

27 FLOW ATTENUATION (SECTION 02820)

27.1 Part 1 General

Flow attenuation involves placing a flow control device to restrict the pass-forward flow together with temporary storage upstream of the flow control device.

The storage will normally be provided by purpose-designed, underground on-line storage tanks or by taking advantage of any spare capacity in the stormwater system.

Flow control devices must be specifically designed in conjunction with the network model being used and may comprise a static orifice or weir, or a proprietary vortex control device.

27.1.1 Related Documents

The following sections of the specification shall be read in conjunction with this section.

Section 01300 -Submittals

Section 01400 -Quality Control

Section 01600 -Material and Equipment

Section 03300-Cast in place Concrete

Section 03800-Testing of Water Retaining Structures

Section 05200-Miscellaneous Metalwork

27.1.2 Standards

All materials and workmanship shall comply with the latest edition of the applicable standards and codes.

The specifications for these devices are:

- a) Orifice – standard pipe specification
- b) Weir – standard reinforced concrete or steelwork specification
- c) Vortex Control – these should comply with UK BBA or WRc certification, or their international equivalents

The on-line storage tanks will be either constructed in reinforced concrete or will be proprietary storage tanks. The latter should be constructed from GRP or HDPE and procured from a recognised, specialist supplier.

Where there are large areas contributing to stormwater run-off such as large mall roofs or car parks then local attenuation can be provided by: