

KEY TO BOREHOLE AND TRIAL PIT LOGS

MATERIAL LEGENDS

	Topsoil		Made Ground		Bituminous Material
	Concrete		Clay		Silt
	Sand		Gravel		Peat
	Cobbles		Boulders		Mudstone
	Siltstone		Sandstone		Limestone
	Chalk		Coal		Breccia
	Conglomerate		Igneous		Metamorphic
	Pyroclastic (volcanic ash)		Gypsum		Shale
	Ironstone		Bedrock (Unidentified)		Void

INSTALLATION/BACKFILL LEGENDS

	Sand		Gravel		Bentonite/Grout
	Arisings		Concrete		Plain Pipe
	Slotted Pipe				

Legend symbols in general accordance with BS 5930:1999+A2:2010 and standard industry practice.

KEY TO BOREHOLE AND TRIAL PIT LOGS

SAMPLE TYPES

ACM	Asbestos Containing Material Sample
B	Bulk Disturbed Sample
BLK	Block Sample
C	Core Sample
CBR	Undisturbed Sample for California Bearing Ratio Test – 154mm diameter
D	Disturbed Sample - Tub
ES	Soil Sample for Environmental Testing
EW	Water Sample for Environmental Testing
G	Gas Sample
U	Undisturbed Driven Tube Sample – 70/102mm diameter, 450mm long
W	Water Sample

TEST TYPES

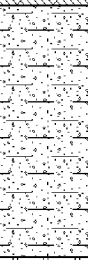
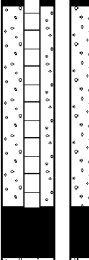
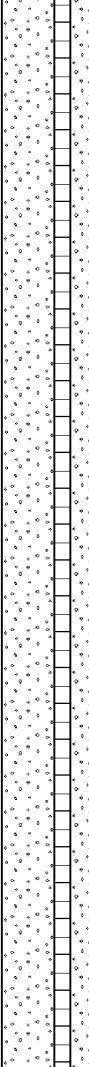
CPT	Cone Penetrometer Test (kN/m ²)
FID	Flame Ionisation Detector Test (ppm)
HV	In-Situ Hand Shear Vane Test (kN/m ²)
PID	Photoionisation Detector Test (ppm)
SPT (S)	Standard Penetration Test – Split Spoon Sampler
SPT (C)	Standard Penetration Test – Solid 60 Degree Cone

CORE DETAILS

If	Fracture Spacing (mm) – Minimum, Average, Maximum
NI	Non-Intact where >25 fracture spacings per metre
TCR	Total Core Recovery (%)
SCR	Solid Core Recovery (%)
RQD	Rock Quality Designation (%)
AF	Air Flush Return (%)
WF	Water Flush Return (%)

WATER COLUMN DETAILS

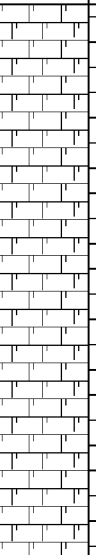
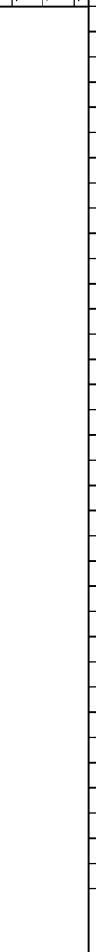
	Water Strike
	Water Level

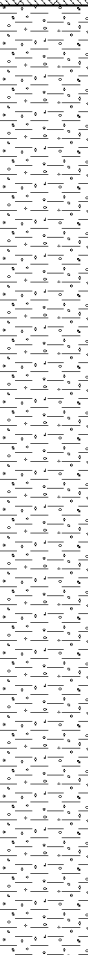
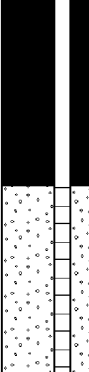
 Head Office 3 Henley Way, Doddington Road Doddington, Lutterworth, Leics, LE17 7JQ				Project No: 20-1543.07		Hole ID: BH01		Page: 1 of 2			
				Project: Oldlands Farm, Bognor Regis							
Rotary Auger Borehole Log				Date: 16/03/2021		Client: Lysander Associates					
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.50	1.64			0.40	ES				
Yellowish brown slightly gravelly clayey fine to coarse SAND. Gravel is angular to subangular fine to coarse flint and chalk. (RAISED MARINE DEPOSITS)		1.50	0.64								
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)											
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk) 2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl. 3. Borehole installed with a raised cover. 4. Elevation and location data obtained from GPS survey.				Water Level Observations					Chiselling		
				Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)	
						0.90 m					
Coordinates: E494438.83 N101884.12		Elevation (mAOD): 2.14		Drilled By: Delta Drilling		Plant Used: Commaccio GEO 205		Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30

Rotary Auger Borehole Log

Date: **16/03/2021**

Client: **Lysander Associates**

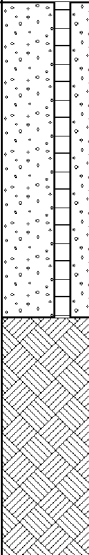
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill	
						Depth (m)	Type	Ref	Depth (m)	Results		
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)		8.00	-5.86									
Borehole complete at 8.00m bgl.												
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.						Water Level Observations					Chiselling	
						Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
								0.90 m				
Coordinates: E494438.83 N101884.12	Elevation (mAOD): 2.14	Drilled By: Delta Drilling		Plant Used: Commaccio GEO 205			Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30		

 Head Office 3 Henley Way, Duddington Road Lincoln LN6 3DR				Project No: 20-1543.07		Hole ID: BH02		Page: 1 of 2			
				Project: Oldlands Farm, Bognor Regis							
Rotary Auger Borehole Log				Date: 17/03/2021		Client: Lysander Associates					
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.50	0.65			0.30	ES				
Soft light brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		4.30	-3.15								
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)											
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.				Water Level Observations					Chiselling		
				Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)	
						5.30 m					
Coordinates: E494473.84 N101808.22		Elevation (mAOD): 1.15		Drilled By: Delta Drilling		Plant Used: Commaccio GEO 205		Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30

Rotary Auger Borehole Log

Date: **17/03/2021**

Client: **Lysander Associates**

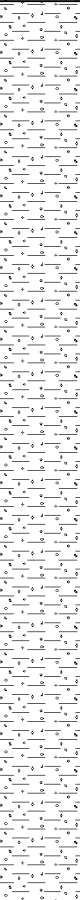
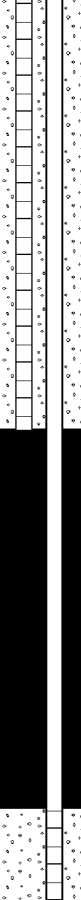
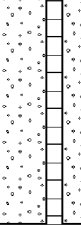
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)		8.00	-6.85								
Borehole complete at 8.00m bgl.											

Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.	Water Level Observations					Chiselling	
	Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
			5.30 m				
Coordinates: E494473.84 N101808.22	Elevation (mAOD): 1.15	Drilled By: Delta Drilling	Plant Used: Commaccio GEO 205	Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30

Rotary Auger Borehole Log

Date: **17/03/2021**

Client: **Lysander Associates**

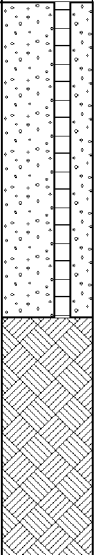
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						Depth (m)	Type	Ref	Depth (m)	Results	
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.60	0.50			0.60	ES				
Soft light brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		1.30	-0.20								
Soft dark grey becoming light grey at 3 m bgl slightly gravelly CLAY. Gravel is angular to subangular fine to coarse of flint and chalk. (RAISED MARINE DEPOSITS)		4.90	-3.80								
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)					5.00						

Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.	Water Level Observations					Chiselling	
	Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
			5.00 m				
Coordinates: E494556.28 N101757.74	Elevation (mAOD): 1.10	Drilled By: Delta Drilling	Plant Used: Commaccio GEO 205	Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30

Rotary Auger Borehole Log

Date: **17/03/2021**

Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)		8.00	-6.90								
Borehole complete at 8.00m bgl.											

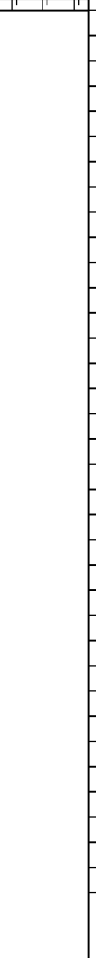
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.	Water Level Observations					Chiselling	
	Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
			5.00 m				
Coordinates: E494556.28 N101757.74	Elevation (mAOD): 1.10	Drilled By: Delta Drilling	Plant Used: Commaccio GEO 205	Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30

Oldlands Farm, Bognor Regis

Rotary Auger Borehole Log

Date: **17/03/2021**

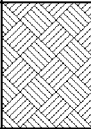
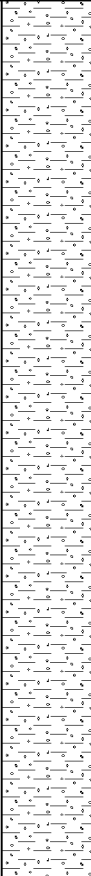
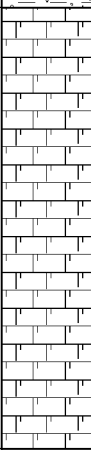
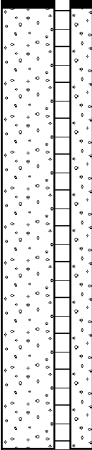
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill	
						Depth (m)	Type	Ref	Depth (m)	Results		
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)		8.00	-6.54									
Borehole complete at 8.00m bgl.												
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.						Water Level Observations					Chiselling	
						Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
								5.00 m				
Coordinates: E494552.40 N101884.55	Elevation (mAOD): 1.46	Drilled By: Delta Drilling			Plant Used: Commaccio GEO 205			Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30	

Rotary Auger Borehole Log

Date: **17/03/2021**

Client: **Lysander Associates**

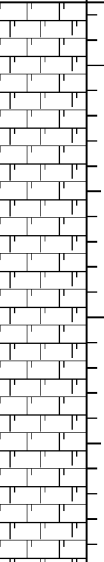
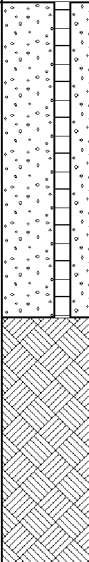
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.50	0.42			0.50	ES				
Soft light brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		4.00	-3.08								
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)											

Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.	Water Level Observations					Chiselling	
	Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
			5.00 m				
Coordinates: E494609.21 N101880.83	Elevation (mAOD): 0.92	Drilled By: Delta Drilling	Plant Used: Commaccio GEO 205	Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30

Rotary Auger Borehole Log

Date: **17/03/2021**

Client: **Lysander Associates**

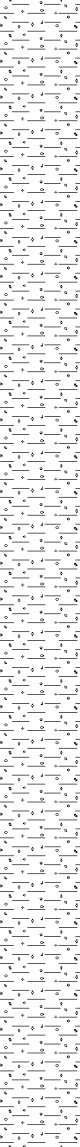
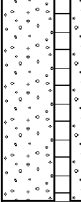
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)		8.00	-7.08								
Borehole complete at 8.00m bgl.											

Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.	Water Level Observations					Chiselling	
	Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
			5.00 m				
Coordinates: E494609.21 N101880.83	Elevation (mAOD): 0.92	Drilled By: Delta Drilling	Plant Used: Commaccio GEO 205	Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30

Rotary Auger Borehole Log

Date: **18/03/2021**

Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.40	0.57			0.40	ES				
Soft light brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)											
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)		5.00	-4.03								

Remarks:

1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.

Water Level Observations

Chiselling

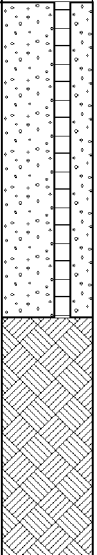
Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
		5.00 m				

Coordinates: E494627.99 N101833.63	Elevation (mAOD): 0.97	Drilled By: Delta Drilling	Plant Used: Commaccio GEO 205	Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30
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Rotary Auger Borehole Log

Date: **18/03/2021**

Client: **Lysander Associates**

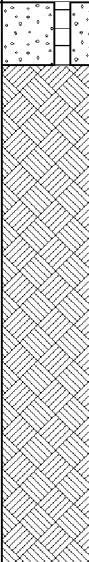
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)		8.00	-7.03								
Borehole complete at 8.00m bgl.											

Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.	Water Level Observations					Chiselling	
	Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
			5.00 m				
Coordinates: E494627.99 N101833.63	Elevation (mAOD): 0.97	Drilled By: Delta Drilling	Plant Used: Commaccio GEO 205	Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30

Rotary Auger Borehole Log

Date: **18/03/2021**

Client: **Lysander Associates**

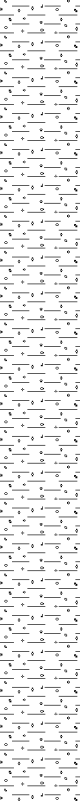
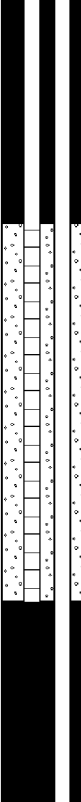
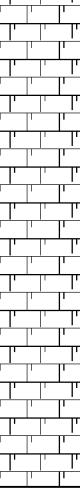
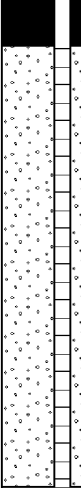
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)		8.00	-6.61								
Borehole complete at 8.00m bgl.											

Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.	Water Level Observations					Chiselling	
	Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
			4.00 m				
Coordinates: E494625.67 N101950.12	Elevation (mAOD): 1.39	Drilled By: Delta Drilling	Plant Used: Commaccio GEO 205	Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30

Rotary Auger Borehole Log

Date: **18/03/2021**

Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.60	0.49			0.40	ES				
Soft light brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		3.80	-2.71								
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)											

Remarks:
1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.

Water Level Observations

Chiselling

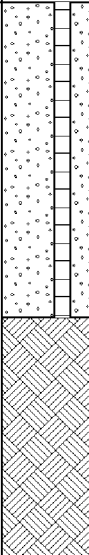
Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
		5.50 m				

Coordinates: E494672.97 N101933.38	Elevation (mAOD): 1.09	Drilled By: Delta Drilling	Plant Used: Commaccio GEO 205	Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30
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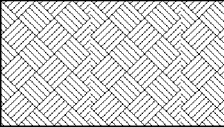
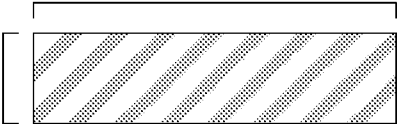
Rotary Auger Borehole Log

Date: **18/03/2021**

Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water Strike	Sample Details			Test Details		Backfill
						Depth (m)	Type	Ref	Depth (m)	Results	
Chalk, recovered as light grey to white slightly gravelly SILT. Gravel is angular to subangular fine to medium of chalk and flint. (UNDIFFERENTIATED CHALK)		8.00	-6.91								
Borehole complete at 8.00m bgl.											

Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.	Water Level Observations					Chiselling	
	Date	Time	Strike	Duration	Standing	Depth (m)	Time (h:m)
			5.50 m				
Coordinates: E494672.97 N101933.38	Elevation (mAOD): 1.09	Drilled By: Delta Drilling	Plant Used: Commaccio GEO 205	Logged: MJ	Checked: DJ	Approved: DJ	Scale (m): 1:30

 Head Office 3 Henley Way, Duddington Road [Redacted Address]		Project No: 20-1543.07		Hole ID: CBR02		Page: 1 of 1		
Trial Pit Log		Date: 13/04/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown slightly gravelly slightly sandy CLAY. Gravel is fine to coarse sub-angular to sub-rounded of flint and chalk. Sand is fine to medium. Frequent rootlets up to 1mm diameter. Rare roots up to 4mm diameter.		0.50	1.43					
Trial pit complete at 0.50 m bgl.								
Dimensions and Orientation: Length = 2.00 m Width = 2.00 m 		Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.6.Trial pit terminated at 0.4 m and used to perform plate load test at 0.50m bgl				
Coordinates: E494420.04 N101875.61	Elevation (mAOD): 1.93	Excavated By: Outsource		Plant Used: JCB 3CX	Logged: DJ	Checked: MJ	Approved: DLJ	Scale: 1:30

Trial Pit Log

Date: 13/04/2021

Client: **Lysander Associates**

[illegible]

Dimensions and Orientation:

Length = 2.00 m

Width = 2.00 m

Orientation:

Inclination:

Remarks:

Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.6.Trial pit terminated at 0.4 m and used to perform plate load test at 0.50m bgl

Coordinates:

E494438.06 N101841.63

Elevation (mAOD):

1.97

Excavated By:

Outsource

Plant Used:

JCB 3CX

Logged:	
---------	--

DJ

Checked:

MJ

Approved:

DLJ

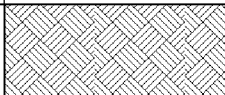
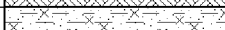
Scale:

1:30

Trial Pit Log

Date: **13/04/2021**

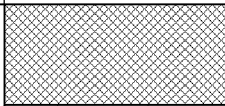
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown slightly gravelly slightly sandy CLAY. Gravel is fine to coarse sub-angular to sub-rounded of flint and chalk. Sand is fine to medium. Frequent rootlets up to 1mm diameter. Rare roots up to 4mm diameter.		0.40	0.99					
Soft orangish brown slightly sandy silty CLAY. Sand is fine to medium. O occasional pockets of orangish brown fine sand up to (15 x 15 x15mm). Rare rootlets up to 1mm diameter. (RAISED MARINE DEPOSITS)		0.50	0.89					
Trial pit complete at 0.50 m bgl.								

Trial Pit Log

Date: **13/04/2021**

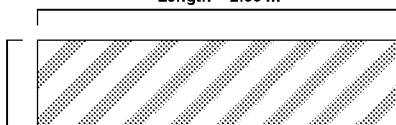
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
MADE GROUND: Grass over soft to firm brown gravelly sandy CLAY with a low to medium cobble content. Gravel is fine to coarse sub angular to sub rounded of flint, concrete and red brick. Cobbles are angular of redbrick and concrete up to (200 x 150 x 150mm). Rare ceramic tile fragments up to (100 x 100 x 10mm). Occasional rootlets up to 1mm diameter. Rare rootlets. Sand is fine to coarse.		0.40	1.29					
		0.50	1.19					
Soft orangish brown slightly sandy silty CLAY. Sand is fine to medium. O occasional pockets of orangish brown fine sand up to (10 x 10 x110mm). Rare rootlets up to 1mm diameter. (RAISED MARINE DEPOSITS)								
Trial pit complete at 0.50 m bgl.								

Dimensions and Orientation:

Length = 2.00 m

Width = 2.00 m



Orientation:

Inclination:

Remarks:

1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.6.Trial pit terminated at 0.4 m and used to perform plate load test at 0.50m bgl

Coordinates:
E494401.40 N101862.69

Elevation (mAOD):
1.69

Excavated By:
Outsource

Plant Used:
JCB 3CX

Logged:
DJ

Checked:
MJ

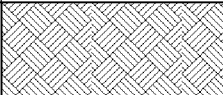
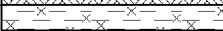
Approved:
DLJ

Scale:
1:30

Trial Pit Log

Date: **14/04/2021**

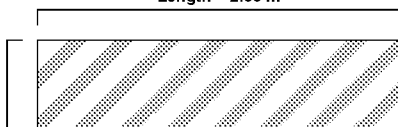
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown slightly gravelly slightly sandy CLAY. Gravel is fine to coarse sub-angular to sub-rounded of flint and chalk. Sand is fine to medium. Frequent rootlets up to 1mm diameter. Rare roots up to 4mm diameter.		0.40	0.93					
Firm brown mottled blueish grey silty CLAY with occasional pockets of orangish brown silt up to (15 x 15 x 15mm). Occasional rootlets up to 1mm diameter. (RAISED MARINE DEPOSITS)		0.50	0.83					
Trial pit complete at 0.50 m bgl.								

