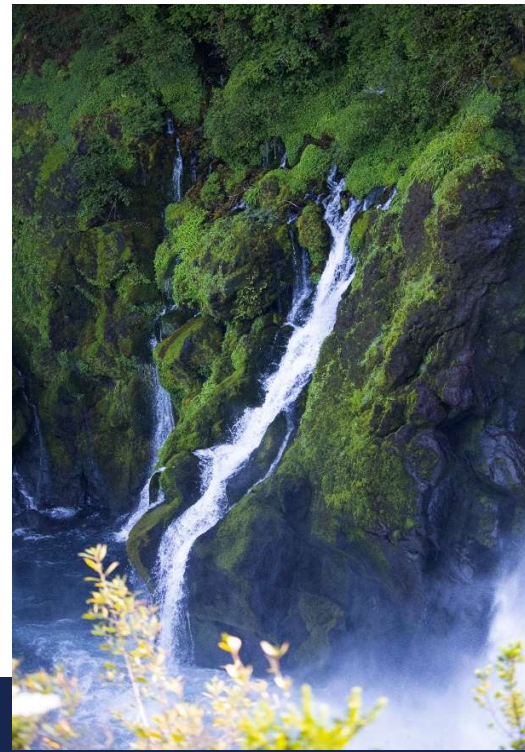




Surface Water Drainage Strategy AEG9125_SP2_Salisbury_07

Site Address: Armishaws
Netherhampton Road
Salisbury
Wiltshire
SP2 8RA

UK Experts in Flood Modelling, Flood Risk
Assessments, and Surface Water Drainage Strategies



Document Issue Record

Project: Surface Water Drainage Strategy

Prepared for: Edson Architecture

Reference: AEG9125_SP2_Salisbury_07

Site Location: Armishaws, Netherhampton Road, Salisbury, Wiltshire, SP2 8RA

Issue	Date	Author	Check	Auth.	Comments
1.0	20/01/2026	Jack Allen	JC	OH	First Issue

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Table of Contents

1. Introduction.....	4
Site Overview.....	4
2. Planning Policy, Documents and Online Mapping	7
National Planning Policy Framework (NPPF)	7
National Standards for SuDS.....	8
Local Plan.....	8
3. Surface Water Drainage Strategy.....	11
Surface Water Drainage Hierarchy	11
Infiltration Potential.....	16
Nearby Watercourses.....	17
Public Sewers.....	17
Greenfield Runoff Rates.....	18
InfoDrainage Modelling and Results.....	21
Designing for Exceedance.....	27
Water Quality	29
4. Conclusions.....	31
Appendix A - Development Proposals.....	33
Appendix B - Topographical Survey	34
Appendix C - Surface Water Drainage layout	35
Appendix D – BRE365 Soakaway Test Results	36
Appendix E – Wessex Water Asset Plans	37
Appendix F – InfoDrainage Results	38

1. Introduction

- 1.1. Aegaea were commissioned Esdon Architecture to undertake a Surface Water Drainage Strategy (SWDS) to support a planning application for the proposed development. This SWDS has been prepared in accordance with the requirements set out in the National Planning Policy Framework (NPPF) and the associated Planning Practice Guidance.
- 1.2. This report is intended to support a planning application and as such the level of detail included is commensurate and subject to the nature of the proposals.

Site Overview

- 1.3. The site of the proposed development is Armishaws, Netherhampton Road, Salisbury, Wiltshire, SP2 8RA (Figure 1). The existing site consists of a commercial warehouse in the south-west with associated access road, storage yard, car parking, and planted areas across the remainder of the site.

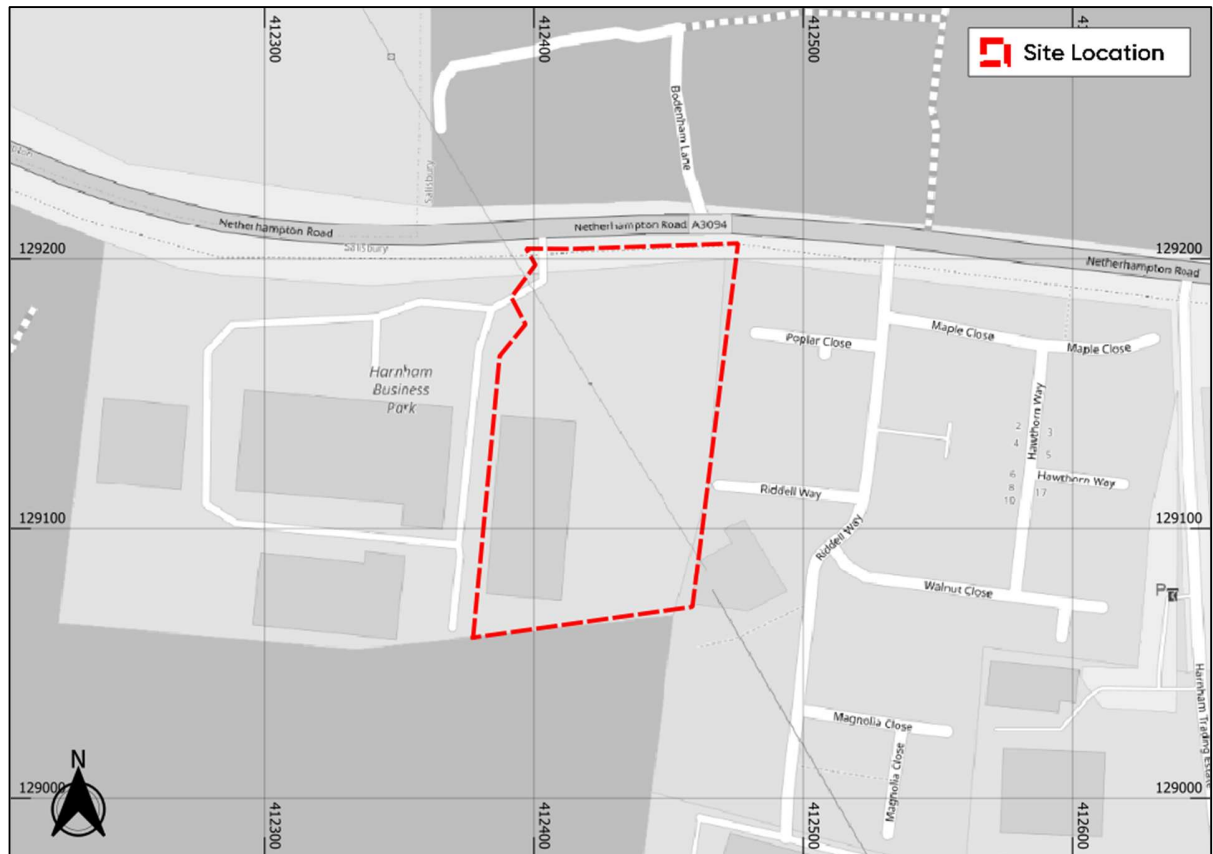


Figure 1: Site Location (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © <https://www.openstreetmap.org> and contributors)

- 1.4. The client is seeking full planning permission for a mixed-use commercial development including a convenience/food retail unit, a drive-through coffee unit, two B8 warehouses with ancillary office use, and the retention of an existing B8 warehouse, along with associated parking, access, and servicing arrangements (Wiltshire Ref PL/2025/05762). The proposed development plans are included in this report as Appendix A.
- 1.5. A topographic survey was undertaken by Esdon Architecture in 2025 (Appendix B). The survey indicates that ground levels across the site range from approximately 48.08m AOD in the north-west to 49.26m AOD in the southern part of the site. It is noted that the topographic survey does not cover the entirety of the site. The topography for the eastern extent of the site has been assessed with Environment Agency Light Detection and Ranging (LiDAR) data Digital Terrain Model (Figure 2). Levels in the east of the site range between 47.75m AOD and 48.68m AOD.

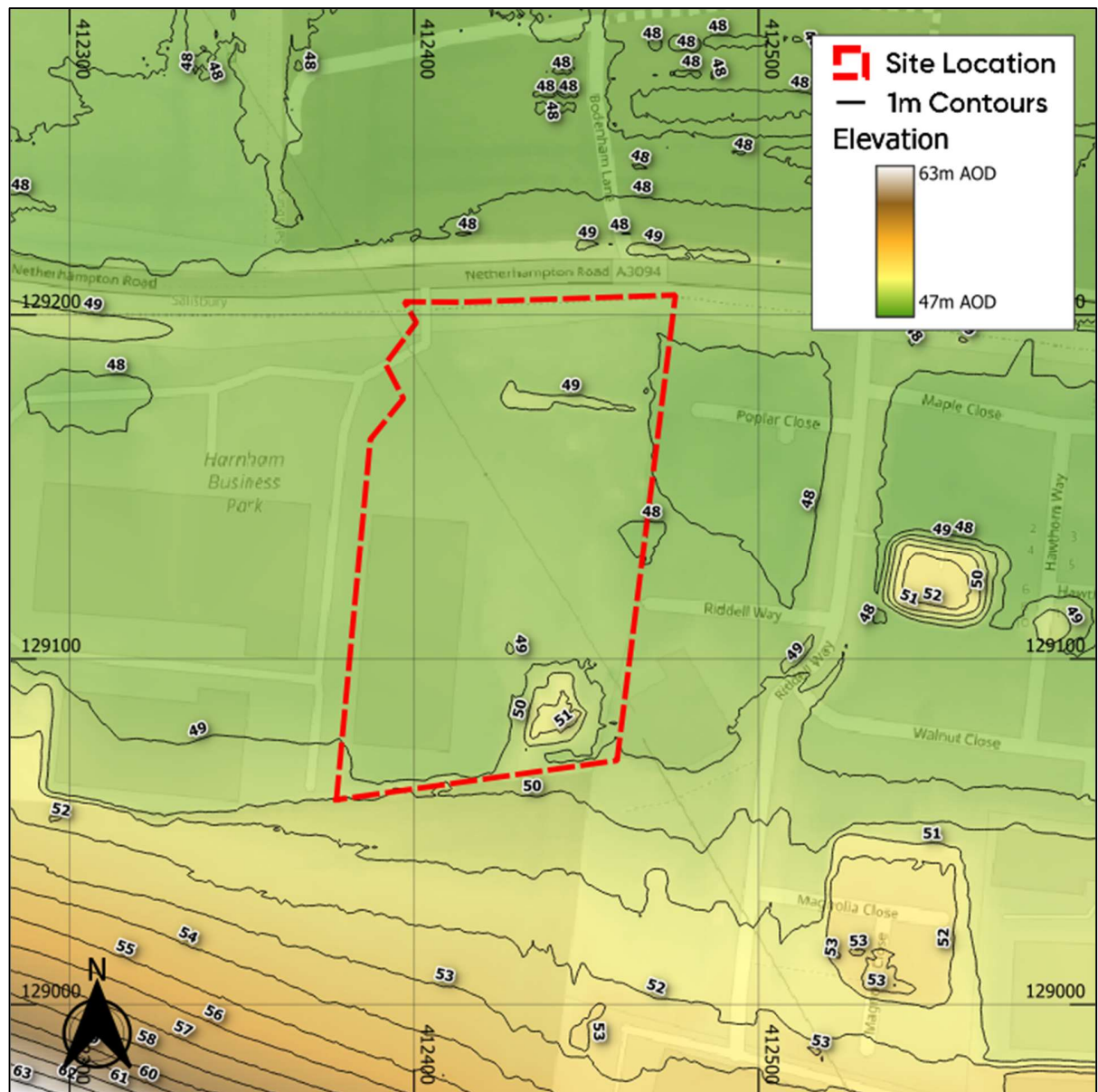


Figure 2: Site Topography (Base map and data from OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA). © <https://www.openstreetmap.org> and contributors. Contains public sector information licensed under the Open Government Licence v3.0)

- 1.6. Wiltshire Council is the Local Planning Authority (LPA) for the site and also the designated Lead Local Flood Authority (LLFA). The site sits within the Environment Agency's Wessex region.

2. Planning Policy, Documents and Online Mapping

- 2.1. With ever-increasing urbanisation, the ability for precipitation to penetrate the hard paved surfaces to the groundwater below is inhibited. This results in increased flood risk, overstressed combined sewer infrastructure, and reduced ability to replenish aquifers. Sustainable Drainage Systems (SuDS) mitigate these issues by replicating natural processes to manage rainfall.

National Planning Policy Framework (NPPF)

- 2.2. The National Planning Policy Framework¹ (NPPF) (MHCLG, 2024) which includes UK Government policy on development and flood risk states:

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.*

¹ <https://www.gov.uk/guidance/national-planning-policy-framework>, last updated Dec 2024

National Standards for SuDS

2.3. Updates to the national planning policy have defined a framework for Sustainable Drainage Systems (SuDS). The new 'National Standards for SuDS'² was published on June 19th, 2025, and is used to inform this drainage strategy. There are seven key standards are as follows;

- **Standard 1 Runoff Destination:** The drainage hierarchy now prioritises water re-use followed by infiltration, before discharging to watercourses and sewers.
- **Standard 2 Management of Everyday Rainfall (interception):** The design must ensure that the first 5mm of rainfall from any event is managed within the site and does not leave the boundary.
- **Standard 3 Management of Extreme Rainfall and Flooding:** The SuDS must be designed to manage runoff from all extreme rainfall events, up to and including the 1 in 100-year return period (including an allowance for climate change).
- **Standard 4 Water Quality:** The system must be designed to prevent or mitigate the risk of surface water runoff pollution using SuDS management trains.
- **Standard 5 Amenity:** The SuDS should be designed to improve the aesthetic value of the development, demonstrating multifunctional solutions where feasible.
- **Standard 6 Biodiversity:** The system should be designed to promote biodiversity using above ground SuDS where feasible.
- **Standard 7 Maintenance:** A clear plan must be provided for the long-term operation and maintenance of the SuDS to ensure it remains effective for the lifetime of the development.

Local Plan

2.4. The Local Plan prepared by the Local Planning Authority, Wiltshire Council, sets out the policies for development in the local area.

