



## STORM WATER / SUDs MAINTENANCE PLAN

### PROJECT DESFORD

#### 1. Introduction

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

- Drainage drawing Ref Nos. T\_20\_2283\_55-0001/0007

The considered drainage solution comprises of two attenuated networks with restricted discharge rates to Thurlaston Brook on the southern boundary and Rothley Brook to the northern boundary of the proposed development via a vortex flow control device.

Storage volume is provided by way of oversized pipes and permeable paving for the 1 in 30 year storm events and attenuation ponds and dock levellers to accommodate the 1 in 100 year event plus 40% climate change.

A plan of routine inspection maintenance should be adopted and adhered to in order 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 T2283\_55-0001/0007.

The main drainage components are;

1. Roof water from the building is collected into a gravity fed drainage system and routed to the below ground oversized pipes. Pipes requires periodic inspection and de-silting as required.
2. The access road is drained by trapped gullies and the service yard by channel drainage. These systems require periodic inspection and de-silting.
3. Attenuation ponds broad and vegetated banks designed to store and convey runoff and remove pollutants. Attenuation ponds require periodic inspection and the banks possible reseeding.
4. 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.

5. 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.

### 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                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vortex Flow Control Unit                                                                                                                                                                                                                                                                                                 | 6 monthly inspect and remove debris                                                                                                                                                                     |
| Inspect all manholes chambers, road gullies and channel drains for siltation and debris                                                                                                                                                                                                                                  | 6 monthly and after every major storm event.<br>Remove debris/silt as encountered                                                                                                                       |
| Catchpits immediately upstream from ponds and storage tanks                                                                                                                                                                                                                                                              | 6 Monthly and after heavy rainfall.<br>Remove debris /silt as required                                                                                                                                  |
| <u>Attenuation Ponds</u><br>Remove litter and debris.<br>Cut grass to retain grass height within operational range.<br>Manage vegetation and remove nuisance plants.<br>Inspect inlets and outlets for blockages.<br>Reseed areas of poor vegetation growth and alter plant types to suit better conditions if required. | 3 monthly and after every major storm event.<br>Remove debris/silt as encountered                                                                                                                       |
| Permeable Surfaces                                                                                                                                                                                                                                                                                                       | 3 times per year to remove debris, dust and leaves. See recommendations above.                                                                                                                          |
| Storage Tank                                                                                                                                                                                                                                                                                                             | 6 monthly to check for blockages and after every main storm event.<br>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.