

**NAME OF THE PROPOSAL : CONSTRUCTION OF ROAD FROM
GARHSAMNABANJ TO MARILA RAJUNDI**

MUCK DISPOSAL PLAN

1. Muck Disposal Plan

Muck disposal plan is for the construction of road by which muck would be generated. The excavation shall result in large quantity of excavated material i.e. muck which have to be evacuated, disposed off and roller compacted or laid on mild slopes with the excavation work to such designated areas where the muck piles do not substantially interfere with either environment / ecology or the river flow regime and do not cause turbidity impairing the quality of water. The disposal of muck has to be scientifically planned keeping in view the economic aspects necessitating nearness to the muck generating component of work, which understandably reduce the travel time of dumpers, less interference to surface flow and ground water aquifer and disposition of habitation.

Based on the quantities of excavation a muck management plan, therefore, has been formulated to manage the disposal of muck and restore such areas from further degradation of the environment. During construction of the project, quantities of excavation will be carried out and shall be dumped in designated areas to provide stable slopes.

2. Quantity of Muck disposal and its reuse

During the construction of the project, muck will be generated. Total quantity of muck / debris, generated due to the project in the forest land, shall be 42,328 cum. Out of the total muck generated, 25,397 cum shall be utilized on project work leaving 16,931 cum to be dumped. It is proposed to utilize about 60% of the excavated material for construction of various project components. The balance 40% shall have to be disposed off away from sites to make available the site clear. The muck shall be properly roller compacted and dumped on slopes and treated to mix and match with the surrounding environment with least change in landscape. Tab1e-1 indicates for muck disposal quantity below:

W
JE

D
J.E

Key
Executive Engineer
PMGSY Division
Ramnagar

Table - 1

S No	RD (Forest Land)	Length of Road in Forest (m)	Quantity of muck generated (cum)	Quantity of Muck To Be Used In Road Construction (30 % Stone + 30 % Soil) (cum)	Quantity of muck to be Dumped (cum)
1	0/0 - 2/225	2225	35992	21595	14397
2	2/675 - 3/300	625	6336	3802	2534
Total		2850	42328	25397	16931

3. Selection of Muck Disposal Site

The selection of muck disposal sites was carried out considering the quantity of the muck, landscape, cost effectiveness, nearness to source of generation. All the dumping locations shall be well supported at base and at higher elevation by suitable retaining structures. Three (3) muck dumping sites have been identified on non-forest private land matching the criteria. The details of dumping sites along with their total capacity and amount of muck to be disposed are enumerated in Table 2.

M/E *J.E*

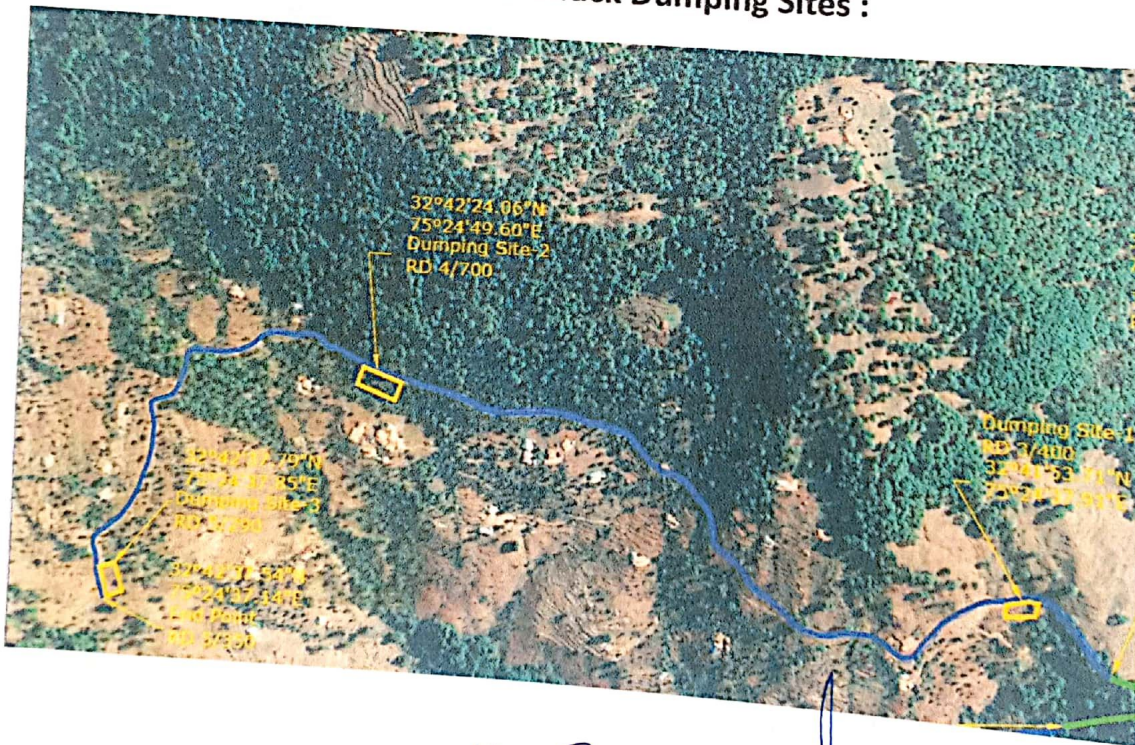
[Signature]

