



STORM WATER / SUDs MAINTENANCE PLAN

1. Introduction

This outline maintenance proposal is to be read in conjunction with Tier Consult, Drainage Strategy Drawing T/17/2008 Ref No 55-01 which employs a hierarchical approach to considering the storm water management for the proposed development.

The considered drainage solution comprises an attenuated network with discharge rates to private sewer limited by a vortex flow control device and the incorporation of a Naylor 'Smart Sponge' filter to control water quality at the outfall. Storage volume is provided within an underground tank constructed from modular cellular units.

A plan of routine inspection maintenance should be adopted and adhered to in order to prevent failure due to inadequate maintenance. This document describes the drainage systems used and provides a framework for future maintenance procedures.

2. Site Drainage Components

The site drainage network is shown on Tier Consultants drawing reference T/17/2008 Ref No 55-01

The main drainage components are:-

1. Roof water from the building is collected in pipework and routed to the storage tank. The tank requires periodic inspection and de-silting as required
2. Surface water runoff from external paved areas are collected by trapped gullies and liner drainage channels (incorporating trapped sumps) and discharged into the piped network which conveys flows to the cellular storage tank.
Gullies and channels require periodic inspection and de-silting as required.
The external pavement areas require periodic sweeping as this will remove silt and contaminants directly from the paved surfaces before they become mobilised during rainfall events and transported into the drainage system.
3. The storage tank is formed with a modular crate system wrapped with an impermeable membrane to prevent escape of water and ingress of soil particles.
The storage tank requires periodic inspection and de-silting if required.



4. The vortex flow control unit limits the discharge of surface water to the receiving drain at a predetermined rate.
The chamber housing the control unit requires periodic inspection to check for any siltation and the vortex flow control unit should be checked for any blockages.
5. The final manhole prior to discharge into the surface water sewer will be fitted with a Naylor 'Smart Sponge' filter.
The filter requires periodic inspection and routine replacement when deemed necessary.

3. Maintenance Schedule

The rate of build up of silt and debris within a drainage system varies from site to site and is dependent upon individual site characteristics. Therefore the frequency of actions below should be adopted as a minimum standard for a period of 24 months after the completion of the development. This period will be sufficient to assess the system performance over 2 complete seasonal cycles after which the maintenance activity schedule may be reviewed accordingly.

Action	Frequency
Clear external areas of litter including bin and recycling enclosures	Monthly
Clear guttering of leaves and debris.	Twice yearly. Spring and Autumn after leaf fall
Inspect all storage tank access points for sediment.	6 Monthly and after heavy rainfall. Remove debris /silt as require
Inspect all manholes chambers for siltation and debris	6 monthly and after every major storm event. Remove debris/silt as encountered
Vortex Flow Control Unit	3 monthly inspect and remove debris
Catchpits immediately upstream from storage tank	Minimum 6 monthly and after every major storm event. Remove debris/silt as encountered
Storage Tank	6 monthly to check for blockages and after every main storm event. The tank can be inspected via the 5 access points and CCTV cameras and high pressure jetting equipment can be deployed if

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Naylor 'Smart Sponge' Filter	required. 3 Monthly It is intended that proactive checks are completed on a six monthly basis, any remedial work will be managed reactively. 1. Open the top of the Smart Filter & using the plastic ties lift out the wire cage containing the Smart Paks, snip the plastic ties & remove the individual Smart Pak, shake off excess water & weigh the Smart Pak and record this on the maintenance schedule. 2. If the recorded weight is greater than twice the dry weight, replace the Smart Paks accordingly with new ones. If less than twice the weight, a changeover date can be calculated based on the relative weights. 3. Relace the Smart Paks back in the wire cages, renewing any plastic ties to hold the cages closed and slide the cage back into place
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