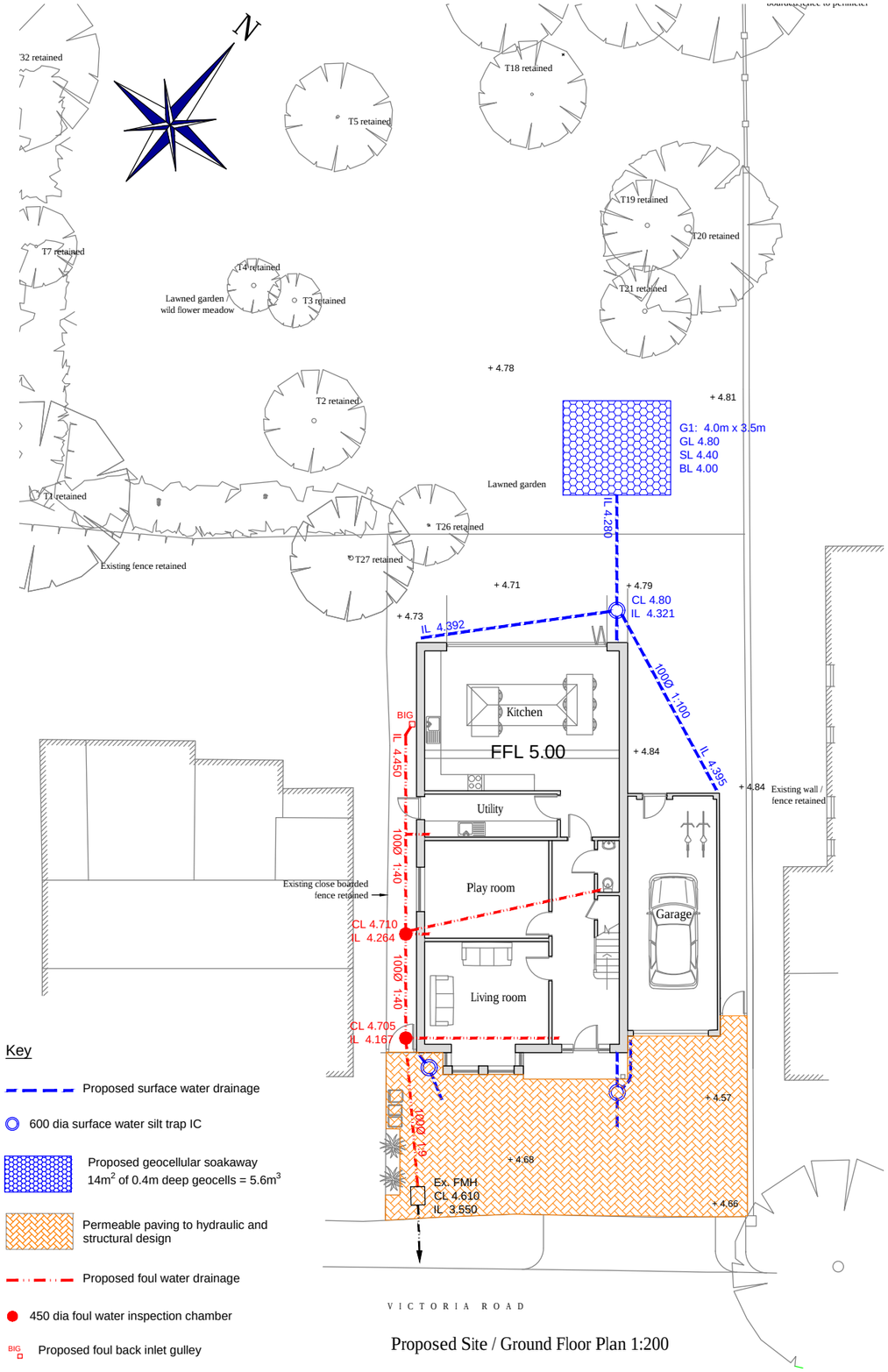
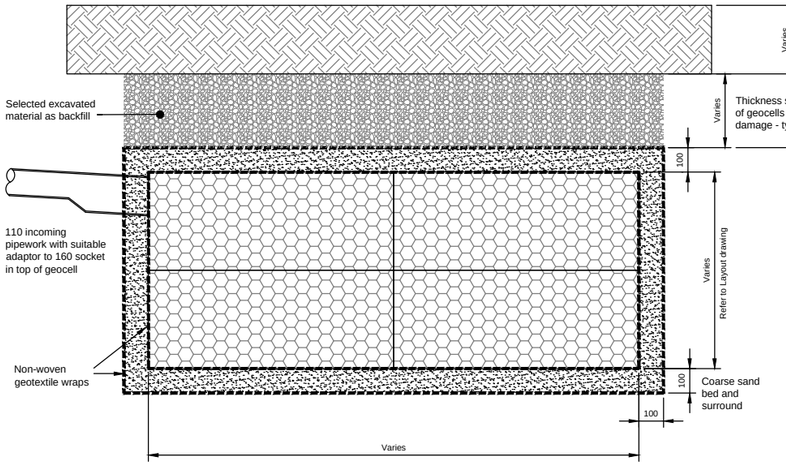


