

#### BRUHAT BENGALURU MAHANAGARA PALIKE

Office of the Deputy Conservator of Forests, Bruhat Bengaluru Mahanagara Palike N.R Square, Bangalore

No: DCF/PR.

/2024-25

Date: 09.12.2024

To,

The Executive Engineer (WWM-P-H & AV) Opp. Nagavara Lake, BDA Outer Ring Road, Bengaluru 560 024.

#### **OFFICIAL MEMORANDUM**

Sub: Regarding the permission for Retention, Translocation and Removal of trees which are standing at BWSSB Project area for 'Work, Design and Construction of new 60 MLD Capacity STP based on IFAS process technology and 40 MLD ISPS along with Raising Main including Operation & Maintenance of Constructed Facilities for 05 years on Turnkey Basis at Hebbal', Bengaluru– reg

Ref: a) BWSSB/EE/(WWM-P-H & AV)/PB/874/2023-24 dtd 17.01.2024

b) Member Secretary, TEC and ACF Letter No. ACF/PR.68/2024-25 dtd 30.10.2024 along with Report and related documents of Tree Expert Committee

1. The Executive Engineer, (WWM-P-H & A Valley, BWSSB, Bengaluru had submitted application under Sections 8 (2) and 8 (3) (vii) of Karnataka Preservation of Trees Act, 1976 regarding removal of 83 trees for Work, Design and Construction of new 60 MLD Capacity STP based on IFAS process technology and 40 MLD ISPS along with Raising Main including Operation & Maintenance of Constructed Facilities for 05 years on Turnkey Basis for BWSSB project in lieu of existing 60 MLD STP at Hebbal, Bengaluru.

Further as per BWSSB letter no BWSSB/EE(WWM-P-H&AV)/ AEE(WWM-P-HAV-I)/AE/495/2024-25 dtd 23.08.2024 emphasised that BWSSB is having various Sewage Treatment Plants in Hebbal Valley which are treating almost 20% of the Sewage Generated in the valley. There are several STPs which were constructed long back to handle and treat as per old discharge limits set by the KSPCB/CPCB norms. Recently, the Hon'ble National Green Tribunal, Principal Bench, New Delhi in Original Application No. 1069/2018 has revised the effluent discharge standards for new as well as existing/under construction STPs.

The 60 MLD Capacity Sewage Treatment Plant at Hebbal which was constructed in 1999 is not fulfilling the latest NGT/CPCB Norms. Hence BWSSB has taken up the work of upgradation of 60 MLD STP to latest discharge standards as prescribed by CPCB/NGT. Rehabilitation/Upgradation work is to be taken up within the available space at Hebbal STP premises. The layout of the proposed structures is such that the new 60 MLD STP is proposed

to be constructed within the footprint of the old, demolished structure itself. Further, it is also informed that the Minor Irrigation Department, Government of Karnataka has taken up the prestigious project of Filling the lakes of Chikkaballapura Taluk and Bangalore Rural District.

The importance of the 60 MLD STP project to be constructed is to treat the sewage generated from areas such as Yeshwanthapura, Jalahalli, Sharadambanagar, Bahubalinagar etc., covering a catchment area of 21.38 Square Kms. The Major Process components consist of Pre-Treatment Units, Biological Treatment units, Filtration System and Sludge Handling Units.

The Public Notice dated 10.06.2024 was issued by the Tree Officer & DCF, Bruhat Bengaluru Mahanagara Palike as per Section 8 (3) of the Karnataka Preservation of Trees Act 1976 (as amended in 2015) with the intention to invite objections/remarks from public.

In this context, the Tree Officer has confirmed that no objection/post has been received from the public in response to the said public notice. Further, the Tree Officer, BBMP also emphasized that the first priority of the Forest authorities will be to save and retain more number of trees at the spot/site itself and in case that is not possible, the next option would be translocation of such trees which fulfill the desired criteria like having suitable girth, satisfactory status/health condition of the tree, feasibility of root-ball excavation of appropriate size. Subsequently the felling of the trees has to be last resort. The Compensatory Afforestation is also stipulated through planting of saplings in the ration 1:10 i.e., 10 saplings to be planted in lieu of each tree translocated/felled (i.e., in the ratio 1:10).

