



Photo 7: view of the arisings from WS2.

Photo 8: close-up view of Clay-with-Flints from WS3.





Photo 9: view of arisings from WS4.

Photo 10: view of the arisings from WS5.





Photo 11: view of the arisings from WS6.

Photo 12: close-up view of some of the Chalk from WS6.





Photo 13: view of WS7 near the western corner of the site during drilling.

Photo 14: view of arisings from WS7.





Photo 15: view of the arising from WS8.

Photo 16: view of WS9 during drilling, looking north-east.





Photo 17: view of the arisings from WS9.

Photo 18: view of shallow soils from WS10





Photo 19: view of arisings from WS11.

Photo 20: view of arisings from WS12.





Photo 21: view of arisings from WS13.

Photo 22: view of arisings from WS14.





Photo 23: view of the arisings from WS15.

Photo 24: view of WS16 during drilling by the current site entrance, looking north into the site.





Photo 25: close-up view of the junction between Clay-with-Flints and underlying Chalk in the core from WS16.

Photo 26: close-up view of the Chalk from WS16.



Appendix E

Borehole Logs



Borehole Log

Borehole No.

BH 1

Sheet 1 of 2

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
CP

Location: Harpenden

Level:

Scale
1:75

Client: Hill Partnerships

Dates: 21/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 0.50	B				TOPSOIL Weathered dark brown silty sandy CLAY with some angular flints and roots.	
		0.50 - 1.00	B					
		1.50		N=15 (1,3/3,4,4,4)	1.10		Firm to stiff orange brown silty sandy CLAY with lenses of orange brown limonite stained sand. Lignite and limonite staining and some angular flint gravel. (Clay with Flints Formation).	
		1.50 - 1.95	SPTL S D					
		2.00		N=16 (2,2/4,3,5,4)	2.30		Fine to coarse orange brown limonite stained clayey SAND. (Clay with Flints Formation).	
		2.00 - 2.95	SPTL S					
		2.50						
		3.00	D					
		3.50		N=21 (3,6/5,5,5,6)				
		3.50 - 3.95	SPTL S D					
		4.00		15 (4,4/15 for 230mm)				
		4.50	D					
		4.50 - 4.95	D					
		5.00	D					
		6.50		N=17 (4,4/3,5,5,4)	6.40		CHALK. White weathered very soft to soft putty CHALK with limonite staining and some small hard nodular chalk lithorelics. (Lewes Nodular Chalk & Seaford Chalk Formation Undifferentiated	
		6.50 - 6.95	SPTL S D					
		7.00						
		8.00		N=17 (3,3/4,6,4,3)				
		8.00 - 8.45	SPTL S					
		9.00	D					
		9.50		N=21 (4,4/5,5,6,5)				
		9.50 - 9.95	SPTL S D					
		10.00						
		11.00		N=25 (4,4/4,5,8,8)				
		11.00 - 11.45	SPTL S					
		12.00	D					
		12.50		N=22 (4,3/5,5,6,6)				
		12.50 - 12.95	SPTL S D					
		13.00						
		14.00		N=24 (3,5/5,6,6,7)	14.00			
		14.00 - 14.45	D				CHALK. Hard becoming very hard rock CHALK with rare flints. (Lewes Nodular Chalk & Seaford Chalk Formation- undifferentiated).	
		15.00	D					

Continued on next sheet

Remarks
Hole dry





Borehole Log

Borehole No.

BH 1

Sheet 2 of 2

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
CP

Location: Harpenden

Level:

Scale
1:75

Client: Hill Partnerships

Dates: 21/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		15.50						
		15.50 - 15.95	SPTL	N=39 (6,7/7,8,10,14)				
		16.00	S					16
			D					
		17.00		N=50 (8,8/50 for 255mm)				17
		17.00 - 17.27	SPTL					
		18.00	S					18
			D					
		18.50		N=50 (7,10/50 for 253mm)				19
		18.50 - 18.95	SPTL					
		19.00	S					20
		19.00 - 20.00	D					
		20.00		N=50 (10,12/50 for 260mm)				21
		20.00 - 20.95	SPTL					
		21.00	S					22
			D					
		21.50		N=50 (10,14/50 for 190mm)				23
		21.50 - 21.95	SPTL					
		23.00	S					24
				N=43 (10,15/43 for 167mm)				
		23.00	D					25
		23.00 - 23.95	SPTL					
		24.00	S					26
			D					
		24.50		50 (25 for 125mm/50 for 247mm)				27
		24.50 - 24.95	SPTL		25.00			
		25.00	S					28
			D					29
							End of borehole at 25.00 m	30

Remarks
Hole dry





Borehole Log

Borehole No.

BH 2

Sheet 1 of 2

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
CP

Location: Harpenden

Level:

Scale
1:75

Client: Hill Partnerships

Dates: 22/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.00 - 0.20	B		0.20		TOPSOIL. Weathered dark brown silty sandy CLAY with some angular flint gravel and roots. Stiff to very stiff orange brown silty sandy CLAY with lenses of limonite stained orange brown clayey sand, some lignite and limonite staining with some flint gravel and flint cobbles.	1	
		0.20 - 1.00	B						
		1.50		N=19 (3,4/4,4,5,6)	3.70		CHALK. White soft putty CHALK with limonite staining and small nodular chalk lithorelics.	2	
		1.50 - 1.95	SPTL						
		2.00	S						
		2.00	D						
		2.50		N=18 (4,3/4,4,5,5)					
		2.50 - 2.95	SPTL						
		3.00	S						
		3.00	D						
		3.50		N=27 (8,9/11,6,5,5)					
		3.50 - 3.95	SPTL						
		4.00	S						
		4.00	D						
		4.50		N=7 (1,1/2,2,1,2)					
		4.50 - 4.95	SPTL						
		5.00	S						
		5.00	D						
		6.00	D						
		6.50		N=6 (2,2/1,1,1,3)					
		6.50 - 6.95	SPTL						
		7.00	S						
		7.00	D						
		8.00		N=13 (1,1/3,2,4,4)					
		8.00 - 8.45	SPTL						
		9.00	S						
		9.00	D						
		9.50		N=9 (2,2/2,2,3,2)					
		9.50 - 9.95	SPTL						
		10.00	S						
		10.00	D						
		11.00		N=26 (5,7/7,7,6,6)					
		11.00 - 11.45	SPTL						
		12.00	S						
		12.00	D						
		12.50		N=29 (5,7/9,7,6,7)					
		12.50 - 12.95	SPTL						
		13.00	S						
		13.00	D						
		14.00		N=32 (6,6/8,8,7,9)					
		14.00 - 14.45	SPTL						
		15.00	S						
		15.00	D						
		15.00			15.00			15	

Continued on next sheet

Remarks
Hole dry.





Borehole Log

Borehole No.

BH 2

Sheet 2 of 2

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
CP

Location: Harpenden

Level:

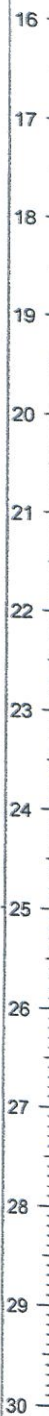
Scale
1:75

Client: Hill Partnerships

Dates: 22/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		15.50		N=39 (7,7/9,9,10,11)			Hard white CHALK with rare flints	
		15.50 - 15.95	SPTL S					
		15.50 - 16.50	B					
		17.00		N=50 (8,8/50 for 255mm)				
		17.00 - 17.95	SPTL S					
		18.00	D					
		18.50		N=50 (7,10/50 for 253mm)				
		18.50 - 18.95	SPTL S					
		19.00	D					
		20.00		N=50 (9,12/50 for 260mm)				
		20.00 - 20.45	SPTL S					
		21.00	D					
		21.50		N=50 (10,14/50 for 240mm)				
		21.50 - 21.95	SPTL S					
		22.00	D					
		23.00		N=50 (10,15/50 for 231mm)				
		23.00 - 23.45	SPTL S					
		24.00	D					
		24.50		50 (25 for 125mm/50 for 247mm)				
		24.50 - 24.95	SPTL S		25.00			
		24.50 - 25.00	B					
		25.00	D					



Remarks
Hole dry.