2.5. Policy 95 Flood risk outlines the requirements for new development within the area. It states:

² <https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds>

- *The council will follow a sequential approach to flood risk management, in line with national policy and guidance. All development proposals will be required to consider the effect of the proposed development on flood risk from all sources, both on and offsite, commensurate with the scale and impact of the development.*
- *Where required, a Site-Specific Flood Risk Assessment, Surface Water Drainage Strategy and Groundwater Assessment should be conducted. This must take account of all flood risk sources and cumulative effects and should incorporate suitable flood risk measures to account for site conditions.*
- *All new development, including where appropriate retrofitting proposals, will include measures to reduce the rate of rainwater run-off and incorporate sustainable drainage systems (SuDS).*
- *All major development should achieve a 20% betterment on greenfield runoff rates whereby runoff is managed as close to the source as possible, in line with the surface water discharge hierarchy.*
- *The drainage strategy must ensure that flood risk is addressed to flood depths for a 1 in 100-year storm event plus climate change in line with Environment Agency guidance.*
- *The drainage strategy must demonstrate that development proposals will remain safe during a flood event throughout its lifetime and consider access, egress and emergency exit routes.*
- *The Drainage Strategy must recognise and demonstrate opportunities for SuDS to provide other multiple benefits.*
- *The drainage strategy should be informed by the council's Green and Blue Infrastructure Strategy, the Climate Change Adaptation Plan, and the Wiltshire Design Guide as these all provide guidance on SuDS by incorporating the synergistic benefits and a nature-based approach, dealing with runoff onsite where possible and avoiding methods such as culverting which alters the natural formation of watercourses.*

Documents and Online Mapping

2.6. The following sources of information have been reviewed for this assessment:

- National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2024)
- Planning Practice Guidance - Flood Risk and Coastal Change (Ministry of Housing, Communities and Local Government, 2022)
- Geoindex Onshore (British Geological Survey, 2024)
- Wiltshire Local Plan 2020-2038, Regulation 19 (Wiltshire Council, emerging 2023)³ and Wiltshire Core Strategy (Wiltshire Council, 2015)⁴
- Wiltshire Local Flood Risk Management Strategy (Wiltshire Council, 2015)⁵
- CIRIA SuDS Manual⁶ (2015)
- Soilscape Online Soil Mapping⁷

CIRIA C753 SuDS Manual

2.7. The CIRIA SuDS manual has been used throughout this SWDS in order to determine an appropriate strategy for the proposed development. This guidance covers the planning, design, construction and maintenance of Sustainable Drainage Systems (SuDS) to assist with their effective implementation within both new and existing developments. It looks at how to maximise amenity and biodiversity benefits and deliver the key objectives of managing flood risk and water quality. There is also supporting information covering topics such as materials, landscape design, maintenance, community engagement and costs and benefits.

³ https://www.wiltshire.gov.uk/media/11976/Wiltshire-Local-Plan-Pre-Submission-Draft-2020-2038-Regulation-19/pdf/Wiltshire_Local_Plan_Reg_19_web_accessible_version.pdf

⁴ <https://www.wiltshire.gov.uk/planning-policy-core-strategy>

⁵ <https://www.wiltshire.gov.uk/media/204/Wiltshire-local-flood-risk-management-strategy/pdf/Flood-risk-management-strategy-civil-emergencies.pdf>

⁶ https://www.ciria.org/CIRIA/CIRIA/Item_Detail.aspx?iProductCode=C753F

⁷ <https://www.landis.org.uk/soilscape/>

3. Surface Water Drainage Strategy

Surface Water Drainage Hierarchy

- 3.1. In accordance with the SuDS management train approach, the use of various SuDS measures to reduce and control surface water flows have been considered in detail for the development in Table 1 overleaf.
- 3.2. The management of surface water has been considered in respect to the SuDS hierarchy below, as detailed in the Statutory Guidance National standards for sustainable drainage systems (SuDS) (2025).

Table 1: SuDS Drainage Hierarchy

SuDS Drainage Hierarchy				
			Suitability	Comment
	1.	Collection for non-potable use	✓	Water butts should be utilised where feasible for use around the landscaped areas of the site.
	2.	Infiltration	x	A BRE365 Soakaway Test Report is included in this report as Appendix D. The soakaway tests were conducted in January 2025 and confirm that the chalk geology type on site is favourable for infiltration drainage. However, both boreholes on site encountered groundwater at 1.2m below ground level. In accordance with the 2025 National SuDS Standards, there must be 1m clearance between the base of any infiltration feature, and the highest recorded groundwater level.
	3.	Discharge to surface waters	x	Given the distance from the site and third-party land between the site and watercourse is considered that discharge to a watercourse is not a viable option for surface water discharge.
	4.	Discharge to surface water sewer, highway drain or similar	✓	It is proposed that surface water will be discharged into the surface water sewer adjacent to the site (beneath Netherhampton Road (A3094)).
	5.	Discharge to combined sewer	x	A surface water sewer is a preferable discharge location over a combined sewer.

- 3.3. The potential for the use of various SuDS has been considered and optimised in the design, as per Table 2 overleaf.

Table 2: SuDS Components Suitability Summary Table

SuDS Component	Description	Constraints and Opportunities	Suitable?
1. Infiltrating SuDS	Infiltration can contribute to reducing runoff rates and volumes while supporting baseflow and groundwater recharge processes. The suitability and infiltration rate depends on the permeability of the surrounding soils.	High groundwater will limit infiltration potential.	x
2. Filter Drains and Filter Strips	Filter drains are shallow trenches filled with stone gravel that create temporary subsurface storage for the attenuation, conveyance and filtration of surface water runoff. Filter strips are uniformly graded and gently sloping strips of grass or dense vegetation, designed to treat runoff from adjacent impermeable areas by promoting sedimentation, filtration and infiltration.	Filter drains are proposed in landscaped areas of the site to ensure exceedance events are managed on site where possible.	✓
3. Permeable Pavement	Pervious surfaces can be used in combination with aggregate sub-base and/or geocellular/modular storage to attenuate and/or infiltrate runoff from surrounding surfaces and roofs. Liners can be used where ground conditions are not suitable for infiltration.	All parking hardstanding is to be constructed using (lined) permeable paving or similar permeable material. Permeable paving should be Type C.	✓
4. Green & Blue Roofs	Green Roofs provide areas of visual benefit, ecological value, enhanced building performance and the reduction of surface water runoff. They are generally more costly to install and	There are flat roofs included as part of the proposed development, that have been proposed as green roofs	✓

SuDS Component	Description	Constraints and Opportunities	Suitable?
	maintain than conventional roofs but can provide many long-term benefits and reduce the on-site storage volumes.		
5. Rainwater Harvesting (RWH)	Rainwater Harvesting is the collection of rainwater runoff for use. It can be collected from roofs or other impermeable areas, stored, treated (where required) and then used as a supply of water for domestic, commercial and industrial properties.	Water butts should be included throughout the development if there is landscaped areas within the vicinity which would benefit from collected rainwater.	✓
6. Swales	Swales are designed to convey, treat and attenuate surface water runoff and provide aesthetic and biodiversity benefits. They can replace conventional pipework as a means of conveying runoff; however, space constraints of some sites can make it difficult incorporating them into the design.	Given the requirements for attenuation, it is not possible to provide attenuation for the development in swales. Additionally, root protection zones prohibit the use of swales in multiple locations.	x
7. Rills and Channels	Rills and Channels keep runoff on the surface and convey runoff along the surface to downstream SuDS components. They can be incorporated into the design to provide a visually appealing method of conveyance. They also provide effectiveness in pre-treatment removal of silts.	Rills and channels can be used, where appropriate, for conveyance. Filter drains are proposed in landscaped areas of the site to prevent unlikely exceedance flows from leaving the site.	✓
8. Bioretention Systems	Bioretention systems can reduce runoff rates and	Raised planters could be installed on rainwater	

SuDS Component	Description	Constraints and Opportunities	Suitable?
	volumes and treat pollution through the use of engineer soils and vegetation. They are particularly effective in delivering interception but can also be an attractive landscape feature whilst providing habitat and biodiversity.	downpipes to provide small attenuation and treatment benefits.	✓
9. Retention Ponds and Wetlands	Ponds and Wetlands are features with a permanent pool of water that provide both attenuation and treatment of surface water runoff. They enhance treatment processes and have great amenity and biodiversity benefits. Often a flow control system at the outfall controls the rates of discharge for a range of water levels during storm events.	Given the landscaped space available as part of the proposed development a new pond/wetland is deemed unfeasible, especially due to root protection zones on site.	x
10. Detention Basins	Detention Basins are landscaped depressions that are usually dry, except during and immediately following storm events, and can be used as a recreational or other amenity facility. They are generally appropriate to manage high volumes of surface water from larger sites, such as a neighbourhood.	There would also be no space to implement such features especially due to root protection zones on site.	x
11. Geocellular Systems	Attenuation storage tanks are used to create a below-ground void space for the temporary storage of	A series of lined geocellular tanks are proposed as the main attenuation features for the proposed development.	✓

SuDS Component	Description	Constraints and Opportunities	Suitable?
	surface water before infiltration, controlled release or use. The inherent flexibility in size and shape means they can be tailored to suit the specific characteristics and requirements of any site.		
12. Proprietary Treatment Systems	Proprietary treatment systems are manufactured products that remove specific pollutants from surface water runoff. They are especially useful where site constraints preclude the use of other methods and can be useful in reducing the maintenance requirements of downstream SuDS.	The commercial yard areas will be treated via propriety treatment devices – manufacturers to provide details on the exact model and specification.	✓

- 3.4. On review of the SuDS drainage hierarchy, available SuDS options, taking into account the site's constraints and with reference to both national and local policy, it is proposed that the surface water runoff from the proposed development will be managed via a series of lined geocellular storage tanks discharging to the surface water sewer beneath Netherhampton Road (A3094). If an existing connection exists, this should be reused.
- 3.5. A CCTV Survey is required at the detailed design stage to identify any existing connections and to understand the invert level of the surface water sewer. Additionally, this strategy is subject to confirmation from Wessex Water.
- 3.6. The proposed Surface Water Drainage Layout is included as Appendix C.

Infiltration Potential

- 3.7. The British Geological Survey's (BGS) mapping shows that the superficial deposits underlying the site are defined as River Terrace Deposits, comprised of sand and gravel. The bedrock underlying the site is mapped as Seaford Chalk Formation.

- 3.8. A BRE365 Soakaway Test Report is included in this report as Appendix D. The soakaway tests were conducted in January 2025 and confirm that the chalk geology type on site is favourable for infiltration drainage. However, both boreholes on site encountered groundwater at 1.2m below ground level. In accordance with the 2025 National SuDS Standards, there must be 1m clearance between the base of any infiltration feature, and the highest recorded groundwater level.
- 3.9. As such, this strategy does not propose infiltration drainage for the reasons outlined above.

Nearby Watercourses

- 3.10. The closest Main River to the site is the River Nadder, located approximately 520m north-east of the site. There are no other watercourses in vicinity of the site as per OS mapping.
- 3.11. Given the distance from the site and third-party land between the site and watercourse is considered that discharge to a watercourse is not a viable option for surface water discharge.

Public Sewers

- 3.12. Wessex Water asset plans are included in this report as Appendix E and reproduced below as Figure 3. The asset plans confirm that there is a public surface water sewer beneath Netherhampton Road (A3094).
- 3.13. The site is brownfield with an existing commercial warehouse. It is assumed that this warehouse currently drains into the surface water sewer adjacent to the site. However, this is to be confirmed via a CCTV Survey during the detailed design stage.
- 3.14. This drainage strategy proposes to discharge at the greenfield rate (or as close to as practicable) into the surface water sewer beneath Netherhampton Road (A3094). Liaison is currently ongoing with Wessex Water to agree a discharge rate and to understand the invert level of their asset. This drainage design will be updated in light of the invert level information if required.

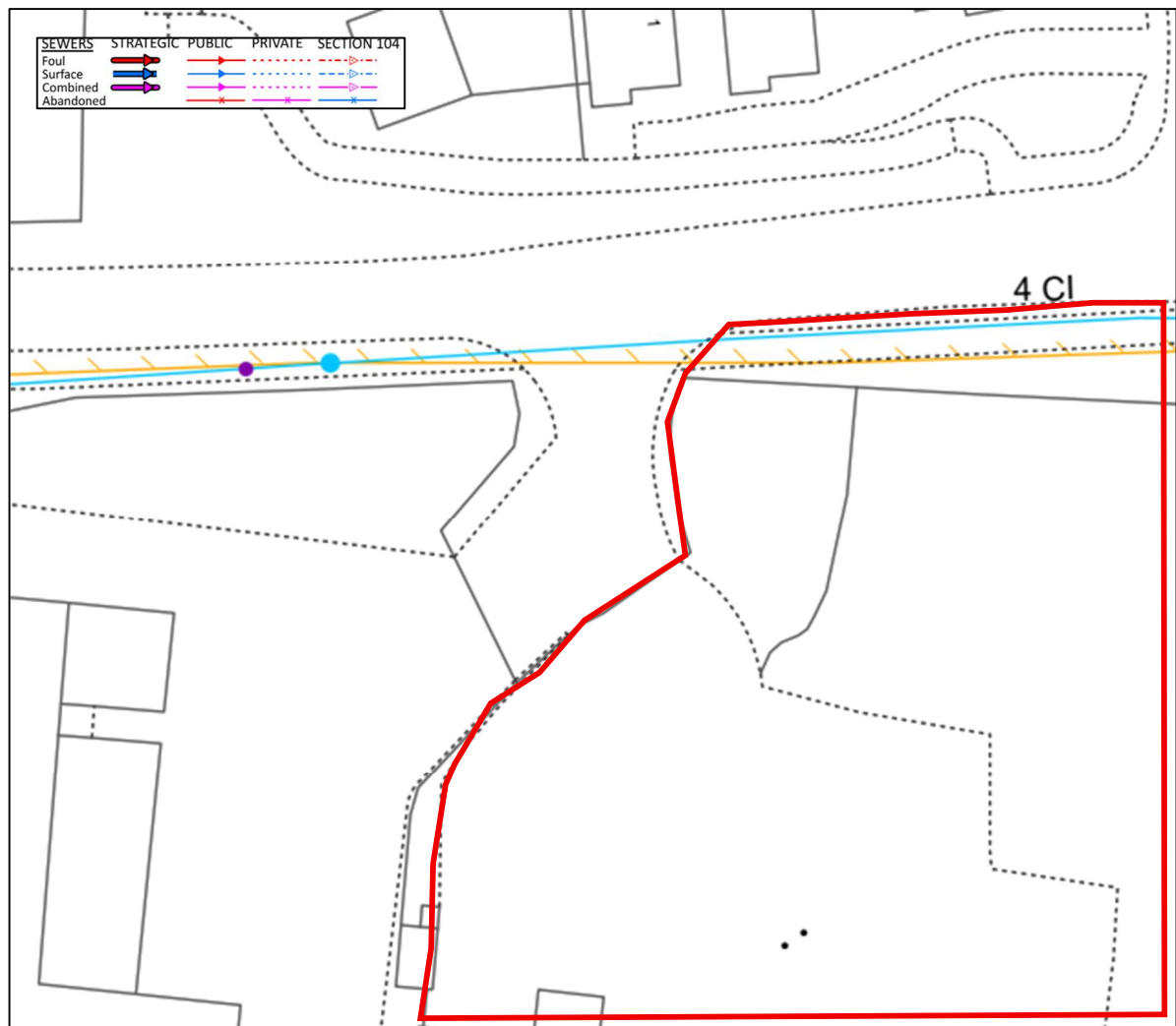


Figure 3: Wessex Water Asset Plan (Source: Wessex Water) (Site in Red)

Greenfield Runoff Rates

- 3.15. The proposed development includes for 0.593 ha of hardstanding area comprising roofs, carparking and access roads as shown within the proposed development plans (Appendix A). The total impermeable area included within the InfoDrainage (v.2025.5) Calculations is 0.593 ha with no urban creep allowance applied as any extensions to the site would require formal planning permission and would include their own drainage strategies.
- 3.16. To determine the required outflow rate for the proposed surface water drainage strategy, the greenfield runoff rate for the total proposed impermeable area of the site has been calculated using the IH124 method (via the ICP SuDS variation) within InfoDrainage Software v2025.5.

