

UTTARAKHAND

LOK NIRMAN VIBHAG

3rd CIRCLE P.W.D. PITHORAGARH

PROVINCIAL DIVISION P.W.D

PITHORAGARH





Name of work :- Muck disposal Plan for Construction of patharkhani-selktiya-Dubaliya-Vijarkanda-Dhuira motor road under state sector (leangth 4.500km)

ESTIMATED COST

8,732.89

LAC

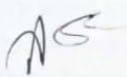
LIST OF OFFICERS

Sl. NO.	NAME	DESIGNATION	FULL SIGNATURE
1	Er. Ashish Dharmasaktu	J. Engineer	
3	Er. K.C. Joshi	Asstt. Engineer	
4	Er. H. Bhandari	Jr.Engineer (T)	
5	Er. N. C. Joshi	Executive.Engineer	


Specifications

Name of work :- Muck disposal Plan for Construction of patharkhani-selktiya-Dubaliya-Vijarkanda-Dhuira motor road under state sector (length 4.500km)

All the works shall be carried out as per detailed specifications of Public Works Department (Uttarakhand) and circulars issued by the Chief Engineer from time to time.


Junior Engineer

P.D.PWD Pithoragarh


Assistant Engineer

P.D.PWD, Pithoragarh


Executive Engineer


P.D.PWD Pithoragarh


**Name of work :- Muck disposal Plan for Construction of patharkhani-selktiya-
Dubaliya-Vijarkanda-Dhuira motor road under state sector (leangth
4.500km)**


Sr no	Discription of Item	Quantity	Unit	Remark
1	Material recived from hill site cutting $1/2 \times 4500 \times 3 \times 3 =$	20250.00	cum	
2	add 40% for swell factor	8100.00	cum	
3	Total quantity for disposal	28350.00	cum	

Reuse and disposal of material

1	RR stone masonry laid in 1:6 cement and sand mortar for Retaining wall 25% of total material	7087.50	cum	
2	RR stone masonry laid dry for Breast wall 25% of total material	7087.50	cum	
3	Hand packed Stone filling Behind Retaing wall and Breast wall 25% of R/wall and breast $= (a+b) \times 25\%$	3543.75	cum	
4	Construction of wire crate Total quantity used in Dumping yard	1845.00	cum	
5	Construction of parapet $(1 \times 100 \times 5 \times 3 \times 0.4 \times 5 \times 0.60) =$	972.00	cum	
6	Granular sub base $(1 \times 5 \times 400 \times 4.15 \times 0.12) =$	3585.60	cum	
7	Improvement of Road grade $(1 \times 5 \times 200 \times 6 \times 0.50)$	3000.00	cum	
	Total material used	27121.35	cum	
	materral disposed by cartage to dumping yards	1228.65	cum	


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Name of work :- Muck disposal Plan for Construction of patharkhani-selktiya-Dubaliya-Vijarkanda-Dhuira motor road under state sector (length 4.500km)

Details of Muck Disposal Yards with Land Owner Detail

Sr. no	Chainage	Name of Land owner	Land in Hect	Land in Sqm	Land area being used for dumping yard(sqm)	Latitude	Longitude
1	Ch. 0.250to 0.275	State forest land (Uttarakhand Govt.)	0.0050	50.00	50.00	29°32'10.620"N	80°15'1.392"E
2	Ch. 1.325to 1.410	State forest land (Uttarakhand Govt.)	0.0170	170.00	170.00	29°31'55.228"N	80°15'10.794"E
3	Ch. 2.600to 2.725	State forest land (Uttarakhand Govt.)	0.0250	250.00	250.00	29°31'36.980"N	80°15'3.958"E
4	Ch. 2.850 to 3.025	State forest land (Uttarakhand Govt.)	0.0350	350.00	350.00	29°31'35.922"N	80°15'13.973"E
		Total	0.0820	820.0000	820.0000		


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Muck Disposal Plan

Name of work :- Muck disposal Plan for Construction of patharkhani-selktiya-Dubaliya-Vijarkanda-Dhuira motor road under state sector (leangth 4.500km)

