

STA	DEPTH	M/G	Q _{PT}
45+12	5.55	5.485	37 x 4.33 = 878.75
+50	5.42	5.34	50 x 4.33 = 1156.11
46+00	5.26	5.26	12 x 4.33 = 273.31
46+12	5.25		

$0.5 \times 4.85 \times 37 \times 4.33 = 116.55$
 $0.5 \times 3.4 \times 50 \times 4.33 = 184.92$
 $0.5 \times 2.6 \times 12 \times 4.33 = 29.26$

T.E pipe
 $\frac{2555.40}{27} = 94.64$
 $\frac{2390.28}{27} = 88.53$

Ex. Trench Earth From Pipe Area Outlet $(5 \times 4.33) + (1.14 \times 4.33 \times 1.5) = 29.05$
 Inlet $(5 \times 4.33) + (2.44 \times 4.33 \times 1.5) = 24.51$
 vol. $\frac{(29.05 + 24.51) \times 99}{2} = 96.21 \text{ cy} + 9.74 \text{ cy} = 105.95 \text{ cy}$ RD 6/18/07

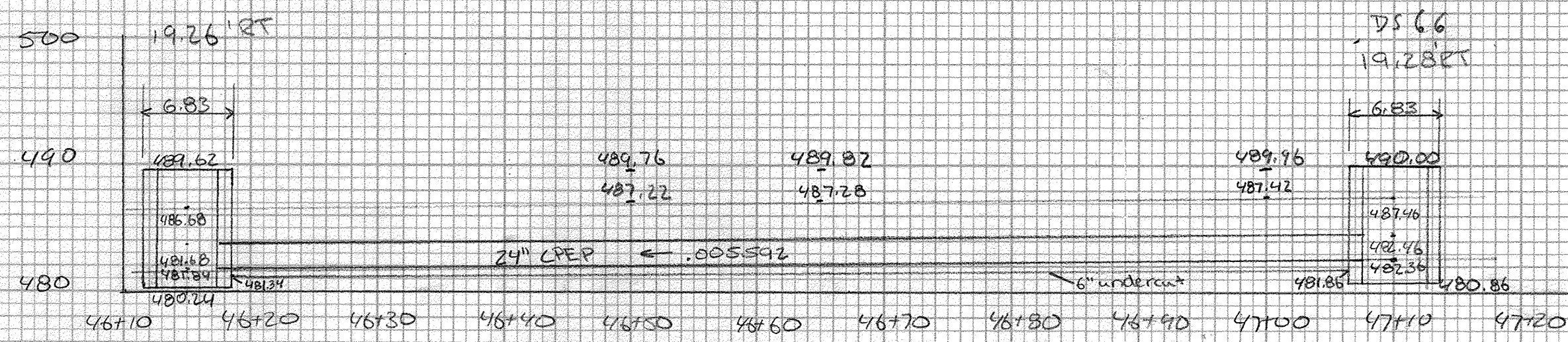
DI @ 46+15 Area $(3.14 \times 3.42^2) = 36.73$
 vol. $\frac{(36.73 \times 5) + (36.73 \times 1.14 \times 1.5)}{2} = 9.79 \text{ cy}$
 $\frac{50.24}{2} = 25.12$
 $\frac{50.24}{2} = 25.12$
 $\frac{1.34}{2} = 0.67$
 $\frac{1.34}{2} = 0.67$
 94.64 cy T.E pipe 1/24/08
 110.22 cy 1/07/08
 103.25 cy 1/07/08

Granular Backfill

$\frac{4.33 \times 1.17 \times 97}{2} = 101.42$
 $\frac{3.14 \times 1.17 \times 97}{2} = 208.47$

$\frac{492.95}{27} = 18.26 \text{ cy}$ RD 6/28/07
 $\frac{10.47}{27} = 0.39 \text{ cy}$ 9/24/07
 $\frac{282.9}{27} = 10.48 \text{ cy}$ 9/24/07

DR # 47+10 RT ~ 46+15 RT 24" CPEP 93'



Ex. Trench Earth From Pipe Area Outlet $(5 \times 4.33) + (2.29 \times 4.33 \times 1.5) = 28.86$
 Inlet $(5 \times 4.33) + (2.01 \times 4.33 \times 1.5) = 28.55$
 vol. $\frac{(28.86 + 28.55) \times 88}{2} = 80.52 \text{ cy} + 10.07 \text{ cy} = 90.59 \text{ cy}$ RD 6/29/07

DI @ 47+10 Area $(3.14 \times 3.42^2) = 36.73$
 vol. $\frac{(36.73 \times 5) + (36.73 \times 1.51 \times 1.5)}{2} = 10.07 \text{ cy}$
 $\frac{1.51}{2} = 0.755$
 $\frac{1.51}{2} = 0.755$
 72.24
 72.24
 9.88
 82.12
 7.88 cy 1/24/08
 7.88 cy 1/24/08

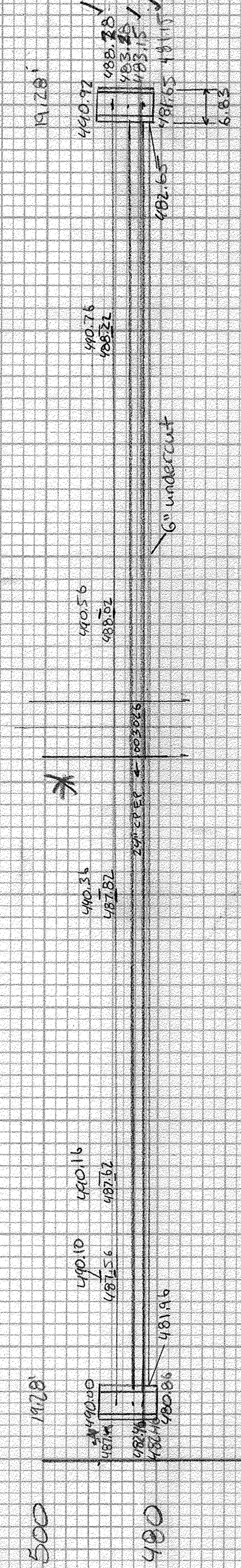
Granular Backfill

$\frac{4.33 \times 1.17 \times 88}{2} = 636.34$
 $\frac{3.14 \times 1.17 \times 88}{2} = 189.13$

$\frac{447.21}{27} = 16.56 \text{ cy}$ RD 6/29/07
 $\frac{255.4}{27} = 9.45 \text{ cy}$
 $\frac{256.67}{27} = 9.51 \text{ cy}$ T.B.C. 12/6/07

TOTAL T.E 92.00 cy 1/11/11

DR # 49+40 RT ~ 47+10 RT 24" CPEP 228'



Ex. Trench Earth from Pipe Area Outlet $(5 \times 4.33) + (2.29 \times 4.33 \times 1.5) = 28.86$
 Inlet $(5 \times 4.33) + (2.01 \times 4.33 \times 1.5) = 28.55$
 vol. $\frac{(28.86 + 28.55) \times 228}{2} = 821.2 \text{ cy}$
 $\frac{1.51}{2} = 0.755$
 $\frac{1.51}{2} = 0.755$
 72.24
 72.24
 9.88
 82.12
 7.88 cy 1/24/08
 7.88 cy 1/24/08

DI @ 49+40 Area $(3.14 \times 3.42^2) = 36.73$

Granular Backfill

$\frac{4.33 \times 1.17 \times 228}{2} = 1102.89$
 $\frac{3.14 \times 1.17 \times 228}{2} = 328.29$

20/11/07
 9/12/07