

Conwy SAB Local Guidance

Version 1 - December 2025

Conwy County Borough Council - Sustainable Drainage Approval Body



To be read in conjunction with the main North Wales SuDS Guide and other appendices.

This publication has been produced by:

Conwy County Borough Council

Sustainable Drainage Approval Body (Conwy SAB)

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Purpose of document

This document has been developed by Conwy County Borough Council for the purpose of providing guidance to all persons involved in the design, construction, operation and future maintenance of all SuDS features within Conwy County jurisdiction.

Conwy County Borough Council accept no liability for any costs, liabilities or losses arising as a result of the use of or reliance upon the contents of this guidance.

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Contents

1. Introduction	1
2. Who is the SAB in Conwy?.....	1
Flood Risk and Infrastructure	1
Open Spaces	1
Legal Services	2
Planning Authority.....	2
Building Control.....	2
How to contact Conwy SAB?.....	2
3. Early engagement	3
4. SAB Pre-Application Service	3
Pre-Application Technical Review and Feedback.....	3
Follow-Up Meeting (Optional)	4
5. Full Application.....	4
Validation	5
Statutory Consultation	5
Non-Statutory Consultation	6
6. Information and Design Requirements	7
Catchment Plan or Description of the Existing Surface Water Drainage Regime of the Site	7
Calculations for Interception.....	8
Calculations for Surface Water Treatment	10
Exceedance Flow Assessment and associated details	10
7. SuDS Design Parameters	11
Calculation of Existing and Proposed Runoff Rates	11
Rainfall Estimation (the use of FEH or FSR).....	12
8. Adoption and Maintenance.....	12
Conditions for Adoption.....	12
Legal Agreement	13
Commuted Sums	14
Registered Social Landlord Exemptions	15
Non-Performance Bonds.....	15
9. Phased Developments	16
10. Inspections	16
11. Enforcement.....	17
Appendix A – Commuted Sum Example	18

Figures

Figure 6.1: Interception Calculation Example

Figure 7.1: Section G2.30 of WG Statutory Standards

Figure 7.2: Section 24.2.2 of The SuDS Manual

Figure 8.1: Example SAB Adoption Plan

Tables

Table 4.1: Conwy SAB Pre-Application Advice Fees

Table 6.1: Document Required for Full Application

Appendices

Appendix A: Commuted Sum Example

1. Introduction

- 1.1 Schedule 3 of the Flood and Water Management Act 2010, which came into effect in Wales in January 2019, establishes requirements for the use of Sustainable Drainage Systems (SuDS) in new developments. It stipulates that any development of more than one dwelling or covering an area of 100 square metres or more must incorporate SuDS. These systems must be designed and constructed in line with statutory standards and must receive approval from SuDS Approval Bodies (SABs). Additionally, the legislation places a duty on SABs to adopt and maintain approved SuDS, provided specific conditions are met. In practice, this means that local authorities are responsible for managing these systems, ensuring their long-term functionality and integration into community infrastructure.
- 1.2 SuDS are environmentally friendly techniques designed to manage and control surface water runoff. The SuDS approach aims to mimic natural drainage, by managing surface water runoff as close to the surface and source as possible, whilst controlling the flow and providing a range of additional benefits. These systems help improve water quality through natural filtration and enhance biodiversity by creating green spaces that support wildlife and offer attractive, welcoming environments. This approach contrasts with traditional drainage techniques of underground pipes conveying rainwater away from properties as quickly as possible.
- 1.3 The Conwy SAB Local Guidance is specific to Conwy County Borough County's (CCBC) role as a SAB. While CCBC's methods may resemble those of other local authorities, variations can occur due to different operational procedures. Therefore, it is important to seek specific advice from the relevant SAB Authority. This document details the unique aspects of Conwy SABs processes and should be read alongside the North Wales SuDS Guide¹.

2. Who is the SAB in Conwy?

Flood Risk and Infrastructure

- 2.1 The Flood Risk and Infrastructure (FR&I) team within the Environment, Roads and Facilities (ERF) department is the primary point of contact who process and approve SuDS Applications. FR&I work closely with other CCBC departments to ensure cross-departmental collaboration, knowledge sharing and where appropriate, coordinated service delivery.

Open Spaces

- 2.2 The Open Spaces team within ERF have a key role in approving any proposed SuDS features that connect into an existing highway drainage system. They are a statutory consultee in the SuDS Application process, due to the potential impact of surface water drainage discharges on their assets and regulatory interests.
- 2.3 Typically, highway drainage systems are designed and built to accept flows from just the highway, therefore any additional capacity for private development flows would need to be evidenced. Where a potential connection to a highway drain is considered, developers are encouraged to seek specific advice from the Open Spaces team.

¹ North Wales Flood Risk Management Group, *North Wales SuDS Guide* (2025)

- 2.4 The Open Spaces team are receptive to the implementation of SuDS for highway drainage, provided they function effectively and are easily maintainable.

Legal Services

- 2.5 Technical approval of a SuDS design does not constitute Full SAB approval, and a legal agreement will be required in the case of adoptable SuDS. Applicants should confirm whether there would be a requirement for a legal agreement through early engagement or pre-application with Conwy SAB, in advance of submitting a Full Application.

Planning Authority

- 2.6 As of 31st March 2025, the Welsh Government (WG) has issued updated planning advice on flooding through a new Technical Advice Note 15² (TAN 15). This imposes additional responsibilities on Planning Authorities and SABs within Wales regarding the approval of drainage strategies. Where planning permission is sought prior to SAB approval, applicants are now required to provide a Drainage Statement as part of their planning applications.
- 2.7 Planning authorities are required to share the Drainage Statement with the SAB, allowing time for the SAB to provide feedback before the planning application is determined. Planning Authorities and SABs are required to evaluate the drainage arrangements outlined in Drainage Statements to ensure that appropriate surface water drainage meeting the National SuDS Standards³ is likely to be achievable for the development.
- 2.8 In providing our response as the SAB, we are committed to supporting the planning process in a timely and constructive manner. Our aim is not to delay or hinder planning applications, but rather to ensure that surface water drainage proposals are robust and aligned with the National SuDS Standards³. Typically, our primary focus will be on the proposed surface water outfall, as this is often the most critical element in determining the feasibility of sustainable drainage. We will also consider other elements of the drainage strategy that may warrant comment, particularly where they could affect the viability of a development if not considered alongside the planning process.

Building Control

- 2.9 Conwy SAB collaborates with CCBC Building Control to ensure that drainage systems are designed and constructed to meet the minimum required standards.

How to contact Conwy SAB?

- 2.10 The primary point of contact within Conwy SAB is the Senior Environmental Officer (Flood Risk and Consenting). They can be reached via email at SAB@conwy.gov.uk or by telephone on 01492 577354.