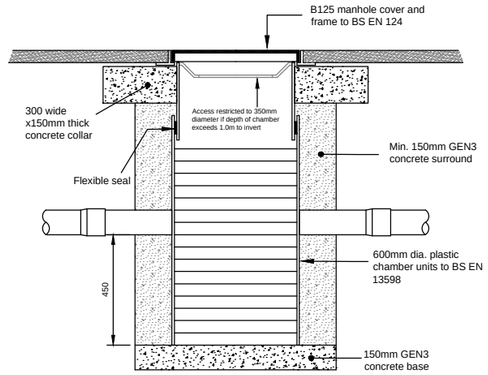
Proposed Site / Ground Floor Plan 1:200

Key

- Proposed surface water drainage
- 600 dia surface water silt trap IC
- Proposed geocellular soakaway 14m^2 of 0.4m deep geocells = 5.6m^3
- Permeable paving to hydraulic and structural design
- Proposed foul water drainage
- 450 dia foul water inspection chamber
- BIG Proposed foul back inlet gulley
- + 5.644 Existing ground levels

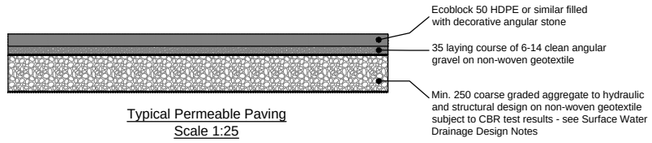


Typical Geocellular soakaway Unit
(for use in soft landscaped areas)
Scale 1:25



Typical Silt Trap Inspection Chamber Detail
(for use in areas subject to light traffic loading

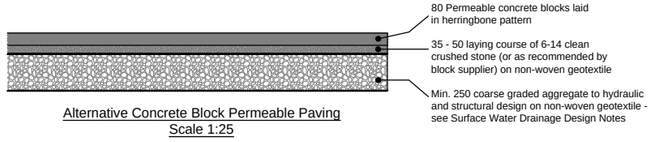
Note
Permeable paving design is for hydraulic purposes only. The structural design will depend on the loads it is required to take and the strength of the formation and is to be carried out by others



Typical Permeable Paving
Scale 1:25

NOTE

This drawing had been produced for discharge of planning conditions only. All levels and details to be checked for Building Regulations approval and construction purposes



Alternative Concrete Block Permeable Paving
Scale 1:25

Surface Water Drainage Design Notes

Ground conditions here comprise topsoil over Head Deposits of clay, silt, sand and gravel over Upper Chalk of the Tarrant Chalk Member at depth.

The Head Deposits were found at 200 to 300 mm below ground level, extending to the end of the boreholes at 2.0m depth. The Head Deposits comprised soft to very firm silty clays.

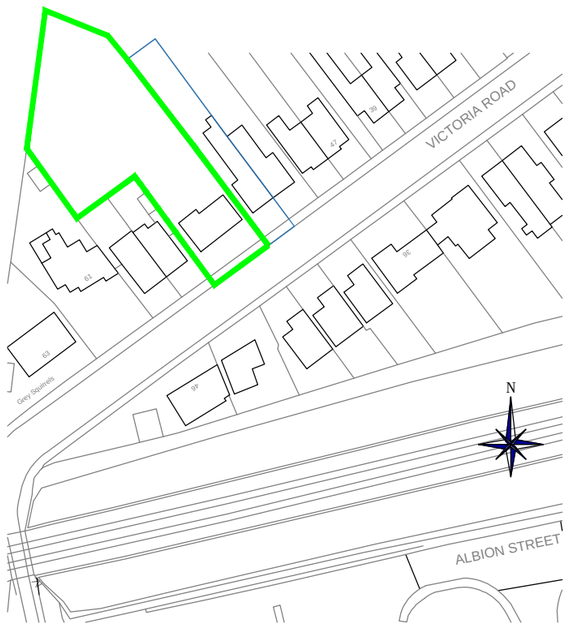
No groundwater was encountered but levels are likely to be high here in winter months and only shallow test pits were excavated for the percolation testing. Two test pits were excavated in early July 2018 and testing to BRE 365 principles was undertaken.

Percolation tests in two shallow pits gave soil infiltration rates that averaged 8.8035 x 10^{-6} m/s. A further percolation test carried out at 1.233m below ground level gave a very poor result and we concluded that only shallow infiltration techniques were suitable for this site.

Permeable paving is proposed for the front of the site and some roof areas will be drained directly into the paving sub-base. The direct connections will need to be made via silt trap inspection chambers and in accordance with the pavement supplier's recommendations.

The permeable paving will require structural design following CBR testing but will require a minimum of 250mm of coarse graded aggregate for surface water storage. CBR testing may determine that additional construction is required for pavement structural purposes.

A shallow geocellular soakaway has been designed for the rear of the site comprising 14 sq.m of 400mm plastic 'crates'.



Location Plan - scale 1:1250

Rev.	Description	Drn.	Date
-	Original	RTFC	18.7.18

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55 Victoria Road
Southwick

Client
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Drawing Title
Drainage Layout

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Scale	At original
As shown	A3

Drawing Number	Revision
1797/SK2	-