- 3.17. The IH124 method was developed as part of the original Flood Studies Report (FSR) in 1975 and was devised to calculate runoff from small catchments by estimating the mean annual flood flow (Q_{bar}) using the following equation:

$$Q_{bar_{rural}} = 0.00108(0.1 \times AREA)^{0.89} \times SAAR^{1.17} \times SPR^{2.17} m^3/s$$

Where:

$Q_{bar_{rural}}$ is the mean annual flood flow from a rural catchment (approximately 2.3 year return period).

AREA is the area of the hardstanding surfaces in ha.

SAAR is the Standard Average Annual Rainfall for the period 1941 to 1970 in mm.

SPR is Standard Percentage Runoff coefficient for the SOIL category. The SOIL category is extracted from UK Winter Rainfall Acceptance Potential (WRAP) map.

- 3.18. The ICP SuDS variation is a scaled-down version of the IH124 runoff method for estimating peak flow rates from both undeveloped and partly urbanised catchments that are smaller than 50 ha in size, which is appropriate in this instance.
- 3.19. The parameters used for estimating the greenfield runoff rates for the site are presented in Table 3.

Table 3: ICP SuDS Input Parameters

Greenfield runoff rates from the site – simulation criteria	
Rainfall Data	FEH22
Area	0.593 ha
SAAR	873.0
SOIL	0.3
Region	7

- 3.20. Table 4 displays the estimated greenfield runoff rates for the proposed site area of 0.593 ha.

Table 4: Greenfield Runoff Rates

Return Period	Greenfield Runoff Rate
1 in 1 Year	1.2
QBAR (approx. 1 in 2.33 Year)	1.4
1 in 30 Year	3.2
1 in 100 Year	4.5

3.21. Runoff rates from the proposed development should be restricted to greenfield rates where possible. Given the size of the development, it is not practicable to provide the volume of attenuation required to discharge at the greenfield rate (560m³ attenuation required for a 1.4l/s discharge rate). Wessex Water generally follows the *Design and Construction Guidance* (formerly *Sewers for Adoption*)⁸ which strongly recommends a minimum of 75mm to reduce the risk of blockage. In order to discharge at the greenfield rate of 1.4l/s a flow control device smaller than 75mm would be required.

3.22. In accordance with 'Standard 3: management of extreme rainfall and flooding' of the New National SuDS Standards previously developed sites can apply a 'relaxation factor' up to 5;

3.21 For previously developed sites a 'relaxation factor' shall be applied to the target 50% and 1% AEP greenfield runoff rates where evidence is provided that demonstrates why greenfield runoff or 3l/s/ha rates cannot be achieved and this is agreed with the approving body.

3.23. As such, the proposed discharge rate from the development is 4l/s which incorporates a relaxation factor of less than 3.

3.24. Surface water is proposed to be restricted via a Hydro-Brake® to a flow rate of 4.0l/s for all storms up to and including the 1 in 100 year (plus a 45% allowance for climate change) storm event. This is to be agreed with Wessex Water during the detailed design stage.

⁸ <https://www.water.org.uk/sites/default/files/wp/2021/07/SSG-App-C-Des-Con-Guide.pdf>

InfoDrainage Modelling and Results

- 3.25. InfoDrainage Software (v2025.5) was used to calculate the indicative attenuation volumes from the development proposals area.
- 3.26. The total proposed impermeable area being managed was calculated to be 0.593 ha of roof areas and paving areas. A 10% urban creep allowance has not been applied due to the limited potential/space for increase in impermeable surfaces. Any increase in built footprint will require planning permission; thus drainage will need to be considered as part of a planning application.
- 3.27. The model comprises:
- 24no. contributing catchment areas to represent the total of 0.593 ha of impermeable surfaces proposed. There are 2no. catchment areas which are green roof catchments discharging into the drainage network.
 - 12no. Lined (Type C) lined permeable paving units. Modelled with 30% porosity, 50mm paving layer depth (TBC by manufacturer), and a clean crushed stone subbase depth of 250mm ('Permeable Paving 2' and 'Permeable Paving 4' have subbase depths of 300mm). All permeable paving units include orifice outlets to reduce the surface water flow rate at the source.
 - 4no. geocellular tanks. Modelled with 95% porosity. All tanks have a tank depth of 0.8m. 'Tank 1', 'Tank 2', and 'Tank 3' are to be fitted with 75mm orifice plates at their outlet and 'Tank 4' is to include no orifice. Rather, 'Tank 4' will discharge into the downstream manhole which is to include a Hydro-Brake (HB Reference: CHE-0088-4000-1150-4000) flow control at the outlet.
 - 7no. surface water manholes – utilised to model the main spine of the drainage associated with this strategy.
- 3.28. Table 5 summarises the simulation criteria for the InfoDrainage model.

Table 5: Simulation Parameters

Catchment Area Simulation Parameters	
Rainfall Data	FEH22 - as per national suds guidance.
Total Area	0.593 ha

Return Periods	2, 30, 30+40% for climate change, 100, 100 +45% for Climate Change. Summer and Winter
Storm Durations	15, 30, 60, 120, 240, 360, 480, 960, 1440, 2160 minute
Volumetric Runoff Coefficient	1.0 (summer and winter storms)
Percentage Impervious	100%
Time of Concentration	5 minutes

3.29. The Environment Agency Peak Rainfall Climate Change Allowance guidance (updated in May 2022) was reviewed and subsequently the DEFRA Peak Rainfall Allowances Map was assessed to determine appropriate climate change allowances to inform the surface water drainage strategy. In line with this guidance, the upper end allowances for the Avon Hampshire Management Catchment have been used for both the 1% and 3.3% annual exceedance probability events. An allowance of 40% has been used for the 3.3% AEP event and an allowance of 45% has been used for the 1% AEP event.

InfoDrainage Results

3.30. The full calculation outputs can be found in Appendix F of this report although the 1 in 100 year+45% climate change results for the proposed tank and permeable paving have been summarised below:

- The maximum depth within the permeable paving subbase (for the 300mm subbase permeable paving) during a 1 in 100-year plus 45% climate change critical storm (1,440 minute summer) is 286mm.
- The maximum depth within the permeable paving subbase (for the 250mm subbase permeable paving) during a 1 in 100-year plus 45% climate change critical storm (480 minute summer) is 247mm.
- The maximum depth within the 0.8m deep geocellular storage tanks for a 1 in 100-year plus 45% climate change critical storm (960 minute winter) is 0.797m.
- The maximum discharge rate from the proposed Hydro-Brake for a 1 in 100-year plus 45% climate change critical storm (960 minute summer) is 4.0l/s
- No flooding is observed in the critical storm event based on the InfoDrainage model.

3.31. As such, these results indicate that the runoff from the proposed development could be accommodated within a drainage system of the approximate size modelled.

Maintenance

3.32. Table 6, 7, 8, and 9 presents the details regarding the maintenance requirements for the proposed SuDS included as part of the development taken from the CIRIA C753 'The SuDS Manual'. Each manufacturer will have bespoke requirements, however, the below should be used as a guide.

Table 6: Maintenance Requirements for Geocellular Systems

Maintenance Schedule	Required Action	Typical Frequency
Regular Maintenance	Inspect and identify any area that are not operating correctly. If required, take remedial action	Monthly for 3 months, then annually
	Remove debris from the catchment surface (where it may cause risks to performance)	Monthly
	For systems where rainfall infiltrates into the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary.	Annually
	Remove sediment from pre-treatment structures and/ or internal forebays	Annually, or as required
Remedial Actions	Repair/ rehabilitate inlets, outlet, overflows and vents	As required
Monitoring	Inspect/ check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually
	Survey inside of tank for sediment build-up and remove if necessary	Every 5 years or as required

Table 7: Maintenance Requirements for Permeable Pavements

Maintenance Schedule	Required Action	Typical Frequency
Regular Maintenance	Brushing and vacuuming (standard cosmetic sweep over whole surface)	Once a year, after autumn leaf fall, or reduced frequency as required, based on site-specific observations of clogging or manufacturers recommendations - pay particular attention to areas where water runs onto pervious surface from adjacent impermeable areas as this area is most likely to collect the most sediment
Occasional Maintenance	Stabilise and mow contributing and adjacent areas	As required
	Removal of weeds or management using glyphosate applied directly into the weeds by an applicator rather than spraying	As required - once per year on less frequently used pavements
Remedial Actions	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised to within 50mm of the level of the paving	As required
	Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost jointing material	As required
	Rehabilitation of surface and upper substructure by remedial sweeping	Every 10 to 15 years or as required (if infiltration performance is reduced due to significant clogging)
Monitoring	Initial inspection	Monthly for three months after installation
	Inspect for evidence of poor operation and/or weed	Three-monthly, 48hr after large storms in first six months

	growth - if required, take remedial action	
	Inspect silt accumulation rates and establish appropriate brushing frequencies	Annually
	Monitor inspection chambers	Annually

Table 8: Maintenance Requirements for Green Roofs

Maintenance Schedule	Required Action	Typical Frequency
Regular Inspections	Inspect all components including soil substrate, vegetation, drains, irrigation systems (if applicable), membranes and roof structure for proper operation, integrity of waterproofing and structural stability	Annually and after severe storms
	Inspect soil substrate for evidence of erosion channels and identify and sediment sources	Annually and after severe storms
	Inspect drain inlets to ensure restricted runoff from the drainage layer to the conveyance or roof drain system	Annually and after severe storms
	Inspect underside of roof for evidence of leakage	Annually and after severe storms
Regular Maintenance	Remove debris and litter to prevent clogging of inlet drains and interference with plant growth	Six monthly and annually as required
	During establishment (i.e., year one), replace dead plants as required	Monthly (but usually responsibility of manufacturer)
	Post establishment, replace dead plants as required (where >5% of coverage)	Annually (in autumn)
	Remove fallen leaves and debris from deciduous plant foliage	Six monthly or as required

	Remove nuisance and invasive vegetation, including weeds	Six monthly or as required
	Mow grasses, prune shrubs and manage other planting (if appropriate) as required – clippings should be removed and not allowed to accumulate	Six monthly or as required
Remedial Actions	If erosion channels are evident, these should be stabilised with extra soil substrate similar to the original material, and sources of erosion damage should be identified and controlled	As required
	if drain inlet has settled, cracked or moved, investigate and repair as appropriate	As required

Table 9: Maintenance Requirements for Bioretention Systems (SuDS Planters)

Maintenance Schedule	Required Action	Typical Frequency
Regular Maintenance	Inspect infiltration surfaces for silting and ponding, record de-watering time of the facility and assess standing water levels in underdrain (if appropriate) to determine if maintenance is necessary	Quarterly
	Check operation of underdrains by inspection of flows after rain	Annually
	Assess plants for disease infection, poor growth, invasive species etc and replace as necessary	Quarterly
	Inspect inlets and outlets for blockage	Quarterly
	Remove litter and surface debris and weeds	Quarterly
	Replace any plants, to maintain planting density	As required
	Remove sediment, litter and debris build-up from around inlets or from forebays	Quarterly to biannually
Remedial Actions	Remove and replace filter medium and vegetation above	As required but likely to be > 20 years
Occasional Maintenance	Infill any holes or scour in the filter medium, improve erosion protection if required	As required

Maintenance Schedule	Required Action	Typical Frequency
	Repair minor accumulations of silt by raking away surface mulch, scarifying surface of medium and replacing mulch	As required

Hydrobrake

3.33. The Hydro-International maintenance requirements for a hydrobrake are included below;

Normally, little maintenance is required as there are no moving parts within the Flow Control. Experience has shown that if blockages occur they do so at the intake, and the cause on such occasions has been due to a lack of attention to engineering detail such as approach velocities being too low, inadequate benching, or the use of units below the minimum recommended size. The Flow Control (where applicable) is fitted with a pivoting bypass door, which allows the manhole chamber to be drained down should blockage occur. The smaller conical units, below the minimum recommended size, are also supplied with rodding facilities or vortex suppressor pipes as standard.