² Welsh Government, *Planning Policy Wales Technical Advice Note 15 Development, flooding and coastal erosion* (2025)

³ Welsh Government, *Statutory standards for sustainable drainage systems – designing, constructing, operating and maintaining surface water drainage systems* (2018)

3. Early engagement

- 3.1 Conwy SAB offers a free early engagement advice service to applicants. This equates to a meeting or telephone discussion (limited to 1 hour) to discuss the broader principles and requirements of the WG Standards³ and the potential relevance for a proposed development. Applicants with development proposals of a relatively minor nature are particularly encouraged to seek this free early engagement advice. Sometimes this can be sufficient to clarify the details required for a Full Application of such a development without the need for further Pre-Application advice.
- 3.2 It is highly recommended that consultation with Conwy SAB is undertaken as early as possible when planning development, to understand and consider the site-specific drainage elements that are required to meet the statutory standards³, and to inform the master planning or layout development of the site.

4. SAB Pre-Application Service

- 4.1 Conwy SABs Pre-Application service provides tailored feedback on specific SuDS proposals. It provides an early opportunity to check that the intended or outline drainage design complies with the WG Standards³ prior to progression to detailed design and Full Application.
- 4.2 Pre-Application advice is charged at 35% of the Full Application fees, and is based on the size of the site/development, see **Table 5.1**. To obtain Conwy SAB Pre-Application advice, developers should request, complete and return a Pre-Application form with any supporting documents to SAB@conwy.gov.uk. Applicants should also provide invoicing details, including delivery and email address.
- 4.3 Upon receipt of an application, an officer from Conwy SAB will contact you within ten working days providing a case reference number, confirming the associated pre-application fee and requesting invoice details, if not already provided. From the first working day thereafter, the Conwy SAB will provide Pre-Application Technical Feedback within 4 weeks. Conwy SABs Pre-Application advice service has two distinct stages.

Pre-Application Technical Review and Feedback

- 4.4 Formal feedback on compliance of the proposed drainage design with each of the six WG Standards³ and the principles underpinning them will be provided within 4 weeks upon receipt of all Pre-Application document. Feedback on each of the WG standards³ can only be provided where specific information pertinent to that standard has been received. The more information included as part of the pre-application submission, the lower the risk of issues arising with the subsequent Full Application and the less effort required at that stage.
- 4.5 Information relating to all six of the WG standards³ may not be available at the Pre-Application stage, but the SAB encourages the applicant to submit as much detail as possible to achieve maximum benefit from the Pre-Application review and feedback process.

Follow-Up Meeting (Optional)

- 4.6 A follow up meeting can be either online or at the CCBC offices at Coed Pella, Colwyn Bay. This provides an opportunity for the developer to talk through the Pre-Application Technical Review and Feedback with an approving officer from the SAB. The objective of the meeting is for applicants to leave with a clear understanding of the specific information that will be needed to evidence how the SuDS design complies with WG Standards³.

Table 4.1: Conwy SAB Pre-Application Advice Fees

Service	Size of Application Site	Fee
Early Engagement Advice	All	Free
Pre-Application Advice & Optional Follow Up Meeting	0 – 0.1ha (minimum fee)	£147
	0.5 ha	£245
	1.0 ha	£333
	5.0 ha	£613
	10.0 ha	£788
	66.0 ha (Maximum fee)	£2748
Pre-Application Advice Additional Services	N/A	£51 per hour
Charged at an hourly rate. Services might include but are not limited to attendance at additional meetings and site visits.		

**Correct at time of publication September 2025. Will be subject to annual review and possible increases in the future.*

5. Full Application

- 5.1 A Full Application is the only means of obtaining approval from the SAB. It is expressly prohibited under Paragraph 7(1) of Schedule 3 of the Flood and Water Management Act 2010 to commence construction work that has drainage implications unless Conwy SAB has approved the drainage system. Construction work means anything done by way of, in connection with or in preparation for the creation of a building or other structure.
- 5.2 A Full Application should not be submitted until the applicant is entirely confident that the design is finalised and all necessary supporting information can be provided to demonstrate compliance with WG Standards³. If there are elements of the design that need further refinement or there are any details outstanding, Pre-Application advice should be sought instead of submission of a Full Application.
- 5.3 To obtain Full Application advice, developers should request, complete and return a Full-Application form along with any supporting documents to SAB@conwy.gov.uk. Upon receipt of an application, an officer from the SAB will contact the applicant within 10 working days of receipt to confirm the associated fee, provide an application case reference number and request invoicing details, if not already provided.
- 5.4 Full Application fees are defined nationally in the WG Statutory Guidance⁴, and depend on the size of the construction area. These figures may change in future so the most recent WG Guidance⁴ should be referred to. At the time of this guide’s publication, the Full-Application fees are as follows:

⁴ Welsh Government, *Sustainable Drainage Statutory Guidance* (2019)

- £350 per application, plus (up to a maximum of £7,500):
 - for every 0.1 ha up to 0.5 ha - £70
 - for every 0.1 ha between 0.5 ha and 1 ha - £50
 - for every 0.1 ha between 1 ha and 5 ha - £20
 - for every 0.1 ha above 5 ha - £10

5.5 Conwy SAB have an Application Fee Calculator that can be made available upon request.

Validation

- 5.6 Before a Full Assessment can commence, Conwy SAB must validate each SuDS application to ensure it meets the minimum technical and administrative requirements. This validation step confirms that all required documents, plans, and fees have been submitted, and that the application is complete and ready for formal review. Early identification of missing or incorrect information helps avoid delays later in the process.
- 5.7 Only once an application has been successfully validated can Conwy SAB proceed to assess whether the proposed drainage system complies with the Statutory Standards³.
- 5.8 Upon receipt of a Full Application, Conwy SAB will carry out a validation check. The following documents must be submitted as a minimum for the application to be considered valid:
- Contact details for invoicing, including delivery and email address;
 - A fully completed Full Application Form;
 - Existing and Proposed Site Plans showing permeable and impermeable areas;
 - Detailed SuDS design proposals, including construction details for all SuDS features;
 - Surface Water Drainage Model Results and Runoff Calculations;
 - A comprehensive SuDS Asset Maintenance Plan; and
 - Confirmation of approval to connect to third-party assets.
- 5.9 Applicants are strongly encouraged to refer to the Information and Design Requirements outlined in **Section 6** of this guidance document. While not all items listed in **Section 6** are required for validation, failure to provide relevant information may result in the refusal of the Full Application during the assessment stage.
- 5.10 From the first working day following validation, Conwy SAB will determine (approve or not) within 7 weeks (or 12 weeks, where the application is the subject of an Environmental Impact Assessment under Town and Country Planning legislation). In some circumstances, Conwy SAB may request to mutually agree an extension of the approval period.
- 5.11 Similar to the Pre-Application process, a Full Application submitted to Conwy SAB will be subject to Technical Review and Feedback, with an optional follow-up meeting.

