Maharashtra Industrial Township Limited (MITL)

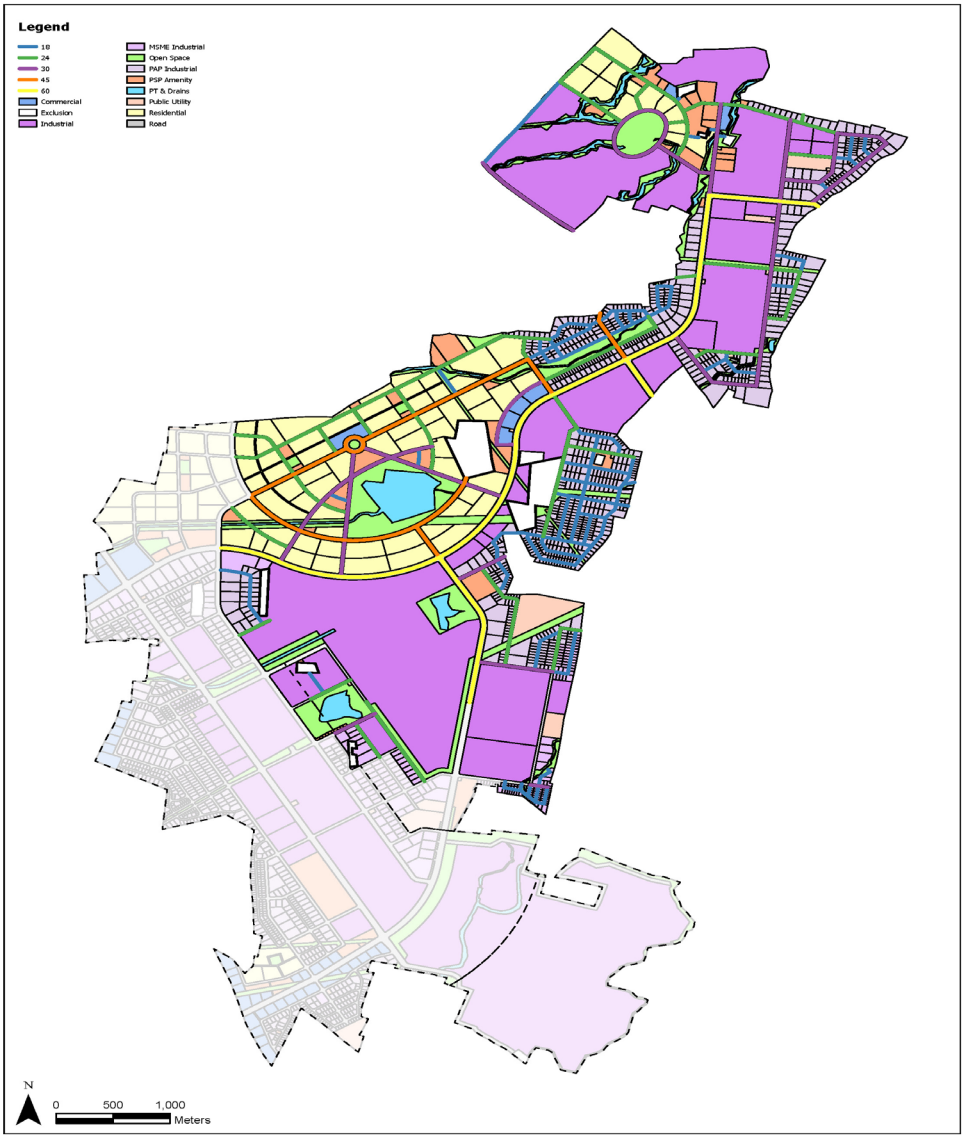
Design, Construction, Testing, Commissioning, Operation and Maintenance of Infrastructure Works at AURIC - Bidkin Industrial Area (BIA), Sector B & C on EPC Basis

Request for Proposal cum Request for Qualification

Volume II - Technical Specifications

Part B - Avenue Plantation for Sector A,B & C

November 2026



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1 General Description

This Scope of Work (SOW) outlines the specific requirements for the development of avenue plantation. The contractor will be responsible for the successful completion of all tasks as specified herein.

1.1 Objectives:

The primary objectives of the avenue plantation are:

a) To improve air quality and reduce pollution.

b) To provide shade and reduce the urban heat island effect.

c) To create a more pleasant and comfortable environment for pedestrians and motorists.

d) To enhance the aesthetic appeal of the designated avenues.

