NCL

PROJECT ID: 9808 - 00 - 70
WITH: N/A

31

COUNTY: FOREST

APR 13

ORDER OF SHEETS



TOTAL SHEETS = 130

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

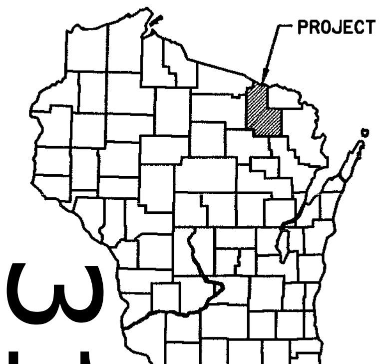
# STH 70 - CTH A

FISHEL ROAD, FH59 FR 2193

## TOWN ROAD
## FOREST COUNTY

| STATE PROJECT NUMBER |
|---|
| 9808-00-70 |

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 9808-00-70 | WISC 2013002 | 1 |
| | | |
| | | |
| | | |




N

DESIGN DESIGNATION

| | | | |
|---|---|---|---|
| A.A.D.T. | 2013 | = | 102 |
| A.A.D.T. | 2033 | = | 113 |
| D.H.V. | 2033 | = | 16 |
| D.D. | | = | 50/50 |
| T. | | = | 6.6% |
| DESIGN SPEED | | = | 25 mph |
| ESALS | | = | 14,600 |

CONVENTIONAL SYMBOLS

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

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

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

R-12-E R-13-E R-14-E

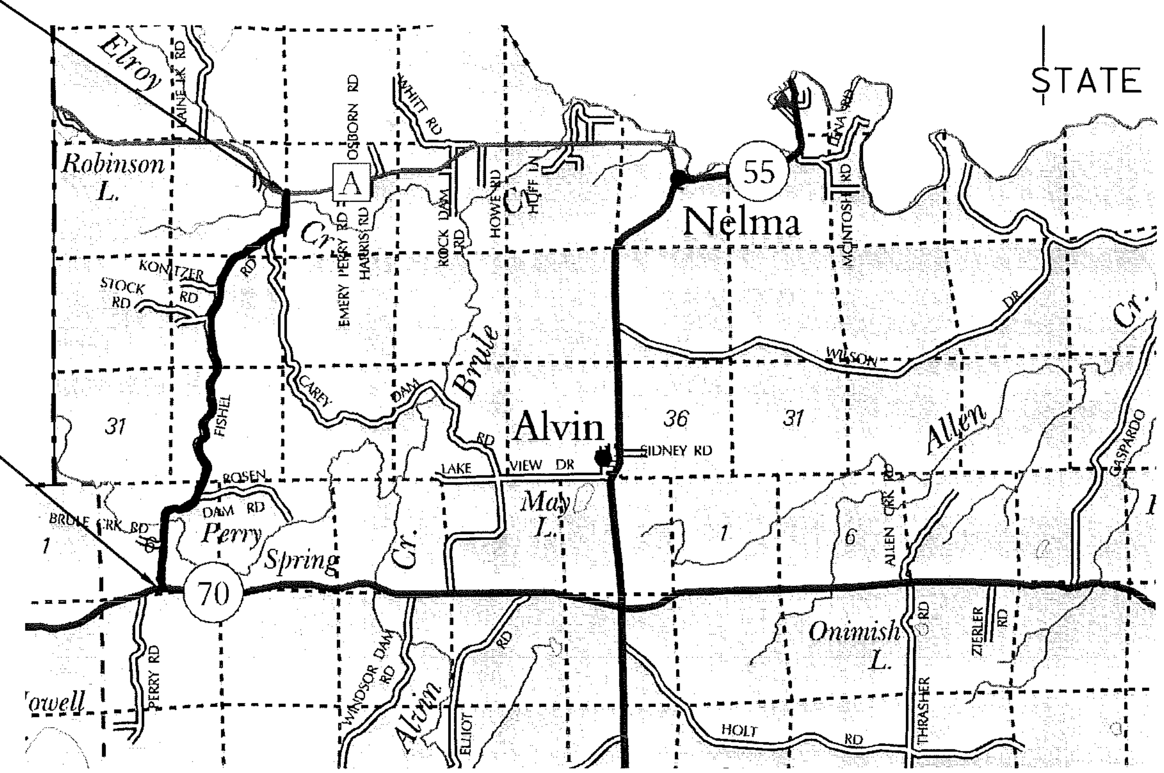
T-41-N

T-40-N

END PROJECT
STA. 227+49.29
Y = 734251.56
X = 839728.93

BEGIN PROJECT
STA. 10+59.26
Y = 716148.68
X = 833682.28

STATE LINE




LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 4.114 MI.

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

APPROVED FOR THE TOWN OF ALVIN

DATE: 7/28/12 Della Roeslor (SIGNATURE)
deputy clerk

ORIGINAL PLANS PREPARED BY:


Robert E. Lee & Associates, Inc.
ENGINEERING, SURVEYING, ENVIRONMENTAL SERVICES
4664 GOLDEN POND PARK COURT
HOBART, WI 54155
PHONE:(920) 662-9641
INTERNET: www.releeinc.com
FAX:(920) 662-9141


WISCONSIN
RYAN H. TRZINSKI
E-42371
GREEN BAY WI
PROFESSIONAL ENGINEER

(Signature) 8-13-12 (Date)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | Robert E. Lee and Associates Inc. |
| Designer | Robert E. Lee and Associates Inc. |
| Management Consultant | Cedar Corporation |
| C.O. Examiner | |

APPROVED FOR THE DEPARTMENT

DATE: 9-5-12 (Management Consultant Signature)

E

DIGGERS HOTLINE

Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

** DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

## UTILITIES

FRONTIER COMMUNICATIONS
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2689 NORTH CLERMONT STREET
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715-847-1504
craig.l.banczak@ftr.com.

WE ENERGIES
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PO BOX 1699
APPLETON, WI 54912
920-380-3554
todd.klitzke@we-energies.com

## CONTACTS

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ALVIN, WI 54542
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jjc@nnex.net

U.S.D.A. FOREST SERVICE
NICOLET NATIONAL FOREST
LAONA RANGER DISTRICT
DISTRICT RANGER
JEFF SEEFELDT
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(715) 674-4481
jseefeldt@fs.fed.us

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mschuster@releeinc.com

FOREST COUNTY
HIGHWAY COMMISSIONER
JOHN RODGERS
5350 COUNTY ROAD W
CRANDON, WI 54520
(920)619-2961
jorogers@co.forest.wi.us

DNR-NORTH CENTRAL DISTRICT
JON SIMONSEN
107 SUTLIFF AVENUE
RHINELANDER, WI 54501
(715) 365-8916
jonathan.simonsen@wisconsin.gov

## INDEX OF DETAIL SHEETS



## GENERAL NOTES

1. WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIALS AS DIRECTED BY THE ENGINEER.
2. NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER OR TOWN OF ALVIN.
3. ALL SIDE ROADS, COMMERCIAL AND PRIVATE ENTRANCES SHALL BE MATCHED IN KIND WITH A SAWED OR MILLED JOINT.
4. THE EXACT SIZE AND LOCATION FOR PRIVATE AND COMMERCIAL ENTRANCES SHALL BE DETERMINED BY THE ENGINEER.
5. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
6. ALL DISTURBED AREAS OUTSIDE OF THE FINISHED SHOULDER POINTS SHALL BE SEEDED. OVERSOW PERMANENT SEEDING AREAS WITH TEMPORARY SEED AT 1.5 LB. PER 1000.
7. CONSTRUCTION LIMITS FOR ALL SIDE ROADS, COMMERCIAL AND PRIVATE ENTRANCES SHALL BE DETERMINED BY THE ENGINEER.
8. EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR EROSION CONTROL IMPLEMENTATION PLAN AND APPROVED BY THE ENGINEER IN THE FIELD.
9. THE 2 ¼ HMA PAVEMENT TYPE E-0.3 SHALL BE CONSTRUCTED IN ONE LIFT, WITH ASPHALTIC MATERIAL PG 58-34
10. ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD88
11. SHRINKAGE IS ESTIMATED AT 20%
12. CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO WITHIN SLOPE INTERCEPTS IN WETLAND AREAS.

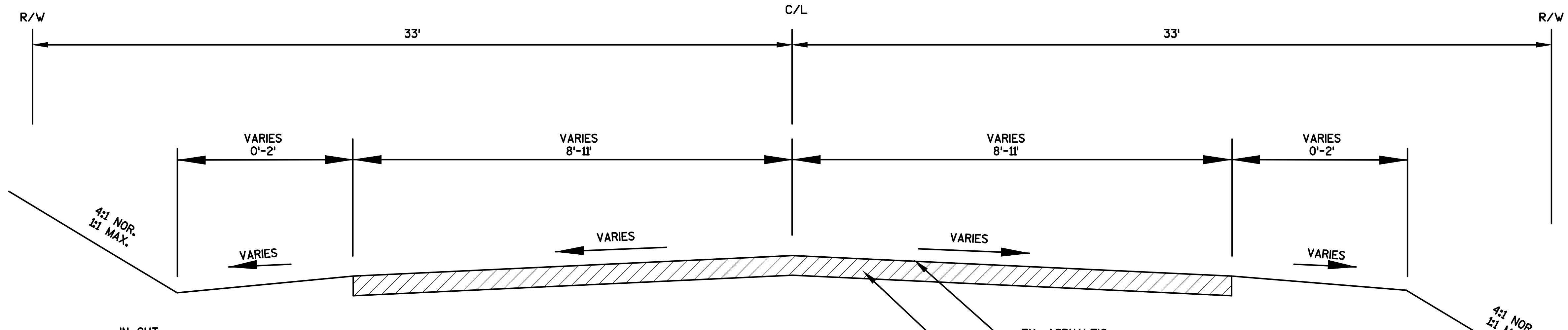
## PAVEMENT CORE LOG

| CORE NO. | STA. | OFFSET FROM CL | ASPHALT DEPTH IN INCHES | UNDER LAYING MATERIAL |
|---|---|---|---|---|
| 1-11 | 19+00 | 4' LT | 3.00 | SAND |
| 2-11 | 37+00 | 3' LT | 3.00 | SAND |
| 3-11 | 46+50 | 2' RT | 3.00 | SAND |
| 4-11 | 58+50 | 6' RT | 1.00 | FILL |
| 5-11 | 78+00 | 3' LT | 3.00 | FILL |
| 6-11 | 107+25 | 5' LT | 2.00 | FILL |
| 7-11 | 126+00 | 5' LT | 2.00 | FILL |
| 8-11 | 147+20 | 2' LT | 3.00 | FILL |
| 9-11 | 165+00 | 3' RT | 5.00 | FILL |
| 10-11 | 180+00 | 3' LT | 4.00 | SAND |
| 11-11 | 201+50 | 3' RT | 4.00 | FILL |
| 12-11 | 223+00 | 3' RT | 2.00 | SAND |

## STANDARD ABBREVIATIONS

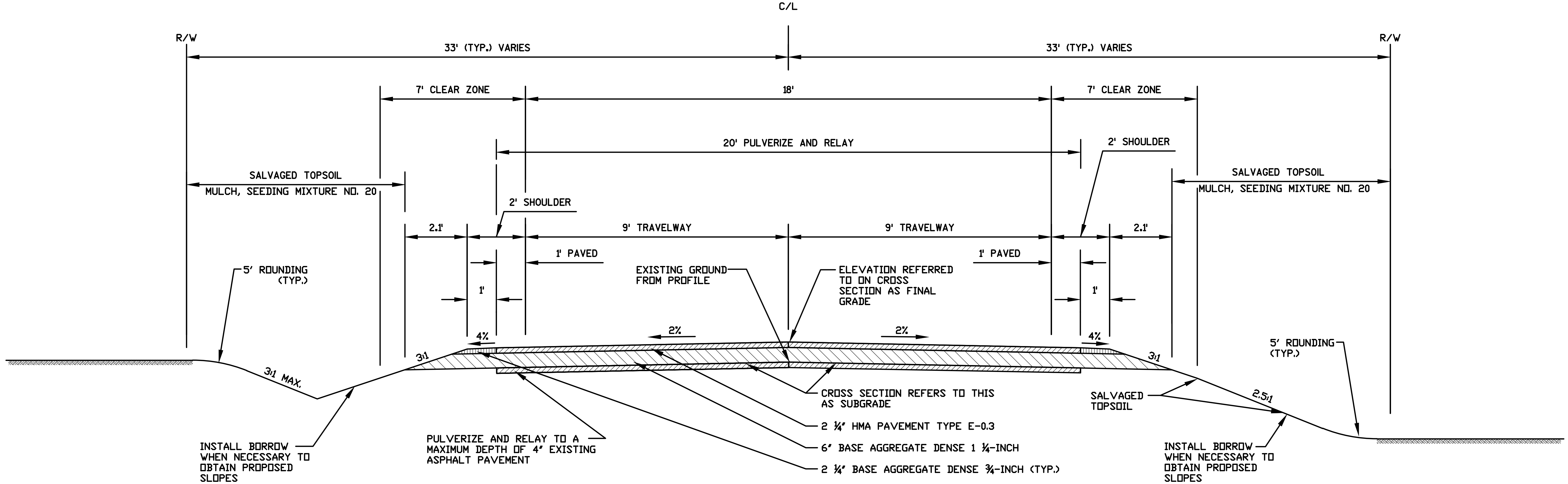
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GR | GRAVEL | WM | WATERMAIN | VPC | VERTICAL POINT OF CURVATURE | R/W | RIGHT OF WAY |
| BIT | BITUMINOUS | HYD | HYDRANT | VPI | VERTICAL POINT OF INTERSECTION | T/C | TOP OF CURB |
| ASPH | ASPHALT PAVEMENT | WV | WATER VALVE | VPT | VERTICAL POINT OF TANGENCY | F/L | FLOW LINE |
| CONC | CONCRETE | SAN | SANITARY SEWER | PC | POINT OF CURVATURE | C/L | CENTERLINE |
| SW | SIDEWALK | MH | MANHOLE | PI | POINT OF INTERSECTION | P/L | PROPERTY LINE |
| BLDG | BUILDING | ST | STORM SEWER | PT | POINT OF TANGENCY | R/L | REFERENCE LINE |
| HSE | HOUSE | CB | CATCH BASIN | R | RADIUS | INV | INVERT |
| PED | PEDESTAL | TELE | TELEPHONE | EX | EXISTING | CMP | CORRUGATED METAL PIPE |
| PP | POWER POLE | ELEC | ELECTRIC | PR | PROPOSED | RCP | REINFORCED CONCRETE PIPE |
| LP | LIGHT POLE | TV | TELEVISION | EOR | END OF RADIUS | CULV | CULVERT |
| BM | BENCH MARK | STA | STATION | B-B | BACK TO BACK (OF CURB) | PE | PERSONAL ENTRANCE |
| CE | COMMERCIAL ENTRANCE | FE | FIELD ENTRANCE | | | | |

2




TYPICAL EXISTING SECTION

FISHEL ROAD (FOREST 2193)
STA. 10+59.26 TO STA. 227+49.29

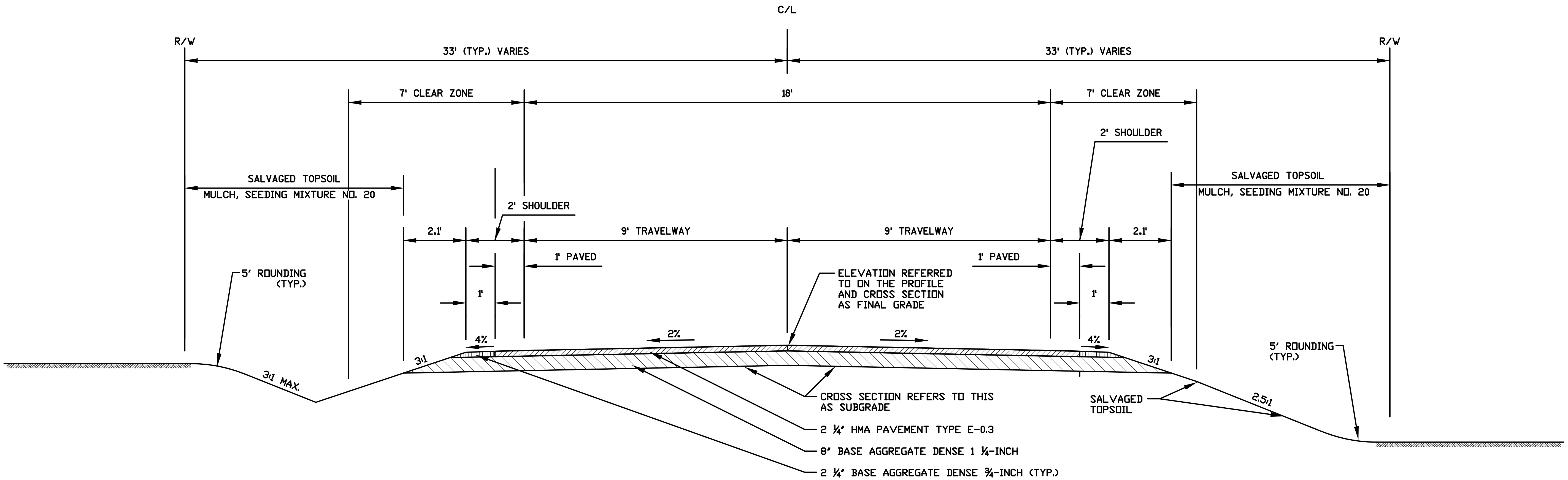



TYPICAL FINISHED SECTION - RECONDITION

FISHEL ROAD (FOREST 2193)
STA 10+59.26 TO STA 24+50
STA 30+00 TO STA 40+00
STA 50+00 TO STA 53+00
STA 74+00 TO STA 76+00
STA 80+00 TO STA 94+00
STA 114+50 TO STA 126+50
STA 130+00 TO STA 147+50
STA 152+00 TO STA 175+50
STA 183+00 TO STA 209+00
STA 216+00 TO STA 221+00
STA 223+00 TO STA 227+49.29

NOTE: EXCPT FOR HORIZONTAL CURVE LOCATIONS SHOWN IN TABLE 1
(SEE TYPICAL FINISHED SUPER ELEVATION SECTION - RECONDITION)

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | TYPICAL SECTION | SHEET 3 | E |
|---|---|---|---|---|---|




TYPICAL FINISHED SECTION - RECONSTRUCT

FISHEL ROAD (FOREST 2193)
STA 24+50 TO STA 30+00
STA 40+00 TO STA 50+00
STA 53+00 TO STA 74+00
STA 76+00 TO STA 80+00
STA 94+00 TO STA 114+50
STA 126+50 TO STA 130+00
STA 147+50 TO STA 152+00
STA 175+50 TO STA 183+00
STA 209+00 TO STA 216+00
STA 221+00 TO STA 223+00

NOTE: EXCPT FOR HORIZONTAL CURVE LOCATIONS SHOWN IN TABLE 1
(SEE TYPICAL FINISHED SUPER ELEVATION SECTION - RECONSTRUCT)

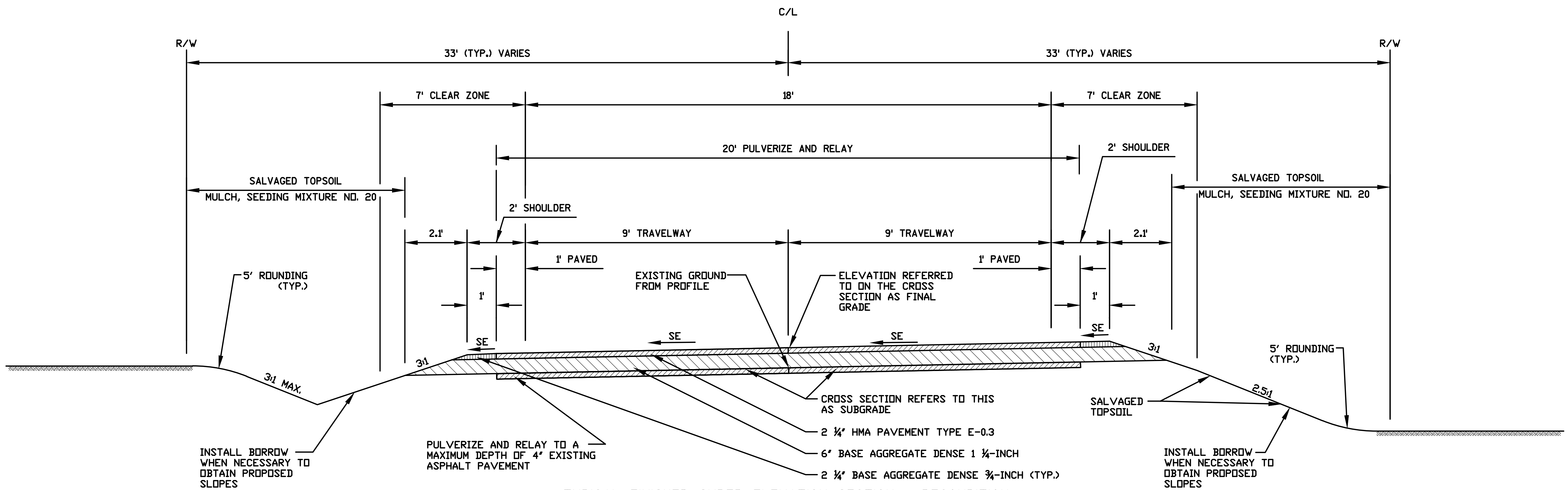
File: R:\4200\4281\4281014\dwg(2010)\4281014GN.dwg
Plot Date: Aug 27, 2012 - 3:46pm

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | TYPICAL SECTION | SHEET -4 | E |

## TABLE 1

## FULL SUPERELEVATION START AND END LOCATIONS

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGIN FULL SE | STA | 14+28 | END FULL SE | STA | 47+18 | BEGIN FULL SE | STA | 79+20 | END FULL SE | STA | 102+53 | BEGIN FULL SE | STA | 127+17 | END FULL SE | STA | 149+23 | BEGIN FULL SE | STA | 182+68 | END FULL SE | STA | 201+70 |
| END FULL SE | STA | 15+31 | BEGIN FULL SE | STA | 50+06 | END FULL SE | STA | 79+54 | BEGIN FULL SE | STA | 103+39 | END FULL SE | STA | 128+47 | BEGIN FULL SE | STA | 152+17 | END FULL SE | STA | 183+68 | BEGIN FULL SE | STA | 205+46 |
| BEGIN FULL SE | STA | 17+47 | END FULL SE | STA | 50+85 | BEGIN FULL SE | STA | 79+97 | END FULL SE | STA | 104+76 | BEGIN FULL SE | STA | 130+38 | END FULL SE | STA | 154+70 | BEGIN FULL SE | STA | 184+14 | END FULL SE | STA | 206+03 |
| END FULL SE | STA | 19+40 | BEGIN FULL SE | STA | 52+81 | END FULL SE | STA | 82+19 | BEGIN FULL SE | STA | 106+25 | END FULL SE | STA | 131+96 | BEGIN FULL SE | STA | 157+00 | END FULL SE | STA | 185+29 | BEGIN FULL SE | STA | 206+48 |
| BEGIN FULL SE | STA | 20+74 | END FULL SE | STA | 54+03 | BEGIN FULL SE | STA | 87+49 | END FULL SE | STA | 107+40 | BEGIN FULL SE | STA | 135+74 | END FULL SE | STA | 158+98 | BEGIN FULL SE | STA | 187+38 | END FULL SE | STA | 208+31 |
| END FULL SE | STA | 21+12 | BEGIN FULL SE | STA | 59+73 | END FULL SE | STA | 89+49 | BEGIN FULL SE | STA | 108+24 | END FULL SE | STA | 136+97 | BEGIN FULL SE | STA | 160+08 | END FULL SE | STA | 188+41 | BEGIN FULL SE | STA | 210+24 |
| BEGIN FULL SE | STA | 21+56 | END FULL SE | STA | 60+90 | BEGIN FULL SE | STA | 90+15 | END FULL SE | STA | 110+16 | BEGIN FULL SE | STA | 138+19 | END FULL SE | STA | 161+92 | BEGIN FULL SE | STA | 188+86 | END FULL SE | STA | 211+83 |
| END FULL SE | STA | 22+97 | BEGIN FULL SE | STA | 64+35 | END FULL SE | STA | 91+39 | BEGIN FULL SE | STA | 111+99 | END FULL SE | STA | 140+03 | BEGIN FULL SE | STA | 166+83 | END FULL SE | STA | 189+89 | | | |
| BEGIN FULL SE | STA | 25+51 | END FULL SE | STA | 65+56 | BEGIN FULL SE | STA | 93+29 | END FULL SE | STA | 113+50 | BEGIN FULL SE | STA | 140+35 | END FULL SE | STA | 169+77 | BEGIN FULL SE | STA | 191+72 | | | |
| END FULL SE | STA | 27+20 | BEGIN FULL SE | STA | 66+54 | END FULL SE | STA | 94+30 | BEGIN FULL SE | STA | 118+17 | END FULL SE | STA | 143+24 | BEGIN FULL SE | STA | 171+63 | END FULL SE | STA | 192+74 | | | |
| BEGIN FULL SE | STA | 44+60 | END FULL SE | STA | 67+06 | BEGIN FULL SE | STA | 94+85 | END FULL SE | STA | 119+42 | BEGIN FULL SE | STA | 143+56 | END FULL SE | STA | 172+85 | BEGIN FULL SE | STA | 194+44 | | | |
| END FULL SE | STA | 45+54 | BEGIN FULL SE | STA | 68+10 | END FULL SE | STA | 96+38 | BEGIN FULL SE | STA | 119+87 | END FULL SE | STA | 143+96 | BEGIN FULL SE | STA | 174+20 | END FULL SE | STA | 195+88 | | | |
| BEGIN FULL SE | STA | 46+05 | END FULL SE | STA | 70+60 | BEGIN FULL SE | STA | 97+99 | END FULL SE | STA | 120+43 | BEGIN FULL SE | STA | 144+29 | END FULL SE | STA | 175+25 | BEGIN FULL SE | STA | 197+29 | | | |
| END FULL SE | STA | 46+13 | BEGIN FULL SE | STA | 77+61 | END FULL SE | STA | 99+80 | BEGIN FULL SE | STA | 121+46 | END FULL SE | STA | 146+06 | BEGIN FULL SE | STA | 180+10 | END FULL SE | STA | 198+67 | | | |
| BEGIN FULL SE | STA | 46+63 | END FULL SE | STA | 78+62 | BEGIN FULL SE | STA | 101+37 | END FULL SE | STA | 123+46 | BEGIN FULL SE | STA | 147+82 | END FULL SE | STA | 181+56 | BEGIN FULL SE | STA | 200+78 | | | |




## TYPICAL FINISHED SUPER ELEVATION SECTION - RECONDITION

FISHEL ROAD (FOREST 2193)
STA 10+59.26 TO STA 24+50
STA 30+00 TO STA 40+00
STA 50+00 TO STA 53+00
STA 74+00 TO STA 76+00
STA 80+00 TO STA 94+00
STA 114+50 TO STA 126+50
STA 130+00 TO STA 147+50
STA 152+00 TO STA 175+50
STA 183+00 TO STA 209+00
STA 216+00 TO STA 221+00
STA 223+00 TO STA 227+49.29

NOTE: SEE TABLE 1 FOR HORIZONTAL CURVE LOCATIONS

# TABLE 1

## FULL SUPERELEVATION START AND END LOCATIONS

| | | |
|---|---|---|
| BEGIN FULL SE | STA | 14+28 |
| END FULL SE | STA | 15+31 |
| BEGIN FULL SE | STA | 17+47 |
| END FULL SE | STA | 19+40 |
| BEGIN FULL SE | STA | 20+74 |
| END FULL SE | STA | 21+12 |
| BEGIN FULL SE | STA | 21+56 |
| END FULL SE | STA | 22+97 |
| BEGIN FULL SE | STA | 25+51 |
| END FULL SE | STA | 27+20 |
| BEGIN FULL SE | STA | 44+60 |
| END FULL SE | STA | 45+54 |
| BEGIN FULL SE | STA | 46+05 |
| END FULL SE | STA | 46+13 |
| BEGIN FULL SE | STA | 46+63 |

| | | |
|---|---|---|
| END FULL SE | STA | 47+18 |
| BEGIN FULL SE | STA | 50+06 |
| END FULL SE | STA | 50+85 |
| BEGIN FULL SE | STA | 52+81 |
| END FULL SE | STA | 54+03 |
| BEGIN FULL SE | STA | 59+73 |
| END FULL SE | STA | 60+90 |
| BEGIN FULL SE | STA | 64+35 |
| END FULL SE | STA | 65+56 |
| BEGIN FULL SE | STA | 66+54 |
| END FULL SE | STA | 67+06 |
| BEGIN FULL SE | STA | 68+10 |
| END FULL SE | STA | 70+60 |
| BEGIN FULL SE | STA | 77+61 |
| END FULL SE | STA | 78+62 |

| | | |
|---|---|---|
| BEGIN FULL SE | STA | 79+20 |
| END FULL SE | STA | 79+54 |
| BEGIN FULL SE | STA | 79+97 |
| END FULL SE | STA | 82+19 |
| BEGIN FULL SE | STA | 87+49 |
| END FULL SE | STA | 89+49 |
| BEGIN FULL SE | STA | 90+15 |
| END FULL SE | STA | 91+39 |
| BEGIN FULL SE | STA | 93+29 |
| END FULL SE | STA | 94+30 |
| BEGIN FULL SE | STA | 94+85 |
| END FULL SE | STA | 96+38 |
| BEGIN FULL SE | STA | 97+99 |
| END FULL SE | STA | 99+80 |
| BEGIN FULL SE | STA | 101+37 |

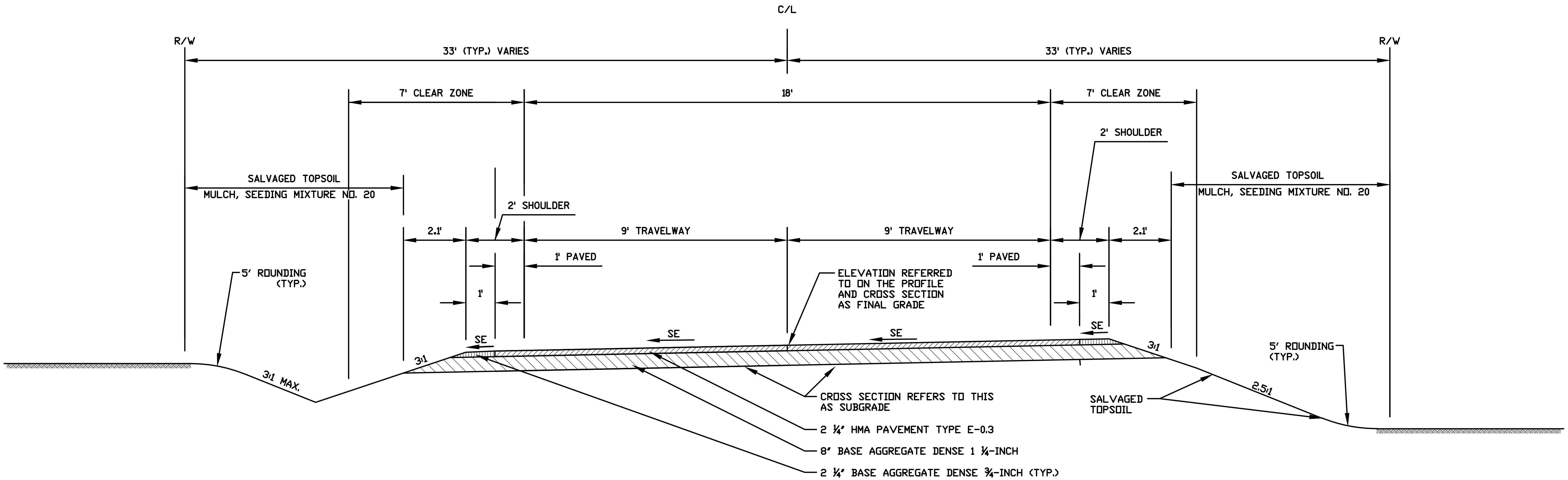
| | | |
|---|---|---|
| END FULL SE | STA | 102+53 |
| BEGIN FULL SE | STA | 103+39 |
| END FULL SE | STA | 104+76 |
| BEGIN FULL SE | STA | 106+25 |
| END FULL SE | STA | 107+40 |
| BEGIN FULL SE | STA | 108+24 |
| END FULL SE | STA | 110+16 |
| BEGIN FULL SE | STA | 111+99 |
| END FULL SE | STA | 113+50 |
| BEGIN FULL SE | STA | 118+17 |
| END FULL SE | STA | 119+42 |
| BEGIN FULL SE | STA | 119+87 |
| END FULL SE | STA | 120+43 |
| BEGIN FULL SE | STA | 121+46 |
| END FULL SE | STA | 123+46 |

| | | |
|---|---|---|
| BEGIN FULL SE | STA | 127+17 |
| END FULL SE | STA | 128+47 |
| BEGIN FULL SE | STA | 130+38 |
| END FULL SE | STA | 131+96 |
| BEGIN FULL SE | STA | 135+74 |
| END FULL SE | STA | 136+97 |
| BEGIN FULL SE | STA | 138+19 |
| END FULL SE | STA | 140+03 |
| BEGIN FULL SE | STA | 140+35 |
| END FULL SE | STA | 143+24 |
| BEGIN FULL SE | STA | 143+56 |
| END FULL SE | STA | 143+96 |
| BEGIN FULL SE | STA | 144+29 |
| END FULL SE | STA | 146+06 |
| BEGIN FULL SE | STA | 147+82 |

| | | |
|---|---|---|
| END FULL SE | STA | 149+23 |
| BEGIN FULL SE | STA | 152+17 |
| END FULL SE | STA | 154+70 |
| BEGIN FULL SE | STA | 157+00 |
| END FULL SE | STA | 158+98 |
| BEGIN FULL SE | STA | 160+08 |
| END FULL SE | STA | 161+92 |
| BEGIN FULL SE | STA | 166+83 |
| END FULL SE | STA | 169+77 |
| BEGIN FULL SE | STA | 171+63 |
| END FULL SE | STA | 172+85 |
| BEGIN FULL SE | STA | 174+20 |
| END FULL SE | STA | 175+25 |
| BEGIN FULL SE | STA | 180+10 |
| END FULL SE | STA | 181+56 |

| | | |
|---|---|---|
| BEGIN FULL SE | STA | 182+68 |
| END FULL SE | STA | 183+68 |
| BEGIN FULL SE | STA | 184+14 |
| END FULL SE | STA | 185+29 |
| BEGIN FULL SE | STA | 187+38 |
| END FULL SE | STA | 188+41 |
| BEGIN FULL SE | STA | 188+86 |
| END FULL SE | STA | 189+89 |
| BEGIN FULL SE | STA | 191+72 |
| END FULL SE | STA | 192+74 |
| BEGIN FULL SE | STA | 194+44 |
| END FULL SE | STA | 195+88 |
| BEGIN FULL SE | STA | 197+29 |
| END FULL SE | STA | 198+67 |
| BEGIN FULL SE | STA | 200+78 |

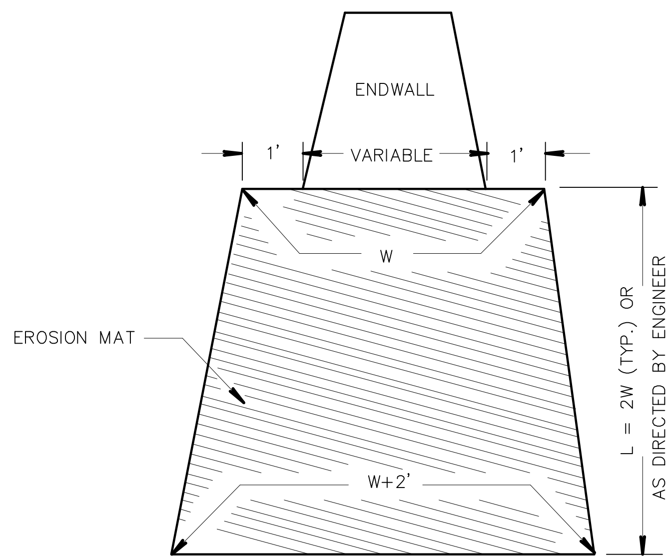
| | | |
|---|---|---|
| END FULL SE | STA | 201+70 |
| BEGIN FULL SE | STA | 205+46 |
| END FULL SE | STA | 206+03 |
| BEGIN FULL SE | STA | 206+48 |
| END FULL SE | STA | 208+31 |
| BEGIN FULL SE | STA | 210+24 |
| END FULL SE | STA | 211+83 |



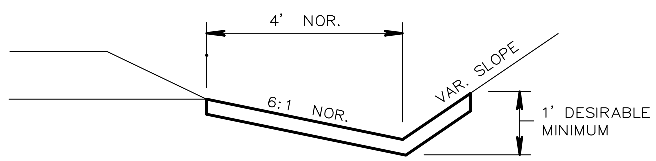

## TYPICAL FINISHED SUPER ELEVATION SECTION - RECONSTRUCT

FISHEL ROAD (FOREST 2193)
STA 24+50 TO STA 30+00
STA 40+00 TO STA 50+00
STA 53+00 TO STA 74+00
STA 76+00 TO STA 80+00
STA 94+00 TO STA 114+50
STA 126+50 TO STA 130+00
STA 147+50 TO STA 152+00
STA 175+50 TO STA 183+00
STA 209+00 TO STA 216+00
STA 221+00 TO STA 223+00

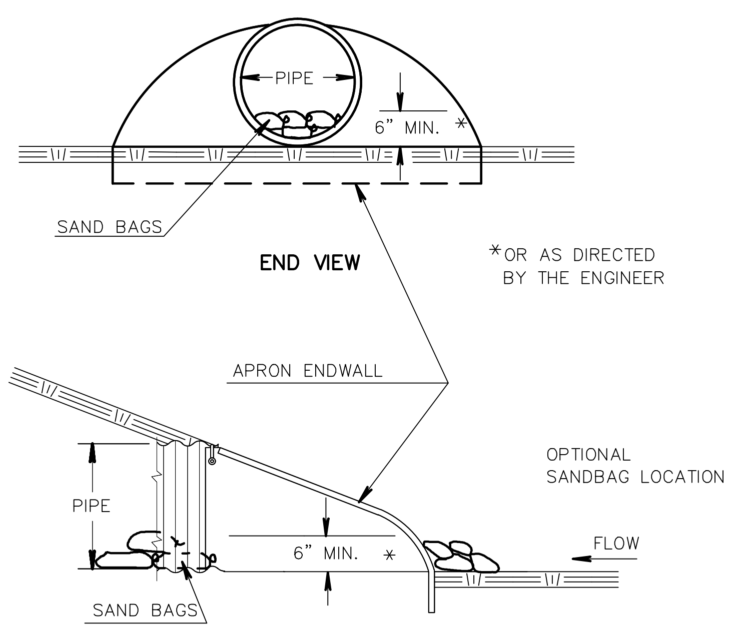
NOTE: SEE TABLE 1 FOR HORIZONTAL CURVE LOCATIONS




EROSION MAT TREATMENT AT CULVERTS



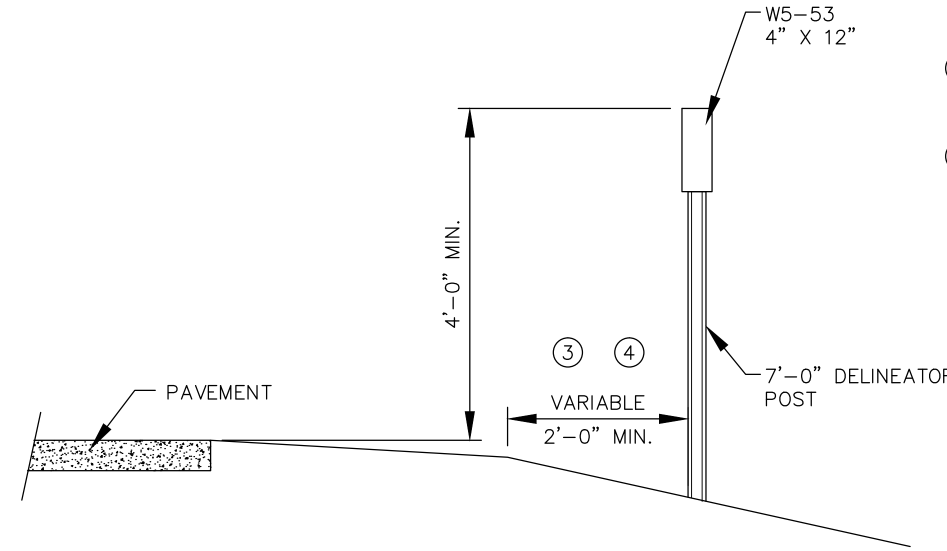

EROSION MAT DETAIL FOR DITCHES




END VIEW

SIDE VIEW

CULVERT PIPE DITCH CHECK DETAIL




3 LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.

4 OBJECT MARKERS (W5-53) SHALL BE LOCATED ALONG A LINE FLARED AWAY FROM THE BRIDGE CORNER TO DELINEATE THE NARROWING OF THE SHOULDER OR BERM.

OBJECT MARKER PLACEMENT

(THIS DETAIL SUPERCEDES THE DETAIL ON THE STANDARD DETAIL
DRAWING SIGNING & MARKING FOR TWO LANE BRIDGES

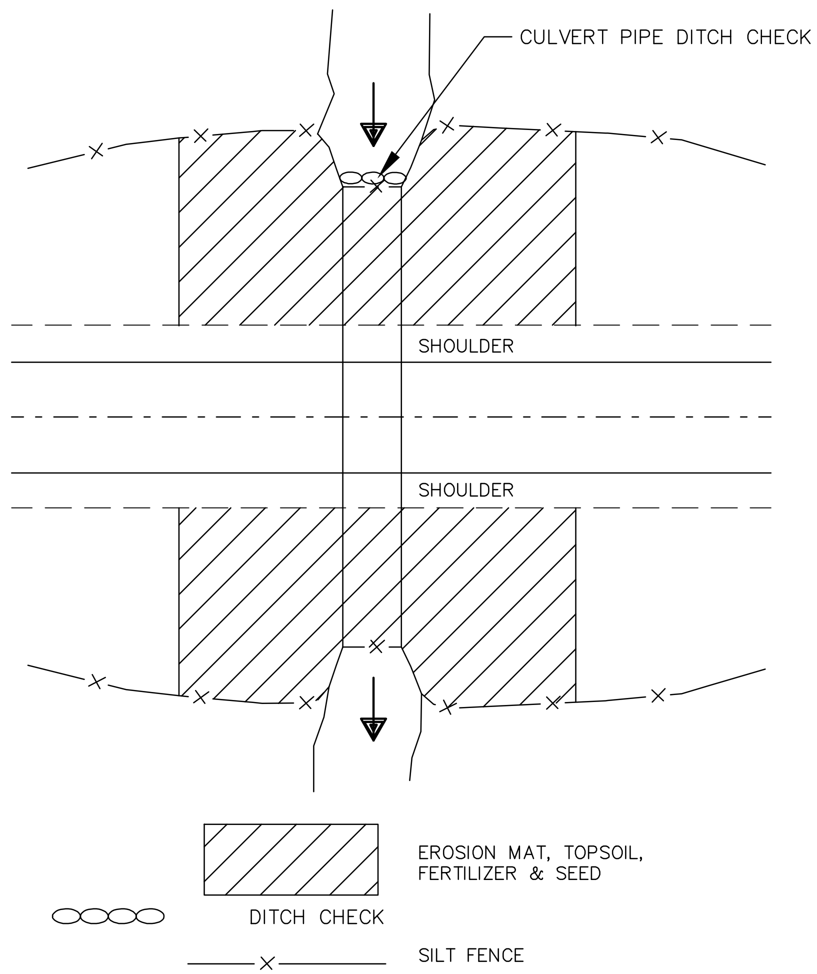
RUNOFF COEFFICIENT TABLE

| | HYDROLOGIC SOIL GROUP | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | | | B | | | C | | | D | | |
| | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | | SLOPE RANGE (PERCENT) | | |
| LAND USE: | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER | 0-2 | 2-6 | 6 & OVER |
| ROW CROPS | .08<br>.22 | .16<br>.30 | .22<br>.38 | .12<br>.26 | .20<br>.34 | .27<br>.44 | .15<br>.30 | .24<br>.37 | .33<br>.50 | .19<br>.34 | .28<br>.41 | .38<br>.56 |
| MEDIAN STRIP-TURF | .19<br>.24 | .20<br>.26 | .24<br>.30 | .19<br>.25 | .22<br>.28 | .26<br>.33 | .20<br>.26 | .23<br>.30 | .30<br>.37 | .20<br>.27 | .25<br>.32 | .30<br>.40 |
| SIDE SLOPE-TURF | | | .25<br>.32 | | | .27<br>.34 | | | .28<br>.36 | | | .30<br>.38 |
| PAVEMENT: | | | | | | | | | | | | |
| ASPHALT | .70 - .95 | | | | | | | | | | | |
| CONCRETE | .80 - .95 | | | | | | | | | | | |
| BRICK | .70 - .80 | | | | | | | | | | | |
| DRIVES, WALKS | .75 - .85 | | | | | | | | | | | |
| ROOFS | .75 - .95 | | | | | | | | | | | |
| GRAVEL ROADS, SHOULDERS | .40 - .60 | | | | | | | | | | | |

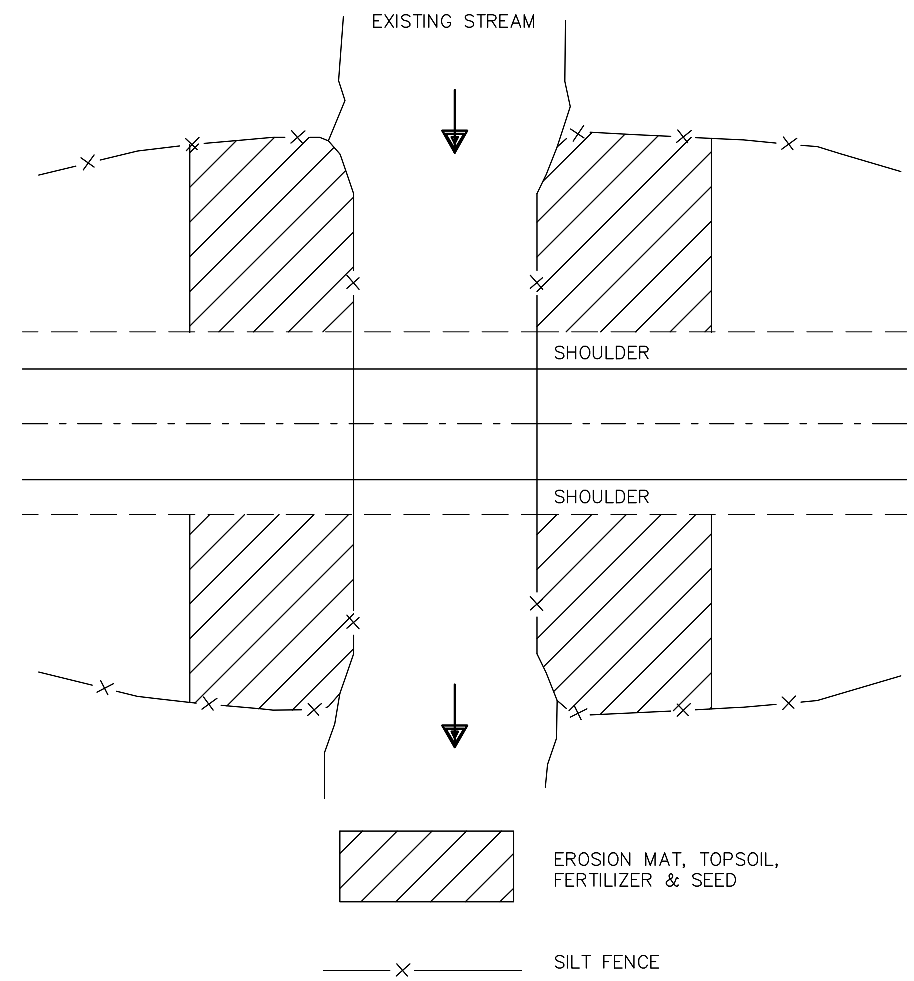
TOTAL PROJECT AREA = 32.86 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 19.67 ACRES

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN: CONSTRUCTION DETAILS | SHEET 7 | E |
|---|---|---|---|---|---|

2

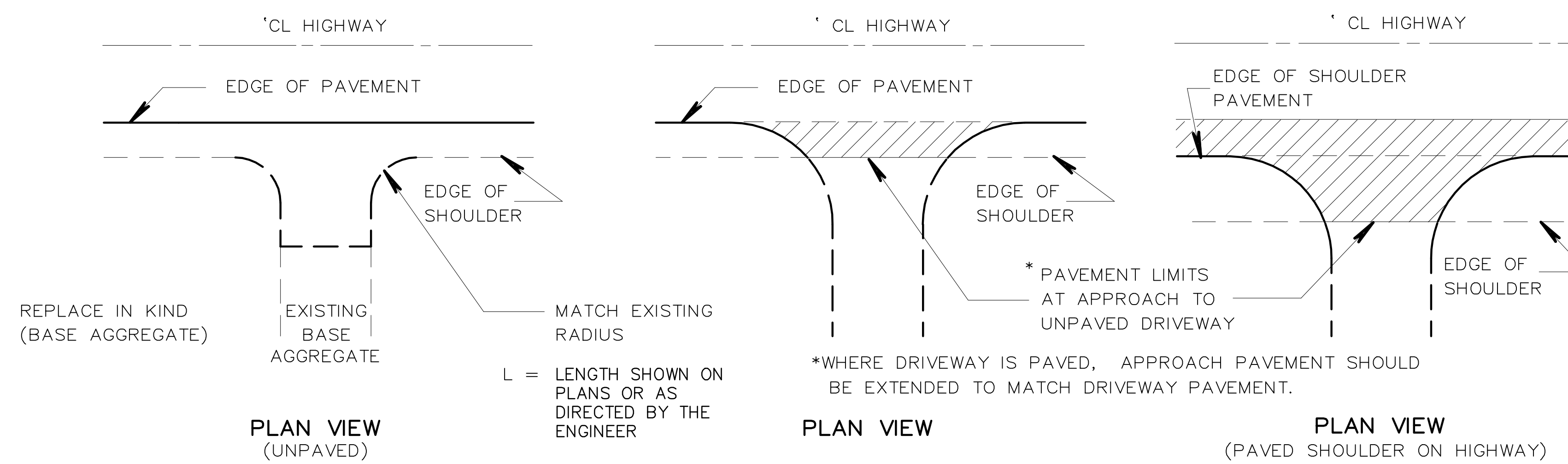



DETAIL FOR EROSION CONTROL AT PIPE REPLACEMENTS

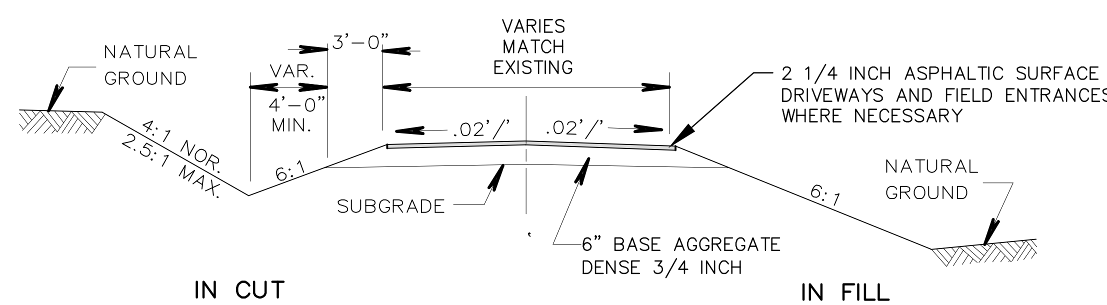



DETAIL FOR EROSION CONTROL AT EXISTING STRUCTURES

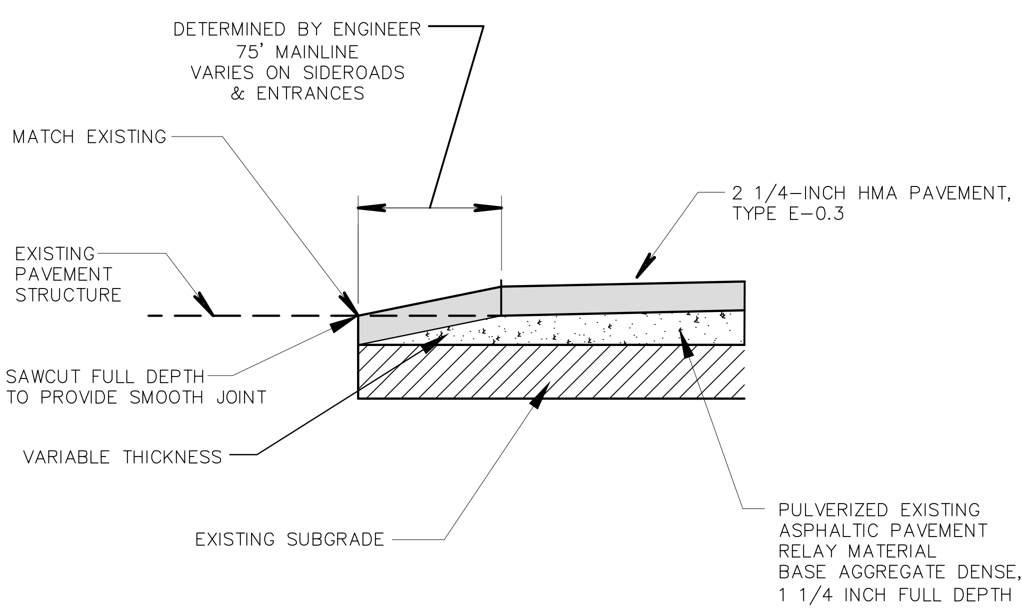
2




RURAL SIDE ROAD & ENTRANCE DETAIL

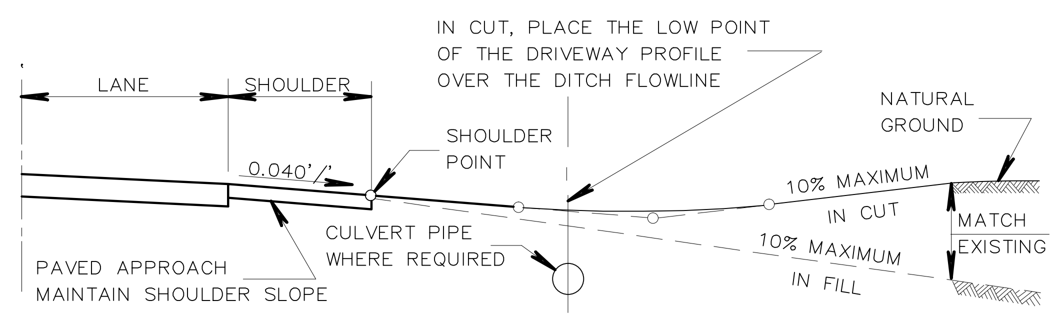



TYPICAL CROSS SECTION FOR SIDEROAD AND ENTRANCES

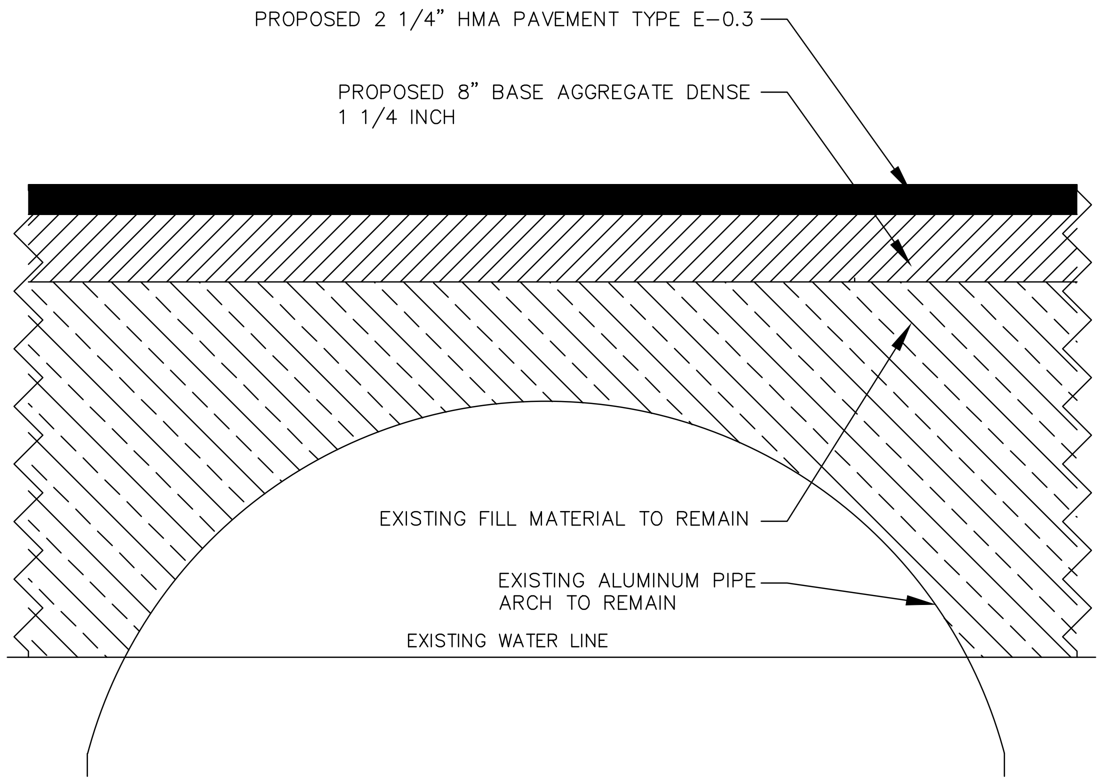


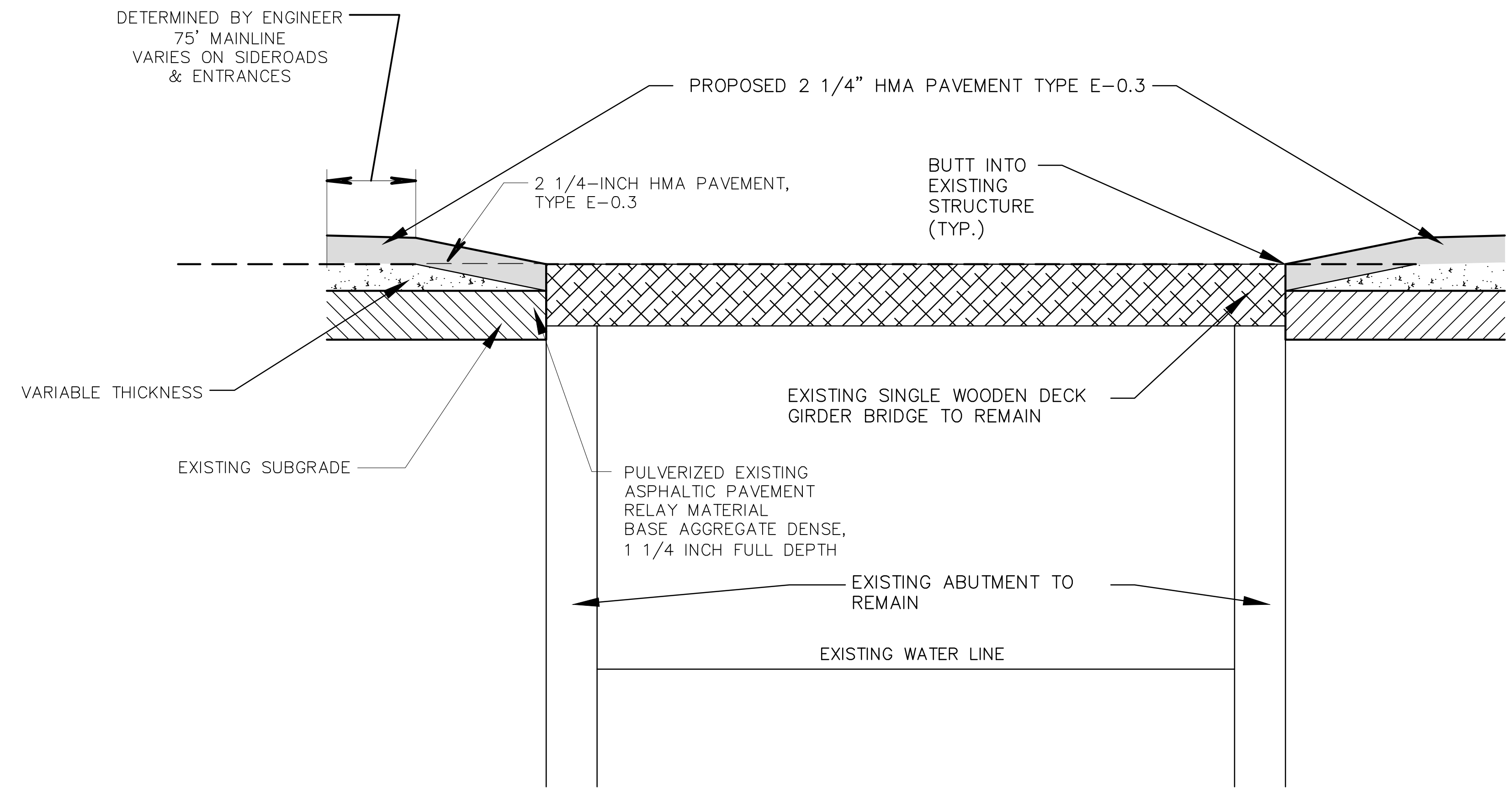

BUTT JOINT DETAIL – SIDE ROADS & PAVED ENTRANCES

AT UNPAVED DRIVEWAYS, WEDGE WITH IN-KIND MATERIAL
GRADING, SHAPING & HAULING PAID AS COMMON EXCAVATION




TYPICAL SIDEROAD AND ENTRANCE PROFILES




BRULE CREEK STRUCTURE WORK

STA. 40+60 TO STA 40+87

ELVOY CREEK STRUCTURE WORK

STA. 222+03 TO STA 222+60

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN: CONSTRUCTION DETAILS | SHEET | E |
|---|---|---|---|---|---|



FILE NAME : R:\4200\4281\4281014\DWG(2010)\DETAILS.DWG PLOT DATE : 9/3/2008 9:36 AM PLOT BY : RANDAL L. ROETHLE PLOT NAME : PLOT SCALE : 0.005100

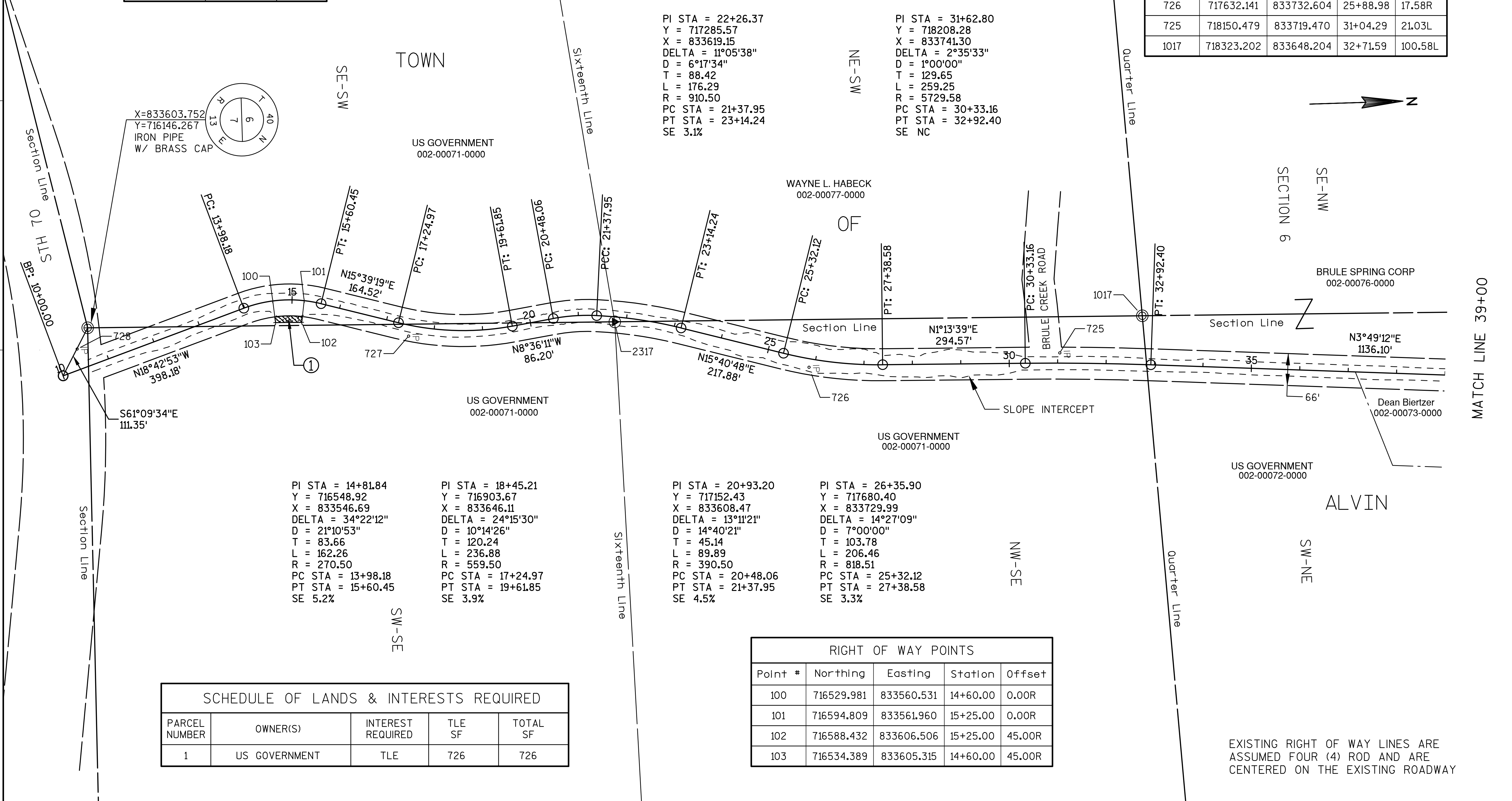
2

| LINE TABLE | | |
|---|---|---|
| Line # | Direction | Length |
| 101-102 | S81°51'11"E | 45.00' |
| 102-103 | S1°15'46"W | 54.06' |
| 103-100 | S84°22'44"W | 45.00' |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| Curve # | Length | Radius | Delta | CH Bearing | CH Length |
| PC-100 | 61.82' | 270.50' | 13°05'37" | N12°10'04"W | 61.68' |
| 100-101 | 65.00' | 270.50' | 13°46'05" | N1°15'46"E | 64.84' |

| CONTROL POINT TABLE | | | | |
|---|---|---|---|---|
| Point # | Northing | Easting | Station | Offset |
| 728 | 716123.159 | 833646.939 | 10+46.43 | 41.66L |
| 727 | 716807.899 | 833641.994 | 17+50.85 | 22.50R |
| 2317 | 717234.230 | 833626.161 | 21+76.20 | 10.30R |
| 726 | 717632.141 | 833732.604 | 25+88.98 | 17.58R |
| 725 | 718150.479 | 833719.470 | 31+04.29 | 21.03L |
| 1017 | 718323.202 | 833648.204 | 32+71.59 | 100.58L |

2




PI STA = 22+26.37
Y = 717285.57
X = 833619.15
DELTA = 11°05'38"
D = 6°17'34"
T = 88.42
L = 176.29
R = 910.50
PC STA = 21+37.95
PT STA = 23+14.24
SE 3.1%

PI STA = 31+62.80
Y = 718208.28
X = 833741.30
DELTA = 2°35'33"
D = 1°00'00"
T = 129.65
L = 259.25
R = 5729.58
PC STA = 30+33.16
PT STA = 32+92.40
SE NC

PI STA = 14+81.84
Y = 716548.92
X = 833546.69
DELTA = 34°22'12"
D = 21°10'53"
T = 83.66
L = 162.26
R = 270.50
PC STA = 13+98.18
PT STA = 15+60.45
SE 5.2%

PI STA = 18+45.21
Y = 716903.67
X = 833646.11
DELTA = 24°15'30"
D = 10°14'26"
T = 120.24
L = 236.88
R = 559.50
PC STA = 17+24.97
PT STA = 19+61.85
SE 3.9%

PI STA = 20+93.20
Y = 717152.43
X = 833608.47
DELTA = 13°11'21"
D = 14°40'21"
T = 45.14
L = 89.89
R = 390.50
PC STA = 20+48.06
PT STA = 21+37.95
SE 4.5%

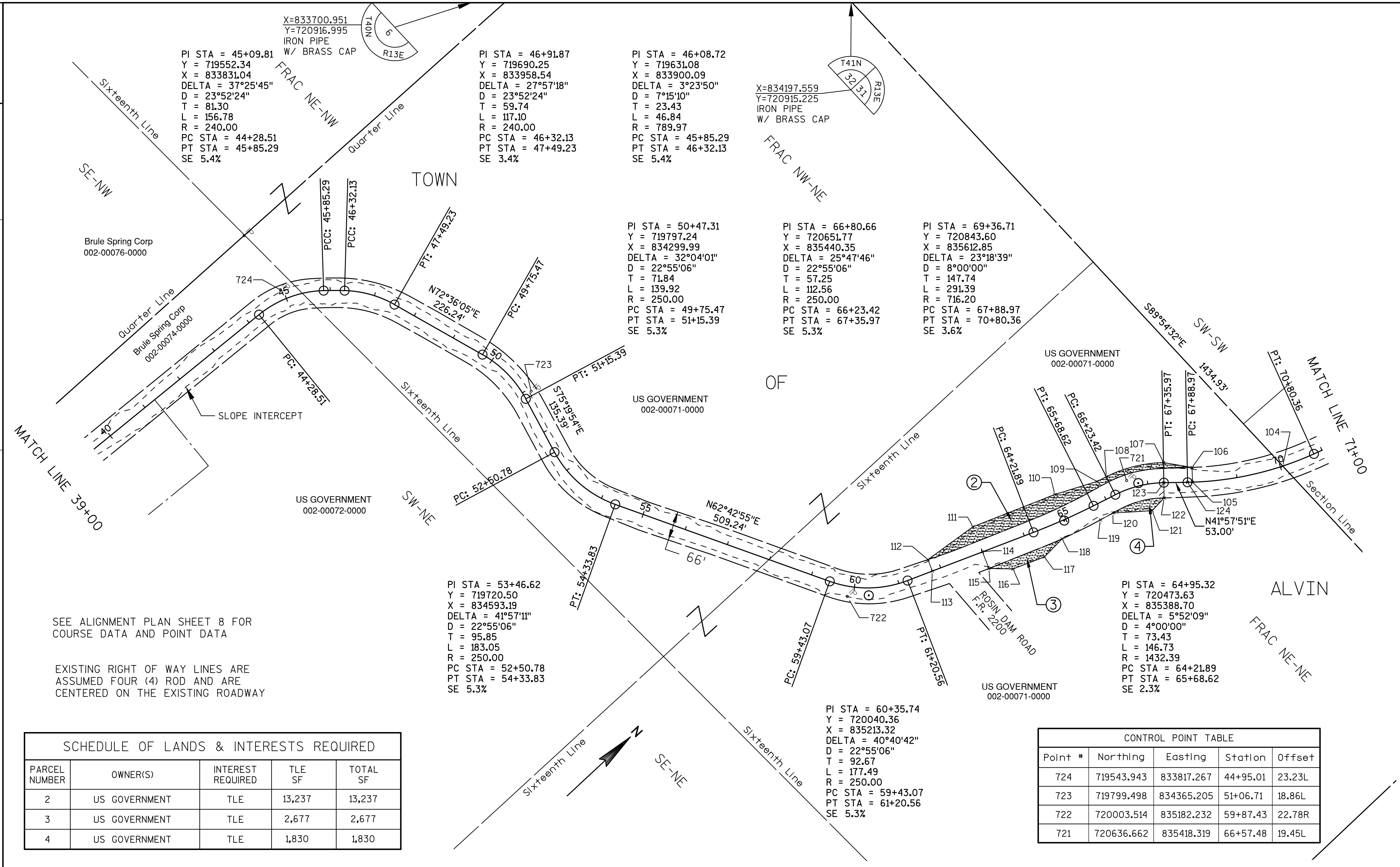
PI STA = 26+35.90
Y = 717680.40
X = 833729.99
DELTA = 14°27'09"
D = 7°00'00"
T = 103.78
L = 206.46
R = 818.51
PC STA = 25+32.12
PT STA = 27+38.58
SE 3.3%

| SCHEDULE OF LANDS & INTERESTS REQUIRED | | | | |
|---|---|---|---|---|
| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE SF | TOTAL SF |
| 1 | US GOVERNMENT | TLE | 726 | 726 |

| RIGHT OF WAY POINTS | | | | |
|---|---|---|---|---|
| Point # | Northing | Easting | Station | Offset |
| 100 | 716529.981 | 833560.531 | 14+60.00 | 0.00R |
| 101 | 716594.809 | 833561.960 | 15+25.00 | 0.00R |
| 102 | 716588.432 | 833606.506 | 15+25.00 | 45.00R |
| 103 | 716534.389 | 833605.315 | 14+60.00 | 45.00R |

EXISTING RIGHT OF WAY LINES ARE ASSUMED FOUR (4) ROD AND ARE CENTERED ON THE EXISTING ROADWAY

| PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | PLAN: ALIGNMENT PLAN | SHEET 11 | E |
|---|---|---|---|---|---|




SEE ALIGNMENT PLAN SHEET 8 FOR COURSE DATA AND POINT DATA

EXISTING RIGHT OF WAY LINES ARE ASSUMED FOUR (4) ROD AND ARE CENTERED ON THE EXISTING ROADWAY

SCHEDULE OF LANDS & INTERESTS REQUIRED

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE SF | TOTAL SF |
|---|---|---|---|---|
| 2 | US GOVERNMENT | TLE | 13,237 | 13,237 |
| 3 | US GOVERNMENT | TLE | 2,677 | 2,677 |
| 4 | US GOVERNMENT | TLE | 1,830 | 1,830 |

CONTROL POINT TABLE

| Point # | Northing | Easting | Station | Offset |
|---|---|---|---|---|
| 724 | 719543.943 | 833817.267 | 44+95.01 | 23.23L |
| 723 | 719799.498 | 834365.205 | 51+06.71 | 18.86L |
| 722 | 720003.514 | 835182.232 | 59+87.43 | 22.78R |
| 721 | 720636.662 | 835418.319 | 66+57.48 | 19.45L |

| PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | PLAN: ALIGNMENT PLAN | SHEET 12 | E |
|---|---|---|---|---|---|

2

## LINE TABLE

| Line # | Direction | Length |
|---|---|---|
| 126-127 | N80°55'00"E | 33.00' |
| 127-128 | N10°26'28"E | 69.22' |
| 128-129 | N13°03'16"W | 52.85' |
| 129-130 | N80°20'04"W | 33.00' |
| 126-170 | S19°59'03"E | 203.18' |
| 171-172 | N64°32'45"W | 29.73' |
| 172-173 | N0°16'48"W | 139.98' |
| 173-170 | N66°25'28"E | 33.00' |

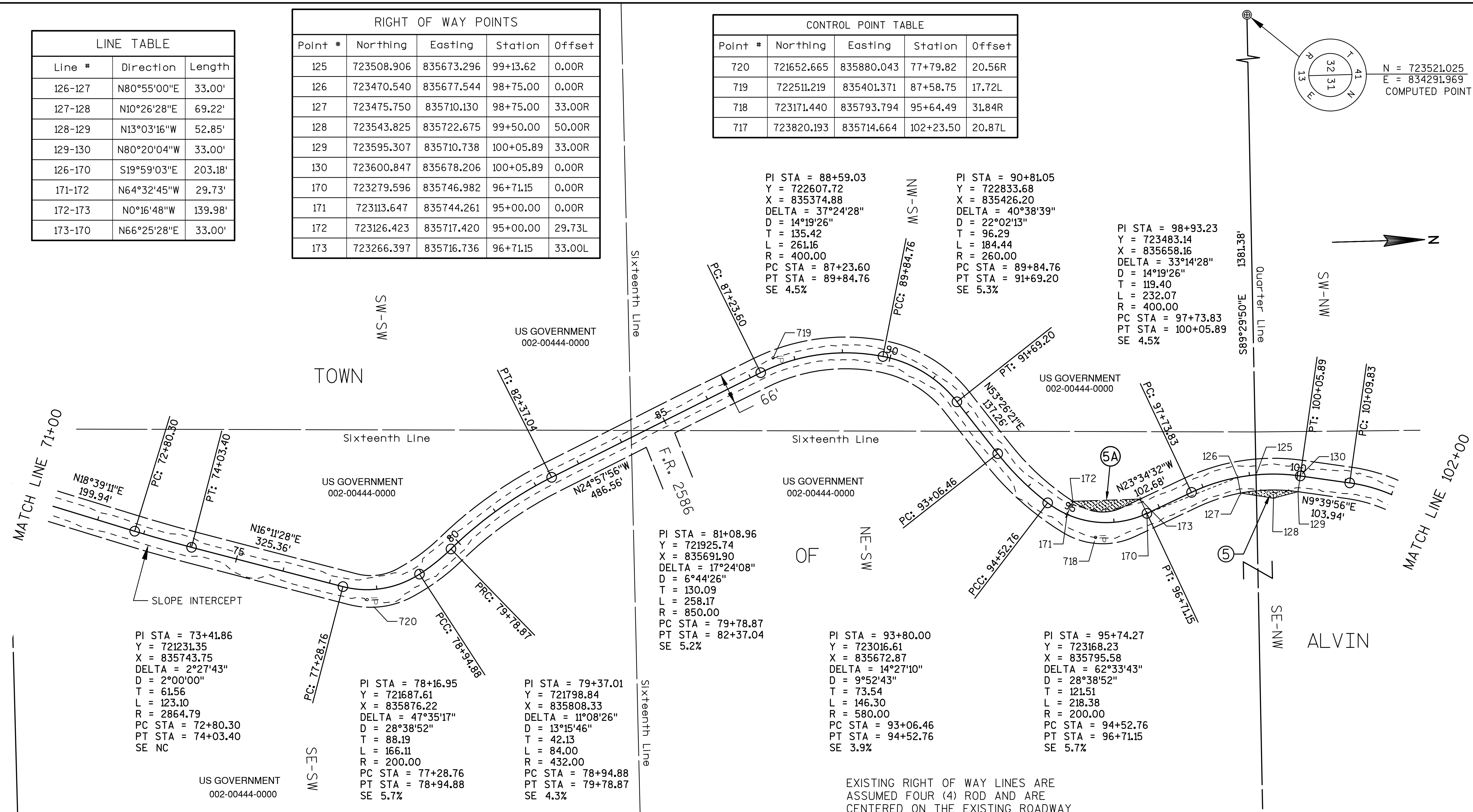
## RIGHT OF WAY POINTS

| Point # | Northing | Easting | Station | Offset |
|---|---|---|---|---|
| 125 | 723508.906 | 835673.296 | 99+13.62 | 0.00R |
| 126 | 723470.540 | 835677.544 | 98+75.00 | 0.00R |
| 127 | 723475.750 | 835710.130 | 98+75.00 | 33.00R |
| 128 | 723543.825 | 835722.675 | 99+50.00 | 50.00R |
| 129 | 723595.307 | 835710.738 | 100+05.89 | 33.00R |
| 130 | 723600.847 | 835678.206 | 100+05.89 | 0.00R |
| 170 | 723279.596 | 835746.982 | 96+71.15 | 0.00R |
| 171 | 723113.647 | 835744.261 | 95+00.00 | 0.00R |
| 172 | 723126.423 | 835717.420 | 95+00.00 | 29.73L |
| 173 | 723266.397 | 835716.736 | 96+71.15 | 33.00L |

## CONTROL POINT TABLE

| Point # | Northing | Easting | Station | Offset |
|---|---|---|---|---|
| 720 | 721652.665 | 835880.043 | 77+79.82 | 20.56R |
| 719 | 722511.219 | 835401.371 | 87+58.75 | 17.72L |
| 718 | 723171.440 | 835793.794 | 95+64.49 | 31.84R |
| 717 | 723820.193 | 835714.664 | 102+23.50 | 20.87L |

2




EXISTING RIGHT OF WAY LINES ARE ASSUMED FOUR (4) ROD AND ARE CENTERED ON THE EXISTING ROADWAY

## CURVE TABLE

| Curve # | Length | Radius | Delta | CH Bearing | CH Length |
|---|---|---|---|---|---|
| 125-126 | 38.62' | 400.00' | 5°31'53" | S6°19'04"E | 38.60' |
| 130-125 | 92.28' | 400.00' | 13°13'04" | S3°03'25"W | 92.07' |
| 170-171 | 171.15' | 200.00' | 49°01'47" | S0°56'22"W | 165.97' |

## SCHEDULE OF LANDS & INTERESTS REQUIRED

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE SF | TOTAL SF |
|---|---|---|---|---|
| 5 | US GOVERNMENT | TLE | 1,120 | 1,120 |
| 5A | US GOVERNMENT | TLE | 2,187 | 2,187 |

| PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | PLAN: ALIGNMENT PLAN | SHEET 13 | E |
|---|---|---|---|---|---|

2

PI STA = 101+96.78
Y = 723789.03
X = 835710.26
DELTA = 28°41'21"
D = 16°51'06"
T = 86.95
L = 170.24
R = 340.00
PC STA = 101+09.83
PT STA = 102+80.08
SE 4.8%

PI STA = 104+08.57
Y = 723957.97
X = 835843.94
DELTA = 18°08'06"
D = 9°57'52"
T = 91.77
L = 182.00
R = 575.00
PC STA = 103+16.81
PT STA = 104+98.80
SE 3.9%

PI STA = 112+75.16
Y = 724693.23
X = 836070.42
DELTA = 15°19'03"
D = 8°00'00"
T = 96.31
L = 191.47
R = 716.20
PC STA = 111+78.85
PT STA = 113+70.32
SE 3.5%

PI STA = 118+79.51
Y = 725298.56
X = 836073.76
DELTA = 10°43'16"
D = 6°37'26"
T = 81.17
L = 161.86
R = 865.00
PC STA = 117+98.34
PT STA = 119+60.20
SE 3.2%

SCHEDULE OF LANDS & INTERESTS REQUIRED

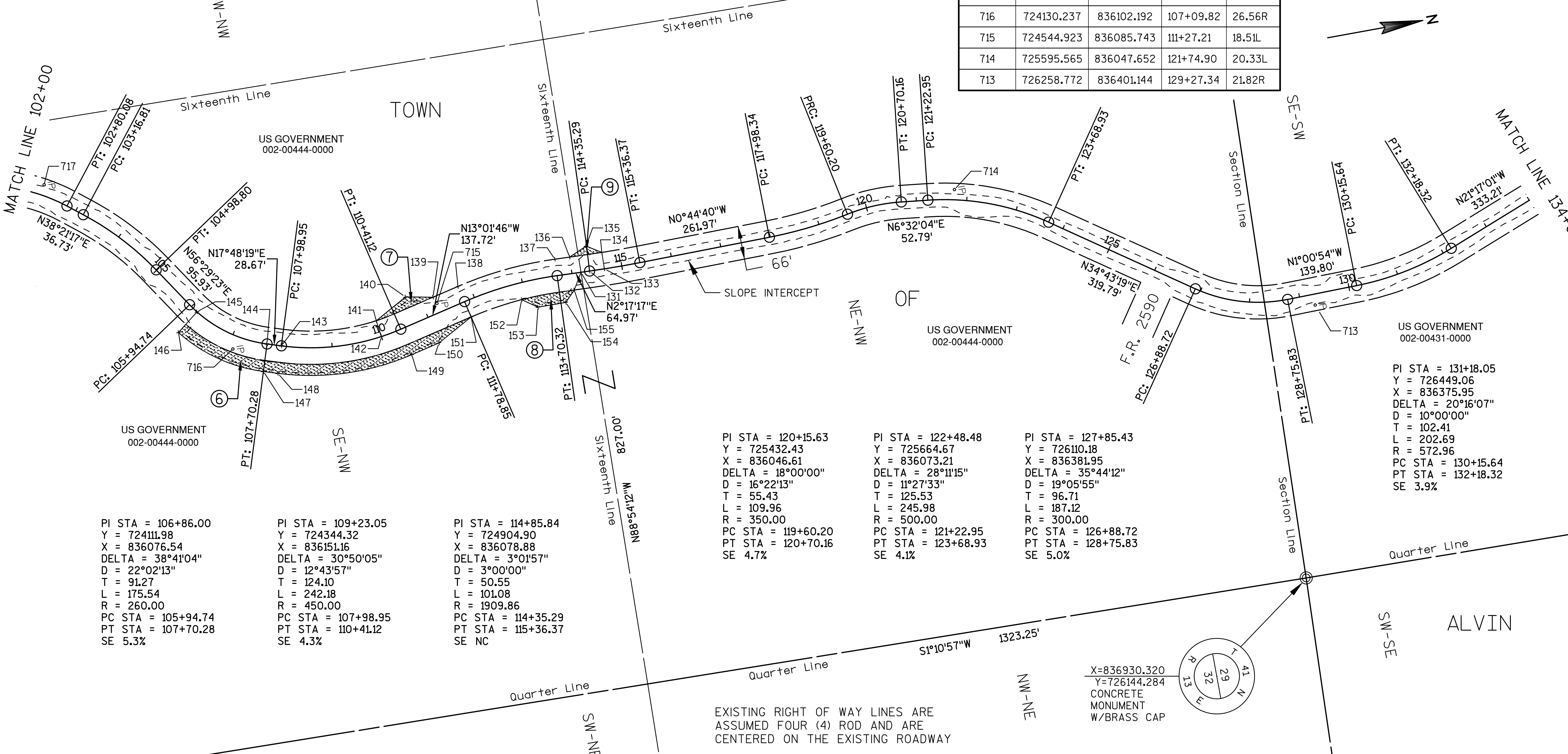
| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE SF | TOTAL SF |
|---|---|---|---|---|
| 6 | US GOVERNMENT | TLE | 12,571 | 12,571 |
| 7 | US GOVERNMENT | TLE | 1,382 | 1,382 |
| 8 | US GOVERNMENT | TLE | 1,810 | 1,810 |
| 9 | US GOVERNMENT | TLE | 549 | 549 |

2

CONTROL POINT TABLE

| Point # | Northing | Easting | Station | Offset |
|---|---|---|---|---|
| 716 | 724130.237 | 836102.192 | 107+09.82 | 26.56R |
| 715 | 724544.923 | 836085.743 | 111+27.21 | 18.51L |
| 714 | 725595.565 | 836047.652 | 121+74.90 | 20.33L |
| 713 | 726258.772 | 836401.144 | 129+27.34 | 21.82R |

SEE ALIGNMENT PLAN SHEET 8 FOR COURSE DATA AND POINT DATA




PI STA = 106+86.00
Y = 724111.98
X = 836076.54
DELTA = 38°41'04"
D = 22°02'13"
T = 91.27
L = 175.54
R = 260.00
PC STA = 105+94.74
PT STA = 107+70.28
SE 5.3%

