



Amenity and Biodiversity Assessment

Proposed Engineering Block and Car Park at

Sefter Farm, Pagham Road, Bognor Regis, West Sussex

On behalf of

Barfoots of Botley

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Document History and Status

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1 Non Technical Summary

- 1.1 This Amenity and Biodiversity Assessment assesses the amenity and biodiversity performance of the proposed sustainable drainage system for the Engineering Block and car park at Sefton Farm, Pagham.
- 1.2 The assessment considers the submitted Flood Risk Assessment and Drainage Statement, drainage and levels drawings, construction details, Interim Maintenance and Management Plan and Biodiversity Net Gain Assessment as a coordinated whole package.
- 1.3 The drainage strategy combines permeable asphalt and gravel surfacing, voided sub-base attenuation, permeable footpaths, channel drainage, an open vegetated swale, transfer of collected runoff to the irrigation reservoir for non-potable reuse, and a restricted bypass discharge to a tributary of the Pagham Rife when reuse is unavailable or the reservoir is full.
- 1.4 On the evidence submitted, the drainage package complies with National Standard 5 and National Standard 6 and accords with the amenity and biodiversity principles of CIRIA C753.
 - Standard 5 is satisfied because operational areas provide multifunctional drainage, access, parking and pedestrian functions, while the swale provides visible green infrastructure and landscape integration.
 - Standard 6 is satisfied because the open drainage corridor creates watercourse habitat, improves linear habitat connectivity, supports local species groups and forms part of the wider proposal delivering measurable biodiversity net gain.
 - The Biodiversity Net Gain Assessment (BNG) reports gains of 14.51% for area habitats, 28.45% for hedgerows and 1,334.66% for watercourse units, with trading rules satisfied.
 - The interim maintenance proposals support the continuing operation of the permeable surfaces, swale and associated drainage components, subject to coordination with the final landscape specification and Habitat Management and Monitoring Plan.

2 Introduction

2.1 Purpose

- 2.1.1 The purpose of this statement is to provide assessments of amenity and biodiversity and to confirm how the submitted reports and drawings, considered together, address Standards 5 and 6 of the National Standards for Sustainable Drainage Systems and the corresponding amenity and biodiversity objectives of CIRIA C753 The SuDS Manual.

2.2 Development

- 2.2.1 The application proposals comprise a new engineering block, car parking areas, a new access road, footpaths and hardstanding at Sefter Farm, Pagham Road, Bognor Regis. The Flood Risk Assessment and Drainage Strategy v1.1 identifies a total positively drained area of approximately 9,414m², comprising roof, access road, car parks, footpaths and hardstanding.

2.3 Documents Reviewed

- Flood Risk Assessment and Drainage Statement, Version 1.1, Parts 1 to 3, July 2026.
- Planning Note - Flood Risk and Drainage, dated 20 August 2026.
- Drawings 200, 201 and 202: Site Layout - Drainage.
- Drawings 300 and 301: Site Layout - Levels.
- Drawing 311: Proposed Site Sections.
- Drawings 400, 401 and 402: Site Layout - Surface Finishes.
- Drawing 501: Construction Details - Surface Finishes.
- Drawing 511: Construction Details - Drainage.
- Drawings 512 and 513: Construction Details - Headwalls.
- Imprint Ecology Ecological Impact Assessment, 2026.
- Imprint Ecology Biodiversity Net Gain Assessment, 2026.Text

3 Proposed Drainage Scheme

3.1 The submitted drainage scheme adopts a source-control and treatment-train approach. The principal components and their wider functions are summarised below:

Component	Drainage function	Amenity and biodiversity relevance
Permeable asphalt car parks	Interception, treatment and attenuation within 280 mm Type 3 voided sub-base	Retains functional parking use while avoiding separate single-purpose storage areas.
Permeable gravel car parks	Interception, treatment and attenuation within 360 mm Type 3 voided sub-base	Provides a visually softer permeable finish and multifunctional storage.
Permeable footpaths	Interception and storage within voided sub-base	Combines pedestrian movement with drainage performance.
Eastern swale	Open conveyance, treatment and controlled movement of runoff	Creates visible green infrastructure and a linear habitat corridor.
Flow control	Hydro-Brake restriction to 2.8 l/s at 360 mm head	Protects downstream water environments and drainage function.
Irrigation reservoir reuse	Receives collected surface water for irrigation under normal operation	Treats water as a resource and supports the operational landscape.
Catchpits, channel drains and sumps	Collection and sediment management	Protects water quality and ecological receptors.
Exceedance route	Routes residual flows via parking areas and swale toward the watercourse	Improves resilience and reduces disruption to users and habitats.

