

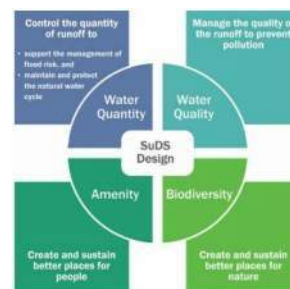


**SuDS Approving Body
Flood & Water Management Team
Environment Department
Wrexham County Borough Council
Abbey Road South
Wrexham
LL13 9PW**

Flood & Water Management Act 2010

Schedule 3 Sustainable Drainage

SuDS Scheme Application for SuDS Approving Body (SAB) Approval – Wales



Application Form for Full Application Approval of SuDS on new developments in accordance with The Sustainable Drainage (Approval and Adoption Procedure) (Wales) Regulations 2018

Full Application Structure	
Full Application Form	(To complete & return)
Guidance on Completing the Full Application Form – including specific information and evidence required to support the application.	(For guidance)

(Use hyperlinks above to directly access the Form and Guidance)

Full Application Form

This form is based on the requirements provided by Welsh Government for the sole purpose of submitting information to the SuDS Approving Body (SAB) in accordance with the legislation detailed on this form and other relevant items of primary and subordinate legislation.

Please be aware that once you have downloaded this form, the SAB and Welsh Government will have no access to the form or the data you enter into it. Subsequent use of this form is solely at your discretion, including the choice to complete and submit it to the SAB in agreement with the declaration section.

Upon receipt of this form and any supporting information, it is the responsibility of the SAB to inform you of its obligations in regard to the processing of your application. Please refer to its website for further information on any legal, regulatory and commercial requirements relating to information security and data protection of the information you have provided.

Please Note:

- 1. This form is for a Full SuDS Scheme Application for SAB approval ONLY;**
2. Approval of this application will be based on compliance with the [Statutory National Standards for Sustainable Drainage Systems \(SuDS\) for Wales](#) and [Statutory Instruments](#);
3. Once this application is made to SAB, it will be determined solely on the written technical and other information submitted with the full application;
4. You are strongly advised to have previously submitted a Pre-Application form to SAB, and engaged early, and directly, with the SAB, the LPA and all other relevant organisations that may have an interest in your SuDS scheme proposal, including the SAB statutory consultees listed below:
 - a. Sewerage undertaker
 - b. National Resources Wales
 - c. Highway Authority
 - d. Canal & River Trust
 - e. Internal Drainage Districts (NRW);
- 5. For a valid SuDS Scheme Full Application to the SAB, all sections of this form MUST be fully completed; and**
- 6. You are also required to provide technical information as indicated in the [Guidance](#) (or as otherwise directed by the SAB during Pre-Application discussions).**

We will process the information you provide so that we can deal with your application. We may also process or release the information to offer you documents or services relating to environmental matters and consult the public, public organisation and other organisations; provide information from the public register to anyone who asks or prevent anyone from breaking environmental law, investigate cases where environmental law may have been broken and take any action that is needed, and respond to requests for information under the Freedom

of Information Act 2000 and the Environmental Information Regulations 2004 (if the Data Protection Act allows).

Please ensure that the information you submit is accurate and correct and does not include personal or sensitive information. If you require any further clarification, please contact the SAB directly.

If printed, please complete using block capitals and black ink prior to submitting to the SAB.

Please read through the [Guidance](#) and complete this application form carefully ensuring all boxes are completed fully. If you fill in the application form correctly first time, the SAB can process it quicker.

Prior to the submission of this Full Application, applicants are strongly advised to make a Pre-Application submission to discuss their proposals with the SAB and ensure that an acceptable SuDS scheme is submitted. Please note that pre-application fees may apply.

Submissions made in support of this application shall be based upon current legislation and industry best practice including documents referenced in [Guidance on Making SuDS Applications for SAB Approval](#).

Proposals submitted should be developed by a competent and suitability qualified professional, experienced in drainage/ SuDs / flood risk management design.

Where applicable, the LPA planning reference or unique identifier must be included.

Applicants should complete this form and submit it, together with the necessary supporting documents, to Wrexham County Borough Council SuDs Approving Body.

Details for the payment of the Full Application fee will be provided upon confirmation of receipt of a valid application. This confirmation will include a unique reference (SAB/FUL/20XX/XXX) that must be quoted on all future correspondence. Your valid application will not be processed until the application fee is received and cleared in full.

When you have completed the application form please submit the form and associated documents to:

Electronically:	SAB@wrexham.gov.uk
Postal:	SuDS Approving Body Flood & Water Management Team Environment Department Wrexham County Borough Council Abbey Road South Wrexham, LL13 9PW

If you are not sure about anything contained in the application form, please contact us.

Content

ALL sections of this form MUST be fully completed

- 1. Applicant Details**
- 2. Site Details**
- 3. Interest in Land**
- 4. Application**
- 5. Application Fee**
- 6. Environmental Impact Assessment (EiA) Statement**
- 7. Compliance with Statutory National Standards for Sustainable Drainage Systems (SuDS)**
- 8. Assessment of Flood Risk**
- 9. Surface Water Discharge Hierarchy**
- 10. Infiltration Assessment**
- 11. Non-performance Bond, Adoption, Operation & Maintenance**
- 12. SuDS Scheme Application Checklist**
- 13. Declaration**

1. Applicant Details**Applicant Name and Address**

Title and Name		Mr Nick Bateman
Company		Wrexham County Borough Council
Suffix (unit/name/number)		
Address line 1		Ruthin Road
Address line 2		
Address line 3		
Town		Wrexham
County		
Postcode		LL13 7TU
Phone number	Mobile	
	Works	01978 315657
	Home	
e-mail address		nick.bateman@wrexham.gov.uk

Agent Name and Address

Title and Name		Mr Russell Hardy
Company		JP Structural Design Ltd.
Suffix (unit/name/number)		Regus House
Address line 1		Heron Way
Address line 2		
Address line 3		
Town		Chester
County		Cheshire
Postcode		CH4 9QR
Phone number	Mobile	07711 107672
	Works	
	Home	
e-mail address		russell@jpstructural.co.uk

Preferred contact	Applicant ☐	Agent ☒
--------------------------	------------------------------------	---

2. Site Details

A general description of site location supported by a plan specifying the construction area and the extent of the drainage system for which approval is sought MUST be submitted. Plans shall be at a scale of 1:2500. All plans MUST show the direction of North.

