

# **ECO-SENSITIVE ZONAL PLAN**



**PRADHAN MANTRI GRAM SADAK YOJANA**

**PMGSY IRRIGATION DIVISION**

**UTTARKASHI**



## **PRADHAN MANTRI GRAM SADAK YOJANA PMGSY IRRIGATION DIVISION UTTARKASHI**

### **1. PROGRAMME OBJECTIVES AND GUIDING PRINCIPLES**

- I. INTRODUCTION:-** Rural road connectivity is not only a key component of Rural development by promoting access to economic and social services and thereby generating increased agricultural incomes and productive employment opportunities in India it is also as a result, a key ingredient in ensuring sustainable poverty reduction. Not with standing the efforts made, over the years, at the state and central levels, through different programmes, about 40% of the Habitation in the country are still not connected by all weather roads it is well known that even where connectivity has been provided, the roads constructed are of such quality (due to poor construction or maintenance) that they cannot always be categorized as all- weather roads.

With a view to redressing the situation, Government have launched the Pradhan Mantri Gram Sadak Yojana on 25<sup>th</sup> December, 2000 to provide all weather access to unconnected habitations. The Pradhan Mantri Gram Sadak Yojana (PMGSY) is a 100% centrally Sponsored Scheme. 50% of the cess on High speed diesel (HSD) is earmarked for this programme.

### **II. PROGRAMME OBJECTIVES:-**

The primary objective of the PMGSY is to provide connectivity by way of an all- weather road (with necessary Culverts and cross drainage structures, which is operable throughout the year), to the eligible unconnected Habitation in the rural areas, in such a way that all unconnected habitations with a population of 1000 persons and above are covered in three years (2000-2003) and all unconnected Habitations with a population of 500 persons and above by the end of the tenth plan period (2007). In respect of the hill states (North East, Sikkim, Himanchal Pradesh, Jammu & Kashmir, Uttarakhand) and all the desert areas (as identified in the desert development programme) as the tribal (schedule V) areas, the objective would be to connect Habitations with a population of 250 persons and above.

### **III. Proposed work in BHATWARI BLOCK COVERED By ECO-SENSITIVE ZONE:-**

As per the Gazette of India, notification of ministry of environment and forest New Delhi, 18 December 2012, from Gaumukh to uttarkashi, 100 Km long 4179.59 sq km whole catchment area of Bhagirathi river is declared as Eco-sensitive zone.

**2. Sanctioned work in which work is in progress under PMGSY ID Uttarkashi**

Sr. No.	Name of motor road	Length (in Km.)	Sanctioned cost (in Lacs)	About Eco-Sensitive zone as per the Gazette of India			Remarks
				Regulated	Permitted	Non-Permitted	
1	Gangori-Dodital motor road (Up gradation work stage-II)	16.00	519.07		Permitted		No Hill side cutting work is proposed/ done. No extension & widening work is proposed/ done. Due to natural calamity during the year 2012-2013 & 2013-2014, road was badly damaged, for which surface improvement & restoration work is under progress /proposed.
2	Gangori to Nald motor road	6.48	231.64		Permitted		Premix carpet work is completed in this road. Damages occurs during the rainy season 2015-2016 are under repairs.
3	Gangori to Uttron motor road	5.33	90.00		Permitted		Road was badly damaged due to natural calamity during the year 2012-2013 & 2013-2014. Restoration work has been now completed.
4	Jamak to Bayana motor road	9.83	295.28		Permitted		Stage-I work is in progress.

# **PROPOSED WORK UNDER PMGSY ID UTTARKASHI**

**Proposed work with Administrative Approval under PMGSY ID Uttarkashi**

Sr. No.	Name of motor road	Length (in Km.)	Approx. cost (in Lacs)	About Eco-Sensitive zone as per the Gazette of India			Remarks
				Regulated	Permitted	Non-Permitted	
1	Gyansu-Sald-Uprikot motor road km.-14 to Nismor motor road	3.00	180.00			Non-Permitted	Details of Administrative approval & cross hill slope along alignment are as per attached <b>annexure-1.</b>
2	Mahidanda motor road to Bagiyal gaon motor road	4.325	240.00			Non-Permitted	Details of Administrative approval & cross hill slope along alignment are as per attached <b>annexure-2.</b>
3	Malla-Sari motor road to Silla motor road	9.60	624.00			Non-Permitted	Details of Administrative approval & cross hill slope along alignment are as per attached <b>annexure-3.</b>
4	Silla motor road to Pilang motor road	12.00	780.00			Non-Permitted	Cross slope 20°-30° between km 0.000 to km 0.150, cross slope 50°-70° between 0.150 to 4.000, cross slope 40°-50° between km 4.000 to 5.500, Cross slope 50°-70° between km 5.500 to km 7.800, Cross slope 30°-40° between km 7.800 to km 12.00.
5	Jamak-Bayana motor road to Syaba motor road	6.00	390.00			Non-Permitted	Details of Administrative approval & cross hill slope along alignment are as per attached <b>annexure-4.</b>

Sr. No.	Name of motor road	Length (in Km.)	Approx. cost (in Lacs)	About Eco-Sensitive zone as per the Gazette of India			Remarks
				Regulated	Permitted	Non-Permitted	
6	Jamak to Kamar motor road	9.950	650.00			Non-Permitted	Details of Administrative approval & cross hill slope along alignment are as per attached <b>annexure-5.</b>
7	Thirang to Salang motor road	4.750	310.00			Non-Permitted	Details of Administrative approval & cross hill slope along alignment are as per attached <b>annexure-6.</b>
8	Gajoli to Naugoan-Bhankoli-Agora motor road	9.625	625.00			Non-Permitted	Details of Administrative approval & cross hill slope along alignment are as per attached <b>annexure-7.</b>



## **Pradhan Mantri Gram Sadak Yojna**

### **PMGSY Irrigation division Uttarkashi**

**Name of motor Road:-** Gyansu-Sald-Uprikot motor road km.14 to Nismor motor road.

**Length of motor road:-** 3.000 km.

**Reserve forest:-** 0.035 Hac.

**Civil Soyam Land:-** 0.203 Hac.

**Nap Land:-** 1.0485 Hac.

**Block:-** Bhatwari

**District:-** Uttarkashi

Administrative approval of above motor road is received from Rural Development Department vide Letter No.- 1880/P3-19/URRDA/11, dated- 23rd December 2011.

For the construction of above motor road, Forest land transfer proposal has been prepared in all respect and online uploaded on dated 14<sup>th</sup> September 2015.

The X-slope along the alignment of above proposed motor road at different chainages are as following:-

<b>Sr. No.</b>	<b>Km.</b>	<b>Chainage (in Km.)</b>	<b>Cross Slope (in degree)</b>	<b>Remark</b>	
1	1.00	0.000 – 0.075	30° – 45°	Nap Land	
2		0.075 – 0.200	55° – 70°		
3		0.200 – 0.475	20° – 30°		
4		0.475 – 0.575	20° – 35°		
5		0.575 – 0.750	25° – 40°		
6		0.750 – 0.825	25° – 35°		
7		0.825 – 1.000	20° – 30°		
8	2.00	1.000 – 1.075	25° – 35°	Nap Land	
9		1.075 – 1.125	50° – 65°		
10		1.125 – 1.175	50° – 60°		
11		1.175 – 1.350	20° – 35°		
12		1.350 – 1.450	55° – 70°		
13		1.450 – 1.500	20° – 30°		
14		1.500 – 1.575	20° – 30°		Nap Land
15		1.575 – 1.625	25° – 40°		Civil Land
16		1.625 – 1.700	20° – 30°		Nap Land
17		1.700 – 1.725	25° – 45°		Civil Land
18		1.725 – 1.775	40° – 60°		Reserve Forest

<b>Sr. No.</b>	<b>Km.</b>	<b>Chainage (in Km.)</b>	<b>Cross Slope (in degree)</b>	<b>Remark</b>
19		1.775 – 1.925	50° – 65°	Civil Land
20	3.00	1.925 – 2.175	20° – 30°	Nap Land
21		2.175 – 2.325	20° – 40°	
22		2.325 – 2.375	20° – 30°	
23		2.375 – 2.575	20° – 30°	
24		2.575 – 2.850	20° – 35°	
25		2.850 – 3.000	25° – 35°	





**Pradhan mantri Gram Sadak Yojna**

**PMGSY Irrigation division Uttarkashi**

**Name of motor Road** % & Mahidanda motor road to Bagiyal gaun motor road

**Length of motor road** % & 4.325 km.

**Reserve forest:-** 0.682 Hac.

**Civil Soyam Land:-** 0.049 Hac.

**Nap Land:-** 2.952 Hac.

**Block:-** Bhatwari

**District:-** Uttarkashi

Administrative approval of above motor road is received from Rural Development Department vide Letter No.- 1760/P3-14/URRDA/09, dated- 14<sup>th</sup> December 2009.

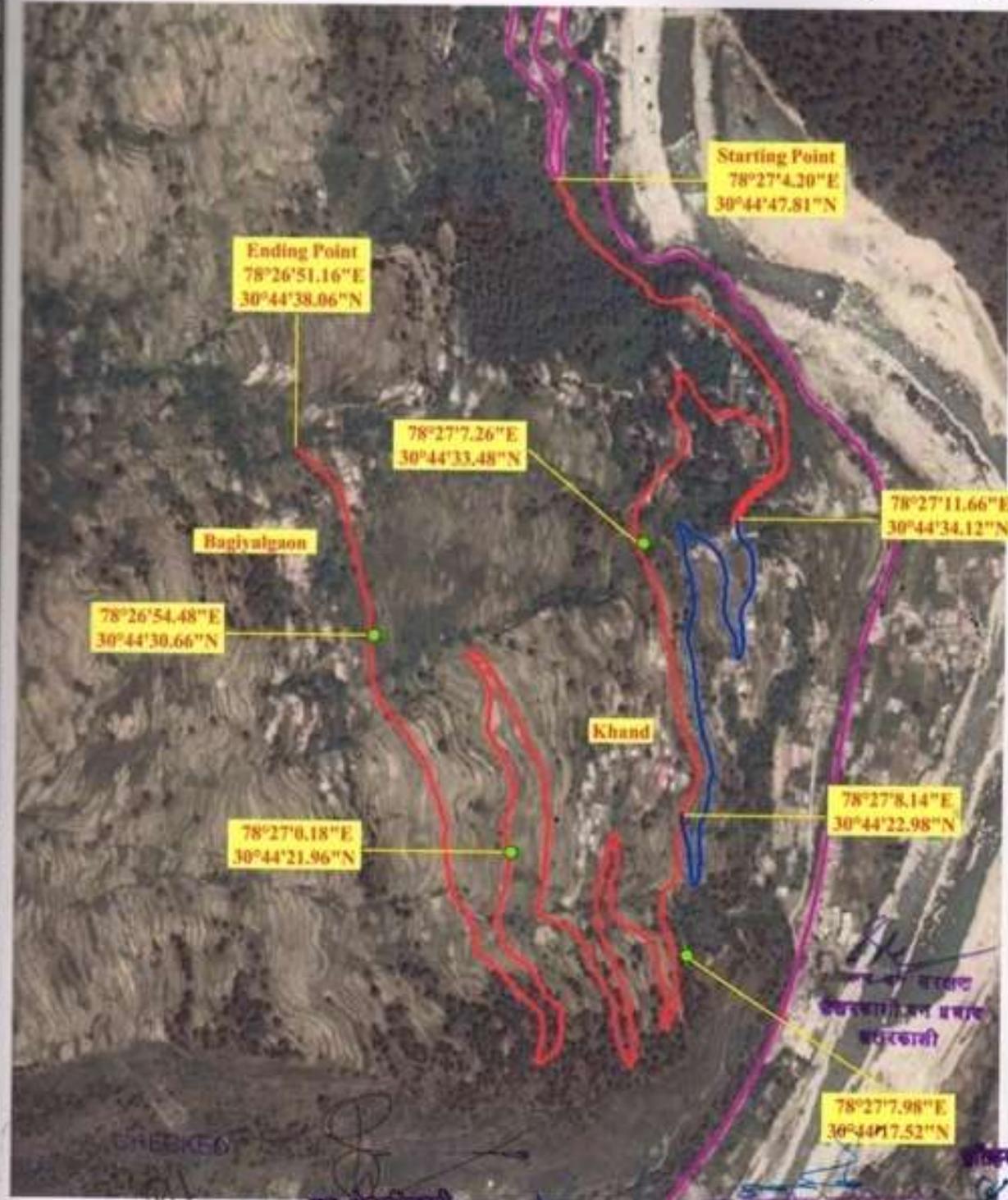
For the construction of above motor road, Forest land transfer proposal has been prepared in all respect and online uploaded on dated 14<sup>th</sup> September 2015.

The X-slope along the alignment of above proposed motor road at different chainages are as following:-

<b>Sr. No.</b>	<b>Km.</b>	<b>Chainage (in Km.)</b>	<b>Cross Slope (in degree)</b>	<b>Remark</b>
1	1.00	0.000 & 0.075	60° & 70°	Reserve forest
2		0.075 & 0.325	65° & 70°	
3		0.325 & 0.550	60° & 70°	
4		0.550 & 0.625	65° & 70°	
5		0.625 & 0.875	20° & 40°	
6		0.875 & 0.975	20° & 35°	
7	2.00	0.975 & 1.125	20° & 35°	Nap Land
8		1.125 & 1.275	20° & 40°	
9		1.275 & 1.350	25° & 35°	
10		1.350 & 1.525	20° & 35°	

<b>Sr. No.</b>	<b>Km.</b>	<b>Chainage (in Km.)</b>	<b>Cross Slope (in degree)</b>	<b>Remark</b>
11		1.525 & 1.600	20° & 30°	Nap Land
12		1.600 & 1.775	20° & 40°	
13		1.775 & 1.850	25° & 40°	Civil Land
14		1.850 & 1.870	20° & 40°	
15		1.870 & 2.000	25° & 35°	Nap Land
16	3.00	2.000 & 2.150	20° & 30°	
17		2.150 & 2.225	20° & 35°	
18		2.225 & 2.475	20° & 40°	
19		2.475 & 2.525	35° & 40°	
20		2.525 & 2.675	20° & 35°	Nap Land
21	2.675 & 2.800	20° & 30°		
22	2.800 & 2.950	30° & 35°		
23	2.950 & 3.000	25° & 35°		
24	4.00	3.000 & 3.075	20° & 40°	
25		3.075 & 3.225	20° & 35°	
26		3.225 & 3.475	20° & 40°	
27		3.475 & 3.625	25° & 40°	
28		3.625 & 3.850	30° & 40°	
29	3.850 & 4.000	20° & 35°	Nap Land	
30	5.00	4.000 & 4.150		20° & 40°
31		4.150 & 4.325		20° & 35°

### डिजिटल मैप – जनपद उत्तरकाशी में प्रधानमंत्री ग्राम सड़क योजना के अन्तर्गत महिडाण्डा मोटर मार्ग से बगियाल गांव मोटर मार्ग के निर्माण हेतु



**Legend**

- Muck Disposal
- Proposed Road
- Alternate Road
- Existing Road

**Drawn by** Manoj Kumar  
Uttarakashi P.W.D. Division

**द्वारा** Manoj Kumar  
उत्तरकाशी प.व. वि. वि. वि.

**उप-प्रभाग** उत्तरकाशी  
भटवाड़ी उप-प्रभाग  
उत्तरकाशी

**अभिजाती अभियन्ता**  
श्री एन. जी. एस. वाई  
सिवाजी नगर, उत्तरकाशी

**अभिजाती अभियन्ता**  
श्री एन. जी. एस. वाई  
सिवाजी नगर, उत्तरकाशी

**अभिजाती अभियन्ता**  
श्री एन. जी. एस. वाई  
सिवाजी नगर, उत्तरकाशी



**Pradhan mantri Gram Sadak Yojna**

**PMGSY Irrigation division Uttarkashi**

**Name of motor Road-** Malla-Sari motor road to Silla motor road

**Length of motor road-** 9.600 km.

**Reserve forest:-** 1.15 Hac.

**Civil Soyam Land:-** 1.98 Hac.

**Nap Land:-** 1.91 Hac.

**Block:-** Bhatwari

**District:-** Uttarkashi

Administrative approval of above motor road is received from Rural Development Department vide Letter No.- 1760/P3-14/URRDA/09, dated- 14<sup>th</sup> December 2009.