The concerned Field Forest Officer has carried out inspections on 27.05.2024 and submitted the connected Mahazar and Report related to 83 trees. The ACF/DCF visited the areas on 12.06.2024 and 20.06.2024 and had submitted the preliminary Assessment Report related to 83 trees. The field inspection for assessment of 83 trees standing within the project area for the proposed BWSSB project was carried out by the TEC on 10.07.2024 and 22.07.2024. The concerned Representatives of BWSSB and Forest Officers of BBMP were present at the project area with all necessary documents.

During the visit to the project area on 10.07.2024, the Committee noticed that many trees standing at the boundary of the project area were not included in the list of enumerated trees. Further it was observed that the construction activities such as road alignment for formation of pathways for movement of vehicles were passing very close to the unnumbered trees. Therefore the Committee instructed the Tree Officer/BWSSB to enumerate all the trees standing within the project area and also trees abutting the boundary as those trees get affected by the implementation of the project components such as provision for storage of materials, movement of heavy machinery, earth movers etc..

As per the instructions after the cursory field inspection on 10.07.2024, the Tree Officer/BWSSB enumerated 62 more number of the trees which were abutting the boundary and standing very close to the project area, thus making a total of 145 trees. The Committee revisited the project area on 22.07.2024 and followed the norms of conducting field inspection.

At the Project Area, during the course of Field Inspections, the following activities were carried out by the TEC for assessment of each tree.

- i. Physical verification of the tree number and the associated information collected by the Forest Department Officers in Template 2 Part-I, including tree health / tree defects and general assessment as per provision under Section 8 (3) of the KPT Act, 1976.
- ii. Confirmation regarding those trees being inside the project area and standing at the construction activity sites/spots.
- iii. Review of assessment of trees as per the entries made by the Tree Officer in Template 2 Part-II.
- iv. Discussions with the BWSSB Authorities to explore possibility of carrying out the construction activities without removal of trees and identification of such trees which can be retained-on-site as this is considered as first priority.
- v. Assessment of the general conditions of the trees to decide the feasibility of its translocation/transplantation in case of retention-on-site not possible, as that being the next option.
- vi. Recording of TEC's remarks and recommendations for on-site retention/translocation/felling of trees.

It has been noticed that 83 enumerated trees are standing within the project area at Sy. Nos. 17/1A, 17/2A, Hebbal, Opposite to Nagavara Lake, BDA Outer Ring Road, Bengaluru. During the cursory and final field inspections undertaken by the Committee on 10.07.2024 and 22.07.2024, the following are the findings on the field:

- a) There are 62 more trees standing abutting the project area and these trees have been enumerated subsequently and included in the list of trees.
- b) Three trees (Tree Nos. 70, 71 & 83) were not found on the field/project area.
- c) Another 08 additional/unnumbered trees were found in the project area at the time of detailed final field inspection.

Therefore all the above said [ $\{(83 \text{ enumerated} + 62 \text{ additionally enumerated} + 08 \text{ unnumbered})$  = 153 trees} -  $\{03 \text{ trees not seen on the site}\}$ ] = 150 standing trees at the project area were assessed.

- 2. The TEC had thorough discussions with the BWSSB authorities regarding execution and construction activities without removal of trees and identifying the trees which can be retained-on-site with respect to alignment, design and plan. As per field inspection, out of the total 150 trees, 67 trees have been identified for retention-on-site as they are not getting affected by the development activities.
- 3. Therefore these 83 trees will have to be suggested for removal/felling as they are standing within the proposed following physical features of the Project as per BWSSB Letter No. BWSSB/EE(WWM-P-H&AV)/ AEE(WWM-P-HAV-I)/AE/495/2024-25 dtd 23.08.2024.

SI. No.	Physical features	Tree Nos	Location
1	Trees to be removed for construction of Aeration Tank	a) Tree No. 1 to Tree No. 39 = 39 Nos b) Tree Nos 48 & 49 = 02 Nos I Sub-total (a + b) = 41 Nos.	
2,49	Trees to be removed for ALUM Storage Building	a) Tree No 40 to Tree No. 45, 41/1 = 07 Nos III Sub-total = 07 Nos	
3.	Trees to be removed for construction of Blower Room	a) Tree No 46 to Tree No. 47, = 02 Nos IV Sub-total = 02 Nos	Project Area at Sy. Nos. 17/1A, 17/2A, Hebbal,
4.	Trees to be removed for Secondary Clarifier 01 & 02	a) Tree No 50 to Tree No. 63, Tree No. 59/1 = 15 Nos V Sub-total = 15 Nos	Opposite to Nagavara Lake, BDA Outer Ring Road, Bengaluru.
5.	Trees to be removed for construction of CCT and CCT Building	a) Tree No 64, 65, 65/1, 65/2, 66, 67, 68, 69, 72, 73, 73/1, 74 and 75. = 13 Nos VI Sub-total = 13 Nos	
6.	Trees to be removed for construction of Plant Water Sump	a) Tree No 76 to Tree No. 79 = 04 Nos VII Sub-total = 04 Nos	
7	Trees to be removed for construction of road	a) Tree No 82 = 01 No VIII Sub-total = 01 No	
		+ II + III + IV + V + VI - VIII = 83 trees	

Since these 83 trees are standing right in the construction zone and hindering the project activities, their removal becomes inevitable.

The next option considered by the TEC in case of those trees which could not be retained-onsite was translocation.

Having concluded that the retention of the above mentioned 83 trees is not possible, the TEC chose the next option of translocation of trees and assessed the suitability of each of these trees. In doing so, the TEC considered the following conditions, in addition to verification of the tree health / tree defects, etc..

i. Proximity of tree to building structures, trunks proximity to the cement / concrete or tarred surface so as to examine the feasibility of extraction of root-ball of appropriate size;

- ii. The natural characteristics and aspects of species viz., ecologically and economically important species; species that could provide food (nectar, pollen, seeds and fruits) and nesting sources (materials and site) to various fauna.
- iii. The trees having below mentioned characteristics do not qualify for translocation.

Trees having multi-forked trunk, major wounds on the trunk, debarking, physical damage on the bark, scar due to fire, damage (girdling), rotting due to fungal infection (fruiting bodies of fungus, rotten core, hollowness) or pest infestation (presence of holes and frass as evidence of insect infestation), and dead / dried major branches, etc..

Taking into consideration the above mentioned assessment attributes, the TEC found that 08 trees at the said area are suitable for translocation.

Ultimately, the balance 75 number of trees standing within the project area which were not found to be suitable either for retention on-site or for translocation, will have to be removed/felled for the implementation of the BWSSB Project.

Having completed the above assessment of trees at the project area, the Committee also inspected the location/area which was identified by the BWSSB for translocation of trees and recommended by the Tree Officer as proposed area for translocation of trees.

Location Site – Vacant space is very close to the boundary wall of the existing Cemetery/Graveyard, Hebbal, Bengaluru

4. The Tree Officer has stated that BWSSB have submitted letter No. BWSSB Letter No. BWSSB/EE(WWM-P-H&AV)/ AEE(WWM-P-HAV-I)/AE/495/2024-25 dtd 23.08.2024 issued by the EE, BWSSB in which they have furnished the required particulars of the said translocation area identified besides mentioning the Specific Receptor Sites Coordinates for the 08 trees to be translocated.

The TEC deliberated and concurred with the recommendations of the Tree Officer and DCF, BBMP regarding the tree translocation details including specific receptor sites coordinates.

The TEC opined that translocation of trees can be done in the proposed receptor sites in accordance with the advice and procedure as rendered by UAS, Bangalore.

The TEC carried out a thorough and multipronged scrutiny of all the 150 trees to make its recommendations regarding:

- a) Trees which could be saved by retaining on-site as it is;
- b) Trees which should be translocated depending upon their general condition as assessed and ecological importance, in the event of (a) above not being possible;

c) Trees recommended for removal in the event of (a) and (b) not being possible including the trees which are silviculturally matured, softwood trees and trees suffering from defects /damages.

### **ORDER**

Under the circumstances explained above and in exercise of the powers vested with the undersigned as per Section 8 (3) of Karnataka Preservation of Trees Act, 1976 and based on the guidelines and decisions taken as per the Field Inspection and proceedings of the Meeting dated 27.09.2024 of the TEC for retention-on-site, translocation, and removal of trees which are standing at Sy. Nos. 17/1A, 17/2A, Hebbal, Opposite to Nagavara Lake, BDA Outer Ring Road, Bengaluru for BWSSB Project. The below mentioned schedule is approved subject to the conditions mentioned thereon. This Order will come into effect after fifteen (15) days from the date of uploading of the order on the Official website of BBMP and for that purpose separate directions will be issued from this Office.

