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**DRAINAGE / SUDS
MAINTENANCE STRATEGY**

AT

Loverock Road, Reading

**REF: 222076-MNP-XX-XX-RP-C-0001
December 2022**

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Report prepared by:



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1. INTRODUCTION

- 1.1. Mason Navarro Pledge Ltd have prepared a Drainage Maintenance and Management Plan for the proposed development at Loverock Road, Reading
- 1.2. This report gives details of the proposed SuDS / Drainage system and describes the long-term operation and maintenance requirements which should be carried out in accordance with the guidance in the CIRIA SuDS Manual.
- 1.3. This report has been prepared by Andrew Quinn.

2. DESCRIPTION OF PROPOSED DRAINAGE

- 2.1 The proposed drainage strategy for the development is shown on drawing:
222076-MNP-XX-00-DR-C-1800 - Drainage Strategy GA Plan
- 2.2 Surface water run-off from the site will be discharged into the public sewer network via a new system of pipes, manholes, channels, pumps, gullies and attenuation tanks.
- 2.3 The drainage has been designed to accommodate the 1 in 100 year storm event including a 40% allowance for climate change.

3. MAINTENANCE / MANAGEMENT RESPONSIBILITY

- 3.1 The management and maintenance responsibility for the drainage and SuDS components across the site will be the landowner of the development or a private management company on behalf of the landowner.

4. INVENTORY OF SURFACE WATER DRAINAGE COMPONENTS

GULLIES

- 4.1 Gullies provide a degree of pollution control in preventing silt and debris passing into the sewer network.

TABLE 1: GULLY MAINTENANCE

MAINTENANCE SCHEDULE	REQUIRED ACTION	RECOMMENDED FREQUENCY
Regular maintenance	Clean and empty gullies.	Quarterly.

CATCHPITS

- 4.1 Catchpit chambers and manholes provide a degree of pollution control in preventing silt and debris passing forwards into the drainage network.
- 4.2 The operation and maintenance requirements are given in the table below:

TABLE 2: CATCHPIT MAINTENANCE

MAINTENANCE SCHEDULE	REQUIRED ACTION	RECOMMENDED FREQUENCY
Regular maintenance	Clean and empty catchpits.	Quarterly.

PERMEABLE PAVING

- 3.1 Permeable block paving allows water to infiltrate through gaps between the blocks into a layer of gravel, from which it is tanked and conveyed through the underlying sub-base to a collection point and drains in to the below ground network.
- 3.2 The operation and maintenance requirements are given the table below:

TABLE 4: PERMEABLE PAVING MAINTENANCE

MAINTENANCE SCHEDULE	REQUIRED ACTION	RECOMMENDED FREQUENCY
Regular maintenance	Sweeping. Note: Any jointing material between the blocks that is lost or displaced as a result of sweeping must be replaced. New jointing material must be the same type as that removed or a suitable replacement.	Three times a year at the end of winter, mid-summer and after autumn leaf fall. Also as required based on site-specific observations.
Occasional maintenance	Stabilise and mow contributing and adjacent areas to prevent excess sediment being washing into the paving. Removal of weed.	As required
Remedial actions	Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users. Rehabilitation of surface and underlying sand and geomembrane.	As required
Monitoring	Inspect for evidence of poor operation and/or weed growth. If required take remedial action.	Monthly for three months after installation, then during regular maintenance visits.

- 3.3 Over time the ability of the permeable paving to infiltrate and convey surface water run-off may degrade due to clogging of the joints by silt and other sediments.
- 3.4 All areas of permeable pavement should be regularly inspected by those responsible, preferably during and after heavy rainfall to check effective operation and to identify any areas of ponding.

ATTENUATION STORAGE TANKS

4.3 The operation and maintenance requirements are given the table below:

TABLE 5: ATTENUATION TANK MAINTENANCE

MAINTENANCE SCHEDULE	REQUIRED ACTION	RECOMMENDED FREQUENCY
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then annually.
	Remove debris from the catchment surface (where it may cause risks to performance).	Monthly.
	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, as required.
Remedial actions	Repair/rehabilitate inlets, outlets, 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.

DRAINAGE CHANNELS

4.4 Inspections should be frequent and regular, depending on local conditions, but at least annually. Inspections should include gratings; covers including their locking bolts; sumps and sump buckets; exposed concrete surround and adjacent paving.

4.5 After removal of gratings and/or inspection covers, channels should be flushed with water or high pressure jetting (Do not use boiling water or cleaning agents). All surfaces and joints should be checked and repaired as necessary. Empty all silt buckets and clean out sump and connections. Replace gratings ensuring they are correctly fitted.

BELOW GROUND MANHOLES AND DRAINAGE - GENERAL

- 4.6 Manholes and Catchpit Inspections should be frequent and regular, depending on local conditions, but at least annually. The drainage system should be cleaned / jetted as necessary.