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.

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.

N W E S

RESIDUAL RISK ITEM
OVERHEAD CABLES

Hardstanding areas formed in Permeable Asphalt & Block Paving, based on infiltration rate of 6.58×10^{-6}m/s, Minimum OGCR Subbase 300mm

Refer to extract opposite

Baffle to prevent rapid through flow of water in Permeable Asphalt

4.5m x 1.5m diameter storage tank to provide 24 hour storage

Proposed Pumping Station (Supplier, storage and design TBC)

Package pumping station control kiosk with visible alarm. Electricity supply required

Flow control set at 2l/s at 1m head

Pump

Cellular Storage Tank
14.0 x 24.0 x 0.4m (dp).
Base of crates = 4.70
Top of crates = 5.10

Tank Vent

Approximate tree root protection zone

Hand Dig construction within Root Protection Zone

Pipe laid invert to invert due to lack of fall

Pipe laid invert to invert due to lack of fall

Southern Water Manhole Ref: 9602
CL: 4.697m (rec)
IL: 3.584m (rec)

Drainage Area = 41m²
Drainage Area = 34m²
Drainage Area = 184m²
Drainage Area = 747m²
Drainage Area = 326m²
Drainage Area = 73m²
Drainage Area = 290m²
Drainage Area = 353m²
Drainage Area = 77m²

FSL 5.80
FFL 5.70

S1 MD 1.006 S0 Connection into existing piped offsite surface water system

S1 MD 1.005 S2 MD 1.004 S3 MD 1.003 S4 MD 1.002 S5 MD 1.001 S6 MD 1.000 S7 MD 2.000 S8 MD 3.002 S9 MD 3.001 S10 MD 3.000 S11 S11a S12 S13 S14 S15 S16 S17 SJ1 F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11

Surface Water Network						Grade 1 in	Pipe DIA (mm)	Length (m)
Manhole Reference	Invert Level (m)	Cover Level (m)	Depth (m)	Chamber Details	Cover Loading			
S0	3.800	5.56	1.76	1200Ø PCC	D400	200.0	225	72.6
S1	4.163	5.40	1.24	1200Ø PCC	D400	200.0	225	11
S2	4.218	5.65	1.43	Flow Control	B125	300.0	300	25.5
S3	4.303	5.65	1.35	900 x 1200mm I.C.	D400	300.0	300	30.5
S4	4.405	5.65	1.25	450 x 600mm I.C.	A15	300.0	300	18.5
S5	4.466	5.65	1.18	450 x 600mm I.C.	A15	300.0	300	24
S6	4.546	5.65	1.10	450 x 600mm I.C.	A15	150.0	150	17
S7	4.810	5.65	0.84	PPIC	A15			
S2	4.218	5.65	1.43	Flow Control	B125			
S8	4.433	5.65	1.22	450 x 600mm I.C.	A15	200.0	300	43
S9	4.543	5.65	1.11	900 x 1200mm I.C.	A15	200.0	300	22
S10	4.646	5.65	1.00	900 x 1200mm I.C.	A15	200.0	300	20.5
S11	4.771	5.65	0.88	450 x 600mm I.C.	A15	200.0	300	25
S12	4.821	5.65	0.83	PPIC	A15	150.0	150	7.5
S13	4.851	5.65	0.80	PPIC	A15	150.0	150	4.5
S11	4.771	5.65	0.88	450 x 600mm I.C.	A15			
S11a	4.844	5.65	0.81	PPIC	A15	150.0	150	11
S10	4.646	5.65	1.00	900 x 1200mm I.C.	A15			
S10a	4.881	5.65	0.77	450 x 600mm I.C.	A15	100.0	150	23.5
S3	4.378	5.65	1.27	900 x 1200mm I.C.	D400			
S14	4.553	5.65	1.10	450 x 600mm I.C.	B125	100.0	225	17.5
S15	4.693	5.65	0.96	450 x 600mm I.C.	A15	100.0	150	6.5
S16	4.853	5.65	0.80	450 x 600mm I.C.	A15	100.0	150	16
SJ1	4.440	5.65	1.21	Junction	-			
S17	4.816	5.70	0.88	450 x 600mm I.C.	A15	60.0	150	22.6

