

**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH02R**

Dates : 9/6/20 - 9/6/20

Job Number : Q0215

Ground Level :

Location :

Engineer :

Coordinates :

m B.G.L.	Run Details				Fractures		Samples		Strata				Water
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thick-ness)	Description	Legend	Depth (Thick-ness)	
0										Drilled using Cable Percussive Drilling techniques		(3.20)	
1													
2													
3													
4										Concrete (Drillers Description)		3.20	
5										Weathered / Weak Mudstone		(0.10)	
6												3.30	
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19										Mudstone		18.70	
20													
21													
22													
23													
24													
25										Coal		24.20	
26										Mudstone		(1.10)	
27												25.30	
28												(2.70)	
29										Sandstone		28.00	
30													
31													
32													
33													
34													
35													
36													
37													
38										Siltstone and Mudstone		37.00	
39													
40													
41													
42													
43													
44													
45													
46										Terminated at 45.0mbgl		45.00	
47													
48													
49													

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
				3.00	115.00	2.90		Slow groundwater inflow below 2.9mbgl		0.00 - 3.00 3.00 - 45.00	Mist Water	100 100

Plant: Commachio 450P  
Remarks:



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

Operator:  
QGL

Logged By:  
MOB

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All measurements in  
metres unless  
otherwise stated



**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH03R**

Dates : 1/6/20 - 1/6/20

Job Number : Q0215

Ground Level :

Location :

Engineer :

Coordinates :

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thick-ness)	Description	Legend	Depth (Thick-ness)		
0									3.00	Made Ground (Drillers Description)		(3.00)		
1									3.00	Weathered / Weak Mudstone (Drillers Description)		3.00		
2									(14.10)			(14.10)		
3									17.10	Mudstone (Drillers Description)		17.10		
4									(7.10)			(7.10)		
5									24.20	Coal (Drillers Description)		24.20		
6									(0.80)	Sandstone (Drillers Description)		(0.80)		
7									25.00			25.00		
8									(7.70)			(7.70)		
9									32.70	Mudstone (Drillers Description)		32.70		
10									(6.80)			(6.80)		
11									39.50	Siltstone (Drillers Description)		39.50		
12									(5.50)			(5.50)		
13									45.00	Terminated at 45.0mbgl		45.00		

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
				3.00	115.00	22.30		Slow groundwater inflow		0.00 - 3.00	Mist	100
										3.00 - 45.00	Water	100

Plant: Commachio 450P

Remarks:



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

Operator:  
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All measurements in  
metres unless  
otherwise stated



**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH04R**

Dates : 10/6/20 - 10/6/20

Job Number : Q0215

Ground Level :

Location :

Engineer :

Coordinates :

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Depth (Thickness)		
0										Driller to 4.7mbgl using Cable Percussive Drilling techniques		(4.70)		
1									(4.70)					
2										Weathered / Weak Mudstone (Drillers Description)		4.70		
3														
4														
5														
6														
7														
8														
9														
10														
11														
12									(14.00)			(14.00)		
13														
14														
15														
16														
17														
18														
19									18.70	Mudstone (Drillers Description)		18.70		
20														
21														
22									(6.40)			(6.40)		
23														
24														
25									25.10	Coal (Drillers Description)		25.10		
26									(0.90)			(0.90)		
27									26.00	Sandstone (Drillers Description)		26.00		
28														
29														
30														
31									(9.00)			(9.00)		
32														
33														
34														
35														
36									35.00	Siltstone (Drillers Description)		35.00		
37														
38														
39														
40														
41									(10.00)			(10.00)		
42														
43														
44														
45									45.00	Terminated at 45.0mbgl		45.00		
46														
47														
48														
49														

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
				4.50	115.00	36.00		Slow Groundwater Inflow		0.00 - 4.50	Mist	100

Plant: Commachio 450P  
Remarks:



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

Operator:  
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All measurements in metres unless otherwise stated



**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH05R**

Dates : 8/6/20 - 8/6/20

Job Number : Q0215

Ground Level :

Location :

Engineer :

Coordinates :

m B.G.L.	Run Details					Fractures		Samples		Strata				Water
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thick-ness)	Description	Legend	Depth (Thick-ness)		
0														
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
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39														
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41														
42														
43														
44														
45														
46														
47														
48														
49														

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
				3.00	115.00	31.60		Slow Groundwater Inflow		0.00 - 3.00	Mist	100
										3.00 - 45.00	Water	100

Plant: Commachio 450P

Remarks:



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

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**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH06R**

Dates : 3/6/20 - 3/6/20

Job Number : Q0215

Ground Level :

Location :

Engineer :

Coordinates:

m B.G.L.	Run Details					Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thick-ness)	Description	Legend	Depth (Thick-ness)			
0											Drilled using Cable Percussive Drilling techniques		(3.30)		
1										(3.30)					
2										3.30	Boulders (Drillers Description)		3.30		
3										(0.10)	Weathered / Weak Mudstone (Drillers Description)		(0.10)		
4										3.40			3.40		
5															
6															
7															
8															
9															
10															
11															
12										(17.40)			(17.40)		
13															
14															
15															
16															
17															
18															
19															
20										20.80	Mudstone (Drillers Description)		20.80		
21										(3.30)			(3.30)		
22										24.10	Coal (Drillers Description)		24.10		
23										(1.10)	Sandstone (Drillers Description)		(1.10)		
24										25.20			25.20		
25															
26															
27															
28															
29															
30										(9.00)			(9.00)		
31															
32															
33															
34										34.20	Mudstone and Siltstone		34.20		
35															
36															
37															
38															
39															
40										(10.80)			(10.80)		
41															
42															
43															
44															
45										45.00	Terminated at 45.0mbgl		45.00		
46															
47															
48															
49															

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
				3.00	115.00					0.00 - 3.00	Mist	100
										3.00 - 45.00	Water	100

**Plant:** Commachio 450P  
**Remarks:** No Groundwater Strike Observed

	Plas Newydd SA 0FO Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	<b>Operator:</b> QGL	<b>Logged By:</b> MOB	<b>Sheet No.</b> 1 Of 1	<b>m Per Page</b> 50	All measurements in metres unless otherwise stated	
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**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH07R**

Dates : 4/6/20 - 4/6/20

Job Number : Q0215

Ground Level :

Location :

Engineer :

Coordinates:

m B.G.L.	Run Details					Fractures		Samples		Strata				Water
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Depth (Thickness)		
0														
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
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46														
47														
48														
49														

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
				3.00	115.00					0.00 - 3.00	Mist	100
										3.00 - 45.00	Water	100

**Plant:** Commachio 450P  
**Remarks:** No Groundwater Strike observed



Plas Newydd  
 SA 0FQ  
 Tel: 01554 744880  
 Fax:  
 email: enquiries@quantumgeotech.co.uk

**Operator:**  
 QGL

**Logged By:**  
 MOB

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All measurements in metres unless otherwise stated



**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH08R**

Dates : 4/6/20 - 4/6/20

Job Number : Q0215

Ground Level :

Location :

Engineer :

Coordinates:

m B.G.L.	Run Details				Fractures		Samples		Strata				Water
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thick-ness)	Description	Legend	Depth (Thick-ness)	
0													
1										Drilled using Cable Percussive Drilling techniques		(3.30)	
2													
3													
4									3.30	Boulders (Drillers Description)		3.30	
5									(0.40)	Weathered / Weak Mudstone (Drillers Description)		(0.40)	
6									3.70			3.70	
7													
8													
9													
10													
11													
12									(15.50)			(15.50)	
13													
14													
15													
16													
17													
18													
19													
20									19.20	Mudstone (Drillers Description)		19.20	
21													
22													
23													
24									(8.40)			(8.40)	
25													
26													
27													
28									27.60	Coal (Drillers Description)		27.60	
29									(0.80)	Sandstone (Drillers Description)		(0.80)	
30									28.40			28.40	
31													
32													
33													
34									(9.10)			(9.10)	
35													
36													
37													
38									37.50	Mudstone and Siltstone		37.50	
39													
40													
41													
42									(7.50)			(7.50)	
43													
44													
45									45.00	Terminated at 45.0mbgl		45.00	
46													
47													
48													
49													

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
				3.00	115.00					0.00 - 3.00	Mist	100
										3.00 - 45.00	Water	100

**Plant:** Commachio 450P

**Remarks:** No Groundwater Strike Observed



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

Operator:  
QGL

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All measurements in  
metres unless  
otherwise stated



**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH09R**

Dates : 11/6/20 - 11/6/20

Job Number : Q0215

Ground Level :

Location :

Engineer :

Coordinates :

m B.G.L.	Run Details					Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thick-ness)	Description	Legend	Depth (Thick-ness)			
0											Drilled using Cable Percussive Drilling techniques		(3.30)		
1															
2															
3															
4										3.30	Boulders (Drillers Description)		3.30		
5										(0.10)	Weathered / Weak Mudstone (Drillers Description)		(0.10)		
6										3.40			3.40		
7															
8															
9															
10															
11															
12															
13															
14															
15										(21.20)			(21.20)		
16															
17															
18															
19															
20															
21															
22															
23															
24															
25										24.60	Mudstone (Drillers Description)		24.60		
26										(4.00)			(4.00)		
27															
28															
29										28.60	Coal (Drillers Description)		28.60		
30										(1.00)	Mudstone (Drillers Description)		(1.00)		
31										29.60	Sandstone (Drillers Description)		29.60		
32										(1.40)			(1.40)		
33										31.00			31.00		
34										(6.00)			(6.00)		
35															
36															
37										37.00	Mudstone and Siltstone		37.00		
38															
39															
40															
41															
42										(8.00)			(8.00)		
43															
44															
45										45.00	Terminated at 45.0mbgl		45.00		
46															
47															
48															
49															

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
				3.00	115.00					0.00 - 3.00	Mist	100
										3.00 - 45.00	Water	100

Plant: Commachio 450P

Remarks: No Groundwater Strike Observed



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

Operator:  
QGL

Logged By:  
MOB

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All measurements in  
metres unless  
otherwise stated



**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH02**

Dates : 8/6/20 - 8/6/20

Job Number : Q0215

Ground Level : 324.96 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316398.47 E  
211270.92 N  
Co-ordinates to Local Grid

m B.G.Li	Samples		Insitu Test Results		Strata			Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	
0	0.30 0.50 0.50 - 1.00	ES1 ES2 B3			(1.00)	MADE GROUND - Greyish brown and grey silty sandy GRAVEL with medium cobble content. Gravel is fine to coarse sub-rounded to angular sandstone, concrete and brick. Cobbles are angular brick and concrete.		(1.00)
1	1.00 1.20 - 1.70	ES4 B6	1.20	SPT (C) 23 (4-5-6-6-6-5)	1.00 (0.30) 1.30	MADE GROUND - Reddish brown and dark grey sandy slightly gravelly CLAY. Gravel is fine to coarse angular brick. Dark grey gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-angular sandstone and mudstone. Cobbles are sub-rounded sandstone.		323.96 (0.30) 323.66
2	2.00 2.00 - 2.50	ES7 B9	2.00	SPT (C) 25 (6-6-7-6-6-7)	(1.90)			(1.90)
3	3.00 - 3.20	B11	3.00 3.20	SPT (C) 48 (8-10-11-12-11-14) SPT (C) 50/155mm (17-8/30mm-21-23-6/5mm-)	3.20	Terminated at 3.2mbgl		321.76

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
				3.20	200.00					2.70	3.20	2:00

**Equipment / plant used:** Dando 2000

**Remarks:** No Groundwater Encountered. Hand excavated service clearance pit undertaken to 1.2mbgl



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

Operator:  
Samson  
Drilling

Logged By:  
P Darby

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All measurements in  
metres unless  
otherwise stated



**Contract : Glyncod School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH03**

Dates : 5/6/20 - 5/6/20

Job Number : Q0215

Ground Level : 325.06 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316384.08 E  
211261.39 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Insitu Test Results		Strata			Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	
0	0.30 0.50 0.50 - 1.00	ES1 ES2 B3			(1.00)	MADE GROUND - Greyish brown slightly silty sandy GRAVEL with medium cobble content. Gravel is fine to coarse angular brick and concrete. Cobbles are angular brick and concrete.		(1.00)
1	1.00 1.20 - 1.70	ES4 B6	1.20	SPT (C) 16 (5-5-4-3-5-4)	1.00 (0.80)	MADE GROUND - Brown gravelly CLAY with medium cobble content. Gravel is fine to coarse sub- rounded to angular sandstone, concrete and brick. Cobbles are angular brick.		324.06 (0.80)
2	2.00 2.00 - 2.50	ES7 B9	2.00	SPT (C) 23 (7-7-6-6-6-5)	1.80	Dark grey gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-rounded to angular sandstone. Cobbles are sub-rounded sandstone.		323.26
3	3.00 - 3.50	B11	3.00	SPT (C) 50/230mm (13-13-15-16-16-3/5mm)	(3.00)			(3.00)
4	4.00 - 4.50	B13	4.00	SPT (C) 43 (9-9-10-11-10-12)				
5			4.60 4.80	SPT (C) 50/180mm (15-10/55mm-20-21-9/30mm-) SPT (C) 50/150mm (19-6/10mm-24-25-10mm-)	4.80	Terminated upon refusal		320.26

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
				4.80	200.00					2.90 4.30	3.20 4.80	1:00 2:00

**Equipment / plant used:** Dando 2000

**Remarks:** No Groundwater Encountered. Hand excavated service clearance pit undertaken to 1.2mbgl



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

Operator:  
Samson  
Drilling

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P Darby

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All measurements in  
metres unless  
otherwise stated



**Contract : Glyncod School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH04**

Dates : 3/6/20 - 3/6/20

Job Number : Q0215

Ground Level : 326.29 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316378.01 E  
211246.60 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Insitu Test Results		Strata			Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	
0					(0.20)	TOPSOIL (Drillers Description)		(0.20)
	0.30	ES1			0.20	MADE GROUND - Dak brown to black very silty slightly sandy GRAVEL / slightly sandy very gravelly SILT with organic odour. Gravel is fine to coarse sub-rounded to angular sandstone and mudstone.		326.09
	0.50	ES2			(1.00)			(1.00)
	0.50 - 1.00	B3						
1	1.00	ES4			1.20	Dark grey gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-rounded to angular sandstone and mudstone. Cobbles are sub-rounded sandstone.		325.09
	1.20 - 1.70	B6	1.20	SPT (C) 20 (5-5-5-4-5-6)				
2	2.00	ES7			2.00			
	2.00 - 2.50	B9	2.00	SPT (C) 32 (7-8-8-7-8-9)				
3	3.00 - 3.50	B11	3.00	SPT (C) 36 (9-9-10-9-8-9)	(3.50)			(3.50)
4	4.00 - 4.50	B13	4.00	SPT (C) 45 (10-11-11-10-11-13)				
			4.70	SPT (C) 50/150mm (16-9/40mm-21-26-30mm-)	4.70	Terminated upon refusal		321.59

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
				4.70	200.00					4.30	4.70	2:00

**Equipment / plant used:** Dando 2000

**Remarks:** No Groundwater Encountered. Hand excavated service clearance pit undertaken to 1.2mbgl



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

Operator:  
Samson  
Drilling

Logged By:  
P Darby

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**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH05**

Dates : 5/6/20 - 5/6/20

Job Number : Q0215

Ground Level : 324.99 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316412.12 E  
211251.17 N  
Co-ordinates to Local Grid

m B.G.Li	Samples		Insitu Test Results		Strata			Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	
0	0.30 0.50 0.50 - 1.00	ES1 ES2 B3			(0.80)	MADE GROUND - Light brown and grey sandy GRAVEL with medium to high cobble content and occasional steel re-bar. Gravel is fine to coarse angular brick and concrete. Cobbles are angular brick and concrete.		(0.80)
1	1.00 1.20 - 1.70	ES4 B6	1.20	SPT (C) 21 (5-6-6-5-4-6)	0.80 (0.40) 1.20	MADE GROUND - Brown gravelly CLAY with medium angular cobble content. Gravel is fine to coarse angular siltstone and brick. Cobbles are angular siltstone. (REWORKED NATURAL GROUND)		324.19 (0.40)
2	2.00 2.00 - 2.50	ES7 B9	2.00	SPT (C) 32 (7-8-8-9-8-7)	(2.00)	Stiff greyish brown slightly gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-rounded to sub-angular siltstone. Cobbles are sub-angular siltstone.		(2.00)
3			3.00 3.20	SPT (C) 50/265mm (12-13-12-15-15-8/40mm) SPT (C) 50/155mm (17-8/30mm-21-23-6/5mm-)	3.20	..... grey below 2.9mbgl		321.79

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
				3.20	200.00					2.90	3.20	2:00

**Equipment / plant used:** Dando 2000

**Remarks:** No Groundwater Encountered. Hand excavated service clearance pit undertaken to 1.2mbgl



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

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**Contract : Glyncod School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH06**

Dates : 1/6/20 - 2/6/20

Job Number : Q0215

Ground Level : 325.15 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316438.20 E  
211276.06 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Insitu Test Results		Strata			Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	
0	0.30 0.50 0.50 - 1.00	ES1 ES2 B3			(1.10)	MADE GROUND - Light brown and grey sandy GRAVEL with medium cobble content. Gravel is fine to coarse angular concrete and brick. Cobbles are angular concrete and brick.		(1.10)
1	1.00 1.20 1.20 - 1.70	ES4 SPT5 B6	1.20	SPT (S) 6 (2-2-1-1-2)	1.10	Stiff light brown and grey gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-angular siltstone. Cobbles are sub-angular siltstone.		324.05
2	2.00 2.00 - 2.50	ES7 SPT8 B9	2.00	SPT (S) 16 (4-4-4-3-4-5)	(2.20)	..... Grey below 2.0mbgl		(2.20)
3			3.00 3.30	SPT (C) 50/150mm (10-12-19-25-60mm-) SPT (C) 50/105mm (19-6/5mm-27-23/30mm-)	3.30			321.85

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
				3.30	200.00					2.80	3.30	2:00

**Equipment / plant used:** Dando 2000

**Remarks:** No Groundwater Encountered. Hand excavated service clearance pit undertaken to 1.2mbgl



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SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

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P Darby

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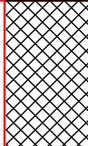
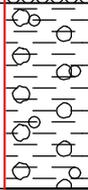
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**Contract : Glyncoed School, Ebbw Vale** **Borehole No. BH07**  
**Client : Blaenau Gwent County Borough Council**

Dates : 2/6/20 - 2/6/20 Job Number : Q0215 Ground Level : 325.06 m A.O.D.  
Level to Ordnance Datum  
Location : Engineer : Coordinates: 316447.88 E  
211249.53 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Insitu Test Results		Strata			Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	
0	0.30 0.50 0.50 - 1.00	ES1 ES2 B3			(1.20)	MADE GROUND - Light brown and grey sandy GRAVEL with medium cobble content. Gravel is fine to coarse sub-rounded to angular siltstone, brick and concrete. Cobbles are angular brick and concrete.		(1.20)
1	1.00 1.20 1.20 - 1.70	ES4 SPT5 B6	1.20	SPT (S) 12 (5-3-3-4-3-2)	1.20	Firm light brown and grey gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-rounded siltstone. Cobbles are sub-angular siltstone.		323.86
2	2.00 2.00 - 2.50	ES7 SPT8 B9	2.00	SPT (S) 50 (6-7-7-8-17-18)	(1.50)	..... Grey below 2.0mbgl		(1.50)
3			2.70	SPT (C) 50/115mm (19-6/5mm-24-26/40mm--)	2.70	Terminated at 2.7mbgl upon refusal		322.36

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
				2.70	200.00					2.20	2.70	2:00

**Equipment / plant used:** Dando 2000  
**Remarks:** No Groundwater Encountered. Hand excavated service clearance pit undertaken to 1.2mbgl

	Plas Newydd SA 0FQ Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	Operator: Samson Drilling	Logged By: P Darby	Sheet No. 1 Of 1	m Per Page 10	All measurements in metres unless otherwise stated	
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**Contract : Glyncoed School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH08**

Dates : 3/6/20 - 3/6/20

Job Number : Q0215

Ground Level : 325.14 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316443.33 E  
211229.48 N  
Co-ordinates to Local Grid

m B.G.Li	Samples		Insitu Test Results		Strata			Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thick-ness)	Description	Legend	
0	0.30 0.50 0.50 - 1.00	ES1 ES2 B3			(0.80)	MADE GROUND - Light grey and brown sandy GRAVEL with medium to high cobble content. Gravel is fine to coarse sub-rounded to angular siltstone, sandstone, brick and concrete. Cobbles are angular brick and concrete.		(0.80)
1	1.00 1.20 1.20 - 1.70	ES4 SPT5 B6	1.20	SPT (S) 20 (5-5-5-5-5)	0.80	Firm light brown and grey gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-rounded to sub-angular siltstone. Cobbles are sub-rounded siltstone.		324.34
2	2.00 2.00 - 2.50	ES7 SPT8 B9	2.00	SPT (S) 30 (6-8-7-7-8-8)	(2.50)	..... Stiff and grey below 1.7mbgl		(2.50)
3	3.00 3.00 - 3.30	SPT10 B11	3.00 3.30	SPT (S) 50/235mm (10-12-14-14-16-6/10mm) SPT (C) 50/110mm (22-3/0mm-27-23/35mm-)	3.30	Terminated upon refusal		321.84

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
				3.00	200.00					2.80 3.00	3.00 3.30	1:00 1:00

**Equipment / plant used:** Dando 2000

**Remarks:** No Groundwater Encountered. Hand excavated service clearance pit undertaken to 1.2mbgl



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

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**Contract : Glyncod School, Ebbw Vale**

**Borehole No.**

**Client : Blaenau Gwent County Borough Council**

**BH09**

Dates : 4/6/20 - 4/6/20

Job Number : Q0215

Ground Level : 325.20 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316420.99 E  
211227.26 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Insitu Test Results		Strata			Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	
0	0.30	ES1			(0.60)	MADE GROUND - Light brown and grey sandy GRAVEL with medium cobble content. Gravel is fine to coarse sub-rounded to angular brick and concrete. Cobble are angular brick and concrete.		(0.60)
	0.50 0.50 - 1.00	ES2 B3			0.60			324.60
1	1.00	ES4			(0.90)	MADE GROUND - Light brown and grey gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-rounded to angular brick, concrete and siltstone. Cobbles are angular brick and concrete.		(0.90)
	1.20 - 1.70	B6	1.20	SPT (C) 17 (3-5-4-4-5-4)	1.50			323.70
2	2.00	ES7			(1.80)	Firm light grey and brown gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-rounded siltstone. Cobbles are sub-rounded to sub-angular siltstone.		(1.80)
	2.00 - 2.50	SPT8 B9	2.00	SPT (S) 26 (6-6-7-6-5-8)	3.00			
3	3.00	SPT10				..... Stiff and grey below 2.8mbgl		
	3.00 - 3.30	B11	3.30	SPT (S) 51 (9-10-12-12-14-13) SPT (C) 50/180mm (15/50mm-10-19-19-12/30mm-)	3.30			321.90
4						Terminated upon refusal		

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
				3.30	200.00					2.80	3.30	2:00

**Equipment / plant used:** Dando 2000

**Remarks:** No Groundwater Encountered. Hand excavated service clearance pit undertaken to 1.2mbgl



Plas Newydd  
SA OFO  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

Operator:  
Samson  
Drilling

Logged By:  
P Darby

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# KEY TO BOREHOLE AND TRIAL PIT LOGS

## MATERIAL LEGENDS

	Made Ground		Topsoil		Clay
	Gravel		Sand		Silt
	Peat		Boulders		Cobbles
	Chalk		Conglomerate		Volcaniclastic
	Asphalt		Void		Mudstone
	Siltstone		Sandstone		Limestone
	Ironstone		Mudstone / Siltstone		Breccia
	Coal		Coral		Bedrock
	Shale		Gypsum		Igneous (Coarse Grained)
	Igneous (Fine Grained)		Igneous (Medium Grained)		Metamorphic (Coarse Grained)
	Metamorphic (Fine Grained)		Metamorphic (Medium Grained)		

## INSTALLATION / BACKFILL DETAILS

	Arisings		Concrete		Bentonite cement grout
	Bentonite seal		Filter		Pea Gravel
	Plain pipe		Slotted pipe		Piezometer / Standpipe tip

NOTE:  
Legend symbols in accordance with BS 5930 (2015)

## KEY TO BOREHOLE AND TRIAL PIT LOGS

**m.A.O.D.** metres Above Ordnance Datum.

### **SAMPLE AND TEST TYPES**

<b>U</b>	Undisturbed driven tube sample - 102mm diameter, 450mm long.
<b>P</b>	Undisturbed pushed piston sample - 102mm diameter, 1000mm long.
<b>TW</b>	Undisturbed thin walled push in sample - 100mm diameter, 750mm long.
<b>B</b>	Bulk disturbed sample.
<b>BLK</b>	Block Sample
<b>CBR</b>	Heavy duty undisturbed sample - 154 mm diameter (CBR mould).
<b>D</b>	Small disturbed sample.
<b>LB</b>	Large Bulk disturbed sample (for earthworks testing)
<b>C</b>	Core sample
<b>W</b>	Water sample
<b>G</b>	Gas sample
<b>ES</b>	Environmental sample (soil)
<b>j</b>	Jar sample
<b>t</b>	Tub sample
<b>p</b>	Pot sample
<b>s</b>	Small sample
<b>v</b>	Vial sample
<b>S</b>	Standard Penetration Test using split spoon sampler. (See Note).
<b>C</b>	Standard Penetration Test using a solid 60 degree cone. (See Note).

NOTE: Where a single value is quoted this is the N value for 300 mm penetration following a seating drive of 150 mm. Where this full penetration is not achieved the number of blows is quoted for the penetration below the seating drive eg. 63/160 mm.  
Where total penetration is less than the seating drive this is indicated by a + and the number of blows for total penetration is quoted eg. +50/75 mm.

<b>HV</b>	Hand Vane Test. Vane undrained shear strength, $c_u$ , quoted in kPa.
<b>V</b>	Borehole Vane Test. Vane undrained shear strength, $c_u$ , quoted in kPa.
<b>FHT/RHT</b>	Falling / Rising Head Permeability Test.

### **CORE RUN DETAILS**

<b>TCR</b>	Total Core Recovery, %
<b>SCR</b>	Solid Core Recovery, %
<b>RQD</b>	Rock Quality Designation, %
<b>FI</b>	Fracture Index. NI - Non intact where > 25 No. per metre length.

### **WATER COLUMN SYMBOLS**

	First water strike, second water strike etc.
	Standing water level after first strike, second strike etc.
	Seepage.

NOTE:  
Legend symbols in accordance with BS 5930 (2015)



## APPENDIX IV – ENGINEERING GEOLOGIST’S TRIAL PIT LOGS

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**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.**

**Client : Blaenau Gwent County Borough Council**

**TP01**

Dates : 16/6/20 - 16/6/20

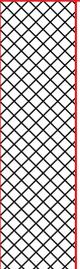
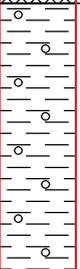
Job Number : Q0215

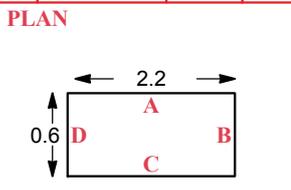
Ground Level : 324.04 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316506.24 E  
211271.09 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Tests		Strata				WATER
	Depth	Type No.	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
1	0.40 - 0.60 0.50 -	B1 ES1			1.00	MADE GROUND - Dark grey to black slightly silty slightly sandy GRAVEL with medium cobble content. Gravel is fine to coarse angular to sub-rounded concrete, brick and sandstone. Cobbles and boulders are angular concrete.			
					1.00	Firm grey and brown gravelly CLAY. Gravel is fine to coarse sub-rounded sandstone.		323.04	
2	1.30 -	D1			2.00	Terminated at 2.0mbgl to undertake soakaway test		322.04	



Groundwater:

Stability: Stable

Shoring: N/A

Remarks : No Groundwater Encountered

Equipment Used: 13t tracked excavator

**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.  
TP01**

**Client : Blaenau Gwent County Borough Council**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

Ground Level : 324.04 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316506.24 E  
211271.09 N  
*Co-ordinates to Local Grid*



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

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P Darby

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**Contract : Glyncoed School, Ebbw Vale**

**Client : Blaenau Gwent County Borough Council**

**Trial Pit No.  
TP01**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

Ground Level : 324.04 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316506.24 E  
211271.09 N  
*Co-ordinates to Local Grid*



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: [enquiries@quantumgeotech.co.uk](mailto:enquiries@quantumgeotech.co.uk)

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QGL

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**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.**

**Client : Blaenau Gwent County Borough Council**

**TP02**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

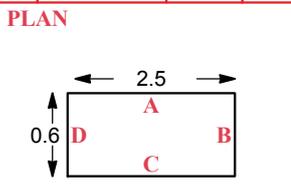
Ground Level : 324.93 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316456.81 E  
211220.63 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Tests		Strata			WATER
	Depth	Type No.	Depth	Test Results	Depth (Thickness)	Description	Legend	
1	0.20 -	ES1			0.40	MADE GROUND - Greyish brown slightly silty sandy GRAVEL. Gravel is fine to coarse rounded and angular brick, concrete and sandstone.		
	0.60 -	D1			0.40 - 0.70	Firm grey and light brown gravelly CLAY. Gravel is fine to coarse sub-rounded to sub-angular siltstone.		324.53
	1.30 -	D2			1.10	Stiff dark grey silty gravelly CLAY. Gravel is fine to coarse sub-angular to sub-rounded siltstone and sandstone.		323.83
2	2.00 - 2.20	B1			1.90			
	2.50 -	D3						
3					3.00	Terminated at 3.0mbgl, too stiff to progress		321.93



Groundwater:

Stability: Stable

Shoring: N/A

Remarks : No Groundwater Encountered

Equipment Used: 13 tonne tracked excavator

**Contract : Glyncoed School, Ebbw Vale**

**Client : Blaenau Gwent County Borough Council**

**Trial Pit No.  
TP02**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

Ground Level : 324.93 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316456.81 E  
211220.63 N  
*Co-ordinates to Local Grid*



Plas Newydd  
SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

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**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.**

**Client : Blaenau Gwent County Borough Council**

**TP03**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

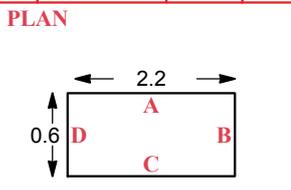
Ground Level : 324.62 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316436.62 E  
211203.46 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Tests		Strata				WATER
	Depth	Type No.	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
1	0.10 -	ES1			0.40	TOPSOIL - Dark grey slightly gravelly SILT with many rootlets. Gravel is fine to medium sub-angular siltstone.			
	0.50 -	D1 ES2			0.40	Firm orangeish brown gravelly CLAY. Gravel is fine to coarse sub-rounded siltstone.		324.22	
	0.80 - 1.00	B1			0.70				
	1.50 -	D2			1.10	Stiff dark grey gravelly CLAY with medium cobble content. Gravel is fine to coarse angular sandstone. Cobbles are sub-rounded sandstone.		323.52	
2	1.80 - 2.00	B2			1.40				
					2.50	Terminated at 2.5mbgl to undertake soakaway test		322.12	



Groundwater:

Stability: Stable

Shoring: N/A

Remarks : No Groundwater Encountered

Equipment Used: 13t tracked excavator

**Contract : Glyncoed School, Ebbw Vale**

**Client : Blaenau Gwent County Borough Council**

**Trial Pit No.  
TP03**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

Ground Level : 324.62 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316436.62 E  
211203.46 N  
*Co-ordinates to Local Grid*



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SA 0FQ  
Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

Operator:  
QGL

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Page

All measurements in  
metres unless  
otherwise stated



**Contract : Glyncoed School, Ebbw Vale**

**Client : Blaenau Gwent County Borough Council**

**Trial Pit No.  
TP03**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

Ground Level : 324.62 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316436.62 E  
211203.46 N  
*Co-ordinates to Local Grid*



Plas Newydd  
SA OFQ  
Tel: 01554 744880  
Fax:  
email: [enquiries@quantumgeotech.co.uk](mailto:enquiries@quantumgeotech.co.uk)

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metres unless  
otherwise stated



**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.**

**Client : Blaenau Gwent County Borough Council**

**TP04**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

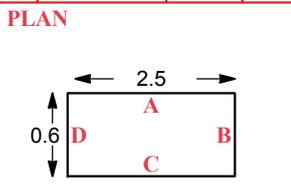
Ground Level : 325.05 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316392.83 E  
211239.01 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Tests		Strata				WATER
	Depth	Type No.	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
1	0.20 -	ES1			0.60	MADE GROUND - Light brown silty sandy GRAVEL with low to medium cobble content. Gravel is fine to coarse sub-rounded to angular brick, concrete and sandstone. Cobbles are sub-rounded to angular sandstone, brick and concrete.			
	0.80 - 1.00 0.80 -	B1 D1 ES2			0.60	POSSIBLE MADE GROUND - Stiff blueish grey gravelly CLAY with low cobble and boulder content. Gravel is fine to coarse sub-rounded to sub-angular siltstone. Cobbles are boulders are sub-rounded to sub-angular siltstone.		324.45	
	1.60 - 1.80	B2			1.30				
					1.90	Terminated at 1.9mbgl on Boulder, possibly concrete		323.15	



Groundwater:

Stability: Stable

Shoring: N/A

Remarks : No Groundwater Encountered

Equipment Used: 13t tracked excavator

**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.  
TP04**

**Client : Blaenau Gwent County Borough Council**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

Ground Level : 325.05 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316392.83 E  
211239.01 N  
*Co-ordinates to Local Grid*



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metres unless  
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**Contract : Glyncod School, Ebbw Vale**

**Trial Pit No.  
TP05**

**Client : Blaenau Gwent County Borough Council**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

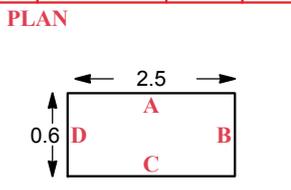
Ground Level : 324.66 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316413.37 E  
211244.87 N  
*Co-ordinates to Local Grid*

m B.G.L.	Samples		Tests		Strata				WATER
	Depth	Type No.	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
1	0.20 -	ES1			0.50	MADE GROUND - Light brown silty sandy GRAVEL with low to medium cobble content. Gravel is fine to coarse sub-rounded to angular brick, concrete and sandstone. Cobbles are sub-rounded to angular sandstone, brick and concrete.			
	0.80 -	ES2			0.50	MADE GROUND - Firm dark grey gravelly CLAY with medium cobble and boulder content and occasional re-bar. Gravel is fine to coarse angular brick, siltstone and concrete. Cobbles are brick and concrete. Boulders are sandstone.		324.16	
2	1.50 - 1.70	B1			1.90				
	1.80 -	ES3							
					2.40	Terminated at 2.4mbgl on possible concrete slab		322.26	



Groundwater: Rapid groundwater inflow below 1.0mbgl

Stability: Stable

Shoring: N/A

Remarks :

Equipment Used: 13t tracked excavator

**Contract : Glyncoed School, Ebbw Vale**

**Client : Blaenau Gwent County Borough Council**

**Trial Pit No.  
TP05**

Dates : 16/6/20 - 16/6/20

Job Number : Q0215

Ground Level : 324.66 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316413.37 E

211244.87 N

*Co-ordinates to Local Grid*



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**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.**

**Client : Blaenau Gwent County Borough Council**

**TP06**

Dates : 17/6/20 - 17/6/20

Job Number : Q0215

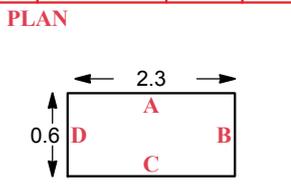
Ground Level : 324.34 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316454.29 E  
211306.53 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Tests		Strata			WATER
	Depth	Type No.	Depth	Test Results	Depth (Thickness)	Description	Legend	
1					0.20	TOPSOIL - Dark brown slightly sandy slightly gravelly SILT with many rootlets. Gravel is fine to medium angular siltstone.		
	0.30 -	ES1			0.20	MADE GROUND - Firm grey and brown gravelly CLAY with low cobble and boulder content and occasional wood fragment. Gravel is fine to coarse sub-rounded to sub-angular brick and siltstone. Cobbles and boulders are sub-rounded siltstone. ..... Land drain at 0.6mbgl		324.14
	0.50 -	D1			0.80			
2					1.00	Firm light brown gravelly CLAY with low cobble and boulder content. Gravel is fine to coarse sub-rounded to sub-angular siltstone. Cobbles and boulders sub-rounded siltstone and sandstone.		323.34
	1.50 -	D2			2.00			
	2.30 - 2.50	B1			2.50 -			D3
3					3.00	Terminated at 3.0mbgl to undertake soakaway test		321.34



Groundwater:

Stability: Stable

Shoring: N/A

Remarks : No Groundwater Encountered

Equipment Used: 13t tracked excavator

**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.  
TP06**

**Client : Blaenau Gwent County Borough Council**

Dates : 17/6/20 - 17/6/20

Job Number : Q0215

Ground Level : 324.34 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316454.29 E  
211306.53 N  
*Co-ordinates to Local Grid*



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Tel: 01554 744880  
Fax:  
email: enquiries@quantumgeotech.co.uk

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**Contract : Glyncoed School, Ebbw Vale**

**Client : Blaenau Gwent County Borough Council**

**Trial Pit No.  
TP06**

Dates : 17/6/20 - 17/6/20

Job Number : Q0215

Ground Level : 324.34 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316454.29 E  
211306.53 N  
*Co-ordinates to Local Grid*



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otherwise stated



**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.  
TP07**

**Client : Blaenau Gwent County Borough Council**

Dates : 17/6/20 - 17/6/20

Job Number : Q0215

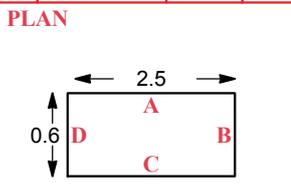
Ground Level : 323.90 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316476.92 E  
211285.80 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Tests		Strata				WATER
	Depth	Type No.	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
1	0.40 - 0.60 0.50 -	B1 D1 ES1			1.20	MADE GROUND - Soft black gravelly silty CLAY with low cobble content. Gravel is fine to coarse angular to sub-angular brick and slag. Cobbles are angular brick.			
2	1.40 - 1.60 1.50 -	B2 D2			1.20 0.80	Firm light brown and grey slightly gravelly CLAY with low to medium cobble and boulder content. Gravel is fine to coarse sub-rounded to sub-angular siltstone. Cobbles and boulders are sub-angular siltstone.		322.70	
3	2.40 - 2.60 2.50 -	B3 D3			2.00 1.00	Stiff dark grey slightly gravelly CLAY with low to medium cobble and boulder content. Gravel is fine to coarse sub-rounded to sub-angular sandstone, siltstone and coal. Cobbles and boulders are sub-rounded to sub-angular siltstone and quartzitic sandstone.		321.90	
					3.00	..... High boulder content below 2.9mbgl Terminated at 3.0mbgl, unable to progress due to high boulder content		320.90	



Groundwater:

Stability: Stable

Shoring: N/A

Remarks : No Groundwater Encountered

Equipment Used: 13t tracked excavator

**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.  
TP07**

**Client : Blaenau Gwent County Borough Council**

Dates : 17/6/20 - 17/6/20

Job Number : Q0215

Ground Level : 323.90 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316476.92 E  
211285.80 N  
*Co-ordinates to Local Grid*



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**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.**

**Client : Blaenau Gwent County Borough Council**

**TP08**

Dates : 17/6/20 - 17/6/20

Job Number : Q0215

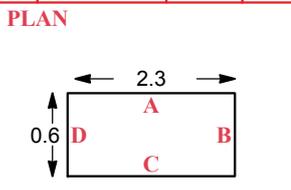
Ground Level : 325.17 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316428.75 E  
211289.10 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Tests		Strata				WATER
	Depth	Type No.	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
1	0.10 -	ES1			0.30	MADE GROUND - Greyish brown sandy GRAVEL with medium cobble content. Gravel is fine to coarse sub-rounded to angular brick, concrete and sandstone. Cobbles are sub-rounded to angular brick, sandstone and concrete. Section of a brick wall.		324.87	
	0.40 - 0.60 0.50 -	B1 D1			0.30				
2	2.20 - 2.40 2.30 -	B2 D3			2.00	Stiff dark grey gravelly friable CLAY with medium cobble content. Gravel is fine to coarse angular to rounded siltstone. Cobbles are sub-rounded quartzitic sandstone, sandstone and siltstone.		323.17	
					1.20				
3					3.20	Terminated at 3.2mbgl		321.97	



Groundwater:

Stability: Stable

Shoring: N/A

Remarks : No Groundwater Encountered

Equipment Used: 13t tracked excavator

	Plas Newydd SA OFO Tel: 01554 744880 Fax: email: enquiries@quantumgeotech.co.uk	Operator: QGL	Logged By: P Darby	Sheet No. 1 Of 2	m Per Page 5	All measurements in metres unless otherwise stated	
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**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.  
TP08**

**Client : Blaenau Gwent County Borough Council**

Dates : 17/6/20 - 17/6/20

Job Number : Q0215

Ground Level : 325.17 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316428.75 E  
211289.10 N  
*Co-ordinates to Local Grid*



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Tel: 01554 744880  
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**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.**

**Client : Blaenau Gwent County Borough Council**

**TP09**

Dates : 17/6/20 - 17/6/20

Job Number : Q0215

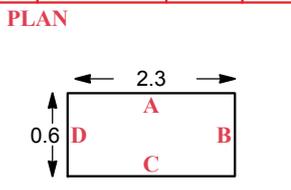
Ground Level : 326.22 m A.O.D.  
Level to Ordnance Datum

Location :

Engineer :

Coordinates: 316369.25 E  
211254.14 N  
Co-ordinates to Local Grid

m B.G.L.	Samples		Tests		Strata				WATER
	Depth	Type No.	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
1	0.10 -	ES1			0.30	TOPSOIL - Dark brown sandy slightly gravelly SILT with many rootlets. Gravel is fine to coarse angular siltstone.			
	0.40 -	D1 ES2			0.30 0.90	Firm light brown and grey gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-angular siltstone and sandstone. Cobbles are sub-angular siltstone.		325.92	
2	1.40 - 1.60 1.40 -	B1 D2			1.20 1.50	Stiff dark grey gravelly CLAY with medium cobble content. Gravel is fine to coarse sub-angular siltstone and sandstone. Cobbles are sub-angular siltstone.		325.02	
	2.40 -	D3			2.70	Terminated at 2.7mbgl, boulders preventing progress		323.52	



Groundwater:

Stability: Stable

Shoring: N/A

Remarks : No Groundwater Encountered

Equipment Used: 13t tracked excavator

**Contract : Glyncoed School, Ebbw Vale**

**Trial Pit No.  
TP09**

**Client : Blaenau Gwent County Borough Council**

Dates : 17/6/20 - 17/6/20

Job Number : Q0215

Ground Level : 326.22 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316369.25 E  
211254.14 N  
*Co-ordinates to Local Grid*



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metres unless  
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**Contract : Glyncoed School, Ebbw Vale**

**Client : Blaenau Gwent County Borough Council**

**Trial Pit No.  
TP09**

Dates : 17/6/20 - 17/6/20

Job Number : Q0215

Ground Level : 326.22 m A.O.D.  
*Level to Ordnance Datum*

Location :

Engineer :

Coordinates: 316369.25 E  
211254.14 N  
*Co-ordinates to Local Grid*



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Fax:  
email: [enquiries@quantumgeotech.co.uk](mailto:enquiries@quantumgeotech.co.uk)

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Page

All measurements in  
metres unless  
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# KEY TO BOREHOLE AND TRIAL PIT LOGS

## MATERIAL LEGENDS

	Made Ground		Topsoil		Clay
	Gravel		Sand		Silt
	Peat		Boulders		Cobbles
	Chalk		Conglomerate		Volcaniclastic
	Asphalt		Void		Mudstone
	Siltstone		Sandstone		Limestone
	Ironstone		Mudstone / Siltstone		Breccia
	Coal		Coral		Bedrock
	Shale		Gypsum		Igneous (Coarse Grained)
	Igneous (Fine Grained)		Igneous (Medium Grained)		Metamorphic (Coarse Grained)
	Metamorphic (Fine Grained)		Metamorphic (Medium Grained)		

## INSTALLATION / BACKFILL DETAILS

	Arisings		Concrete		Bentonite cement grout
	Bentonite seal		Filter		Pea Gravel
	Plain pipe		Slotted pipe		Piezometer / Standpipe tip

NOTE:  
Legend symbols in accordance with BS 5930 (2015)

## KEY TO BOREHOLE AND TRIAL PIT LOGS

**m.A.O.D.** metres Above Ordnance Datum.

### **SAMPLE AND TEST TYPES**

<b>U</b>	Undisturbed driven tube sample - 102mm diameter, 450mm long.
<b>P</b>	Undisturbed pushed piston sample - 102mm diameter, 1000mm long.
<b>TW</b>	Undisturbed thin walled push in sample - 100mm diameter, 750mm long.
<b>B</b>	Bulk disturbed sample.
<b>BLK</b>	Block Sample
<b>CBR</b>	Heavy duty undisturbed sample - 154 mm diameter (CBR mould).
<b>D</b>	Small disturbed sample.
<b>LB</b>	Large Bulk disturbed sample (for earthworks testing)
<b>C</b>	Core sample
<b>W</b>	Water sample
<b>G</b>	Gas sample
<b>ES</b>	Environmental sample (soil)
<b>j</b>	Jar sample
<b>t</b>	Tub sample
<b>p</b>	Pot sample
<b>s</b>	Small sample
<b>v</b>	Vial sample
<b>S</b>	Standard Penetration Test using split spoon sampler. (See Note).
<b>C</b>	Standard Penetration Test using a solid 60 degree cone. (See Note).

NOTE: Where a single value is quoted this is the N value for 300 mm penetration following a seating drive of 150 mm. Where this full penetration is not achieved the number of blows is quoted for the penetration below the seating drive eg. 63/160 mm.  
Where total penetration is less than the seating drive this is indicated by a + and the number of blows for total penetration is quoted eg. +50/75 mm.

<b>HV</b>	Hand Vane Test. Vane undrained shear strength, $c_u$ , quoted in kPa.
<b>V</b>	Borehole Vane Test. Vane undrained shear strength, $c_u$ , quoted in kPa.
<b>FHT/RHT</b>	Falling / Rising Head Permeability Test.

### **CORE RUN DETAILS**

<b>TCR</b>	Total Core Recovery, %
<b>SCR</b>	Solid Core Recovery, %
<b>RQD</b>	Rock Quality Designation, %
<b>FI</b>	Fracture Index. NI - Non intact where > 25 No. per metre length.

### **WATER COLUMN SYMBOLS**

	First water strike, second water strike etc.
	Standing water level after first strike, second strike etc.
	Seepage.

NOTE:  
Legend symbols in accordance with BS 5930 (2015)



## APPENDIX V – SOAKAWAY TEST CERTIFICATES

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## APPENDIX VI – GAS AND GROUND WATER MONITORING RECORDS

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## APPENDIX VII – PLATE LOAD TEST CERTIFICATES

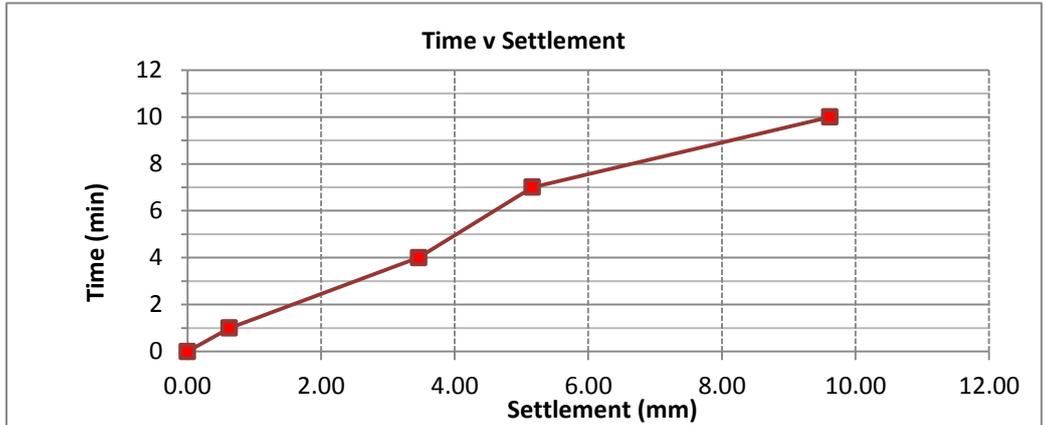
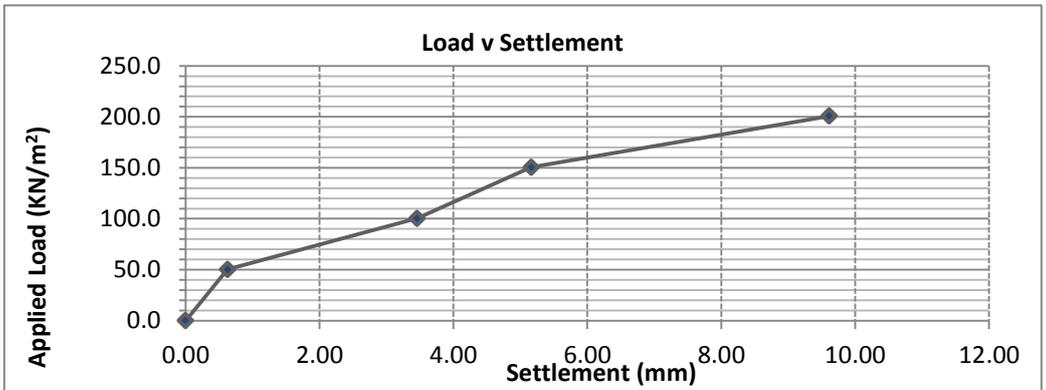
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**Determination of the Vertical Deformation and Strength Characteristics by the Plate Loading Test to  
BS 1377: Part 9: 1990, IAN 73/06 & TP - 10**

<b>Client Name:</b>	Blaenau Gwent County Borough Council		
<b>Client Address:</b>	Civic Centre, Ebbw Vale. NP23 6XB		
<b>Contract Name:</b>	Glyn Coed Scool, Ebbw Vale	<b>Contract No.:</b>	Q0215

Site Reference:	1	Lab. Reference:	1.1	Date Tested:	19.6.20
Sample Location:	Plate 1			Date Received:	19.6.20
Material Description:	Grey brown silty sandy gravelly CLAY with cobbles.				
Supplier:	Unknown	Source:	In - situ		
Depth Below Ground Level:	0.4m	Reaction Load:	14 Tonne Tracked Excavator		
Plate Diameter (mm):	300	Plate Area (m <sup>2</sup> ):	0.071		

Settlement (mm)	Load (KN/m <sup>2</sup> )	Settlement Time (min)
0.00	0.0	0
0.63	50.2	1
3.46	100.4	4
5.16	150.6	7
9.62	200.8	10



**Remarks:** Unable to maintain Final Load (250KN/m<sup>2</sup>), Dial Gauge Travel (25mm) Exceeded.

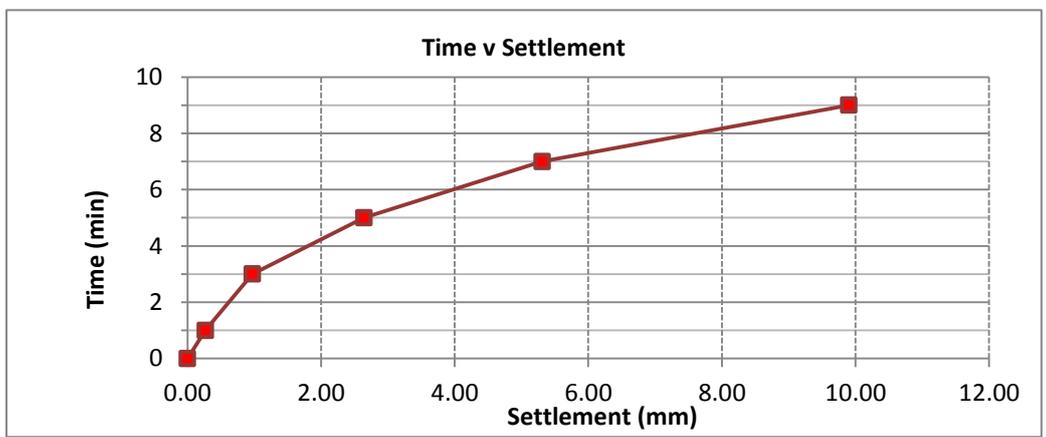
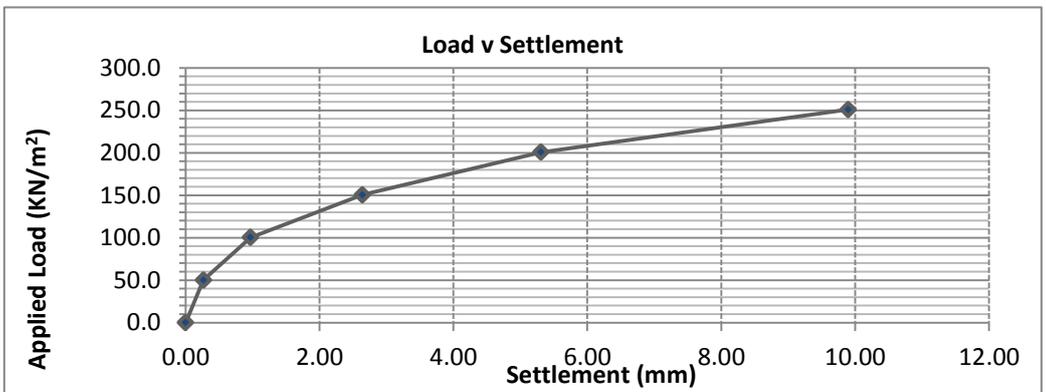
Signed: *J.M. Burke*  
 Position: Principal Engineering Technician  
 Dated: 19 June 2020

**Determination of the Vertical Deformation and Strength Characteristics by the Plate Loading Test to  
BS 1377: Part 9: 1990, IAN 73/06 & TP - 10**

<b>Client Name:</b>	Blaenau Gwent County Borough Council		
<b>Client Address:</b>	Civic Centre, Ebbw Vale. NP23 6XB		
<b>Contract Name:</b>	Glyn Coed Scool, Ebbw Vale	<b>Contract No.:</b>	Q0215

Site Reference:	2	Lab. Reference:	1.2	Date Tested:	19.6.20
Sample Location:	Plate 2			Date Received:	19.6.20
Material Description:	Grey brown silty sandy gravelly CLAY with cobbles.				
Supplier:	Unknown	Source:	In - situ		
Depth Below Ground Level:	0.4m	Reaction Load:	14 Tonne Tracked Excavator		
Plate Diameter (mm):	300	Plate Area (m <sup>2</sup> ):	0.071		

Settlement (mm)	Load (KN/m <sup>2</sup> )	Settlement Time (min)
0.00	0.0	0
0.27	50.2	1
0.97	100.4	3
2.64	150.6	5
5.31	200.8	7
9.90	251.0	9



Remarks:

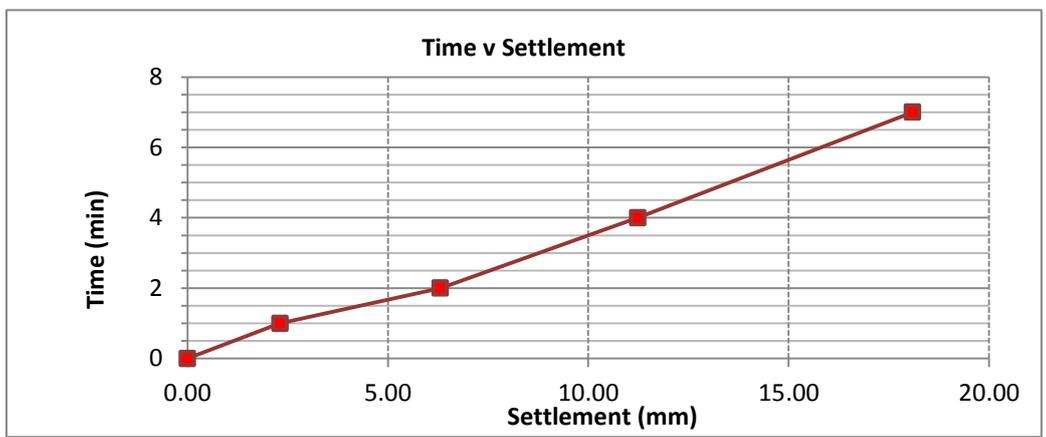
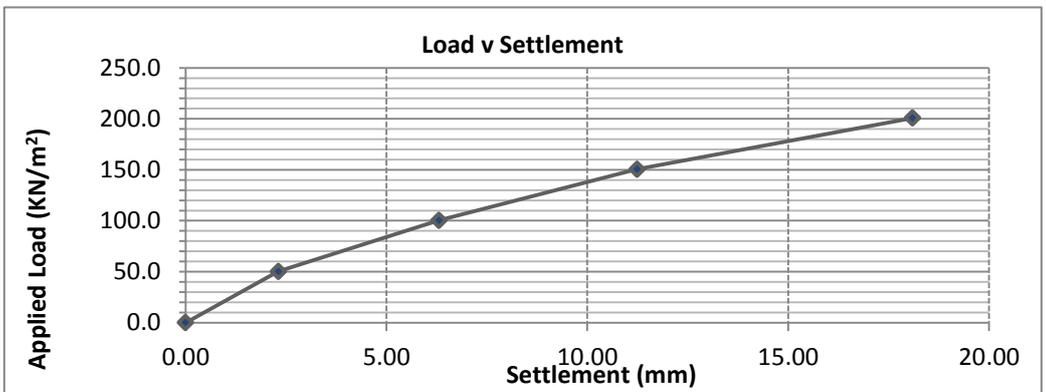
Signed: *J.M. Burke*  
 Position: Principal Engineering Technician  
 Dated: 19 June 2020

**Determination of the Vertical Deformation and Strength Characteristics by the Plate Loading Test to  
BS 1377: Part 9: 1990, IAN 73/06 & TP - 10**

<b>Client Name:</b>	Blaenau Gwent County Borough Council		
<b>Client Address:</b>	Civic Centre, Ebbw Vale. NP23 6XB		
<b>Contract Name:</b>	Glyn Coed Scool, Ebbw Vale	<b>Contract No.:</b>	Q0215

Site Reference:	3	Lab. Reference:	1.3	Date Tested:	19.6.20
Sample Location:	Plate 3			Date Received:	19.6.20
Material Description:	Grey brown silty sandy gravelly CLAY with cobbles.				
Supplier:	Unknown	Source:	In - situ		
Depth Below Ground Level:	0.4m	Reaction Load:	14 Tonne Tracked Excavator		
Plate Diameter (mm):	300	Plate Area (m <sup>2</sup> ):	0.071		

Settlement (mm)	Load (KN/m <sup>2</sup> )	Settlement Time (min)
0.00	0.0	0
2.31	50.2	1
6.31	100.4	2
11.24	150.6	4
18.10	200.8	7



**Remarks:** Unable to maintain Final Load (250KN/m<sup>2</sup>), Dial Gauge Travel (25mm) Exceeded.

Signed: *J.M. Burke*  
 Position: Principal Engineering Technician  
 Dated: 19 June 2020