



Foul and Surface Water Maintenance and Management Plan

Reeds Lane, Sayers Common, West Sussex

23-130-RPT-001 Rev -
March 2024

Document Control Sheet

Project Name:	Reeds Lane, Sayers Common, West Sussex
Project Number:	23-130
Report Title:	Foul and Surface Water Maintenance and Management Plan
Report Number:	001

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
-	Final	TSH	GG	GG	GAC	Mar 24

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1 Introduction & Overview

1.1 Introduction

1.1.1 This document details the management and maintenance requirements for the foul and surface water drainage systems including sustainable urban drainage systems (SUDS) and features utilised for the development site located on Reeds Lane, Sayers Common, West Sussex.

1.1.2 This report has been prepared to be submitted as part of a package of information to the Lead Local Flood Authority (West Sussex County Council (WSSCC)) and the Local Planning Authority (Mid Sussex District Council (MSDC)) to enable the discharge of Condition 5 of planning application reference DM/22/0640 which states;

*“The development hereby permitted shall not commence unless details of the proposed foul and surface water drainage and means of disposal **for all phases of the development** (developer and self-build elements) have been submitted to and approved in writing by the Local Planning Authority in consultation with Southern Water. Self-build plots must be clearly identified on drainage plans, allocated a discharge rate and volume allowance within the wider system. No building shall be occupied until all the approved drainage works have been carried out in accordance with approved details. The details shall include a timetable for its implementation and a management and maintenance plan for the lifetime of the development which shall include arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime. Maintenance and Management during the lifetime of the development should be in accordance with the approved details.”*

1.1.3 This report provides the information relating to the management and maintenance of the foul and surface water drainage systems proposed as part of the approved development.

1.1.4 At the time of preparing this report it is intended for both foul and surface water drainage systems to remain private and not be offered to Southern Water for adoption. The drainage networks will be operated and maintained by a suitable qualified management company yet to be confirmed.

1.1.5 This report will be made available to the maintenance organisation that will ultimately take responsibility for the foul and surface water drainage networks within the development.

1.1.6 In addition, this report should be read in conjunction with drawings 23-130-010 and 23-130-011 appended within **Appendix A**.

1.2 Overview

1.2.1 This document is laid out in specific sections pertinent to SUDS type detailing:

- A description of the SUDS component and its use
- Maintenance requirements and frequencies
- Inspection requirements and frequencies

1.2.2 The activities listed are generic to SUDS types and represent the minimum maintenance and inspection requirements. However additional tasks, or varied maintenance frequency may be introduced as required. This may include:

- Measurement and recording of sediment levels
- Photographic recording of problem areas
- Increased frequency of litter removal in areas identified as litter hotspots
- Adjusted timescales of maintenance activities to minimise impact on wildlife (e.g. great crested newts, birds, voles, etc)
- The use of manual methods of maintenance to limit impact on wildlife habitat (e.g. management of emergent vegetation in ponds)

This specification has been based upon CIRIA's latest technical information for SUDS (C697 The SUDS Manual, CIRIA, London: 2015)

1.2.3 The foul water drainage design is a private piped network that has no specific maintenance requirements beyond that of typical inspection and jetting when required. The foul network has been designed in accordance with NHBC standards, current Building Regulations and guidance set out in Appendix C of the Development Construction Manual (Sewerage Sector Guidance – SSG). As such it will be constructed to the same standards. Therefore, the need for regular inspection and maintenance should not be required.

2 Permeable Paving

2.1 Description

2.1.1 Permeable paving provides a pavement suitable for pedestrian and vehicular traffic, while allowing rainwater to permeate through the surface and into the underlying sub-base. The water is temporarily stored in the sub-base before discharging to the underlying ground (infiltrating) or discharging to a piped network (tanked).

2.1.2 Permeable paving, together with associated substructures, are an efficient means of managing surface water runoff close to source – intercepting runoff, reducing the volume and frequency of runoff and providing a treatment medium. Treatment processes that occur within the surface structure, the subsurface matrix (including soil layers where infiltration can occur) and the geotextile layers include:

- Filtration
- Adsorption
- Biodegradation
- Sedimentation

2.2 Inspection, Maintenance Activities and Frequency

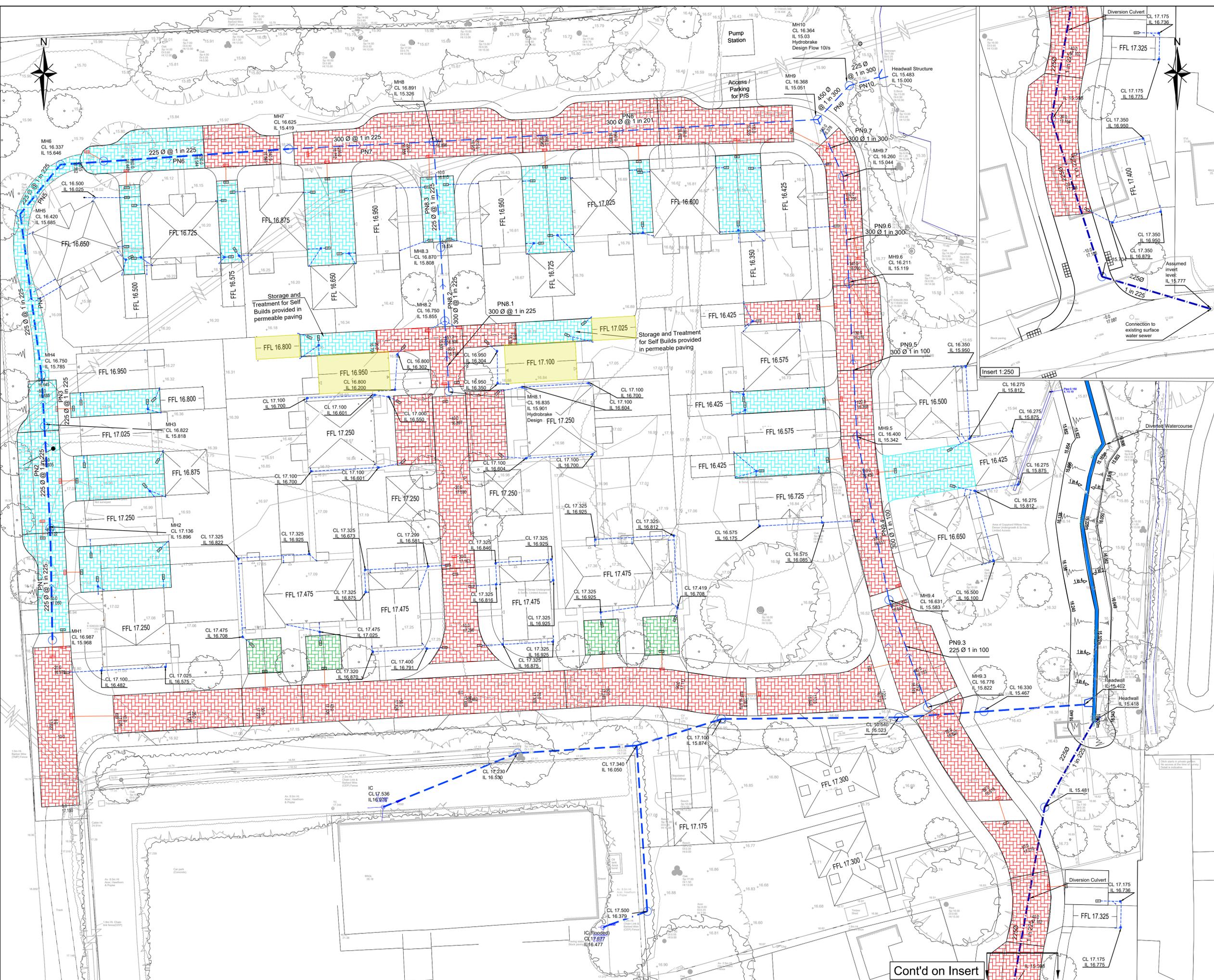
2.2.1 Refer to Table 2.2.1 below for maintenance activities and frequency for permeable paving.

Table 2.2.1: Permeable Paving Inspection, Maintenance Activities and Frequency

Maintenance Category	Maintenance Activity	Frequency	Comments
Regular Maintenance	Brushing and vacuuming (standard cosmetic sweep over whole surface)	Annually (after autumn leaf fall) or reduced frequency, as required, based on site observations of clogging or manufacturer's recommendations.	Particular attention should be paid to areas where water runs onto permeable paving from adjacent impermeable areas as this area is most likely to collect the most sediment
Occasional Maintenance	Stabilise and mow contributing and adjacent areas	As required	
	Removal of weeds	As required – once per year on less frequently used pavements	

Maintenance Category	Maintenance Activity	Frequency	Comments
Remedial Actions	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised to within 50mm of the paving level	As required	
	Remedial work to any depressions, rutting or cracked/broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost jointing material	As required	
	Rehabilitation of surface and upper substructure by remedial sweeping	10 – 15 years	Or as required if infiltration performance is reduced due to significant clogging
Monitoring	Initial inspection	Monthly	For minimum 3 months after installation. If required take remedial action
	Inspect for evidence of poor operation and weed growth	Quarterly, 48 hours after large storms for first 6 months	
	Inspect silt accumulation rates	Annually	
	Monitor inspection chambers	Annually	

Appendix A Drainage Plans



- NOTES**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION AND ALL OTHER RELATED DRAWINGS ISSUED BY THE ENGINEER.
 - DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
 - ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES UNLESS OTHERWISE STATED.
 - ALL DIMENSIONS, LEVELS AND SURVEY GRID CO-ORDINATES ARE TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF THE WORKS. C&A WILL NOT BE LIABLE FOR ANY WORKS UNDERTAKEN PRIOR TO A RESOLUTION OF ANY DISCREPANCIES BEING AGREED BETWEEN C&A AND THE CLIENT.
 - NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS PERMITTED WITHOUT PERMISSION FROM THE ENGINEER.
 - MANHOLES, SEWERS ETC AND ANY OTHER PART OF THE WORKS INTENDED FOR ADOPTION UNDER A SECTION 185 AGREEMENT OR GULLIES ETC INTENDED FOR ADOPTION AS HIGHWAY DRAINAGE ARE TO BE CONSTRUCTED IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE (SSG) AND TO THE APPROVAL OF SOUTH EAST WATER AND WEST SUSSEX COUNTY COUNCIL.
 - ALL EXISTING LEVELS, GRADIENTS, DEPTHS ETC TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
 - REFER TO LONG SECTIONS FOR FULL DETAILS OF PIPE MATERIALS AND BEDDING CLASS.
 - REFER TO MANHOLE SCHEDULES, FOR MANHOLE DEPTHS AND DIAMETERS.
 - MATERIAL TESTING IS REQUIRED FOR ALL MATERIALS INVOLVED IN THE CONSTRUCTION OF THE WORKS. TESTING TO BE UNDERTAKEN BY THE CONTRACTOR IN ACCORDANCE WITH WEST SUSSEX COUNTY COUNCIL DESIGN GUIDELINES WHERE APPLICABLE.
 - ALL ADOPTABLE WORKS TO BE CARRIED OUT IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE AND ANY SUBSEQUENT ADDENDUMS.
 - REFER TO ARCHITECTS LAYOUT/DETAILS FOR RWP POSITIONS.
 - FOR HEADWALLS AND WING WALLS REFER TO ALTHON PRODUCERS 'SFA6 A HEADWALL'.
 - SURFACE WATER FLOWS FROM SELF BUILD UNITS TO BE DIRECTED TO SUB-BASE OF PERMEABLE PAVING. FLOWS TO BE UNDERTAKEN BY THE CONTRACTOR TO SUB-BASE OF SHARED PRIVATE DRIVEWAYS VIA A DIFFUSER UNIT AND 100mmØ PIPE.