Name of proposed development	Ysgol Yr Hafod, Johnstown
-------------------------------------	---------------------------

Grid Reference (E/N)	330135 (E)	346048 (N)
Suffix (unit/name/number)	Ysgol Yr Hafod	
Address line 1	Bangor Road	
Address line 2		
Address line 3		
Town	Johnstown	
County	Wrexham	
Postcode	LL14 2SW	

Description of proposed development	The proposed development consists of a single storey extension (over 2 levels) to the south of the existing school building, a new MUGA and car parking facilities.	
Total application site area (Ha)	0.320 Ha	
Is the existing site currently developed i.e. Brownfield or is it currently undeveloped i.e. Greenfield?	Brownfield	
Existing use	Existing School for children aged 3 to 11 years old.	
Proposed use	Same as existing use, primary school for children aged 3 to 11 years old.	
Does the site cross more than one SAB area?	Yes ☐	No ☒
If "Yes", please confirm the proportionate area in each SAB below: (The main contact will be the SAB that has most of the surface water drainage system within its boundary.)		

SAB	% of Site Area

3. Interest in the Land

What interest do you have in the land?		
Owner	Yes ☐	No ☒
Prospective Owner	Yes ☐	No ☒
Other (please provide details)	Agent	

4. Application

Has any prior advice been sought from the SAB about this application?		Yes ☐	No ☒
If Yes, please complete the following information about the advice you were given. This will help the SAB to deal with this application more efficiently.			
Officer Name	Mr Neil Taunt		
Reference number	Meeting with Mr Neil Taunt, Waterco and WCBC	Date	26 09 2019
Details of pre-application advice received	A summary of main points identified during the SAB meeting detailed below: - The site currently drains to the public combined sewer, north of the site, with partial infiltration of surface water from the hardstanding play area. - Based on the Ground Investigation Report, the site is not suitable for traditional infiltration techniques (soakaways). - There are no watercourses within the vicinity of the site. - The public surface water sewer is separated from the site by third party, urbanized land, restricting the potential to make a connection to the sewer. - DCWW will be contacted to establish the feasibility of making a connection to the public combined sewer from the school extension. - The surface water management system should be designed to accommodate the 1 in 100 year + 20% Climate Change. Further to the above SAB Meeting on 26.09.2019, it was 'hoped' that elements of infiltration could be utilized but have not proven to be viable as the Ian Farmer Associates Ground Investigation report, referenced 42361, recorded 3 soakaway		

	tests as being attempted at the site in accordance with BRE 365, but essentially 'failing'. The tests were undertaken in August in conditions recorded as 'sunny' and yet the water level reduced by only 210mm, 160mm & 50mm in 6 hours respectively, therefore not producing a result. Noting also the very clayey substrata documented in the report, and that groundwater strikes were also encountered at shallow depths at various locations across the site, any proposed solution utilizing infiltration as a means of disposing surface water is therefore deemed unviable.
--	--

Does this application relate to any other SAB application already made?	Yes	No ✓
If "Yes", please provide SAB Reference number		

Is this application part of a phased approach to development of the site, or one of multiple applications for the same site?	Yes ☐	No ☒
If “Yes”, please provide brief details		

Is this application one of two or more applications made at the same time, each setting out an alternative proposal for construction of a drainage system	Yes ☐	No ☒
If “Yes”, please provide details of other applications made at the same time (include SAB Reference number if available)		

5. Application Fee

It is recommended you contact the SAB directly to ensure the correct fee is paid with the application.

		Area of Land (Ha)	Fraction	Fees
Application fee		N/A	N/A	£350.00
Each 0.1ha or fraction of 0.1ha, for first 0.5ha	£70.00	0.3		£210.00
Each 0.1ha or fraction of 0.1ha, from 0.5ha up to and including 1ha	£50.00	0.02		£100.00

Each 0.1ha or fraction of 0.1ha, from 1ha up to and including 5ha	£20.00	00		£0
Each additional 0.1ha or fraction of 0.1ha above 5Ha.	£10.00			£0
Is the applicant a town/community council?		If yes, application fee is half the amount		Yes
<u>If applicable</u> – reduction of 50% application fee due to this being an alternative proposal made at the same time.				£0
<u>If applicable</u> – application fee adjustment due to cross-SAB area approvals needed.				£0
			Total Fees	£330.00

6. Environmental Impact Assessment (EiA) Statement

Does this application relate to a development that is the subject of an EiA application under the Town & Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017(1)?	Yes ☐	No ☒
--	---------------------------------	---

7. Compliance with Statutory National Standards for Sustainable Drainage Systems (SuDS)

All sustainable drainage systems **MUST** comply with the [Statutory National Standards for Sustainable Drainage Systems \(SuDS\) for Wales](#). You are advised to refer to the detailed text in the Standards that relate to the information required below. The Standards are re-produced, in the [Guidance](#) to assist in completing this application form.

Standard Principles

The Principles listed below will underpin the design of surface water management schemes to meet the Statutory National Standards. Please provide a brief summary in each of the boxes below relating to each of the bulleted Standard Principles and itemised Standards 1 to 6, showing how your proposed drainage scheme complies with this statutory requirement.

Compliance with Standard Principles

My proposed surface water drainage scheme will comply in the following way/s:

In accordance with the Welsh Assembly Government's implementation of Schedule 3, the Surface Water Drainage strategy adheres to the principles of;

- Reducing Flood Risk
- Improving Water Quality
- Protecting and Improving the Environment

- Ensuring the Stability & Durability of Drainage Systems

The proposed scheme comprises a single storey extension to the south of the existing school building along with the construction of a new MUGA and new car parking facilities, extending over the existing playing field.

The existing drainage arrangements at the school comprise of a combined sewer system which in turn discharges into the existing combined public sewer network along Bangor Road.

The NRW Flood Risk maps have been consulted and the site is not at any risk of flooding. Further to this a ground investigation has been carried and permeability tests recorded no fall in water level indicating the superficial deposits (clay) to generally be practically impervious. Based on this the report confirms that soakaway drainage is not likely to be effective.

The topography of the existing hardstanding playing area falls away from Ruabon Road towards the playing fields (east) at gradients of approximately 1:37. The topography of the existing playing field falls even steeper towards the east at gradients of approximately 1:25.

The proposed building extension, new MUGA and car parking facilities extends across the existing hardstanding playing area and into half of the existing playing field. The proposed scheme is therefore located across steep gradients and across land deemed as practically impervious. In order to accommodate the proposed works across the existing steep gradients, the proposed single storey extension to the existing school building is proposed over 2 No floor levels (1.1m in difference), the proposed MUGA is located approximately 1.5m ABOVE the new car park. Further to this the proposed works is 'landlocked' as the existing playing field boundary is shared with residential properties, the southern boundary to the existing hardstanding play area is shared with a factory and the short western boundary is along Ruabon Road.

Prevention:

As discussed above, the existing ground is deemed practically impervious and therefore SUDs features such as permeable surfacing, rainwater gardens, soakaways have been discounted.

