



Rail Infrastructure Development Company (Karnataka) Limited.

A Joint Venture of Govt. of Karnataka & Ministry of Railways
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No. K-RIDE/BSRP/C-2/2024/BBMP/0014

Date: 18.09.2024

To,
The Deputy Conservator of Forests,
BBMP, N. R. Square,
Bangalore.

Name of the work: "Design and Construction of Elevated Viaduct of Length 8.027 Km including Ramps and At-Grade Section of Length 17.551 Km and other related infrastructural works from Benniganahalli to Chikkabanavara, excluding station buildings, of Corridor - 2 of Bengaluru Suburban Railway Project (BSRP)".

Sub: Submission of 5th Quarterly Report of Tree Transplantation for BSRP Corridor-2 Project – reg

- Ref: 1. DCF/PR-1642/2022-23, Dt:27/12/2022
2. DCF/PR-1952/2022-23, Dt:24/02/2023
3. DCF/PR-2042/2022-23, Dt:17/03/2023



With reference to above subject and in accordance with Official Memorandums vide ref. 1 to 3 issued by BBMP, please find the enclosed 5th Quarterly Report (June, July & August 2024) detailing the transplantations done in connection with OM's.

This information is provided for your reference.

Yours Sincerely,

19/9/24


Vijay Kumar

(General Manager /Civil/Corridor-2)

Copy to:

1. The Director (P&P), KRIDE: - For your kind information, please.

Encl: As Above

OM 1

Official Memorandum dated 27/12/2022

Report on Implementation of Official Memorandum dated 27/12/2022 (Baiyyapanahalli to Chikkabanawara) by Rail Infrastructure Development Company (Karnataka) Limited (KRIDE).

Name of the Project : Bengaluru Suburban Railway projects
BSRP, Corridor-2

Location of the Project : Bengaluru

OM issued date by the Tree Officer,
BBMP : 27.12.2022

Permission Date : 06.02.2023

Details of the OM dtd: 27.12.2022

Total number of Trees to be removed : 268 Nos. recommended.

Total Number of Trees Recommended : 315
for the Retention on Site

Total Number of Trees Recommended : 58
for Translocation on Site.

Details of Compensatory Plantation : Done by BBMP

Detail of Translocation:

Agency entrusted for tree translocation : TMRH Plantations
by L & T TIIC

Location of Receptor Site : Kendriya Vidyalaya, Ground, Yeshwantpur

Total number of trees to be translocated : 58
as per OM

Translocation completed Month and Year : 17 No's Completed as on , September 1st 2024

Total number of trees to be translocation balance : 41

Total number of trees observed with survival symptoms. : 12

Total number of trees not encounter with any type of survival symptoms : 5

Procedure for agency selection by L & T TIIC : Based on experience and credential review

Methodology adopted for the tree translocation & Felling : Root Ball Method as per the UAS, GKVK, guideline 2020

Supervision of translocation : KRIDE & GC

Supervision by Forest Dept : BBMP Tree officer or Officer deputed by tree officer BBMP

A. TREE TRANSLOCATION

A1. Competent Agency Selected for Translocation:

Bangalore Suburban Railway Project (BSRP) Corridor 2 (Civil Works) excluding stations construction is awarded to L & T. According to the contract, removal / Felling of Trees and Translocating Trees is in the scope of contractor. General Consultant (GC) to KRIDE recommended to entrust TMRH Plantations for the transplantation work based on the review of their credentials.

A2. Survival Rate of Transplanted trees as per the official memorandum:

The Transplanted tree needs to be observed frequently for its survival, growth, pests, diseases and other physiological symptoms/expressions. It is possible to witness temporary wilting of leaves for few days, leaf fall also can happen and the tree may even decide to go in for 'Transitory Dormancy' phase, to avoid moisture loss and desiccation. But can show revival

symptoms within 6 months like, new sprouts, turgid leaves, arrest of leaf fall etc., It is also possible that sometimes, there will be 'Distress' reaction in the form of premature flowering and fruiting.

Also, some trees will exhibit new sprouts within few weeks which may be due to the presence of adequate stored food reserves. Under such circumstances, the new sprouts will not survive for a long and may wither soon. If the tree has not acclimatized, then there will not be any revival symptoms. It should be kept in mind that the transplanted tree has to withstand the test of at least one year (covering all the three seasons) to declare it as 'surviving or successful'. Hence, any premature conclusions and certifications are being restrained.

From February 2023, translocated 17 trees which are given way for the BSRP construction. Morphological characteristics showing the survival symptoms like leaf buds, leaf initiation, new shoots, tree branchlets, flowers, and new leaves were observed in the 12 translocated trees which is evident trees responding to the translocation shock and trying to adapt to the new locations and surroundings microclimate. The remaining 05 no. of translocated tree is not encountered with any survival symptoms based on the inspections made during the quarter.

A.3 Maintenance of Transplanted trees:

A 3.1 Time Period: Trees translocated to be properly maintained and taken care of Three Years.

A 3.2 Plantation activities under taken in the present

Weeding: Not applicable

Soil works: Soil sample was collected at identified location and required parameters of soil was tested at university of agricultural science (Gandhi Krishi Vignan Kendra Bengaluru).

