

Sustainable Surface Water Drainage System

2 No New build semi detached houses

17 a and 17b Lower New Road

The proposed surface water strategy for this site is to dispose of all surface water on site via a sustainable drainage system.

The proposed siting of the proposed new dwellings is on a corner plot on the corner of Lower New Road and Chapel Road. The site for the new dwellings was created by a plot split from No 17 Lower New Road, which benefitted from a large level plot, triangular in shape and of sufficient size to accommodate the two dwellings, off street parking and private gardens.

The previous refurbishment and extensions to the existing semi detached dwellings at No 15 and No 17 were carried out in 2023/ 2024. The proposed works included large flat roof extensions to the rear and the replacement of all rainwater systems comprising rainwater goods, gullies, underground surface water system and construction of a new soakaway. It also included new driveway parking areas to each dwelling situated on the frontage, which were constructed in permeable block paving to enable free draining.

As regards roof drainage this was accommodated via SUDS with a soakaway was dug 6m from the face of the rear extensions on the common boundary of No 15 and No 17 Lower new road, within the rear gardens, and was shared by both dwellings.

The soakaway was subject to a percolation test to establish free draining rates and determine the required capacity of the 176sq.m existing pitched roof and new build flat roof to the dwellings.

The excavation and install of the soakaway and surface water system was inspected and passed by Mc Plan as approved building control inspectors.

The resulting as installed specification of this soakaway was:

- Soakaway excavation: 3.6mtrs deep and approximately 1.2 mtrs x 1.2 mtrs square.
- Soakaway crates: 16 No 192L Nyalor AquaVoid Metro Soak away crates placed onto 200mm of shingle and surrounded by 100mm of shingle all round, with overall soakaway capacity of 3m³.

Proposed Suds Scheme

The proposed surface water disposal for the new build semi detached dwellings at No 17 a and 17b is as follows:

To parking and driveway area: permeable block paving on appropriate free draining sub base

Roof drainage:

- Total roof area as measured on plan to be drained – 156 sq.m
- All roof drainage will discharge into a new surface water drainage system discharging into a soakaway of a design and capacity suited to the already established ground conditions and percolation rates
- Soakaway to be located 6.0m clear of the rear of the dwellings located on the common boundary and shared by both dwellings
- Soakaway excavation: 3.6mtrs deep and approximately 1.2 mtrs x 1.2 mtrs square.
- Soakaway crates: 16 No 192L Nyalor AquaVoid Metro Soak away crates placed onto 200mm of shingle and surrounded by 100mm of shingle all round, with overall soakaway capacity of 3m³.

Programming of works:

The soakaway and associated surface water drainage system will form part of the groundworks package which is currently being negotiated and will be constructed as the first phase of development due to be commenced from mid May 2026; with the soakaway and associated underground surface water system completed prior to construction above DPC.

Maintenance of Soakaway:

- Annual Inspection: Check inlet and outlet pipes for blockages, particularly after heavy rainfall.
- Clear Debris: Regularly clean guttering and downpipes, especially in autumn, to prevent debris from reaching the soakaway.
- Remove Silt: Clean out silt traps or catch pits periodically, as accumulated sediment can block the system and reduce its capacity.
- Vegetation Check: Keep the area above the soakaway free of trees and large shrubs, as their roots can infiltrate and block the system

Photos of the SUDS excavation system at 15/17 Lower New Road as inspected and approved
By Mc Plan Ltd as Approved Building Inspectors



