



HOMEFIELD PRIMARY SCHOOL

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1. Introduction

1.1 Overview

AtkinsRéalis have been appointed by West Sussex County Council to prepare a surface water drainage statement for the Homefield Primary School redevelopment to support the planning application. This report outlines the strategies for managing drainage on site in accordance with local and national guidance.

The proposed works involve the internal refurbishment of the existing school main block and the construction of a new single-storey extension to the west elevation to facilitate the new Special Support Centre (SSC) provision. Externally, the proposal includes the construction of a dedicated SSC and reception play areas, a forest school/woodland teaching area, and the reconfiguration of access routes within the western region of the school premises. Refer to **Appendix A** for the proposed development external arrangement layout.

This report details the foul and surface water drainage design to service the infrastructure proposed for the Homefield Primary School redevelopment/expansion, derived from available site information known to date. The design is currently at the RIBA Stage 3 stage for planning approval.

1.2 Site Information

The Homefield Primary School site is located off Chesswood Road, BN11 2AA, Worthing, and is situated within a predominantly residential urban setting. To the north, the site is bounded by a railway line, Ladydell Road to the east and Chesswood Road to the south, which serves as the primary vehicular and pedestrian access point. Refer to **Figure 1-1** for outline of the site and development boundaries.

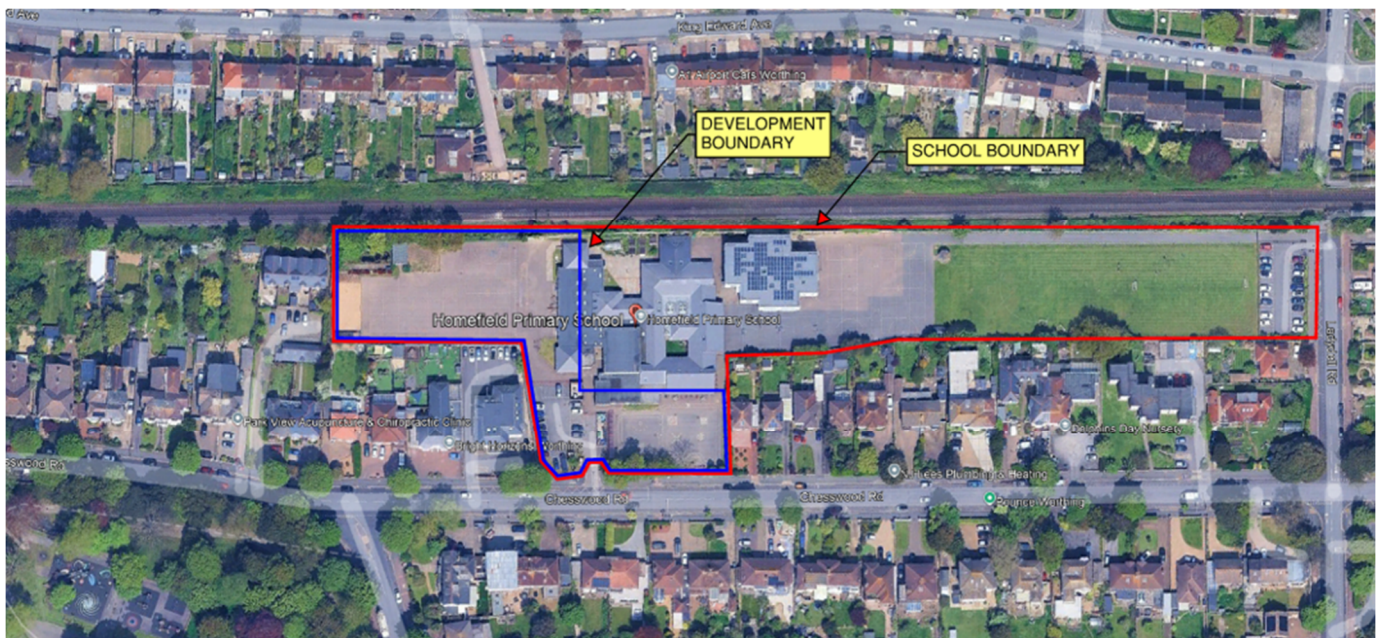


Figure 1-1 – Homefield Primary School – Site and Development Boundaries

The site currently comprises existing school buildings, together with associated hardstanding areas including playgrounds and car parking, and open grass playing fields to the east. Historically, the site has been used for educational purposes, with various phases of redevelopment and temporary structures introduced over time. Vegetation across the site includes mature trees, particularly along the northern boundary and within the proposed

development area. In addition, an existing pond is located in the north-western corner, adjacent to the site boundary fencing opposite the railway line.

