

No. MSRDC/NMSCEW/Forest/ 570/2019

Date: 21/01/2019



**Maharashtra State
Road Development
Corpn. Ltd.**

(A Government of Maharashtra Undertaking)

To,

The Additional Principal Chief Conservator of Forests (Central)

Government of India,

Ministry of Environment, Forest & Climate Change,

Regional Office (WCZ), Ground Floor,

East Wing, New Secretariat Building, Civil Lines,

Nagpur 440001

(Through APCCF and Nodal Officer, Maharashtra State, Nagpur)

Subject: Diversion of 383.8535 Ha of forest land for construction of Nagpur-Mumbai Expressway (Package-V) from Taranganpada, Igatpuri Taluka, Nashik District to Amane, Bhiwandi Taluka in Thane District of 78 km in the State of Maharashtra.

Ref: RO (WCZ) - MoEF, Nagpur Letter F. No. FC-III/MH-35/2018-NGP/4724 dt. 01.01.2019

Respected Sir,

With reference to the above referred letter, we are enclosing point wise reply to the queries raised along with necessary supporting documents as desired by your office for your further consideration and acknowledgement.

Thanking You,

Yours Faithfully,

Executive Engineer



Maharashtra State Road Development Corporation Limited,
Govt. of Maharashtra

Advance copy forwarded with compliments to:

1. APCCF and Nodal Officer, Maharashtra State, Nagpur, 1st Floor, B-Wing, Vanbhavan, Civil Lines, Nagpur-440001.
 2. The Secretary (Forests), Revenue and Forest Department, Hutatma Rajguru Chowk, Madam Cama Marg, Mantralaya, Mumbai-440001
- For recommending the matter to the MoEFCC, Regional Office (WCZ), Nagpur at an early date.

FP/MH/ROAD/34047/2018:

Sub: Diversion of 383.8535 Ha of forest land for construction of Nagpur-Mumbai Expressway (Package-V) from Taranganpada, Igatpuri Taluka, Nashik District to Amane, Bhiwandi Taluka in Thane District of 78 km in the State of Maharashtra.

Point wise reply to the queries raised by RO (WCZ) - MoEF, Nagpur vide Letter F. No. FC-III/MH-35/2018-NGP/4724 dt. 01.01.2019 is as under:

Sr. No.	Queries raised	Compliance comments
i.	Deputy Conservator of Forests, West Nashik Division has mentioned that tunnel of length 3.375 Km is passing through the Division for which 39.177 ha of Forest land is being diverted. Therefore, area calculation statement submitted, may be revisited by the State Government and detailed area calculation statement in terms of Length x Breadth and Curvature may be calculated and the same shall be submitted by the State Government.	<p>The area of 39.177 Ha, running over a length 3.375 km, pertain to only 1 tunnel of project in West Nashik Division. However, there are, in all, 5 tunnels planned in this Package of NMEW, apparently located in both districts namely, Nashik and Thane. We believe that revised approach to work out forest area for tunnel portion will apparently apply to remaining 4 tunnels, which are not mentioned in the observations of REC.</p> <p>Thus, after revisiting the forest area of all 5 such tunnels, in light of revised guidelines, for considering forest clearance for tunnel portion (by adding curvature as an additional parameter) the forest area of tunnels increases by (for tunnel portion) by 1.7612 Ha. Adding this factor to total applied forest area in forest diversion proposal, the revised figure comes to 385.6147 Ha, instead of 383.853 ha.</p> <p>Therefore, diversion of forest land for the project may be sanctioned for 383.853 Ha, with an added stipulation that NPV be charged on cumulative total of 385.6147 Ha.</p> <p>We hereby submit an enclosed (<i>Annexure-I</i>) undertaking to the effect that we shall pay NPV of the forest land against cumulative total of 385.6147 Ha.</p> <p>The modalities adopted for calculating corresponding area figures will be explained to the Committee by our team during hearing before REC.</p>

