



Operation, Management & Maintenance Plan In support of Residential Development at

Harefield Phase 1 & 2
Summerhouse Lane
Hillingdon
UB9 6HS

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Revision [0]
Job No: 6279



Operation,
Management & Maintenance Plan
Harefield Phase 1 & 2, Summerhouse Lane

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Amendments

Revision	Date	Description
0	08/07/2026	Planning Issue

References

Reference	Title
A	East Sussex SuDs Guidance (2015)



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Introduction

This Design Document with Management and Maintenance Plan has been developed in support of a planning application for the development of 8 residential dwellings across Harefield Phases 1 & 2. A location plan and layout of the proposed scheme have been included within the appendices at the end of this document.

Development Description and Location

The development proposals are for the construction of 8 residential dwellings along with a new access road.

The location of the proposed site is at grid reference 504351, 191442, which is located within the planning district of East Sussex.

Existing Drainage

Following a review of the local sewer asset plans, it is understood that the nearest public foul sewer is a 225 mm diameter sewer located within Bellevue Terrace, adjacent to the proposed development site.

Development Drainage Proposals

Surface Water Drainage

Surface water runoff generated by the proposed development will be collected and managed through a combination of conventional drainage infrastructure and sustainable drainage measures.

Runoff from the roofs of the proposed dwellings will be collected via conventional downpipe systems, with rainwater harvesting incorporated in the form of rainwater butts connected to the downpipes serving each dwelling. This will provide a degree of source control by capturing roof runoff for reuse, whilst reducing the volume of surface water entering the drainage network during smaller rainfall events.



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Runoff from private driveways will be managed using permeable block paving constructed over a permeable sub-base incorporating a perforated collection pipe. This arrangement will allow runoff to infiltrate through the paving structure before being collected and conveyed into the wider surface water drainage network. Surface water runoff from the proposed estate road will be collected via a series of conventional highway gullies connected to the site's surface water drainage system.

The collected surface water will be carried through the proposed gravity drainage network to an on-site attenuation basin located within the development. The basin will provide temporary storage of runoff during rainfall events prior to discharge via a deep bore soakaway installed at its base.

Foul Water Drainage

Foul water generated by the proposed development will be collected via the on-site foul drainage network and conveyed to a Type 3 foul pumping station. The pumping station will then discharge the foul flows to the existing public foul sewer located within Bellevue Terrace. More information on this can be seen in the RSPD 6279-01 Drainage Layout drawing, contained in the appendices.



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Future Maintenance

It is essential that the new foul and surface water drainage systems are properly maintained to ensure they operate as efficiently as possible. Without ongoing maintenance, leaks or blockages could occur, potentially leading to flooding in certain areas of the development.

If a leak or a blockage were to occur, this may lead to:

- Overland uncontrolled flows from the foul or surface water system
- Soil Erosion around the pipework

Therefore, it is very advantageous to introduce preventive maintenance measures, that can be carried out on a regular basis to ensure that these issues are far less likely to occur.

It is therefore essential that the property carries out routine maintenance checks. The following maintenance schedule, shown below has been produced by RSPD; however, the property owner may wish to adapt this.

Item	Activity	Frequency	Responsibility
Gutters and Downpipes	Clear debris (leaves, moss, blockages)	Twice per year (Spring & Autumn)	Property Owner
Inspection Chamber	Check for sediment build-up and ensure access is clear	Annually	Property Owner
Attenuation Crates	Visual check (via inspection points if available) for blockages or poor performance (e.g. standing water)	Every 2–3 years or after extreme storms	Property Owner
Connecting Pipework	Check for blockages, damage, or leakage	Annually or as needed	Property Owner

Maintenance of Manhole Chambers/Catch pits

To ensure the long-term effectiveness of the surface water collection assets, the sediment that accumulates within the sump of the conventional gully pot or catch pit must periodically be removed to prevent it from entering the rest of the network. The frequency of this maintenance operation will vary depending on the density of the site, vegetation, design of the drainage system, other permeable areas and if the site is pre or post construction.

The ongoing maintenance activities for this system are tabulated below in Table 1.

Table 1 –Catch Pit and Chamber Maintenance – By the elected management company.

Maintenance Activity	Remedial Action	Inspection Frequency	
Inspect Sumps and Catch-pits	Clear any sediment or detritus found in the chamber/s. If sediment has built up within the pipe network, this should be cleared with rodding equipment or professional jetting techniques.	Pre-completion	Monthly
		Post completion – up to 1 year	Quarterly
		On-going	Annually

Permeable Paved Areas

The shared access and parking areas at this site have been designed as permeable paving to attenuate surface water and improve the water quality before discharging into the on-site surface water system.