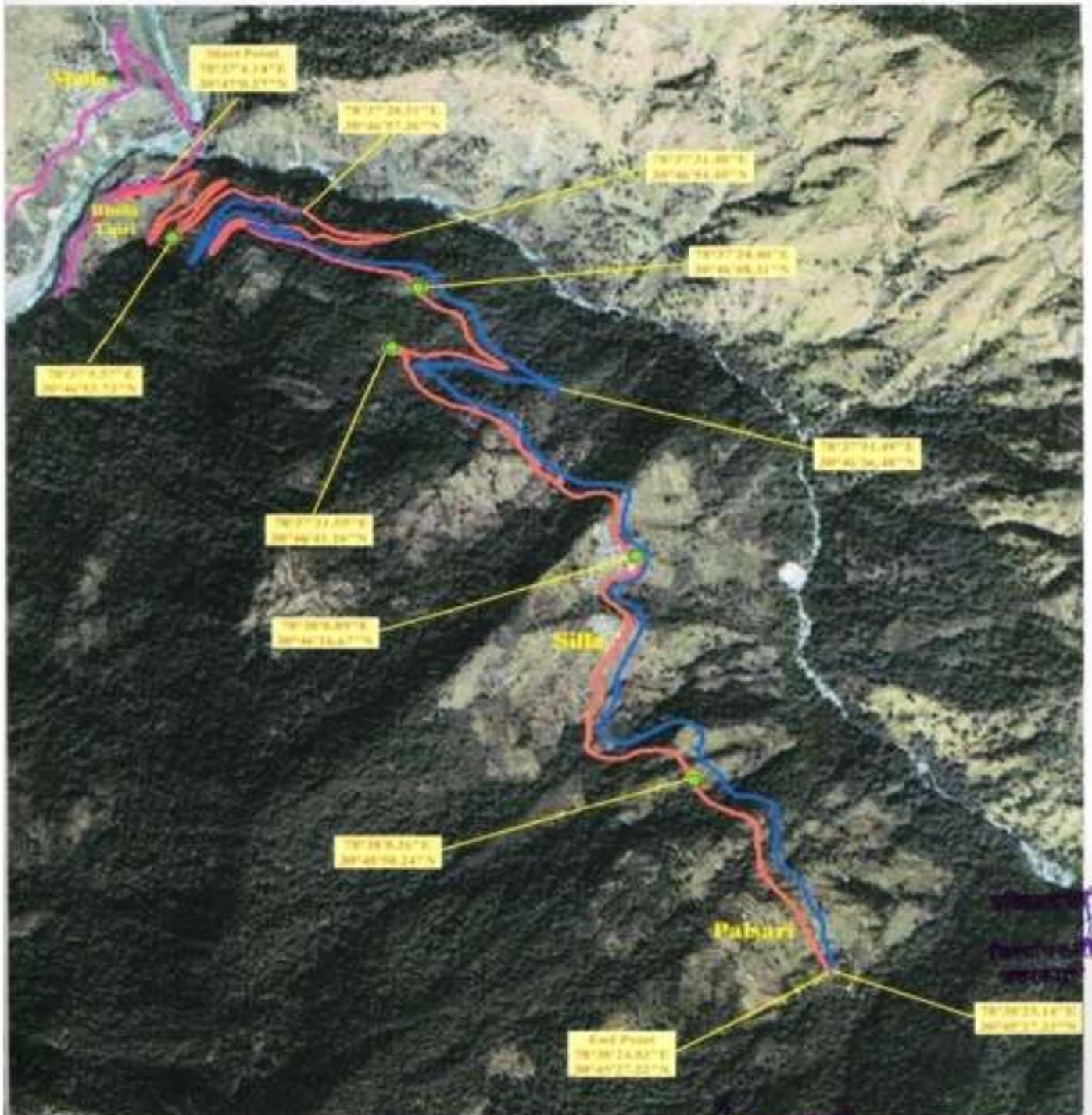
For the construction of above motor road, Forest land transfer proposal has been prepared in all respect and online uploaded on dated 28<sup>th</sup> September 2015.

The X-slope along the alignment of above proposed motor road at different chainages are as following:-

Sr. No.	Km.	Chainage (in Km.)	Cross Slope (in degree)	Remark	
1	1	0.000-0.150	15°-20°	Nap Land	
2		0.150-0.500	10°-15°		
3		0.500-0.750	30°-40°		
4		0.750-1.000	50°-60°		
5	2	1.000-1.500	55°-65°	Nap Land	
6		1.500-1.800	55°-70°		
7		1.800-2.000	60°-70°		
8	3	2.000-2.300	40°-50°		
9		2.300-2.750	45°-50°		
10		2.750-3.000	40°-50°		
11	4	3.000-3.300	45°-50°		
12		3.300-3.700	40°-50°		
13		3.700-4.000	40°-50°		
14		4.000-4.250	30°-40°		

<b>Sr. No.</b>	<b>Km.</b>	<b>Chainage (in Km.)</b>	<b>Cross Slope (in degree)</b>	<b>Remark</b>
15	5	4.250-4.700	30°-45°	Nap Land
16		4.700-5.000	40°-50°	
17	6	5.000-5.400	30°-40°	
18		5.400-5.500	20°-30°	
19		5.500-5.700	30°-40°	
20		5.700-6.000	25°-35°	
21	7	6.000-6.250	30°-40°	Nap Land/Civil Land
22		6.250-6.700	40°-45°	
23		6.700-7.000	30°-40°	
24	8	7.000-7.400	30°-40°	
25		7.400-7.800	35°-45°	
26		7.800-8.000	30°-45°	
27	9	8.000-8.500	30°-40°	
28		8.500-8.750	30°-40°	
29		8.750-9.000	35°-40°	
30	10	9.000-9.250	30°-40°	
31		9.250-9.600	20°-30°	

डिजिटल मैप – जनपद उत्तकाशी में प्रधानमंत्री ग्राम सड़क योजना के अन्तर्गत मल्ला-सारी मोटर मार्ग से सिल्ला मोटर मार्ग के निर्माण हेतु (लम्बाई – 9.600)



Legend

- Dumping Zone
- Proposed Road
- Alternate Road
- Existing Road

[Signature] [Signature] [Signature]  
 सहायक अभियन्ता, पी.एम.जी.एस.वाई. विभाग, उत्तराखण्ड  
 सहायक अभियन्ता, पी.एम.जी.एस.वाई. विभाग, उत्तराखण्ड  
 सहायक अभियन्ता, पी.एम.जी.एस.वाई. विभाग, उत्तराखण्ड  
 सहायक अभियन्ता, पी.एम.जी.एस.वाई. विभाग, उत्तराखण्ड



**Pradhan mantri Gram Sadak Yojna**

**PMGSY Irrigation division Uttarkashi**

**Name of motor Road-** Jamak Bayana to Syaba motor road

**Length of motor road-** 6.000 km.

**Reserve forest:-** 2.891 Hac.

**Civil Soyam Land:-** 0.427 Hac.

**Nap Land:-** 1.134 Hac.

**Block:-** Bhatwari

**District:-** Uttarkashi

Administrative approval of above motor road is received from Rural Development Department vide Letter No.- 1760/P3-14/URRDA/09, dated- 14<sup>th</sup> December 2009.

For the construction of above motor road, Forest land transfer proposal has been prepared in all respect and offline send to Nodal office Dehradun on dated 26 December 2014.

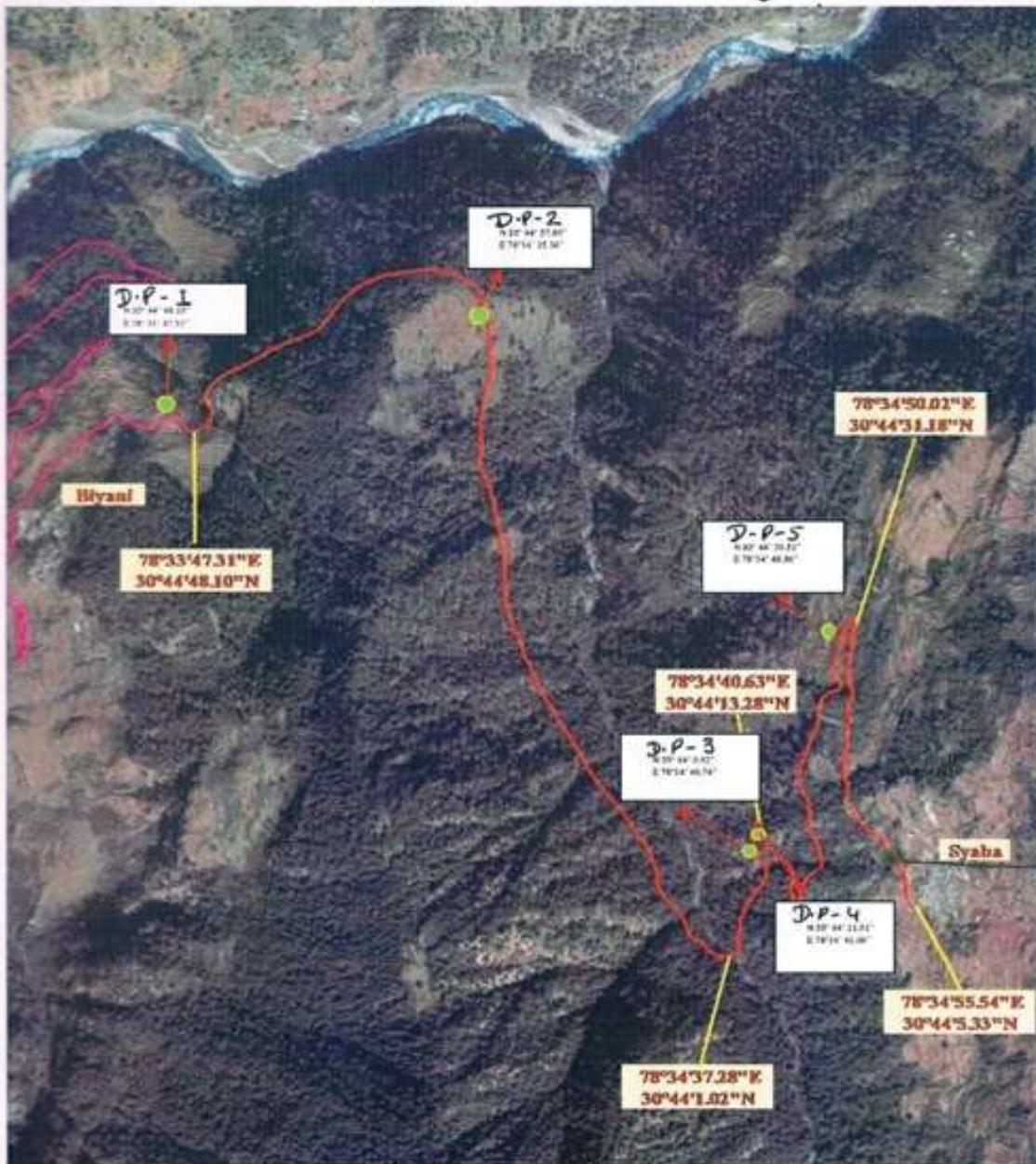
The X-slope along the alignment of above proposed motor road at different chainages are as following:-

S.No.	Km. No.	X-Sec (Km)	Slop in Degree	Remark	
1	1	0.000-0.065	50°-70°	Forest land	
2		0.065-0.350	50°-70°		
3		0.350-0.520	60°-70°		
4		0.520-0.830	50°-70°		
5		0.830-0.980	55°-70°		
6		0.980-1.000	60°-70°		
7	2	1.000-1.580	50°-65°		
8		1.580-1.850	55°-65°		
9		1.850-2.000	60°-65°		
10	3	2.000-2.180	50°-70°		
11		2.180-2.330	20°-35°		Forest land
12		2.330-2.590	20°-40°		

<b>S.No.</b>	<b>Km. No.</b>	<b>X-Sec (Km)</b>	<b>Slop in Degree</b>	<b>Remark</b>
13		2.590-2.940	25°-35°	<b>Nap land</b>
14		2.940-3.000	20°-30°	
15		3.000-3.430	20°-35°	
16	<b>4</b>	3.430-3.830	55°-65°	<b>Forest land</b>
17		3.830-3.870	50°-60°	<b>Civil land</b>
18		3.870-4.000	50°-65°	
19	<b>5</b>	4.000-4.100	20°-35°	<b>Nap land</b>
20		4.100-4.200	25°-40°	
21		4.200-4.400	20°-35°	<b>Civil land</b>
22		4.400-4.450	25°-40°	<b>Nap land</b>
23		4.450-4.900	55°-70°	<b>Civil land</b>
24		4.900-4.980	50°-65°	<b>Forest land</b>
25		4.980-5.000	55°-70°	<b>Civil land</b>
26	5.000-5.370	20°-35°		
27	<b>6</b>	5.370-5.540	25°-40°	<b>Nap land</b>
28		5.540-5.640	25°-35°	<b>Civil land</b>
29		5.640-5.810	30°-40°	<b>Nap land</b>
30		5.810-6.000	20°-35°	

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डिजिटल मैप :- जनपद उत्तरकाशी के अन्तर्गत ब्याणा से स्याबा मोटर मार्ग के निर्माण हेतु (लम्बाई 6.00 कि०मी०)



- Proposed Road
- Other Proposed Road
- Existing Road

● — Dumping Zone

D.P-6  
N-30°44'7  
E-70°34'5

वन क्षेत्राधिकारी  
मुख्यमं रेंज (धान्तरी)

प्रभागीय वनाधिकारी  
उत्तरकाशी वन प्र  
उत्तरकाशी

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58

*Handwritten signature*  
सहायक अभियन्ता  
पी० एम० जी० एस० वाई०  
सिमाई खण्ड, उत्तरकाशी

*Handwritten signature*  
प्रविणाली अभियन्ता  
पी० एम० जी० एस० वाई०  
सिमाई खण्ड, उत्तरकाशी



## Pradhan mantri Gram Sadak Yojna

### PMGSY Irrigation division Uttarkashi

**Name of motor Road-** Jamak to Kamar motor road

**Length of motor road-** 9.950 km.

**Reserve forest:-** 0.682 Hac.

**Civil Soyam Land:-** 0.049 Hac.

**Nap Land:-** 2.952 Hac.

**Block:-** Bhatwari

**District:-** Uttarkashi

Administrative approval of above motor road is received from Rural Development Department vide Letter No.- 1760/P3-14/URRDA/09, dated- 14<sup>th</sup> December 2009.

For the construction of above motor road, Forest land transfer proposal has been prepared in all respect and online uploaded on dated 15<sup>th</sup> October 2015.

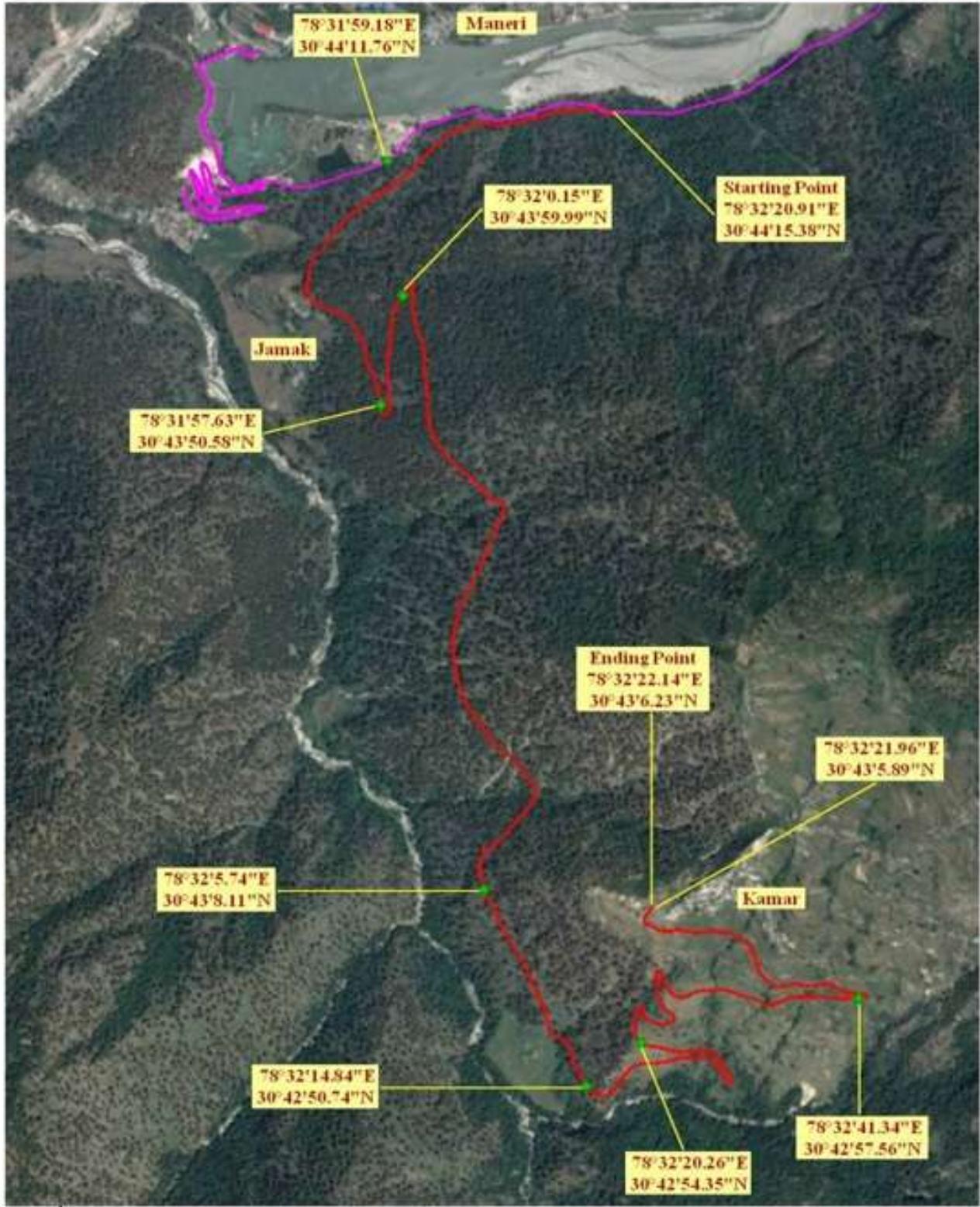
The X-slope along the alignment of above proposed motor road at different chainages are as following:-

Sr. No.	Km.	Chainage (in Km.)	Cross Slope (in degree)	Remark		
1	1.00	0.000–0.100	50°–70°	Reserve Forest		
2		0.100–0.190	65°–70°			
3		0.190–0.260	50°–70°			
4		0.260–0.325	55°–70°			
7		0.325–0.610	50°–70°			
8		0.610–0.725	55°–65°			
9		0.725–0.950	50°–70°			
10		0.950–1.000	55°–70°			
11		2.00	1.000–1.085		50°–70°	Civil Land
12			1.085–1.300		55°–65°	
13	1.360–1.550		55°–70°			
14	1.550–1.625		60°–70°			

<b>Sr. No.</b>	<b>Km.</b>	<b>Chainage (in Km.)</b>	<b>Cross Slope (in degree)</b>	<b>Remark</b>
15	3.00	1.625–1.845	60°–70°	Reserve Forest
16		1.845–2.000	55°–70°	
17		2.000–2.060	55°–65°	
18		2.175–2.375	60°–65°	Civil Land
19		2.375–2.525	55°–65°	
20		2.525–2.620	50°–70°	
21	4.00	2.620–3.000	65°–70°	Reserve Forest
22		3.000–3.115	60°–70°	
23		3.115–3.310	55°–70°	
24		3.310–3.625	55°–65°	
25		3.625–3.810	60°–70°	
26		3.810–4.000	50°–70°	
27	5.00	4.000–4.095	60°–75°	
28		4.095–4.280	55°–75°	
29		4.280–4.490	50°–70°	
30		4.490–4.740	55°–70°	
31		4.740–5.000	65°–70°	
32	6.00	5.000–5.175	50°–70°	
33		5.175–5.375	65°–70°	
34		5.375–5.720	50°–65°	
35		5.720–5.810	50°–70°	
36		5.810–6.000	50°–70°	
37	7.00	6.000–6.110	45°–60°	
38		6.110–6.475	55°–70°	
39		6.475–6.610	45°–70°	

<b>Sr. No.</b>	<b>Km.</b>	<b>Chainage (in Km.)</b>	<b>Cross Slope (in degree)</b>	<b>Remark</b>
40		6.610–6.700	50°–70°	Reserve Forest
41		6.700–7.000	20°–35°	Civil Land
42	8.00	7.000–7.200	20°–35°	Nap Land
43		7.200–7.380	30°–40°	Civil Land
44		7.380–7.425	30°–45°	
45		7.425–7.475	50°–70°	
46		7.475–7.600	55°–65°	Reserve Forest
47		7.600–7.865	50°–70°	
48		7.865–8.000	50°–70°	
49		9.00	8.000–8.150	
50	8.150–8.240		50°–70°	
51	8.240–8.425		55°–70°	
52	8.425–8.650		50°–70°	Civil Land
53	8.650–9.000		20°–30°	Nap Land
54	10.00	9.000–9.125	20°–30°	
55		9.125–9.350	25°–30°	
56		9.350–9.610	25°–30°	
57		9.610–9.810	25°–30°	
58		9.810–9.950	20°–35°	

डिजिटल मैप :- जनपद उत्तरकाशी के अन्तर्गत जामक से कामर मोटर मार्ग के निर्माण हेतु (लम्बाई 9.950 कि०मी०)



- Legend**
- Muck Disposal
  - Proposed Road
  - Existing Road



## Pradhan mantri Gram Sadak Yojna

### PMGSY Irrigation division Uttarkashi

**Name of motor Road** % & Thirang to Salang motor road

**Length of motor road** % & 4.750 km.

**Reserve forest:-** 3.461 Hac.

**Civil Soyam Land:-** 0.052 Hac.

**Nap Land:-** 0.045 Hac.

**Block:-** Bhatwari

**District:-** Uttarkashi

Administrative approval of above motor road is received from Rural Development Department vide Letter No.- 1760/P3-14/URRDA/09, dated- 14<sup>th</sup> December 2009.

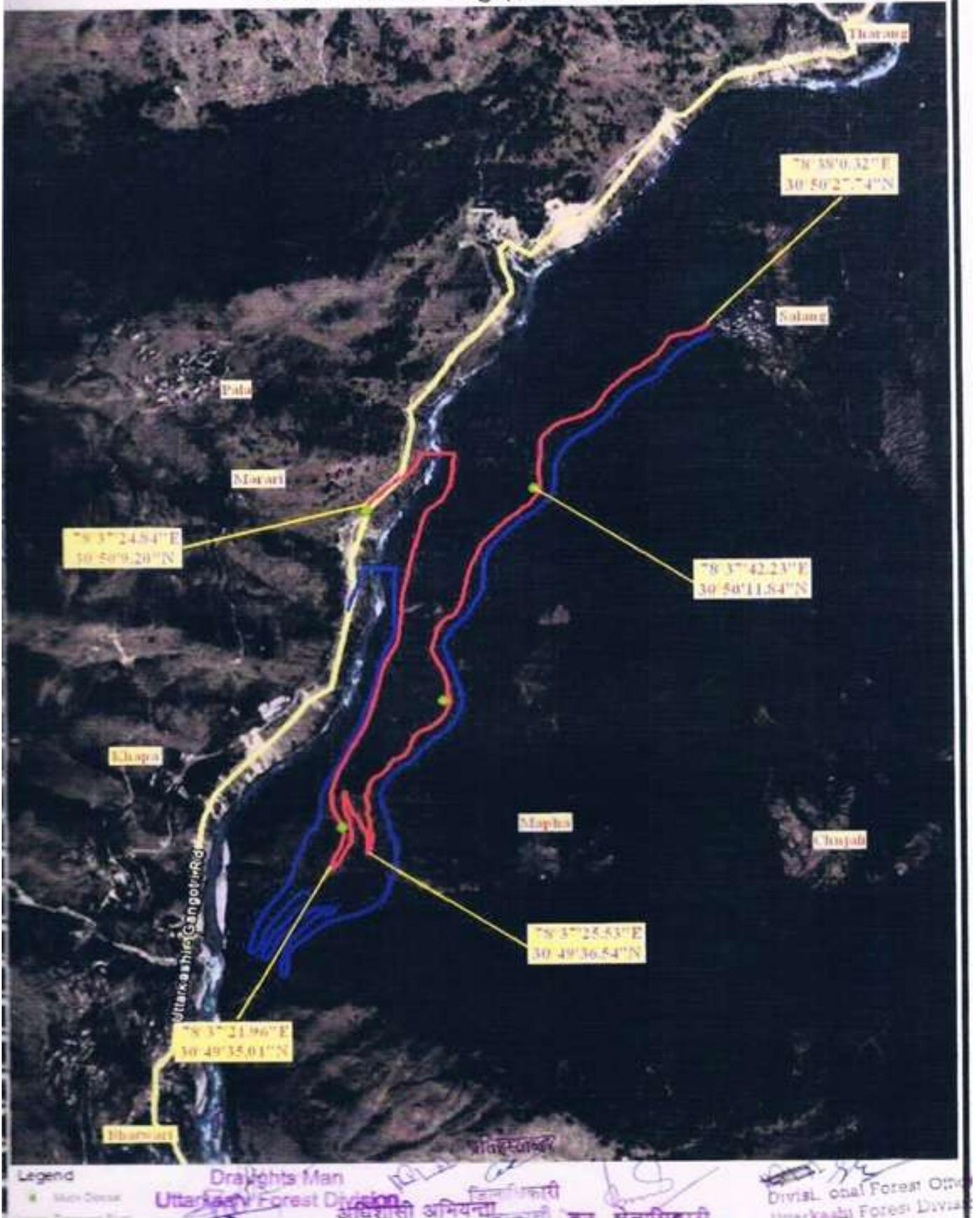
For the construction of above motor road, Forest land transfer proposal has been prepared in all respect and online uploaded on dated 5<sup>th</sup> May 2015.

The X-slope along the alignment of above proposed motor road at different chainages are as following:-

Sr. No.	Km.	Chainage (in Km.)	Cross Slope (in degree)	Remark
1	1	0.000-0.250	30°-40°	Forest Land
2		0.250-0.400	35°-45°	
3		0.400-0.850	40°-50°	
4		0.850-1.000	35°-45°	
5	2	1.000-1.400	30°-45°	
6		1.400-1.700	35°-45°	
7		1.700-2.000	35°-45°	
8	3	2.000-2.300	40°-50°	
9		2.300-2.600	55°-60°	
10		2.600-3.000	50°-60°	
11	4	3.000-3.350	45°-50°	
12		3.350-3.800	40°-50°	

<b>Sr. No.</b>	<b>Km.</b>	<b>Chainage (in Km.)</b>	<b>Cross Slope (in degree)</b>	<b>Remark</b>
<b>13</b>		<b>3.800-4.000</b>	<b>45°-55°</b>	
<b>14</b>	<b>5</b>	<b>4.000-4.250</b>	<b>50°-60°</b>	
<b>15</b>		<b>4.250-4.500</b>	<b>30°-40°</b>	
<b>16</b>		<b>4.500-4.750</b>	<b>25°-30°</b>	<b>Nap Land/ Civil Land</b>

डिजिटल मैप – जनपद उत्तरकाशी के अर्न्तगत भटवाड़ी ब्लॉक में थिरांग से सालंग तक मोटर मार्ग के निर्माण हेतु (लम्बाई 4.75 किमी०)





## Pradhan mantri Gram Sadak Yojna

### PMGSY Irrigation division Uttarkashi

Name of motor Road- Gajoli to Naugaon –Bhankoli-Agora motor road

Length of motor road- 9.625 km.