PI STA = 109+23.05
Y = 724344.32
X = 836151.16
DELTA = 30°50'05"
D = 12°43'57"
T = 124.10
L = 242.18
R = 450.00
PC STA = 107+98.95
PT STA = 110+41.12
SE 4.3%

PI STA = 114+85.84
Y = 724904.90
X = 836078.88
DELTA = 3°01'57"
D = 3°00'00"
T = 50.55
L = 101.08
R = 1909.86
PC STA = 114+35.29
PT STA = 115+36.37
SE NC

PI STA = 120+15.63
Y = 725432.43
X = 836046.61
DELTA = 18°00'00"
D = 16°22'13"
T = 55.43
L = 109.96
R = 350.00
PC STA = 119+60.20
PT STA = 120+70.16
SE 4.7%

PI STA = 122+48.48
Y = 725664.67
X = 836073.21
DELTA = 28°11'15"
D = 11°27'33"
T = 125.53
L = 245.98
R = 500.00
PC STA = 121+22.95
PT STA = 123+68.93
SE 4.1%

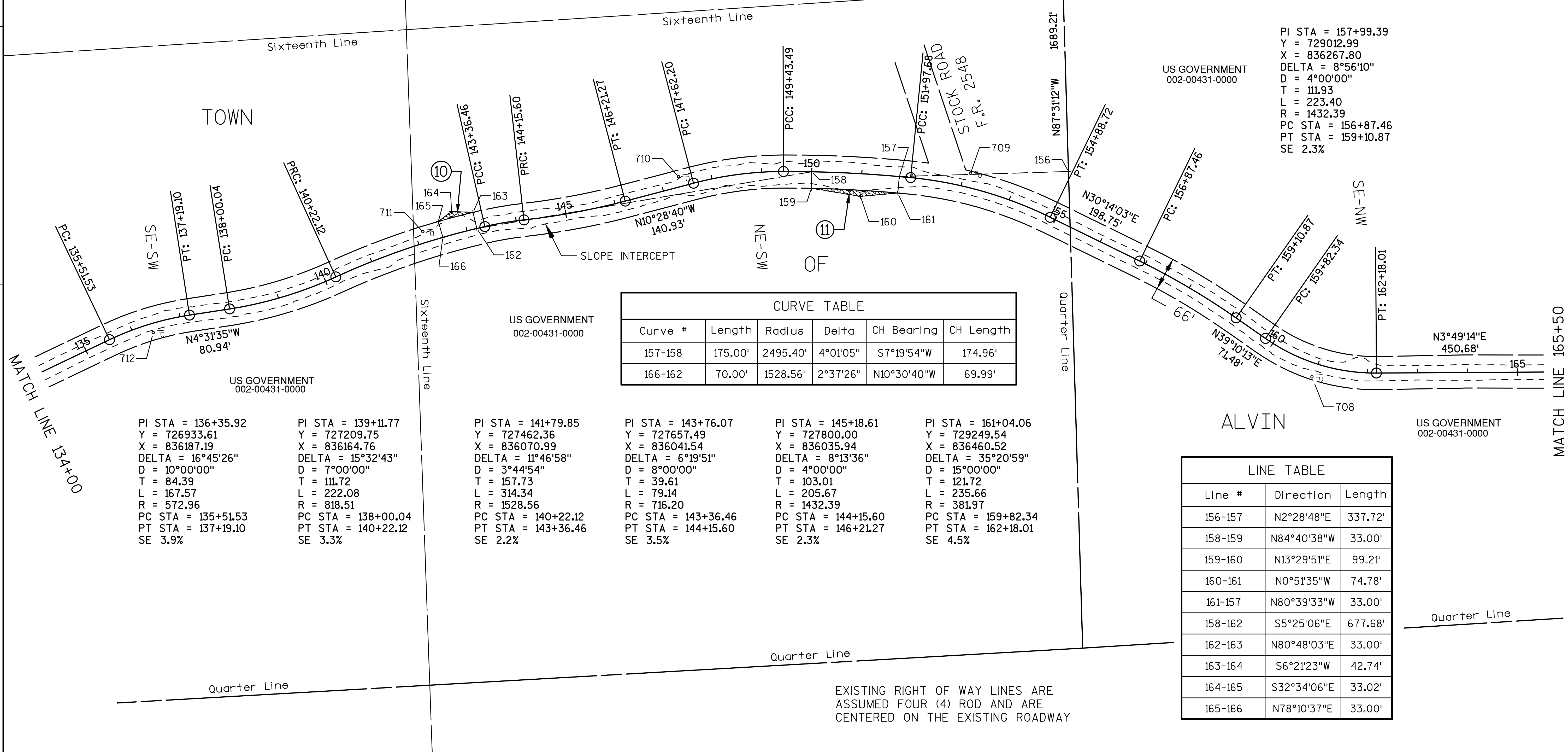
PI STA = 127+85.43
Y = 726110.18
X = 836381.95
DELTA = 35°44'12"
D = 19°05'55"
T = 96.71
L = 187.12
R = 300.00
PC STA = 126+88.72
PT STA = 128+75.83
SE 5.0%

PI STA = 131+18.05
Y = 726449.06
X = 836375.95
DELTA = 20°16'07"
D = 10°00'00"
T = 102.41
L = 202.69
R = 572.96
PC STA = 130+15.64
PT STA = 132+18.32
SE 3.9%

EXISTING RIGHT OF WAY LINES ARE ASSUMED FOUR (4) ROD AND ARE CENTERED ON THE EXISTING ROADWAY

| PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | PLAN: ALIGNMENT PLAN | SHEET 14 | E |
|---|---|---|---|---|---|

2




US GOVERNMENT
002-00431-0000

| CONTROL POINT TABLE | | | | |
|---|---|---|---|---|
| Point # | Northing | Easting | Station | Offset |
| 712 | 726943.038 | 836210.165 | 136+39.52 | 18.30R |
| 711 | 727494.162 | 836048.496 | 142+15.19 | 22.38L |
| 710 | 728010.822 | 835976.341 | 147+36.41 | 20.27L |
| 709 | 728592.542 | 836012.306 | 153+12.25 | 28.64L |
| 708 | 729242.086 | 836466.798 | 160+95.85 | 27.52R |

PI STA = 148+53.33
Y = 728129.49
X = 835975.01
DELTA = 14°30'11"
D = 8°00'00"
T = 91.13
L = 181.29
R = 716.20
PC STA = 147+62.20
PT STA = 149+43.49
SE 3.5%

PI STA = 150+70.70
Y = 728347.28
X = 835990.33
DELTA = 5°50'11"
D = 2°17'46"
T = 127.20
L = 254.19
R = 2495.40
PC STA = 149+43.49
PT STA = 151+97.68
SE NC

PI STA = 153+44.75
Y = 728617.50
X = 836037.31
DELTA = 20°22'21"
D = 7°00'00"
T = 147.07
L = 291.04
R = 818.51
PC STA = 151+97.68
PT STA = 154+88.72
SE 3.3%

| SCHEDULE OF LANDS & INTERESTS REQUIRED | | | | |
|---|---|---|---|---|
| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | TLE SF | TOTAL SF |
| 10 | US GOVERNMENT | TLE | 424 | 424 |
| 11 | US GOVERNMENT | TLE | 1,094 | 1,094 |

PI STA = 157+99.39
Y = 729012.99
X = 836267.80
DELTA = 8°56'10"
D = 4°00'00"
T = 111.93
L = 223.40
R = 1432.39
PC STA = 156+87.46
PT STA = 159+10.87
SE 2.3%

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| Curve # | Length | Radius | Delta | CH Bearing | CH Length |
| 157-158 | 175.00' | 2495.40' | 4°01'05" | S7°19'54"W | 174.96' |
| 166-162 | 70.00' | 1528.56' | 2°37'26" | N10°30'40"W | 69.99' |

PI STA = 136+35.92
Y = 726933.61
X = 836187.19
DELTA = 16°45'26"
D = 10°00'00"
T = 84.39
L = 167.57
R = 572.96
PC STA = 135+51.53
PT STA = 137+19.10
SE 3.9%

PI STA = 139+11.77
Y = 727209.75
X = 836164.76
DELTA = 15°32'43"
D = 7°00'00"
T = 111.72
L = 222.08
R = 818.51
PC STA = 138+00.04
PT STA = 140+22.12
SE 3.3%

PI STA = 141+79.85
Y = 727462.36
X = 836070.99
DELTA = 11°46'58"
D = 3°44'54"
T = 157.73
L = 314.34
R = 1528.56
PC STA = 140+22.12
PT STA = 143+36.46
SE 2.2%

PI STA = 143+76.07
Y = 727657.49
X = 836041.54
DELTA = 6°19'51"
D = 8°00'00"
T = 39.61
L = 79.14
R = 716.20
PC STA = 143+36.46
PT STA = 144+15.60
SE 3.5%

PI STA = 145+18.61
Y = 727800.00
X = 836035.94
DELTA = 8°13'36"
D = 4°00'00"
T = 103.01
L = 205.67
R = 1432.39
PC STA = 144+15.60
PT STA = 146+21.27
SE 2.3%

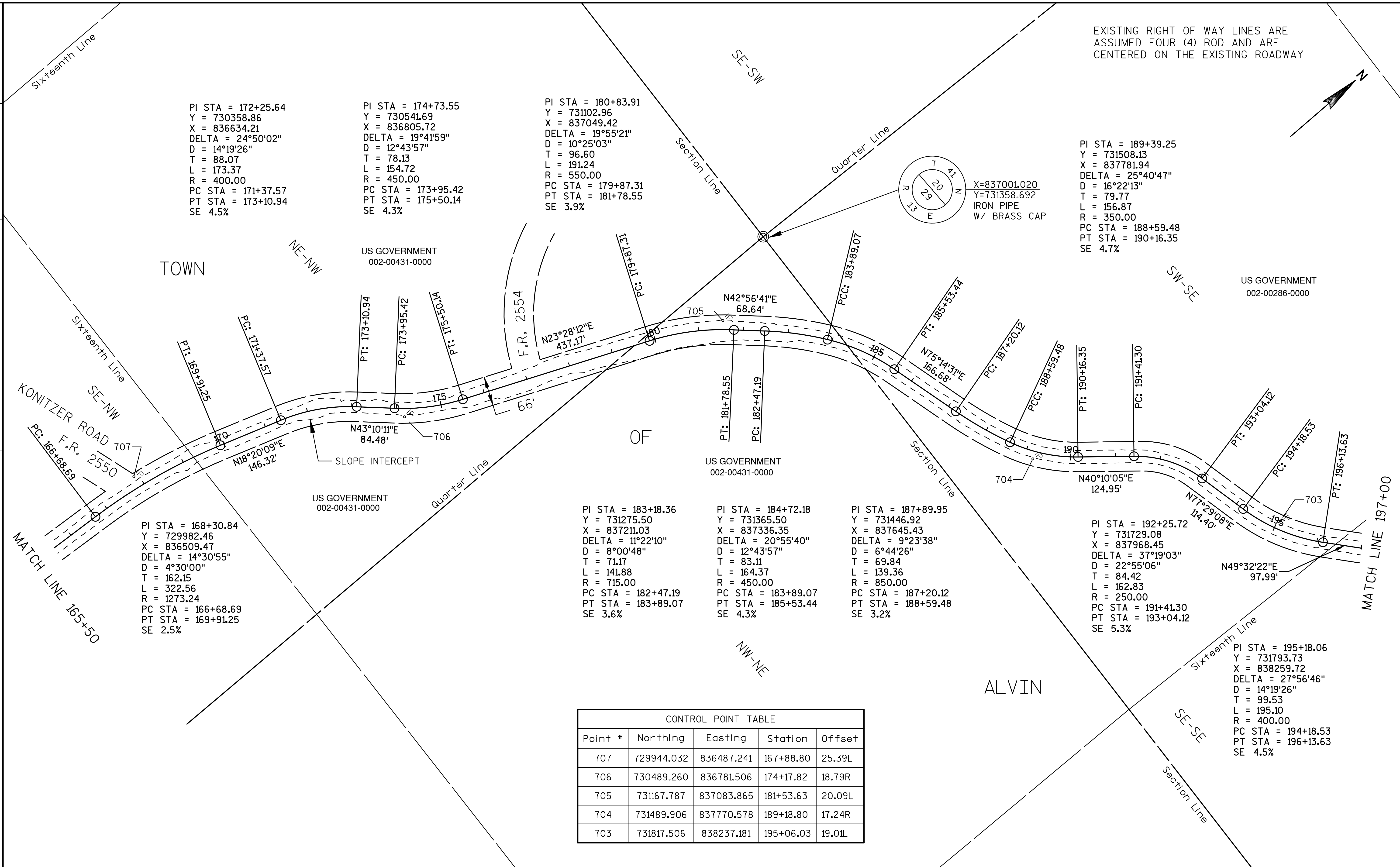
PI STA = 161+04.06
Y = 729249.54
X = 836460.52
DELTA = 35°20'59"
D = 15°00'00"
T = 121.72
L = 235.66
R = 381.97
PC STA = 159+82.34
PT STA = 162+18.01
SE 4.5%

| LINE TABLE | | |
|---|---|---|
| Line # | Direction | Length |
| 156-157 | N2°28'48"E | 337.72' |
| 158-159 | N84°40'38"W | 33.00' |
| 159-160 | N13°29'51"E | 99.21' |
| 160-161 | N0°51'35"W | 74.78' |
| 161-157 | N80°39'33"W | 33.00' |
| 158-162 | S5°25'06"E | 677.68' |
| 162-163 | N80°48'03"E | 33.00' |
| 163-164 | S6°21'23"W | 42.74' |
| 164-165 | S32°34'06"E | 33.02' |
| 165-166 | N78°10'37"E | 33.00' |

EXISTING RIGHT OF WAY LINES ARE ASSUMED FOUR (4) ROD AND ARE CENTERED ON THE EXISTING ROADWAY

2

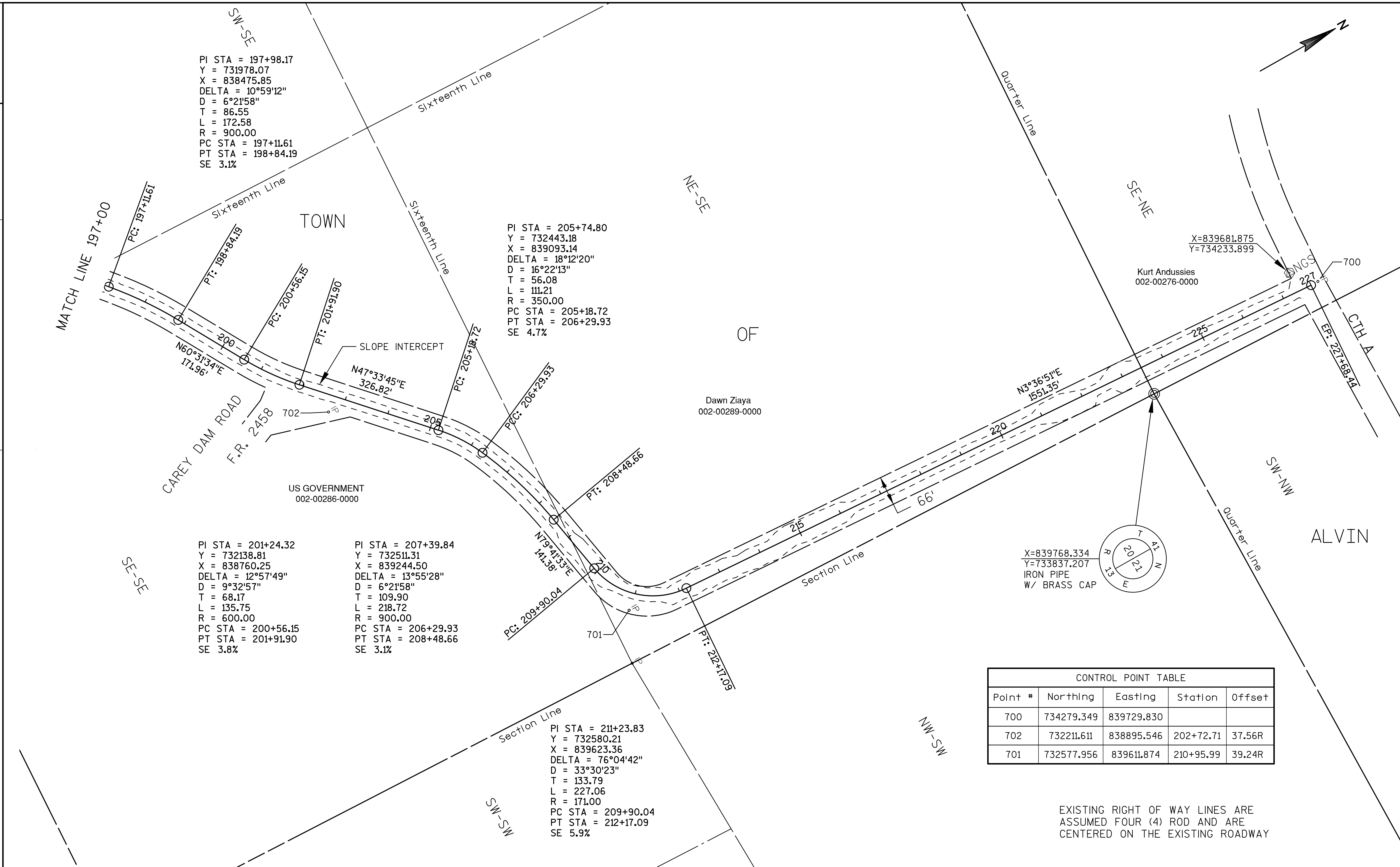
| PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | PLAN: ALIGNMENT PLAN | SHEET 15 | E |
|---|---|---|---|---|---|




CONTROL POINT TABLE

| Point # | Northing | Easting | Station | Offset |
|---|---|---|---|---|
| 707 | 729944.032 | 836487.241 | 167+88.80 | 25.39L |
| 706 | 730489.260 | 836781.506 | 174+17.82 | 18.79R |
| 705 | 731167.787 | 837083.865 | 181+53.63 | 20.09L |
| 704 | 731489.906 | 837770.578 | 189+18.80 | 17.24R |
| 703 | 731817.506 | 838237.181 | 195+06.03 | 19.01L |

| PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | PLAN: ALIGNMENT PLAN | SHEET 16 | E |
|---|---|---|---|---|---|




| CONTROL POINT TABLE | | | | |
|---|---|---|---|---|
| Point # | Northing | Easting | Station | Offset |
| 700 | 734279.349 | 839729.830 | | |
| 702 | 732211.611 | 838895.546 | 202+72.71 | 37.56R |
| 701 | 732577.956 | 839611.874 | 210+95.99 | 39.24R |

EXISTING RIGHT OF WAY LINES ARE ASSUMED FOUR (4) ROD AND ARE CENTERED ON THE EXISTING ROADWAY

| PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | PLAN: ALIGNMENT PLAN | SHEET 17 | E |
|---|---|---|---|---|---|

2

2

## SHEET AL2 (STATION 39+00-71+00)

RIGHT OF WAY POINTS

| Point # | Northing | Easting | Station | Offset |
|---|---|---|---|---|
| 104 | 720913.989 | 835632.484 | 70+05.45 | 0.00R |
| 105 | 720742.008 | 835521.378 | 68+00.00 | 0.00R |
| 106 | 720763.634 | 835496.572 | 68+00.00 | 32.91L |
| 107 | 720724.432 | 835445.168 | 67+35.97 | 45.00L |
| 108 | 720609.320 | 835381.187 | 66+23.42 | 45.00L |
| 109 | 720586.831 | 835374.667 | 66+00.00 | 45.00L |
| 110 | 720498.186 | 835331.710 | 65+00.00 | 60.00L |
| 111 | 720315.100 | 835259.801 | 63+00.00 | 60.00L |
| 112 | 720191.627 | 835245.013 | 61+80.00 | 27.38L |
| 113 | 720181.354 | 835270.393 | 61+80.00 | 0.00R |
| 114 | 720292.587 | 835315.418 | 63+00.00 | 0.00R |
| 115 | 720277.641 | 835352.341 | 63+00.00 | 39.83R |
| 116 | 720316.422 | 835389.795 | 63+50.00 | 60.00R |
| 117 | 720386.065 | 835417.981 | 64+25.00 | 60.00R |
| 118 | 720442.401 | 835415.385 | 64+75.00 | 37.46R |
| 119 | 720533.818 | 835442.659 | 65+68.03 | 35.06R |
| 120 | 720564.828 | 835450.559 | 66+00.00 | 34.02R |
| 121 | 720632.652 | 835506.485 | 67+00.00 | 60.00R |
| 122 | 720671.579 | 835503.942 | 67+35.97 | 34.04R |
| 123 | 720694.343 | 835478.628 | 67+35.97 | 0.00R |
| 124 | 720733.752 | 835514.068 | 67+88.97 | 0.00R |

LINE TABLE

| Line # | Direction | Length |
|---|---|---|
| 105-106 | N48°55'05"W | 32.91' |
| 106-107 | S52°40'12"W | 64.65' |
| 108-109 | S16°10'04"W | 23.42' |
| 109-110 | S25°51'16"W | 98.51' |
| 110-111 | S21°26'34"W | 196.70' |
| 111-112 | S6°49'47"W | 124.35' |
| 112-113 | S67°57'47"E | 27.38' |
| 113-114 | N22°02'13"E | 120.00' |
| 114-115 | S67°57'47"E | 39.83' |
| 115-116 | N44°00'10"E | 53.91' |
| 116-117 | N22°02'04"E | 75.13' |
| 117-118 | N2°38'17"W | 56.40' |
| 119-120 | N14°17'35"E | 32.00' |
| 120-121 | N39°30'30"E | 87.91' |
| 121-122 | N3°44'13"W | 39.01' |
| 122-123 | N48°02'09"W | 34.04' |
| 123-124 | N41°57'51"E | 53.00' |

CURVE TABLE

| Curve # | Length | Radius | Delta | CH Bearing | CH Length |
|---|---|---|---|---|---|
| 104-105 | 205.45' | 716.20' | 16°26'10" | S32°51'50"W | 204.75' |
| 107-108 | 132.82' | 295.00' | 25°47'46" | S29°03'57"W | 131.70' |
| 118-119 | 95.43' | 1178.92' | 4°38'16" | N16°36'43"E | 95.40' |
| 124-105 | 11.03' | 716.20' | 0°52'56" | N41°31'23"E | 11.03' |

## SHEET AL4 (STATION 102+00-134+00)

RIGHT OF WAY POINTS

| Point # | Northing | Easting | Station | Offset |
|---|---|---|---|---|
| 131 | 724837.147 | 836076.169 | 114+18.03 | 0.00R |
| 132 | 724854.385 | 836076.858 | 114+35.29 | 0.00R |
| 133 | 724884.083 | 836077.813 | 114+65.00 | 0.00R |
| 134 | 724884.887 | 836044.823 | 114+65.00 | 33.00L |
| 135 | 724856.381 | 836026.898 | 114+35.29 | 50.00L |
| 136 | 724820.444 | 836042.475 | 114+00.00 | 33.00L |
| 137 | 724790.784 | 836041.290 | 113+70.32 | 33.00L |
| 138 | 724591.964 | 836059.981 | 111+78.85 | 33.00L |
| 139 | 724539.504 | 836072.121 | 111+25.00 | 33.00L |
| 140 | 724485.832 | 836061.960 | 110+75.00 | 55.00L |
| 141 | 724420.320 | 836097.916 | 110+00.00 | 33.00L |
| 142 | 724424.795 | 836130.611 | 110+00.00 | 0.00R |
| 143 | 724226.171 | 836113.213 | 107+98.95 | 0.00R |
| 144 | 724198.877 | 836104.447 | 107+70.28 | 0.00R |
| 145 | 724073.430 | 836016.886 | 106+15.00 | 0.00R |
| 146 | 724030.076 | 836050.729 | 106+15.00 | 55.00R |
| 147 | 724182.059 | 836156.813 | 107+70.28 | 55.00R |
| 148 | 724209.353 | 836165.579 | 107+98.95 | 55.00R |
| 149 | 724477.627 | 836176.766 | 110+41.12 | 55.00R |
| 150 | 724534.988 | 836163.492 | 111+00.00 | 55.00R |
| 151 | 724606.844 | 836124.282 | 111+78.85 | 33.00R |
| 152 | 724711.584 | 836108.473 | 112+90.00 | 33.00R |
| 153 | 724740.829 | 836128.997 | 113+20.00 | 55.00R |
| 154 | 724796.947 | 836129.607 | 113+80.00 | 55.00R |
| 155 | 724817.809 | 836108.423 | 114+00.00 | 33.00R |

LINE TABLE

| Line # | Direction | Length |
|---|---|---|
| 131-132 | N2°17'17"E | 17.25' |
| 133-134 | N88°36'12"W | 33.00' |
| 134-135 | S32°09'46"W | 33.67' |
| 135-136 | S23°26'07"E | 39.17' |
| 136-137 | S2°17'17"W | 29.68' |
| 138-139 | S13°01'46"E | 53.85' |
| 139-140 | S10°43'12"W | 54.63' |
| 140-141 | S28°45'35"E | 74.73' |
| 141-142 | N82°12'23"E | 33.00' |
| 143-144 | S17°48'19"W | 28.67' |
| 145-146 | S37°58'33"E | 55.00' |
| 147-148 | N17°48'19"E | 28.67' |
| 149-150 | N13°01'46"W | 58.88' |
| 150-151 | N28°37'12"W | 81.86' |
| 152-153 | N35°03'38"E | 35.73' |
| 153-154 | N0°37'22"E | 56.12' |
| 154-155 | N45°26'17"W | 29.73' |
| 155-131 | N59°03'18"W | 37.61' |

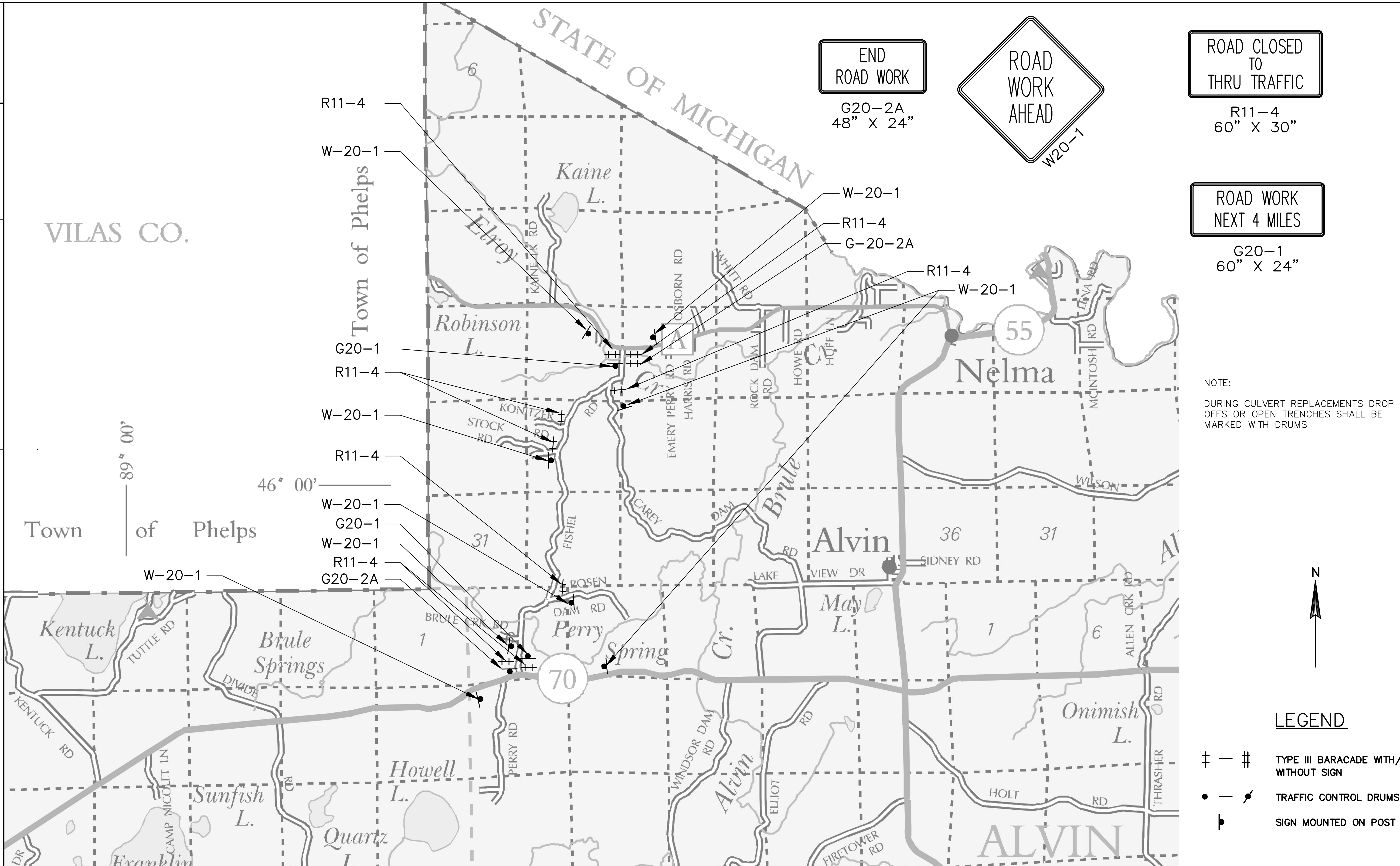
CURVE TABLE

| Curve # | Length | Radius | Delta | CH Bearing | CH Length |
|---|---|---|---|---|---|
| 132-133 | 29.71' | 1909.86' | 0°53'29" | N1°50'33"E | 29.71' |
| 137-138 | 200.29' | 749.20' | 15°19'03" | S5°22'14"E | 199.70' |
| 142-143 | 201.05' | 450.00' | 25°35'56" | S5°00'21"W | 199.38' |
| 144-145 | 155.28' | 260.00' | 34°13'08" | S34°54'53"W | 152.98' |
| 146-147 | 188.13' | 315.00' | 34°13'08" | N34°54'53"E | 185.34' |
| 148-149 | 271.77' | 505.00' | 30°50'05" | N2°23'16"E | 268.51' |
| 151-152 | 106.03' | 683.20' | 8°53'32" | N8°35'00"W | 105.93' |

## SHEET AL5 (STATION 134+00-165+00)

RIGHT OF WAY POINTS

| Point # | Northing | Easting | Station | Offset |
|---|---|---|---|---|
| 156 | 728787.644 | 836022.949 | 154+82.19 | 98.11L |
| 157 | 728450.245 | 836008.336 | 151+75.00 | 0.00R |
| 158 | 728276.711 | 835986.008 | 150+00.00 | 0.00R |
| 159 | 728273.650 | 836018.866 | 150+00.00 | 33.00R |
| 160 | 728370.115 | 836042.021 | 151+00.03 | 45.14R |
| 161 | 728444.889 | 836040.899 | 151+75.00 | 33.00R |
| 162 | 727602.055 | 836049.999 | 143+20.00 | 0.00R |
| 163 | 727596.780 | 836017.423 | 143+20.00 | 33.00L |
| 164 | 727554.304 | 836012.692 | 142+80.00 | 45.00L |
| 165 | 727526.475 | 836030.468 | 142+50.00 | 33.00L |
| 166 | 727533.236 | 836062.768 | 142+50.00 | 0.00R |




| PROJECT NO:9808–00–70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN: TRAFFIC CONTROL PLAN | SHEET 19 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\TRAFFIC CONTROL PLAN.DWG PLOT DATE : 9/3/2008 9:36 AM PLOT BY : RANDAL L. ROETHLE PLOT NAME : PLOT SCALE : 0.000200

WISDOT/CADDS SHEET 42

3

3

DATE 28JAN13 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 | 9808-00-70 QUANTITY |
|---|---|---|---|---|---|
| 0010 | 201.0105 | CLEARING | STA | 217.000 | 217.000 |
| 0020 | 201.0205 | GRUBBING | STA | 217.000 | 217.000 |
| 0030 | 203.0100 | REMOVING SMALL PIPE CULVERTS 01. 9808-00-70 | EACH | 11.000 | 11.000 |
| 0040 | 205.0100 | EXCAVATION COMMON | CY | 10,000.000 | 10,000.000 |
| 0050 | 208.0100 | BORROW | CY | 9,496.000 | 9,496.000 |
| 0060 | 213.0100 | FINISHING ROADWAY (PROJECT) 01. 9808-00-70 | EACH | 1.000 | 1.000 |
| 0070 | 214.0100 | OBLITERATING OLD ROAD | STA | 2.000 | 2.000 |
| 0080 | 305.0110 | BASE AGGREGATE DENSE 3/4-INCH | TON | 1,300.000 | 1,300.000 |
| 0090 | 305.0120 | BASE AGGREGATE DENSE 1 1/4-INCH | TON | 27,500.000 | 27,500.000 |
| 0100 | 325.0100 | PULVERIZE AND RELAY | SY | 29,200.000 | 29,200.000 |
| 0110 | 455.0115 | ASPHALTIC MATERIAL PG64-22 | TON | 360.000 | 360.000 |
| 0120 | 460.1100 | HMA PAVEMENT TYPE E-0.3 | TON | 6,010.000 | 6,010.000 |
| 0130 | 465.0315 | ASPHALTIC FLUMES | SY | 80.000 | 80.000 |
| 0140 | 521.0124 | CULVERT PIPE CORRUGATED STEEL 24-INCH | LF | 176.000 | 176.000 |
| 0150 | 521.0724 | PIPE ARCH CORRUGATED STEEL 24X18-INCH | LF | 66.000 | 66.000 |
| 0160 | 521.0728 | PIPE ARCH CORRUGATED STEEL 28X20-INCH | LF | 196.000 | 196.000 |
| 0170 | 521.1024 | APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH | EACH | 8.000 | 8.000 |
| 0180 | 521.1224 | APRON ENDWALLS FOR PIPE ARCH STEEL 24X18-INCH | EACH | 4.000 | 4.000 |
| 0190 | 521.1228 | APRON ENDWALLS FOR PIPE ARCH STEEL 28X20-INCH | EACH | 10.000 | 10.000 |
| 0200 | 616.0700.S | FENCE SAFETY | LF | 500.000 | 500.000 |
| 0210 | 619.1000 | MOBILIZATION | EACH | 1.000 | 1.000 |
| 0220 | 625.0500 | SALVAGED TOPSOIL | SY | 30,000.000 | 30,000.000 |
| 0230 | 627.0200 | MULCHING | SY | 24,700.000 | 24,700.000 |
| 0240 | 628.1104 | EROSION BALES | EACH | 250.000 | 250.000 |
| 0250 | 628.1504 | SILT FENCE | LF | 5,600.000 | 5,600.000 |
| 0260 | 628.1520 | SILT FENCE MAINTENANCE | LF | 22,400.000 | 22,400.000 |
| 0270 | 628.1905 | MOBILIZATIONS EROSION CONTROL | EACH | 5.000 | 5.000 |
| 0280 | 628.1910 | MOBILIZATIONS EMERGENCY EROSION CONTROL | EACH | 3.000 | 3.000 |
| 0290 | 628.2002 | EROSION MAT CLASS I TYPE A | SY | 3,200.000 | 3,200.000 |
| 0300 | 628.2004 | EROSION MAT CLASS I TYPE B | SY | 2,100.000 | 2,100.000 |
| 0310 | 628.7504 | TEMPORARY DITCH CHECKS | LF | 500.000 | 500.000 |
| 0320 | 628.7555 | CULVERT PIPE CHECKS | EACH | 11.000 | 11.000 |
| 0330 | 629.0210 | FERTILIZER TYPE B | CWT | 20.800 | 20.800 |
| 0340 | 630.0120 | SEEDING MIXTURE NO. 20 | LB | 931.000 | 931.000 |
| 0350 | 633.0100 | DELINEATOR POSTS STEEL | EACH | 8.000 | 8.000 |
| 0360 | 633.5200 | MARKERS CULVERT END | EACH | 22.000 | 22.000 |
| 0370 | 634.0612 | POSTS WOOD 4X6-INCH X 12-FT | EACH | 8.000 | 8.000 |
| 0380 | 634.0616 | POSTS WOOD 4X6-INCH X 16-FT | EACH | 25.000 | 25.000 |
| 0390 | 637.0202 | SIGNS REFLECTIVE TYPE II | SF | 225.820 | 225.820 |
| 0400 | 638.2602 | REMOVING SIGNS TYPE II | EACH | 21.000 | 21.000 |
| 0410 | 642.5001 | FIELD OFFICE TYPE B | EACH | 1.000 | 1.000 |
| 0420 | 643.0100 | TRAFFIC CONTROL (PROJECT) 01. 9808-00-70 | EACH | 1.000 | 1.000 |
| 0430 | 643.0300 | TRAFFIC CONTROL DRUMS | DAY | 1,300.000 | 1,300.000 |
| 0440 | 643.0420 | TRAFFIC CONTROL BARRICADES TYPE III | DAY | 2,100.000 | 2,100.000 |
| 0450 | 643.0705 | TRAFFIC CONTROL WARNING LIGHTS TYPE A | DAY | 4,000.000 | 4,000.000 |
| 0460 | 643.0715 | TRAFFIC CONTROL WARNING LIGHTS TYPE C | DAY | 1,300.000 | 1,300.000 |
| 0470 | 643.0900 | TRAFFIC CONTROL SIGNS | DAY | 2,500.000 | 2,500.000 |
| 0480 | 646.0103 | PAVEMENT MARKING PAINT 4-INCH | LF | 45,910.000 | 45,910.000 |
| 0490 | 650.5000 | CONSTRUCTION STAKING BASE | LF | 21,690.000 | 21,690.000 |
| 0500 | 650.6000 | CONSTRUCTION STAKING PIPE CULVERTS | EACH | 11.000 | 11.000 |

DATE 28JAN13 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 | 9808-00-70 QUANTITY |
|---|---|---|---|---|---|
| 0510 | 650.8000 | CONSTRUCTION STAKING RESURFACING REFERENCE | LF | 13,140.000 | 13,140.000 |
| 0520 | 650.9910 | CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 9808-00-70 | LS | 1.000 | 1.000 |
| 0530 | 650.9920 | CONSTRUCTION STAKING SLOPE STAKES | LF | 21,690.000 | 21,690.000 |
| 0540 | ASP.1T0A | ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR | HRS | 600.000 | 600.000 |
| 0550 | ASP.1T0G | ON-THE-JOB TRAINING GRADUATE AT $5.00/HR | HRS | 1,200.000 | 1,200.000 |

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## CLEARING & GRUBBING

| STATION | LOCATION | OFFSET | 201.0105 CLEARING STA | 201.0205 GRUBBING STA |
|---|---|---|---|---|
| 10+59.26 - 227+49.29 | Fishel Road | LT/RT | 217.0 | 217.0 |
| TOTAL | | | 217.0 | 217.0 |

| LOCATION | 213.0100 FINISHING ROADWAY (9808-00-70) EACH | 619.1000 MOBILIZATION EACH | 642.5000 FIELD OFFICE TYPE B (9808-00-70) EACH | 643.0100 TRAFFIC CONTROL (9808-00-70) EACH |
|---|---|---|---|---|
| FISHEL ROAD | 1 | 1 | 1 | 1 |
| PROJECT TOTAL | 1 | 1 | 1 | 1 |

## FENCE SAFETY

| STATION | LOCATION | OFFSET | 616.0700.S FENCE SAFETY LF |
|---|---|---|---|
| 123+00. - 128+00. | FISHEL ROAD | LT | 500 |
| TOTAL | | | 500 |

## PULVERIZE & RELAY

| STATION | LOCATION | 325.0100 PULVERIZE & RELAY SY |
|---|---|---|
| 10+59.26 - 24+50. | Fishel Road | 3,091 |
| 30+00. - 40+00. | Fishel Road | 2,222 |
| 50+00. - 53+00. | Fishel Road | 667 |
| 74+00. - 76+00. | Fishel Road | 444 |
| 80+00. - 94+00. | Fishel Road | 3,111 |
| 114+50. - 126+50. | Fishel Road | 2,667 |
| 130+00. - 147+50. | Fishel Road | 3,889 |
| 152+00. - 175+50. | Fishel Road | 5,222 |
| 183+00. - 209+00. | Fishel Road | 5,778 |
| 216+00. - 221+00. | Fishel Road | 1,111 |
| 223+00. - 227+49.29 | Fishel Road | 998 |
| TOTAL | | 29,200 |

## PAVEMENT MARKING

| STATION | LOCATION | OFFSET | 646.0103 PAVEMENT MARKING PAINT 4-INCH WHITE LF | YELLOW LF | REMARKS |
|---|---|---|---|---|---|
| 10+59.26 - 227+49.29 | Fishel Road | Centerline | - | 43,380 | DOUBLE YELLOW |
| 37+61 - 43+85 | Fishel Road | LT/RT | 1250 | - | LANE LINES |
| 219+20 - 225+57 | Fishel Road | LT/RT | 1280 | - | LANE LINES |
| TOTAL | | | 45,910 | | |

## BASE AGGREGATE

| STATION | LOCATION | 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON | 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON |
|---|---|---|---|
| 10+59.26 - 227+49.29 | Fishel | 640 | 22,700 |
| DRIVEWAYS & SIDEROADS | | 300 | 500 |
| UNDISTRIBUTED | | 360 | 4300 |
| TOTAL | | 1,300 | 27,500 |

## ASPHALT

| STATION | LOCATION | 455.0115 ASPHALTIC MATERIAL PG64-22 TON | 460.1100 HMA PAVEMENT TYPE E-0.3 TON | 465.0315 ASPHALTIC FLUMES SY |
|---|---|---|---|---|
| 10+59.26 - 227+49.29 | Fishel | 358 | 5,970 | 80 |
| Sideroads & Driveways | | 2 | 40 | - |
| TOTAL | | 360 | 6,010 | 80 |

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## EARTHWORK SUMMARY

| Division | From/To Station | Location | Common Excavation (1) (item # 205.0100) Cut (2) | EBS Excavation (3) | Salvaged/Unusable Pavement Material (4) | Available Material (5) | Marsh Excavation (6) (item #205.0500 | Rock Excavation (7) item #205.0200 | Reduced Marsh in Fill (8) Factor 0.60 | Reduced EBS in Fill (9) Factor 0.80 | Expanded Marsh Backfill (10) Factor 1.50 | Expanded EBS Backfill (11) Factor 1.30 | Expanded Rock (12) Factor 1.10 | Unexpanded Fill | Expanded Fill (13) Factor 1.25 | Mass Ordinate +/- (14) | Waste | Borrow (item #208.0100) | Comment: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10+59.26-227+49. | Fishel RD | 9187 | 0 | 0 | 9187 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14474 | 18093 | -8906 | | 8906 | |
| | Sideroads | Project | | | | | | | | | | | | 400 | 500 | -500 | | 500 | |
| | Undistributed | Project | 813 | | | 813 | | | | | | | | 723 | 904 | -91 | | 91 | |
| Division 1 Subtotal | | | 10000 | 0 | 0 | 10000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15597 | 19496 | -9496 | | 9496 | |
| Grand Total | | | 10000 | 0 | 0 | 10000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15597 | 19496 | -9496 | 0 | 9496 | |
| | | | Total Common Exc | 10000 | | | | | | | | | | | | | | | |

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 usable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
9) Reduced EBS in Fill - Excavated EBS material is usable 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.
15) Use 9,128 CY of material from Division 1. Borrow Excavation item number 208.0100

## OBLITERATING OLD ROAD

| STATION | LOCATION | OFFSET | 214.0100 OBLITERATING OLD ROAD STA |
|---|---|---|---|
| 500+00. - 502+00. | CAREY DAM ROAD | RT | 2.0 |
| TOTAL | | | 2.0 |

3

## CULVERT PIPE CORRUGATED STEEL

| | LEFT | | | RIGHT | | | 203.0100 | 521.0124 | 521.0724 | 521.0728 | 521.1024 | 521.1224 | 521.1228 | 628.7555 | 633.5200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | REMOVING SMALL PIPE CULVERTS | CULVERT PIPE CORRUGATED STEEL 24-INCH (MINIMUM STEEL THICKNESS 0.064") | PIPE ARCH CORRUGATED STEEL 24x18-INCH (MINIMUM STEEL THICKNESS 0.064") | PIPE ARCH CORRUGATED STEEL 28x20-INCH (MINIMUM STEEL THICKNESS 0.064") | APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH | APRON ENDWALLS FOR PIPE ARCH STEEL 24x18-INCH | APRON ENDWALLS FOR PIPE ARCH STEEL 28x20-INCH | CULVERT PIPE CHECKS | MARKERS CULVERT END |
| LOCATION | STATION | OFFSET TO END OF PIPE LF | INVERT ELEVATION | STATION | OFFSET TO END OF PIPE LF | INVERT ELEVATION | EACH | LF | LF | LF | EACH | EACH | EACH | EACH | EACH |
| FISHEL RD | 23+88 | 16 | 1631.30 | 23+88 | 16 | 1630.80 | 1 | - | - | 32 | - | - | 2 | 1 | 2 |
| FISHEL RD | 27+75 | 18 | 1632.52 | 27+75 | 22 | 1631.27 | 1 | 40 | - | - | 2 | - | - | 1 | 2 |
| FISHEL RD | 46+01 | 20 | 1622.27 | 46+01 | 22 | 1621.33 | 1 | - | - | 42 | - | - | 2 | 1 | 2 |
| FISHEL RD | 58+72 | 20 | 1620.47 | 58+72 | 22 | 1620.23 | 1 | 42 | - | - | 2 | - | - | 1 | 2 |
| FISHEL RD | 60+63 | 20 | 1625.05 | 60+63 | 18 | 1626.85 | 1 | - | - | 38 | - | - | 2 | 1 | 2 |
| FISHEL RD | 78+30 | 22 | 1627.20 | 78+30 | 26 | 1627.71 | 1 | 48 | - | - | 2 | - | - | 1 | 2 |
| FISHEL RD | 116+32 | 14 | 1655.93 | 116+32 | 14 | 1655.15 | 1 | - | 28 | - | - | 2 | - | 1 | 2 |
| FISHEL RD | 161+88 | 22 | 1726.10 | 161+88 | 16 | 1729.03 | 1 | - | 38 | - | - | 2 | - | 1 | 2 |
| FISHEL RD | 177+70 | 28 | 1663.79 | 177+70 | 18 | 1666.78 | 1 | 46 | - | - | 2 | - | - | 1 | 2 |
| FISHEL RD | 211+42 | 18 | 1588.90 | 211+42 | 24 | 1588.00 | 1 | - | - | 42 | - | - | 2 | 1 | 2 |
| FISHEL RD | 213+70 | 17 | 1589.91 | 213+70 | 25 | 1585.20 | 1 | - | - | 42 | - | - | 2 | 1 | 2 |
| TOTAL | | | | | | | 11 | 176 | 66 | 196 | 8 | 4 | 10 | 11 | 22 |

* OFFSET TO END OF PIPE IS FROM CENTER LINE OF ROADWAY.

## CONSTRUCTION STAKING

| | | 650.5000 | 650.6000 | 650.8000 | 650.9910 | 651.9920 |
|---|---|---|---|---|---|---|
| | | CONSTRUCTION STAKING BASE | CONSTRUCTION STAKING PIPE CULVERTS | CONSTRUCTION STAKING RESURFACING REFERENCE | CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) | CONSTRUCTION STAKING SLOPE STAKES |
| LOCATION | STATION | LF | EACH | LF | LS | LF |
| FISHEL ROAD | 10+59.26 - 227+49.29 | 21,690 | - | - | 1 | 21,690 |
| FISHEL ROAD | 10+59.26 - 24+50 | - | - | 1,391 | - | - |
| FISHEL ROAD | 30+00 - 40+00 | - | - | 1,000 | - | - |
| FISHEL ROAD | 50+00 - 53+00 | - | - | 1,300 | - | - |
| FISHEL ROAD | 74+00 - 76+00 | - | - | 200 | - | - |
| FISHEL ROAD | 80+00 - 94+00 | - | - | 1,400 | - | - |
| FISHEL ROAD | 114+50 - 126+50 | - | - | 1,200 | - | - |
| FISHEL ROAD | 130+00 - 147+50 | - | - | 1,750 | - | - |
| FISHEL ROAD | 152+00 - 175+50 | - | - | 1,350 | - | - |
| FISHEL ROAD | 183+00 - 209+00 | - | - | 2,600 | - | - |
| FISHEL ROAD | 216+00 - 221+00 | - | - | 500 | - | - |
| FISHEL ROAD | 223+00 - 227+49.29 | - | - | 449 | - | - |
| FISHEL ROAD | 23+88 | - | 1 | - | - | - |
| FISHEL ROAD | 27+75 | - | 1 | - | - | - |
| FISHEL ROAD | 46+01 | - | 1 | - | - | - |
| FISHEL ROAD | 58+72 | - | 1 | - | - | - |
| FISHEL ROAD | 60+63 | - | 1 | - | - | - |
| FISHEL ROAD | 78+30 | - | 1 | - | - | - |
| FISHEL ROAD | 116+32 | - | 1 | - | - | - |
| FISHEL ROAD | 161+88 | - | 1 | - | - | - |
| FISHEL ROAD | 177+70 | - | 1 | - | - | - |
| FISHEL ROAD | 211+42 | - | 1 | - | - | - |
| FISHEL ROAD | 213+70 | - | 1 | - | - | - |
| PROJECT TOTAL | | 21,690 | 11 | 13,140 | 1 | 21,690 |

| | | | 628.1104 | 628.1504 | 628.1520 | 628.1905 | 628.1910 |
|---|---|---|---|---|---|---|---|
| | | | EROSION BALES | SILT FENCE | SILT FENCE MAINTENANCE | MOBILIZATIONS EROSION CONTROL | MOBILIZATIONS EMERGENCY EROSION CONTROL |
| STATION | LOCATION | OFFSET | EACH | LF | LF | EACH | EACH |
| 10+59.26-227+49.29 | Fishel Road | | 200 | | | 5 | 3 |
| 41+00-42+00 | Fishel Road | LT | | 100 | 400 | - | - |
| 41+00-50+00 | Fishel Road | RT | | 900 | 3600 | - | - |
| 53+00-55+00 | Fishel Road | LT | | 200 | 800 | - | - |
| 53+00-55+00 | Fishel Road | RT | | 200 | 800 | - | - |
| 57+50-60+00 | Fishel Road | RT | | 250 | 1000 | - | - |
| 57+50-68+00 | Fishel Road | LT | | 1050 | 4200 | - | - |
| 77+00-79+00 | Fishel Road | LT | | 200 | 800 | - | - |
| 77+00-79+00 | Fishel Road | RT | | 200 | 800 | - | - |
| 105+00-110+00 | Fishel Road | LT | | 500 | 2000 | - | - |
| 148+00-152+00 | Fishel Road | RT | | 400 | 1600 | - | - |
| 175+00-179+00 | Fishel Road | LT | | 400 | 1600 | - | - |
| 213+00-215+00 | Fishel Road | RT | | 200 | 800 | - | - |
| 221+00-225+00 | Fishel Road | LT | | 400 | 1600 | - | - |
| 221+00-225+00 | Fishel Road | RT | | 400 | 1600 | - | - |
| UNDISTRIBUTED | | | 50 | 200 | 800 | - | - |
| Subtotal | | | 250 | 5600 | 22400 | 5 | 3 |
| PROJECT TOTAL | | | 250 | 5600 | 22400 | 5 | 3 |

3

## PERMANENT SIGNING

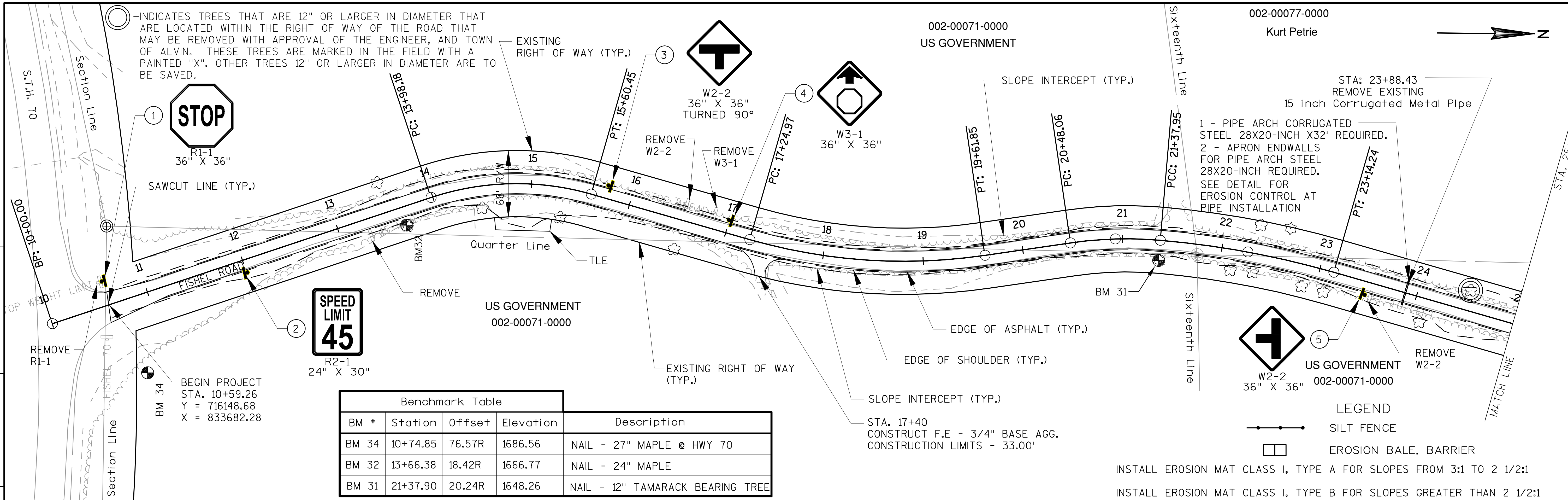
| SIGN NO. | ROAD | DIRECTION | SIDE OF ROAD | LOCATION | SIGN CODE | SIGN MESSAGE | SIGN SIZE INCH X INCH | 633.0100 DELINEATOR POSTS STEEL EACH | 634.0612 POST WOOD 4"x6"x12' EACH | 634.0616 POST WOOD 4"x6"x16' EACH | 637.0202 SIGNS REFLECTIVE TYPE II SF | 638.2602 REMOVING SIGNS TYPE II EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FISHEL ROAD | SB | WEST | 10+60 | R1-1 | STOP | 36 X 36 | - | - | 1 | 7.46 | 1 | REMOVE EXISTING INSTALL NEW |
| 2 | FISHEL ROAD | NB | EAST | 12+00 | R2-1 | SPEED LIMIT 45 | 24 X 30 | - | - | 1 | 5.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 3 | FISHEL ROAD | SB | WEST | 15+75 | W2-2 | SIDE ROAD RIGHT ANGLE | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTING INSTALL NEW ROTATED 90° |
| 4 | FISHEL ROAD | SB | WEST | 17+00 | W3-1 | STOP AHEAD | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 5 | FISHEL ROAD | NB | EAST | 23+50 | W2-2 | SIDE ROAD RIGHT ANGLE | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 6 | BRULE CREEK RD | EB | SOUTH | 30+50 | R1-1 | STOP | 36 X 36 | - | - | 1 | 7.46 | 1 | REMOVE EXISTING INSTALL NEW |
| 7 | FISHEL ROAD | SB | WEST | 34+00 | W1-4 | ROAD CURVES AHEAD | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 8 | FISHEL ROAD | SB | WEST | 37+00 | W2-2 | SIDE ROAD RIGHT ANGLE | 36 X 36 | - | - | 1 | 9.00 | - | INSTALL NEW |
| 9 | FISHEL ROAD | NB | EAST | 37+00 | W1-4 | ROAD CURVES AHEAD | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 10 | FISHEL ROAD | SB | WEST | 57+00 | W1-4 | ROAD CURVES AHEAD | 36 X 36 | - | - | 1 | 9.00 | - | INSTALL NEW |
| 11 | ROSEN DAM RD | WB | NORTH | 62+70 | R1-1 | STOP | 36 X 36 | - | - | 1 | 7.46 | 1 | REMOVE EXISTING INSTALL NEW |
| 12 | FISHEL ROAD | SB | WEST | 70+00 | W2-2 | SIDE ROAD RIGHT ANGLE | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 13 | NF RD 2590 | WB | NORTH | 126+40 | R1-1 | STOP | 36 X 36 | - | - | 1 | 7.46 | 1 | REMOVE EXISTING INSTALL NEW |
| 14 | STOCK ROAD | EB | SOUTH | 152+50 | R1-1 | STOP | 36 X 36 | - | - | 1 | 7.46 | 1 | REMOVE EXISTING INSTALL NEW |
| 15 | FISHEL ROAD | NB | EAST | 161+00 | W2-2 | SIDE ROAD RIGHT ANGLE | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 16 | FISHEL ROAD | SB | WEST | 161+00 | W2-2 | SIDE ROAD RIGHT ANGLE | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 17 | NF RD 2550 | EB | SOUTH | 167+30 | R1-1 | STOP | 36 X 36 | - | - | 1 | 7.46 | 1 | REMOVE EXISTING INSTALL NEW |
| 18 | FISHEL ROAD | SB | WEST | 176+40 | W2-2 | SIDE ROAD RIGHT ANGLE | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 19 | CAREY DAM RD | WB | NORTH | 201+80 | R1-1 | STOP | 36 X 36 | - | - | 1 | 7.46 | 1 | REMOVE EXISTING INSTALL NEW |
| 20 | FISHEL ROAD | SB | WEST | 218+10 | W1-4 | ROAD CURVES AHEAD | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 21 | FISHEL ROAD | NB | EAST | 218+10 | W3-1 | STOP AHEAD | 36 X 36 | - | - | 1 | 9.00 | 1 | REMOVE EXISTNIG INSTALL NEW |
| 22 | FISHEL ROAD | SB | WEST | 226+50 | R2-1 | SPEED LIMIT 45 | 24 X 30 | - | - | 1 | 5.00 | 1 | REMOVE EXISTING INSTALL NEW |
| 23 | FISHEL ROAD | NB | EAST | 227+35 | R1-1 | STOP | 36 X 36 | - | - | 1 | 7.46 | 1 | REMOVE EXISTING INSTALL NEW |
| 24 | FISHEL ROAD | NB | EAST | 217+50 | W5-2 | NARROW BRIDGE | 30 X 30 | - | - | 1 | 6.25 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| 25 | FISHEL ROAD | NB | WEST | 222+10 | W5-52L | BRIDGE OBJECT MARKER | 12 X 36 | - | 1 | - | 3.00 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| 26 | FISHEL ROAD | NB | EAST | 222+30 | W5-52R | BRIDGE OBJECT MARKER | 12 X 36 | - | 1 | - | 3.00 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| 27 | FISHEL ROAD | SB | WEST | 222+47 | W5-52R | BRIDGE OBJECT MARKER | 12 X 36 | - | 1 | - | 3.00 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| 28 | FISHEL ROAD | SB | EAST | 222+67 | W5-52L | BRIDGE OBJECT MARKER | 12 X 36 | - | 1 | | 3.00 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| 29 | FISHEL ROAD | SB | WEST | 226+00 | W5-2 | NARROW BRIDGE | 30 X 30 | - | - | 1 | 6.25 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| | FISHEL ROAD | NB | | | W5-53 | OBJECT MARKER | 4 X 12 | 4 | - | - | 1.32 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| | FISHEL ROAD | SB | | | W5-53 | OBJECT MARKER | 4 X 12 | 4 | - | - | 1.32 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| 30 | FISHEL ROAD | NB | WEST | 40+61 | W5-52L | BRIDGE OBJECT MARKER | 12 X 36 | - | 1 | - | 3.00 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| 31 | FISHEL ROAD | NB | EAST | 40+61 | W5-52R | BRIDGE OBJECT MARKER | 12 X 36 | - | 1 | - | 3.00 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| 32 | FISHEL ROAD | SB | WEST | 40+85 | W5-52R | BRIDGE OBJECT MARKER | 12 X 36 | - | 1 | - | 3.00 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| 33 | FISHEL ROAD | SB | EAST | 40+85 | W5-52L | BRIDGE OBJECT MARKER | 12 X 36 | - | 1 | - | 3.00 | - | INSTALL NEW, SDD SIGNING TWO LANE BRIDGE |
| | TOTAL | | | | | | | 8 | 8 | 25 | 225.82 | 21 | |

## TRAFFIC CONTROL

| LOCATION | CALENDAR DAYS | 643.0300 TRAFFIC CONTROL DRUMS DAYS | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS | 643.0900 TRAFFIC CONTROL SIGNS DAYS |
|---|---|---|---|---|---|---|
| Fishel Road | 120 | 1200 | 1920 | 3840 | 1200 | 2400 |
| Undistributed | | 100 | 180 | 160 | 100 | 100 |
| TOTAL | | 1300 | 2100 | 4000 | 1300 | 2500 |

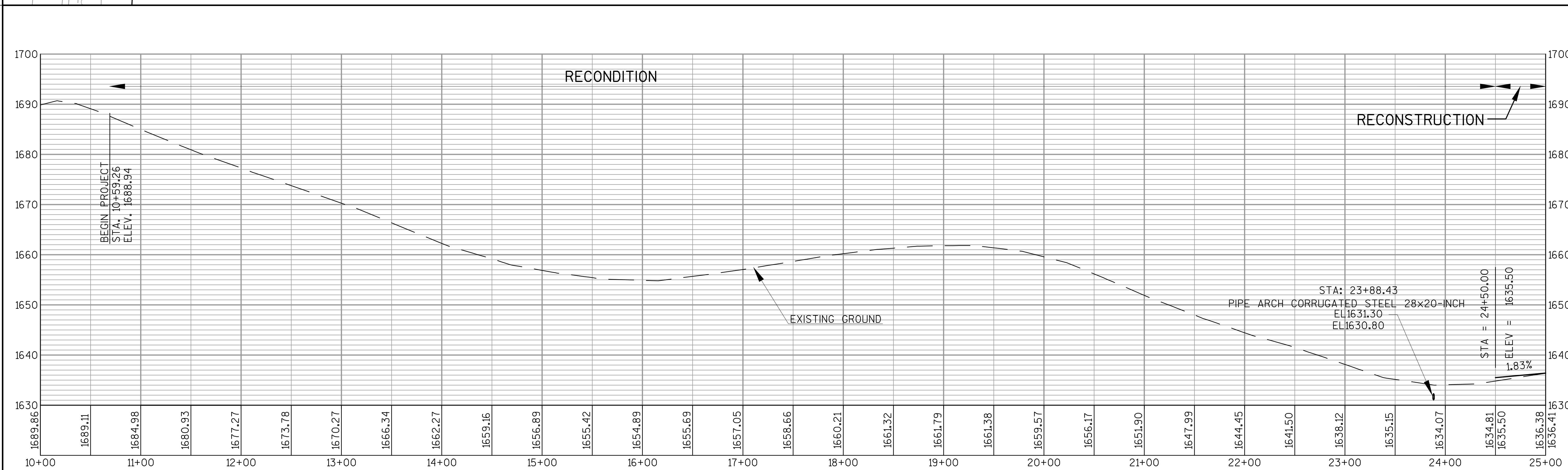
## FINISHING ITEMS

| STATION | LOCATION | 625.0500 SALVAGED TOPSOIL SY | 627.0200 MULCHING SY | 628.2002 EROSION MAT CLASS I TYPE A SY | 628.7504 TEMPORARY DITCH CHECKS LF | 628.2004 EROSION MAT CLASS I TYPE B SY | 629.0210 FERTILIZER TYPE B CWT | 630.0120 SEEDING MIXTURE NO. 20 LB |
|---|---|---|---|---|---|---|---|---|
| 10+59.26-227+49.29 | Fishel Road | 29,000 | 24,000 | 3,000 | 0 | 2,000 | 20.1 | 900.0 |
| UNDISTRIBUTED | | 1,000 | 700 | 200 | 500 | 100 | 0.7 | 31.0 |
| Subtotal | | 30,000 | 24,700 | 3,200 | 500 | 2,100 | 20.8 | 931 |
| PROJECT TOTAL | | 30000 | 24700 | 3200 | 500 | 2100 | 20.8 | 931 |

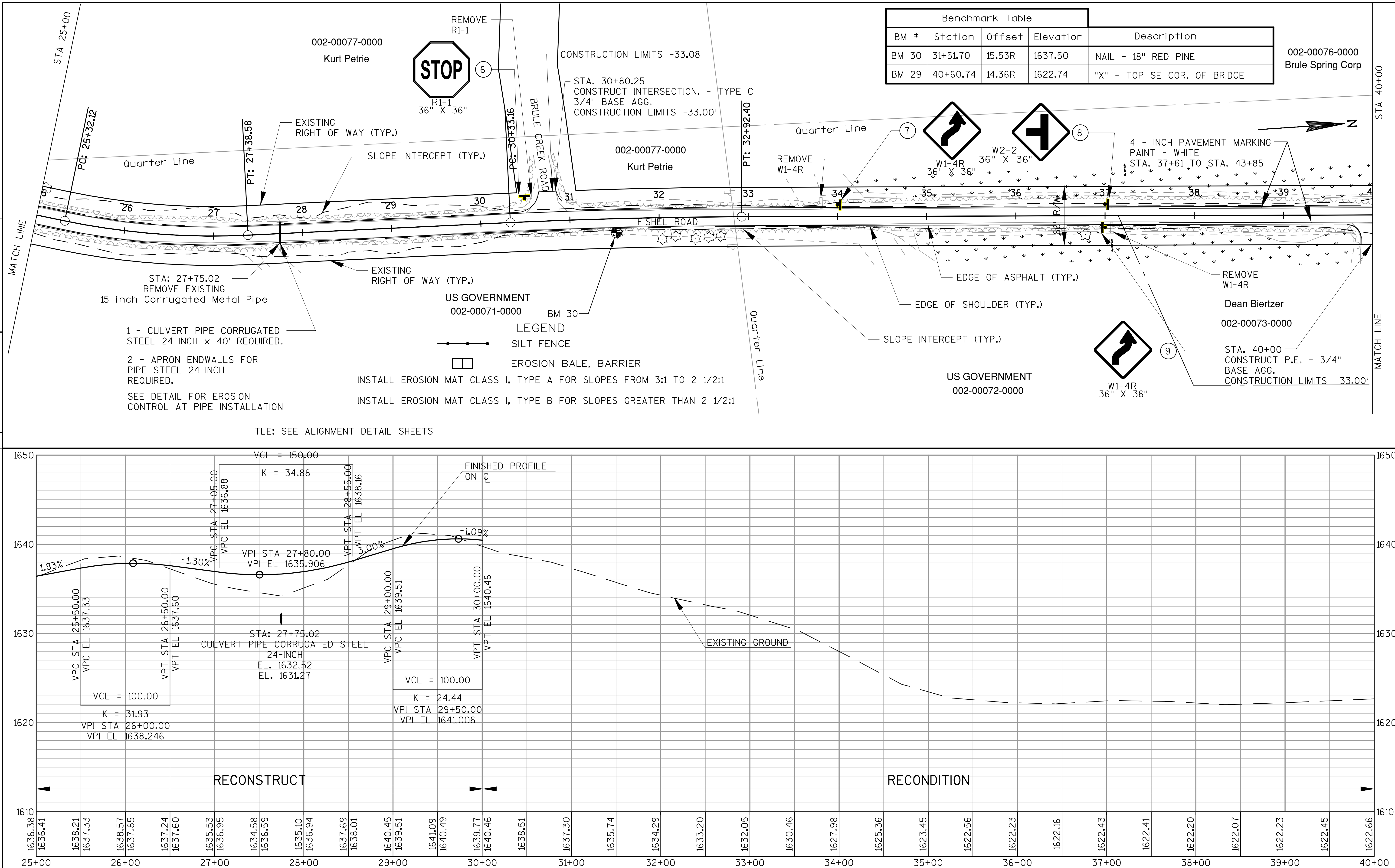



Benchmark Table

| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 34 | 10+74.85 | 76.57R | 1686.56 | NAIL - 27" MAPLE @ HWY 70 |
| BM 32 | 13+66.38 | 18.42R | 1666.77 | NAIL - 24" MAPLE |
| BM 31 | 21+37.90 | 20.24R | 1648.26 | NAIL - 12" TAMARACK BEARING TREE |




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 25 | E |
|---|---|---|---|---|---|

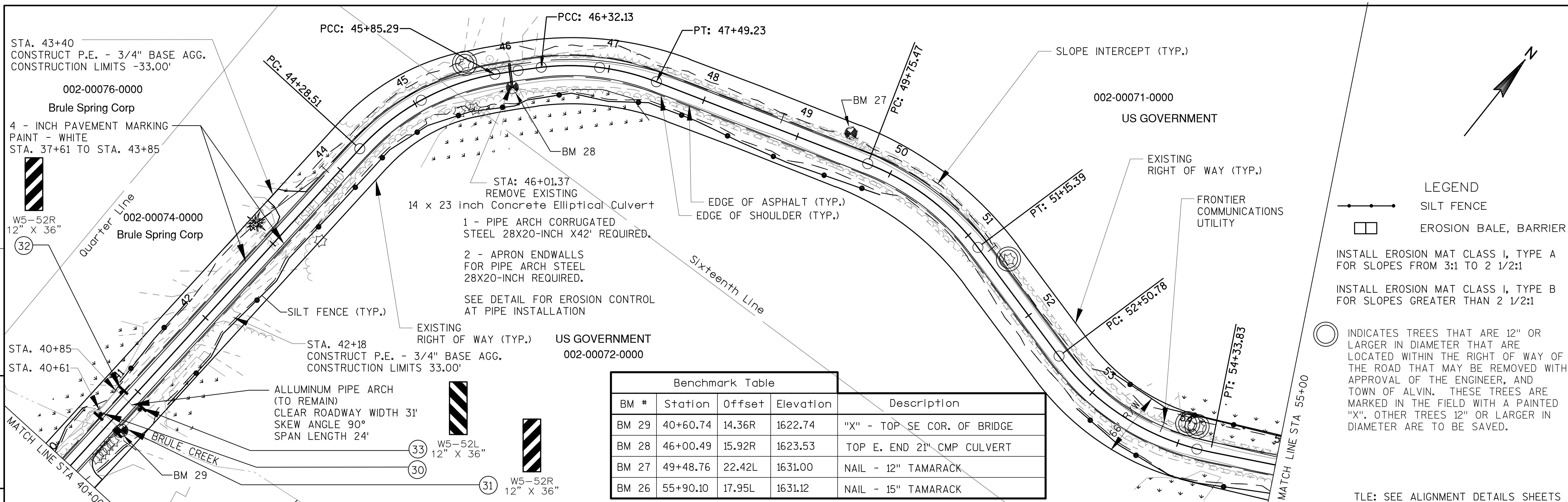



Benchmark Table

| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 30 | 31+51.70 | 15.53R | 1637.50 | NAIL - 18" RED PINE |
| BM 29 | 40+60.74 | 14.36R | 1622.74 | "X" - TOP SE COR. OF BRIDGE |

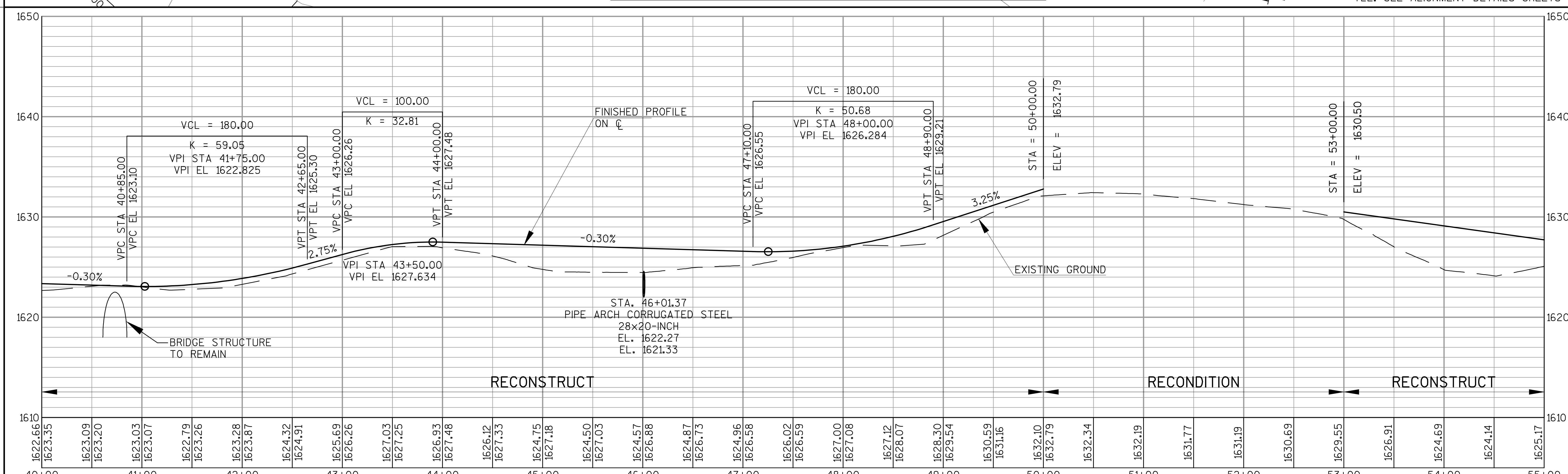
| | | | | |
|---|---|---|---|---|
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 26 E |

FILE NAME : R:\4200\4281\4281014\DWG(2010)\FISHEL ROAD_PP.DWG PLOT DATE : 9/3/2008 9:39 AM PLOT BY : RANDAL L. ROETHLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

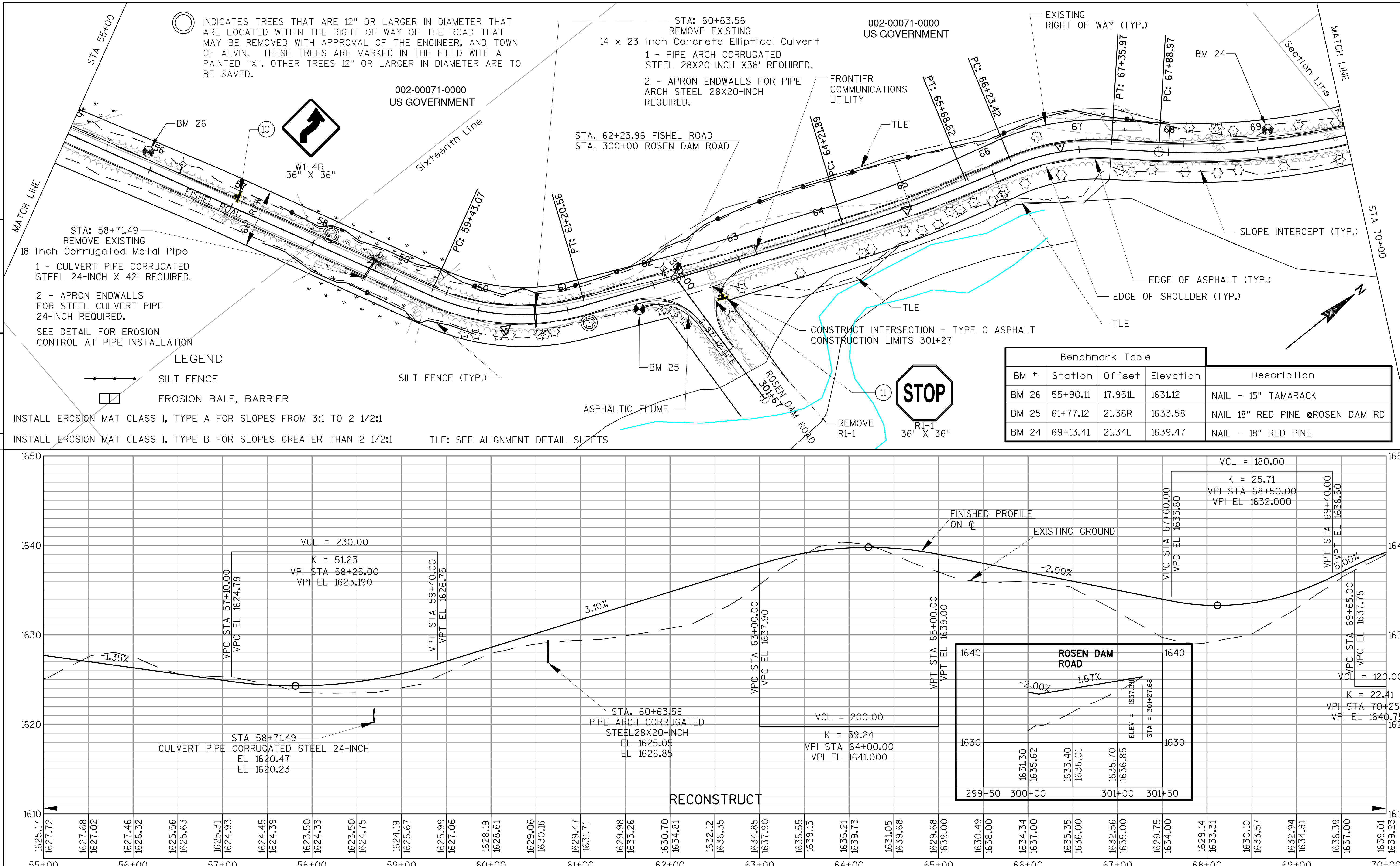



Benchmark Table

| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 29 | 40+60.74 | 14.36R | 1622.74 | "X" - TOP SE COR. OF BRIDGE |
| BM 28 | 46+00.49 | 15.92R | 1623.53 | TOP E. END 21" CMP CULVERT |
| BM 27 | 49+48.76 | 22.42L | 1631.00 | NAIL - 12" TAMARACK |
| BM 26 | 55+90.10 | 17.95L | 1631.12 | NAIL - 15" TAMARACK |




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 27 | E |
|---|---|---|---|---|---|

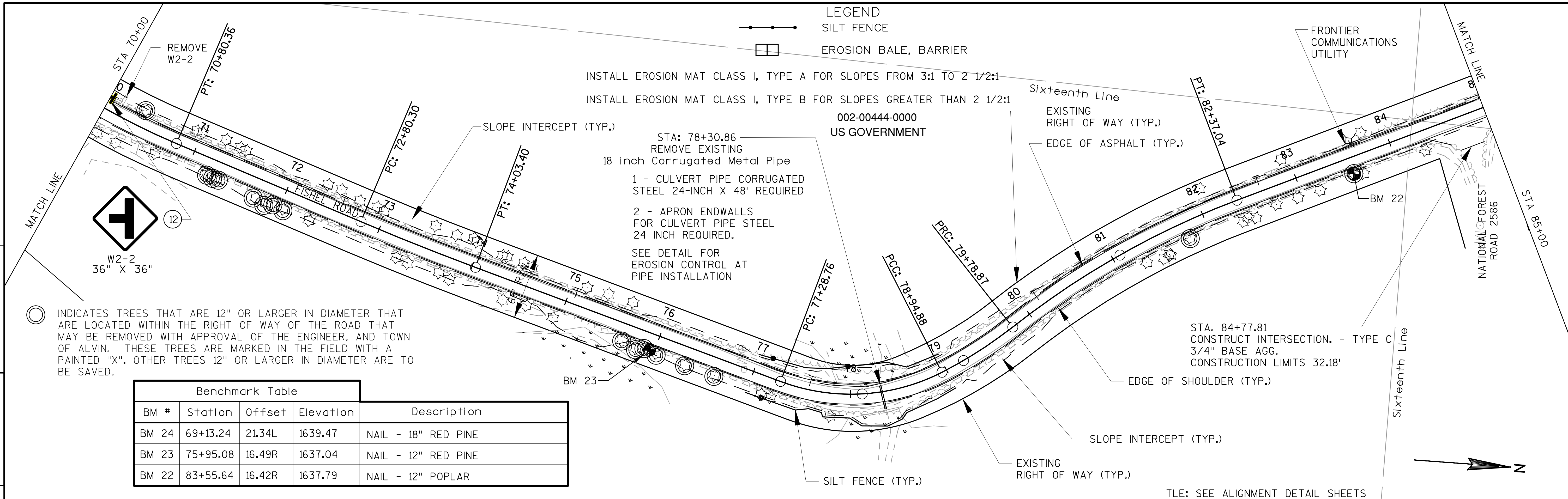



Benchmark Table

| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 26 | 55+90.11 | 17.951L | 1631.12 | NAIL - 15" TAMARACK |
| BM 25 | 61+77.12 | 21.38R | 1633.58 | NAIL 18" RED PINE @ROSEN DAM RD |
| BM 24 | 69+13.41 | 21.34L | 1639.47 | NAIL - 18" RED PINE |

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 28 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\FISHEL ROAD_PP.DWG PLOT DATE : 9/3/2008 9:39 AM PLOT BY : RANDAL L. ROETHLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

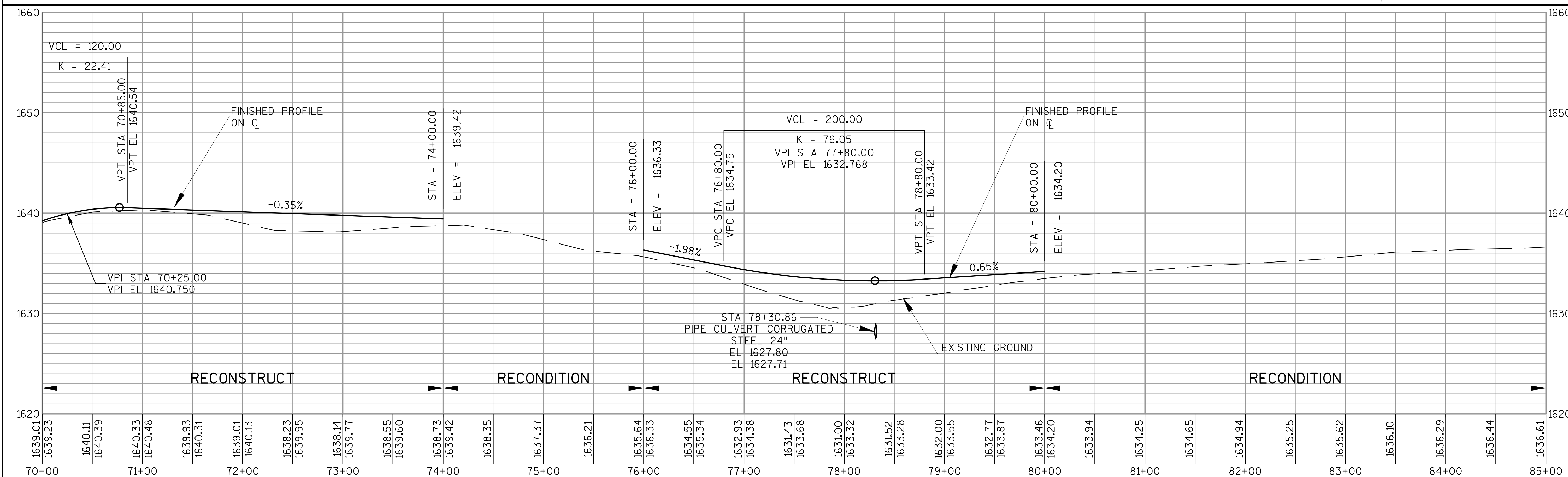



Benchmark Table

| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 24 | 69+13.24 | 21.34L | 1639.47 | NAIL - 18" RED PINE |
| BM 23 | 75+95.08 | 16.49R | 1637.04 | NAIL - 12" RED PINE |
| BM 22 | 83+55.64 | 16.42R | 1637.79 | NAIL - 12" POPLAR |

5

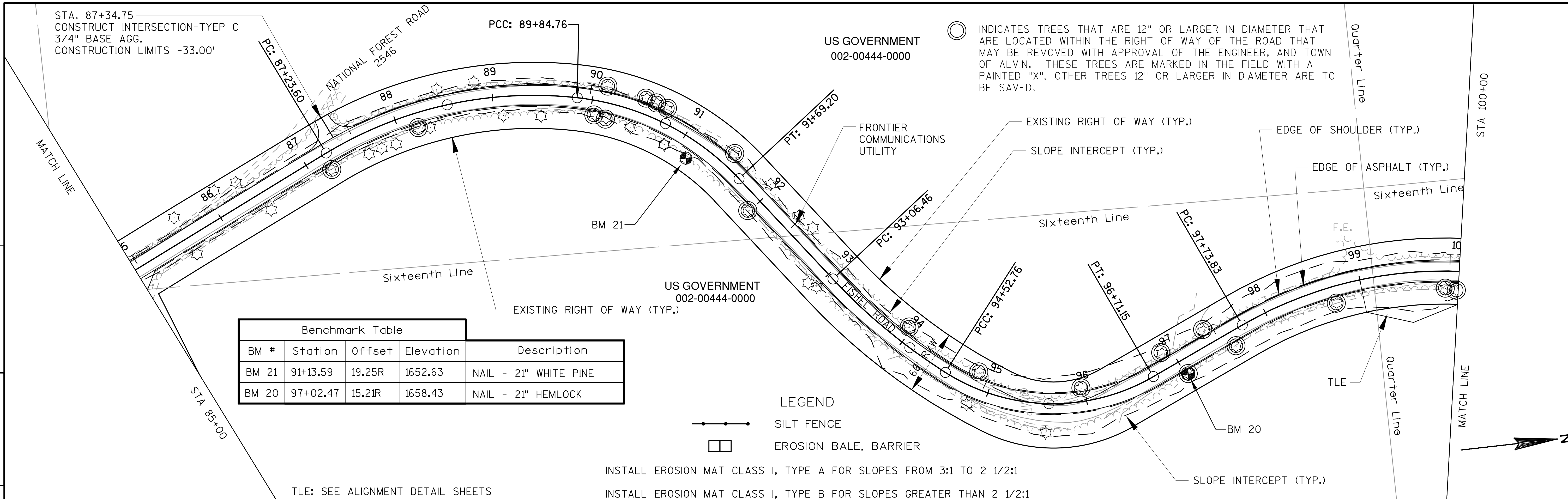
5




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 29 | E |
|---|---|---|---|---|---|

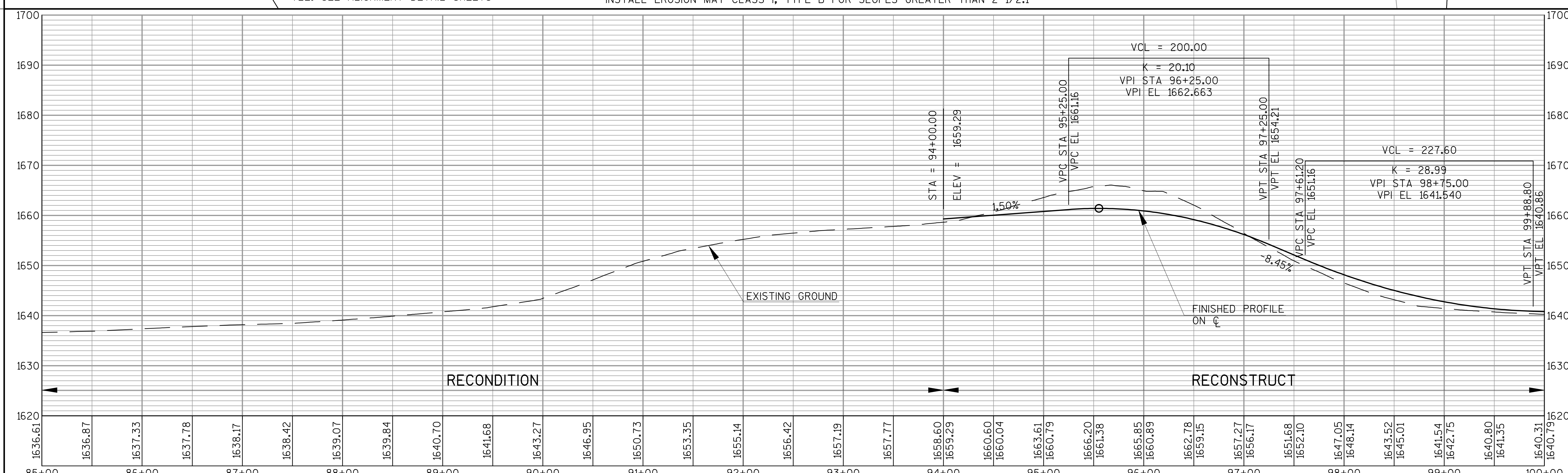
FILE NAME : R:\4200\4281\4281014\DWG(2010)\FISHEL ROAD_PP.DWG PLOT DATE : 9/3/2008 9:39 AM PLOT BY : RANDAL L. ROETHLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

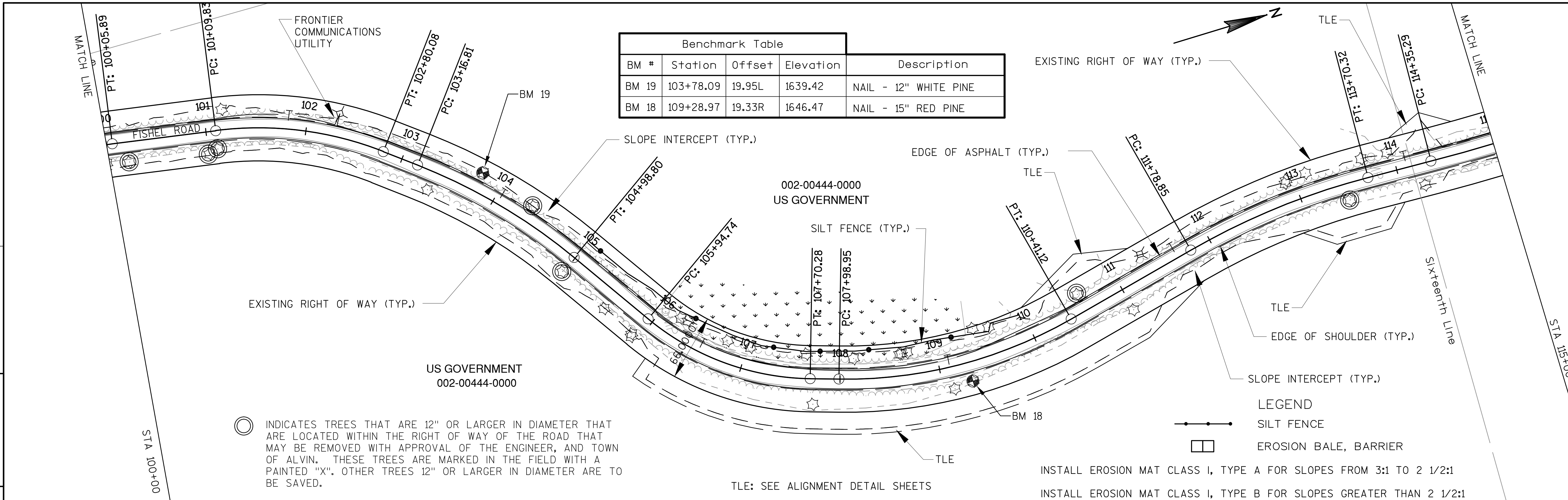



Benchmark Table

| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 21 | 91+13.59 | 19.25R | 1652.63 | NAIL - 21" WHITE PINE |
| BM 20 | 97+02.47 | 15.21R | 1658.43 | NAIL - 21" HEMLOCK |




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 30 | E |
|---|---|---|---|---|---|




| Benchmark Table | | | | |
|---|---|---|---|---|
| BM # | Station | Offset | Elevation | Description |
| BM 19 | 103+78.09 | 19.95L | 1639.42 | NAIL - 12" WHITE PINE |
| BM 18 | 109+28.97 | 19.33R | 1646.47 | NAIL - 15" RED PINE |

◎ INDICATES TREES THAT ARE 12" OR LARGER IN DIAMETER THAT ARE LOCATED WITHIN THE RIGHT OF WAY OF THE ROAD THAT MAY BE REMOVED WITH APPROVAL OF THE ENGINEER, AND TOWN OF ALVIN. THESE TREES ARE MARKED IN THE FIELD WITH A PAINTED "X". OTHER TREES 12" OR LARGER IN DIAMETER ARE TO BE SAVED.

