JDL Consultants Limited Civil and Structural Consulting Engineers

68 Macrae Road, Eden Office Park
Pill, Bristol BS20 0DD
106 Weston Street
London SE1 3QB

Tel: 01275 372 154
email: jdl@jdlconsultants.co.uk
www.jdlconsultants.co.uk
Tel: 02037 275 380

Job Title **Lombard Service Station, Brook Road**	By: TN	Project No: 20265
	Date: Jun 2021	Checked by:

Re: 21/00241/F - Lombard Service Station

Following on from the revisions to the planning submission to a minor development the drainage strategy for the scheme has been revised. The planning permission condition 3 is repeated below in *italics*:

No development shall take place until a Sustainable Drainage Strategy and associated detailed design, management and maintenance plan of surface water drainage for the site using SuDS methods has been submitted to and approved in writing by the Local Planning Authority. The approved drainage system shall be implemented in accordance with the approved Sustainable Drainage Strategy prior to the use of the building commencing and maintained thereafter for the lifetime of the development

Reason: To prevent the increased risk of flooding by ensuring the provision of a satisfactory means of surface water disposal is incorporated into the design and the build and that the principles of sustainable drainage are incorporated into this proposal and maintained for the lifetime of the proposal.

Additional surveys have been undertaken on the existing network which show the connectivity from the site to the public sewer under St Pauls Road. A mark-up of the survey is included with this submission and shown on the proposed drainage strategy.

The existing site is fully impermeable and 465m^2 in area. The proposed site includes for 34m^2 of planting and 66m^2 of permeable paving which reduces the impermeable area to 365m^2. This reduction in impermeable area will proportionately reduce both the runoff rate and runoff volume from the development.

The existing outfall will be reused in the proposed development with a new access chamber off the back of the public footway within the private ownership.

A non-return valve will be included in the C01 chamber on both the foul and storm connections to prevent foul entering the surface water network and surcharging of the foul network during storm events.

Linear channels will be included at the back of footway to prevent any surface water flowing from private areas across the adopted footway.

© JDL Consultants Limited

JDL Consultants Limited Civil and Structural Consulting Engineers

68 Macrae Road, Eden Office Park
Pill, Bristol BS20 0DD
106 Weston Street
London SE1 3QB

Tel: 01275 372 154
email: jdl@jdlconsultants.co.uk
www.jdlconsultants.co.uk
Tel: 02037 275 380

The O&Ms will be produced through the construction stage but as a template at this stage:

Action	Frequency	Responsibility
As Built. Once construction of drainage network has been completed a CCTV survey should be undertaken to detect and defects which should be rectified to the original design.	Once	Main contractor
Pipe and chambers. Visual inspection of chambers, and clearance of any deleterious materials. Inspection of inlet and outlet. If any blockages are detected an inspection of the connecting pipework should be undertaken to determine potential causes.	Annually (or directly following an extreme storm event) Remedial action	Property owner (can be assigned to a Management Company)
Permeable subbase. Visual inspection of connecting chamber (only need to inspect one per extent of permeable subbase), cleansing of sump and removal of silt to be undertaken as required. Inspection of inlets\outlets to ensure no debris build-up and removal of any deleterious materials. Where the subbase is not functioning correctly this may indicate an issue with the connecting filter drain which should then be replaced. Ponding on surface without high water in chambers may indicate upper geotextile is clogged and needs to be replaced.	Biannually (or directly following an extreme storm event) Remedial action Remedial action	Property owner (can be assigned to a Management Company)
Filter chambers. Visual inspection and cleansing of the sump and removal of silt to be undertaken as required.	Initially monthly reducing to quarterly (or directly following an extreme storm event) where silt load is low.	Property owner (can be assigned to a Management Company)

© JDL Consultants Limited

JDL Consultants Limited Civil and Structural Consulting Engineers

68 Macrae Road, Eden Office Park
Pill, Bristol BS20 0DD
106 Weston Street
London SE1 3QB

Tel: 01275 372 154
email: jdl@jdlconsultants.co.uk
www.jdlconsultants.co.uk
Tel: 02037 275 380

Where filter is damaged or impedes drainage even after cleansing it should be replaced.	Remedial action	

Exceedance Routes.

The site is largely flat with fully permeable tanked surfaces therefore the exceedance routing will follow this preferential flow path through the permeable material and out to the adjacent carriageway.

Detailed design drawings of the proposed SuDS features.

The drainage details are included with this submission.

Regards,

Toby Nicks
Civil Engineer

Enc.
20265-E01-P03 Drainage Strategy
20265-E05-P01 Typical Drainage Details 1 of 2
20265-E06-P02 Typical Drainage Details 2 of 2
2021-05-28 Additional Survey

© JDL Consultants Limited