Oxfordshire County Council LLFA

SuDS Flows and Volumes - LLFA Technical Assessment Pro-forma

This form identifies the information required by Oxfordshire County Council LLFA to enable technical assessment of flows and volumes determined as part of drainage / SuDS calculations.

*Note : * means delete as appropriate; Numbers in brackets refer to accompanying notes.*

SITE DETAILS

1.1 Planning application reference 21/02286/F

1.2 Site name Land Northwest of Launton Roundabout Adjoining Skimmingdish Lane

1.3 Total application site area (1) 11800 m² ..... ha

1.4 Is the site located in a CDA or LFRZ Y/N

1.5 Is the site located in a SPZ Y/N

VOLUME AND FLOW DESIGN INPUTS

2.1 Site area which is positively drained by SuDS (2) 1757 m²

2.2 Impermeable area drained pre development (3) 0 m²

2.3 Impermeable area drained post development (3) 1757 m²

2.4 Additional impermeable area (2.3 minus 2.2) 1757 m²

2.5 Predevelopment use (4) Greenfield / Brownfield / Mixed*

2.6 Method of discharge (5) Infiltration / waterbody / storm sewer/ combined sewer*

2.7 Infiltration rate (where applicable) 0.012 m/hr

2.8 Influencing factors on infiltration

2.9 Depth to highest known ground water table..... mAOD Groundwater not encounted in SI

2.10 Coefficient of runoff (Cv) (6) 0.75

2.11 Justification for Cv used only areas of impermeable surface used in calcs

2.12 FEH rainfall data used (Note that FSR is no longer the preferred rainfall calculation method) Y/N

2.13 Will storage be subject to surcharge by elevated water levels in watercourse/ sewer Y/N site in 100 year flood plain

2.14 Invert level at outlet (invert level of final flow control) 68.335 mAOD

2.15 Design level used for surcharge water level at point of discharge(14) 68.050 mAOD

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CALCULATION OUTPUTS

Sections 3 and 4 refer to site where storage is provided by attenuation and/or partial infiltration. Where all flows are infiltrated to ground omit Sections 3 -5 and complete Section 6.

3.0 Defining rate of runoff from the site

3.2 Max. discharge for 1 in 1 year rainfall .....l/s/ha, 2.4 l/s for the site

3.2 Max. discharge for Q_{med} rainfall .....l/s/ha, ...l/s for the site

3.3 Max. discharge for 1 in 30 year rainfall .....l/s/ha, 4.5 l/s for the site

3.4 Max. discharge for 1 in 100 year rainfall .....l/s/ha, 5.0 l/s for the site

3.5 Max. discharge for 1 in 100 year plus 40%CC .....l/s/ha, 5.0 l/s for the site

4.0 Attenuation storage to manage peak runoff rates from the site

4.1 Storage - 1 in 1 year 15.5 m^3 0.09 m^3/m^2 (of developed impermeable area)

4.2 Storage - 1 in 30 year (7 37.9 m^3 0.022 m^3/m^2

4.3 Storage - 1 in 100 year (8) 51.4 m^3 0.029 m^3/m^2

4.4 Storage - 1 in 100 year plus 40%CC (9) 77.4 m^3 0.044 m^3/m^2

5.0 Controlling volume of runoff from the site

5.1 Pre development runoff volume(b) 128 m^3 for the site

5.2 Post development runoff volume (unmitigated) (b) — m^3 for the site

5.3 Volume to be controlled/does not leave site (5.2-5.1) 128 m^3 for the site

5.4 Volume control provided by

Interception losses(11)	—m3
Rain harvesting(12)	—m3
Infiltration (even at very low rates)	—m3
Separate area designated as long term storage(13)	—m3

5.5 Total volume control (sum of inputs for 5.4) —m3 (15)

6.0 Site storage volumes (full infiltration only)

6.1 Storage - 1 in 30 year (7 37.9 m^3 0.022 m^3/m^2 (of developed impermeable area)

6.2 Storage - 1 in 100 year plus CC (9 77.4 m3 0.044 m3/m2