



MANUFACTURER	HYDRO INTERNATIONAL
TELEPHONE	01275 878371
TYPE	41mm Type C
FLOW/HEAD	3250/5 @ 2.97m
HYDRO REF.	10-2031

To be installed in accordance with manufacturers specification and recommendations, before the manhole cover slab is installed.

HYDROBRAKE DATA

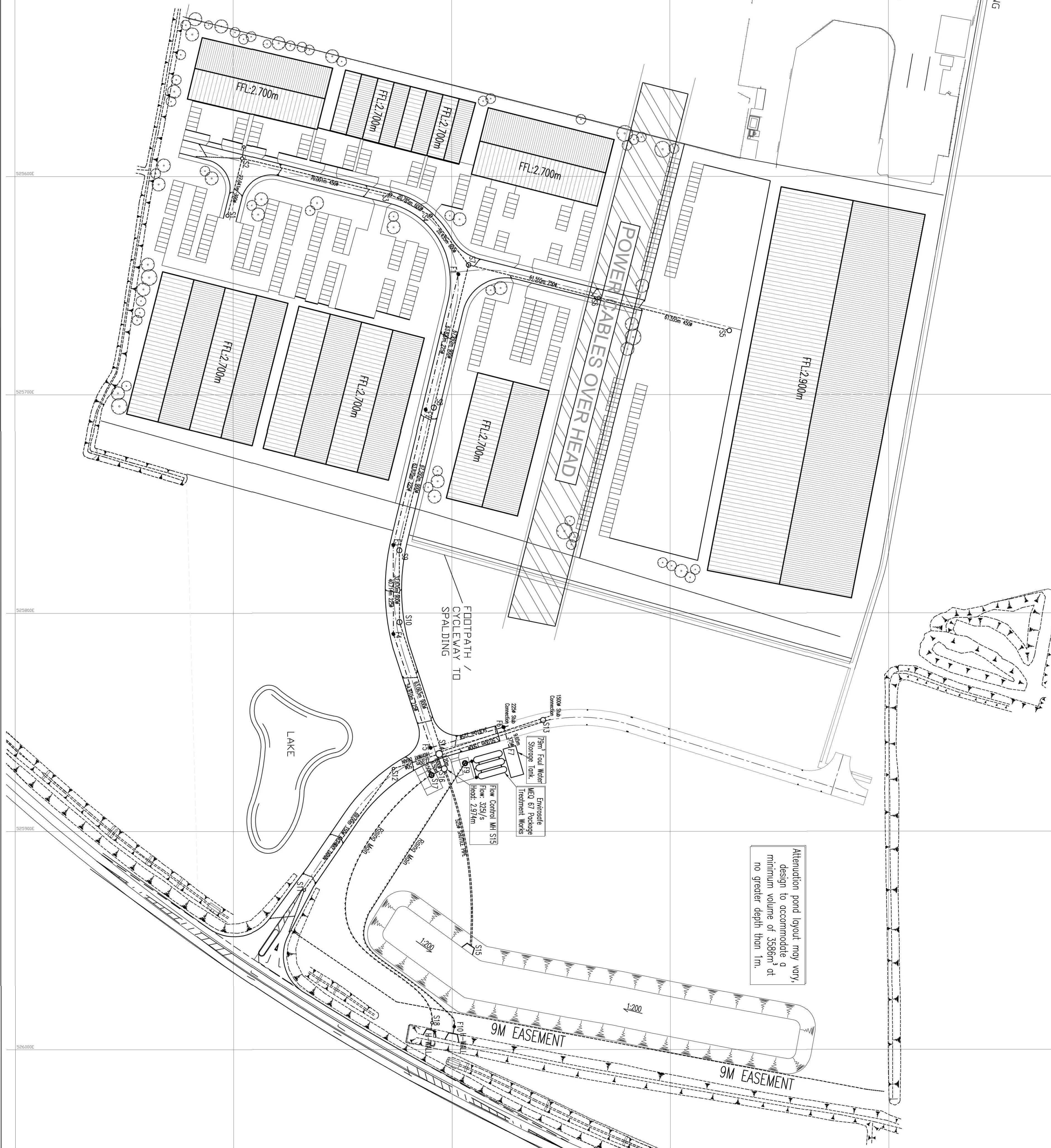
SURFACE WATER MANHOLE SCHEDULE							
Manhole Reference	Cover Level (in A.O.D.)	Invert Level (in A.O.D.)	Depth to Invert (ft)	Pipe		Manhole Type	Grate Over Cover
				Soffit Depth (ft)	Pipe Size (in)		
S1	2.583	1.083	1.500	1.200	300	IN/OUT	D400
S2	2.342	0.842	1.500	1.200	450	IN	D400
S3	2.802	0.512	2.288	1.835	450	OUT	D400
S4	2.761	0.326	2.435	1.835	600	IN	D400
S5	3.125	0.785	1.650	1.200	450	IN	D400
S6	2.418	0.468	1.850	1.200	750	OUT	D400
S7	2.431	0.719	2.312	1.562	750	IN	D400
S8	2.456	-0.031	2.462	1.562	900	OUT	D400
S9	2.770	-0.300	2.622	1.722	900	IN	D400
S10	2.352	-0.386	2.718	1.818	900	IN/OUT	D400
S11	2.241	0.981	1.350	1.200	150	OUT	D400
S12	2.789	0.207	2.582	2.432	150	IN/OUT	D400
S13	2.828	-1.750	4.778	4.428	150	IN/OUT	D400
S14	2.465	-1.250	3.745	2.845	900	IN	D400
		-1.650	4.345	2.845	1500	IN	
		-2.150	4.645	2.845	1800	OUT	
							A(3'100)

SURFACE WATER MANHOLE SCHEDULE

	Cover length may vary, still on site within conditions			
	1,200	1,050	150	IN/OUT
HWALL	2,000	0,800	1,200	IN/OUT
S18	2,190	0,823	1,367	1,217 IN/OUT
S17	2,413	-3,038	5,451	150 IN Pumping Station
S16	2,400	-2,165	4,565	4,301 IN Private Surface Water
S13	1,900	-0,300	4,200	525 IN/OUT See ARP Dev 13/04/01/08

FOUL WATER MANHOLE SCHEDULE

Manhole Reference	Cover Level (m A.O.D.)	Inlet Level (m A.O.D.)	Depth To Inlet (m)	Depth To Soft (m)	Flow Size (mm)	Flow Type	Manhole Grade Or Cover
F1	2.420	-0.812	3.232	3.007	225	IN/OUT	A1(500) D400
F2	2.460	-1.194	3.654	3.429	225	IN/OUT	A1(500) D400
F3	2.780	-1.576	4.306	3.811	225	IN/OUT	A1(500) D400
F4	2.280	-1.820	4.100	3.875	225	IN/OUT	A1(500) D400
F5	2.458	-2.146	4.428	4.203	225	N	A1(500) D400
F6	2.840	-2.357	5.197	4.972	225	N	A1(500) D400
		-2.507	5.347	4.972	375	OUT	
F7	2.210	-2.565	4.775	4.400	375	N	
		-2.866	4.875	4.500	375	OUT	
F8	2.018	-2.836	5.046	4.671	375	IN/OUT	A1(500) B125
		-3.883	4.976	4.751	225	N	Private Foot Water
F9	2.003	-3.883	5.976	5.751	225	OUT	Pumping Station
F10	1.800	-1.164	0.516	0.391	225	OUT	B1(200) B125
H1 WALL	1.600	1.764	0.336	0.211	225	IN/OUT	HEADWALL



- | | MC | July | |
|--|---|------|--|
| 4. All manholes within Highway to be D400 type covers with concrete collar, all others to be B125. | | | |
| 3. All manholes deeper than 2m to be minimum of 1200mm x pre cast concrete rings. | | | |
| 2. All works to be carried out in accordance with <u>Specifiers for Adoption</u> fifth Edition. | ☐ Storm water manhole
☐ Surface Water Rising Manhole
☐ Foul water manhole
☐ Foul water sewer
☐ Foul Water Rising Manhole
☐ Headroom Outfall
☐ Private Pumping Station Manhole | | |
| 1. For residential sections refer to drawing No. 1034/01/0310-0303. |  | | |

General Drainage Installation Notes:

1. Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 BS EN 124 with 150mm deep frames in highway.
2. Filled ground must be filled and consolidated before any sewer works are carried out.
3. All concrete pipes to BS EN 1916 Class 120.

4. Cover soils must only the B3 Material, where the clear opening of the referenced product is different to that of the cover and fitting. A locking bearing seal should be fitted above the cover seal to bring the size down to 630x320mm.
5. The cover and fitting must be a minimum of 1m and maximum 0.5m from kerb, roads and service margins.
6. Seers must have 3 metres clearance from trees and hedges. (Also refer to figure 2.3 on page 37 in Seers for Adoption 6th Edition for restrictions on the planting adjacent to Seers).
7. Seers to be laid on 100mm bedding (150mm granular bed and surround). Where depth of cover to top of the sear is less than 120mm in highways and verges (or less than 100mm in more rural access areas) then a concrete slab should be provided above the granular bed and surround.

9. All sewers to be BS1 Kitemark (certified to BS 455-01).
10. Sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer.
11. Bedding and backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2)

12. The chairline size of manholes with more than one connection in them may not be increased on increment to accommodate the structures and details.
13. Structures and details fitting motifs to be provided with motor type.
14. Detection chambers to be a min. 450mm diameter for 100mm haul and 150mm surface water pipes to be 120mm deep, for depths greater than 120mm, restricted access opening to 350mm is required for safety
15. The depth of detection chamber to be 70mm where depth exceeds 120mm.
16. Sufficient resistant cement (C20-B2) and eight manholes must be used on a laboratory report provided that such precautions are not necessary.

A	MTO	13.09.11	Revised to suit layout changes.	
/	MTO	17.09.10	Issued for Information	ARP
Rev	By	Date	Revision	Chk


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TITLE	
PHASE A DRAINAGE LAYOUT	
PROJECT	
CLAY LAKE SPALDING	
CLIENT	
ASHLEY KING DEVELOPMENTS	
Scale	Date
1:1000 @ A1	JUN '10
Drawn	MTD
Ok	APP
Rev	
1034/01/02	A