All areas of this permeable paving will be designed with a sub-base with a 30 - 40% void ratio to accommodate the water attenuation.

All maintenance operations are to be carried out in accordance with the manufacturer's recommendations.

Ongoing maintenance activities for this permeable paving are tabulated on the following page in Table 2.

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Table 2 – Permeable Paving Maintenance Activities – By the property owner/management and maintenance elected company.

Maintenance Activity	Remedial Action	Inspection Frequency	
Check the Surface and ensure it is free from debris, dirt etc.	Clean surfacing as required and remove detrimental materials.	Pre-completion	Monthly
		Post completion – up to 1 year	Quarterly
		On-going	Annually or as required
Ensure the surface is clear of sediments.	Sweep surface clean of silt and deleterious materials, top up joints with sealing grit as required.	Pre-completion	Monthly
		Post completion – up to 1 year	Quarterly
		On-going	Annually or as required
Inspect joints and carryout weed control.	Remove weeds and top up joints with sealing grit as required.	Pre-completion	Quarterly
		Post completion – up to 1 year	Quarterly
		On-going	Quarterly
Ensure paving dewaterers after rain and between storms.	Check joints for sedimentation, mechanically clean or jet wash and sweep surface free from silt. Re-fill joints with sealing grit as required.	Pre-completion	Monthly
		Post completion – up to 1 year	Quarterly
		On-going	Annually or as required
Inspect blocks for spalling or deterioration and joints for loss of grit.	Replace blocks and top up sealing grit as required.	Pre-completion	Monthly
		Post completion – up to 1 year	Quarterly
		On-going	Annually or as required

Maintenance of Basins

The following maintenance schedule outlines the routine inspection and remedial actions required to ensure basin and associated drainage features continue to operate effectively. Regular inspections and timely maintenance help maintain hydraulic performance, prevent blockages and erosion, and preserve the long-term functionality of the drainage system throughout the pre-completion, post-completion, and ongoing operational phases.

Table 3 – Basin Maintenance Activities – By the elected Management Company

Maintenance Activity	Remedial Action	Inspection Frequency	
Inspect Basin for Litter and debris	Remove litter and debris with appropriate tools and dispose to the appropriate facility.	Pre-completion	Monthly
		Post completion – up to 1 year	Monthly
		On-going	Monthly or as required
Inspect vegetation growth	Cut back vegetation/grass to ensure the channel is visible and the flow is not restricted.	Pre-completion	Monthly
		Post completion – up to 1 year	Monthly
		On-going	Quarterly or as required
Inspect channel and discharge points for erosion.	Repair any affected areas by replacing any lost soil and re-turfing where necessary.	Pre-completion	Quarterly
		Post completion – up to 1 year	Quarterly
		On-going	Annually
Inspect channel for build-up of sediment.	Remove excess sediment from the channel with the appropriate equipment and dispose to an appropriate facility.	Pre-completion	Monthly
		Post completion – up to 1 year	Quarterly
		On-going	Annually or as required
Inspect outlet pipes and culverts for sediment build-up.	Remove any excess sediment from the pipes/culverts with drainage rods and/or professional jetting techniques.	Pre-completion	Monthly
		Post completion – up to 1 year	Quarterly
		On-going	Annually or as required



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Anticipated SUDS Replacement Schedule

The following table highlights the SUDS features incorporated into the drainage design for Harefield Phase 1, highlighting the quantity and life expectancy of each feature.

Anticipated Replacement Schedule – Summerhouse Lane		
Item	Quantity	Life Expectancy (Years)
Orifice Plate	1	50-100
Pipework (Foul/Surface Water)	69.0 Linear meters (Approx)	50-100



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Appendices

- Harefield Phase 1 & 2 Location Plan
- Harefield Proposed Site Plan
- RSPD 6279-01 Drainage Layout





- NOTES:**
- This drawing is to be read in conjunction with all other RSPD drawings, and with all relevant Architect's and Engineer's drawings and specification. Any discrepancies found are to be reported immediately to the Engineer.
 - RSPD accepts no responsibility for inaccuracies in data provided by third parties such as topographic surveys or Ordnance Survey mapping.
 - Do not scale, work to figured dimensions only. All dimensions are in metres unless noted otherwise and all levels are in metres from the topographic survey datum.
 - Any information given regarding existing underground services is given in good faith after consultation with the relevant authority, however accuracy is not certain. The main contractor is responsible for checking all information on site prior to work commencing and taking due care whilst undertaking the works.
 - All dimensions to be checked on site. All details and dimensions relating to sub-contractors work must be checked and agreed between the sub-contractor or supplier and the general contractor.
 - The electronic information from this drawing can not be guaranteed as dimensionally drawn exact. Figured dimensions must be used for setting out and detailing. RSPD logos and company information must be removed from copies if information is re-used.
 - The main contractor is responsible for the design of all temporary works, and is also responsible for the safe maintenance and stability of existing buildings at all times.
 - The main contractor is responsible for dealing with all occurrences of ground water during the construction period.
 - The contractor must comply with all current legislation relating to health & safety.
 - All products specified shall be installed in strict accordance with the manufacturers recommendations and instructions. If there are discrepancies between that information and the details on any RSPD drawings, the manufacturers instructions must be used.

- DRAINAGE NOTES:**
- All drainage works to be constructed in strict accordance with specification of the local authority, building regulations, sewers for adoption, BS8301 & BS EN 752-1.
 - For location and setting out of building drainage points refer to architects drawings.
 - All pipe runs near buildings to comply with the building regulations 2015 Part H1. Where a pipe is within 1m of a foundation the trench shall be filled with class GEN3 concrete up to the lowest level of the foundation. Where the trench is further than 1m from the foundation, the trench shall be filled with class GEN3 concrete to a level below the lowest level for the foundation equal to the distance from the foundation less 150mm. In both cases the pipe shall be bedded and surrounded in 150mm thick class GEN3 concrete.
 - Where pipes, external to the structures, have a depth to soffit from ground level of less than 450mm they shall have a class GEN3 concrete encasement (150mm thick).
 - Where a pipe, under a carriageway, has a depth of cover of less than 1.2m the pipe shall be laid with a concrete bed and surround.
 - In any circumstances where pipes are bedded and surrounded in concrete flexible joints should be provided. Compressible boards (fibreboard or polystyrene) shall be provided at a maximum of 8m centres (coinciding with pipe joints). The boards shall be pre-cut to pipe diameter and to a height and width equal to the concrete cross section. A board thickness of 18mm for pipes up to 450mm nominal diameter and 36mm for pipes over 450mm nominal diameter.
 - All private building drainage shall be constructed in strict accordance with BS EN 752-1, unless otherwise specified building drainage shall be 100mm diameter and shall be laid at a minimum gradient of $<1/1s = 1$ in 40 $>1/1s = 1$ in 80 for foul drains and 1 in 100 for surface water drains.
 - All pipes, bends and junction for private building drainage shall be upvc conforming to BS4660 and BS5481 as appropriate and shall be laid in accordance with the manufacturer's specification.
 - All gully connections other than at manholes to be 'y' junctions. All road gully connections to be 150mm diameter.
 - All stub stacks to be fitted with air admittance valves where branch drain exceeds 12m except at the head of the run. Soil vent pipes located at the head of a run to terminate to fresh air.
 - All connections to be soffit to soffit unless otherwise noted.
 - All concrete and concrete products to be in accordance with BRE 363 for sulphates.
 - The locations and sizes of all svps and rwps shall be cross referenced against the architects drawings during setting out.
 - The precise depth and location and size of existing pipes or manholes where connections or diversion are proposed must be confirmed and reported to the engineer prior to commencement.
 - All soakaways are to be located a minimum of 5m from any proposed or existing buildings.

General Notes

KEY:

- Application Site Boundary
- Surface Water Drain
- Foul Water Drain
- Linear Drainage
- Pipe Protection
- SW Rising Main
- FW Rising Main
- French Drain/Perforated Pipe
- Surface Catch Pit/Manhole
- Foul Water Manhole
- Surface Water Soakaway
- Gully & Lead
- Waste Water Package Treatment Plant
- Retaining Wall
- Spot Levels
- Formation Levels
- Direction of Flow
- Embankment
- Brick Headwall

FOR TENDER

No.	Revision/Issue	Date

RSPD
Roads & Sewers for Planning & Design Ltd
www.roadandsewers.co.uk 07876 573377

Project Name and Address
**CHANDIGRAH,
SUMMERHOUSE LANE,
HAREFIELD, UB9 6HS.**

Description
DRAINAGE LAYOUT

Project 6279	Sheet 04
Date 18/06/2026	
Scale 1:200 @ A1	