Borehole Log

Borehole No.

BH 3

Sheet 1 of 2

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
CP

Location: Harpenden

Level:

Scale
1:75

Client: Hill Partnerships

Dates: 20/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10 - 1.00	B		0.10		TOPSOIL. Weathered dark brown silty sandy CLAY with some angular flint gravel and roots. Orange brown limonite stained sandy CLAY with lignite staining and some angular flint gravel, (Clay with Flints Formation).	1	
		1.50 1.55 - 1.95	SPTL S D	N=20 (2,4/4,6,5,5)				2	
		2.00 2.50 2.50 - 2.95	SPTL S D	N=23 (3,4/5,5,7,6)	2.90		CHALK. White Soft putty chalk becoming firm to stiff chalk with limonite staining, are flints. (Lewes Nodular Chalk & Seaford Chalk Formation Undifferentiated).	3	
		3.00 3.50 3.50 - 3.95	SPTL S D	N=7 (1,0/2,2,1,2)				4	
		4.00 4.50 4.50 - 4.95	SPTL S D	N=9 (1,2/2,3,2,2)				5	
		5.00 6.00	D					6	
		6.50 6.50 - 6.95	SPTL S D	N=13 (2,3/3,3,4,3)				7	
		7.00 8.00 8.00 - 8.45	SPTL S	N=12 (3,3/2,2,4,4)				8	
		9.00 9.50 9.50 - 9.95	D SPTL S D	N=16 (3,4/3,3,4,6)				9	
		10.00 11.00 11.00 - 11.45	SPTL S	N=25 (3,5/5,7,7,6)				10	
		12.00 12.50 12.50 - 12.95	D SPTL S D	N=17 (2,4/4,3,5,5)				11	
		13.00 14.00 14.00 - 14.45	SPTL S	N=28 (3,3/6,6,8,8)				12	
		15.00	D					13	
								14	
								15	

Continued on next sheet

Remarks
Hole dry.





Borehole Log

Borehole No.

BH 3

Sheet 2 of 2

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
CP

Location: Harpenden

Level:

Scale
1:75

Client: Hill Partnerships

Dates: 20/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		15.50		N=48 (7,12/10,11,13,14)	16.50			CHALK. Hard rock CHALK with rare flints.	16
		15.50 - 15.95	SPTL S D						
		17.00		N=46 (8,10/10,11,12,13)	18.50				17
		17.00 - 17.45	SPTL S D						
		18.50		N=50 (10,13/50 for 255mm)	19.50				18
		18.50 - 18.95	SPTL S D						
		20.00		N=50 (9,9/50 for 264mm)	20.50				19
		20.00 - 20.45	SPTL S D						
		21.50		N=50 (10,14/50 for 230mm)	21.50				20
		21.50 - 21.95	SPTL S D						
		23.00		50 (25 for 120mm/50 for 244mm)	23.50				21
		23.00 - 23.45	SPTL S D						
		24.50		N=75 (15,10/75 for 239mm)	24.50				22
		24.50 - 24.95	SPTL S D						
		25.00			26.00				23
		25.50 - 26.00	D B						
								End of borehole at 26.00 m	24
									25
									26
									27
									28
									29
									30

Remarks
Hole dry.





Borehole Log

Borehole No.

WS 1

Sheet 1 of 2

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

Scale
1:25

Client: Hill Partnerships

Dates: 10/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.30		TOPSOIL. Dark brown weathered silty sandy CLAY with scattered flint gravel and roots. (Weathered Clay with Flints)	
		0.75 - 1.00	ES		0.75		Dark brown weathered silty sandy CLAY with scattered flint gravel. (Weathered Clay with Flints Formation).	
		1.00 1.00 - 2.00	ES	N=15 (2,2/3,3,4,5)			Stiff becoming very stiff orange brown silty sandy CLAY with scattered flint gravel and traces of fine chalk gravel with depth, limonite staining and traces of lignite. (Clay with Flints Formation).	
		2.00		N=24 (2,3/5,6,7,6)				
		2.93 - 3.00 3.00	ES	N=4 (1,0/1,1,1,1)	2.93		Soft white weathered damp CHALK, structureless with a putty/clayey consistency with some limonite staining and rare flints. Becoming stiff to very stiff between 6 and 10 mbgl. (Lewes Nodular Chalk & Seaford Chalk Formation - undifferentiated).	
		4.00		N=5 (1,1/2,1,1,1)				
		5.00		N=7 (1,1/2,1,2,2)				

Continued on next sheet

Remarks
Hole dry.