To improve the drainage system across the site and to reduce the possibility of flooding for the existing and proposed areas of the site, the Drainage Strategy includes a separate surface water and foul system across the existing and proposed drainage system for the school. Previous communications between WaterCo and DCWW, confirms DCWW have agreed a surface water Peak Flow rate of 15l/sec from the school site to be discharged into the existing private combined manhole upstream of the combined public sewer network along Bangor Road. The surface water discharge across the site (including the existing and proposed works) will therefore be attenuated onsite and pumped return to the existing combined drain just upstream of the combined public sewer network along Bangor Road.

The proposed attenuation has been designed to accommodate up to and including a 1 in 100 year return period plus 20% for Climate Change, as agreed with SAB on the 26.09.2019.

Rainwater butts will be installed around the site as a measure for harvesting an element of rainwater which can be used for plant irrigation, cleaning etc. Existing raised planters will be maintained across the site. Further to this rainwater planters will be installed around the site providing an opportunity to contribute to the natural environment and increasing the surface water discharge Time of Concentration.

Good House Keeping Measures

Linear drainage are proposed along the eastern boundaries of the car park and MUGA and outlets incorporate sump units. The sump units along with the attenuation for surface water from cross the school site will provide an opportunity for sediment to be removed from the surface water discharge.

Runoff from the roofs and playgrounds is considered to be a low risk in terms of pollution controls although it is proposed to install rainwater planters across the site and will provide an opportunity for the removal of pollutants through collection and biodegradation before returning cleansed water to the new improved surface water drainage system.

The bin store area will be relocated and drained separately to the foul system.

Local Source Control

Local source controls are implemented at the site with the use of rainwater butts, rainwater planters and surface water attenuation.

Rainwater butts and rainwater planters are proposed at the downpipes of the new extension, and will provide an element of attenuation, reuse and an increase Time of Concentration for the surface water discharge from the new roofs.

Surface water attenuation is proposed for the whole site and has been designed to accommodate storms up to and including 1 in 100 year return period plus 20% climate, as agreed with SAB on 26.09.2019. As discussed above the surface water discharge rate of 15l/sec to the DCWW combined sewer, along Bangor Road, has been agreed with DCWW.

Site Source Controls

There are no site source controls as such as all surface water is managed within the site.

As the system is a pump solution, with high ground water levels it has all discouraged the ideal of a leaky system as we are more concerned with water entering the system and effectively pump land drainage.

Relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance **MUST** be listed below, and all relevant material submitted.

1. 94001-500-P01 – Site Information
2. 94001-501-P01 – Existing Drainage
3. 94001-502-P01 – Proposed Drainage
4. Waterco Communications with DCWW
5. Drainage Calculations

Standards 1 to 6

Compliance with Standard S1 - Surface water runoff destination

My proposed surface water drainage scheme will comply in the following way/s:

In determining a suitable methodology for disposal of surface water flows from this development, it is necessary to explore the technical options outlined under Standard S1 of the SNSSUDS 2018 document published by Welsh Government. This states that disposal should be made through the hierarchical approach which are, in order of preference, below:

- **Priority Level 1 – Surface water runoff collected for use:**
 Due to the nature of the development as an extension to an existing school facility, the existing ground conditions the topography of the site and the minimal remaining area of the site available post development for use by the children, it was considered impracticable for grey water harvesting type solutions to be considered. However, rainwater butts will be provided as a means of capturing rainwater for irrigation and cleansing purposes. Rainwater planters will also be implemented as a means of reusing rainwater to nurture and contribute to the amenity and biodiversity within the school site.
- **Priority Level 2 – Surface water runoff is infiltrated to ground:**
 As discussed previously, ground investigation (GI) was carried out at the site and the permeability of the site assessed. The outcome of the permeability testing recorded no fall in water level indicating the superficial deposits (clay) to generally be, as described in the GI Report as, 'practically impervious'. Further to this the GI Report states that soakaway drainage is not likely to be effective. Surface water runoff infiltrated to ground has therefore been discounted for the proposed scheme.
- **Priority Level 3 – Surface water runoff is discharged to a surface water body:**
 The closest surface water body located to the site are the ponds located at Stryt Las Park, approximately 200m to the west of the site and Ruabon Road. Due to the topography of the site, surface water generated across the school site falls towards the east and therefore further away from the ponds at Stryt Las Park. Further to this in order to discharge surface water to the ponds at Stryt Las Park, the surface water discharge drain would have to cross Ruabon Road and a number of third party land. This option has therefore been discounted.
- **Priority Level 4 – Surface water runoff is discharged to a surface water sewer, highway drain or another drainage system:**
 No surface water from the site is proposed to discharge to a surface water sewer.
- **Priority Level 5 – Surface water runoff is discharged to a combined sewer:**
 The drainage across the existing site consists of combined sewer drains which discharge into the combined public sewer network along Bangor Road. The Drainage Strategy for the proposed development includes a revised drainage system across the whole site (existing and proposed) with separate foul and surface water drains. The new surface water runoff from the site is discharged to the existing combined public sewer along Bangor Road at a peak discharge rate of 15 l/sec, as agreed with the DCWW.

Relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance **MUST** be listed below, and all relevant material submitted.

1. 94001-501-P01 – Existing Drainage
2. 94001-502-P01 – Proposed Drainage
3. Waterco Communications with DCWW
4. DCWW Statutory Information
5. Ground Investigation Report

Compliance with Standard S2 - Surface water runoff hydraulic control

My proposed surface water drainage scheme will comply in the following way/s:

In accordance with statutory guidelines, the development of this site should not increase flood risk elsewhere and as such, all runoff from attenuated areas on site should be contained within the site boundary for up to and including a 1 in 100-year design period storm, plus 20% climate change, as agreed with SAB on 26.09.2019.

As discussed previously, infiltration based options have been discounted due to the impermeable nature of the existing ground conditions.

As per communications between Waterco and DCWW, a surface water discharge peak flow of 15l/sec has been agreed via the existing combined sewer connection upstream to the combined public sewer along Bangor Road.

The Drainage Strategy for the proposed development therefore includes the revised drainage system across the site, separating the foul and surface water drains. Surface water attenuation is therefore proposed, under the new car park, with a pumped return to the existing combined sewer drain which in turn discharges to the combined public sewer along Bangor Road. The proposed attenuation is designed for up to and including a 1 in 100 year return period, plus 20% climate.

Should an exceedance event occur, in excess of the 1 in 100 year return period plus 20% CC, surface water flows from across the site with follow the topography of the site and make its way onto the playing field and soft landscaped areas to the east and south east of the site. The existing soft landscaping (consisting of mature trees and hedges) and proposed soft landscaping will intercept exceedance flows and minimize any impact on neighboring properties.

Relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance **MUST** be listed below, and all relevant material submitted.

1. 94001-502-P01 – Proposed Drainage
2. Waterco Communications with DCWW
3. Ground Investigation Report

Compliance with Standard S3 – Water Quality

My proposed surface water drainage scheme will comply in the following way/s:

In accordance with the CIRIA C753 publication 'The SUDs Manual' (2015) Table 26.2, commercial roofs (applicable to schools), are classified as having a 'low' pollution hazard level.

As discussed previously, infiltration based options have been discounted due to the impermeable nature of the existing ground conditions.

Rainwater butts and rainwater planters are proposed at the downpipes. Rainwater butts will provide retention for surface water runoff generated from the new roofs and will also provide an opportunity for sediment to settle thereby providing cleaner water for reuse across the site and excess surface water returned to the sewer network. Rainwater planters will provide an opportunity for the removal of pollutants through collection and biodegradation before returning improved water quality to the new onsite surface water drainage system.

ACO Channels, proposed along the eastern lengths of the car park and MUGA, will include outlets incorporating sump units. The sump units and proposed surface water attenuation will provide an opportunity for sedimentation to take place, and therefore an improved water quality will be pumped returned to the existing public sewer network.

The proposed pumps for the pumped return solution will provide filtration, thereby removing further sediment from the surface water before being discharged to the public sewer system.

The bin store will be relocated within the proposed development and will be drained separately to the foul drainage system.

Relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance **MUST** be listed below, and all relevant material submitted.

1. 94001-502-P01 – Proposed Drainage

Compliance with Standard S4 – Amenity

My proposed surface water drainage scheme will comply in the following way/s:

Taking into considering that infiltration based solutions are not feasible, due to existing ground conditions, and the remaining outdoor area being reduced due to the proposed development SUDs components are minimal across the site. However, the proposed rainwater butts and rainwater planters and the retention of the existing raised planters will provide much needed amenity along the outskirts of the building. The site will also retain the existing soft landscaping (trees and hedges/shrubs) along with additional soft landscaping around the new MUGA and car park.

Further to the above it is considered that the scheme as a whole will add significant value / amenity with its additional learning spaces, new nursery, MUGA and improved parking facilities. The proposed scheme will also add aesthetic value with the new extension to the south of the existing school building which will also be visible along Ruabon Road.

Relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance **MUST** be listed below, and all relevant material submitted.

1. 94001-502-P01 – Proposed Drainage

Compliance with Standard S5 – Biodiversity

My proposed surface water drainage scheme will comply in the following way/s:

The SuDS scheme biodiversity strategy should revolve around the creation of significant and varied habitat to increase the overall biodiversity of the site and ecological value.

Due to the size, type, location and existing ground conditions of the site, it has proved challenging to improve on biodiversity of the area. However, the implementation of rainwater butts will provide a means for garden irrigation, including the irrigation of the existing raised planters to be retained. Rainwater planters are proposed and will contribute to the biodiversity across the site. The existing soft landscaping, which include trees and hedges / shrubs, will be retained across the site. Further to this additional soft landscaping is proposed which will include new trees around the new car park and MUGA.

Relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance **MUST** be listed below, and all relevant material submitted.

1. 94001-502-P01 – Proposed Drainage

Compliance with Standard S6– Design of drainage for Construction and Maintenance and Structural Integrity

My proposed surface water drainage scheme will comply in the following way/s:

The proposed system will not be required for adoption as it does not serve more than one property. However, it will still be designed to the standards set out in Ciria C753 & Sewers for Adoption 7th Edition. The proposed drainage scheme consists of predominantly standard products and methods of construction that should not concern a suitably experienced and qualified contractor.

An O&M manual will also be provided to the school in due course, including the final 'As Built' constructions drawings and a maintenance schedule for the drainage system.

A preliminary maintenance schedule is enclosed.

Relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown [Table A](#) and [Table B](#) of this Guidance **MUST** be listed below, and all relevant material submitted.

1. JPS Maintenance Plan - Ysgol Yr Hafod

8. Assessment of Flood Risk

Is the site within an area at risk of flooding? Refer to Natural Resources Wales Development Advice maps. (Natural Resources Wales / Development and flood risk)	Yes ☐	No ☒
If the proposed development is within the area at risk of flooding, you will need to consider whether it is appropriate to submit a flood consequences assessment. (Refer to Technical Advice Note 15 (TAN15)).		

Is the site located within an area susceptible to surface water flooding? Refer to NRW Surface Water Flood Maps .	Yes ☐	No ☒
--	-------------------------------------	---

Is the site located within an area susceptible to groundwater flooding?	Yes ☐	No ☒
Is there a watercourse (as defined under Section 72 Land Drainage Act 1991) located within 20m of the proposed development?	Yes ☐	No ☒

9. Surface Water Discharge Hierarchy

Surface water drainage arrangements shall demonstrate the proposed surface water drainage complies with National SuDS Standards. As much of the runoff as possible should be discharged to each hierarchy element before a lower hierarchy element is considered. Collection and infiltration methods of drainage are required to be considered in the first instance. With reference to the hierarchy levels below, please indicate your proposed drainage arrangements.

Level	Yes	No
1. Collect for use	☒	☐
2. Infiltration	☐	☒
3. To watercourse	☐	☒
a. Is it an Ordinary Watercourse?	☐	☐
b. Is it a Main River?	☐	☐
4. To surface water sewer	☐	☒
a. Is it a Highway drain?	☐	☐
b. Is it a public sewer?	☐	☐
c. Is it a private sewer?	☐	☐

d. Other	☐	☐
5. To combined sewer	☒	☐

Has advice been sought from the asset owners?	Yes ☒	No ☐
Has advice been sought from the land owners?	Yes ☒	No ☐

10. Infiltration Assessment

Where infiltration drainage is proposed, testing should be carried out to a methodology agreed with the SAB e.g. [Infiltration Drainage - Manual of Good Practice \(CIRIA R156\)](#) and [BRE Soakaway Design \(DG 365 – 2016\)](#), and be used to inform the design, construction, maintenance, testing and assessment of infiltration systems.

