



DRAINAGE KEY

- Private Storm Drain
- Adoptable Storm Drain (S4)
- Adoptable Storm Drain (S4) (Perforated)
- Adoptable Storm Drain (S4) (Perforated pipe wrapped in impermeable membrane)
- Non-Adoptable Permeable Paving with open grid (shaded surface)
- Adoptable Swale (S4)
- Flat Rain Garden (Non-Adoptable)
- Adoptable Bioretention Area (S4)
- Infiltration Headwall
- Gully Manhole
- Water Butt
- Adoptable Foul Sewer
- Adoptable Foul Rising Man

HYDRAULIC CONTROL - S2

Greenfield Catchment Area* = 1.50ha
*Based on proposed impermeable area

Greenfield Runoff Rates (1.50ha)

- 1 in 1yr = 7.4 l/s
- 1 in 2yr = 7.8 l/s
- 1 in 30yr = 15.1 l/s
- 1 in 100yr = 18.3 l/s

Pre-Development volume discharge (1.50ha)

1 in 100yr (360mins) = 471m³

Post-Development

Approx Impermeable Area = 1.50ha

Post-Development peak flow rate

- 1 in 1yr = 7.4 l/s (+0.0 l/s)
- 1 in 2yr = 7.5 l/s (-0.3 l/s)
- 1 in 30yr = 11.8 l/s (-3.3 l/s)
- 1 in 100yr + 40% = 16.5 l/s (-1.8 l/s)

Discharge Volume (100yr 360mins)

Post-Dev - 1 in 100yr + 40% (360mins) = 436m³

Total Volume +/- = -35m³

SuDS Measures

The above post-development flow rates are based on a traditional piped system with a 5 minute concentration time.

However, all runoff is to be conveyed to pass through a SuDS feature which will further reduce the above discharge rates and volume.

The SuDS components will effectively increase concentration time, reduce flow velocities and rates, and providing significant volume losses through evaporation and evapotranspiration.

KEY

- Proposed Ground Level
- Masonry Retaining Wall (Height Indicated)
- Gravel Board Retaining Wall (Height Indicated)
- Gibson Retaining Wall (Height Indicated)
- Exposed Facing Brickwork (Height Indicated)
- Exposed Facing Brickwork (Height Indicated)
- 1 in 3 max Embankment
- Finished Floor Level
- Slope (No. Indicated)

RESIDENTIAL

EXISTING RESIDENTIAL

EXISTING RESIDENTIAL

PUBLIC OPEN SPACE
Comprising of (400 m2) LEAP

OPEN FIELDS

Existing Foul
Pumping Station

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rev	date	description	by
A	May 2022	Drawing amended to suit updated Layout.	VCH
B	Aug 2022	Site levels generally updated at Client's direction; Swale/SuDS layout along southern boundary updated.	RMJ

Status: **PLANNING**

Drawn: VCH
 Checked: MCC
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