Key

Surface Water

- 0.48m Road Sub-Base Depth
- 0.63m Road Sub-Base Depth
- 0.83m Road Sub-Base Depth
- Proposed Surface Water Sewer

Private Surface Water

- Surface Water Private 450Ø Chamber
- Surface Water Private 250Ø Chamber
- Rodding Eye
- Diffuser Inlet
- Diffuser Outlet
- Self Build Units

NOT FOR CONSTRUCTION - SUBJECT TO APPROVAL

B	Self Build Units Highlighted	MT	TS	GC	Mar 24
A	Updated Levels	MT	TS	GC	Feb 24
Rev	Amendments	Drn	Chk	App	Date

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Job Title: **Reeds Lane, Sayers Common**

Drawing Title: **Surface Water Drainage**

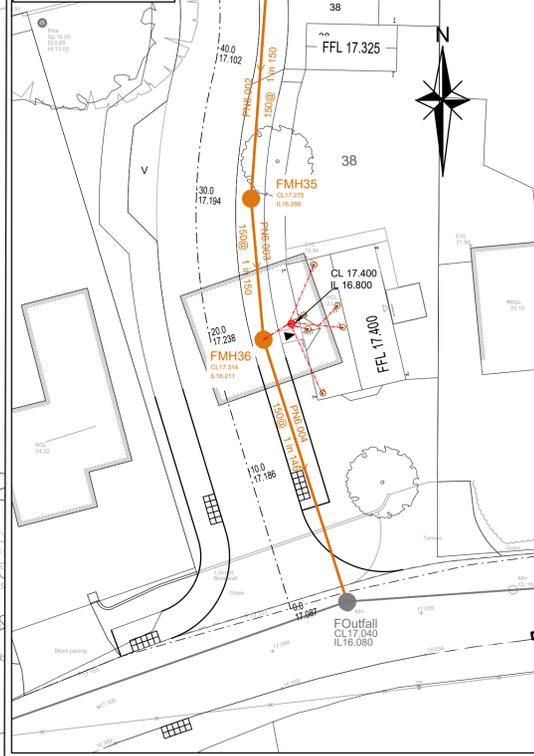
Client: **Elivia Homes**

Scale: 1:250 @A1	Date: Feb 24	Designed: NMM
Drawn: NMM	Checked: TSH	Approved: GAC
Job No: 23-130	Drawing No: 23-130-010	Rev: B

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 - FOUL WATER FLOWS FROM SELF BUILD UNITS TO BE DIRECTED TO FOUL WATER SEWER VIA A 100mm DIAMETER PIPE.

KEY

- Foul Water
- Proposed Foul Water Sewer
- Proposed Route for Rising Main (Size TBC)
- Foul Water Pumping Station
- Existing Foul Sewer
- Concrete Surround for Pipe

Private Foul Water

- Foul Water Private 4500 Chamber
- Connections from Stacks and SVPs

Levels

- FFL 16.800 Proposed Finished Floor Level (FFL)
- Self Build Units

NOT FOR CONSTRUCTION - SUBJECT TO APPROVAL

B	Self Build Units Highlighted	MT	TS	GC	Mar	24
A	Updated Levels	MT	TS	GC	Feb	24
Rev	Amendments	Drn	Chk	App	Date	

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Job Title		Reeds Lane, Sayers Common	
Drawing Title		Foul Water Drainage Strategy	
Client		Elviva Homes	
Scale	1:250 @A1	Date	Feb 24
Drawn	MT	Checked	TSH
Job No	23-130	Designed	MT
		Approved	GAC
		Rev	B

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