

Tree Cutting for Metro Line -3, Stations and TBM Shafts

- A. 1. Number of trees impacted as per EIA report by RITES(Sep.2012): 595
 2. Number of trees impacted including trees retained as per updated EIA report by GC (Jan. 2016) for stations: 4255
 3. **Tree impacted including trees retained as per Contractor submission to Tree Authority for stations: 4175**
 4. Reduction in no. of trees in contractor proposal to tree authority against GC survey: - 80 less.
 5. **Tree impacted including trees retained as per Contractor submission to Tree Authority for MML3 Project including stations, TBM shafts, Ramps, Casting yard etc. (Excluding Crashed Depot)-4997**
 6. **Details of Trees impacted for MML-3 Project (Excluding Car Depot)**

S.No	Tree Details	Numbers
i.	Trees to be retained	1401
ii.	Trees to be Transplanted	2042
iii.	Trees to be Cut Permission	1554
iv.	Trees Transplanted (as on date: - 10/12/2018)	1464
v.	Trees cut (as on date: - 10/12/2018)	1274
vi.	Trees planted on degraded forest through SGNP (Including Mortality)	22,100
vii.	Trees Planted at Various places in Mumbai within MCGM area.	2894
viii.	Total Plantation done	24,994
ix.	Additional trees to be planted after project work completion at 26 Stations.	2801

* Work of tender award for in-situ plantation after station work is in progress for 2 packages. For remaining one package bidding process is in progress. As per undertaking, trees of 18-24-inch girth will be planted. Maintenance period for both compensatory and in-situ will be for three years.

- B. **The EIA report** prepared by RITES in Sep. 2012 was based on broader issues. At this point of time detailed engineering of the project was not done. The detailed Engineering assessment, construction methodology, station designs, entry and exit points were finalized by General Consultants. As per GC report (Jan.2016) trees impacted are to be 4255. Thereafter, contractors did the final detailing of the execution plan of the station construction activities, as per which number of trees along the whole alignment for station construction activity comes out to be 4175.
- C. **Procedure for obtaining permission from tree authority** for tree cutting and tree transplantation is stipulated by Tree Authority. Stages of such procedure are shown as below:

Stages in Approval Process by Tree Authority

Stages of Tree Authority Approval	
Stage I	Submission of application to respective Dy. Superintendent of Garden Zonaloffice
	Scrutiny of proposal by concerned Assistant Superintendent of Garden/Horticulture Assistant /Junior Tree Officer
Stage II	Site inspection by concerned officer of respective ward of MCGM
	Submission of inspection report by MCGM Zonal office
	Receipt of approval from Superintendent of Garden /Tree Officer
Stage III	Inspection and Remarks of Tree Authority members
Stage IV	Advertisement in local Newspapers and Display of Notice on each tree for publicinformation
Stage V	Hearing before Superintendent of Garden on Objections / Suggestions filed by theCitizens
Stage VI	Inclusion of Proposal in Tree Authority Meeting Agenda
Stage VII	Post Approval of Tree Authority – Payment of Processing fees and Deposition of Fee
Stage IX	Receipt of Approval from MCGM

- Proposal of tree cutting, tree plantation and transplantation is reviewed by tree officers of MCGM before granting final permission

D. Tree cutting/Transplantation activity is being monitored by the Team of Environmental Experts of GC, Environment division of MMRC, Tree Officers of MCGM& High Court appointed Committee in the following manner.

- Officers of the Environment Cell visiting the sites of respective packages where Tree Cutting, Preparation for Transplantation of Trees & Transplantation in progress. During the visit appropriate guidance is provided to the Contractor/Sub-contractor engaged in the activity. Shortcomings observed are brought to the notice for improvement in the practices. It is also ensured that Trees earmarked for cutting/ Transplantation are cut/ Transplanted as per permission granted by Tree authority.A Checklist is prescribed on procedure to be followed which would be confirmed by Horticulturist of the Contractor, Site Inspector of GC and Station Manager/Site in Charge of the Contractor by Signing it. Tree Officer of Concerned ward, MCGM is Visiting Various Sites of Tree Cutting, Preparation for Transplantation of Trees & Transplantation site and verifying the practices adopted and ensuring as to whether the trees cut / Transplanted are in consonance with the permissions granted by Tree authority.

- Committee of Two officers Nominated by Hon'ble High Court have visited to all 26 stations. Officers of Environment Cell, Respective Packages of MM RC, GC and Tree officer of MCGM remained present during the visit. The committee is verifying the fact that only those Trees are cut /transplanted which are permitted for cutting Transplantation by the Tree authority of MCGM.
- E. All the 7 packages contractors have submitted **Method Statements** to GC for review and approval. GC has reviewed and issued no objection with certain comments.
- F. **Credentials of tree Transplanting (and cutting) agencies** appointed by contractor have been reviewed and approved by GC. The credentials reviewed include the experience of the agency, qualification of the staff, availability of skilled man power and availability of necessary equipment with the agency.
- G. GC has organized two workshops (26thOct. and 16thDec. 2016) for all the 7 package contractors staff handling tree proposals and MMRC officials along with GC project staff. The objective is to bring in awareness on the tree approval process and guidelines for tree protection on site, tree transplantation.
- H. **Metro-3 will take off 5.54 lakh vehicle trips from the road in 2031 and save fuel consumption to the tune of 2.95 lakh liters per day.**
- I. **The 3596 trees removal for MML-3 project excluding car shed depot will reduce emission (CO2) absorption by 78 ton/year. However, once operational, Metro-3 will reduce the emission of CO2 and Green house gases to the tune of 9907 ton/ year as per DPR. For the same environmental benefit City would require planting more than 4.5 Lakh trees which require 726 ha. land.**
- J. As per the latest tree census, there are more than 26 Lakhs trees in Mumbai and only 3596 trees are getting affected by Metro-3 project excluding Car shed Depot.
- K. The decision to appoint Arborist through GC was a proactive decision taken by MMRC in December 2016. to ensure that all contractors' follow appropriate and scientific methods of tree transplantation and achieve better survival rate. An Expert Arborist has Advisory role on tree issues.