

Appendix A2 - Surface Water Drainage Proforma Statement for

Category C and D applications (see Appendix F for full descriptions)

This form should be used on planning applications which include any of the following:

- 9 or less dwellings
- Manufacture or retail with a floor space less than 1000 sqm
- All development sites less than 1 hectare in Flood Zone 1

Applicant Name:	Mr & Mrs L O'Brian					
Planning Application Name:	Erection of a permanent occupational workers dwelling					
Development Address & Post Code:	Harehill Farm, Edgton, Craven Arms, Shropshire, SY7 8HN					
Application Type - Outline or Full:	FULL					
Is the site Brownfield or Greenfield	Brownfield					
Total Site Area served by drainage system (excluding open space) (Ha)*	100m ²	На				



In order to provide the level of surface water drainage detail required for Minor development sites the applicant, or those working on their behalf, must complete the following proforma to be submitted in support of an application.

The proforma should be considered alongside other supporting SuDS Guidance but focuses on ensuring flood risk is not increased elsewhere. The SuDS solution must operate effectively for the lifetime of the development, taking into account future climate change.

Where evidence is requested, this can be provided as text or as a reference number for a drawing or other document included in your planning submission. This proforma will be used as a basis for the Lead Local Flood Authorities (LLFA) response to consultation from the Local Planning Authority (LPA).



1. Existing Site

Please provide general information on the site and its proximity to any known or mapped flood risk.

Fluvial and Pluvial flood maps can be found on the .gov website here: <u>https://flood-map-for-planning.service.gov.uk/</u>

Evidence Required	Required for Single Dwelling	Required for Outline Planning	Required for Full Planning	Evidence Supplied
Site location plan	Y	Y	Y	
Site layout plan at an identified scale with a north arrow (minimum 1:500)	Y	Y	Y	
Plan showing the proximity of Flood Zones 2 and 3	Y	Y	Y	
Plan showing proximity of surface water / pluvial flooding	Υ	Υ	Υ	
Simplified Flood Risk Assessment for single building developments in Flood Zones 2 and 3	Y	N	N	
Full Flood Risk Assessment for multiple buildings in Flood Zones 2 and 3	N	Y	Y	
Topographical survey of the site, including cross sections of any adjacent watercourses for an appropriate distance upstream and downstream of the proposed discharge point	Ν	N	Y	



2. Impermeable Area

Please provide information on the existing and proposed impermeable areas on site including an assessment of urban creep associated with additions of hardstanding made by future property owners. This information is required for all development types.

Area	Existing	Proposed	Difference (Proposed – Existing)
Total Site Area (Red Line Boundary)	0.1ha	N/A	N/A
Impermeable Area (ha) Areas to be shown on a plan	100m ²	100m ²	0
Urban Creep (+10% of proposed impermeable area)	N/A		N/A
Total Impermeable Area (Including Urban Creep)		100m ²	



3. Surface Water Discharge

Please provide information on the proposed point of surface water discharge for the site. This information is required for all development types.

Consideration for the disposal for surface water should be in line with the SuDS hierarchy with preference given to infiltration where possible. Please be aware Shropshire Council will not permit connections to the highway network form new development.

Evidence Required	Evidence Supplied
Infiltration (If checked proceed to Section 4)	
To Watercourse (If checked proceed to Section 5)	
To Public Surface Water Sewer. (If checked proceed to Section 5)	
To Public Combined Sewer / Foul (If checked proceed to Section 5)	



4. Infiltration

If you have selected Infiltration as the method of surface water disposal in Section 3 above, please fill in the below table and then move to Section 9. If surface water will be disposed of to a positive outfall, proceed to Section 5.

Evidence Required	Required for Single Dwelling	Required for Outline Planning	Required for Full Planning	Evidence Supplied
Results of Infiltration Tests undertaken in line with BRE365	Y	N	Y	
Are infiltration rates above 1x10 ⁻⁶ m/s.	Y	N	Y	
Type of infiltration system to be used	Y	N	Y	
Drainage layout plan showing location of proposed soakaway	Y	Y	Y	
Is the site within a known Source Protection Zones (SPZ)?	Y	Y	Y	
Soakaway design in accordance with BRE Digest 365 to cater for a 1 in 10 year storm event.	Y	N	N	
Soakaway design in accordance with BRE Digest 365 to cater for a 1 in 100 year storm event plus 40% Climate Change. Alternative soakaway designed for the 1 in 10 year storm event together with details of flood routing to show what would happen in an 'exceedance event' above the 1 in 10 year storm event.	N	N	Y	



5. Existing Site Runoff Rate Estimation

Please provide information on the existing pre-development runoff from the site and the proposed post development rate of discharge. Post-development discharge rates should be in line with those set out in the SuDS Guidance Document. Ideally drainage design software such as MicroDrainage or Causeway should be used to calculate rates of discharge however it is appreciated that this may not be available or appropriate for smaller scale developments.

Where design software is not used for **Greenfield** sites the HR Wallingford Greenfield Estimation Tool can be used: <u>https://www.uksuds.com/tools</u>. Please provide a pdf results sheet as part of your application documents.

Where design software is not used for **Brownfield sites** please use the 2.78 (APR) calculation were: \mathbf{A} = Total site area, \mathbf{P} = % of total site area impermeable, and \mathbf{R} = 50 (mm/hr).

	Required for	Required for	Required for	
Greenfield Runoff Estimation	Single	Outline	Full	Existing Rates (I/s)
	Dwelling	Planning	Planning	
Site Greenfield QBAR rate	Y	Y	Y	
1 in 1 year	Y	Y	Y	
1 in 30 year	Y	Y	Y	
1in 100 year	Y	Y	Y	
1 in 100 year plus 40% Climate Change	Y	Y	Y	
Brownfield Runoff Estimation				
2.78 (APR) Calculation Result	Y	Y	Y	



6. Proposed Post-development Discharge Rate

Please provide information on the proposed post-development rate of discharge.

For **Greenfield sites** the post-development rate of discharge must not exceed the Greenfield QBAR rate set out in Section 5.

For **Brownfield sites** the proposed rate of discharge should ideally restrict the site to the Greenfield rate of 5 l/s. If this is not possible a minimum of a 50% reduction on pre-development rate of discharge set out in Section 5 should be provided.

	Required for	Required for	Required for	
Evidence Required	Single	Outline	Full	Proposed Rates (I/s)
	Dwelling	Planning	Planning	
Proposed Discharge Rate	Y	Y	Y	



7. Required Attenuation Volumes

Please provide information on the surface water storage volumes required to achieve the proposed rates of discharge set out in Section 6.

Ideally drainage design software such as MicroDrainage or Causeway should be used to calculate required storage volumes however it is appreciated that this may not be available or appropriate for smaller scale developments.

Where design software is not used the HR Wallingford Surface Water Storage Volume Estimation tool can be used to calculate required onsite storage volumes: <u>https://www.uksuds.com/tools.</u> Please provide a pdf results sheet as part of your application documents.

	Required	Required	Required for	
Return Period	for Single	for Outline	Full	Required Volume (m ³)
	Dwelling	Planning	Planning	
1 in 1 year	Y	Y	Y	
1 in 30 year	Y	Y	Y	
1 in 100 year	Y	Y	Y	
1 in 100 year plus 40% Climate	Y	Y	Y	
Change				



8. SuDS Management Train

For all development types please provide evidence that the use of SuDS features has been considered when designing the surface water drainage network.

Preference should always be given to the use of above ground attenuation features which also provide surface water treatment, with underground storage only being proposed as a last resort.

Measure	Y / N	Consideration Reason
Attenuation Pond / Basin		
Swale		
Permeable paving		
Rain gardens		
Storage Crates / Oversized Pipework		
Rain/Grey water harvesting		
Other		



9. Site Drainage Design

Please provide drainage design information to show that the proposed drainage design can be delivered and accommodated within the proposed site layout. Ideally drainage design software such as MicroDrainage or Causeway should be used to design the proposed drainage network however it is appreciated that this may not be available or appropriate for smaller scale developments.

Surface water attenuation features which serve multiple properties should not be constructed in private property and should be located in areas of public open space or shared space to allow future maintenance. Details on future maintenance responsibilities for surface water attenuation features should also be provided to ensure SuDS features are maintained over the lifetime of the development.

Evidence Required	Required for Single Dwelling	Required for Outline Planning	Required for Full Planning	Evidence Supplied
Conceptual drainage layout plan showing that proposed surface water attenuation feature or soakaway can be accommodated within the site layout.	N	Y	Ν	
Drainage Layout Plan at an appropriate scale including numbered manholes with invert levels, along with numbered pipe runs and pipe diameters.	Y	N	Y	
Detailed Design of proposed Soakaway or attenuation feature and associated flow control device.	Y	N	Y	
MicroDrainage/Causeway design in .mdx format or drainage calculations showing site can be effectively drained up to the1 in 100 year plus 40% Climate Change	Ν	N	Y	
Details of future ownership of proposed soakaway or attenuation features.	N	N	Y	
Where a feature is to be maintained by a management company, please provide company details including 24hour emergency contact details.				



10. Exceedance / Overland Flow Routes

Please provide evidence that flows that exceed the design capability of the proposed drainage network will be directed away from proposed properties and away from existing properties outside the site boundary.

Consideration should also be given for flows produced off site and how they may flow onto the proposed development.

Exceedance	Required for Single Dwelling	Required for Outline Planning	Required for Full Planning	Evidence Supplied
Exceedance / Overland Flood Routing Plan	Y	Y	Y	
Flow arrows based on proposed site topography which show how flows which exceed the capacity of the drainage network will not result the flooding of more vulnerable areas within the development site or contribute to surface water flooding of any area outside of the development site.				



11. Foul Drainage for Non-Mains Connections

Where foul flows produced by development will not connect to the public sewer network, further information on how these flows will be managed are required.

Non-Mains Foul Connection	Required for Single Dwelling	Required for Outline Planning	Required for Full Planning	Evidence Supplied
Details and sizing of the proposed Package treatment plan or septic tank sized in accordance with 'British Water Flows and Loads 4	Y	Y	Y	
Details of percolation tests and design of the drainage field in accordance with The Building Regulation Part H	Y	Y	Y	
If discharging to positive outfall plan showing proposed point of connection.	Y	Y	Y	
Evidence that package treatment plant discharge is to a watercourse that normally has flow throughout the year.	Y	Y	Y	
Submission of the Foul Drainage Assessment Form (FDA1 Form).	Y	Y	Y	



The above form should be completed by the applicant or the agent acting on their behalf.

It should serve as a summary of the documents and drainage information submitted to support the allocation and should form part of the evidence base to show that the site can effectively be drained and that the proposed rate of discharge will not increase offsite flood risk.

Form completed by:					
Qualification of person responsible for signing off this pro-forma:					
Company:					
On behalf of (Client's details)					
Date:					



Appendix F Development Types

Reference	Shropshire Category	Туре	Description
01Q	А	Largescale Major Dwellings	200 or more dwellings to be constructed or 4ha or more when number of dwellings not given
02Q	А	Largescale Major Offices	Floor space of 10,000 sq.m or more or where site area is 2ha or more
03Q	А	Largescale Major Manufacture	Floor space of 10,000 sq.m or more or where site area is 2ha or more
04Q	А	Largescale Major Retail	Floor space of 10,000 sq.m or more or where site area is 2ha or more
05Q	А	Largescale Gypsy/ Traveller	200 or more pitches
06Q	А	Largescale Major Other	Floor space of 10,000 sq.m or more or where site area is 2ha or more
07Q	В	Small-scale Major Dwellings	Between 10 – 199 dwellings to be constructed or site area is 0.5ha and less than 4ha where the number of dwellings is not given
s08Q	В	Small-scale Major Offices	Floor space of between 1,000sqm and 9,999sqm or where the site area is 1ha and less than 2 ha.
09Q	В	Small-scale Major Manufacture	Floor space of between 1,000sqm and 9,999sqm or where the site area is 1ha and less than 2 ha.
10Q	В	Small-scale Major Retail	Floor space of between 1,000sqm and 9,999sqm or where the site area is 1ha and less than 2 ha.
11Q	В	Small-scale Gypsy/ Traveller	Between 10 – 199 pitches
12Q	В	Small-scale Major Other	Floor space of between 1,000sqm and 9,999sqm or where the site area is greater than 1ha and less than 2 ha.
13Q	С	Minor Dwellings	1 - 9 dwellings (inclusive) constructed or a site area of less than 0.5ha where number of dwellings is not given
14Q	С	Minor Offices	Less than 1,000sqm or where the site area is less than 1ha.
15Q	С	Minor Manufacture	Less than 1,000sqm or where the site area is less than 1ha.



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Reference	Category	Туре	Description
16Q	C	Minor Retail	Less than 1,000sqm or where the site area is less than 1ha.
17Q	С	Minor Gypsy/ Traveller	Between 1 – 9 pitches
18Q	С	Minor Other	Less than 1,000sqm or where the site area is less than 1ha.
19Q	D	Minerals Processing	
20Q	D	Change of Use	
21Q	D	Householder	
22Q	D	Advertisements	
23Q	D	Listed Building Consent	Applications to extend and/or alter
24Q	D	Listed Building Consent	Applications to demolish
25Q	D	Conservation Area Consent	
26Q	D	Certificate of Lawful Dev.	Both Proposed Use and Existing Use
27Q	D	OHL/TEL Notifications / TPO	
28Q	D	Trees in Cons. Area/ Hedgerow Removal	
42Q	D	Prior Notifications (Agri)	

Site area is defined as the area directly involved in some aspect of the development. Normally this will be the area outlined on the plan included with the application form. If the area involved in a development is split into two parts by a classified road it should still be considered as one site. The area occupied by the road should not be included in the site area.

The **floor space** of a building is defined as the sum of the floor area within the building, measured externally, at each level. * Basement car parks, rooftop plant rooms, staircases should all be included in the floor space figure. **If two floors then you calculate for each floor*.

Change of Use: Many developments involve some change of use of land or building use but a decision should only be classified 'Change of Use' if:

- the application does not concern a major development
- no building or engineering work is involved

Where a largescale major or small-scale major development is subject to a change of use application, it should be coded as largescale major or small-scale major and not as a change of use. The use category will be determined by the 'end use' of the proposed change.



Householder Developments: are defined as those within the curtilage of a house (or a single flat) which require an application for planning permission and are not a change of use. Included in householder developments are; extensions, conservatories, dormer windows, alterations, garages, car ports or outbuildings, swimming pools, walls, fences, domestic vehicular accesses, porches, satellite dishes

Excluded from Householder Development: are applications relating to any work to two or more flats, applications to change the number of dwellings, changes of use to part or all of the property to non-residential (including business) uses, anything outside the curtilage of the property (including stables if outside the curtilage)

The application for a **variation or removal of condition** should be coded under the same code as the original application