LEGEND

- SILT FENCE
- EROSION BALE, BARRIER

INSTALL EROSION MAT CLASS I, TYPE A FOR SLOPES FROM 3:1 TO 2 1/2:1

INSTALL EROSION MAT CLASS I, TYPE B FOR SLOPES GREATER THAN 2 1/2:1

5

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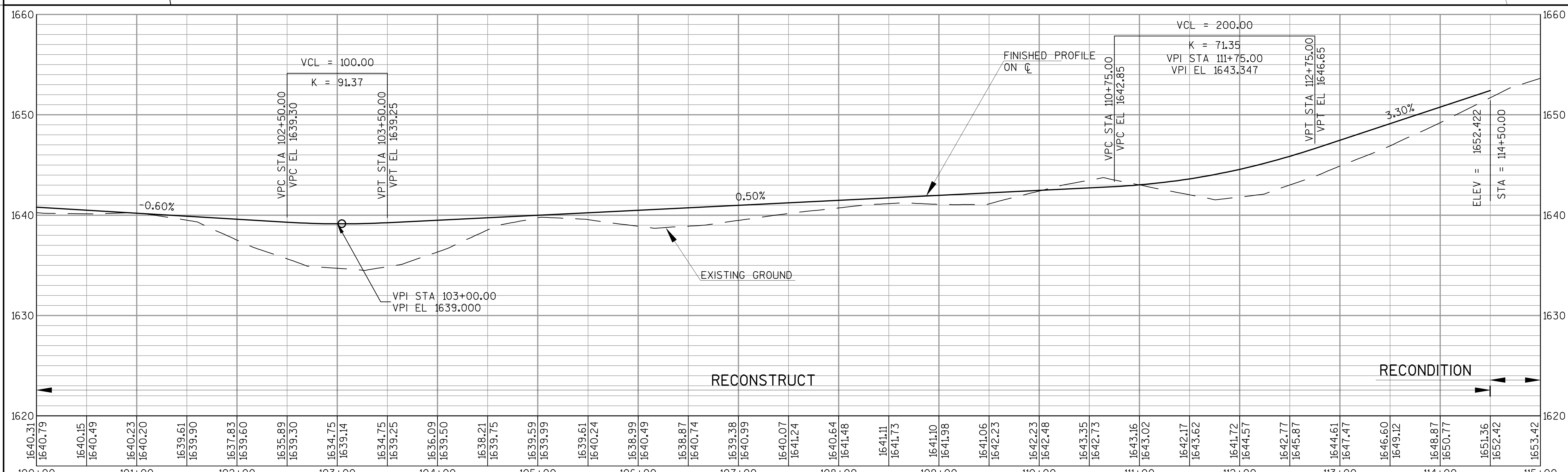
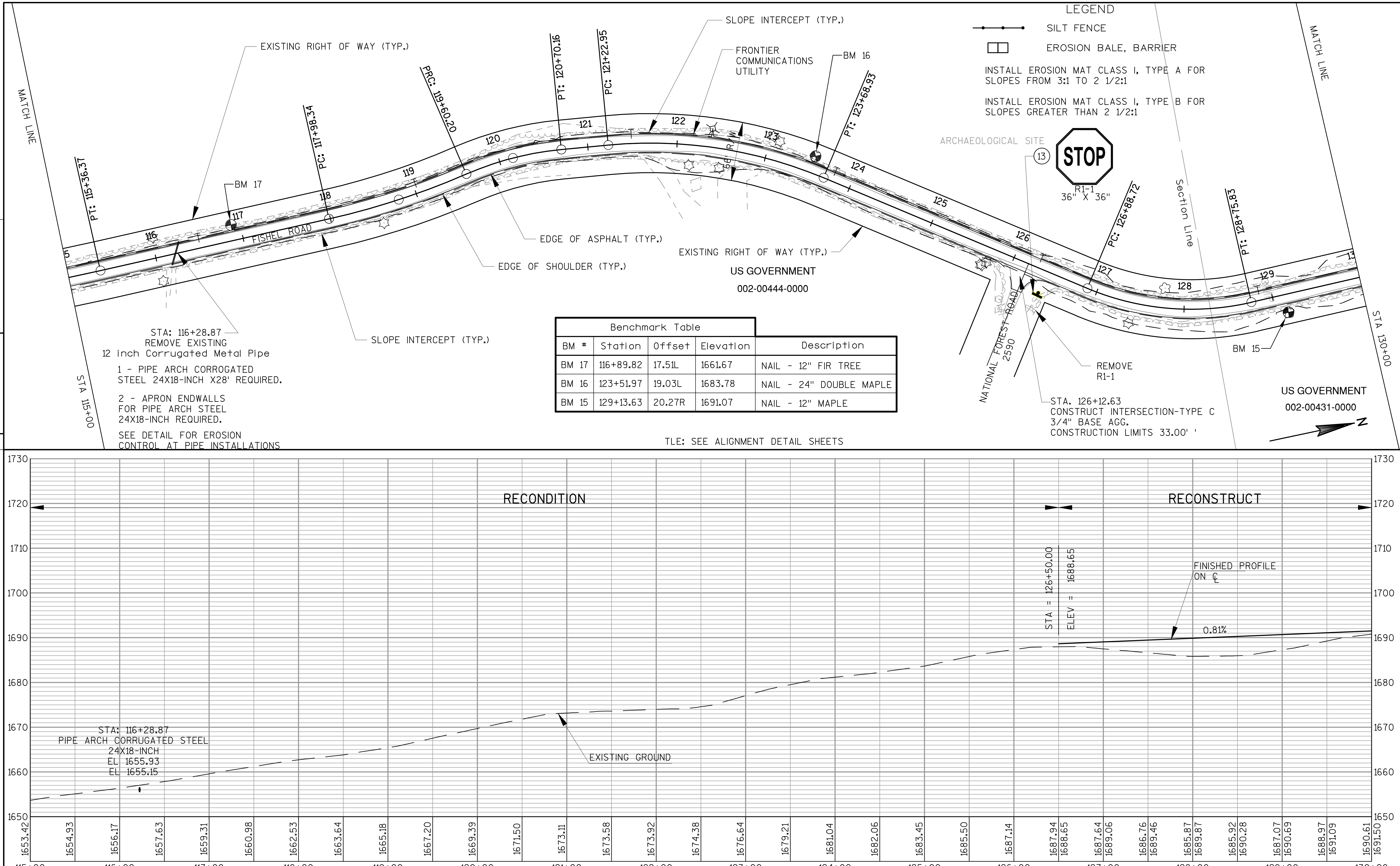



| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 31 | E |
|---|---|---|---|---|---|




Benchmark Table

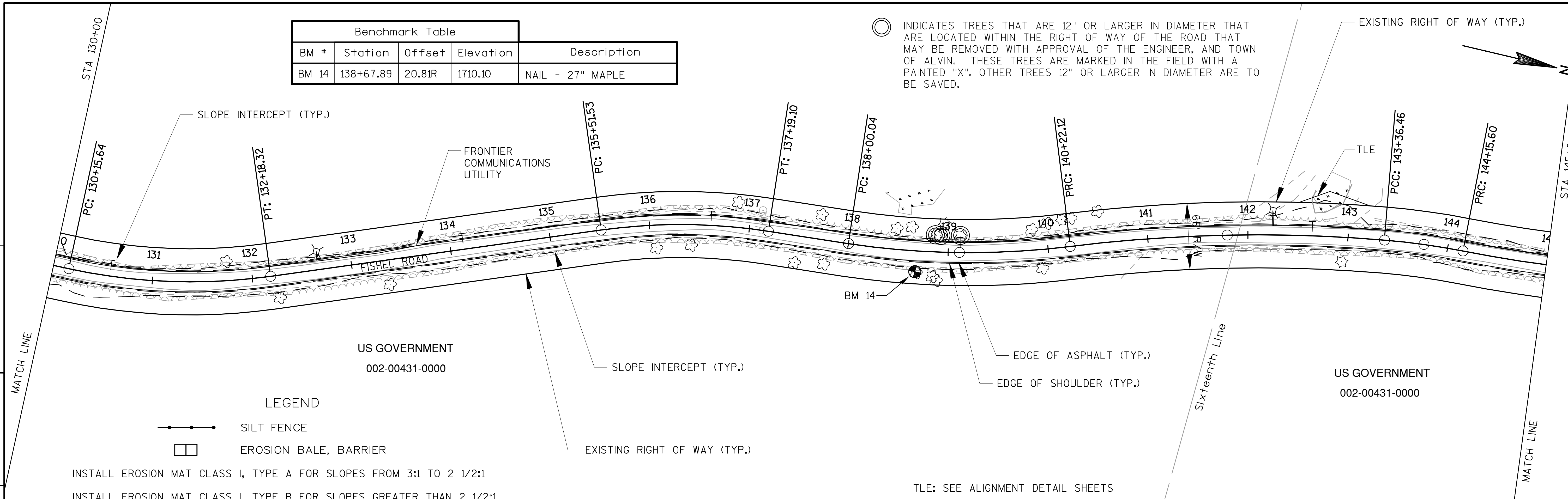
| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 17 | 116+89.82 | 17.51L | 1661.67 | NAIL - 12" FIR TREE |
| BM 16 | 123+51.97 | 19.03L | 1683.78 | NAIL - 24" DOUBLE MAPLE |
| BM 15 | 129+13.63 | 20.27R | 1691.07 | NAIL - 12" MAPLE |

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 32 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\FISHEL ROAD_PP.DWG PLOT DATE : 9/3/2008 9:39 AM PLOT BY : RANDAL L. ROETHLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

| Benchmark Table | | | | |
|---|---|---|---|---|
| BM # | Station | Offset | Elevation | Description |
| BM 14 | 138+67.89 | 20.81R | 1710.10 | NAIL - 27" MAPLE |

INDICATES TREES THAT ARE 12" OR LARGER IN DIAMETER THAT ARE LOCATED WITHIN THE RIGHT OF WAY OF THE ROAD THAT MAY BE REMOVED WITH APPROVAL OF THE ENGINEER, AND TOWN OF ALVIN. THESE TREES ARE MARKED IN THE FIELD WITH A PAINTED "X". OTHER TREES 12" OR LARGER IN DIAMETER ARE TO BE SAVED.

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LEGEND

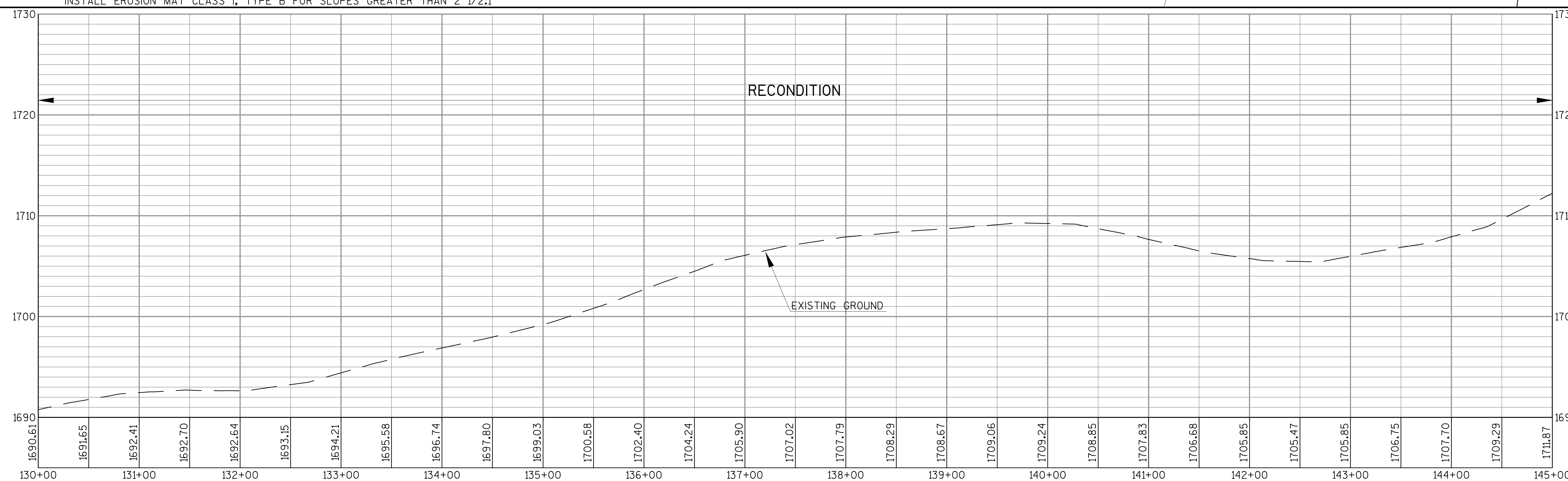
SILT FENCE

EROSION BALE, BARRIER

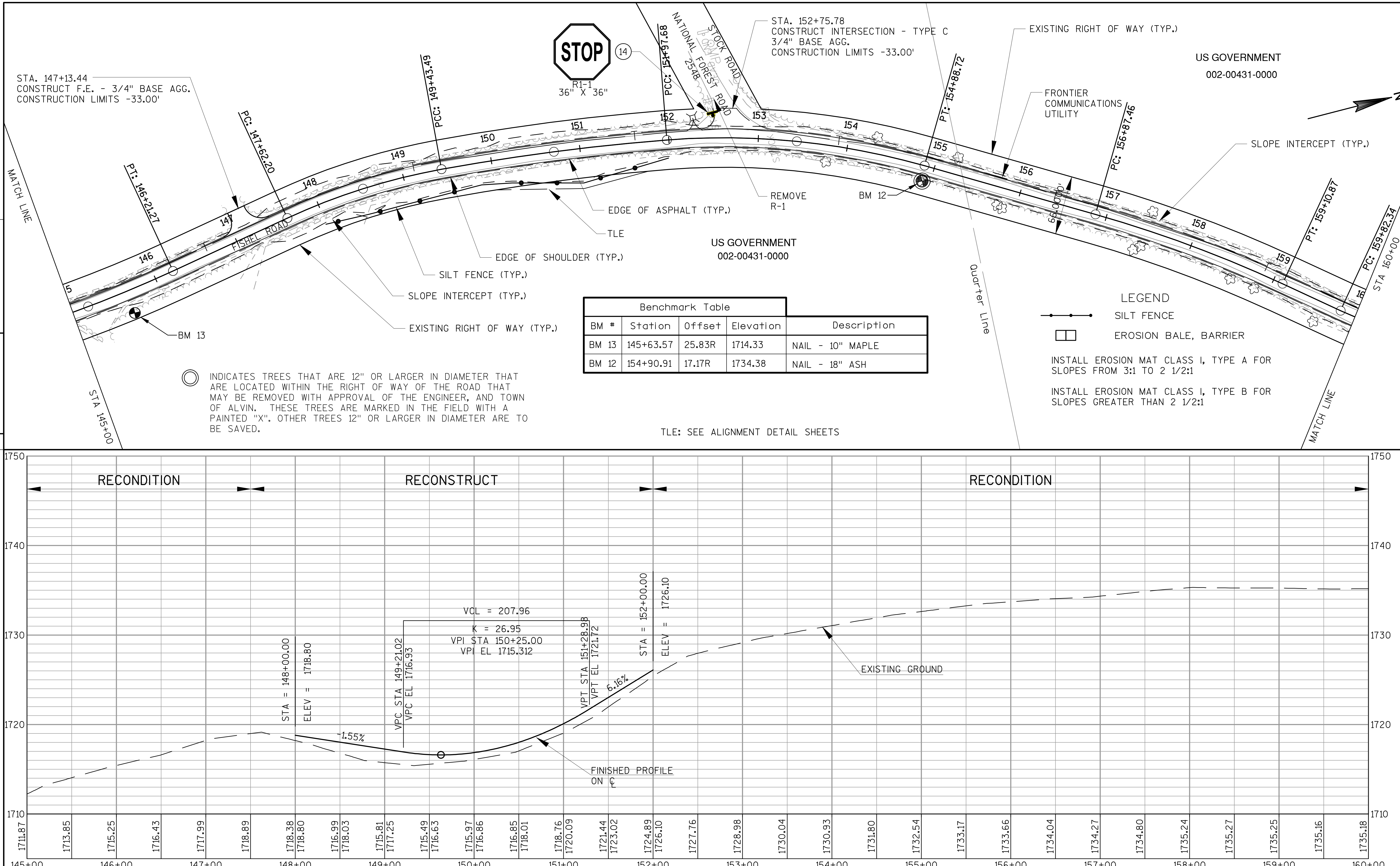
INSTALL EROSION MAT CLASS I, TYPE A FOR SLOPES FROM 3:1 TO 2 1/2:1

INSTALL EROSION MAT CLASS I, TYPE B FOR SLOPES GREATER THAN 2 1/2:1

TLE: SEE ALIGNMENT DETAIL SHEETS




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 33 | E |
|---|---|---|---|---|---|

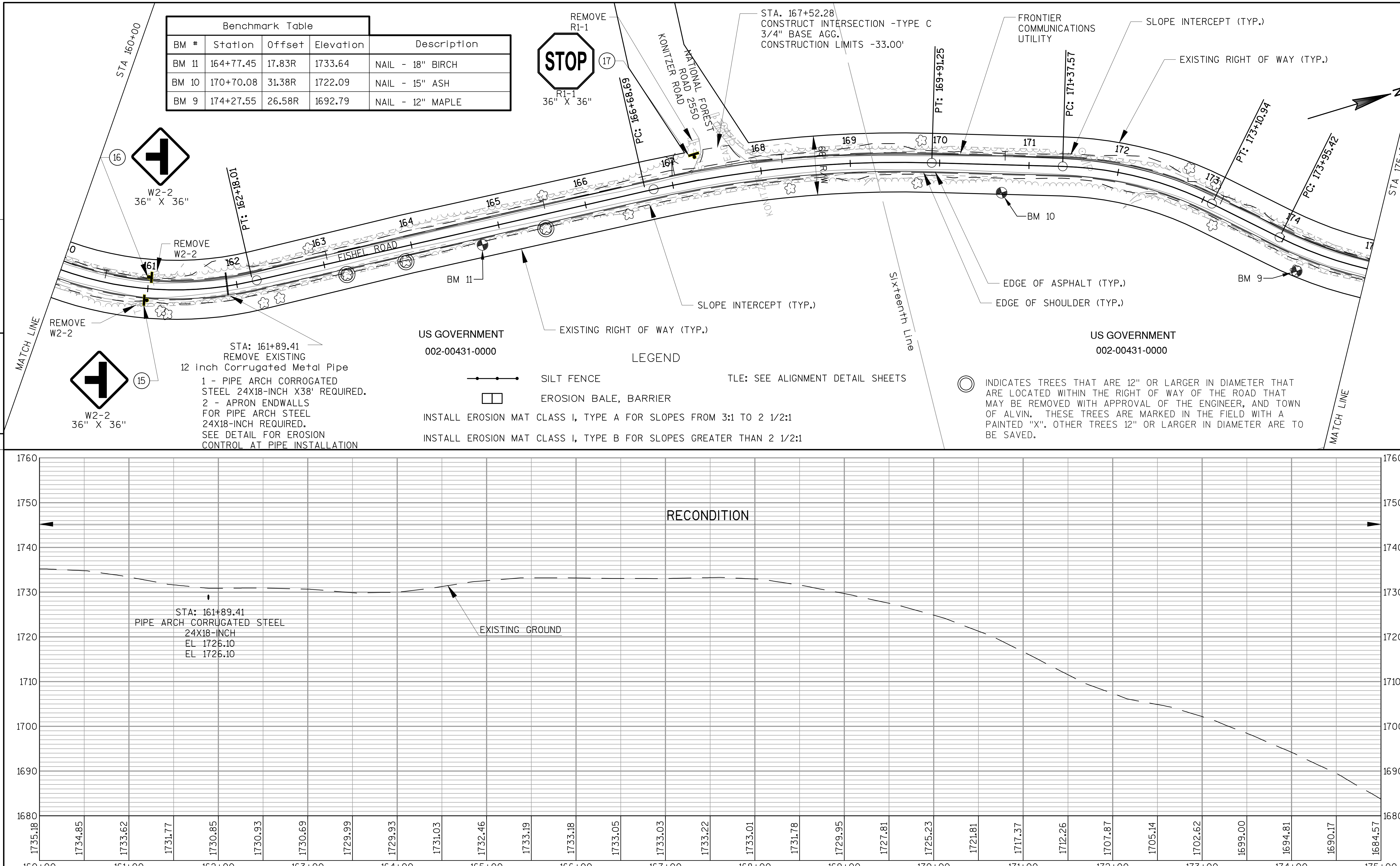



Benchmark Table

| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 13 | 145+63.57 | 25.83R | 1714.33 | NAIL - 10" MAPLE |
| BM 12 | 154+90.91 | 17.17R | 1734.38 | NAIL - 18" ASH |

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 34 | E |
|---|---|---|---|---|---|

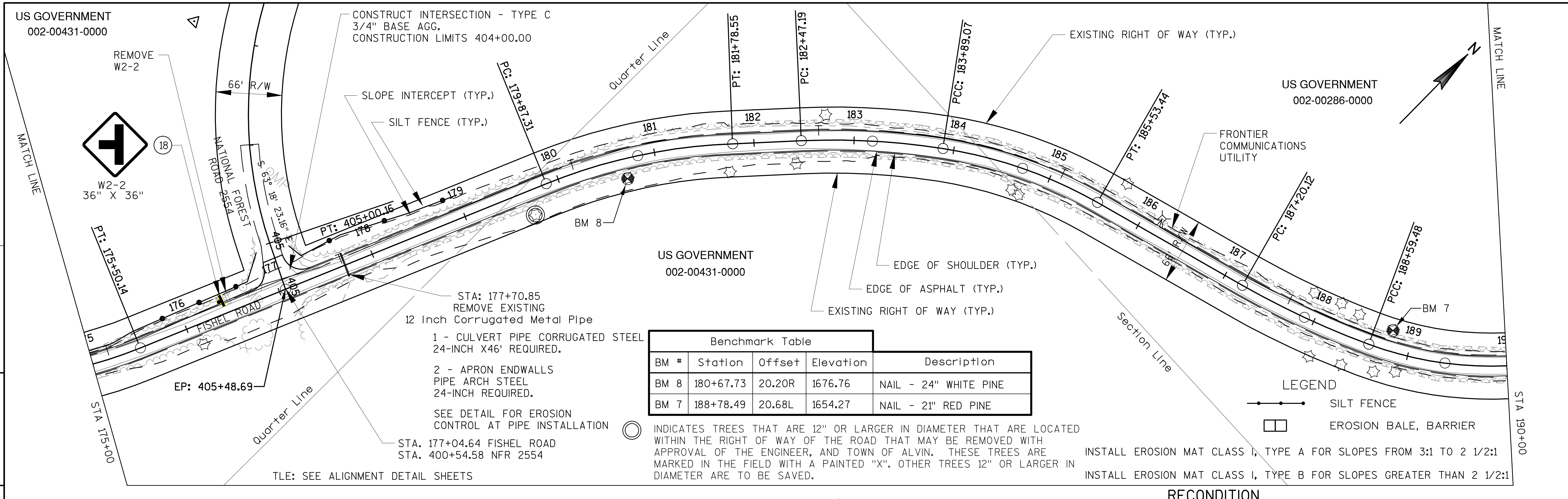
| Benchmark Table | | | | |
|---|---|---|---|---|
| BM # | Station | Offset | Elevation | Description |
| BM 11 | 164+77.45 | 17.83R | 1733.64 | NAIL - 18" BIRCH |
| BM 10 | 170+70.08 | 31.38R | 1722.09 | NAIL - 15" ASH |
| BM 9 | 174+27.55 | 26.58R | 1692.79 | NAIL - 12" MAPLE |




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 35 | E |
|---|---|---|---|---|---|

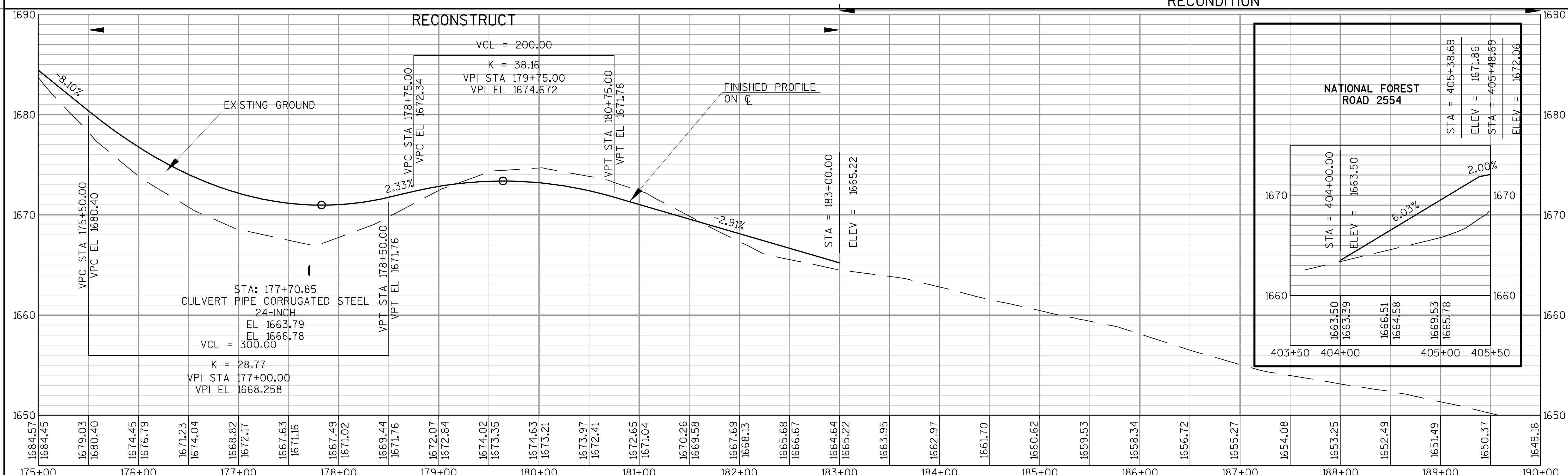
FILE NAME : R:\4200\4281\4281014\DWG(2010)\FISHEL ROAD_PP.DWG PLOT DATE : 9/3/2008 9:39 AM PLOT BY : RANDAL L. ROETHLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44




Benchmark Table

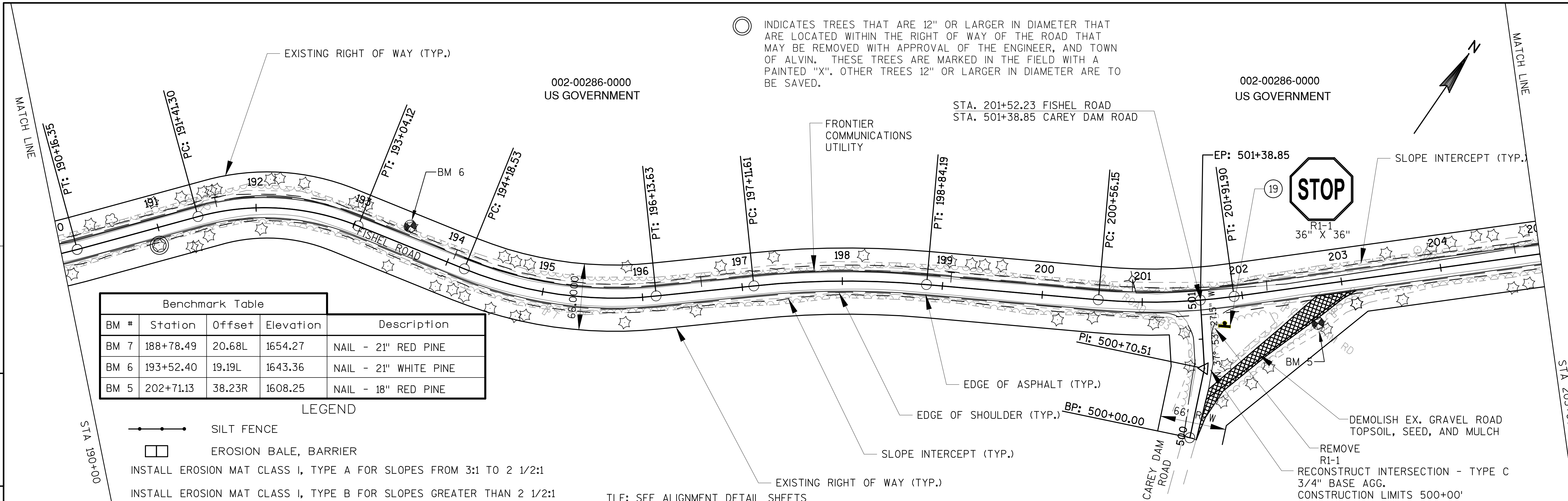
| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 8 | 180+67.73 | 20.20R | 1676.76 | NAIL - 24" WHITE PINE |
| BM 7 | 188+78.49 | 20.68L | 1654.27 | NAIL - 21" RED PINE |




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 36 | E |
|---|---|---|---|---|---|

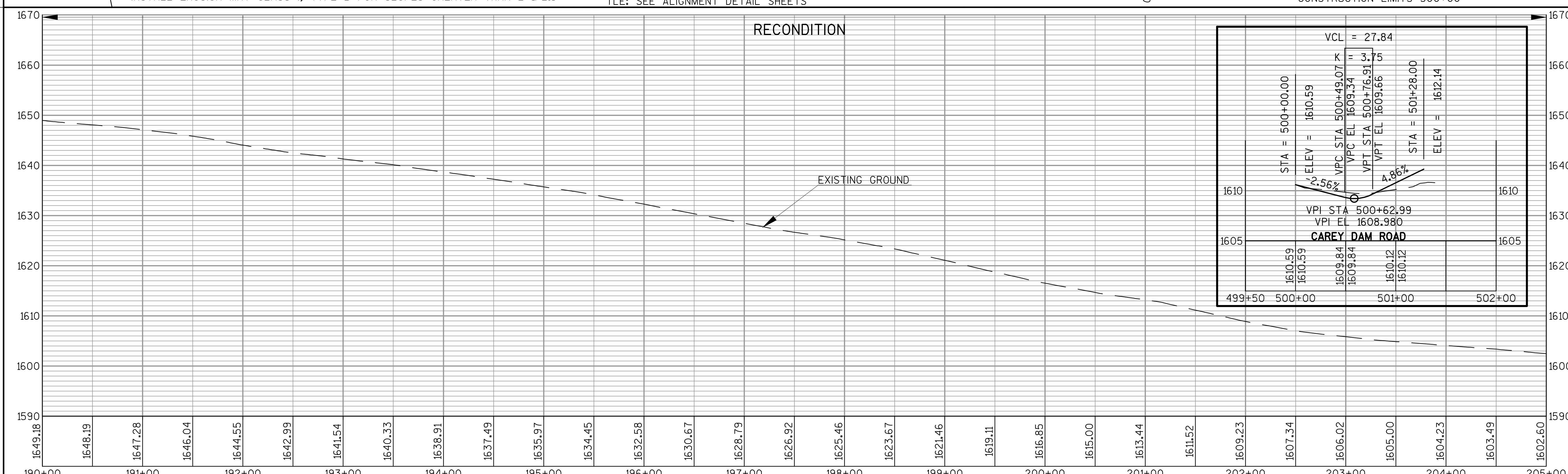
FILE NAME : R:\4200\4281\4281014\DWG(2010)\FISHEL ROAD_PP.DWG PLOT DATE : 9/3/2008 9:39 AM PLOT BY : RANDAL L. ROETHLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44




Benchmark Table

| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 7 | 188+78.49 | 20.68L | 1654.27 | NAIL - 21" RED PINE |
| BM 6 | 193+52.40 | 19.19L | 1643.36 | NAIL - 21" WHITE PINE |
| BM 5 | 202+71.13 | 38.23R | 1608.25 | NAIL - 18" RED PINE |

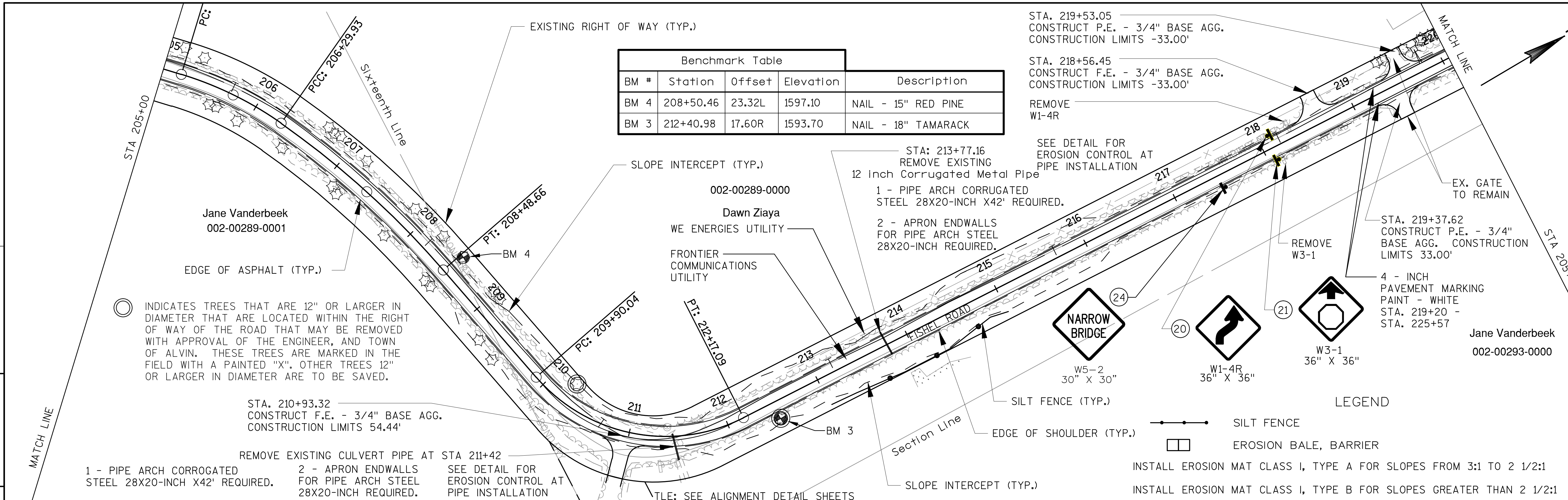


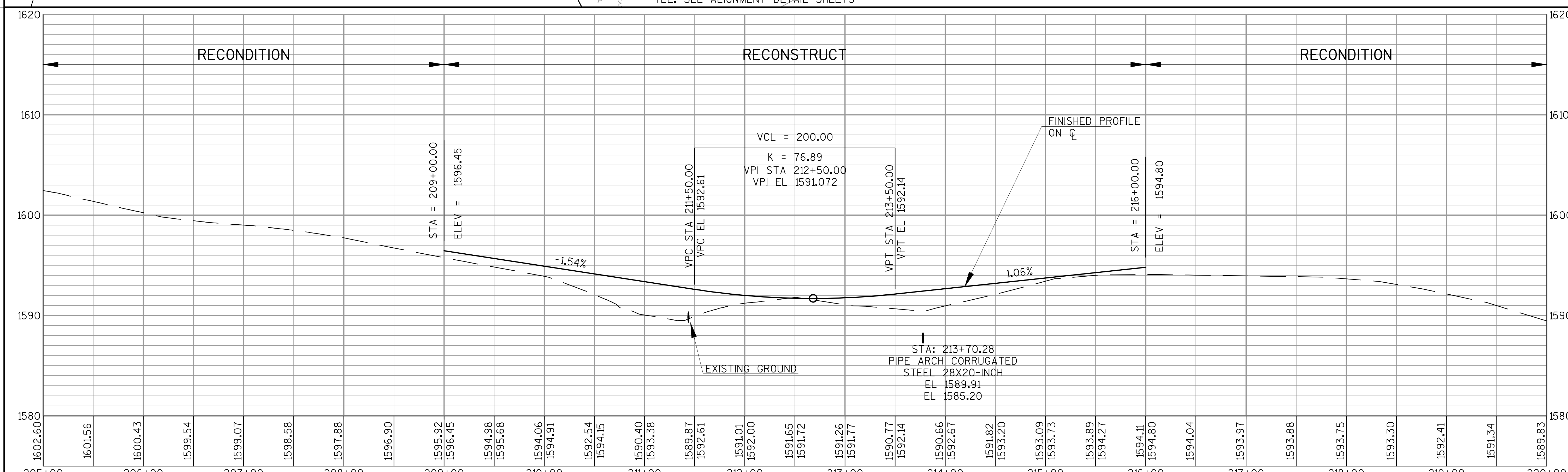

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET :37 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\FISHEL ROAD_PP.DWG PLOT DATE : 9/3/2008 9:39 AM PLOT BY : RANDAL L. ROETHLE PLOT NAME : PLOT SCALE : 1 IN:100 FT

Benchmark Table

| BM # | Station | Offset | Elevation | Description |
| --- | --- | --- | --- | --- |
| BM 4 | 208+50.46 | 23.32L | 1597.10 | NAIL - 15" RED PINE |
| BM 3 | 212+40.98 | 17.60R | 1593.70 | NAIL - 18" TAMARACK |




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | PLAN AND PROFILE | SHEET 38 | E |
| --- | --- | --- | --- | --- | --- |

Benchmark Table

| BM # | Station | Offset | Elevation | Description |
|---|---|---|---|---|
| BM 2 | 222+61.15 | 15.74R | 1585.65 | RR SPIKE NE WINGWALL |
| BM D64 | 227+30.49 | 45.90L | 1592.72 | NGS MON# D64 |

LEGEND

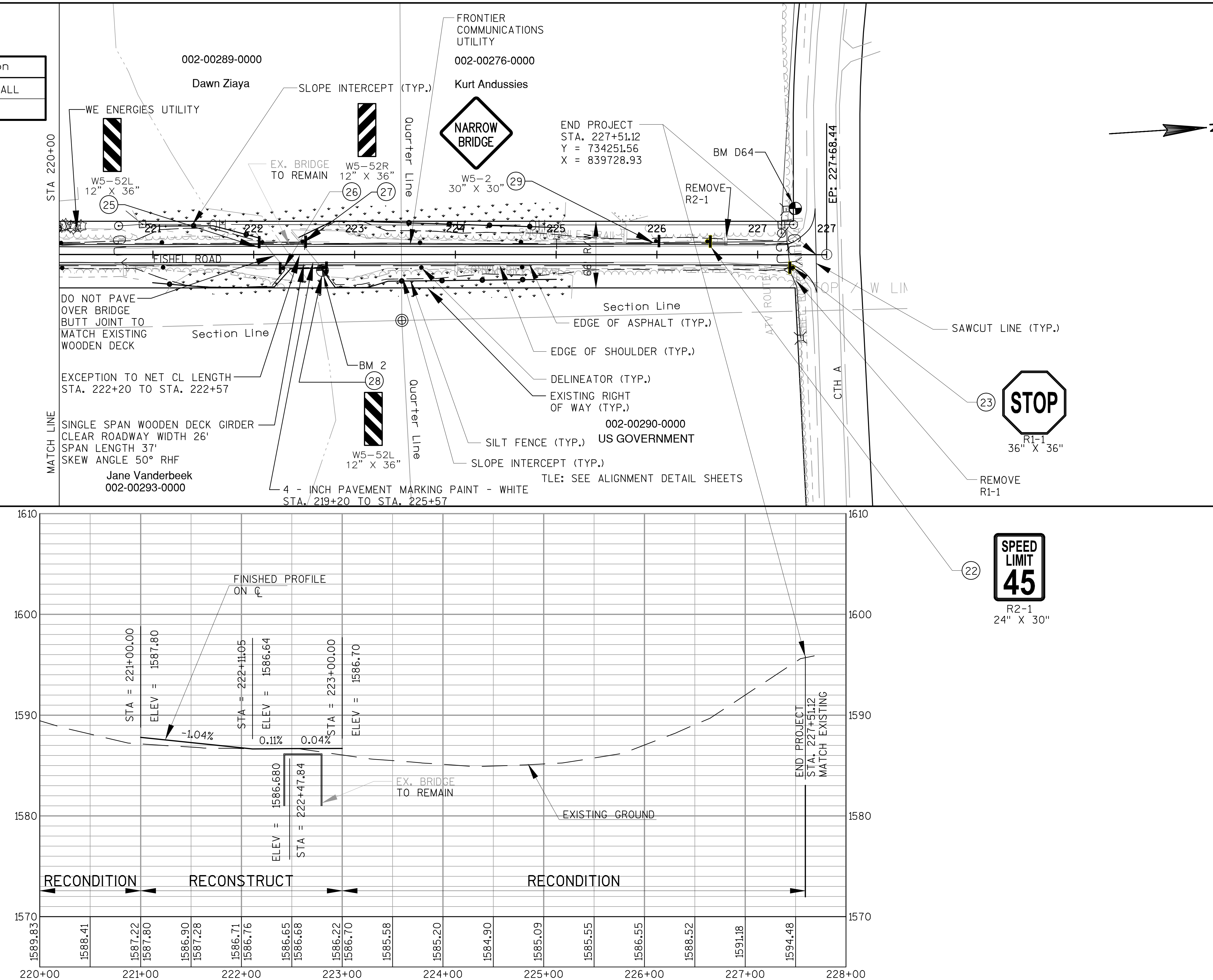
SILT FENCE

EROSION BALE, BARRIER

INSTALL EROSION MAT CLASS I, TYPE A FOR SLOPES FROM 3:1 TO 2 1/2:1

INSTALL EROSION MAT CLASS I, TYPE B FOR SLOPES GREATER THAN 2 1/2:1

5




5

## Standard Detail Drawing List

| | |
|---|---|
| 08D04-05 | CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES |
| 08E08-03 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E09-06 | SILT FENCE |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F02-01 | APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE |
| 09A01-12A | AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE |
| 15A02-07 | DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR |
| 15A03-01 | MARKER POSTS, FLEXIBLE, FOR CULVERT END |
| 15C02-04A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-04B | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C03-01 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C06-05 | SIGNING & MARKING FOR TWO LANE BRIDGES |
| 15C08-14A | PAVEMENT MARKING (MAINLINE) |
| 15C08-14B | PAVEMENT MARKING (INTERSECTIONS) |
| 15C12-03 | TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS) |
| 15C19-01A | MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY |

6

6

## GENERAL NOTES

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

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

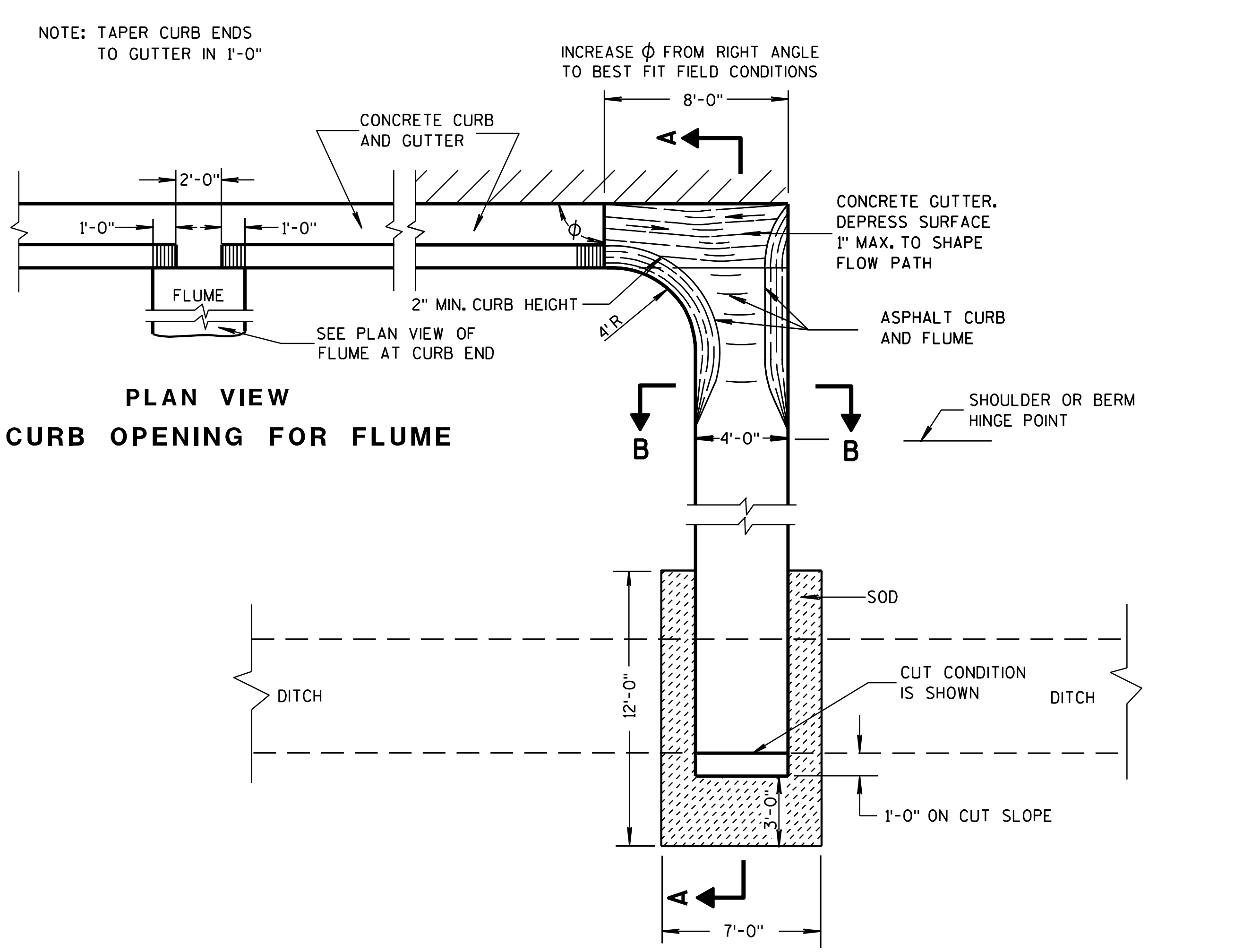
① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

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

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

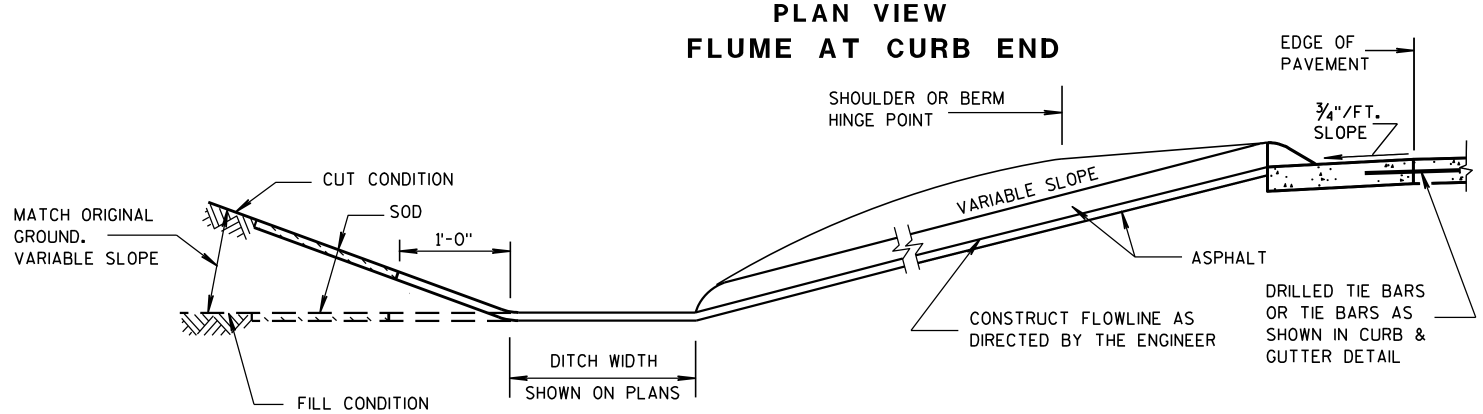
## ASPHALTIC FLUME

NOTE: TAPER CURB ENDS TO GUTTER IN 1'-0"

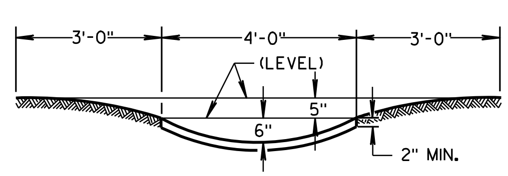



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END

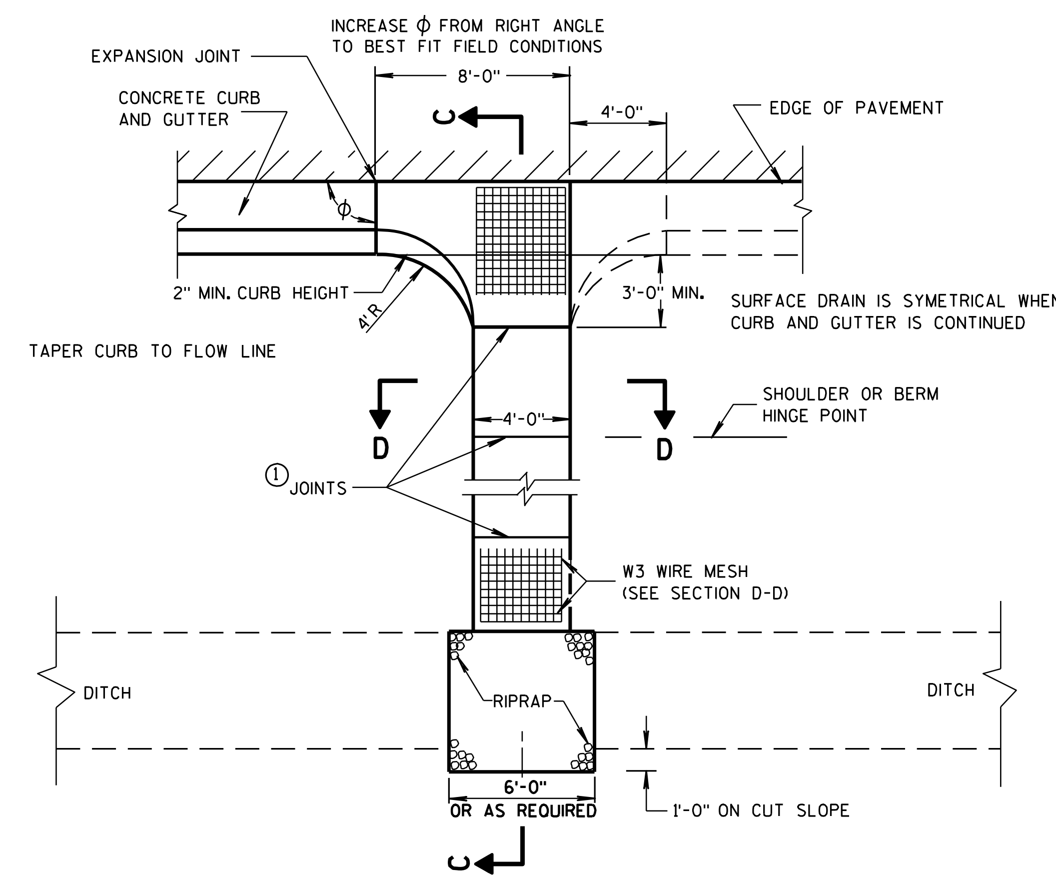



SECTION A-A

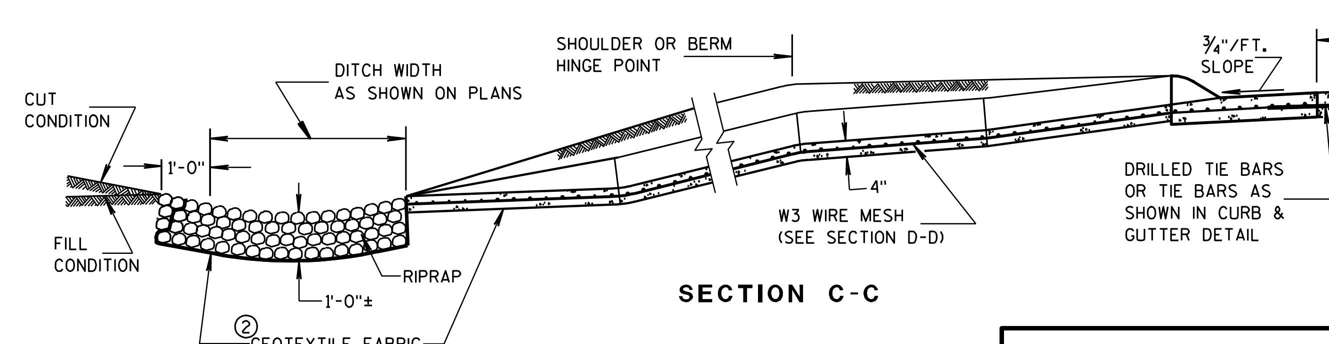



SECTION B-B

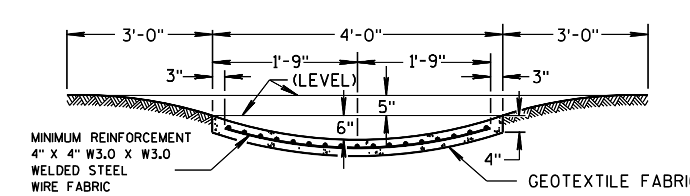
## ③ CONCRETE SURFACE DRAIN




PLAN VIEW




SECTION C-C




SECTION D-D

6

6

S.D.D. 8 D 4-5

S.D.D. 8 D 4-5

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

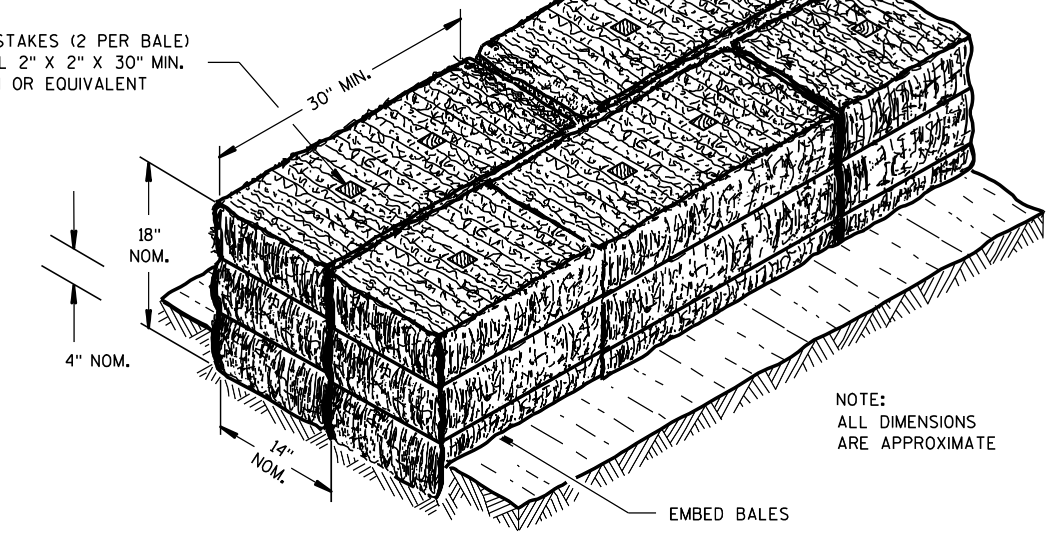
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

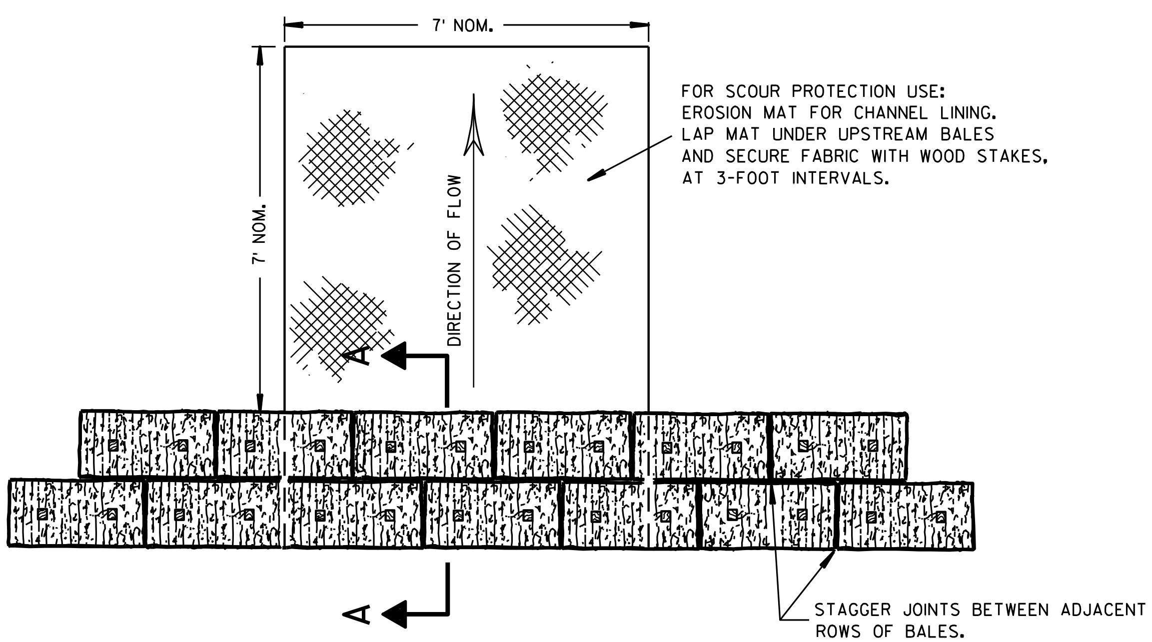
9-4-08
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

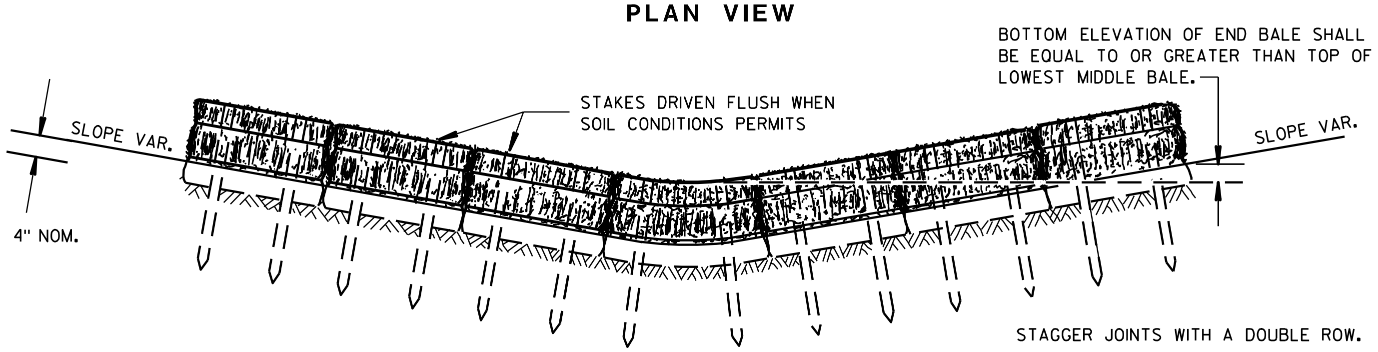
FHWA




**SECTION A-A**




**PLAN VIEW**



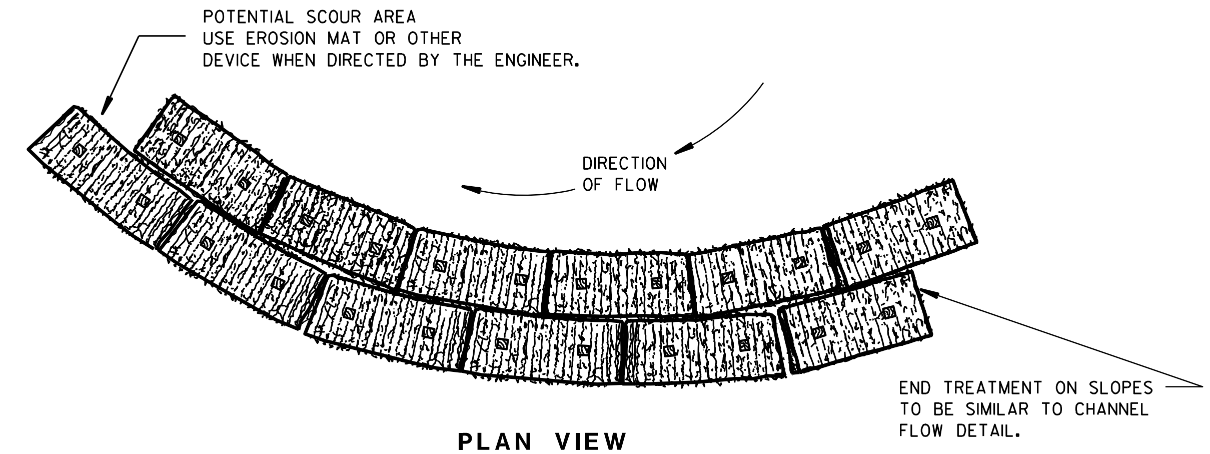

**FRONT ELEVATION**

## TEMPORARY DITCH CHECK USING EROSION BALES ①

## GENERAL NOTES

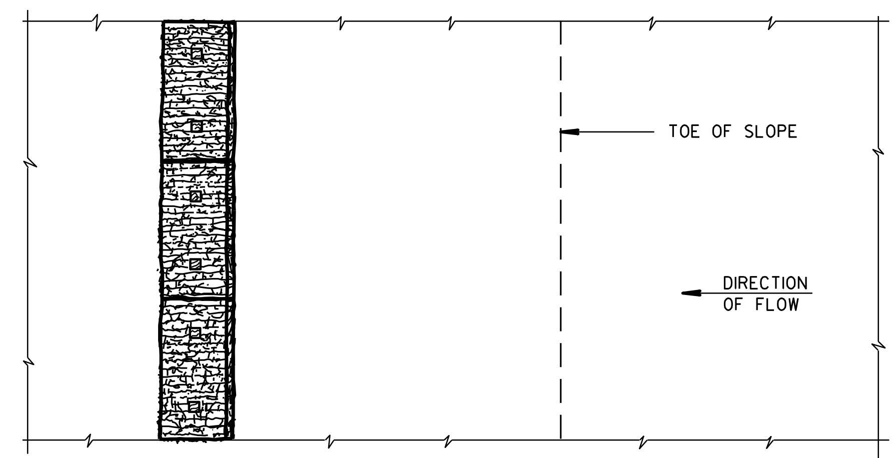
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

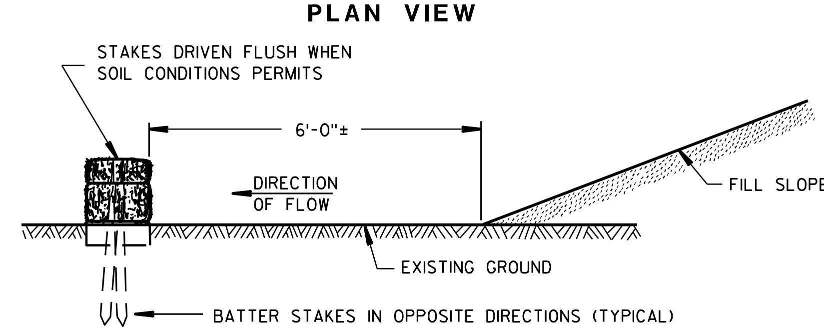



**PLAN VIEW**

WHEN ALTERING THE DIRECTION OF FLOW




**PLAN VIEW**




**FRONT ELEVATION**

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

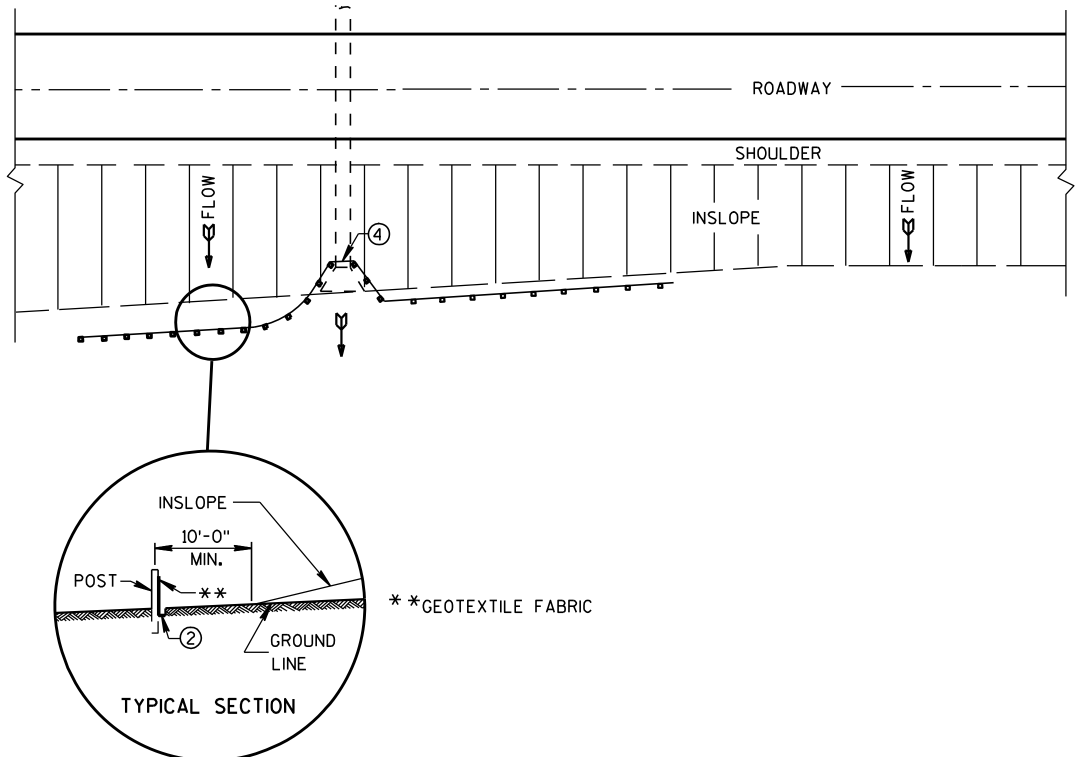
## EROSION BALES FOR SHEET FLOW

| |
|---|
| TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |
| APPROVED<br>6/04/02 DATE — /S/ Beth Cann... CHIEF ROADWAY DEVELOP... ...INEER<br>FHWA |



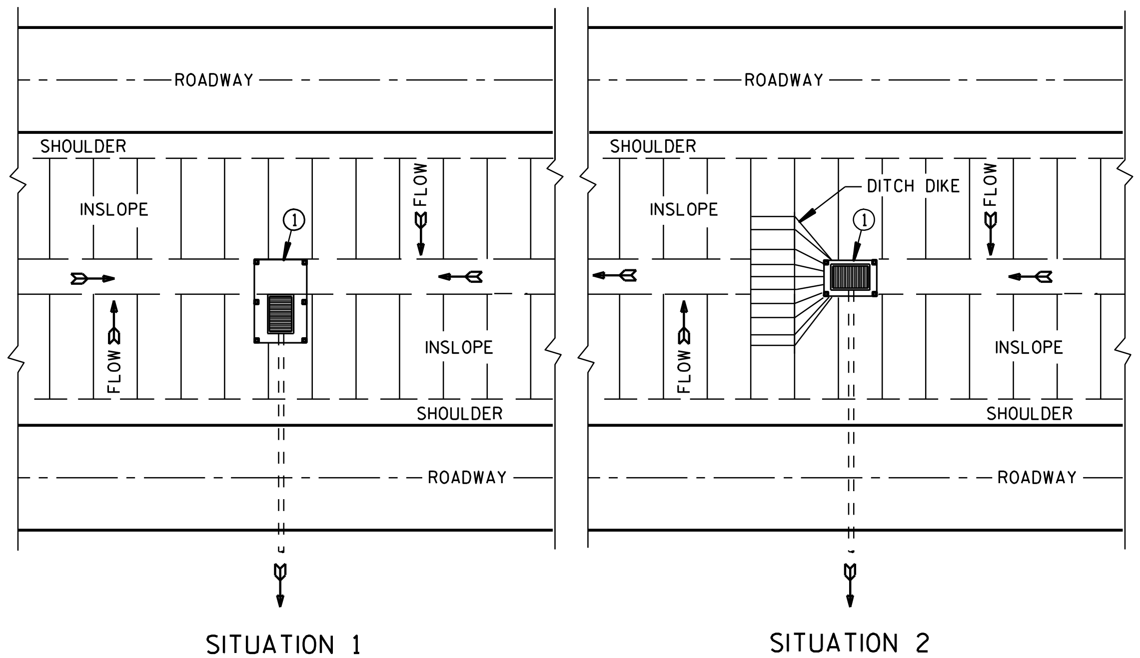


6
S.D.D. 8 E 8-3




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE



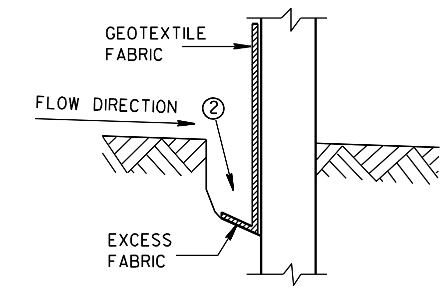

PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

## GENERAL NOTES

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

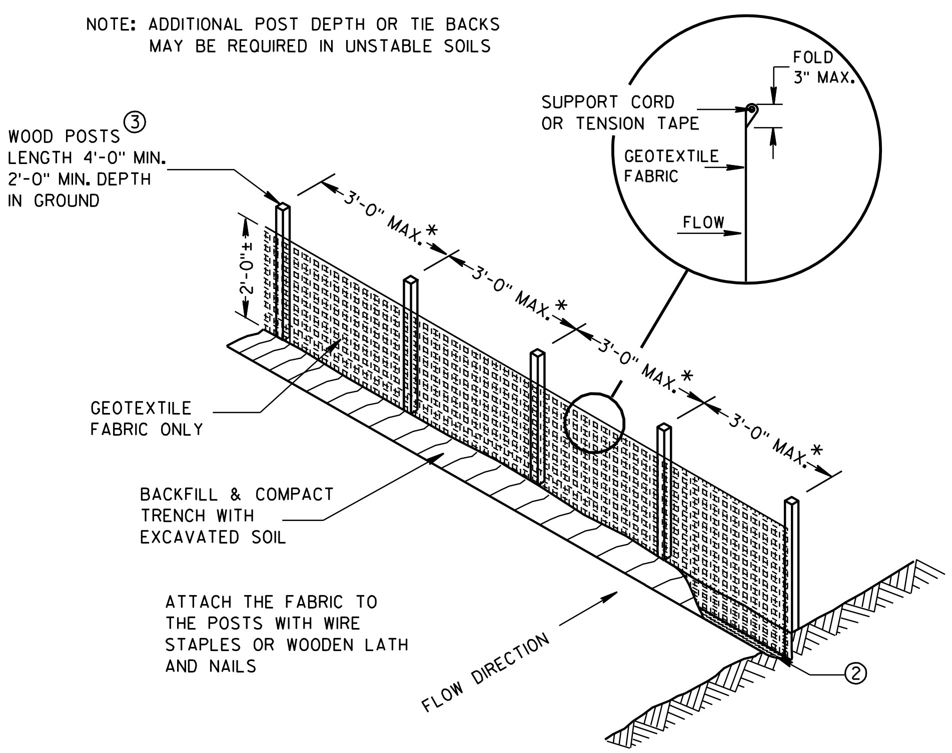
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES. B) HOOK THE END OF EACH SILT FENCE LENGTH.




## TRENCH DETAIL

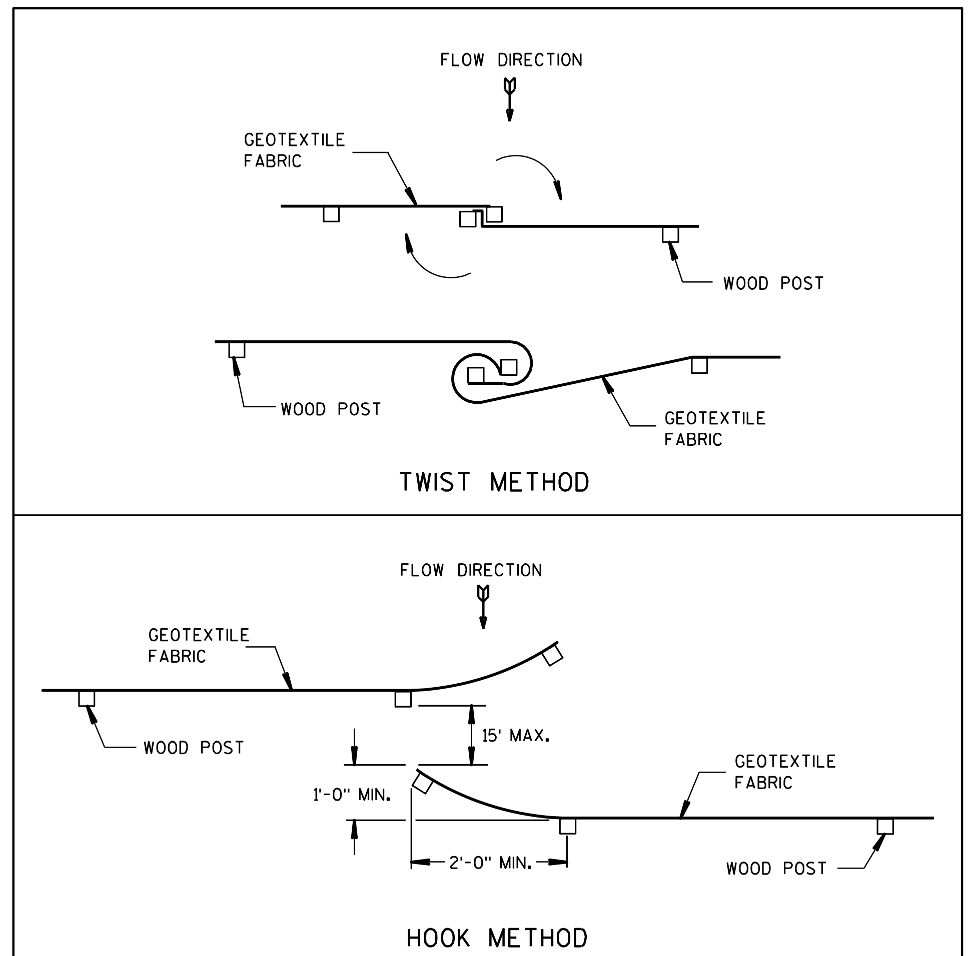
6

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

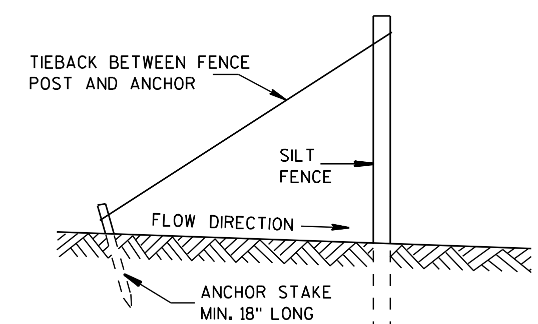



*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

## SILT FENCE




## JOINING TWO LENGTHS OF SILT FENCE 5




## SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

| SILT FENCE |
|---|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION |
| APPROVED 4-29-05 DATE /S/ Beth Cann... CHIEF ROADWAY DEVELOP... ENGINEER |
| FHWA |

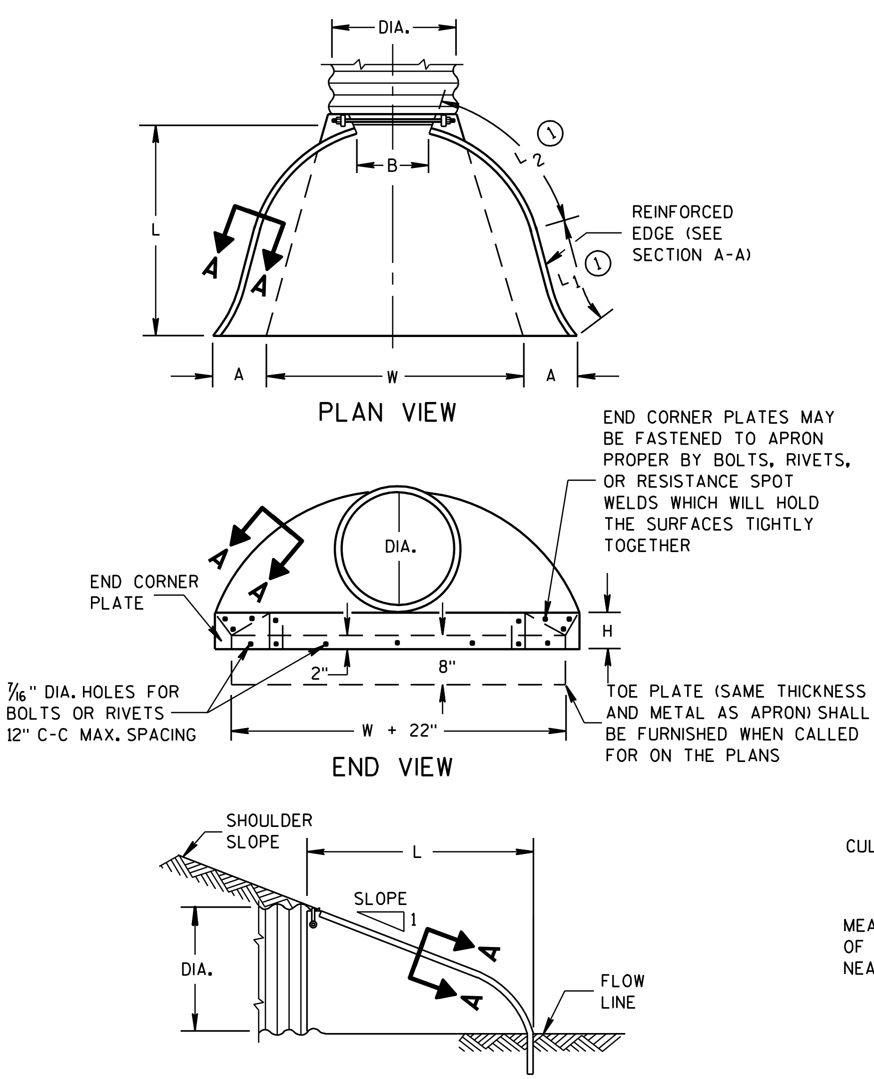
S.D.D. 8 E 9-6

| METAL APRON ENDWALLS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PIPE DIA. (IN.) | MIN. THICK. (Inches) | | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE | BODY |
| | STEEL | ALUM. | A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | | |
| 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. |

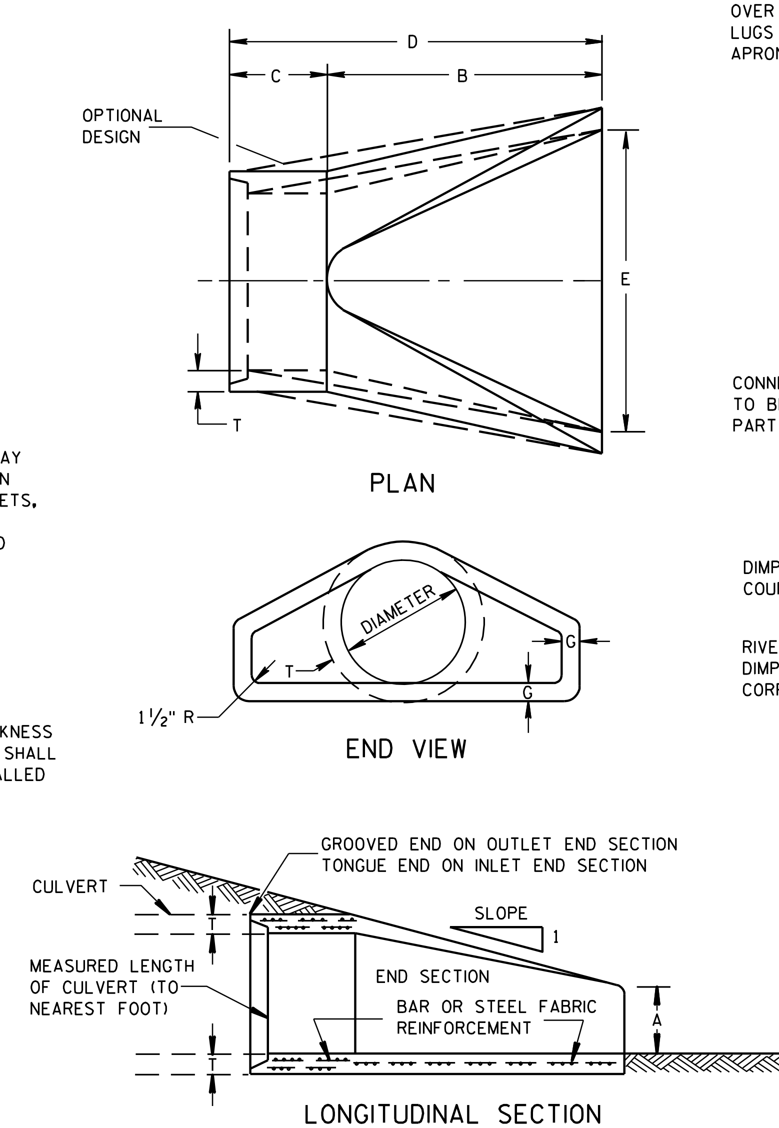
× EXCEPT CENTER PANEL
SEE GENERAL NOTES

| REINFORCED CONCRETE APRON ENDWALLS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PIPE DIA. (IN.) | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE |
| | T | A | B | C | D | E | G | |
| 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 |

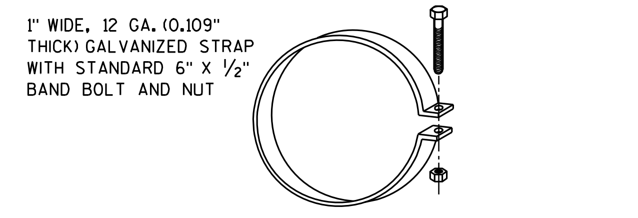
*MINIMUM
**MAXIMUM




## METAL ENDWALLS

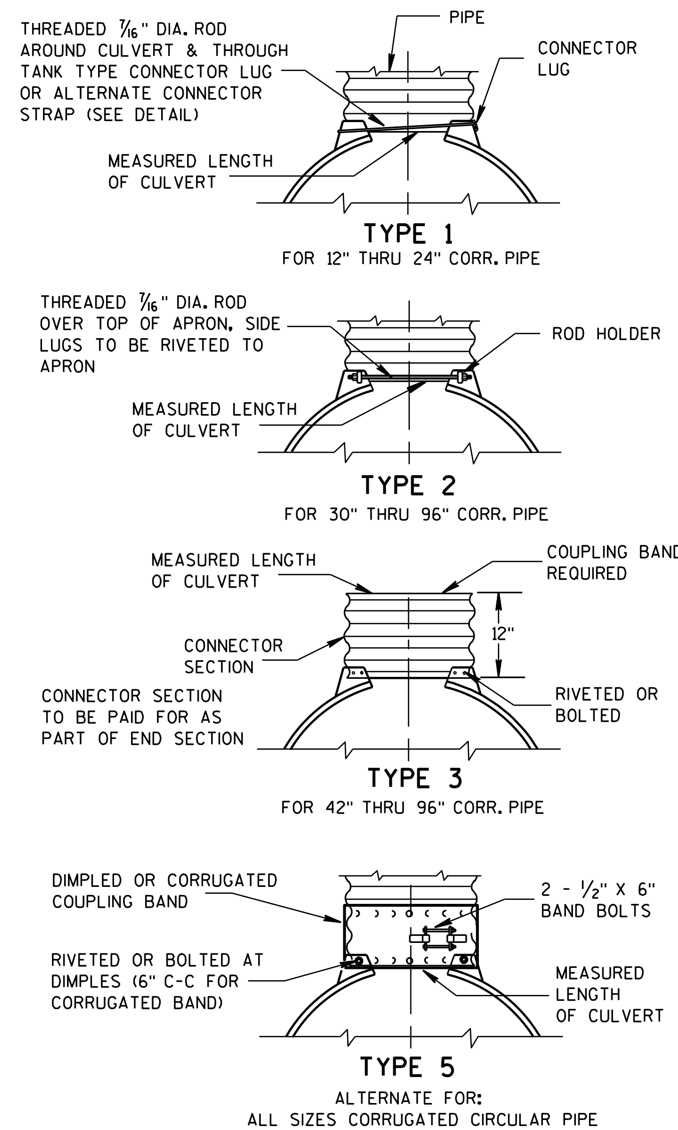



## CONCRETE ENDWALLS




ALTERNATE FOR TYPE 1 CONNECTION

## END SECTION CONNECTOR STRAP



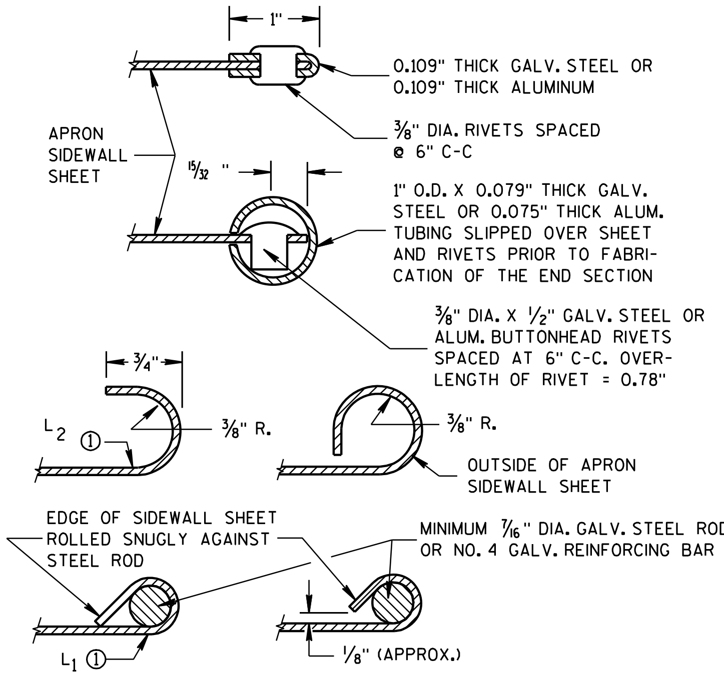

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

## CONNECTION DETAILS




## SECTION A-A

## GENERAL NOTES

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

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

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

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" 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.

