 m (457.63')

SLOPE INTERCEPT

SLOPE INTERCEPT

1 A.P.
STA. 0+776
10 m MAX.

1 A.P.
STA. 0+829
10 m MAX.

1 A.P.
STA. 0+948
12 m MAX.

40 m

WISCONSIN PUBLIC SERVICE CORP.
EASEMENT 8266X, VOL. 90 P. 460

WISCONSIN PUBLIC SERVICE CORP.
EASEMENT 8131X, VOL. 82 P. 499

WISCONSIN PUBLIC SERVICE CORP.
EASEMENT 8245X, VOL. 88 P. 403

(10) (11) (12) (13) (14) (15) (16) (23) (24) (25) (26) (27) (38) (39) (40)

MARVIN DRAKE & GAIL L. DRAKE

ROBERT C. GREENHECK
RUTH D. GREENHECK
(TRUSTEES)
THE GREENHECK FAMILY TRUST
CSM 6770

SCOTT L. & MARY R. TURNER
C.S.M. 8095

P.L.

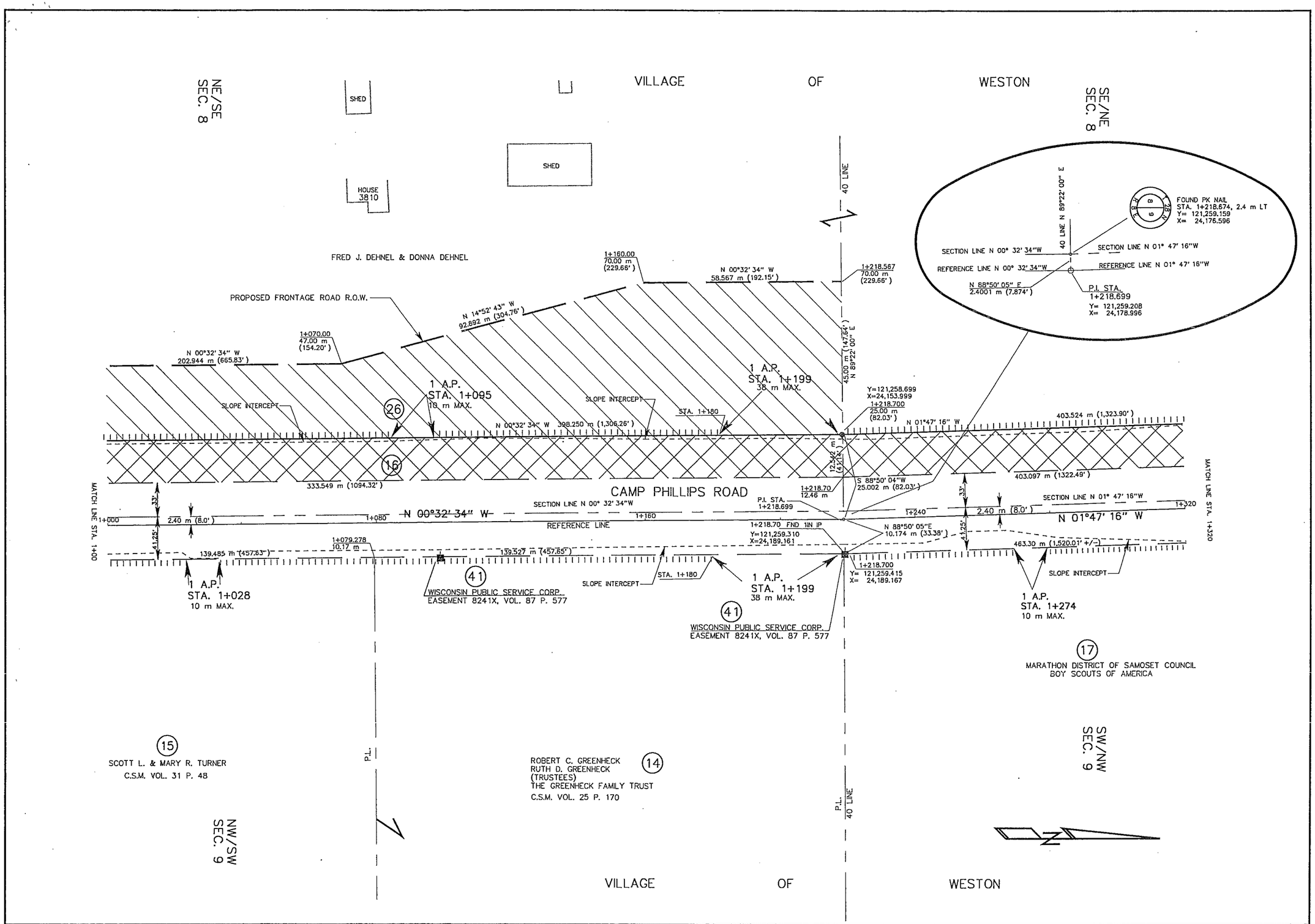
P.L. 40 LINE

MATCH LINE STA. 0+680

MATCH LINE STA. 1+000

camprow3.S70

| | | | | | |
|---|---|---|---|---|---|
| REVISION DATE 10/02/01 9/22/09 8/20/09 | DATE 6–10–99 | SCALE, METERS 0 20 m 40 m | HWY: CAMP PHILLIPS ROAD | FEDERAL PROJECT NO: | |
| | GRID FACTOR | | COUNTY: MARATHON | STATE R/W PROJECT NO: 6676–03–01 | SHEET NO: 4.5 M |




| REVISION DATE | DATE 6-10-99 | SCALE, METERS | HWY: CAMP PHILLIPS ROAD | FEDERAL PROJECT NO: | | |
|---|---|---|---|---|---|---|
| 10/02/01 | GRID FACTOR | 0 20 m 40 m | COUNTY: MARATHON | STATE R/W PROJECT NO: 6676-03-01 | SHEET NO: 4.6 | M |

VILLAGE OF WESTON

SE/NE SEC. 8

NE/NE SEC. 8

40 LINE N 89°22'00" E

FOUND PK NAIL
STA. 1+218.674, 2.4 m LT
Y= 121,259.159
X= 24,176.596

SECTION LINE N 00°32'34"W

SECTION LINE N 01°47'16"W

REFERENCE LINE N 00°32'34"W

REFERENCE LINE N 01°47'16"W

1+320

N 88°50'05"E
2.4001 m (7.874')

P.I. STA.
1+218.699
Y= 121,259.208
X= 24,178.996

40 LINE S 89°50'05" E

P.L.

(18) VILLAGE OF WESTON
C.S.M. VOL. 32 P. 187

FRED DEHNEL

SLOPE INTERCEPT

1+360
40.00 m
(131.20')

FEE

N 01°47'16" W 262.735 m (861.77')

(28)

1+622.735
40.00 m
(131.20')

FEE 56.650 m (185.86')

1+320
31.00 m
(101.68')

1+360
31.00 m
(101.68')

1+320
25.00 m
(82.00')

S 89°50'17"W
6.000 m (19.68')

40.00 m (131.20')

S 89°50'17"W
9.000 m (29.52')

302.218 m (991.53')

N 01°47'16" W 483.524 m (1,323.90')

403.097 m (1322.49')

1+622.224
25.00 m
(82.00')

15.009 m (49.28')

5.105 m (16.74')

25.184 m (82.54')

(29)

1+623.200
19.00 m
(55.27')
Y=121,661.741
X=24,146.521

60.487 m (198.45')

Y=121,661.719 1+621.797
X=24,153.954 FND 1IN IR

CAMP PHILLIPS ROAD

MATCH LINE STA. 1+320

MATCH LINE STA. 1+650

N 01°47'16" W

1+320

1+400

1+480

1+560

1+640

SECTION LINE N 01°47'16"W

2.40 m (8.0')

33'

41.25'

REFERENCE LINE

463.30 m (1,520.01'+/-)

1+360.00
10.17 m

(30)

N 01°47'16" W

322.00 m (1,056.43')

SLOPE INTERCEPT

FEE

(43) WISCONSIN PUBLIC SERVICE CORP.
EASEMENT 8119X, VOL. 82 P. 123

WISCONSIN PUBLIC SERVICE CORP.
EASEMENT 8232X, VOL. 87 P. 328

(42)

(42) WISCONSIN PUBLIC SERVICE CORP.
EASEMENT 8232X, VOL. 87 P. 328

SLOPE INTERCEPT

S 89°50'17"W
7.62 m
(25.68')

1+360
18.00 m
(59.04')

FEE

S 89°50'05" E

(17) MARATHON DISTRICT OF SAMOSET COUNCIL
BOY SCOUTS OF AMERICA

# CAMP PHILLIPS

SW/NW SEC. 9

NW/NW SEC. 9

VILLAGE OF WESTON

| | | | | | |
|---|---|---|---|---|---|
| REVISION DATE 10/02/01 9/25/09 8/20/09 | DATE 6-10-99 | SCALE, METERS 0 20 m 40 m | HWY: CAMP PHILLIPS ROAD | FEDERAL PROJECT NO: | |
| | GRID FACTOR | | COUNTY: MARATHON | STATE R/W PROJECT NO: 6676-03-01 | SHEET NO: 4.7 M |

VILLAGE OF WESTON

NOTE:
THE REFERENCE LINE FOR THIS PROJECT IS INDEPENDENT OF PREVIOUS COUNTY PROJECT REFERENCE LINE.

NE/NE SEC. 8

NW/NW SEC 9

20.1168 m (66.00')
N 8316'35" E
0°NW"+340
0°NW"+360
0°NW"+420
0°NW"+460
N 79°11'30" E
S 73°56'58" W
S 16°21'29" W
S 05°33'55" E
N 82°56'02" E

PI STA.
0°NW"+365.890
Y=121,840.848
X=24,027.749

PI STA.
0°NW"+436.346
Y=121,854.060
X=24,096.955

+393.500
12.371 m
(40.58')
4.512 m
(14.80')
N10°48'30" W
+393.500
16.871 m
(55.35')

NORTHWESTERN AVENUE

N 83°19'51" E
N 83°19'51" E
FEE
107.786 m (353.63')
74.337 m (243.88')

VILLAGE OF WESTON
C.S.M. 8419 VOL. 32 P. 187

SLOPE INTERCEPT TYPICAL

1+679.31
40.00 m
(131.23')
1+680.00
29.044 m
(95.29')
1+798.76
29.044 m
(95.29')

56.650 m (185.86')
FEE
118.429 m (388.55')
FEE
N 01°47'16" W
74.474 m (244.27')

END RELOCATION ORDER
STA. 1+822.616
Y = 121,862.830
X = 24,160.154

FOUND PK NAIL
LAHR AVE.
Y= 122,064.284
X= 24,151.465

P.O.T. STA.
0°NW"+486.699
Y= 121860.226
X= 24146.929

C/L NORTHWESTERN AVE.
P.O.T. STA.
1+820.480 =
0°NW"+500.000 &
0°L"+500.000

N 02°28'11"W 201.641 m (661.55')

SECTION LINE N 01°47'16"W

REFERENCE LINE

CAMP PHILLIPS ROAD

LAHR AVENUE

1+804.053
19.90 m
(65.27')
Y=121,843.655
X=24,140.843

1+804.688

1+822.616
END .75IN IR
Y=121,863.148
X=24,170.379

1+798.927
10.17 m
X=121,839.470
Y=24,171.067

1+795.639
18.00 m (59.04')
Y=121,836.427
X=24,178.987

1+795.842
10.17 m
Y=121836.386
X=24,171.158

3.048 m
(10.00')

23.726 m
(77.84')

37.025 m
(121.48')

1+730.182
19.90 m (65.27')
Y=121,789.820
X=24,143.148

1+727.567 Y=121,768.144
10.17 m X=24,173.299

END 1IN IP

1+682.284
12.46 m

1+720.653
12.46 m

38.369 m (125.88')

1+666.612
19.90 m (65.27')
Y=121,708.281
X=24,145.131

25.164 m (82.54')

END 1IN IP

MATCH LINE STA. 1+950

N 01°47'16"W

1+720

1+800

1+880

1+960

2.40 m (8.0')

33'

41.25'

STRUCTURE B-37-295

76.20 m (250'+/-)

68.275 m (224.00')

76.561 m (251.25')

7.838 m
(25.71')

7.827 m (25.68')
S 89°50'06" E

7.827 m
(25.68')

1+682.00
10.17 m

1+682.00
18.00 m
(59.04')

322.00 m (1,056.43')
N 01°47'16" W
FEE

1+719.058
18.00 m
(59.04')

7.830 m
(25.68')

N 89°49'47" E
90.090 m (295.63')

N 71°42'08" E
(25.63')

3115
IOZZO'S

SLOPE INTERCEPT TYPICAL

MEANDER LINE

P/L

EAU CLAIRE RIVER

14.935 m
(49.00')

11.921 m
(39.11')

S 89°32'55" W

N 0031'16"W

1+809.828
46.981 m
(154.14')
X=121,851.514
Y=24,207.512

1+821.751
47.245 M
(155.00')
Y=121,863.440
X=24,207.403

GLENCO VEAL FARM

3113

JAMES IOZZO

1+794.896
46.651 m
(153.02')
Y=121,836.579
X=24,207.647

0'L"+540
0'L"+580
N 01°47'36" W
0'L"+620
0'L"+660

N 00°31'16" W
N 01°49'11" E

MARATHON DISTRICT OF SAMOSET CONCIL
BOY SCOUTS OF AMERICA

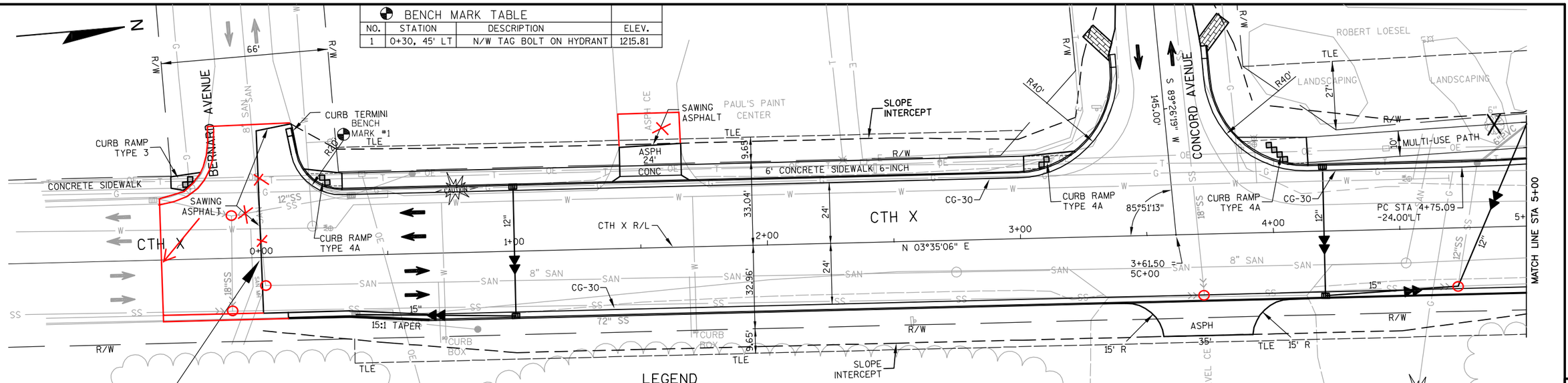
JAMES IOZZO
C.S.M. 4004 VOL. 15 P. 2

WISCONSIN PUBLIC SERVICE CORP.
EASEMENT 8117X, VOL. 82 P. 47

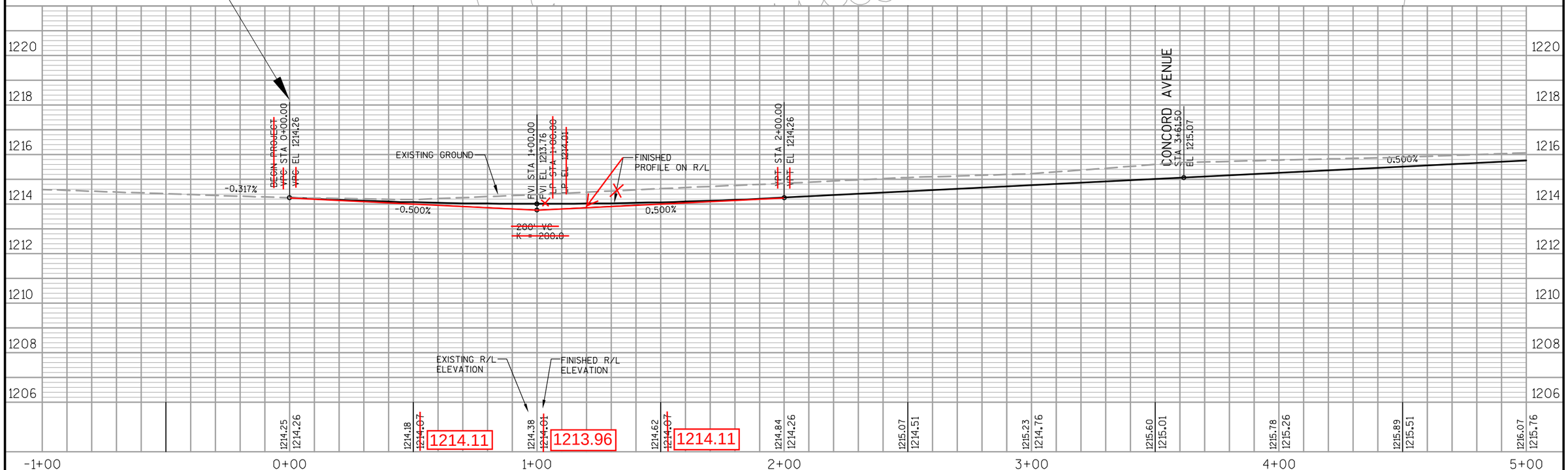
VILLAGE OF WESTON

| | | | | | |
|---|---|---|---|---|---|
| REVISION DATE 10/02/01 9/25/09 8/20/09 12/09/09 | DATE 6-10-99 | SCALE, METERS 0 20 m 40 m | HWY: CAMP PHILLIPS ROAD | FEDERAL PROJECT NO: | |
| | GRID FACTOR | | COUNTY: MARATHON | STATE R/W PROJECT NO: 6676-03-01 | SHEET NO: 4.8 M |

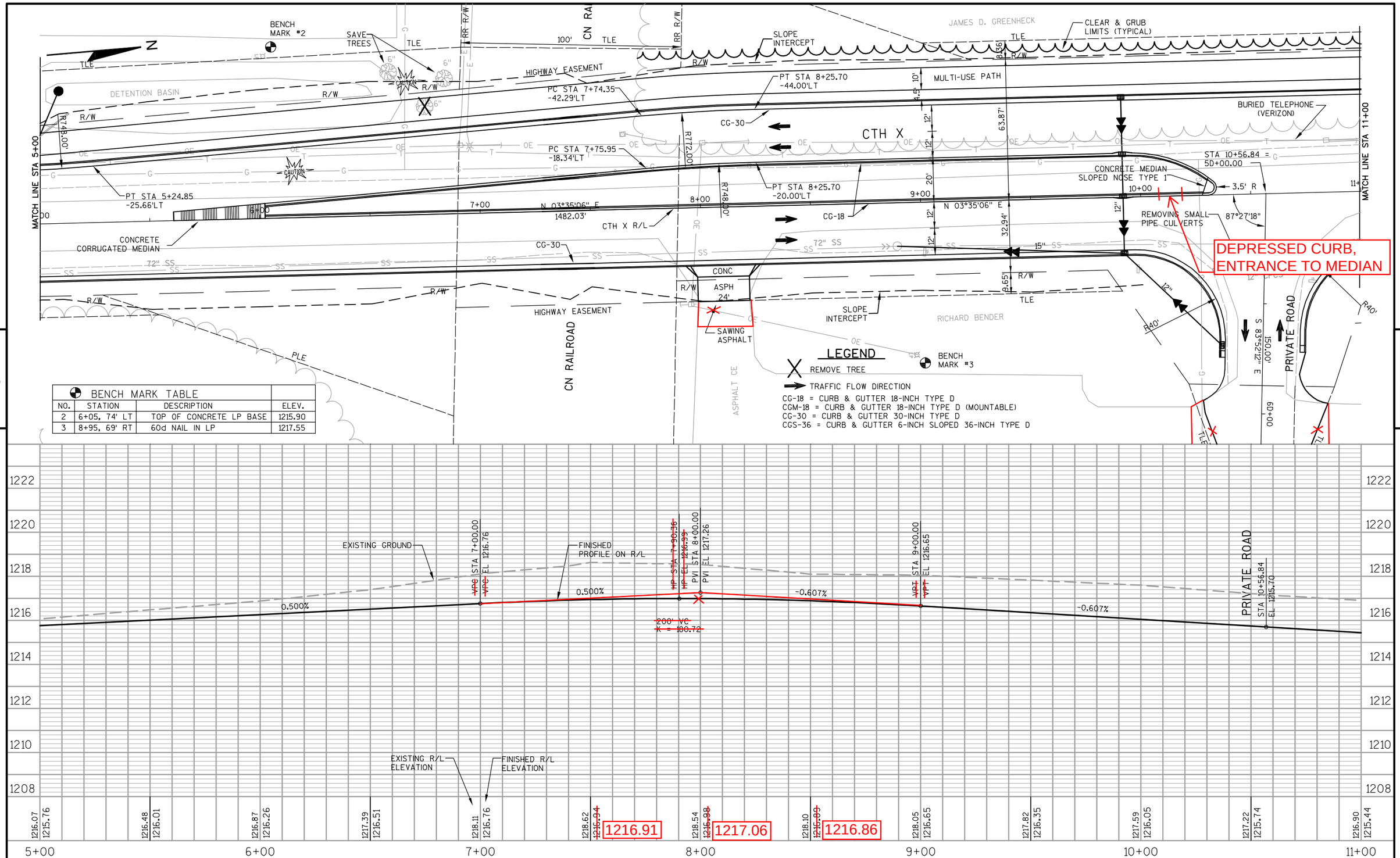
| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 1 | 0+30, 45' LT | N/W TAG BOLT ON HYDRANT | 1215.81 |




**BEGIN PROJECT 6999-13-70**
**STA ~~0+00~~** 0-38
~~Y=185019.325~~
~~X=296185.356~~




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 89 | E |
|---|---|---|---|---|---|




| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 2 | 6+05, 74' LT | TOP OF CONCRETE LP BASE | 1215.90 |
| 3 | 8+95, 69' RT | 60d NAIL IN LP | 1217.55 |

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 90 | E |
|---|---|---|---|---|---|

| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 4 | 16+21, 47' RT | 60d NAIL IN PP 2808-9LS | 1215.49 |

N

JAMES D. GREENHECK

BURIED GAS (WISCONSIN PUBLIC SERVICE)

OVERHEAD ELECTRIC (WISCONSIN PUBLIC SERVICE)

CLEAR & GRUB LIMITS (TYPICAL)

MULTI-USE PATH

CAUTION

STA 11+53.94 -8.00'LT

CG-30

CG-18

CURB RAMP TYPE 2

MATCH LINE STA 11+00

CONCRETE MEDIAN SLOPED NOSE TYPE 1

CTH X R/L

REMOVING SMALL PIPE CULVERTS

REMOVING ASPHALTIC SURFACE (DRIVEWAY)

SLOPE INTERCEPT

SAWING ASPHALT

RICHARD BENDER

EAU CLAIRE AVENUE

S 89°25'56" W 200.00'

46+00

CURB RAMP TYPE 2

CHESTER J. CHEREK
MARY J. CHEREK

SEPTIC VENT

GUY ANCHORS

FIBER OPTIC CABLE (KDL/NORLIGHT)

CN RAILROAD

HIGHWAY EASEMENT

SLOPE INTERCEPT

MULTI-USE PATH

DEPRESS CURB FOR FUTURE CURB RAMP TYPE 3

CGT

CGS-36

FENCE TO BE REMOVED BY OWNER

STA 14+75.70 -19.61'LT

CG-18

CONCRETE MEDIAN SLOPED NOSE TYPE 1

85°50'49"

14+00

N 03°35'06" E

13+68.14 = 5E+00

PI STA 14+82.03

N 00°22'46" W

STA 15+97.07 -32.00'LT

CURB RAMP TYPE 5

REMOVING SMALL PIPE CULVERTS

DEPRESS CURB FOR FUTURE CURB RAMP TYPE 3

MATCH LINE STA 17+00

HIGHWAY EASEMENT

BENCH MARK #4

GLUELAM HIWIRE POLE (WISCONSIN PUBLIC SERVICE)

FUTURE MOUNTAIN BAY TRAIL

CN RAILROAD

ARVILLA BENDER

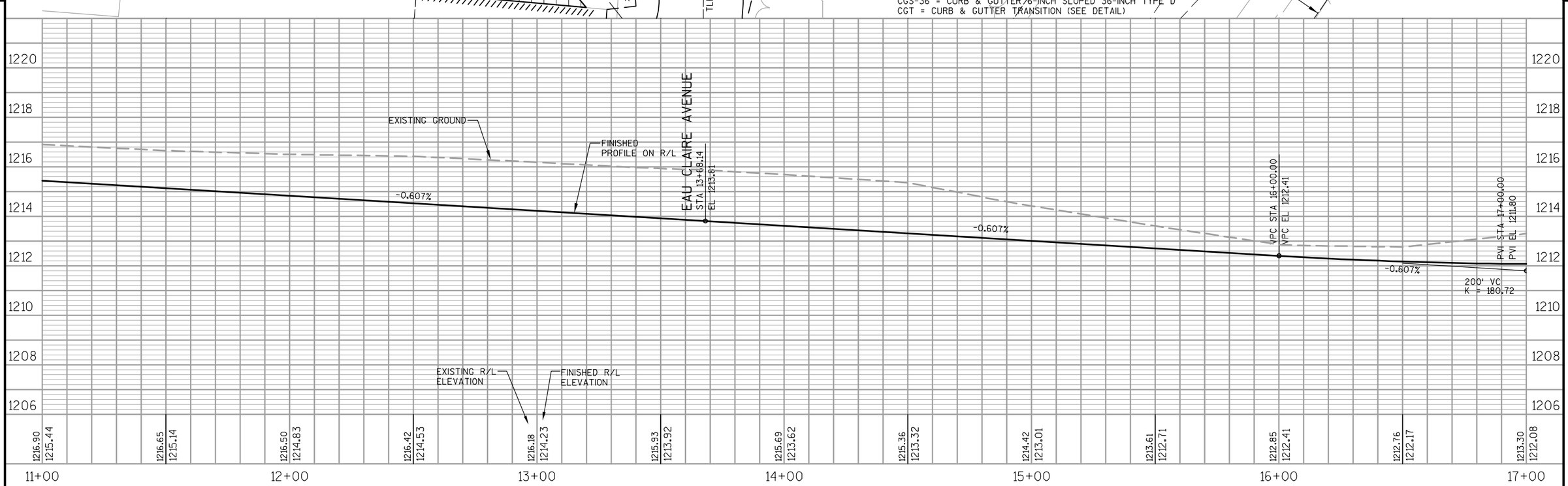
34' ASPH

20' R

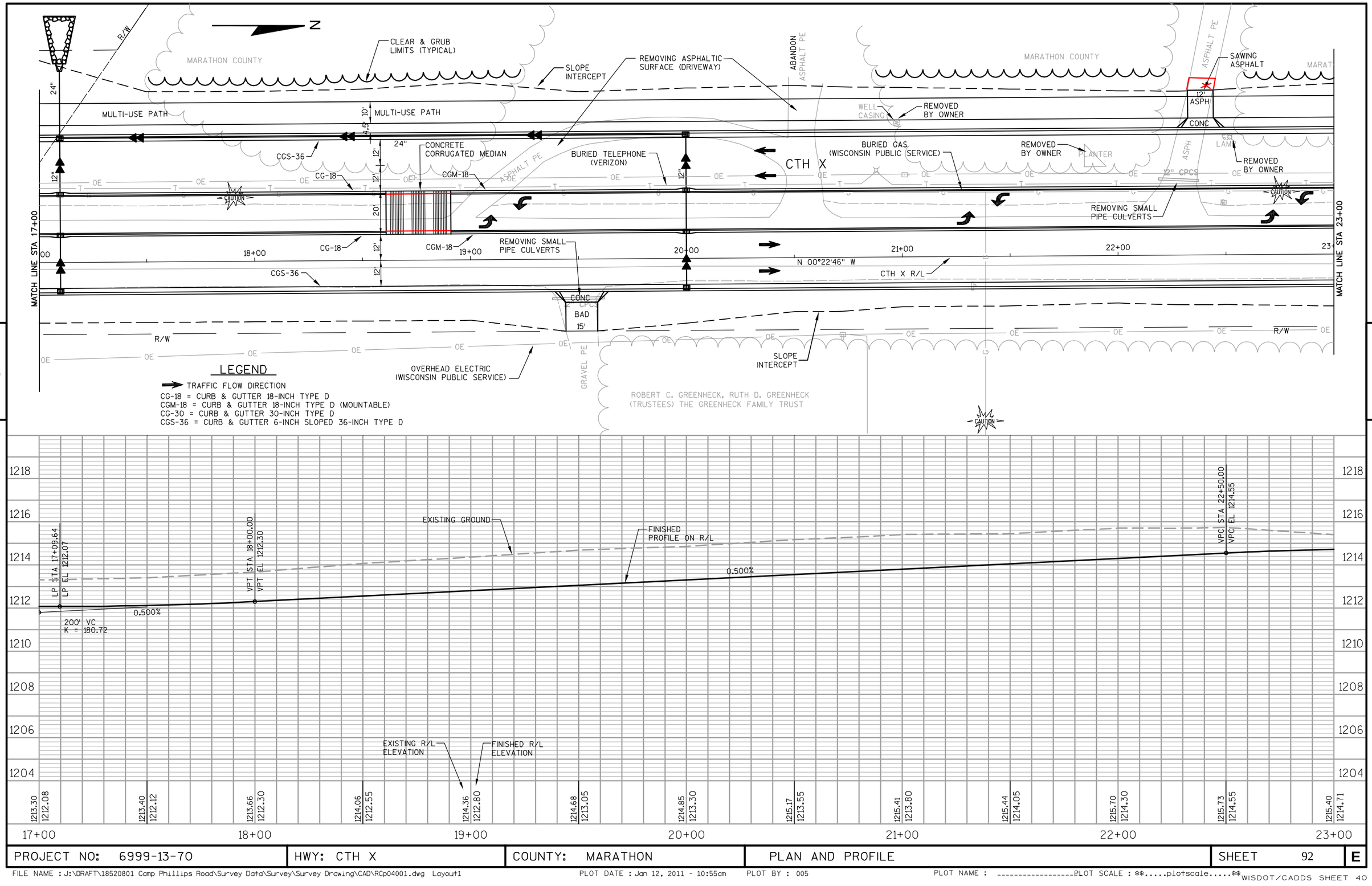
LEGEND

- CONCRETE SIDEWALK 4-INCH
- OBLITERATING OLD ROAD (DRIVEWAY)
- TRAFFIC FLOW DIRECTION

CG-18 = CURB & GUTTER 18-INCH TYPE D
CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)
CG-30 = CURB & GUTTER 30-INCH TYPE D
CGS-36 = CURB & GUTTER 36-INCH SLOPED 36-INCH TYPE D
CGT = CURB & GUTTER TRANSITION (SEE DETAIL)




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 91 | E |
|---|---|---|---|---|---|




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 92 | E |
|---|---|---|---|---|---|

| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 5 | 24+23, 34' RT | 60d NAIL IN PP #86 | 1214.35 |

N

IVAN FRY

LORENE K. ZILISCH

MARATHON COUNTY

GRAVEL PE

ASPHALT PE

SLOPE INTERCEPT

CLEAR & GRUB LIMITS (TYPICAL)

12' BAD / ASPH / CONC

MULTI-USE PATH

24"

PLANTER POST

TRACTOR

CAUTION

REMOVED BY OWNER

LAMP

ASPH

12" CPCS

CGS-36

CGM-18

81.91'

4.5'

10'

12'

20'

REMOVING SMALL PIPE CULVERTS

MATCH LINE STA 23+00

MATCH LINE STA 29+00

24+00

25+00

26+00

27+00

28+00

CTH X

N 00°22'46" W

CTH X R/L

BENCH MARK #5

33.34'

CONC / 15" CPCS / ASPH

17'

15'

SAWING ASPHALT

GLUELAM HIWIRE POLE (WISCONSIN PUBLIC SERVICE)

MARVIN DRAKE

R/W

OE

25.71'

TLE

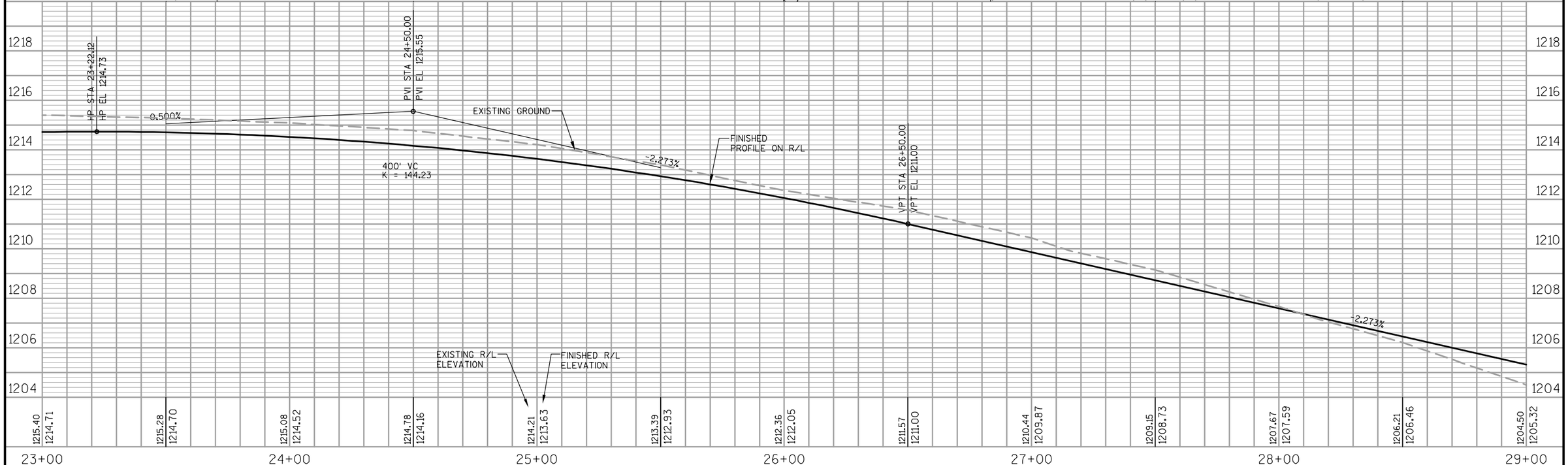
ROBERT C. GREENHECK, RUTH D. GREE (TRUSTEES) THE GREENHECK FAMILY TI

## LEGEND

OBLITERATING OLD ROAD (DRIVEWAY)

TRAFFIC FLOW DIRECTION

CG-18 = CURB & GUTTER 18-INCH TYPE D
CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)
CG-30 = CURB & GUTTER 30-INCH TYPE D
CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 93 | E |
|---|---|---|---|---|---|

| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 6 | 32+11, 34' RT | RR SPIKE IN PP # 84 | 1201.41 |

LEGEND

TRAFFIC FLOW DIRECTION

CG-18 = CURB & GUTTER 18-INCH TYPE D

CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)

CG-30 = CURB & GUTTER 30-INCH TYPE D

CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

N

MARATHON COUNTY

MULTI-USE PATH

ADD DRWY APRON 6"
STA 30+15, LT

CAUTION

REMOVING SMALL PIPE CULVERTS

CTH X

CTH X R/L

2516.32'
N 00°22'46" W

CONC
18" CPCS
BAD

SLOPE INTERCEPT

BENCH MARK #6

GLUELAM HIWIRE POLE
(WISCONSIN PUBLIC SERVICE)

IE 1194.89

IE 1194.40

SLOPE INTERCEPT

CGS-36

CGM-18

ASPH

SAWING ASPHALT

GRAVEL PE

ASPHALT PE

SCOTT L. & MARY R. TURNER

ROBERT C. GREENHECK, RUTH D. GREENHECK
(TRUSTEES) THE GREENHECK FAMILY TRUST

MATCH LINE STA 29+00

MATCH LINE STA 35+00

R/W

TLE

154.10' TO R/W

33.35'

25.71'

10'

4.5'

20'

12'

24"

8"

15'

17'

1193
1194
1195
1196
1197
1198
1199
1200

29+00 30+00 31+00 32+00 33+00 34+00 35+00

-2.273%

0.500%

VPC STA 30+20.00
VPC EL 1202.59

EXISTING GROUND

FINISHED PROFILE ON R/L

360' VC
K = 129.81

PVI STA 32+00.00
PVI EL 1198.50

LP STA 33+15.10
LP EL 1199.24

VPT STA 33+80.00
VPT EL 1199.40

EXISTING R/L ELEVATION

FINISHED R/L ELEVATION

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1204.50 | 1203.27 | 1202.43 | 1201.90 | 1201.47 | 1201.13 | 1201.05 | 1201.08 | 1201.22 | 1201.46 | 1201.88 | 1202.10 | 1202.25 |
| 1205.32 | 1204.18 | 1203.05 | 1201.94 | 1201.02 | 1200.29 | 1199.75 | 1199.40 | 1199.25 | 1199.28 | 1199.50 | 1199.75 | 1200.00 |

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 94 | E |
|---|---|---|---|---|---|

| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 7 | 39+98, 34' RT | 60d NAIL IN PP #82 | 1204.89 |

N

MARATHON COUNTY

GRAVEL PE

14' BAD ASPH

12"

CONC

8" CONC DRWY APRON

REMOVING SMALL PIPE CULVERTS

CONCRETE CORRUGATED MEDIAN

CGS-36

CG-18

CGM-18

CAUTION

4.5' 10'

12' 12' 20' 12' 12'

12"

SLOPE INTERCEPT

MARATHON COUN

4" CONC SIDEWALK

R/W

T.O. R/W

BURIE

DEPRESSED CURB, ENTRANCE TO MEDIAN

BURIED GAS (WISCONSIN PUBLIC SERVICE)

12"

OE T G

MATCH LINE STA 35+00

MATCH LINE STA 41+00

00 36+00 37+00 38+00 39+00 40+00 41+

CTH X

N 00°22'46" W

CTH X R/L

PI STA 39+98.35

N 01°37'28" W

33.38

ADD LEFT TURN LANE

OE R/W

GLUELAM HIWIRE POLE (WISCONSIN PUBLIC SERVICE)

SLOPE INTERCEPT

OVERHEAD ELECTRIC (WISCONSIN PUBLIC SERVICE)

GLUELAM HIWIRE POLE (WISCONSIN PUBLIC SERVICE)

BENCH MARK #7

MARATHON DISTRICT OF SAMOSET COUNCIL BOY SCOUTS OF AMERICA

ROBERT C. GREENHECK, RUTH D. GREENHECK (TRUSTEES) THE GREENHECK FAMILY TRUST

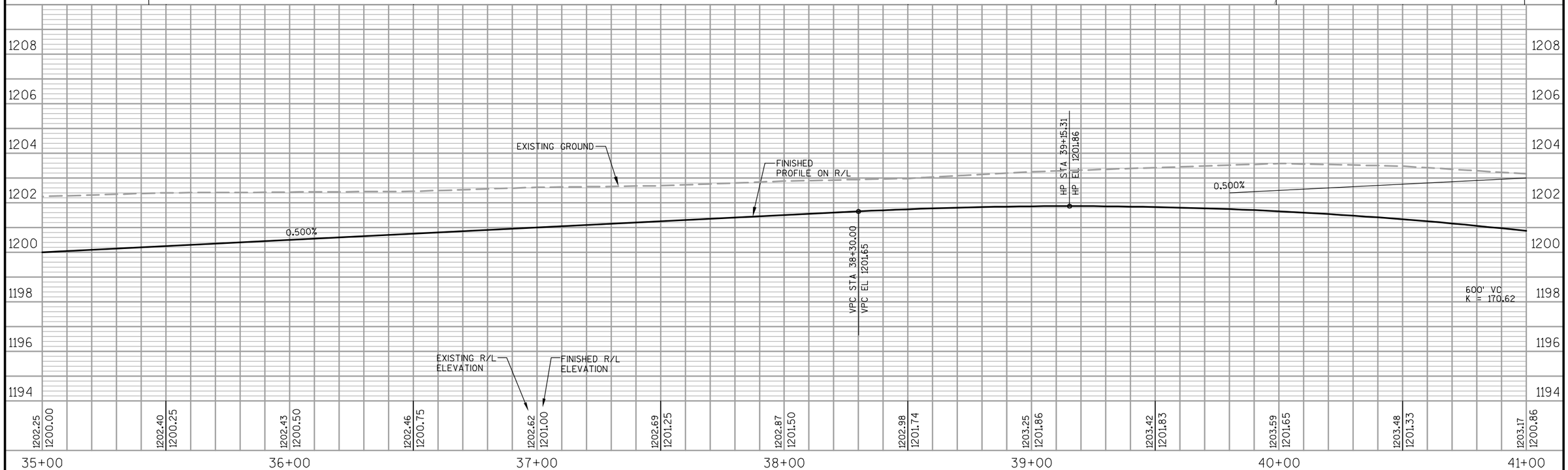
LEGEND

TRAFFIC FLOW DIRECTION

CG-18 = CURB & GUTTER 18-INCH TYPE D
CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)
CG-30 = CURB & GUTTER 30-INCH TYPE D
CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

5

5




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 95 | E |
|---|---|---|---|---|---|

## LEGEND

CONCRETE SIDEWALK 4-INCH

TRAFFIC FLOW DIRECTION

CG-18 = CURB & GUTTER 18-INCH TYPE D
CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)
CGS-24 = CURB & GUTTER 4-INCH SLOPED 24-INCH TYPE D
CG-30 = CURB & GUTTER 30-INCH TYPE D
CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
CGT = CURB & GUTTER TRANSITION (SEE DETAIL)

N

ADD 6" CONC DRWY APRON

8" CONC DRWY APRON

FRED DEHNEL

R/W

MULTI-USE PATH

CLEAR & GRUB LIMITS (TYPICAL)

SLOPE INTERCEPT

131.08'

101.55'

82.00'

33.32'

59.07'

CG-18

CGS-36

CGS-24

CGT

STA 42+92.18
-20.00'LT

STA 44+12.18
-32.00'LT

CAUTION

CONCRETE MEDIAN SLOPED NOSE TYPE 1

3.5' R

CONCRETE MEDIAN SLOPED NOSE TYPE 1

CTH X

N 01°37'28" W

CTH X R/L

MATCH LINE STA 41+00

MATCH LINE STA 47+00

CONC

ASPH

21'

SAWING ASPHALT

ASPHALT PE

FENCE TO BE REMOVED BY OTHERS WITHIN R/W

GLUELAM HIWIRE POLE (WISCONSIN PUBLIC SERVICE)

MARATHON DISTRICT OF SAMOSET COUNCIL BOY SCOUTS OF AMERICA

41+00 42+00 43+00 44+00 45+00 46+00 47+00

PVI STA 41+30.00
PVI EL 1203.15

600' VC
K = 170.62

-3.017%

EXISTING GROUND

FINISHED PROFILE ON R/L

VPC STA 44+30.00
VPC EL 1194.10

VPT STA 44+30.00
VPT EL 1194.10

EXISTING R/L ELEVATION

FINISHED R/L ELEVATION

| | 41+00 | 42+00 | 43+00 | 44+00 | 45+00 | 46+00 | 47+00 |
|---|---|---|---|---|---|---|---|
| EXISTING R/L ELEVATION | 1203.17 | 1202.59 | 1201.95 | 1200.83 | 1199.30 | 1197.43 | 1195.59 |
| FINISHED R/L ELEVATION | 1200.86 | 1200.25 | 1199.49 | 1198.58 | 1197.53 | 1196.33 | 1194.98 |
| | 1193.86 | 1192.27 | 1190.92 | 1189.70 | 1188.73 | 1187.95 | |
| | 1193.51 | 1192.13 | 1190.90 | 1189.82 | 1188.89 | 1188.10 | |

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 96 | E |
|---|---|---|---|---|---|

| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 8 | 49+09, 34' RT | 60d NAIL IN PP #80 | 1183.78 |

DEHNEL R/W

N

FRED DEHNEL

R/W

CLEAR & GRUB LIMITS (TYPICAL)

SLOPE INTERCEPT

5' DRAINAGE SWALE @ 0.80% STA 47+50-53+00

LEGEND

TRAFFIC FLOW DIRECTION
CG-18 = CURB & GUTTER 18-INCH TYPE D
CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)
CGS-24 = CURB & GUTTER 4-INCH SLOPED 24-INCH TYPE D
CG-30 = CURB & GUTTER 30-INCH TYPE D
CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

MULTI-USE PATH

BURIED TELEPHONE (VERIZON)

BURIED GAS (WISCONSIN PUBLIC SERVICE)

CGS-36

CGS-24

CTH X

CAUTION

MATCH LINE STA 47+00

MATCH LINE STA 53+00

48+00 49+00 50+00 51+00 52+00

N 01°37'28" W
CTH X R/L

DRIVEWAY CURB STA 51+75-52+20

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

STEEL PLATE BEAM GUARD CLASS A

FENCE TO BE REMOVED BY OTHERS WITHIN R/W

OVERHEAD ELECTRIC (WISCONSIN PUBLIC SERVICE)

BENCH MARK #8

GLUELAM HIWIRE POLE (WISCONSIN PUBLIC SERVICE)

SLOPE INTERCEPT

24" 15" 12" 10' 4.5' 12' 20' 59.12' 131.08

600' VC
K = 169.96

PVI STA 47+30.00
PVI EL 1185.05

0.17%

0.514%

EXISTING GROUND

LP STA 49+42.72
LP EL 1186.37

FINISHED PROFILE ON R/L

VPT STA 50+30.00
VPT EL 1186.59

VPC STA 51+90.00
VPC EL 1187.41

EL 1179.90

DITCHING LEFT PROFILE @ 0.80%

EXISTING R/L ELEVATION

FINISHED R/L ELEVATION

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1187.95 | 1188.10 | 1187.39 | 1187.46 | 1186.92 | 1186.97 | 1186.62 | 1186.62 | 1186.24 | 1186.42 | 1185.98 | 1186.37 | 1185.93 | 1186.46 | 1185.86 | 1186.59 | 1185.87 | 1186.95 | 1185.89 | 1187.21 | 1185.85 | 1187.46 | 1185.77 | 1187.66 | 1185.55 | 1187.79 |

1187.81
1187.45
1187.63

1192 1190 1188 1186 1184 1182 1180 1178

47+00 48+00 49+00 50+00 51+00 52+00 53+00

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 97 E |

CLEARING ONLY (15", 16", 18", 21")
NO GRUBBING DONE

CLEARING & GRUBBING BY OTHERS

CLEARING & GRUBBING (25")

CLEARING BY OTHERS
GRUBBING ONLY (12", 16")

BM STA 54+55.70, 15' RT DISK ON SE PARAPET 1190.96

SLOPE INTERCEPT
SEE SOUTH BRIDGE APPROACH DETAIL
MULTI-USE PATH
CGS-36
CGT
CG-18
STA 54+55.90 -24'LT
CGS-24
STA 53+35.90 CGT -12.00'LT
REMOVING GUARDRAIL
END OF DECK STA 54+67.20
BENCH MARK #9
RIPRAP MEDIUM
GLUELAM HIWIRE POLE (WISCONSIN PUBLIC SERVICE)
STEEL PLATE BEAM GUARD, CLASS "A"
EAU CLAIRE RIVER
CHAIN LINK FENCE 8'-0", TYP
CTH X
N 01°37'28" W
CTH X R/L
C/L OF PIER STA 55+73.12
END OF DECK STA 56+79.04
SEE NORTH BRIDGE APPROACH DETAIL
DRIVEWAY CURB STA 57+51-57+96
REMOVING ASPHALTIC SURFACE
SLOPE INTERCEPT
SAWING ASPHALT
BENCH MARK #11
GLUELAM HIWIRE POLE (WISCONSIN PUBLIC SERVICE)
TLE
JAMES IOZZO
IOZZO'S
MATCH LINE STA 53+00
MATCH LINE STA 59+00

| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV |
| ~~9~~ | ~~54+72, 8' RT~~ | ~~CHISELED ON TOP ABUTMENT~~ | ~~1184.40~~ |
| 11 | 58+20, 35' RT | 60d NAIL IN PP # 78 | 1183.28 |

**BEGIN PROJECT 6676-03-73**
**STA 54+20**
**BEGIN NET EXCEPTION TO C/L LENGTH**
**PROJECT 6999-13-70**

**END PROJECT 6676-03-73**
**STA 57+25**
**END NET EXCEPTION TO C/L LENGTH**
**PROJECT 6999-13-70**

LEGEND
- REMOVE TREE
- TRAFFIC FLOW DIRECTION
- CONCRETE SIDEWALK 4-INCH

CG-18 = CURB & GUTTER 18-INCH TYPE D
CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)
CGS-24 = CURB & GUTTER 4-INCH SLOPED 24-INCH TYPE D
CG-30 = CURB & GUTTER 30-INCH TYPE D
CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
CGT = CURB & GUTTER TRANSITION (SEE DETAIL)

PVI STA 53+20.00
PVI EL 1188.08
HP STA 53+54.12
HP EL 187.83
~~260' VC~~
~~K = 519.58~~
-0.300%
VPT STA 54+50.00
VPT EL 1187.69
-0.300%
FINISHED PROFILE ON R/L
EXISTING GROUND
VPC STA 58+70.00
VPC EL 1186.43
LLP STA 58+95.00
LLP EL 1186.39
100 YEAR EL. 1179.06
EXISTING R/L ELEVATION
FINISHED R/L ELEVATION

STA 55+73.12
REMOVE EXISTING STRUCTURE P-37-921
3 SPAN STEEL THRU GIRDER
24' CLEAR ROADWAY WIDTH

STA 55+73.12
STRUCTURE B-37-295 REQ'D
2 SPAN 54W" PRESTRESSED GIRDER
27' CLEAR ROADWAY WIDTH

| | | |

| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 12 | 63+51, 35' RT | 60d NAIL IN PP #77 | 1169.54 |

SEE MATCHLINE BELOW

R/W CORNER STA 60+28.51 -195.40'LT

DEPRESS CURB FOR FUTURE CURB RAMP TYPE 2

CLEAR & GRUB LIMITS (TYPICAL)

SLOPE INTERCEPT

R/W CORNER STA 64+84.15 -271.73'LT

R/W CORNER STA 64+81.21 -173.44'LT

LEGEND

CONCRETE SIDEWALK 4-INCH

TRAFFIC FLOW DIRECTION

CG-18 = CURB & GUTTER 18-INCH TYPE D

CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)

CG-30 = CURB & GUTTER 30-INCH TYPE D

CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

NORTHWESTERN AVENUE

LAHR AVENUE

CURB RAMP TYPE 1

DEPRESSED CURB, ENTRANCE TO MEDIAN

CONCRETE MEDIAN SLOPED NOSE TYPE 1

STA 59+72.69 = STA 5N+00.00

STA 61+08.00 -20.00'LT

STA 62+28.00 -32.00'LT

CTH X

CTH X R/L

N 01°37'28" W

REMOVING SMALL PIPE CULVERTS

DRIVEWAY CURB STA 62+43.5-62+88.5

12" CPRC

24" CPCS

12' BAD CONC

GRAVEL FE

MARATHON COUNTY

STEEL PLATE BEAM GUARD, CLASS "A"

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

BENCH MARK #12

ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2

RIPRAP MEDIUM

GLUELAM HIWIRE POLE (WISCONSIN PUBLIC SERVICE)

SLOPE INTERCEPT

MATCH LINE STA 59+00

MATCH LINE STA 65+00

153.94' TO R/W

159.61' TO R/W

SEE MATCHLINE ABOVE

R/W

FINISHED PROFILE ON R/L

EXISTING GROUND

-0.300%

6.419%

VPT STA 59+72.69
VPT EL 1186.75

PVI STA 61+50.00
PVI EL 1185.59

560' VC
K = 83.35

VPT STA 64+30.00
VPT EL 1203.56

EXISTING R/L ELEVATION

FINISHED R/L ELEVATION

| | | |

| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 13 | 68+92, 35' RT | 60d NAIL IN PP #76 | 1239.29 |

N

R/W CORNER
STA 66+47.24 -271.78'LT

R/W CORNER
STA 66+44.91 -172.61'LT

REMOVING ASPHALTIC SURFACE

ASPHALT PE

REMOVING SMALL PIPE CULVERTS

REMOVING SMALL PIPE CULVERTS

18" CPCS

24"

12" CPCS

REMOVING SMALL PIPE CULVERTS

OVERHEAD ELECTRIC
(WISCONSIN PUBLIC SERVICE)

SLOPE INTERCEPT

CLEAR & GRUB LIMITS (TYPICAL)

STA 69+00
56' LT

STA 69+00
32' LT

BURIED GAS
(WISCONSIN PUBLIC SERVICE)

STA 69+00
12' LT

MATCH LINE STA 65+00

MATCH LINE STA 71+00

CGS-36

CG-18

15"

15"

12"

CAUTION

130.24' TO R/W

148.27' TO R/W

12'

20'

65+00

66+00

67+00

68+00

69+00

70+00

71+00

N 01°37'28" W

PI STA 66+41.20

1403.94'

N 01°13'22" W

CTH X

CTH X R/L

CPCS

SLOPE INTERCEPT

BENCH MARK #13

GLUELAM HIWIRE POLE
(WISCONSIN PUBLIC SERVICE)

CLEAR & GRUB LIMITS (TYPICAL)

MARATHON COUNTY

MARATHON COUNTY

GLUELAM HIWIRE POLE
(WISCONSIN PUBLIC SERVICE)

R/W CORNER
STA 67+24.25 147.93'RT

## LEGEND

→ TRAFFIC FLOW DIRECTION

CG-18 = CURB & GUTTER 18-INCH TYPE D
CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)
CG-30 = CURB & GUTTER 30-INCH TYPE D
CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

5

5

1224
1222
1220
1218
1216
1214
1212
1210

1234
1232
1230
1228
1226
1224
1222
1220

EXISTING GROUND

FINISHED PROFILE ON R/L

6.419%

ESTIMATED ROCK PROFILE

VPC STA 67+45.00
VPC EL 1223.78

EXISTING R/L ELEVATION

FINISHED R/L ELEVATION

1202.12 1208.06
1207.11 1211.26
1212.04 1214.47
1216.88 1217.68
1221.37 1220.89
1225.45 1224.10
1228.88 1227.00
1231.64 1229.38
1233.76 1231.25
1235.02 1232.60
1235.81 1233.44
1235.87 1233.76
1235.38 1233.56

65+00 66+00 67+00 68+00 69+00 70+00 71+00

EXISTING GROUND

FINISHED PROFILE ON R/L

6.419%

ESTIMATED ROCK PROFILE

HP STA 70+55.99
HP EL 1233.76

RVI STA 70+60.00
RVI EL 1244.00
630' VC
K = 48.45

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 100 | E |
|---|---|---|---|---|---|

N

RIP RAP

R/W CORNER
STA 74+52.11
-201.30'LT

## LEGEND

OBLITERATING OLD ROAD (DRIVEWAY)

TRAFFIC FLOW DIRECTION

CG-18 = CURB & GUTTER 18-INCH TYPE D
CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)
CG-30 = CURB & GUTTER 30-INCH TYPE D
CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 14 | 72+42. 43' LT | 60d NAIL IN PP *2808-5R9 | 1227.04 |

CLEAR & GRUB LIMITS (TYPICAL)

198.01' TO R/W

SLOPE INTERCEPT

BURIED TELEPHONE (VERIZON)

BENCH MARK #14

ASPHALTIC FLUMES

STA 74+40
20' LT

ASPHALTIC FLUMES

CAUTION

CGS-36

CG-18

CONCRETE CORRUGATED MEDIAN

CTH X

MATCH LINE STA 71+00

72+00

73+00

74+00

75+00

~~CONCRETE CORRUGATED MEDIAN~~

76+00

CTH X

MATCH LINE STA 77+00

REMOVING SMALL PIPE CULVERTS

N 01°13'22" W

CTH X R/L

CONC

ASPH

STA 72+23
END CORR. MEDIAN

SAWING ASPHALT

12"

R/W CORNER
STA 73+03.18 33.39'RT

33.38'

ASPHALTIC FLUMES

SLOPE INTERCEPT

REMOVING SMALL PIPE CULVERTS

REMOVING ASPHALTIC SURFACE (DRIVEWAY)

SAWING ASPHALT

R/W

APRON ENDWALLS FOR CULVERT PIPE 24-INCH

CULVERT PIPE
CLASS III 24-INCH
SOUTH INVERT EL ~~1206.19~~ 1210.13
NORTH INVERT EL ~~1205.17~~ 1209.08

GLUELAM HIWIRE POLE (WISCONSIN PUBLIC SERVICE)

DAVID L. BALLARD
TAMARA R. BALLARD

MARATHON COUNTY

R/W CORNER
STA 71+50.15 149.00'RT

HOMEOWNER OPTED TO KEEP SOUTHERNMOST DRIVEWAY (OK'd BY MCHD)

-6.58%

EXISTING GROUND

FINISHED PROFILE ON R/L

ESTIMATED ROCK PROFILE

VPT STA 73+75.00
VPT EL 1223.26

EXISTING R/L ELEVATION

FINISHED R/L ELEVATION

VPC STA 75+00.00
VPC EL 1215.03

400' VC
K = 65.59

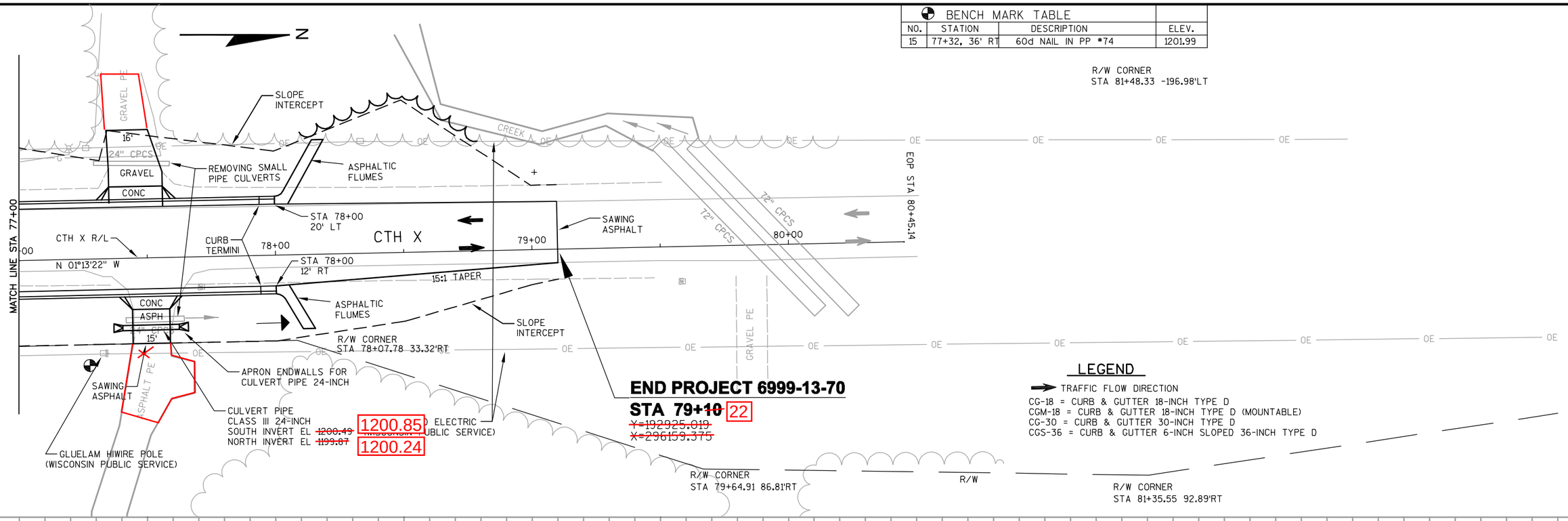
PVI STA 77+00.00
PVI EL 1201.86

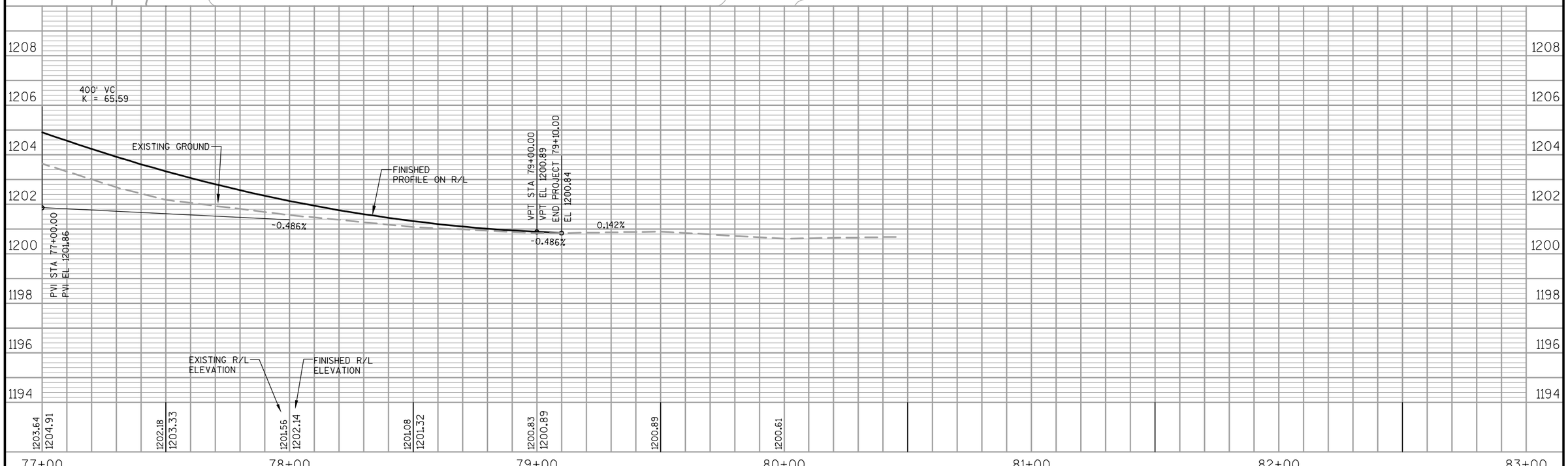
| | 71+00 | 72+00 | 73+00 | 74+00 | 75+00 | 76+00 | 77+00 |
|---|---|---|---|---|---|---|---|
| EXISTING GROUND | 1235.38 | 1233.73 | 1231.53 | 1229.18 | 1225.59 | 1221.91 | 1218.10 |
| FINISHED PROFILE ON R/L | 1233.56 | 1232.85 | 1231.62 | 1229.88 | 1227.62 | 1224.84 | 1221.61 |
| | | | | | | 1214.68 | 1211.94 |
| | | | | | | 1218.32 | 1215.03 |
| | | | | | | 1209.48 | 1207.11 |
| | | | | | | 1211.93 | 1209.21 |
| | | | | | | 1205.26 | 1203.64 |
| | | | | | | 1206.87 | 1204.91 |

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 101 | E |
|---|---|---|---|---|---|

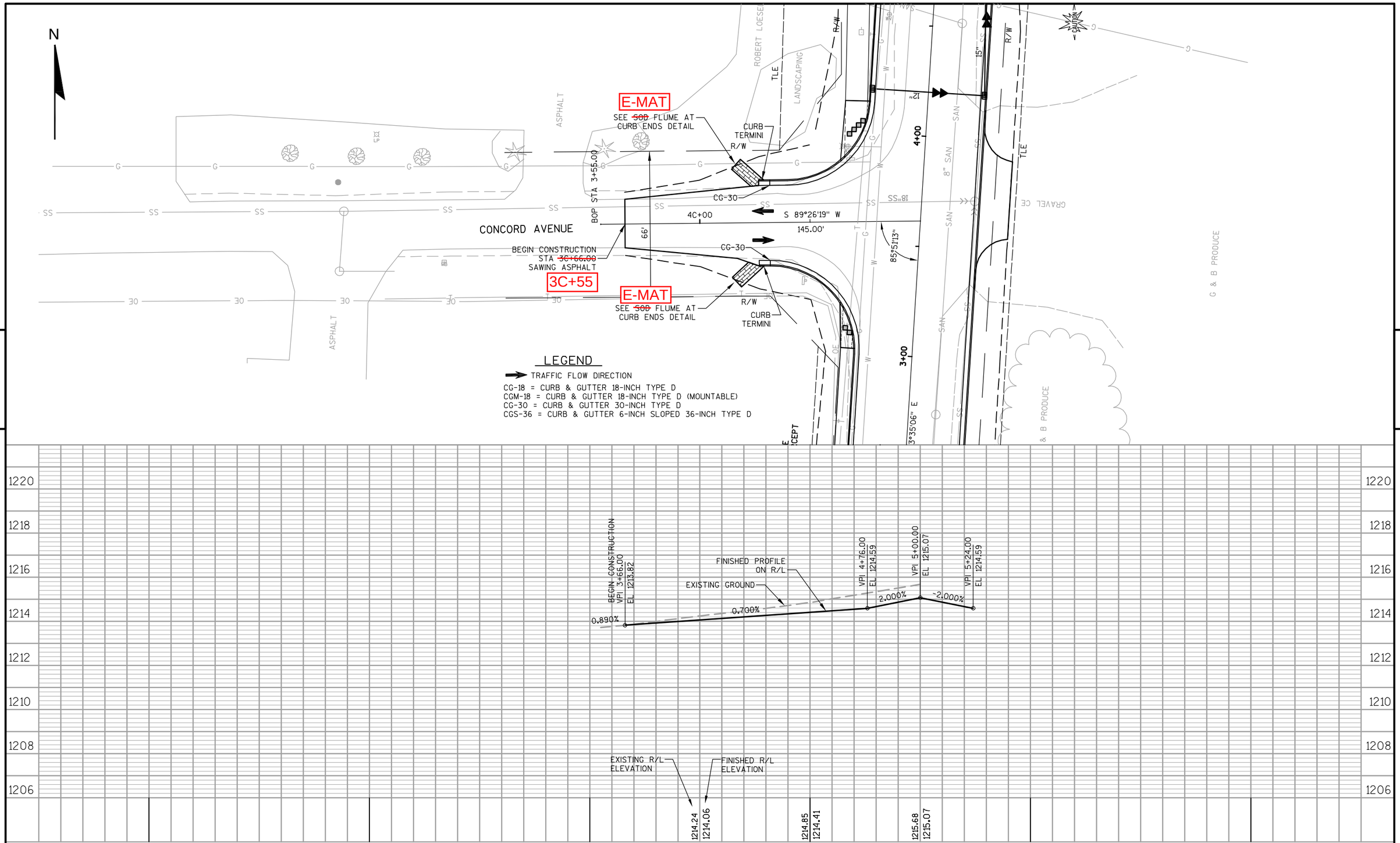
FILE NAME : J:\DRAFT\18520801 Camp Phillips Road\Survey Data\Survey\Survey Drawing\CAD\RCp13001.dwg Layout1 PLOT DATE : Jan 12, 2011 - 10:57am PLOT BY : 005 PLOT NAME : ----------PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 40

| BENCH MARK TABLE | | | |
|---|---|---|---|
| NO. | STATION | DESCRIPTION | ELEV. |
| 15 | 77+32, 36' RT | 60d NAIL IN PP #74 | 1201.99 |

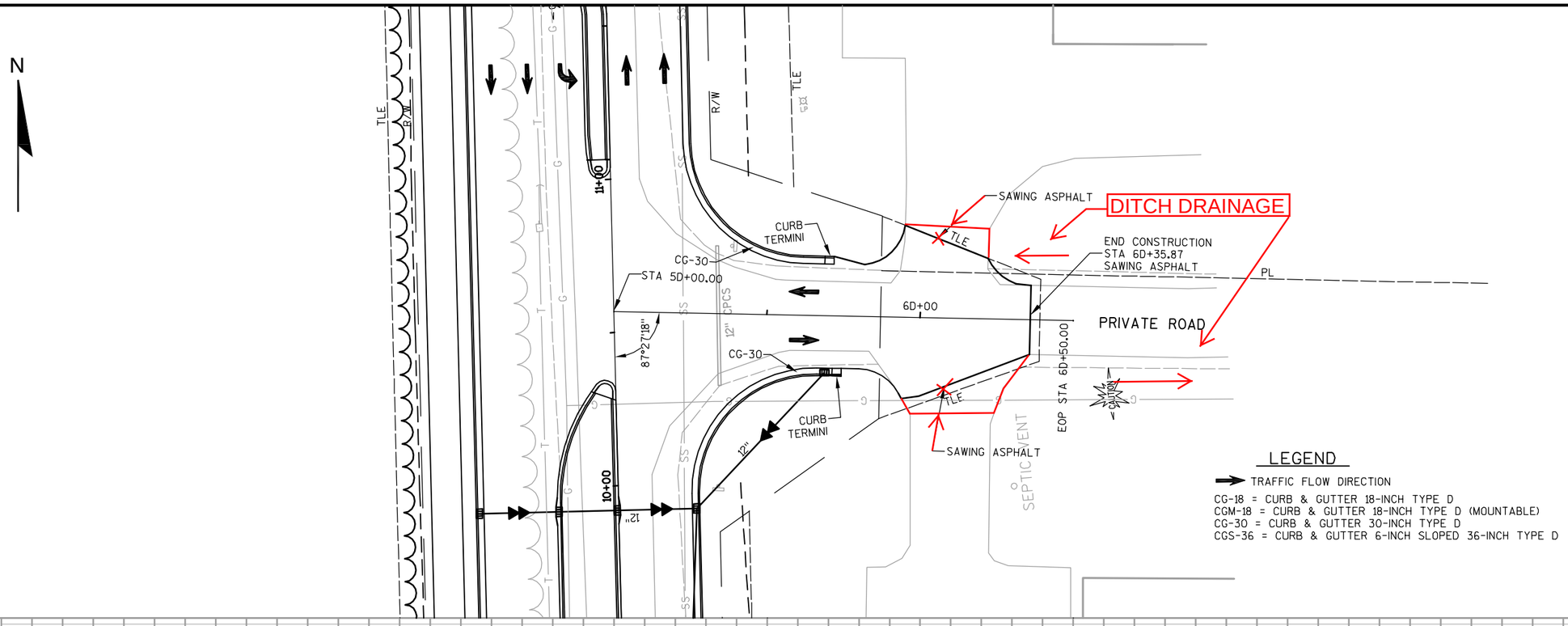


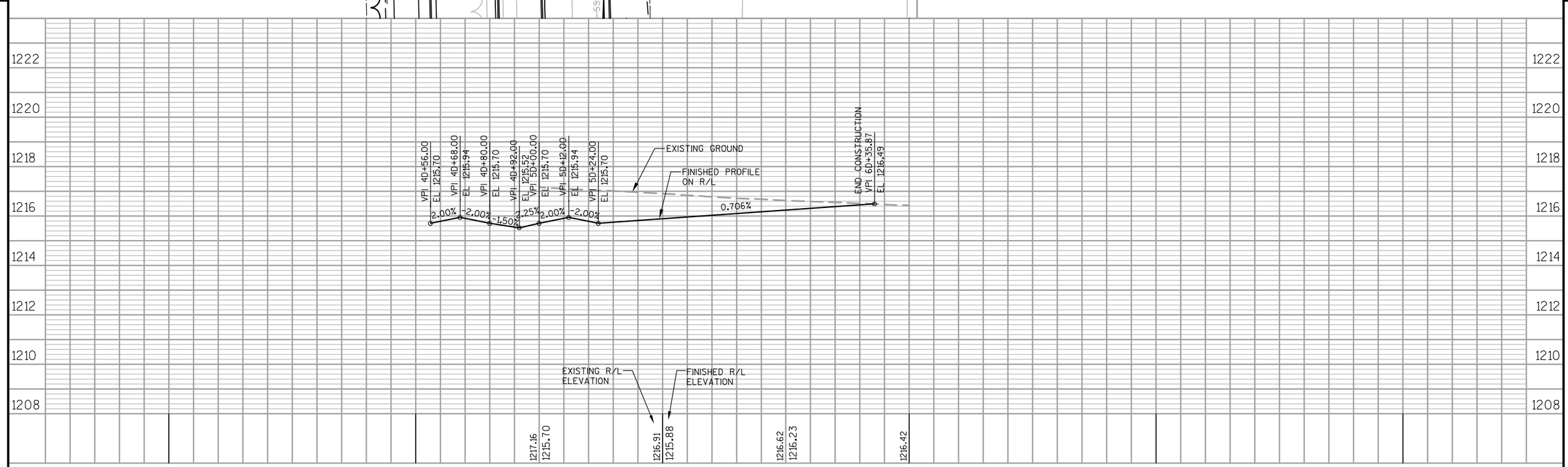




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE | SHEET 102 | E |
|---|---|---|---|---|---|

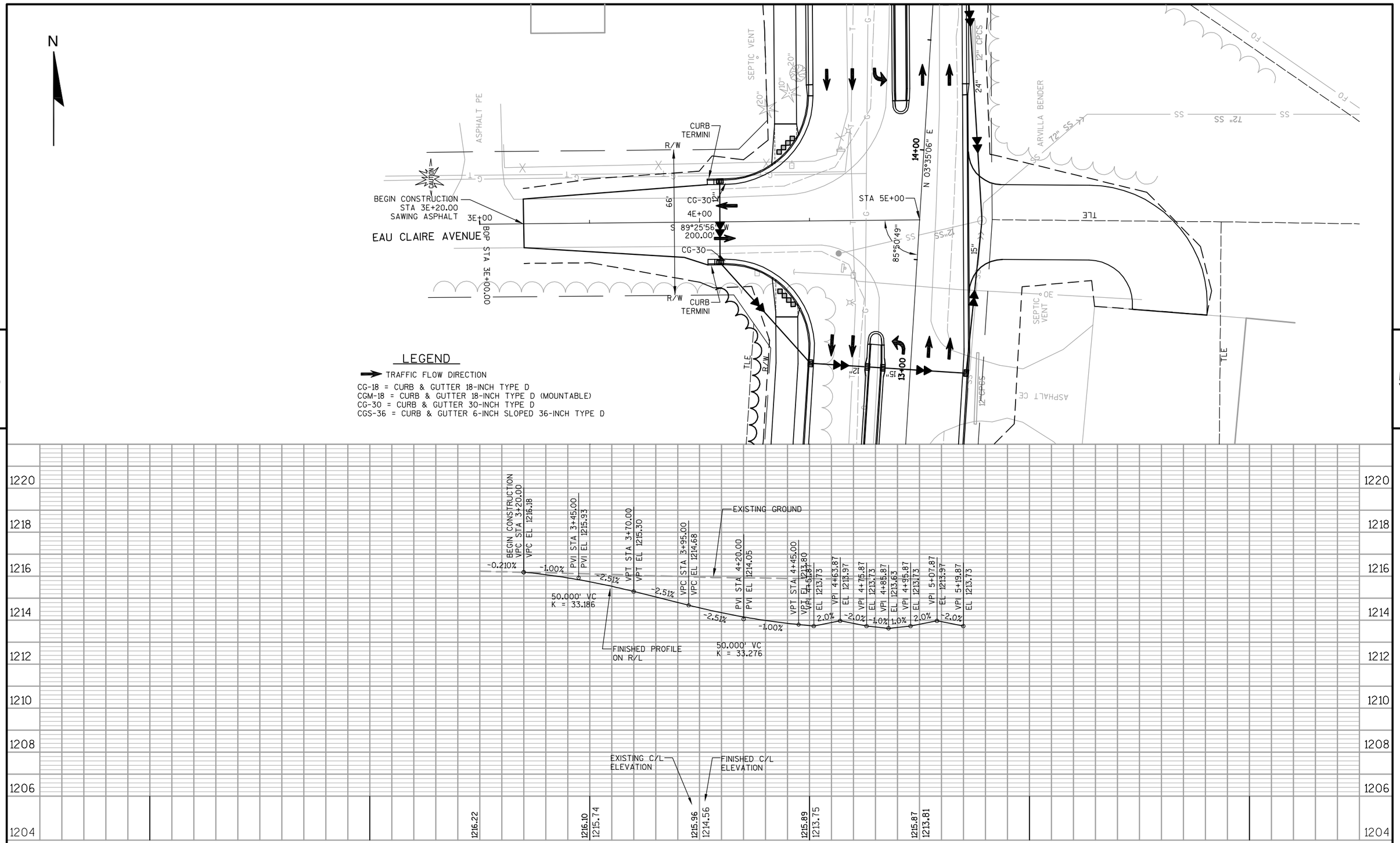



| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE - CONCORD AVENUE | SHEET 103 | E |
|---|---|---|---|---|---|




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE - PRIVATE ROAD | SHEET 104 | E |
|---|---|---|---|---|---|




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE - EAU CLAIRE AVENUE | SHEET 105 | E |
|---|---|---|---|---|---|

LEGEND

TRAFFIC FLOW DIRECTION
CG-18 = CURB & GUTTER 18-INCH TYPE D
CGM-18 = CURB & GUTTER 18-INCH TYPE D (MOUNTABLE)
CG-30 = CURB & GUTTER 30-INCH TYPE D
CGS-36 = CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

N

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH

CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH

BEGIN CONSTRUCTION STA ON+83.18
SAWING ASPHALT

SAWING ASPHALT

SEE CONCRETE COLLAR DETAIL

BOP STA ON+60.08

ASPHALTIC FLUME

CURB TERMINI

CURB RAMP TYPE 2

SAWING ASPHALT

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH

NORTHWESTERN AVENUE

MULTI-USE PATH

R/W

266.56'
N 79°51'25" E

PI STA 3N+32.86
24.00'RT

PI STA 3N+28.64

N 83°07'51" E
129.73'

PI STA 4N+56.37

N 88°08'33" E
43.64'

MATCH LINE STA 5N+20

CGS-36

17.00'

24.00'

5°04'43"

89°46'17"

0N+00 1N+00 2N+00 3N+00 4N+00 5N+00 6N+00

BEGIN CONSTRUCTION
VPI 0+83.18
EL 1180.30

VPC STA 0+85.00
VPC EL 1180.29

LP STA 1+03.29
LP EL 1180.26

PVI STA 1+50.00
PVI EL 1180.06

VPT STA 2+15.00
VPT EL 1181.49

-0.359%

-0.359%

2.194%

2.194%

130' VC
K = 50.912

FINISHED PROFILE ON R/L

EXISTING GROUND

VPI 4+43.95 EL 1186.51
VPI 4+56.00 EL 1186.75
VPI 4+68.00 EL 1186.51
VPI 4+78.10 EL 1186.41
VPI 4+88.00 EL 1186.51
VPI 5+00.00 EL 1186.75
VPI 5+12.00 EL 1186.51

2.0% -2.0% -1.0% 1.0% 2.0% -2.0%

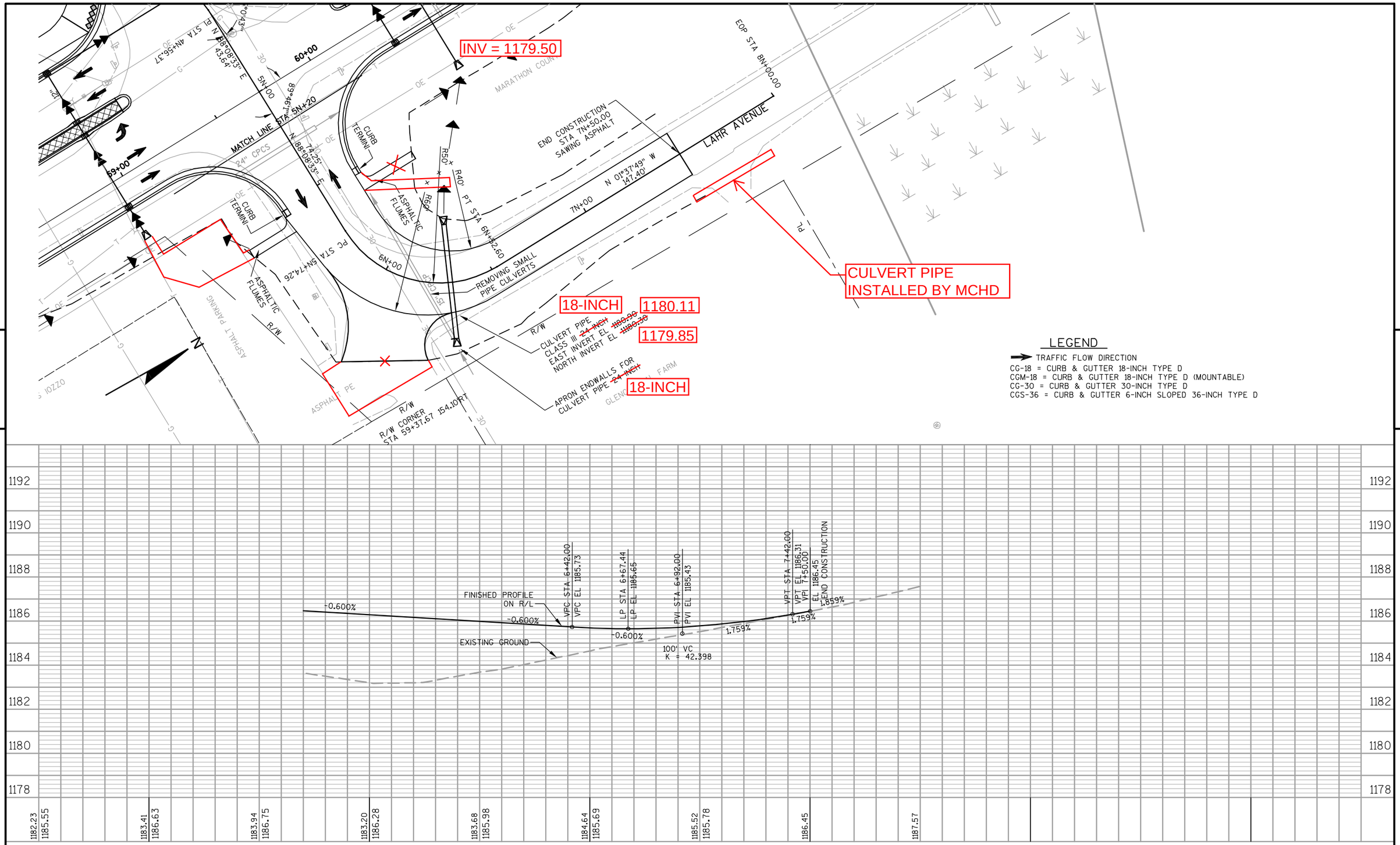
EXISTING C/L ELEVATION

FINISHED C/L ELEVATION

1180.54
1180.42
1180.24 1180.25
1180.31 1180.44
1180.58 1181.17
1180.95 1182.25
1180.98 1183.35
1180.88 1184.45
1182.27 1185.54
1183.41 1186.63
1183.94 1186.75
1183.19 1186.28
1183.68 1185.98

1190 1188 1186 1184 1182 1180 1178 1176

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE - NORTHWESTERN AVENUE | SHEET 106 | E |
|---|---|---|---|---|---|



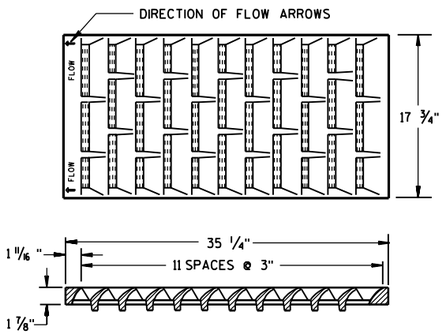

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | PLAN AND PROFILE: LAHR AVENUE | SHEET 107 | E |
|---|---|---|---|---|---|

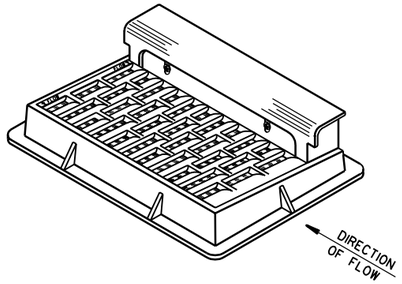
# Standard Detail Drawing List

| | |
|---|---|
| 08A5-16A | INLET COVERS TYPE A, H, A-S, & H-S |
| 08A5-16B | INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM |
| 08A5-17C | INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S |
| 08A6-4 | CATCH BASINS TYPE 1 & 2 |
| 08A7-3 | CATCH BASINS TYPE 3 & 5 |
| 08D1-17 | CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES |
| 08D4-5 | CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES |
| 08D5-14A | CURB RAMPS TYPES 1 AND 1-A |
| 08D5-14B | CURB RAMPS TYPES 2 AND 3 |
| 08D5-14C | CURB RAMPS TYPE 4A |
| 08D5-14D | CURB RAMPS TYPE 4B |
| 08D5-14E | CURB RAMPS TYPES 5, 6, 7A, 7B & 8 |
| 08E8-3 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E9-6 | SILT FENCE |
| 08E10-2 | INLET PROTECTION TYPE A, B, C AND D |
| 08E11-2 | TURBIDITY BARRIER |
| 08F1-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F4-6 | JOINT TIES FOR CONCRETE PIPE |
| 11B1-5 | CONCRETE CORRUGATED MEDIAN |
| 11B2-2 | CONCRETE MEDIAN NOSE |
| 12A3-10 | NAME PLATE (STRUCTURES) |
| 13B2-6 | CONCRETE PAVEMENT APPROACH SLAB |
| 14B15-6A | STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS |
| 14B15-6B | STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS |
| 14B15-6C | STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS |
| 14B15-6D | STEEL PLATE BEAM GUARD, CLASS "A", MOW STRIP DETAIL |
| 14B16-4A | ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2 |
| 14B16-4B | ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2 |
| 14B18-6A | STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS) |
| 14B20-9A | STEEL THRIE BEAM STRUCTURE APPROACH |
| 14B20-9B | STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END AND VERTICAL FACED PARAPETS |
| 14B22-5A | CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE) |
| 14B22-5B | CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE) |
| 14B24-7A | STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL |
| 14B24-7B | STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL |
| 14B24-7C | STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL |
| 15C2-4A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C2-4B | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C2-4C | DETOUR SIGNING FOR MAINLINE CLOSURES |
| 15C3-1 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C7-11B | PAVEMENT MARKING WORDS |
| 15C7-11D | PAVEMENT MARKING ARROWS |
| 15C8-13A | PAVEMENT MARKING (MAINLINE) |
| 15C8-13B | PAVEMENT MARKING (INTERSECTIONS) |
| 15C8-13E | PAVEMENT MARKING (LEFT TURN LANE) |
| 15C8-13F | PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK) |
| 15C18-3 | MEDIAN ISLAND MARKING |
| 15C21-3 | SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS |

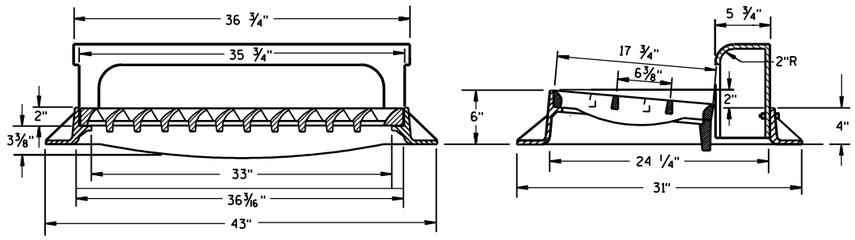
6

NOTE:
GRATE IS REVERSIBLE.



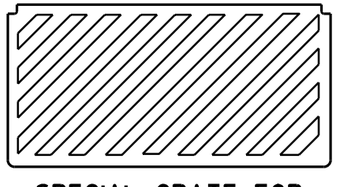

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"




## TYPE "H"

(APPROXIMATE WEIGHT 422 LBS.)
FRAME..... 175 LBS.
GRATE..... 138 LBS.
CURB BOX..... 109 LBS.

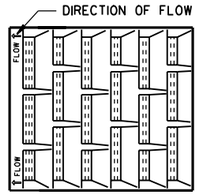
1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS

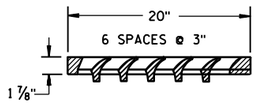


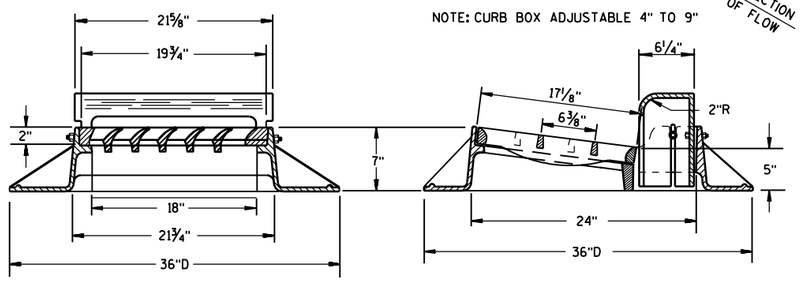
## SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 172 LBS.)
GRATE..... 172 LBS.

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

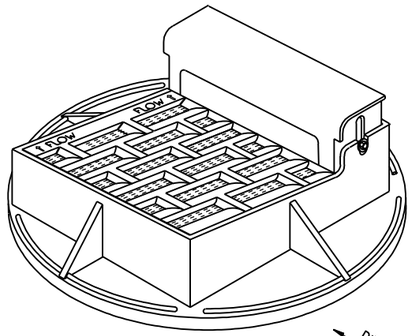



## TYPE "A"

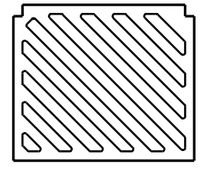
(APPROXIMATE WEIGHT 325 LBS.)
FRAME..... 157 LBS.
GRATE..... 84 LBS.
CURB BOX..... 84 LBS.




NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.

1" DIAGONAL BARS
WITH 1 1/2" OPENINGS



## SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8"
GRATE..... 84 LBS.

(NOTED AS TYPE A-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 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.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

# INLET COVERS
# TYPE A, H, A-S, & H-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

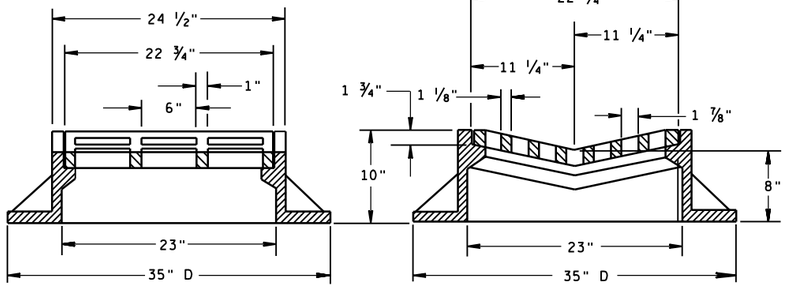
APPROVED
10/4/99
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

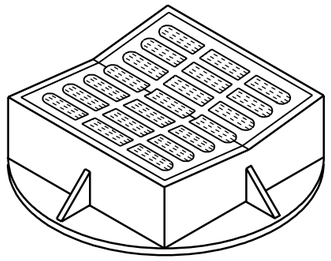
6

S.D.D. 8 A 5-16a

6

S.D.D. 8 A 5-16a

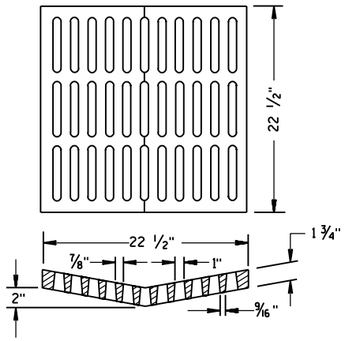


## TYPE "B"

(APPROXIMATE WEIGHT 395 LBS.)

FRAME..... 285 LBS.
GRATE..... 110 LBS.

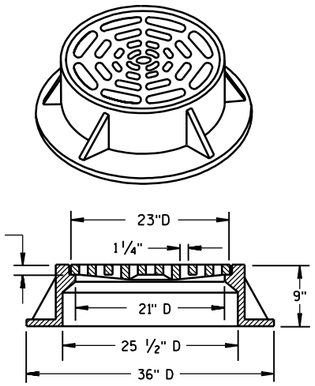



## ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 125 LBS.)
GRATE.....125 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

**NOTED AS TYPE B-A ON THE DRAINAGE TABLE**




## TYPE "C"

(APPROXIMATE WEIGHT 340 LBS.)

FRAME..... 235 LBS.
GRATE..... 105 LBS.

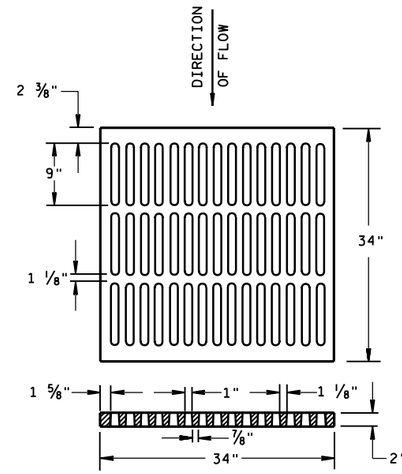
## GENERAL NOTES

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.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

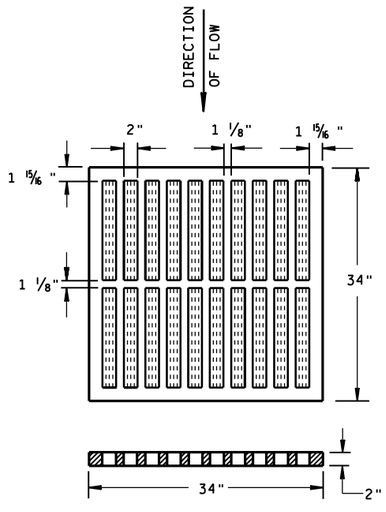



## ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 365 LBS.)
GRATE.....365 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

**NOTED AS TYPE MS-A ON THE DRAINAGE TABLE**

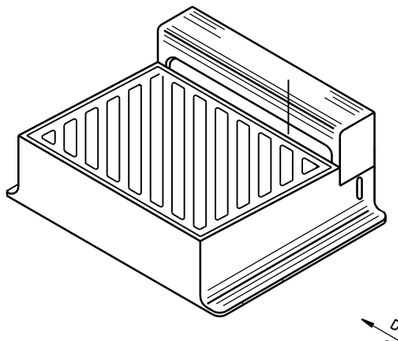



## TYPE "MS"

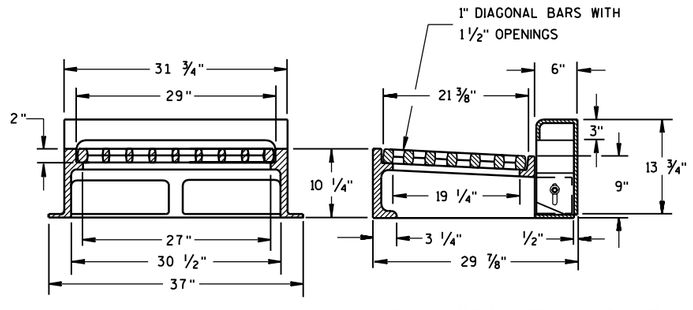
(APPROXIMATE GRATE WEIGHT 270 LBS.)
GRATE.....270 LBS.

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"

(APPROXIMATE WEIGHT 670 LBS.)

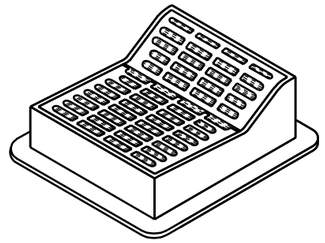
FRAME..... 360 LBS.
GRATE..... 160 LBS.
CURB BOX..... 150 LBS.

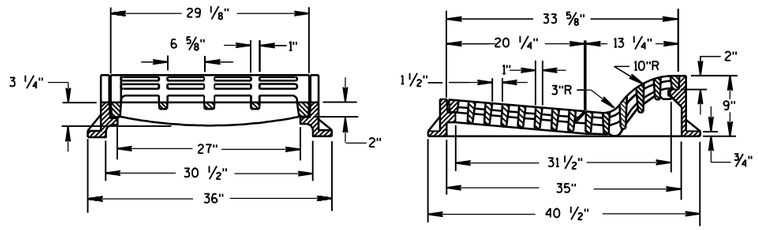
## INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/4/99
DATE
FHWA

CHIEF ROADWAY DEVELOPMENT ENGINEER



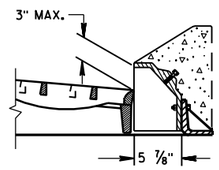



## TYPE "F"

(APPROXIMATE WEIGHT 645 LBS.)

FRAME.....300 LBS.
GRATE.....165 LBS.
GRATE.....180 LBS.

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




## ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

(APPROXIMATE WEIGHT 79 LBS.)
CURB BOX.....79 LBS.

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

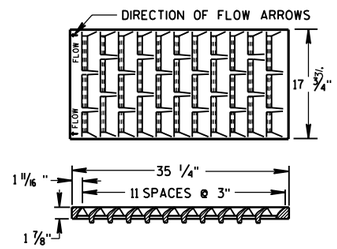
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

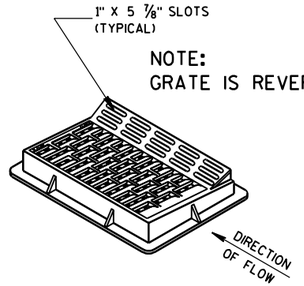
## GENERAL NOTES

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.

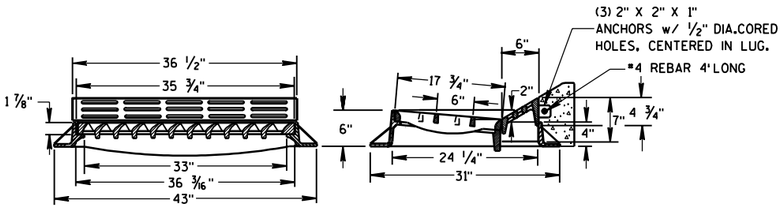
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.




NOTE:
GRATE IS REVERSIBLE.

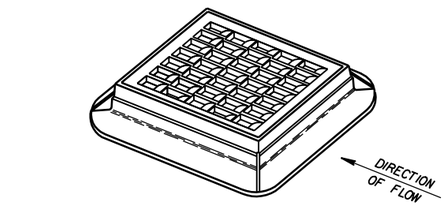


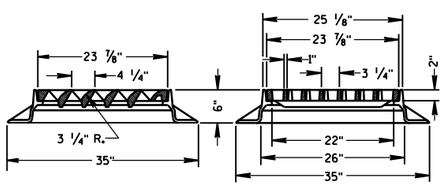

## TYPE "HM"

(APPROXIMATE WEIGHT 375 LBS.)
FRAME.....175 LBS.
GRATE.....138 LBS.
CURB BOX..... 62 LBS.

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

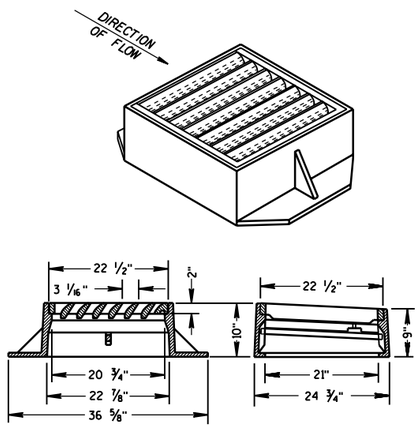



## TYPE "S"

(APPROXIMATE WEIGHT 334 LBS.)

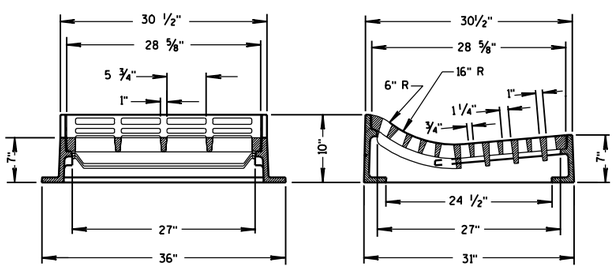
FRAME.....165 LBS.
GRATE.....169 LBS.

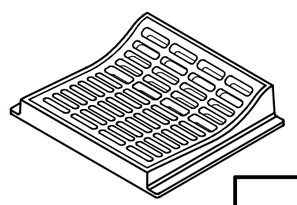



## TYPE "V"

(APPROXIMATE WEIGHT 405 LBS.)

FRAME.....270 LBS.
GRATE.....130 LBS.
SAFETY BAR..... 5 LBS.



## TYPE "T"

(APPROXIMATE WEIGHT 530 LBS.)
FRAME.....270 LBS.
GRATE.....260 LBS.

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 30 INCH.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/07
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

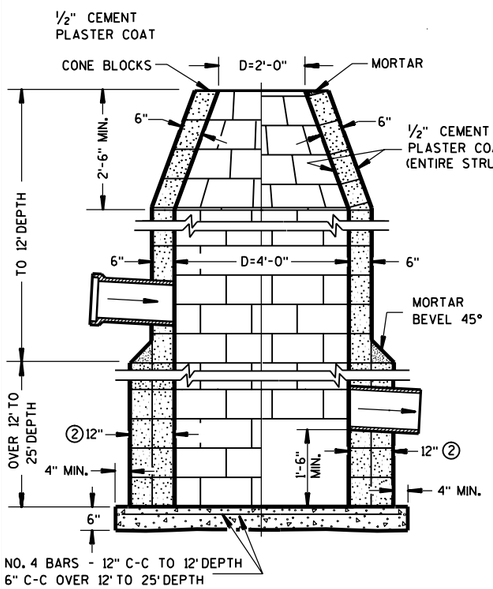
FHWA

6

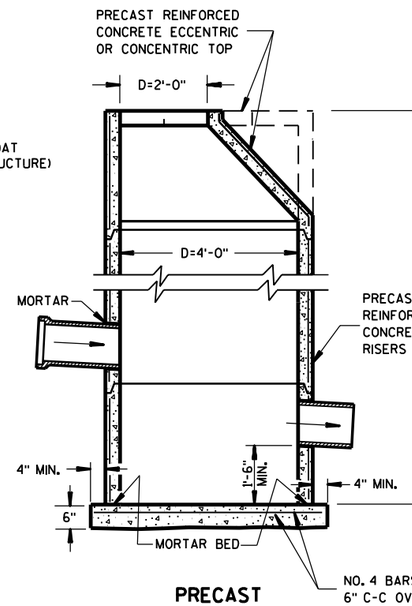
S.D.D. 8 A 5-17c

6

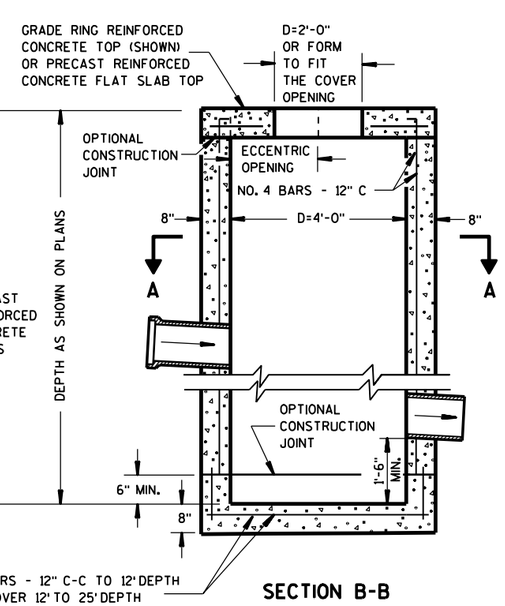
S.D.D. 8 A 5-17c




CONCRETE BLOCK

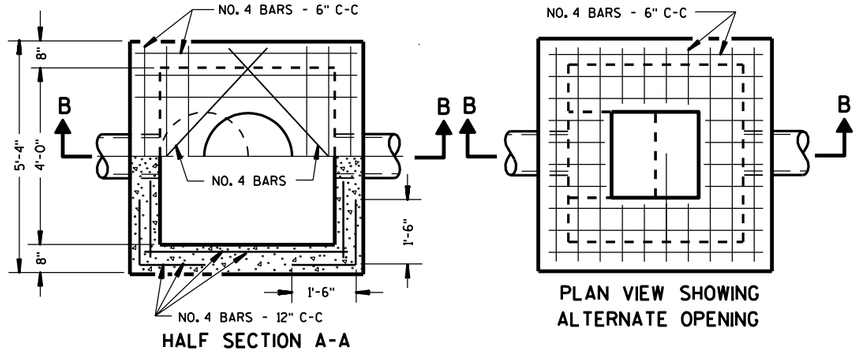



PRECAST REINFORCED CONCRETE




SECTION B-B
REINFORCED CONCRETE

## CATCH BASINS, TYPE 1




HALF SECTION A-A

PLAN VIEW SHOWING ALTERNATE OPENING

## 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.

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 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED 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 CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE 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 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.

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.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

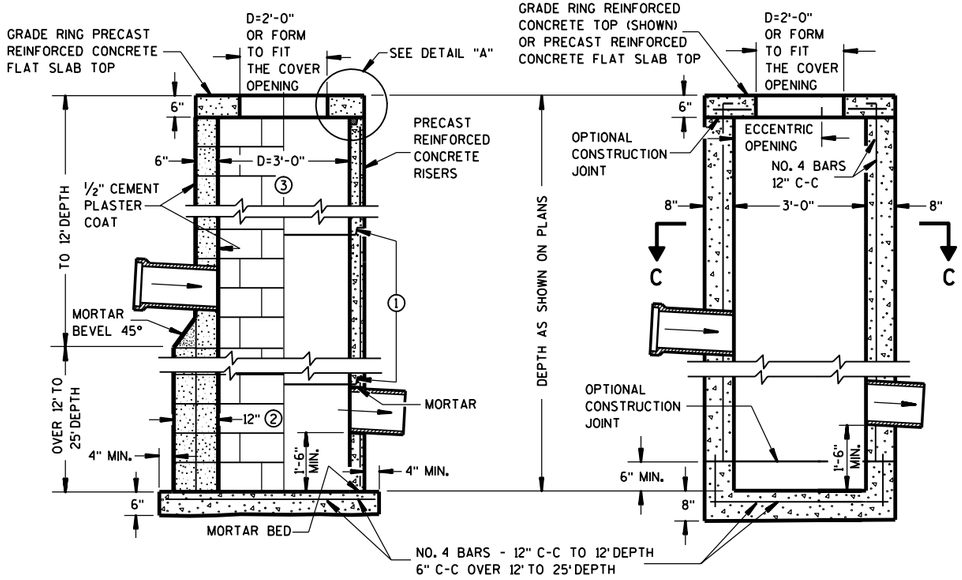
THE "PRECAST REINFORCED CONCRETE FLAT SLAB TOP" OPTION IS REQUIRED ON CATCH BASINS, TYPE 1 WHEN 2' X 3' OPENING INLET COVERS ARE REQUIRED.

① PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH THE TONGUE DOWN WHEN GRADE RINGS ARE USED FOR THE SLAB TOP.

② 2 COURSES 6" BLOCK.

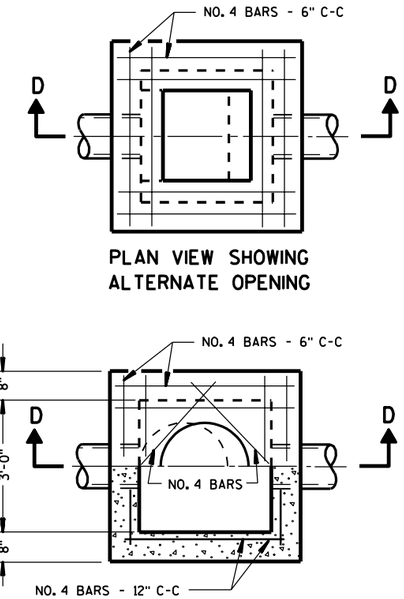
③ WHEN THE CONNECTING PIPES ARE 24" OR LARGER THE PRECAST CATCH BASIN MAY BE INCREASED TO 42" DIA.

## CATCH BASINS, TYPE 2




CONCRETE BLOCK

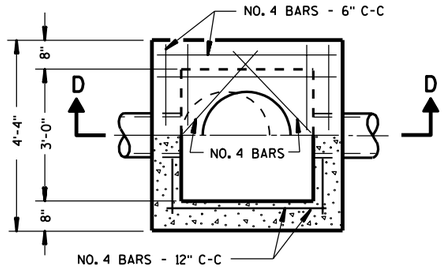
PRECAST REINFORCED CONCRETE



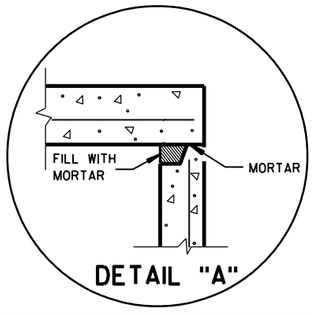

SECTION D-D
REINFORCED CONCRETE




PLAN VIEW SHOWING ALTERNATE OPENING




HALF SECTION C-C




DETAIL "A"

CATCH BASINS TYPE 1 & 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

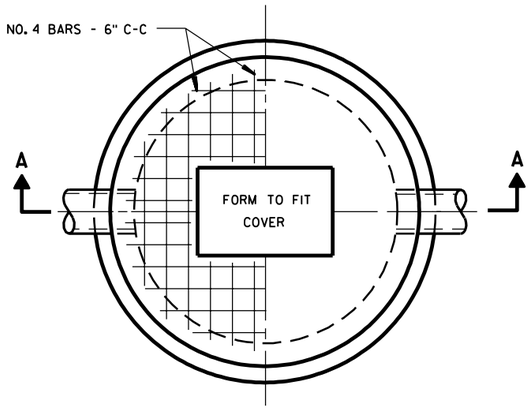
APPROVED
6/9/99
DATE
FHWA

CHIEF ROADWAY DEVELOPMENT ENGINEER

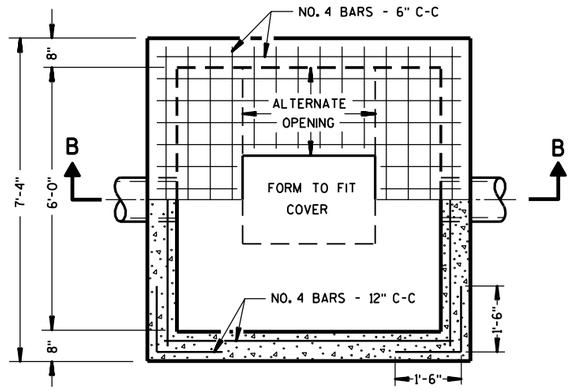
S.D.D. 8 A 6-4

6

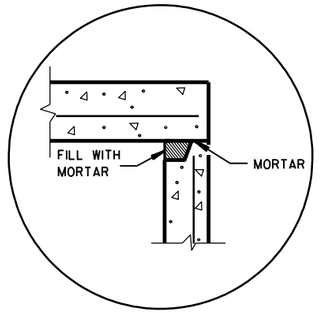
S.D.D. 8 A 6-4



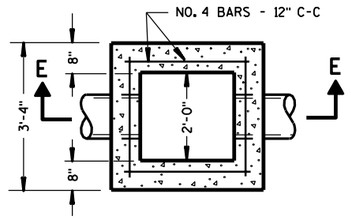

PLAN VIEW




HALF SECTION C-C




DETAIL "A"




SECTION D-D

## 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.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE A PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLE 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS FOR GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

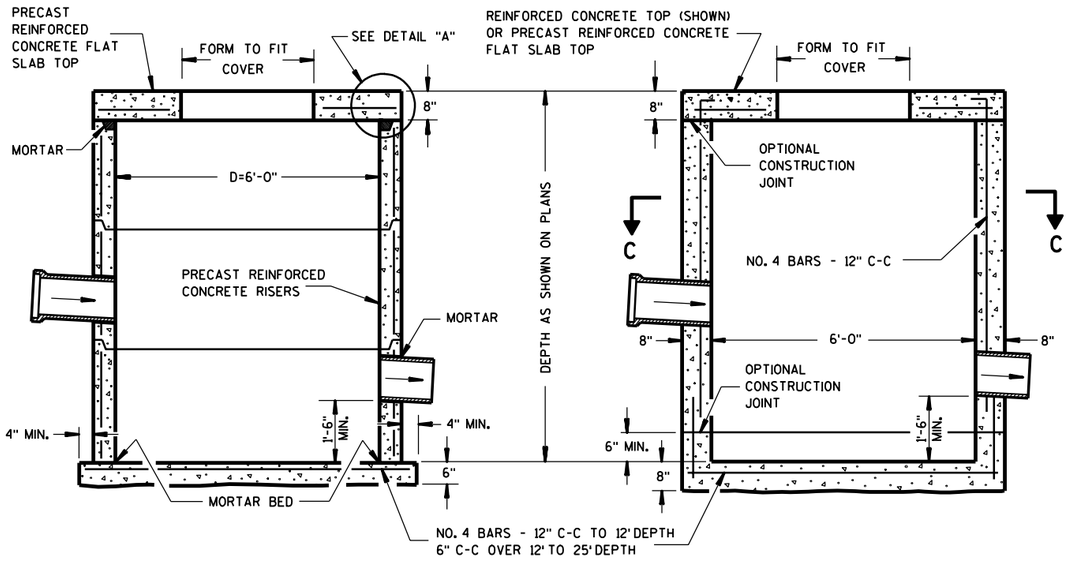
STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A CROSS SECTIONAL DIMENSION OF 1 INCH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR WILL BE ACCEPTABLE.

