18.5 TRADITIONAL OR SUSTAINABLE URBAN DRAINAGE

Traditional techniques include features such as oversized pipes, off-line storage chambers and flow restriction devices to limit runoff rates from drainage systems.

Sustainable Urban Drainage System (SUDS) techniques can be used to reduce the volume of water entering the drainage system and to attenuate flows within the drainage system. These SUDS techniques should ideally be used to provide a dual function of balancing surface water discharges from the developed site and in reducing the risk of polluting natural watercourses from any contaminants present on the developed area.

The SUDS techniques may be grouped into three main categories;

- source control techniques (e.g. permeable pavements, water butts);
- permeable conveyance systems (e.g. swales, french drains)
- passive treatment systems (e.g. ponds, wetlands)

The potential for SUDS on the south side of the Tyne is limited due to the lack of available space. There may be more potential for SUDS on the north side of the Tyne, as there is more land available for structures such as balancing ponds. Given the nature of the area, it is thought more likely that traditional techniques would be used.

The site would currently experience runoff rates higher than typical greenfield runoff rates for the area, due to the history of the site. At a minimum, the site drainage should be designed so that this situation is not exacerbated and potential exists for measures to be implemented such that a positive effect on the hydrology of the site could occur.