

Muck Disposal Index

Muck Disposal Plan for Up-gradation to two lane with paved shoulders from Km 0.000 (Dharasu) to Km 24.300 (Silkyara bend) section of NH-94 under EPC Mode.

- Calculation of Muck quantity and available dumping Yards
- Nature of Land choosen for Muck Disposal
- Cross section of Muck Disposal Plan

रिजिंग
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Jag
11/10/2018

✓
अधिशारी अभियन्ता
रा०मा० खण्ड, लो०नि०वि०
बड़कोट (उत्तरकाशी)

Muck Disposal Plan

A. Detail as per old proposal no.- 24549

S. No.	Particulars	Quantity (Cum)	Remark
1	Total muck generated for old proposal no. 24549 (NH-134 Km 0.00 to 24.30) as per original muck dumping plan along with 40% swell factor	1196079.50	
2	Total muck to be disposed for proposal no. 24549 (NH-134 Km 0.00 to 24.30) as per original muck dumping plan considering 20% reuse of material	956863.60	
3	Capacity of 6 nos available dumping zones (only 6 nos dumping were available for dumping out of 7 nos approved in old proposal no.- 24549)	1170250.00	
4	Muck already disposed in 6 nos available dumping zones	1170250.00	630033.65 cum muck from hill side cutting in 16km length and 540216.35 cum muck from slip clearance.
5	Already reused material for construction of road (@ 20% of muck generated from hill side cutting)	157508.41	
6	Balance undisposed muck remaining from old proposal no. 24549 (as hill side cutting is remaining in 8.3Km length.)	408537.43	Considering swell factor @ 40%

B. Detail as per new proposal no.- 36902

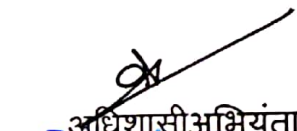
S. No.	Particulars	Quantity (Cum)	Remark
1	Balance undisposed muck from remaining hill side cutting of 8.3km length.	408537.43	Considering swell factor @ 40%.
2	Reuse of material for construction of road	81707.48	
3	Total quantity of muck to be dumped in proposed 3 nos dumping zones as per new proposal no. 36902	326829.95	

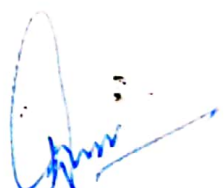
Location and Capacity of Dumping Yards

Sr. No.	Location	Size	Type of Land	Capacity of Dumping Yard (Cum)
1	Km 2	(105m x 116m x 60m) x 1/3	Reserve Forest	243600.00
2	Km 14	(71.50m x 77m x 40m) x 1/3	Reserve Forest, Civil land, Nap Land	73406.66
3	Km 14	(50m x 90m x 25m) x 1/3	Civil Land , Nap Land	37500.00
	Total			354506.66

Sr. No.	Total Remaining Debris	Reuse material for road construction	Total disposal in Dumping Zone	Capacity of the Dumping Zone	Balance Debris
1	408537.43	81707.48	326829.95	354506.66	(-) 27676.71

❖ The Total Muck generated is less than the capacity of Dumping Yards Proposed.


अधिसासी अभियंता
Executive Engineer
एन. एच. पी. डिवीजन
बड़वोद, उत्तराखण्ड (U.K.)



प्रधान सचिव अधिकारी
उत्तराखण्ड वन प्रभाग
उत्तराखण्ड

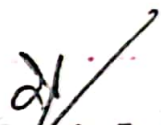
ABSTRACT OF COST

**NAME OF WORK – REHABILITATION AND UPGRADATION 2-LANE/2-LANE WITH
PAVED SHOULDER CONFIGURATION & STRENGTHENING OF NATIONAL HIGHWAYS
NO. 94 FROM KM 0.00 (DHARASU BAND) TO KM 24.300(SILKYARA BAND) IN THE
STATE OF UTTARAKHAND.**

SL NO.	ITEM OF WORK	AMOUNT
1	2	3
1	REHABILITATION AND UPGRADATION 2-LANE/2-LANE WITH PAVED SHOULDER CONFIGURATION & STRENGTHENING OF NATIONAL HIGHWAYS NO. 94	Rs. 7676108.80
	Add 12 % G.S.T on item No-1	921133.06
	Total	Rs. 8597241.86