Following installation of the Flow Control it is vitally important that any extraneous material i.e. building materials are removed from the unit and the chamber. After the system is made live, and assuming that the chamber design is satisfactory, it is recommended that each unit be inspected monthly for three months and thereafter at six monthly intervals with hose down if required. If problems are experienced, please do not hesitate to contact the company so that an investigation may be made.

All Flow Control units are typically manufactured from grade 304 Stainless Steel, and if required they can also be manufactured in grade 316 Stainless Steel. Both materials have an estimated life span in excess of the design life of drainage systems

Designing for Exceedance

- 3.34. Exceedance events are those greater than the design rainfall event, i.e. greater than the 100-year rainfall event plus 45% increase for climate change.
- 3.35. Periods of exceedance occur when the rate of surface water runoff exceeds the drainage system capacity. Conveyance beneath ground cannot, generally, be economically or sustainably constructed to the scale required for the most extreme rainfall events. This may result, on

occasion, in the surface water runoff exceeding the capacity of the drainage network, with excess water (exceedance flow) being conveyed above ground.

- 3.36. For situations where extreme rainfall intensity exceeds inlet capacities, or for extreme storm events exceeding the design flood event considered for drainage design, the surface water exceedance will flow towards highway drainage. Hardstanding areas should also be laid to fall away from internal thresholds towards the large, landscaped areas within the site. Also, as a precaution filter drains should be included within the landscaped areas of the development to ensure that any unlikely exceedance flows are managed on site.

Water Quality

- 3.37. In order to protect the downstream receiving water body, a key element of SuDS is that they have the potential to improve the quality of surface water discharged from a site. In order to assess this, the "Pollution hazard indices for different land use classifications", provided in table 26.2 of the CIRIA SuDS Manual (C753) has been reviewed. The indices use four different indicators for assessing pollution potential based on the hazard level, total suspended solids (TSS), Metals, and Hydrocarbons.
- 3.38. The Pollution Hazard Indices are summarised in Table 10 below (with reference to table 26.2 in the CIRIA SuDS manual). The pollution hazard indices for "Other Roofs", "Commercial Yards", and "Low Trafficked Roads" have been used.
- 3.39. Table 10 shows that roof areas will be sufficiently managed by either a green roof or SuDS Planters, the commercial yard will be managed by proprietary treatment devices, and parking areas will be managed by permeable paving.

Table 10: Pollution Hazard Indices

Land Use	Pollution Hazard Level	Total Suspended Solids (TSS)	Metals	Hydrocarbons
Hazard				
Other Roofs	Low	0.3	0.2	0.05
Mitigation				
Green Roof or SuDS Planters		0.8	0.8	0.8
Hazard				
Commercial Yard/ Delivery Areas (main hardstanding access roads)	Medium	0.7	0.6	0.7
Mitigation				
Proprietary Treatment Device		A series of proprietary treatment devices will be included in this strategy, located upstream of each geocellular storage tank. The exact model will be confirmed via the manufacturer, however, the mitigation indices for TTS, metals and Hydrocarbons should be a minimum of 0.7, 0.6, and 0.7.		
Hazard				
Low trafficked road (parking areas)	Medium	0.5	0.4	0.4
Mitigation				
Permeable Paving		0.7	0.7	0.5

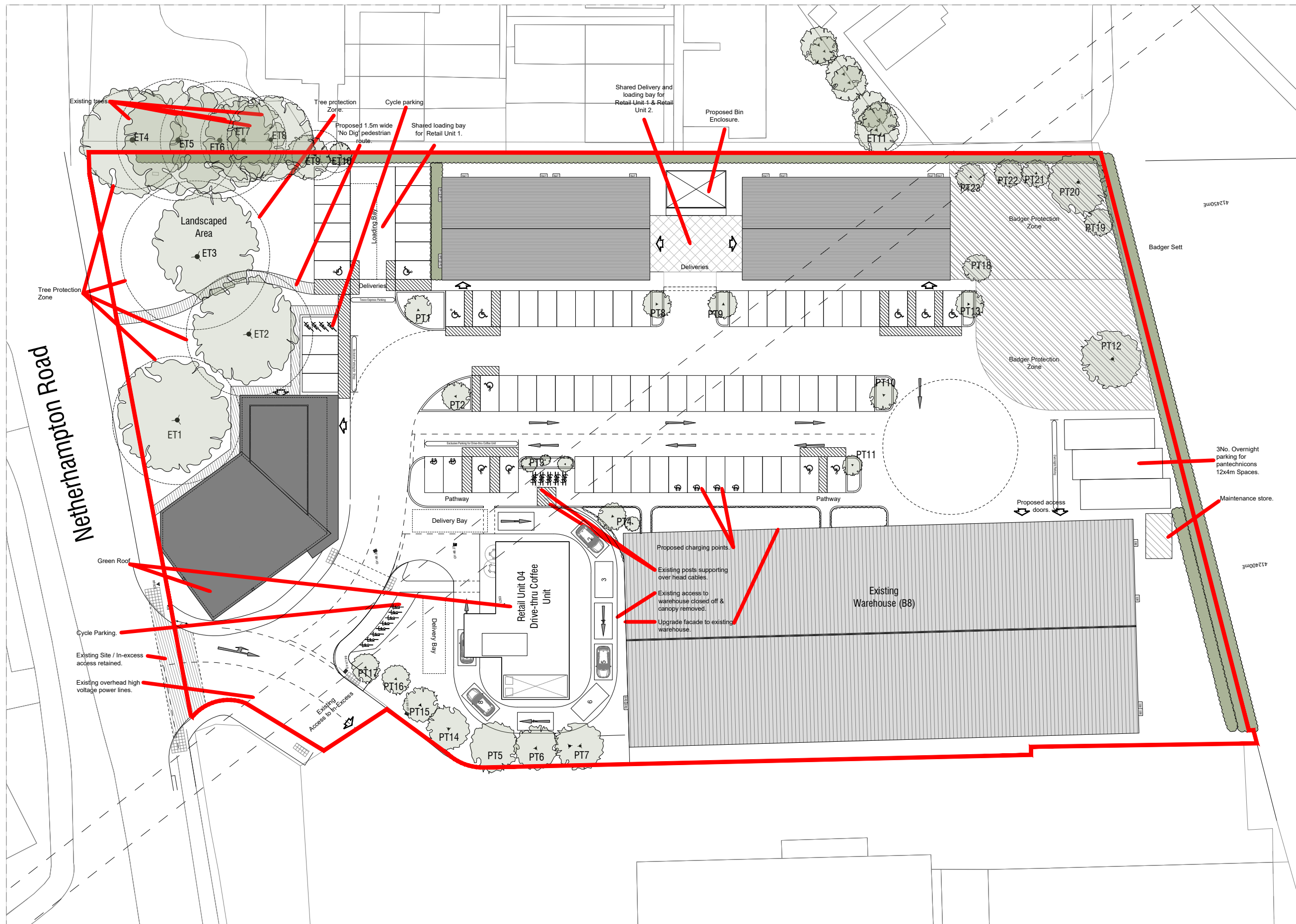
3.40. As such, the proposed drainage strategy should offer sufficient treatment of runoff from the proposed roof and hardstanding areas.

4. Conclusions

- 4.1. This SWDS has been undertaken with reference to the proposed development at Armishaws, Netherhampton Road, Salisbury, Wiltshire, SP2 8RA.
- 4.2. On review of the SuDS drainage hierarchy, available SuDS options, taking into account the site's constraints and with reference to both national and local policy, it is proposed that the surface water runoff from the proposed development will be managed via a series of lined geocellular storage tanks discharging to the surface water sewer beneath Netherhampton Road (A3094). If an existing connection exists, this should be reused.
- 4.3. A CCTV Survey is required at the detailed design stage to identify any existing connections and to understand the invert level of the surface water sewer. Additionally, this strategy is subject to confirmation from Wessex Water.
- 4.4. The full calculation outputs can be found in Appendix F of this report although the 1 in 100 year+45% climate change results for the proposed tank and permeable paving have been summarised below:
 - The maximum depth within the permeable paving subbase (for the 300mm subbase permeable paving) during a 1 in 100-year plus 45% climate change critical storm (1,440 minute summer) is 286mm.
 - The maximum depth within the permeable paving subbase (for the 250mm subbase permeable paving) during a 1 in 100-year plus 45% climate change critical storm (480 minute summer) is 247mm.
 - The maximum depth within the 0.8m deep geocellular storage tanks for a 1 in 100-year plus 45% climate change critical storm (960 minute winter) is 0.797m.
 - The maximum discharge rate from the proposed Hydro-Brake for a 1 in 100-year plus 45% climate change critical storm (960 minute summer) is 4.0l/s
 - No flooding is observed in the critical storm event based on the InfoDrainage model.
- 4.5. As such, these results indicate that the runoff from the proposed development could be accommodated within a drainage system of the approximate size modelled.
- 4.6. Using the CIRIA SuDS Index Approach, the proposed system provides sufficient treatment for the proposed land use.

- 4.7. This SWDS should be submitted as part of the planning application to satisfy the requirements under NPPF.

Appendix A - Development Proposals



01 - Proposed Site Plan

General Notes:

- Do not scale drawings other than for planning purposes and refer only to figured dimensions.
- Contractor is to raise any concerns of discrepancies in this drawing and that of what is noted on site to the architect before building works commence.
- In the circumstance that the drawing relates to an existing building or setting, the contractor is to confirm there is no conflict between this drawings dimensions and the actual building/settings dimensions.
- Refer to all other project consultants and specialists relevant drawings and specifications.
- It is the contractor responsibility to ensure all site dimensions, levels and setting out is in line with the architects drawings.
- Refer to the Structural Engineers drawings for full details on structure where necessary

P5	25.11.25	New convenience store design.
P4	02.07.25	Site Vehicle Tracking Improvements
P3	20.06.25	Planning Issue
P2	10.06.25	Planning Issue
P1	10.04.25	Planning Issue

Rev:	Date:	Revision History:

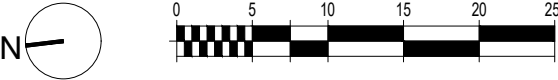
T: 01722 680 419
W: info@esdon-architecture.com

Project:
25-020
Armishaws

Designed by:	EE	Date:		Checked:	EE	Date:	
Drawn By:	EE			Approved:	EE		

A3	Status:
1:500	Planning

Drawing Title:	Proposed Site Plan		
Drawing No:	10-002	Rev:	P5



Appendix B - Topographical Survey



- General Notes:**
- Do not scale drawings other than for planning purposes and refer only to figured dimensions.
 - Contractor is to raise any concerns of discrepancies in this drawing and that of what is noted on site to the architect before building works commence.
 - In the circumstance that the drawing relates to an existing building or setting, the contractor is to confirm there is no conflict between this drawings dimensions and the actual building/settings dimensions.
 - Refer to all other project consultants and specialists drawings and specifications.
 - It is the contractor responsibility to ensure all site dimensions, levels and setting out is in line with the architects drawings.
 - Refer to the Structural Engineers drawings for full details on structure where necessary

P2	04.11.25	Existing Drainage added
P1	10.04.25	Planning Issue
Rev:	Date:	Revision History:

ESDON
ARCHITECTURE

T: 01722 680 419
W: info@esdon-architecture.com

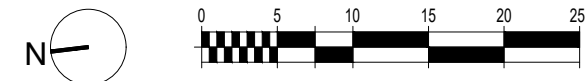
Project:
25-020
Armishaws

Designed by:	Name:	Date:	Checked:	Name:	Date:
Drawn By:	EE		Approved:	EE	

A3
1:500
Status:
Planning

Drawing Title:
Existing Site Plan

Drawing No:
00-002
Rev:
P2



Appendix C - Surface Water Drainage layout

SUMMARY

ALL SURFACE WATER WILL ULTIMATELY BE ATTENUATED VIA THE GEOCELLULAR STORAGE TANKS AND PERMEABLE PAVING PRIOR TO BEING DISCHARGED INTO THE SURFACE WATER SEWER BENEATH NETHERHAMPTON ROAD. THE INVERT LEVELS OF THE SEWER IS TO BE CONFIRMED AND THE DRAINAGE STRATEGY UPDATED IN LIGHT OF THIS INFORMATION.

THE DISCHARGE RATE IS SUBJECT TO CONFIRMATION FROM WESSEX WATER FOLLOWING A CAPACITY CHECK.

IF EXISTING CONNECTIONS ARE FOUND FOLLOWING A CCTV SURVEY, THESE SHOULD BE REUSED.

HYDROBRAKE MANHOLE

LIMITING RUNOFF TO 4.0l/s FOR ALL STORM EVENTS UP TO AND INCLUDING 100YEAR+45%CC

MODELLLED MAX FLOW: 4.0l/s

UNIT REFERENCE: CHE-0088-4000-1150-4000

PROPOSED GREEN ROOF ATOP THE FLAT ROOF OF THE PROPOSED CONVENIENCE STORE.

FLAT ROOF MODELLED WITH A 120mm STORAGE LAYER. FINAL DESIGN TO BE CONFIRMED VIA MANUFACTURER.

FILTER DRAINS PROPOSED IN THE LANDSCAPED AREAS OF THE SITE TO ENSURE SURFACE WATER EXCEEDANCE EVENTS ARE MANAGED ON SITE WHERE FEASIBLE.

'PERMEABLE PAVING 8'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 250mm
POROSITY: 30%
PLAN AREA: 110m²

TO DISCHARGE INTO THE GEOCELLULAR STORAGE 'TANK 3' VIA A 35mm ORIFICE OUTLET.

'PERMEABLE PAVING 9'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 250mm
POROSITY: 30%
PLAN AREA: 160m²

TO DISCHARGE INTO THE GEOCELLULAR STORAGE 'TANK 3' VIA A 35mm ORIFICE OUTLET.

GEOCELLULAR STORAGE 'TANK 3'

COVER DEPTH: 1.2m MINIMUM

INVERT LEVEL: 46.300 BASED ON 1m RESOLUTION LIDAR DATA.

PLAN AREA: 304m²

DEPTH: 0.8m

POROSITY: 95%

TOTAL VOLUME AVAILABLE: 231.04m³

75mm ORIFICE PLATE DISCHARGING TO 'TANK 4'.

