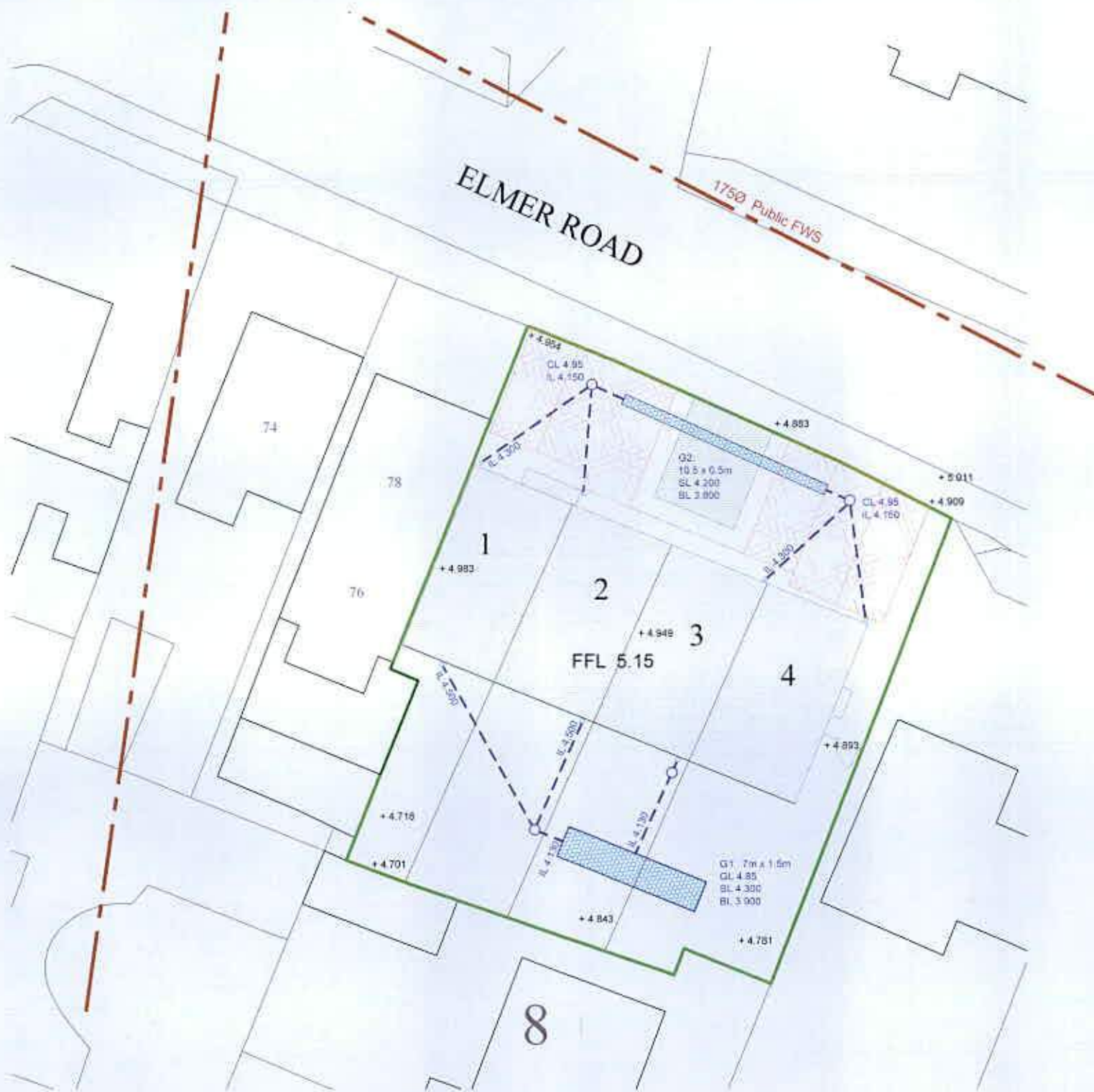
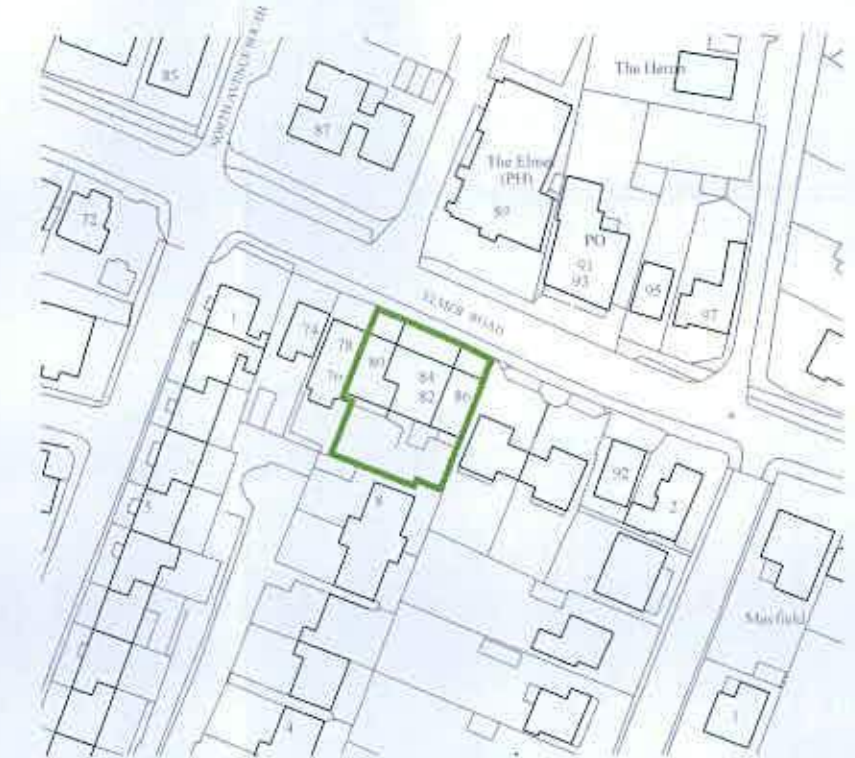