Watering: Regularly

Application of Fertilizers: Not Applied

B. Status of Translocated trees pertaining to OM dated 27.12.2022

Total No of translocation tree – 17 No's

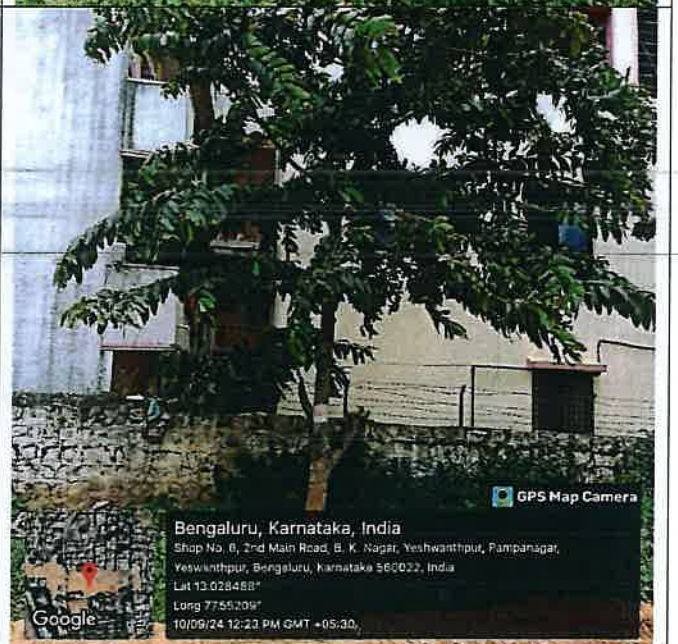
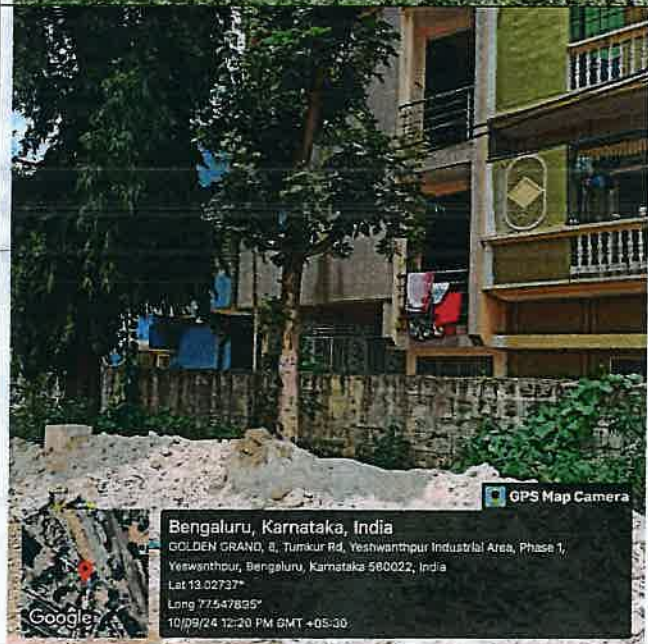
Location: KV School Ground

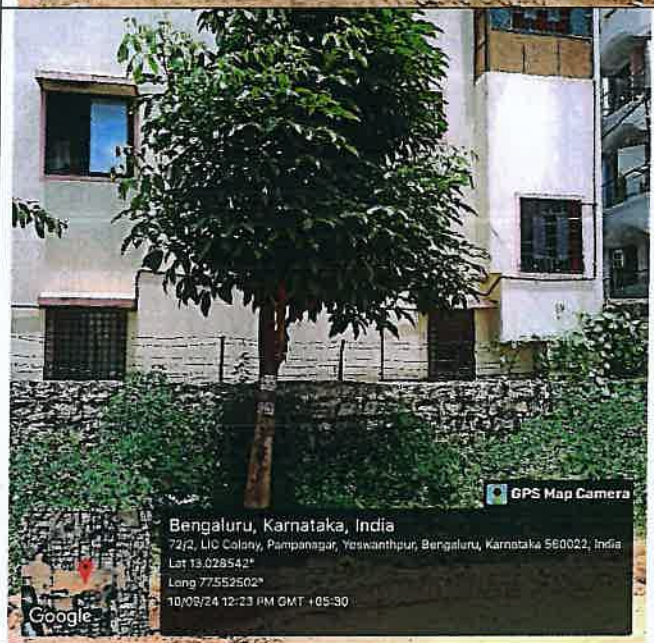
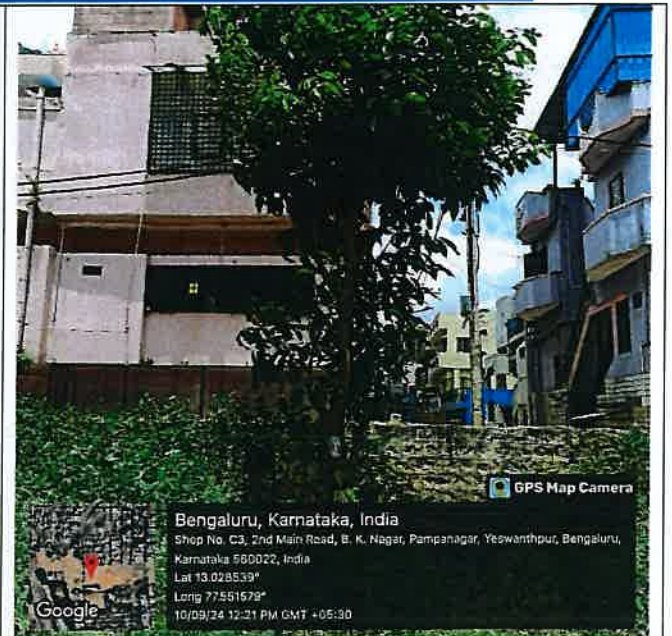
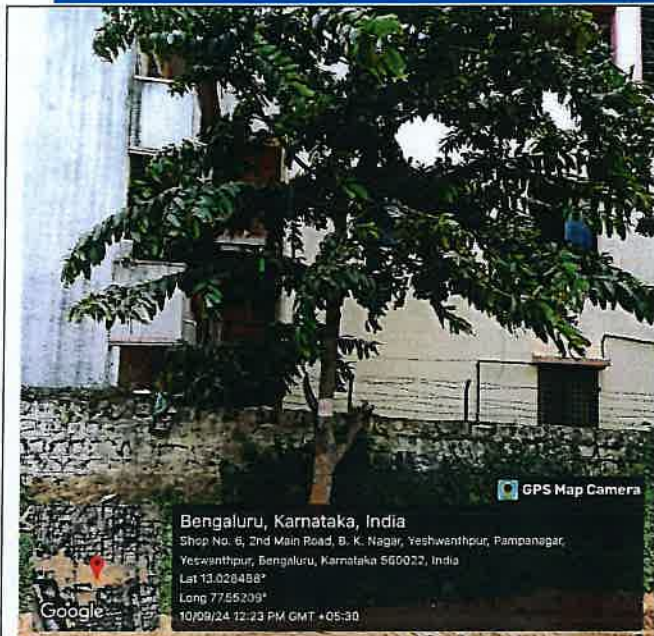
September 1st 2024

