

## Pentlands, New Mill Road, Holmfirth

### GSM Developments

### SuDS Management and Maintenance Plan

February 2026



**P3052-RP01**

T: 0113 249 7416 E: [admin@avie-consulting.co.uk](mailto:admin@avie-consulting.co.uk) W: [www.avie-consulting.co.uk](http://www.avie-consulting.co.uk)

Registered in England and Wales No 8325892



Registered in England and Wales No 8325892



---

## Contents

1	Maintenance.....	4
1.1	Introduction .....	4
2	Components .....	4
2.2	Manholes .....	5
2.3	Pipes .....	5
2.4	Silt Traps.....	6
2.5	Inlets/Outlets .....	7
2.6	Pump Station.....	8
2.7	Flow Control Units.....	9
2.8	Cellular Storage.....	<b>Error! Bookmark not defined.</b>

## **1 Maintenance**

### **1.1 Introduction**

This report is intended to give an overview of the operation and maintenance for the drainage features included with the drainage strategy and in relation to typical details. Where proprietary products are specified, the manufacturer's instructions and recommendations should be followed in priority to this document unless specifically noted otherwise due to project constraints.

The recommended operations and frequencies are typical only and should be more frequent initially to ensure that there are no unforeseen issues with the operation and then adjusted to suit the site requirements.

The surface water network has been designed to accommodate the 1 in 100-year storm rainfall event plus an allowance for 30% climate change to the requirements of the site. It may be that the exceedance flows above the 1 in 30-year storm rainfall event are stored within the site partially above ground, on non-habitable external landscaping, parking or other space. As the flows are generally being attenuated on site and within SuDs features there will be a period of time after storm events where the network is still partially or fully surcharged and is draining down. Where this surcharging is still present after 48hrs appropriate action should be taken as noted in this section.

Silt traps have been incorporated within the design to adequately manage any pollutants and silt from the site to the receiving soakaway.

## **2 Components**

2.1.1.1 The following components have been included within the drainage design for the proposed development:

- Manholes
- Pipes
- Silt Traps (Water Treatment)
- Inlets/Outlets
- Pump Station
- Flow Control Units

2.1.1.2 A suitable maintenance strategy should be adopted to ensure the drainage network is cleaned regularly and the routine maintenance and cleansing regime should be documented.

2.1.1.3 It is assumed that the maintenance of the drainage network will be the responsibility of the land owner as a private network. The land owner may however appoint an on-site facilities management team to be responsible for maintenance.

2.1.1.4 A copy of the final construction drainage layout should be provided in the final Operations and Maintenance Manual.

- 2.1.1.5 The surface water network has been designed to accommodate the 1 in 100-year storm rainfall event plus an allowance for 30% climate change particular to the requirements of the site. It may be that the exceedance flows above the 1 in 30-year storm rainfall event are stored within the site partially above ground, on non-habitable external landscaping, parking or other space. As the flows are generally being attenuated on site and within SuDs features there will be a period of time after storm events where the network is still partially or fully surcharged and is draining down. Where this surcharging is still present after 48hrs appropriate action should be taken as noted below.
- 2.1.1.6 It is recommended that the drainage system is inspected as a minimum twice a year, with the system also being inspected after any major storm event.
- 2.1.1.7 Significant sediment deposition is likely in areas used for storage, so a post clean-up operation may be required including the removal of litter, vegetation, sewerage debris and larger objects.
- 2.1.1.8 Long-term management practices include monthly sweeping of external paved areas. The sweeping program will remove sand and contaminants directly from paved surfaces before they become mobilised during storm events and transported to the drainage system.
- 2.1.1.9 During the winter months, drainage features such as gullies and channels should be cleared of ice, snow, debris or litter.
- 2.1.1.10 Sediment/material removal should be undertaken in consultation with the environmental regulator to confirm appropriate protocols; especially where run-off is taken from potentially contaminated areas such as the filter drains and the upstream/downstream chambers.

## **2.2 Manholes**

- 2.2.0.1 The locations of Manholes are indicated on Avie drainage drawing P3052-01.
- 2.2.0.2 Access points have been located at the head of each run, at a change in direction and at a change of pipe size in accordance with Building Regulations Part H.
- 2.2.0.3 The appropriate health and safety equipment must be used when accessing manholes. Confined space certificates must be held by any personnel entering a manhole and the appropriate permits should be obtained from the Maintenance Manager prior to any access.

## **2.3 Pipes**

- 2.3.0.1 The locations of the drainage pipes are indicated on Avie drainage drawing P3052-01.
- 2.3.0.2 Pipes are proprietary products, and the materials can vary across the site as such where used the manufacturer's recommendations should be followed. Regardless of the product used the pipes will be fully compliant with the Avie drainage specification.
- 2.3.0.3 Pipes are intended to be the main conveyance across the development and where oversized they form the attenuation volume required by the limitation of the discharge rate. They are intended to be dry except during rainfall events. These have been designed to be self-cleaning where possible for smaller diameter pipes.