'PERMEABLE PAVING 10'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 250mm
POROSITY: 30%
PLAN AREA: 80m²

TO DISCHARGE INTO MANHOLE 6.

'PERMEABLE PAVING 6'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 250mm
POROSITY: 30%
PLAN AREA: 140m²

TO DISCHARGE INTO MANHOLE 6.

'PERMEABLE PAVING 12'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 250mm
POROSITY: 30%
PLAN AREA: 50m²

TO DISCHARGE INTO MANHOLE 6.

'PERMEABLE PAVING 11'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 250mm
POROSITY: 30%
PLAN AREA: 50m²

TO DISCHARGE INTO GEOCELLULAR STORAGE 'TANK 2'.

'PERMEABLE PAVING 7'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 250mm
POROSITY: 30%
PLAN AREA: 160m²

TO DISCHARGE INTO GEOCELLULAR STORAGE 'TANK 2'.

GEOCELLULAR STORAGE 'TANK 2'

COVER DEPTH: 1.2m MINIMUM

INVERT LEVEL: 46.507 BASED ON 1m RESOLUTION LIDAR DATA.

PLAN AREA: 78.4m²

DEPTH: 0.8m

POROSITY: 95%

TOTAL VOLUME AVAILABLE: 59.584m³

75mm ORIFICE PLATE DISCHARGING TO MH6.

GEOCELLULAR STORAGE 'TANK 4'

COVER DEPTH: 1.2m MINIMUM

INVERT LEVEL: 46.177 BASED ON 1m RESOLUTION LIDAR DATA.

PLAN AREA: 100.8m²

DEPTH: 0.8m

POROSITY: 95%

TOTAL VOLUME AVAILABLE: 76.608m³

DISCHARGE TO HYDRO-BRAKE MANHOLE.

'PERMEABLE PAVING 3'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 250mm
POROSITY: 30%
PLAN AREA: 70m²

TO DISCHARGE INTO MANHOLE 5.

'PERMEABLE PAVING 5'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 250mm
POROSITY: 30%
PLAN AREA: 110m²

TO DISCHARGE INTO MANHOLE 5.

PROPOSED GREEN ROOF ATOP THE FLAT ROOF OF THE PROPOSED DRIVE-THRU COFFEE UNIT.

FLAT ROOF MODELLED WITH A 120mm STORAGE LAYER. FINAL DESIGN TO BE CONFIRMED VIA MANUFACTURER.

GEOCELLULAR STORAGE 'TANK 1'

COVER DEPTH: 1.2m MINIMUM

INVERT LEVEL: 46.633 BASED ON 1m RESOLUTION LIDAR DATA.

PLAN AREA: 44.8m²

DEPTH: 0.8m

POROSITY: 95%

TOTAL VOLUME AVAILABLE: 34.048m³

75mm ORIFICE PLATE DISCHARGING TO TANK 3.

'PERMEABLE PAVING 4'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 300mm
POROSITY: 30%
PLAN AREA: 150m²

TO DISCHARGE INTO MANHOLE 3.

PROPRIETARY TREATMENT DEVICE PROPOSED PRIOR TO EACH GEOCELLULAR STORAGE TANK TO ENSURE SURFACE WATER RUNOFF DRAINING DIRECTLY FROM THE HARDSTANDING ROADS IS SUFFICIENTLY TREATED.

'PERMEABLE PAVING 1'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 250mm
POROSITY: 30%
PLAN AREA: 170m²

TO DISCHARGE INTO GEOCELLULAR STORAGE 'TANK 1'.

'PERMEABLE PAVING 2'

TYPE C (LINED) PERMEABLE PAVING UNIT.

TAKING FLOW FROM THE PAVING ITSELF.

BLOCK PAVING LAYER DEPTH: 50mm
SUBBASE LAYER DEPTH (ATTENUATION LAYER): 300mm
POROSITY: 30%
PLAN AREA: 260m²

TO DISCHARGE INTO MANHOLE 6.



DRAFT

LEGEND

- TYPE C PERMEABLE PAVING
- PROPOSED FILTER DRAIN
- PROPOSED SURFACE WATER DRAIN
- SURFACE WATER SEWER
- HYDROBRAKE FLOW CONTROL CHAMBER
- GEOCELLULAR STORAGE
- CATCHMENT AREAS
- FLOW DIRECTION ARROWS
- PROPOSED GREEN ROOF
- RAINWATER DOWNPIPE
- PROPOSED MANHOLE
- SUDS PLANTER
- CATCHMENT NOT INCLUDED IN CALCULATIONS
- PROPRIETARY TREATMENT DEVICE

1.0 20.01.2026 SURFACE WATER DRAINAGE STRATEGY JA

Rev Date Description By

Client

EDSON ARCHITECTURE

Project

SURFACE WATER DRAINAGE STRATEGY

Title

ARMISHAWS, NETHERHAMPTON ROAD,
SALISBURY, WILTSHIRE, SP2 8RA

Project No. Drawing No. Revision

AEG9125 DR01 1.0

Drawn Checked Approved Date Scale @ A1

JA JC OH 20/01/2026 SEE SCALE

Drawing Status

FOR PLANNING ONLY

aegaea

water, civils and environment

0m 25m

Appendix D – BRE365 Soakaway Test Results



**Armishaws Removals
Netherhampton Road
Salisbury
SP2 8RA**

BRE 365 Soak-Away Test Report

**S25-259
January 2025**

Revision 1

Prepared by :

**Southwest Environmental Limited
10 Park Street
Bristol
BS1 5HX**

On behalf of :

**Esdon Architecture
40 Fisherton Street
Salisbury
SP2 7RB**



**Armishaws Removals
Netherhampton Road
Salisbury
SP2 8RA**

BRE 365 Soak-Away Test Report

**S25-259
January 2025**

Chapters and Appendices

1.0 Introduction

2.0 Site Geology

3.0 Site Works

4.0 Results

5.0 Certification

Appendix 1 Site Plans

Appendix 2 Calculations

Appendix 3 Trial Pit Logs

Appendix 4 Photos

1.0 Introduction

This report was commissioned in order to provide infiltration data and installations design in line with BRE 365. Southwest Environmental Limited was commissioned by Esdon Architecture.

1.1 The Development

The proposed development for new proposed retail units.

Address	Armishaws Removals Netherhampton Road Salisbury
Postcode	SP2 8RA

A location plan is shown in **Appendix 1**.

1.2 Terms of Reference

This report has been prepared following BRE Digest 365.

2.0 Site Geology

Lime-rich loamy soils developed from firm white chalk, with conspicuous semi-continuous nodular and tabular flint inclusions. The underlying bedrock comprises hardgrounds with thin marly layers in the lower horizons. Flint nodules occur throughout, ranging from moderate to very large sizes.

There are several boreholes in the vicinity and we see from these records that ground water is just below surface at this location, with the shallowest depth recorded at 1.8m (BGS ID: 401039). The other two boreholes have the groundwater level recorded at 3.61m (BGS ID: 401036) and 2.25m (BGS ID: 401037)

This would indicate that water levels on site are between 1.8m and 3.61m below ground level.

A falling head test was conducted to determine the soil permeability.

A falling head test measures soil permeability by filling a borehole with water and recording how quickly the water level drops as it infiltrates into the surrounding ground.

Procedure:

- Raise water level in borehole above natural groundwater
- Record initial water depth (h_0) at time zero
- Measure water level at regular intervals as it falls
- Plot data on semi-logarithmic graph (head ratio vs. time)
- Extract basic time lag (T) – time for head to fall

Result: Coefficient of permeability in m/s, typically 10^{-6} to 10^{-4} m/s for most soils. Values $>1 \times 10^{-6}$ m/s are suitable for soakaway design.

Infiltration testing confirmed the high permeability of the shallow chalk and flint deposits. The first of the two trials demonstrated infiltration rates exceeding 1 m/s, whilst the second trial at the same location returned a more conservative rate of 3.6 m/hr. This variability reflects localised variations in flint nodule density and soil compaction, which are characteristic of this glacial drift geology.

3.0 Site Works

Site works comprised of 2no. trial pit with 3 x soakaway tests conducted in each pit. The positioning of these pits were chosen in anticipation of final layout. Holes were dug with a driller. The boreholes were then installed with plain and slotted piping, bentonite seal and flush covers.

The location of the pits can be viewed on the location plan in **Appendix 1**.

Two infiltration tests were conducted per trial pit. Trial pit 1 showed rapid drainage to 0 m in 1 minute demonstrating very high permeability through flint-rich ground. Trial pit 2 showed slower drainage over 25 minutes. The conservative (lowest) infiltration rate was selected for design purposes (derived from Trial 2), yielding 3.6 m/hr, equivalent to 1.0×10^{-3} m/s.

4.0 Results

Based on site-specific infiltration testing and using the Civil Web soakaway design calculator, the proposed development can be adequately served by two rectangular installations, each 1 m × 1 m in plan with an effective depth of 3 m. Each installation has a nominal manhole diameter of 1,050 mm.

- Catchment area: 2,900 m²
- Runoff coefficient: 85%
- Design rainfall: 12 mm/hr sustained for 360 minutes (6 hours)
- Infiltration rate applied: 3.6 m/hr (with 1.5 factor of safety)

Design return period = 1 in 100 years + 40% climate change allowance

Results:

- Total storage volume required: 4.68 m³
- Total storage volume provided (two installation): 5.74 m³
- Status: Acceptable
- Time to empty 50% of storage: 6 minutes (0.1 hours)

The installation design demonstrates 5% spare capacity, providing suitable safety margin for uncertain future conditions. Plans of which are available in **Appendix 2**.

5.0 Certification

This report is produced for the sole use of the Client, and no responsibility of any kind, whether for negligence or otherwise, can be accepted for any Third Party who may rely upon it.

The conclusions and recommendations given in this report are based on our understanding of the future plans for the site. If, however, the site is developed for a different use, then a different interpretation might be appropriate.

It necessarily relies on the co-operation of other organizations and the free availability of information and total access. No responsibility can, therefore, be accepted for conditions arising from information that was not available to the investigating team as a result of information being withheld or access being denied.

This planning document cannot be relied upon in the gauging of negative value impacts of surrounding property as a result of negative drainage impacts resulting from the proposed development.

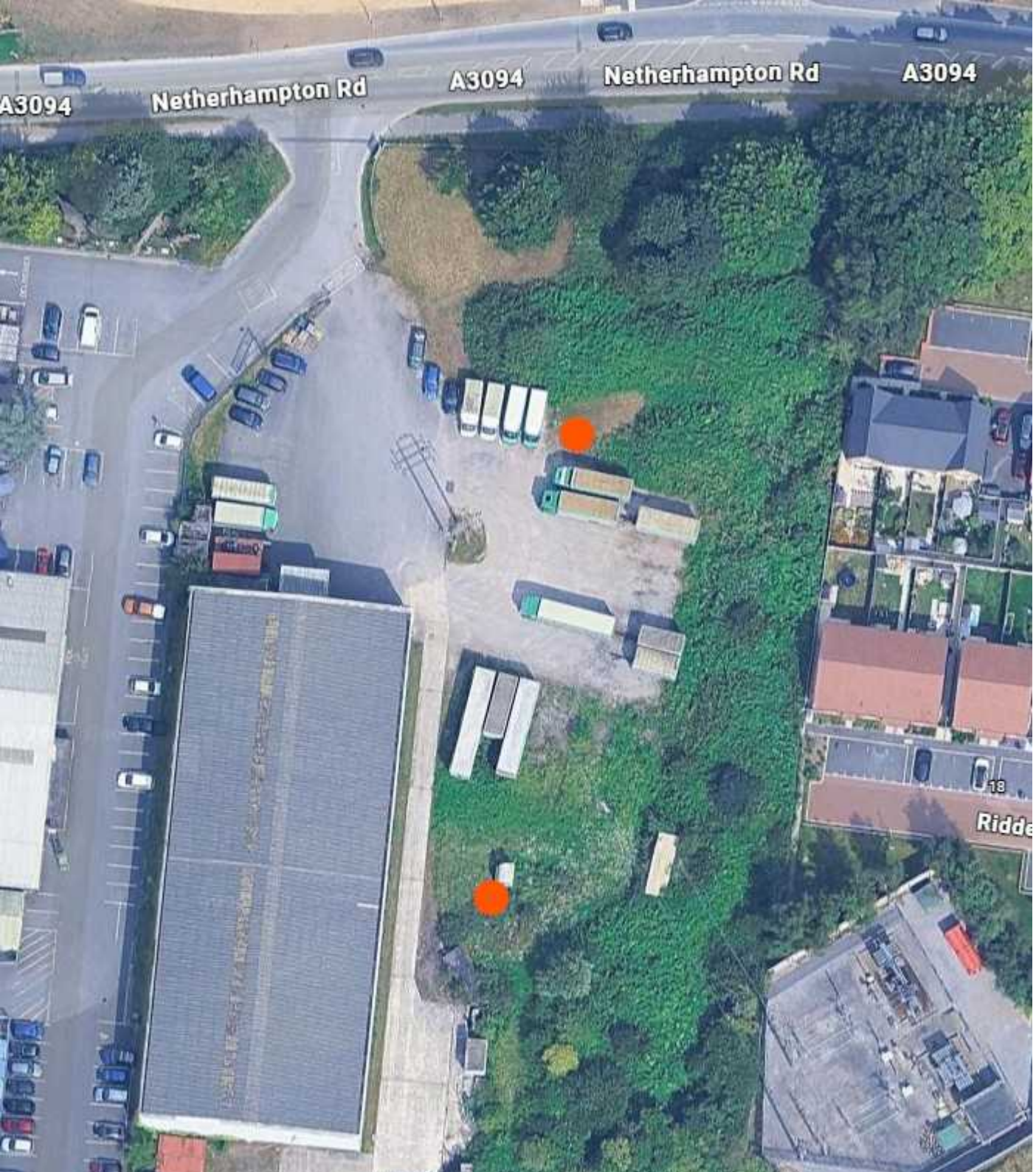
The scope of this assessment was discussed and agreed with the Client. No responsibility is accepted for conditions not encountered, which are outside of the agreed scope of work.



Appendix 1

Plans





Borehole Locations

Netherhampton Road

www.southwest-environmental.co.uk





Appendix 2

Calculations

Project: Netherhampton Road		By: CC
Calculation: Soakaway Design		Approved: WT
Sheet Number: 1	Date: 5/1/2025	

Catchment Details		
Catchment Area	2,900	m ²
Runoff Coefficient	85	%
Design Storm Intensity	12	mm/hr
Design Storm Duration	360	mins

6 hrs

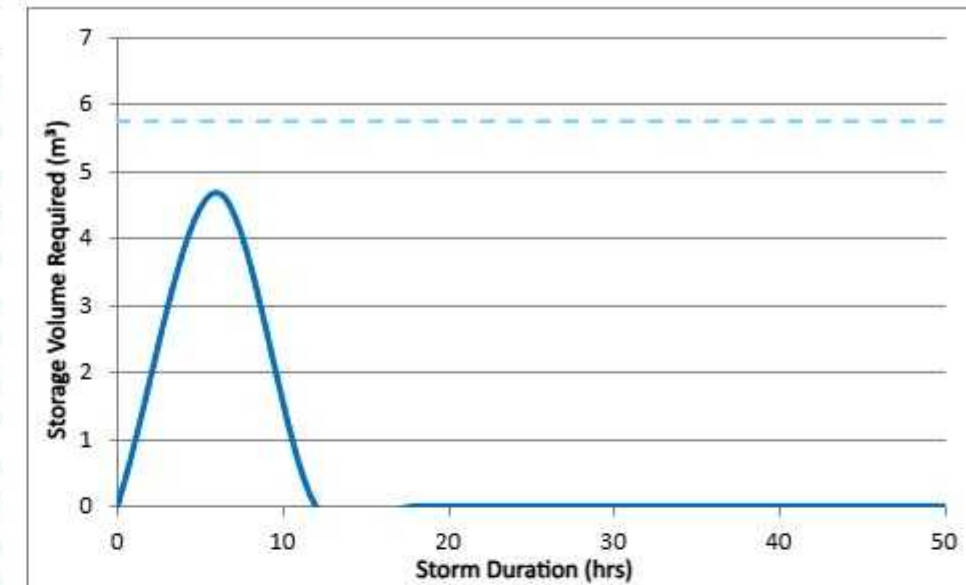
Ground Information		
Infiltration Rate	3.6	m/hr
Factor of Safety	1.5	

Soakaway Design		
Soakaway Shape	Manhole Within Pit	
Number of Soakaways	2	
Length	1	
Width	1	m
Effective Depth	3	m
Backfill Porosity	100	%
Additional Outflow (If Any)	0	l/s
Base Infiltration Factor	0	
Manhole Diameter	1050	mm

Soakaway Plan

Soakaway Cross Section

Storage Volume Required	4.68 m ³	
Storage Area Provided	5.74 m ³	Acceptable
Time for Emptying 50%	0.1 hours	Acceptable





Appendix 3

Photos

[illegible]

[illegible]



Appendix 4

Logs



WS1 - 1.0mBGL - 5.0mBGL

Southwest Environmental Limited

Email: cc@southwest-environmental.co.uk

Project No: S25-259



WS2 - 1.0mBGL - 4.0mBGL

Southwest Environmental Limited

Email: cc@southwest-environmental.co.uk

Project No: S25-259



WS1 - 0.0mBGL - 1.2mBGL

Southwest Environmental Limited

Email: cc@southwest-environemntal.co.uk

Project No: S25-259



WS2 - 0.0mBGL - 1.0mBGL

Southwest Environmental Limited

Email: cc@southwest-environmental.co.uk

Project No: S25-259



WS1 - with the fitted pipe

Southwest Environmental Limited

Email: cc@southwest-environmental.co.uk

Project No: S25-259



WS2 - with the fitted pipe

Southwest Environmental Limited

Email: cc@southwest-environemntal.co.uk

Project No: S25-259



WS1 - Finished soakaway with flush cover

Southwest Environmental Limited

Email: cc@southwest-environmental.co.uk

Project No: S25-259



WS2 - Finished soakaway with flush cover

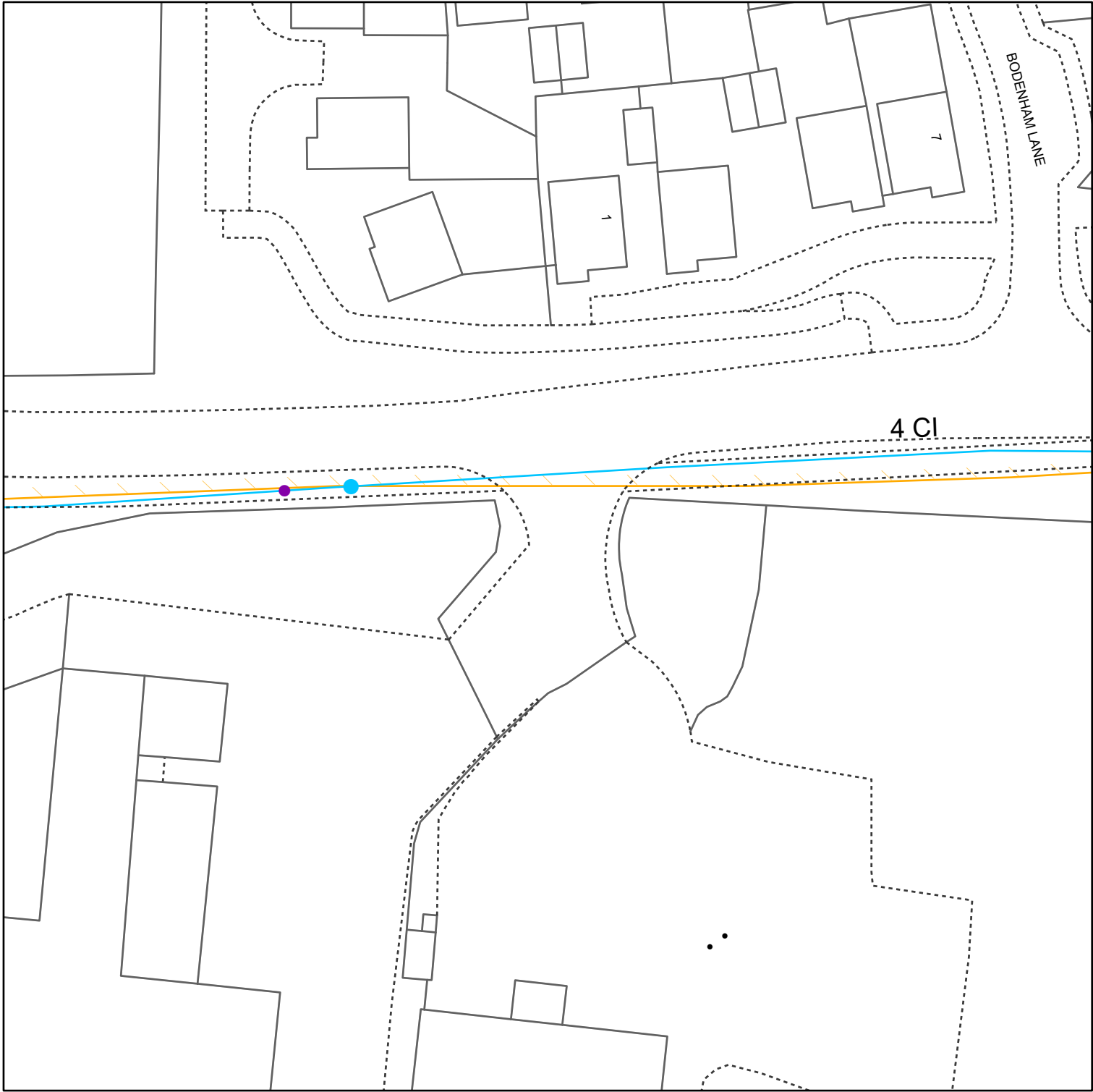
Southwest Environmental Limited

Email: cc@southwest-environmental.co.uk

Project No: S25-259

Appendix E – Wessex Water Asset Plans

Wessex Water Network Map



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WATER MAINS	SEWERS	STRATEGIC PUBLIC	PRIVATE	SECTION 104	OTHER WESSEX PIPES	NON-WESSEX / UNKNOWN
- Distribution - Washout - Raw Water - Abandoned - Private	- Foul - Surface - Combined - Abandoned	Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).	Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).	Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).	- Rising Mains - Standby Rising Mains - EDM Effluent Disposal - Overflow - Syphon	- Private Rising Mains - Culverted Watercourse - Highway Drain - Use Unknown - Status Unknown
FITTINGS - Hydrant - Other	STRUCTURES - Manhole - Foul - Manhole - Surface - Manhole - Combined - Inlet - Outfall - Lamphole - Bifurcation - Foul - Bifurcation - Surface - Bifurcation - Combined - Combined Sewage Overflow	- Pumping Station - Surface - Pumping Stn - Foul/Combined - Gully - Vent Column - Rodding Eye - Catchpit - Flushing Chamber - Soakaway - Non Return Valve - Air Valve - Hatch Box - Washout	- Pumping Station - Surface - Pumping Stn - Foul/Combined - Gully - Vent Column - Rodding Eye - Catchpit - Flushing Chamber - Soakaway - Non Return Valve - Air Valve - Hatch Box - Washout	- Pumping Station - Surface - Pumping Stn - Foul/Combined - Gully - Vent Column - Rodding Eye - Catchpit - Flushing Chamber - Soakaway - Non Return Valve - Air Valve - Hatch Box - Washout	OTHER STRUCTURES - Attenuation Tank - Storage Tank - Chamber - Tunnel - Interceptor	

Information in this map is provided for identification purposes only. No warranty as to accuracy is given or implied. The precise route of pipe work may not exactly match that shown. Wessex Water does not accept liability for inaccuracies. Sewers and lateral drains adopted by Wessex Water under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011 are to be plotted over time and may not yet be shown. In carrying out any works, you accept liability for the cost of any repairs to Wessex Water apparatus damaged as a result of your works. You are advised to commence excavations using hand tools only. Mechanical digging equipment should not be used until pipe work has been precisely located. If you are considering any form of building works and pipe work is shown within the boundary of your property or a property to be purchased (or very close by) a surveyor should plot its exact position prior to commencing works or purchase. If you are proposing to build over or near Wessex Water's apparatus you should contact the Developer Services Team, tel: 01225 526333 or e-mail: developer.enquiries@wessexwater.co.uk to discuss your proposals. Details of assets within Wessex Water's land ownership are unavailable through this service.

Wessex Water
YTL GROUP

Date: 19/09/2025
Centre: 412403E, 129196N
Scale: 1:625
(when printed at A4 size)

Appendix F – InfoDrainage Results

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Inflows Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
Company Address: Aegaea				



Catchment 2

Type : Catchment Area

Area (ha)	0.038
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 3

Type : Catchment Area

Area (ha)	0.025
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 4

Type : Catchment Area

Area (ha)	0.038
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 6

Type : Catchment Area

Area (ha)	0.005
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Inflows Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
Company Address: Aegaea				



Catchment 7

Type : Catchment Area

Area (ha)	0.005
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 8

Type : Catchment Area

Area (ha)	0.011
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 9

Type : Catchment Area

Area (ha)	0.026
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 10

Type : Catchment Area

Area (ha)	0.016
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Inflows Storm Phase: Phase	Designed by: JA	Checked by:		Approved By:
Company Address: Aegaea				



Catchment 11

Type : Catchment Area

Area (ha)	0.014
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 12

Type : Catchment Area

Area (ha)	0.033
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 13

Type : Catchment Area

Area (ha)	0.057
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 14

Type : Catchment Area

Area (ha)	0.008
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026		
	Designed by: JA	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	Company Address: Aegaea		





Catchment 15

Type : Catchment Area

Area (ha)	0.016
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 16

Type : Catchment Area

Area (ha)	0.073
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 17

Type : Catchment Area

Area (ha)	0.015
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 18

Type : Catchment Area

Area (ha)	0.017
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Inflows Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
Company Address: Aegaea				



Catchment 19

Type : Catchment Area

Area (ha)	0.007
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 20

Type : Catchment Area

Area (ha)	0.032
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 21

Type : Catchment Area

Area (ha)	0.011
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 22

Type : Catchment Area

Area (ha)	0.034
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Inflows Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
Company Address: Aegaea				



Catchment 23

Type : Catchment Area

Area (ha)	0.04
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Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 24

Type : Catchment Area

Area (ha)	0.007
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment 1 - Green Roof

Type : Catchment Area

Area (ha)	0.023
-----------	-------

Dynamic Sizing

Runoff Method	Green Roof
Summer Volumetric Runoff	1.000
Coefficient	
Winter Volumetric Runoff	1.000
Coefficient	
Depression Storage (mm)	4
Evapotranspiration (mm/day)	3.0
Decay Coefficiency	0.050
Time Delay (mins)	120

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Inflows Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
	Company Address: Aegaea			



Catchment 5 Green Roof

Type : Catchment Area

Area (ha)	0.042
-----------	-------

Dynamic Sizing

Runoff Method	Green Roof
Summer Volumetric Runoff Coefficient	1.000
Winter Volumetric Runoff Coefficient	1.000
Depression Storage (mm)	4
Evapotranspiration (mm/day)	3.0
Decay Coefficiency	0.050
Time Delay (mins)	120

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP1

Type : Porous Paving

Dimensions

Exceedance Level (m)	48.587
Depth (m)	0.300
Base Level (m)	48.287
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	36.074
Long. Slope (1:X)	2000.00
Width (m)	4.793
Total Volume (m³)	12.967

Inlets

Inlet (2)

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 18
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (6)
Outlet Type	Orifice
Diameter (m)	0.050
Coefficient of Discharge	0.600
Invert Level (m)	48.287

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP2

Type : Porous Paving

Dimensions

Exceedance Level (m)	48.317
Depth (m)	0.350
Base Level (m)	47.967
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	53.941
Long. Slope (1:X)	10000.00
Width (m)	4.857
Total Volume (m³)	23.579

Inlets

Inlet (3)

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 9
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (5)
Outlet Type	Orifice
Diameter (m)	0.075
Coefficient of Discharge	0.600
Invert Level (m)	47.967

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP5

Type : Porous Paving

Dimensions

Exceedance Level (m)	48.373
Depth (m)	0.300
Base Level (m)	48.073
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	25.657
Long. Slope (1:X)	2000.00
Width (m)	4.228
Total Volume (m³)	8.136

Inlets

Inlet (3)

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 21
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (13)
Outlet Type	Orifice
Diameter (m)	0.035
Coefficient of Discharge	0.600
Invert Level (m)	48.073

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP4

Type : Porous Paving

Dimensions

Exceedance Level (m)	48.330
Depth (m)	0.350
Base Level (m)	47.980
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	60.329
Long. Slope (1:X)	2000.00
Width (m)	2.483
Total Volume (m³)	13.480

Inlets

Inlet

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 17
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (15)
Outlet Type	Orifice
Diameter (m)	0.075
Coefficient of Discharge	0.600
Invert Level (m)	47.980

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP3

Type : Porous Paving

Dimensions

Exceedance Level (m)	48.103
Depth (m)	0.300
Base Level (m)	47.803
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	19.516
Long. Slope (1:X)	2000.00
Width (m)	3.496
Total Volume (m³)	5.118

Inlets

Inlet (3)

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 24
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (16)
Outlet Type	Orifice
Diameter (m)	0.035
Coefficient of Discharge	0.600
Invert Level (m)	47.803

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP7

Type : Porous Paving

Dimensions

Exceedance Level (m)	48.675
Depth (m)	0.300
Base Level (m)	48.375
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	31.528
Long. Slope (1:X)	2000.00
Width (m)	5.068
Total Volume (m³)	11.984

Inlets

Inlet

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 10
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (20)
Outlet Type	Orifice
Diameter (m)	0.035
Coefficient of Discharge	0.600
Invert Level (m)	48.375

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP6

Type : Porous Paving

Dimensions

Exceedance Level (m)	48.334
Depth (m)	0.300
Base Level (m)	48.034
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	27.937
Long. Slope (1:X)	2000.00
Width (m)	4.983
Total Volume (m³)	10.441

Inlets

Inlet

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 11
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet (1)

Outgoing Connection	Pipe (9)
Outlet Type	Orifice
Diameter (m)	0.035
Coefficient of Discharge	0.600
Invert Level (m)	48.034

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP8

Type : Porous Paving

Dimensions

Exceedance Level (m)	48.245
Depth (m)	0.300
Base Level (m)	47.945
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	38.131
Long. Slope (1:X)	2000.00
Width (m)	2.807
Total Volume (m³)	8.028

Inlets

Inlet (2)

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 8
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (21)
Outlet Type	Orifice
Diameter (m)	0.035
Coefficient of Discharge	0.600
Invert Level (m)	47.945

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP10

Type : Porous Paving

Dimensions

Exceedance Level (m)	47.849
Depth (m)	0.300
Base Level (m)	47.549
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	17.112
Long. Slope (1:X)	10000.00
Width (m)	4.741
Total Volume (m³)	6.085

Inlets

Inlet

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 14
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (12)
Outlet Type	Orifice
Diameter (m)	0.035
Coefficient of Discharge	0.600
Invert Level (m)	47.549

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP9

Type : Porous Paving

Dimensions

Exceedance Level (m)	47.648
Depth (m)	0.300
Base Level (m)	47.348
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	31.125
Long. Slope (1:X)	2000.00
Width (m)	5.123
Total Volume (m³)	11.959

Inlets

Inlet

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 15
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (18)
Outlet Type	Orifice
Diameter (m)	0.035
Coefficient of Discharge	0.600
Invert Level (m)	47.348

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP11

Type : Porous Paving

Dimensions

Exceedance Level (m)	48.713
Depth (m)	0.300
Base Level (m)	48.413
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	34.659
Long. Slope (1:X)	2000.00
Width (m)	1.542
Total Volume (m³)	4.008

Inlets

Inlet

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 7
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (19)
Outlet Type	Orifice
Diameter (m)	0.035
Coefficient of Discharge	0.600
Invert Level (m)	48.413

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



PP12

Type : Porous Paving

Dimensions

Exceedance Level (m)	48.392
Depth (m)	0.300
Base Level (m)	48.092
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	31.066
Long. Slope (1:X)	2000.00
Width (m)	1.463
Total Volume (m³)	3.409

Inlets

Inlet (1)

Inlet Type	Lateral Inflow
Incoming Item(s)	Catchment 6
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (11)
Outlet Type	Orifice
Diameter (m)	0.035
Coefficient of Discharge	0.600
Invert Level (m)	48.092

Advanced

Conductivity (m/hr)	500.0
---------------------	-------

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



Tank 3

Type : Cellular Storage

Dimensions

Exceedance Level (m)	48.189
Depth (m)	0.800
Base Level (m)	46.300
Number of Crates Long	100
Number of Crates Wide	19
Number of Crates High	2
Porosity (%)	95
Crate Length (m)	0.4
Crate Width (m)	0.4
Crate Height (m)	0.4
Total Volume (m³)	232.129

Inlets

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	Catchment 23
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (3)

Inlet Type	Point Inflow
Incoming Item(s)	Catchment 22
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (5)

Inlet Type	Point Inflow
Incoming Item(s)	Catchment 5 Green Roof
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (2)

Inlet Type	Point Inflow
Incoming Item(s)	Pipe (7)
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (4)

Inlet Type	Point Inflow
Incoming Item(s)	Pipe (3)
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (1)

Inlet Type	Point Inflow
Incoming Item(s)	Pipe (18)
Bypass Destination	(None)
Capacity Type	No Restriction

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase	Designed by: JA		Checked by:	Approved By:
Company Address: Aegaea				

Outlets

Outlet

Outgoing Connection	Pipe (8)
Outlet Type	Orifice
Diameter (m)	0.075
Coefficient of Discharge	0.600
Invert Level (m)	46.300



Tank 2

Type : Cellular Storage

Dimensions

Exceedance Level (m)	48.561
Depth (m)	0.800
Base Level (m)	46.507
Number of Crates Long	35
Number of Crates Wide	14
Number of Crates High	2
Porosity (%)	95
Crate Length (m)	0.4
Crate Width (m)	0.4
Crate Height (m)	0.4
Total Volume (m³)	60.838

Inlets

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	Catchment 13
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (1)

Inlet Type	Point Inflow
Incoming Item(s)	Pipe (1) Pipe (19) Pipe (20)
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe
Outlet Type	Orifice
Diameter (m)	0.075
Coefficient of Discharge	0.600
Invert Level (m)	46.507

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			



Tank 1

Type : Cellular Storage

Dimensions

Exceedance Level (m)	48.780
Depth (m)	0.800
Base Level (m)	46.633
Number of Crates Long	20
Number of Crates Wide	14
Number of Crates High	2
Porosity (%)	95
Crate Length (m)	0.4
Crate Width (m)	0.4
Crate Height (m)	0.4
Total Volume (m³)	35.395

Inlets

Inlet (2)

Inlet Type	Point Inflow
Incoming Item(s)	Pipe (17)
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	Pipe (6)
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (4)
Outlet Type	Orifice
Diameter (m)	0.075
Coefficient of Discharge	0.600
Invert Level (m)	46.633

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Stormwater Controls Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
Company Address: Aegaea				



Tank 4

Type : Cellular Storage

Dimensions

Exceedance Level (m)	48.169
Depth (m)	0.800
Base Level (m)	46.177
Number of Crates Long	42
Number of Crates Wide	15
Number of Crates High	2
Porosity (%)	95
Crate Length (m)	0.4
Crate Width (m)	0.4
Crate Height (m)	0.4
Total Volume (m³)	77.800

Inlets

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	Pipe (8)
Bypass Destination	Pipe (21)
Capacity Type	(None)
	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (10)
Outlet Type	Free Discharge

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Inflow Summary Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment 1 - Green Roof	MH5		Green Roof	0.023		0		0.023
Catchment 2	MH4		Time of Concentration	0.038	100	0	100	0.038
Catchment 3	MH1		Time of Concentration	0.025	100	0	100	0.025
Catchment 4	MH4		Time of Concentration	0.038	100	0	100	0.038
Catchment 5 Green Roof	Tank 3		Green Roof	0.042		0		0.042
Catchment 6	PP12		Time of Concentration	0.005	100	0	100	0.005
Catchment 7	PP11		Time of Concentration	0.005	100	0	100	0.005
Catchment 8	PP8		Time of Concentration	0.011	100	0	100	0.011
Catchment 9	PP2		Time of Concentration	0.026	100	0	100	0.026
Catchment 10	PP7		Time of Concentration	0.016	100	0	100	0.016
Catchment 11	PP6		Time of Concentration	0.014	100	0	100	0.014
Catchment 12	MH3		Time of Concentration	0.033	100	0	100	0.033
Catchment 13	Tank 2		Time of Concentration	0.057	100	0	100	0.057
Catchment 14	PP10		Time of Concentration	0.008	100	0	100	0.008
Catchment 15	PP9		Time of Concentration	0.016	100	0	100	0.016
Catchment 16	MH2		Time of Concentration	0.073	100	0	100	0.073
Catchment 17	PP4		Time of Concentration	0.015	100	0	100	0.015
Catchment 18	PP1		Time of Concentration	0.017	100	0	100	0.017
Catchment 19	MH3		Time of Concentration	0.007	100	0	100	0.007
Catchment 20	MH5		Time of Concentration	0.032	100	0	100	0.032
Catchment 21	PP5		Time of Concentration	0.011	100	0	100	0.011
Catchment 22	Tank 3		Time of Concentration	0.034	100	0	100	0.034
Catchment 23	Tank 3		Time of Concentration	0.040	100	0	100	0.040
Catchment 24	PP3		Time of Concentration	0.007	100	0	100	0.007
TOTAL		0.0		0.593				0.593

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Network Design Criteria Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			

Flow Options

Peak Flow Calculation	(UK) Modified Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

Pipe Options

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Cover Depth (m)	1.200
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Pipe Size Library

Default

Add. Increment (mm)	75
Max. Diameter (mm)	0

Diameter (mm)	Min. Slope (1:X)	Max. Slope (1:X)
100	0.00	0.00
150	0.00	0.00

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Network Design Criteria Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			

Manhole Options

Apply Offset	☐
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Manhole Size Library

Default

Diameter / Width

Connection (mm)	Diameter / Length (m)	Width (m)
0	1.200	0.000
375	1.350	0.000
500	1.500	0.000
750	1.800	0.000

Additional Sizing

Connection (mm)	900
Diameter / Length (m)	0.900
Width (m)	0.000

Depth

Depth (m)	Diameter / Length (m)	Width (m)
0.000	1.050	0.000
1.500	1.200	0.000

Access

Depth (m)	Ladder Protrusion (mm)
0.000	130
3.000	230

Benching Requirements

Landing Width (mm)	500
Benching Width (mm)	225

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026					
Report Title: Rainfall Analysis Criteria	Designed by: JA <table border="1" style="display: inline-table; vertical-align: top;"> <tr> <td>Checked by:</td> <td>Approved By:</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>		Checked by:	Approved By:		
Checked by:	Approved By:					
	Company Address: Aegaea					

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall		
FEH		Type: FEH
Site Location	GB 412410 129139 SU 12410 29139	
Rainfall Version	2022	
Summer	☒	
Winter	☒	

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0.000
30.0	0.000
100.0	0.000
30.0	40.000
100.0	45.000

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
240	480
360	720
480	960
960	1920
1440	2880
2160	4320

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Title: UK and Ireland Rural Runoff Calculator		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			

ICP SUDS / IH 124

Details

Method	ICP SUDS
Area (ha)	0.592
SAAR (mm)	873.0
Soil	0.3
Region	Region 7
Urban	0
Return Period (years)	0

Results

Region	QBAR Rural (L/s)	QBAR Urban (L/s)	Q 1 (years) (L/s)	Q 30 (years) (L/s)	Q 100 (years) (L/s)
Region 7	1.4	1.4	1.2	3.2	4.5

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
	Company Address: Aegaea			



**FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max.
Resident Volume**

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture			Date: 20/01/2026			
			Designed by: JA	Checked by:	Approved By:	
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase			Company Address: Aegaea			

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Lost Volume (m³)	Total Discharge Volume (m³)	Percentage Available (%)	Status
PP1	FEH: 2 years: +0 %: 2160 mins: Summer	48.406	48.316	0.102	0.029	0.2	4.124	0.000	0.1	0.000	6.799	68.196	OK
PP2	FEH: 2 years: +0 %: 2160 mins: Winter	48.097	47.989	0.124	0.022	0.2	7.146	0.000	0.1	0.000	8.550	69.693	OK
PP5	FEH: 2 years: +0 %: 1440 mins: Summer	48.176	48.107	0.090	0.034	0.2	2.310	0.000	0.1	0.000	3.923	71.608	OK
PP4	FEH: 2 years: +0 %: 2160 mins: Summer	48.128	47.997	0.118	0.018	0.2	4.069	0.000	0.1	0.000	5.005	69.813	OK
PP3	FEH: 2 years: +0 %: 960 mins: Summer	47.894	47.835	0.081	0.032	0.2	1.251	0.000	0.1	0.000	2.222	75.554	OK
PP7	FEH: 2 years: +0 %: 2160 mins: Summer	48.490	48.413	0.099	0.038	0.2	3.808	0.000	0.1	0.000	6.567	68.223	OK
PP6	FEH: 2 years: +0 %: 1440 mins: Summer	48.142	48.073	0.093	0.039	0.3	3.088	0.000	0.1	0.000	4.840	70.428	OK
PP8	FEH: 2 years: +0 %: 2160 mins: Summer	48.068	47.972	0.103	0.026	0.2	2.554	0.000	0.1	0.000	4.092	68.189	OK
PP10	FEH: 2 years: +0 %: 960 mins: Summer	47.632	47.584	0.081	0.035	0.2	1.511	0.000	0.1	0.000	2.614	75.159	OK
PP9	FEH: 2 years: +0 %: 2160 mins: Summer	47.461	47.385	0.098	0.037	0.2	3.769	0.000	0.1	0.000	6.496	68.485	OK
Tank 3	FEH: 2 years: +0 %: 480 mins: Summer	46.548	46.548	0.248	0.248	14.2	71.736	0.000	4.9	0.000	135.925	69.097	OK
PP11	FEH: 2 years: +0 %: 2160 mins: Summer	48.532	48.431	0.102	0.018	0.1	1.230	0.000	0.0	0.000	2.274	69.316	OK
PP12	FEH: 2 years: +0 %: 2160 mins: Summer	48.206	48.109	0.099	0.017	0.1	1.006	0.000	0.0	0.000	2.069	70.482	OK
Tank 2	FEH: 2 years: +0 %: 120 mins: Summer	46.694	46.694	0.187	0.187	12.2	13.918	0.000	4.3	0.000	24.866	77.123	OK
Tank 1	FEH: 2 years: +0 %: 120 mins: Summer	46.823	46.823	0.190	0.190	9.0	8.095	0.000	4.3	0.000	19.123	77.130	OK
Tank 4	FEH: 2 years: +0 %: 960 mins: Summer	46.431	46.431	0.254	0.254	4.8	24.291	0.000	4.0	0.000	187.704	68.778	OK

