DESIGN & CONSTRUCTION NOTE STREET TREE SPECIFICATION

STREET TREE AND IRRIGATION DESIGN

- The contractor or consultant shall collect soil samples from the planned planting site. If pH is not neutral, soil remediation is required.
- It is recommended that an accredited soil scientist be engaged to carry out the site soil validation pre and post remediation.
- Preference should be given to the selection of neutral to high pH (alkaline) soil adapted species for tree planting. Where this cannot be achieved, soil remediation will be required to adjust soil pH.
- Where soil remediation is required, the contractor is to apply Ferrous Sulphate Tetrahydrate in accordance with the manufacturer's requirements to achieve the required pH levels.

## Structural Soils

- Structural soils may be used where existing site conditions do not enable the installation of structural cells and/or to make up additional / target soil volumes.
- Structural cells may be used in addition to structural cells in instances where they enable a connected trench for tree roots or a greater rootable soil volume around existing utilities or infrastructure
- Note that structural soil products are typically only 1/3 soil (2/3 ballast). Soil volume calculations must take this into account.
- Structural soils can and should be installed around existing utilities. Some utility providers may require protective conduits or barriers to their infrastructure prior to compaction. Adhere to all utility providers requirements working around existing services.
- Preferred product Eclipse Structural Soil or approved equivalent.
- Structural soil to adhere to AS4419:2018 Soils for Landscape and Garden Use;
- Sample of structural soil (1kg) shall be provided to the City's Representative for approval with testing results and certification against the standards and specification at least 10 days prior to installation.
- Structural Soil to be installed in layers and lightly compacted as per these Design and Construction Notes
- Structural soil to be installed separately to regular planting soil via plywood + props or similar methodology during compaction
- Structural soils to be installed according to the suppliers instructions to meet compaction requirements nominated in these design and construction notes.

## Structural Cells

- Preferred product City Green Stratavault 45 or similar approved by City's Representive. Consultant or contractor to confirm with the manufacturer that the product is fit for the intented location and loading.
- Structural cells are preferred over structural soils due to their better spatial efficiency (approx. 90% rootable soil volume)
- To be installed by a certified installer (requiring 1 hr online training).
- The Contractor must follow and document the suppliers inspection protocol to maintain warranty. Written evidence of approval and Warranty to be provided to the City's Representative.
- Excavate full extent of structural cell zone and install sub base as per COP detail and layout cells in place. <u>THIS IS A HOLD POINT.</u>
- Fibregrid to be installed to sides of Stratavault modules as per manufacturer's specification and COP details to control cross contamination of soil types andmaintain structural integrity.
- Fibregrid to be installed as per CoP details 100Kn Fibregrid top, bottom and sides.
- Installation of structural cells (prior to backfilling) THIS IS A HOLD POINT
- Photographic evidence must be submitted of the structural cells installed prior to backfilling to the City's representative and manufacturer for warranty purposes.



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