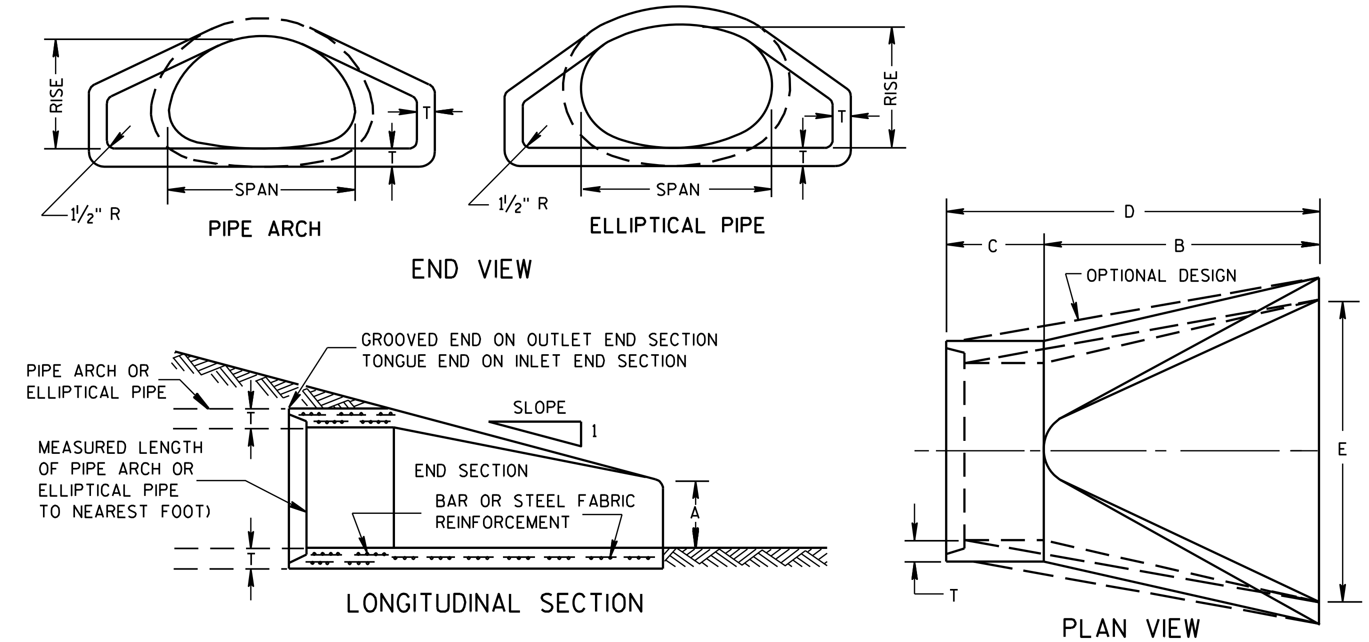
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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 /S/ Rory L. Rhinesmith
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA




## CONCRETE ENDWALLS

| 2- 2/3" X 1/2" CORRUGATIONS | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EQUIV. DIA. (Inches) | (Inches) | | MIN. THICK. (Inches) | | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE | BODY |
| | SPAN | RISE | STEEL | ALUM. | A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | | |
| 15 | 17 | 13 | .064 | .060 | 7 | 9 | 6 | 19 | 14 | 16 | 30 | 2 1/2 to 1 | 1 Pc. |
| 18 | 21 | 15 | .064 | .060 | 7 | 10 | 6 | 23 | 14 | 19 3/8 | 36 | 2 1/2 to 1 | 1 Pc. |
| 21 | 24 | 18 | .064 | .060 | 8 | 12 | 6 | 28 | 18 | 21 3/4 | 42 | 2 1/2 to 1 | 1 Pc. |
| 24 | 28 | 20 | .064 | .060 | 9 | 14 | 6 | 32 | 18 | 27 1/2 | 48 | 2 1/2 to 1 | 1 Pc. |
| 30 | 35 | 24 | .079 | .075 | 10 | 16 | 6 | 39 | 18 | 37 5/8 | 60 | 2 1/2 to 1 | 1 Pc. |
| 36 | 42 | 29 | .079 | .075 | 12 | 18 | 8 | 46 | 24 | 45 3/8 | 75 | 2 1/2 to 1 | 1 Pc. |
| 42 | 49 | 33 | .109 | .105 | 13 | 21 | 9 | 53 | 24 | 54 3/4 | 85 | 2 1/2 to 1 | 2 Pc. |
| 48 | 57 | 38 | .109 | .105 | 18 | 26 | 12 | 63 | 24 | 68 | 90 | 2 1/2 to 1 | 3 Pc. |
| 54 | 64 | 43 | .109 | .105 | 18 | 30 | 12 | 70 | 24 | 72 3/4 | 102 | 2 1/4 to 1 | 3 Pc. |
| 60 | 71 | 47 | .109* | .105* | 18 | 33 | 12 | 77 | 30 | 82 1/4 | 114 | 2 1/4 to 1 | 3 Pc. |
| 66 | 77 | 52 | .109* | .105* | 18 | 36 | 12 | 77 | — | — | 126 | 2 to 1 | 3 Pc. |
| 72 | 83 | 57 | .109* | .105* | 18 | 39 | 12 | 77 | — | — | 138 | 2 to 1 | 3 Pc. |

| 3" X 1" CORRUGATIONS | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EQUIV. DIA. (Inches) | (Inches) | | MIN. THICK. (Inches) | | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE | BODY |
| | SPAN | RISE | STEEL | ALUM. | A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | | |
| 48 | 53 | 41 | .109 | .105 | 18 | 26 | 12 | 63 | 24 | 72 3/4 | 90 | 2 1/2 to 1 | 2 Pc. |
| 54 | 60 | 46 | .109 | .105 | 18 | 30 | 12 | 70 | 30 | 82 1/4 | 102 | 2 to 1 | 2 Pc. |
| 60 | 66 | 51 | .109* | .105* | 18 | 33 | 12 | 77 | — | — | 114 | 1 1/2 to 1 | 3 Pc. |
| 66 | 73 | 55 | .109* | .105* | 18 | 36 | 12 | 77 | — | — | 126 | 1 1/2 to 1 | 3 Pc. |
| 72 | 81 | 59 | .109* | .105* | 18 | 39 | 12 | 77 | — | — | 138 | 2 to 1 | 3 Pc. |
| 78 | 87 | 63 | .109* | .105* | 22 | 38 | 12 | 77 | — | — | 148 | 1 1/2 to 1 | 3 Pc. |
| 84 | 95 | 67 | .109* | .105* | 22 | 34 | 12 | 77 | — | — | 162 | 1 1/2 to 1 | 3 Pc. |
| 90 | 103 | 71 | .109* | .105* | 22 | 38 | 12 | 77 | — | — | 174 | 1 1/2 to 1 | 3 Pc. |
| 96 | 112 | 75 | .109* | .105* | 24 | 40 | 12 | 77 | — | — | 174 | 1 1/2 to 1 | 3 Pc. |

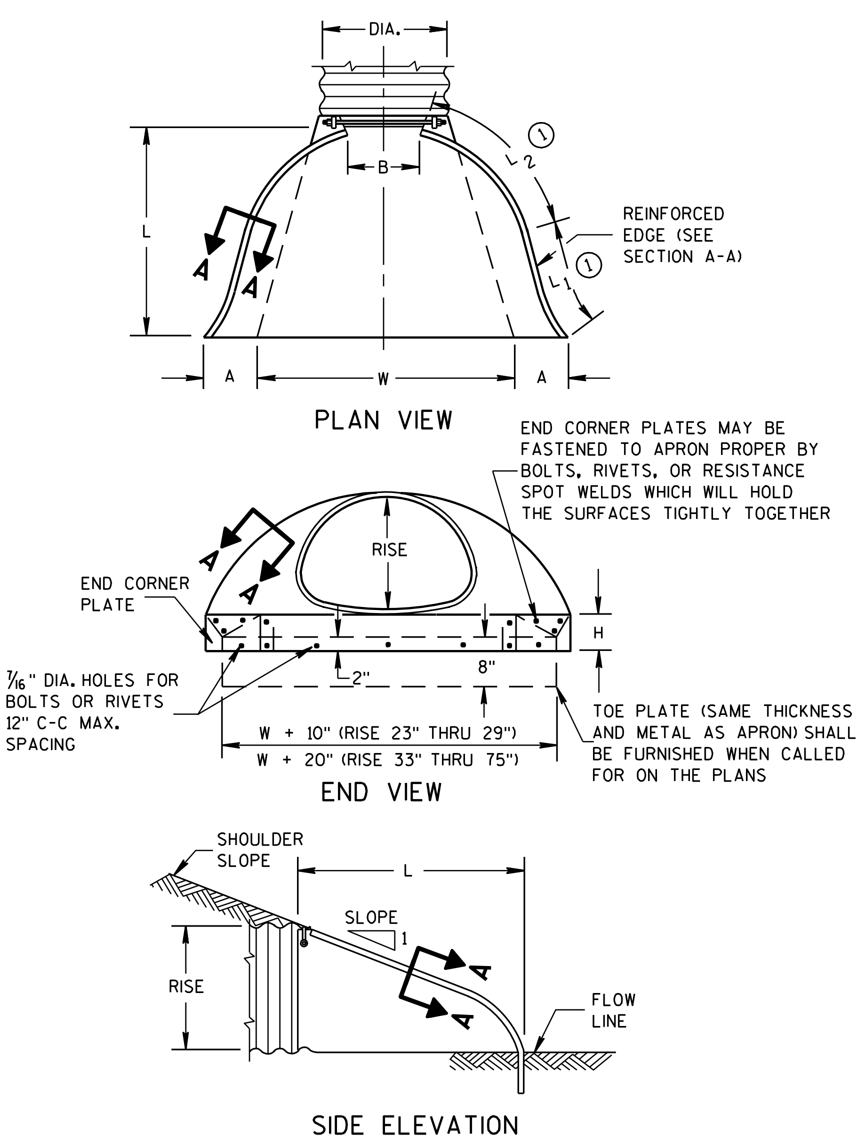
NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

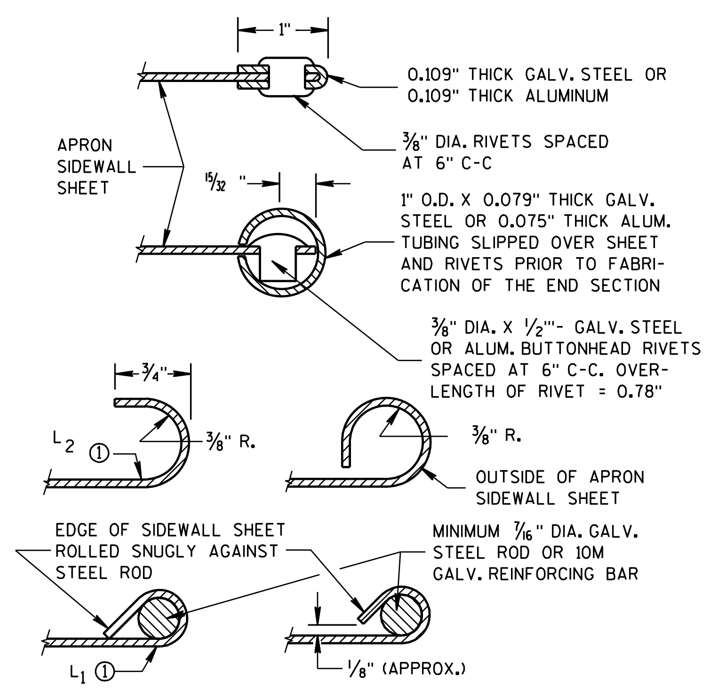
| REINFORCED CONCRETE PIPE ARCH | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EQUIV. DIA. (Inches) | DIMENSIONS (Inches) | | | | | | | | APPROX. SLOPE |
| | ** SPAN | ** RISE | T | A | B | C | D | E | |
| 24 | 29 | 18 | 3 | 8 1/2 | 39 | 33 | 72 | 48 | 3 to 1 |
| 30 | 36 | 22 | 3 1/2 | 9 1/2 | 50 | 46 | 96 | 60 | 3 to 1 |
| 36 | 44 | 27 | 4 | 11 1/8 | 60 | 36 | 96 | 72 | 3 to 1 |
| 42 | 51 | 31 | 4 1/2 | 15 13/16 | 60 | 36 | 96 | 78 | 3 to 1 |
| 48 | 58 | 36 | 5 | 21 | 60 | 36 | 96 | 84 | 3 to 1 |
| 54 | 65 | 40 | 5 1/2 | 25 1/2 | 60 | 36 | 96 | 90 | 3 to 1 |
| 60 | 73 | 45 | 6 | 31 | 60 | 36 | 96 | 96 | 3 to 1 |
| 72 | 88 | 54 | 7 | 31 | 60 | 39 | 99 | 120 | 2 to 1 |
| 84 | 102 | 62 | 8 | 28 1/2 | 83 | 19 | 102 | 144 | 2 to 1 |

| REINFORCED CONCRETE ELLIPTICAL PIPE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EQUIV. DIA. (Inches) | DIMENSIONS (Inches) | | | | | | | | APPROX. SLOPE |
| | ** SPAN | ** RISE | T | A | B | C | D | E | |
| 24 | 30 | 19 | 3 1/4 | 8 1/2 | 39 | 33 | 72 | 48 | 3 to 1 |
| 30 | 38 | 24 | 3 3/4 | 9 1/2 | 54 | 18 | 72 | 60 | 3 to 1 |
| 36 | 45 | 29 | 4 1/2 | 11 1/8 | 60 | 24 | 84 | 72 | 2 1/2 to 1 |
| 42 | 53 | 34 | 5 | 15 3/4 | 60 | 36 | 96 | 78 | 2 1/2 to 1 |
| 48 | 60 | 38 | 5 1/2 | 21 | 60 | 36 | 96 | 84 | 2 1/2 to 1 |
| 54 | 68 | 43 | 6 | 25 1/2 | 60 | 36 | 96 | 90 | 2 1/2 to 1 |
| 60 | 76 | 48 | 6 1/2 | 30 | 60 | 36 | 96 | 96 | 2 1/2 to 1 |

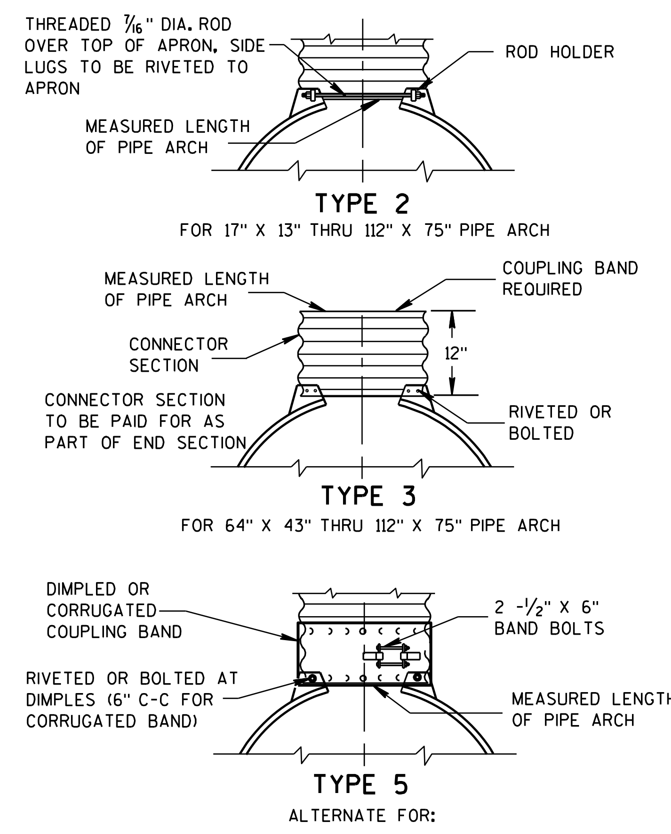
** NOMINAL SIZE




## METAL ENDWALLS




## SECTION A-A




NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

## CONNECTION DETAILS

# GENERAL NOTES

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

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

**APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — /S/ Rory L. Rhin...
DATE — CHIEF ROADWAY DEVELO... ...GINEER

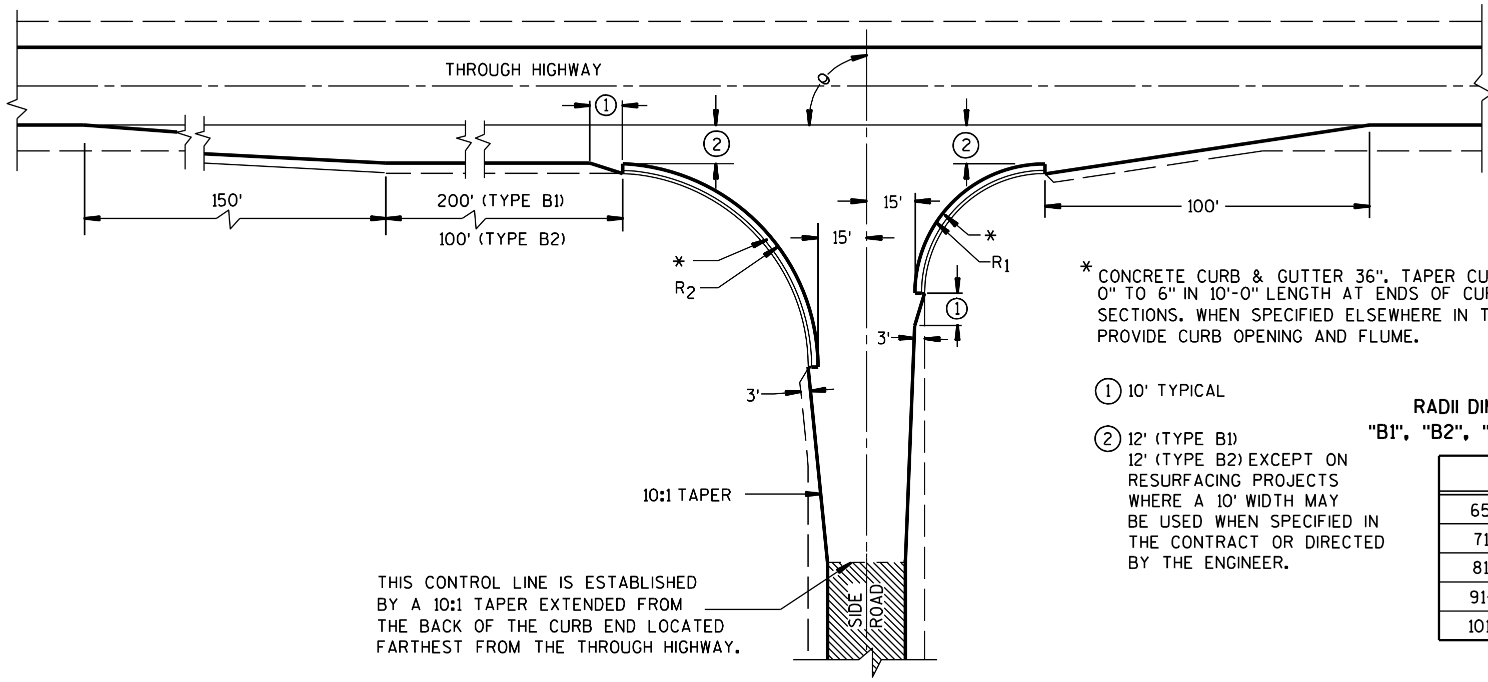
FHWA





6

S.D.D. 8 F 2-1




TYPE "B1" AND "B2"

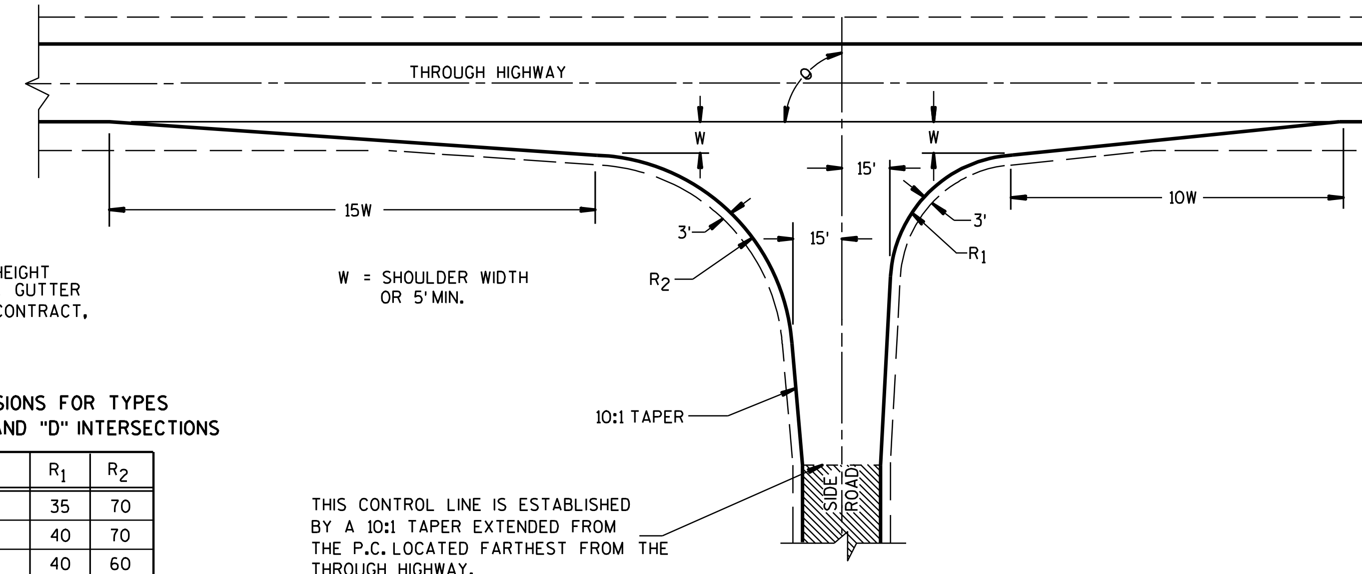
* CONCRETE CURB & GUTTER 36", TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

(1) 10' TYPICAL

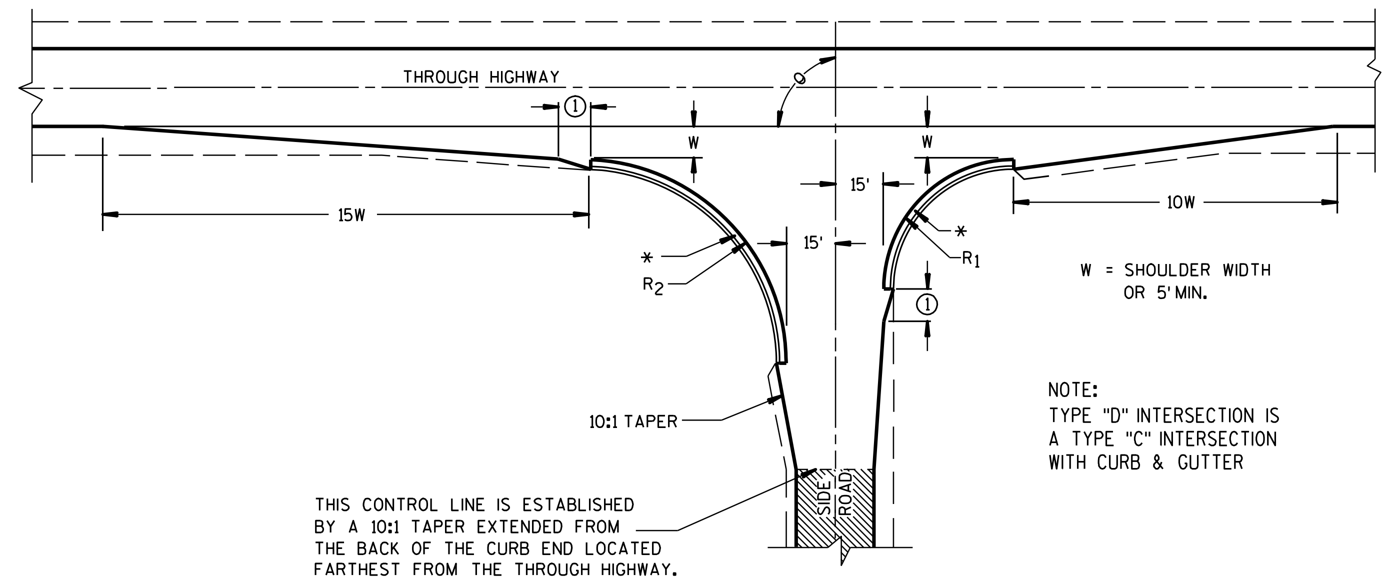
(2) 12' (TYPE B1)
12' (TYPE B2) EXCEPT ON RESURFACING PROJECTS WHERE A 10' WIDTH MAY BE USED WHEN SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

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

| θ | $R_1$ | $R_2$ |
|---|---|---|
| 65-70 | 35 | 70 |
| 71-80 | 40 | 70 |
| 81-90 | 40 | 60 |
| 91-100 | 50 | 55 |
| 101-110 | 60 | 45 |




TYPE "C"




NOTE:
TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB & GUTTER

TYPE "D"

## GENERAL NOTES

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

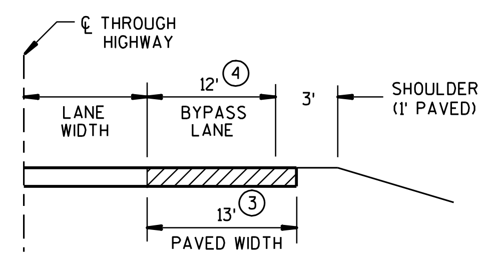
### SIDE ROAD SURFACING NOTE

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

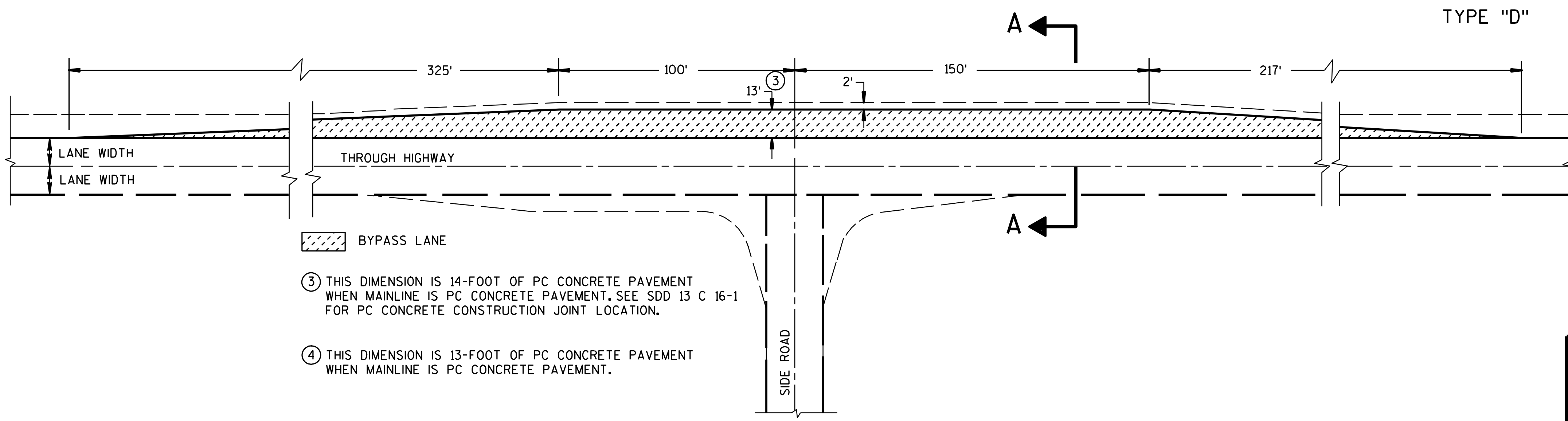
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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

EXISTING SURFACE




SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)




BYPASS LANE

(3) THIS DIMENSION IS 14-FOOT OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT. SEE SDD 13 C 16-1 FOR PC CONCRETE CONSTRUCTION JOINT LOCATION.

(4) THIS DIMENSION IS 13-FOOT OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT.

TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

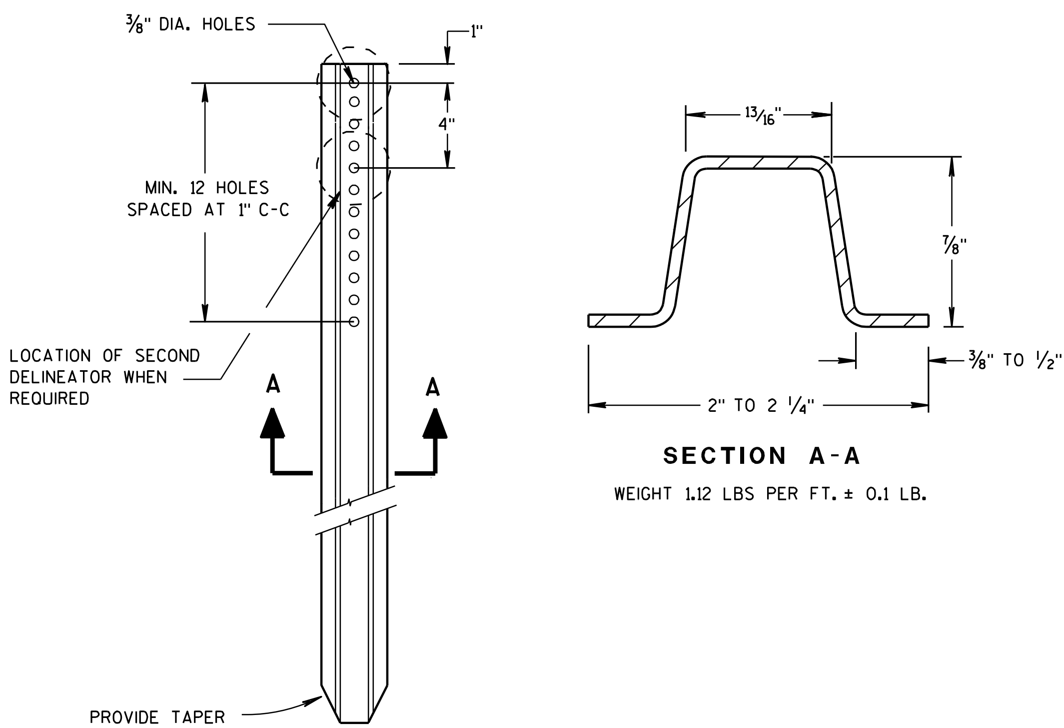
6

S.D.D. 9 A 1-12a

## GENERAL NOTES

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

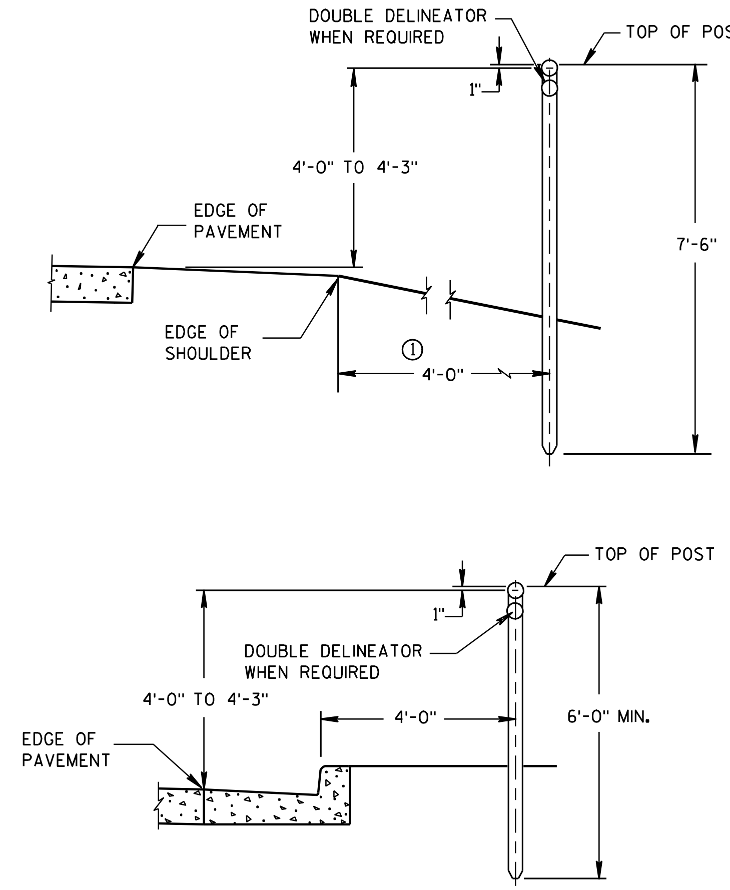
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



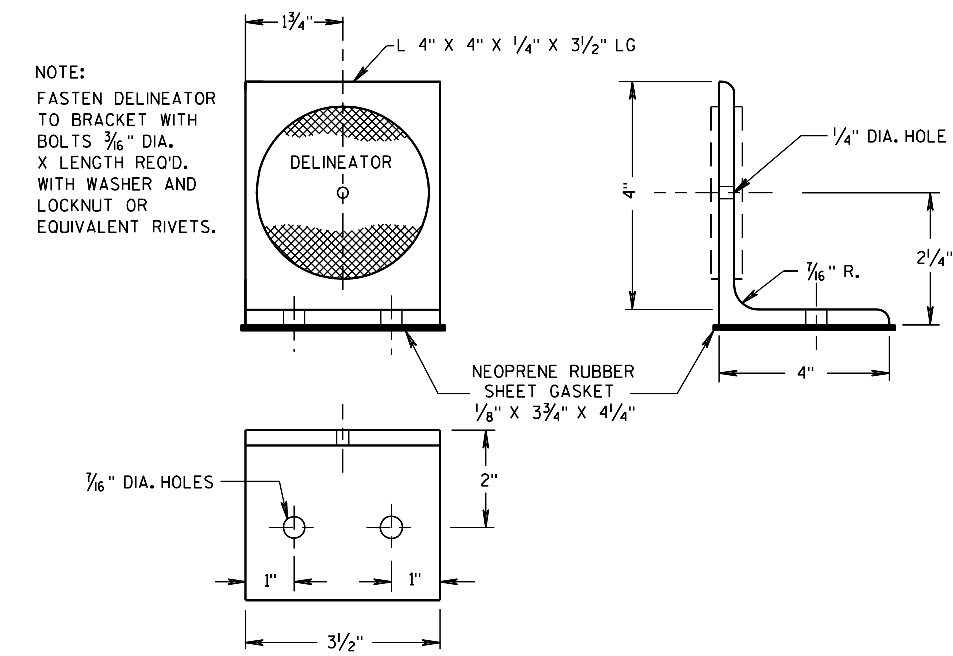

**DELINEATOR POST**

**SECTION A-A**

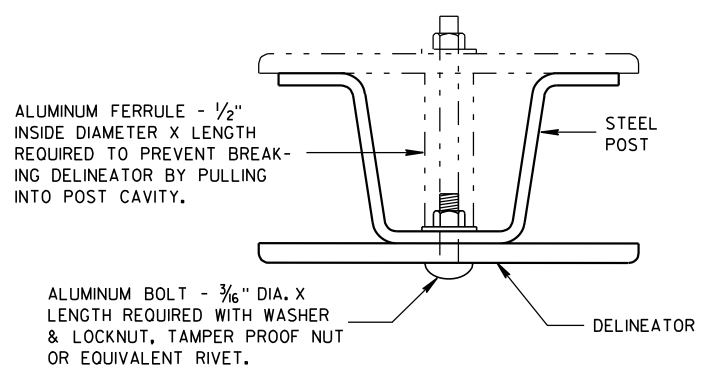
WEIGHT 1.12 LBS PER FT. ± 0.1 LB.



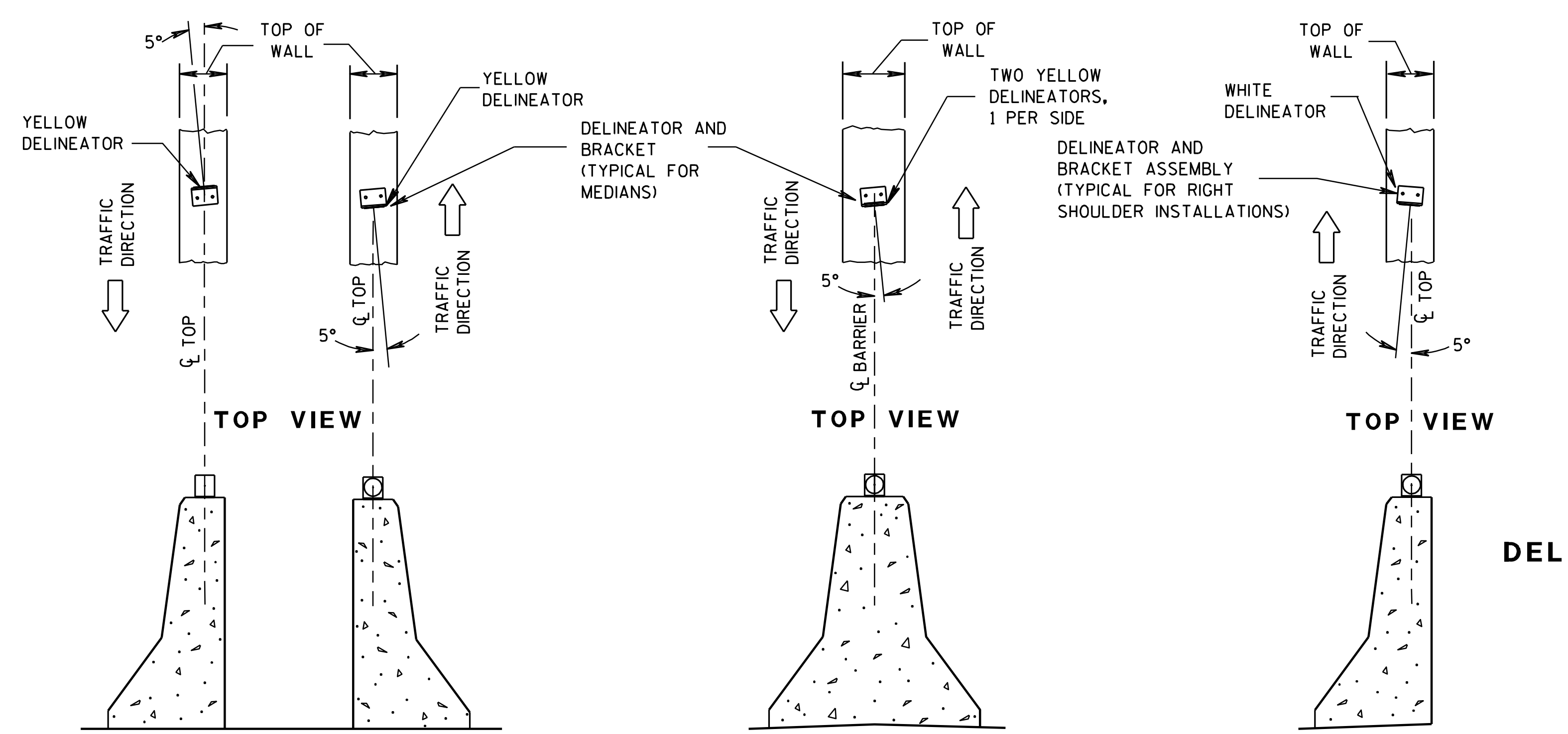

**TYPICAL INSTALLATIONS OF DELINEATOR POSTS**




**DELINEATOR BRACKET**




**MOUNTING DETAIL FOR DELINEATOR**

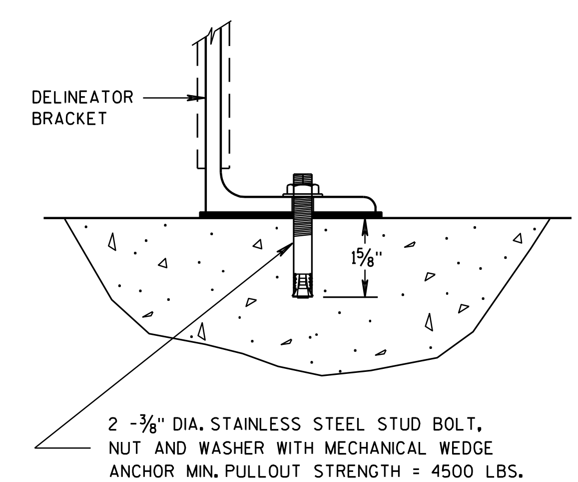



**DOUBLE BARRIERS IN MEDIAN**

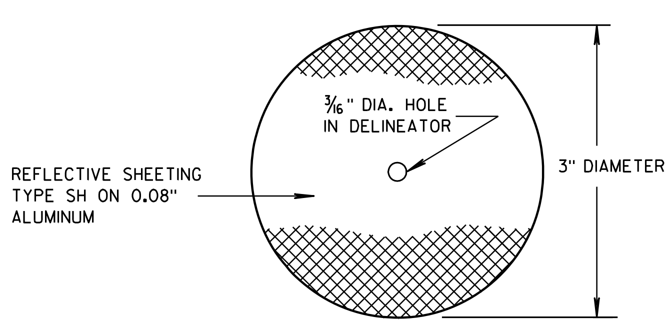
**MEDIAN BARRIER**

**BARRIER LOCATED TO RT. OF TRAFFIC FLOW**

**LOCATION AND AIMING DETAILS FOR DELINEATORS MOUNTED ON CONCRETE BARRIERS**




**DELINEATOR BRACKET MOUNTING DETAIL**




**DELINEATOR**

**DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1/25/2011 — /S/ Thomas N. Notbohm
DATE — STATE TRAFFIC ENGINEER 47 DESIGN
FHWA

S.D.D. 15 A 2-7

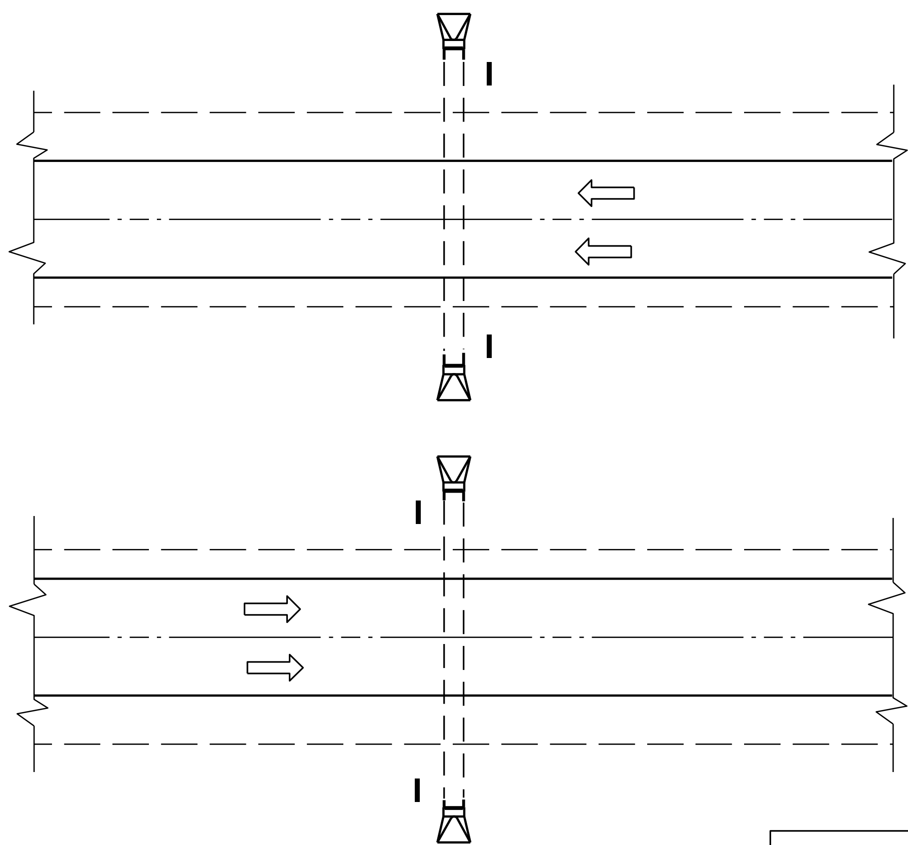
6

6

S.D.D. 15 A 2-7

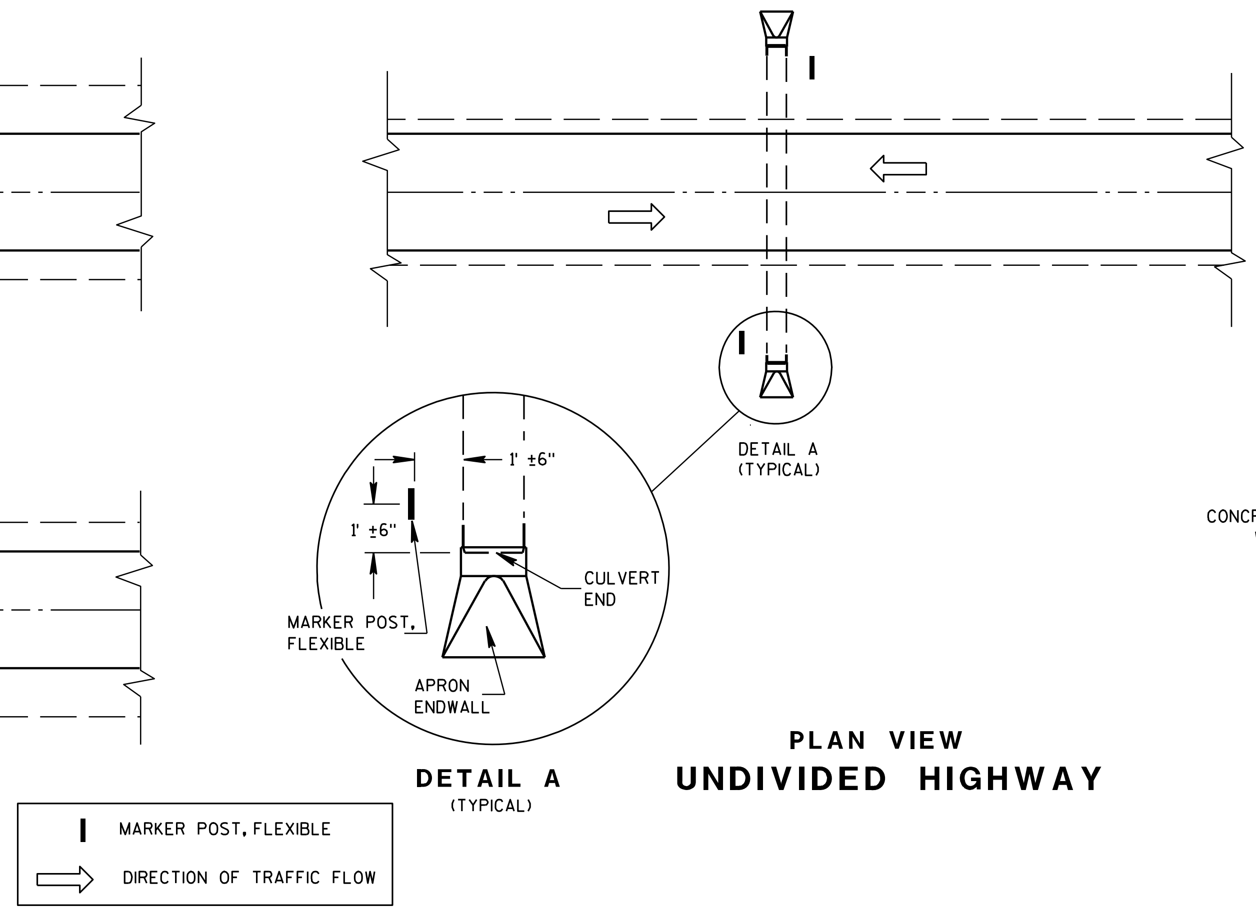
## GENERAL NOTES

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



PLAN VIEW

**DIVIDED HIGHWAY**

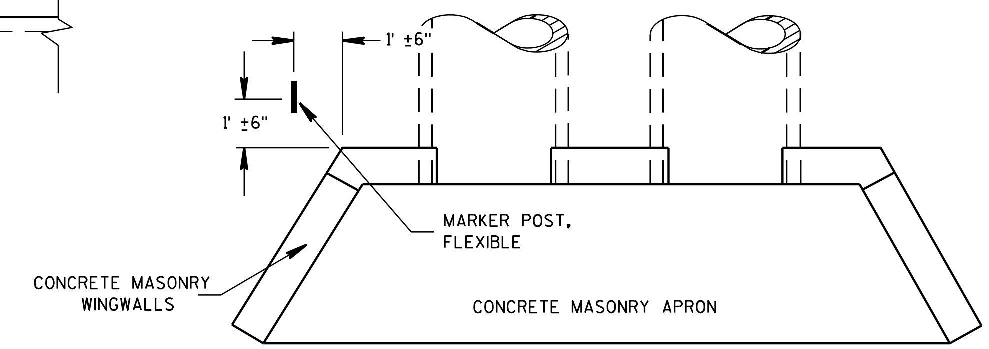



DETAIL A
(TYPICAL)

PLAN VIEW

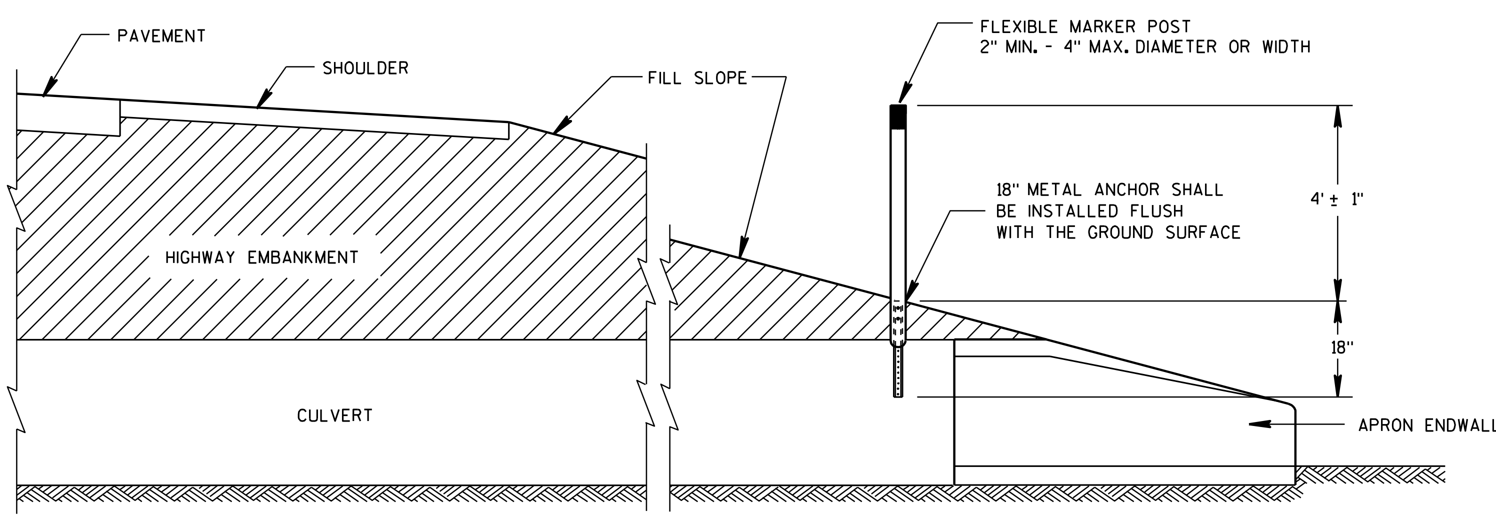
**UNDIVIDED HIGHWAY**

## FLEXIBLE MARKER POST LOCATION



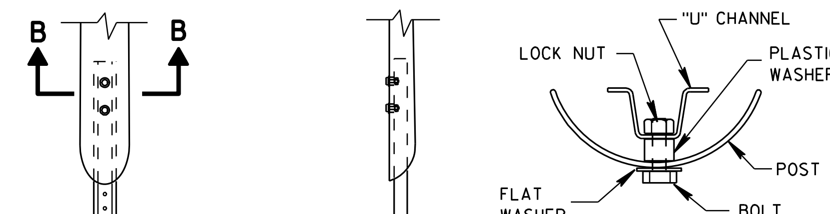

PLAN VIEW

**CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH**



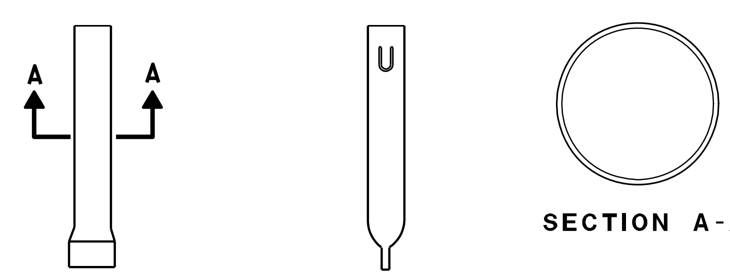

CROSS SECTION

**FLEXIBLE MARKER POST**




FRONT VIEW SIDE VIEW SECTION B-B

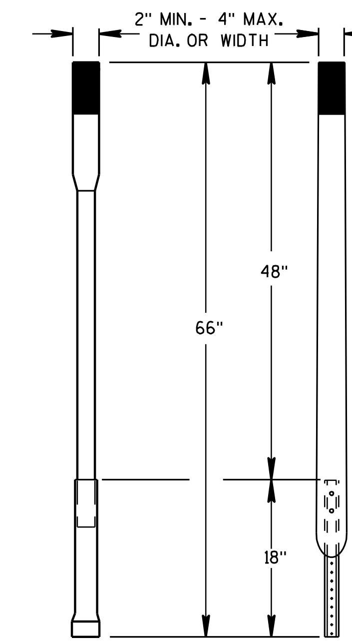
CURVED MARKER




FRONT VIEW SIDE VIEW SECTION A-A

ROUND MARKER

## FLEXIBLE MARKER POST ANCHORS




ALTERNATE 1 ALTERNATE 2

**FLEXIBLE MARKER POST**

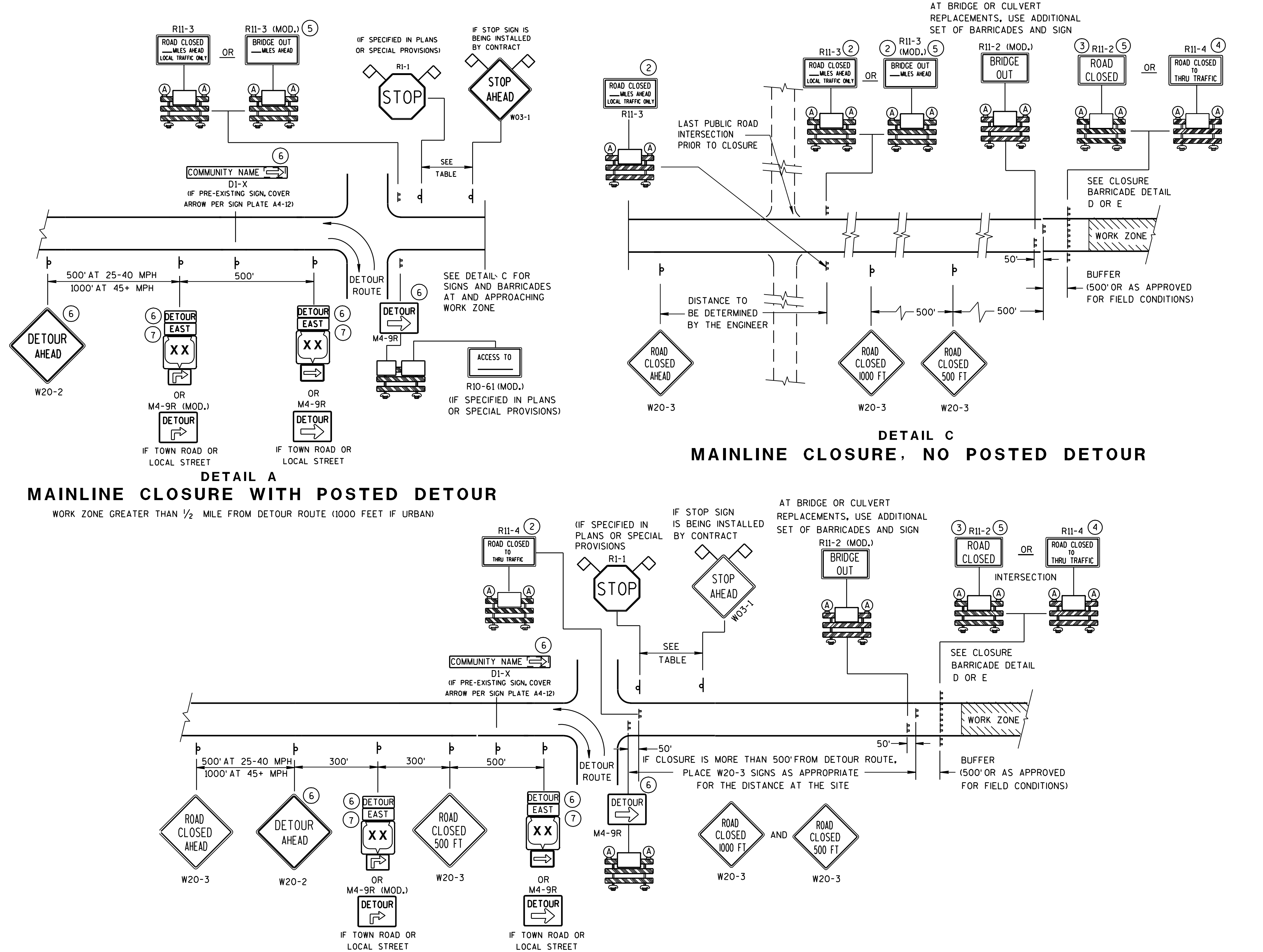
MARKER POST, FLEXIBLE, FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/1/98 /S/ Rory L. Rhinesmith
DATE CHEIF ROADWAY DEVELOPMENT ENGINEER

FHWA




## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

## DETAIL C
## MAINLINE CLOSURE, NO POSTED DETOUR

## DETAIL B
## MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

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

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

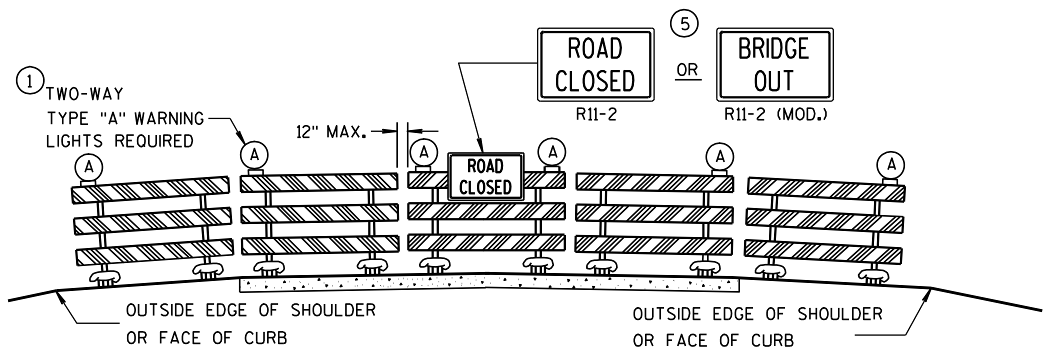
### LEGEND
- POST MOUNTED SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR M4-8 / EAST M3-X
- M1-4 OR M1-5A (COUNTY XX) OR M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

**BARRICADES AND SIGNS FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

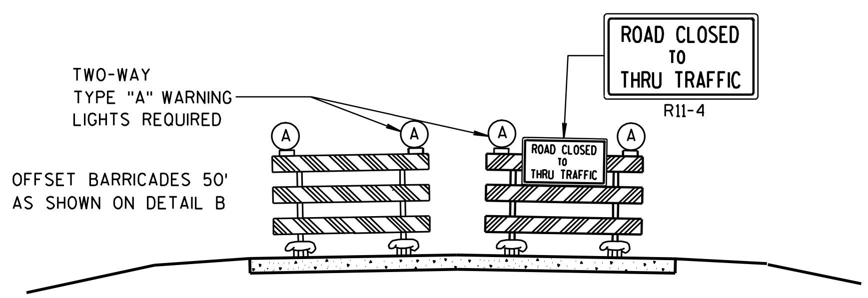
S.D.D. 15 C 2-4a




**DETAIL D**

## ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW




**DETAIL E**

## LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

## GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/16/03 — DATE

/S/ Thomas N. N[illegible] — CHIEF SIGNS AND MAR[illegible]INEER

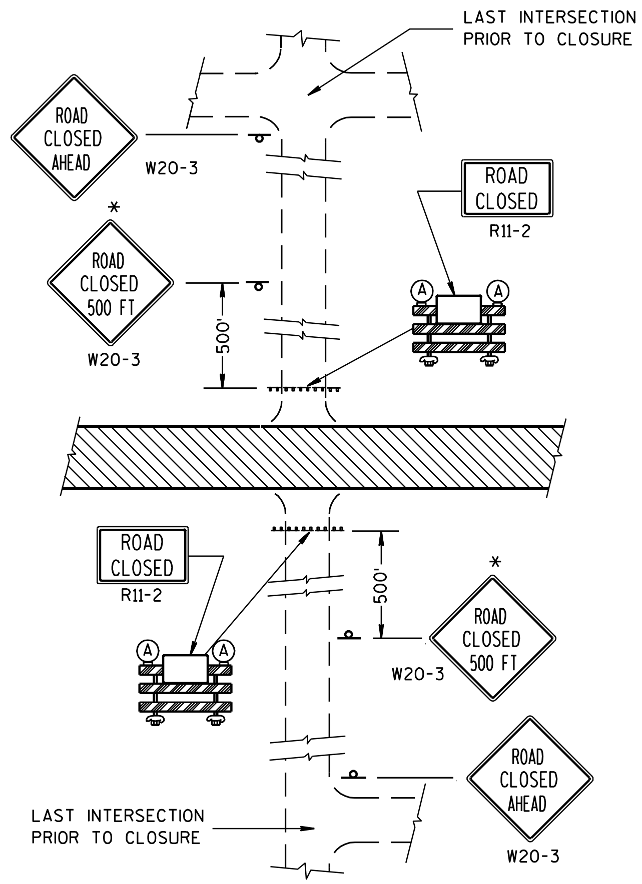
FHWA





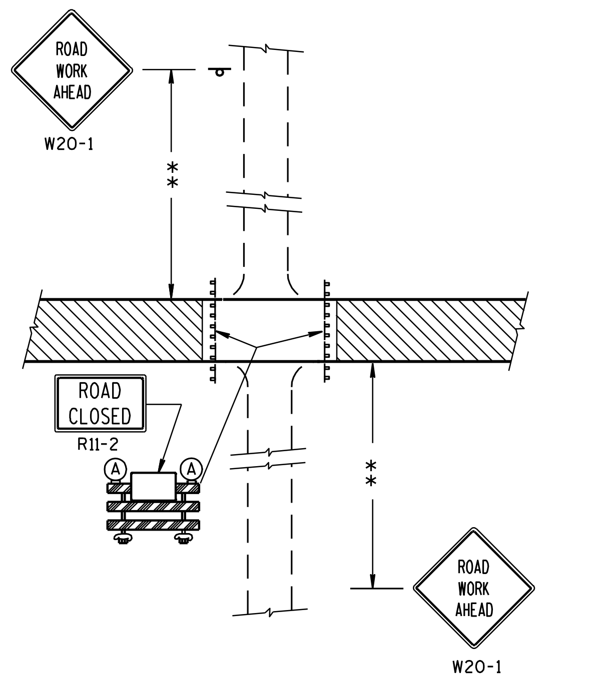
6

S.D.D. 15 C 2-4b



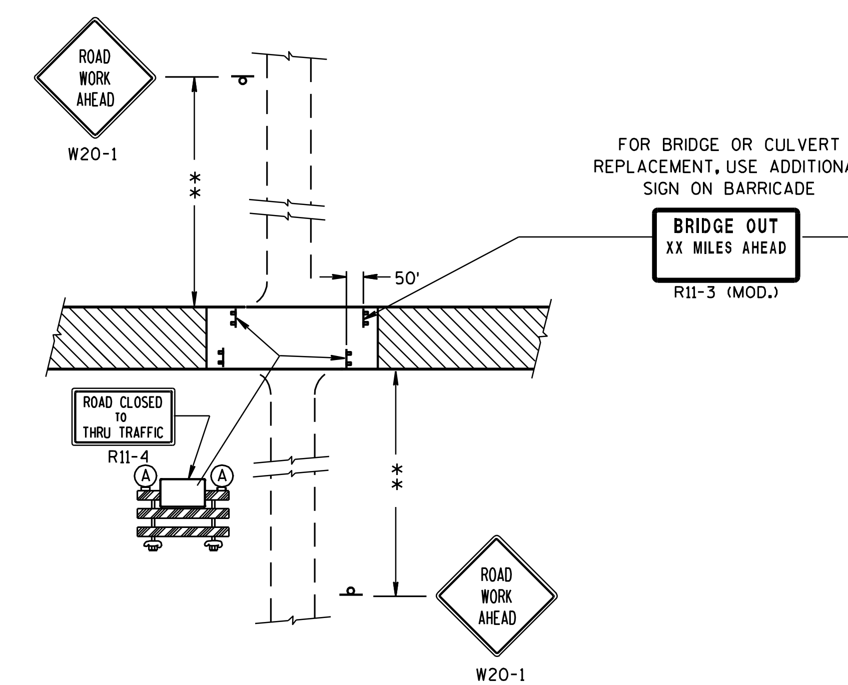

## DETAIL 1

(NO ACCESS TO PROJECT)



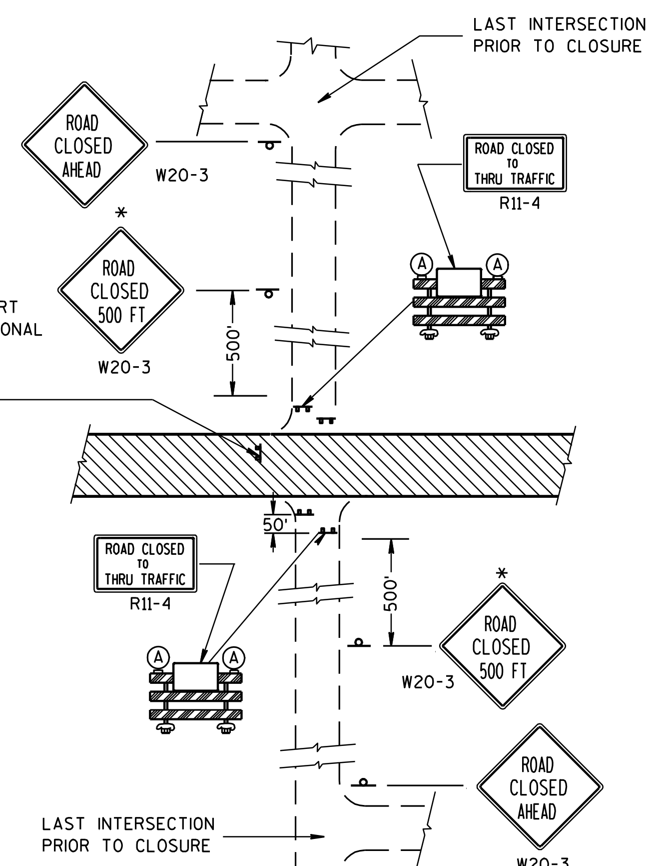

## DETAIL 2

(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

6

6

**BARRICADES AND SIGNS FOR SIDEROAD CLOSURES**

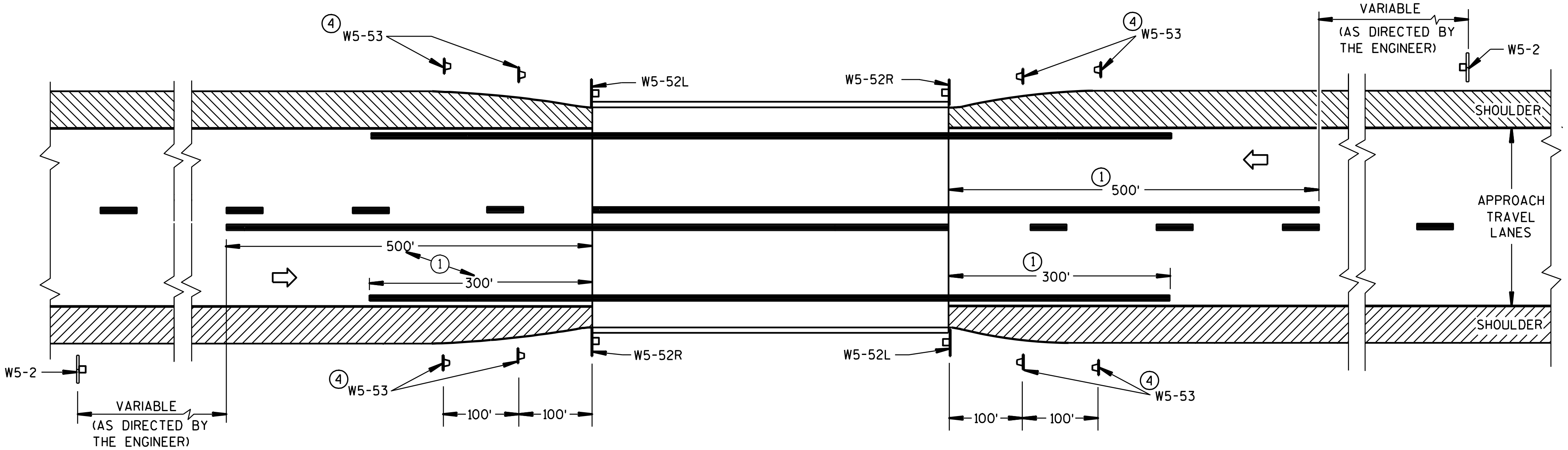
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-16-03 DATE
/S/ Thomas N. Notbohm
CHIEF SIGNS AND MARKINGS ENGINEER
FHWA



S.D.D. 15 C 3-1

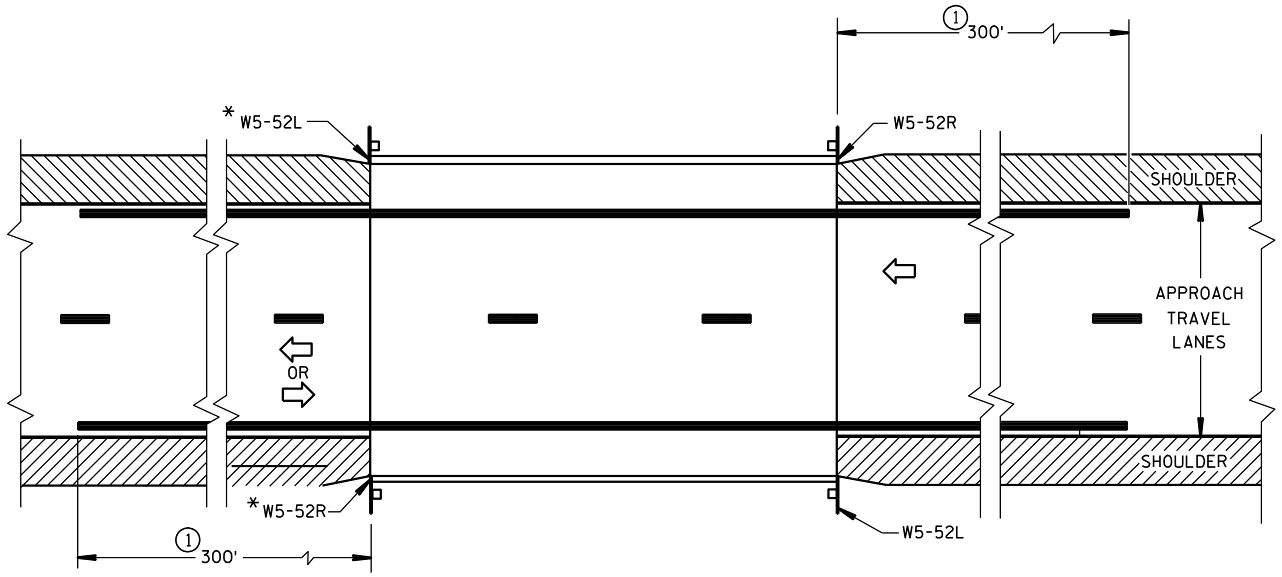
6




## SITUATION 1

WARRANTING CRITERION:

BRIDGE WIDTH IS AT LEAST 18 FEET BUT LESS THAN 24 FEET




*OMIT ON ONE-WAY TRAVELLED WAYS

## SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.

## GENERAL NOTES

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

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

① MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.

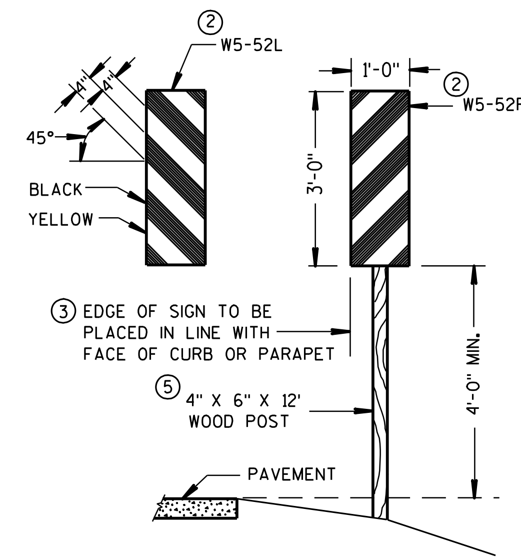
② FACE OF OBJECT MARKERS W5-52R AND W5-52L SHALL BE COVERED WITH TYPE H REFLECTIVE SHEETING.

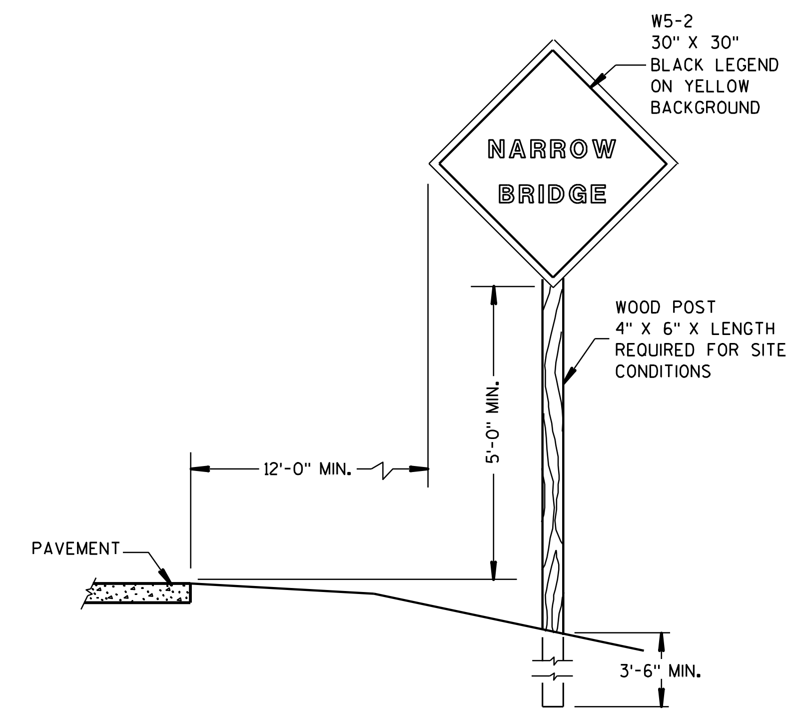
③ LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.

④ OBJECT MARKERS (W5-53) SHALL BE LOCATED ALONG A LINE FLARED AWAY FROM THE BRIDGE CORNER TO DELINEATE THE NARROWING OF THE SHOULDER OR BERM.

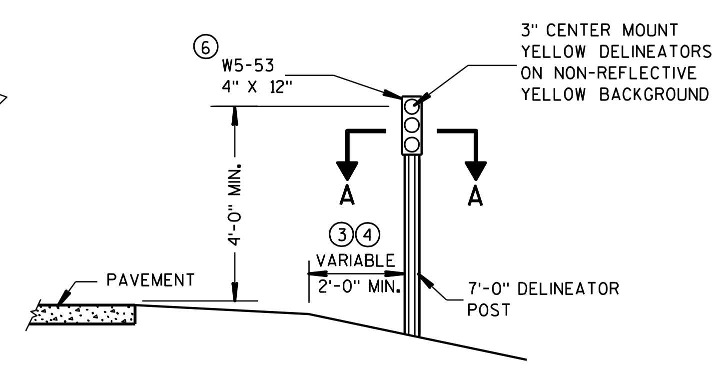
⑤ A 12 FOOT DELINEATOR POST MAY BE USED INSTEAD OF A WOOD POST.

⑥ NON-BID ITEM. INCIDENTAL TO OTHER ITEMS.

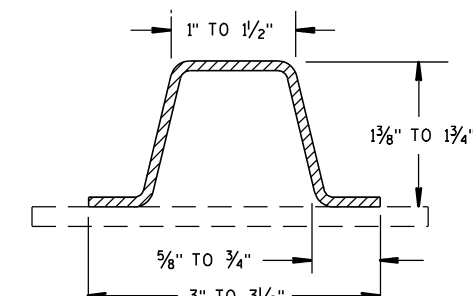



## SIGN PLACEMENT




## OBJECT MARKER PLACEMENT




## SECTION A-A

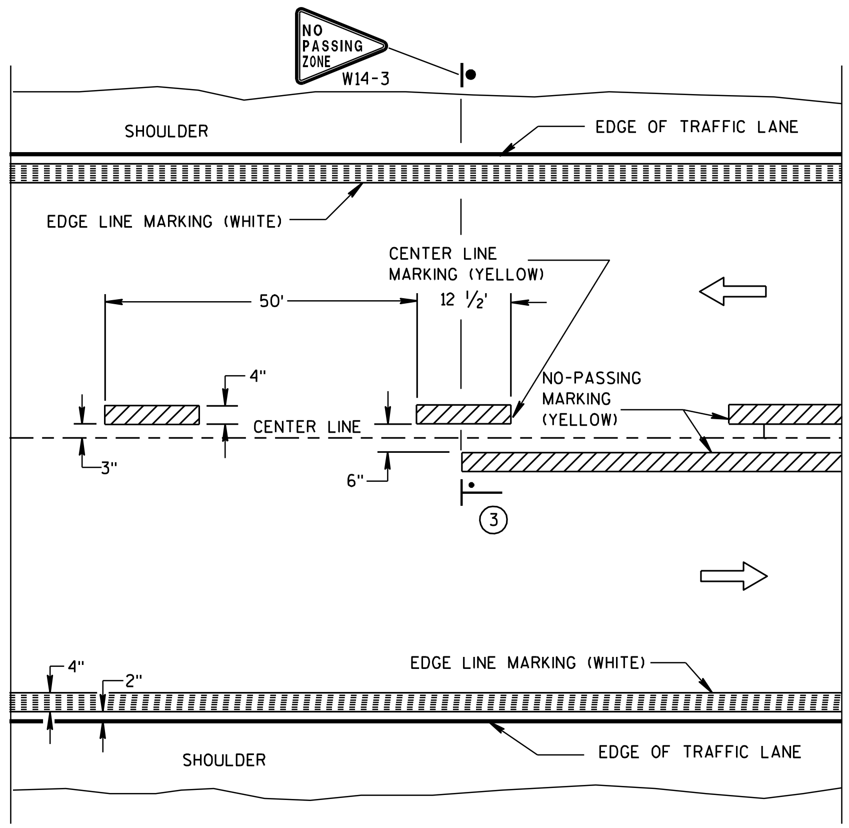
(MINIMUM WEIGHT 1.9 LBS. PER FT. AFTER GALVANIZING)

| |
|---|
| SIGNING & MARKING FOR TWO LANE BRIDGES |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION |
| APPROVED<br>9/5/06 /S/ Thomas N. Notbohm<br>DATE STATE TRAFFIC ENGINEER DESIGN<br>FHWA |

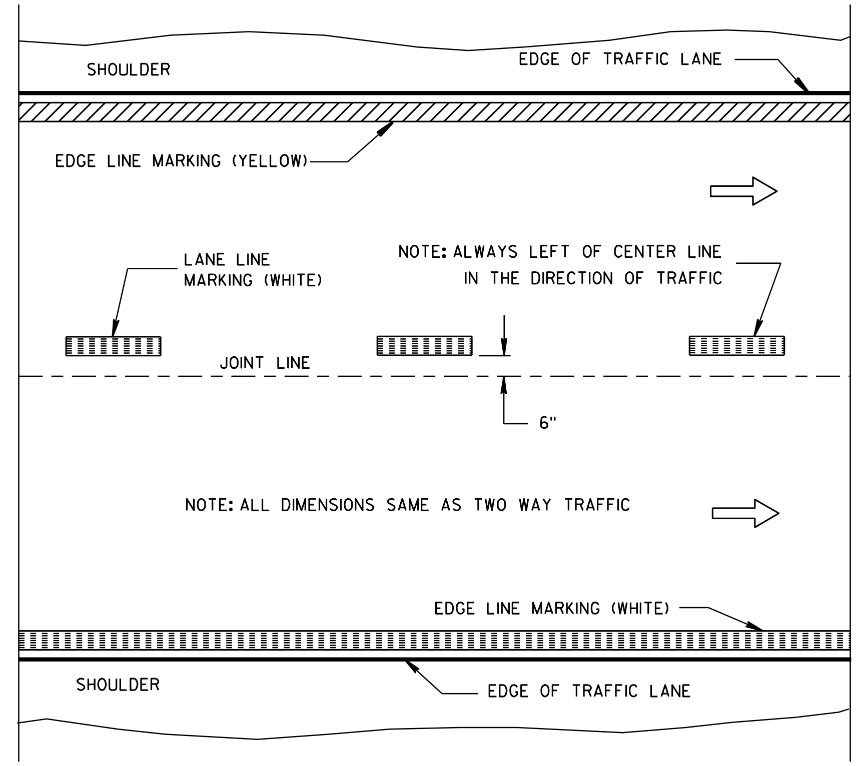
6

S.D.D. 15 C 6-5

S.D.D. 15 C 6-5

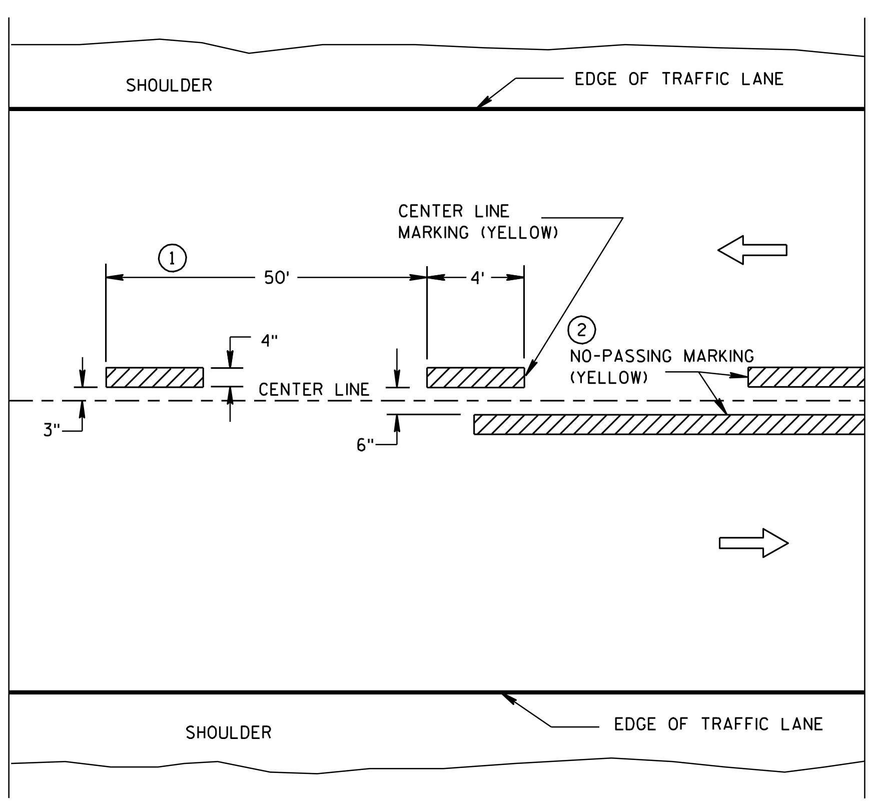



TWO WAY TRAFFIC

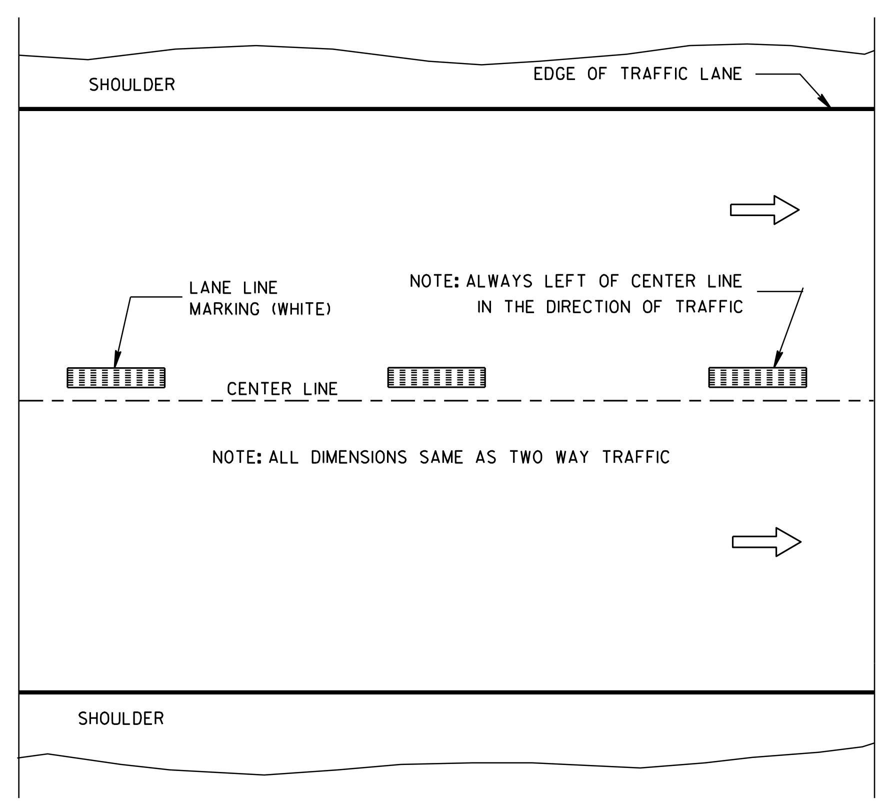



ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING




TWO WAY TRAFFIC




ONE WAY TRAFFIC

## TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

## GENERAL NOTES

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

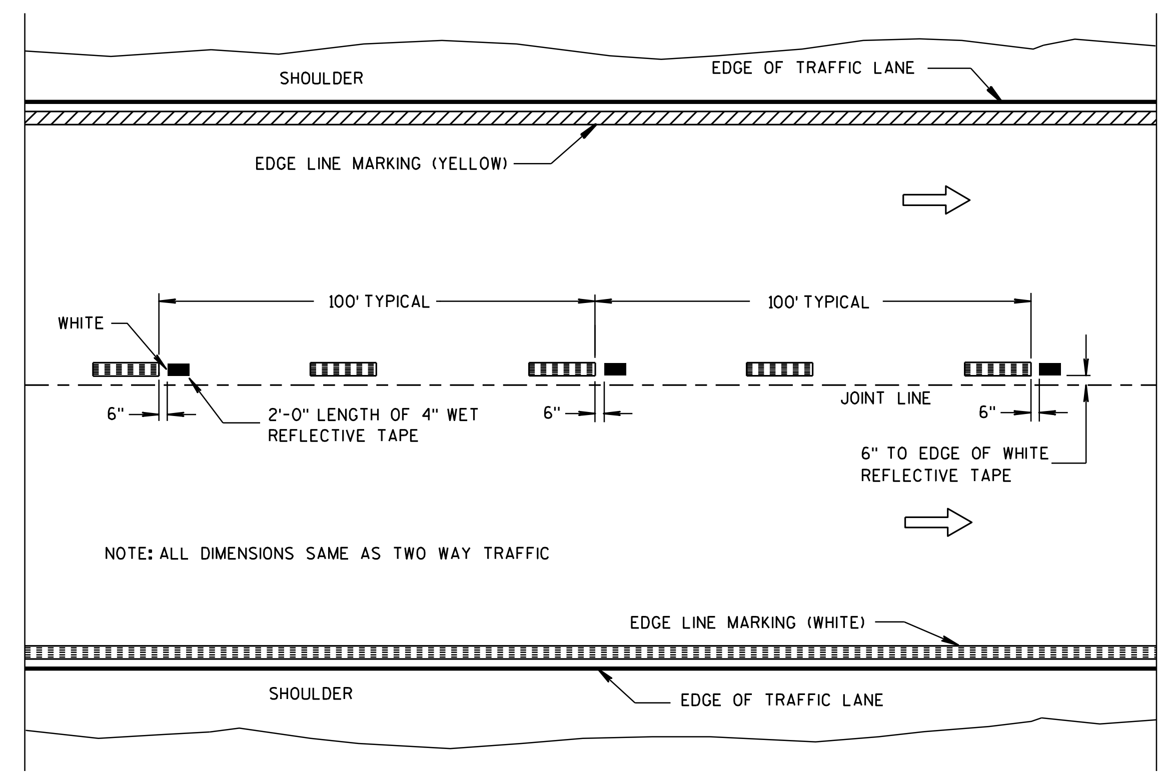
1 HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.

