



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)

National Highways Authority of India

(Ministry of Road Transport & Highways, Govt. of India)

परियोजना कार्यान्वयन ईकाई-वसन्त विहार। **Project Implementation Unit-Vasant Vihar**

मकान सं० 171, फेज-I, वसन्त विहार, देहरादून - 248006 House no.171, Phase-I, Vasant Vihar, Dehradun - 248006

दूरभाष/Phone: 0135-2760001 ई-मेल/E-mail: piuvasantvihar@nhai.org वेब/Web: www.nhai.gov.in



NHAI/PIU/VV/2022/Bhaniyawala-Rishikesh/Forest/ 5698

Dt.30.11.2023

To,

Divisional Forest Officer,
Dehradun Forest Division,
Tilak Road, Dehradun.
(Email- dfodoon@gmail.com)

Sub: Four/Six laning of Bhaniyawala - Jollygrant - Rishikesh road (Spur) section of NH-07 from Design Ch. 0.000 to Design Ch. 19.780 in the state of Uttarakhand.

Reg-Compliance Report of Received EDS regarding Forest Diversion proposal No. FP/UK/ROAD/146663/2021.

Ref: -

- DFO Narender Nagar office letter no1392/12-1 dated 29.11.2023.
- M/s Yongma Engineering co. Ltd. office letter no.YM(EN) 2023-2710001 dated 27.10.2023.
- This office letter no.5528 dated 25.10.2023.
- M/s Yongma Engineering co. Ltd. office letter no.YM(EN) 2023-2010003 dated 20.10.2023.
- RO, MoEF&CC, Dehradun office letter no.8B/UPC/06/66/2023/FC/932 dated 16.10.2023.
- Scientist 'D', MoEF&CC, Gol, New Delhi office letter dated 21.08.2023.

Sir,

This is in reference to query raised by DFO, Dehradun Forest Division on 21.11.2023 on Parivesh Portal, regarding the submission of compliances of observations raised by O/o Regional officer, MoEF&CC, Dehradun vide its letter dated 16.10.2023. The following point wise compliances are mentioned below for the same:-

S.No.	Observations	Compliances
i.	No details of existing approval under FCA of the existing road are found available in the proposal. State Government is requested to provide the same.	The forest land proposed for diversion is required for widening of the existing road which existed prior to 1980 therefore no Forest land diversion proposal was submitted in the past. However, the area of existing road overlapping on proposed road has already been incorporated into total area of forest land proposed for diversion in the current proposal.
ii.	No details of existing Black top area, carriage way and RoW is found available. State Government is requested to provide the same and also provide details for the proposed existing Black top area, carriageway and RoW.	The existing road has black top / carriageway of 7 m and ROW of 11 m. For the proposed four lane Black top will be 17m. In general, the proposed ROW is 23m including median, shoulder, toe wall, retaining wall etc. However, the average width of proposed ROW is 21.6298m due to variable width of forest land needed in different chainages. (Segment & Compartment wise area calculation sheet already included)

Contd.2.

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iii.	As per land schedule, average width proposed in this proposal is 21.6298 m. State Government is requested to clarify whether this average width involves existing road width. It is also requested to submit the details of approved width in hilly area for four laning as per norms and order of MoRTH.	<p>The average road width of 21.6298 m includes the existing road width also.</p> <p>The Project road is falling under the category of plain and rolling terrain as per clause 2.2.1 of IRC:SP:84-2019, manual for Four-Lanning of highways. The recommended ROW for 4-lane highways as per IRC codal provisions is as below:</p> <ul style="list-style-type: none"> • Minimum 45 m (as per para 4.1, table 4.1 IRC:73-2023 copy attached as Annexure-1A) • Minimum 60 m (as per Para 2.3 IRC:SP:84-2019, copy attached as Annexure-1B) <p>With a view to minimizing the cutting of trees, average road width of 21.6298m (maximum upto 23m in forest area) is proposed instead of recommended minimum 45 m width of road as per IRC:73-2023, and only 23 m ROW is proposed in the forest area.</p>
iv.	State Government is requested to clarify whether tree counting of 4442 trees is done in RoW or in carriageway.	Tree counting of 4442 trees are done in the proposed ROW. As there will be requirement of construction of shoulder, retaining walls, toe walls also in addition to carriageway.
v.	State Government is requested to submit the list of trees which are actually required to be felled out of 4442 trees.	User agency has made the possible efforts to minimize the area of forest land for diversion as well as minimum number of trees to be felled out and constructing the four-lane Road within 23m width. Out of 4442 nos of trees, 1085 are samplings. The user agency has already proposed four-lane Road with 23m width and, will consumed entirely in accommodating carriageway, Median, toe/retaining/ breast walls, crash barriers/ fencing, boundary walls and utility corridors. Hence, the number of trees to be felled down would be 4442.
vi.	It is seen that the shape of proposed road mentioned in KML file and in digital map are not matching. Shifting of road alignment is found at starting, ending and point no.12 & 17 as provided in digital map. State Government is requested to clarify the same.	Revised Digital map are enclosed.
vii.	Instead of administrative approval of the proposed road, administrative approval of Paonta Sahib Ballupur road is found uploaded in part I addl. document. It is requested to upload the administrative approval of the proposed road.	A copy of the Standing Finance Committee approval of the Bhaniyawala-Rishikesh project order no. RW/ NH-37011/ 102/ 2022- BP&SP dated 03.02.2023 is attached herewith.
viii.	Cost benefit analysis not found uploaded which is required to be uploaded at para G in Part-I.	As per policy circular/guideline No. 7-69/2011 FC (Pt) dated 01.08.2017 Cost benefit analysis is not applicable whereas forest land proposed for diversion is less than 20 ha, Therefore, it was not uploaded. (Copy attached)

Contd.3.

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ix.	It is seen that the form III is not signed by CF at para 16 in part II. State Govt is requested to submit/upload the signed copy of the recommendation of CF.	Related to Forest Department.
x.	In the CA site suitability certificate, it is mentioned that density of two sites i.e. Khanan ii and Khanana 12 are 0.4. As per guidelines, CA area proposed in degraded forest cannot be accepted for sites having density 0.4 and more. It is requested to change these two sites out of three and select some other site suitable for raising CA.	DFO, Narendernagar vide letter no. 1392/12-1 dated 29.11.2023 has submitted that site inspection was conducted again regarding the density in the proposed compensatory afforestation of total 39.669 ha area due to the presence of bushes and green grass, the density appears to be high whereas as per the actual condition of the area, the vegetation density is less than 0.30 and the said site is absolutely suitable for compensatory afforestation. A certification has also been issued by DFO Narendernagar in this regard. (Certificate Attached)
xi.	It appears that there is continuous movement of wildlife across the proposed road. However, no comments have been provided regarding the effect of widening on the movement of elephants. Also, no mitigation measures have been proposed. State Government is requested to make comments in this regard and provide a mitigation plan, if necessary	NOC has been received from the Chief Wildlife Warden, Dehradun (Copy enclosed). In view of the movement of wildlife, the user agency has already proposed 04 elephant passes with an aggregate length of 3060 m, 01 major bridge cum elephant pass of 340 m, 02 minor bridges and 19 culverts in forest area for crossing of all types of animals including elephants.

An early action in this regard is highly solicited please.

Thanking You

Yours faithfully

Encl:As above.


(P.K. Mourya)
GM (Tech) cum Project Director
PIU-Vasant Vihar (Dehradun)



सत्यमेव जयते

भारत सरकार / GOVERNMENT OF INDIA
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय /
Ministry of Environment, Forest & Climate Change
क्षेत्रीय कार्यालय, देहरादून /
Regional Office, Dehradun



25 सुभाष रोड, देहरादून-248001/ 25 SUBHASH ROAD, DEHRADUN-248001

दूरभाष/ PHONE-0135-2650809, ईमेल/ E-mail-moef.ddn@gov.in

पत्र सं० 8बी/यू.सी.पी./06/66/2023/एफ.सी./932

दिनांक: 16/10/2023

सेवा में,

- ✓ अपर प्रमुख वन संरक्षक एवं नोडल अधिकारी
वन संरक्षण, इन्दिरानगर फारेस्ट कालोनी,
उत्तराखण्ड, देहरादून।

विषय:- उत्तराखण्ड राज्य के जनपद-देहरादून में राष्ट्रीय राजमार्ग-7 के भानियावाला (देहरादून) से ऋषिकेश रोड (स्पर) के डिजाईन किमी० 0.000 से किमी० 20.600 तक के मौजूदा सड़क चार लेन चौड़ीकरण एवं सुदृढ़ीकरण हेतु 19.8345 है० वन भूमि का गैर वानिकी कार्यों हेतु भारतीय राष्ट्रीय राजमार्ग प्राधिकरण को प्रत्यावर्तन। (Online Proposal No. FP/UK/ROAD/146663/2021)

सन्दर्भ:- कार्यालय- अपर प्रमुख वन संरक्षक एवं नोडल अधिकारी, वन संरक्षण, उत्तराखण्ड का पत्रांक – 323/12-1
दिनांक 14.08.2023 (received online on 11.09.2023)

महोदय,

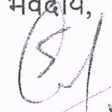
उपर्युक्त प्रस्ताव पर ध्यानपूर्वक विचार करने के उपरान्त मुझे आपको यह सूचित करने का निर्देश हुआ है कि विषयांकित प्रस्ताव में निम्नलिखित त्रुटियाँ पाई गयी है। राज्य सरकार निम्नलिखित बिन्दुओं पर आवश्यक सूचनायें प्रेषित करने का कष्ट करें, ताकि अग्रिम कार्यवाही सुनिश्चित की जा सके:-

- No details of existing approval under FCA of the existing road is found available in the proposal. State Government is requested to provide the same.
- No details of existing Black top area, carriage way and RoW is found available. State Government is requested to provide the same and also provide details for the proposed existing Black top area, carriageway and RoW.
- As per land schedule, average width proposed in this proposal is 21.6298 m. State Government is requested to clarify whether this average width involves existing road width. It is also requested to submit the details of approved width in hilly area for four laning as per norms and order of MoRTH.
- State Government is requested to clarify whether tree counting of 4442 trees is done in RoW or in carriageway.
- State Government is requested to submit the list of trees which are actually required to be felled out of 4442 trees.