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2 Scope of Work

The scope of the project includes all sectors, including already developed roads without avenue plantations but not limited to:

2.1 General

a) The Contractor shall design, supply, execute, establish and maintain all avenue plantation works, including irrigation and protection systems, along all road rights-of-way (ROWs) in Sectors A, B & C, including existing developed roads without avenue plantation. The scope shall include all horticultural operations, procurement of plant material, inspections, necessary approvals, labour, materials, tools, equipment, transportation and coordination with existing infrastructure and utilities required to complete and maintain the works in accordance with the Tender Drawings, specifications and approved detailed designs, within the Contract Price.

b) Plantation shall maintain the sight distances, visibility splays, pedestrian and cycle clearances, and access to utilities required by the applicable standards. Species, locations and mature canopy/root spread shall be coordinated with pavements, drains, lighting, signs, junctions and underground and overhead services. Root barriers and protection measures shall be provided wherever required by the approved design.

c) The Contractor shall provide, test, commission and maintain a complete drip irrigation system, including necessary connections, storage, pumping, filtration, controls, pipelines, emitters and protective arrangements. Water quantity, quality and irrigation frequency shall suit the plants, soil and prevailing weather. Water supply responsibilities and charges shall be as expressly stated in the Contract, and backup watering shall be provided during interruptions.

d) The Contractor shall maintain all plantation from the date of planting throughout construction and the four-year O&M period, commencing as stipulated in the EPC Agreement. The 12-month establishment requirement shall operate within these contractual periods and shall not create a separate or conflicting commencement date. Maintenance shall include watering, irrigation repairs, weeding, pruning, soil improvement, plant protection and replacement of dead, missing, diseased or defective plants within the Contract Price.

e) At completion and final handover, all scheduled planting positions shall contain healthy plants complying with the specified species and quality requirements, and the irrigation and protection systems shall be fully functional. The Contractor shall submit the updated geo-referenced plantation inventory, replacement records, as-built irrigation drawings and maintenance records. Outstanding replacements and defects shall be rectified before acceptance

f)

g) Any items not specified nor specifically shown in the drawings but are generally required as per good industry/engineering practice and meeting project requirements are considered part of the work and deemed to be included in this contract and their execution shall be covered by the contract price, in the same manner as if they have been expressly shown on the drawings and described in the specifications.

2.2 Design and Details

a) The contractor shall work out detailed plantation designs based on the IRC guidelines and designs provided in the tender drawings. The proposed plantation palette must align with the tender specifications, EIA report, and CPCB guidelines. The detailed plantation designs and drawings shall be submitted to the Employer's Engineer for approval.

b) Plantation design for avenues and junctions should consider sight line requirements as per the IRC guidelines.

c) The contractor should mandatorily adhere to the planting specifications and drawings indicated in the tender document. In case of non-availability of any species for reasons not attributable to the contractor, the contractor may propose a species of low-maintenance native plants that are well-suited to local climatic conditions, have high survival rates, and provide high habitat value for review and approval by the Employer's Engineer.

d) The plantation plan shall be designed in coordination with lighting, utilities, and signage plans. Trees must be pruned from the bottom such that all safety devices and signage are visible clearly to all road users.

e) Any discrepancies in the design due to execution hurdles and required alterations should be reported to the PMNC. The contractor shall proceed with work only after obtaining approval for the modifications.

f) The Contractor shall furnish all drawings listed as follows but not limited to

i. Plantation Plans/designs for each ROWs and Junctions

ii. Typical Cross Sections of Plantation for each ROW

iii. Standard Drawings

iv. Irrigation

2.2.1 Additional Drawings

If the Employer's Engineer determines that additional drawings are necessary for fulfilling its obligations under this Agreement, beyond those already specified, it may request the Contractor to prepare and provide these drawings promptly.

2.3 Soil Testing & Tree Survey

2.3.1 Tree Survey

The contractor shall carry out a tree survey for the ROW. All existing trees must be identified, numbered, and marked on a Survey Plan. The survey shall generate a tree inventory of existing trees, showing location, species, height, girth diameter, canopy size, and reference number duly shown on the plan. The trees at the site to be numbered and marked with paint including the identification of trees, which are proposed to be retained or transplanted or removed in specific cases. The geo-referenced survey map shall be submitted to the Employer's Engineer/PMNC for approval.

