1. **Name of Work:** Remodeling/Modernization from RD 8300-43000 M of Main Ravi Canal by way of providing Cemen Concrete lining.

S.No.	Particulars of Items	Amount
1.	Clearing jungle including uprooting of rank, vegetation, grass, brushwood, trees and saplings of girth upto 30cm measured at height of 1m above ground level & removal of rubbish material upto a distance of 50m outside the periphery of the area cleared:- $\bar{2}$ x 100m x (3+4)m = 1400m^2@70% = 980m^2@ Rs 1249.10/100m^2	12241/-
2.	Silt clearance from canal. Inclusive of initial lead and lift (50m & 1.5m respectively): Qty.: $\bar{1}$ x 100 m x 1.938 m^2 = 193.80 m^3@ Rs 111.00/m^3	21511/-
3.	Demolishing cement concrete manually/by mechanical means including disposal of material within 50 meters lead:- 1:3:6 or richer mix L/Side = $\bar{1}$ x 100m x 6.56m x 0.10m = 65.60m^3 R/Side = $\bar{1}$ x 100m x 6.56m x 0.10m = 65.60m^3 Bed = $\bar{1}$ x 100m x 3m x 0.10m = 30.00m^3 Top = $\bar{2}$ x 100m x 0.45m x 0.10m = 9.00m^3 Total = 170.2m^3@ 50% = 85.10 m^3@ Rs 1725.20/m^3	146814/-
4.	Prepare and dressing side slopes and bed of canals for lining: (a) L/Side = $\bar{1}$ x 100m x 6.56m = 656m^2 R/Side = $\bar{1}$ x 100m x 6.56m = 656m^2 Total = 1312.00m^2@ Rs 33.20/m^2 (b) Bed = $\bar{1}$ x 100m x 3m = 300.00m^2 Top = $\bar{2}$ x 100m x 0.45m = 90m^2 Total = 390.00m^2@ Rs 27.45/m^2	43558/- 10705/-
5.	Excavating conglomerate (for drains and bed sleepers under the lining): ($\overline{33}$ + 1) x 17.02 m x 0.30 m x 0.10 m = 17.34 m^3 $\bar{4}$ x 89.80 m x 0.30 m x 0.10 m = 10.76 m^3 Total = 28.10 m^3 @ Rs 1665.35/m^3	46796/-
6.	Providing and fixing upto floor five level precast cement concrete solid blocks including hoisting setting in position in cement mortar 1:3 (1 cement : 3 coarse sand) , cost of required centering, shuttering and curing complete: 1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20 mm nominal size) Bed-Sleepers: Qty. vide item no. 5 = 28.10 m^3 @ Rs 12876.15/m^3	361819/-
7.	Providing and laying 10 mm thick , 1 cement ; 3 fine sand sand mortar slurry on beds and side slopes (prior to laying In-situ concrete lining): 100 m x 17.02 m = 1702.00 m^2 @ Rs 77.75/m^2	132330/-
8.	Extra for every additional lift (2 nos.) of 1.5 mtr. or part thereof in: Qty. vide item no.3 = 85.10 m^3 Qty. vide item no.2 = 193.80 m^3 Total = 278.90 m^3@ Rs 179.50/m^3	50062/-
9.	Providing and laying in-situ concrete lining using M-20 nominal mix concrete (max. size of aggregate: 20mm nominal): (a) On slopes: Qty. vide item no.4(a) = 131.2m^3@ Rs 7255.90/m^3 (b) Horizontal: Qty. vide item no.4(b) = 39.00m^3@ Rs. 6911.80/m^3	951974/- 269560/-

10.	Filling expansion joints (12mm wide) with special Impervious hot-pour:- Qty.: (a) Perimeter = $\overline{33}$ x 17.0m x 0.012m x 0.05m = 0.34m^3 (b) Longitudinal = $\bar{4}$ x 100m x 0.012m x 0.05m = 0.24m^3 Total = 0.58m^3 @ Rs 96506.60/m^3				55973/-
11.	Curing canal lining for 28 days: For Bed = $\bar{1}$ x 100m x 3m = 300m^2 Top = $\bar{2}$ x 100m x 0.45m = 90m^2 Total = 390m^2@ Rs 20.15/m^2 For Slope = $\bar{2}$ x 100m x 6.56m = 1312m^2@ Rs 62.85/m^2				7858/- 82459/-
12.	Scaffolding for canal lining: $\bar{2}$ x 100m x 6.56m = 1312m^2@ 80% = 1049.6m^2@ Rs 4.75/m^2				4985/-
	MATERIAL STATEMENT				
Item No.	Qty.	Rate	Cement	Sand	Bajree
6.	170.20m^3	8.00 bags	1361.60 bags	76.59m^3	153.18m^3
13.	Carriage of Sand and Bajree at an avg. lead of 10 km by MT: Qty.: 229.77m^3@ Rs 279.04/m^3				64115/-
				Total for 100m lining = Cost for 1m lining = Rs 22627/- Total length of lining = 22000M	2262760/- 5656.75 lacs

Jr. Engineer **Asstt. Executive Engineer** **Executive Engineer**
RCC Upper Division
Kathua

Typical X-Sec of Main Ravi Canal