

Proposed Care facility, West Hill, East Grinstead
Maintenance Schedule
Appendix 6

Principal Maintenance and operation requirements

Access during maintenance Period

Access for maintenance is provided by use of the proposed car park. Dedicated parking areas will be provided on site in the existing parking areas and cordoned off during maintenance. The area to be cordoned off will be determined by the maintenance, and the plant required.

Maintenance Responsibility

The Care Home providers in-house maintenance team and sub-contractors, when required, will have full responsibility for the safe operation and maintenance of the East Grinstead site. Their dedicated team have skilled operatives to facilitate planned, preventative maintenance activities (PPM) at all times. Full details of the care home management contact details will be provided to the LLFA once appointed.

All surface water drainage associated with the Site will remain private and will be maintained by Care Home providers in-house maintenance team and sub-contractors. This involves proactively responding to maintenance activities for each of their sites which includes the critical foul and surface water drainage systems that are employed.

It is standard procedure for the care home providers to employ a maintenance team contracted to maintain all aspects of care home operations.

This maintenance schedule must be included within the as built drawings within the Operations Manual.

Materials to be used for private SUDS systems: Maintenance is relatively simple and access to all chambers is unhindered. Covers are generally medium duty pedestrian loading and can be lifted by hand by a single person. If in doubt use two persons or bespoke manhole cover lifting gear. Chambers are generally shallow and detritus can be removed by gloved hand or small hand tools.

Maintenance costs

HR Wallingford 2004 provides indicative annual maintenance costs for various SUDS Features but this is dependent of factors such as scale of development.

Typically:

Permeable paving: £0.75-£1.20 per/ m³ of storage volume

Design Life

In line with Planning Policy Guidance and best practice (BS8533), a 75 years lifetime of development should be applied to a commercial development. The design life is also an important consideration in whole life costing as component assets may have a shorter service life than the design life. Design life for

SUDS systems may be very long assuming appropriate construction and long-term maintenance is undertaken over the system life. There is a low risk of structural failure of SUDS components that can help to extend the structural design life. Whilst this is the case, regular maintenance and inspections may be required to ensure that the SUDS components are delivering the required attenuation and water quality benefits. This requirement may limit the operational life of the assets or a component of a system that requires some level of intermittent maintenance or rehabilitation. This highlights the two elements of design life:

- Design life of the system as a whole.
- Component life of a system element, the failure of which may reduce the system's ability to achieve the stated function.

A review of available design lives for various SUDS measures are provided in the table below, based on a review of literature undertaken in 2004 as part of HR Wallingford's work for the DTI on whole life costing for SUDS components.

References:

CIRIA C753 (205): Wildlife and Wetlands Trust Guidance (2012) maximising the potential for people and wildlife: HR Wallingford (2004) Whole life costing for sustainable drainage. Report SR 627: DEFRA (2010) Surface water management plan technical guidance.

Maintenance Schedule

Element	Actions required	Frequency	Estimated Costs to owner based on owner having some ability to carry out simple tasks
Flow Control chambers	No moving parts. Check for debris/ sediment in flow control chamber ensure orifice opening is clear Note: Maintenance providers should endeavour to check flow control prior to predicted storm events	Three times per year preferably 48 hrs after significant storms (over 30mm of rainfall in a single event)	*Labour cost £350.00 per day
Catchpits gullies and linear drainage channels	Visual inspection and jetting/ cleaning Note: Maintenance providers should endeavour to check and remove debris prior to predicted storm events	Annually or as required	*Labour cost £350.00 per day
Pipework including oversized pipes	Visual inspection and jetting cleaning	Every 5 years or as required	*Labour cost £350.00 per day
	Visual inspection for physical damage and remediation		*Labour cost £350.00 per day
Silt traps	Inspection for litter and debris removal	monthly	*Labour cost £350.00 per day
	Sediment removal from silt buckets	6 monthly	*Labour cost £350.00 per day
Attenuation storage tanks	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months, then annually	*Labour cost £350.00 per day
	Remove debris from catchment surface (where it may cause risks to performance)	Monthly	*Labour cost £350.00 per day
	For systems where rainfall infiltrates into the tank from above (ie from Rain Garden above), check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary.	Annually, or as required	*Labour cost £350.00 per day SDS GEOLIGHT advise design life to be a minimum of 50 years
	Repair/rehabilitation of inlets, outlet, overflows and vents	As required	
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and	Annually and after large storms	

	operating as designed		
	Survey inside of tank for sediment build up and remove if necessary	Every 5 years or as required	

Construction plan guidance

Item	Method and timings within programme
Construction Programme	Contractor to provide a Construction Programme to the client and architect prior to starting the works. Items listed below shall be considered when producing the programme
Surface water chambers and carrier pipes	Can be laid following pouring of foundations. Chambers to be protected during the construction phase and replaced if damaged. Alternatively can be constructed after buildings are completed as components connect to external rainwater pipes. All pipework to be surveyed with cctv upon completion to ensure all components are free of construction debris
Below ground attenuation crates	Can be assembled following pouring of foundations. Crates should be covered and protected. No vehicles or plant must traffic over or placed on the crates, until backfilled to full depth SDS Geolight system is virtually maintenance free. Access for jetting and cctv is provided through central carrier pipes