Hardscape Guidelines:

I) Stone paving:

1. Natural stones in pedestrian areas over filled up area or real ground should be less thickness – not more than 19- 25 mm. Only for fire tender movements, it can be 40 mm or more based on the stone selection.

2. The finish of the stone should be rough, textured, river washed, bush hammered, sand blasted (only machine based finish to be used) or calibrated to create an anti-skid surface in exterior areas. Polished stones and flamed finish stones not to be used. Minimum groove of 3mm to be provided and to be filled with epoxy grout.

   i. Sample Approval & lot inspection:
   All natural stones used in hardscape must have sample approval done (including actual usage size, shape and surface treatment finish signed off) and 2-3 samples should be kept at site and office. Before receipt at site, CM finishing, Material Management & Quality team to inspect the lot/batch at actual size & shape. & any lot/batch not matching with the approved sample to be rejected by CM finishing team, Material Management & Quality team and needs to be replaced by vendor. CM finishing team, Material Management & Quality team to ensure only lot/batches which are approved on inspection are delivered at site.

   ii. Cleaning & Protection:
   After laying & polishing of flooring is complete, entire surface to be cleaned using pressurized water and covered with thick plastic sheet's/flute board for horizontal surface and adhesive plastic sheet/flute board or ply for vertical surface. Any cutting for nahani trap or switch plates shall be done using a pre-made 'pharma' to ensure cutting in proper shape; rotary cutter with carbon or tungsten bits are ideal for cutting procedure.

   iii. For granites cut on site from random slabs, CM team and Design team should review the design wastage before cutting & laying the final flooring to ensure it is within allowable limits

   iv. Above mentioned points to be followed in both FLO (Lodha supplied material) and FMLO (vendor supplied material) contracts.

3. Finish for vertical edges of planter walls should be preferably dark stone cladding to avoid staining of the mud water. The thickness of the stone should be kept minimum – 19-25mm. Use of sliced marble / granite can be beneficially used to reduce the cost.

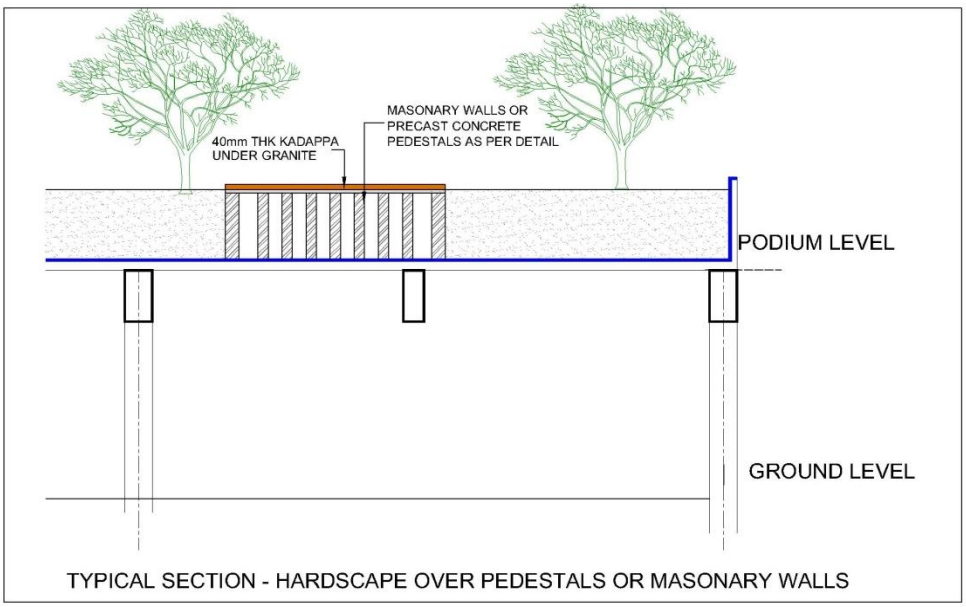
4. On podiums, light weight filling under hardscapes should be avoided – either with design levels or slab grid design as per specific soil depth of trees or shrubs or Fire tender movements. Area for fire tender movement can be differentiated by differential in levels or introducing landscape features which would not allow the fire tender to stray into area it is not supposed to.

5. On podiums, light weight filling can also be reduced "by reducing the width" of pathways or extent of hardscape in one area – hence more softscape.

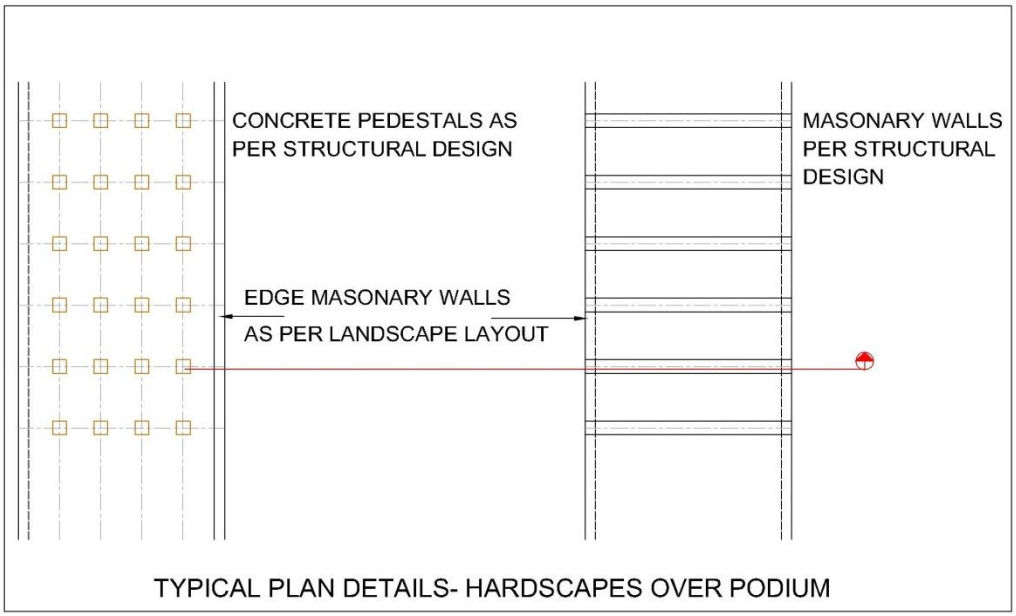
6. Following methodologies can be used as alternatives to the light weight fill based on the approval by structural team for each project. (Refer sections below).