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

PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

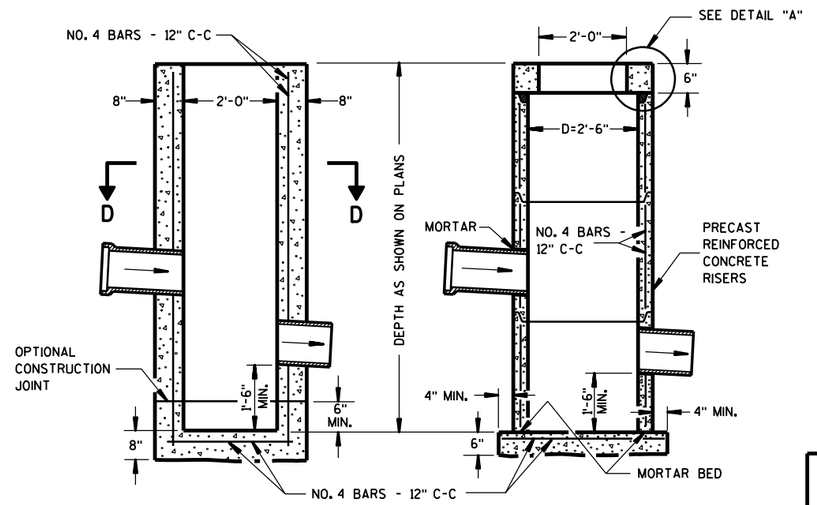
ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.




PRECAST REINFORCED CONCRETE
SECTION A-A

REINFORCED CONCRETE
SECTION B-B

CATCH BASINS TYPE 5




REINFORCED CONCRETE
SECTION E-E

PRECAST REINFORCED CONCRETE

CATCH BASINS TYPE 3

CATCH BASINS TYPE 3 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/13/82
DATE
FHWA

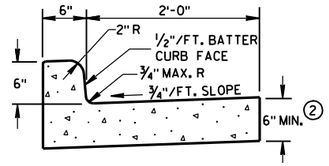
CHIEF DESIGN ENGINEER

6

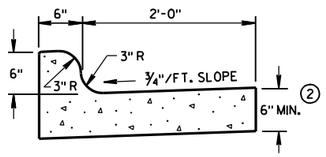
S.D.D. 8 A 7-3

6

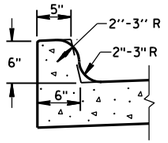
S.D.D. 8 A 7-3



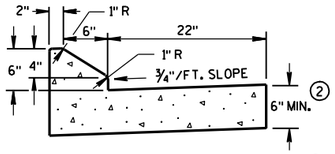

TYPES A & D ①



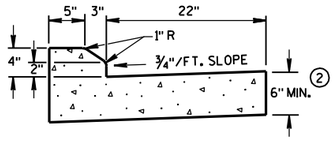

TYPES K & L ①




OPTIONAL CURB SHAPE FOR TYPES K & L ①

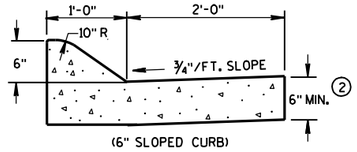



6" SLOPED CURB TYPES G & J ①

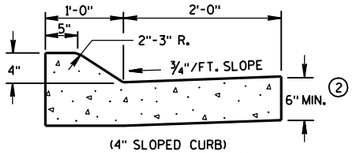



4" SLOPED CURB TYPES G & J ①

## CONCRETE CURB & GUTTER 30"

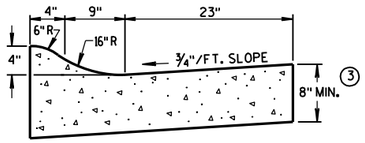



(6" SLOPED CURB)



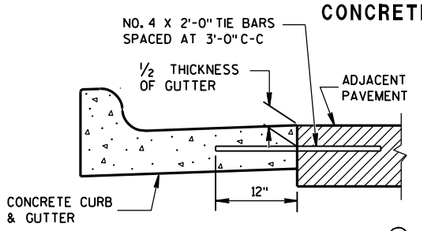

(4" SLOPED CURB)

TYPES A & D ①

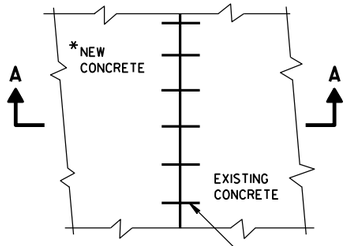



4" SLOPED CURB TYPES R & T ①④

## CONCRETE CURB & GUTTER 36"

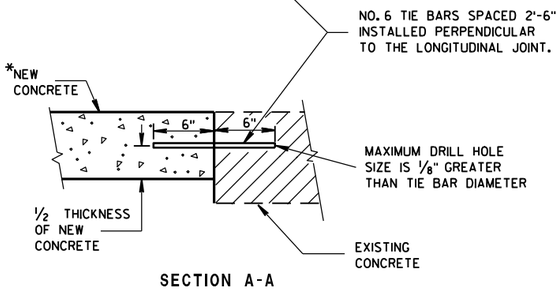



TYPICAL TIE BAR LOCATION ①



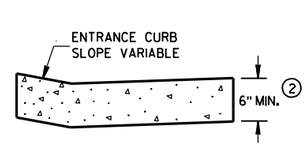

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

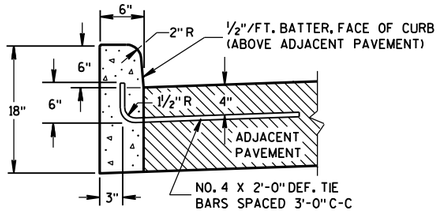



SECTION A-A

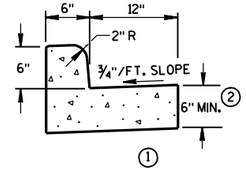
TIE BARS DRILLED INTO EXISTING PAVEMENT




DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

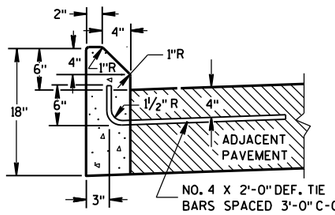



① TYPES A & D




① TYPES A & D

## CONCRETE CURB & GUTTER 18"




① TYPES G & J

## CONCRETE CURB

## GENERAL NOTES

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

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

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

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

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

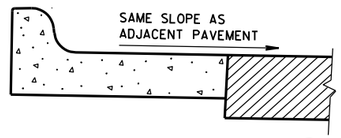
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

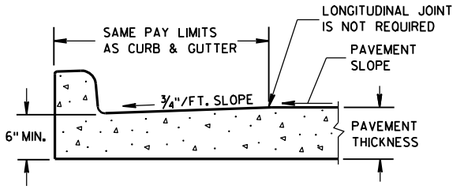
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

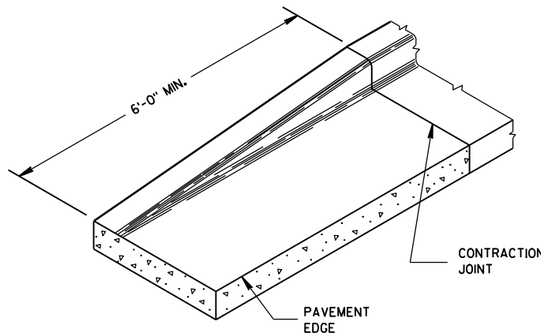
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.




REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)




PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER




END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

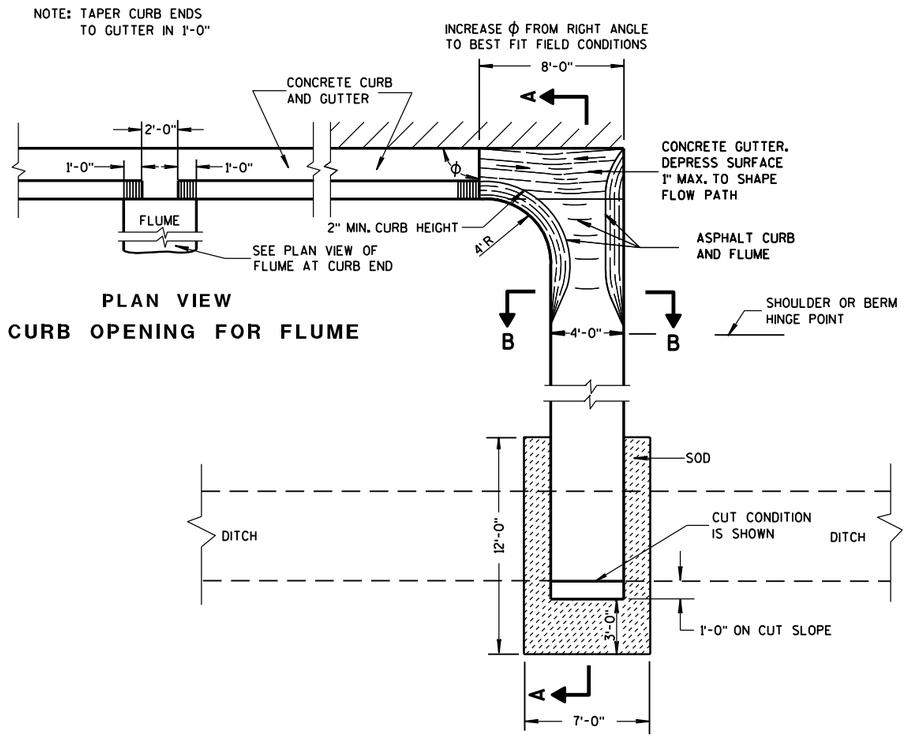
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

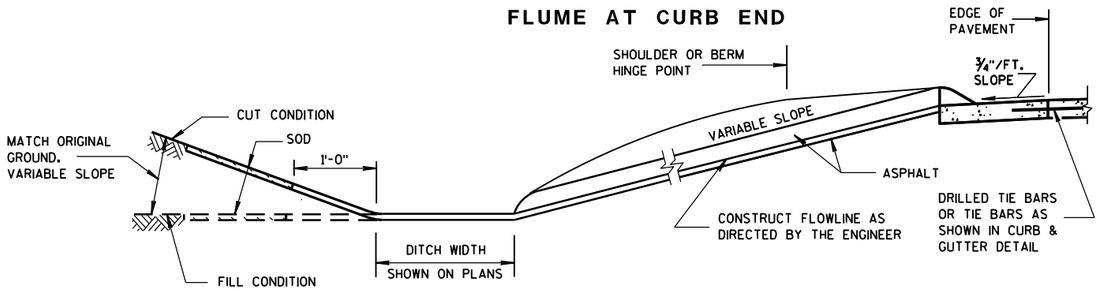
S.D.D. 8 D 1-17

## ASPHALTIC FLUME

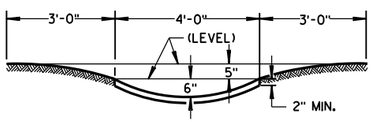



PLAN VIEW
CURB OPENING FOR FLUME

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.

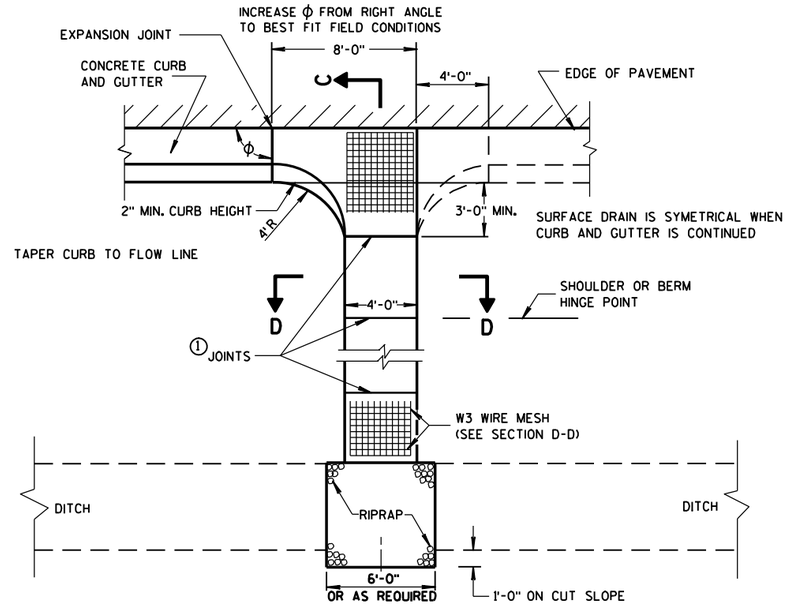
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

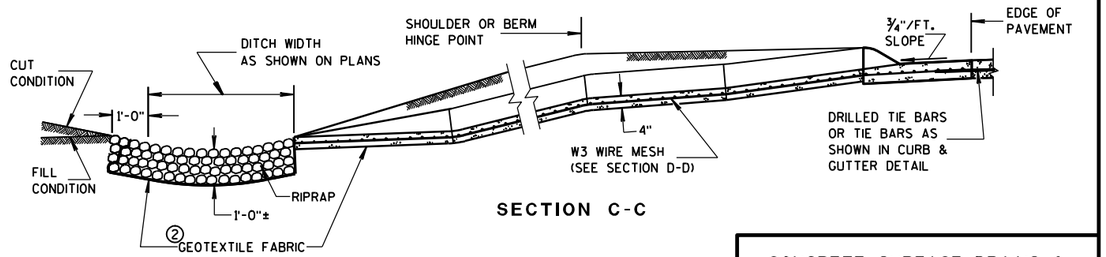
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

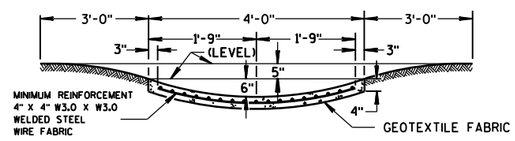
## ③ CONCRETE SURFACE DRAIN




PLAN VIEW




SECTION C-C




SECTION D-D

## CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

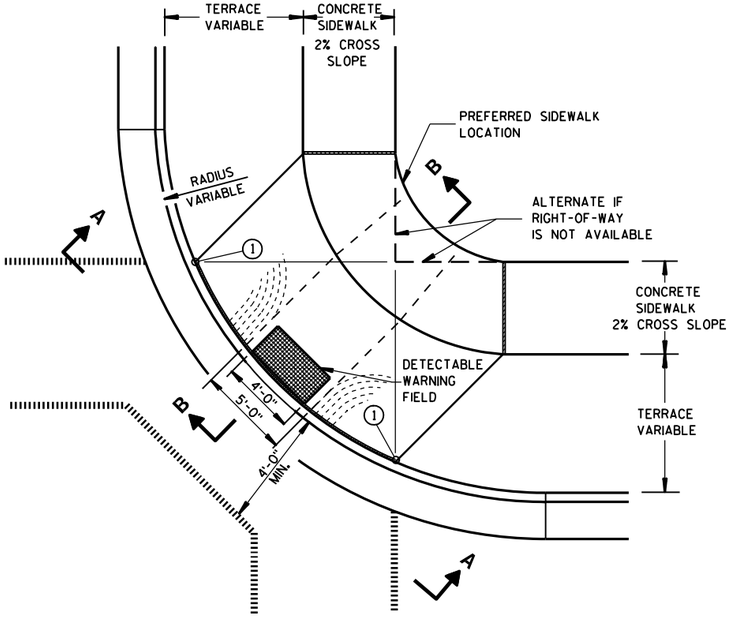
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 D 4-5

6

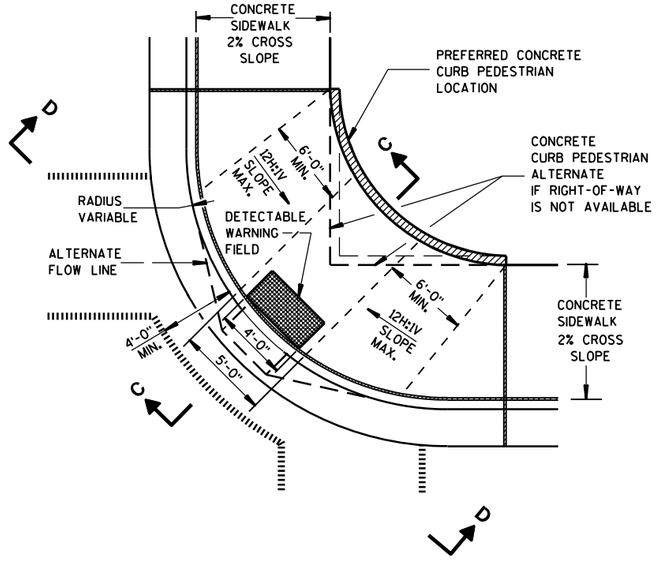
S.D.D. 8 D 4-5




PLAN VIEW

## TYPE 1 RAMP

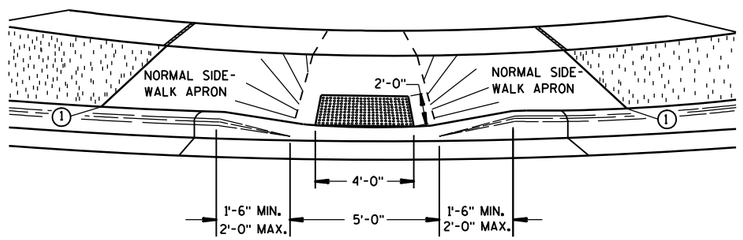
(CENTER OF CORNER RADIUS)



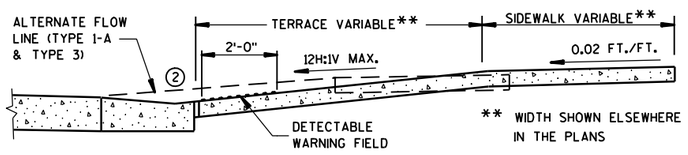

PLAN VIEW

## TYPE 1-A RAMP

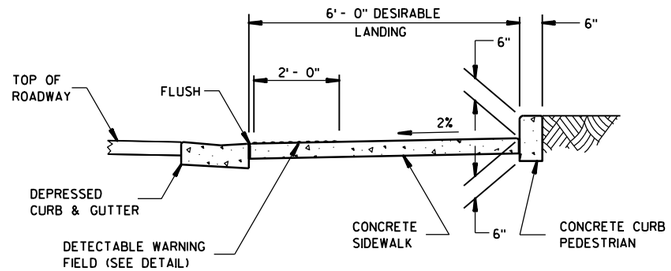
(NO TERRACE)



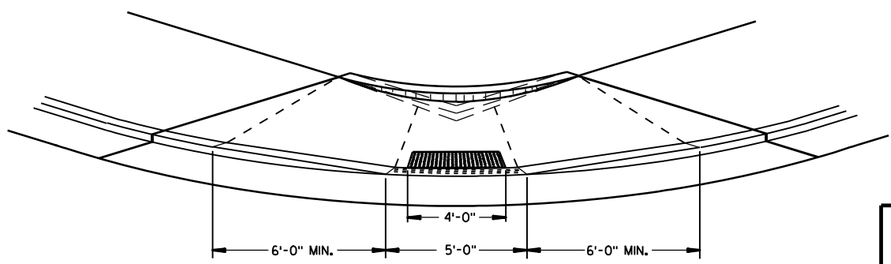

VIEW A-A




SECTION B-B




SECTION C-C




VIEW D-D

## 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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. 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".

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%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

### LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

**CURB RAMPS**
**TYPES 1 AND 1-A**

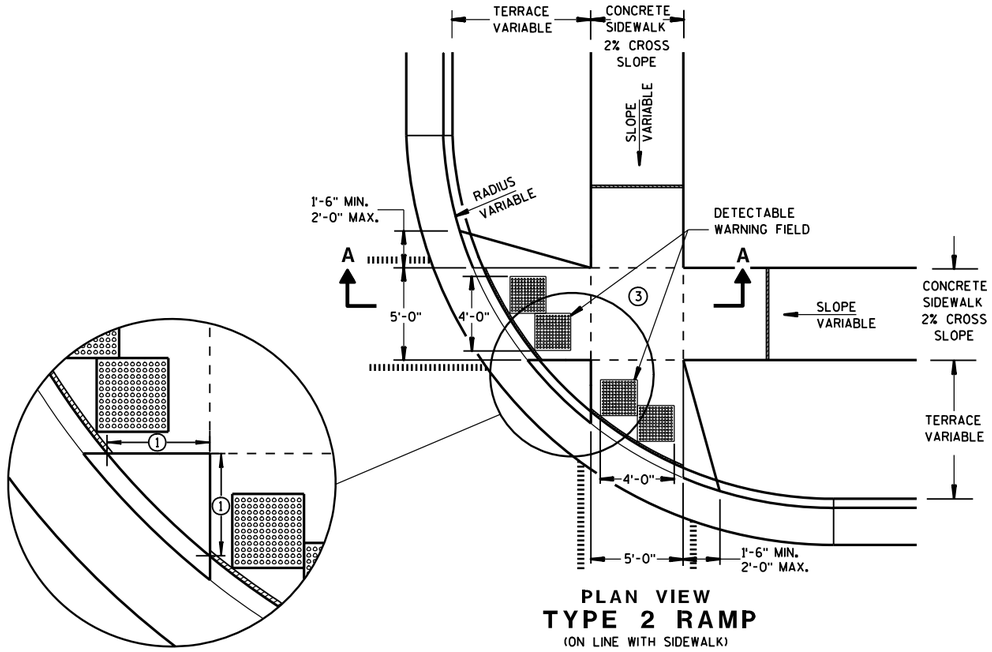
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 5-14a

6

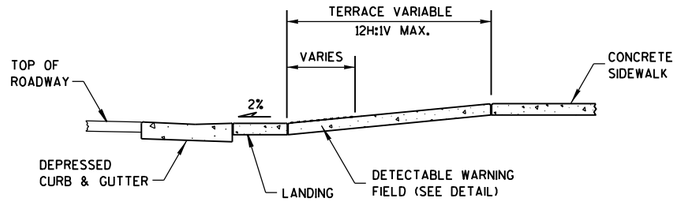
S.D.D. 8 D 5-14a



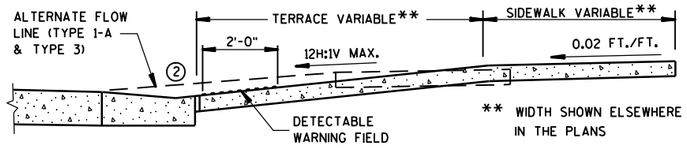

PLAN VIEW

## TYPE 2 RAMP

(ON LINE WITH SIDEWALK)




SECTION A-A




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.

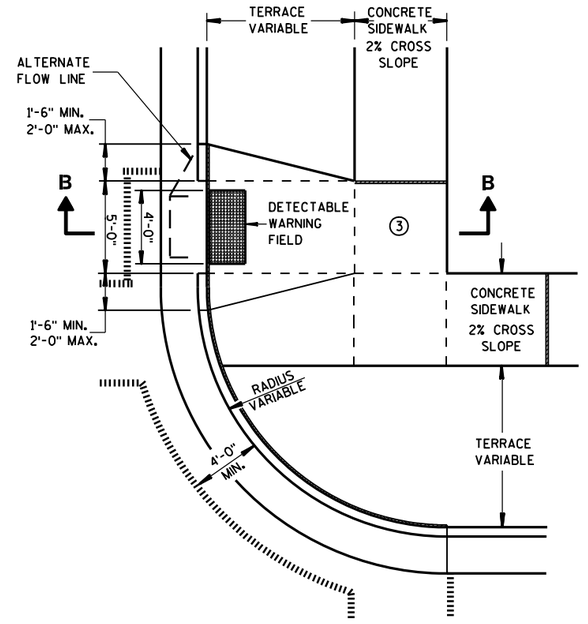
(1) WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

(3) PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

### 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**

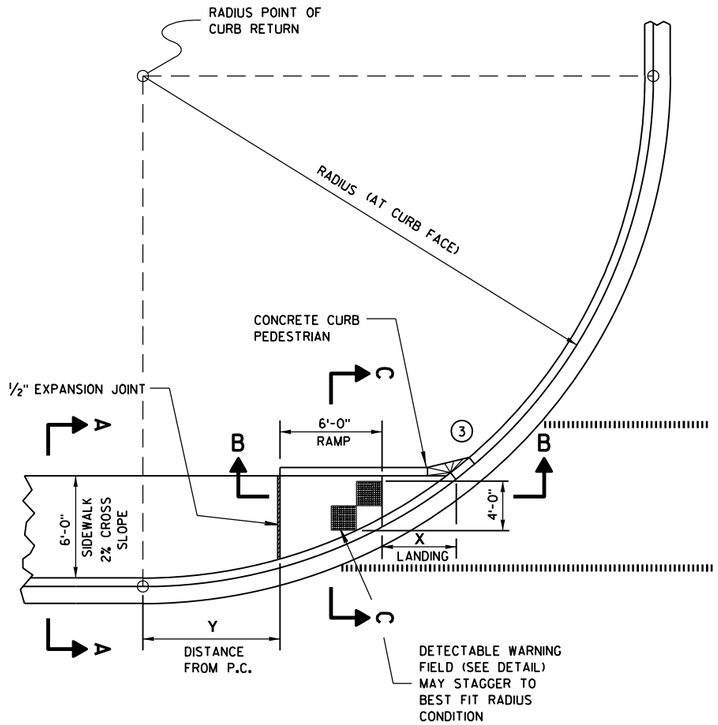
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 5-14b

6

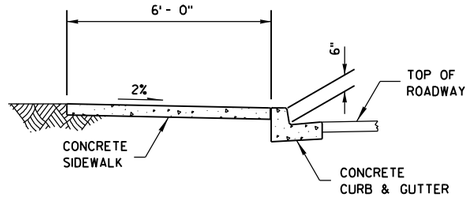
S.D.D. 8 D 5-14b



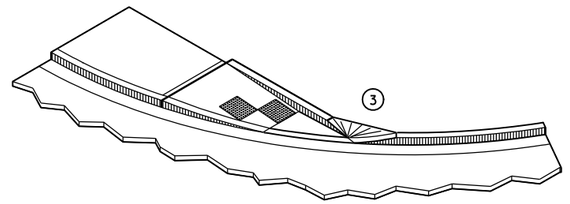

## CURB RAMP TYPE 4A
### PLAN VIEW

| 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" |

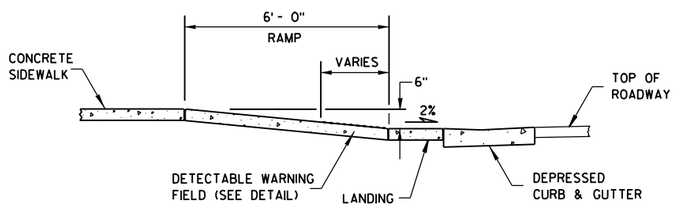
INTERMEDIATE RADII CAN BE INTERPOLATED



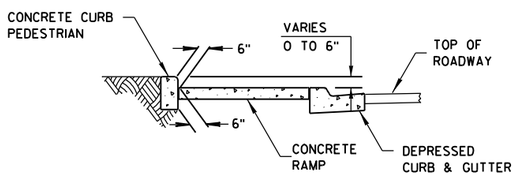

SECTION A-A




ISOMETRIC VIEW




SECTION B-B




SECTION C-C

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

### LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS**
**TYPE 4A**

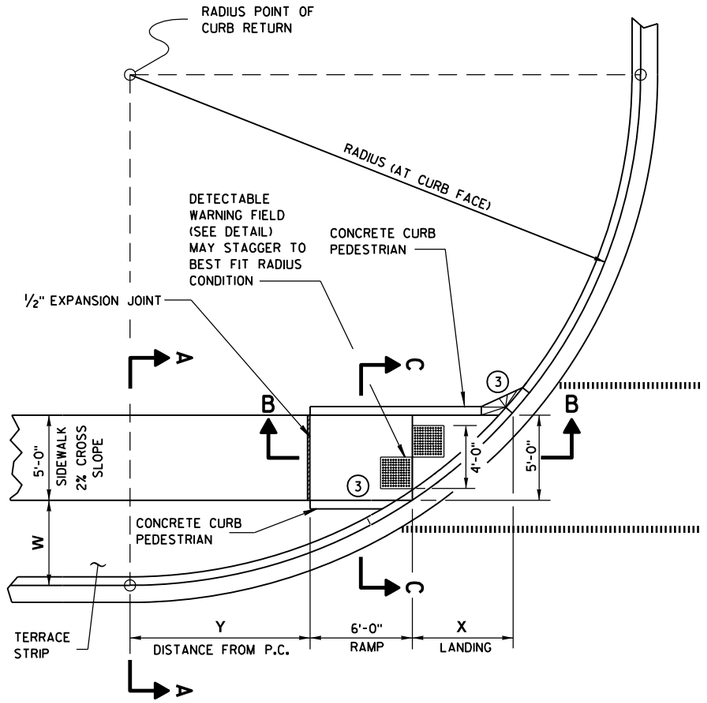
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 5-14c

6

S.D.D. 8 D 5-14c




## CURB RAMP TYPE 4B
### PLAN VIEW

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

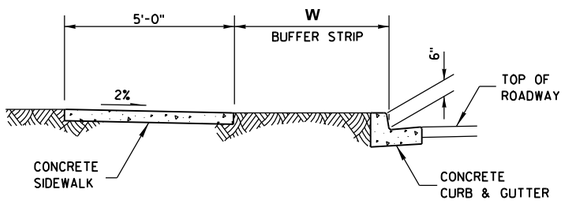
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

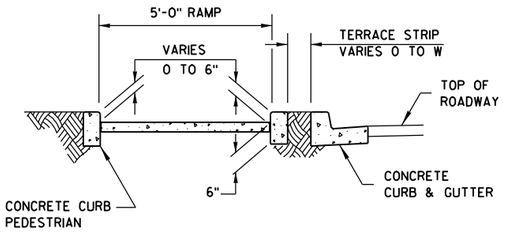
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

| 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" |
| 70 FEET | 12'-2¾" | 14'-3¼" | 11'-¼" | 17'-4" | 10'-1" | 19'-11¾" | 9'-3¾" | 22'-4¼" | 8'-8¼" | 24'-6¼" |
| 80 FEET | 13'-2" | 15'-8½" | 11'-10½" | 18'-11¾" | 10'-10¾" | 21'-10" | 10'-1" | 24'-4¾" | 9'-5" | 26'-8¾" |
| 90 FEET | 14'- ½" | 17'-½" | 12'-8¼" | 20'-6½" | 11'-7¾" | 23'-7" | 10'-9¾" | 26'-3¾" | 10'-1¼" | 28'-9½" |
| 100 FEET | 14'-10½" | 18'-3¾" | 13'-5½" | 22'-0" | 12'-4¼" | 25'-2¾" | 11'-5¾" | 28'-1½" | 10'-9" | 30'-9" |

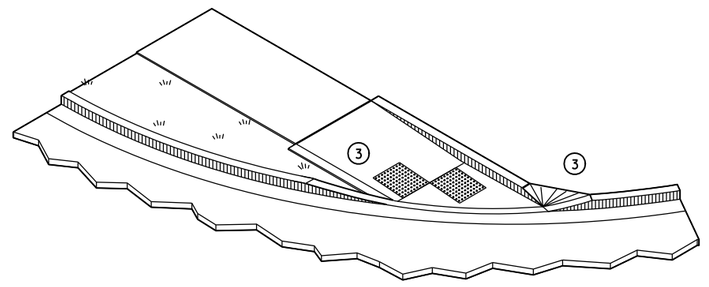
INTERMEDIATE RADII CAN BE INTERPOLATED



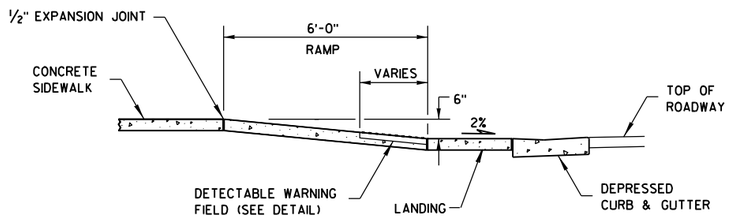

SECTION A-A




SECTION C-C




ISOMETRIC VIEW




SECTION B-B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4B

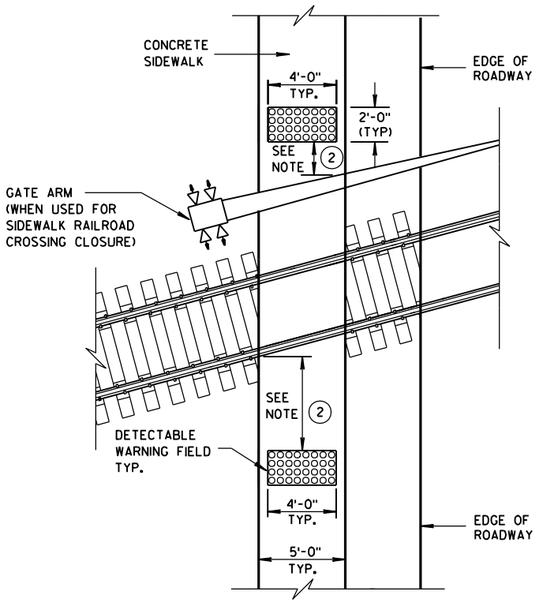
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

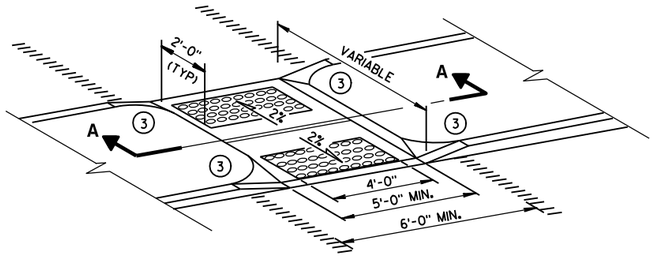
S.D.D. 8 D 5-14d

6

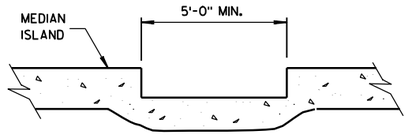
S.D.D. 8 D 5-14d




**TYPE 8**
**DETECTABLE WARNINGS AT RAILROAD CROSSING**




**MEDIAN ISLAND**
**NON-ELEVATED CROSSING**
**TYPE 5**




**SECTION A-A**

## GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(2) 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.

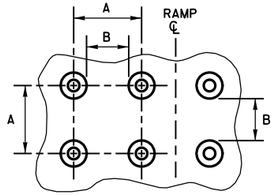
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

### LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

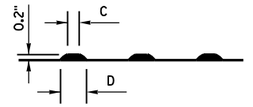
PAVEMENT MARKING CROSSWALK (WHITE)



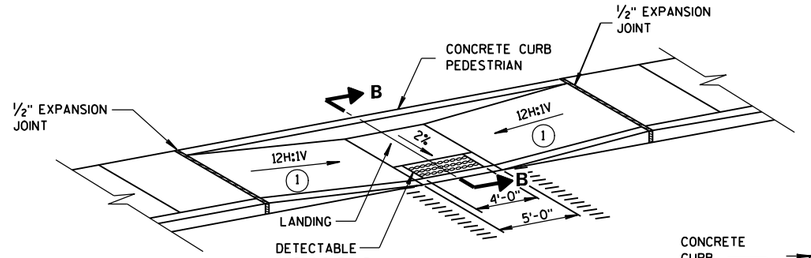

**PLAN VIEW**

| | MIN. | MAX. |
|---|---|---|
| A | 1.6" | 2.4" |
| B | 0.65" | 1.5" |
| C | * | * |
| D | 0.9" | 1.4" |

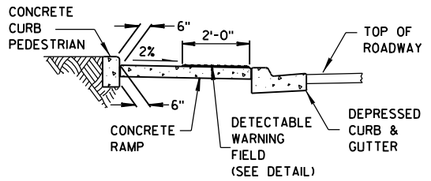
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.




**ELEVATION VIEW**

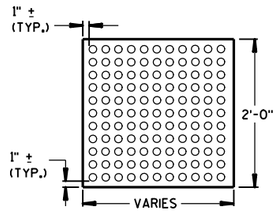



**MID-BLOCK CROSSING**
**TYPE 7A**



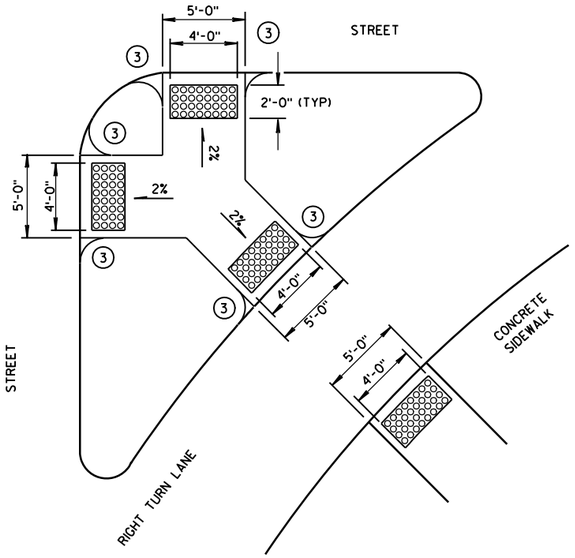

**SECTION B-B**

## TRUNCATED DOMES
**DETECTABLE WARNING PATTERN DETAIL**

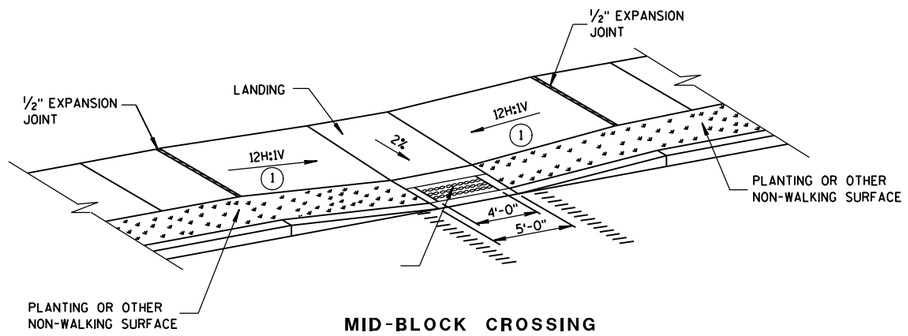



**PLAN VIEW**

**DETECTABLE WARNING FIELD (TYPICAL)**




**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.

**CURB RAMPS**
**TYPES 5, 6, 7A, 7B & 8**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-9-10 — DATE — FHWA

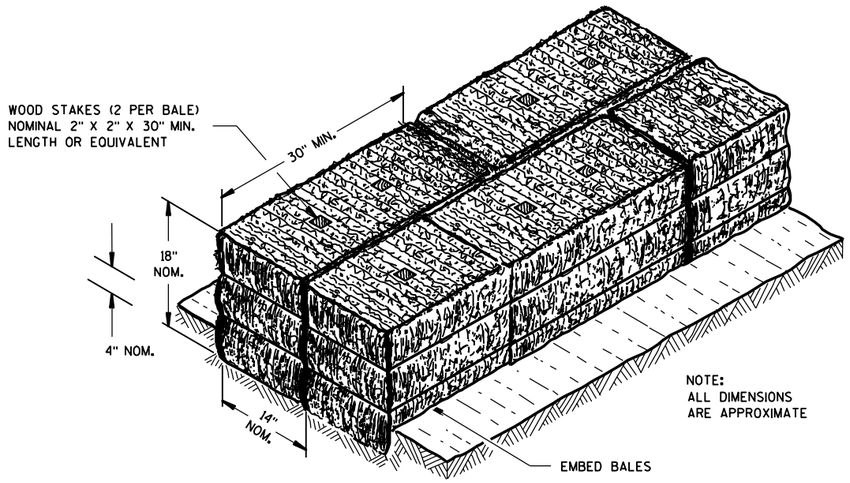
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

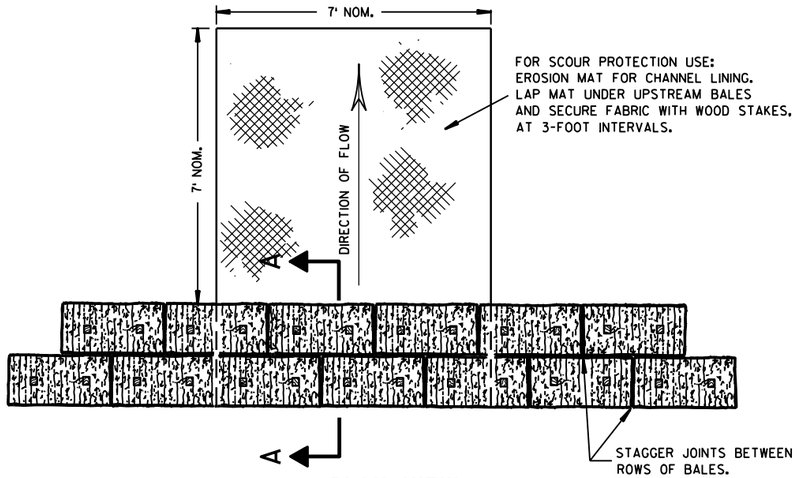
S.D.D. 8 D 5-14e

6

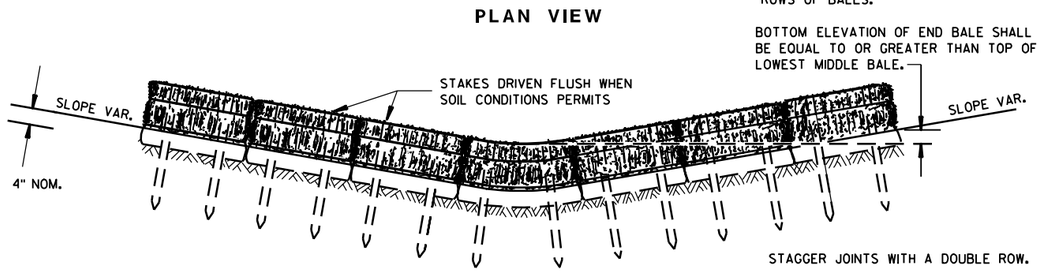
S.D.D. 8 D 5-14e




SECTION A-A




PLAN VIEW



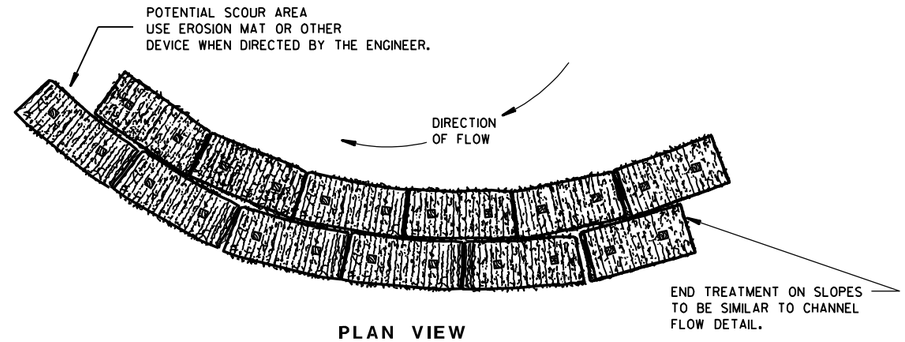

FRONT ELEVATION

## TEMPORARY DITCH CHECK USING EROSION BALES (1)

## GENERAL NOTES

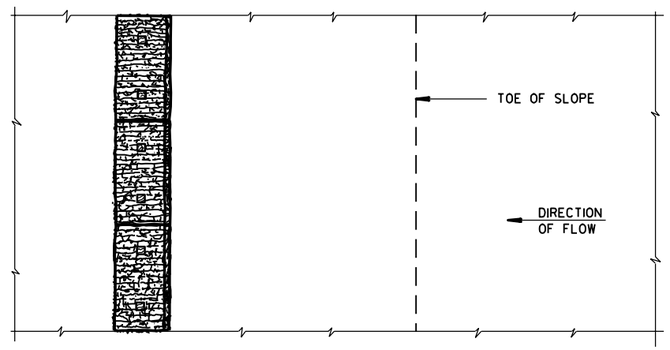
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

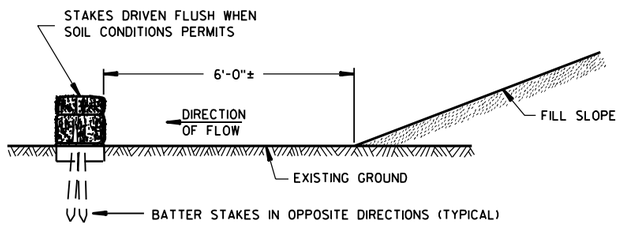



PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW




PLAN VIEW




FRONT ELEVATION

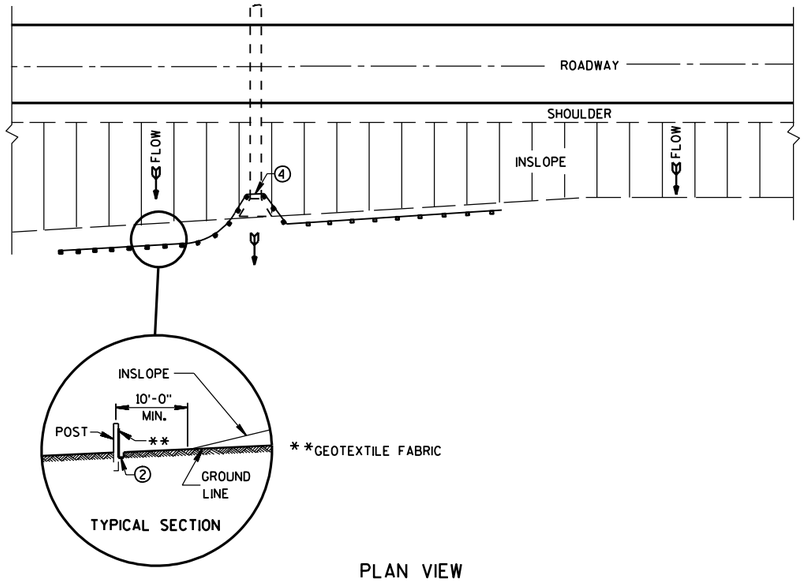
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

## EROSION BALES FOR SHEET FLOW

**TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS**

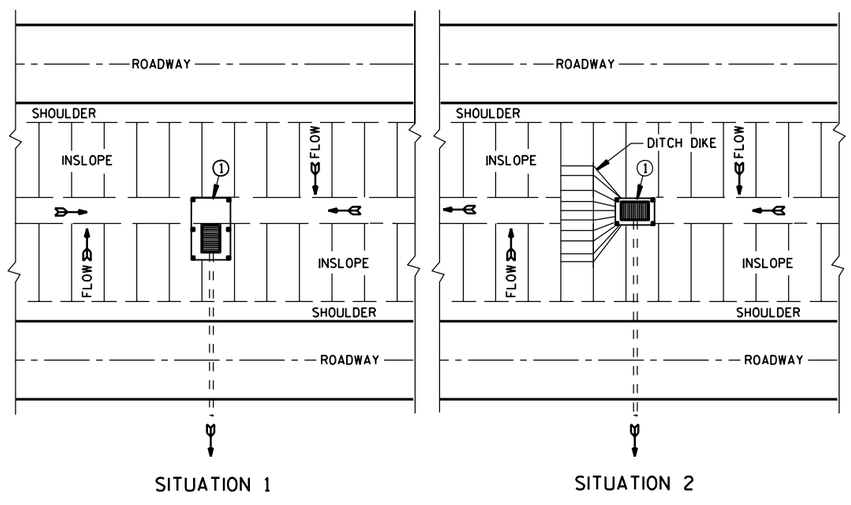
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE



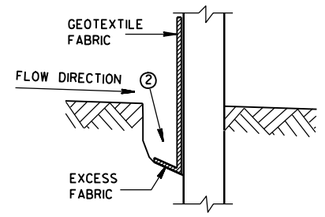

PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

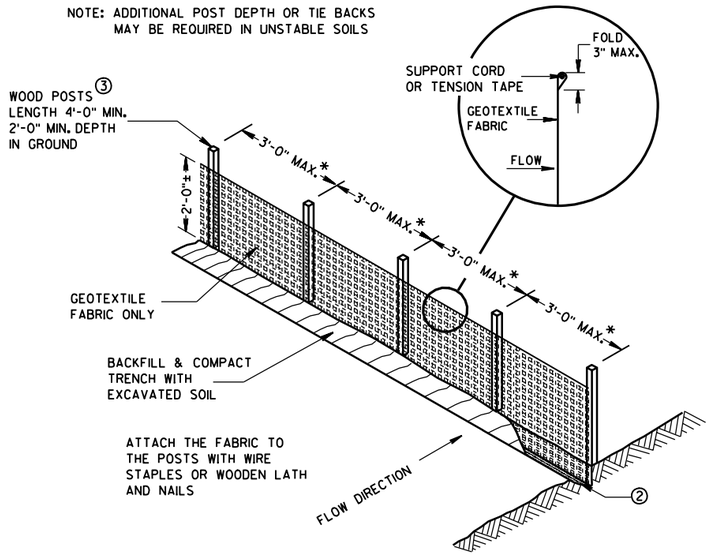
## GENERAL NOTES

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

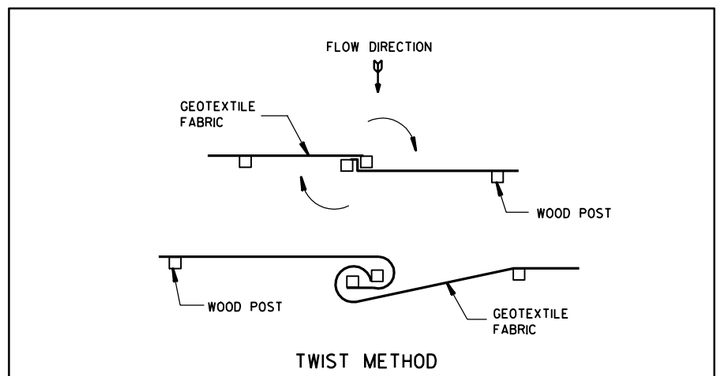
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



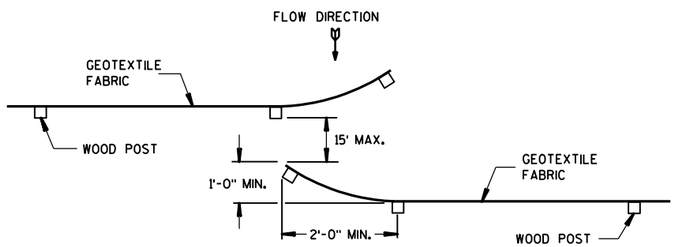

## TRENCH DETAIL




## SILT FENCE

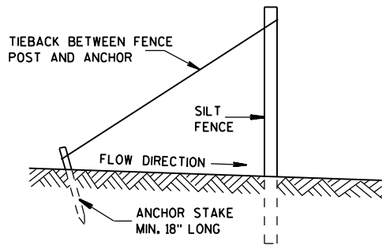



TWIST METHOD




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

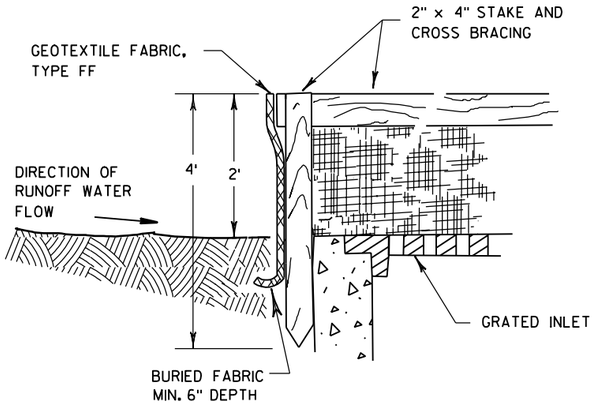
APPROVED
4-29-05
DATE
FHWA

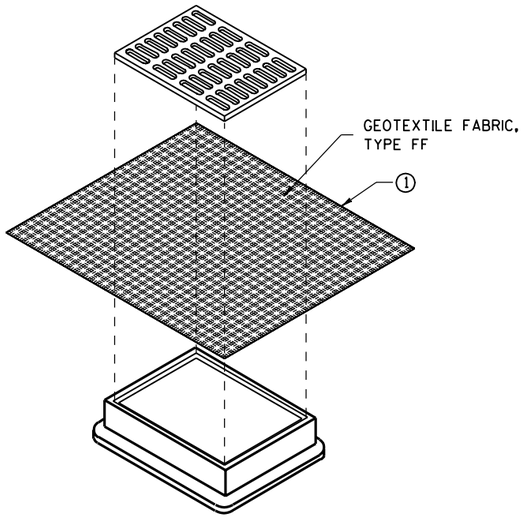
CHIEF ROADWAY DEVELOPMENT ENGINEER

6

S.D.D. 8 E 9-6

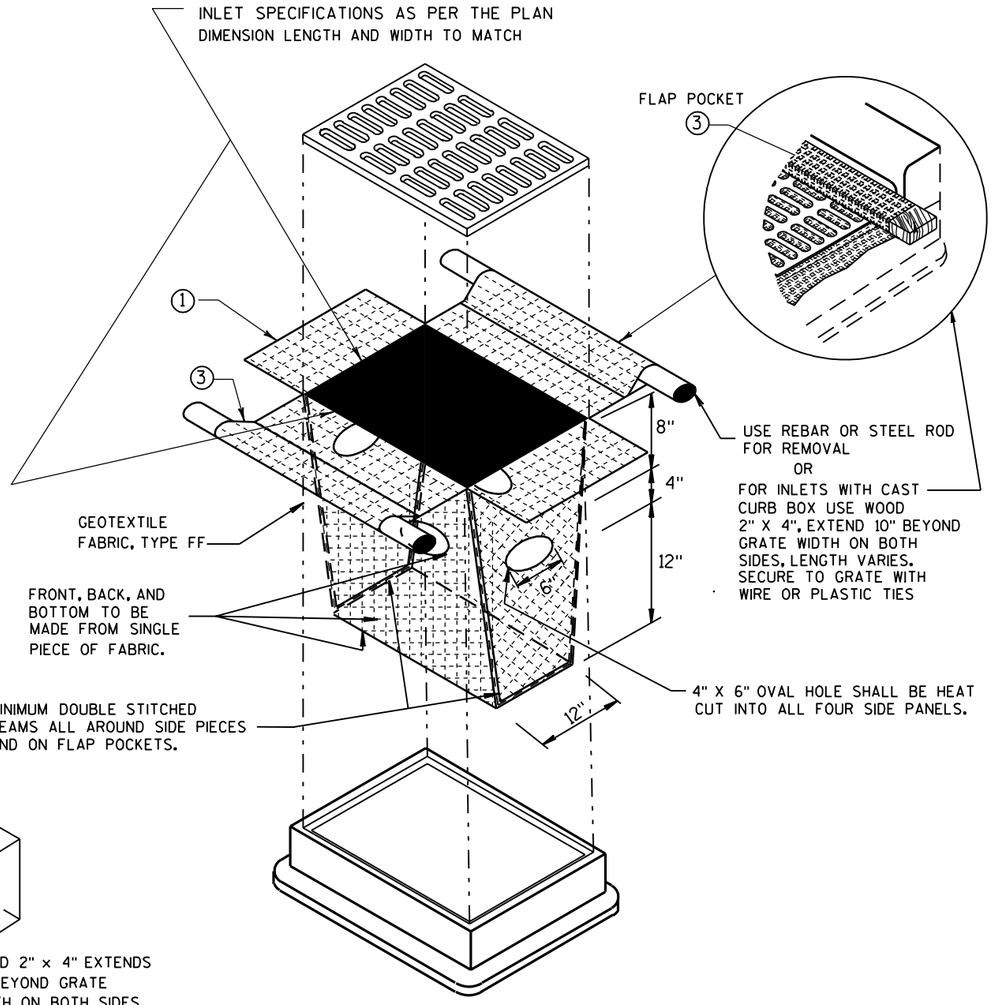
S.D.D. 8 E 9-6



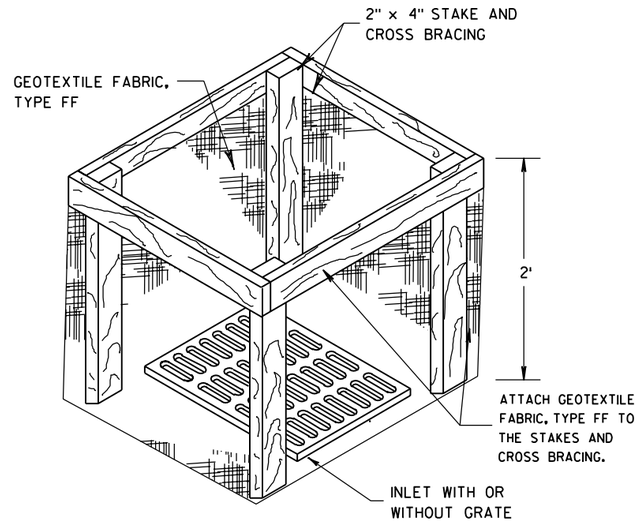

**INLET PROTECTION, TYPE B**
**(WITHOUT CURB BOX)**

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

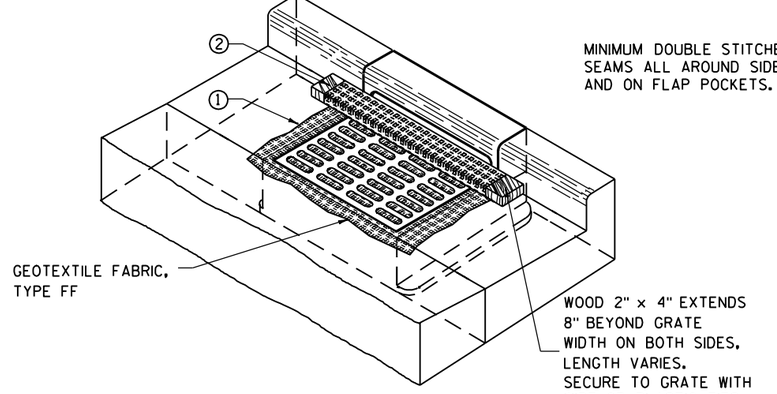



**INLET PROTECTION, TYPE D**

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




**INLET PROTECTION, TYPE A**




**INLET PROTECTION, TYPE C (WITH CURB BOX)**

## 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**

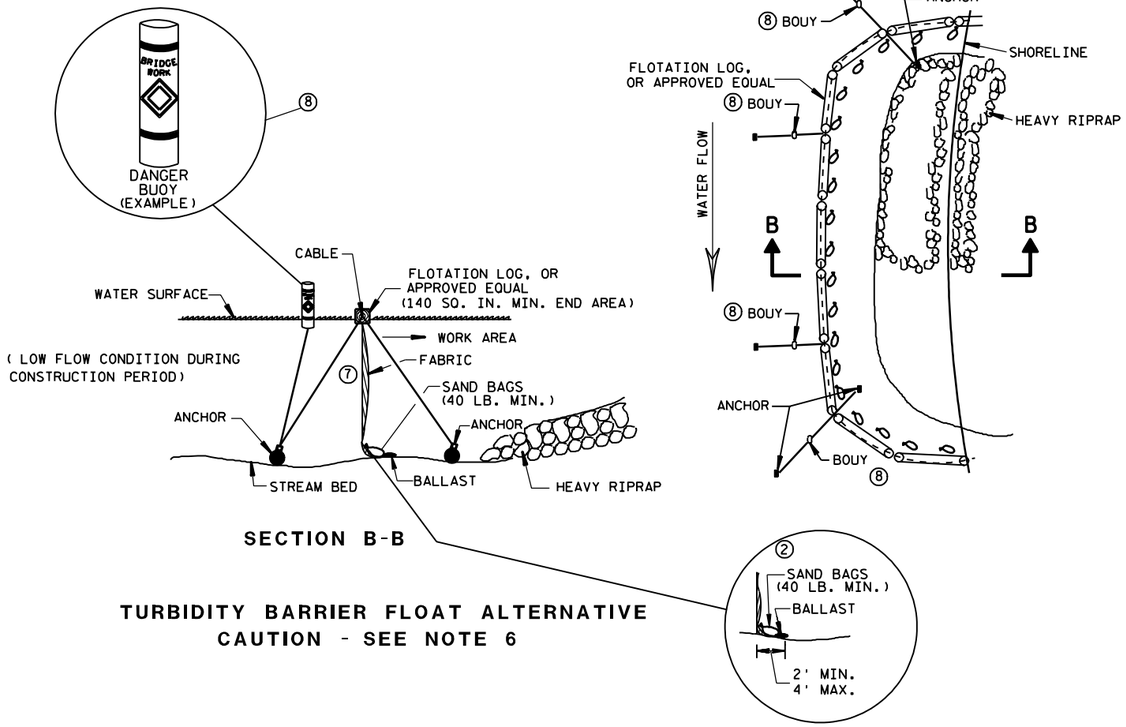
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
FHWA

CHIEF ROADWAY DEVELOPMENT ENGINEER

6

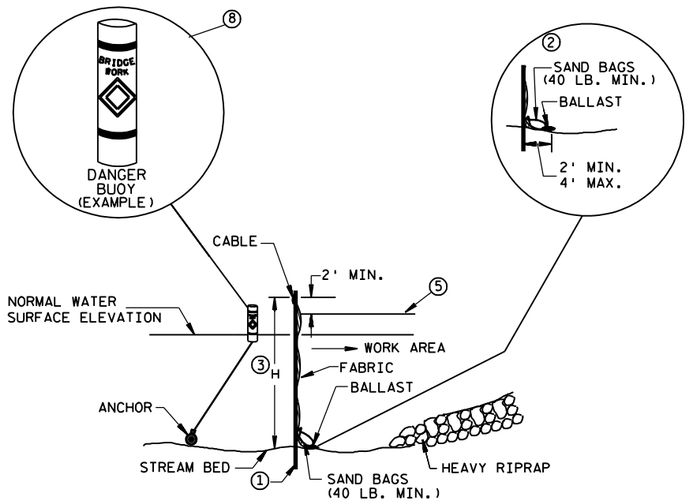
S.D.D. 8 E 10-2




SECTION B-B



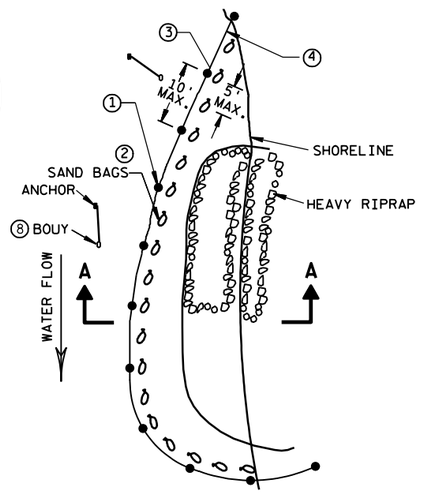

**TURBIDITY BARRIER FLOAT ALTERNATIVE**
**CAUTION - SEE NOTE 6**







SECTION A-A




PLAN VIEW

**TURBIDITY BARRIER STANDARD POST INSTALLATION**

**TURBIDITY BARRIER PLACEMENT DETAILS**

## GENERAL NOTES

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

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

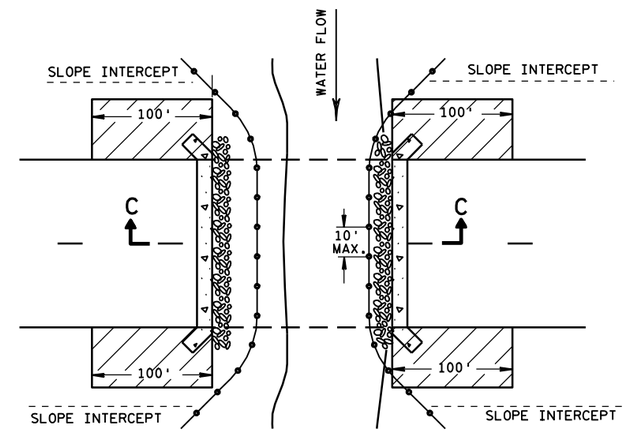
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

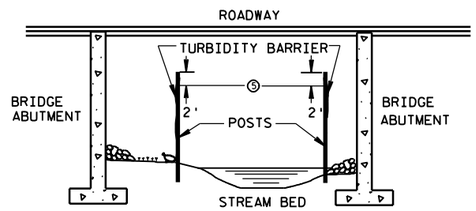
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.




PLAN VIEW




SECTION C-C

**TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES**

| TURBIDITY BARRIER | |
|---|---|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 6/04/02 DATE FHWA | CHIEF ROADWAY DEVELOPMENT ENGINEER |

## METAL APRON ENDWALLS

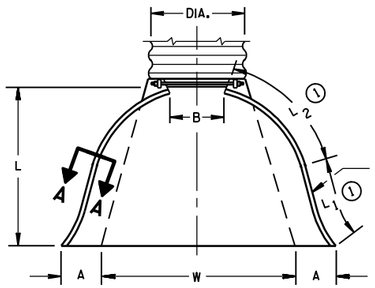
| PIPE DIA. (IN.) | MIN. THICK. (inches) STEEL | MIN. THICK. (inches) ALUM. | DIMENSIONS (inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | .064 | .060 | 6 | 6 | 6 | 21 | 12 | 17 1/2 | 24 | 2 1/2 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

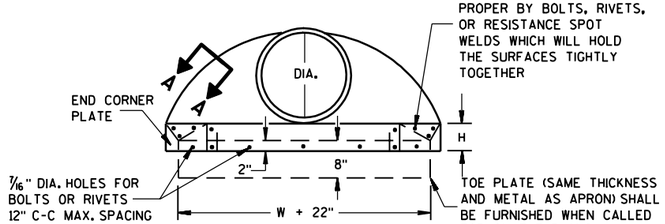
| PIPE DIA. (IN.) | DIMENSIONS (inches) T | A | B | C | D | E | G | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|
| 12 | 2 | 4 | 24 | 48 7/8 | 72 7/8 | 24 | 2 | 3 to 1 |
| 15 | 2 1/4 | 6 | 27 | 46 | 73 | 30 | 2 1/4 | 3 to 1 |
| 18 | 2 1/2 | 9 | 27 | 46 | 73 | 36 | 2 1/2 | 3 to 1 |
| 21 | 2 3/4 | 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




REINFORCED EDGE (SEE SECTION A-A)

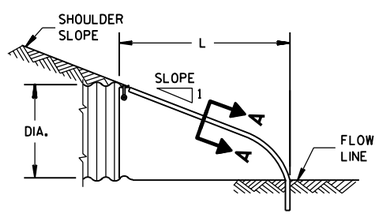
PLAN VIEW




END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

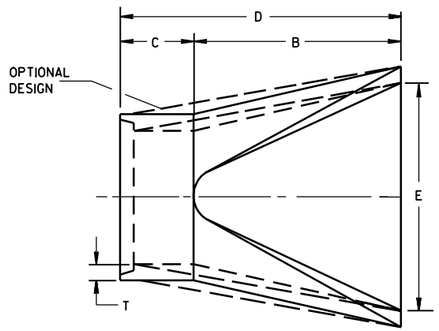
TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS

END VIEW

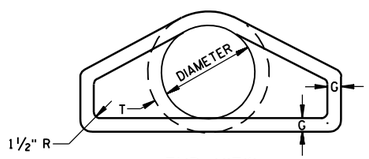



SIDE ELEVATION

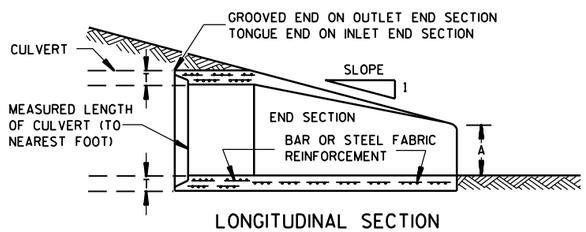
## METAL ENDWALLS




PLAN

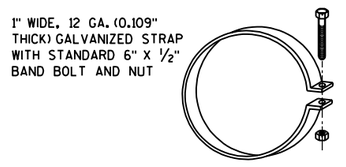



END VIEW



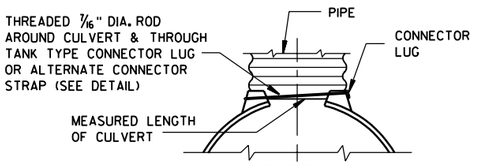

LONGITUDINAL SECTION

## CONCRETE ENDWALLS

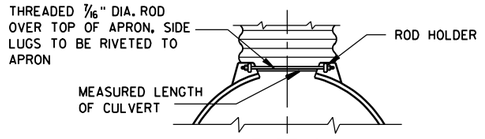



ALTERNATE FOR TYPE 1 CONNECTION

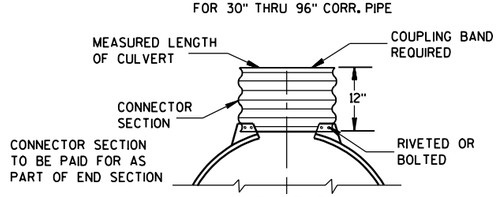
## END SECTION CONNECTOR STRAP



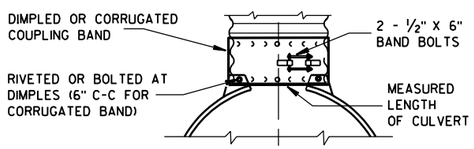

**TYPE 1**
FOR 12" THRU 24" CORR. PIPE




**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

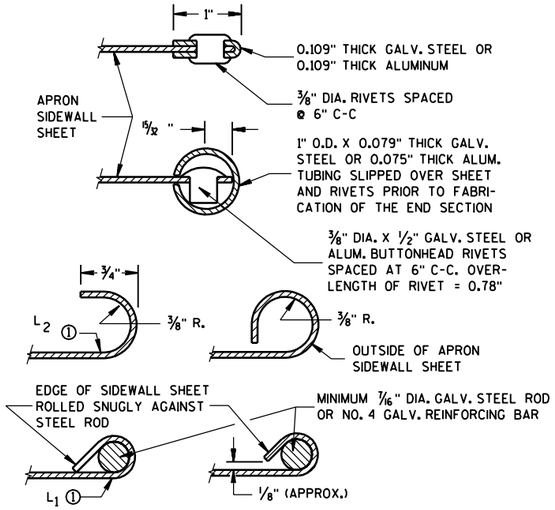
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

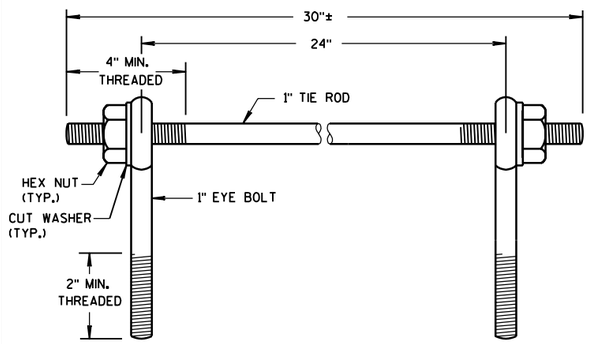
# APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

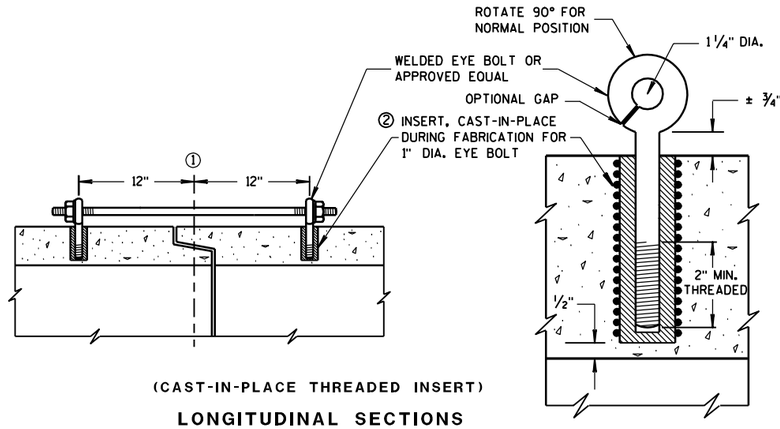
APPROVED
11/30/94
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA




EYE BOLTS AND TIE ROD




(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

## 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 PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED ON 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 CULVERT PIPE AS INDICTED ON THE PLANS AND BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO CILVERT PIPE, REINFORCED CONCRETE CULVERT PIPE, OR REINFORCED CONCRETE PIPE CATTLE PASS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

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.

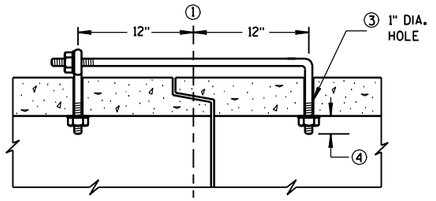
③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

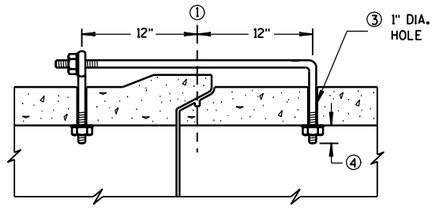
⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.

# EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)




(TONGUE & GROOVE PIPE)




(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

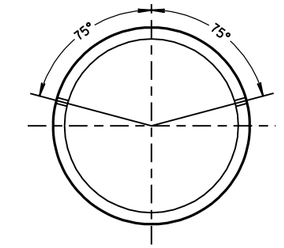
**EYE BOLT DIMENSION TABLE**

| 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" | |

**ADJUSTABLE TIE ROD TABLE**

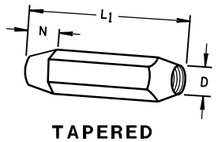
| PIPE DIAMETER | TIE ROD DIAMETER | D | $L_1$ | N |
|---|---|---|---|---|
| 12-60 | 5/8 | 5/8 | 5 | 1/2 |
| 66-84 | 3/4 | 3/4 | 5 | 1/2 |
| 90-108 | 1 | 1 | 7 | 1 7/16 |

DIMENSIONS SHOWN ARE IN INCHES




PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION

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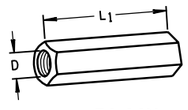
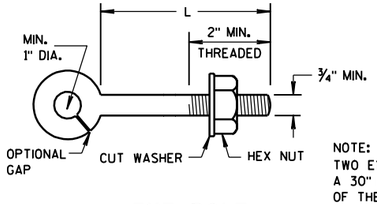



PLAIN

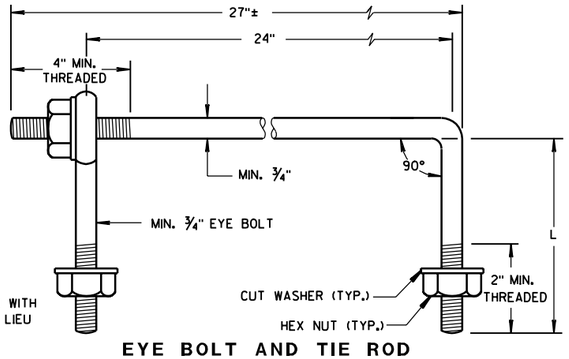
RIGHT AND LEFT THREADS

SLEEVE NUTS




EYE BOLT

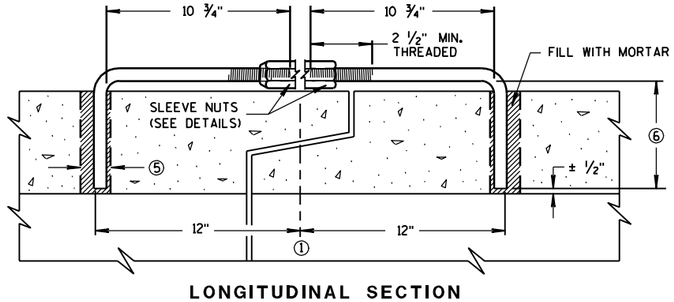
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.




EYE BOLT AND TIE ROD

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

## EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)




LONGITUDINAL SECTION

(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

## ADJUSTABLE TIE ROD (ALTERNATE NO. 3)

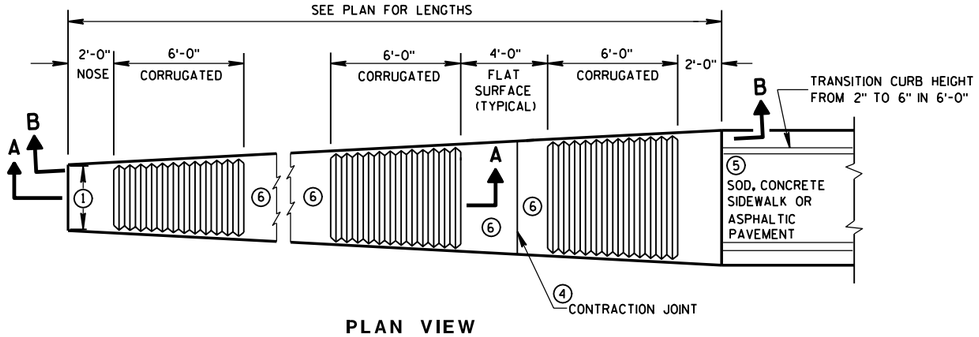
JOINT TIES FOR CONCRETE PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/07 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

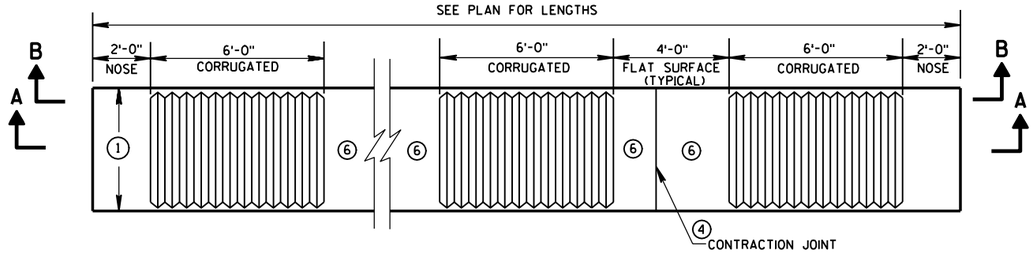
6

S.D.D. 8 F 4-6



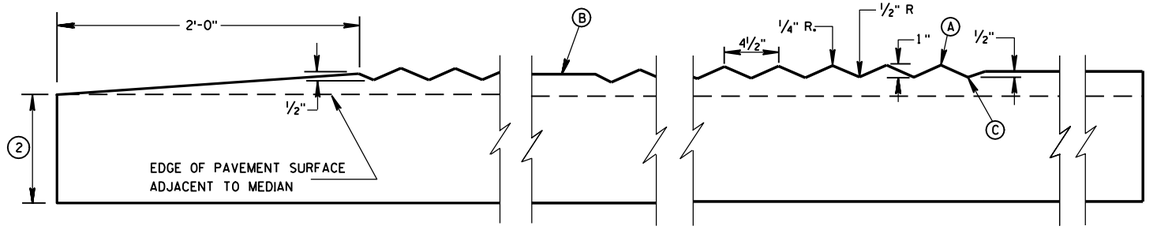

PLAN VIEW

## 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.

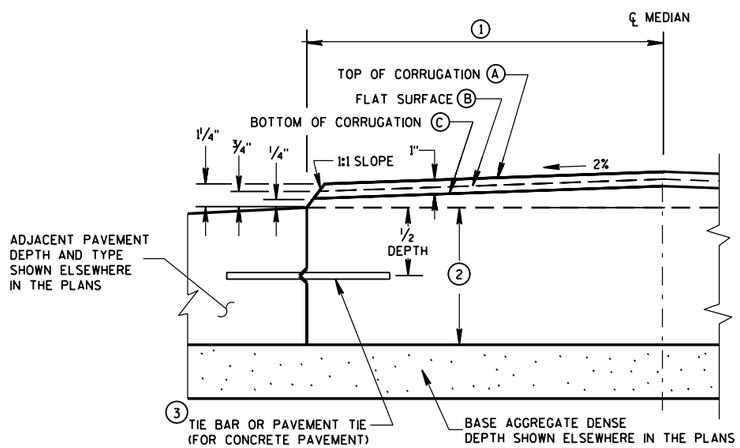
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

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.

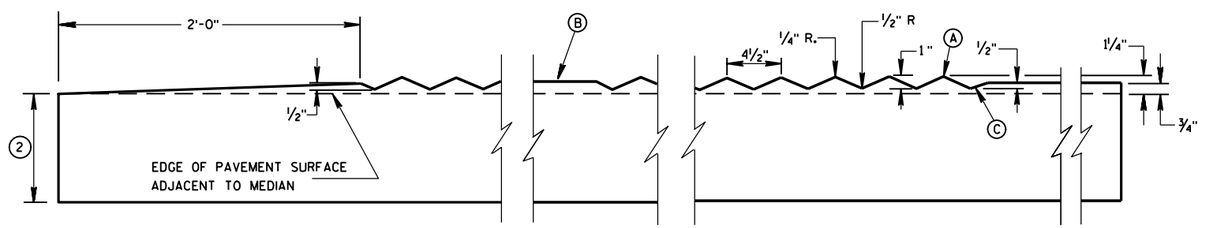
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(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

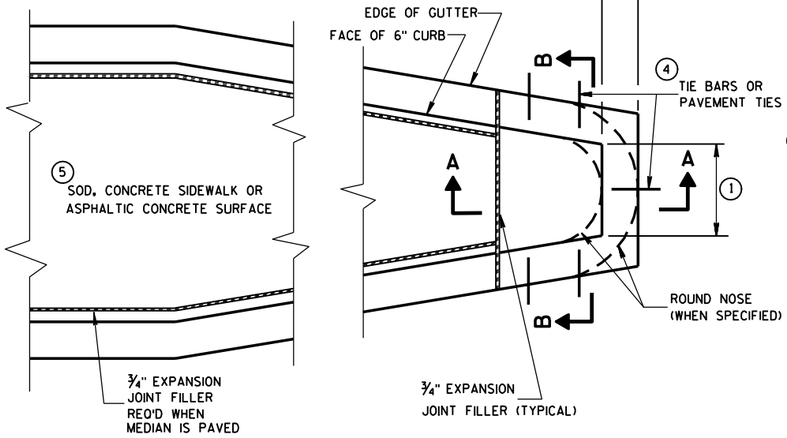
12/17/07 — DATE

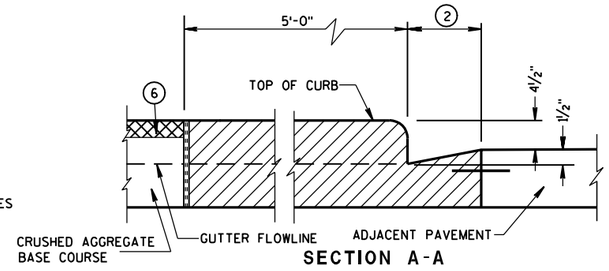
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

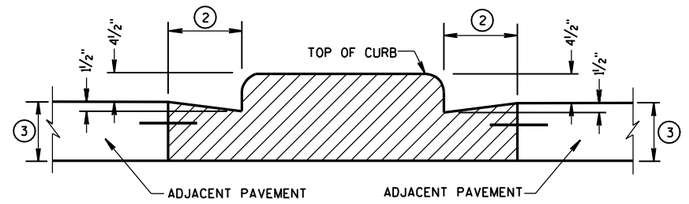
6

S.D.D. 11B 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.

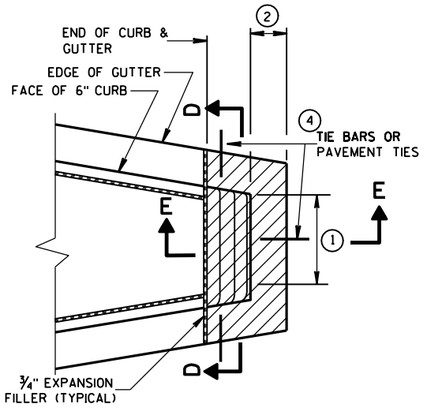
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

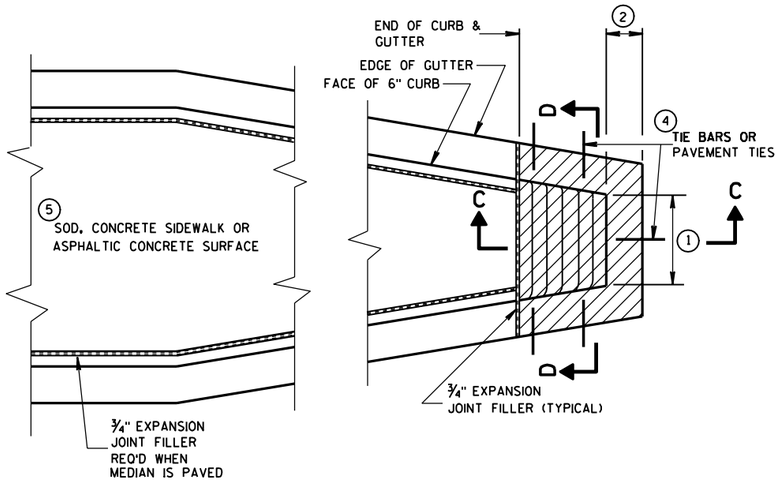
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

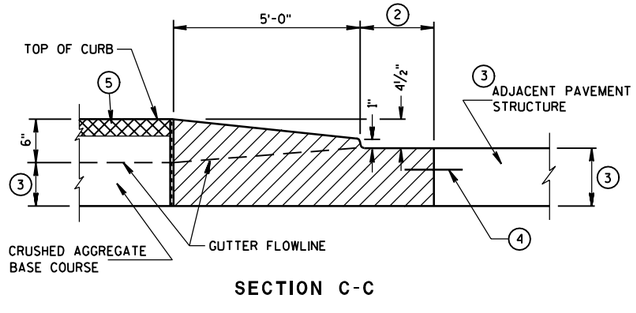
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

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.

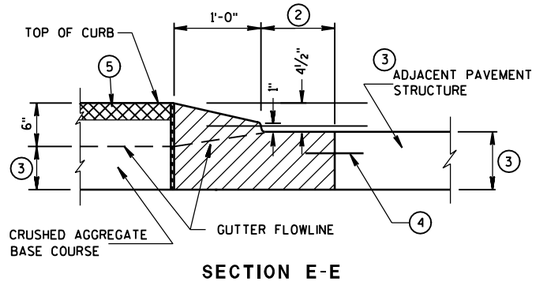
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



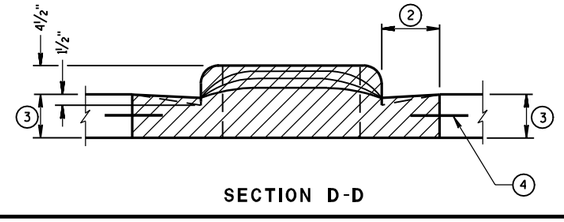

SECTION C-C




SECTION E-E

## CONCRETE MEDIAN SLOPED NOSE TYPE 2

## CONCRETE MEDIAN SLOPED NOSE TYPE 1




SECTION D-D

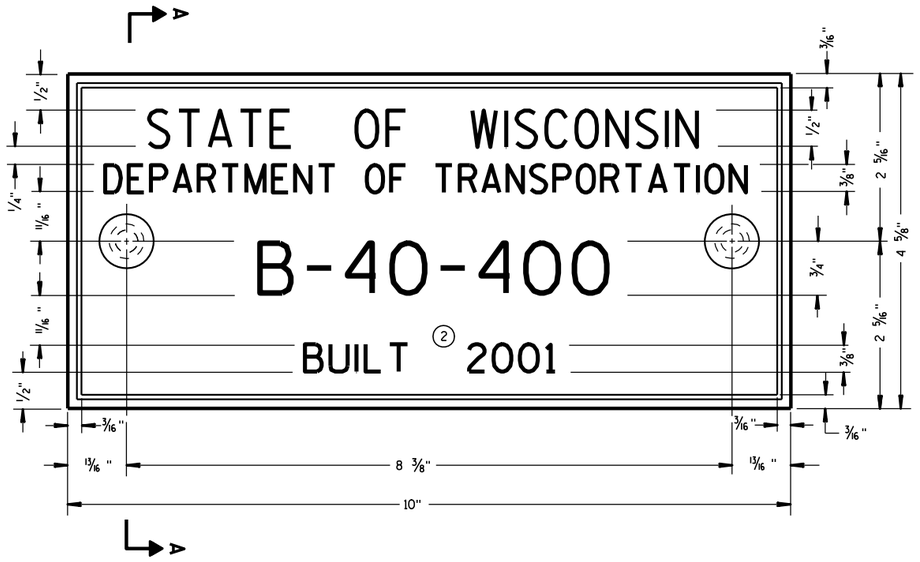
| CONCRETE MEDIAN NOSE | |
|---|---|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>6/8/06<br>DATE<br>FHWA | /S/ Jerry H. Zogg<br>ROADWAY STANDARDS DEVELOPMENT ENGINEER |

6

S.D.D. 11B 2-2

6

S.D.D. 11B 2-2




## TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

## NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

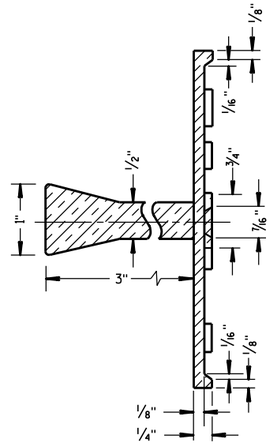
## GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

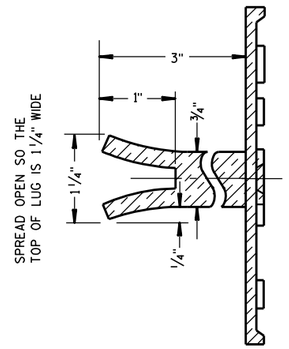
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

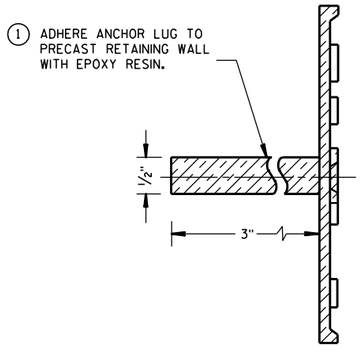
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.




SECTION A-A




ALTERNATE LUG




## ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE
(STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/26/10
DATE

/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER

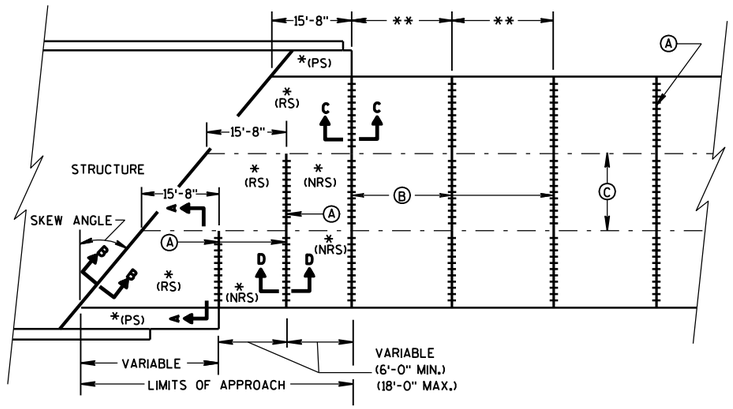
FHWA

6

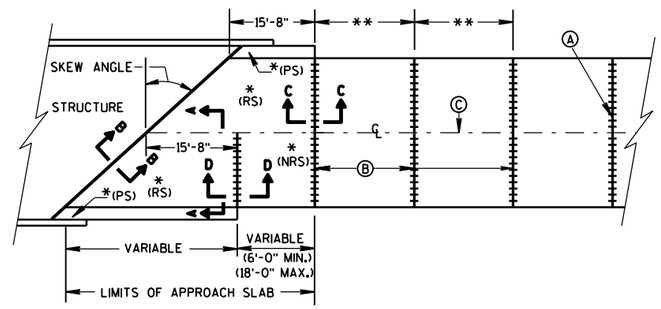
S.D.D. 12 A 3-10

6

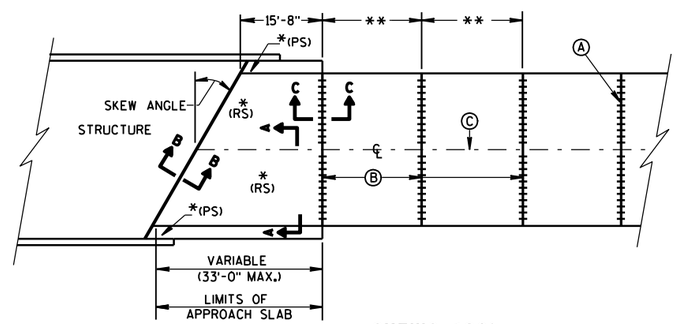
S.D.D. 12 A 3-10




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




**SKEWS >30°**
**(PAVEMENT WIDTH ≤30')**



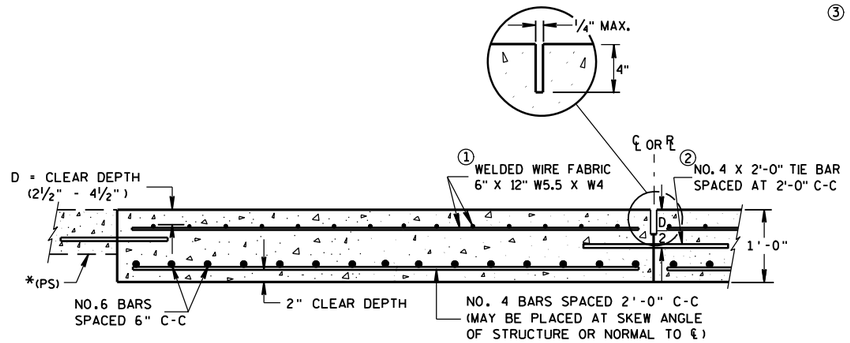

**SKEWS ≤30°**
**(PAVEMENT WIDTH ≤30')**

**APPROACH SLAB AND ADJACENT PAVEMENT**

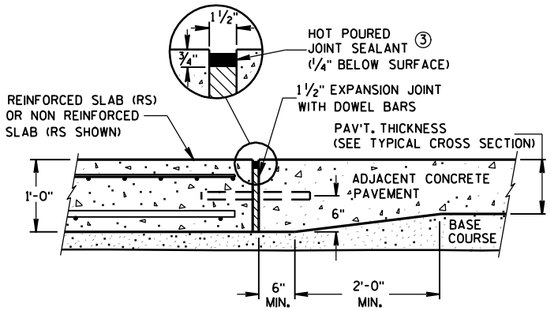
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING
(SEE SDD 13C4, SDD 13C11, & SDD 13C13)

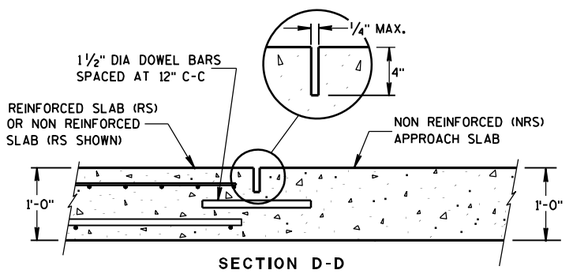
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
Ⓑ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄
Ⓒ STANDARD LONGITUDINAL JOINT AND TIE BARS.




**SECTION A-A**
**REINFORCEMENT POSITIONING DETAIL**




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




**SECTION D-D**
**CONTRACTION JOINT**

## GENERAL NOTES

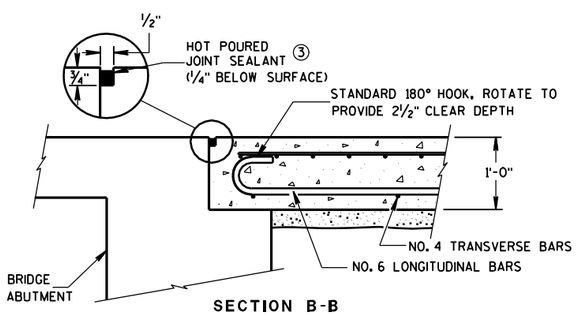
APPROACH SLABS ABUTTING AN HMA PAVEMENT OVER BASE COURSE DO NOT NEED TO BE DOWELED.

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

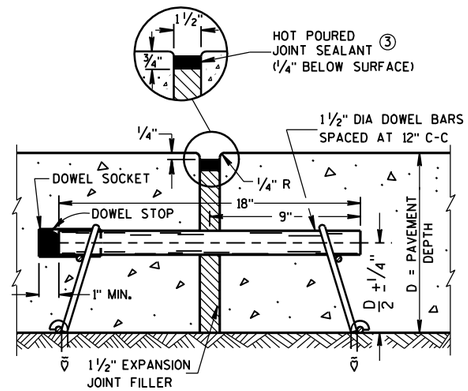
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

③ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.




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




**EXPANSION JOINT**

**CONCRETE PAVEMENT APPROACH SLAB**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/11/2009 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DESIGN ENGINEER
FHWA

6

S.D.D. 13 B 2-6

6

S.D.D. 13 B 2-6

# 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) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

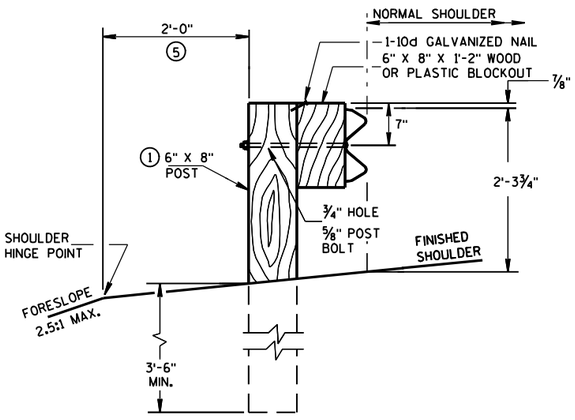
(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

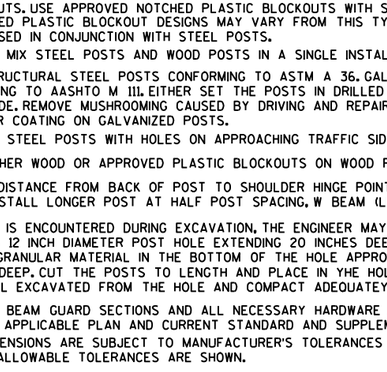
(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

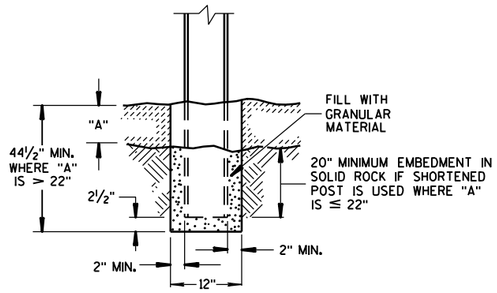
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



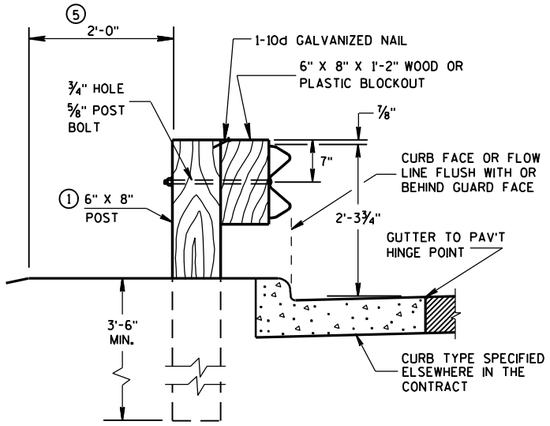

END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



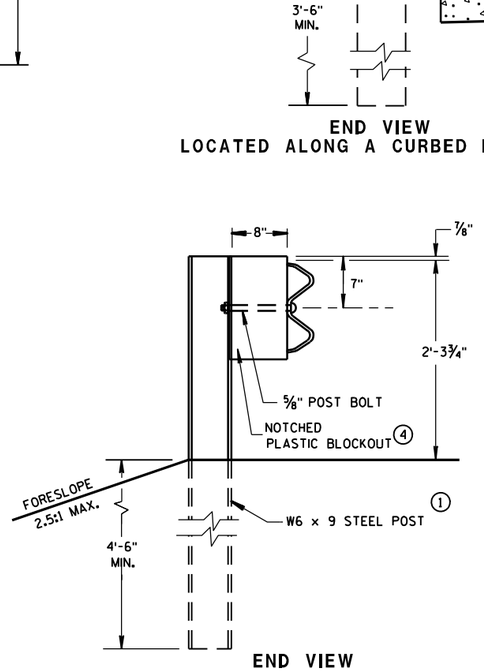

END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



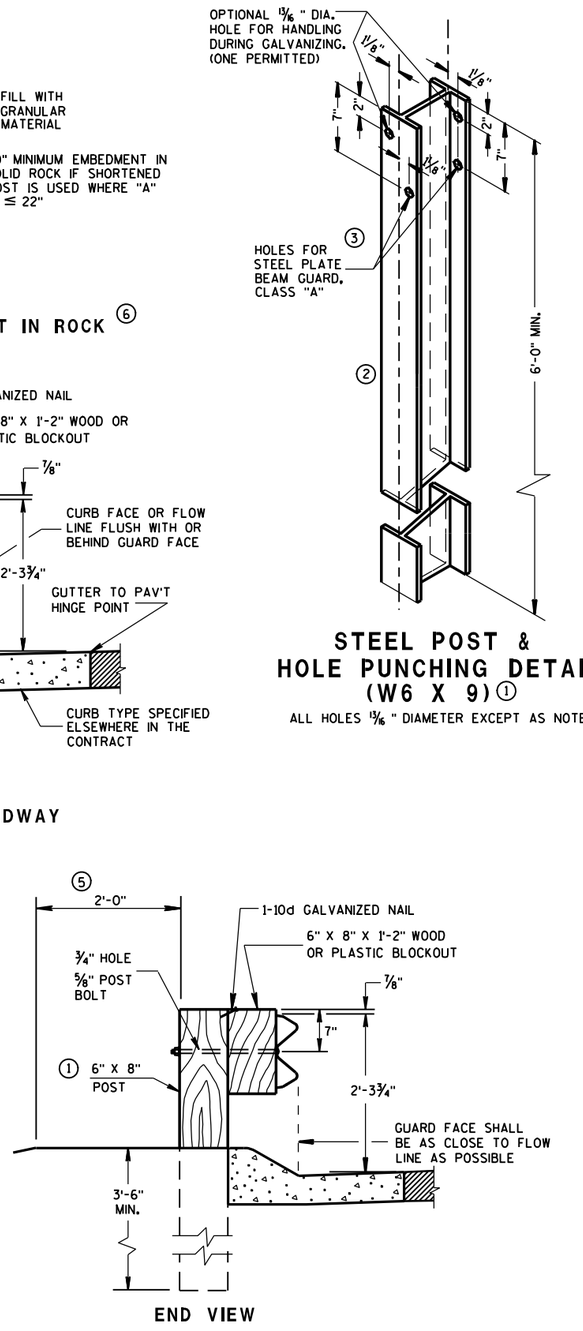

END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)




END VIEW
LOCATED ALONG A CURBED ROADWAY




END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)

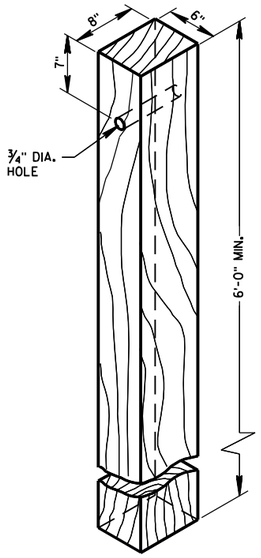



END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

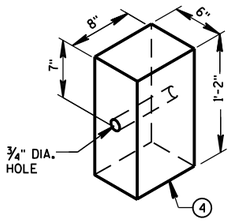



STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

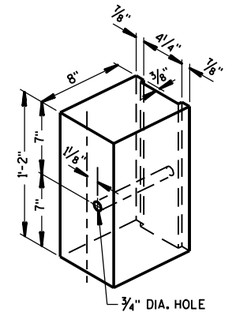
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



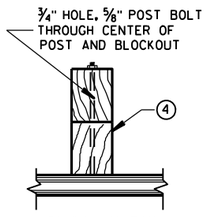

WOOD POST
(6"X8") NOMINAL



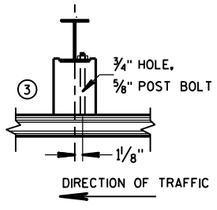

WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS




TYPICAL NOTCHED (1)
PLASTIC BLOCKOUT
FOR STEEL POSTS




PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM




PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

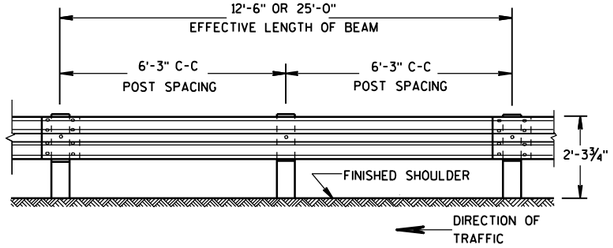
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 15-6a

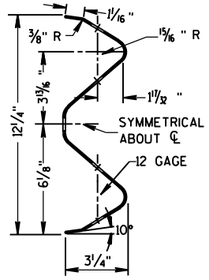
6

S.D.D. 14 B 15-6a

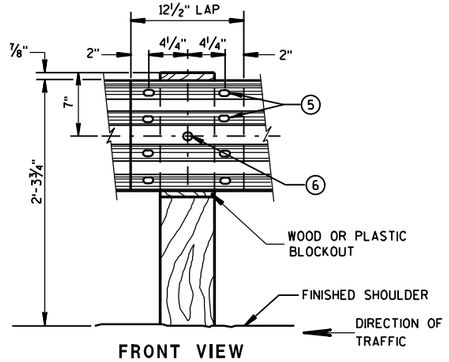



FRONT VIEW

## POST SPACING STANDARD INSTALLATION




## SECTION THRU W BEAM

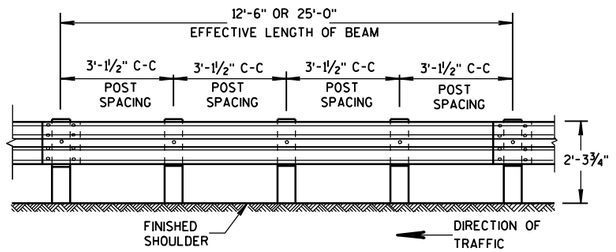



FRONT VIEW

## BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

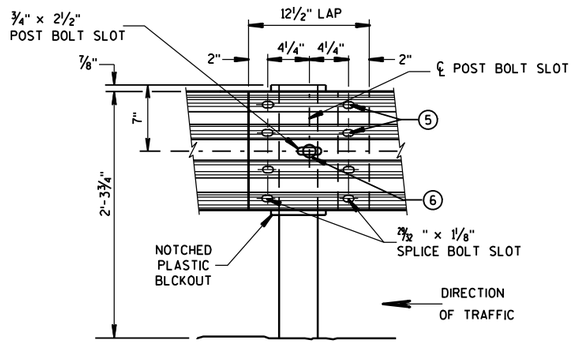
## GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 8 -⅝" ϕ X 2 " BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
6. ⅝" ϕ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.