- vi. It is seen that the shape of proposed road mentioned in KML file and in digital map are not matching. Shifting of road alignment is found at starting, ending and point no.12 & 17 as provided in digital map. State Government is requested to clarify the same.
- vii. Instead of administrative approval of the proposed road, administrative approval of Paonta Sahib Ballupur road is found uploaded in part I addl. document. It is requested to upload the administrative approval of the proposed road.
- viii. Cost benefit analysis not found uploaded which is required to be uploaded at para G in Part I.
- ix. It is seen that the form III is not signed by CF at para 16 in part II. State Govt is requested to submit/ upload the signed copy of the recommendation of CF.
- x. In the CA site suitability certificate, it is mentioned that density of two sites i.e. Khanan ii and Khanana 12 are 0.4. As per guidelines, CA area proposed in degraded forest cannot be accepted for sites having density 0.4 and more. It is requested to change these two sites out of three and select some other site suitable for raising CA.
- xi. It appears that there is continuous movement of wildlife across the proposed road. However, no comments have been provided regarding the effect of widening on the movement of elephants. Also, no mitigation measures have been proposed. State Government is requested to make comments in this regard and provide a mitigation plan, if necessary.

उपरोक्त के क्रम में जवाब प्राप्ति के उपरांत ही प्रस्ताव पर अग्रिम कार्यवाही की जा सकेगी ।

भवदीय,

 (सन्नी गोयल) 16/10/23
 तकनीकी अधिकारी (वानिकी)

प्रतिलिपि सूचनार्थ एवं आवश्यक कार्यवाही हेतु:-

1. अपर मुख्य सचिव (वन) उत्तराखण्ड शासन, सुभाष रोड, देहरादून।

/
 (सन्नी गोयल)
 तकनीकी अधिकारी (वानिकी)

TimeLine Details

Proposal received date at each stage of flow.

A. General Details

(i). **Proposal No. :** FP/UK/ROAD/146663/2021

(ii). **Name of Project for which Forest Land is required :** Up-gradation & 4-laning of Bhaniyawala - Rishikesh Road (Spur) of NH-7 from km 0.000 to km 20.600 in the State of Uttarakhand.

(iii). **Short narrative of the proposal and Project/scheme for which the forest land is required :** Up-gradation & 4-laning of Bhaniyawala - Rishikesh Road (Spur) of NH-7 from km 0.000 to km 20.600 in the State of Uttarakhand.

(iv). **State :** Uttarakhand

(v). **Category of the Project :** Road

(vi). **Shape of forest land proposed to be diverted :** Linear

(vii). **Area of forest land proposed for diversion(in ha.):** 19.8345

B. Time Line

Proposal No.	Submitted by User Agency	Query for Shortcoming(if any) by Nodal Officer	Resubmission of Proposal by User Agency	Query by Nodal Officer for submitting Hard Copies	Uploading(by U.A.) of copies of receipt received from DFO & DC	Division	Circle	Nodal Office	State Government	Regional Office	Stage-I Approval on	Stage-II Approval on
FP/UK/ROAD/146663/2021	16/04/2022	aa		18/04/2022	21/04/2022	Dehradun : 21/04/2022	Shivalik : 20/03/2023 (Dehradun)	Uttarakhand : 28/06/2023	Uttarakhand : 15/08/2023	Dehradun : 11/09/2023		

C. Essential Details Sought History

Communication between Regional Office & State Government	Communication between State Government & Nodal Officer	Communication between Nodal Officer & Circle	Communication between Circle & Division	Communication between Division & User Agency
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Query raised by Regional Office (Dehradun) on: 16/10/2023	Query raised by State Government (Uttarakhand) on: 18/10/2023	Query raised by Nodal Officer (Uttarakhand) on: 21/07/2023 Replied by Circle(Shivalik) on: 07/08/2023 Query raised by Nodal Officer (Uttarakhand) on: 10/08/2023 Replied by Circle(Shivalik) on: 14/08/2023 Query raised by Nodal Officer (Uttarakhand) on: 19/10/2023 Replied by Circle() on:	Query raised by Circle (Shivalik) on: 23/03/2023 Replied by DFO (Dehradun) on: 24/03/2023 Query raised by Circle (Shivalik) on: 24/03/2023 Replied by DFO (Dehradun) on: 24/03/2023 Query raised by Circle (Shivalik) on: 27/03/2023 Replied by DFO (Dehradun) on: 27/03/2023 Query raised by Circle (Shivalik) on: 27/03/2023 Replied by DFO (Dehradun) on: 24/06/2023 Query raised by Circle (Shivalik) on: 22/07/2023 Replied by DFO (Dehradun) on: 03/08/2023 Query raised by Circle (Shivalik) on: 05/08/2023 Replied by DFO (Dehradun) on: 05/08/2023 Query raised by Circle (Shivalik) on: 10/08/2023 Replied by DFO (Dehradun) on: 14/08/2023 Query raised by Circle (Shivalik) on: 20/10/2023	Query raised by DFO (Dehradun) on: 09/05/2022 Replied by UA on: 21/07/2022 Query raised by DFO (Dehradun) on: 03/08/2022 Replied by UA on: 16/08/2022 Query raised by DFO (Dehradun) on: 18/08/2022 Replied by UA on: 26/08/2022 Query raised by DFO (Dehradun) on: 31/08/2022 Replied by UA on: 12/12/2022 Query raised by DFO (Dehradun) on: 17/01/2023 Replied by UA on: 01/02/2023 Query raised by DFO (Dehradun) on: 27/02/2023 Replied by UA on: 03/03/2023 Query raised by DFO (Dehradun) on: 24/03/2023 Replied by UA on: 24/03/2023 Query raised by DFO (Dehradun) on: 28/03/2023
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			Replied by DFO () on:	Replied by UA on : 12/05/2023 Query raised by DFO (Dehradun) on: 22/07/2023 Replied by UA on : 02/08/2023 Query raised by DFO (Dehradun) on: 10/08/2023 Replied by UA on : 10/08/2023
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NOTE:- Proposal is pending at DFO due to EDS raised by Regional Office .

Segment and Compartment wise Area Calculation Sheet													
Name of Project : Widning of State Highway-24 Bhaniyawala (Dehradun) to Rishikesh from km 0.00 to km 20.600 in the State of Uttarakhand.													
Proposal No. : FP/UK/ROAD/146663/2021 (Applied Area - 19.8345 Hectare)													
S.No.	Segment	Villages	Forest Area							Non Forest Area			
			Forest Compartment	Entry Chainage (km)	Exit Chainage (km)	Length	Width	Area (Sq.m.)	Area (ha.)	Length	Width	Area (Sq.m.)	Area (ha.)
1	Segment-1	Bhaniawala	Bhaniawala - 2b Barkot Range	5.000	5.250	250.00	1.476	369	0.0369	12561	32.2400	404967	40.4967
2	Segment-2	Bhaniawala	Bhaniawala - 2b Barkot Range	5.300	5.420	120.00	22.333	2680	0.2680				
3	Segment-3	Bidhalna	Bidhalna -1 Thano Range	5.640	6.180	540.00	17.681	9548	0.9548				
4	Segment-4	Sainkot	Sainkot -1b Barkot Range	10.140	10.900	760.00	23.000	17480	1.7480				
5	Segment-5	Sainkot	Sainkot -2b Barkot Range	10.900	11.250	350.00	23.000	8050	0.8050				
6	Segment-6	Sainkot	Sainkot -2a Barkot Range	11.250	12.600	1350.00	22.999	31049	3.1049				
7	Segment-7	Sainkot	Sainkot - 3 Barkot Range	12.600	14.300	1700.00	23.000	39100	3.9100				
8	Segment-8	Sainkot	Sainkot - 9 Barkot Range	14.300	16.150	1850.00	22.999	42549	4.2549				
9	Segment-9	Bibiwala	Bibiwala - 2 Rishikesh Range	16.150	17.700	1550.00	23.000	35650	3.5650				
10	Segment-10	Bibiwala	Bibiwala -1a Rishikesh Range	17.700	17.800	100.00	23.000	2300	0.2300				
11	Segment-11	Bibiwala	Bibiwala -1b Rishikesh Range	17.800	18.030	230.00	23.000	5290	0.5290				
12	Segment-12	Rishikesh	Rishikesh -3 Rishikesh Range	18.500	18.630	130.00	14.908	1938	0.1938				
13	Segment-13	Sainkot	Sainkot -1b Barkot Range	0.000	0.240	240.00	9.758	2342	0.2342				
TOTAL FOREST AREA								19.8345 Hectare	TOTAL NON FOREST AREA			40.4967 Hectare	

