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GOVERNMENT OF KARNATAKA

(Public works, Ports and Inland Water Transport Department)

No.EE/NHD/HSN/AE-3/NH-173/Job-873/2019-20/ 487

Office of the Authority's Engineer
& Executive Engineer,

National Highway Division,

Hassan, Date: 07/09/2021

Project Name: "Widening to Two Lane with Paved Shoulders from km 24.600 to km 70.063 of Mudigere to Kadur Section of NH-173" on EPC mode in the State of Karnataka(Job No. NH-173-KNT-2017-18-873)".

PROPOSAL: For diversion of 5.7244 Ha of forest land falling under Chikkamagaluru Forest division which is being diverted for the work of "Widening to Two Lane with Paved Shoulders from km 24.600 to km 70.063 of Mudigere to Kadur Section of NH-173" on EPC mode in the State of Karnataka(Job No. NH-173-KNT-2017-18-873)".

**JUSTIFICATION FOR LOCATING THE PROJECT IN
FOREST AREA**

1. BACKGROUND:

In order to cater to the needs of the National Highways in the State of Karnataka, a separate zone is formed namely, National Highway Zone under the Public Works Department. The National Highway Division is the nodal agency responsible for building, upgrading and maintaining most of the National Highways network in Karnataka. It operates under the **Ministry of Road Transport and Highways (MoRT&H), Government of India, New Delhi**. The present road NH- 173 falls under the jurisdiction of Executive Engineer, National Highway Division, Hassan.

Presently, the project road comprises of Intermediate Lane with varying shoulder width all along the stretch except at the major built-up areas of Chikkamagaluru, Sakarayapatna and Kadur. The road provides connectivity to major pilgrimage places like Dharmastala, Udupi, Kukke Subramanya and other places of tourist interests in the vicinity.

The project road predominantly passes through Chikkamagaluru district. Chikkamagaluru is a district in the South Indian State of Karnataka. The mountains in Chikkamagaluru District which are a part of the Western Ghats are the source of rivers like Tunga and Bhadra. Mullayanagiri, which is the highest peak in Karnataka, is located in the district. Chikkamagaluru is also a tourist's paradise containing hill stations like Kemmanugundi, Kudremukh and waterfalls like Manikyadhara, Hebbe, Kallathigiri. Chikkamagaluru district has a rich


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history as is seen in the Hoysala temple at Amruthapura. Wildlife enthusiasts would be interested in the Kudremukh National Park and Bhadra Wildlife Sanctuary present in this district. All these places attract tourists from India and abroad. Considering the importance of the district developing the project road is paramount importance.

2. INTRODUCTION

National Highway no.173 originates from Mudigere hand post at Km: 113.750 of NH-73 and terminates at Holalkere on NH 369, in Karnataka State. This is an important highway linking NH-73, NH-69 and NH-369. The NH-173 passes through Mudigere, Chikkamagaluru, Sakarayapatna, Kadur, Hosadurga and terminates at Holalkere.

Government of India announced Mudigere - Kadur section as National Highway -173 Vide gazette notification Dated: 28/05/2014. Earlier it was State Highway No-64 originating at Kadur and terminating at Mudigere hand post passing through Chikkamagaluru town.

Now the reach from Km 0.00 to 72.100 is under jurisdiction of Assistant Executive Engineer, National Highway sub division, Belur, working under the administrative control of the Executive Engineer National Highway Division, Hassan.

In order to provide seamless traffic movement on National Highway, during the year of 2017, survey work was taken up from km 0.000 to km 72.100 to Widen the above National Highway-173 to Two Lane with Paved Shoulders width. The DPR consultant proposed and submitted the DPR in Three appropriate packages viz., Package - I: From Km 0.00 to Km 5.200, Package - II: From Km 5.200 to Km 24.600, and Package - III: From Km 24.600 to Km 70.063 and these are just the proposals submitted by the DPR consultant.

Out of the above three packages, Package - III i.e. from Km 24.600 to Km 70.063 for a length of 45.463 km found feasible for the competent authority (Ministry of the Road Transport and Highways, Government of India, New Delhi) and has been approved with the Administrative and Financial Sanction, giving the name and Job no. as "Widening to two lane with paved shoulders from Km: 24.60 to 70.063 of Mudigere Kadur section NH-173 in the state of Karnataka. (Job No. NH-173-KNT-2017-18-873)". Hence, the Forest clearance process has been initiated for the sanctioned Package-III work only. The above work is already under progress by the EPC Contractor and expect forest Clearance stretches, the remaining work is already under completion stage.

The other Two Packages (Package-I, 0.00 to 5.200 and Package-II 5.200 to 24.600) which are just the proposals of the private DPR consultant and not part of the project highway. Without the Administrative and Financial sanction from the Competent Authority


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(MORT&H, GOI, New Delhi) for the Package -I and Package-II, it is not possible and it is unlawful to process for Forest Clearance.

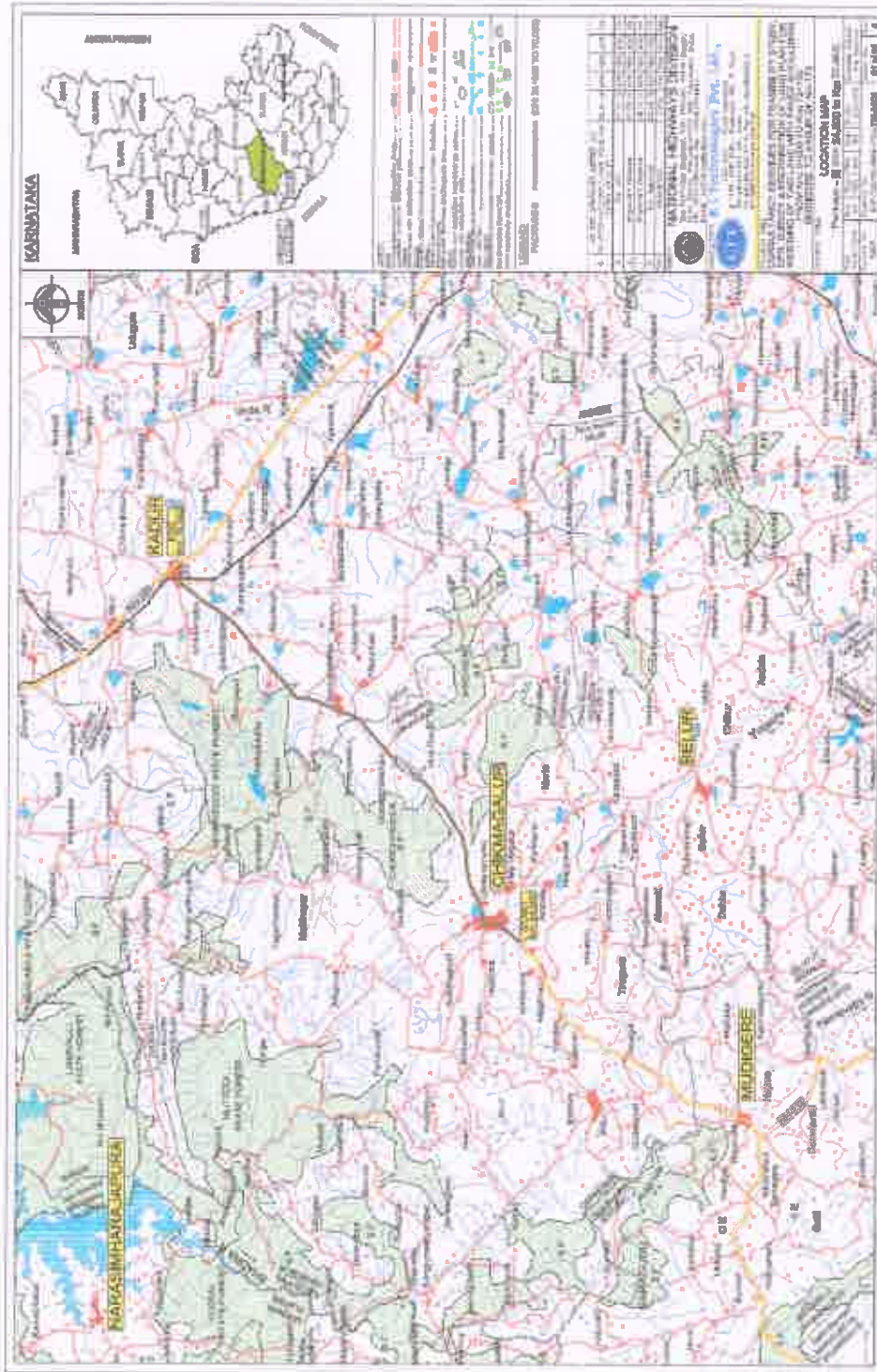
Also, as the DPR was prepared during the year 2017 which was 3 years ago. Hence, fresh DPR is to be prepared as per the current guidelines from the MORT&H for taking the widening project from Km 0.00 to 24.600 (earlier proposed Package-I and Package-II length). The alignment and area of land acquisition may be changed in the fresh DPR. The proposed FC for the work of "Widening to Two Lane with Paved Shoulders from km 24.600 to km 70.063 of Mudigere to Kadur Section of NH-173" on EPC mode in the State of Karnataka (Job No. NH-173-KNT-2017-18-873)" is for the Linear Road Project, it will not be clubbed with the FC proposals for the other works in any manner in the future.

3. Location of Project Road

The project work "Widening to two lane with paved shoulders from Km: 24.60 to 70.063 of Mudigere Kadur section NH-173 in the state of Karnataka. (Job No. NH-173-KNT-2017-18-873)" between Chikkamagalur to Kadur covering a length of 45.46 Km i.e. from outskirts of Chikkamagaluru town limit (towards Mudigere side) till end at Kadur at the intersection with NH 69.


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Figure: The Location map indicating the project road is figured below




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4. Existing features of Project Road:

Existing National Highway NH-173 from Km 24.600 to 70.063 is having intermediate lane carriageway (5.5 Mtrs Bituminous top). To provide uniform carriageway throughout the length except at major built-up areas the highway is need to be widened to Two-Lane with paved shoulder configuration. Project features are given in the table below.

Table: Salient features of the work of "Widening to two lane with paved shoulders from Km: 24.60 to 70.063 of Mudigere Kadur section NH-173 in the state of Karnataka. (Job No. NH-173-KNT-2017-18-873)"

SL No.	Particulars	Project Features	Remarks
1.	Start Km	24.600,	Muguthihalli
2.	End Km	70.063	Kadur
3.	Total length (Km)	45.463	
4.	District	01 Nos.	Chikkamagaluru
5.	Terrain	Plain / Rolling / Mountainous	
6.	Right of way	Existing: 16 to 30m	
7.	Existing carriage way (length)	Intermediate	37.263
		2 lane	3.90
		4lane	4.30
8.	Proposed carriage way (Length)	Intermediate	0.00
		2 lane + paved shoulder	31.275
		4lane	14.188
9.	Major Bridges	Nil	
10.	Minor Bridges	14 Nos.	
11.	Vehicular overpasses	Nil	
12.	Vehicular Underpasses	Nil	
13.	Foot over Bridge	Nil	


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14.	Culverts	79 Nos.	
15.	Flyover	Nil	
16.	Major Junctions	04 Nos.	
17.	Minor Junctions	31 Nos.	
18.	Built up areas length	13.413 Km.	
19.	Villages/towns	17 Nos..	

5. IMPROVEMENT PROPOSAL AND DESIGN:

Study mandates the improvement of the project road to 2- lane paved shoulders standards for the project stretch. Considering the importance of the project, careful planning has been made to provide various components of highway and associated utilities, which affect the safety and operation of the highway. The proposed improvements are aimed at easing traffic congestion, reducing accident, improving physical characteristics of the road, which includes geometry, pavement strength, drainage, and enhancing the aesthetic. Hence, the following optimum level of improvements is proposed.

