

Government of Maharashtra

By Speed Post

No. FLD-1223/CR-86/F-10
Revenue and Forest Department,
Mantralaya, Mumbai- 400 032.
Date:- 21.09.2023

To,
Deputy Director General of Forests (Central),
Regional Office,
Ministry of Environment, Forests & Climate Change,
Government of India,
Ground Floor, East Wing,
New Secretariat Building, Civil Lines,
Nagpur-440 001.

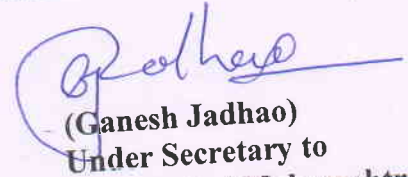
Sub.:- Forest Land-Thane

Diversion of 12.2607 ha. forest land in favour of Thane Municipal Corporation for construction of Balkum to Gaimukh DP Road (NH-3 Connector Ghodbunder By-pass) in Tal. Thane, Dist. Thane in the State of Maharashtra.

Ref: 1. Your Office Letter No. FC-II/MH-213/2023-NGP/11639, Dt.29.05.2023.
2. APCCF & Nodal Officer Letter No. Desk-17/FCA-S1/PID-148050/Thane/2023-24/1829, Dt.13.09.2023.

Regional Office, MoEF&CC, Government of India has sought additional information with respect to proposal for diversion of 12.2607 ha. forest land in favour of Thane Municipal Corporation for construction of Balkum to Gaimukh DP Road (NH-3 Connector Ghodbunder By-pass) in Tal. Thane, Dist. Thane in the State of Maharashtra.

2. Additional Principal Chief Conservator of Forests & Nodal Officer, Maharashtra State, Nagpur has submitted compliance report to the Government of Maharashtra vide letter under reference no.2, Compliance Report submitted by the APCCF & Nodal Officer is self-explanatory and attached herewith for further necessary action in the matter.


(Ganesh Jadhao)
Under Secretary to

the Government of Maharashtra
Under Secretary
Revenue and Forests Department
Hutatma Rajguru Chowk
Madam Cama Road, Mantralaya
Mumbai 400 032

Encl : As above.

Copy to:

- 1) Principal Chief Conservator of Forests (HoFF), Maharashtra State, Nagpur.
- 2) Additional Principal Chief Conservator of Forests and Nodal Officer, Nagpur.
- 3) Additional Principal Chief Conservator of Forests, Mangrove Cell, Mumbai.
- 4) Divisional Forest Officer, Mumbai Mangrove Conservation Unit.

OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS
(HEAD OF FOREST FORCE), MAHARASHTRA STATE, NAGPUR

ADDITIONAL PRINCIPAL CHIEF CONSERVATOR OF FORESTS AND NODAL OFFICER, MAHARASHTRA STATE, NAGPUR.

First Floor, 'B' Wing, Van Bhavan, Civil Lines, Nagpur-440001.

Tel no. (0712) 2530166, 2556916, Fax no. (0712) 2550675 E-mail- apccfnodal@mahaforest.gov.in

No. Desk-17/FCA-SI/PID-148050/Thane/2023-24/1829

Nagpur – 440 001, Date:- 13/09/2023

To,
Principal Secretary (Forests),
Revenue & Forest Department,
Mantralaya Mumbai -32.

Sub:- Diversion of 12.2607 ha. of forest land in favour of Thane Municipal Corporation for construction of Balkum to Gaimukh DP Road (NH-3 Connector Ghodbunder By-pass) in Taluka-Thane, Dist.Thane in the State of Maharashtra-reg.

Ref:- 1) The Government of India, MoEF&CC, IRO Nagpur letter F.No.FC-II/MH-213/2023-NGP-11639 dated 29/05/2023
2) The Additonal Principal Chief Conservator of Forests, Mangrove Cell, Mumbai vide letter No. O.No.land/Desk-3/886, dated 24/08/2023

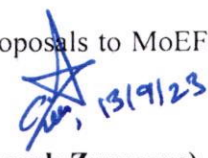
The Government of India, Ministry of Environment, Forests and Climate Change, Regional Office, Nagpur vide letter under reference No. 1 has raised back query on 05 points. Accordingly, the Additonal Principal Chief Conservator of Forests, Mangrove Cell, Mumbai vide letter under reference No. 2 has submitted the compliance report to this office. The same may be submitted as under:-

S.No.	Query	Compliance
i	The User Agency in consultation with the DCF concern shall explore the possibility of shifting alignment further towards the main land at chainage 750.	<p>To explore the possibility of shifting alignment towards the main land at chainage + 0.750 Km, site visit was carried out on 08.07.2023.</p> <p>In the current alignment, 0.5778 ha. Mangrove area is to be diverted from chainage 0.750 km to 0.0 km. If the current alignment is shifted at chainage 750 as per the alternate alignment no.1, the total mangrove area to be diverted will be 0.6393 ha. as per alternate alignment no.2, the total mangrove area to be diverted will be 0.4527 ha.</p> <p>As per alternate alignment no.2 the area to be diverted is less. However according to the user agency, the current alignment has been selected considering the criteria of road engineering. The proposed alignment is required to cross the old Agra road at level 2 due to ongoing Mumbai Metro line at 5 at the chainage + 1.700 Km and requires sufficient distance to avoid the steep gradient to joint the designated junction and for the purpose certain degree of the curve has been proposed to increase the distance between ch. 0.00 Km to 0.750 Km. Hence the alternate alignment no.2 suggested by DFO, MMCU does not adhere to design criteria of road</p>

		engineering. The comparative map showing alternate alignment on Google image and MRSAC Maps is enclosed as (Annexure No.I)
ii	The DCF concern shall certify whether the mangroves can grow naturally under the proposed structure.	<p>Looking at the site conditions and natural vegetation of mangroves present at the site, there is ample scope for the restoration of mangroves in the said areas.</p> <ul style="list-style-type: none"> ➤ For the development of approach Road, only natural material such as sand, stones, mud etc should be used. Usage of Construction and Demolition Waste material should be avoided for the development of a temporary approach road. ➤ Culverts should be placed intermittently at a minimum of 30 meters with a diameter of 0.5 to 1 meter each depending on the flow of water throughout the length of the temporary approach road in order to ensure proper flow of tidal water. ➤ Before handing over the area to Mangrove Cell for undertaking restoration, all the materials laid for making the temporary approach road should be removed. ➤ In the area that will be affected due to the construction of the Cut and Cover Tunnel, measures should be undertaken to ensure the proper flow of high tide water that is necessary for the restoration of mangroves.
iii	Specific comments of the CWLW/PCCF (Wildlife) with respect to the proposed mangroves cutting, maintenance of flow of water/ wild animals across the proposed structure at the time of construction and also proximity of the proposed alignment to the SGNP.	The comments of the CWLW/PCCF (Wildlife) is enclosed herewith as (Annexure No.II)
iv	The State Government shall submit CA schemes and KML files for NFL and DFL areas proposed for CA.	The CA scheme and KML file NFL and DFL of the proposed CA land is enclosed herewith as (Annexure No.III)
v	User Agency shall submit CRZ clearance from competent authority.	<p>The User Agency has applied for CRZ Clearance and MCZMA has recommended the project. The copy of the same is enclosed herewith as (Annexure No.IV).</p> <p>The User Agency has given undertaking to obtain CRZ clearance for the project, prior to commencement of work. The copy of the same is enclosed herewith as (Annexure No.V)</p>

In view of the above facts, it is requested to process the proposals to MoEF&CC for approval under section – 2 of the Forest (Conservation) Act, 1980.

Encl : As above


(Naresh Zurmure)

**Addl. Principal Chief Conservator of Forests
& Nodal Officer**

Copy to Additional Principal Chief Conservator of Forests, Mangrove Cell, Mumbai for information.

Copy to the Divisional Forest Officer, Mumbai Mangrove Conservation Unit for information.

Copy to the Executive Engineer (PWD), Thane Municipal Corporation for information.



Forest Department

O/o Principal Chief Conservator of Forests (HoFF), Maharashtra State

Phone No.- 0712-2560953 Principal Chief Conservator of Forest (Wildlife) Maharashtra State

E-mail - pccfwlmgp@mahaforest.gov.in Website - www.mahaforest.gov.in

"Van Bhavan", 3rd Floor, Ramgiri Road, Civil Lines, Nagpur - 440 001.

No:- D-23(2)/Survey/C.N.157(Nodal)/ **1844**/2023-24, Dated **12/09/2023**

Office Note

Sub:- Diversion of 12.2607 ha. of forest land in favour of Thane Municipal Corporation for Construction of Balkum to Gaimukh DP Road (NH-13 connector Ghodbunder By Pass) in Taluka Thane, Dist. Thane in the State of Maharashtra.

Ref:- Your office letter no. Desk-17/FCA-S2//PID-148050/Thane/1685,
dated 30/08/2023.

With reference to letter cited above, MoEF & CC, Government of India had sought comments from Principal Chief Conservator of Forest, Maharashtra State with respect to mangroves cutting, maintenance of flow of water/wild animals across the proposed structure at the time of construction and also proximity of the proposed alignment to the SGNP.

The side inspection of the proposed site was carried out by Additional Principal Chief Conservator of Forest, Mangrove Cell along with field staff and representative of project proponent on 04/08/2023. The team had suggested the following precautions to be implemented while constructing the Balkum to Gaimukh road passing through mangrove forest.

1. For the development of temporary approach road, the construction debris or waste material should not be used instead fresh natural sand, store mud to be used in mangrove patch.
2. Culverts should be placed intermittently at a minimum of 30 meters with a diameter of 0.5 to 1 meter each depending on the flow of water throughout the length of the temporary approach road in order to ensure proper flow of tidal water.
3. Before handing over the area to Mangrove Cell for undertaking restoration, all the materials laid for making the temporary approach road should be removed.
4. The area that will be affected due to the construction of the Cut and Cover Tunnel, measures should be undertaken to ensure the proper flow of high tide water that is necessary for the restoration of mangroves.

3064
13/9/23

The wild fauna including migratory birds are found in the region. Along with 180 species of birds other wild animals like Golden Jackal, Indian Grey mongoose are also found. Due to vicinity of Sanjay Gandhi National Park, Borivali, leopards are occasionally found in the proposed project area. It is necessary to restore the mangrove forest after construction of road. As the birds and other wild animals are acclimatized to the effect of urbanization no long term impact will be seen on wild animals, so no special mitigation measures need to be taken.

The undersigned agrees with the above recommendations and suggests to add measures 1 to 4 as conditions while approving the diversion of mangrove forests.

Encl:- Side Inspection report 04/08/2023



(Maheep Gupta)

Principal Chief Conservator of Forests (Wildlife),
Maharashtra State

✓ To,
Additional Principal Chief Conservator of Forest &
Nodal officer, Maharashtra State, Nagpur

Site inspection by Additional Principal Chief Conservator of Forests, Mangrove Cell regarding the proposed Diversion of 12.2607 Ha. Forest (Mangrove) for Construction of Balkum to Gaimukh DP Road (NH 3 Connector Ghodbunder By-pass) by Thane Municipal Corporation (TMC).

Date of site inspection 04/08/2023

Accompanied by:

Shri. Adarsh Reddy, DFO, Mumbai Mangrove Conservation Unit, Mangrove Cell.

Shri. Vikrant Khade, Range Forest Officer, Mangrove Cell Thane (and his field team).

Shri Anil Patil, Dy Engineer, Thane Municipal Corporation.

Shri Vikas Dhole, Dy City Engineer, Thane Municipal Corporation.

Shri Pagare, Dy Engineer, Mumbai Metropolitan Region Development Authority.

Shri Jitendra R Patil, Project Consultant, Thane Municipal Corporation.

I visited the proposed diversion of Mangrove land proposed for the development of Balkum to Gaimukh road on Friday 4th August 2023 along with the officers mentioned above.

The purpose of the diversion of 12.026 Ha of mangrove forest land is for the development of Balkum to Gaimukh road passing through Kharegaon Toll Naka at Mumbai Nashik Highway (NH-3) and ending at Ghodbunder Road (SH-42) near Gaimukh which will help in decongestion of traffic on the Ghodbunder road in the Thane city and will allow faster movement of the vehicle.

My opinion on the effect of mangroves, wild animals including avifauna regarding the said construction of the road is as follows:

1. Mangrove Restoration

During the site visit the areas that will be affected due to the construction of the proposed structure were observed. Looking at the site conditions and natural vegetation of mangroves present at the site, there is ample scope for the restoration of mangroves in the said areas. Mangroves can be restored under the proposed structure considering precautions as below: -


- For the development of Approach Road, only natural materials such as sand, stones, Mud, etc should be used. Usage of Construction and Demolition Waste material should be avoided for the development of a temporary approach road.
- Culverts should be placed intermittently at a minimum of 30 meters with a diameter of 0.5 to 1 meter each depending on the flow of water throughout the length of the temporary approach road in order to ensure proper flow of tidal water.

- Before handing over the area to Mangrove Cell for undertaking restoration, all the materials laid for making the temporary approach road should be removed.
- The area that will be affected due to the construction of the Cut and Cover Tunnel, measures should be undertaken to ensure the proper flow of high tide water that is necessary for the restoration of mangroves.

2. About wild animals including avifauna

On inquiry with the field team and with some scientific researchers it is understood that the following wild animals are known to use the area:

- Around 180 species of birds are found in the region of which around 81 species are migratory some of the species are Painted Storks, Lesser Flamingo and Black-tailed Godwit.
- Most of the migratory birds are found in the region during the period of November to May and furthermore these birds are mainly found on the mudflats and since the proposed road is going to pass away from the mudflats there is no visible impact on the migratory birds.
- The common mammal species found are Golden Jackal, Indian Grey Mongoose, etc and the coastal marine fauna found in the region are mudskippers, fiddler crabs and mud crabs various species of marine snails.
- Based on the clarification sought from the field team and site inspection it is understood that the wild animals including avifauna and marine animals will not be disturbed permanently.
- Based on the information from some wildlife researchers, it is understood that the area where the proposed Balkum Gaimukh Road joins the Ghodbunder road near Gaimukh has an occasional presence of leopards. As the said area has only occasional leopard presence and furthermore forested habitat of SGNP and Nagla block are near to the said site which allows the leopard to have an alternate habitat where they may disperse.
- Since it is proposed that most of the land which will be diverted for the construction of the said road will be restored with mangrove plantation and thus it is felt that no serious and long term impact will be seen on the wildlife in the region.
- The area is near the urban habitat and thus wild animals found in the habitat are acclimatized to the effects of urbanization. Thus, no special mitigation measures needs to be taken.


(S.V. Ramarao, IFS)

Addl. Principal Chief Conservator of Forests,
Mangrove Cell, Mumbai



Office of the Additional Principal Chief Conservator of Forests, Mangrove Cell, Mumbai

302, Wakefield House, 3rd Floor, Ballard Estate, Above Britannia & Co. Restaurant,
Fort, Mumbai-400 001.

Ph: 022-2694984 / 85, Email: ccfmmumbai@gmail.com / dcfmangrovecell@gmail.com.

Letter

O.No. land/Desk-3/886 /2023-24.

Date: 24/08/2023 Mumbai.

To,

✓ Additional Principal Chief Conservator of Forests
& Nodel Officer,
Maharashtra State, Nagpur.

Sub. :- Diversion of 12.2607 ha of forest land in favour of Thane Municipal Corporation for Construction of Balkum to Gaimukh DP Road (NH13 connector Ghodbunder By pass) in Taluka Thane Dist, Thane in the State of Maharashtra.

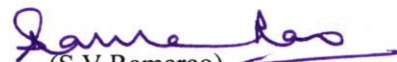
- Ref. :-** 1) MoEF & CC Office letter No. FC-II/MH-213/2023-NGP-11639 Dated 29/05/2023.
2) Your Office letter No. Desk-17/FCA-S1/PID-148050/Mangrove-758 Dated 08/06/2023.
3) Executive Engineer (PWD), Thane Municipal Corporation letter No. TMC/PWD/EE/42, dated 29/05/2023.
4) Executive Engineer (PWD), Thane Municipal Corporation letter No. TMC/PWD/EE/177, dated 10/07/2023.
5) Executive Engineer (PWD), Thane Municipal Corporation letter No. TMC/PWD/EE/191, dated 17/07/2023.
6) Divisional Forest Officer, Mumbai Mangrove Conservation Unit officer letter No. Land/Desk-9/341 Dated 09/03/2023.
7) Dy. City Engineer (PWD), Thane Municipal Corporation, Thane TMC/PWD/DYCE-18, Dated 16/05/2023.
8) Principal Chief Conservator of Forests (Wildlife), Maharashtra State, Nagpur letter No. D-23(2)/ Wildlife/ Survey/C.R.No.102/1101, Dated 13/07/2023.
9) This office letter No. D-3/Land/868 /2023-24, Dated 23 /08/2023.

Thane
28/8
File
20/8
With respect to above subject, MoEF & CC has raised shortcomings vide reference No.01. Accordingly, this office along with user agency has directed for compliance of the same vide reference No.02. In this regard, Executive Engineer (PWD), Thane Municipal Corporation has submitted compliance report to the Divisional Forest Officer, Mumbai Mangrove Conservation Unit vide reference No.03 to 05. Divisional Forest Officer, Mumbai Mangrove Conservation Unit has submitted their compliance report to this office vide reference No.06 and same is being forwarded herewith further action.

2702
28/8/23
Regarding the compliance of shortcoming No.03, user agency has requested to Principal Chief Conservator of Forests (Wildlife), Maharashtra State, Nagpur for specific comments with respect to the proposed Mangroves cutting, maintenance of flow of water/wild animal across the proposed structure at the time of construction and also proximity of the proposed alignment to the SGNP vide reference No.07. Principal Chief Conservator of Forests (Wildlife), Maharashtra State, Nagpur has directed to this office to submit the mitigation

measures for Wildlife (Including Bird) due to proposed road in mangrove area. This office has submitted a detailed report of the same to Principal Chief Conservator of Forests (Wildlife), Maharashtra State, Nagpur vide reference No.09. Copy of the report is attached to the compliance of shortcomings for the further action.

Enclosed : As above.


(S.V.Ramarao)



Additional Principal Chief Conservator of Forests
Mangrove Cell, Mumbai

Copy to :- Principal Chief Conservator of Forests (Wildlife), Maharashtra State, Nagpur for information and necessary action.

Copy to :- Divisional Forest Officer, Mumbai Mangrove Conservation Unit for information and necessary action.

Copy to :- Executive Engineer (PWD), Thane Municipal Corporation for information and necessary action.

Reference-6

 महाराष्ट्र शासन वनविभाग	 महाराष्ट्र शासन वनविभाग
दूरध्वनीक्र. 022-25220097 EmailId: dfommcu@gmail.com	विभागीय वन अधिकारी, मुंबई कांदळवन संधारण घटक यांचे कार्यालय ब- ६८, कामगार नगर, टिळकनगर स्टेशन जवळ, कुर्ला (पुर्व), मुंबई - ४०० ०२४

O. No. land/ Desk-9/1054/2023-24.

Date: 31/07/2023.

To,
 Additional Principal Chief Conservator of Forest,
 Mangrove Cell, Mumbai.

Sub: Diversion of 12.2607 ha of forest land in favour of Thane Municipal Corporation for Construction of Balkum to Gaimukh DP Road (NH3 Connector Ghodbunder By-Pass) in Taluka Thane Dist. Thane in the State of Maharashtra.

- Ref:
1. MoEF&CC letter FC-II/MH-231/2023/2023 NGP-11639 dated 29/05/2023.
 2. Assistant Conservator of Forests Desk -17 letter no. desk-17/FCA-51/PID-148050/7 Mangrove, Dated 08/06/2023.
 3. Executive Engineer (PWD), Thane Municipal Corporation letter No. TMC/PWD/EE/42 dated- 29/05/2023.
 4. Executive Engineer (PWD), Thane Municipal Corporation letter No. TMC/PWD/EE/177 dated- 10/07/2023.
 5. Executive Engineer (PWD), Thane Municipal Corporation letter No. TMC/PWD/EE/191 dated- 17/07/2023.

MoEF & CC vide reference no.1 has raised queries regarding the forest proposal Diversion of 12.2607 ha of forest land in favour of Thane Municipal Corporation for Construction of Balkum to Gaimukh DP Road (NH3 Connector Ghodbunder By-Pass) in Taluka Thane Dist. Thane. The user agency has submitted the compliance of the same to this office vide reference no.3, 4 & 5. We hereby submit the point wise compliance of the same as follows:

Sr. No.	Conditions	Compliance
1	The User Agency in consultation with the DCF concern shall explore the possibility of shifting alignment further towards the main land at chainage 750.	To explore the possibility of shifting alignment towards the main land at chainage +0.750 Km, site visit was carried out on 08.07.2023. In the current alignment, 0.5778 ha. Mangrove area is to be diverted from chainage 0.750 km to 0.0 km. If the current alignment is shifted at chainage 750 as per the alternate alignment no. 1, the total mangrove area to be diverted will be 0.6393 ha. As per alternate alignment

		<p>no.2, the total mangrove area to be diverted will be 0.4527 ha.</p> <p>As per alternate alignment no.2 the area to be diverted is less. However according to the user agency, the current alignment has been selected considering the criteria of road engineering. The proposed alignment is required to cross the old Agra road at level 2 due to ongoing Mumbai Metro line at 5 at the chainage +1.700 Km and requires sufficient distance to avoid the steep gradient to join the designated junction and for that purpose certain degree of the curve has been proposed to increase the distance between ch 0.00 Km to 0.750 Km. Hence the alternate alignment no .2 suggested by DFO, MMCU does not adhere to design criteria of road engineering. The comparative map showing alternate alignment on Google image and MRSAC Maps is attached as Annexure 1.</p>
2	<p>The DCF concern shall certify whether the mangroves can grow naturally under the proposed structure.</p>	<p>Looking at the site conditions and natural vegetation of mangroves present at the site, there is ample scope for the restoration of mangroves in the said areas.</p> <p>Mangroves can be restored under the proposed structure considering precautions as below: -</p> <ul style="list-style-type: none"> • For the development of approach Road, only natural materials such as sand, stones, mud, etc should be used. Usage of Construction and Demolition Waste material should be avoided for the development of a temporary approach road. • Culverts should be placed intermittently at a minimum of 30 meters with a diameter of 0.5 to 1 meter each depending on the flow of water throughout the length of the temporary approach road in order to ensure proper flow of tidal water. • Before handing over the area to Mangrove Cell for undertaking restoration, all the materials laid for making the temporary approach road should be removed. • In the area that will be affected due to the construction of the Cut and Cover Tunnel, measures should be undertaken to ensure the proper flow of high tide water that is necessary for the restoration of mangroves.

43

3	Specific comments of the CWLW/PCCF (Wildlife) with respect to the proposed mangroves cutting, maintenance of flow of water/wild animals across the proposed structure at the time of construction and also proximity of the proposed alignment to the SGNP.	TMC have submitted the proposal to CWLW/PCCF (Wildlife) for his specific comments. The copy of the same is attached herewith as Annexure 2 .
4	The State Government shall submit CA schemes and KML files for NFL and DFL areas proposed for CA.	The CA Scheme and KML of NFL and DFL of the Proposed CA land is attached herewith as Annexure 3 .
5	User Agency shall submit CRZ clearance from competent authority.	The User agency have applied for CRZ Clearances and MCZMA has recommended the project. Copy attached herewith as Annexure 4 . User agency have given undertaking to obtain CRZ clearances for the project, prior to commencement of work, attached herewith as Annexure 5 .

MSR 1/12/23
(Adarsh Reddy)

Divisional Forest Officer,
Mumbai Mangrove Conservation Unit.

✓ Copy to: Executive Engineer (PWD), Thane Municipal Corporation for information.

Support Document
DDO Point - 2
Refere - 6
(LPO)

Site Visit Report

Subject: Site Visit for the Construction of Balkum to Gaimukh DP Road.