Plan - scale 1:250



Ordnance Survey (c) Crown Copyright 2015. All rights reserved. Licence number 100022432

Location Plan - Scale 1:1250

Foul Water Drainage

There is a 175mm diameter public foul water sewer in Elmer Road to which the development is/can be connected.

Key

- Proposed surface water drains
- Trench soakaway in 400mm deep geocells
- 500 dia surface water silt trap IC
- Permeable block paving

Surface Water Drainage Design Notes

Ground conditions here comprise Topsoil over Brickearth and River Terrace Deposits over Upper Chalk. The River Terrace Deposits were found at 0.1m below ground level and comprised soft, firm and stiff silty clays over compact silty sands with some sub-angular gravel. The Upper Chalk here is generally at 5+ metres deep and was not encountered. Groundwater was found at 1.25m below ground level and two groundwater monitoring points were installed and monitored from mid-March 2016 through to the end of May 2016 and again from 7th February 2018 through to 21st April 2018. The highest groundwater level was recorded in early March 2018 at 1.087m below ground level.

The drainage design is based on percolation tests carried out to BRE365 principles in March 2016 and again in April 2018. Two test pits were excavated and soil infiltration rates of 3.26×10^{-5} m/s and 7.11×10^{-5} m/s were obtained for shallow tests at 900mm depth in 2016 and 1.98×10^{-5} m/s and 3.86×10^{-5} m/s in 2018. The lowest test result has been used here for safety.

A trench soakaway in geocellular blocks is proposed for surface water disposal in the rear gardens, 1.5m wide and 7m long, situated a minimum of 5m from any building. Catchpit inspections chambers will be required upstream of the soakaway to prevent silt and other debris from entering as shown.

A further geocellular soakaway is proposed in the front parking area that will accept flow from the roof drainage here and can also distribute flow as necessary to the permeable concrete block paving. A minimum thickness of 250mm of coarse graded aggregate will be required below the block paving or as dictated by structural design and the block manufacturer's recommendations.

Rev	Description	App	Chk	Dtn	Date
-	Original	PC	RTFC		18.5.18

Project	80-86 Elmer Road Middleton-on-Sea
---------	--------------------------------------

Client	Shivelmer LLP
Drawing Title	SW 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	1683/D1.2
Revision	-