### **SCHEDULE**

- 1. The Sixty Seven (67) trees which are listed with remarks, enclosed to this Official Memorandum as Annexure A can be retained-on-site. Hence permission is declined to remove the above said 67 trees and they should continue to stand at their present locations.
- 2. Based on the considerations, The Eight (08) trees which are listed with remarks, enclosed to this Official Memorandum as Annexure B have to be translocated. Hence permission is accorded to translocate the said 08 trees to suitable places as mentioned below in the 'Conditions'.
- 3. The remaining Seventy Five (75) trees which are listed with remarks, enclosed to this Official Memorandum as Annexure C can be removed/felled. Hence permission is accorded for removal of the said 75 trees only as per the felling of trees norms adopted by Karnataka Forest Department (KFD).

## **Conditions**

- 1. No damage should be caused to the trees which are retained on the spot, while carrying out the civil works or any project related works.
- 2. The trees which are retained-on-site have to be properly protected and maintained. Accordingly BWSSB should give an assurance in this respect.
- 3. The translocation of trees should be done at the following proposed locations in collaboration with the DCF, BBMP.
  - Location Site Vacant space is very close to the boundary wall of the existing Cemetery/Graveyard, Hebbal, Bengaluru
- 4. The Persons/Agencies who are entrusted with translocation works should have sufficient knowledge and experience in such works.

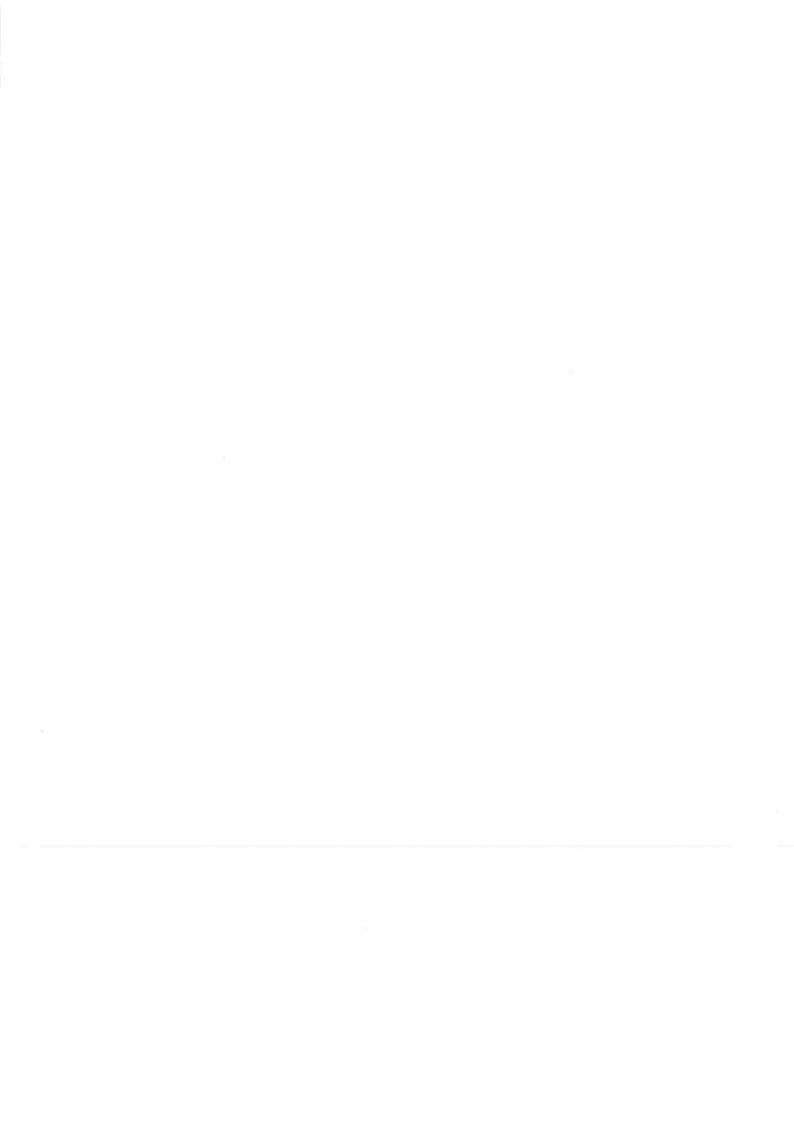
- 5. The work of translocation of trees has to be executed under close supervision of Officials/Officers of Forest Wing of BBMP and according to the formulated guidelines of UAS, Bengaluru.
- 6. The trees so translocated have to be properly maintained and taken care of, for a minimum period of three years.
- 7. The entire process of translocation of trees has to be properly documented and records compiled in a systematic manner.
- 8. As per the Section 10 of KPT Act 1976, which provides that where any tree has fallen or destroyed due to force of nature or other natural causes, requires to plant a tree or trees in place of the tree so fallen or destroyed.
- 9. In lieu of the trees translocated and felled, 10 healthy and heighted saplings have to be planted in lieu of each tree either translocated or felled. The saplings have to be planted as per forestry practices and maintained for a minimum period of five years. Photographs and proper documentation has to be submitted for saplings/seedlings planted.
- 10. Regular monitoring must be done to ensure the conducive growth of translocated trees and planted saplings/seedlings.