4 Policy and Assessment Framework

4.1 National Standard 5: Amenity

- 4.1.1 Standard 5 requires a SuDS approach that maximises amenity benefits through the creation of multifunctional places and landscapes. The relevant test is whether the overall drainage design integrates useful, safe and visually appropriate features into the development layout.

4.2 National Standard 6: Biodiversity

- 4.2.1 Standard 6 requires the surface water drainage system to maximise biodiversity benefits throughout the development lifecycle, including creation of resilient ecosystems, support for local habitats and species, contribution to local biodiversity strategies and habitat connectivity.

4.3 CIRIA C753

- 4.3.1 CIRIA C753 promotes the four pillars of SuDS: water quantity, water quality, amenity and biodiversity. This assessment focuses on multifunctionality, landscape integration, visibility of water management, habitat creation, ecological connectivity, water quality protection, safe operation and long-term management.

4.4 Local Planning Context

- 4.4.1 Arun Local Plan Policy W DM3 requires SuDS to contribute positively to appearance, effectively manage water and water quality, accommodate and enhance biodiversity, provide amenity, retain drainage function and be maintained in perpetuity through an agreed maintenance and management regime.

5 Amenity Assessment

5.1 Multifunctional Use of Development Space

- 5.1.1 The proposed design integrates surface water drainage infrastructure into areas also required for access, parking and pedestrian movement. The permeable car parks and footpaths provide interception, treatment and attenuation. This applies the CIRIA C753 principle of multifunctionality.

5.2 Landscape and Visual Integration

- 5.2.1 The open swale will introduce a green linear feature along the eastern part of the site and provide a landscape transition between the operational development and surrounding land.
- 5.2.2 The swale will add a visible surface water feature and landscape variety to a development site otherwise dominated by buildings, parking and access infrastructure.

5.3 Operational Amenity and Resilience

- 5.3.1 Surface water runoff will be stored within the voided sub-base under the parking and footpath areas. Hydraulic calculations confirm no flooding for the design events up to and including the 1:100 year rainfall event with a 45% climate change allowance.
- 5.3.2 The exceedance routing will direct extreme flows in excess of the design storm event through the parking areas and eastern swale to the Rife. This routing provides operational resilience and protects the buildings and site operation during any exceedance rainfall event.

5.4 Water as a Resource

- 5.4.1 The proposed surface water drainage system transfers collected runoff to the irrigation reservoir for reuse in the wider site irrigation system.

5.5 Safety, Accessibility and Maintenance

- 5.5.1 The swale is designed with a minimum 500mm base, 1:2 side slopes, a minimum depth of 750mm and a 3m maintenance easement from the top of bank. The Interim Maintenance and Management Plan includes vegetation management, litter and debris removal, mowing, sediment removal and inspection of the swale, permeable paving, flow controls and storage.

5.6 Amenity Conclusion

- 5.6.1 The proposal complies with National Standard 5 when the submitted details are considered as a whole.
- 5.6.2 Compliance is met by the proposed provision of multifunctional permeable surfaces, a visible landscaped swale, productive reuse of runoff, climate resilience and a defined maintenance regime.

6 Biodiversity Assessment

6.1 Baseline and Ecological Context

6.1.1 The Ecological Impact Assessment (EIA) by Imprint Ecology describes the site as a mosaic of generally low-value habitats associated with agricultural and operational use, including modified grassland, bare ground, hardstanding, artificial unsealed surfaces, buildings, a reservoir, tall forbs and a small southern ditch. Species-rich scrub and hedgerow along the northern boundary is identified as the most valuable existing ecological feature and provides a local wildlife corridor.

6.2 Habitat Creation within the Surface Water Drainage System

6.2.1 The new eastern swale creates an open vegetated habitat feature rather than utilising a buried pipe network. Once established, it will provide damp grassland margins, structural diversity and seasonal variation in moisture conditions. The EIA identifies the new drainage ditch (swale) as potentially providing additional habitat for reptiles and other species.

6.3 Habitat Connectivity

6.3.1 The linear alignment of the swale will create an additional movement and foraging corridor for fauna through the site. In combination with retained scrub, field margins, the southern ditch and wider agricultural habitats, this feature will provide greater habitat connectivity. The tie-in to the existing ditch was selected at a gap within the existing vegetation to avoid effects on mature trees.

6.4 Species Benefits and Mitigation

6.4.1 The EIA identifies potential use of the site by commuting and foraging bats, hedgehogs, reptiles, amphibians, nesting birds and common mammals. The swale corridor and associated vegetation can increase shelter, foraging and movement opportunities. A reptile and amphibian hibernaculum is proposed near the new ditch within the southern tall-forb habitat.