S No	Tree No	Species	Condition of Tree (Healthy / New Sprouts / Any other)
1.	385	Mahagani	Healthy
2.	386	Tabebuia rosea	Healthy
3.	399	Mahagani	Healthy
4.	403	Mahagani	Healthy
5.	407	Mahagani	Sprouts were observed
6.	408	Honge	<i>Not showing any survival symptoms</i>
7.	409	Mahagani	<i>Not showing any survival symptoms</i>
8.	414	Mahagani	Healthy
9.	417	Mahagani	Healthy
10.	418	Mahagani	New Sprouts were observed
11.	423	Tore Matti	Healthy
12.	424	Tabebuia Rosea	Healthy
13.	429	Tabebuia Rosea	Healthy
14.	430	Mahagani	<i>Not showing any survival symptoms</i>
15.	432	Mahagani	<i>Not showing any survival symptoms</i>
16.	433	Jamun	Healthy
17.	434	Jamun	<i>Not showing any survival symptoms</i>

C. Tree Photographs







D. Conclusion:September 1st 2024

SI No.	Condition as per OM	Recommendation as per the OM 1	Completed till date.	Balance	Remarks
1.	Tree translocation	58	17	41	12 No's Survived

It is submitted that as per the directions and Official Memorandum (OM) issued by the tree officer/DCF (BBMP and Urban Division), Bengaluru. The Quarterly Progress report of translocation for the Quarter June, July and August 2024 is hereby submitted. It is requested that Tree officer, Deputy Conservator of Forest, BBMP Bangalore to kindly consider the same for further needful action.



Manjunath BK

Environmental Expert
General Consultants - KRIDE

OM 2

Official Memorandum dated 24/02/2023

Report on Implementation of Official Memorandum dated 24/02/2023 (from Baiyyapanahalli Railway station to Lottegollahalli Railway station) by Rail Infrastructure Development Company (Karnataka) Limited (KRIDE).

Name of the Project : Bengaluru Suburban Railway projects
BSRP, Corridor-2

Location of the Project : Bengaluru

OM issued date by the Tree Officer, BBMP : 24.02.2023

Permission Date : 28.03.2023

Details of the OM 2:

Total number of Trees to be removed : 1234 no's Recommended

Total Number of Trees Recommended for the Retention on Site : 123

Total Number of Trees Recommended for Translocation on Site. : 73

Details of Compensatory Plantation : Done by BBMP

Detail of Translocation:

Agency entrusted for tree translocation by L & T TIIC : TMRH Plantations

Location of Receptor Site : Near Railway quarters Opposite Treatment plant, Yeswanthpur

Total number of trees to be translocated as per OM : 73

Translocation completed Month and Year : Only 11 No's Completed, as on 1st September 2024

Total number of trees to be translocation balance : 62

Total number of trees observed with survival symptoms. : 7

Total number of trees not encounter with any type of survival symptoms : 4

Procedure for agency selection by L & T TIIC	: Based on experience and credential review.
Methodology adopted for the tree translocation & Felling	: Root Ball Method as per the UAS, GKVK, guideline 2020
Supervision of translocation Supervision by Forest Dept	: KRIDE & GC BBMP Tree officer or Officer deputed by tree officer BBMP

A. TREE TRANSLOCATION

A1. Competent Agency Selected for Translocation:

BSRP Corridor 2 (Civil Works) excluding stations construction is awarded to L & T. According to the contract, removal / Felling of Trees and Translocating Trees is in the scope of contractor. GC recommended TMRH Plantations based on credential review.

A2. Survival Rate of Transplanted trees as per the official memorandum:

The Transplanted tree needs to be observed frequently for its survival, growth, pests, diseases and other physiological symptoms/expressions. It is possible to witness temporary wilting of leaves for few days, leaf fall also can happen and the tree may even decide to go in for 'Transitory Dormancy' phase, to avoid moisture loss and desiccation. But can show revival symptoms within 6 months like, new sprouts, turgid leaves, arrest of leaf fall etc., It is also possible that sometimes, there will be 'Distress' reaction in the form of premature flowering and fruiting.

Also, some trees will exhibit new sprouts within few weeks which may be due to the presence of adequate stored food reserves. Under such circumstances, the new sprouts will not survive for a long and may wither soon. If the tree has not acclimatized, then there will not be any revival symptoms. It should be kept in mind that the transplanted tree has to withstand the test of at least one year (covering all the three seasons) to declare it as 'surviving or successful'. Hence, any premature conclusions and certifications are being restrained.

From May 2023, translocated 11 trees which are given way for the BSRP construction. Morphological characteristics showing the survival symptoms like leaf buds, leaf initiation, new

shoots, tree branchlets, flowers, and new leaves were observed in the 7 translocated trees which is evident trees responding to the translocation shock and trying to adapt to the new locations and surroundings microclimate. The remaining 04 no. of translocated tree is not encountered with any survival symptoms.

A.3 Maintenance of Transplanted trees:

A 3.1 Time Period: Trees translocated to be properly maintained and taken care of Three Years.

A 3.2 Plantation activities under taken in the present

Weeding: Not applicable

Soil works: Soil sample was collected at identified location and required parameters of soil was tested at university of agricultural science (Gandhi Krishi Vignan Kendra Bengaluru)

Watering: Regularly

Application of Fertilizers: Not Applied

B . Status of Translocated trees pertaining to OM dated 24.02.2023.

Total No of translocation tree – 11 No's

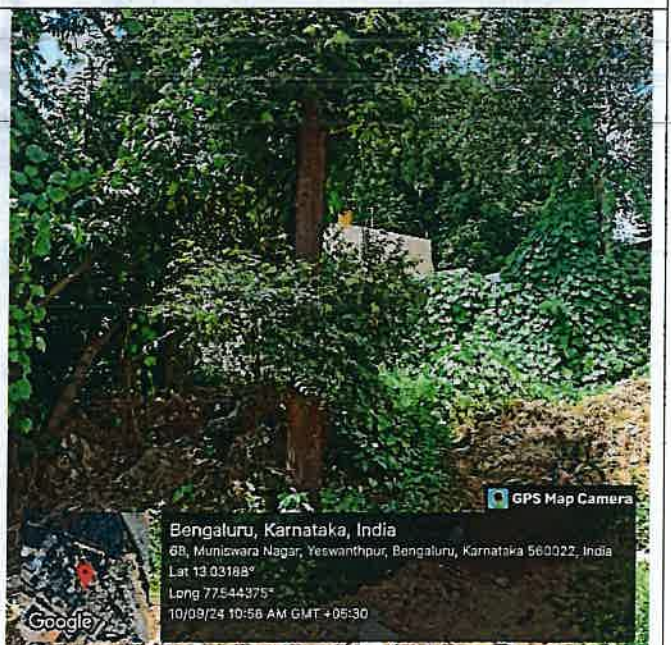
Location: Near Railway Quarters, opposite to treatment plant, Yeswanthpur

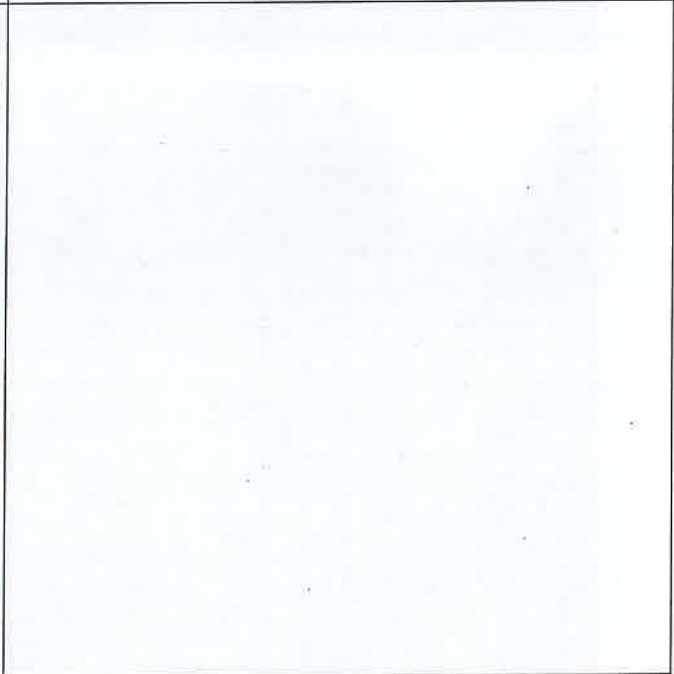
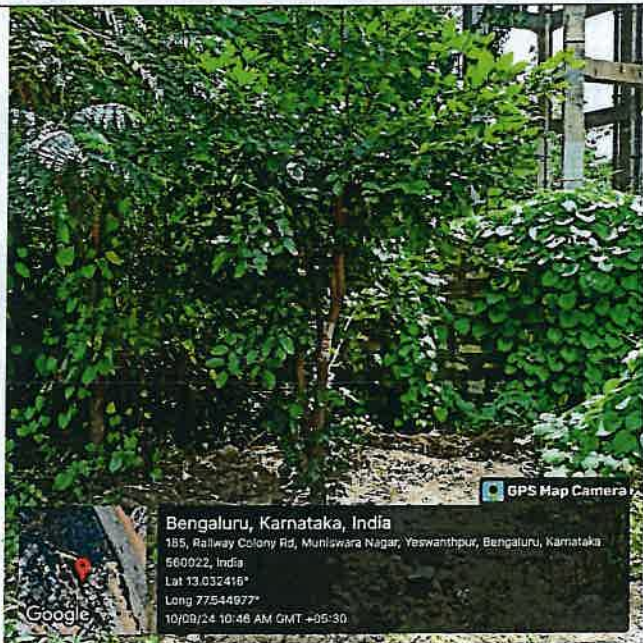
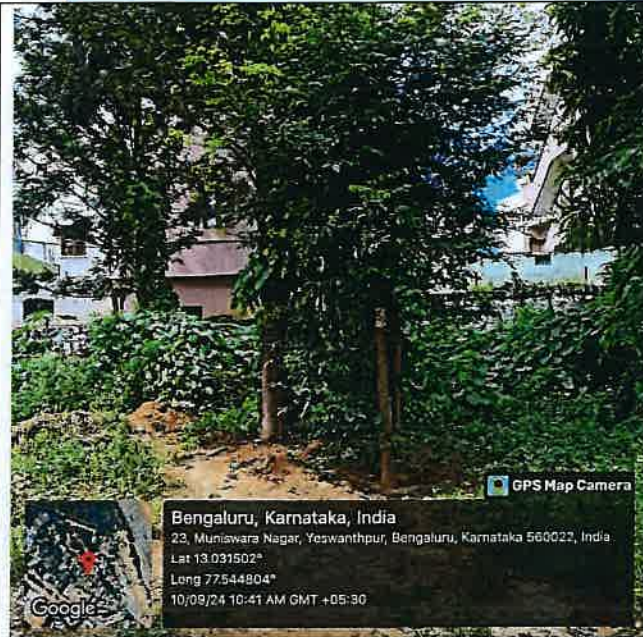
September 1st 2024

S No	Tree No	Species	Condition of Tree (Healthy / New Sprouts / Any other)
1.	11	Nerale	<i>Not showing any survival symptoms</i>
2.	21	Nerale	<i>Not showing any survival symptoms</i>
3.	36	Atthi	<i>Not showing any survival symptoms</i>
4.	208	Mahogany	Healthy
5.	212	Mahogany	Healthy

S No	Tree No	Species	Condition of Tree (Healthy / New Sprouts / Any other)
6.	206	Mahogany	<i>Not showing any survival symptoms</i>
7.	207	Tabeuia Rosia	Healthy
8.	649	Sihi hunase	Fresh leaves observed
9.	651	Sihi hunase	Fresh leaves observed
10.	755	Hebbevu	Fresh leaves observed
11.	1424	Honge	Fresh leaves observed

C. Tree Photographs





D. Conclusion:**1st September 2024**

SI No.	Condition as per OM 2	Recommendation as per the OM 2	Completed till	Balance	Remarks
1.	Tree translocation	73	11	62	7 No's Survived

It is submitted that as per the directions and Official Memorandum (OM) issued by the tree officer/DCF (BBMP and Urban Division), Bengaluru. The Quarterly Progress report of translocation for the Quarter June, July and August 2024 is hereby submitted. It is requested that Tree officer, Deputy Conservator of Forest, BBMP Bangalore to kindly consider the same for further needful action.



Manjunath BK
Environmental Expert
General Consultants - KRIDE



OM 3

Official Memorandum dated 17/03/2023

Report on Implementation of Official Memorandum dated 17/03/2023 (from Lottogollahalli Railway station to Chikkabanawara Station) by Rail Infrastructure Development Company Karnataka limited (K – RIDE)

Name of the Project : Bengaluru Suburban Railway projects
BSRP, Corridor-2
Location of the Project : Bengaluru
OM issued date by the Tree Officer, : 17.03.2023
BBMP
Permission Date : 12.04.2023

Details of the OM dtd:

Total number of Trees needs to be removed : 596 No's Recommended

Total Number of Trees Recommended for the Retention on Site : 135

Total Number of Trees Recommended for Translocation on Site. : 47

Details of Compensatory Plantation : Done by BBMP

Detail of Translocation:

Agency entrusted for tree translocation by L & T TIIC : TMRH Plantations

Location of Receptor Site : Near Railway quarters Opposite
Treatment plant, Yeswanthpur

Total number of trees to be translocated as per OM : 47

Translocation completed Month and Year : Only 33 No's Completed, 1st September
2024

Total number of trees to be translocation balance : 14

Total number of trees observed with survival symptoms. : 19

Total number of trees not encounter with any type of survival symptoms	: 14
Procedure for agency selection by L & T TIIC	: Based on experience and credential review.
Methodology adopted for the tree translocation & Felling	: Root Ball Method as per the UAS, GKVK, guideline 2020
Supervision of translocation	: KRIDE & GC
Supervision by Forest Dept	BBMP Tree officer or Officer deputed by tree officer BBMP

A. TREE TRANSLOCATION

A1. Competent Agency Selected for Translocation:

BSRP Corridor 2 (Civil Works) excluding stations construction is awarded to L & T. According to the contract, removal / Felling of Trees and Translocating Trees is in the scope of contractor. GC recommended TMRH Plantations based on credential review.

A2. Survival Rate of Transplanted trees as per the official memorandum:

The Transplanted tree needs to be observed frequently for its survival, growth, pests, diseases and other physiological symptoms/expressions. It is possible to witness temporary wilting of leaves for few days, leaf fall also can happen and the tree may even decide to go in for 'Transitory Dormancy' phase, to avoid moisture loss and desiccation. But can show revival symptoms within 6 months like, new sprouts, turgid leaves, arrest of leaf fall etc., It is also possible that sometimes, there will be 'Distress' reaction in the form of premature flowering and fruiting.

Also, some trees will exhibit new sprouts within few weeks which may be due to the presence of adequate stored food reserves. Under such circumstances, the new sprouts will not survive for a long and may wither soon. If the tree has not acclimatized, then there will not be any revival symptoms. It should be kept in mind that the transplanted tree has to withstand the test of at least one year (covering all the three seasons) to declare it as 'surviving or successful'. Hence, any premature conclusions and certifications are being restrained.

From August 2023, translocated 33 trees which are given way for the BSRP construction. Morphological characteristics showing the survival symptoms like leaf buds, leaf initiation, new shoots, tree branchlets, flowers, and new leaves were observed in the 18 no. of translocated trees which is evident trees responding to the translocation shock and trying to

adapt to the new locations and surroundings microclimate. The remaining 15 no. of translocated tree is not encountered with any survival symptoms.

A.3 Maintenance of Transplanted trees:

A 3.1 Time Period: Trees translocated to be properly maintained and taken care of Three Years.

A 3.2 Plantation activities under taken in the present

Weeding: Not applicable

Soil works: Soil sample was collected at identified location and required parameters of soil was tested at university of agricultural science (Gandhi Krishi Vignan Kendra Bengaluru)

Watering: Regularly

Application of Fertilizers: Not Applied

B. Status of Trees Translocated pertaining to OM 3 dated 17/03/2023

Total No of translocation tree – 33 No's

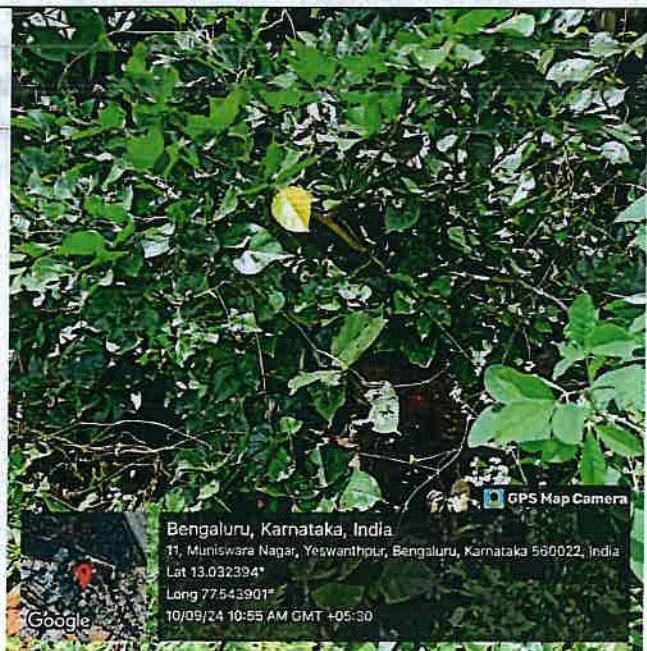
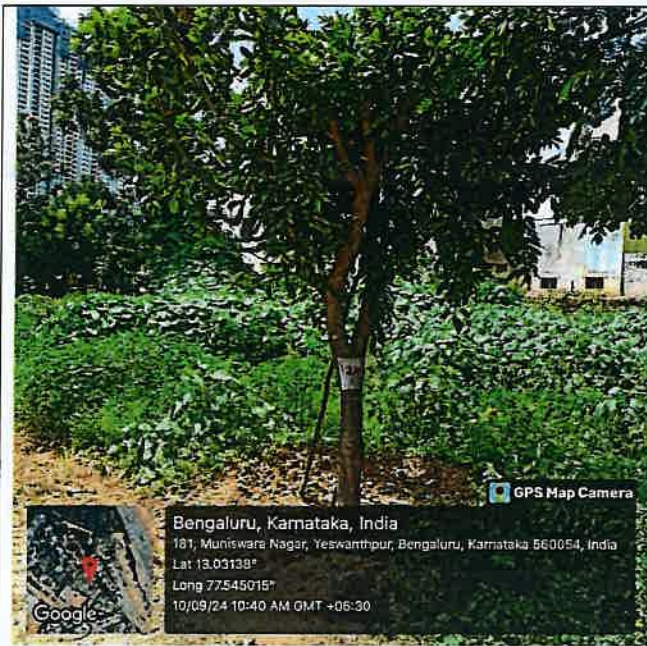
Location: Near Railway Quarters, Opposite treatment plant, Yeswanthpur.