Statutory Consultation

- 5.12 Where a proposed drainage scheme involves discharging into third-party assets, such as those owned by the Sewerage Undertaker or Highway Authority, Conwy SAB requires formal confirmation of the surface water drainage proposals from the relevant authority. This is essential to ensure that the proposed outfall location, capacity, and connection arrangements are technically feasible and acceptable.

- 5.13 In addition, consideration must be given to the presence and impact on existing underground services. Drainage proposals must be designed to avoid conflicts with existing infrastructure, and Conwy SAB will consult with Dŵr Cymru Welsh Water (DCWW) and other relevant bodies to assess any potential risks or constraints posed by underground utilities.
- 5.14 Applicants are strongly encouraged to engage in pre-application discussions with Conwy SAB and the relevant authorities where their drainage proposals involve:
- Discharge into public sewers or highway drains;
 - Connections near or across third-party infrastructure; and
 - Works in proximity to existing underground services.
- 5.15 Following the publication of DCWW's Surface Water Management Position Statement in April 2025, developers are encouraged to undertake thorough due diligence and provide a robust evidence base to support any proposed connection.
- 5.16 As part of the Full Application process, Conwy SAB is required to consult statutory consultees such as DCWW, with responses expected within a three-week timeframe. If the applicant has not already obtained confirmation from DCWW regarding their proposed connection and provided this to Conwy SAB, the statutory consultation period will be used to seek a response from DCWW on the drainage proposals. This will form part of the validation process. Following the three-week consultation period, if confirmation from DCWW cannot be provided due to insufficient information on the drainage proposals, the Full Application will not pass validation.
- 5.17 It is not uncommon for developers to bypass the Pre-Application stage and proceed directly to submitting a Full Application. When this occurs, particularly where the proposed drainage scheme involves discharge to third-party assets, such as those owned by DCWW, it becomes challenging for SABs to determine whether the drainage hierarchy has been properly considered. Once a Full Application is submitted, there is no opportunity for preliminary SAB review prior to the statutory consultation. Conducting such a review at that stage would place undue pressure on the SAB's limited resources and risk extending the statutory determination period.
- 5.18 Early engagement helps ensure that the proposed drainage strategy is both technically deliverable and acceptable to all stakeholders. Failure to confirm a connection or assess underground constraints at the design stage may result in significant delays, redesign costs, or refusal of the application.
- 5.19 Conwy SAB will not begin assessing a Full Application until written confirmation has been received from the relevant authority that the proposed discharge location and connection arrangements are acceptable. Only at this point will the statutory assessment period formally commence. However, Conwy SAB remains open to early engagement and encourages applicants to discuss their proposals through Pre-Application discussions.
- 5.20 All consultation responses will be shared with the applicant. If any objections or technical concerns are raised, it is the applicant's responsibility to liaise directly with the relevant authority to resolve them. Conwy SAB does not act as an intermediary between applicants and other departments within CCBC or external regulatory bodies.

Non-Statutory Consultation

- 5.21 In addition to statutory consultation, Conwy SAB may undertake non-statutory consultation with relevant internal departments where appropriate. These are intended to ensure that proposed drainage schemes align with broader local objectives, such as flood risk management and biodiversity enhancement.

5.22 Non-statutory consultees may include:

- **CCBC's Flood Risk Management Team:** who ensure that proposed SuDS features do not increase flood risk and are compliant with local flood risk policies and guidance.
- **CCBC's Ecology Department:** who assess whether the scheme incorporates opportunities to enhance biodiversity and supports local ecological networks.

5.23 Applicants should be aware that Conwy SAB are likely to consult internally in the following scenarios:

- The site is located within or adjacent to a flood risk area or has a history of surface water flooding;
- The proposed drainage system includes features such as swales, ponds, wetlands, or basins that may impact local hydrology or ecology;
- The development is near designated ecological sites or habitats of known ecological value;
- The scheme proposes innovative or non-standard SuDS features that may require additional scrutiny; and
- There is a need to coordinate with other CCBC-led infrastructure or environmental initiatives.

5.24 These consultations are carried out at the discretion of Conwy SAB and are intended to support the delivery of high-quality, sustainable drainage systems that meet both technical and environmental standards. To avoid unnecessary delays, applicants are encouraged to consider these factors early in the design process and, where relevant, seek informal advice from the appropriate departments prior to submission.

6. Information and Design Requirements

6.1 Conwy SAB recognises that the detail and technical complexity of information required to support a Full Application can vary greatly depending on the scale and nature of the development.

6.2 Tables A and B on the 'Application Form for Full Application Approval of SuDS' list the relevant types of supporting information that are required for a Full Application and are included within **Table 6.1**. Appendices C-F of the North Wales SuDS Guide¹ are also useful in completing Pre-Applications and Full-Applications and include:

- Infiltration test results pro forma;
- Hydraulic design calculations pro forma;
- Water quality assessment requirements; and
- Maintenance plan pro forma.

6.3 In addition to this information, the following points are crucial in our Full Application requirements and failure to provide may result in refusal.

Catchment Plan or Description of the Existing Surface Water Drainage Regime of the Site

6.4 This is required to determine and show any natural flood flows paths and to review the potential for flows onto the site from upstream catchments. It is imperative to understand the existing pre-development drainage regime in order to inform and evaluate the proposed drainage against the pre-development scenario. Required details include existing runoff destinations, drainage catchments, natural flow paths, exceedance routes and existing levels.

Calculations for Interception

- 6.5 Sites should not generate runoff for the first 5mm of rainfall as per Standard 2 of the WG Standards³. Conwy SAB would expect to see calculations to support the retention of the first 5mm on site, similar to the example shown in **Figure 6.1**.

Figure 6.1: Interception Volumetric Calculation Example

Here is a simple explanation of how to produce the interception calculation:

1. Determine the Total Impermeable Area

- Measure the total area of impermeable surfaces on the site (in square metres).
- This includes roofs, paved areas, car parks, and any other hardstanding that will generate runoff.

Example:

Development Total Impermeable Area = 3,530m²

2. Calculate the Required 5mm Interception Volume

- Multiply the total impermeable area by 0.005 metres (5mm expressed in metres) to get the required storage volume in cubic metres (m³).