वन क्षेत्राधिकारी
बनकोट रेंज
देहरादून वन प्रभाग

उप प्रभागीय वनाधिकारी
देहरादून वन प्रभाग
देहरादून

परियोजना निदेशक / Project Director
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India
(राष्ट्रीय परिवहन राजमार्ग मंत्रालय, भारत सरकार)
Ministry of Road Transport & Highways
पि०आइ०यू०-वसन्त विहार, देहरादून

वन क्षेत्राधिकारी
थानों रेंज
देहरादून वन प्रभाग

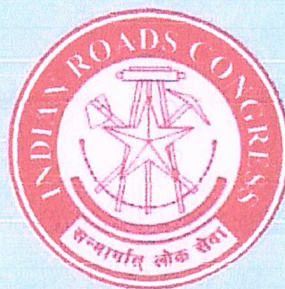
वन क्षेत्राधिकारी
रुषिकेश रेंज
देहरादून वन प्रभाग, देहरादून



IRC:73-2023

GEOMETRIC DESIGN STANDARDS FOR NON-URBAN ROADS

(First Revision)



**INDIAN ROADS CONGRESS
2023**

परियोजना निदेशक / Project Director
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India
(सड़क परिवहन राजमार्ग मंत्रालय, भारत सरकार)
Ministry of Road Transport & Highways
पि०आइ०यू०-बसन्त विहार, देहरादून

distance of an object stereoscopically and its speed are important to the road user. Older drivers have special needs that should be considered in roadway design and traffic control.

Hearing is an aid to the road user which can at times be very vital. The sound of a horn or the sound of the nearby vehicle itself can alert a pedestrian to safely cross or doing other manoeuvre. Elderly persons with poor eyesight can perceive better through hearing than through seeing.

The important psychological characteristics of road user include perception, intellection, emotion and volition, abbreviated as PIEV and the time taken for these processes is known as PIEV time. **Perception** is the process of perceiving the sensations received through the eyes, ears, nervous system and brain. **Intellection** is the identification of the stimuli by the development of new thoughts and ideas. **Emotion** is the personal trait of the individual that governs his decision-making process, after the perception and intellection of the stimuli. **Volition** is the will to react to a situation. This PIEV time is used in the calculation of sight distance. According to AASHTO Green book, average PIEV time ranges from 0.6 seconds to 2 seconds when an event is expected, and it increases by 35 percent in case of unexpected events. Thus, for a simple, unexpected decision and action, some drivers may take as long as 2.7 seconds to respond. A complex decision with several alternatives may take several seconds longer than a simple decision. In India, a design value of 2.5 seconds is taken for calculating the required stopping sight distance and 2.0 seconds for calculating the required overtaking sight distance.

3.3.4 Traffic

The volume and characteristics of traffic should be considered for the design of a roadway. Traffic volumes for an interval of time shorter than a day more appropriately reflect the operating conditions that should be used for the design and mostly, in all the cases, adequate time period is considered to be one hour. Due to the changing traffic pattern during the various hours of the day, a key decision is involved in determining the appropriate hourly volumes for design. It would be uneconomical if maximum peak-hour traffic during a year is used for design and if average hourly traffic is used, it would lead to inadequacy. So, always a reasonable value of traffic is considered for the geometric design. The traffic characteristics include directional distribution, composition and speed of traffic which are necessary to be considered for the geometric design.

3.3.5 Environment and Economy

The term environment includes human, animal, and plant communities and the forces acting on all the three. The roadway design should be in such a way that it would not affect the sustenance and quality of human life. The design developed considering all the above factors should be economical and must be within the allocated budget for the construction and maintenance of roadways.

The roadway geometric design should be in such a way that the overall aesthetics of the environment is not affected.

4. CROSS-SECTIONAL ELEMENTS

4.1 Right-of-Way

Road land width (also termed the Right-of-Way) is the land acquired for road construction purposes and provision of utilities along the length of road. However, additional land, if required

for accommodating cross sections, improvement of geometrics, realignment, junctions, bypasses etc., should be acquired by the authority. A minimum ROW to be available for development of highways is given in **Table 4.1**. Desirable land widths for other classes of roads are indicated in **Table 4.2**.

Table 4.1 Recommended Right-of-Way for Highways and Expressways

S. No.	Road Classification	Minimum Right of Way
1	2- lane Highways	30 m
2	4- lane Highways	45 m
3	6- lane Highways	60 m
4	8- lane Highways	120 m
5	Expressways	90-120 m
6	2- lane Highways with Bypasses	45-60 m
7	2- lane Highways in Open Areas** (Mountainous and steep terrain)	24 m 18 m (Exceptional)
8	2- lane Highways in Built-up Areas** (Mountainous and steep terrain)	20 m 18 m (Exceptional)

Note: The ROW width must include the 2 m wide strip on either side reserved for placement of utilities outside the fencing.

Table 4.2 Recommended Right-of-Way for Other Classes of Roads (in m)

S. No.	Road Classification	Plain and Rolling Terrain				Mountainous and Steep Terrain			
		Open Areas		Built-up Areas		Open Areas**		Built-up Areas**	
		Normal	Range	Normal	Range	Normal	Exceptional	Normal	Exceptional
1	Major District Roads	25	25-30	20	15-25	18	15	15	12
2	Other District Roads	15	15-25	15	15-20	15	12	12	9
3	Village Roads	12	12-18	10	10-15	9	9	9	9

In order to ensure proper sight distance and for the circumstances given below in notes, it will be necessary to acquire additional right of way over that indicated in **Table 4.1 and **Table 4.2**

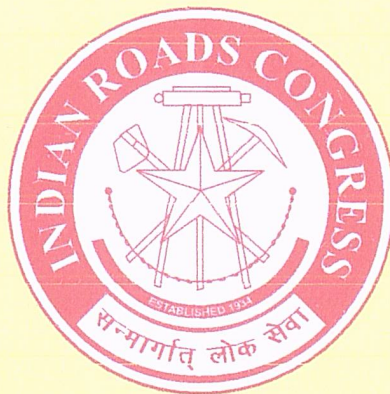
Notes:

1. Right of way shall be enough to ensure minimum setback of 5 m for building line from edge of road land boundary.
2. Additional land is required at locations involving deep cuts to maintain stability of slopes, high fills and unstable/land slide area.
3. If the road is planned to be upgraded in the future, land width shall correspond to higher class of road.
4. Keeping in view the fast pace of ribbon development of habitation along the roads in hilly/ mountainous region, encumbrance free future expansion and safety of road users, minimum two-lane carriage way road as per national highway standard shall be planned and the land width shall be planned accordingly.
5. In case of village roads where initially it is decided to construct single lane carriage way due to low volume of traffic, the width of the land to be acquired shall be planned for two lane road as per national highway standards in the beginning for safety of road users and to take care of encumbrance free future expansion on account of ribbon development along right of way.

IRC:SP:84-2019

MANUAL OF SPECIFICATIONS AND STANDARDS FOR FOUR LANING OF HIGHWAYS

(Second Revision)



**INDIAN ROADS CONGRESS
2019**



परियोजना निदेशक / Project Director
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India
(सड़क परिवहन राजमार्ग मंत्रालय, भारत सरकार)
Ministry of Road Transport & Highway
पो०आई०यू०-वसन्त विहार, देहरादून

Table 2.1 Design Speed

Nature of Terrain	Cross Slope of the Ground	Design Speed (km/h)	
		Ruling	Minimum
Plain and Rolling	Up to 25 percent	100	80
Mountainous and Steep	More than 25 percent	60	40

Short stretches (say less than 1 km) of varying terrain met with on the road stretch shall not be taken into consideration while deciding the terrain classification for a given section of Project Highway.

2.2.2 In general, the ruling design speed shall be adopted for the various geometric design features of the road. Minimum design speed shall be adopted only where site conditions are restrictive and adequate land width is not available. Such stretches where design speed other than ruling speed is to be adopted shall be as indicated as deviation in **Schedule 'D'** of the Concession Agreement.

2.3 Right-of-Way

A minimum Right of Way (ROW) of 60 m should be available for development of a 4-lane highway. The Authority would acquire the additional land required, if any. The land to be acquired shall be indicated in **Schedule 'B'** of the Concession Agreement. The consideration for planning, design and construction described in Para 1.13 shall apply.

2.4 Lane Width of Carriageway

The standard lane width of project highway shall be 3.5 m.