Has infiltration testing been carried out?		Yes ☒	No ☐	
Analysis of development Geology (including both bedrock and superficial deposits where known)		Records indicate superficial deposits of Glacial Till beneath the western part of the site and Glaciofluvial deposits to the east. Bedrock comprises to the west Sandstone of the Cefn Rock to the west and Mudstone of the Etruria Formation to the east. Permeability tests recorded no fall in water level indicating the superficial deposits (clay) to generally be practically impervious.		
Depth to groundwater (metres)		2.0m		
Borehole testing	Reference	BH04		
	Date	08	08	2019

Has a Contaminated Land Assessment been undertaken?	Yes ☐	No ☒
Is the infiltration drainage proposed on contaminated land?	Yes ☐	No ☒

Infiltration test result	Insufficient fall in water level therefore infiltration rate could not be determined.
--------------------------	---

11. Non-performance Bond, Adoption, Operation & Maintenance

What are your proposals regarding cost of works, adoption and maintenance of the SuDS scheme?	
Non-performance Bond – Estimated cost of work	N/A
Adoption (including land agreements etc)	N/A
Funded Maintenance Plan for the lifetime of the development	N/A

12. SuDS Scheme Application Checklist

Please complete the following checklist and make sure you have read the Guidance on Making SuDS Applications for SAB Approval , the Guidance on completing the Full Application Form , and provided all the necessary information in support of your application:	
Correct Full Application fee.	We would be grateful if the fee could be confirmed.
Completed, signed and dated Full Application form.	Yes
Plan/s specifying the construction area and the extent of the drainage system for which approval is sought. All plan/s shall be at a scale of 1:2500 and MUST show the direction of North.	Yes
Taken account of SAB Guidance on technical information to be submitted to enable SAB to assess your Full Application.	Yes

13. Declaration

I/ we hereby apply for SuDS Approval as described in this form and the accompanying plans/drawings and additional information. I confirm that I have read and complied with the National SuDS Standards and, to the best of my knowledge, any facts stated are true and accurate and any opinions given are the genuine opinions of the persons giving them.

This form has been completed using evidence from the Flood Consequences Assessment where applicable, surface water drainage strategy and site plans and associated documents.

This form has been completed using accurate information. It can be used as a summary of the detailed surface water drainage proposals on this site, and clearly shows that these drainage proposals conform to the National SuDS Standards for Wales.

Form completed by	Russell Hardy
Signature	
Qualification of person responsible for signing off this application	BSc (Hons) Civil Engineering
Company	JP Structural Design
On behalf of (Client's details)	Wrexham County Borough Council
Date	30.07.2021

Disclaimer

Information provided on this form and in supporting documents may be published on the SABs SuDS register and website and be made publicly available.

For information as to how Wrexham County Borough Council handles personal data, please see our Privacy Notices on our website: www.wrexham.gov.uk

Appendix H – SAB Approval

In pursuance of its powers under the Acts and Orders referred to below, the County Borough Council as SuDS Approving Body, hereby determines your application in accordance with the particulars and plans comprising the application

**Flood and Water Management Act 2010
Schedule 3 (Wales)**

Application Ref.	SAB_FUL_2021_0804	Date Validated	15 th September 2021
Date Determined:	7 th October 2021	Ask For:	Carole Wright

Applicant: Mr Nick Bateman Wrexham County Borough Council Ruthin Road Wrexham LL13 7TU	Agent: Mr Russell Hardy JP Structural Design Ltd. Regus House Heron Way Chester Cheshire CH4 9QR
--	--

WREXHAM COUNTY BOROUGH COUNCIL as SuDS Approving Body hereby **APPROVES** the Sustainable Drainage System associated with the following development in accordance with the plans and application submitted to the Council, subject to any conditions.

Location:	Ysgol Yr Hafod Bangor Road Johnstown Wrexham LL14 2SW
Description of Proposal:	The proposed development consists of a single storey extension (over 2 levels) to the south of the existing school building, a new MUGA and car parking facilities.

Date of Decision: 7th October 2021

Signed:



Kevin Edwards
Streetscene Team Leader

On behalf of

Darren Williams

Chief Officer Environment & Technical

IT IS IMPORTANT THAT YOU COMPLY WITH THE APPROVED PLANS AND ALL CONDITIONS BELOW. PLEASE READ INFORMATIVES BELOW THAT ACCOMPANY THE DECISION.

CONDITIONS OF APPROVAL

1. The development to which this permission relates shall be begun not later than **FIVE** years from the date of this permission.
2. Any works undertaken are to be in strict accordance with the proposals contained in the submitted plans, drawings and supporting documents.
3. The Applicant shall notify the SAB at least seven days prior to its intention to commence work on site.
4. The SAB is to undertake **ONE** inspection(s) of the work to confirm SuDS features are constructed in compliance with the approval at a fee of £168 per inspection in accordance with The Sustainable Drainage (Application for Approval Fees) (Wales) Regulations 2018. The applicant is to give the SAB at least 48 hours' notice for inspection of the following feature(s):
1). Inspection of all SuDS features functioning at completion.
5. Notice in writing must be given immediately by the applicant to the SAB upon completion of the Works, with evidence that the Works have been completed in accordance with the approved plans. The SAB reserves the right to inspect the Works should the evidence be deemed unsatisfactory. Inspection fees will be charged at £168.00 per inspection in accordance with The Sustainable Drainage (Application for Approval Fees) (Wales) Regulations 2018.
6. The SAB does not accept any responsibility for the design and construction of the works that are subject of this Approval; nor liability for any costs of damage which may arise out of their design, construction, maintenance or use.
7. Site construction runoff should be adequately treated to ensure that no sediments or pollutants are passed on to any downstream receiving water bodies, SuDS or sewer.

8. The owner is obliged to maintain the drainage system in accordance with the approved design and the statutory standards for sustainable drainage systems (SuDS) for the lifetime of the development the approved SuDS serves.

INFORMATIVES & ADVISORY NOTES

- This approval does not remove from the applicant the necessity to obtain other licences, consents, approvals or permissions (including planning permission) which may be required in law or in order to comply with any duties or responsibilities for conservation or protection of the environment.
- No surface water and/or land drainage shall be allowed to connect directly or indirectly with the public sewerage network in order to prevent hydraulic overloading of the public sewerage system, to protect the health and safety of existing residents and ensure no pollution of or detriment to the environment
- Please note that this SAB approval relates solely to the approval of SuDS components. In order to establish whether the proposed development benefits from consent, the applicant is advised to refer to the planning permission granted as well as any conditions in reference to foul water drainage. In accordance with the Town & Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016 Dwr Cymru Welsh Water is a statutory consultee to the planning process and will provide comments to any proposals for foul water drainage by response to a planning application consultation.

APPROVED PLANS, DRAWINGS & SUPPORTING DOCUMENTS

1. SAB Application - Ysgol Yr Hafod
2. 94001-500-P01 - Site Information
3. 94001-501-P01 - Existing Drainage
4. 94001-502-P01 - Prop Drainage
5. Ground Investigation Report 42361 Ysgol Yr Hafod
6. JPS Maintenance Plan - Ysgol Yr Hafod
7. Waterco communications with DCWW_Extract from Waterco DS
8. Ysgol Yr Hafod - DCWW Statutory Information
9. Ysgol Yr Hafod - DCWW Statutory Information

RIGHTS AND GENERAL INFORMATION

We believe that a negotiated solution is best when dealing with disputes around SAB decisions. However a formal mechanism for appeals to the Welsh Ministers is provided in Regulations (Sustainable Drainage (Appeals) (Wales) Regulations 2018).

