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.

Surveyor: Anthony Brookes Surveys Ltd
DRG: 557/10760/1B — Date Received: 13/02/2019

Architect: Quattro Design Architects
DRG: 5385-F-100 — Date Received: 24-05-2019

NOTES

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

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

Drainage Key

Sewers

- Surface water drain (private/non adoptable)
- Foul water drain (private/non adoptable)
- Foul water sewer (Adoptable)
- Foul rising main

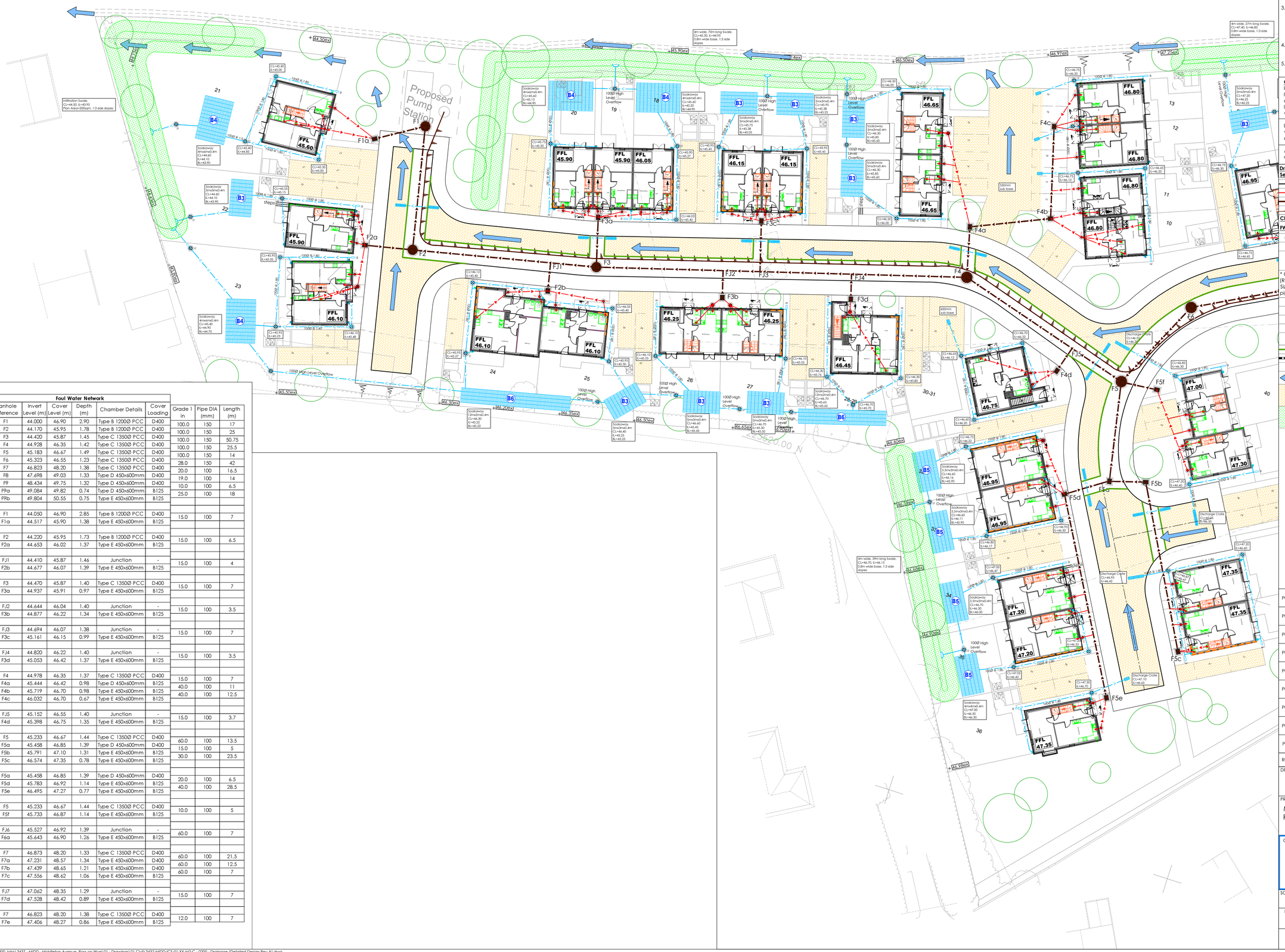
Chamber Key

FW/SW

- PPIC - 475mmØ*
- Adoptable Type D/E Chamber
- Manhole Type B - 1200Ø Type C - 1350Ø

* 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)

- S1/F1 — Manhole reference number
- Cellular storage (refer to drawing for sizes)
- Cellular discharge/collection unit
- Headwall
- FFL XX.XX — Finished Floor Level (FFL)
- Baffle to permeable paving
- Retaining wall
- Silt Trap (ST) with removable silt bucket
- Flood exceedance route(s)
- Block paving - permeable
- Infiltration Swale