Junior Engineer


Assistant Engineer
N. H. Division , P.W.D.
Barkot (Uttarkashi)



Executive Engineer
N. H. Division , P.W.D.
Barkot (Uttarkashi)

BILL OF QUANTITY

**NAME OF WORK - REHABILITATION AND UPGRADATION 2-LANE/2-LANE
WITH PAVED SHOULDER CONFIGURATION & STRENGTHENING OF
NATIONAL HIGHWAYS NO. 94 FROM KM 0.00 (DHARASU BAND) TO KM
24.300(SILKYARA BAND) IN THE STATE OF UTTARAKHAND.**

Sl. No.	ITEMS OF WORK	QTY.	UNIT	RATE	UNIT	AMOUNT
1	2	3	4	5	6	7
1	Providing and Laying of Mechanically Woven Double Twisted Hexagonal shaped Gabions of galvanized steel, of size 3mX1mX1m with two diaphragms at 1m interval, having mesh opening 100mmx120 mm, mesh wire diameter 3 mm for gabions, edge/selvedge wire diameter 3.9 mm and lacing wire diameter 2.2 mm. (The work includes filling boulders in the gabions).					
		1013.00	Nos	7577.60	Nos	7676108.80
				Total		7676108.80


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DETAIL OF MEASUREMENT

NAME OF WORK - REHABILITATION AND UPGRADATION 2-LANE/2-LANE WITH PAVED SHOULDER CONFIGURATION & STRENGTHENING OF NATIONAL HIGHWAYS NO. 94 FROM KM 0.00 (DHARASU BAND) TO KM 24.300(SILKYARA BAND) IN THE STATE OF UTTARAKHAND.

Sl. No	Item of Work	No.	Length	Width	Hight/Depth	Qty.	Unit
1	2	3	4	5	6		
1	Providing and Laying of Mechanically Woven Double Twisted Hexagonal shaped Gabions of galvanized steel, of size 3mX1mX1m with two diaphragms at 1m interval, having mesh opening 100mmx120 mm, mesh wire diameter 3 mm for gabions, edge/selvedge wire diameter 3.9 mm and lacing wire diameter 2.2 mm. (The work includes filling boulders in the gabions).						
	Gabions for protection of Dumping yard						
	Chainage- 2+00 (105.00 m)	1x5	105			525.00	Nos
	Chainage- 13+530 (72.00 m)	1x4	72			288.00	Nos
	Chainage- 13+730 (50.00 m)	1x4	50			200.00	Nos
				TOTAL		1013.00	Nos


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PWD UTTARAKHAND
SCHEDULE OF RATES

