

Ben's Yard - Tree Rooting Volumes & Drainage Co-ordination



Key

- Street Tree Pit to Provide 3.25m³ of Rooting Available Soil Volume (RASV) 1.8m x 1.8m x 1m overall rooting depth (400mm depth ameliorated topsoil over 500mm depth subsoil over 100mm broken / ripped base).
- Adjacent Rooting Available Soil Volume (RASV) for Street Trees - 5.5m x 3m x 0.5m (less m² of tree pit) = 6.63 m³ planting areas circa 300+ mm topsoil over 200mm ripped subsoil / 150+ mm grass areas over 350mm ripped subsoil

Rooting Available Soil Volume (RASV) for small / medium street trees = + 10m³

Areas calculated to accord with above volumes, trees in open ground all have additional rooting areas beyond the Adjacent RASV as shown.

See drawing 1434-02 Planting Proposals for outline specification and further details regarding root barriers and topsoil amelioration, composting, fertilizer & mulching. Topsoil & subsoil depth for tree pits, planting beds and grass areas within Adjacent RASV to accord with the above key.

- Garden Fruit Tree Pit 1.2m x 1.2m x 0.6 (400mm depth ameliorated topsoil over 200mm depth subsoil - RASV provided adjacent open ground
- Native Garden Tree Pit 1.8m x 1.8m x 0.6 (400mm depth ameliorated topsoil over 200mm depth subsoil - RASV provided adjacent open ground

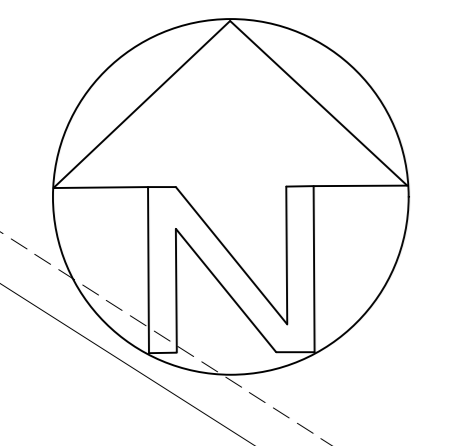
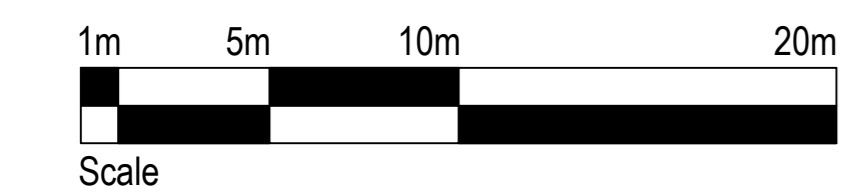
See drawing '1434-08 Tree Pit Sections' for typical tree pit detail

Drainage layout as shown is based on David Cahill Design Consultants Drawing 3188 / 900 revision A

Root barriers as required to Engineers drawings - pipe work that needs protecting should be ducted or wrapped in root protection material thus avoiding the need for vertical root barriers that could reduce the available soil volume for rooting as required for the trees long term success

Detailed Drainage Scheme Key

- RB ○ Denotes 200 lit rainwater butt access bend 30No rodding eye 20No
- X denotes 7.kw 32 amp car charging point
- 100.35 proposed invert levels
- FC3 proposed foul inspection chambers
- storm drains
- foul drains
- denotes concrete capping to shallow drain
- denotes permeable tarmac finish
- permeable paviors finish
- Attenuation Tank with root protection membrane to prevent root ingress from adjacent hedge and trees



CAMBIUM : Landscape architecture Arboricultural consultancy		
Project Ben's Yard		
Title Tree Pits, Rooting Area and Drainage Co-ordination		
Client David Cahill Design		
Date	Nov 2023	Drawn MW
Scale	1:200 @ A0	Checked MW
Dwg No.	1434-07	Revision - Status Planning
Cambium, Bankspace 145-147 East Street Bedminster Bristol BS3 4EJ		