The survey should also identify sensitive trees that have nesting, roosting or providing specific habitat to faunal species. Heritage trees are to be marked separately.

A detailed procedure for handling affected trees, orchids on trees, shrubs, and ground flora is to be worked out and submitted. The treatment can include practices like the transplantation of trees, and relocation of shrubs, and orchids. This may need nursery support to be sought out by the contractor by either establishing a temporary nursery or collaborating with a local nursery.

2.3.2 Soil Testing

The contractor should obtain a soil test report to verify the soil type, depths, and pH values. Every six months, or as required due to poor plantation performance, the contractor shall conduct soil tests. Measures shall be taken to maintain the pH value within the recommended range.

2.4 Preservation of Existing Features, Vegetation and Services

2.4.1 Existing Topsoil and Subsoil

a) The existing topsoil layer up to 1 ft, displaced due to excavation or levelling during construction, should be stored separately in a designated area. It should be used in median verges or buffers along sidewalks/cycle tracks for avenue tree plantation or in other areas for green belt development, open spaces, or nursery development.

b) The topsoil shall be stored at a higher elevation to prevent flooding during the monsoon season.

c) The area shall be cleared of vegetation or any construction waste and shall be left undisturbed during the construction process.

d) If the topsoil is reasonably dry and friable, it shall be heaped to a maximum height of 3m. Compaction of the surface should be done.

e) To prevent erosion, stockpiled topsoil should be planted with grasses or other suitable vegetation, if left for a period of more than two weeks. Precautions should be taken to avoid the growth of invasive species to maintain soil quality.

f) The underlying mineral soil, if applicable, shall be stacked separately and can be reused for various purposes like brick making, filling, or creating landscape features.

2.4.2 Existing Trees

a) Trees falling within the median, landscape buffers, and along sidewalks & cycle tracks must be retained. Each such tree should be protected with suitable barricades/structures (maybe using local materials like bamboo, grass stacks etc) during the construction stage.

b) Transplantation should be preferred over tree cutting. The contractor should evaluate the success rate of transplantation and submit the feasibility to the Employer's Engineer/PMNC for approval.

c) All trees or branches that are required to be cut shall be stored separately and used as fuel wood during tarring.

2.4.3 Excavation:

Do not excavate by machine within 1 m of underground services.

2.5 Tree Transplantation

a) To preserve mature trees along existing roadsides, transplantation may be considered within a reasonable distance from their current location. Transplantation should be carefully planned and executed based on the season, utilizing specialized equipment and expertise. Post-transplantation care is essential for successful tree survival.

b) As per the EIA report, at least 20% of fully grown trees that are required to be removed must be transplanted.

c) Mapping: A map and quantity of trees proposed for transplantation should be submitted to the Employer's Engineer or PMNC for approval, along with relevant tree details and photographs.

d) Marking: Trees scheduled for transplantation should be marked clearly using a non-harmful, visible, and easily removable method.

e) Flora and Fauna inspection: Trees should be inspected for the presence of flora and fauna. If fauna is found, cease removal operations, and contact a rescue center, or local forest department for further guidelines on how to handle the wildlife. Do not carryout any such operation without expert involvement from forest department and their permission.

f) Guidelines for Tree Transplantation:

   i. A planting ratio of 1:2 must be maintained for transplanted trees, meaning two new trees should be planted for every transplanted tree.

   ii. The contractor should hire a specialized agency with at least 10 years of experience in tree relocation and be recognized by IS standards.

iii. Tree protection barriers should be installed around existing trees adjacent to transplantation operations.

iv. Any trees damaged or destroyed, proposed to be retrained, will be replaced with similar species, size, and quality at the contractor's expense.

v. The contractor should define evaluation criteria to enhance the success rate of tree transplantation.

vi. A transplantation methodology should be developed based on IRC: SP:119-2018 and approved by the Employer's Engineer/PMNC.

vii. Suitable locations for transplantation should be identified based on tree details, soil type, moisture, pH values, and other relevant factors.

2.6 Tree Cutting

a) Mapping: A map and quantity of trees to be removed should be submitted to the Employer's Engineer for approval, along with relevant information and photographs.

b) Marking: Trees and shrubs to be removed should be marked clearly using a non-harmful, visible, and removable method. PMNC shall verify the same.

c) Approval: Obtain necessary approval from the tree-cutting authority before removing any trees.

d) Flora and Fauna inspection: Trees should be inspected for the presence of flora and fauna. If fauna is found, cease removal operations, and contact a rescue centre, or local forest department for further guidelines on how to handle the wildlife. Do not carry out any such operation without expert involvement from the forest department and their permission.

e) Orchids, if present on the trees, shrubs, etc. and tubers, in the ground shall be removed and replanted in a designated place or in the plant nursery. These can be used during plantation works on hillocks & reserved forest buffers.

f) Removal: Remove trees in a safe and approved manner, following industry standards and protocols. Damage should not be caused to the trees or vegetation to be retained and infrastructure that is laid.

g) Guidelines for Tree Removal

i. After the permission is granted in writing, and if any terms are to be fulfilled, they should be noted and taken into consideration during or after the felling of the trees.

ii. As per the EIA report, the plantation ratio for felling trees is 1:5 or as per decision of Tree Committee, wherein 5 trees must be planted against the one fallen tree. The proposed locations of these new trees shall be indicated clearly on a map and submitted to the Employer's Engineer/PMNC for approval.

iii. Trees should be cut as close to the ground as possible.

iv. Branches of the trees that can regrow by cuttings to be handed over to the nursery for making saplings. Eg all ficus species

v. Trunks to be cut to convenient lengths.

vi. Root stumps shall be removed to a minimum depth of 1500mm below ground level. These root stumps can be used in replanting work so to be handled in the nursery or replanted immediately to pre-planned areas.

vii. The wood generated is to be reused as fuelwood.

viii. Any debris or material generated during the tree removal process should be managed in accordance with the Waste Management Plan.

2.7 Control and Protection

2.7.1 Dewatering:

Ensure drainage and avoid ponding of water around the base of trees to be protected.

2.7.2 Anti-termite Treatment

a) Any of the chemicals as per the relevant Indian Standard codes shall be applied by pressure pumps, uniformly over the area to be treated.

b) The method of application and the stages it will be applied shall be submitted for approval and this shall conform to relevant IS codes.

c) All work must follow health and safety procedures, and avoid application during unsuitable weather (rain, strong winds, heat waves).

d) Chemicals should be stored in sealed containers, brought to the site in adequate quantities, and kept in cool, locked stores.

e) Concentrated chemicals should be diluted with water using graduated containers to achieve the desired concentration.

f) Hand-operated pressure pumps with graduated containers should be used for uniform spraying and proper penetration.

g) Treated soil barriers should not be disturbed after formation, and any disturbances should be promptly addressed to maintain continuity.

2.7.3 Fertilizer Treatment

a) Use neem cake as a natural fertilizer for trees. Neem cake provides essential nutrients, acts as a pesticide, and promotes plant growth.

b) Chemical pesticides or fertilizers should not be used during planting or maintenance.

2.7.4 Protection of Existing Trees within ROW

a) Placement of Tree Enclosures:

b) Place enclosures around trees to be retained, avoiding the root zones unless necessary. Enclosures should be at least 1000mm away from the tree.

c) Root zone Protection:

d) Protect root zones outside enclosures with wood planks and rubber matting.

2.8 Work near trees to be retained

2.8.1 Harmful materials:

a) Keep the area around trees free of construction materials and debris.

b) Avoid placing bulk materials or harmful substances near trees.

c) Do not place excavation spoil within the primary root zone.

d) Prevent harmful materials such as cement, concrete dust, washed aggregate, concrete, mortar, plaster wash, oil, chemicals, solvents and paints from entering the root zone.

2.8.2 Damage:

Protect tree bark from damage.

2.8.3 Alignment and Excavation:

a) Pathways, utility alignments and extent of earthworks shall be marked clearly before starting work to review its impact on trees to be retained.

b) If excavation is necessary within the primary root zone, use hand methods to minimize damage to roots.

c) Excavations in the primary root zone of trees to be retained shall be opened up for as short a period as possible.

d) Pits for plantation along hard rocky areas should be dug using a breaker machine.

2.8.4 Root Handling:

a) Avoid cutting roots larger than 50mm in diameter.

b) For smaller roots, use a hand saw or chain saw and apply a rooting hormone to promote new growth.

c) Do not apply paint to cut roots.

2.8.5 Root hormone treatment:

a) If roots are exposed during excavation, apply root hormone solution directly to the cut surfaces.

b) If roots are not exposed, drench the soil surface with the root hormone solution.

c) Follow the manufacturer's recommended application rates and intervals.

