## **CONSULTATION DRAFT North West SuDS Pro-forma**

This pro-forma supports developers and regulators in **summarising and confirming** how surface water from a development will be managed sustainably under current and future conditions. It is required for any application which seeks planning permission for major development\* and recommended to accompany minor applications.

It should be **completed in conjunction with 'Completing your Pro Forma' Guidance** and your sustainable drainage system should be designed in accordance with <u>CIRIA The</u> <u>SuDS Manual C753</u> and any necessary adoption standards. **Complete all white boxes and submit this pro-forma to the Local Planning Authority**, along with your supporting evidence.

The pro-forma follows the <u>National Planning Policy Framework</u>, <u>House of Commons Written Statement (HWSW 161) on SuDS</u>, <u>Planning Practice Guidance</u> and <u>Defra's Technical</u> <u>Standards for Sustainable Drainage Systems</u>. It is supported by the <u>Defra/EA Guidance on Rainfall Runoff Management</u> and can be completed using freely available tools such as <u>Tools for Sustainable Drainage Systems</u> or approved Industry Standard surface water management design software.

\* (as defined in Section 2 of Statutory Instrument 2015 No. 595) or on sites of 0.5 hectares in Critical Drainage Areas.

Section 1: Development Det	ails					
Planning Application Reference (if available)			Have you sub Assessment?	Have you submitted a Flood Risk Assessment?		No 🗆
Development Name			Have you sub Drainage Stra	nitted a Sustainable tegy?	Yes 🗆	No 🗆
Development Address (including postco	evelopment Address (including postcode) Refer to Planning Practice Guidance "Flood Risk and Coastal Change" Paragraph 026		ime of Development (years) Practice Guidance "Flood Risk and Paragraph 026			
Developer(s) and Consultant(s) Nam	ies:		Pre-Application			]
Development Grid Reference	Eastings		Type of	Outline		]
	Northings		Planning Application	Full		]
Total Development Site Area (Ha)			(√)	Hybrid		]
Area served by proposed sustainable system (excluding open space) (Ha)*	e drainage			Reserved Matters		]
Development Type						
Greenfield Site						1
• Site is undeveloped and a new drainage system will be installed; <u>OR</u>						1
Site is already developed and a new surface water drainage system will be installed to serve the new development.						
Previously Developed Site (Consult your LLFA before selecting this option)						]
• Site is already developed, and the entirety of the existing surface water drainage system will be used to serve the new development; OR						

•	Where records of the previously developed system are not available so that the hydraulic characteristics of the system cannot be determined or where the drainage
	system is not in reasonable working order i.e. broken, blocked or no longer operational for other reasons, then one of the approaches outlined in Section 24.5 of the
	SuDS Manual 2015 (CIRIA 753) should be adopted.

Section 2: Impermeable Area and Existing Drainage			rainage	<b>ge</b> For outline or reserved matters applications,			
	Existing (E)	Proposed (P)	Change (P – E)	Evidence Checklist			
State Impermeable Area (Ha)				Plans showing development layout of site with existing and proposed impermeable areas.			
Conceptual Drainage Des	ign			<ul> <li>Plans showing:</li> <li>Existing and modified flow routes</li> <li>Current (if any) and proposed 'source control' and 'management train' locations of sustainable drainage components (C753 Chapter 7)</li> <li>Note consideration should be given to manage surface water from both impermeable and permeable surfaces (including gardens and verges).</li> </ul>			
Are there existing sewers bodies, highway drains, s the site?	s, watercourses soakaways or fi	, water Iter drains on	Yes 🗆 No 🗆	<ul> <li>Plans showing existing layout to include all:</li> <li>Watercourses, open and culverted</li> <li>Water bodies – ponds, swales etc.</li> <li>Sewers, including manholes</li> <li>Highway drains, include manholes</li> <li>Infiltration features - soakaways, filter drains etc</li> </ul>			

Section 3: Calcul	Section 3: Calculate Peak Discharge <u>RATES</u> – Technical Standards S2 and S3 (unless S1 applies)								
Rainfall Event	Existing Rate (I/s)	Greenfield Rate (l/s)	Proposed Rate (I/s) Previously developed sites must reduce discharge rates by a minimum of XX%	Evidence Checklist					
Qbar				Methodology used to calculate peak discharge rate clearly stated					
1:1 Year Event				and justified.					
1:30 Year Event				Impermeable areas plan, supported by topographical survey confirming positive drainage					
1:100 Year Event				MicroDrainage (or similar) calculations					

Section 4: Calculate Discharge VOLUME – Technical Standards S4, S5 and S6 (unless S1 applies)									
Rainfall Event	Existing Volume (m³)	Greenfield Volume (m <sup>3</sup> )	Proposed Volume (m³)	Evidence Checklist					
1:100 Year 6 Hour Event				Methodology used to calculate discharge volume clearly stated and justified. MicroDrainage (or similar) calculations					

