

- Key
- Proposed surface water drainage
 - 100mm UPVC silt trap IC
 - 250 dia surface water inspection chamber
 - 450 dia surface water inspection chamber
 - 500 dia surface water silt trap IC
 - Surface water rodding eye
 - Permeable paving to hydraulic and structural design - 457m²
 - Non permeable surface laid to fall to permeable paved areas - 210 m²
 - Concrete ring soakaway 1.2m diameter and 2.0m deep
 - + 5.644 Existing ground levels

Surface Water Drainage Design Notes

Ground conditions here comprise topsoil over silty, sandy clays and clayey sands (Brickearth) over Upper Chalk at depth. The Brickearth was found to extend from around 200mm below ground level to the end of the boreholes at 2.0m when nodules of chalk were becoming more prevalent. The Brickearth comprised compact silty clays with an increasing presence of flints from 0.8m down in some of the test pits.

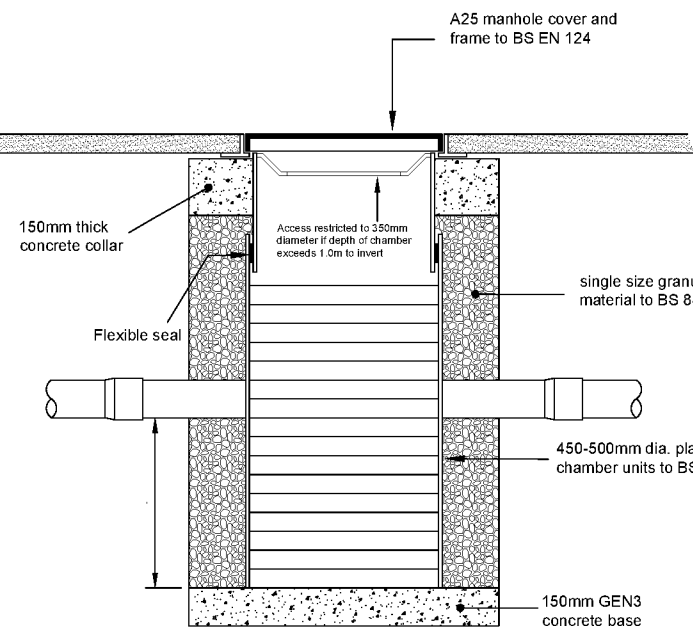
Winter groundwater levels are known to be high in this area and only shallow test pits were excavated for the percolation testing. Four test pits were excavated in early July 2018 and testing to BRE 365 principles was undertaken only at shallow depth, as deep soakage is not appropriate for this site.

Percolation tests in the four pits gave fairly consistent soil infiltration rates ranging from of 1.371×10^{-5} up to 1.881×10^{-4} m/s. The average value was 6.659×10^{-5} m/s.

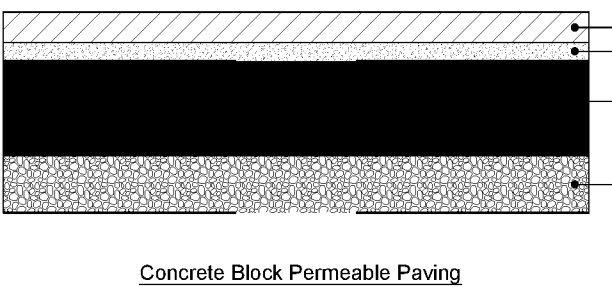
Permeable concrete block paving is proposed for part of the access road and parking areas within the site with two concrete ring soakaways to supplement the shallow soakage and to provide hydraulic continuity with the permeable paving sub-base. Roof areas will be drained partly to the concrete ring soakaways and partly directly into the permeable paving sub-base. The direct connections are to be made via silt trap inspection chambers and/or in accordance with the pavement supplier's recommendations.

The permeable paving will require structural design following CBR testing but will likely comprise a hydraulically bound sub-base layer over coarse graded aggregate. A minimum of 300mm of combined sub-base will be required for surface water storage.