FRONT VIEW

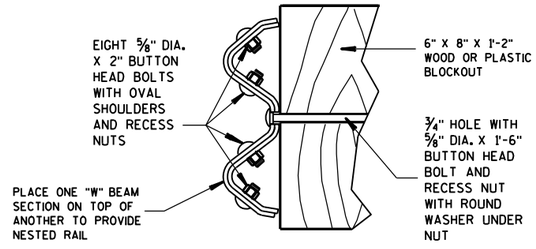
## POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)




FRONT VIEW

## BEAM SPLICE AT STEEL POST

## TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

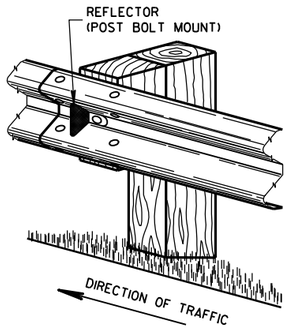


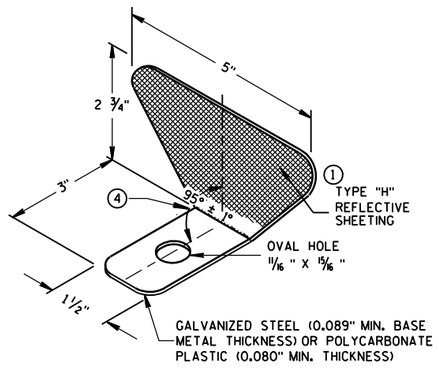

## NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING (2)

| | BEAM GUARD LENGTH | REFLECTOR SPACING | NO. SURFACES REFLECTORIZED | MIN. NO. REFLECTORS |
|---|---|---|---|---|
| ONE WAY TRAFFIC | < 200' | 50' C-C | 1 | 3 |
| | > 200' | 100' C-C | 1 | |
| TWO WAY TRAFFIC | < 200' | 25' C-C | 1 (3) | 6 |
| | > 200' | 50' C-C | 1 | |
| TWO WAY TRAFFIC | < 200' | 50' C-C | 2 (4) | 3 |
| | > 200' | 100' C-C | 2 | |




## ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (1)

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

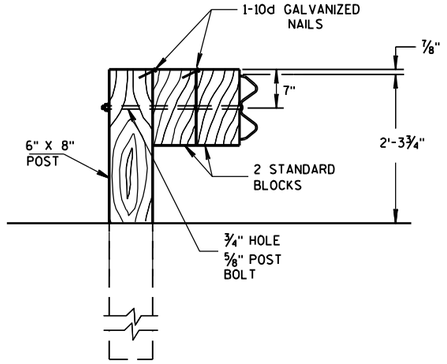
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 15-6b

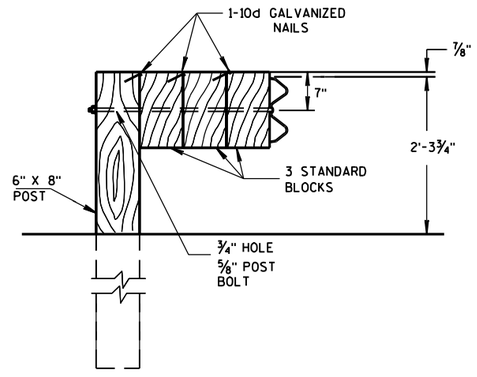
6

S.D.D. 14 B 15-6b




**DETAIL FOR DOUBLE BLOCKS**

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

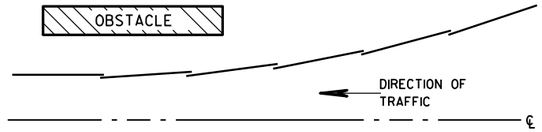



**DETAIL FOR TRIPLE BLOCKS**

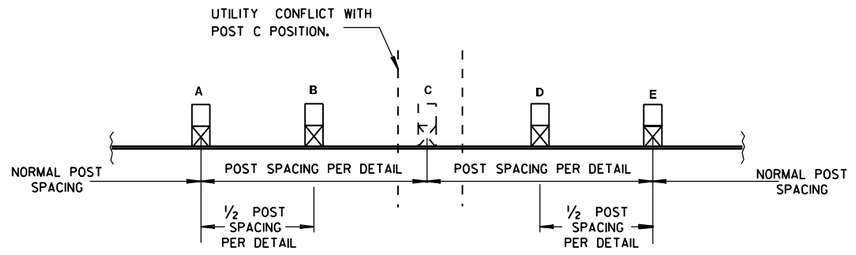
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

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




**PLAN VIEW**
**BEAM LAPPING DETAIL**




**POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION**

**STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS**

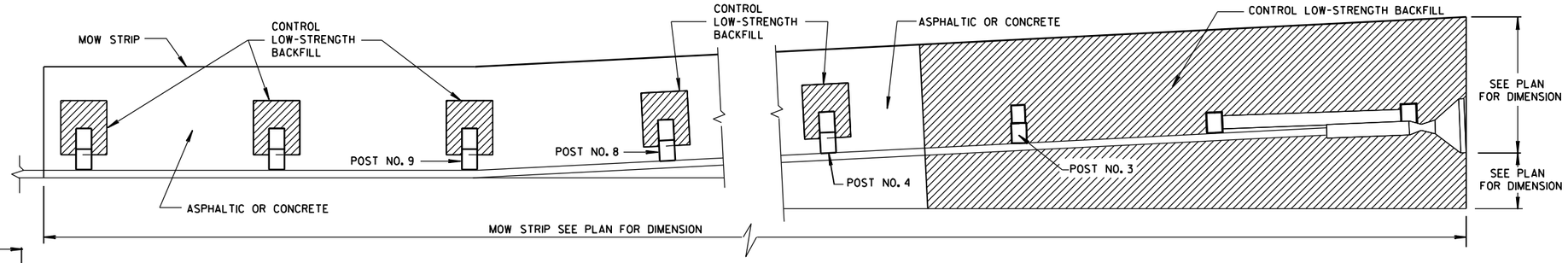
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 15-6c

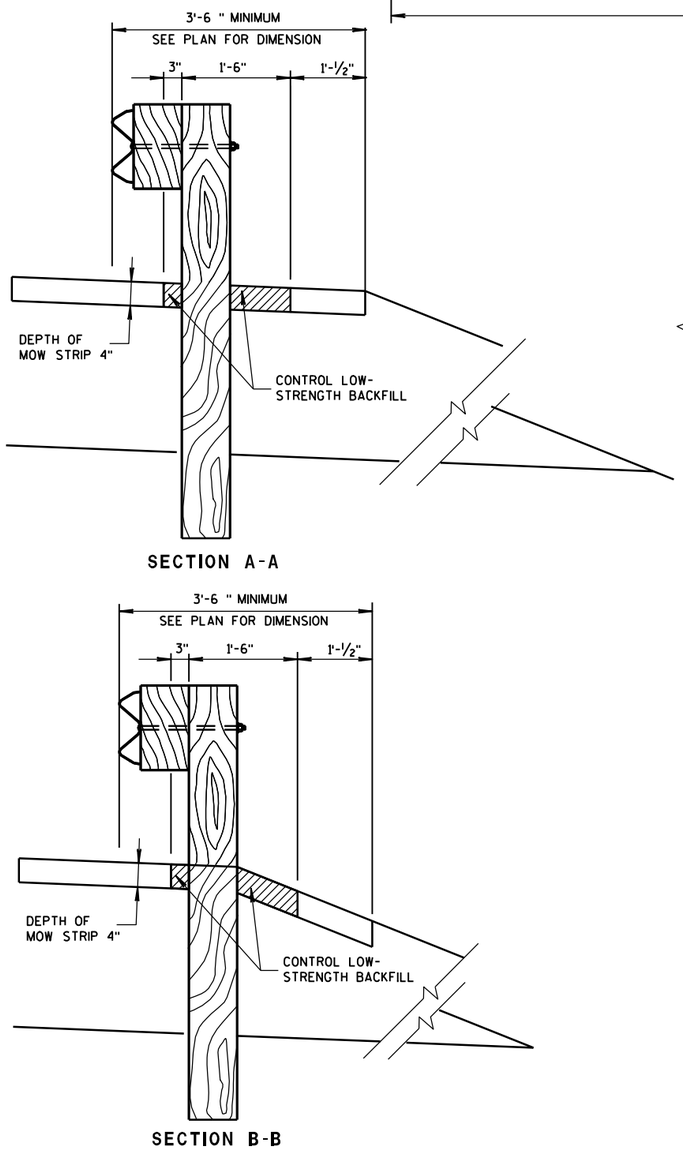
6

S.D.D. 14 B 15-6c

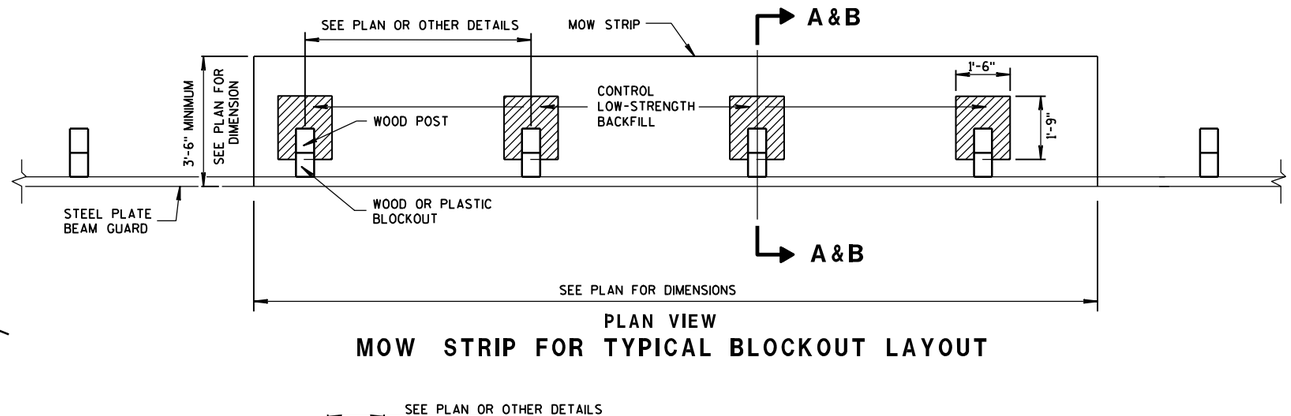



PLAN VIEW

## MOW STRIP FOR STEEL PLATE BEAM GUARD ENERGY ABORBING TERMINAL




SECTION A-A

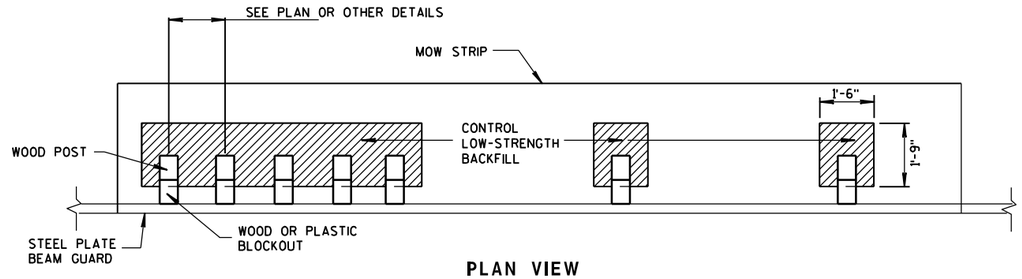



PLAN VIEW

## MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

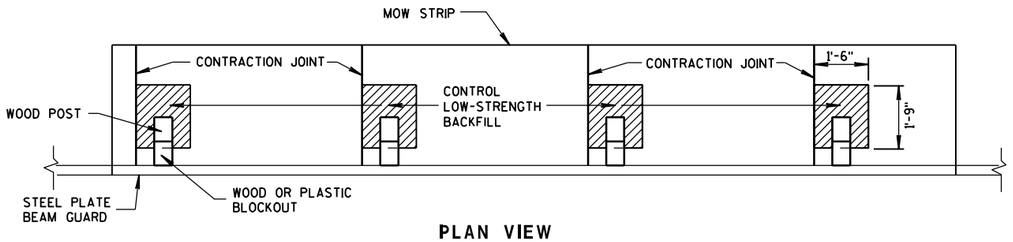



SECTION B-B




PLAN VIEW

## MOW STRIP FOR TIGHT SPACING LAYOUT




PLAN VIEW

## JOINT PLACEMENT FOR CONCRETE MOW STRIP

6

S.D.D. 14 B 15-6d

6

S.D.D. 14 B 15-6d

**STEEL PLATE BEAM GUARD, CLASS "A" MOW STRIP DETAIL**

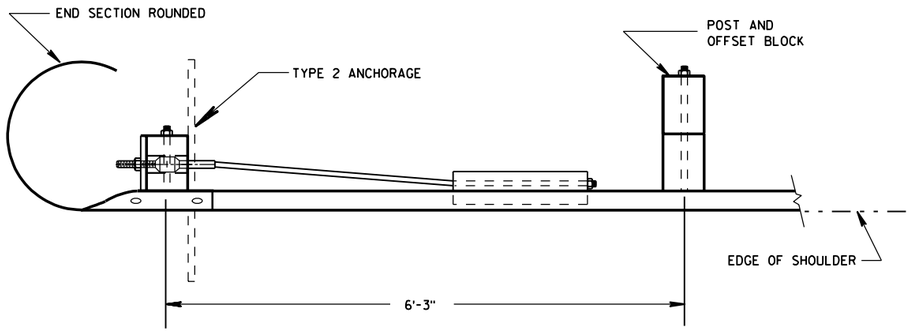
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

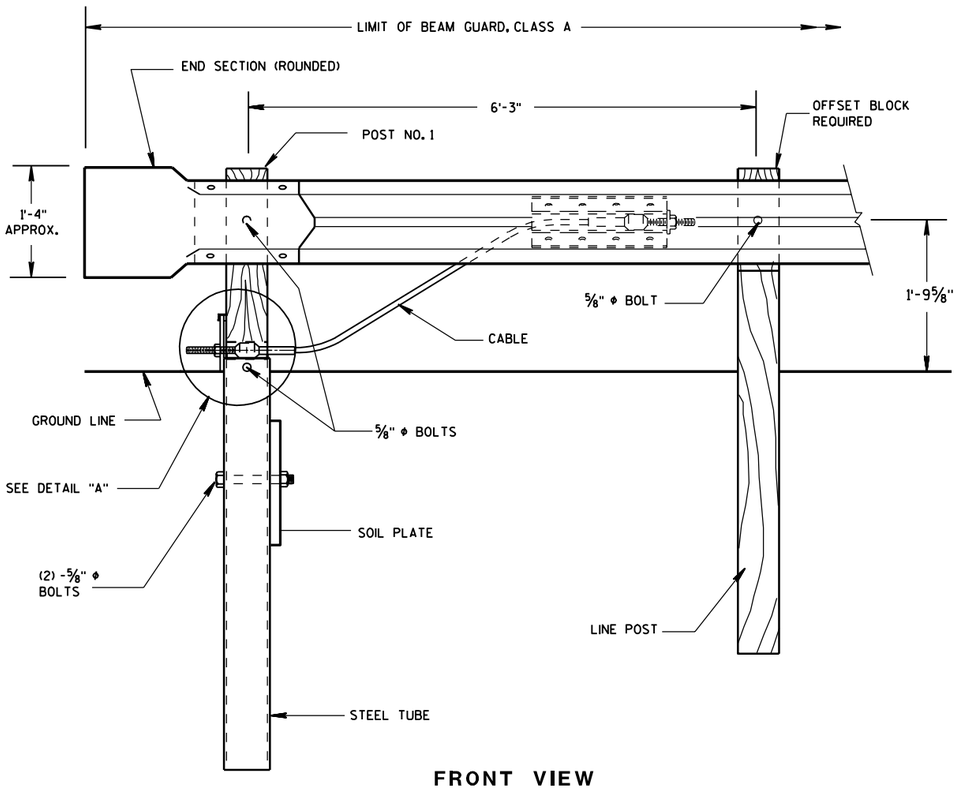
7-13-09
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



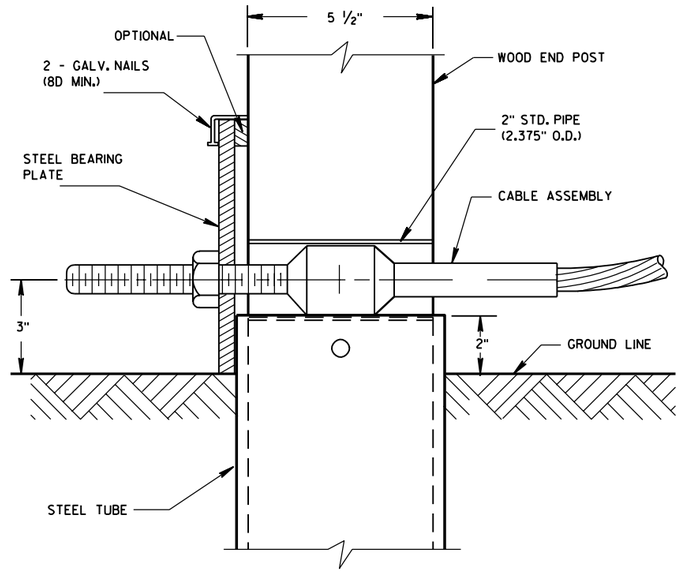

PLAN VIEW




FRONT VIEW

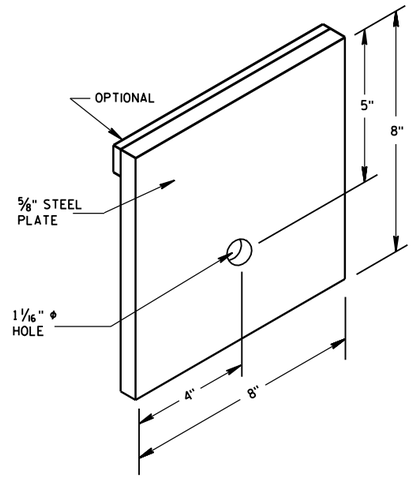
## END TREATMENT WITH TYPE 2 ANCHORAGE

(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)




DETAIL "A"

POST NO. 1




STEEL BEARING PLATE

ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 16-4a

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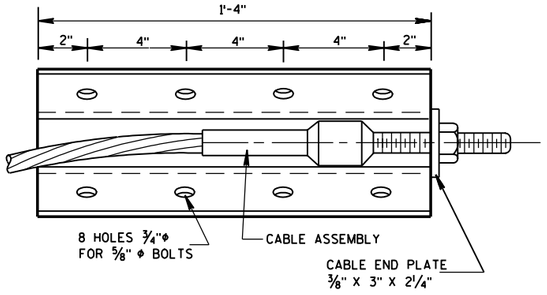
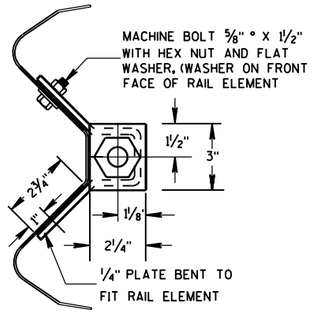
S.D.D. 14 B 16-4a

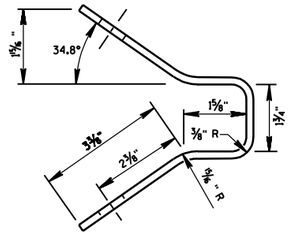



FRONT VIEW

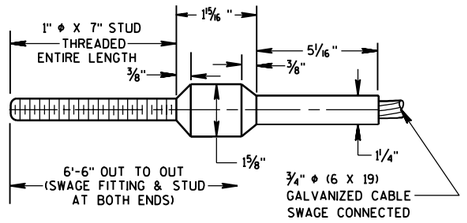



END VIEW

ANCHOR PLATE DETAIL




END VIEW OF BRACKET




CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP A MINIMUM BREAKING STRENGTH OF 40,000 LB (TIGHTEN UNTIL TAUT)

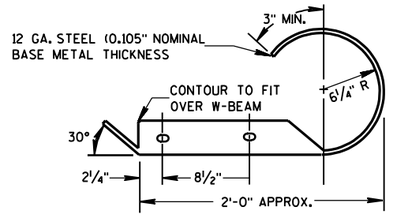
## GENERAL NOTES

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

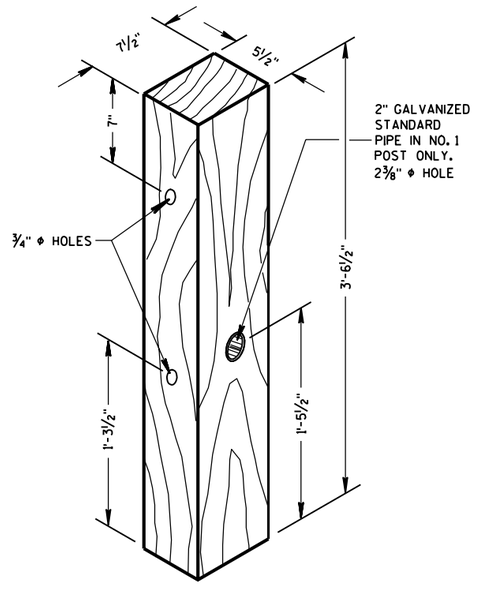
STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.

POST NO. 1 SHALL BE WOOD BREAKAWAY POST INSERTED AND BOLTED INTO STEEL TUBE.

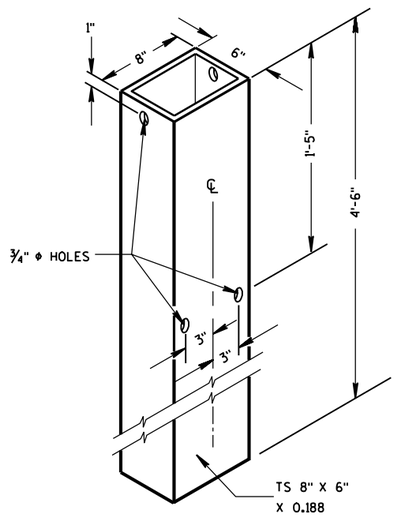
TYPE 2 ANCHORAGE SHALL CONSIST OF A STEEL TUBE, SOIL PLATE WOOD BREAKAWAY POST, BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE, ALL STEEL PARTS SHALL BE GALVANIZED.




PLAN VIEW

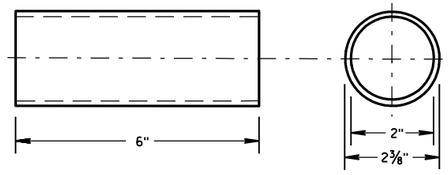



WOOD BREAKAWAY POST



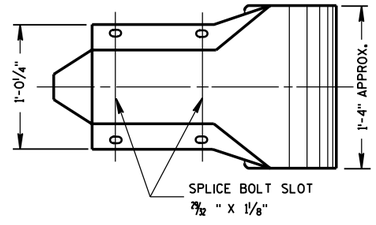

STEEL TUBE

STEEL TUBE SHALL CONFORM TO REQUIREMENTS OF ASTM A500

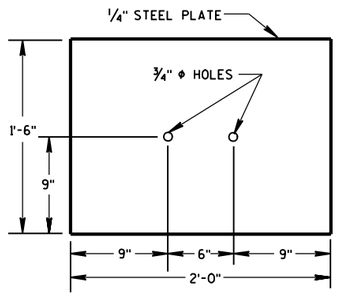



BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"




FRONT VIEW
W BEAM END SECTION ROUNDED




SOIL PLATE

ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/21/07 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 16-4b

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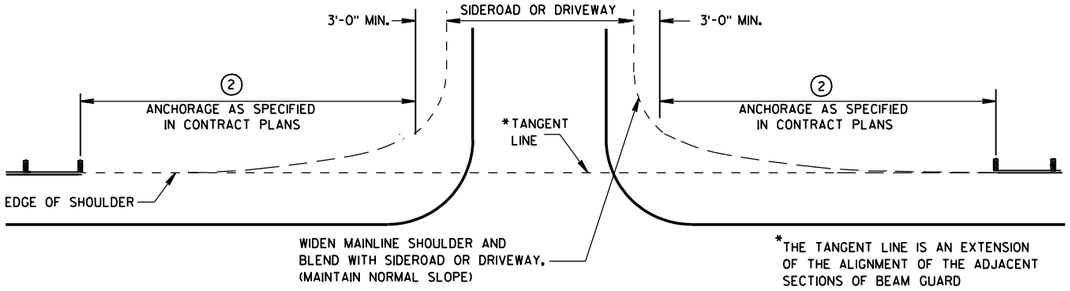
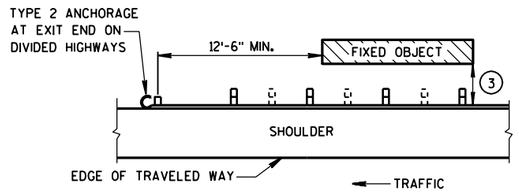
S.D.D. 14 B 16-4b




## BEAM GUARD AT SIDEROADS OR DRIVEWAYS




## BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

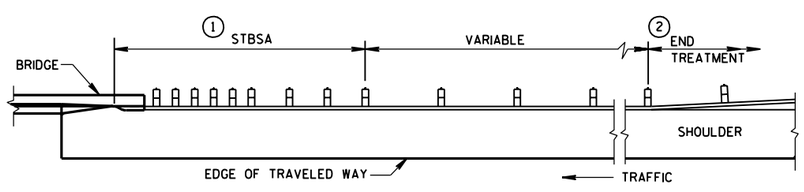
THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

(1) STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.

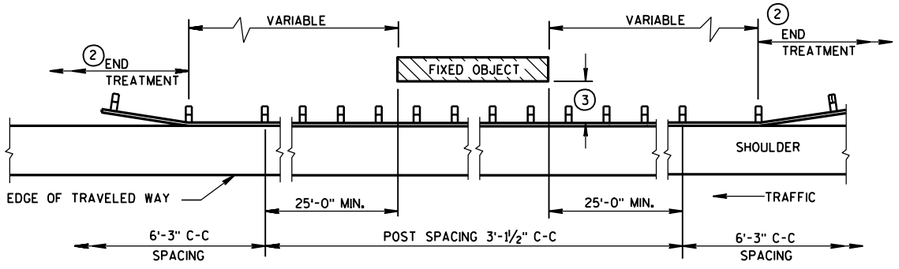
(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(3)

| MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT | POST SPACING |
|---|---|
| 3'-6" | 3' - 1½" |
| 4'-6" | 6' - 3" |

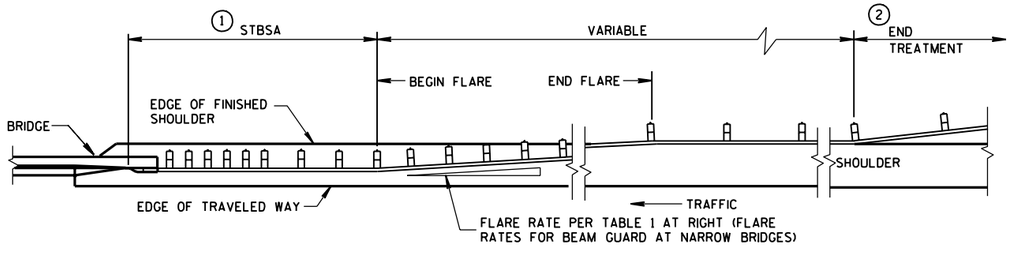



## BEAM GUARD AT FULL WIDTH BRIDGES




## BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")




## BEAM GUARD AT NARROW BRIDGES

(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

TABLE 1
FLARE RATES FOR BEAM GUARD AT NARROW BRIDGES

| POSTED SPEED (MPH) | FLARE RATE |
|---|---|
| 25 | 13:1 |
| 30 | 15:1 |
| 35 | 16:1 |
| 40 | 18:1 |
| 45 | 21:1 |
| 50 | 24:1 |
| 55 | 26:1 |
| 65 | 30:1 |

STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-21-07 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 18-6a

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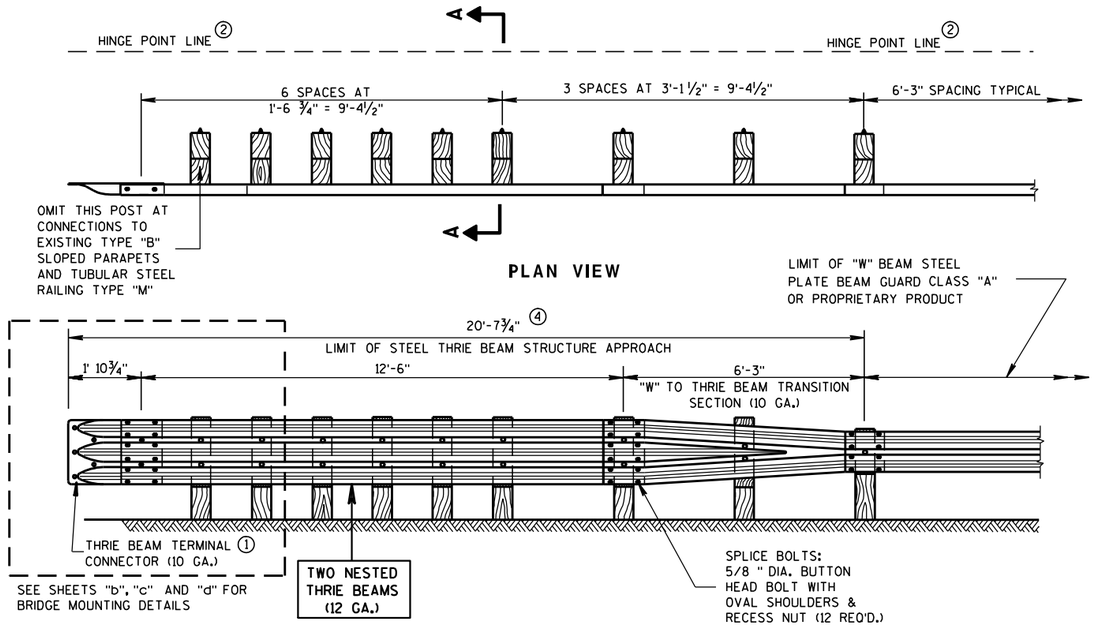
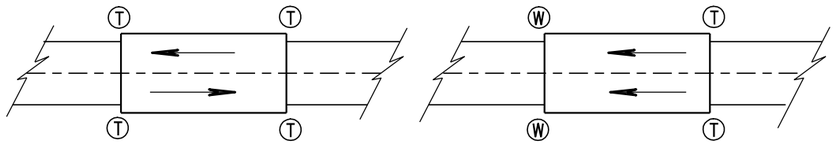
S.D.D. 14 B 18-6a



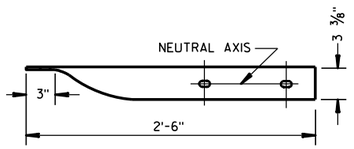

TWO WAY TRAFFIC

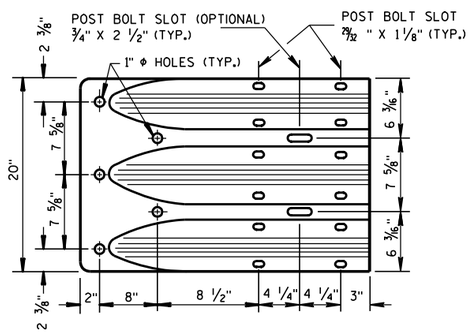
ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

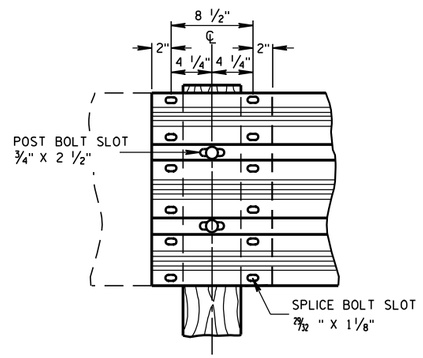
Ⓦ W-BEAM CONNECTION WHEN REQUIRED

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

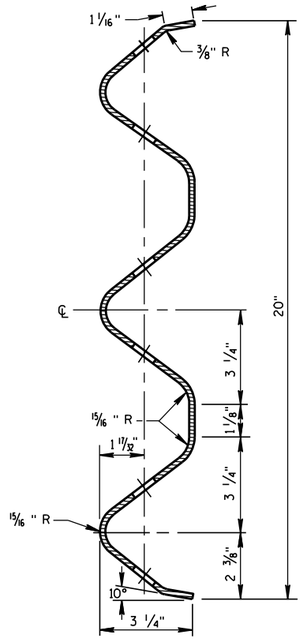


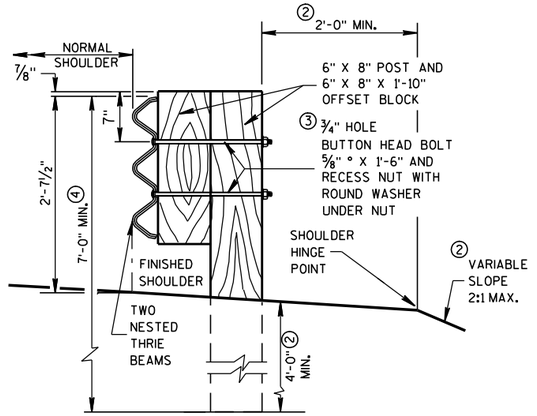

THRIE BEAM TERMINAL CONNECTOR




THRIE BEAM SPLICE




SECTION THRU THRIE BEAM RAIL ELEMENT




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.

FURNISH AND CONSTRUCT THRIE BEAM STRUCTURAL APPROACH ACCORDING TO THE REQUIREMENTS OF SECTION 614 OF THE STANDARD SPECIFICATIONS. THRIE BEAM SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M180, CLASS "A", TYPE 2.

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY. (SEE SDD 14 B 15-4a).

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

② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.

③ BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F-1554, GRADE 55. NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-563 DH.

④ ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.

# STEEL THRIE BEAM STRUCTURE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

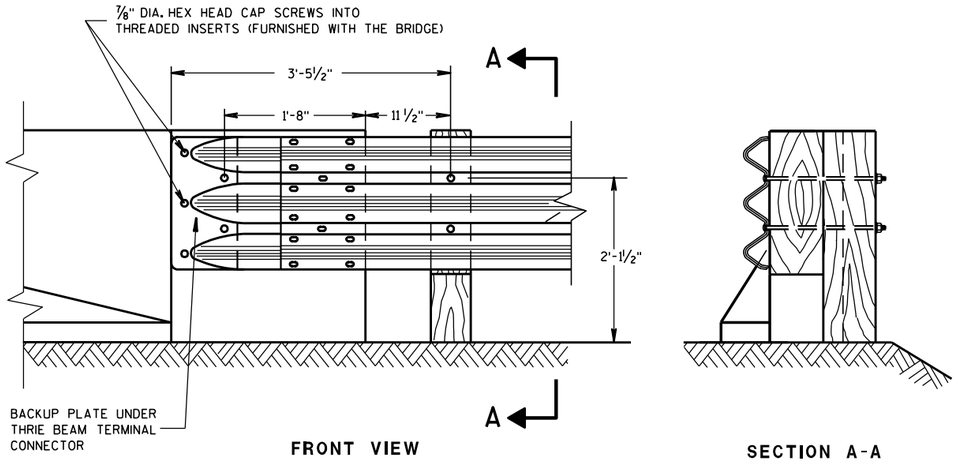
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



6

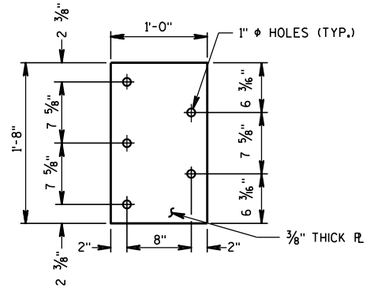
S.D.D. 14 B 20-9a




FRONT VIEW

SECTION A-A

## THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS




② BACKUP PLATE DETAIL
(USE ONLY AT BRIDGE PARAPET CONNECTIONS)

## GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

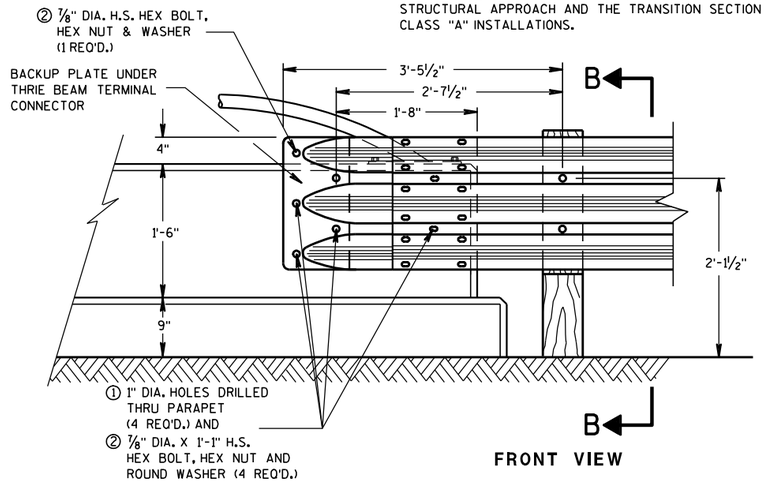
① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

② EACH BOLT AT THE BACK FACE OF THE PARAPET REQUIRES A HARDENED ROUND STEEL WASHER WITH A 2 ¼" O.D. X 5/32 " THICK.

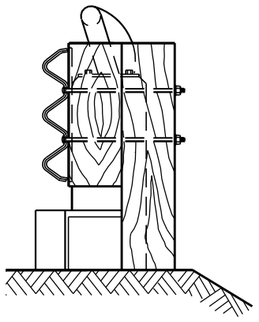
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

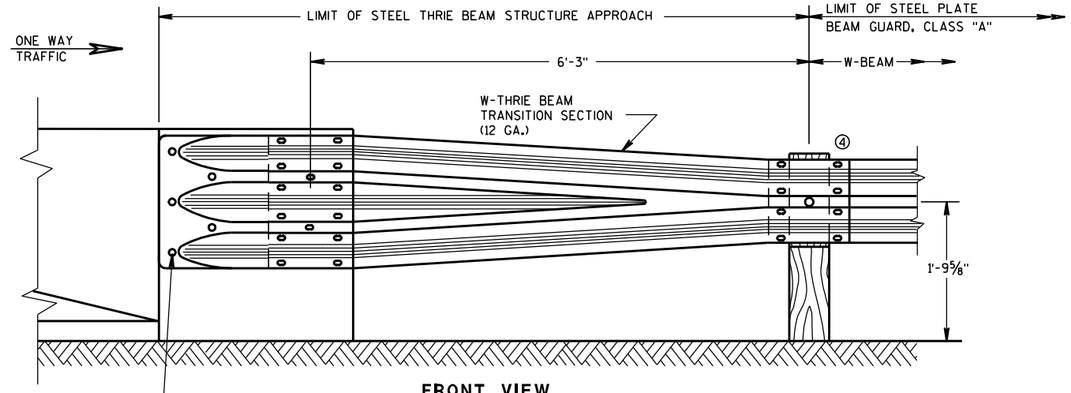



FRONT VIEW



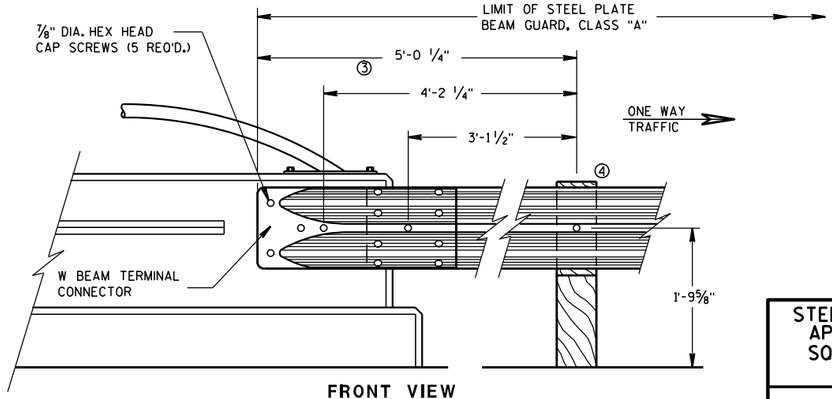
SECTION B-B

THRIE BEAM CONNECTION
TO VERTICAL FACED PARAPETS




FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO
BRIDGE PARAPETS WITH SQUARE ENDS
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)




FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END AND VERTICAL FACED PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-3-2010 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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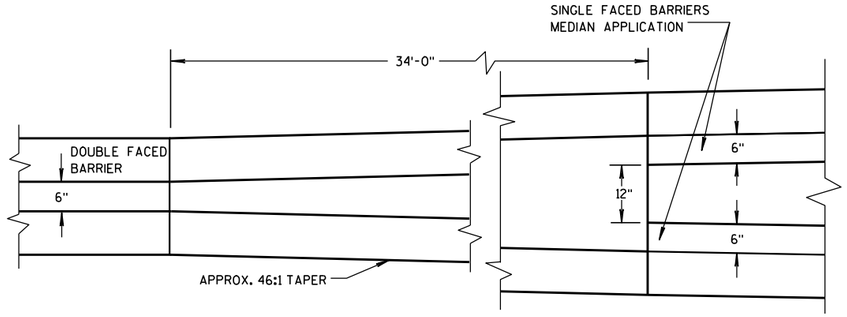
S.D.D. 14 B 20-9b

6

S.D.D. 14 B 20-9b




**PLAN VIEW**

## TRANSITION DETAILS OF DOUBLE FACED TO SINGLE FACED CONCRETE MEDIAN BARRIER

**(FOOTINGS ARE NOT SHOWN)**

## GENERAL NOTES

SPLICES OF LONGITUDINAL BARS SHALL BE MADE WITH BARS LAPPED AT LEAST 18-INCHES AND FIRMLY TIED OR FASTENED TOGETHER.

ALL BAR STEEL REINFORCEMENT SHALL CONFORM TO REQUIREMENTS OF AASHTO M31, GRADE 60.

(1) BARRIER SHALL BE INSTALLED ON A CONCRETE SHOULDER INSTEAD OF THE CONCRETE FOOTING WHEN SPECIFIED OR SHOWN ELSEWHERE IN CONTRACT.

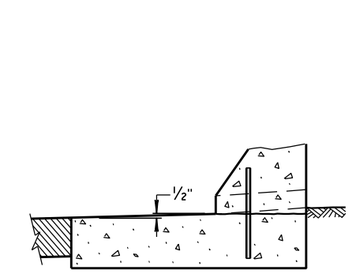
(2) OPENINGS FOR DRAINAGE SHALL BE PLACED AT LOW POINTS OF VERTICAL CURVES OR WHERE DIRECTED BY THE ENGINEER.

(3) ¾-INCH BEVEL OR 1-INCH RADIUS (TYPICAL).

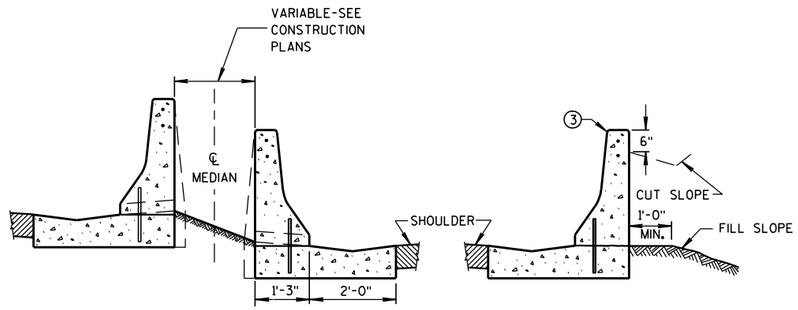
(4) NO. 4 BARS SHALL BE CONTINUED THROUGH CONSTRUCTION JOINTS.

(5) EXPANSION JOINTS SHALL BE PLACED AT EXISTING EXPANSION JOINTS IN THE PAVEMENT AND AT STRUCTURES. SEE REINFORCEMENT AT BARRIER END DETAIL.

(6) SAWED CONTRACTION JOINTS SHALL BE PROVIDED ACROSS THE FULL WIDTH OF THE BARRIER FOOTING, AND IN FRONT, TOP AND BACK FACE OF THE BARRIER AT EXISTING PAVEMENT JOINTS AND AT UNIFORM INTERVALS BETWEEN WITH A MAXIMUM SPACING OF 25 FEET.

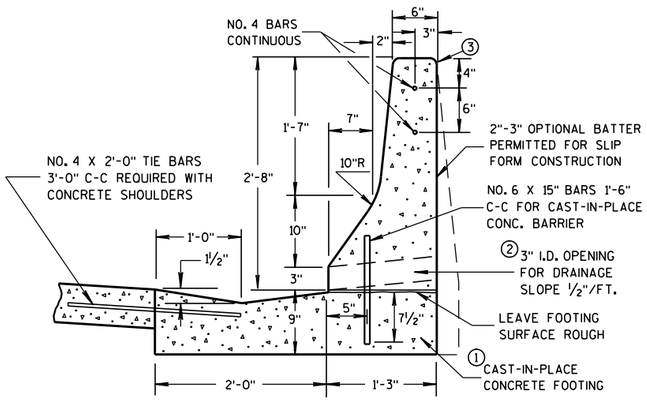



**HIGH SIDE CONCRETE BARRIER DETAIL**

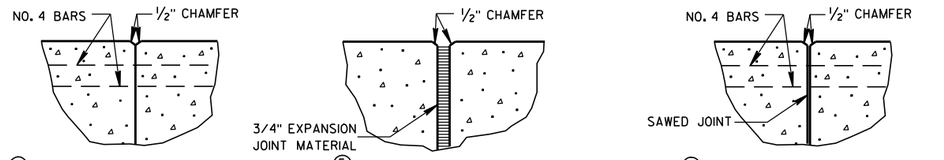



**MEDIAN** **SHOULDER**

**TYPICAL APPLICATIONS**




**SECTION VIEW**




**JOINT DETAILS**

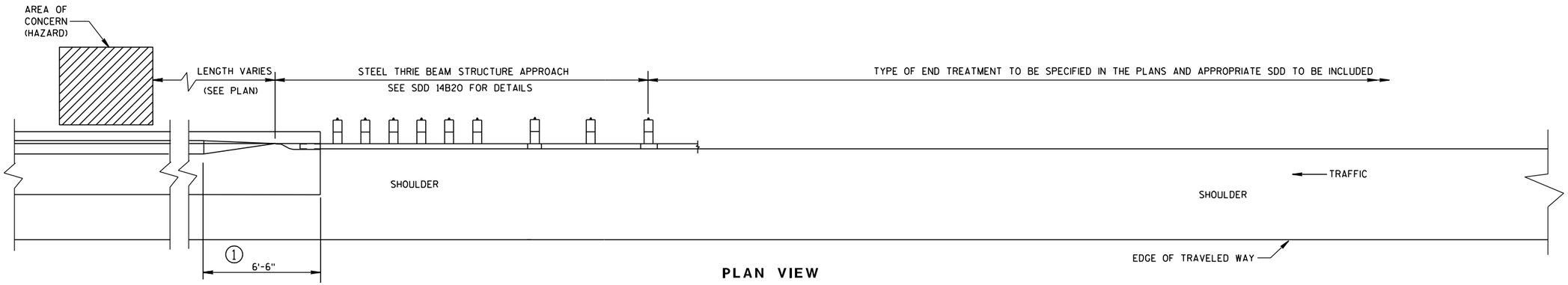
| |
|---|
| CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE) |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION |

6

S.D.D. 14 B 22-5a

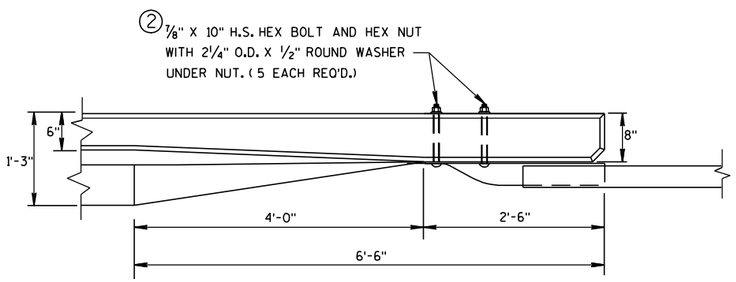
6

S.D.D. 14 B 22-5a

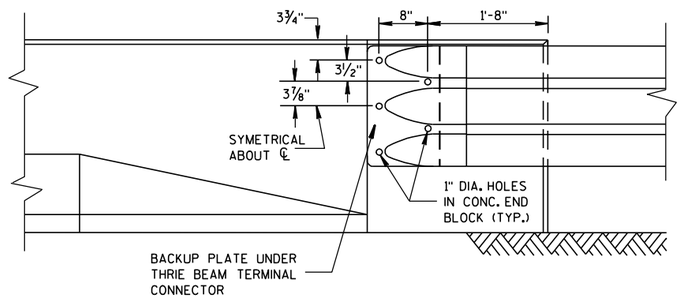



**PLAN VIEW**

# TRANSITION TO STEEL PLATE BEAM GUARD AND END TERMINAL

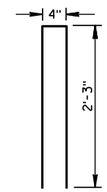



**PLAN VIEW**

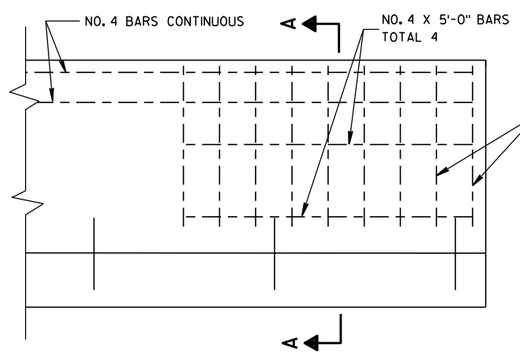



**FRONT VIEW**

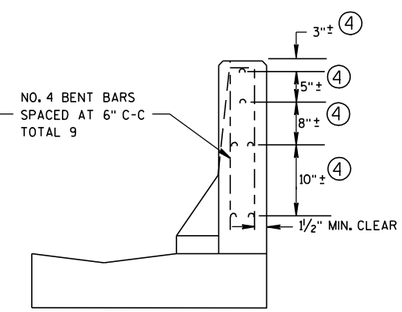
## CONCRETE BARRIER TRANSITION TO THRIE BEAM




**BENT BAR DETAIL**




**FRONT VIEW**




**SECTION A-A**

## ③ REINFORCEMENT AT BARRIER END

## GENERAL NOTES

① A SPECIAL END IS REQUIRED ON THE CONCRETE BARRIER TO TRANSITION TO A CONNECTION WITH THE STEEL THRIE BEAM STRUCTURE APPROACH. SEE THE DETAILS ON THIS SHEET.

② HIGH STRENGTH BOLTS SHALL MEET REQUIREMENTS OF ASTM A325.

③ REINFORCEMENT REQUIRED AT EXPANSION JOINTS AND WHERE CONCRETE BARRIER IS TERMINATED.

④ PLACE REINFORCEMENT SUCH THAT IT WILL NOT CONFLICT WITH THE BOLT HOLES IN THE THRIE BEAM TERMINAL CONNECTOR.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

**CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/12/10 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 14 B 22-5b

6

S.D.D. 14 B 22-5b

## BILL OF MATERIALS

| NOTE NO. | QTY. | DESCRIPTION |
|---|---|---|
| ① | 4 | WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9" |
| ② | ** | STEEL TUBE: OPTION 1 - QUANITY OF 4 TS 8" X 6" X 0.188", 4'-6" LONG OR OPTION 2 - QUANITY OF 2 TS 8" X 6" X 0.188", 6'-0" AND 2 TS 8" X 6" X 0.188", 4'-6" LONG |
| ③ | 2 | SOIL PLATE: 2'-0" X 1'-6" X ¼" ** |
| ④ | 4 | WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0" |
| ⑤ | 6 | WOOD OFFSET BLOCKS: 6' X 8" X 1'-2" |
| ⑥ | 1 | PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE |
| ⑦ | 1 | BEARING PLATE |
| ⑧ | 1 | BCT CABLE ASSEMBLY |
| ⑨ | 1 | CABLE ANCHOR BOX |
| ⑩ | 1 | STRUT & YOKE |
| ⑪ | 1 | STEEL PLATE BEAM, END PANEL 12 GA. 13'-6½" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS |
| ⑫ | 3 | STEEL PLATE BEAM: 12 GA. 13'-6½" |
| ⑬ | 1 | ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER |
| ⑭ | 1 | REFLECTIVE SHEETING TYPE H: 18" X 18" |
| ⑮ | 1 | E.A.T. MARKER POST |

## GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS. IF NONE ARE AVAILABLE, INSTALL ⅝" ø X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

(A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL),AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

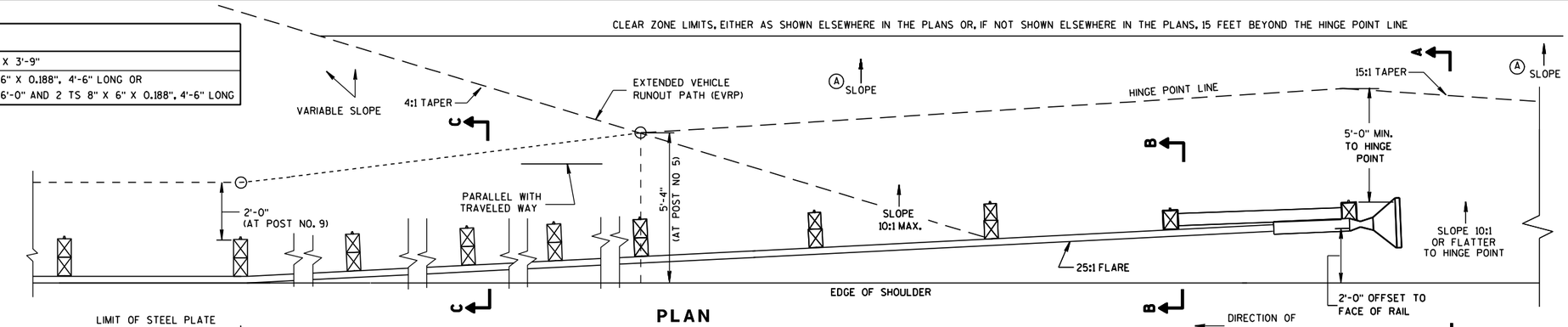
(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

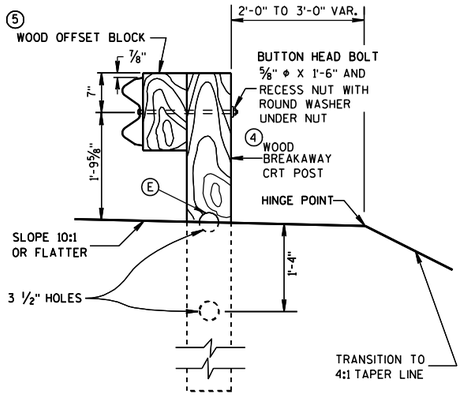
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

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

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

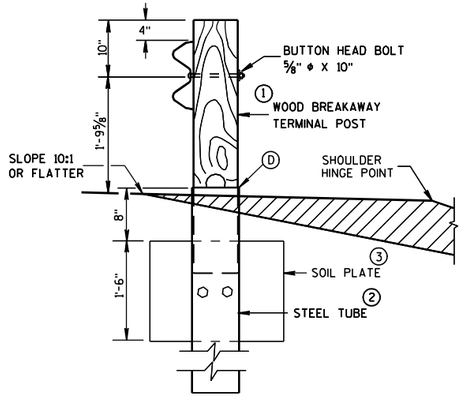
** SDD SHOWS 4 - 54 INCH STEEL TUBES WITH SOIL PLATES INSTALLED ON POST 1 AND POST 2. POST 3 AND 4 DO NOT NEED SOIL PLATES. AN ALTERNATIVE INSTALLATION WOULD CONSIST OF 2 - 72 INCH STEEL TUBES ON POST 1 AND POST 2 AND 54 INCH SOIL TUBES ON POSTS 3 AND 4. THE ALTERNATIVE INSTALLATION DOES NOT REQUIRE SOIL PLATES.



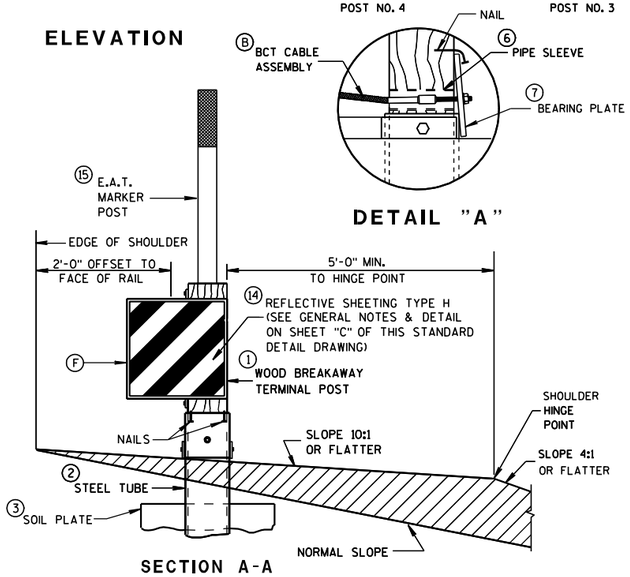

SECTION C-C

TYPICAL AT POST NOS. 6, 8



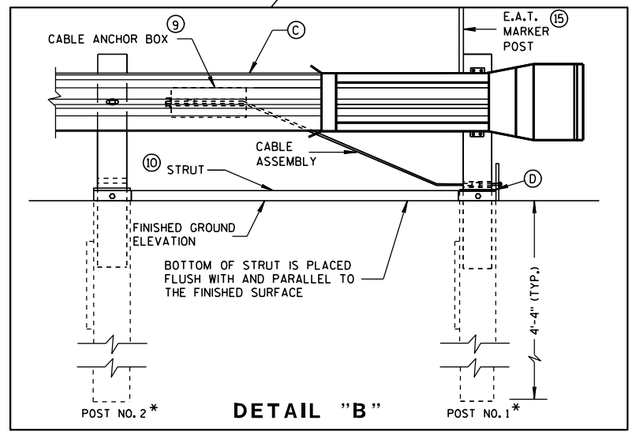

SECTION B-B

TYPICAL AT POST NO. 2*




SECTION A-A

TYPICAL AT POST NO. 1*




STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

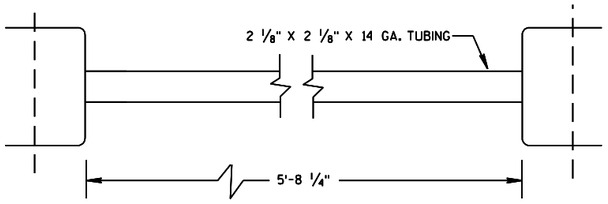
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

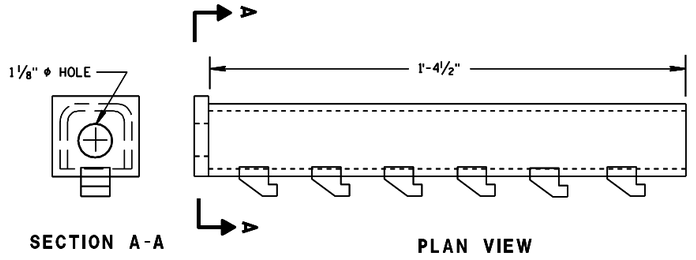
S.D.D. 14 B 24-7a

6

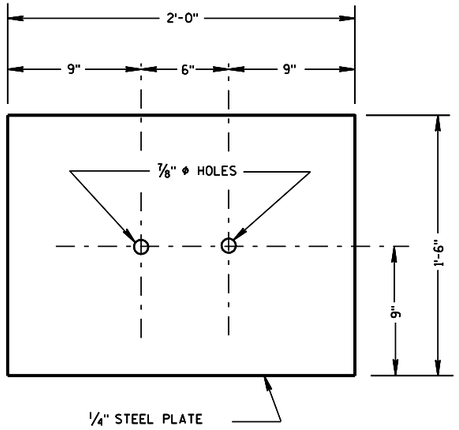
S.D.D. 14 B 24-7a




⑩ STRUT DETAIL (SKT-350)

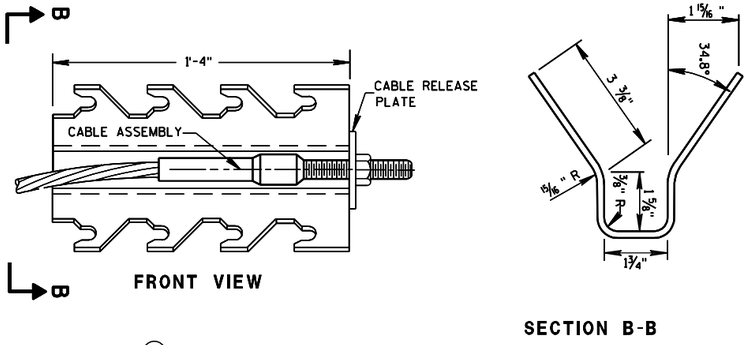



⑨ CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



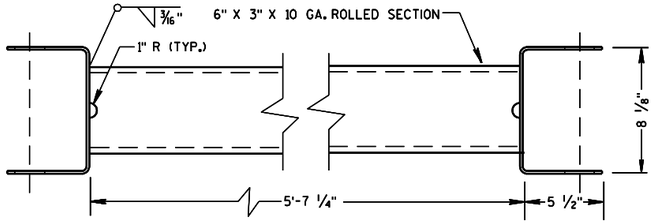

③ SOIL PLATE

(SKT-350, ET-2000/ET-2000 PLUS)



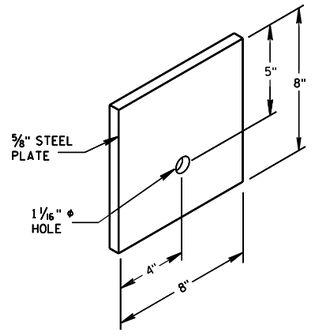

⑨ CABLE ANCHOR BOX (SKT-350)

(SKT-350)




⑩ STRUT DETAIL (ET-2000/ET-2000 PLUS)

(ET-2000/ET-2000 PLUS)




⑦ STEEL BEARING PLATE

(SKT-350, ET-2000/ET-2000 PLUS)

6

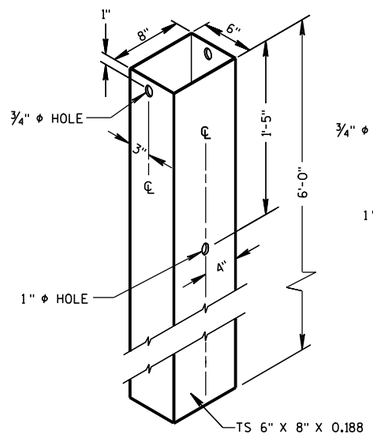
6

S.D.D. 14 B 24-7b

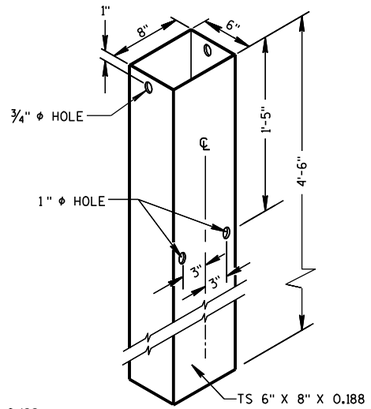
S.D.D. 14 B 24-7b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

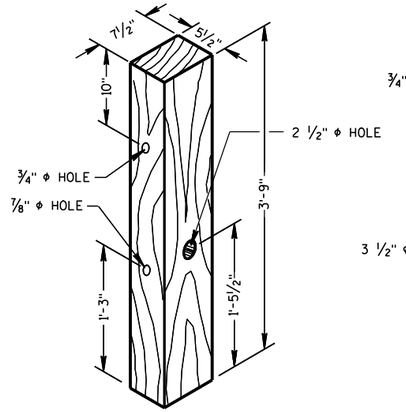
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



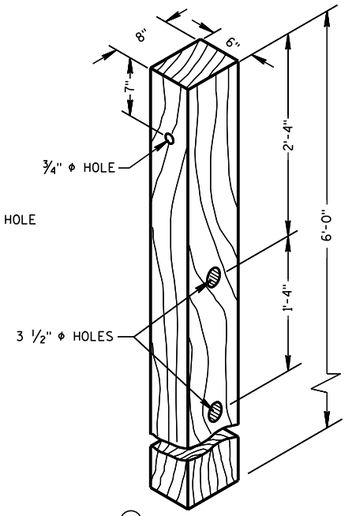

② 72" STEEL TUBE
(POSTS NO. 1-4




② 54" STEEL TUBE
(POSTS NO. 1-4




① TERMINAL POST
(POSTS NO. 1-4




④ CRT POST
(POSTS NO'S 5-8

## WOOD BREAKAWAY POSTS

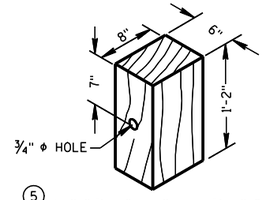
## GENERAL NOTES

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

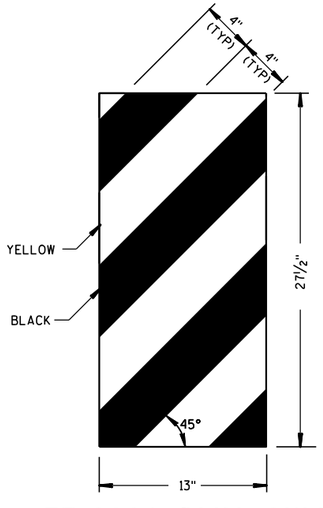
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

SEE APPROVED PRODUCTS LIST FOR ACCEPTABLE E. A. T. MARKER POST.

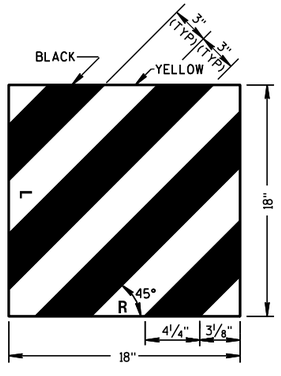
(G) ½" DIA. X 3" LAG BOLT WITH WASHER.




⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

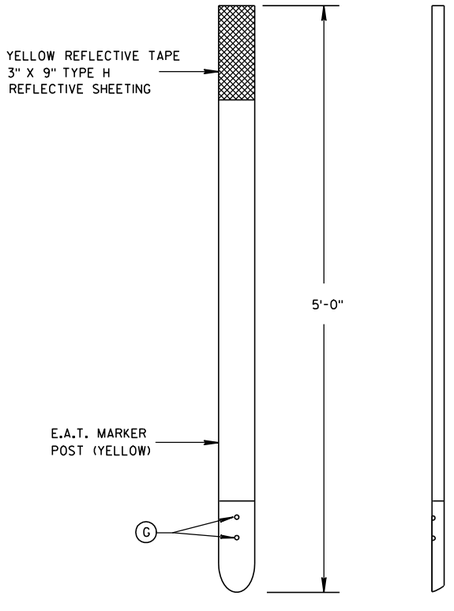



ET-2000 PLUS ONLY



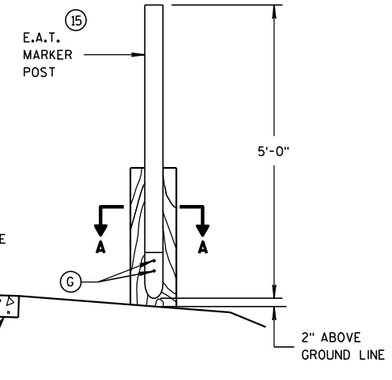

ET-2000 AND SKT-350

⑭ REFLECTIVE SHEETING DETAILS

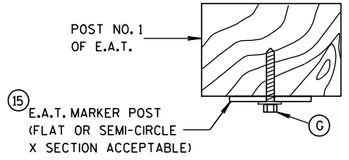



FRONT VIEW SIDE VIEW

⑮ E.A.T. MARKER POST




TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)




SECTION A-A

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-12-10
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

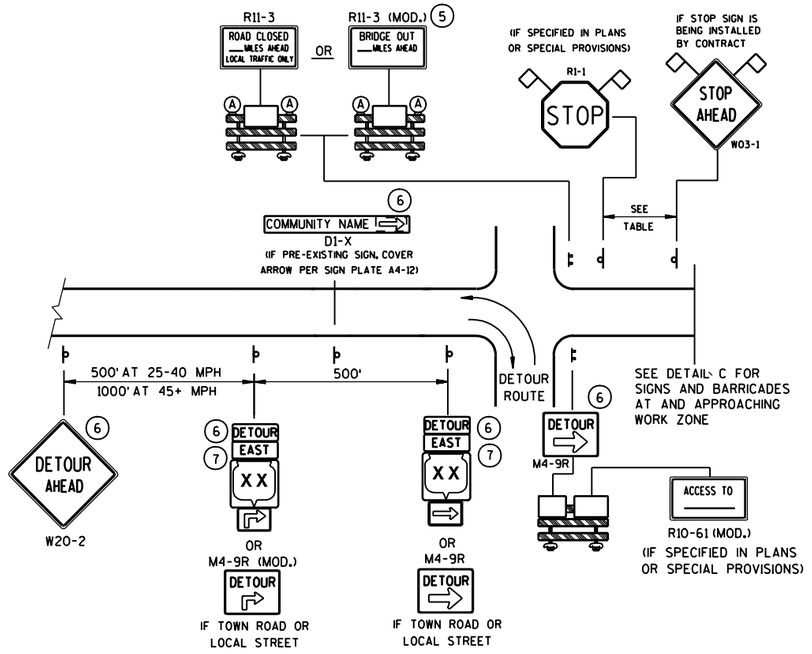
FHWA

6

S.D.D. 14 B 24-7c

6

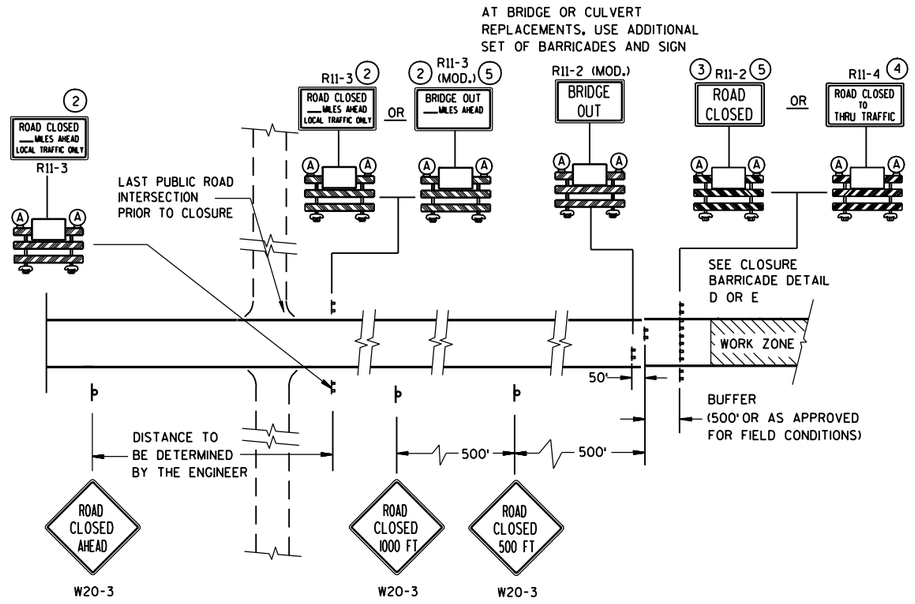
S.D.D. 14 B 24-7c




**DETAIL A**

## MAINLINE CLOSURE WITH POSTED DETOUR

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

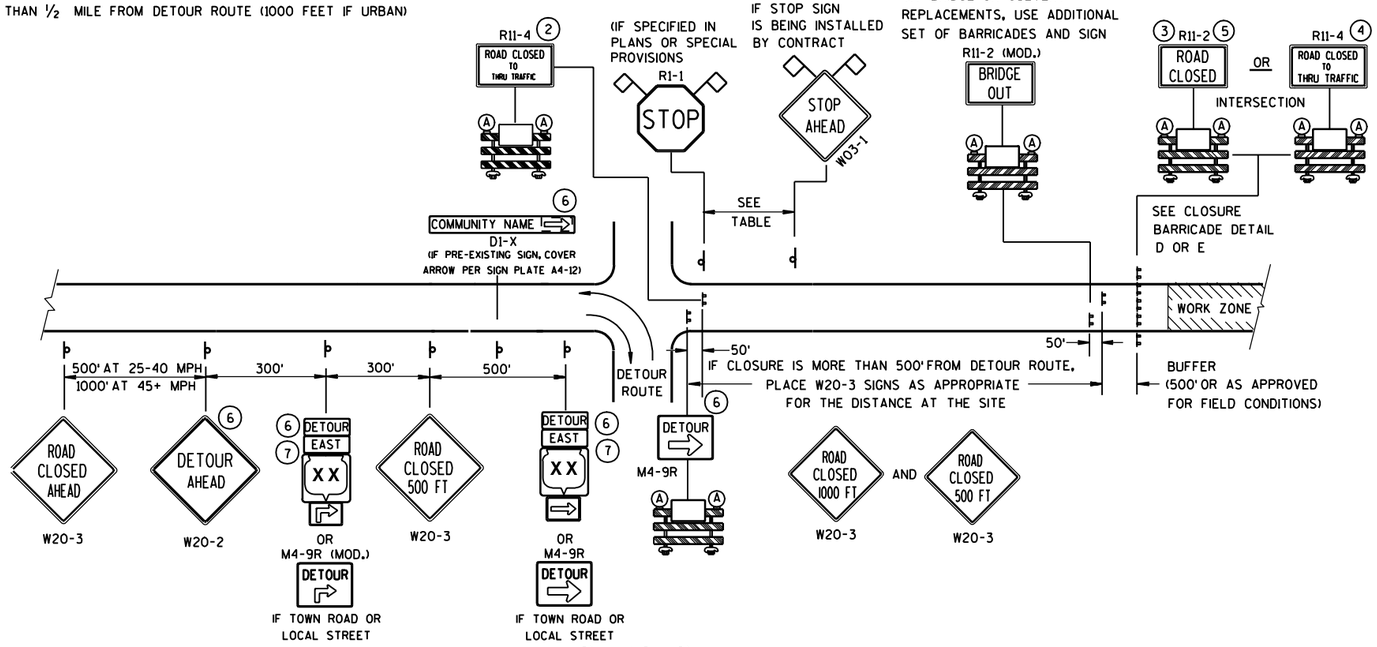



**DETAIL C**

## 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 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)




**DETAIL B**

## MAINLINE CLOSURE WITH POSTED DETOUR

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

### LEGEND

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

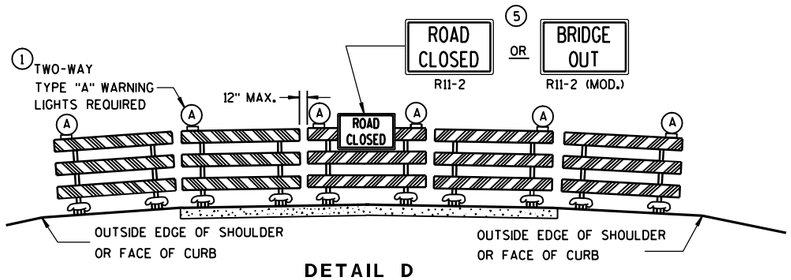
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 2-4a

6

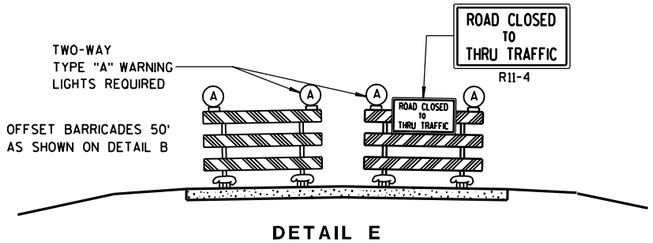
S.D.D. 15 C 2-4a




**DETAIL D**

## ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW




**DETAIL E**

## LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

## GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**BARRICADES AND SIGNS FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/16/03
DATE

Thomas N. Notthoff for
CHIEF SIGNS AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 2-4b

6

S.D.D. 15 C 2-4b

**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.

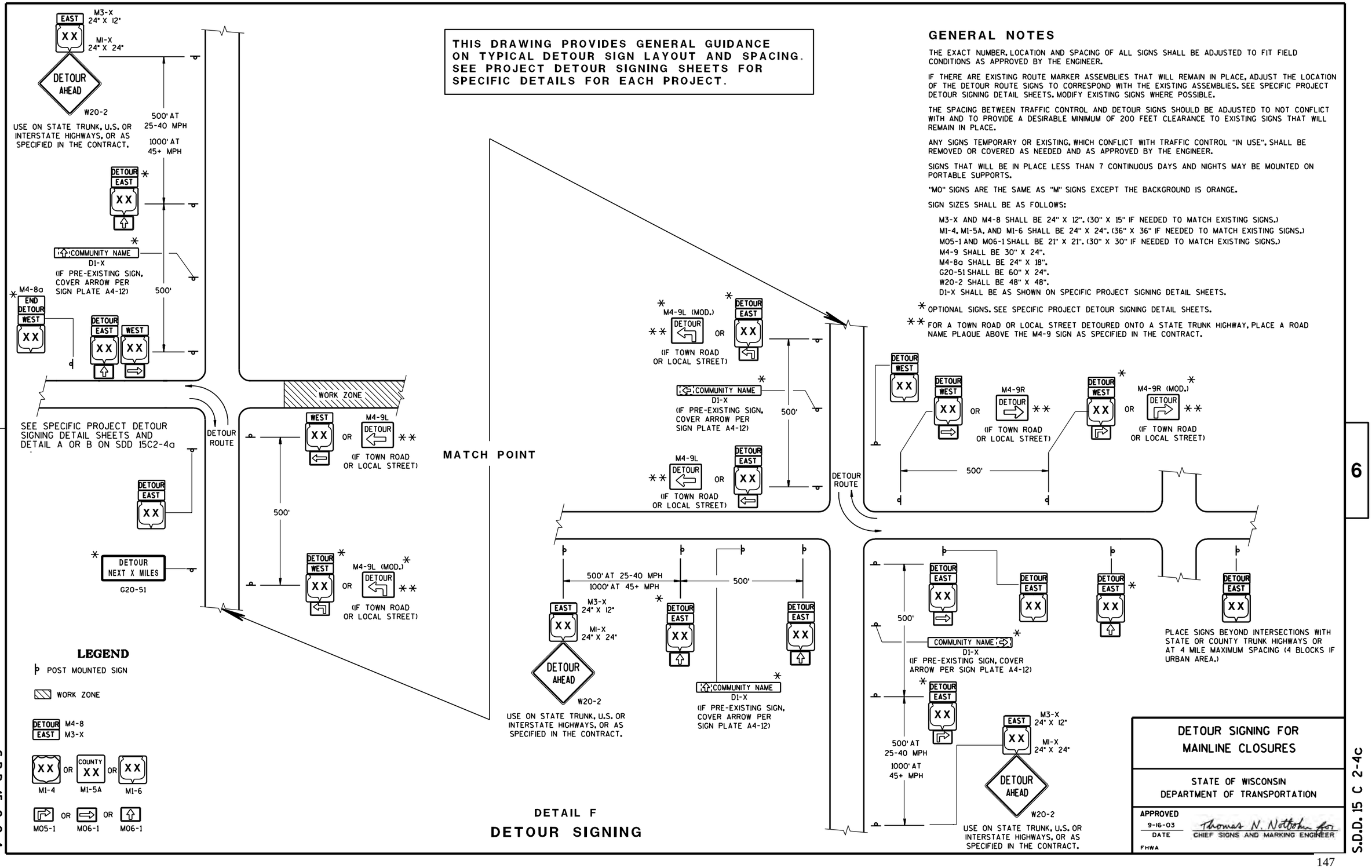
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

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

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

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




DETAIL F

**DETOUR SIGNING**

**DETOUR SIGNING FOR MAINLINE CLOSURES**

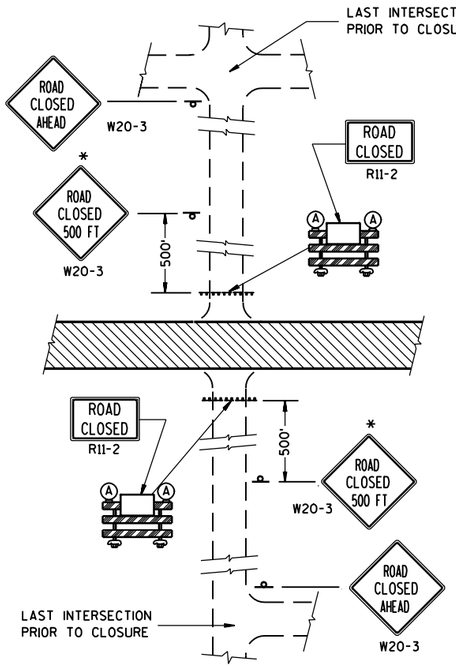
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-16-03
DATE

Thomas N. Nottbohm for
CHIEF SIGNS AND MARKING ENGINEER

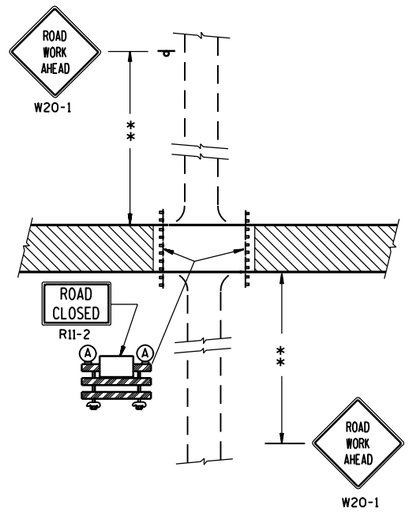
FHWA

S.D.D. 15 C 2-4c



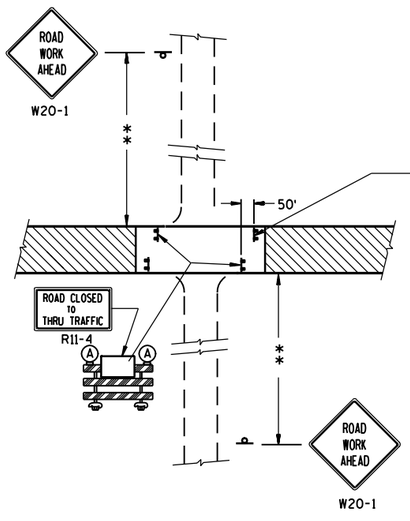

**DETAIL 1**

(NO ACCESS TO PROJECT)



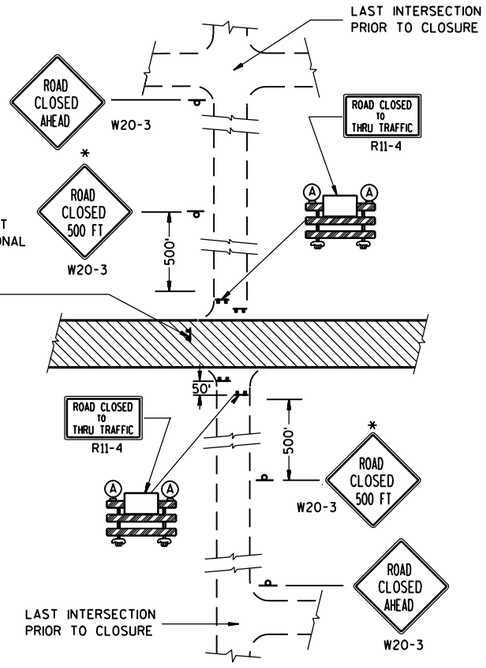

**DETAIL 2**

(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.

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

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

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

**BARRICADES AND SIGNS FOR SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-16-03
DATE

Thomas N. Nottbohm for
CHIEF SIGNS AND MARKING ENGINEER

FHWA

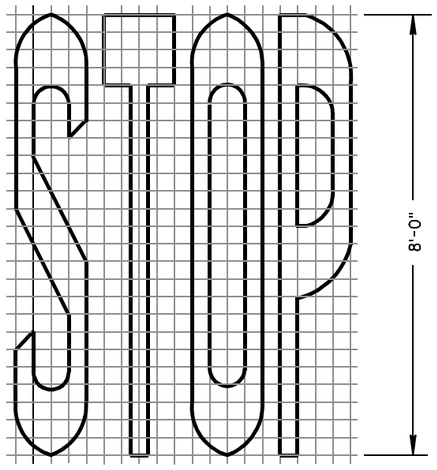
6

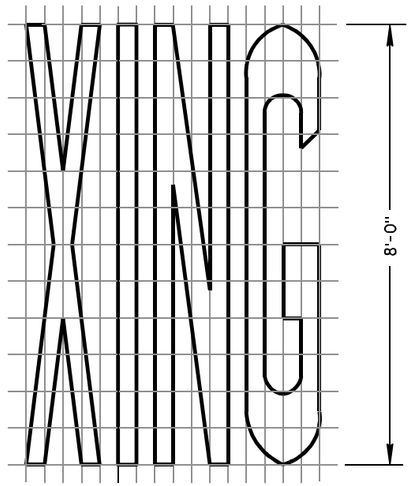
S.D.D. 15 C 3-1

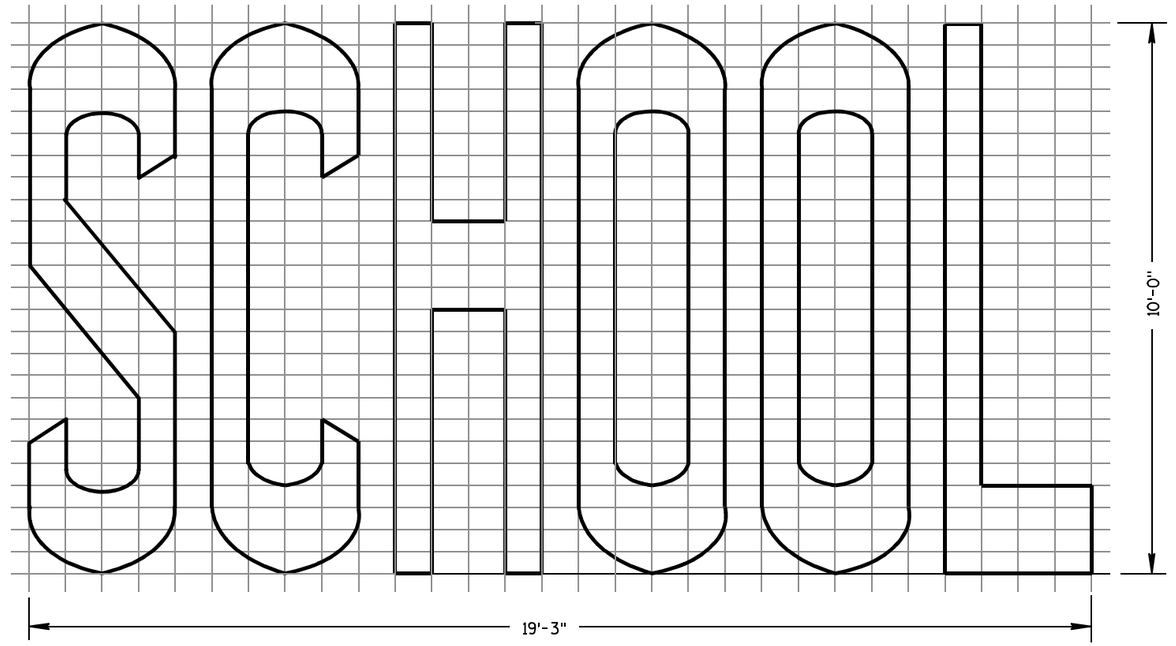
## GENERAL NOTES

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.

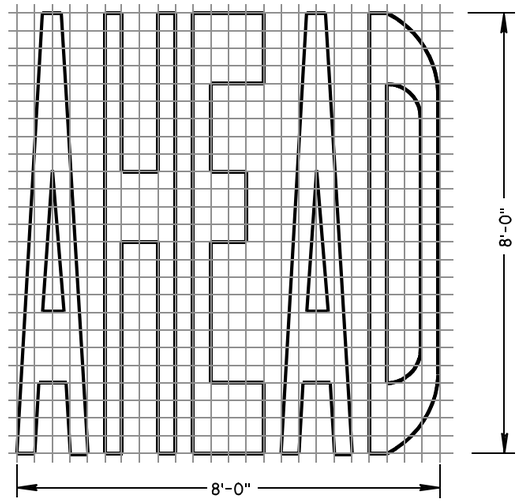
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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

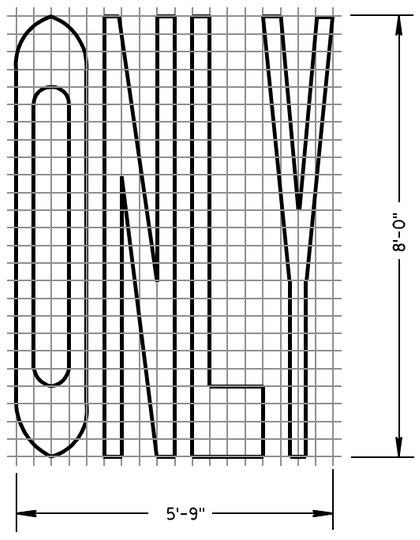


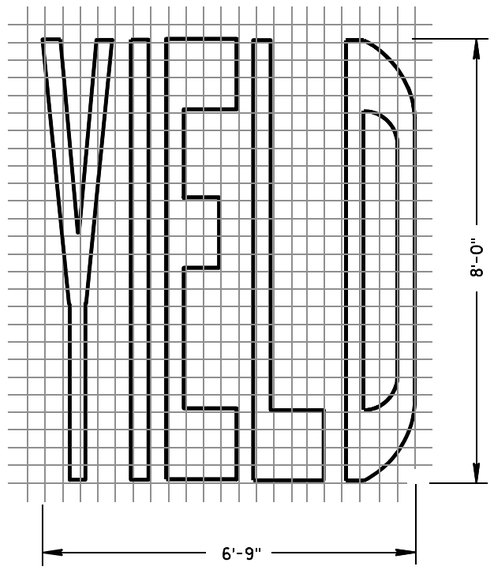



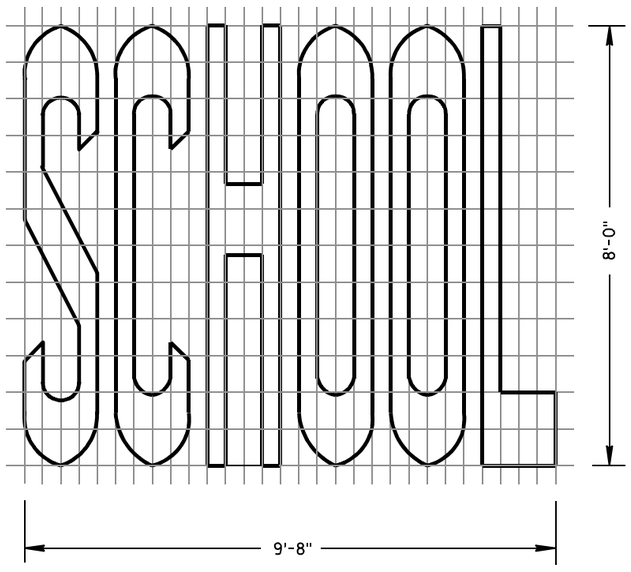




**TWO-LANE**




**SINGLE-LANE**

**PAVEMENT MARKING WORDS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

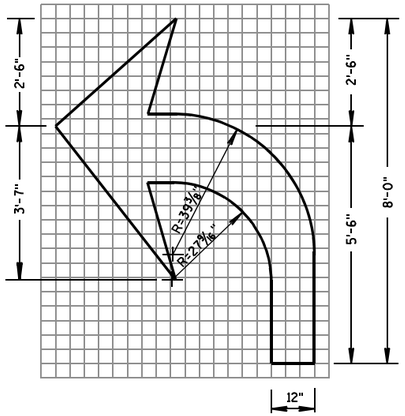
APPROVED
5-13-10 — DATE
/S/ Thomas N. Notbohm — STATE TRAFFIC ENGINEER OF DESIGN
FHWA

6

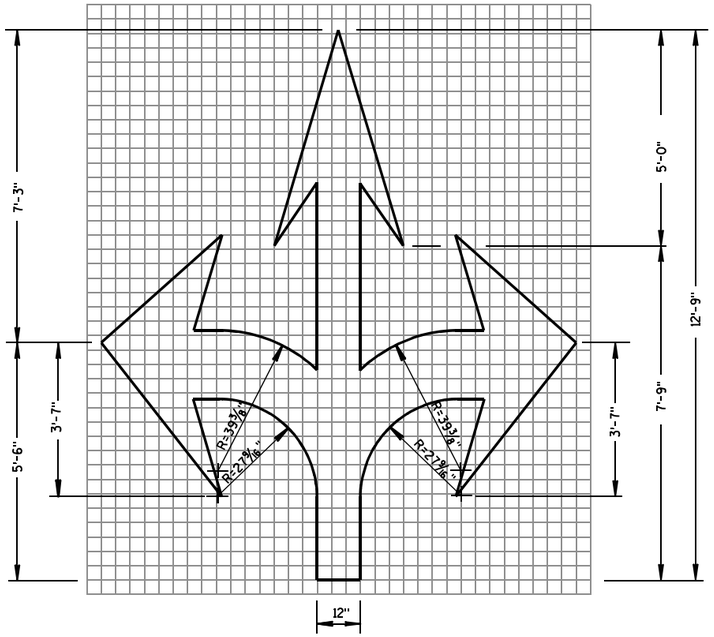
S.D.D. 15 C 7-11b

6

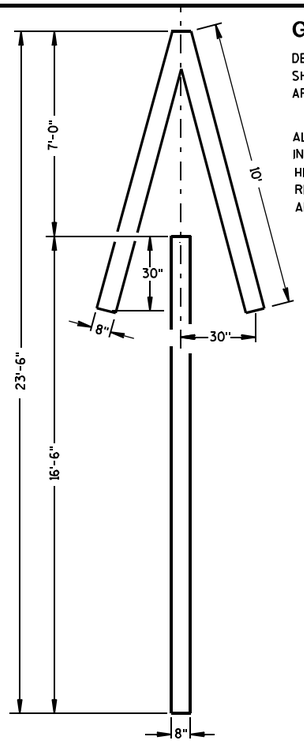
S.D.D. 15 C 7-11b




TYPE 2




TYPE 6

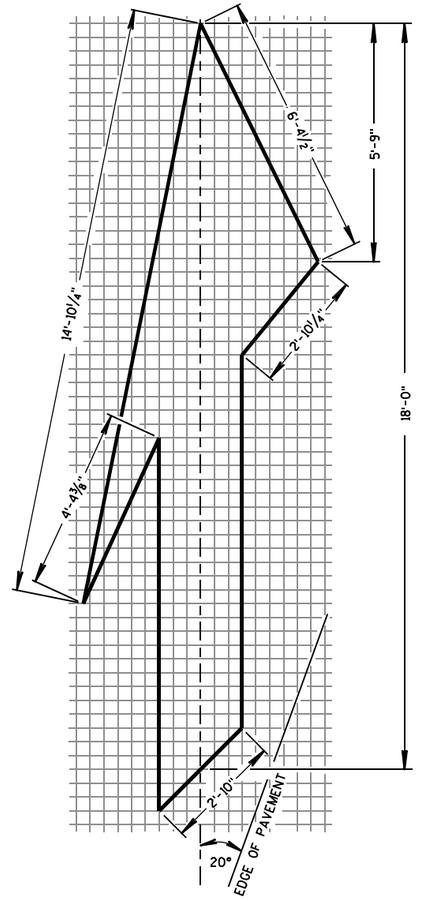



TYPE 4

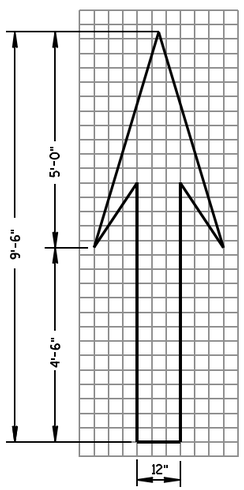
## GENERAL NOTES

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.

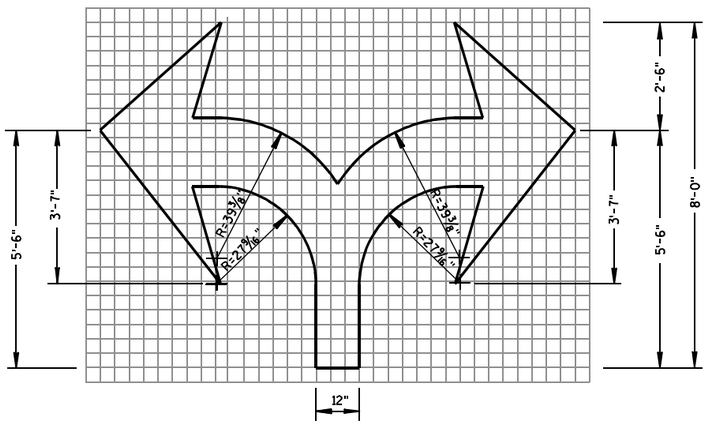
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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



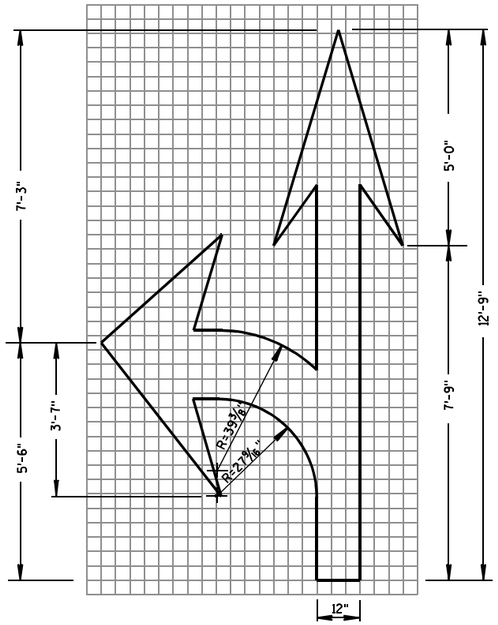

TYPE 5 LANE DROP ARROW




TYPE 1




TYPE 7




TYPE 3

PAVEMENT MARKING ARROWS

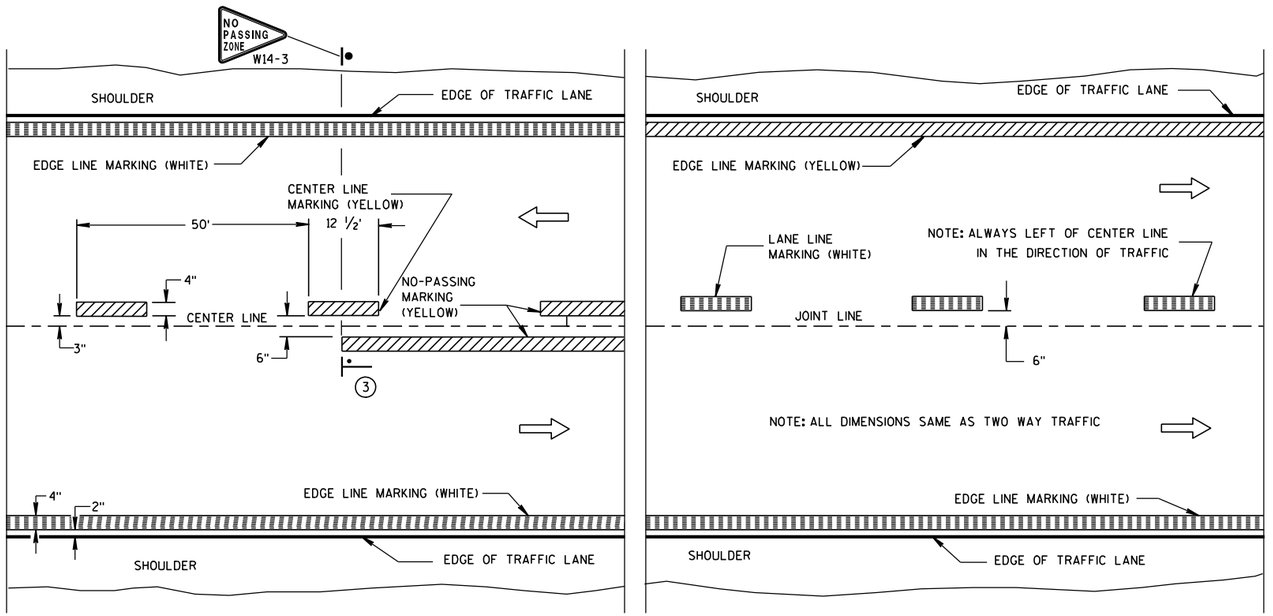
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/13/10 — DATE
/S/ Thomas N. Notbohm — STATE TRAFFIC ENGINEER OF DESIGN
FHWA

S.D.D. 15 C 7-11d

6

S.D.D. 15 C 7-11d




TWO WAY TRAFFIC

ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING

## GENERAL NOTES

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

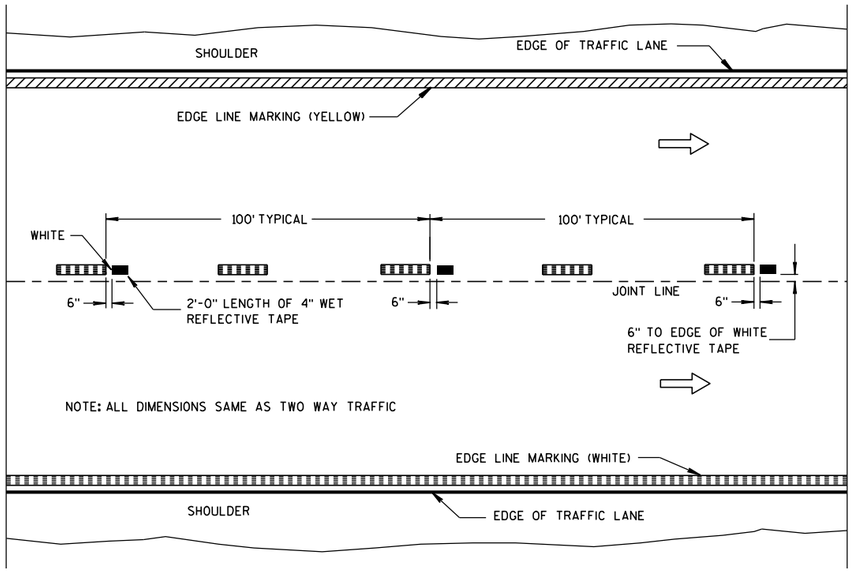
(1) HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.

(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.

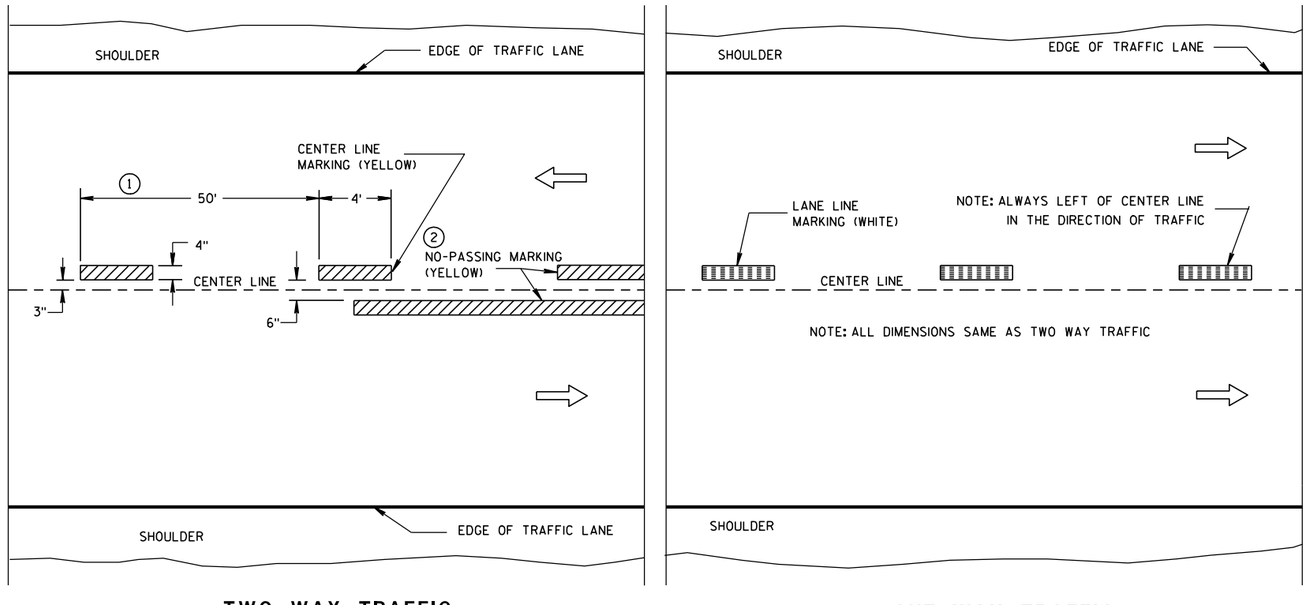
(3) NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.

