

SUSTAINABLE DRAINAGE MANAGEMENT AND MAINTENANCE PLAN

Land at Nethertown Road St Bees Cumbria

March 2025 2025-019 Rev A



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1.0 INTRODUCTION

Waterway Drainage Engineering Ltd have been engaged to undertake a Drainage Maintenance and Management Plan for the siting of 5 holiday pods at Nethertown Road, St Bees.

The purpose of this report is to demonstrate how the Foul water and Surface water drainage systems, including the SuDS system, will be managed during the lifetime of the development. The plan will demonstrate how it will be implemented with timescales and actions required.

This document should also be read in conjunction with A L Daines' and Partners Proposed Drainage Design 23-C-17369-002 dated November 2022. This plan does not deal with any measures or precautions which may be required to the drainage systems by the civils contractor during the construction phase of the contract which are dealt with in a separate Construction Phase Plan (CPP).

The owners of Site (Sunshine Properties West Coast Limited) will be responsible for any maintenance and repairs to the system after completion of the drainage systems.

2.0 MAINTENANCE OF DRAINAGE SYSTEMS CONSTRUCTED

Following installation of the drainage systems, including the SuDS system, they will be handed over to the owners (Sunshine Properties West Coast Limited) who will own and manage the systems in perpetuity.

Sunshine Properties West Coast Limited will be responsible for the appointment of suitably qualified and competent persons to carry out the necessary inspection checks and any associated remedial actions.

Sunshine Properties West Coast Limited will prepare an Operation and Maintenance file which will contain: -

- Copies of the As-Built drainage drawings.
- Copy of the Drainage Strategy dated November 2022
- Information on the ground conditions
- Utility companies existing services records
- Newly installed services As-Built drawings
- Details of any known hazards
- Copies of any relevant permits for connections to existing public sewers
- Copies of the manufacturer's maintenance requirements for any specialist items e.g., flow control devices



3.0 SURFACE WATER DRAINAGE SYSTEM - MAINTENANCE PLAN

The surface water system consists of several components including pipes, road gullies, and soakaway. For the surface water drainage system to operate as originally designed, it will be necessary to ensure that it is adequately maintained throughout its lifetime. This document provides details on each component's inspection and maintenance requirements which the management company shall implement.

3.1 PIPES

Pipes are to be inspected as required if there is thought to be a blockage. Any blockages within a pipe are to be removed by rodding or water jetting to clear any debris. Evidence of any blockages in pipes will usually manifest itself in other elements of the system e.g., manholes backing up with water, and the management company should report any problems to an appointed drainage clearance contractor immediately for appropriate action.

3.2 MANHOLES

All manholes are to be inspected annually and any accumulated sediment or blockages shall be removed, and the manhole hosed down if required.

3.3 CATCH PIT MANHOLES/SILT TRAPS

Any Catch Pit manholes and/or Silt Traps in the SW drainage system will be inspected annually, and any accumulated silt shall be removed as required.

3.4 ROAD GULLIES

The trapped road gullies form part of the privately owned road and will be owned and managed by Sunshine Properties West Coast Limited.

Gullies shall be inspected and cleaned out on an annual basis, or sooner, if there is visual evidence of a potential blockage. Any blockages found to be within the piped connection to the main surface water sewer shall be removed by rodding or water jetting to clear the debris.



3.5 SOAKAWAY

The surface water soakaway shall be maintained in accordance with the relative requirements shown in the SuDS Manual. These intervals should be deemed as a minimum frequency and reference should also be made to the manufacturers' guidance to ensure all components are maintained correctly.

