Station Road, Huntingdon

Sustainable Drainage Maintenance Schedule

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Rev B 06/06/25

1 Maintenance Responsibilities:

Maintenance of all SuDs non adopted surface water drainage system is the responsibility of the Land Owner(s) and/or assign management company appointed by the Land Owner. Any plot drainage will be assigned and conveyed to the plot within their curtilage for the tenants on going responsibility. All surface water management system defined within this document and drawings will require access as necessary for maintenance purposes.

Contact details are provided below of a suitably qualified company capable of providing maintenance assistance of the drainage network designed on this site.

2 Land Owner Contact Details

Company name	MTVH – Metropolitan Thames Valley Housing
Address	Metropolitan Thames Valley The Grange 100 High Street London N14 6PW

3 Introduction

The intention is for this handbook to be used as a reference guide by adopting parties, management company or tenant/occupier responsible for the maintenance of the SuDS features within the proposed development. This handbook sets out each type of proposed SuDS features within the development and provides a schedule of how that system should be operated and maintained to ensure the surface water system operates as it was originally intended and minimise performance deterioration.

For the purposes of this manual, maintenance refers to:

- Inspections required to identify performance issues and plan appropriate maintenance needs;
- Operation and maintenance of the surface water drainage system;
- Landscape management;
- Waste management associated with contaminated silt and other waste materials resulting from maintenance.

All maintenance will need to take the protection of habitats and associated ecology into account. Maintenance regimes should be regularly assessed (i.e. once per year) to make sure that the approach is still achieving objectives in terms of drainage, landscaping, amenity and biodiversity.

4 What is Sustainable Drainage (SuDS)?

Approaches to manage surface water that takes into account water quantity (flooding), water quality (pollution), biodiversity (wildlife and plants) and amenity are collectively referred to as Sustainable Drainage Systems (SuDS). The main purpose of SuDS is to replicate the natural local drainage regime and typically manage rainfall close to where it falls. SuDS are more sustainable than traditional drainage methods because they:

- Manage runoff volumes and flow rates from hard, impermeable surfaces, reducing the impact of urbanisation on flooding;
- Provide opportunities for using runoff where it falls;
- Protect and / or enhance water quality (reducing pollution from runoff);
- Protect natural flow regimes in watercourses;
- Are sympathetic to the environment and needs of the local community;
- Provide an attractive habitat for wildlife in urban watercourses;
- Provide opportunities for evapotranspiration from vegetation and surface water;
- Encourage natural groundwater/aquifer recharge (where appropriate);

5 Sustainable drainage used on this development:

Surface water is collected through a range of drainage and SuDS elements including RWP's/water butts, Gullies, drainage channels, filter drains, swales.

Surface water attenuation is when the permitted discharge rate of rainwater leaving the site, is less than the volume of water landing on the site during heavy rainfall periods.

The water gradually builds up in a storage structure, until such time as the rain stops, and the stored water is slowly released into the public sewer network.

This flow restriction reduces the amount of water leaving site at any single point in time, which in turn reduces the effects of flooding downstream.

Any detention basin(s) are designed to provide enough storage for an extreme rainfall event. That is a rainfall occurrence of 1 in 100 years, an additional allowance is also made for climate change and urban creep. Refer to Engineering Layout 101.

The design is then sufficient to prevent flooding occurring on the site reducing the risk to the end user.

6 Maintenance of SuDS:

Maintenance of the system is vital to the continued performance of the system. It is important that the original design intent is achieved throughout the lifespan of the development otherwise the likelihood of flooding increases as the performance of the system decreases.

Refer to the site-specific drawings contained within the Appendix to familiarise with the arrangement of SuDS features on the site.

Proposed SuDs management & Maintenance

An example of operation and maintenance requirements for a proprietary treatment system		
Maintenance schedule	**Required action**	**Typical frequency**
Routine maintenance	Remove litter and debris and inspect for sediment oil and grease accumulation	Six monthly
	Change the filter media	As recommended by manufacturer
	Remove sediment, oil , grease and floatables	As necessary- indicate by system inspections or immediately following significant spill
Remedial actions	Replace malfunctioning parts of structures	As required
Monitoring	Inspect for evidence of poor operation	Six monthly
	Inspect filter media and establish appropriate replacement frequencies	Six monthly
	Inspect sediment accumulation rates and establish appropriate removal frequencies	Monthly during first half year of operation, then every six months