Full details of the procedure for appeals, including; how an appeal may be made, the information to be provided, duties of the SAB in providing information, timescales for appeal decisions and the specific duties for the Welsh Ministers, are contained in the Sustainable Drainage (Appeals) (Wales) Regulations 2018.

Please Note noted that making an appeal does not suspend a decision and a developer appealing against a condition of an approval must not start construction.

SAB decisions that can be appealed and the time-limit for doing so

In the event that a mutually acceptable resolution of a dispute over a SAB decision cannot be reached, which may relate to:

- an application for approval,
- approval conditions, including a condition specifying a non-performance bond,
- a request to adopt a drainage system.

The developer may, by notice, appeal to Welsh Ministers against the decision, the appeal must at the same time be copied to the SAB. In practice, the Planning Inspectorate Wales (PINS) will handle the appeal on behalf of the Welsh Ministers. A copy of the form needed to make an appeal is available by contacting PINS:

- Website: https://beta.gov.wales/planning-inspectorate?contact_us/
- Email: wales@pins.gsi.gov.uk
- Telephone: 0303 444 5940

An appeal must be made to the Welsh Ministers (PINs) and copied to the SAB within the time-limit set in Regulation 5 of the Sustainable Drainage (Appeals) (Wales) Regulations 2018:

- Any appeal concerning an application for approval or a request to adopt must be made within the period of 6 months beginning with:

Appeal Type	Either	Or
An application for approval (other than a decision about a condition)	The date of the decision	If the appeal is against the deemed refusal of the application arising from the failure of the approving body to determine the application within the period prescribed in Regulation 5 of the Sustainable Drainage (Approval and Adoption Procedure) (Wales) Regulations 2018, the last day of that period.

- Any appeal concerning a condition of approval, including a condition specifying a non-performance bond, must be made within the period of 6 months beginning with the date approval is granted.

In addition, the appellant must identify a choice of appeal mechanism:

- Written representation
- Oral hearing
- Enquiry

Appeals may be submitted electronically or by post. An appeal may be withdrawn at any time by the appellant by giving notice in writing to the Welsh Ministers (PINs), copied to the SAB.

Appendix I – GI Extract

WREXHAM COUNTY BOROUGH COUNCIL

**YSGOL YR HAFOD,
JOHNSTOWN, LL14 2SW**

GROUND INVESTIGATION REPORT

Contract: 42361

Date: September 2019

Ian Farmer Associates (1998) Limited
14 – 15 Rufford Court, Warrington, Cheshire
WA1 4RF
Tel: 01925 855440
e-mail: warrington@ianfarmer.co.uk

- 6.2.6 Square pad foundations of widths about 1m at a minimum depth of 0.75m should support an allowable bearing pressure about 100kN/m² which would provide an adequate factor of safety against shear failure and limit settlements to the order of 25mm.
- 6.2.7 It is possible that shallow strip foundations could be supported on different strata, in this instance sand and clay, resulting in possible differential settlements developing due to the different settlement characteristics of these strata. It is recommended that reinforcement should be included within strip foundations to span loose zones and minimise differential settlement.

6.3 Ground Floor Slabs

- 6.3.1 Based on observation on site consideration may be given to constructing ground floor slabs on formation prepared in the natural strata.
- 6.3.2 Any deleterious material should be removed and replaced with properly compacted granular fill.

6.4 Excavations

- 6.4.1 Based on observations on site, together with the results of in-situ and laboratory tests, it is considered that excavations to less than 1.00m may not stand unsupported in the short term. Side support for safety purposes should of course be provided to all excavations which appear unstable, and those more than 1.20m deep, in accordance with Health and Safety Regulations.
- 6.4.2 It is anticipated that standard plant will be generally suitable for excavation.

6.2 Permeability

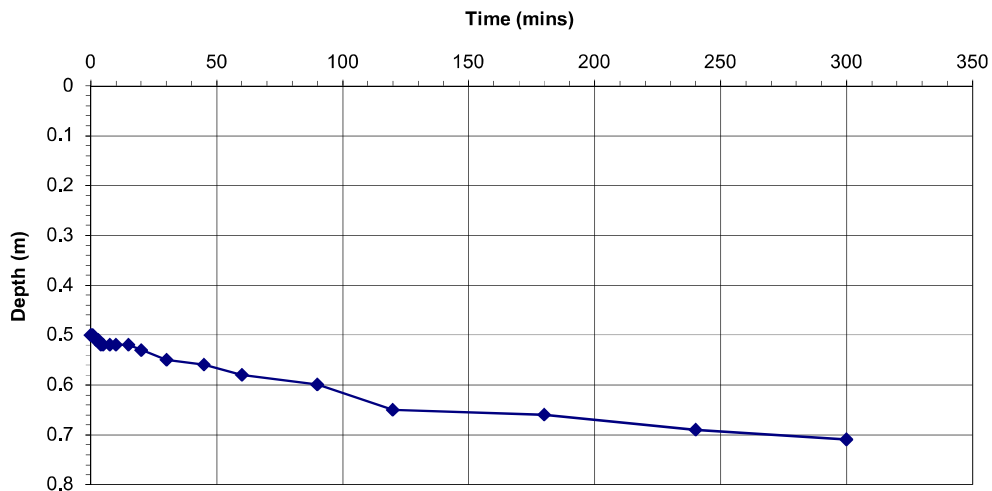
- 6.4.1 The permeability of the ground was assessed by in-situ variable head testing carried out in BH04. The results are presented in Appendix 2.
- 6.4.2 The test recorded no fall in water level indicating the superficial deposits (clay) to generally be practically impervious (Ref 9.11).
- 6.4.3 On this basis soakaway drainage is not likely to be effective.