- 2.3.0.4 Access for maintenance is provided through access chambers, manholes and rodding eyes.
- 2.3.0.5 Regular inspection and maintenance is important to identify areas which may have been obstructed/clogged and may not be draining correctly thus exposing the development to a greater level of flood risk.
- 2.3.0.6 Inspection and Maintenance Regime

<b>Maintenance Schedule Pipes</b>	<b>Required Action</b>	<b>Frequency</b>
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required).	Initial Inspection should be provided as post construction CCTV survey.	N/A
Regular maintenance\ inspection	Inspect for evidence of poor operation via water level in chambers. If required, take remedial action.	3-monthly, 48 hours after large storms.
	Check and remove large vegetation growth near pipe runs.	Monthly or as required
Remedial Action	Rod through poorly performing runs as initial remediation.	As required.
	If continued poor performance jet and CCTV survey poorly performing runs.	As required.
	Seek advice as to remediation techniques suitable for the type of performance issue and location.	As required. If above does not improve performance.

## 2.4 Silt Traps

- 2.4.0.1 The silt trap manhole is located within MH SXX prior to the connection to the existing sewer as shown on drainage drawing P3052-01. A typical arrangement is shown on drawing P3052-10-01.

2.4.0.2 The silt traps are intended to be water treatment features. These features are intended to ensure that silt & debris are adequately managed and removed to ensure this is not conveyed to the receiving watercourse.

2.4.0.3 Inspection and Maintenance Regime

Maintenance Schedule <b>Silt Trap</b>	Required Action	Frequency
Regular maintenance\inspection	Inspection of silt trap for any damage to the system	Quarterly
	Inspection and removal of any litter & debris	Monthly or as required
Occasional maintenance	Removal of any sediment collected in the system	6 – Monthly
Remedial actions	Repair (as a result of any damage/ vandalism)	As Required

## 2.5 Inlets/Outlets

2.5.0.1 The cellular soakaway crates are located on the North end of the site underneath the landscaped area on drainage drawing P3052-01.

2.5.0.2 Inlets and outlet structures may be surface structures or conveyance pipes with guards or headwalls. They must be always free from obstruction.

2.5.0.3 Inspection and Maintenance Regime

Maintenance Schedule <b>Inlets/Outlets</b>	Required Action	Frequency
Regular maintenance\inspection	Inspection of surface structure check any damage to the system	Quarterly
	Inspection and removal of any litter, debris & silts	Monthly or as required
Occasional maintenance	Removal of any sediment collected causing obstruction	6 – Monthly
Remedial actions	Repair (as a result of any damage/ vandalism). Strim vegetation 1m minimum surround to structures and keep hard aprons free from silt and debris	As Required

## 2.6 Pump Station

- 2.6.0.1 Foul water pump stations are located in the back gardens of Plots 11-15 as indicated on drainage drawings P3052-07.
- 2.6.0.2 The pump station is intended to lift foul water levels to provide gravity outfall into the main foul water sewer before discharging to the New Mill Road drainage network.
- 2.6.0.3 Adequate access will be provided to the manhole housing, the pump's surface and provide maintenance points for inspection and maintenance, including for appropriate equipment and vehicles.
- 2.6.0.4 Inspection and Maintenance Regime

Regular inspection and maintenance is important for the effective operation of the water pump drainage feature. Sediment/material removal should be undertaken.

Maintenance Schedule <b>Pump Station</b>	Required Action	Frequency
Monitoring to be (undertaken more regularly after a heavy storm)	Initial inspection.	Monthly for three months after installation
	Check the physical condition of the system to ensure it is secure and undamaged	3-monthly, 48 hours after large storms.
	Specifically examine the condition of the pump including its impeller, seals, bearings, valves and volute. Assess the condition of pipework for wear or damage	6-monthly.
	Monitor inspection chambers.	Annually.

Regular maintenance\inspection	Check electrical components to ensure insulation is intact, fuses are in good condition and that bulbs and heaters are working properly Finally, check that all safeguards are operating correctly, and that alarm beacons and buzzers are functional.	Three times/year at end of winter, mid-summer, after autumn leaf fall, or as required based manufacturers' recommendations.
--------------------------------	---	---

## 2.7 Flow Control Units

- 2.7.0.1 The flow control units are intended for flood control and flow restriction. The flow control chamber and device are indicated on SDS drawing W-2478-23.
- 2.7.0.2 The flow controls are specified as Crown flow control units and are proprietary products; therefore, the manufacturer's recommendations should also be taken into consideration.
- 2.7.0.3 Access for maintenance has been provided by locating within manhole chambers.
- 2.7.0.4 Inspection and Maintenance Regime

Maintenance Schedule <b>Flow Control</b>	Required Action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required).	Inspect inlets for blockages, and clear if required. If faults persist jetting and CCTV survey may be required.	Monthly and after large storms.
Regular maintenance\ inspection	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then six monthly.
	Debris removal from catchment surface (where may cause risks to performance).	Monthly
	Remove sediment from pre-treatment structures and flow control chambers	Annually (or as required after heavy rainfall events)

Remedial Actions	Repair/rehabilitation of inlets.	As required.
------------------	----------------------------------	--------------

## 2.8 Cellular Storage

2.9 The cellular storage crates are located under the POS area located to the north of the development adjacent Plots 1-5 and shown on drainage drawing P3092-01. The SDS general tank arrangement is shown on drawing P3052-10-03.

2.10 The cellular storage is intended to be a water attenuation feature. This feature is intended to attenuate storm events up to and including a 100yr + 30% climate change event

### 2.11 Inspection and Maintenance Regime

Maintenance Schedule <b>Cellular Storage</b>	Required Action	Frequency
Occasional maintenance \ inspection	Inspection of catch pit / flow control chamber to head / outfall of attenuation tank for silt and debris build up	Annually (Semi-annually during first year)



P3052-RP01  
Pentlands, New Mill Road, Holmfirth

---

