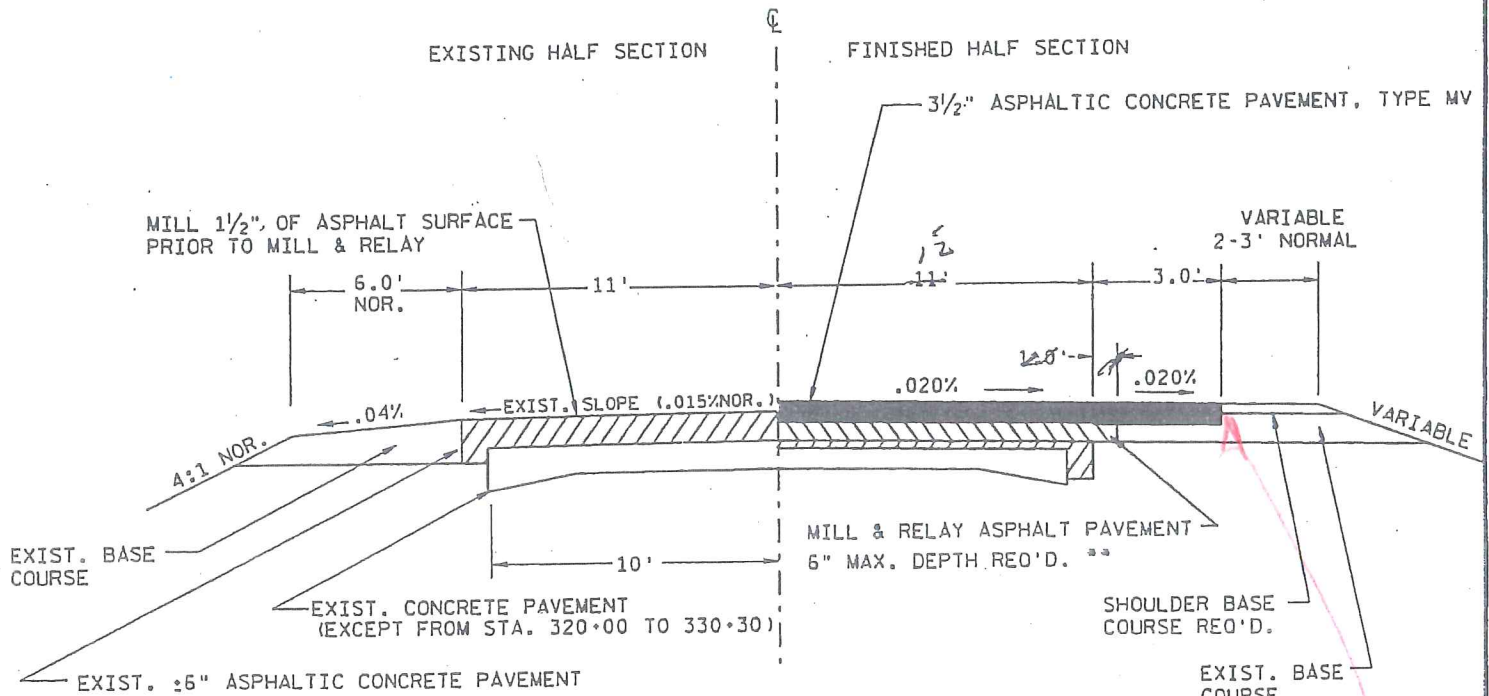


TYPICAL SECTIONS AND BORING  
LOG CHART

U.S.H. 12

ST. CROIX CO.



TYPICAL SECTION U.S.H. 12  
STA. 36+00 TO STA. 366+00

\*\* IN AREAS WHERE THE EXISTING ASPHALT DEPTH ABOVE THE EXISTING CONCRETE IS GREATER THAN 6" AFTER THE 1 1/2" SURFACE MILL ONLY THE TOP 6" NEEDS TO BE MILLED AND RELAID.

BORING LOG CHART

| STATION | LOCATION         | DEPTH OF EXIST. ASPH. ABOVE OLD CONC. PAV'T. |
|---------|------------------|----------------------------------------------|
| 45+00   | 7' LT.           | 9"                                           |
| 77+00   | 8' RT.           | 8 1/2"                                       |
| 95+50   | 7' LT.           | 7"                                           |
| 172+00  | 6' LT. & 10' RT. | 8 1/2" LT., 4" RT.                           |
| 244+00  | 8' LT.           | 7 1/2"                                       |
| 291+00  | 8' LT.           | 19"                                          |
| 316+00  | 8' RT.           | 11 1/2"                                      |
| 330+00  | 7' LT.           | 8"                                           |
| 349+00  | 6' LT.           | 6"                                           |

1997  
Resurface

CAT 10 Quantities  
for 8949-04-78

10/31/15

## Assumptions

Assume 200' Length Pond Ditch Clean 2 Sta

8 CY Rip rap per AEW Ditch

25 SY. HR Fabric per Ditch

20 SY Topsoil per outlet/inlet

120 SY Topsoil per Ditch Station

Type "B" mat, 50% Topsoil Quantities

## Common

$$\begin{array}{l} C-SS-37 \quad [(575 \times 72) + 100(\frac{72}{2})] \div 27 \\ C-SS-38 \quad [(75) + (\frac{100}{2})] 72 \div 27 \\ C-SS-39 \quad [(175) + (\frac{100}{2})] 72 \div 27 \\ 3 \text{ culverts} \quad (3 \times 25 \times 72) \div 27 \end{array}$$

$$\begin{array}{r} 11666 \text{ c.y.} \\ 333 \\ 600 \\ 200 \\ \hline 2799 \Rightarrow 3,000 \text{ c.y.} \end{array}$$

## Borrow

$$\begin{array}{l} C-SS-37 \quad [(570 \times 25) + (100 \times \frac{25}{2})] \div 27 \\ C-SS-38 \quad [150 + 50 \times \frac{1}{2}] (20) \div 27 \\ C-SS-39 \quad [175 + 50 \times \frac{1}{2}] \div 27 \\ 3 \text{ culverts} \quad (3 \times 25 \times 20) + (25 \times 20 \times 3) \div 27 \end{array}$$

$$\begin{array}{r} 575 \text{ c.y.} \\ 130 \text{ c.y.} \end{array}$$

$$\begin{array}{r} 111 \\ \hline 816 \times \\ 1.3 \\ \hline 1060 \text{ c.y.} \\ 1125 \end{array}$$

$$\text{Available Fill} = 3,000 - \frac{P_{\text{avg}}}{27} (30 \times 1.5) 1125 =$$

Zero Need

$$(1 \frac{3}{4}'' \text{ Base}) \quad (46 \times \frac{10}{12}) (1150) \times (0.95) (=) 3030$$

3,100 tons ✓

$$3/4'' \text{ Base} = (7/12) (1150) (1.05 \times 10 + 4) = 640$$

650 tons ✓

$$\text{Asph} = [17000 - (20' - 20' - 15' - 15' \times 2) - 29 - 25] \frac{7}{12} (30) \frac{2.10}{27} = 1370$$

$$\text{Approach to C-SS 37 \& 39} = (40' \times 8) (\frac{7}{12}) \frac{2.105}{27} = 158$$

1,500 tons

$$\text{Tack} [(10000 + 60 \times 8)] \div 9 \times 3 \times 0.059 \frac{1}{54}$$

500 gal

Topsoil

|             |                                                     |      |
|-------------|-----------------------------------------------------|------|
| C-37        | $(670 \times 35) \div 9$                            | 2605 |
| C-38        | $(200 \times 35) \div 9$                            | 778  |
| C-39        | $(1300 \times 35) \div 9$                           | 1166 |
| 4234        | $[(30 \times 25 \times 2) + (30 \times 50)] \div 9$ | 333  |
| 4239        | 11                                                  | 333  |
| 4250        | $[(35 \times 125) + (15 \times 50)] \div 9$         | 569  |
| Ditch Clean | 120 S.Y. x 6                                        | 720  |
| AEW         | = 20 S.Y. x 9                                       | 180  |

$\begin{array}{r} 6684 \\ \text{use } 6700 \\ \hline \text{mulch } 3350 \end{array}$

"B" ~~4234~~ 3350

Seed  $(6700 \times 9) \times \frac{7}{1000} = 120 \#$

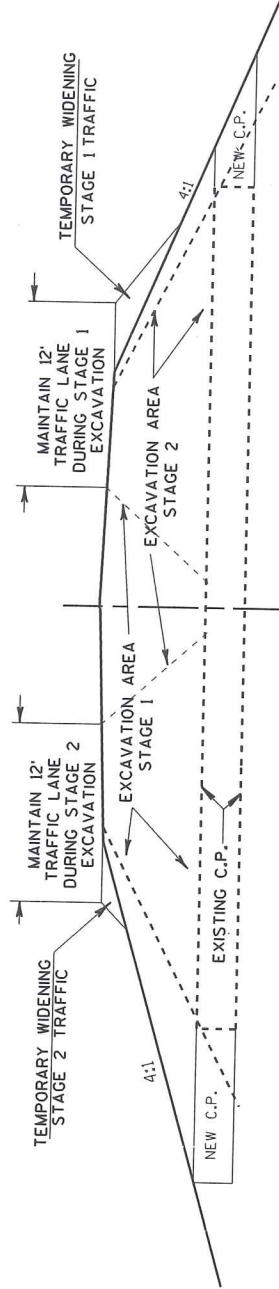
Fert  $(6700 \times 9) \times \frac{7}{1000} \div 100 = 4.2 \Rightarrow 5 \text{ CWT}$

RipRap  $8 \times 17 = 1360$  use 1400 CY  
 HR Fabr  $25 \times 17 = 425$  S.Y.

C-55-37, 38 & 39  
 included in  
 Cat 20, 30 & 40

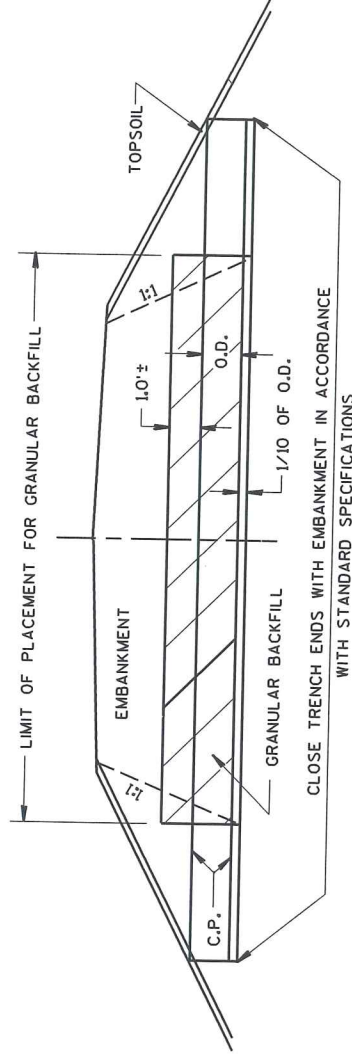
cat 10 only

| Item No.                                  | Description                                    | Units | Authorized Quantity | Cumulative Quantity Paid To Date | Unit Price | Amount Paid To Date | Cumulative Total Qty Placed | %Complete | Stockpile Material Allowance | Quantity This Estimate | Amount This Estimate |
|-------------------------------------------|------------------------------------------------|-------|---------------------|----------------------------------|------------|---------------------|-----------------------------|-----------|------------------------------|------------------------|----------------------|
| <b>Project 7540-00-70 , Category 0010</b> |                                                |       |                     |                                  |            |                     |                             |           |                              |                        |                      |
| 628.2027                                  | Erosion Mat Class II Type C                    | SY    | 800                 | 1,166.00                         | 4.25       | \$4,955.50          | 1,166.00                    | 145.75%   | \$0.00                       | 0.00                   | \$0.00               |
| 628.6005                                  | Turbidity Barriers                             | SY    | 300                 | 0.00                             | 22.50      | \$0.00              | 0.00                        | 00.00%    | \$0.00                       | 0.00                   | \$0.00               |
| 628.7504                                  | Temporary Ditch Checks                         | LF    | 30                  | 67.50                            | 10.00      | \$675.00            | 67.50                       | 225.00%   | \$0.00                       | 0.00                   | \$0.00               |
| 629.0210                                  | Fertilizer Type B**p**                         | CWT   | 1.1                 | 1.00                             | 75.00      | \$75.00             | 1.00                        | 90.91%    | \$0.00                       | 0.00                   | \$0.00               |
| 630.0120                                  | Seeding Mixture No. 20**p**                    | LB    | 45                  | 75.00                            | 6.00       | \$450.00            | 75.00                       | 166.67%   | \$0.00                       | 0.00                   | \$0.00               |
| 642.5001                                  | Field Office Type B                            | EACH  | 1                   | 1.00                             | 1,200.00   | \$1,200.00          | 1.00                        | 100.00%   | \$0.00                       | 0.00                   | \$0.00               |
| 643.0100                                  | Traffic Control (project)01. 7540-00-70        | EACH  | 1                   | 1.00                             | 1,339.04   | \$1,339.04          | 1.00                        | 100.00%   | \$0.00                       | 0.00                   | \$0.00               |
| 643.0420                                  | Traffic Control Barricades Type III            | DAYS  | 700                 | 2,112.00                         | 1.65       | \$3,484.80          | 2,112.00                    | 301.71%   | \$0.00                       | 0.00                   | \$0.00               |
| 643.0705                                  | Traffic Control Warning Lights Type A          | DAYS  | 1400                | 3,300.00                         | 0.16       | \$528.00            | 3,300.00                    | 235.71%   | \$0.00                       | 0.00                   | \$0.00               |
| 643.0905.S                                | Traffic Control Covering Signs                 | EACH  | 10                  | 50.00                            | 10.00      | \$500.00            | 50.00                       | 500.00%   | \$0.00                       | 0.00                   | \$0.00               |
| 643.2000                                  | Traffic Control Detour (project)01. 7540-00-70 | EACH  | 1                   | 1.00                             | 1,000.00   | \$1,000.00          | 1.00                        | 100.00%   | \$0.00                       | 0.00                   | \$0.00               |
| 643.3000                                  | Traffic Control Detour Signs                   | DAYS  | 7210                | 8,692.00                         | 0.11       | \$956.12            | 8,692.00                    | 120.55%   | \$0.00                       | 0.00                   | \$0.00               |
| 646.0106                                  | Pavement Marking Epoxy 4-inch                  | LF    | 900                 | 1,164.50                         | 1.80       | \$2,096.10          | 1,164.50                    | 129.39%   | \$0.00                       | 0.00                   | \$0.00               |
| 650.4500                                  | Construction Staking Subgrade                  | LF    | 350                 | 350.00                           | 0.40       | \$140.00            | 350.00                      | 100.00%   | \$0.00                       | 0.00                   | \$0.00               |



