

DETAIL OF TOPOGRAPHY OF ALIGNMENT

Add. Attachment 2.4

य का नाम:- तल्ला रामगढ़ रातीघाट मोटर मार्ग के किमी 0 6 से किमुपानी, थानदेव के सैमधार से सैम मंदिर तक
मार्ग का नव निर्माण कार्य।(लम्बाई- 5.000 कि०मी०)

Point of Topography of the Road	Proposed Alignment No-1	Proposed Alignment No-2
Main features and Description of Alignment	This alignment started from Km.6 of Talla Ramgarh Ratighat motor road and connects villages Kimupani, Thandev and saimdhhar	This alignment started from Km.6 of Talla Ramgarh Ratighat motor road and connects villages Kimupani, Thandev and saimdhhar
Length of the alignment from starting to terminal point	5.000 Km.	5.450Km.
Geometries:- (I) Gradient in different stretches (ii) Curves and hairpin bends etc.	1:20R/F, 1:40R, & 1:60 R 11	1:18R/F, 1:40R, & 1:50R 12 No
Terrain soil conditions:- (I) Geology of area (ii) Road length passing through (a) Mountainous terrain (cross slop from 25% to 40 %) (b) Mountainous terrain (cross slop from 40% to 70%) (c) Rocky stretches with indicating of length in loose stretches (d) Snow bound area	Hill area 3.500 Km. 1.00 Km. 0.500 km. Nil	Hill area 2.700 Km. 1.500 Km. 1.25 Nil
Nature of soil :- (I) Length of reaches with earth & boulder (ii) length of reaches with medium rock/shale (iii) Length of reaches with hard rock/shale (iv) Length of reaches with homogeneous rock	2.600 Km. 1.700Km. 0.700Km. Nil	1.900 1.600 1.950 Nil
Requirement of bridges:- 1-Minor Bridges (a) Total No. (b) Span (c) Total water ways 2-Major Bridges (a) Total No. (b) Span (c) Total water ways	Nil Nil 3No.(3N0 Causeways incl.) Nil N.A. Nil	Nil Nil 4No.(4N0 Causeways incl.) Nil N.A. Nil
General elevation of the road (i) Indicating maximum and minimum height negotiated by main ascends and descends (ii) Total No. of ascends & descends (iii) Total No. of cliffs & gorges	1400-1550Mts. 01, 01 Nil	1400-1550Mts. 01, 01 Nil

Add. Assistant Engineer

Assistant Engineer

अधिशारी अभियंता
निर्माण, लोडिंग विभाग
नैनीताल.

सहायक अभियंता
निर्माण विभाग, लोडिंग विभाग

N.	Point of Topography of the Road	Alignment	Alignment
	(a) Right of way bringing out construction on account of built up area, mountains and other structure.	Total Mountain Area	Total Mountain Area
	(b) Approximate area and value.		
	(i) Cultivated land	1.150 Km	0.800 Km.
	(ii) irrigated		Nil
	(iii) Unirrigated	1.150 Km	0.800 Km.
	(a) Existing means of inter communications, sub path, Geep, track etc.	Bridle path, Mule track	Bridle path, Mule track
	(b) Relation of proposed alignment with exiting, under construction road.	This alignment connect to Talla Ramgarh Ratighat M/Road	This alignment connect to Talla Ramgarh Ratighat M/Road
	(a) Availability of road construction material.	Stone will be available from hill side cutting	Stone will be available from hill side cutting
	(b) Location of quarries	Haldwani	Haldwani
	(c) Average lead	(a) 2.50 Km (b) 65.00 Km.	(a) 2.50 Km (b) 65.00 Km.
	(a) Facilities/resources		
	(i) Landing ground	Nil	Nil
	(ii) Dropping zones	Nil	Nil
	(iii) Food stuffs	Local food grain available	Local food grain available
	(iv) Labour (locally available or need of import)	As per contract basis (Locals & Napalis)	As per contract basis (Locals & Napalis)
	(v) Construction material - timber bamboos, stone etc.	Stone & sand locally available, grit from Haldwani quarry.	Stone & sand locally available, grit from Haldwani quarry.
	Access points: Indication possibilities of inductions of equipment	Talla Ramgaeh	Talla Ramgaeh
	Climatic condition		
	(a) Temperature Maximum and minimum	Max.(30 ⁰), Min.(2 ⁰)	Max.(30 ⁰), Min.(2 ⁰)
	(b) Rain fall dates wind direction velocity		
	(c) Exposed of sun	June - September 6 to 7 hour during clear weather North-East	June - September 6 to 7 hour during clear weather North-East
	(d) Drainage characteristic of area, indicating susceptibility of drainage	Minor damages may occur during the rainy season.	Minor damages may occur during the rainy season.
	Length of land slides	Nil	Nil
	Length of unstable area	50 M	150 M
	Length of heavy clearing	Nil	Nil
	Length of marshy or flooded area	Nil	Nil