## NOTE

ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL




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




TWO WAY TRAFFIC

ONE WAY TRAFFIC

## TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

**LEGEND**

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-10 DATE

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

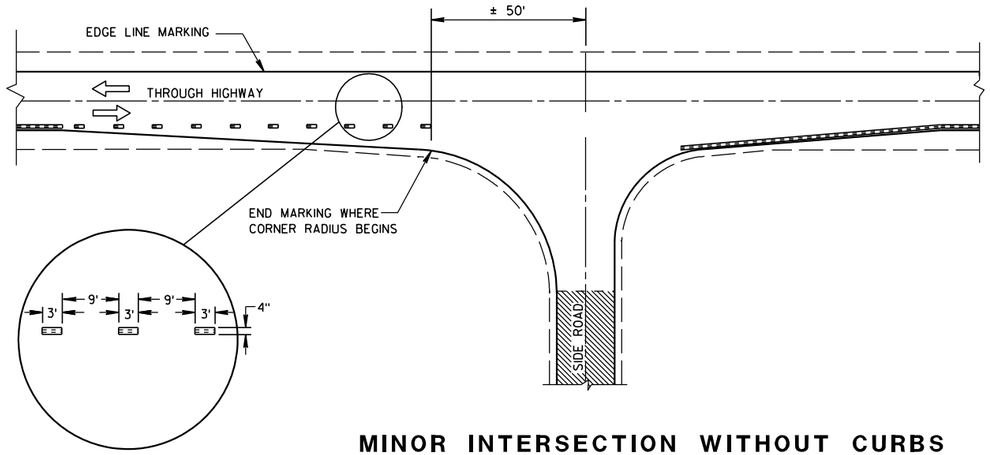
FHWA

6

S.D.D. 15 C 8-13a

6

S.D.D. 15 C 8-13a




## 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.

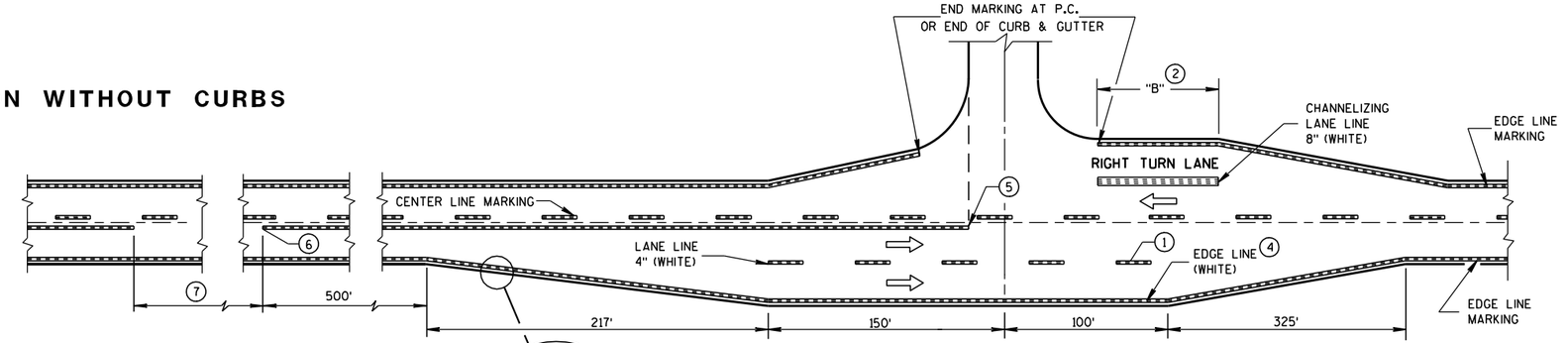
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

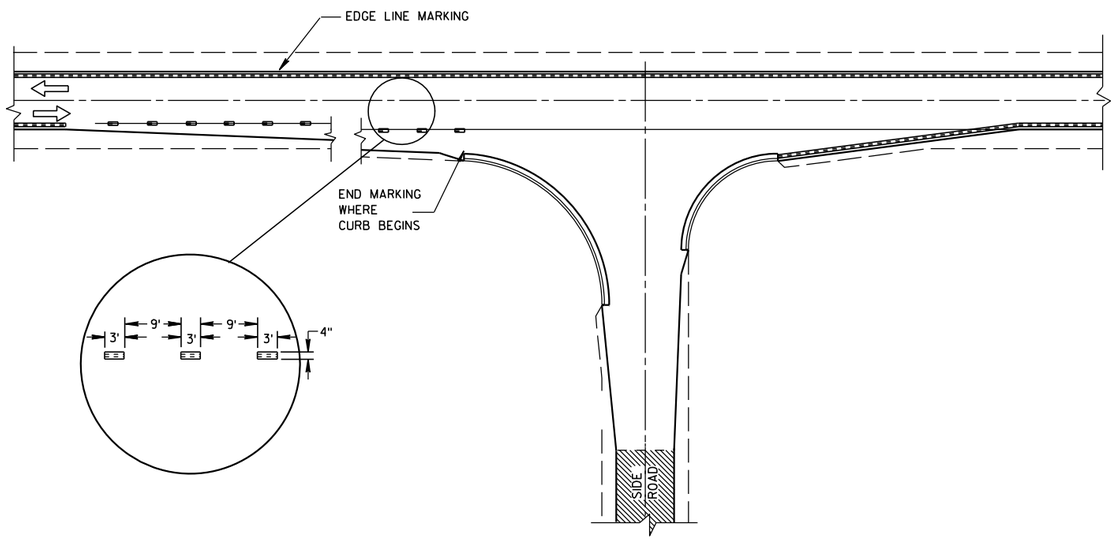
ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL

(7)

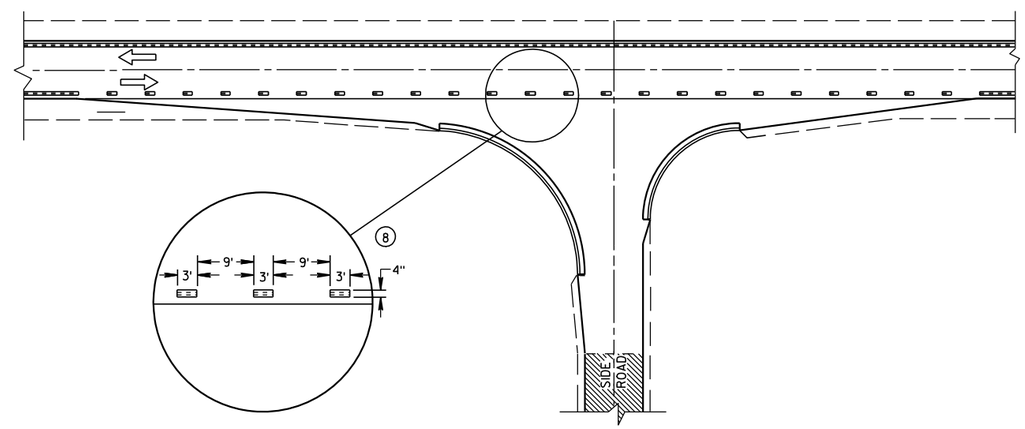
| POSTED SPEED (MPH) | MINIMUM DISTANCE BETWEEN ZONES (FEET) |
|---|---|
| 25 - 30 | 528 |
| 35 - 40 | 528 |
| 45 - 50 | 686 |
| 55 | 792 |




## 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)

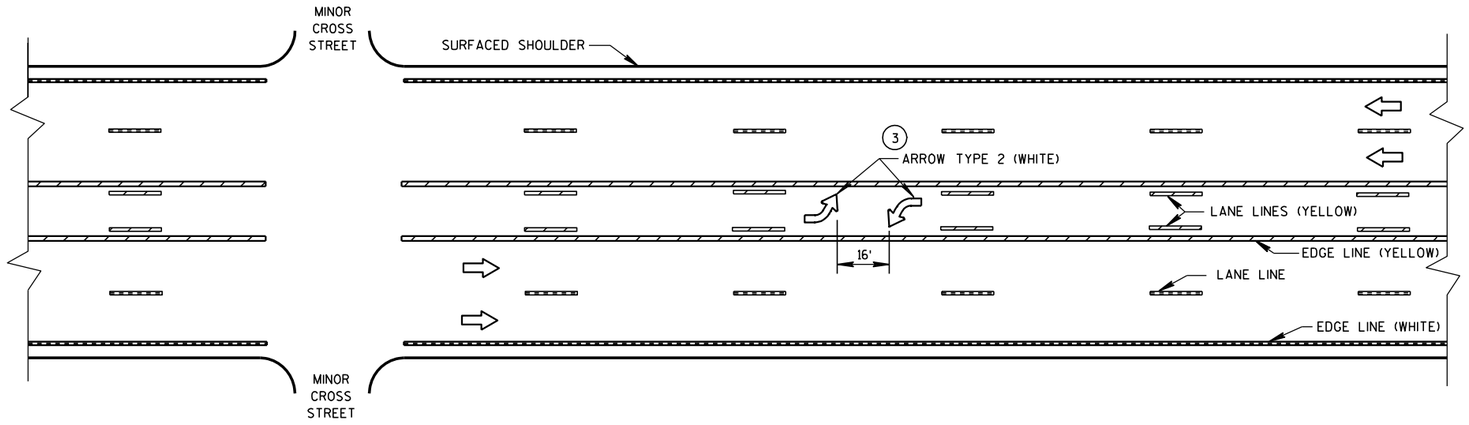
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 8-13b

6

S.D.D. 15 C 8-13b

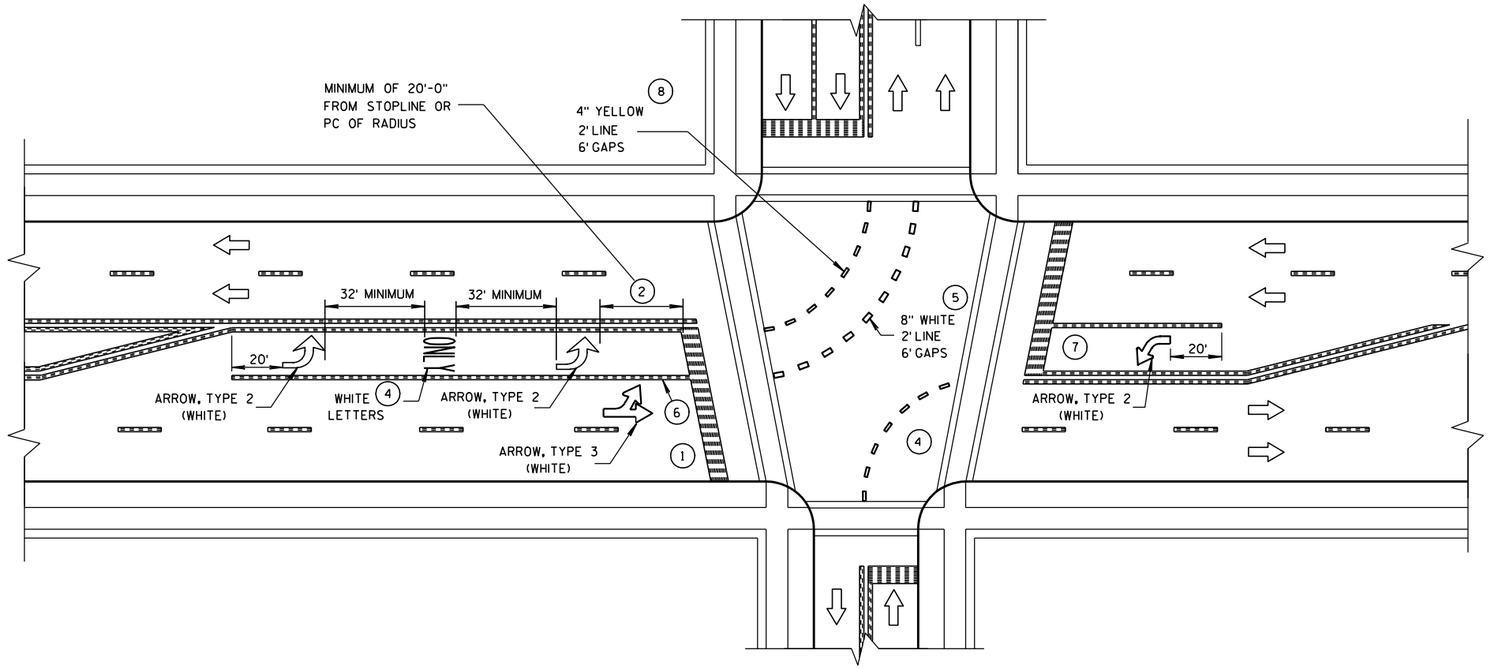



## TWO WAY LEFT TURN LANE

## 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' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA ARROW AND ONLY PER 160' 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'.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL ( ⇨ )
SHOWS DIRECTION OF TRAVEL




PAVEMENT MARKING
(LEFT TURN LANE)

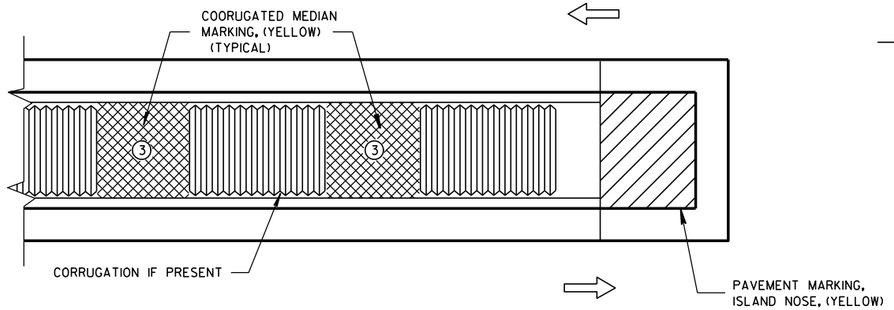
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

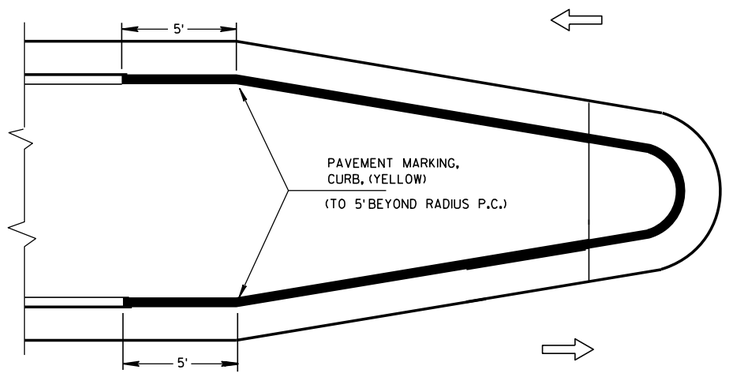
S.D.D. 15 C 8-13e

6

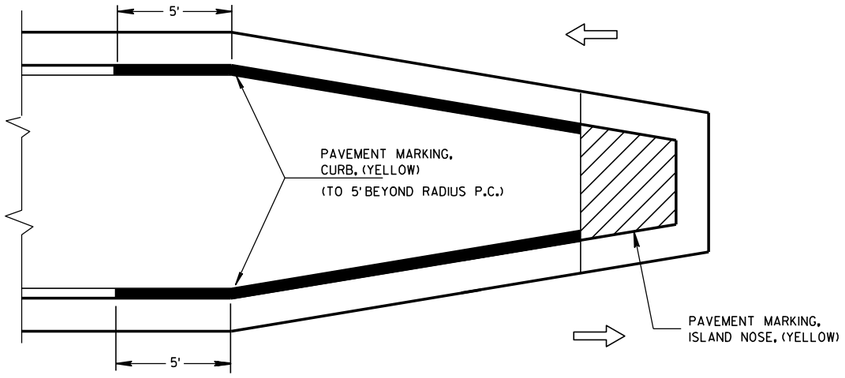
S.D.D. 15 C 8-13e




**MEDIAN ISLAND WITH SQUARE BLUNT NOSE**

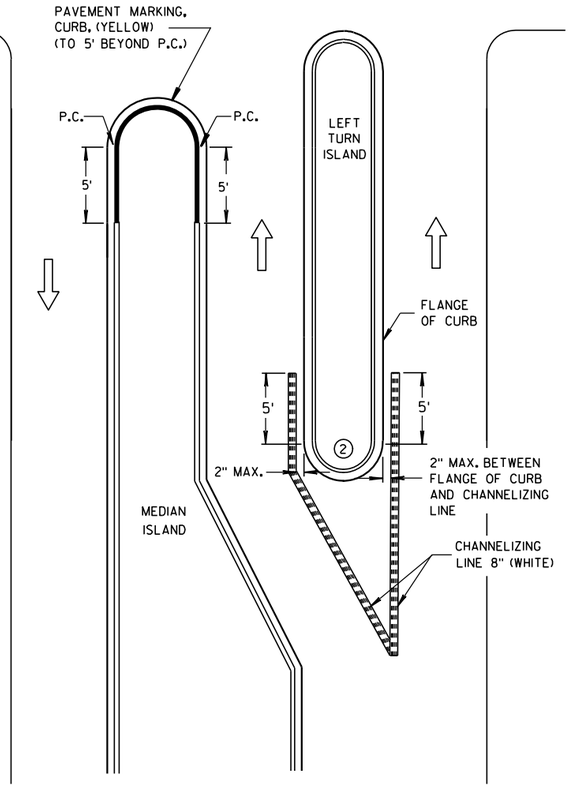



**MEDIAN ISLAND WITH ROUND BLUNT NOSE**

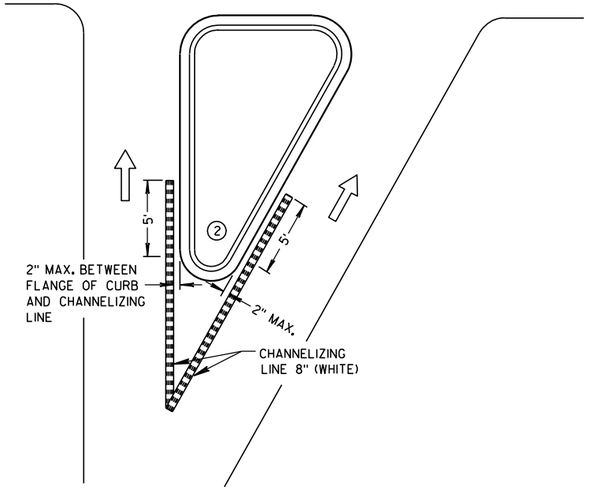



**MEDIAN ISLAND WITH SLOPED NOSE**

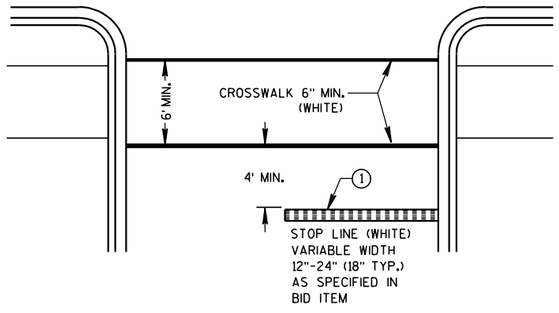
**TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS**




**LEFT TURN & MEDIAN ISLAND**




**RIGHT TURN ISLAND**




**STOP LINE AND CROSSWALK**

## GENERAL NOTES

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

### LEGEND

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

**PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)**

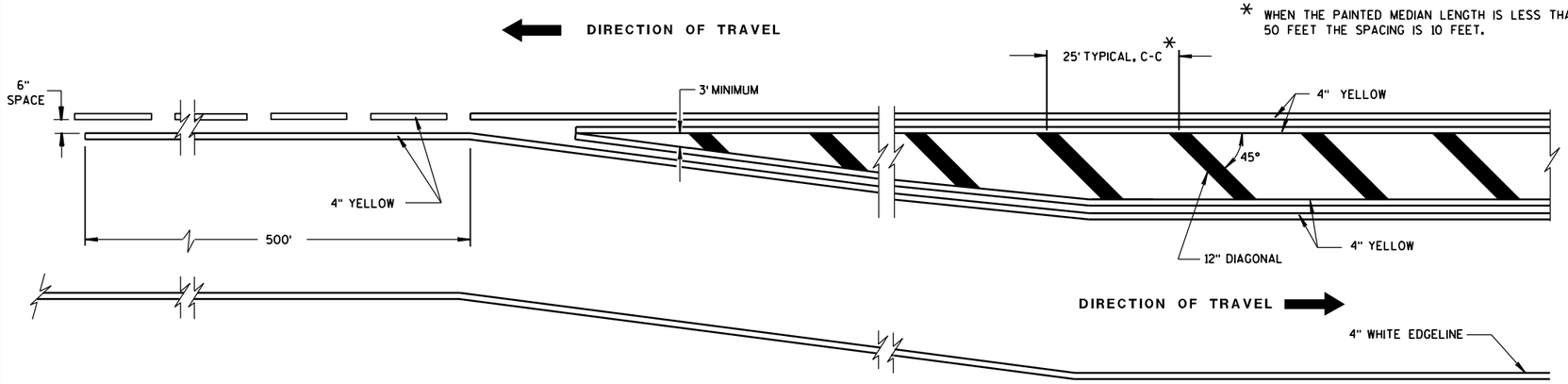
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 8-13f

6

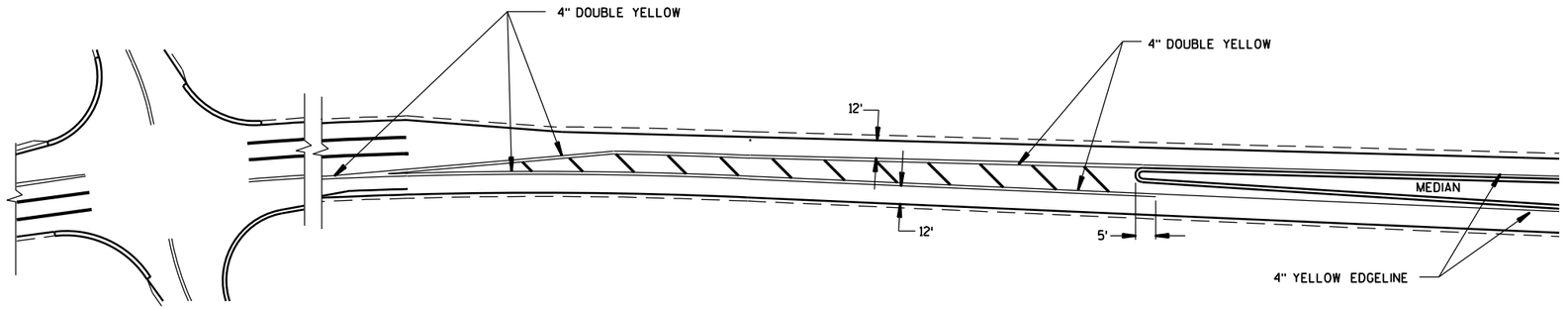
S.D.D. 15 C 8-13f



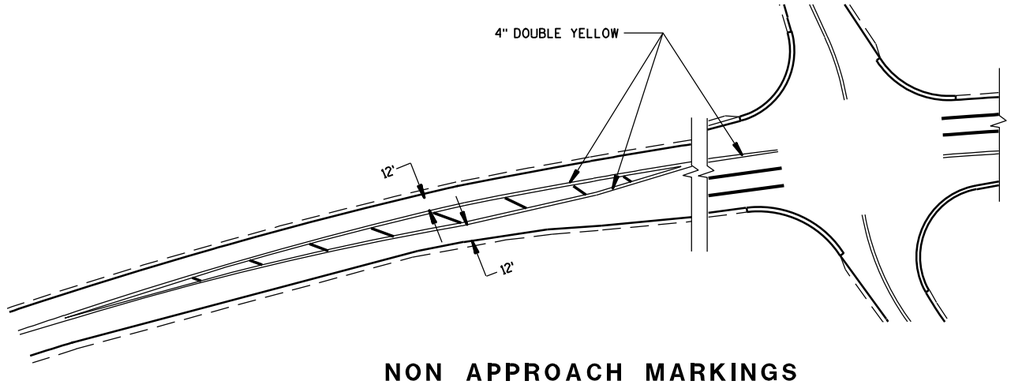

MEDIAN ISLAND DETAIL

## 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

MEDIAN ISLAND MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-5-09 DATE
/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

FHWA

6

S.D.D. 15 C 18-3

6

S.D.D. 15 C 18-3

## GENERAL NOTES

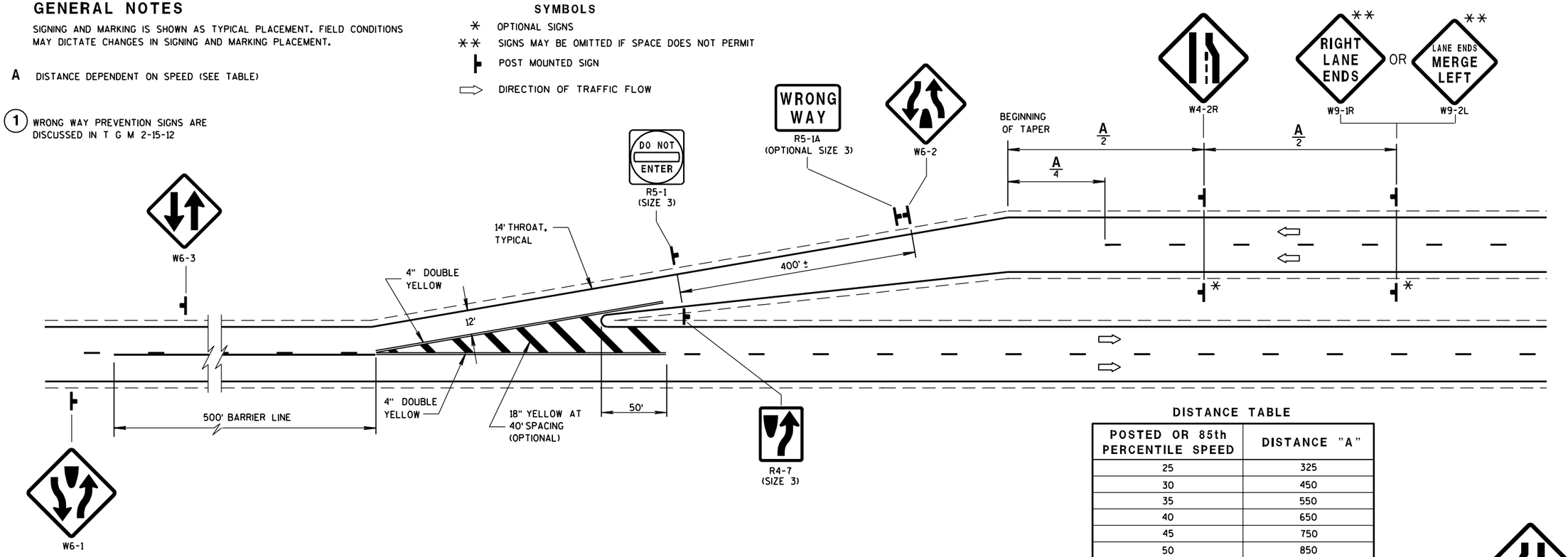
SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

**A** DISTANCE DEPENDENT ON SPEED (SEE TABLE)

(1) WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12

## SYMBOLS

- ✳ OPTIONAL SIGNS
- ✳✳ SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW



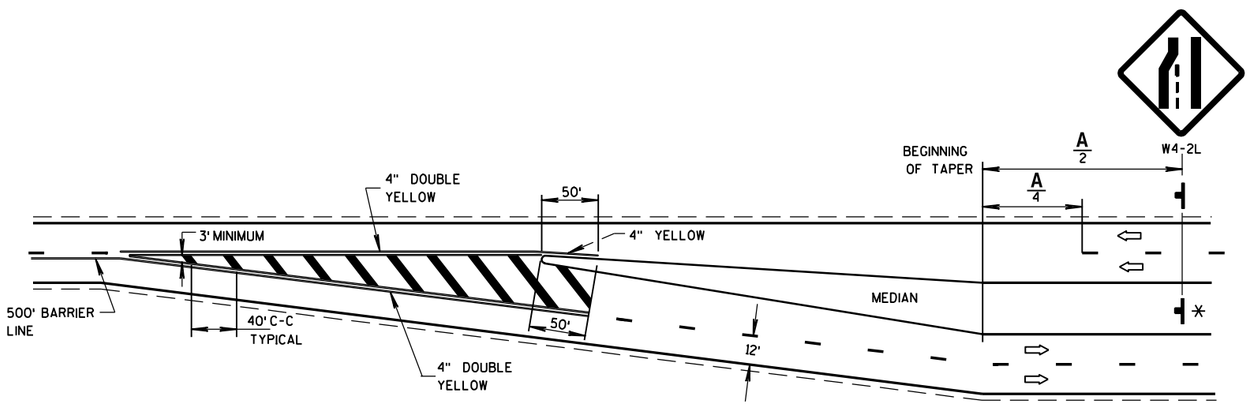

### DISTANCE TABLE

| POSTED OR 85th PERCENTILE SPEED | DISTANCE "A" |
|---|---|
| 25 | 325 |
| 30 | 450 |
| 35 | 550 |
| 40 | 650 |
| 45 | 750 |
| 50 | 850 |
| 55 | 950 |

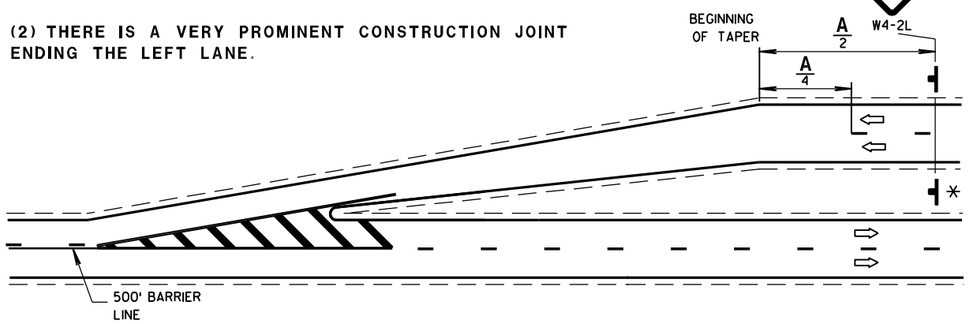
**USE W4-2L IF :**

**(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 FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/7/08 — DATE

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

FHWA

6

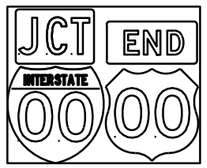
S.D.D. 15 C 21-3

6

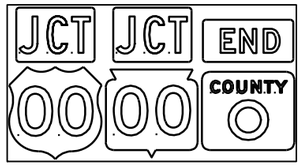
S.D.D. 15 C 21-3

## TYPICAL ASSEMBLIES

J1-1

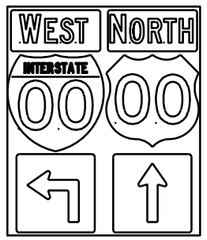


J1-2

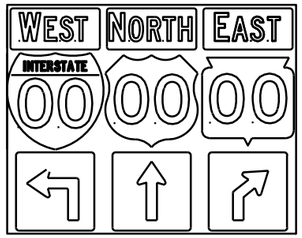


J1-3

J2-1

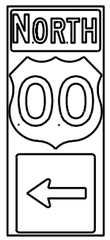


J2-2

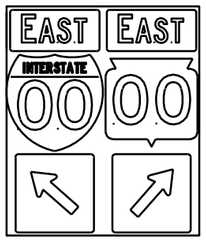


J2-3

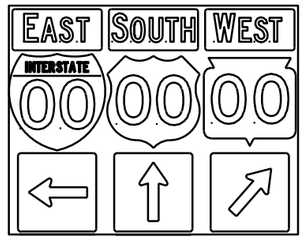
JV



J3-1

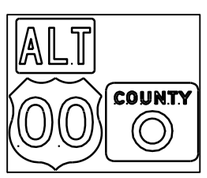


J3-2

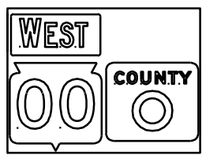


J3-3

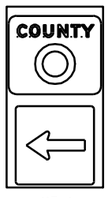
J4-1



J4-2



J4-2



J13-1

J12-1

J32-1

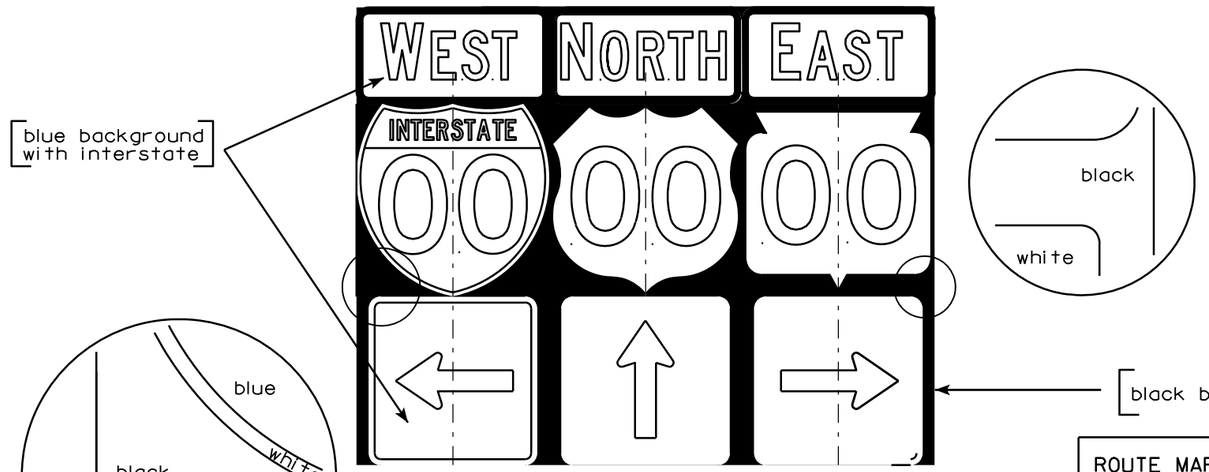
J33-1

J23-1

J22-1

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 since base material is plywood.
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.




ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

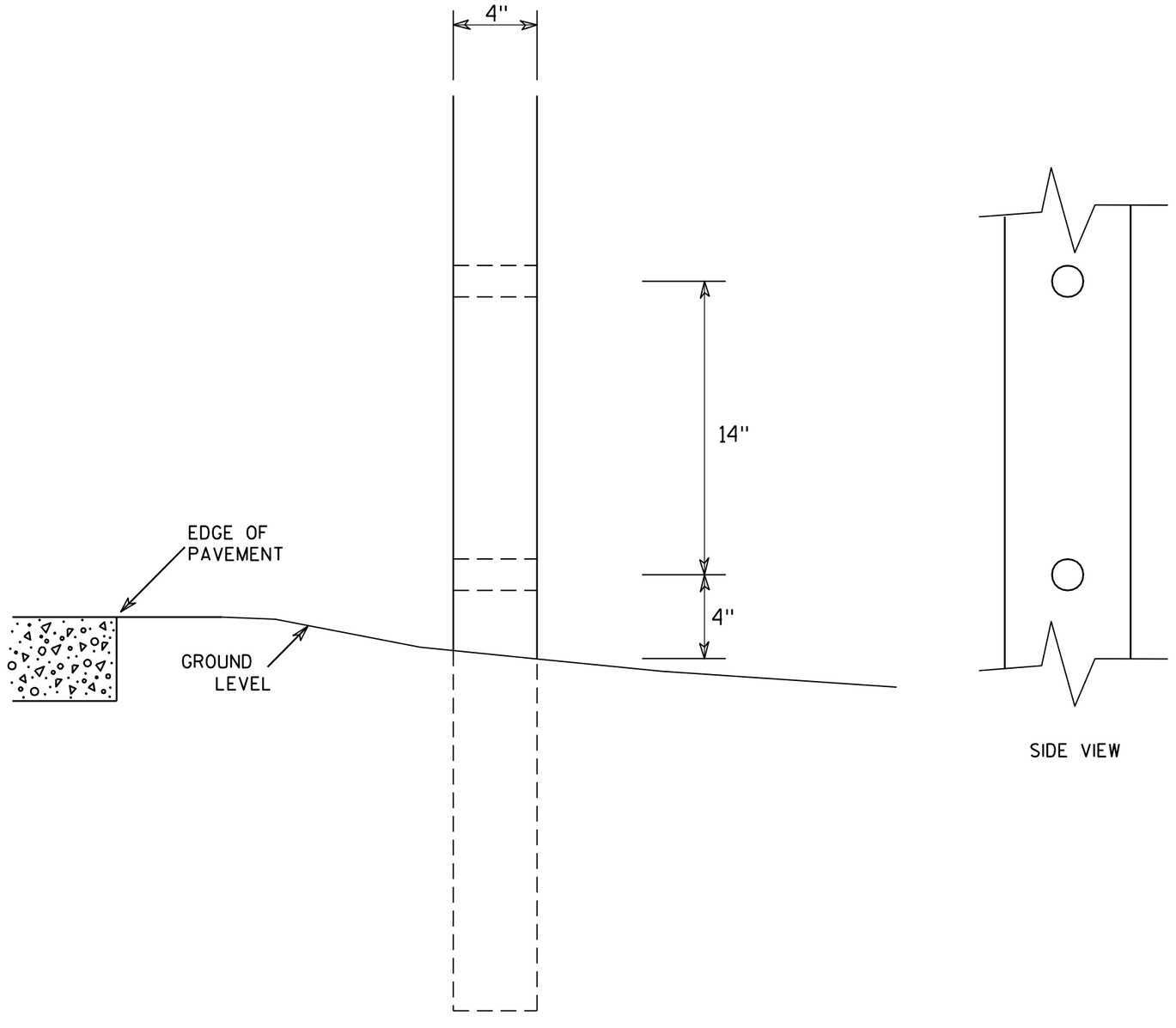
DATE 10/21/09 PLATE NO. A2-1S.6

7

7

PROJECT NO:

SHEET NO: 157 E






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

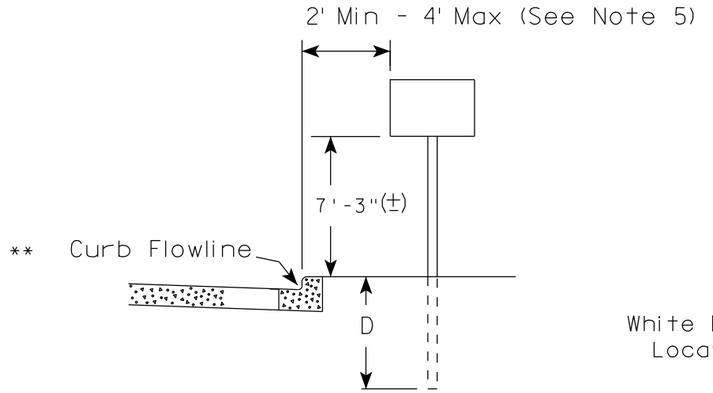
WISCONSIN DEPT OF TRANSPORTATION

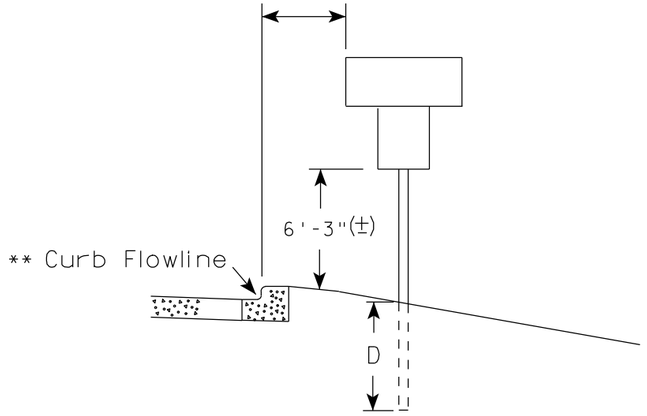
APPROVED Chester J Spang for State Traffic Engineer

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

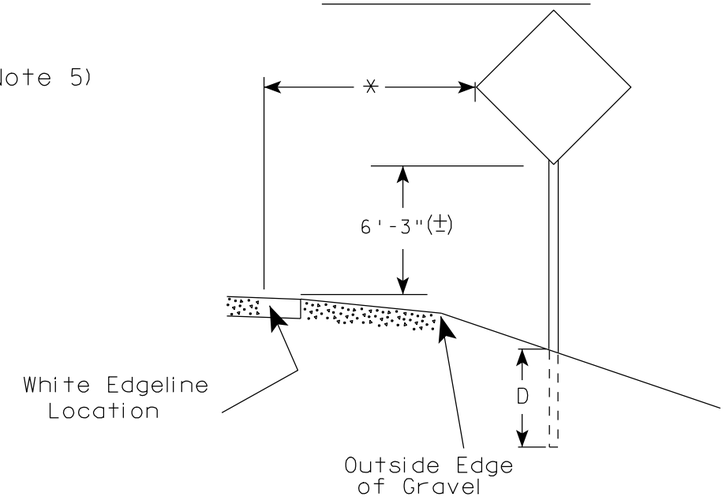
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 158 | E |
|---|---|---|---|---|---|

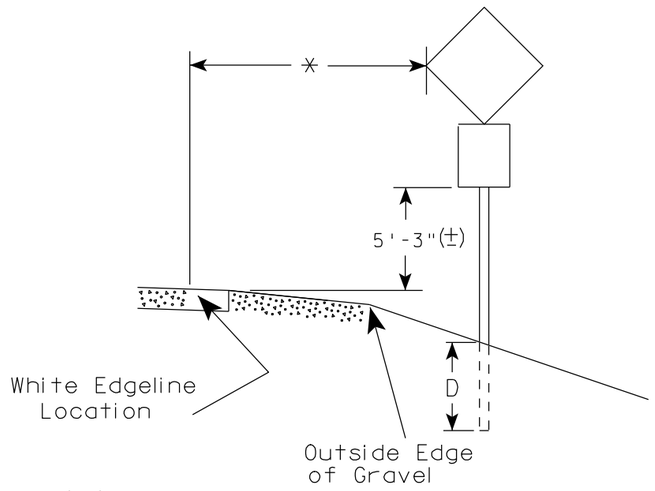
## URBAN AREA




## 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.

## GENERAL NOTES

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

## POST EMBEDMENT DEPTH

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

# TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

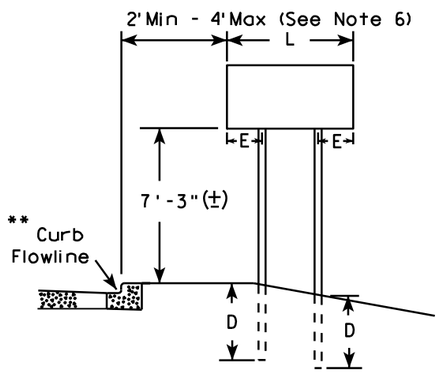
DATE 9/30/09 PLATE NO. A4-3.15

7

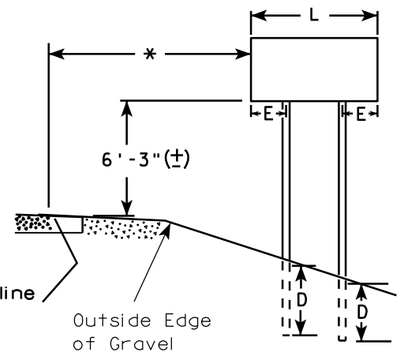
7

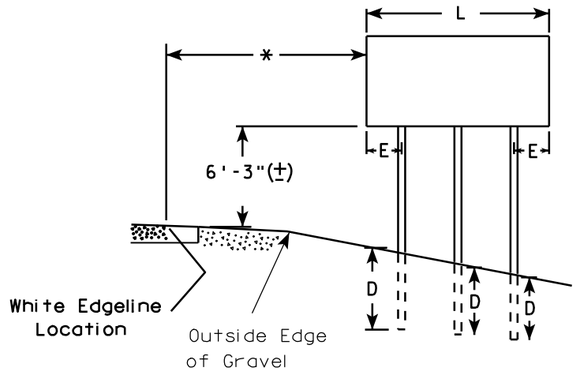
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 159 | E |
|---|---|---|---|---|---|

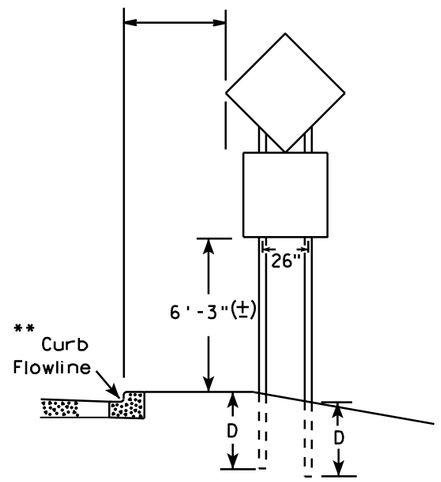
## URBAN AREA



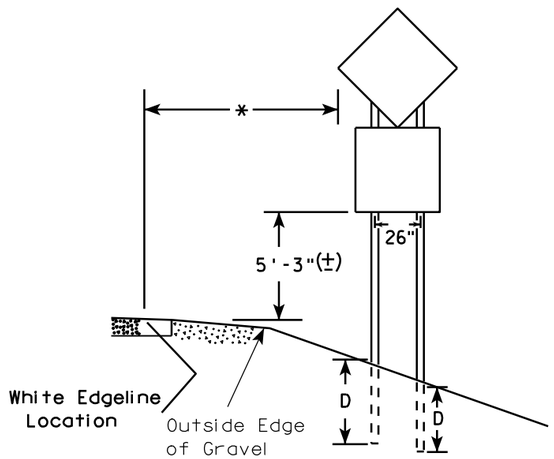

## RURAL AREA (See Note 3)




48" DIAMOND WARNING SIGN




48" DIAMOND WARNING SIGN

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

*** 

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

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

## POST EMBEDMENT DEPTH

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

## GENERAL NOTES

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

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

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

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

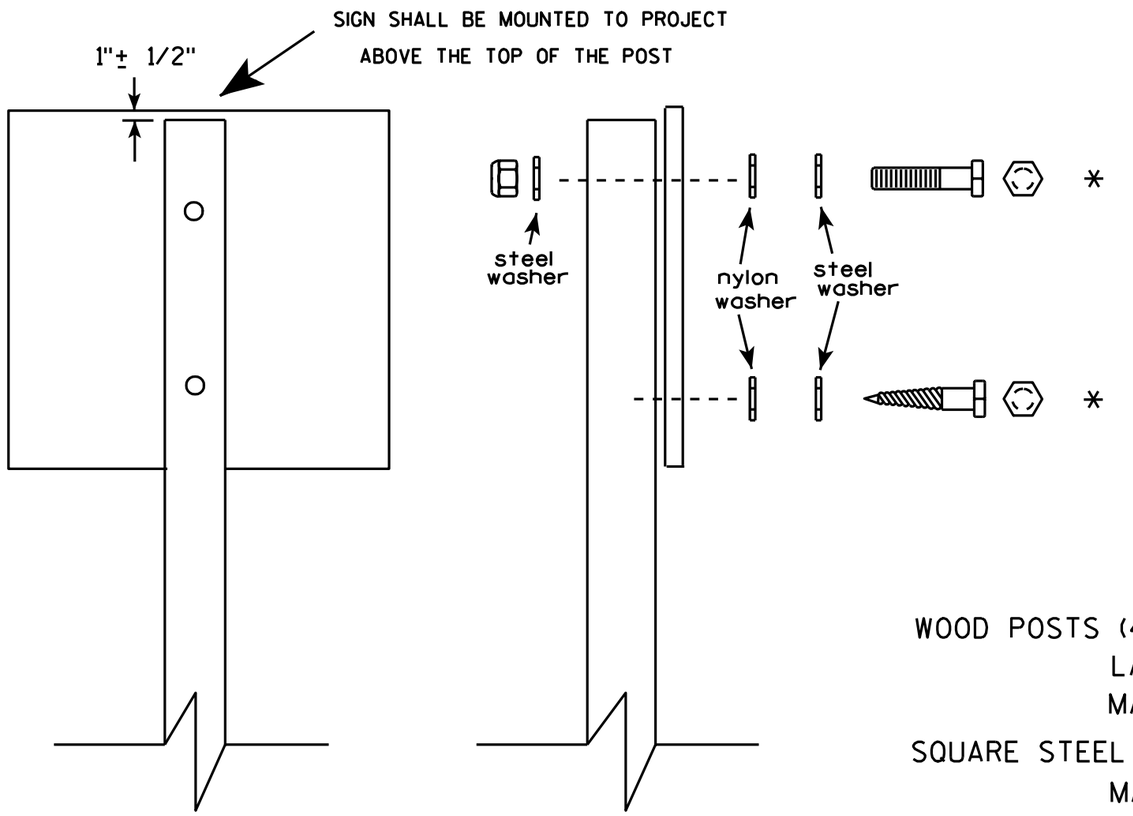
# TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. A4-4.10

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 160 | E |
|---|---|---|---|---|---|




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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

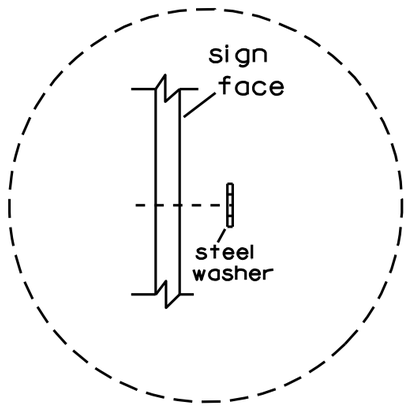
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.




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

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

# ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

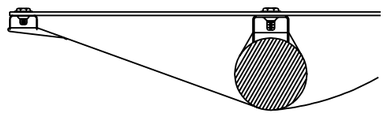
7

7

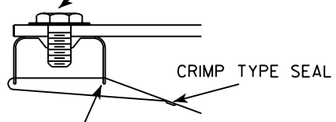
PROJECT NO:

SHEET NO: 161 E

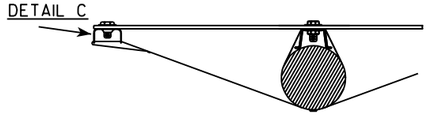
## BRACE BANDING

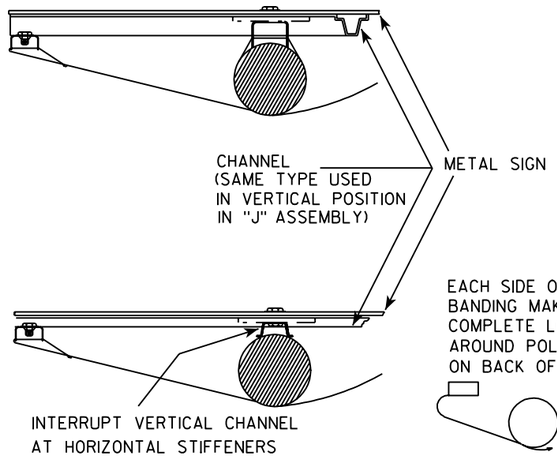


DETAIL C
CADMIUM PLATED STEEL BOLT
THROUGH BLACK BORDER




DETAIL C



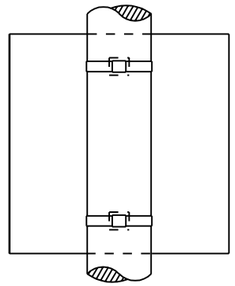


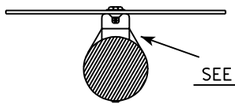

EACH SIDE OF BRACE
BANDING MAKES ONE
COMPLETE LOOP
AROUND POLE-SEAL
ON BACK OF POLE



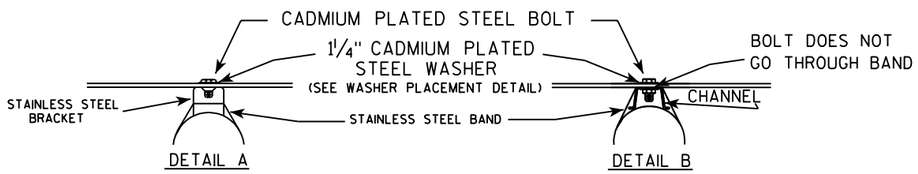
## BRACKET BANDING

SINGLE SIGN

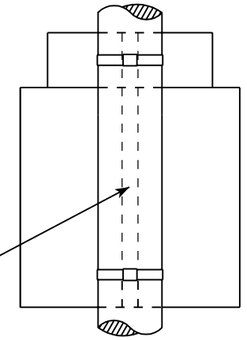




SEE DETAIL A




"J" ASSEMBLY

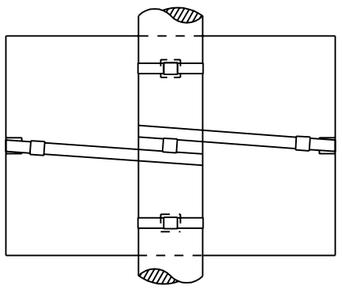


CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

SEE DETAIL B

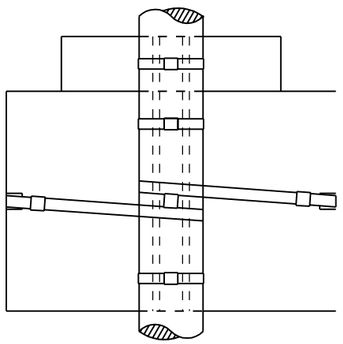
## GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

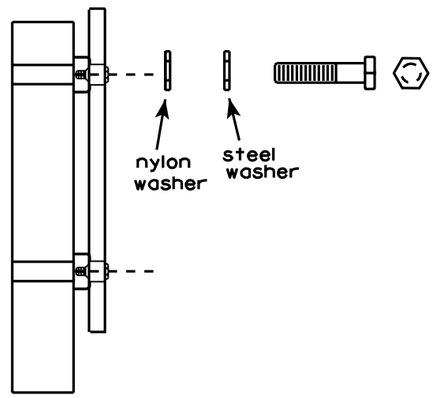


### BRACE BANDING

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



## 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

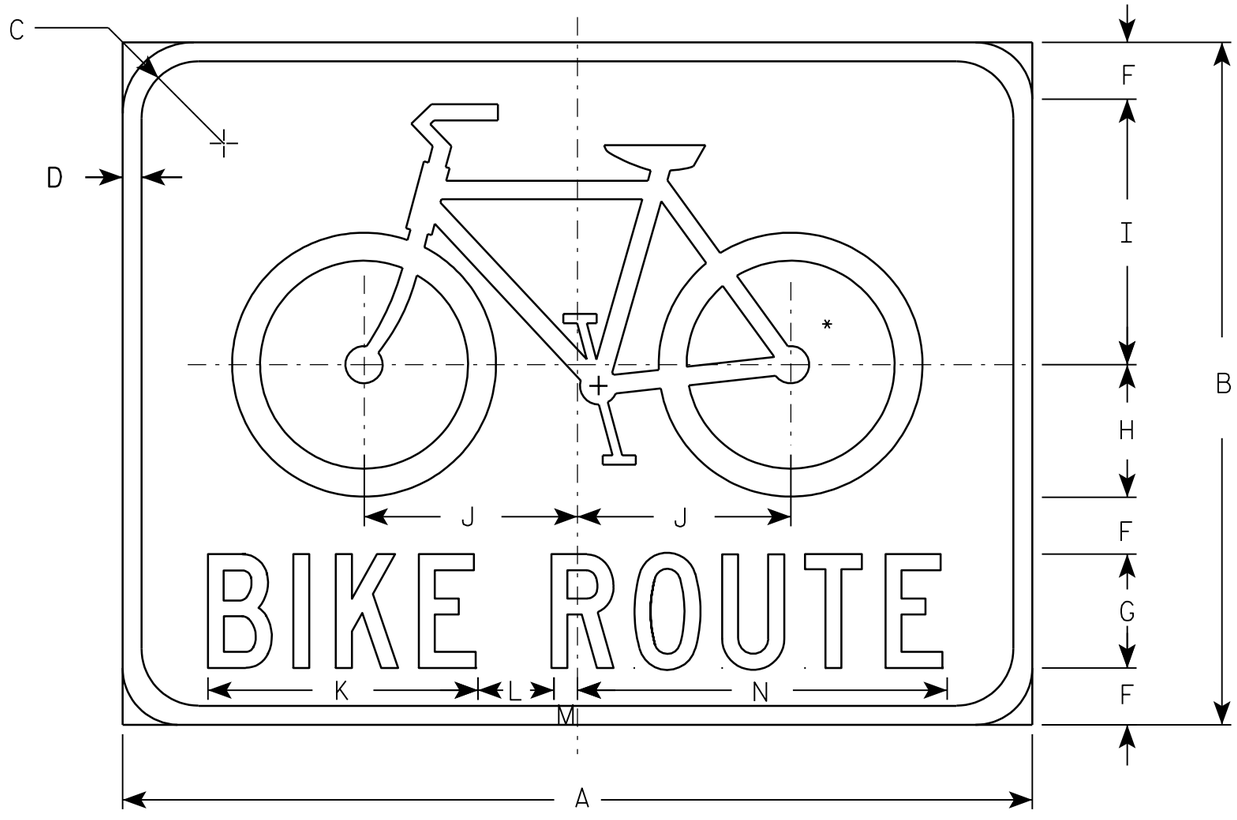
# STANDARD SIGN
# SIGN BANDING DETAILS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

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

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 162 | E |
|---|---|---|---|---|---|




D11-1

NOTES

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

* See W11-1 for symbol design

Metric equivalent for this sign is:

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 18 | 1 1/2 | 1/2 | | 1 1/2 | 3 | 3 1/2 | 7 | 5 5/8 | 7 1/8 | 2 | 5/8 | 9 3/4 | | | | | | | | | | | | | 3.0 | 0.27 |
| 3 | 30 | 24 | 1 1/4 | 5/8 | | 2 | 4 | 4 3/4 | 9 1/4 | 7 1/2 | 9 1/2 | 2 5/8 | 7/8 | 13 | | | | | | | | | | | | | 5.0 | 0.45 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
D11-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/04 PLATE NO. D11-1.1

PROJECT NO:

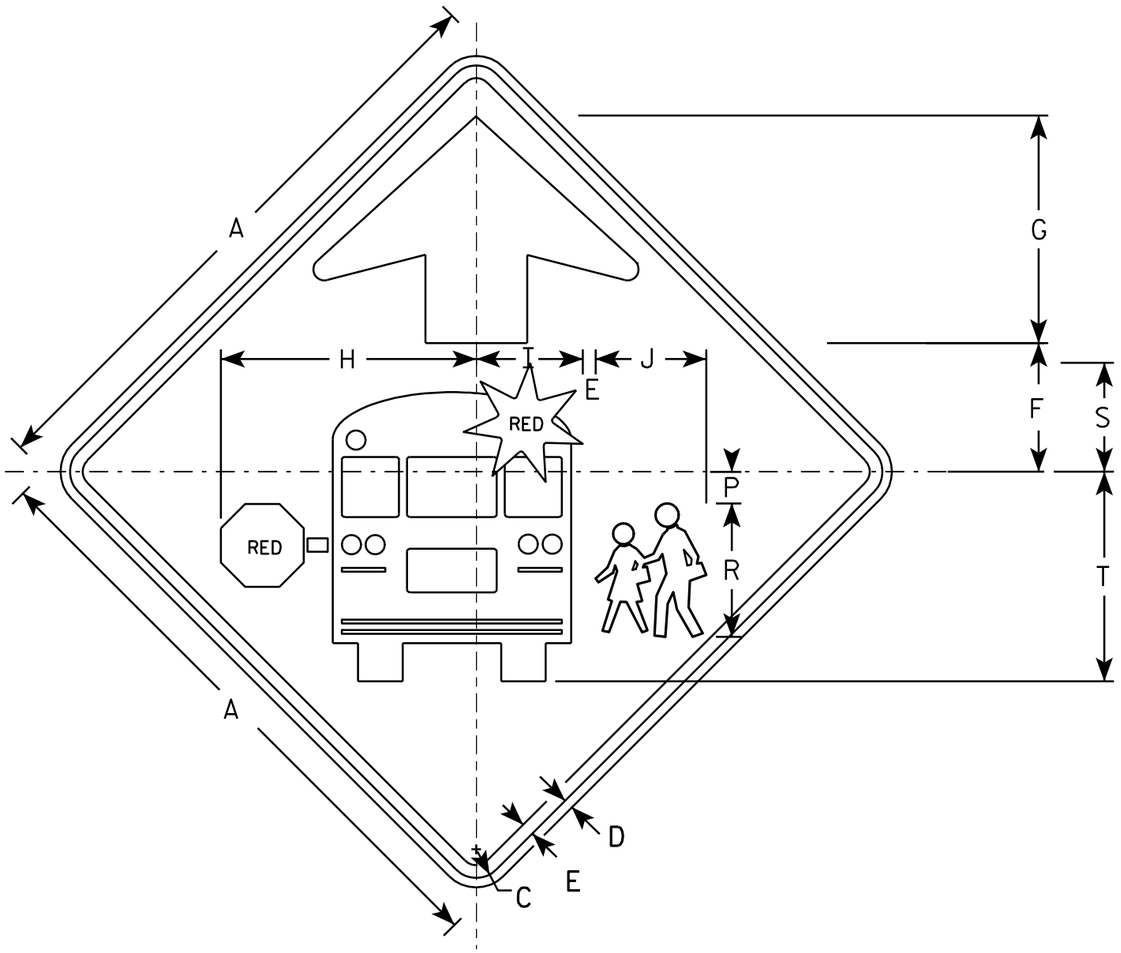
SHEET NO: 163 E

FILE NAME : C:\Users\Projects\tr_stdplate\D111.DGN PLOT DATE : 17-MAR-2005 10:38 PLOT BY : DOTDZK

WISDOT/CADDS SHEET 42

7

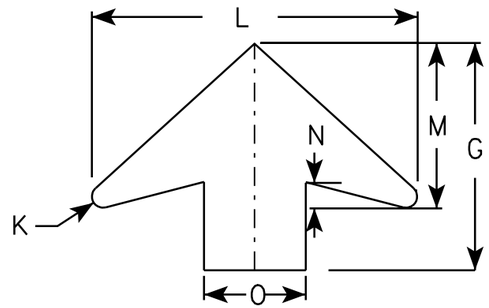
7




S3-1

## NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 6 1/4 | 11 1/4 | 12 1/2 | 5 1/4 | 5 1/2 | 1/2 | 16 | 8 | 1 1/4 | 5 | 1 1/2 | | 6 5/8 | 5 3/8 | 10 3/8 | | | | | | | 6.25 |
| 2 | 36 | | 1 5/8 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 15 1/8 | 6 1/4 | 6 1/2 | 5/8 | 19 1/4 | 9 3/4 | 1 5/8 | 6 | 1 7/8 | | 7 7/8 | 6 3/8 | 12 3/8 | | | | | | | 9.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 10 | 17 7/8 | 20 1/8 | 8 3/8 | 8 3/4 | 7/8 | 25 5/8 | 13 | 2 | 8 | 2 1/2 | | 10 1/2 | 8 1/2 | 16 1/2 | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 10 | 17 7/8 | 20 1/8 | 8 3/8 | 8 3/4 | 7/8 | 25 5/8 | 13 | 2 | 8 | 2 1/2 | | 10 1/2 | 8 1/2 | 16 1/2 | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
S3-1

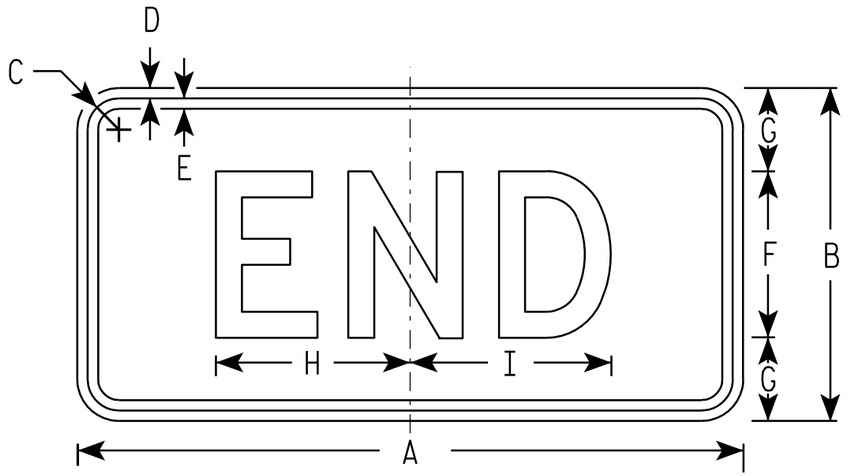
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

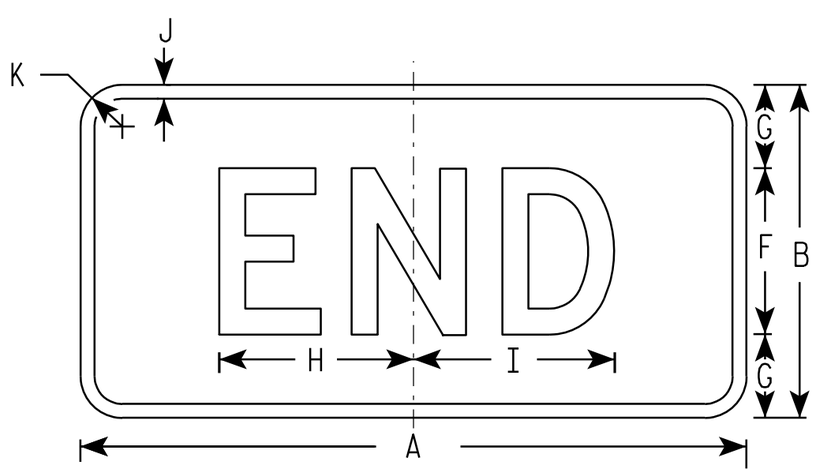
DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

SHEET NO: 164 E




M4-6
MK4-6
MM4-6
MR4-6




MB4-6
MG4-6
MN4-6

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - 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. M4-6 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
   Message - Black

   MB4-6 Background - Blue
   Message - White - Type H Reflective (Detour or temporary Signs - Reflective)

   MG4-6 Background - Green
   Message - White - Type H Reflective

   MK4-6 Background - Green
   Message - White - Type H Reflective

   MM4-6 Background - White - Type H Reflective
   Message - Green

   MN4-6 Background - Brown
   Message - White - Type H Reflective

   MR4-6 Background - Brown
   Message - Yellow - Type H 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 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 3 | 7 | 7 1/4 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 12 | 11 7/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 12 | 11 7/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 12 | 11 7/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |

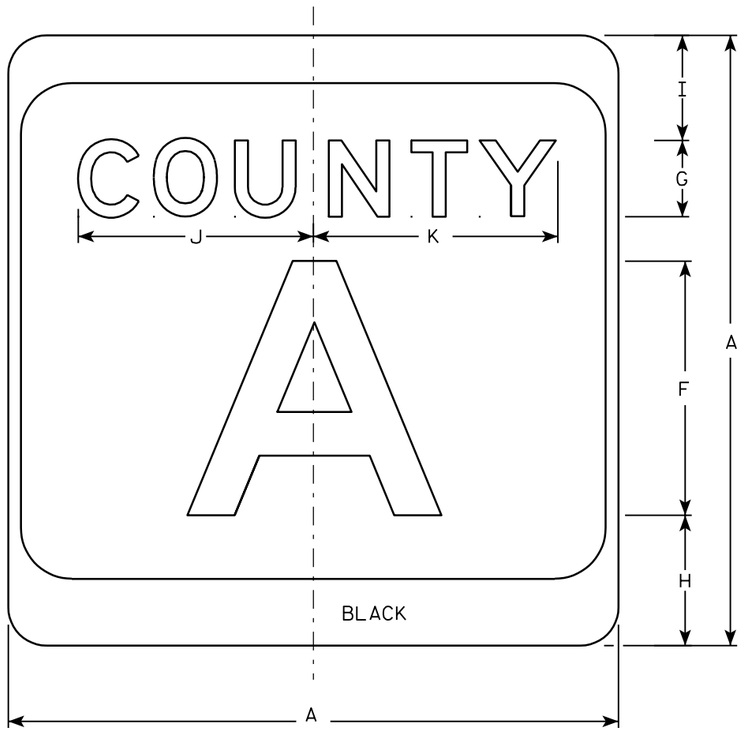
STANDARD SIGN
M4-6

WISCONSIN DEPT OF TRANSPORTATION

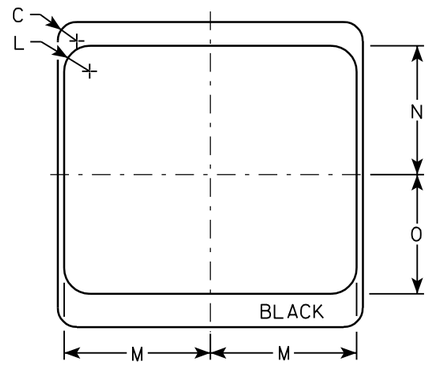
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-6.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 165 | 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 appropirate letters & optically adjust spacing to achieve proper balance.
7. 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 | | | 10 | 3 | 5 1/8 | 4 1/8 | 9 1/4 | 9 5/8 | 2 | 11 1/2 | 10 1/8 | 9 3/8 | | | | | | | | | | | | 4.0 | .36 |
| 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 | | | | | | | | | | | | 9.0 | .81 |
| 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 | | | | | | | | | | | | 9.0 | .81 |
| 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 | | | | | | | | | | | | 9.0 | .81 |

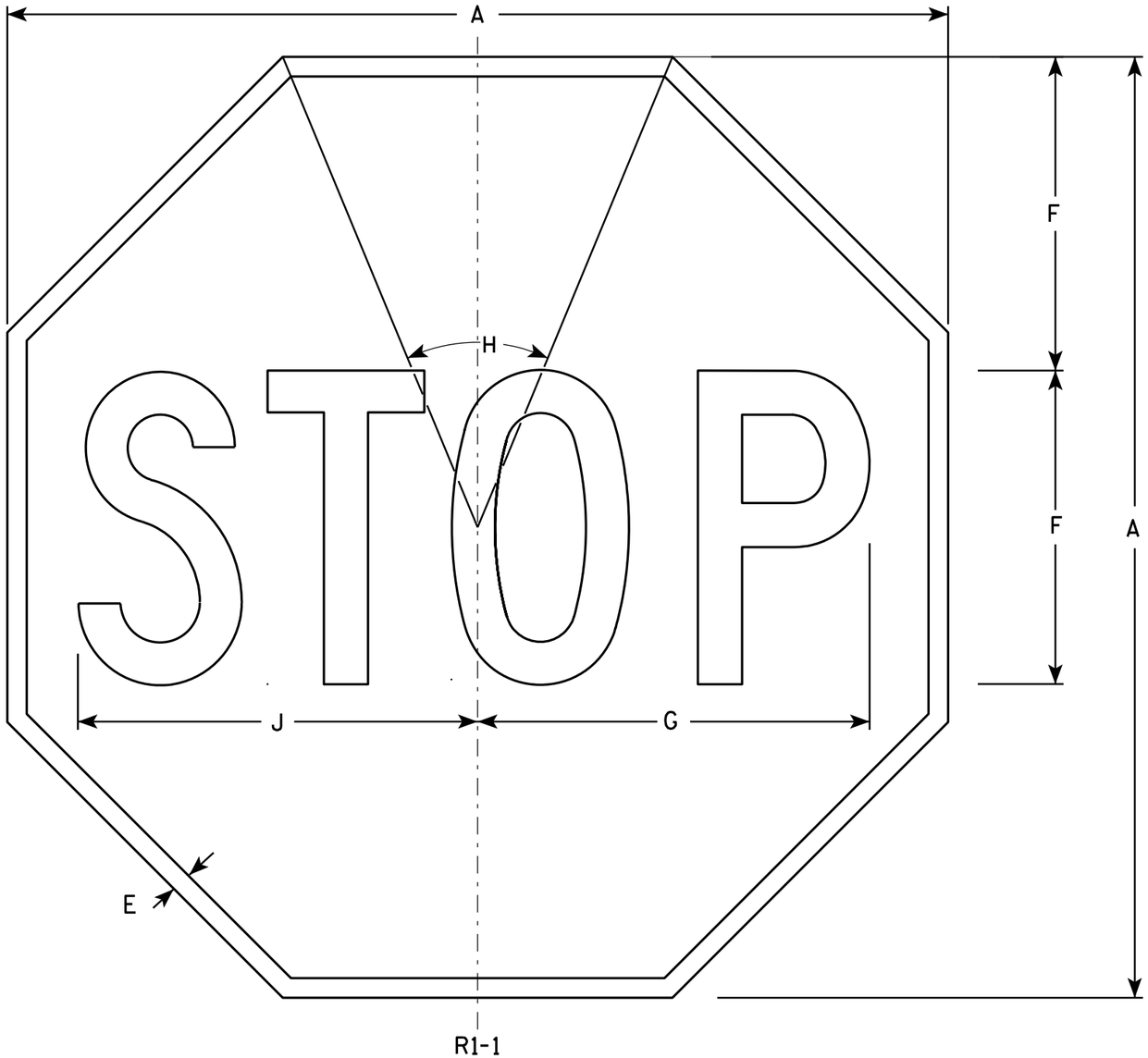
CTH MARKER
M1-5A FOR ASSEMBLIES

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Chester J Spagg for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-5A.7

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 166 | E |
|---|---|---|---|---|---|




NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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 | 24 | | | | 3/8 | 8 | 10 | 45° | | 10 1/4 | | | | | | | | | | | | | | | | | 3.31 |
| 2S | 30 | | | | 5/8 | 10 | 12 1/2 | 45° | | 12 3/4 | | | | | | | | | | | | | | | | | 5.18 |
| 2M | 36 | | | | 3/4 | 12 | 15 | 45° | | 15 3/8 | | | | | | | | | | | | | | | | | 7.46 |
| 3 | 36 | | | | 3/4 | 12 | 15 | 45° | | 15 3/8 | | | | | | | | | | | | | | | | | 7.46 |
| 4 | 48 | | | | 1 | 16 | 20 | 45° | | 20 1/2 | | | | | | | | | | | | | | | | | 13.25 |
| 5 | 48 | | | | 1 | 16 | 20 | 45° | | 20 1/2 | | | | | | | | | | | | | | | | | 13.25 |
| 6 | 18 | | | | 3/8 | 6 | 7 3/4 | 45° | | 7 3/4 | | | | | | | | | | | | | | | | | 1.86 |
| 7 | 12 | | | | 1/4 | 4 | 5 | 45° | | 5 1/8 | | | | | | | | | | | | | | | | | 0.78 |

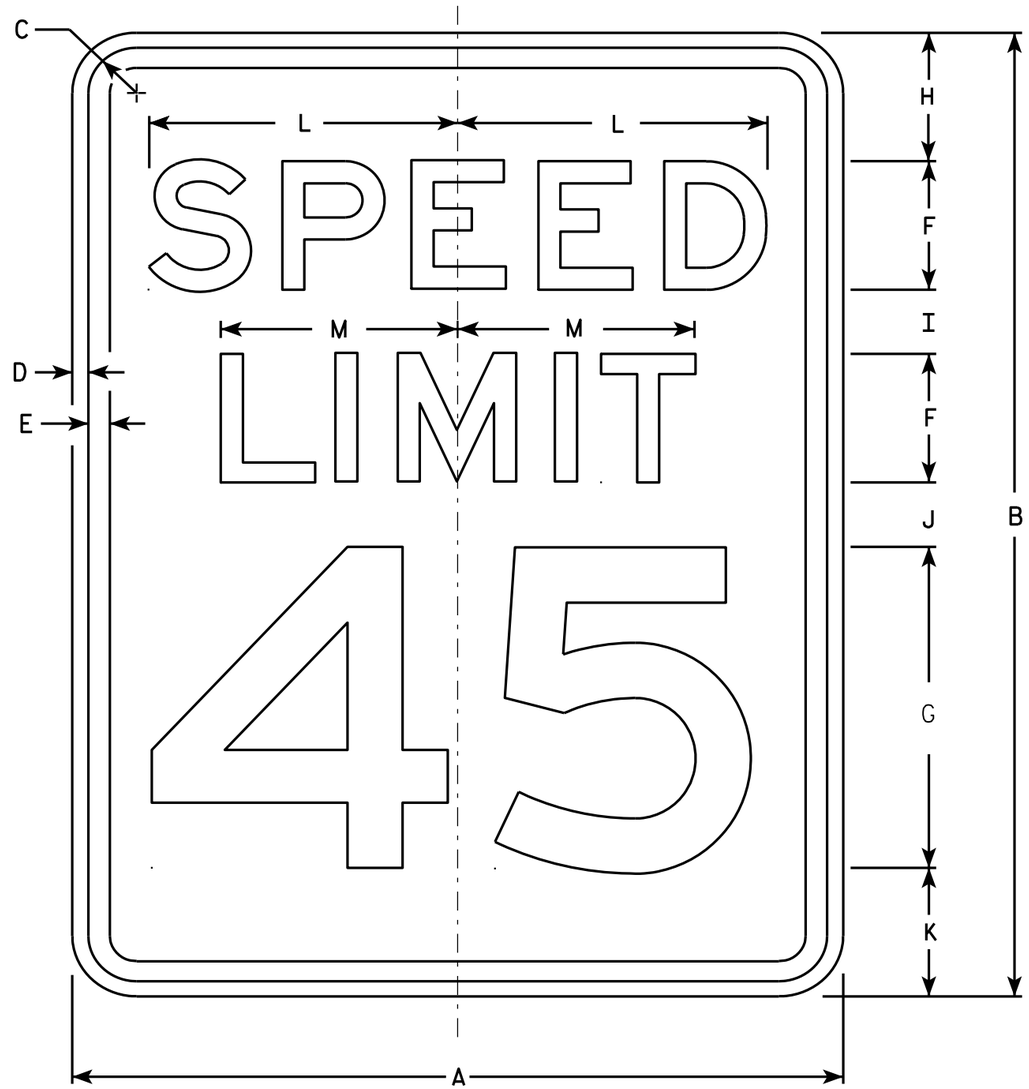
# STANDARD SIGN
# R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 167 | 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 |

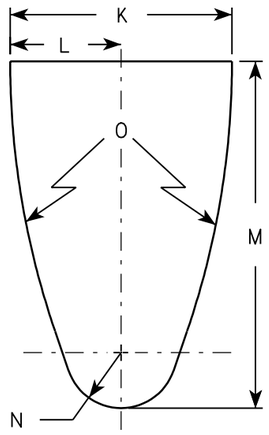
STANDARD SIGN
R2-1

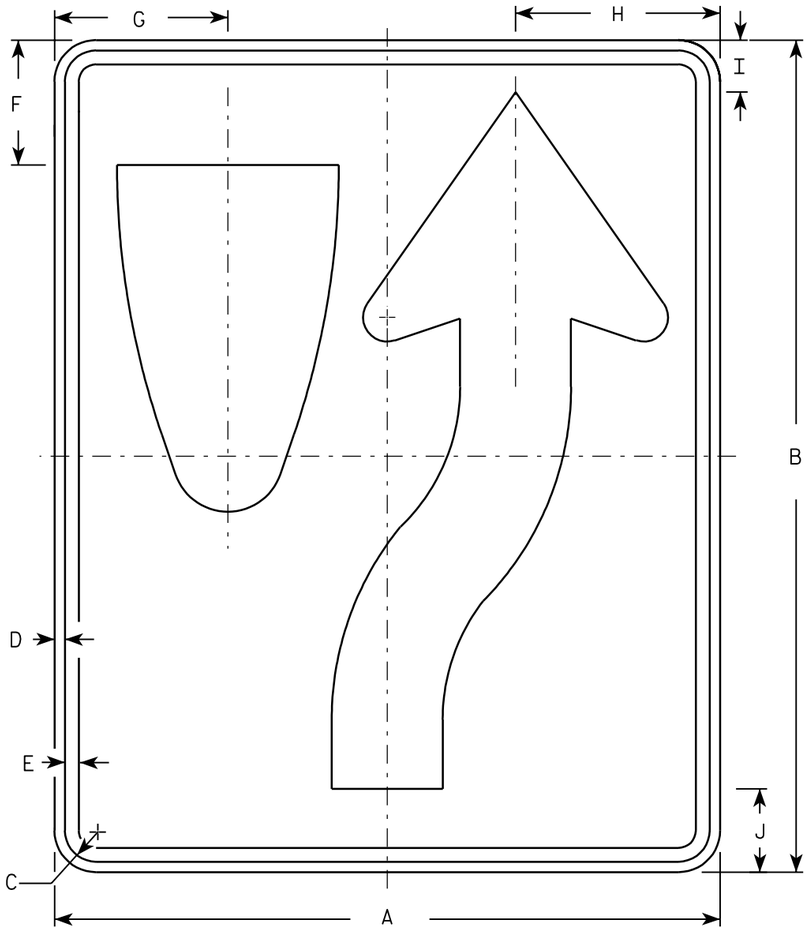
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 168 | E

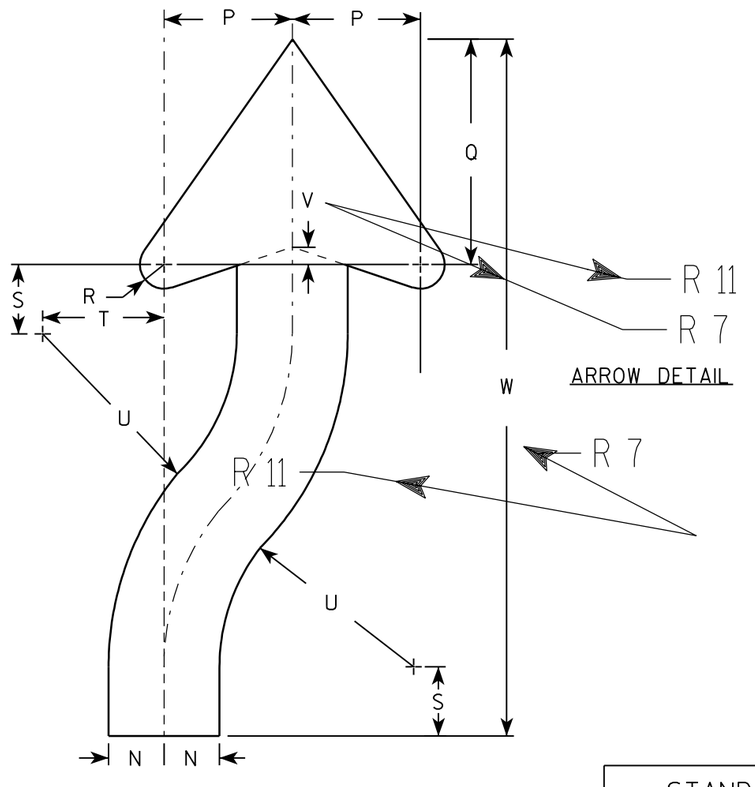



R4-7

NOTES

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




ARROW DETAIL

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | 450 mm X 600 mm |
| 2 | 600 mm X 750 mm |
| 3 | 900 mm X 1200 mm |
| 4 | 900 mm X 1200 mm |
| 5 | 900 mm X 1200 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 | 18 | 24 | 1 1/8 | 3/8 | 1/2 | 3 3/8 | 4 3/4 | 5 1/2 | 1 3/8 | 2 1/4 | 6 | 3 | 9 3/8 | 1 1/2 | 22 1/2 | 3 1/2 | 6 1/8 | 5/8 | 1 7/8 | 3 1/4 | 6 3/4 | 1/2 | 20 3/8 | | | | 3.0 | .27 |
| 2 | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 4 1/2 | 6 1/4 | 7 3/8 | 1 7/8 | 3 | 8 | 4 | 12 1/2 | 2 | 30 | 4 5/8 | 8 1/8 | 7/8 | 2 1/2 | 4 3/8 | 9 | 5/8 | 25 1/8 | | | | 5.0 | .45 |
| 3 | 36 | 48 | 1 3/4 | 1/2 | 5/8 | 6 3/4 | 9 3/8 | 11 1/8 | 2 7/8 | 4 1/2 | 12 | 6 | 18 3/4 | 3 | 45 | 6 7/8 | 12 1/4 | 1 1/4 | 3 3/4 | 6 5/8 | 13 1/2 | 1 | 40 3/4 | | | | 12.0 | 1.08 |
| 4 | 36 | 48 | 1 3/4 | 1/2 | 5/8 | 6 3/4 | 9 3/8 | 11 1/8 | 2 7/8 | 4 1/2 | 12 | 6 | 18 3/4 | 3 | 45 | 6 7/8 | 12 1/4 | 1 1/4 | 3 3/4 | 6 5/8 | 13 1/2 | 1 | 40 3/4 | | | | 12.0 | 1.08 |
| 5 | 48 | 60 | 2 1/4 | 3/4 | 1 | 9 | 12 1/2 | 14 3/4 | 3 3/4 | 6 | 16 | 8 | 25 | 4 | 60 | 9 1/4 | 16 1/4 | 1 5/8 | 5 | 8 3/4 | 18 | 1 1/4 | 50 1/4 | | | | 20.0 | 1.08 |

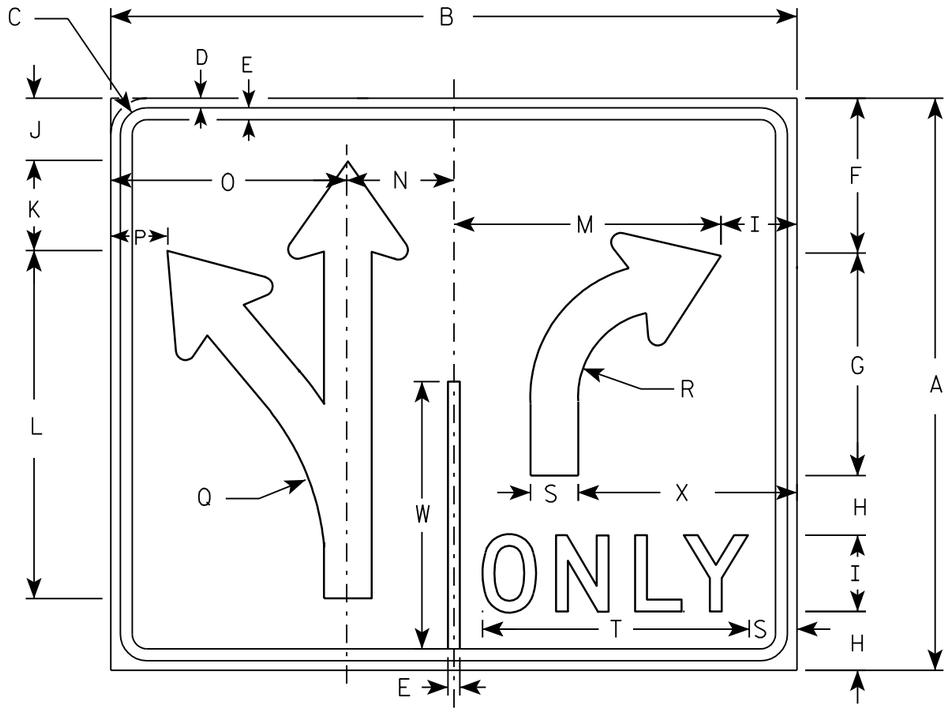
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 2/6/02 PLATE NO. R4-7.7

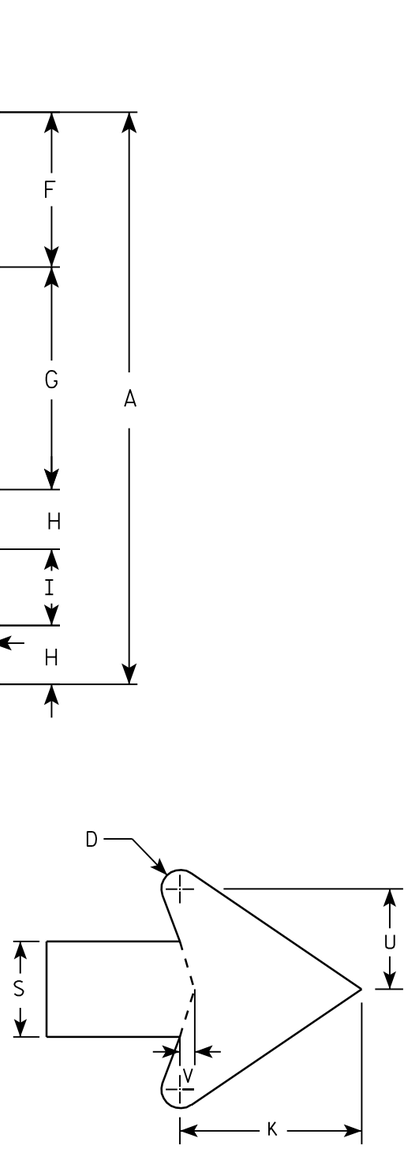
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 169 | E |
|---|---|---|---|---|---|



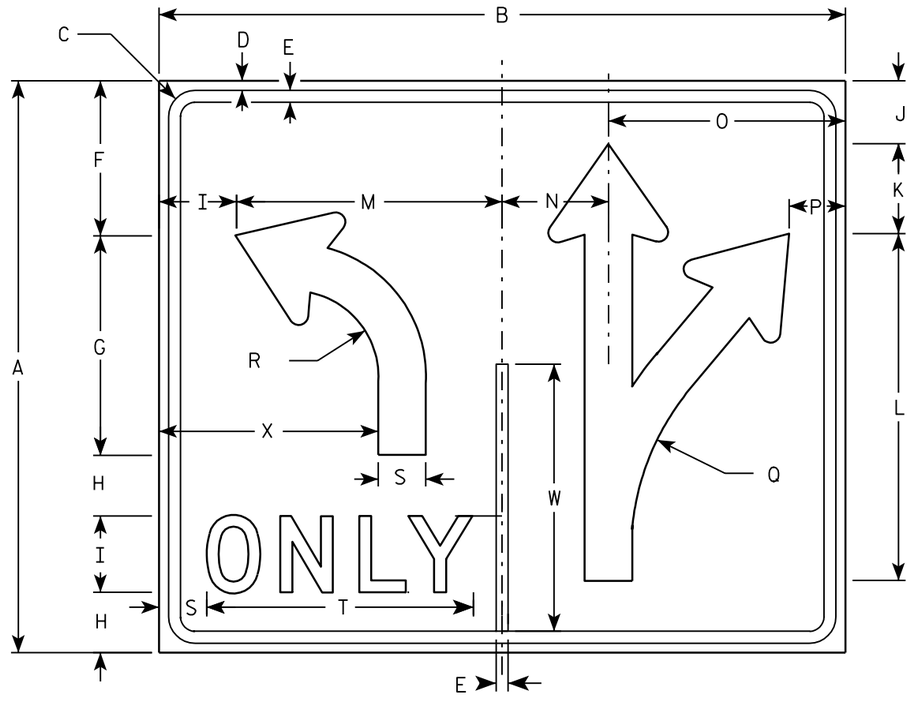

R3-8

NOTES

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




R3-8A

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | |
| 2 | 750 mm X 900 mm |
| 3 | |
| 4 | 1200 mm X 1350 mm |
| 5 | 1200 mm X 1350 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 | 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 | 0.68 |
| 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 | 1.62 |
| 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 | 1.62 |

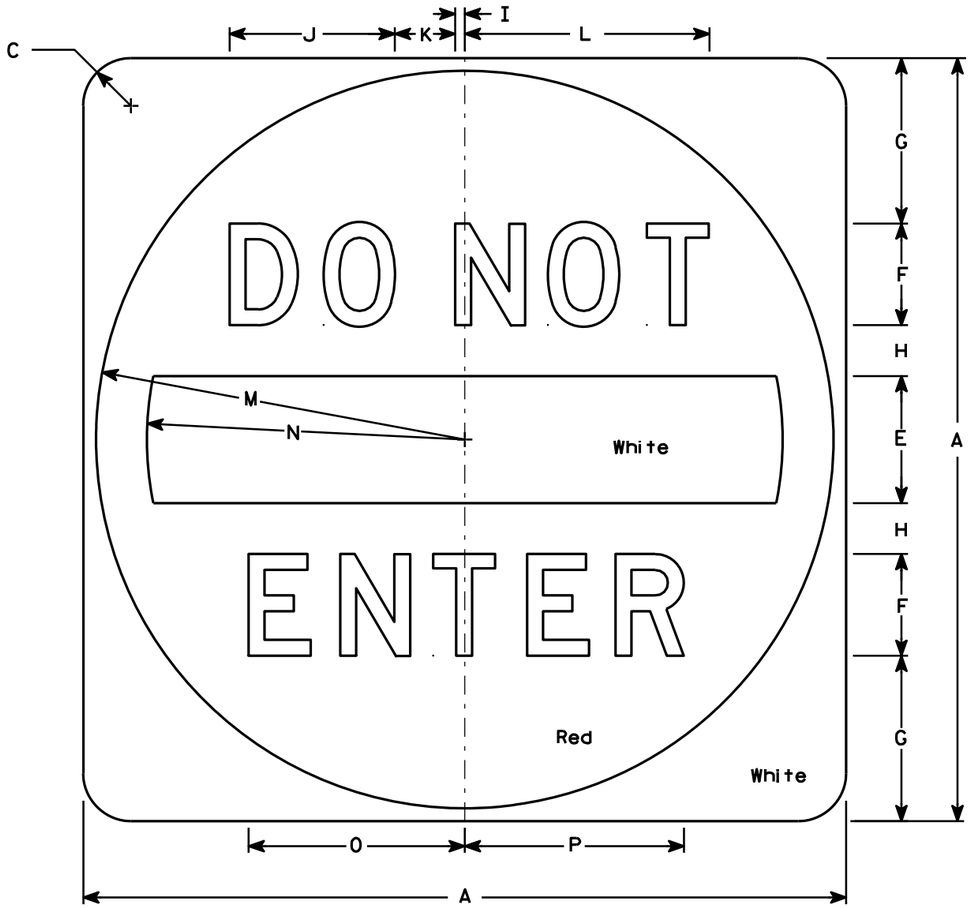
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/04 PLATE NO. R3-8.4

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 170 | 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 |

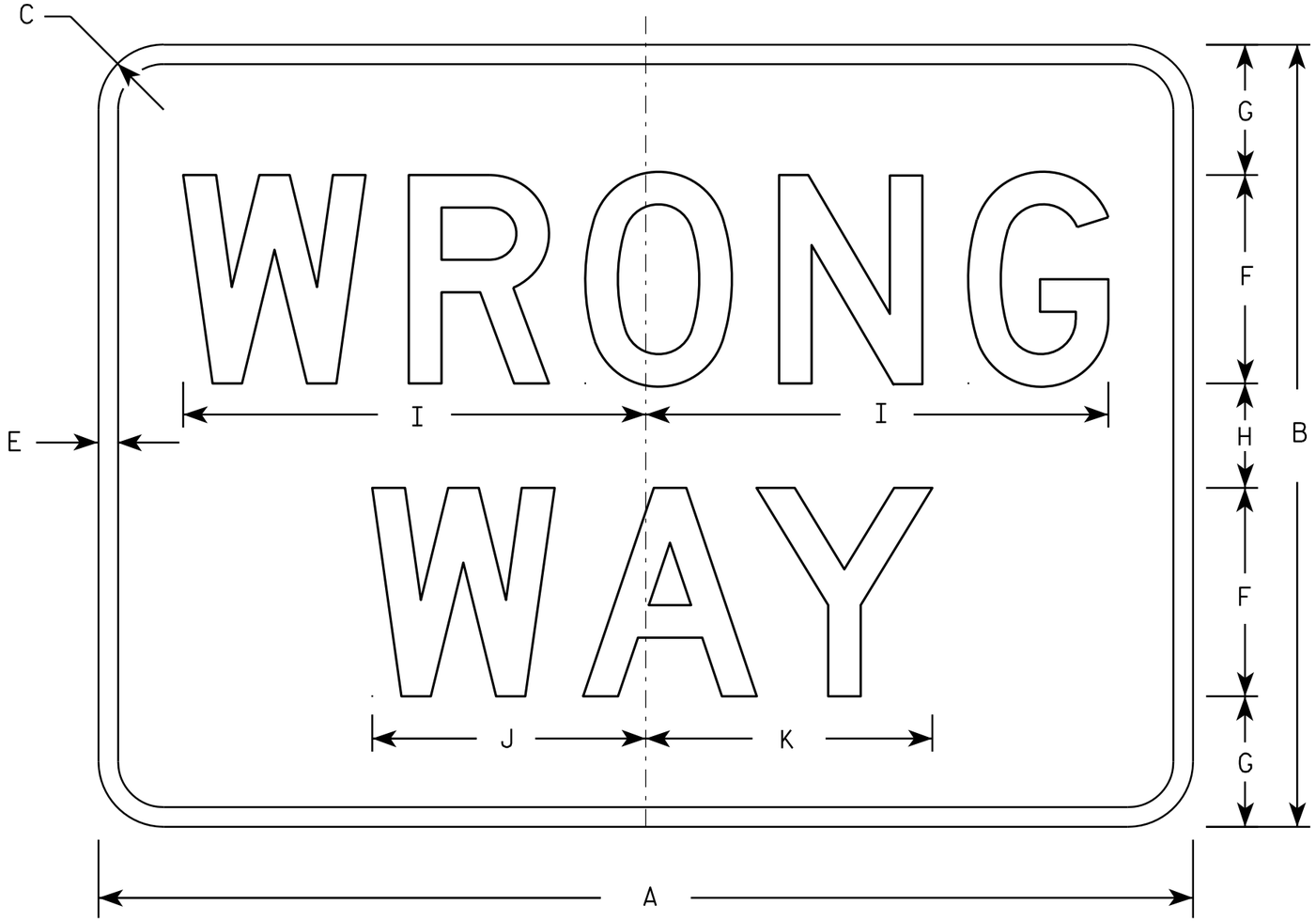
STANDARD SIGN
R5-1

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: 171 | 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 |

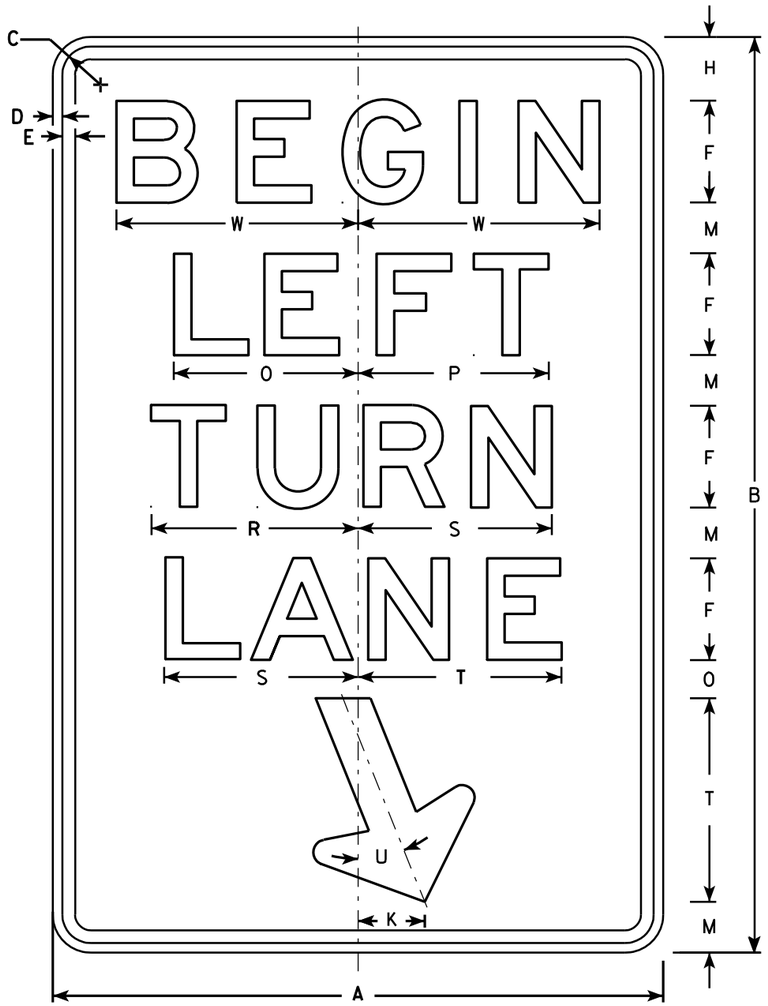
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

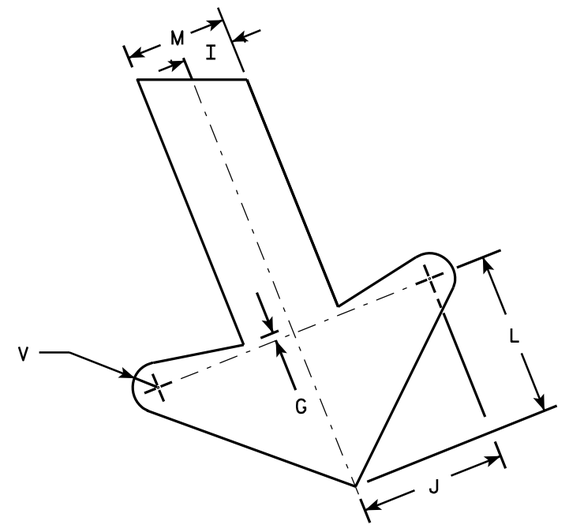
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 172 | E |
|---|---|---|---|---|---|




R3-20L

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.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 7 1/4 | 7 1/2 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 2M | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 7 1/4 | 7 1/2 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 3 | 36 | 54 | 1 3/4 | 1/2 | 5/8 | 6 | 3/8 | 3 3/4 | 1 1/2 | 4 1/4 | 4 | 4 7/8 | 3 | 2 1/4 | 10 7/8 | 11 1/4 | | 12 1/4 | 11 1/2 | 12 | 22° | 3/4 | 13 1/4 | | | | 13.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

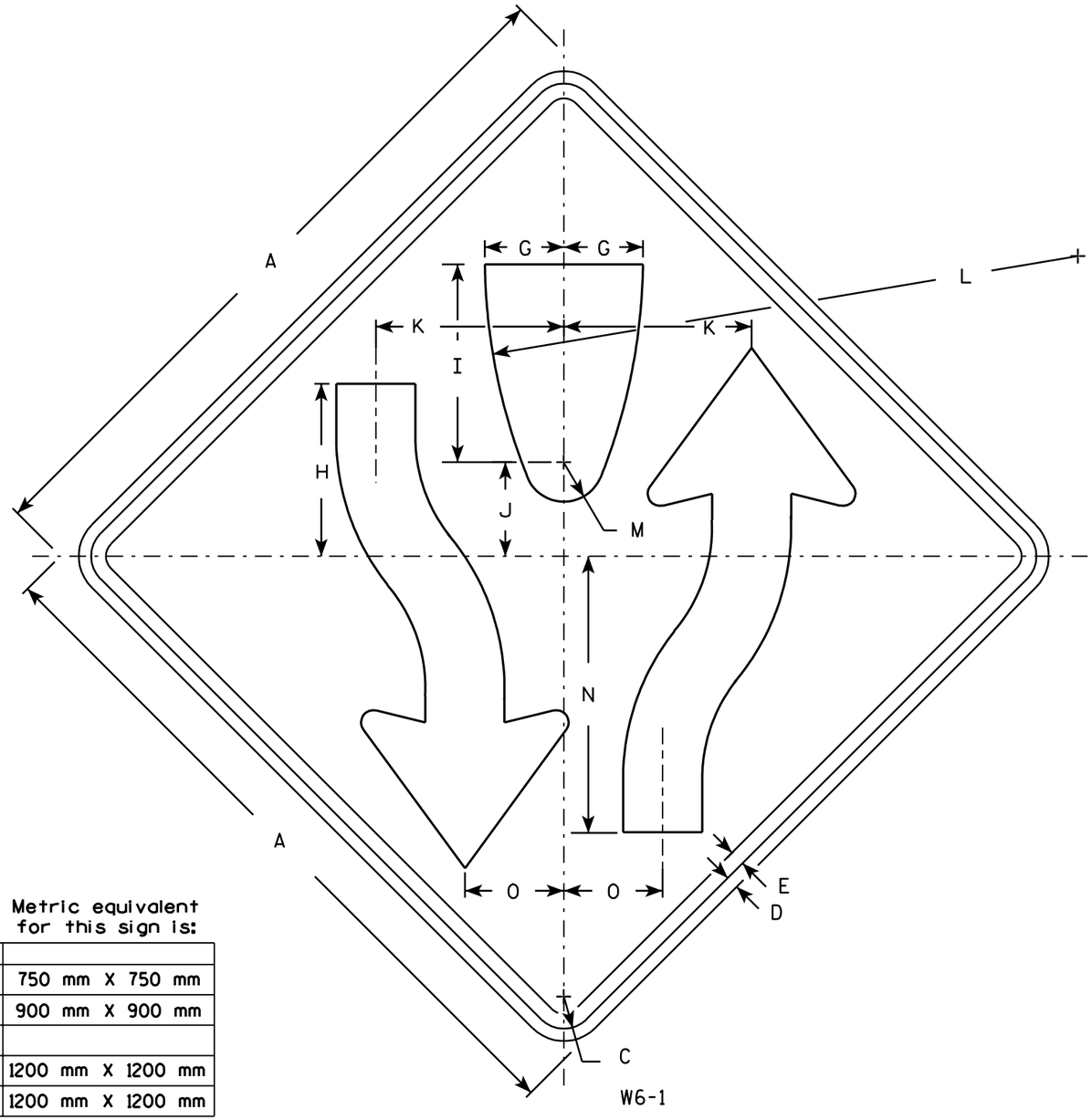
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

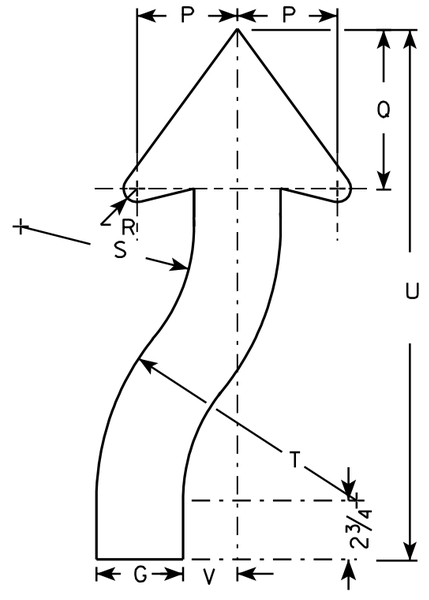
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 173 | E




W6-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.




ARROW DETAIL

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | 750 mm X 750 mm |
| 2 | 900 mm X 900 mm |
| 3 | |
| 4 | 1200 mm X 1200 mm |
| 5 | 1200 mm X 1200 mm |

| 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. | Area m² |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | | 3 1/4 | 8 | 8 1/4 | 4 1/8 | 7 7/8 | 25 | 1 3/4 | 11 5/8 | 4 1/8 | 3 7/8 | 6 3/4 | 5/8 | 6 5/8 | 9 7/8 | 21 5/8 | 2 | | | | | 6.25 | 0.56 |
| 2 | 36 | | 1 5/8 | 5/8 | 3/4 | | 4 | 8 3/4 | 10 | 4 3/4 | 9 1/2 | 30 | 2 | 14 | 5 | 4 5/8 | 7 3/8 | 7/8 | 8 | 12 | 24 1/2 | 2 1/2 | | | | | 9.0 | 0.81 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 5 3/8 | 11 5/8 | 13 3/8 | 6 3/8 | 12 5/8 | 40 | 2 5/8 | 18 5/8 | 6 5/8 | 6 1/4 | 9 7/8 | 1 1/4 | 10 5/8 | 16 | 32 5/8 | 3 3/8 | | | | | 16.0 | 1.44 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 5 3/8 | 11 5/8 | 13 3/8 | 6 3/8 | 12 5/8 | 40 | 2 5/8 | 18 5/8 | 6 5/8 | 6 1/4 | 9 7/8 | 1 1/4 | 10 5/8 | 16 | 32 5/8 | 3 3/8 | | | | | 16.0 | 1.44 |

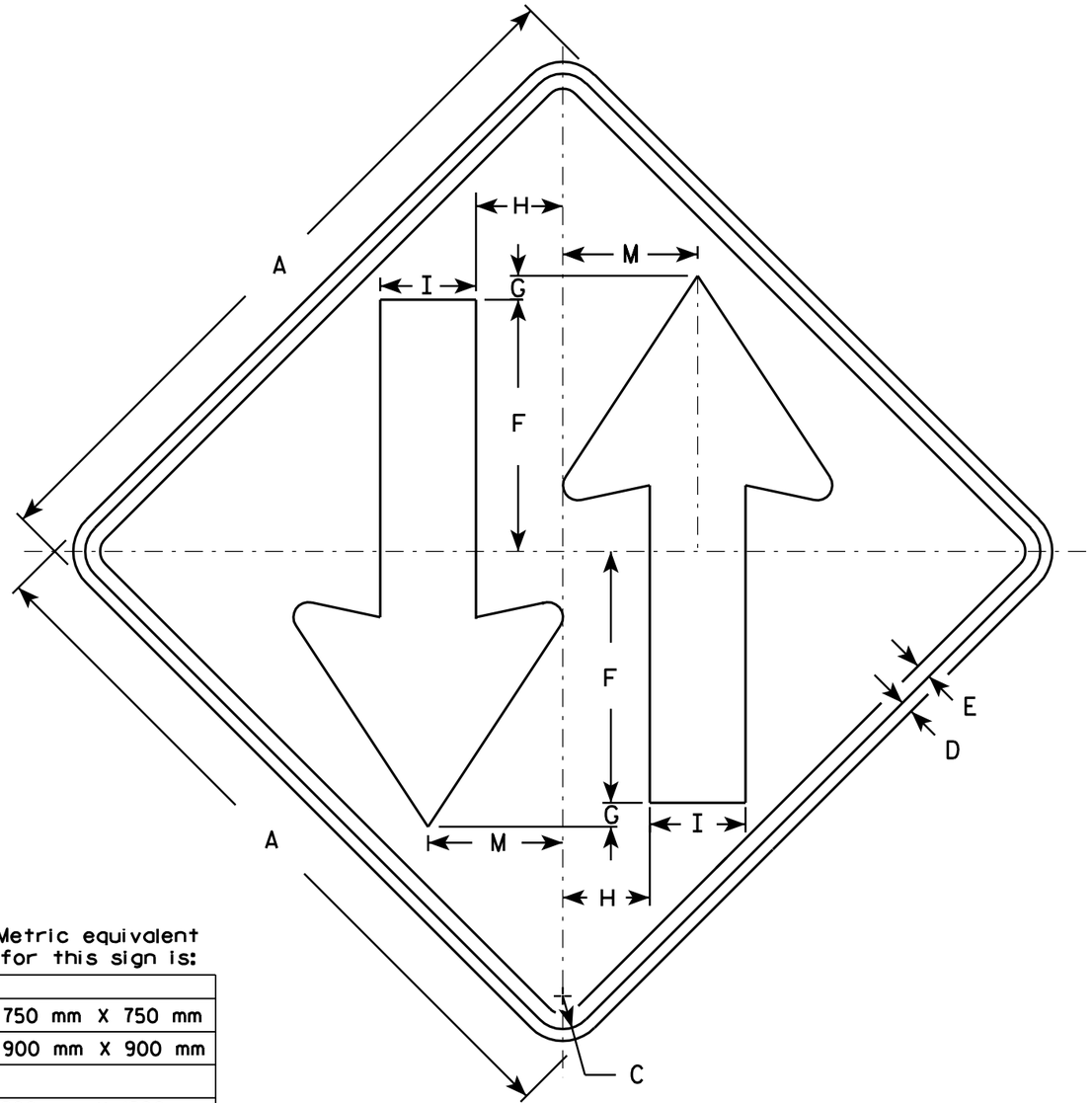
# STANDARD SIGN
# W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/01/05 PLATE NO. W6-1.12

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 174 | E |
|---|---|---|---|---|---|



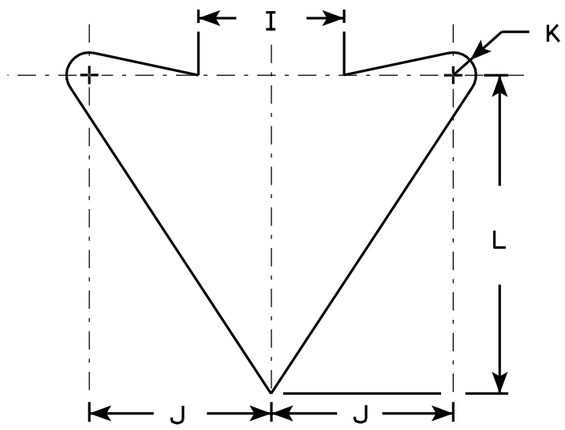

W6-3

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | 750 mm X 750 mm |
| 2 | 900 mm X 900 mm |
| 3 | |
| 4 | 1200 mm X 1200 mm |
| 5 | 1200 mm X 1200 mm |

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. 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. | Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 10 1/2 | 1 | 3 5/8 | 4 | 5 | 5/8 | 8 3/4 | 5 5/8 | | | | | | | | | | | | | | 6.25 | 0.56 |
| 2 | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 1 | 4 1/4 | 5 | 6 | 3/4 | 10 1/2 | 6 3/4 | | | | | | | | | | | | | | 9.0 | 0.81 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 15 1/2 | 1 | 6 | 6 | 8 | 1 | 14 | 9 | | | | | | | | | | | | | | 16.0 | 1.44 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 15 1/2 | 1 | 6 | 6 | 8 | 1 | 14 | 9 | | | | | | | | | | | | | | 16.0 | 1.44 |

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

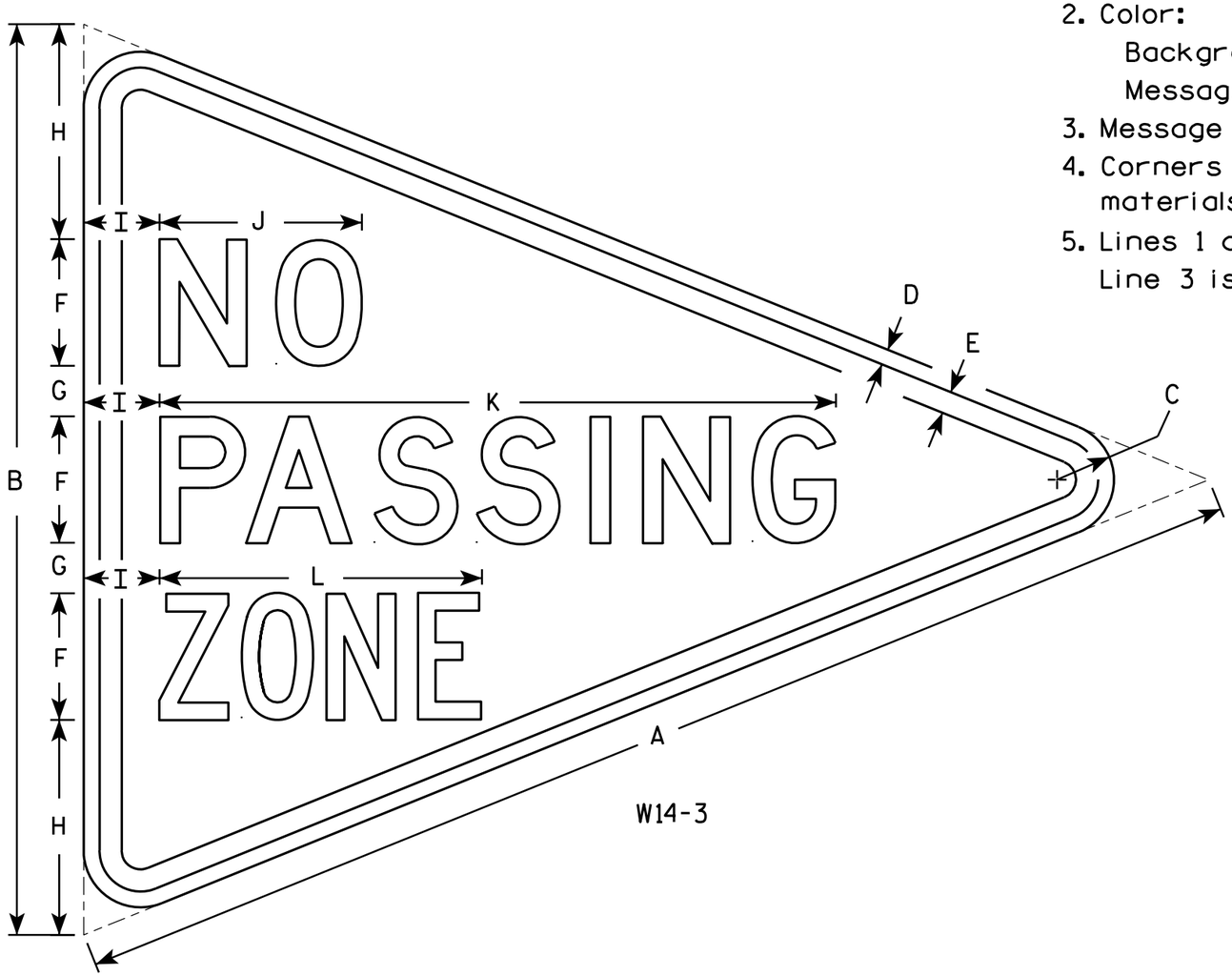
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 03/01/05 PLATE NO. W6-3.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 175 | E |
|---|---|---|---|---|---|

NOTES

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




W14-3

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

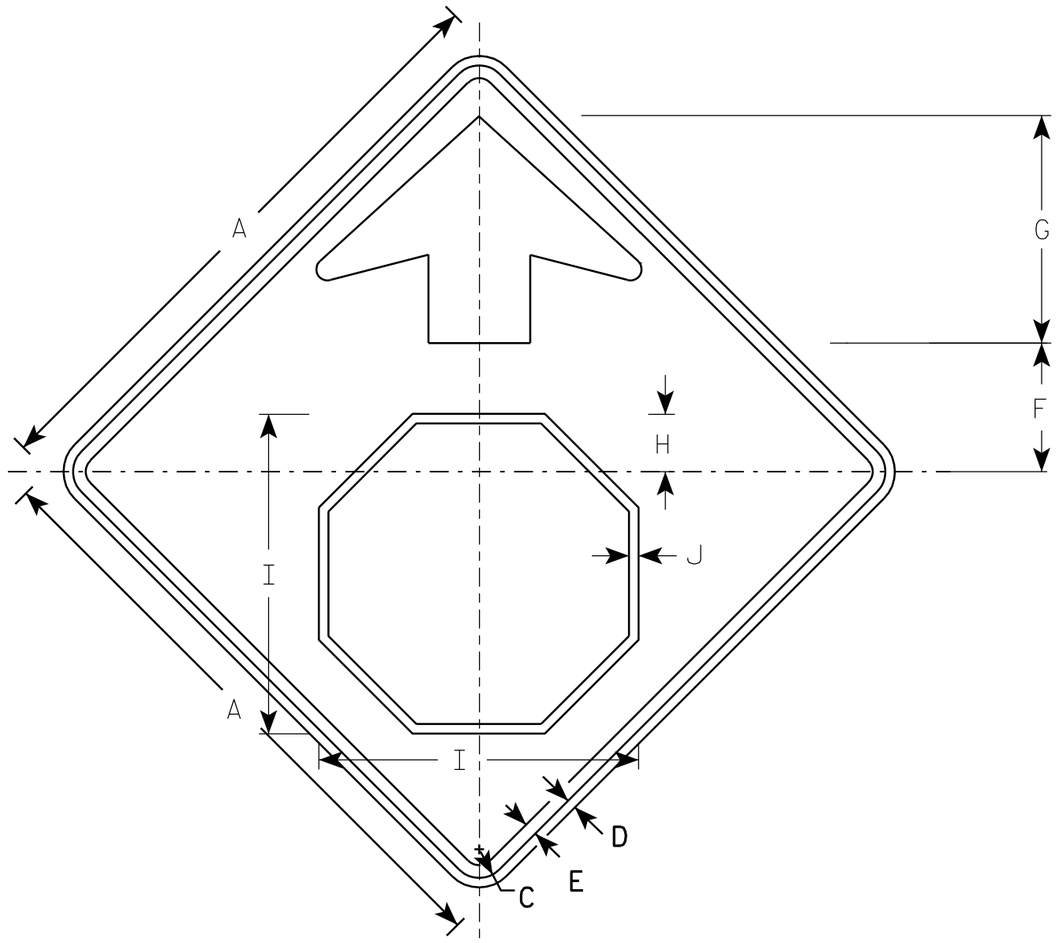
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

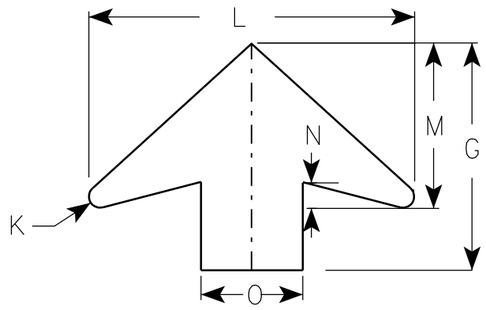
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 176 | E |
|---|---|---|---|---|---|




W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   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 | 30 | | 1 3/8 | 1/2 | 5/8 | 6 1/4 | 11 1/4 | 2 7/8 | 15 3/4 | 1/2 | 1/2 | 16 | 8 | 1 1/4 | 5 | | | | | | | | | | | | 6.25 |
| 2S | 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 |
| 2M | 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 |
| 3 | 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 |
| 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
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

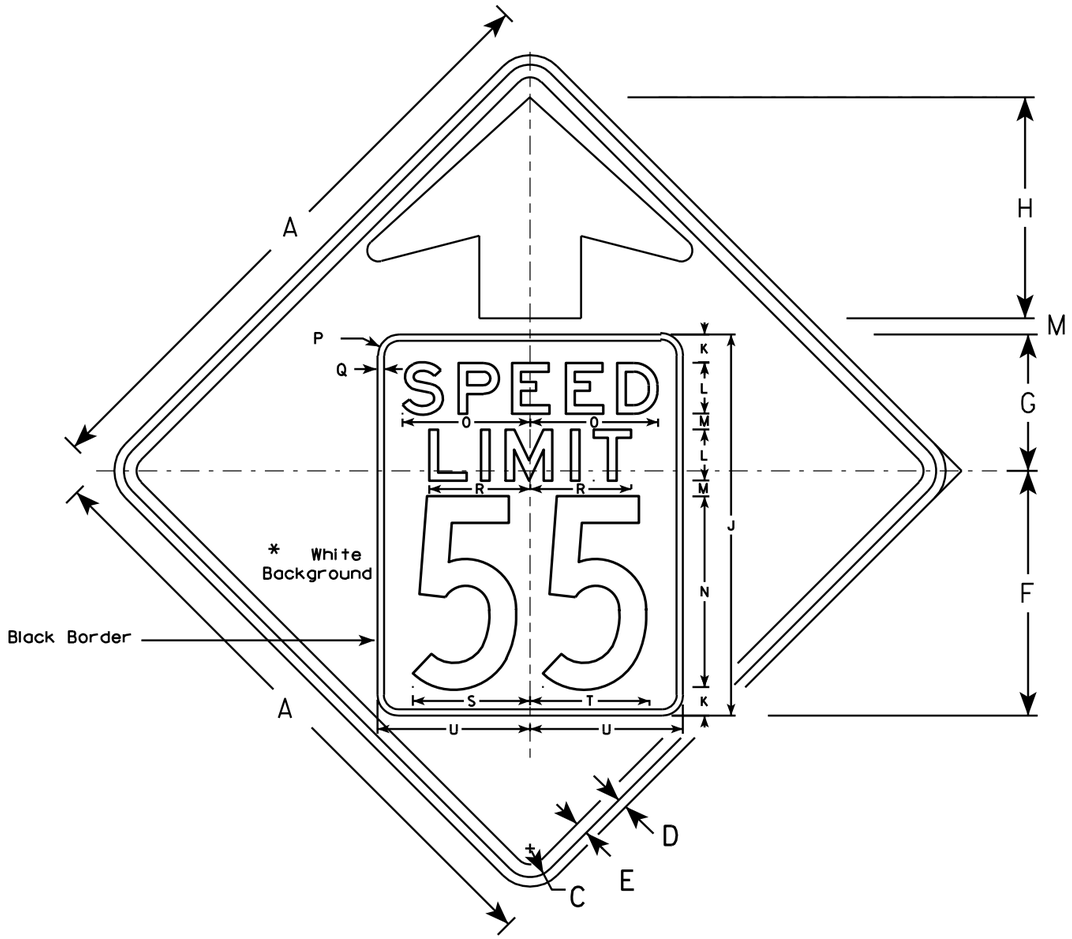
SHEET NO: 177 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W31.DGN PLOT DATE : 07-JUN-2010 12:59 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

7

7

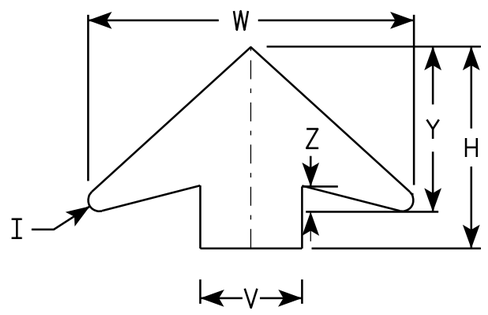



W3-5

## NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - C
4. 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 | | 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 | | 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 | | 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 | | 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 | | 13 | 2 | 16.0 |

STANDARD SIGN
W3-5

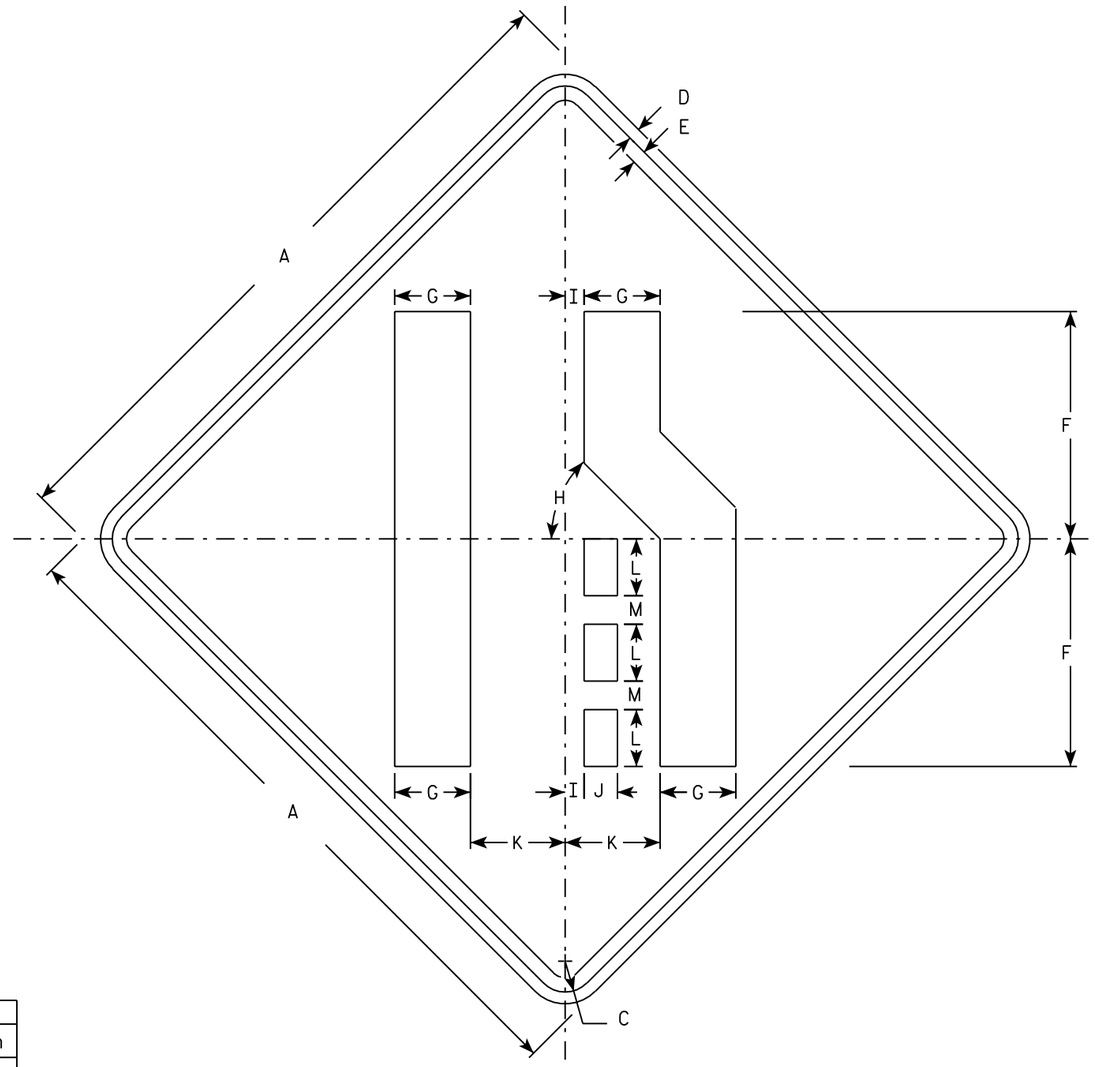
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/08/10 PLATE NO. W3-5.3

PROJECT NO:

SHEET NO: 178 E




W4-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the message is reversed along the vertical centerline.