Formula:

Interception Volume (m³) = Impermeable Area (m²) × 0.005m

Example:

3,530m² × 0.005 m = 17.65m³

3. Provide Details of Proposed SuDS Features and Their Storage Capacities

- List all proposed SuDS features designed to intercept the first 5mm of rainfall.
- Calculate and state the interception storage provided by each feature.
- Ensure storage capacities are measured up to the level of the outflow pipe, which should be set above the base, to allow for interception before discharge.

4. Total Interception Volume Provided

- Add the storage capacities of all SuDS features designed for interception.

5. Confirm Compliance

- Check that the total interception volume provided is equal to or greater than the required interception volume calculated in **Step 2**.

Table 6.1: Documents required for Full Application

	Documents Required
Check all documents in Table A have been provided	Flood Consequences Assessment (FCA)
	Detailed Geotechnical Factual and Interpretive Report
	Detailed Whole Site SuDS Drainage Design Proposals
	Detailed SuDS Assets Maintenance Plan. For sites where the SAB will be adopting, maintenance details provided should not be basic and non-specific. A specific maintenance plan and drawing should be provided showing the elements to be maintained, maintenance access and parking etc. and detailing how maintenance has been considered in the design.
	Amenity and Biodiversity Plan
	Unstable and Contaminated Land Reports
	Water Quality and/or Pollution Prevention Plan
	Landscaping Plan
	Construction Management Plan
	Construction Phase Plan
	Information and Communications Plan
	Health and Safety Risk Assessment or CDM designers risk register
	Consents and permission e.g. DCWW, NRW, LLFA
	Title documents
Check all documents in Table B have been provided	Drawing Issue Sheet
	Planning notice
	Site location plan
	Catchment plan or description of the existing surface water drainage regime of the site. This is required to determine and show any natural flood flows paths and to review the potential for flows onto the site from upstream catchments.
	Calculations for interception - Sites should not generate runoff for the first 5mm of rainfall.
	Calculations for treatment - Simple Index Approach
	Exceedance flow assessment and associated details. These are required to understand the impact on the development, drainage system and the surrounding properties during extreme events and or failure / blockage.
	General engineering layout-coloured drawings (Adoption Plan)
	Longitudinal section-coloured drawings
	Cross section drawings and standard detail drawings
	Landscaping layout drawing
	Specialist drawings

- 6.6 The 'Volumetric Method' may not be the most suitable approach for calculating interception requirements on smaller developments. For smaller sites, various interception methods are considered compliant with the requirement for zero runoff from the first 5mm of rainfall, as outlined in Table G2.1 of the Statutory Standards³ and Section 24.6 of The SuDS Manual⁵. These methods can also be applied to larger developments where interception is managed by area. Where the 'Area Method' is proposed, Conwy SAB would still expect to see supporting calculations or a clear description demonstrating the site's interception potential.
- 6.7 According to good practice, drainage components should be distributed across a development and in series to achieve a robust surface water management system, to provide effective interception and source control, whilst also meeting other Statutory Standards, such as amenity and biodiversity. In addition to this, the first 5mm of every rainfall event contains the highest concentration of pollutants, especially for roads, making its interception crucial for improving water quality. SuDS should therefore target the most polluting aspects of a site, such as the highway corridor. Reliance on SuDS elements provided at the end of a drainage network such as a basin or attenuation feature alone are unlikely to provide sufficient interception to meet the full 5mm criteria.
- 6.8 Even sites with limited infiltration potential can still meet the full interception requirements for initial rainfall events by maximising vegetation cover, incorporating surface storage, and implementing engineered systems designed for temporary retention and evaporation.
- 6.9 It is important to consult with Conwy SAB as early as possible when planning development, as the overall drainage strategy, if not considered early, can have significant implications for a site in terms of layout and design. Drainage strategies should therefore be considered at the concept and early stages of development in order to make suitable allowances in the site layout for the required drainage features. This is particularly relevant for greenfield developments, as they provide the greatest potential for the inclusion of SuDS.

Calculations for Surface Water Treatment

- 6.10 Conwy SAB requires calculations for appropriate surface water treatment, such as the Simple Index Approach, as detailed in Section 26.7.1 of the SuDS Manual⁵. SuDS must be designed so that they provide the treatment values specified in the 'Treatment Design' section of the SuDS Manual⁵, for each respective SuDS element.

Exceedance Flow Assessment and associated details

- 6.11 An exceedance flow assessment is required to understand the impact on the development, drainage system and the surrounding properties during extreme events and or failure/blockage. Conwy SAB would expect the following detail to be included on exceedance plans.
- Flow routes need to be shown to the development boundary;
 - Finished contour levels should be shown on the drawing;
 - Commentary needs to be provided on the drawing in the form of annotative leaders; and
 - Failure or blockage should be shown from the most likely sources.

⁵ CIRIA, *The SuDS Manual* (2015)

7. SuDS Design Parameters

- 7.1 Sections 6.2 and 6.3 of the North Wales SuDS Guide¹ outline the hydraulic design parameters and requirements for all surface water drainage designs. Conwy SAB seeks to clarify specific design parameters related to the calculation of existing and proposed runoff rates and rainfall estimation methods.

Calculation of Existing and Proposed Runoff Rates

- 7.2 Paragraph G2.19 of the WG Standards³ states the following:

“the assessment of peak runoff rates from greenfield, previously developed and proposed development sites, and the design of attenuation storage systems is set out in the SuDS Manual”.

- 7.3 Therefore, the calculation methods for determining greenfield runoff rates should follow Chapter 24 of the SuDS Manual⁵, using the FEH ReFEH2, FEH Statistical, or IH124 methods.
- 7.4 Statutory Standard S2 of the WG Standards³ requires that both flow rates and volumes from development sites must be controlled and attenuated to greenfield rates and volumes. Restricting the proposed runoff rate to QBAR (Mean Annual Flood) for all events up to and including the 1 in 100 year event plus Climate Change satisfies this criterion, as outlined in G2.30 of the WG Standards³.

Figure 7.1: Section G2.30 of WG Statutory Standards

All the runoff from the site for the 1:100 year event should be discharged at either a rate of 2 l/s/ha or the average annual peak flow rate (i.e. the mean annual flood, QBAR), whichever is the greater.

- 7.5 It is vital that the site areas used in the runoff calculations for the greenfield and proposed development have been appropriately accounted for and are consistent, as stated in the Suds Manual⁵ section 24.2.2.

Figure 7.2: Section 24.2.2 of The SuDS Manual

24.2.2 Runoff areas to be used in calculations

The runoff area used in any of the runoff estimation methods should be consistent; for example, if the whole site area is used in the greenfield runoff rate calculations, the whole site should also be represented in the runoff calculations for the proposed development. If there is a landscaped area in the developed scenario that discharges directly to receiving waters and does not contribute to the drainage system (so is excluded from the calculations) then this area should also be excluded from the greenfield calculations.