Add Assistant. Engineer

Assistant Engineer

Photo Copy Attached

अविशारी अभिगता
Executive Engineer
निर्माण खण्ड, लो. नि. विभाग
चैनीताल.

अविशारी अभिगता
निर्माण खण्ड, लो. नि. विभाग
चैनीताल

Point of Topography of the Road	Alignment	Alignment
(a) Important villages, towns, market -ing center and commercial center	Talla Ramgarh	Talla Ramgarh
(b) Length of portion with loose rocks villages following with	50 Mtrs	150 Mtrs
(i) 1st Km. Of the alignment	Nil	Nil
(ii) 1st Km. to 5th Km. of alignment	50 Mtrs	150 Mtrs
Period required for construction	2 year	2 year
Vegetation	Grass and bushes, Chir wood trees.	Grass and bushes, Chir wood trees.
Political aspects	Nil	Nil
Strategic conditions	Crops, vegetable & Fruit etc	Crops, vegetable & Fruit etc
Economic and Industrial		
(I) Population secured by the alignment	App.350 Total Population	App 350 Total Population
Recreational potential and development of tourism	Yes	Yes
Scope of agriculture of horticulture Development	Road construction will encourage development of Tourism, horticulture & agriculture. Locally produced fruits & vegetables will reach to the market easily. Less Distance to Thesil & Distt Head quarter.	Road construction will encourage development of Tourism, horticulture & agriculture. Locally produced fruits & vegetables will reach to the market easily. Less Distance to Thesil & Distt Head quarter.
Exploitation of forest wealth	Nil	Nil
Aspects of development of minor and major hydroelectric projects	Nil	Nil
Approximate cost of construction	259.00 Lac.	282.31 Lac.
(a) Merits	1. Development of area, connects all nearby villages of above 350 population in total. 2. Shortest route to Thesil & Distt Headquarter	1. Development of area, connects all nearby villages of above 350 population in total. 2. Shortest route to Thesil & Distt Headquarter
(b) Demerits	Nil	During construction damage some property, & vegetation.
As other useful information, other important project etc. being area required completion of the work	This M/R will be shortest route for these villages to connect Thesil & Distt head quarter.	This M/R will be shortest route for these villages to connect Thesil & Distt head quarter
Recommendation of the Executive Engineer.	In consideration of all the above aspects of the work, Alignment -1 shown in red color seems to be most suitable and is, therefore, Recommended for approval.	In consideration of all the above aspects of the work, Alignment-2 shown in Blue color seems to be not suitable and is there fore alignment is not recommended for the favour for approval.
Order of Superintending Engineer		

Add Assistant Engineer

Assistant Engineer

Photo Copy Attached.

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 EX-1000 एडिओरदो विभाग
 बरेली जिला.

अधिसारी अभियन्ता

अधिसारी अभियन्ता, लो. नि. वि.

अधिसारी