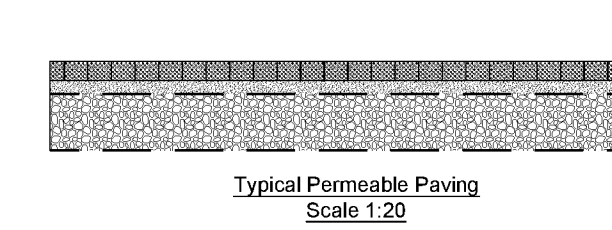
The formation may be provided with a 130mm layer of bituminous material above as a running surface during construction so as not to damage it. If provided, the bituminous material would be punctured on completion prior to laying the block paving with 75mm dia. holes at 750mm centres in an orthogonal pattern. In due course, CBR testing may determine that additional construction is required for pavement structural purposes.



Typical Silt Trap Inspection Chamber Detail (for use in landscaped areas and footways) Scale 1:20



Concrete Block Permeable Paving



Typical Permeable Paving Scale 1:20

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

New section of tarmac drive constructed in accordance with existing on 100mm well compacted hardcore

Bin collection area

Existing access from Ferringham Lane

Existing block paving to be removed and drive resurfaced. 20mm wearing course laid over 100mm tarmac over 200mm MOT type 1 laid over existing 100mm compacted hardcore base. Construction to provide 12.5 tonne capacity for fire appliance

Visitors Parking

Turning area for fire appliance

See drawing prepared by Bright Plan 20-07-16 Rev 4

Plot 1
See drawings 20-07-3.01 to 3.04
F.F.L 6180

Plot 2
See drawings 20-07-3.05 to 3.08
F.F.L 6060

Plot 3
See drawings 20-07-3.09 to 3.12
F.F.L 5960

Plot 4
See drawings 20-07-3.13 to 3.16
F.F.L 5880

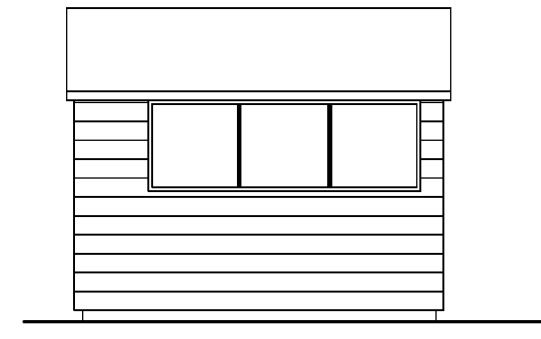
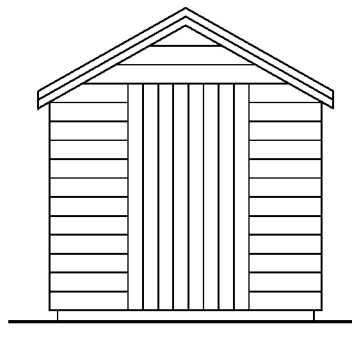
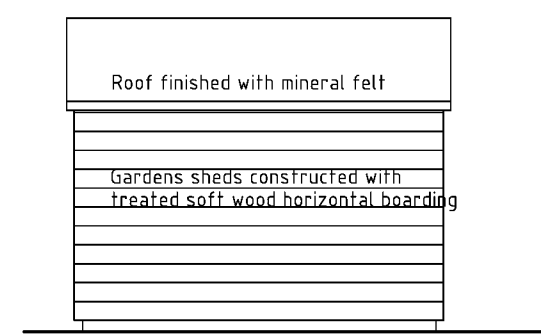
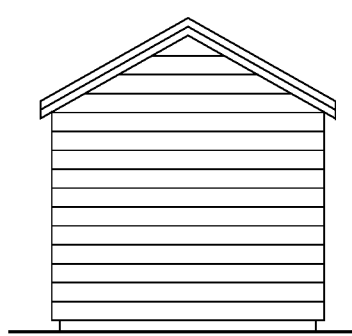
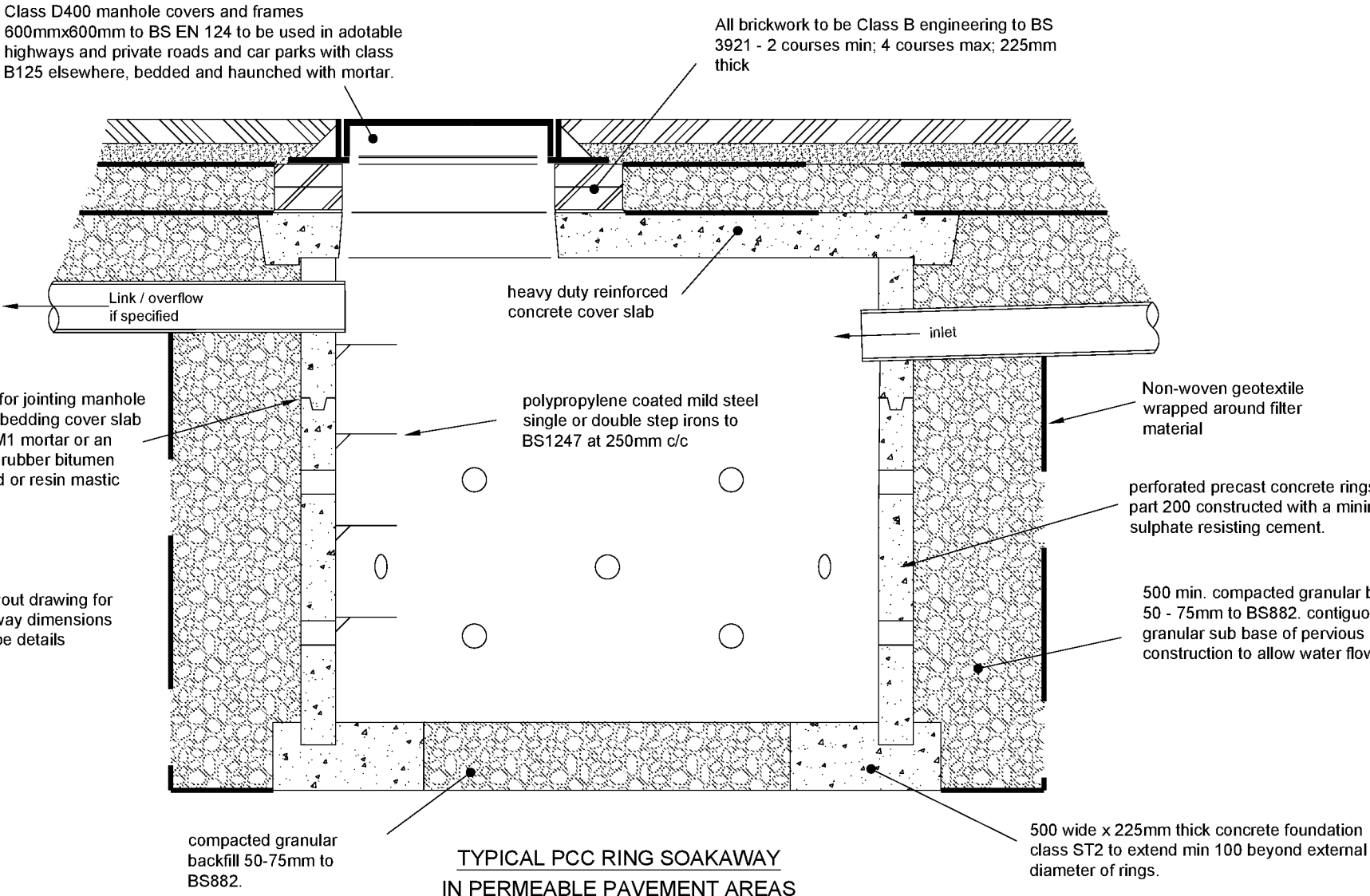
Approximate location of electric vehicle charging point

Garage and parking for plot 4

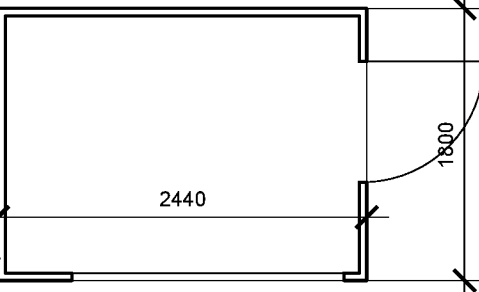
Site Plan

0m 2m 4m 6m 8m 10m

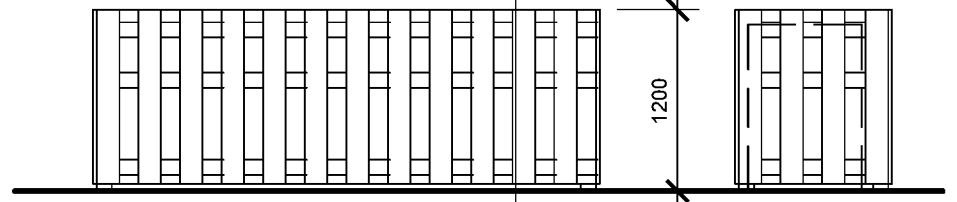
scale - 1:200 @ A1



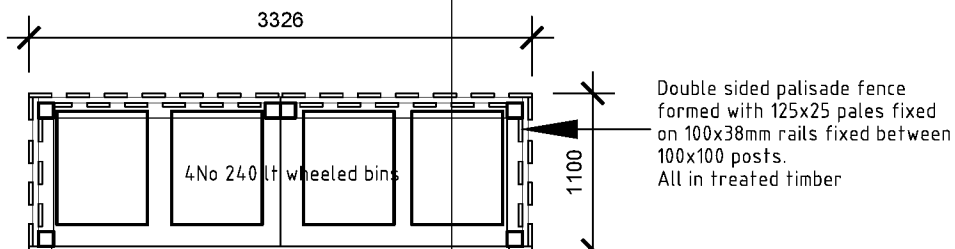
Elevations



Plan
Garden Sheds / Cycle store 1:50

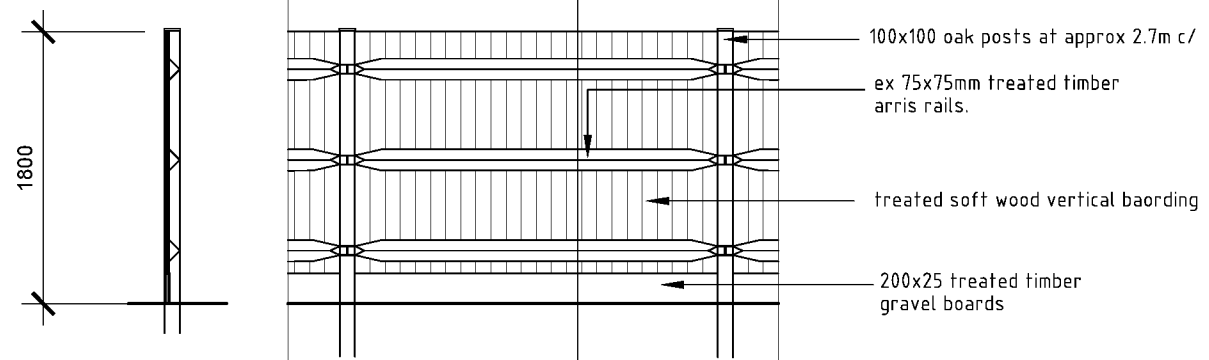


Elevation

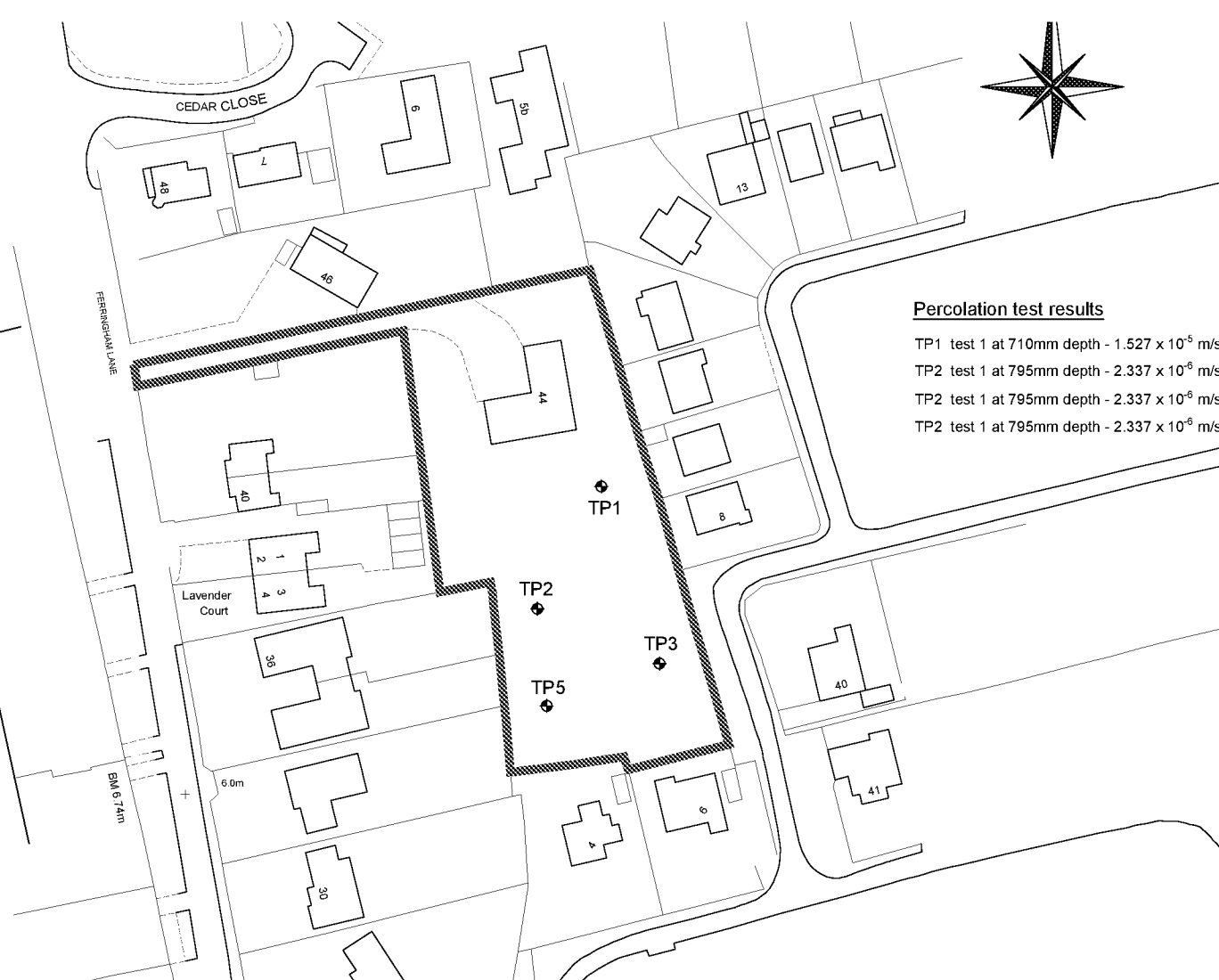


Plan

Bin store



Detail of new sections close boarded fence 1:50
see landscape drawing for location



Percolation test results

TP1 test 1 at 710mm depth - 1.527 x 10⁻⁴ m/s
TP2 test 1 at 795mm depth - 2.337 x 10⁻⁴ m/s
TP2 test 1 at 795mm depth - 2.337 x 10⁻⁴ m/s
TP2 test 1 at 795mm depth - 2.337 x 10⁻⁴ m/s

NOTES

DO NOT SCALE OFF THIS DRAWING EXCEPT FOR PLANNING PURPOSES
ALL DIMENSIONS SHOULD CHECKED ON SITE PRIOR TO COMMENCEMENT OF WORK
ALL GOODS MATERIALS AND WORKMANSHIP MUST CONFORM WITH CURRENT BUILDING REGULATIONS, BRITISH STANDARDS AND CODES OF PRACTICE
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E	Oct 2021	GM	Additional drainage details added
D	Aug 2021	GM	Block Plan omitted and details of bin store and new boundary fence added
C	July 2021	GM	Shed / cycle store detail added
B	July 2021	GM	Electric vehicle charging points shown
A	July 2021	GM	Notes relating to drive construction added
	July 2021	GM	Building regs issue

REV	DATE	BY	AMENDMENT
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CLIENT

Globe Estates (Southern) Ltd

JOB TITLE

Residential development at
Site Adjacent to
44 Ferringham Lane, Ferring

DRAWING TITLE		
Site Plan and Location Plan		

DATE	SCALE	DRAWN BY	GM
June 21	As shown	CHECKED BY	
JOB NO.	DRAWING NO.	REVISION	
2007	3.17	E	

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