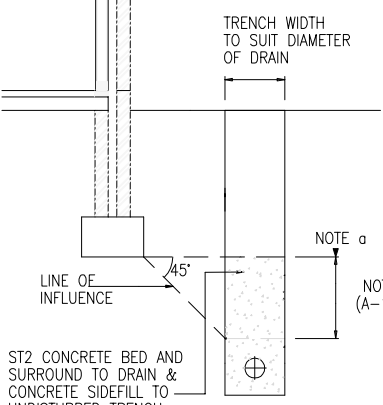
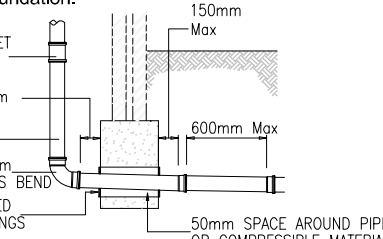
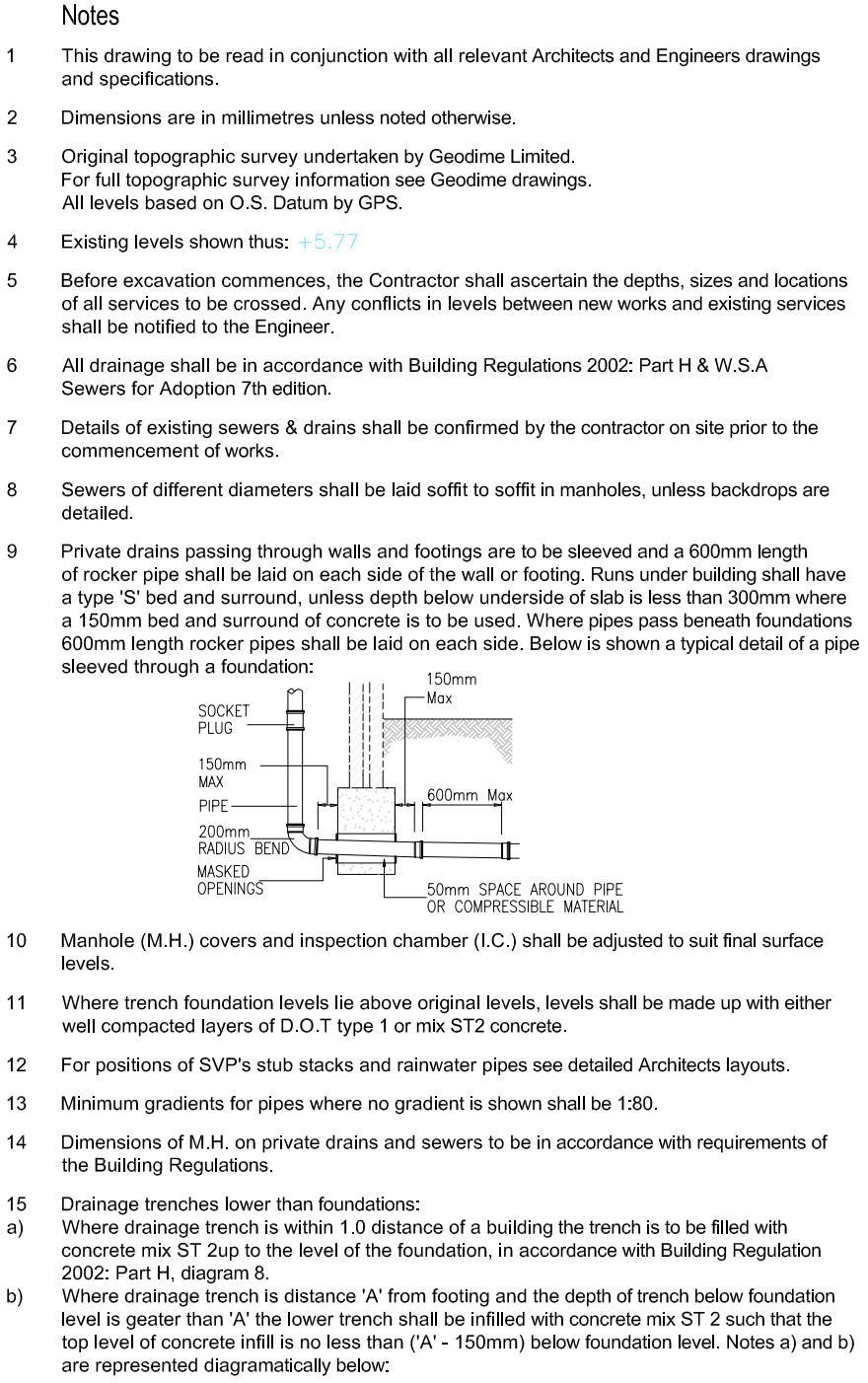




- a) Pipe materials shall be:
- For external private drain runs:
- i) Clay pipes, extra strength or super strength in accordance with BS EN 295: 1991
- ii) UPVC pipes in accordance with BS 4680 & BS 5481: 1989 (flexible pipes)
- iii) Ductile iron pipe work in accordance with BS EN 598, as Stanton Integral with high performance joints or equivalent.
- b) For adoptable sewers/highways drains, see longitudinal sections.
- 17 Definition of 'rigid' and 'flexible' pipes shall be as Building Regulations Part 1, table 7.
- 18 Flexible pipes - Where private flexible pipes have more than 900mm cover under: vehicular areas and more than 600mm cover under gardens, bedding and backfill shall be Type S as shown on drawing SD/01.05.
- For special protection where pipes are laid with less cover see notes below.
- a) Where private flexible pipes have less than 900mm cover under vehicular areas, a standard concrete bedding and backfill shall be used (see as 'Type Y' drawing SD/01.05). Reference Building Regulations 2002: Part H.
- b) Where private flexible pipes have less than 600mm cover under gardens, concrete shall be laid as bedding and backfill shall be used (see as 'Type X' drawing SD/01.05.) Reference Building Regulations 2002: Part H.
- 19 Rigid pipes - Bedding and backfill shall be 'Type S' as shown on drawing SD/01.05, except on lengths where special protection is required (see notes below).
- a) For 150mm private rigid pipes have less than 400mm cover under vehicular areas, a 'Type Z' concrete surround shall be used (see drawing SD/01.05) Reference Building Regulations 2002: Part H.
- b) For 150mm private rigid pipes have less than 300mm cover under garden areas, a 'Type Z' concrete surround shall be used (see drawing SD/01.05) Reference Building Regulations 2002: Part H.
- c) For 150mm private rigid pipes have less than 600mm cover under any areas, a 'Type Z' concrete surround shall be used (see drawing SD/01.05) Reference Building Regulations 2002: Part H
- 20 Private storm and foul drainage connections shall be detailed by the Architect.
- 21 All external rainwater down pipes shall discharge through a proprietary bottle gully as shown on drawing SD/01.12.
- 22 Trenches below existing carriageways and parking areas shall be reinstated with D.O.E Type 1 material in accordance with standard detail SD/02.05.
- 23 Road gullies shall be trapped in accordance with standard detail SD/01.05 Type 1T.
- 24 All utility covers & frames within the extent of the works shall be adjusted as necessary. The Contractor shall ensure that all services within vehicular areas have appropriate grade covers & frames as shown on drawings.
- | | Vehicular areas | D400 | Pedestrian areas | B125 |
|----|---|------|------------------|------|
| 25 | Where drains are to be abandoned they shall be removed or infilled by grouting in accordance with The Civil Engineering Specification for the Water industry - 6th Edition, clause 5.23. Drainage runs shall be CCTV Surveyed prior to being abandoned to ascertain whether any 'blind' junction exist. | | | |
| 26 | Redundant / abandoned gullies, soakways and manholes shall be broken out to a depth of 600mm then infilled with well compacted Type GF4645 chipper material. | | | |
| 27 | Channel drains shall be Aco Multidrain MD150 with a 0.5% in built gradient, or equivalent. They shall discharge to a suitable drain or gully. Grating shall be Hegelguss Class D400. To be installed in accordance with manufacturers instructions. | | | |

P3	MANHOLES F6 & F7 DELETED.	-	PF-01-11-16
P2	CLIENT'S COMMENTS INCORPORATED. MANHOLES F8, F9 & F10 DELETED.	-	PF-31-10-16
REV	DESCRIPTION	CHECKED	DATE



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CLIENT
Kingsham Homes

PROJECT
Housing Development

Bound Lane, Hayling Island

General Arrangement - Drainage

DRAWN BY PF	CHECKED BY VC	DESIGNED BY PF
SCALE @ A1 1:200	DATE Oct. 2016	STATUS Preliminary
JOB NO. 28476	DRAWING NO. 101	REVISION P3

