


Cole Easdon Consultants		Page 0
York House, Edison Park Dorcan Way Swindon, SN3 3RB	FWS NW1 Bicester	
Date April 2011 File FWS NW1.MDX	Designed By TGL Checked By	
Elstree Computing Ltd	Network W.12.4	

FOUL SEWERAGE DESIGN

Design Criteria for FWS NW1.FWS

Pipe Sizes	STANDARD	Manhole Sizes	STANDARD
Industrial Flow (l/s/ha)	0.00	Add Flow / Climate Change (%)	10
Industrial Peak Flow Factor	0.00	Minimum Backdrop Height (m)	0.200
Flow Per Person (l/per/day)	225.00	Maximum Backdrop Height (m)	0.000
Persons per House	3.00	Min Design Depth for Optimisation (m)	1.200
Domestic (l/s/ha)	0.00	Min Vel for Auto Design only (m/s)	0.75
Domestic Peak Flow Factor	6.00	Min Slope for Optimisation (1:X)	500


Designed with Level Soffits

Network Design Table for FWS NW1.FWS

PN	Length (m)	Fall (m)	Slope (1:X)	Area (ha)	Houses	DWF (l/s)	k (mm)	HYD SECT	DIA (mm)
1.000	32.642	0.218	150.0	0.000	14	0.0	1.500	o	150
1.001	20.317	0.135	150.5	0.000	18	0.0	1.500	o	150
1.002	68.985	0.460	150.0	0.000	0	0.0	1.500	o	150
1.003	34.228	0.228	150.1	0.000	4	0.0	1.500	o	150
1.004	7.270	0.990	7.3	0.000	22	0.0	1.500	o	150

Network Results Table

PN	US/IL (m)	Σ Area (ha)	Σ DWF (l/s)	Σ Hse	Add Flow (l/s)	P.Dep (mm)	P.Vel (m/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.000	77.190	0.000	0.0	14	0.1	25	0.38	0.71	12.6	0.7
1.001	76.972	0.000	0.0	32	0.2	37	0.49	0.71	12.6	1.7
1.002	76.837	0.000	0.0	32	0.2	37	0.49	0.71	12.6	1.7
1.003	76.377	0.000	0.0	36	0.2	39	0.51	0.71	12.6	1.9
1.004	76.149	0.000	0.0	58	0.3	23	1.69	3.25	57.4	3.0

Cole Easdon Consultants		Page 1
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PIPELINE SCHEDULES for FWS NW1.FWS

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH DIAM., L*W (mm)
1.000	o	150	1	78.814	77.190	1.474	1050
1.001	o	150	2	78.635	76.972	1.513	1200
1.002	o	150	3	78.489	76.837	1.502	1200
1.003	o	150	4	77.830	76.377	1.303	1050
1.004	o	150	5	77.486	76.149	1.187	1050

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH DIAM., L*W (mm)
1.000	32.642	150.0	2	78.635	76.972	1.513	1200
1.001	20.317	150.5	3	78.489	76.837	1.502	1200
1.002	68.985	150.0	4	77.830	76.377	1.303	1050
1.003	34.228	150.1	5	77.486	76.149	1.187	1050
1.004	7.270	7.3	6	77.448	75.159	2.139	0