- 7.6 To ensure consistency, QBAR should be expressed in litres per second per hectare (l/s/ha). This is calculated by dividing the QBAR value (in l/s) by the area (in hectares) used to derive it. The proposed discharge rate for the development site is then determined by multiplying the QBAR rate (l/s/ha) by the impermeable area of the proposed drainage network (ha), resulting in a peak runoff rate expressed in litres per second (l/s).

Rainfall Estimation (the use of FEH or FSR)

- 7.7 Conwy SAB wish to consider the use of FEH rainfall in the hydraulic analysis and a 30% allowance for climate change plus 10% urban creep. If FSR is to be used, please apply a 50% climate change allowance (i.e. an additional 20% on the required 30% allowance) to account for the reduced rainfall.

8. Adoption and Maintenance

- 8.1 According to the WG Standards³, the SAB is responsible for adopting SuDS features that serve more than one property and ensuring their maintenance in accordance with these standards. Regardless of whether the actual maintenance responsibilities fall to another body, the SAB will always adopt surface water drainage systems serving multiple properties. Conwy SAB generally does not accept management companies appointed by developers, except under exceptional circumstances. In all other cases, a commuted sum must be agreed upon for the maintenance of the SuDS system for the next 60 years.
- 8.2 For sites where Conwy SAB will be adopting SuDS features, upon completion of the proposed works and following final inspection, Conwy SAB will issue a Certificate of Substantial Completion, provided there are no issues. This will be followed by a 24-month maintenance period. This period ensures that the constructed drainage system functions in accordance with the Approval. During the Maintenance Period (and until it begins), the developer must maintain the drainage system at their own cost and in accordance with the Maintenance Plan, as approved by Conwy SAB as part of a Full Application, ensuring it functions as designed at all times. Before issuing a final Completion Certificate at the end of the maintenance period, the SAB must be satisfied that the drainage system has been properly maintained and is functioning as designed. If Conwy SAB are not responsible for maintaining the drainage system following the end of the maintenance period, then the appointed maintainer must undertake maintenance strictly in accordance with the Maintenance Plan.

Conditions for Adoption

- 8.3 Once an agreement has been reached on the adoption and maintenance of SuDS features, Full Consent can be granted, and construction can commence. Full Consent will be given subject to conditions to ensure the adoptable SuDS are constructed as per the approved design. Examples of applicable conditions include, but are not limited to, the following:
- Verification checks are required to be carried out by the designer during the construction phase and upon completion of the surface water drainage works. This is to ensure the system is constructed in accordance with the design, fulfils its intended use and meets the specified requirements.
 - A detailed as-built survey, which accurately represents the positioning and levels of the development must be provided to Conwy SAB upon completion of the proposed works.
 - The drainage system must be free from significant structural defects, blockages, and obstructions. A CCTV survey must be conducted at various stages throughout the development and upon completion of construction to confirm these conditions are met. Conwy SAB may also require CCTV Surveying to be carried out prior to completion of the 24-month Maintenance Period and to Conwy SAB formally taking on maintenance responsibilities.
- 8.4 Failure to address or adhere to any conditions listed within a Conwy SAB consent document may result in a withdrawal of the SAB Approval and a Stop Notice or other Enforcement may be applied to the works.

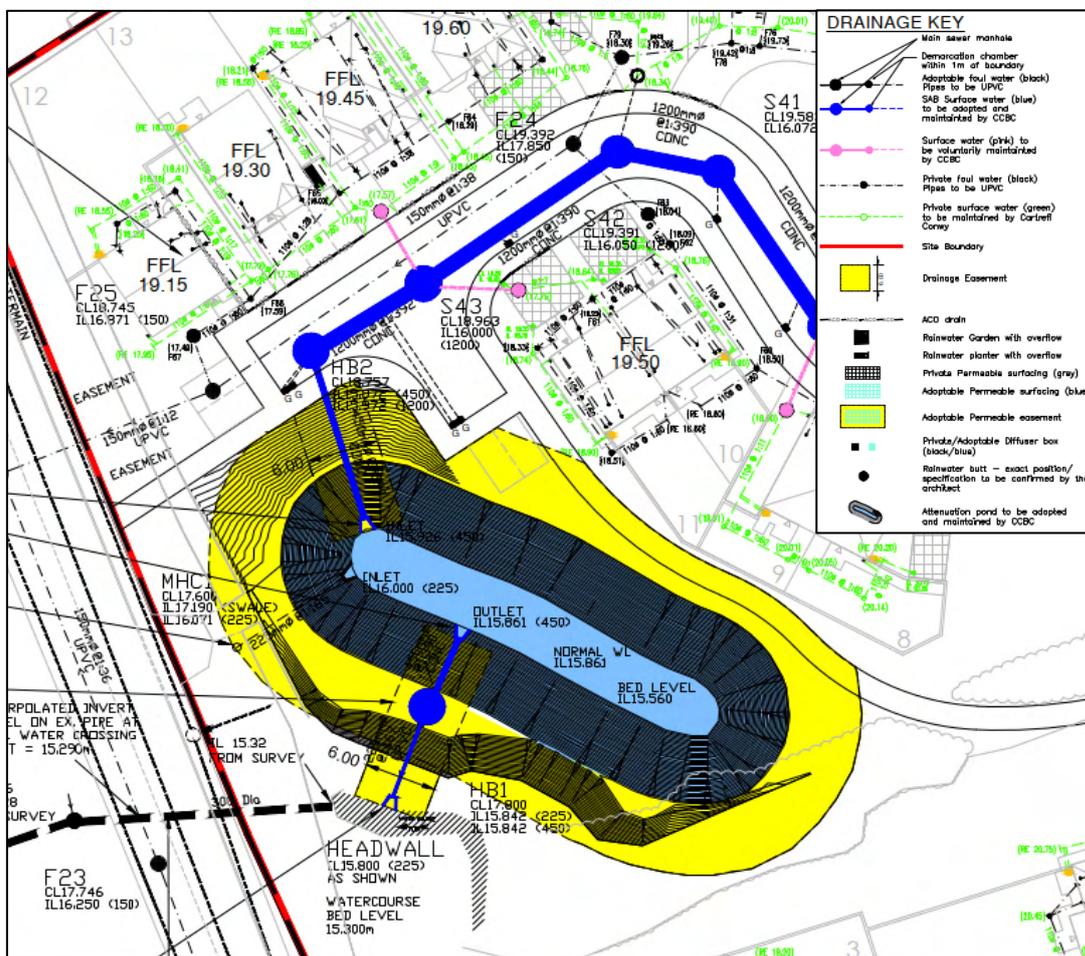
Legal Agreement

8.5 Conwy SAB will require a legal agreement to be entered into if Conwy SAB will ultimately adopt elements of a drainage system. This provides a formal means of setting out the detailed arrangements for the construction and operation of the drainage system for the lifetime of the development, together with other relevant provisions. For the purposes of the SAB agreement, the lifetime of development is taken to be 60 years.

