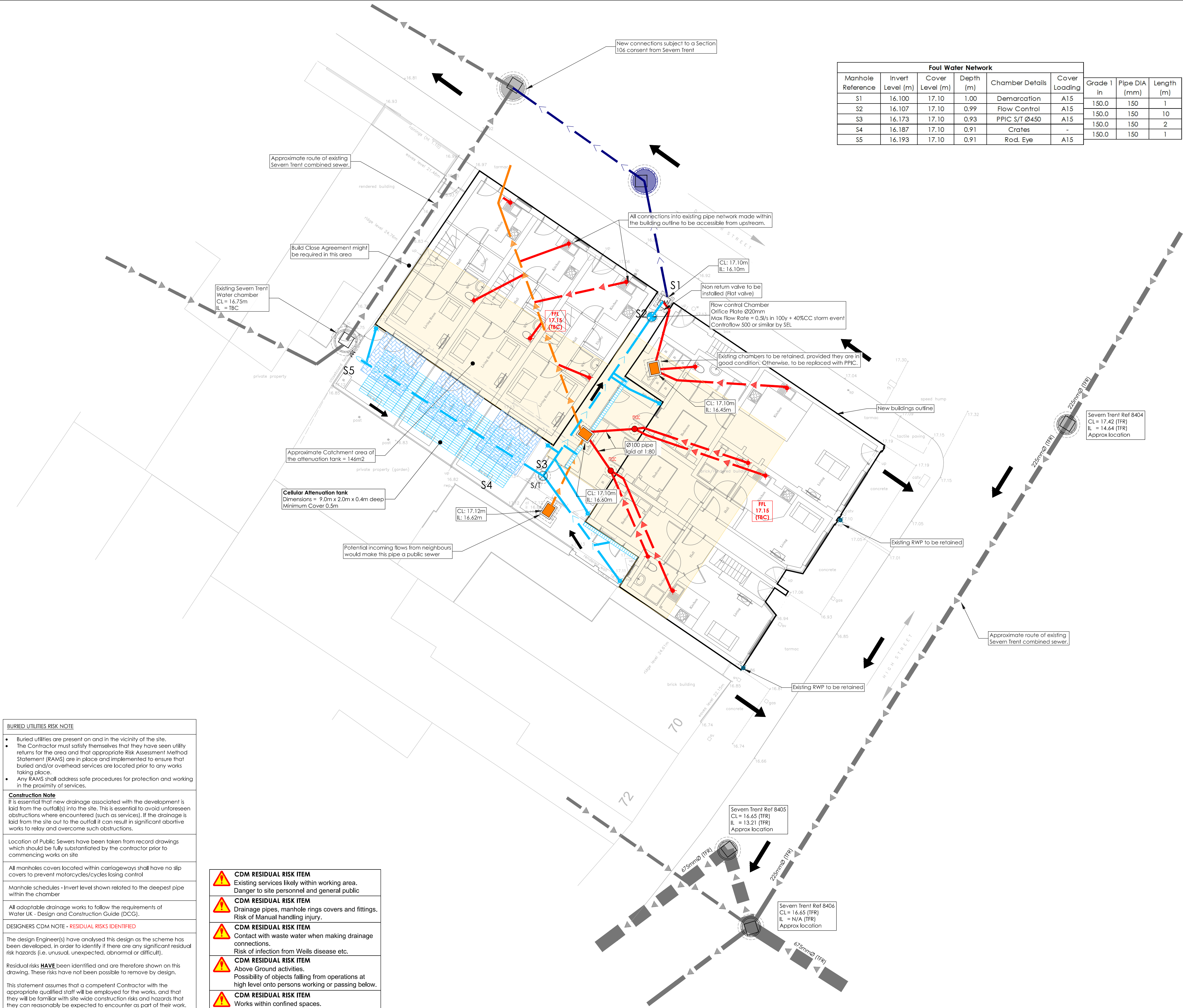




Foul Water Network						
Manhole Reference	Invert Level (m)	Cover Level (m)	Depth (m)	Chamber Details	Cover Loading	
S1	16.100	17.10	1.00	Demarcation	A15	Grade 1 in 150.0
S2	16.107	17.10	0.99	Flow Control	A15	Pipe DIA 150 (mm)
S3	16.173	17.10	0.93	PPIC S/T Ø450	A15	Length 10 (m)
S4	16.187	17.10	0.91	Crates	-	150.0
S5	16.193	17.10	0.91	Rod. Eye	A15	150.0

- NOTES
- All dimensions and levels are in metres unless otherwise noted
 - This drawing is to be read in conjunction with the relevant Architect's/Engineer's drawings, specifications and CDM documentation
 - This drawing has been produced electronically and may have been photo reduced or enlarged when copied. Work to figured dimensions only (DO NOT SCALE - EXCEPT FOR PLANNING PURPOSES). All dimensions to be checked on site. Any errors or omissions to be reported to the engineer immediately.
 - This drawing contains coloured lines / information that may not be clear if reproduced in black and white.
 - Digital copies of this plan can only be considered accurate if supplied directly by Infrastruct CS Ltd.

Drainage Key	
Sewers	
	Foul water drain (private/non adaptable)
	Surface water drain (private/non adaptable)
	Existing foul water drain (private/non adaptable)
	Existing surface water drain (private/non adaptable)
	Existing combined water sewer (Adopted)
	Surface water sewer (Adoptable)
	Redundant sewer
Chamber Key	
FW/SW	
	Mini access chamber (mac) - 300mmØ
	PPIC - 475mmØ*
	P.C.C. units/brick*
	Manhole
	Depth: 1.25m to 1.5m*
	Depth: 1.55m to 3.0m*
* General note (Refer to standard details & longitudinal sections for chamber sizes. Size may need to increase dependant on number of incoming pipes/size of incoming pipes)	
	Surface water rodding eye
	Rain water down pipe (roddable access)
	Soil vent pipe/soil stack
	Silt Trap (ST) with removable silt bucket
	Manhole reference number
	Yard gully (150mm - 200mmØ trapped)
	Floor gully (trapped)
	Surface water sump unit
	Linear drainage channel
	Cellular storage (refer to drawing for sizes)
	Finished Floor Level (FFL)
	Flood exceedance routing
	Permeable Paving Patios - Self draining

CATCHMENT AREAS NOTE

Original total impermeable area (roof and concrete surfacing) = 351.9m2, drained to sewer, unattenuated.

Proposed total impermeable area = 286.5m2, of which 146m2 are drained into attenuation tank.

Self draining areas (patios and gardens) = 64m2

Remaining unattenuated = 142m2 (40% of original, so 60% reduction)

BURIED UTILITIES RISK NOTE

- Buried utilities are present on and in the vicinity of the site.
- The Contractor must satisfy themselves that they have seen utility returns for the area and that appropriate Risk Assessment Method Statement (RAMS) are in place and implemented to ensure that buried and/or overhead services are located prior to any works taking place.
- Any RAMS shall address safe procedures for protection and working in the proximity of services.

Construction Note

It is essential that new drainage associated with the development is laid from the outfall(s) into the site. This is essential to avoid unforeseen obstructions where encountered (such as services). If the drainage is laid from the site out to the outfall it can result in significant abortive works to relay and overcome such obstructions.

Location of Public Sewers have been taken from record drawings which should be fully substantiated by the contractor prior to commencing works on site

All manholes covers located within carriageways shall have no slip covers to prevent motorcycles/cycles losing control

Manhole schedules - Invert level shown related to the deepest pipe within the chamber

All adoptable drainage works to follow the requirements of Water UK - Design and Construction Guide (DCG).

DESIGNERS CDM NOTE - RESIDUAL RISKS IDENTIFIED

The design Engineer(s) have analysed this design as the scheme has been developed, in order to identify if there are any significant residual risk hazards (i.e. unusual, unexpected, abnormal or difficult).

Residual risks **HAVE** been identified and are therefore shown on this drawing. These risks have not been possible to remove by design.

This statement assumes that a competent Contractor with the appropriate qualified staff will be employed for the works, and that they will be familiar with site wide construction risks and hazards that they can reasonably be expected to encounter as part of their work.

	CDM RESIDUAL RISK ITEM Existing services likely within working area. Danger to site personnel and general public
	CDM RESIDUAL RISK ITEM Drainage pipes, manhole rings covers and fittings. Risk of Manual handling injury.
	CDM RESIDUAL RISK ITEM Contact with waste water when making drainage connections. Risk of infection from Weils disease etc.
	CDM RESIDUAL RISK ITEM Above Ground activities. Possibility of objects falling from operations at high level onto persons working or passing below.
	CDM RESIDUAL RISK ITEM Works within confined spaces.

DESIGNER NOTES

Exact location of rainwater pipes to be confirmed by the Architect

Existing pipe network shown approximate.

P04	AA	MBD	Flap valve added	03/05/24
P03	AA	MBD	Surface water layout amended in line with LLFA comments	30/04/24
P02	RSI	MBD	Attenuation Tank added	17/04/24
P01	RSI	MBD	Initial issue	02/04/24
REV	DRAWN	CHECK	REVISION COMMENTS	ISSUE DATE
DRAWING TITLE				SHEET NO.
Drainage Design				1/1
PROJECT				
64 - 68 High Street Gloucester GL1 4SR				
CLIENT				
Development Studio			 Infrastruct CS Ltd	
SCALE @ A1				
1:100				ENGINEER
PROJECT NUMBER		STATUS		MBD
5800		S2		DRAFT
ORIGIN		PHASE		NJ
HIGH		01		APPROVED
LEVEL		TYPE		RJW
XX		DR		NO. REVISION
0200		P04		