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | 750 mm X 750 mm |
| 2 | 900 mm X 900 mm |
| 3 | 1200 mm X 1200 mm |
| 4 | 1200 mm X 1200 mm |
| 5 | 1200 mm X 1200 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 | 30 | | 1 3/8 | 1/2 | 5/8 | 10 | 3 3/8 | 45° | 7/8 | 1 1/2 | 4 1/4 | 2 1/2 | 1 1/4 | | | | | | | | | | | | | | 6.25 | 0.56 |
| 2 | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 | 0.81 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 | 1.44 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 | 1.44 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 | 1.44 |

STANDARD SIGN
W4-2

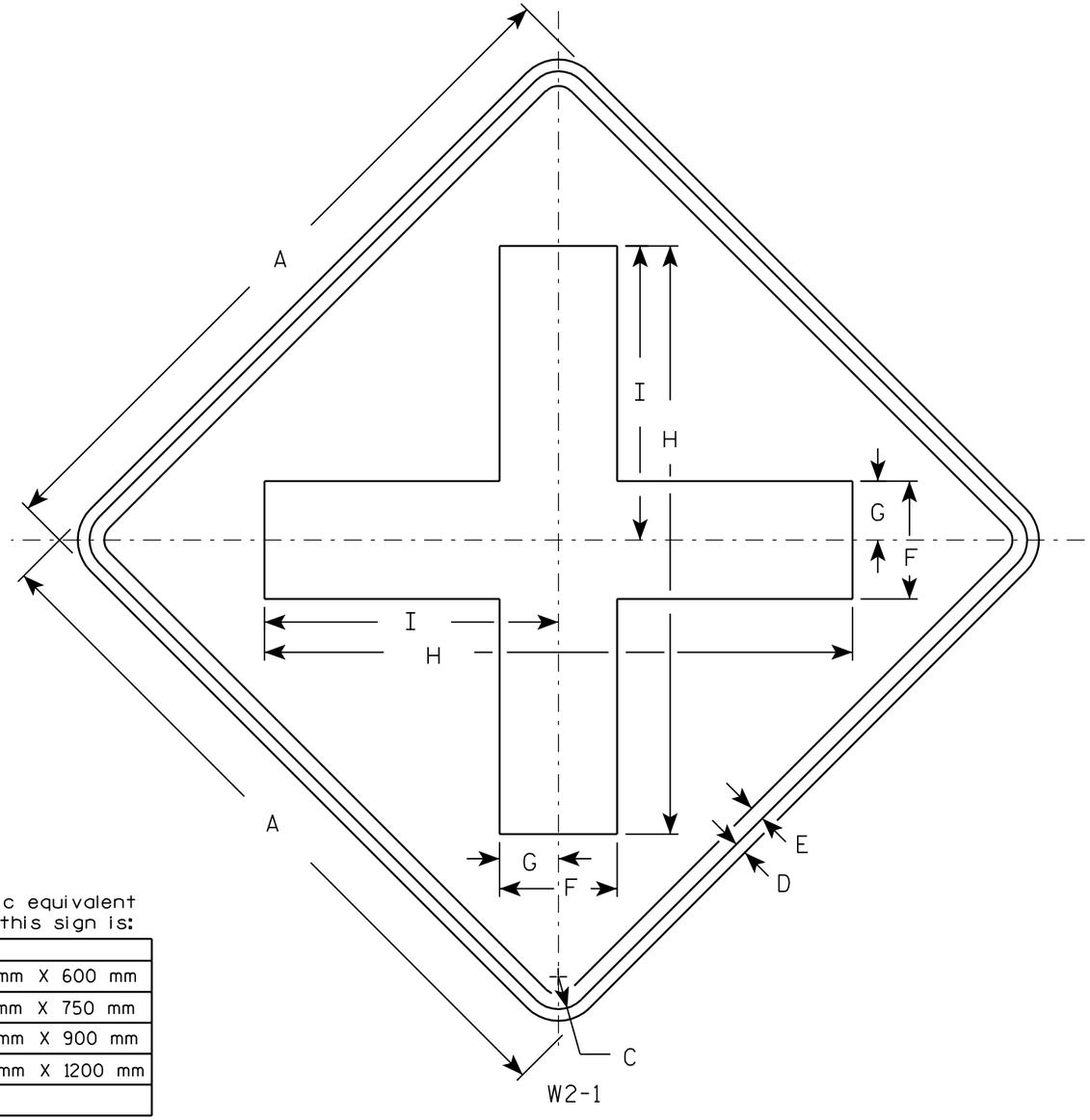
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/08/05 PLATE NO. W4-2.11

PROJECT NO:

SHEET NO: 179 E




## NOTES

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

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | 600 mm X 600 mm |
| 2 | 750 mm X 750 mm |
| 3 | 900 mm X 900 mm |
| 4 | 1200 mm X 1200 mm |
| 5 | |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 4 | 2 | 20 | 10 | | | | | | | | | | | | | | | | | | 4.0 | 0.36 |
| 2 | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 1/2 | 25 | 12 1/2 | | | | | | | | | | | | | | | | | | 6.25 | 0.56 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 3 | 30 | 15 | | | | | | | | | | | | | | | | | | 9.0 | 0.81 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 4 | 40 | 20 | | | | | | | | | | | | | | | | | | 16.0 | 1.44 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W2-1

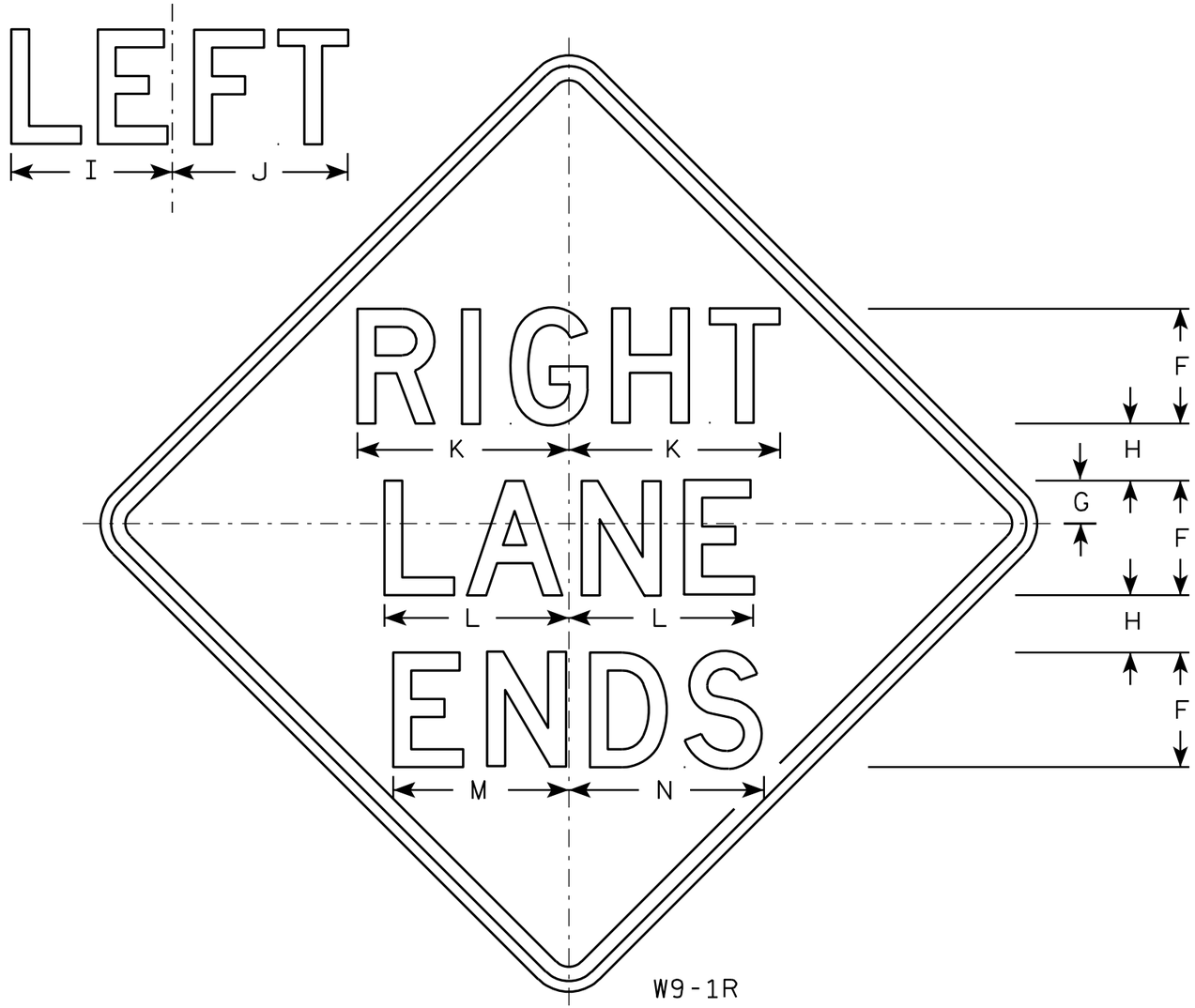
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 01/14/02 PLATE NO. W2-1.7

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 180 | E |
|---|---|---|---|---|---|

FILE NAME : C:\Users\Projects\tr_stdplate\W21.DGN PLOT DATE : 05-OCT-2005 11:51 PLOT BY : DITJPH PLOT NAME : PLOT SCALE : 6.209203:1.000000




W9-1R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W9-1L same as W9-1R except the word Left replaces 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 | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 1 1/2 | 2 1/2 | 7 1/8 | 7 5/8 | 9 1/4 | 8 1/8 | 7 5/8 | 8 5/8 | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 2 | 3 | 8 1/2 | 9 1/8 | 11 | 9 3/4 | 9 | 10 3/8 | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 2 | 3 | 8 1/2 | 9 1/8 | 11 | 9 3/4 | 9 | 10 3/8 | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 2 | 3 | 8 1/2 | 9 1/8 | 11 | 9 3/4 | 9 | 10 3/8 | | | | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 2 | 3 | 8 1/2 | 9 1/8 | 11 | 9 3/4 | 9 | 10 3/8 | | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 | 4 | 11 1/4 | 12 1/4 | 14 3/4 | 12 7/8 | 12 1/4 | 13 5/8 | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 12/20/10 PLATE NO. W9-1.7

PROJECT NO:

SHEET NO: 181 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W91.DGN PLOT DATE : 20-DEC-2010 08:54 PLOT BY : dotsja

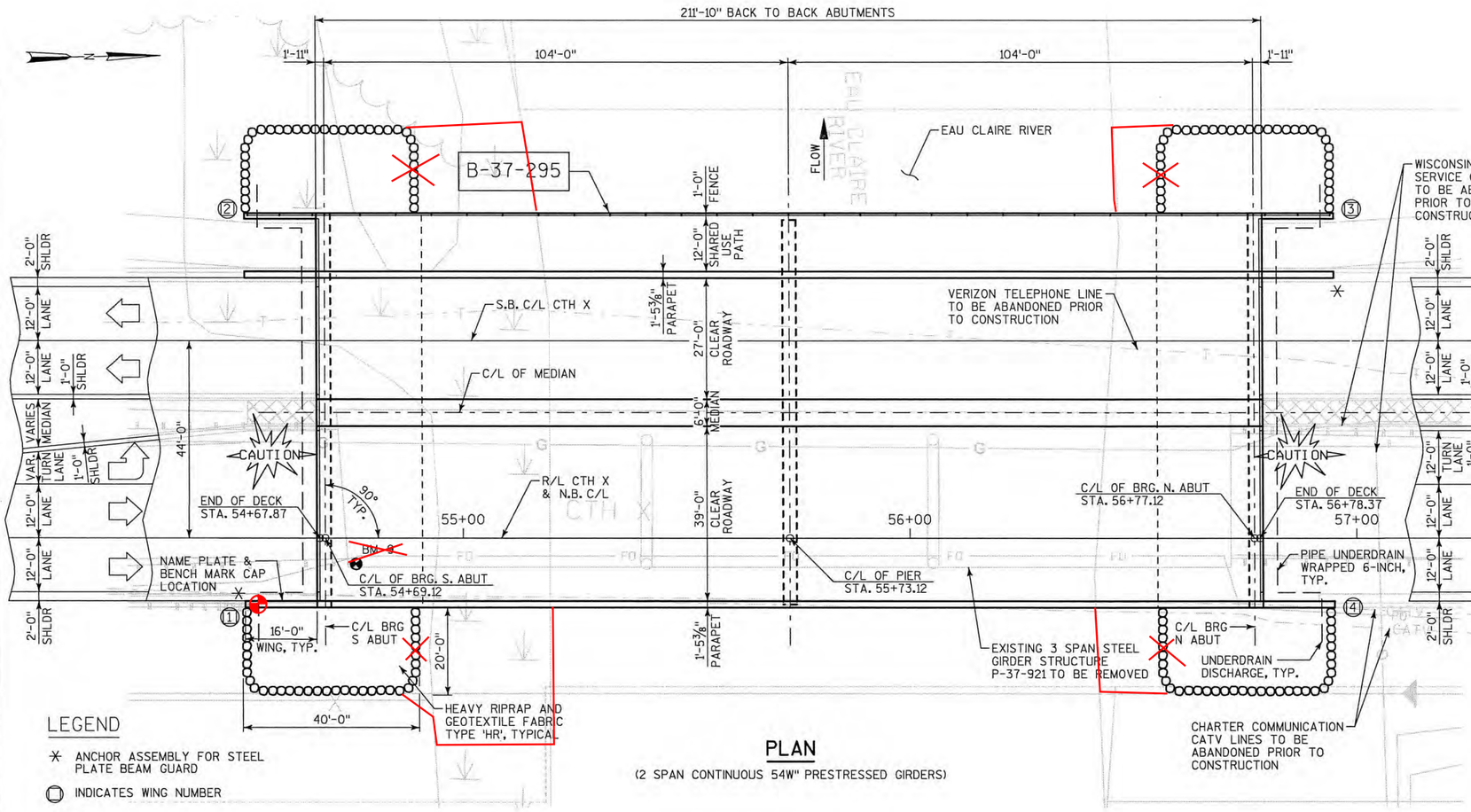
WISDOT/CADDS SHEET 42

7

7

STATE PROJECT NUMBER

6676-03-73

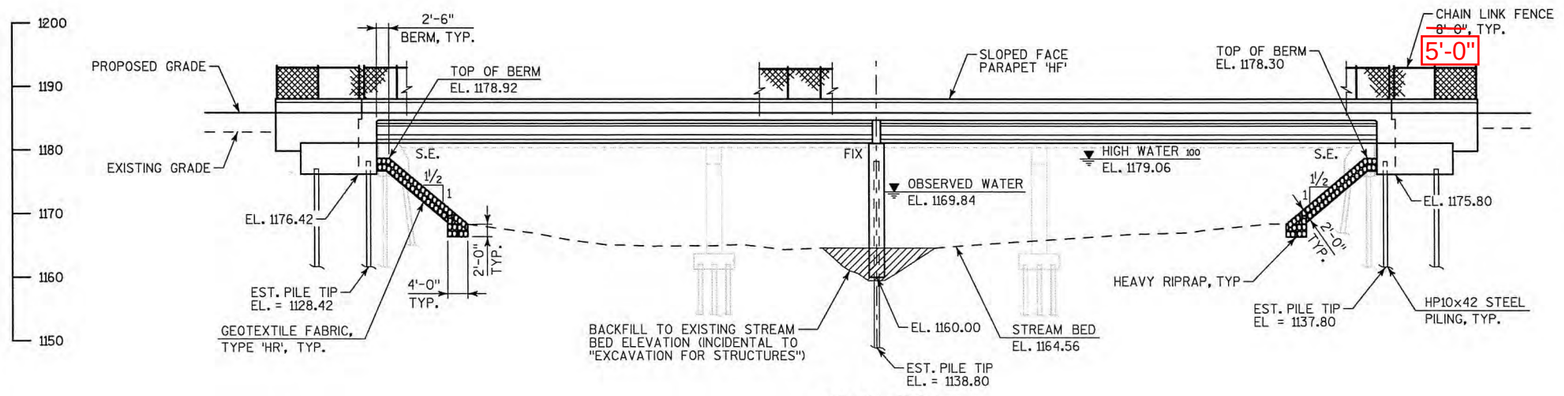



LEGEND

- ANCHOR ASSEMBLY FOR STEEL PLATE BEAM GUARD
- INDICATES WING NUMBER

## PLAN

(2 SPAN CONTINUOUS 54W" PRESTRESSED GIRDERS)




## ELEVATION

(LOOKING WEST)

## DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.21
OPERATING RATING FACTOR: RF = 1.57
MAXIMUM STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR FUTURE WEARING SURFACE OF 20 PSF.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY DECK — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 _____ fy = 60,000 P.S.I.
54W" PRESTRESSED GIRDERS, CONCRETE MASONRY _____ f'c = 8,000 P.S.I.
STRANDS - 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

## FOUNDATION DATA

ABUTMENTS AND PIER TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 55 TONS PER PILE. ESTIMATED LENGTH OF 50 FEET AT SOUTH ABUTMENT, 40 FEET AT PIER, AND 40 FEET AT NORTH ABUTMENT.

## HYDRAULIC DATA

100 YEAR FREQUENCY

DRAINAGE AREA.....448 SQ. MI.
$Q_{100}$.....10,490 C.F.S.
VELOCITY.....4.66 F.P.S.
WATERWAY AREA.....2,256 SQ. FT.
HIGH $WATER_{100}$ ELEVATION.....1,179.06
ROAD OVERTOPPING NOT APPLICABLE
SCOUR CRITICAL CODE = 8

## TRAFFIC DATA

CTH X

A.D.T. = 9,400 (2011)
A.D.T. = 16,100 (2031)
R.D.S. = 40 MPH

## LIST OF DRAWINGS


1. GENERAL PLAN & ELEVATION
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. PIER
9. 54W" PRESTRESSED GIRDER
10. 54W" PRESTRESSED GIRDER DETAILS
11. INTERMEDIATE STEEL DIAPHRAGM
12. SUPERSTRUCTURE & DECK ELEVATIONS
13. SUPERSTRUCTURE CROSS SECTION
14. SUPERSTRUCTURE DETAILS
15. EAST PARAPET SLOPED FACE PARAPET 'HF'
16. SHARED USE PATH SLOPED FACE PARAPET 'HF'
17. CHAIN LINK FENCE DETAILS


WISCONSIN
STEVEN G. MILLER
E-26710
MILWAUKEE, WI
PROFESSIONAL ENGINEER
1-25-2011

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVE MILLER (414) 847-0480

ORIGINAL PLANS PREPARED BY
**CH2MHILL**
135 S. 84TH STREET SUITE 400
MILWAUKEE, WISCONSIN 53214
(414) 272-2426

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

Plans Prepared For WISDOT
BUREAU OF STRUCTURES

APPROVED William C. Dreher KAR 01/25/11
CHIEF STRUCTURES DESIGN ENGINEER DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-37-295

CTH X OVER EAU CLAIRE RIVER

| COUNTY | TOWN/~~CITY/VILLAGE~~ |
|---|---|
| MARATHON | WESTON |

| DESIGN SPEC. | LOAD |
|---|---|
| AASHTO LRFD DESIGN SPEC. 4th EDITION | HL-93 |

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| BKS | KES | MHM | SGM |

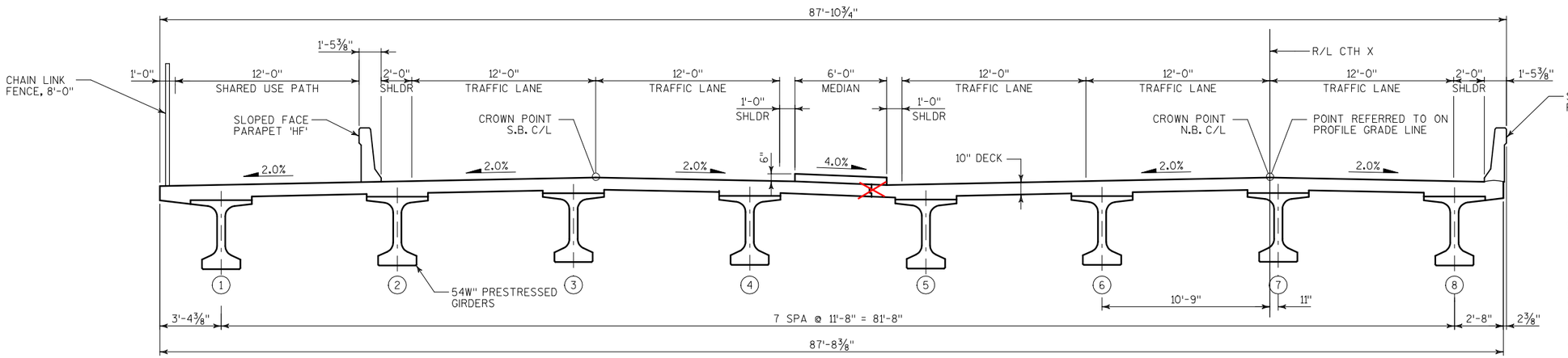
GENERAL PLAN & ELEVATION

SHEET 1 OF 17

8

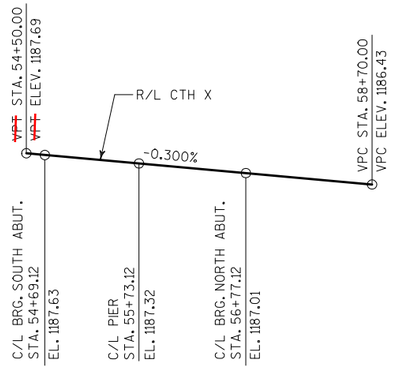
8

| STATE PROJECT NUMBER |
|---|
| 6676-03-73 |




## CROSS SECTION THRU ROADWAY

(LOOKING NORTH)




## PROFILE GRADE LINE - CTH X

## BENCH MARK

| NO. | STATION | OFFSET | DESCRIPTION | EL. |
|---|---|---|---|---|
| ~~9~~ | ~~54+72.00~~ | ~~8.00' RT~~ | ~~CHISELED MARK ON TOP OF ABUTMENT~~ | ~~1184.40~~ |

54+55.70 15' RT DISK ON SE PARAPET 1190.96

CONTRACTOR SHALL USE THIS BENCH MARK TO ESTABLISH A CONSTRUCTION BENCH MARK THAT WILL BE UNDISTURBED THROUGHOUT CONSTRUCTION.

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE EXISTING STRUCTURE P-37-921 IS A 3-SPAN STEEL GIRDER BRIDGE. THE BRIDGE SHALL BE REMOVED. THE PIERS SHALL BE REMOVED TO 4 FEET BELOW THE STREAM BED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED. THE TOP LAYER OF BAR STEEL REINFORCEMENT IN THE DECK SHALL BE PLACED WITH 2½" OF CLEAR COVER.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. ALL DIMENSIONS IN THE BAR BENDS ARE OUT TO OUT.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

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

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

CONCRETE FOR ABUTMENT AND PIER DIAPHRAGMS SHALL BE PLACED WITH THE DECK CONCRETE. NO OPTIONAL CONSTRUCTION JOINT WILL BE PERMITTED.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

THE EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIER.

THE UPPER LIMITS OF EXCAVATION AT THE ABUTMENTS SHALL BE THE BOTTOM OF SLOPE PROTECTION.

PIER CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP MATERIAL AND GEOTEXTILE FABRIC TYPE 'HR' TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE TOP OF THE DECK, TOP OF SHARED USE PATH, TO THE TOP AND BOTH FACES OF SHARED USE PATH BARRIER, MEDIAN, AND TO THE TOP AND TRAFFIC FACE OF THE EAST PARAPET.

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES. ADDITIONAL UTILITIES NOT SHOWN ON THIS PLAN MAY BE PRESENT.

PILE SPLICES SHALL BE MADE BY A CERTIFIED WELDER.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE DEPTH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET, AND IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

## TOTAL ESTIMATED QUANTITIES

| BID ITEM NUMBER | BID ITEM DESCRIPTION | UNIT | SOUTH ABUT. | PIER | NORTH ABUT. | SUPER-STRUCTURE | TOTALS |
|---|---|---|---|---|---|---|---|
| 203.0600.S | REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 55+73.00 | LS | - | - | - | - | 1 |
| 206.1000 | EXCAVATION FOR STRUCTURES BRIDGES B-37-295 | LS | - | - | - | - | 1 |
| 210.0100 | BACKFILL STRUCTURE | CY | 585 | - | 585 | - | 1,170 |
| 502.0100 | CONCRETE MASONRY BRIDGES | CY | 81 | 170 | 81 | 831 | 1,163 |
| 502.3200 | PROTECTIVE SURFACE TREATMENT | SY | 23 | - | 23 | 2,320 | 2,366 |
| 503.0155 | PRESTRESSED GIRDER TYPE I54W-INCH | LF | - | - | - | 1,670 | 1,670 |
| 505.0405 | BAR STEEL REINFORCEMENT HS BRIDGES | LB | - | 7,860 | - | - | 7,860 |
| 505.0605 | BAR STEEL REINFORCEMENT HS COATED BRIDGES | LB | 7,290 | 130 | 7,290 | 152,120 | 166,830 |
| 506.2605 | BEARING PADS ELASTOMERIC NON-LAMINATED | EA | 8 | 16 | 8 | - | 32 |
| 506.4000 | STEEL DIAPHRAGMS B-37-295 | EA | - | - | - | 28 | 28 |
| 516.0500 | RUBBERIZED MEMBRANE WATERPROOFING | SY | 20 | - | 20 | - | 40 |
| 511.3000 | PILE POINTS | EA | 23 | 29 | 23 | - | 75 |
| 511.2105 | PILING STEEL DELIVERED AND DRIVEN HP 10-INCH X 42 LB | LF | 1,150 | 1,160 | 920 | - | 3,230 |
| 606.0300 | RIPRAP HEAVY | CY | 480 | - | 480 | - | 960 |
| 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | 127 | - | 127 | - | 254 |
| 614.0150 | ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD | EA | 1 | - | 1 | - | 2 |
| 616.0208 | FENCE CHAIN LINK 8-FT | LF | 16 | - | 16 | 212 | 244 |
| 645.0120 | GEOTEXTILE FABRIC TYPE HR | SY | 656 | - | 656 | - | 1,312 |
| | | | | | | | |
| | NON-BID ITEMS | | | | | | |
| | FILLER | SIZE | | | | | ½",¾" |
| | CORK FILLER | SIZE | | | | | ¾" |
| | NAME PLATE | EACH | | | | | 1 |
| | | | | | | | |

8

8

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

| DRAWN BY | MHM | PLANS CK'D. | SGM |
|---|---|---|---|

CROSS SECTION & QUANTITIES

SHEET 2 OF 17

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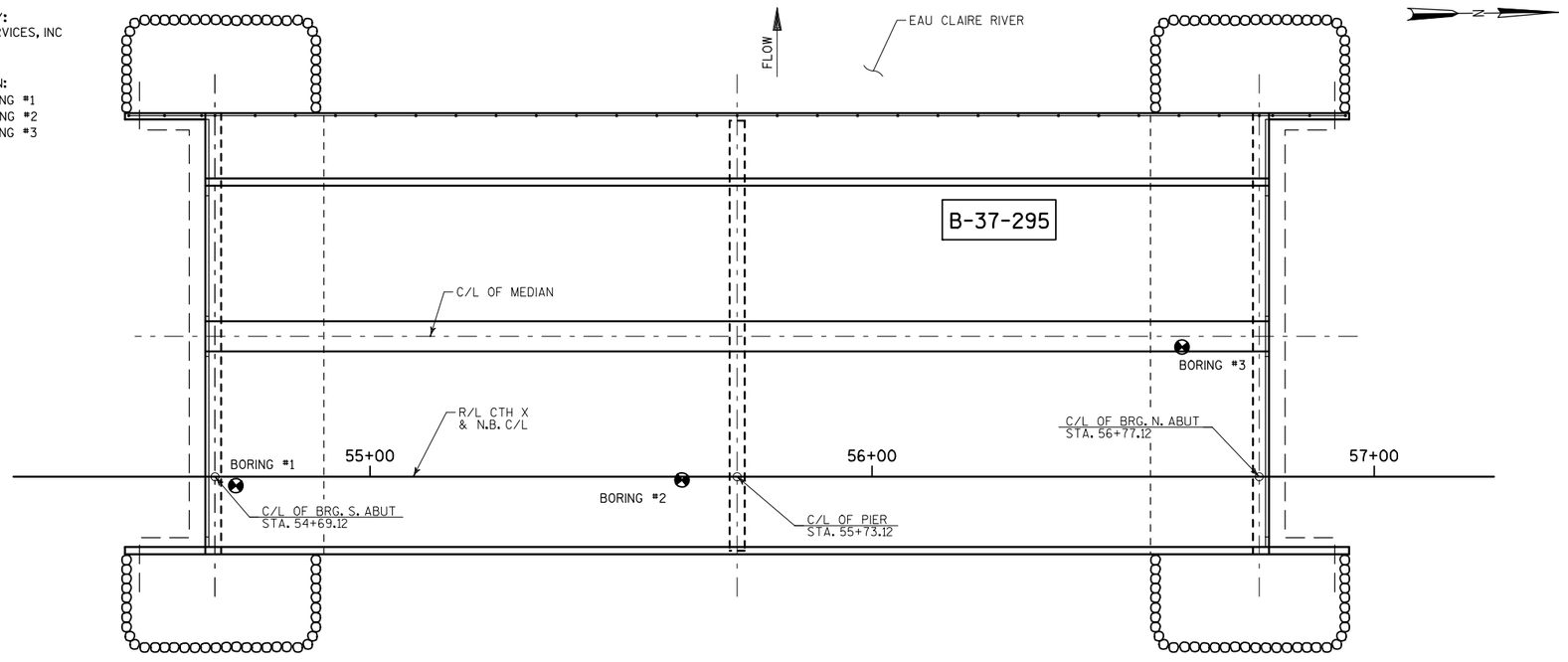
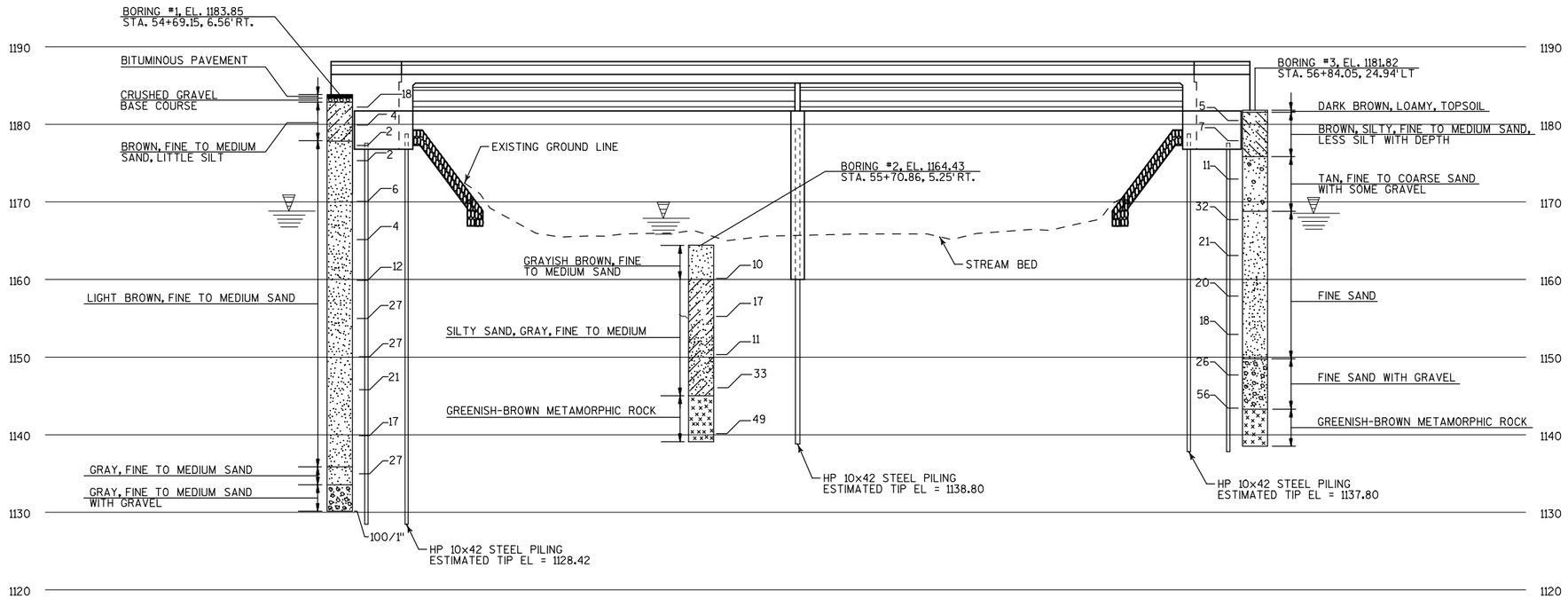
FILE= B37295_080102_ts.dgn
SCALE = 8

PLOT DATE : 24-JAN-2011 PLOT BY : mmorgan

SOIL BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES, INC
MADISON, WI

SOIL BORINGS PERFORMED ON:
DECEMBER 16, 1997 - BORING #1
DECEMBER 16, 1997 - BORING #2
DECEMBER 17, 1997 - BORING #3




STATE PROJECT NUMBER

6676-03-73

ABBREVIATIONS

F — FINE  M — MEDIUM  C — COARSE
WS — WEATHERED  SO — SOUND

MATERIAL SYMBOLS

TOPSOIL, SAND, GRAVEL, SILT, PEAT, CLAY, SANDSTONE, LIMESTONE, IGNEOUS ROCK

LEGEND OF PROBING

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

LEGEND OF BORING

BORING NO.
ELEV.
STA.
UNCONFINED STRENGTH (TSF) — 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY MHM | PLANS CK'D. SGM

SUBSURFACE EXPLORATION

SHEET 3 OF 17

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8

8

PLOT DATE : 24-JAN-2011  PLOT BY : mmorgan

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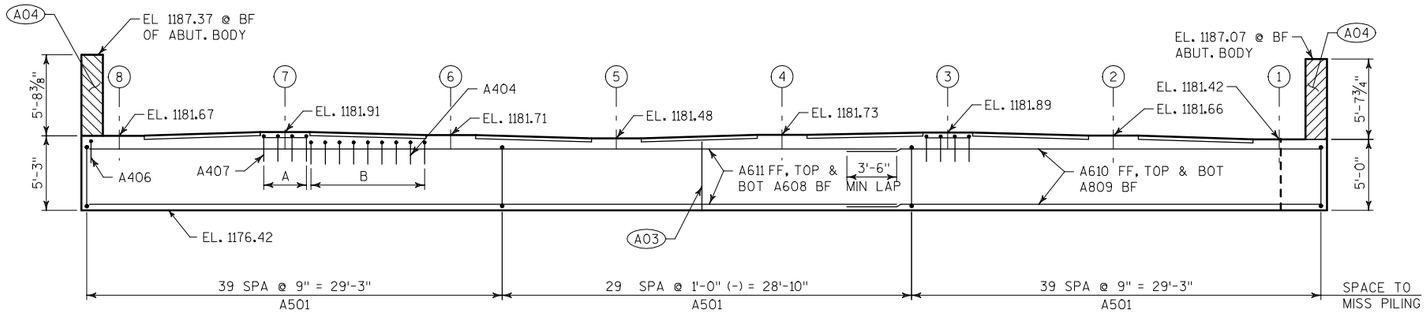
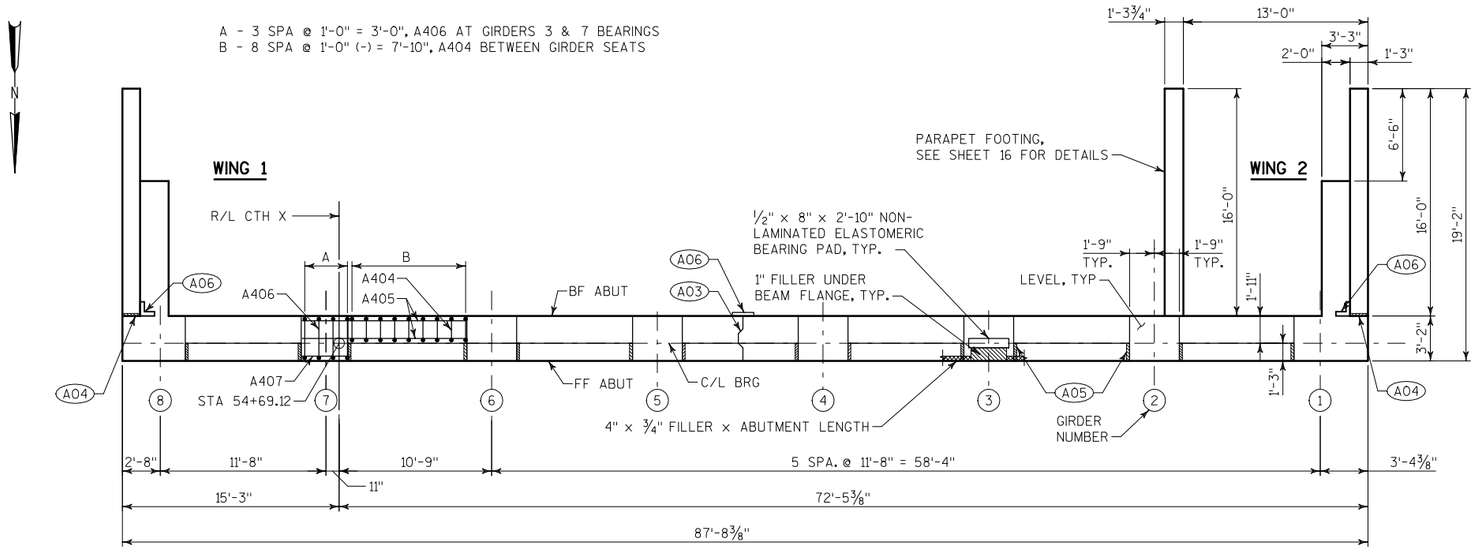
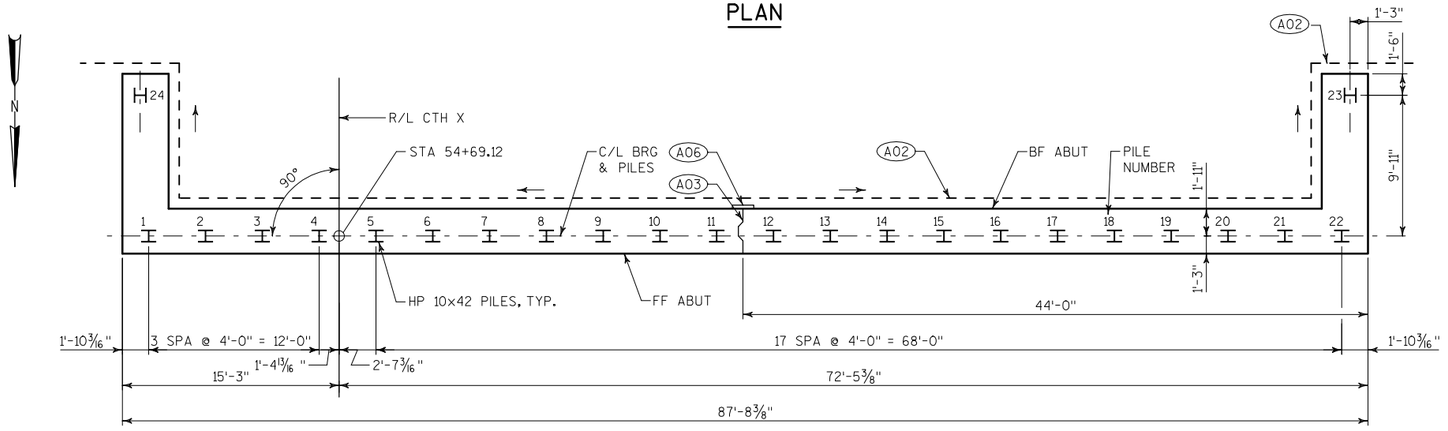



## ELEVATION
(LOOKING SOUTH)

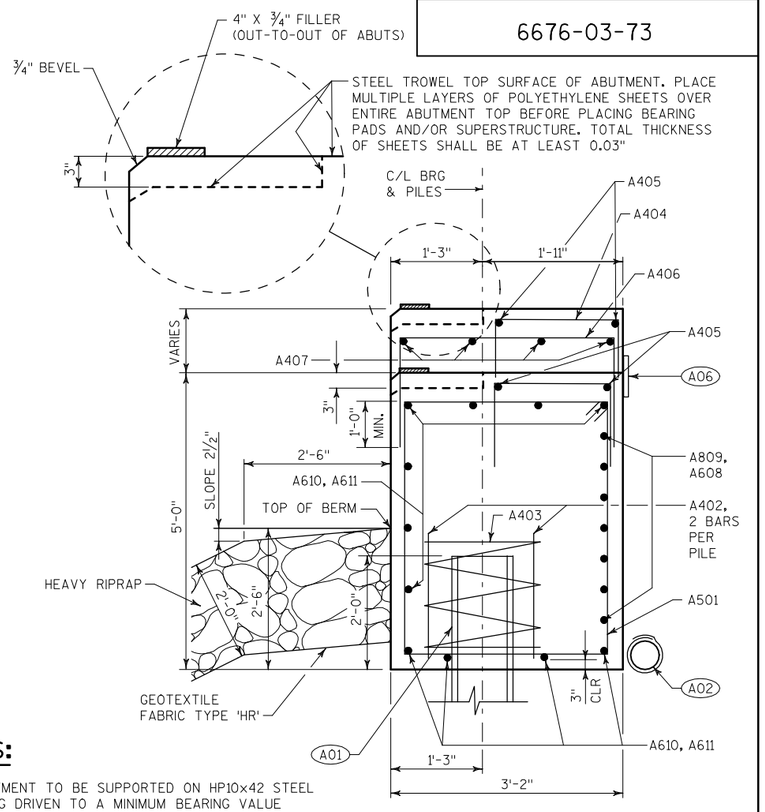
A - 3 SPA @ 1'-0" = 3'-0", A406 AT GIRDERS 3 & 7 BEARINGS
B - 8 SPA @ 1'-0" (-) = 7'-10", A404 BETWEEN GIRDER SEATS




## PLAN




## PILE PLAN




## SECTION THRU BODY

## NOTES:

(A01) ABUTMENT TO BE SUPPORTED ON HP10x42 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 55 TONS PER PILE. ESTIMATED PILE LENGTH = 50'-0".

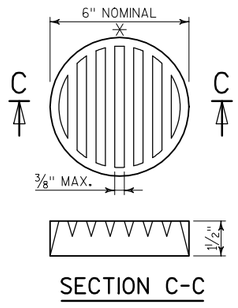
(A02) PIPE UNDERDRAIN, WRAPPED, 6 INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT END OF PIPE UNDERDRAIN.

(A03) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"x8". CLEAR BEARING SEAT BY 3" MIN. CLEAR PILES BY 9" MIN.

(A04) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ & VERT SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A05) ¾" CORK FILLER ON VERT BEAM SEAT FACES, TYP.

(A06) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.




## SECTION C-C

## RODENT SCREEN DETAIL

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

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

THE RODENT SCREEN 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 SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

STATE PROJECT NUMBER
6676-03-73

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY PAK | PLANS CK'D. SGM

SOUTH ABUTMENT

SHEET 4 OF 17

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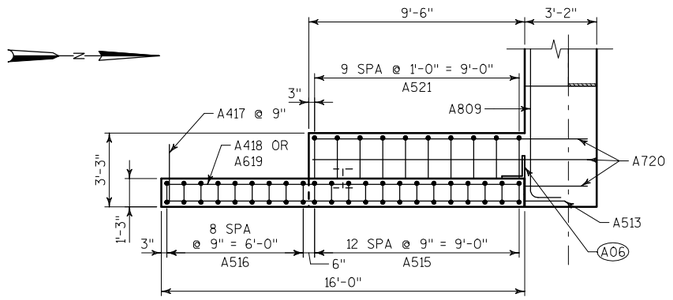
8

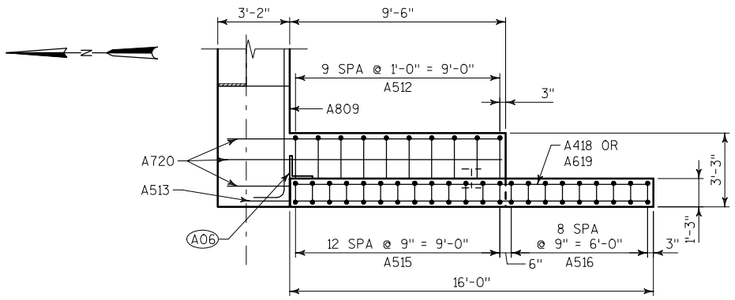
8

FILE= B37295_080201_ab.dgn
SCALE = 10.667

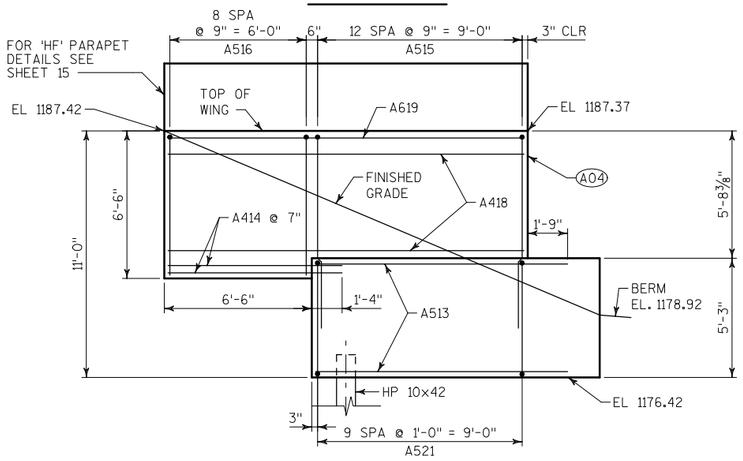
PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan




## WING 1 PLAN

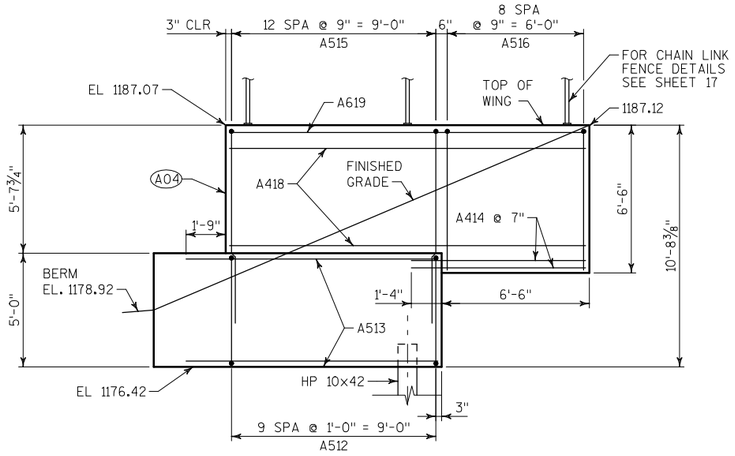



## WING 2 PLAN



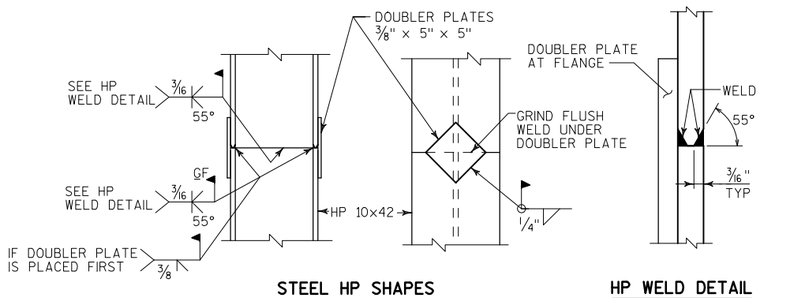

## WING 1 ELEVATION

(FRONT FACE)




## WING 2 ELEVATION

(FRONT FACE)



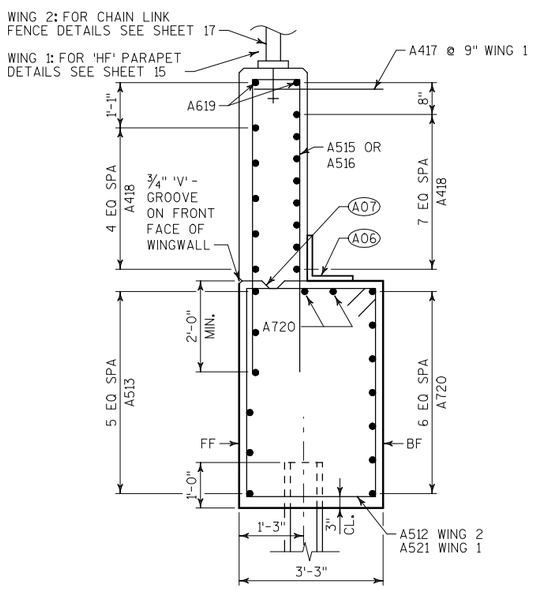

**STEEL HP SHAPES**

**HP WELD DETAIL**

FLANGE SHOWN, WEB SIMILAR

## PILE DETAILS

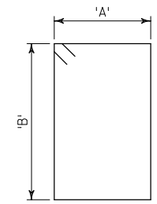
(STEEL HP PILE MATERIAL SHALL BE ASTM A709 GR 50)



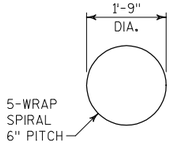

## WINGS 1 & 2 SECTION

## BILL OF BARS

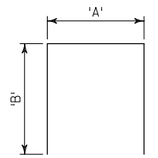
| BAR MARK | COAT | NO. | LENGTH | BENT | LOCATION |
|---|---|---|---|---|---|
| A501 | X | 108 | 15'-1" | X | ABUT BODY STIRRUPS |
| A402 | X | 44 | 2'-3" | | ABUT PILES - 2 PER PILE - VERTICAL |
| A403 | X | 22 | 28'-0" | X | ABUT PILES - 1 PER PILE - 5 WRAP SPIRAL |
| A404 | X | 63 | 4'-11" | X | ABUT BODY TOP - BTWN BEAM SEATS |
| A405 | X | 14 | 12'-10" | | ABUT BODY TOP - HORIZ BTWN BEAM SEATS |
| A406 | X | 8 | 6'-2" | X | ABUT BODY TOP - UNDER GIRDERS 3&7 |
| A407 | X | 8 | 3'-2" | | ABUT BODY TOP - HORIZ UNDER GIRDERS 3&7 |
| A608 | X | 7 | 60'-0" | | ABUT BODY - BF HORIZ |
| A809 | X | 14 | 18'-5" | X | ABUT BODY BF - HORIZ |
| A610 | X | 11 | 30'-11" | | ABUT BODY - HORIZ |
| A611 | X | 11 | 60'-0" | | ABUT BODY - HORIZ |
| A512 | X | 10 | 15'-5" | X | WING 2 - STIRRUP |
| A513 | X | 12 | 11'-1" | | WING 1&2 - HORIZ |
| A414 | X | 8 | 7'-8" | | WING 1&2 - HORIZ |
| A515 | X | 26 | 16'-8" | X | WING 1&2 - VERT |
| A516 | X | 18 | 13'-0" | X | WING 1&2 - VERT |
| A417 | X | 22 | 2'-1" | | WING 1 - HORIZ - TIE WITH APPROACH SLAB |
| A418 | X | 26 | 15'-7" | | WING 1&2 - HORIZ |
| A619 | X | 4 | 15'-7" | | WING 1&2 - HORIZ |
| A720 | X | 18 | 12'-2" | | WING 1&2 - HORIZ |
| A521 | X | 10 | 15'-11" | X | WING 1 - STIRRUP |



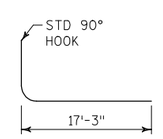

| BAR MARK | DIM 'A' | DIM 'B' |
|---|---|---|
| A501 | 2'-10" | 4'-5" |
| A512 | 2'-11" | 4'-6" |
| A521 | 2'-11" | 4'-9" |




**A403**




| BAR MARK | DIM 'A' | DIM 'B' |
|---|---|---|
| A404 | 1'-7" | 1'-9" |
| A406 | 2'-10" | 1'-9" |
| A515 | 1'-1" | 7'-11" |
| A516 | 1'-1" | 6'-1" |




**A809**

## NOTES:

(A04) ½" FILLER (INCLUDED IN WIN LENGTH): SEAL ALL EXPOSED HORIZ & VERT SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A06) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

(A07) OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6" KEYWAY.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY PAK | PLANS CK'D. SGM

SOUTH ABUTMENT DETAILS

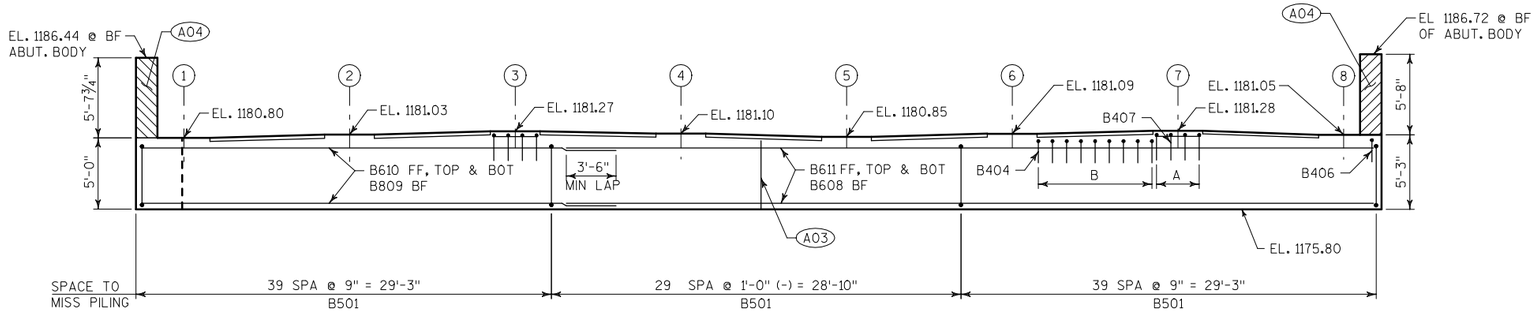
SHEET 5 OF 17



FILE= B37295_080202_ab.dgn
SCALE = 3.333
PLOT DATE : 21-JAN-2011
PLOT BY : mmorgan

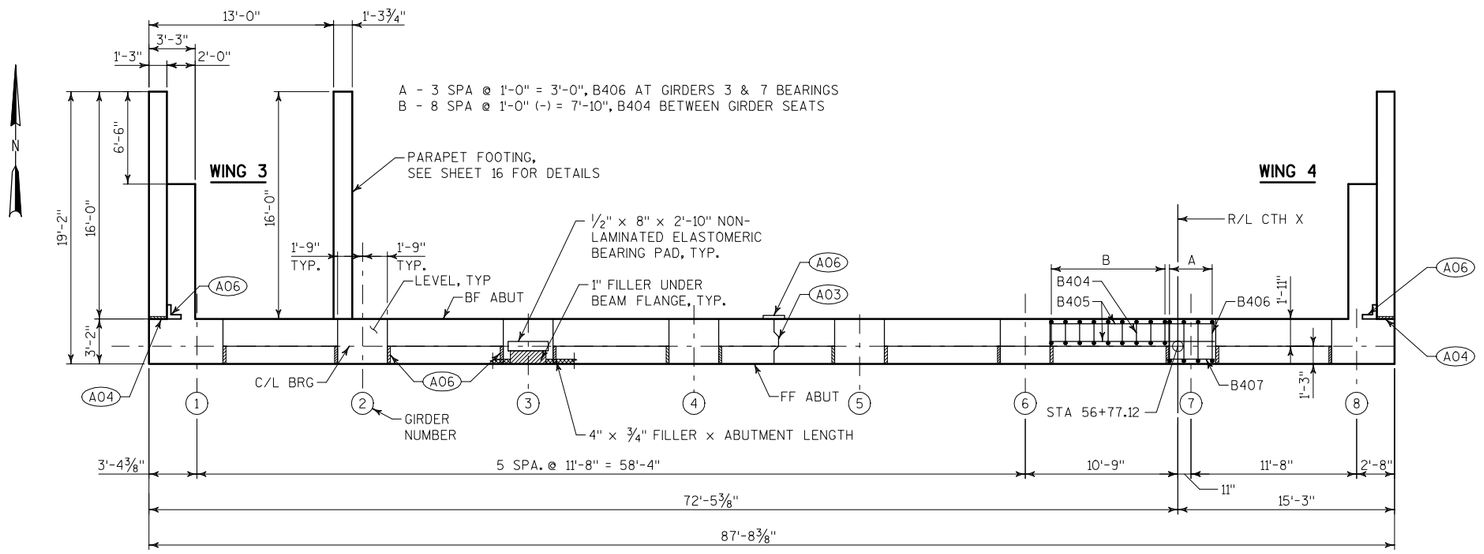
STATE PROJECT NUMBER

6676-03-73

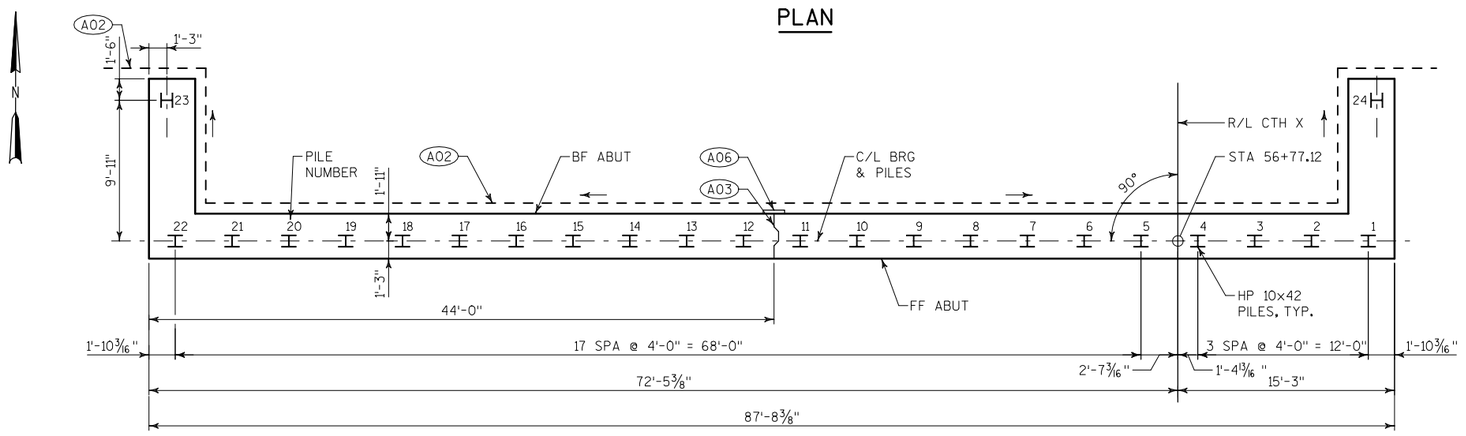



## ELEVATION

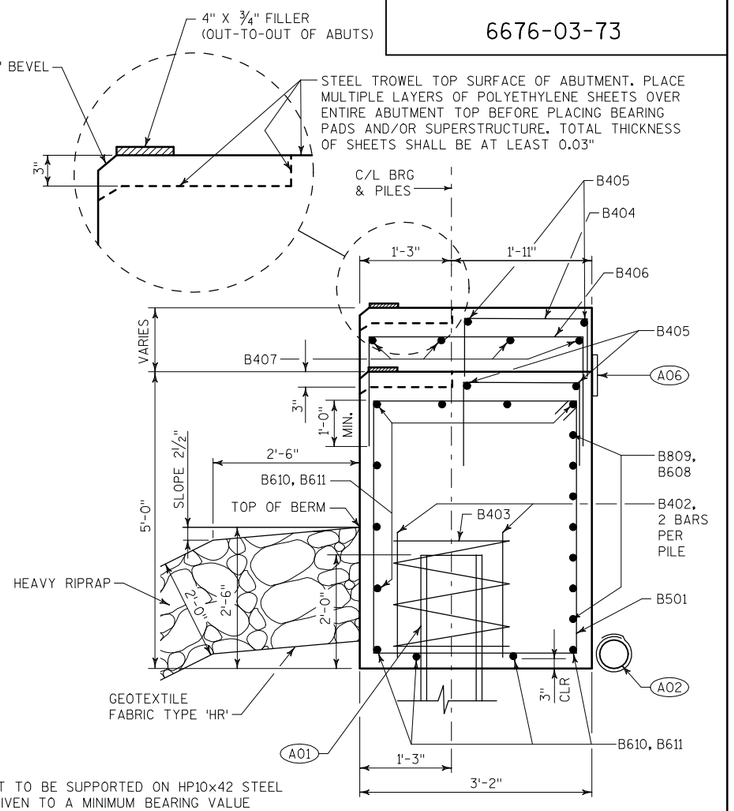
(LOOKING NORTH)




## PLAN




## PILE PLAN




## SECTION THRU BODY

## NOTES:

(A01) ABUTMENT TO BE SUPPORTED ON HP10x42 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 55 TONS PER PILE. ESTIMATED PILE LENGTH = 40'-0".

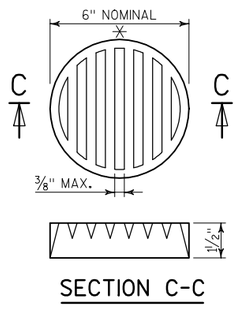
(A02) PIPE UNDERDRAIN, WRAPPED, 6 INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT END OF PIPE UNDERDRAIN.

(A03) VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"x8". CLEAR BEARING SEAT BY 3" MIN. CLEAR PILES BY 9" MIN.

(A04) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ & VERT SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A05) ¾" CORK FILLER ON VERT BEAM SEAT FACES, TYP.

(A06) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.




## SECTION C-C

## RODENT SCREEN DETAIL

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

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

THE RODENT SCREEN 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 SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY PAK | PLANS CK'D. SGM

NORTH ABUTMENT

SHEET 6 OF 17



8

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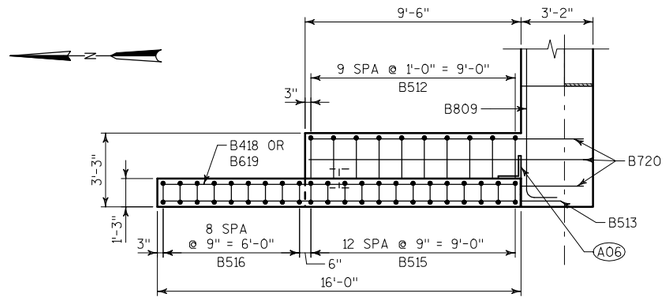
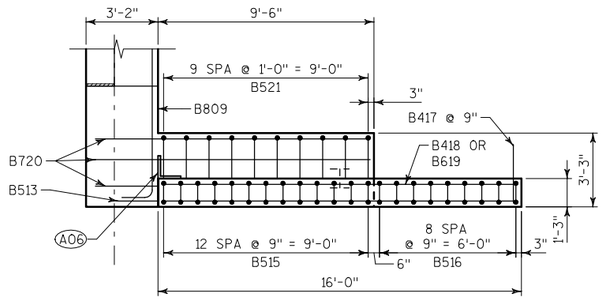
FILE= B37295_080203_ab.dgn
SCALE = 10.667

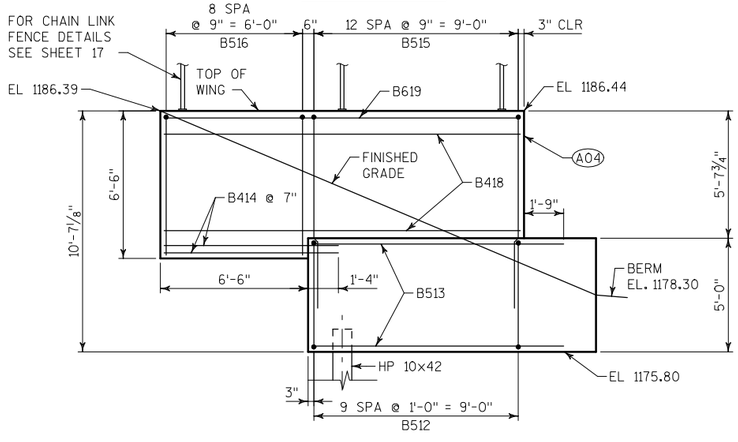
PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan




## WING 3 PLAN

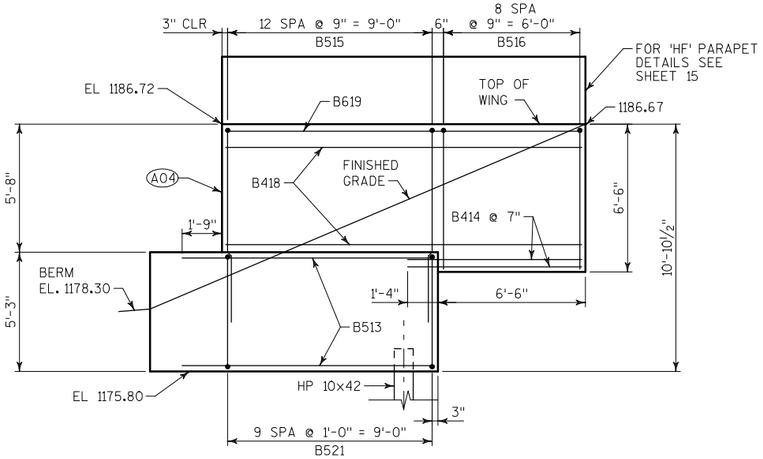



## WING 4 PLAN



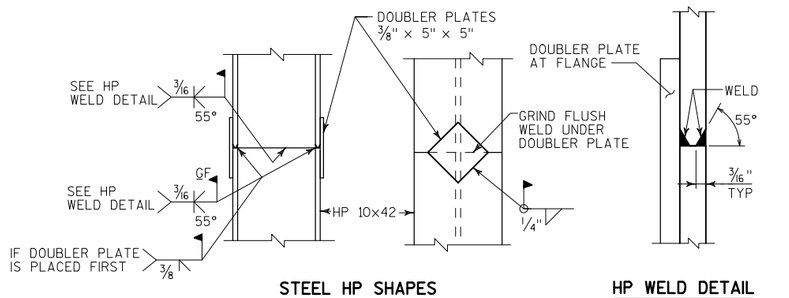

## WING 3 ELEVATION

(FRONT FACE)




## WING 4 ELEVATION

(FRONT FACE)



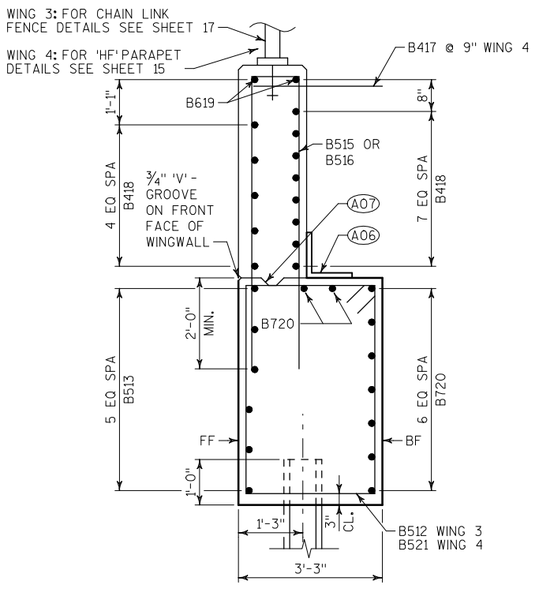

**STEEL HP SHAPES**

**HP WELD DETAIL**

FLANGE SHOWN, WEB SIMILAR

## PILE DETAILS

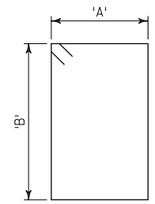
(STEEL HP PILE MATERIAL SHALL BE ASTM A709 GR 50)



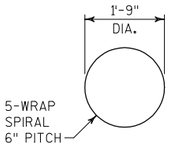

## WINGS 3 & 4 SECTION

## BILL OF BARS

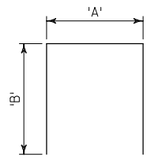
| BAR MARK | COAT | NO. | LENGTH | BENT | LOCATION |
|---|---|---|---|---|---|
| B501 | X | 108 | 15'-1" | X | ABUT BODY STIRRUPS |
| B402 | X | 44 | 2'-3" | | ABUT PILES - 2 PER PILE - VERTICAL |
| B403 | X | 22 | 28'-0" | X | ABUT PILES - 1 PER PILE - 5 WRAP SPIRAL |
| B404 | X | 63 | 4'-11" | X | ABUT BODY TOP - BTWN BEAM SEATS |
| B405 | X | 14 | 12'-10" | | ABUT BODY TOP - HORIZ BTWN BEAM SEATS |
| B406 | X | 8 | 6'-2" | X | ABUT BODY TOP - UNDER GIRDERS 3&7 |
| B407 | X | 8 | 3'-2" | | ABUT BODY TOP - HORIZ UNDER GIRDERS 3&7 |
| B608 | X | 7 | 60'-0" | | ABUT BODY - BF HORIZ |
| B809 | X | 14 | 18'-5" | X | ABUT BODY BF - HORIZ |
| B610 | X | 11 | 30'-11" | | ABUT BODY - HORIZ |
| B611 | X | 11 | 60'-0" | | ABUT BODY - HORIZ |
| B512 | X | 10 | 15'-5" | X | WING 3 - STIRRUP |
| B513 | X | 12 | 11'-1" | | WING 3&4 - HORIZ |
| B414 | X | 8 | 7'-8" | | WING 3&4 - HORIZ |
| B515 | X | 26 | 16'-8" | X | WING 3&4 - VERT |
| B516 | X | 18 | 13'-0" | X | WING 3&4 - VERT |
| B417 | X | 22 | 2'-1" | | WING 4 - HORIZ - TIE WITH APPROACH SLAB |
| B418 | X | 26 | 15'-7" | | WING 3&4 - HORIZ |
| B619 | X | 4 | 15'-7" | | WING 3&4 - HORIZ |
| B720 | X | 18 | 12'-2" | | WING 3&4 - HORIZ |
| B521 | X | 10 | 15'-11" | X | WING 4 - STIRRUP |



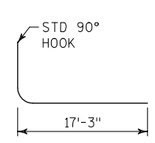

| BAR MARK | DIM 'A' | DIM 'B' |
|---|---|---|
| A501 | 2'-10" | 4'-5" |
| A512 | 2'-11" | 4'-6" |
| A521 | 2'-11" | 4'-9" |




**A403**




| BAR MARK | DIM 'A' | DIM 'B' |
|---|---|---|
| A404 | 1'-7" | 1'-9" |
| A406 | 2'-10" | 1'-9" |
| A515 | 1'-1" | 7'-11" |
| A516 | 1'-1" | 6'-1" |




**A809**

## NOTES:

(A04) ½" FILLER (INCLUDED IN WIN LENGTH): SEAL ALL EXPOSED HORIZ & VERT SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A06) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

(A07) OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6" KEYWAY.

STATE PROJECT NUMBER

6676-03-73

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY PAK | PLANS CK'D. SGM

NORTH ABUTMENT DETAILS

SHEET 7 OF 17

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FILE= B37295_080204_ab.dgn
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PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan

| STATE PROJECT NUMBER |
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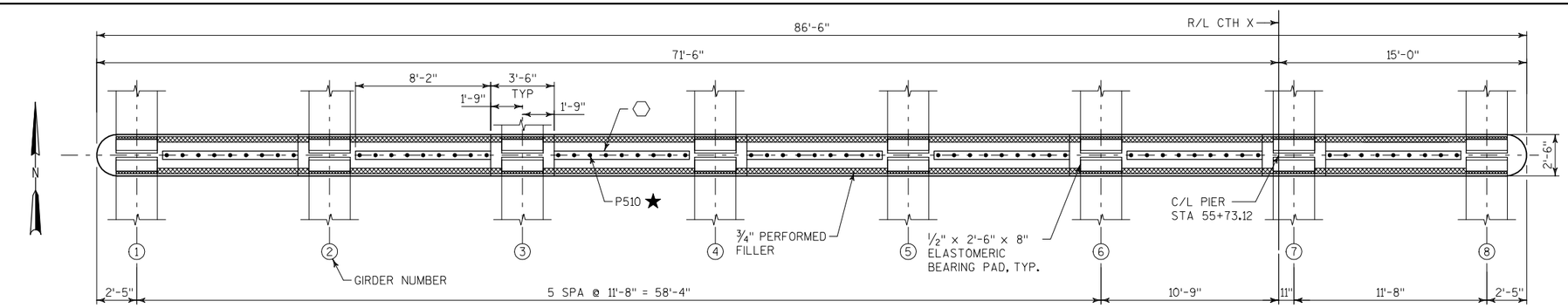
| 6676-03-73 |




## BEARING SEAT PLAN

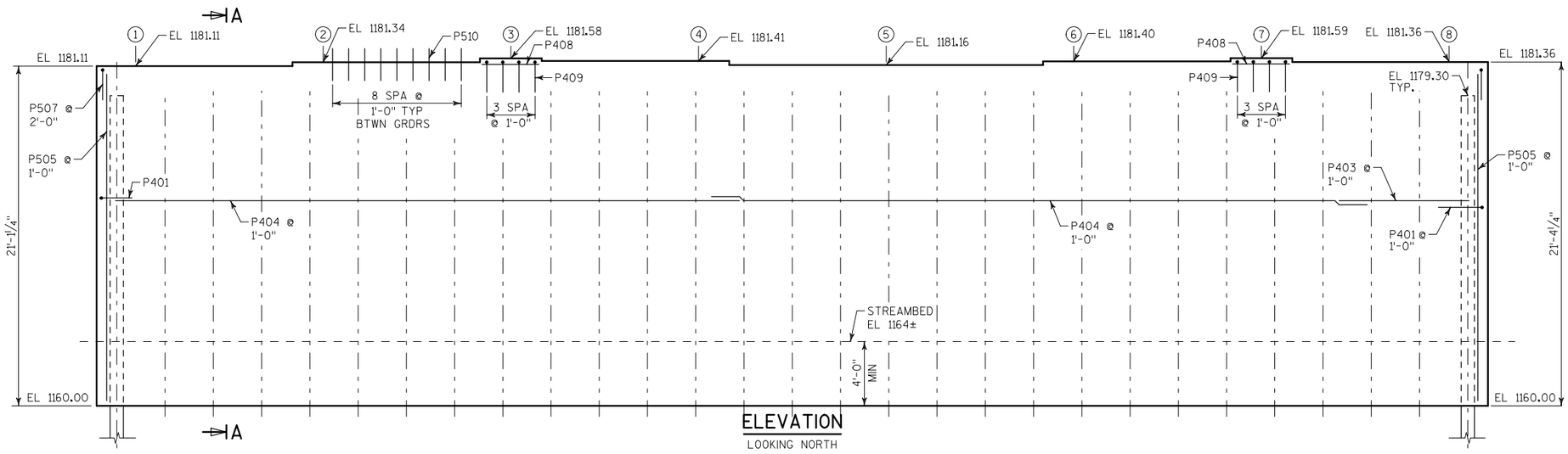
## BILL OF BARS

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | LOCATION |
|---|---|---|---|---|---|
| P401 | | 44 | 4'-11" | X | ENDS HORIZONTAL |
| | | | | | |
| P403 | | 44 | 7'-8" | | HORIZONTAL |
| P404 | | 88 | 40'-0" | | HORIZONTAL |
| P505 | | 176 | 20'-5" | | VERTICAL |
| P406 | | 609 | 2'-11" | X | TIES BETWEEN FACES |
| P507 | | 43 | 5'-3" | X | VERTICAL AT TOP |
| P408 | | 4 | 3'-2" | | HORIZONTAL UNDER GIRDERS 3 & 7 |
| P409 | | 8 | 5'-4" | X | VERTICAL UNDER GIRDERS 3 & 7 |
| P510 | X | 63 | 2'-0" | | DIAPHRAGM DOWEL |

## NOTES

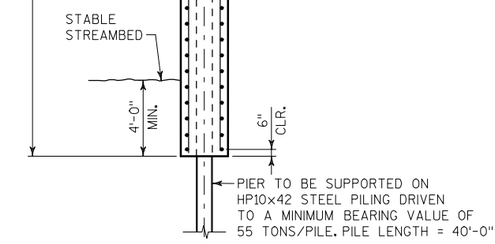
⬡ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6".

★ THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. EMBED 1'-0".



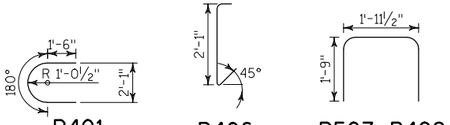

## ELEVATION

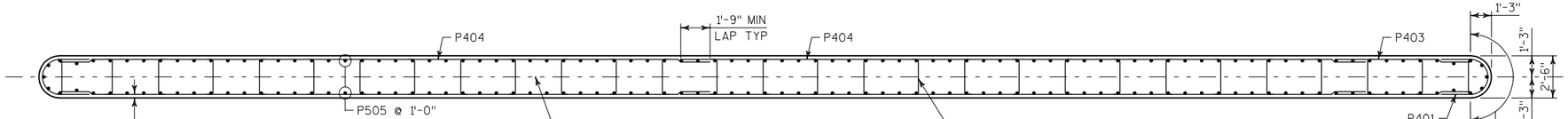
LOOKING NORTH



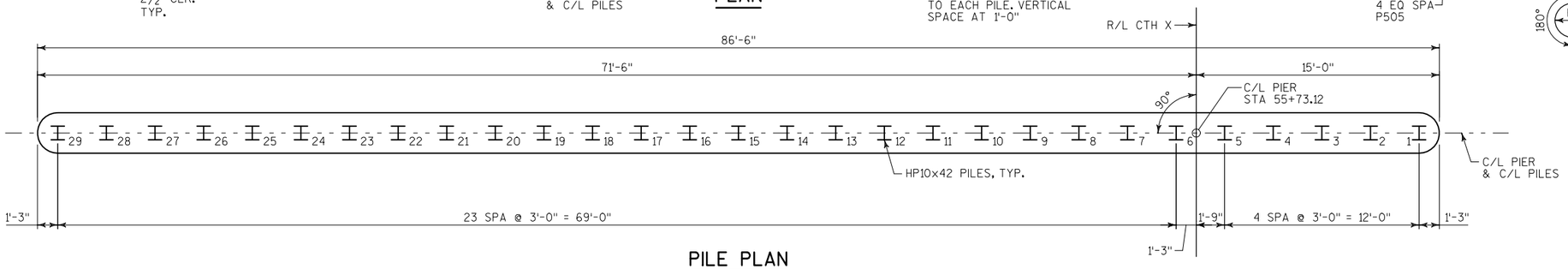

## SECTION A-A THRU PIER

FOR PILE SPLICE DETAIL, SEE NORTH ABUTMENT DETAILS SHEET.




## PLAN




## PILE PLAN

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

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STRUCTURE B-37-295

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PIER

SHEET 8 OF 17

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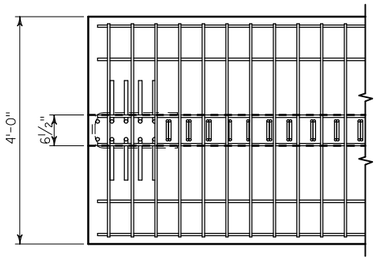
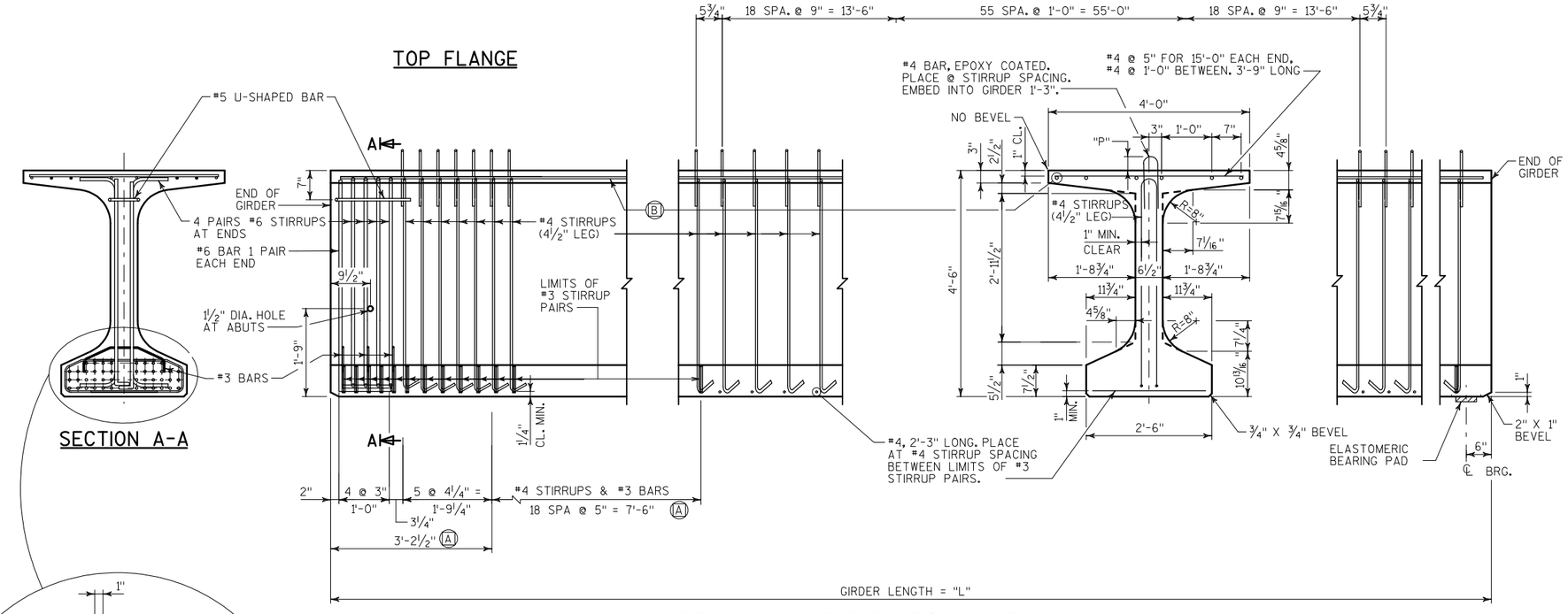
PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan

STATE PROJECT NUMBER

6676-03-73




## TOP FLANGE

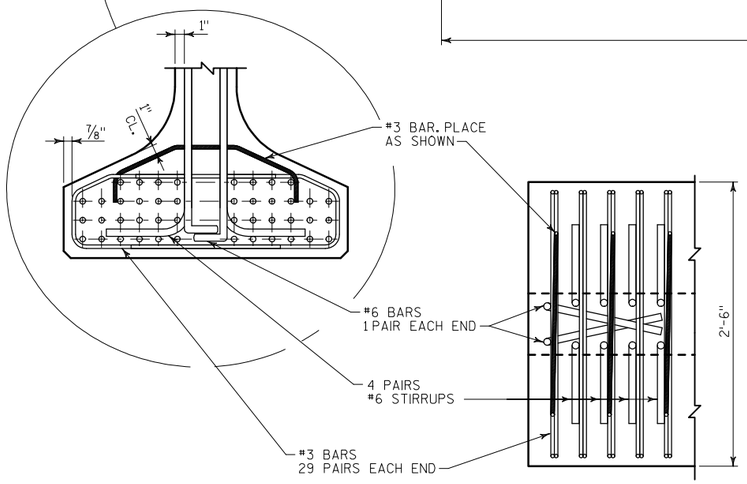



## SIDE VIEW & TYP. SECTION IN SPAN

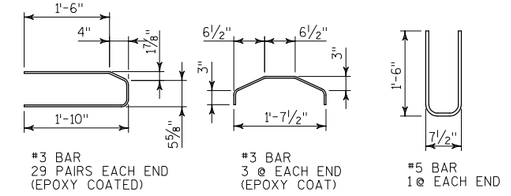
Ⓐ DETAIL TYP. AT EACH END

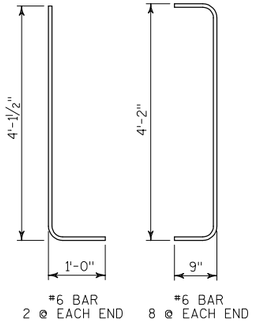
Ⓑ 6-#4 BARS, FULL LENGTH, MIN. LAP = 1'-8"

## SECTION A-A




## BOTTOM FLANGE




## GIRDER DATA

| SPAN | GIRDER NUMBER | GIRDER LENGTH "L" | DEAD LOAD DEFL. ** (IN.) | | | | | CONC. STRGTH. f'c (P.S.I.) | "P" | DIA. OF STRAND (IN.) | DRAPED PATTERN | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | | | | TOTAL NO. OF STRANDS | f'ci (P.S.I.) * | ( IN.) "A" | "B" MIN. | "B" MAX. | "C" |
| 1 | 1&8 | 104'-4½" | ½" | 1" | 1½" | 1⅝" | 1¾" | 8000 | 8" | 0.6 | 38 | 6800 | 47 | 16 | 19 | 5 |
| 1 | 2,3,4,5,6&7 | 104'-4½" | ⅝" | 1¼" | 1⅝" | 2" | 2⅛" | 8000 | 8" | 0.6 | 38 | 6800 | 47 | 16 | 19 | 5 |
| 2 | 1&8 | 104'-4½" | ½" | 1" | 1½" | 1⅝" | 1¾" | 8000 | 8" | 0.6 | 38 | 6800 | 47 | 16 | 19 | 5 |
| 2 | 2,3,4,5,6&7 | 104'-4½" | ⅝" | 1¼" | 1⅝" | 2" | 2⅛" | 8000 | 8" | 0.6 | 38 | 6800 | 47 | 16 | 19 | 5 |

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

** SEE DEAD LOAD DEFLECTION DIAGRAM, SHEET 10.

## GIRDER NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 15" OF THE TOP FLANGE.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

PRESTRESSING STRANDS SHALL BE 0.6"ϕ - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi.

STRANDS SHALL BE FLUSH WITH THE END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, THE FOLLOWING OPTION IS AVAILABLE:

USE ASTM A706, GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT CHIEF, (608)266-5161.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY: PAK | PLANS CK'D.: SGM

54W" PRESTRESSED GIRDER

SHEET 9 OF 17

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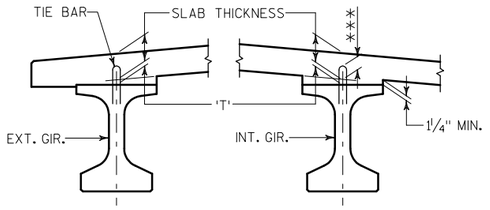
PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan

FILE= B37295_080301_de.dgn
SCALE = 2.667

STATE PROJECT NUMBER

6676-03-73




## SLAB HAUNCH DETAIL

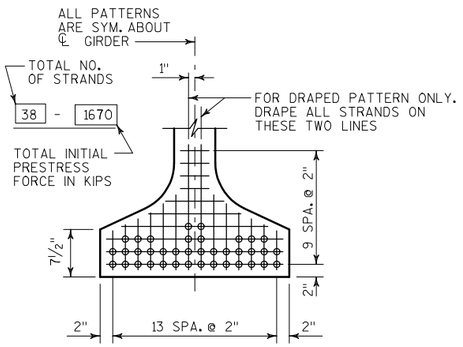
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

*** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH 'T' OF 3" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



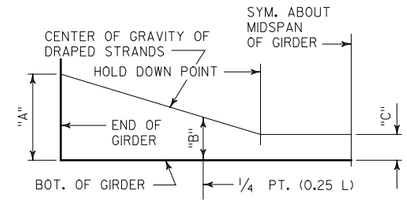

## TYP. STRAND PATTERN

0.6" DIA. STRANDS

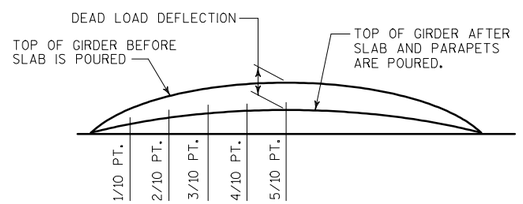
THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN.

| SPAN | CAMBER (IN.) |
|---|---|
| 1 | 2½" |
| 2 | 2½" |

THESE VALUES ARE NOT TO BE USED IN DETERMINIMG 'T'. USE ACTUAL GIRDER SHOTS. THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.




## DRAPED STRAND PROFILE




## DEAD LOAD DEFLECTION DIAGRAM

DEFLECTIONS ARE SYMETRIC ABOUT MIDPOINT OF BEAM

8

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

STRUCTURE B-37-295

DRAWN BY PAK | PLANS CK'D. SGM

54W" PRESTRESSED GIRDER DETAILS

SHEET 10 OF 17

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FILE= B37295_080302_de.dgn
SCALE = 5.333

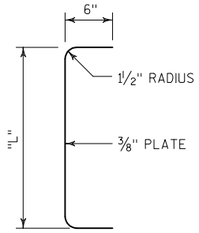
PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan

STATE PROJECT NUMBER

6676-03-73

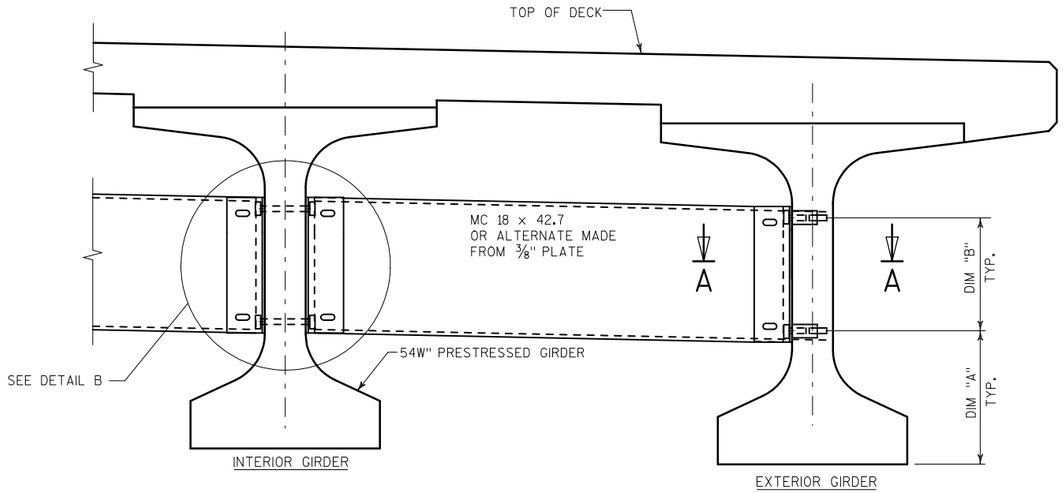
## TABLE

| GIRDER HEIGHT | DIM. "A" | DIM. "B" | DIM. "L" | * DIM. "X" |
|---|---|---|---|---|
| 54W" | 1'-9 1/8" | 1'-5 7/8" | 1'-9 1/2" | 4 1/4" |




## SECTION THRU ALTERNATE DIAPHRAGM

*DIM "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM




## PART TRANSVERSE SECTION AT DIAPHRAGM

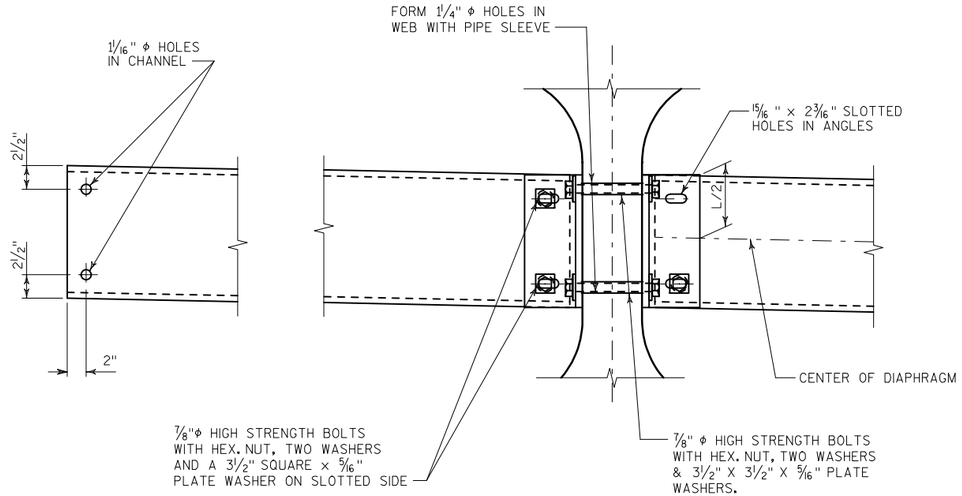
## NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-37-295", EACH.

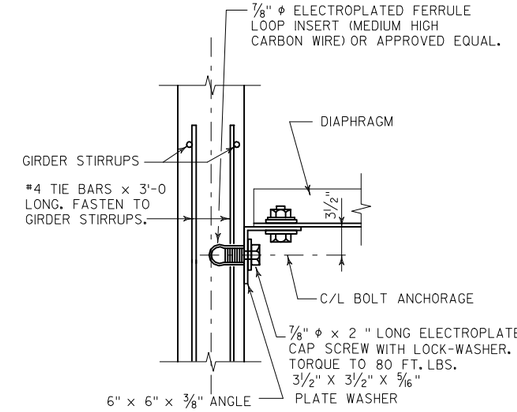
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

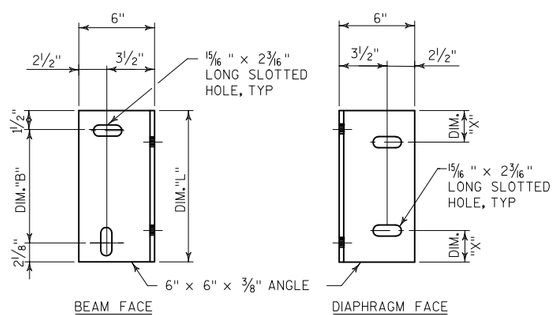



## DETAIL B




## SECTION A-A

(FOR EXTERIOR ATTACHMENT)




## DIAPHRAGM SUPPORT

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY PAK | PLANS CK'D. SGM

INTERMEDIATE STEEL DIAPHRAGM

SHEET 11 OF 17

192

8

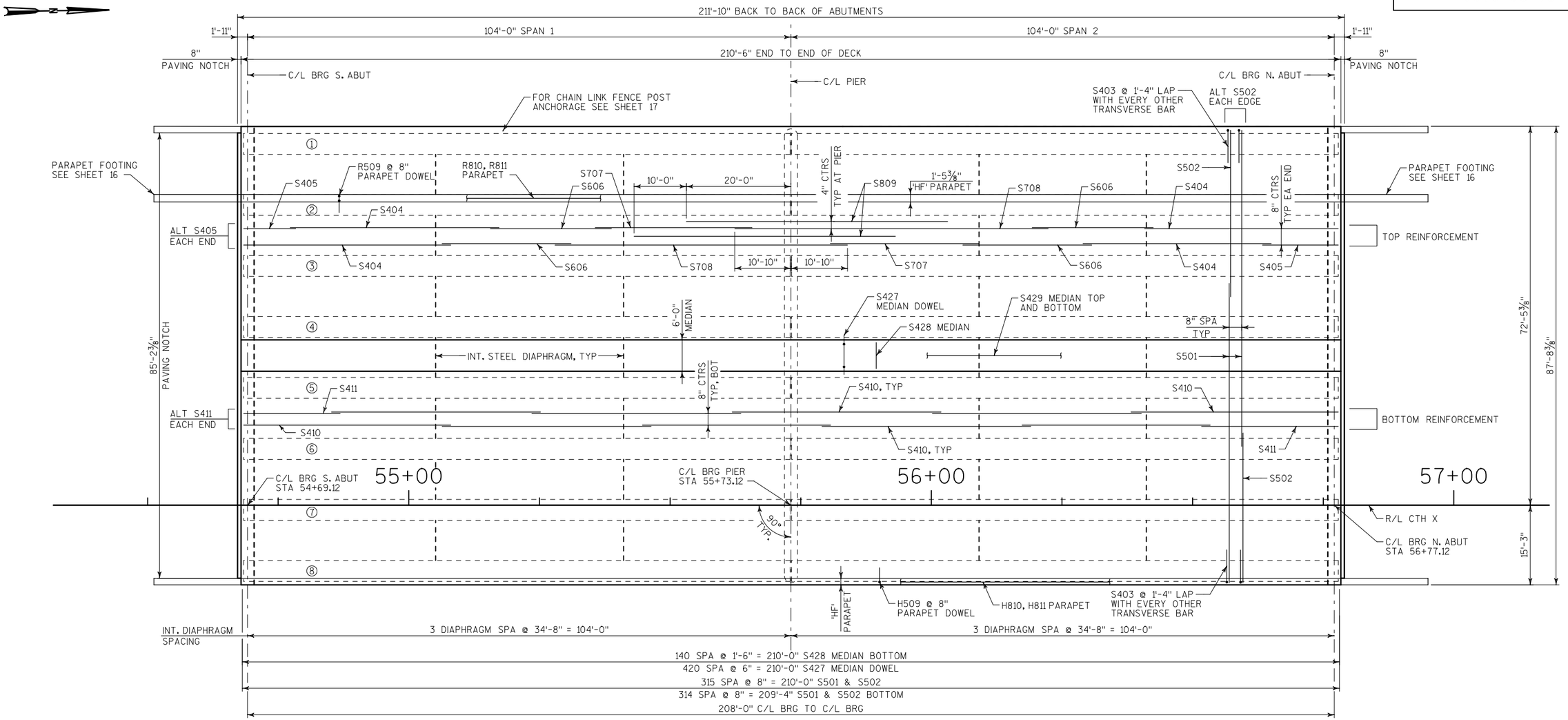
8

FILE= B37295_080303_su.dgn
SCALE = 2

PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan

STATE PROJECT NUMBER

6676-03-73




PLAN

## TOP OF DECK ELEVATIONS

| | S ABUT | 0.1L | 0.2L | 0.3L | 0.4L | 0.5L | 0.6L | 0.7L | 0.8L | 0.9L | C/L PIER | 0.1L | 0.2L | 0.3L | 0.4L | 0.5L | 0.6L | 0.7L | 0.8L | 0.9L | N ABUT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WEST EDGE OF DECK | 1187.06 | 1187.03 | 1187.00 | 1186.97 | 1186.94 | 1186.91 | 1186.88 | 1186.85 | 1186.81 | 1186.78 | 1186.75 | 1186.72 | 1186.69 | 1186.66 | 1186.63 | 1186.60 | 1186.56 | 1186.53 | 1186.50 | 1186.47 | 1186.44 |
| C/L GIRDER 1 | 1187.13 | 1187.10 | 1187.07 | 1187.04 | 1187.01 | 1186.97 | 1186.94 | 1186.91 | 1186.88 | 1186.85 | 1186.82 | 1186.79 | 1186.76 | 1186.73 | 1186.69 | 1186.66 | 1186.63 | 1186.60 | 1186.57 | 1186.54 | 1186.51 |
| C/L GIRDER 2 | 1187.36 | 1187.33 | 1187.30 | 1187.27 | 1187.24 | 1187.21 | 1187.18 | 1187.15 | 1187.11 | 1187.08 | 1187.05 | 1187.02 | 1186.99 | 1186.96 | 1186.93 | 1186.90 | 1186.87 | 1186.83 | 1186.80 | 1186.77 | 1186.74 |
| C/L GIRDER 3 | 1187.60 | 1187.57 | 1187.54 | 1187.50 | 1187.47 | 1187.44 | 1187.41 | 1187.38 | 1187.35 | 1187.32 | 1187.29 | 1187.25 | 1187.22 | 1187.19 | 1187.16 | 1187.13 | 1187.10 | 1187.07 | 1187.04 | 1187.00 | 1186.97 |
| CROWN-S.B. CTH X | 1187.63 | 1187.60 | 1187.57 | 1187.54 | 1187.51 | 1187.48 | 1187.45 | 1187.41 | 1187.38 | 1187.35 | 1187.32 | 1187.29 | 1187.26 | 1187.23 | 1187.20 | 1187.16 | 1187.13 | 1187.10 | 1187.07 | 1187.04 | 1187.01 |
| C/L GIRDER 4 | 1187.43 | 1187.40 | 1187.37 | 1187.34 | 1187.31 | 1187.28 | 1187.25 | 1187.22 | 1187.18 | 1187.15 | 1187.12 | 1187.09 | 1187.06 | 1187.03 | 1187.00 | 1186.97 | 1186.94 | 1186.90 | 1186.87 | 1186.84 | 1186.81 |
| W FLOWLINE-MEDIAN | 1187.37 | 1187.34 | 1187.31 | 1187.28 | 1187.25 | 1187.22 | 1187.19 | 1187.15 | 1187.12 | 1187.09 | 1187.06 | 1187.03 | 1187.00 | 1186.97 | 1186.94 | 1186.90 | 1186.87 | 1186.84 | 1186.81 | 1186.78 | 1186.75 |
| E FLOWLINE-MEDIAN | 1187.13 | 1187.10 | 1187.07 | 1187.04 | 1187.01 | 1186.98 | 1186.95 | 1186.91 | 1186.88 | 1186.85 | 1186.82 | 1186.79 | 1186.76 | 1186.73 | 1186.70 | 1186.66 | 1186.63 | 1186.60 | 1186.57 | 1186.54 | 1186.51 |
| C/L GIRDER 5 | 1187.18 | 1187.15 | 1187.12 | 1187.09 | 1187.06 | 1187.03 | 1187.00 | 1186.97 | 1186.93 | 1186.90 | 1186.87 | 1186.84 | 1186.81 | 1186.78 | 1186.75 | 1186.72 | 1186.69 | 1186.65 | 1186.62 | 1186.59 | 1186.56 |
| C/L GIRDER 6 | 1187.42 | 1187.39 | 1187.36 | 1187.32 | 1187.29 | 1187.26 | 1187.23 | 1187.20 | 1187.17 | 1187.14 | 1187.11 | 1187.07 | 1187.04 | 1187.01 | 1186.98 | 1186.95 | 1186.92 | 1186.89 | 1186.86 | 1186.82 | 1186.79 |
| R/L CTH X | 1187.63 | 1187.60 | 1187.57 | 1187.54 | 1187.51 | 1187.48 | 1187.45 | 1187.41 | 1187.38 | 1187.35 | 1187.32 | 1187.29 | 1187.26 | 1187.23 | 1187.20 | 1187.16 | 1187.13 | 1187.10 | 1187.07 | 1187.04 | 1187.01 |
| C/L GIRDER 7 | 1187.61 | 1187.58 | 1187.55 | 1187.52 | 1187.49 | 1187.46 | 1187.43 | 1187.40 | 1187.36 | 1187.33 | 1187.30 | 1187.27 | 1187.24 | 1187.21 | 1187.18 | 1187.15 | 1187.12 | 1187.08 | 1187.05 | 1187.02 | 1186.99 |
| C/L GIRDER 8 | 1187.38 | 1187.35 | 1187.32 | 1187.29 | 1187.26 | 1187.22 | 1187.19 | 1187.16 | 1187.13 | 1187.10 | 1187.07 | 1187.04 | 1187.01 | 1186.98 | 1186.94 | 1186.91 | 1186.88 | 1186.85 | 1186.82 | 1186.79 | 1186.76 |
| TOE OF E PARAPET | 1187.35 | 1187.32 | 1187.29 | 1187.26 | 1187.23 | 1187.20 | 1187.17 | 1187.13 | 1187.10 | 1187.07 | 1187.04 | 1187.01 | 1186.98 | 1186.95 | 1186.92 | 1186.88 | 1186.85 | 1186.82 | 1186.79 | 1186.76 | 1186.73 |

## DECK AND MEDIAN BAR LAP LENGTH

| BAR SIZE | MIN LAP LENGTH |
|---|---|
| #4 | 1'-8" |
| #5 | 2'-7" |
| #6 | 3'-1" |
| #7 | 4'-10" |

SMALLER BAR DETERMINES LAP LENGTH.