Dimensions and Orientation:

Length = 2.00 m

Width = 2.00 m



Orientation:

Inclination:

Remarks:

1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.6.Trial pit terminated at 0.4 m and used to perform plate load test at 0.50m bgl

Coordinates:
E494382.55 N101836.63

Elevation (mAOD):
1.33

Excavated By:
Outsource

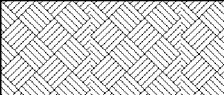
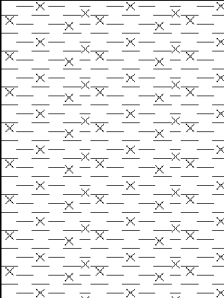
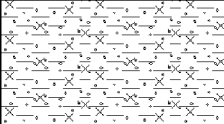
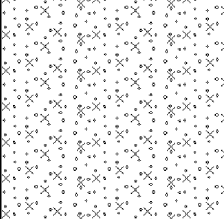
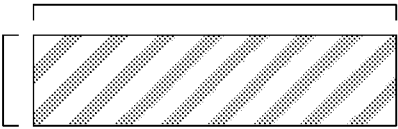
Plant Used:
JCB 3CX

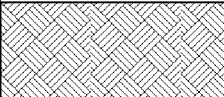
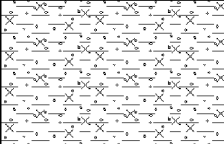
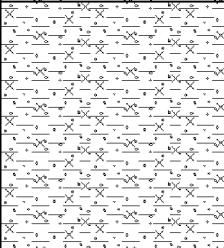
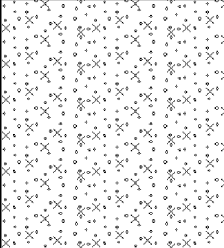
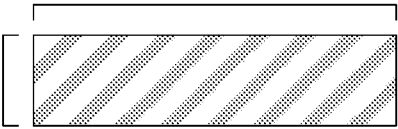
Logged:
DJ

Checked:
MJ

Approved:
DLJ

Scale:
1:30

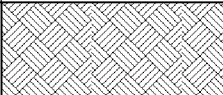
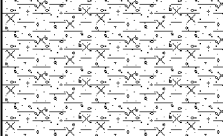
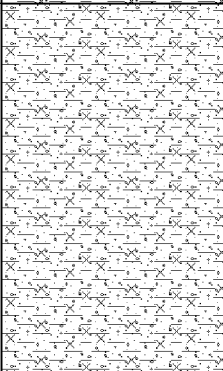
 Head Office 3 Henley Way, Doddington Road Lingfield, TN26 3DB		Project No: 20-1543.07		Hole ID: CBR11		Page: 1 of 1		
Trial Pit Log		Project: Oldlands Farm, Bognor Regis						
		Date: 15/04/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown sandy slightly gravelly CLAY. Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Frequent rootlets and rare roots. Sand is fine to medium.		0.40						
Soft to firm brown mottled light grey slightly gravelly silty CLAY. Gravel is sub angular to sub rounded fine to medium of flint and chalk. Frequent pockets of orangish brown silt to (10 x 10 x10mm). Occasional rootlets. (RAISED MARINE DEPOSITS)		1.60					0.50 1.00	HV=68 kPa HV=58 kPa
Soft orangish brown and light grey gravelly sandy silty CLAY with a low cobble content. Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Cobbles are sub angular of flint up to (200 x 120 x 100mm). Sand is fine to medium. (RAISED MARINE DEPOSITS)		2.10		1.80				
STRUCTURELESS CHALK: Recovered as slightly sandy silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with occasional orange staining and rare black specks. Matrix is off-white. Sand is fine to medium. Occasional sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK)		3.00						
Trial pit complete at 3.00 m bgl.								
Dimensions and Orientation: 				Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.		
Coordinates:	Elevation (mAOD):	Excavated By: Outsource		Plant Used: JCB 3CX	Logged: DJ	Checked: MJ	Approved: DLJ	Scale: 1:30

 Head Office 3 Henley Way, Duddington Road [Redacted Address]		Project No: 20-1543.07		Hole ID: CBR12		Page: 1 of 1		
		Project: Oldlands Farm, Bognor Regis						
Trial Pit Log		Date: 15/04/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown sandy slightly gravelly CLAY. Gravel is sub angular to subrounded fine to coarse of flint and chalk. Frequent rootlets and rare roots. Sand is fine to medium.		0.40						
Soft to firm brown mottled light grey slightly gravelly silty CLAY. Gravel is sub angular to sub rounded fine to medium of flint and chalk. Frequent pockets of orangish brown silt to (15 x 15 x15mm). Occasional rootlets. (RAISED MARINE DEPOSITS)		1.00					0.50	HV=68 kPa
Soft orangish brown and light grey gravelly sandy silty CLAY with a low cobble content. Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Cobbles are sub angular of flint and chalk up to (150 x 150 x 100mm). Sand is fine to medium. (RAISED MARINE DEPOSITS)		2.00					1.00	HV=60 kPa
STRUCTURELESS CHALK: Recovered as slightly sandy silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with occasional orange staining and rare black specks. Matrix is off-white. Sand is fine to medium. Occasional sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK) (UNDIFFERENTIATED CHALK)		3.00						
Trial pit complete at 3.00 m bgl.								
Dimensions and Orientation: 		Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.				
Coordinates:	Elevation (mAOD):	Excavated By: Outsource		Plant Used: JCB 3CX	Logged: DJ	Checked: MJ	Approved: DLJ	Scale: 1:30

Trial Pit Log

Date: **15/04/2021**

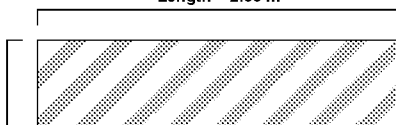
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown sandy slightly gravelly CLAY. Gravel is sub angular to subrounded fine to coarse of flint and chalk. Frequent rootlets and rare roots. Sand is fine to medium.		0.40						
Soft to firm brown mottled light grey slightly gravelly slightly sandy silty CLAY. Gravel is sub angular to sub rounded fine to coarse of flint. Frequent pockets of orangish brown silt up to (15 x15 x15mm). Rare rootlets. (RAISED MARINE DEPOSITS)		1.00					0.50	HV=60 kPa
Soft orangish brown and light grey gravelly sandy silty CLAY with a low cobble content. Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Cobbles are sub angular of flint and chalk up to (100 x 100 x 80mm). Sand is fine to medium. (UNDIFFERENTIATED CHALK)		2.50					1.00	HV=52 kPa
Trial pit complete at 2.50 m bgl.								

Dimensions and Orientation:

Length = 2.00 m

Width = 0.60 m



Orientation:

Inclination:

Remarks:

1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.

Coordinates:

Elevation (mAOD):

Excavated By:

Outsource

Plant Used:

JCB 3CX

Logged:

DJ

Checked:

MJ

Approved:

DLJ

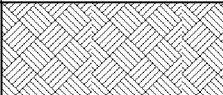
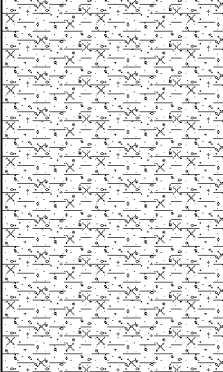
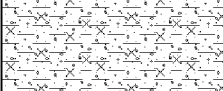
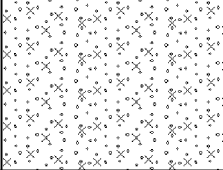
Scale:

1:30

Trial Pit Log

Date: **15/04/2021**

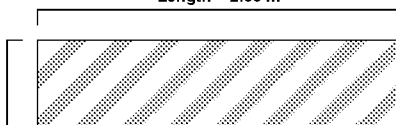
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown sandy slightly gravelly CLAY. Gravel is sub angular to subrounded fine to coarse of flint and chalk. Frequent rootlets and rare roots. Sand is fine to medium.		0.40						
Soft to firm orangish brown gravelly sandy silty CLAY with a low cobble content. Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Sand is fine to medium. rare rootlets. rare pockets of black organic matter up to (10 x 10 x 10mm). (RAISED MARINE DEPOSITS)		1.90					0.50	HV=70 kPa
Soft orangish brown and light grey gravelly sandy silty CLAY with a low cobble content. Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Cobbles are angular of flint up to (80 x 80 x 80mm). (RAISED MARINE DEPOSITS)		2.30						
STRUCTURELESS CHALK: Recovered as slightly sandy silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with occasional orange staining and rare black specks. Matrix is off-white. Sand is fine to medium. Occasional sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK)		3.00						
Trial pit complete at 3.00 m bgl.								

Dimensions and Orientation:

Length = 2.00 m

Width = 0.60 m



Orientation:

Inclination:

Remarks:

1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.

Coordinates:

Elevation (mAOD):

Excavated By:

Outsource

Plant Used:

JCB 3CX

Logged:

DJ

Checked:

MJ

Approved:

DLJ

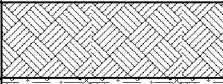
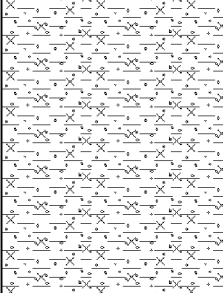
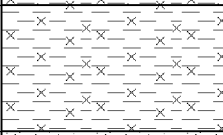
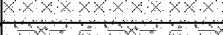
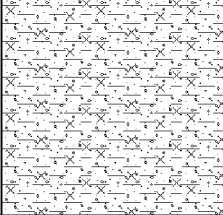
Scale:

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Trial Pit Log

Date: **15/04/2021**

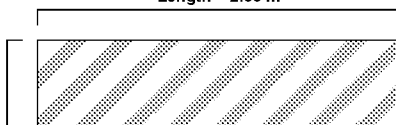
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown sandy slightly gravelly CLAY. Gravel is sub angular to subrounded fine to coarse of flint and chalk. Frequent rootlets and rare roots. Sand is fine to medium.		0.30						
Soft to firm orangish brown mottled blueish grey slightly gravelly silty CLAY. Gravel is sub angular to sub rounded of flint and chalk. Occasional rootlets. Rare pockets of brown and black organic matter up to (15 x 15 x 15mm). Occasional pockets of orangish brown silty up to (10 x10 x10mm). (RAISED MARINE DEPOSITS)		1.50					0.50 1.00	HV=52 kPa HV=32 kPa
Soft to firm blueish grey locally mottled orangish brown silty CLAY with frequent pockets and fragments of brown and partially decomposed organic matter up to (20 x 20 x 20mm). Occasional pockets of grey silt up to (30 x 30 x 30mm). (RAISED MARINE DEPOSITS)		2.00						
Light grey and blueish grey slightly sandy SILT. Sand is fine. (RAISED MARINE DEPOSITS)		2.10						
Firm brown slightly gravelly slightly sandy silty CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent pockets of dark brown and black organic matter up to (15 x 15 x 15mm). Rare partially decomposed roots. Sand is fine (RAISED MARINE DEPOSITS)		3.00						
Trial pit complete at 3.00 m bgl.								

Dimensions and Orientation:

Length = 2.00 m

Width = 0.60 m



Orientation:

Inclination:

Remarks:

1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.

Coordinates:

Elevation (mAOD):

Excavated By:

Outsource

Plant Used:

JCB 3CX

Logged:

DJ

Checked:

MJ

Approved:

DLJ

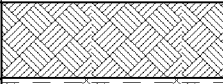
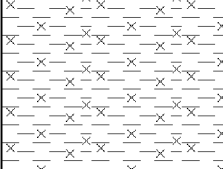
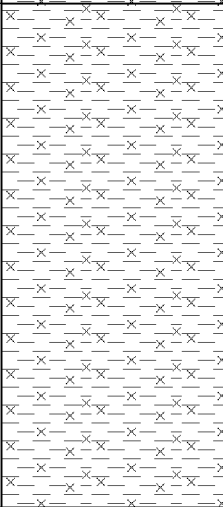
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Trial Pit Log

Date: **16/04/2021**

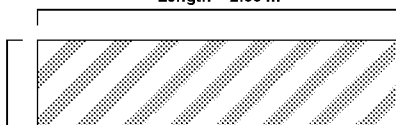
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Soft to firm brown slightly gravelly slightly sandy CLAY Gravel is sub angular to sub rounded fine to medium of flint and chalk. Frequent rootlets and rare roots. Sand is fine to medium.		0.30						
Soft to firm blueish grey mottled orangish brown silty CLAY with frequent rootlets and occasional pockets of orangish brown silt up to (15 x15 x15mm). (RAISED MARINE DEPOSITS)		1.00					0.50	HV=52 kPa
Soft locally firm blueish grey silty CLAY with occasional pockets of black organic matter up to (10 x10 x10mm) (RAISED MARINE DEPOSITS)		3.00					1.00	HV=40 kPa
							1.50	HV=10 kPa
							2.00	HV=14 kPa
Trial pit complete at 3.00 m bgl.								

Dimensions and Orientation:

Length = 2.00 m

Width = 0.60 m



Orientation:

Inclination:

Remarks:

1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.

Coordinates:

Elevation (mAOD):

Excavated By:

Outsource

Plant Used:

JCB 3CX

Logged:

DJ

Checked:

MJ

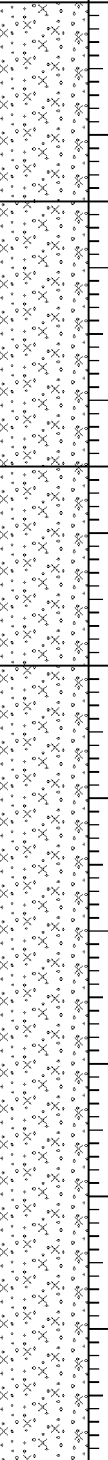
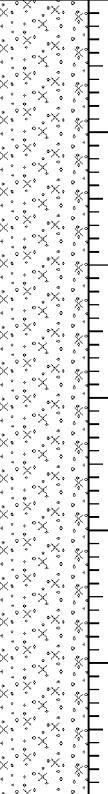
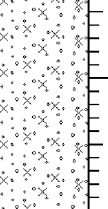
Approved:

DLJ

Scale:

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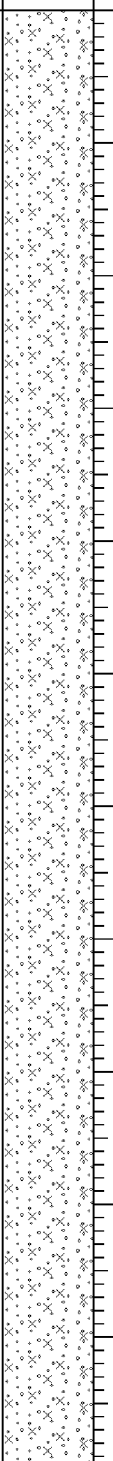
 Head Office 3 Henley Way, Dodington Road					Project No: 20-1543.07		Hole ID: CP01		Page: 1 of 4			
Cable Percussive Borehole Log					Project: Oldlands Farm, Bognor Regis							
					Date: 12/04/2021 - 14/04/2021		Client: Lysander Associates					
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
TOPSOIL: Grass over soft to firm brown slightly gravelly slightly sandy CLAY. Gravel is fine to medium sub-angular to sub-rounded of flint and chalk. Sand is fine. Frequent rootlets up to 1mm diameter. Rare roots up to 4mm diameter. (TOPSOIL) Soft to firm orangish brown mottled blueish grey slightly sandy silty CLAY with frequent pockets of orangish brown silt up to (10 x 10 x 10mm) and occasional pockets of dark brown and black organic matter up to (4 x 4 x 4mm). Rare rootlets up to 1mm diameter. Sand is fine. (RAISED MARINE DEPOSITS) Soft grey locally mottled off-white slightly gravelly silty CLAY. Gravel is sub-rounded to sub-angular fine to coarse of flint and chalk. Occasional pockets of black and dark brown organic matter up to (15 x 15 x 15mm). (RAISED MARINE DEPOSITS) Very weak, low density off white CHALK with occasional orange staining recovered as: Silty sub-angular fine to coarse GRAVEL. Rare angular to sub angular fine to medium flint with a cortex <1mm. (Grade Dm) (UNDIFFERENTIATED CHALK)		0.40	(0.40)	0.63			0.00 0.20 - 0.30 0.40 0.60 - 0.70	D ES B ES		SPT(S)N=1 (1,1/0,1,0,0)		
		2.50	(2.10)	-1.47		2.50	1.20 2.00	D B	1.20			
		3.00	(0.50)	-1.97		3.00	3.00 3.00 - 3.10	B D ES	3.00		SPT(S)N=6 (0,0/1,2,2,1)	
							4.00 4.00	B D	4.00		SPT(N)=9 (1,0/1,2,3,3)	
							5.00 5.00	B D	5.00		SPT(N)=10 (1,1/1,3,3,3)	
							6.50	D	6.50		SPT(N)=12 (1,3/2,3,3,4)	
		8.00		-6.97			8.00 8.00	B D	8.00		SPT(N)=14 (2,2/5,3,3,3)	
			(4.50)				9.50 9.50	B D	9.50		SPT(N)=12 (1,3/2,3,3,4)	
							11.00	D	11.00		SPT(N)=15 (1,2/3,3,4,5)	
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole commenced as cable percussive borehole to 16 m bgl with rotary open hole follow-on to 35 m bgl.5. Elevation and location data obtained from GPS survey.					Water Strikes		Water Level		Chiselling			
					Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration	
						3.00		20 min	2.50			
Coordinates: E494505.80 N101815.01					Elevation (mAOD): 1.03		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ Checked: MJ Approved: DLJ Scale (m): 1:57	

 Head Office 3 Henley Way, Doddington Road					Project No: 20-1543.07		Hole ID: CP01		Page: 2 of 4			
					Project: Oldlands Farm, Bognor Regis							
Cable Percussive Borehole Log					Date: 12/04/2021 - 14/04/2021		Client: Lysander Associates					
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
Very weak and weak, low and medium density off white CHALK with occasional orange staining recovered as: Silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular up to (80 x 80 x 80mm). Rare angular to sub angular fine to medium flint fragments with a cortex <1mm. (Grade Dm) (UNDIFFERENTIATED CHALK)		12.50		-11.47			11.10	B				
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine to medium sub-angular flint fragments with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)		12.50					12.50	B D	12.50	SPT(N=33 (5,10/10,9,9,5))		
		14.50	(2.00)	-13.47			14.00 14.00	B D	14.00	SPT(N=45 (3,7/9,11,10,15))		
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine to medium sub-angular flint fragments with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)		16.00	(1.50)	-14.97			15.00 - 15.10	ES				
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine to medium sub-angular flint fragments with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)							15.50 15.50	B D	15.50	SPT(N=50 (8,17/50 for 185mm))		
									16.00	SPT(N=50 (19,17/50 for 185mm))		
									17.50	SPT(50 (25 for 130mm/50 for 90mm))		
									19.00	SPT(50 (30 for 120mm/50 for 90mm))		
									20.50	SPT(50 (25 for 75mm/50 for 75mm))		
									22.00	SPT(50 (25 for 70mm/50 for 70mm))		
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole commenced as cable percussive borehole to 16 m bgl with rotary open hole follow-on to 35 m bgl.5. Elevation and location data obtained from GPS survey.						Water Strikes		Water Level		Chiselling		
						Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
							3.00		20 min	2.50		
Coordinates: E494505.80 N101815.01		Elevation (mAOD): 1.03		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57	

Cable Percussive Borehole Log

Date: **12/04/2021 - 14/04/2021**

Client: **Lysander Associates**

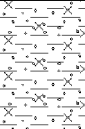
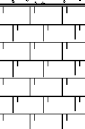
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill
							Depth (m)	Type & Ref	Depth (m)	Results	
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine to medium sub-angular flint fragments with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)									23.50	SPT(50 (25 for 40mm/50 for 40mm)	
									25.00	SPT(50 (25 for 45mm/50 for 40mm)	
									26.50	SPT(50 (25 for 75mm/50 for 75mm)	
									28.00	SPT(50 (25 for 60mm/50 for 70mm)	
									29.50	SPT(50 (25 for 5mm/50 for 70mm)	
									31.00	SPT(50 (25 for 15mm/50 for 35mm)	
									32.50	SPT(50 (25 for 75mm/50 for 75mm)	

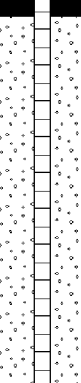
Remarks:
1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole commenced as cable percussive borehole to 16 m bgl with rotary open hole follow-on to 35 m bgl.5. Elevation and location data obtained from GPS survey.

