



# **Norwich Western Link**

## **Drainage Strategy Report**

### **Appendix 1: Interpretation of infiltration values from the ground investigation report**

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## **1 Introduction**

- 1.1 This document includes a summary table of the infiltration rates as discussed in Section 5.2.5 of the Drainage Strategy Report. It shows for each basin the results of the infiltration test undertaken in each trial pit, the date of test, highlights the lowest result in each test, the depth of the test, depth of the basin and a summary of the ground encountered within the trial pit log.

**Interpretation of infiltration values from the ground investigation report**

No Data	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Geology
Location	Location (new naming convention)	Trial pit	Design (Note 1)	Design (Note 2)	GI (Note 3)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Depth of trial hole (Infiltration test carried out at) / Comments	Current Basin Design Depth	Summary of Ground Encountered to approx. basin design level. For further details, refer to detailed TP/ BH logs .
No data	No data	No data	m/hr	m/hr	No data	m/s	m/hr	m/s	m/hr	m/s	m/hr	No data	Metres	No data
A1067-1	A1067	TP04	0.0432	No data	Oct-21	1.01E-06	0.0036	8.51E-07	0.0031	<b>8.31E-07</b>	<b>0.0030</b>	4m	1.5	Made ground to 0.55, slightly gravelly slightly clayey fine to coarse SAND 0.55 - 2.20, over structureless CHALK to 4m
A1067-1	No data	TP205	No data	No data	Jul-22	5.08E-06	0.0183	4.32E-06	0.0156	<b>3.78E-06</b>	<b>0.0136</b>	1.8m	1.5	0.5m made ground, slightly clayey fine to coarse SAND to 1.8m depth
A1067-1	No data	TP206	No data	No data	Jul-22	9.53E-06	0.0343	4.72E-06	0.0170	<b>3.99E-06</b>	<b>0.0144</b>	1.8m	1.5	0.5m made ground, slightly clayey fine to coarse SAND to 1.8m depth
A1067-1	No data	TP207	No data	0.0096	Jul-22	6.53E-06	0.0235	<b>2.66E-06</b>	<b>0.0096</b>	1.31E-04	0.4716	3.5m (3.1m)	1.5	0.5m made ground, slightly clayey fine to coarse SAND to 3.5m depth
Basin 2	ML01	TP07	0.0432	No data	Oct-21	9.17E-06	0.0330	7.29E-06	0.0262	<b>6.34E-06</b>	<b>0.0228</b>	1.6m due to pit becoming unstable.	1.2	Made ground to 0.40, Gravelly silty fine to medium SAND 0.40 - 1.60. S/S by revised Basin 2 location position for the refined highway alignment
No data	No data	TP209	No data	No data	Jul-22	1.83E-05	0.0659	1.11E-05	0.0400	<b>1.11E-05</b>	<b>0.0400</b>	No data	No data	Silty fine and medium SAND
No data	No data	TP223	No data	0.0216	Jul-22	<b>5.99E-06</b>	<b>0.0216</b>	6.79E-06	0.0244	6.21E-06	0.0224	No data	No data	Slightly gravelly slightly clayey fine to coarse SAND
No data	No data	TP224	No data	No data	Jul-22	9.24E-06	0.0333	7.22E-06	0.0260	<b>6.34E-06</b>	<b>0.0228</b>	No data	No data	gravelly slightly clayey fine to coarse SAND
No data	ML02	TP13	No data	No data	Oct-21	1.05E-06	0.0038	9.82E-07	0.0035	<b>8.91E-07</b>	<b>0.0032</b>	4m	No data	Slightly gravelly very sandy CLAY
No data	No data	TP14	0.0432	No data	Oct-21	1.13E-04	0.4068	8.33E-05	0.2999	<b>5.22E-05</b>	<b>0.1879</b>	4m	2	Made ground to 0.50, Slightly clayey silty fine to coarse SAND 0.50 - 0.80, Firm occasionally stiff sandy gravelly CLAY 0.80 - 2.20, over structureless CHALK to 4.0m.
No data	No data	TP222	No data	0.0113	Jul-22	3.63E-06	0.0131	<b>3.05E-06</b>	<b>0.0110</b>	3.15E-06	0.0113	2.15m	No data	Slightly gravelly sandy CLAY
No data	No data	TP229	No data	No data	Jul-22	5.74E-06	0.0207	5.28E-06	0.0190	<b>4.55E-06</b>	<b>0.0164</b>	1.70m	No data	Sandy gravelly SILT
No data	No data	TP230	No data	No data	Jul-22	1.78E-05	0.0641	1.46E-05	0.0526	<b>1.32E-05</b>	<b>0.0475</b>	1.70m	No data	Coarse GRAVEL
Basin 3	No data	TP13	No data	No data	Jul-22	No data	No data	No data	No data	8.91E-07	0.0032	4.00m	No data	Slightly gravelly very sandy CLAY
No data	No data	TP14	No data	No data	Jul-22	No data	No data	No data	No data	5.22E-05	0.1879	4.00m	No data	Made ground to 0.50, Slightly clayey silty fine to coarse SAND 0.50 - 0.80, Firm occasionally stiff, sandy gravelly CLAY 0.80 - 2.20, over structureless CHALK to 4.0m.
No data	No data	TP222	No data	No data	Jul-22	No data	No data	No data	No data	<b>3.05E-06</b>	<b>0.0110</b>	2.15m	No data	Slightly gravelly sandy CLAY

No Data	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Infiltration test results	Geology	
Location	Location (new naming convention)	Trial pit	Design (Note 1)	Design (Note 2)	GI (Note 3)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Percolation test results (lowest of 3 in bold used)	Depth of trial hole (Infiltration test carried out at) / Comments	Current Basin Design Depth	Summary of Ground Encountered to approx. basin design level. For further details, refer to detailed TP/ BH logs .
No data	No data	No data	m/hr	m/hr	No data	m/s	m/hr	m/s	m/hr	m/s	m/hr	No data	Metres	No data	
No data	No data	TP229	No data	No data	Jul-22	No data	No data	No data	No data	4.55E-06	0.0164	No data	1.70m	Sandy gravelly SILT	
No data	No data	TP230	No data	No data	Jul-22	No data	No data	No data	No data	1.32E-05	0.0475	No data	1.70m	Coarse GRAVEL	
Basin 4	ML03	TP11	0.0432	No data	Oct-21	3.15E-05	0.1134	1.28E-05	0.0461	<b>1.06E-05</b>	<b>0.0382</b>	4m	2	Topsoil to 0.50, gravelly slightly Sandy silty fine to medium SAND 0.50 - 1.50, Structureless CHALK 1.5 - 4.0	
Basin 4	No data	TP225	No data	0.0089	Jul-22	3.35E-06	0.0121	2.48E-06	0.0089	<b>2.48E-06</b>	<b>0.0089</b>	2.4m	No data	0.33m topsoil, gravelly, slightly clayey fine to coarse SAND to 1.4m depth, slightly gravelly fine and medium SAND to 2.4m depth	
Basin 4	No data	TP226	No data	No data	Jul-22	6.01E-06	0.0216	6.16E-06	0.0222	<b>5.67E-06</b>	<b>0.0204</b>	1.6m due to pit becoming unstable	No data	0.32m topsoil, gravelly silty fine to coarse SAND to 0.52m depth, gravelly silt to 1.6m depth, gravelly sandy CLAY.	
Basin 4	No data	TP227	No data	No data	Jul-22	4.25E-05	0.1530	2.27E-05	0.0817	<b>1.91E-05</b>	<b>0.0688</b>	0.95m	No data	0.35m topsoil, gravelly slightly clayey fine to coarse SAND to 0.7m depth, Firm to stiff slightly gravelly sandy CLAY to 0.95m	
Basin 4 forebay	No data	TP228	No data	0.4968	Jul-22	1.15E-03	4.1400	2.78E-04	1.0008	<b>1.38E-04</b>	<b>0.4968</b>	1.30m	No data	Gravelly silt	
Basin 6	ML05	CP12	0.02124	No data	Oct-21	3.90E-07	0.0014	3.60E-07	0.0013	<b>2.40E-07</b>	<b>0.0009</b>	9m Test carried out in a borehole not trial pit	2	Topsoil to 0.35, sandy gravelly CLAY 0.35 - 0.70, slightly gravelly silty CLAY 0.70 - 3.80, slightly gravelly slightly silty CLAY to 6.7, slightly silty fine to medium SAND to 8.9, slightly silty fine to coarse SAND and fine to coarse GRAVEL with occasional thin bands of sandy CLAY	
Basin 6	ML05	CP11	As Above	No data	Oct-21	3.10E-06	0.0112	<b>8.10E-07</b>	<b>0.00292</b>	1.10E-06	0.0040	12m Test carried out in a borehole not trial pit	As Above	Topsoil to 0.35, sandy gravelly CLAY 0.35 - 2.20	

Note 1) Client's requirement, source WSP ground investigation Infiltration testing ref. doc. NCCT41793-03-C-07-02-20200626-Surface Water Drainage Strategy)

Note 2) Percolation value to be used for detailed design

Note 3) Date of ground investigation from which percolation values are quoted