

Add Attachment 2.4

(13)

DETAIL OF TOPOGRAPHY OF ALIGNMENT

का नाम:- राज्य योजना के अन्तर्गत जनपद नैनीताल के विधान सभा क्षेत्र-नैनीताल के विकास खण्ड बेतालधाट के गत पांगकटारा से खलाड तक मोटर मार्ग का नव निर्माण कार्य。(प्रथम चरण)(लम्बाई:-3.000किमी)

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 Pangkatar, Khallad	This alignment started from End Point Of Km 2.0 of Garketh To Pangkatara Motor road and Connects Villages Pangkatar, Khallad
Length of the alignment from starting to terminal point	3.00 Km.	3.20 Km.
Geometries:-		
(I) Gradient in different stretches	1:20F/R, 1:30R/F, 1:40R, 1:240R, 1:60R & Level Gradient	1:15F, 1:30R, 1:24R, 1:60F & 1:24R
(ii) Curves and hairpin bends etc.	2 No	2 No
Terrain soil conditions:-		
(I) Geology of area	Hill area	Hill area
(ii) Road length passing through		
(a) Mountainous terrain (cross slop from 25% to 40 %)	25° to 50°	25° to 50°
(b) Mountainous terrain (cross slop from 40% to 70%)		
(c) Rocky stretches with indicating of length in loose stretches	Nil	Nil
(d) Snow bound area	Nil	Nil
Nature of soil :-		
(I) Length of reaches with earth & boulder	Mixed Reaches in Alignment	Mixed Reaches in Alignment
(ii) length of reaches with medium rock/shale		
(iii) Length of reaches with hard rock/shale		
(iv) Length of reaches with homogeneous rock	Nil	Nil
Requirement of bridges:		
-Minor Bridges		
(a) Total No.	Nil	Nil
(b) Span	Nil	Nil
(c) Total water ways	24 Nos	25 Nos
-Major Bridges		
(a) Total No.	Nil	Nil
(b) Span	N.A.	N.A.
(c) Total water ways	Nil	Nil
General elevation of the road		
(i) Indicating maximum and minimum height negotiated by main ascends and descends	1200-1400	1300-1500 0
(ii) Total No. of ascends & descends	3 Nos	4Nos
(iii) Total No. of cliffs & gorges	Nil	1 No

[Signature]
Add. Assistant Engineer

[Signature]
Assistant Engineer
सहायक अभियंता
निर्माण खण्ड, लो०३० विभाग
बैनीताल।

[Signature]
Executive Engineer
निर्माण खण्ड, लो०३० विभा०
नैनीताल।

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SN	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. (b) Approximate area and value. (i) Cultivated land (ii) irrigated (iii) Unirrigated	Total Mountain Area 1.000 Km. Nil 1.00 Km.	Total Mountain Area 1.50 Km. Nil 1.150 Km.
9	(a) Existing means of inter communications, sub path, Geep,track etc. (b) Relation of proposed alignment with exiting, under construction road.	Bridle path, Mule track	Bridle path, Mule track
10	(a) Availability of road construction material. (b) Location of quarries (c) Average lead	Stone will be available from hill side cutting Betalghat (a) 40.00 Km	Stone will be available from hill side cutting Betalghat (a) 40.00 Km
11	(a) Facilities/réssources (i) Landing ground (ii) Dropping zones (iii) Food stuffs (iv) Labour (locally available or need of import) (v) Construction material -timber bamboos, stone etc.	Nil Nil Local food grain available , vegetables, Fruits Local Stone & sand locally available, grit from Betalghat & Lalkuon quarry.	Nil Nil Local food grain available , vegetables, Fruits (Locals) 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 (b) Rain fall dates wind direction velocity (c) Exposed of sun (d) Drainage characteristic of area, indicating susceptibility of drainage	Max.(35°), Min.(10°) June - September 6 to 7 hour during clear weather North-West Minor damages may occur during the rainy season.	Max.(35°), Min.(10°) June - September 6 to 7 hour during clear weather North-West 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


Add. Assistant Engineer


Assistant Engineer

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निर्माण खण्ड, लोकनि० बिभाग
नैचोत्तम।

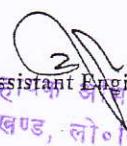
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नैचोत्तम।

Executive Engineer. वि०

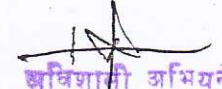
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Point of Topography of the Road		Alignment
(a) Important villages, towns, market center and commercial center	Betalghat, Khairna	Betalghat, Khairna
(b) Length of portion with loose rocks villages following with	Nil	Nil
(i) 1st Km. Of the alignment	Nil	Nil
(ii) 1st Km. to 5th Km. of alignment	Nil	Nil
Period required for construction	Two year	Two year
Vegetation	पांज, बुरांश, चीड़, खरसू	पांज, बुरांश, चीड़, 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. 2. Shortest route to Thesil & Distt Headquarter	1. Development of area, connects all nearby villages of above 449 population in total. 2. Shortest route to Thesil & Distt Headquarter
(b) Demerits	During construction damage some property, & vegetation.	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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