

# DERLIN

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Project -: Upminster Depot – Car Parking Areas

Location –: Upminster Depot, Front Lane, Upminster, Essex RM14 2TD

Start –: 14/10/2016

Complete –: 12/12/2016

Value -: £208,136

Client -: London Underground – Track Delivery Unit

Contact – Jake Morgan [Jake.Morgan@tube.tfl.gov.uk](mailto:Jake.Morgan@tube.tfl.gov.uk)

Scope - :

Car park 1, Adjacent to Entrance. 327m<sup>2</sup>

Creation of parking area in Upminster Depot using permeable block paving. The area was previously grass/shrub land.

- Removal of vegetation
- Breakout and disposal of small concrete slab
- Sawcut of existing perimeter concrete and remove existing kerb
- Excavation and removal of spoil, including drainage trenches and sub-base crossfall
- California Bearing Ratio testing
- Subbase. 4-20mm Crushed Stone. 350mm min with 1in1000 fall to land drains.
- Terram 1000 geotextile encapsulation of subbase, including drainage trenches
- Laying Course, 5mm crushed stone. 50mm depth
- Aquaflow Blocks, 100x200x80mm. Jointing material, 3mm stone brushed in cracks 2kg/m<sup>2</sup>
- Kerbs around perimeter
- 4 Inspection Chambers for drainage
- Drainage pipework
- Manhole and connection to existing surface water
- Parking Bay lines
- Reset 3 existing Man Holes to new level
- \*New Inspection Chamber x1. (not picked up on drawings, class D400)
- New Man Hole Cover & Frame x 1 (not picked up on drawings, class D400)

Car park 2, East of Maintenance Shed. ~480m<sup>2</sup>

Creation of a parking area in Upminster Depot using permeable block paving. The area was previously grass/shrub land.

- Excavation and removal of spoil, including drainage trenches and sub-base crossfall
- California Bearing Ratio testing
- Sub-base, hydraulically bound coarse graded aggregate, cement at 170kg/m<sup>2</sup>. 200mm depth
- Sub-base, Coarse graded aggregate, 250mm min depth plus cross fall to drainage 1in100 and drainage trenches
- Geotextile Terram T1000 encapsulating sub-base, including drainage trenches
- Laying course, Sharp Sand, depth 50mm
- Block paving, 100x200x80mm, Marshalls Priora, and Jointing material
- Kerbs work. HB2, BN, Drop
- Armco vehicle barrier with posts in concrete and a 5m section of removable barrier -TBC, likely slab fixed posts
- Concrete slab 150mm thick behind kerbs/under Armco barrier
- Concrete caps over buried services
- Inspection Chamber and Man Hole with connection to existing surface run off
- Drainage Pipework
- Parking Bay lines – Complaint to LU Standards
- Contrasting colour paving blocks displaying text 'Upminster Depot' and two Roundels
- Reset existing Inspection Chambers to new level x2
- Move Earthing Rod pit
- \*New Inspection Chamber cover & frame x3. (not picked up on drawings, class D400)
- Additional 10m of HB2 kerb required on east side of site