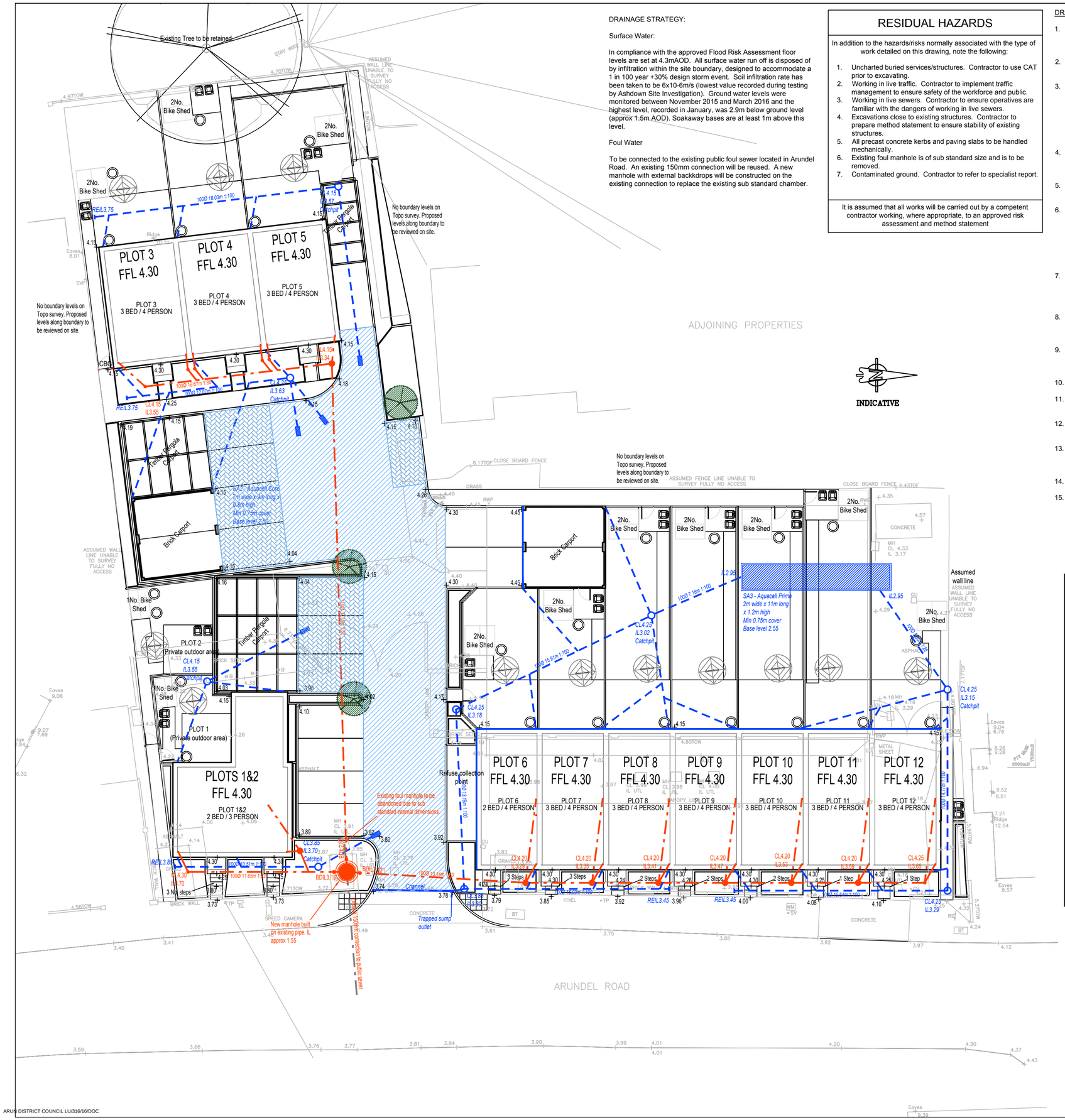


DRAINAGE STRATEGY:

Surface Water:

In compliance with the approved Flood Risk Assessment floor levels are set at 4.3mAOD. All surface water run off is disposed of by infiltration within the site boundary, designed to accommodate a 1 in 100 year +30% design storm event. Soil infiltration rate has been taken to be 6x10-6m/s (lowest value recorded during testing by Ashdown Site Investigation). Ground water levels were monitored between November 2015 and March 2016 and the highest level, recorded in January, was 2.9m below ground level (approx 1.5m AOD). Soakaway bases are at least 1m above this level.

Foul Water

To be connected to the existing public foul sewer located in Arundel Road. An existing 150mm connection will be reused. A new manhole with external backkdrops will be constructed on the existing connection to replace the existing sub standard chamber.

RESIDUAL HAZARDS

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, note the following:

1. Uncharted buried services/structures. Contractor to use CAT prior to excavating.
2. Working in live traffic. Contractor to implement traffic management to ensure safety of the workforce and public.
3. Working in live sewers. Contractor to ensure operatives are familiar with the dangers of working in live sewers.
4. Excavations close to existing structures. Contractor to prepare method statement to ensure stability of existing structures.
5. All precast concrete kerbs and paving slabs to be handled mechanically.
6. Existing foul manhole is of sub standard size and is to be removed.
7. Contaminated ground. Contractor to refer to specialist report.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement

DRAINAGE NOTES:

1. All drainage works to be constructed in strict accordance with specification of the local authority, building regulations, sewers for adoption, BS8301 & BSEN.752-1.
2. For location and setting out of building drainage points refer to architects drawings.
3. All pipe runs near buildings to comply with the building regulations 2002 Part H1. Where a pipe is within 1m of a foundation the trench shall be filled with class GEN3 concrete up to the lowest level of the foundation. Where the trench is further than 1m from the foundation, the trench shall be filled with class GEN3 concrete to a level below the lowest level for the foundation equal to the distance from the foundation less 150mm. In both cases the pipe shall be bedded and surrounded in 150mm thick class GEN3 concrete.
4. Where pipes, external to the structures, have a depth to soffit from ground level of less than 450mm they shall have a class GEN3 concrete encasement (150mm thick).
5. Where a pipe, under a carriageway, has a depth of cover of less than 1.2m the pipe shall be laid with a concrete bed and surround.
6. In any circumstances where pipes are bedded and surrounded in concrete flexible joints should be provided. Compressible boards (fibreboard or polystyrene) shall be provided at a maximum of 8m centres (coinciding with pipe joints). The boards shall be pre-cut to pipe diameter and to a height and width equal to the concrete cross section. A board thickness of 18mm for pipes up to 450mm nominal diameter and 36mm for pipes over 450mm nominal diameter.
7. All private building drainage shall be constructed in strict accordance with BSEN.752-1. unless otherwise specified building drainage shall be 100mm diameter and shall be laid at a minimum gradient of (<1l/s = 1 in 40/>1l/s = 1 in 80) for foul drains and 1 in 80 for surface water drains.
8. All pipes, bends and junction for private building drainage shall be upvc conforming to BS4660 and BS5481 as appropriate and shall be laid in accordance with the manufacturer's specification.
9. All stub stacks to be fitted with air admittance valves where branch drain exceeds 12m except at the head of the run. Soil vent pipes located at the head of a run to terminate to fresh air.
10. All connections to be soffit to soffit unless otherwise noted.
11. All concrete and concrete products to be in accordance with BRE 363 for sulphates.
12. The locations and sizes of all svps and rwps shall be cross referenced against the architects drawings during setting out.
13. The precise depth and location and size of existing pipes or manholes where connections or diversion are proposed must be confirmed and reported to the engineer prior to commencement.
14. All exiting unused drainage is to be grubbed out and backfilled.
15. Any uncharted live drains encountered during construction are to be reported to the engineer.

-DRAINAGE KEY-

- Existing Foul Water Drain/Sewer
- Existing Surface Water Drain/Sewer
- #Ø 5.00m 1:#: Storm Water (Private Drain/Public Sewer)
- REIL3.79: Rodding eye(Max 0.6m depth to invert)
- CL## ## / IL## ##: 250Ø IC (Max 0.6m depth to invert)
- CL## ## / IL## ##: 480Ø IC (Max 1.2m depth to invert)
- Rainwater pipe and diffuser
- Cellular soakaway
- Porous tarmac with CGA sub base
- Block paving with CGA sub base
- #Ø 5.00m 1:#: Foul Water (Private Drain/Public Sewer)
- CL## ## / IL## ##: 250Ø IC (Max 0.6m depth to invert)
- CL## ## / IL## ##: 480Ø IC (Max 1.2m depth to invert)

NOTES

A2

1. This drawing is to be read in conjunction with all other RGP drawings, and with all relevant Architect's and Engineer's drawings and specification. Any discrepancies found are to be reported immediately to the Engineer.
2. RGP accepts no responsibility for inaccuracies in data provided by third parties such as topographic surveys or Ordnance Survey mapping.
3. Do not scale, work to figured dimensions only. All dimensions are in millimeters unless noted otherwise and all levels are in metres from the topographic survey datum.
4. Any information given regarding existing underground services is given in good faith after consultation with the relevant authority, however accuracy is not certain. The main contractor is responsible for checking all information on site prior to work commencing and taking due care whilst undertaking the works.
5. All dimensions to be checked on site. All details and dimensions relating to sub-contractors work must be checked and agreed between the sub-contractor or supplier and the general contractor.
6. The electronic information from this drawing can not be guaranteed as dimensionally drawn exact. Figured dimensions must be used for setting out and detailing. RGP logos and company information must be removed from copies if information is re-used.
7. The main contractor is responsible for the design of all temporary works, and is also responsible for the safe maintenance and stability of existing buildings at all times.
8. The main contractor is responsible for dealing with all occurrences of ground water during the construction period.
9. The contractor must comply with all current legislation relating to health & safety.
10. All products specified shall be installed in strict accordance with the manufacturers recommendations and instructions. If there are discrepancies between that information and the details on any RGP drawings, the manufacturers instructions must be used.

Rev.	Date	Amendments	Drawn	Appr.
B	19/08/2016	Porous paving clarified.	LDF	LDF
A	19/08/2016	Cellular Soakaways omitted and replaced with porous paving.	LDF	LDF
-	12/08/2016	Original Issue	LDF	LDF

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Client: PMC Construction Ltd

Project: Arundel Road, Littlehampton

Drawing Title: Site Layout Drainage and Levels

Scale	Drawn By	Checked By	Approved By
1:200	LDF	-	-

Date	Drawing No.	Rev.
August 2016	2016-D1129-201	B