



Location Plan - scale 1:1250

KEY

- Proposed storm drainage 100mm dia at min 1:100
- Proposed silt trap inspection chamber
- 250 dia surface water inspection chamber
- Existing ground levels in meters AOD
- Proposed foul water drainage
- 250 dia foul water inspection chamber
- Concrete ring soakaway 1200Ø, 1.5m deep
- Proposed geocellular soakaway 3sq.m of 400mm deep geocells
- SL 7.80 Soffit (top) level of geocells
- BL 6.800 Base level of geocells
- IL 7.480 Invert level of surface water drains
- Surface water rodding eye

Surface Water Drainage Design Notes

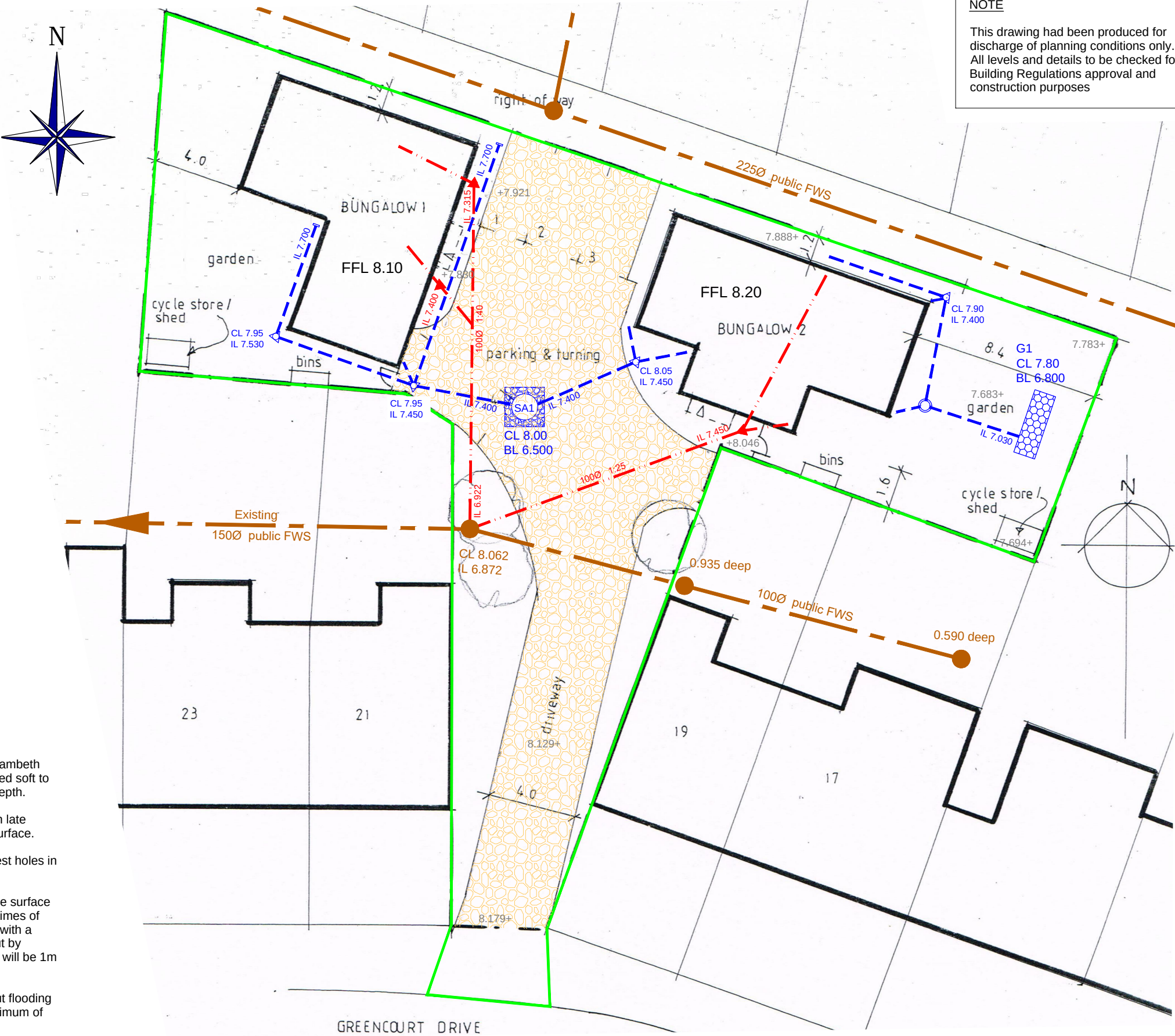
The Geology here comprises superficial deposits of Brickearth (soft to firm silty sandy clays) over the Lambeth Group of similar material. Intrusive investigations revealed a little topsoil the Brickearth, which comprised soft to firm silty sandy clay with some large flint gravel, becoming firmer with an increasing clay content with depth.

Groundwater was found at 1.57m below ground level rising to 1.48m during investigations carried out in late February and early March 2018. Since then, monitoring has shown a maximum level of 1.55m below surface.

The drainage design is based on percolation tests carried out to BRE365 principles in three separate test holes in early March 2018. An average soil infiltration rate of 6.429×10^{-5} m/s has been obtained.

A shallow concrete ring soakaway located in the access has been designed to accept the majority of the surface water run-off from the roofs. This will distribute flow to the permeable paving sub-base, as required in times of high rainfall. The permeable surfaces will comprise an HDPE geocellular system such as Ecoblock 50 with a minimum of 75mm of coarse graded aggregate for hydraulic storage - structural design to be carried out by others. A small geocellular soakaway has been included to serve part of the roof of Bungalow 2. This will be 1m wide x 3m long using 400mm deep units.

Together the drainage will be suitable to drain the access and parking areas as well as the roofs without flooding on a 1 in 100 year rainfall event + 40% climate change addition. The soakaways should be sited a minimum of 5m from any building structure or public sewer.



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

-	Original	PC	RTFC	13.3.18	
Rev.	Description	App.	Chk.	Dm.	Date

Project
Land r/o 17-23 Greencourt Drive
Bognor Regis
West Sussex
PO21 5EU

Client
Matt Lush
Drawing Title
Drainage Layout

Robert Clark Associates Ltd
Chartered Civil Engineers
Willow Cottage, Herne Lane, Rustington
West Sussex BN16 3EE
Tel: 01903 778945 Email: rca-ltd@talktalk.net

© This drawing is the copyright of Robert Clark Associates Limited It may not be copied or reproduced without their written authority	
Scale As shown	At original A3
Drawing Number 1787/SK1	Revision -