## PARAPET BAR LAP LENGTH

| BAR SIZE | MIN LAP LENGTH |
|---|---|
| #8 | 5'-9" |

SMALLER BAR DETERMINES LAP LENGTH.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY PAK | PLANS CK'D. SGM

SUPERSTRUCTURE & DECK ELEVATIONS

SHEET 12 OF 17

193

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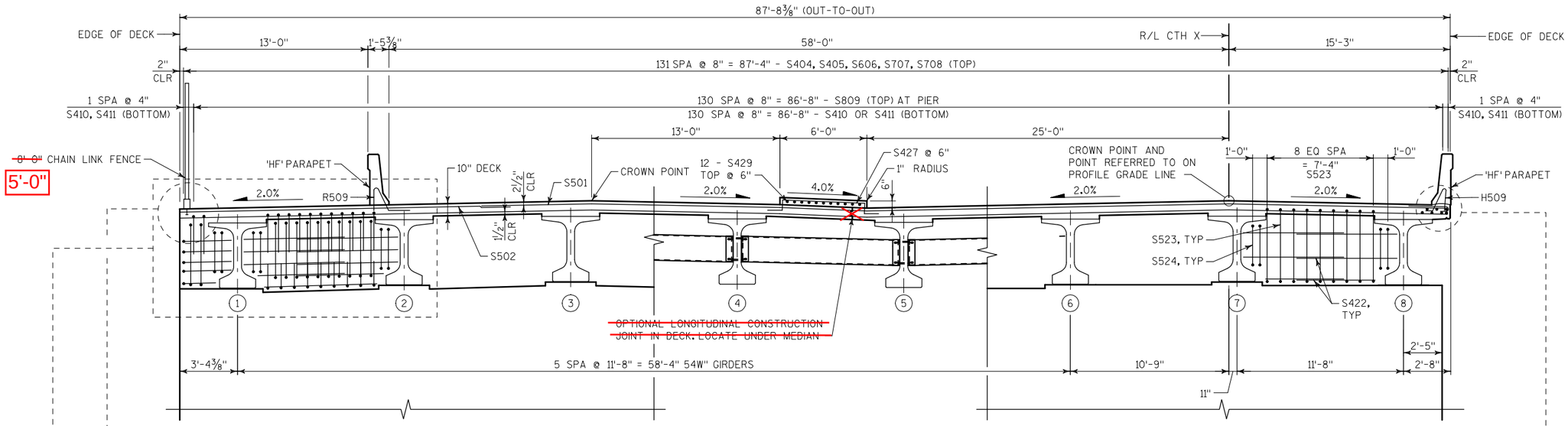
SCALE = 20

PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan

STATE PROJECT NUMBER

6676-03-73

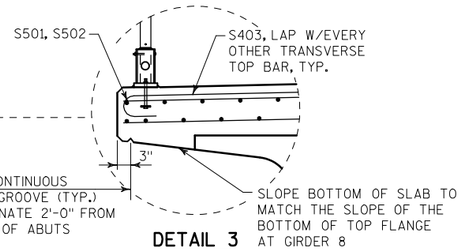



CONCRETE DIAPHRAGM AT ABUTMENT

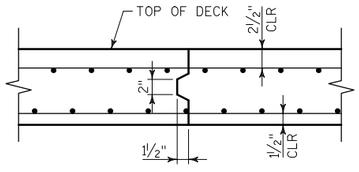
IN SPAN DIAPHRAGM
CROSS SECTION THRU ROADWAY

(LOOKING NORTH)

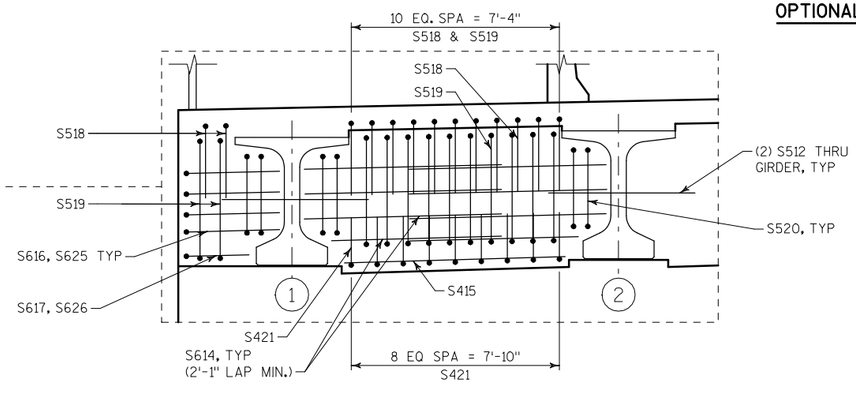
CONCRETE DIAPHRAGM AT PIER



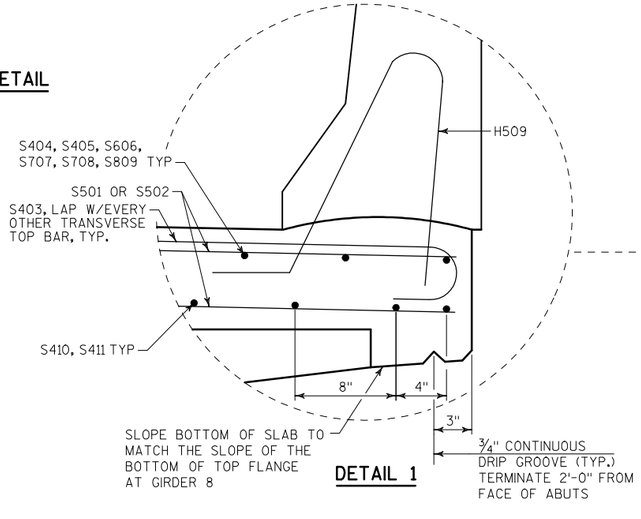

DETAIL 3




OPTIONAL LONGITUDINAL CONSTRUCTION JOINT DETAIL




DETAIL 2




DETAIL 1

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY PAK | PLANS CK'D. SGM

SUPERSTRUCTURE CROSS SECTION

SHEET 13 OF 17

194

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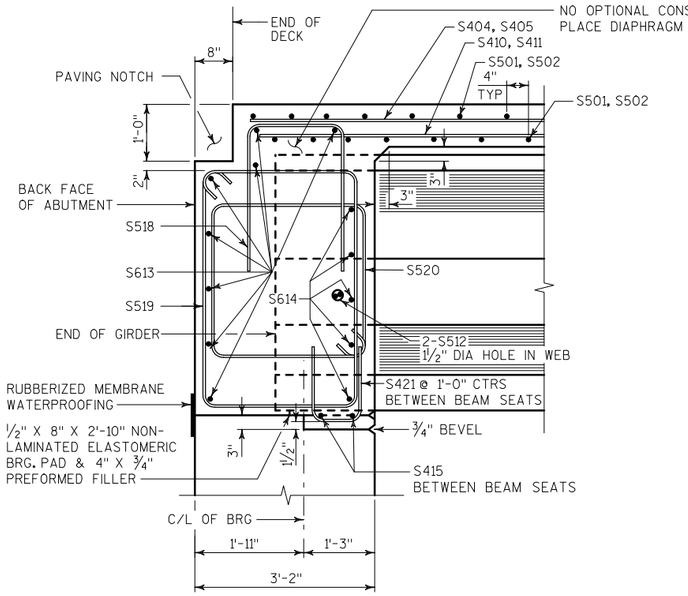
8

8

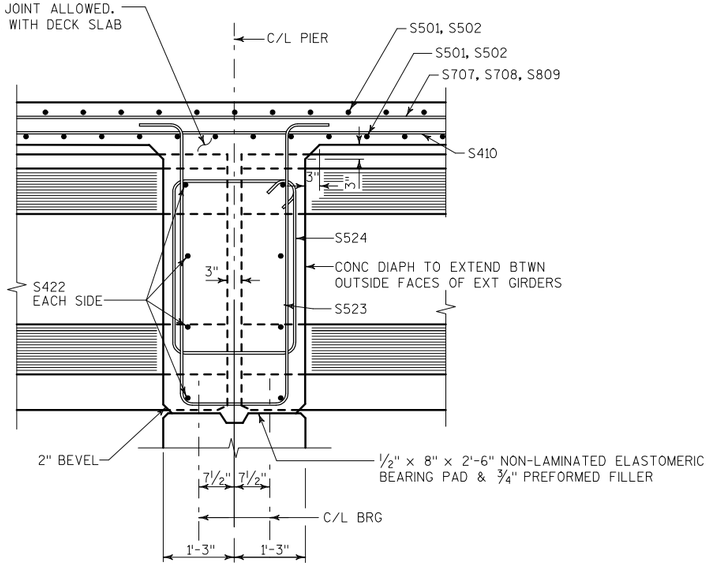
PLOT DATE : 24-JAN-2011 PLOT BY : mmorgan

STATE PROJECT NUMBER

6676-03-73

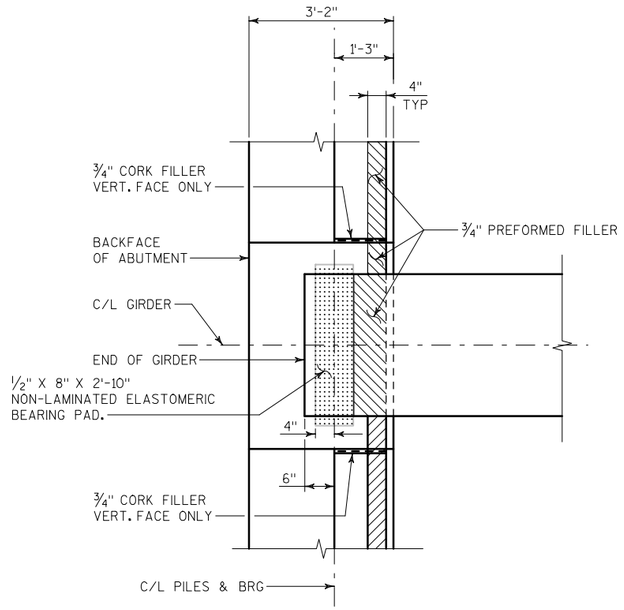



AT ABUTMENT DIAPHRAGM

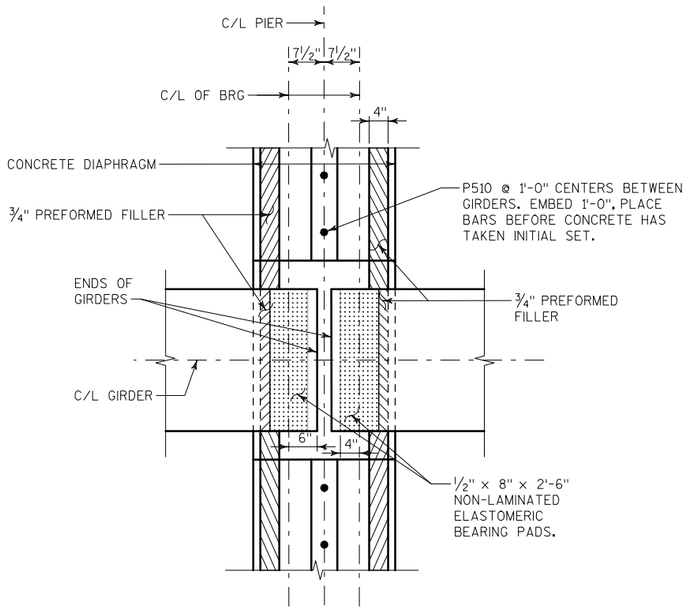



AT PIER DIAPHRAGM

## PART LONGIT SECTION




AT ABUTMENTS

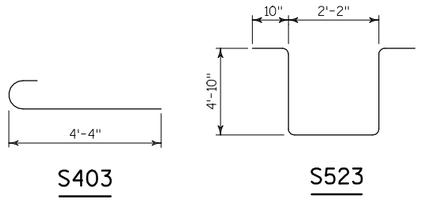



AT PIER

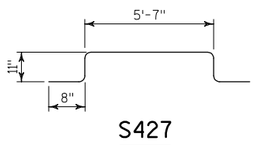
## BEARING PAD DETAIL

## BILL OF BARS

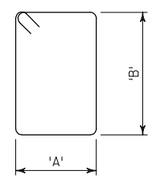
| BAR MARK | COAT | NO. REQ'D | LENGTH | BENT | LOCATION |
|---|---|---|---|---|---|
| S501 | X | 631 | 60'-0" | | SLAB TRANSVERSE TOP & BOTTOM |
| S502 | X | 631 | 30'-0" | | SLAB TRANSVERSE TOP & BOTTOM |
| S403 | X | 316 | 4'-10" | X | SLAB TRANSVERSE TOP AT OVERHANG |
| S404 | X | 264 | 40'-0" | | SLAB LONGITUDINAL TOP |
| S405 | X | 132 | 10'-10" | | SLAB LONGITUDINAL TOP AT ENDS |
| S606 | X | 264 | 23'-2" | | SLAB LONGITUDINAL TOP |
| S707 | X | 132 | 30'-0" | | SLAB LONGITUDINAL TOP |
| S708 | X | 132 | 60'-0" | | SLAB LONGITUDINAL TOP |
| S809 | X | 131 | 50'-0" | | SLAB LONGITUDINAL TOP AT PIER |
| S410 | X | 665 | 40'-0" | | SLAB LONGITUDINAL BOTTOM |
| S411 | X | 133 | 18'-6" | | SLAB LONGITUDINAL BOTTOM AT ENDS |
| S512 | X | 32 | 6'-0" | | ABUT DIAPH HORIZ THRU GIRDER WEBS |
| S613 | X | 28 | 45'-3" | | ABUT DIAPH HORIZ BF |
| S614 | X | 140 | 6'-6" | | ABUT DIAPH HORIZ FF |
| S415 | X | 28 | 7'-10" | | ABUT DIAPH HORIZ BTWN BEAM SEATS |
| S616 | X | 8 | 7'-11" | X | ABUT DIAPH HORIZ OUTSIDE |
| S617 | X | 2 | 5'-11" | X | ABUT DIAPH HORIZ OUTSIDE |
| S518 | X | 162 | 6'-3" | X | ABUT DIAPH VERT W/ SLAB |
| S519 | X | 162 | 14'-7" | X | ABUT DIAPH VERT BTWN GIRDERS |
| S520 | X | 64 | 12'-1" | X | ABUT DIAPH VERT BTWN GIRDER FLANGES |
| S421 | X | 126 | 3'-10" | X | ABUT DIAPH VERT BTWN BEAM SEATS |
| S422 | X | 56 | 6'-6" | | PIER DIAPH HORIZ |
| S523 | X | 63 | 13'-3" | X | PIER DIAPH VERT BTWN GIRDERS |
| S524 | X | 28 | 10'-9" | X | PIER DIAPH VERT BTWN GIRDER FLANGES |
| S625 | X | 8 | 6'-5" | X | ABUT DIAPH HORIZ OUTSIDE |
| S626 | X | 2 | 4'-7" | X | ABUT DIAPH HORIZ OUTSIDE |
| S427 | X | 421 | 8'-5" | X | SLAB MEDIAN DOWEL |
| | | | | | |
| S429 | X | 72 | 36'-6" | | MEDIAN LONGITUDINAL |



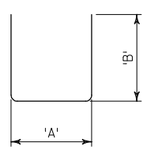

S403 S523




S427




| BAR MARK | DIM. 'A' | DIM. 'B' |
|---|---|---|
| S519 | 2'-10" | 4'-2" |
| S520 | 2'-10" | 2'-11" |
| S524 | 2'-2" | 2'-11" |




| BAR MARK | DIM. 'A' | DIM. 'B' |
|---|---|---|
| S616 | 2'-9" | 2'-9" |
| S617 | 2'-9" | 1'-9" |
| S518 | 2'-2" | 2'-2" |
| S421 | 1'-0" | 1'-6" |
| S625 | 2'-9" | 2'-0" |
| S626 | 2'-9" | 1'-1" |

## NOTE:

CONCRETE FOR ABUTMENT AND PIER DIAPHRAGMS IS TO BE PLACED WITH THE DECK CONCRETE. A CONSTRUCTION JOINT BETWEEN THE DECK AND DIAPHRAGMS IS NOT PERMITTED.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY PAK | PLANS CK'D. SGM

SUPERSTRUCTURE DETAILS

SHEET 14 OF 17

195

8

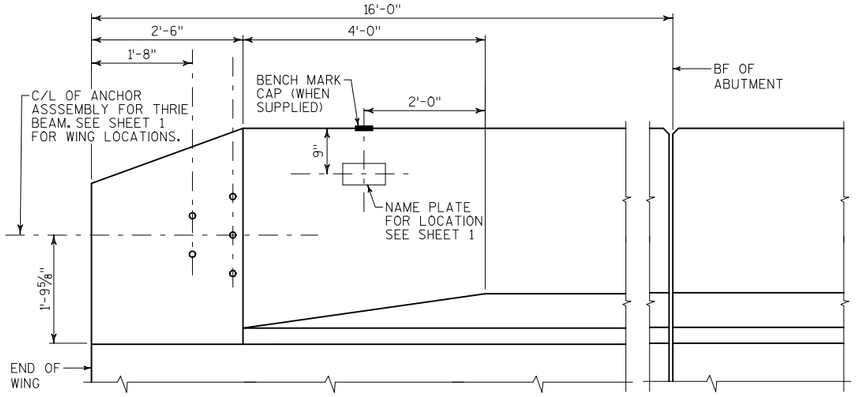
8

FILE= B37295_080306_su.dgn
SCALE = 2.667

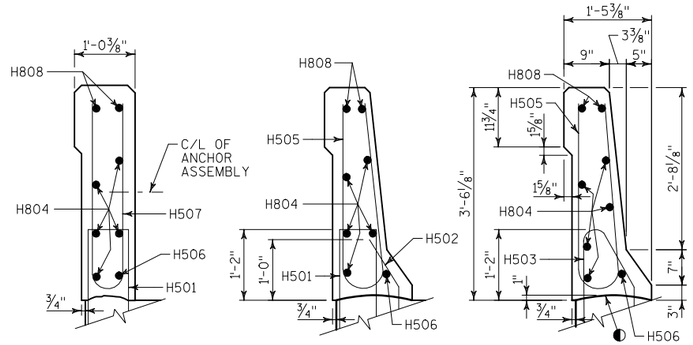
PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan

STATE PROJECT NUMBER

6676-03-73




TRAFFIC SIDE ELEVATION




SECTION A SECTION B SECTION C

## NOTES

◐ HORIZONTAL CONSTRUCTION JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

◪ H502 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE H502 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ H501 AND H503 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

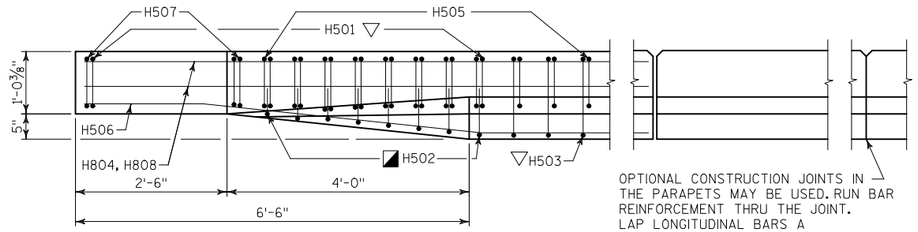
## BILL OF BARS

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

| BAR MARK | COAT | NO. REQ'D | | | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|---|---|
| | | S. ABUT. | N. ABUT. | SUPER | | | | |
| H501 | X | 14 | 14 | - | 4'-7" | X | | PARAPET VERTICAL |
| H502 | X | 8 | 8 | - | 2'-4" | X | | PARAPET VERTICAL |
| H503 | X | 15 | 15 | - | 4'-7" | X | | PARAPET VERTICAL |
| H804 | X | 5 | 5 | - | 15'-7" | | | PARAPET HORIZONTAL |
| H505 | X | 22 | 22 | 319 | 6'-6" | X | | PARAPET VERTICAL |
| H506 | X | 1 | 1 | - | 15'-7" | X | | PARAPET HORIZONTAL |
| H507 | X | 6 | 6 | - | 5'-8" | X | ⚠ | PARAPET VERTICAL |
| H808 | X | 2 | 2 | - | 15'-7" | X | | PARAPET HORIZONTAL |
| H509 | X | - | - | 317 | 4'-7" | X | | PARAPET VERTICAL |
| H810 | X | - | - | 24 | 60'-0" | | | PARAPET HORIZONTAL |
| H811 | X | - | - | 8 | 41'-10" | | | PARAPET HORIZONTAL |

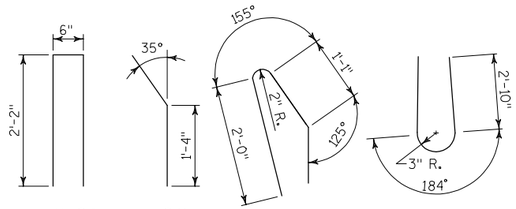
## BAR SERIES TABLE

| BAR MARK | NO. REQ'D. | LENGTH |
|---|---|---|
| H507 | 2 SERIES OF 6 | 4'-10" TO 6'-6" |
| | | |

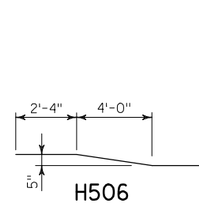



PLAN

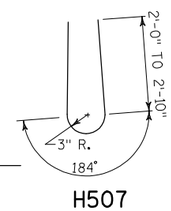
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINFORCEMENT THRU THE JOINT. LAP LONGITUDINAL BARS A MINIMUM OF 5'-9". MINIMUM JOINT SPACING OF 80'-0". DEFINE CONSTRUCTION JOINT WITH A ¾" 'V' GROOVE.



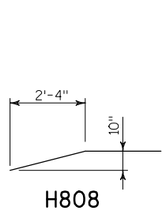

H501 H502 H503 H505




H506




H507

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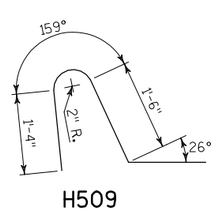


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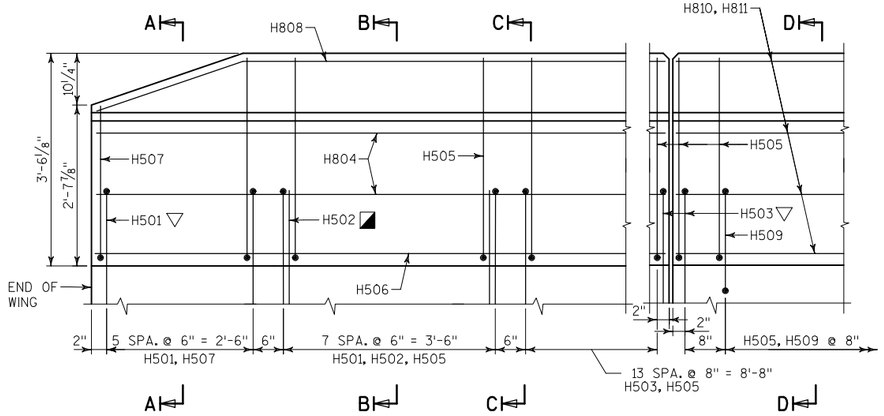
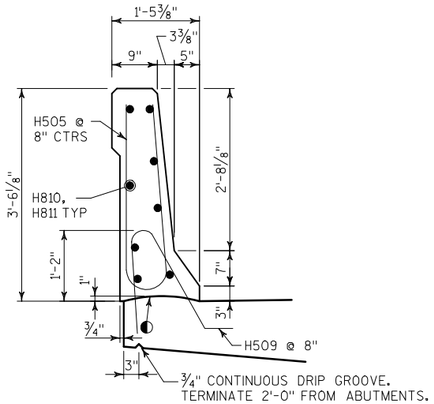
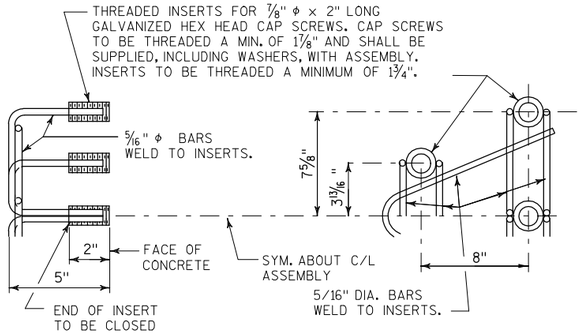



OUTSIDE ELEVATION




SECTION D




DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY MHM | PLANS CK'D. SGM

EAST PARAPET SLOPED FACE PARAPET 'HF'

SHEET 15 OF 17



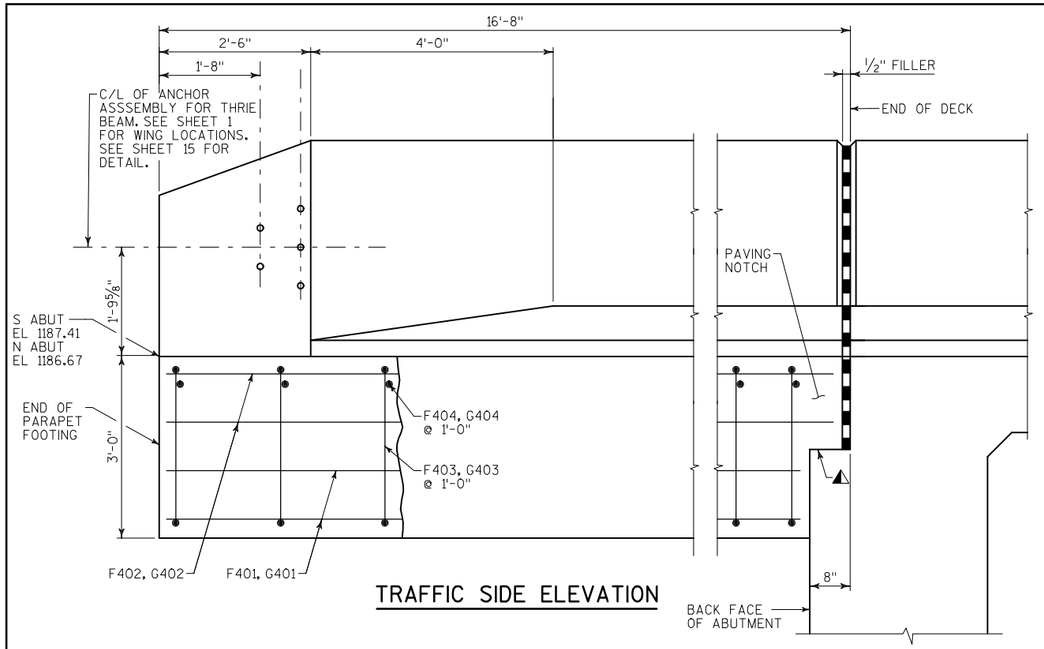
8

8

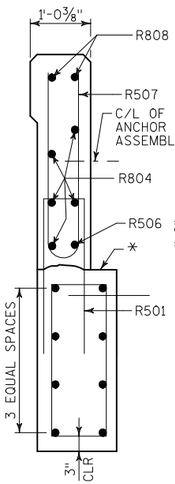
FILE= B37295_080307_pp.dgn
SCALE = 2.5

PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan

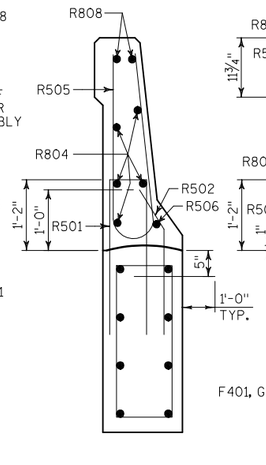
| STATE PROJECT NUMBER |
|---|
| 6676-03-73 |



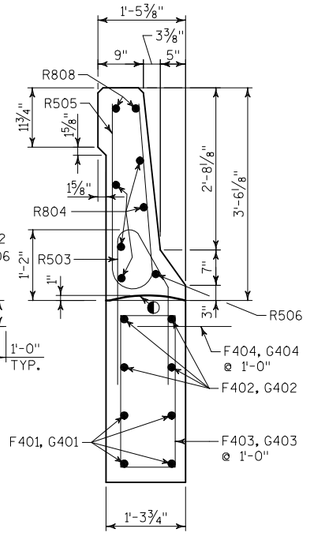

TRAFFIC SIDE ELEVATION




SECTION A




SECTION B




SECTION C

## NOTES

◐ HORIZONTAL CONSTRUCTION JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.
SEE ABUTMENT SHEETS FOR PARAPET FOOTING LOCATION

⚠ STEEL TROWEL HORIZONTAL SURFACE OF PAVING NOTCH. PLACE MULTIPLE LAYERS OF POLYETHLENE SHEETS BETWEEN PARAPET FOOTING AND HORIZONTAL SURFACE OF PAVING NOTCH. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

◪ R502 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R502 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 & R503 BARS TO BE TIED TO PARAPET FOOTING STEEL BEFORE FOOTING IS POURED.

* FINISH SURFACE NOT COVERED BY PARAPET SAME AS ROADWAY. THIS SURFACE SHALL BE LEVEL.

## BILL OF BARS

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

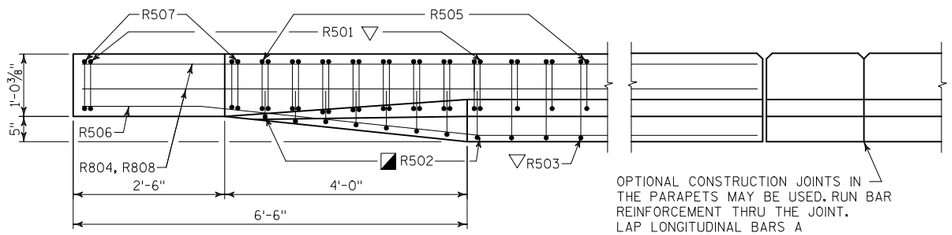
| BAR MARK | COAT | NO. REQ'D | | | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|---|---|
| | | S. ABUT. | N. ABUT. | SUPER | | | | |
| R501 | X | 14 | 14 | - | 4'-7" | X | | PARAPET VERTICAL |
| R502 | X | 8 | 8 | - | 2'-4" | X | | PARAPET VERTICAL |
| R503 | X | 15 | 15 | - | 4'-7" | X | | PARAPET VERTICAL |
| R804 | X | 5 | 5 | - | 16'-3" | | | PARAPET HORIZONTAL |
| R505 | X | 23 | 23 | 317 | 6'-6" | X | | PARAPET VERTICAL |
| R506 | X | 1 | 1 | - | 16'-3" | X | | PARAPET HORIZONTAL |
| R507 | X | 6 | 6 | - | 5'-8" | X | ⚠ | PARAPET VERTICAL |
| R808 | X | 2 | 2 | - | 16'-3" | X | | PARAPET HORIZONTAL |
| R509 | X | - | - | 317 | 4'-7" | X | | PARAPET VERTICAL |
| R810 | X | - | - | 24 | 60'-0" | | | PARAPET HORIZONTAL |
| R811 | X | - | - | 8 | 40'-6" | | | PARAPET HORIZONTAL |

## BILL OF BARS FOR PARAPET FOOTINGS

| BAR MARK | COAT | NO REQ'D | LENGTH | BENT | LOCATION |
|---|---|---|---|---|---|
| F401 | X | 4 | 15'-7" | | SOUTH ABUTMENT - HORIZONTAL |
| F402 | X | 4 | 16'-3" | | SOUTH ABUTMENT - HORIZONTAL |
| F403 | X | 17 | 7'-6" | X | SOUTH ABUTMENT - STIRRUPS - VERTICAL |
| F404 | X | 17 | 2'-2" | | SOUTH ABUTMENT - SURFACE DRAIN ANCHOR |
| | | | | | |
| G401 | X | 4 | 15'-7" | | NORTH ABUTMENT HORIZONTAL |
| G402 | X | 4 | 16'-3" | | NORTH ABUTMENT HORIZONTAL |
| G403 | X | 17 | 7'-6" | X | NORTH ABUTMENT - STIRRUPS - VERTICAL |
| G404 | X | 17 | 2'-2" | | NORTH ABUTMENT - SURFACE DRAIN ANCHOR |

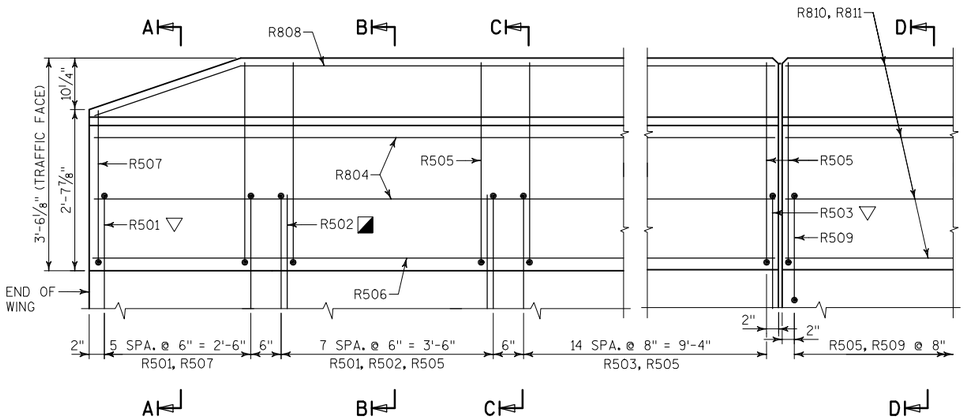
## BAR SERIES TABLE

| BAR MARK | NO. REQ'D. | LENGTH |
|---|---|---|
| R507 | 2 SERIES OF 6 | 4'-10" TO 6'-6" |
| | | |

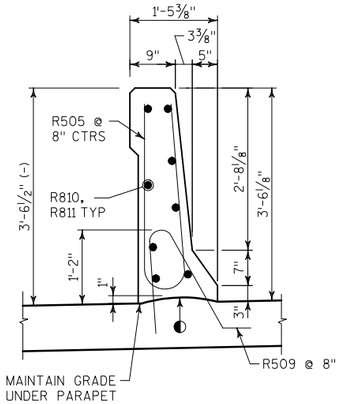



PLAN

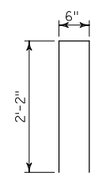
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINFORCEMENT THRU THE JOINT. LAP LONGITUDINAL BARS A MINIMUM OF 5'-9". MINIMUM JOINT SPACING OF 80'-0". DEFINE CONSTRUCTION JOINT WITH A 3/4" 'V' GROOVE.



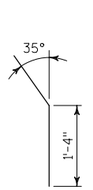

OUTSIDE ELEVATION



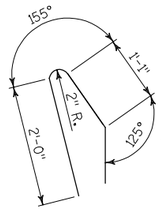

SECTION D



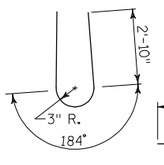

R501



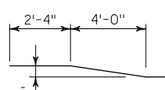

R502



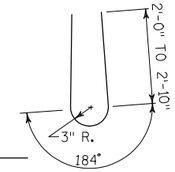

R503



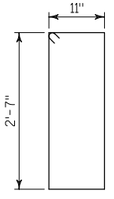

R505



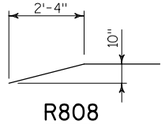

R506



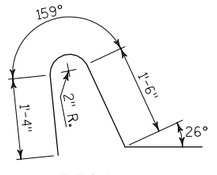

R507




F403, G403




R808




R509

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY MHM | PLANS CK'D. SGM

SHARED USE PATH SLOPED FACE PARAPET 'HF'

SHEET 16 OF 17

197

8

8

PLOT DATE : 21-JAN-2011 PLOT BY : mmorgan

FILE= B37295_080308_pp.dgn
SCALE = 2.5

STATE PROJECT NUMBER

6676-03-73

## FENCE MEMBER SIZE AND WEIGHT

| STEEL FENCE MEMBER | OUTSIDE DIAMETER (INCHES) | WEIGHT (LB/FT) |
|---|---|---|
| RAILS | 1.660 | 2.27 |
| END POST | 2.875 | 5.80 |
| OVERHANG POST | 2.875 | 5.80 |
| LINE POST | 2.375 | 3.65 |
| POST SLEEVE | 4.000 | 9.12 |

## GENERAL NOTES

POSTS ARE TO BE SET VERTICAL.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 8-FT.", LF.

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

BASE PLATES, ANCHOR PLATES AND SHIMS SHALL BE ASTM A709, GRADE 36.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

◪ CAULK AROUND PERIMETER OF BASE PLATE AND FILL PORTION OF SLOTTED HOLE AROUND ANCHOR BOLT IN SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

✳ ALTERNATE TO DOUBLE CLAMP: USE LINE RAIL CLAMP (BOULEVARD) OR 180° BRACE BAND, WHICH MAY BE USED WHEN THE POSTS ARE EITHER BOLTED TO THE POST SLEEVES OR DIRECTLY WELDED TO THE BASE PLATE.

◭ ½" DIA. X 6⅞" LONG GALVANIZED HEX BOLT WITH NUT & WASHER. TYPE "S", ½" DIA. CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR ½" DIA. BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE "S" ANCHORS ARE USED. SEE ☆

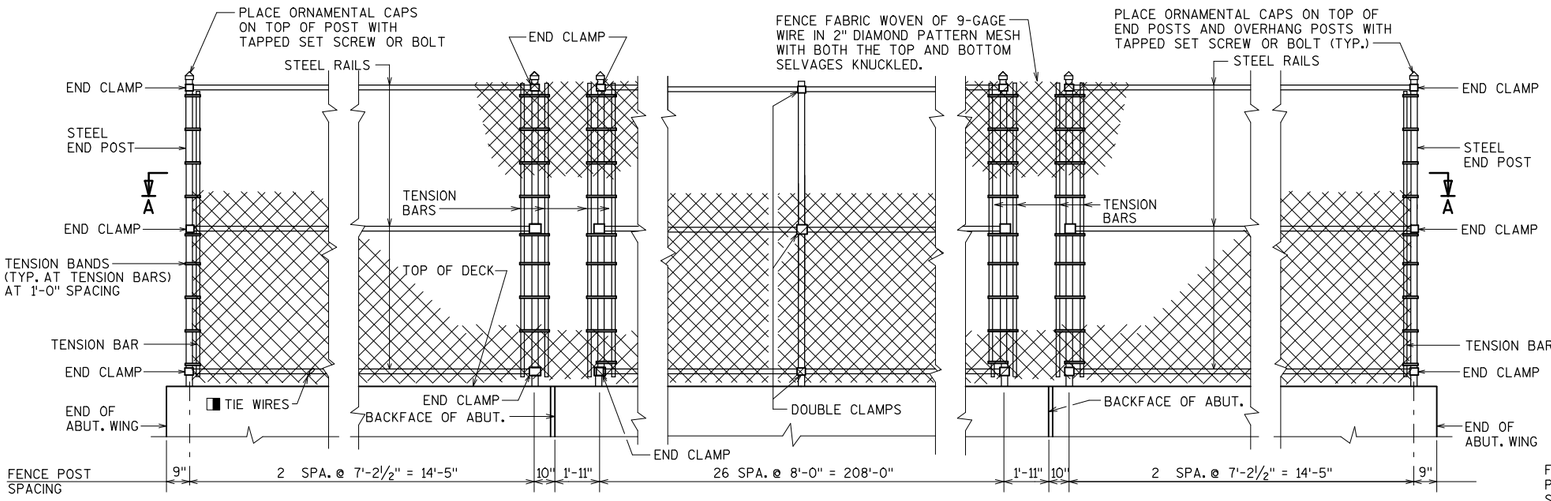
☆ ½" DIA. CONCRETE MASONRY ANCHOR, TYPE "S", 6" MIN. EMBEDMENT (EPOXY ANCHORED) INTO CONCRETE AND MINIMUM PULLOUT CAPACITY OF 10 KIPS. ANCHOR, WASHER AND NUT SHALL BE GALVANIZED.

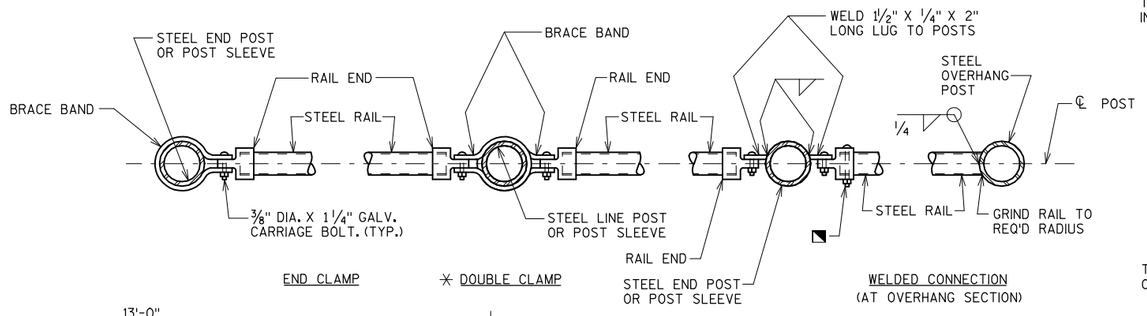
◨ ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

◹ BOLT RAIL TO RAIL END TO SECURE OVERHANG SECTION. ALTERNATE IS TO WELD RAIL DIRECTLY TO END POST.

MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". LOCATE SPLICES NEAR ¼ POINT OF POST SPACING.

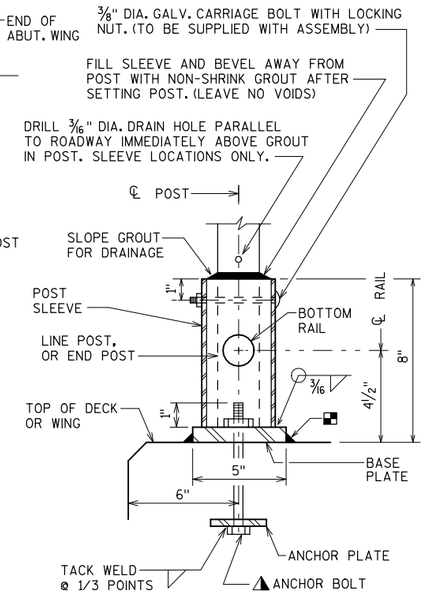
## FENCE PART ELEVATION




## SECTION A-A

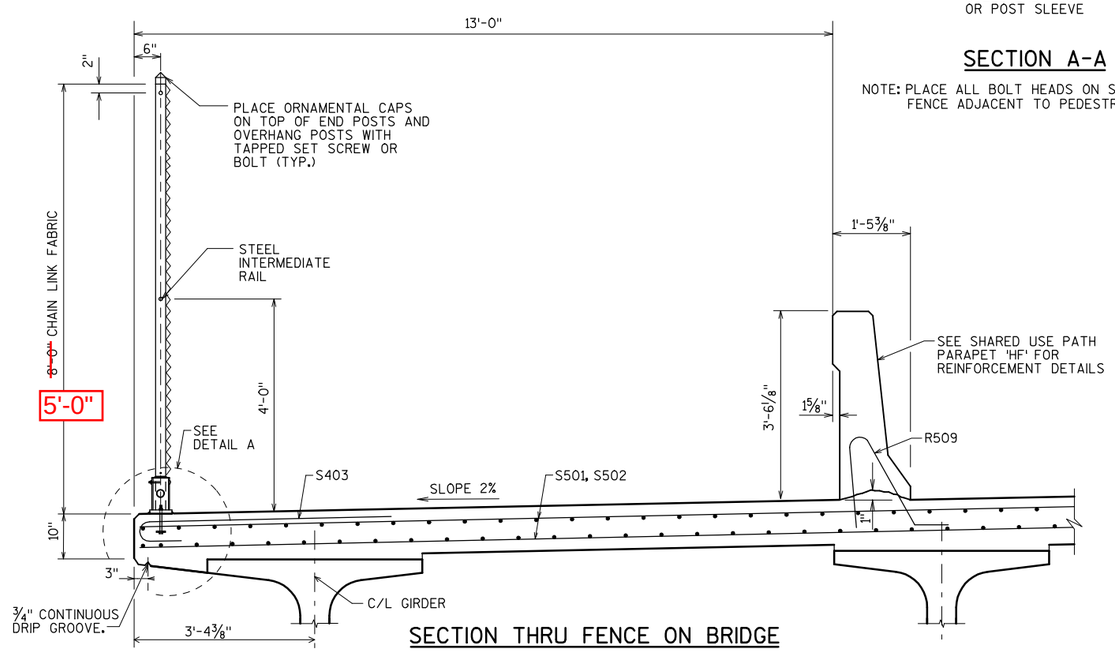
NOTE: PLACE ALL BOLT HEADS ON SIDE OF FENCE ADJACENT TO PEDESTRIANS



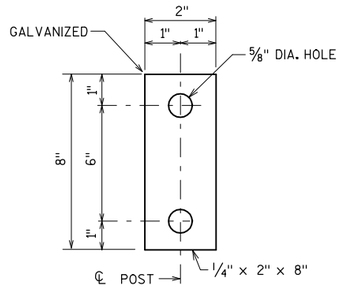

## DETAIL 'A'

UNIT SHALL BE GALVANIZED AFTER FABRICATION

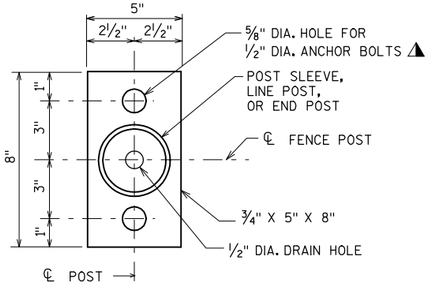
NOTE: IN LIEU OF USING THE POST SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.




## SECTION THRU FENCE ON BRIDGE




## ANCHOR PLATE




## BASE PLATE

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-295

DRAWN BY: MHM | PLANS CK'D.: SGM

CHAIN LINK FENCE DETAILS

SHEET 17 OF 17

198

8

8

FILE= B37295_080401_fe.dgn
SCALE = 3

PLOT DATE : 24-JAN-2011 PLOT BY : mmorgan

| Station 0+00 to Station 23+50 | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Expanded Marsh | | Expanded EBS | Reduced Marsh | Reduced EBS | |
| STATION | Real Station | Distance | Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Expanded Fill | Backfill | Expanded Rock | Backfill | in Fill | In Fill | Mass Ordinate |
| | | | | | | | | | 1.00 | 1.25 | 1.50 | 1.10 | 1.30 | 0.60 | 0.80 | |
| | | | Note 1 | Note 2 | Note 3 | | | | Note 1 | | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 00+00.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 00+50.00 | 50 | 50 | 176 | 0 | 3 | 0 | 0 | 0 | 176 | 4 | 0 | 0 | 0 | 0 | 0 | 172 |
| 01+00.00 | 100 | 50 | 196 | 0 | 16 | 0 | 0 | 0 | 372 | 24 | 0 | 0 | 0 | 0 | 0 | 348 |
| 01+50.00 | 150 | 50 | 231 | 0 | 14 | 0 | 0 | 0 | 603 | 41 | 0 | 0 | 0 | 0 | 0 | 562 |
| 02+00.00 | 200 | 50 | 244 | 0 | 3 | 0 | 0 | 0 | 847 | 45 | 0 | 0 | 0 | 0 | 0 | 802 |
| 02+50.00 | 250 | 50 | 229 | 0 | 8 | 0 | 0 | 0 | 1,076 | 55 | 0 | 0 | 0 | 0 | 0 | 1,021 |
| 03+00.00 | 300 | 50 | 222 | 0 | 9 | 0 | 0 | 0 | 1,298 | 66 | 0 | 0 | 0 | 0 | 0 | 1,232 |
| 03+50.00 | 350 | 50 | 244 | 0 | 3 | 0 | 0 | 0 | 1,542 | 70 | 0 | 0 | 0 | 0 | 0 | 1,472 |
| 03+61.50 | 361.5 | 12 | 64 | 0 | 0 | 0 | 0 | 0 | 1,606 | 70 | 0 | 0 | 0 | 0 | 0 | 1,536 |
| 04+00.00 | 400 | 39 | 196 | 0 | 3 | 0 | 0 | 0 | 1,802 | 74 | 0 | 0 | 0 | 0 | 0 | 1,728 |
| 04+50.00 | 450 | 50 | 198 | 0 | 15 | 0 | 0 | 0 | 2,000 | 93 | 0 | 0 | 0 | 0 | 0 | 1,908 |
| 05+00.00 | 500 | 50 | 171 | 0 | 19 | 0 | 0 | 0 | 2,171 | 116 | 0 | 0 | 0 | 0 | 0 | 2,055 |
| 05+10.00 | 510 | 10 | 34 | 0 | 3 | 0 | 0 | 0 | 2,205 | 120 | 0 | 0 | 0 | 0 | 0 | 2,085 |
| 05+50.00 | 550 | 40 | 143 | 0 | 23 | 0 | 0 | 0 | 2,348 | 149 | 0 | 0 | 0 | 0 | 0 | 2,199 |
| 06+00.00 | 600 | 50 | 195 | 0 | 52 | 0 | 0 | 0 | 2,543 | 214 | 0 | 0 | 0 | 0 | 0 | 2,329 |
| 06+50.00 | 650 | 50 | 217 | 0 | 63 | 0 | 0 | 0 | 2,760 | 293 | 0 | 0 | 0 | 0 | 0 | 2,468 |
| 07+00.00 | 700 | 50 | 276 | 0 | 35 | 0 | 0 | 0 | 3,036 | 336 | 0 | 0 | 0 | 0 | 0 | 2,700 |
| 07+40.00 | 740 | 40 | 284 | 0 | 5 | 0 | 0 | 0 | 3,320 | 343 | 0 | 0 | 0 | 0 | 0 | 2,978 |
| 07+50.00 | 750 | 10 | 78 | 0 | 0 | 0 | 0 | 0 | 3,398 | 343 | 0 | 0 | 0 | 0 | 0 | 3,056 |
| 08+00.00 | 800 | 50 | 397 | 0 | 0 | 0 | 0 | 0 | 3,795 | 343 | 0 | 0 | 0 | 0 | 0 | 3,453 |
| 08+10.00 | 810 | 10 | 80 | 0 | 0 | 0 | 0 | 0 | 3,875 | 343 | 0 | 0 | 0 | 0 | 0 | 3,533 |
| 08+50.00 | 850 | 40 | 320 | 0 | 0 | 0 | 0 | 0 | 4,195 | 343 | 0 | 0 | 0 | 0 | 0 | 3,853 |
| 09+00.00 | 900 | 50 | 385 | 0 | 0 | 0 | 0 | 0 | 4,580 | 343 | 0 | 0 | 0 | 0 | 0 | 4,238 |
| 09+50.00 | 950 | 50 | 382 | 0 | 0 | 0 | 0 | 0 | 4,962 | 343 | 0 | 0 | 0 | 0 | 0 | 4,620 |
| 10+00.00 | 1000 | 50 | 404 | 0 | 0 | 0 | 0 | 0 | 5,366 | 343 | 0 | 0 | 0 | 0 | 0 | 5,024 |
| 10+50.00 | 1050 | 50 | 497 | 0 | 0 | 0 | 0 | 0 | 5,863 | 343 | 0 | 0 | 0 | 0 | 0 | 5,521 |
| 10+57.00 | 1057 | 7 | 73 | 0 | 0 | 0 | 0 | 0 | 5,936 | 343 | 0 | 0 | 0 | 0 | 0 | 5,594 |
| 11+00.00 | 1100 | 43 | 385 | 0 | 4 | 0 | 0 | 0 | 6,321 | 348 | 0 | 0 | 0 | 0 | 0 | 5,974 |
| 11+50.00 | 1150 | 50 | 427 | 0 | 9 | 0 | 0 | 0 | 6,748 | 359 | 0 | 0 | 0 | 0 | 0 | 6,389 |
| 11+53.94 | 1153.94 | 4 | 33 | 0 | 1 | 0 | 0 | 0 | 6,781 | 360 | 0 | 0 | 0 | 0 | 0 | 6,421 |
| 12+00.00 | 1200 | 46 | 390 | 0 | 6 | 0 | 0 | 0 | 7,171 | 368 | 0 | 0 | 0 | 0 | 0 | 6,804 |
| 12+50.00 | 1250 | 50 | 436 | 0 | 3 | 0 | 0 | 0 | 7,607 | 371 | 0 | 0 | 0 | 0 | 0 | 7,236 |
| 12+62.84 | 1262.84 | 13 | 114 | 0 | 0 | 0 | 0 | 0 | 7,721 | 371 | 0 | 0 | 0 | 0 | 0 | 7,350 |
| 13+00.00 | 1300 | 37 | 371 | 0 | 0 | 0 | 0 | 0 | 8,092 | 371 | 0 | 0 | 0 | 0 | 0 | 7,721 |
| 13+09.30 | 1309.3 | 9 | 96 | 0 | 0 | 0 | 0 | 0 | 8,188 | 371 | 0 | 0 | 0 | 0 | 0 | 7,817 |
| 13+50.00 | 1350 | 41 | 431 | 0 | 4 | 0 | 0 | 0 | 8,619 | 376 | 0 | 0 | 0 | 0 | 0 | 8,243 |
| 13+68.14 | 1368.14 | 18 | 221 | 0 | 12 | 0 | 0 | 0 | 8,840 | 391 | 0 | 0 | 0 | 0 | 0 | 8,449 |
| 14+00.00 | 1400 | 32 | 349 | 0 | 19 | 0 | 0 | 0 | 9,189 | 415 | 0 | 0 | 0 | 0 | 0 | 8,774 |
| 14+50.00 | 1450 | 50 | 494 | 0 | 0 | 0 | 0 | 0 | 9,683 | 415 | 0 | 0 | 0 | 0 | 0 | 9,268 |
| 14+75.70 | 1475.7 | 26 | 274 | 0 | 0 | 0 | 0 | 0 | 9,957 | 415 | 0 | 0 | 0 | 0 | 0 | 9,542 |
| 14+82.03 | 1482.03 | 6 | 65 | 0 | 0 | 0 | 0 | 0 | 10,022 | 415 | 0 | 0 | 0 | 0 | 0 | 9,607 |
| 15+00.00 | 1500 | 18 | 183 | 0 | 0 | 0 | 0 | 0 | 10,205 | 415 | 0 | 0 | 0 | 0 | 0 | 9,790 |
| 15+50.00 | 1550 | 50 | 478 | 0 | 1 | 0 | 0 | 0 | 10,683 | 416 | 0 | 0 | 0 | 0 | 0 | 10,267 |
| 15+97.07 | 1597.07 | 47 | 327 | 0 | 3 | 0 | 0 | 0 | 11,010 | 420 | 0 | 0 | 0 | 0 | 0 | 10,590 |
| 16+00.00 | 1600 | 3 | 15 | 0 | 0 | 0 | 0 | 0 | 11,025 | 420 | 0 | 0 | 0 | 0 | 0 | 10,605 |
| 16+07.00 | 1607 | 7 | 31 | 0 | 1 | 0 | 0 | 0 | 11,056 | 421 | 0 | 0 | 0 | 0 | 0 | 10,635 |
| 16+14.00 | 1614 | 7 | 26 | 0 | 2 | 0 | 0 | 0 | 11,082 | 424 | 0 | 0 | 0 | 0 | 0 | 10,658 |
| 16+50.00 | 1650 | 36 | 122 | 0 | 29 | 0 | 0 | 0 | 11,204 | 460 | 0 | 0 | 0 | 0 | 0 | 10,744 |
| 17+00.00 | 1700 | 50 | 216 | 0 | 118 | 0 | 0 | 0 | 11,420 | 608 | 0 | 0 | 0 | 0 | 0 | 10,813 |
| 17+50.00 | 1750 | 50 | 278 | 0 | 91 | 0 | 0 | 0 | 11,698 | 721 | 0 | 0 | 0 | 0 | 0 | 10,977 |
| 18+00.00 | 1800 | 50 | 303 | 0 | 6 | 0 | 0 | 0 | 12,001 | 729 | 0 | 0 | 0 | 0 | 0 | 11,272 |
| 18+50.00 | 1850 | 50 | 310 | 0 | 6 | 0 | 0 | 0 | 12,311 | 736 | 0 | 0 | 0 | 0 | 0 | 11,575 |
| 19+00.00 | 1900 | 50 | 329 | 0 | 18 | 0 | 0 | 0 | 12,640 | 759 | 0 | 0 | 0 | 0 | 0 | 11,881 |
| 19+50.00 | 1950 | 50 | 362 | 0 | 16 | 0 | 0 | 0 | 13,002 | 779 | 0 | 0 | 0 | 0 | 0 | 12,223 |
| 20+00.00 | 2000 | 50 | 350 | 0 | 9 | 0 | 0 | 0 | 13,352 | 790 | 0 | 0 | 0 | 0 | 0 | 12,562 |
| 20+50.00 | 2050 | 50 | 329 | 0 | 16 | 0 | 0 | 0 | 13,681 | 810 | 0 | 0 | 0 | 0 | 0 | 12,871 |
| 20+72.00 | 2072 | 22 | 149 | 0 | 6 | 0 | 0 | 0 | 13,830 | 818 | 0 | 0 | 0 | 0 | 0 | 13,013 |
| 21+00.00 | 2100 | 28 | 198 | 0 | 5 | 0 | 0 | 0 | 14,028 | 824 | 0 | 0 | 0 | 0 | 0 | 13,204 |
| 21+50.00 | 2150 | 50 | 369 | 0 | 6 | 0 | 0 | 0 | 14,397 | 831 | 0 | 0 | 0 | 0 | 0 | 13,566 |
| 22+00.00 | 2200 | 50 | 374 | 0 | 4 | 0 | 0 | 0 | 14,771 | 836 | 0 | 0 | 0 | 0 | 0 | 13,935 |
| 22+28.00 | 2228 | 28 | 214 | 0 | 2 | 0 | 0 | 0 | 14,985 | 839 | 0 | 0 | 0 | 0 | 0 | 14,146 |
| 22+40.00 | 2240 | 12 | 90 | 0 | 1 | 0 | 0 | 0 | 15,075 | 840 | 0 | 0 | 0 | 0 | 0 | 14,235 |
| 22+50.00 | 2250 | 10 | 70 | 0 | 1 | 0 | 0 | 0 | 15,145 | 841 | 0 | 0 | 0 | 0 | 0 | 14,304 |
| 23+00.00 | 2300 | 50 | 293 | 0 | 14 | 0 | 0 | 0 | 15,438 | 859 | 0 | 0 | 0 | 0 | 0 | 14,579 |
| 23+50.00 | 2350 | 50 | 251 | 0 | 21 | 0 | 0 | 0 | 15,689 | 885 | 0 | 0 | 0 | 0 | 0 | 14,804 |

CONTINUTED ON FOLLOWING SHEET

9

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

9

| Station 23+74 to Station 54+20 | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Expanded Marsh | | Expanded EBS | Reduced Marsh | Reduced EBS | |
| STATION | Real Station | Distance | Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut 1.00 | Expanded Fill 1.25 | Backfill 1.50 | Expanded Rock 1.10 | Backfill 1.30 | in Fill 0.60 | In Fill 0.80 | Mass Ordinate |
| | | | Note 1 | Note 2 | Note 3 | | | | Note 1 | | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 23+74.00 | 2374 | 24 | 134 | 0 | 8 | 0 | 0 | 0 | 15,823 | 895 | 0 | 0 | 0 | 0 | 0 | 14,928 |
| 24+00.00 | 2400 | 26 | 146 | 0 | 11 | 0 | 0 | 0 | 15,969 | 909 | 0 | 0 | 0 | 0 | 0 | 15,060 |
| 24+23.00 | 2423 | 23 | 125 | 0 | 10 | 0 | 0 | 0 | 16,094 | 921 | 0 | 0 | 0 | 0 | 0 | 15,173 |
| 24+31.00 | 2431 | 8 | 47 | 0 | 3 | 0 | 0 | 0 | 16,141 | 925 | 0 | 0 | 0 | 0 | 0 | 15,216 |
| 24+50.00 | 2450 | 19 | 111 | 0 | 5 | 0 | 0 | 0 | 16,252 | 931 | 0 | 0 | 0 | 0 | 0 | 15,321 |
| 25+00.00 | 2500 | 50 | 249 | 0 | 44 | 0 | 0 | 0 | 16,501 | 986 | 0 | 0 | 0 | 0 | 0 | 15,515 |
| 25+50.00 | 2550 | 50 | 199 | 0 | 71 | 0 | 0 | 0 | 16,700 | 1,075 | 0 | 0 | 0 | 0 | 0 | 15,625 |
| 25+80.00 | 2580 | 30 | 123 | 0 | 32 | 0 | 0 | 0 | 16,823 | 1,115 | 0 | 0 | 0 | 0 | 0 | 15,708 |
| 26+00.00 | 2600 | 20 | 89 | 0 | 14 | 0 | 0 | 0 | 16,912 | 1,133 | 0 | 0 | 0 | 0 | 0 | 15,780 |
| 26+50.00 | 2650 | 50 | 257 | 0 | 1 | 0 | 0 | 0 | 17,169 | 1,134 | 0 | 0 | 0 | 0 | 0 | 16,035 |
| 27+00.00 | 2700 | 50 | 327 | 0 | 6 | 0 | 0 | 0 | 17,496 | 1,141 | 0 | 0 | 0 | 0 | 0 | 16,355 |
| 27+16.00 | 2716 | 16 | 111 | 0 | 1 | 0 | 0 | 0 | 17,607 | 1,143 | 0 | 0 | 0 | 0 | 0 | 16,465 |
| 27+50.00 | 2750 | 34 | 296 | 0 | 1 | 0 | 0 | 0 | 17,903 | 1,144 | 0 | 0 | 0 | 0 | 0 | 16,759 |
| 28+00.00 | 2800 | 50 | 569 | 0 | 0 | 0 | 0 | 0 | 18,472 | 1,144 | 0 | 0 | 0 | 0 | 0 | 17,328 |
| 28+17.00 | 2817 | 17 | 170 | 0 | 0 | 0 | 0 | 0 | 18,642 | 1,144 | 0 | 0 | 0 | 0 | 0 | 17,498 |
| 28+50.00 | 2850 | 33 | 169 | 0 | 120 | 0 | 0 | 0 | 18,811 | 1,294 | 0 | 0 | 0 | 0 | 0 | 17,517 |
| 29+00.00 | 2900 | 50 | 86 | 0 | 591 | 0 | 0 | 0 | 18,897 | 2,033 | 0 | 0 | 0 | 0 | 0 | 16,865 |
| 29+50.00 | 2950 | 50 | 57 | 0 | 857 | 0 | 0 | 0 | 18,954 | 3,104 | 0 | 0 | 0 | 0 | 0 | 15,850 |
| 30+00.00 | 3000 | 50 | 63 | 0 | 766 | 0 | 0 | 0 | 19,017 | 4,061 | 0 | 0 | 0 | 0 | 0 | 14,956 |
| 30+50.00 | 3050 | 50 | 93 | 0 | 528 | 0 | 0 | 0 | 19,110 | 4,721 | 0 | 0 | 0 | 0 | 0 | 14,389 |
| 31+00.00 | 3100 | 50 | 139 | 0 | 324 | 0 | 0 | 0 | 19,249 | 5,126 | 0 | 0 | 0 | 0 | 0 | 14,123 |
| 31+07.00 | 3107 | 7 | 24 | 0 | 31 | 0 | 0 | 0 | 19,273 | 5,165 | 0 | 0 | 0 | 0 | 0 | 14,108 |
| 31+50.00 | 3150 | 43 | 154 | 0 | 159 | 0 | 0 | 0 | 19,427 | 5,364 | 0 | 0 | 0 | 0 | 0 | 14,063 |
| 31+50.00 | 3150 | 43 | 154 | 0 | 159 | 0 | 0 | 0 | 19,581 | 5,563 | 0 | 0 | 0 | 0 | 0 | 14,019 |
| 32+00.00 | 3200 | 50 | 211 | 0 | 108 | 0 | 0 | 0 | 19,792 | 5,698 | 0 | 0 | 0 | 0 | 0 | 14,095 |
| 32+11.00 | 3211 | 11 | 56 | 0 | 12 | 0 | 0 | 0 | 19,848 | 5,713 | 0 | 0 | 0 | 0 | 0 | 14,136 |
| 32+50.00 | 3250 | 39 | 245 | 0 | 22 | 0 | 0 | 0 | 20,093 | 5,740 | 0 | 0 | 0 | 0 | 0 | 14,353 |
| 33+00.00 | 3300 | 50 | 406 | 0 | 3 | 0 | 0 | 0 | 20,499 | 5,744 | 0 | 0 | 0 | 0 | 0 | 14,755 |
| 33+50.00 | 3350 | 50 | 493 | 0 | 0 | 0 | 0 | 0 | 20,992 | 5,744 | 0 | 0 | 0 | 0 | 0 | 15,248 |
| 33+69.00 | 3369 | 19 | 207 | 0 | 0 | 0 | 0 | 0 | 21,199 | 5,744 | 0 | 0 | 0 | 0 | 0 | 15,455 |
| 34+00.00 | 3400 | 31 | 337 | 0 | 0 | 0 | 0 | 0 | 21,536 | 5,744 | 0 | 0 | 0 | 0 | 0 | 15,792 |
| 34+50.00 | 3450 | 50 | 524 | 0 | 0 | 0 | 0 | 0 | 22,060 | 5,744 | 0 | 0 | 0 | 0 | 0 | 16,316 |
| 35+00.00 | 3500 | 50 | 505 | 0 | 0 | 0 | 0 | 0 | 22,565 | 5,744 | 0 | 0 | 0 | 0 | 0 | 16,821 |
| 35+50.00 | 3550 | 50 | 488 | 0 | 0 | 0 | 0 | 0 | 23,053 | 5,744 | 0 | 0 | 0 | 0 | 0 | 17,309 |
| 35+94.00 | 3594 | 44 | 424 | 0 | 0 | 0 | 0 | 0 | 23,477 | 5,744 | 0 | 0 | 0 | 0 | 0 | 17,733 |
| 36+00.00 | 3600 | 6 | 58 | 0 | 0 | 0 | 0 | 0 | 23,535 | 5,744 | 0 | 0 | 0 | 0 | 0 | 17,791 |
| 36+04.00 | 3604 | 4 | 38 | 0 | 0 | 0 | 0 | 0 | 23,573 | 5,744 | 0 | 0 | 0 | 0 | 0 | 17,829 |
| 36+50.00 | 3650 | 46 | 401 | 0 | 2 | 0 | 0 | 0 | 23,974 | 5,746 | 0 | 0 | 0 | 0 | 0 | 18,228 |
| 37+00.00 | 3700 | 50 | 381 | 0 | 1 | 0 | 0 | 0 | 24,355 | 5,748 | 0 | 0 | 0 | 0 | 0 | 18,608 |
| 37+50.00 | 3750 | 50 | 345 | 0 | 2 | 0 | 0 | 0 | 24,700 | 5,750 | 0 | 0 | 0 | 0 | 0 | 18,950 |
| 38+00.00 | 3800 | 50 | 335 | 0 | 3 | 0 | 0 | 0 | 25,035 | 5,754 | 0 | 0 | 0 | 0 | 0 | 19,281 |
| 38+50.00 | 3850 | 50 | 328 | 0 | 4 | 0 | 0 | 0 | 25,363 | 5,759 | 0 | 0 | 0 | 0 | 0 | 19,604 |
| 39+00.00 | 3900 | 50 | 330 | 0 | 4 | 0 | 0 | 0 | 25,693 | 5,764 | 0 | 0 | 0 | 0 | 0 | 19,929 |
| 39+50.00 | 3950 | 50 | 357 | 0 | 2 | 0 | 0 | 0 | 26,050 | 5,766 | 0 | 0 | 0 | 0 | 0 | 20,284 |
| 39+98.00 | 3998 | 48 | 393 | 0 | 0 | 0 | 0 | 0 | 26,443 | 5,766 | 0 | 0 | 0 | 0 | 0 | 20,677 |
| 39+98.35 | 3998 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 26,446 | 5,766 | 0 | 0 | 0 | 0 | 0 | 20,680 |
| 40+00.00 | 4000 | 2 | 15 | 0 | 0 | 0 | 0 | 0 | 26,461 | 5,766 | 0 | 0 | 0 | 0 | 0 | 20,695 |
| 40+50.00 | 4050 | 50 | 472 | 0 | 0 | 0 | 0 | 0 | 26,933 | 5,766 | 0 | 0 | 0 | 0 | 0 | 21,167 |
| 41+00.00 | 4100 | 50 | 530 | 0 | 0 | 0 | 0 | 0 | 27,463 | 5,766 | 0 | 0 | 0 | 0 | 0 | 21,697 |
| 41+50.00 | 4150 | 50 | 588 | 0 | 0 | 0 | 0 | 0 | 28,051 | 5,766 | 0 | 0 | 0 | 0 | 0 | 22,285 |
| 41+82.00 | 4182 | 32 | 413 | 0 | 0 | 0 | 0 | 0 | 28,464 | 5,766 | 0 | 0 | 0 | 0 | 0 | 22,698 |
| 42+00.00 | 4200 | 18 | 243 | 0 | 0 | 0 | 0 | 0 | 28,707 | 5,766 | 0 | 0 | 0 | 0 | 0 | 22,941 |
| 42+50.00 | 4250 | 50 | 706 | 0 | 0 | 0 | 0 | 0 | 29,413 | 5,766 | 0 | 0 | 0 | 0 | 0 | 23,647 |
| 43+00.00 | 4300 | 50 | 708 | 0 | 0 | 0 | 0 | 0 | 30,121 | 5,766 | 0 | 0 | 0 | 0 | 0 | 24,355 |
| 43+50.00 | 4350 | 50 | 654 | 0 | 6 | 0 | 0 | 0 | 30,775 | 5,774 | 0 | 0 | 0 | 0 | 0 | 25,001 |
| 44+00.00 | 4400 | 50 | 642 | 0 | 16 | 0 | 0 | 0 | 31,417 | 5,794 | 0 | 0 | 0 | 0 | 0 | 25,623 |
| 44+50.00 | 4450 | 50 | 698 | 0 | 22 | 0 | 0 | 0 | 32,115 | 5,821 | 0 | 0 | 0 | 0 | 0 | 26,294 |
| 44+53.00 | 4453 | 3 | 45 | 0 | 1 | 0 | 0 | 0 | 32,160 | 5,823 | 0 | 0 | 0 | 0 | 0 | 26,338 |
| 45+00.00 | 4500 | 47 | 397 | 0 | 430 | 0 | 0 | 0 | 32,557 | 6,360 | 0 | 0 | 0 | 0 | 0 | 26,197 |
| 45+50.00 | 4550 | 50 | 97 | 0 | 1191 | 0 | 0 | 0 | 32,654 | 7,849 | 0 | 0 | 0 | 0 | 0 | 24,805 |
| 46+00.00 | 4600 | 50 | 90 | 0 | 1208 | 0 | 0 | 0 | 32,744 | 9,359 | 0 | 0 | 0 | 0 | 0 | 23,385 |
| 46+50.00 | 4650 | 50 | 85 | 0 | 868 | 0 | 0 | 0 | 32,829 | 10,444 | 0 | 0 | 0 | 0 | 0 | 22,385 |
| 47+00.00 | 4700 | 50 | 81 | 0 | 698 | 0 | 0 | 0 | 32,910 | 11,316 | 0 | 0 | 0 | 0 | 0 | 21,594 |
| 47+50.00 | 4750 | 50 | 81 | 0 | 642 | 0 | 0 | 0 | 32,991 | 12,119 | 0 | 0 | 0 | 0 | 0 | 20,872 |
| 48+00.00 | 4800 | 50 | 92 | 0 | 692 | 0 | 0 | 0 | 33,083 | 12,984 | 0 | 0 | 0 | 0 | 0 | 20,099 |
| 48+50.00 | 4850 | 50 | 120 | 0 | 543 | 0 | 0 | 0 | 33,203 | 13,663 | 0 | 0 | 0 | 0 | 0 | 19,541 |
| 49+00.00 | 4900 | 50 | 133 | 0 | 390 | 0 | 0 | 0 | 33,336 | 14,150 | 0 | 0 | 0 | 0 | 0 | 19,186 |
| 49+09.00 | 4909 | 9 | 26 | 0 | 67 | 0 | 0 | 0 | 33,362 | 14,234 | 0 | 0 | 0 | 0 | 0 | 19,128 |
| 49+50.00 | 4950 | 41 | 118 | 0 | 324 | 0 | 0 | 0 | 33,480 | 14,639 | 0 | 0 | 0 | 0 | 0 | 18,841 |
| 50+00.00 | 5000 | 50 | 134 | 0 | 468 | 0 | 0 | 0 | 33,614 | 15,224 | 0 | 0 | 0 | 0 | 0 | 18,390 |
| 50+50.00 | 5050 | 50 | 94 | 0 | 597 | 0 | 0 | 0 | 33,708 | 15,970 | 0 | 0 | 0 | 0 | 0 | 17,738 |
| 51+00.00 | 5100 | 50 | 39 | 0 | 809 | 0 | 0 | 0 | 33,747 | 16,981 | 0 | 0 | 0 | 0 | 0 | 16,766 |
| 51+50.00 | 5150 | 50 | 42 | 0 | 932 | 0 | 0 | 0 | 33,789 | 18,146 | 0 | 0 | 0 | 0 | 0 | 15,643 |
| 52+00.00 | 5200 | 50 | 26 | 0 | 1071 | 0 | 0 | 0 | 33,815 | 19,485 | 0 | 0 | 0 | 0 | 0 | 14,330 |

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EARTHWORK | SHEET 200 | E

FILE NAME : J:\DRAFT\18520801 Camp Phillips Road\CAD\090101_ew_6999-13-70.dwg 090102_ew | PLOT DATE : Oct 19, 2010 - 3:15pm | PLOT BY : 007 | PLOT NAME : _____PLOT SCALE : $$.....plotscale.....$$

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 52+50.00 | 5250 | 50 | 15 | 0 | 1355 | 0 | 0 | 0 | 33,830 | 21,179 | 0 | 0 | 0 | 0 | 0 | 12,651 |
| 53+00.00 | 5300 | 50 | 12 | 0 | 1706 | 0 | 0 | 0 | 33,842 | 23,311 | 0 | 0 | 0 | 0 | 0 | 10,531 |
| 53+34.70 | 5334.7 | 35 | 0 | 0 | 1315 | 0 | 0 | 0 | 33,842 | 24,955 | 0 | 0 | 0 | 0 | 0 | 8,887 |
| 53+50.00 | 5350 | 15 | 0 | 0 | 548 | 0 | 0 | 0 | 33,842 | 25,640 | 0 | 0 | 0 | 0 | 0 | 8,202 |
| 53+60.00 | 5360 | 10 | 0 | 0 | 333 | 0 | 0 | 0 | 33,842 | 26,056 | 0 | 0 | 0 | 0 | 0 | 7,786 |
| 54+00.00 | 5400 | 40 | 0 | 0 | 1276 | 0 | 0 | 0 | 33,842 | 27,651 | 0 | 0 | 0 | 0 | 0 | 6,191 |
| 54+20.00 | 5420 | 20 | 0 | 0 | 1000 | 0 | 0 | 0 | 33,842 | 28,901 | 0 | 0 | 0 | 0 | 0 | 4,941 |
| | **TOTAL 0+00 - 54+20** | | **33,842** | **0** | **23,121** | **0** | **0** | **0** | | | | | | | | |

| **Station 57+25 to Station 79+10** | | | **Incremental Vol (CY) (Unadjusted)** | | | | | | **Cumulative Vol (CY)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Expanded Marsh | | Expanded EBS | Reduced Marsh | Reduced EBS | |
| **STATION** | **Real Station** | **Distance** | **Cut** | **Salvaged/Unusable Pavement Material** | **Fill** | **Marsh Exc** | **Rock Exc** | **EBS** | **Cut** | **Expanded Fill** | **Backfill** | **Expanded Rock** | **Backfill** | **in Fill** | **In Fill** | **Mass Ordinate** |
| | | | | | | | | | 1.00 | 1.25 | 1.50 | 1.10 | 1.30 | 0.60 | 0.80 | |
| | | | **Note 1** | **Note 2** | **Note 3** | | | | **Note 1** | | **Note 4** | | **Note 5** | **Note 6** | **Note 7** | **Note 8** |
| 57+25.00 | 5725 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57+50.00 | 5750 | 25 | 0 | 0 | 425 | 0 | 0 | 0 | 0 | 531 | 0 | 0 | 0 | 0 | 0 | -531 |
| 58+00.00 | 5800 | 50 | 0 | 0 | 3369 | 0 | 0 | 0 | 0 | 4,743 | 0 | 0 | 0 | 0 | 0 | -4,743 |
| 58+20.00 | 5820 | 20 | 0 | 0 | 141 | 0 | 0 | 0 | 0 | 4,919 | 0 | 0 | 0 | 0 | 0 | -4,919 |
| 58+50.00 | 5850 | 30 | 0 | 0 | 248 | 0 | 0 | 0 | 0 | 5,229 | 0 | 0 | 0 | 0 | 0 | -5,229 |
| 59+00.00 | 5900 | 50 | 0 | 0 | 501 | 0 | 0 | 0 | 0 | 5,855 | 0 | 0 | 0 | 0 | 0 | -5,855 |
| 59+50.00 | 5950 | 50 | 0 | 0 | 374 | 0 | 0 | 0 | 0 | 6,323 | 0 | 0 | 0 | 0 | 0 | -6,323 |
| 59+62.00 | 5962 | 12 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 6,384 | 0 | 0 | 0 | 0 | 0 | -6,384 |
| 59+72.69 | 5973 | 11 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 6,445 | 0 | 0 | 0 | 0 | 0 | -6,445 |
| 60+00.00 | 6000 | 27 | 0 | 0 | 237 | 0 | 0 | 0 | 0 | 6,741 | 0 | 0 | 0 | 0 | 0 | -6,741 |
| 60+50.00 | 6050 | 50 | 0 | 0 | 949 | 0 | 0 | 0 | 0 | 7,928 | 0 | 0 | 0 | 0 | 0 | -7,928 |
| 61+00.00 | 6100 | 50 | 0 | 0 | 1,294 | 0 | 0 | 0 | 0 | 9,545 | 0 | 0 | 0 | 0 | 0 | -9,545 |
| 61+08.00 | 6108 | 8 | 0 | 0 | 210 | 0 | 0 | 0 | 0 | 9,808 | 0 | 0 | 0 | 0 | 0 | -9,808 |
| 61+50.00 | 6150 | 42 | 0 | 0 | 832 | 0 | 0 | 0 | 0 | 10,848 | 0 | 0 | 0 | 0 | 0 | -10,848 |
| 62+00.00 | 6200 | 50 | 0 | 0 | 880 | 0 | 0 | 0 | 0 | 11,948 | 0 | 0 | 0 | 0 | 0 | -11,948 |
| 62+28.00 | 6228 | 28 | 0 | 0 | 695 | 0 | 0 | 0 | 0 | 12,816 | 0 | 0 | 0 | 0 | 0 | -12,816 |
| 62+50.00 | 6250 | 22 | 0 | 0 | 629 | 0 | 0 | 0 | 0 | 13,603 | 0 | 0 | 0 | 0 | 0 | -13,603 |
| 62+76.00 | 6276 | 26 | 0 | 0 | 847 | 0 | 0 | 0 | 0 | 14,661 | 0 | 0 | 0 | 0 | 0 | -14,661 |
| 63+00.00 | 6300 | 24 | 0 | 0 | 1,012 | 0 | 0 | 0 | 0 | 15,926 | 0 | 0 | 0 | 0 | 0 | -15,926 |
| 63+50.00 | 6350 | 50 | 0 | 0 | 2,219 | 0 | 0 | 0 | 0 | 18,700 | 0 | 0 | 0 | 0 | 0 | -18,700 |
| 63+51.00 | 6351 | 1 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 18,750 | 0 | 0 | 0 | 0 | 0 | -18,750 |
| 64+00.00 | 6400 | 49 | 0 | 0 | 2,249 | 0 | 0 | 0 | 0 | 21,561 | 0 | 0 | 0 | 0 | 0 | -21,561 |
| 64+50.00 | 6450 | 50 | 0 | 0 | 2,553 | 0 | 0 | 0 | 0 | 24,753 | 0 | 0 | 0 | 0 | 0 | -24,753 |
| 65+00.00 | 6500 | 50 | 0 | 0 | 2,025 | 0 | 0 | 0 | 0 | 27,284 | 0 | 0 | 0 | 0 | 0 | -27,284 |
| 65+50.00 | 6550 | 50 | 0 | 0 | 1,149 | 0 | 0 | 0 | 0 | 28,720 | 0 | 0 | 0 | 0 | 0 | -28,720 |
| 66+00.00 | 6600 | 50 | 0 | 0 | 614 | 0 | 0 | 0 | 0 | 29,488 | 0 | 0 | 0 | 0 | 0 | -29,488 |
| 66+41.20 | 6641 | 41 | 15 | 0 | 228 | 0 | 0 | 0 | 15 | 29,773 | 0 | 0 | 0 | 0 | 0 | -29,758 |
| 66+50.00 | 6650 | 9 | 9 | 0 | 15 | 0 | 0 | 0 | 24 | 29,791 | 0 | 0 | 0 | 0 | 0 | -29,768 |
| 67+00.00 | 6700 | 50 | 138 | 0 | 47 | 0 | 0 | 0 | 161 | 29,850 | 0 | 0 | 0 | 0 | 0 | -29,689 |
| 67+50.00 | 6750 | 50 | 304 | 0 | 13 | 0 | 1 | 0 | 465 | 29,865 | 0 | 1 | 0 | 0 | 0 | -29,401 |
| 68+00.00 | 6800 | 50 | 466 | 0 | 0 | 0 | 19 | 0 | 931 | 29,839 | 0 | 22 | 0 | 0 | 0 | -28,930 |
| 68+50.00 | 6850 | 50 | 585 | 0 | 0 | 0 | 81 | 0 | 1,516 | 29,727 | 0 | 111 | 0 | 0 | 0 | -28,323 |
| 68+92.00 | 6892 | 42 | 540 | 0 | 0 | 0 | 0 | 0 | 2,056 | 29,727 | 0 | 111 | 0 | 0 | 0 | -27,783 |
| 69+00.00 | 6900 | 8 | 105 | 0 | 0 | 0 | 184 | 0 | 2,161 | 29,474 | 0 | 314 | 0 | 0 | 0 | -27,627 |
| 69+50.00 | 6950 | 50 | 697 | 0 | 0 | 0 | 219 | 0 | 2,858 | 29,173 | 0 | 554 | 0 | 0 | 0 | -26,870 |
| 70+00.00 | 7000 | 50 | 707 | 0 | 0 | 0 | 168 | 0 | 3,565 | 28,942 | 0 | 739 | 0 | 0 | 0 | -26,117 |
| 70+50.00 | 7050 | 50 | 639 | 0 | 0 | 0 | 102 | 0 | 4,204 | 28,802 | 0 | 851 | 0 | 0 | 0 | -25,450 |
| 71+00.00 | 7100 | 50 | 528 | 0 | 0 | 0 | 32 | 0 | 4,732 | 28,758 | 0 | 887 | 0 | 0 | 0 | -24,913 |
| 71+50.00 | 7150 | 50 | 388 | 0 | 7 | 0 | 0 | 0 | 5,120 | 28,767 | 0 | 887 | 0 | 0 | 0 | -24,534 |
| 72+00.00 | 7200 | 50 | 235 | 0 | 42 | 0 | 0 | 0 | 5,355 | 28,819 | 0 | 887 | 0 | 0 | 0 | -24,351 |
| 72+23.00 | 7223 | 23 | 58 | 0 | 37 | 0 | 0 | 0 | 5,413 | 28,866 | 0 | 887 | 0 | 0 | 0 | -24,339 |
| 72+50.00 | 7250 | 27 | 46 | 0 | 68 | 0 | 0 | 0 | 5,459 | 28,951 | 0 | 887 | 0 | 0 | 0 | -24,378 |
| 72+75.00 | 7275 | 25 | 22 | 0 | 118 | 0 | 0 | 0 | 5,481 | 29,098 | 0 | 887 | 0 | 0 | 0 | -24,504 |
| 73+00.00 | 7300 | 25 | 3 | 0 | 169 | 0 | 0 | 0 | 5,484 | 29,309 | 0 | 887 | 0 | 0 | 0 | -24,712 |
| 73+50.00 | 7350 | 50 | 0 | 0 | 456 | 0 | 0 | 0 | 5,484 | 29,879 | 0 | 887 | 0 | 0 | 0 | -25,282 |
| 74+00.00 | 7400 | 50 | 0 | 0 | 590 | 0 | 0 | 0 | 5,484 | 30,617 | 0 | 887 | 0 | 0 | 0 | -26,020 |
| 74+40.00 | 7440 | 40 | 0 | 0 | 488 | 0 | 0 | 0 | 5,484 | 31,227 | 0 | 887 | 0 | 0 | 0 | -26,630 |
| 74+50.00 | 7450 | 10 | 0 | 0 | 116 | 0 | 0 | 0 | 5,484 | 31,372 | 0 | 887 | 0 | 0 | 0 | -26,775 |
| 75+00.00 | 7500 | 50 | 0 | 0 | 494 | 0 | 0 | 0 | 5,484 | 31,989 | 0 | 887 | 0 | 0 | 0 | -27,392 |
| 75+18.00 | 7518 | 18 | 0 | 0 | 131 | 0 | 0 | 0 | 5,484 | 32,153 | 0 | 887 | 0 | 0 | 0 | -27,556 |
| 75+50.00 | 7550 | 32 | 0 | 0 | 190 | 0 | 0 | 0 | 5,484 | 32,391 | 0 | 887 | 0 | 0 | 0 | -27,793 |
| 76+00.00 | 7600 | 50 | 0 | 0 | 224 | 0 | 0 | 0 | 5,484 | 32,671 | 0 | 887 | 0 | 0 | 0 | -28,073 |
| 76+07.00 | 7607 | 7 | 0 | 0 | 22 | 0 | 0 | 0 | 5,484 | 32,698 | 0 | 887 | 0 | 0 | 0 | -28,101 |
| 76+25.00 | 7625 | 18 | 0 | 0 | 59 | 0 | 0 | 0 | 5,484 | 32,772 | 0 | 887 | 0 | 0 | 0 | -28,175 |
| 76+50.00 | 7650 | 25 | 0 | 0 | 67 | 0 | 0 | 0 | 5,484 | 32,856 | 0 | 887 | 0 | 0 | 0 | -28,258 |
| 77+00.00 | 7700 | 50 | 12 | 0 | 81 | 0 | 0 | 0 | 5,496 | 32,957 | 0 | 887 | 0 | 0 | 0 | -28,348 |
| 77+32.00 | 7732 | 32 | 17 | 0 | 36 | 0 | 0 | 0 | 5,513 | 33,002 | 0 | 887 | 0 | 0 | 0 | -28,376 |
| 77+50.00 | 7750 | 18 | 12 | 0 | 17 | 0 | 0 | 0 | 5,525 | 33,023 | 0 | 887 | 0 | 0 | 0 | -28,385 |
| 78+00.00 | 7800 | 50 | 58 | 0 | 45 | 0 | 0 | 0 | 5,583 | 33,079 | 0 | 887 | 0 | 0 | 0 | -28,383 |
| 78+50.00 | 7850 | 50 | 94 | 0 | 87 | 0 | 0 | 0 | 5,677 | 33,188 | 0 | 887 | 0 | 0 | 0 | -28,398 |
| 79+00.00 | 7900 | 50 | 111 | 0 | 67 | 0 | 0 | 0 | 5,788 | 33,272 | 0 | 887 | 0 | 0 | 0 | -28,371 |
| 79+10.00 | 7910 | 10 | 23 | 0 | 0 | 0 | 0 | 0 | 5,811 | 33,272 | 0 | 887 | 0 | 0 | 0 | -28,348 |
| | **TOTAL 57+25 - 79+10** | | **5,811** | **0** | **27,504** | **0** | **806** | **0** | | | | | | | | |

9

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

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PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EARTHWORK | SHEET 201 | E

| CONCORD AVENUE | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Expanded Marsh | | Expanded EBS | Reduced Marsh | Reduced EBS | |
| STATION | Real Station | Distance | Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Expanded Fill | Backfill | Expanded Rock | Backfill | in Fill | In Fill | Mass Ordinate |
| | | | | | | | | | 1.00 | 1.25 | 1.50 | 1.10 | 1.30 | 0.60 | 0.80 | |
| | | | Note 1 | Note 2 | Note 3 | | | | Note 1 | | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 03+55.00 | 355 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03+66.00 | 366 | 11 | 9 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 04+00.00 | 400 | 34 | 66 | 0 | 1 | 0 | 0 | 0 | 75 | 1 | 0 | 0 | 0 | 0 | 0 | 74 |
| 04+27.00 | 427 | 27 | 68 | 0 | 3 | 0 | 0 | 0 | 143 | 5 | 0 | 0 | 0 | 0 | 0 | 138 |
| 04+50.00 | 450 | 23 | 73 | 0 | 4 | 0 | 0 | 0 | 216 | 10 | 0 | 0 | 0 | 0 | 0 | 206 |
| | TOTAL | | 216 | 0 | 8 | 0 | 0 | 0 | | | | | | | | |

| PRIVATE DRIVE | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Expanded Marsh | | Expanded EBS | Reduced Marsh | Reduced EBS | |
| STATION | Real Station | Distance | Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Expanded Fill | Backfill | Expanded Rock | Backfill | in Fill | In Fill | Mass Ordinate |
| | | | | | | | | | 1.00 | 1.25 | 1.50 | 1.10 | 1.30 | 0.60 | 0.80 | |
| | | | Note 1 | Note 2 | Note 3 | | | | Note 1 | | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 05+00.00 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05+72.00 | 572 | 72 | 87 | 0 | 3 | 0 | 0 | 0 | 87 | 4 | 0 | 0 | 0 | 0 | 0 | 83 |
| 06+00.00 | 600 | 28 | 82 | 0 | 3 | 0 | 0 | 0 | 169 | 8 | 0 | 0 | 0 | 0 | 0 | 162 |
| 06+37.00 | 637 | 37 | 71 | 0 | 0 | 0 | 0 | 0 | 240 | 8 | 0 | 0 | 0 | 0 | 0 | 233 |
| 06+50.00 | 650 | 13 | 9 | 0 | 0 | 0 | 0 | 0 | 249 | 8 | 0 | 0 | 0 | 0 | 0 | 242 |
| | TOTAL | | 249 | 0 | 6 | 0 | 0 | 0 | | | | | | | | |

| EAU CLAIRE AVENUE | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Expanded Marsh | | Expanded EBS | Reduced Marsh | Reduced EBS | |
| STATION | Real Station | Distance | Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Expanded Fill | Backfill | Expanded Rock | Backfill | in Fill | In Fill | Mass Ordinate |
| | | | | | | | | | 1.00 | 1.25 | 1.50 | 1.10 | 1.30 | 0.60 | 0.80 | |
| | | | Note 1 | Note 2 | Note 3 | | | | Note 1 | | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 03+00.00 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03+20.00 | 320 | 20 | 17 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 03+50.00 | 350 | 30 | 60 | 0 | 1 | 0 | 0 | 0 | 77 | 1 | 0 | 0 | 0 | 0 | 0 | 76 |
| 04+00.00 | 400 | 50 | 158 | 0 | 1 | 0 | 0 | 0 | 235 | 3 | 0 | 0 | 0 | 0 | 0 | 233 |
| 04+06.00 | 406 | 6 | 26 | 0 | 0 | 0 | 0 | 0 | 261 | 3 | 0 | 0 | 0 | 0 | 0 | 259 |
| 04+50.00 | 450 | 44 | 227 | 0 | 1 | 0 | 0 | 0 | 488 | 4 | 0 | 0 | 0 | 0 | 0 | 484 |
| | TOTAL | | 488 | 0 | 3 | 0 | 0 | 0 | | | | | | | | |

| NORTHWESTERN AVENUE | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Expanded Marsh | | Expanded EBS | Reduced Marsh | Reduced EBS | |
| STATION | Real Station | Distance | Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Expanded Fill | Backfill | Expanded Rock | Backfill | in Fill | In Fill | Mass Ordinate |
| | | | | | | | | | 1.00 | 1.25 | 1.50 | 1.10 | 1.30 | 0.60 | 0.80 | |
| | | | Note 1 | Note 2 | Note 3 | | | | Note 1 | | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 00+00.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 00+50.00 | 50 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 00+83.18 | 83 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01+00.00 | 100 | 17 | 42 | 0 | 5 | 0 | 0 | 0 | 42 | 6 | 0 | 0 | 0 | 0 | 0 | 36 |
| 01+02.35 | 102 | 2 | 6 | 0 | 1 | 0 | 0 | 0 | 48 | 8 | 0 | 0 | 0 | 0 | 0 | 41 |
| 01+50.00 | 150 | 48 | 109 | 0 | 60 | 0 | 0 | 0 | 157 | 83 | 0 | 0 | 0 | 0 | 0 | 75 |
| 01+74.00 | 174 | 24 | 56 | 0 | 44 | 0 | 0 | 0 | 213 | 138 | 0 | 0 | 0 | 0 | 0 | 76 |
| 02+02.54 | 203 | 29 | 60 | 0 | 63 | 0 | 0 | 0 | 273 | 216 | 0 | 0 | 0 | 0 | 0 | 57 |
| 02+50.00 | 250 | 47 | 57 | 0 | 177 | 0 | 0 | 0 | 330 | 438 | 0 | 0 | 0 | 0 | 0 | -108 |
| 02+91.16 | 291 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 438 | 0 | 0 | 0 | 0 | 0 | -108 |
| 03+00.00 | 300 | 9 | 23 | 0 | 344 | 0 | 0 | 0 | 353 | 868 | 0 | 0 | 0 | 0 | 0 | -515 |
| 03+26.63 | 327 | 27 | 2 | 0 | 290 | 0 | 0 | 0 | 355 | 1,230 | 0 | 0 | 0 | 0 | 0 | -875 |
| 03+32.64 | 333 | 6 | 0 | 0 | 78 | 0 | 0 | 0 | 355 | 1,328 | 0 | 0 | 0 | 0 | 0 | -973 |
| 03+50.00 | 350 | 17 | 0 | 0 | 229 | 0 | 0 | 0 | 355 | 1,614 | 0 | 0 | 0 | 0 | 0 | -1,259 |
| 03+97.91 | 398 | 48 | 0 | 0 | 685 | 0 | 0 | 0 | 355 | 2,470 | 0 | 0 | 0 | 0 | 0 | -2,115 |
| 04+09.66 | 410 | 12 | 0 | 0 | 183 | 0 | 0 | 0 | 355 | 2,699 | 0 | 0 | 0 | 0 | 0 | -2,344 |
| | TOTAL | | 355 | 0 | 2,159 | 0 | 0 | 0 | | | | | | | | |

| LAHR AVENUE | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Expanded Marsh | | Expanded EBS | Reduced Marsh | Reduced EBS | |
| STATION | Real Station | Distance | Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Expanded Fill | Backfill | Expanded Rock | Backfill | in Fill | In Fill | Mass Ordinate |
| | | | | | | | | | 1.00 | 1.25 | 1.50 | 1.10 | 1.30 | 0.60 | 0.80 | |
| | | | Note 1 | Note 2 | Note 3 | | | | Note 1 | | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 05+50.00 | 550 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05+52.23 | 552 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | -4 |
| 05+74.25 | 574 | 22 | 0 | 0 | 134 | 0 | 0 | 0 | 0 | 171 | 0 | 0 | 0 | 0 | 0 | -171 |
| 06+00.00 | 600 | 26 | 0 | 0 | 97 | 0 | 0 | 0 | 0 | 293 | 0 | 0 | 0 | 0 | 0 | -293 |
| 06+08.47 | 608 | 8 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 319 | 0 | 0 | 0 | 0 | 0 | -319 |
| 06+30.00 | 630 | 22 | 1 | 0 | 25 | 0 | 0 | 0 | 1 | 350 | 0 | 0 | 0 | 0 | 0 | -349 |
| 06+50.00 | 650 | 20 | 6 | 0 | 18 | 0 | 0 | 0 | 7 | 373 | 0 | 0 | 0 | 0 | 0 | -366 |
| 06+52.60 | 653 | 3 | 1 | 0 | 2 | 0 | 0 | 0 | 8 | 375 | 0 | 0 | 0 | 0 | 0 | -367 |
| 06+63.00 | 663 | 10 | 7 | 0 | 4 | 0 | 0 | 0 | 15 | 380 | 0 | 0 | 0 | 0 | 0 | -365 |
| 07+00.00 | 700 | 37 | 46 | 0 | 6 | 0 | 0 | 0 | 61 | 388 | 0 | 0 | 0 | 0 | 0 | -327 |
| 07+50.00 | 750 | 50 | 94 | 0 | 0 | 0 | 0 | 0 | 155 | 388 | 0 | 0 | 0 | 0 | 0 | -233 |
| 07+64.00 | 764 | 14 | 15 | 0 | 0 | 0 | 0 | 0 | 170 | 388 | 0 | 0 | 0 | 0 | 0 | -218 |
| 08+00.00 | 800 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 170 | 388 | 0 | 0 | 0 | 0 | 0 | -218 |
| | TOTAL | | 170 | 0 | 310 | 0 | 0 | 0 | | | | | | | | |

9

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

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| DETENTION BASIN | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Expanded Marsh | | Expanded EBS | Reduced Marsh | Reduced EBS | |
| STATION | Real Station | Distance | Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Expanded Fill | Backfill | Expanded Rock | Backfill | in Fill | In Fill | Mass Ordinate |
| | | | | | | | | | 1.00 | 1.25 | 1.5 | 1.1 | 1.3 | 0.6 | 0.8 | |
| | | | Note 1 | Note 2 | Note 3 | | | | Note 1 | | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| BASIN | BASIN | 0 | 4,120 | 0 | 0 | 0 | 0 | 0 | 4,120 | 0 | 0 | 0 | 0 | 0 | 0 | 4,120 |
| | TOTAL | | 4120 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |

## EARTHWORK SUMMARY: 6999-13-70

| From/To Station | Location | 205.0100 Common Excavation (1) | | Salvaged/Unusable Pavement Material | Available Material (5) | 205.0500 Marsh | 205.0200 Rock | Reduced Marsh in Fill (8) | Reduced EBS in Fill (9) | Expanded Marsh Backfill | Expanded EBS Backfill | Expanded Rock (12) | Unexpanded Fill | Expanded Fill (13) | Mass Ordinate +/- (14) | Waste | 208.0100 Borrow | 208.1100 Select Borrow |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Cut (2) | EBS Excavation (3) | | | | | Factor 0.60 | Factor 0.80 | Factor 1.50 | Factor 1.30 | Factor 1.10 | | Factor 1.25 | | | | Factor 1.25 |
| 0+00 - 54+20 | LT, RT | 33,842 | 0 | 2,240 | 31,602 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23,121 | 28,901 | 2,701 | 2,701 | 0 | 0 |
| 57+25 - 79+10 | LT, RT | 5,811 | 0 | 965 | 4,846 | 0 | 806 | 0 | 0 | 0 | 0 | 887 | 27,504 | 33,272 | -28,426 | 0 | 28,426 | 0 |
| Concord Ave | LT, RT | 216 | 0 | 35 | 181 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 10 | 171 | 171 | 0 | 0 |
| Private Road | LT, RT | 249 | 0 | 40 | 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 8 | 201 | 201 | 0 | 0 |
| Eau Claire Ave | LT, RT | 488 | 0 | 50 | 438 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 434 | 434 | 0 | 0 |
| Northwestern Ave | LT, RT | 355 | 0 | 150 | 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,159 | 2,699 | -2,494 | 0 | 2,494 | 0 |
| Lahr Ave | LT, RT | 170 | 0 | 75 | 95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 310 | 388 | -293 | 0 | 293 | 0 |
| BASIN | LT | 4,120 | 0 | 0 | 4,120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,120 | 0 | -4,120 | 1,951 |
| | | 41,131 | 0 | | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | TOTAL | 41,131 | 3,555 | 37,576 | 0 | 806 | 0 | 0 | 0 | 0 | 887 | 53,111 | 65,282 | -27,706 | 3,507 | 31,213 | 1,951 |

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. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 205.0500
7) Rock Excavation item number 205.0200
8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
9) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.11
11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.11
12) Expanded Rock - Factor = 1.1.
13) Expanded Fill. Factor = 1.25

Depending on selections:

**Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor**

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * 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 the Division.

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NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6999-13-70 UNLESS OTHERWISE NOTED

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| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | EARTHWORK | SHEET 203 | E |
|---|---|---|---|---|---|

| STATION 54+20- STATION 54+67.80 | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATION | Real Station | Distance | 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 |
| | | | | | | | | | 1.00 | 1.25 | 1.50 | 1.10 | 1.30 | 0.60 | 0.80 | |
| | | | Note 1 | Note 2 | Note 3 | | | | Note 1 | | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 54+20.00 | 5420 | 0 | 0 | 0 | 1,276 | 0 | 0 | 0 | 0 | 1,595 | 0 | 0 | 0 | 0 | 0 | 0 |
| 54+50.00 | 5450 | 30 | 0 | 0 | 1,725 | 0 | 0 | 0 | 0 | 3,751 | 0 | 0 | 0 | 0 | 0 | -3,751 |
| 54+54.70 | 5455 | 5 | 0 | 0 | 174 | 0 | 0 | 0 | 0 | 3,969 | 0 | 0 | 0 | 0 | 0 | -3,969 |
| 54+67.80 | 5468 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **3,969** | 0 | 0 | 0 | 0 | 0 | **-3,969** |
| | | **TOTAL** | **0** | **0** | **3,175** | **0** | **0** | **0** | | | | | | | | |

| STATION 56+78.40 - STATION 57+25 | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATION | Real Station | Distance | 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 |
| | | | | | | | | | 1.00 | 1.25 | 1.50 | 1.10 | 1.30 | 0.60 | 0.80 | |
| | | | Note 1 | Note 2 | Note 3 | | | | Note 1 | | Note 4 | | Note 5 | Note 6 | Note 7 | Note 8 |
| 56+78.40 | 5678 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57+00.00 | 5700 | 22 | 0 | 0 | 1,075 | 0 | 0 | 0 | 0 | 1,344 | 0 | 0 | 0 | 0 | 0 | -1,344 |
| 57+25.00 | 5725 | 25 | 0 | 0 | 425 | 0 | 0 | 0 | 0 | **1,875** | 0 | 0 | 0 | 0 | 0 | **-1,875** |
| | | **TOTAL** | **0** | **0** | **1,500** | **0** | **0** | **0** | | | | | | | | |

## EARTHWORK SUMMARY: 6676-03-73

| From/To Station | Location | 205.0100 Common Excavation (1) | | Salvaged/Unusable Pavement Material | Available Material (5) | 205.0500 Marsh | 205.0200 Rock | Reduced Marsh in Fill (8) | Reduced EBS in Fill (9) | Expanded Marsh Backfill | Expanded EBS Backfill | Expanded Rock (12) | Unexpanded Fill | Expanded Fill (13) | Mass Ordinate +/- (14) | Waste | 208.0100 Borrow |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Cut (2) Note 1 | EBS Excavation (3) | | | | | Factor 0.60 | Factor 0.80 | Factor 1.50 | Factor 1.30 | Factor 1.10 | | Factor 1.25 | | | |
| 54+20 - 54+67.80 | LT, RT | 0 | 0 | 15 | -15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,175 | 3,969 | -3,984 | 0 | 3,984 |
| 56+78.40 - 57+25 | LT, RT | 0 | 0 | 25 | -25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,500 | 1,875 | -1,900 | 0 | 1,900 |
| | | | | | | | | | | | | | | | | | |
| | - | 0 | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | **TOTAL** | **0** | | **-40** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **4,675** | **5,844** | **-5,884** | **0** | **5,884** |

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. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 205.0500
7) Rock Excavation item number 205.0200
8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
9) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.11
11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.11
12) Expanded Rock - Factor = 1.1.
13) Expanded Fill. Factor = 1.25

Depending on selections:

**Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor**

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * 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 the Division.

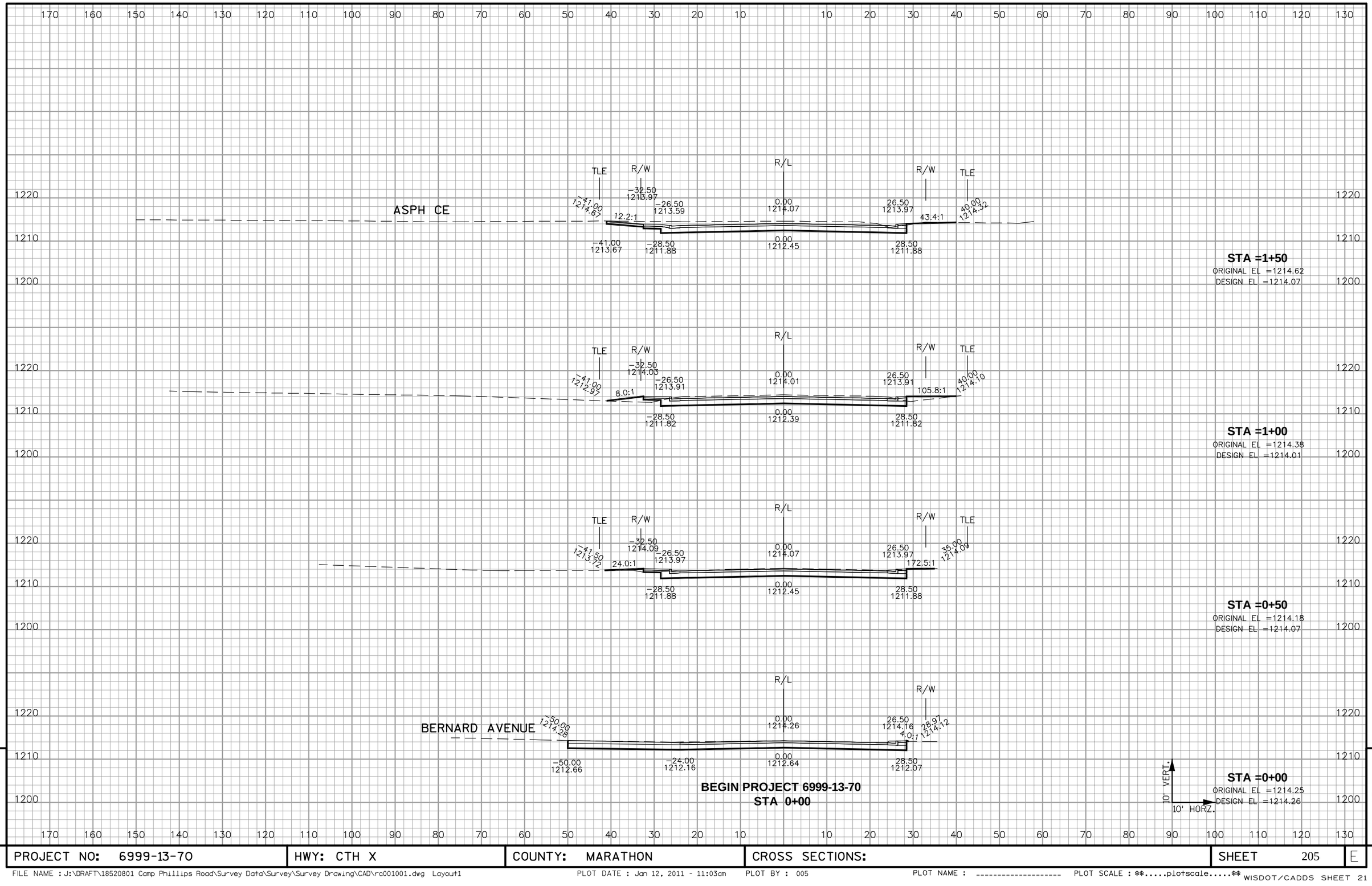
9

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE PROJECT 6676-03-73 UNLESS OTHERWISE NOTED



9

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9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 205 | E |
|---|---|---|---|---|---|

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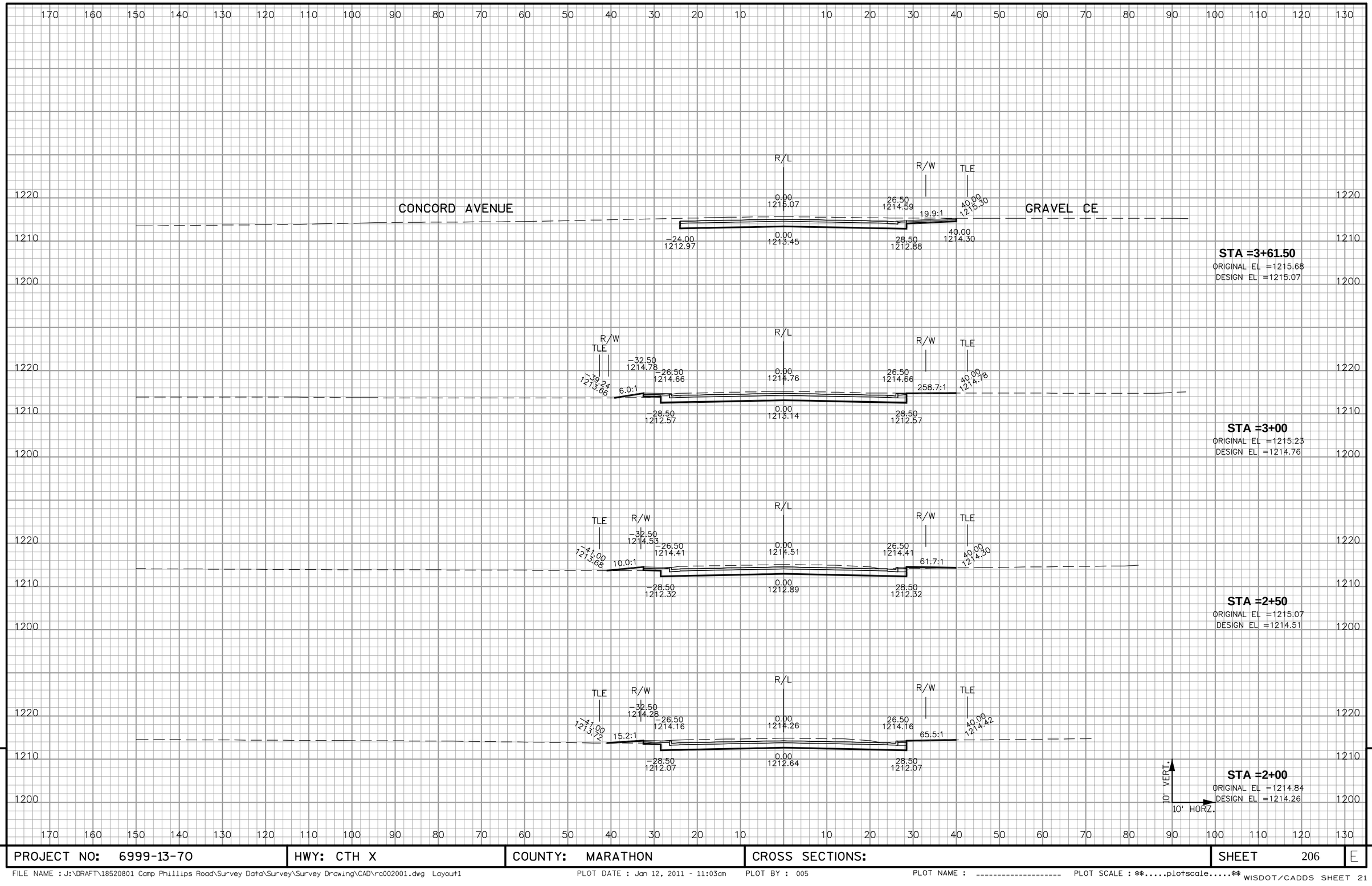


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| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 206 | E |
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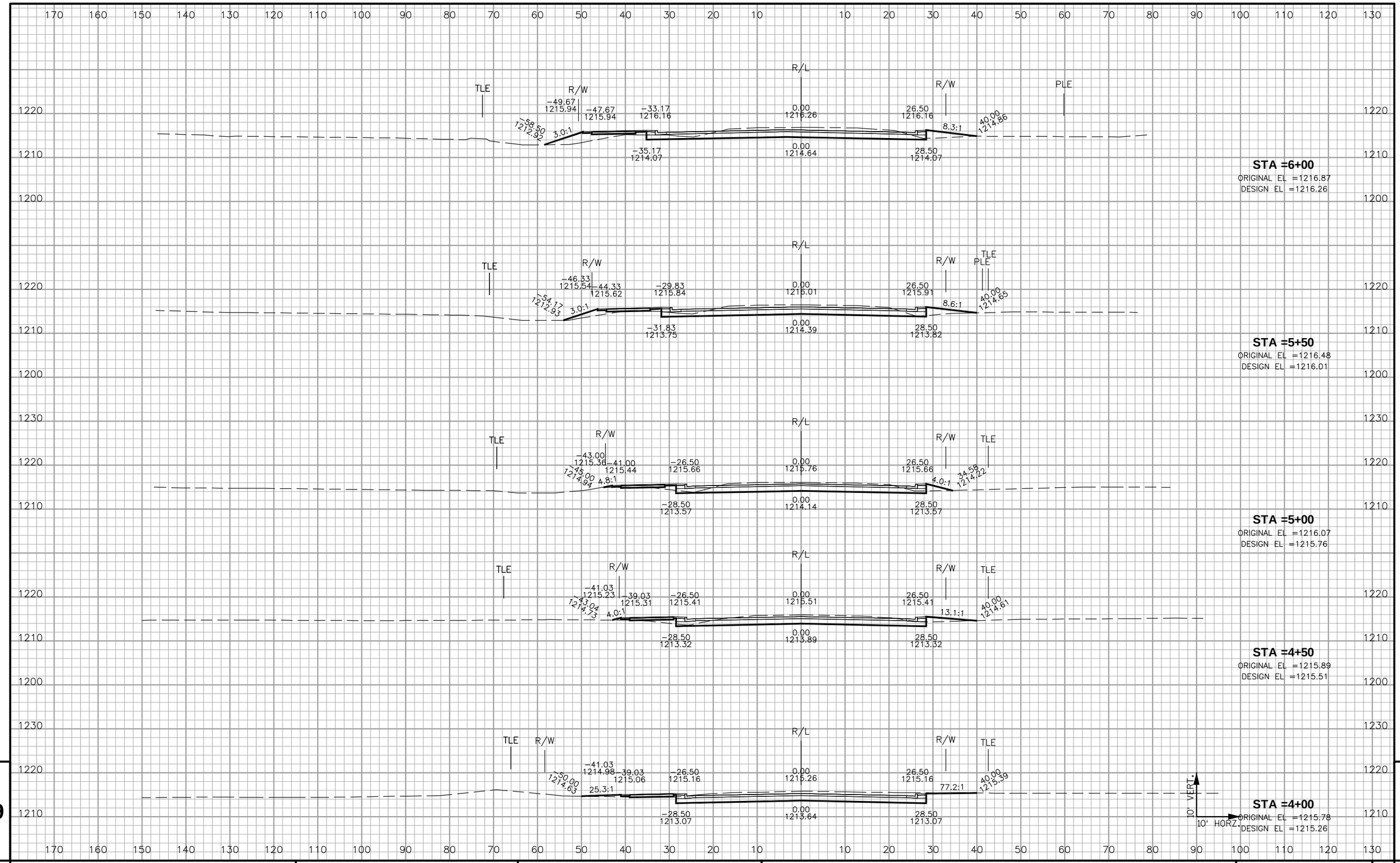


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| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 207 | E |
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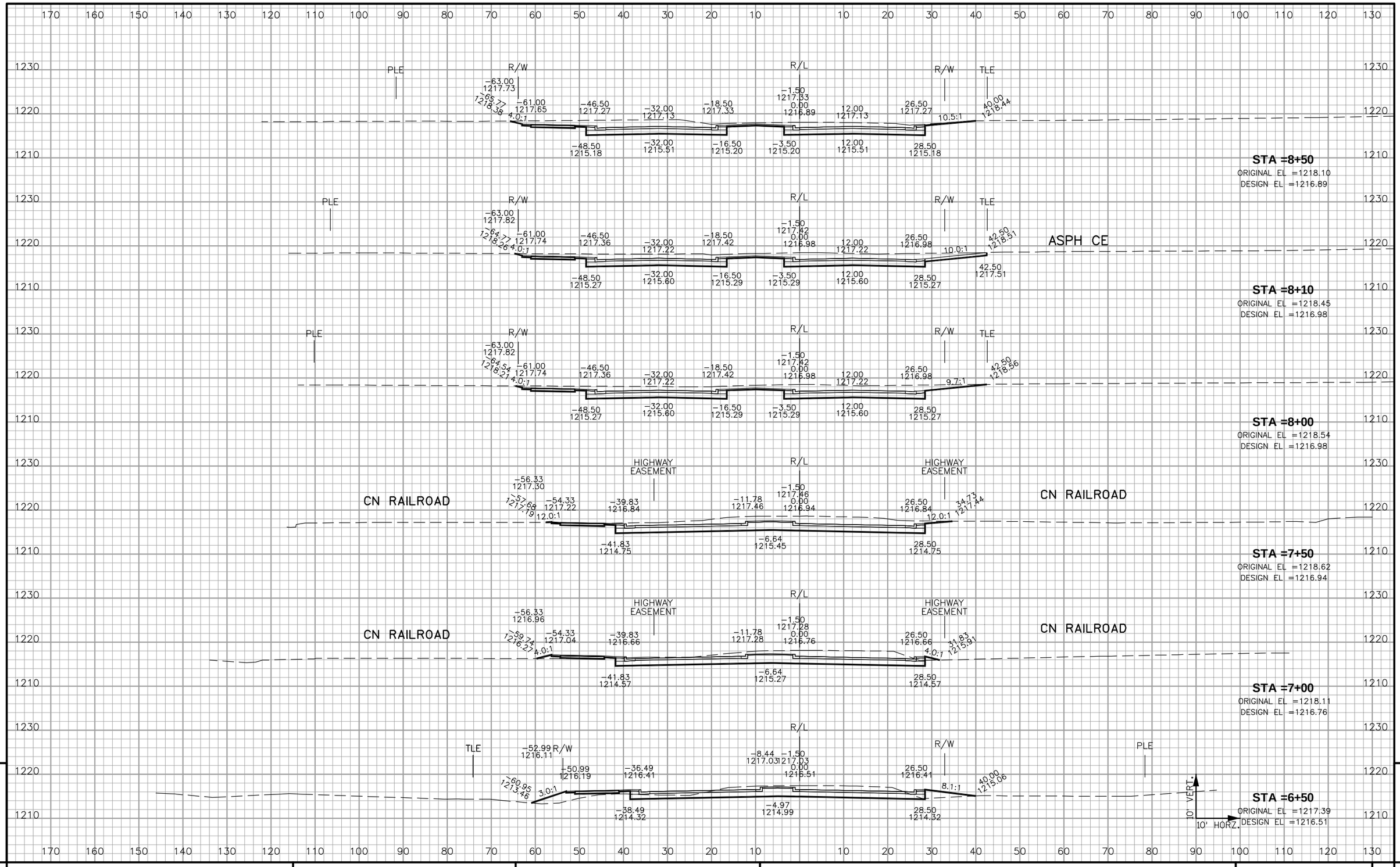


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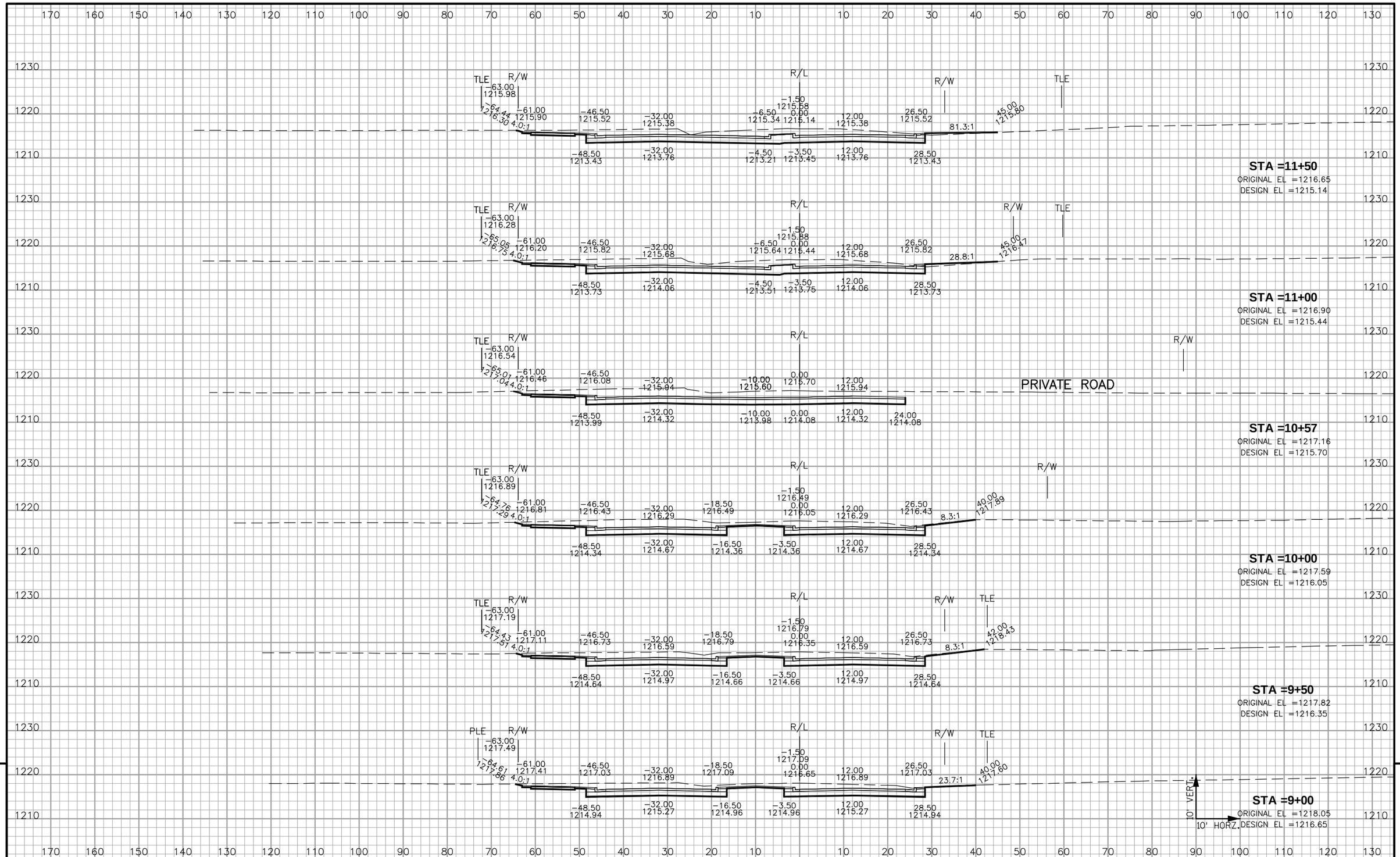
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 208 | E |
|---|---|---|---|---|---|