2.8.6 Root protection:

a) Protect exposed roots for more than 24 hours and up to 1 week with peat or compost and maintain moisture.

b) Use temporary root barriers for periods exceeding 1 week.

c) Backfill excavations with appropriate topsoil and compact carefully.

2.8.7 Backfilling:

a) Backfilling around roots shall be done using topsoil type A.

b) The backfill should be placed in layers of a maximum 300 mm depth.

c) Each layer should be compacted to a dry density similar to the original or surrounding soil to stability and prevent settling.

d) Avoid piling backfill to a height greater than the original ground surface.

e) Water the root zone immediately after backfilling.

2.8.8 Compacted ground:

a) Do not operate heavy machinery within the primary root zone.

b) De-compact soil if necessary, using approved methods.

c) Use timber planks to protect the root zone.

2.9 Execution/Plantation

2.9.1 Procurement Phase

1 Sourcing of saplings

a) Species shall be procured as per specifications only.

b) Choose healthy, vigorous saplings 2.5-5 feet tall with well-developed root systems.

c) Store saplings in appropriate bags to protect them from sun and weather.

d) The age of any sapling at the time of plantation shall not be less than 2 years.

2 Tree Health:

a) Ensure saplings are free from diseases, pests, and defects such as knots, windburn, sun-cold, injuries, abrasion, or disfigurement.

b) Check for healthy root systems and proper form.

3 Specification of Trees

a) Adhere to the specified height, age, and foliage requirements mentioned in the specifications.

b) Contractor shall mandatorily use the species as specified in the tender design/drawings. In case of unavailability of any of the species as per specifications, the alternate species shall have to be approved after due confirmation of the Employer's Engineer/PMNC.

2.9.2 Preparation Phase

1 Pit Size

Minimum Pit Size (refer to Annexure IV)

a) For large trees along the roads - 0.75m×0.75m×0.75m

b) For medium trees along the roads - 0.60m×0.60m×0.60m

c) For large trees at road intersections - 1.0m×1.0m×1.0m.

d) For Shrubs/Medians - 0.30m×0.30m×0.30m.

2 Preparation of Soil and Pits

a) Utilize the topsoil that is preserved and enhanced during road excavation work. If necessary, supplement this topsoil with mineral soil that has been stored separately. If the available topsoil is insufficient, import fertile soil from agricultural fields located off-site for all plantation activities.

b) Preparation of pits must be completed in the summer season from February to May.

c) After exposing the pits to direct sun for 15 days, fill them with:

d) If the on-site soil quality is good, use 60 % site soil.

e) In the absence of good quality site soil, use 30% site soil and remaining 30% to be imported.

f) The pits should be filled with the following components:

Table 2-1 Details of Soil Mix

Sl. No.	Components	Quantities per saplings	Unit
1	Soil	2 ghameli	brass
2	Bagasse or crop residue: preferably fine-chopped	2 ghameli	brass
3	Compost	2	kg
4	Coco peat	1	kg
5	Neem pend/Cake	0.25	gms
6	Bamboo stake	1	units

Additives and soil conditioners shall be applied as per requirements to maintain pH value of the soil between 7.0 and 7.5 before plantation works.

2.9.3 Implementation Phase:

1 Planting

a) Plant the saplings as per the approved plantation plan during the monsoon season, typically in the 2nd or 3rd week of June. However, the planting time may vary depending on local weather conditions and water availability.

b) Plant the tree with the root ball intact (tin grown/poly bag grown), carefully removing the container without disturbing the roots. Collect the plastic bags should be collected separately, count them, and deliver them to identified plastic recycling facility.

2 Watering:

a) Water the plants approximately 3-5 litres every other day during October-February and daily during March-June. Continue watering if there are inconsistent rains or sunny days.

b) Use of drip irrigation system for watering with design and engineering duly approved by the Employer's Engineer is mandatory.

3 Mulching:

Apply a 2-foot heap of local grass or mulch around the base of the plants to maintain soil moisture, reduce evaporation, and provide organic matter.

4 Shading:

Ensure shading for saplings during high temperatures or summer months to protect them from heat stress.

5 Fertilization:

Use 1kg of vermicompost to each plant for 2 years in March to enhance soil fertility and nutrient availability.

6 Staking

Bamboo stakes shall be used provide support to saplings and protect from bending & toppling due to the wind pressure.

2.9.4 Scheduling of Plantation Works

a) The scheduling of plantation work shall be synchronized with the implementation timeline of infrastructure works.

b) Plantation works shall be carried out only after utilities are installed and the primary irrigation network is in place.

c) The contractor shall submit the detailed implementation plan outlining the schedule of activities based on IRC: SP:119-2018 to the Employer's Engineer/PMNC for approval.

2.10 Maintenance during Execution Phase

a) The contractor shall develop a comprehensive maintenance manual, specifically tailored to the avenue plantations, to ensure the long-term health and vitality of the plantation. This manual should include detailed specifications for:

i. Plant Care:

1 Watering schedule (frequency, duration, and methods)

2 Fertilization plans (types of fertilizers, application rates, and timing)

3 Pruning guidelines (techniques, timing, and removal of dead or diseased parts)

4 Pest and disease control measures (identification, prevention, and treatment strategies)

ii. Soil Management:

1 Soil testing recommendations (frequency and parameters)

2 Amendments and improvements (organic matter, pH adjustment, and drainage)

3 Mulching practices (types of mulch, application rates, and benefits)

iii. Irrigation Systems:

1 System design and components

2 Maintenance and cleaning schedules

3 Troubleshooting guidelines

iv. Safety Considerations:

1 Hazard identification and mitigation

2 Emergency procedures

3 Personal protective equipment (PPE) requirements

v. Record Keeping:

1 Maintenance logs (date, activity, and observations)

2 Plant health records (growth rates, flowering, and fruiting)

3 Pest and disease control records

b) The maintenance manual should be clear, concise, and easy to understand, with illustrations or diagrams where necessary. It should be submitted to the Employer's Engineer/PMNC for review and approval before the start of the maintenance period.

c) Before the official maintenance period begins, the contractor must ensure that planted trees and shrubs are healthy and thriving.

d) The contractor shall facilitate the following maintenance activities during the execution phase as needed:

i. Replacement of dead/missing plants
ii. Watering
iii. Soil cultivation and loosening
iv. Weeding
v. Pruning and clipping
vi. Pest and insect eradication
vii. Mulching
viii. Fertilizing

2.11 Maintenance during Operation & Maintenance Phase

a) The contractor shall maintain the works for the period of 4 years. The employer/Employer's Engineer reserves the right to terminate the maintenance period at any time without additional charges to the EPC Contractor.

b) The contractor's horticulturist shall inspect the site daily and submit weekly or monthly reports to the Employer's Engineer/PMNC indicating progress of work, actions taken and pending tasks. Weekly reports shall also outline planned operations and target dates.

c) Plantations will be inspected, and remedial works will be listed. These works must be completed before the next inspection.

d) At the time of handover, plantations should be well-maintained and disease-free.

e) Contractor shall maintain nurseries during the O&M period with the sapling numbers and species as agreed with MITL. At the time of handover, all nurseries set up on the site by the contractor shall be handed along with the healthy number of saplings as agreed with MITL.

2.11.1 Litter (solid waste) Removal and Clean Up

a) All non-vegetative litter (e.g., paper, cans, refuse) shall be regularly collected and disposed of properly. The frequency of litter removal shall be determined based on the required maintenance level and the amount of litter accumulated.

b) Vegetative litter, such as leaves, on the carriageway, sidewalks, or cycle tracks can be retained at the base of plants to serve as a natural mulch. This practice helps retain moisture and provides nutrients for the plants, reducing the need for additional composting or disposal. If excessive litter accumulates, it should be disposed of in an approved manner according to the waste management plan.

c) Clean up after maintenance practices such as mowing, shall include sweeping or blowing of paved areas and sidewalks.