Ref. : Letter to Deputy Director Projects, Mangrove Foundation no: O. No. land/Desk -9/890/2023-24 dated 12/7/2023

Respected Sir

Vide the above-mentioned letter considering expertise in the subject, DFO MMCU has asked DD-Projects, Mangrove Foundation to give specific comments on whether mangroves can grow naturally under the proposed structure. On the discussion of the same with APCCF Mangrove Cell, it was directed DD- projects to conduct a site visit and submit the detailed report along with comments.

Therefore, a site visit was conducted on 18th July 2023 by Dr. Sheetal Pachpande, Deputy Director of Projects of Mangrove Foundation, Range Forest Officer, Thane, MMCU, Mangrove Cell, and Consultant from Thane Municipal Corporation

Based on the site visit the comments on whether mangroves can grow naturally under the proposed structure are as below:


Clarification Sought	Comments
1. The DCF Concerned shall certify whether mangroves can grow naturally under the proposed structure.	During the site visit the areas that will be affected due to the construction of the proposed structure were observed. Looking at the site conditions and natural vegetation of mangroves present at the site, there is ample scope for the restoration of mangroves in the said areas.

Mangroves can be restored under the proposed structure considering precautions as below: -

- For the development of Approach Road, only natural materials such as sand, stones, Mud, etc should be used. Usage of Construction and Demolition Waste material should be avoided for the development of a temporary approach road.
- Culverts should be placed intermittently at a minimum of 30 meters with a diameter of 0.5 to 1 meter each depending on the flow of water throughout the length of the temporary approach road in order to ensure proper flow of tidal water.
- Before handing over the area to Mangrove Cell for undertaking restoration, all the materials laid for making the temporary approach road should be removed.
- The area that will be affected due to the construction of the Cut and Cover Tunnel, measures should be undertaken to ensure the proper flow of high tide water that is necessary for the restoration of mangroves.

Submitted for Approval


Deputy Director, Projects
Mangrove Foundation

forward the opinions to
DFO/MMCU for further
action.

Arcef/Mangrove Cell, 31/7/23



अपर प्रधान मुख्य वनसंरक्षक, कांदळवन कक्ष, मुंबई यांचे कार्यालय,
३०२, वेक फिल्ड हाऊस, ३ रा मजला, ब्रिटानिया रेस्टोरंट जवळ, बॅलार्डइस्टेट, फोर्ट, मुंबई ४०० ००१.
दूरध्वनी क्र.०२२-२२६९४९८४/८५, Email:ccfmumbai@gmail.com/defmangrovecell@gmail.com

महत्वाचे

जा.क्र.कक्ष-३/जमीन/ ४६४ /सन २०२३-२४.
फोर्ट, मुंबई ४०० ००१ दिनांक : २३/ ८/२०२३.

प्रति,

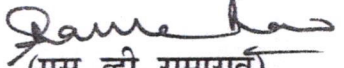
प्रधान मुख्य वनसंरक्षक (वन्यजीव)
महाराष्ट्र राज्य, नागपूर

विषय :- Request for the Specific Comments as per direction of REC Committee MoEFCC for the Forest Diversion Proposal for the Development of Balkum-Gaimukh Road in Thane Municipal Corporation (TMC).

संदर्भ :- आपले कार्यालयाकडील पत्र क्र. कक्ष-२३(२)/वजी/सर्व्हे/प्र.क्र.१०२/११०१/२०२३-२४ दिनांक १३/०७/२०२३.

विषयांकीत प्रकरणी संदर्भित पत्रान्वये उक्त प्रकरणाबाबत संबंधीत यंत्रणेकडून नकाशाच्या ३ प्रती या स्तरावर प्राप्त करून अभिप्रायासह नकाशा स्वाक्षांकीत करून २ प्रती तसेच सदर रस्ता जिथून कांदळवन मधून जात आहे तिथे वन्यप्राणी (पक्षीसह) यांना अडथळा होवू नये, म्हणून उपशमन योजना सूचविण्याबाबत कळविण्यात आलेले आहे. त्या अनुषंगाने प्रस्तावित प्रकल्पाबाबत दिनांक ०४/०८/२०२३ रोजी प्रत्यक्ष जागेवर जाऊन वस्तुस्थिती तपासून, सोबतच्या अभिप्रायानुसार अहवाल व या कार्यालयाकडून स्वाक्षांकीत केलेले नकाशे पुढील कार्यवाहीसाठी पाठविण्यात येत आहे.

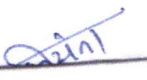
सोबत - वरीलप्रमाणे.


(एस. व्ही. रामाराव)

अपर प्रधान मुख्य वनसंरक्षक
कांदळवन कक्ष

प्रतिलिपी - विभागीय वन अधिकारी, कांदळवन संधारण घटक यांना माहिती व आवश्यक कार्यवाहीसाठी अग्रेषित.

प्रतिलिपी - उप शहर अभियंता (सा. बं. वि), ठाणे महानगर पालिका यांना माहिती व आवश्यक कार्यवाहीसाठी अग्रेषित.



(37)

Site inspection by Additional Principal Chief Conservator of Forests, Mangrove Cell regarding the proposed Diversion of 12.2607 Ha. Forest (Mangrove) for Construction of Balkum to Gaimukh DP Road (NH 3 Connector Ghodbunder By-pass) by Thane Municipal Corporation (TMC).

Date of site inspection 04/08/2023

Accompanied by:

Shri. Adarsh Reddy, DFO, Mumbai Mangrove Conservation Unit, Mangrove Cell.

Shri. Vikrant Khade, Range Forest Officer, Mangrove Cell, Thane (and his field team).

Shri Anil Patil, Dy Engineer, Thane Municipal Corporation.

Shri Vikas Dhole, Dy City Engineer, Thane Municipal Corporation.

Shri Pagare, Dy Engineer, Mumbai Metropolitan Region Development Authority.

Shri Jitendra R Patil, Project Consultant, Thane Municipal Corporation.

I visited the proposed diversion of Mangrove land proposed for the development of Balkum to Gaimukh road on Friday 4th August 2023 along with the officers mentioned above.

The purpose of the diversion of 12.026 Ha of mangrove forest land is for the development of Balkum to Gaimukh road passing through Kharegaon Toll Naka at Mumbai Nashik Highway (NH-3) and ending at Ghodbunder Road (SH-42) near Gaimukh which will help in decongestion of traffic on the Ghodbunder road in the Thane city and will allow faster movement of the vehicle.

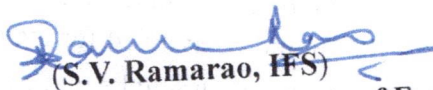
My opinion on the effect of mangroves, wild animals including avifauna regarding the said construction of the road is as follows:

1. Mangrove Restoration

During the site visit the areas that will be affected due to the construction of the proposed structure were observed. Looking at the site conditions and natural vegetation of mangroves present at the site, there is ample scope for the restoration of mangroves in the said areas. Mangroves can be restored under the proposed structure considering precautions as below: -

- For the development of Approach Road, only natural materials such as sand, stones, Mud, etc should be used. Usage of Construction and Demolition Waste material should be avoided for the development of a temporary approach road.
- Culverts should be placed intermittently at a minimum of 30 meters with a diameter of 0.5 to 1 meter each depending on the flow of water throughout the length of the temporary approach road in order to ensure proper flow of tidal water.