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 209 | E |
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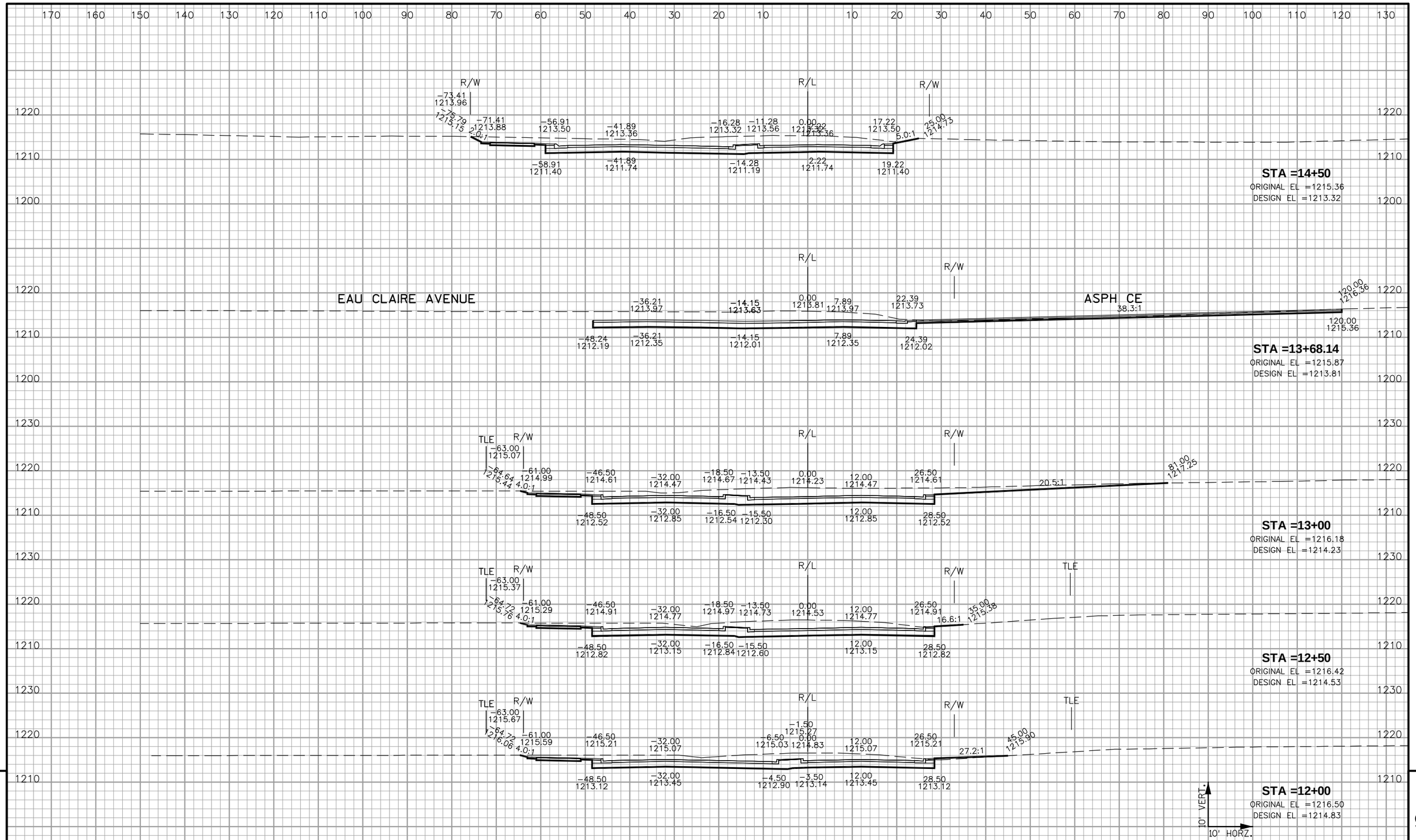


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| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 210 | E |
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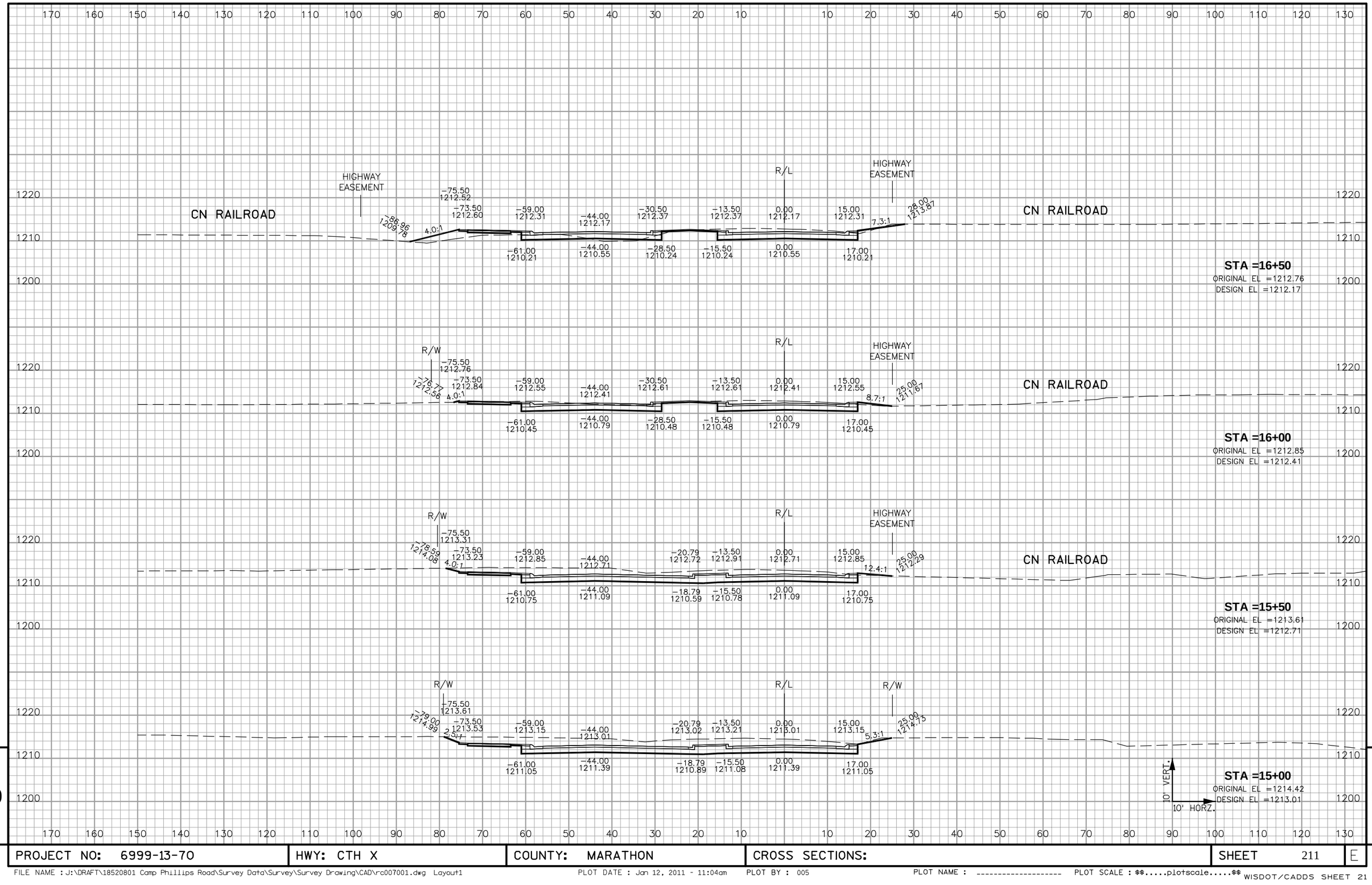


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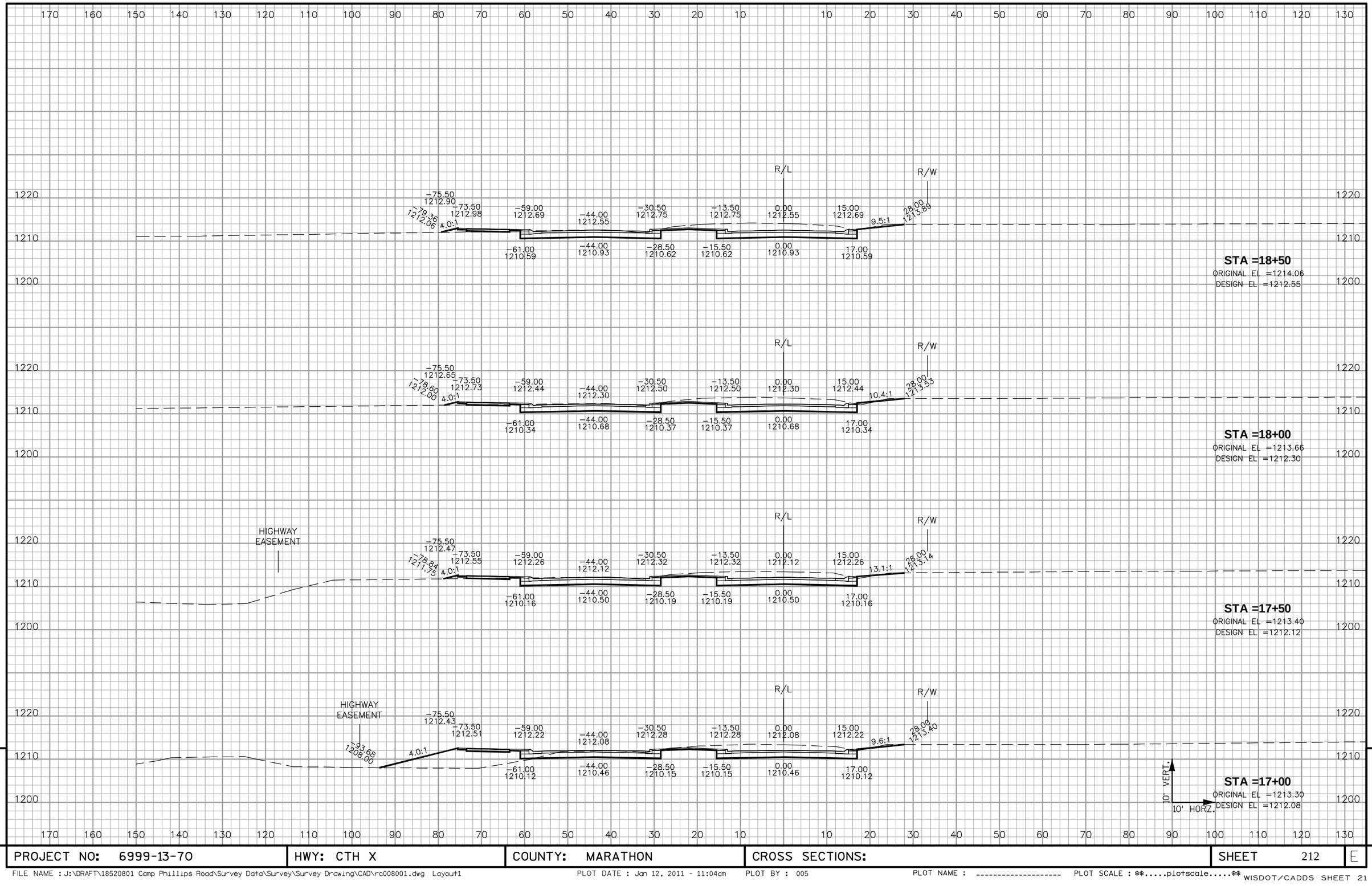
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 211 | E |
|---|---|---|---|---|---|

9




9

9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 212 | E |
|---|---|---|---|---|---|

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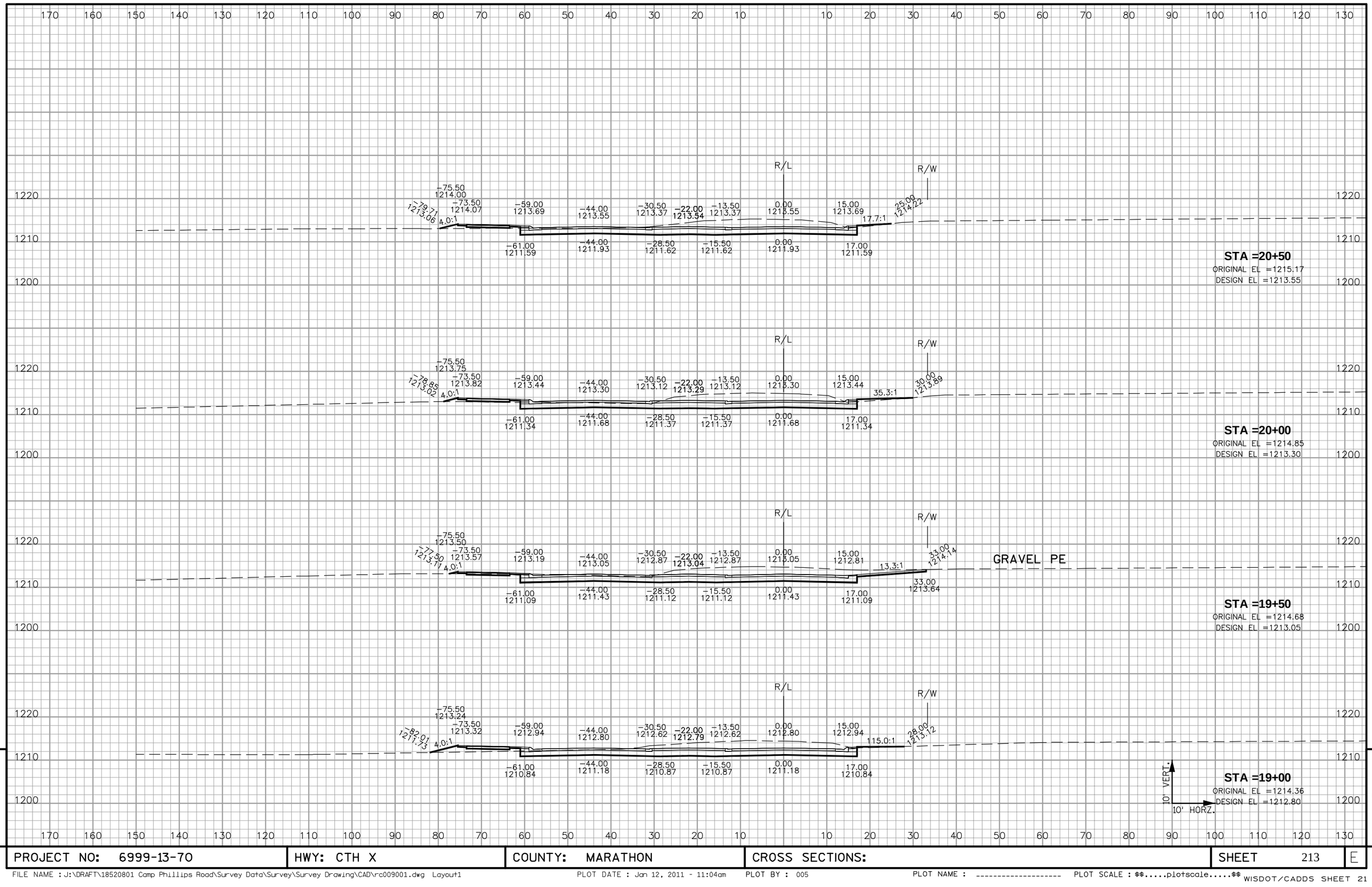


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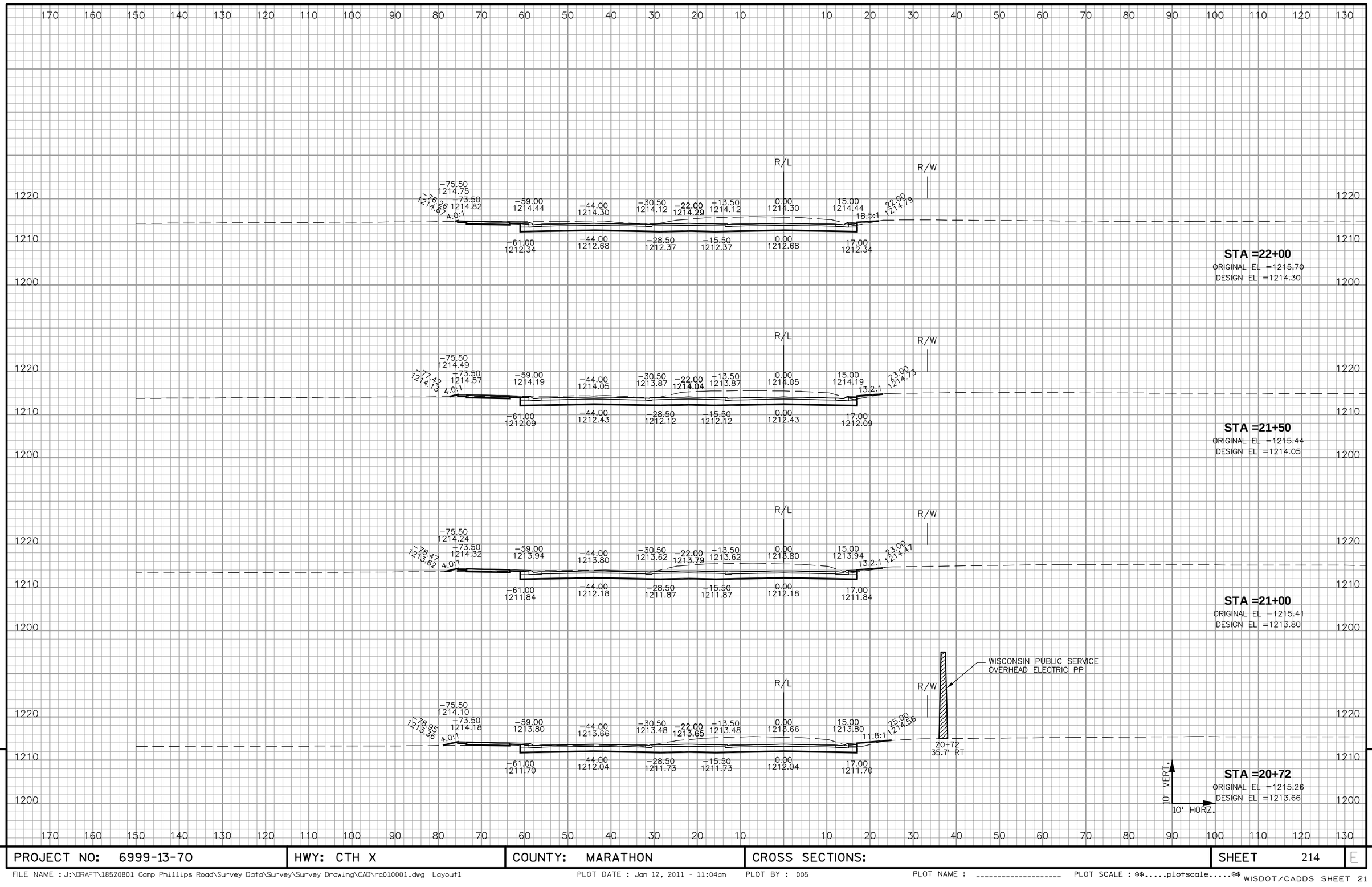
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 213 | E |
|---|---|---|---|---|---|

9

FILE NAME : J:\DRAFT\18520801 Camp Phillips Road\Survey Data\Survey\Survey Drawing\CAD\rc009001.dwg Layout1 PLOT DATE : Jan 12, 2011 - 11:04am PLOT BY : 005 PLOT NAME : ---------- PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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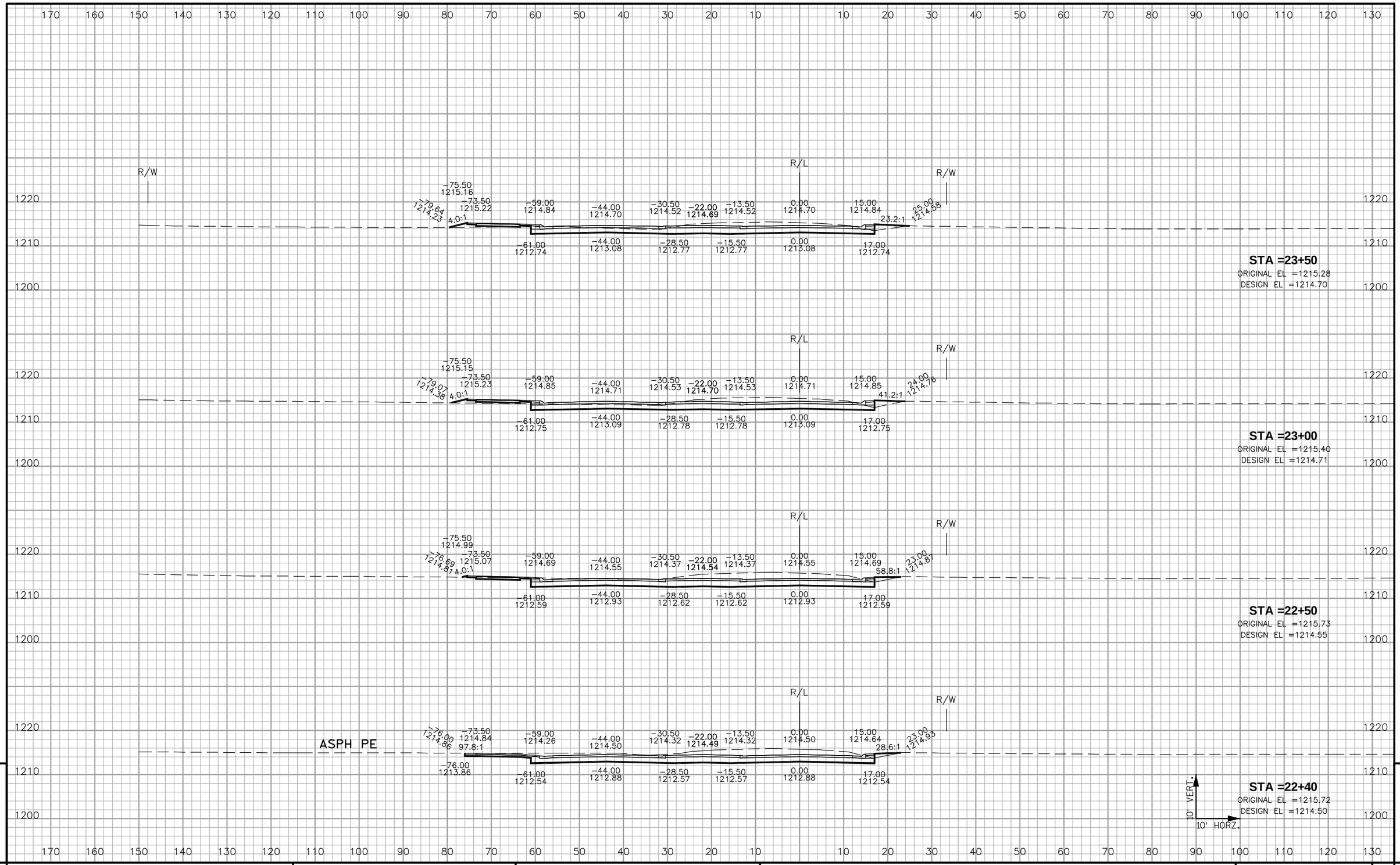
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 214 | E |
|---|---|---|---|---|---|

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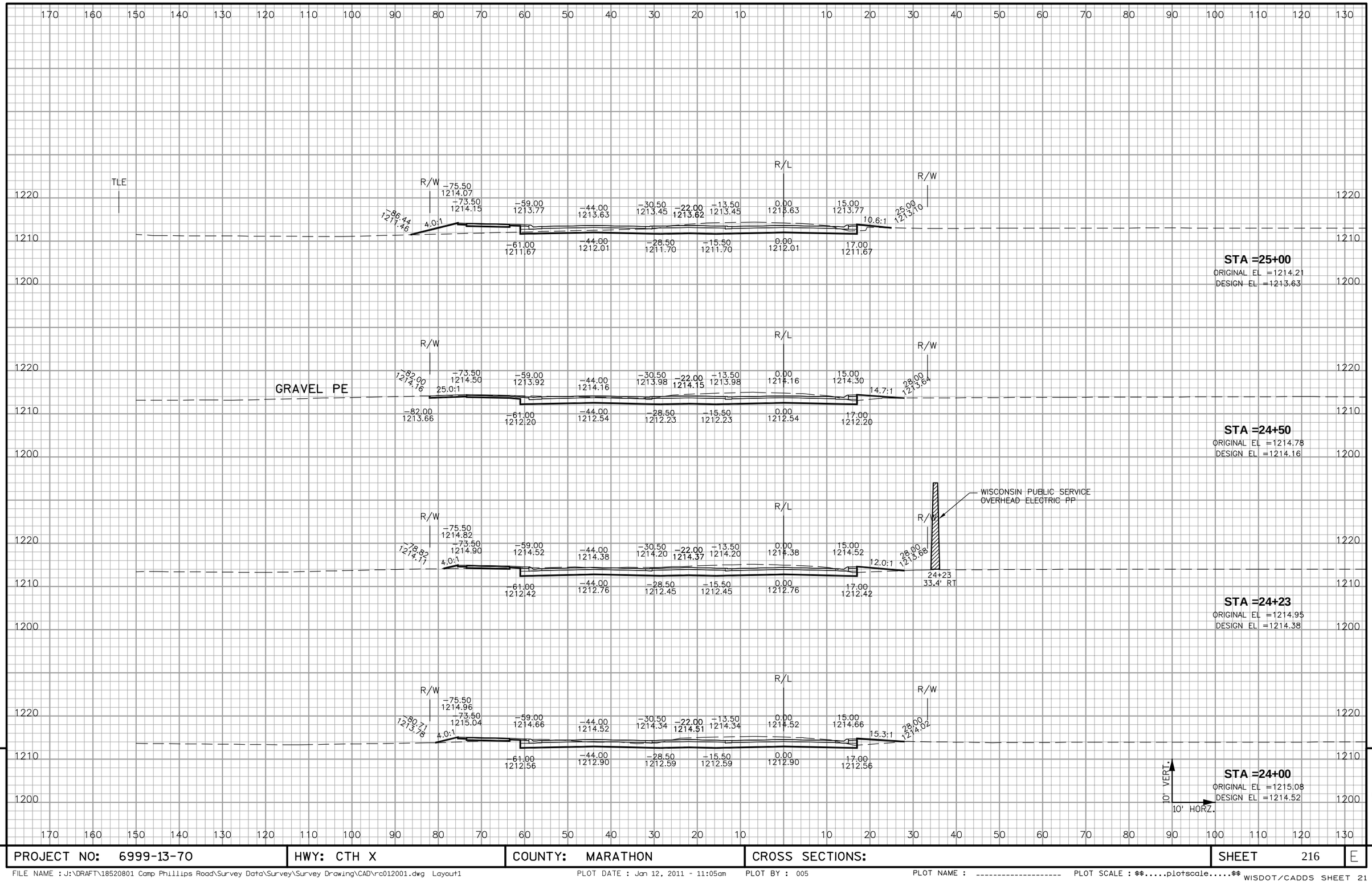
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 215 | E |
|---|---|---|---|---|---|

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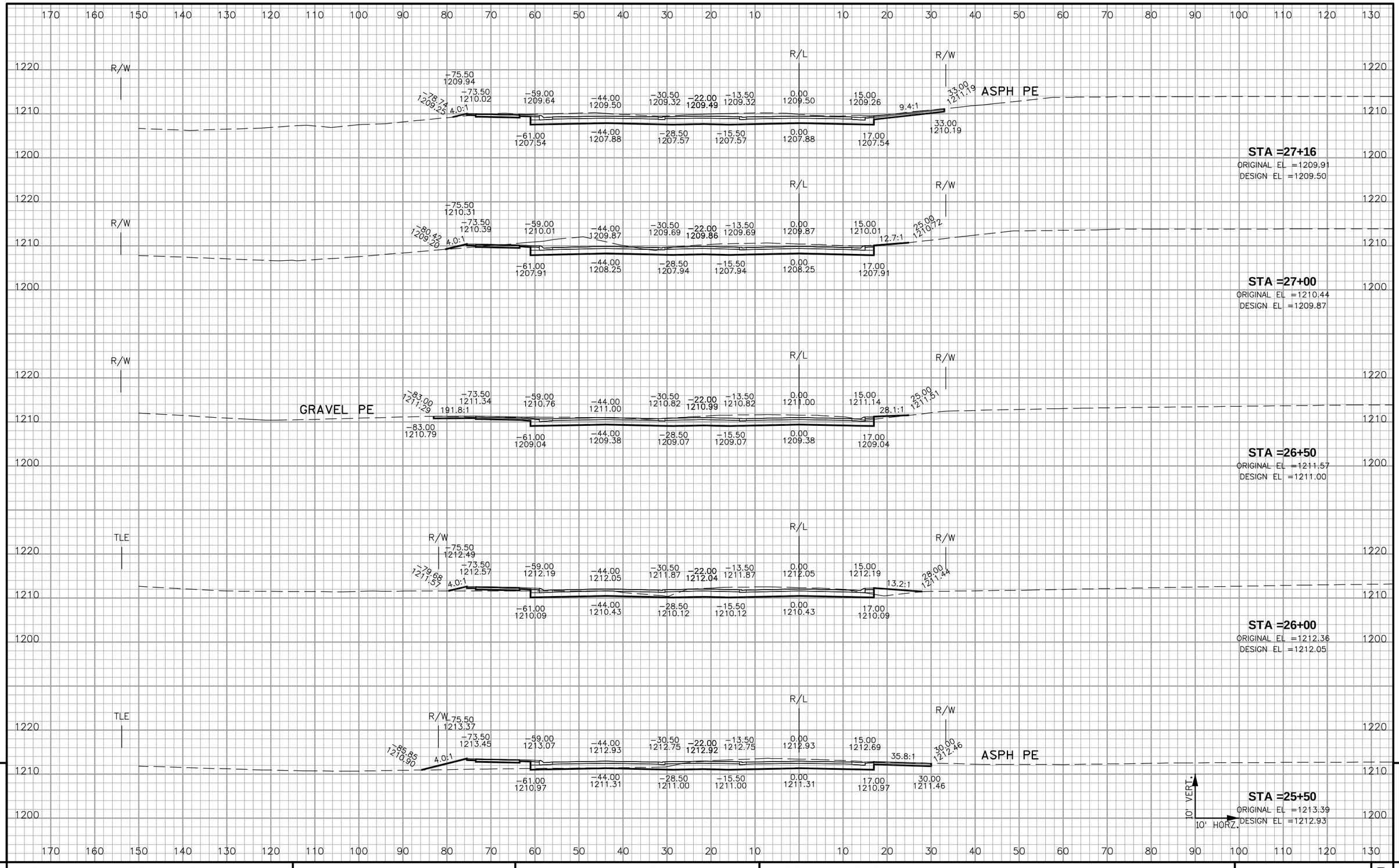
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 216 | E |
|---|---|---|---|---|---|

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| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 217 | E |
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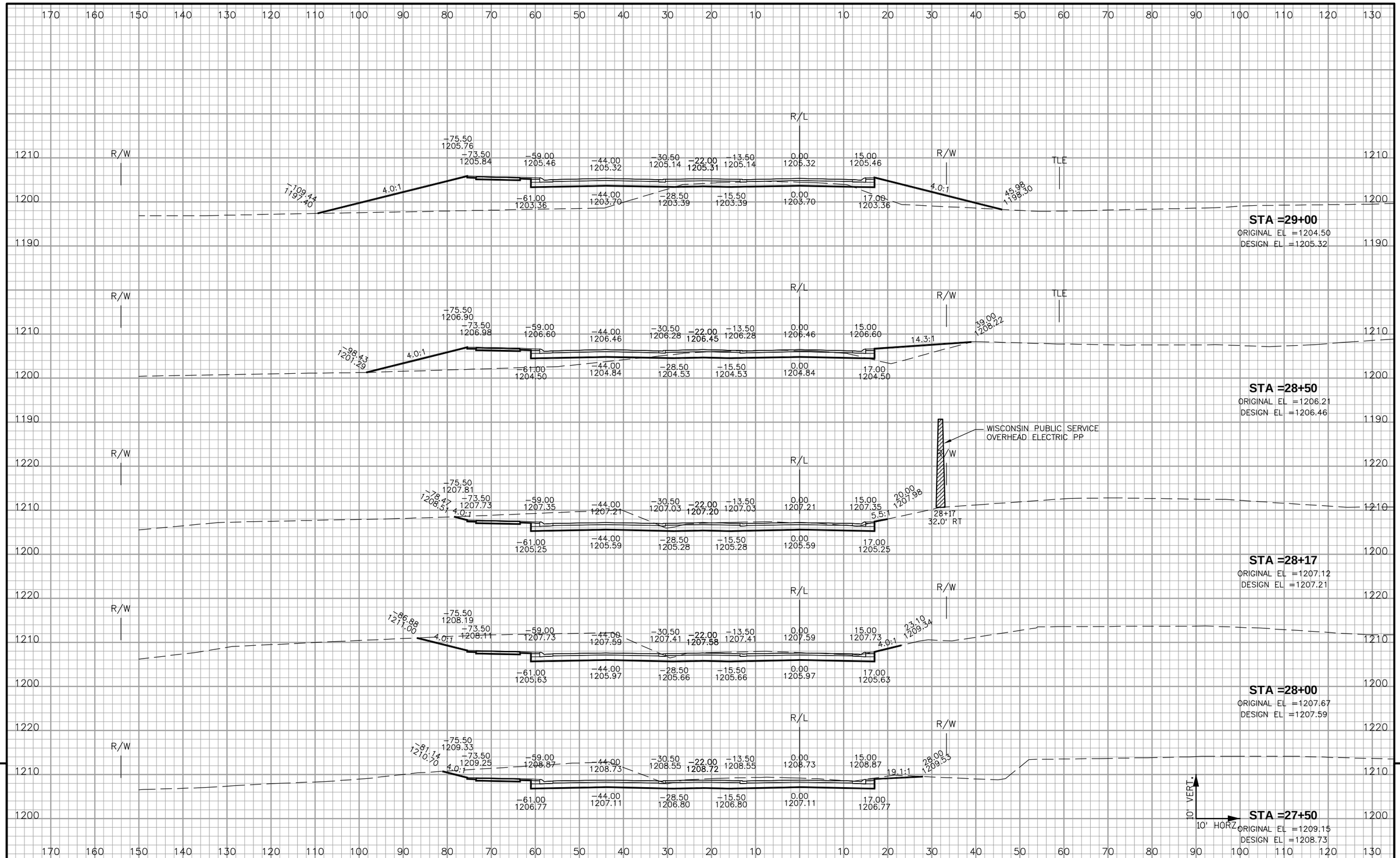


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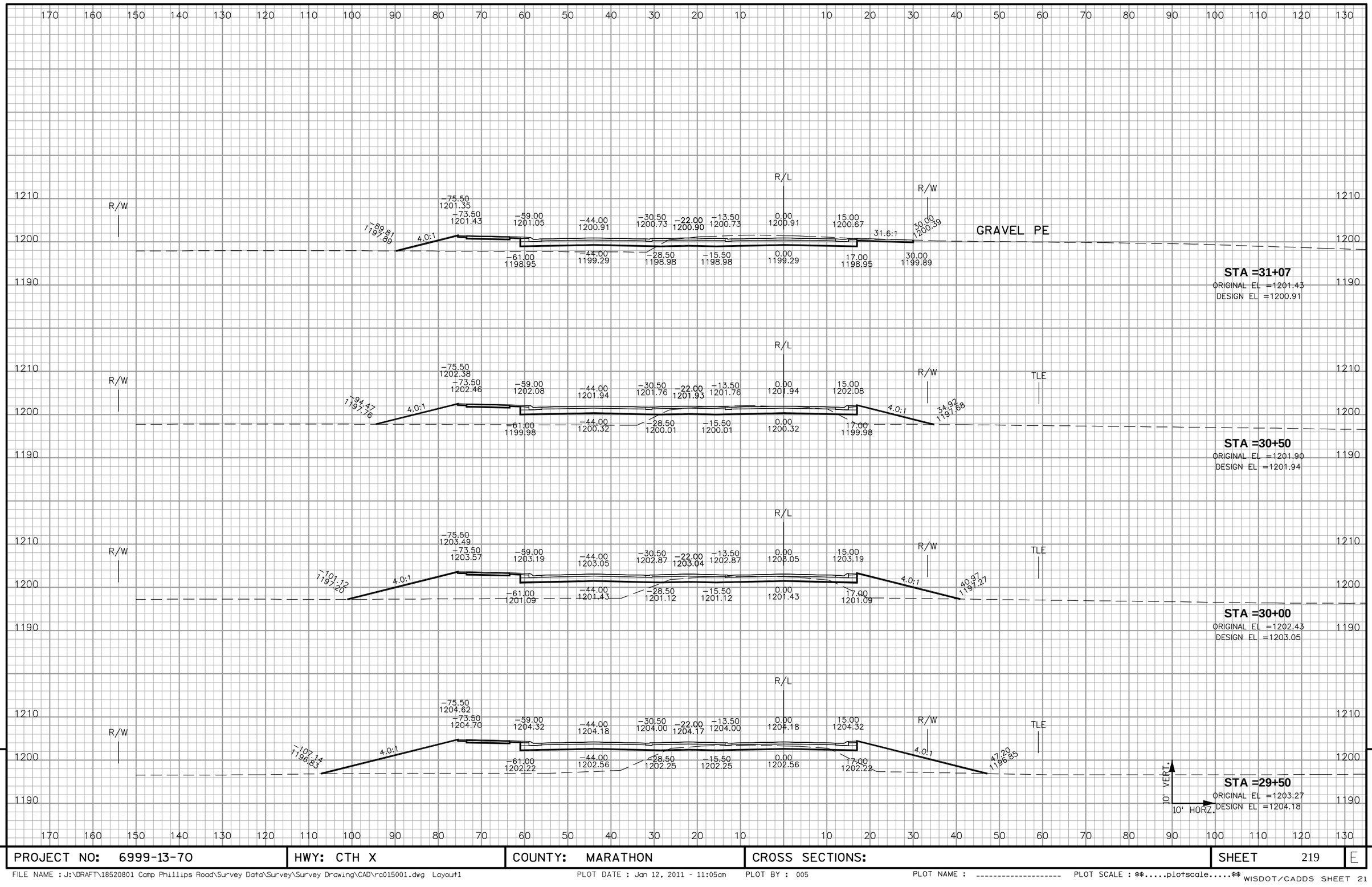
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 218 | E |
|---|---|---|---|---|---|

9

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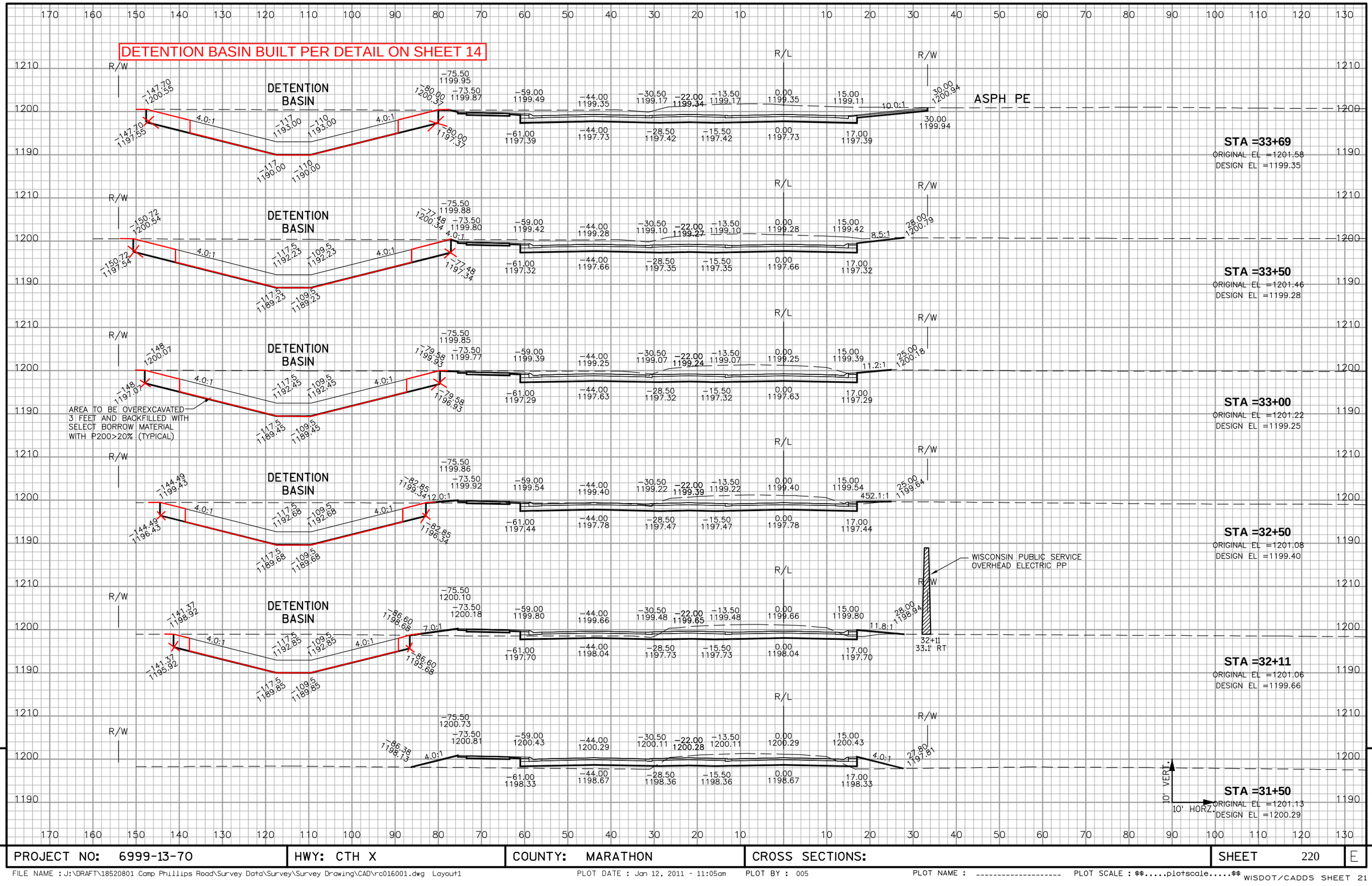
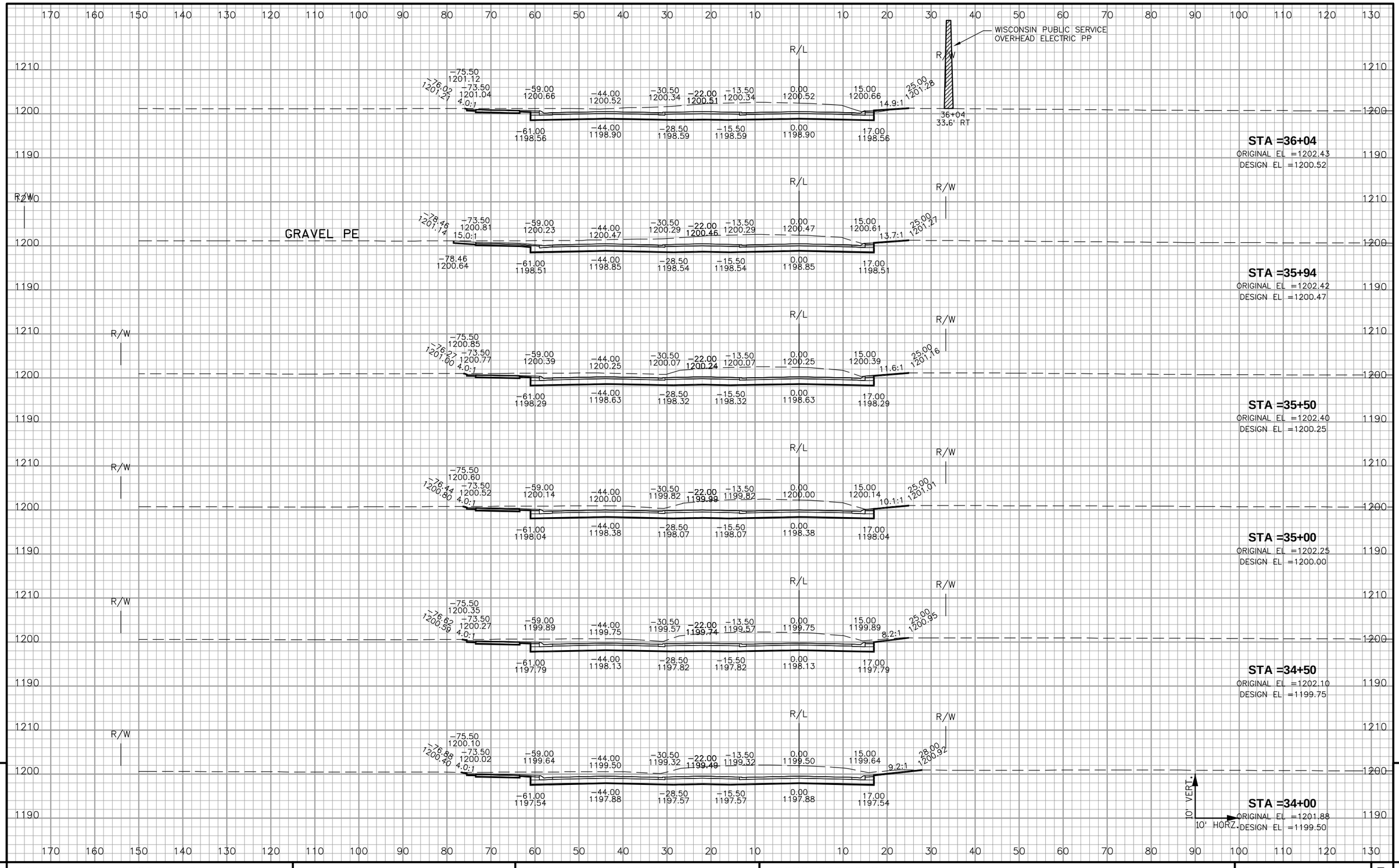
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 219 | E |
|---|---|---|---|---|---|

DETENTION BASIN BUILT PER DETAIL ON SHEET 14




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 220 | E |
|---|---|---|---|---|---|

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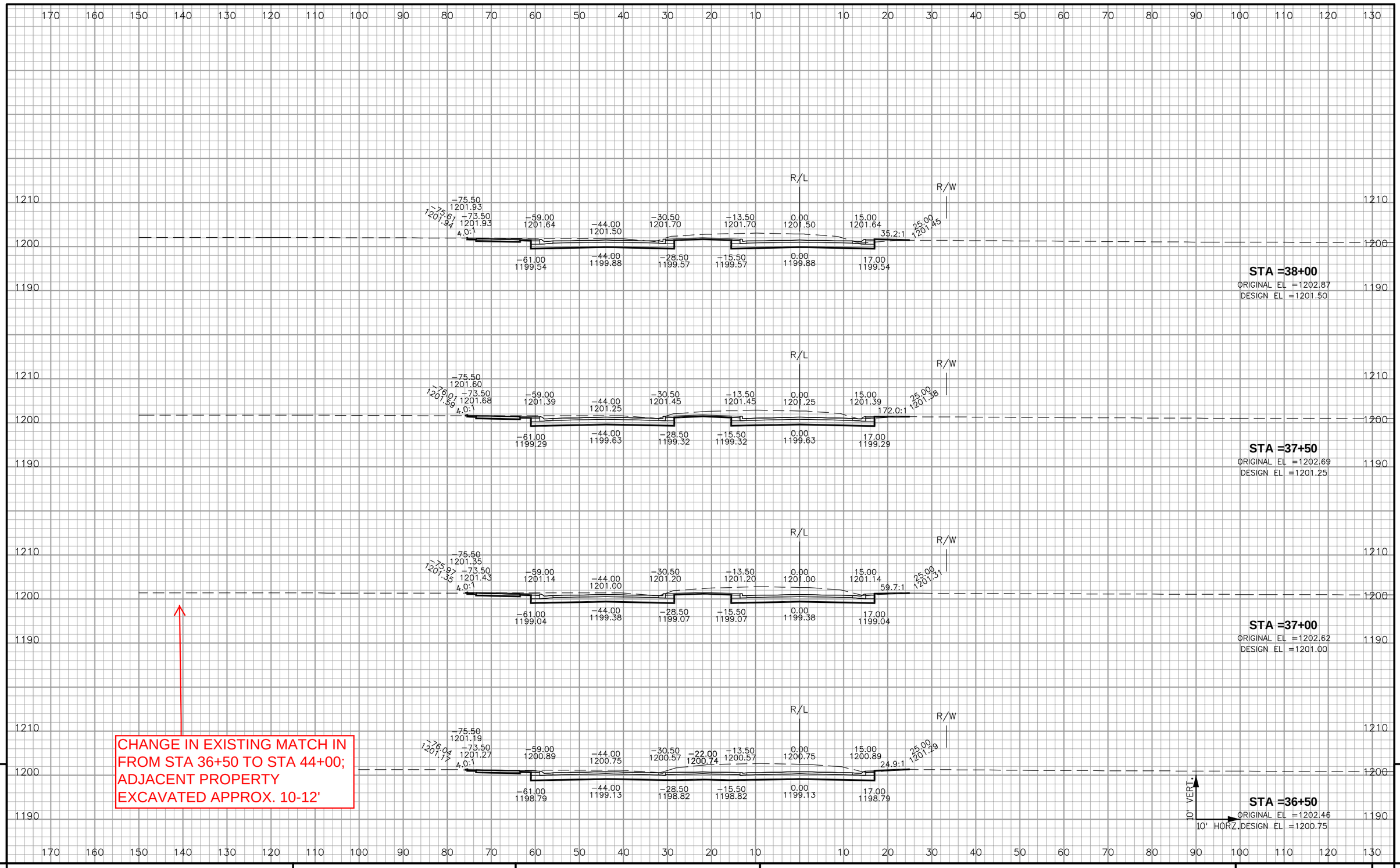
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 221 | E |
|---|---|---|---|---|---|

FILE NAME : J:\DRAFT\18520801 Camp Phillips Road\Survey Data\Survey\Survey Drawing\CAD\rc017001.dwg Layout1 PLOT DATE : Jan 12, 2011 - 11:06am PLOT BY : 005 PLOT NAME : ---------- PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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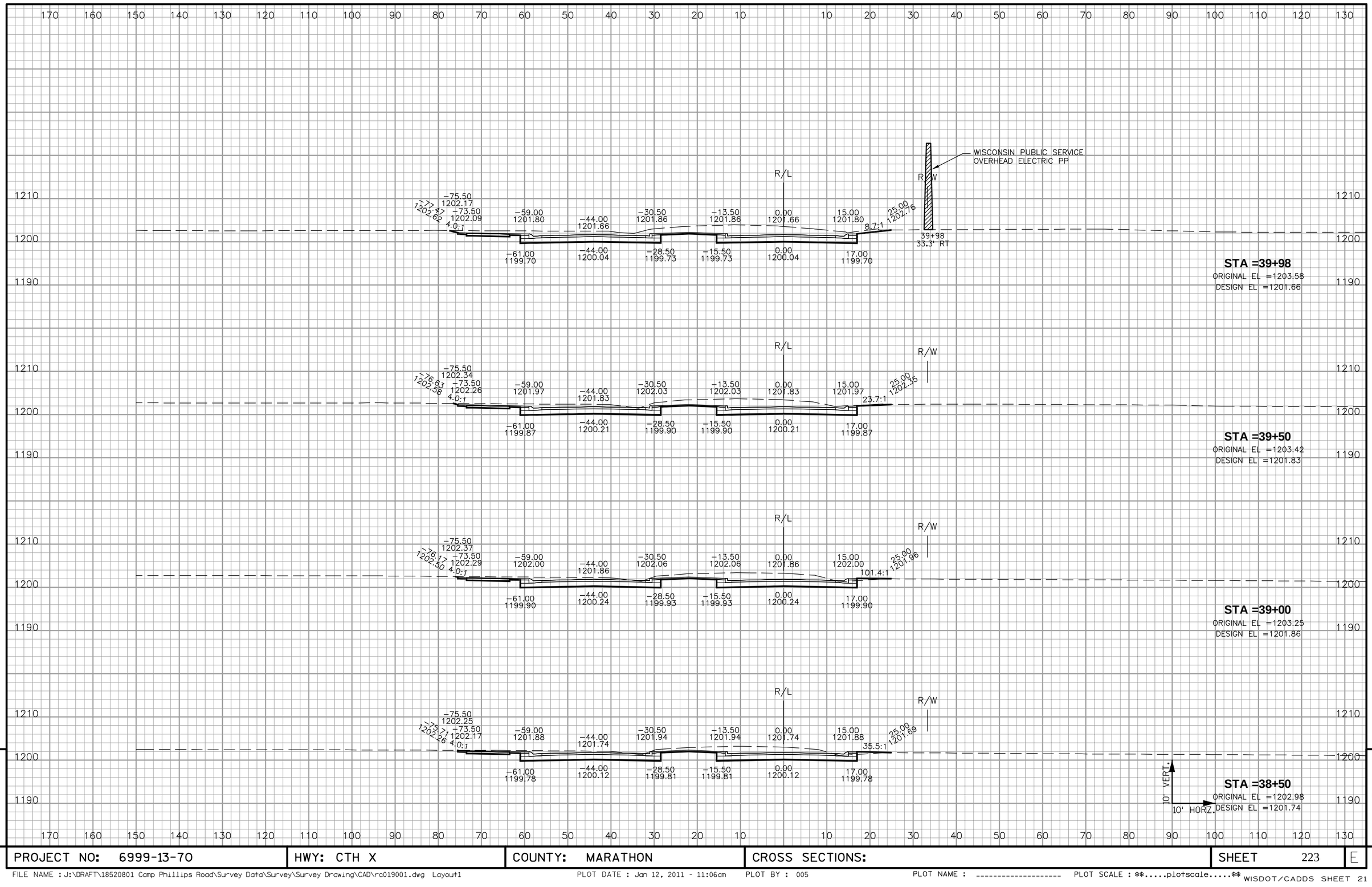
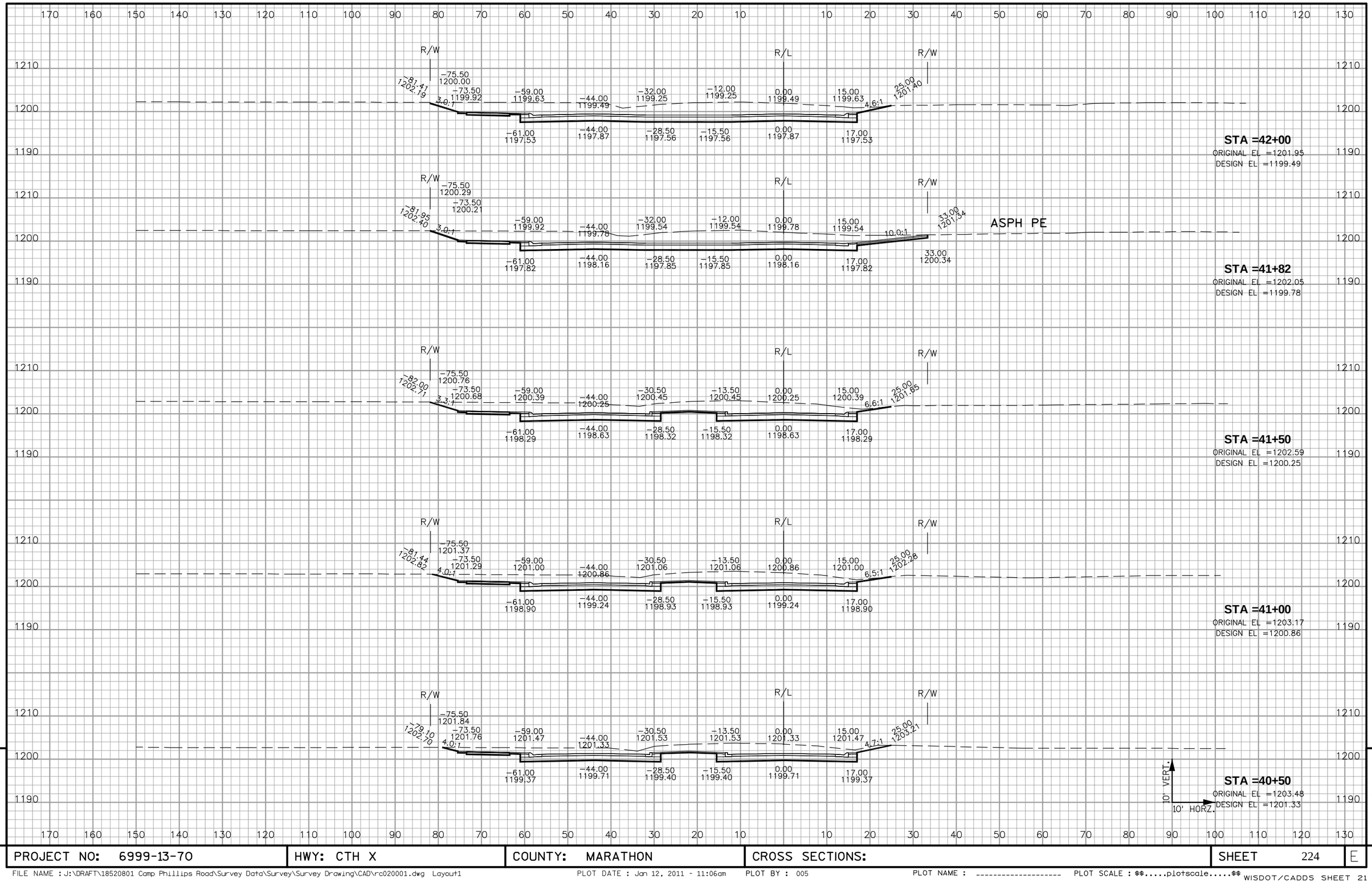
9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 222 | E |
|---|---|---|---|---|---|




9 9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 223 | E |
|---|---|---|---|---|---|

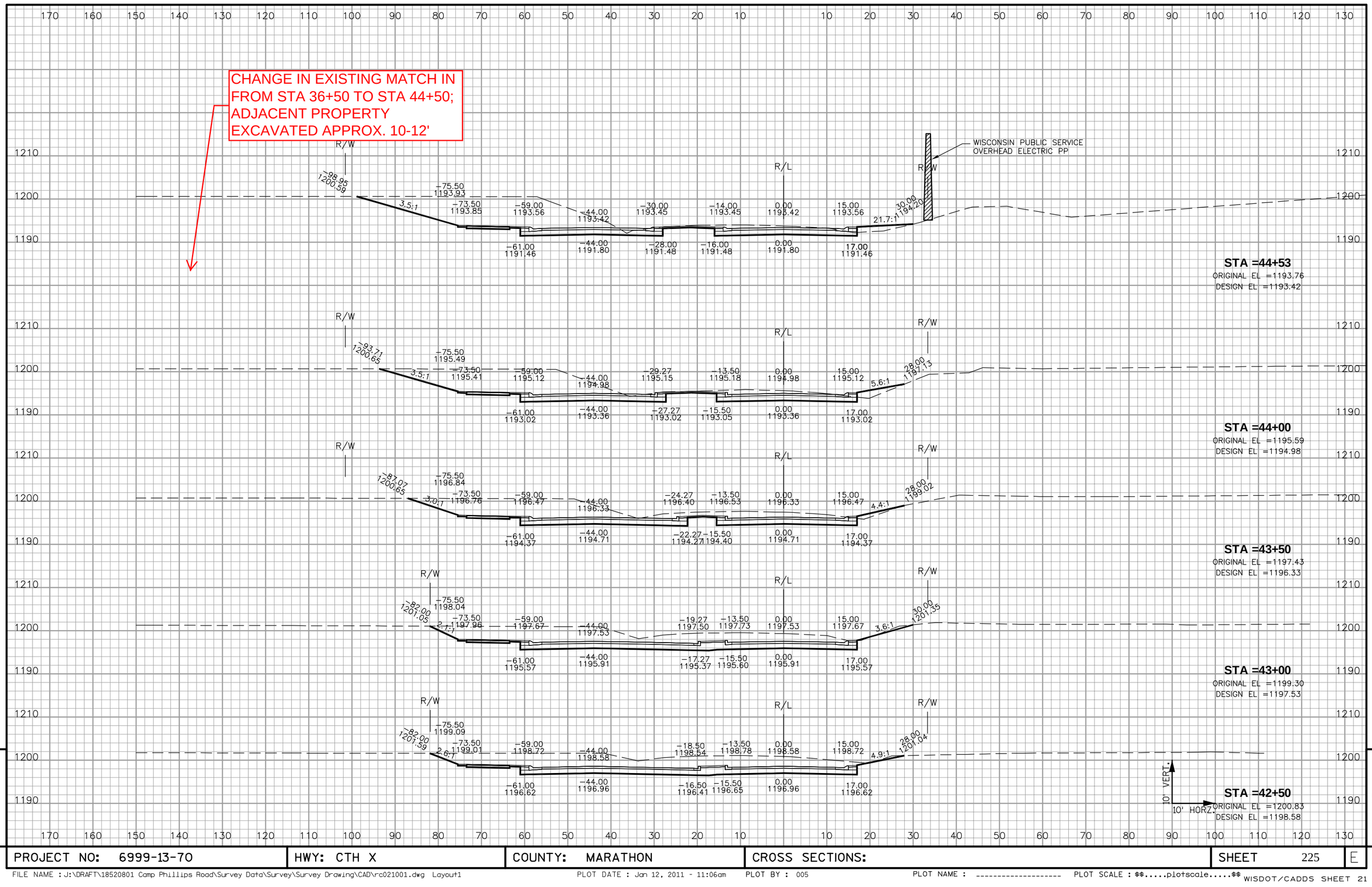



9

9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 224 | E |
|---|---|---|---|---|---|

CHANGE IN EXISTING MATCH IN FROM STA 36+50 TO STA 44+50; ADJACENT PROPERTY EXCAVATED APPROX. 10-12'

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9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 225 | E |
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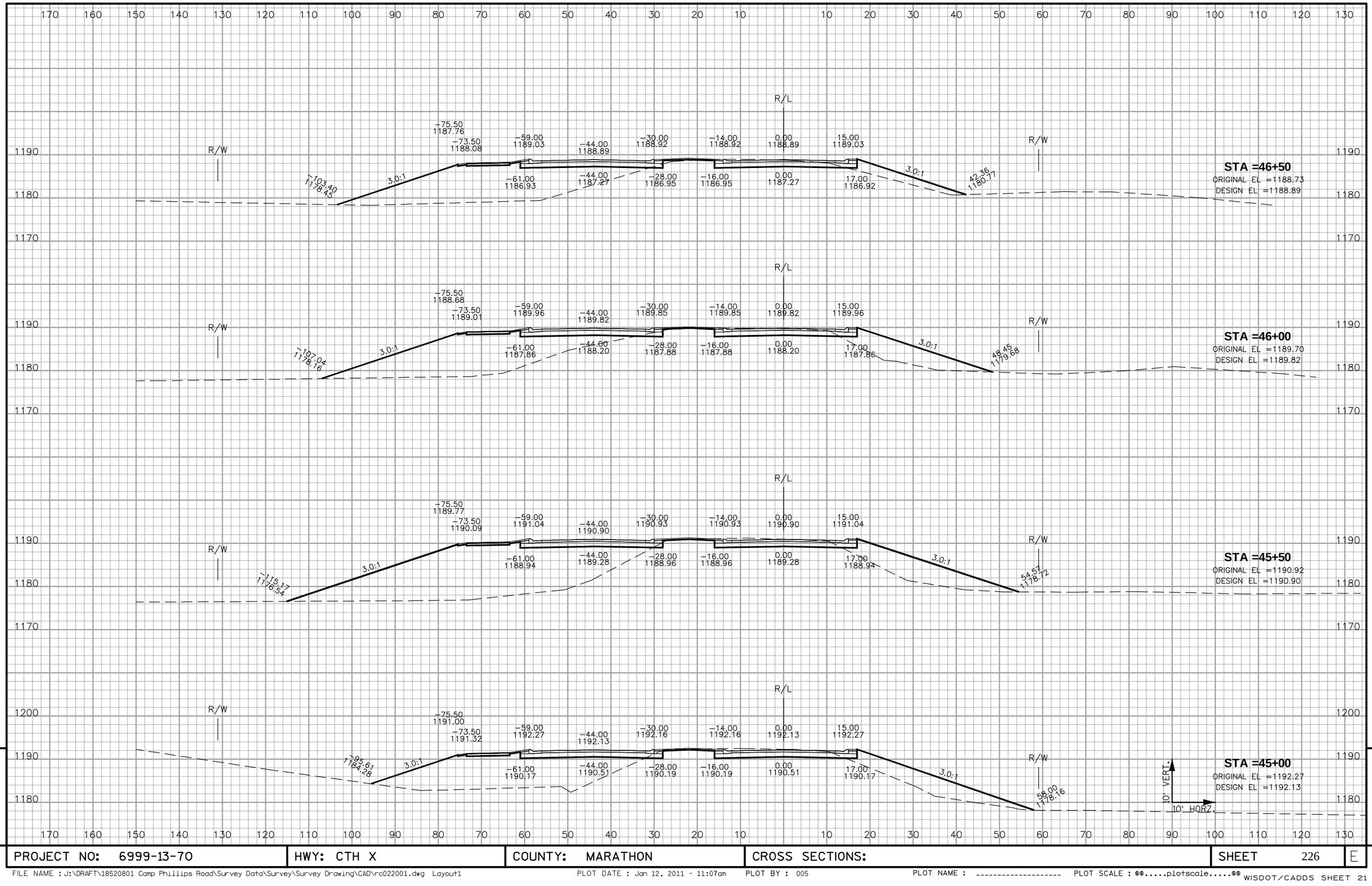


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| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 226 | E |
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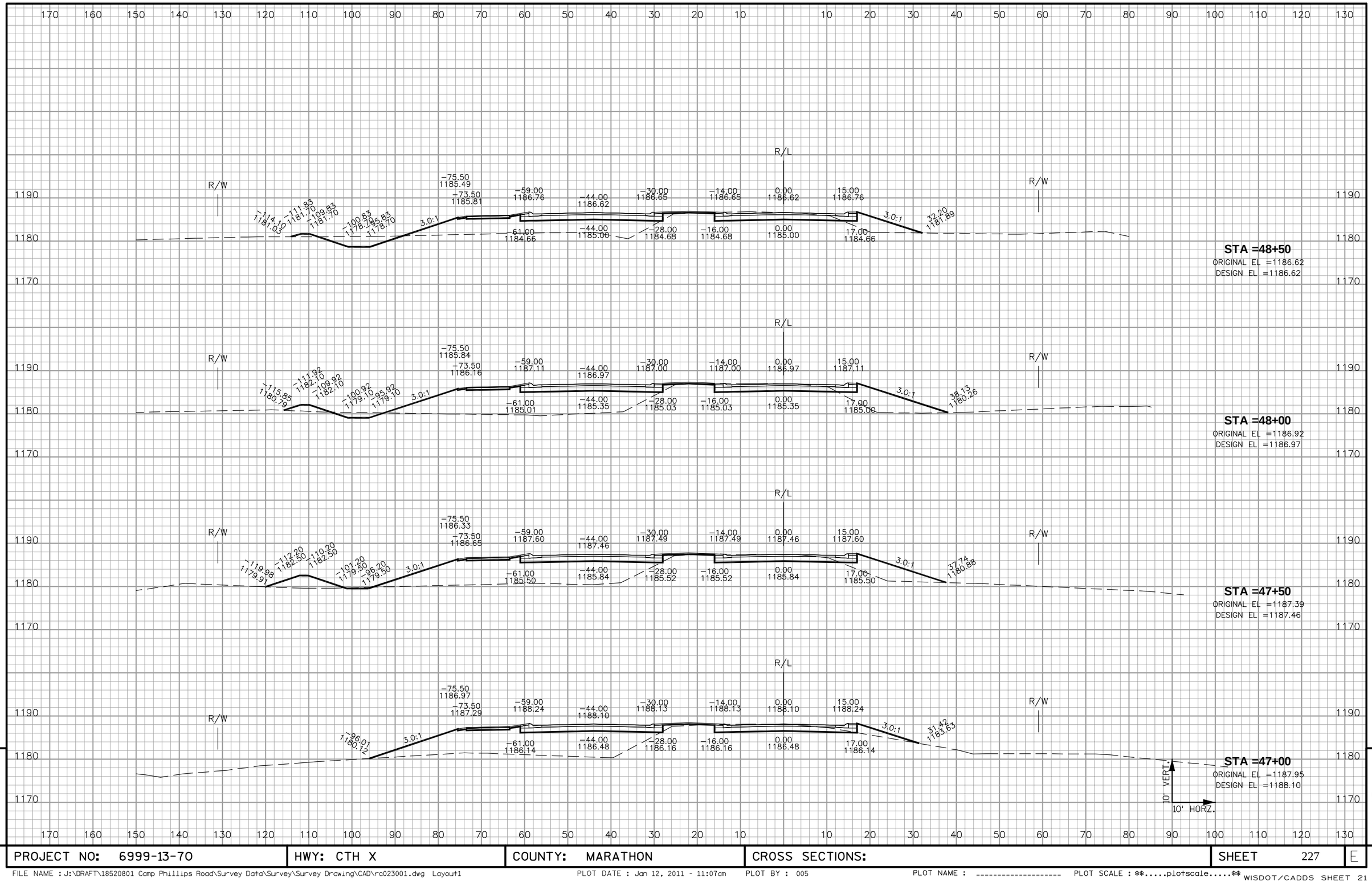


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| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 227 | E |
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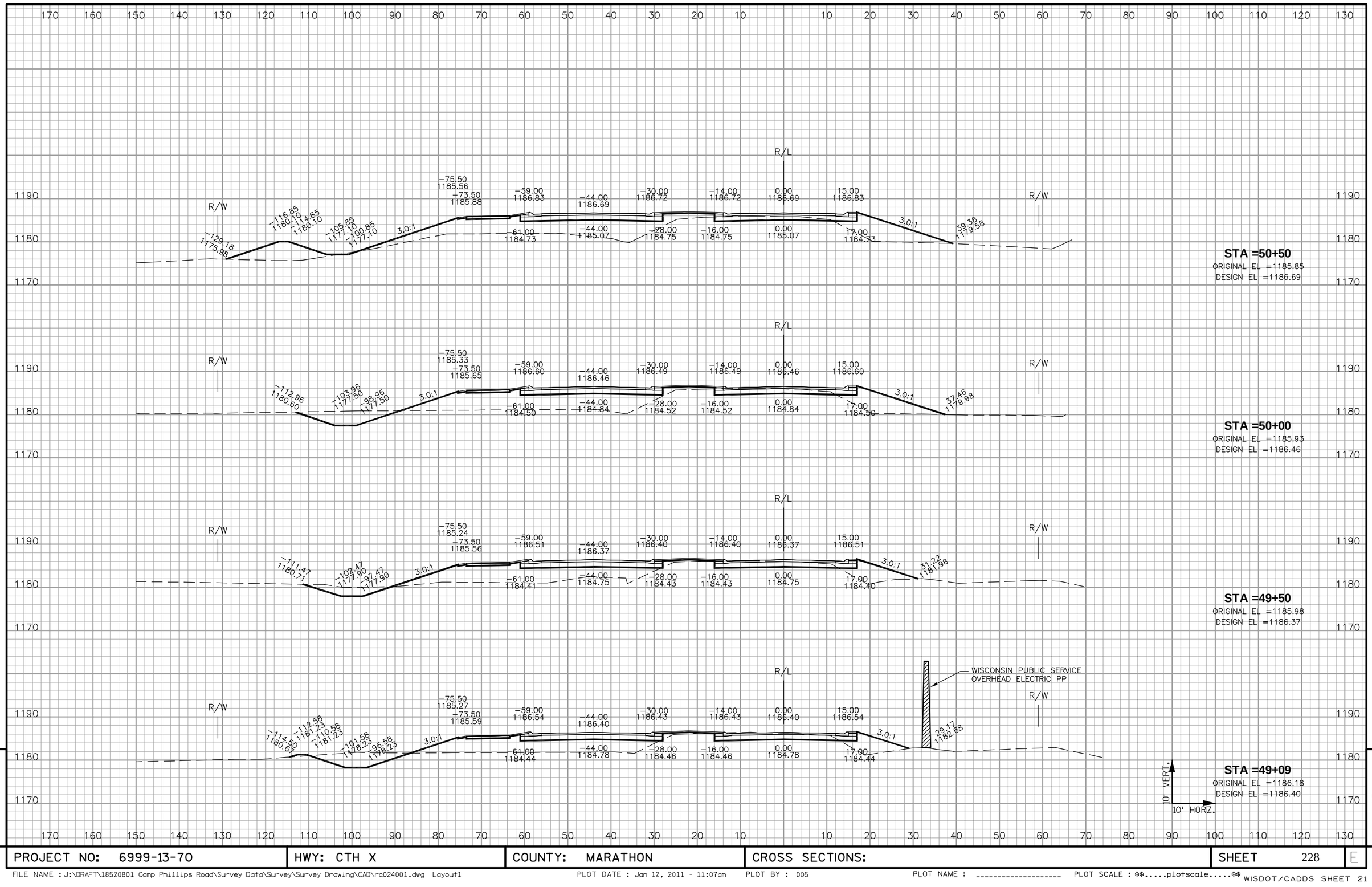


| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 228 | E |
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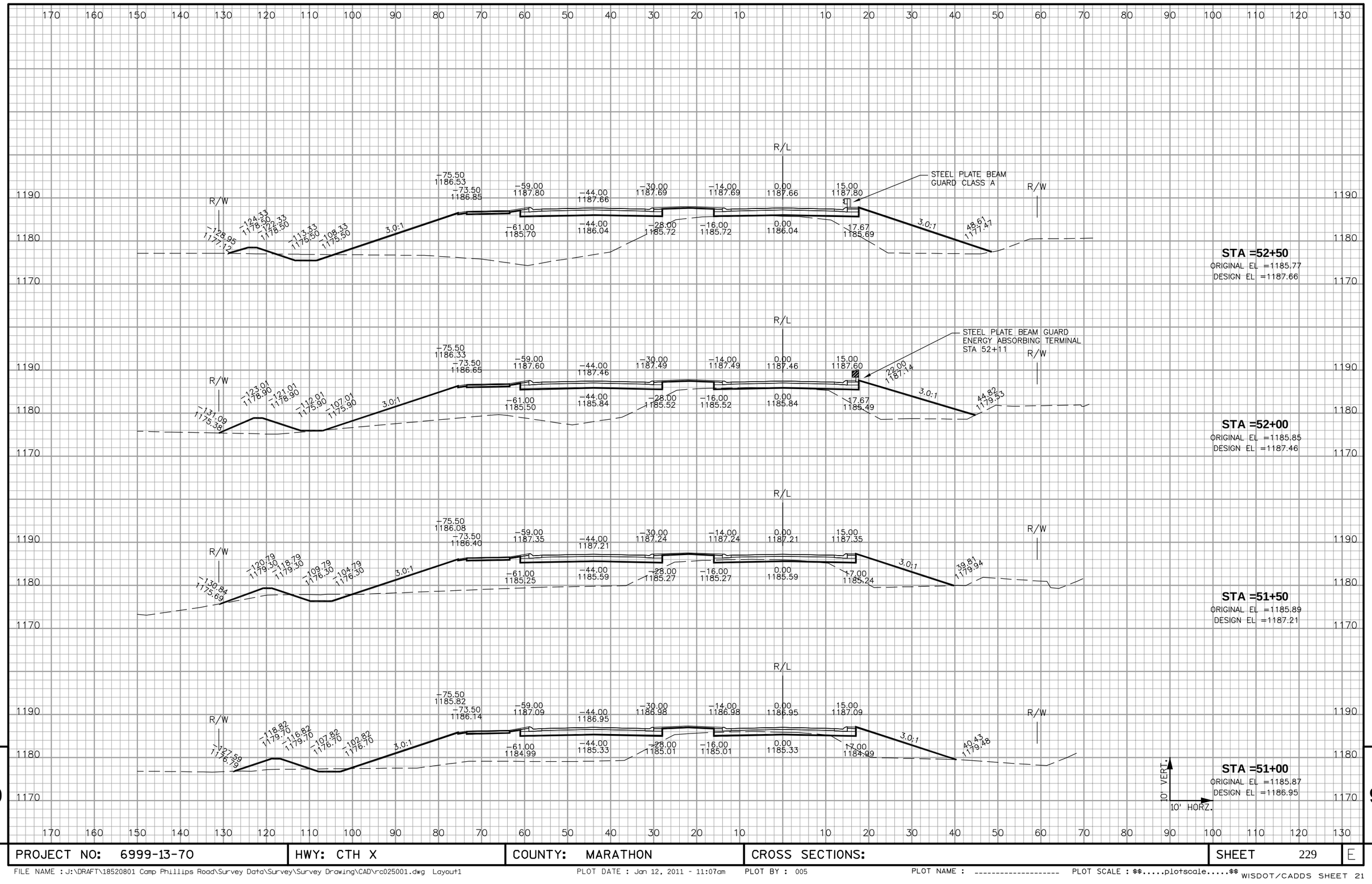
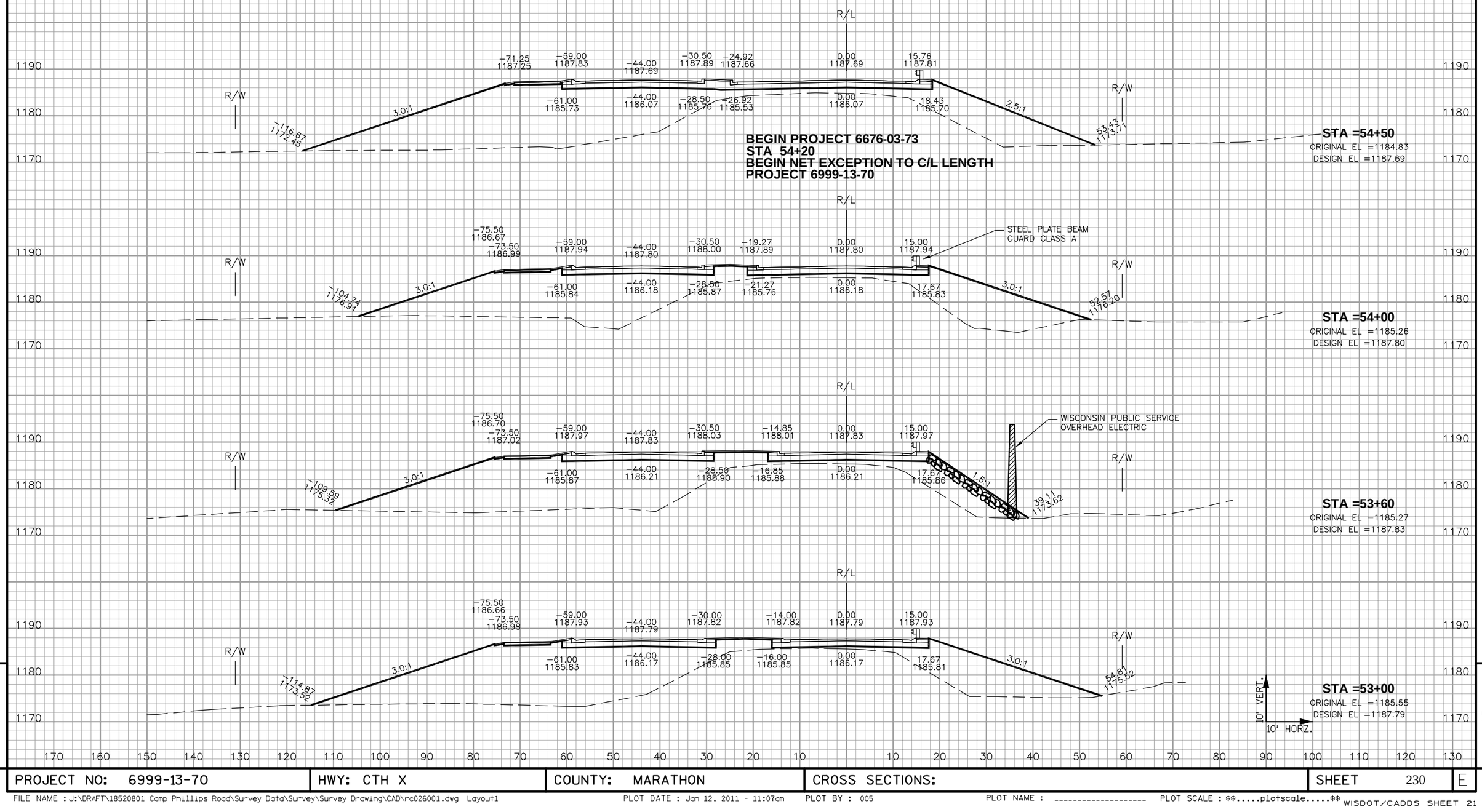



9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 229 | E |
|---|---|---|---|---|---|

**STA 55+73.12**
**STRUCTURE B-37-295**

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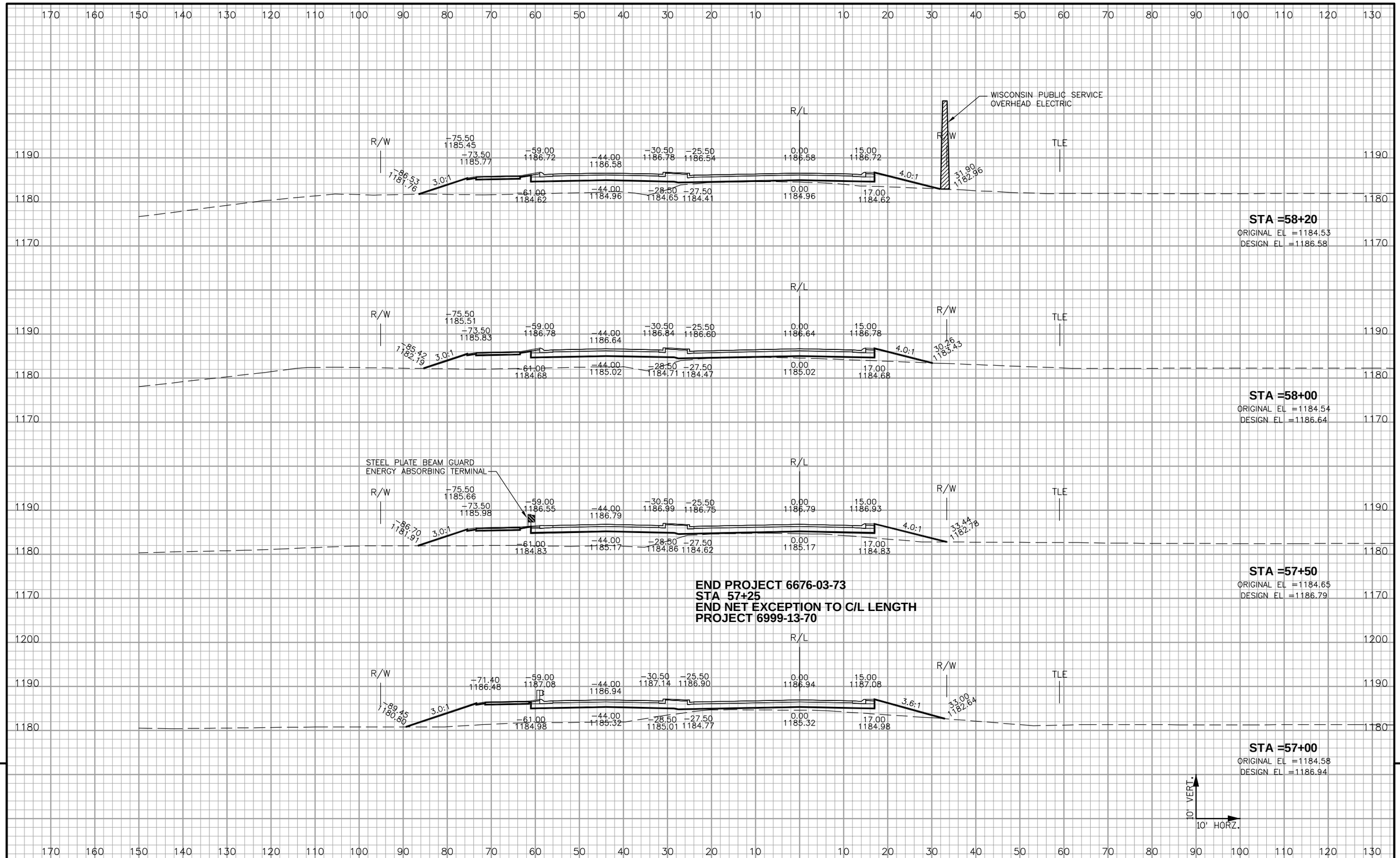
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 230 | E |
|---|---|---|---|---|---|

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9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 231 | E |
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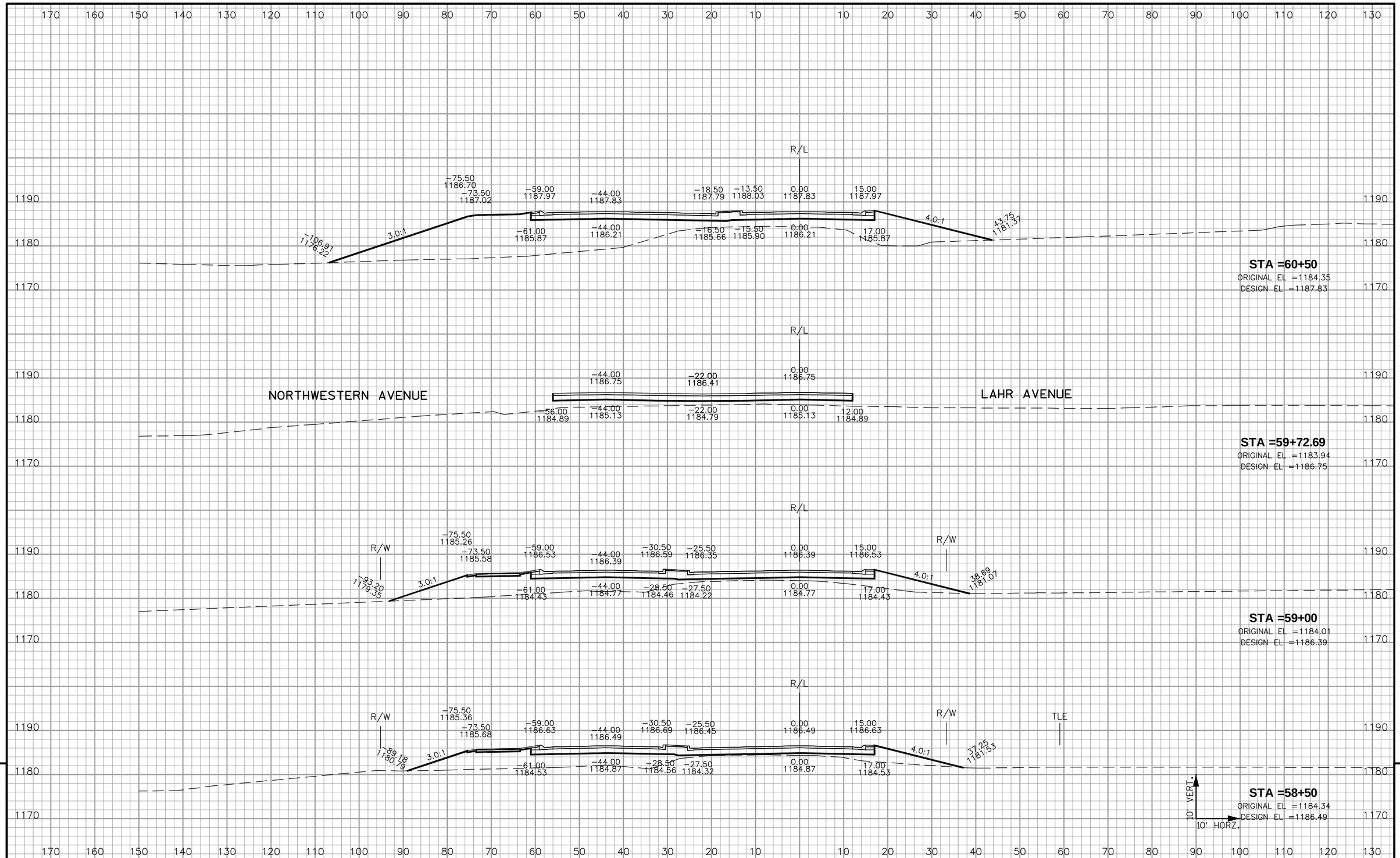
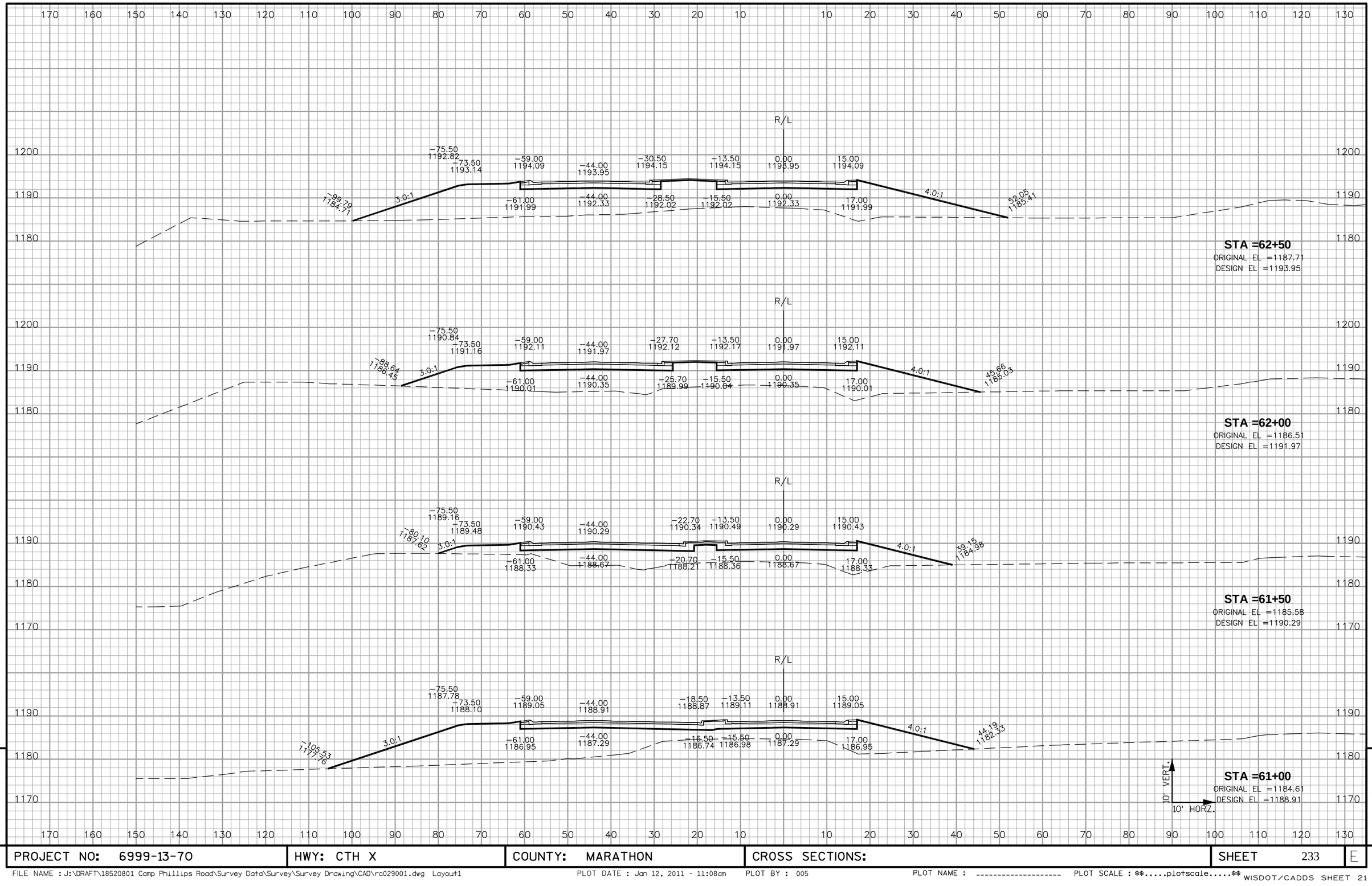



9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 232 | E |
|---|---|---|---|---|---|

9

FILE NAME : J:\DRAFT\18520801 Camp Phillips Road\Survey Data\Survey\Survey Drawing\CAD\rc028001.dwg Layout1 PLOT DATE : Jan 12, 2011 - 11:08am PLOT BY : 005 PLOT NAME : ---------- PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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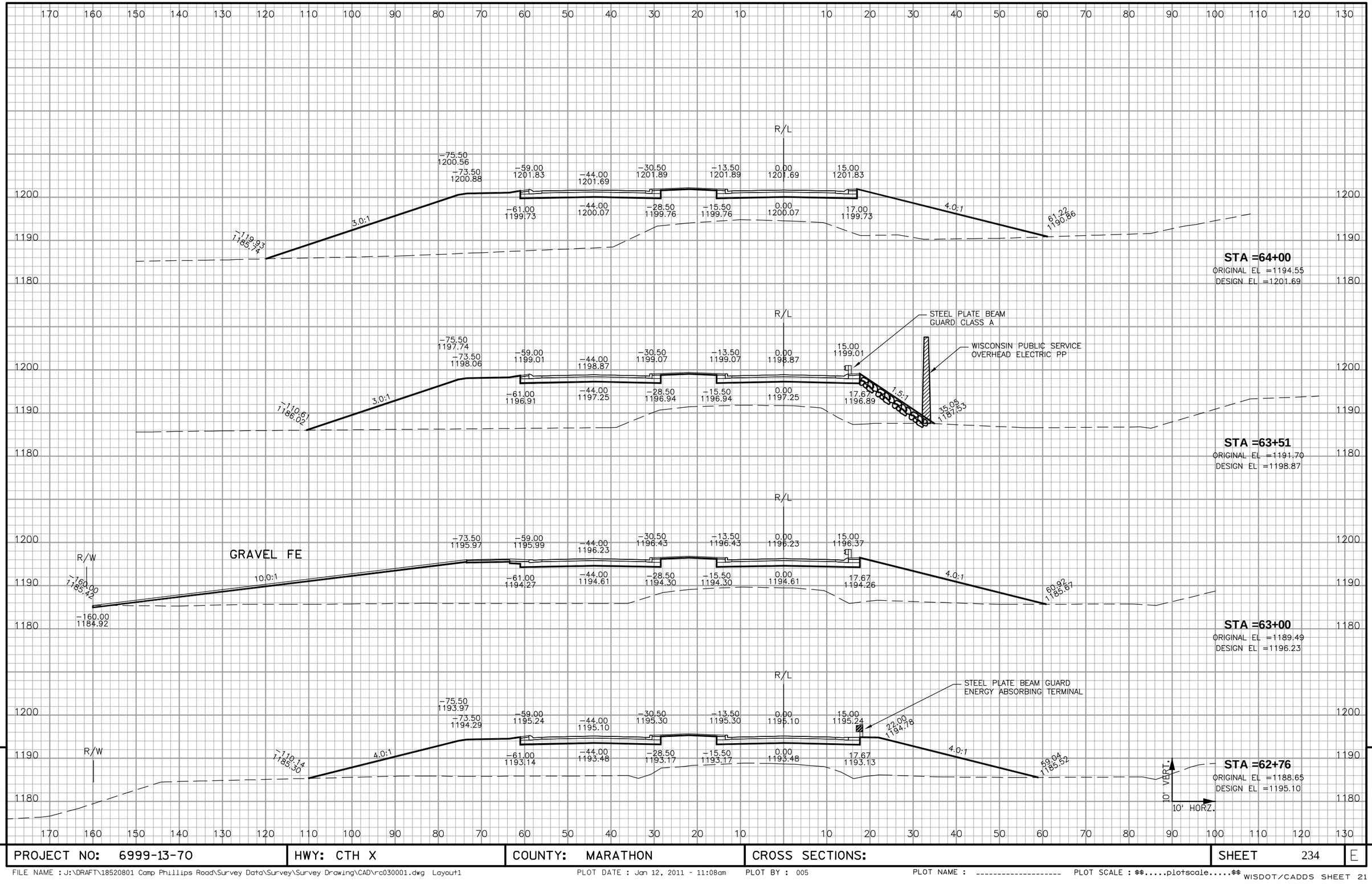
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 233 | E |
|---|---|---|---|---|---|

9

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| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 234 | E |
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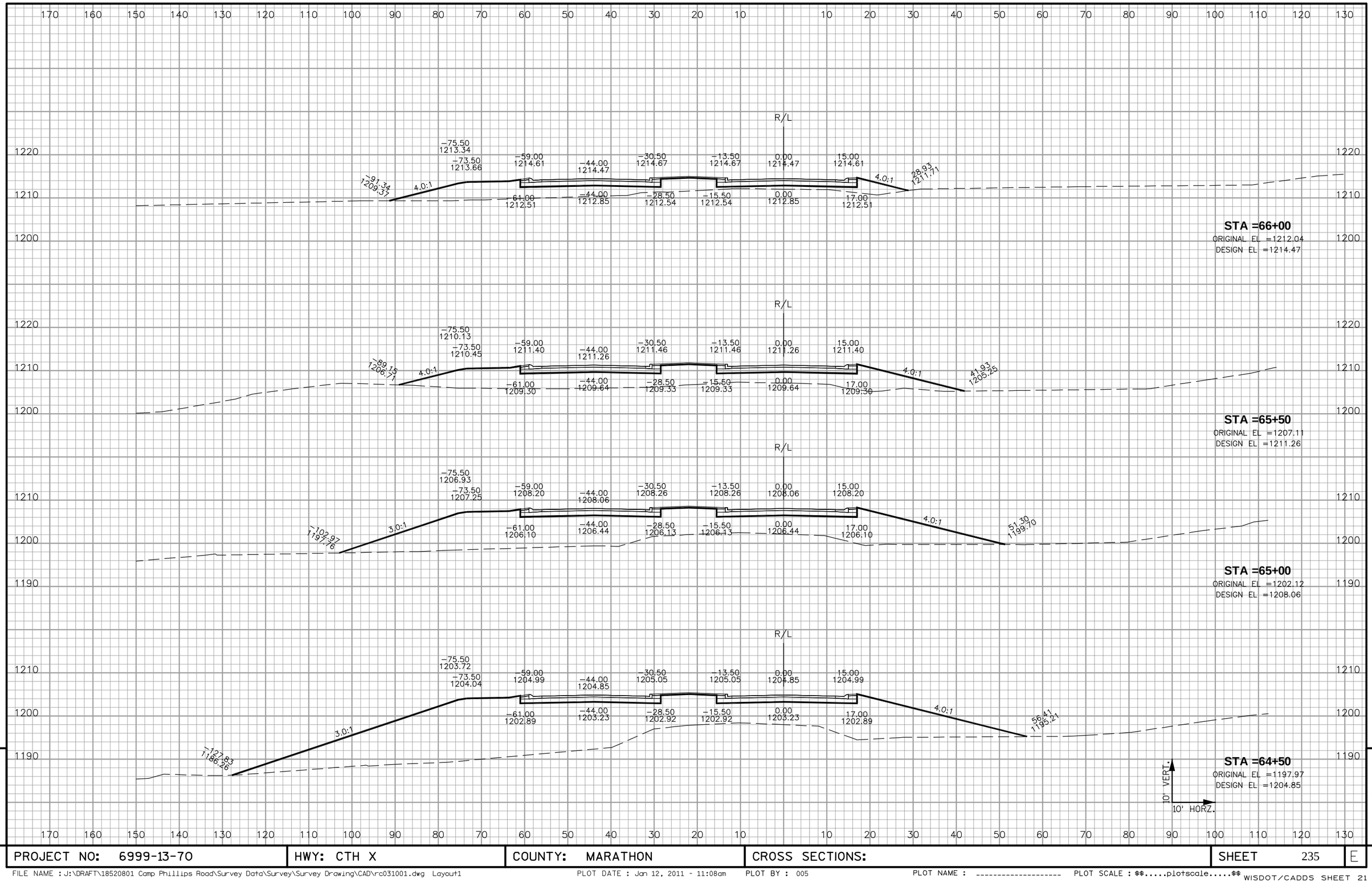
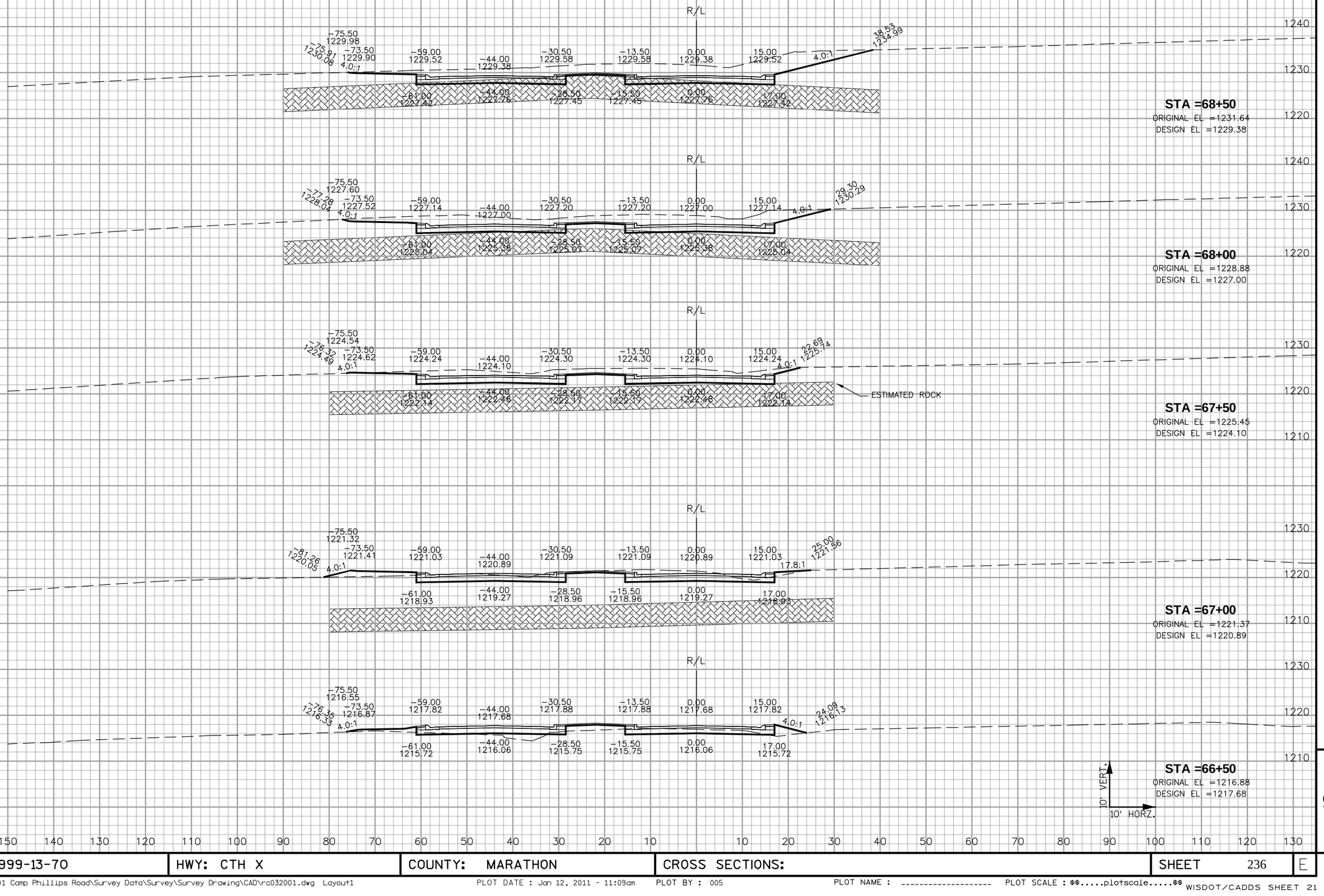


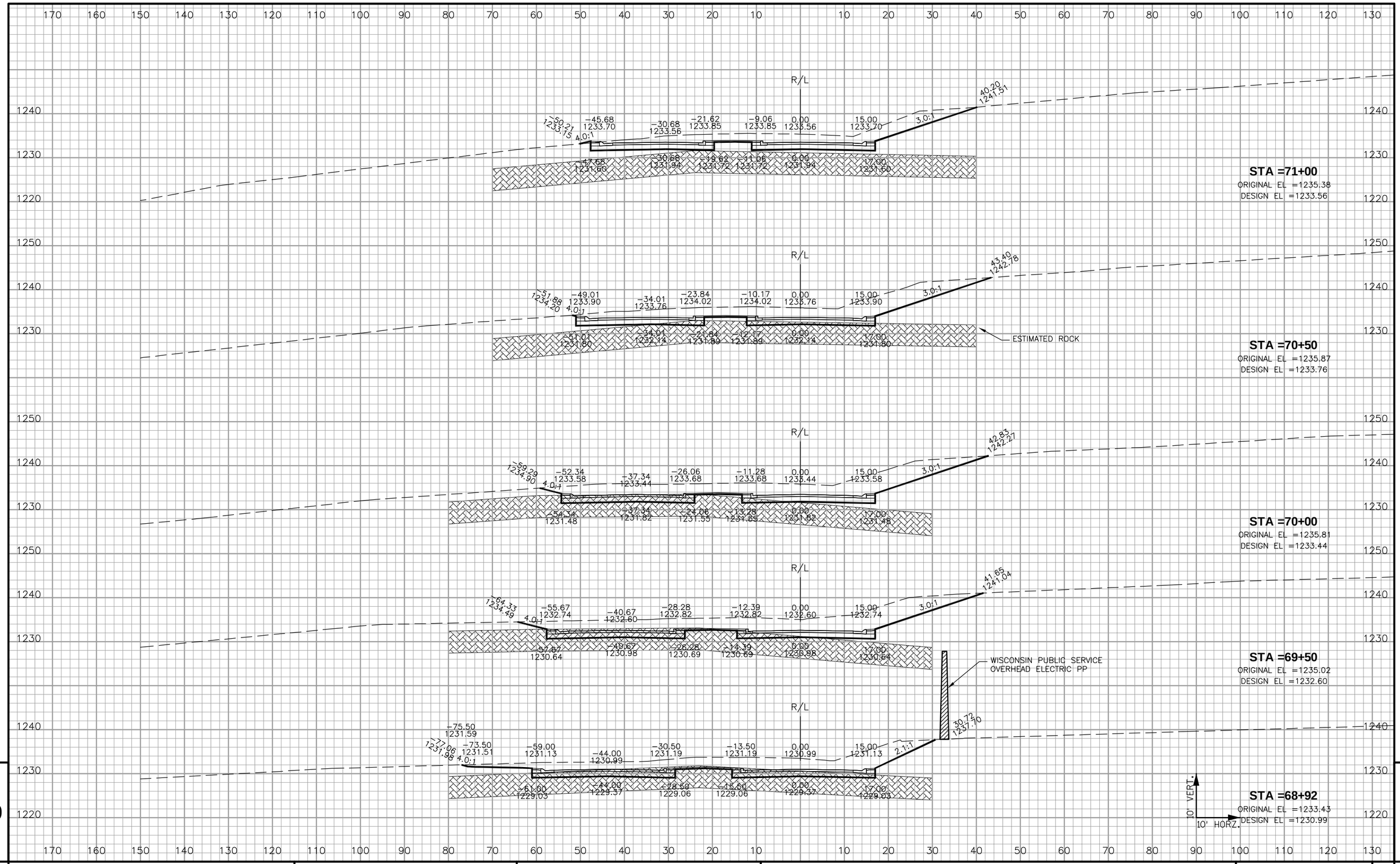

9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 235 | E |
|---|---|---|---|---|---|




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 236 | E |
|---|---|---|---|---|---|

FILE NAME : J:\DRAFT\18520801 Camp Phillips Road\Survey Data\Survey\Survey Drawing\CAD\rc032001.dwg Layout1 PLOT DATE : Jan 12, 2011 - 11:09am PLOT BY : 005 PLOT NAME : ---------- PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 237 | E |
|---|---|---|---|---|---|

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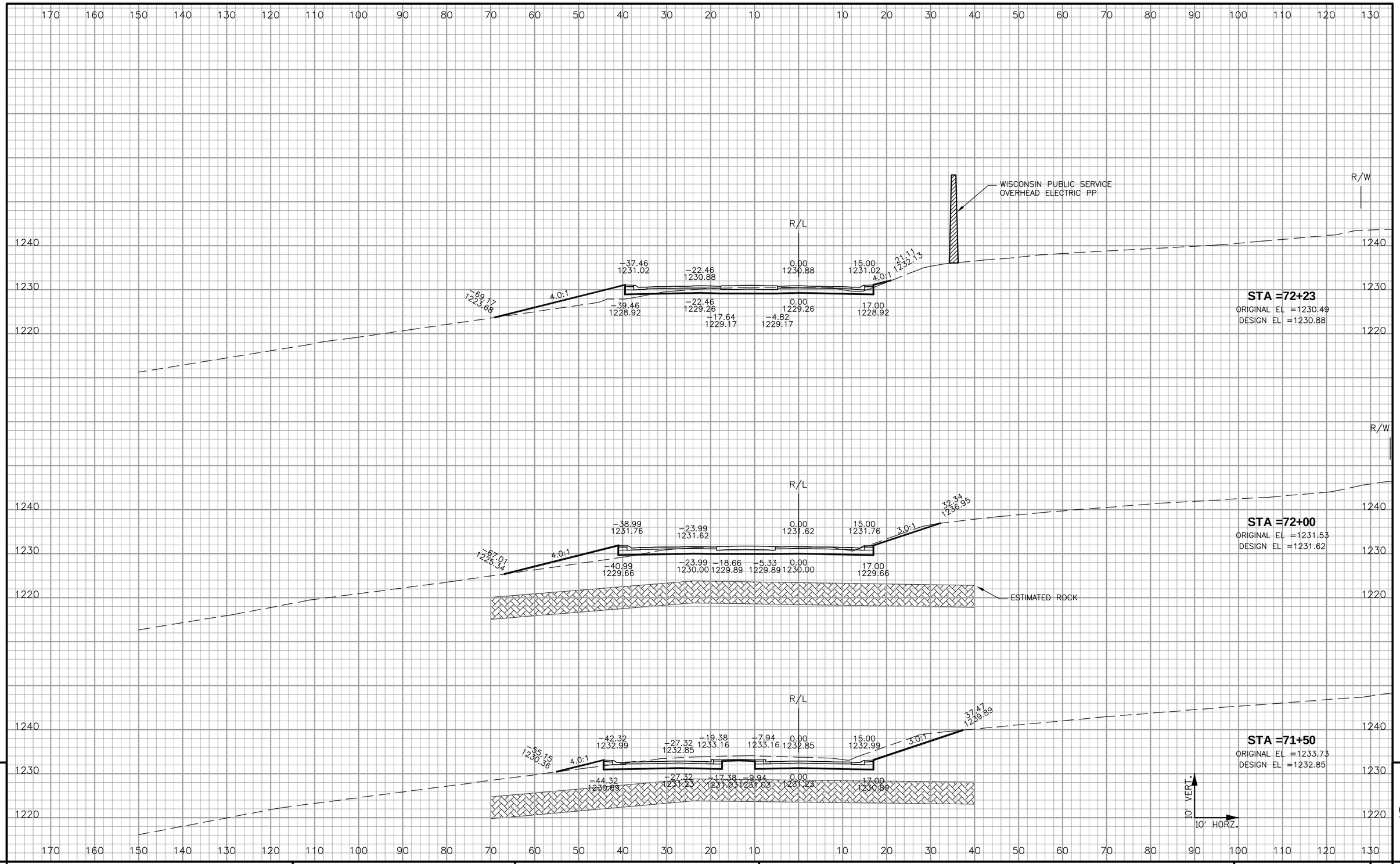
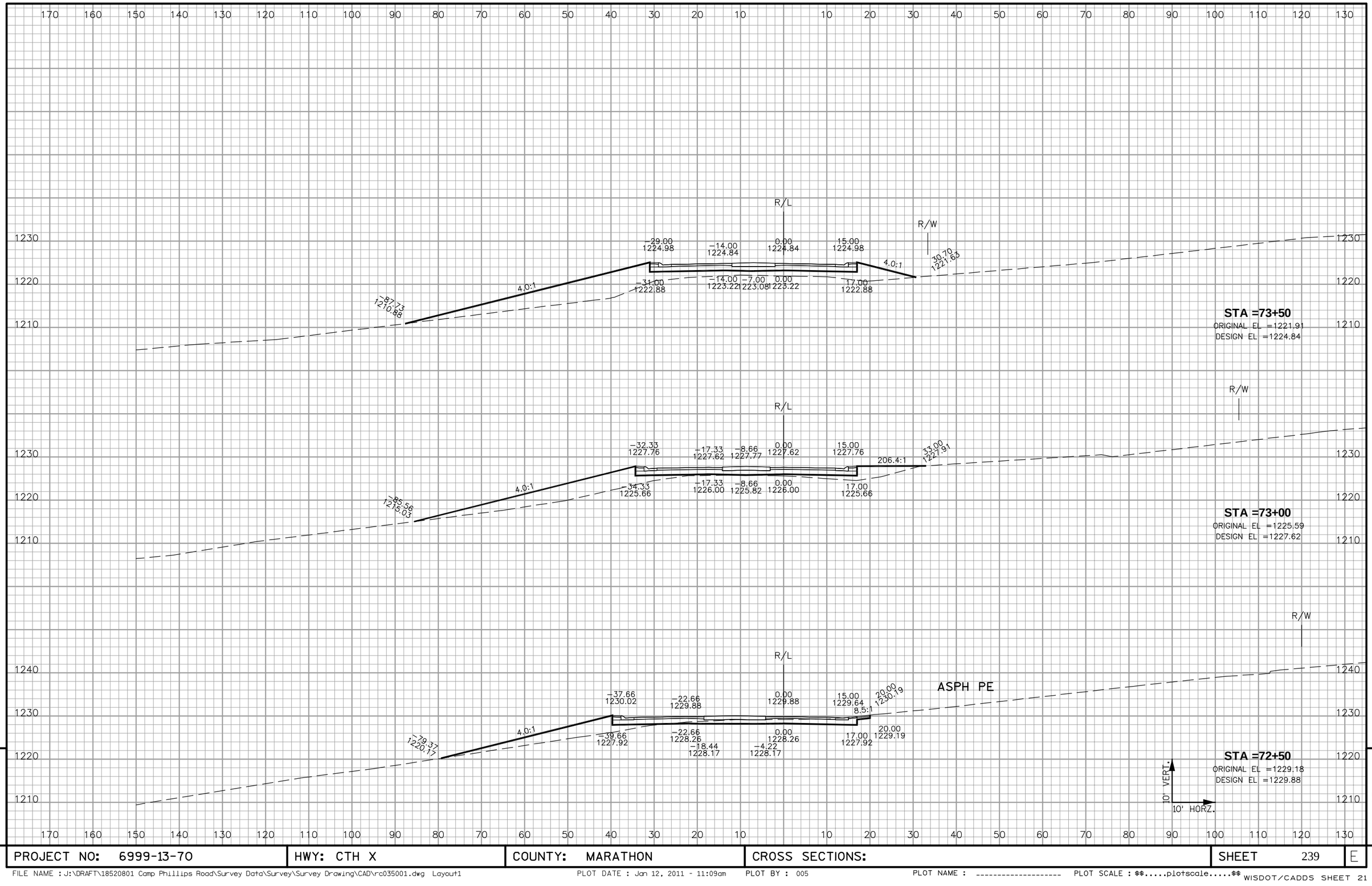