SOR :- MISCELLANEOUS
For Block 04 Dunda

Year :- FY. 2018-19
Effective From:-01-May-2018

Sl. No.	Description	Rate	Unit
1-7	Providing and laying of wire crates 3.00x1.50x1.50 in size with GI wire conforming to IS: 280 & IS:4826 in 150mm x 150mm mesh laid with stone boulders. as per direction of Engineer-in- charge. (As per PWD Uttarakhand specifications)		
1-7-1	GI wire 10 gauge BWG	1,508.10	Cum
1-7-2	GI wire 8 gauge BWG	1,689.90	Cum
1-8	Providing and Laying of Mechanically Woven Double Twisted Hexagonal shaped Gabions (Zinc plus PVC coated), of size 3mX1mX1m with two diaphragms at 1m interval, having mesh opening 100mmx120 mm, mesh wire diameter 2.7mm/3.7mm, edge/selvedge wire diameter 3.4/4.4 mm and lacing wire diameter 2.2/3.2 mm. (The work includes filling boulders in the gabions).	7,395.80	No.
1-9	Providing and Laying of Mechanically Woven Double Twisted Hexagonal shaped Gabions of galvanized steel, of size 3mX1mX1m with two diaphragms at 1m interval, having mesh opening 100mmx120 mm, mesh wire diameter 3 mm for gabions, edge/selvedge wire diameter 3.9 mm and lacing wire diameter 2.2 mm. (The work includes filling boulders in the gabions).	7,577.60	No. ✓
1-10	Clearance of land slides (Slip Clearance)		
1-10-1	Clearance of land slides in soil and ordinary rock by a bull-dozer D 80 A-12, 180 HP and disposal of the same on the valley side complete as directed by the Engineer-in-charge.	69.40	Cum
1-10-2	Clearing of land slide in hard rock requiring blasting for 50 per cent of the boulders and disposal of the same on the valley side (Using bull-dozer) complete as directed by the Engineer-in-charge.	111.60	Cum
1-10-3	Slip clearance (by manual means) of loose earth and other small loose materials including disposal complete as directed by the Engineer-in-charge.	183.50	Cum
1-10-4	Slip clearance (by manual means) of earth and boulders including disposal complete as directed by the Engineer-in-charge.	184.20	Cum
1-10-5	Slip clearance (by manual means) of boulders only including disposal complete as directed by the Engineer-in-charge.	197.20	Cum
1-11	Setting Out (Construction of Reference Pillars, Back Pillars and Job Pillars)		
1-11-1	Construction of reference pillars with RR 1:6 stone masonry and Plastered with 1:4 Mortar, (totally under ground) of length 200mm, width 200mm and height 300mm) as per Fig. 1600.1 (b) and Technical Specification Clause 1602.1 of MORD specifications.	53.70	No.

KM-2

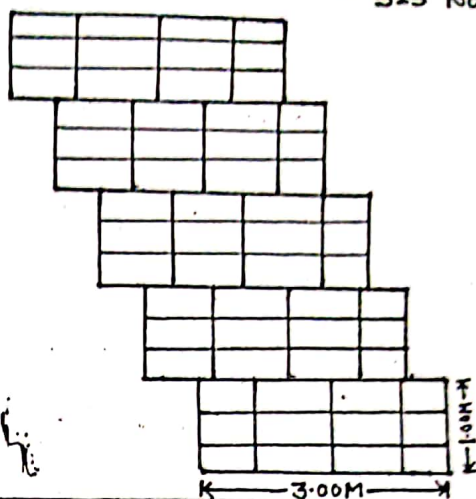
HILL SIDE

ROAD

60 M

HEIGHT OF GABION
INCREASES AS PER
HEIGHT OF DUMPPING
QUANTITIES AND PLANED
AT OPEN FACE OF DUMPING
MATERIALS

LENGTH - 105 MT
IN ONE ROW - 105 MT
1 MT
- 105 NO
SO IN 5 ROW - 5×105
- 525 NOS



KM (13+530)

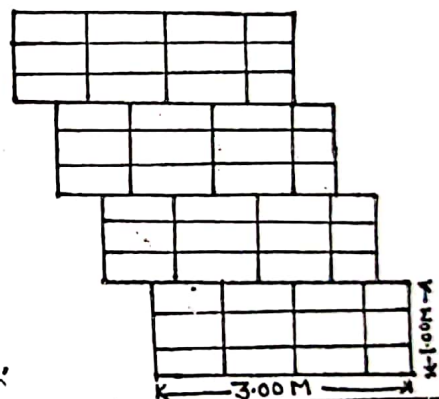
HILL SIDE

ROAD

40 M

HEIGHT OF GABION
INCREASES AS PER
HEIGHT OF DUMPPING
QUANTITIES AND PLACED
AT OPEN FACE OF DUMPING
MATERIALS

LENGTH - 72 MT
IN ONE ROW - 72 MT
1 MT
- 72 NO
SO IN 4 ROW - 4×72
- 288 NOS



(13+730)

HILL SIDE

ROAD

25 M

HEIGHT OF GABION
INCREASES AS PER
HEIGHT OF DUMPPING
QUANTITIES AND PLACED
AT OPEN FACE OF DUMPING
MATERIALS

LENGTH - 50 MT
IN ONE ROW - 50 MT
1 MT
- 50 NO
SO IN 4 ROW - 4×50
- 200 NOS

