



ಬೆಂಗಳೂರು ಮೆಟ್ರೋ ರೈಲ್ ನಿಗಮ ನಿಯಮಿತ

(ಸಹಭಾಗಿತ್ವದ - ಕರ್ನಾಟಕ ಸರ್ಕಾರ ಹಾಗೂ ಕೇಂದ್ರ ಸರ್ಕಾರ ಉದ್ಯಮ)
ನೋಂದಾಯಿತ ಕಛೇರಿ : ಬಿ.ಎಂ.ಟಿ.ಸಿ. ಕಾಂಪ್ಲೆಕ್ಸ್, 3ನೇ ಮಹಡಿ, ಕೆಂಗಲ್ ಹನುಮಂತಯ್ಯ ರಸ್ತೆ, ಶಾಂತಿನಗರ
ಬೆಂಗಳೂರು - 560 027, ಭಾರತ

Bangalore Metro Rail Corporation Ltd.

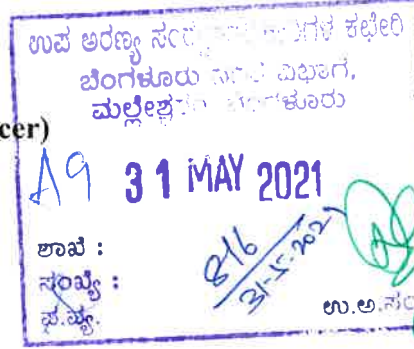
(A Joint Venture of Government of Karnataka & Government of India)

Regd. Office : B.M.T.C. Complex, 3rd Floor, K.H. Road, Shanthinagar,
Bangalore - 560 027. INDIA

BMRCL/CE/SEMU/TP/2021/1103

To,
Deputy Conservator of Forest (Tree officer)
Bengaluru Urban Division
Aranya Bhavan Annex, 18th cross
Melleshwaram

Dear Sir,



31.05.2021

*as per the request
of BMRCL
upload in
concerned
website*

Sub: Location of 18 trees to be translocated as per Official Memorandum dated 08.04.2021 **pertaining** to clearance of trees in Reach 6 (Elevated) Kothnur Depot Entry Line section of BMRCL - Concurrence of Receptor location by TEC.

Ref:

1. Chief Engineer Reach-6 (Elevated)/BMRCL letter no. BMRCL/R6(Elevated)/Ph-2/F-203/Via & Stn/ (R6-cc-01)/2020-21/ 2697 dated: 27.11.2020 (copy enclosed)
2. Tree officer and DCF, Bangalore Urban Division Official Memorandum issued vide letter no. A9/Tree Cutting/BMRCLICR-34/2020-21 dated: 08.04.2021 (Template -5 enclosed)
3. Daily Order dated 22.04.2021 of Honorable High Court of Karnataka on WP 17841/2018. (Copy enclosed).

Brief history of the case

This is with reference to the court hearing held on 22.04.2021 regarding permission for felling of exempted trees in Bangalore Metro Line which included exempted trees standing in Kothnur Depot also.

During the hearing of Honorable High Court, the subject regarding translocation of 58 trees pertaining to Reach 6 UG Section of BMRCL as per OM dated 23.03.2021 came up for discussion. After hearing, the Honorable High Court has advised to prepare the details of translocation of each tree specifying the receptor locations and obtain concurrence/recommendation of the TEC as there are more than one receptor location. Accordingly Reach 6 UG Section of BMRCL is seeking concurrence on the subject matter and from TEC.

On the same lines, for Kothnur Depot Entry Line there are 18 no of tree to be translocated As per. Tree officer and DCF, Bangalore Urban Division Official Memorandum issued vide letter no. A9/Tree Cutting/BMRCLICR-34/2020-21 dated:08.04.2021, the receptor location specified for translocation of trees are at the following 2 locations.

1. Biotechnology centre ,Dept. of Horticulture, Hulimavu Opposite to Meenakshi Mal, Bannerghatta Road, Bengaluru-79.(Inside Horticulture internal area).
2. Kempegowda International Airport Limited (KIAL)

As no of trees involved are only 18 nos, as sufficient area is available within Horticultural Internal area, distance for shifting/ transportation being minimum and also from other logistics point of view of execution of the work, it is requested that TEC may recommend translocation of all 18 trees to be taken up at one receptor location only i.e. in Horticulture Internal area. In this connection it is mentioned that soil sample testing has already been conducted at GKVK, UAS Bangalore and as per the test report furnished, with proper nutrient application the soil is suitable for tree shifting (copy of test report enclosed).

Accordingly, the no of trees to be translocated in each of the receptor location gets revised as under

Sl. No.	Receptor Location	No of Trees proposed for translocation	Remarks
1.	Biotechnology center, dept. of Horticulture, Hulimavu Opposite to Meenakshi Mall, Bannerghatta Road, Bengaluru-79. (inside Horticulture internal area	18	Details of Trees enclosed as Annexure -1
2.	Kempegowda International Airport Limited (KIAL)	0	NA

In view of the above submission TEC is requested to furnish its recommendation for transplanting these 18 trees so as to enable BMRCL to submit the same before the Honorable High Court with prayer to permit Translocation of these 18 trees at one receptor location.

Thanking you,

Encl: As above

Yours Faithfully,



B C Nataraja
Chief Engineer (SEM U)



ದೂರವಾಣಿ /ಫ್ಯಾಕ್ಸ್ - 080-23343464
Email ID -dcfurban82@yahoo.co.in

ಕರ್ನಾಟಕ ಅರಣ್ಯ ಇಲಾಖೆ

ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿಯವರ ಕಛೇರಿ

ಬೆಂಗಳೂರು ನಗರ ವಿಭಾಗ, ಅರಣ್ಯ ಭವನ ಸಂಕೀರ್ಣ, 18ನೇ ಅಡ್ಡರಸ್ತೆ, ಮಲ್ಲೇಶ್ವರಂ, ಬೆಂಗಳೂರು - 560 003

Office of the Deputy Conservator of Forests

Bangalore Urban Division, AranyaBhavanCompus. 18th cross, Malleshwaram, Bangalore-560003

No: A9/Tree Cutting /BMRCL/CR-34/2020-21

Date:08/04/2021.

Official Memorandum

Sub: Permission for felling of trees infringing the Metro Rail Construction work Phase-2,R-6 elevated(Kothnur Depot Entryline)-reg in Hulimavu Horticulture Department, Bannerghatta Road, Bengaluru.

Ref:1. Hon'ble High Court Order dated: 18.11.2020 in WP 17841/2018

2. Letter No: BMRCL/R-6(Ele)/Ph-2/F-203/via &stn/R6-CC-01)/2020-21/2697 Dated 27.11.2020.
3. This Office Public Notice vide letter No: A9 /Tree Cutting /BMRCL/CR- 34/2020-21 Dated: 30.11.2020
4. Letter No: RFO/KGP/Metro/GL-523/2020-21/Dtd. 13.12.2020 O/o of The Range Forest Officer, Kaggalipura Range, Kaggalipura.
5. Members Secretary and ACF BBMP, Bengaluru Letter No.ACF/PR.82/2020-21 Dtd.29-03-2021 along with report and proceeding of Tree Expert Committee.

*_*_*

Preamble:-

BMRCCL submitted a fresh application dated 27.11.2020 read at ref (2) above seeking permission for removal of 39 trees infringing the Metro Rail Construction work Phase-2,R-6 elevated(Kothnur Depot Entryline)-reg in Hulimavu Horticulture Department, Bannerghatta Road, Bengaluru as per the directions issued by the Hon'ble High Court of Karnataka vide Order dated:18.11.2020 in WP No. 17841/2018 read at ref (1) above.

The processing and consideration of the application was taken up as per provisions of the Karnataka Preservation of Trees Act, 1976 (hereinafter mentioned as "the Act") and the Memorandum of Procedure (hereinafter mentioned as "the MOP") formulated by the Tree Expert Committee

(hereinafter mentioned as "the TEC"). As stipulated under Section 8(3)(vii) of the Act, a public notice in Template No. 1 of the MOP was issued duly inviting the objections from the public, as the total number of trees proposed to be removed are more than 50, though the number at this location is 39 only. The public notice appeared in Deccan Herald, Vartha Bahrathi, The Times of India and Vijaya karnataka newspapers on 03.12.2020. The details of the project area, Number of trees to be removed, GPS Co-ordinates and physical details of those trees were uploaded in the website of BBMP, as per the MOP.

In response to the public notice, one objection and one suggestion was received from the general public. The suggestion is for translocating all 39 trees based on assessment by experts/NGOs using objective criteria. In particular Arakere Lake has been suggested as a possible site for the translocation. The observation is in support of the project. Both objection and observation were considered carefully, and proceedings of that consideration along with a tabular statement showing the objections from the public, and remarks and findings of the undersigned for each specific objection and comment were prepared on 14.12.2020, besides recording summary of the findings in Template No. 3 of the MOP.

As per BMRCL's application, there are 39 trees in the project area out of which 39 trees are sought to be removed. Detailed enumeration of each of those 39 trees in terms of location, physical parameters, health and defects, etc. was organized from the forest officers in Part-I of Template No. 2 of the MOP. Thereafter, the same was verified by the undersigned and a preliminary assessment in terms of possibility of onsite retention or translocation or felling along with justification was carried out through inspection of those 39 trees on 14.12.2020 and recorded in Part-II of Template No. 2.

The proceedings regarding consideration of the objections, tabular statement of the findings along with summary, detailed enumeration and preliminary assessment along with justification for each of the 39 trees, and information in Template No 2 and 3 were submitted vide letter dated 15.12.2020 for consideration by the TEC.

The TEC has submitted a detailed report dated 29.03.2021 giving their recommendations for onsite retention of 6 trees, translocation of 18 trees and felling of 15 trees with justification for each of them along with an abstract of the report in Template No. 4. It is noted from the report that the TEC carried out their activities in 4 stages, namely, (i) review of the application, objections received from the public and findings by the undersigned, (ii) review of preliminary assessment by the undersigned, (iii) their field inspection, and (iv) post inspection review and report preparation.

The TEC has concluded that out of total 39 trees proposed for removal by BMRCL, the project activities can be carried out without removal of following 06 trees.

Trees recommended by TEC for Onsite Retention	
Tree Numbers	1, 10, 16, 18, 19 and 20 Total = 06 nos

The TEC concluded that the balance 33 trees need to be removed as they are falling within the following physical features of Metro Project.

Physical Features	Tree Numbers
Construction of Portal pier and erection works. (Located between metro pillar No. DP2-DP6, DP15-DP17, DP22-DP23, DP37 & DP40-DP44)	2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, S1, S2, S3 & S4 Total – 30 Nos.
Construction of pile and pile cap works. (Located between metro pillar No. DP15-DP17 and DP42-DP43)	11, 12 & 32 Total – 03 Nos.

The TEC has further concluded that 18 trees out of these 39 trees are healthy and suitable for translocation. The TEC has accordingly recommended translocation of those 18 trees to save them. Based on the inspection and soil test reports of the proposed receptor sites, the TEC has confirmed suitability of those sites for the translocation.

The TEC has also concluded that 15(including one Sandal tree fallen due wind)trees out of these 33 trees are not suitable for the translocation as they have major defects or extraction of the root ball of adequate size is not practical. The TEC has accordingly recommended felling of those 15 trees.

The report of the TEC has been examined. The TEC has provided detailed specific justification for removal of each of the 39 trees, besides giving justification for translocation or felling of the trees in Part-III of Template 2 as well as in Appendix to its report. The undersigned concurs with the recommendations and justification of the TEC.

The final assessment of the undersigned has been recorded in Part-IV of Template No. 2. The translocation of 18 trees and felling of 15 trees (including one Sandal tree-Tree NO.39, which was decayed and wind fallen as per the RFO report vide letter No:RFO/KGP/Metro/JL-523/2020-21 dated 13-12-2020, and hence the extracted wood of the said tree was stored in Jarakbande Sandal Godown, Bangalore Range, Bangalore for departmental storage vide this office letter No:A4/stores.Sandal.CR-67/2020-21 dated 14-12-2020) are essential for implementation of the metro project, which seeks to build a sustainable public transport system. The adverse impact of the felling of trees will have to be mitigated by directing BMRCL to take up compensatory plantation in adequate number.

Hence, the following order.

Order

1. Permission is refused for removal of Six(6) trees listed in **Appendix 1** appended to this Official Memorandum. They should be retained at site only.
 2. Based on the consideration detailed above, permission is hereby granted for removal of (Eighteen)18 trees by way of translocation as listed with justification in Template No. 5 appended to this Official Memorandum as **Appendix-2**.
 3. Permission is hereby also granted for removal of fifteen(15) trees by way of felling as listed with justification in Template No. 6 appended to this Official Memorandum as **Appendix-3**. This includes one tree fallen due to wind.
 4. This order will come into effect fifteen (15) days from the date of uploading of the order on the websites of BBMP and serving by email on the petitioners in WP 17841/2018.
 5. The order is subject to following directions to BMRCL.
 - A. Translocation of trees:
 - i. The translocation should be carried out only at following locations.
 - 1) Horticulture Internal Area
 - 2) Kempegowda International Airport Limited(KIAL)
- The translocation should be organized by competent agencies, as mentioned in Template 5.

The translocation should follow the methodology suggested by UAS, GKVK.

B. Compensatory Plantation:

- i. Arrange compensatory Afforestation of 330tall and healthy saplings, i.e., @ 10 saplings for each tree removed within 6 months from the date of the removal.
- ii. Submit a plan for the compensatory plantation within 2 months from the date of this order.

C. Care & Maintenance of translocated trees and compensatory plantation, and their Reporting:

- i. BMRCL should ensure proper and effective care and maintenance of the translocated trees and compensatory plantation for a period of 3 years.
- ii. BMRCL should also submit reports regarding condition of the translocated trees and the compensatory plantation every quarter for a period of 3 years to the undersigned.

D. Storage & disposal of felled trees:

- i. The extracted wood from 14 trees to be felled should be deposited with the Range Forest Officer, Kaggalipura for disposal.

Sd/-

**Tree Officer &
Deputy Conservator of Forests
Bengaluru Urban Division.**

Copy to:

1. Chief Conservator of Forests, Bengaluru Circle & Chairman, Tree Authority, Vanavikas, Bangalore.
2. Managing Director, BMRCL, 3rd Floor, BMTCL Complex, Shanthinagara, Bengaluru - 560027
3. Sri Dattatraya T Devare, A-102 Natasha Golf View Apartments, Domlur Bengaluru- 560071, Petitioner in WP 17841/2018
4. Bangalore Environment Trust, 10, Sirur Park B Street Seshadripuram Bengaluru - 560020, Petitioner in WP 17841/2018.
5. Chief Engineer - Reach-6(Elevated), BMRCL.

6. Assistant Conservator of Forest & Member Secretary, Tree Expert Committee appointed by Hon'ble High Court in WP 17841/2018.
7. Assistant Conservator of Forests, South Sub Division, Bangalore.
8. Range Forest Officer, Kaggalipura Range, Kaggalipura.



**Tree Officer &
Deputy Conservator of Forests,
Bangaluru Urban Division.**

Tree Officer and
Deputy Conservator of Forests
Bangalore Urban Division,
BANGALORE.

TEMPLATE No. 5

PARTICULARS ON TRANSPLANTATION / TRANSLOCATION OF TREE(S)*

(to be prepared in compliance to Step 10 of the Memorandum of Procedure of TEC)

Name of the user agency	Bangalore Metro Rail Corporation Limited								
Purpose of the project	Construction of Metro Rail Project, Phase-2								
Extent of the project area	665m in length/8964 Sqm								
Location of the project area	Kothnur Depot Entry Line(Reach-6) Phase- 2								
	Location	Latitude (N)	Longitude (E)						
	Starting Point	12° 52' 35.191"	77° 35' 41.507"						
	Ending Point	12° 52' 45.487"	77° 35' 24.781"						
Number of tree(s) enumerated in the project area	39 Nos.								
Number of tree(s) recommended for transplantation / translocation	18 Nos.								
Feasibility of the tree for transplantation / translocation (as per Template No. 2 – Tree Assessment Form)	All the trees are feasible for transplantation/ translocation								
Name of the agency identified to execute transplantation / translocation	<ul style="list-style-type: none"> INDUS Herbs, -#47, ShankaraArchade, Vanivilas Road, Gandhi Bazar, Basavanagudi, Bangalore-560004. 								
Transplantation / Translocation methodology	Tree Bur lapping Method								
Location of receptor site	<p>A. Biotechnology Centre Dept. of Horticulture, Hulimavu Opposite to Meenakshi Mall, Bannerghatta road, Bengaluru- 76. (Inside Horticulture internal area)</p> <table border="1"> <thead> <tr> <th>Sl. No</th> <th>Latitude (N)</th> <th>Longitude (E)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>12° 52' 45.838"</td> <td>77° 35' 29.479"</td> </tr> </tbody> </table>			Sl. No	Latitude (N)	Longitude (E)	1	12° 52' 45.838"	77° 35' 29.479"
Sl. No	Latitude (N)	Longitude (E)							
1	12° 52' 45.838"	77° 35' 29.479"							

	2	12° 52' 47.067"	77° 35' 29.494"
	B. Kempegowda International Airport Limited, Bengaluru.		
	Sl. No	Latitude (N)	Longitude (E)
	1	13° 12' 3.9312"	77° 40' 45.1344"
	2	13° 11' 50.9964"	77° 42' 52.2504"
Compatibility of receptor site	Compatible		
Number of trees to be transplanted / translocated to the selected receptor site	18 Nos.		
Spacing between transplanted / translocated trees	5m - 6m		
Post care management	Proper manure and watering for survival of transplanted/translocated trees		

* Note:

1. List of the trees to be translocated containing details of kind / species, girth, height, GPS coordinates should be appended to this template. These details should be extracted from relevant parts of Template2.
2. *The Project Authorities / User agency should strictly adopt the Transplantation / Translocation guidelines prescribed by UAS (B), GKVK, enclosed as Annexure 1 to the MOP.*

Date: 08-04-2021



**Tree Officer &
Deputy Conservator of Forests,
Bangalore Urban Division, Bangalore.**

**Tree Officer and
Deputy Conservator of Forests
Bangalore Urban Division,
BANGALORE.**

UNIVERSITY OF AGRICULTURAL SCIENCES GKVK, BANGALORE
DEPARTMENT OF SOIL SCIENCE AND AGRICULTURAL CHEMISTRY
 SS&AC/ /2020-21 20-08-2020

To,

SHRI C M RANGANATH
 CE/R6(ELEVATED)
 BANGALORE METRO RAIL CORPORATION LTD.,
 REGD. OFFICE: BMTc COMPLEX
 3RD FLOOR, K.H. ROAD, SHANTINAGAR
 BANGALORE- 560 027
 INDIA

Sir,

Sub: Analytical result of two soil samplesreg

Ref: DR/ STA/TT -105/ 2020-21

dt:-18-08-2020

Please find here with the analytical results of two soil samples provided by you (BMRCL/P2/R6/ELEVATED/ TREE/2020-21/2234) for analysis in the Dept. of Soil Science and Agricultural Chemistry, College of Agriculture, GKVK, Bangalore-65

Soil samples


Parameters	1 Present location Kothnur depot entry line	2 Proposed location Horticulture internal area
pH (1:2.5)	6.51	7.36
Electrical conductivity (dS/m)(1: 2.5)	0.12	0.39
Organic carbon (%)	0.06	0.05
Nitrogen(kg ha ⁻¹)	188.2	188.2
Phosphorus (kg ha ⁻¹)	10.39	4.45
Potassium(kg ha ⁻¹)	196.5	106.2
Calcium (meq/100 g)	5.00	7.00
Magnesium (meq/100 g)	1.50	1.80
Sulphur (ppm)	6.08	4.83
Iron (ppm)	5.21	4.44
Manganese (ppm)	4.16	3.00
Zinc (ppm)	0.54	0.60
Copper (ppm)	0.28	0.41
Boron (ppm)	0.21	0.12

Inference: The two samples provided for analysis are slightly acidic to neutral in nature, low in salt content and organic matter content and contain low quantities of major nutrients (N,P,K and all other parameters as per standards). Therefore with proper nutrient application soil is suitable for tree shifting


The result should not be utilized for legal / commercial purposes without prior consent of the Director of Research.

Forwarded to
 Director of Research

NO. DR/STA/TT-105/2020-21 dtd. 20/8/2020
 Yours faithfully
COUNTERSIGNED


 Director of Research

University of Agricultural Sciences
 GKVK Bangalore-560 065


 Professor and Head
 Dept. of Soil Science & Agril. Chemistry
 College of Agriculture, U.A.S., G.K.V.K.
 Bangalore - 560 065

Location of Tree Transplantation-Kothnur Depot Entry Line

Sl. No	Tree Number	Name of the species	Location	Location of Transplantation (All 18 No. of Trees)
			Latitude (N) / Longitude (E)	
1	8	Jackfruit	12° 52' 36.3972"N / 77° 35' 40.697"E	Biotechnology Centre, Dept of Horticulture, Hulimavu Opposite to Meenakshi Mall, Bannerghatta road, Bengaluru-560079. (Inside Horticulture Internal Area)
2	9	Jackfruit	12° 52' 36.8760"N / 77° 35' 40.157"E	
3	11	Spethodia	12° 52' 38.2944"N / 77° 35' 35.153"E	
4	12	Ficus Sp.	12° 52' 38.2692"N / 77° 35' 34.976"E	
5	13	Ficus Sp.	12° 52' 38.2764"N / 77° 35' 34.890"E	
6	14	Nelli	12° 52' 38.9604"N / 77° 35' 31.956"E	
7	15	Nelli	12° 52' 38.9136"N / 77° 35' 31.895"E	
8	17	Jackfruit	12° 52' 44.4000"N / 77° 35' 28.025"E	
9	21	Butter fruit	12° 52' 45.4260"N / 77° 35' 24.904"E	
10	28	Dalchni	12° 52' 37.0848"N / 77° 35' 40.168"E	
11	30	Nelli	12° 52' 38.8920"N / 77° 35' 32.485"E	
12	31	Nelli	12° 52' 39.1440"N / 77° 35' 31.801"E	
13	32	Jackfruit	12° 52' 45.5124"N / 77° 35' 25.825"E	
14	33	Jackfruit	12° 52' 45.4476"N / 77° 35' 25.721"E	
15	35	Kunkum	12° 52' 45.1956"N / 77° 35' 26.491"E	
16	S1	Sandal	12° 52' 45.5088"N / 77° 35' 25.494"E	
17	S2	Sandal	12° 52' 45.5088"N / 77° 35' 25.494"E	
18	S3	Sandal	12° 52' 45.5088"N / 77° 35' 25.494"E	

