Operation & Maintenance Plan
For Off Line Geocellular Surface Water Attenaution Tanks
Mount Road, Gorton

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1.0 SURFACE WATER DRAINAGE OWNERSHIP RESPONSIBILITY

The main foul & surface water sewer systems to serve the development is to be adopted with a Section 104 Agreement by NAV – ESP Utilities Group Limited.

The surface water system has been designed to restrict the discharge rates to pre development greenfield rates. To achieve this the surface water system incorporates attenuation and a vortex flow control unit on the outfall.

The surface water for all storm events up to and including the 30 year event is contained within oversized pipes to be adoptable network.

In additional further attenuation to accommodate flows generated by storm events in excess of the 30 year up to the 100year event (plus allowance for climate change) are provided by 3 offline geocellular tanks. The geocellular tanks are not included within sewer system offered for adoption within the proposed Section 104 Agreement and will be maintained by a Management Company.

This plan describes the operation and maintenance requirement for the off line tanks

2.0 OPERATION AND MAINTENANCE REQUIREMENTS

As with all traditional drainage systems, SuDS need to be inspected and maintained regularly to ensure that they operate correctly and efficiently. If SuDS are not properly maintained then there is a risk that the components become overloaded during periods of prolonged heavy rainfall potentially resulting in localised flooding within the development. Recommendations for the maintenance of the SuDS components are detailed in the following section.

As part of this process it is recommended that inspection and maintenance records are retained by the Management Company to track the progressive performance of the SuDS over time. The inspection records should include the following:

- Sediment condition and depth
- Water observations (sheen, smell, etc.)
- Unscheduled maintenance needs
- Components that do not meet performance criteria and require immediate maintenance
- Common problem areas, solutions and general observations
- Aesthetic conditions

For Health and Safety reasons as well as practicality, SuDS systems should be maintained during periods of dry weather wherever possible. Adhering to the recommended maintenance regimes outlined below will minimise the risk of maintenance activities being required when a fault becomes apparent, usually during a rainfall event.

<u>Underground Cellular Systems</u>

As detailed above, flows will enter via a catch-pit inspection chambers. The cellular units will be wrapped in an impermeable geotextile to ensure water from the surrounding ground cannot enter the system..

The following operation and maintenance requirements refer to the recommendations in The SUDS Manual (CIRIA C753) and from the manufacturer. Regular inspection and maintenance is required to ensure the effective long-term operation of underground storage systems.

Table 2.3 Underground Cellular System maintenance activities & schedule

Maintenance Schedule	Required Action	Typical Frequency
Regular Maintenance	Inspect and identify any areas upstream of the system that are not operating correctly (i.e. rainwater pipe gullies, silt traps, inspection chambers). If required, take remedial action	Monthly for first 3 months, then six monthly thereafter
	Visual inspection of silt traps to ensure no obvious build-up of silt or other blockages. Check to ensure there is no standing water in the chambers	Monthly for first 3 months, then six monthly thereafter (and after large storm events)
	Visual inspection of surface cover to tank for signs of damage that may expose tank.	Monthly for first 3 months, then six monthly thereafter
Remedial Actions	Repair/rehabilitation of inlets, outlets and vents. De-silt tank and inlet catch-pit as required.	As required, de-silting six monthly.
Monitoring	Inspect/check all upstream drainage inlets and outlets to ensure that they are in good condition and operating effectively	Annually and after large storm events
	Survey interior of tank for sediment build-up	5 yearly