Tree Officer and

Deputy Conservator of Forests Bruhat Bengaluru Mahanagara Palike, Bengaluru

## Copy to:

- 1. The Chairman, Tree Authority and Chief Conservator of Forests, Bangalore Circle, Bangalore for kind information
- 2. The Member Secretary Tree Expect Committee, and the Assistant Conservator of Forests, BBMP for information and further action.
- 3. The Assistant Conservator of Forests, BBMP for information and further action
- 4. The Range Forest Officers/Deputy Range Forest Officers for information and further action
- 5. Office Copy
- \* Any objections against the above Order of the Tree Officer, BBMP under Section 14 of the KPT Act 1976, an appeal can be made to the Tree Authority, Bengaluru.



## ANNEXURE - A

# LIST OF TREES FOR RETENTION

Sl. No.	Tree No.	Tree Name/Species	Girth (in Mtr)	Height (in Mtr)	Remarks
1.	80	Gulmohur (Delonix regia)	3.00	1.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
2.	81	Tamarind (Tamarindus indica)	1.65	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
3.	84	Gulmohur (Delonix regia)	1.55	5.00	The tree (snag) is standing in the project area, but not hindering the construction activities, and recommended for retention.
4.	85 / 85A	Akash mallige (Mellingtonia hortensis)	1.05 / 1.40	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
5.	85/1 85/1A 85/1B	Sandal wood	0.30 / 0.20 / 0.20	2.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
6.	86	Akash mallige (Mellingtonia hortensis)	1.00	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
7.	87	Akash mallige (Mellingtonia hortensis)	1.40	7.50	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
8.	88	Akash mallige (Mellingtonia hortensis)	1.20	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
9.	89	Akash mallige (Mellingtonia hortensis)	1.00	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
10.	90	Akash mallige (Mellingtonia hortensis)	1.40	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
11,	91	Akash mallige (Mellingtonia hortensis)	1.15	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
12.	92	Akash mallige (Mellingtonia hortensis)	0.70	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
13.	93	Akash mallige ( <i>Mellingtonia</i> <i>hortensis</i> )	1.50	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.

14.	94	Jamun	0.80	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
15.	95 / 95A	Akash mallige (Mellingtonia hortensis)	1.35 / 0.60	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
16.	96	Akash mallige (Mellingtonia hortensis)	1.20	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
17.	97 / 97A	Akash mallige (Mellingtonia hortensis)	1.10 / 1.35	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
18.	98 / 98A	Peltophorum sp.	1.95 / 1.20	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
19.	99 / 99A / 99B	Peltophorum sp.	0.70 / 0.60 / 0.65	3.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
20.	100	Peltophorum sp.	1.00	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
21.	101 / 101A	Peltophorum sp.	1.25 / 1.30	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
22.	102 / 102A / 102B	Peltophorum sp.	1.10 / 1.00 / 0.95	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
23.	103 / 103A	Peltophorum sp.	1.30 / 1.25	8.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
24.	104 / 104A	Peltophorum sp.	0.80 /	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
25.	105 / 105A / 105B	Peltophorum sp.	0.70 / 0.60 / 0.50	3.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
26.	106 / 106A 106B	Peltophorum sp.	1.15 / 0.90 / 0.80	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
27,	107	Peltophorum sp.	1.40	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.

28.	108 / 108A	Peltophorum sp.	1.20	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
29.	109	Tectona grandis	0.50	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
30.	110	Peltophorum sp.	1.00	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
31.	111 / 111A	Peltophorum sp.	1.60 / 0.80	6.50	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
32.	112	Tectona grandis	0.55	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
33.	112 / 1	Basavanapada	0.30	2.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
34.	113 / 113A	Acacia sp.	1.10 / 1.20	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
35.	114	Basavanapada	0.65	2.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
36.	114 / 1	Guava	0.40	2.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
37.	115 / 115A 115B	Aththi mara (Ficus racemosa)	1.20 / 0.60 / 1.30	3.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
38.	116 / 116A	Acacia sp.	1.00 / 1.00	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
39.	117	Arali (Ficus religioisa)	1.20	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
40.	118	Peltophorum sp.	1.70	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
41.	119 / 119A	Peltophorum sp.	0.70 / 0.80	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.

