

**UTTARAKHAND**

LOK NIRMAN VIBHAG

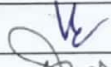



3rd CIRCLE P.W.D. PITHORAGARH

PROVINCIAL DIVISION P.W.D

PITHORAGARH

*Name of Work :- Muck disposal Plan for Construction of Machimkhali-Bisau road (length =3.00 km)*

ESTIMATED COST Rs. 14.97 LAC**LIST OF OFFICERS**

Sl. NO.	NAME	DESIGNATION	FULL SIGNATURE
1	Er. H.C. Joshi	J. Engineer	
3	Er. D.S. Boora	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 Machinakholi- Kanari -Bisar  
Motor Road State Sector (length 3.000km)**

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 Machinakholi-  
Kanari -Bisar Motar Road State Sector (length 3.000km)**

Sr no	Discription of Item	Quantity	Unit	Remark
1	Material recived from hill site cutting 1/2x3000x3x3=	13500.00	cum	
2	add 40% for swell factor	5400.00	cum	
3	Total quantity for disposal	<b>18900.00</b>	<b>cum</b>	

**Reuse and disposal of material**

1	RR stone masonry laid in 1:6 cement and sand mortar for Retaining wall 23% of total material	4347.00	cum	
2	RR stone masonry laid dry for Breast wall 23% of total material	4347.00	cum	
3	Hand packed Stone filling Behind Retaing wall and Breast wall 20% of R/wall and breast=(a+b)x20%	869.40	cum	
4	Construction of wire crate Total quantity used in Dumping yard	747.00	cum	
5	Construction of parapet (1x100x5x3x0.4 5x0.60)=	972.00	cum	
6	Granular sub base (1x5x400x4.15x0.12)=	3585.60	cum	
7	Improvement of Road grade (1x5x200x6x0.50)	3000.00	cum	
	Total material used	<b>17868.00</b>	<b>cum</b>	
	maternal disposed by cartage to dumping yards	<b>1032.00</b>	<b>cum</b>	

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**Name Of Work : Muck Disposal Plan For Construction Of Machinakholi- Kanari -Bisar Motar Road State Sector  
(length 3.000km)**

**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. 0.275to 0.315	State forest land (Uttarakhand Govt.)	0.0080	80.00	80.00	29°34'36.939"N	80°10'47.016"E
2	Ch. 0.925to 0.960	State forest land (Uttarakhand Govt.)	0.0070	70.00	70.00	29°34'26.963"N	80°10'41.652"E
3	Ch.2.190to 2.240	State forest land (Uttarakhand Govt.)	0.0042	42.00	42.00	29°34'9.652"N	80°10'27.609"E
4	Ch.2.750to 2.920	State forest land (Uttarakhand Govt.)	0.0340	340.00	340.00	29°34'7.382"N	80°10'17.346"E
		<b>Total</b>	<b>0.0532</b>	<b>532.0000</b>	<b>532.0000</b>		

  
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Pithoragarh

## Muck Disposal Plan

**Name Of Work : Muck Disposal Plan For Construction Of Machinakholi- Kanari -Bisar Motar Road  
State Sector (length 3.000km)**

### Summary of Results

1 The quantity of material received from hill side cutting -=	18900.00 cum
(Sheet sttached on page no. 64 of Muck disposal estimate )	
2 The quantity of material used in various items =	17868.00 cum
(Sheet sttached on page no. 64 of Muck disposal estimate )	
3 The remaining quantity of muck for dumping i/c swell factor	1032.00 cum
(Sheet sttached on page no. 64 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. 65 of Muck disposal estimate )	
5 Carring capacity of dumping yards with dimensions & coordinates	
Area in hect	0.053
Quantity	
In state forest land =	1064.00 cum
(ii) In Nap Land =	0 cum
	1064.00 cum
(Sheet sttached on page no. 67 of Muck disposal estimate )	
6 Land ownership Reports (Nap Land)	
(Sheet sttached on page no. 65 of Muck disposal estimate )	
7 Amount for Construction of Dumping Yards	
(i) In state forest land =	11.67 Lacs
(ii) In Nap Land =	0 Lacs
(Sheet sttached on page no. 73 & 74 of Muck disposal estimate )	
8 Cost of Vegetation Plantation in Civil Soyam Land =	3.00 Lacs
(Sheet sttached on page no. 72 of Muck disposal estimate )	
9 Total Amount in Civil Soyam Land =	
(i) Cost of construction of dumping Yards =	11.67 Lacs
(ii) Cost of Vegetation Plantation =	3.00 Lacs
	Total 14.67
Add 2% for Incidental Charges	0.29
	Total 14.96

  
J.E.