- Before handing over the area to Mangrove Cell for undertaking restoration, all the materials laid for making the temporary approach road should be removed.
 - The area that will be affected due to the construction of the Cut and Cover Tunnel, measures should be undertaken to ensure the proper flow of high tide water that is necessary for the restoration of mangroves.
2. About wild animals including avifauna
- On inquiry with the field team and with some scientific researchers it is understood that the following wild animals are known to use the area:
- Around 180 species of birds are found in the region of which around 81 species are migratory some of the species are Painted Storks, Lesser Flamingo and Black-tailed Godwit.
 - Most of the migratory birds are found in the region during the period of November to May and furthermore these birds are mainly found on the mudflats and since the proposed road is going to pass away from the mudflats there is no visible impact on the migratory birds.
 - The common mammal species found are Golden Jackal, Indian Grey Mongoose, etc and the coastal marine fauna found in the region are mudskippers, fiddler crabs and mud crabs various species of marine snails.
 - Based on the clarification sought from the field team and site inspection it is understood that the wild animals including avifauna and marine animals will not be disturbed permanently.
 - Based on the information from some wildlife researchers, it is understood that the area where the proposed Balkum Gaimukh Road joins the Ghodbunder road near Gaimukh has an occasional presence of leopards. As the said area has only occasional leopard presence and furthermore forested habitat of SGNP and Nagla block are near to the said site which allows the leopard to have an alternate habitat where they may disperse.
 - Since it is proposed that most of the land which will be diverted ^{for} regarding the construction of the said road will be restored with mangrove plantation and thus it is felt that no serious and long term impact will be seen on the wildlife in the region.
 - The area is near the urban habitat and thus wild animals found in the habitat are acclimatized to the effects of urbanization. Thus, no special mitigation measures needs to be taken.


(S.V. Ramarao, IFS)

Addl. Principal Chief Conservator of Forests,
Mangrove Cell, Mumbai



दुरध्वनी : (07137) 272017
Email ID : dcfwadsa@gmail.com
GSTIN : 27AAAGD0578F1ZM



महाराष्ट्र शासन
वनविभाग

उपवनसंरक्षक, वडसा वनविभाग वडसा यांचे कार्यालय
आरमोरी रोड, वडसा (देसाईगंज) - 441 207 (महाराष्ट्र राज्य)

विषय :- Request for 15.00 Hector Degraded Forest land or the Compensatory Afforestation in lieu of the FCA PROPOSAL OF Balkum-Gaikmukh Road for Thane Municipal Corporation

क्रमांक :- कक्ष-10/सर्व्हे/जमिन/प्र.क्र./1244/2022-23

वडसा, दिनांक :- 15/12/2022

✓ प्रति

आयुक्त,
महानगर पालिका, ठाणे

संदर्भ :- आपले कार्यालयीन पत्र क्रमांक /ठाणपा/TMC/COMM/CE/422 दि. 06.12.2022

--00--

विषयाचे अनुषंगाने, ठाणे महानगर पालिका अंतर्गत येत असलेल्या Balkum to Gaikmukh, DP रोडकरीता वन (संवर्धन) अधिनियमन 1980 अंतर्गत जमीन वळतीकरणाचा प्रस्ताव आपणाकडून सादर करण्यात आला आहे. उक्त अधिनियमाअंतर्गत पर्यायी वनीकरणाकरीता (Compensatory Afforestation) अवनत (Degraded) क्षेत्राची आवश्यकता असल्याने 15.00 हेक्टर वनक्षेत्र उपलब्ध करून देण्याबाबत संदर्भित पत्रान्वये कळविले आहे.

त्यानुसार, या विभागाअंतर्गत पर्यायी वनीकरणाकरीता आरमोरी परिक्षेत्रातील मौजा मेंढेबोडी कक्ष क्रमांक 45 मधील 15.00 हेक्टर अवनत (Degraded) क्षेत्र पर्यायी वनीकरणाकरीता योग्य असल्याबाबतचे प्रमाणपत्रासह 10 वर्षांची पर्यायी वनीकरणाची योजना, (C.A. Scheme) पर्यायी वनीकरणाचा नकाशा, KML ची सॉफ्ट कॉपीसह यासोबत 4 प्रतीत पुढील कार्यवाहीस्तव आपणाकडे पाठविण्यात येत आहे.

सहपत्र:- वरीलप्रमाणे

(धर्मवीर साल्विडेल, भावसे)
उपवनसंरक्षक
वडसा वनविभाग, वडसा

प्रतिलिपी :- वनसंरक्षक (प्रा) गडचिरोली यांना माहितीस सविनय सादर.

प्रतिलिपी :- सहायक वनसंरक्षक, वडसा वनविभाग, वडसा यांना माहितीस अग्रेषित.



दुरध्वनी : (07137) 272017
Email ID : dcfwadsa@gmail.com
GSTIN : 27AAAGD0578F1ZM



सत्यमेव जयते

महाराष्ट्र शासन
वनविभाग

उपवनसंरक्षक, वडसा वनविभाग वडसा यांचे कार्यालय
आरमोरी रोड, वडसा (देसाईगंज) - 441 207 (महाराष्ट्र राज्य)

CERTIFICATE


This is to certify that, below mention site from Wadsa Forest Division do not have any plantation site taken under any of the government plantation schemes in last 10 years.

Detail of proposed sites is as follows :-

Dist.	Division	Range	Round	Beat	Name of Village	Compt. No.	Area (Ha.)	Status
Gadchiroli	Wadsa	Armori	Wairagad	Sukala	Mendhebodi	45	15.00	RF
Total							15.00	

Place : Wadsa

Date : 08.12.2022


(Dharmaveer Salvitthal, IFS)
Dy. Conservator of Forests
Wadsa Division, Wadsa.



दुरध्वनी : (07137) 272017

Email ID : dcfwadsa@gmail.com

GSTIN : 27AAAGD0578F1ZM



सत्यमेव जयते

महाराष्ट्र शासन

वनविभाग

उपवनसंरक्षक, वडसा वनविभाग वडसा यांचे कार्यालय

आरमोरी रोड, वडसा (देसाईगंज) - 441 207 (महाराष्ट्र राज्य)

COMPENSATORY AFFORESTATION AREA SUITABILITY CERTIFICATE

This is to certify that the identified de-graded Forests Land of 15.00 Ha. in Range Armori of Wadsa Forest Division, District Gadchiroli is suitable for Compensatory afforestation from management purpose also and it is free from encroachment and an encumbrances. Though satellite imagery shows greenery, it is due to widespread local weed called Kukutranzi (*Calycopteris floribunda*). It has not economical value and it has badly affected growth of other valuable tree species. So this area should be converted into forest species. So to protect and convert this area into valuable forest, afforestation is needed in below mentioned sites.

Detail of proposed site is as follows.

Dist.	Division	Range	Round	Beat	Name of Village	Compt. No.	Area (Ha.)	Status
Gadchiroli	Wadsa	Armori	Wairagad	Sukala	Mendhebodi	45	15.00	RF
Total							15.00	

Place : Wadsa

Date : 08.12.2022

(Dharmaveer Salvitthal, IFS)
Dy. Conservator of Forests
Wadsa Division, Wadsa.

MODEL RATE STRUCTURE FOR COMPENSATORY AFFORESTATION

Model No. 4

Model rate structure for plantation of mixed tree species with rainfall up to 800 mm and medium quality, medium drained soil with soil depth up to 30 cm.

Propose C.A. Area for Diversion of 15.00 ha. Forest land for Balkum to Gaikmukh, DP Road Thane.

Forest Division Wadsa

Total Area 15.00 ha.

Total Area - 15.00 Ha. (1111 Plants/ha.)

Wages Rate Rs. Per Days 445.19

Size of pits - 0.45 x 0.45 x 0.45 mtr.

Spacement - 3.00 x 3.00 mtr.

Sr. No.	Particulars of Works	1.00 Ha. Plantation				15.00 Ha. Plantation			
		Mandays	Wages	Material Supply	Total Amount	Mandays	Wages	Material Supply	Total Amount
1	2	3	4	5	6	7	8	9	10
	A) Pre Monsoon Works (PPO/PYO)								
1	a) Survey & Demarcation	1.00	445.19	91.00	536.19	15.00	6677.85	1365.00	8042.85
	b) Preparation of treatment map (100mX50 m grid)	1.00	445.19	91.00	536.19	15.00	6677.85	1365.00	8042.85
	c) Digging trial pits of size 0.30x0.30x0.60 mtr in corner of grid.	0.40	178.08	0.00	178.08	6.00	2671.14	0.00	2671.14
	d) Fixing 60cm x 0.05 cm x 12cm cement pillars upto 30cm deep in corner of grid painting with Grid no. etc complete (3 pillars Rs. 75/- for each pillars)	0.00	0.00	225.00	225.00	0.00	0.00	3375.00	3375.00
	e) Clearing of bushes and preparation of site (As per requirement)	10.00	4451.90	91.00	4542.90	150.00	66778.50	1365.00	68143.50
2	Soil and moisture Conservation works including collection of rubbles from areas upto 30 m etc.	31.00	13800.89	0.00	13800.89	465.00	207013.35	0.00	207013.35
3	Providing and fixing chain link fencing, 102 Rmt per ha. (with one gate + two wickets gates for one site) (Rs. 1494/- per Rmt of basic rate +20% for transportation of ave. Leadplus 20% for tribal/remote area (by tender process) (Rs.1494+149+149=1792/- per Rmt (1.60 Rmt height with G.I Chain link size 50mmx50m, 8 gauge thick and fixed 75 mm above ground level complete as per SSR item No. 1744 for 2017-18)	0.00	0.00	362855.00	362855.00	0.00	0.00	5442825.00	5442825.00
4	Alignment of pits at 3m x 3m spacement. 1111 pits per 100 pits 0.26 M.D. M/S 8.18 per 100 pits	2.89	1286.60	91.00	1377.60	43.35	19298.99	1365.00	20663.99



5	Digging of pits of size 0.45 X 0.45 X 0.45 m (1111 pits per ha.) 6.60 M.D. per 100 pits. Note :- As per local conditions provision for mechanized digging can be made	73.33	32645.78	0.00	32645.78	1099.95	489686.74	0.00	489686.74
6	Construction of 5.00 Rmt wide Inspection path 1 M.D. per 100 Rmt	1.00	445.19	0.00	445.19	15.00	6677.85	0.00	6677.85
7	Enumeration of all valuabel plant species at plantation site and grid wise counting and providing color band and recording the same in Register (0.75 M.D.) per 100 plants.	0.75	333.89	25.00	358.89	11.25	5008.39	375.00	5383.39
8	Providing and fixing (4 feet x 3 feet) information board each per site	0.00	0.00	5000.00	5000.00	0.00	0.00	5000.00	5000.00
9	Part Nursery cost of raising 1333 seedlings per ha (including 20% casualty replacement) in polygons of size 12.50 x 25.00cm (wages Rs.11.90 and M& S Rs. 3.62 per plant)	46.70	20790.37	4798.80	25589.17	700.50	311855.60	71982.00	383837.60
	Total -	168.07	74823.08	373267.80	448090.88	2521.05	1122346.25	5529017.00	6651363.25
	Contingancy 3%							199540.90	199540.90
	Labour wlfare 4%							266054.53	266054.53
	Grand Total -	168.07	74823.08	373267.80	448090.88	2521.05	1122346.25	5994612.43	7116958.68
	Say Rs. -		74823	373268	448091	2521	1122346	5994612	7116959
B) First Year Operation									
1	Part nursery cost for maintainace of 1333 seedling per ha Rs. 2.64 per seedling (Wages Rs. 2.69, M&S Rs. 0.81)	14.80	6588.81	1079.00	7667.81	222.00	98832.18	16185.00	115017.18
2	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits)	18.44	8209.30	1944.00	10153.30	276.60	123139.55	29160.00	152299.55
3	Transportation of 1333 seedlings from nursery to plantation site including loading & unloading (0.14 M.D. per 100 seedling & M.S. Rs. 1.82 per seedlings.)	1.87	832.51	2426.00	3258.51	28.05	12487.58	36390.00	48877.58
4	Planting of 1111 seedling (1.0 M.D. per 100 seedlings)	11.11	4946.06	0.00	4946.06	166.65	74190.91	0.00	74190.91
5	3 Seedlings (1 Rmt circular) and 2 soil workings (4.00 M.D per 100 seedlings) fertilizer application Rs. 0.82 per seedling.	44.44	19784.24	911.02	20695.26	666.60	296763.65	13665.30	310428.95
6	Casualty replacement (20% i.e. 222 seedlings per ha.) (2 M.D per 100 seedlings)	4.44	1976.64	0.00	1976.64	66.60	29649.65	0.00	29649.65
7	Part Nursery cost for causality replacement in SYO (222 seedlings per ha.) (wages Rs. 11.90 and material supply Rs. 3.62 total Rs. 12.55 per seedling.)	7.78	3463.58	803.64	4267.22	116.70	51953.67	12054.60	64008.27
8	Watch and ward (10 months - 1 watcher per 10 ha.)	27.38	12189.30	0.00	12189.30	410.70	182839.53	0.00	182839.53

9	Soil working for naturally growing plants and singling (1.15 M.D. per 100 plants)	1.15	511.97	10.00	521.97	17.25	7679.53	150.00	7829.53
10	Fire tracing	2.00	890.38	0	890.38	30.00	13355.70	0.00	13355.70
	Total -	133.41	59392.80	7173.66	66566.46	2001.15	890891.97	107604.90	998496.87
	Contingancy 3%							29954.91	29954.91
	Labour wlfare (medi. & water) 4%							39939.87	39939.87
	Grand Total -	133.41	59392.80	7173.66	66566.46	2001.15	890891.97	177499.68	1068391.65
	Say Rs. -	133	59393	7174	66566	2001	890892	177500	1068392
	C) Second Year Operation								
1	Part nursery cost for seedlings for causality replcemrnt (222 seedlings per ha.) labour rate @ Rs3.77 and M.S. Rs. 1.82 per seedlings.	2.46	1095.17	404.04	1499.21	36.90	16427.51	6060.60	22488.11
2	Transportation of 222 seedlings for casuality replcement from nursery to plantation site (including loading and unloading) wages 0.14 M.D per 100 Seedling & M.S. Rs.1.82 per seedlings.	0.31	138.01	404.04	542.05	4.65	2070.13	6060.60	8130.73
3	Planting for Casualty replacement 222 seedings (2.00 M.D. per 100 seedlings)	4.44	1976.64	0.00	1976.64	66.60	29649.65	0.00	29649.65
4	2 weedings and 1 soil working with fertilizer application at 2.5 M.D. per 100 seedlings M.S. Rs. 0.82 per seedling	27.77	12362.93	911.02	13273.95	416.55	185443.89	13665.30	199109.19
5	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
6	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total -	73.48	32712.56	1719.10	34431.66	1102.20	490688.42	25786.50	516474.92
	Contingancy 3%							15494.25	15494.25
	Labour wlfare (medi. & water) 4%							20659.00	20659.00
	Grand Total -	73.48	32712.56	1719.10	34431.66	1102.20	490688.42	61939.74	552628.16
	Say Rs. -		32713	1719	34432	1102	490688	61940	552628
	D) Third Year Operations								
1	1 weeding and 1 soil working (1.50 M.D. per 100 seedlings) applying fertilizer @ Rs. 0.82 per plant	16.67	7421.32	911.02	8332.34	250.05	111319.76	13665.30	124985.06
2	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
3	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total -	57.17	25451.51	936.02	26387.53	857.55	381772.68	14040.30	395812.98
	Contingancy 3%							11874.39	11874.39
	Labour welfare (medi. & water) 4%							15832.52	15832.52
	Grand Total -	57.17	25451.51	936.02	26387.53	857.55	381772.68	41747.21	423519.89
	Say Rs. -		25452	936	26388	858	381773	41747	423520

5

E) Fourth Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93
	Contingancy 3%							8124.84	8124.84
	Labour welfare (medi. & water) 4%							10833.12	10833.12
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88
F) Fifth Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93
	Contingancy 3%							8124.84	8124.84
	Labour welfare (medi. & water) 4%							10833.12	10833.12
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88
G) Sixth Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93
	Contingancy 3%							8124.84	8124.84
	Labour welfare (medi. & water) 4%							10833.12	10833.12
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88
H) Seventh Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93
	Contingancy 3%							8124.84	8124.84
	Labour welfare (medi. & water) 4%							10833.12	10833.12
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88
	Say Rs. -		18030	25	18055	608	270453	19333	289786

	H) Eighth Year Operation								
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93
	Contingancy 3%							8124.84	8124.84
	Labour welfare (medi. & water) 4%							10833.12	10833.12
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88
	Say Rs. -		18030	25	18055	608	270453	19333	289786
	H) Ninth Year Operation								
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93
	Contingancy 3%							8124.84	8124.84
	Labour welfare (medi. & water) 4%							10833.12	10833.12
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88
	Say Rs. -		18030	25	18055	608	270453	19333	289786
	I) Tenth Year Operation								
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93
	Contingancy 3%							8124.84	8124.84
	Labour welfare (medi. & water) 4%							10833.12	10833.12
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88
	Say Rs. -		18030	25	18055	608	270453	19333	289786

ABSTRACT

S. No.	Year of Operation	1.00 ha. Plantation				15.00 ha. Plantation			
		Mandays	Wages	Material Supply	Total	Mandays	Wages	Material Supply	Total Amount (round off)
1	2	3	4	5	6	7	8	9	10
1	PPO + PYO Works	168	74823	373268	448091	2521	1122346	5994612	7116959
2	First year Operation	133	59393	7174	66566	2001	890892	177500	1068392
3	Second Year Operation	73	32713	1719	34432	1102	490688	61940	552628
4	Third Year Operation	57	25452	936	26388	858	381773	41747	423520
5	Fourth Year Operation	41	18030	25	18055	608	270453	19333	289786
6	Fifth Year Operation	41	18030	25	18055	608	270453	19333	289786
7	Sixth Year Operation	41	18030	25	18055	608	270453	19333	289786
8	Seventh Year Operation.	41	18030	25	18055	608	270453	19333	289786
9	Eighth Year Operation.	41	18030	25	18055	608	270453	19333	289786
10	Nineth Year Operation.	41	18030	25	18055	608	270453	19333	289786
11	Tenth Year Operation.	41	18030	25	18055	608	270453	19333	289786
	Total-	716	318591	383272	701863	10734	4778870	6411130	11190000

Rs. 11190000/- (Rs. One Crore Eleven Lac Ninety Thousand only.)

Asstt. Conservator Of Forests
Wadsa Forest Division, Wadsa

Dy. Conservator of Forests
Wadsa Division, Wadsa

3
ANN-4
of
Refer-6

MAHARASHTRA COASTAL ZONE MANAGEMENT AUTHORITY

Tel. No.: 2202 9388
E-mail : dirl.mev-mh@nic.in
Website: <https://mczma.gov.in/>

No. CRZ 2022/CR 108/TC 4
Office of the -
Maharashtra Coastal Zone Management Authority,
Environment & Climate Change Department,
15th Floor, New Administrative Building,
Mantralaya, Mumbai- 400 032
Date: 14th February, 2023

To,
Director (IA-III),
Coastal Zone Regulation,
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran bhavan, Jor Bagh Road,
New Delhi - 110 003.

Subject: Proposal of development of the Balkum Gaimukh of Thane Municipal Corporation (TMC)

The Maharashtra Coastal Zone Management Authority in its 160th & 163rd meeting held on 12.09.2022 and 2-3.02.2022 deliberated the subject proposal for development of the Balkum Gaimukh of Thane Municipal Corporation.

2. The Authority noted that the DP starting from Kharegaon Toll Naka at Mumbai Nashik Highway (NH-3) and ends at Ghodbunder Road (SH-42) near Gaimukh. DP road from Balkum to Gaikmukh is essential to overcome the heaviest Traffic Junction in the MMR Region Development. It will divert the goods traffic currently on the Ghodbunder road coming from the Gujarat and North India towards JNPT. This will decongest Ghodbunder Road in Thane City. The Proposed Balkum Gaikmukh Road is part of the Approved Development plan of the Thane Municipal Corporation.

3. The Authority noted that the total road length is 13.215 Km. Double level grade separator (2nd Level) is proposed to cross over metro line 5 with required vertical clearance. At Akbar Camp (Airforce Station) considering the sensitivity and security of the area the Cut & Cover Tunnel of 500 m length is proposed. The total length of the tunnel along including open to sky ramp is 1.24 Km. The Road Ends at Gaikmukh outside the SGNP Eco Sensitive Zone. The Road is proposed on the Stilt on mangroves land.

4. As per the submission, the site falls in CRZ IA (Mangroves and 50 m buffer zone), CRZ IB (Intertidal), CRZ II and outside CRZ area.

5. The Authority noted that the MCZMA in its 158th meeting held on 25th May, 2022 deliberated the proposal and noted that proposed road is passing through the Mangroves Land. Considering the impact on significant area of mangroves, the Authority opined that the TMC should explore other possible alignments with an objective to have minimum impact on mangrove vegetation. EIA report submitted by the TMC should cover the alternative site analysis matrix and impact of the proposed road on creek/ mangrove biodiversity. Accordingly, the matter was deferred.

6. The Authority noted that the TMC vide letter dated 19.10.2022 submitted a reply stating that TMC have carried out the analysis of possible alignment with objective to have minimum impact on mangrove vegetation. The alignment being minimum possible impact on creek/ mangroves biodiversity have been explored and report and updated EIA is submitted.

EIA report at chapter 5. Analysis of Alternatives (Technology and site) mentions that all efforts were taken for the minimum impact on the mangroves. The possible alternation in alignment was possible in mogharpada only. The constraint in the alternation of the proposed road were as follows:

- Air force station at Koshert: The alignment passing through the influence area of the akbar camp shifting away towards landward side was not possible as it would require the air force station area.
- Existing Urbanized area: The alignment passing in already developed area as per the Development plan constrain the shifting of alignment mangroves.
- Public Utility: The Alignment is parallel to Brihanmumbai Municipal Corporation water supply lines at Kolshet and Balkum and also MSEDCL high tension tower at Khirogon.

A joint held on 03.03.2021 and 05.03.2021 was held by MMRDA Hon Metropolitan Commissioner-1, Hon Additional Commissioner and Thane Municipal Commissioner along with Urban & Environment planners was held to discuss and following suggested change were incorporated in alignment and project. With respect to the minimal impact in the Mangroves, TMC and MMRDA jointly took following action in design and variation in alignment as where possible.

- The proposed road was designed for the 3+3 Lane instead of the 4+4 in the Mangroves Area.
- The revised design enables with space of 12 Meter between the two lane of road on slit. The space enables the passing of the sunlight to bottom thus favourable condition for the mangrove and associated species replantation was possible.
- Road alignment was shifted away from Mangroves Area at Mogharpada in survey no 30. The Realignment shifting in Mogharpada can avoid destruction of the 2 Ha of mangrove patch.

Total 3 alignments were explored. Alignment i.e Option 3 is preferred.

- Embankment – 4+4 lane
- Structures on Mangroves – 3+3 lane
- Total Length of Road – 13.215 Km
- Road on Embankment – 7105 M
- Road on Stilt – 2990 M
- Elevated Road With RE Wall – 1530 M
- Proposed Tunnel – 1240 M
- Open Cut – 350 M
- Area of Mangroves Affected – 10.0377 Ha

7. The Authority noted that the PP has submitted the EIA / EMP report prepared by Centre for Envotech & Management Consultancy Private Ltd (Nabet accredited) and Tondon Urban Solution Private Ltd. The PP during the meeting informed that bridge is proposed on stilt in CRZ area except, proposed tunnel in CRZ area. Expert Members discussed the impact of the project on mangroves. Expert member felt that TMC should adopt all possible measures to minimize the impact on mangroves.

8. The Authority noted that the TMC officials presented that as per the map of mangroves cell, 10.0377 Ha mangroves will be affected. However, on ground truthing by the DFO mangroves, mangrove area affected is 12.2607 Ha. The TMC have submitted the forest diversion proposal under the Forest Conservation Act to mangroves Cell for approval. TMC has adopted various measures to lessen the impact of project on mangroves. Road on stilt is proposed on mangroves. The post construction, 8 Ha of mangroves land will be restored. Further, proposed section in mangroves have design with 7 Meter in between the two Lane of the Proposed Road gives enough sunlight for the growth of the replanted Mangroves post Construction.

9. The Authority noted that the TMC officials further presented that considering the sensitivity and security of the area, Cut & Cover Tunnel of 500 m length is proposed. The total length of the tunnel along including open to sky ramp is 1.24 Km. The Proposed Cut and Cover Area falls in the mangroves notified Area. For Cut and Cover Tunnel at Kolshet total 2 Ha land required out of which 1.5 Ha can be restored post Construction by planation of the Mangroves or mangroves Associated Species.