2.5 Median

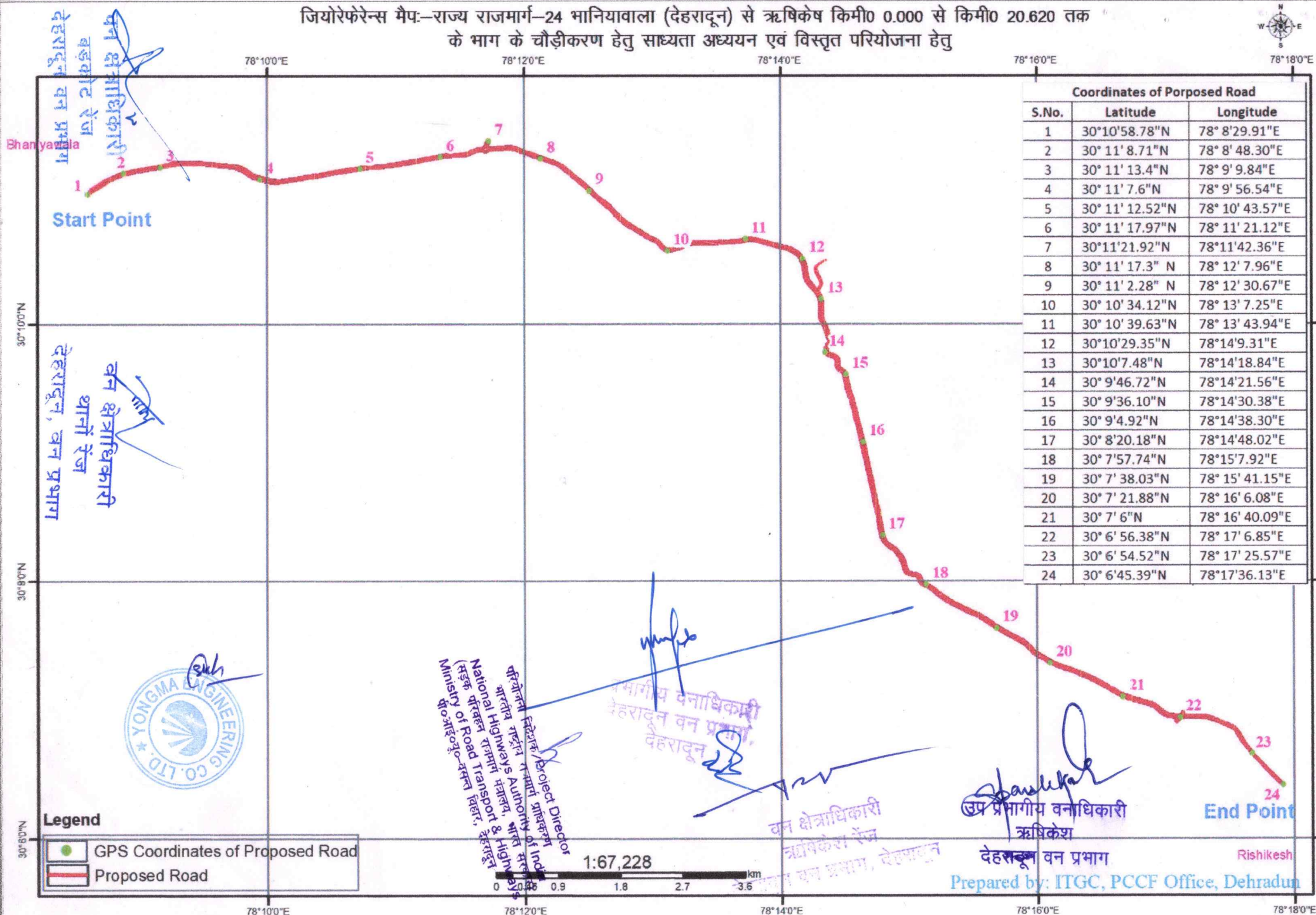
2.5.1 The median shall be either raised or depressed. The width of median is the distance between inside edges of carriageway. The type of median shall depend upon the availability of Right of Way. The minimum width of median, subject to availability of Right of Way, for various locations shall be as in **Table 2.2**.

Table 2.2 Width of Median

Type of Section	Minimum Width of Median (m)		
	Plain and Rolling Terrain		Mountainous and Steep Terrain
	Raised*	Depressed Median	Raised*
Open country with isolated built-up area	5.0	7.0	2.5
Built up area	2.5	Not Applicable	2.5
Approach to grade separated structures	5.0	Not Applicable	2.5

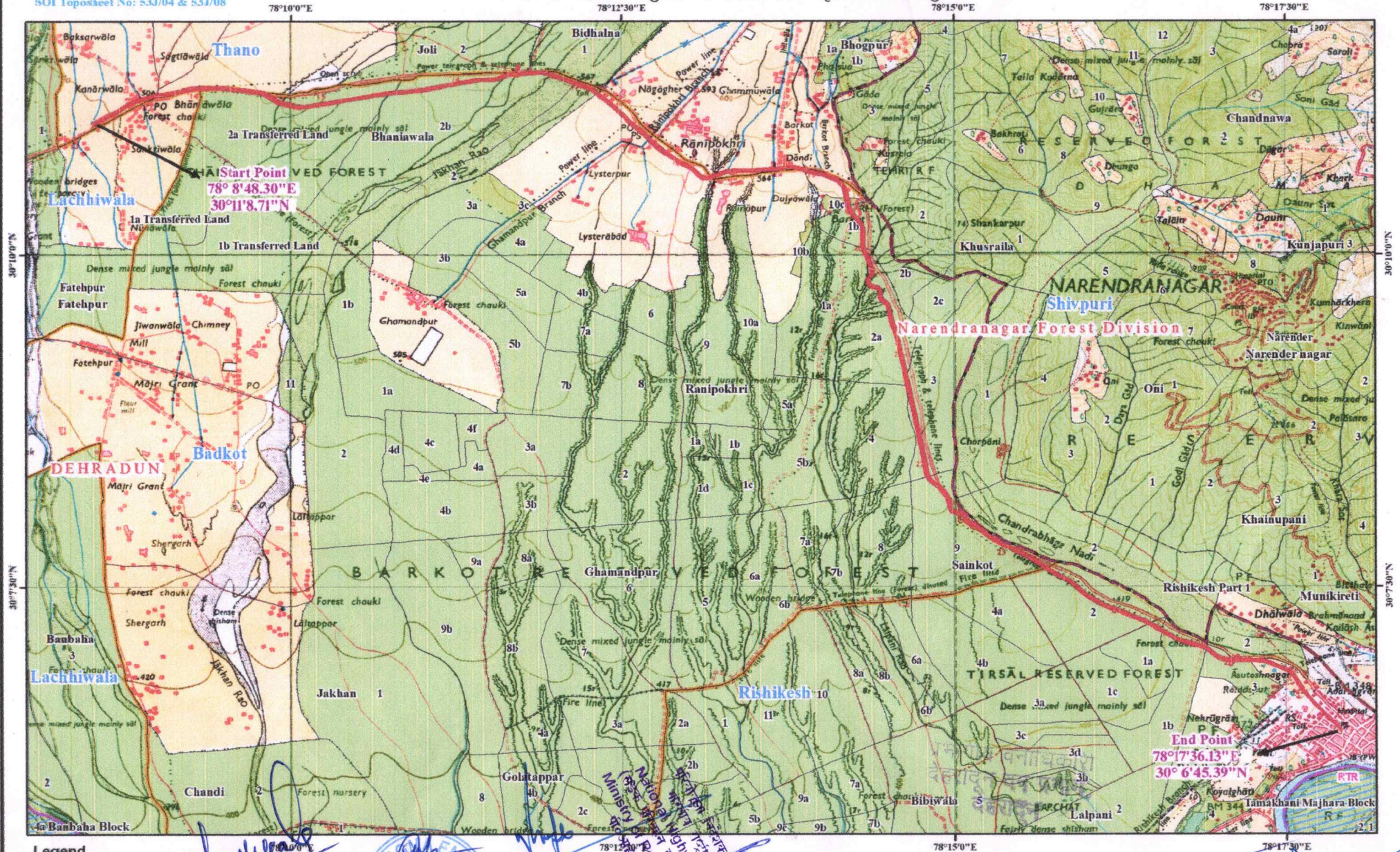
* Including Kerb shyness of 0.50 m on either side. In the existing 4-lane reaches also, the minimum kerb shyness of 0.5 m shall be maintained. This additional width for kerb shyness shall be catered by augmenting the carriageways toward the shoulder side. The type and widths of median in various stretches of Project Highway shall be as indicated in **Schedule 'B'**.

जियोरेफरेन्स मैप:-राज्य राजमार्ग-24 भानियावाला (देहरादून) से ऋषिकेश किमी 0.000 से किमी 20.620 तक के भाग के चौड़ीकरण हेतु साध्यता अध्ययन एवं विस्तृत परियोजना हेतु



डिजिटल मैप-राज्य राजमार्ग-24 भानियावाला (देहरादून) से ऋषिकेश किमी0 0.000 से किमी0 20.620 तक
के भाग के चौड़ीकरण हेतु साध्यता अध्ययन एवं विस्तृत परियोजना हेतु

SOI Toposheet No: 53J/04 & 53J/08



Legend

- Reserve Forest Area
- Reserve Forest Boundary
- Forest Division Boundary
- Protected Area
- Proposed Road



राज्य राजमार्ग-24 भानियावाला (देहरादून) से ऋषिकेश किमी0 0.000 से किमी0 20.620 तक के भाग के चौड़ीकरण हेतु साध्यता अध्ययन एवं विस्तृत परियोजना हेतु

वन क्षेत्राधिकारी
धनो रेंज
देहरादून, वन प्रभाग

वन क्षेत्राधिकारी
बड़कोट रेंज
देहरादून वन प्रभाग

Prepared by ITCC/PCCF Office, Dehradun

No. RW/NH-37011/102/2022-BP&SP
Government of India
Ministry of Road Transport & Highways
(BP&SP Cell)
Transport Bhawan, 1, Parliament Street, New Delhi-110001

Dated: 03rd February, 2023

To,
The Chairman,
National Highways Authority of India,
G-5 & 6, Sector-10, Dwarka,
New Delhi - 110075.

[Kind Attention: Shri Amarendra Kumar, CGM (T)]

Subject: Four Laning of Bhaniyawala-Rishikesh Road (Spur of New NH-7) (old SH-24) (Design Ch 0.000 to Ch 20.600) in the State of Uttarakhand under NH(O) on Hybrid Annuity Mode- approval reg.

Ma'am/Sir,

This is in reference to the SFC Meeting held on 16.01.2023 at 10.30 AM under the Chairmanship of Secretary (RT&H) wherein subject proposal was recommended.

2. The approval of Competent Authority is hereby conveyed for implementation of the following project (recommended by SFC in the Meeting held on 16.01.2023 at 10.30 AM) to be executed on HAM Mode under NH(O) subject to the conditions that NHAI would strictly comply with conditions/decisions/recommendations stipulated in the minutes of SFC meeting held on 16.01.2023 at 10.30 AM; as per details given below:

Name	Length (in Km)	Civil Construction Cost (Including shifting of utilities, excluding GST) (in Rs. crore)	Estimated Project Cost including centages excluding GST (in Rs. crore)	Total Capital Cost (Including LA, GST & Forest Clearance etc.) (in Rs. crore)
Four Laning of Bhaniyawala-Rishikesh Road (Spur of New NH-7) (old SH-24) (Design Ch 0.000 to Ch 20.600) in the State of Uttarakhand on Hybrid Annuity Mode.	20.60	733.64	775.50	1036.23

Yours faithfully,

परियोजना निदेशक/Project Director
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India
(सड़क परिवहन संज्वालन, भारत सरकार)
Ministry of Road Transport & Highways
अ. ०३/०२/२०२३-वसन्त विहार, देहरादून

(Gargi Singh)
Asstt. Executive Engineer (BP&SP)

RW/NH-37011/102/2022-BP&SP
Government of India
Ministry of Road Transport & Highways
(BP&SP Cell)
Transport Bhawan, 1, Parliament Street, New Delhi-110001

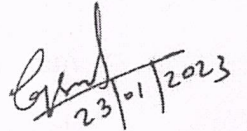
Date: 23.01.2023

OFFICE MEMORANDUM

Sub: Four Laning of Bhaniyawala-Rishikesh Road (Spur of New NH-7) (old SH-24) (Design Ch 0.000 to Ch 20.600) in the State of Uttarakhand on Hybrid Annuity Mode under NH(O) - reg

Please find enclosed herewith minutes of Standing Finance Committee (SFC) meeting held for subject project on 16.01.2023 at 10.30 A.M. under the Chairmanship of Secretary (RT&H) in Committee Room, 5th Floor, Transport Bhawan, New Delhi.

Encl.: As stated above.


(Gargi Singh)


Asstt. Executive Engineer

To:

- i. Secretary, Department of Economic Affairs, M/o Finance, New Delhi;
- ii. Adviser (PPPAU), NITI Aayog, New Delhi;
- iii. Secretary, Department of Expenditure, M/o Finance, New Delhi;
- iv. Secretary, Department of Legal Affairs, M/o Law & Justice, New Delhi;
- v. Secretary, Ministry of Environment & Forest, Paryavaran Bhawan, New Delhi.

Copy to:

- i. Chairperson, NHAI, New Delhi;
- ii. Sr. PPS to Secretary (M/o RT&H), New Delhi;
- iii. Sr. PPS to AS & FA (M/o RT&H), New Delhi;
- iv. Sr. PPS to AS, Highways (M/o RT&H), New Delhi;
- v. PPS to SE, BPSP Cell (M/o RT&H), New Delhi.


प्रियोजना निदेशक/Project Director
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India
(सड़क परिवहन मंत्रालय, भारत सरकार)
Ministry of Road Transport & Highways
प्रान्त/राज्य-स्तर, दिल्ली

Minutes of Standing Finance Committee (SFC) held on 16.01.2023 at 10.30 P.M. chaired by Secretary (RT&H) at Transport Bhawan, New Delhi.

List of participants is attached at Annexure.

2. The following project proposal, to be executed by NHAI on HAM mode under NH (O), was placed before the Standing Finance Committee (SFC) for consideration:

Name	Length (in Km)	Civil Construction Cost (including shifting of utilities, excluding GST) (in Rs. crore)	Estimated Project Cost including centages excluding GST (in Rs. crore)	Total Capital Cost (Including LA, GST & Forest Clearance etc.) (in Rs. crore)
Four Laning of Bhaniyawala-Rishikesh Road (Spur of New NH-7) (old SH-24) (Design Ch 0.000 to Ch 20.600) in the State of Uttarakhand on Hybrid Annuity Mode	20.60	733.64	775.50	1036.23

3. The proposal was discussed in detail. The details of deliberations held and decisions taken in the meeting are as under:

3.1 CGM (T) NHAI made a presentation on the project details and its features.

3.2 The instant proposal is for upgradation of Bhaniyawala-Rishikesh highway (declared as Spur of New NH-07) which starts at Bhaniyawala underpass on NH-72 and ends at Rishikesh (km 20.600) in Dehradun District of Uttarakhand. The proposed project is mostly brown-field.

3.3 The project highway is envisioned to attract tourist and pilgrimage traffic from J&K, Himachal Pradesh, Haryana, and Punjab by better and safe roads to places of tourist attraction like Rishikesh, Chhar Dham and other religious places in Uttarakhand and to speed up the freight movement and provide better access to freight vehicles between J&K, Himachal Pradesh, Haryana, and Uttarakhand. CGM (T) further informed that improvement of the instant stretch will lead to better connectivity to Jolly Grant Airport (Dehradun), Rishikesh, Dehradun and Haridwar.

3.4 CGM (T) submitted the following details regarding the project features:

S. No.	Name of features	Details
1	Length	20.600 km (Design Km 0.000 to Km. 20.600)
2	Estimated Project Cost including Utilities Shifting Cost	Rs. 732.84 Cr.
3	Type of Pavement (Rigid/Flexible)	Flexible
4	Major Bridges	01 No
5	Minor Bridges	01 No

- 1/3 -

परियोजना निदेशक / Project Director
 भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
 National Highways Authority of India
 (सड़क परिवहन राजमार्ग मंत्रालय, भारत सरकार)
 Ministry of Road Transport & Highways
 प्लॉट आइड ०५०-वसन्त विहार, देहरादून

23/01/2023

6	Elephant Passes	04 Nos (length 3060 m)						
7	Culverts	Box Culverts –28 Nos Pipe Culverts –26 Nos +22 on side roads						
8	Elevated Structure (Viaduct) Ramp (Solid on RE Walls)	2100m (4-lane) + 553 m (2-lane) 400 m (4-Lane) + 328 m (2-lane)						
9	ROB	Nil						
10	RUB	Nil						
11	VUP/VOP/LVUP	Nil						
12	Minor Intersections	90 Nos (35 minor junction are avoided by providing Elevated Structure and the 55 are one-sided i.e., no median opening is provided)						
13	Major Intersections	14 Nos (01 major junction are avoided by providing Elevated Structure)						
14	Truck lay Bys	Nil						
15	Rest Area / Wayside amenities	1 No. (1.7447 Ha. Land required)						
16	Length of Service Road/Slip Road	<table border="1"> <tr> <th>Details</th><th>LHS</th><th>RHS</th></tr> <tr> <td>Service Road 7m</td><td>500 m</td><td>500 m</td></tr> </table>	Details	LHS	RHS	Service Road 7m	500 m	500 m
Details	LHS	RHS						
Service Road 7m	500 m	500 m						
17	Toll Plaza / Ramp Toll Booths	Nil						
18	Re-alignment Length/Bypass / Greenfield	Realignment length – 2.5 km						
19	Bus bays / Bus Shelters	8 (both sides) – Bus shelters						
20	Construction Period	30 Months						
21	Traffic	Traffic figures on the project highway at the count station before Jolly grant airport and near Rishikesh in the Forest section by 2020 are 17241 & 15270 PCU (Design MSA- 50)						
22	Length of Lined Drain (RCC)	20.675 km						

3.5 Regarding the status of pre-construction activities, CGM (T) submitted the following:

S. No.	Description	Status of Works
1.	Land Acquisition	Total land required – 60.3312 Ha Existing land available – 34.1122 Ha Diversion of Forest land – 19.8345 Ha Additional Land Required (Ha) – 6.3845 ha Private Land (Ha) - 4.6398 Ha Govt. Land (Ha) - 1.7447 Ha 3A - 5.1733 Ha (81.02%) 3D – 4.6648 Ha (73.06%) 3G – In process

-2/3-

परियोजना निदेशक/Project Director
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India
(सड़क परिवहन राजमार्ग मंत्रालय, भारत सरकार)
Ministry of Road Transport & Highways
प्लॉट नं० १०-बक्स विहार, देहरादून

23/01/2023

2.	Environmental Clearances	As per notification of MOEF F.O.2559 (E) dated 22/08/2013, the project will not attract Environmental Clearance.
3.	Forest Clearance	Stage I clearance in process (Proposal is pending at DFO Dehradun, Likely date of Stage I clearance: 15.03.2023)
4.	ROB Approval	Not Required
5.	Cutting of Live Trees	3776 trees

3.7 CGM (T) responded to all the observations raised by IFD, DEA, NITI Aayog and DoE. Secretary (RT&H) requested the representatives of all the appraising agencies for their further queries or comments. Representatives from NITI Aayog, AS&FA MoRTH remarked that they have received the replies and their queries have been addressed in the presentation and raised no further queries regarding the proposal and agreed with the compliance/ justifications furnished by NHAI regarding all the observations raised.

3.8 Secretary (RT&H) asked about the use of new technology in the instant project. CGM (T) informed that they are adopting CTSB and CTB layers in the sub-base and base layers. Secretary (RT&H) advised to use plastic waste in the service/slip roads.

3.9 All the appraising agencies directed NHAI that the project shall not be awarded until land requirements and all the statutory clearances, as per the guidelines, are in place.

4. After detailed deliberations, the Committee recommended the project for approval of Competent Authority with the following details:

Name	Length (in Km)	Civil Construction Cost (including shifting of utilities, excluding GST) (in Rs. crore)	Estimated Project Cost including centages excluding GST (in Rs. crore)	Total Capital Cost (Including LA, GST & Forest Clearance etc.) (in Rs. crore)
Four Laning of Bhaniyawala-Rishikesh Road (Spur of New NH-7) (old SH-24) (Design Ch 0.000 to Ch 20.600) in the State of Uttarakhand on Hybrid Annuity Mode.	38.30	733.64	775.50	1036.23

5. The meeting ended with a vote of thanks to and from the Chair.

- 3 / 3 -

परियोजना निदेशक/Project Director
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highway Authority of India
(सड़क परिवहन और राजमार्ग विभाग, भारत सरकार)
Ministry of Road Transport & Highways
प्लॉट आइड 6/30-बस स्टैंड बिल्डिंग, देहरादून

23/01/2023

Annexure

List of participants

A. Ministry of Road Transport & Highways

1. Mrs Alka Upadhyay, Secretary (RT&H)- In Chair
2. Shri Sanjay Kumar, AS&FA;
3. Shri Amit Kumar Ghosh, AS (Highways);
4. Shri A.K. Kushwaha, SE (BP&SP);
5. Shri Avdesh Gupta, EE(BP&SP);
5. Shri Gargi Singh, AEE (BP&SP).

B. NITI Aayog

1. Shri Chandrashekhar Jain, Consultant (PPP) - (Through VC)

C. Department of Economic Affairs


1. Ms. Preeti Jain, Deputy Secretary- (Through VC)

D. Department of Legal Affairs

1. Shri Satish Kumar Singh - (Through VC)

E. National Highway Authority of India

1. Shri Manoj Kumar, Member (P) - (Through VC)
2. Shri K.V. Singh, CGM (T)
3. Shri Virendra Sambyal, GM (T)


परियोजना निदेशक/Project Director
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India
(सड़क परिवहन राजमार्ग मंत्रालय, भारत सरकार)
Ministry of Road Transport & Highways
प्लॉट नं. 20-बमन विहार, कलकत्ता

No. 7-69/2011-FC(Pt.)
Government of India
Ministry of Environment, Forest & Climate Change
(Forest Conservation Division)

Indira Paryavaran Bhawan,
Jorbagh Road, Aliganj,
New Delhi-110003.
Dated: 01st August, 2017.

To

The Principal Secretary (Forests)
All States / Union Territories Governments.

Sub: **Guidelines for conducting Cost Benefit Analysis for projects involving diversion of forest land under the provisions of the Forest (Conservation) Act, 1980.**

Sir,

I am directed to inform that in supersession of all earlier orders / guidelines including that referred to at 2.6 of the Handbook of Forest (Conservation) Act, 1980 for conducting Cost Benefit Analysis of projects involving forest diversion, a revised set of guidelines has been prepared by the Ministry and shall be applicable for all projects involving diversion of forest land under the provisions of the Forest (Conservation) Act, 1980, which are required to be undertaken as per Table A of the new guidelines, from the date of issue of this letter. These guidelines will be applicable for all such projects which are yet to be recommended by the State Government on the date of issue of this guideline.

The guidelines for conducting Cost Benefit Analysis for projects involving forest diversion areas is enclosed herewith for further action.

This issues with the approval of competent authority.

Yours faithfully,

Encl: As above.

(Nisheeth Saxena)

Sr. Assistant Inspector General of Forests

Copy to:-

1. Prime Minister's Office (PMO)
2. Secretary, Ministry of Mines, Government of India
3. Secretary, Ministry of Coal, Government of India.
4. Secretary, Ministry of Steel, Government of India
5. Principal Chief Conservator of Forests, all States/UTs.

7. All Regional Offices, Ministry of Environment, Forest and Climate Change (MoEF&C)
8. Joint Secretary, In-charge, Impact Assessment Division, MoEF&CC.
9. PS to the Hon'ble Minister of State (Independent Charge) for Environment, Forest and Climate Change.
10. Chairman, State Environment Impact Assessment Authority, all States/UTs.
11. Member-Secretary, State Environment Impact Assessment Authority, all States/UTs.
12. All Directors/Assistant Inspector General of Forests in Forest Conservation Division, MoEF&CC.
13. All Advisors/Directors/Dy. Directors in the Impact Assessment Division, MoEF&CC.
14. Director, Regional Office (Headquarters), MoEF&CC.
15. Sr. Director (Technical), NIC, MoEF&CC with a request to place a copy of this letter on website of this Ministry.
16. Sr. PPS to the Secretary, Ministry of Environment, Forest and Climate Change.
17. Sr. PPS to Director General of Forests and Special Secretary, Ministry of Environment, Forest and Climate Change.
18. Sr. PPS to Addl. Director General of Forests (Forest Conservation), Ministry of Environment, Forest and Climate Change.
19. PPS to IGF(FC), MoEF&CC.
20. Guard File.

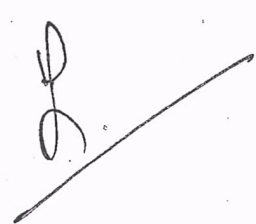


(Nisheeth Saxena)

Sr. Assistant Inspector General of Forests

Guidelines for conducting cost-benefit analysis for projects involving forest diversion

- (i) While considering proposal for diversion of forest land for non-forestry use, it is essential that ecological and environmental losses and eco-economic distress caused to the people who are displaced are weighted against economic and social gains.
- (ii) Whenever the forest land is involved in the development projects, the cost of ecosystem services and fragmentation of habitat of wildlife and economic distress caused to people dependent on forests and the cost of settlement of people dependent on forest should also be added as the cost of forest diversion in addition to the standard project cost which would have been incurred by the user agencies without involvement of forest land while conducting the cost benefit analysis of the project. Similarly the benefits from the project accruing due to diversion of forest land and used in the project should also be accounted for in the benefits component in addition to the standard benefits of the project which would have been accrued without involvement of forest land while conducting the cost benefit analysis and determining the benefit and cost ratio (BC ratio).
- (iii) The cost of compensatory afforestation and its maintenance in future and soil & moisture conservation at present discounted value and future benefits from such compensatory forestation accruing over next 50 years monetised and discounted to the present value should be included as cost and benefits respectively of compensatory afforestation while conducting the cost benefit analysis and determining the benefit and cost ratio (BC ratio).
- (iv) **Table-A** lists the details the types of projects involving forest land for which cost-benefit analysis will be required. **Table-B** lists the parameters according to which the cost aspect of forest land diverted for the development projects will be determined, while **Table-C** lists the parameters for assessing the benefits accruing to the project using of forest land.
- (v) A cost-benefit analysis as above should accompany the proposals sent to the Central Government for forest clearance under the Forest Conservation Act.



Cost Benefit Analysis Guidelines for forest land diversion -2017

Table-A : Cases under which a cost-benefit analysis for forest diversion are required

No	Nature of proposal	Applicable/ not applicable	Remarks
1	All categories of proposals involving forest land upto 20 hectares in plains and upto 5 hectare in hills	Not applicable	These proposals may be considered on a case to case basis and value judgement
2	Proposal for defence installation purposes and oil prospecting (prospecting only)	Not applicable	In view of national Priority accorded to these sectors, the proposals would be critically assessed to help ascertain that the utmost minimum forest land is diverted for non-forest use
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not applicable	These activities being detrimental to protection and conservation of forest, as a matter of policy, such proposals would be rarely entertained.
4	All other proposals involving forestland more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor, medium and major irrigation projects, hydro projects, mining activity, railway lines, location specific installations like micro-wave stations, auto repeater centres, TV towers etc.	Applicable	These are cases where a cost-benefit analysis is necessary to determine when diverting the forest land to non-forest use in the overall public interest.

Table-B: Estimation of cost of forest diversion

SN	Parameters	Remarks
1	Ecosystem services losses due to proposed forest diversion	Economic value of loss of eco-system services due to diversion of forests shall be the net present value (NPV) of the forest land being diverted as prescribed by the Central Government (MoEF& CC). <i>Note: In case of National Parks the NPV shall be ten (10) times the normal NPV and in case of Wildlife Sanctuary the NPV shall be five (5) times the normal NPV or otherwise prescribed by the ministry or any other competent authority</i>
2	Loss of animal husbandry productivity, including loss of fodder	To be quantified and expressed in monetary terms or 10% of NPV applicable whichever is maximum
3	Cost of human resettlement	To be quantified and expressed in monetary terms as per approved R&R plan
4	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways, etc.) on forest land, which would require forest land if these facilities were diverted due to the project	To be quantified and expressed in monetary terms on actual cost basis at the time of diversion

Cost Benefit Analysis Guidelines for forest land diversion -2017

5	possession value of forest land diverted	30% of environmental costs (NPV) due to loss of forests or circle rate of adjoining area in the district should be added as a cost component as possession value of forestland whichever is maximum
6	Cost of suffering to oustees	The social cost of rehabilitation of oustees (in addition to the cost likely to be incurred in providing residence, occupation and social services as per R&R plan) be worked out as 1.5 times of what oustees should have earned in two years had he not been shifted.
8	Habitat Fragmentation Cost	While the relationship between fragmentation and forest goods and services is complex, for the sake of simplicity the cost due to fragmentation has been pegged at 50% of NPV applicable as a thumb rule.
	Compensatory afforestation and soil & moisture conservation cost	The actual cost of compensatory afforestation and soil & moisture conservation and its maintenance in future at present discounted value

Table-C - Existing guidelines for estimating benefits of forest-diversion in CBA

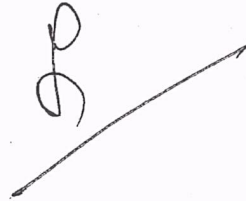
Sr. No.	Parameters	Remarks
1	Increase in productively attribute to the specific project	To be quantified & expressed in monetary terms avoiding double counting
2	Benefits to economy due to the specific project	The incremental economic benefit in monetary terms due to the activities attributed to the specific project
3	No. of population benefited due to specific project	As per the Detailed project report
4	Economic benefits due to of direct and indirect employment due to the project	As per the Detailed project report.
5	Economic benefits due to Compensatory afforestation	Benefits from such compensatory forestation accruing over next 50 years monetised and discounted to the present value should be included as benefits of compensatory afforestation. *For benefits of CA the guideline of the Ministry for NPV estimation may be consulted.

Note-1: Net Present value (NPV) of environment and ecosystem services loss:

The concept of Net Present value of the forest land diverted is a scientific method of calculating the environmental cost and other losses caused due to diversion of forest land for non-forestry purposes. The NPV represents the net value of various ecosystem services and other environmental services in monetary terms which the forest would have provided if the forest would not have been diverted.

Note-2: Possession value of forest land diverted:

The forest land diverted for the project such as irrigation, hydropower, railways, roads, wind, and transmission lines and mining etc are unlikely to be returned and remains in possession of the user agencies. Therefore 30% of the net present value (NPV) of forest land diverted or market rate of adjoining area in the district should be added as a cost component as "possession value of forest land" in addition to the environmental costs due to loss of forests.





भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)

National Highways Authority of India

(Ministry of Road Transport & Highways, Govt. of India)

परियोजना कार्यान्वयन इकाई-वसन्त विहार। Project Implementation Unit-Vasant Vihar

मकान सं० 171, फेज-1, वसन्त विहार, देहरादून - 248006 House no.171, Phase-I, Vasant Vihar, Dehradun - 248006

दूरभाष/Phone: 0135-2760001 ई-मेल/E-mail: piuvasantvihar@nhai.org वेब/Web: www.nhai.gov.in



NHAI/PIU/VV/2023/Bhaniyawaala-Rishikesh/Forest/5528

Dt.25.10.2023

सेवा में,

प्रभागीय वनाधिकारी

नरेन्द्रनगर वन प्रभाग

मुनिकीरेती।

ई-मेल: dfonnagar-forest-uk@nic.in

विषय: उत्तराखण्ड राज्य के जनपद देहरादून में राष्ट्रीय राजमार्ग संख्या-07 (स्पर) के भानियावाला - जौलीग्रान्ट-ऋषिकेश-किमी 0.000 से किमी 19.780 तक के चार लेन चौड़ीकरण एवं सुदृढीकरण विषयक - ऑनलाईन वन भूमि हस्तान्तरण प्रस्ताव संख्या FP/UK/ROAD/146663/2021 के संबंध में।

- संदर्भ: 1. तकनीकी अधिकारी (वानिकी), क्षेत्रीय कार्यालय, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, देहरादून का पत्र सं० 932 दिनांक 16.10.2023
2. प्रभागीय वनाधिकारी, नरेन्द्रनगर वन प्रभाग, मुनिकीरेती का पत्र सं० 1616 दिनांक 19.12.2022।

महोदय,

उपरोक्त विषयक कृपया अपने पत्र दिनांक 19.12.2022 का संदर्भ ग्रहण करने का कष्ट करें, जिसके माध्यम से उपरोक्त परियोजना हेतु क्षतिपूर्क वृक्षारोपण के लिए नरेन्द्रनगर वन प्रभाग के अन्तर्गत माणिकनाथ राजि के क्षेत्र मरोडा एवं खनाना क्षेत्र में 39.669 हे० भूमि का चयन करते हुए भूमि के कॉर्डिनेट्स एवं विवरण इस कार्यालय को प्रेषित किये गये हैं।

2. उक्त के क्रम में कार्यालय अपर प्रमुख वन संरक्षक एवं नोडल अधिकारी, वन संरक्षण, उत्तराखण्ड के द्वारा ऑनलाईन परिवेश पोर्टल के माध्यम से स्टेज-1 स्वीकृति हेतु, क्षेत्रीय कार्यालय, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, देहरादून को दिनांक 11.09.2023 प्रेषित किया गया, जिसके क्रम में क्षेत्रीय कार्यालय, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, देहरादून द्वारा उनके पत्र दिनांक 16.10.2023 के माध्यम से संबंधित प्रस्ताव पर कुछ आपत्तियां लगाते हुए अनुपालन आख्या प्रेषित करने हेतु निर्देशित किया गया है।

3. उक्त संदर्भित आपत्तियों में से आपत्ति सं० 10, जिसके अनुसार कि क्षतिपूर्क वनीकरण हेतु चयनित क्षेत्र माणिकनाथ के कक्ष सं० 11 एवं 12 खनाना के औसत घनत्व 0.4 से अधिक है जबकि वन विभाग के दिशा निर्देशों के अनुसार क्षतिपूर्क वनीकरण हेतु औसत घनत्व 0.4 से कम होना चाहिए, अतः संबंधित की पुनः गणना किया जाना आवश्यक है। संदर्भित आपत्ति का अनुपालन आपके कार्यालय से किया जाना अपेक्षित है।

अतः राष्ट्रीय महत्व की परियोजना को दृष्टिगत रखते हुए आपसे अनुरोध है कि आपत्ति सं० 10 के अनुपालन में औसत घनत्व का पुनः गणना कराने अथवा क्षतिपूर्क वनीकरण हेतु नया क्षेत्र चयनित करते हुए अनुपालन आख्या इस कार्यालय को यथाशीघ्र प्रेषित करने का कष्ट करें।

भवदीय

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(पंकज कुमार मौर्य)

महाप्रबन्धक (तक०) सह परियोजना निदेशक
प०का०ई०-वसन्त विहार (देहरादून)

प्रतिलिपि:

1. अपर प्रमुख वन संरक्षक एवं नोडल अधिकारी, वन संरक्षण, उत्तराखण्ड, देहरादून - सूचनार्थ प्रेषित।
2. वन संरक्षक, शिवालिक वृत्त, उत्तराखण्ड, देहरादून - सूचनार्थ प्रेषित।
3. टीम लीडर, मै० योगमा इन्जी० कं० प्रा० लि० - को इस आशय से प्रेषित कि संबंधित वन विभाग से समन्वय स्थापित कर आवश्यक कार्यवाही कराना सुनिश्चित करें।

कार्यालय प्रभागीय वनाधिकारी, नरेन्द्रनगर वन प्रभाग, मुनिकीरेती

E-mail: dfonnagar-forest-uk@nic.in

Telefax- 0135-2442052

पत्रांक सं०: 1392 / 12-1

दिनांक 29 / 11 / 2023

सेवा में,

महाप्रबन्धक (तक०)
सह परियोजना निदेशक,
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
प०का०ई०-वसन्त विहार (देहरादून)

विषय :- उत्तराखण्ड राज्य के जनपद देहरादून में राष्ट्रीय राजमार्ग सं०-०७ (स्पर) के भानियावाला-जौलिग्रान्त-ऋषिकेश किमी० ०.००० से किमी० १९.७८० तक के चार लेन चौड़ीकरण एवं सुदृढीकरण विषयक-ऑनलाईन वन भूमि हस्तांतरण प्रस्ताव संख्या FP/UK/ROAD/146663/2021 के संबंध में।

सन्दर्भ :- आपका पत्रांक NHAI/PIU/VV/2023/Bhaniyawala-Rshikesh/Forest/5528 दिनांक 25.10.2023 महोदय

उपरोक्त विषयक संदर्भित पत्र के क्रम में अवगत कराना है कि उत्तराखण्ड राज्य के जनपद देहरादून में राष्ट्रीय राजमार्ग सं०-०७ (स्पर) के भानियावाला-जौलिग्रान्त-ऋषिकेश किमी० ०.००० से किमी० १९.७८० तक के चार लेन चौड़ीकरण एवं सुदृढीकरण हेतु भूमि का गैर वनिकी कार्य हेतु भारतीय राष्ट्रीय राजमार्ग प्राधिकरण को प्रत्यावर्तन के फलस्वरूप क्षतिपूरक वनीकरण हेतु राजि के अन्तर्गत खनाना कक्ष सं०-११ में १० हे०, खनाना क०सं०-१२ में १५ हे० एवं मरोड क०सं० ११अ में १४.६६९ हे०, कुल ३९.६६९ हे० भूमि का घनत्व किया गया था, उक्त क्षेत्र का घनत्व अधिक होने के फलस्वरूप क्षतिपूरक वनीकरण हेतु अन्य स्थल चयन करने हेतु उच्चस्तर से निर्देशित किया गया है। जिसके अनुपालन में क्षतिपूरक वनीकरण हेतु चयनित भूमि का स्थलीय निरीक्षण किया गया, स्थलीय निरीक्षण के दौरान संज्ञान में आया है कि प्रस्तावित क्षतिपूरक वनीकरण स्थल खनाना कक्ष सं०-११, खनाना कक्ष सं०-१२ एवं मरोड क०सं० ११अ का प्रभाग की प्रचलित कार्ययोजना वर्ष-२०१३-१४ से वर्ष-२०२२-२३ के कक्ष इतिहास में औसत घनत्व ०.३०-०.४० दर्शाया गया है। जिसके अनुसार क्षतिपूरक वनीकरण स्थल उपयुक्तता प्रमाण-पत्र में घनत्व का उल्लेख पूर्व में ०.३०-०.४० किया गया है। तथा प्रस्तावित ३९.६६९ हे० क्षेत्रफल में, झाड़ियों तथा हरी घास विद्यमान होने के कारण घनत्व अधिक प्रतीत हो रहा है, जबकि क्षेत्र की वास्तविक स्थिति के अनुसार वानस्पतिक घनत्व ०.३० से कम है तथा उक्त स्थल क्षतिपूरक वृक्षारोण हेतु सर्वथा उपयुक्त है। (प्रमाण-पत्र संलग्न)

अतः वांछित सूचना अग्रेत्तर कार्यवाही हेतु प्रेषित की जा रही है।

संलग्न-यथोपरि।

प्रभागीय वनाधिकारी,
नरेन्द्रनगर वन प्रभाग, मुनिकीरेती।

संख्या:- 1392 / 12-1 दिनांकित।

प्रतिलिपि :- अपर प्रमुख वन संरक्षक, एवं नोडल अधिकारी, वन संरक्षण, उत्तराखण्ड, देहरादून की सेवा में सादर सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

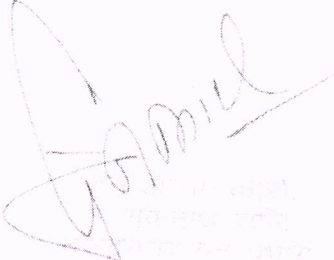
प्रतिलिपि :- प्रभागीय वनाधिकारी, देहरादून वन प्रभाग, देहरादून को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

प्रभागीय वनाधिकारी,
नरेन्द्रनगर वन प्रभाग, मुनिकीरेती।

—:: स्थल उपयुक्तता प्रमाण पत्र ::—

प्रमाणित किया जाता है कि, जनपद देहरादून में राष्ट्रीय राजमार्ग संख्या-07 (स्पर) के भानियावाला जौलीग्रान्ट-ऋषिकेश कि०मी० 0.000 से कि०मी० 19.780 तक के चार लेन चौड़ीकरण एवं सुदृढीकरण परियोजना के वन भूमि हस्तान्तरण प्रस्ताव के सापेक्ष माणिकनाथ राजि के अन्तर्गत खनाना कक्ष सं०-11 (10.0 हे०), खनाना कक्ष सं०-12 (15.0 हे०) व मरोड़ा कक्ष सं०-11 अ (14.669 हे०) अर्थात् कुल 39.669 क्षतिपूरक वनीकरण हेतु प्रस्तावित किया जा रहा है, उक्त स्थल क्षतिपूरक वनीकरण हेतु उपयुक्त है तथा कक्षों में वनीकरण हेतु प्रस्तावित स्थल का घनत्व 0.30 से कम है।


उप प्रभागीय वनाधिकारी
(विनियोग)
नरेंद्रनगर वन प्रभाग

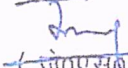

उप प्रभागीय वनाधिकारी
(विनियोग)
नरेंद्रनगर वन प्रभाग

प्रभागीय वनाधिकारी
नरेंद्रनगर वन प्रभाग
मुक्ति-वी-रेली

परियोजना का नाम:- उत्तराखण्ड राज्य के जनपद-देहरादून में राज्य राजमार्ग-24 भानियावाला (देहरादून) से ऋषिकेश खण्ड के कि०मी० 0.000 से कि०मी० 20.620 तक के भाग के चौड़ीकरण एवं सुदृढीकरण के सम्बन्ध में।

मुख्य वन संरक्षक, अनुश्रवण, मूल्यांकन, आईटी एवं आधुनिकीकरण के पत्रांक 3201-21/1/2020 दिनांक 16 अगस्त 2021 द्वारा उत्तराखण्ड राज्य के जनपद-देहरादून में राज्य राजमार्ग-24 भानियावाला (देहरादून) से ऋषिकेश खण्ड के कि०मी० 0.000 से कि०मी० 20.620 तक के भाग के चौड़ीकरण एवं सुदृढीकरण के निर्माण हेतु याचित वन भूमि की राजाजी टाइगर रिजर्व की सीमा से हवाई दूरी 497m सन्निकट आंकलित की गयी है। प्रस्तावित परियोजना/कार्यस्थल राष्ट्रीय पार्क/वन्यजीव विहार के अन्तर्गत स्थित नहीं है। इस परियोजना के निर्माण से वन्यजीवों पर कोई निपरीत प्रभाव पड़ने की सम्भावना नहीं है। भारत सरकार का पत्रांक 6-60/2020 WL दिनांक 16 जुलाई 2020 के अनुसार उक्त प्रकरण में किसी प्रकार की पर्यावरणीय स्वीकृत की आवश्यकता नहीं है।

अतः उक्त परियोजना निर्माण हेतु जनहित में सहमति व्यक्त की जाती है।


(जे०एस० सुहाग)
मुख्यवन्य जीव प्रतिपालक,
उत्तराखण्ड।


कार्यालय मुख्य वन्यजीव प्रतिपालक, उत्तराखण्ड


85-राजपुर रोड, देहरादून (उत्तराखण्ड) फोन नं०-0135-2742834 फैक्स-2745691 ई-मेल-

पत्रांक 1079 / 12-1 देहरादून दिनांक 25 सितम्बर 2021

प्रतिलिपि निम्नलिखित को आवश्यक कार्यवाही हेतु प्रेषित -

1. प्रभागीय वनाधिकारी, देहरादून वन प्रभाग, देहरादून।
2. टीम लीडर, मै० योंग्मा इन्जीनियरिंग को० लि०।


(जे०एस० सुहाग)
मुख्यवन्य जीव प्रतिपालक,
उत्तराखण्ड।


परियोजना निदेशक/प्रोजेक्ट डायरेक्टर
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India
(सड़क परिवहन राजमार्ग मंत्रालय, भारत सरकार)
Ministry of Road Transport & Highways
प्लॉट नं० 10/20-वसन्त विहार, देहरादून


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