42.	120 / 120A	Peltophorum sp.	1.20 / 1.20	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
43.	121/ 121A	Peltophorum sp.	0.90 / 0.90	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
44.	122	Seemathangadi	0.60	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
45.	123	Acacia sp.	1.20	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
46.	124	Acacia sp.	1.00	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
47.	125	Acacia sp.	0.70	4.50	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
48.	126	Acacia sp.	1.20	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
49.	127	Acacia sp.	0.70	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
50.	128	Seemathangadi	0.60	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
51.	129	Acacia sp.	0.80	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
52.	130	Acacia sp.	0.70	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
53.	131	Acacia sp.	0.80	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
54.	132 / 132A	Seemathangadi	0.80 / 0.80	3.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
55.	133	Peltophorum sp.	0.85	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.

56.	134	Seemathangadi	0.80	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
57.	135	Acacia sp.	0.90	6.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
58.	136	Peltophorum sp.	1.50	6.50	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
59.	137 / 137A	Gulmohur	1.60 / 1.10	7.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
60.	138	Seemathangadi	1.20	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
61.	139 / 139A / 139B / 139C	Seemathangadi	0.85 / 095 / 0.60 / 0.65	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
62.	140	Sihi Hunsae	0.50	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
63.	141	Seemathangadi	0.55	2.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
64.	142 / 142A	Seemathangadi	0.55 / 0.60	4.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
65.	143	Seemathangadi	0.55	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
66.	144	Seemathangadi	1.00	5.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.
67.	145	Seemathangadi	0.30	3.00	The tree is standing in the project area, but not hindering the construction activities, and recommended for retention.

**TOTAL NUMBER OF TREES FOR RETENTION = 67 Nos** 

Tree Officer &
Deputy Conservator of Forests,
BBMP, Bengaluru



## LIST OF TREES FOR TRANSLOCATION

SI.	TREE	Tree	Girth	Height	IRANSLUCATION
No.	No.	Name/Species		(in Mtr)	Remarks
1.9	9	Tectona grandis	0.52	6.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth, and tree condition (healthy), the tree is recommended for translocation.
2.	20	Tectona grandis	0.70	2.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth, and tree condition (healthy), the tree is recommended for translocation.
3.	27	Tectona grandis	0.58	2.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth, and tree condition (healthy), the tree is recommended for translocation.
4.	31	Tectona grandis	0.63	3.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth, and tree condition (healthy), the tree is recommended for translocation.
5	35	Tectona grandis	0.60	4 .00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth, and tree condition (healthy), the tree is recommended for translocation.
6.	37	Tectona grandis	0.80	6.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth, and tree condition (healthy), the tree is recommended for translocation.
7,	40	Tectona grandis	0.45	3.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth, and tree condition (healthy), the tree is recommended for translocation.
8.	59/1	Arali mara (Ficus religiosa)	0.25	2.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth, and tree condition (healthy – above ground status), the tree is recommended for translocation.

**TOTAL NUMBER OF TREES FOR TRANSLOCATION = 08 Nos** 

Tree Officer &

Deputy Conservator of Forests, BBMP, Bengaluru

# LIST OF TREES FOR FELLING

Sl. No.	TREE No.	Tree Name/Species	Girth (in Mtr)	Height (in Mtr)	Remarks
1.	1	Tectona grandis	1.18	2.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth (not feasible for excavation of root ball), the tree is recommended for felling.
2.	2	Tectona grandis	0.80	4.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth (not feasible for excavation of root ball), the tree is recommended for felling.
3.	3	Tectona grandis	0.67	4.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
4.	4	Tectona grandis	0.83	5.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth size, and field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
5	5	Tectona grandis	0.96	0.45	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth size, and field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
6.	6	Tectona grandis	0.97	6.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth size, and field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
7.	7	Tectona grandis	0.84	5.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth size, and field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
8.	8	Tectona grandis	1.04	2.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth size, and field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.