8.6 For SuDS adoption, external legal services are likely to be engaged. Developers should be aware that there is a cost undertaking associated with these services. Therefore, applicants are encouraged to have the relevant details and information readily available to expedite the legal agreement process. In order to reduce legal fees, applicants are advised to provide the following information to Conwy SAB at the earliest possible stages of applying for SAB Approval:

- Developer details;
- Site owner (if different);
- Solicitors contact details;
- Mortgagee details;
- Date of charge;
- Surety Provider details;
- Surety amount (Full construction costs of adoptable SuDS features by Conwy SAB); and
- Maintenance arrangement (Management Company or Commuted Sum).

Figure 8.1: Example SAB Adoption Plan



- 8.7 In addition to a legal agreement, a SAB Adoption Plan will be required, which should be provided by the applicant once Technical Approval has been granted for a SuDS Application, similar to the example shown in **Figure 9.1**. The adoption plan should clearly identify SuDS features that serve more than one dwelling, usually highlighted in blue, with a 3m maintenance easement either side. Easements are not required for pipework located within an adopted highway.
- 8.8 To ensure the long-term functionality and maintainability of adoptable SuDS infrastructure, it is essential that all relevant legal provisions, such as easements and land transfers, are secured before the sale of individual plots. These provisions must be clearly defined and legally recorded in the deeds of all affected properties. They should grant appropriate rights of access, inspection, maintenance, and repair to the adopting authority or responsible body.
- 8.9 It is equally important that prospective homeowners are made fully aware of these arrangements and agree to them as part of the purchase process. This transparency helps avoid future disputes and ensures that the infrastructure can be maintained without legal or physical obstruction.
- 8.10 Failure to include these legal mechanisms prior to plot sales may result in delays or refusal of adoption by Conwy SAB, as well as complications in accessing and maintaining shared drainage infrastructure. In some cases, this could also lead to liabilities for developers or management companies. Developers are therefore strongly advised to engage legal advisors early to ensure that all necessary easements and transfers are properly drafted, agreed upon, and registered in a timely manner.

Commuted Sums

- 8.11 In calculating commuted sums, Conwy SAB follows the guidance set out in Section 4.22 of the SuDS Statutory Guidance⁴, alongside best practice documents such as the SuDS Manual⁵, and relevant manufacturer specifications. The commuted sum is calculated to cover the expected costs of not only regular maintenance, but also remedial and replacement works for specific SuDS features over a 60-year period. Applicants should be aware that this may result in a substantial commuted sum, depending on the type of SuDS proposed. While Conwy SAB is open to adopting a variety of SuDS features, the associated long-term costs can be significant. Therefore, it is essential that applicants carefully consider the ongoing and future maintenance requirements of SuDS features over the lifetime of the development. A commuted sum must be paid to Conwy SAB before the end of the 24-month maintenance period.
- 8.12 Permeable paving requires significant regular maintenance, and remedial or replacement works can be costly, often increasing commuted sum amounts. Buried cellular storage is effective for providing attenuated storage with minimal aboveground space requirements. However, compared to other SuDS features, cellular storage offers few additional benefits necessary for SAB approval, such as improvements in water quality, amenity, or biodiversity. Additionally, once silt enters these systems, it can be difficult to remove, as camera inspection and jetting are often impractical. Excavating and restoring an area once cellular storage has been replaced can also incur significant costs, as such, underground storage will generally only be permitted when it is the only option left available to appropriately control final discharge from the site.
- 8.13 Those who wish to development in Conwy County are advised to carefully consider the duty of adoption that is placed on Conwy SAB, and any associated costs that planned development may incur as a result. An example Commuted Sum Calculation is included in **Appendix A**.

Registered Social Landlord Exemptions

- 8.14 Where a drainage system serves multiple properties, Conwy SAB will consider the intended ownership position for the relevant properties. If a development does not include owner-occupier housing (either as market housing or through a shared ownership scheme) or any other buildings or structures owned by a third party, then Conwy SAB may place an obligation on the Registered Social Landlords (RSLs) to maintain the drainage notwithstanding the adoption by Conwy SAB. This would be in a similar manner to the appointment of a management company for this purpose (noting RSL's can be considered to provide strong covenant), thus negating the need for a commuted sum. Please note, in instances where Conwy SAB have placed an obligation on the RSL to maintain the drainage notwithstanding the adoption by Conwy SAB, a legal agreement will still be required.
- 8.15 Developments by RSLs may include properties intended for owner-occupation, either by open market sale or through a shared ownership scheme. Conwy SAB are therefore required to confirm the proposed tenure of each relevant property. The most common evidence of this will be a planning obligation given to the CCBC under a Section 106 Agreement, or a condition attached to a planning permission, requiring that particular properties within a development remain as specific types of affordable housing. The SAB will not accept a bare statement of intent by an RSL as sufficient evidence where this is not binding on the RSL.

Non-Performance Bonds

- 8.16 Conwy SAB may require a cash/surety bond in relation to adoptable SuDS features, to safeguard against non-performance or failure to complete the approved drainage system. A bond may be requested in the following situations:
- Where there is uncertainty about the developer's ability to complete the SuDS scheme in accordance with the approved plans and standards;
 - For large or complex developments, where the risk of non-completion or delayed implementation is higher;
 - Where the developer has no proven track record or history of delivering compliant SuDS schemes; and
 - If the SAB considers there is a significant risk to public interest or environmental protection should the SuDS not be completed or maintained properly.
- 8.17 To ensure funding is available for remedial works if the developer fails to meet their obligations. A Non-Performance Bonds acts as a financial guarantee that the SAB can draw upon to complete or rectify a SuDS scheme if necessary. The value of the bond will be set at 100% of the cost of construction for the adoptable SuDS features. In calculating the bond, Conwy SAB will request an itemised breakdown of the cost of construction of the adoptable SuDS features from the developer. Conwy SAB recommend applicants confirm whether there will be a requirement for a bond through early engagement or pre-application advice in advance of submitting their Full application.
- 8.18 A cash/surety bond is refunded/discharged by 50% on issue of the Certificate of Substantial Completion and 50% upon issue of the Final Certificate.