3 General Conditions for Avenue Plantation Work

a) The Contractor shall make himself conversant with the project location and the work to be carried out so that the Contractor clearly understands the scope of work and assesses the manpower requirement. The Contractor may visit the site for this purpose.

b) The development period shall be 12 calendar months from the date of planting of all the plants in a specified zone or till the time the planting is established, whichever is later. This period includes routine maintenance tasks such as watering, fertilizing, weeding, and applying necessary chemicals (insecticides, herbicides, pesticides, and fungicides). If a plant, shrub, or bulb dies or is destroyed, it must be immediately replaced at no additional cost with a plant of the same species and size. Routine maintenance tasks like soil works, plant replacement, applying fertilizer, and watering are expected. If maintenance is not performed satisfactorily, the Employer's Engineer may extend the maintenance period and/or withhold maintenance payments.

c) To ensure efficient project coordination, the Contractor must submit a detailed work schedule outlining the development and maintenance of the plantation before starting work on-site. This schedule should include specific dates for material delivery, a breakdown of work stages with corresponding completion dates, and a target date for final project completion. Under no circumstances should the quality of the completed work be compromised to meet deadlines.

d) Landscape Contractor must submit a weekly/monthly report indicating the progress done/reasons for delay in completion of any works.

e) A daily report regarding the number of labourers employed at the site and delivery notes for all plant materials delivered to the site shall be delivered by the Landscape Contractor to the Employer's Engineer/PMNC.

f) Nursery Establishment and Maintenance

The contractor shall establish a nursery within 8 months from the commencement date with optimal microclimatic conditions for storing and propagating plant and shrub saplings intended for streetscape development. This nursery should be scalable to accommodate additional saplings for other landscape zones, as needed. The location, layout, and size of the nursery will be finalized in consultation with the Employer's Engineer/PMNC.

g) Manpower Requirements

The contractor shall employ qualified, experienced, and sufficient garden supervisors to ensure the quality of the plantations. A senior supervisor with a minimum of a Master of Science (Horticulture) or Bachelor of Science (Agriculture) degree and 8-10 years of relevant experience will be the overall in-charge. The deployment of additional maintenance staff will be determined based on a detailed maintenance schedule.

i. To evaluate maintenance work, a joint inspection will be conducted on the 25th day of each month, or the 1st working day following that date.

ii. The contractor shall be responsible for any replacement towards mortality of trees or shrubs.

iii. The Certificate of Completion will not be issued until all plants scheduled on the Drawings and Schedule of Works are installed in a healthy condition and meet all specifications.

iv. The contractor shall maintain on-site records of all maintenance and operational activities and submit weekly reports to the Employer's Engineer/PMNC.

v. The contractor shall provide routine progress evaluation reports of transplanted trees until the end of the maintenance period.

4 Annexures

4.1 Annexure I: Definitions

a) Drip line: The outside extent of the tree canopy outlined on the ground.

b) Root zone: Area of roots around trees extending to the edge of the Primary root zone.

i. Primary root zone: A radius extending 10x the trunk diameter measured at 1400mm above ground level.

ii. Critical root zone: A radius extending 5x the trunk diameter measured at 1400mm above ground level.

iii. Site-improved topsoil type A: This refers to topsoil that has been enhanced or modified to improve its quality for planting.

c) Imported topsoil type A: This is topsoil that has been brought in from an external source.

4.2 Annexure II: List Of Standards

a) IRC: SP:117-2018 Manual on Universal Accessibility for Urban Roads and Streets

b) IRC: SP:119-2018 Manual of Planting and Landscaping of Urban Roads

c) IRC: SP:21-2009 Guidelines On Landscaping And Tree Plantation

4.3 Annexure III: Recommended Plantation Palette

4.3.1 Summary of Proposed Avenue Plantation Quantities – As per ROWs

Sr. No.	Theme for tree plantation	Planting specifications- Trees	Planting Specifications- Shrubs
1	Shade	2 trees species: 10 Shisam, 10 Karanj alternate / per section between 2 junctions at 5m c-c distance	Shrubs between two trees: 4 Shrubs at 1m c-c
2	Colour (Yellow)	2 species: 10 bahawa, 10 shivan / per section between 2 junctions at 5m c-c distance	Shrubs between two trees: 4 Shrubs at 1m c-c
3	Vertical canopy trees/Palm	1 species: Satwin / per section between 2 junctions at 6m c-c distance	Shrubs between two trees: 4 Shrubs at 1m c-c
4	Fragrance	2 tree species: 10 Muchkund, 10 Bakul alternate / per section between 2 junctions at 5m c-c distance	Shrubs between two trees: 4 Shrubs at 1m c-c
5	Shade	2 tree species: 10 Shisam, 10 Karanj alternate / per section between 2 junctions at 5m c-c distance	Shrubs between two trees: 4 Shrubs at 1m c-c

Note: Contractor may propose alternative trees and shrubs species suitable for the local climate while maintaining the theme of tree plantation

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