9.	10	Tectona grandis	0.74	5.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth size, and field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
10.	11	Tectona grandis	0.75	3.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the tree condition (bent, decay), the tree is recommended for felling.
11.	12	Tectona grandis	1.05	4.50	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth size, and field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
12.	13	Tectona grandis	0.85	4.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth size, and field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
13.	14	Tectona grandis	0.60	4.50	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the tree condition (split / vertical defect), the tree is recommended for felling.
14.	15	Tectona grandis	0.60	5.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
15.	16	Tectona grandis	0.85	5.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth size, and field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
16.	17	Tectona grandis	0.85	6.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth size, and field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
17.	18	Tectona grandis	0.65	4.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the field condition (1 to 1.5m soil from the ground level is heaped all around the trunk), the tree is recommended for felling.
18.	19	Tectona grandis	0.99	3.50	The tree is standing within the project area earmarked for construction of Aeration

					Tank. In consideration to the girth size,
					and field condition (1 to 1.5m soil from the
					ground level is heaped all around the
					trunk), the tree is recommended for felling.
19.	21	Tectona grandis	0.52	2.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
20.	22	Tectona grandis	0.80	3.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
21.	23	Tectona grandis	1.12	4.50	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth (not feasible for excavation of desired root ball) and tree condition (slanting in position), the tree is recommended for felling.
22.	24 / 24A	Tectona grandis	0.73 / 0.83	6.20	The tree is forked, and standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
23.	25	Tectona grandis	0.90	4.50	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
24.	26	Tectona grandis	0.93	6.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
25.	28	Tectona grandis	084	3.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
26.	29	Tectona grandis	1.03	3.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.

27.	30	Tectona grandis	0.95	4.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
28.	32 / 32A	Tectona grandis	0.84 / 0.75	5.50	The tree is forked, and standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
29.	33	Tectona grandis	0.83	4.50	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth (not feasible for excavation of desired root ball) and tree condition (slanting in position), the tree is recommended for felling.
30.	34	Tectona grandis	0.75	4.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
31.	36	Tectona grandis	0.95	4.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
32.	38	Tectona grandis	0.45	2.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the tree condition (topped), the tree is recommended for felling.
33.	39	Tectona grandis	0.65	4.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
34.	41	Tectona grandis	0.70	3.50	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (tree is standing very close to tree no. 42, preventing the excavation of desired root ball), the tree is recommended for felling.
35.	41/1	Paper mulberry (Broussonetia papyrifera)	0.79	3.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and

					field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
36.	42	Tectona grandis	0.79	3.60	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (tree is standing very close to tree no. 41, preventing the excavation of desired root ball), the tree is recommended for felling.
37.	43	Tectona grandis	0.72	2.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and tree condition (defects / decay), the tree is recommended for felling.
38.	44	Tectona grandis	0.66	2.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and tree condition (defects / decay), the tree is recommended for felling.
39.	45	Tectona grandis	0.79	3.50	The tree is standing within the project area earmarked for construction of Storage Tank (for chemical). In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
40.	46	Tectona grandis	0.60	4.00	The tree is standing within the project area earmarked for construction of Storage Tank (for chemical). In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
41.	47	Hunase mara (Tamarindus indica)	1.90	2.00	The tree is standing within the project area earmarked for construction of Blower room. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
					The tree is standing within the project area
42.	48	Arali mara (Ficus religiosa)	3.50	1.50	earmarked for construction of Aeration Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
43.	49	Aththi (Ficus racemosa)	3.50	2.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (tree is standing very close to tree no. 50, preventing the excavation of desired root ball), the tree is recommended for felling.

44.	50	Jungle	0.90	4.00	The tree is standing within the project area earmarked for construction of Aeration Tank. In consideration to the girth and field condition (tree is standing very close to tree no. 59, preventing the excavation of desired root ball), the tree is recommended for felling.
45.	51 / 51A	Gulmohar (Delonix regia)	1.46 / 1.20	2.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth (not feasible for excavation of root ball), the tree is recommended for felling.
46.	52	Gulmohar (Delonix regia)	1.23	4.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth (not feasible for excavation of root ball), the tree is recommended for felling.
47.	53 / 53A	Gulmohar (Delonix regia)	1.45 / 1.15	3.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth (not feasible for excavation of root ball), the tree is recommended for felling.
48.	54	Dalichand ( <i>Markhamia</i> <i>lutea</i> )	0.75	5.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the tree condition (decay / canker), the tree is recommended for felling.
49.	55	Shisham (Dalbergia sisso)	1.25	6.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth (not feasible for excavation of root ball), the tree is recommended for felling.
50.	56 / 56A	Shisham (Dalbergia sisso)	0.80 / 0.60	4.00	The tree is forked, and standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the tree condition (weak branch union, decay / canker), the tree is recommended for felling.
51.	57	Shisham (Dalbergia sisso)	0.80	5.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
52.	58	Shisham (Dalbergia sisso)	0.70	4.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
53.	59 / 59A / 59B	Sihi Hunsae	1.35 / 0.75 / 1.35	2.50	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth and