9. Phased Developments

- 9.1 For developments delivered in phases, it is essential that SuDS infrastructure is implemented in alignment with the construction and occupation of each phase. At all times, developers must demonstrate that the SuDS system has adequate capacity to manage surface water runoff from all completed and occupied areas, in accordance with the design criteria approved under the SuDS application.
- 9.2 Where components of the drainage system are intended to serve multiple phases, these elements must be constructed and fully operational prior to the occupation of any phase they support. This ensures the system functions as designed and mitigates flood risk from the outset.
- 9.3 Developers must also manage surface water runoff during the construction phase. Temporary drainage and pollution control measures should be implemented to prevent sediment, debris, and contaminants from entering the SuDS network, thereby safeguarding its long-term performance and protecting site users.
- 9.4 The SuDS system should be designed with sufficient flexibility to accommodate future phases without compromising the performance or integrity of infrastructure already in use. Any interdependencies between phases must be clearly understood and incorporated into the design and delivery of the overall drainage strategy.
- 9.5 If a development was not identified as phased during the SuDS application process but later becomes phased during construction, Conwy SAB must be notified immediately. The requirements outlined above must then be applied to ensure compliance and effective surface water management. Developers should expect to be required to provide any necessary information to Conwy SAB to demonstrate that the SuDS infrastructure continues to meet approved design criteria and remains fit for purpose throughout all phases of development.
- 9.6 In some cases, it may be mutually agreed that a phased approach to adoption is appropriate, particularly if the development of a site is altered to proceed in phases.

10. Inspections

- 10.1 The SAB reserves the right to inspect the construction of approved SuDS to ensure they are built to the appropriate standard with the specified or suitable materials. The need for inspections and their timing and frequency will be agreed between the developer and Conwy SAB as part of the approval process and will be covered through condition on approval.
- 10.2 For sites incorporating adoptable SuDS, Conwy SAB reserves the right to undertake as many inspections as deemed necessary, depending on the progression of the construction phase and any issues that arise or are anticipated. Upon issuing Full Consent, Conwy SAB expects to receive contact details for all relevant site personnel to facilitate effective coordination of site inspections. Following an initial site visit, Conwy SAB will work with the on-site team to determine the need for ongoing updates regarding the progress of works, which will help inform the timing and scope of subsequent inspections.
- 10.3 For sites where Conwy SAB will be adopting SuDS features, upon completion of the proposed works and following final inspection, Conwy SAB will issue a Certificate of Substantial Completion, provided there are no issues. This will be followed by a 24-month maintenance period during which the developer is responsible for maintaining the drainage system. Before issuing a final Completion Certificate at the end of the maintenance period, the SAB must be satisfied that the drainage system has been properly maintained and is functioning as designed.

10.4 Measures relating to surface water management will be thoroughly checked during site inspections, this includes verifying that construction works comply with the approved design, and that sufficient measures have been implemented during the construction period to manage surface water run-off. Inspection fees will be charged in accordance with the Sustainable Drainage (Application for Approval Fees) (Wales) Regulations 2018⁶.

11. Enforcement

- 11.1 Conwy SAB have a responsibility to take whatever enforcement action may be necessary pursuant to the powers available to them under the Sustainable Drainage (Enforcement) (Wales) Order 2018⁷ in the public interest. In the event that a breach of the requirements for SAB approval is discovered (and there is a clear public interest in enforcement action and Conwy SAB consider it reasonable and expedient to do so), Conwy SAB will look to pursue formal enforcement actions. This may be in the form of an Enforcement Notice, Temporary Stop Notice or Stop Notice served on a developer.
- 11.2 In some circumstances, Conwy SAB may consider a retrospective application is the better way to resolve a breach or that other steps can be undertaken by the developer and may prefer to negotiate to achieve acceptable remediation of any breach without enforcement action being taken. In such instances, Conwy SAB will not depart from the need to comply with the WG Standards³. This scenario carries a significant risk of high cost and inconvenience associated with retrospective works.
- 11.3 Notwithstanding the above, developers should be fully aware of the implications and risks that commencing construction works without SuDS approval carries. This can include difficulties in having highways adopted and matters arising in legal searches and conveyancing procedures.

⁶ Welsh Government, *The Sustainable Drainage (Application for Approval Fees) (Wales) Regulations 2018* (2018)

⁷ Welsh Government, *The Sustainable Drainage (Enforcement) (Wales) Order 2018* (2018)

Appendix A – Commuted Sum Example

- A.1 When planning for long-term maintenance, it is important to remember that money today is worth more than the same amount in the future. This is because of factors like inflation and interest rates. To work out how much future maintenance costs are really worth in today's terms, we use a method called Net Present Value (NPV).
- A.2 This calculation adjusts future costs by applying a discount rate, which reduces the value of future payments to reflect what they would be worth today. The discount rate is worked out by comparing expected interest rates with inflation. Once we have this rate, we use it to reduce each future maintenance payment, depending on how many years away it is. For example, if maintenance of £850 is needed every 10 years over a 30-year period, each future payment is reduced according to how far in the future it is. These adjusted values are then added together to give an NPV factor.
- A.3 Finally, to find the total amount that would need to be set aside today to cover these future costs (commuted sum) we multiply the current maintenance cost by the NPV factor. This ensures enough money is available now to pay for future maintenance, without needing to overestimate or underestimate what is required. **Figure A.1** illustrates the detailed breakdown of how Commuted Sums are calculated. The next pages offer a real-life example of the expected maintenance costs for various SuDS.

Figure A.1 – Commuted Sum Calculation

$\Sigma Mp / (1 + D/100)^{TM}$
 Mp - Estimated periodic maintenance cost based on current rates
 D - Periodic Discounted Rate (effective annual interest rate %)
TM - Time period before expenditure will be incurred (years)

Periodic Discounted Rate (D)

$$D = ((LTNBR/RPIX) - 1) \times 100$$

LTNBR - Long term neutral base rate

RPIX - Retail Price Index excluding mortgage payments

Net Present Value (NPV)

$$NPV \text{ Factor} = \Sigma 1 / (1 + D/100)^{TM}$$

EXAMPLE

Mp - £850

LTNBR - 4.5%

RPIX - 2.25%

TM - maintenance required every 10 years for 30 years period

$$D = ((1.045 / 1.0225) - 1) \times 100$$

$$D = 2.2\%$$

$$NPV = 1 / (1 + 2.2/100)^{10} + 1 / (1 + 2.2/100)^{20} + 1 / (1 + 2.2/100)^{30}$$

$$NVP = 1.97211$$

Commuted Sum = current cost x NPV factor

$$\text{Commuted Sum} = £850 \times 1.97211$$

$$\text{Commuted Sum} = £1676.30$$

A.4 The following example outlines the anticipated maintenance costs for a Sustainable Drainage System, incorporating swales, attenuation basins, traditional drainage infrastructure (e.g. manholes and pipework), and a vortex flow control device. These cost estimates are based on a real-life scheme and reflect site-specific SuDS features. Commuted sums will vary depending on the specific SuDS components proposed for each site. Some maintenance costs are based on Conwy County Borough Council's (CCBC) internal charging rates, where maintenance is undertaken by the Council. Certain maintenance activities require specialist contractors. In such cases, industry best practice and published cost data have been used to inform the estimates.

