Highgate Newtown Community Centre

Surface Water Drainage Management & Maintenance Plan

May 2022

Doran CONSULTING

DELIVERING ENGINEERING EXCELLENCE

Doran CONSULTING
DELIVERING ENGINEERING EXCELLENCE

CONSULTING ENGINEERS
- Civil Engineering
- Structural Engineering
- Traffic and Transportation
- CDM Co-ordination
- Project Management

Electronic Copy

DORAN CONSULTING LTD

Surface Water Drainage Management & Maintenance Plan

Highgate Newtown Community Centre

May 2022

Job no	Prepared by	Checked by	Approved by	Status	Issued to	No of copies	Date
202050	RD	AC	IRL	Issue 01	Farrans	*e	25.05.22
202050	AMCG	AC	IRL	Issue 02	Farrans	*e	12.12.22

Doran Consulting Limited
Registered Office
Norwood House
96-102 Great Victoria Street
Belfast BT2 7BE

T 028 9033 3443
F 028 9023 5501
E mail@doran.co.uk
W www.doran.co.uk

FS 25466
OHS 507887
EMS 75248

consultancy **engineering** business **environment**

NI Reg No. NI055181

CONTENTS

1.0 INTRODUCTION

Doran Consulting Ltd. have been commissioned by Farrans Construction Ltd. (Farrans) to undertake the below ground surface water and foul water drainage design for the proposed Highgate Newtown Community Centre and Youth Academy development, located at 25 Bertram Street, London, N19 5DQ.

1.1 The proposed development consists of the demolition of existing buildings and construction of the following:

- Block A – Residential building.
- Block B – Offices.
- Block C – Reconfiguration of the existing Gospel Hall.
- Block D – Four-storey residential building.
- Sports hall.
- Bicycle shed and stores.

1.2 The proposals for the development also involve new associated hard and soft landscaping.

1.3 The surface water drainage for the development has been designed with an innovative and sustainable approach, incorporating a range of sustainable elements. This report aims to outline the management & maintenance requirements of the surface water drainage systems within the proposed development.

2.0 DRAINAGE OPERATION AND MAINTENANCE REQUIREMENTS

2.1 The following components are proposed to be incorporated within the development's surface water drainage design:

- Filter/French drains.
- Geocellular SUDS storage.
- Gullies.
- ACO channels.
- Silt pits.
- Vortex flow control units and chambers.

2.2 Operation and maintenance requirements for each of these components are described in the table below. It is imperative that the systems are adequately maintained as failure to do so may result in reduced capacity/efficiency or a complete systems failure.

2.3 Inspection and maintenance of the proposed components within the developments surface water drainage design to be carried out by the Drainage Team at Camden Council.

Component	Maintenance	Regularity
Filter/French Drains	Litter and debris removal.	Monthly (or as required).
	Grass cutting (maintain a suitably low grass height).	Monthly (during growing season).
	Manage other vegetation and remove nuisance plants.	Monthly (at start then as required).
	Inspect filter strip surface to identify evidence of erosion, compaction, ponding, sedimentation and/or contamination e.g., oils.	Six-monthly.
	Check filter strip surface for even gradients.	Six-monthly.
	Inspect gravel trench for clogging.	Six-monthly.
	Check for poor vegetation growth due to lack of sunlight or dropping of leaf litter and cut back adjacent vegetation where possible.	Annually.
	Re-seed areas of poor vegetation growth. Alter plant types to better suit conditions (if required).	Annually.
	Repair erosion or other damage by re-turfing or re-seeding.	As required.
	Re-level uneven surfaces and reinstate proposed design levels.	As required.
	Scarify and spike topsoil layer to improve infiltration performance, break up silt deposits and prevent compaction of the soil surface.	As required.
Geocellular SUDS storage	Debris removal from catchment surface (where it may cause risk to overall performance).	Monthly.
	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly (for three months

		and then six-monthly).
	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed.	Annually or after large storm events.
	Remove sediment from pre-treatment structures.	Six-monthly (or as required).
	Jet clean distributor pipe.	Annually (or as required).
	Repair/rehabilitation of inlets, outlets, overflows and vents.	As required.
Gullies	Litter and debris removal.	Monthly (or as required).
ACO channels	Litter and debris removal.	Monthly (or as required).
	Jet cleaning along drainage channel.	Six-monthly or after large storm events.
Silt pits	Assess the depth of accumulated silt/oil.	Monthly or after large storm events.
	Remove accumulated silt from bases of pits and dispose of in an appropriate manner.	Six-monthly or after large storm events.
Vortex flow control units and chambers	Assess the depth of accumulated silt/oil.	Monthly or after large storm events.
	Remove accumulated silt from bases of pits and dispose of in an appropriate manner.	Six-monthly or after large storm events.
	Assess for rusting of parts or damage to inlets/outlets.	Six-monthly or after large storm events.
	Assess for any evidence of blockage.	Six-monthly or after large storm events.