Block:- Bhatwari

District:- Uttarkashi

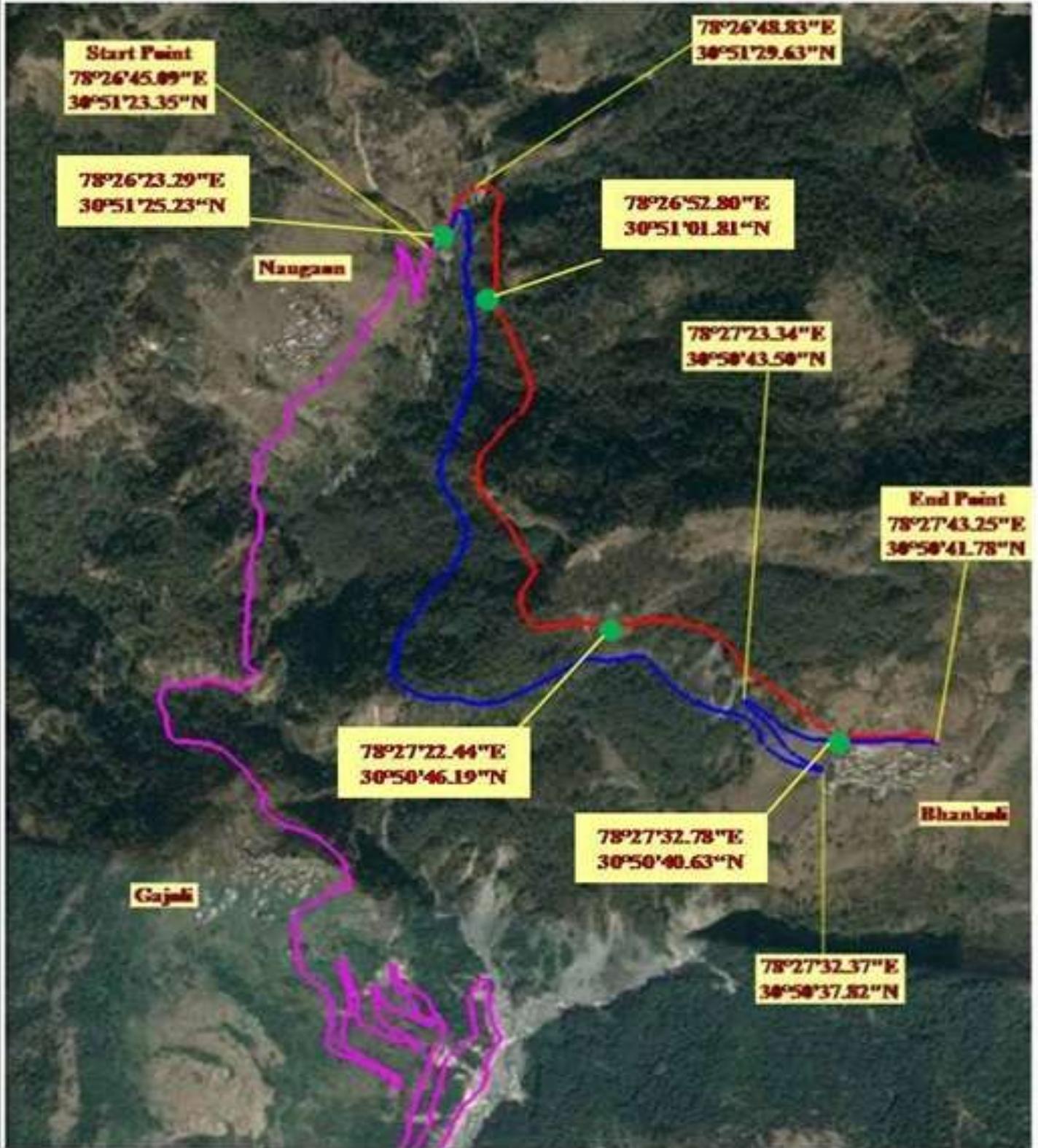
Administrative approval of above motor road is received from Rural Development Department vide Letter No.- 1414/P3-14/URRDA/14, dated- 7<sup>th</sup> November 2014.

The X-slope along the alignment of above proposed motor road at different chainages are as following:-

Sr. No.	Km.	Chainage (in Km.)	Cross Slope (in degree)	Remark
1	1	0.000 – 0.150	25°-30°	Nap Land/ Civil Land
2		0.150 – 0.400	20°-30°	
3		0.400 – 0.750	30°-40°	
4		0.750 – 1.000	50°-60°	
5	2	1.000 – 1.400	50°-60°	Forest Land
6		1.400 – 1.700	55°-65°	
7		1.700 – 2.000	40°-50°	
8	3	2.000 – 2.300	50°-60°	Nap Land/ Civil Land
9		2.300 – 2.600	30°-40°	
10		2.600 – 3.000	20°-30°	
11	4	3.000 – 3.250	20°-30°	Nap Land/ Civil Land
12		3.250 – 3.700	20°-30°	
13		3.700 – 4.000	20°-30°	
14	5	4.000 – 4.250	20°-30°	Nap Land/ Civil Land
15		4.250 – 4.750	20°-30°	
16		4.750 – 5.000	30°-40°	

<b>Sr. No.</b>	<b>Km.</b>	<b>Chainage (in Km.)</b>	<b>Cross Slope (in degree)</b>	<b>Remark</b>
17	6	5.000 – 5.300	30°-40°	Nap Land
18		5.300 – 5.600	30°-40°	
19		5.600 – 5.750	20°-30°	
20		5.750 – 6.000	20°-30°	
21	7	6.000 – 6.250	30°-40°	Nap Land/Civil Land
22		6.250 – 6.750	30°-40°	
23		6.750 – 7.000	35°-45°	
24	8	7.000 – 7.400	30°-40°	
25		7.400 – 7.700	35°-45°	
26		7.700 – 8.000	30°-45°	
27	9	8.000 – 8.500	30°-40°	
28		8.500 – 8.750	30°-40°	
29		8.750 – 9.000	35°-40°	
30	10	9.000 – 9.250	30°-40°	
31		9.250 – 9.625	20°-30°	

डिजिटल मैप – प्रधानमंत्री ग्रामसड़क योजना के अन्तर्गत नौगांव से मंकोली मोटर मार्ग का निर्माण (लम्बाई 4.00कि०मी०)



**Legend**

- Proposed Road
- Alternate Road
- Other Proposed Road
- Dumping Point

**IN REFERFNCE TO THE NOTIFICATION OF MINISTRY OF ENVIRONMENT AND FOREST G.O.I. DATED: 18<sup>TH</sup> DECEMBER 2012, FOLLOWING POINTS TO BE ADDED IN ZONAL MASTER PLAN OF BHAGIRATHI ECO-SENSITIVE ZONE.**

S.No	Zonal master plan, as per notification of ministry of environment and forest, Government of India dated 18 <sup>th</sup> December 2012	Comments on zonal master plan in Bhagirathi Eco-Sensitive zone.
1	No development on existing steep hill slopes or slopes or slopes with a high degree of erosion shall be per mitted. (The Gazette of India, notification 18 December 2012, page No. 27. S.No. 16(iii))	In Bhatwari block of Uttarkashi district after preliminary survey of proposed roads, it is observed that the cross slopes of hills are generally 50°-70°. Therefore cross hill slope upto 70 <sup>0</sup> must be permitted for the construction of roads for un-connected habitations, which will help relief during the natural calamity.
2	For construction of any road including untarred in the Eco-sensitive Zone of more than 5 Km length (including the extension or widening of existing roads). Page No. 29 S.No 19 (i) of Zonal master plan)	To connect un-connected habitation such as Pilang minimum length of road should be 21.60 Km. All the suggested comments on zonal master plan will be considered for the construction of road.
3	Provision shall be made in the design of the road for treatment of hill slope instabilities resulting from road cutting cross drainage works and culverts using bio- engineering and other appropriate techniques and by including the cost of such measures in the cost estimate of the proposed road.	During the survey work Geologist investigate whole length of road, and as per geological condition at different reaches sub sequent treatment suggested for hill side slope protection such as pucca masonry or cement concrete breast wall, mechanically woven hexagonal gabion wall etc. Cross slope of hills having more then 50 <sup>0</sup> within bio-engineering bamboo species plants are planted in slopes, whose roots are about 1.00 m & 1.50 m deep. Accordingly subsequent provision will be made in DPR.
4	The debris shall not be dumped down the khud or slopes but shall be subsumed in the construction of roads and the provision shall also be made for disposal of unused debris in appropriate manner at suitable and identified locations so as not to affect the ecology of the area adversely and the debris shall be treated and landscaped using bioengineering and other appropriate techniques and the cost of such measures shall be included in the cost estimate of the proposed road;	Fully agreed with this provision of Zonal master plan. Total quantity of Hill side cutting is calculated & quantity used in road work is deducted. For balance quantity of Hill side cutting dumping places is selected at proper location along road alignment. Dumping places is constructed with boulder filled wire crates masonry. Balance debris cartage upto dumping place & dumped in it. After completion of road works plants of deep roots are planted on dumping

		<p>place.</p> <p>Cost of all the above works are being added in the detailed Estimate.</p>
5	All roads shall be provided with adequate number of road side drains and these drains shall be kept free from blockage for runoff disposals and this run off from the road side drainage shall be connected with the natural drainage system in the area;	<p>Fully agreed with this provision of zonal master plan.</p> <p>In each natural Nala/Gadera cross drainage works such as causeway, scupper, culvert, minor and major bridges are provided as per site condition. In every 200 mtr. Length of road for drainage of rain water scupper/culverts are being provided.</p>
6	Alignment shall be selected so as to minimize loss of vegetal cover.	Alignment is selected with the consent of local people, & during this process it is keep in mind that the vegetation loss will be minimum.
7	Appropriate design standards shall be followed while designing the roads including mass balancing of cut and fill and avoidance of unnecessary cutting.	For hill road design manuals- IRC-52, IRC-73, SP-20 and SP-48 is used, and road section is designed in such a manner partly cutting & partly filling.
8	Notice shall be given about all fault Zones and land slide zones along the roads indicating the beginning and end of such areas.	<p>After fixing preliminary alignment, geological investigation is done by the senior Geologist, and thereafter on the basis of report alignment is finalized.</p> <p>Information about fault zones &amp; landslides will be displayed &amp; submitted as per notification.</p>

**5. Meeting held with local peoples for knowing their views specially women for preparing zonal master plan**

<b>S. No.</b>	<b>Name of Villages participate in meeting</b>	<b>Name of meeting place</b>	<b>Date of meeting</b>
1	Mukhawa, Dharali, Harshil, Bagori. Jhala, Purali, Jaspur, Sukkhi, Gangotri, Jadung.	Inter College Harshil .	22-09-2015 11:00 AM
2	Gangnani, Hurri, Bhangeli, Tihar, Sunagar, Bhukki, Salang, Sanglaie.	Junior High School Sunagar	24-09-2015 11:00 AM
3	Bhatwari, Bandrani, Kyark, Pahi, Dwari, Varsu, Kujjan, Saura, Sari, Lata, Kumalti, Gorsali, Raithal, Nateen, Silla, Pilang, Jodau, Sainj, Bhela tipri, Jakhol, Malla, Salu, Syaba.	Meeting Hall Bhatwari Block	29-09-2015 11:00 AM
4	Netala, Gawana, Heena, Maneri, Ganeshpur, Jamak, Didsari, Kamar.	Govt. Inter College Netala	01-10-2015 11:00 AM
5	Gangori, Agora, Dasada, Bhankoli, Naugaon, Gajoli, Seku, Uttraun, Nald, Sangrali, Pata, Bagiyal Gaon, Khand Goan, Sirauri, Aungi.	Govt. Inter College Gangori	03-10-2015 11:00 AM
6	Uttarkashi, Tiloth, Thalan, Maundo, Silyana, Nismor, Nirakot, Mastadi, Manpur, Ladari, Kuroli, Kotiyal Goan, Kishanpur, Kankradi, Kaneth, Joshiyara, Bonga, Aleth, Dhanpur, Doha, Thalan, Gyanja .	Suman Sabhagar Room uttarkashi	05-10-2015 11:00 AM

Executive Engineer PMGSY, I.D., Uttarkashi participate in above meeting in due time & place, but local people oppose the meetings. Therefore no any suggestion collected about zonal master plan.

## 6. Cost Analysis

- In Gazette Notification of Eco-Sensitive Zone no commercial mining is allowed. All the construction activities come under commercial activities. Due to restriction on commercial mining such as stone, grit, sand etc. the cost of work will be increased. For this purpose cost analysis is being enclosed as follows.
- The material will be carted beyond the Eco-Sensitive Zone. Hence extra cartage will be paid for carting such type of construction materials like sand grit, stone etc.
- Cost of extra cartage.

1)	20 mm stone ballast	Cost of cartage	Unit
	Basic Rate	1200.00	
	10% C.P.	120.00	
	4% VAT	48.00	
	add 2% wastage on basic cost	24.00	
	<b>Total A</b>	<b>1392.00</b>	
	Cartage- 45 km by truck at Quarry Dunda		
	(1x72+2x11+2x10+5x9+7x7)	208.00	
	(1x10)x16	160.00	
	total	368.00	
	10% C.P. on cartage	36.80	
	<b>Total B</b>	<b>404.80</b>	
	<b>Total A+B</b>	<b>1796.80</b>	
	<b>Say</b>	<b>1797.00</b>	<b>Per Cum</b>

2)	Coarse Sand	Cost of cartage	Unit
	Basic Rate	800.00	
	10% C.P.	80.00	
	4% VAT	32.00	
	add 2% wastage on basic cost	16.00	
	<b>Total A</b>	<b>928.00</b>	
	Cartage- 45 km by truck at Quarry Dunda		
	(1x72+2x11+2x10+5x9+7x7)	208.00	
	(1x10)x16	160.00	
	total	368.00	

	10% C.P. on cartage	36.80	
	<b>Total B</b>	<b>404.80</b>	
	<b>Total A+B</b>	<b>1332.80</b>	
	<b>Say</b>	<b>1333.00</b>	<b>Per Cum</b>

<b>3)</b>	<b>40 mm gauge stone ballast</b>	<b>Cost of cartage</b>	<b>Unit</b>
	Basic Rate	<b>1600.00</b>	
	10% C.P.	<b>160.00</b>	
	4% VAT	<b>64.00</b>	
	add 1% wastage on basic cost	<b>16.00</b>	
	<b>Total A</b>	<b>1840.00</b>	
	Cartage- 45 km by truck at Quarry Dunda		
	(1x10)x16	<b>160.00</b>	
	10% C.P. on cartage	<b>16.00</b>	
	<b>Total B</b>	<b>176.00</b>	
	<b>Total A+B</b>	<b>2016.00</b>	
	<b>Say</b>	<b>2016.00</b>	<b>Per Cum</b>

<b>4)</b>	<b>Fine Sand</b>	<b>Cost of cartage</b>	<b>Unit</b>
	Basic Rate	500.00	
	10% C.P.	50.00	
	4% VAT	20.00	
	add 2% wastage on basic cost	10.00	
	<b>Total A</b>	<b>580.00</b>	
	Cartage- 45 km by truck at Quarry Dunda		
	(1x72+2x11+2x10+5x9+7x7)	208.00	
	(1x10+2x4.50)x16	304.00	
	Total	512.00	
	10% C.P. on cartage	51.20	
	<b>Total B</b>	<b>563.20</b>	
	<b>Total A+B</b>	<b>1143.20</b>	
	<b>Say</b>	<b>1143.00</b>	<b>Per Cum</b>

5)	Stone	Cost of cartage	unit
	Basic Rate	300.00	
	10% C.P.	30.00	
	4% VAT	12.00	
	add 2% wastage on basic cost	6.00	
	<b>Total A</b>	<b>348.00</b>	
	Cartage- 45 km by truck at Quarry Dunda		
	(1x72+2x11+2x10+5x9+7x7)	208.00	
	(1x10+2x4.50)x16	304.00	
	total	512.00	
	10% C.P. on cartage	51.20	
	<b>Total B</b>	<b>563.20</b>	
	<b>Total A+B</b>	<b>911.20</b>	
	<b>Say</b>	<b>911.00</b>	<b>Per Cum</b>

6)	20 mm gauge stone grit	Cost of cartage	unit
	Basic Rate	3750.00	
	10% C.P.	375.00	
	total	4125.00	
	Cartage- 45 km by truck at Quarry Dunda		
	(1x72+2x11+2x10+5x9+10x7+10x6.5+20x6+163x5.5)	1310.50	
	10% C.P. on cartage	131.05	
	Total	1441.55	
	cartage per qtl	144.16	
	hence rate at site	4269.16	
	<b>Say</b>	<b>4269.20</b>	<b>per qtl</b>

<b>SN</b>	<b>Item</b>	<b>Unit</b>	<b>Rate as per SOR</b>	<b>Rate after extra cartage of material</b>	<b>Percent of increase of rate</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1	R.R. dry	Cum	1985.00	2923.00	47.25 %
2	R.R 1:6	Cum	3152.90	5270.90	67.18 %
3	WBM G1	Cum	1857.60	2795.60	50.50 %
4	WBM G2	Cum	1944.70	2882.70	48.23 %
5	WBM G3	Cum	2019.90	2957.90	46.44 %
6	Premix Carpet	Sqm	230.40	271.90	18.01 %
				<b>Average of %</b>	<b>46.27%</b>