Section 5: Storage – Technical Standards S7 and S8			
Storage Details	Details	Evidence Checklist	
State climate change allowance used (%)		State / use in MicroDrainage (or similar)	
State storage volume required (m <sup>3</sup> ) (excluding non-void spaces ) NOTE: MUST include an allowance for climate change (20 – 40%) and urban creep (XX%)		Drainage plans showing location of attenuation and all flow control devices and supporting calculations	
Summarise how storage will be provided for 1:30 year event on site.		Plans showing size and location of storage and supporting calculations	
Storage must be designed to ensure that at no flooding occurs onsite in a 1 in 30 year event except in designed areas <u>and</u> no flooding occurs offsite in a 1 in 100 year (+ climate change allowance) event.			
Summarise how storage will be provided for 1:100 year (+ climate change) 6 hour event on site. Where storage above the 1:30 year rainfall event is provided in designated areas designed to accommodate excess surface water volumes, plans showing storage locations and surface water depths and supported by MicroDrainage (or similar) calculations.		Plans showing size and location of storage and supporting calculations	

Section 6: Hierarchy of drainage options – Planning Practice Guidance								
Surface Water Discharge Method	Proposed? Tick ALL that apply		If YES - Evidence Checklist		If NO - Evidence Checklist Tick <u>ALL</u> that apply			
			Completed Infiltration Checklist from CIRIA The SuDS Manual C753 Appendix B An editable version of this form is available on <u>SusDrain</u> website.		<ul> <li>Note: in some cases desktop information can provide justification for point B and occasionally point A.</li> <li>A. Site investigation to show that the ground is not free draining (e.g. Soil Permeability Testing stating Percolation Coefficient, in accordance with BRE 365).</li> </ul>			
1. Into the ground (via infiltration)	Yes 🗌 🛛 No 🗖				<ul> <li>Evidence to show that infiltration to ground would result in a risk of deterioration to ground water quality</li> </ul>			
					C. Visibility of Geotechnical advice which determines that infiltration of water to ground would pose an unacceptable risk of geohazards to the site and/or local area.			
					AND Statement providing justification in your Sustainable Drainage Strategy			
	Yes 🗆 No 🗆		Surface waterbody survey/ report (within the site curtilage)		Plan showing nearby watercourses and waterbodies			
<b>2. Discharge to a surface waterbody</b> <i>NOTE: Consent or Permit may be required – refer to guidance</i>	Water body Main river Ordinary watercourse Canal				Statement providing justification in your Sustainable Drainage Strategy Note: where third party land is cited as a barrier, you should provide visibility of discussions held to date with the riparian owner of the waterbody.			
			Written correspondence from Water and		Plan showing nearby sewers			
3. Discharge to surface water sewer or highway drain	Yes □ No □ Surface water sewer □ Highway drain □		Sewerage Company/ Highway Authority regarding proposed connection.		AND Statement providing justification in your Sustainable Drainage Strategy			
4. Discharge to combined sewer	Yes 🗆 No 🗆							

## **Section 7: Infiltration Proposals**

Where ground conditions are not verified and you are proposing to discharge surface water to ground (via infiltration), you should consider an alternative 'Plan B' sustainable drainage design utilising an alternative discharge method, in case infiltration proposals are proven not feasible upon site specific ground investigation.

The alternative 'Plan B' design should demonstrate a residual level of infiltration, in the event of the assumed rate being slower. Therefore, priority should be given to roof and surface level Sustainable Drainage System (SuDS) components.

Is this section relevant to your development?	Yes – Complete Section 7 $\Box$		
NOTE: This should correspond with the hierarchy options selected in Section 6	No – Continue to Section 8 🛛		
Here you submitted on alternative (Dlan B' sustainable drainage design)	Yes 🗆	Evidence Checklist	
Have you submitted an alternative Plan B sustainable drainage design?	No 🗆	'Plan B' conceptual sustainable drainage plans and statement of approach	

Section 8: Water Quality Considerations – Technical Standard S13 and National Planning Policy Framework									
Confirm Polluti Tick <u>ALL</u> t	m Pollution Hazard Level Description (refer to Pollution Hazard Indices for different Land Use Classifications in Table 26.2 of CIRIA The SuDS Manual C753 for further guidance) Tick ALL that apply								
VERY LOW		Residential roofs	Residential roofs						
LOW		<ul> <li>Other roofs (typically comm</li> <li>Individual property driveway</li> <li>Non-residential car parking</li> </ul>	Other roofs (typically commercial/industrial roofs) Individual property driveways, residential car parks, low traffic roads (e.g. cul de sacs, home-zones and general access roads) Non-residential car parking with infrequent change (e.g. schools, offices) i.e. < 300 traffic movements/day						
MEDIUM		<ul> <li>Commercial yard and delive</li> <li>Non-residential car parking</li> <li>All roads except low traffic r</li> </ul>	<ul> <li>Commercial yard and delivery areas</li> <li>Non-residential car parking with frequent change (e.g. hospitals, retail)</li> <li>All roads except low traffic roads and trunk roads/motorways1</li> </ul>						
HIGH		<ul> <li>Sites with heavy pollution (e.g. haulage yards, lorry parks, highly frequented lorry approaches to industrial estates, waste sites)</li> <li>Sites where chemicals and fuels (other than domestic fuel oil) are to be delivered, handled, stored, used or manufactured</li> <li>Industrial sites</li> <li>Trunk roads and motorways</li> </ul>							
Where parts of	the development	have a High and / or Medium po	llution hazar	d potential,	will the discha	arge require an <u>En</u>	vironmental Permit?	Yes 🗆	No□
					If	YES, provide deta	ils below		
Where an Environmental Permit is required, has pre-application         advice been obtained from the Environment Agency?         Yes       No									
Does the selector	Does the selected SuDS component(s) have a total pollution mitigation index that equals or exceeds the pollution hazard index for discharges to Yes No						No□ *		
* If the total pollution to control	urface or ground waters? (Refer to Tables 26.3 and 26.4 of CIRIA SuDS Manual C753 for guidance) If the total pollution mitigation index of the SuDS component(s) is not equal to or greater than the pollution hazard index, the proposed scheme may pose an unacceptable risk of ollution to controlled waters and will not be acceptable								

Section 9: Details of your proposed Sustainable Drainage System							
	Functions			Proposed?		If applicable, please provide a brief sentence to describe how	
Do your proposals store rainwater for later use (as a resource)?				Yes 🗆	No 🗆		
Do your proposals allow surfa evapotranspiration?	ace water to soak into the groun	id and promote		Yes 🗆	No 🗆		
		Proposed SuDS Co	mponent Typ	es		·	
Within property	Rainwater harvesting	Green/ blue roofs	Pervious n	avements		Soakaway 🗌	Bioretention systems []
boundary			Type A	$\Box$ Type B			
			- //	Туре С [	7]		
Within development site	Infiltration system 🗆	Surface level $\square$	Fi	Iter strips [		Filter drains 🗆	Swales 🗆
boundary (not property)		Below ground $\square$					
	Bioretention systems	Detention basins 🗆	Ponds and	wetlands [		Attenuation tanks $\Box$	Other (please state) $\Box$
Please confirm that the above	Please confirm that the above selected components have been designed in accordance with CIRIA C753 (The SuDS Manual 2015)						
Please confirm that you have the exceedance routes in orde	Please confirm that you have considered the management of flows resulting from rainfall in excess of a 1 in 100 year rainfall event and the exceedance routes in order to minimise the risks to people and property within the design of your Sustainable Drainage System						

Section 10: Operation and Maintenance – Technical Standard S12 and NPPF							
The applicant is responsible to ensure that <u>ALL</u> components selected in Section 9 can be maintained for the design life of the development.							
1. The applicant acknowledges that the maintenance	e and management of the sustainable o	Irainage sys <sup>.</sup>	tem will need	I to be secured in agreeme	nt with the		
Local Planning Authority via planning condition or p	lanning obligation						
2. A statement has been provided within your susta appropriate maintenance and management arrange	inable drainage strategy to confirm ements for;	١	/es	No	Not app	licable	
Sustainable drainage components that are with	in a proposed property boundary						
<ul> <li>Sustainable drainage components that are with (but not the property boundary)</li> </ul>	in the development site boundary					]	
Please select any of the adopting bodies that you	Water and Sewerage Company			Highway Authority			
will be offering your sustainable drainage	Section 104 agreement (Water Industry Act	: 1991) Section 38 agreement (Highways Act		hways Act			
components for adoption.				1980)			
For any surface level components, please advise	ients, please advise Management company 🗌 Local Author						
how you intend to have the landscape maintained							
in accordance with any planning approved							
landscape management plan.							

## **Declaration and Submission**

*This pro-forma has been completed using evidence from information which has been submitted with my planning application.* 

The information submitted in the Sustainable Drainage Strategy and site-specific Flood Risk Assessment (FRA), where submitted, is proportionate to the site conditions, flood risks and magnitude of development and I agree that this information can be used as evidence to this sustainable drainage approach.

**Submitter Details** 

Form completed by	-	Email Address				
Form <u>completed</u> by		Daytime Telephone				
Form <u>signed off</u> by		Accreditation(s) and/or Qualification(s)				
Date (dd/mm/yyyy)		Company				
Client Details						
Name		Company				