Borehole Log

Borehole No.

WS 1

Sheet 2 of 2

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

Scale
1:25

Client: Hill Partnerships

Dates: 10/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		6.00 6.00 - 7.00	ES	N=20 (1,3/3,4,6,7)				6
		7.00		N=18 (4,5/5,5,4,4)				7
		8.00 8.00 - 9.00	ES	N=12 (2,2/3,4,3,2)				8
		9.00 9.00 - 10.00	ES	N=25 (4,5/5,5,7,8)				9
		10.00		N=18 (4,5/5,4,4,5)	10.00			10

End of borehole at 10.00 m

Remarks
Hole dry.



Borehole Log

Borehole No.

WS 2

Sheet 1 of 1

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

Scale
1:25

Client: Hill Partnerships

Dates: 10/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 1.00	ES		0.30		TOPSOIL. Weathered dark brown silty sandy CLAY with some angular flints and roots,	
		1.00 1.00 - 2.00	ES	N=18 (1,2/4,5,5,4)			Stiff to very stiff orange brown silty sandy CLAY with lenses of orange brown sand, lignite staining and some angular flint gravel. (Clay with Flints Formation).	
		2.00 2.00 - 3.00	ES	N=29 (1,2/3,3,10,13)	2.80		CHALK. White soft putty CHALK with limonite staining and some small hard nodular chalk lithorelicts, becoming firm at 5.00 mbgl. (Lewes Nodular Chalk & Seaford Chalk Formation-undifferentiated).	
		3.00 3.00 - 4.00	ES	N=7 (1,2/2,2,2,1)				
		4.00		N=2 (1,1/0,1,0,1)				
		5.00		N=10 (2,2/2,3,3,2)	5.00		End of borehole at 5.00 m	

Remarks
Hole dry.





Borehole Log

Borehole No.

WS 3

Sheet 1 of 1

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

Scale
1:25

Client: Hill Partnerships

Dates: 10/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 0.45	ES		0.30		TOPSOIL. Weathered dark brown silty sandy CLAY with some angular flint gravel and roots.	
		0.45 - 1.00	ES					Stiff to very stiff orange brown silty sandy CLAY with lenses of orange brown sand with much limonite staining, lignite staining and some angular flint gravel. (Clay with Flints Formation).
		1.00 1.00 - 2.00	ES	N=19 (2,3/4,4,5,6)	2.00	Orange brown dense clayey SAND with some lignitic and limonite staining. (Clay with Flints Formation).		
		2.00 2.00 - 3.00	ES	N=21 (2,2/4,5,5,7)		4.00		End of borehole at 4.00 m
		3.00 3.00 - 4.00	ES	N=21 (4,4/5,6,5,5)				

Remarks
Hole dry.





Borehole Log

Borehole No.

WS 4

Sheet 1 of 1

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

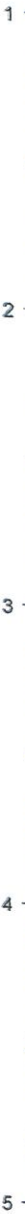
Scale
1:25

Client: Hill Partnerships

Dates: 10/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.60 - 1.00	ES		0.60		TOPSOIL. Weathered dark brown silty sandy CLAY with some angular flint gravel and roots.	
		1.00 1.00 - 2.00	ES	N=12 (2,2/2,3,3,4)			Firm to stiff orange brown silty sandy CLAY with lenses of orange brown sand, lignite staining and some angular flint gravel. (Clay with Flints Formation).	
		2.00		N=5 (1,1/1,2,1,1)				
		3.00		N=10 (1,2/2,2,3,3)	2.60		CHALK. Soft to very soft putty CHALK with rare flints and some orange brown limonite staining. (Lewes Chalk and Nodular chalk Formation - undifferentiated).	
		4.00		N=6 (1,1/1,2,1,2)	4.00			
End of borehole at 4.00 m								



Remarks
Hole dry





Borehole Log

Borehole No.

WS 5

Sheet 1 of 1

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

Scale
1:25

Client: Hill Partnerships

Dates: 11/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 0.50	ES				TOPSOIL. Weathered dark brown silty sandy CLAY with some angular flint gravel and roots,	
		0.50 - 2.30	ES		0.30		Stiff to very stiff orange brown silty sandy CLAY with lenses of orange brown sand, lignite staining some flint gravel and flint cobbles. Locally with pockets of mottled bluish grey sandy clay. Large flint cobbles at base. (Clay with Flints Formation).	
		1.00		N=11 (1,1/2,2,3,4)				
		2.00		N=15 (3,3/4,5,3,3)				
		2.30 - 5.00	ES		2.30		CHALK. White soft to firm putty CHALK with limonite staining and some small hard nodular chalk lithorelicts. (Lewes Nodular Chalk and Seaford Chalk Formations- undifferentiated).	
		3.00		N=12 (1,1/2,1,4,5)				
		4.00		N=10 (4,4/2,3,3,2)				
		5.00		N=13 (1,3/3,3,3,4)	5.00			
								End of borehole at 5.00 m

Remarks
Hole dry.





Borehole Log

Borehole No.

WS 6

Sheet 1 of 1

Project Name: Townsend Lane	Project No. 2015/2631	Co-ords: -	Hole Type WLS
Location: Harpenden	Level:		Scale 1:25
Client: Hill Partnerships	Dates: 11/08/2015 -		Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 0.30	ES				TOPSOIL. Weathered dark brown silty sandy CLAY with angular flint gravel and roots.	
		0.30 - 1.50	ES		0.30		Stiff orange brown silty sandy CLAY with lenses of orange brown sand, lignite and limonite staining and some angular flint gravel. (Clay with Flints Formation).	
		1.00		N=13 (1,2/3,4,3,3)				
		1.50 - 5.00	ES		1.50		CHALK. White soft to firm putty CHALK with limonite staining and some small hard chalk lithorelicts and rare flints. (Lewes Nodular Chalk & Seaford Chalk Formations - undifferentiated).	
		2.00		N=6 (3,2/1,2,1,2)				
		3.00		N=7 (1,1/2,2,2,1)				
		4.00		N=13 (8,9/4,3,3,3)				
		5.00		N=4 (1,0/1,1,1,1)	5.00			

Remarks
Hole dry.



End of borehole at 5.00 m



Borehole Log

Borehole No.

WS 7

Sheet 1 of 1

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

Scale
1:25

Client: Hill Partnerships

Dates: 11/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 0.35	ES		0.35		TOPSOIL. Weathered dark brown silty sandy CLAY with some angular flint gravel and roots.	
		0.30 - 1.00	ES				Stiff to very stiff orange brown silty sandy CLAY with limonite stained sand lenses, lignite and limonite staining. Layer of coarse flints at 4.5 metres. (Clay with Flints Formation).	
		1.00		N=12 (3,4/2,3,3,4)			1	
		2.00		N=16 (2,3/3,3,4,6)			2	
		3.00		N=19 (2,4/5,5,4,5)			3	
		4.00		N=15 (1,2/2,3,4,6)			4	
		4.50 - 5.00	ES				4.50	
		5.00		N=18 (4,4/4,5,5,4)	5.00	End of borehole at 5.00 m		

Remarks
Hole dry.





Borehole Log

Borehole No.

