

SuDS Management & Maintenance Plan

JOB NO. EX20/072/05

Address: Unit 6, The Runway, Ruislip

Revision	Date	Changes
-	01.02.21	Initial Issue

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1 Introduction

- 1.1 This document has been produced on behalf of Morris Grosz for the proposed development at the Unit 6, The Runway, Ruislip. The proposed development comprises of 5 x studio flats with associated car parking, cycle and refuse storage.
- 1.2 This report gives guidance on the maintenance of a Sustainable Drainage System (SuDS) and outlines who will be responsible for the maintenance. Investigations at the site have confirmed that the available strata at the site is unsuitable for infiltration purposes due to negligible permeability; the general topography and restricted site are likewise making evaporative or similar techniques impractical.
- 1.3 As such, by necessity the available SuDS is limited to attenuation of outfall to the proposed discharge rate from the site of 1.2 litres per second.
- 1.4 SuDs on site will be maintained by a management company, organised by Morris Grosz.

2 Inventory of Surface Water Drainage Components

2.1 Storage and Attenuation

- 2.1.1 Surface water from the site is to be attenuated by SuDS into the ground using permeable tarmac paving for road surface. They will receive surface run-off from the roofs, roads, and hard standings.
- 2.1.2 Maintenance of the system will be the responsibility of a private management company set up by the developer. See 'Table 1'.

**Table 1 – System Storage Operation and Maintenance Requirements
(Permeable Paving)**

Maintenance Schedule	Required Action	Recommended Frequency
Regular Maintenance	Brushing & vacuuming (standard cosmetic sweep over whole surface).	Once a year, after autumn leaf fall, or reduced frequency as required, based on site-specific observations of clogging or manufacturers recommendations.
Occasional Maintenance	Stabilise and mow contributing and adjacent areas.	As required
	Removal of weeds or management using glyphosate applied directly into the weeds by an applicator rather than spraying.	As required – once per year on less frequently used pavements.
Remedial Actions	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised to within 50mm of the level of the paving.	As required
	Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users & replace lost jointing material.	As required
	Rehabilitation of surface and upper substructure by remedial sweeping.	Every 10-15 years or as required (if infiltration performance is reduced due to significant clogging).
Monitoring	Initial inspection.	Monthly for three months after installation.

	Inspect for evidence of poor operation and/or weed growth – if required, take remedial action.	Three-monthly, 48 h after large storms in first six months.
	Inspect silt accumulation rates and establish appropriate brushing frequencies.	Annually
	Monitor inspection chambers.	Annually

2.2 Hydrobrake Flow Control

- 2.2.1 This is a proprietary system which is designed to control the surface water discharge from the site to greenfield rates. Some of the proposed flow controls may be prone to blocking and should be monitored closely. Maintenance of the system will be the responsibility of the private management company set up by the Developer. See 'Table 2' below: -

Table 2 – Flow Control Operation and Maintenance Requirements

Maintenance Schedule	Required Action	Recommended Frequency
Regular Maintenance	Remove litter, debris and grass cuttings from upstream SuDs to prevent being washed into the flow control. Inspection of the flow control chamber and the removal of any sediment/debris when required.	Quarterly or as required following monitoring.
Remedial Actions	Check drain down doors are operational, check vortex flow control fixings to manhole chamber and access into the chamber is functional.	Quarterly or as required following monitoring.
Monitoring	Inspect flow control and check flows are not impeded.	Monthly or after periods of heavy rainfall.

2.3 Roof Water Collection Apparatus

- 2.3.1 The rainwater from the roofs of the dwellings is collected via rainwater pipes and will be carried to an orifice chamber which will disperse the water at a rate of 1.2l/s into the public highway.
- 2.3.2 The maintenance of the collections system is the responsibility of the respective property owners.
See 'Table 3 below': -

**Table 3 – Roof Water Collection Apparatus Operation and Maintenance Requirements
(Rainwater Pipes, Gullies, Channel Drains)**

Maintenance Schedule	Required Action	Recommended Frequency
Regular Maintenance	Inlets, outlets and surface control structure Inspect surface structure(headwall), removing obstructions and silt as necessary. Check there is no physical damage. Strim vegetation 1m min surround to structures and keep hard aprons free from silt and debris Inspection chambers and below – ground chamber Remove cover and inspect, ensuring that water flowing freely and that the exist route for water is unobstructed. Remove debris and silt. Undertake inspection after leaf fall in autumn	Quarterly or as required following monitoring.
Remedial Actions	Check for blockages in manholes and pipes. Rodding and jetting of pipes to be carried out. CCTV survey can be carried out to inspect condition of pipework.	Quarterly or as required following monitoring.
Monitoring	Inspect collection apparatus for debris and litter. Remove where necessary to prevent blockages in the system.	Monthly or after periods of heavy rainfall.

2.4 Design Life

- 2.4.1 The design life of the development is likely to exceed the design life of each of the SuDS components listed above.
- 2.4.2 During the routine inspections of any drainage components, it may become apparent that they have reached the end of their functional lifetime. In the interest of sustainability, repairs should be the first-choice solution where practicable. If this is not the case, then it will be necessary to undertake complete replacement of the component in question.