Water Strikes			Water Level		Chiselling	
Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
	3.00		20 min	2.50		

Coordinates: E494505.80 N101815.01	Elevation (mAOD): 1.03	Drilled By: Borehole Surveys	Plant Used: Dando 150	Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57
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 Head Office 3 Henley Way, Dodington Road					Project No: 20-1543.07		Hole ID: CP01		Page: 4 of 4			
					Project: Oldlands Farm, Bognor Regis							
Cable Percussive Borehole Log					Date: 12/04/2021 - 14/04/2021		Client: Lysander Associates					
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine to medium sub-angular flint fragments with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)		35.00		-33.97					34.00	SPT()50 (25 for 70mm/50 for 50mm)		
Borehole complete at 35.00 m bgl.									35.00	SPT()70 (25 for 50mm/70 for 60mm)		
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole commenced as cable percussive borehole to 16 m bgl with rotary open hole follow-on to 35 m bgl.5. Elevation and location data obtained from GPS survey.						Water Strikes		Water Level		Chiselling		
						Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
							3.00		20 min	2.50		
Coordinates: E494505.80 N101815.01						Elevation (mAOD): 1.03		Drilled By: Borehole Surveys		Plant Used: Dando 150		
						Logged: DJ		Checked: MJ		Approved: DLJ		
						Scale (m): 1:57						

 Head Office 3 Henley Way, Duddington Road						Project No: 20-1543.07		Hole ID: CP02		Page: 1 of 2		
						Project: Oldlands Farm, Bognor Regis						
Cable Percussive Borehole Log						Date: 28/04/2021 - 29/04/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
TOPSOIL: Grass over soft to firm brown slightly gravelly slightly sandy CLAY. Gravel is fine to medium sub-angular to sub-rounded of flint and chalk. Sand is fine. Frequent rootlets up to 1mm diameter. Rare roots up to 4mm diameter. (TOPSOIL)		0.70	(0.70)	0.40			0.00 - 0.70 0.10 - 0.20 0.10 - 0.20	D ES ES.				
Soft to firm orangish brown mottled blueish grey slightly sandy silty CLAY with frequent pockets of orangish brown silt up to (10 x 10 x 10mm) and occasional pockets of dark brown and black organic matter up to (4 x 4 x 4mm). Rare rootlets up to 1mm diameter. Sand is fine. (RAISED MARINE DEPOSITS)		2.50	(1.80)	-1.40		1.70	0.70 0.80 - 0.90 0.80 - 0.90 1.20 - 1.65	B ES ES. U	1.20	U=18 Blows for 89%		
Soft grey locally mottled white slightly gravelly silty CLAY. Gravel is sub-rounded to sub-angular fine to coarse of flint and chalk. Occasional pockets of black and dark brown organic matter up to (15 x 15 x 15mm). (RAISED MARINE DEPOSITS)		3.50	(1.00)	-2.40			2.00 2.00 - 2.45	B D	2.00	SPT(S)N=6 (1,1/2,1,1,2)		
STRUCTURELESS CHALK: Recovered as off white sandy gravelly SILT. Gravel is very weak low density sub rounded to angular fine to coarse white chalk with occasional black specks and rare orangish brown staining. Matrix is off-white. Sand is fine to medium. (Grade Dm) (UNDIFFERENTIATED CHALK)		4.50	(1.00)	-3.40		4.50	2.50 2.60 - 2.70 2.60 - 2.70 3.00 - 3.45	B ES ES. B	3.00	SPT(S)N=2 (0,0/0,1,0,1)		
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL. Gravel is very weak, low density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)			(10.00)				3.50 3.50 - 3.60	B ES	4.00	SPT(S)N=3 (0,1/0,1,1,1)		
							4.00 - 4.45	D	4.00	SPT(S)N=3 (0,1/0,1,1,1)		
							5.00 5.00 - 5.45	B D	5.00	SPT(S)N=6 (0,1/1,2,1,2)		
							6.50 6.50 - 6.95	B D	6.50	SPT(S)N=11 (1,0/5,2,2,2)		
							8.00 8.00 - 8.45	B D	8.00	SPT(S)N=9 (1,2/1,2,3,3)		
							9.50 9.50 - 9.95	B D	9.50	SPT(S)N=16 (1,2/5,3,4,4)		
							11.00 11.00 - 11.45	B D	11.00	SPT(S)N=16 (1,2/4,4,3,5)		
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.						Water Strikes		Water Level		Chiselling		
						Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
						28/04/2021	4.50	fast flow	5 min	1.70		
Coordinates: E494533.53 N101755.00		Elevation (mAOD): 1.10		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57	

 Head Office 3 Henley Way, Doddington Road						Project No: 20-1543.07		Hole ID: CP02		Page: 2 of 2		
Cable Percussive Borehole Log						Project: Oldlands Farm, Bognor Regis						
						Date: 28/04/2021 - 29/04/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL. Gravel is very weak, low density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)							12.50	B D	12.50	SPT(S)N=14 (2,2/3,3,3,5)		
							12.50 - 12.95					
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL. Gravel is very weak and weak, low and medium density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)		14.50		-13.40			14.00	B D	14.00	SPT(S)N=21 (4,3/4,5,5,7)		
							14.00 - 14.45					
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL. Gravel is very weak and weak, low and medium density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)			(3.00)				15.50	B D	15.50	SPT(S)N=35 (5,6/7,10,10,8)		
							15.50 - 15.95					
Borehole complete at 17.50 m bgl.		17.50		-16.40			17.00	B D	17.00	SPT(S)50 (10,15/50 for 160mm)		
							17.00 - 17.31					
							17.50	D	17.50	SPT(S)50 (18,25/50 for 105mm)		
							17.50 - 17.76					
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.						Water Strikes		Water Level		Chiselling		
						Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
						28/04/2021	4.50	fast flow	5 min	1.70		
Coordinates: E494533.53 N101755.00		Elevation (mAOD): 1.10		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57	



Head Office

2 Haverley Way, Duddington Road

Project No: 20-1543.07

Hole ID: CP03

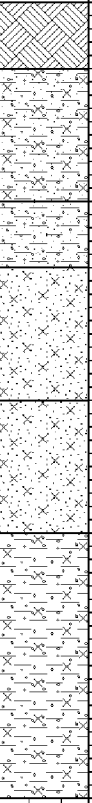
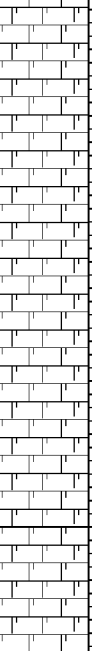
Page: 1 of 3

Project: Oldlands Farm, Bognor Regis

Cable Percussive Borehole Log

Date: 14/04/2021 - 19/04/2021

Client: Lysander Associates

Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
TOPSOIL: Grass over soft to firm brown slightly gravelly sandy CLAY. Gravel is fine to medium sub-angular of flint and chalk. Sand is fine to medium. Frequent rootlets up to 1mm diameter. Rare roots up to 4mm diameter. (TOPSOIL) Soft to firm orangish brown mottled blueish grey and brown slightly sandy silty CLAY. Frequent pockets of grey silt up to (10 x10 x 10mm) rate rootlets up to 1mm diameter. Sand is fine. (RAISED MARINE DEPOSITS) Soft to firm orangish brown mottled light grey slightly gravelly sandy CLAY. Gravel is angular to sub rounded fine to medium of chalk and flint. Sand is fine to medium. (RAISED MARINE DEPOSITS) Loose greenish grey silty fine to medium SAND with frequent black specks. (RAISED MARINE DEPOSITS) Loose dark grey silty fine SAND with occasional pockets of black organic matter up to (15 x 15 x15mm) and occasional black specks. (RAISED MARINE DEPOSITS) Soft light grey and brown slightly sandy gravelly silty CLAY with a low cobble content. Gravel is sub angular fine to coarse of flint and chalk. Cobbles are angular to sub angular of flint up to (80 x 80 x 80mm). Sand is fine to medium. (RAISED MARINE DEPOSITS)		0.50	(0.50)	0.58		0.00 - 0.50	D	1.20 U=17 Blows for 67% 2.00 SPT(N)=3 (0,0/1,2,0,0) 3.00 SPT(N)=1 (0,0/1,0,0,0) 4.00 SPT(N)=9 (1,1/2,2,3,2) 5.00 SPT(N)=10 (1,2/2,3,2,3) 6.00 SPT(N)=1 (1,0/0,1,0,0) 7.50 SPT(N)=6 (0,0/1,2,1,2) 9.00 SPT(N)=9 (0,1/1,2,3,3) 10.50 SPT(N)=32 (2,3/7,9,7,9)				
		0.10 - 0.20	ES									
		0.50	B									
		0.60 - 0.70	ES									
		1.20 - 1.65	U									
		1.50	B									
		1.50 - 1.60	ES									
		2.00	B									
		2.00 - 2.45	D									
		3.00	B									
3.00	D											
3.00 - 3.10	ES											
4.00	B											
4.00 - 4.20	ES											
4.00 - 4.45	D											
5.00	B											
5.00 - 5.45	D											
6.00	B											
6.00 - 6.10	ES											
6.00 - 6.45	D											
7.50	B											
7.50 - 7.95	D											
9.00	B											
9.00 - 9.45	D											
10.00												
10.50	B											
10.50 - 10.95	D											
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL. Gravel is very weak, low density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dm) (UNDIFFERENTIATED CHALK)			(4.00)									
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL. Gravel is very weak and weak, low and medium density with occasional orangish brown staining and rare black												

Remarks:

1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.

Water Strikes

Date

Depth (m)

Remarks

2.00

6.00

Water Level

Duration

Standing

20 min

0.40

20 min

2.17

Chiselling

Depth Top

Duration

Coordinates: E494607.98 N101763.24

Elevation (mAOD): 1.08

Drilled By: Borehole Surveys

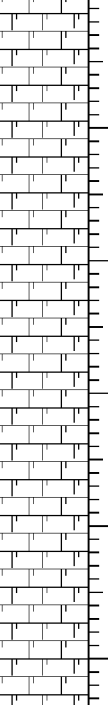
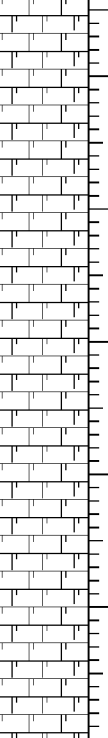
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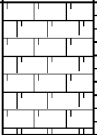
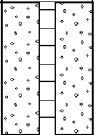
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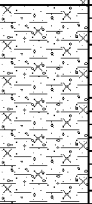
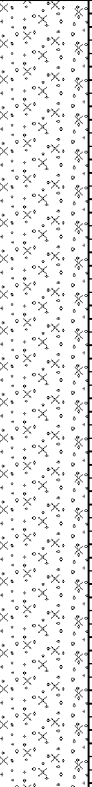
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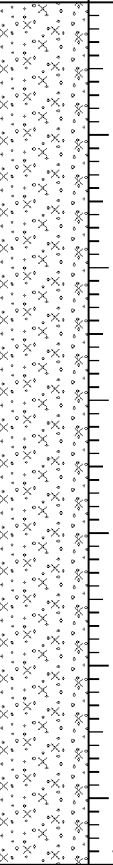
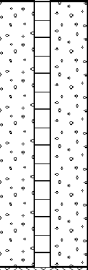
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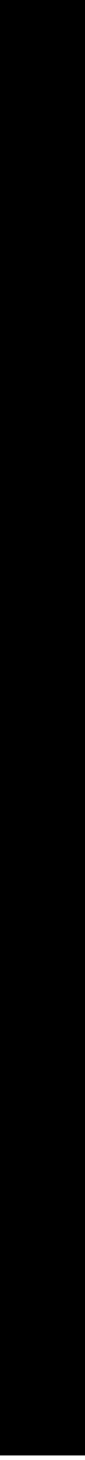
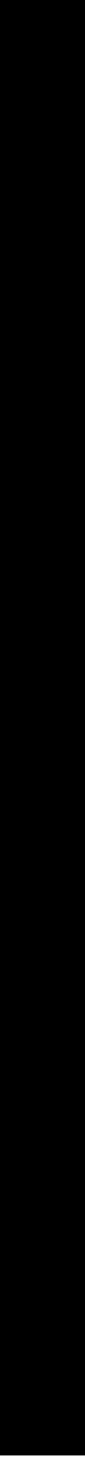
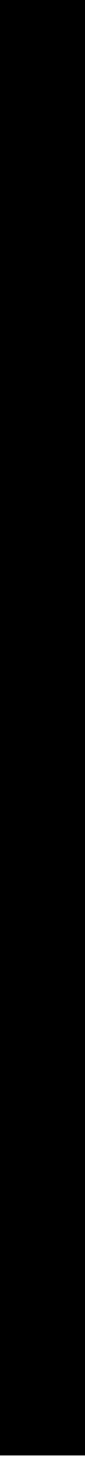
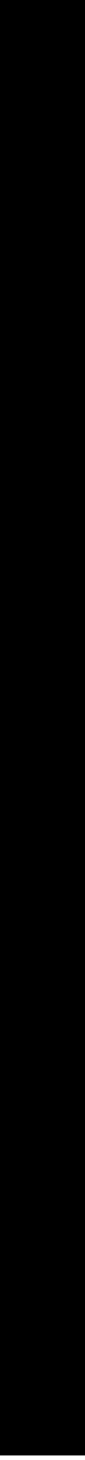
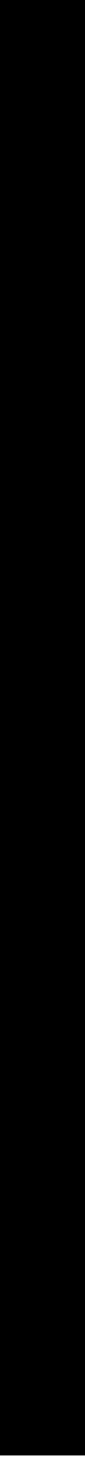
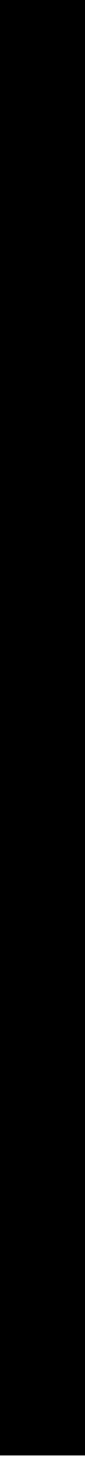
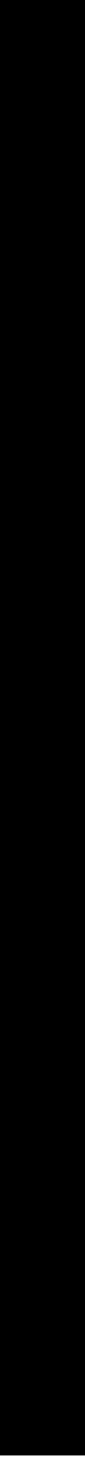
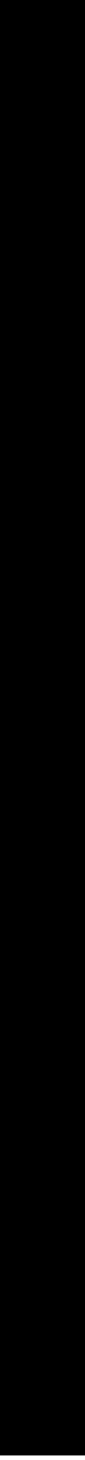
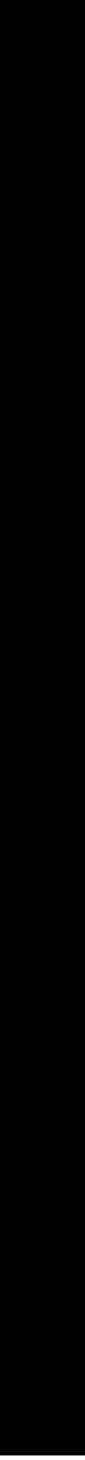
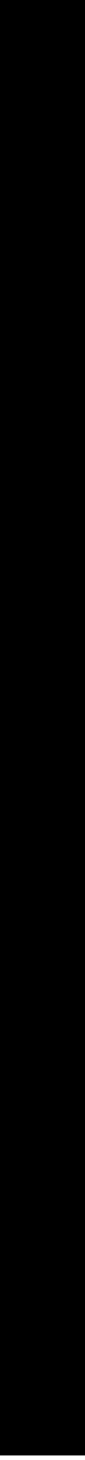
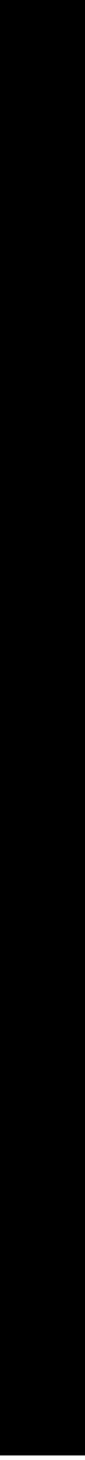
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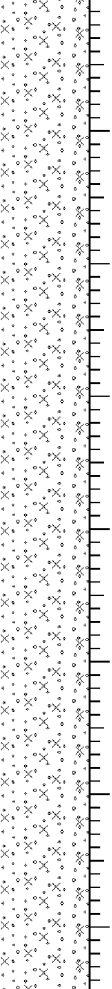
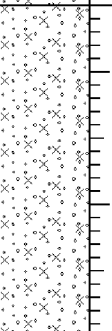
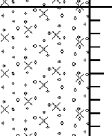
 Head Office 3 Henley Way, Doddington Road Lingfield, TN28 3DR						Project No: 20-1543.07		Hole ID: CP03		Page: 2 of 3		
						Project: Oldlands Farm, Bognor Regis						
						Date: 14/04/2021 - 19/04/2021			Client: Lysander Associates			
Cable Percussive Borehole Log												
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL. Gravel is very weak and weak, low and medium density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)			(6.50)				12.00 12.00 - 12.45	B D	12.00	SPT(N)=29 (2,3/6,6,8,9)		
							13.50 13.50 - 13.95	B D	13.50	SPT(N)=27 (2,3/5,5,8,9)		
							15.00 15.00 - 15.45	B D	15.00	SPT(N)=30 (3,4/7,7,6,10)		
							16.50 16.50 - 16.95	B D	16.50	SPT(N)=43 (11,12/11,12,10,10)		
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine to medium sub-angular flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)		16.50	(6.60)				18.00 18.00 - 18.34	B D	18.00	SPT(N)=50 (10,23/50 for 260mm)		
							19.50 19.50 - 19.75	B D	19.50	SPT(N)=50 (10,15/50 for 100mm)		
							21.00 21.00 - 21.33	B D	21.00	SPT(N)=50 (11,10/50 for 100mm)		
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.						Water Strikes		Water Level		Chiselling		
						Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
							2.00 6.00		20 min 20 min	0.40 2.17		
Coordinates: E494607.98 N101763.24		Elevation (mAOD): 1.08		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57	

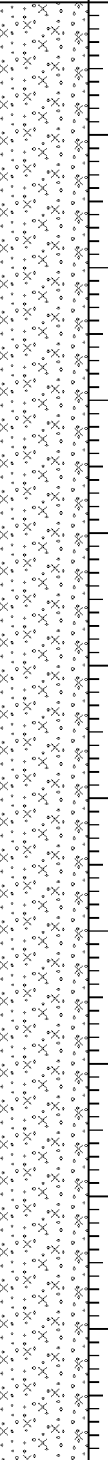
 Head Office 3 Henley Way, Doddington Road 01223 814400						Project No: 20-1543.07		Hole ID: CP03		Page: 3 of 3		
Cable Percussive Borehole Log Date: 14/04/2021 - 19/04/2021 Client: Lysander Associates						Project: Oldlands Farm, Bognor Regis						
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine to medium sub-angular flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK) Borehole complete at 23.00 m bgl.		23.00		-21.92			22.50 - 22.83	D	22.50	SPT()50 (18,25/50 for 105mm)		
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.												
						Water Strikes		Water Level		Chiselling		
						Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
							2.00		20 min	0.40		
							6.00		20 min	2.17		
Coordinates: E494607.98 N101763.24		Elevation (mAOD): 1.08		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57	

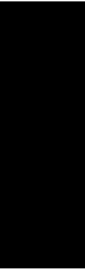
 Head Office 3 Henley Way, Dodington Road					Project No: 20-1543.07		Hole ID: CP04		Page: 1 of 2									
Cable Percussive Borehole Log					Project: Oldlands Farm, Bognor Regis													
					Date: 21/04/2021 - 23/04/2021		Client: Lysander Associates											
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill							
							Depth (m)	Type & Ref	Depth (m)	Results								
TOPSOIL: Grass over soft brown sandy slightly gravelly CLAY. Gravel is sub angular to subrounded fine to medium of flint and chalk. Frequent rootlets and rare roots. Sand is fine to medium. (TOPSOIL) Firm brown mottled blueish grey slightly sandy silty CLAY with occasional pockets of orangish brown silt up to (15 x15mm). Sand is fine. (RAISED MARINE DEPOSITS)	 	0.60	(0.60)	0.37			0.00 - 0.60 0.10 - 0.20 0.60 - 0.70	D ES ES										
Soft to firm blueish grey locally mottled orangish brown slightly sandy slightly gravelly silty CLAY. Gravel is sub angular to sub rounded fine to medium of flint and chalk. Sand is fine to medium. (RAISED MARINE DEPOSITS)			(1.90)				1.20 1.20 - 1.65 2.00 2.00 - 2.45 2.50 - 2.60	B U D ES	1.20 2.00	U=35 Blows for 50% SPT(N)=0 (0,0/0,0,0,0)								
STRUCTURELESS CHALK: Recovered as off white sandy gravelly SILT. Gravel is very weak low density sub rounded to angular fine to coarse white chalk with occasional black specks and rare orangish brown staining. Matrix is off-white. Sand is fine to medium. (Grade Dm) (UNDIFFERENTIATED CHALK) Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL. Gravel is very weak, low density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)	 	4.00 4.50	(0.50)	-3.03 -3.53			4.00 4.00 - 4.20 4.00 - 4.45 5.00 5.00 - 5.45 6.50 6.50 - 6.95 8.00 8.00 - 8.45 9.50 9.50 - 9.95	B ES D B D B D	4.00 5.00 6.50 8.00 9.50	SPT(N)=3 (0,0/0,1,1,1) SPT(N)=6 (0,0/1,1,2,2) SPT(N)=8 (0,1/1,2,2,3) SPT(N)=15 (1,3/4,4,3,4) SPT(N)=16 (1,3/4,5,4,3)								
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL.		10.50		-9.53			11.00 11.00 - 11.45	B D	11.00	SPT(N)=19 (2,2/3,4,6,6)								
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.					Water Strikes		Water Level		Chiselling									
					Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration							
						4.50		20 min	0.90									
Coordinates: E494579.00 N101857.47					Elevation (mAOD): 0.97		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ		Checked: MJ		Approved: DLJ		Scale (m): 1:57	

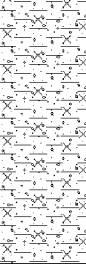
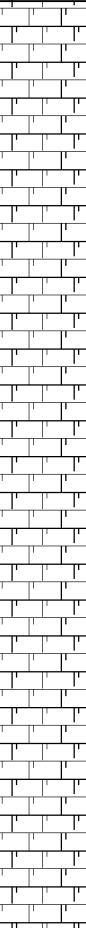
 Head Office 3 Henley Way, Doddington Road Gloucester, GL2 0DZ					Project No: 20-1543.07		Hole ID: CP04		Page: 2 of 2				
Cable Percussive Borehole Log Date: 21/04/2021 - 23/04/2021 Client: Lysander Associates					Project: Oldlands Farm, Bognor Regis								
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill		
							Depth (m)	Type & Ref	Depth (m)	Results			
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL. Gravel is very weak and weak, low and medium density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)			(7.00)				12.50	B D	12.50	SPT(N)=21 (2,3/3,4,7,7)			
							12.50						
							14.00 14.00 - 14.45	B D	14.00	SPT(N)=24 (3,2/3,5,8,8)			
15.50 15.50 - 15.95	B D	15.50	SPT(N)=23 (3,3/2,4,5,12)										
17.00 17.00 - 17.45	B D	17.00	SPT(N)=50 (8,10/50 for 295mm)										
18.00 - 18.85	D						18.50	B	18.50	SPT(50) (14,14/50 for 195mm)			
19.50							19.50 19.50 - 19.66	B D	19.50	SPT(50) (30,20/50 for 5mm)			
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.							Water Strikes		Water Level		Chiselling		
							Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
								4.50		20 min	0.90		
Coordinates: E494579.00 N101857.47		Elevation (mAOD): 0.97		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57		

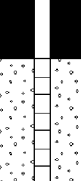
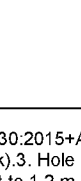
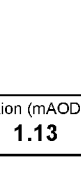
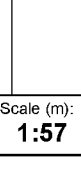
 Head Office 3 Henley Way, Duddington Road					Project No: 20-1543.07		Hole ID: CP05		Page: 1 of 4											
Cable Percussive Borehole Log					Project: Oldlands Farm, Bognor Regis															
					Date: 19/04/2021 - 21/04/2021		Client: Lysander Associates													
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill									
							Depth (m)	Type & Ref	Depth (m)	Results										
TOPSOIL: Grass over soft to firm brown slightly gravelly slightly sandy CLAY. Gravel is fine to medium sub-angular to sub-rounded of flint and chalk. Sand is fine to medium. Frequent rootlets up to 1mm diameter. Rare roots up to 4mm diameter. (TOPSOIL) Soft locally firm blueish grey locally mottled brown slightly sandy silty CLAY with frequent pockets of orangish brown silt up to (10 x 10 x 10mm). Sand is fine to medium. (RAISED MARINE DEPOSITS)		0.40	(0.40)	0.46			0.00 - 0.40	D												
							0.10 - 0.20	ES												
							0.40	B												
							0.60 - 0.70	ES												
							1.20 - 1.65	U										U=8 Blows for 67%		
							2.00												SPT(S)N=1 (0,0/0,0,1,0)	
							2.00 - 2.45													B
							2.40													D
							2.50 - 2.60													B
							3.00													ES
					3.00 - 3.45	D														
					4.00		SPT(S)N=4 (0,1/0,1,1,2)													
					4.00 - 4.20				B											
					4.00 - 4.45				ES											
					5.00				D											
					5.00 - 5.45			B												
					6.50				SPT(S)N=10 (1,2/2,3,2,3)											
					6.50 - 6.95					D										
					8.00						SPT(S)N=11 (1,2/3,2,3,3)									
					8.00 - 8.45							B								
					9.50								SPT(S)N=13 (1,2/3,3,3,4)							
					9.50 - 9.95	D														
					11.00		SPT(S)N=20 (3,4/4,5,5,6)													
					11.00 - 11.45									B						
														D						
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.					Water Strikes		Water Level		Chiselling											
					Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration									
					20/04/2021	5.00	fast flow	20 min	1.38											
					20/04/2021	9.50		20 min	5.40											
Coordinates: E494633.49 N101868.40		Elevation (mAOD): 0.86		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57									

 Head Office 3 Henley Way, Doddington Road London, E16 3DR						Project No: 20-1543.07		Hole ID: CP05		Page: 2 of 4		
						Project: Oldlands Farm, Bognor Regis						
Cable Percussive Borehole Log						Date: 19/04/2021 - 21/04/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL. Gravel is very weak and weak, low and medium density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)			(7.50)				12.50	B	12.50	SPT(S)N=26		
							12.50	D		(6,5/6,6,7,7)		
							14.00	B	14.00	SPT(S)N=48		
							14.00 - 14.45	D	(4,6/21,12,8,7)			
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine to medium sub-angular flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)			(2.50)				15.50	B	15.50	SPT(S)N=50		
							15.50 - 15.95	D	(4,9/10,12,14,14)			
							17.00	B	17.00	SPT(S)N=32		
							17.00 - 17.45	D	(2,3/7,7,8,10)			
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine		18.50		-17.64			18.50	B	18.50	SPT(S)N=46		
							18.50 - 18.95	D	(3,6/10,12,13,11)			
							20.00	B	20.00	SPT(S)50		
							20.00 - 20.30	D	(20,20/50 for 145mm)			
		21.00		-20.14			21.50	B	21.50	SPT(S)50		
							21.50 - 21.79	D	(10,20/50 for 140mm)			
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.						Water Strikes			Water Level		Chiselling	
						Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
						20/04/2021	5.00	fast flow	20 min	1.38		
						20/04/2021	9.50		20 min	5.40		
Coordinates: E494633.49 N101868.40		Elevation (mAOD): 0.86		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57	

 Head Office 3 Henley Way, Doddington Road 01223 810000				Project No: 20-1543.07		Hole ID: CP05		Page: 3 of 4				
				Project: Oldlands Farm, Bognor Regis								
				Date: 19/04/2021 - 21/04/2021		Client: Lysander Associates						
Cable Percussive Borehole Log												
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine to medium sub-angular flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)				(14.00)					23.50	SPT()50 (8,9/50 for 110mm)		
									25.00	SPT()50 (25 for 60mm/50 for 50mm)		
									26.50	SPT()50 (25 for 55mm/50 for 35mm)		
									28.00	SPT()50 (25 for 50mm/50 for 50mm)		
									29.50	SPT()50 (25 for 70mm/50 for 40mm)		
									31.00	SPT()50 (25 for 55mm/50 for 45mm)		
								32.50	SPT()50 (25 for 70mm/50 for 30mm)			
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.						Water Strikes		Water Level		Chiselling		
						Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
						20/04/2021	5.00	fast flow	20 min	1.38		
						20/04/2021	9.50		20 min	5.40		
Coordinates: E494633.49 N101868.40		Elevation (mAOD): 0.86		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57	

 Head Office 3 Henley Way, Doddington Road Lincoln LN6 3DR					Project No: 20-1543.07		Hole ID: CP05		Page: 4 of 4					
Cable Percussive Borehole Log					Project: Oldlands Farm, Bognor Regis									
					Date: 19/04/2021 - 21/04/2021		Client: Lysander Associates							
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill			
							Depth (m)	Type & Ref	Depth (m)	Results				
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare fine to medium sub-angular flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)		35.00		-34.14					34.00	SPT(50 (25 for 50mm/50 for 50mm)				
Borehole complete at 35.00 m bgl.									35.00	SPT(50 (25 for 45mm/50 for 45mm)				
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.					Water Strikes			Water Level		Chiselling				
					Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration			
					20/04/2021	5.00	fast flow	20 min	1.38					
					20/04/2021	9.50		20 min	5.40					
Coordinates: E494633.49 N101868.40					Elevation (mAOD): 0.86		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57

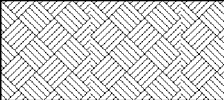
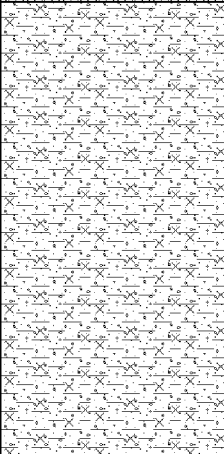
 Head Office 3 Henley Way, Doddington Road				Project No: 20-1543.07		Hole ID: CP06		Page: 1 of 2				
Oldlands Farm, Bognor Regis				Date: 26/04/2021 - 27/04/2021		Client: Lysander Associates						
Cable Percussive Borehole Log												
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravel is sub angular fine to medium of flint and chalk. Occasional rootlets and rare roots. Sand is fine to medium.		0.70	(0.70)	0.43			0.00 - 0.70 0.20 - 0.30	D ES				
(TOPSOIL) Firm brown mottled blueish grey slightly sandy silty CLAY with occasional pockets of orangish brown silt up to (20 x 20 x 20mm). Sand is fine.		2.00	(1.30)	-0.87		0.80 1.00	0.70 0.80 - 0.90 1.20 - 1.65	B ES U	1.20	U=24 Blows for 50%		
(RAISED MARINE DEPOSITS) Soft brown and light grey gravelly sandy silty CLAY with a low cobble content. Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Cobbles are sub angular of flint up to (80 x 80 x 80mm) Sand is fine to coarse. (RAISED MARINE DEPOSITS)		4.00	(2.00)	-2.87			2.00 2.00 - 2.45 2.10 - 2.20 3.00 3.00 - 3.45	B D ES D	2.00 3.00	SPT(S)N=2 (0,0/1,0,1,0) SPT(S)N=0 (0,0/0,0,0,0)		
STRUCTURELESS CHALK: Recovered as off white sandy gravelly SILT. Gravel is very weak low density sub rounded to angular fine to coarse white chalk with occasional black specks and rare orangish brown staining. Matrix is off-white. Sand is fine to medium. (Grade Dm) (UNDIFFERENTIATED CHALK)			(10.00)			4.80	4.00 4.00 - 4.10 5.00 5.00 - 5.45 6.50 6.50 - 6.95 8.00 8.00 - 8.45 9.50 9.50 - 9.95 11.00 11.00 - 11.45	B ES D D B D B D	4.00 5.00 6.50 8.00 9.50 11.00	SPT(S)N=0 (0,0/0,0,0,0) SPT(S)N=14 (2,3/3,4,3,4) SPT(S)N=22 (3,3/5,4,6,7) SPT(S)N=9 (1,2/2,2,2,3) SPT(S)N=14 (2,3/3,3,4,4) SPT(S)N=10 (3,3/3,4,1,2)		
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.						Water Strikes		Water Level		Chiselling		
						Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration
						27/04/2021	4.80		5 min	0.90		
						27/04/2021	9.00		20 min	1.00		
Coordinates: E494607.14 N101915.38		Elevation (mAOD): 1.13		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ	Checked: MJ	Approved: DLJ	Scale (m): 1:57	

 Head Office 3 Henley Way, Dodington Road						Project No: 20-1543.07		Hole ID: CP06		Page: 2 of 2									
Cable Percussive Borehole Log						Project: Oldlands Farm, Bognor Regis													
						Date: 26/04/2021 - 27/04/2021			Client: Lysander Associates										
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill								
							Depth (m)	Type & Ref	Depth (m)	Results									
STRUCTURELESS CHALK: Recovered as off white sandy gravelly SILT. Gravel is very weak low density sub rounded to angular fine to coarse white chalk with occasional black specks and rare orangish brown staining. Matrix is off-white. Sand is fine to medium. (Grade Dm) (UNDIFFERENTIATED CHALK)		14.00		-12.87			12.50	B D	12.50	SPT(S)N=16 (3,2/3,4,5,4)									
							12.50												
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL with a low cobble content. Gravel is very weak, low density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)		16.50	(2.50)	-15.37			14.00	B D	14.00	SPT(S)N=24 (4,5/5,6,6,7)									
							14.00 - 14.45												
Weak medium density off-white CHALK with occasional orangish brown staining. Recovered as: silty sub-angular fine to coarse GRAVEL with a low cobble content. Cobbles are angular to sub-angular up (70 x 70 x 70mm). Rare medium sub-angular flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)		20.00	(3.50)	-18.87			15.00	B		SPT(S)N=30 (7,6/5,6,8,11)									
							15.50 - 15.95												
Borehole complete at 20.00 m bgl.							17.00	B D	17.00	SPT(S)50 (6,8/50 for 175mm)									
							17.00 - 17.33												
							18.00	B		SPT(S)50 (8,15/50 for 185mm)									
							18.50 - 18.84												
							20.00	B D	20.00	SPT(S)50 (20,28/50 for 10mm)									
							20.00 - 20.16												
Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.4. Borehole installed with a 50mm monitoring pipe and finished with a raised steel cover.5. Elevation and location data obtained from GPS survey.						Water Strikes		Water Level		Chiselling									
						Date	Depth (m)	Remarks	Duration	Standing	Depth Top	Duration							
						27/04/2021	4.80		5 min	0.90									
						27/04/2021	9.00		20 min	1.00									
Coordinates: E494607.14 N101915.38						Elevation (mAOD): 1.13		Drilled By: Borehole Surveys		Plant Used: Dando 150		Logged: DJ		Checked: MJ		Approved: DLJ		Scale (m): 1:57	

Trial Pit Log

Date: **13/04/2021**

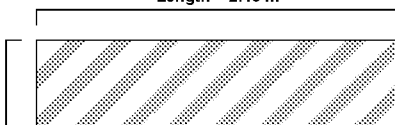
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravel is fine to medium sub-angular to sub-rounded of flint and chalk. Sand is fine to medium. Frequent rootlets up to 1mm diameter. Rare roots up to 4mm diameter.		0.40	1.72		0.20 - 0.30 0.30 - 0.40	ES D	0.30	HV=42 kPa
Soft locally firm orangish brown and off white gravelly sandy silty CLAY with a low cobble content. Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Cobbles are sub angular to sub rounded of flint and chalk up to (100 x 80 x 80mm) Sand is fine to medium. Rare rootlets up to 1mm diameter and rare pockets of black organic matter up to (10 x 10 x 10mm). (RAISED MARINE DEPOSITS)		2.20	-0.08		0.60 - 0.70 0.70 - 0.80 1.00 - 1.20	ES D B		
Trial pit complete at 2.20 m bgl.								

Dimensions and Orientation:

Length = 2.40 m

Width = 0.60 m



Orientation:

Inclination:

Remarks:

1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.6.Trial pit terminated at 2.2 m and used to perform soakaway test in accordance with BRE 365

Coordinates:

E494459.68 N101871.30

Elevation (mAOD):

2.12

Excavated By:

Borehole Surveys

Plant Used:

JCB 3CX

Logged:

DJ

Checked:

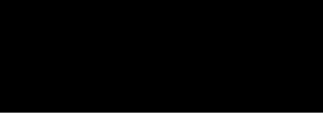
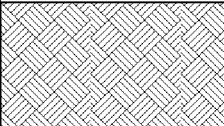
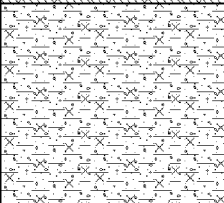
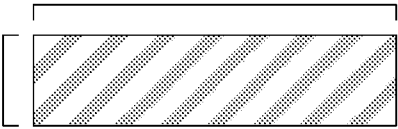
MJ

Approved:

DLJ

Scale:

1:30

 Head Office		Project No: 20-1543.07		Hole ID: SA02		Page: 1 of 1		
		Project: Oldlands Farm, Bognor Regis						
		Date: 13/04/2021		Client: Lysander Associates				
Trial Pit Log								
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft to firm brown slightly gravelly sandy CLAY. Gravel is fine to medium sub-angular to sub-rounded of flint. Sand is fine to medium. Frequent rootlets up to 1mm diameter. Rare roots up to 4mm diameter.		0.50	1.35		0.10 - 0.20 0.20 - 0.30	ES D	0.50	HV=60 kPa
Soft to firm orangish brown mottled brown slightly sandy silty CLAY. Sand is fine to medium. Occasional pockets of orangish brown fine sand up to (15 x 15 x 15mm). Rare rootlets up to 1mm diameter. (RAISED MARINE DEPOSITS)		1.30	0.55		0.60 - 0.70 0.70 - 0.80 0.70 - 0.80	B D ES	1.00	HV=30 kPa
Trial pit complete at 1.30 m bgl.								
Dimensions and Orientation: Length = 2.40 m Width = 0.60 m  Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.6.Trial pit terminated at 1.3 m and used to perform soakaway test in accordance with BRE 365						
Coordinates: E494403.72 N101844.78		Elevation (mAOD): 1.85		Excavated By: Borehole Surveys		Plant Used: JCB 3CX		Logged: DJ Checked: MJ Approved: DLJ Scale: 1:30

Trial Pit Log

Date: **16/04/2021**

Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown slightly gravelly slightly sandy CLAY Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Frequent rootlets and rare roots up to 5mm diameter. Sand is fine to medium.		0.40						
Soft to firm blueish grey mottled orangish brown slightly sandy silty CLAY with frequent pockets of orangish brown silt up to (10 x10 x10mm). Sand is fine to medium. (RAISED MARINE DEPOSITS)		1.00					0.50 1.00	HV=42 kPa HV=40 kPa
Trial pit complete at 1.00 m bgl.								

Dimensions and Orientation:

Length = 2.00 m

Orientation:

Width = 0.60 m

Inclination:

Remarks:

1. Terminated at 1.00mbgl; Land drain encountered. Orientation: 290 W 2. XYZ Co-ordinates not available.

Coordinates:

Elevation (mAOD):

Excavated By:

Outsource

Plant Used:

JCB 3CX

Logged:	
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D.J.

Checked:

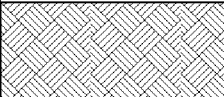
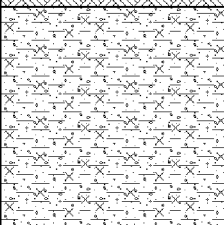
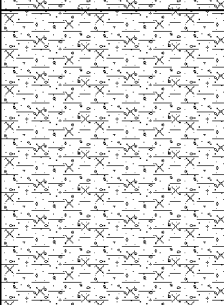
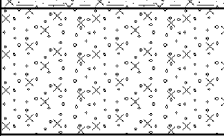
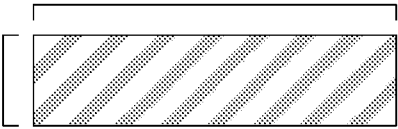
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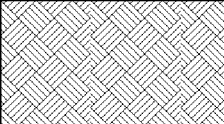
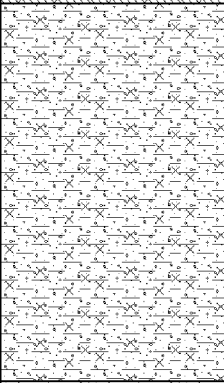
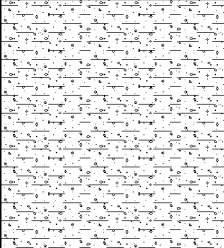
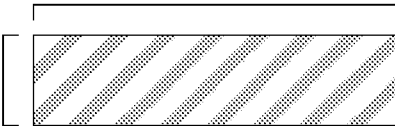
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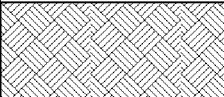
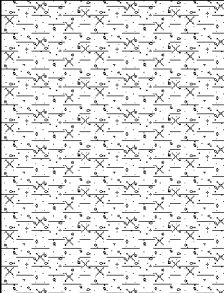
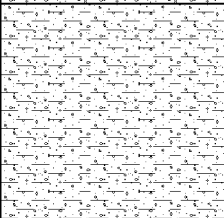
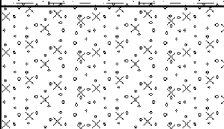
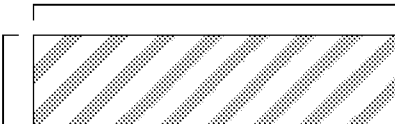
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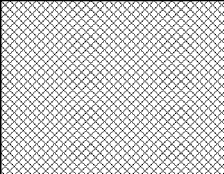
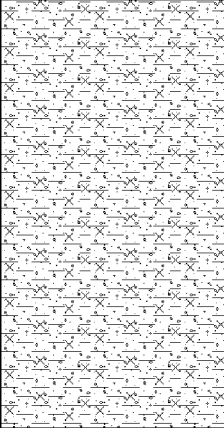
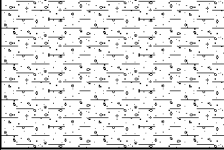
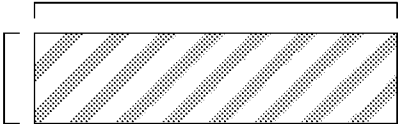
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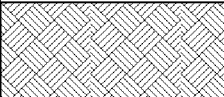
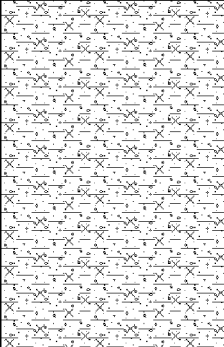
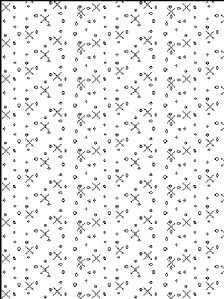
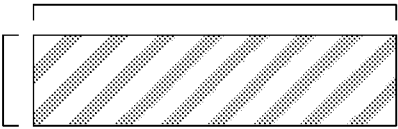
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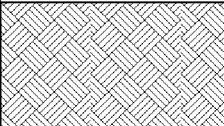
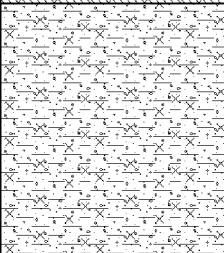
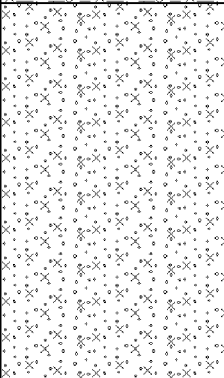
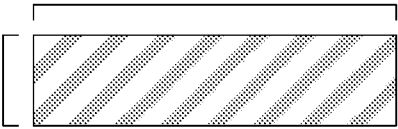
 Head Office 3 Henley Way, Duddington Road		Project No: 20-1543.07		Hole ID: TP112		Page: 1 of 1		
		Project: Oldlands Farm, Bognor Regis						
Trial Pit Log		Date: 16/04/2021			Client: Lysander Associates			
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Grass over soft brown slightly gravelly slightly sandy CLAY Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Frequent rootlets and rare roots up to 5mm diameter. Sand is fine to medium.		0.40						
Soft to firm orangish brown locally mottled blueish grey slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular to sub rounded fine to medium of flint. Cobbles are sub angular of flint up to (70 x 70 x 70mm). Frequent pockets of orangish brown silt up to (15 x 15 x 15mm). Occasional rootlets. (RAISED MARINE DEPOSITS)		1.30					0.50	HV=50 kPa
							1.00	HV=30 kPa
Soft orangish brown and light grey gravelly sandy silty CLAY with a low cobble content. Gravel is sub angular to sub rounded fine to coarse of flint and chalk. Cobbles are sub angular of flint and chalk up to (150 x 100 x 100mm). Sand is fine to coarse. (RAISED MARINE DEPOSITS)		2.50						
Structureless CHALK: Recovered as off white slightly sandy silty sub angular to sub rounded fine to medium GRAVEL with a low cobble content. Gravel is very weak, low density with occasional orangish brown staining and rare black specks. Matrix is off white and locally light brown. Sand is fine to medium. Rare sub angular fine to medium fragments of flint with a cortex <1mm. (Grade Dc) (UNDIFFERENTIATED CHALK)		3.00						
(UNDIFFERENTIATED CHALK)								
Trial pit complete at 3.00 m bgl.								
Dimensions and Orientation: 		Orientation:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.				
		Inclination:						
Coordinates:	Elevation (mAOD):	Excavated By: Outsource		Plant Used: JCB 3CX	Logged: DJ	Checked: MJ	Approved: DLJ	Scale: 1:30

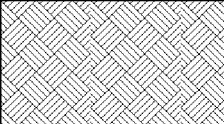
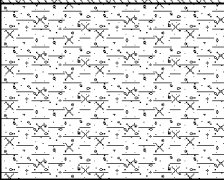
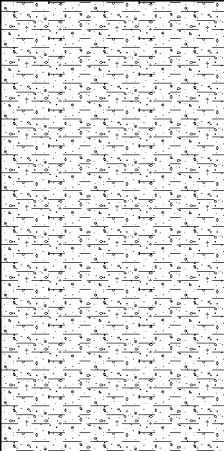
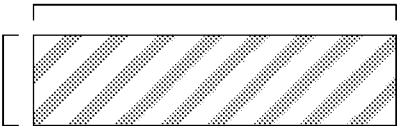
 Head Office 3 Henley Way, Doddington Road Lincoln LN6 3DR		Project No: 20-1543.07		Hole ID: TP201		Page: 1 of 1	
		Project: Oldlands Farm, Bognor Regis					
Trial Pit Log		Date: 29/04/2021		Client: Lysander Associates			
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details
					Depth (m)	Type & Ref	Depth (m)
TOPSOIL: Agricultural crop over soft brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)		0.50	3.37		0.10 - 0.20 0.10 - 0.30 0.30	ES B D	0.50 HV=70 kPa
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)		2.00	1.87		1.00 1.00 - 1.20	D B	1.00 HV=70 kPa
Firm light orangish brown and off white gravelly sandy CLAY with a low cobble content. Gravel is sub angular to angular of chalk and flint. Cobbles are angular of flint up to (80 x 70 x 70mm). Sand is medium to coarse. (RIVER TERRACE DEPOSITS)		3.00	0.87		2.00 2.00 - 2.20	D B	
Trial pit complete at 3.00 m bgl.					2.90 - 3.00 3.00	B D	
Dimensions and Orientation: 		Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.			
Coordinates: E494469.94 N101987.72	Elevation (mAOD): 3.87	Excavated By: Outsource		Plant Used: JCB 3CX	Logged: DJ	Checked: MJ	Approved: DLJ
					Scale: 1:30		

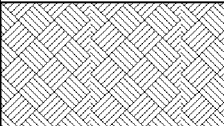
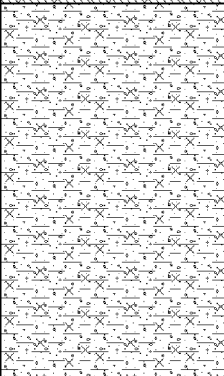
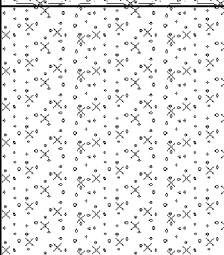
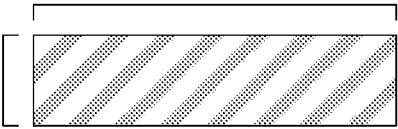
 Head Office 3 Henley Way, Doddington Road Barnstaple, Devon PL4 8AT		Project No: 20-1543.07		Hole ID: TP202		Page: 1 of 1		
		Object: Oldlands Farm, Bognor Regis						
Trial Pit Log				Date: 28/04/2021		Client: Lysander Associates		
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Agricultural crop over soft to firm brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)		0.40	3.74		0.10 - 0.20 0.10 - 0.40 0.30	ES B D		
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)		1.60	2.54		1.00 1.00 - 1.20	D B	0.50 1.00	HV=68 kPa HV=72 kPa
Firm light orangish brown and off white gravelly sandy CLAY with a low cobble content. Gravel is sub angular to angular of chalk and flint. Cobbles are angular of flint up to (80 x 70 x 70mm). Sand is medium to coarse. (RIVER TERRACE DEPOSITS)		2.50	1.64		2.00 2.00 - 2.20	D B		
STRUCTURELESS CHALK: Recovered as slightly sandy silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with occasional orange staining and rare black specks. Matrix is off-white. Sand is fine to medium. Occasional sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK)		3.00	1.14		2.90 - 3.00 3.00	B D		
Trial pit complete at 3.00 m bgl.								
Dimensions and Orientation: 				Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.		
Coordinates: E494511.28 N102004.40		Elevation (mAOD): 4.14		Excavated By: Outsource		Plant Used: JCB 3CX		Logged: DJ Checked: MJ Approved: DLJ Scale: 1:30

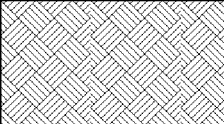
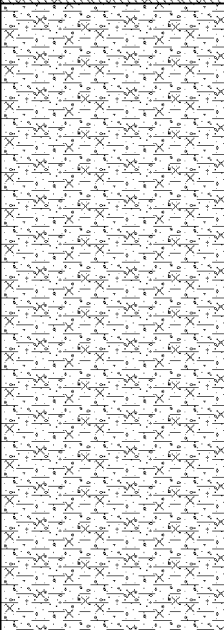
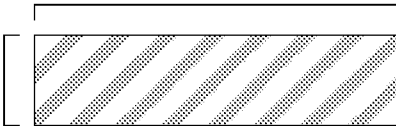
 Head Office 2 Kingston Way, The Ridgeway, Blandford		Project No: 20-1543.07		Hole ID: TP203		Page: 1 of 1		
Trial Pit Log		Project: Oldlands Farm, Bognor Regis						
		Date: 28/04/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
MADE GROUND: Agricultural crop over soft to firm brown slightly sandy gravelly CLAY with a low cobble content. Gravels are sub angular to angular fine to coarse of flint and chalk. Cobbles are angular of flint up to (100 x 90 x 80mm). Rare red brick fragments up to (40 x 40 x 10mm). Sand is fine to medium. Occasional rootlets, rare roots. (MADE GROUND)		0.70	2.87		0.20 - 0.30 0.30 - 0.60 0.60	ES B D	0.50	HV=64 kPa
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (80 x 70 x 60mm). Occasional pockets of brown and black organic matter up to (20 x 20 x 20mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)		2.40	1.17		1.00 1.00 - 1.20 2.00 2.00 - 2.20	D B D B	1.00	HV=68 kPa
Firm light orangish brown and off white gravelly sandy CLAY with a low cobble content. Gravel is sub angular to angular of chalk and flint. Cobbles are angular of flint up to (80 x 70 x 70mm). Sand is medium to coarse. (RIVER TERRACE DEPOSITS)		3.00	0.57		2.90 - 3.00 3.00	B D		
Trial pit complete at 3.00 m bgl.								
Dimensions and Orientation: Length = 2.00 m Width = 0.60 m 				Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.		
Coordinates: E494571.53 N102026.78		Elevation (mAOD): 3.57		Excavated By: Outsource		Plant Used: JCB 3CX		Logged: DJ Checked: MJ Approved: DLJ Scale: 1:30

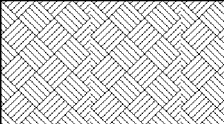
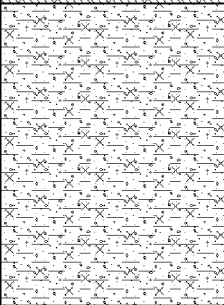
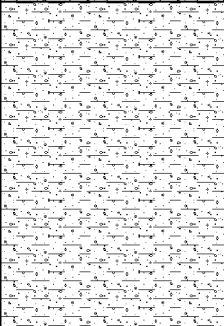
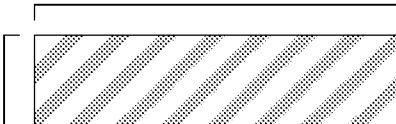
 Head Office 3 Henley Way, Dodington Road Gloucester, GL4 3DR Tel: 01452 876100		Project No: 20-1543.07		Hole ID: TP204		Page: 1 of 1			
Trial Pit Log		Project: Oldlands Farm, Bognor Regis				Date: 29/04/2021		Client: Lysander Associates	
		Strata Depth (m)		Reduced Level (mAOD)		Water Strike (m)		Sample Details	
Description of Strata		Legend		Depth (m)		Type & Ref		Test Details	
TOPSOIL: Agricultural crop over soft brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)				0.40		2.83		0.10 - 0.20 0.10 - 0.30 0.30 ES B D	
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)				1.80		1.43		0.50 1.00 1.00 - 1.20 D B HV=70 kPa HV=72 kPa	
STRUCTURELESS CHALK: Recovered as slightly sandy silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with occasional orange staining and rare black specks. Matrix is off-white. Sand is fine to medium. Occasional sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK)				3.00		0.23		2.00 2.00 - 2.20 2.90 - 3.00 3.00 D B D	
Trial pit complete at 3.00 m bgl.									
Dimensions and Orientation: Length = 2.00 m Width = 0.60 m 				Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.6.Trial pit terminated at 1.3 m and used to perform soakaway test in accordance with BRE 365			
Coordinates: E494644.03 N102144.28		Elevation (mAOD): 3.23		Excavated By: Outsource		Plant Used: JCB 3CX		Logged: DJ Checked: MJ Approved: DLJ Scale: 1:30	

 deltasimons Engineering - Health & Safety - Sustainability		Head Office 3 Henley Way, Duddington Road Lingslade, Lincs LN8 3DR 		Project No: 20-1543.07		Hole ID: TP205		Page: 1 of 1			
				Project: Oldlands Farm, Bognor Regis							
Trial Pit Log				Date: 29/04/2021		Client: Lysander Associates					
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details				
					Depth (m)	Type & Ref	Depth (m)	Results			
TOPSOIL: Agricultural crop over soft brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)		0.50	2.25		0.10 - 0.20 0.10 - 0.30 0.30	ES B D	0.50	HV=50 kPa			
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)		1.50	1.25		1.00 1.00 - 1.20	D B	1.00	HV=68 kPa			
STRUCTURELESS CHALK: Recovered as slightly sandy silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with occasional orange staining and rare black specks. Matrix is off-white. Sand is fine to medium. Occasional sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK)		3.00	-0.25	2.50 2.50 3.00	2.00 2.00 - 2.20 2.90 - 3.00 3.00	D B B D					
Trial pit complete at 3.00 m bgl.											
Dimensions and Orientation: 				Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.					
Coordinates: E494719.69 N102177.38		Elevation (mAOD): 2.75		Excavated By: Outsource		Plant Used: JCB 3CX		Logged: DJ	Checked: MJ	Approved: DLJ	Scale: 1:30

 Head Office 3 Henley Way, Doddington Road Lincoln LN6 3DR		Project No: 20-1543.07		Hole ID: TP207		Page: 1 of 1		
Project: Oldlands Farm, Bognor Regis		Date: 30/04/2021		Client: Lysander Associates				
Trial Pit Log								
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Agricultural crop over soft brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)		0.50	4.42		0.10 - 0.30 0.30	B D	0.50	HV=72 kPa
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)		1.20	3.72		0.60 1.00 1.00 - 1.10	ES D B		
Soft to firm light orangish brown and off white gravelly sandy CLAY with a low cobble content. Gravel is sub angular to angular of chalk and flint. Cobbles are angular of flint up to (70 x 70 x 70mm). Sand is medium to coarse. (RIVER TERRACE DEPOSITS)		3.00	1.92		2.00 2.00 - 2.20 2.20	D B D		
Trial pit complete at 3.00 m bgl.					3.00 3.00	B D		
Dimensions and Orientation: Length = 2.00 m Width = 0.60 m 		Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.				
Coordinates: E494593.48 N102245.06	Elevation (mAOD): 4.92	Excavated By: Outsource	Plant Used: JCB 3CX	Logged: DJ	Checked: MJ	Approved: DLJ	Scale: 1:30	

 Head Office 3 Henley Way, Doddington Road Lingfield, TN26 3DR		Project No: 20-1543.07		Hole ID: TP209		Page: 1 of 1		
Trial Pit Log		Project: Oldlands Farm, Bognor Regis						
		Date: 30/04/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Agricultural crop over soft brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)		0.50	4.80		0.10 - 0.20 0.10 - 0.30 0.30	ES B D	0.50	HV=72 kPa
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)		2.00	3.30		0.60 1.00 1.00 - 1.10	ES D B	1.00	HV=70 kPa
STRUCTURELESS CHALK: Recovered as slightly sandy silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with occasional orange staining and rare black specks. Matrix is off-white. Sand is fine to medium. Occasional sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK)		3.00	2.30		2.00 2.00 - 2.20 2.20	D B ES		
Trial pit complete at 3.00 m bgl.					3.00 3.00	B D		
Dimensions and Orientation: 				Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.		
Coordinates: E494511.08 N102258.62		Elevation (mAOD): 5.30		Excavated By: Outsource		Plant Used: JCB 3CX		Logged: DJ Checked: MJ Approved: DLJ Scale: 1:30

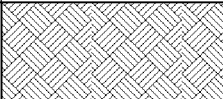
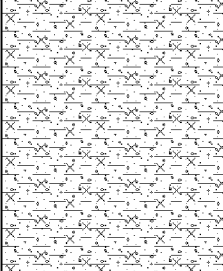
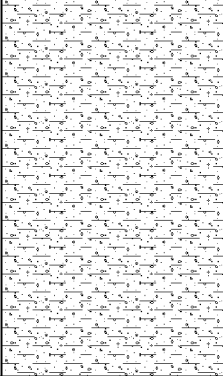
 Head Office 3 Henley Way, Doddington Road [Redacted Address]		Project No: 20-1543.07		Hole ID: TP210		Page: 1 of 1		
		Project: Oldlands Farm, Bognor Regis						
Trial Pit Log		Date: 30/04/2021			Client: Lysander Associates			
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Agricultural crop over soft brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)		0.50	3.75		0.10 0.30	B D	0.50	HV=80 kPa
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)					1.00 1.00 - 1.20	D B		
					2.00 2.00 - 2.20	D B		
		3.00	1.25		3.00 3.00	B D		
Trial pit complete at 3.00 m bgl.								
Dimensions and Orientation: 				Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.		
Coordinates: E494339.94 N102212.16		Elevation (mAOD): 4.25		Excavated By: Outsource		Plant Used: JCB 3CX		Logged: DJ Checked: MJ Approved: DLJ Scale: 1:30

 Head Office		Project No: 20-1543.07		Hole ID: TP212		Page: 1 of 1		
		Project: Oldlands Farm, Bognor Regis						
Trial Pit Log		Date: 30/04/2021			Client: Lysander Associates			
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Agricultural crop over soft brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)		0.50	4.14		0.10 - 0.20 0.10 - 0.30 0.30	ES B D	0.50	HV=82 kPa
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)		1.70	2.94		0.60 1.00 1.00 - 1.10	ES D B	1.00	HV=82 kPa
Soft to firm light orangish brown and off white gravelly sandy CLAY with a low cobble content. Gravel is sub angular to angular of chalk and flint. Cobbles are angular of flint up to (80 x 70 x 70mm). Sand is medium to coarse. (RIVER TERRACE DEPOSITS)		3.00	1.64		2.00 2.00 - 2.20 2.20	D B D		
Trial pit complete at 3.00 m bgl.					3.00 3.00	B D		
Dimensions and Orientation: Length = 2.00 m Width = 0.60 m 				Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.		
Coordinates: E494546.49 N102126.28		Elevation (mAOD): 4.64		Excavated By: Outsource		Plant Used: JCB 3CX		Logged: DJ Checked: MJ Approved: DLJ Scale: 1:30

Trial Pit Log

Date: **29/04/2021**

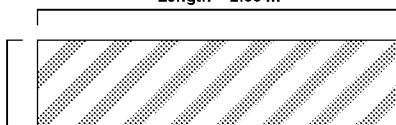
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Agricultural crop over soft brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)		0.40	3.15		0.10 - 0.20 0.10 - 0.30 0.30	ES B D		
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)		1.50	2.05		1.00 1.00 - 1.20	D B	0.50 1.00	HV=64 kPa HV=74 kPa
Soft to firm light orangish brown and off white gravelly sandy CLAY with a low cobble content. Gravel is sub angular to angular of chalk and flint. Cobbles are angular of flint up to (80 x 70 x 70mm). Sand is medium to coarse. (RIVER TERRACE DEPOSITS)		3.00	0.55		2.00 2.00 - 2.20 2.90 - 3.00 3.00	D B B D		
Trial pit complete at 3.00 m bgl.								

Dimensions and Orientation:

Length = 2.00 m

Width = 0.60 m



Orientation:

Inclination:

Remarks:

1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.

