

- SURFACE WATER DRAINAGE-
- Surface water disposal should be managed in view of the SuDS hierarchy;
    - Infiltration
    - Watercourse
    - Public Surface Water Sewer(s)
  - Following the undertaking of groundwater monitoring and infiltration testing, there are limited opportunities to propose infiltration-based methods and techniques as a means of dealing with run-off generated by the development.
  - It is proposed that surface water runoff is captured and attenuated within permeable block pavement (500mm subbase thickness, see modelling calculations for site variance), geocellular underground storage, and open ponds across the site, adjacent to the existing boundary watercourses.
  - Permeable paving will have a total plan area of 10,133m<sup>2</sup>, providing approximately 1,620m<sup>3</sup> storage (based on a sub-base depth of 500mm and 32% voids).
  - 9 No. shallow open storage ponds will provide attenuation for runoff from the site. These are designed with 1:3 sloped sides. The ponds cover a total area of 4,775m<sup>2</sup>.
  - The approved drainage strategy determined the Greenfield runoff rate (Q<sub>GR</sub>) for Site A - South Side to be 3.5l/s/ha.
  - Further to the above, run-off from the development will be discharged at a rate of 16.0l/s to the existing watercourse network, via headwalls and flow control manholes.
  - It is proposed that all captured run-off from the proposed areas of impermeable surfacing will be captured up to the in 100 year storm event, including an allowance of 40% for Climate Change (without exceedance).

- DRAINAGE KEY-
- Watercourse Building/Structure Buffer Zone (5.0m) (Measured from Top of Bank)
  - SuDS Maintenance Buffer Zone (3.0m) (Measured from Top of Bank)
  - Existing Watercourse (Top of Bank to Top of Bank)
  - Proposed Surface Water Sewer
  - Proposed Surface Water Manhole
  - Proposed Surface Water Outfall (Headwall)
  - Proposed Surface Water Flow Control
  - Proposed Permeable Paving (500mm Sub-Base)
  - Proposed Basin (Pond)
  - Proposed Watercourse
  - Existing Foul Water Drain/Sewer
  - Existing Foul Water Rising Main
  - Public Sewer Protected Strip
  - Foul Water (Private Drain/Public Sewer)
  - Proposed Private Pumping Station
  - Proposed Foul Water Rising Main
  - Existing Road Gully
  - Existing Highway Drainage
  - RG

- FOUL WATER STRATEGY-
- Foul water disposal should adhere to the following hierarchy;
    - Public Sewer
    - Private Treatment Plant
    - Septic Tank and Drainage Field
    - Cesspool
  - The proposed development will establish a new connection to the public foul water sewer located in Summer Lane, via a proposed foul pumping station to serve both the northern and southern parcels of the proposed development.
  - It is proposed that flows from the site will be pumped, with a Type 3 adoptable pumping station required.
  - In relation to the proposed Type 3 adoptable pumping station, the well must be positioned at least 15.00m from habitable buildings.
  - Post development, there will be an estimated peak foul water flow generation of 9.70l/s (based on Water UK Sewer Sector Guidance, Design and Construction Guidance).

Rising Main Easements;  
No development or new tree planting should be located within 3.00m either side of the centreline of the 375mm dia. public foul rising main, and all existing infrastructure should be protected during the course of construction works.  
Alternatively, proposed diversion works need to be agreed with Southern Water.

EXISTING RISING LINE & LEVEL  
Approx. CL 5.65; Approx SL 4.65, IL 4.28  
Line and level based on gradiometer survey and require confirmation from Southern Water Clerk of Works.

EXISTING RISING LINE & LEVEL  
Approx. CL 5.10; Approx SL 4.30, IL 3.92  
Line and level based on gradiometer survey and require confirmation from Southern Water Clerk of Works.

## PLANNING

NOT FOR CONSTRUCTION

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|   |                                       |            |
|---|---------------------------------------|------------|
| J | Site Layout Development               | 15/09/2022 |
| I | Drainage Pond Amendments              | 19/08/2022 |
| H | Drainage Pond Amendments              | 18/08/2022 |
| G | Optimisation of Drainage & Levels     | 23/05/2022 |
| F | Site Layout Development               | 12/04/2022 |
| E | Site Layout Development               | 21/03/2022 |
| D | Layout updated                        | 18/11/2021 |
| C | Final Issue                           | 05/11/2021 |
| B | Annotations updated                   | 03/11/2021 |
| A | Revised Foul Rising Main Line & Level | 25/10/2021 |
| - | Original Issue                        | 18/10/2021 |

| Rev. | Amendments | Date |
|------|------------|------|
|------|------------|------|



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Drawing Status **PLANNING**

Client **Pagham Homes Ltd**

Project **Land at Summer Lane Pagham, West Sussex**

Drawing Title **Proposed FW & SW Drainage Strategy (Southern) Sheet 1 of 2**

Scale **1:500** Date **Sep 2022** Drawn By **DJL** Checked By **MJA**

Drawing No. **D1915-300** Rev. **J**

APRIL DISTRICT COUNCIL 07583885