- Widening of the project road
- Strengthening/reconstruction of the existing pavement for the entire length
- Provision of the footpath cum built-up drain at Built up and industrial locations
- Improve/redesign sharp curves
- Widening/reconstruction of existing culverts and provision of additional culverts depending on the drainage condition
- Junction improvements
- Provision of traffic signs and road furniture
- Provision of bus shelters
- Shifting of utilities
- Land acquisition, R&R and other social impacts


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6. FOREST STRETCHES ALONG THE PROJECT ROAD:

SL.No	Forest Survey No.	VillageName	Taluk Name	Forest Area (In Hectare)	Chainage		Location
					From	To	
1	59	DASARAHALLI	CHIKKAMAGALURU	0.0679000	36+495	36+577	RHS
2					36+800	36+885	RHS
3	60			0.0865000	36+605	36+700	LHS
4					37+004	37+022	LHS
5					37+093	37+115	LHS
6					37+165	37+215	LHS
7					37+230	37+260	LHS
8	59	DEVARAHALLI	CHIKKAMAGALURU	0.0145000	39+870	41+460	LHS
9	60			1.1278000	40+400	40+595	RHS
10		40+660	41+400		RHS		
11	118	HALELAKYA	CHIKKAMAGALURU	0.3508000	37+325	37+420	RHS
12					37+560	37+660	RHS
13					37+720	37+795	RHS
14					37+857	37+875	RHS
15	112	HIREGOWJA	CHIKKAMAGALURU	0.8388000	41+460	42+360	LHS
16	302	BRAHMASAMUDRA	KADUR	0.1139000	56+830	57+430	RHS
17	1	YEMMEDODDI	KADUR	0.1197000	56+485	56+540	RHS
18					56+600	56+675	LHS
19					56+715	56+830	RHS
20	74	SAKREPATNA	KADUR	0.0761940	55+340	55+450	RHS
21					54+965	55+005	RHS
22	744	SAKREPATNA	KADUR	2.9283200	54+650	55+450	LHS
			Total area in Hectare	5.724414			

7. JUSTIFICATION:

The project road is newly upgraded road as National Highway- 173 from the State Highway-64. After the upgradation as National Highway-173 the road is being upgraded to National Highway standards considering the present traffic and safety of the road users. The existing road is having intermediate lanewidth (avg 5.50 mtrs Carriage way). There has been an increase in the traffic volume in the recent past necessitating the widening of existing road to two lane paved shoulders width (10 mtrs Carriage way). The existing road is geometrically poor with respect to alignment and has concerns over safety of road users.

The existing alignment is followed during design but where the alignment is geometrically poor with respect to alignment and a threat to safety of road users, geometrical improvements such as smoothening of sharp curves has been recommended as per Indian Road Congress(IRC)


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specifications. While doing so, curved alignments at forest stretches adjacent to highway have been smoothened keeping the design vehicle speed and the safety of users.

Technical, economical and environmental attributes have been considered during finalising the alignment and all possible efforts have been made to avoid the forest land. It is further stated that the area of the forest land involved in the proposed alignment for improvement of project stretch of NH 173 is bare minimum. The attempt has also been made for alternative alignments to avoid forest land and there are no other feasible alternatives found.

The proposed land diversion is the minimum area as per the proposed improvement. The diversion of forest land has not been proposed for any bypass or re-alignment. The proposed diversion of forest land is based on Minimum geometric improvement is proposed for the reaches/ section under considerations.

In addition to that, in some locations, the past Authorities have constructed the road on the government land by-passing the Right of way of the road. Now those government gomala land is considered / Notified as deemed forest land. Hence, in the above locations, even though the road is being constructed on the old existing alignment, forest clearance is being proposed as per the instructions of the Forest Authorities of the Chikkamagaluru and based on the Revenue Village Map.


Village wise justification of proposed land diversion.

a) Dasarahalli Village

- It is to be noted that, between km 36.500 to Km 37.000, there exist a forest land on Both sides hence diversion on either side will warrant more forest land. Hence, existing road alignment is followed with geometric improvements.
- From km 37.00 to km 37.350, on LHS forest land pertaining to Dasarahalli village exist. Hence any alternative other than proposed will warrant for extra/ More forest land diversion.

b) Devarahalli Village.

- It is to be noted that, between km 39.870 to Km 41+460 there exist a forest land on left side and from km 40+400 to 41+400 there exist a deemed forest land on Right side. hence diversion on either side will warrant more forest land. Hence, existing road alignment is followed with geometric improvements.
- Many years ago, the past Authorities have constructed the road on the government land survey numbers of 59 and 60, by-passing the Right of way of the road. The Right of way as per the revenue Village map is present on left side inside the dense forest. Now those survey numbers 59 and 60 of Dasarahalli is considered / Notified as deemed forest land. Hence, in the


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above locations, even though the road is being constructed on the old existing alignment, forest clearance is being proposed as per the instructions of the Forest Authorities of the Chikkamagaluru and based on the Revenue Village Map.

c) Hiregowja Village.

- It is to be noted that, between km 41+460 to 42+360, there exist a forest land on both side. hence diversion on either side will warrant more forest land. Hence, existing road alignment is followed with geometric improvements. Any alternative other than proposed will warrant for extra/ More forest land diversion.
- As per the revenue records the survey number 112 of the Hiregowja village is defined as government Gomala as per the revenue land records. At Present the road is being widened on the old existing alignment, without the realignment. Now those survey number 112 of Hiregowja is considered / Notified as deemed forest land. Hence, the Forest clearance is being proposed as per the instructions of the Forest Authorities of the Chikkamagaluru and based on the Revenue Village Map.

d) Halelakya Village.

- From Km 37.325 to 37.875, on RHS again there exist a forest land. If Alternative alignment is proposed for improvement, then more land of forest would be required from this village under Sy.118. Hence, the proposed alignment is proposed with minimum area of forest land diversion.

e) Sakarapatna Village.

- From km 55.320 to Km 55.450, the existing road is revised due to improvement in the vertical profile. Due to this improvement, the formation width is extended at the toe level in RHS towards forest land. Here also, there is no Realignment in the horizontal alignment. Hence, the proposed improvement is least improvement.
- As per the revenue records the survey number 744 village is defined as revenue land as per the revenue land records. At Present the road is being widened and Toll Plaza is proposed on the old existing alignment, without the realignment at this survey number. Now these survey number 774 is considered / Notified as deemed forest land. Hence, the Forest clearance is being proposed as per the instructions of the Forest Authorities of the Chikkamagaluru.

f) Brahmasamudra Village.

- It is to be noted that, between km 56+830 to 57+430, there exist a forest land on Both sides. Hence diversion on either side will warrant more forest land. Hence, existing road alignment is


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followed with geometric improvements with minimal use of the forest land at curve widening.

- In addition to that, the survey number 302 of the Brahmasamudra village is defined as revenue land as per the revenue land records. At Present the road is being widened and on the old existing alignment, without any realignment at this survey number. Now these survey number 302 of Brahmasamudra village is considered / Notified as deemed forest land. Hence, the Forest clearance is being proposed as per the instructions of the Forest Authorities of the Chikkamagaluru.

g) Yemmedoddi Village.

- It is to be noted that, between km 56+485 to 56+830, there exist a forest land on Both sides. Hence diversion on either side will warrant more forest land. Hence, existing road alignment is followed with geometric improvements with minimal use of the forest land at curve widening.

In addition to that, the survey number 1 of the Yemmedoddi village is defined as revenue land as per the revenue land records. At Present the road is being widened and on the old existing alignment, without any realignment at this survey number. Now these survey number 1 of Brahmasamudra village is considered / Notified as deemed forest land. Hence, the Forest clearance is being proposed as per the instructions of the Forest Authorities of the Chikkamagaluru.


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