2 NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

3 NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.

## NOTE

ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL




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

## LEGEND

"T" MARKING

POST MOUNTED SIGN

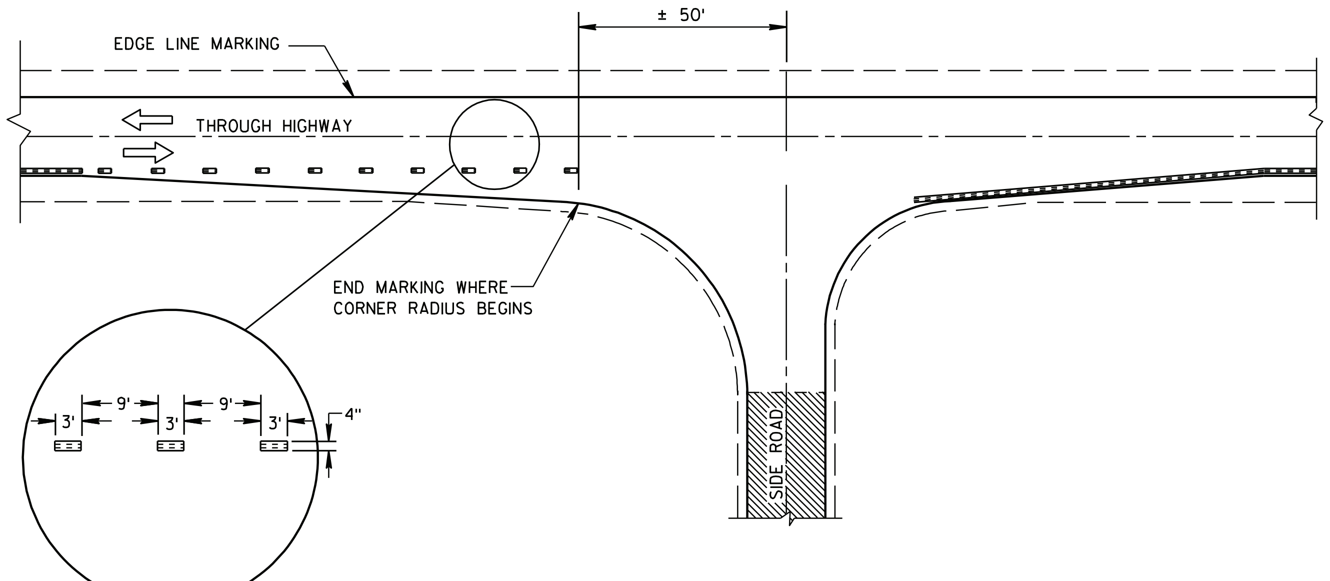
PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-23-11 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINE 53 ESIGN
FHWA



6
S.D.D. 15 C 8-14a




## MINOR INTERSECTION WITHOUT CURBS

## GENERAL NOTES

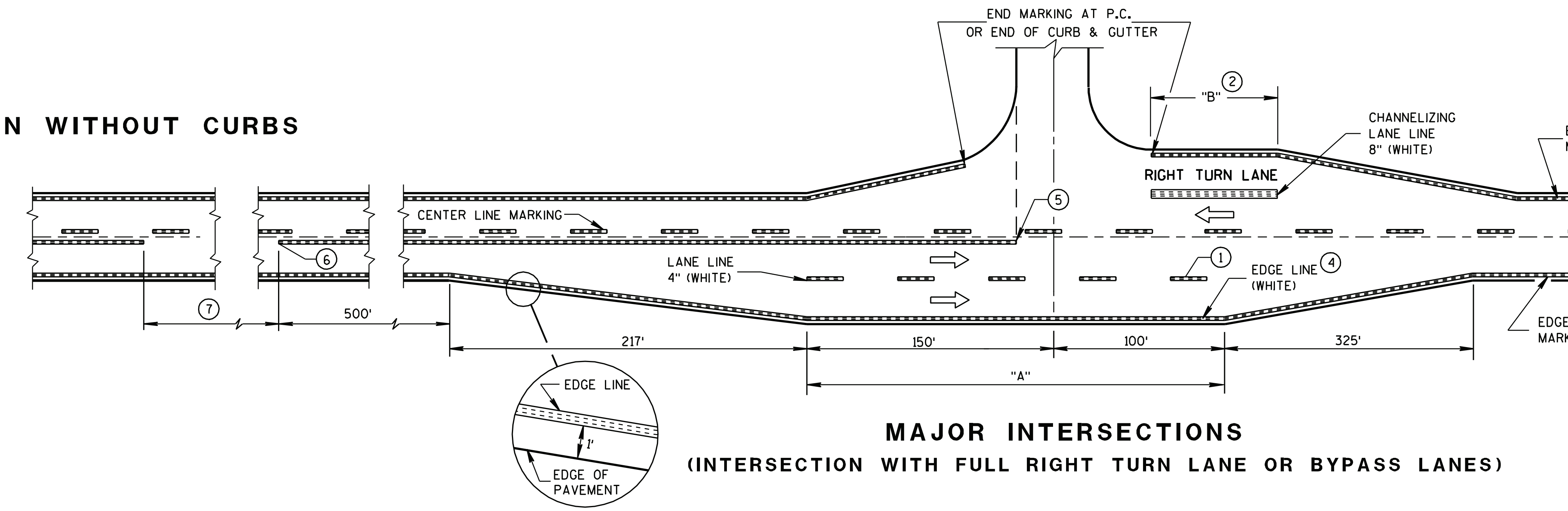
EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

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.

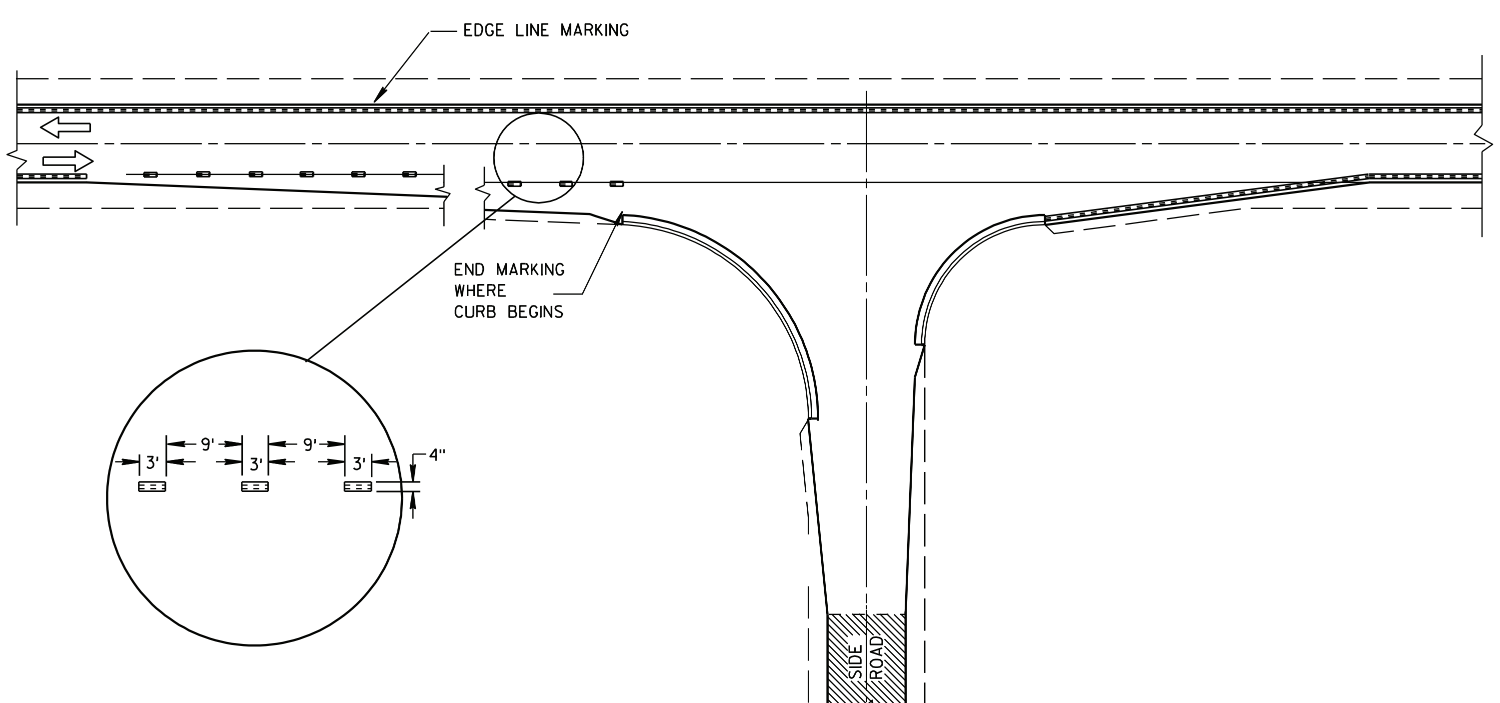
ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL

7

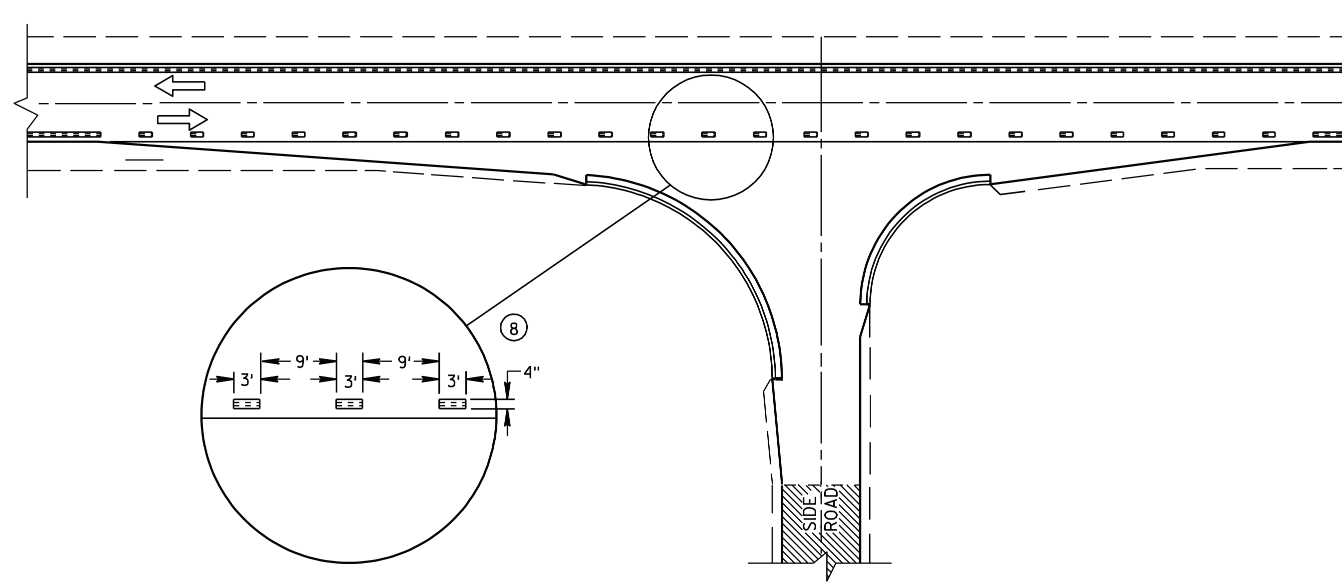
| POSTED SPEED (MPH) | MINIMUM DISTANCE BETWEEN ZONES (FEET) |
|---|---|
| 25 - 30 | 528 |
| 35 - 40 | 528 |
| 45 - 50 | 686 |
| 55 | 792 |




## 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





S.D.D. 15 C 8-14b

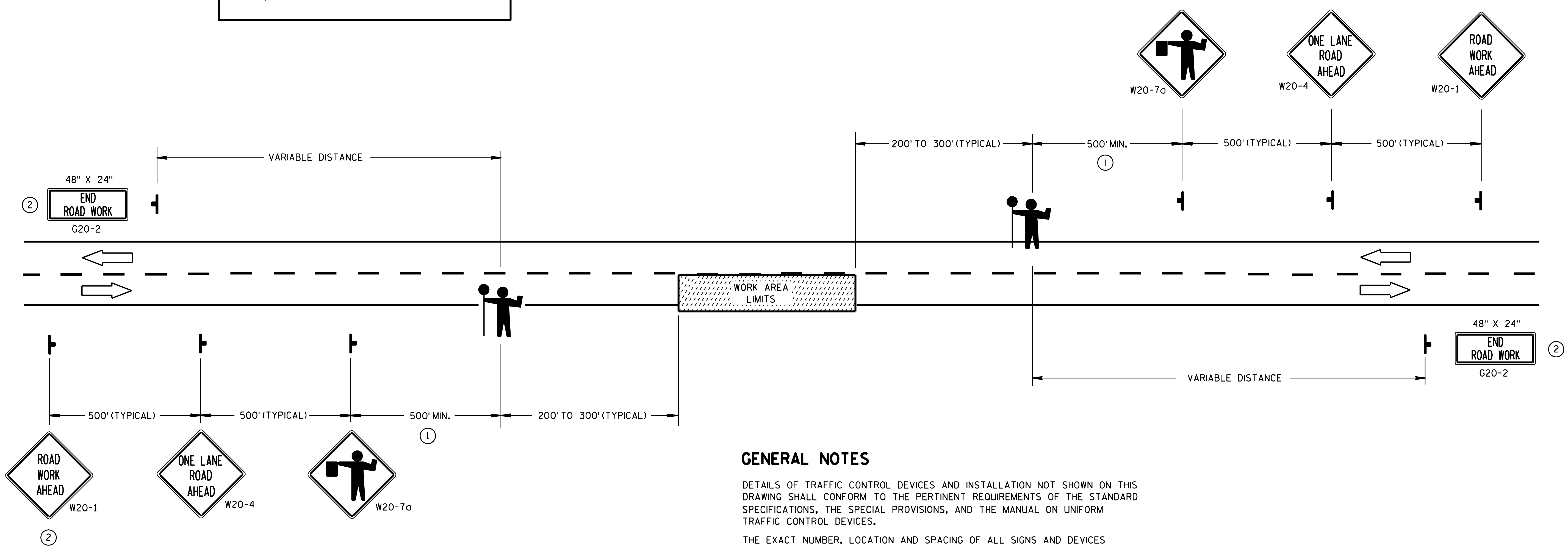
6

## TWO-LANE ROADWAY

### SYMBOLS

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


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




1. FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

2. SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

## GENERAL NOTES

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

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

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

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

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

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

**TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06 — DATE
/S/ Thomas N. Notbohm — STATE TRAFFIC ENGINE ESIGN
FHWA

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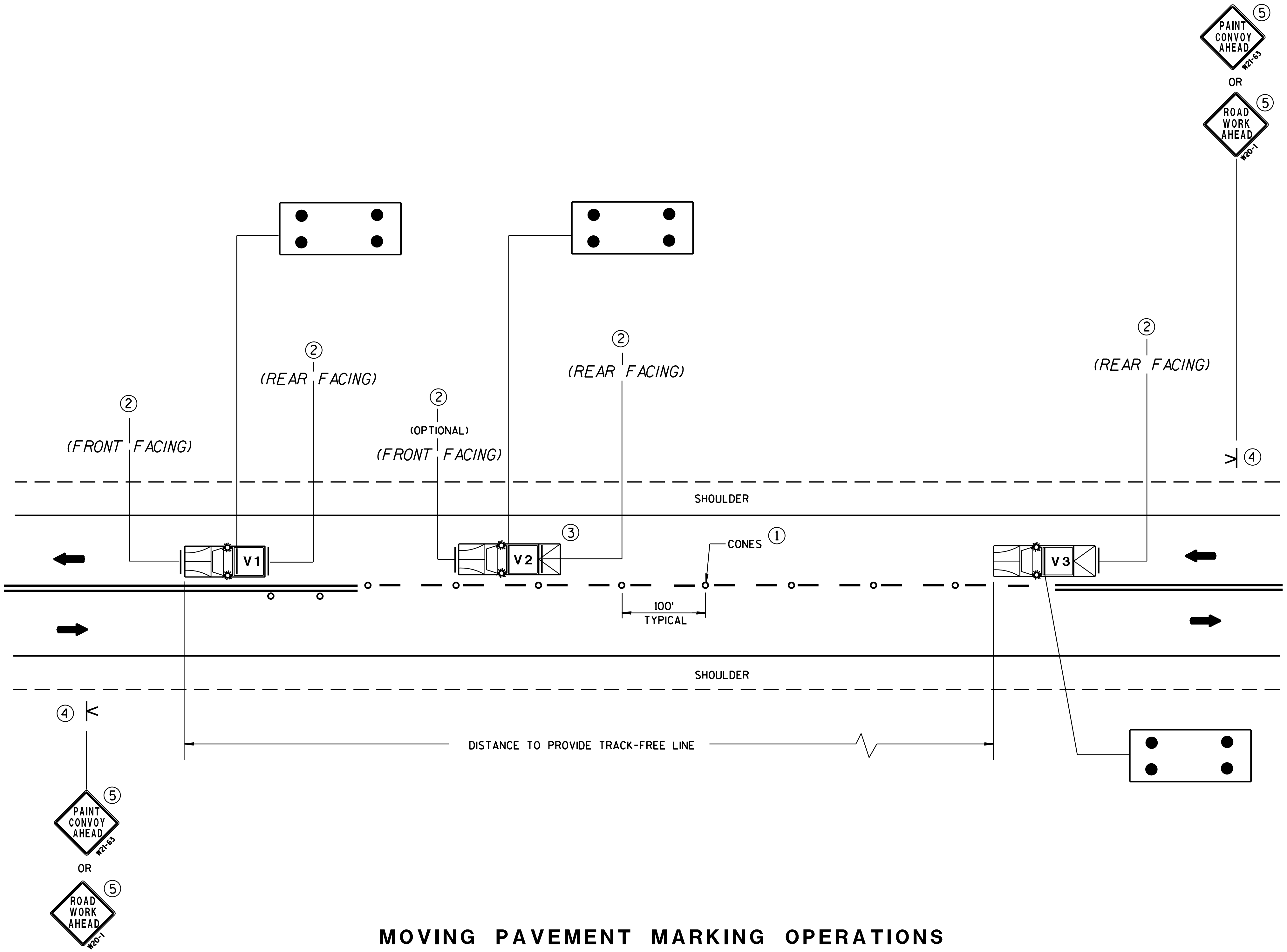
6

S.D.D. 15 C 12-3

S.D.D. 15 C 12-3




## GENERAL NOTES

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

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

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

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

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

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

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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

## LEGEND

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

## MOVING PAVEMENT MARKING OPERATIONS
## TWO-LANE TWO-WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION
TWO-LANE TWO-WAY ROADWAY

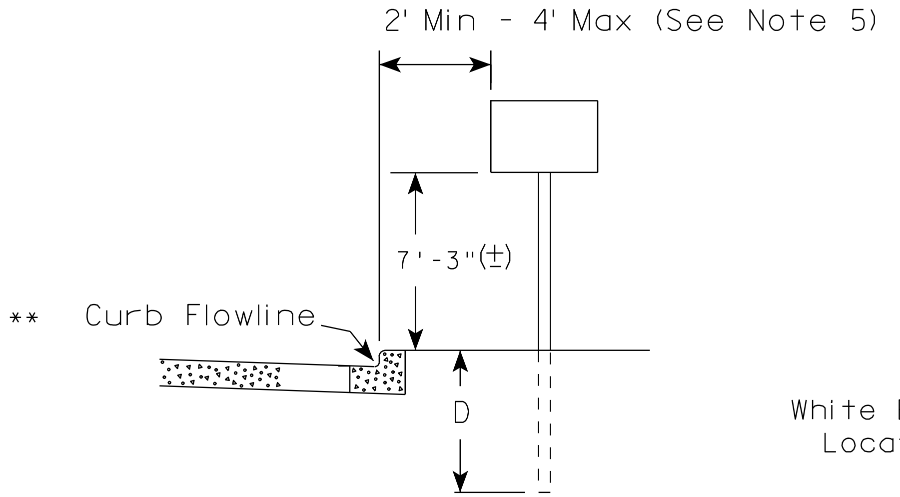
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

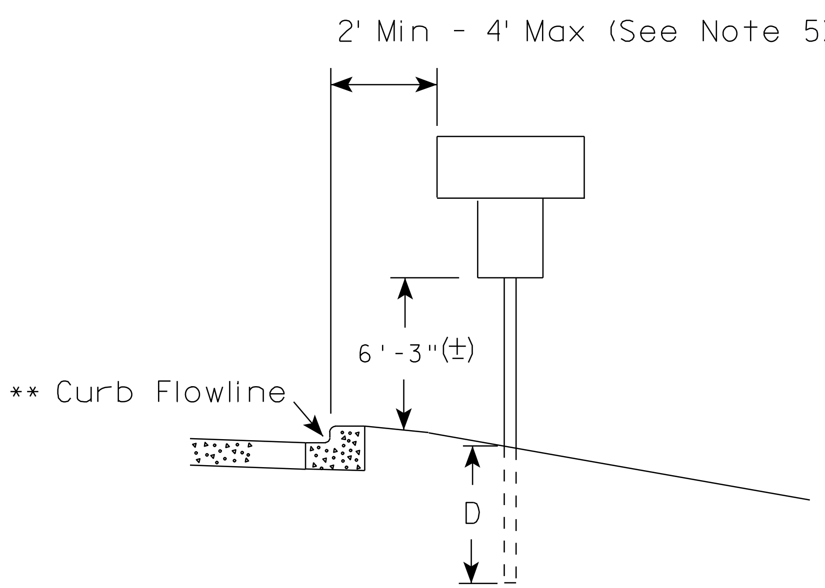
APPROVED
12/6/2011 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER ... SIGN
FHWA


6

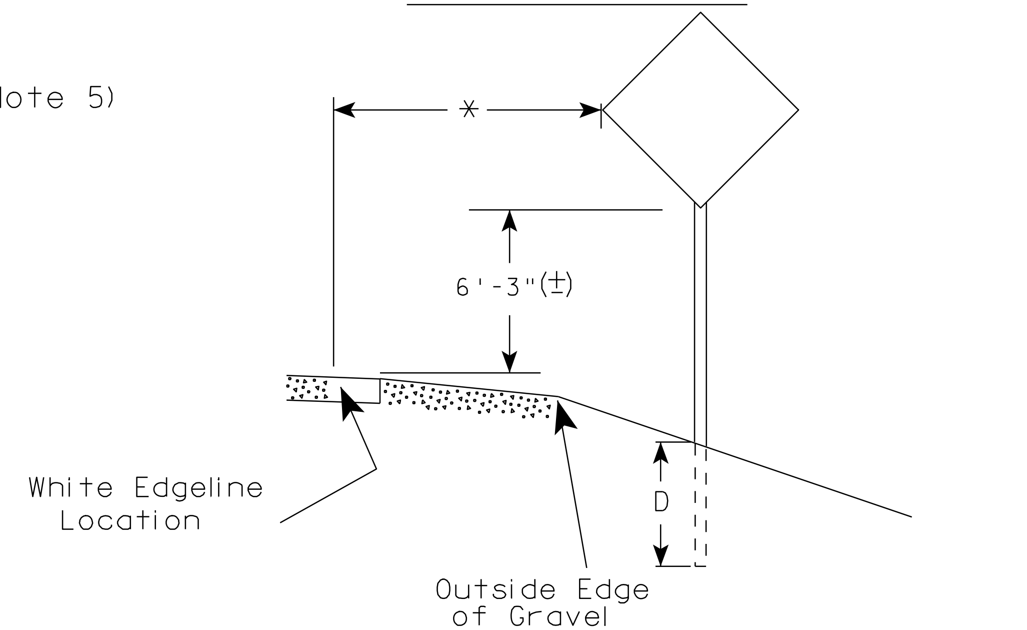
S.D.D. 15 C 19-1a

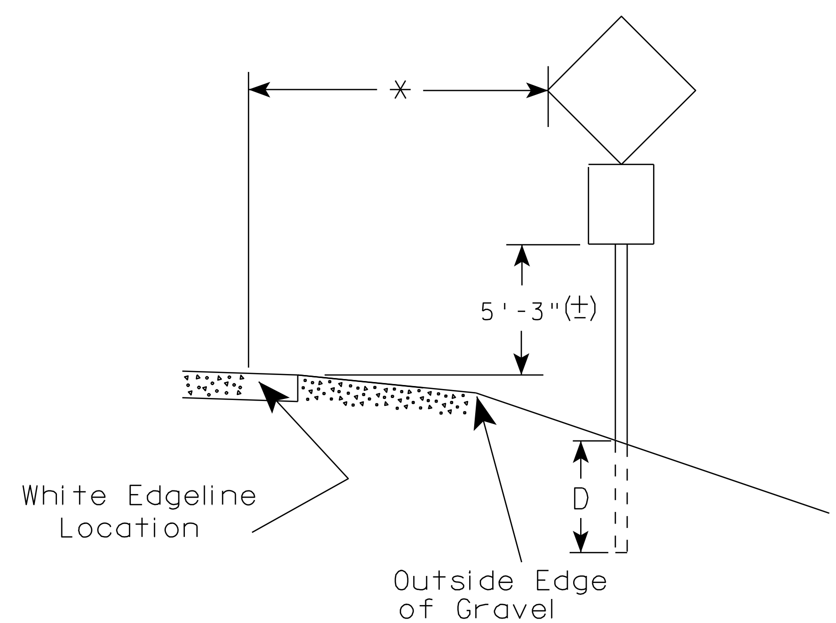
# URBAN AREA




# RURAL AREA (See Note 2)




## GENERAL NOTES

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

## POST EMBEDMENT DEPTH

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

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

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

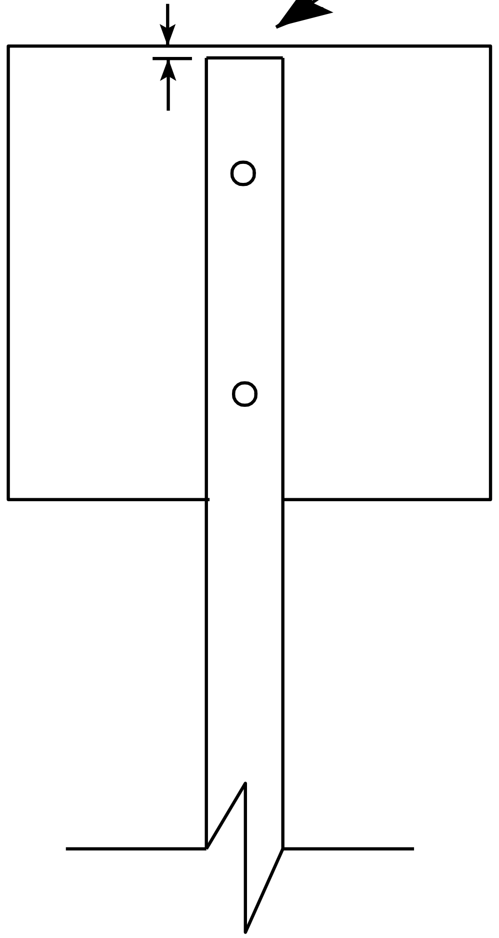
DATE 9/21/2011 PLATE NO. A4-3.16

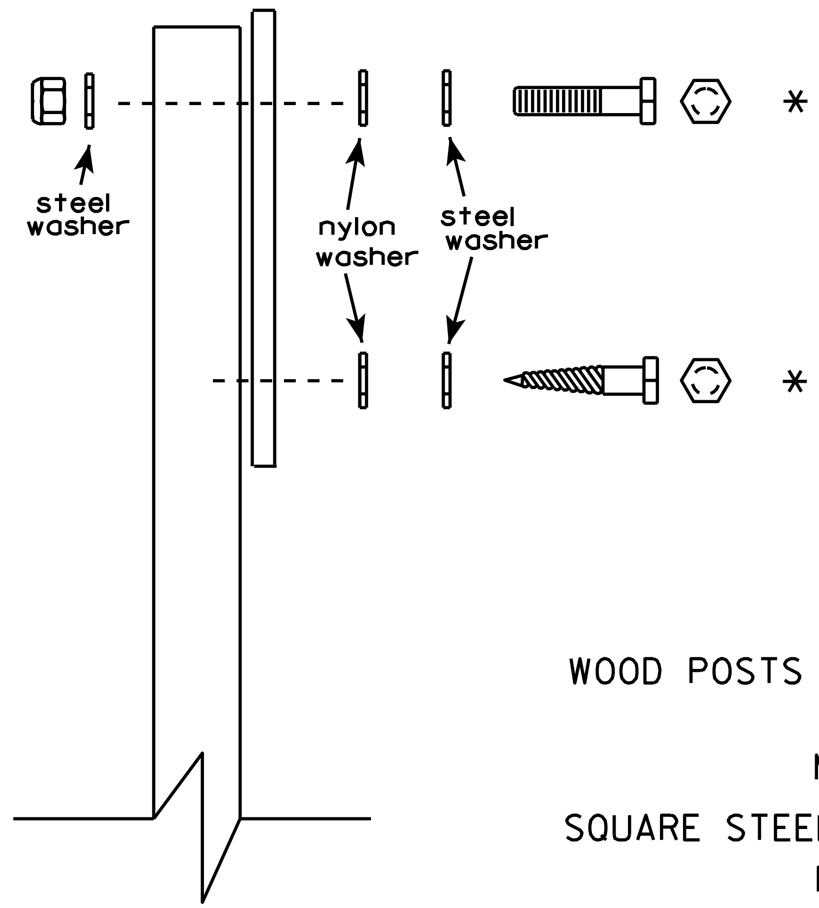
7

7

| PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | SIGN PLATES | SHEET NO: 57 | E |
|---|---|---|---|---|---|

SIGN SHALL BE MOUNTED TO PROJECT
ABOVE THE TOP OF THE POST



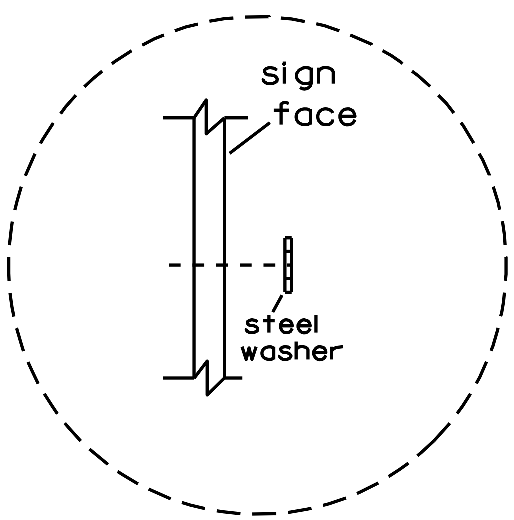

Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

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.

7

7

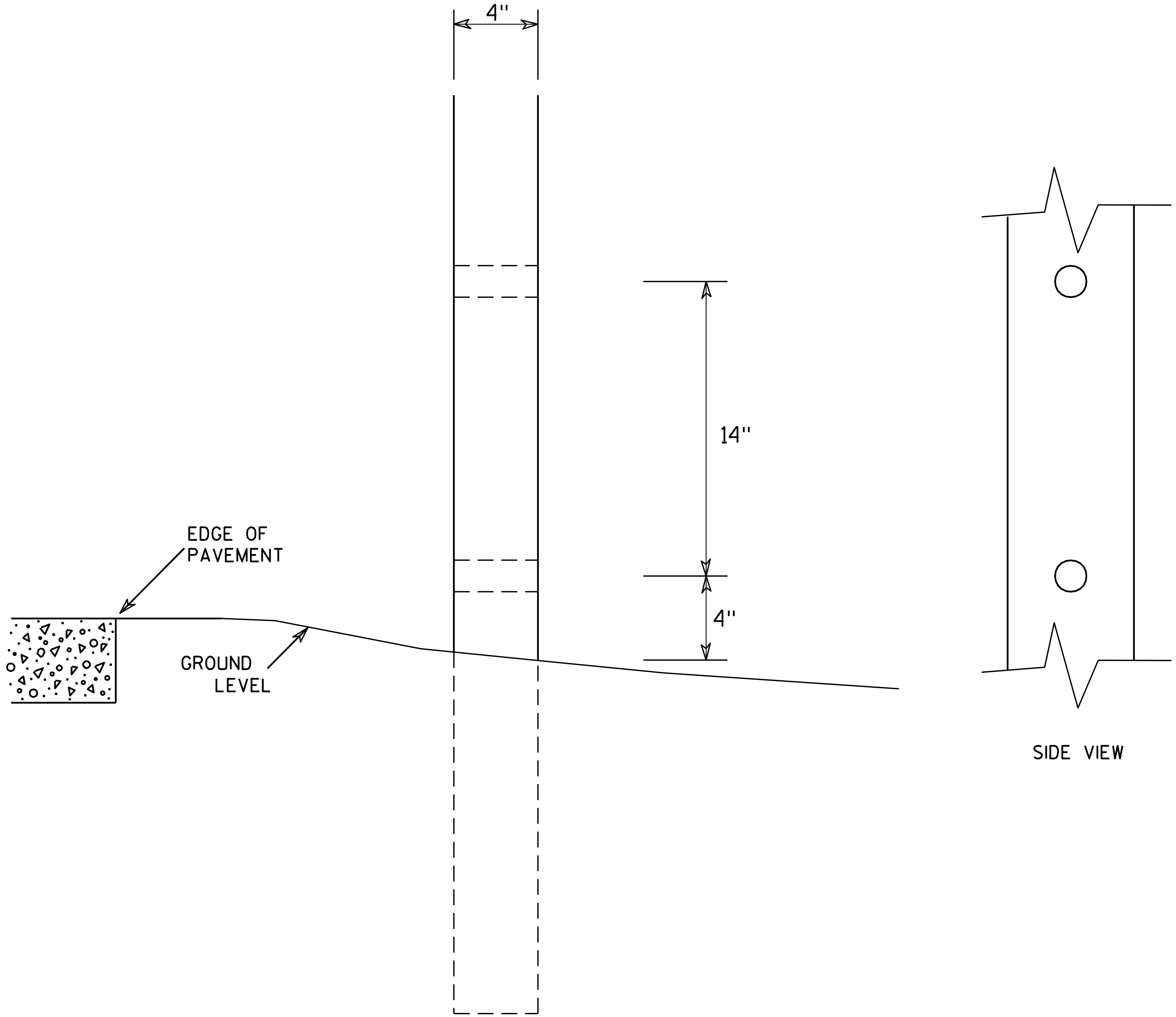
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

| PROJECT NO: 9808-00-07 | HWY: FISHEL ROAD | COUNTY : FOREST | SIGN PLATES | SHEET NO: 58 | E |
|---|---|---|---|---|---|




GENERAL NOTES

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

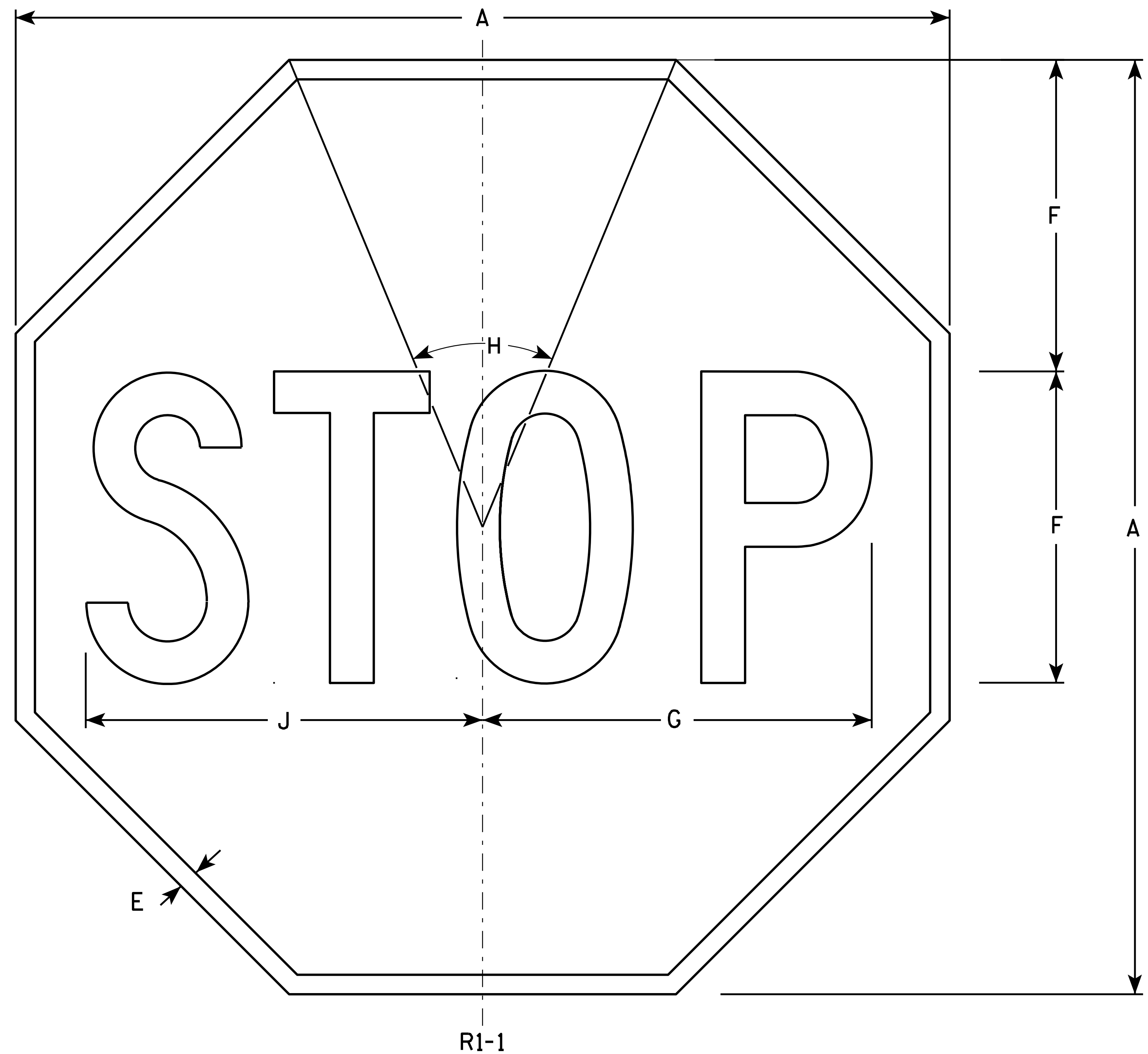
# 4 X 6 WOOD POST MODIFICATIONS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

| PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | SIGN PLATES | SHEET NO: 59 | 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 |

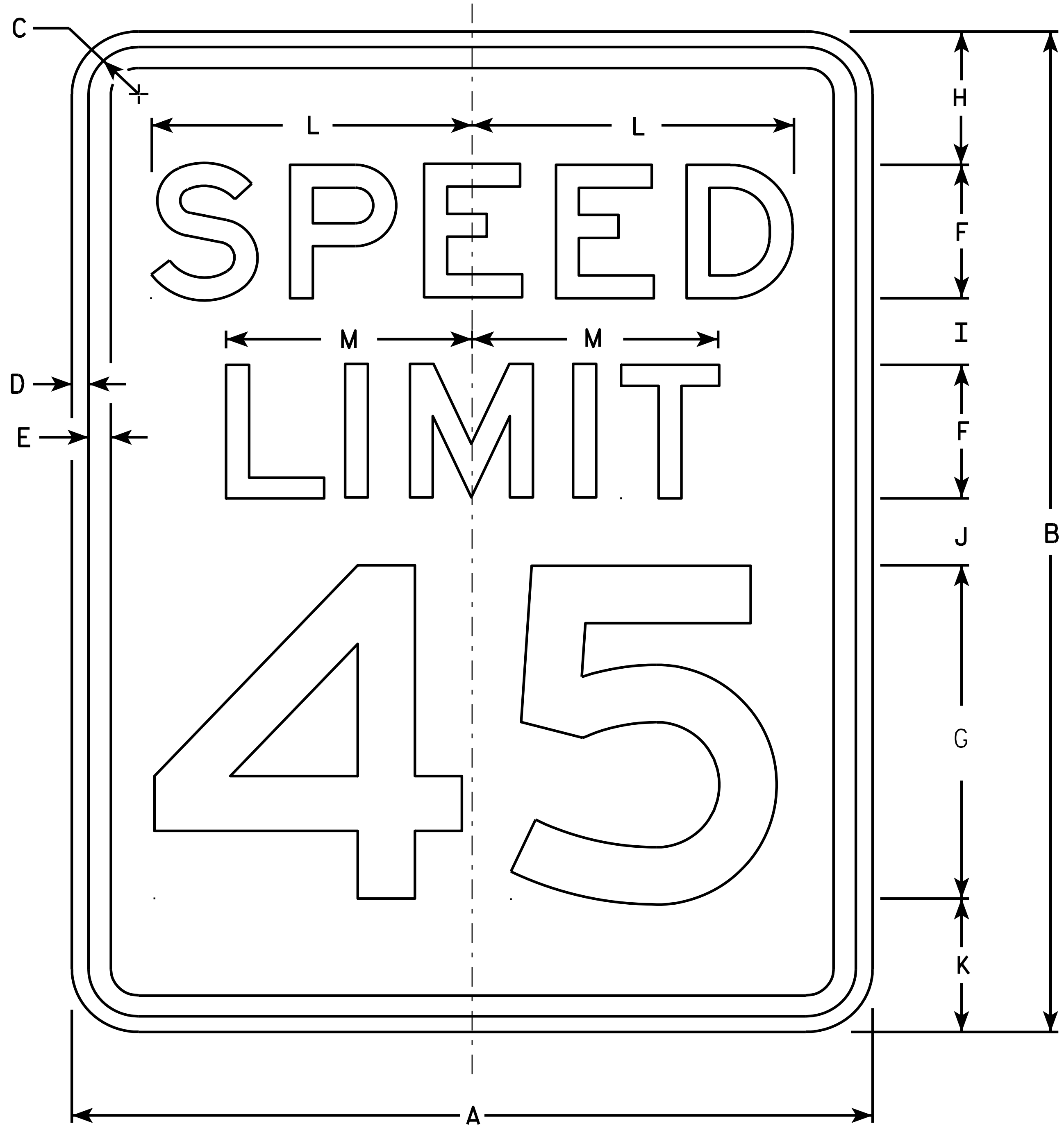
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | SIGN PLATES | SHEET NO: 60 | 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

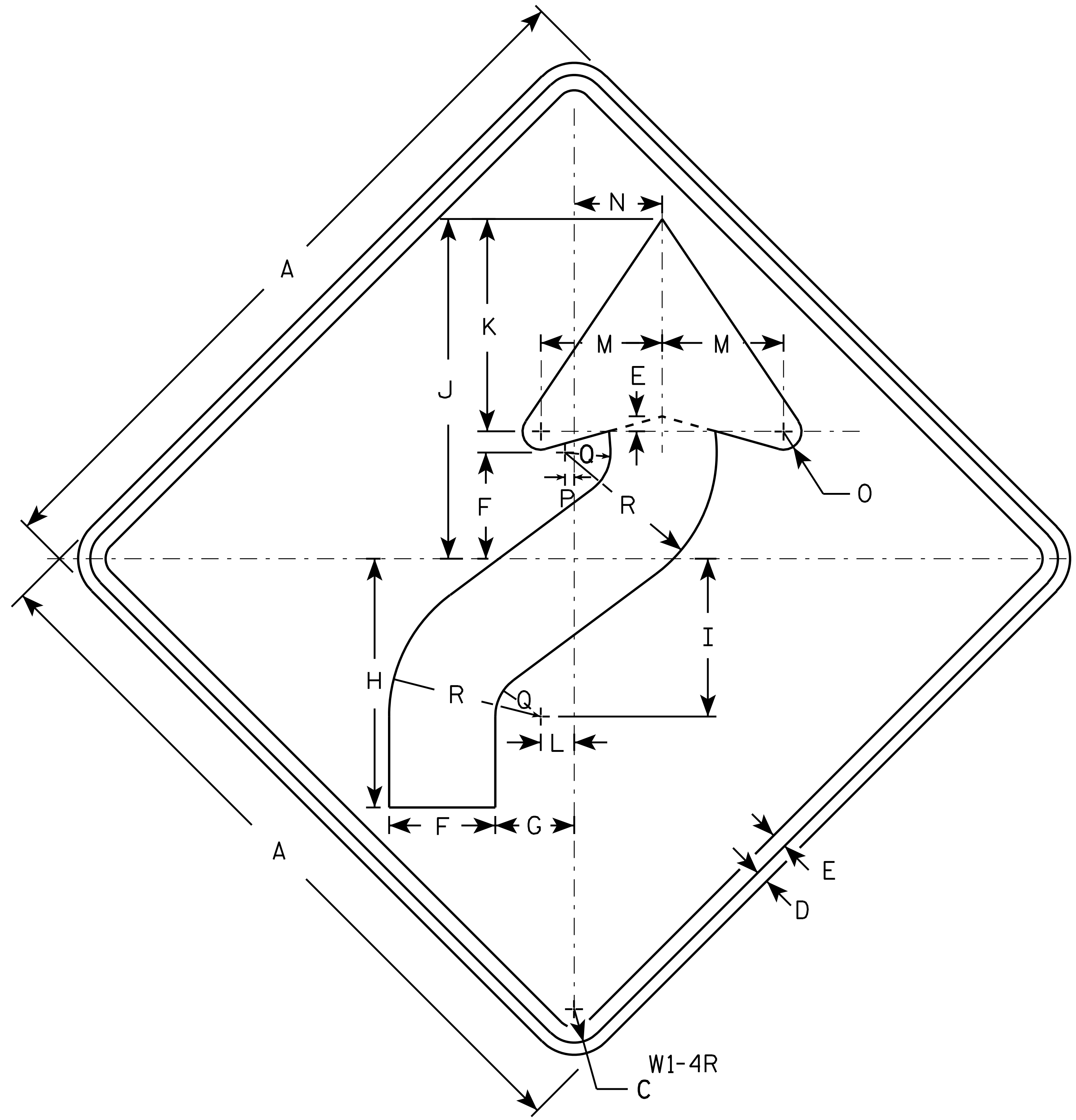
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | SIGN PLATES | SHEET NO: 61 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000 WISDOT/CADDS SHEET 42

7




## NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 3 1/2 | 2 5/8 | 8 1/4 | 5 1/4 | 11 1/4 | 7 | 1 1/8 | 4 | 3 | 5/8 | 1/4 | 1 1/2 | 5 | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 4 3/8 | 3 1/4 | 10 1/4 | 6 1/2 | 14 | 8 3/4 | 1 3/8 | 5 | 3 5/8 | 3/4 | 3/8 | 1 7/8 | 6 1/4 | | | | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |

STANDARD SIGN
W1-4

*WISCONSIN DEPT OF TRANSPORTATION*

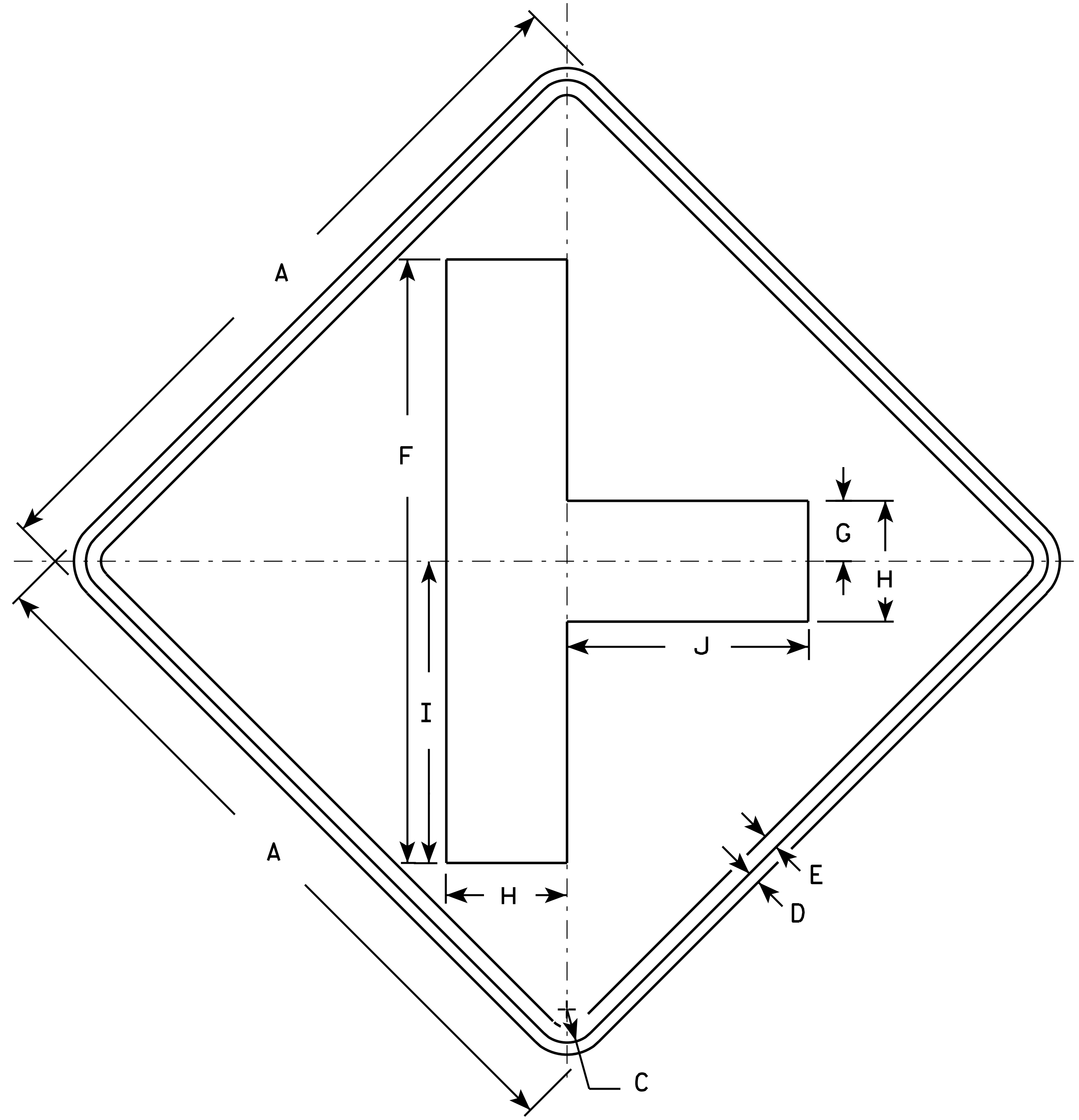
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

7

7

PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | SIGN PLATES | SHEET NO: 62 | E




W2-2

## NOTES

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

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

STANDARD SIGN
W2-2

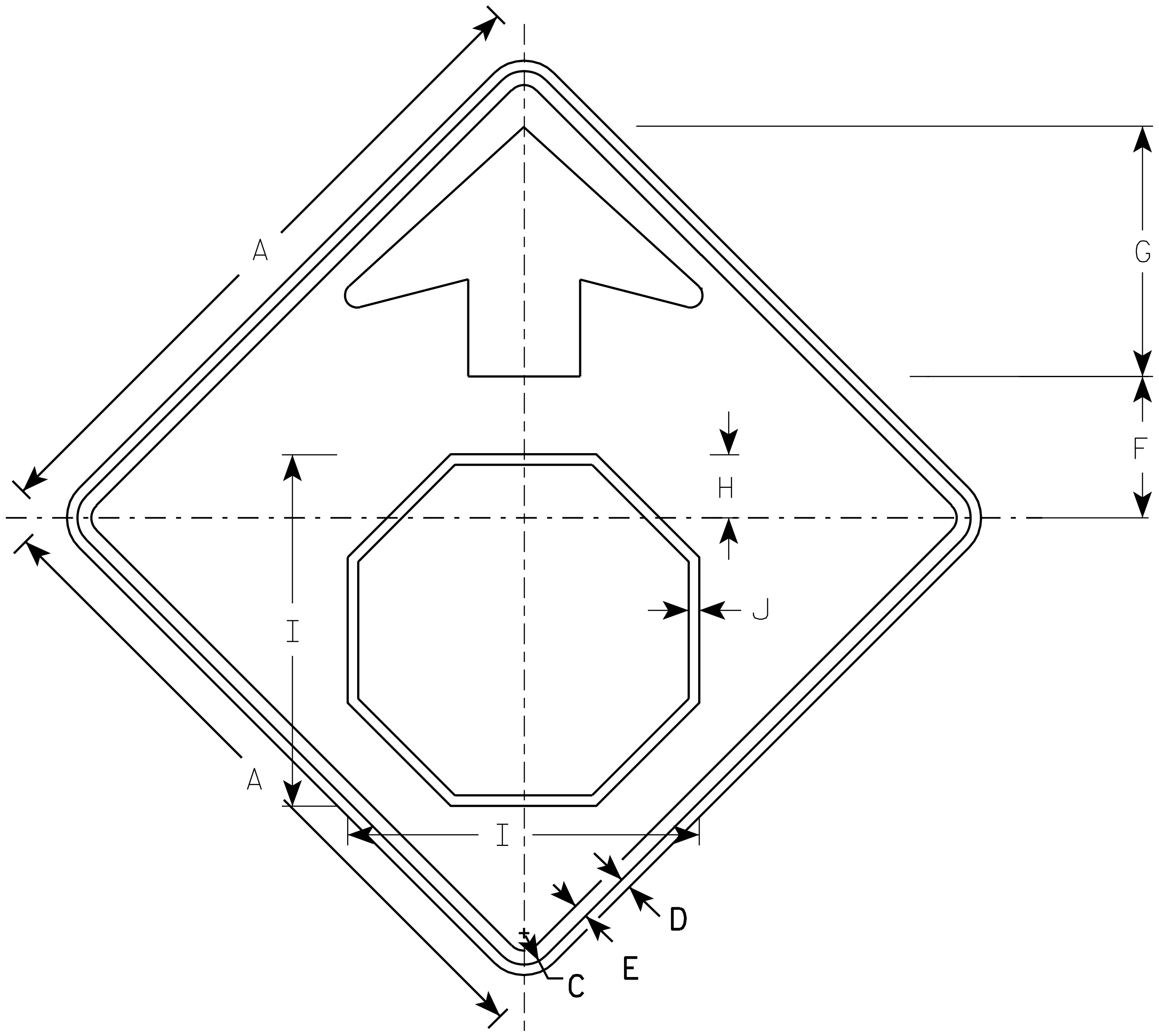
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
For State Traffic Engineer

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

7

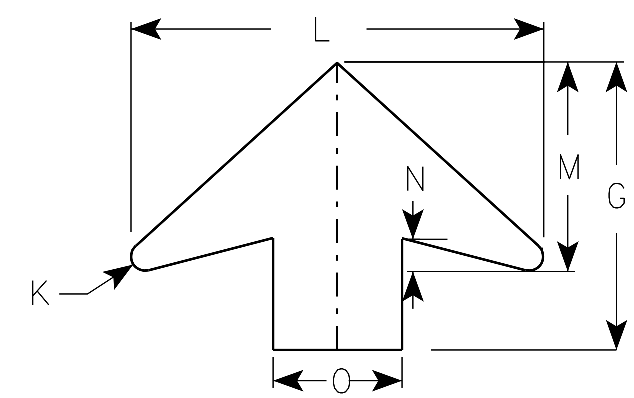
7




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

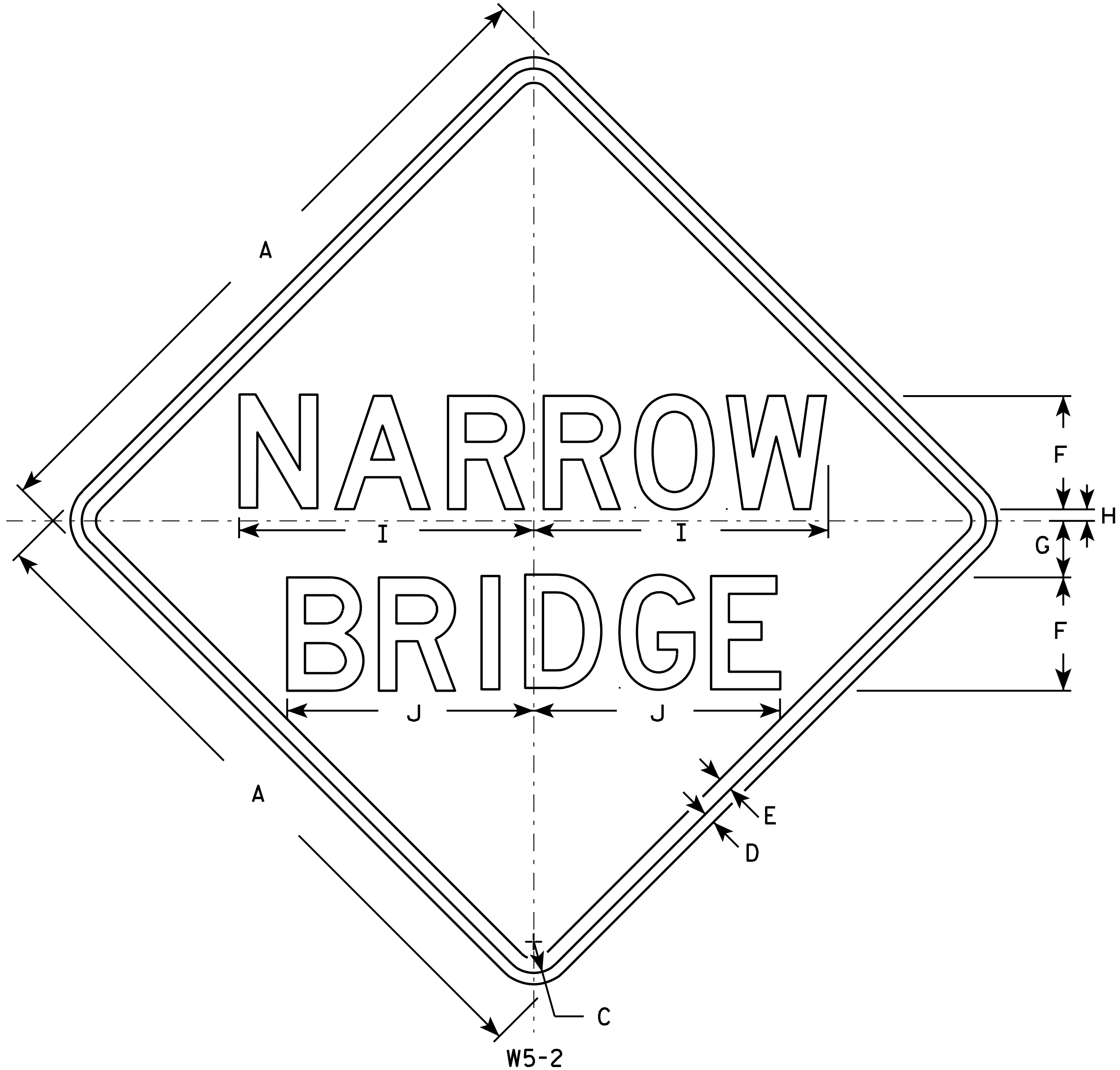
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 6 1/4 | 11 1/4 | 2 7/8 | 15 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




## 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.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 1/2 | 1/2 | 13 | 10 7/8 | | | | | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 3 | 3/4 | 15 5/8 | 13 1/8 | | | | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 3 | 3/4 | 15 5/8 | 13 1/8 | | | | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 3 | 3/4 | 15 5/8 | 13 1/8 | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 4 | 3/4 | 20 3/4 | 17 3/8 | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W5-2

WISCONSIN DEPT OF TRANSPORTATION

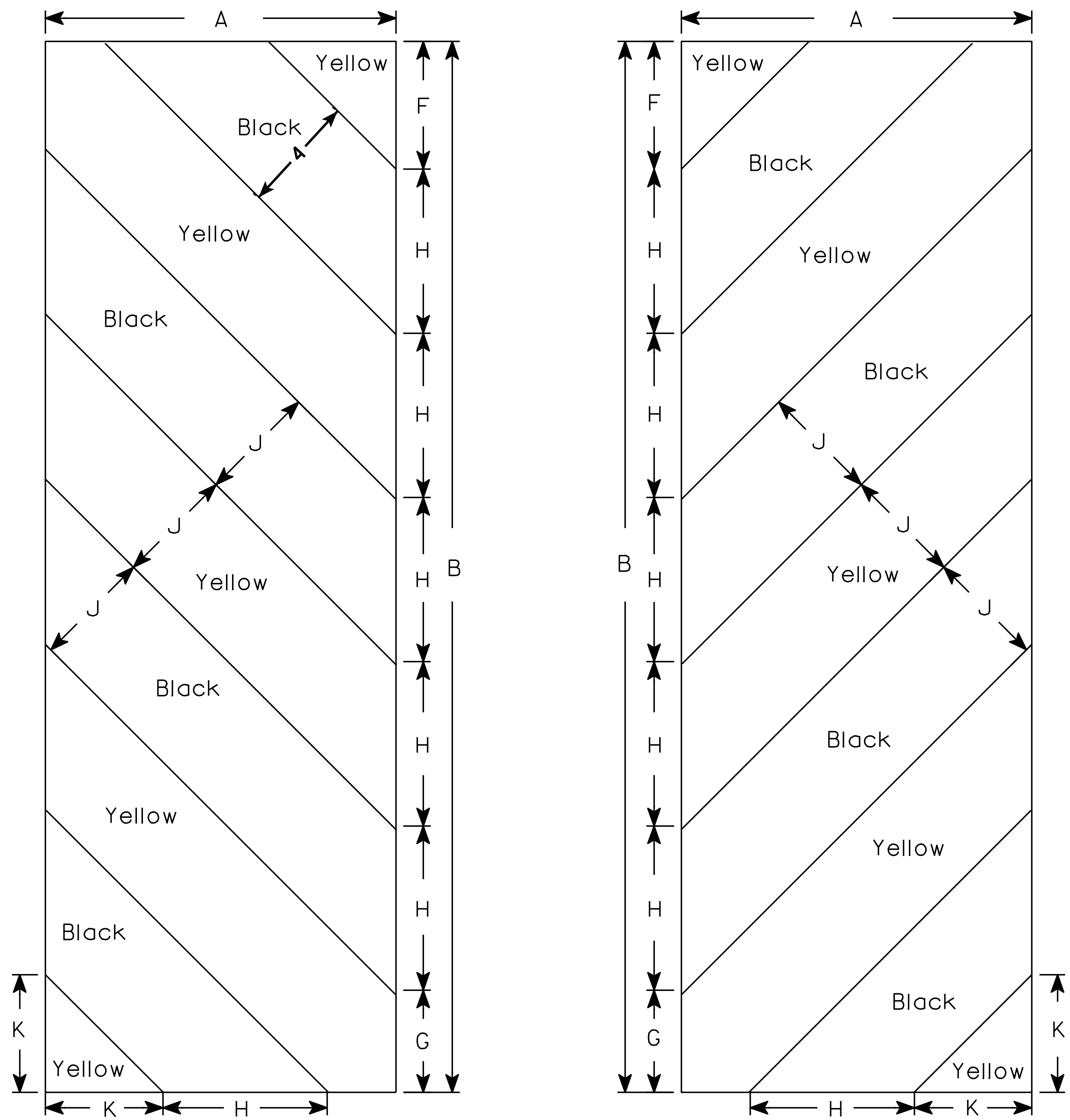
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W5-2.7

PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | SIGN PLATES | SHEET NO: 65 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W52.DGN PLOT DATE : 18-APR-2011 14:46 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.207338:1.000000

WISDOT/CADDS SHEET 42




W5-52L

W5-52R

## NOTES

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

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

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

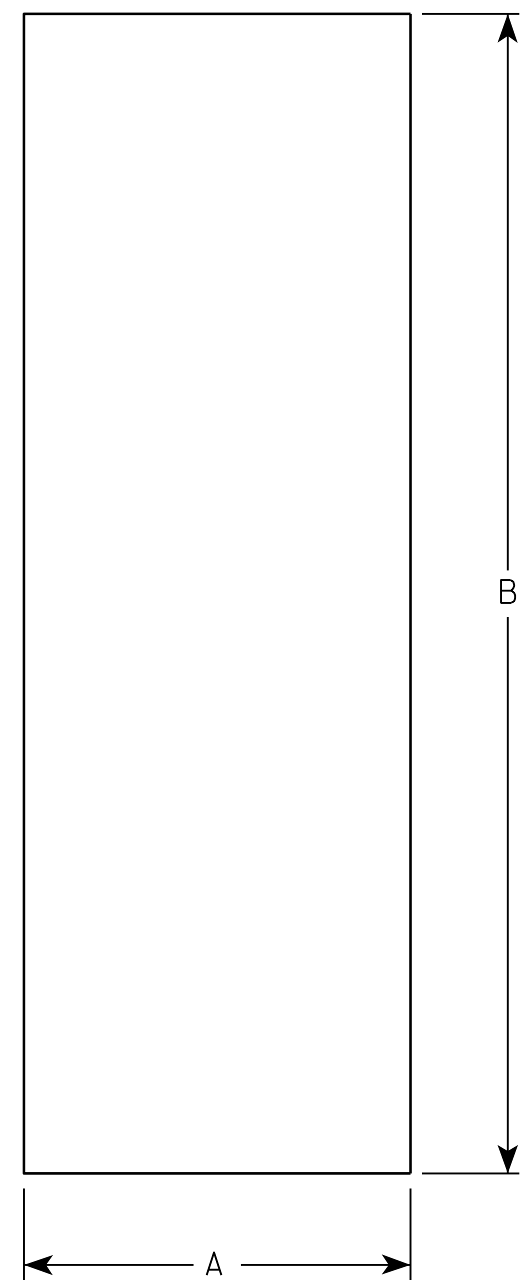
DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO: 9808-00-70 | HWY: FISHEL ROAD | COUNTY: FOREST | SIGN PLATES | SHEET NO: 66 | E



7

7



W5-53

## NOTES

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

| 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 | 4 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | .33 |
| 2M | 4 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | .33 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W5-53

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-53.7

| | | | AREA (SF) | | | | | | Incremental Vol (CY) (Unadjusted) | | | | | | Cumulative Vol (CY) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATION | Real Station | Distance | Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS | Cut | Expanded Fill | Expanded Marsh Backfill | Expanded Rock | Expanded EBS Backfill | Reduced Marsh in Fill | Reduced EBS In Fill | Mass Ordinate |
| | | | | | | | | | | | | | | | 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 |
| 24+00 | | | | | | | | | | | | | | | | | | | | | | |
| 24+50 | 2450 | 50 | 13.93 | 0 | 9.64 | 0 | 0 | 0 | 26 | 0 | 18 | 0 | 0 | 0 | 26 | 22 | 0 | 0 | 0 | 0 | 0 | 3 |
| 25+00 | 2500 | 50 | 33.88 | 0 | 0.00 | 0 | 0 | 0 | 44 | 0 | 9 | 0 | 0 | 0 | 70 | 33 | 0 | 0 | 0 | 0 | 0 | 37 |
| 25+50 | 2550 | 50 | 79.46 | 0 | 0.00 | 0 | 0 | 0 | 105 | 0 | 0 | 0 | 0 | 0 | 175 | 33 | 0 | 0 | 0 | 0 | 0 | 142 |
| 26+00 | 2600 | 50 | 101.96 | 0 | 0.00 | 0 | 0 | 0 | 168 | 0 | 0 | 0 | 0 | 0 | 343 | 33 | 0 | 0 | 0 | 0 | 0 | 310 |
| 26+50 | 2650 | 50 | 30.77 | 0 | 1.68 | 0 | 0 | 0 | 123 | 0 | 2 | 0 | 0 | 0 | 466 | 35 | 0 | 0 | 0 | 0 | 0 | 430 |
| 27+00 | 2700 | 50 | 24.70 | 0 | 27.93 | 0 | 0 | 0 | 51 | 0 | 27 | 0 | 0 | 0 | 517 | 70 | 0 | 0 | 0 | 0 | 0 | 448 |
| 27+50 | 2750 | 50 | 0.00 | 0 | 70.05 | 0 | 0 | 0 | 23 | 0 | 91 | 0 | 0 | 0 | 540 | 183 | 0 | 0 | 0 | 0 | 0 | 357 |
| 27+75 | 2775 | 25 | 0.00 | 0 | 102.36 | 0 | 0 | 0 | 0 | 0 | 80 | 0 | 0 | 0 | 540 | 283 | 0 | 0 | 0 | 0 | 0 | 257 |
| 28+00 | 2800 | 25 | 0.00 | 0 | 67.14 | 0 | 0 | 0 | 0 | 0 | 78 | 0 | 0 | 0 | 540 | 381 | 0 | 0 | 0 | 0 | 0 | 159 |
| 28+50 | 2850 | 50 | 30.75 | 0 | 4.14 | 0 | 0 | 0 | 28 | 0 | 66 | 0 | 0 | 0 | 569 | 463 | 0 | 0 | 0 | 0 | 0 | 105 |
| 29+00 | 2900 | 50 | 128.03 | 0 | 0.00 | 0 | 0 | 0 | 147 | 0 | 4 | 0 | 0 | 0 | 716 | 468 | 0 | 0 | 0 | 0 | 0 | 247 |
| 29+50 | 2950 | 50 | 64.10 | 0 | 0.00 | 0 | 0 | 0 | 178 | 0 | 0 | 0 | 0 | 0 | 894 | 468 | 0 | 0 | 0 | 0 | 0 | 425 |
| 30+00 | 3000 | 50 | 10.84 | 0 | 2.16 | 0 | 0 | 0 | 69 | 0 | 2 | 0 | 0 | 0 | 963 | 471 | 0 | 0 | 0 | 0 | 0 | 492 |
| 40+00 | 4000 | 50 | 6.68 | 0 | 1.62 | 0 | 0 | 0 | 16 | 0 | 4 | 0 | 0 | 0 | 979 | 475 | 0 | 0 | 0 | 0 | 0 | 504 |
| 40+50 | 4050 | 50 | 23.70 | 0 | 0.00 | 0 | 0 | 0 | 28 | 0 | 2 | 0 | 0 | 0 | 1007 | 477 | 0 | 0 | 0 | 0 | 0 | 530 |
| 41+00 | 4100 | 50 | 26.08 | 0 | 0.00 | 0 | 0 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 1053 | 477 | 0 | 0 | 0 | 0 | 0 | 576 |
| 41+50 | 4150 | 50 | 12.31 | 0 | 2.21 | 0 | 0 | 0 | 36 | 0 | 2 | 0 | 0 | 0 | 1089 | 480 | 0 | 0 | 0 | 0 | 0 | 609 |
| 42+00 | 4200 | 50 | 8.57 | 0 | 1.04 | 0 | 0 | 0 | 19 | 0 | 3 | 0 | 0 | 0 | 1108 | 483 | 0 | 0 | 0 | 0 | 0 | 625 |
| 42+50 | 4250 | 50 | 36.84 | 0 | 2.04 | 0 | 0 | 0 | 42 | 0 | 3 | 0 | 0 | 0 | 1150 | 487 | 0 | 0 | 0 | 0 | 0 | 663 |
| 43+00 | 4300 | 50 | 35.53 | 0 | 0.67 | 0 | 0 | 0 | 67 | 0 | 3 | 0 | 0 | 0 | 1217 | 490 | 0 | 0 | 0 | 0 | 0 | 727 |
| 43+37 | 4337 | 37 | 23.25 | 0 | 0.33 | 0 | 0 | 0 | 40 | 0 | 1 | 0 | 0 | 0 | 1258 | 491 | 0 | 0 | 0 | 0 | 0 | 767 |
| 43+50 | 4350 | 13 | 23.19 | 0 | 0.15 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 1269 | 491 | 0 | 0 | 0 | 0 | 0 | 778 |
| 44+00 | 4400 | 50 | 7.39 | 0 | 5.02 | 0 | 0 | 0 | 28 | 0 | 5 | 0 | 0 | 0 | 1297 | 497 | 0 | 0 | 0 | 0 | 0 | 800 |
| 44+50 | 4450 | 50 | 2.55 | 0 | 23.12 | 0 | 0 | 0 | 9 | 0 | 26 | 0 | 0 | 0 | 1306 | 530 | 0 | 0 | 0 | 0 | 0 | 777 |
| 45+00 | 4500 | 50 | 2.93 | 0 | 64.27 | 0 | 0 | 0 | 5 | 0 | 81 | 0 | 0 | 0 | 1311 | 631 | 0 | 0 | 0 | 0 | 0 | 681 |
| 45+50 | 4550 | 50 | 3.12 | 0 | 73.50 | 0 | 0 | 0 | 6 | 0 | 128 | 0 | 0 | 0 | 1317 | 790 | 0 | 0 | 0 | 0 | 0 | 527 |
| 46+00 | 4600 | 50 | 3.06 | 0 | 102.81 | 0 | 0 | 0 | 6 | 0 | 163 | 0 | 0 | 0 | 1323 | 994 | 0 | 0 | 0 | 0 | 0 | 328 |
| 46+50 | 4650 | 50 | 6.31 | 0 | 29.55 | 0 | 0 | 0 | 9 | 0 | 123 | 0 | 0 | 0 | 1331 | 1147 | 0 | 0 | 0 | 0 | 0 | 184 |
| 47+00 | 4700 | 50 | 3.38 | 0 | 33.59 | 0 | 0 | 0 | 9 | 0 | 58 | 0 | 0 | 0 | 1340 | 1221 | 0 | 0 | 0 | 0 | 0 | 120 |
| 47+50 | 4750 | 50 | 4.33 | 0 | 7.46 | 0 | 0 | 0 | 7 | 0 | 38 | 0 | 0 | 0 | 1347 | 1268 | 0 | 0 | 0 | 0 | 0 | 79 |
| 48+00 | 4800 | 50 | 22.96 | 0 | 0.67 | 0 | 0 | 0 | 25 | 0 | 8 | 0 | 0 | 0 | 1373 | 1277 | 0 | 0 | 0 | 0 | 0 | 95 |
| 48+50 | 4850 | 50 | 6.31 | 0 | 14.23 | 0 | 0 | 0 | 27 | 0 | 14 | 0 | 0 | 0 | 1400 | 1295 | 0 | 0 | 0 | 0 | 0 | 105 |
| 49+00 | 4900 | 50 | 3.75 | 0 | 30.34 | 0 | 0 | 0 | 9 | 0 | 41 | 0 | 0 | 0 | 1409 | 1346 | 0 | 0 | 0 | 0 | 0 | 63 |
| 49+50 | 4950 | 50 | 7.84 | 0 | 5.13 | 0 | 0 | 0 | 11 | 0 | 33 | 0 | 0 | 0 | 1420 | 1387 | 0 | 0 | 0 | 0 | 0 | 33 |
| 50+00 | 5000 | 50 | 9.69 | 0 | 9.15 | 0 | 0 | 0 | 16 | 0 | 13 | 0 | 0 | 0 | 1436 | 1404 | 0 | 0 | 0 | 0 | 0 | 32 |
| 53+00 | 5300 | 50 | 21.62 | 0 | 5.86 | 0 | 0 | 0 | 29 | 0 | 14 | 0 | 0 | 0 | 1465 | 1421 | 0 | 0 | 0 | 0 | 0 | 44 |
| 53+50 | 5350 | 50 | 2.99 | 0 | 64.86 | 0 | 0 | 0 | 23 | 0 | 65 | 0 | 0 | 0 | 1488 | 1503 | 0 | 0 | 0 | 0 | 0 | -15 |
| 54+00 | 5400 | 50 | 0.00 | 0 | 210.56 | 0 | 0 | 0 | 3 | 0 | 255 | 0 | 0 | 0 | 1491 | 1822 | 0 | 0 | 0 | 0 | 0 | -331 |
| 54+50 | 5450 | 50 | 0.00 | 0 | 188.29 | 0 | 0 | 0 | 0 | 0 | 369 | 0 | 0 | 0 | 1491 | 2283 | 0 | 0 | 0 | 0 | 0 | -793 |
| 55+00 | 5500 | 50 | 0.00 | 0 | 99.31 | 0 | 0 | 0 | 0 | 0 | 266 | 0 | 0 | 0 | 1491 | 2616 | 0 | 0 | 0 | 0 | 0 | -1126 |
| 55+50 | 5550 | 50 | 79.92 | 0 | 0.00 | 0 | 0 | 0 | 74 | 0 | 92 | 0 | 0 | 0 | 1565 | 2731 | 0 | 0 | 0 | 0 | 0 | -1167 |
| 56+00 | 5600 | 50 | 96.25 | 0 | 0.00 | 0 | 0 | 0 | 163 | 0 | 0 | 0 | 0 | 0 | 1728 | 2731 | 0 | 0 | 0 | 0 | 0 | -1004 |
| 56+50 | 5650 | 50 | 24.22 | 0 | 3.97 | 0 | 0 | 0 | 112 | 0 | 4 | 0 | 0 | 0 | 1839 | 2736 | 0 | 0 | 0 | 0 | 0 | -897 |
| 57+00 | 5700 | 50 | 40.26 | 0 | 0.00 | 0 | 0 | 0 | 60 | 0 | 4 | 0 | 0 | 0 | 1899 | 2740 | 0 | 0 | 0 | 0 | 0 | -841 |
| 57+50 | 5750 | 50 | 31.13 | 0 | 0.00 | 0 | 0 | 0 | 66 | 0 | 0 | 0 | 0 | 0 | 1965 | 2740 | 0 | 0 | 0 | 0 | 0 | -775 |
| 58+00 | 5800 | 50 | 3.01 | 0 | 14.60 | 0 | 0 | 0 | 32 | 0 | 14 | 0 | 0 | 0 | 1997 | 2757 | 0 | 0 | 0 | 0 | 0 | -761 |
| 58+50 | 5850 | 50 | 0.00 | 0 | 47.03 | 0 | 0 | 0 | 3 | 0 | 57 | 0 | 0 | 0 | 2000 | 2829 | 0 | 0 | 0 | 0 | 0 | -829 |
| 58+68 | 5868 | 18 | 0.00 | 0 | 76.57 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 0 | 0 | 2000 | 2880 | 0 | 0 | 0 | 0 | 0 | -881 |
| 59+00 | 5900 | 32 | 0.00 | 0 | 69.18 | 0 | 0 | 0 | 0 | 0 | 86 | 0 | 0 | 0 | 2000 | 2988 | 0 | 0 | 0 | 0 | 0 | -989 |
| 59+50 | 5950 | 50 | 7.12 | 0 | 22.37 | 0 | 0 | 0 | 7 | 0 | 85 | 0 | 0 | 0 | 2006 | 3094 | 0 | 0 | 0 | 0 | 0 | -1088 |
| 60+00 | 6000 | 50 | 36.26 | 0 | 1.91 | 0 | 0 | 0 | 40 | 0 | 22 | 0 | 0 | 0 | 2046 | 3122 | 0 | 0 | 0 | 0 | 0 | -1076 |
| 60+50 | 6050 | 50 | 12.77 | 0 | 24.25 | 0 | 0 | 0 | 45 | 0 | 24 | 0 | 0 | 0 | 2092 | 3153 | 0 | 0 | 0 | 0 | 0 | -1061 |
| 60+63 | 6063 | 13 | 4.49 | 0 | 45.08 | 0 | 0 | 0 | 4 | 0 | 17 | 0 | 0 | 0 | 2096 | 3173 | 0 | 0 | 0 | 0 | 0 | -1078 |
| 61+00 | 6100 | 37 | 0.00 | 0 | 64.52 | 0 | 0 | 0 | 3 | 0 | 75 | 0 | 0 | 0 | 2099 | 3267 | 0 | 0 | 0 | 0 | 0 | -1168 |
| 61+50 | 6150 | 50 | 0.00 | 0 | 99.89 | 0 | 0 | 0 | 0 | 0 | 152 | 0 | 0 | 0 | 2099 | 3458 | 0 | 0 | 0 | 0 | 0 | -1359 |
| 62+00 | 6200 | 50 | 0.00 | 0 | 133.79 | 0 | 0 | 0 | 0 | 0 | 216 | 0 | 0 | 0 | 2099 | 3728 | 0 | 0 | 0 | 0 | 0 | -1629 |
| 62+50 | 6250 | 50 | 0.00 | 0 | 178.79 | 0 | 0 | 0 | 0 | 0 | 289 | 0 | 0 | 0 | 2099 | 4090 | 0 | 0 | 0 | 0 | 0 | -1991 |
| 63+00 | 6300 | 50 | 20.51 | 0 | 178.25 | 0 | 0 | 0 | 19 | 0 | 331 | 0 | 0 | 0 | 2118 | 4503 | 0 | 0 | 0 | 0 | 0 | -2385 |
| 63+50 | 6350 | 50 | 87.52 | 0 | 178.61 | 0 | 0 | 0 | 100 | 0 | 330 | 0 | 0 | 0 | 2218 | 4916 | 0 | 0 | 0 | 0 | 0 | -2698 |
| 64+00 | 6400 | 50 | 159.45 | 0 | 194.09 | 0 | 0 | 0 | 229 | 0 | 345 | 0 | 0 | 0 | 2447 | 5347 | 0 | 0 | 0 | 0 | 0 | -2901 |
| 64+50 | 6450 | 50 | 26.68 | 0 | 241.05 | 0 | 0 | 0 | 172 | 0 | 403 | 0 | 0 | 0 | 2619 | 5851 | 0 | 0 | 0 | 0 | 0 | -3232 |
| 65+00 | 6500 | 50 | 16.38 | 0 | 261.74 | 0 | 0 | 0 | 40 | 0 | 466 | 0 | 0 | 0 | 2659 | 6433 | 0 | 0 | 0 | 0 | 0 | -3774 |
| 65+50 | 6550 | 50 | 8.49 | 0 | 183.14 | 0 | 0 | 0 | 23 | 0 | 412 | 0 | 0 | 0 | 2682 | 6948 | 0 | 0 | 0 | 0 | 0 | -4266 |
| 66+00 | 6600 | 50 | 28.37 | 0 | 52.93 | 0 | 0 | 0 | 34 | 0 | 219 | 0 | 0 | 0 | 2716 | 7221 | 0 | 0 | 0 | 0 | 0 | -4505 |
| 66+50 | 6650 | 50 | 117.49 | 0 | 36.05 | 0 | 0 | 0 | 135 | 0 | 82 | 0 | 0 | 0 | 2851 | 7324 | 0 | 0 | 0 | 0 | 0 | -4473 |
| 67+00 | 6700 | 50 | 77.21 | 0 | 141.49 | 0 | 0 | 0 | 180 | 0 | 164 | 0 | 0 | 0 | 3031 | 7530 | 0 | 0 | 0 | 0 | 0 | -4498 |
| 67+50 | 6750 | 50 | 0.00 | 0 | 204.98 | 0 | 0 | 0 | 71 | 0 | 321 | 0 | 0 | 0 | 3103 | 7931 | 0 | 0 | 0 | 0 | 0 | -4828 |
| 68+00 | 6800 | 50 | 0.00 | 0 | 163.08 | 0 | 0 | 0 | 0 | 0 | 341 | 0 | 0 | 0 | 3103 | 8357 | 0 | 0 | 0 | 0 | 0 | -5254 |
| 68+50 | 6850 | 50 | 0.00 | 0 | 114.18 | 0 | 0 | 0 | 0 | 0 | 257 | 0 | 0 | 0 | 3103 | 8677 | 0 | 0 | 0 | 0 | 0 | -5575 |
| 69+00 | 6900 | 50 | 8.51 | 0 | 41.81 | 0 | 0 | 0 | 8 | 0 | 144 | 0 | 0 | 0 | 3111 | 8858 | 0 | 0 | 0 | 0 | 0 | -5747 |
| 69+50 | 6950 | 50 | 23.36 | 0 | 7.74 | 0 | 0 | 0 | 30 | 0 | 46 | 0 | 0 | 0 | 3140 | 8915 | 0 | 0 | 0 | 0 | 0 | -5775 |
| 70+00 | 7000 | 50 | 21.61 | 0 | 0.05 | 0 | 0 | 0 | 42 | 0 | 7 | 0 | 0 | 0 | 3182 | 8924 | 0 | 0 | 0 | 0 | 0 | -5743 |
| 70+50 | 7050 | 50 | 13.01 | 0 | 2.82 | 0 | 0 | 0 | 32 | 0 | 3 | 0 | 0 | 0 | 3214 | 8928 | 0 | 0 | 0 | 0 | 0 | -5714 |
| 71+00 | 7100 | 50 | 16.84 | 0 | 0.67 | 0 | 0 | 0 | 28 | 0 | 3 | 0 | 0 | 0 | 3242 | 8932 | 0 | 0 | 0 | 0 | 0 | -5690 |
| 71+50 | 7150 | 50 | 19.78 | 0 | 0.91 | 0 | 0 | 0 | 34 | 0 | 1 | 0 | 0 | 0 | 3275 | 8934 | 0 | 0 | 0 | 0 | 0 | -5658 |
| 72+00 | 7200 | 50 | 7.45 | 0 | 15.22 | 0 | 0 | 0 | 25 | 0 | 15 | 0 | 0 | 0 | 3301 | 8952 | 0 | 0 | 0 | 0 | 0 | -5652 |
| 72+50 | 7250 | 50 | 2.73 | 0 | 35.21 | 0 | 0 | 0 | 9 | 0 | 47 | 0 | 0 | 0 | 3310 | 9011 | 0 | 0 | 0 | 0 | 0 | -5701 |
| 73+00 | 7300 | 50 | 3.17 | 0 | 29.76 | 0 | 0 | 0 | 5 | 0 | 60 | 0 | 0 | 0 | 3316 | 9086 | 0 | 0 | 0 | 0 | 0 | -5770 |
| 73+50 | 7350 | 50 | 4.27 | 0 | 12.47 | 0 | 0 | 0 | 7 | 0 | 39 | 0 | 0 | 0 | 3322 | 9135 | 0 | 0 | 0 | 0 | 0 | -5812 |
| 74+00 | 7400 | 50 | 10.75 | 0 | 2.32 | 0 | 0 | 0 | 14 | 0 | 14 | 0 | 0 | 0 | 3336 | 9152 | 0 | 0 | 0 | 0 | 0 | -5816 |
| 76+00 | 7600 | 50 | 7.68 | 0 | 1.38 | 0 | 0 | 0 | 17 | 0 | 3 | 0 | 0 | 0 | 3353 | 9156 | 0 | 0 | 0 | 0 | 0 | -5803 |
| 76+50 | 7650 | 50 | 9.66 | 0 | 5.47 | 0 | 0 | 0 | 16 | 0 | 6 | 0 | 0 | 0 | 3369 | 9164 | 0 | 0 | 0 | 0 | 0 | -5795 |
| 77+00 | 7700 | 50 | 5.37 | 0 | 26.38 | 0 | 0 | 0 | 14 | 0 | 29 | 0 | 0 | 0 | 3383 | 9201 | 0 | 0 | 0 | 0 | 0 | -5818 |
| 77+50 | 7750 | 50 | 2.89 | 0 | 52.77 | 0 | 0 | 0 | 8 | 0 | 73 | 0 | 0 | 0 | 3391 | 9293 | 0 | 0 | 0 | 0 | 0 | -5902 |
| 78+00 | 7800 | 50 | 0.00 | 0 | 104.28 | 0 | 0 | 0 | 3 | 0 | 145 | 0 | 0 | 0 | 3394 | 9474 | 0 | 0 | 0 | 0 | 0 | -6081 |
| 78+30 | 7830 | 30 | 3.08 | 0 | 106.07 | 0 | 0 | 0 | 2 | 0 | 117 | 0 | 0 | 0 | 3395 | 9620 | 0 | 0 | 0 | 0 | 0 | -6225 |
| 78+50 | 7850 | 20 | 0.00 | 0 | 72.45 | 0 | 0 | 0 | 1 | 0 | 66 | 0 | 0 | 0 | 3397 | 9703 | 0 | 0 | 0 | 0 | 0 | -6306 |
| 79+00 | 7900 | 50 | 0.00 | 0 | 39.10 | 0 | 0 | 0 | 0 | 0 | 103 | 0 | 0 | 0 | 3397 | 9832 | 0 | 0 | 0 | 0 | 0 | -6436 |
| 79+50 | 7950 | 50 | 7.90 | 0 | 17.96 | 0 | 0 | 0 | 7 | 0 | 53 | 0 | 0 | 0 | 3404 | 9898 | 0 | 0 | 0 | 0 | 0 | -6494 |
| 80+00 | 8000 | 50 | 6.23 | 0 | 10.03 | 0 | 0 | 0 | 13 | 0 | 26 | 0 | 0 | 0 | 3417 | 9931 | 0 | 0 | 0 | 0 | 0 | -6514 |