Foul Water Network						Grade 1 in	Pipe DIA (mm)	Length (m)
Manhole Reference	Invert Level (m)	Cover Level (m)	Depth (m)	Chamber Details	Cover Loading			
PUMP	3.700	5.65	1.95	Pump	D400	100.0	150	28
F1	3.980	5.65	1.67	1200Ø PCC	B125	100.0	150	18.5
F2	4.165	5.65	1.49	900 x 1200mm I.C.	B125	100.0	150	26
F3	4.425	5.65	1.23	450 x 600mm I.C.	A15	80.0	150	19
F4	4.663	5.65	0.99	PPIC	A15	60.0	150	10
F5	4.829	5.67	0.84	PPIC	A15			
PUMP	3.700	5.65	1.95	Pump	D400	100.0	150	26
F6	3.960	5.65	1.69	1200Ø PCC	D400	100.0	150	44
F7	4.400	5.65	1.25	450 x 600mm I.C.	A15	60.0	150	16
F8	4.667	5.65	0.98	PPIC	A15			
PUMP	3.867	5.65	1.78	Pump	D400	45.0	150	18
F9	4.267	5.65	1.38	450 x 600mm I.C.	A15	80.0	150	14.5
F10	4.448	5.65	1.20	PPIC	A15	80.0	150	11.5
F11	4.592	5.65	1.06	PPIC	A15			

1:250 0m 6.25m 12.5m

Offsite drainage system discharges into Existing ditch at this location

Southern Water Manhole Ref: 9601 U.T.L

CLIMPING STREET

Ditch discharges into Southern Water Surface Water system at this location. 2l/s discharge rate agreed by Southern Water.

1:500 0m 12.5m 25.0m

Rising Main discharge chamber

RISK ITEM
Existing rising main

New connection into chamber subject to S106 agreement with Southern Water

Southern Water Manhole Ref: 8701
CL = 5.651
IL = 4.026

NOTE TO TENDERERS
Capacity request from Southern Water suggest connection point into chamber 9601. Provide extra-over cost for extending rising main down Climping Street and connecting into this chamber.

1:250 0m 6.25m 12.5m

Survey Company info here
DRG NUMBER: DATE RECEIVED:
Hunters
DRG NUMBER: M9316-APL003.dwg DATE RECEIVED: 04.11.2021

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

Drainage Key

Sewers

- Foul water drain (private/non adoptable)
- Surface water drain (private/non adoptable)
- Surface water sewer (Adoptable)
- Foul water sewer (Adoptable)
- Surface Water rising main
- Foul rising main
- Existing foul water sewer (Adopted)

Chamber Key

FW	SW	
MH		Mini access chamber (mac) - 300mmØ *
		PPIC - 475mmØ *
DM	DM	Adoptable demarcation manhole within 1m of boundary *
		Manhole Depth 1.25 to 1.5m * Depth 1.55 to 3.0m *

* General note
(Refer to standard details & long sections for chamber sizes. Size may need to increase dependant on number of incoming pipes/size of incoming pipes)

- Surface water rodding eye
- F1 Manhole reference number
- Rain water down pipe (roddable access)
- ST Silt Trap (ST) with removable silt bucket
- Soil vent pipe/soil stack
- RG Road gully (trapped) D400
- Linear drainage channel
- Cellular storage (refer to drawing for sizes)
- Overland Flows Route
- Tree root protection zone (RPZ)
- Baffle to prevent rapid through flow of water through permeable Surfacing
- Approximate Extent of Green Roof

REV	DRAWN	CHECK	REVISION COMMENTS	ISSUE DATE
P13	NJ	TST	Drainage design updated in line with revised site layout	04/11/21
P12	NJ	TST	Storage tank amended to avoid floatation issues, cover level to foul chambers amended	20/04/21
P11	NJ	TST	Drainage system amended following high groundwater readings	10/03/21
P10	NJ	TST	Soakaway F added	17/02/21
P09	NJ	TST	Permeable note amended by Soakaway E	16/02/21
P08	NJ	TST	Pipe information added to surface water design. Additional notes added	29/01/21
P07	NJ	TST	Drainage design updated	14/01/21
P06	NJ	TST	Legal site boundary amended	19/11/20
P05	NJ	TST	Rising main re-routed. On-site storage tank added	23/10/20

DRAWING TITLE: Proposed Drainage Strategy
SHEET NO.: 1/1

PROJECT
Bairds Care Home
Littlehampton
Sussex

CLIENT: BRACKLEY

Infrastruct CS Ltd
The Studios, High Goggan Farm, Nr Cogan, Kehna, CF64 6AS Tel: 01993 709709 info@infrastruct.co.uk

SCALE @ A1: As Noted

ENGINEER	DRAFT	APPROVED
MBD	NJ	TST

PROJECT NUMBER	STATUS	DATE
2868	S2	April 18

PROJECT	ORIGIN	PHASE	LEVEL	TYPE	ROLE	DWG NO	REVISION
BCH	ICS	01	XX	DR	C	003	P13

X:\ICS Jobs\2800 Jobs\2868 - Baird's Farm Shop, Crookthorn Lane (Brackley Investments)\01 - Drawings\01 Civil\2868-BCH-ICS-01-XX-M2-C-003_Drainage Design.dwg

ARUN DISTRICT COUNCIL CM/46/21/PL