    a. The space under the stone paving and slab top can be void with supporting masonry walls as per structural detail, for areas earmarked as pedestrian walkways.
    b. A pedestal system can be used as an option.

7. For stones to be laid over masonry walls or pedestals as mentioned in point no. 6, the thickness of the stone should be minimum 30mm. In case the granite or similar stone with less thickness (19mm) to be used, a 40mm thick Kadappa can be used as a under layer to avoid breakage of granite.



TYPICAL SECTION - HARDSCAPE OVER PEDESTALS OR MASONARY WALLS



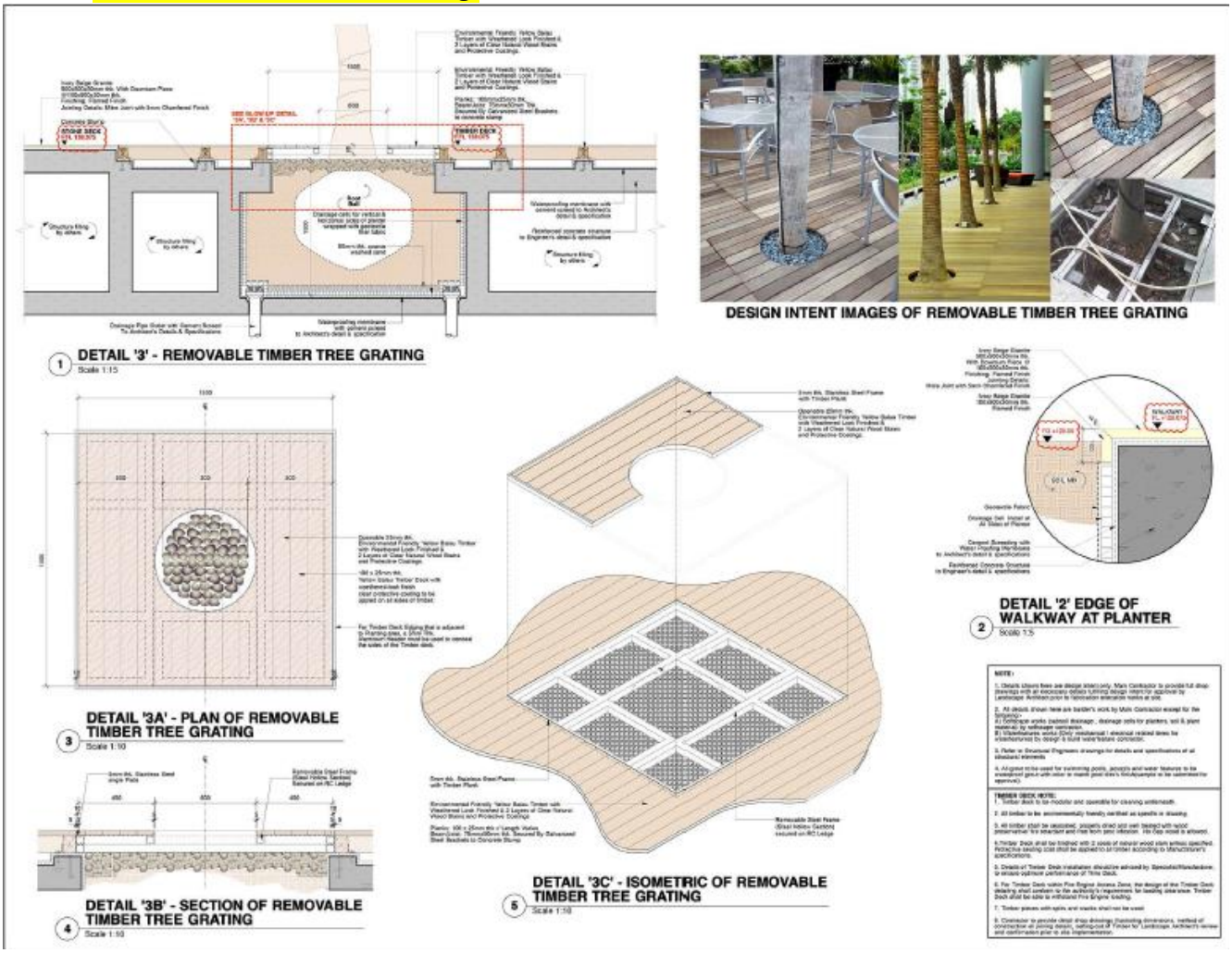
TYPICAL PLAN DETAILS- HARDSCAPES OVER PODIUM

II) Timber decking:

1. The fixing methodology, as per manufacturer's specs to be finalized during the design development stage. Nailing from the top should be avoided.
2. The water drainage system to be designed to avoid any stagnation after execution. All the surface water of the pool deck should be drained away from the swimming pool.
3. The edges of tree pits or pools and patterns of the decking to be designed based on the available sizes of the material to reduce wastage.

III) Tree pit details to be as per annexure's below:

Annexure 1: For timber decking.



Annexure 2: For Stone flooring:

