STORM WATER / SUDs MAINTENANCE PLAN
ASHBROOKE, MOSS NOOK, MANCHESTER

1. Introduction

This drainage maintenance proposal is to be read in conjunction with the following documents:

- Drainage drawing Ref Nos. T/20/2463 55-01

The considered drainage solution comprises of an attenuated networks with restricted discharge rates via vortex flow control devices to the watercourse to the northern boundary of the proposed development.

The proposed surface water networks are designed to accommodate all storm events up to the 1 in 100 year storm plus an additional 40% to cater for climatic change.

A plan of routine inspection maintenance should be adopted and adhered to 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 Consult drawing reference T/20/24563 55-01.
The main drainage components are.

1. Roof water from the building is collected into a gravity fed drainage system and routed to the surface water drains. The gutters and downspouts require periodic inspection and de-silting as required.

2. Surface water runoff from external paved areas is discharged into trapped gullies and linear channel. Gullies and channels require periodic inspection and de-silting as required.

3. The pavement areas which consist of service yards, roads and car parks 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.

4. Porous paved surfaces receive rainwater run-off from the carpark areas of development. Surface water infiltrates through to the subbase where a perforated collection pipe conveys surface water flows into the wider drainage system. This system requires periodic inspection and cleaning to remove litter, dust and leaf fall.

5. Oil separators remove oil-based pollutants before the flow is discharged from the site. Requires routine de-sludging.

6. 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 possible de-silting if required.

7. 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 and to ensure it is working correctly.

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
Permeable Surfaces	3 times per year to remove debris, dust and leaves. See recommendations above.
Inspect all storage tank access points for sediment.	6 Monthly and after heavy rainfall. Remove debris /silt as required.
Petrol/oil Separator	Inspect bi-annually and when alerted by the audible/visual alarms. Remove oil and contaminants
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.
Catch pits	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 access points and CCTV cameras and high-pressure jetting equipment can be deployed if required.

4. Management Company

The majority of the maintenance for the drainage features on each plot will likely be the responsibility of the tenant. However, an overall management company will be appointed to manage the maintenance regime for the wider drainage features such as ponds and outfalls. Personnel will be site based and where specialised contractors are required the work will be undertaken through a series of written RAMS.