Figure A.2 – SuDS Maintenance Requirements

<p>Swale:</p> <ul style="list-style-type: none"> • Element: Litter Pick, Grass Cutting and Weeding • Visits per year: 8 • Duration: Half a day per visit (3.75 hours) <p>Attenuation Basin:</p> <ul style="list-style-type: none"> • Element: Inspection • Visits per year: 12 times per year (for first year) • Duration: 2 Hours • Element: Grass Cutting and general maintenance • Visits per year: Half Yearly (spring - before nesting season, and autumn) • Duration: Full Day (7.5 Hours) <p>Traditional Drainage Systems (Manholes, Pipework):</p> <ul style="list-style-type: none"> • Element: Inspect Manholes, Inspection Chambers and Silt Trap • Visits per year: 1 • Duration: Full Day (7.5 hours) • Element: Clear out Silt Trap (Gully Sucker) • Visits per year: 1 • Duration: N/A (Contractual) <p>Flow Control Device - Vortex (e.g. Hydro-Brake):</p> <ul style="list-style-type: none"> • Element: Inspection • Visits per year: Monthly for first six months • Duration: 2 Hours • Element: Inspection • Visits per year: Every six months • Duration: 2 Hours • Element: Replacement • Visits per year: 30 years • Duration: N/A (Contractual)

Swales

Year Frequency	Maintenance Schedule	Element	Comment	No per year	Rate	Cost
Annually	Regular Maintenance	Litter Pick	<ul style="list-style-type: none"> • 2 x Operatives, Van and Small Tools • £70 an hour • Half Day 	8	£262.50	£2,100.00
		Cut grass - to retain grass height within specified design				
		Weeding				
Total Cost						£2,100.00

Year Frequency	Maintenance Sum	NVP Factor for Year Frequency	Total Cost
Annually	£2,100.00	33.13701708	£69,587.74
Total			£69,587.74
Contingency to allow for ad hoc repairs etc. Allow 15%			£10,438.16
Total Commuted Sum			£80,025.90

Attenuation Basins

Year Frequency	Maintenance Schedule	Element	Comment	No per year	Rate	Cost
Monthly (for first year)	Regular Maintenance	Inspect inlets and facility surface for silt accumulation. Establish appropriate silt removal frequencies.	<ul style="list-style-type: none"> • 2 x Operatives, Van and Small Tools • £70 an hour • Monthly (for first year) then annually or as required • 2 hours per month 	12	£140.00	£1,680.00
Total Cost						£1,680.00

Year Frequency	Maintenance Schedule	Element	Comment	No per year	Rate	Cost
Monthly (during growing season), or as required	Regular Maintenance	Cut grass - for spillway and access routes	As required			
Total Cost						£0.00

Year Frequency	Maintenance Schedule	Element	Comment	No per year	Rate	Cost
Half Yearly (spring - before nesting season, and autumn)	Regular Maintenance	Cut grass - meadow grass in and around basin	<ul style="list-style-type: none"> • 2 x Operatives, Van and Small Tools • £70 an hour • Half Yearly (spring - before nesting season, and autumn) • Full Day 	2	£525.00	£1,050.00
Total Cost						£1,050.00

Year Frequency	Annual Maintenance Sum	NVP Factor for Year Frequency	Total Cost
Monthly (for first year)			£1,680.00
Half Yearly (spring - before nesting season, and autumn)	£1,050.00	33.13701708	£34,793.87
Total			£36,473.87
Contingency to allow for ad hoc repairs etc. Allow 15%			£5,471.08
Total Commuted Sum			£41,944.95

Traditional Drainage Systems

Year Frequency	Maintenance Schedule	Element	Comment	No per year	Rate	Cost
Annually	Regular Maintenance	Inspect Manholes, Inspection Chambers and Silt Trap	<ul style="list-style-type: none"> 2 x Operatives, Van and Small Tools £70 an hour Full Day 	1	£525.00	£525.00
		Clear out Silt Trap	Gully Sucker incl. Operator	1	£500.00	£500.00
Total Cost						£1,025.00

Year Frequency	Maintenance Sum	NVP Factor for Year Frequency	Total Cost
Annually	£1,025.00	33.13701708	£33,965.44
Total			£33,965.44
Contingency to allow for ad hoc repairs etc. Allow 15%			£5,094.82
Total Commuted Sum			£39,060.26

Flow Control - Vortex

Year Frequency	Maintenance Schedule	Element	Comment	No per year	Rate	Cost
First Six Months	Regular Maintenance	Inspect flow control mechanism and chamber	<ul style="list-style-type: none"> 2 x Operatives, Van and Small Tools £70 an hour 2 hours Monthly for first six months 	6	£140.00	£840.00
Total Cost						£840.00

Year Frequency	Maintenance Schedule	Element	Comment	No per year	Rate	Cost
Every Six Months	Regular Maintenance	Inspect flow control mechanism and chamber	<ul style="list-style-type: none"> 2 x Operatives, Van and Small Tools £70 an hour 2 hours Every six months 	2	£140.00	£280.00
		Inspect inlets and outlets for blockages				
		Check emergency drain down mechanism is in good working order				
Total Cost						£280.00

Year Frequency	Maintenance Schedule	Element	Comment	No per year	Rate	Cost
Every 30 years	Replacement	Repair/replace if damaged (following inspection)	See rate build-up	1	£8,489.00	£8,489.00
Total Cost						£8,489.00

Year Frequency	Annual Maintenance Sum	NVP Factor for Year Frequency	Total Cost
First Six Months			£840.00
Annually	£280.00	66.27403	£18,556.73
Every 30 Years	£8,489.00	0.79154842	£6,719.45
Total			£26,116.18
Contingency to allow for ad hoc repairs etc. Allow 15%			£3,917.43
Total Commuted Sum			£30,033.61

Rate Build Up	
Senior/Sub Agent	£350.00
General Foreman	£1,625.00
Operative	£1,400.00
Small Welfare Unit	£175.00
15T Self Drive Excavator	£250.00
Water pump	£25.00
Pick-up	£100.00
Small tools	£75.00
Vortok fence/m	£39.00
Screening device - £200/ea	£200.00
Vortex - £2,750/ea	£2,750.00
Make good after vortex replacement - £1000/ea	£1,000.00
Disposal	£500.00
Total	£8,489.00