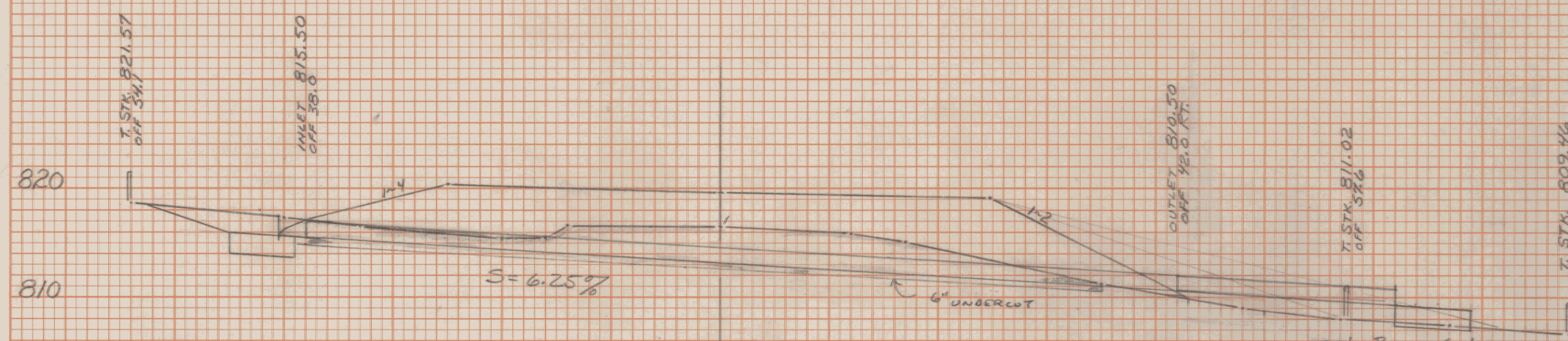


DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ PLOTTED: \_\_\_\_\_  
 ORIGINAL SURVEY NOTE BOOK NO. \_\_\_\_\_  
 AREAS CHECKED: \_\_\_\_\_

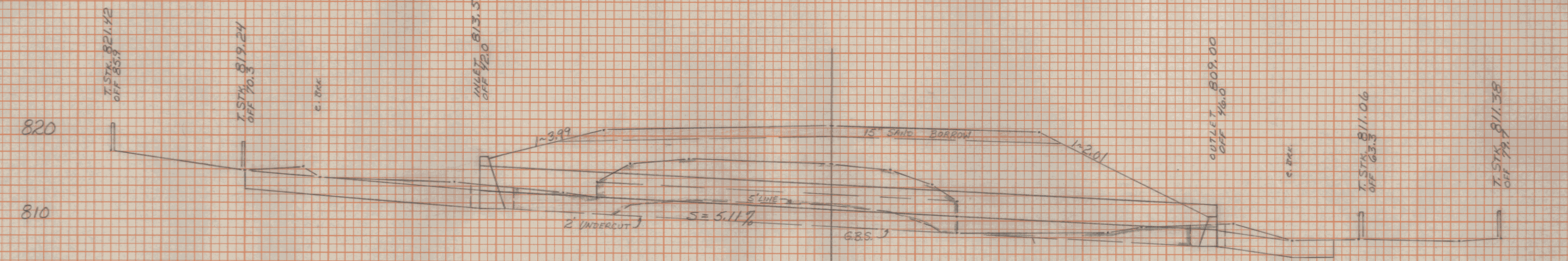
DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ PLOTTED: \_\_\_\_\_  
 ORIGINAL SURVEY NOTE BOOK NO. \_\_\_\_\_  
 AREAS CHECKED: \_\_\_\_\_



173+50 @ 90°  
 18" x 8" PCCSP (.064) w/IES @ INLET  
 CONSTRUCT INLET DITCH  
 BOOK 2B PAGE 84 (DS 76)

TRENCH EARTH  
 2-5' x 3.6 x 1/2 = 26 CY  
 1/2-5' x 3.6 x 1/2 = 4.8 CY  
 30.8 CY  
 5" x 3" x 1/2" LTP

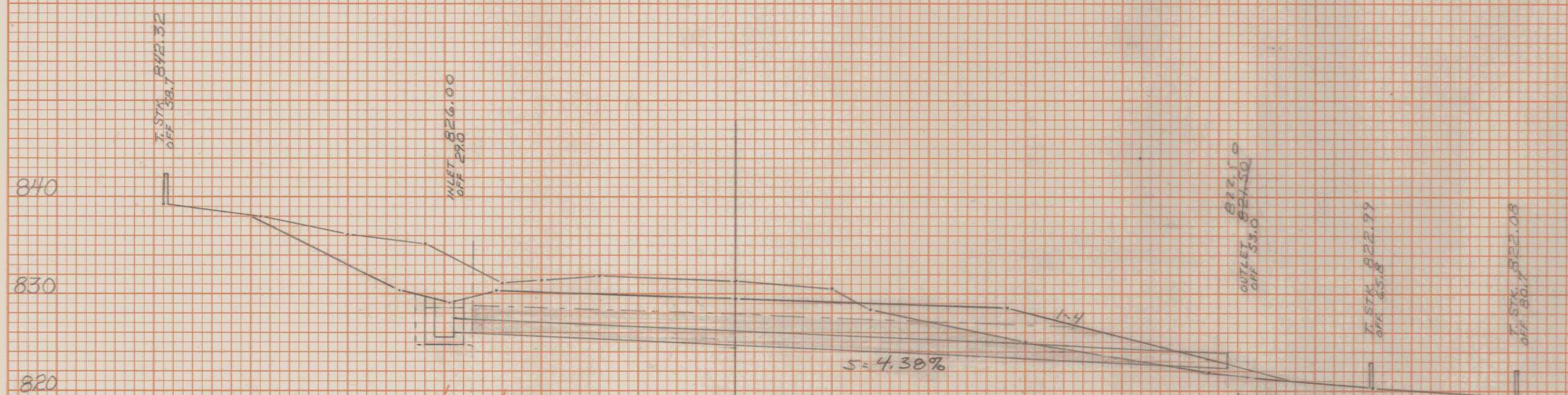
GRAV. BKFA  
 0.5 x 7.3 x 3.6 x 1/2 = 4.8 CY



171+28 @ 85° 00' Pr  
 36" x 8" PCCSP (.079) w/ 1.5" HW @ INLET  
 & CANDLE 1" @ OUTLET  
 REMOVE EXISTING 20" ACCGMP  
 BOOK 2B PAGE 72 (DS 74)

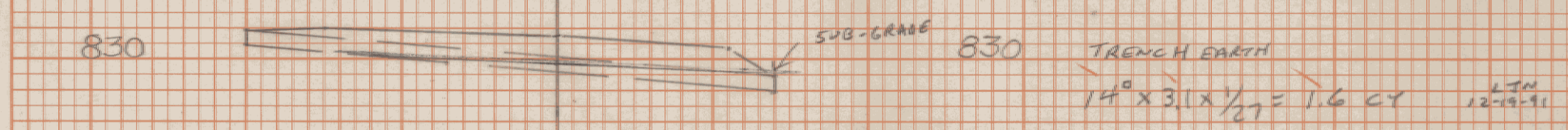
TRENCH EARTH  
 0-5'  
 SHW - 15" x 14" = 132 FT³  
 CHW - 11" x 9" = 99 FT³  
 PIPE - 24" x 5.1' = 1351.5 FT³  
 OVER 5'  
 PIPE - 11" x 5.1' x 1.5 = 589.05 FT³  
 TOTAL 2221.55 FT³ ÷ 27 = 82.3 CY

