



Laboratory Report



Contract Number: 77672

Client Ref: **9222**
Client PO: **13309**

Date Received: **26-03-2025**
Date Completed: **24-04-2025**
Report Date: **24-04-2025**

Client: **Earth Science Partnership**

This report has been checked and approved by:

Contract Title: **9222 - Sandfields Business Park**
For the attention of: **Aaron Case**

Brendan Evans
Senior Office Administrator

Description	Qty
Particle Size Distribution BS EN ISO 17892-4 : 5.1 - * UKAS	11
Sedimentation by Pipette Method BS EN ISO 17892-4 : 5.4 - @ Non Accredited Test	2
Determination of the Swelling Potential of Fill Material (Slag Expansion Test 7 day test) BR 481 - Part B - Appendix B - @ Non Accredited Test	2

Notes: Observations and Interpretations are outside the UKAS Accreditation
* - denotes test included in laboratory scope of accreditation
- denotes test carried out by approved contractor
@ - denotes non accredited tests

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Approved Signatories:

Brendan Evans (Senior Office Administrator) - Darren Bourne (Quality Senior Technician) - Paul Evans (Director)
Richard John (Quality/Technical Manager) - Shaun Jones (Laboratory manager) - Shaun Thomas (Site Manager)
Wayne Honey (HR & HSE Manager)

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve, Clause 5.2

Contract Number

77672

Borehole/Pit No.

CP101A

Project Name

9222 - Sandfields Business Park

Sample No.

Sample Description

Brown slightly silty/ clayey fine to coarse gravelly fine to coarse SAND

Depth Top

2.00

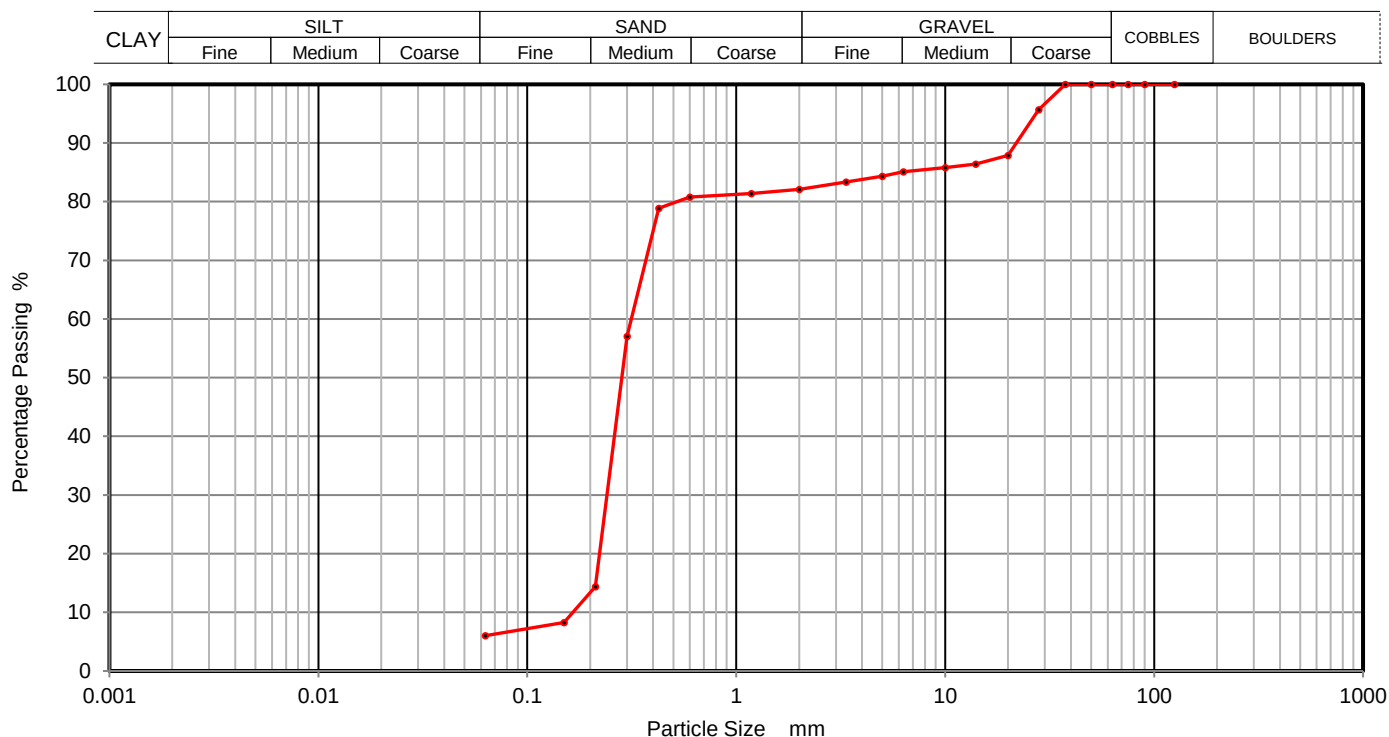
Depth Base

Date Tested

09/04/2025

Sample Type

B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	96		
20	88		
14	86		
10	86		
6.3	85		
5	84		
3.35	83		
2	82		
1.18	81		
0.63	81		
0.425	79		
0.30	57		
0.20	14		
0.15	8		
0.063	6		

Sample Proportions	% dry mass
Cobbles	0
Gravel	18
Sand	76
Silt and Clay	6

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator

David. E

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve, Clause 5.2

Contract Number

77672

Borehole/Pit No.

CP101A

Project Name

9222 - Sandfields Business Park

Sample No.