Summary of Results

1 The quantity of material received from hill side cutting ==	28350.00 cum
(Sheet sttached on page no. 87 of Muck disposal estimate)	
2 The quantity of material used in various items =	27121.35 cum
(Sheet sttached on page no. 67 of Muck disposal estimate)	
3 The remaining quantity of muck for dumping i/c swell factor	1228.65 cum
(Sheet sttached on page no. 67 of Muck disposal estimate)	
4 Numbers of dumping yards needed for the dumping of muck	
(i) In state forest land =	4.00 Nos
(ii) In Nap Land =	nil Nos
(Sheet sttached on page no. 68 of Muck disposal estimate)	
5 Carring capacity of dumping yards with dimensions & coordinates	
	Area in hect 0.082 Quantity
In state forest land =	1640.00 cum
(ii) In Nap Land =	0 cum
	1640.00 cum
(Sheet sttached on page no. 70 of Muck disposal estimate)	
6 Land ownership Reports (Nap Land)	
(Sheet sttached on page no. 68 of Muck disposal estimate)	
7 Amount for Construction of Dumping Yards	
(i) In state forest land =	27.69 Lacs
(ii) In Nap Land =	0 Lacs
(Sheet sttached on page no. 76 & 77 of Muck disposal estimate)	
8 Cost of Vegetation Plantation in Civil Soyam Land =	4.50 Lacs
(Sheet sttached on page no. 74 of Muck disposal estimate)	
9 Total Amount in Civil Soyam Land =	
(i) Cost of construction of dumping Yards =	27.69 Lacs
(ii) Cost of Vegetation Plantation =	4.50 Lacs
	Total 32.19
Add 2% for Incidental Charges	0.64
	Total 32.83


J.E.


A.E.


E.E.


Name of work :- Muck disposal Plan for Construction of patharkhani-selktiya-Dubaliya-Vijarkanda-Dhuira motor road under state sector (leangth 4.500km)


Summary of Debries disposal

Sr. no	Total debries	Reused material for road construction	Material disposed by Cartage	Total disposal in dumping zone	Balance debries
1	28350.00	27121.35	1228.65	1640.00	Nil

Location and quantity of debries for disposal

Sr. no	Location of dumping yards	Size of dumping yards	Type of land	Capacity of dumping yards	Remark
1	Ch. 0.250to 0.275	25 x2x2	State forest land (Uttarakhand Govt.)	100.00	कुल अधिग्रहित वन भूमि की चौड़ाई = 9.00 मी०
2	Ch. 1.325to 1.410	85 x2x2	State forest land (Uttarakhand Govt.)	340.00	मोटर मार्ग में प्रयुक्त वन भूमि की चौड़ाई = 6.00 मी०
3	Ch. 2.600to 2.725	125 x2x2	State forest land (Uttarakhand Govt.)	500.00	कुल अधिग्रहित वन भूमि की चौड़ाई = 9.00 मी०
4	Ch. 2.850 to 3.025	175 x2x2	State forest land (Uttarakhand Govt.)	700.00	मोटर मार्ग में प्रयुक्त वन भूमि की चौड़ाई = 6.00 मी०
		410	Total	1640.00	


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sector (leangth 4.500km)

PROPOSAL PLAN FOR MUCK DUMPING

HILL SIDE

Breast Wall

ROW = 9.00 Mtr

KUD SIDE

WIDTH = 3.00 MT

ROAD WIDTH = 6.00 MT

Wire Crate



Drain

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PWD UTTARAKHAND
SCHEDULE OF RATES


SOR :- MISCELLANEOUS
For Block 56 Munakot

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

Sl. No.	Description	Rate	Unit
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CHAPTER-1 - General Items

