

Project:- 110 Green Lane,
Northwood,
Middlesex,
HA6 1AW

Job No.- 37-245A

Proposed SUDS Principles

- 1) Car parking and other hardstanding areas are to be constructed using permeable block paving or permeable asphalt. The underlying ground is primarily stiff brown fissured clay with very poor infiltration qualities however some percolation of surface water will occur and a certain amount of evaporation can be anticipated which will contribute to a reduction in the amount of surface water run-off from the site. The sub-base of the hardstanding areas will also act as an attenuation tank which will have the benefit of holding back surface water during sudden intense storm conditions. An overflow pipe will be installed should the capacity of the permeable hardstanding areas be exceeded during prolonged periods of heavy rainfall. This overflow pipe will discharge to the existing surface water manhole and then into the public sewer.
- 2) A rainwater harvesting tank to be installed to take the roof drainage from the new property. The rainwater collected can be used for re-cycling such as garden irrigation, car washing etc. Should the capacity of the rain water harvesting tank be exceeded there will be an outfall pipe discharging to a small pumping chamber with a rising main connecting to the existing surface water manhole from where it will discharge to the public sewer network utilising the existing drainage connection.

Summary

- By implementing the above proposals there will be an overall reduction in the volume of surface water leaving the site with a corresponding decrease in demand on the public sewer network.
- The proposals will provide the opportunity for rainwater to be re-used and recycled.
- The permeable paving once established provides a habitat for micro-organisms which digest hydro carbons and other contaminants. The rainwater harvesting tank comes fitted with filters which will collect debris therefore both systems will contribute to the prevention of pollutants entering the sewer network.
- The maintenance of the rainwater harvesting tank and permeable paving will be the responsibility of the property owners.