Sample Description

Brown slightly silty/ clayey fine to medium gravelly fine to coarse SAND

Depth Top

4.00

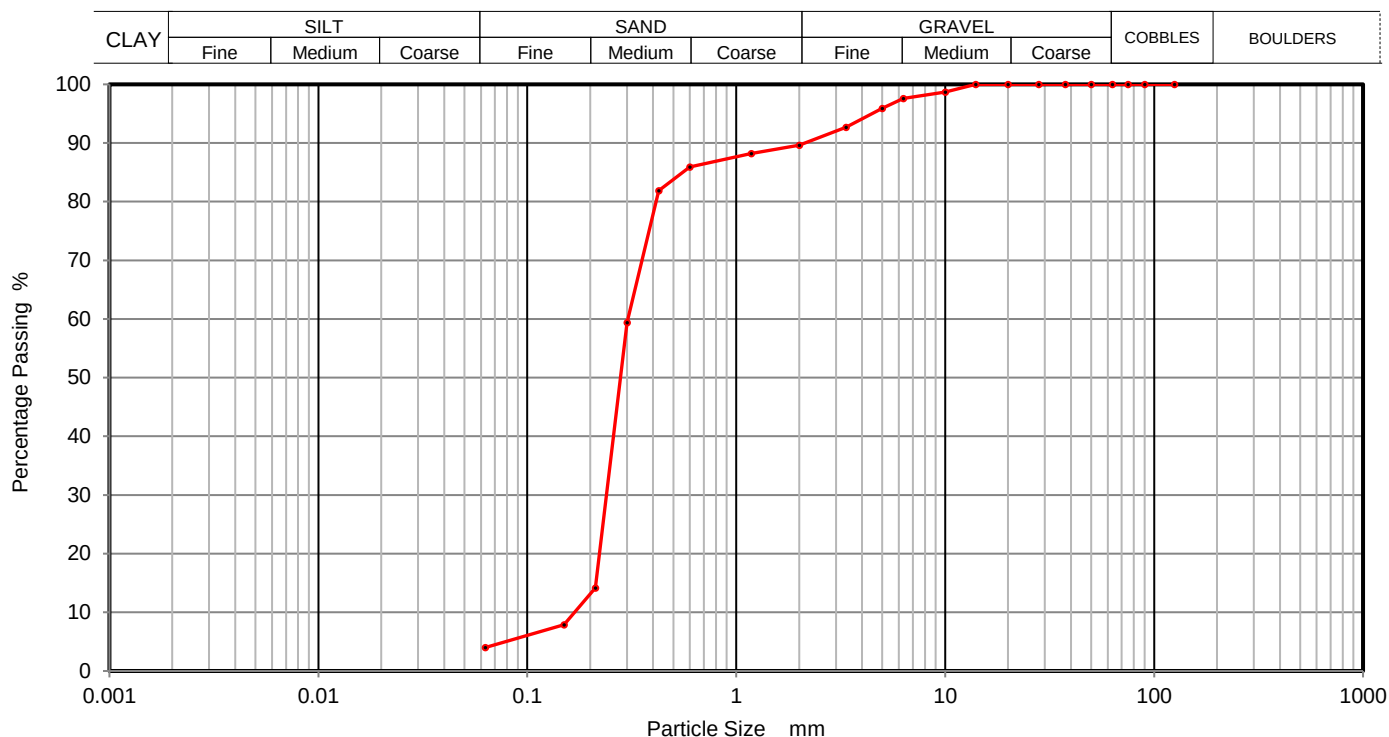
Depth Base

Date Tested

09/04/2025

Sample Type

B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	99		
6.3	98		
5	96		
3.35	93		
2	90		
1.18	88		
0.63	86		
0.425	82		
0.30	59		
0.20	14		
0.15	8		
0.063	4		

Sample Proportions	% dry mass
Cobbles	0
Gravel	10
Sand	86
Silt and Clay	4

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator

David. E

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve, Clause 5.2

Contract Number

77672

Borehole/Pit No.

CP101A

Project Name

9222 - Sandfields Business Park

Sample No.

Sample Description

Brown slightly silty/ clayey fine to coarse SAND

Depth Top

10.00

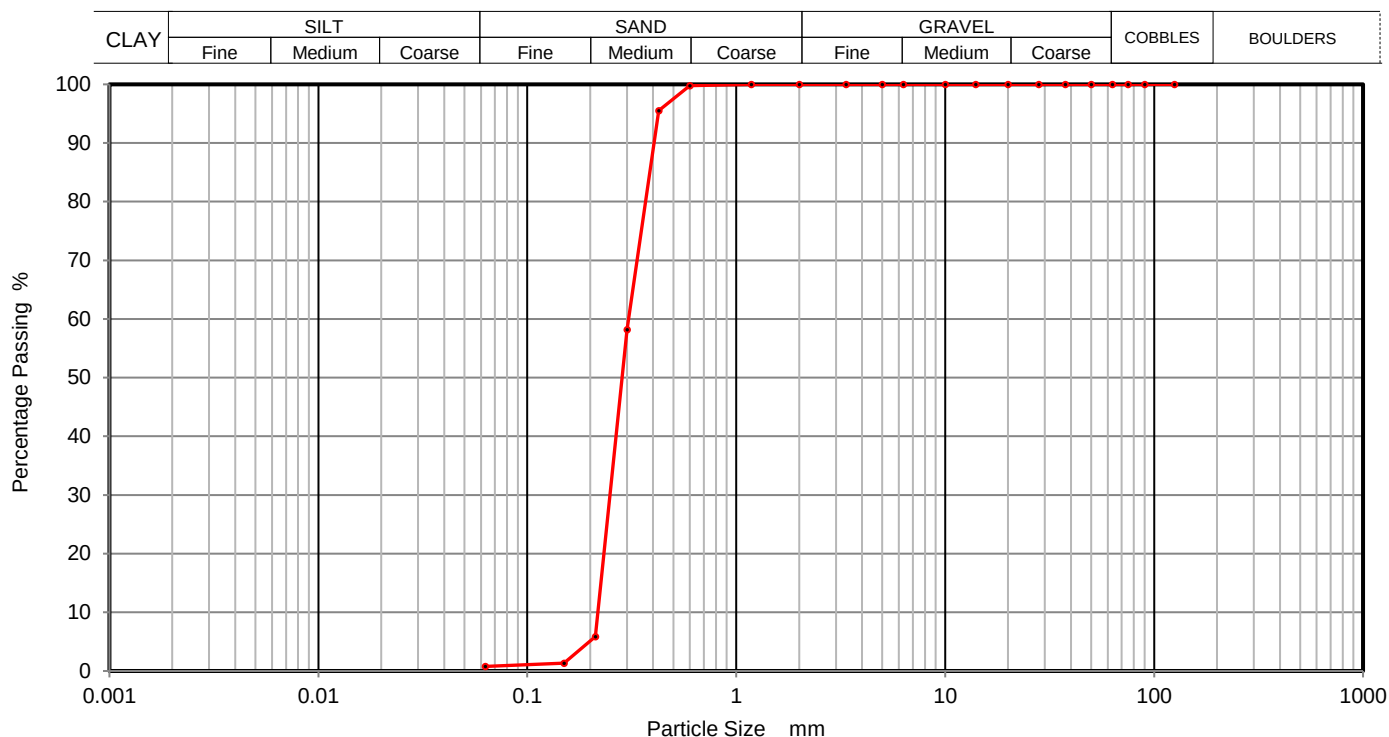
Depth Base

Date Tested

09/04/2025

Sample Type

B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.63	100		
0.425	96		
0.30	58		
0.20	6		
0.15	1		
0.063	1		

Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	99
Silt and Clay	1

Remarks

Preparation and testing in accordance with BS17892 unless noted below

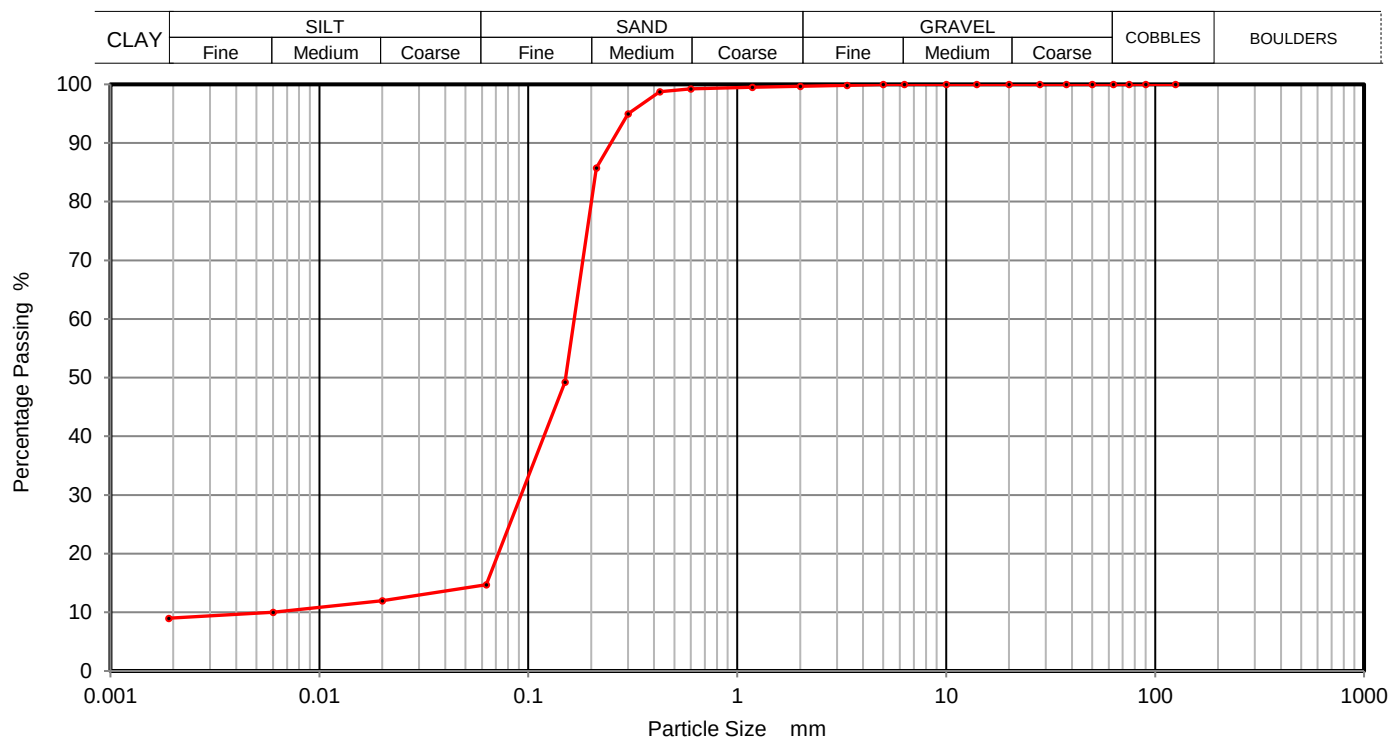
Operator

David. E

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve & Pipette Analysis, Clause 5.2 & 5.4

Contract Number	77672
Borehole/Pit No.	CP101A
Sample No.	
Depth Top	20.00
Depth Base	
Sample Type	B

Project Name	9222 - Sandfields Business Park
Sample Description	Grey slightly silty clayey fine to coarse SAND
Date Tested	09/04/2025



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	12
90	100	0.0060	10
75	100	0.0020	9
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.63	99		
0.425	99		
0.30	95		
0.20	86		
0.15	49		
0.063	15		

Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	85
Silt	6
Clay	9

Remarks
Preparation and testing in accordance with BS17892 unless noted below

Operator
David. E

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve, Clause 5.2

Contract Number

77672

Borehole/Pit No.

CP102

Project Name

9222 - Sandfields Business Park

Sample No.

Sample Description

Brown slightly silty/ clayey slightly gravelly fine to coarse SAND

Depth Top

3.00

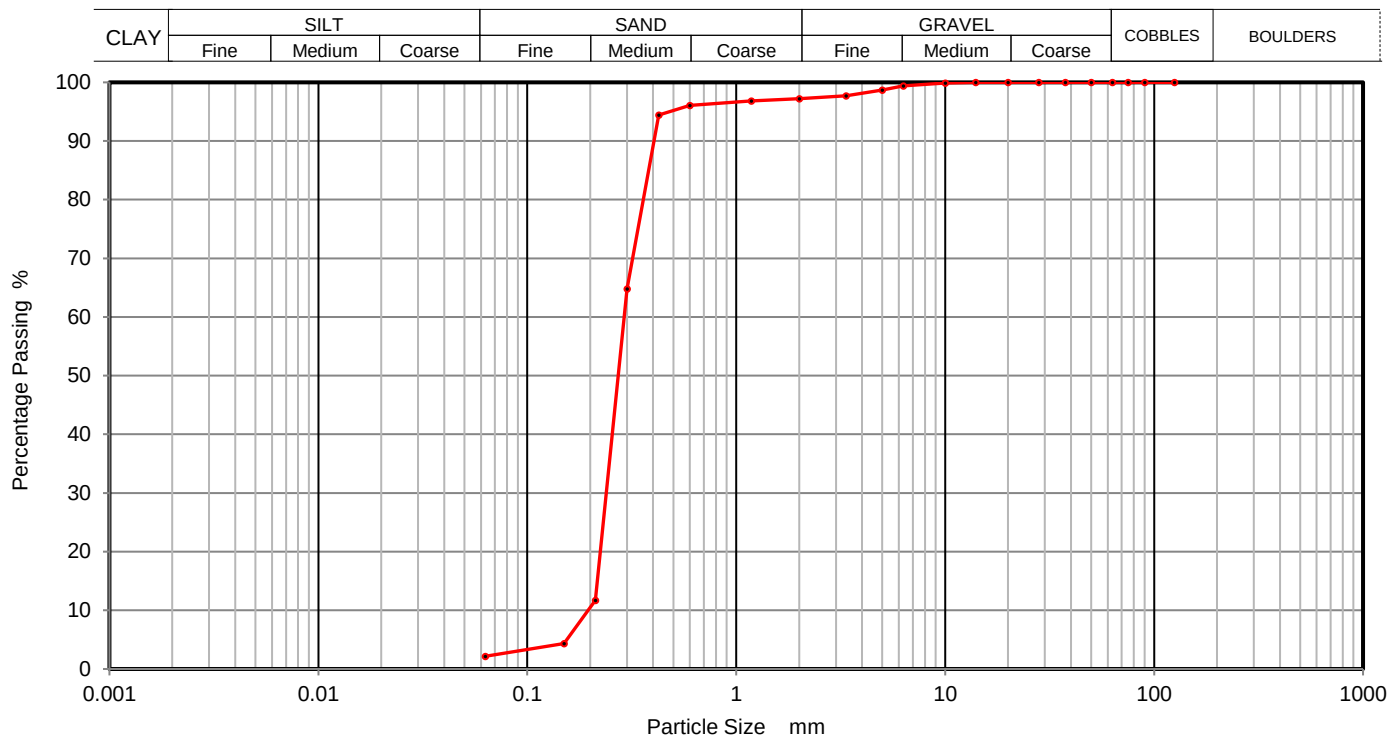
Depth Base

Date Tested

09/04/2025

Sample Type

B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	99		
5	99		
3.35	98		
2	97		
1.18	97		
0.63	96		
0.425	94		
0.30	65		
0.20	12		
0.15	4		
0.063	2		

Sample Proportions	% dry mass
Cobbles	0
Gravel	3
Sand	95
Silt and Clay	2

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator

David. E

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve, Clause 5.2

Contract Number

77672

Borehole/Pit No.

CP102

Project Name

9222 - Sandfields Business Park

Sample No.

Sample Description

Brown fine to coarse SAND

Depth Top

9.00

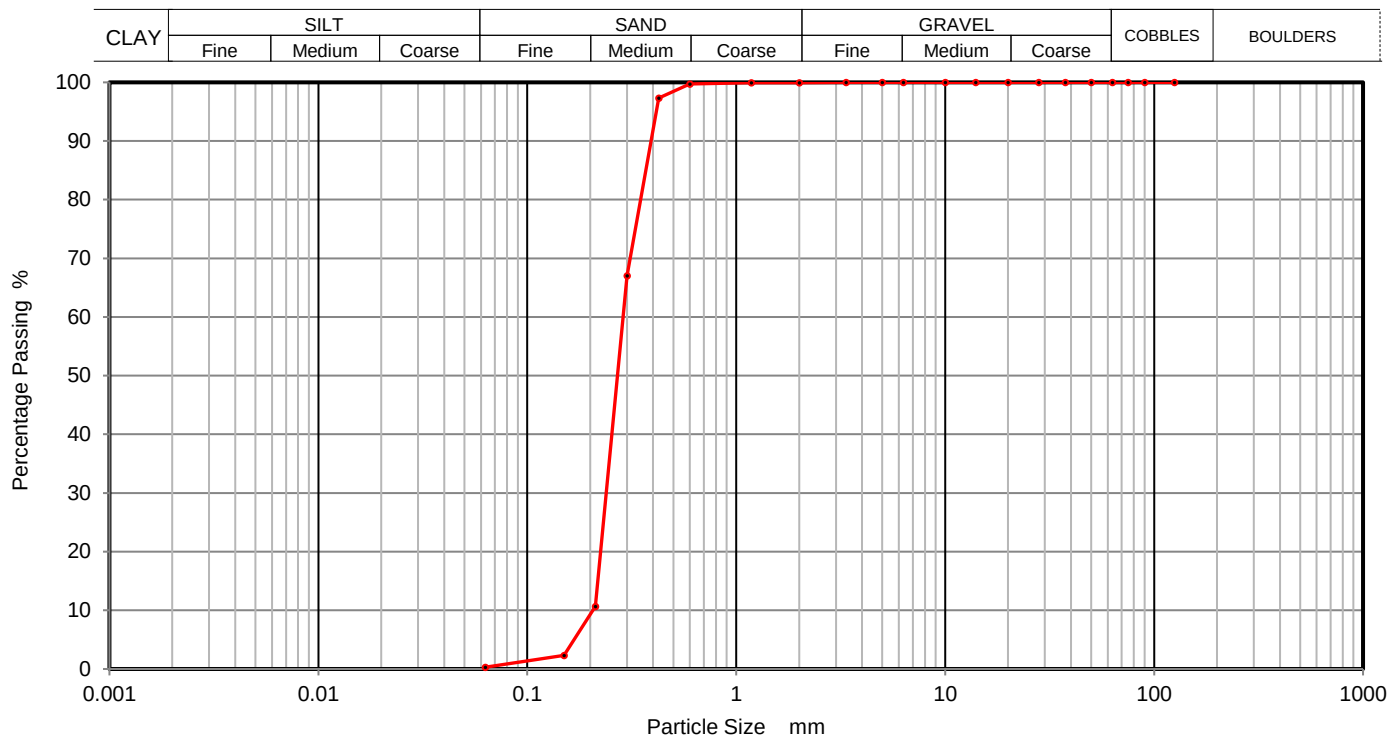
Depth Base

Date Tested

09/04/2025

Sample Type

B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.63	100		
0.425	97		
0.30	67		
0.20	11		
0.15	2		
0.063	0		

Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	100
Silt and Clay	0

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator

David. E

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve, Clause 5.2

Contract Number

77672

Borehole/Pit No.

CP103

Project Name

9222 - Sandfields Business Park

Sample No.

Sample Description

Brown slightly silty/ clayey fine to coarse sandy fine to coarse GRAVEL with cobbles

Depth Top

2.00

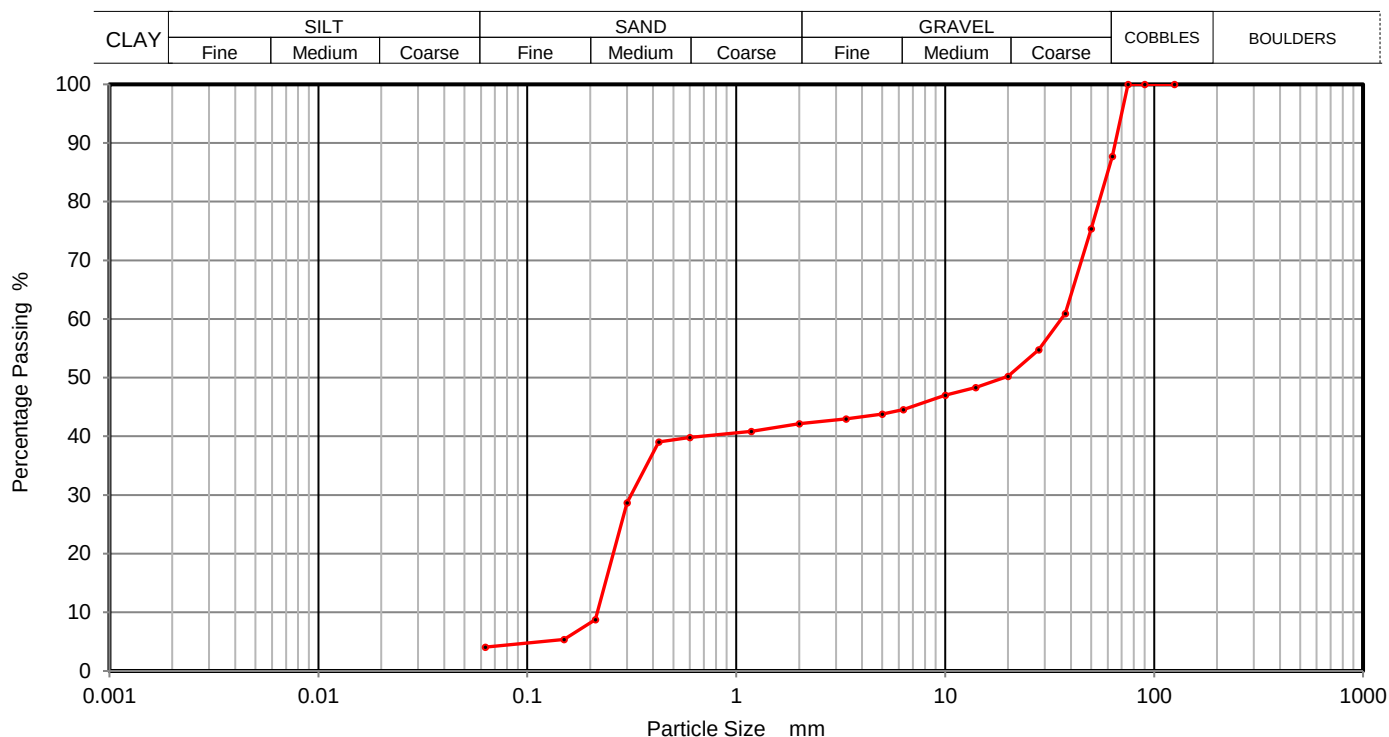
Depth Base

Date Tested

09/04/2025

Sample Type

B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	88		
50	75		
37.5	61		
28	55		
20	50		
14	48		
10	47		
6.3	45		
5	44		
3.35	43		
2	42		
1.18	41		
0.63	40		
0.425	39		
0.30	29		
0.20	9		
0.15	5		
0.063	4		

Sample Proportions	% dry mass
Cobbles	12
Gravel	46
Sand	38
Silt and Clay	4

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator

David. E

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve, Clause 5.2

Contract Number **77672**

Borehole/Pit No. **CP103**

Project Name **9222 - Sandfields Business Park**

Sample No.

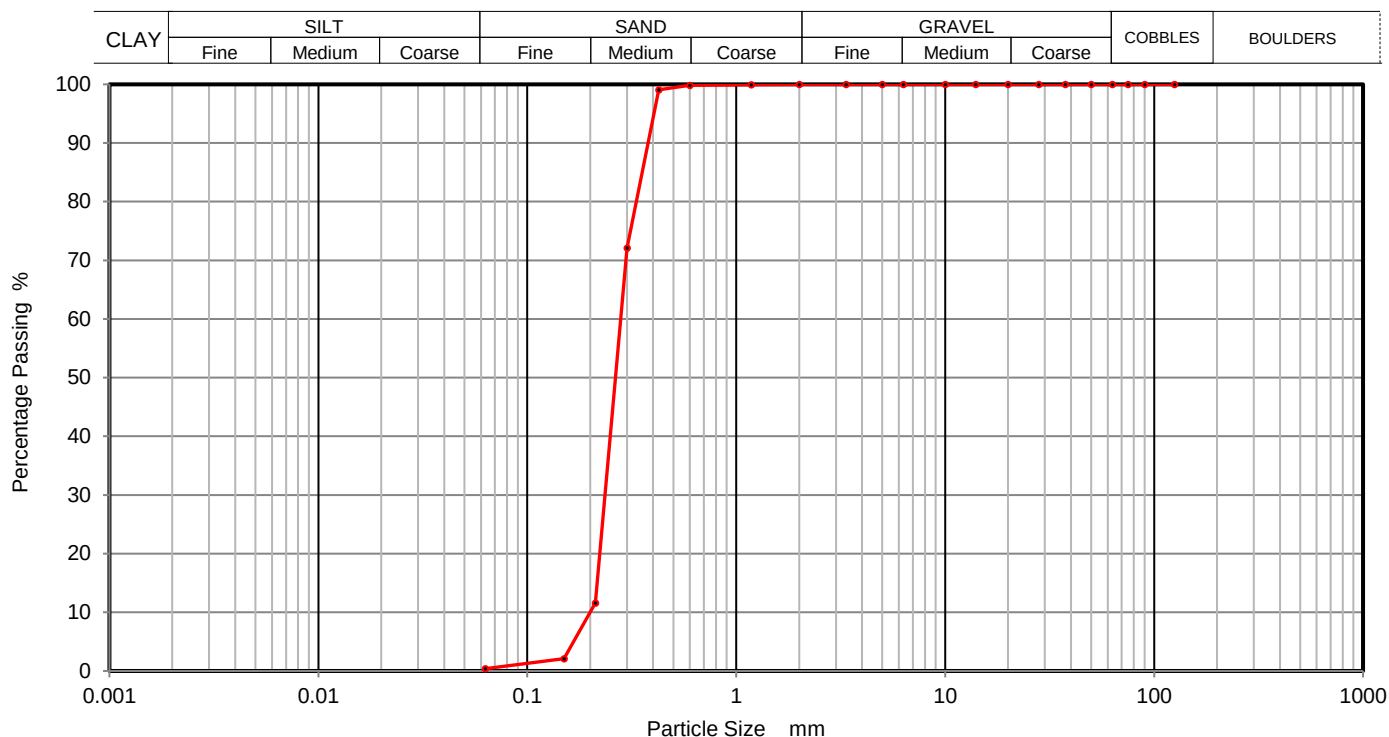
Sample Description **Brown fine to coarse SAND (shell fragments)**

Depth Top **6.00**

Depth Base

Date Tested **09/04/2025**

Sample Type **B**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.63	100		
0.425	99		
0.30	72		
0.20	12		
0.15	2		
0.063	0		

Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	100
Silt and Clay	0

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator

David. E

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve, Clause 5.2

Contract Number

77672

Borehole/Pit No.

CP103

Project Name

9222 - Sandfields Business Park

Sample No.

Sample Description

Brown slightly silty/ clayey fine to coarse SAND (shell fragments)

Depth Top

18.00

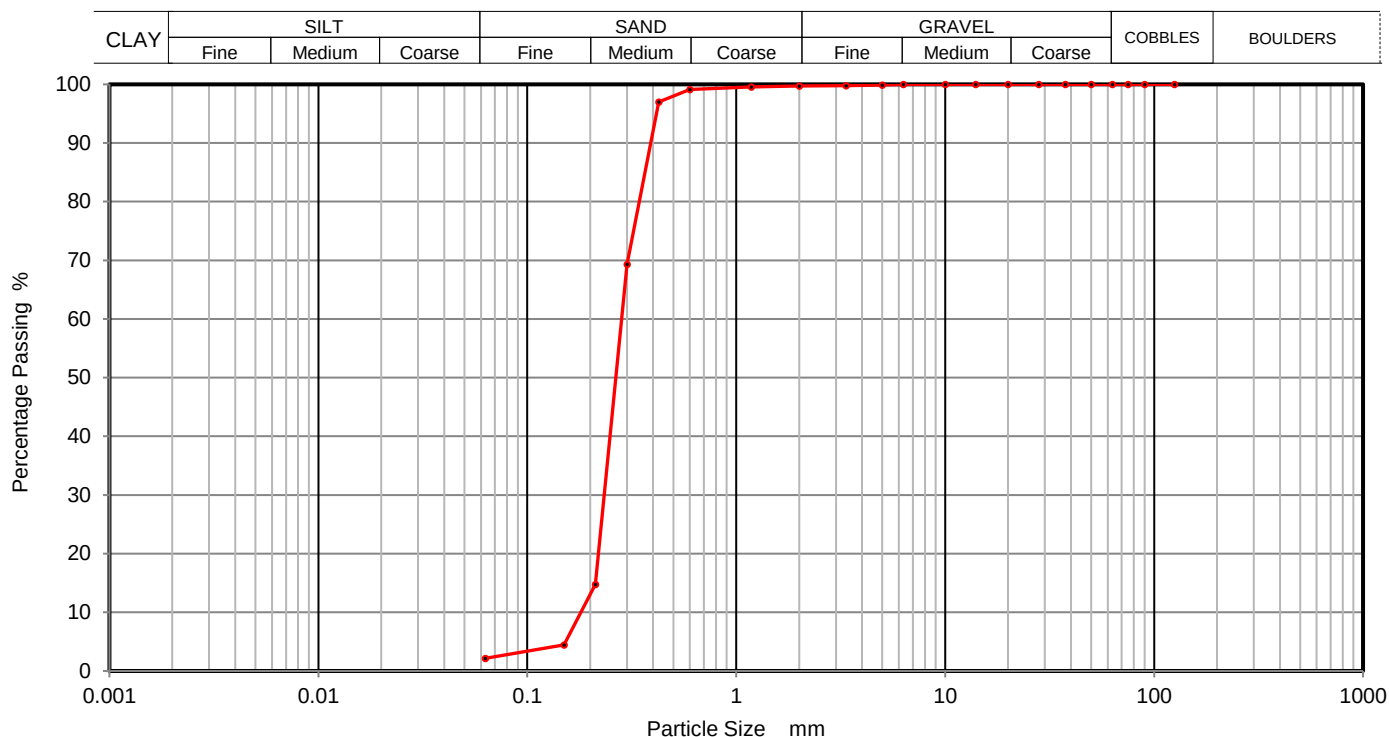
Depth Base

Date Tested

09/04/2025

Sample Type

B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.63	99		
0.425	97		
0.30	69		
0.20	15		
0.15	4		
0.063	2		

Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	98
Silt and Clay	2

Remarks

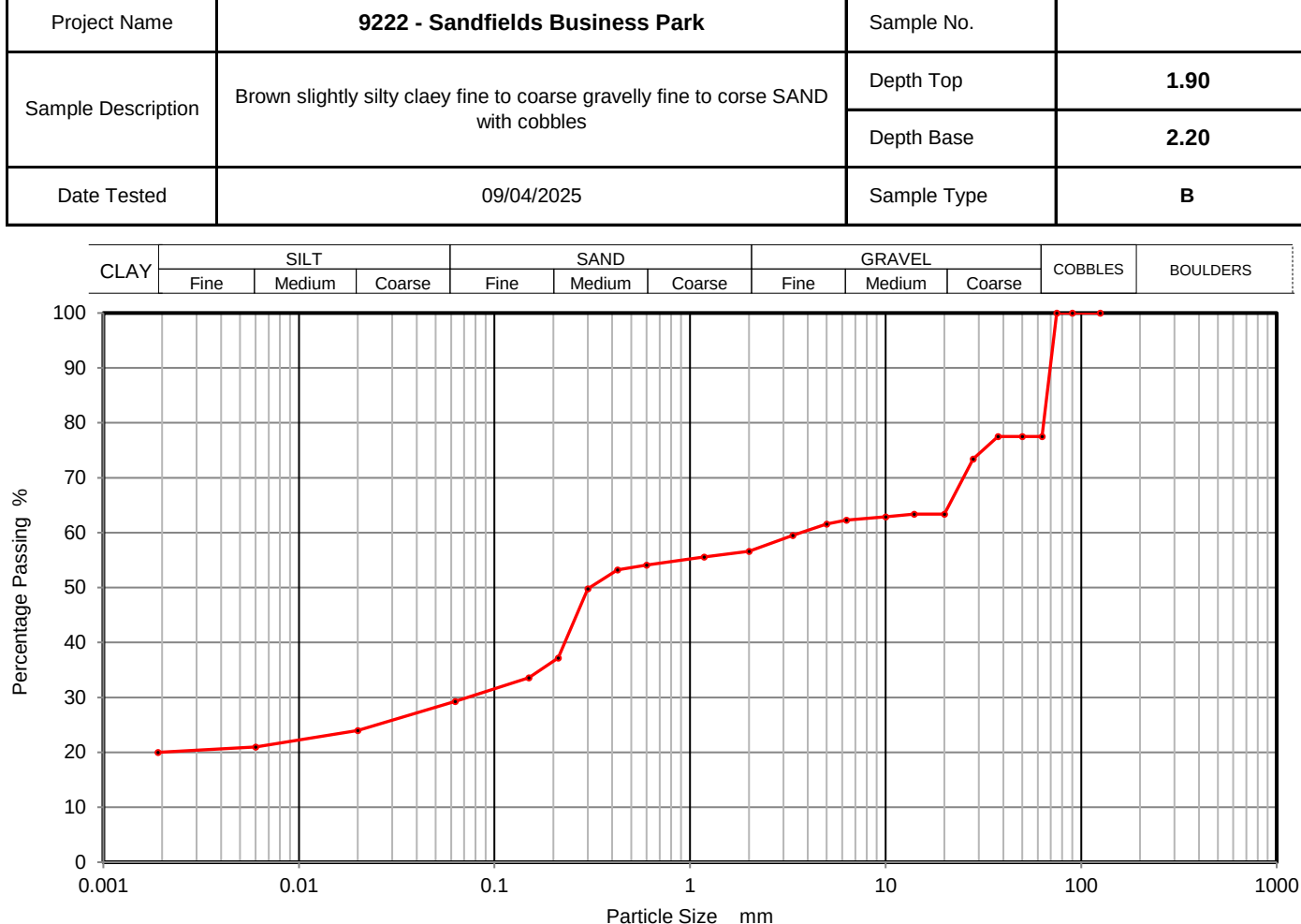
Preparation and testing in accordance with BS17892 unless noted below