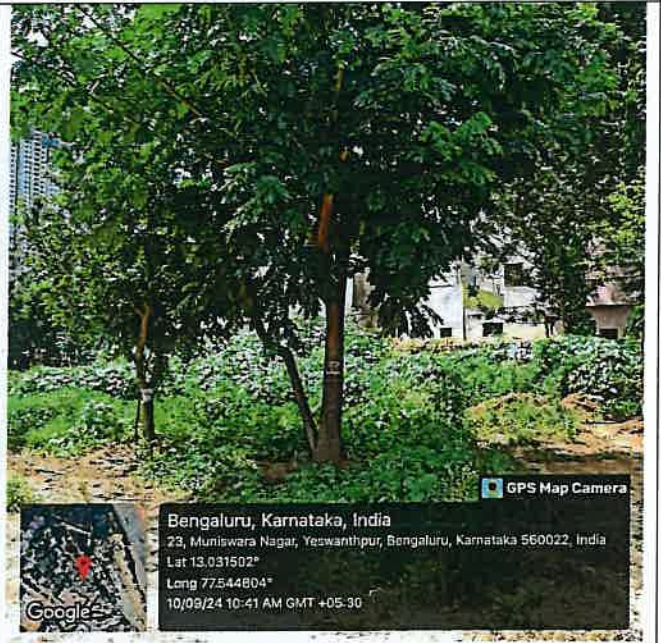
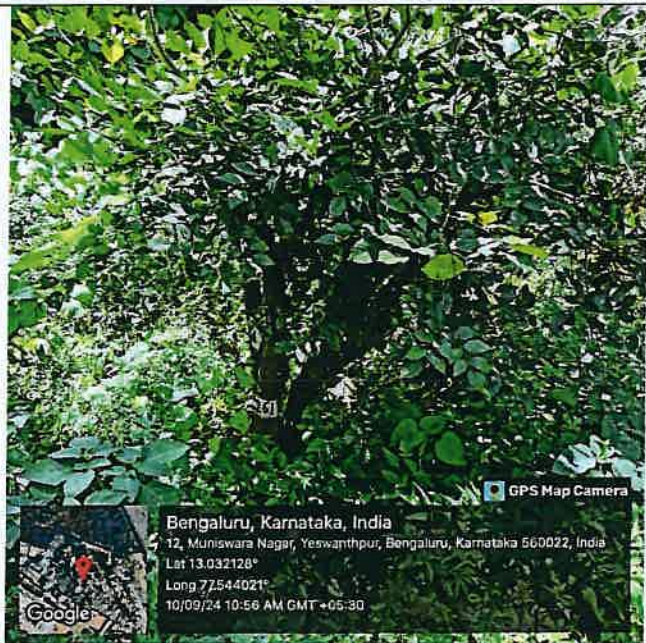
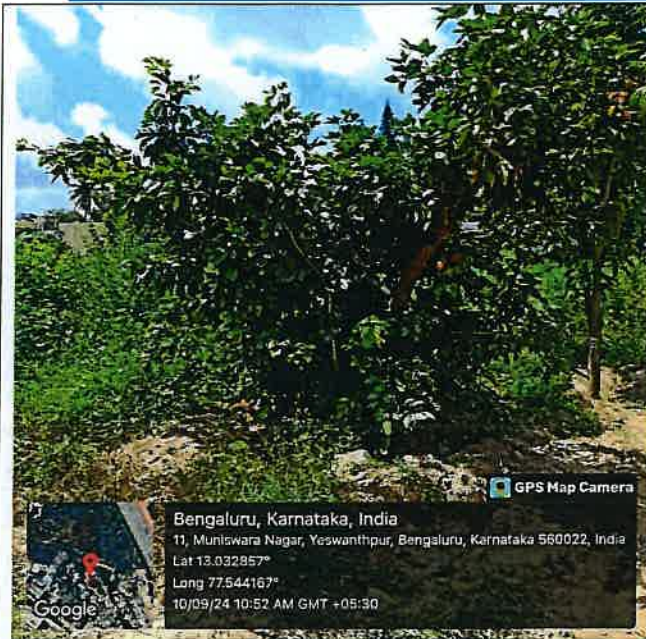
1st September 2024

