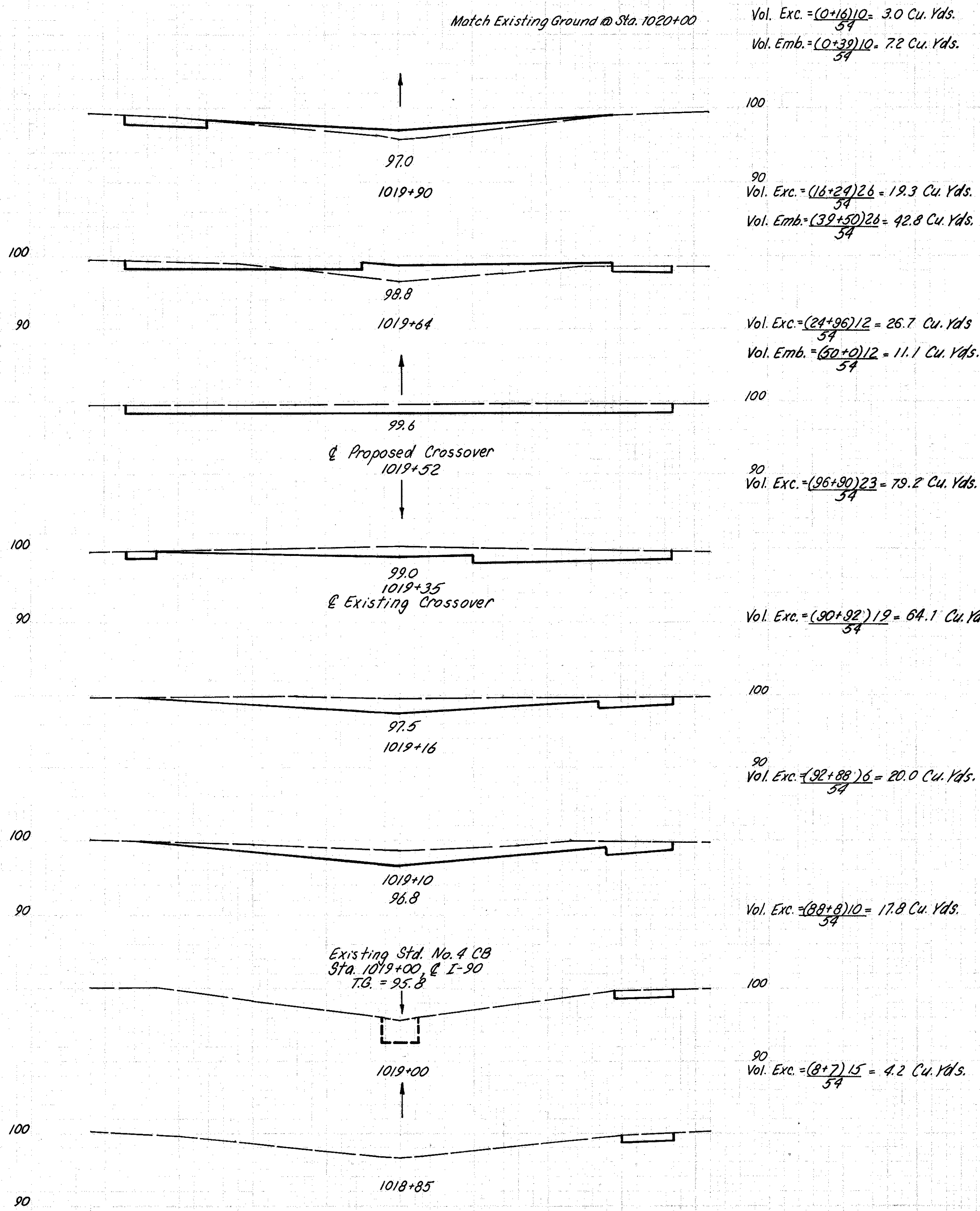


QUANTITIES
 Made: REM 5-12-72
 Ckd: RAE 6-1-72

FED. RD. DIVISION	STATE	PROJECT	87
5	OHIO		III

LAKE COUNTY
 LAK-90-3.56



Vol. Exc. = $\frac{(0+16)10}{34}$ = 3.0 Cu. Yds.
 Vol. Emb. = $\frac{(0+39)10}{34}$ = 7.2 Cu. Yds.

Vol. Exc. = $\frac{(16+24)26}{34}$ = 19.3 Cu. Yds.
 Vol. Emb. = $\frac{(39+50)26}{34}$ = 42.8 Cu. Yds.

Vol. Exc. = $\frac{(24+96)12}{34}$ = 26.7 Cu. Yds.
 Vol. Emb. = $\frac{(50+0)12}{34}$ = 11.1 Cu. Yds.

Vol. Exc. = $\frac{(96+90)23}{34}$ = 79.2 Cu. Yds.

