

QUANTITIES
Made: REM 4-27-72
Ckd: ERH 5-18-72

Vol. Exc. = 0
Vol. Emb. = $\frac{(0+85)40}{54} = 63.0$ Cu. Yds

Vol. Emb. = $\frac{(0+23)25}{54} = 33.8$ Cu. Yds.

Vol. Emb. = $\frac{(23+8)58}{54} = 87.0$ Cu. Yds.

Vol. Emb. = $\frac{(8+10)62}{54} = 20.7$ Cu. Yds.

Vol. Emb. = $\frac{(10+17)27}{54} = 13.5$ Cu. Yds.

Vol. Emb. = $\frac{(17+32)62}{54} = 56.2$ Cu. Yds.

Vol. Emb. = $\frac{(32+42)13}{54} = 17.8$ Cu. Yds.

Vol. Emb. = $\frac{(42+92)53}{54} = 131.6$ Cu. Yds.

Vol. Emb. = $\frac{(92+0)39}{54} = 66.5$ Cu. Yds.

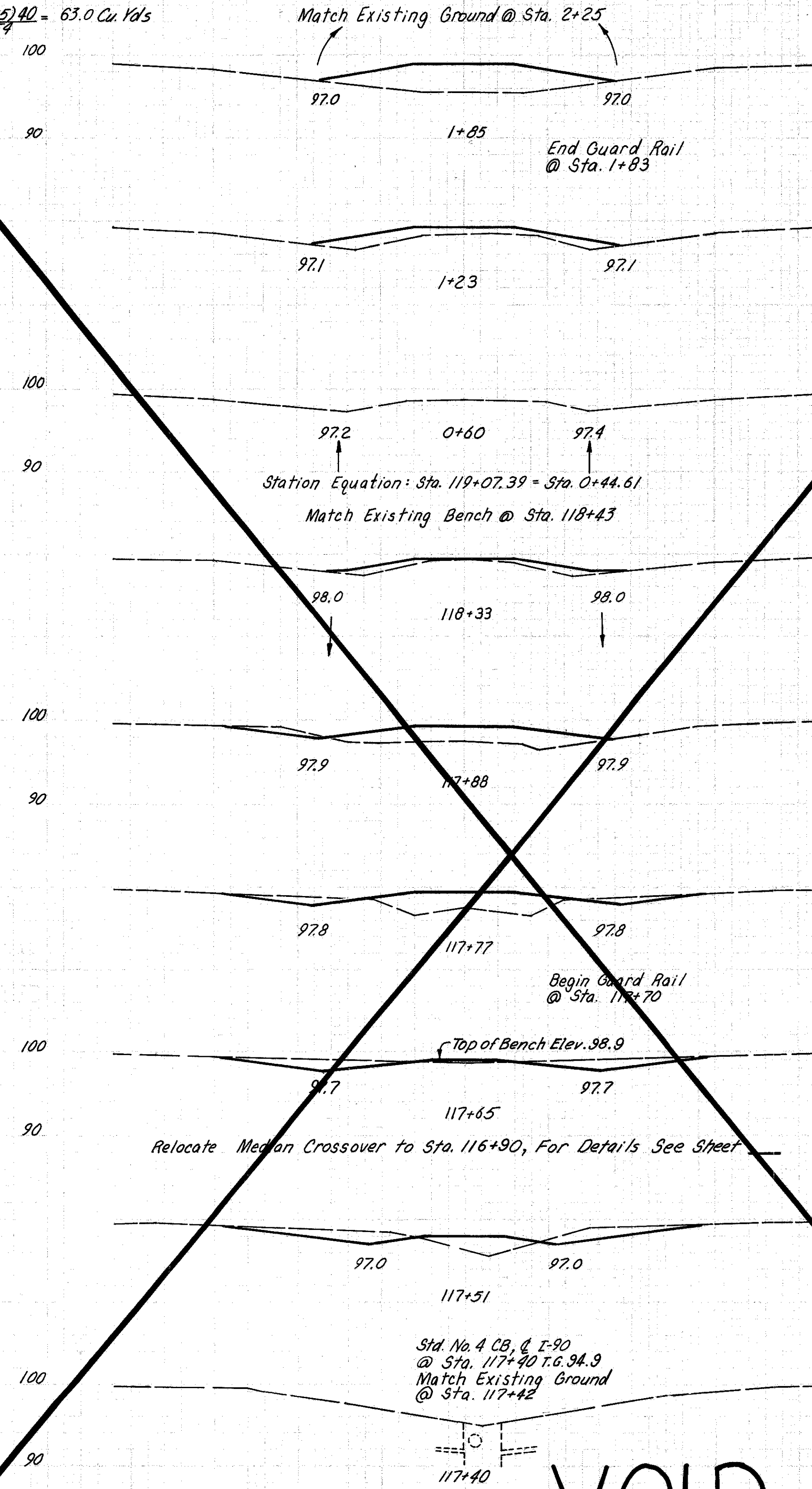
TOTAL VOLUME
Excavation = 0
Embankment = 427.1 Cubic Yards
Seeding & Mulching = 987.7 Sq. Yds.
(For Plan View See Sheet 29.)

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

BATES RD.

FED. RD. DIVISION	STATE	PROJECT	80 III
5	OHIO		

LAKE COUNTY
LAK.-90-3.56



Vol. Exc. = 0
Vol. Emb. = $\frac{(85+39)62}{54} = 142.5$ Cu. Yds

Vol. Exc. = 0
Vol. Emb. = $\frac{(39+0)63}{54} = 45.5$ Cu. Yds

Vol. Exc. = 0
Vol. Emb. = $\frac{(17+0)10}{54} = 3.2$ Cu. Yds.

Vol. Exc. = $\frac{(0+9)45}{54} = 7.5$ Cu. Yds
Vol. Emb. = $\frac{(17+66)45}{54} = 69.2$ Cu. Yds.

Vol. Exc. = $\frac{(9+19)11}{54} = 5.7$ Cu. Yds.
Vol. Emb. = $\frac{(66+61)11}{54} = 25.9$ Cu. Yds.

Vol. Exc. = $\frac{(19+38)12}{54} = 12.7$ Cu. Yds.
Vol. Emb. = $\frac{(61+15)12}{54} = 16.9$ Cu. Yds.

Vol. Exc. = $\frac{(38+41)14}{54} = 20.5$ Cu. Yds.
Vol. Emb. = $\frac{(15+27)14}{54} = 10.9$ Cu. Yds.

Vol. Exc. = $\frac{(41+0)9}{54} = 6.8$ Cu. Yds.
Vol. Emb. = $\frac{(27+0)9}{54} = 4.5$ Cu. Yds.

At Sta. 117+00 West Bound Lane, Left Edge of Pavement, Elevation = 100.0

COUNTY LINE RD.

VOID

(For Plan View See Sheet 30.)

TOTAL VOLUME
Excavation = 53.2 Cubic Yards
Embankment = 381.6 Cubic Yards
Seeding & Mulching = 947.9 Sq. Yds.