CALCULATION OF INFILTRATION RATE IN ACCORDANCE WITH BRE DG 365: 2016

Client:	Wrexham Borough County Council		
Site:	Johnstown		
Job No:	42361	Test No:	SA01
Date	08/08/2019	Weather:	Sunny

INPUT DATA AND CALCULATION

Time (min)	Depth (m)	Size of Trial Pit	Length (m) =	2.00
0	0.5		Width (m) =	0.60
0.5	0.5		Depth (m) =	1.60
1	0.5			
2	0.51	Depth to water at start of test (m) = 0.50		
3	0.51	Depth to water at end of test (m) = 0.71		
4	0.52	Depth to water at 75% level (m) = 0.78		
5	0.52	Depth to water at 50% level (m) = 1.05		
7.5	0.52	Depth to water at 25% level (m) = 1.33		
10	0.52			
15	0.52	Base area of pit (m ²) = 1.20		
20	0.53	Effective area of loss a _{s50} (m ²) = 4.06		
30	0.55	V _{P75} - V _{P25} (m ³) = 0.66		
45	0.56	From the graph: t_{p75} (min) = n/a t_{p25} (min) = n/a		
60	0.58			
90	0.6			
120	0.65			
180	0.66			
240	0.69			
300	0.71			
		Soil infiltration rate, f, (m/s) =	n/a	normal test
		Tested by:	HD/HH	Date: 08/08/2019
		Checked by:	HH	Date: 19/08/2019


Notes

Insufficient fall in water level therefore infiltration rate could not be determined.

Soakaway Trial Pit Photographs



Trial Pit SA01



Trial Pit SA01

Soakaway Trial Pit Photographs



Trial Pit SA01

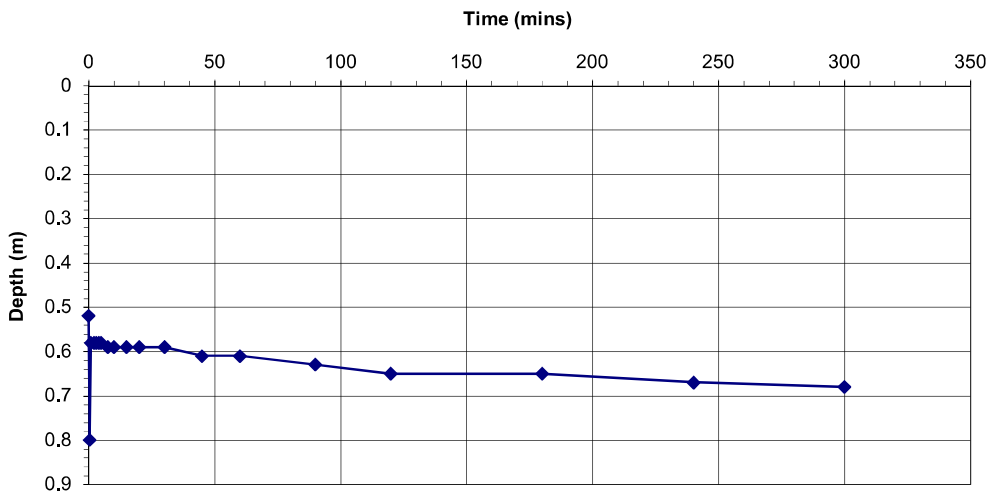
	Plant used: Tracked excavator		Project: Ysgol Yr Hafod, Johnstown			Location ID: SA02	
	Dates: 08/08/2019		Client: Wrexham County Council			Sheet 1 of 1	
Trial Pit Log		Location: 330229.43E 346021.57N		Ground level:	Logged by: HH	Vertical scale: 1:25	Contract ID: 42361

Samples & In Situ Testing			Strata Details				Scale	Water Strike	Backfill/ Installation
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Strata Description	Legend			
				(0.30)	Grass over dark brown, fine to coarse SAND with rootlets.		1		
				0.30	Orangish grey, mottled brown, gravelly, slightly clayey, fine to coarse SAND with rare nodules of clay and low cobble content.				
				(1.20)					
				1.50	End of Trial Pit at 1.50m				
							2		
							3		
							4		
							5		

Termination:			Stability: Soakaway pit remained stable during excavation.		Remarks:
Dimensions (Length m x Width m): 2.20 x 0.80					
Water Strikes					
Strike (m)	Time (mins)	Rose to (m)	Remarks		
					Checked by: Status:
					DRAFT IFA TP v01.01

CALCULATION OF INFILTRATION RATE IN ACCORDANCE WITH BRE DG 365: 2016

Client:	Wrexham Borough County Council		
Site:	Johnstown		
Job No:	42361	Test No:	SA02
Date	08/08/2019	Weather:	Sunny
INPUT DATA AND CALCULATION			
Time (min)	Depth (m)	Size of Trial Pit	Length (m) = 2.20
0	0.52		Width (m) = 0.60
0.5	0.8		Depth (m) = 1.50
1	0.58		
2	0.58	Depth to water at start of test (m) = 0.52	
3	0.58	Depth to water at end of test (m) = 0.80	
4	0.58	Depth to water at 75% level (m) = 0.77	
5	0.58	Depth to water at 50% level (m) = 1.01	
7.5	0.59	Depth to water at 25% level (m) = 1.26	
10	0.59		
15	0.59	Base area of pit (m ²) = 1.32	
20	0.59	Effective area of loss a_{s50} (m ²) = 4.06	
30	0.59	$V_{P75} - V_{P25}$ (m ³) = 0.65	
45	0.61		
60	0.61		
90	0.63		
120	0.65		
180	0.65		
240	0.67		
300	0.68		
		From the graph:	
		t_{p75} (min) = n/a	
		t_{p25} (min) = n/a	
		Soil infiltration rate, f , (m/s) =	n/a
		normal test	
		Tested by: HD/HH	Date: 08/08/2019
		Checked by: HH	Date: 19/08/2019


Notes

Insufficient fall in water level therefore infiltration rate could not be determined.

Soakaway Trial Pit Photographs



Trial Pit SA02



Trial Pit SA02

Soakaway Trial Pit Photographs



Trial Pit SA02

	Plant used: Tracked excavator		Project: Ysgol Yr Hafod, Johnstown			Location ID: SA03	
	Dates: 08/08/2019		Client: Wrexham County Council			Sheet 1 of 1	
Trial Pit Log		Location: 330178.73E 346013.14N		Ground level:	Logged by: HD	Vertical scale: 1:25	Contract ID: 42361

Samples & In Situ Testing			Strata Details				Scale	Water Strike	Backfill/ Installation
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Strata Description	Legend			
				(0.30)	Grass over dark brown, fine to coarse SAND with rootlets.		1		
				0.30	Orangish brown and grey, gravelly, slightly clayey, fine to coarse SAND. Gravel is subangular to subrounded, fine to coarse including mudstone, coal and sandstone.				
				(1.20)					
				1.50	End of Trial Pit at 1.50m				
							2		
							3		
							4		
							5		

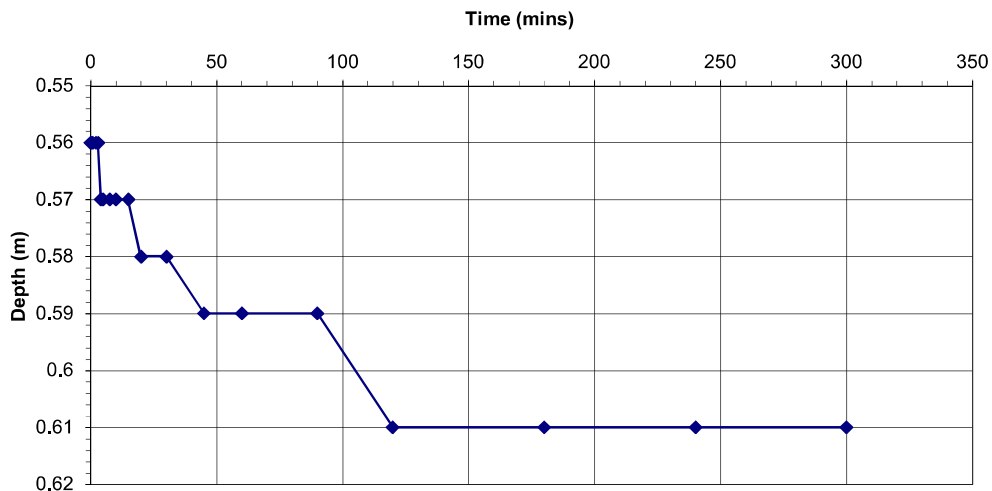
Termination:			Stability: Soakaway pit remained stable during excavation.		Remarks:	
Dimensions (Length m x Width m): 2.30 x 0.85						
Water Strikes						
Strike (m)	Time (mins)	Rose to (m)	Remarks			
					Checked by: Status:	IFA TP v01.01 DRAFT

CALCULATION OF INFILTRATION RATE IN ACCORDANCE WITH BRE DG 365: 2016

Client:	Wrexham Borough County Council		
Site:	Johnstown		
Job No:	42361	Test No:	SA03
Date	08/08/2019	Weather:	Sunny

INPUT DATA AND CALCULATION

Time (min)	Depth (m)	Size of Trial Pit	Length (m) =	2.00
0	0.56		Width (m) =	0.60
0.5	0.56		Depth (m) =	1.50
1	0.56			
2	0.56	Depth to water at start of test (m) = 0.56		
3	0.56	Depth to water at end of test (m) = 0.61		
4	0.57	Depth to water at 75% level (m) = 0.80		
5	0.57	Depth to water at 50% level (m) = 1.03		
7.5	0.57	Depth to water at 25% level (m) = 1.27		
10	0.57			
15	0.57	Base area of pit (m ²) = 1.20		
20	0.58	Effective area of loss a _{s50} (m ²) = 3.64		
30	0.58	V _{P75} - V _{P25} (m ³) = 0.56		
45	0.59			
60	0.59			
90	0.59			
120	0.61			
180	0.61			
240	0.61			
300	0.61			
		Soil infiltration rate, f, (m/s) =		n/a
				normal test
		Tested by:	HD/HH	Date: 08/08/2019
		Checked by:	HH	Date: 19/08/2019


Notes

Insufficient fall in water level therefore infiltration rate could not be determined.

Soakaway Trial Pit Photographs



Trial Pit SA03



Trial Pit SA03

Soakaway Trial Pit Photographs



Trial Pit SA03

Appendix J – O&M Manuals

Wynne Construction

Ysgol Yr Hafod,

Johnstown

Attenuation Tank and Packaged
Pumping Stations - Maintenance
Plan

94001-JPS-XX-XX-RP-D-0001

Rev: P01 Status: S4

July 2021



Table 1: Maintenance Inspection Checklist

GENERAL INFORMATION			
Site ID	Ysgol Yr Hafod, Johnstown, Wrexham, LL14 2SW		
Site Location and co-ordinates (GIS if appropriate)	Bangor Road, Johnstown, Wrexham (330135, 346048)		
Elements forming the Sewage Treatment scheme	SW Attenuation Packaged Pumping Stations	Approved Drawing Reference(s)	94001-502-P01
Inspection frequency	Annual	Approved Specification Reference	-
Type of development	School	Specific purpose of any parts of the scheme (e.g. biodiversity, wildlife and visual aspects)	-
Agreements Restrictions			
Discharge Type	Connection	Outflow	Agreement
Surface Water	Pumped Return to MH upstream of public sewer network	15l/sec	DCWW
Foul	Pumped Return to MH upstream of public sewer network	TBC	



	Inspection date				Inspection date			
	Details	Y/N	Action required	Date Completed	Details	Y/N	Action required	Date Completed
GENERAL INSPECTION ITEMS								
Is there any evidence of erosion, ponding, or other poor hydraulic performance?								
Is there any evidence of, oils, poor water quality, odours, nuisance insects?								
Have any health and safety risks been identified to either the public or maintenance operatives?								



	Inspection date				Inspection date			
	Details	Y/N	Action required	Date Completed	Details	Y/N	Action required	Date Completed
SILT/SEDIMENT ACCUMULATION								
Is there any sediment accumulation at inlets (or other defined accumulation zones such as the surface of filter drains or infiltration basins and within proprietary devices)? If yes, state depth (mm) and extent Is removal required? If yes, state waste disposal requirements and confirm all waste management requirements have been complied with (consult Environment Agency or SEPA).								
SYSTEM BLOCKAGES / SEWAGE BUILD UP								
Is there evidence of sewage accumulation in the system? If yes, is this a blockage risk?								
Is there any evidence of any other clogging/blockage of outlets or drainage paths?								



	Inspection date				Inspection date			
	Details	Y/N	Action required	Date Completed	Details	Y/N	Action required	Date Completed
INFRASTRUCTURE								
Is there evidence of any accidental damage to the system (e.g. wheel ruts?)								
Is there any evidence of cross connections or other unauthorised inflows?								
Is there any evidence of tampering with the pumping station?								
Has annual pumping station service been undertaken?								
Is there any evidence of tampering with the Attenuation Tanks?								
Are Attenuation tank vents clear?								
Is there any evidence of tampering with the flow controls?								
Are gullies/channels/kerb drainage clear of debris/detritus?								
Are Rainwater Down Pipes and gutters clear of debris /detritus?								



Are there any other matters that could affect the performance of the system in relation to the design objectives for hydraulic, effluent quality, biodiversity, visual and odour aspects? (Specify.)								
OTHER OBSERVATIONS								
Information appended (e.g. photos)								



	Inspection date				Inspection date			
	Details	Y/N	Action required	Date Completed	Details	Y/N	Action required	Date Completed
SUITABILITY OF CURRENT MAINTENANCE REGIME								
Continue as current								
Increase maintenance								
Decrease maintenance								
NEXT INSPECTION								
Proposed date for next inspection								

Additional Notes