CRADDYS

PRIVATE DRAINAGE O & M MANUAL

FOR

ALDI FLEET STREET, HOLBEACH

CLIENT

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1. INTRODUCTION

1.1. **Purpose of this Report.** This document provides the client with all relevant information required for the operation and maintenance of the private drainage on site. The operation and maintenance of adoptable drainage is not covered in this report.

1.2. **CDM Regulations.** The information provided is in line with the requirements of the CDM regulations (2015). For unusual or unforeseeable residual risks associated with the operation, maintenance and decommissioning / dismantling of the drainage, reference should be made to the CDM boxes on the individual drawings.

1.3. **Maintenance.** Refer to sections 4 for full maintenance requirements.

1.4. **Supporting information**. The as-built drawings will be provided in electronic format to accompany this document as part of the H&S file.

2. DESCRIPTION OF THE PROJECT

2.1. **Site location**. Fleet Street, Holbeach, PE127AG.

2.2. **Brief**. Development of Brownfield site with construction of an ALDI store.

2.3. **Foul Water Drainage**. The foul water drainage for the site discharges to the public foul water sewer onsite via a foul water pump station.

2.4. **Surface Water Drainage**. The surface water drainage for the site discharges offsite to a highways drain located along fleet street.

3. DRAINAGE MAINTENANCE RESPONSIBILITIES

3.1. All the drainage will be private drainage and will maintained by Aldi Store Ltd's management company with a quantified regime.

4. PRIVATE DRAINAGE OPERATION AND MAINTENANCE ACTIVITIES AND SCHEDULES

4.1. **Overview.** The following information details the drainage items which will require periodic maintenance, and sets out how often they should be maintained to achieve their maximum design life in accordance with CIRIA C753 guidance. All maintenance should be carried out by suitably trained individuals using the appropriate equipment.

4.2. **Inspection chambers and manholes.** Inspection chambers and manholes should be inspected annually for build-up of silt and general debris. Should silt/debris be identified in the drainage system, the services of a specialist drainage engineer should be enlisted.

4.3. **Unusual / unresolved problems.** If problems persist even after following the following guidelines including the jet-cleaning if necessary, this might indicate greater issues within the system. At this point, a CCTV survey is likely to be required and further advice should be sought from a drainage engineer.

4.4. **Drainage Pipes and Manholes**. Inspect manholes for build-up of silt and general debris (at least once a year, preferably in the spring after leaf fall in the autumn). If silt/debris is building up then clean with jetting lorry / gully sucker & inspect pipe. If the pipes to be jetted are plastic then a high flow, low pressure setting should be used so that the pipes are not damaged. (NOTE: Manhole covers can be heavy and suitable lifting equipment / procedures should be used. Personnel should not enter manholes to carry out maintenance).

4.5. **Silt traps.** The silt traps should be inspected monthly for the first three months following commissioning and six-monthly thereafter. It will be necessary to hose down and remove any silt from the chamber sumps.

Silt Traps and Hydrobrake Chamber O&M Requirements (Based on Table 13.1 of CIRIA C753)		
Maintenance schedule	**Required action**	**Typical frequency**
Regular maintenance	Inspect for sediment and debris in chamber sump	Annually
	Cleaning of gutters and any filters on downpipes	Annually (or as required based on inspections)
Occasional maintenance	Properly maintain pre-treatment components, i.e. gutters and permeable pavements.	As required, based on inspections
Monitoring	Inspect the Silt Trap and note rate of sediment accumulation	Monthly in the first year and then annually

4.6. **Cellular storage.** The soakaway will be a Versavoid Geocellular soakaway. It is designed to be maintenance fee. Refer to the table below which is based on Table 21.3 of the CIRIA C753 for the synthesised maintenance requirements. Reference should be also be made to the Versavoid maintenance guidelines.

O&M Requirements for Attenuation Storage Tanks (Table 21.3 of CIRIA C753)		
Maintenance schedule	**Required action**	**Typical 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, or as required
Remedial actions	Repair/rehabilitate inlets, outlet, 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 the pipe that runs through the tank for sediment build-up and remove if necessary	Every 5 years or as required

4.7. **Pump station.** The pump station requires periodic checking and maintenance to ensure that it can continue operating reliable and for its design life. As a minimum, the pump station should be inspected annually.

Aldi Store Ltd It have a drainage maintenance agreement with Thermatic Technical FM for each store. The preventive maintenance agreement includes maintenance the pump stations. The typical pump station maintenance requirements are as shown in the table below, which has been collated in accordance with the tables in the CIRIA C753 and Pump Maintenance Checklist by SafetyCulture.

Pump Station O&M Requirements (Based on Tables from CIRIA C753 and SafetyCulture Checklists

Maintenance schedule	Required action	Typical frequency
Regular maintenance	Inspect the interior of the wet well for debris and sediment build-up. Include cracks, blisters and loose material.	Annually (and following poor performance)
	Inspect stainless steel bolts, piping/ducting and concrete penetrations.	Annually (and following poor performance)
	Inspect the control chamber and make sure that wiring schematic is available in door pocket, verify signed-of electrical inspection report from governing electrical inspector. Check all warning lights are operational.	Annually (and following poor performance)
	Cleaning of the drainage channel and pump that discharges to the pump station.	Biannually (or as required based on inspections)
Occasional maintenance	Verify operating range of floats are as per original design. Ensure pump is secure and operating smoothly.	As required, based on inspections
	Use the manufacturer's design life guidance documents to programme the pump replacement works.	As required and based on pump station design life
Remedial actions	Pump repairs	As required