					field condition (roots are partially exposed
					preventing the excavation of desired root
					ball), the tree is recommended for felling.
54.	60	Sihi Hunsae	0.90	2.50	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
55.	61	Sihi Hunsae	0.74	3.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth and tree condition (severe canker and defects), the tree is recommended for felling.
56.	62	Aththi (Ficus racemosa)	1.20	3.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth and field condition (tree is standing very close to tree no. 63, preventing the excavation of desired root ball), the tree is recommended for felling.
57.	63	Subabul	0.75	3.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth and field condition (tree is standing very close to tree no. 62, preventing the excavation of desired root ball), the tree is recommended for felling.
58.	64	Gulmohur (Delonix regia)	2.10	3.00	The tree is standing within the project area earmarked for construction of Secondary Clarifier. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
59.	65	Subabul	0.70	3.00	The tree is standing within the project area earmarked for construction of Dis-filter. In consideration to the tree condition (bent) and field condition (standing close to tree no. 65/1), the tree is recommended for felling.
					The tree is standing within the project area
60.	65 / 1	Sandal wood	0.40	1.00	earmarked for construction of Dis-filter. In consideration to the tree condition (bent) and field condition (standing close to tree no. 65), the tree is recommended for felling.
61.	65 / 2	Subabul	1.20	2.00	The tree is standing within the project area earmarked for construction of Dis-filter. In consideration to the tree condition (bent), the tree is recommended for felling.
62.	66	Acacia	1.10	4.00	The tree is standing within the project area earmarked for construction of Dis-filter. In consideration to the girth and field condition (roots are partially exposed

		40			
					preventing the excavation of desired root ball), the tree is recommended for felling.
63.	67	Tamarind ( <i>Tamarindus</i> indica)	2.90	4.00	The tree is standing within the project area earmarked for construction of Dis-filter. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
64.	68	Gulmohur (Delonix regia)	2.00	1.50	The tree is standing within the project area earmarked for construction of Curative Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
65.	69	Gulmohur (Delonix regia)	1.90	1.50	The tree is standing within the project area earmarked for construction of Curative Tank. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
66.	72 / 72A	Gulmohur (Delonix regia)	1.10 / 1.00	4.00	The tree is forked, and standing within the project area earmarked for construction of Curative Tank / CCT. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
67.	73	Gulmohur (Delonix regia)	1.90	2.50	The tree is standing within the project area earmarked for construction of Curative Tank / CCT. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
68.	73 / 1	Gulmohur (Delonix regia)	1.41	1.00	The tree is standing within the project area earmarked for construction of Curative Tank / CCT. In consideration to the girth and tree condition (topped), the tree is recommended for felling.
69.	74 / 74A	Sihi Hunsae	2.10 / 0.90	4.00	The tree is forked, and standing within the project area earmarked for construction of Curative Tank / CCT. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
70.	75	Sihi Hunsae	0.70	3.00	The tree is standing within the project area earmarked for construction of Curative Tank / CCT. In consideration to the girth and field condition (tree is standing close to tree no. 76), the tree is recommended for felling.
71:	76	Sihi Hunsae	0.70	3.00	The tree is standing within the project area earmarked for construction of Curative

					Tank / CCT. In consideration to the girth and field condition (tree is standing close to tree no. 75), the tree is recommended for felling.
72.	77	Gulmohur (Delonix regia)	2.20	4.00	The tree is standing within the project area earmarked for construction of Curative Tank / CCT. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
73.	78	Gulmohur (Delonix regia)	1.10	3.00	The tree is standing within the project area earmarked for construction of Curative Tank / CCT. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
74.	79	Arali (Ficus religiosa)	3.00	4.00	The tree is standing within the project area earmarked for construction of Curative Tank / CCT. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.
75.	82 / 82A	Tamarind ( <i>Tamarindus</i> <i>indica</i> )	1.00 / 1.20	2.45	The tree is forked, and standing within the project area earmarked for construction of Road. In consideration to the girth and field condition (roots are partially exposed preventing the excavation of desired root ball), the tree is recommended for felling.

**TOTAL NUMBER OF TREES FOR FELLING = 75 Nos.** 

Tree Officer &

Deputy Conservator of Forests,

BBMP, Bengaluru