Executive Engineer
PMGSY Division
Ramnagar

Table-2

S No	Location of Dumping Place	Length, Width of Dumping Place (Area in sqm)	Height of Dump Expected (m)	Quantity of Muck that can be Disposed (cum)
(1)	(2)	(3)	(4)	(5) = (3) x (4)
1	3/400	50 x 35 = 1750	3.2	5600
2	4/700	50 x 35 = 1750	3	5250
3	5/290	50 x 35 = 1750	3.5	6125
Total				16975

Layout Plan of Muck Dumping Sites :



V
J/E

8
J/E

(Handwritten Signature)

Executive Engineer
PMGSY Division
Ramnaqar

4. Description on Muck Disposal Sites

Muck Disposal Site 1

The proposed muck dumping site-1 is located on the left hand side of the road on the non-forest private land. The proposed chainage of the Muck Dumping Site-1 is 3/400 to 3/450. The plan area of Dumping Site-1 is 0.175 ha.

Muck Disposal Site 2

The proposed muck dumping site-2 is located on the left hand side of the road on the non-forest private land. The proposed chainage of the Muck Dumping Site-2 is 4/700 to 4/750. The plan area of Dumping Site-2 is 0.175 ha.

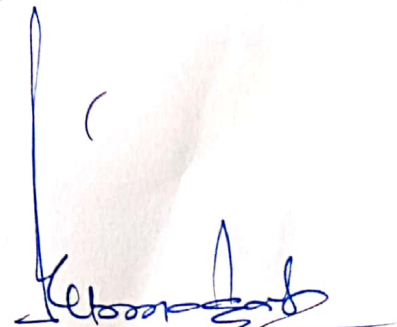
Muck Disposal Site 3

The proposed muck dumping site-3 is located on the left hand side of the road on the non-forest private land. The proposed chainage of the Muck Dumping Site-1 is 5/290 to 5/340. The plan area of Dumping Site-1 is 0.175 ha.

5. Implementation of Engineering Measures At Muck Disposal Sites

It has been observed that after disposal of muck, it creates problem as it is susceptible to scattering unless the muck disposal yards are supported with engineering measures such as protective walls. All the dumping sites need proper handling to avoid spilling of muck while dumping and in the post dumping stages. All the muck disposal sites have to be developed from the ground level either by providing stone masonry or by gabion structure. Retaining Walls will be provided to support disposed muck. In all the muck dumping sites, the muck brought in by dumpers shall be dumped and manually spread and roller compacted in such a way that rock mass is properly stacked behind the R/Walls with minimum of voids.