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
	Company Address: Aegaea			



**FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max.
Resident Volume**

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Lost Volume (m³)	Total Discharge Volume (m³)	Percentage Available (%)	Status
PP1	FEH: 30 years: +0 %: 960 mins: Summer	48.453	48.336	0.148	0.050	0.7	6.043	0.000	0.2	0.000	7.698	53.400	OK
PP2	FEH: 30 years: +0 %: 2160 mins: Summer	48.152	48.003	0.180	0.036	0.6	10.393	0.000	0.2	0.000	14.504	55.921	OK
PP5	FEH: 30 years: +0 %: 480 mins: Summer	48.222	48.148	0.136	0.075	0.8	3.710	0.000	0.1	0.000	3.943	54.398	OK
PP4	FEH: 30 years: +0 %: 2160 mins: Summer	48.187	48.005	0.177	0.025	0.3	5.959	0.000	0.1	0.000	8.433	55.792	OK
PP3	FEH: 30 years: +0 %: 240 mins: Summer	47.937	47.876	0.124	0.073	0.8	2.079	0.000	0.1	0.000	1.997	59.373	OK
PP7	FEH: 30 years: +0 %: 480 mins: Summer	48.536	48.461	0.145	0.085	1.1	5.957	0.000	0.2	0.000	5.015	50.288	OK
PP6	FEH: 30 years: +0 %: 480 mins: Summer	48.188	48.118	0.140	0.084	1.0	4.962	0.000	0.2	0.000	4.719	52.474	OK
PP8	FEH: 30 years: +0 %: 960 mins: Summer	48.115	47.996	0.151	0.050	0.4	3.791	0.000	0.1	0.000	4.675	52.777	OK
PP10	FEH: 30 years: +0 %: 360 mins: Summer	47.676	47.625	0.126	0.077	0.7	2.547	0.000	0.1	0.000	2.962	58.137	OK
PP9	FEH: 30 years: +0 %: 960 mins: Summer	47.508	47.426	0.144	0.078	0.6	5.861	0.000	0.1	0.000	7.343	50.989	OK
Tank 3	FEH: 30 years: +0 %: 360 mins: Winter	46.728	46.728	0.428	0.428	20.3	123.584	0.000	6.4	0.000	145.821	46.761	OK
PP11	FEH: 30 years: +0 %: 960 mins: Summer	48.574	48.444	0.144	0.031	0.2	1.735	0.000	0.1	0.000	2.410	56.714	OK
PP12	FEH: 30 years: +0 %: 960 mins: Summer	48.251	48.121	0.143	0.030	0.2	1.459	0.000	0.1	0.000	2.230	57.200	OK
Tank 2	FEH: 30 years: +0 %: 60 mins: Summer	46.903	46.903	0.396	0.396	33.9	29.493	0.000	6.6	0.000	29.357	51.521	OK
Tank 1	FEH: 30 years: +0 %: 60 mins: Summer	47.059	47.059	0.426	0.426	25.1	18.151	0.000	6.9	0.000	29.386	48.720	OK
Tank 4	FEH: 30 years: +0 %: 480 mins: Summer	46.602	46.602	0.425	0.425	6.5	40.746	0.000	4.0	0.000	152.823	47.628	OK

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
	Company Address: Aegaea			



**FEH: 100 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max.
Resident Volume**

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Lost Volume (m³)	Total Discharge Volume (m³)	Percentage Available (%)	Status
PP1	FEH: 100 years: +0 %: 480 mins: Summer	48.478	48.360	0.173	0.073	1.4	7.204	0.000	0.3	0.000	6.642	44.442	OK
PP2	FEH: 100 years: +0 %: 2160 mins: Summer	48.183	48.010	0.210	0.042	0.7	12.130	0.000	0.2	0.000	18.065	48.558	OK
PP5	FEH: 100 years: +0 %: 480 mins: Summer	48.248	48.171	0.163	0.098	0.9	4.529	0.000	0.2	0.000	4.962	44.337	OK
PP4	FEH: 100 years: +0 %: 2160 mins: Summer	48.218	48.009	0.208	0.029	0.4	6.957	0.000	0.1	0.000	10.403	48.393	OK
PP3	FEH: 100 years: +0 %: 120 mins: Winter	47.959	47.899	0.146	0.096	1.1	2.545	0.000	0.2	0.000	1.556	50.268	OK
PP7	FEH: 100 years: +0 %: 480 mins: Winter	48.565	48.484	0.174	0.108	0.9	7.252	0.000	0.2	0.000	6.273	39.485	OK
PP6	FEH: 100 years: +0 %: 480 mins: Summer	48.216	48.143	0.168	0.109	1.2	6.075	0.000	0.2	0.000	5.921	41.810	OK
PP8	FEH: 100 years: +0 %: 480 mins: Summer	48.141	48.023	0.176	0.077	0.9	4.550	0.000	0.1	0.000	3.985	43.324	OK
PP10	FEH: 100 years: +0 %: 360 mins: Summer	47.699	47.647	0.149	0.098	0.8	3.100	0.000	0.2	0.000	3.677	49.057	OK
PP9	FEH: 100 years: +0 %: 480 mins: Summer	47.534	47.456	0.171	0.108	1.3	7.138	0.000	0.2	0.000	6.180	40.311	OK
Tank 3	FEH: 100 years: +0 %: 360 mins: Winter	46.825	46.825	0.525	0.525	23.5	151.712	0.000	6.8	0.000	160.068	34.643	OK
PP11	FEH: 100 years: +0 %: 480 mins: Summer	48.599	48.458	0.168	0.045	0.4	2.046	0.000	0.1	0.000	2.132	48.954	OK
PP12	FEH: 100 years: +0 %: 480 mins: Summer	48.274	48.135	0.166	0.043	0.4	1.712	0.000	0.1	0.000	1.964	49.791	OK
Tank 2	FEH: 100 years: +0 %: 60 mins: Summer	47.022	47.022	0.515	0.515	42.9	38.330	0.000	7.5	0.000	33.228	36.997	OK
Tank 1	FEH: 100 years: +0 %: 60 mins: Summer	47.172	47.172	0.539	0.539	30.7	22.956	0.000	7.8	0.000	35.129	35.143	OK
Tank 4	FEH: 100 years: +0 %: 960 mins: Summer	46.694	46.694	0.517	0.517	6.3	49.503	0.000	4.0	0.000	324.793	36.371	OK

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
	Company Address: Aegaea			



**FEH: 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max.
Resident Volume**

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026		
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Designed by: JA	Checked by:	Approved By:
		Company Address: Aegaea		



Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Lost Volume (m³)	Total Discharge Volume (m³)	Percentage Available (%)	Status
PP1	FEH: 30 years: +40 %: 480 mins: Summer	48.502	48.375	0.197	0.088	1.7	8.281	0.000	0.3	0.000	7.938	36.141	OK
PP2	FEH: 30 years: +40 %: 2160 mins: Summer	48.211	48.016	0.238	0.048	0.8	13.787	0.000	0.3	0.000	21.578	41.531	OK
PP5	FEH: 30 years: +40 %: 480 mins: Summer	48.271	48.192	0.186	0.119	1.1	5.250	0.000	0.2	0.000	5.832	35.467	OK
PP4	FEH: 30 years: +40 %: 2160 mins: Summer	48.249	48.013	0.239	0.034	0.5	7.940	0.000	0.2	0.000	12.485	41.098	OK
PP3	FEH: 30 years: +40 %: 240 mins: Summer	47.982	47.914	0.169	0.111	1.1	2.959	0.000	0.2	0.000	2.960	42.188	OK
PP7	FEH: 30 years: +40 %: 480 mins: Summer	48.589	48.509	0.198	0.134	1.6	8.423	0.000	0.2	0.000	7.320	29.714	OK
PP6	FEH: 30 years: +40 %: 480 mins: Summer	48.239	48.165	0.191	0.131	1.4	7.026	0.000	0.2	0.000	6.904	32.702	OK
PP8	FEH: 30 years: +40 %: 960 mins: Summer	48.168	48.029	0.204	0.084	0.6	5.255	0.000	0.2	0.000	6.942	34.550	OK
PP10	FEH: 30 years: +40 %: 360 mins: Summer	47.720	47.667	0.170	0.118	1.0	3.599	0.000	0.2	0.000	4.309	40.856	OK
PP9	FEH: 30 years: +40 %: 480 mins: Summer	47.558	47.479	0.195	0.131	1.5	8.263	0.000	0.2	0.000	7.205	30.905	OK
Tank 3	FEH: 30 years: +40 %: 480 mins: Winter	46.915	46.915	0.615	0.615	22.4	177.572	0.000	6.9	0.000	214.144	23.503	OK
PP11	FEH: 30 years: +40 %: 480 mins: Winter	48.623	48.461	0.192	0.048	0.3	2.338	0.000	0.1	0.000	2.558	41.670	OK
PP12	FEH: 30 years: +40 %: 480 mins: Summer	48.297	48.144	0.189	0.052	0.4	1.961	0.000	0.1	0.000	2.352	42.462	OK
Tank 2	FEH: 30 years: +40 %: 60 mins: Winter	47.081	47.081	0.574	0.574	38.1	42.777	0.000	7.7	0.000	35.108	29.686	OK
Tank 1	FEH: 30 years: +40 %: 60 mins: Summer	47.229	47.229	0.596	0.596	33.9	25.370	0.000	8.2	0.000	37.213	28.323	OK
Tank 4	FEH: 30 years: +40 %: 960 mins: Summer	46.784	46.784	0.607	0.607	6.5	58.169	0.000	4.0	0.000	343.267	25.233	OK

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture	Date: 20/01/2026			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Designed by: JA	Checked by:	Approved By:	
	Company Address: Aegaea			



**FEH: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By:
Max. Resident Volume**

Project: AEG9125_SP2_Salisbury_07 Armishaws, Netherhampton Road, Salisbury, Edson Architecture		Date: 20/01/2026			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Designed by: JA	Checked by:		Approved By:
		Company Address: Aegaea			

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Lost Volume (m³)	Total Discharge Volume (m³)	Percentage Available (%)	Status
PP1	FEH: 100 years: +45 %: 480 mins: Summer	48.548	48.408	0.243	0.121	2.1	10.447	0.000	0.4	0.000	10.555	19.431	OK
PP2	FEH: 100 years: +45 %: 1440 mins: Summer	48.258	48.031	0.285	0.064	1.3	16.568	0.000	0.4	0.000	23.200	29.734	OK
PP5	FEH: 100 years: +45 %: 480 mins: Summer	48.316	48.237	0.230	0.164	1.3	6.682	0.000	0.2	0.000	7.501	17.868	OK
PP4	FEH: 100 years: +45 %: 1440 mins: Summer	48.296	48.024	0.286	0.044	0.8	9.506	0.000	0.2	0.000	13.275	29.480	OK
PP3	FEH: 100 years: +45 %: 120 mins: Winter	48.021	47.954	0.208	0.151	1.6	3.767	0.000	0.2	0.000	2.197	26.394	OK
PP7	FEH: 100 years: +45 %: 360 mins: Winter	48.637	48.557	0.246	0.182	1.6	10.712	0.000	0.2	0.000	7.255	10.615	OK
PP6	FEH: 100 years: +45 %: 480 mins: Summer	48.285	48.212	0.237	0.178	1.7	8.951	0.000	0.2	0.000	8.720	14.269	OK
PP8	FEH: 100 years: +45 %: 480 mins: Summer	48.211	48.077	0.247	0.132	1.3	6.634	0.000	0.2	0.000	6.275	17.369	OK
PP10	FEH: 100 years: +45 %: 240 mins: Summer	47.760	47.709	0.209	0.161	1.6	4.586	0.000	0.2	0.000	4.238	24.625	OK
PP9	FEH: 100 years: +45 %: 360 mins: Winter	47.606	47.527	0.243	0.179	1.6	10.546	0.000	0.2	0.000	7.181	11.812	OK
Tank 3	FEH: 100 years: +45 %: 960 mins: Winter	47.097	47.097	0.797	0.797	22.4	230.146	0.000	6.2	0.000	419.376	0.854	OK
PP11	FEH: 100 years: +45 %: 360 mins: Summer	48.663	48.498	0.233	0.084	0.8	2.917	0.000	0.2	0.000	2.889	27.236	OK
PP12	FEH: 100 years: +45 %: 360 mins: Summer	48.338	48.172	0.231	0.080	0.7	2.444	0.000	0.1	0.000	2.678	28.307	OK
Tank 2	FEH: 100 years: +45 %: 60 mins: Winter	47.290	47.290	0.783	0.783	50.1	58.325	0.000	8.6	0.000	40.856	4.131	OK
Tank 1	FEH: 100 years: +45 %: 60 mins: Summer	47.426	47.426	0.793	0.793	39.7	33.752	0.000	9.6	0.000	43.193	4.641	OK
Tank 4	FEH: 100 years: +45 %: 960 mins: Summer	46.958	46.958	0.781	0.781	7.0	74.836	0.000	4.0	0.000	375.312	3.811	OK