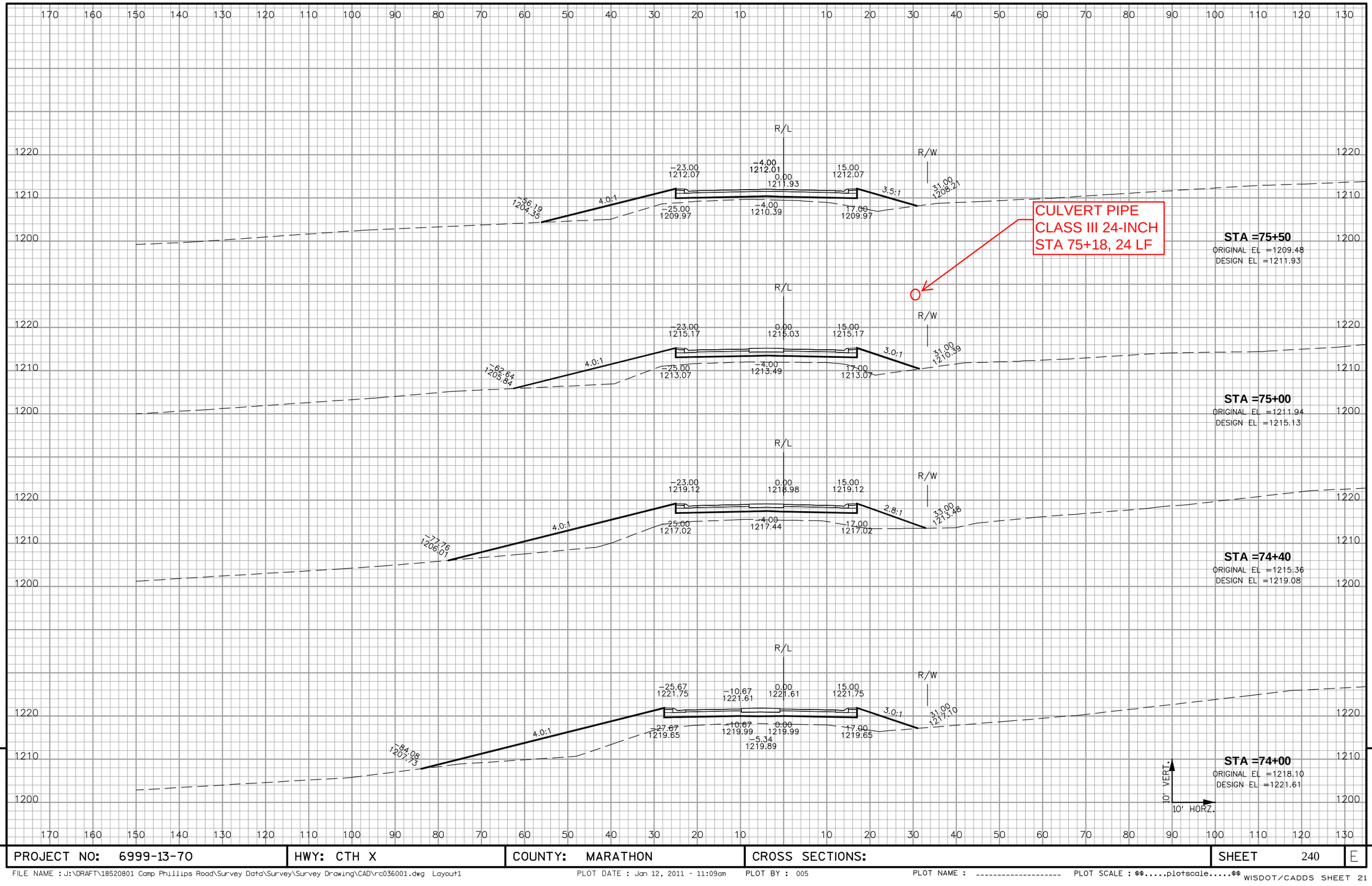

9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 238 | E |
|---|---|---|---|---|---|



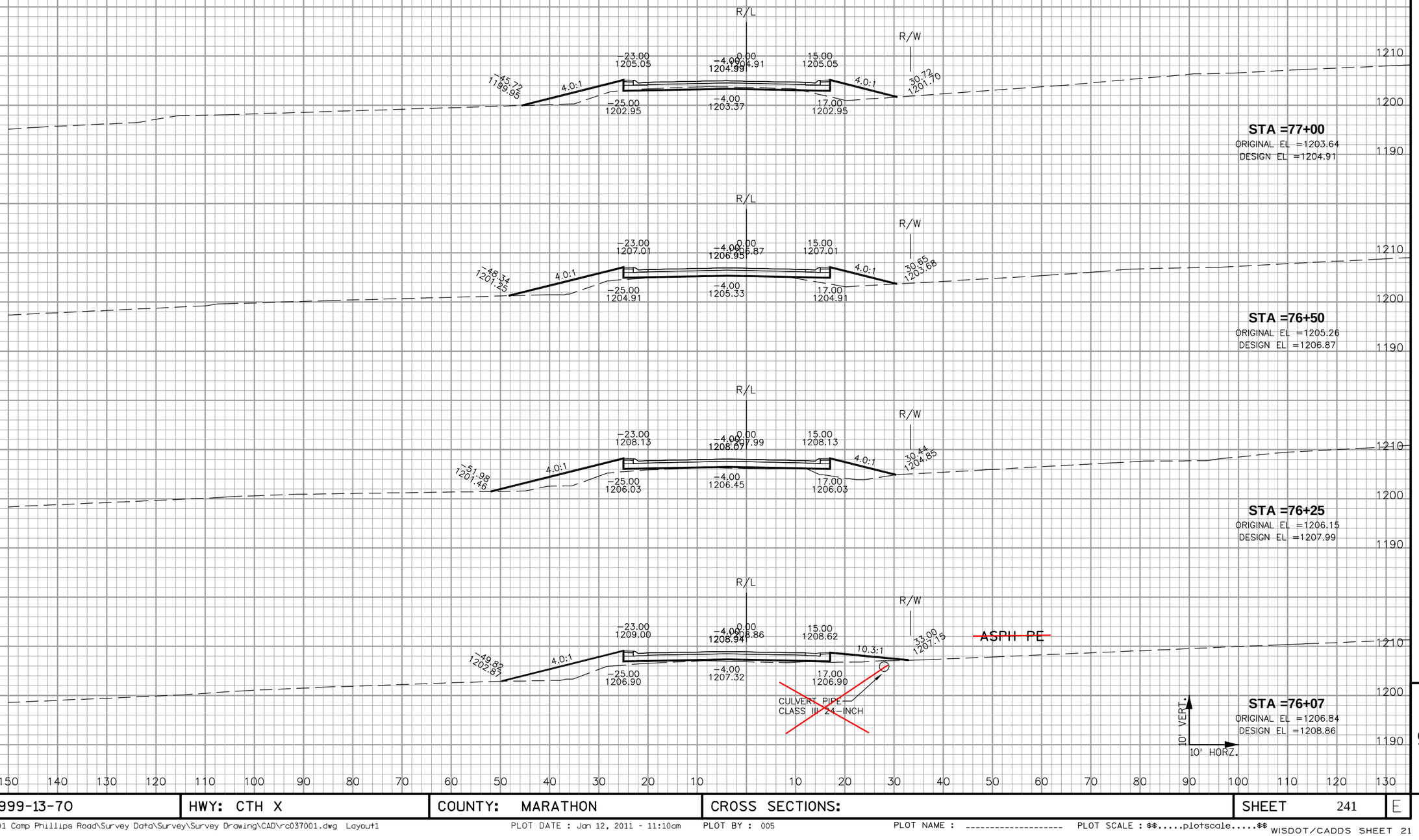

9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 239 | E |
|---|---|---|---|---|---|




9

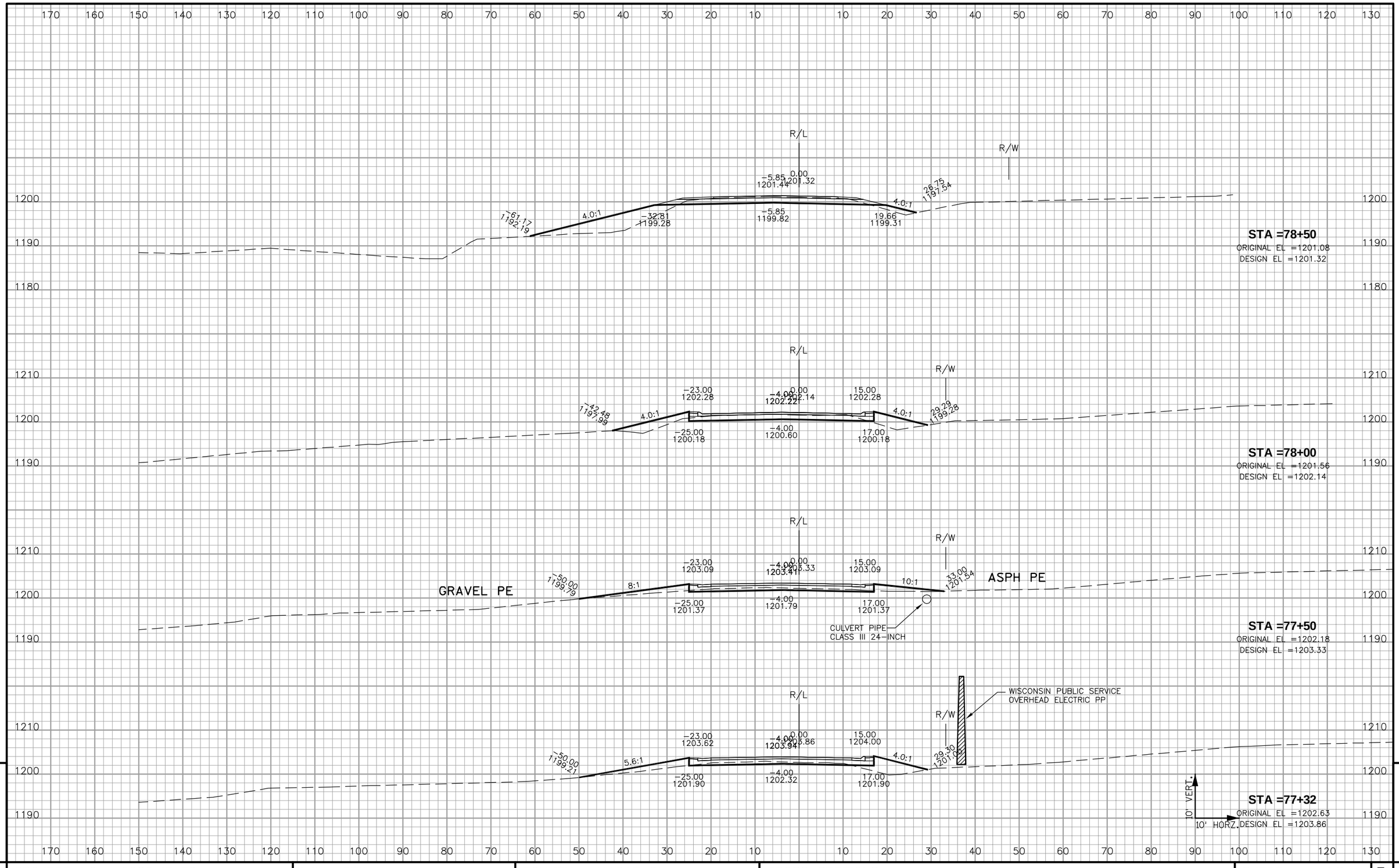
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 240 | E |
|---|---|---|---|---|---|




9

9

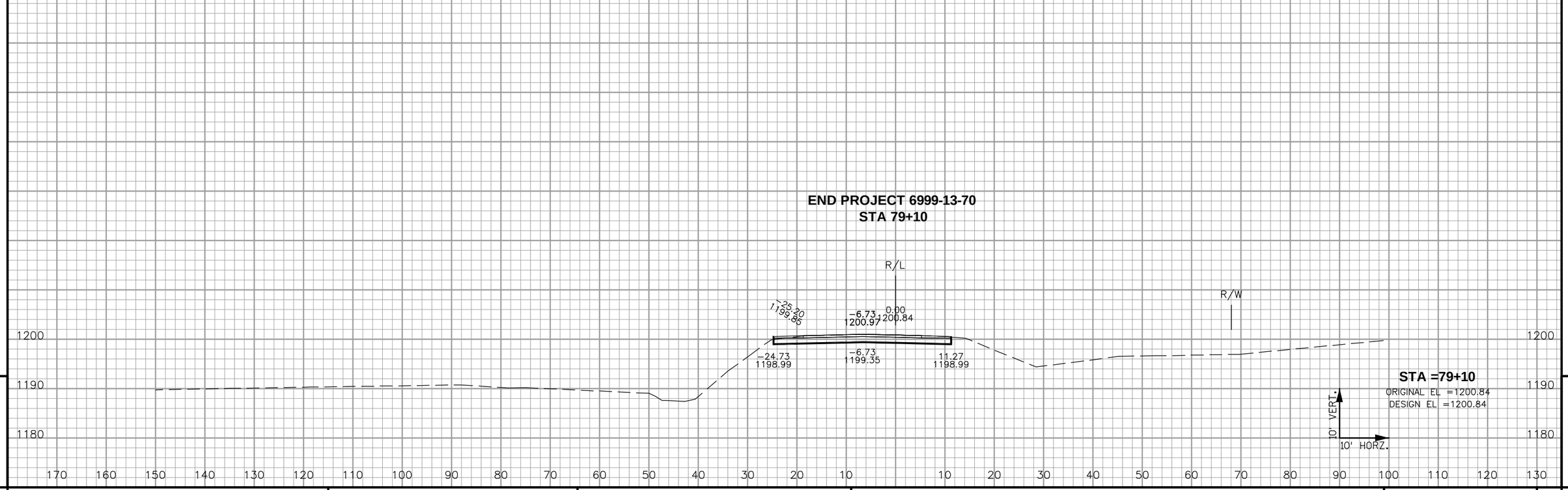
| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 241 | E |
|---|---|---|---|---|---|




9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 242 | E |
|---|---|---|---|---|---|

**END PROJECT 6999-13-70**
**STA 79+10**

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| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: | SHEET 243 | E |
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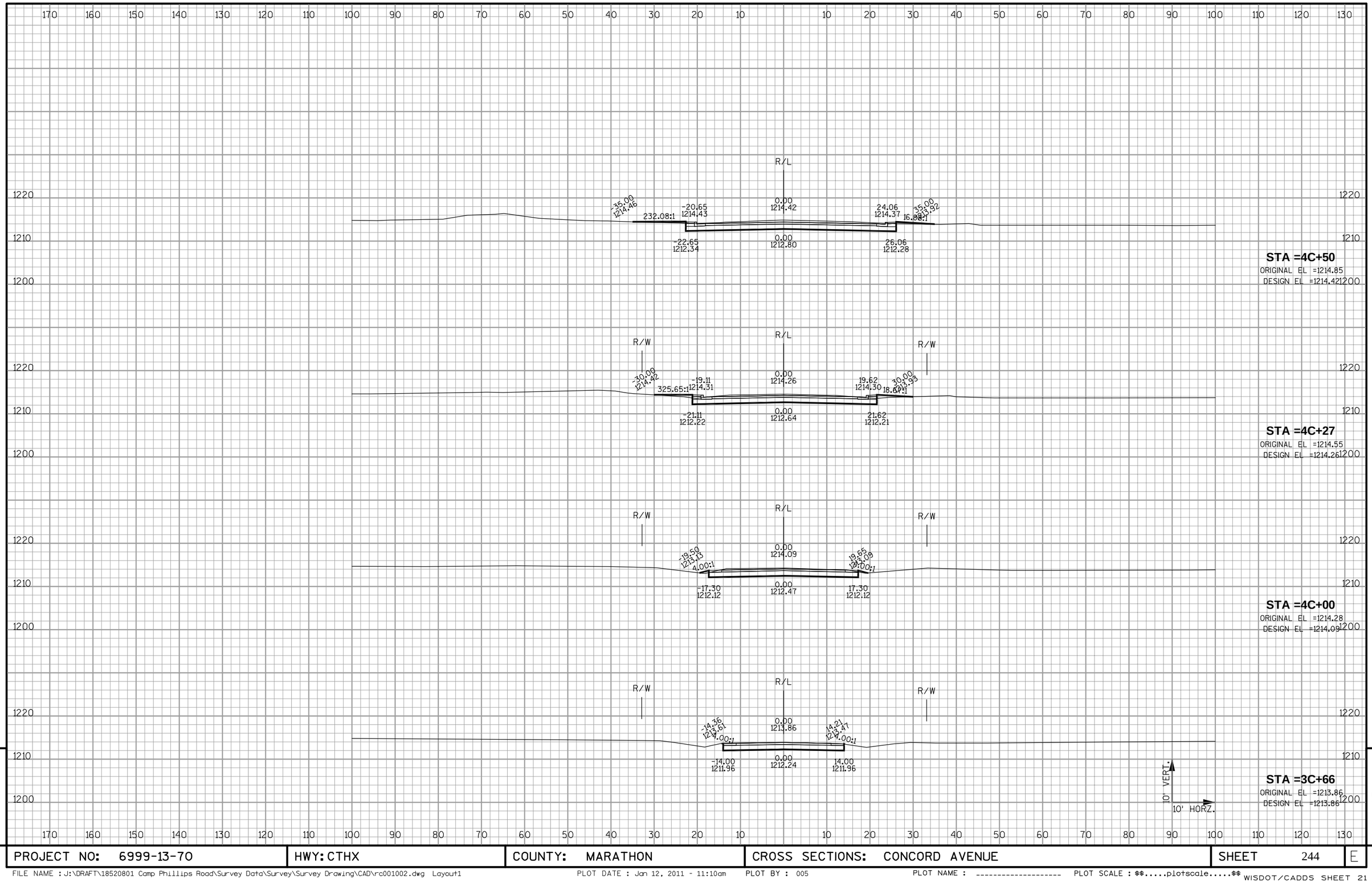
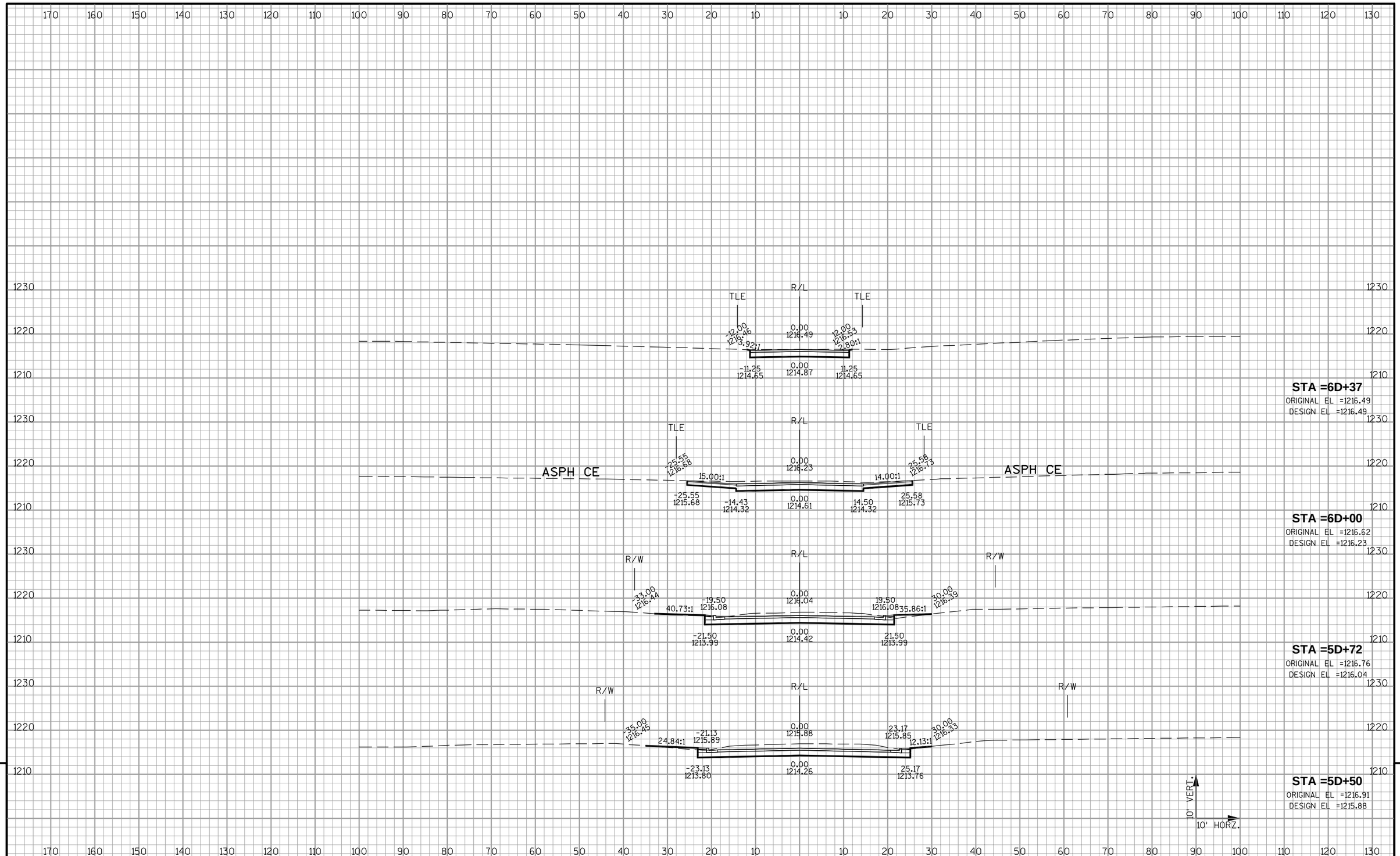


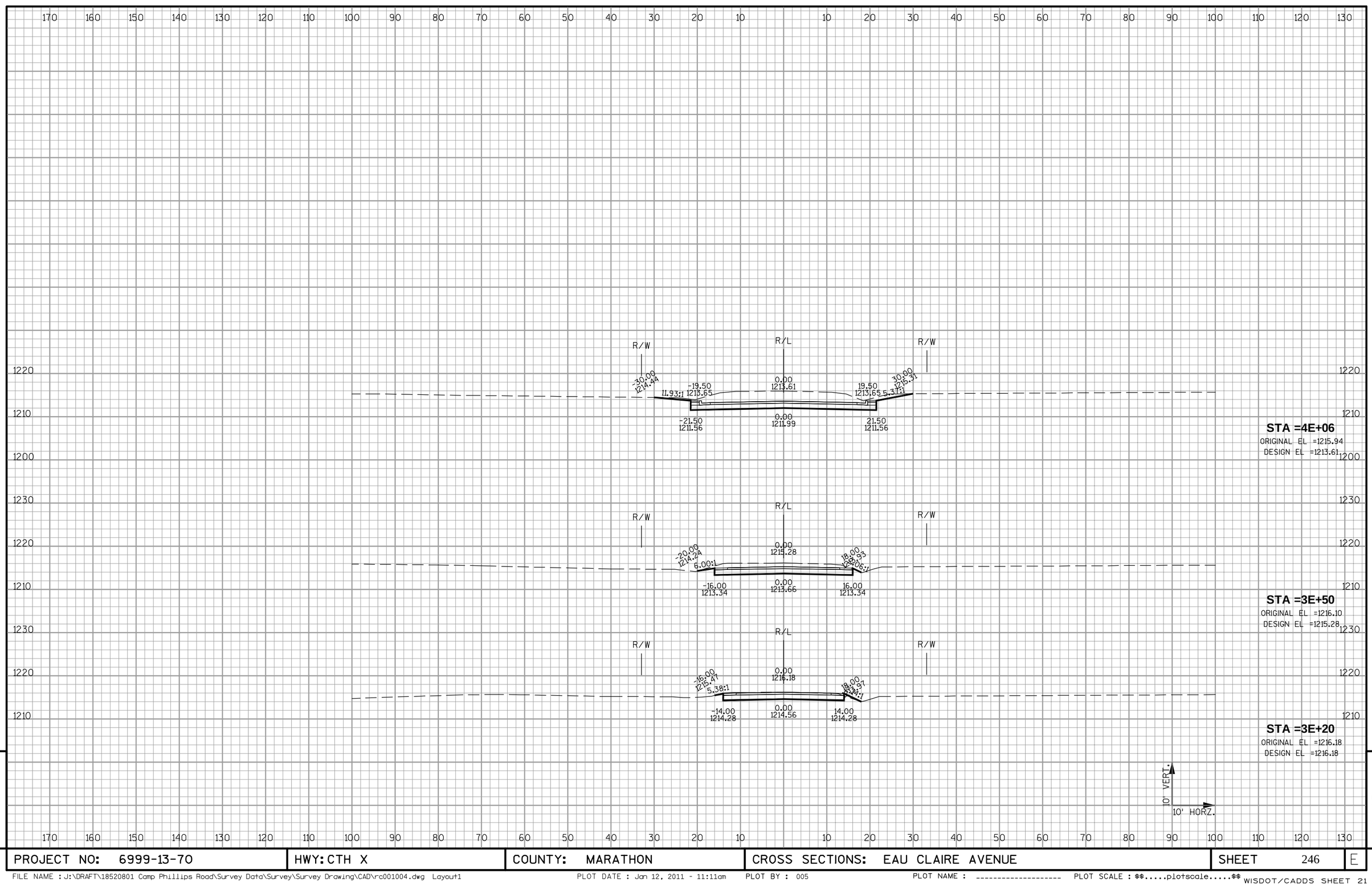

9

9

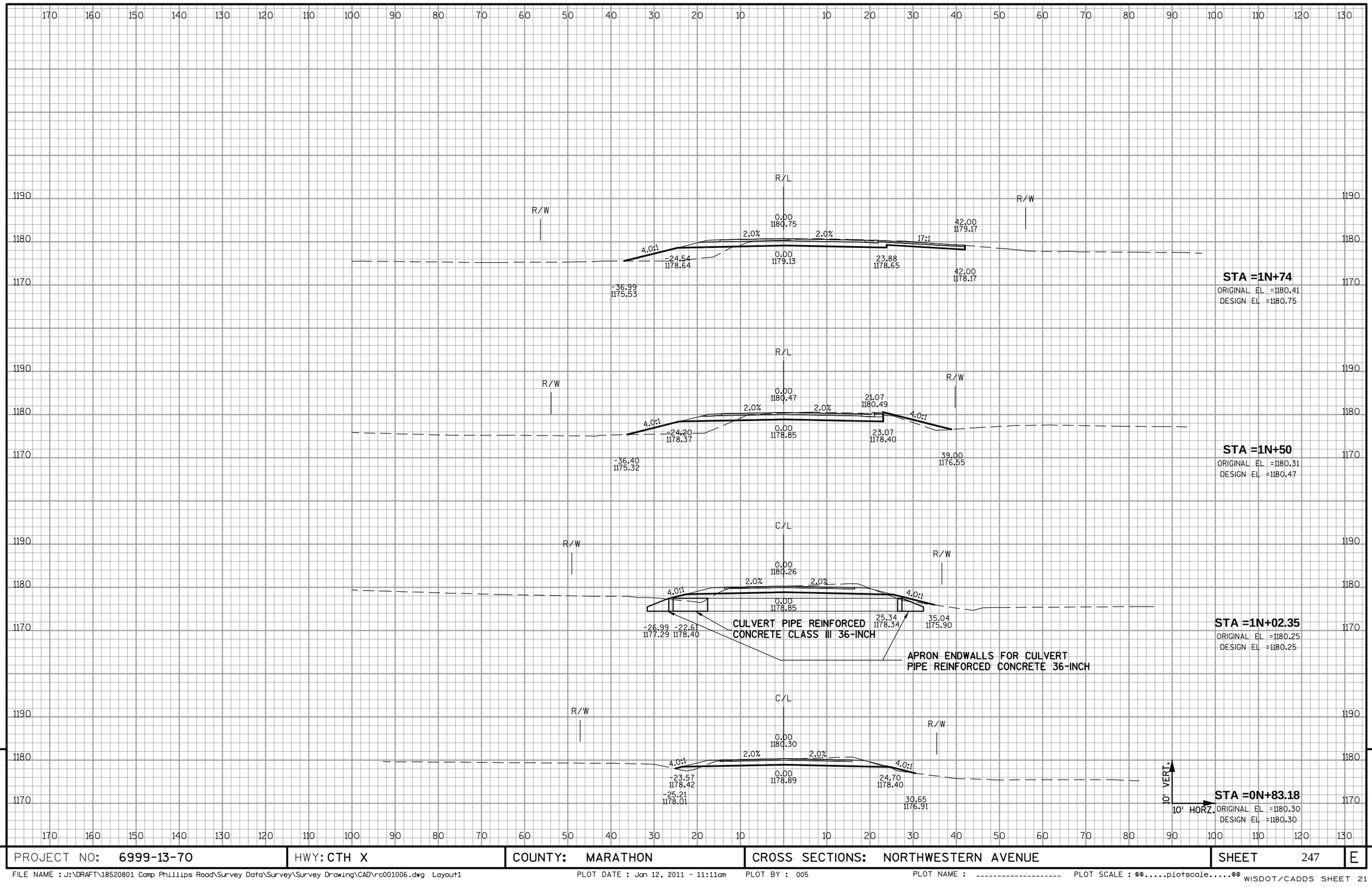
| PROJECT NO: 6999-13-70 | HWY: CTHX | COUNTY: MARATHON | CROSS SECTIONS: CONCORD AVENUE | SHEET 244 | E |
|---|---|---|---|---|---|




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: PRIVATE ROAD | SHEET 245 | E |
|---|---|---|---|---|---|



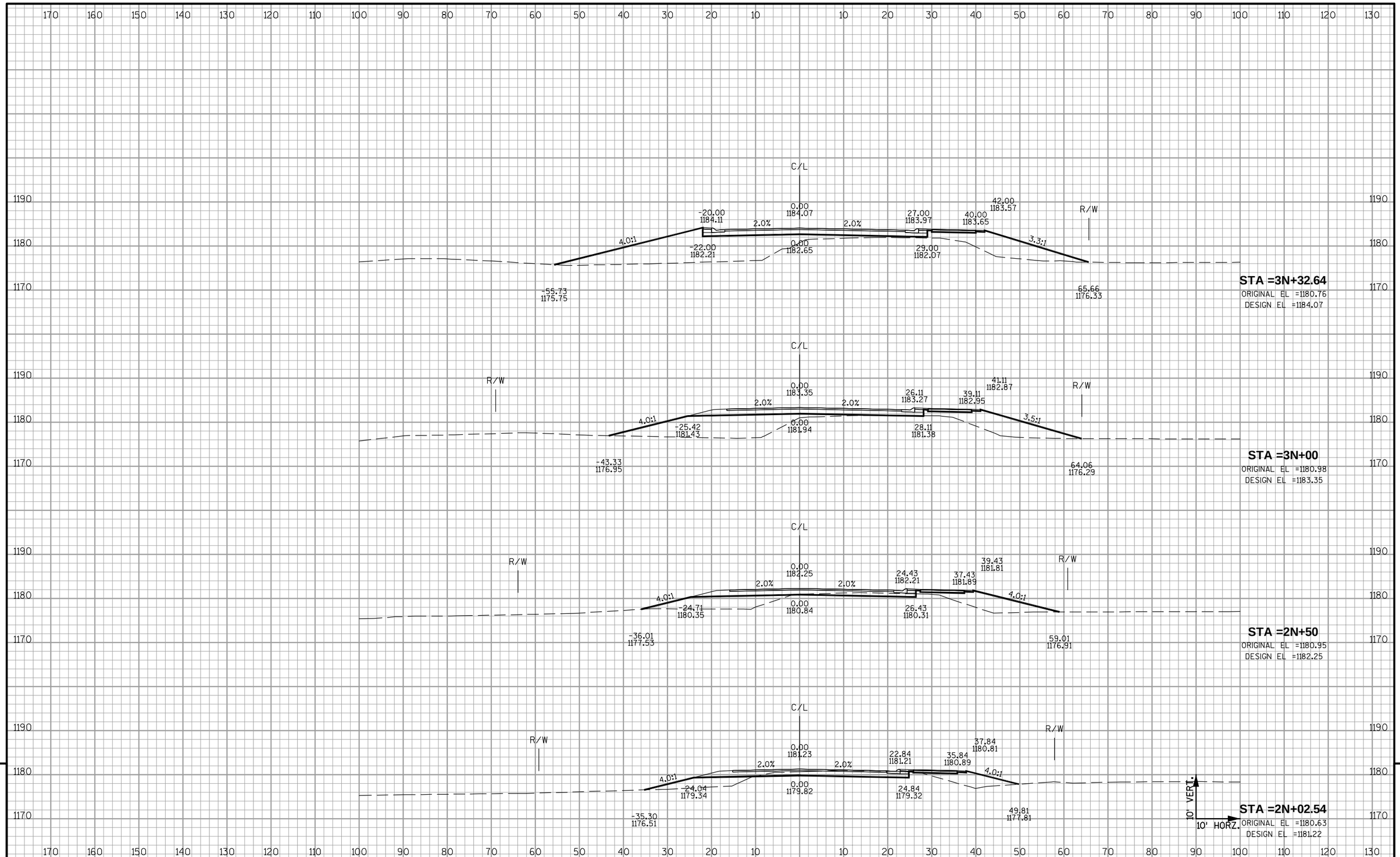

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: EAU CLAIRE AVENUE | SHEET 246 | E |
|---|---|---|---|---|---|




9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: NORTHWESTERN AVENUE | SHEET 247 | E |
|---|---|---|---|---|---|

9

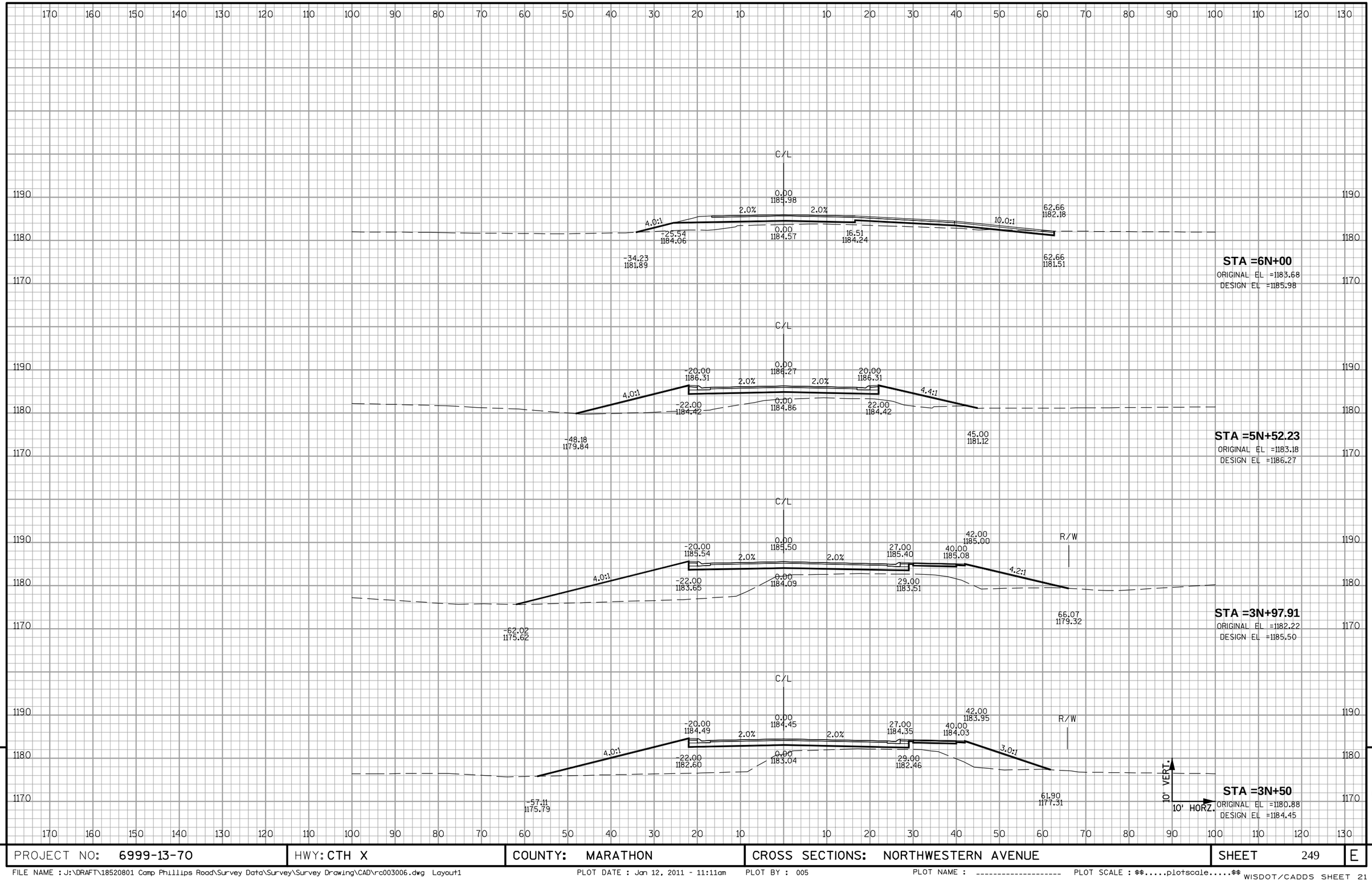



9

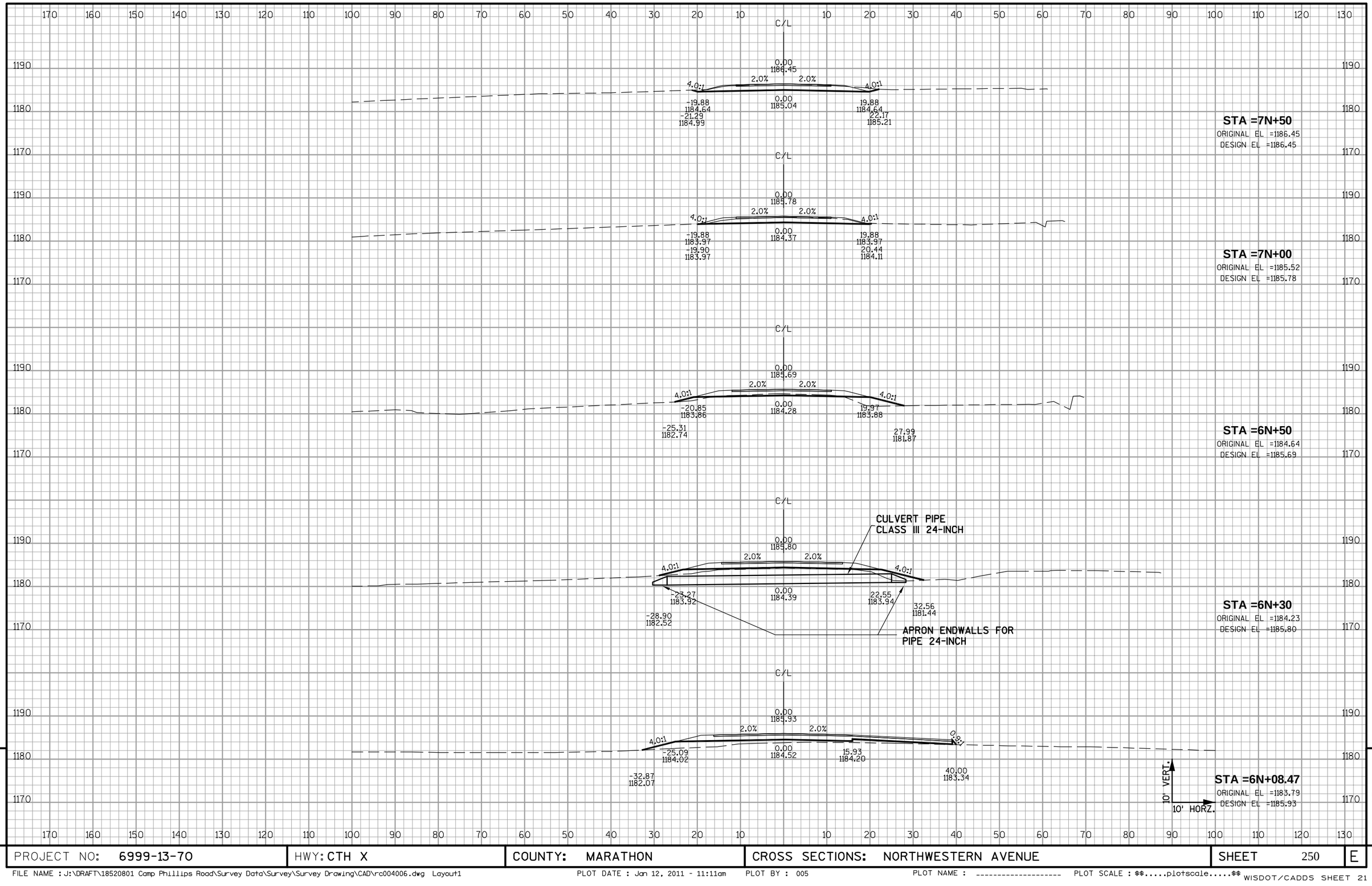
9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: NORTHWESTERN AVENUE | SHEET 248 | E |
|---|---|---|---|---|---|

FILE NAME : J:\DRAFT\18520801 Camp Phillips Road\Survey Data\Survey\Survey Drawing\CAD\rc002006.dwg Layout1 PLOT DATE : Jan 12, 2011 - 11:11am PLOT BY : 005 PLOT NAME : ---------- PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21




| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: NORTHWESTERN AVENUE | SHEET 249 | E |
|---|---|---|---|---|---|




9

9

| PROJECT NO: 6999-13-70 | HWY: CTH X | COUNTY: MARATHON | CROSS SECTIONS: NORTHWESTERN AVENUE | SHEET 250 | E |
|---|---|---|---|---|---|

Notes

*Wisconsin Department of Transportation*

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

NCL MAR 11

PROJECT ID: 6999-13-71

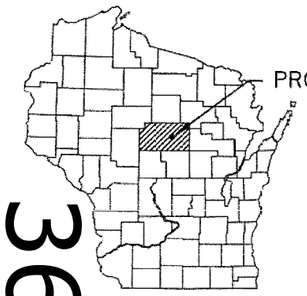
WITH: 6676-03-73 & 6999-13-70

COUNTY: MARATHON

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 = 16




36

DESIGN DESIGNATION

| | | |
|---|---|---|
| A.A.D.T. | ------ | = N/A |
| A.A.D.T. | ------ | = N/A |
| C.H.V. | ------ | = N/A |
| C.D. | | = N/A |
| T. | ----- | = N/A |
| DESIGN SPEED | | = N/A |
| ESALS | | = N/A |

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 (951.36)
- 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

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

# CAMP PHILLIPS RD (CTH X), WESTON

BERNARD AVE-NORTHWESTERN AVE

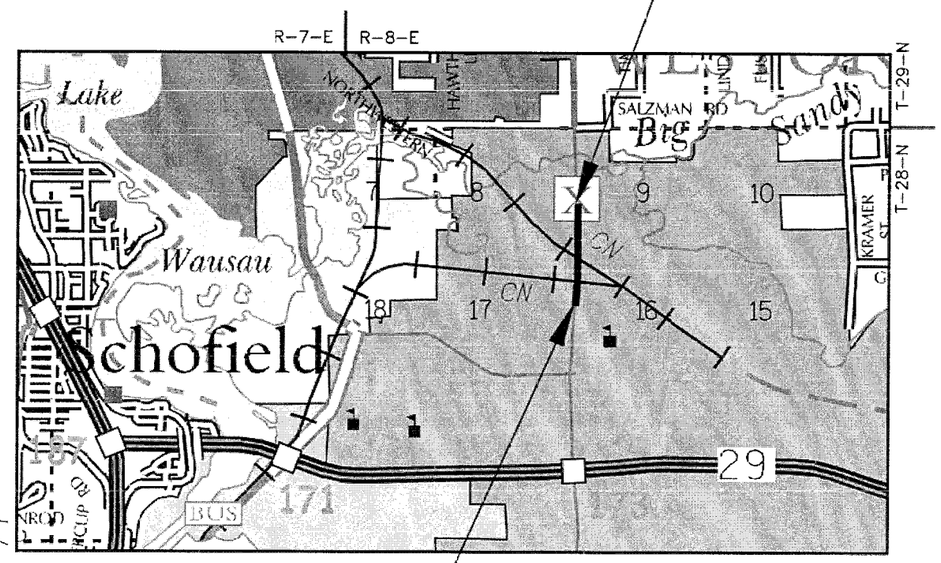
## LOCAL UTILITIES

## MARATHON COUNTY

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 6999-13-71 | ——— | ——— |
| | | |
| | | |
| | | |

STATE PROJECT NUMBER
**6999-13-71**

**END PROJECT**
**STA 41+00**
Y=189,110.21
X=296,236.63




**BEGIN PROJECT 6999-13-71**
**STA 0+00**
Y=185,019.33
X=296,185.36

LAYOUT
SCALE 0 0.5 MI.

"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), "MARATHON" COUNTY."

TOTAL NET LENGTH OF CENTERLINE = 0.776 MI. PROJECT 6999-13-71

ACCEPTED FOR
MARATHON COUNTY

11/18/2010 (Date) (Signature & Title of Official)

ACCEPTED FOR
VILLAGE OF WESTON

11/18/2010 (Date) (Signature & Title of Official)

ORIGINAL PLAN PREPARED BY

Becher Hoppe
Engineers and Architects
330 Fourth Street · PO Box 8000
Wausau, WI · 54402-8000
715.845.8000 · Fax 715.845.8006
BecherHoppe.com

KENNETH J. LIGMAN E-15603 WAUSAU WI. PROFESSIONAL ENGINEER WISCONSIN

11/18/10 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor CWE, INC.
Designer BECHER-HOPPE ASSOCIATES, INC.

Management Consultant CEDAR CORPORATION
C.O. Examiner

APPROVED FOR THE DEPARTMENT
DATE: ~~12-9-10~~ 12-9-10 (Signature)

E

TABLE OF MINIMUM
LOW PRESSURE AIR TEST TIME
(MANHOLE TO MANHOLE)

Specification time (Min:Sec) required for loss of 1.0 psig air pressure for size and length of pipe indicated.

| Pipe Diameter (in.) | Length for Minimum Time (min:sec) | Time for Minimum Time (ft) | Longer Length (sec) | Specification time (Min:Sec) for length shown | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 100 ft | 150 ft | 200 ft | 250 ft | 300 ft | 350 ft | 400 ft | 450 ft |
| 4 | 3:46 | 597 | .390L | 3:46 | 3:46 | 3:46 | 3:46 | 3:46 | 3:46 | 3:46 | 3:46 |
| 6 | 5:40 | 398 | .854L | 5:40 | 5:40 | 5:40 | 5:40 | 5:40 | 5:40 | 5:42 | 6:24 |
| 8 | 7:34 | 298 | 1.520L | 7:34 | 7:34 | 7:34 | 7:34 | 7:36 | 8:52 | 10:08 | 11:24 |
| 10 | 9:26 | 239 | 2.374L | 9:26 | 9:26 | 9:26 | 9:53 | 11:52 | 13:51 | 15:49 | 17:48 |
| 12 | 11:20 | 199 | 3.418L | 11:20 | 11:20 | 11:24 | 14:15 | 17:05 | 19:56 | 22:47 | 25:38 |
| 15 | 14:10 | 159 | 5.342L | 14:10 | 14:10 | 17:48 | 22:15 | 26:42 | 31:09 | 35:36 | 40:04 |
| 18 | 17:00 | 133 | 7.692L | 17:00 | 19:13 | 25:38 | 32:03 | 38:27 | 44:52 | 51:16 | 57:41 |
| 21 | 19:50 | 114 | 10.470L | 19:50 | 26:10 | 34:54 | 43:37 | 52:21 | 61:00 | 69:48 | 78:31 |
| 24 | 22:40 | 99 | 13.674L | 22:47 | 34:11 | 45:54 | 56:58 | 68:22 | 79:46 | 91:10 | 102:23 |
| 27 | 25:30 | 88 | 17.306L | 28:51 | 43:16 | 57:41 | 72:07 | 86:32 | 100:57 | 115:22 | 129:48 |
| 30 | 28:20 | 80 | 21.366L | 35:47 | 53:25 | 71:13 | 89:02 | 106:50 | 124:38 | 142:26 | 160:15 |
| 33 | 31:10 | 72 | 25.852L | 43:05 | 64:38 | 86:10 | 107:43 | 129:16 | 150:43 | 172:21 | 193:53 |
| 36 | 34:00 | 66 | 30.768L | 51:17 | 76:55 | 102:34 | 128:12 | 153:50 | 179:29 | 205:07 | 230:46 |

## SEWER LOW PRESSURE AIR TEST TIME

NOT TO SCALE

LEAKAGE SHALL NOT EXCEED THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FOLLOWING EQUATION:

$$L = \frac{SD \times (P)}{133{,}200}^{1/2}$$

L= ALLOWABLE LEAKAGE IN GALLONS PER HOUR

S= LENGTH OF PIPELINE TESTED IN FEET

D= NOMINAL DIAMETER OF PIPE IN INCHES

P= TEST PRESSURE IN PSIG

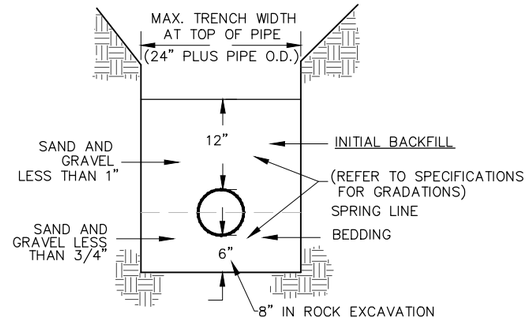
BASED ON 11.65 GPD PER MILE OF PIPE PER INCH OF NOMINAL DIAMETER AT 150 PSI.

THE ALLOWABLE LEAKAGE PER 1,000 FEET OF PIPELINE IS AS FOLLOWS:

| PIPE SIZE (INCHES) | ALLOWABLE LEAKAGE (GPH) |
|---|---|
| 4 | 0.37 |
| 6 | 0.55 |
| 8 | 0.74 |
| 10 | 0.92 |
| 12 | 1.10 |
| 14 | 1.29 |
| 16 | 1.66 |

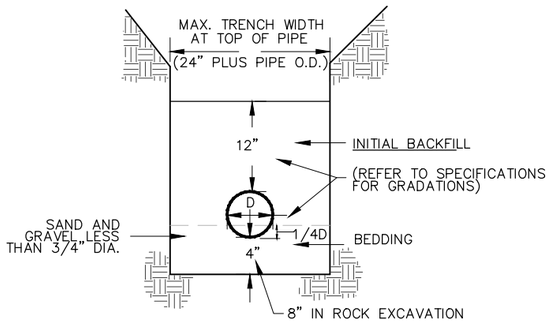
## WATERMAIN LEAKAGE TEST

NOT TO SCALE




## CLASS "B" BEDDING AND INITIAL BACKFILL

NOT TO SCALE




## CLASS "C" BEDDING AND INITIAL BACKFILL

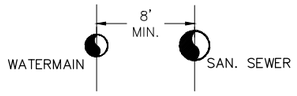
NOT TO SCALE


UTILITY CONSULTANT
BECHER HOPPE ASSOCIATES (DESIGN)
KEN LIGMAN, PE
330 FOURTH STREET
PO BOX 8000
WAUSAU, WI 54402-8000
PHONE: (715) 845-8000
kligman@becherhoppe.com

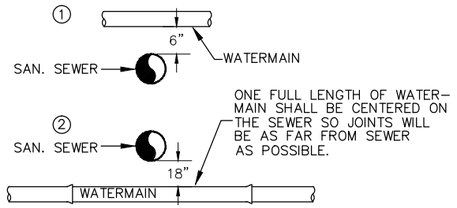
WDNR (WATERMAIN)
STEVE ELMORE
101 S. WEBSTER STREET
PO BOX 7921
MADISON, WI 53707-7921
PHONE: (608) 264-9246
Steve.Elmore@wisconsin.gov

WDNR (SANITARY SEWER)
STEVE SMITH
101 S. WEBSTER STREET
PO BOX 7921
MADISON, WI 53707-7921
PHONE: (608) 266-7580
Steve.Smith@wisconsin.gov

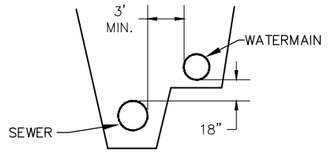
2




HORIZONTAL




VERTICAL

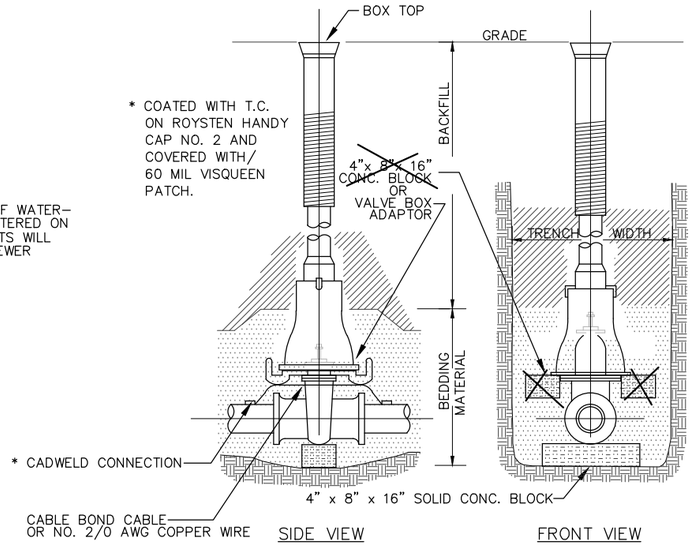



PIPE PLACEMENT IN ROCK EXCAVATION

WHEN THE ABOVE SEPARATIONS CANNOT BE MAINTAINED, THE OWNER MAY REQUIRE THE CONTRACTOR TO ENCASE THE SEWER IN CONCRETE

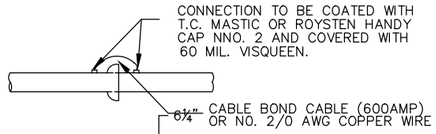
## SEWER/WATERMAIN MIN. SEPERATION DISTANCE

NOT TO SCALE



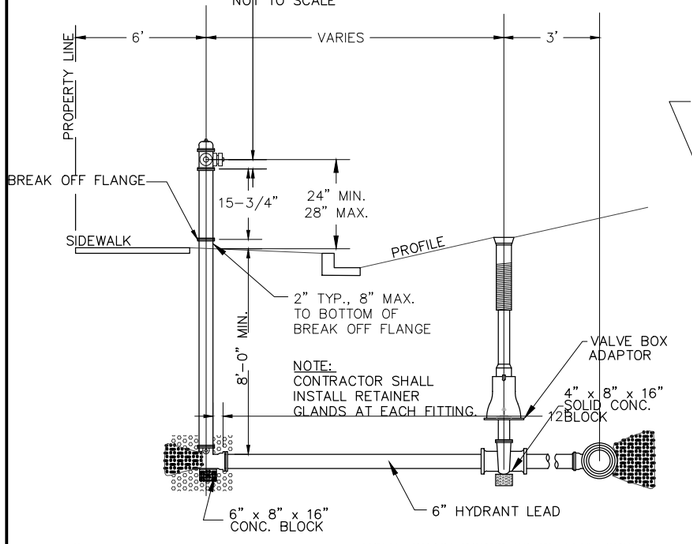

## GATE VALVE BOX SETTING

NOT TO SCALE




## D.I. ELECTRICAL CONTINUITY CONNECTION PIPE/PIPE JOINT OR PIPE FITTING JOINT

NOT TO SCALE

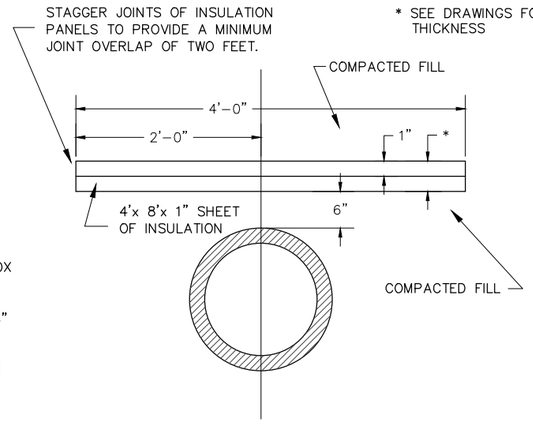



NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING HYDRANT TO FINISHED GRADE AND SUPPLY HYDRANT BARREL EXTENSIONS IF NECESSARY.

NOTE: DRAIN PORTS TO BE LEFT OPEN AND CLEAR OF ANY OBSTRUCTIONS UNLESS IT IS DIRECTED TO BE PLUGGED AS PER THE SPECIFICATIONS OR AS DIRECTED BY THE OWNER.

PROFILE VIEW

## TYPICAL HYDRANT INSTALLATION URBAN

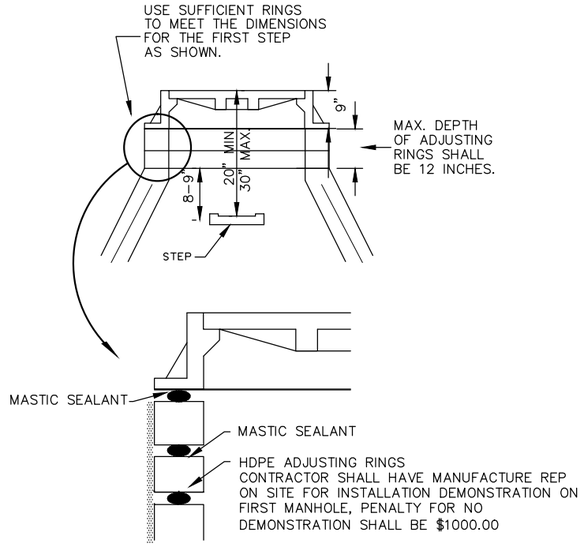



## PIPELINE INSULATION DETAIL

NOT TO SCALE

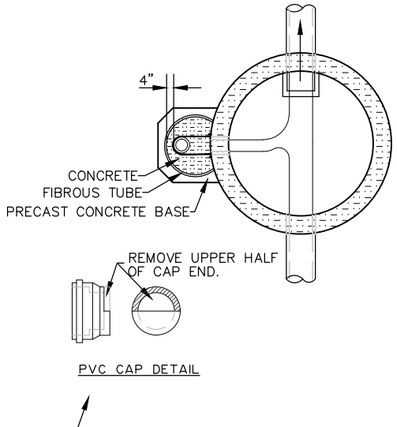
NOTE:
ALL PVC/HDPE SANITARY FORCEMAIN, SANITARY SEWER, AND LATERALS SHALL INCLUDE TRACER WIRE FOR THE FULL LENGTH OF INSTALLATION.

2

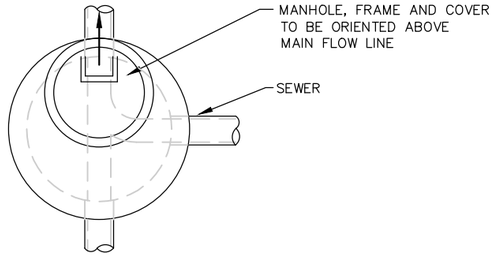


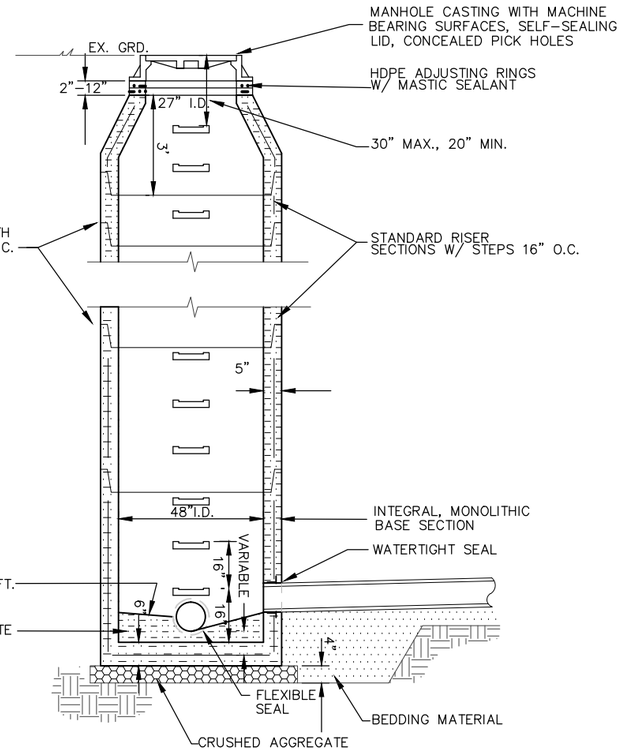

## METHOD OF SEALING MANHOLE ADJUSTING RINGS

NOT TO SCALE



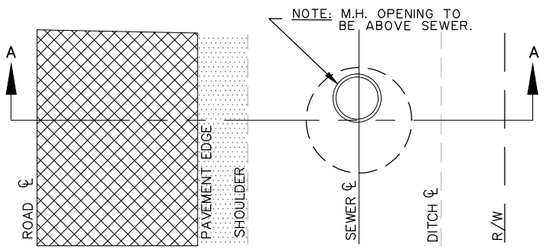

PVC CAP DETAIL



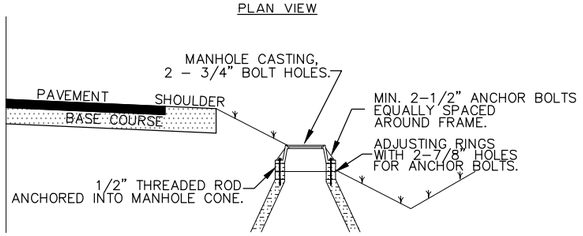




## TYPICAL PRECAST MANHOLE

NOT TO SCALE



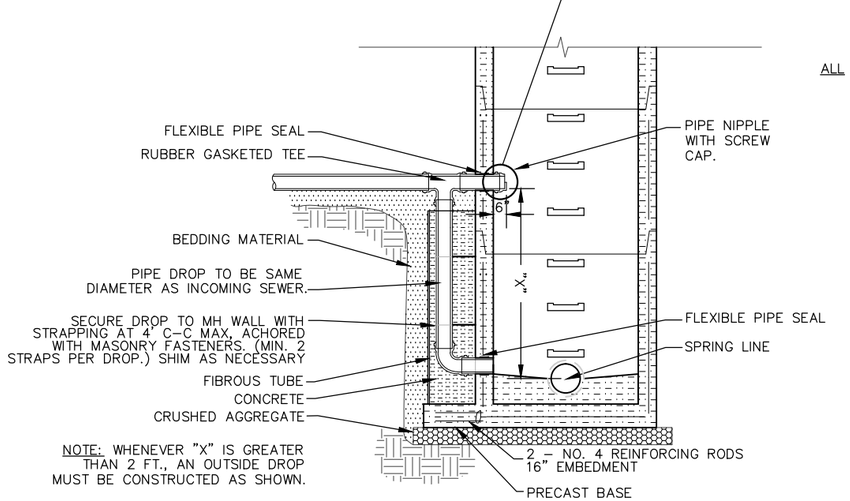

PLAN VIEW




SECTION A-A

## TYPICAL DETAIL FOR OFF PAVEMENT MANHOLE LOCATION AND ANCHORED MANHOLE FRAME

NOT TO SCALE




## OUTSIDE DROP PRECAST MANHOLE

NOT TO SCALE

| PROJECT NO: 6999-13-71 | CAMP PHILLIPS RD (CTH X), WESTON | COUNTY: MARATHON | CONSTRUCTION DETAILS | SHEET 4 E |
|---|---|---|---|---|

1-WATERMAIN TEE 12x10 INCH
2-WATERMAIN COUPLING 12 INCH
1-WATERMAIN COUPLING 10 INCH
1-WATERMAIN GATE VALVE WITH BOX 12 INCH
1-WATERMAIN GATE VALVE WITH BOX 10 INCH

BEGIN PROJECT 6999-13-71
STA 0+00
Y=185,019.33
X=296,185.36

BERNARD AVENUE
CONCORD AVENUE
CTH X
PAUL'S PAINT CENTER
G & B PRODUCE
ROBERT LOESEL
LANDSCAPING
GRAVEL CE
ASPH CE

REMOVE WATER VALVE MANHOLE
ADJUST WATERMAIN VALVE BOX
SLOPE INTERCEPT
RELOCATE HYDRANT
CONNECT TO EXISTING WATERMAIN INCIDENTAL TO WATERMAIN
ADJUST SANITARY MANHOLE CASTING
ADJUST WATERMAIN VALVE BOX
CURB BOX
SANITARY MANHOLE CASTING
RECONSTRUCT SANITARY MANHOLE
CONNECTION TO SANITARY MANHOLE

BP: 0+00.00
0+00
1+00
2+00
3+00
4+00
5+

8" SAN
12" SAN
18" SS
15" SS
72" SS
12" WM

BEGIN PROJECT VPC STA 0+00.00 VPC EL 1214.26
EXISTING RIM 1214.12
PROPOSED RIM 1213.93
ADJUST -0.19'
EXISTING R/L PROFILE
EXISTING RIM 1213.76
PROPOSED RIM 1213.47
ADJUST -0.29'
PVI STA 1+00.00
PVI EL 1213.76
LP STA 1+00.00
LP EL 1214.01
FINISHED R/L PROFILE
VPT STA 2+00.00
VPT EL 1214.26
EXISTING RIM 1214.44
PROPOSED RIM 1214.38
ADJUST -0.06'
CONCORD AVENUE
STA 3+61.50
EL 1215.07
EXISTING RIM 1215.63
PROPOSED RIM 1214.64
ADJUST -0.99'
EXISTING RIM 1215.66
PROPOSED RIM 1215.26
ADJUST -0.40'±
INV OUT 1208.13
INV IN 1208.13

-0.317%
-0.500%
0.500%
200.000' VC
K = 200.000
1213.33
CONNECT TO EXISTING INLET
12" SSPRC @ 2.10%
1209.82
1208.50
1214.68
15" SSPRC @ 1.00%
1210.92
1210.40
12" SSPRC @ 1.00%
1209.40
CONNECT TO EXISTING MANHOLE

1218
1216
1214
1212
1210
1208
1206
1204
1202

-1+00
0+00
1+00
2+00
3+00
4+00
5+00

| PROJECT NO:6999-13-71 | HWY: CAMP PHILLIPS RD (CTH X) | COUNTY: MARATHON | UTILITY PLAN | SHEET _____ 5 | E |
|---|---|---|---|---|---|

FILE NAME : P:\2009\2009.033 - WESTON - CAMP PHILLIPS RD SS & WTRMAIN\PH 2 - DESIGN\I - CAD\PLANS\09033_022501_SS.DWG PLOT DATE : 6/11/2010 11:44 AM PLOT BY : HIGGINS, MIKE PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

ROBERT LOESEL

DETENTION BASIN

PROPOSED 12 INCH WATERMAIN

PROPOSED 8 INCH SANTARY SEWER WITH 4 FOOT WIDE 2 INCH THICK INSULATION

SLOPE INTERCEPT

JAMES D. GREENHECK

SAN MH
STA: 9+30
OFF: 53' LT

PROPOSED 6 INCH SANITARY LATERAL WITH 4 FOOT WIDE 2 INCH THICK INSULATION

PROPOSED 6-INCH SANITARY FORCEMAIN

SANITARY MANHOLE
SANITARY MANHOLE CASTING

8 FOOT LONG, 4 FOOT WIDE, 2 INCH THICK INSULATION

CTH X

PROPOSED 8-INCH WATERMAIN

PROPOSED 12-INCH WATERMAIN

PROPOSED 10-INCH WATERMAIN

4-SANITARY FORCEMAIN BEND 45 DEGREE 2-INCH
2-SANITARY FORCEMAIN BEND 45 DEGREE 6-INCH
1-SANITARY FORCEMAIN CAP 2-INCH

SANITARY MANHOLE
SANITARY MANHOLE CASTING

SAN MH
STA: 8+52.12
OFF: 10' RT

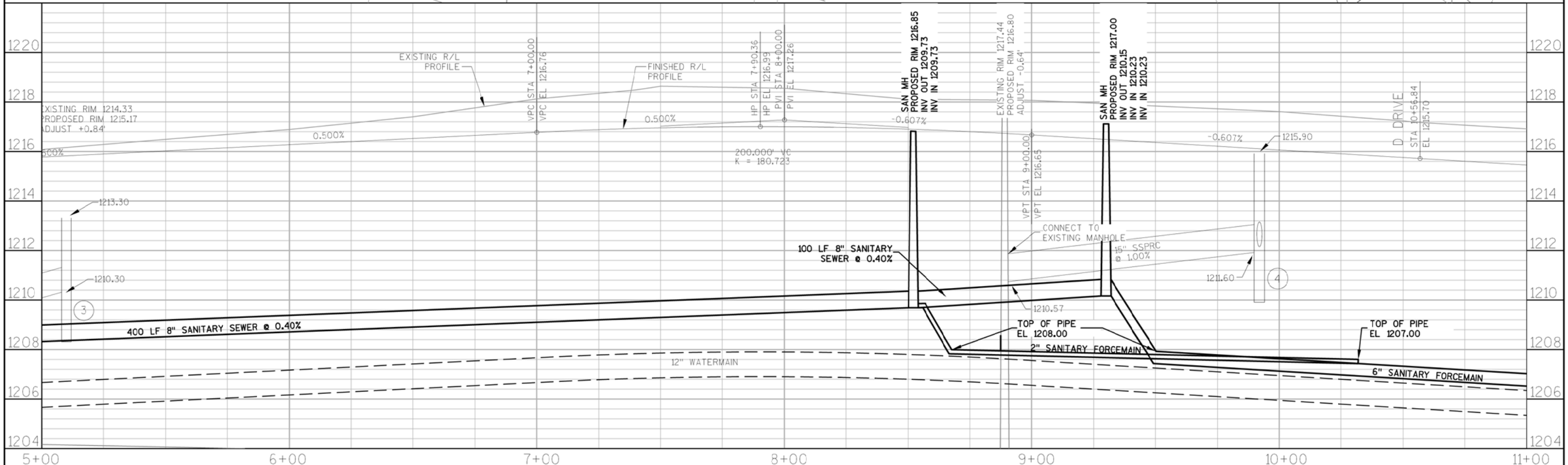
PROPOSED 2-INCH SANITARY FORCEMAIN

RICHARD BENDER

1-WATERMAIN CROSS 12X10-INCH
1-WATERMAIN REDUCER 10X8-INCH
1-WATERMAIN REDUCER 10X6-INCH
1-WATERMAIN GATE VALVE & BOX 10-INCH
1-WATERMAIN GATE VALVE & BOX 8-INCH
1-WATERMAIN CAP 8-INCH
1-HYDRANT

2-WATERMAIN BEND 45 DEGREE 12-INCH

PRIVATE ROAD




| PROJECT NO: 6999-13-71 | HWY: CAMP PHILLIPS RD (CTH X) | COUNTY: MARATHON | UTILITY PLAN | SHEET _____ 6 | E |
|---|---|---|---|---|---|

FILE NAME : P:\2009\2009.033 - WESTON - CAMP PHILLIPS RD SS & WTRMAIN\PH 2 - DESIGN\I - CAD\PLANS\09033_022501_SS.DWG PLOT DATE : 6/11/2010 11:44 AM PLOT BY : HIGGINS, MIKE PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

2

JAMES D. GREENHECK

CHESTER J. CHEREK
MARY J. CHEREK

LOWER WATERMAIN BENEATH SANITARY FORCEMAIN

PROPOSED 6-INCH SANITARY FORCEMAIN

SLOPE INTERCEPT

PROPOSED 12-INCH WATERMAIN

EAU CLAIRE AVENUE

PI: 14+82.03

SLOPE INTERCEPT

RICHARD BENDER

ASPHALT CE

SEPTIC VENT

ARVILLA BENDER

FUTURE MOUNTAIN BAY TRAIL

1-WATERMAIN TEE 12X12-INCH
3-WATERMAIN GATE VALVE & BOX 12-INCH
6-WATERMAIN BEND 45 DEGREE 12-INCH
1-WATERMAIN REDUCER 12X6 INCH
1-HYDRANT

EXISTING R/L PROFILE

FINISHED R/L PROFILE

EAU CLAIRE AVENUE
STA 13+68.14
EL 1213.81

EXISTING RIM 1213.62
PROPOSED RIM 1213.95
ADJUST +0.33'

1214.03

-0.607%

15" SSPRC @ 1.00%

1208.88

CONNECT TO EXISTING MANHOLE

1208.18

24" SSPRC @ 1.00%

1205.54

12" WATERMAIN

1212.57

-0.607%

VPC STA 16+00.00
VPC EL 1212.41

1211.40

1211.40 -0.607%

200.000' VC
K = 180.723

PVI STA 17+00.00
PVI EL 1211.80

12" SSPRC @ 1.00%

1208.60

1208.20

12" SSPRC @ 1.00%

1207.41

1206.86

24" SSPRC @ 0.50%

1206.90

TOP OF PIPE
1203.4

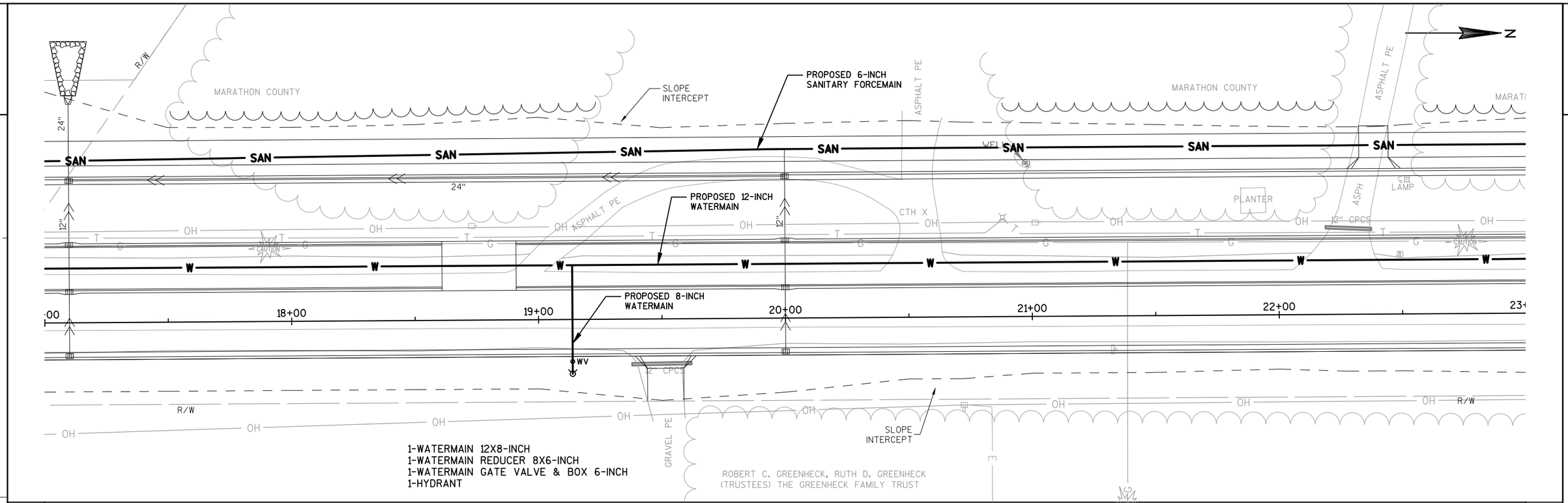
6" SANITARY FORCEMAIN

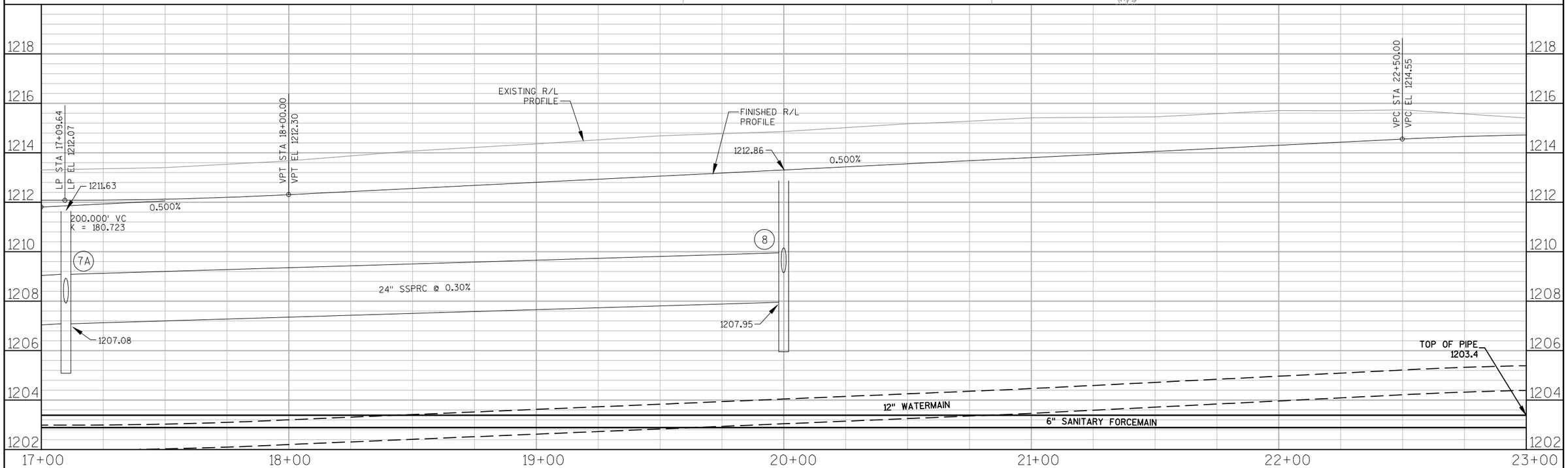
1218
1216
1214
1212
1210
1208
1206
1204
1202

11+00 12+00 13+00 14+00 15+00 16+00 17+00

| PROJECT NO:6999-13-71 | HWY: CAMP PHILLIPS RD (CTH X) | COUNTY:MARATHON | UTILITY PLAN | SHEET _____ 7 | E |
|---|---|---|---|---|---|

FILE NAME : P:\2009\2009.033 - WESTON - CAMP PHILLIPS RD SS & WTRMAIN\PH 2 - DESIGN\I - CAD\PLANS\09033_022501_SS.DWG PLOT DATE : 6/11/2010 11:44 AM PLOT BY : HIGGINS, MIKE PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT




| PROJECT NO:6999-13-71 | HWY:CAMP PHILLIPS RD (CTH X) | COUNTY:MARATHON | UTILITY PLAN | SHEET 8 | E |
|---|---|---|---|---|---|

FILE NAME : P:\2009\2009.033 - WESTON - CAMP PHILLIPS RD SS & WTRMAIN\PH 2 - DESIGN\I - CAD\PLANS\09033_022501_SS.DWG PLOT DATE : 6/11/2010 11:44 AM PLOT BY : HIGGINS, MIKE PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

N

SAN SAN SAN SAN SAN SAN SAN SAN SAN

W W W W W W W W W

PROPOSED 6-INCH SANITARY FORCEMAIN

PROPOSED 12-INCH WATERMAIN

PROPOSED 8-INCH WATERMAIN

PROPOSED 8-INCH WATERMAIN

SLOPE INTERCEPT

SLOPE INTERCEPT

IVAN FRY

LORENE K. ZILISCH

IVAN FRY

MARATHON COUNTY

MARVIN DRAKE

MARVIN DRAKE

ROBERT C. GREENHECK, RUTH D. GREE (TRUSTEES) THE GREENHECK FAMILY T

R/W

R/W

R/W

TLE

ASPHALT PE

ASPHALT PE

GRAVEL PE

GRAVEL PE

GRAVEL PE

ASPH

LAMP

PLANTER

POST

POST

PLANTER

TRACTOR

24"

CAUTION

CAUTION

OH

OH

OH

OH

OH

OH

OH

OH

12" CPCS

12" CPCS

12" CPCS

12" CPCS

15" CPCS

12"

CTH X

24+00

25+00

26+00

27+00

28+00

29+

WV

WV

1-WATERMAIN 12X8-INCH
1-WATERMAIN REDUCER 8X6-INCH
1-WATERMAIN GATE VALVE & BOX 6-INCH
1-WATERMAIN GATE VALVE & BOX 12-INCH
1-HYDRANT

1-WATERMAIN 12X8-INCH
1-WATERMAIN REDUCER 8X6-INCH
1-WATERMAIN GATE VALVE & BOX 6-INCH
1-HYDRANT

HP STA 23+22.73
HP EL 1214.73

PVI STA 2
PVI EL 121

VP

VP

0.500%

EXISTING R/L PROFILE

FINISHED R/L PROFILE

-2.273%

400.000' VC
K = 144.231

1211.80

1207.09

9

-2.273%

24" SSPRC @ -2.24%

6" SANITARY FORCEMAIN

12" WATERMAIN

TOP OF PIPE
1203.4

12" WATERMAIN

6" SANITARY FORCEMAIN

TOP OF PIPE
1202.0

1216
1214
1212
1210
1208
1206
1204
1202
1200

1214
1212
1210
1208
1206
1204
1202
1200
1198

23+00 24+00 25+00 26+00 27+00 28+00 29+00

| PROJECT NO:6999-13-71 | HWY:CAMP PHILLIPS RD (CTH X) | COUNTY:MARATHON | UTILITY PLAN | SHEET _____ 9 | E |
|---|---|---|---|---|---|

FILE NAME : P:\2009\2009.033 - WESTON - CAMP PHILLIPS RD SS & WTRMAIN\PH 2 - DESIGN\I - CAD\PLANS\09033_022501_SS.DWG PLOT DATE : 6/11/2010 11:44 AM PLOT BY : HIGGINS, MIKE PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2

N

SAN SAN SAN SAN SAN SAN SAN SAN

24" 24" 24" 24" 24"

12" 12" 12" 12" 12" 12" 12" 12" 12" 12" 12"

OH T G W

CAUTION

PROPOSED 12-INCH WATERMAIN

PROPOSED 6-INCH SANITARY FORCEMAIN

1197 1198 1199 1200

-00 30+00 31+00 32+00 33+00 34+00 35+

CTH X

18" CPCS

SLOPE INTERCEPT

OH R/W OH OH R/W OH OH OH OH R/W

TLE TLE

ROBERT C. GREENHECK, RUTH D. GREENHECK (TRUSTEES) THE GREENHECK FAMILY TRUST

GRAVEL PE

SCOTT L. & MARY R. TURNER

ASPHALT PE

SCOTT L. & MARY R. TURNER

WV

1-WATERMAIN 12X8-INCH
1-WATERMAIN REDUCER 8X6-INCH
1-WATERMAIN GATE VALVE & BOX 6-INCH
1-WATERMAIN GATE VALVE & BOX 12-INCH
1-HYDRANT

1204.06
-2.273%

VPC STA 30+20
VPC EL 1202.59

EXISTING R/L PROFILE

FINISHED R/L PROFILE

360.000' VC
K = 129.808

PVI STA 32+00.00
PVI EL 1198.50

LP STA 33+15.10
LP EL 1199.24

VPT STA 33+80.00
VPT EL 1199.40

1199.85

1198.80

0.500%

10 11A 11 12 12E 14

1199.35

24" SSPRC @ -1.93%

24" SSPRC @ -1.00%

1195.21

1194.65

-2.273%

24" SSPRC @ 0.50%

1194.40

1194.62

1197.00

12" SSPRC @ -0.50%

24" SSPRC @ 0.30%

6" SANITARY FORCEMAIN

12" WATERMAIN

TOP OF PIPE 1191.0

TOP OF PIPE 1191.0

1204 1202 1200 1198 1196 1194 1192 1190 1188

29+00 30+00 31+00 32+00 33+00 34+00 35+00

| PROJECT NO: 6999-13-71 | HWY: CAMP PHILLIPS RD (CTH X) | COUNTY: MARATHON | UTILITY PLAN | SHEET _____ 10 | E |
|---|---|---|---|---|---|

FILE NAME : P:\2009\2009.033 - WESTON - CAMP PHILLIPS RD SS & WTRMAIN\PH 2 - DESIGN\I - CAD\PLANS\09033_022501_SS.DWG PLOT DATE : 6/11/2010 11:44 AM PLOT BY : HIGGINS, MIKE PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

MARATHON COUNTY

GRAVEL

SLOPE INTERCEPT

MARATHON COUNTY

N

R/W

SAN

W

OH

G

T

12"

PROPOSED 12-INCH WATERMAIN

PROPOSED 6-INCH SANITARY FORCEMAIN

PI: 39+98.34

WV

36+00

37+00

38+00

CTH X

39+00

40+00

41+00

SLOPE INTERCEPT

ROBERT C. GREENHECK, RUTH D. GREENHECK
(TRUSTEES) THE GREENHECK FAMILY TRUST

1-WATERMAIN TEE 12X12-INCH
1-WATER REDUCER 12X6-INCH
3-WATERMAIN VALVE & BOX 12-INCH
1-WATERMAIN CAP 12-INCH
1-HYDRANT
1-SANITARY FORCEMAIN CAP 6-INCH

MARATHON DISTRICT OF SAMOSET COUNCIL
BOY SCOUTS OF AMERICA

**END PROJECT**
**STA 41+00**
Y=189,110.21
X=296,236.63

EXISTING R/L PROFILE

FINISHED R/L PROFILE

VPC STA 38+30.00
VPC EL 1201.65

HP STA 39+15.31
HP EL 1201.86

0.500%

600.000' VC
K = 170.616

13A

1199.81

1200.31

15

16

1201.42

1194.57

12" SSPRC @ -0.50%

24" SSPRC @ 0.30%

1195.30

1195.82

12" WATERMAIN

6" SANITARY FORCEMAIN

TOP OF PIPE
1191.0

TOP OF PIPE
1191.0

TOP OF PIPE
1190.5

1204
1202
1200
1198
1196
1194
1192
1190
1188

35+00 36+00 37+00 38+00 39+00 40+00 41+00

| PROJECT NO:6999-13-71 | HWY: CAMP PHILLIPS RD (CTH X) | COUNTY:MARATHON | UTILITY PLAN | SHEET ----- 11 | E |
|---|---|---|---|---|---|

FILE NAME : P:\2009\2009.033 - WESTON - CAMP PHILLIPS RD SS & WTRMAIN\PH 2 - DESIGN\I - CAD\PLANS\09033_022501_SS.DWG PLOT DATE : 6/11/2010 11:44 AM PLOT BY : HIGGINS, MIKE PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

3

DATE 25JAN11 — 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 | 6999-13-71 QUANTITY |
|---|---|---|---|---|---|
| 0850 | 619.1000 | MOBILIZATION | EACH | 0.050 | 0.050 |
| 1540 | SPV.0060 | SPECIAL 01. SANITARY MANHOLE CASTING | EACH | 3.000 | 3.000 |
| 1550 | SPV.0060 | SPECIAL 02. HYDRANT | EACH | 7.000 | 7.000 |
| 1560 | SPV.0060 | SPECIAL 03. WATERMAIN GATE VALVE AND BOX 6-INCH | EACH | 4.000 | 4.000 |
| 1570 | SPV.0060 | SPECIAL 04. WATERMAIN GATE VALVE AND BOX 8-INCH | EACH | 1.000 | 1.000 |
| 1580 | SPV.0060 | SPECIAL 05. WATERMAIN GATE VALVE AND BOX 10-INCH | EACH | 2.000 | 2.000 |
| 1590 | SPV.0060 | SPECIAL 06. WATERMAIN GATE VALVE AND BOX 12-INCH | EACH | 9.000 | 9.000 |
| 1600 | SPV.0060 | SPECIAL 07. WATERMAIN CROSS 12X10-INCH | EACH | 1.000 | 1.000 |
| 1610 | SPV.0060 | SPECIAL 08. WATERMAIN TEE 12X10-INCH | EACH | 1.000 | 1.000 |
| 1620 | SPV.0060 | SPECIAL 09. WATERMAIN TEE 12X8-INCH | EACH | 4.000 | 4.000 |
| 1630 | SPV.0060 | SPECIAL 10. WATERMAIN TEE 12X12-INCH | EACH | 2.000 | 2.000 |
| 1640 | SPV.0060 | SPECIAL 11. WATERMAIN BEND 45 DEGREE 12-INCH | EACH | 8.000 | 8.000 |
| 1650 | SPV.0060 | SPECIAL 12. WATERMAIN REDUCER 8X6-INCH | EACH | 4.000 | 4.000 |
| 1660 | SPV.0060 | SPECIAL 13. WATERMAIN REDUCER 10X6-INCH | EACH | 1.000 | 1.000 |
| 1670 | SPV.0060 | SPECIAL 14. WATERMAIN REDUCER 12X6-INCH | EACH | 1.000 | 1.000 |
| 1680 | SPV.0060 | SPECIAL 15. WATERMAIN REDUCER 10X8-INCH | EACH | 1.000 | 1.000 |
| 1690 | SPV.0060 | SPECIAL 16. WATERMAIN CAP 8-INCH | EACH | 1.000 | 1.000 |
| 1700 | SPV.0060 | SPECIAL 17. WATERMAIN CAP 12-INCH | EACH | 1.000 | 1.000 |
| 1710 | SPV.0060 | SPECIAL 18. WATERMAIN COUPLING 12-INCH | EACH | 2.000 | 2.000 |
| 1720 | SPV.0060 | SPECIAL 19. WATERMAIN COUPLING 10-INCH | EACH | 1.000 | 1.000 |
| 1730 | SPV.0060 | SPECIAL 20. SANITARY FORCEMAIN 45 BEND 2-INCH | EACH | 4.000 | 4.000 |
| 1740 | SPV.0060 | SPECIAL 21. SANITARY FORCEMAIN 45 BEND 6-INCH | EACH | 2.000 | 2.000 |
| 1750 | SPV.0060 | SPECIAL 22. SANITARY FORCEMAIN CAP 2-INCH | EACH | 1.000 | 1.000 |
| 1760 | SPV.0060 | SPECIAL 23. SANITARY FORCEMAIN CAP 6-INCH | EACH | 1.000 | 1.000 |
| 1770 | SPV.0060 | SPECIAL 24. CONNECTION TO SANITARY MANHOLE | EACH | 1.000 | 1.000 |
| 1780 | SPV.0060 | SPECIAL 25. ADJUST SANITARY MANHOLE CASTING | EACH | 1.000 | 1.000 |
| 1790 | SPV.0060 | SPECIAL 26. RECONSTRUCT SANITARY MANHOLE | EACH | 2.000 | 2.000 |
| 1800 | SPV.0060 | SPECIAL 27. REMOVE WATER VALVE MANHOLE | EACH | 1.000 | 1.000 |
| 1810 | SPV.0060 | SPECIAL 28. RELOCATE HYDRANT | EACH | 1.000 | 1.000 |
| 1820 | SPV.0060 | SPECIAL 29. ADJUST WATERMAIN VALVE BOX | EACH | 5.000 | 5.000 |
| 1870 | SPV.0090 | SPECIAL 01. WATERMAIN 6-INCH | LF | 46.000 | 46.000 |
| 1880 | SPV.0090 | SPECIAL 02. WATERMAIN 8-INCH | LF | 200.000 | 200.000 |
| 1890 | SPV.0090 | SPECIAL 03. WATERMAIN 10-INCH | LF | 94.000 | 94.000 |
| 1900 | SPV.0090 | SPECIAL 04. WATERMAIN 12-INCH | LF | 3,839.000 | 3,839.000 |
| 1910 | SPV.0090 | SPECIAL 05. SANITARY FORCEMAIN 2-INCH | LF | 212.000 | 212.000 |
| 1920 | SPV.0090 | SPECIAL 06. SANITARY FORCEMAIN 6-INCH | LF | 3,214.000 | 3,214.000 |
| 1930 | SPV.0090 | SPECIAL 07. SANITARY SEWER 8-INCH | LF | 500.000 | 500.000 |
| 1940 | SPV.0090 | SPECIAL 08. SANITARY SEWER LATERAL 6-INCH | LF | 15.000 | 15.000 |
| 1950 | SPV.0090 | SPECIAL 09. SANITARY SEWER TELEVISING | LF | 500.000 | 500.000 |
| 1960 | SPV.0090 | SPECIAL 10. PIPELINE SHEET INSULATION | LF | 531.000 | 531.000 |
| 1980 | SPV.0200 | SPECIAL 01. SANITARY MANHOLE | VF | 12.500 | 12.500 |

SPV.0060 SPECIAL 30. FLUSHING STATION 2-INCH 3 EACH

SPV.0060 SPECIAL 31. SERVICE CONNECTION 1-1/4-INCH 2 EACH

SPV.0060 SPECIAL 32. WATERMAIN CORPORATION STOP 2-INCH 1 EACH

SPV.0060 SPECIAL 33. WATERMAIN CURB STOP AND BOX 2-INCH 1 EACH

SPV.0060 SPECIAL 34. SANITARY WYE 8 X 6-INCH 1 EACH

SPV.0060 SPECIAL 35. SANITARY CAP 6-INCH 1 EACH

SPV.0060 SPECIAL 36. HYDRANT EXTENSION 12-INCH 1 EACH

SPV.0060 SPECIAL 37. HYDRANT EXTENSION 18-INCH 1 EACH

SPV.0060 SPECIAL 38. LOWER HYDRANT 1 EACH

SPV.0090 SPECIAL 11. PIPELINE SHEET INSULATION (WATER) 58 LF

SPV.0090 SPECIAL 12. WATER SERVICE 2-INCH 58 LF

SPV.0090 SPECIAL 13. SANITARY FORCEMAIN 1-1/4-INCH 97 LF

## MOBILIZATION

| | 619.1000 MOBILIZATION |
|---|---|
| | EACH |
| | 0.05 |
| TOTAL | 0.05 |

## SANITARY MANHOLE SCHEDULE

| STA | OFFSET | SPV .0060.01 SANITARY MANHOLE CASTING EACH | SPV .0200.01 SANITARY MANHOLE VF | SPV .0060.24 CONNECTION TO SANITARY MANHOLE EACH | SPV .0060.25 ADJUST SANITARY MANHOLE CASTING EACH | SPV .0060.26 RECONSTRUCT SANITARY MANHOLE EACH | SPV .0060.27 REMOVE WATER VALVE MANHOLE EACH |
|---|---|---|---|---|---|---|---|
| 0+02 | 10 RT | - | - | - | 1 | - | - |
| 0+20 | 12 LT | - | - | - | - | - | 1 |
| 2+72 | 11 RT | 1 | - | | - | 1 | - |
| 4+52 | 13 RT | - | - | 1 | - | 1 | - |
| 8+72 | 10 RT | 1 | 6.4 | - | - | - | - |
| 9+30 | 53 LT | 1 | 6.1 | - | - | - | - |
| | TOTAL | 3 | 12.5 | 1 | 1 | 2 | 1 |

## WATERMAIN VALVES & HYDRANTS SCHEDULE

| STA | OFFSET | SPV .0060.02 HYDRANT EACH | SPV .0060.03 WATERMAIN GATE VALVE AND BOX 6-INCH EACH | SPV .0060.04 WATERMAIN GATE VALVE AND BOX 8-INCH EACH | SPV .0060.05 WATERMAIN GATE VALVE AND BOX 10-INCH EACH | SPV .0060.06 WATERMAIN GATE VALVE AND BOX 12-INCH EACH | SPV .0060.28 RELOCATE HYDRANT EACH | SPV .0060.29 ADJUST WATERMAIN VALVE BOX EACH |
|---|---|---|---|---|---|---|---|---|
| 0+20 | 15 LT | - | - | - | 1 | - | - | - |
| 0+24 | 12 LT | - | - | - | - | 1 | - | - |
| 0+27 | 10 LT | - | - | - | - | - | - | 1 |
| 0+72 | 33 RT | - | - | - | - | - | - | 1 |
| 1+72 | 33 RT | - | - | - | - | - | - | 1 |
| 3+93 | 34 LT | - | - | - | - | - | - | 1 |
| 3+93 | 37 LT | - | - | - | - | - | 1 | - |
| 4+54 | 20 LT | - | - | - | - | - | - | 1 |
| 10+81 | 80 RT | 1 | - | - | - | - | - | - |
| 10+85 | 7 LT | - | - | - | 1 | - | - | - |
| 10+85 | 15 LT | - | - | 1 | - | - | - | - |
| 13+84 | 108 LT | 1 | - | - | - | - | - | - |
| 13+94 | 21 LT | - | - | - | - | 1 | - | - |
| 13+97 | 24 LT | - | - | - | - | 1 | - | - |
| 14+00 | 21 LT | - | - | - | - | 1 | - | - |
| 19+14 | 17 RT | - | 1 | - | - | - | - | - |
| 19+14 | 22 RT | 1 | - | - | - | - | - | - |
| 23+71 | 17 RT | - | 1 | - | - | - | - | - |
| 23+71 | 22 RT | 1 | - | - | - | - | - | - |
| 23+74 | 22 LT | - | - | - | | 1 | - | - |
| 28+22 | 17 RT | - | 1 | - | - | - | - | - |
| 28+22 | 22 RT | 1 | - | - | - | | | |
| 34+00 | 17 RT | - | 1 | - | - | - | - | - |
| 34+00 | 22 RT | 1 | - | - | - | - | - | - |
| 34+05 | 22 LT | | | | | 1 | - | - |
| 40+90 | 25 LT | - | - | - | - | 1 | - | - |
| 40+90 | 19 LT | - | - | - | - | 1 | - | - |
| 40+90 | 22 RT | 1 | - | - | - | - | - | - |
| 40+90 | 27 LT | - | - | - | - | 1 | - | - |
| | TOTAL | 7 | 4 | 1 | 2 | 9 | 1 | 5 |

## WATERMAIN TEES, REDUCERS, CAPS & BENDS SCHEDULE

| STA | OFFSET | SPV .0060.07 WATERMAIN CROSS 12 X 10-INCH EACH | SPV .0060.08 WATERMAIN TEE 12 X 10-INCH EACH | SPV .0060.09 WATERMAIN TEE 12 X 8-INCH EACH | SPV .0060.10 WATERMAIN TEE 12 X 12-INCH EACH | SPV .0060.11 WATERMAIN BEND 45 DEGREE 12-INCH EACH | SPV .0060.12 WATERMAIN REDUCER 8X6-INCH EACH | SPV .0060.13 WATERMAIN REDUCER 10X6-INCH EACH | SPV .0060.14 WATERMAIN REDUCER 12X6-INCH EACH | SPV .0060.15 WATERMAIN REDUCER 10X8-INCH EACH | SPV .0060.16 WATERMAIN CAP 8-INCH EACH | SPV .0060.17 WATERMAIN CAP 12-INCH EACH | SPV .0060.18 WATERMAIN COUPLINGS 12-INCH EACH | SPV .0060.19 WATERMAIN COUPLINGS 10-INCH EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0+16 | 12 LT | - | - | - | - | - | | - | - | - | - | - | 1 | - |
| 0+20 | 12 LT | - | 1 | - | - | - | - | - | - | - | - | - | - | - |
| 0+20 | 18 LT | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| 0+28 | 12 LT | - | - | - | - | - | - | - | - | - | - | - | 1 | - |
| 4+90 | 20 LT | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 5+10 | 10 LT | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 10+81 | 77 RT | - | - | - | - | - | - | 1 | - | - | - | - | - | - |
| 10+85 | 11 LT | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10+85 | 13 LT | - | - | - | - | - | - | - | - | 1 | - | - | - | - |
| 10+87 | 65 LT | - | - | - | - | - | - | - | - | - | 1 | - | - | - |
| 13+85 | 83 LT | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 13+94 | 78 LT | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 13+95 | 67 LT | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 13+95 | 63 LT | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 13+95 | 61 LT | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 13+95 | 58 LT | - | - | - | - | 1 | - | - | - | - | - | - | - | - |
| 13+97 | 21 LT | - | - | - | 1 | - | - | - | - | - | - | - | - | - |
| 19+14 | 22 LT | - | - | 1 | - | - | - | - | - | - | - | - | - | - |
| 19+14 | 17 RT | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| 23+71 | 15 RT | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| 23+71 | 22 LT | - | - | 1 | - | - | - | - | - | - | - | - | - | - |
| 28+22 | 22 LT | - | - | 1 | - | - | - | - | - | - | - | - | - | - |
| 28+22 | 15 RT | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| 34+00 | 15 RT | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| 34+00 | 22 LT | - | - | 1 | - | - | - | - | - | - | - | - | - | - |
| 40+90 | 17 RT | - | - | - | - | - | - | - | 1 | - | - | - | - | - |
| 40+90 | 22 LT | - | - | - | 1 | - | - | - | - | - | - | - | - | - |
| 40+90 | 82 LT | - | - | - | - | - | - | - | - | - | - | - | 1 | - |
| | SUBTOTAL | 1 | 1 | 4 | 2 | 8 | 4 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |

## SANITARY FORCEMAIN BENDS & CAPS SCHEDULE

| STA | OFFSET | SPV .0060.20 SANITARY FORCEMAIN 45 BEND 2-INCH EACH | SPV .0060.21 SANITARY FORCEMAIN 45 BEND 6-INCH EACH | SPV .0060.22 SANITARY FORCEMAIN CAP 2-INCH EACH | SPV .0060.23 SANITARY FORCEMAIN CAP 6-INCH EACH |
|---|---|---|---|---|---|
| 8+54 | 10 RT | 1 | - | - | - |
| 8+57 | 10 RT | 1 | - | - | - |
| 9+32 | 53 LT | - | 1 | - | - |
| 9+36 | 53 LT | - | 1 | - | - |
| 10+09 | 10 RT | 1 | - | - | - |
| 10+12 | 13 RT | 1 | - | - | - |
| 10+12 | 65 RT | - | - | 1 | - |
| 41+10 | 68 LT | - | - | - | 1 |
| | TOTAL | 4 | 2 | 1 | 1 |

## WATERMAIN SCHEDULE

| STA | OFFSET TO | STA | OFFSET | SPV .0090.01 WATERMAIN 6-INCH LF | SPV .0090.02 WATERMAIN 8-INCH LF | SPV .0090.03 WATERMAIN 10-INCH LF | SPV .0090.04 WATERMAIN 12-INCH LF |
|---|---|---|---|---|---|---|---|
| 0+16 | 12 LT | 0+28 | 12 LT | - | - | - | 12 |
| 0+20 | 12 LT | 0+20 | 18 LT | - | - | 6 | - |
| 3+93 | 37 LT | 3+93 | 42 LT | 5 | - | - | - |
| 4+70 | 20 LT | 4+90 | 20 LT | - | - | - | 20 |
| 4+90 | 20 LT | 5+10 | 10 LT | - | - | - | 22 |
| 5+10 | 10 LT | 40+94 | 22 LT | - | - | - | 3596 |
| 10+81 | 75 RT | 10+85 | 11 LT | - | - | 86 | - |
| 10+81 | 77 RT | 10+81 | 80 RT | 3 | - | - | - |
| 10+85 | 13 LT | 10+87 | 65 LT | - | 52 | - | - |
| 10+85 | 11 LT | 10+85 | 13 LT | - | - | 2 | - |
| 13+85 | 103 LT | 13+95 | 20 LT | - | - | - | 90 |
| 13+85 | 103 LT | 13+85 | 108 LT | 5 | - | - | - |
| 19+14 | 22 LT | 19+14 | 15 RT | - | 37 | - | - |
| 19+14 | 15 RT | 19+14 | 22 RT | 7 | - | - | - |
| 23+71 | 22 LT | 23+71 | 15 RT | - | 37 | - | - |
| 23+71 | 15 RT | 23+71 | 22 RT | 7 | - | - | - |
| 28+22 | 22 LT | 28+22 | 15 RT | - | 37 | - | - |
| 28+22 | 15 RT | 28+22 | 22 RT | 7 | - | - | - |
| 34+00 | 22 LT | 34+00 | 15 RT | - | 37 | - | - |
| 34+00 | 15 RT | 34+00 | 22 RT | 7 | - | - | - |
| 40+90 | 82 LT | 40+91 | 17 RT | - | - | - | 99 |
| 40+90 | 17 RT | 40+90 | 22 RT | 5 | - | - | - |
| | | | TOTAL | 46 | 200 | 94 | 3839 |

## SANITARY FORCEMAIN SCHEDULE

| STA | OFFSET TO | STA | OFFSET | SPV .0090.05 SANITARY FORCEMAIN 2-INCH LF | SPV .0090.06 SANITARY FORCEMAIN 6-INCH LF |
|---|---|---|---|---|---|
| 8+52 | 10 RT | 10+09 | 10 RT | 157 | - |
| 10+09 | 10 RT | 10+12 | 13 RT | 3 | - |
| 10+12 | 13 RT | 10+12 | 65 RT | 52 | |
| 9+30 | 53 LT | 17+00 | 66 LT | - | 765 |
| 17+00 | 66 LT | 20+00 | 69 LT | | 301 |
| 20+00 | 69 LT | 41+00 | 69 LT | - | 2148 |
| | | | TOTAL | 212 | 3214 |

## SANITARY SEWER SCHEDULE

| STA | OFFSET TO | STA | OFFSET | SPV .0090.07 SANITARY SEWER 8-INCH LF | SPV .0090.08 SANITARY SEWER LATERAL 6-INCH LF | SPV .0090.09 SANITARY SEWER TELEVISING LF | SPV.0090.10 PIPELINE SHEET INSULATION LF |
|---|---|---|---|---|---|---|---|
| 4+52 | 13 RT | 8+52 | 10 RT | 400 | - | 400 | 400 |
| 8+52 | 10 RT | 9+30 | 53 LT | 100 | - | 100 | 100 |
| 8+52 | 10 RT | 8+60 | 10 RT | | | | 8 |
| 9+30 | 53 LT | 9+38 | 53 LT | | | | 8 |
| 9+30 | 53 LT | 9+40 | 64 LT | - | 15 | - | 15 |
| | | | TOTAL | 500 | 15 | 500 | 531 |

## ESTIMATE OF QUANTITIES

Date

Line

| Number | Item | Item Description | Unit | Total | Quantity |
|---|---|---|---|---|---|
| | 619.1000 | Mobilization | EACH | 1 | 1 |
| | SPV .0200 | Special 01. Sanitary Manhole | VF | 12.5 | 12.5 |
| | SPV .0060 | Special 01. Sanitary Manhole Casting | EACH | 3 | 3 |
| | SPV .0060 | Special 02. Hydrant | EACH | 7 | 7 |
| | SPV .0060 | Special 03. Watermain Gate Valve and Box 6-Inch | EACH | 4 | 4 |
| | SPV .0060 | Special 04. Watermain Gate Valve and Box 8-Inch | EACH | 1 | 1 |
| | SPV .0060 | Special 05. Watermain Gate Valve and Box 10-Inch | EACH | 2 | 2 |
| | SPV .0060 | Special 06. Watermain Gate Valve and Box 12-Inch | EACH | 9 | 9 |
| | SPV .0060 | Special 07. Watermain Cross 12x10 -inch | EACH | 1 | 1 |
| | SPV .0060 | Special 08. Watermain Tee 12x10-inch | EACH | 1 | 1 |
| | SPV .0060 | Special 09. Watermain Tee 12 x 8-Inch | EACH | 4 | 4 |
| | SPV .0060 | Special 10. Watermain Tee 12 x 12-Inch | EACH | 2 | 2 |
| | SPV .0060 | Special 11. Watermain Bend 45 Degree 12-Inch | EACH | 8 | 8 |
| | SPV .0060 | Special 12. Watermain Reducer 8 x 6-Inch | EACH | 4 | 4 |
| | SPV .0060 | Special 13. Watermain Reducer 10 x 6-Inch | EACH | 1 | 1 |
| | SPV .0060 | Special 14. Watermain Reducer 12 x 6-Inch | EACH | 1 | 1 |
| | SPV .0060 | Special 15. Watermain Reducer 10 x 8-Inch | EACH | 1 | 1 |
| | SPV .0060 | Special 16. Watermain Cap 8-inch | EACH | 1 | 1 |
| | SPV .0060 | Special 17. Watermain Cap 12-inch | EACH | 1 | 1 |
| | SPV .0060 | Special 18. Watermain Coupling 12-Inch | EACH | 2 | 2 |
| | SPV .0060 | Special 19. Watermain Coupling 10-Inch | EACH | 1 | 1 |
| | SPV .0060 | Special 20. Sanitary Forcemain 45 Bend 2-Inch | EACH | 4 | 4 |
| | SPV .0060 | Special 21. Sanitary Forcemain 45 Bend 6-Inch | EACH | 2 | 2 |
| | SPV .0060 | Special 22. Sanitary Forcemain Cap 2-Inch | EACH | 1 | 1 |
| | SPV .0060 | Special 23. Sanitary Forcemain Cap 6-Inch | EACH | 1 | 1 |
| | SPV.0060 | Special 24.Connection to Sanitary Manhole | EACH | 1 | 1 |
| | SPV.0060 | Special 25. Adjust Sanitary Manhole Casting | EACH | 1 | 1 |
| | SPV.0060 | Special 26. Reconstruct Sanitary Manhole | EACH | 2 | 2 |
| | SPV.0060 | Special 27. Remove Water Valve Manhole | EACH | 1 | 1 |
| | SPV.0060 | Special 28. Relocate Hydrant | EACH | 1 | 1 |
| | SPV.0060 | Special 29. Adjust Watermain Valve Box | EACH | 5 | 5 |
| | SPV .0090 | Special 01. Watermain 6-Inch | LF | 46 | 46 |
| | SPV .0090 | Special 02. Watermain 8-Inch | LF | 200 | 200 |
| | SPV .0090 | Special 03. Watermain 10-Inch | LF | 94 | 94 |
| | SPV .0090 | Special 04. Watermain 12-Inch | LF | 3839 | 3839 |
| | SPV.0090 | Special 05.Sanitary Forcemain 2-Inch | LF | 212 | 212 |
| | SPV.0090 | Special 06. Sanitary Forcemain 6-Inch | LF | 3214 | 3214 |
| | SPV .0090 | Special 07. Sanitary Sewer 8-Inch | LF | 500 | 500 |
| | SPV .0090 | Special 08. Sanitary Sewer Lateral 6-Inch | LF | 15 | 15 |
| | SPV .0090 | Special 09. Sanitary Sewer Televising | LF | 500 | 500 |
| | SPV.0090 | Special 10. Pipeline Sheet Insulation | LF | 531 | 531 |

Notes

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Place Sheet Numbers