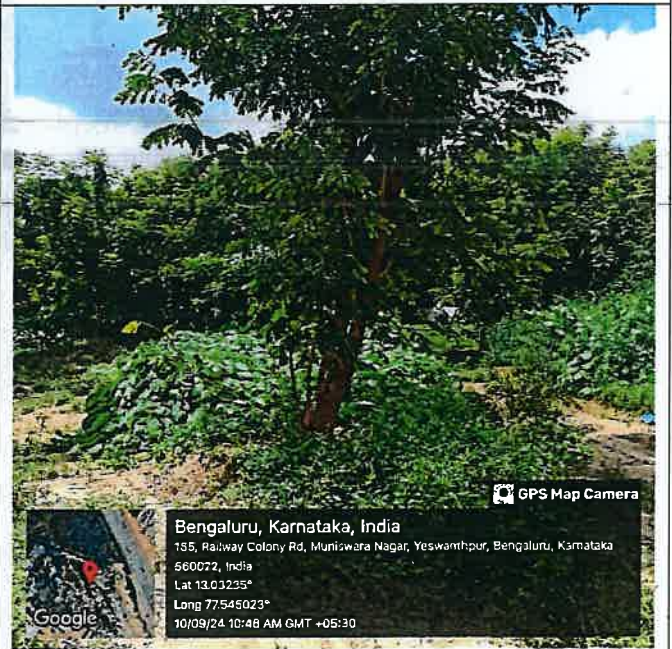
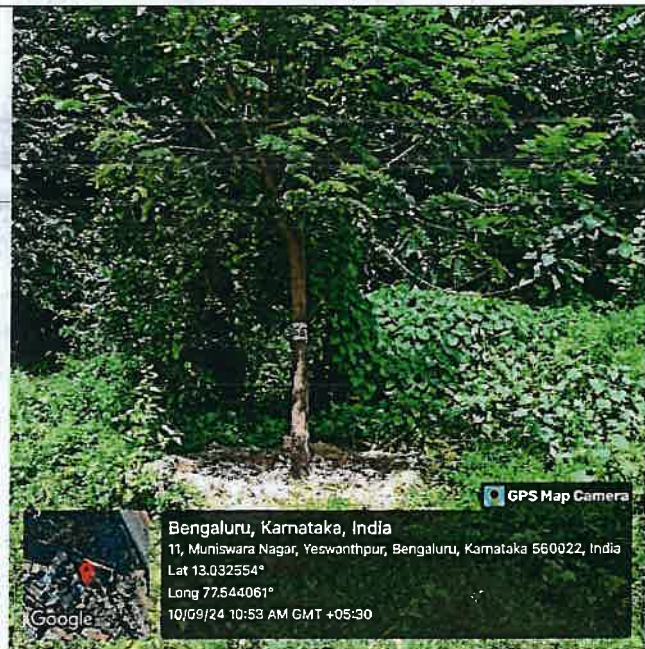
SI No	Tree No	Species	Condition of Tree (Healthy / New Sprouts / Any other)
1.	237	Buruga	<i>Not showing any survival symptoms</i>
2.	241	Honge	<i>Fresh leaves were observed</i>
3.	242	Memosops elangi	<i>Not showing any survival symptoms</i>
4.	243	Tremma orientalis	<i>Not showing any survival symptoms</i>
5.	259	Honge	Healthy leaves were observed
6.	260	Honge	Fresh leaves were observed
7.	261	Honge	Fresh leaves were observed
8.	262	Honge	Healthy leaves were observed
9.	264	Honge	Healthy leaves were observed
10.	276	Basavanapadha	Healthy leaves were observed

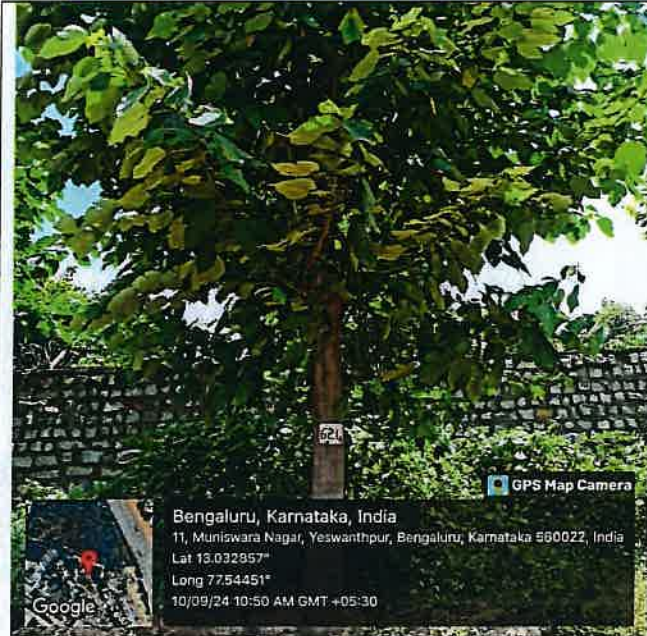
SI No	Tree No	Species	Condition of Tree (Healthy / New Sprouts / Any other)
11.	280	Tabebuia rosea	Healthy leaves were observed
12.	344	Rain tree	<i>Not showing any survival symptoms</i>
13.	358	Tremma orientalis	<i>Not showing any survival symptoms</i>
14.	362	Atti	<i>Not showing any survival symptoms</i>
15.	586	Rain tree	Healthy leaves were observed
16.	598	Kakke	<i>Not showing any survival symptoms</i>
17.	599	Kakke	<i>Not showing any survival symptoms</i>
18.	616	Rain Tree	Healthy leaves were observed
19.	624	Rain Tree	Healthy leaves were observed
20.	625	Rain tree	Healthy leaves were observed
21.	650	Rain tree	Healthy leaves were observed
22.	653	Rain tree	Healthy leaves were observed
23.	654	Rain tree	<i>Not showing any survival symptoms</i>
24.	667	Rain tree	Healthy leaves were observed
25.	701	Atti	Healthy leaves were observed
26.	702	Halasu	<i>Not showing any survival symptoms</i>
27.	768	Kaadu badami	<i>Not showing any survival symptoms</i>
28.	867/1	Sandal	<i>Not showing any survival symptoms</i>
29.	873	Sisso	Healthy leaves were observed
30.	964	Benjamina	<i>Not showing any survival symptoms</i>
31.	969	Benjamina	<i>Not showing any survival symptoms</i>
32.	971	Kaadu badami	leaves were observed
33.	972	Benjamina	<i>Not showing any survival symptoms</i>

C. Tree Photographs











D. Conclusion:

1st September 2024

SI No.	Condition as per OM	Recommendation as per the OM	Completed till date	Balance	Remarks
1.	Tree translocation	47	33	14	18 No's Survived

It is submitted that as per the directions and Official Memorandum (OM) issued by the tree officer/DCF (BBMP and Urban Division), Bengaluru. The Quarterly Progress report of translocation for the Quarter

June, July and August 2024 are hereby submitted. It is requested that Tree officer, Deputy Conservator of Forest, BBMP Bangalore to kindly consider the same for further needful action.

Manjunath BK
Environmental Expert
General Consultants - KRIDE