10. The Authority deliberated the proposal at length and noted from the presentation of the PP that Proposed Balkum Gaikmukh Road is part of the approved Development plan of the Thane Municipal Corporation. The road will decongest the heaviest traffic at around around Ghodbunder junction. The proposed road is mix of options like road on stilt and partly on ground in the form of tunnel i.e. by way of reclamation.

11. The Authority noted that the Thane Municipal Corporation shall implement all adequate measures in order to mitigation the impact of proposed project on coastal environment. During construction phase, necessary training and environment awareness programme should be carried out for the contractors and labours. TMC should strictly ensure that Noise and vibration level should be kept within prescribed limits. All mitigation measures & Environment Management Plan as suggested in the EIA report should be followed in letter and spirit. It was noted that as per CRZ amendment Notification dated 30th Sep, 2015, the proposal requires clearance from MoEF&CC, Delhi

12. In the light of above, the Authority after deliberation decided to recommend the proposal from CRZ point of view to MoEF&CC subject to compliance of following conditions:

Specific Conditions:

- i. The proposed activity should be carried out strictly as per the provisions of CRZ Notification, 2011 (as amended from time to time) and guidelines/ clarifications given by MoEF from time to time.
- ii. Prior High Court permission should be obtained by the PP as per Hon'ble High Court order dated 17th Sep, 2018 in PIL 87/2006, since the project involves cutting of mangroves.
- iii. NoC from the Mangrove Cell should be obtained by the PP. Compensatory mangrove plantation should be carried out in consultation with Mangrove Cell. Three times the number of mangroves destroyed or cut during the construction process shall be replanted
- iv. PP to obtain the prior Forest Clearance under Forest (Conservation) Act, 1980.
- v. PP to ensure that proposed activities should be carried out with exercising extra caution with objective to have less impact on the surrounding mangroves and coastal ecology. PP to ensure that efforts should be made to lessen the footprint of the road on the mangrove area.
- vi. PP to strictly ensure that activities of local fisherman communities should not be hampered due to the proposed project.
- vii. In certain stretch, where road is proposed on stilt, spacing between the pillars/ piers should be provided taking into consideration free flow of the tidal water is not obstructed.
- viii. The PP to ensure that free flow of the creek water is not obstructed.
- ix. The PP shall ensure that adequate noise barriers along the coastal road are provided.
- x. The PP shall not undertake any blasting / construction activities during night hours. During the day time, noise level should be within the prescribed limits.
- xi. There shall be no disposal of solid or liquid waste in the coastal area. Solid waste management shall be as per Solid Wastes Management Rules, 2016.
- xii. During the construction phase, all possible efforts/ measures should be taken to maintain the coastal ecology and biodiversity. Necessary training / awareness should be imparted to contractors & workers so that adequate environmental safeguards could be implemented on site, during execution of the project activities

- xiii. PP to ensure that noise and vibration level is within permissible limit during construction phase of the project.
- xiv. No labour camp are allowed in CRZ area & it should also be ensured that the waste water from these entities should not be released into sea. Mobile toilets with mobile STPs to be provided in work front area.
- xv. All the other mandatory permission from different statutory authorities should be obtained prior to the commencement of work of project.

General Conditions:

a) Construction Phase:

- i. Any hazardous waste generated during construction phase should be disposed of as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
- ii. The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
- iii. PP to strictly adhere to all the conditions mentioned in Maharashtra (Urban Areas) Protection and Preservation of Trees Act, 1975 as amended during the validity of Environment Clearance.
- iv. Vehicles hired for transportation of Raw material shall strictly comply the emission norms prescribed by Ministry of Road Transport & Highways Department. The vehicle shall be adequately covered to avoid spillage/leakages.
- v. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/MPCB.
- vi. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during construction phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel is preferred. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.
- vii. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings by a separate environment cell /designated person.

b) Operation phase:

- i. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- ii. Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes.

C) General MCZMA Conditions:

- i. In case of any change in project profile, the project would require fresh appraisal by the MCZMA.
- ii. The MCZMA reserves the right to revoke this recommendation, if the conditions stipulated are not complied with to the satisfaction of the MCZMA or Environment Department.
- iii. The MCZMA or any other competent authority, concerned planning authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.
- iv. The clearance accorded to the project under CRZ notification shall be valid for a period of seven years from the date of issue of such clearance: Provided that the construction activities shall commence within a period of five years from the date of the issue of clearance and the construction be completed and the operations be commenced within seven years from the date of issue of such clearance.
- v. The recommendation from CRZ point of view is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this recommendation does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.
- vi. PP has to strictly abide by the conditions stipulated by the MCZMA.
- vii. If applicable Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
- viii. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining MCZMA clearance.
- ix. No further Expansion or modifications, other than mentioned in the CRZ Notification, 2011 / 2019 and its amendments, shall be carried out without prior approval of the MCZMA. In case of deviations or alterations in the project proposal from those submitted to MCZMA for clearance, a fresh reference shall be made to the MCZMA as applicable to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- x. This MCZMA clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of the National Board for Wild life as if applicable & this MCZMA clearance does not necessarily implies that Forestry & Wild life clearance granted to the project which will be considered separately on merit.
- xi. PP to submit an indemnity bond to the MCZMA for any future litigation.
- xii. MCZMA reserves the right to cancel / revoke CRZ permission in case of any violation of CRZ Notification, 2011 /2019 issued by the MoEF&CC, New Delhi amended from time to time without prejudice to any liability on MCZMA.
- xiii. The MCZMA clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent in the case filed against him, if any or action initiated under EP Act.
- xiv. This MCZMA Clearance is issued purely from an environment point of view without prejudice to any court cases and all other applicable permissions / NoCs shall be obtained before starting proposed work at site.

- xv. In case of submission of false document and non-compliance of stipulated conditions, MCZMA will revoke or suspend the MCZMA Clearance without any intimation and initiate appropriate legal action under Environment Protection Act, 1986.
- xvi. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (protection) Act, 1986 and rules there under, hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public liability Insurance Act, 1991 and its amendments.
- xvii. Any appeal against this MCZMA clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune) New Administrative building, 1st floor, D wing, Opposite Council Hall, Pune, if prepared, within 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.
10. Agenda item & minutes of the meeting is available on the website of MCZMA i.e. <http://mczma.gov.in>.



(Abhay Pimparkar)

Director, Environment & MS, MCZMA

Copy for information to:

1. **PS (Environment) & Chairperson, (MCZMA), Environment & CC Department, Room No. 217 (Annex), Mantralaya, Mumbai - 32**
2. **Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Road No. 8, Sion Cir, opp. PVR Theater, Mumbai - 400022**
3. **District Collector, Thane, Court Naka, Thane (W)**
4. **Municipal Commissioner, Thane Municipal Corporation, New Administrative Building, Chandan Wadi, Pachpakhadi, Mahapalika Bhavan Rd, Thane West, Thane, Maharashtra 400602 - You are requested to apply online on Parivesh Portal of MoEF&CC, New Delhi along with this CRZ recommendation letter.**
5. **Select File (TC 4)**

(23) (28) ANN-5
of
Refer-6

Full Title of the Project: Diversion of 12.2607 Ha forest (Mangroves) for Construction of Balkum to Gaimukh DP Road (NH3 Connector Ghodbunder By-Pass) by Thane Municipal Corporation.

Undertaking of obtaining CRZ Clearances requirement for the Project

I/We Thane Municipal Corporation, have applied for diversion of 12.2607 Ha forest (Mangroves) for Construction of Balkum to Gaimukh DP Road (NH3 Connector Ghodbunder By-Pass) by Thane Municipal Corporation. The proposed project falls within CRZ notified area hence we have applied for CRZ clearance from MCZMA and we hereby submit undertaking for obtaining CRZ clearance prior to commencement of the work.



guelu

**Executive Engineer (PWD)
Thane Municipal Corporation**

Office Seal

Place: Thane

Date: