

1. ALL ADAPTABLE ELEMENTS OF THE WORKS TO BE CONSTRUCTED AS DETAILED IN THE SECTOR GUIDANCE IN RELATION TO THE ADOPTION OF SEWERAGE ASSETS BY SEWERAGE COMPANIES IN ENGLAND AS ENABLED BY WATER UK'S CODE FOR ADOPTION. SECTIONS OF DRAINAGE TO BE ADOPTED UNDER THE TERMS OF A SECTION 104 AGREEMENT. ALL ADAPTABLE PIPEWORK TO BE CONSTRUCTED FROM VITRIFIED CLAY TO BS EN 252 (UP TO 225mm PIPE) OR CONCRETE TO BS EN 1916 AND BS EN 5911 (300mm PIPE AND ABOVE).
2. ALL CONCRETE PIPEWORK, MANHOLES AND FITTINGS SHALL BE TO BS EN 1916 & BS 5911 (ALL RELEVANT PARTS). ALL CONCRETE PIPEWORK TO BE TO HIGH STRENGTH.
3. WHERE CONNECTIONS ARE TO BE MADE TO EXISTING MANHOLES/SEWERS, (INVERT LEVELS, PIPE SIZES & ORIENTATIONS) SHALL BE CHECKED PRIOR TO THE COMMENCEMENT OF THE WORKS AND ANY VARIANCE REPORTED TO THE ENGINEER IMMEDIATELY. WORK TO COMMENCE AT CONSTRUCTION RISK WHEREVER POSSIBLE.
4. WHERE PIPELINES CROSS, EACH IS TO BE SURROUNDED WITH GRADE ST4 MASS CONCRETE FOR A DISTANCE NOT LESS THAN 1m CENTRED ON THE CROSSING POINT. LENGTH OF SURROUNDING TO BE EXTENDED AS NECESSARY TO WITHIN 150mm OF THE NEXT NEAREST FLEXIBLE JOINTS.
5. DUCTILE IRON COVERS SHALL BE: (UNLESS NOTED ON DRAWING OR MANHOLE SCHEDULE)
ON ACCESS ROADS AND CAR PARKS: GRADE D400 (BS EN 124:1994)
ON SHARED PATHWAYS, FIELDS: GRADE A15 (BS EN 124:1994)
6. SOWER JETTING FOR FUTURE MAINTENANCE SHOULD ACCORD WITH BS EN 1869-1:2014 AND THE SOWER JETTING CODE OF PRACTICE (PUBLISHED BY WGL). MANUFACTURERS OF THE DRAINAGE SYSTEM COMPONENTS SHOULD ALSO BE CONSULTED BUT UNDER NO CIRCUMSTANCES SHOULD THE FOLLOWING PRESSURES BE EXCEEDED:
PLASTIC PIPES - 2000 psi
CLAY PIPES - 5000 psi
CONCRETE PIPES - 5000 psi
7. STORAGE DESIGN BASED ON 1 IN 100 YR STORM + 40%.
8. CONTRACTOR TO ESTABLISH LOCATIONS OF ALL EXISTING SERVICES PRIOR TO COMMENCING.
9. EXISTING TREES TO BE PROTECTED WHERE EXCAVATIONS RUN CLOSE.
10. THE PROPOSED CONNECTIONS INTO THE ADOPTED SEWER NETWORK AND THE DISCHARGE RATES WILL ALL BE SUBJECT TO APPROVAL AND INSPECTION BY SOUTHERN WATER UNDER THE TERMS OF A SECTION 106 AGREEMENT.
11. THE PROPOSED DRAINAGE LAYOUT IS SUBJECT TO DRAINAGE SURVEY OUTCROP CORROBORATING PIPE SIZES AND INVERT LEVELS OF EXISTING MANHOLES FORMING FINAL OUTLINES OF THE SITE'S PROPOSED DRAINAGE NETWORK. ANY VARIATIONS TO BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING ANY WORKS ON SITE. WORK TO COMMENCE AT CONSTRUCTION RISK WHEREVER POSSIBLE.

KEY

- Existing Surface Water Drain
Private Surface Water Drain
Adoptable Section 104 Surface Water Sewer
Adoptable Section 38 Highway Drain
Adoptable Section 104 Surface Water Sewer Manhole
Adoptable Section 38 Highway Manhole
Network 1 (Refer to Windes Calculations)
Network 2 (Refer to Windes Calculations)
Underground Attenuation Tank
Surface Water Plastic Inspection Chamber - Lateral Drain
Adoptable Section 38 Highway Road Gully
Headwall
Impervious Area Contributing to Surface Water Network Through Private Network
1,000 - Assigned Pipe Number
1,720,14m² - Area in Square Meters
Impervious Area Contributing to Surface Water Network Directly into Highway Road Gullies
1,000 - Assigned Pipe Number
1,720,14m² - Area in Square Meters
Detention Basin Area Contributing to Surface Water Network
1,000 - Assigned Pipe Number
1,720,14m² - Area in Square Meters

NOTE

- Drawing to be read in conjunction with Windes Calculations:
• 10768_Surface Water Network 1 Simulation
• 10768_Surface Water Network 2 Simulation

Manhole	Pipe	Total
No.	No.	Invert
SWMH1.1	1.000	806.488
SWMH1.2	1.001	712.854
SWMH1.3	1.002	653.876
SWMH1.4	1.003	528.854
SWMH1.5	1.004	1332.652
SWMH1.6	1.005	108.854
SWMH1.7	1.006	614.807
SWMH1.8	1.007	407.123
SWMH1.9	1.008	779.840
SWMH1.10	1.009	156.854
SWMH1.11	1.010	690.376
SWMH1.12	1.011	495.154
SWMH1.13	1.012	495.154
SWMH1.14	1.013	495.154
SWMH1.15	1.014	1362.075
SWMH1.16	1.015	1362.075
Headwall 1	1.016	0.000
Headwall 2	1.017	1332.652
SWMH1.17	1.018	0.000
SWMH1.18	1.019	0.000
Headwall 3	1.020	670.300
SWMH1.19	1.021	0.000
Headwall 4	1.022	0.000
SWMH1.20	1.023	690.376
SWMH1.21	1.024	0.000
SWMH1.22	1.025	0.000
SWMH1.23	1.026	0.000
SWMH1.24	1.027	0.000
SWMH1.25	1.028	0.000
SWMH1.26	1.029	0.000
SWMH1.27	1.030	0.000
SWMH1.28	1.031	0.000
SWMH1.29	1.032	0.000
SWMH1.30	1.033	0.000
SWMH1.31	1.034	0.000
SWMH1.32	1.035	0.000
SWMH1.33	1.036	0.000
SWMH1.34	1.037	0.000
SWMH1.35	1.038	0.000
SWMH1.36	1.039	0.000
SWMH1.37	1.040	0.000
SWMH1.38	1.041	0.000
SWMH1.39	1.042	0.000
SWMH1.40	1.043	0.000
SWMH1.41	1.044	0.000
SWMH1.42	1.045	0.000
SWMH1.43	1.046	0.000
SWMH1.44	1.047	0.000
SWMH1.45	1.048	0.000
SWMH1.46	1.049	0.000
SWMH1.47	1.050	0.000
SWMH1.48	1.051	0.000
SWMH1.49	1.052	0.000
SWMH1.50	1.053	0.000
SWMH1.51	1.054	0.000
SWMH1.52	1.055	0.000
SWMH1.53	1.056	0.000
SWMH1.54	1.057	0.000
SWMH1.55	1.058	0.000
SWMH1.56	1.059	0.000
SWMH1.57	1.060	0.000
SWMH1.58	1.061	0.000
SWMH1.59	1.062	0.000
SWMH1.60	1.063	0.000
SWMH1.61	1.064	0.000
SWMH1.62	1.065	0.000
SWMH1.63	1.066	0.000
SWMH1.64	1.067	0.000
SWMH1.65	1.068	0.000
SWMH1.66	1.069	0.000
SWMH1.67	1.070	0.000
SWMH1.68	1.071	0.000
SWMH1.69	1.072	0.000
SWMH1.70	1.073	0.000
SWMH1.71	1.074	0.000
SWMH1.72	1.075	0.000
SWMH1.73	1.076	0.000
SWMH1.74	1.077	0.000
SWMH1.75	1.078	0.000
SWMH1.76	1.079	0.000
SWMH1.77	1.080	0.000
SWMH1.78	1.081	0.000
SWMH1.79	1.082	0.000
SWMH1.80	1.083	0.000
SWMH1.81	1.084	0.000
SWMH1.82	1.085	0.000
SWMH1.83	1.086	0.000
SWMH1.84	1.087	0.000
SWMH1.85	1.088	0.000
SWMH1.86	1.089	0.000
SWMH1.87	1.090	0.000
SWMH1.88	1.091	0.000
SWMH1.89	1.092	0.000
SWMH1.90	1.093	0.000
SWMH1.91	1.094	0.000
SWMH1.92	1.095	0.000
SWMH1.93	1.096	0.000
SWMH1.94	1.097	0.000
SWMH1.95	1.098	0.000
SWMH1.96	1.099	0.000
SWMH1.97	1.100	0.000
SWMH1.98	1.101	0.000
SWMH1.99	1.102	0.000
SWMH1.100	1.103	0.000
SWMH1.101	1.104	0.000
SWMH1.102	1.105	0.000
SWMH1.103	1.106	0.000
SWMH1.104	1.107	0.000
SWMH1.105	1.108	0.000
SWMH1.106	1.109	0.000
SWMH1.107	1.110	0.000
SWMH1.108	1.111	0.000
SWMH1.109	1.112	0.000
SWMH1.110	1.113	0.000
SWMH1.111	1.114	0.000
SWMH1.112	1.115	0.000
SWMH1.113	1.116	0.000
SWMH1.114	1.117	0.000
SWMH1.115	1.118	0.000
SWMH1.116	1.119	0.000
SWMH1.117	1.120	0.000
SWMH1.118	1.121	0.000
SWMH1.119	1.122	0.000
SWMH1.120	1.123	0.000
SWMH1.121	1.124	0.000
SWMH1.122	1.125	0.000
SWMH1.123	1.126	0.000
SWMH1.124	1.127	0.000
SWMH1.125	1.128	0.000
SWMH1.126	1.129	0.000
SWMH1.127	1.130	0.000
SWMH1.128	1.131	0.000
SWMH1.129	1.132	0.000
SWMH1.130	1.133	0.000
SWMH1.131	1.134	0.000
SWMH1.132	1.135	0.000
SWMH1.133	1.136	0.000
SWMH1.134	1.137	0.000
SWMH1.135	1.138	0.000
SWMH1.136	1.139	0.000
SWMH1.137	1.140	0.000
SWMH1.138	1.141	0.000
SWMH1.139	1.142	0.000
SWMH1.140	1.143	0.000
SWMH1.141	1.144	0.000
SWMH1.142	1.145	0.000
SWMH1.143	1.146	0.000
SWMH1.144	1.147	0.000
SWMH1.145	1.148	0.000
SWMH1.146	1.149	0.000
SWMH1.147	1.150	0.000
SWMH1.148	1.151	0.000
SWMH1.149	1.152	0.000
SWMH1.150	1.153	0.000
SWMH1.151	1.154	0.000
SWMH1.152	1.155	0.000
SWMH1.153	1.156	0.000
SWMH1.154	1.157	0.000
SWMH1.155	1.158	0.000
SWMH1.156	1.159	0.000
SWMH1.157	1.160	0.000
SWMH1.158	1.161	0.000
SWMH1.159	1.162	0.000
SWMH1.160	1.163	0.000
SWMH1.161	1.164	0.000
SWMH1.162	1.165	0.000
SWMH1.163	1.166	0.000
SWMH1.164	1.167	0.000
SWMH1.165	1.168	0.000
SWMH1.166	1.169	0.000
SWMH1.167	1.170	0.000
SWMH1.168	1.171	0.000
SWMH1.169	1.172	0.000
SWMH1.170	1.173	0.000
SWMH1.171	1.174	0.000
SWMH1.172	1.175	0.000
SWMH1.173	1.176	0.000
SWMH1.174	1.177	0.000
SWMH1.175	1.178	0.000
SWMH1.176	1.179	0.000
SWMH1.177	1.180	0.000
SWMH1.178	1.181	0.000
SWMH1.179	1.182	0.000
SWMH1.180	1.183	0.000
SWMH1.181	1.184	0.000
SWMH1.182	1.185	0.000
SWMH1.183	1.186	0.000
SWMH1.184	1.187	0.000
SWMH1.185	1.188	0.000
SWMH1.186	1.189	0.000
SWMH1.187	1.190	0.000
SWMH1.188	1.191	0.000
SWMH1.189	1.192	0.000
SWMH1.190	1.193	0.000
SWMH1.191	1.194	0.000
SWMH1.192	1.195	0.000
SWMH1.193	1.196	0.000
SWMH1.194	1.197	0.000
SWMH1.195	1.198	0.000
SWMH1.196	1.199	0.000
SWMH1.197	1.200	0.000
SWMH1.198	1.201	0.000
SWMH1.199	1.202	0.000
SWMH1.200	1.203	0.000
SWMH1.201	1.204	0.000
SWMH1.202	1.205	0.000
SWMH1.203	1.206	0.000
SWMH1.204	1.207	0.000
SWMH1.205	1.208	0.000
SWMH1.206	1.209	0.000
SWMH1.207	1.210	0.000
SWMH1.208	1.211	0.000
SWMH1.209	1.212	0.000
SWMH1.210	1.213	0.000
SWMH1.211	1.214	0.000
SWMH1.212	1.215	0.000
SWMH1.213	1.216	0.000
SWMH1.214	1.217	0.000
SWMH1.215	1.218	0.000
SWMH1.216	1.219	0.000
SWMH1.217	1.220	0.000
SWMH1.218	1.221	0.000
SWMH1.219	1.222	0.000
SWMH1.220	1.223	0.000
SWMH1.221	1.224	0.000
SWMH1.222	1.225	0.000
SWMH1.223	1.226	0.000
SWMH1.224	1.227	0.000
SWMH1.225	1.228	0.000
SWMH1.226	1.229	0.000
SWMH1.227	1.230	0.000
SWMH1.228	1.231	0.000
SWMH1.229	1.232	0.000
SWMH1.230	1.233	0.000
SWMH1.231	1.234	0.000
SWMH1.232	1.235	0.000
SWMH1.233	1.236	0.000
SWMH1.234	1.237	0.000
SWMH1.235	1.238	0.000
SWMH1.236	1.239	0.000
SWMH1.237	1.240	0.000
SWMH1.238	1.241	0.000
SWMH1.239	1.242	0.000
SWMH1.240	1.243	0.000
SWMH1.241	1.244	0.000
SWMH1.242	1.245	0.000
SWMH1.243	1.246	0.000
SWMH1.244	1.247	0.000
SWMH1.245	1.248	0.000
SWMH1.246	1.249	0.000
SWMH1.247	1.250	0.000
SWMH1.248	1.251	0.000
SWMH1.249	1.252	0.000
SWMH1.250	1.253	0.000
SWMH1.251	1.254	0.000
SWMH1.252	1.255	0.000
SWMH1.253	1.256	0.000
SWMH1.254	1.257	0.000
SWMH1.255	1.258	0.000
SWMH1.256	1.259	0.000
SWMH1.257	1.260	0.000
SWMH1.258	1.261	0.000
SWMH1.259	1.262	0.000
SWMH1.260	1.263	0.000
SWMH1.261	1.264	0.000
SWMH1.262	1.265	0.000
SWMH1.263	1.266	0.000
SWMH1.264	1.267	0.000
SWMH1.265	1.268	0.000
SWMH1.266	1.269	0.000
SWMH1.267	1.270	0.000
SWMH1.268	1.271	0.000
SWMH1.269	1.272	0.000
SWMH1.270	1.273	0.000
SWMH1.271	1.274	0.000
SWMH1.272	1.275	0.000
SWMH1.273	1.276	0.000
SWMH1.274	1.277	0.000
SWMH1.275	1.278	0.000
SWMH1.276	1.279	0.000
SWMH1.277	1.280	0.000
SWMH1.278	1.281	0.000
SWMH1.279	1.282	0.000
SWMH1.280	1.283	0.000
SWMH1.281	1.284	0.000
SWMH1.282	1.285	0.000
SWMH1.283	1.286	0.000
SWMH1.284	1.287	0.000
SWMH1.285	1.288	0.000
SWMH1.286	1.289	0.000
SWMH1.287	1.290	0.000
SWMH1.288	1.291	0.000
SWMH1.289	1.292	0.000
SWMH1.290	1.293	0.000
SWMH1.291	1.294	0.000
SWMH1.292	1.295	0.000
SWMH1.293	1.296	0.000
SWMH1.294	1.297	0.000
SWMH1.295	1.298	0.000
SWMH1.296	1.299	0.000
SWMH1.297	1.300	0.000
SWMH1.298	1.301	0.000
SWMH1.299	1.302	0.000
SWMH1.300	1.303	0.000
SWMH1.301	1.304	0.000
SWMH1.302	1.305	0.000
SWMH1.303	1.306	0.000
SWMH1.304	1.307	0.000
SWMH1.305	1.308	0.000
SWMH1.306	1.309	0.000
SWMH1.307	1.310	0.000
SWMH1.308	1.311	0.000
SWMH1.309	1.312	0.000
SWMH1.310	1.313	0.000
SWMH1.311	1.314	0.000
SWMH1.312	1.315	0.000
SWMH1.313	1.316	0.000
SWMH1.314	1.317	0.000
SWMH1.315	1.318	0.000
SWMH1.316	1.319	0.000
SWMH1.317	1.320	0.000
SWMH1.318	1.321	0.000
SWMH1.319	1.322	0.000
SWMH1.320	1.323	0.000
SWMH1.321	1.324	0.000
SWMH1.322	1.325	0.000
SWMH1.323	1.326	0.000
SWMH1.324	1.327	0.000
SWMH1.325	1.328	0.000
SWMH1.326	1.329	0.000
SWMH1.327	1.330	0.000
SWMH1.328	1.331	0.000
SWMH1.329	1.332	0.000
SWMH1.330	1.333	0.000
SWMH1.331	1.334	0.000
SWMH1.332	1.335	0.000
SWMH1.333	1.336	0.000
SWMH1.334	1.337	0.000
SWMH1.335	1.338	0.000
SWMH1.336	1.339	0.000
SWMH1.337	1.340	0.000
SWMH1.338	1.341	0.000
SWMH1.339	1.342	0.000
SWMH1.340	1.343	0.000
SWMH1.341	1.344	0.000