Sr. No.	Queries raised	Compliance comments
ii.	Maps viz. 10 Km radius map showing protected areas and protected area Distance Map is not submitted.	10 km radius Map of Tansa WLS and Kalsubai Harishchandragad WLS duly certified by concerned DCFs has been submitted with the proposal. Please refer Section VI, Pg. No. VI /181 A and VI/183 A of the proposal. However additional copies of the same are submitted for ready reference as <i>Annexure-II.</i>
iii.	Certificate, from the DFO/DCF concerned, regarding location of the area outside/within 10 Km of distance from the boundary of protected areas is not submitted.	10 km radius Maps of Tansa WLS and Kalsubai Harishchandragad WLS duly certified by respective DCFs has been submitted. Kindly see Annexure-II as referred under Pt.(ii) above. This document clearly depicts the project area falling outside/within the boundary of these protected areas. The required Certificates from concerned offices are attached as <i>Annexure-III.</i>
iv.	Details of facts as contained in the Part- II of the proposal viz. Topography of the area, Geology and Slope to erosion are not mentioned.	<p>Details of facts relating to Topography of the area, Geology and Slope to erosion are given as under :-</p> <p>Topography:</p> <p><u>Nashik District:</u> Topography of Nashik district is conspicuous by the presence of the Sahyadri hills and their offshoots, which forms the main hill system of the district running from north to south. Offshoots of this hill system stretch out to the eastern parts of the district at various places. Kalsubai is the highest peak (1650.49 m) in the district. There are many isolated irregularly shaped hills, most which are flat topped supporting stunted tree growth as under lying sheet rock at the top of these hills is covered by barely an inch of soil.</p> <p><u>Thane District:</u> Thane district has the Sahyadri hill ranges on the eastern region running north-south with lateral offshoots at many places. The height of the hills decrease gradually towards west. Mountain ranges spread unevenly in the central region of the district also. Central and western parts of the district are covered by vast</p>

Sr. No.	Queries raised	Compliance comments
		<p>plains.</p> <p>The proposed road alignment follows partly plain, partly rolling and partly hilly topography. Some of these stretches where the alignment passes through plain lands are at high elevation.</p> <p>Geology:</p> <p><u>Nashik District:</u> Deccan traps comprising of pahoehoe and Aa lava flows of basaltic composition of Late cretaceous to palaeogene age (68 to 62) occupy the entire area of the district. Thin beds of volcanic tuffs are found between the flows along the contacts at few places. The entire lava pile have been classified into three formations viz. Salher formation, Lower Ratangarh Formation and Upper Ratangarh Formation in the ascending order of megacryst flows M1 & M2 developed on the top of Salher and Lower Ratangarh Formations respectively.</p> <p><u>Thane District:</u> There are three types of geological formations: Sub-Recent-Recent (Soil), Pliestocene-Recent (Laterite) and Upper Cretaceous – Eocene (Deccan trap). The upper cretaceous – Eocene and the pliestocene-recent formations are rocks and the sub-recent-recent formation is a resultant soil layer obtained on dis-integration of rocks.</p> <p><u>Upper-Cretaceous Eocene:</u> The deccan trap covers almost the entire district and consists of usual horizontal layers of basaltic lava. The rocks are generally grey to green in colour. The non-vesicular forms are hard, tough, compact and medium to fine grained, breaking with a conchoidal fracture. The vesicles are filled with various minerals such as quartz, amethyst, calcite, agate, zeolite and jasper.</p> <p><u>Plietocene-Recent:</u> Laterite is a compact and vesicular rock essentially composed of hydrated</p>

Sr. No.	Queries raised	Compliance comments
		<p>oxides of aluminium and iron with small amounts of oxides of manganese and titanium. Generally, it is reddish brown in colour and found at many places; particularly on the crest of hills where it forms capping over the deccan trap.</p> <p>Soil Erosion:</p> <p><u>Nashik District:</u> About 83% of the forest area is subjected to mild soil erosion. The rest 17 % forest areas suffer from moderate soil erosion. However, no forest area has heavy soil erosion. The moderate soil erosion is confined mostly to central and eastern part of the district where there is poor vegetation or open forest. The western part has mostly good forest cover and mild soil erosion.</p> <p><u>Thane District:</u> Almost all forest areas of Thane district are subjected to mild soil erosion. As such no heavy soil erosion has been noticed in any part of the district</p>
v.	<p>Original certificate ensuring importance of Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, in prescribed format as per Govt. of India guidelines issued vide letter no. 11-9/98 FC (pt) dated 5th July, 2013 for linear projects is not submitted. The same has to be submitted along with English translated copies documentary evidences in the form of copies of the resolutions of the concerned Forest Rights Committee(s), Gram Sabha(s), Sub-Division Level Committee(s) recording their consent for the proposal and bearing signature of the participants have not been submitted. The same is required to be submitted by the State Government. In addition to this, copies of record of</p>	<p>Original Certificates as obtained in full compliance to Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 are under English translation from Marathi language, as desired by REC, including the resolutions of concerned Forest Rights Committee(s), Gram Sabha(s), Sub-Division Level Committee(s) along with proceedings of the Forest Rights Committee, Sub Divisional Level Committee(s) and shall be submitted subsequently along with Original copies.</p>

