



Our Reference: 0304_CSWMP_A_P1

james.savage@schemaengineering.co.uk

09/10/2023

Drainage

SUDS

Drainage Strategy Report

Hydraulic Modelling

Infrastructure

Prepared for:

Highways

Earthworks

Jason Goodey

Inspections

Cocksedge Building Contractors

Feasibility Studies

11 Meridian Way

3rd Party Reviews

Meridian Business Park

Norwich

NR7 0TA

By email: jgoodey@cocksedge.com

Former Mid-Suffolk Council Offices, Needham Market – DC/23/04079

Introduction

This letter statement relate specifically to the Construction Surface Water Management plan in relation to Maintenance during construction of the SuDS and Drainage Assets.

Inspection and Monitoring

The following is a list of inspections and monitoring to be carried out during the works relating to surface water management. Cocksedge site team including Project Manager, Foreman and Engineer will carry out these inspections.

- i. Inspect the Principal Control Measures outlined in this plan on a weekly basis. Report findings to the SCC.
- ii. Inspect surface water treatment measures (ponds, tanks, sandbags, etc.) on a daily basis;
- iii. Daily visual inspection of all discharges of measures implemented within the site on a daily basis including excavation, deposition, pumping out or concreting works are on-going in the vicinity;
- v. Wheel wash facilities shall be inspected on a weekly basis;
- vi. Borrow Pits shall be inspected on a daily basis while in operation and on a weekly basis thereafter;
- vii. Material Deposition Areas shall be inspected on a daily basis while in operation and on a weekly basis thereafter;
- viii. Stockpiles shall be monitored on a daily basis while being filled or emptied and otherwise on a weekly basis;
- ix. Control measures for works at or near water bodies shall be inspected on a daily basis;

- x. Concrete operations shall be supervised and designated concrete washing out facilities shall be inspected on a daily basis;
- xi. Site Compounds shall be inspected on a weekly basis;
- xii. Any direct release of sediment to a watercourse causing plumes or exceedance of water test parameters investigatory levels shall result in: -
 - a. SCC shall be notified immediately;
 - b. the contractor will be required to take immediate action and to implement measures to ensure that such discharges do not re-occur;
 - c. Works if stopped, shall not recommence until appropriate corrective measures to avoid any repetition are put in place. Such measures shall be agreed with the Project Manager following consultation with the SCC;
 - d. Works and/ or discharges from the works shall not recommence until written consent is received from the Project Manager.
- xiii. Where the Project Manager considers that the risk of a sediment release is high SCC shall be informed by Cocksedge and protective action to be taken. The Project Manager shall report all such notifications and requests to the SCC.

Maintenance Regime

The recommended maintenance regime [as set out within CIRIA C753] for the private and adoptable storm water and SUDS drainage system is set out in Tables 1 - 4.

Table 1 – Pipes, Manholes, Flow controls, Filter Drains etc

Maintenance Schedule	Required Action	Frequency	Asset Owner
Regular Maintenance	Remove sediment and debris from inspection chambers, gratings flow control chambers etc	Weekly	Contractor
	Cleaning of gutters and any filters on downpipes.	As required	
	Remove any root ingress.	As required	
	As per Manufacturers guidance [specific information to be confirmed during detailed design as final products are selected].	As required by Manufacturer [specific information to be confirmed during detailed design as final products are selected].	
Occasional Maintenance	CCTV survey of drains to check alignment, cracking and joint displacement.	10-year intervals	
	Replace gratings, damaged features.	As required	

Table 2 – Permeable Pavement Maintenance Schedule

Maintenance Schedule	Required Action	Frequency	Asset Owner
Regular Maintenance	Brushing and 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 manufacturer's recommendations – pay attention to areas where water runs onto pervious surface from adjacent impermeable areas as this area is most likely to collect the most sediment	Contractor
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, and replace lost jointing material.	As required	
	Rehabilitation of surface and upper substructure by remedial sweeping.	Every 10 to 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 hours after large storms in first six months	
	Inspect silt accumulation rates and establish appropriate brushing frequencies.	As required	
	Monitor inspection chambers.	Annually	

Table 3 – Attenuation Storage Tanks Maintenance Schedule

Maintenance Schedule	Required Action	Frequency	Asset Owner
Regular Maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Weekly during construction phase, then monthly thereafter.	Contractor
	Remove debris from the catchment surface (where it may cause risks to performance).	Weekly during Construction Phase	
	For systems where rainfall infiltrates into the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary.	Annually	
	Remove sediment from pre-treatment structures and / or internal forebays.	Annually, or as required	
Remedial Actions	Repair / rehabilitate 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 operating as designed.	Annually	
	Survey inside of tank for sediment build-up and remove if necessary.	Every 5 years or as required	

In addition to the information provided in Tables 1 - 4, the hardstanding's will need to be regularly monitored to ensure that flow towards the various surface drainage collection features. If the hardstanding's are damaged, then the risk of localised flooding could be increased in a location that was not accounted for.

We trust you find the above and enclosed satisfactory and sufficient for your purposes; however, should you have any queries in this respect, please do not hesitate to contact the Writer.

This report has been prepared by:

James Savage

Associate

BSc (Hons) GMICE MIET MCIHT VR

Schema Engineering Ltd

Copyright

©2023 This Report is the copyright of Schema Engineering Ltd. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.