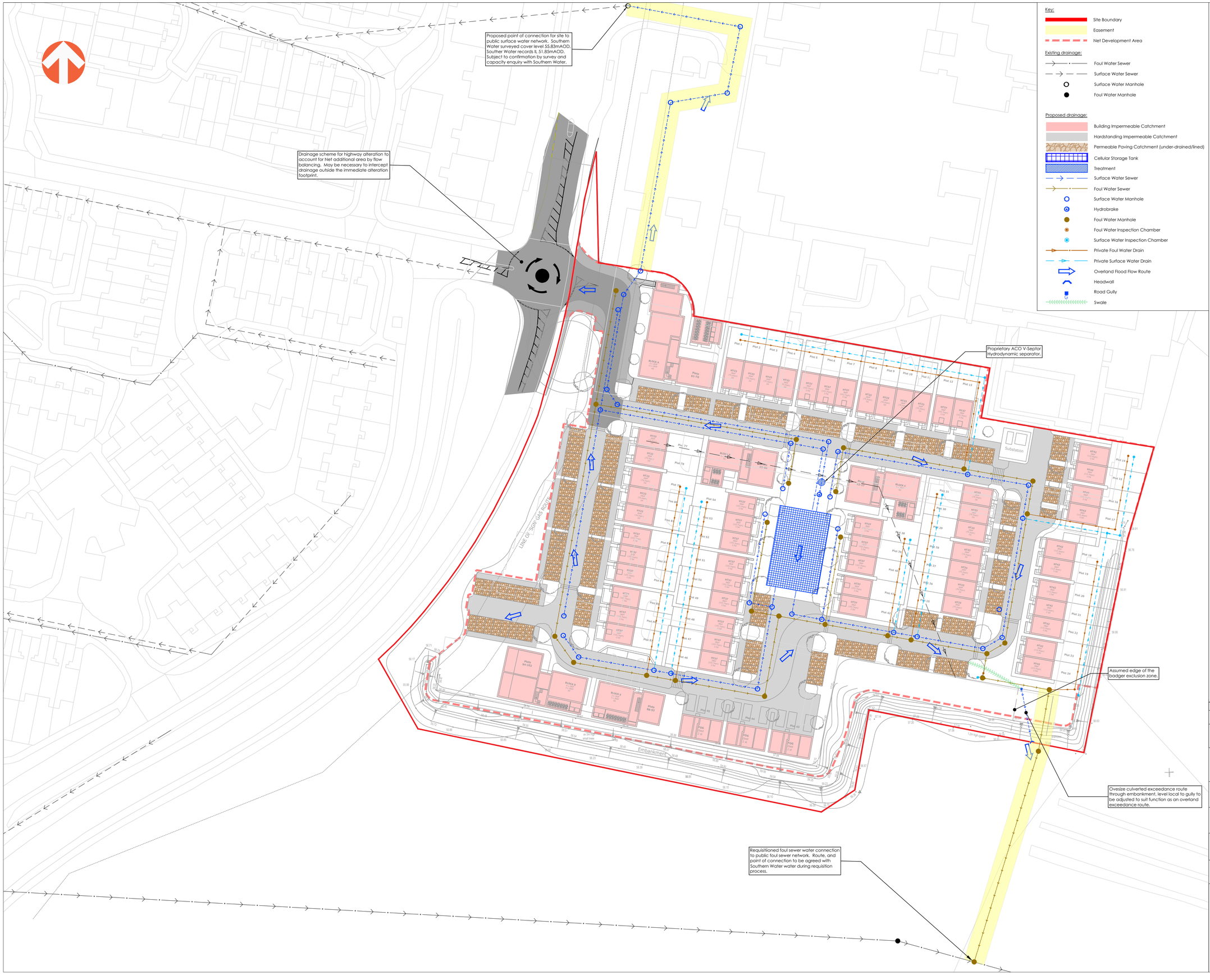

Area Summary Schedule

Net Developable Area	1.928 ha
Impermeable Catchment	1.076 ha
PIMP %	56%

Pre-Development (Greenfield) Runoff

The greenfield runoff rates have been assessed for the 'net developable area' using the FEH Method. The calculation excludes large areas of open space which will remain undeveloped.

Existing Greenfield Runoff Rates

Return Period	Greenfield Rate (l/s)
2yr	8.76
30yr	22.88
100yr	31.74

Attenuation Summary

Cellular Storage Tanks

Catchment	1.122 ha
Hydraulic Control	Hydrobrake @IL 0.00m Ref: MD-SHE-0128-8700-1600-8700 100mm Orifice @ IL 0.725m
Porosity	95%
Dimension	352.5m² X 1.6m Deep 352.5m² X 1.6m Deep
Total 100yr+40% Peak Discharge	27.5l/s
Total Volume Required:	**531.5 m³**
Total 100yr+40% Peak Discharge	**27.5 l/s**

Notes:

1. The proposed development has been assessed in line with the NPPF, to allow the planning application to be progressed and to show that the development can be undertaken in an acceptable manner from a flood risk perspective.
2. The extents of built development are limited to 'Flood Zone 1' only and are not susceptible to surface flooding from pluvial, groundwater, infrastructure or artificial sources.
3. To ensure the development is safe throughout its lifetime, the surface water strategy accounts for runoff in up to the 100 year return period.
4. The strategy also safeguards against the upper end allowances for climate change (40%), providing betterment over undeveloped conditions, where the rate and volume of runoff would continue to increase due to climate change.
5. The Ground Investigation indicates the site has a low infiltration rate that precludes the use of soakaways by virtue of excessive half drain-down time (in excess 7 days).
6. The outline strategy also provides a 10% allowance for future urban creep and discharge at existing greenfield runoff rates. The cumulative impact of the various design allowances will ensure that flood risk within the downstream catchment is reduced as a result of the proposed development.
7. The drainage arrangements include a treatment scheme to mitigate against degradation of water quality as a result of the development. The proposals contribute to the provision of amenity space, and provide potential for planting to improve biodiversity of the development.
8. It is anticipated that flood risk from alteration to the highway can be mitigated by local inclusion of storage and flow controls subject to adoption detailed design.
9. During exceedance events runoff will be directed away from buildings and toward low points where exceedance drainage provision is provided.
10. Foul flows generated by the development are proposed to be discharges via a requisitioned connection to the pubic foul sewer to the south of the site.

REV	DATE	DESCRIPTION	BY	CHK	APD
A	25.03.2022	INITIAL ISSUE	VS	JB	CPY

DRAWING STATUS: PLANNING APPLICATION

CLIENT: PLACE FOR PEOPLE

PROJECT: SOUTH DOWNS COLLEGE

TITLE: PRELIMINARY DRAINAGE LAYOUT

PROJECT No:	DRAWING No:	REV:
1017	01-PDL-1001	A

SCALE @ A1: 0 1:500 25 metres

DESIGN BY:

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