An example of operation and maintenance requirements for Drainage Channels		
Maintenance schedule	**Required action**	**Typical frequency**
Regular maintenance	Remove litter and debris	Monthly (or as required)
	Ensure grates are clear from silt and blockages and freely draining.	Monthly (or if ponding occurs)
	Manage other vegetation and remove nuisance plants in the vicinity	Monthly (as start, then as required)
	Inspect silt accumulation rates within outlet gully and establish appropriate removal frequencies	Monthly (at start then half yearly)
	Inspect silt accumulation rates within channel and establish appropriate removal frequencies	Monthly (at start then half yearly)
Occasional maintenance	Inspect for damage to grating and channels	As required
Remedial actions	Removal of silt from outlet gully	As required
	Jet channel to remove silt	As required
	Replace broken grates or channels	As required

An example of operation and maintenance requirement for filter drains		
Maintenance schedule	**Required action**	**Typical frequency**
Regular maintenance	Remove litter (including leaf litter) and debris from filter drain surface, access chambers and pre-treated devices	Monthly (or as required)
	Inspect filter drain surface, inlet/outlet pipework and control systems for blockages, clogging, standing water and structural damage	Monthly
	Inspect pre-treatment systems, inlets and perforated pipework for silt accumulation and establish appropriate silt removal frequencies	Six monthly
	Remove sediment from pre-treatment devices	Six monthly, or as required
Occasional maintenance	At locations with high pollution loads, remove surface geotextile and replace, and wash or replace overlaying filter medium	Five yearly, or as required
	Clear perforated pipework of blockages	As required

An example of operation and maintenance requirements for detention basins		
Maintenance schedule	**Required action**	**Typical frequency**
Regular maintenance	Remove litter and debris	Monthly
	Cut grass- for spillways and access routes	Monthly(during growing season) or as required
	Cut grass- meadow grass in and around basin	Half yearly(spring – before nesting season and autumn)
	Manage other vegetation and remove nuisance plants	Monthly (at start, then as required)
	Inspect inlets, outlets and overflows for blockages and clear if required	Monthly
	Inspect banksides ,structures pipework etc for evidence of physical damage	Monthly
	Inspect inlets and facility surface for silt accumulation establish appropriate silt removal frequencies	Monthly (for first year) then annually or as required
	Check any penstocks and other mechanical devices	Annually
	Tidy all dead growth before start of growing season	Annually
	Remove sediment from inlets outlets and forebay	Annually (or as required)
	Manage wetland plants in outlet pool-where provided	
Occasional maintenance	Reseed areas of poor vegetation growth	As required
	Prune and trim and trees and remove cuttings	Every 2 years or as required
	Remove sediment from inlets, outlets, forebays and main basin when required	Every 5 years, or as required (likely to be minimal requirements where effective upstream source control is provided)
Remedial actions	Repair erosion or other damage by reseeding or re-turfing	As required
	Realignment of rip rap	As required
	Repair/rehabilitation of inlets, outlets, and overflows	As required
	Relevel uneven surfaces and reinstate design levels	As required

An example of operation and maintenance requirements for Vortex Flow Control		
Maintenance schedule	**Required action**	**Typical frequency**
Regular maintenance	Inspect the performance of the system and advise a drainage engineer of any problems with water levels. The system should only reach full capacity during a severe storm.	First three months
	Inspect the chamber and ensure no debris is present, which may cause blockages. Remove as necessary.	Annually (and following poor performance)
	Ensure emergency by pass door release mechanism is functioning.	Annually
	Inspect sump for silt build up and clear as necessary.	Annually
Occasional maintenance	Following severe storms. Inspect the drainage network and ensure the system is operating as designed. In the majority of cases no overland flooding should occur. Any flooding will be an indication of blockage reducing the performance. Inspect the chambers either side of the tank for silt / blockage and remove as necessary.	As required
Remedial actions	Repair any damage to chamber or cover	As required

An example of operation and maintenance requirements for Road Gullys		
Maintenance schedule	**Required action**	**Typical frequency**
Regular maintenance	Soon after site works have completed, a large amount of build up is normally expected within the drainage system. Lift the cover to the Silt Trap Chamber and assess any silt build up. Any build up should be removed and disposed of.	First three months
	This gully pit should be emptied yearly to prevent build-up of silt blocking the outlet	Annually (and following poor performance)
Occasional maintenance	Inspect the chambers for silt / blockage and remove as necessary.	Annually or as required
Remedial actions	Repair any damage to pot or cover	As required

Appendix A:

Engineering layout and associated plot drainage plan(s) including SuDs required

Appendix B:

Maintenance Log

Date	Works Undertaken	Person / Company