Sr. No.	Queries raised	Compliance comments								
	proceedings of the Forest Rights Committee, Sub Divisional Level Committee(s) may also be submitted.									
vi.	Details on Justification for selecting the proposed alternative and Reasons for discarding other alternatives is not mentioned.	<p>Comparative statement of Alternative alignments considered for selection of proposed alignment has been submitted along with Maps of the same on Toposheet & Google Earth. Please refer page nos. VI/5, VI/7, VI/8, XIII/5 & XIII/6 respectively.</p> <p>Reasons for discarding alternatives other than preferred alignment, adapted for the project in FDP, are based on the final scores after Matrix Evaluation where each of the criteria (based on Engineering, Environment & Cost consideration). Final scores of all the alternatives is mentioned under last column of the Comparative Statement on Pg. VI/5 & XIII/6 of the proposal. However, additional copy of the same is submitted for ready reference as <i>Annexure-IV</i>.</p>								
vii.	Discrepancy is observed in the details of employment potential likely to be generated from implementation of the project in online Part- I application and hard copy submitted by the User Agency. In online application it is mentioned that 6000 permanent employment and 28,28,570 mandays of temporary employment will be generated from the project. Whereas, in Part- I submitted along with the proposal it is mentioned that about 13,68,570 mandays of employment will be generated from the project and permanent employment for 100 persons will be generated. Therefore, correct details on employment potential likely to be generated in terms of Skilled, Semi-skilled and Unskilled persons/ mandays (permanent and temporary) by	<p>Employment details are correct as per the Part-I submitted along with proposal with details of Man-days generated as under:</p> <table><tr><td>Unskilled</td><td>714105</td></tr><tr><td>Semiskilled</td><td>514480</td></tr><tr><td>Skilled</td><td>139985</td></tr><tr><td>Total</td><td>1368570</td></tr></table> <p>Permanent employment for 100 persons shall be generated for toll operations.</p>	Unskilled	714105	Semiskilled	514480	Skilled	139985	Total	1368570
Unskilled	714105									
Semiskilled	514480									
Skilled	139985									
Total	1368570									

Sr. No.	Queries raised	Compliance comments
	implementation of the project may be submitted by the User Agency.	
viii.	Discrepancy is also observed in total cost of the project. In online application it is mentioned that the total cost of the project is 964266 Lakhs, whereas in Part- I submitted along with the proposal it is mentioned that the total cost of the project is 536500 Lakhs. Therefore, correct details shall be submitted by the User Agency.	It is now finally submitted that the total project cost is 964266 Lakhs, which is in accordance with figure submitted in online application. Kindly consider the same.



Executive Engineer

Maharashtra State Road Development Corporation
Limited, Govt. of Maharashtra

Annexure – I

TO WHOMSOEVER IT MAY CONCERN

We hereby undertake & state to the effect that we shall **pay NPV of the total forest land against a cumulative total of 385.6147 Ha** (considering curvature component) for the “Construction of Package – V of Nagpur – Mumbai Expressway passing through West Nashik, Shahapur and Thane Forest Divisions from Village Taranganpada of Taluka Igatpuri in District Nashik to Village Amane, of Taluka Bhiwandi in District Thane of 78 Km”, against Forest Diversion Proposal (Proposal No.: FP/MH/ROAD/34047/2018), for non-forestry purposes, submitted under the provisions of Forest (Conservation) Act, 1980 to the MoEFCC.

Date: 21/01/2019

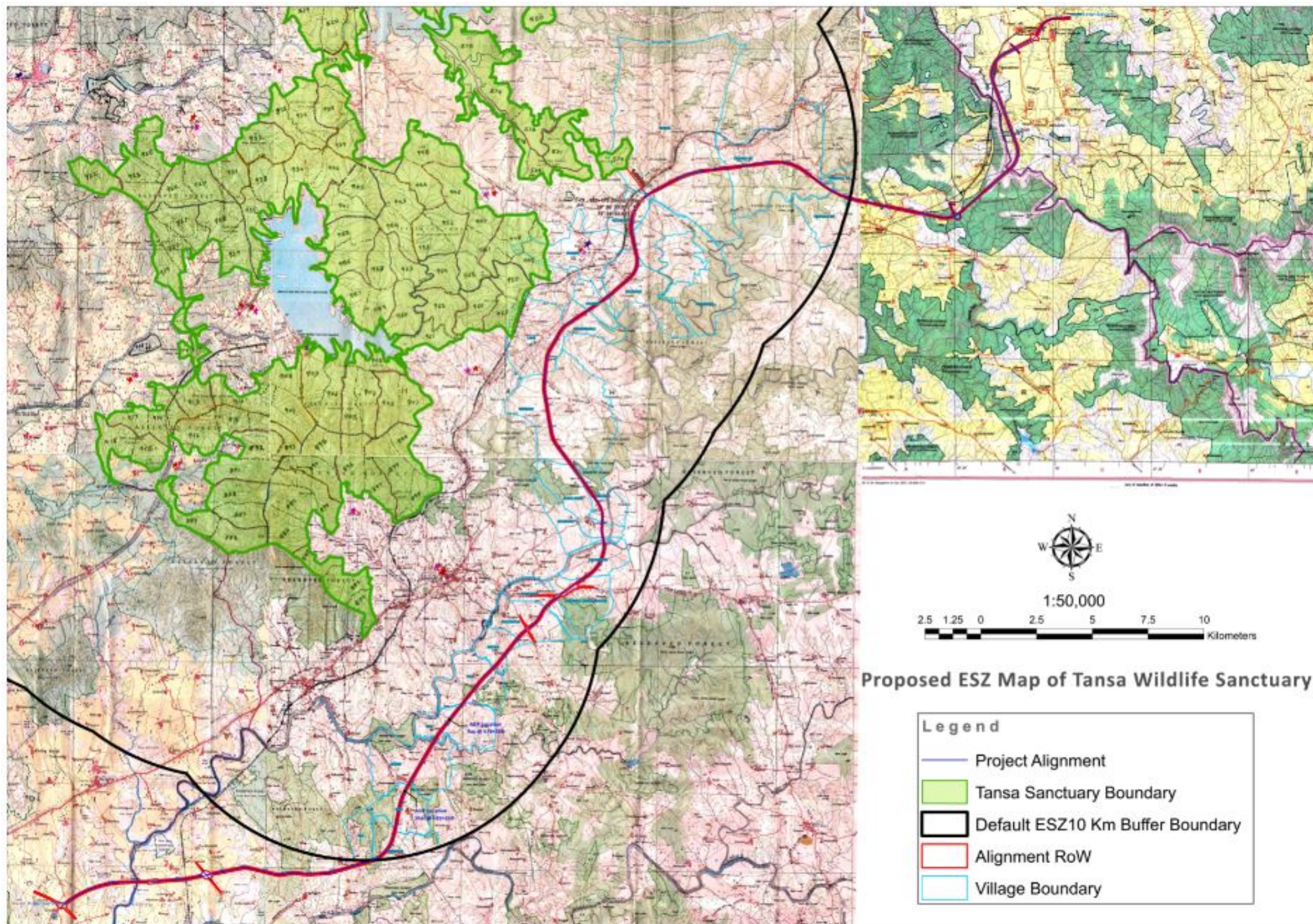
Place: Mumbai



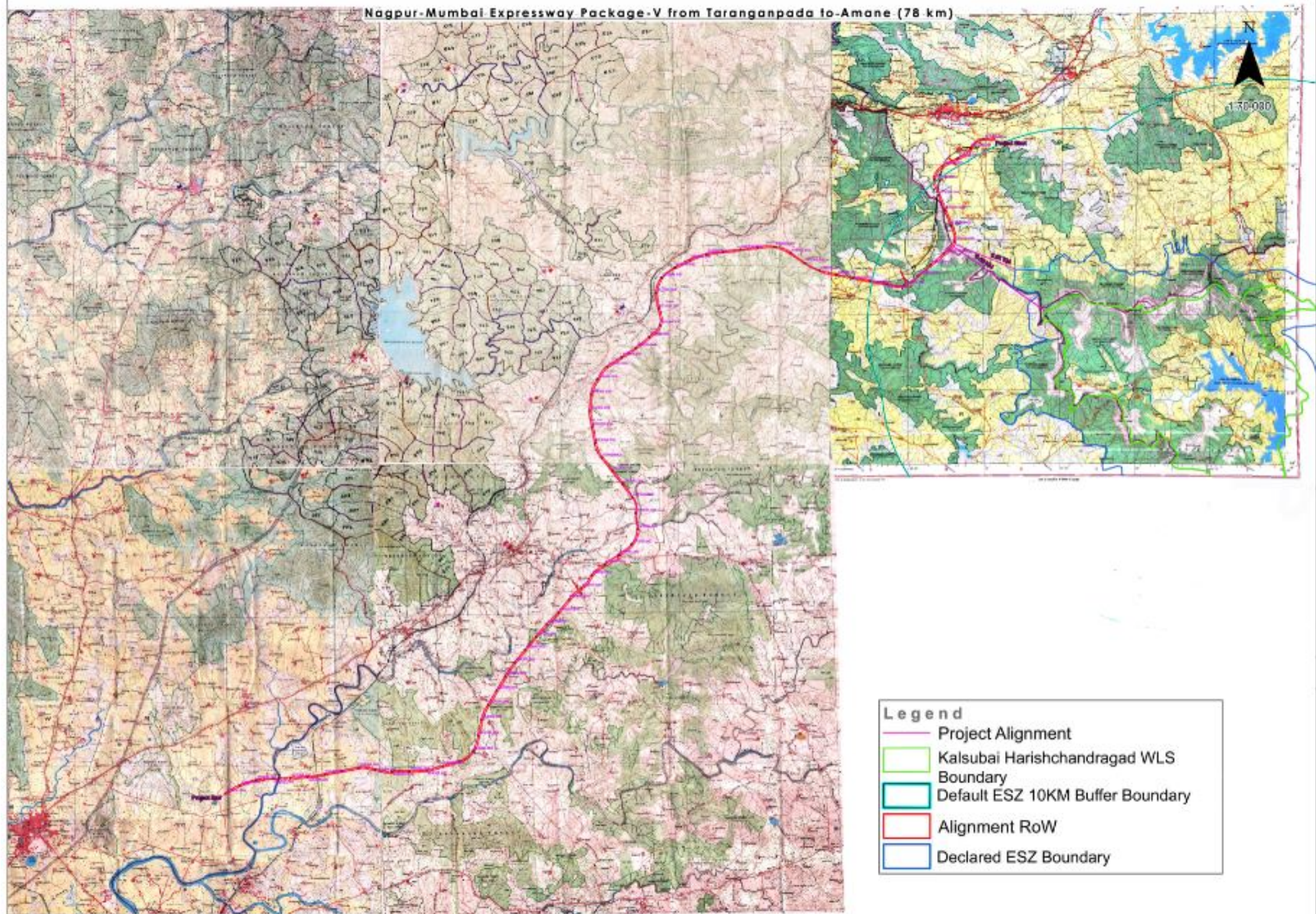
Executive Engineer, Package – V

Maharashtra State Road Development Corporation Limited,
Bandra Office, Mumbai

Annexure – II



Nagpur-Mumbai Expressway Package-V from Taranganpada to-Amane (78 km)



Annexure – III



Office of the Dy. Conservator of Forests, Wildlife Thane
L.B.S Marg, Teen Hath Naka, Naupada, Thane 400 602
Phone No.022 2540 2522, Fax No.022 2539 2070
Email : cfwlthane@mahaforest.gov.in



Subject : Construction of Nagpur-Mumbai Super communication Expressway Packg V from Taranganpada,Igatpuri Taluka,Nashik District to Amane,Bhiwandi Taluka in Thane District of 78 km in the state of Maharashtra

Land/Mumbai-Nagpur/ 1720 /2018-19
Thane 400 602, Dtd. 15.01.2019

To,

Executive Engineer,
Maharashtra State Road Development Corp. Ltd,
Opp Bandra Reclamation Bus Depot,
Near Lilavati Hospital,
K.C.Marg, Bandra (West)
Mumbai 400 050.

Reference : Your office letter No.MSRDC/NMSCEW/Forest/360/19,
Dtd.11.01.2019

Vide letter under reference your office has requested to issue a certificate regarding location of the area outside/within 10 km distance from the boundary of protected area.

After scrutiny of office record,it is revealed that closest distance from border of Tansa Wildlife Sanctuary is 1.47 km away from the proposed project (Nagpur-Mumbai Super Communication Express way) that means it falls within 10 km distance from the boundary of proposed ESZ of Tansa Wildlife Sanctuary.

Further it is revealed that 46.44 km of proposed pckg-V project alignment falls within 10 km default ESZ of Tansa Wildlife Sanctuary,whereas the rest of the alignment (31.56 km) falls outside of the 10 km default ESZ of Tansa Wildlife Sanctuary.

(D.B.Shendge)

Dy. Conservator of Forests
Wildlife Thane



Conservator of Forests (Wildlife) Nashik

"Aranya Sunkul" old Agra Road, Tranbak Naka, Nashik 422002

Phone no. (0253) 2505114/15 Email-cfwlnashik@mahaforest.gov.in

Certificate

It is certified that the portion of alignment from Ch.628.170 to 637.920 of 9.75 km length of proposed package of V of 78 km from village Taranganpada, Igatpuri Taluka, Nashik District to Village Amane, Bhiwandi Taluka in Thane District of six lane Nagpur -Mumbai Expressway (NMEW) Project, falls within 10 km default ESZ of Kalsubai Harishchandragad Wildlife Sanctuary & the balance length of 62.25 km falls outside the 10 km default ESZ of Kalsubai Harishchandragad Wildlife Sanctuary.

(A.M. Anjankar)
Conservator of Forests
(Wildlife) Nashik

Annexure - IV

A brief note regarding alignment selection criteria and matrix analysis applied

The proposed alignment of Expressway has been chosen out of many alternatives studied by the experts based on various parameters. Hence the project location is site specific, and it is justified to locate the project on forest land where ever it is barely essential.

Wherever possible non forest land has been used but, in view of above reason, the patch of Expressway passing through forest cannot be located on non-forest land and, as such, the proposed diversion of 383.8535 ha is justified.

The evaluation matrix of three alignments is presented in following Section:

Map of the Alternative Alignment Options:

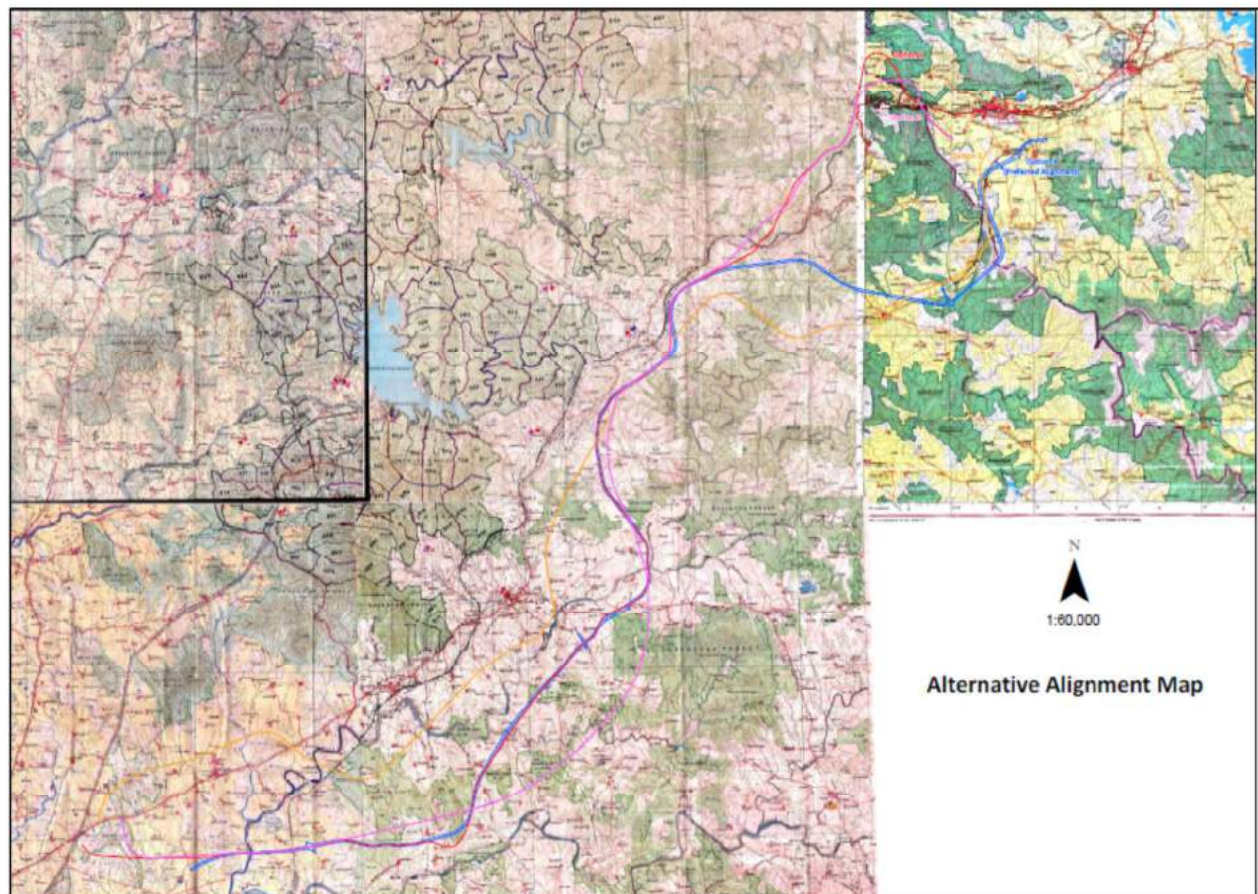


Table: Evaluation Matrix of Alternative alignment options (based on Engineering, Social & Environmental and Cost aspects):

Sr. No.	Parameters	Weights	Opt1	Score	Opt2	Score	Opt3	Score	Opt4	Score
1	Road Length (km)	100	80.20	92.27	76.40	96.86	74.00	100.00	78.00	94.87
2	Interchanges (nos.)	100	6.00	83.33	6.00	83.33	5.00	100.00	5.00	100.00
3	ROB (nos.)	100	2.00	50.00	3.00	33.33	1.00	100.00	1.00	100.00
4	Major Bridge (nos.)	100	2.00	50.00	3.00	33.33	3.00	33.33	0.00	100.00
5	Forest Land (Ha.)	100	175.58	100.00	317.38	55.32	264.76	66.32	383.8535	45.74
6	Agricultural Land (Ha.)	100	597.02	67.54	487.48	82.72	403.23	100.00	417.6829	96.54
7	Barren Land (Ha.)	100	208.78	83.06	167.36	66.58	251.36	100.00	105.9880	42.17
8	Affected Residential/ Commercial Structures (no.)	100	108	7.41	112	7.14	148	5.41	8	100.00
9	Eco-Sensitivity	100	1.00	100.00	1.00	99.62	2.00	96.80	2.00	90.40
10	Mitigation Structures (Wildlife/Forest) (km)	100	7.02	33.51	6.43	30.69	16.50	78.76	20.95	100.00
11	Tunnel (km)	100	1.60	62.50	1.00	100.00	6.50	15.38	10.48	9.54
12	Viaduct (km)	100	5.42	100.00	5.43	99.82	10.00	54.20	10.47	51.79
13	Total Construction Cost (Cr.)	100	4200.06	95.16	3996.90	100.00	5562.94	71.85	9642.66	41.45
Total Score		1300		924.78		888.75		922.05		972.50

Comparative analysis on the basis of Engineering, Social and environmental aspects and Cost criteria shows that **Option 4** scores highest marks compared to other Alignment Options. This is primarily because of the fact that comparatively it requires lesser agricultural land; less RoBs; minimizes impact on forest /Wildlife by increased length of Tunnels & Viaducts and higher number of other mitigation structures; and affects least Residential & Commercial buildings minimizing social impacts and R&R issues.

Date: 02/07/2018
Place: Mumbai

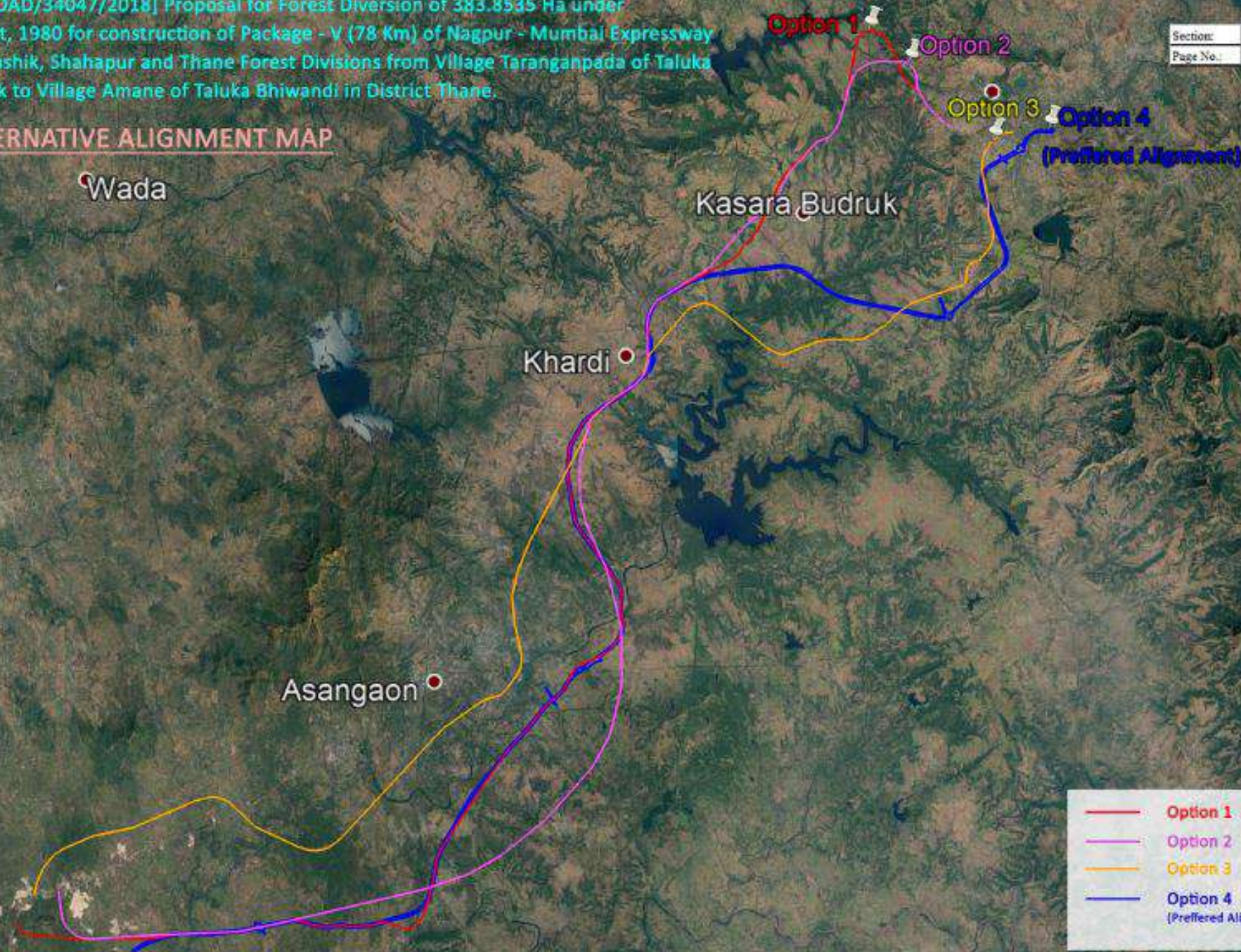


(S. V. Abhang)
Executive Engineer, Package – V
Maharashtra State Road Development
Corporation Limited, Bandra Office, Mumbai



[Proposal No.: FP/MH/ROAD/34047/2018] Proposal for Forest Diversion of 383.8535 Ha under Forest (Conservation) Act, 1980 for construction of Package - V (78 Km) of Nagpur - Mumbai Expressway passing through West Nashik, Shahapur and Thane Forest Divisions from Village Taranganpada of Taluka Igatpuri in District Nashik to Village Amane of Taluka Bhiwandi in District Thane.

ALTERNATIVE ALIGNMENT MAP



[Proposal No.: FP/MH/ROAD/34047/2018] Proposal for Forest Diversion of 383.8535 Ha under Forest (Conservation) Act, 1980 for construction of Package - V (78 Km) of Nagpur - Mumbai Expressway passing through West Nashik, Shahapur and Thane Forest Divisions from Village Taranganpada of Taluka Igatpuri in District Nashik to Village Amane of Taluka Bhiwandi in District Thane.

ALTERNATIVE ALIGNMENT MAP



1:60,000

Alternative Alignment Map