9 9

| STATION | Real Station | Distance | AREA (SF) Cut | AREA (SF) Salvaged/Unusable Pavement Material | AREA (SF) Fill | AREA (SF) Marsh Exc | AREA (SF) Rock Exc | AREA (SF) EBS | Incremental Vol (CY) (Unadjusted) Cut | Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material | Incremental Vol (CY) (Unadjusted) Fill | Incremental Vol (CY) (Unadjusted) Marsh Exc | Incremental Vol (CY) (Unadjusted) Rock Exc | Incremental Vol (CY) (Unadjusted) EBS | Cumulative Vol (CY) Cut | Cumulative Vol (CY) Expanded Fill | Cumulative Vol (CY) Expanded Marsh Backfill | Cumulative Vol (CY) Expanded Rock | Cumulative Vol (CY) Expanded EBS Backfill | Cumulative Vol (CY) Reduced Marsh in Fill | Cumulative Vol (CY) Reduced EBS In Fill | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Note 1 | Note 2 | Note 3 | | | | **1.00** Note 1 | 1.25 | 1.50 Note 4 | 1.10 | 1.30 Note 5 | 0.60 Note 6 | 0.80 Note 7 | Note 8 |
| 94+00 | 9400 | 50 | 3.65 | 0 | 24.25 | 0 | 0 | 0 | 9 | 0 | 32 | 0 | 0 | 0 | 3426 | 9970 | 0 | 0 | 0 | 0 | 0 | -6544 |
| 94+50 | 9450 | 50 | 43.06 | 0 | 9.54 | 0 | 0 | 0 | 43 | 0 | 31 | 0 | 0 | 0 | 3469 | 10009 | 0 | 0 | 0 | 0 | 0 | -6540 |
| 95+00 | 9500 | 50 | 132.84 | 0 | 0.00 | 0 | 0 | 0 | 163 | 0 | 9 | 0 | 0 | 0 | 3632 | 10020 | 0 | 0 | 0 | 0 | 0 | -6388 |
| 95+50 | 9550 | 50 | 229.81 | 0 | 0.00 | 0 | 0 | 0 | 336 | 0 | 0 | 0 | 0 | 0 | 3968 | 10020 | 0 | 0 | 0 | 0 | 0 | -6052 |
| 96+00 | 9600 | 50 | 276.20 | 0 | 0.00 | 0 | 0 | 0 | 469 | 0 | 0 | 0 | 0 | 0 | 4437 | 10020 | 0 | 0 | 0 | 0 | 0 | -5584 |
| 96+50 | 9650 | 50 | 165.11 | 0 | 0.00 | 0 | 0 | 0 | 409 | 0 | 0 | 0 | 0 | 0 | 4845 | 10020 | 0 | 0 | 0 | 0 | 0 | -5175 |
| 97+00 | 9700 | 50 | 50.32 | 0 | 0.00 | 0 | 0 | 0 | 199 | 0 | 0 | 0 | 0 | 0 | 5045 | 10020 | 0 | 0 | 0 | 0 | 0 | -4976 |
| 97+50 | 9750 | 50 | 19.26 | 0 | 16.70 | 0 | 0 | 0 | 64 | 0 | 15 | 0 | 0 | 0 | 5109 | 10040 | 0 | 0 | 0 | 0 | 0 | -4931 |
| 98+00 | 9800 | 50 | 14.11 | 0 | 41.06 | 0 | 0 | 0 | 31 | 0 | 53 | 0 | 0 | 0 | 5140 | 10107 | 0 | 0 | 0 | 0 | 0 | -4967 |
| 98+50 | 9850 | 50 | 8.65 | 0 | 58.10 | 0 | 0 | 0 | 21 | 0 | 92 | 0 | 0 | 0 | 5161 | 10221 | 0 | 0 | 0 | 0 | 0 | -5060 |
| 99+00 | 9900 | 50 | 12.80 | 0 | 26.11 | 0 | 0 | 0 | 20 | 0 | 78 | 0 | 0 | 0 | 5181 | 10319 | 0 | 0 | 0 | 0 | 0 | -5138 |
| 99+50 | 9950 | 50 | 54.48 | 0 | 4.43 | 0 | 0 | 0 | 62 | 0 | 28 | 0 | 0 | 0 | 5243 | 10354 | 0 | 0 | 0 | 0 | 0 | -5111 |
| 100+00 | 10000 | 50 | 22.33 | 0 | 9.51 | 0 | 0 | 0 | 71 | 0 | 13 | 0 | 0 | 0 | 5314 | 10370 | 0 | 0 | 0 | 0 | 0 | -5056 |
| 100+50 | 10050 | 50 | 20.13 | 0 | 6.04 | 0 | 0 | 0 | 39 | 0 | 14 | 0 | 0 | 0 | 5354 | 10388 | 0 | 0 | 0 | 0 | 0 | -5035 |
| 101+00 | 10100 | 50 | 39.64 | 0 | 0.04 | 0 | 0 | 0 | 55 | 0 | 6 | 0 | 0 | 0 | 5409 | 10395 | 0 | 0 | 0 | 0 | 0 | -4986 |
| 101+50 | 10150 | 50 | 17.13 | 0 | 2.62 | 0 | 0 | 0 | 53 | 0 | 2 | 0 | 0 | 0 | 5461 | 10398 | 0 | 0 | 0 | 0 | 0 | -4937 |
| 102+00 | 10200 | 50 | 3.00 | 0 | 47.85 | 0 | 0 | 0 | 19 | 0 | 47 | 0 | 0 | 0 | 5480 | 10457 | 0 | 0 | 0 | 0 | 0 | -4977 |
| 102+50 | 10250 | 50 | 0.00 | 0 | 108.46 | 0 | 0 | 0 | 3 | 0 | 145 | 0 | 0 | 0 | 5483 | 10638 | 0 | 0 | 0 | 0 | 0 | -5155 |
| 103+00 | 10300 | 50 | 0.00 | 0 | 150.91 | 0 | 0 | 0 | 0 | 0 | 240 | 0 | 0 | 0 | 5483 | 10938 | 0 | 0 | 0 | 0 | 0 | -5455 |
| 103+50 | 10350 | 50 | 0.00 | 0 | 148.32 | 0 | 0 | 0 | 0 | 0 | 277 | 0 | 0 | 0 | 5483 | 11284 | 0 | 0 | 0 | 0 | 0 | -5801 |
| 104+00 | 10400 | 50 | 0.00 | 0 | 100.14 | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 0 | 0 | 5483 | 11572 | 0 | 0 | 0 | 0 | 0 | -6089 |
| 104+50 | 10450 | 50 | 5.42 | 0 | 20.50 | 0 | 0 | 0 | 5 | 0 | 112 | 0 | 0 | 0 | 5488 | 11711 | 0 | 0 | 0 | 0 | 0 | -6224 |
| 105+00 | 10500 | 50 | 52.03 | 0 | 0.21 | 0 | 0 | 0 | 53 | 0 | 19 | 0 | 0 | 0 | 5541 | 11735 | 0 | 0 | 0 | 0 | 0 | -6194 |
| 105+50 | 10550 | 50 | 5.68 | 0 | 4.42 | 0 | 0 | 0 | 53 | 0 | 4 | 0 | 0 | 0 | 5595 | 11741 | 0 | 0 | 0 | 0 | 0 | -6146 |
| 106+00 | 10600 | 50 | 2.39 | 0 | 33.98 | 0 | 0 | 0 | 7 | 0 | 36 | 0 | 0 | 0 | 5602 | 11785 | 0 | 0 | 0 | 0 | 0 | -6183 |
| 106+50 | 10650 | 50 | 39.38 | 0 | 50.69 | 0 | 0 | 0 | 39 | 0 | 78 | 0 | 0 | 0 | 5641 | 11883 | 0 | 0 | 0 | 0 | 0 | -6243 |
| 107+00 | 10700 | 50 | 73.58 | 0 | 46.79 | 0 | 0 | 0 | 105 | 0 | 90 | 0 | 0 | 0 | 5745 | 11996 | 0 | 0 | 0 | 0 | 0 | -6251 |
| 107+50 | 10750 | 50 | 114.87 | 0 | 34.98 | 0 | 0 | 0 | 174 | 0 | 76 | 0 | 0 | 0 | 5920 | 12091 | 0 | 0 | 0 | 0 | 0 | -6171 |
| 108+00 | 10800 | 50 | 124.76 | 0 | 32.10 | 0 | 0 | 0 | 222 | 0 | 62 | 0 | 0 | 0 | 6142 | 12168 | 0 | 0 | 0 | 0 | 0 | -6027 |
| 108+50 | 10850 | 50 | 81.42 | 0 | 28.84 | 0 | 0 | 0 | 191 | 0 | 56 | 0 | 0 | 0 | 6333 | 12239 | 0 | 0 | 0 | 0 | 0 | -5906 |
| 109+00 | 10900 | 50 | 34.79 | 0 | 40.28 | 0 | 0 | 0 | 108 | 0 | 64 | 0 | 0 | 0 | 6440 | 12319 | 0 | 0 | 0 | 0 | 0 | -5879 |
| 109+50 | 10950 | 50 | 46.31 | 0 | 25.15 | 0 | 0 | 0 | 75 | 0 | 61 | 0 | 0 | 0 | 6515 | 12395 | 0 | 0 | 0 | 0 | 0 | -5879 |
| 110+00 | 11000 | 50 | 93.70 | 0 | 0.30 | 0 | 0 | 0 | 130 | 0 | 24 | 0 | 0 | 0 | 6645 | 12424 | 0 | 0 | 0 | 0 | 0 | -5779 |
| 110+50 | 11050 | 50 | 163.40 | 0 | 0.00 | 0 | 0 | 0 | 238 | 0 | 0 | 0 | 0 | 0 | 6883 | 12424 | 0 | 0 | 0 | 0 | 0 | -5541 |
| 111+00 | 11100 | 50 | 146.18 | 0 | 0.00 | 0 | 0 | 0 | 287 | 0 | 0 | 0 | 0 | 0 | 7170 | 12424 | 0 | 0 | 0 | 0 | 0 | -5255 |
| 111+50 | 11150 | 50 | 4.09 | 0 | 48.11 | 0 | 0 | 0 | 139 | 0 | 45 | 0 | 0 | 0 | 7309 | 12480 | 0 | 0 | 0 | 0 | 0 | -5171 |
| 112+00 | 11200 | 50 | 0.00 | 0 | 86.98 | 0 | 0 | 0 | 4 | 0 | 125 | 0 | 0 | 0 | 7313 | 12636 | 0 | 0 | 0 | 0 | 0 | -5324 |
| 112+50 | 11250 | 50 | 4.35 | 0 | 80.81 | 0 | 0 | 0 | 4 | 0 | 155 | 0 | 0 | 0 | 7317 | 12831 | 0 | 0 | 0 | 0 | 0 | -5514 |
| 113+00 | 11300 | 50 | 19.60 | 0 | 60.33 | 0 | 0 | 0 | 22 | 0 | 131 | 0 | 0 | 0 | 7339 | 12994 | 0 | 0 | 0 | 0 | 0 | -5655 |
| 113+50 | 11350 | 50 | 36.95 | 0 | 53.21 | 0 | 0 | 0 | 52 | 0 | 105 | 0 | 0 | 0 | 7391 | 13125 | 0 | 0 | 0 | 0 | 0 | -5734 |
| 114+00 | 11400 | 50 | 4.79 | 0 | 32.31 | 0 | 0 | 0 | 39 | 0 | 79 | 0 | 0 | 0 | 7430 | 13224 | 0 | 0 | 0 | 0 | 0 | -5795 |
| 114+50 | 11450 | 50 | 0.00 | 0 | 0.00 | 0 | 0 | 0 | 4 | 0 | 30 | 0 | 0 | 0 | 7434 | 13262 | 0 | 0 | 0 | 0 | 0 | -5828 |
| 126+50 | 12650 | 50 | 7.38 | 0 | 1.87 | 0 | 0 | 0 | 7 | 0 | 2 | 0 | 0 | 0 | 7441 | 13264 | 0 | 0 | 0 | 0 | 0 | -5823 |
| 127+00 | 12700 | 50 | 7.57 | 0 | 32.97 | 0 | 0 | 0 | 14 | 0 | 32 | 0 | 0 | 0 | 7455 | 13304 | 0 | 0 | 0 | 0 | 0 | -5849 |
| 127+50 | 12750 | 50 | 0.00 | 0 | 83.90 | 0 | 0 | 0 | 7 | 0 | 108 | 0 | 0 | 0 | 7462 | 13440 | 0 | 0 | 0 | 0 | 0 | -5978 |
| 128+00 | 12800 | 50 | 0.00 | 0 | 119.49 | 0 | 0 | 0 | 0 | 0 | 188 | 0 | 0 | 0 | 7462 | 13675 | 0 | 0 | 0 | 0 | 0 | -6213 |
| 128+50 | 12850 | 50 | 0.00 | 0 | 171.22 | 0 | 0 | 0 | 0 | 0 | 269 | 0 | 0 | 0 | 7462 | 14011 | 0 | 0 | 0 | 0 | 0 | -6550 |
| 129+00 | 12900 | 50 | 0.00 | 0 | 110.90 | 0 | 0 | 0 | 0 | 0 | 261 | 0 | 0 | 0 | 7462 | 14338 | 0 | 0 | 0 | 0 | 0 | -6876 |
| 129+50 | 12950 | 50 | 9.13 | 0 | 37.17 | 0 | 0 | 0 | 8 | 0 | 137 | 0 | 0 | 0 | 7470 | 14509 | 0 | 0 | 0 | 0 | 0 | -7039 |
| 130+00 | 13000 | 50 | 30.02 | 0 | 9.95 | 0 | 0 | 0 | 36 | 0 | 44 | 0 | 0 | 0 | 7507 | 14564 | 0 | 0 | 0 | 0 | 0 | -7057 |
| 147+50 | 14750 | 50 | 0.00 | 0 | 0.00 | 0 | 0 | 0 | 28 | 0 | 9 | 0 | 0 | 0 | 7534 | 14575 | 0 | 0 | 0 | 0 | 0 | -7041 |
| 148+00 | 14800 | 50 | 20.30 | 0 | 3.25 | 0 | 0 | 0 | 19 | 0 | 3 | 0 | 0 | 0 | 7553 | 14579 | 0 | 0 | 0 | 0 | 0 | -7026 |
| 148+50 | 14850 | 50 | 3.05 | 0 | 40.16 | 0 | 0 | 0 | 22 | 0 | 40 | 0 | 0 | 0 | 7575 | 14629 | 0 | 0 | 0 | 0 | 0 | -7055 |
| 149+00 | 14900 | 50 | 3.04 | 0 | 46.78 | 0 | 0 | 0 | 6 | 0 | 81 | 0 | 0 | 0 | 7580 | 14730 | 0 | 0 | 0 | 0 | 0 | -7150 |
| 149+50 | 14950 | 50 | 6.31 | 0 | 19.06 | 0 | 0 | 0 | 9 | 0 | 61 | 0 | 0 | 0 | 7589 | 14806 | 0 | 0 | 0 | 0 | 0 | -7217 |
| 150+00 | 15000 | 50 | 3.54 | 0 | 12.60 | 0 | 0 | 0 | 9 | 0 | 29 | 0 | 0 | 0 | 7598 | 14843 | 0 | 0 | 0 | 0 | 0 | -7245 |
| 150+50 | 15050 | 50 | 7.15 | 0 | 16.38 | 0 | 0 | 0 | 10 | 0 | 27 | 0 | 0 | 0 | 7608 | 14876 | 0 | 0 | 0 | 0 | 0 | -7268 |
| 151+00 | 15100 | 50 | 7.23 | 0 | 33.34 | 0 | 0 | 0 | 13 | 0 | 46 | 0 | 0 | 0 | 7621 | 14934 | 0 | 0 | 0 | 0 | 0 | -7312 |
| 151+50 | 15150 | 50 | 4.58 | 0 | 19.06 | 0 | 0 | 0 | 11 | 0 | 49 | 0 | 0 | 0 | 7632 | 14995 | 0 | 0 | 0 | 0 | 0 | -7362 |
| 152+00 | 15200 | 50 | 7.99 | 0 | 7.38 | 0 | 0 | 0 | 12 | 0 | 24 | 0 | 0 | 0 | 7644 | 15025 | 0 | 0 | 0 | 0 | 0 | -7381 |
| 175+50 | 17550 | 50 | 0.00 | 0 | 52.13 | 0 | 0 | 0 | 7 | 0 | 55 | 0 | 0 | 0 | 7651 | 15094 | 0 | 0 | 0 | 0 | 0 | -7443 |
| 176+00 | 17600 | 50 | 0.00 | 0 | 79.82 | 0 | 0 | 0 | 0 | 0 | 122 | 0 | 0 | 0 | 7651 | 15247 | 0 | 0 | 0 | 0 | 0 | -7595 |
| 176+50 | 17650 | 50 | 0.00 | 0 | 99.13 | 0 | 0 | 0 | 0 | 0 | 166 | 0 | 0 | 0 | 7651 | 15454 | 0 | 0 | 0 | 0 | 0 | -7802 |
| 177+00 | 17700 | 50 | 0.00 | 0 | 118.15 | 0 | 0 | 0 | 0 | 0 | 201 | 0 | 0 | 0 | 7651 | 15705 | 0 | 0 | 0 | 0 | 0 | -8054 |
| 177+50 | 17750 | 50 | 0.00 | 0 | 154.33 | 0 | 0 | 0 | 0 | 0 | 252 | 0 | 0 | 0 | 7651 | 16021 | 0 | 0 | 0 | 0 | 0 | -8369 |
| 177+70 | 17770 | 20 | 0.00 | 0 | 163.98 | 0 | 0 | 0 | 0 | 0 | 118 | 0 | 0 | 0 | 7651 | 16168 | 0 | 0 | 0 | 0 | 0 | -8517 |
| 178+00 | 17800 | 30 | 0.00 | 0 | 131.18 | 0 | 0 | 0 | 0 | 0 | 164 | 0 | 0 | 0 | 7651 | 16373 | 0 | 0 | 0 | 0 | 0 | -8722 |
| 178+50 | 17850 | 50 | 4.00 | 0 | 54.59 | 0 | 0 | 0 | 4 | 0 | 172 | 0 | 0 | 0 | 7655 | 16588 | 0 | 0 | 0 | 0 | 0 | -8933 |
| 179+00 | 17900 | 50 | 33.81 | 0 | 0.05 | 0 | 0 | 0 | 35 | 0 | 51 | 0 | 0 | 0 | 7690 | 16651 | 0 | 0 | 0 | 0 | 0 | -8961 |
| 179+50 | 17950 | 50 | 86.86 | 0 | 0.00 | 0 | 0 | 0 | 112 | 0 | 0 | 0 | 0 | 0 | 7802 | 16651 | 0 | 0 | 0 | 0 | 0 | -8850 |
| 180+00 | 18000 | 50 | 102.49 | 0 | 0.00 | 0 | 0 | 0 | 175 | 0 | 0 | 0 | 0 | 0 | 7977 | 16651 | 0 | 0 | 0 | 0 | 0 | -8674 |
| 180+50 | 18050 | 50 | 98.55 | 0 | 0.00 | 0 | 0 | 0 | 186 | 0 | 0 | 0 | 0 | 0 | 8163 | 16651 | 0 | 0 | 0 | 0 | 0 | -8488 |
| 181+00 | 18100 | 50 | 95.98 | 0 | 0.00 | 0 | 0 | 0 | 180 | 0 | 0 | 0 | 0 | 0 | 8343 | 16651 | 0 | 0 | 0 | 0 | 0 | -8308 |
| 181+50 | 18150 | 50 | 43.42 | 0 | 0.65 | 0 | 0 | 0 | 129 | 0 | 1 | 0 | 0 | 0 | 8473 | 16652 | 0 | 0 | 0 | 0 | 0 | -8180 |
| 182+00 | 18200 | 50 | 6.88 | 0 | 18.36 | 0 | 0 | 0 | 47 | 0 | 18 | 0 | 0 | 0 | 8519 | 16674 | 0 | 0 | 0 | 0 | 0 | -8155 |
| 182+50 | 18250 | 50 | 3.30 | 0 | 26.47 | 0 | 0 | 0 | 9 | 0 | 42 | 0 | 0 | 0 | 8529 | 16726 | 0 | 0 | 0 | 0 | 0 | -8198 |
| 183+00 | 18300 | 50 | 8.24 | 0 | 13.10 | 0 | 0 | 0 | 11 | 0 | 37 | 0 | 0 | 0 | 8539 | 16772 | 0 | 0 | 0 | 0 | 0 | -8233 |
| 209+00 | 20900 | 50 | 12.74 | 0 | 10.77 | 0 | 0 | 0 | 19 | 0 | 22 | 0 | 0 | 0 | 8559 | 16799 | 0 | 0 | 0 | 0 | 0 | -8241 |
| 209+50 | 20950 | 50 | 8.26 | 0 | 14.96 | 0 | 0 | 0 | 19 | 0 | 24 | 0 | 0 | 0 | 8578 | 16829 | 0 | 0 | 0 | 0 | 0 | -8251 |
| 210+00 | 21000 | 50 | 12.81 | 0 | 21.22 | 0 | 0 | 0 | 20 | 0 | 34 | 0 | 0 | 0 | 8598 | 16871 | 0 | 0 | 0 | 0 | 0 | -8274 |
| 210+50 | 21050 | 50 | 6.13 | 0 | 43.12 | 0 | 0 | 0 | 18 | 0 | 60 | 0 | 0 | 0 | 8615 | 16946 | 0 | 0 | 0 | 0 | 0 | -8330 |
| 211+00 | 21100 | 50 | 0.00 | 0 | 84.93 | 0 | 0 | 0 | 6 | 0 | 119 | 0 | 0 | 0 | 8621 | 17094 | 0 | 0 | 0 | 0 | 0 | -8473 |
| 211+50 | 21150 | 50 | 0.00 | 0 | 73.09 | 0 | 0 | 0 | 0 | 0 | 146 | 0 | 0 | 0 | 8621 | 17277 | 0 | 0 | 0 | 0 | 0 | -8656 |
| 212+00 | 21200 | 50 | 9.75 | 0 | 14.18 | 0 | 0 | 0 | 9 | 0 | 81 | 0 | 0 | 0 | 8630 | 17378 | 0 | 0 | 0 | 0 | 0 | -8748 |
| 212+50 | 21250 | 50 | 47.18 | 0 | 4.40 | 0 | 0 | 0 | 53 | 0 | 17 | 0 | 0 | 0 | 8683 | 17399 | 0 | 0 | 0 | 0 | 0 | -8717 |
| 213+00 | 21300 | 50 | 24.04 | 0 | 20.80 | 0 | 0 | 0 | 66 | 0 | 23 | 0 | 0 | 0 | 8748 | 17428 | 0 | 0 | 0 | 0 | 0 | -8680 |
| 213+50 | 21350 | 50 | 0.00 | 0 | 61.02 | 0 | 0 | 0 | 22 | 0 | 76 | 0 | 0 | 0 | 8771 | 17523 | 0 | 0 | 0 | 0 | 0 | -8752 |
| 213+69 | 21369 | 19 | 0.00 | 0 | 92.15 | 0 | 0 | 0 | 0 | 0 | 54 | 0 | 0 | 0 | 8771 | 17590 | 0 | 0 | 0 | 0 | 0 | -8820 |
| 214+00 | 21400 | 31 | 0.00 | 0 | 69.04 | 0 | 0 | 0 | 0 | 0 | 93 | 0 | 0 | 0 | 8771 | 17706 | 0 | 0 | 0 | 0 | 0 | -8935 |
| 214+50 | 21450 | 50 | 18.57 | 0 | 19.61 | 0 | 0 | 0 | 17 | 0 | 82 | 0 | 0 | 0 | 8788 | 17809 | 0 | 0 | 0 | 0 | 0 | -9021 |
| 215+00 | 21500 | 50 | 61.16 | 0 | 0.05 | 0 | 0 | 0 | 74 | 0 | 18 | 0 | 0 | 0 | 8862 | 17831 | 0 | 0 | 0 | 0 | 0 | -8970 |
| 215+50 | 21550 | 50 | 53.11 | 0 | 0.11 | 0 | 0 | 0 | 106 | 0 | 0 | 0 | 0 | 0 | 8968 | 17832 | 0 | 0 | 0 | 0 | 0 | -8864 |
| 216+00 | 21600 | 50 | 31.60 | 0 | 2.86 | 0 | 0 | 0 | 78 | 0 | 3 | 0 | 0 | 0 | 9046 | 17835 | 0 | 0 | 0 | 0 | 0 | -8789 |

9

9

| STATION | Real Station | Distance | AREA (SF) Cut | Salvaged/Unusable Pavement Material | Fill | Marsh Exc | Rock Exc | EBS |
|---|---|---|---|---|---|---|---|---|
| 221+00 | 22100 | 50 | 5.74 | 0 | 10.34 | 0 | 0 | 0 |
| 221+50 | 22150 | 50 | 4.82 | 0 | 46.98 | 0 | 0 | 0 |
| 222+00 | 22200 | 50 | 24.97 | 0 | 4.38 | 0 | 0 | 0 |
| 222+50 | 22250 | 50 | 21.57 | 0 | 38.69 | 0 | 0 | 0 |
| 223+00 | 22300 | 50 | 6.89 | 0 | 18.78 | 0 | 0 | 0 |

| STATION | Incremental Vol (CY) (Unadjusted) Cut Note 1 | Salvaged/Unusable Pavement Material Note 2 | Fill Note 3 | Marsh Exc | Rock Exc | EBS |
|---|---|---|---|---|---|---|
| 221+00 | 35 | 0 | 12 | 0 | 0 | 0 |
| 221+50 | 10 | 0 | 53 | 0 | 0 | 0 |
| 222+00 | 28 | 0 | 48 | 0 | 0 | 0 |
| 222+50 | 43 | 0 | 40 | 0 | 0 | 0 |
| 223+00 | 26 | 0 | 53 | 0 | 0 | 0 |
| Column totals | 9187 | 0 | 14474 | 0 | 0 | 0 |

| STATION | Cumulative Vol (CY) Cut 1.00 Note 1 | Expanded Fill 1.25 | Expanded Marsh Backfill 1.50 Note 4 | Expanded Rock 1.10 | Expanded EBS Backfill 1.30 Note 5 | Reduced Marsh in Fill 0.60 Note 6 | Reduced EBS In Fill 0.80 Note 7 | Mass Ordinate Note 8 |
|---|---|---|---|---|---|---|---|---|
| 221+00 | 9081 | 17850 | 0 | 0 | 0 | 0 | 0 | -8770 |
| 221+50 | 9090 | 17917 | 0 | 0 | 0 | 0 | 0 | -8826 |
| 222+00 | 9118 | 17976 | 0 | 0 | 0 | 0 | 0 | -8858 |
| 222+50 | 9161 | 18026 | 0 | 0 | 0 | 0 | 0 | -8865 |
| 223+00 | 9187 | 18092 | 0 | 0 | 0 | 0 | 0 | -8905 |

| Notes: | | |
|---|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material | |
| 2 - Salvaged/Unusabl | This does not show up in cross sections | |
| 3 - Fill | Does not include Unusable Pavement Exc volume | |
| 4 - Expanded Marsh E | Will be backfilled with Granular Backfill (or Cut, or Borrow) | Note 4 - Select one based on input dialog selection |
| 5 - Expanded EBS | Will be backfilled with Granular Backfill (or Cut, or Borrow) | Note 5 - Select one based on input dialog selection |
| 6 - Reduced Marsh in | Reduced Marsh Excavation that can be used in Fill | Note 6 - If excavated Marsh can be used in Fill |
| 7 - Reduced EBS in Fi | Reduced EBS Excavation that can be used in Fill | Note 7 - If excavated EBS can be used in Fill |
| 8 - Mass Ordinate | If Marsh or EBS to be backfilled with Cut or Borrow: [(Cut + Marsh Exc + EBS) - ((Fill - Reduced Marsh in Fill) - (Reduced EBS in Fill) | Note 8 - Select one based on mass haul input dialog selection. EBS and Marsh Exc used outside 1:1 in fill slopes |
| 8 - Mass Ordinate | If Marsh and EBS to be backfilled with Granular: [(Cut + EBS + Marsh Exc) - ((Fill - (Reduced Marsh in Fill) - (Reduced EBS in Fill) | EBS and Marsh Exc used outside 1:1 in fill slopes |
| 8 - Mass Ordinate | If Marsh and EBS to be backfilled with Granular: [(Cut) - ((Fill - Expanded Rock) * Fill Factor))] | Marsh and EBS are not usable outside the 1:1 slopes |
| 8 - Mass Ordinate | If Marsh and EBS to be backfilled with Cut or Borrow: [(Cut) - ((Fill - Expanded Rock) * Fill Factor))] | Marsh and EBS are not usable outside the 1:1 slopes |

Notes for macro:

This option assumes that the pavement removal is shown in the cross sections.

Make a check box to show which option was used

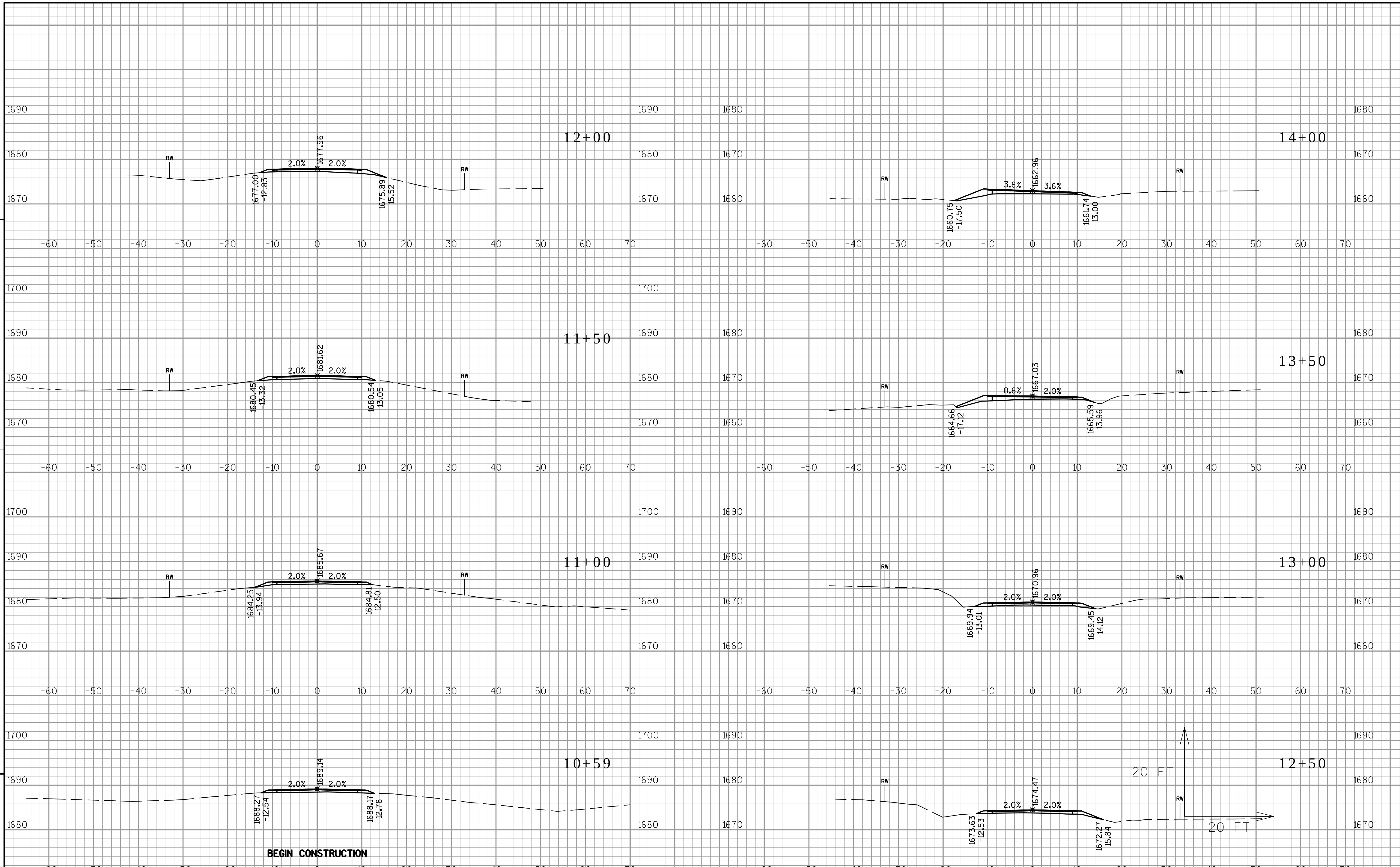
Spreadsheet option 1 or 2

Mass haul does or does not include Marsh and EBS in the fills

Common will be quantified when we do the summaries

9

9

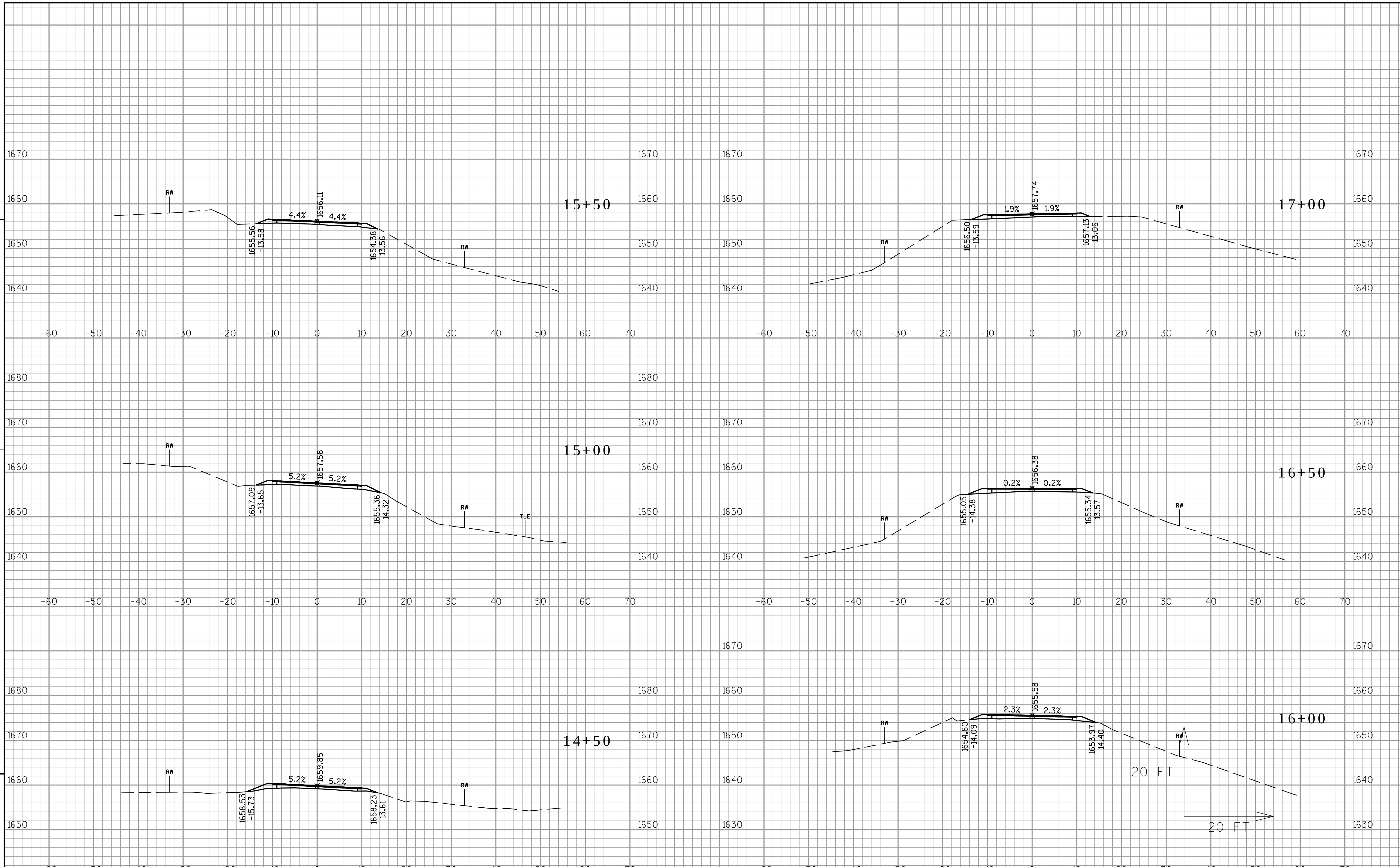



9

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 71 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS01 PLOT DATE : 8/27/2012 11:00 AM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



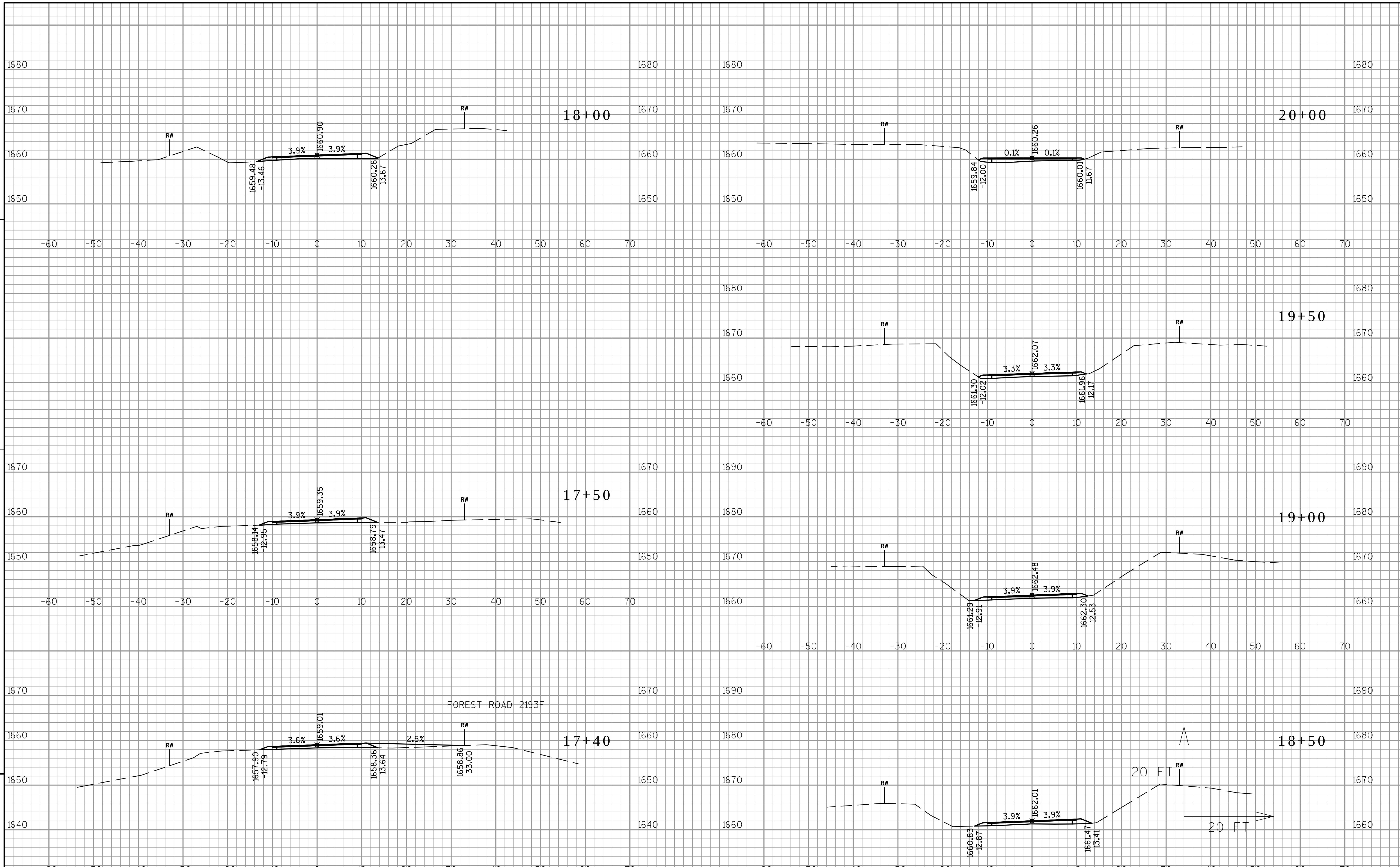

9 | 9

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 72 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS02 PLOT DATE : 8/27/2012 11:46 AM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

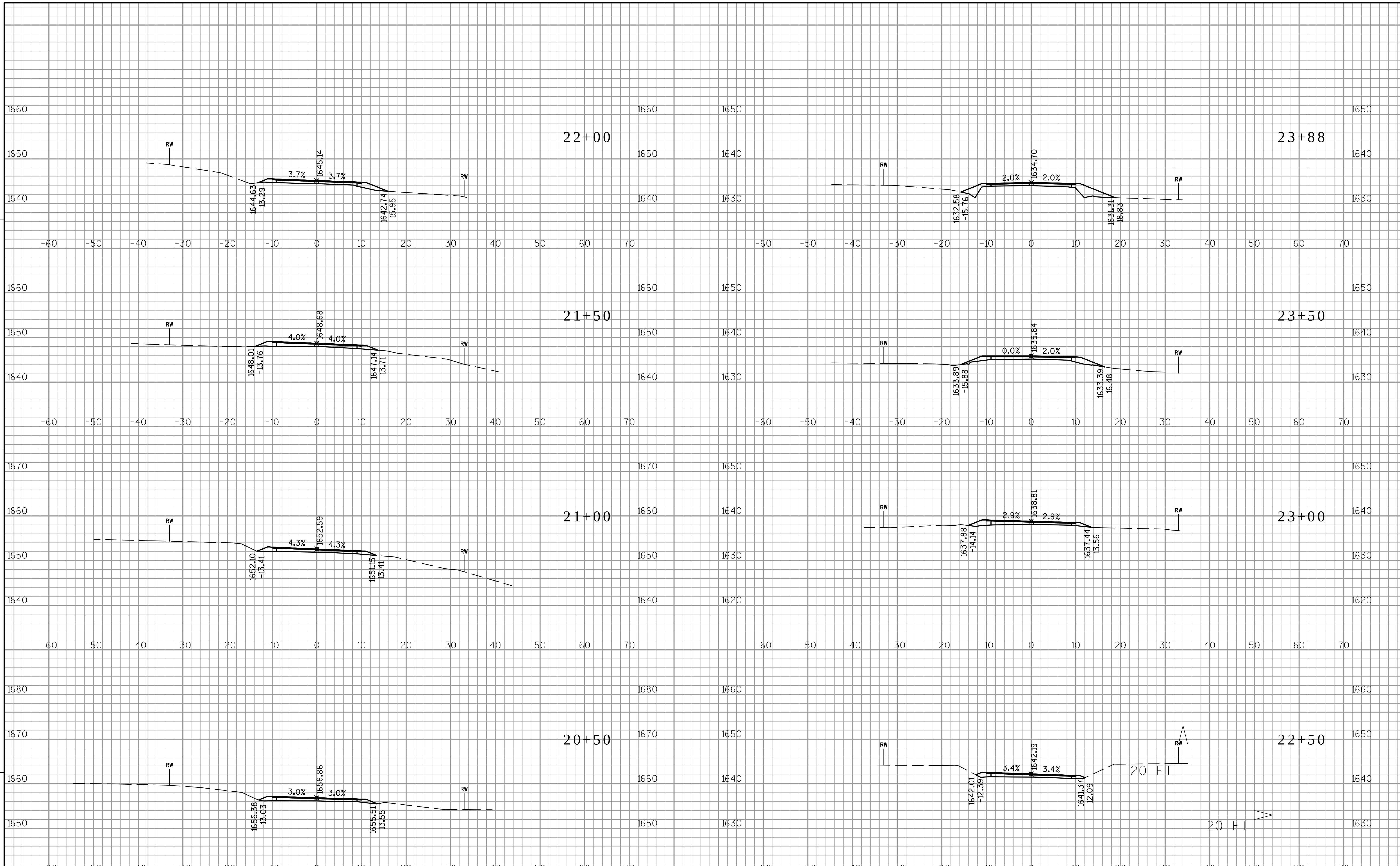
WISDOT/CADDS SHEET 49

9

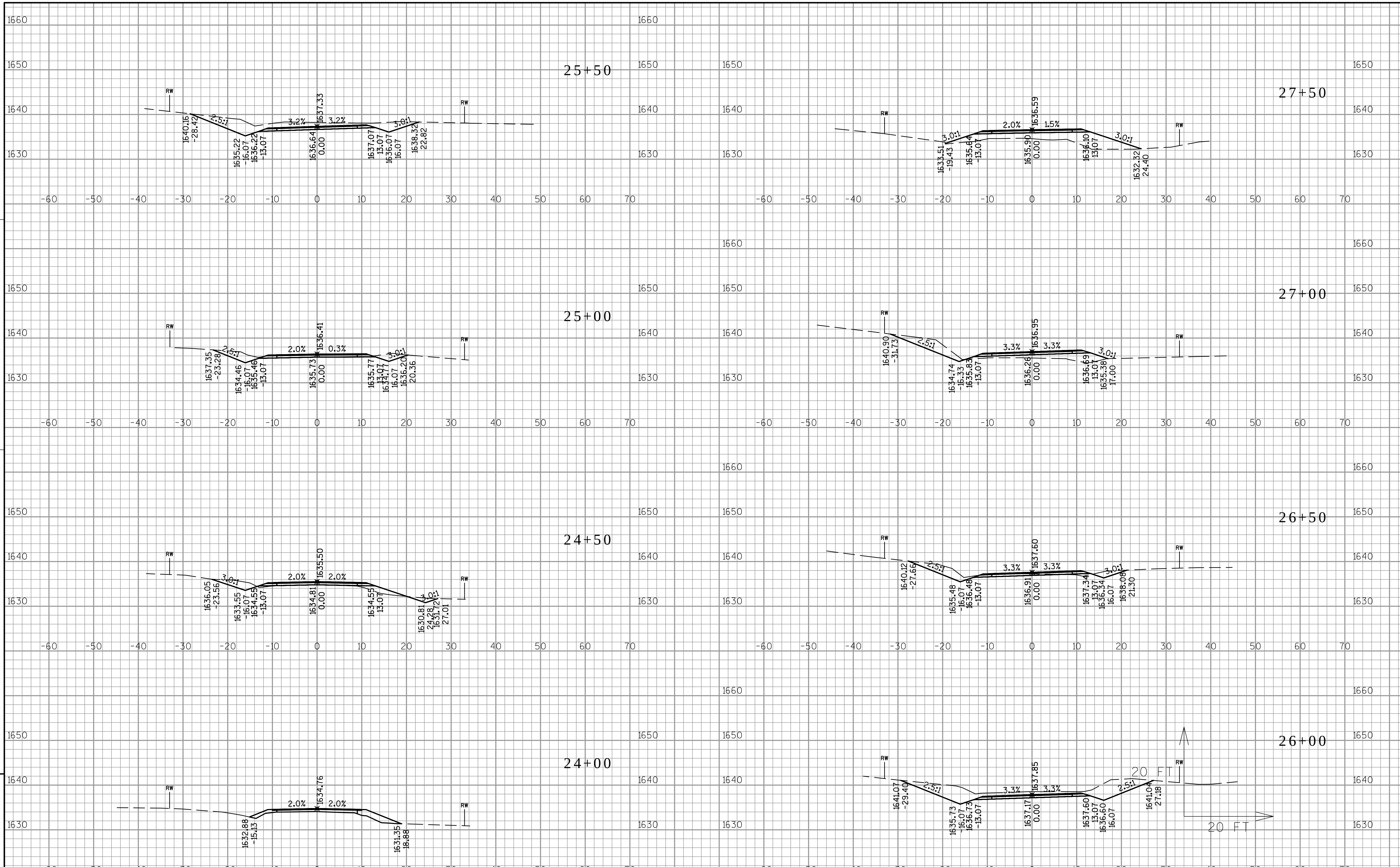



9

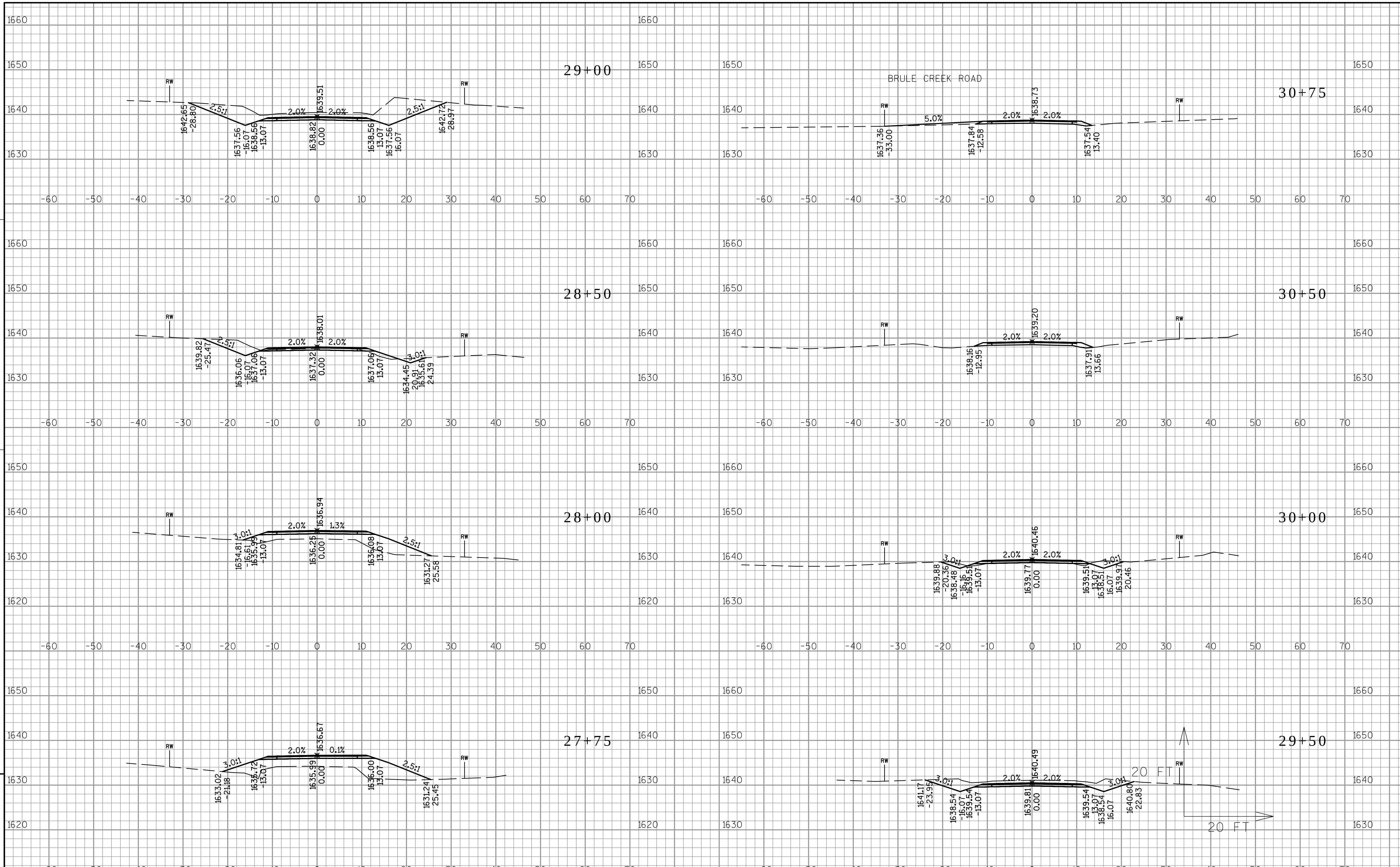
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 73 | E |
|---|---|---|---|---|---|




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 74 | E |
|---|---|---|---|---|---|

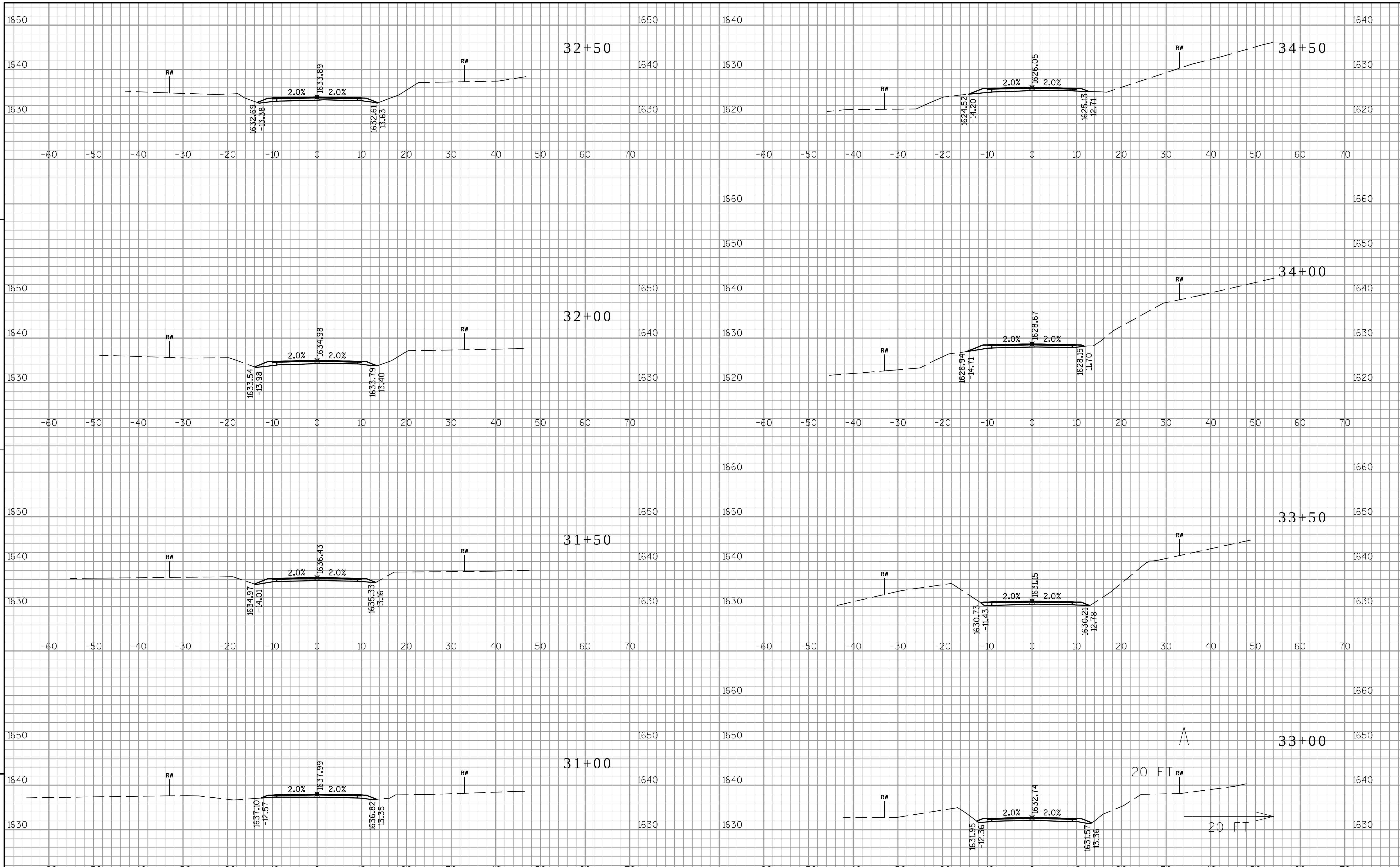



| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 75 | E |
|---|---|---|---|---|---|



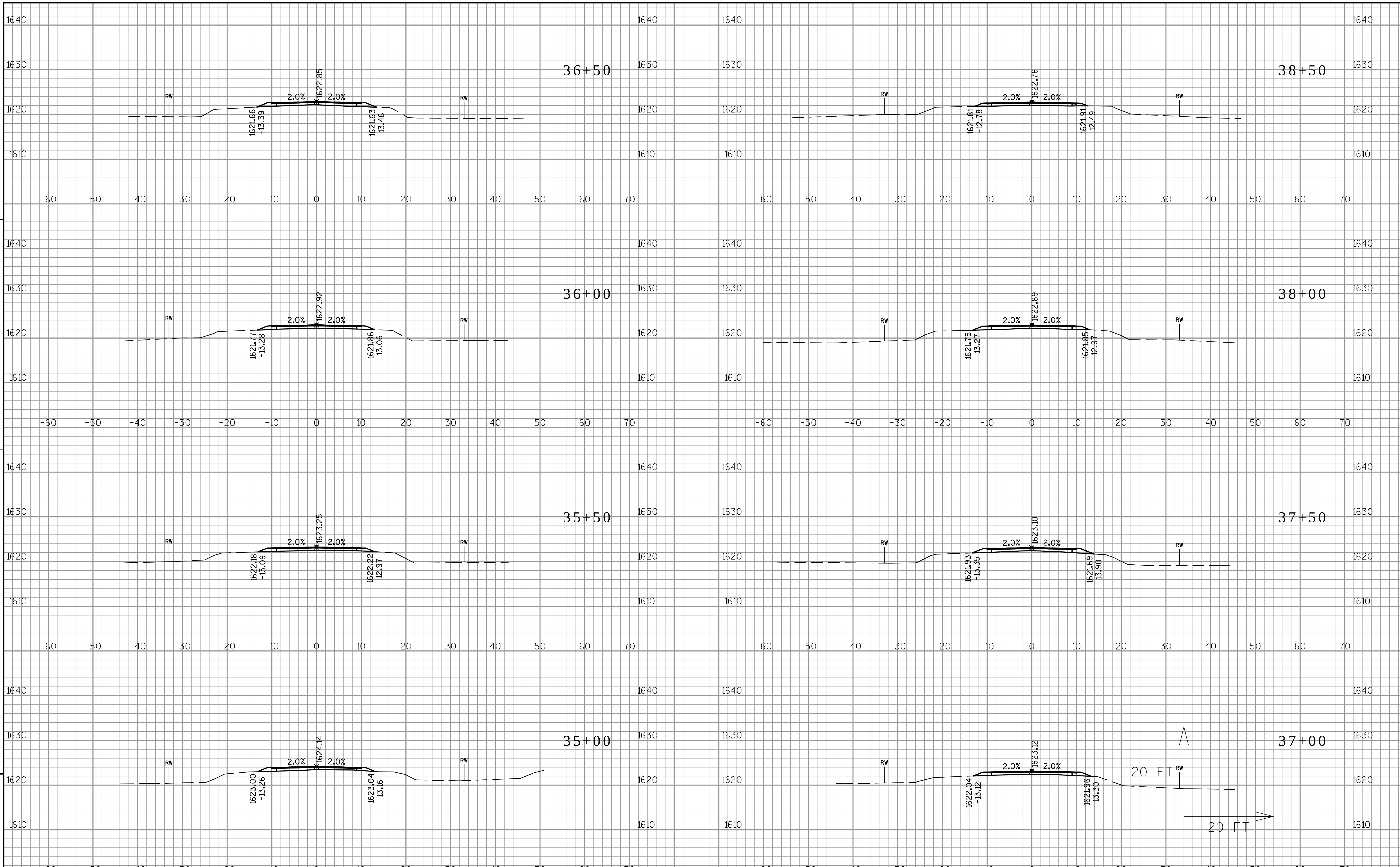
29+00
28+50
28+00
27+75
BRULE CREEK ROAD
30+75
30+50
30+00
29+50
RW
20 FT
20 FT

9




9

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 77 | E |
|---|---|---|---|---|---|

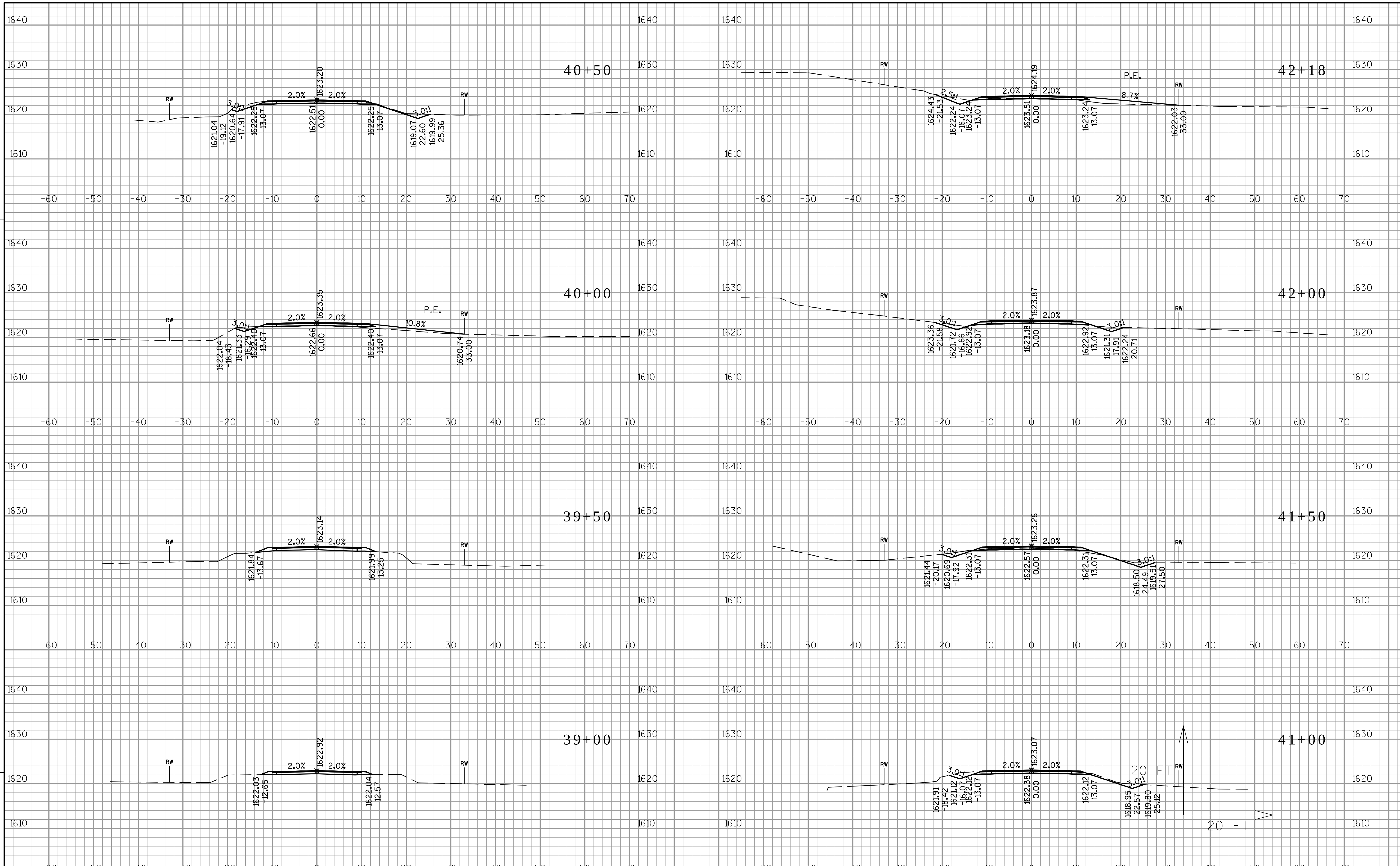



9

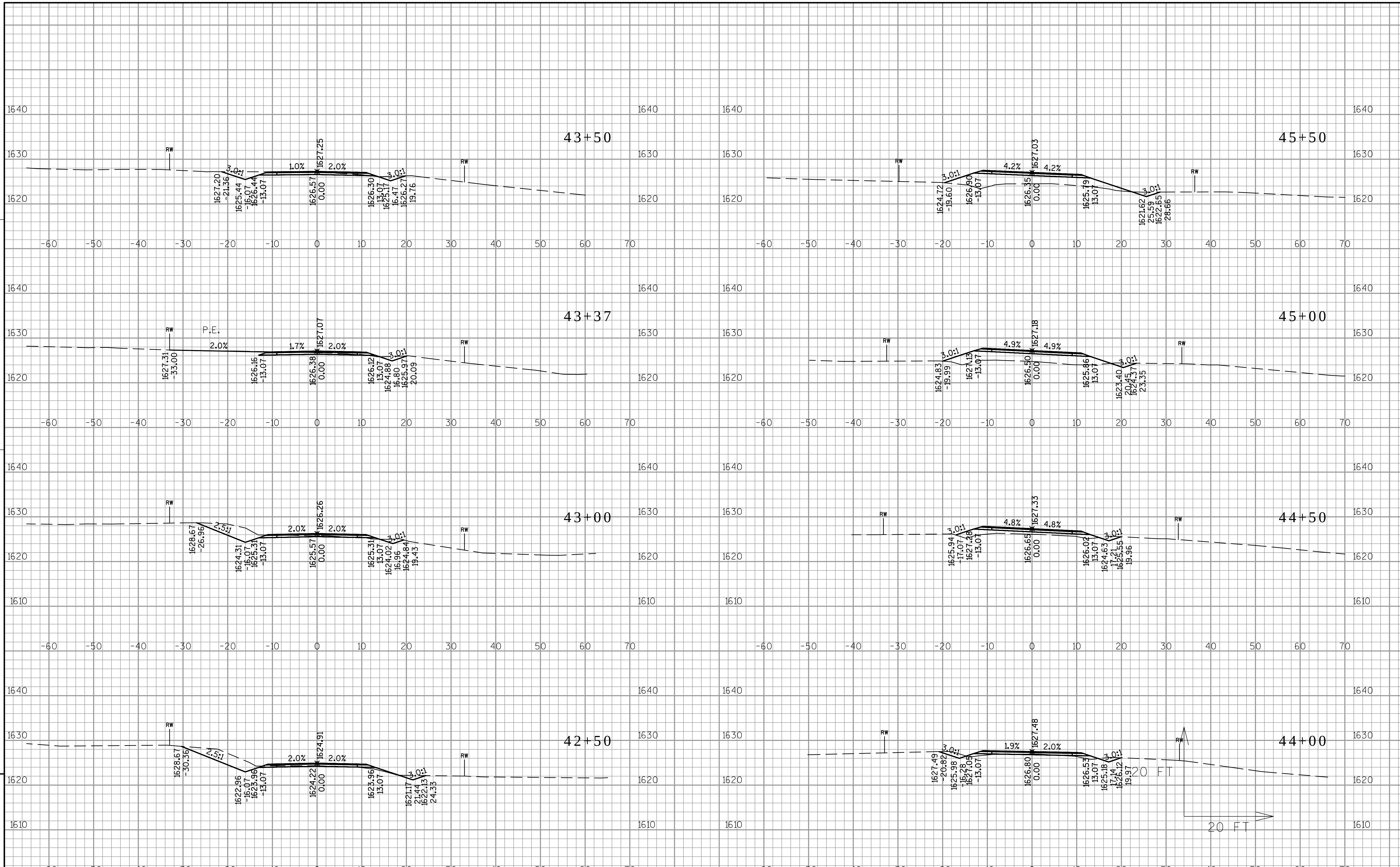
9

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 78 | E |
|---|---|---|---|---|---|

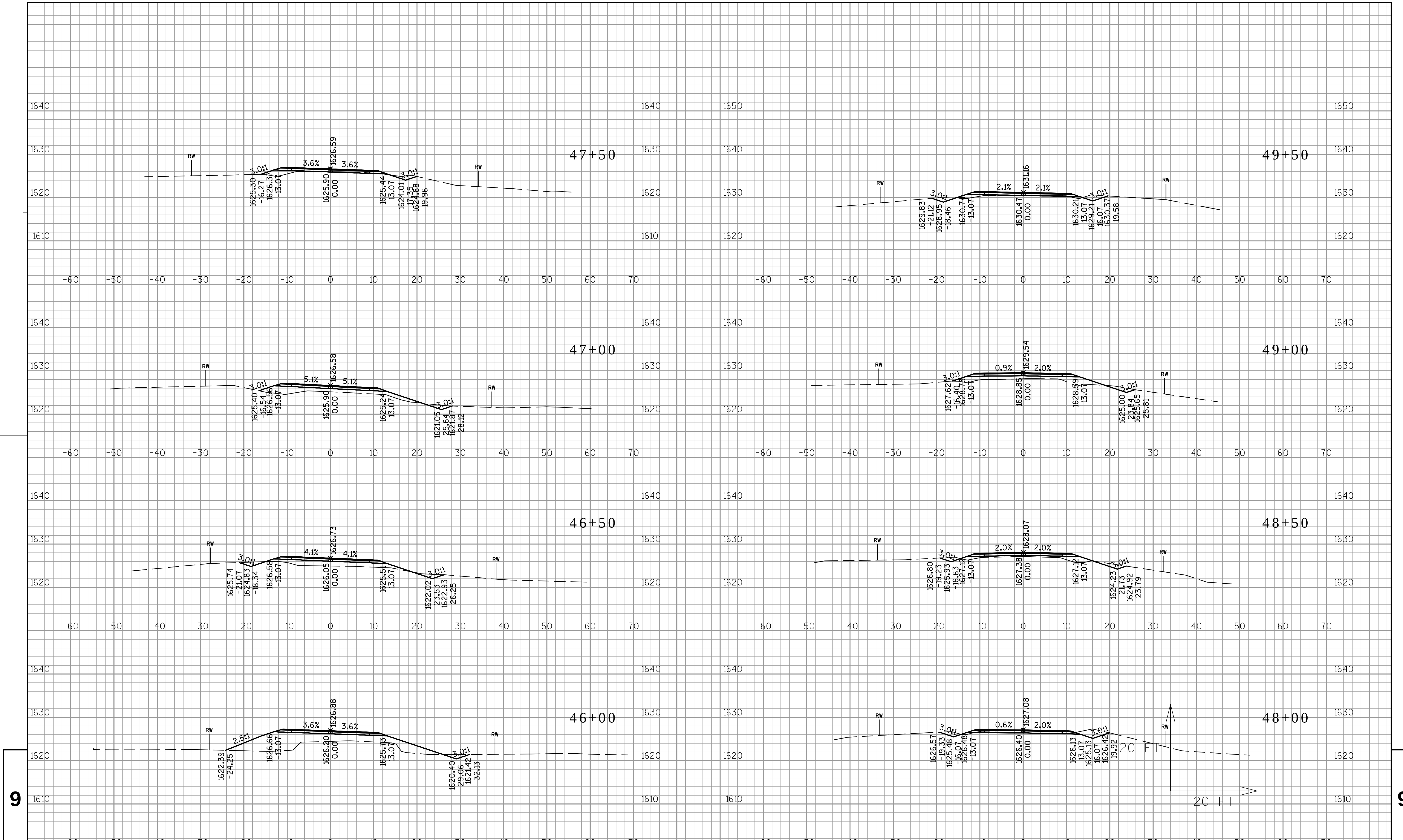
FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS08 PLOT DATE : 8/16/2012 4:21 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 79 | E |
|---|---|---|---|---|---|

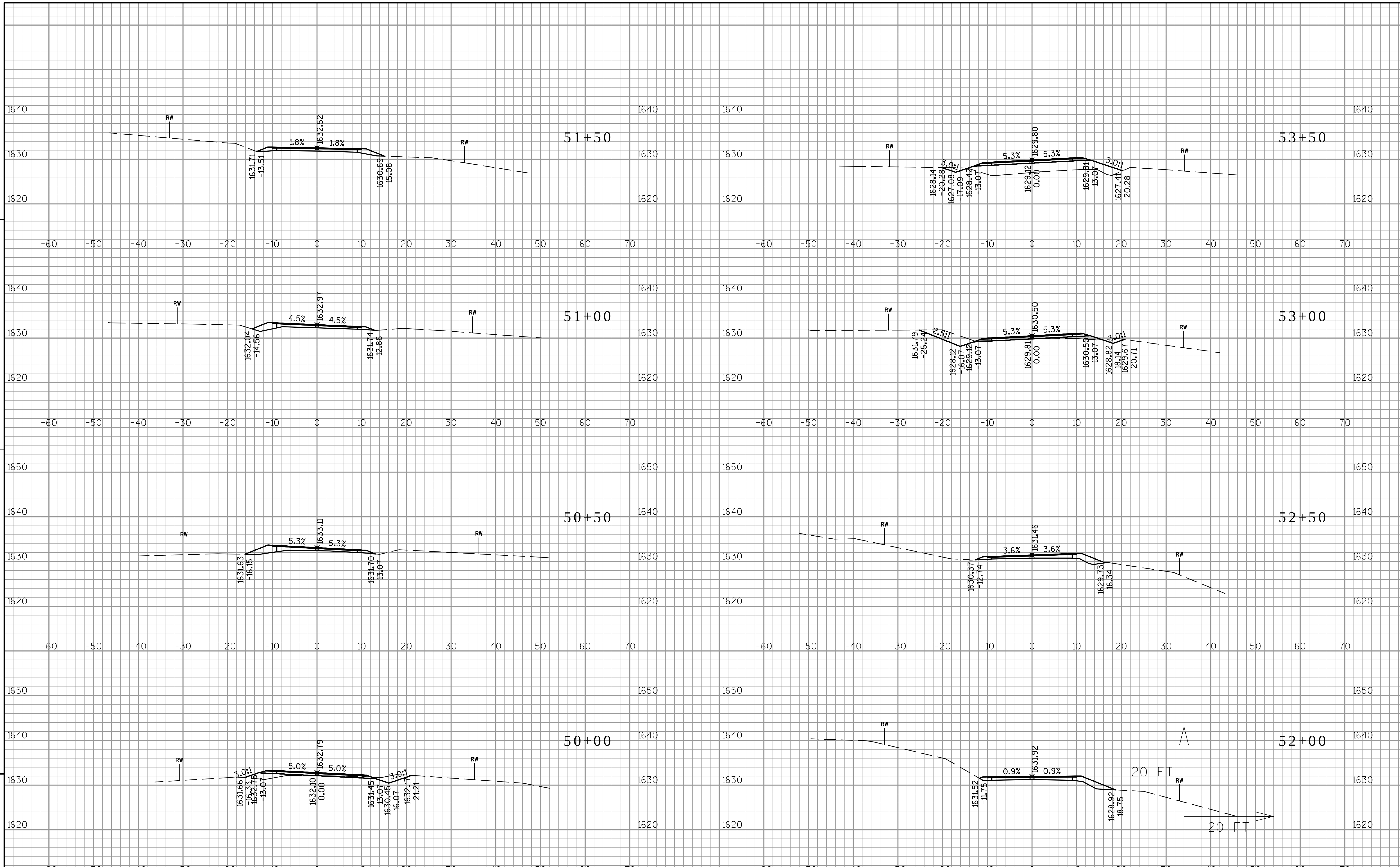



| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 80 | E |
|---|---|---|---|---|---|




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 81 | E |
|---|---|---|---|---|---|

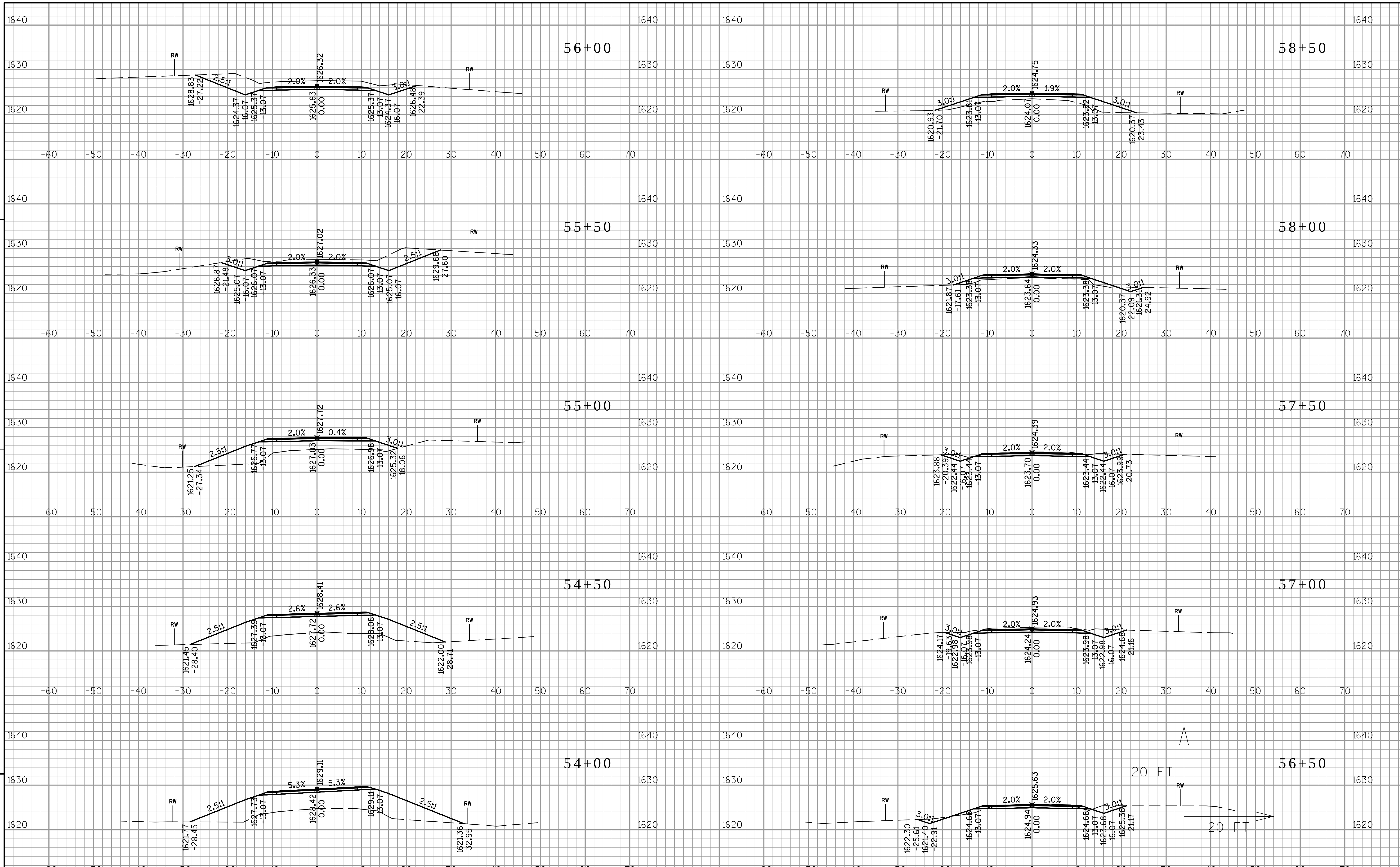
FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS11 PLOT DATE : 8/16/2012 4:26 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT




9

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 82 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS12 PLOT DATE : 8/16/2012 4:27 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