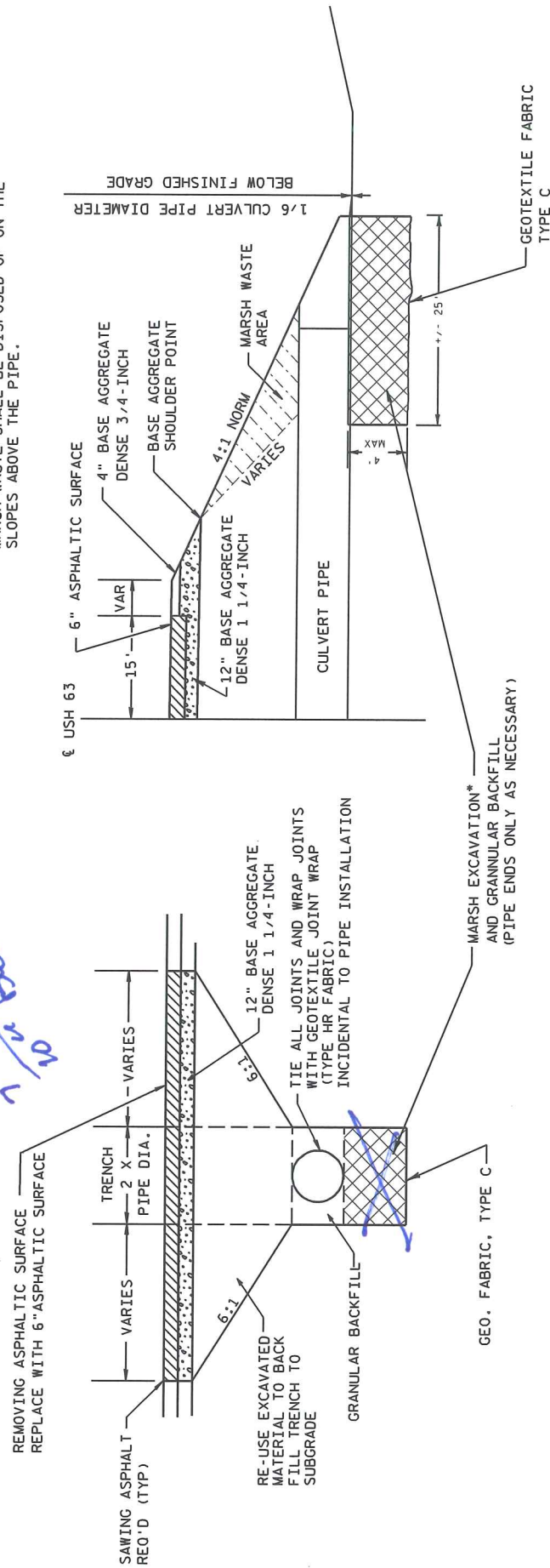
### CULVERT REPLACEMENT STAGING DETAIL

STA. 523+80



### CULVERT BACKFILL DETAIL

|                                                                 |                                  |                  |                                      |                       |
|-----------------------------------------------------------------|----------------------------------|------------------|--------------------------------------|-----------------------|
| PROJECT NO: 1550-04-60<br>FILE NAME : ss.....docx\otfile.....82 | HWY: USH 63                      | COUNTY: WASHBURN | CONSTRUCTION DETAILS                 | SHEET E               |
| PLOT DATE : ss.....plottingdate.....82                          | PLOT BY : ss.....plotuser.....82 | PLOT NAME :      | PLOT SCALE : ss.....plotscale.....82 | WISDOT/CADD5 SHEET 42 |

$$\frac{r_{\text{in}}}{r_{\text{out}}}$$


## PIPE REPLACEMENT DETAIL