Muck Quantity Details

> ## For Pump House No. 1 (Under Gwalior Forest area)

Total Length of MS Pipe Passing the Forest = 1.61 Kms

Dia of MS Pipe Coming under Forest Area = 1900 mm

Quantity of Excavation as per attached Drawing,

Size of Trench = 3.00m x 2.50m

Total Volume of Soil Excavated = 3.00 x 2.50 x 1.61 x 1000
                    Total Quantity = 12075 Cum

Refilling will be done after laying of Pipe, So the Quantity Remaining After Laying Should be Equal to Total Volume of Pipe,
Which is = $\pi/4$ x 1.9^2 x 1.61 x 1000 = 4563 Cum

Soil Spread Equally 0.50m height over Pipe Line in 6.00m width For approach road purpose, Hence Total Qty Req. For Approach road Purpose is = 1.16 x 1000 x 6.00 x 0.50 = 4830 Cum

So all Soil will be utilized, Hence no muck generate in Pump House No.1 under Gwalior Forest Area.

(Anil Dixit)
Project Administrator
Maa Ratangarh PIU WRD
Mau, Distt. Bhind (M.P.)

➢ **For Pump House No. 2 (Under Datia Forest area)**

Total Length of MS Pipe Passing the Forest = 10.10 Kms

Dia of MS Pipe Coming under Forest Area = 1900 mm

Quantity of Excavation as per attached Drawing,

Size of Trench = 3.00m x 2.50m

Total Volume of Soil Excavated = 3.00 x 2.50 x 10.10 x 1000
                    Total Quantity = 75750 Cum

Refilling will be done after laying of Pipe, So the Quantity Remaining After Laying Should be Equal to Total Volume of Pipe,
Which is = $\pi/4$ x 1.9^2 x 10.10 x 1000 = 28622 Cum

Soil Spread Equally 0.50m height over Pipe Line in 6.00m width For approach road purpose, Hence Total Qty Req. For Approach road Purpose is = 10.10 x 1000 x 6.00 x 0.50 = 30300 Cum

So all Soil will be utilized, Hence no muck generate in Pump House No.2 under Datia Forest Area.

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Excavation Trench Detail

NGL

2.500

Ø1.900

2.500

3.000