FOUL MANHOLE SCHEDULE

M.H. REF.	INVERT LEVEL LOWEST PIPE	COVER LEVEL	CHAMBER SIZE INTERNAL DIMS	C.V. RATING	COVER SIZE	COVER TYPE	M.H. TYPE	COMMENT / DRG.
F1	11.1480 80.3090	4.730	EXISTING	—	—	—	—	NEW BACKDROP
F2	3.3275	4.930	ø1050	600 x 600	D400	P3	STD.01.23	
F3	3.3395	4.870	ø1050	600 x 600	D400	P3	STD.01.23	
F4	3.5655	4.915	750 x 675	750 x 600	D400	P2	STD.01.22	
F5	3.8000	4.930	750 x 675	750 x 600	D400	P2	STD.01.22	

SURFACE WATER MANHOLE SCHEDULE

M. REF.	INVERT LEVEL - LOWEST PIPE.	COVER LEVEL	CHAMBER SIZE INTERNAL	CHAMBER DIMS	COVER CLEAR	SIZE OPENING	COVER TYPE	M.H. TYPE	COMMENT /	DRG.
S1	4.150	4.870	750	x 675	750	x 600	D400*	P2	STD.01.22	
S2	4.150	4.870	750	x 675	750	x 600	D400*	P2	STD.01.22	
S3	4.150	4.890	750	x 675	750	x 600	D400*	P2	STD.01.22	
S3A	4.150	4.890	750	x 675	750	x 600	D400*	P2	STD.01.22	
S4	4.150	4.890	750	x 675	750	x 600	D400*	P2	STD.01.22	
S4A	4.150	4.880	750	x 675	750	x 600	D400*	P2	STD.01.22	
S5	4.150	4.930	750	x 675	750	x 600	D400*	P2	STD.01.22	
S6	4.150	5.040	750	x 675	750	x 600	D400*	P2	STD.01.22	

* = Chamber with Vented Cover

SOAKAWAY SCHEDULE

TYPE	LOWEST INCOMING INVERT LEVEL	EFFECTIVE DEPTH (H)	TOTAL DEPTH (m)	RING DIA. (m)	PIT DIMENSIONS PLAN (L x W)	COVER SIZE (CLEAR OPENING) (mm)	COVER TYPE	COMMENT
S A1	as shown	1.20	1.80	—	2.00 x 2.50	Ø225 (2 No.)	B125	SEE DWG 01.63 HIGH STRENGTH SA
S A2	as shown	1.20	1.80	—	2.00 x 2.50	Ø225 (2 No.)	B125	SEE DWG 01.63 HIGH STRENGTH SA
S A3	as shown	1.20	1.80	—	2.00 x 2.50	Ø225 (2 No.)	B125	SEE DWG 01.63 HIGH STRENGTH SA
S A4	as shown	1.20	1.80	—	2.00 x 2.50	Ø225 (2 No.)	B125	SEE DWG 01.63 HIGH STRENGTH SA
S A5	as shown	1.20	1.80	—	2.00 x 2.50	Ø225 (2 No.)	B125	SEE DWG 01.63 HIGH STRENGTH SA

1. A Lotrac 1800 geotextile or equivalent surround is required.
2. Soakaways shall be a minimum of 5.00 m from any buildings or structures.
3. The Contractor shall immediately notify the Engineer if groundwater is encountered in soakaway pits.
4. A soil infiltration rate of 4.50×10^6 m/sec has been used for soakaway design.



WARNING :

- Surface water drainage design is subject to further on site groundwater level monitoring.

OUTSTANDING DESIGN ISSUES:

- Highway Works Agreement
- Sewer Connection Agreement
- Precise RWP Locations
- Precise Foul Outlet Locations
- Foundation Details

KEY

-
- TOPOGRAPHICAL SURVEY
- PROPOSALS
- PROPOSED SURFACE WATER DRAINS Ø 100 UNLESS NOTED OTHERWISE
- SURFACE WATER MANHOLE/ Ø 450 INSPECTION CHAMBER/ RODDING EYE
- FULLY PERFORATED DISTRIBUTION PIPE, TYPE 'S' BED, SEE DETAIL
- PROPOSED FOUL WATER DRAINS Ø 100 UNLESS NOTED OTHERWISE
- FOUL WATER MANHOLE/Ø 450 INSPECTION CHAMBER/ RODDING EYE
- Ø100/S/150
(13.54)
- GRADIENT
BED TYPE (SEE STD.01.85)
PIPE DIAMETER
DISTANCE CHAMBER CENTRE TO CHAMBER CENTRE
DIRECTION OF FALL
- CHANNEL DRAIN
- SOAKAWAY, SEE SCHEDULE
- HYDRAULIC BREAK, SEE DETAILED DRAWING