WS 8

Sheet 1 of 1

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

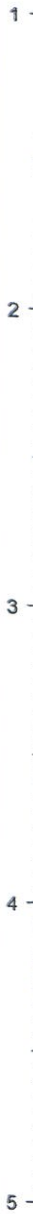
Scale
1:25

Client: Hill Partnerships

Dates: 11/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 0.50	ES				TOPSOIL. Weathered dark brown silty sandy CLAY with some angular flint gravel and roots.	
		0.50 - 2.90	ES		0.30		Dense to very dense orange brown limonite stained clayey SAND with lignite staining and some angular flint gravel. (Clay with Flints Formation).	
		1.00		N=20 (2,3/4,4,5,7)				
		2.00		N=23 (1,3/4,5,6,8)				
		2.90 - 4.50	ES		2.90		Firm to stiff orange brown silty sandy CLAY with lenses of orange brown sand, lignite staining and some angular flint gravel. (Clay with Flints Formation).	
		3.00		N=15 (2,2/3,3,4,5)				
		4.00		N=13 (4,3/3,3,3,4)				
		5.00		N=8 (2,3/3,2,1,2)	5.00			



End of borehole at 5.00 m

Remarks
Hole dry.





Borehole Log

Borehole No.

WS 9

Sheet 1 of 2

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

Scale
1:25

Client: Hill Partnerships

Dates: 11/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 0.35	ES			[Patterned Legend Box]	TOPSOIL. Weathered dark brown silty sandy CLAY with some angular flint gravel.	
		0.35 - 1.10	ES		0.35		Stiff to very stiff orange brown silty sandy CLAY with lenses of limonite stained orange brown clayey sand, some lignite and limonite staining and some angular flint gravel. (Clay with Flints Formation).	
		1.00 1.10 - 4.00	ES	N=25 (1,3/5,6,7,7)				
		2.00		N=20 (2,3/6,5,4,5)				
		3.00		9 (2,2/9 for 228mm)				
		4.00		N=19 (2,3/6,4,4,5)				
		5.00		N=19 (3,4/5,4,5,5)				

1
2
3
4
5

Continued on next sheet

Remarks
Hole dry.





Borehole Log

Borehole No.

WS 9

Sheet 2 of 2

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

Scale
1:25

Client: Hill Partnerships

Dates: 11/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		5.50 - 6.50	ES					
		6.00		N=35 (3,4/6,9,9,11)	6.00		Orange brown silty clayey SAND with a little flint gravel, limonite and lignitic staining locally with comminuted flint. Becoming more clayey with depth with rare rounded flint gravel. (Clay with Flints Formation).	
		7.00		N=16 (1,3/3,4,4,5)				
					10.00			

6
7
8
9
10

Remarks
Hole dry.

End of borehole at 10.00 m





Borehole Log

Borehole No.

WS 10

Sheet 1 of 1

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

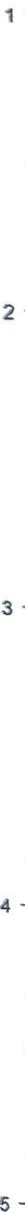
Scale
1:25

Client: Hill Partnerships

Dates: 12/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 0.40	ES		0.30		TOPSOIL. Weathered silty sandy CLAY with scattered flint gravel and roots. (Weathered Clay with Flints).	
		1.00 1.00 - 2.00	ES	N=16 (1,3/2,3,4,7)			Stiff to very stiff orange brown silty sandy CLAY with lenses of limonite stained sand lignite and limonite staining angular flint gravel. (Clay with Flints Formation).	
		2.00		N=17 (2,2/3,4,4,6)				
		3.00		N=15 (2,3/3,3,4,5)				
		4.00		N=14 (1,2/3,3,3,5)				
		5.00		N=11 (1,2/3,2,3,3)	5.00			



End of borehole at 5.00 m

Remarks
Hole dry.





Borehole Log

Borehole No.

WS 11

Sheet 1 of 1

Project Name: Townsend Lane

Project No.
2015/2631

Co-ords: -

Hole Type
WLS

Location: Harpenden

Level:

Scale
1:25

Client: Hill Partnerships

Dates: 12/08/2015 -

Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00 - 0.70	ES				TOPSOIL. Weathered dark brown silty sandy CLAY with some angular flint gravel and roots. Soil is loosely compacted in hedgerow.	
		1.00		N=4 (0,1/1,1,1,1)	0.70		Soft to firm orange brown silty sandy CLAY with lenses of limonite stained orange brown sand, lignite staining and some angular flint gravel. (Clay with Flints Formation).	
		1.20 - 2.00	ES		2.00		End of borehole at 2.00 m	



Remarks
Hole dry.

