

DETAIL OF TOPOGRAPHY OF ALIGNMENT

का नाम:- राज्य योजना के अन्तर्गत जनप्रद नैनीताल के विधान सभा क्षेत्र-नैनीताल के विकास खण्ड बेटालघाट के अन्तर्गत पांगकटारा से खलाड तक मोटर मार्ग का नव निर्माण कार्य।(प्रथम चरण)(लम्बाई:-3.000किमी0)

Point of Topography of the Road	Proposed Alignment No-1	Proposed Alignment No-2
Main features and Description of Alignment	This alignment started from End Point Of Km 2.0 of Garketh To Pangkatara Motor road and Connects Villages Pangkatara, Khallad	This alignment started from End Point Of Km 2.0 of Garketh To Pangkatara Motor road and Connects Villages Pangkatara, Khallad
Length of the alignment from starting to terminal point	3.00 Km.	3.20 Km.
Geometries:- (I) Gradient in different stretches (ii)Curves and hairpin bends etc.	1:20F/R,1:30R/F,1:40R,1:240R,1:60R& Level Gradient 2 No	1:15F,1:30R,1:24R,1:60F& 1:24R 2 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 25° to 50° Nil Nil	Hill area 25° to 50° Nil 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	Mixed Reaches in Alignment Nil	Mixed Reaches in Alignment Nil
Requirement of bridges: -Minor Bridges (a) Total No. (b) Span (c)Total water ways -Major Bridges (a) Total No. (b) Span (c)Total water ways	 Nil Nil 24 Nos Nil N.A. Nil	 Nil Nil 25 Nos 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	 1200-1400 3 Nos Nil	 1300-1500 0 4Nos 1 No

Add.Assistant Engineer

Assistant Engineer

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नैनीताल.

Executive Engineer

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S.N.	Point of Topography of the Road		Alignment
8	(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	1.000 Km.	1.50 Km.
	(ii) Irrigated	Nil	Nil
	(iii) Unirrigated	1.00 Km.	1.150 Km.
9	(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 existing, under construction road.		
10	(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	Betalghat	Betalghat
	(c) Average lead	(a) 40.00 Km	(a) 40.00 Km
11	(a) Facilities/resources		
	(i) Landing ground	Nil	Nil
	(ii) Dropping zones	Nil	Nil
	(iii) Food stuffs	Local food grain available, vegetables, Fruits	Local food grain available, vegetables, Fruits
	(iv) Labour (locally available or need of import)	Local	(Locals)
	(v) Construction material - timber bamboos, stone etc.	Stone & sand locally available, grit from Betalghat & Lalkuon quarry.	Stone & sand locally available, grit from Betalghat & Lalkuon quarry.
12	Access points: Indication possibilities of inductions of equipment	Betalghat Motor road.	Betalghat Motor road.
13	Climatic condition		
	(a) Temperature Maximum and minimum	Max.(35 ⁰), Min.(10 ⁰)	Max.(35 ⁰), Min.(10 ⁰)
	(b) Rain fall dates wind direction velocity	June - September 6 to 7 hour during clear weather	June - September 6 to 7 hour during clear weather
	(c) Exposed of sun	North-West	North-West
	(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.
14	Length of land slides	Nil	Nil
15	Length of unstable area	Nil	Nil
16	Length of heavy clearing	Nil	Nil
17	Length of marshy or flooded area	Nil	Nil

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Add. Attachment - 2.4

Point of Topography of the Road		Alignment
(a) Important villages, towns, market -ing center and commercial center	Betalghat, Khairna	Betalghat, Khairna
(b) Length of portion with loose rocks villages following with	Nil	Nil
(i) 1st Km. Of the alignment	Nil	Nil
(ii) 1st Km. to 5th Km. of alignment	Nil	Nil
Period required for construction	Two year	Two year
Vegetation	वांज, बुरांरा, चीड, खरसू	वांज, बुरांरा, चीड, खरसू
Political aspects	Nil	Nil
Strategic conditions	Crops. vegetable, Pulses & Fruit etc	Crops, vegetable, Pulses & Fruit etc
Economic and Industrial		
(i) Population secured by the alignment	App. 449 Total Population	App. 449 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	158.4 Lac.	168.96 Lac.
(a) Merits	1. Development of area, connects all nearby villages of above 449 population in total.	1. Development of area, connects all nearby villages of above 449 population in total.
(b) Demerits	2. Shortest route to Thesil & Distt Headquarter During construction damage some property, & vegetation.	2. Shortest route to Thesil & Distt Headquarter 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, <u>Recommended for approval.</u>	In consideration of all the above aspects of the work, Alignment-2 shown in Blue color seems to be not suitable, Since alignment 2 is not recommended for the favour for approval.
Order of Superintending Engineer		


Add. Assistant Engineer


Assistant Engineer

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बेनीताल.


Executive Engineer

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बेनीताल.