Foul Water Network								
Manhole Reference	Invert Level (m)	Cover Level (m)	Depth (m)	Chamber Details	Cover Loading	Grade 1 in	Pipe DIA (mm)	Length (m)
F1	44.000	46.90	2.90	Type B 1200Ø PCC	D400	100.0	150	17
F2	44.170	45.95	1.78	Type B 1200Ø PCC	D400	100.0	150	25
F3	44.420	45.87	1.45	Type C 1350Ø PCC	D400	100.0	150	50.75
F4	44.928	46.35	1.42	Type C 1350Ø PCC	D400	100.0	150	25.5
F5	45.183	46.67	1.49	Type C 1350Ø PCC	D400	100.0	150	14
F6	45.323	46.55	1.23	Type C 1350Ø PCC	D400	28.0	150	42
F7	46.823	48.20	1.38	Type C 1350Ø PCC	D400	20.0	100	16.5
F8	47.698	49.03	1.33	Type D 450x600mm	D400	19.0	100	14
F9	48.434	49.75	1.32	Type D 450x600mm	D400	10.0	100	6.5
F9a	49.084	49.82	0.74	Type D 450x600mm	B125	25.0	100	18
F9b	49.804	50.55	0.75	Type E 450x600mm	B125			
F1	44.050	46.90	2.85	Type B 1200Ø PCC	D400	15.0	100	7
F1a	44.517	45.90	1.38	Type E 450x600mm	B125			
F2	44.220	45.95	1.73	Type B 1200Ø PCC	D400	15.0	100	6.5
F2a	44.653	46.02	1.37	Type E 450x600mm	B125			
FJ1	44.410	45.87	1.46	Junction	-	15.0	100	4
F2b	44.677	46.07	1.39	Type E 450x600mm	B125			
F3	44.470	45.87	1.40	Type C 1350Ø PCC	D400	15.0	100	7
F3a	44.937	45.91	0.97	Type E 450x600mm	B125			
FJ2	44.644	46.04	1.40	Junction	-	15.0	100	3.5
F3b	44.877	46.22	1.34	Type E 450x600mm	B125			
FJ3	44.694	46.07	1.38	Junction	-	15.0	100	7
F3c	45.161	46.15	0.99	Type E 450x600mm	B125			
FJ4	44.820	46.22	1.40	Junction	-	15.0	100	3.5
F3d	45.053	46.42	1.37	Type E 450x600mm	B125			
F4	44.978	46.35	1.37	Type C 1350Ø PCC	D400	15.0	100	7
F4a	45.444	46.42	0.98	Type D 450x600mm	B125	40.0	100	11
F4b	45.719	46.70	0.98	Type E 450x600mm	B125	40.0	100	12.5
F4c	46.032	46.70	0.67	Type E 450x600mm	B125			
FJ5	45.152	46.55	1.40	Junction	-	15.0	100	3.7
F4d	45.398	46.75	1.35	Type E 450x600mm	B125			
F5	45.233	46.67	1.44	Type C 1350Ø PCC	D400	60.0	100	13.5
F5a	45.458	46.85	1.39	Type D 450x600mm	D400	15.0	100	5
F5b	45.791	47.10	1.31	Type E 450x600mm	B125	30.0	100	23.5
F5c	46.574	47.35	0.78	Type E 450x600mm	B125			
F5a	45.458	46.85	1.39	Type D 450x600mm	D400	20.0	100	6.5
F5d	45.783	46.92	1.14	Type E 450x600mm	B125	40.0	100	28.5
F5e	46.495	47.27	0.77	Type E 450x600mm	B125			
F5	45.233	46.67	1.44	Type C 1350Ø PCC	D400	10.0	100	5
F5f	45.733	46.87	1.14	Type E 450x600mm	B125			
FJ6	45.527	46.92	1.39	Junction	-	60.0	100	7
F6a	45.643	46.90	1.26	Type E 450x600mm	B125			
F7	46.873	48.20	1.33	Type C 1350Ø PCC	D400	60.0	100	21.5
F7a	47.231	48.57	1.34	Type E 450x600mm	D400	60.0	100	12.5
F7b	47.439	48.65	1.21	Type E 450x600mm	D400	60.0	100	7
F7c	47.556	48.62	1.06	Type E 450x600mm	B125			
FJ7	47.062	48.35	1.29	Junction	-	15.0	100	7
F7d	47.528	48.42	0.89	Type E 450x600mm	B125			
F7	46.823	48.20	1.38	Type C 1350Ø PCC	D400	12.0	100	7
F7e	47.406	48.27	0.86	Type E 450x600mm	B125			

REV	DRAWN	CHECK	REVISION COMMENTS	ISSUE DATE
P09	NJ	TST	Infiltration swales amended following client comments	10/05/22
P08	NJ	TST	Drainage amended following LLFA comments	03/05/22
P07	NJ	TST	Drainage amended following LLFA comments	08/03/22
P06	NJ	TST	Route of Rising Main amended	01/02/22
P05	NJ	TST	Drainage scheme updated following receipt of BRE365 infiltration testing	25/01/22
P04	NJ	TST	Scheme amended following LLFA comments	30/03/20
P03	NJ	TST	Design amended in line with revised architectural site layout	20/02/20
P02	EPR	TST	Foul outfall location amended	29/08/19
P01	EPR	TST	Initial issue	03/05/22

DRAWING TITLE: Proposed Drainage Layout — SHEET NO. 1/2

PROJECT: Middleton Avenue, Ross-On-Wye

S4 - TECHNICAL APPROVAL

CLIENT: EG CARTER & CO LTD

Infrastruct CS Ltd

The Lodge, High Cogges Estate, Witney, OX28 4LL. Tel: 01993 705709 info@infrastructcs.co.uk

SCALE @ A1			ENGINEER
1:250	0m — 6.25m — 12.5m		TST
PROJECT NUMBER	STATUS	DATE	DRAFT NJ
3437	S4	May 19	APPROVED DJ

PROJECT	ORIGIN	PHASE	LEVEL	TYPE	ROLE	NO.	REVISION
MIDD	ICS	01	XX	DR	C	0200	P09

X:\ICS Jobs\3400 Jobs\3437 - MIDD - Middleton Avenue, Ross on Wye\01 - Drawings\01 Civil\3437-MIDD-ICS-01-XX-M2-C - 0200 - Drainage (Detailed Design Rev A).dwg