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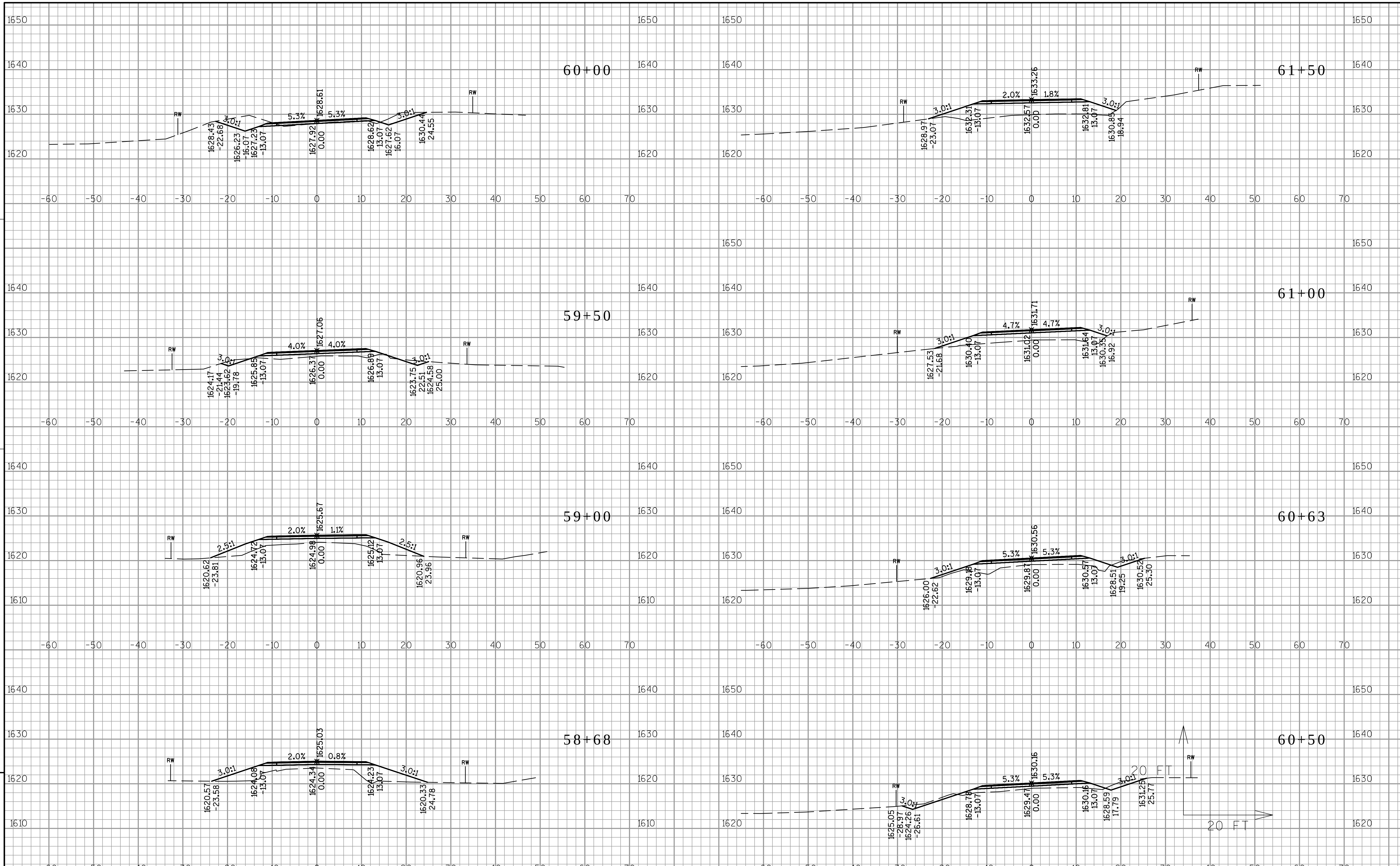
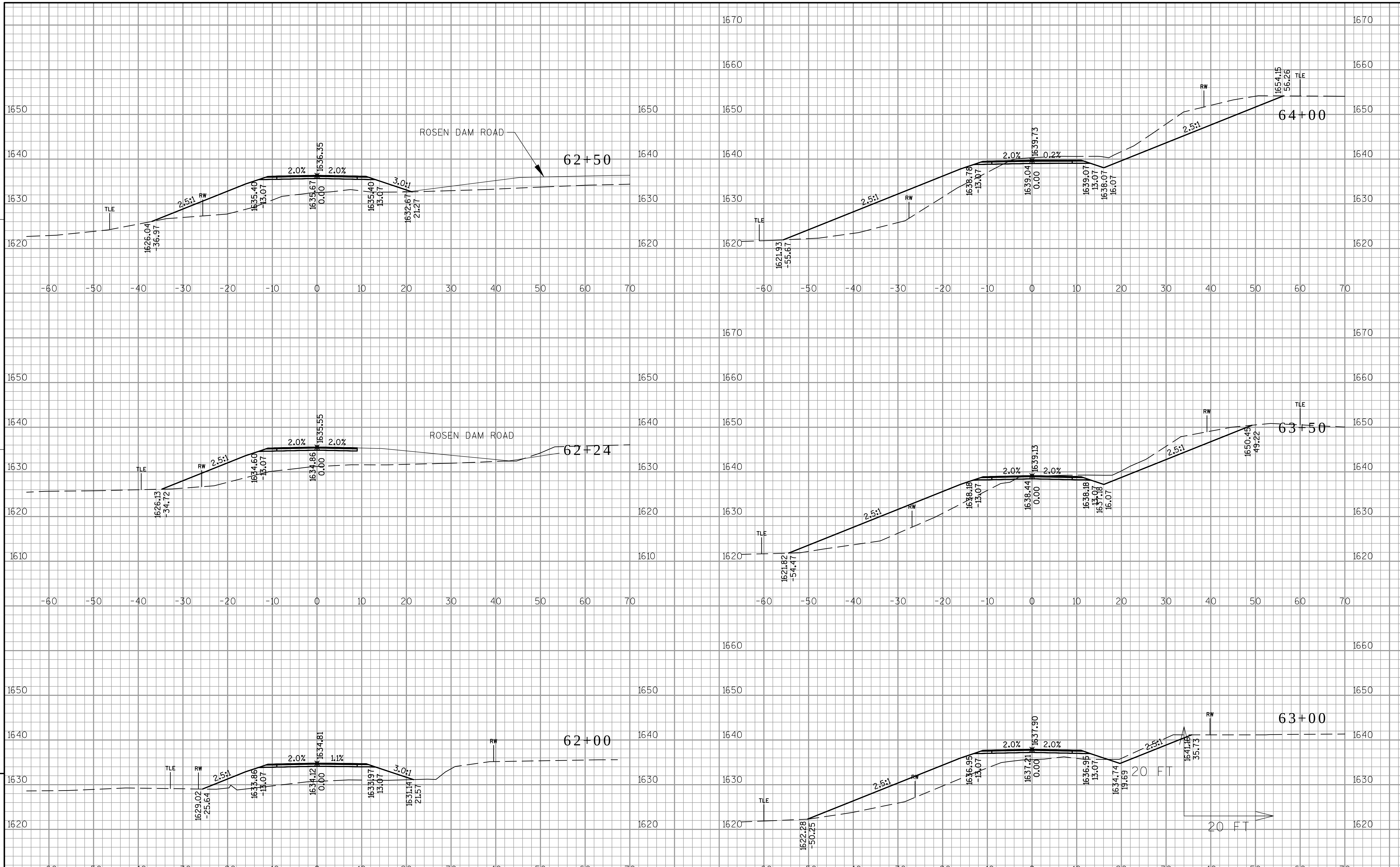
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 83 | E |
|---|---|---|---|---|---|




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 84 | E |
|---|---|---|---|---|---|

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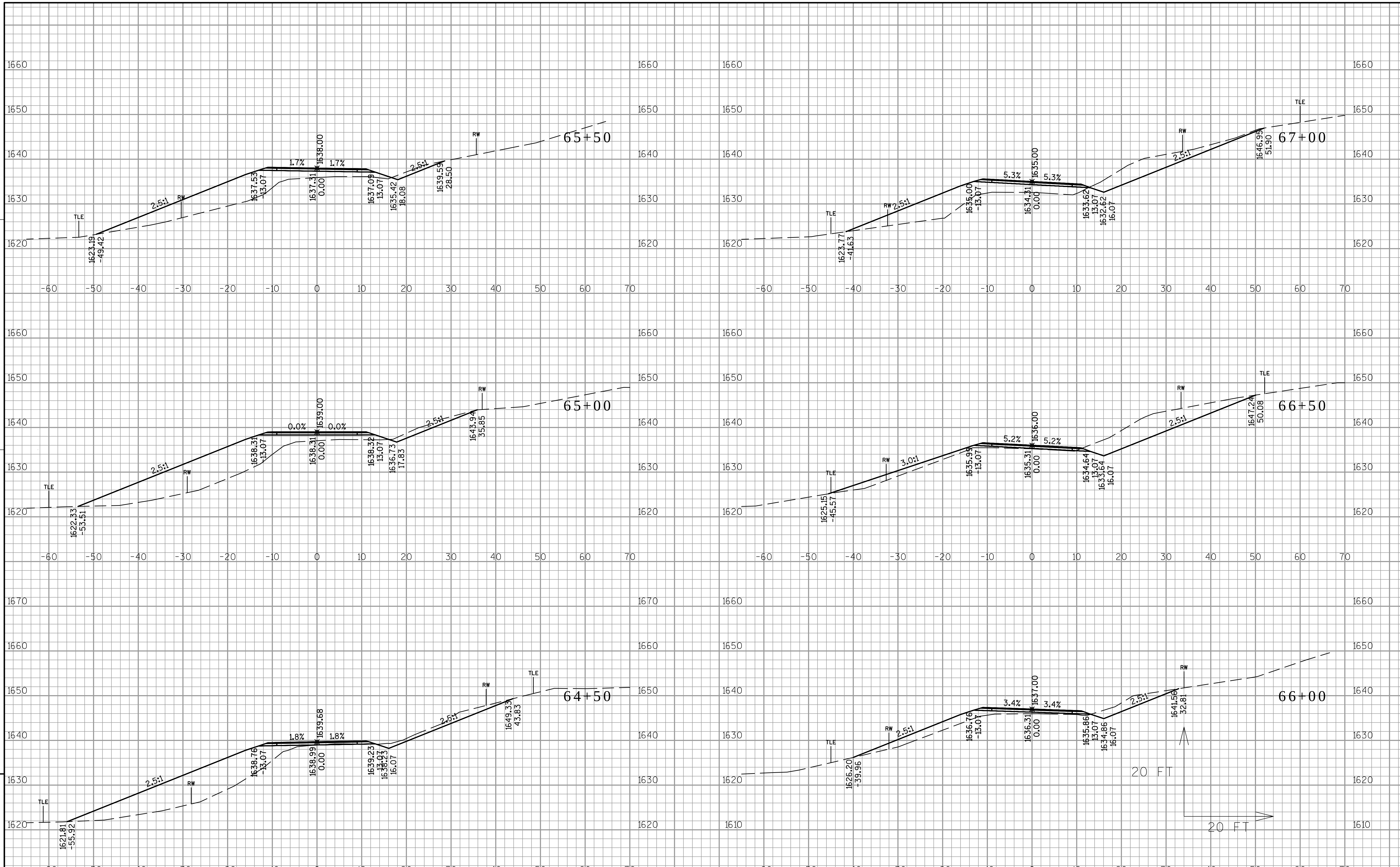
|---|---|---|---|---|
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 85 | E |

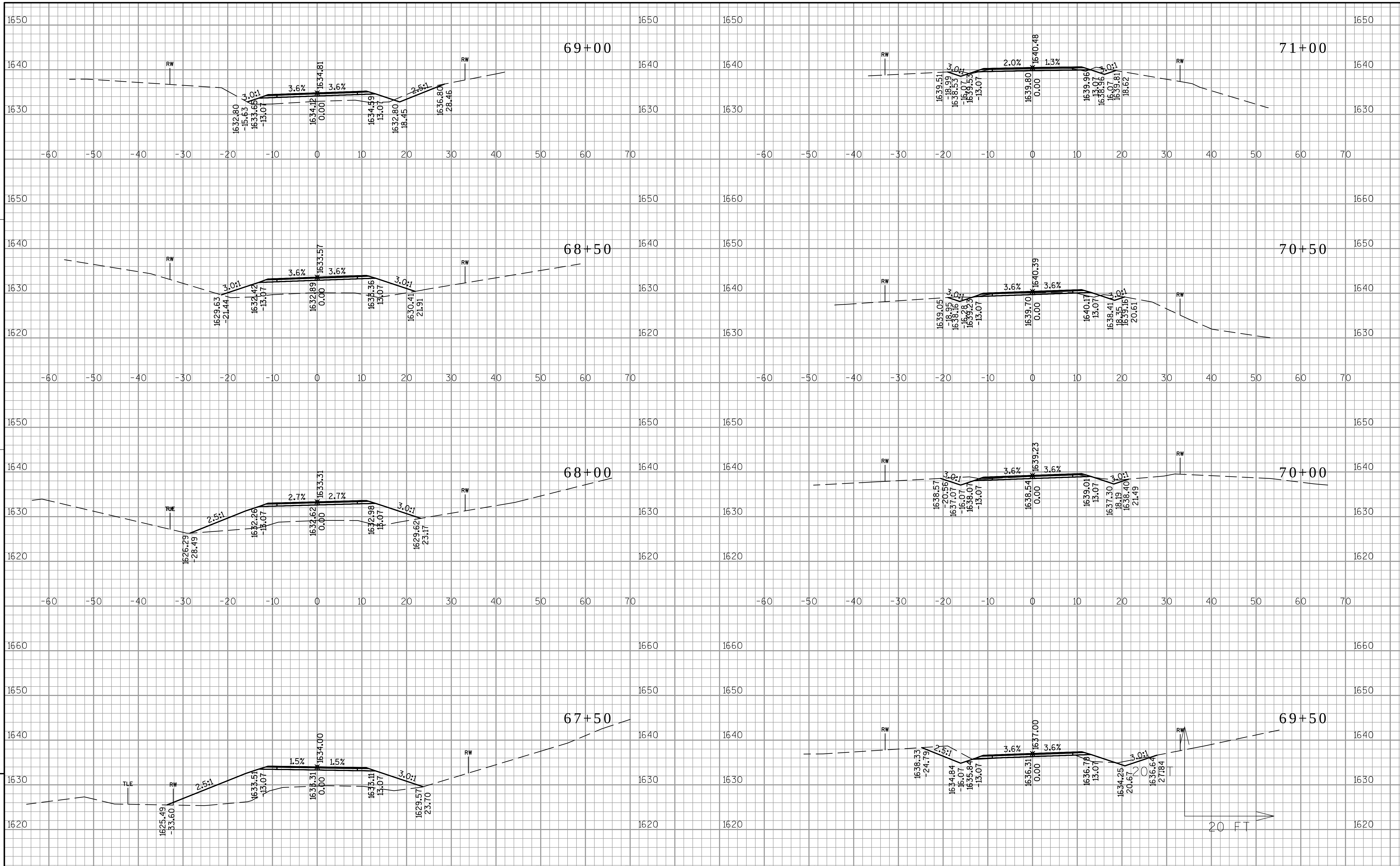
FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS15 PLOT DATE : 8/16/2012 4:30 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 86 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS16 PLOT DATE : 8/16/2012 4:32 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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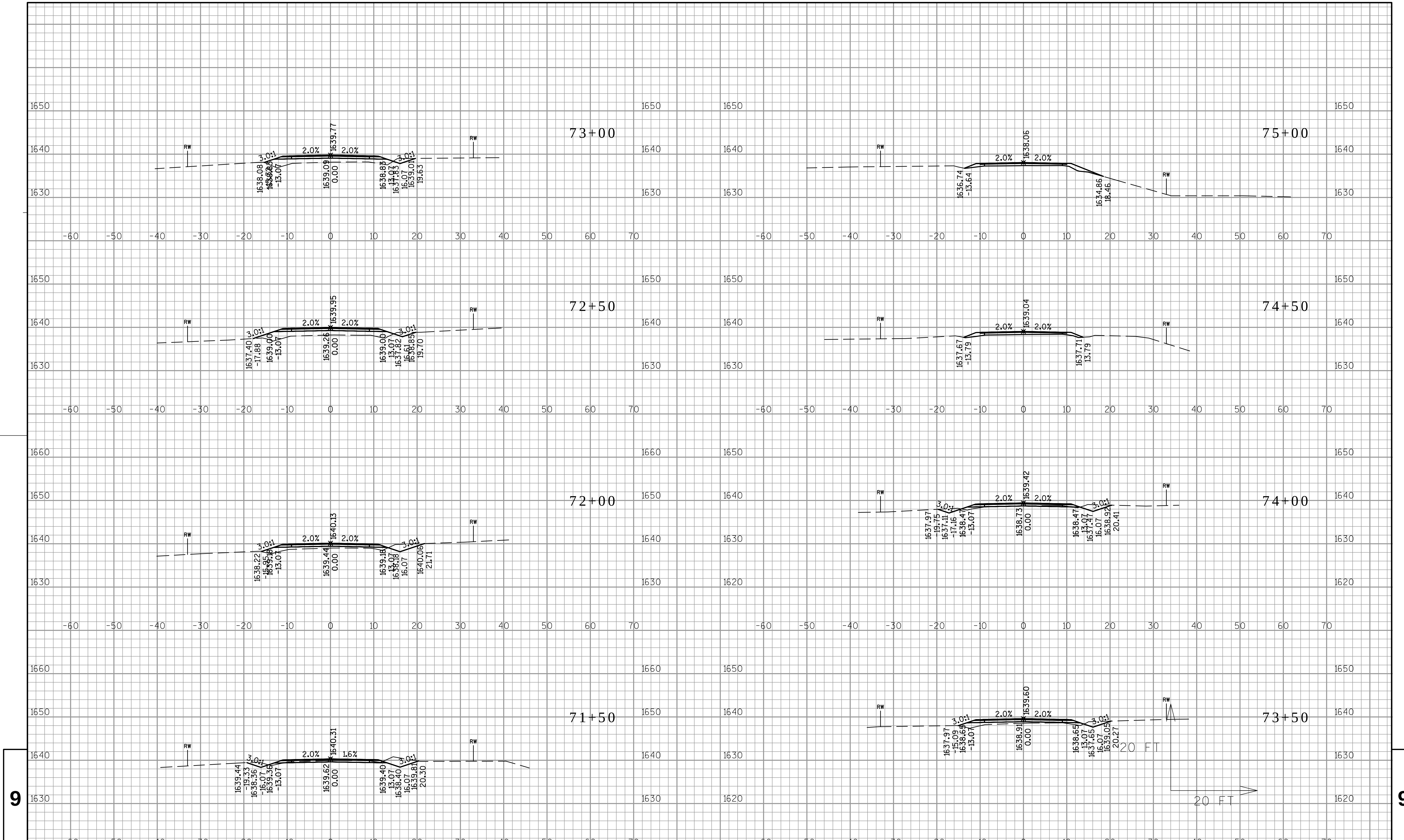
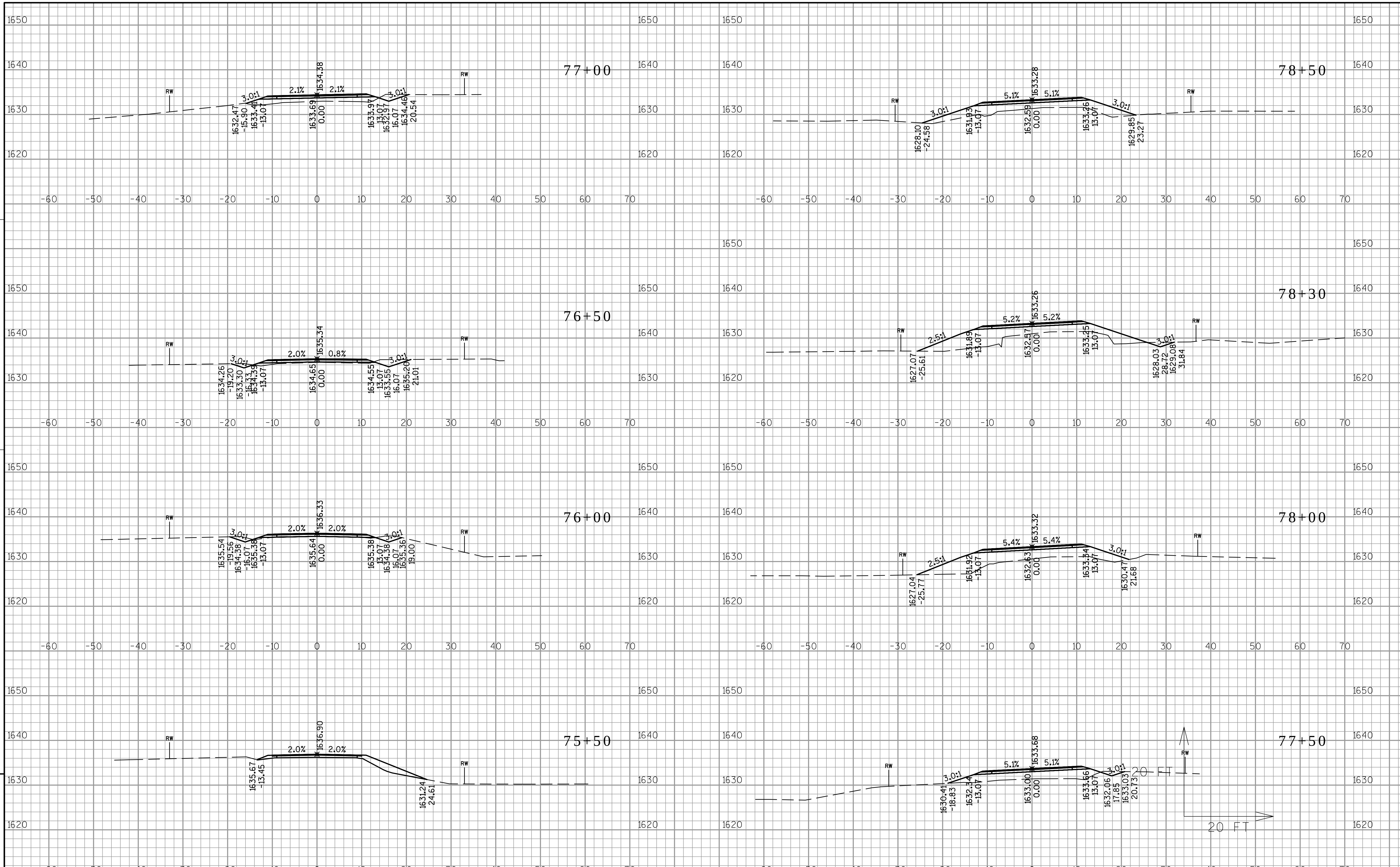
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 87 | E |
|---|---|---|---|---|---|




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 88 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS18 PLOT DATE : 8/16/2012 4:36 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT WISDOT/CADDS SHEET 49

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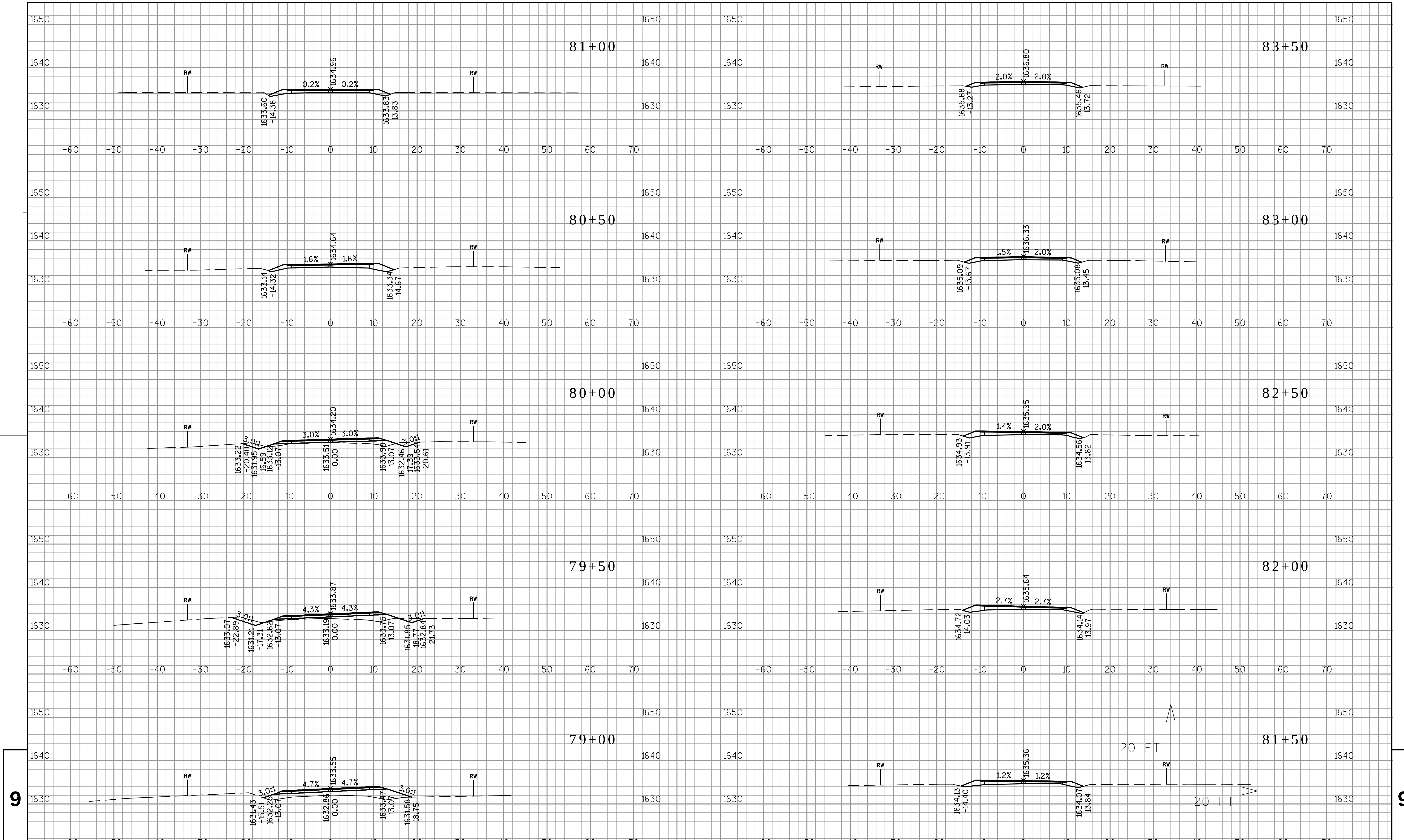
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 89 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS19 PLOT DATE : 8/16/2012 4:38 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

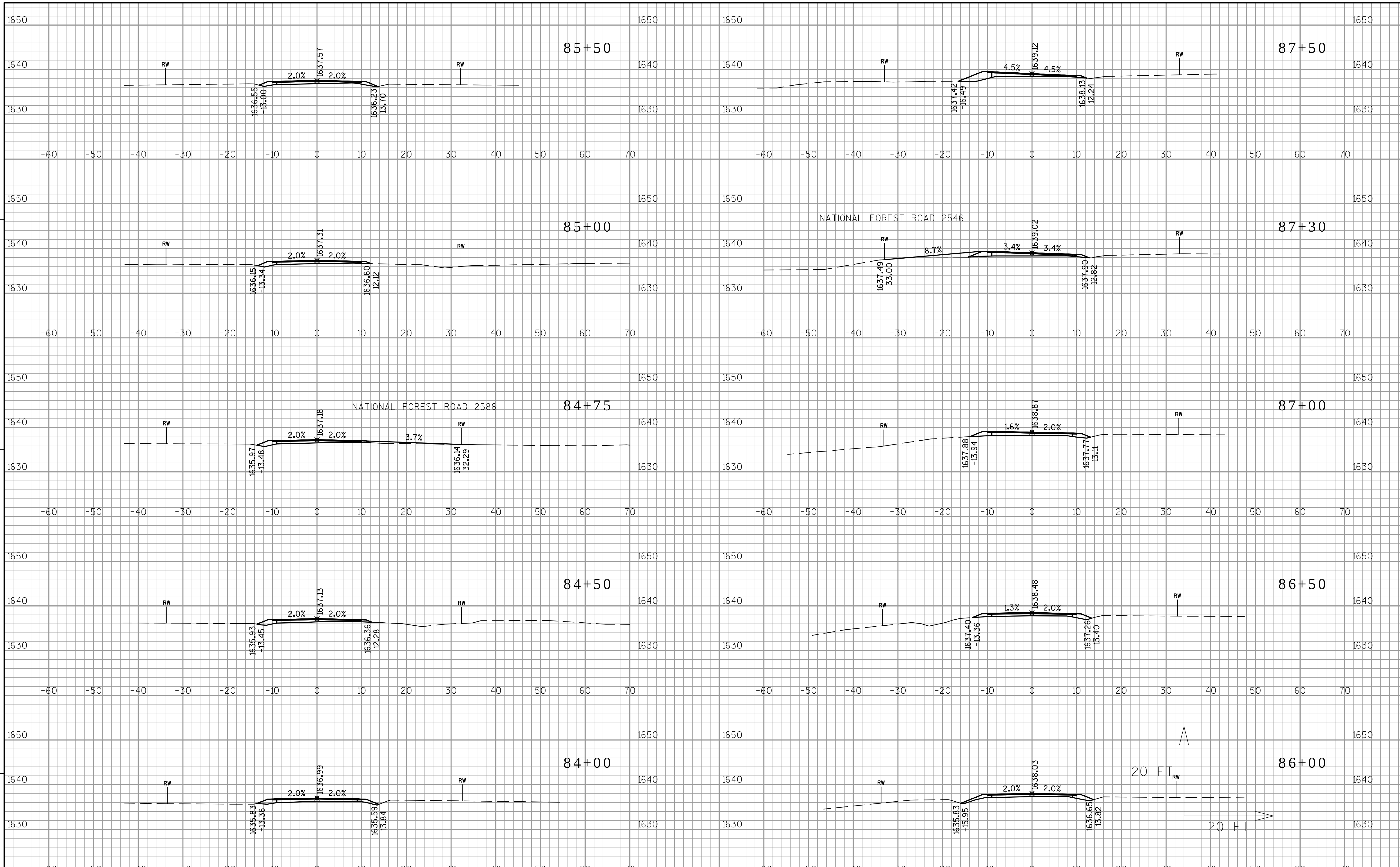
WISDOT/CADDS SHEET 49




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 90 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS20 PLOT DATE : 8/16/2012 4:39 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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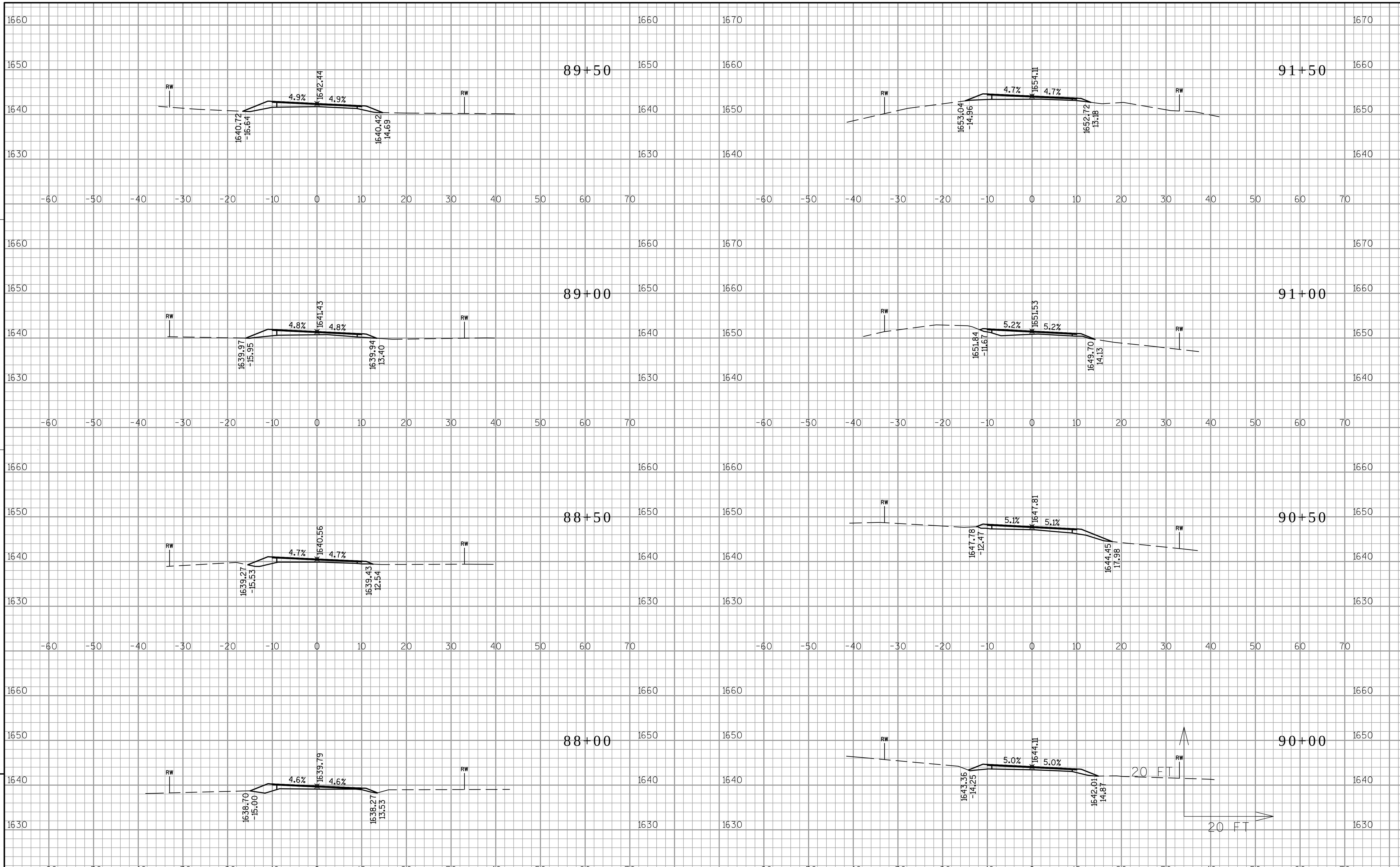
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 91 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS21 PLOT DATE : 8/16/2012 4:41 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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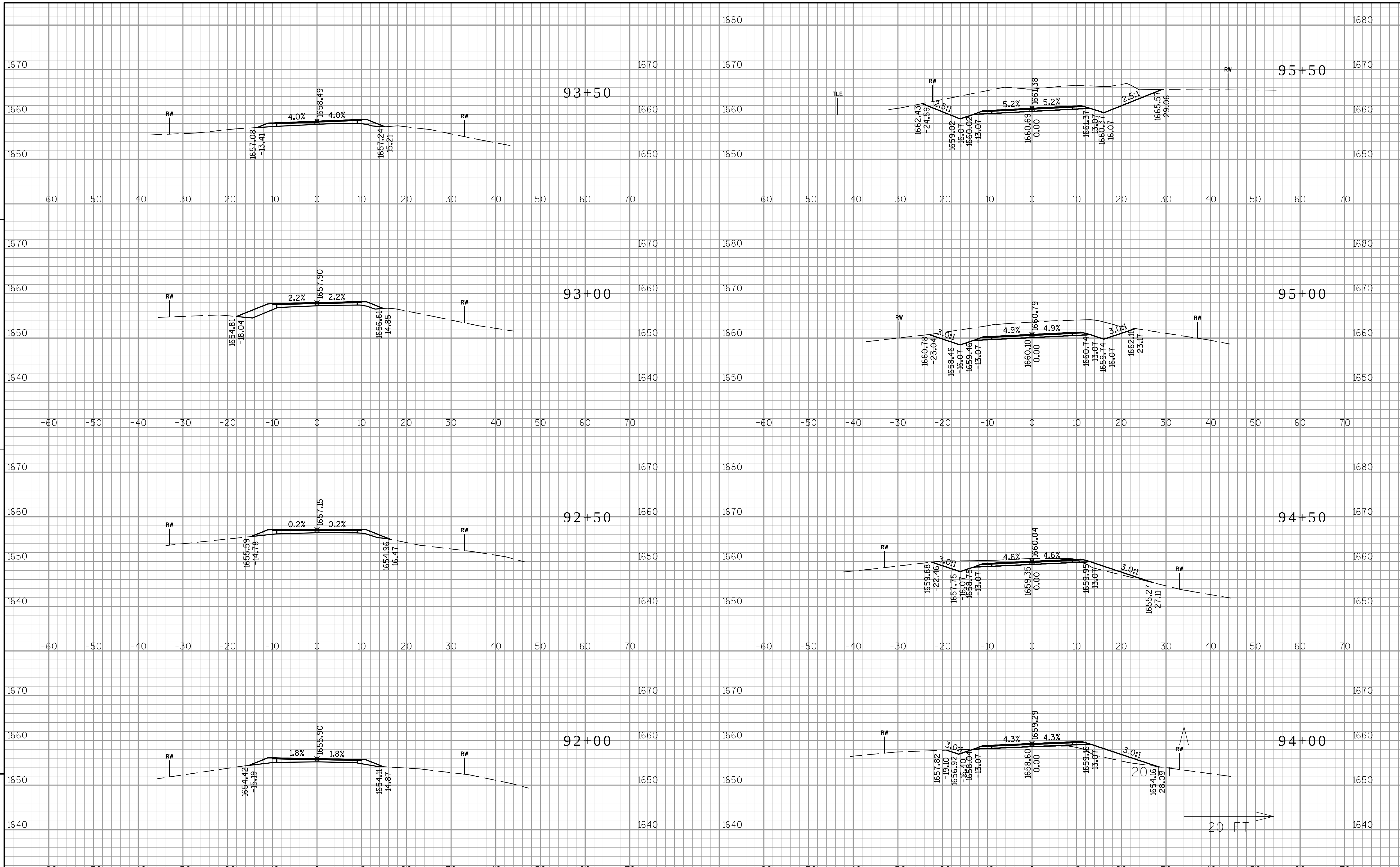
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 92 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS22 PLOT DATE : 8/16/2012 4:42 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

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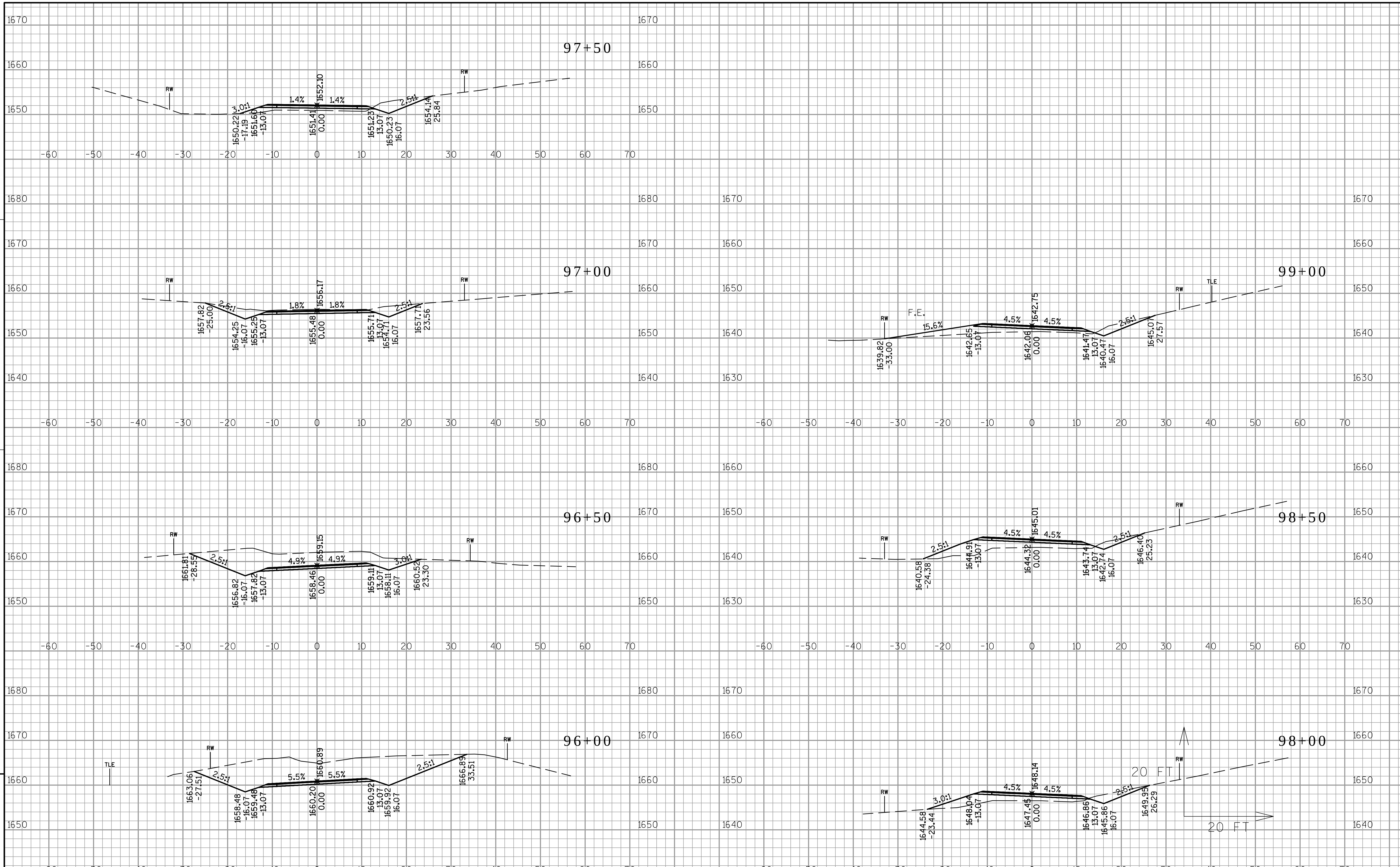
PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 93 | E

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS23 PLOT DATE : 8/16/2012 4:44 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 94 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS24 PLOT DATE : 8/16/2012 4:45 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

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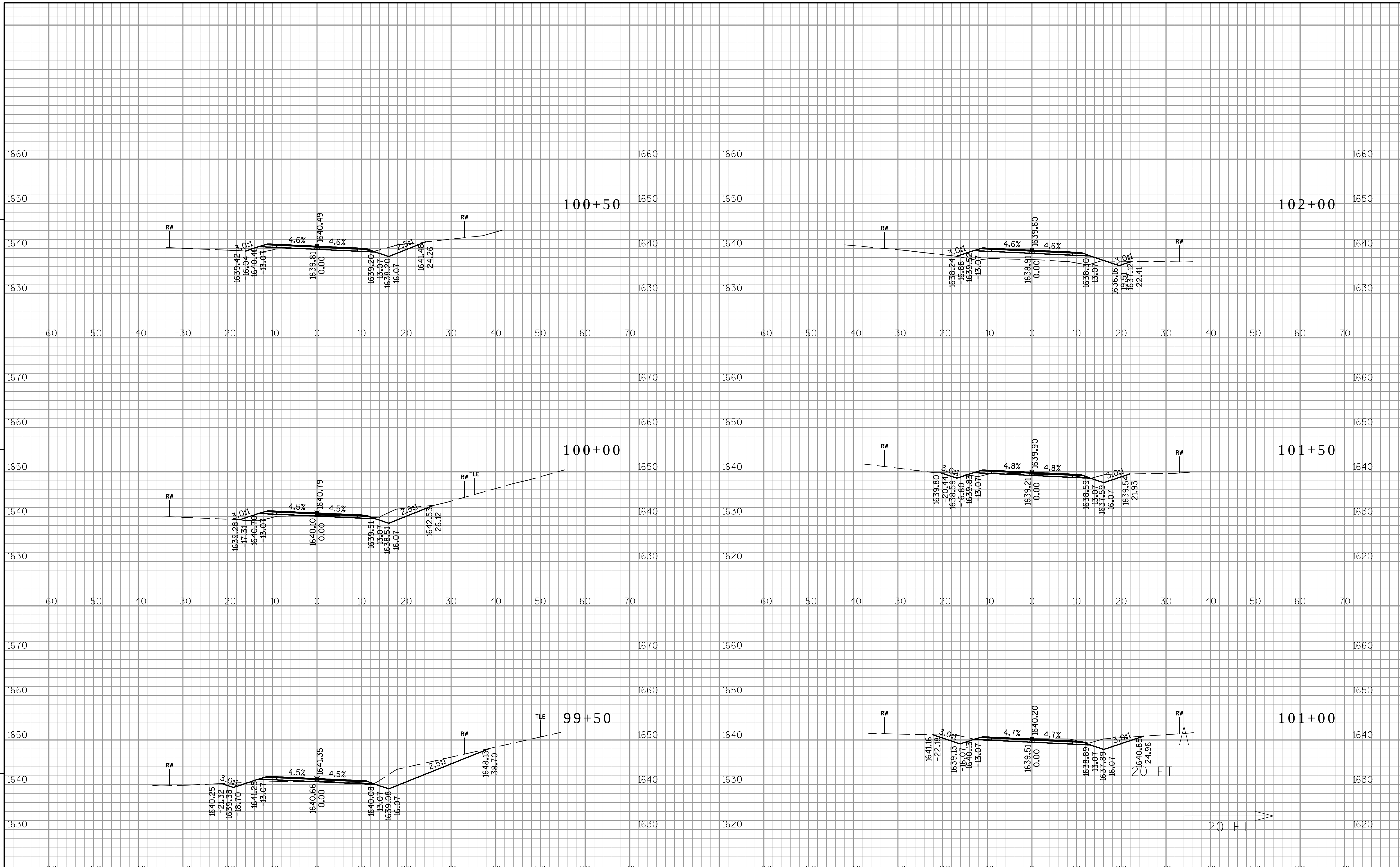


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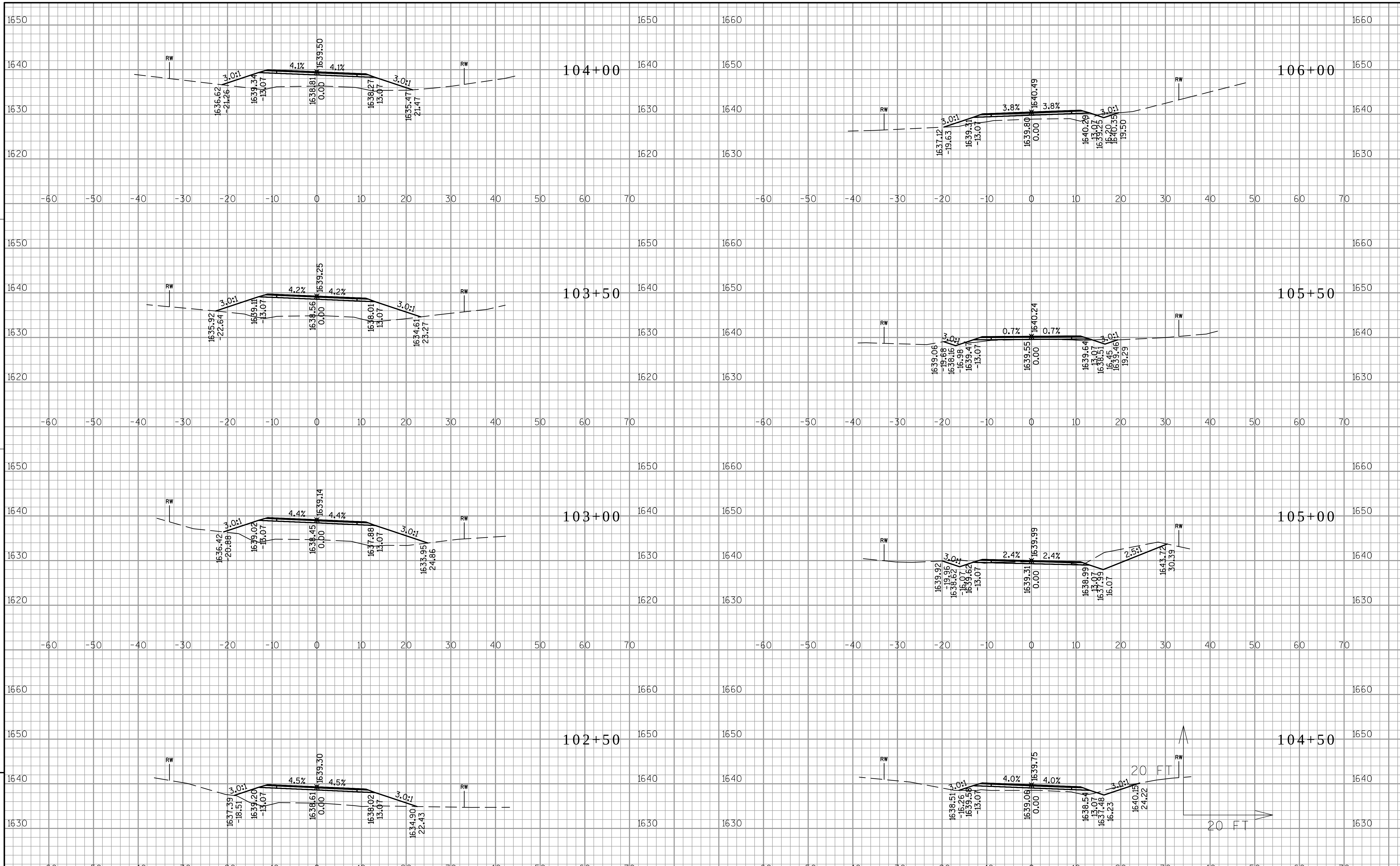
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 95 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS25 PLOT DATE : 8/16/2012 4:47 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

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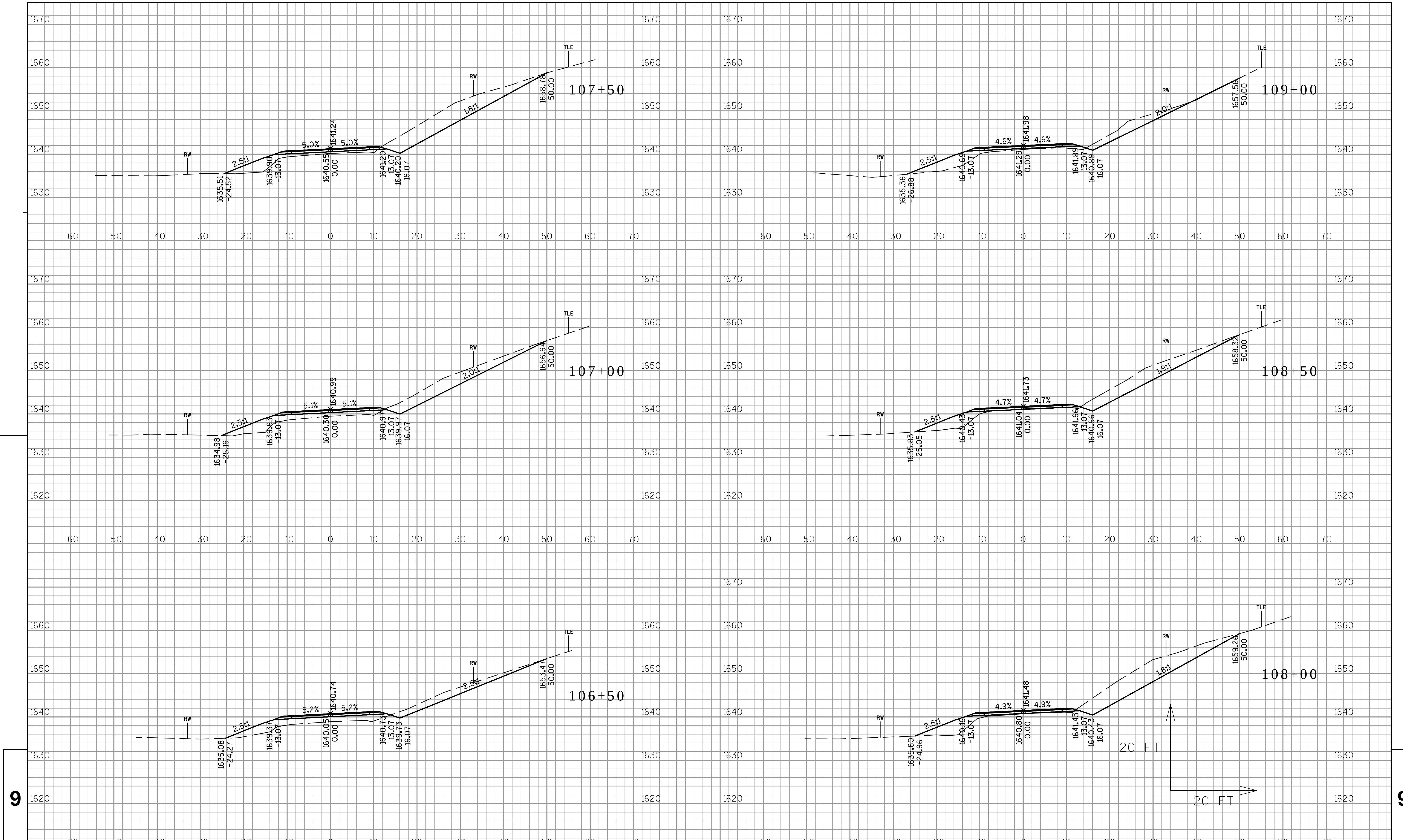
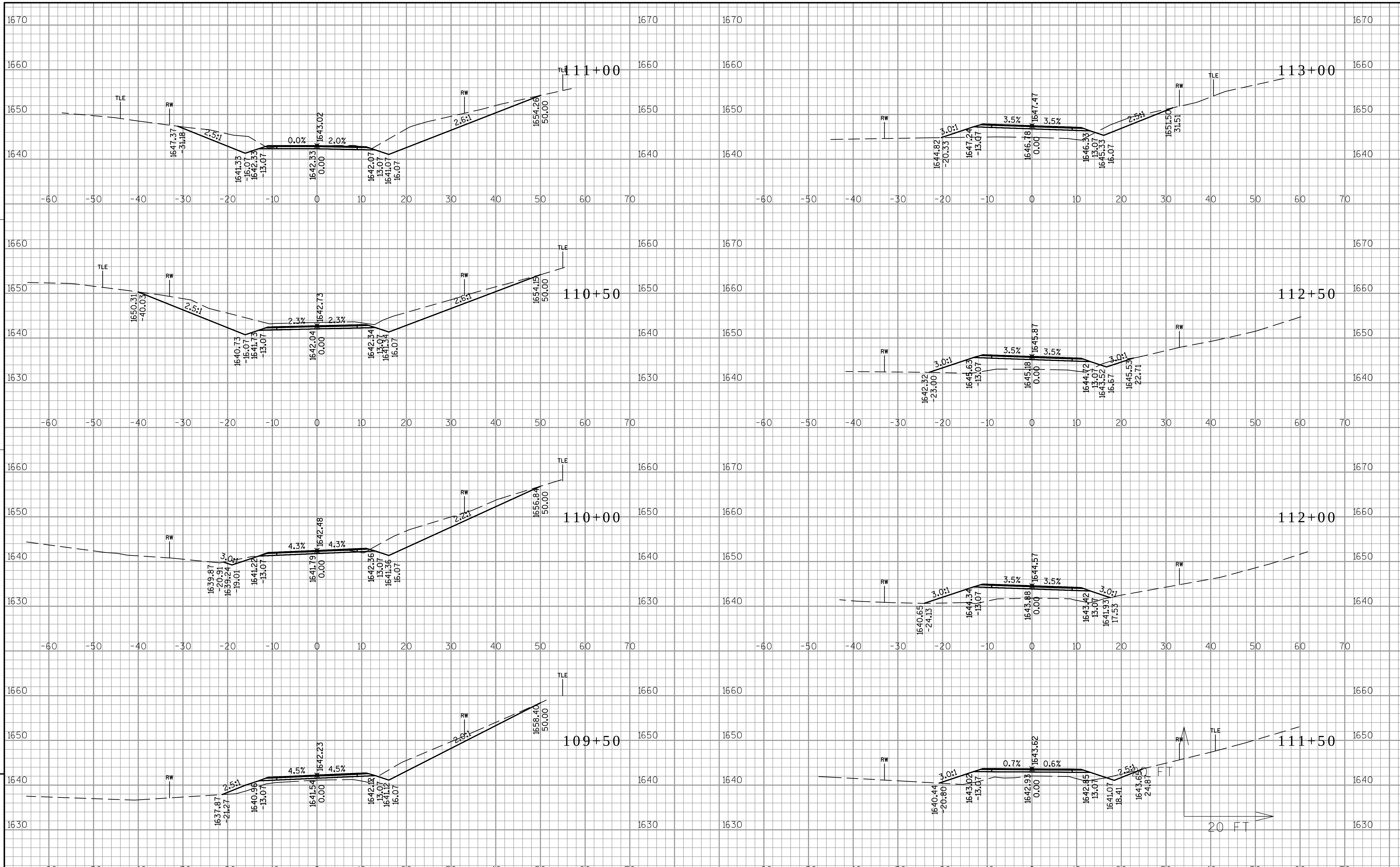
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 96 | E |
|---|---|---|---|---|---|

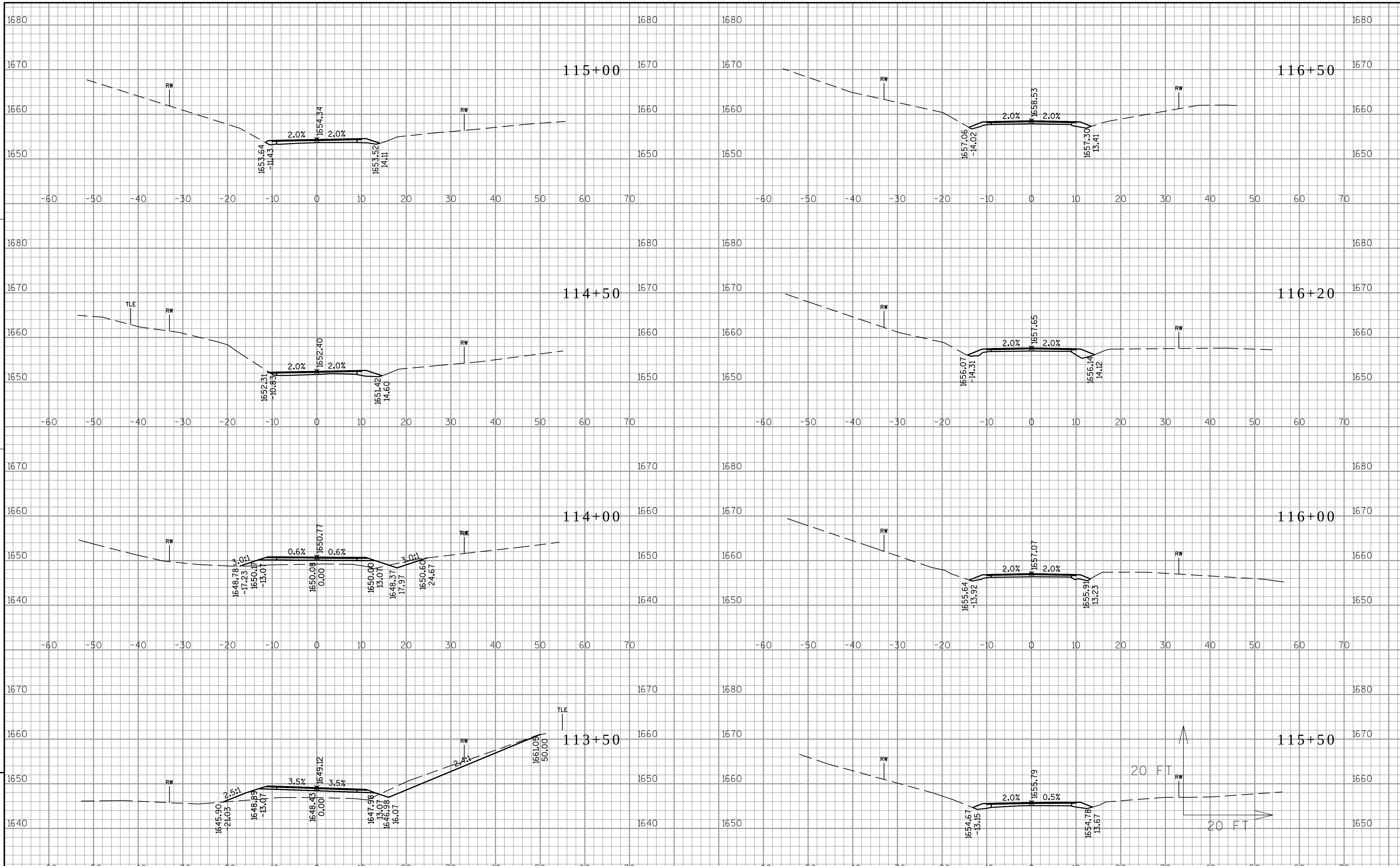



| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 97 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS27 PLOT DATE : 8/16/2012 4:50 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT




PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 98 | E

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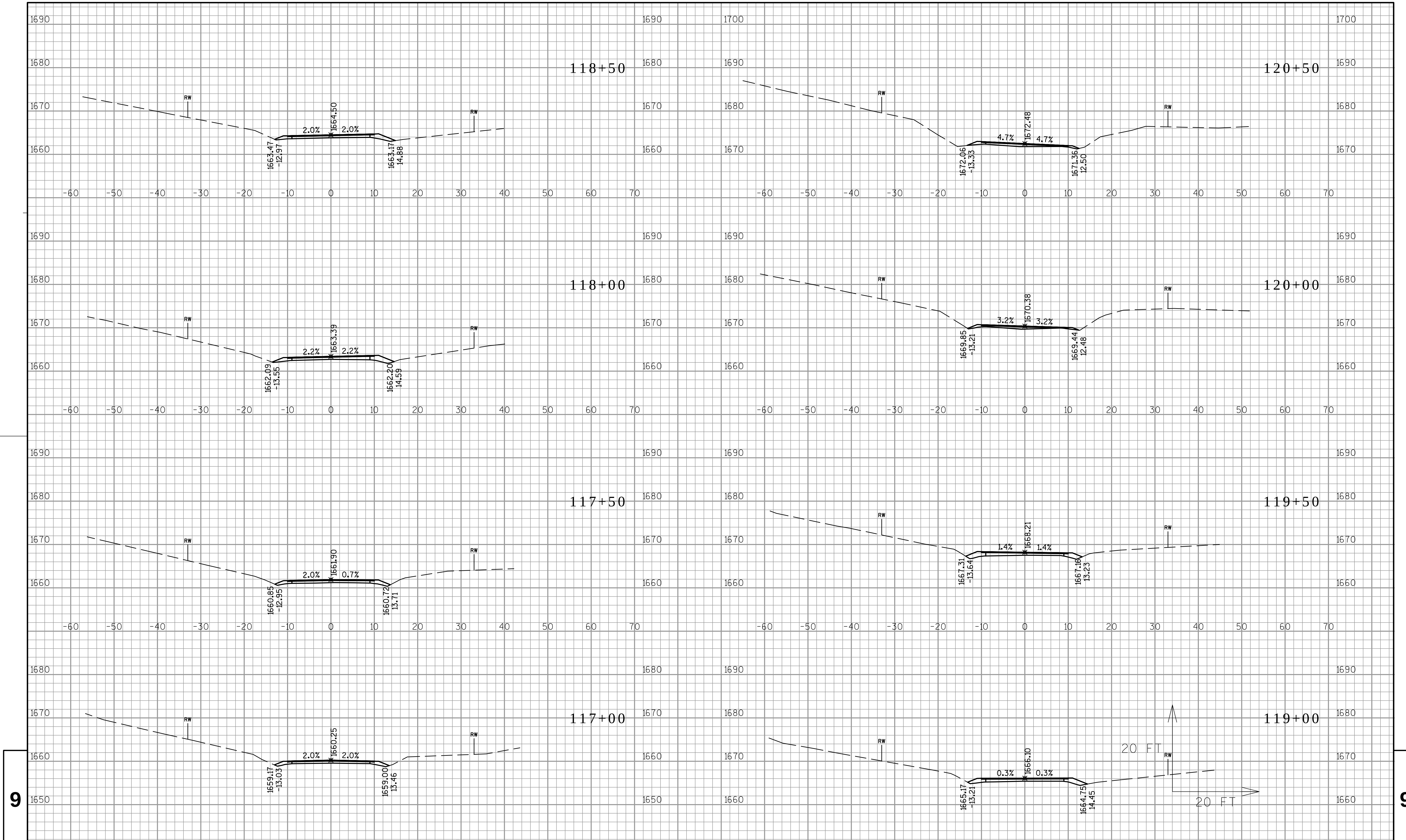
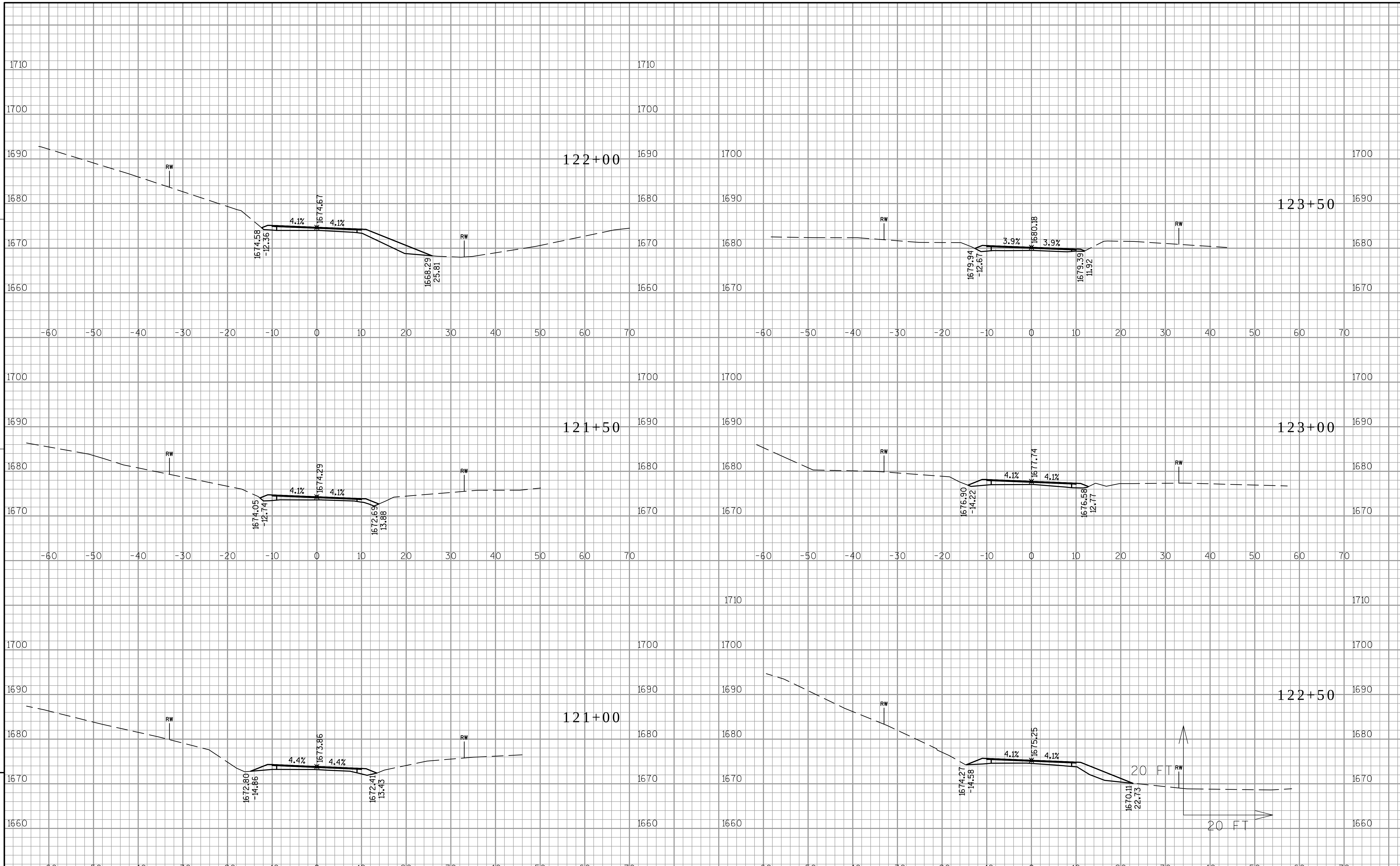
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 99 E |



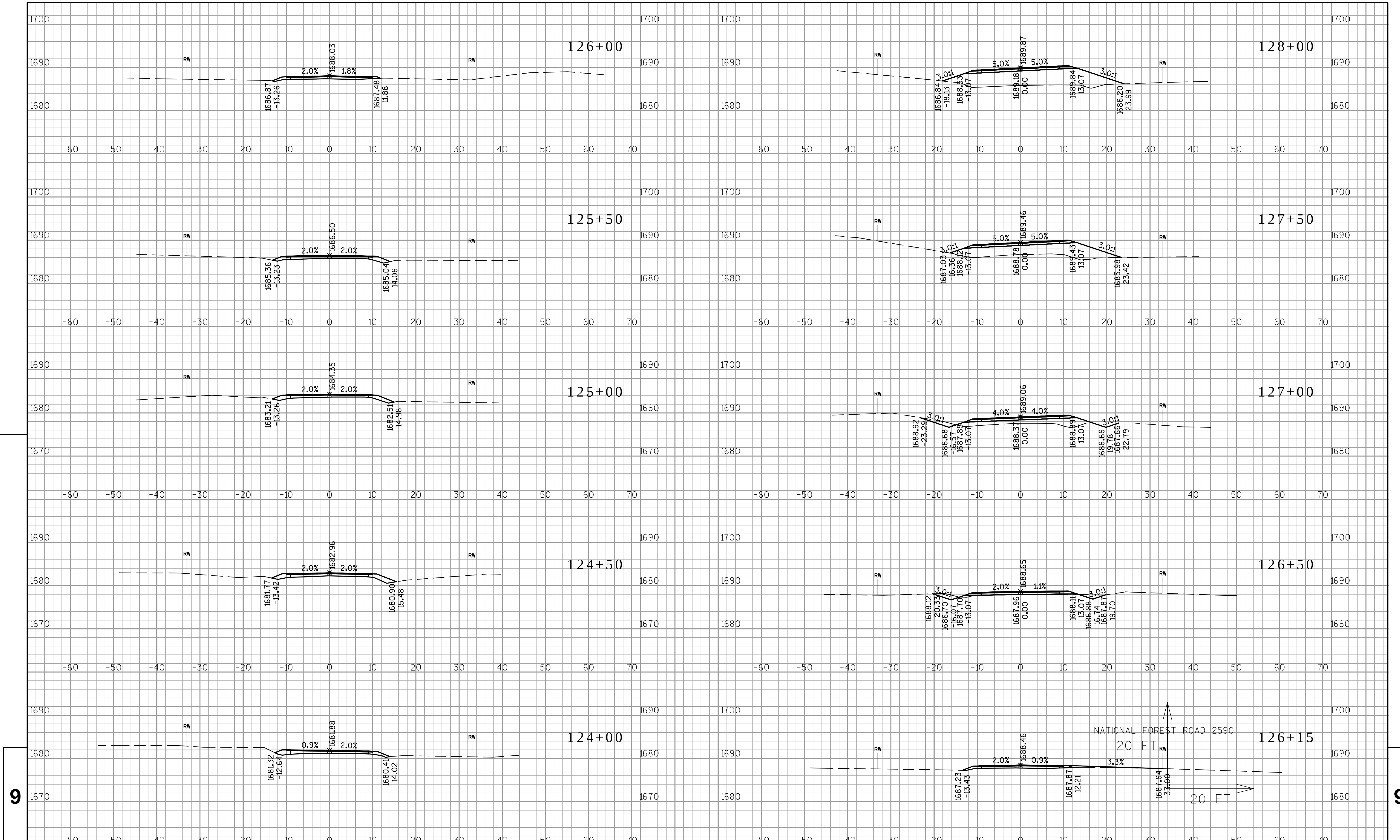

| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 100 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS30 PLOT DATE : 8/16/2012 4:54 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 101 | E |
|---|---|---|---|---|---|

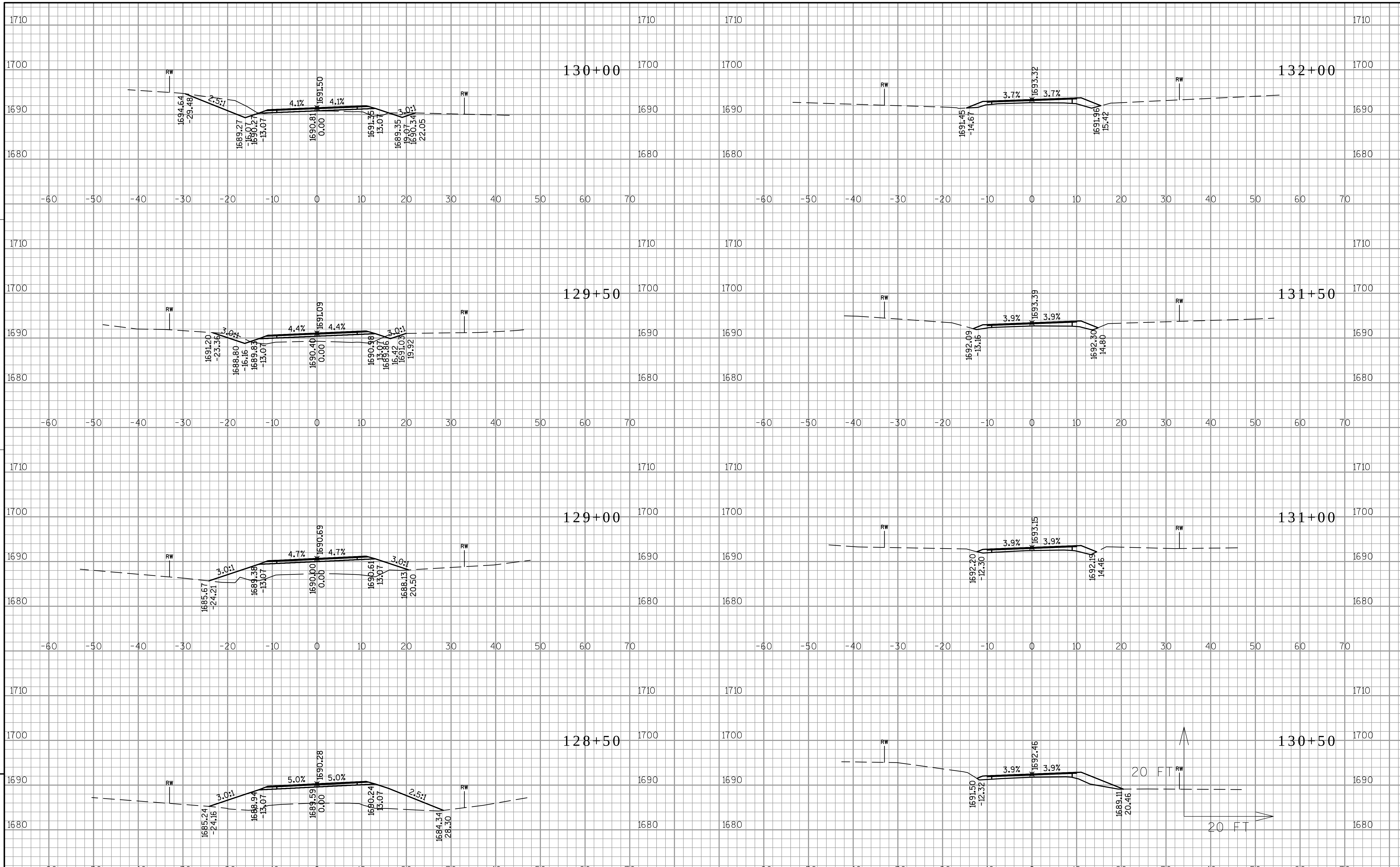
FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS31 PLOT DATE : 8/16/2012 4:56 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 102 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS32 PLOT DATE : 8/16/2012 4:57 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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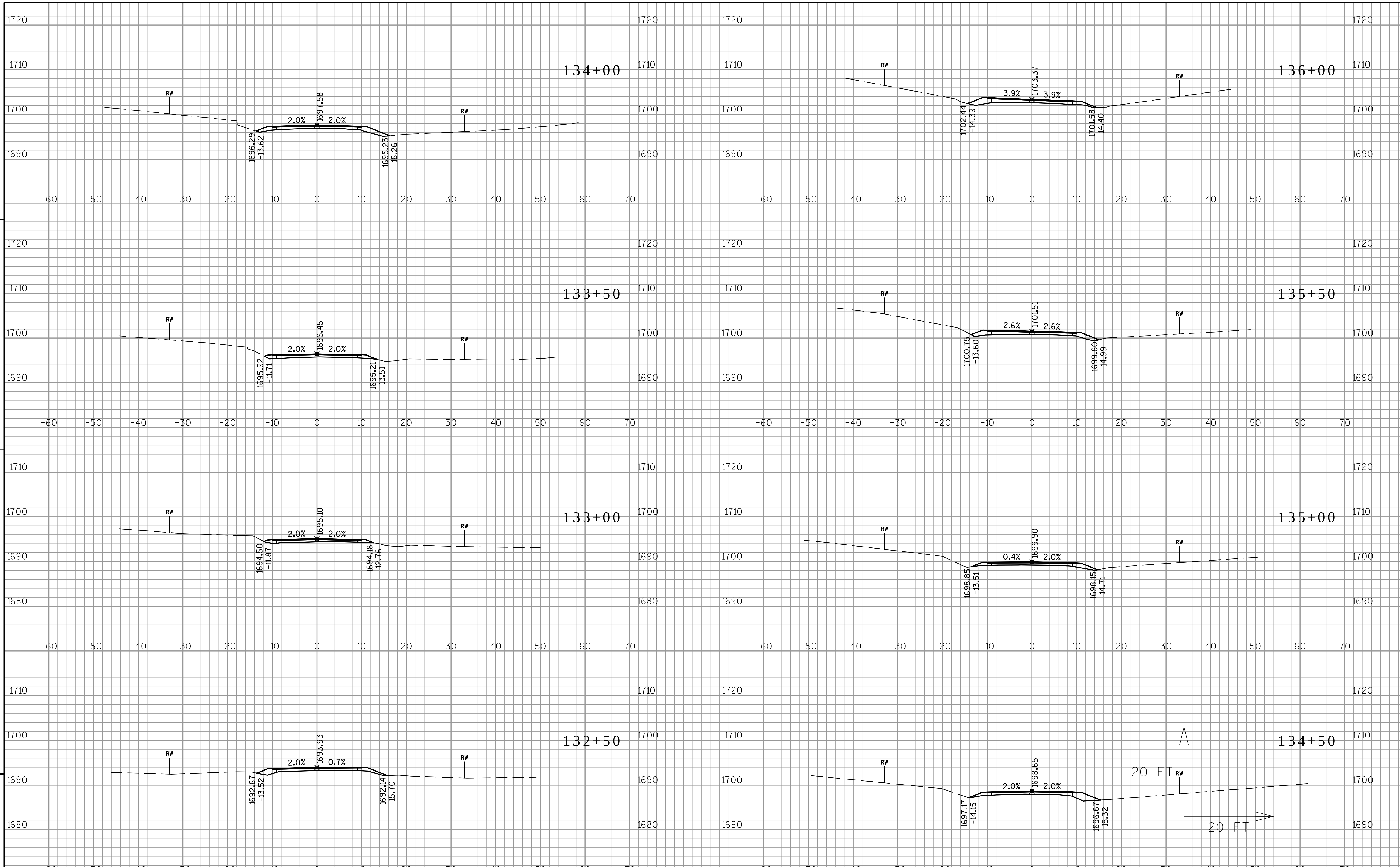
PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 103 | E

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS33 PLOT DATE : 8/16/2012 4:59 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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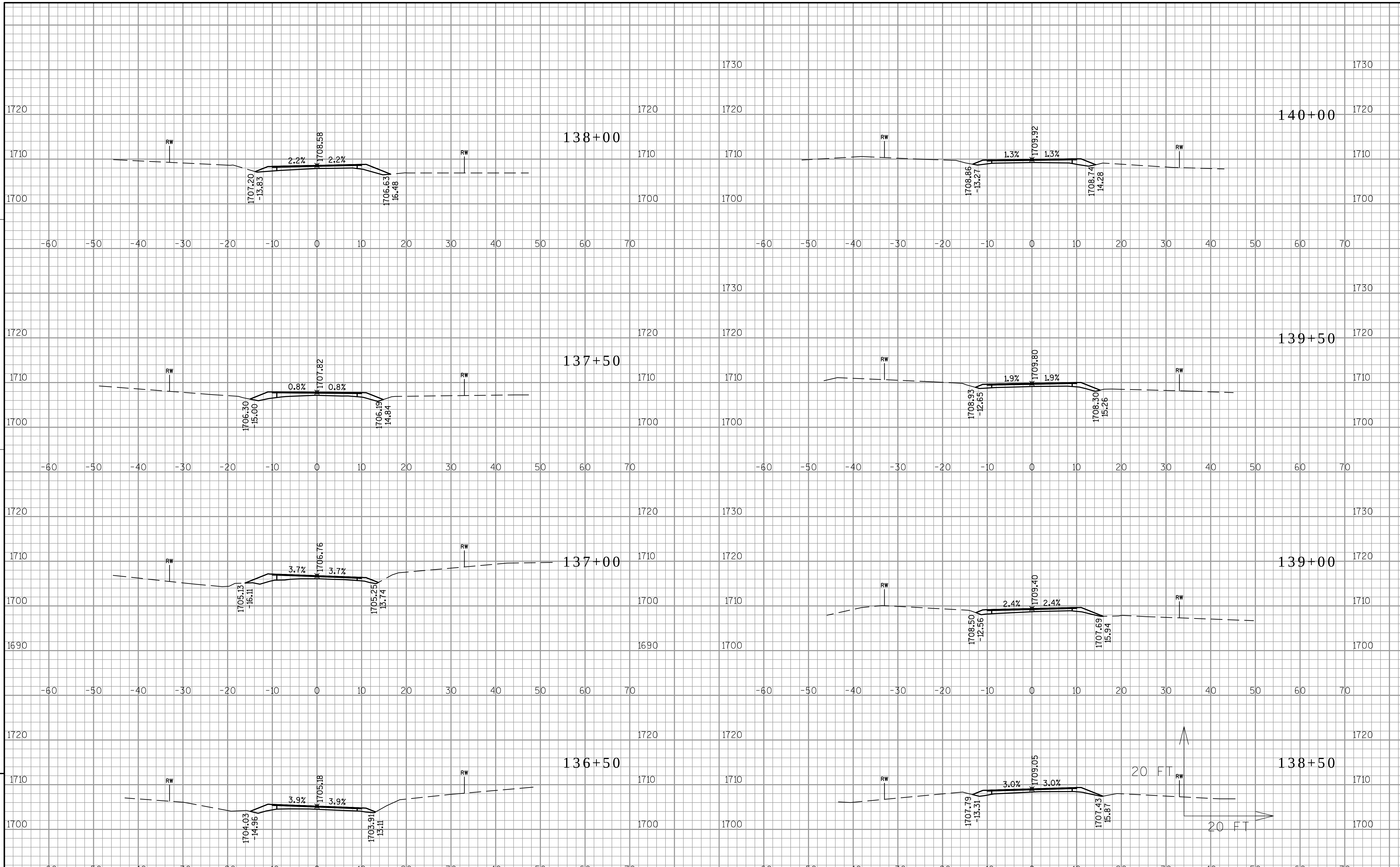
PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 104 | E

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS34 PLOT DATE : 8/16/2012 5:00 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

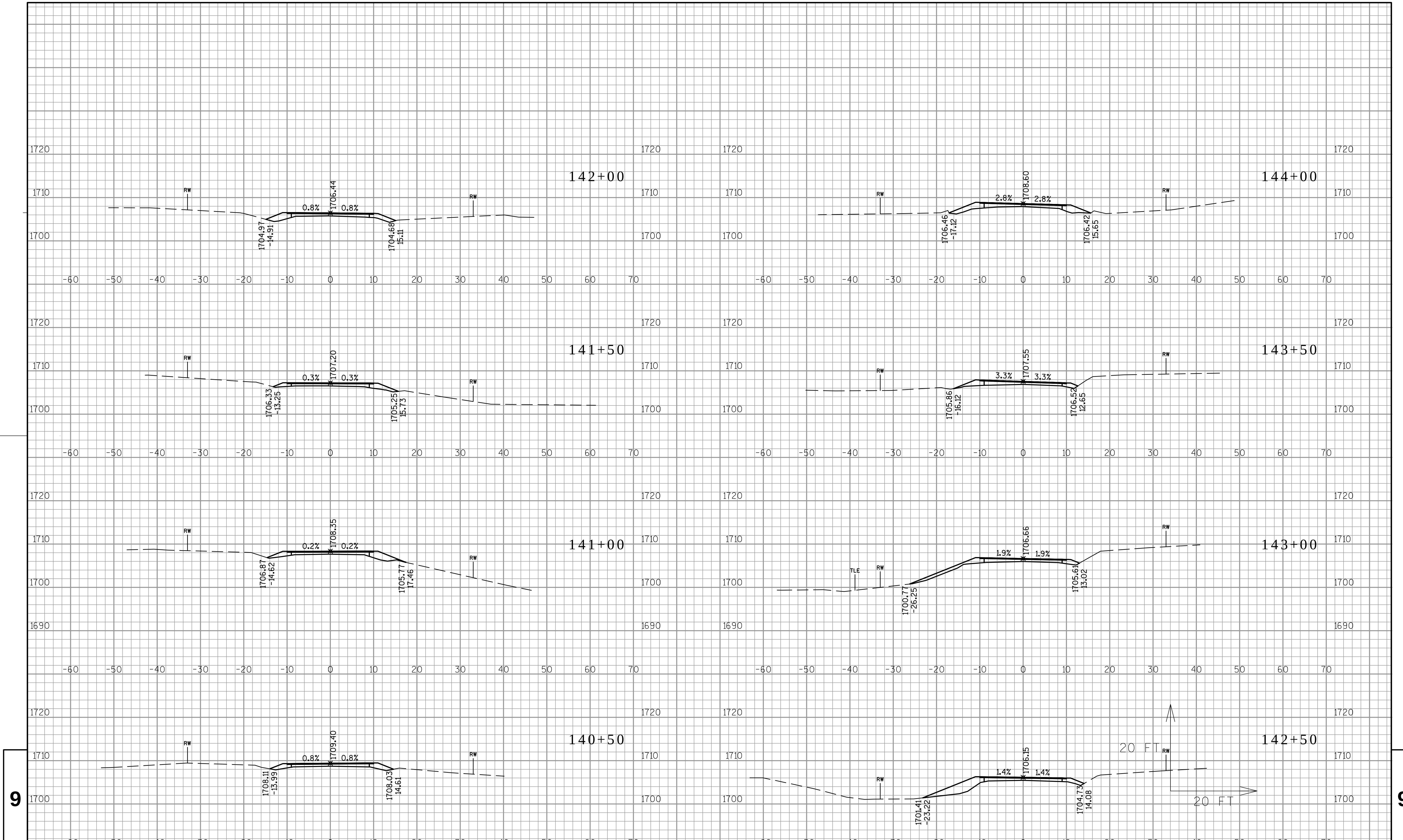
WISDOT/CADDS SHEET 49




9 PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 105 | E 9

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS35 PLOT DATE : 8/16/2012 5:02 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

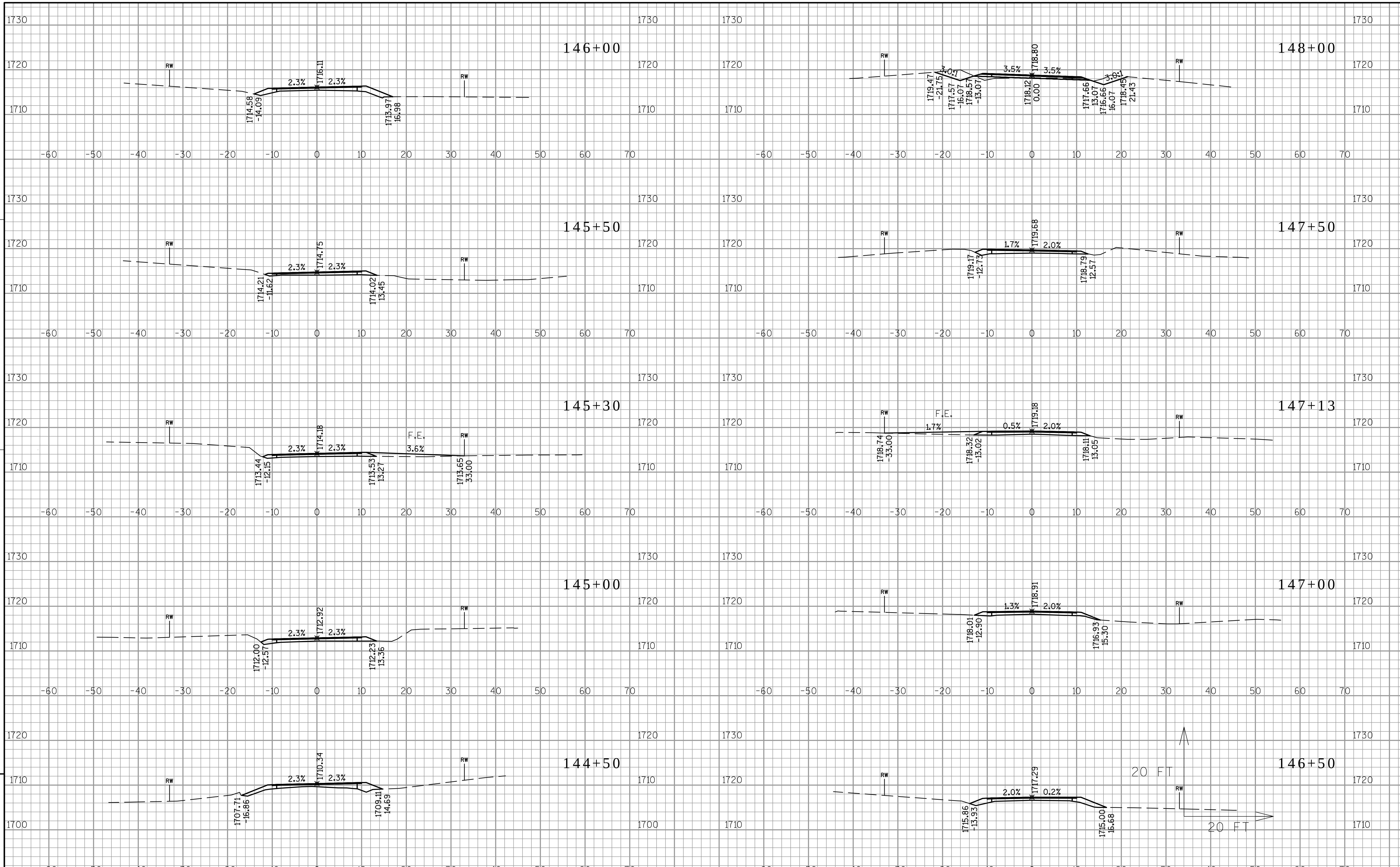
WISDOT/CADDS SHEET 49




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 106 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS36 PLOT DATE : 8/16/2012 5:03 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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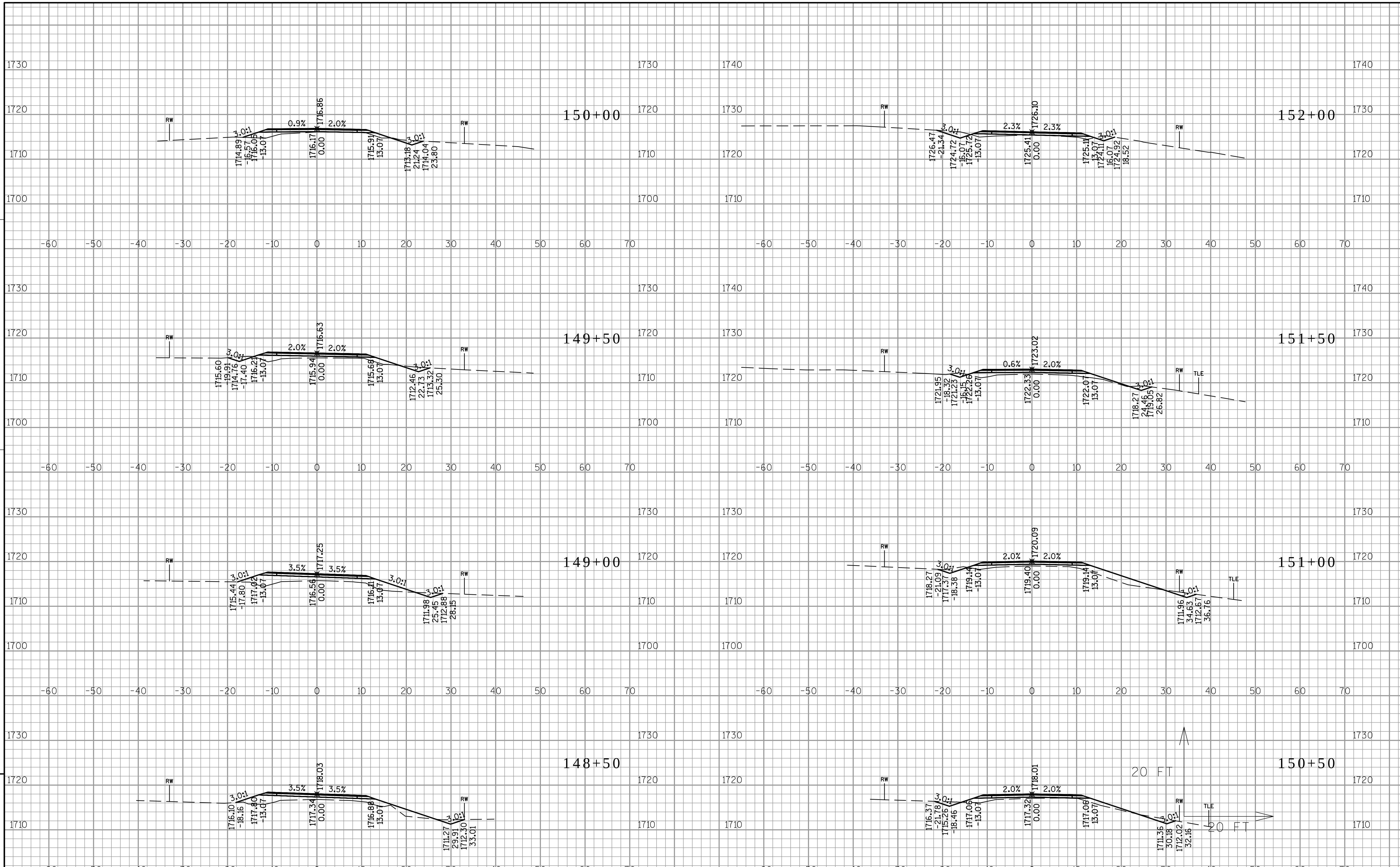
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 107 | E |
|---|---|---|---|---|---|

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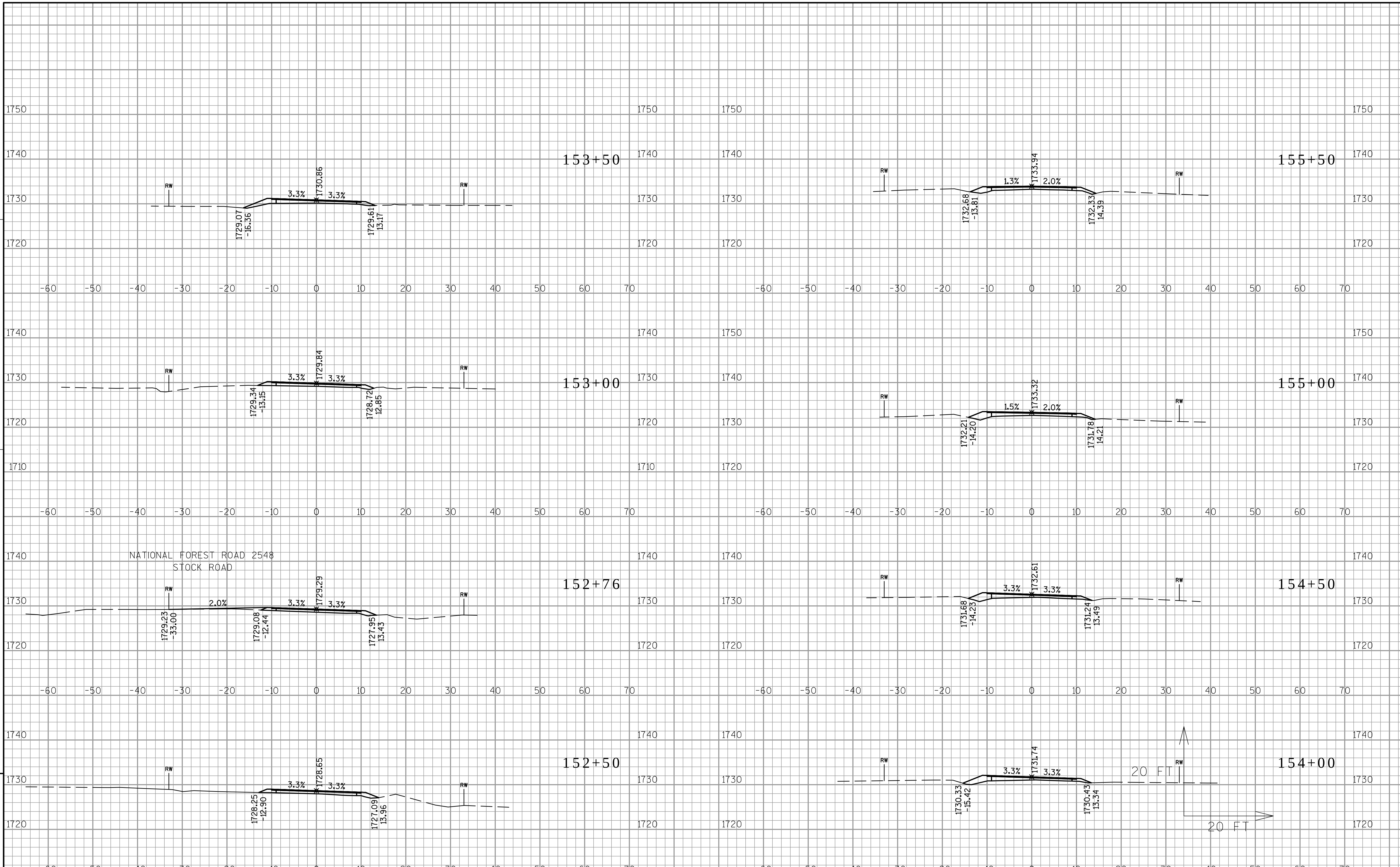
|---|---|---|---|---|---|
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 108 | E |

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS38 PLOT DATE : 8/16/2012 5:06 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

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| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 109 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS39 PLOT DATE : 8/16/2012 5:07 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

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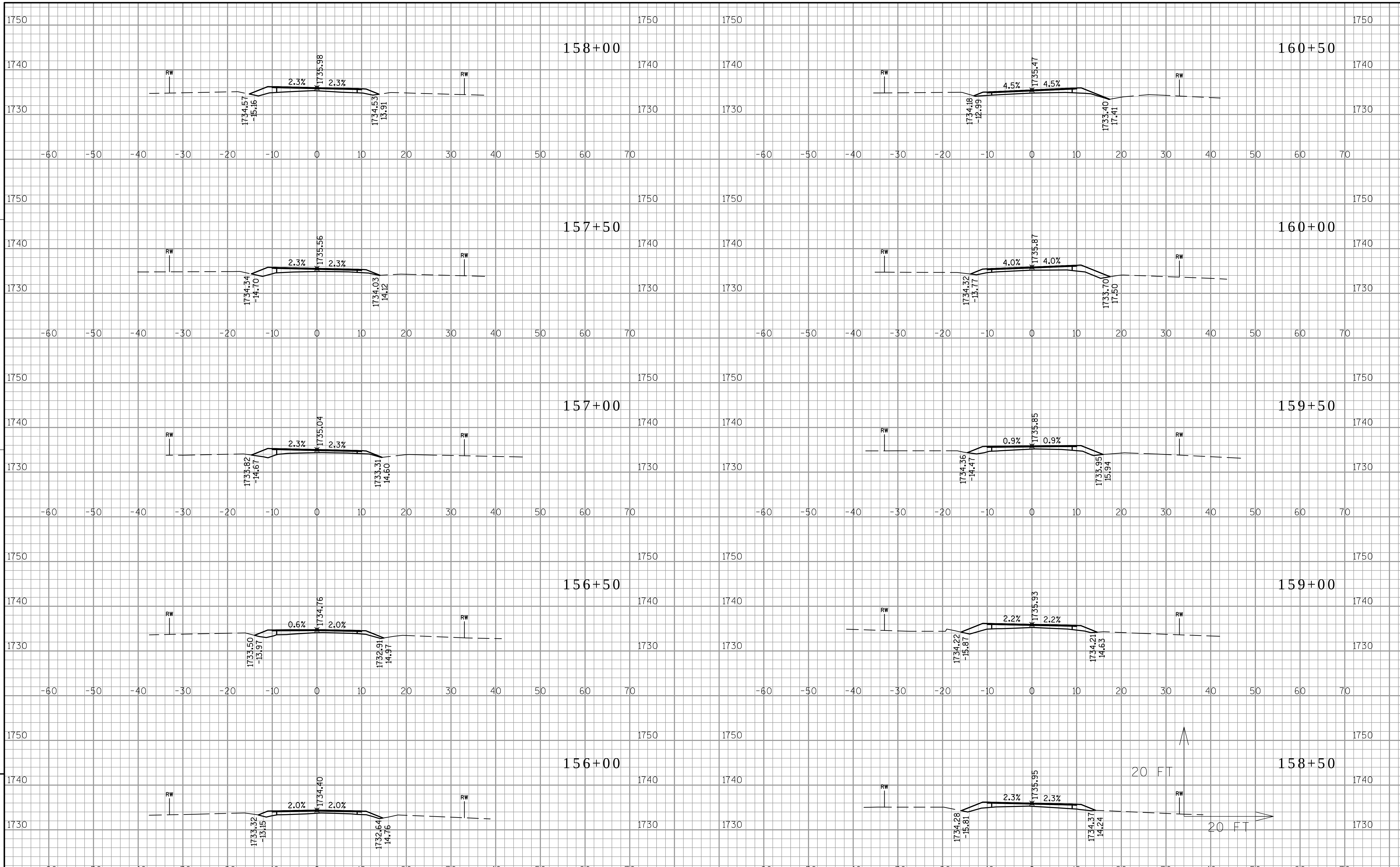


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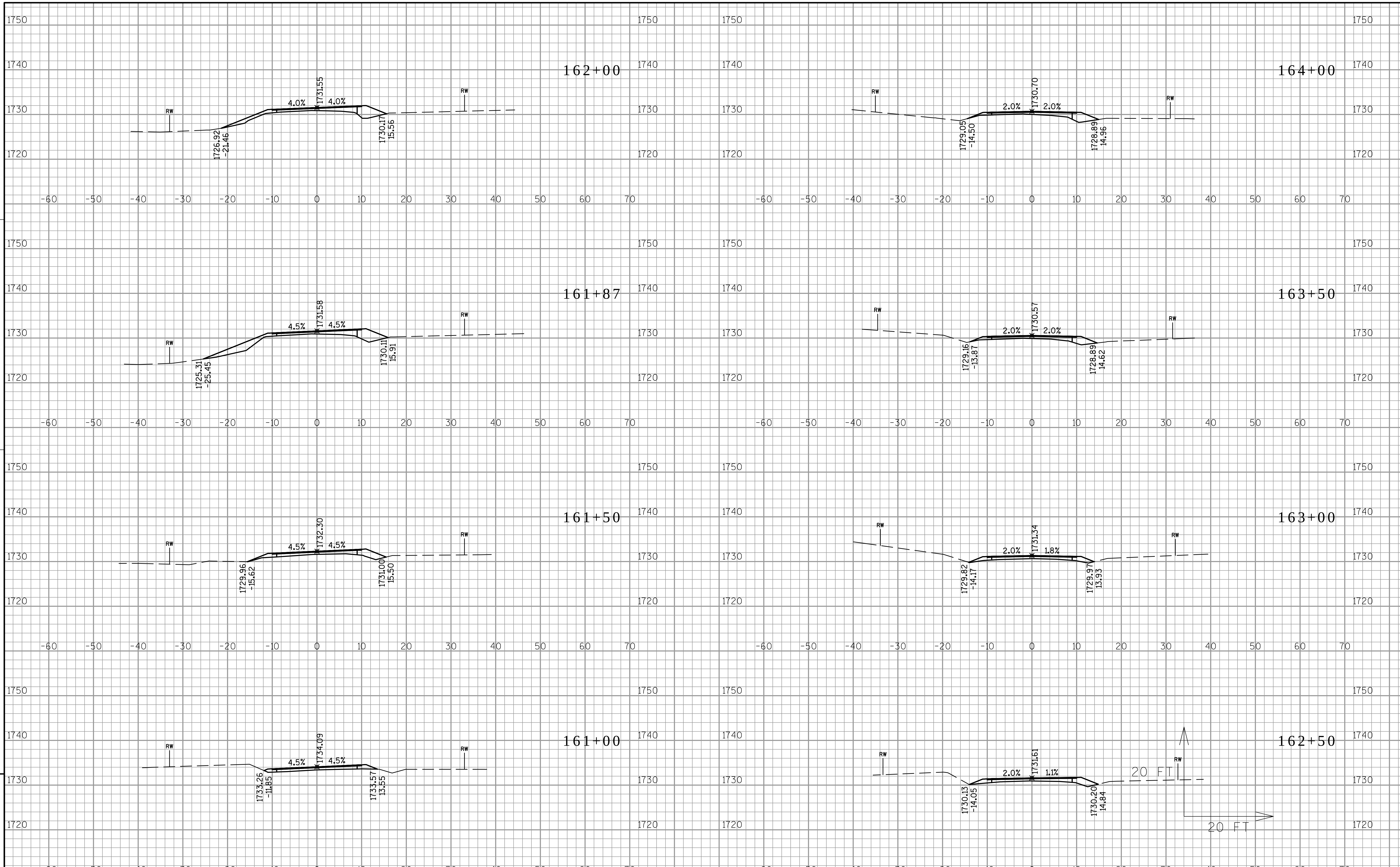
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 110 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS40 PLOT DATE : 8/16/2012 5:09 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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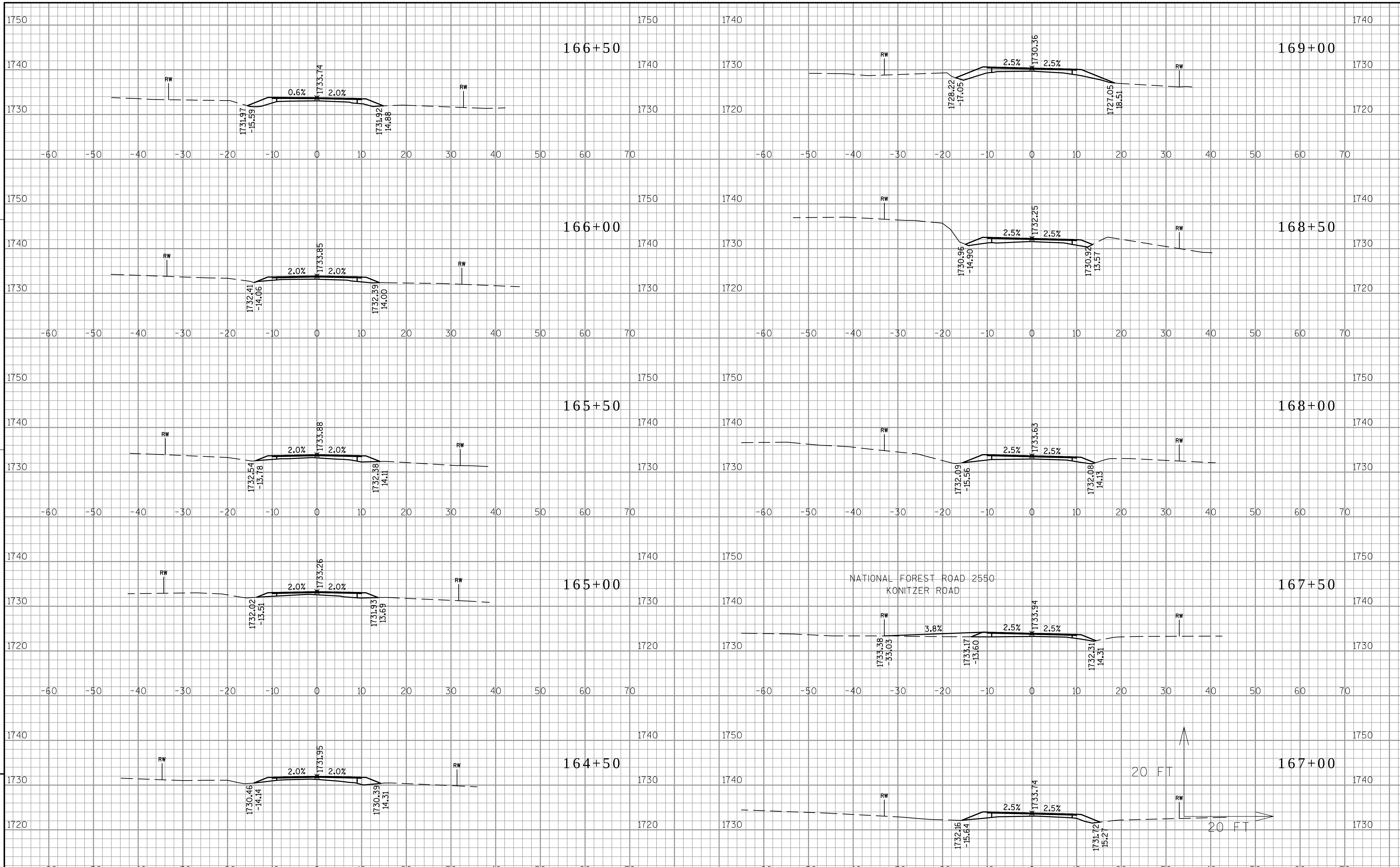
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 111 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS41 PLOT DATE : 8/16/2012 5:10 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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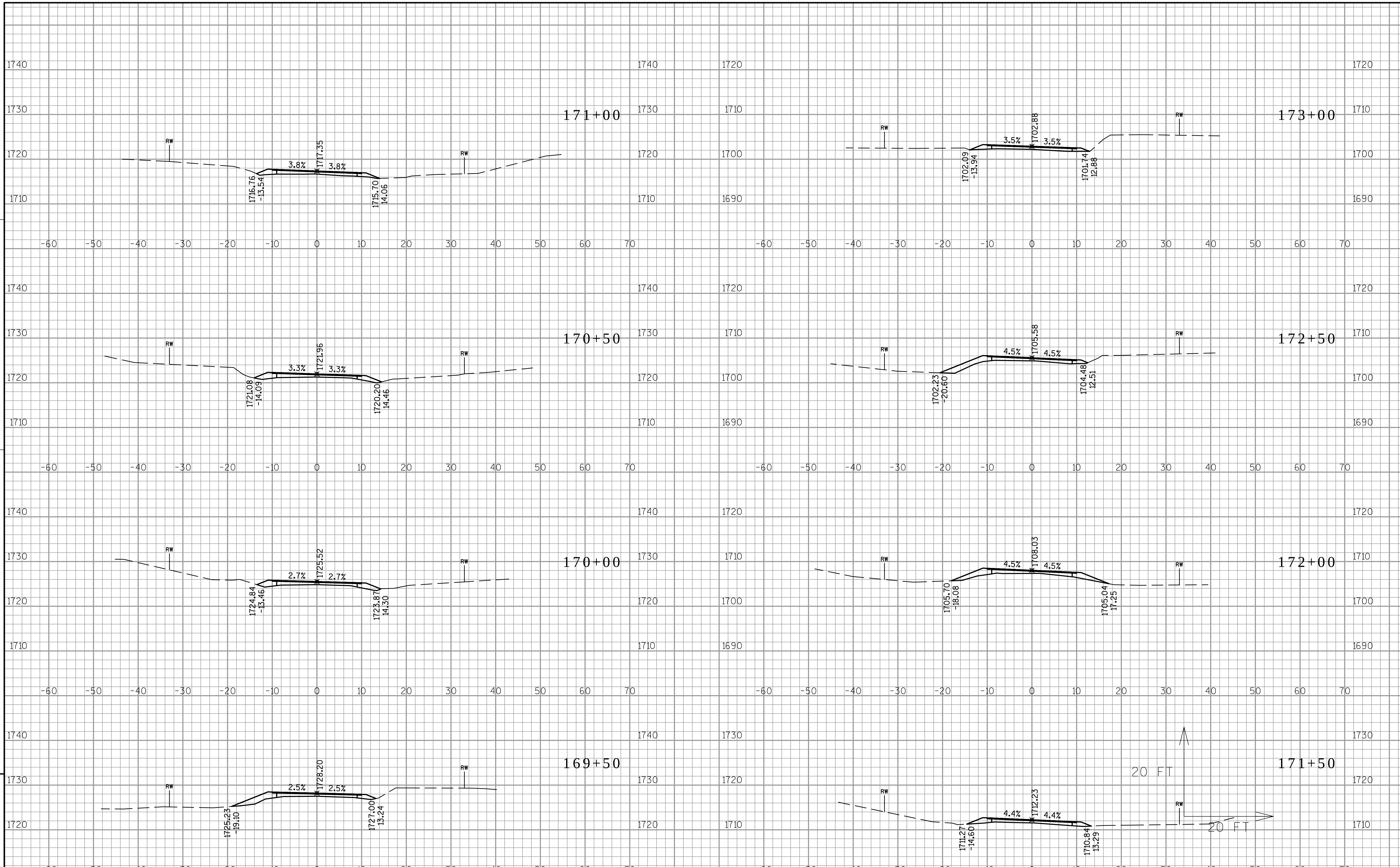
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 112 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS42 PLOT DATE : 8/16/2012 5:11 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

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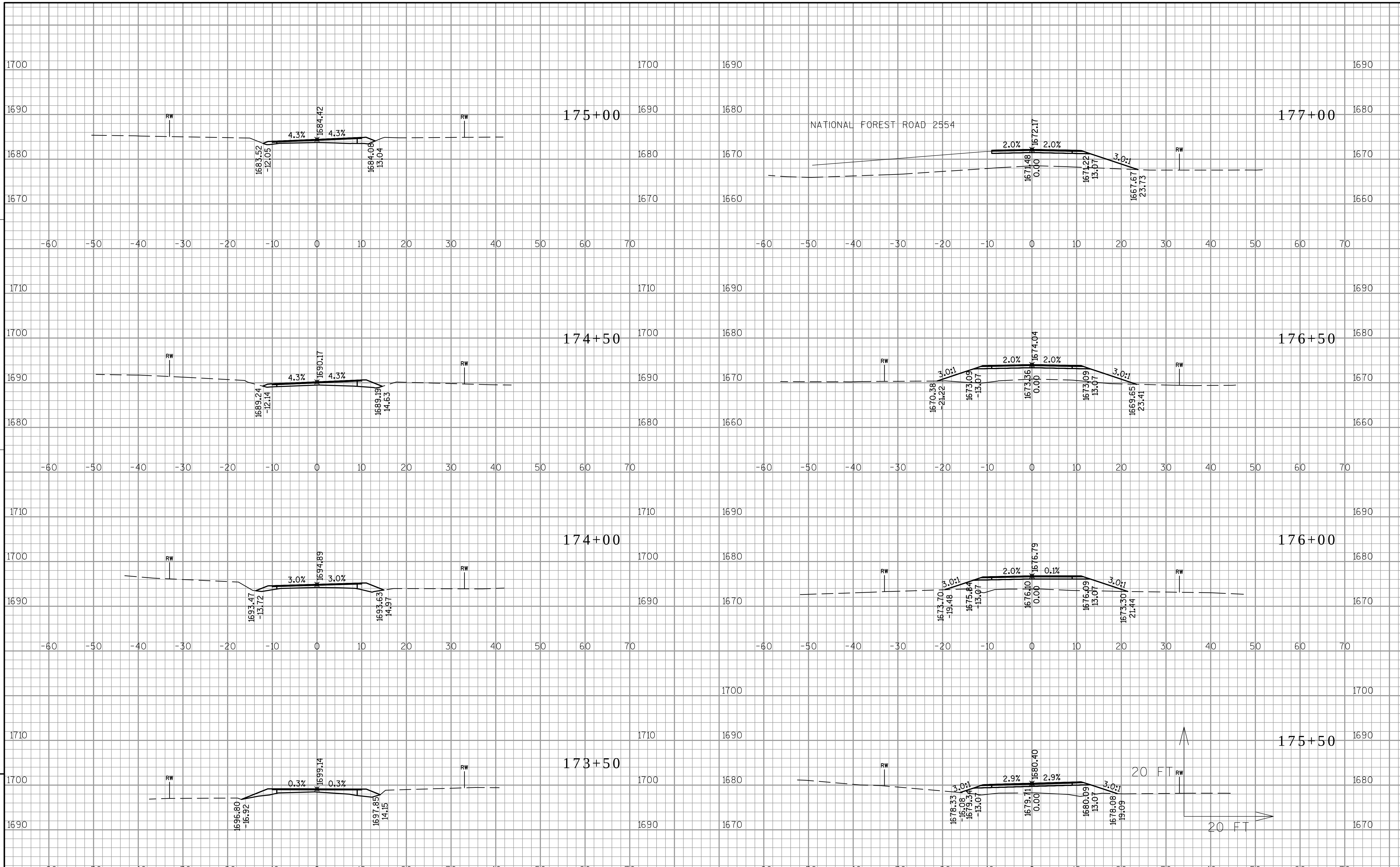
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 113 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS43 PLOT DATE : 8/16/2012 5:13 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

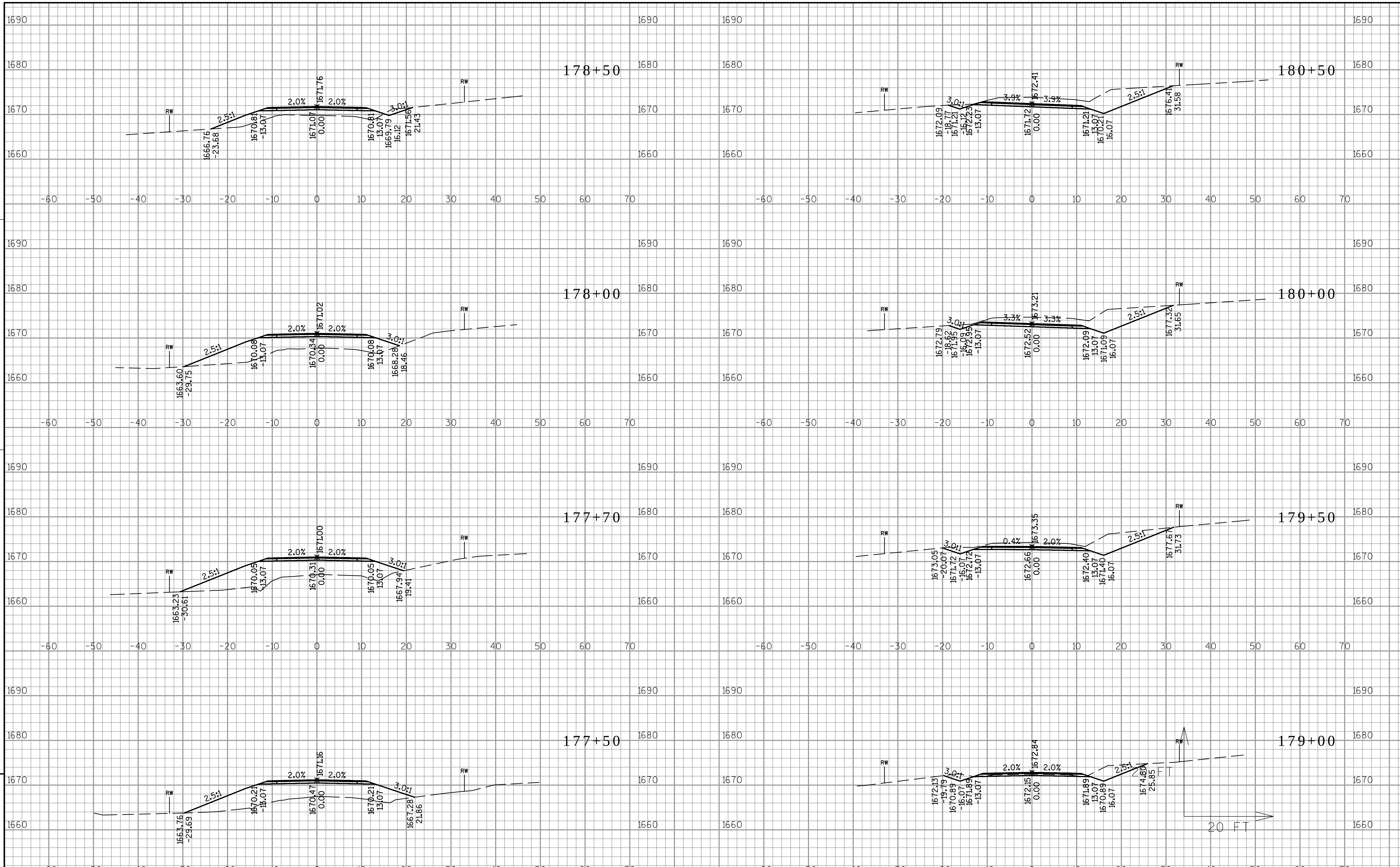
WISDOT/CADDS SHEET 49




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 114 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS44 PLOT DATE : 8/16/2012 5:14 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

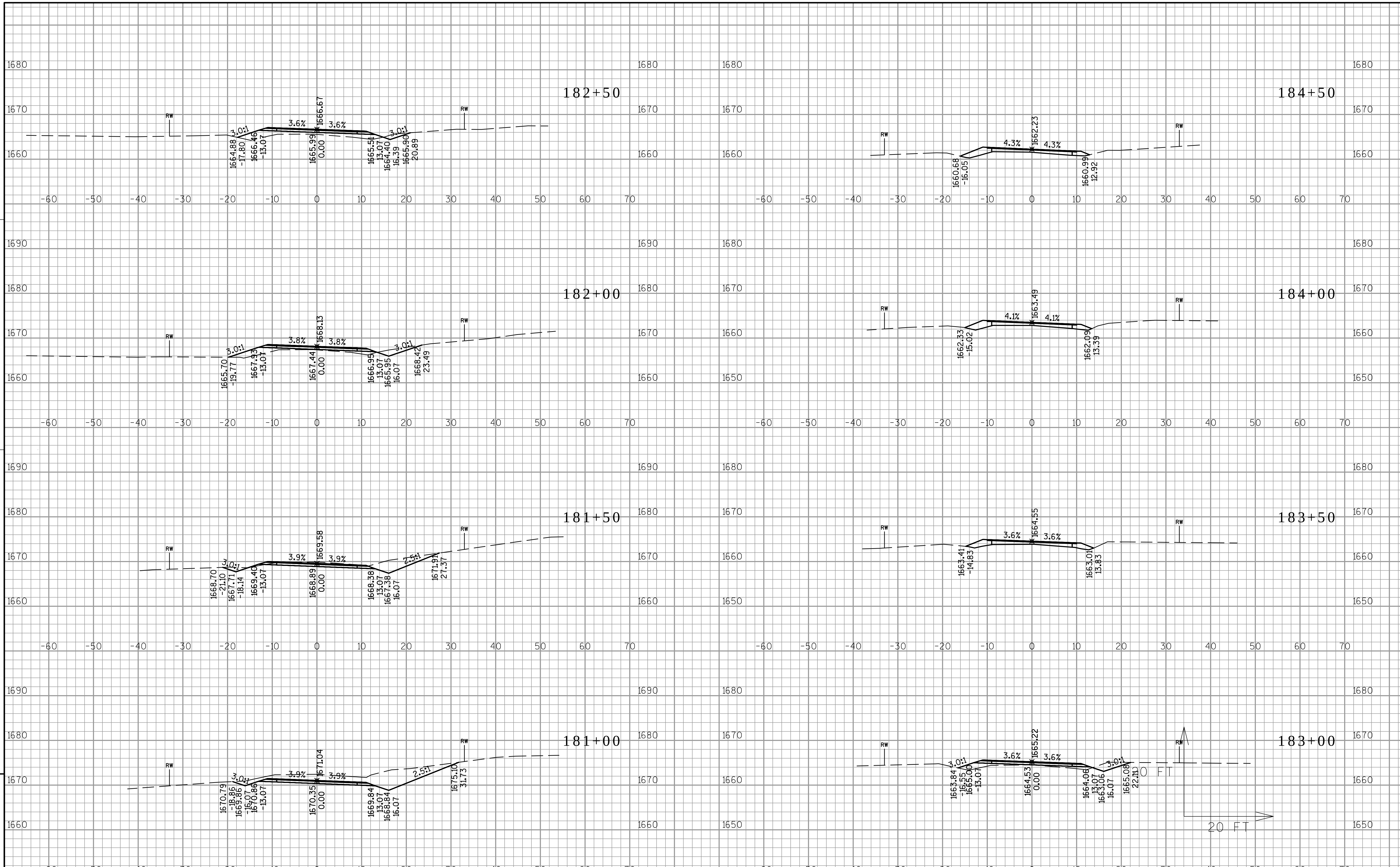



| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET | E |
|---|---|---|---|---|---|



FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS45 PLOT DATE : 8/16/2012 5:16 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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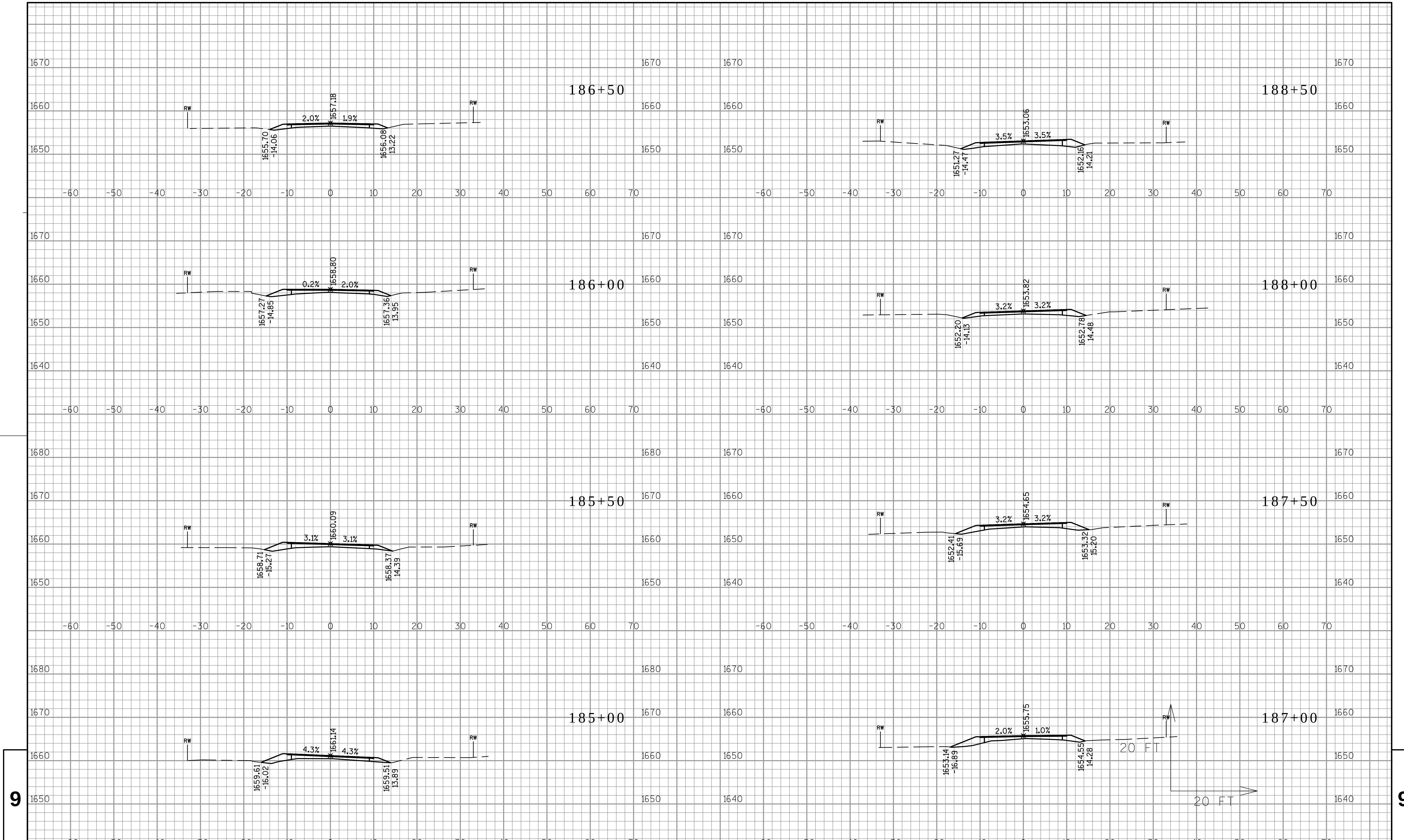
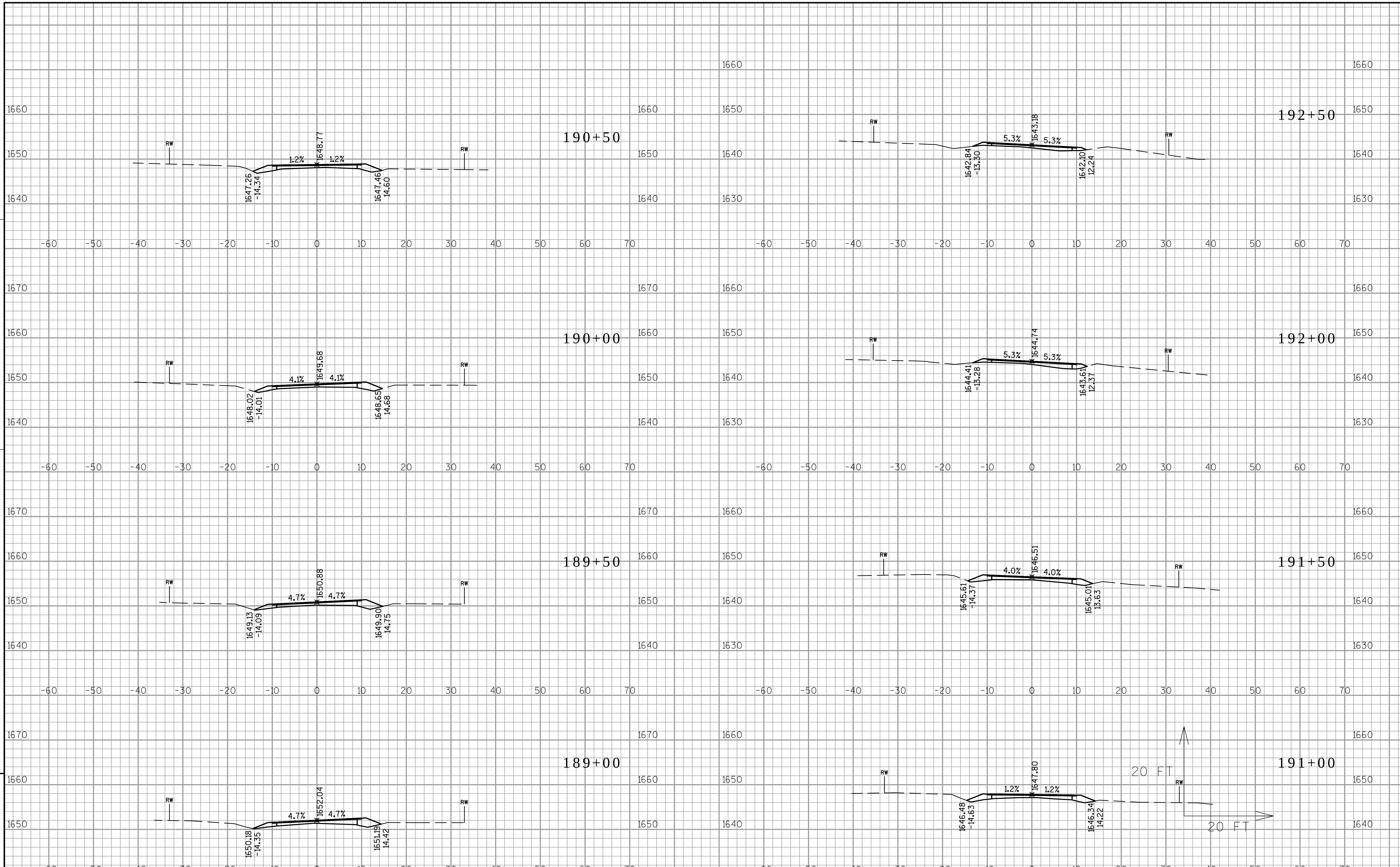
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 116 | E |
|---|---|---|---|---|---|




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 117 | E |
|---|---|---|---|---|---|

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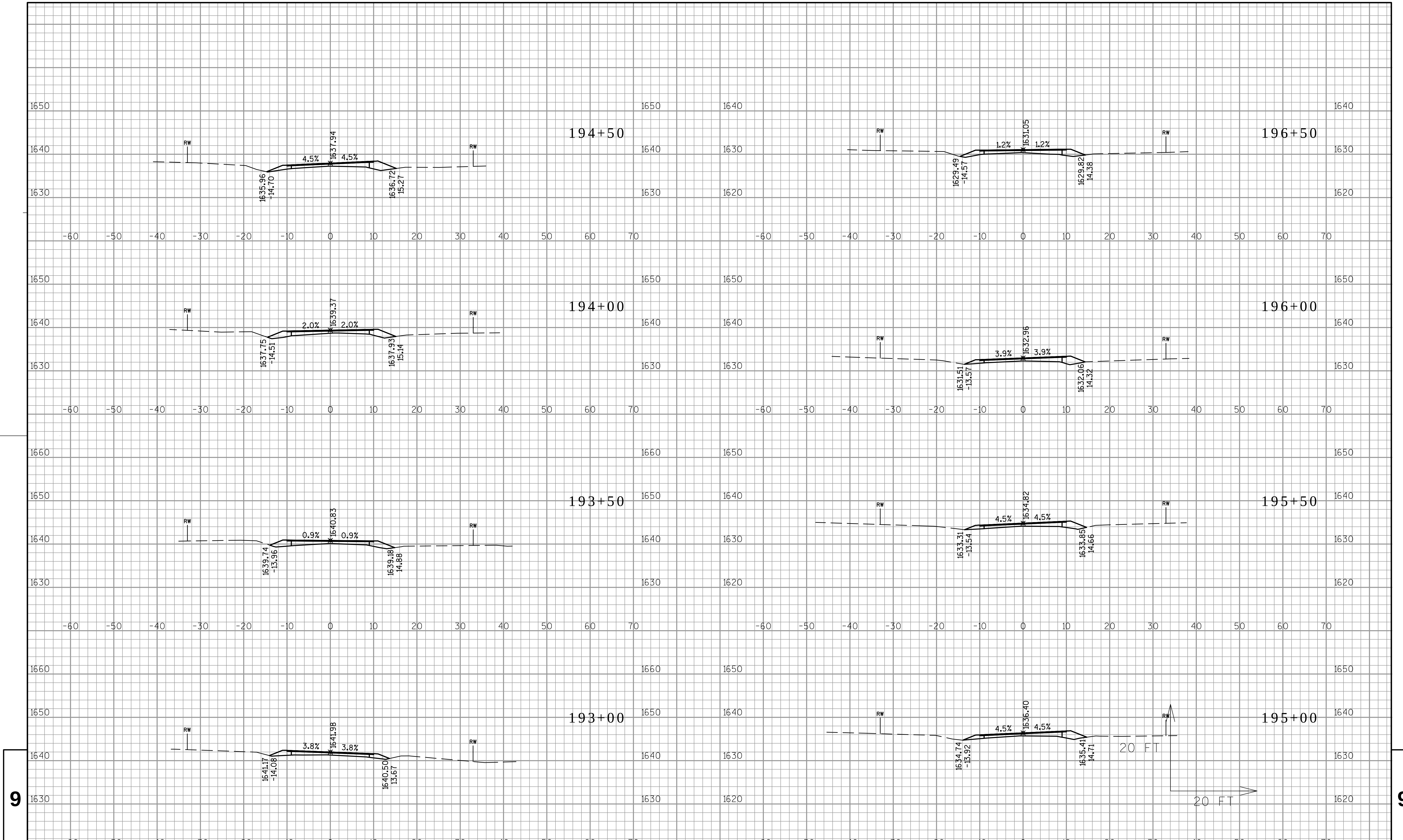
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 118 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS48 PLOT DATE : 8/16/2012 5:20 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

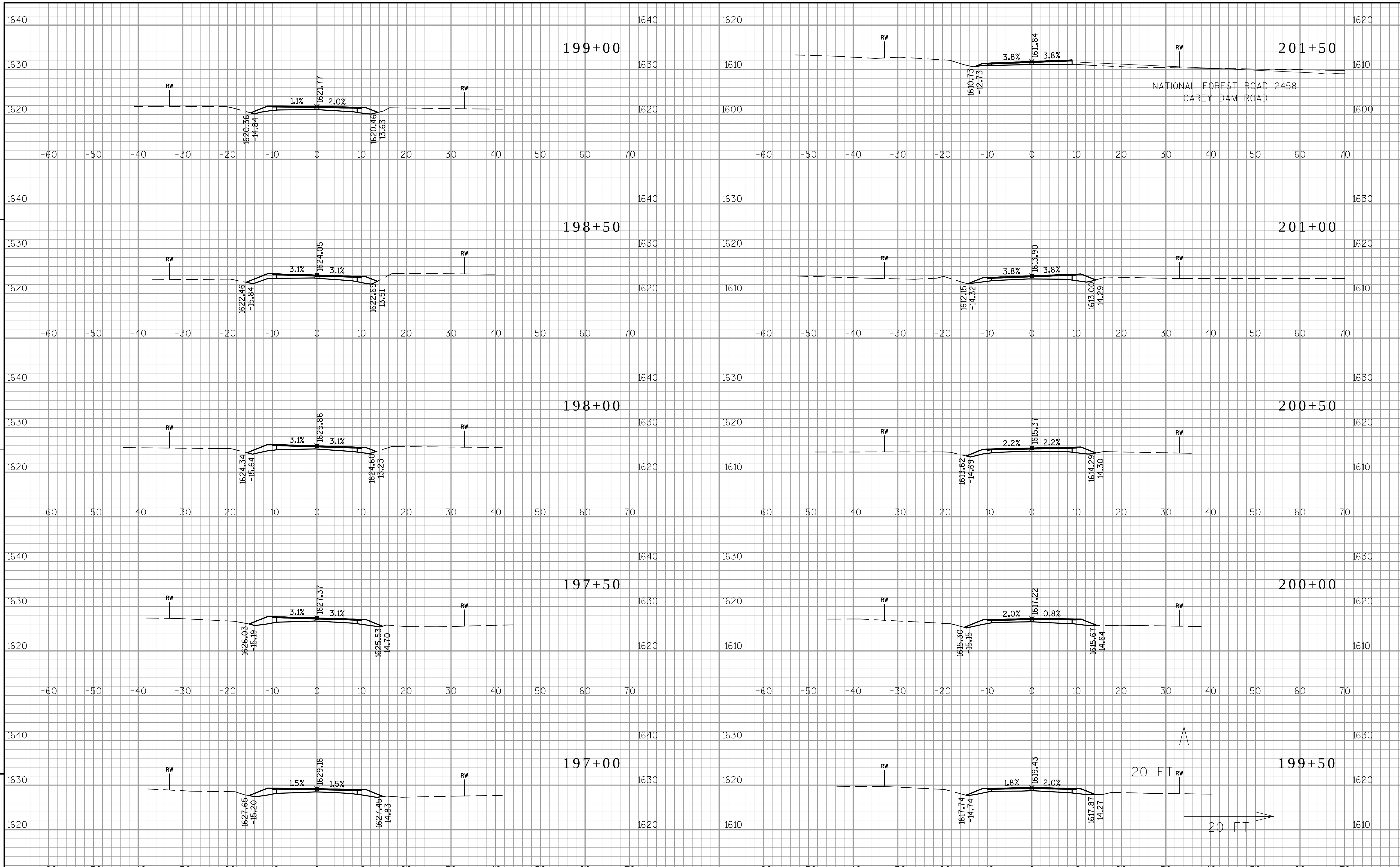
WISDOT/CADDS SHEET 49




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 119 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS49 PLOT DATE : 8/16/2012 5:21 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : ____________________ PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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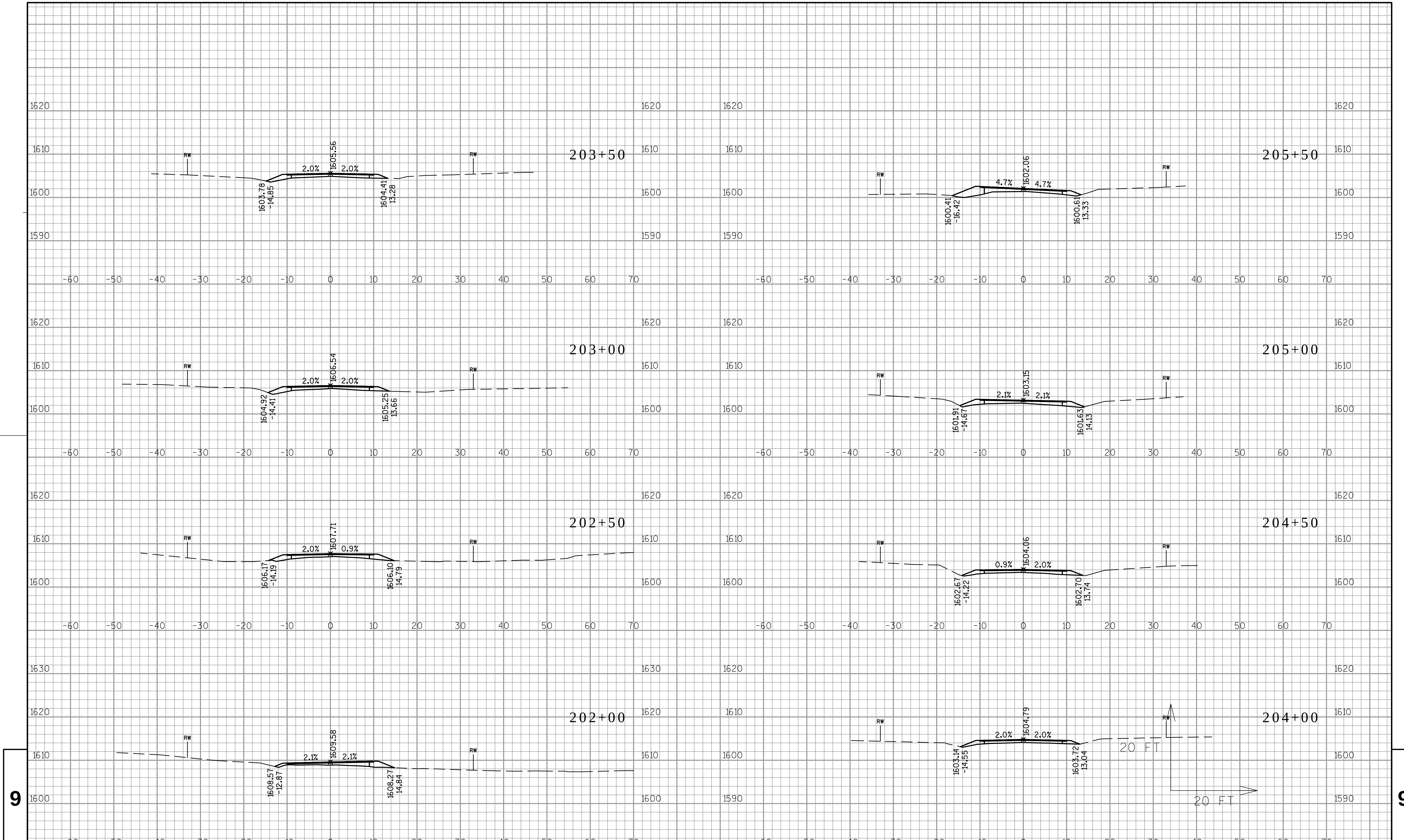
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 120 | E |
|---|---|---|---|---|---|

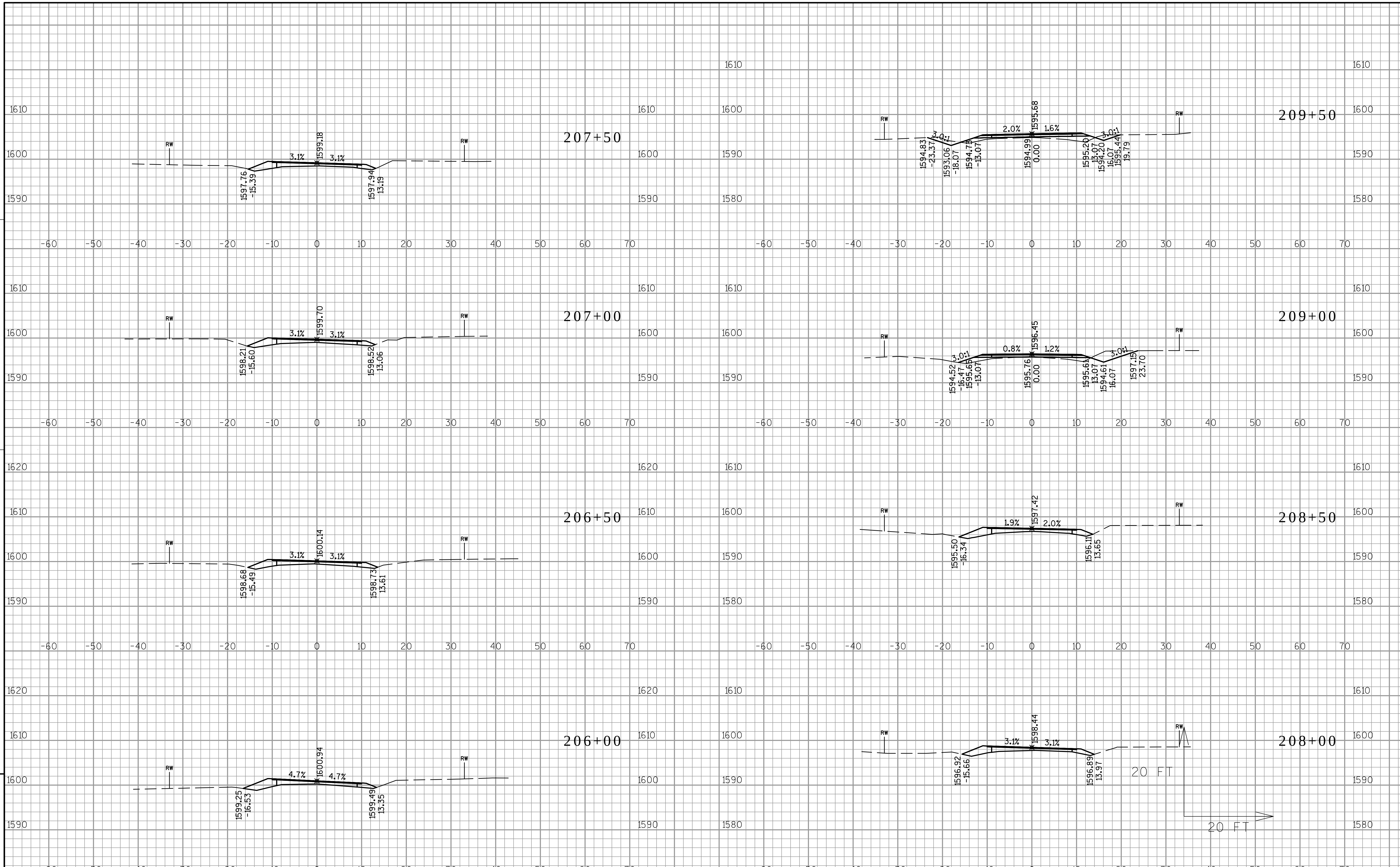
FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS50 PLOT DATE : 8/16/2012 5:23 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 121 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS51 PLOT DATE : 8/16/2012 5:24 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

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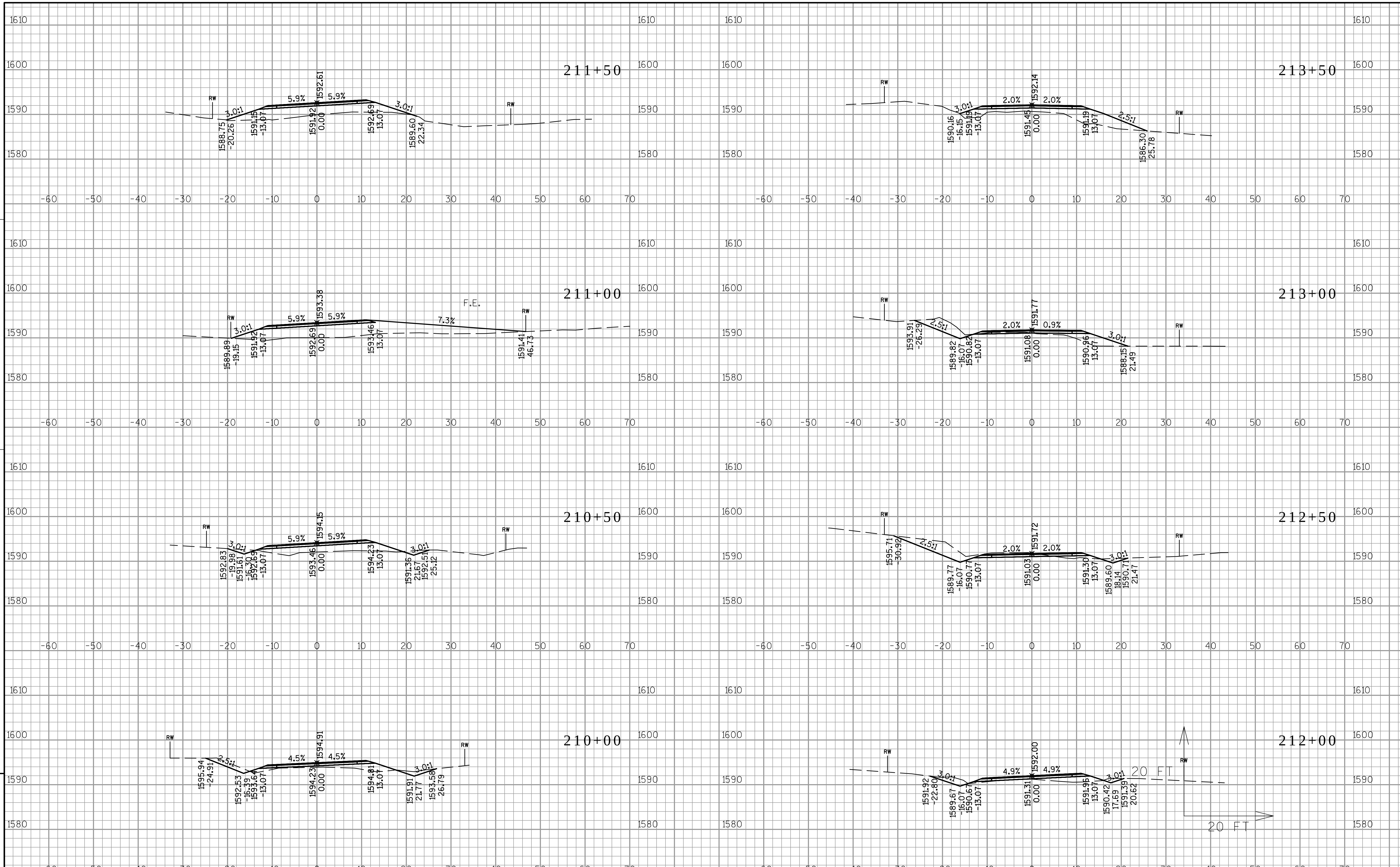
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 122 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS52 PLOT DATE : 8/16/2012 5:26 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET | E |
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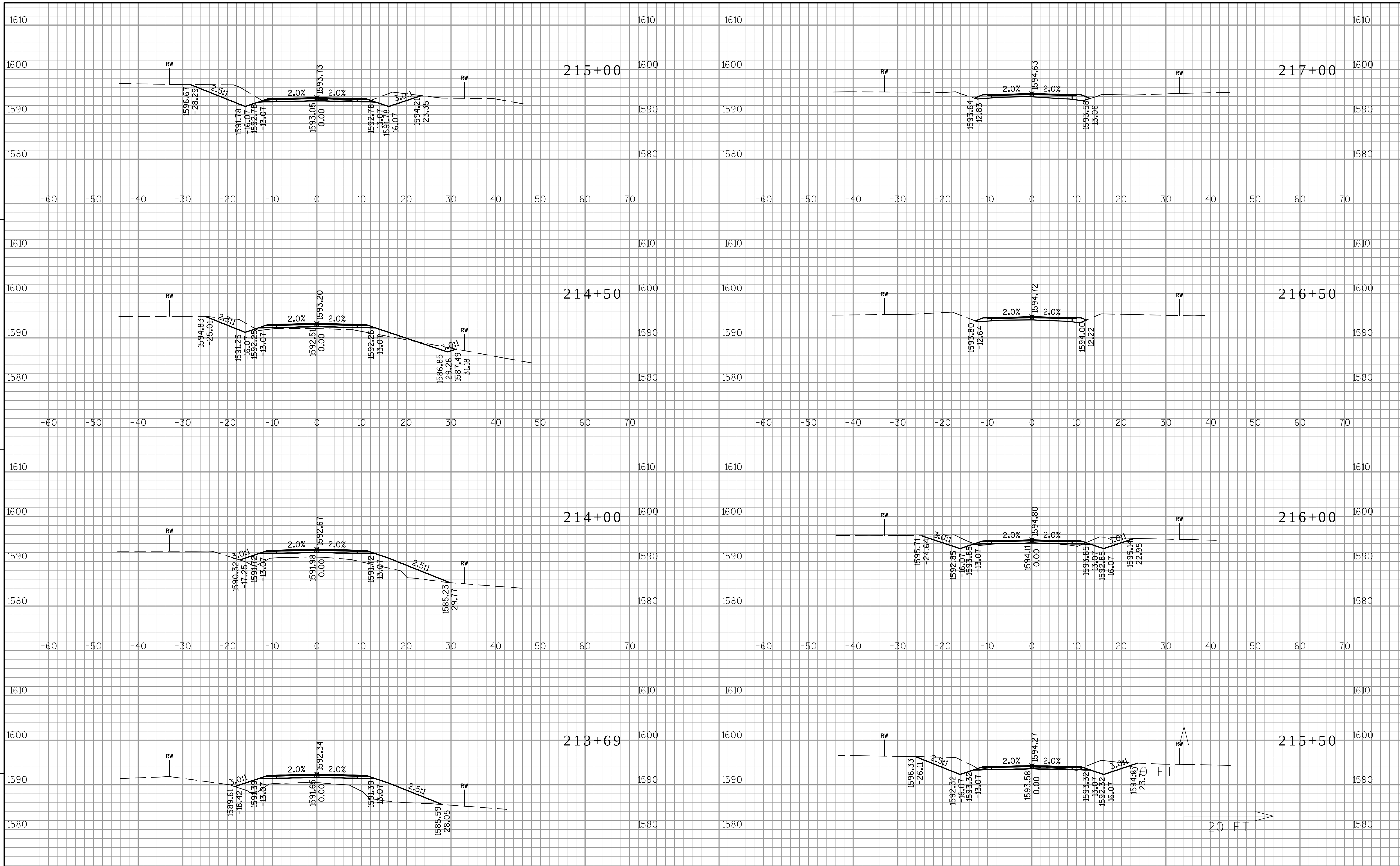
FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS53 PLOT DATE : 8/16/2012 5:27 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 124 | E |
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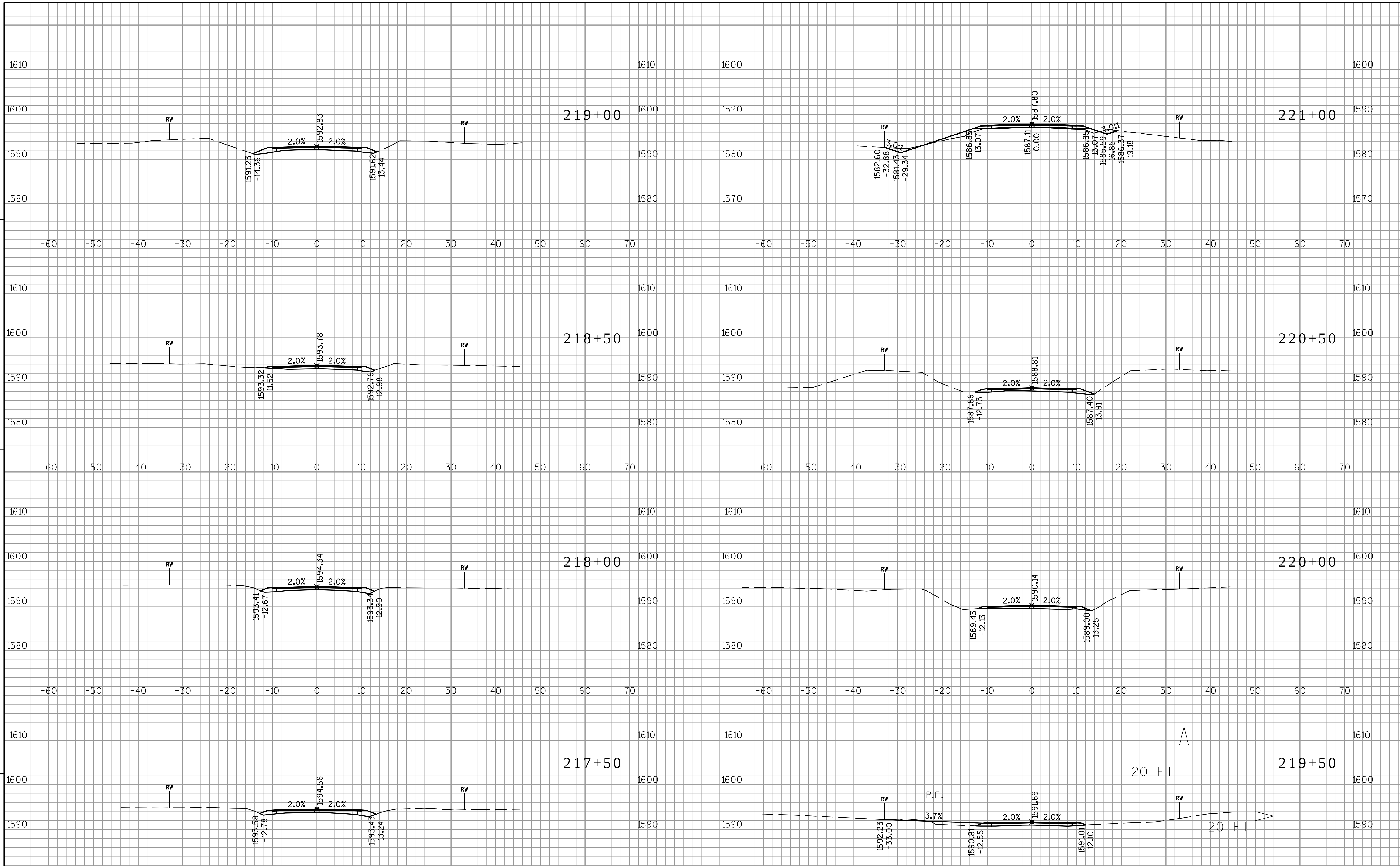
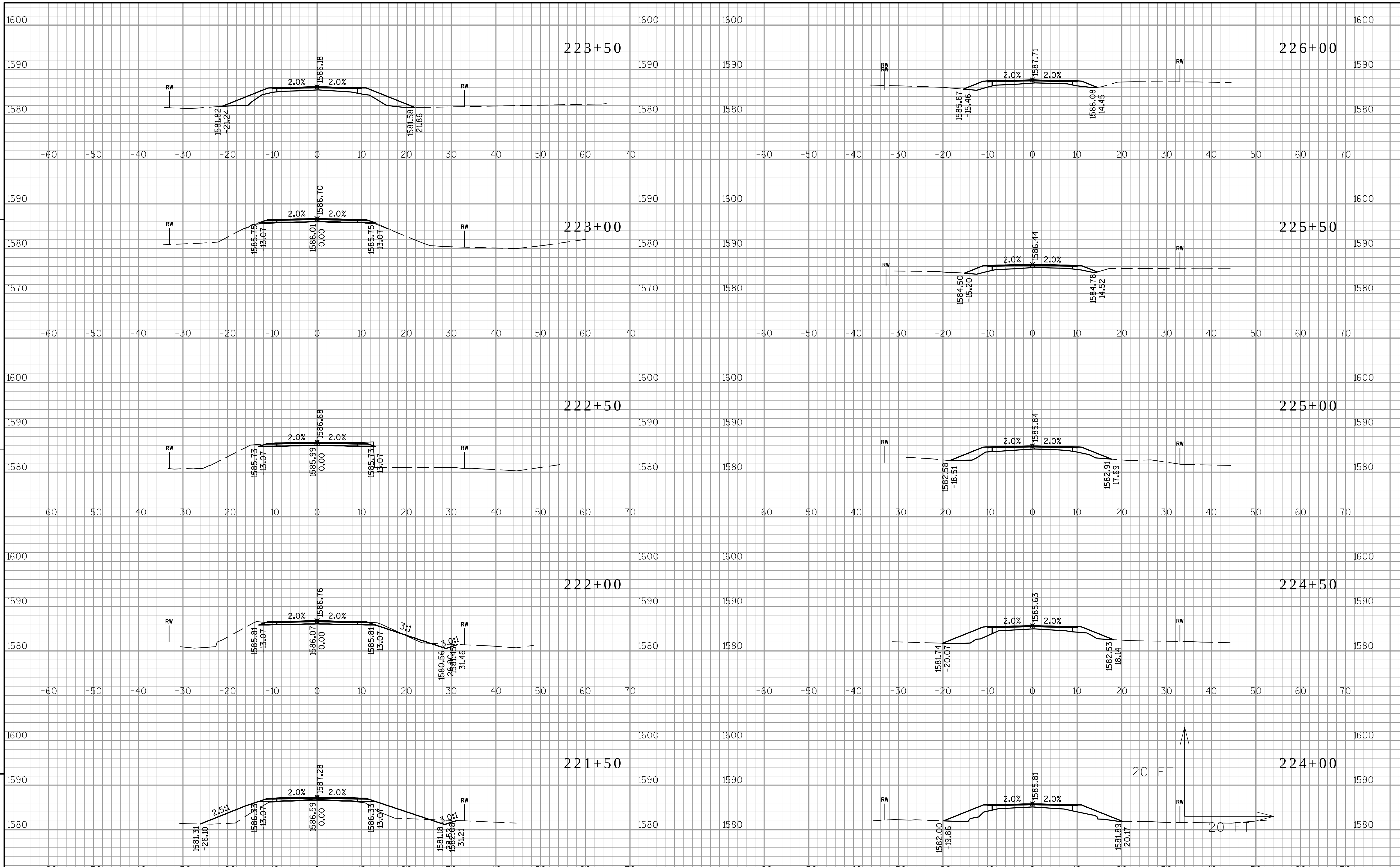
FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS54 PLOT DATE : 8/16/2012 5:29 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49




| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 125 | E |
|---|---|---|---|---|---|

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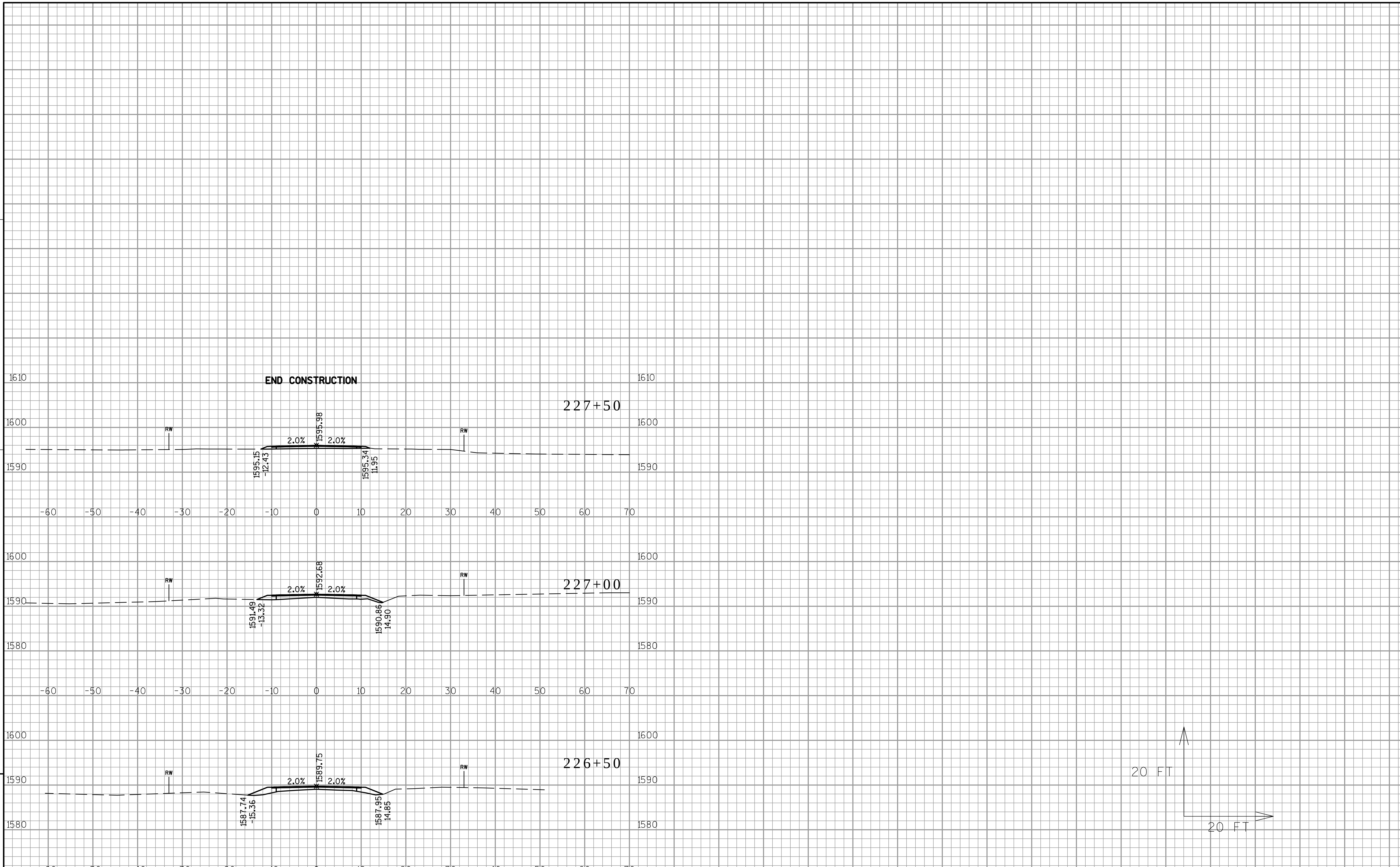
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 126 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS56 PLOT DATE : 8/16/2012 5:31 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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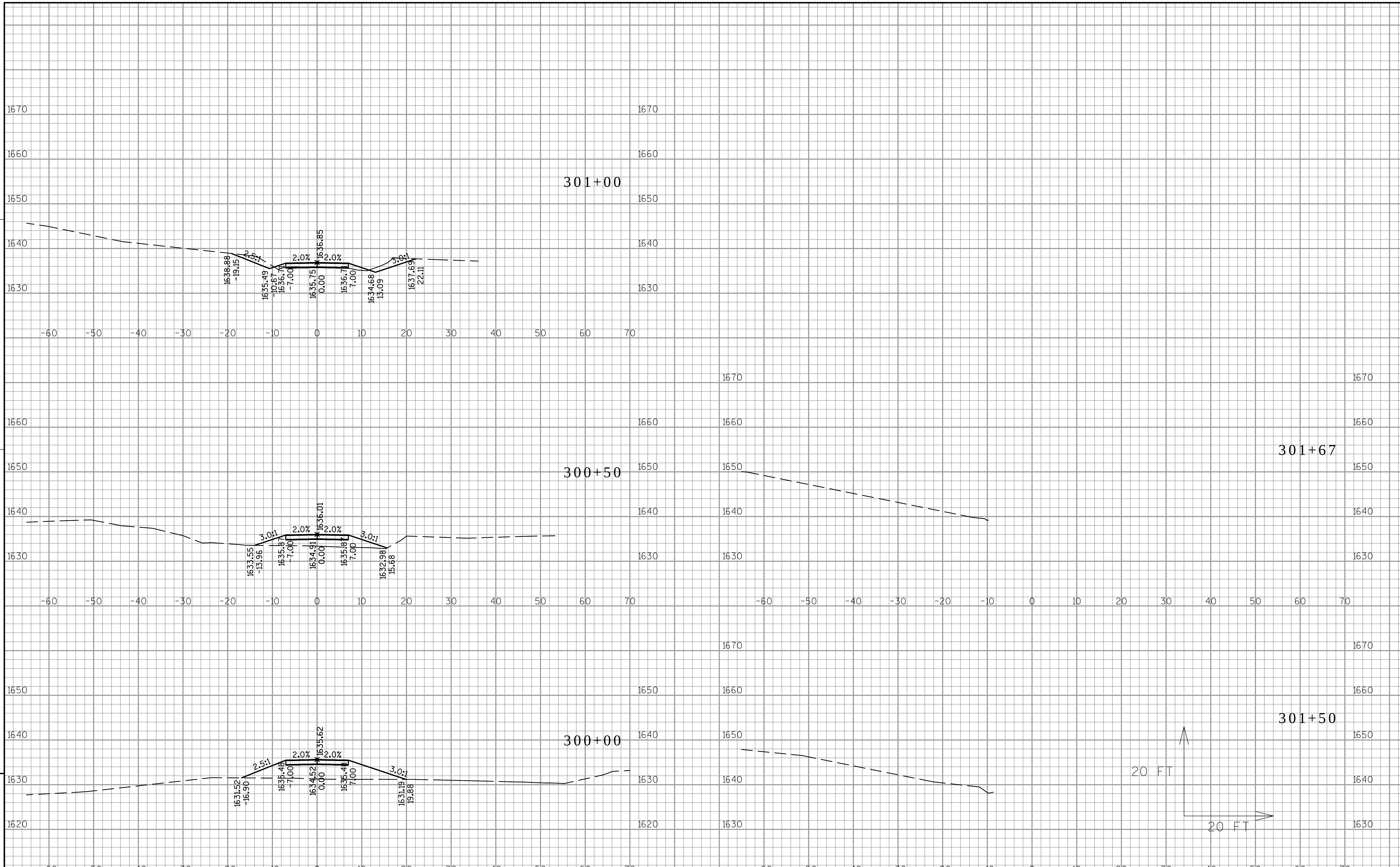
| PROJECT NO:9808-00-70 | HWY:FISHEL ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 127 E |

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS57 PLOT DATE : 8/27/2012 11:36 AM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT WISDOT/CADDS SHEET 49

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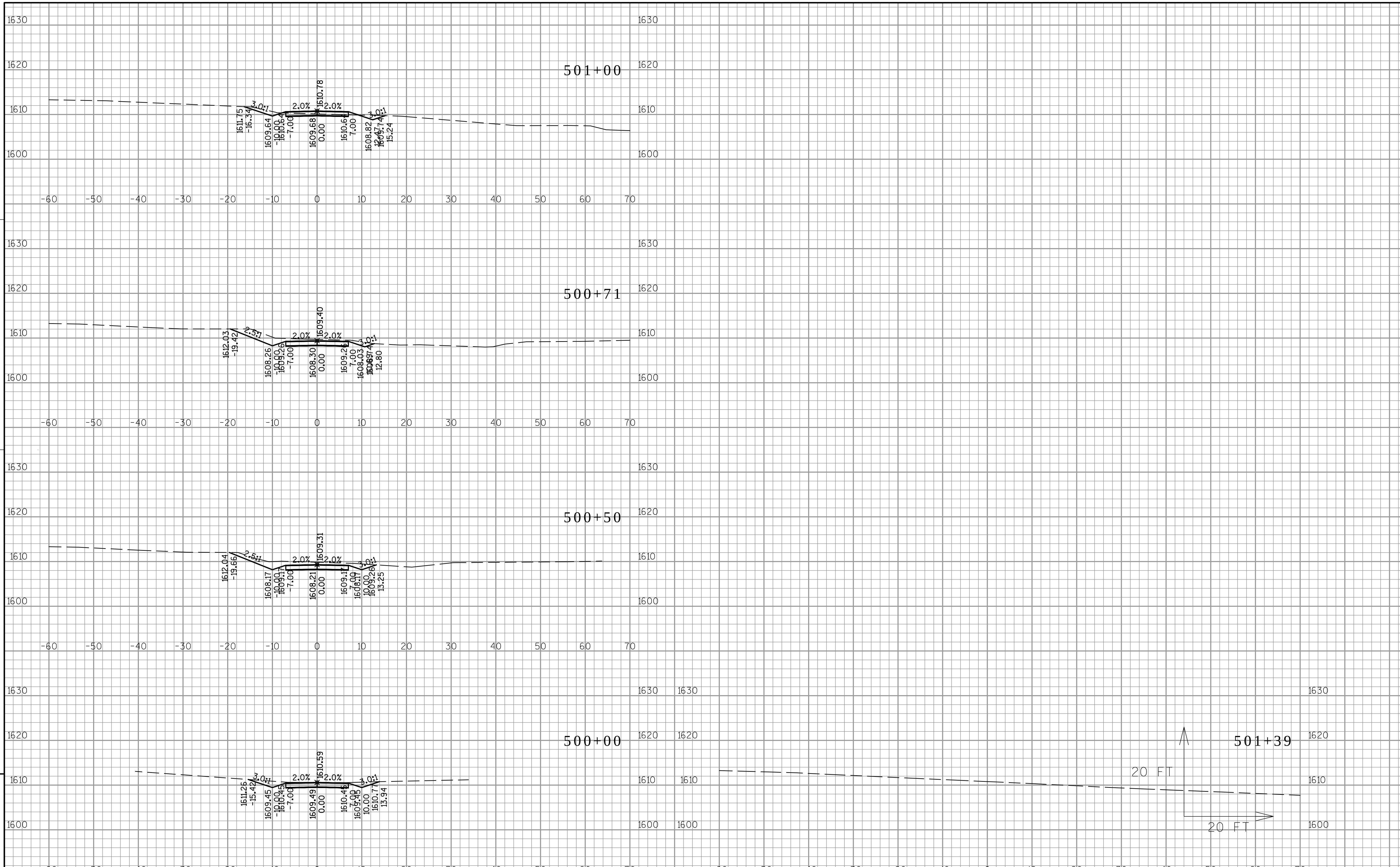
| PROJECT NO:9808-00-70 | HWY: ROSEN DAM ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 128 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS_ROSEN PLOT DATE : 8/16/2012 5:36 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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| PROJECT NO:9808-00-70 | HWY: CAREY DAM ROAD | COUNTY:FOREST | CROSS SECTIONS: | SHEET 129 | E |
|---|---|---|---|---|---|

FILE NAME : R:\4200\4281\4281014\DWG(2010)\XS.DWG LAYOUT : XS_CAREY PLOT DATE : 8/16/2012 5:34 PM PLOT BY : SCOTT M. DEBAKER PLOT NAME : PLOT SCALE : 1 IN:20 FT

*Wisconsin Department of Transportation*

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