GRAV. BKFA STRUCTURES  
 8" x 2' x 5.1' x 1/2" = 31.7 CY



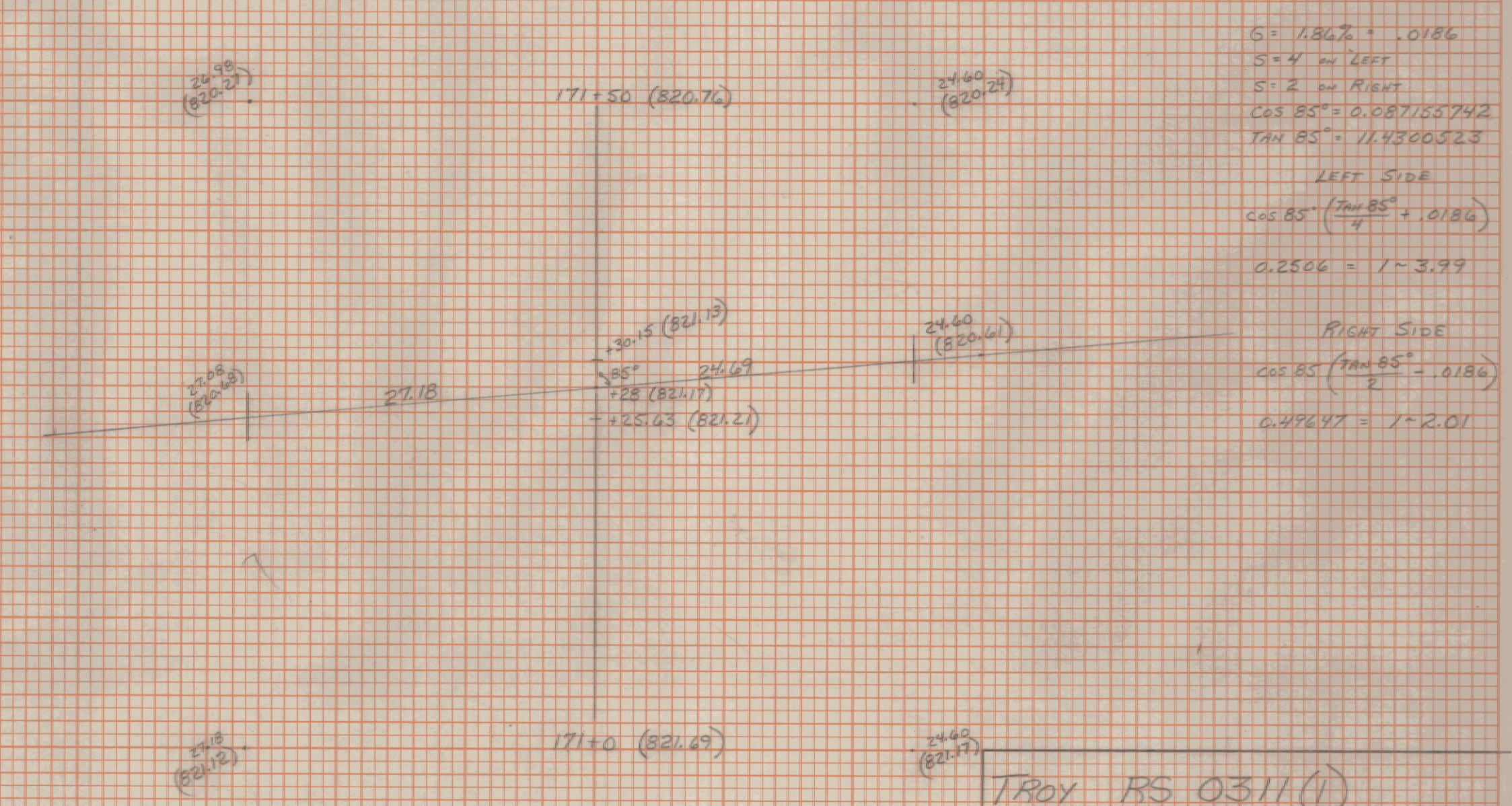
178+00 @ 90°  
 18" x 8" PCCSP (.064) w/ RCDI @ INLET  
 BOOK 2B PAGE 90 (DS 77)

TRENCH EARTH  
 2-5' x 3.6 x 1/2 = 26 CY  
 1/2-5' x 3.6 x 1/2 = 4.8 CY  
 30.8 CY  
 5" x 3" x 1/2" LTP



178+09 ASHEN  
 REMOVE EXISTING 12" CMP  
 BOOK 2B PAGE 96 (DS 78)

TRENCH EARTH  
 14" x 3.1 x 1/2 = 1.6 CY  
 1.6 CY



G = 1.86% = .0186  
 S = 4' on LEFT  
 S = 2' on RIGHT  
 Cos 85° = 0.087165742  
 Tan 85° = 11.9306823

LEFT SIDE  
 Cos 85° (Tan 85° + 0.186)  
 0.2506 = 1 - 3.99

RIGHT SIDE  
 Cos 85° (Tan 85° - 0.186)  
 0.49647 = 1 - 2.01