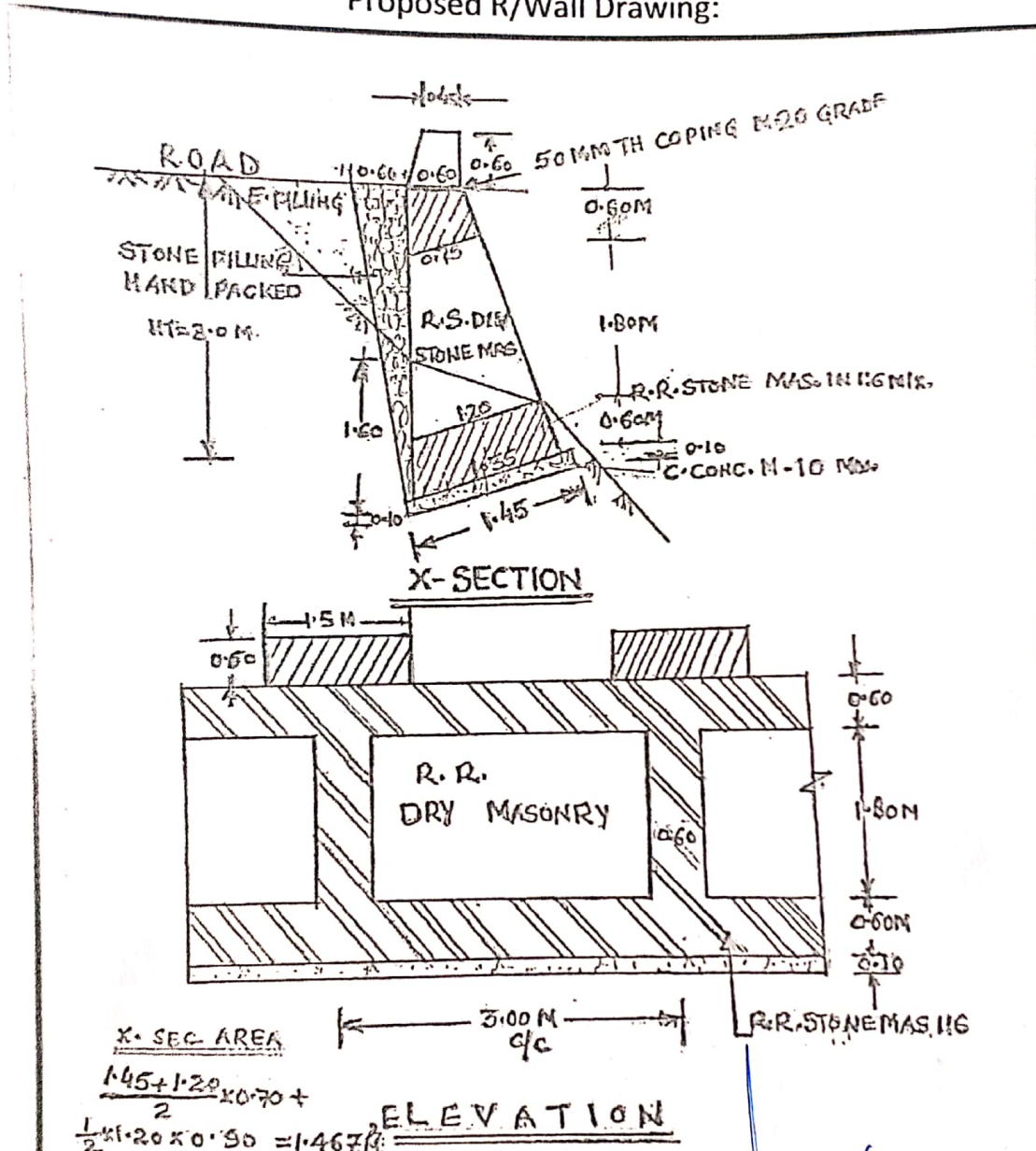

M
JE
S
JE


Executive Engineer
PMGSY Division
Ramnagar

6. Budget for Muck Disposal Plan :

500 Rmt of Semi Pucca R/Wall has been proposed in the DPR of road. The quantity of R/Wall required for the support of disposed muck will be utilized from the already proposed Semi Pucca R/Wall of length 500 Rmt. Hence the cost of protective works required for disposed muck will be beared from the protective works already proposed in the DPR.

Proposed R/Wall Drawing:



U/S
J/E

[Signature]
Executive Engineer
PMGSY Division
Ramnagar

Status of Land of Muck Dumping Sites :

S No	LOCATION	STATUS OF LAND	LENGTH (in m)	WIDTH (in m)	AREA (in Ha)
1	RD 3/400	Non Forest Private Land	50	35	0.175
2	RD 4/700	Non Forest Private Land	50	35	0.175
3	RD 5/290	Non Forest Private Land	50	35	0.175
Total					0.525

M
JE

S
J.E

[Signature]
Executive Engineer
PMGSY Division
Rampagar