Maintenance	Required Action	Typical
Schedule		Frequency
Regular	Inspect for sediment and debris in pre-treatment	Annually
Maintenance	components and floor of inspection tube or	
	chamber and inside of PPIC manhole rings	
	Clearing of gullies and any filters on downspouts	Annually (or
		as required
		based on
		inspections)
	Trimming any roots that may be causing blockages	Annually (or
		as required)
Occasional	Remove sediment and debris from pre-treatment	As required,
Maintenance	components and floor of inspection tube or	based on
	chamber and inside of PPIC manhole rings	inspections
Remedial	Reconstruct soakaway and/or replace or clean void	As required
Actions	fill if performance deteriorates or failure occurs.	
	Replacement of clogged geotextile (will require	As required
	reconstruction of soakaway)	
Monitoring	Inspect silt traps and note rate of sediment	Monthly in
	accumulation	the first year,
		then annually
	Check soakaway to make sure emptying is	Annually
	occurring	

Table 1: Maintenance regime for the soakaways on Site



3.6 FILTER DRAINS

The filter drains on site shall be maintained in accordance with the relative requirements shown in the SuDS Manual. These intervals should be deemed as a minimum frequency and reference should also be made to the manufacturers' guidance to ensure all components are maintained correctly.

Maintenance	Required Action	Typical
Schedule		Frequency
Regular	Remove litter (including leaf litter) and debris	Monthly
Maintenance	from filter drain surfaces, access chambers	(or as
	and pre-treatment devices	required)
	Inspect filter drain surface, inlet/outlet	Monthly
	pipework and control systems for blockages,	
	clogging, standing water and structural	
	damage	
	Inspect pre-treatment system, inlets, and	Six
	perforated pipework for silt accumulation,	monthly
	and establish appropriate silt removal	
	frequencies	
	Remove sediment from pre-treatment devices	Six
		monthly,
		or as
		required
Occasional	Remove or control tree roots where they are	As
Maintenance	encroaching the sides of the filter drain, using	required
	recommended methods (e.g. NJUG, 2007 or	
	BS 3998:2010)	
	At locations with high pollution loads, remove	Five yearly,
	surface geotextile and replace, and wash or	or as
	replace overlying filter medium	required
	Clear perforated pipework or blockages.	As
		required.

Table 2: Maintenance regime for the filter drains on Site



4.0 FOUL WATER DRAINAGE SYSTEM - MAINTENANCE PLAN

The foul water drainage system is separate to the surface water system and consists of a series of pipes and manholes with a pumped connection to the existing combined sewerage network along Nethertown Road, St Bees.

To ensure the foul water drainage system continues to operate as originally designed, it will be necessary to maintain it throughout its lifetime. This document provides details on each component's inspection and maintenance requirements which the management company shall implement.

4.1 PIPES

Pipes are to be inspected as required if there is thought to be a blockage. Any blockages within a pipe are to be removed by rodding or water jetting to clear any debris. Evidence of any blockages in pipes will usually manifest itself in other elements of the system e.g., manholes backing up with water, and the management company should report any problems to an appointed drainage clearance contractor immediately for appropriate action.

4.2 MANHOLES

All manholes are to be inspected annually and any accumulated sediment or blockages shall be removed, and the manhole hosed down if required.

4.3 FOUL WATER PUMPING STATION

The foul water pumping station proposed on Site is to be maintained in accordance with the Environmental Agency Pollution Prevention Guidelines and EN858-2. As such, a service is to be undertaken by the chosen manufacturer on a yearly basis. The maintenance of the foul water pumping station incorporates the following measures:

- Preventative Measures: Daily and Weekly Checks
- Monthly and Quarterly Inspections
- Annual Maintenance



4.3.1 Preventive Measures: Daily and Weekly Checks

Prevention is critical in sewage pump maintenance. The daily and weekly checks to be undertaken for the development site are detailed below:

- Visual Inspections to check for signs of leaks, rust, or general wear and tear.
- A noise Assessments to check for anu unusual noises. Unusual noises can indicate mechanical issues.
- Efficiency Checks through timing the pump cycles.
- Cleaning Accessible Parts
- 4.3.2 Monthly and Quarterly Inspections

The monthly and quarterly checks required are detailed below:

- Cleaning and Lubricating Bearings
- Checking Motor Condition for signs of overheating, corrosion, or other forms of wear and tear.
- Inspecting Electrical Connections to ensure all connections are tight and pollution-free.
- Testing Pump Controls and Alarms
- 4.3.3 Annual Maintenance Tasks

The annual maintenance regime for the foul water pumping station is detailed below:

- Comprehensive cleaning including the pump, surrounding pipes and electrical components.
- Pump Performance Testing
- Parts Replacement if required following an annual service