The proposed works involve the internal refurbishment of the existing main block and the construction of a new single-storey SSC building to the west as shown below in **Figure 1-2**. Externally, the proposal includes the creation of the new SSC building and reception play areas, a forest school/woodland teaching area, and the reconfiguration of access routes within the western region of the school premises.



Figure 1-2 - Homefield Primary School - Existing and proposed Facilities Location

2. Planning, Legislation and Guidance

This report has been prepared in accordance with the national, regional and local policies and guidance listed below:

- National Planning Policy Framework (NPPF) (Dec 2024)
- National Planning Practice Guidance (NPPG) (Aug 2021)
- West Sussex County Council Local Flood Risk Management Strategy: 2025-2030 (July 2025)
- Worthing Borough Council Local Plan 2020-2036 (March 2023)
- National Standards for Sustainable Drainage Systems (SuDS) (July 2025)

2.1 National Planning Policy Framework (NPPF)

The NPPF sets out the government's planning policies for England and how these are expected to be applied. The most applicable policies to this drainage strategy report in the NPPF are paragraphs 181 & 182, which state:

181. When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:

- a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;

- b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;
- c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;
- d) any residual risk can be safely managed; and
- e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.”

“**182.** Applications which could affect drainage on or around the site should incorporate sustainable drainage systems to control flow rates and reduce volumes of runoff, and which are proportionate to the nature and scale of the proposal. These should provide multifunctional benefits wherever possible, through facilitating improvements in water quality and biodiversity, as well as benefits for amenity. Sustainable drainage systems provided as part of proposals for major development should:

- a. take account of advice from the Lead Local Flood Authority;
- b. have appropriate proposed minimum operational standards; and
- c. have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development.

2.2 National Planning Practice Guidance (NPPG)

The ‘Flood risk and coastal change section’ of the NPPG advises how to take account of and address the risks associated with flooding and coastal change in the planning process. Paragraphs 055 – 063 provide guidance on SuDS and their implementation. Paragraph 056 stipulates a preference for multi-functional SuDS that allow surface water to be discharged according to the following hierarchy of drainage options:

1. Into the ground (infiltration).
2. To a surface water body.
3. To a surface water sewer, highway drain, or another drainage system.
4. To a combined sewer.

2.3 National Standards for Sustainable Drainage Systems (NSSuDS)

The National standards for sustainable drainage systems (NSSuDS) provides design criteria for application in the design of surface water drainage systems for new infrastructure and development. The guidance outlines the principles to provide a ‘SuDS Approach’ to the management of surface water and the final discharge point. The core standards are summarised below:

Standard 1: runoff destinations

- A ‘SuDS approach’ shall be adopted to address the management of surface water by the development and where it should be discharged. Runoff shall be treated as a resource and managed in a way that avoids negative impacts of the development on flood risk, the morphology and water quality of receiving waters and the associated ecology.
- 1.2 Runoff from the development shall be discharged to the following final destinations, to the maximum extent practicable, in accordance with the below hierarchy:
 - priority 1: collected for non-potable use
 - priority 2: infiltrated to ground
 - priority 3: discharged to an above ground surface water body
 - priority 4: discharged to a surface water sewer, or another piped surface water drainage system



- priority 5: discharged to a combined sewer

Note 1: priority 1 is the highest priority and priority 5 is the lowest.

Note 2: for the purposes of this standard, a combined sewer is a sewer intended to receive both foul sewage and surface runoff and does not include a sewer intended to receive only foul sewage, even if it has the capacity to accommodate additional flows or has an element of surface water in it already.

- 1.3 To utilise a lesser priority final destination, appropriate evidence shall be provided that demonstrates all higher priority final destinations have been utilised to the maximum extent practicable. Higher cost alone shall not be a reason to utilise lower priority final destinations.
- 1.4 Where more than one final destination is utilised, each final destination's ability to accept runoff shall be maximised in order of priority.

Standard 2: management of everyday rainfall (interception)

- "2.1 Apply a 'SuDS approach' so that at least the first 5mm of rainfall for the majority of rainfall events does not result in runoff from the site to surface waters or piped drainage systems.
- 2.2 Evidence shall be provided that the approach to managing runoff from 'everyday' rainfall has been developed alongside and in support of the management of runoff quality (standard 4) and the delivery of amenity and biodiversity benefits (standards 5 and 6)."

Standard 3: management of extreme rainfall and flooding

- "3.1 A 'SuDS approach' shall be adopted to address the management of development runoff during extreme rainfall, including allowances for climate change and urban creep to:
 - protect people and property on the development from flooding of the surface water drainage system
 - mitigate any increased flood risk to people and property adjacent to or downstream of the development
 - protect the receiving water body from morphological damage or minimise the impact on sewer capacity
- 3.2 When discharging to an infiltration feature, the system shall be appropriately sized to accommodate the design event based on ground conditions and contributing areas.
- 3.3 When discharging to an above ground surface water body, sewer or other piped drainage system, the surface water runoff (rate and volume) for the 1% annual exceedance probability (AEP) event shall be controlled to ensure the runoff from the development does not increase flood risk elsewhere.
- 3.4 When discharging to an above ground surface water body, sewer or other piped drainage system, the surface water runoff rate for the 50% AEP event shall be controlled to ensure development runoff from an event of this magnitude has no negative impact.
- 3.5 Any flooding from the surface water drainage system for events up to the 1% AEP event shall be managed within the development.
- 3.6 Any flooding from off-site sources for the 1% AEP event should be managed on site or safely routed through the site, ensuring any downstream risks are not increased compared to the pre-development scenario.
- 3.7 The risks (both on and off the development) associated with flooding from the surface water drainage system for exceedance events greater than the 1% AEP event shall be appropriately managed."

Standard 4: water quality

- 4.1 Apply a 'SuDS approach' that protects surface waters, groundwater and coastal waters by managing the quality of the surface water runoff to adequately address water quality risks from the development.
- 4.2 The proposed SuDS management train(s) shall be based on a robust water quality risk assessment, appropriate to the pollution hazard and sensitivity of receiving waters, reflecting industry recognised guidance¹ or other quantitative assessment as agreed with the approving body and permitting requirements².



Standard 5: amenity

- 5.1 A 'SuDS approach' shall be adopted that maximises benefits for amenity through the creation of multifunctional places and landscapes.

Standard 6: biodiversity

- 6.1 A 'SuDS approach' shall be adopted to ensure the surface water drainage system maximises biodiversity benefits throughout the development lifecycle.
- 6.2 The surface water drainage system shall add aquatic biodiversity value by:
 - creating diverse, self-sustaining, resilient local ecosystems³ which contribute to net gains in biodiversity
 - supporting and promoting natural local habitat and species, for example, through local nature recovery strategies (LNRS)⁴
 - contributing to the delivery of local biodiversity strategies
 - contributing to habitat connectivity

Standard 7: design of drainage for construction, operation, maintenance, decommissioning and structural integrity

- 7.1 A 'SuDS approach' shall be adopted to ensure that surface water drainage systems are designed⁵ so they can be easily and safely constructed, operated and maintained taking account of the need to minimise negative impacts on natural resources and the environment.
- 7.2 The designer shall provide a management and maintenance plan⁶ that supports the design objectives detailed in standards 1 to 6 and ensures the performance of the surface water drainage system with regards to runoff destinations, everyday and extreme rainfall, water quality, amenity and biodiversity is maintained throughout the lifetime of the development.
- 7.3 Surface water drainage design shall examine for the likelihood and consequences of potential failure scenarios that may occur during the operation phase and safely manage the associated risks.
- 7.4 The surface water drainage system shall be designed to ensure structural integrity of all components under anticipated loading conditions for the design life of the development so that it does not affect the structural integrity of any existing or proposed components within, or adjacent to, the development.

1 As set out in Chapter 4, Chapter 26 and Chapter 27 of C753 The SuDS Manual (CIRIA) or any future version.

2 An Environmental Permit may be required under Paragraph 3 (1) (c) of Schedule 22 of the Environmental Permitting (England and Wales) Regulations 2016 if there is a risk of mobilising existing contamination

3 The UK Climate Resilience Programme (UKRI and Met Office) (<https://www.ukclimateresilience.org/>)

4 Local Nature Recovery Strategies: how to prepare and what to include (DEFRA) (<https://consult.defra.gov.uk/land-use/local-naturerecovery-strategies/>)

5 BS EN 752:2017 Drain and sewer systems outside buildings. Sewer system management (British Standards)

6 Guidance on the production of Management and Maintenance Plans is contained within C753 The SuDS Manual (CIRIA) or any future version

