

## Surface water drainage checklists

### Outline planning application

Item	Description	Format
Topographical survey	Topographical survey of the site	Drawing
Existing drainage	Details of existing drainage arrangements on site, including catchment areas, contours (or site levels) and any drainage systems to which the site drains	Drawing – full size paper copy or pdf
Discharge rates and volumes	Calculations showing the pre- runoff rates and volumes, and post- runoff rates together with the size drainage structures.	Calculations
Drainage layout plan	A site plan showing the location of SuDS features, conveyance paths, discharge points, storage and treatment areas.	Drawing
SuDS/Drainage strategy	Evidence demonstrating compliance with Planning Practice Guide on SuDS and the non-statutory Technical Standards such as runoff destination hierarchy and maintenance.	Report or statement
Site investigations (when infiltration is proposed)	Site investigations such as ground investigations, including groundwater monitoring. Infiltration (soakage) tests at the location of each proposed infiltration SuDS feature. Soakage tests should be in accordance with BRE365. These are especially relevant when infiltration is proposed	Drawing(s), test results and interpretive report
Management of exceedance flows	Show how flows in excess of the design event will be managed safely, including any relevant calculations	Drawing(s), report, statement
Offsite impacts	An assessment of offsite impacts, demonstrating how they have been managed.	Report, statement
Secure outfall	Confirmation of discharge location along with an agreement in principle from the relevant organisation	Report, letters, emails or telephone records
Stakeholder consultation	Records of correspondence with the relevant stakeholders and regulatory authorities to demonstrate approval has been agreed in principle.	Letters, emails, telephone records
Drainage design code (for multi-phased developments only)	Details of how the principles of the drainage strategy for the whole site will be retained for each phase or plot	Report or statement

## Detailed planning application

Item	Description	Format
Topographical survey	Topographical survey of the site	Drawing
Existing drainage	Details of existing site layout, drainage patterns, catchment areas and public sewers or any drainage system (including size, cover levels and invert levels) to which the site drains.	Drawing – full size paper copy or pdf
Site investigations (when infiltration is proposed)	Ground investigation with details of the ground conditions, contamination and geo-hazard potential (such as soil stability). This should include infiltration tests and groundwater monitoring results, where required. Infiltration (soakage) tests at the location of each proposed infiltration SuDS feature. Soakage tests should in accordance with BRE365. These are especially relevant when infiltration is proposed	Drawing(s), test results and interpretive report
Drainage layout plan	Detailed site layout and drainage layout plan at an identified scale (minimum scale 1/500), showing the proposed drainage system, the catchment areas and referenced drainage features.	Drawing(s)
Long and cross sections	Long sections and cross sections of the proposed drainage system, showing finished levels, cover levels, invert levels, gradients and referenced drainage features.	Drawing(s)
Hydraulic calculations	Hydraulic calculations, for both before and after development scenarios. The hydraulic calculations should have the same reference for drainage features as the submitted drainage layout plan. All assumptions and the design criteria for the site should be included together with emptying times of the system.	Calculations
Concept plan	A site plan showing the location of SuDS features, conveyance paths, discharge points, storage and treatment areas.	Drawing
Management of exceedance flows	Details of how exceedance events will be managed, including areas of the site that will be allowed to flood and conveyance of flood waters.	Drawing(s) and summary report
Offsite impacts	An assessment of offsite impacts, demonstrating how they have been managed.	Report, statement
Construction details	Suitable construction details and connections, including all flow control devices and connections to another drainage system such as watercourse, public sewer and highway drains.	Drawing(s)
Secure outfall	Confirmation of discharge location, consents, capacity along with agreements from the relevant organisations	Report
Maintenance access	A plan showing the easements required for maintaining the drainage system and evidence that these easements have been or will be granted to the adopting organisation. Vehicle access might be required in some cases.	Drawing(s) and reports
Maintenance of drainage system	A management plan for the whole drainage system.	Report
Drainage design code (for multi-phased developments)	Summary of how the drainage design has adhered to the principles within the drainage design code developed during outline planning	Summary report