

24 April 2024

Planning Ref DM/23/0926

15084

Little Winton, Keymer Road, Burgess Hill

Planning Condition 5 – Below Ground Drainage

1 Introduction

This document has been prepared to address the following planning condition:

The development hereby permitted shall not commence unless and until details of the proposed foul and surface water drainage and means of disposal have been submitted to and approved in writing by the local planning authority. No building shall be occupied until all the approved drainage works have been carried out in accordance with the approved details. The details shall include a timetable for its implementation and a management and maintenance plan for the lifetime of the development which shall include arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime. Maintenance and management during the lifetime of the development should be in accordance with the approved details.

Reason: To ensure that the proposal is satisfactorily drained and to accord with the NPPF requirements and Policy DP41 of the District Plan (2014 - 2031).

The following drawings and calculations are submitted to enable this pre-commencement condition to be discharged:

- 15084-TUL-XX-XX-DR-C-51001-A-Drainage Layout
- 15084-TUL-XX-XX-DR-C-51002-A-Surface Water Exceedance
- 15084-TUL-XX-00-DR-C-52001-C-External Ground Levels
- 15084-TUL-XX-XX-DR-C-66001-A-Private Drainage Details Sheet 1
- 15084-TUL-XX-XX-DR-C-66002-A-Private Drainage Details Sheet 2
- 15084-TUL-XX-XX-DR-C-67001-A-Manhole Schedules
- InfoDrainage calculations '15084 SW Attenuation 2024-04-17'

2 Surface Water Drainage

The strategy is essentially as that proposed by Motion in their Drainage Statement report Rev C dated 27-03-2023. A series of below ground attenuation tanks and flow controls are provided with final discharge restricted to 1.0 l/s as agreed between Motion and Southern Water. A new adoptable gravity connection from the north-west is to be provided by Southern Water under a Section 98 Sewer Requisition. A vortex separator is provided downstream of the final flow control device to provide water quality treatment and silt removal prior to discharge offsite.

Attenuation of 170m³ is provided to accommodate a 1 in 100 year storm with 45% climate change; refer to the Info Drainage calculations for details of this and other storm events. Due to levels, surface water from the lower level of Plot 5 is pumped up into the main attenuation system.

FEH rainfall data has been used with the Cv runoff coefficient = 1.0.

10% urban creep has been applied to all houses, all private drives and the paths/patios around Plots 1 & 2; this gives a total impermeable area of approximately 1500m² for design purposes. The rear patios to Plots 3 to 5 drain overland to the adjacent soft landscaping and therefore are not included in the urban creep or attenuation calculations.

Address

Sheridan House, Hartfield Road, Forest Row, East Sussex, RH18 5EA

Tully De'Ath (Consultants) Ltd. Registered Number: 2493115. Registered address as above. Members of ACE. Investors in People. BS EN ISO9001. BS EN 14001

Tel

01342 828 000

Email

info@tullys.uk

Under exceedance events rainwater has been directly away from buildings as far as reasonably possible. Some temporary, shallow depth ponding may occur. Due to site topography, the garages to Plots 3 to 5 may experience temporary ponding under this exceedance scenario.

3 Foul Drainage

Again the strategy is essentially as proposed by Motion in 2023, i.e. pumped outfall to the existing adopted foul sewer to the east in Keymer Road. Two foul pump chambers are proposed; one to serve Plots 1 to 4 and a second to serve Plot 5. The Plot 5 pump discharges into the Plot 1 to 4 pump chamber. Emergency storage is provided sufficient for 24 hours of normal use by the residents in the event of a pump and/or power failure (based on a total of 21 people @ 150 l/person/day = 3.15m³ minimum).

4 Maintenance Schedule

The tables below provide a drainage maintenance schedule based on recommendations in the SuDS Manual published by CIRIA. Inspection/clearing should also be carried out after every major storm event and to the manufacturer's recommendations.

Item	Task	Frequency	Location	Access	Comments
Main Drainage Network					
Rainwater downpipes	Clean out at roof level and ground level	Twice yearly for the first 2 years of operation then annually	Roof level, around building perimeter	High level access required to roof outlets.	Works undertaken by appropriately qualified person(s).
Chambers, silt-traps & catchpits	Clean out chamber/sump				For RWP outlets at roof level follow health & safety regulations dealing with working at height
Pipe network & drainage channels	Pipes to be inspected and condition assessed. Pipes/channels to be cleaned (jetted) as necessary				

Item	Task	Frequency	Location	Access	Comments
Flow Control Devices					
Hydrobrake chambers	Clean out chamber/sump	Monthly for first 3 months then twice yearly	Main access road and communal open space	Communal vehicular area and communal soft landscaping	Works undertaken by appropriately qualified person(s)
	Inspect flow control unit and remove debris				
Pumps	As pump manufacture's maintenance schedule	Annually (or as otherwise defined by pump manufacture's maintenance schedule)	Main access road and private rear garden	Communal vehicular area and private hard & soft landscaping	Works undertaken by appropriately qualified person(s) It is recommended that an annual maintenance contract is arranged with the pump supplier

Item	Task	Frequency	Location	Access	Comments
Geocellular Attenuation Tanks					
Upstream & downstream catchpit chambers	Clean out chamber/sump	Twice yearly for the first 2 years of operation then annually	Main access road and communal open space	Communal vehicular area and communal soft landscaping	Works undertaken by appropriately qualified person(s)
Inlets, outlets, vents and overflows	Inspect/check to ensure in good condition and correct operation	Annually and after large storms			
Geocellular units	CCTV inspection. Clean (jet) if required	5 Years or if excessive silt/debris observed in upstream & downstream catchpit chambers			

5 Timetable for Implementation

The drainage infrastructure will be in place prior to first occupation which is currently planned for July 2025.