

22358-R-602 – Surface Water Maintenance Schedule

November 2022

Maintenance Plan for the surface water system.

To ensure the surface water systems to function as intended it is important appropriate maintenance arrangements are in place.

The surface water from the proposed development will be maintained in accordance to CIRIA C753 Chapter 32.

Storm Water Maintenance Management Schedule (CIRIA C753 – The SuDS Manual)

Operation and maintenance activity	SuDS component												
	Pond	Wetland	Detention basin	Infiltration basin	Soakaway	Infiltration trench	Filter drain	Modular storage	Pervious pavement	Swale/bioretention/ trees	Filter strip	Green roofs	Proprietary treatment systems
Regular maintenance													
Inspection	■	■	■	■	■	■	■	■	■	■	■	■	■
Litter and debris removal	■	■	■	■	□	■	■	□	■	■	■		□
Grass cutting	■	■	■	■	□	■	■	□	□	■	■		
Weed and invasive plant control	□	□	□	□		□	□		□		□	■	
Shrub management (including pruning)	□	□	□	□					□	□	□		
Shoreline vegetation management	■	■	□										
Aquatic vegetation management	■	■	□										
Occasional maintenance													
Sediment management¹	■	■	■	■	■	■	■	■	■	■	■		■
Vegetation replacement	□	□	□	□						□	□	■	
Vacuum sweeping and brushing									■				
Remedial maintenance													
Structure rehabilitation /repair	□	□	□	□	□	□	□	□	□	□	□	□	
Infiltration surface reconditioning				□	□	□	□		□	□	□		

Key

- will be required
- may be required

Notes

- 1 Sediment should be collected and managed in pre-treatment systems, upstream of the main device.

Proposed Site SuDS Features

1. Pervious Surfacing
2. Bio Retention Planter / Rain Garden
3. Piped Network Elements

The maintenance management will be highlighted in 3 categories: -

Regular Maintenance

Regular maintenance comprises tasks that are likely to be required regularly to maintain and observe the drainage system typically on a monthly programme.

- Inspection - (Elements - 1, 2, 3)
- Litter and Debris Removal - (Elements - 1, 2, 3)
- Grass Cutting - (Elements - 2)
- Shrub Management - (Elements – 2)

Occasional Maintenance

Occasional maintenance comprises tasks that are likely to be required periodically, but on a much less frequent and predictable basis than the regular tasks, typically annually.

- Sediment management - (Elements - 1, 2, 3)
- Catchpit / Silt trap cleaning - (Elements - 3)
- Gully cleaning - (Existing Carpark Network)
- Pipe jetting if required - (Elements – 1, 3)
- Vegetation Replacement - (Elements – 2)
- Vacuum Sweeping and Brushing - (Elements - 1)

Remedial Maintenance

Remedial maintenance describes the intermittent tasks that may be required to rectify faults associated with the system, although the likelihood of faults can be minimised by good design, construction, and regular maintenance activities. Where remedial work is found to be necessary, it is likely to be due to site-specific characteristics or unforeseen events, and so timings are difficult to predict.

- Structure Rehabilitation / Repair - (Elements - 1, 2, 3)

Site Specific Maintenance Plan (Refer to SAB layout 22358-001)

1. Permeable Surfacing

Maintenance to be carried in accordance with Ciria Suds Manual (Chapter 20 & Table 20.1.5) and to include but not limited to the following actions: -

- Annual visual inspections to be undertaken of the pervious system with litter and debris removed.
- Brush / Vacuum, replacing any lost jointing material every year. Sediment management to be undertaken at the same time. Upstream chamber of discharge pipe to be inspected and cleaned yearly.
- Remedial maintenance will be undertaken intermittently following the outcome of monthly inspections if required. This may consist of the following items –
 - Weed control
 - Replacement of damaged blocks
 - Repair any rutting
 - Cleaning for aesthetics of the paving blocks
 - De-icing during winter months
 - Inspection of ponding during or following heavy rainfall

2. Bioretention Planting / Rain Gardens

Site specific method statement

Maintenance to be carried in accordance with Ciria Suds Manual (Chapter 18 & Table 18.3) and to include but not limited to the following actions: -

- Quarterly visual inspections to be undertaken along with litter and debris removed. planting inspection to be undertaken at the same time but will be less frequent during winter months.
- Remedial maintenance will be undertaken intermittently following the outcome of quarterly inspections if required. This may consist of the following items –
 - Weed control
 - Replacement of damaged planting
 - Structure Rehabilitation / Repair
 - Surface Reconditioning

3. Piped Network

- Gully / catchpit / channel drain cleaning and pipe jetting to be undertaken typically every year. If a blockage is present and flooding occurs, cleaning and clearing the blockage should be undertaken immediately. If item is defective, this should also be repaired or replaced.