Drainage strategy

The site is currently served by a separate surface water- & foul drain, which combine before discharging from site in a combined fashion. It is proposed to maintain these runs to facilitate the proposed development. The development does not generate an increased population equivalent and associated demand on the drainage network. We have employed sustainable urban drainage systems (Suds) in the form of soakaways for roofwater drainage, which diminishes the overall discharge from site during storm events.

Surface Water

It is proposed to collect all rainwater incident on the roofs of houses and outhouses via gutters & downpipes to a soakaway, located in the rear yard area of each house. The soakaway will be formed in precast concrete rings and filled with washed stone. Site investigations have indicated that soakaways can be placed in the well-drained, high permeability **gravel** soils, below the made ground material.

By discharging roofwater to ground, we have reduced the overall flow into the public system from the site by 63% by area. Storm flows during a 5 year, 60 min storm event are ***reduced by 5.7 litres per second***.

Impermeable areas	Existing	Effective existing	Proposed	Effective proposed
Roof	120 m²	120 m²	563 m²	0 m²
Hard finishes	2,062 m²	1,856 m²	808 m²	727 m²
			978 m²	
Total	2,182 m²	1,976 m²	2,282 m²	727 m²

Foul Water

The effective foul water discharge is unchanged by provision of the development as the demand as not increased or reduced.

Ex SWMH
CL: 27.29
IL: 26.09

Ex 150mmØ SW

Planter with free draining base

Ex SWMH
CL:26.69
IL: 25.50

100mmØ RW

100mmØ FW

Yard areas to be finished in permeable macadam finish laid flat typically

1.5m Ø precast concrete rings forming soakaway to a depth of min 1.2m below invert and filled with max 100mm washed stone

Existing foul drain/sewer retained & protected

150mmØ FW

Planter with free draining base

Ex 150mmØ SW

150mmØ combined drain

Ex FWMH
CL: 25.14
IL: 24.04

Existing combined sewer retained & protectec

Ex SWMH
CL:25.26
IL: 23.82

Ex SWMH
CL:24.68
IL: 24.00

1.5m Ø precast concrete rings forming soakaway to a depth of min 1.2m below invert and filled with max 100mm washed stone

Yard areas to be finished in permeable macadam finish laid flat typically

Legend

- Foul water line
- Surface water line
- Existing combined drain/sewer
- Permeable paviour
- Permeable macadam
- Soakaway - precast stone filled chamber

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER PROJECT DRAWINGS

NOTES:

1. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECT'S AND OTHER CONSULTANT'S DRAWINGS AND INFORMATION. SETTING OUT IS TO BE TAKEN FROM ARCHITECT'S DRAWING.
2. DO NOT SCALE THIS DRAWING. USE ONLY FIGURED DIMENSIONS.
3. CONCRETE GRADE TO BE C28/35 UNLESS SPECIFICALLY STATED OTHERWISE.
4. COVER TO REINFORCEMENT TO BE 35mm GENERALLY, 50mm FOR FOUNDATIONS.
5. ANY DISCREPENCIES BETWEEN SITE AND WHAT IS INDICATED ON THIS DRAWING IS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
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CLIENT: Galway City Council/CENA	ARCHITECT: de Siun Architects
PROJECT: Circular Road Group Housing, Galway	
DRAWING: Site drainage strategy layout	DRAWING No: R39-P-001 / SCALE: As shown
	DATE: July 21 / REVISION: -

Site drainage works layout

Sc 1:150