Coordinates:
E494270.70 N102162.20

Elevation (mAOD):
3.55

Excavated By:
Outsource

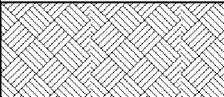
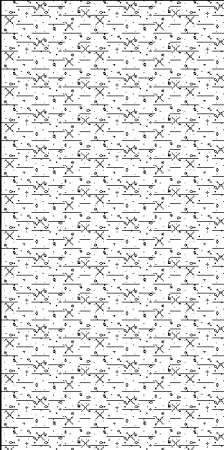
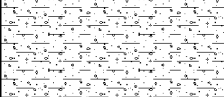
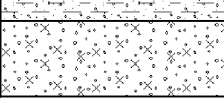
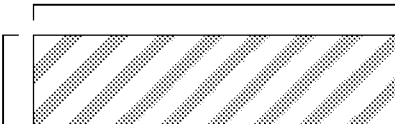
Plant Used:
JCB 3CX

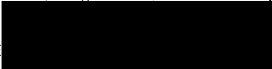
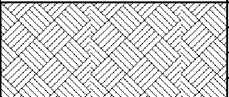
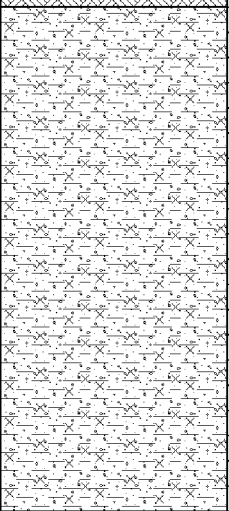
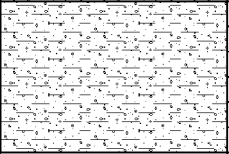
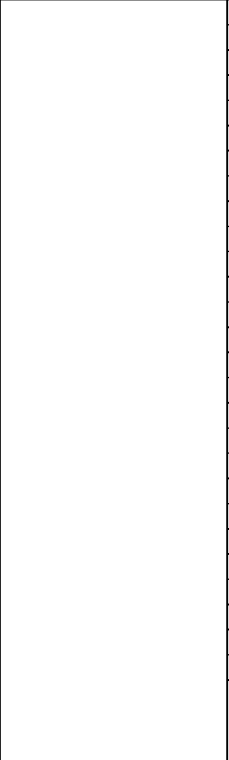
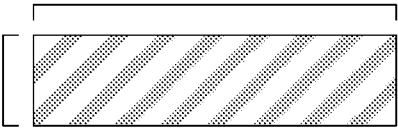
Logged:
DJ

Checked:
MJ

Approved:
DLJ

Scale:
1:30

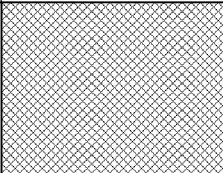
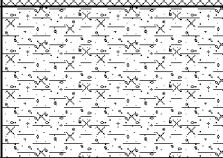
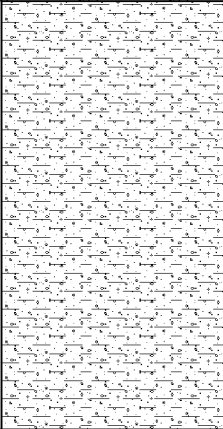
		Project No: 20-1543.07		Hole ID: TP216		Page: 1 of 1	
Project: Oldlands Farm, Bognor Regis		Date: 28/04/2021		Client: Lysander Associates			
Trial Pit Log		Strata Depth (m)		Reduced Level (mAOD)		Water Strike (m)	
Description of Strata		Legend		Sample Details		Test Details	
TOPSOIL: Agricultural crop over soft to firm brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)				0.40		3.60	
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)				2.20		1.80	
Firm light orangish brown and off white gravelly sandy CLAY with a low cobble content. Gravel is sub angular to angular of chalk and flint. Cobbles are angular of flint up to (80 x 70 x 70mm). Sand is medium to coarse. (RIVER TERRACE DEPOSITS)				2.70		1.30	
STRUCTURELESS CHALK: Recovered as slightly sandy silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with occasional orange staining and rare black specks. Matrix is off-white. Sand is fine to medium. Occasional sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK)				3.00		1.00	
Trial pit complete at 3.00 m bgl.							
Dimensions and Orientation:		Length = 2.00 m		Orientation:		Inclination:	
Width = 0.60 m				Remarks:		1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.	
Coordinates: E494489.17 N101996.95		Elevation (mAOD): 4.00		Excavated By: Outsource		Plant Used: JCB 3CX	
Logged: DJ		Checked: MJ		Approved: DLJ		Scale: 1:30	

 deltasimons Engineering - Health & Safety - Sustainability		Head Office 3 Henley Way, Doddington Road 		Project No: 20-1543.07		Hole ID: TP217		Page: 1 of 1			
Trial Pit Log				Date: 28/04/2021		Client: Lysander Associates					
Description of Strata		Legend		Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details		
							Depth (m)	Type & Ref	Depth (m)	Results	
TOPSOIL: Agricultural crop over soft to firm brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)				0.40	3.34		0.10 - 0.20 0.10 - 0.30 0.20	ES B D			
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)							1.00 1.00 - 1.20	D B	0.50 1.00	HV=60 kPa HV=74 kPa	
Firm light orangish brown and off white gravelly sandy CLAY with a low cobble content. Gravel is sub angular to angular of chalk and flint. Cobbles are angular of flint up to (80 x 70 x 70mm). Sand is medium to coarse. (RIVER TERRACE DEPOSITS)				2.40	1.34		2.00 2.00 - 2.20	D B			
Trial pit complete at 3.00 m bgl.				3.00	0.74		2.90 - 3.00 3.00	B D			
Dimensions and Orientation: 				Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.					
Coordinates: E494543.15 N102017.96		Elevation (mAOD): 3.74		Excavated By: Outsource		Plant Used: JCB 3CX		Logged: DJ	Checked: MJ	Approved: DLJ	Scale: 1:30

Trial Pit Log

Date: **28/04/2021**

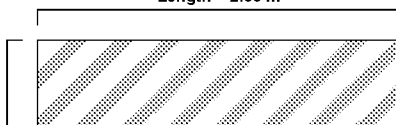
Client: **Lysander Associates**

Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
MADE GROUND: Agricultural crop over soft to firm brown slightly sandy gravelly CLAY with a low cobble content. Gravels are sub angular fine to coarse of flint, chalk and red brick. Cobbles are angular of flint up to (80 x 80 x 70mm). Rare ceramic tile fragments up to (100 x 100 x 5mm). Sand is fine to medium. Occasional rootlets, rare roots. (MADE GROUND)		0.70	2.55		0.20 - 0.30 0.30 - 0.60 0.60	ES B D	0.50	HV=48 kPa
Firm orangish brown slightly gravelly slightly sandy CLAY. Gravel is sub angular fine of flint. Occasional pockets of brown and black organic matter up to (20 x 20 x 20mm) Sand is fine to medium. (RIVER TERRACE DEPOSITS)		1.30	1.95		1.00 1.00 - 1.20	D B	1.00	HV=50 kPa
Firm light orangish brown and off white gravelly sandy CLAY with a low cobble content. Gravel is sub angular to angular of chalk and flint. Cobbles are angular of flint up to (70 x 70 x 70mm). Sand is medium to coarse. (RIVER TERRACE DEPOSITS)		3.00	0.25		2.00 2.00 - 2.20 2.90 - 3.00 3.00	D B B D		
Trial pit complete at 3.00 m bgl.								

Dimensions and Orientation:

Length = 2.00 m

Width = 0.60 m



Orientation:

Inclination:

Remarks:

1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.

Coordinates:
E494609.58 N102029.78

Elevation (mAOD):
3.25

Excavated By:
Outsource

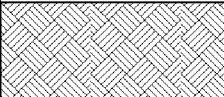
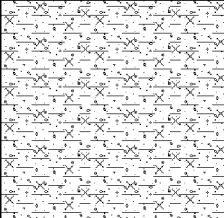
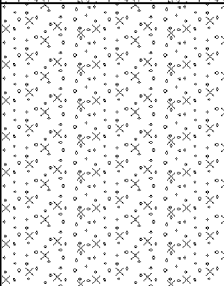
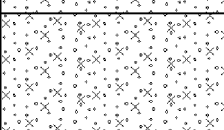
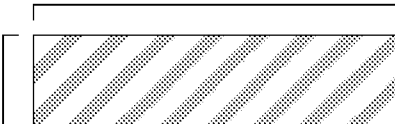
Plant Used:
JCB 3CX

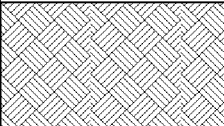
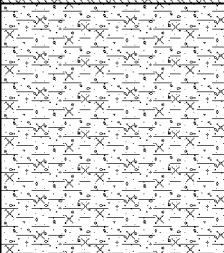
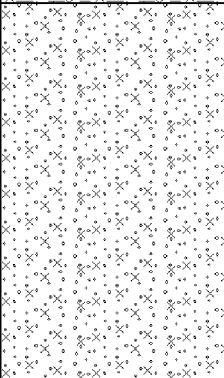
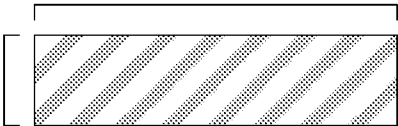
Logged:
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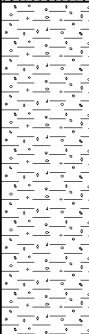
Checked:
MJ

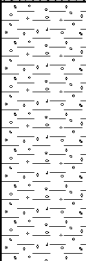
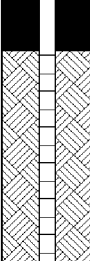
Approved:
DLJ

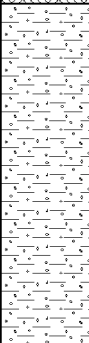
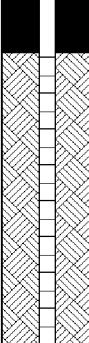
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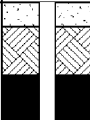
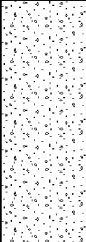
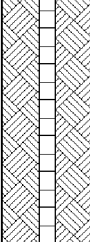
 Head Office 3 Henley Way, Duddington Road		Project No: 20-1543.07		Hole ID: TP219		Page: 1 of 1		
		Project: Oldlands Farm, Bognor Regis						
Trial Pit Log		Date: 29/04/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Agricultural crop over soft brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)		0.40	2.14		0.10 - 0.20 0.10 - 0.30 0.30	ES B D		
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)							0.50	HV=54 kPa
		1.30	1.24		1.00 1.00 - 1.20	D B	1.00	HV=70 kPa
STRUCTURELESS CHALK: Recovered as slightly sandy silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with occasional orange staining and rare black specks. Matrix is off-white. Sand is fine to medium. Occasional sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK)					2.00 2.00 - 2.20	D B		
		2.50	0.04					
STRUCTURELESS CHALK: Recovered as silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with rare black specks. Matrix is off-white. Occasional sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK)		3.00	-0.46		2.90 - 3.00 3.00	B D		
Trial pit complete at 3.00 m bgl.								
Dimensions and Orientation: 		Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.				
Coordinates: E494642.99 N102057.28	Elevation (mAOD): 2.54	Excavated By: Outsource		Plant Used: JCB 3CX	Logged: DJ	Checked: MJ	Approved: DLJ	Scale: 1:30

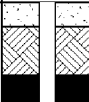
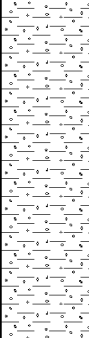
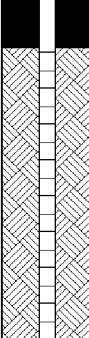
 Head Office 2, Winston Way, The Ridgeway, Bognor Regis		Project No: 20-1543.07		Hole ID: TP220		Page: 1 of 1		
Trial Pit Log		Project:		Oldlands Farm, Bognor Regis				
		Date: 29/04/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m)	Reduced Level (mAOD)	Water Strike (m)	Sample Details		Test Details	
					Depth (m)	Type & Ref	Depth (m)	Results
TOPSOIL: Agricultural crop over soft brown slightly gravelly slightly sandy CLAY. Gravel is sub angular to sub rounded fine to medium of flint. Frequent rootlets up to 1mm diameter. Rare roots. Sand is fine to medium. (TOPSOIL)		0.50	2.72		0.10 - 0.20 0.10 - 0.30 0.30	ES B D	0.50	HV=68 kPa
Firm orangish brown slightly gravelly slightly sandy silty CLAY with a low cobble content. Gravel is sub angular fine to medium of flint. Cobbles are sub angular to sub rounded of flint up to (100 x 80 x 80mm). Occasional pockets of brown and black organic matter up to (15 x 15 x 15mm). Sand is fine to medium. (RIVER TERRACE DEPOSITS)		1.50	1.72		1.00 1.00 - 1.20	D B		
STRUCTURELESS CHALK: Recovered as slightly sandy silty sub angular to sub rounded fine to coarse GRAVEL with a low cobble content. Clasts are very weak and weak low density white with occasional orange staining and rare black specks. Matrix is off-white. Sand is fine to medium. Rare sub angular to sub rounded medium gravel of flint. (Grade Dc) (UNDIFFERENTIATED CHALK)		3.00	0.22		2.00 2.00 - 2.20	D B		
Trial pit complete at 3.00 m bgl.					2.90 - 3.00 3.00	B D		
Dimensions and Orientation: 		Orientation: Inclination:		Remarks: 1. Logged in general accordance with BS5930:2015+A1:20202. Logged in general accordance with C574 (Engineering in Chalk).3.Trial pit location cleared for services prior to breaking ground.4. Trial pit remained stable throughout.5. Elevation and location data obtained from GPS survey.				
Coordinates: E494727.36 N102246.88	Elevation (mAOD): 3.22	Excavated By: Outsource		Plant Used: JCB 3CX	Logged: DJ	Checked: MJ	Approved: DLJ	Scale: 1:30

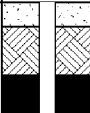
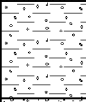
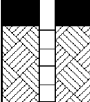
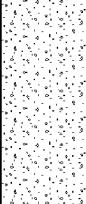
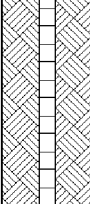
 Head Office					Project No: 20-1543.07		Hole ID: VP01		Page: 1 of 1			
					Project: Oldlands Farm, Bognor Regis							
Dynamic Sampler Log					Date: 16/03/2021		Client: Lysander Associates					
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.40	(0.40)	1.68								
Soft light brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		1.80	(1.40)	0.28								
Borehole complete at 1.80 m bgl.												
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.						Water Strike		Water Level		Borehole Diameter		
						Date	Depth (m)	Remarks	Duration (min)	Depth	Depth Base	Diameter
Coordinates: E494441.30 N101850.21		Elevation (mAOD): 2.08		Drilled By: Delta Drilling		Plant Used: Commaccio GEO 205		Logged: MJ	Checked: DJ	Approved: DJ	Scale: 1:32	

 Head Office 3 Henley Way, Doddington Road Lincoln LN6 3DR					Project No: 20-1543.07		Hole ID: VP02		Page: 1 of 1																							
					Project: Oldlands Farm, Bognor Regis																											
					Date: 16/03/2021		Client: Lysander Associates																									
Dynamic Sampler Log																																
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill																					
							Depth (m)	Type & Ref	Depth (m)	Results																						
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.40	(0.40)	0.68																												
Soft light brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		1.50	(1.10)	-0.42																												
Grey slightly gravelly fine to coarse SAND. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		1.80	(0.30)	-0.72																												
Borehole complete at 1.80 m bgl.																																
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk) 2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl. 3. Borehole installed with a raised cover. 4. Elevation and location data obtained from GPS survey. <table border="1"> <thead> <tr> <th colspan="3">Water Strike</th> <th colspan="2">Water Level</th> <th colspan="2">Borehole Diameter</th> </tr> <tr> <th>Date</th> <th>Depth (m)</th> <th>Remarks</th> <th>Duration (min)</th> <th>Depth</th> <th>Depth Base</th> <th>Diameter</th> </tr> </thead> <tbody> <tr> <td></td> <td>1.50</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												Water Strike			Water Level		Borehole Diameter		Date	Depth (m)	Remarks	Duration (min)	Depth	Depth Base	Diameter		1.50					
Water Strike			Water Level		Borehole Diameter																											
Date	Depth (m)	Remarks	Duration (min)	Depth	Depth Base	Diameter																										
	1.50																															
Coordinates: E494512.15 N101784.47		Elevation (mAOD): 1.08		Drilled By: Delta Drilling		Plant Used: Commaccio GEO 206		Logged: MJ		Checked: DJ																						
								Approved: DJ		Scale: 1:32																						

 Head Office 3 Henley Way, Duddington Road 					Project No: 20-1543.07		Hole ID: VP03		Page: 1 of 1		
Dynamic Sampler Log					Project: Oldlands Farm, Bognor Regis						
					Date: 16/03/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill
							Depth (m)	Type & Ref	Depth (m)	Results	
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.40	(0.40)	0.60							
soft brownish grey slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)			(1.40)			0.90					
Borehole complete at 1.80 m bgl.		1.80		-0.80							
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk)2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl.3. Borehole installed with a raised cover.4. Elevation and location data obtained from GPS survey.					Water Strike		Water Level		Borehole Diameter		
					Date	Depth (m)	Remarks	Duration (min)	Depth	Depth Base	Diameter
						0.90					
Coordinates: E494564.57 N101778.82		Elevation (mAOD): 1.00		Drilled By: Delta Drilling		Plant Used: Commaccio GEO 205		Logged: MJ	Checked: DJ	Approved: DJ	Scale: 1:32

 Head Office 3 Henley Way, Dodington Road Dorchester, Dorset DT1 1JH					Project No: 20-1543.07		Hole ID: VP04		Page: 1 of 1		
					Project: Oldlands Farm, Bognor Regis						
Dynamic Sampler Log					Date: 16/03/2021		Client: Lysander Associates				
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill
							Depth (m)	Type & Ref	Depth (m)	Results	
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.50	(0.50)	0.67							
Soft light brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		0.80	(0.30)	0.37							
Grey slightly gravelly fine to coarse SAND. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		1.80	(1.00)	-0.63		1.00					
Borehole complete at 1.80 m bgl.											
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk) 2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl. 3. Borehole installed with a raised cover. 4. Elevation and location data obtained from GPS survey.					Water Strike			Water Level		Borehole Diameter	
					Date	Depth (m)	Remarks	Duration (min)	Depth	Depth Base	Diameter
						1.00					
Coordinates: E494595.18 N101731.94		Elevation (mAOD): 1.17		Drilled By: Delta Drilling		Plant Used: Commaccio GEO 205		Logged: MJ	Checked: DJ	Approved: DJ	Scale: 1:32

 Head Office 3 Henley Way, Dodington Road 01262 414100					Project No: 20-1543.07		Hole ID: VP05		Page: 1 of 1			
					Project: Oldlands Farm, Bognor Regis							
Dynamic Sampler Log					Date: 16/03/2021		Client: Lysander Associates					
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill	
							Depth (m)	Type & Ref	Depth (m)	Results		
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.40	(0.40)	0.45								
Soft light brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		1.80	(1.40)	-0.95		1.70						
Borehole complete at 1.80 m bgl.												
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk) 2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl. 3. Borehole installed with a raised cover. 4. Elevation and location data obtained from GPS survey.						Water Strike		Water Level		Borehole Diameter		
						Date	Depth (m)	Remarks	Duration (min)	Depth	Depth Base	Diameter
							1.70					
Coordinates: E494535.45 N101823.86		Elevation (mAOD): 0.85		Drilled By: Delta Drilling		Plant Used: Commaccio GEO 205		Logged: MJ	Checked: DJ	Approved: DJ	Scale: 1:32	

 Head Office 3 Henley Way, Doddington Road Lincoln LN6 3DR					Project No: 20-1543.07		Hole ID: VP06		Page: 1 of 1		
					Project: Oldlands Farm, Bognor Regis						
					Date: 16/03/2021		Client: Lysander Associates				
Dynamic Sampler Log											
Description of Strata	Legend	Strata Depth (m bgl)	Strata Thickness (m)	Reduced Level (mAOD)	Casing Diameter (mm)	Water	Sample Details		Test Details		Backfill
							Depth (m)	Type & Ref	Depth (m)	Results	
TOPSOIL: Grass over soft brown slightly gravelly sandy CLAY. Gravels is angular to subangular fine to medium of flint and chalk, with frequent roots and rootlets. (TOPSOIL)		0.50	(0.50)	0.44							
Soft light brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		0.90	(0.40)	0.04		0.90					
Grey slightly gravelly fine to coarse SAND. Gravel is angular to subrounded fine to medium of flint and chalk. (RAISED MARINE DEPOSITS)		1.80	(0.90)	-0.86							
Borehole complete at 1.80 m bgl.											
Remarks: 1. Logged in general accordance with BS5930:2015+A1:2020 and C574 (Engineering in Chalk) 2. Hole location cleared for services prior to excavating a hand dug service inspection pit to 1.2 m bgl. 3. Borehole installed with a raised cover. 4. Elevation and location data obtained from GPS survey.					Water Strike			Water Level		Borehole Diameter	
					Date	Depth (m)	Remarks	Duration (min)	Depth	Depth Base	Diameter
						0.90					
Coordinates: E494621.20 N101776.96		Elevation (mAOD): 0.94		Drilled By: Delta Drilling		Plant Used: Commaccio GEO 205		Logged: MJ	Checked: DJ	Approved: DJ	Scale: 1:32

