DETAIL OF TOPOGRAPHY OF ALIGNMENT

Name of Road:- अनुसूचित जाति उपयोजना के अन्तर्गत जनपद नैनीताल में जिनौली तडी से सकदीना तक मोटर मार्ग निर्माण। (लम्वाई— 6.650 कि0मी0)

S.N.	Topography of the Road	Allignment No (1)	Allignment No (2)
	Main features and Description of Alignment	This alignment started from Km.3 of Simalkha-Sakdina motor road and connects villages Sakdina, Patori, Jinoli. and Tarhi.	
2	Length of the alignment from starting to terminal point	6.650 Km.	7.500 Km.
	Geometries:- (I) Gradient in different stretches	1:24R,1:40R,&1:24R	1:20R,1:24R,&1:18R
	(ii)Curves and hairpin bends etc.	10 No	
	Terrain soil conditions:-	10 100	13 No
	(I) Geology of area (ii) Road length passing through (a) Mountainous terrain (cross slop from	Hill area	Hill area
1	25% to 40 %) (b)Mountainous terrain (cross slop from	4.000Km.	3.800Km.
i	40% to 70%) (c)Rocky stretches with indicating of length	2.650Km.	2.850Km.
1	in loose stretches (d) Snow bound area	0.500 km.,3.000 Km. Nil	0.400 km.,3.000 Km.
5	Nature of soil:-	INII	Nil
	(I) Length of reaches with earth & boulder (ii) length of reaches with medium	2.500Km.	1.500Km.
	rock/shale (iii) Length of reaches with hard	3.000Km.	3.000Km.
	rock/shale (iv) Length of reaches with homogeneous rock	1.150Km.	2.150Km.
\vdash	SAN TACALINGS AND	Nil	Nil
	Requirement of bridges:		>
	1-Minor Bridges		
1	(a) Total No.	Nil	Nil
1	(b) Span	Nil	Nil
1	(c)Total water ways	4No.(2N0 Causeways incl.)	6No.(3N0 Causeways incl.)
1	2-Major Bridges		
1 1	(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		
1		1300-1500Mts.	1500 170084
1	(ii)Total No. of ascends & descends	6	1500-1700Mts.
	(iii)Total No. of cliffs & gorges	1No.	1No.

Add. Assistant Engineer

Assistant Engineer

Executive Engineer

.N.		Alignment (1)	Alignment(2)
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	1.650 Km.	1.000 Km.
	(ii) irrigated	1.000 Km.	1.500 Km.
	(iii) Unirrigated	4.000 Km.	4.150 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	Bridie patii, wide track	Bridie patii, widie track
	with exiting, under construction	This alignment connect	This alignment connect
	road.	This alignment connect to Simalka-Sakdina M/Road	This alignment connect to Simalka-Sakdina M/Road
0	(a) Availability of road construction	Stone will be available	Stone will be available
	material.	from hill side cutting	from hill side cutting
	(b) Location of quarries	Haldwani	Haldwani
	(c) Average lead	(a)3.000Km(b)90.000Km.	(a)3.000Km(b)90.000Km.
1	(a) Facilities/resources	(a)3.000Kiii(b)30.000Kiii.	(a)3.000Kiii(0)30.000Kiii.
	(i) Landing ground	Nil	Nil
	(i) Dropping zones	Nil	Nil Nil
	(iii) Food stuffs		500.570.
	(iv) Labour (locally available or	Local food grain available	Local food grain available
		As per contract basis	As per contract basis
	need of import)	(Locals & Napalis)	(Locals & Napalis)
	(v) Construction material -timber	Stone & sand locally	Stone & sand locally
	bamboos, stone etc.	available, grit from Haldwani	available, grit from Haldwani
2		&Lalkuon quarry.	&Lalkuon quarry.
. 2	Access points: Indication possibilities of inductions of equipment	Rati Ghat- Betal Ghat	Rati Ghat- Betal Ghat
3	Climatic condition	Motor road.	Motor road.
٦	(a) Temperature Maximum and		
	minimum	M (250) M: (100)	(250) 34: (100)
	(b) Rain fall dates wind direction	$Max.(35^0), Min.(10^0)$	Max.(35 ⁰),Min.(10 ⁰)
	velocity	T	
	(c)Exposed of sun	June - September	June - September
	(c)Exposed of suff	6 to 7 hour during	6 to 7 hour during
		clear weather	clear weather
	(IND	North-West	North-West
	(d)Drainage characteristic of area,	Minor damages may occur	Minor damages may occur
	indicating susceptibility of drainage	during the rainy season.	during the rainy season.
_	Length of land slides	Nil	Nil
5	Length of unstable area	200 M	200 M
6	Length of heavy clearing	Nil	Nil
17	Length of marshy or flodded area	Nil	Nil

Add Assistant. Engineer

Assistant Engineer

Executive Engineer

a) Important villages, towns, market ing center and commercial center b) Length of portion with loose rocks villages following with) 1st Km. Of the alignment i)1st Km.to 5th Km.of alignment eriod required for construction egetation olitical aspects crategic conditions conomic and Industrial) Population secured by the alignment ecreational potential and evelopment of tourism cope of agriculture of horticulture evelopment	Sakdina, Patori, Jinoli. Betal Ghat 200M. Nil Two year Grass and bushes, Chir wood trees. Nil Crops, vegetable & Fruit etc App. 450 Total Population Yes Road construction will encourage development of Tourism, horticulture &	Alignment (2) Sakdina,Patori,Jinoli. Betal Ghat 200M. Nil Two year Grass and bushes, Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes Road construction will encourage
co) Length of portion with loose rocks villages following with 1) 1st Km. Of the alignment i) 1st Km.to 5th Km.of alignment eriod required for construction egetation 10 1st km.to 5th km.of alignment eriod required for construction egetation 10 2st km.to 5th km.of alignment egetation 11 2st km.to 5th km.of alignment egetation 12 2st km.to 5th km.of alignment egetation 13 2st km.to 5th km.of alignment egetation 14 2st km.to 5th km.of alignment egetation 15 2st km.to 5th km.of alignment egetation 16 2st km.to 5th km.of alignment egetation 18 2st km.to 5th km.to 5th km.of alignment egetation 18 2st km.to 5th km.to 5th km.of alignment egetation 18 2st km.to 5th km.to 5th km.of alignment egetation 18 2st km.to 5th km.to 5th km.of alignment egetation 18 2st km.to 5th km.to 5th km.to 6th km.to	200M. Nil Two year Grass and bushes, Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes Road construction will encourage	Betal Ghat 200M. Nil Two year Grass and bushes, Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes
i)1st Km.to 5th Km.of alignment eriod required for construction egetation olitical aspects crategic conditions conomic and Industrial) Population secured by the alignment ecreational potential and evelopment of tourism cope of agriculture of horticulture	Nil Two year Grass and bushes, Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes Road construction will encourage	Nil Two year Grass and bushes, Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes
eriod required for construction egetation colitical aspects crategic conditions conomic and Industrial) Population secured by the alignment ecreational potential and evelopment of tourism cope of agriculture of horticulture	Two year Grass and bushes, Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes Road construction will encourage	Two year Grass and bushes, Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes
egetation political aspects trategic conditions conomic and Industrial) Population secured by the alignment ecreational potential and evelopment of tourism cope of agriculture of horticulture	Grass and bushes, Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes Road construction will encourage	Grass and bushes, Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes
political aspects crategic conditions conomic and Industrial Population secured by the alignment ecreational potential and evelopment of tourism cope of agriculture of horticulture	Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes Road construction will encourage	Chir wood trees. Nil Crops, vegetable & Fruit etc App.450 Total Population Yes
crategic conditions conomic and Industrial) Population secured by the alignment ecreational potential and evelopment of tourism cope of agriculture of horticulture	Nil Crops, vegetable & Fruit etc App.450 Total Population Yes Road construction will encourage	Nil Crops, vegetable & Fruit etc App.450 Total Population Yes
crategic conditions conomic and Industrial) Population secured by the alignment ecreational potential and evelopment of tourism cope of agriculture of horticulture	Crops, vegetable & Fruit etc App.450 Total Population Yes Road construction will encourage	Crops, vegetable & Fruit etc App.450 Total Population Yes
conomic and Industrial) Population secured by the alignment ecreational potential and evelopment of tourism cope of agriculture of horticulture	App.450 Total Population Yes Road construction will encourage	App.450 Total Population Yes
Population secured by the alignment ecreational potential and evelopment of tourism cope of agriculture of horticulture	Yes Road construction will encourage	Yes
evelopment of tourism cope of agriculture of horticulture	Road construction will encourage	
	agriculture. Locally produced fruits & vegetables will reach to the market easely.Less Distance to Thesil & Distt Head quarter.	development of Tourism, horticulture agriculture. Locally produced fruits vegetables will reach to the market easely. Less Distance to Thesil & Distance quarter.
xploitation of forest wealth	Nil	Nil
spects of development of minor		
	Nil	Nil
pproximate cost of construction	210.00 Lac.	250.00 Lac.
Merits Demerits	1.Development of area, connects all nearby villages of above 450 population in total. 2.Shortest route to Thesil & Distt Headquarter During construction damage some property, & vegetation.	nearby villages of above 450 population in total.
other useful information, other portant project etc. being area quired completion of the work	This M/R will be shortest route for these villages to connect Thesil & Distt head quarter, Parallel along the Koshi river.	This M/R will be shortest route for these villages to connect Thesil & Dis head quarter, Parallel along the Kosl river.
gineer.	red color seems to be most suitable and	of the work. Alignment (2) shown
	pects of development of minor d major hydroelectric projects oproximate cost of construction Merits Demerits other useful information, other portant project etc. being area uired completion of the work commendation of the Executive	easely.Less Distance to Thesil & Distt Head quarter. Nil pects of development of minor d major hydroelectric projects Proproximate cost of construction Merits 1.Development of area, connects all nearby villages of above 450 population in total. 2.Shortest route to Thesil & Distt Headquarter During construction damage some property, & vegetation. This M/R will be shortest route for these villages to connect Thesil & Distt head quarter, Parallel along the Koshi river. Commendation of the Executive gineer. In consideration of all the above aspects of the work, Alignment (1) shown in red color seems to be most suitable and is therefore.

Add. Assistant Engineer

Assistant Engineer

Executive Engineer