  
A.E.

  
E.E.




**Name Of Work : Muck Disposal Plan For Construction Of Machinakholi- Kanari -Bisar Motar Road State Sector  
(length 3.000km)**


**Summary of Debris disposal**


Sr. no	Total debris	Reused material for road construction	Material disposed by Cartage	Total disposal in dumping zone	Balance debris
1	18900.00	17868.00	1032.00	1064.00	Nil

**Location and quantity of debris for disposal**

Sr. no	Location of dumping yards	Size of dumping yards	Type of land	Capacity of dumping yards	Remark
1	Ch. 0.275 to 0.315	40 x 2x2	State forest land (Uttarakhand Govt.)	160.00	कुल अधिग्रहित वन भूमि की चौड़ाई = 9.00 मी०
2	Ch. 0.925 to 0.960	35 x 2x2	State forest land (Uttarakhand Govt.)	140.00	मोटर मार्ग में प्रयुक्त वन भूमि की चौड़ाई = 6.00 मी०
3	Ch. 2.190 to 2.240	21 x 2x2	State forest land (Uttarakhand Govt.)	84.00	कुल अधिग्रहित वन भूमि की चौड़ाई = 9.00 मी०
	Ch. 2.750 to 2.920	170 x 2x2	State forest land (Uttarakhand Govt.)	680.00	मोटर मार्ग में प्रयुक्त वन भूमि की चौड़ाई = 6.00 मी०
		266	<b>Total</b>	<b>1064.00</b>	

  
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 Pithoragarh

  
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Name Of Work : Muck Disposal Plan For Construction Of Machinakholi- Kanari -Bisar Motar Road State Sector (length 3.000km)

## PROPOSAL PLAN FOR MUCK DUMPING

HILL SIDE

Breast Wall

ROW = 9.00 MT

ROAD WIDTH = 6.00 MT

WIDTH = 3.00 MT

KUD SIDE

Wire Crate

MUCK

Drain

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Pithoragarh

Assistant Engineer

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Pithoragarh

Executive Engineer

Pro. Div. P.W.D

Pithoragarh



PWD UTTARAKHAND  
SCHEDULE OF RATES

SOR :- MISCELLANEOUS  
For Block 55 Bin

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	60.90	Cum
1-1-1-B	Extra for Every Additional Lift of 1.5 m or Part thereof	20.20	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.	91.80	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.	264.00	Cum
1-1-3-B	Extra for Every Additional Lift of 1.5 m or Part thereof	39.70	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	306.50	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	1,832.20	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	3,295.20	Cum
1-5	Hand Packed stone filling in back of wallls including cost of all materials, royalty, T&P etc. complete as per direction of Engineer-in- charge. (As per PWD Uttarakhand specifications)	705.30	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)	1,217.90	Cum





**PWD UTTARAKHAND  
SCHEDULE OF RATES**

**SOR :- MISCELLANEOUS  
For Block 55 Bin**


**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	1,474.00	Cum
1-7-2	GI wire 8 gauge BWG	1,655.80	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.	53.40	No.

## Analysis of Rates

● Name Of Work : Muck Disposal Plan For Construction Of Machinakholi- Kanari -Bisar Motar Road State Sector (length 3.000km)

Name		Road & Bridge Uttarakhand	Year		2018-2019
Rate Card		Block 56 Pithoragarh (Kanalichina)	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	306.50	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	1474.00	cum
		GI wire 10 Gauge BWG			
3		Vegitative Plantation	per	10000000	km

  
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## Detail of Measurement

**Name Of Work : Muck Disposal Plan For Construction Of Machinakholi- Kanari -Bisar Motar Road  
State Sector (length 3.000km)**

S. No.	Item	No	L (m)	B(m)	H(m)	QTY
1	<b>Excavation in foundation</b> 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)					
	Ch. 0.275to 0.315	1x1/2	40.00	1.50	0.30	9.00 cum.
	Ch. 0.925to 0.960	1x1/2	35.00	1.50	0.30	7.88 cum.
	Ch.2.190to 2.240	1x1/2	21.00	1.50	0.30	4.73 cum.
	Ch.2.750to 2.920	1x1/2	70.00	1.50	0.30	15.75 cum.
					<b>G.Total</b>	<b>37.36 cum.</b>
2	<b>Providing and laying of boulder apron laid in wire crates</b> 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. 0.275to 0.315	1x2	40.00	1.50	1.50	180.00 cum.
	Ch. 0.925to 0.960	1x2	35.00	1.50	1.50	157.50 cum.
	Ch.2.190to 2.240	1x2	21.00	1.50	1.50	94.50 cum.
	Ch.2.750to 2.920	1x2	70.00	1.50	1.50	315.00 cum.
					<b>G.Total</b>	<b>747.00 cum.</b>
3	<b>Vegitation Plantation .</b>					
						1 job

  
 Junior Engineer  
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 Pithoragarh

  
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## Bill of Quantity

**Name Of Work : Muck Disposal Plan For Construction Of Machinakholi- Kanari -Bisar  
Motar Road State Sector (length 3.000km)**

Sl. No	Item of work	Quantity	Unit	Rate	Amount
1	<b>Excavation in foundation</b> 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)	37.36	cum.	306.50	<b>11450.84</b>
2	Providing and laying of boulder apron laid in <b>wire crates</b> 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.	747.00	cum.	1547.50	<b>1155982.50</b>
				<b>Total</b>	<b>1167433.34</b>
3	Vegetation Plantation .	3.00	km	100000.00	<b>300000.00</b>
				<b>Total</b>	<b>1467433.34</b>
	<b>Add 2% for Incidental Charges</b>				<b>29348.67</b>
				<b>Total</b>	<b>1496782.01</b>

✓  
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Pithoragarh

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प्रमाणित एवं जमाकरी  
मिनिस्टर एवं प्रमाणित



## Summary of Estimated Cost

**Name Of Work : Muck Disposal Plan For Construction Of Machinakholi-  
Kanari -Bisar Motar Road State Sector (length 3.000km)**

S.No.	Description	Amount In Lacs
1-	Muck disposal Plan for Construction of Machinakholi, Kanari , Bisar motor road under state sector	1496782.01
	<b>Total</b>	<b>1496782.01</b>
	<b>Say</b>	<b>14.97 Lacs</b>

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प्रमाणित वन अधिकारी  
पिथौरागढ़ जिला

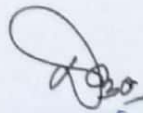
जनपद पिथौरागढ़ के विधान सभा क्षेत्र पिथौरागढ़ के अन्तर्गत सुगौली चमाली रोड से मछीनाखोली कनारी विषाण तक मोटर मार्ग का नव निर्माण




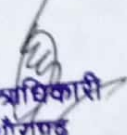
MUCK DISPOSAL POINT NO 1 K.M. 1



MUCK DISPOSAL POINT NO 1 K.M. 2

  
सहायक अभियन्ता  
प्रान्तीय खण्ड लो०नि०वि०  
पिथौरागढ़

  
अधिशासी अभियन्ता  
प्रान्तीय खण्ड लो०नि०वि०  
पिथौरागढ़

  
जन क्षेत्राधिकारी  
पिथौरागढ़

  
जन क्षेत्राधिकारी  
पिथौरागढ़




जनपद पिथौरागढ़ के विधान सभा क्षेत्र पिथौरागढ़ के अन्तर्गत सुगौली चमाली रोड से मछीनाखोली कनारी विषाण तक मोटर मार्ग का नव निर्माण





MUCK DISPOSAL POINT NO 2 K.M. 3



MUCK DISPOSAL POINT NO 3 K.M. 4

  
सहायक अभियन्ता  
प्रान्तीय खण्ड लो०नि०वि०  
पिथौरागढ़

  
अधिशाली अभियन्ता  
प्रान्तीय खण्ड लो०नि०वि०  
पिथौरागढ़

  
जन क्षेत्राधिकारी  
पिथौरागढ़

प्रान्तीय खण्ड लो०नि०वि०  
पिथौरागढ़