Appendix D – SPT Calibration Certificates



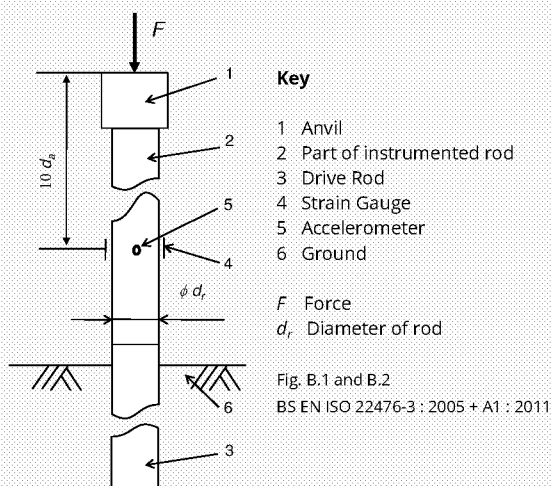
SPT Calibration Report

Hammer Energy Measurement Report

Type of Hammer SPT HAMMER
Test No EQU2751
Client CC GROUND INVESTIGATIONS
Test Depth (m) 9.60
Mass of hammer $m = 63.5\text{kg}$
Falling height $h = 0.76\text{m}$
 $E_{\text{theor}} = m \times g \times h = 473\text{J}$

Characteristics of the instrumented rod

Diameter $d_r = 0.052\text{ m}$
Length of instrumented rod 0.558 m
Area $A = 11.61\text{ cm}^2$
Modulus $E_a = 206843\text{ MPa}$



DATE OF TEST VALID UNTIL HAMMER ID

05/01/2021 05/01/2022 CCB1

$E_{\text{meas}} = 0.384\text{ kN-m}$

$E_{\text{theor}} = 0.473\text{ kN-m}$

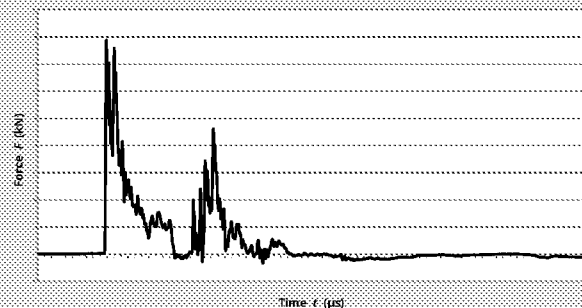
Comments

$$\text{Energy Ratio (Er)} = \frac{E_{\text{meas}}}{E_{\text{theor}}}$$

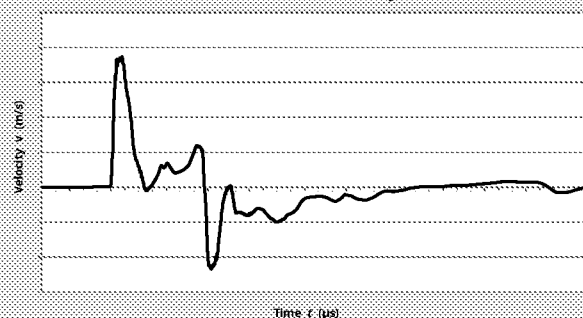
81.26%

© COPYRIGHT 2021

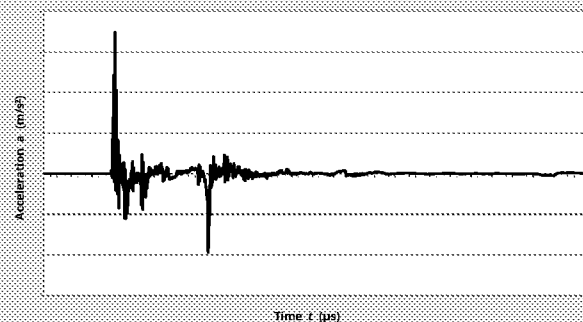
Force



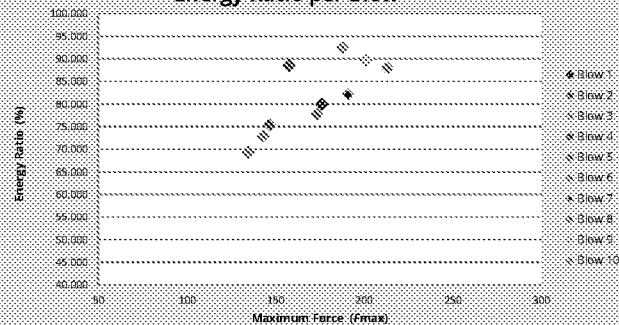
Particle Velocity



Acceleration



Energy Ratio per Blow



Equipe SPT Analyzer Operator

JML

Certificate date

06/01/2021

Ryburgh House Farm
63 Fakenham road
Great Ryburgh

SPT Hammer Ref: BS01
Test Date: 23/12/2019
Report Date: 06/01/2020
File Name: BS01.spt
Test Operator: RW

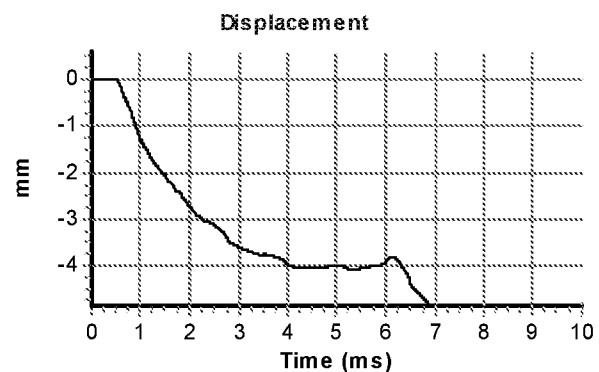
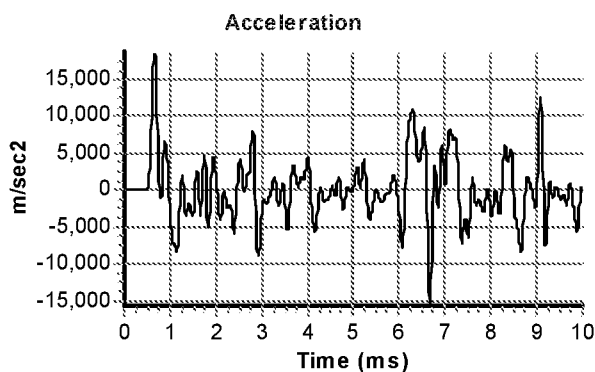
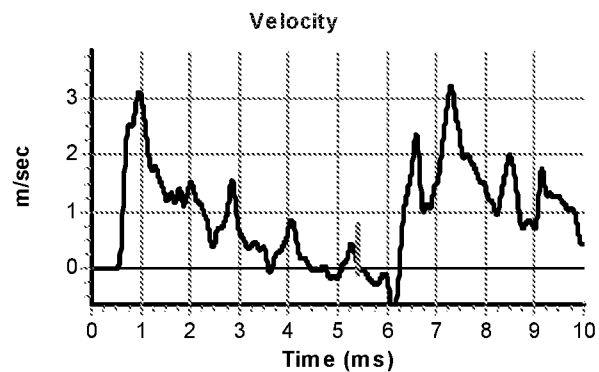
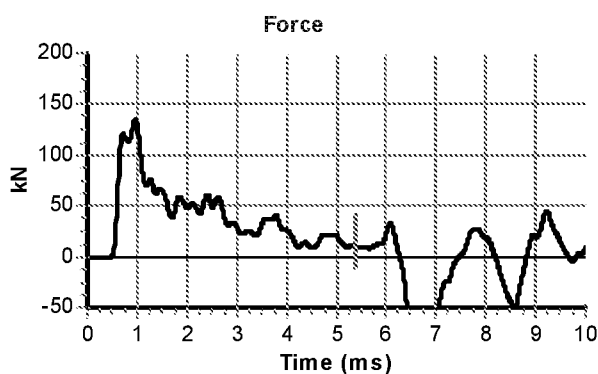
Instrumented Rod Data

Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.4
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 63177
Accelerometer No.2: 63178

SPT Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
SPT String Length L (m): 13.6

Comments / Location



Calculations

Area of Rod A (mm²): 957
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 293

Energy Ratio E_r (%):

62

Signed: RW
Title: Drilling Manager

Appendix E – CBR Results



Determination of Equivalent CBR Value derived from Plate Bearing test BS 1377-9
Tested in accordance with In House Procedure based upon SHW Design manual IAN73/06

i2 Analytical Ltd
7 Woodshots Meadow
Croxley Green Business Park
Watford Herts WD18 8YS



Science

Client: Delta-Simons
Client Address: 3 Henley Office Park
Doddington Road
Lincoln, Lincolnshire
LN6 3QR
Contact: Mark James
Testing Carried Out At: Bognor Regis

Client Reference: DS 60081
Job Number: 21-67770_1

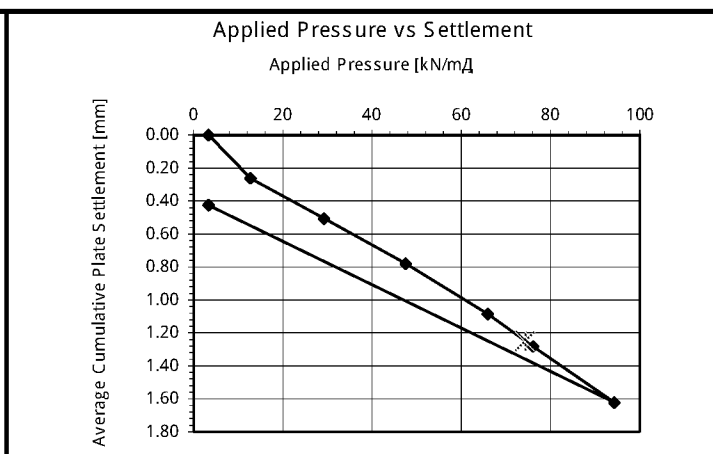
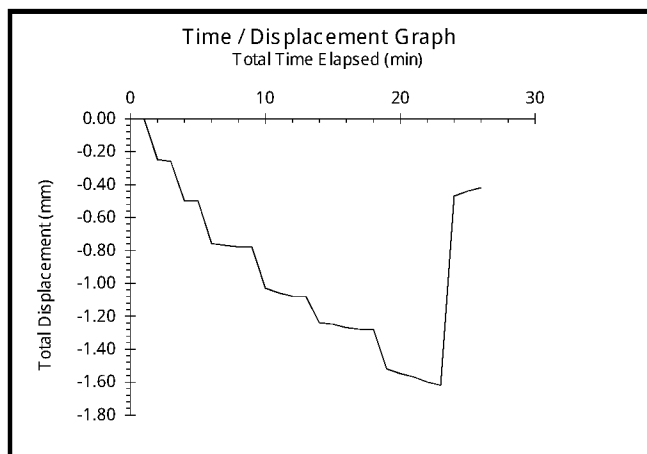
Date Tested: 13/04/2021
Tested By: SL

Test Results

Laboratory Reference:	67770_1
Test Reference:	1
Material Description:	Stoney sandy clayey C chalk
Test Location:	Test 1 CBR 1

Depth Top (m):	0.4
Layer Thickness (mm):	N/K
Weather Conditions:	Clear
Kentledge Type:	J CB 3CX
Plate Diameter [m]:	0.60

Applied Load [kN]	Applied Pressure [kN/m ²]	Average Plate Settlement [mm]
0.96	3	0.00
3.62	13	0.26
8.27	29	0.51
13.45	48	0.78
18.65	66	1.09
21.52	76	1.28
26.66	94	1.62
0.96	3	0.43
End of Test		
Recovery %		73.72%



Pressure at 1.25mm Settlement:	74.4 kN/m ²	Max Applied Pressure:	94.3 kN/m ²
Modulus of Subgrade Reaction:	47.9 MN/m ² /m	Maximum settlement:	1.62 mm
Equivalent CBR By Plate Loading:	7.9 %	Moisture Content:	N/A

Remarks:

Sign

Mark Collyer
Regional Director (Geotechnical) - South

SS F68.3

Date Reported: 14/04/2021

Page: 1 of 1

for and on behalf of i2 Analytical Ltd

[illegible]



Determination of Equivalent CBR Value derived from Plate Bearing test BS 1377-9
Tested in accordance with In House Procedure based upon SHW Design manual IAN73/06

i2 Analytical Ltd
7 Woodshots Meadow
Croxley Green Business Park
Watford Herts WD18 8YS



Review Article Science

Client: Delta-Simons
Client Address: 3 Henley Office Park
Doddington Road
Lincoln, Lincolnshire
LN6 3QR
Contact: Mark James
Testing Carried Out At: Bognor Regis

Client Reference: DS60081
Job Number: 21-67770_2

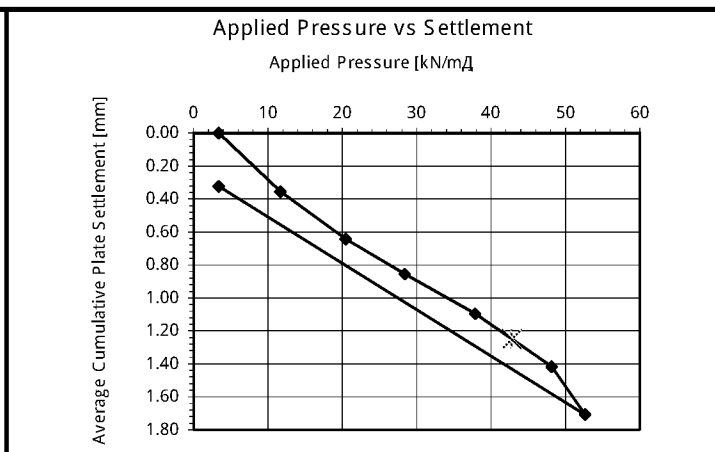
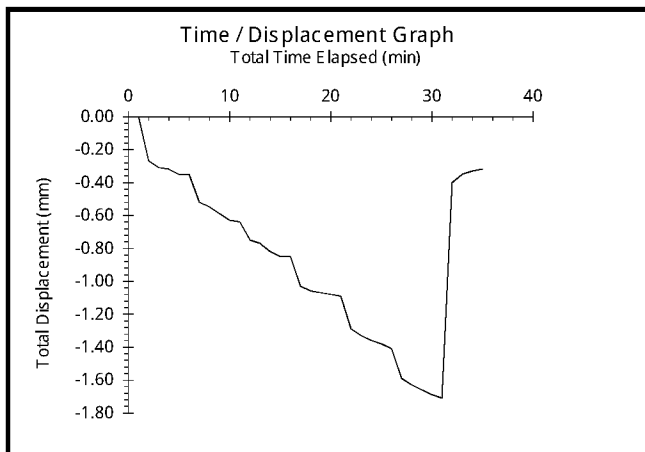
Date Tested: 13/04/2021
Tested By: SL

Test Results

Laboratory Reference:	67770_2
Test Reference:	2
Material Description:	Clayey CHALK
Test Location:	Test 2 CBR 3

Depth Top (m):	0.5
Layer Thickness (mm):	N/K
Weather Conditions:	Clear
Kentledge Type:	J CB 3CX
Plate Diameter [m]:	0.60

Applied Load [kN]	Applied Pressure [kN/m ²]	Average Plate Settlement [mm]
0.96	3	0.00
3.31	12	0.36
5.79	20	0.64
8.04	28	0.86
10.71	38	1.10
13.61	48	1.42
14.89	53	1.71
0.96	3	0.32
End of Test		
Recovery %		81.09%



Pressure at 1.25mm Settlement:	42.8 kN/m ²	Max Applied Pressure:	52.7 kN/m ²
Modulus of Subgrade Reaction:	27.5 MN/m ² /m	Maximum settlement:	1.71 mm
Equivalent CBR By Plate Loading:	3.0 %	Moisture Content:	N/A

Remarks:

Signed:

Mark Collyer
Regional Director (Geotechnical) - South

SS F68.3

Date Reported: 14/04/2021

Page: 1 of 1

for and on behalf of i2 Analytical Ltd

[illegible]



4041

TEST CERTIFICATE

Determination of Equivalent CBR Value derived from Plate Bearing test BS 1377-9
Tested in accordance with In House Procedure based upon SHW Design manual IAN73/06

i2 Analytical Ltd
7 Woodshots Meadow
Croxley Green Business Park
Watford Herts WD18 8YS



Environment Science

Client: Delta-Simons
Client Address: 3 Henley Office Park
Doddington Road
Lincoln, Lincolnshire
LN6 3QR
Contact: Mark James
Testing Carried Out At: Bognor Regis

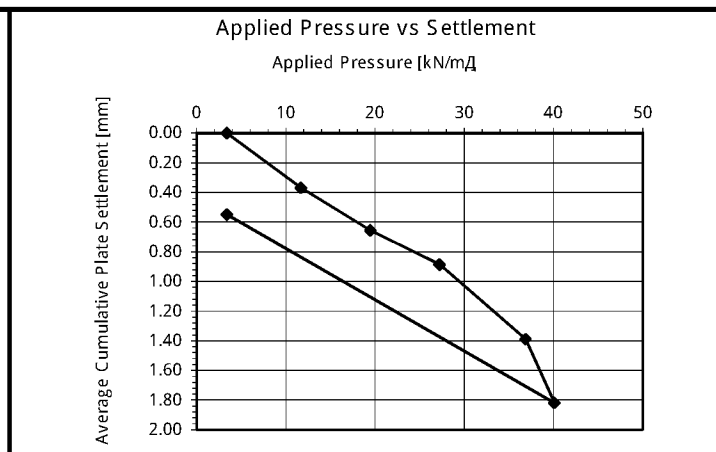
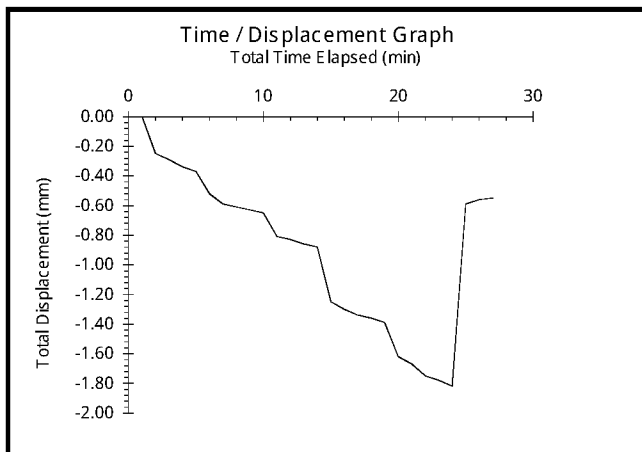
Client Reference: DS 60081
Job Number: 21-67770_3
Date Tested: 13/04/2021
Tested By: SL

Test Results

Laboratory Reference: 67770_3
Test Reference: 3
Material Description: Clayey Chalk
Test Location: Test 3 CBR 4

Depth Top (m): 0.5
Layer Thickness (mm): N/K
Weather Conditions: Clear
Kentledge Type: JCB 3CX
Plate Diameter (m): 0.60

Applied Load [kN]	Applied Pressure [kN/m ²]	Average Plate Settlement [mm]
0.96	3	0.00
3.31	12	0.37
5.51	19	0.66
7.70	27	0.89
10.43	37	1.39
11.34	40	1.82
0.96	3	0.55
End of Test		
Recovery %		230.91%



Pressure at 1.25mm Settlement: 34.2 kN/m²
Modulus of Subgrade Reaction: 22.0 MN/m²
Equivalent CBR By Plate Loading: 2.0 %

Max Applied Pressure: 40.1 kN/m²
Maximum settlement: 1.82 mm
Moisture Content: N/A

Remarks:

Signed:

Mark Collier
Regional Director (Geotechnical) - South

SSF68.3

Date Reported: 14/04/2021

Page: 1 of 1

for and on behalf of i2 Analytical Ltd

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Determination of Equivalent CBR Value derived from Plate Bearing test BS 1377-9
Tested in accordance with In House Procedure based upon SHW Design manual IAN73/06

i2 Analytical Ltd
7 Woodshots Meadow
Croxley Green Business Park
Watford Herts WD18 8YS



Client: Delta-Simons
Client Address: 3 Henley Office Park
Doddington Road
Lincoln, Lincolnshire
LN6 3QR
Contact: Mark James
Testing Carried Out At: Bognor Regis