6.4.2 Construction safeguards include ecological supervision during tall-forb removal and ditch excavation, toolbox talks, directional clearance, precautionary methods for reptiles and great crested newts, protection of excavations and pipework, pollution prevention, and sensitive lighting that avoids hedgerows, trees, ditches and other natural features.

6.5 Water Quality and Downstream Ecology

- 6.5.1 The proposed treatment train comprises permeable pavement followed by further water quality treatment within the proposed swale, with catchpits and sumps for sediment control. The FRA reports combined mitigation indices of 0.95 for suspended solids, 0.90 for metals and 1.00 for hydrocarbons. These measures reduce pollutant loads before reuse or controlled discharge and protect the ecological function of the swale, irrigation reservoir and receiving watercourse.

6.6 Relationship with Biodiversity Net Gain (BNG)

- 6.6.1 The BNG Assessment reports a 14.51% gain in area habitat units, a 28.45% gain in hedgerow units and a 1,334.66% gain in watercourse units.
- 6.6.2 The level of watercourse gain is directly related to the creation of the swale within the surface water drainage network which will provide linear watercourse habitat and connectivity along the eastern side of the development.

6.7 Long-Term Management

- 6.7.1 The Interim Drainage Management and Maintenance Plan provides for vegetation management, mowing of the swale, litter removal, sediment removal, inspection of inlets and outlets, and remedial reinstatement.
- 6.7.2 The BNG Assessment states that long-term habitat management and monitoring will be secured for at least 30 years and may require a Habitat Management and Monitoring Plan (HMMP).

6.8 Biodiversity Conclusion

- 6.8.1 The proposal complies with National Standard 6 when the submitted details are considered as a whole package. The open swale adds habitat value and connectivity, the wider package provides measurable biodiversity net gain, water quality and maintenance measures protect ecological function throughout the development lifecycle.

7 Whole-Package Compliance with Standards 5 and 6

Criterion	Evidence in submitted package	Finding
Standard 5: multifunctional places and landscapes	Permeable parking and footpaths combine access, interception, treatment and attenuation; the swale combines conveyance, landscape and habitat functions.	Compliant
Visible and integrated SuDS	Eastern open swale and reservoir reuse are integrated with the site layout and drainage strategy.	Compliant
Safe and usable development	Hydraulic modelling reports no flooding in design events; exceedance is routed through parking areas and the swale.	Compliant
Amenity maintained over time	Interim Drainage Maintenance and Management Plan includes swale vegetation, litter, sediment and drainage inspections.	Compliant
Standard 6: lifecycle biodiversity	Ecological Impact Assessment covers construction, operation, mitigation and enhancement; BNG management is to be secured for at least 30 years.	Compliant
Habitat creation	New vegetated swale or drainage ditch and associated corridor habitat.	Compliant
Support for habitats and species	Ecological Impact Assessment identifies benefits and safeguards for reptiles, amphibians, bats, birds, hedgehogs and common mammals.	Compliant
Habitat connectivity	Linear eastern drainage swale links with retained and adjacent habitat features.	Compliant
Contribution to net gain	BNG Assessment reports gains above 10% for area and hedgerow units and a substantial watercourse-unit gain.	Compliant
Protection of ecological receptors	Permeable pavement and swale treatment train, sediment controls and pollution-prevention measures.	Compliant
Integrated management	Interim Drainage Maintenance and Management Plan plus Habitat Management and Monitoring Plan.	Compliant

8 Conclusions

- 8.1 The submitted documents demonstrate a coordinated SuDS strategy rather than a conventional single-purpose drainage network. Permeable car parks and footpaths, voided sub-base storage, treatment components, the open eastern swale, irrigation reservoir reuse and controlled discharge operate together to manage water quantity and quality while providing wider landscape and ecological functions.
- 8.2 The amenity benefits of the proposed development are demonstrated by use of multifunctional parking and pedestrian areas, introduction of visible green infrastructure, reuse of runoff as an irrigation resource and provision of resilience against extreme rainfall. The submitted details therefore satisfy National Standard 5 of the National Standards for Sustainable Drainage Systems and the amenity principles of CIRIA C753.
- 8.3 The biodiversity benefits of the proposed development are the creation of an open linear habitat feature (swale), improved connectivity, water quality measures to protect the receiving waterbodies and these are supported by ecological mitigation, enhancement measures and measurable biodiversity net gain. The submitted details therefore satisfy National Standard 6 of the National Standards for Sustainable Drainage Systems and the biodiversity principles of CIRIA C753.