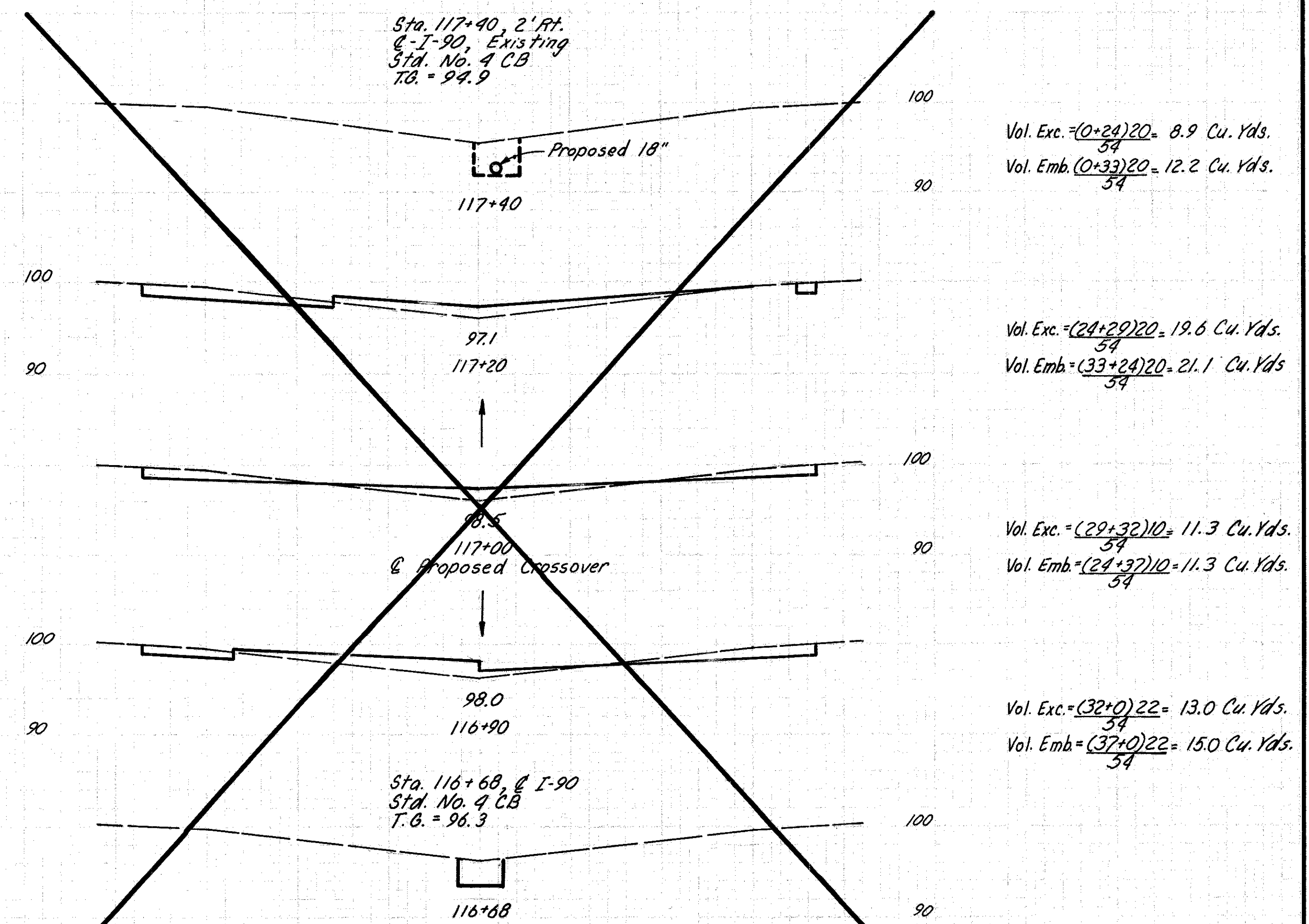
Vol. Exc. = $\frac{(90+92)19}{34}$ = 64.1 Cu. Yds.

Vol. Exc. = $\frac{(92+88)16}{34}$ = 20.0 Cu. Yds.

Vol. Exc. = $\frac{(88+9)10}{34}$ = 17.8 Cu. Yds.

Vol. Exc. = $\frac{(8+7)15}{34}$ = 4.2 Cu. Yds.

TOTAL VOLUME
 Excavation = 234 Cubic Yards
 Embankment = 61 Cubic Yards
 Seeding & Mulching = 425 Sq. Yds.
 (For Plan View See Sheet 28.)



Vol. Exc. = $\frac{(0+24)20}{34}$ = 8.9 Cu. Yds.
 Vol. Emb. = $\frac{(0+33)20}{34}$ = 12.2 Cu. Yds.

Vol. Exc. = $\frac{(24+29)20}{34}$ = 19.6 Cu. Yds.
 Vol. Emb. = $\frac{(33+24)20}{34}$ = 21.1 Cu. Yds.

Vol. Exc. = $\frac{(29+32)10}{34}$ = 11.3 Cu. Yds.
 Vol. Emb. = $\frac{(24+37)10}{34}$ = 11.3 Cu. Yds.

Vol. Exc. = $\frac{(32+0)22}{34}$ = 13.0 Cu. Yds.
 Vol. Emb. = $\frac{(37+0)22}{34}$ = 15.0 Cu. Yds.

At Sta. 117+00, West Bound Lane, Left Edge of Pavement, Elevation = 100.00

S-105
 VOID

~~TOTAL VOLUME
 Excavation = 53 Cubic Yards
 Embankment = 60 Cubic Yards
 Seeding & Mulching = 147 Sq. Yds.
 (For Plan View See Sheet 30.)~~

At 1018+00 West Bound Lane, Left Edge of Pavement, Elevation = 100.00

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
 CONSULTING ENGINEERS
 KANSAS CITY CLEVELAND NEW YORK