1-1	Earthwork in Hill Road (Hill Side Cutting)		
1-1-1	Excavation in soil in Hilly Area by mechanical means		
1-1-1-A	Excavation in soil in Hilly Area by mechanical means Without using Dozer including cutting and trimming of side slopes and disposing of excavated earth with a lift upto 1.5 m and a lead upto 20 m as per Technical Specification Clause 1603.1	62.30	Cum
1-1-1-B	Extra for Every Additional Lift of 1.5 m or Part thereof	20.40	Cum
1-1-2	Excavation in Hilly Areas in Ordinary Rock by mechanical means not requiring blasting (With out Dozer) Excavation in hilly area in ordinary rock not requiring blasting by mechanical means without using Dozer including cutting and trimming of slopes and disposal of cut material with a lift upto 1.5 m and lead upto 20 m as per Clause 1603.2.	93.50	Cum
1-1-3	Excavation in Hilly Areas in Hard Rock requiring blasting		
1-1-3-A	Excavation in hilly areas in hard rock requiring blasting, by mechanical means without using Dozer, lift upto 1.5 m and disposal of excavated rock upto a lead of 20 m as per Clause 1603.2.	269.10	Cum
1-1-3-B	Extra for Every Additional Lift of 1.5 m or Part thereof	40.00	Cum
1-2	Excavation in foundation for retaining, breast walls etc, in all types of soils and rocks including all lead, lift and disposal of surplus material as per direction of engineer - in - charge, as per drawing and technical specifications Clause 305.1 of MORD Specification	309.20	Cum
1-3	Random Rubble Stone Masonry laid Dry, in breast walls, retaining walls, etc. including supply of all material, labour, T&P and royalties etc. complete as per drawing and technical specifications Clauses 702, 704, 1202 & 1203 of MORD Specification	1,842.90	Cum
1-4	Random Rubble Stone Masonry laid in 1:6 cement and sand mortar, in breast walls, retaining walls, parapets, scuppers, etc. including supply of all material, labour, T&P and royalties etc. complete as per drawing and technical specifications Clauses 702, 704, 1202 & 1203 of MORD Specification	3,313.90	Cum
1-5	Hand Packed stone filling in back of walls including cost of all materials, royalty, T&P etc. complete as per direction of Engineer-in- charge. (As per PWD Uttarakhand specifications)	708.60	Cum
1-6	Construction of coolie walling including supply of all material, labour, T&P etc. required for proper completion of the work as per direction of Engineer-in- charge. (As per PWD Uttarakhand specifications)	1,226.00	Cum

PWD UTTARAKHAND			
SCHEDULE OF RATES			
		Year :- FY. 2018-19	
SOR :- MISCELLANEOUS		Effective From:-01-May-2018	
For Block 56 Munakot		Rate	Unit
Sl. No.	Description		

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)	1,485.50	Cum
1-7-1	GI wire 10 gauge BWG	1,667.30	Cum
1-7-2	GI wire 8 gauge BWG		
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).	7,414.20	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).	7,596.00	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.	71.90	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.	114.60	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.	185.00	Cum
1-10-4	Slip clearance (by manual means) of earth and boulders including disposal complete as directed by the Engineer-in-charge.	185.80	Cum
1-10-5	Slip clearance (by manual means) of boulders only including disposal complete as directed by the Engineer-in-charge.	198.80	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.

Analysis of Rates

Name of work :- Muck disposal Plan for Construction of patharkhani-selktiya-Dubaliya-Vijarkanda-Dhuira motor road under state sector (leangth 4.500km)

Name		Road & Bridge Uttarakhand	Year		2018-2019
Rate Card		Block 56 Pithoragarh (Munakot)	Effective Date		1/5/2018
1	1-2	Excavation in Foundation for retaining, breast wall etc. in all type of soil and rocks including all lead, lift and disposal of surplus material as per direction of engineer-in-charge as per drawing and technical specifications Clause 305.1 of MORD specification			
			Cum	309.20	cum
2	1-7-1	Providing and laying of wire crate 3.00*1.50 in size with GI wire conforming to IS:280 & IS: 4826 in 150mm*150mm mesh laid with stone boulders, as per direction of engineer-in- charge.(As per PWD Uttarakhand Specifications)			
			Cum	1485.50	cum
		GI wire 10 Gauge BWG			
3		Vegitative Plantation	Per	100000.00	Km

Asc

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Q

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M

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Detail of Measurement

Name of work :- Muck disposal Plan for Construction of patharkhani-selktiya-Dubaliya-Vijarkanda-Dhuira motor road under state sector (leangth 4.500km)

S. No.	Item	No	L (m)	B(m)	H(m)	QTY	
1	Excavation in foundation for structure as per drawing and technical specificaltion clause 305.1 including setting out construction of shorting and bracing, removal of stumps and other deleterious material and disposal up to 50mt,dressing of sides and bottom and backfilling in trenches with excavated material(ref 11.20-300)						
	Ch. 0.250to 0.275	1x1/2	25.00	1.50		0.30	5.63 cum.
	Ch. 1.325to 1.410	1x1/2	85.00	1.50		0.30	19.13 cum.
	Ch. 2.600to 2.725	1x1/2	125.00	1.50		0.30	28.13 cum.
	Ch. 2.850 to 3.025	1x1/2	175.00	1.50		0.30	39.38 cum.
						G.Total	92.27 cum.
2	Providing and laying of boulder apron laid in wire crates with 4mm dia G.I. Wire conforming to IS : 280 & IS : 4826 in 100mm x 100mm mesh (woven diagonally) including 10% extra for laps and joints laid with stone boulders weighting not less than 25 Kg each as per drawing and technical specification of PWD and as directed by Engineer in charge.						
	Ch. 0.250to 0.275	1x2	25.00	1.50		1.50	112.50 cum.
	Ch. 1.325to 1.410	1x2	85.00	1.50		1.50	382.50 cum.
	Ch. 2.600to 2.725	1x2	125.00	1.50		1.50	562.50 cum.
	Ch. 2.850 to 3.025	1x2	175.00	1.50		1.50	787.50 cum.
						G.Total	1,845.00 cum.
3	Vegetation Plantation .						
							1 job


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Bill of Quantity

Name of work :- Muck disposal Plan for Construction of patharkhani-selktiya-Dubaliya-Vijarkanda-Dhuira motor road under state sector (leangth 4.500km)

Sl. No	Item of work	Quantity	Unit	Rate	Amount
1	Excavation in foundation for structure as per drawing and technical specification clause 305.1 including setting out construction of shorting and bracing, removal of stumps and other deleterious material and disposal up to 50mt,dressing of sides and bottom and backfilling in trenches with excavated material(ref 11.20-300)	92.27	cum.	309.20	28529.88
2	Providing and laying of boulder apron laid in wire crates with 4mm dia G.I. Wire conforming to IS : 280 & IS : 4826 in 100mm x 100mm mesh (woven diagonally) including 10% extra for laps and joints laid with stone boulders weighting not less than 25 Kg each as per drawing and technical specification of PWD and as directed by Engineer in charge.	1,845.00	cum.	1485.50	2740747.50
				Total	2769277.38
3	Vegetation Plantation .	4.50	Km	100000.00	450000.00
				Total	3219277.38
	Add 2% for Incidental Charges				64385.55
				Total	3283662.93

ASG

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[Signature]
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पिथौरागढ़ जिला पंचायत
विधानसभा क्षेत्र

Summary of Estimated Cost

Name of work :- Muck disposal Plan for Construction of patharkhani-selktiya-Dubaliya-Vijarkanda-Dhuira motor road under state sector (leangth 4.500km)

S.No.	Description	Amount In Lacs
1-	Muck disposal Plan for Construction of patharkhani-selktiya-Dubaliya-Vijarkanda-Dhuira motor road under state sector	3283662.93
	Total	3283662.93
	Say	32.84 Lacs



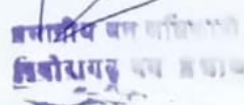
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पिथौरागढ़ प.व. विभाग

Name of Work: Muck Disposal Plan for Construction of Patharkhani-Selkatiya-Dubaliya-Vijarkanda-Dhura Motor Road under state sector (Leangth 1.00km)



Muck Disposal Point No-1 km 1

Name of Work: Muck Disposal Plan for Construction of Patharkhani-Selkatiya-Dubaliya-Vijarkanda-Dhura Motor Road under state sector (Leangth 2.00km)



Muck Disposal Point No-2 km 2

सहायक अभियन्ता
नीय खण्ड लो०नि०
पिथौरागढ़

अधिशोषी अभियन्ता
प्रान्तीय खण्ड लो०नि०
पिथौरागढ़

वन क्षेत्राधिकारी
पिथौरागढ़

प्रभावीय वन अधिकारी
पिथौरागढ़

Name of Work: Muck Disposal Plan for Construction of Patharkhani-Selkatiya-Dubaliya-Vijarkanda-Dhura Motor Road under state sector (Leangth 3.00km)



Muck Disposal Point No-3 km 3

Name of Work: Muck Disposal Plan for Construction of Patharkhani-Selkatiya-Dubaliya-Vijarkanda-Dhura Motor Road under state sector (Leangth 4.00km)



Muck Disposal Point No-4 km 4

सहायक अभियन्ता
प्रान्तीय खण्ड लो०नि०वि०
पिथौरागढ़

अधिष्ठाता अभियन्ता
प्रान्तीय खण्ड लो०नि०वि०
पिथौरागढ़

जन क्षेत्र अधिकारी
पिथौरागढ़

प्रान्तीय वन अधिकारी
पिथौरागढ़