Client Reference: DS60081
Job Number: 21-67770_4

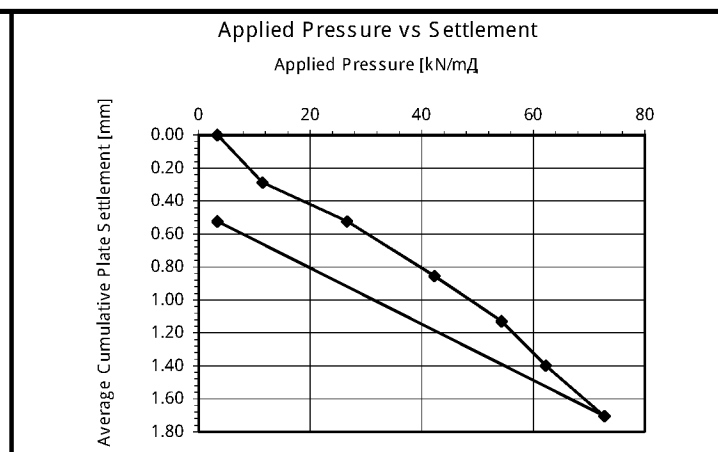
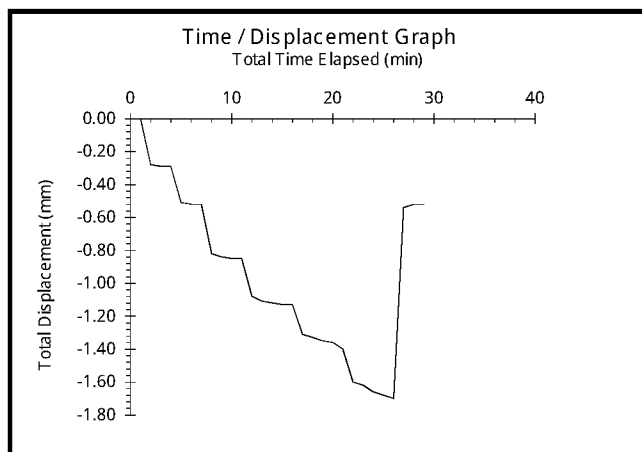
Date Tested: 13/04/2021
Tested By: SL

Test Results

Laboratory Reference:	67770_4
Test Reference:	4
Material Description:	Clayey Chalk
Test Location:	Test 4 CBR 2

Depth Top (m):	0.5
Layer Thickness (mm):	N/K
Weather Conditions:	Overcast
Kentledge Type:	J CB 3CX
Plate Diameter [m]:	0.60

Applied Load [kN]	Applied Pressure [kN/m ²]	Average Plate Settlement [mm]
0.96	3	0.00
3.26	12	0.29
7.54	27	0.52
11.96	42	0.86
15.36	54	1.13
17.60	62	1.40
20.58	73	1.71
0.96	3	0.52
End of Test		
Recovery %		69.34%



Pressure at 1.25mm Settlement:	57.8 kN/m ²	Max Applied Pressure:	72.8 kN/m ²
Modulus of Subgrade Reaction:	37.2 MN/m ² m	Maximum settlement:	1.71 mm
Equivalent CBR By Plate Loading:	5.1 %	Moisture Content:	N/A

Remarks:

Signed:

Mark Collyer
Regional Director (Geotechnical) - South

SS F68.3

Date Reported: 14/04/2021

Page: 1 of 1

for and on behalf of i2 Analytical Ltd

[illegible]



Determination of Equivalent CBR Value derived from Plate Bearing test BS 1377-9
Tested in accordance with In House Procedure based upon SHW Design manual IAN73/06

i2 Analytical Ltd
7 Woodshots Meadow
Croxley Green Business Park
Watford Herts WD18 8YS



Science

Client: Delta-Simons
Client Address: 3 Henley Office Park
Doddington Road
Lincoln, Lincolnshire
LN6 3QR
Contact: Mark James
Testing Carried Out At: Bognor Regis

Client Reference: DS60081
Job Number: 21-67770_5

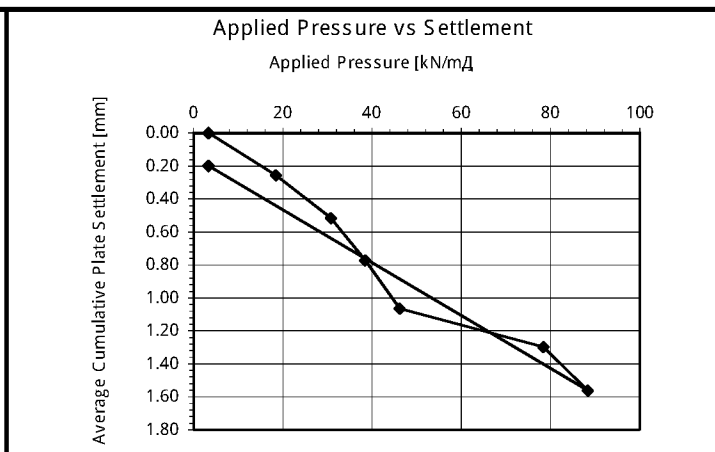
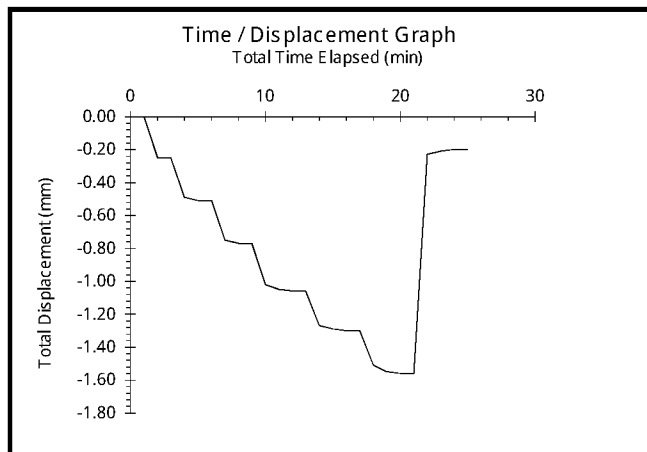
Date Tested: 13/04/2021
Tested By: SL

Test Results

Laboratory Reference:	67770_5
Test Reference:	5
Material Description:	Stoney sandy clayey C chalk
Test Location:	Test 5 CBR 5

Depth Top (m):	0.5
Layer Thickness (mm):	N/K
Weather Conditions:	Overcast/ Heavy Cloud
Kentledge Type:	J CB 3CX
Plate Diameter [m]:	0.60

Applied Load [kN]	Applied Pressure [kN/m ²]	Average Plate Settlement [mm]
0.96	3	0.00
5.23	18	0.26
8.71	31	0.52
10.89	39	0.77
13.07	46	1.07
22.17	78	1.30
24.99	88	1.56
0.96	3	0.20
End of Test		
Recovery %		87.21%



Pressure at 1.25mm Settlement:	71.5 kN/m ²	Max Applied Pressure:	88.4 kN/m ²
Modulus of Subgrade Reaction:	46.0 MN/m ² /m	Maximum settlement:	1.56 mm
Equivalent CBR By Plate Loading:	7.3 %	Moisture Content:	N/A

Remarks:

Signed:

Mark Collyer
Regional Director (Geotechnical) - South

SS F68.3

Date Reported: 14/04/2021

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for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

Determination of Equivalent CBR Value derived from Plate Bearing test BS 1377-9
Tested in accordance with In House Procedure based upon SHW Design manual IAN73/06

i2 Analytical Ltd
7 Woodshots Meadow
Croxley Green Business Park
Watford Herts WD18 8YS



Environment Science

Client: Delta-Simons
Client Address: 3 Henley Office Park
Doddington Road
Lincoln, Lincolnshire
LN6 3QR
Contact: Mark James
Testing Carried Out At: Bognor Regis

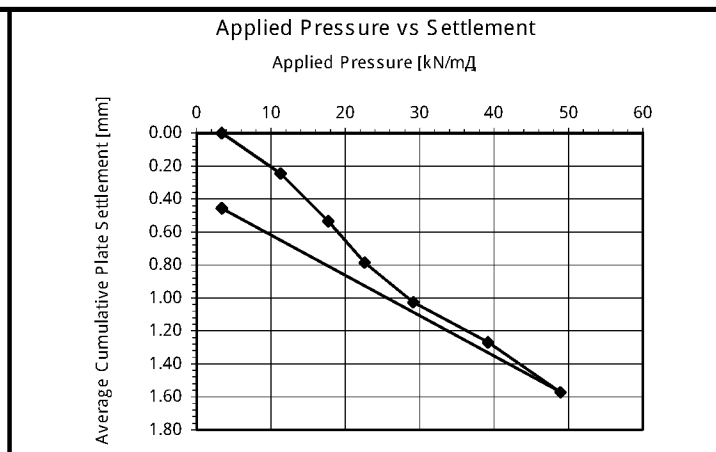
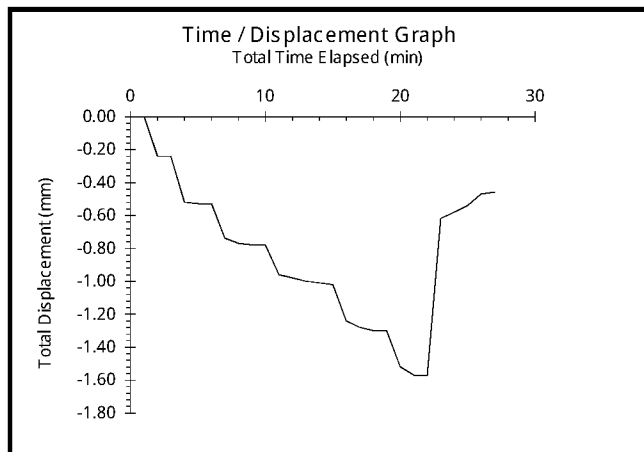
Client Reference: DS 60081
Job Number: 21-67770_6
Date Tested: 13/04/2021
Tested By: SL

Test Results

Laboratory Reference: 67770_6
Test Reference: 6
Material Description: Stoney sandy clayey Chalk
Test Location: Test 6 CBR 10

Depth Top (m): 0.5
Layer Thickness (mm): N/K
Weather Conditions: Overcast
Kentledge Type: J CB 3CX
Plate Diameter [m]: 0.60

Applied Load [kN]	Applied Pressure [kN/m ²]	Average Plate Settlement [mm]
0.96	3	0.00
3.19	11	0.25
5.01	18	0.54
6.39	23	0.79
8.24	29	1.03
11.08	39	1.27
13.84	49	1.57
0.96	3	0.46
End of Test		
Recovery %		70.97%



Pressure at 1.25mm Settlement: 38.4 kN/m²
Modulus of Subgrade Reaction: 24.7 MN/m²/m
Equivalent CBR By Plate Loading: 2.5 %

Max Applied Pressure: 48.9 kN/m²
Maximum settlement: 1.57 mm
Moisture Content: N/A

Remarks:

Signed:

Mark Collyer
Regional Director (Geotechnical) - South

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Date Reported: 14/04/2021

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for and on behalf of i2 Analytical Ltd

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Determination of Equivalent CBR Value derived from Plate Bearing test BS 1377-9
Tested in accordance with In House Procedure based upon SHW Design manual IAN73/06

i2 Analytical Ltd
7 Woodshots Meadow
Croxley Green Business Park
Watford Herts WD18 8YS



Science

Client: Delta-Simons
Client Address: 3 Henley Office Park
Doddington Road
Lincoln, Lincolnshire
LN6 3QR
Contact: Mark James
Testing Carried Out At: Bognor Regis

Client Reference: DS 60081
Job Number: 21-68049_1

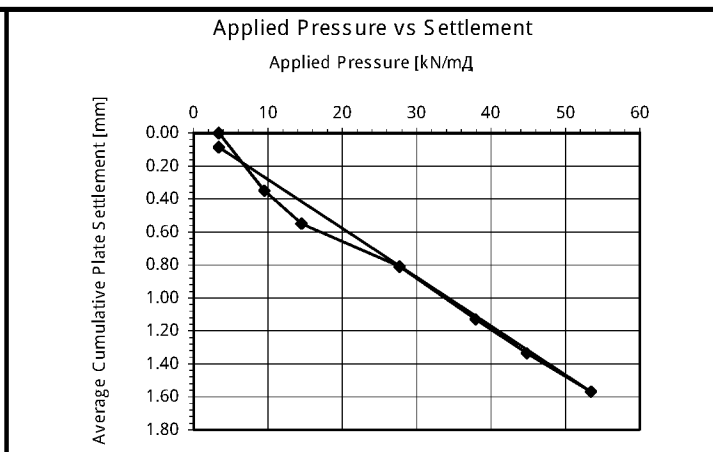
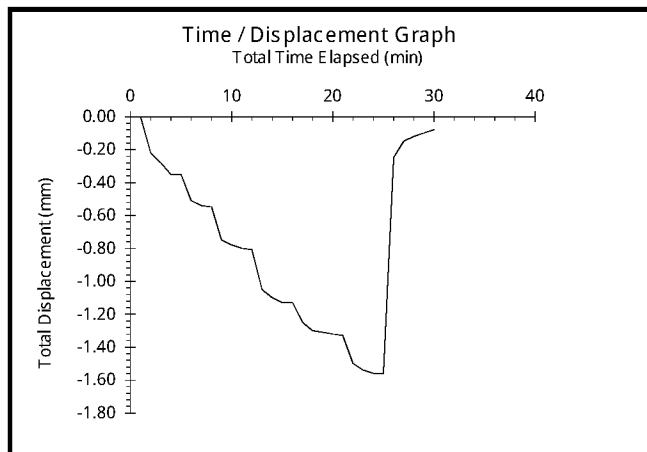
Date Tested: 14/04/2021
Tested By: SL

Test Results

Laboratory Reference:	68049_1
Test Reference:	7
Material Description:	CLAY (Brown to Grey) & Marine deposits
Test Location:	Test 7 CBR 6

Depth Top (m):	0.5
Layer Thickness (mm):	N/K
Weather Conditions:	Clear
Kentledge Type:	J CB 3CX
Plate Diameter [m]:	0.60

Applied Load [kN]	Applied Pressure [kN/m ²]	Average Plate Settlement [mm]
0.96	3	0.00
2.70	10	0.35
4.11	15	0.55
7.83	28	0.81
10.72	38	1.13
12.67	45	1.34
15.11	53	1.57
0.96	3	0.09
End of Test		
Recovery %		94.48%



Pressure at 1.25mm Settlement:	41.9 kN/m ²	Max Applied Pressure:	53.4 kN/m ²
Modulus of Subgrade Reaction:	27.0 MN/m ² /m	Maximum settlement:	1.57 mm
Equivalent CBR By Plate Loading:	2.9 %	Moisture Content:	N/A

Remarks:

Signed:

Mark Collyer
Regional Director (Geotechnical) - South

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Date Reported: 15/04/2021

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TEST CERTIFICATE

Determination of Equivalent CBR Value derived from Plate Bearing test BS 1377-9
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Contact: Mark James
Testing Carried Out At: Bognor Regis

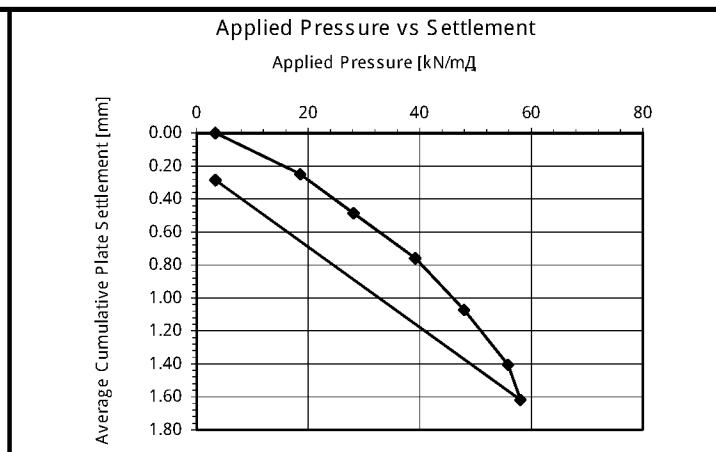
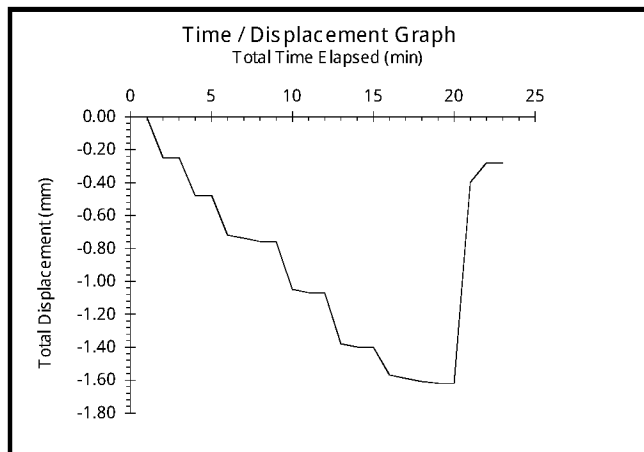
Client Reference: DS 60081
Job Number: 21-68049_2
Date Tested: 14/04/2021
Tested By: SL

Test Results

Laboratory Reference: 68049_2
Test Reference: 8
Material Description: Brown-grey clay/marine deposits-made ground
Test Location: Test 8 CBR 9

Depth Top (m): 0.5
Layer Thickness (mm): N/K
Weather Conditions: Clear
Kentledge Type: JCB 3CX
Plate Diameter (m): 0.60

Applied Load [kN]	Applied Pressure [kN/m ²]	Average Plate Settlement [mm]
0.96	3	0.00
5.27	19	0.25
7.95	28	0.49
11.09	39	0.76
13.57	48	1.07
15.79	56	1.41
16.42	58	1.62
0.96	3	0.29
End of Test		
Recovery %		82.30%



Pressure at 1.25mm Settlement: 52.2 kN/m²
Modulus of Subgrade Reaction: 33.6 MN/m²
Equivalent CBR By Plate Loading: 4.3 %

Max Applied Pressure: 58.1 kN/m²
Maximum settlement: 1.62 mm
Moisture Content: N/A

Remarks:

Signed:

Mark Conyer
Regional Director (Geotechnical) - South

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Date Reported: 15/04/2021

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for and on behalf of i2 Analytical Ltd

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Determination of Equivalent CBR Value derived from Plate Bearing test BS 1377-9
Tested in accordance with In House Procedure based upon SHW Design manual IAN73/06

i2 Analytical Ltd
7 Woodshots Meadow
Croxley Green Business Park
Watford Herts WD18 8YS



Client: Delta-Simons
Client Address: 3 Henley Office Park
Doddington Road
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Contact: Mark James
Testing Carried Out At: Bognor Regis

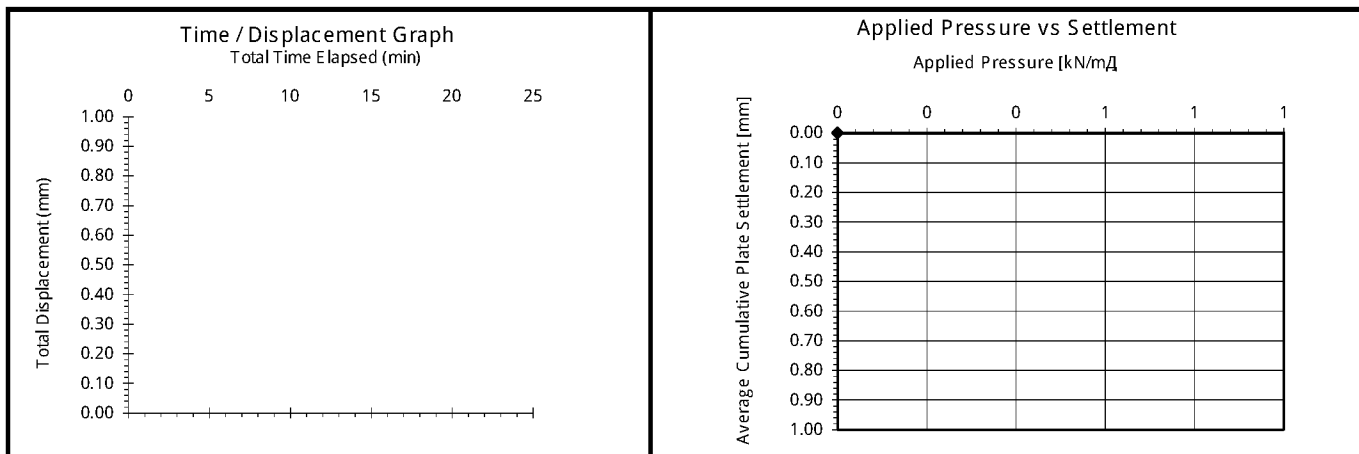
Client Reference: DS60081
Job Number: 21-68049_3

Date Tested: 14/04/2021
Tested By: SL

Test Results

Laboratory Reference:	68049_3	Depth Top (m):	0.5
Test Reference:	9	Layer Thickness (mm):	N/K
Material Description:	CLAY (Brown to Grey) - Marine deposits & Made	Weather Conditions:	Clear
Test Location:	Test 9 CBR 7	Kentledge Type:	J CB 3CX
		Plate Diameter (ml):	0.60

Applied Load [kN]	Applied Pressure [kN/m ²]	Average Plate Settlement [mm]
-	-	-



Pressure at 1.25mm Settlement:	-	Max Applied Pressure:	-
Modulus of Subgrade Reaction:	-	Maximum settlement:	-
Equivalent CBR By Plate Loading:	-	Moisture Content:	-

Remarks: Ground too soft to support kentledge, test terminated

Signed

Mark Conyer
Regional Director (Geotechnical) - South

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