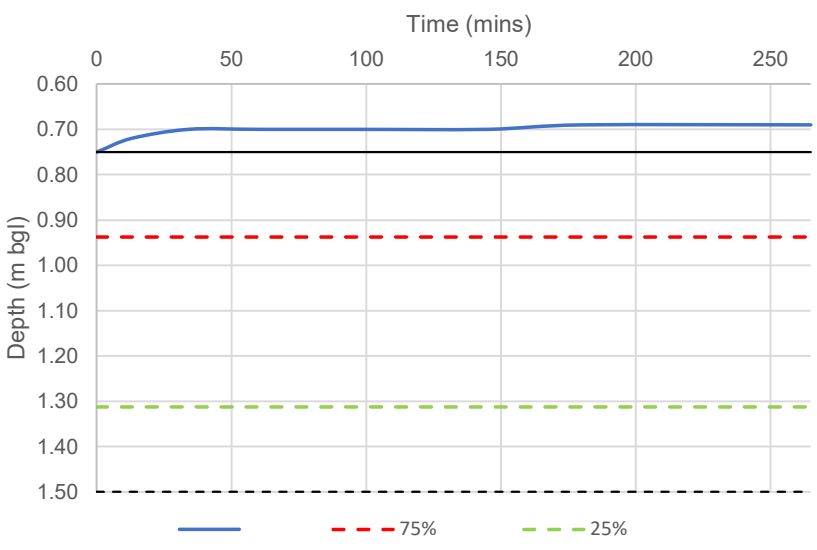
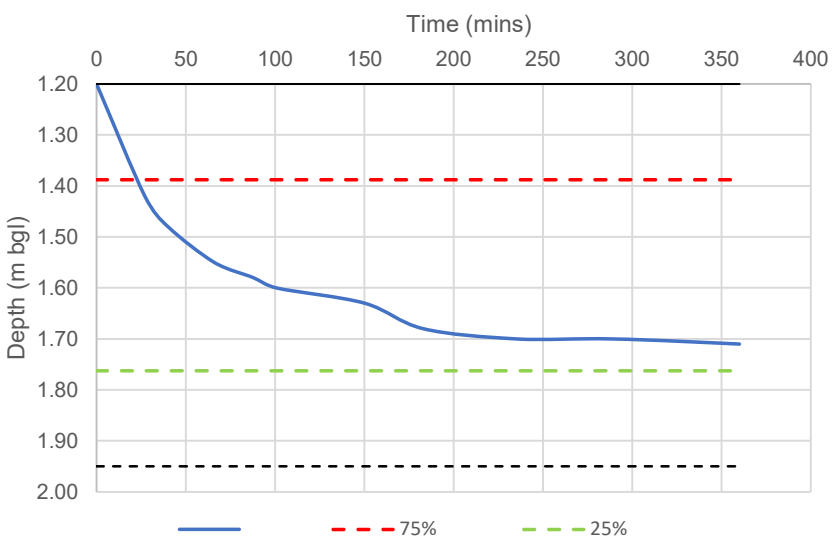


		SUTCLIFFE INVESTIGATIONS				BRE 365 Soil Infiltration Test	
		TEL: 0151 227 3155					
		FAX: 0151 227 3156					
Job No.: 33029LG		Job Name: Benchill Road, Wythenshawe					
Position Ref.: SA101		Date: 11/10/2023		Site Team: MW			
Pit Dimensions							
Depth (m) 1.50		Width (m) 0.60		Length (m) 1.60			
Depth to Water (m bgl) 0.75		Effective Depth (m) 0.75					
Soil Infiltration Test Data		Volume Outflowing between 75% and 25% of effective depth					
Time (mins)	Depth (m bgl)						
0	0.75	$V_{p75-25} = L \times B \times D_{75-25}$					
13	0.72	$= 1.60 \times 0.60 \times 0.38$					
34	0.70	$= 0.11 \text{ m}^3 \text{ (30\% Void Allowance Made)}$					
60	0.70	Mean surface area through which outflow occurs, taken to be pit sides to 50% effective depth and including the base of the pit					
95	0.70						
145	0.70						
180	0.69						
265	0.69	$a_{p50} = L_{\text{side Area}} + B_{\text{side Area}} + \text{Base Area}$					
		$= 1.20 + 0.45 + 0.96$					
		$= 2.61 \text{ m}^2$					
Soil Infiltration Test Graph							
							
Depth at 75% (m bgl) 0.94		Depth at 25% (m bgl) 1.31					
Infiltration Rate Calculation							
$t_{p75-25} = \text{Time at 25\%} - \text{Time at 75\%}$		$= - 60 = -$					
Soil Infiltration Rate		$= V_{p75-25} / (a_{p50} \times t_{p75-25} \times 60)$					
		$= - \text{ m/s } = - \text{ mm/hr}$					
Comments							
Test Failed - The test results did not provide an infiltration rate due to the inefficiencies of the ground to infiltrate. Infiltration testing has been undertaken and failed, therefore alternative drainage solutions will be required. NOTE: The water level rose during the test due to rain and no infiltration.							

		SUTCLIFFE INVESTIGATIONS TEL: 0151 227 3155 FAX: 0151 227 3156		BRE 365 Soil Infiltration Test	
Job No.: 33029LG		Job Name: Benchill Road, Wythenshawe			
Position Ref.: SA102		Date: 11/10/2023		Site Team: MW	
Pit Dimensions					
Depth (m) 1.95		Width (m) 0.60		Length (m) 1.45	
Depth to Water (m bgl) 1.20		Effective Depth (m) 0.75			
Soil Infiltration Test Data		Volume Outflowing between 75% and 25% of effective depth			
Time (mins)	Depth (m bgl)				
0	1.20	$V_{p75-25} = L \times B \times D_{75-25}$			
27	1.42	$= 1.45 \times 0.60 \times 0.38$			
40	1.48	$= 0.10 \text{ m}^3 \text{ (30\% Void Allowance Made)}$			
66	1.55	Mean surface area through which outflow occurs, taken to be pit sides to 50% effective depth and including the base of the pit			
88	1.58				
101	1.60				
150	1.63				
183	1.68	$a_{p50} = L_{\text{side Area}} + B_{\text{side Area}} + \text{Base Area}$			
235	1.70	$= 1.09 + 0.45 + 0.87$			
289	1.70	$= 2.41 \text{ m}^2$			
360	1.71	Soil Infiltration Test Graph			
					
		Depth at 75% (m bgl) 1.39		Depth at 25% (m bgl) 1.76	
Infiltration Rate Calculation					
		$t_{p75-25} = \text{Time at 25\%} - \text{Time at 75\%}$			
		$= - 60 = -$			
		Soil Infiltration Rate			
		$= V_{p75-25} / (a_{p50} \times t_{p75-25} \times 60)$			
		$= - \text{ m/s } = - \text{ mm/hr }$			
Comments					
Test Failed - The test results did not provide an infiltration rate due to the inefficiencies of the ground to infiltrate. Infiltration testing has been undertaken and failed, therefore alternative drainage solutions will be required.					