

Water Quality Assessment

The development site is a residential development for 54 units and onsite access road at Uttoxeter Road, Upper Tean, Staffordshire, ST10 4LJ

As such classified as Low Hazard (CIRIA C753 Table 26.2).

A suitable SuDs management train is proposed for the drained area (Permeable paving infiltration is proposed locally. Where infiltration is not possible permeable paving is proposed for all individual plots collecting & attenuating before bio-retention system conveying surface water flow to attenuation tank prior to final discharge), as such, the mitigation index is higher than the pollution hazard index as demonstrated in the table below. Due to constraints of the site, an area of the proposed highway (14% of the whole proposed site) will discharge into the storm network untreated via road gullies.

Land use	Pollution hazard Level	Total suspended solids (TSS)	Metals	Hydrocarbons
Residential Roofs	Very Low	0.2	0.2	0.05
Residential Driveways	Low	0.5	0.4	0.4

Type of SuDs Component	Total suspended solids (TSS)	Metals	Hydrocarbons
Permeable Pavement	0.7	0.6	0.7
Bioretention system	0.8	0.8	0.8
Total SuDs mitigation index	1.1	1.0	1.1

Land use	Pollution hazard Level	Total suspended solids (TSS)	Metals	Hydrocarbons
Residential access road	Low	0.5	0.4	0.4

Type of SuDs Component	Total suspended solids (TSS)	Metals	Hydrocarbons
Permeable Pavement	0.7	0.6	0.7
Total SuDs mitigation index	0.7	0.6	0.7

Land use	Pollution hazard Level	Total suspended solids (TSS)	Metals	Hydrocarbons
Residential access road	Low	0.5	0.4	0.4

Type of SuDs Component	Total suspended solids (TSS)	Metals	Hydrocarbons
Bioretention system	0.8	0.8	0.8
Total SuDs mitigation index	0.8	0.8	0.8