Operator

David. E

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve & Pipette Analysis, Clause 5.2 & 5.4

Contract Number	77672
Borehole/Pit No.	TP101
Sample No.	
Depth Top	1.90
Depth Base	2.20
Sample Type	B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	24
90	100	0.0060	21
75	100	0.0020	20
63	78		
50	78		
37.5	78		
28	73		
20	63		
14	63		
10	63		
6.3	62		
5	62		
3.35	60		
2	57		
1.18	56		
0.63	54		
0.425	53		
0.30	50		
0.20	37		
0.15	34		
0.063	29		

Sample Proportions	% dry mass
Cobbles	22
Gravel	21
Sand	28
Silt	9
Clay	20

Remarks
Preparation and testing in accordance with BS17892 unless noted below

Operator
David. E

PARTICLE SIZE DISTRIBUTION
BS EN ISO 17892-4:2016
Wet Sieve, Clause 5.2

Contract Number **77672**

Borehole/Pit No. **TP102**

Project Name **9222 - Sandfields Business Park**

Sample No.

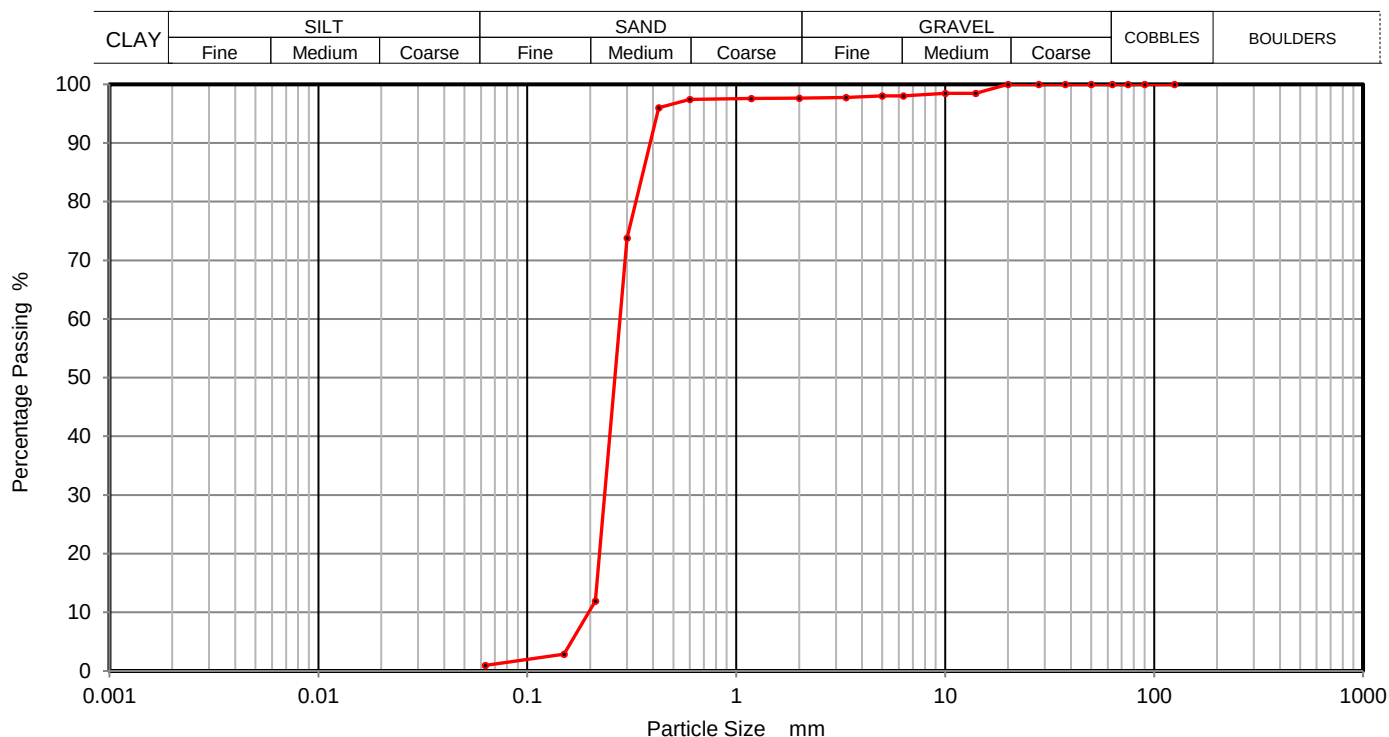
Sample Description **Brown slightly silty/ clayey slightly gravelly fine to coarse SAND**

Depth Top **1.60**

Depth Base **1.90**

Date Tested **09/04/2025**

Sample Type **B**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	98		
10	98		
6.3	98		
5	98		
3.35	98		
2	98		
1.18	98		
0.63	97		
0.425	96		
0.30	74		
0.20	12		
0.15	3		
0.063	1		

Sample Proportions	% dry mass
Cobbles	0
Gravel	2
Sand	97
Silt and Clay	1

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator

David. E

Test Report: **Determination of the Swelling Potential of Fill Material. Rapid Assessment, In house Method**

Client: Earth Science Partnership
Client ref: 9222
Project Name: 9222 - Sandfields Business Park
Contract Number: 77672
Date Test Started: 27/03/25
BH/TP: CP101A
Sample Number: 0
Depth (m) : 1.20
Sample Type: B
Operator: Darcy E
Description: Grey silty clayey sandy fine to coarse GRAVEL

INITIAL CONDITIONS.

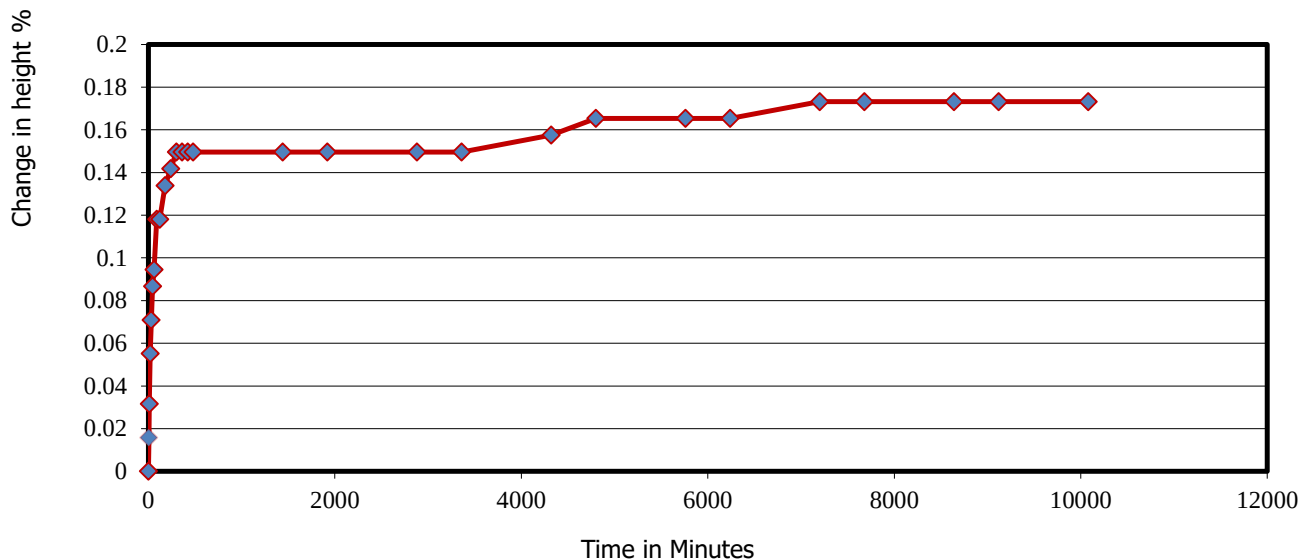
Initial Height - mm: 127.00
 Moisture Content - %: 9.5
 Bulk Density - Mg/m3: 2.14
 Dry Density - Mg/m3: 1.95

FINAL CONDITIONS.

Final Height - mm: 127.22
 Moisture Content - %: 11
 Bulk Density - Mg/m3: 2.12
 Dry Density - Mg/m3: 1.95

Test Temperature C°: 90

Swelling Potential



Swelling after 168 Hours -%
0.17

For and behalf of GEO Site & Testing Services Ltd

Remarks:

Test Report: Determination of the Swelling Potential of Fill Material. Rapid Assessment, In house Method

Client: Earth Science Partnership
Client ref: 9222
Project Name: 9222 - Sandfields Business Park
Contract Number: 77672
Date Test Started: 27/03/25
BH/TP: CP103
Sample Number: 0
Depth (m) : 1.20
Sample Type: B
Operator: Darcy E
Description: Grey silty clayey sandy fine to coarse GRAVEL

INITIAL CONDITIONS.

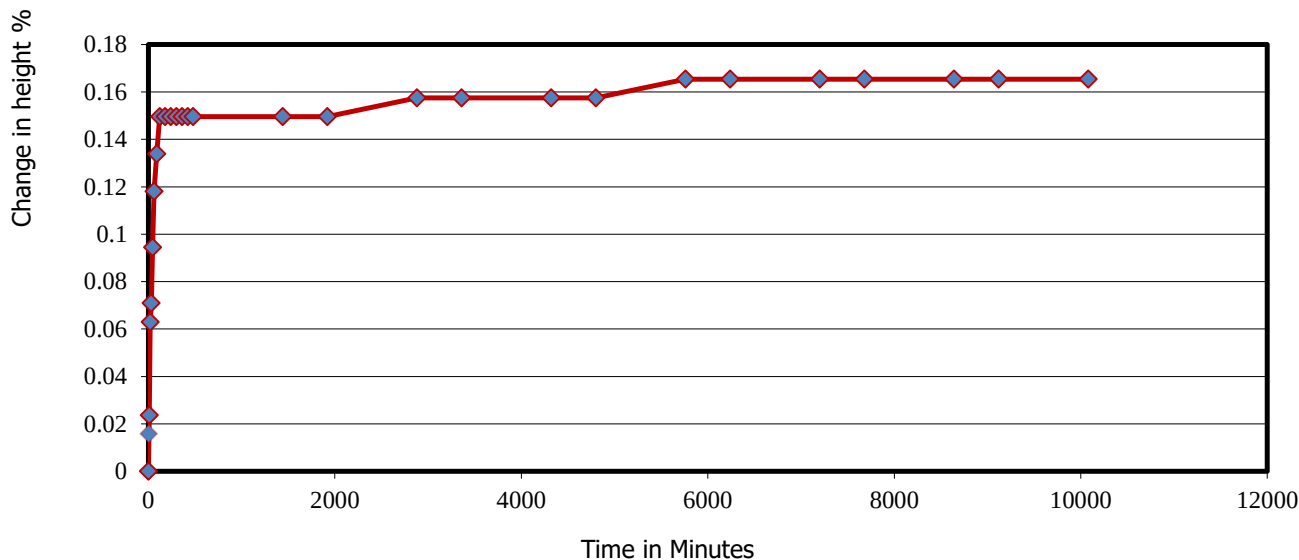
Initial Height - mm: 127.00
 Moisture Content - %: 10.0
 Bulk Density - Mg/m3: 2.15
 Dry Density - Mg/m3: 1.95

FINAL CONDITIONS.

Final Height - mm: 127.21
 Moisture Content - %: 12
 Bulk Density - Mg/m3: 2.12
 Dry Density - Mg/m3: 1.95

Test Temperature C°: 90

Swelling Potential



Swelling after 168 Hours -%
0.17

For and behalf of GEO Site & Testing Services Ltd

Remarks: