Trial Pit Log

Trialpit No **TP437**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418298.56 - 425017.08 Level:	Date 14/01/2019
Location: Cleckheaton		Dimensions (m): 3.6 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.70	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	J,K&T					MADE GROUND: Pinkish red ashy gravelly SAND. Gravel is angular fine to coarse of burnt shale and clinker. (ASH & CLINKER)
				0.30			MADE GROUND: Blackish brown clayey gravelly SAND with low boulder content. Gravel is angular fine to coarse of brick and concrete. Boulders are angular of concrete. (BRICKFILL)
	0.40	J,K&T					
	0.80	B					
				1.10			MADE GROUND: Light brown gravelly CLAY. Gravel is angular fine to coarse of sandstone. (COHESIVE MADE GROUND) *Major spalling of trial pit walls from 1.1m depth.*
				1.20			MADE GROUND: Black gravelly slightly ashy SAND with low cobble content. Gravel is angular fine to coarse of brick, concrete, clinker and ceramic. Cobbles are angular of brick. Clinker and bricks are stained yellow. (ASH & CLINKER) *Burnt odour at 1.4m depth.*
	1.40	J&K					*Old brick chamber in E trial pit wall from 0.8m to 2.7m with curved wall.*
				2.40			MADE GROUND: Strong grey CONCRETE. 40% aggregate of angular fine to coarse gravel of mixed lithology. (CONCRETE)
				2.50			MADE GROUND: Black slightly gravelly SAND with medium cobble content. Gravel and cobbles are angular of brick. (BRICKFILL)
				3.50			MADE GROUND: Black sandy slightly gravelly CLAY. Gravel is angular fine to coarse of mixed lithology. (COHESIVE MADE GROUND) *Unable to excavate further due to concrete slab at 2.4m.*
	3.60	J&K		3.70			End of pit at 3.70 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit were unstable between 1.1m and 3.7m depth during excavation.

Trial Pit Log

Trialpit No **TP438**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: - Level:	Date 14/01/2019
Location: Cleckheaton		Dimensions (m): 9.8 × 0.6	Scale 1:25
Client: Strata Homes		Depth 4.50	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	J,K&T					MADE GROUND: Brown gravelly slightly clayey SAND with low cobble content. Gravel and cobbles are angular fine to coarse of sandstone, concrete and brick with glass, plastic, metal and electrical wiring fragments. (BRICKFILL)
				1.40			
				1.50			MADE GROUND: Pinkish red angular COBBLES of brick. (GRANULAR MADE GROUND)
	1.80	J&K					MADE GROUND: Black ashy slightly gravelly SAND. Gravel is angular fine to coarse of clinker and brick. (BRICKFILL)
							Sweet solvent smell at 2.0m depth.
	2.80	K					
				3.10			*Concrete block in E trial pit wall from 1.6m to around 4.0m depth - trenched over the top of the concrete block which was 2.5m wide oriented N-S lined with bricks on its eastern side, possible old tank.*
							MADE GROUND: Black ashy slightly gravelly SAND. Gravel is angular fine to coarse of clinker. (ASH & CLINKER)
	3.60	K					
				4.50			End of pit at 4.50 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit were unstable between ground level and 4.5m depth during excavation with constant spalling.

Trial Pit Log

LITHOS CONSULTING			Trialpit No **TP439** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: - Level:	Date 14/01/2019
Location: Cleckheaton		Dimensions (m): 7 × 0.6	Scale 1:25
Client: Strata Homes		Depth 4.40	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	J,K&T					MADE GROUND: Brown sandy gravelly angular COBBLES of brick and concrete. (BRICKFILL) *Large block of rendered bonded brickwork at 1.3m depth, 0.8mx0.4mx0.4m.* *From 1.4m at either trial pit a brick wall stepped/curved down to 2.3m depth.*
				1.80			MADE GROUND: Yellowish brown gravelly SAND. Gravel is angular fine to coarse of mixed lithology. Gravel is stained yellow. (FILTER SAND) *Layer of wood above the yellowish brown made ground at 1.8m depth.*
	2.00	J&K					
				2.30			MADE GROUND: Pinkish red COBBLES of brick. Bricks are stained yellow. (BRICKFILL) *Metal pipe 50mm diameter at 2.3m depth.*
				2.40			MADE GROUND: Multi-coloured gravelly clayey SAND. Gravel is angular fine to coarse of clinker and brick. (FILTER SAND) *Slight solvent odour at 2.4m depth.*
	2.80	J&K					
				3.80			Stiff yellowish brown sandy slightly gravelly CLAY. Gravel is angular to subangular fine to coarse of sandstone. (COHESIVE RESIDUAL SOIL)
	3.90	K					
	4.20	D					*Slight groundwater seepage at 4.4m depth.*
				4.40			End of pit at 4.40 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent as a seepage at 4.4m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit were unstable between ground level and 3.8m depth during excavation.

AGS

Trial Pit Log

Trialpit No **TP440**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418269.06 - 424979.20 Level:	Date 14/01/2019
Location: Cleckheaton		Dimensions (m): 3.3 × 0.6	Scale 1:25
Client: Strata Homes		Depth 4.00	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	J,K&T					MADE GROUND: Brown gravelly slightly clayey SAND with medium cobble content. Gravel and cobbles are angular of brick (GRANULAR MADE GROUND)
				1.30			MADE GROUND: Weak grey CONCRETE. 40% aggregate of rounded fine gravel of mixed lithology. (CONCRETE)
				1.40			MADE GROUND: Black ash gravelly SAND. Gravel is angular fine to coarse of clinker and brick. (ASH & CLINKER)
	2.00	J&K					
							Slight hydrocarbon odour at 2.4m depth.
				2.50			Firm orangish brown slightly sandy CLAY. (COHESIVE RESIDUAL SOIL)
	2.70	K					*Slight groundwater seepage of black groundwater at 2.5m depth whilst sampling.*
							No blocks for vane between 2.5m and 2.9m depth.
				2.90			Brown mottled grey very clayey angular fine to coarse GRAVEL of mudstone. (GRANULAR RESIDUAL SOIL)
	3.50	T					
				4.00			End of pit at 4.00 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent as a seepage at 2.5m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit were unstable between ground level and 2.4m depth during excavation.

Trial Pit Log

Trialpit No **TP441**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418304.92 - 424982.21 Level:	Date 14/01/2019
Location: Cleckheaton		Dimensions (m): 3.2 × 0.6	Scale 1:25
Client: Strata Homes		Depth 4.10	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	J,K&T					MADE GROUND: Brown gravelly slightly clayey SAND with low cobble content. Gravel and cobbles are angular of brick and concrete with wood, metal and tile fragments. (GRANULAR MADE GROUND)
	1.90	J&K		1.80			MADE GROUND: Black sandy slightly clayey angular fine to coarse GRAVEL of clinker. (ASH & CLINKER)
	3.00	J&K		2.20			MADE GROUND: Black CLAY. (COHESIVE MADE GROUND) *Inflow of black groundwater at 2.2m depth with strong stagnant smell.*
	3.90	K	HVP=50	3.80			Firm orangish brown gravelly CLAY. Gravel is angular fine to coarse of sandstone. (COHESIVE RESIDUAL SOIL)
				4.10			End of pit at 4.10 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent as an inflow at 2.2m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit were unstable between ground level and 2.2m depth during excavation.

Trial Pit Log

Trialpit No **TP442**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418330.47 - 424982.81 Level:	Date 15/01/2019
Location: Cleckheaton		Dimensions (m): 3.4 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.20	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	J,K&T					MADE GROUND: Brown gravelly SAND with medium cobble content. Gravel and cobbles are angular of brick and sandstone with occasional wood and glass fragments. (BRICKFILL) *Old brick wall from ground level to 0.7m depth, 0.3m wide running E-W.*
	1.00	J&K		0.90			MADE GROUND: Multicoloured gravelly CLAY. Gravel is angular fine to coarse of clinker, brick and concrete with wood fragments. (GRANULAR MADE GROUND) *Slight hydrocarbon odour at 1.0m depth.*
	1.50	K	HVP=70	1.40			Firm light orangish brown mottled grey sandy slightly gravelly CLAY. Gravel is angular fine of sandstone. (COHESIVE RESIDUAL SOIL)
	2.00	D					
	3.10	T		3.00 3.20			Strong orangish brown thinly bedded SANDSTONE. Recovered as angular fine to coarse gravel. (COAL MEASURES) *Groundwater inflow at 3.0m depth with oily sheen and hydrocarbon odour.* End of pit at 3.20 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent as an inflow at 3.0m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit were unstable between ground level and 1.4m depth during excavation.

Trial Pit Log

Trialpit No **TP443**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418297.95 - 424972.67 Level:	Date 15/01/2019
Location: Cleckheaton		Dimensions (m): 2.6 × 0.6	Scale 1:25
Client: Strata Homes		Depth 1.40	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.50	J,K&T		0.60			MADE GROUND: Brown gravelly CLAY. Gravel is angular fine to coarse of brick and concrete. (COHESIVE MADE GROUND)
	0.80	J&K					MADE GROUND: Black gravelly SAND with medium cobble content. Gravel and cobbles are angular fine to coarse of brick. (GRANULAR MADE GROUND)
				1.40			*End at 1.4m due to groundwater inflow from old drain.* End of pit at 1.40 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP443A**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418295.80 - 424971.89 Level:	Date 15/01/2019
Location: Cleckheaton		Dimensions (m): 3.2 × 0.6	Scale 1:25
Client: Strata Homes		Depth 2.40	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.30			MADE GROUND: Brown gravelly CLAY. Gravel is angular fine to coarse of brick and concrete. (COHESIVE MADE GROUND)
							MADE GROUND: Pinkish red ashy gravelly SAND with medium cobble content. Gravel and cobbles are angular of brick and concrete. (BRICKFILL)
							Concrete slab in N trial pit wall at 1.5m, 0.2m thick.
							End at 2.4m due to groundwater inflow.
				2.40			End of pit at 2.40 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent as an inflow at 2.4m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP444**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418283.13 - 424963.79 Level:	Date 15/01/2019
Location: Cleckheaton		Dimensions (m): 6 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.40	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	J,K&T					MADE GROUND: Brown sandy gravelly CLAY. Gravel is angular fine to coarse of brick. (COHESIVE MADE GROUND)
	0.70	B		0.80			MADE GROUND: Stiff grey mottled orangish brown gravelly CLAY. Gravel is angular fine to medium of mudstone and mudstone lithorelicts. (COHESIVE MADE GROUND)
			HVP=80	1.20			MADE GROUND: Black sandy angular fine to coarse GRAVEL of mixed lithology. (GRANULAR MADE GROUND) *Groundwater seepage at 1.2m with slight hydrocarbon odour and oily sheen.* *Attempted to trench out but major groundwater inflow at 1.3m depth from the S trench end.*
	1.50	J&K					
	2.40	K					
	2.50	D	HVP=50	2.50			Firm orangish brown and grey mottled slightly gravelly CLAY. Gravel is angular fine to medium of mudstone. (COHESIVE RESIDUAL SOIL)
			HVP=45	3.40			End of pit at 3.40 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent as a seepage at 1.2m and an inflow at 2.4m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP445**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418343.95 - 425064.46 Level:	Date 15/01/2019
Location: Cleckheaton		Dimensions (m): 5.9 × 0.6	Scale 1:25
Client: Strata Homes		Depth 4.90	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							MADE GROUND: Multicoloured sandy ashy angular fine to coarse GRAVEL with low cobble content. Gravel and cobbles are angular of brick and clinker. (BRICKFILL)
				1.50			MADE GROUND: Black ashy gravelly SAND. Gravel is angular fine to coarse of clinker and ceramic. (ASH & CLINKER)
	2.60	B					
				4.60			MADE GROUND: Firm brown gravelly CLAY. Gravel is angular fine to coarse of mudstone, brick and sandstone. (COHESIVE MADE GROUND)
				4.90			End of pit at 4.90 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP446**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418342.40 - 425078.08 Level:	Date 15/01/2019
Location: Cleckheaton		Dimensions (m): 3.2 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.10	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.30	J,K&T					MADE GROUND: Pinkish red ashy gravelly SAND. Gravel is angular fine to coarse of clinker. (ASH & CLINKER) *Slight solvent odour at 1.0m depth.*
	1.60	J&K		1.50			Stiff orangish brown and grey mottled gravelly CLAY. Gravel is angular fine to coarse of sandstone. (COHESIVE RESIDUAL SOIL)
	1.80	D	HVP=80				
				2.90			Strong orangish brown thinly bedded SANDSTONE. Recovered as angular fine to coarse of sandstone. (COAL MEASURES)
				3.10			End of pit at 3.10 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP447**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418474.36 - 425015.94 Level:	Date 15/01/2019
Location: Cleckheaton		Dimensions (m): 3.2 × 0.6	Scale 1:25
Client: Strata Homes		Depth 2.80	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							MADE GROUND: Brown gravelly slightly clayey SAND with low cobble content. Gravel and cobbles are angular of brick and concrete. (GRANULAR MADE GROUND)
				1.00			MADE GROUND: Grey gravelly CLAY. Gravel is angular fine to coarse of brick. (COHESIVE MADE GROUND)
				1.20			Stiff orangish brown mottled grey gravelly CLAY. Gravel is angular fine to coarse of sandstone. (COHESIVE RESIDUAL SOIL)
			HVP=120				
	1.50	B					
	1.50	D					
				2.20			Brown very clayey angular fine to coarse GRAVEL of sandstone. (COAL MEASURES)
							Groundwater inflow in base of pit at 2.8m depth.
				2.80			End of pit at 2.80 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent as an inflow at 2.8m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP448**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418498.39 - 425033.62 Level:	Date 15/01/2019
Location: Cleckheaton		Dimensions (m): 3.2 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.30	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							MADE GROUND: Black ashy gravelly SAND. Gravel is angular fine to coarse of clinker. (ASH & CLINKER)
				0.80			MADE GROUND: Orangish brown and grey mottled gravelly CLAY. Gravel is angular fine to coarse of sandstone. (COHESIVE MADE GROUND)
				1.10			MADE GROUND: Pinkish red ashy gravelly SAND. Gravel is angular fine to coarse of clinker, burnt shale and brick. (ASH & CLINKER)
				1.50			MADE GROUND: Black ashy gravelly SAND. Gravel is angular fine to coarse of clinker. (ASH & CLINKER)
							Groundwater inflow at 3.3m depth.
				3.30			End of pit at 3.30 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent as an inflow at 3.3m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit were unstable between ground level and 3.3m depth during excavation.

Trial Pit Log

Trialpit No **TP449**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418505.51 - 425029.92 Level:	Date 15/01/2019
Location: Cleckheaton		Dimensions (m): 3.2 × 0.6	Scale 1:25
Client: Strata Homes		Depth 2.90	Logged JEJ

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.10			MADE GROUND: Grass over purplish red sandy angular fine to medium GRAVEL of limestone. (GRANULAR MADE GROUND)
				0.40			MADE GROUND: Black gravelly SAND. Gravel is angular fine to coarse of brick, concrete and sandstone. (GRANULAR MADE GROUND)
				0.60			MADE GROUND: Orangish brown mottled grey gravelly CLAY. Gravel is angular fine to coarse of sandstone. (COHESIVE MADE GROUND)
							MADE GROUND: Black ashy gravelly SAND. Gravel is angular fine to coarse of clinker and burnt shale. (ASH & CLINKER)
				1.20			Firm orangish brown mottled grey gravelly CLAY. Gravel is angular fine to coarse of mudstone. (COHESIVE RESIDUAL SOIL) *No blocks for vane between 1.2m and 2.0m depth.*
				2.00			Brown very clayey angular fine to coarse GRAVEL of mudstone. (GRANULAR RESIDUAL SOIL) *Groundwater inflow at 2.9m depth.*
				2.90			End of pit at 2.90 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent as an inflow at 2.9m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Co-ordinates from hand held GPS, hole not surveyed in.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP501**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418240.33 - 425055.83 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.80	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.40	J&T					MADE GROUND: Black mottled red sandy angular fine to coarse GRAVEL of concrete, brick, sandstone and pottery. Some gravel sized fragments of plastic and wood. Medium subangular cobble content of brick and sandstone. Occasional rootlets. (GRANULAR MADE GROUND) *From 0.0m to 1.5m, A glass fibre storage tank with 'oily' black sludge in the base.*
				0.70			MADE GROUND: Black sandy slightly clayey angular fine to coarse GRAVEL of concrete and brick. Low subangular cobble content of brick. Occasional gravel to cobble sized fragments of plastic and metal. (GRANULAR MADE GROUND) *At 1.1m, An oily odour.*
	1.20	J&K					
				1.50			MADE GROUND: Firm grey mottled brown gravelly CLAY with rare metal pipe. Gravel is subangular to angular fine to medium of sandstone and mudstone. (COHESIVE MADE GROUND) *From 2.8m, Clay becomes stiff and very gravelly.*
	1.80	J,K&T					
			HVP=82				
				3.30			MADE GROUND: Greyish brown mottled red slightly clayey slightly gravelly fine to coarse SAND. Gravel is angular fine to medium of brick, burnt shale, concrete and sandstone. (GRANULAR MADE GROUND)
	3.60	J,K&T					
				3.80			End of pit at 3.80 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP502**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418243.08 - 425042.59 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 4.50	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							MADE GROUND: Black sandy angular fine to coarse GRAVEL of macadam, sandstone, brick and burnt shale. (HARDCORE) *From 0.2m to 0.3m, A layer of red sandy angular tabular fine to medium gravel of burnt shale.*
				0.30			MADE GROUND: Black mottled red sandy angular fine to coarse GRAVEL of burnt shale, coal, sandstone and rare glass. High subangular cobble content of brick. Some gravel sized fragments of wood and metal. (BRICKFILL) *From 0.6m, Overbreak due to house bricks.*
	0.80	J&T					
				1.60			MADE GROUND: Yellow sandy angular fine to coarse GRAVEL of coarse grained sandstone. (GRANULAR MADE GROUND)
				2.40			MADE GROUND: Yellowish grey gravelly SAND. Gravel is subangular fine to medium of sulphurous oxides. (FILTER SAND)
	2.80	J,K&T					
				4.50			End of pit at 4.50 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit were unstable at 0.6m depth during excavation with some overbreak in the granular strata.

Trial Pit Log

Trialpit No **TP503**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418240.69 - 425026.43 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 4.20	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.20	J&T					MADE GROUND: Black slightly silty sandy fine to coarse GRAVEL of macadam, brick and sandstone. Sand includes ash. (HARDCORE)
				0.40			MADE GROUND: Red sandy angular fine to coarse GRAVEL of burnt shale. (BURNT SHALE)
	0.80	J&T					
				1.00			MADE GROUND: Greyish white slightly gravelly SAND. Gravel is fine to medium of sulphurous oxides and occasional sandstone, mudstone and limestone. (FILTER SAND) *From 1.0m to 3.4m, Overbreak.*
	1.50	J&T					*From 1.5 to 2.1m, A poorly bonded brick wall on a concrete footing orientated east-west.*
				1.80			MADE GROUND: Black sandy angular fine to coarse GRAVEL of brick and burnt shale. High subangular cobble content of brick. (BRICKFILL)
				2.90			MADE GROUND: Soft greyish brown slightly sandy slightly gravelly CLAY. Gravel is angular fine to medium of sandstone and mudstone. Rare subangular cobbles of brick. (COHESIVE MADE GROUND)
▼							*At 3.8m, groundwater inflow.*
				4.20			End of pit at 4.20 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent at 3.8m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit were unstable between 1.0m to 3.4m depth during excavation with some overbreak in the granular strata.

Trial Pit Log

Trialpit No **TP504**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418256.43 - 425026.94 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.40	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.10			MADE GROUND: Black silty slightly gravelly SAND. Gravel is angular fine to medium of burnt shale, macadam and sandstone. (HARDCORE)
	0.60	J,K&T					MADE GROUND: Red sandy angular tabular fine to coarse GRAVEL of burnt shale. (BURNT SHALE)
				0.80			MADE GROUND: Black mottled red slightly clayey angular fine to coarse GRAVEL of brick, burnt shale and clinker. High subangular cobble content of brick and occasional burnt shale. (BRICKFILL)
	1.00 - 1.40	D&B					*From 1.0m to 1.2m, A pocket (0.3m) of yellow sandy gravel of sandstone.*
	1.20	J,K&T					
				1.40			Strong grey CONCRETE. 60% aggregate of subangular fine gravel of predominantly brick. 40% cement matrix. Rare small irregular isolated voids. (CONCRETE)
				1.50			MADE GROUND: Black sandy angular fine to medium GRAVEL of brick, concrete and mudstone. High subangular cobble content of brick. with a high cobble content. Gravel is of brick, concrete and shale. Cobbles of brick. (GRANULAR MADE GROUND)
							From 1.5m to 2.3m, A poorly bonded brick wall, 0.4m wide oriented north-south in face of pit.
							At 3.4m, Possible bedrock - Unable to excavate further.
				3.40			End of pit at 3.40 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP505**

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418288.31 - 425033.93 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6 Depth 5.20	Scale 1:25
Client: Strata Homes			Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.20	J&T		0.30			MADE GROUND: Red sandy angular tabular fine to coarse GRAVEL of burnt shale. (BURNT SHALE) *From 0.0m to 0.03m, A veneer of black silty angular fine to medium gravel of tarmac and burnt shale.*
	0.80	J,K&T					MADE GROUND: Black mottled red sandy angular fine to coarse GRAVEL of brick, burnt shale, coal, sandstone and concrete. High subangular cobble content of brick. Some gravel to cobble sized fragments of metal, wood, fabric and plastic. (GRANULAR MADE GROUND) *From 0.3m to 4.5m, Overbreak.*
							At 1.3m, Tabular, angular gravel, cobbles and boulders of sandstone.
	2.10	K					*At 2.0m, Sandstone block work cemented with bitumen.*
	2.60	J,K&T		2.40			MADE GROUND: Yellowish grey slightly gravelly SAND. Gravel is subangular fine to medium of sandstone and occasional coal. (GRANULAR MADE GROUND)
	3.80	J,K&T		2.90			MADE GROUND: Black mottled reddish brown sandy angular fine to coarse GRAVEL of clinker, brick, coal and sandstone. (GRANULAR MADE GROUND) *At 3.8m, A pocket of soft grey mottled orange and yellow slightly gravelly CLAY. Gravel is angular fine of mixed lithologies.*
	4.80	J,K&T					

Continued on next sheet

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit were unstable between 0.3m to 4.5m depth during excavation with some overbreak in the granular strata.

Trial Pit Log

Trialpit No **TP505**

Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418288.31 - 425033.93 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 5.20	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				5.20			End of pit at 5.20 m

6 7 8 9 10

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit were unstable between 0.3m to 4.5m depth during excavation with some overbreak in the granular strata.

Trial Pit Log

Trialpit No **TP506**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418315.62 - 425050.68 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 2.80	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.40	J&T					MADE GROUND: Black mottled red sandy angular fine to coarse GRAVEL of brick, macadam and burnt shale. Medium subangular cobble content of brick. (GRANULAR MADE GROUND)
	0.50 - 1.00	D&B					*At 0.5m, Solid concrete obstruction, pit extended west.*
							At 1.2m, Vitrified stone drain struck with inflow of water, hole moved 2.0m south.
				1.30			MADE GROUND: Greyish yellow slightly clayey sandy angular fine to medium GRAVEL of concrete. (GRANULAR MADE GROUND)
	1.50	J&T					
				1.60			Firm brown mottled grey gravelly CLAY. Gravel is angular fine to medium of sandstone and mudstone. (COHESIVE RESIDUAL SOIL)
	1.80	J&T					
			HVP=70				
	2.30	D					
				2.50			Weak thickly laminated yellowish brown fine grained SANDSTONE. Recovered as sandy angular fine to coarse gravel. (COAL MEASURES)
				2.80			*At 2.8m, Bedrock - Unable to excavate further.*
							End of pit at 2.80 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP507**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418309.35 - 425035.38 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 2.00	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.10			Moderately weak black MACADAM. 70% aggregates. 30% tar matrix. Rare small irregular isolated voids. (MACADAM)
	0.30	J&T		0.40			MADE GROUND: Red sandy angular tabular fine to coarse GRAVEL of burnt shale. (GRANULAR MADE GROUND)
							MADE GROUND: Black sandy angular fine to coarse GRAVEL of brick, concrete, burnt shale and clinker. Low subangular cobble content of brick. (GRANULAR MADE GROUND) *At 0.7m, 100mm diameter metal pipe.*
	1.00	J&T		1.00			Strong pale grey CONCRETE. 70% aggregate of subangular fine to medium gravel of predominantly brick. 30% cement with rare small voids. (CONCRETE)
				1.40			MADE GROUND: Black sandy angular fine to coarse GRAVEL of brick and concrete. (GRANULAR MADE GROUND) *From 1.5m to 2.7m, Arched brick lined tunnel, orientated north to south.*
				1.70			MADE GROUND: Soft orange mottled brown sandy CLAY. (COHESIVE MADE GROUND) *At 1.7m, brick wall in centre of pit - void of tunnel to the west and soft yellowish brown clay to the east.*
				2.00			End of pit at 2.00 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP508**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418302.84 - 425015.78 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.20	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.20	J,K&T					MADE GROUND: Black gravelly CLAY. With gravel sized fragments of plastic. Gravel is subangular fine of brick, clinker, glass and tile. (COHESIVE MADE GROUND) *From 0.0m to 2.2m, occasional roots and rootlets.*
	0.40 - 1.00	D&B		0.30			MADE GROUND: Black sandy angular fine to coarse GRAVEL of brick, tarmac, concrete and clinker with a low cobble content, glass, wire, metal and plastic. Cobbles are of house bricks. (GRANULAR MADE GROUND) *At 0.7m, Pocket of firm to stiff gravelly clay. Gravel is angular fine to coarse of sandstone, mudstone and brick.*
	0.60	J,K&T					
				1.20			MADE GROUND: Red sandy angular tabular fine to coarse GRAVEL of burnt shale. (BURNT SHALE)
	1.40	J,K&T					
				1.60			MADE GROUND: Yellowish grey slightly gravelly SAND. Gravel is of sulphur. (FILTER SAND) *From 1.6m to 2.3m, Brick lined tunnel with arched roof with vertical wall, orientated north-south in the east of the pit.*
	2.00	J,K&T					
				2.20			MADE GROUND: Soft red sandy CLAY. (COHESIVE MADE GROUND) *At 3.2m, Obstruction, possible bedrock - Unable to excavate further.*
	2.30	J,K&T					
				3.20			End of pit at 3.20 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP509**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418296.58 - 425030.11 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.30	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.50	J,K&T					MADE GROUND: Brown mottled black slightly gravelly SAND with rootlets. Gravel is subangular to angular fine to coarse of clinker, brick and burnt shale. (GRANULAR MADE GROUND)
				1.20			MADE GROUND: Yellowish grey mottled red slightly gravelly SAND. Gravel is subangular fine to coarse of brick, limestone and sandstone. (GRANULAR MADE GROUND)
	1.70	J,K&T					
	2.00 - 2.50	D&B					
				2.90			Firm red mottled brown slightly sandy CLAY. (COHESIVE RESIDUAL SOIL)
	3.00	J,K&T					
	3.10	D					
				3.30			End of pit at 3.30 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP510**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418268.96 - 425022.78 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 1.90	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	J,K&T					MADE GROUND: Red sandy angular fine to coarse GRAVEL of burnt shale. Some rootlets. (BURNT SHALE)
				0.30			MADE GROUND: Dark brown sandy angular fine to coarse GRAVEL of concrete, bitumen, brick and pottery. Occasional gravel sized fragments of wood and metal. Low subangular cobble content of brick. (GRANULAR MADE GROUND)
	0.90	J,K&T					
							At 1.7m, Sandstone boulder.
				1.90			End of pit at 1.90 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP511**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418275.24 - 425009.41 Level:	Date 15/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 1.90	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.50	J,K&T					MADE GROUND: Black mottled red sandy angular fine to coarse GRAVEL of brick, tile, sandstone, glass and concrete. Occasional fragments of plastic, metal and wire. Medium subangular cobble content of brick. (BRICKFILL)
	0.80 - 1.30	D&B					*At 1.3m, Angular sandstone boulder.*
				1.60			Medium strong white thickly bedded SANDSTONE. Recovered as angular fine to coarse gravel with a high cobble content. (COAL MEASURES)
				1.90			*At 1.9m, Bedrock - Unable to excavate further.* End of pit at 1.90 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

LITHOS CONSULTING			Trialpit No **TP512** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418317.61 - 424988.87 Level:	Date 16/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6 Depth 2.40	Scale 1:25
Client: Strata Homes			Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.20	J,K&T		0.30			MADE GROUND: Dark brown organic rich slightly gravelly CLAY. Gravel is angular fine to medium of brick, burnt shale and glass. Frequent rootlets and gravel sized fragments of plastic and metal. Low subangular cobble content of brick. (MADE GROUND TOPSOIL)
	0.90	J,K&T					MADE GROUND: Dark reddish brown gravelly SAND. Gravel is angular fine to coarse of brick, coal and glass. Some gravel sized fragments of plastic, metal and cement sheeting (possible ACM). Medium subangular cobble content of brick and concrete. (GRANULAR MADE GROUND) *From 0.3m to 2.4m, Overbreak.*
	1.00	T					*At 1.4m, Pocket of burnt shale.*
				1.70			Moderately weak pale grey CONCRETE. 70% aggregate of angular medium gravel of sandstone. 30% cement. Rare small irregular isolated voids. (CONCRETE)
				1.90			MADE GROUND: Black mottled red gravelly SAND with some gravel sized fragments of wood and bitumen. Gravel is angular to subangular fine to coarse of brick, burnt shale and clinker. High subangular cobble content of brick. (GRANULAR MADE GROUND)
	2.30	J,K&T		2.40			*From 1.9m to 2.4m, Possible weak bonded brick footing (0.4m wide) orientated east to west.* *At 2.4m, Faint oil odour.* *At 2.4m, Obstruction - Unable to excavate further.* End of pit at 2.40 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit were unstable between 0.3m to 2.4m depth during excavation with some overbreak in the granular strata.

AGS

Trial Pit Log

Trialpit No **TP513**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418265.82 - 424992.03 Level:	Date 16/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 5.00	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.50 0.50 - 1.00	J,K&T D&B					MADE GROUND: Black mottled red gravelly SAND. Gravel is subangular to subrounded fine to coarse of clinker, brick, burnt shale, sandstone, coal and concrete. High subangular cobble content of brick, vitrified stoneware and concrete. (GRANULAR MADE GROUND) *From 0.0m to 3.0m, Pit wall collapse.* *From 0.3m to 2.0m, Overbreak.* *From 1.3m to 2.3m, Well bonded brick wall orientated east to west.* *At 1.3m, brick tunnel entrance with arched roof (1.0m tall x 0.8m wide).* *At 1.9m, Sandstone and concrete boulders.*
	2.90	J,K&T		2.70			MADE GROUND: Soft light grey mottled white sandy CLAY with rare greyish white angular fine to coarse gravel of sandstone. (COHESIVE MADE GROUND) *At 2.8m, Poorly bonded brick wall orientated north to south in east of pit.*
▼	4.00 4.10	J,K&T D	HVP=70 HVP=65	3.80			MADE GROUND: Firm locally soft grey mottled yellow gravelly sandy slightly CLAY. Gravel is angular fine to medium of sandstone and coal. (COHESIVE MADE GROUND) *At 3.8m, Groundwater seepage.*
	4.50 4.80	J,K&T D	HVP=85	4.40			Firm grey mottled brown gravelly CLAY. Gravel is angular fine to medium of mudstone lithorelicts. (COHESIVE RESIDUAL SOIL) *At 5.0m, Full reach of excavator - Unable to excavate further.*
				5.00			End of pit at 5.00 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater seepage was apparent at 3.8m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit were unstable between 0.3m to 2.0m depth during excavation with some overbreak in the granular strata.

Trial Pit Log

Trialpit No **TP514**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418295.21 - 424987.53 Level:	Date 16/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 4.50	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.30	J,K&T		0.40			MADE GROUND: Black gravelly CLAY. Grave is angular fine to medium of brick, sandstone coal, burnt shale and occasional glass. Occasional gravel to cobble sized fragments of wood and metal. Low subangular cobble content of brick. (COHESIVE MADE GROUND)
				0.60			Moderately weak pale grey CONCRETE. 70% aggregate of angular fine gravel of sandstone and brick. 30% cement matrix. Rare small irregular voids. (CONCRETE)
	0.70	J,K&T		0.80			MADE GROUND: Red mottled white sandy angular tabular fine to coarse GRAVEL of burnt shale and sandstone. (BURNT SHALE)
	0.90	J,K&T					MADE GROUND: Multicoloured (black, yellow & red) very clayey sandy angular fine to coarse GRAVEL of sandstone, brick, limestone, burnt shale and coal. (GRANULAR MADE GROUND)
	1.00 - 1.50	D&B					
				2.00			MADE GROUND: Poorly bonded brick and mortar relict floor with black bitumen lining on surface. (BRICKFILL)
				2.20			MADE GROUND: Black sandy gravelly angular fine to medium CLAY. Gravel is angular to subangular fine to coarse of brick, burnt shale and glass. (COHESIVE MADE GROUND)
							At 2.6m, Strata becomes blueish green mottled black.
	2.80	J,K&T					*At 2.8m, Slight odour.*
				3.00			Soft black slightly sandy CLAY. (COHESIVE MADE GROUND)
							From 3.0m, Strata has an oily sheen, smells strongly of oil.
	3.30	J,K&T					
				3.50			Soft grey mottled orange sandy CLAY. (COHESIVE RESIDUAL SOIL)
				4.20			Firm grey mottled orange very gravelly CLAY. Gravel is angular fine to coarse of mudstone lithorelicts. (COHESIVE RESIDUAL SOIL)
	4.40	J&K					
				4.50			End of pit at 4.50 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP515**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418349.46 - 425030.91 Level:	Date 16/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.70	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	J&T		0.20			MADE GROUND: Blackish brown clay slightly gravelly SAND. Gravel is angular fine to medium of brick, burnt shale and concrete. Occasional gravel sized fragments of plastic and occasional rootlets. Low subangular cobble content of brick. (GRANULAR MADE GROUND)
	0.40	J&T		0.70			MADE GROUND: Orangish red slightly gravelly ash SAND. Gravel is angular fine to coarse of clinker. (ASH & CLINKER)
	0.80	J&T		1.00			MADE GROUND: Yellowish brown mottled black gravelly slightly sandy CLAY. Gravel is angular fine to coarse of brick, burnt shale and clinker. (COHESIVE MADE GROUND)
	1.80	J&T		3.70			MADE GROUND: Black mottled orange gravelly ash SAND. Gravel is angular fine to coarse of clinker. (ASH & CLINKER) End of pit at 3.70 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP516**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418436.46 - 424978.70 Level:	Date 16/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 4.00	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.10			MADE GROUND: Black silty angular fine to coarse GRAVEL of brick, coal and ash. (HARDCORE)
	0.30	J&T		0.40			MADE GROUND: Black mottled red gravelly SAND. Rare fragments of plastic. Gravel is subangular fine to coarse of brick, mortar, concrete and sandstone. High subangular cobble content of brick. (BRICKFILL)
	0.80	J&T					MADE GROUND: Black mottled orangish brown gravelly SAND. Gravel is subangular to angular fine to coarse of brick, clinker, coal and mudstone. (ASH & CLINKER)
							From 1.4m to 3.2, Overbreak.
	1.90	D&B					*From 2.0m, Low cobble content. Cobbles are angular of brick, concrete and shale.*
				3.20			MADE GROUND: Orange slightly gravelly angular fine to medium SAND. Gravel is of clinker and sandstone. (GRANULAR MADE GROUND)
	3.40	J&T					
				4.00			End of pit at 4.00 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit were unstable between 1.4m to 3.2m depth during excavation with some overbreak in the granular strata.

Trial Pit Log

Trialpit No **TP517**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: - Level:	Date 16/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.40	Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.20	J&T		0.30			MADE GROUND: Black slightly gravelly CLAY. Gravel is angular fine to coarse of brick and concrete. Low subangular cobble content of brick and concrete. Some rootlets. (MADE GROUND TOPSOIL) *At 0.2m, sulphurous odour.*
	0.50	J&T		0.60			MADE GROUND: Black slightly gravelly SILT. Gravel is angular fine of brick and coal. (COHESIVE MADE GROUND)
	0.90	D		2.10			Firm grey mottled orangish brown gravelly CLAY. Gravel is subangular fine to medium of sandstone and mudstone. (COHESIVE RESIDUAL SOIL) *At 0.7m, Too gravelly for hand vane.* *At 0.8m, Dry 150mm diameter cast iron pipe.*
	2.40	D		3.20			Stiff grey mottled orangish brown gravelly CLAY. Gravel is angular fine to coarse of sandstone, mudstone and coal. (COHESIVE RESIDUAL SOIL)
				3.40			Weak whitish yellow SANDSTONE. Recovered as clayey angular fine to coarse gravel with a low cobble content. (COAL MEASURES) *At 3.4m, Bedrock - Unable to excavate further.* End of pit at 3.40 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

LITHOS CONSULTING			Trialpit No **TP518** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418427.13 - 425097.75 Level:	Date 16/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6 Depth 3.90	Scale 1:25
Client: Strata Homes			Logged AP

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.10			MADE GROUND: Dark brown gravelly CLAY with frequent rootlets. Gravel is angular fine to coarse of sandstone, brick, tile and limestone. (MADE GROUND TOPSOIL)
	0.20	J&T					
				0.30			MADE GROUND: Reddish brown sandy fine to coarse GRAVEL. Low cobble content. Gravel is angular fine to medium of brick and sandstone. Cobbles are of brick. (GRANULAR MADE GROUND)
	0.40	J&T					
				0.50			MADE GROUND: Black gravelly SAND. Gravel is angular fine to medium of brick, clinker, coal and glass with rare house brick. (GRANULAR MADE GROUND)
	1.00	J&T					MADE GROUND: Firm locally stiff grey mottled orange gravelly CLAY. Gravel is angular fine to coarse of brick, mudstone, sandstone, coal and burnt shale. (COHESIVE MADE GROUND) *At 0.9m, Lens of blackish brown gravelly clay.*
				1.60			MADE GROUND: Black fine SAND. (GRANULAR MADE GROUND) *At 1.8m, An oily odour.*
	2.00	J,K&T					
				2.30			Stiff grey mottled orange gravelly CLAY. Gravel is angular fine to coarse of sandstone and mudstone. (COHESIVE RESIDUAL SOIL) *At 2.5m, Groundwater seepage.*
▼			HVP=80				
	2.70	J,K&T					
	2.80	D					
				3.30			Stiff reddish brown gravelly CLAY. Gravel is angular fine to medium of coal, mudstone and sandstone. (COHESIVE RESIDUAL SOIL)
	3.60	D	HVP=92				*At 3.9m, Scratching on bedrock.*
				3.90			End of pit at 3.90 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater seepage was apparent at 2.5m depth during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

AGS

Trial Pit Log

Trialpit No **TP519**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418356.81 - 425144.06 Level:	Date 26/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 2.40	Logged GLM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05	T		0.06			Medium strong dark grey MACADAM. 60% aggregate of subangular fine to medium gravel. 10% Tar matrix. 30% small to medium irregular interconnected voids. (HARDSTAND)
				0.15			MADE GROUND: Brown sandy subangular fine GRAVEL of sandstone. (GRANULAR MADE GROUND)
	0.30	J,K&T					MADE GROUND: Dark grey and brown SAND and subangular to subrounded fine to coarse GRAVEL of clinker and occasional brick, sandstone and mortar. Low subrounded to subangular cobble content of brick and clinker. (ASH & CLINKER)
				0.70			Firm light brown mottled grey slightly sandy CLAY. (COHESIVE RESIDUAL SOIL)
	0.90	D	HVP=60 HVP=72				
				1.40			Brown mottled grey very gravelly CLAY. Gravel is angular, tabular medium of sandstone. (COHESIVE RESIDUAL SOIL)
				2.00			Medium strong grey fine to medium grained SANDSTONE. Recovered as slightly clayey slightly sandy angular tabular fine to medium gravel. (COAL MEASURES)
				2.40			*At 2.4m, refusal.*
							End of pit at 2.40 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP520**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418324.38 - 425140.59 Level:	Date 26/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 2.90	Logged GLM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10	J,K&T		0.25			Medium strong dark grey MACADAM. 70% aggregate of subangular fine gravel. 10% Tar matrix. 20% small irregular isolated voids. (HARDSTAND)
	0.40	J,K&T		0.70			MADE GROUND: Yellowish brown sandy subangular fine to medium GRAVEL of sandstone. (GRANULAR MADE GROUND) *At 0.25m, poorly bonded brick and mortar wall in East wall of pit.*
			HVP=56	1.80			MADE GROUND: Dark grey very sandy subrounded fine to medium GRAVEL of clinker and occasional slag, brick, sandstone and mortar. (ASH & CLINKER)
	2.00	D		2.60			Firm brown mottled grey gravelly slightly sandy CLAY. Gravel is angular to subangular tabular medium of sandstone. (COHESIVE RESIDUAL SOIL)
				2.90			Medium strong yellowish grey fine grained SANDSTONE. Recovered as angular, tabular fine to medium gravel. (COAL MEASURES) *At 2.9m, refusal.* End of pit at 2.90 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP521**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418340.52 - 425165.21 Level:	Date 26/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 2.00	Logged GLM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05	T		0.06			Moderately weak dark grey MACADAM. 70% subangular fine gravel. 20% Tar matrix. 10% small irregular isolated voids. Surfaced with subangular to subrounded fine to medium quartz gravel. (HARDSTAND)
	0.40	J,K&T		0.20			MADE GROUND: Reddish brown poorly bonded cobbles of brick with mortar. (BRICKFILL)
				0.95			MADE GROUND: COARSE SOIL: Angular tabular COBBLES and rare small boulders of sandstone and occasional brick. With much finer content of sandy subangular to angular fine to coarse gravel of sandstone, brick and mortar. (BRICKFILL)
				1.30			Firm light brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is subangular, tabular fine to medium of sandstone. (COHESIVE RESIDUAL SOIL)
				1.80			Stiff brown mottled grey gravelly CLAY. Gravel is angular medium to coarse of SANDSTONE. (COHESIVE RESIDUAL SOIL)
				2.00			Medium strong grey fine to medium grained SANDSTONE. Recovered as slightly clayey angular fine gravel. (COAL MEASURES) *At 1.9m, refusal.*

End of pit at 2.00 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP522**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418351.57 - 425121.20 Level:	Date 26/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.60	Logged GLM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.03	T		0.05			Medium strong dark grey MACADAM. 70% aggregate of subangular fine gravel. 20% Tar matrix. 10% small irregular isolated voids. (HARDSTAND)
	0.50	J,K&T					MADE GROUND: Dark brown gravelly ash SAND. Gravel is subangular to subrounded fine to coarse of brick, mortar and clinker. Medium subangular cobble content of brick. (ASH & CLINKER) *From 0.2m to 1.0m, poorly bonded brick and mortar wall runs North to South through centre of pit.*
				0.90			Firm light brown mottled grey CLAY. (COHESIVE RESIDUAL SOIL)
			HVP=70				
	1.20	D	HVP=74				*From 1.8m to 2.5m, poorly bonded bricks and angular, tabular cobbles of sandstone in north wall.*
				2.00			Firm brown mottled grey gravelly CLAY. Gravel is angular medium to coarse of SANDSTONE. (COHESIVE RESIDUAL SOIL)
				3.60			End of pit at 3.60 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP523**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418448.28 - 425057.31 Level:	Date 26/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.80	Logged GLM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.20	J,K&T		0.40			MADE GROUND: Dark brown gravelly ash SAND and subangular to subrounded fine to medium GRAVEL of clinker and occasional slag, burnt shale and mudstone. (ASH & CLINKER)
	0.50	J,K&T		1.30			MADE GROUND: Yellowish brown SAND and subangular to subrounded fine to medium GRAVEL of predominantly sandstone and occasional brick, clinker and burnt shale. (GRANULAR MADE GROUND)
	1.50	J,K&T		3.80			MADE GROUND: Purplish brown very sandy subangular to rounded fine to coarse GRAVEL of clinker, slag, concrete and mudstone. Sand is predominantly of ash. Rare gravel sized fragments of wood. Low subangular cobble content of brick. (ASH & CLINKER)
							End of pit at 3.80 m

1 2 3 4 5

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP524**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418299.06 - 424958.83 Level:	Date 26/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.50	Logged GLM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.50	J,K&T					MADE GROUND: Greyish brown gravelly slightly clayey SAND. Gravel is subangular to subrounded fine to coarse of brick with occasional mortar, concrete and sandstone. Low subangular cobble content of brick. Occasional gravel to cobble sized fragments of plastic, wood and metal sheet. (GRANULAR MADE GROUND)
				2.00			MADE GROUND: Grey mottled light brown CLAY. Open fissures with sand and gravel fill. Seepage of groundwater with hydrocarbon smell and blackish grey staining along fissures. (COHESIVE MADE GROUND)
▼	2.30	J,K&T					*At 2.2m, groundwater seepage.*
				2.70			MADE GROUND: Black angular to subangular fine to medium GRAVEL of mudstone and occasional clinker, brick and burnt shale. Occasional gravel to cobble sized fragments of timber and metal. (GRANULAR MADE GROUND)
	3.00	J,K&T					
				3.50			End of pit at 3.50 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was apparent at 2.2m during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP525**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418282.60 - 424946.09 Level:	Date 26/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 3.40	Logged GLM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.70	J,K&T					MADE GROUND: COARSE SOIL: Subangular COBBLES of brick and occasional mortar, concrete and sandstone with many subangular small to large BOULDERS of concrete and well bonded brick and mortar. With much finer material of sandy slightly clayey angular to subangular fine to coarse gravel of brick and concrete. With some gravel sized fragments of wire, metal, plastic and wood. (BRICKFILL) *From 0.1m to 1.8m, overbreak and spalling.* *From 1.0m to 1.8m, brick and concrete structure in South of pit.*
				1.80			MADE GROUND: Very soft black SILT. (COHESIVE MADE GROUND)
	2.00	J,K&T					
▼							*At 2.8m, groundwater inflow.*
	3.00	J					
				3.40			End of pit at 3.40 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater inflow was apparent at 2.8m during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit were unstable between 0.1m and 1.8m depth during excavation with some overbreak in the granular strata.

Trial Pit Log

Trialpit No **TP526**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418384.27 - 424970.95 Level:	Date 26/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 0.37	Logged GLM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.10			MADE GROUND: Grey slightly silty sandy subangular fine to coarse GRAVEL of macadam chippings and mixed lithologies. (HARDCORE)
				0.30			MADE GROUND: Dark brownish grey SAND and subangular fine to coarse GRAVEL of concrete and occasional sandstone, limestone and burnt shale. (GRANULAR MADE GROUND)
				0.37			Grey CONCRETE. (CONCRETE)
							0.37m, unable to excavate further into concrete obstruction.
							End of pit at 0.37 m

1
2
3
4
5

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP527**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418385.60 - 424951.92 Level:	Date 26/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6 Depth 0.41	Scale 1:25
Client: Strata Homes			Logged GLM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.40			MADE GROUND: Greyish brown very sandy angular to subangular fine to coarse GRAVEL of brick, concrete, sandstone and occasional mortar and burnt shale. Medium subangular cobble content of sandstone and brick. (HARDCORE)
				0.41			Grey CONCRETE. (CONCRETE) *0.41m unable to excavate further into concrete obstruction.* End of pit at 0.41 m

1
2
3
4
5

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Trial Pit Log

Trialpit No **TP528**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418327.80 - 424931.21 Level:	Date 26/09/2020
Location: Cleckheaton		Dimensions (m): 2.5 × 0.6	Scale 1:25
Client: Strata Homes		Depth 2.00	Logged GLM

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.10			MADE GROUND: Buff slightly sandy subangular to subrounded fine to medium GRAVEL of limestone. (GRANULAR MADE GROUND)
							MADE GROUND: Dark brown slightly sandy subangular to subrounded fine to medium GRAVEL of clinker and occasional mudstone and burnt shale. (ASH & CLINKER)
				0.90			Light brown very clayey slightly sandy subrounded fine to medium GRAVEL of sandstone. (GRANULAR ALLUVIUM)
							At 1.8m, stone culvert exposed with groundwater ingress.
				2.00			End of pit at 2.00 m

Remarks: 1. Prior to excavation a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during excavation. 3. Backfilled with materials arising upon completion. 4. Exploratory hole surveyed in (level and co-ordinates) on completion.

Stability: 1. The sides of the trial pit remained stable during excavation.

Appendix G

Borehole Logs

Borehole Log

Borehole No. **BH501**

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418246E - 425050N	Hole Type CP
Location: Cleckheaton		Level: 100.85 m AOD	Scale 1:50
Client: Strata Homes		Dates: 14/09/2020	Logged By GLM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description	
					0.15	100.85 100.70		MADE GROUND: Greyish brown sandy slightly silty subangular fine to medium GRAVEL of macadam, concrete and occasional brick and pottery. (GRANULAR HARDCORE)	
		1.00 1.20	S D	N=6 (1,1/1,2,1,2)	1.10	99.75		MADE GROUND: Dark grey slightly silty ash SAND and subangular to subrounded fine to medium GRAVEL of clinker and occasional burnt shale. Medium cobble content of subangular brick. (ASH & CLINKER) *0.9m borehole drilled through timber obstruction.*	1
					1.50	99.35		MADE GROUND: Brown sandy gravelly CLAY. Gravel is subangular fine to coarse of brick, mudstone and clinker. Sand includes ash. (COHESIVE MADE GROUND)	
		2.00 2.00	D S	N=3 (3,2/1,1,0,1)				MADE GROUND: Reddish brown very sandy slightly clayey subangular fine to coarse GRAVEL of concrete, sandstone and brick. Likely with high cobble content of brick and concrete when in-situ. (GRANULAR MADE GROUND)	2
					2.60	98.25		MADE GROUND: Red and grey gravelly ash SAND. Gravel is subangular fine to coarse of brick, concrete, clinker and sandstone. (ASH & CLINKER)	
		3.00 3.00	D S	N=3 (1,1/1,1,0,1)					3
		4.00 4.00 - 5.00 4.00	D D&B S	N=6 (1,1/1,1,2,2)	4.00	96.85		MADE GROUND: Grey very clayey gravelly SAND. Gravel is subrounded fine to medium of mudstone, pottery and occasional burnt shale and brick. With sulphurous smell throughout. (FILTER SAND)	4
		5.00 5.00	D S	N=40 (5,4/7,9,9,15)	5.20	95.65		MADE GROUND: Black SAND and subangular fine to medium GRAVEL of coal, clinker and mudstone. Sand includes coal dust and ash. (ASH & CLINKER)	5
		5.80	D		5.80	95.05		MADE GROUND: Greyish brown slightly sandy subangular fine to coarse GRAVEL of sandstone and occasional pottery and concrete. (GRANULAR MADE GROUND) *5.8m groundwater struck. Rose to 4.85m in 5 minutes.*	
		6.00 6.00	D S	N=30 (4,5/7,7,7,9)	6.20	94.65			6
					7.20	93.65		MADE GROUND: Firm brown and grey gravelly CLAY. Gravel is subangular medium of sandstone and occasional pottery and clinker. (COHESIVE MADE GROUND)	7
		7.50 7.50 7.60	D S J,K&T	N=16 (17,10/4,4,4,4)				MADE GROUND: Brown subangular fine to coarse GRAVEL of sandstone. (GRANULAR MADE GROUND) *from 7.6m faint hydrocarbon smell during drilling.*	8
								From 8.3m gravel predominantly comprises mudstone.	
		9.00 9.00	D S	N=16 (3,4/5,4,4,3)					9
									10

Continued on Next Sheet

Remarks

1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was encountered at 5.8m and rose to 4.85m after 5 minutes. 3. The borehole was advanced by chiselling from 10.7m to 11.0m (0.5 hours).

Borehole Log

Borehole No. **BH501**

Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords: 418246E - 425050N
Location:	Cleckheaton		Level: 100.85 m AOD
Client:	Strata Homes		Dates: 14/09/2020

Hole Type: CP

Scale: 1:50

Logged By: GLM

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results			Depth (m)	Level (m)	Legend	Stratum Description
		10.50 10.50	D S	50 (4,3/50 for 245mm)			10.70	90.15		MADE GROUND: Brown subangular fine to coarse GRAVEL of sandstone. (GRANULAR MADE GROUND)
		11.20 - 11.50	C	93	40	0	11.20	89.65		Medium strong grey fine grained SANDSTONE. (COAL MEASURES)
		11.50 - 13.00	2	84	30 (25 for 125mm/30 for 275mm)	0	11.70	89.15		Recovered as: subangular medium GRAVEL of grey fine grained SANDSTONE. (COAL MEASURES) *11.5m unable to advance further into bedrock using percussive methods. Borehole advanced using rotary cored methods.*
		13.00 - 14.20	1	91	58	0	13.00	87.85		Medium strong grey fine grained SANDSTONE, thinly to thickly cross laminated with very closely spaced cross laminations of dark grey mudstone. Discontinuities are closely spaced horizontal and vertical, planar, occasionally stepped, rough, closed with little grey sandy clay on surfaces. (COAL MEASURES) *12.6m to 12.8m extremely closely spaced fractures; with up to 4mm of soft grey clay fill.*
		14.20 - 15.70	4	95	68	7				Medium strong dark grey MUDSTONE with very closely spaced thin laminations of grey siltstone. Discontinuities are very closely spaced horizontal, occasionally subvertical, planar, smooth, closed with a little grey clay on surfaces. (COAL MEASURES) *13.0m to 13.3m very closely spaced fractures; recovered as slightly clayey subangular fine to medium gravel.* *13.5m to 13.9m very closely spaced fractures with up to 2mm of grey clay fill and weakening of surrounding rock mass. Partly recovered as angular fine gravel.* *14.3m to 14.35m mudstone is very weak.* *14.7m to 14.75m mudstone is very weak.* *15.1m coarse gravel sized clast of sandstone recovered in core.* *From 16.0m fractures are very closely spaced.*
		15.70 - 17.20	2	77	35	0	17.20	83.65		End of Borehole at 17.200m
			FI	TCR	SCR	RQD				

Remarks

1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was encountered at 5.8m and rose to 4.85m after 5 minutes. 3. The borehole was advanced by chiselling from 10.7m to 11.0m (0.5 hours).

Borehole Log

Borehole No. **BH502**

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418433E - 424993N	Hole Type CP
Location: Cleckheaton		Level: 96.00 m AOD	Scale 1:50
Client: Strata Homes		Dates: 14/09/2020	Logged By GLM

Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Stratum Description
				96.00	
			0.20	95.80	MADE GROUND: Dark grey very sandy slightly silty subangular fine to medium GRAVEL of macadam and quartzite. Low subangular cobble content of brick. (GRANULAR HARDCORE)
1.00	S	N=5 (1,1/1,1,1,2)			MADE GROUND: Dark brown sandy subangular fine to coarse GRAVEL of clinker, mudstone and occasional burnt shale, brick, concrete, mortar and pottery. Medium subangular cobble content of sandstone. Sand is predominantly of ash. (ASH & CLINKER)
1.20	D		1.30	94.70	
					MADE GROUND: Dark brown gravelly ash SAND. Gravel is angular to subrounded fine to coarse of clinker and mudstone. Low subangular cobble content of brick and concrete. (ASH & CLINKER)
2.00	D				
2.00	S	N=2 (2,1/1,0,0,1)			
3.00	D				
3.00	S	N=7 (8,4/2,2,1,2)			
4.00	D				
4.00	S	N=3 (1,1/1,1,0,1)			
5.00	D				
5.00	S	N=5 (1,0/1,1,1,2)			
					5.3m little ingress of groundwater during drilling.
					5.5m groundwater struck. Rose to 4.42m in 10 minutes.
6.00	D				
6.00	S	N=17 (1,1/1,6,6,4)			
7.50	D				
7.50	S	N=17 (11,13/8,6,3,0)			
9.00	D				
9.00	S	N=15 (2,3/4,4,3,4)			
			9.50	86.50	
9.70	C	50 (25 for 90mm/50 for 235mm)			MADE GROUND: Grey and brown sandy subangular fine to coarse GRAVEL of sandstone and occasional mudstone.
	C	50 (25	9.70	86.30	
			9.80	86.20	
	FI	TCR / SCR / RQD			

Remarks

1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was encountered at 5.5m and rose to 4.42m after 10 minutes. 3. The borehole was advanced by chiselling from 9.7m to 10.2m (0.5 hours).

Rotary Core Log

Borehole No. **BH502**

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418433.45 - 424992.56	Hole Type CP
Location: Cleckheaton		Level: 96.00	Scale 1:50
Client: Strata Homes		Dates: 14/09/2020 - 15/09/2020	Logged By GLM

Well	Water Strikes	Depth (m)	Type /FI	Coring TCR	Coring SCR	Coring RQD	Depth (m)	Level (m)	Legend	Stratum Description	
		9.80 - 11.20	10 1	85	for 90m m/50 for 235m m)	37				MADE GROUND: Grey and brown sandy subangular fine to coarse GRAVAEL of sandstone and occasional mudstone. (GRANULAR MADE GROUND) Medium strong grey fine grained SANDSTONE. (COAL MEASURES)	11
		11.20 - 12.70	1	90	53	0	11.80	84.20		Strong grey fine grained SANDSTONE with closely to very closely spaced laminations and cross laminations of dark grey siltstone. Discontinuneties are closely spaced horizontal and vertical, undulating, rough, closed with dark grey staining on surfaces and orangish brown staining penetrating up to 140mm. (COAL MEASURES) *10.2m unable to advance further into bedrock using percussive methods. Borehole advanced using rotary cored methods.*	12
		12.70 - 15.70	2	49	19	0	12.70	83.30		*10.7m to 10.8m very closely spaced fractures. Partly recovered as angular medium gravel.* *10.8m to 10.9m with thin beds of very closely fractured dark grey mudstone.* *11.35m to 11.4m extremely closely spaced fractures with up to 4mm of grey sandy clay fill.* Weak dark grey thinly laminated MUDSTONE. Discontinuities are extremely closely spaced, horizontal, occasionally subvertical, planar, smooth, closed, clean. (COAL MEASURES) *12.55m to 12.7m mudstone is extremely weak; partly recovered as firm grey clay with gravel of mudstone lithorelicts.*	13 14
		15.70 - 17.10	2	94	28	0	17.10	78.90		Moderately weak dark grey MUDSTONE with closely spaced thick laminations and thin beds of grey siltstone. Discontinuities are very closely spaced, horizontal and vertical, planar, smooth, closed with up to 1mm of soft grey clay on surfaces. (COAL MEASURES) *13.6m to 13.75m mudstone is very weak with extremely closely spaced randomly orientated fractures with grey clay on surfaces.* *16.1m to 16.2m mudstone is very weak.* *16.6m to 17.0m single subvertical planar smooth closed clean fracture cuts core.*	15 16 17

End of Borehole at 17.100m

18

19

20

Remarks

1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was encountered at 5.5m and rose to 4.42m after 10 minutes. 3. The borehole was advanced by chiselling from 9.7m to 10.2m (0.5 hours).

Borehole Log

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords: 418464E - 425120N
Location:	Cleckheaton		Level: 100.40 m AOD
Client:	Strata Homes		Dates: 15/09/2020

Borehole No. **BH503**

Sheet 1 of 2

Hole Type: CP

Scale: 1:50

Logged By: RR

Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Stratum Description
				100.40	MADE GROUND: Dark brown clayey slightly sandy subangular fine to coarse GRAVEL of clinker, brick and mixed lithologies. (ASH & CLINKER)
1.00 - 1.45 1.00	D S	N=9 (4,4/4,3,1,1)			
2.00 - 2.45 2.00	D S	N=6 (3,2/2,2,1,1)	2.00	98.40	MADE GROUND: Dark brown gravelly slightly sandy CLAY. Gravel is angular to subrounded fine to coarse of sandstone, burnt shale, clinker, slag and occasional coal and concrete. With rare fragments of timber. (COHESIVE MADE GROUND)
3.00 - 3.45 3.00	D S	N=1 (1,0/0,1,0,0)			
4.00 - 4.45 4.00	D S	N=11 (6,4/3,3,3,2)			
5.00 - 5.45 5.00	D S	N=5 (2,1/2,1,1,1)			
6.00 - 6.45 6.00	D S	N=6 (1,2/1,2,1,2)			
			6.70	93.70	MADE GROUND: Brown gravelly CLAY. Gravel is subangular medium to coarse of sandstone and occasional brick. (COHESIVE MADE GROUND)
7.50 - 7.95 7.50	D S	N=9 (3,3/3,3,1,2)			
8.00 - 9.45	D				
9.00	C	50 (25 for 125mm/50 for 265mm)	9.00	91.40	Medium strong yellowish grey fine grained
9.20 - 9.30	D		9.20		SANDSTONE. Recovered as subangular fine gravel. (COAL MEASURES)
9.20 - 10.70		76 / 67 / 29			*9.2m unable to advance further into bedrock using percussive methods. Borehole advanced using*
	FI	TCR / SCR / RQD			

Remarks

1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during drilling.

Rotary Core Log

Borehole No. **BH503**

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418464.41 - 425120.19	Hole Type CP
Location: Cleckheaton		Level: 100.40	Scale 1:50
Client: Strata Homes		Dates: 15/09/2020	Logged By RR

Well	Water Strikes	Depth (m)	Type /FI	Coring TCR	Coring SCR	Coring RQD	Depth (m)	Level (m)	Legend	Stratum Description	
		10.70 - 11.00	6	97	57	0				Medium strong yellowish grey fine grained SANDSTONE. Recovered as subangular fine gravel. (COAL MEASURES) *9.2m unable to advance further into bedrock using percussive methods. Borehole advanced using rotary cored methods.*	11
		11.00 - 12.40	1	67	36	8	11.40 11.60	89.00 88.80		Strong grey fine grained SANDSTONE with very closely spaced dark grey cross laminations of mudstone. Discontinuities are very closely to closely spaced horizontal, occasionally subhorizontal, undulating, rough, closed with dark grey staining on surfaces. (COAL MEASURES) *9.2m with subangular gravel of brick and sandstone; result of disturbance during drilling & not in-situ materials.*	12
		12.40 - 13.90	2	63	32	0	12.40	88.00		Recovered as very clayey fine GRAVEL of mudstone and siltstone. (COAL MEASURES)	13
		13.90 - 15.40	1	68	41	0				Moderately weak dark grey thinly to thickly laminated SILTSTONE. Discontinuities are extremely to very closely spaced horizontal and vertical planar, occasionally stepped, smooth, closed, predominantly clean, occasionally with up to 1mm of grey clay on surfaces. (COAL MEASURES) *11.7m to 11.8m extremely closely spaced randomly orientated fractures with up to 5mm of soft grey clay will and weakening of surrounding rock for up to 10mm. Partly recovered as clayey angular fine gravel.*	14 15
							15.40	85.00		Weak dark grey MUDSTONE with closely spaced thin laminations of grey siltstone. Discontinuities are extremely closely to very closely spaced, horizontal and vertical, planar, smooth, open (likely due to drilling) clean. (COAL MEASURES) *12.4m to 14.5m partly recovered as subangular tabular fine to coarse gravel. 14.45m to 14.5m extremely closely spaced fractures with grey clay will and weakening of surrounding rock mass up to 8mm. Weakened rock degrades to clay with moderate effort when handled. 14.9m to 15.0m subvertical planar smooth open fracture with up to 30mm of grey gravelly clay fill cuts core.*	16 17
										End of Borehole at 15.400m	18 19 20

Remarks

1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during drilling.

Borehole Log

LITHOS CONSULTING			Borehole No. **BH504** Sheet 1 of 2
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418426.76 - 425027.10	Hole Type CP
Location: Cleckheaton		Level: 97.55	Scale 1:50
Client: Strata Homes		Dates: 15/09/2020 - 15/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description	
					0.10	97.45		MADE GROUND: Dark grey sandy subangular fine to medium GRAVEL of macadam. (GRANULAR HARDCORE)	
		1.00		N=2 (1,0/1,0,1,0)				MADE GROUND: Brown slightly clayey ash SAND and subangular to subrounded fine to coarse GRAVEL of clinker and occasional brick, mudstone, coal and burnt shale. (ASH & CLINKER)	1
		1.20	D						
		2.00	D						2
		2.00		N=7 (2,1/1,2,2,2)					
		3.00	D						3
		3.00		N=7 (2,2/1,1,2,3)					
		4.00	D						4
		4.00		N=6 (1,2/1,1,2,2)					
		5.00	D						5
		5.00		N=6 (1,2/1,1,2,2)					
		6.00	D						6
		6.00		N=7 (2,3/2,2,1,2)					
									7
		7.50	D					*7.5m groundwater struck. Rose to 7.30m in 10 minutes.*	
		7.50		N=13 (2,4/3,3,3,4)					8
		9.00	D						9
		9.00		N=7 (3,4/1,3,1,2)					
									10

Continued on next sheet

Remarks

1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was encountered at 7.5m and rose to 7.3m in 10 minutes.

AGS

Borehole Log

Borehole No.
BH504
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418426.76 - 425027.10	Hole Type CP
Location: Cleckheaton		Level: 97.55	Scale 1:50
Client: Strata Homes		Dates: 15/09/2020 - 15/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.50 10.50	D	N=17 (7,7/6,4,3,4)				
					12.00	85.55		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was encountered at 7.5m and rose to 7.3m in 10 minutes.

Borehole Log

LITHOS CONSULTING			Borehole No. **BH505** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418482.43 - 425061.16	Hole Type CP
Location: Cleckheaton		Level: 98.90	Scale 1:50
Client: Strata Homes		Dates: 15/09/2020 - 16/09/2020	Logged By RR

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description	
		1.00 1.00 - 1.45	D	N=26 (2,4/5,7,7,7)				MADE GROUND: Dark brownish grey sandy angular to subrounded fine to coarse GRAVEL of predominantly clinker, occasional mudstone, brick and slag and rare glass, concrete and glass. Sand includes ash. (ASH & CLINKER)	1
		2.00 2.00 - 2.45	D	N=0 (1,0/0,0,0,0)					2
		3.00 3.00 - 3.45	D	N=0 (1,1/0,0,0,0)					3
		4.00 4.00 - 4.45	D	N=4 (2,2/1,1,1,1)					4
		5.00 5.00 - 5.45	D	N=4 (2,2/1,1,1,1)					5
		6.00 6.00 - 6.45	D	N=8 (2,3/2,2,2,2)					6
					6.80	92.10		MADE GROUND: Light yellowish brown gravelly CLAY. Gravel is subangular fine to coarse of sandstone and occasional burnt shale. (COHESIVE MADE GROUND)	7
		7.50 7.50 - 7.95	D	N=8 (3,2/1,2,3,2)					8
					8.80	90.10		Medium strong yellowish grey fine grained SANDSTONE. Recovered as subangular fine gravel.	9
		9.00 9.00 - 9.45	D	N=50 (10,12/15,15,16,4)					
					9.50	89.40		*9.5m unable to advance further into bedrock using percussive methods.* End of borehole at 9.50 m	10

Remarks

1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during drilling.

AGS

Borehole Log

LITHOS CONSULTING			Borehole No. **BH506** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418349.63 - 425045.48	Hole Type CP
Location: Cleckheaton		Level: 100.50	Scale 1:50
Client: Strata Homes		Dates: 15/09/2020 - 16/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND: Gravelly slightly silty SAND. Gravel is subangular fine to coarse of brick and occasional concrete and mortar. Medium subangular cobble content of brick and sandstone. Some roots. (GRANULAR MADE GROUND) *0.9m to 1.1m concrete obstruction chiselled through for c. 20 minutes; likely boulder/buried floor slab.*
					1.70	98.80		MADE GROUND: Dark grey clayey medium SAND. (GRANULAR MADE GROUND)
		2.00 2.00	D	N=34 (5,6/7,7,9,11)				
					2.30	98.20		MADE GROUND: Red gravelly SAND. Gravel is subangular fine to clinker, slag and mudstone. (GRANULAR MADE GROUND)
		3.00 3.00	D	N=15 (6,9/6,3,3,3)				
		4.00 4.00	D	N=46 (6,9/9,9,9,19)				
					4.30	96.20		MADE GROUND: Stiff friable yellowish brown gravelly CLAY. Gravel is angular tabular fine of sandstone and occasional burnt shale, mudstone, clinker and brick. (COHESIVE MADE GROUND)
		5.00 5.00	D	N=11 (4,3/3,3,3,2)				
		6.00 6.00	D	N=12 (3,3/3,4,2,3)				
	▼	7.50 7.50	D	N=12 (6,6/3,3,3,3)				*7.5m groundwater struck. Rose to 7.2. in 5 minutes.*
		9.00 9.00	D	N=10 (3,2/2,3,2,3)	9.00	91.50		End of borehole at 9.00 m

Remarks

1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was encountered at 7.5m and rose to 7.2m after 5 minutes. 3. The borehole was advanced by chiselling from 0.9m to 1.1m (0.3 hrs).

AGS

Borehole Log

LITHOS CONSULTING			Borehole No. **BH507** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418319.80 - 424933.95	Hole Type CP
Location: Cleckheaton		Level: 94.75	Scale 1:50
Client: Strata Homes		Dates: 16/09/2020 - 16/09/2020	Logged By RR

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
					0.50	94.25		MADE GROUND: Grey mottled red slightly silty subangular fine to coarse GRAVEL of limestone, brick, concrete and mortar. With occasional gravel sized fragments of plastic. Low subangular cobble content of brick. (GRANULAR MADE GROUND)
		1.00 1.00 - 1.45	D	N=9 (2,3/2,3,2,2)	1.20	93.55		MADE GROUND: Dark grey very sandy gravelly CLAY/SILT. Sand includes ash. Gravel is subangular fine to medium or brick, concrete and clinker. (COHESIVE MADE GROUND) *1.0m groundwater struck. Rose to 0.82m in 5 minutes.*
		2.00 2.00 - 2.45	D	N=19 (3,3/4,5,5,5)				MADE GROUND: Reddish brown slightly clayey slightly sandy angular to subangular fine to coarse GRAVEL of brick and occasional mudstone, sandstone and mortar. Likely with a high subangular cobble content of brick in-situ. (GRANULAR MADE GROUND)
		3.00 3.00 - 3.45	D	N=19 (2,4/4,4,5,6)				
					3.60	91.15		Very weak grey MUDSTONE. Becoming stronger with depth. (COAL MEASURES)
		4.00 4.00 - 4.45	D	50 (25 for 145mm/50 for 255mm)	4.40	90.35		*4.4m unable to advance further into bedrock using percussive methods.* End of borehole at 4.40 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was encountered from 1.0m during drilling.

AGS

Borehole Log

Borehole No.
BH508
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418347.37 - 424933.57	Hole Type CP
Location: Cleckheaton		Level: 94.70	Scale 1:50
Client: Strata Homes		Dates: 17/09/2020 - 17/09/2020	Logged By RR

Samples and In Situ Testing						
Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
			0.10	94.60		Strong buffish grey CONCRETE. 60% aggregate of subangular to subrounded fine to medium gravel of mixed lithologies. 35% cement matrix. 5% irregular small isolated voids. With 5mm steel reinforcement at base. (CONCRETE)
			0.70	94.00		MADE GROUND: Buff sandy subangular medium GRAVEL of limestone. (SUB-BASE)
1.00 1.00 - 1.45	D	N=5 (1,1/1,1,1,2)				MADE GROUND: Firm blackish brown gravelly slightly sandy CLAY. Gravel is subangular to subrounded fine to coarse of mixed lithologies, clinker and brick. (COHESIVE MADE GROUND)
2.00 2.00 - 2.45	D	N=14 (2,2/3,3,4,4)	1.80	92.90		Firm brown sandy CLAY. Rare subangular fine gravel of mixed lithologies and coal. (COHESIVE ALLUVIUM)
2.50 - 2.95	U					
3.00 3.00 - 3.45	D	N=46 (6,6/8,8,20,10)	3.00	91.70		Weak dark grey MUDSTONE. (COAL MEASURES) *3.2m groundwater struck. Rose to 2.7m in 5 minutes.*
4.00 4.00 - 4.45	D	N=50 (12,12/12,12,14,12)	4.40	90.30		End of borehole at 4.40 m

Water Strikes

Well

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was encountered from 3.2m during drilling.

Borehole Log

Borehole No. **BH509**

Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418423.34 - 424941.10	Hole Type CP
Location: Cleckheaton		Level: 94.50	Scale 1:50
Client: Strata Homes		Dates: 17/09/2020 - 17/09/2020	Logged By RR

Samples and In Situ Testing						
Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
			0.06	94.44		Medium strong grey CONCRETE. 70% aggregate of subrounded fine gravel of mixed lithologies. 20% cement matrix. 10% irregular isolated small to medium voids. (CONCRETE)
			0.14	94.36		
			0.30	94.20		
			0.80	93.70		Strong grey CONCRETE. 65% aggregate of subrounded fine gravel of mixed lithologies. 35% sandy cement matrix. Rare irregular isolated small voids. (CONCRETE)
1.00		N=3 (1,1/1,0,1,1)				
1.00 - 1.45	D					
						MADE GROUND: Buff sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies; predominantly limestone. (SUB-BASE)
2.00 - 2.45	U					
						MADE GROUND: Brown sandy gravelly CLAY. Gravel is subangular to subrounded fine to medium of clinker, concrete and brick. (COHESIVE MADE GROUND)
2.45 - 2.70	D					
2.70 - 3.15	U					
						Firm brown sandy slightly gravelly CLAY. Gravel is subrounded medium of sandstone. (COHESIVE ALLUVIUM)
3.20		N=25 (7,8/8,7,5,5)	3.20	91.30		Brown clayey sandy angular tabular fine to medium GRAVEL of sandstone. (GRANULAR RESIDUAL SOIL)
3.20 - 3.65	D					
			3.80	90.70		Moderately weak grey fine to medium grained SANDSTONE. (COAL MEASURES)
4.00		48 (,25/48 for 255mm)				
4.00 - 4.45	D					*4.2m groundwater struck. Rose to 1.88m in 5 minutes.*
4.30		50 (25 for 145mm/50 for 255mm)	4.50	90.00		End of borehole at 4.50 m
4.50	D					

Remarks

1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during drilling.

Appendix H

Rotary Probehole & Stitch-hole Logs

Borehole Log

LITHOS CONSULTING			Borehole No. **PH501** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418485.04 - 425151.91	Hole Type PH
Location: Cleckheaton		Level: 100.10	Scale 1:50
Client: Strata Homes		Dates: 22/09/2020 - 22/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. Veneer of cobbles at surface. (COHESIVE MADE GROUND)
					2.40	97.70		Buff SANDSTONE. (COAL MEASURES)
					9.00	91.10		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

LITHOS CONSULTING			Borehole No. **PH502** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418511.61 - 425028.38	Hole Type PH
Location: Cleckheaton		Level: 92.95	Scale 1:50
Client: Strata Homes		Dates: 22/09/2020 - 22/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (COHESIVE MADE GROUND)
					6.00	86.95		Buff SANDSTONE. (COAL MEASURES)
					9.00	83.95		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

LITHOS CONSULTING			Borehole No. **PH503** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418488.40 - 425025.84	Hole Type PH
Location: Cleckheaton		Level: 92.80	Scale 1:50
Client: Strata Homes		Dates: 22/09/2020 - 22/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (COHESIVE MADE GROUND)
					5.90	86.90		Buff SANDSTONE. (COAL MEASURES)
					7.00	85.80		Grey MUDSTONE. (COAL MEASURES)
					9.00	83.80		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
PH504
Sheet 1 of 1

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418490.66 - 425023.12	Hole Type PH
Location:	Cleckheaton		Level:	92.70	Scale 1:50
Client:	Strata Homes		Dates:	22/09/2020 - 22/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (COHESIVE MADE GROUND)
					5.90	86.80		Buff SANDSTONE. (COAL MEASURES)
					7.20	85.50		Grey MUDSTONE. (COAL MEASURES)
					9.00	83.70		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
PH505
Sheet 1 of 1

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418450.88 - 425112.35	Hole Type PH
Location:	Cleckheaton		Level:	100.50	Scale 1:50
Client:	Strata Homes		Dates:	23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (ASH & CLINKER)
					6.00	94.50		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
PH506
Sheet 1 of 1

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418458.92 - 425085.94	Hole Type PH
Location:	Cleckheaton		Level:	100.00	Scale 1:50
Client:	Strata Homes		Dates:	23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (COHESIVE MADE GROUND)
					6.00	94.00		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **PH507** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418458.28 - 425059.79	Hole Type PH
Location: Cleckheaton		Level: 99.40	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (ASH & CLINKER)
								From 2.0m to 3.0m, brickwork/dense Brickfill.
					6.00	93.40		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
PH508
Sheet 1 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418439.96 - 425005.70	Hole Type PH
Location:	Cleckheaton		Level:	96.35	Scale 1:50
Client:	Strata Homes		Dates:	23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					10.00	86.35		Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
PH508
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418439.96 - 425005.70	Hole Type PH
Location: Cleckheaton		Level: 96.35	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
[redacted]								SOLID (COAL MEASURES) *Flush lost during drilling through made ground.*
					12.00	84.35		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **PH509** Sheet 1 of 2
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418428.42 - 425016.20	Hole Type PH
Location: Cleckheaton		Level: 97.15	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (ASH & CLINKER)

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
PH509
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418428.42 - 425016.20	Hole Type PH
Location: Cleckheaton		Level: 97.15	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
					10.40	86.75		SOLID (COAL MEASURES) *Flush lost during drilling through made ground.*
					12.00	85.15		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **PH510** Sheet 1 of 2
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418416.08 - 425030.34	Hole Type PH
Location: Cleckheaton		Level: 97.90	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (COHESIVE MADE GROUND)
					10.00	87.90		Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
PH510
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418416.08 - 425030.34	Hole Type PH
Location: Cleckheaton		Level: 97.90	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description	
								Solid. (COAL MEASURES) *Flush lost during drilling through made ground.*	11 12 13 14
					15.00	82.90		End of borehole at 15.00 m	15 16 17 18 19 20

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **PH511** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418417.00 - 425030.33	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (ASH & CLINKER)
					6.00			End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
PH512
Sheet 1 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418389.05 - 425076.54	Hole Type PH
Location:	Cleckheaton		Level:	99.75	Scale 1:50
Client:	Strata Homes		Dates:	23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					7.80	91.95		Buff SANDSTONE. (COAL MEASURES)

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
PH512
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418389.05 - 425076.54	Hole Type PH
Location:	Cleckheaton		Level:	99.75	Scale 1:50
Client:	Strata Homes		Dates:	23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	87.75		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **PH513** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418345.10 - 425160.49	Hole Type PH
Location: Cleckheaton		Level: 105.25	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (COHESIVE MADE GROUND)
					1.50	103.75		Yellowish brown sandy CLAY. (WEATHERED COAL MEASURES)
					2.00	103.25		Buff SANDSTONE. (COAL MEASURES)
					9.00	96.25		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
PH514
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418345.00 - 425071.16	Hole Type PH
Location: Cleckheaton		Level: 101.55	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
PH514
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418345.00 - 425071.16	Hole Type PH
Location:	Cleckheaton		Level:	101.55	Scale 1:50
Client:	Strata Homes		Dates:	26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					11.00	90.55		Buff SANDSTONE. (COAL MEASURES)	11
					12.00	89.55		End of borehole at 12.00 m	12
									13
									14
									15
									16
									17
									18
									19
									20

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **PH515** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418314.41 - 425052.81	Hole Type PH
Location: Cleckheaton		Level: 100.85	Scale 1:50
Client: Strata Homes		Dates: 28/09/2020 - 28/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					2.50	98.35		Buff SANDSTONE. (COAL MEASURES)
					7.00	93.85		Grey MUDSTONE. (COAL MEASURES)
					9.00	91.85		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

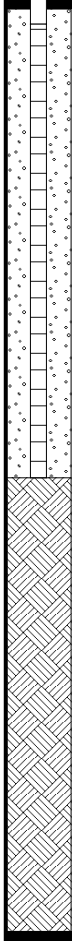
AGS

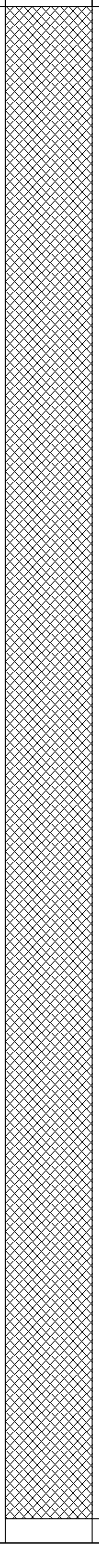
Borehole Log

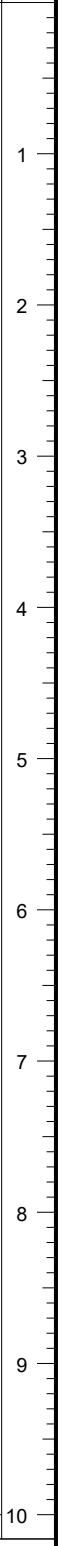
Borehole No.
PH516
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418280.06 - 425042.48	Hole Type PH
Location: Cleckheaton		Level: 101.05	Scale 1:50
Client: Strata Homes		Dates: 28/09/2020 - 28/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)







Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
PH516
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418280.06 - 425042.48	Hole Type PH
Location: Cleckheaton		Level: 101.05	Scale 1:50
Client: Strata Homes		Dates: 28/09/2020 - 28/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					10.50	90.55		Buff SANDSTONE. (COAL MEASURES)
					12.00	89.05		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **PH517** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418254.40 - 425039.51	Hole Type PH
Location: Cleckheaton		Level: 100.90	Scale 1:50
Client: Strata Homes		Dates: 28/09/2020 - 28/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					6.00	94.90		Grey MUDSTONE. (COAL MEASURES)
					9.00	91.90		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

LITHOS CONSULTING			Borehole No. **PH518** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418250.20 - 425026.37	Hole Type PH
Location: Cleckheaton		Level: 100.70	Scale 1:50
Client: Strata Homes		Dates: 28/09/2020 - 28/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					4.00	96.70		Buff SANDSTONE. (COAL MEASURES)
					7.50	93.20		End of borehole at 7.50 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

LITHOS CONSULTING			Borehole No. **PH519** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418313.87 - 424994.57	Hole Type PH
Location: Cleckheaton		Level: 98.35	Scale 1:50
Client: Strata Homes		Dates: 28/09/2020 - 28/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					3.00	95.35		Buff SANDSTONE. (COAL MEASURES)
					5.00	93.35		End of borehole at 5.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

LITHOS CONSULTING			Borehole No. **PH520** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418283.24 - 424982.65	Hole Type PH
Location: Cleckheaton		Level: 97.80	Scale 1:50
Client: Strata Homes		Dates: 28/09/2020 - 28/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					4.00	93.80		Buff SANDSTONE. (COAL MEASURES)
					8.00	89.80		End of borehole at 8.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
ST501A
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418466.65 - 425133.00	Hole Type PH
Location: Cleckheaton		Level: 100.35	Scale 1:50
Client: Strata Homes		Dates: 22/09/2020 - 22/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					7.00	93.35		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					9.00	91.35		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST501B
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418466.85 - 425135.11	Hole Type PH
Location: Cleckheaton		Level: 100.35	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					7.00	93.35		Buff SANDSTONE. (COAL MEASURES)
					9.00	91.35		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **ST501C** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418466.35 - 425137.46	Hole Type PH
Location: Cleckheaton		Level: 100.45	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (ASH & CLINKER)
					2.50	97.95		Buff SANDSTONE. (COAL MEASURES)
					6.00	94.45		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
ST501D
Sheet 1 of 1

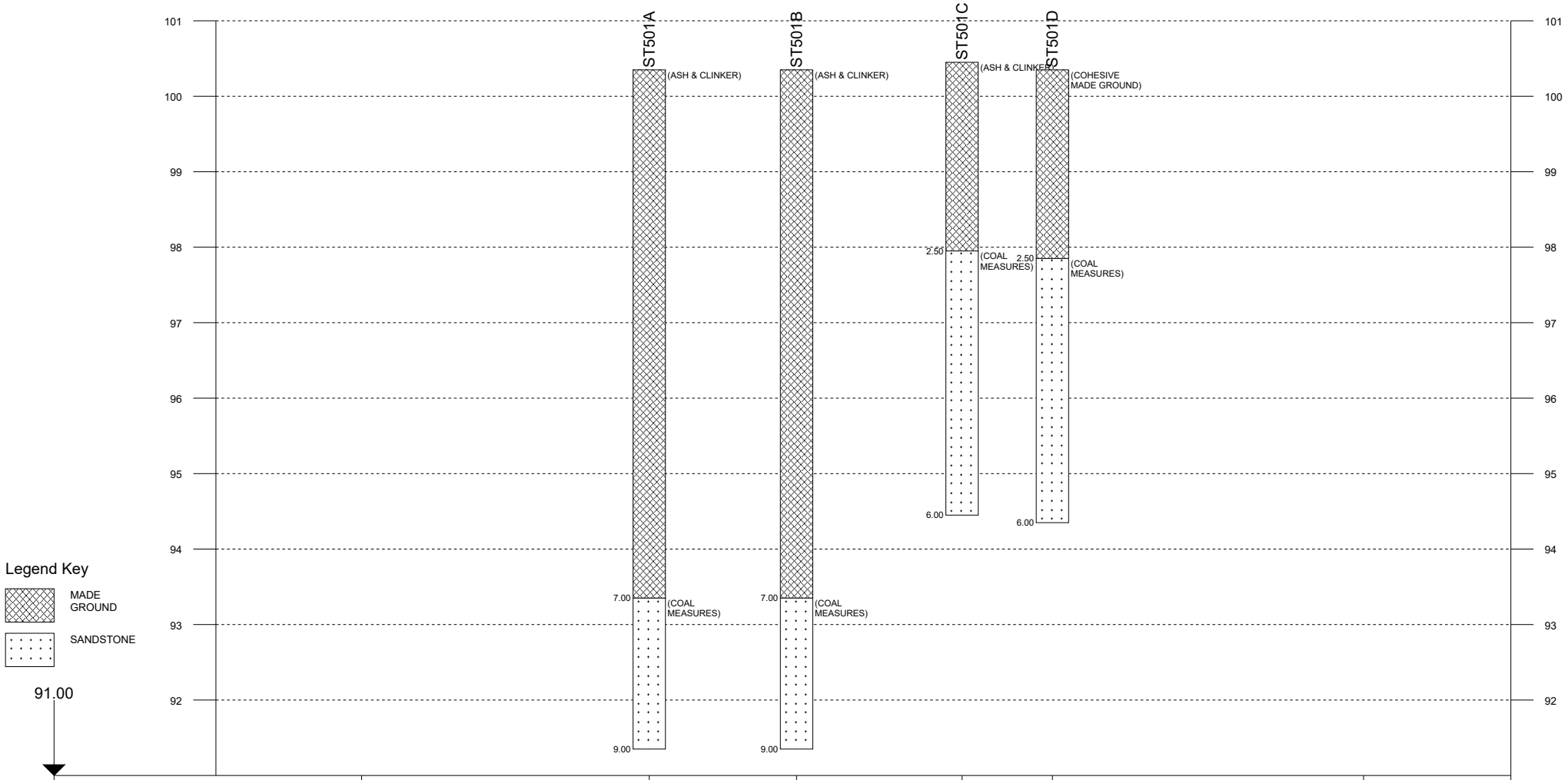
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418466.32 - 425138.75	Hole Type PH
Location: Cleckheaton		Level: 100.35	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								COHESIVE MADE GROUND. (COHESIVE MADE GROUND)
					2.50	97.85		Buff SANDSTONE. (COAL MEASURES)
					6.00	94.35		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Project Id: 3043
Project Title: Westgate, Cleckheaton
Location: Cleckheaton
Client: Strata Homes

Title: Stitch PH line 501
Vertical Scale: 1:77
Horizontal Scale: 1:83
Engineer: ASw



Chainage (m)	0.00	4.11	6.21	8.57	9.86	14.31
Offset (m)		0.02	0.24	0.19	0.18	
Elevation (mAOD)		100.35	100.35	100.45	100.35	

Borehole Log

Borehole No.
ST502A
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418453.87 - 425117.22	Hole Type PH
Location: Cleckheaton		Level: 100.50	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (COHESIVE MADE GROUND)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502A
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418453.87 - 425117.22	Hole Type PH
Location: Cleckheaton		Level: 100.50	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					16.00	84.50		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					18.00	82.50		End of borehole at 18.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502B
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418451.94 - 425116.92	Hole Type PH
Location: Cleckheaton		Level: 100.50	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502B
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418451.94 - 425116.92	Hole Type PH
Location:	Cleckheaton		Level:	100.50	Scale 1:50
Client:	Strata Homes		Dates:	23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					16.00	84.50		Buff SANDSTONE. (COAL MEASURES)
					20.00	80.50		End of borehole at 20.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502C
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418449.66 - 425116.81	Hole Type PH
Location: Cleckheaton		Level: 100.60	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502C
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418449.66 - 425116.81	Hole Type PH
Location: Cleckheaton		Level: 100.60	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					15.00	85.60		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					18.00	82.60		End of borehole at 18.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502D
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418443.53 - 425112.55	Hole Type PH
Location: Cleckheaton		Level: 100.60	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502D
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418443.53 - 425112.55	Hole Type PH
Location: Cleckheaton		Level: 100.60	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					14.30	86.30		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					18.00	82.60		End of borehole at 18.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502E
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418439.85 - 425112.56	Hole Type PH
Location: Cleckheaton		Level: 100.70	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502E
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418439.85 - 425112.56	Hole Type PH
Location: Cleckheaton		Level: 100.70	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	88.70		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					15.00	85.70		End of borehole at 15.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502F
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418434.16 - 425109.68	Hole Type PH
Location: Cleckheaton		Level: 100.75	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502F
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418434.16 - 425109.68	Hole Type PH
Location: Cleckheaton		Level: 100.75	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					16.40	84.35		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					18.00	82.75		End of borehole at 18.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502G
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418431.94 - 425108.22	Hole Type PH
Location: Cleckheaton		Level: 100.75	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502G
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418431.94 - 425108.22	Hole Type PH
Location: Cleckheaton		Level: 100.75	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					16.50	84.25		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					18.00	82.75		End of borehole at 18.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502H
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418429.97 - 425107.50	Hole Type PH
Location: Cleckheaton		Level: 100.75	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					9.50	91.25		Buff SANDSTONE. (COAL MEASURES)

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST502H
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418429.97 - 425107.50	Hole Type PH
Location:	Cleckheaton		Level:	100.75	Scale 1:50
Client:	Strata Homes		Dates:	23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	88.75		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **ST502I** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418427.88 - 425106.78	Hole Type PH
Location: Cleckheaton		Level: 100.75	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

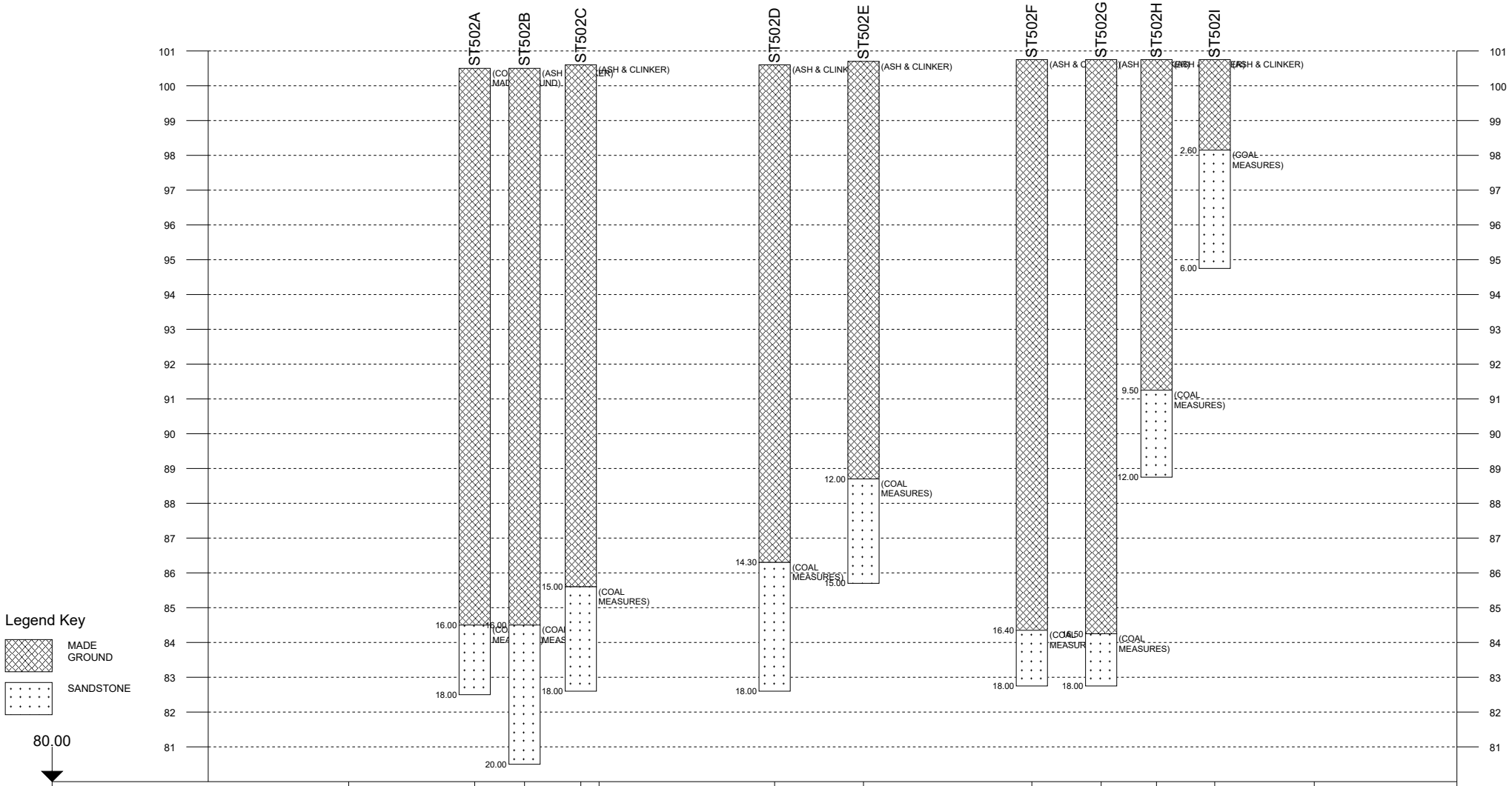
Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					2.60	98.15		Buff SANDSTONE. (COAL MEASURES)
					6.00	94.75		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Project Id: 3043
Project Title: Westgate, Cleckheaton
Location: Cleckheaton
Client: Strata Homes

Title: Stitch PH line 502
Vertical Scale: 1:161
Horizontal Scale: 1:212
Engineer: ASw



Chainage (m)	0.00	4.76	6.65	8.78	9.47	16.11	19.47	25.84	28.46	30.55	32.76	36.52	
Offset (m)		0.19	0.31	1.14	3.44	0.28	1.22	0.89	0.46	0.60	0.78		
Elevation (mAOD)		100.50	100.50	100.60	100.50	100.60	100.70	100.75	100.75	100.75	100.75		

Borehole Log

Borehole No.
ST503A
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418432.44 - 425068.06	Hole Type PH
Location: Cleckheaton		Level: 100.25	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					4.00	96.25		Buff SANDSTONE. (COAL MEASURES)
					9.00	91.25		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST503B
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418433.59 - 425069.20	Hole Type PH
Location: Cleckheaton		Level: 100.30	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					4.30	96.00		Buff SANDSTONE. (COAL MEASURES)
					6.00	94.30		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out. 2. Groundwater was not apparent during drilling.

Borehole Log

Borehole No.
ST503C
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418434.80 - 425070.30	Hole Type PH
Location: Cleckheaton		Level: 100.25	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					4.50	95.75		Buff SANDSTONE. (COAL MEASURES)
					6.00	94.25		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST503D
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418436.17 - 425071.56	Hole Type PH
Location: Cleckheaton		Level: 100.10	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					4.20	95.90		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					6.00	94.10		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST503E
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418437.94 - 425072.76	Hole Type PH
Location: Cleckheaton		Level: 100.05	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					3.50	96.55		Buff SANDSTONE. (COAL MEASURES)
					6.00	94.05		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST503F
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418439.37 - 425073.62	Hole Type PH
Location: Cleckheaton		Level: 100.10	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					4.00	96.10		Buff SANDSTONE. (COAL MEASURES)
					6.00	94.10		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST503G
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418441.18 - 425075.01	Hole Type PH
Location: Cleckheaton		Level: 100.15	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					9.50	90.65		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST503G
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418441.18 - 425075.01	Hole Type PH
Location:	Cleckheaton		Level:	100.15	Scale 1:50
Client:	Strata Homes		Dates:	23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	88.15		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST503H
Sheet 1 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418442.65 - 425076.28	Hole Type PH
Location:	Cleckheaton		Level:	100.30	Scale 1:50
Client:	Strata Homes		Dates:	23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)
					9.70	90.60		SOLID.

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST503H
Sheet 2 of 2

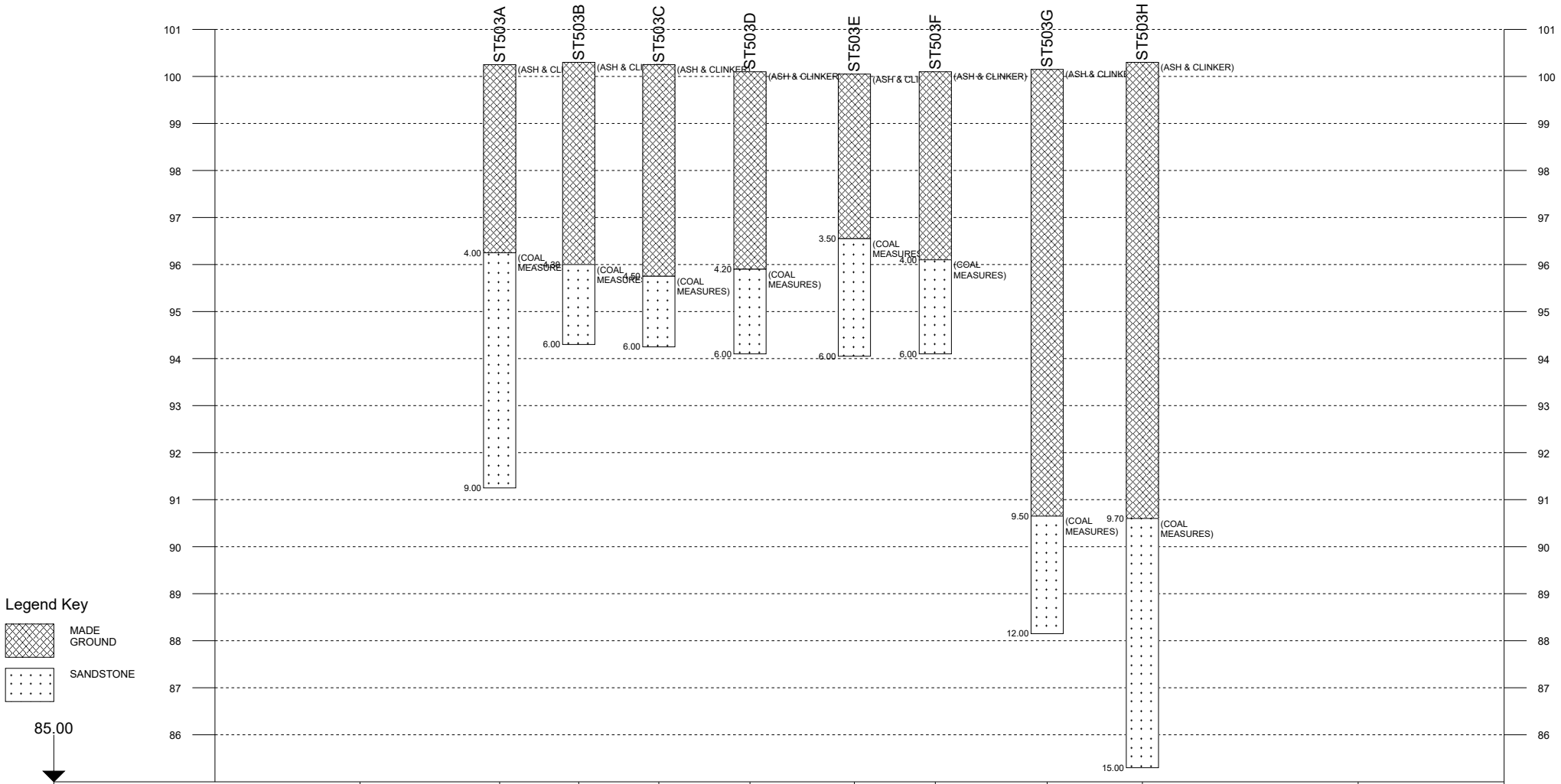
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418442.65 - 425076.28	Hole Type PH
Location: Cleckheaton		Level: 100.30	Scale 1:50
Client: Strata Homes		Dates: 23/09/2020 - 23/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								(COAL MEASURES) *Flush lost during drilling through made ground.*
					15.00	85.30		End of borehole at 15.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Project Id: 3043
Project Title: Westgate, Cleckheaton
Location: Cleckheaton
Client: Strata Homes

Title: Stitch PH line 503
Vertical Scale: 1:123
Horizontal Scale: 1:118
Engineer: ASw



Chainage (m)	0.00	2.85	4.46	6.09	7.95	10.08	11.73	14.01	15.95	20.35
Offset (m)		0.23	0.38	0.46	0.56	0.36	0.11	0.03	0.08	
Elevation (mAOD)		100.25	100.30	100.25	100.10	100.05	100.10	100.15	100.30	

Borehole Log

Borehole No.
ST504A
Sheet 1 of 12

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418475.80 - 425040.35	Hole Type PH
Location:	Cleckheaton		Level:	98.40	Scale 1:50
Client:	Strata Homes		Dates:	29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST504A
Sheet 2 of 12

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418475.80 - 425040.35	Hole Type PH
Location: Cleckheaton		Level: 98.40	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					11.00	87.40		Buff SANDSTONE. (COAL MEASURES)	11
									12
									13
									14
					15.00	83.40			15
									16
									17
									18
									19
									20

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST504B
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418475.14 - 425041.61	Hole Type PH
Location: Cleckheaton		Level: 98.45	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					10.00	88.45		Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST504B
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418475.14 - 425041.61	Hole Type PH
Location: Cleckheaton		Level: 98.45	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								Buff SANDSTONE. (COAL MEASURES)
					12.00	86.45		End of borehole at 12.00 m

11
12
13
14
15
16
17
18
19
20

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST504C
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418474.67 - 425042.91	Hole Type PH
Location: Cleckheaton		Level: 98.45	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)

1 2 3 4 5 6 7 8 9 10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

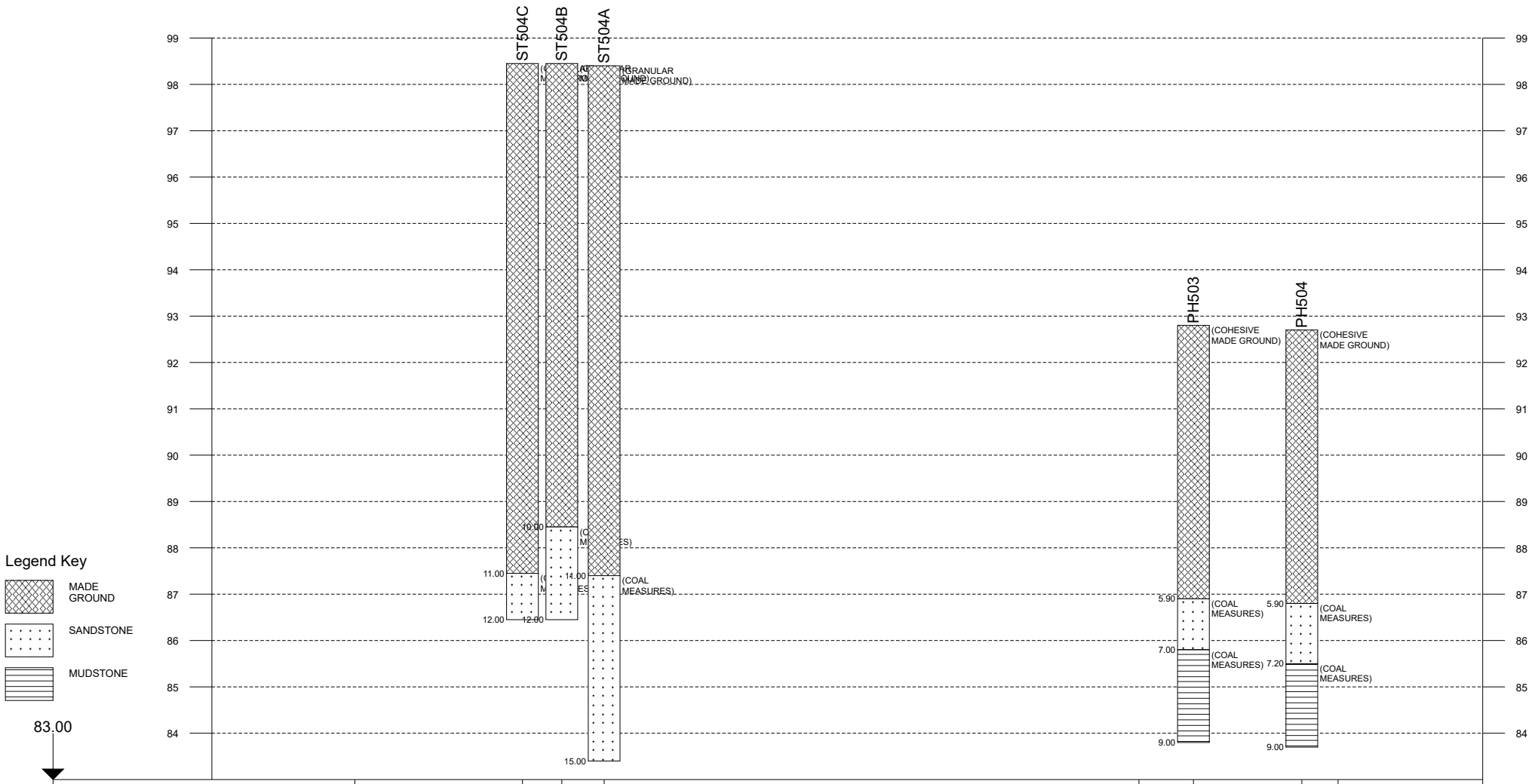
Borehole No.
ST504C
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418474.67 - 425042.91	Hole Type PH
Location: Cleckheaton		Level: 98.45	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					11.00	87.45		Buff SANDSTONE. (COAL MEASURES)
					12.00	86.45		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Project Id: 3043	Title: Stitch PH line 504
Project Title: Westgate, Cleckheaton	Vertical Scale: 1:123
Location: Cleckheaton	Horizontal Scale: 1:186
Client: Strata Homes	Engineer: ASw



Chainage (m)	0.00	5.47	6.75	8.13	25.57	27.34	30.88	32.06	
Offset (m)		0.28	0.23	0.58	5.89	0.83	0.95		
Elevation (mAOD)		98.45	98.45	98.40		92.80	92.70		

Borehole Log

Borehole No.
ST505A
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418407.90 - 425044.71	Hole Type PH
Location: Cleckheaton		Level: 98.35	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					2.50	95.85		Buff SANDSTONE. (COAL MEASURES)
					3.50	94.85		End of borehole at 3.50 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST505B
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418409.04 - 425043.48	Hole Type PH
Location: Cleckheaton		Level: 98.25	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					2.60	95.65		Buff SANDSTONE. (COAL MEASURES)
					6.00	92.25		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **ST505C** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418410.35 - 425042.29	Hole Type PH
Location: Cleckheaton		Level: 98.15	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					2.50	95.65		Buff SANDSTONE. (COAL MEASURES)
					6.00	92.15		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
ST505D
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418411.12 - 425040.90	Hole Type PH
Location: Cleckheaton		Level: 98.15	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					2.80	95.35		Buff SANDSTONE. (COAL MEASURES)
					6.00	92.15		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST505E
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418411.73 - 425039.79	Hole Type PH
Location: Cleckheaton		Level: 98.15	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					6.00	92.15		Buff SANDSTONE. (COAL MEASURES)
					9.00	89.15		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST505F
Sheet 1 of 1

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418412.37 - 425038.59	Hole Type PH
Location:	Cleckheaton		Level:	98.10	Scale 1:50
Client:	Strata Homes		Dates:	29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					6.00	92.10		Buff SANDSTONE. (COAL MEASURES)
					9.00	89.10		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST505G
Sheet 1 of 1

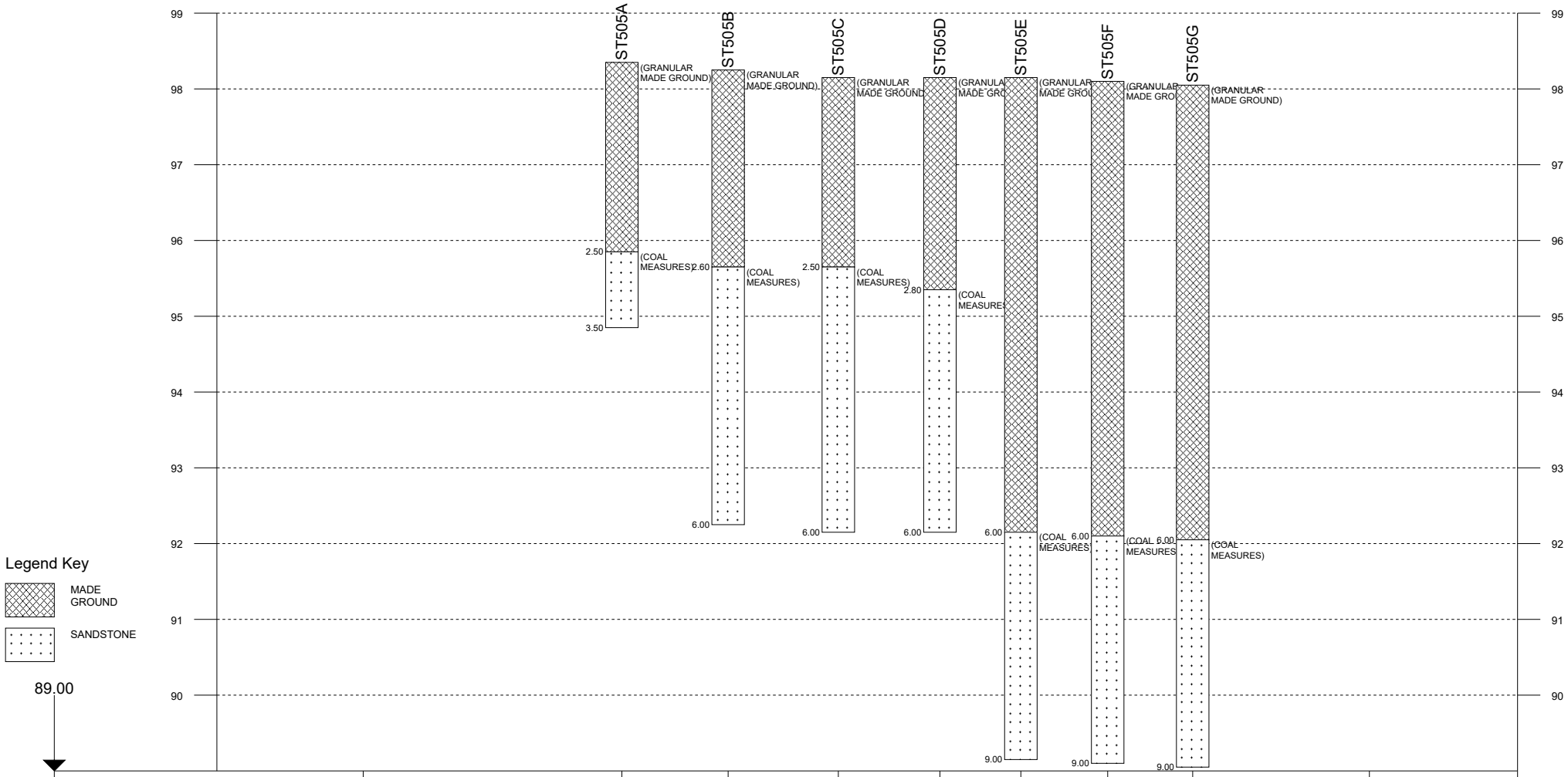
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418412.75 - 425037.25	Hole Type PH
Location: Cleckheaton		Level: 98.05	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					6.00	92.05		Buff SANDSTONE. (COAL MEASURES)
					9.00	89.05		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Project Id: 3043
Project Title: Westgate, Cleckheaton
Location: Cleckheaton
Client: Strata Homes

Title: Stitch PH line 505
Vertical Scale: 1:77
Horizontal Scale: 1:91
Engineer: ASw



Chainage (m)	0.00	4.03	5.69	7.41	8.99	10.25	11.60	12.93	15.68
Offset (m)		0.18	0.45	0.87	0.74	0.63	0.49	0.06	
Elevation (mAOD)		98.35	98.25	98.15	98.15	98.15	98.10	98.05	

Borehole Log

Borehole No.
ST506A
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418413.24 - 425011.31	Hole Type PH
Location: Cleckheaton		Level: 97.45	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					1.30	96.15		Buff SANDSTONE. (COAL MEASURES)
					3.00	94.45		End of borehole at 3.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **ST506B** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418415.07 - 425012.37	Hole Type PH
Location: Cleckheaton		Level: 97.30	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					3.00	94.30		Buff SANDSTONE. (COAL MEASURES)
					6.00	91.30		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
ST506B
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418415.07 - 425012.37	Hole Type PH
Location:	Cleckheaton		Level:	97.30	Scale 1:50
Client:	Strata Homes		Dates:	29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	85.30		

11
12
13
14
15
16
17
18
19
20

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST506C
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418416.01 - 425012.80	Hole Type PH
Location: Cleckheaton		Level: 97.25	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					9.00	88.25		Buff SANDSTONE. (COAL MEASURES)

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST506C
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418416.01 - 425012.80	Hole Type PH
Location:	Cleckheaton		Level:	97.25	Scale 1:50
Client:	Strata Homes		Dates:	29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	85.25		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST506D
Sheet 1 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418418.39 - 425014.20	Hole Type PH
Location:	Cleckheaton		Level:	97.05	Scale 1:50
Client:	Strata Homes		Dates:	29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)

1 2 3 4 5 6 7 8 9 10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST506E
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418419.85 - 425014.76	Hole Type PH
Location: Cleckheaton		Level: 97.00	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)

1 2 3 4 5 6 7 8 9 10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST506E
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418419.85 - 425014.76	Hole Type PH
Location:	Cleckheaton		Level:	97.00	Scale 1:50
Client:	Strata Homes		Dates:	29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					15.00	82.00		Buff SANDSTONE. (COAL MEASURES)
					18.00	79.00		End of borehole at 18.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST506D
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418418.39 - 425014.20	Hole Type PH
Location:	Cleckheaton		Level:	97.05	Scale 1:50
Client:	Strata Homes		Dates:	29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	85.05		Buff SANDSTONE. (COAL MEASURES)
					15.00	82.05		End of borehole at 15.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST506F
Sheet 1 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418421.14 - 425015.36	Hole Type PH
Location:	Cleckheaton		Level:	97.05	Scale 1:50
Client:	Strata Homes		Dates:	29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
								Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST506F
Sheet 2 of 2

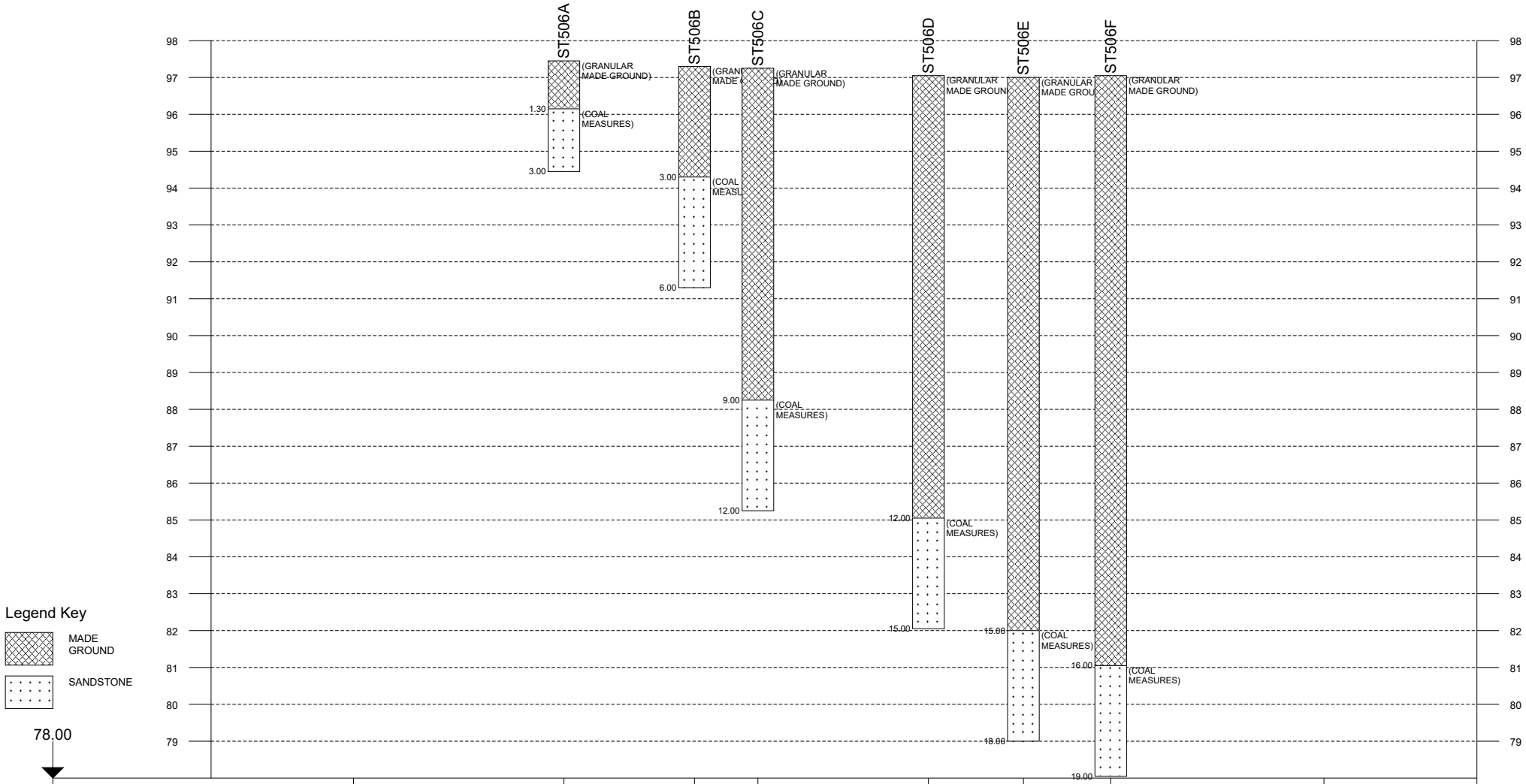
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418421.14 - 425015.36	Hole Type PH
Location: Cleckheaton		Level: 97.05	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					16.00	81.05		Buff SANDSTONE. (COAL MEASURES)
					19.00	78.05		End of borehole at 19.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Project Id: 3043
Project Title: Westgate, Cleckheaton
Location: Cleckheaton
Client: Strata Homes

Title: Stitch PH line 506
Vertical Scale: 1:154
Horizontal Scale: 1:92
Engineer: ASw



Chainage (m)	0.00	3.41	5.52	6.55	9.31	10.85	12.26	15.71
Offset (m)		0.89	0.84	0.72	0.68	0.40	0.24	
Elevation (mAOD)		97.45	97.30	97.25	97.05	97.00	97.05	

Borehole Log

Borehole No.
ST507A
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418430.25 - 424976.83	Hole Type PH
Location: Cleckheaton		Level: 95.75	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					10.00	85.75		Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST507A
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418430.25 - 424976.83	Hole Type PH
Location: Cleckheaton		Level: 95.75	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								Buff SANDSTONE. (COAL MEASURES)
					15.00	80.75		End of borehole at 15.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST507B
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418428.67 - 424975.70	Hole Type PH
Location: Cleckheaton		Level: 95.65	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 -	Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND (GRANULAR MADE GROUND)
					8.50	87.15		SOLID. (COAL MEASURES)
					10.00	85.65		Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST507B
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418428.67 - 424975.70	Hole Type PH
Location:	Cleckheaton		Level:	95.65	Scale 1:50
Client:	Strata Homes		Dates:	29/09/2020 -	Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
									11
								End of borehole at 12.00 m	12
									13
									14
									15
									16
									17
									18
									19
									20

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **ST507C** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418425.85 - 424975.05	Hole Type PH
Location: Cleckheaton		Level: 95.80	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					1.50	94.30		Buff SANDSTONE. (COAL MEASURES)
					6.00	89.80		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
ST507D
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418423.62 - 424974.30	Hole Type PH
Location: Cleckheaton		Level: 95.65	Scale 1:50
Client: Strata Homes		Dates: 29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					9.00	86.65		Buff SANDSTONE. (COAL MEASURES)

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

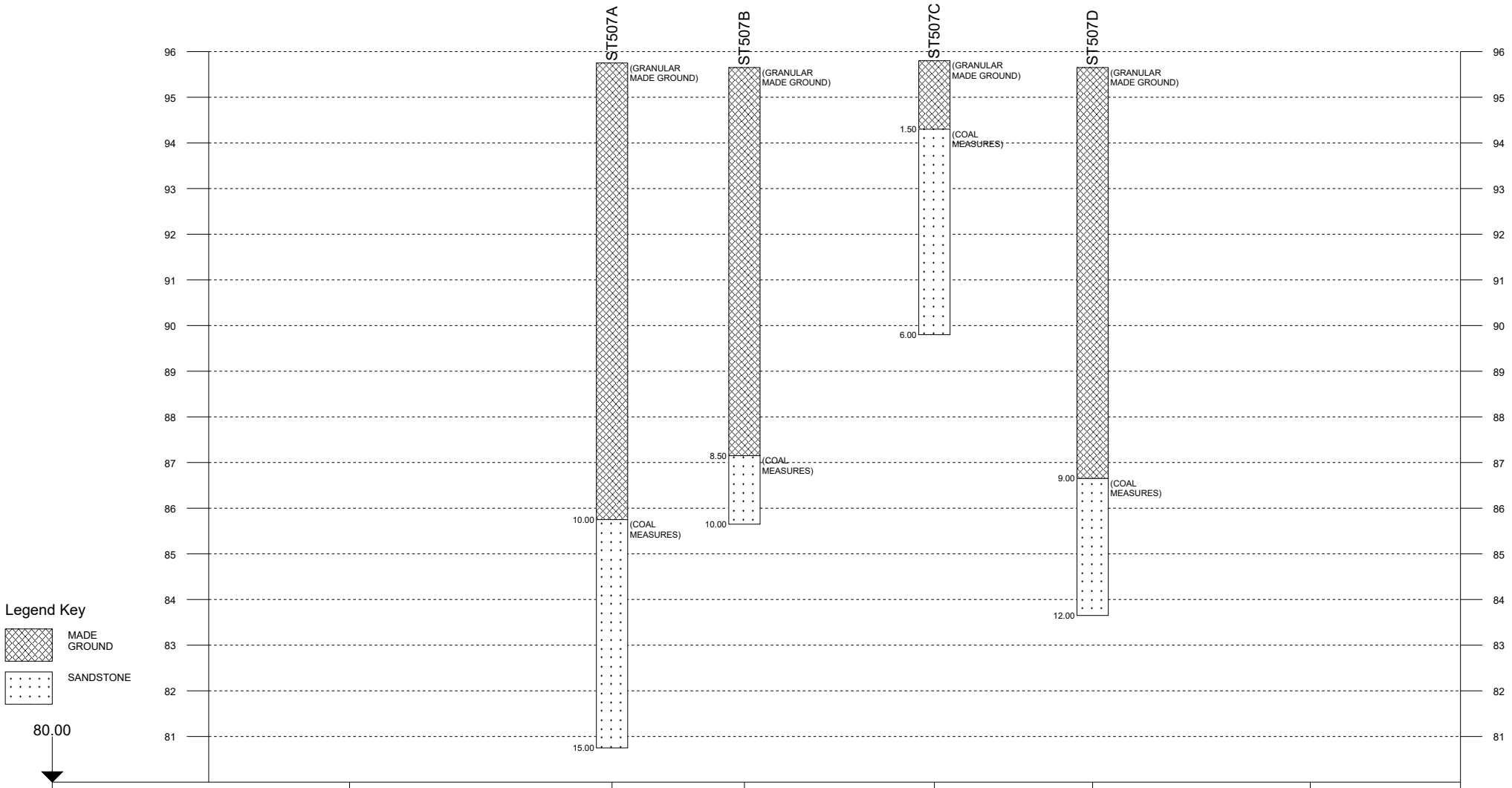
Borehole No.
ST507D
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418423.62 - 424974.30	Hole Type PH
Location:	Cleckheaton		Level:	95.65	Scale 1:50
Client:	Strata Homes		Dates:	29/09/2020 - 29/09/2020	Logged By GLM

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	83.65		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Project Id: 3043	Title: Stitch PH line 507
Project Title: Westgate, Cleckheaton	Vertical Scale: 1:123
Location: Cleckheaton	Horizontal Scale: 1:82
Client: Strata Homes	Engineer: ASw



Chainage (m)	0.00	3.83	5.76	8.54	10.84	14.02
Offset (m)		0.75	0.95	0.12	0.33	
Elevation (mAOD)		95.75	95.65	95.80	95.65	

Borehole Log

LITHOS CONSULTING			Borehole No. **ST508A** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418342.08 - 425082.58	Hole Type PH
Location: Cleckheaton		Level: 102.10	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					3.00	99.10		Buff SANDSTONE. (COAL MEASURES)
					6.00	96.10		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

LITHOS CONSULTING			Borehole No. **ST508B** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418342.36 - 425081.38	Hole Type PH
Location: Cleckheaton		Level: 102.15	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					3.00	99.15		Buff SANDSTONE. (COAL MEASURES)
					6.00	96.15		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

LITHOS CONSULTING			Borehole No. **ST508C** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418342.73 - 425079.73	Hole Type PH
Location: Cleckheaton		Level: 102.10	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					3.00	99.10		Buff SANDSTONE. (COAL MEASURES)
					6.00	96.10		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No. **ST508D** Sheet 1 of 1			
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418343.43 - 425078.15	Hole Type PH
Location: Cleckheaton		Level: 102.00	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					3.00	99.00		Buff SANDSTONE. (COAL MEASURES)
					6.00	96.00		End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST508E
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418343.91 - 425076.23	Hole Type PH
Location: Cleckheaton		Level: 101.90	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					1.50	100.40		MADE GROUND. (ASH & CLINKER)
					9.00	92.90		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST508E
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418343.91 - 425076.23	Hole Type PH
Location: Cleckheaton		Level: 101.90	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					11.00	90.90		End of borehole at 11.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST508F
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418343.92 - 425076.24	Hole Type PH
Location: Cleckheaton		Level: 101.90	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					1.00	100.90		MADE GROUND: Blackish grey. (GRANULAR MADE GROUND)
					4.00	97.90		MADE GROUND. (ASH & CLINKER)
								Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST508F
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418343.92 - 425076.24	Hole Type PH
Location: Cleckheaton		Level: 101.90	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					11.00	90.90		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					12.00	89.90		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST508G
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: -	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

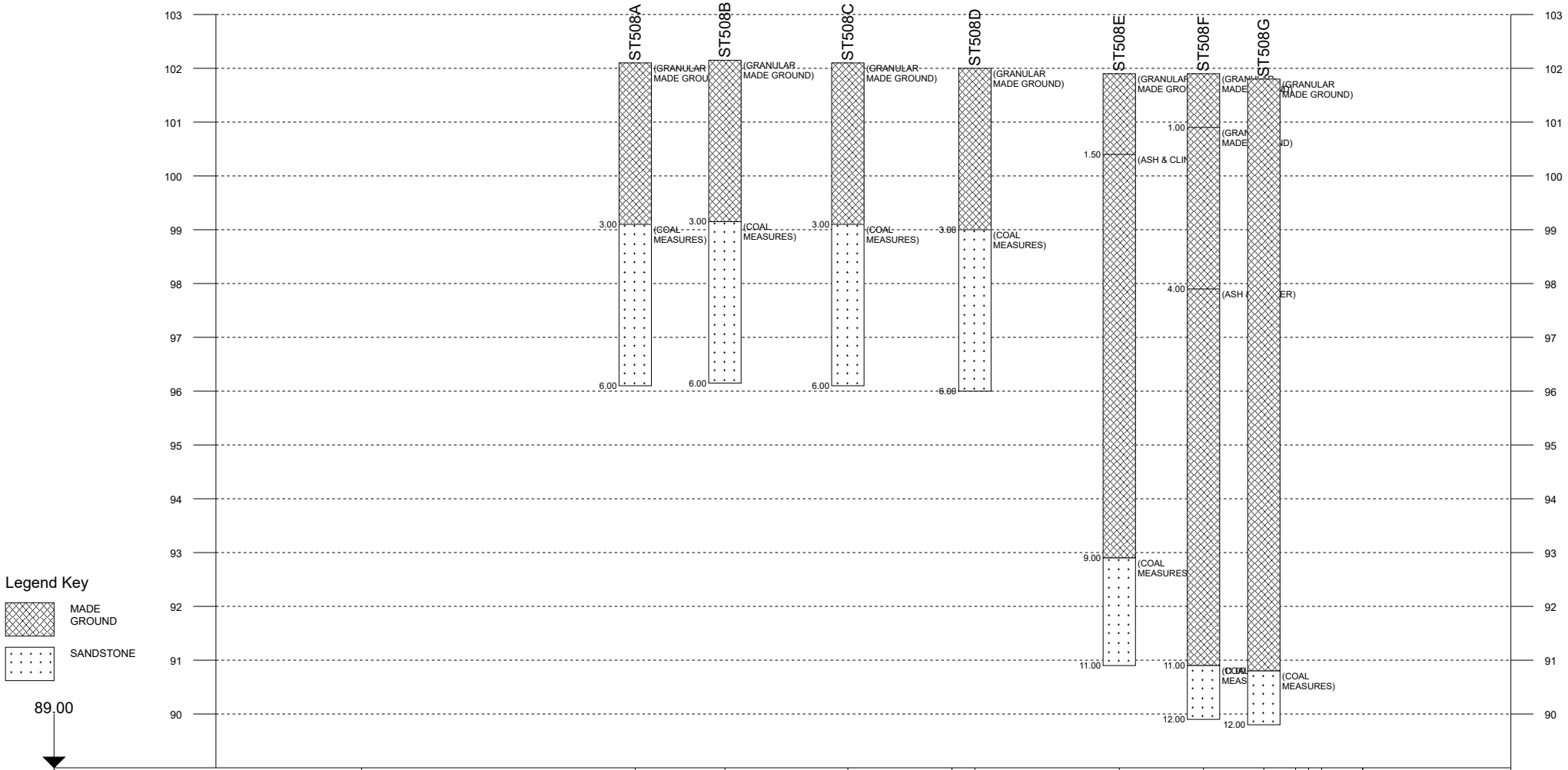
Borehole No.
ST508G
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: -	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					11.00			Yellow SANDSTONE. (COAL MEASURES)
					12.00			End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Project Id: 3043	Title: Stitch PH lint 508
Project Title: Westgate, Cleckheaton	Vertical Scale: 1:108
Location: Cleckheaton	Horizontal Scale: 1:79
Client: Strata Homes	Engineer: ASw



Chainage (m)	0.00	3.72	4.94	6.61	8.02	8.34	10.30	11.44	12.26	12.69	12.87	13.05	13.61
Offset (m)		0.53	0.35	0.09	0.82	0.17	0.09	0.11	0.42				2.17
Elevation (mAOD)		102.10	102.15	102.10		102.00	101.90	101.90	101.80				101.55

Borehole Log

Borehole No.
ST509A
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418352.40 - 425031.49	Hole Type PH
Location: Cleckheaton		Level: 99.85	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					2.00	97.85		MADE GROUND. (ASH & CLINKER)
								Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST509A
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418352.40 - 425031.49	Hole Type PH
Location:	Cleckheaton		Level:	99.85	Scale 1:50
Client:	Strata Homes		Dates:	26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	87.85		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					15.00	84.85		End of borehole at 15.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST509B
Sheet 1 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418352.64 - 425029.52	Hole Type PH
Location:	Cleckheaton		Level:	99.75	Scale 1:50
Client:	Strata Homes		Dates:	26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks

Borehole Log

Borehole No.
ST509B
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418352.64 - 425029.52	Hole Type PH
Location: Cleckheaton		Level: 99.75	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	87.75		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					15.00	84.75		End of borehole at 15.00 m

Remarks

Borehole Log

Borehole No.
ST509C
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418352.68 - 425028.01	Hole Type PH
Location: Cleckheaton		Level: 99.65	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)

1 2 3 4 5 6 7 8 9 10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **ST509C** Sheet 2 of 2
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418352.68 - 425028.01	Hole Type PH
Location: Cleckheaton		Level: 99.65	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
					12.00	87.65		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					15.00	84.65		End of borehole at 15.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
ST509D
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418352.81 - 425026.64	Hole Type PH
Location: Cleckheaton		Level: 99.60	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)

1 2 3 4 5 6 7 8 9 10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST509D
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418352.81 - 425026.64	Hole Type PH
Location: Cleckheaton		Level: 99.60	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	87.60		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					15.00	84.60		End of borehole at 15.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST509E
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418352.35 - 425024.51	Hole Type PH
Location: Cleckheaton		Level: 99.45	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (ASH & CLINKER)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST509E
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418352.35 - 425024.51	Hole Type PH
Location: Cleckheaton		Level: 99.45	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	87.45		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					15.00	84.45		End of borehole at 15.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST509F
Sheet 1 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418351.28 - 425021.98	Hole Type PH
Location:	Cleckheaton		Level:	99.00	Scale 1:50
Client:	Strata Homes		Dates:	26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)

1
2
3
4
5
6
7
8
9
10

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST509F
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418351.28 - 425021.98	Hole Type PH
Location: Cleckheaton		Level: 99.00	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					11.00	88.00		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					15.00	84.00		End of borehole at 15.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST509G
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418350.20 - 425020.10	Hole Type PH
Location: Cleckheaton		Level: 98.75	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					9.00	89.75		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST509G
Sheet 2 of 2

Project Name:	Westgate, Cleckheaton	Project No. 3043	Co-ords:	418350.20 - 425020.10	Hole Type PH
Location:	Cleckheaton		Level:	98.75	Scale 1:50
Client:	Strata Homes		Dates:	26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00	86.75		End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST509H
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418349.40 - 425017.70	Hole Type PH
Location: Cleckheaton		Level: 98.45	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					5.00	93.45		SOLID. (COAL MEASURES) *Flush lost during drilling through made ground.*
					9.00	89.45		End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

LITHOS CONSULTING			Borehole No. **ST509I** Sheet 1 of 1
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418348.43 - 425015.31	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
								MADE GROUND. (GRANULAR MADE GROUND)
					3.00			Yellow SANDSTONE. (COAL MEASURES)
					6.00			End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

AGS

Borehole Log

Borehole No.
ST509J
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418347.49 - 425013.45	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

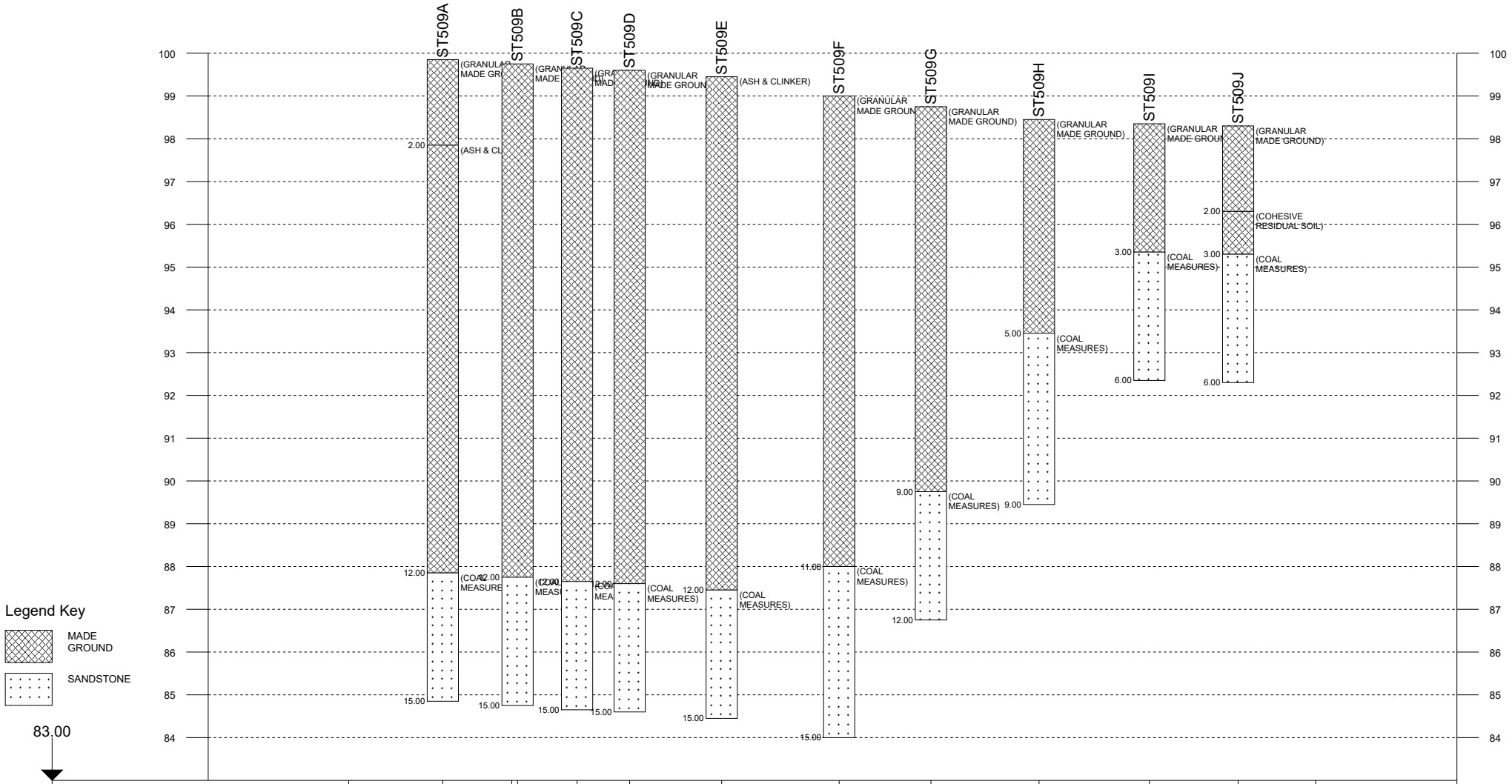
Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					2.00			Brown CLAY (COHESIVE RESIDUAL SOIL)
					3.00			Buff SANDSTONE. (COAL MEASURES)
					6.00			End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Project Id: 3043
Project Title: Westgate, Cleckheaton
Location: Cleckheaton
Client: Strata Homes

Title: Stitch PH line 509
Vertical Scale: 1:131
Horizontal Scale: 1:131
Engineer: ASw

LITHOS CONSULTING



Chainage (m)	0.00	2.20	3.81	5.34	6.57	8.72	11.46	13.61	16.13	18.71	20.79	22.60
Offset (m)		2.63	5.16	1.10	0.48	0.13	0.21	0.53	0.40	0.43	0.63	
Elevation (mAOD)		99.85	99.75	99.65	99.60	99.45	99.00	98.75	98.45	98.35	98.30	

Borehole Log

Borehole No.
ST510A
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418300.10 - 425035.35	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					5.00			Buff SANDSTONE. (COAL MEASURES)
					9.00			End of borehole at 9.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST510B
Sheet 1 of 1

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418299.49 - 425037.27	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					4.50			Buff SANDSTONE. (COAL MEASURES)
					6.00			End of borehole at 6.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST510C
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418298.90 - 425038.99	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					9.50			Buff SANDSTONE. (COAL MEASURES)

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST510C
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418298.90 - 425038.99	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00			End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST510D
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418298.94 - 425041.34	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					1.00			MADE GROUND. (ASH & CLINKER)
					9.50			Buff SANDSTONE. (COAL MEASURES)

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST510D
Sheet 2 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418298.94 - 425041.34	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00			End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST510E
Sheet 1 of 2

Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418298.74 - 425044.19	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
								MADE GROUND. (GRANULAR MADE GROUND)
					9.50			Buff SANDSTONE. (COAL MEASURES)

Continued on next sheet

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Borehole Log

Borehole No.
ST510E
Sheet 2 of 2

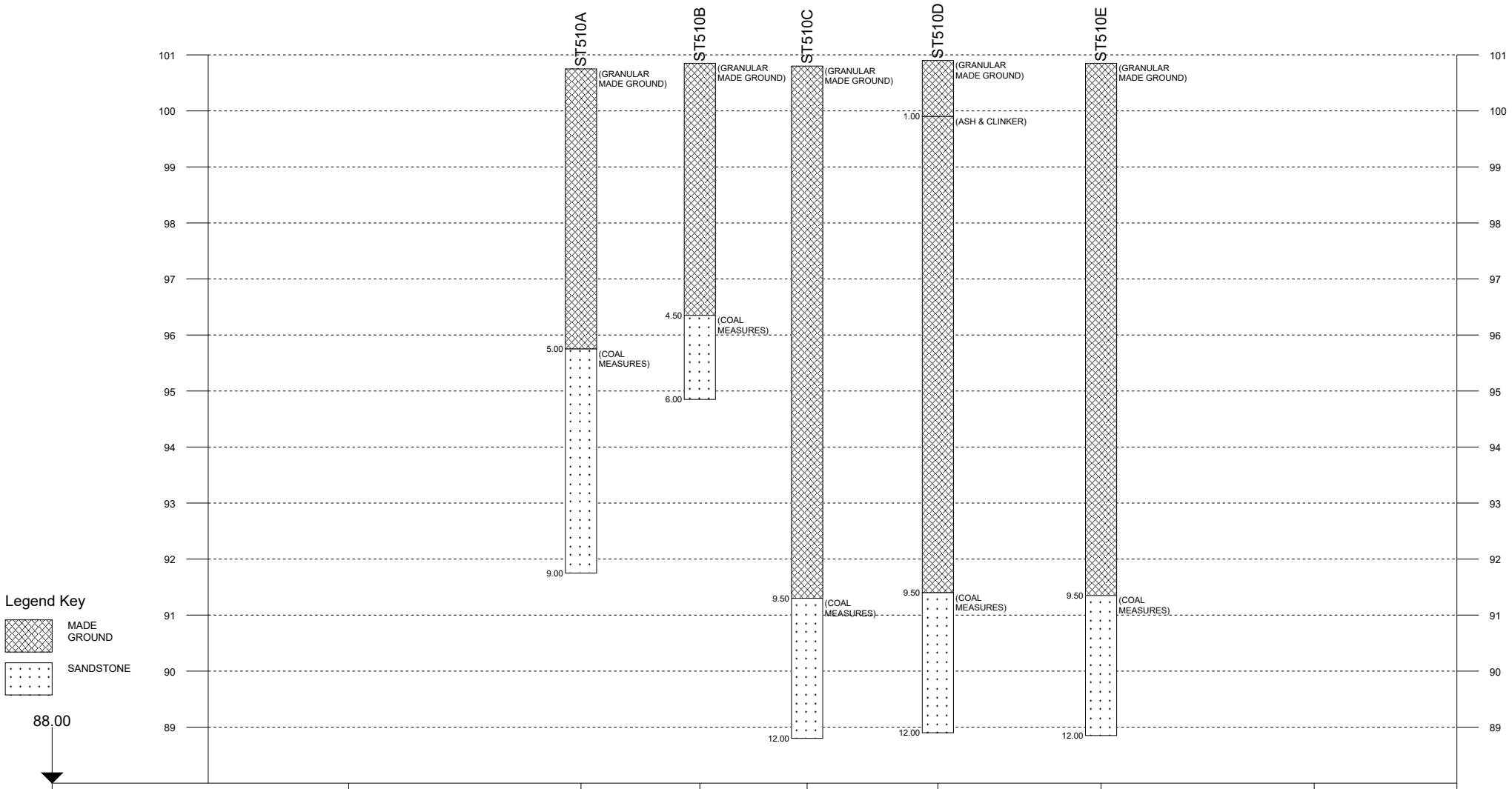
Project Name: Westgate, Cleckheaton	Project No. 3043	Co-ords: 418298.74 - 425044.19	Hole Type PH
Location: Cleckheaton		Level:	Scale 1:50
Client: Strata Homes		Dates: 26/09/2020 - 26/09/2020	Logged By AP

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					12.00			End of borehole at 12.00 m

Remarks
1. Prior to drilling a Cable Avoidance Tool (CAT) survey was carried out.

Project Id: 3043
Project Title: Westgate, Cleckheaton
Location: Cleckheaton
Client: Strata Homes

Title: Stitch PH line 510
Vertical Scale: 1:100
Horizontal Scale: 1:95
Engineer: ASw



Chainage (m)	0.00	3.94	5.95	7.77	9.99	12.75	16.36
Offset (m)		1.27	1.24	1.26	0.47	0.24	
Elevation (mAOD)		100.75	100.85	100.80	100.90	100.85	

Appendix I

Chemical Results

Certificate of Analysis

Certificate Number	19-00769
Client	Lithos Consulting Ltd Parkhill Walton Rd Wetherby LS22 5DZ

21-Jan-19

Our Reference	19-00769
Client Reference	3043
Order No	PO14032
Contract Title	Westgate, Cleckheaton
Description	6 Water samples.
Date Received	16-Jan-19
Date Started	16-Jan-19
Date Completed	21-Jan-19
Test Procedures	Identified by prefix DETSn (details on request).
Notes	Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

Adam Fenwick
Contracts Manager

UKAS TESTING
2139

Summary of Chemical Analysis
Water Samples

Our Ref 19-00769
Client Ref 3043
Contract Title Westgate, Cleckheaton

			Lab No	1445465	1445468
			Sample ID	US	DS
			Depth		
			Other ID	1	1
			Sample Type	WATER	WATER
			Sampling Date	14/01/19	14/01/19
			Sampling Time	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Metals					
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.92	0.68
Boron, Dissolved	DETSC 2306*	12	ug/l	44	29
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03
Chromium, Dissolved	DETSC 2306	0.25	ug/l	0.61	0.28
Copper, Dissolved	DETSC 2306	0.4	ug/l	2.9	2.1
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.66	0.29
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	2.8	1.9
Selenium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25	< 0.25
Zinc, Dissolved	DETSC 2306	1.3	ug/l	14	8.6
Inorganics					
Conductivity	DETSC 2009	1	uS/cm	673	682
pH	DETSC 2008			8	7.6
Alkalinity, Carbonate as CaCO3	DETSC 2030*	10	mg/l	< 10	< 10
Cyanide, Total	DETSC 2130	0.04	mg/l	< 0.04	< 0.04
Sulphide	DETSC 2208	10	ug/l	< 10	< 10

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Water VOC/SVOC Samples

Our Ref 19-00769
Client Ref 3043
Contract Title Westgate, Cleckheaton

			Lab No	1445466	1445467	1445469	1445470
			Sample ID	US	US	DS	DS
			Depth				
			Other ID	2	3	2	3
			Sample Type	WATER	WATER	WATER	WATER
			Sampling Date	14/01/19	14/01/19	14/01/19	14/01/19
			Sampling Time	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
VOCs							
Dichlorodifluoromethane	DETSC 3432	1	ug/l		< 1		< 1
Chloromethane	DETSC 3432	1	ug/l		< 1		< 1
Vinyl Chloride	DETSC 3432	1	ug/l		< 1		< 1
Bromomethane	DETSC 3432	1	ug/l		< 1		< 1
Chloroethane	DETSC 3432	1	ug/l		< 1		< 1
Trichlorofluoromethane	DETSC 3432*	1	ug/l		< 1		< 1
1,1-dichloroethylene	DETSC 3432	1	ug/l		< 1		< 1
Methylene Chloride	DETSC 3432*	27	ug/l		< 27		< 27
Trans-1,2-dichloroethylene	DETSC 3432	1	ug/l		< 1		< 1
1,1-dichloroethane	DETSC 3432	1	ug/l		< 1		< 1
Cis-1,2-dichloroethylene	DETSC 3432	1	ug/l		< 1		< 1
2,2-dichloropropane	DETSC 3432	2	ug/l		< 2		< 2
Bromochloromethane	DETSC 3432	4	ug/l		< 4		< 4
Chloroform	DETSC 3432	1	ug/l		3		2
1,1,1-trichloroethane	DETSC 3432	1	ug/l		< 1		< 1
1,1-dichloropropene	DETSC 3432	1	ug/l		< 1		< 1
Carbon tetrachloride	DETSC 3432	1	ug/l		< 1		< 1
Benzene	DETSC 3432	1	ug/l		< 1		< 1
1,2-dichloroethane	DETSC 3432	1	ug/l		< 1		< 1
Trichloroethylene	DETSC 3432*	1	ug/l		< 1		< 1
1,2-dichloropropane	DETSC 3432	1	ug/l		< 1		< 1
Dibromomethane	DETSC 3432	1	ug/l		< 1		< 1
Bromodichloromethane	DETSC 3432	4	ug/l		< 4		< 4
cis-1,3-dichloropropene	DETSC 3432	1	ug/l		< 1		< 1
Toluene	DETSC 3432	1	ug/l		< 1		< 1
trans-1,3-dichloropropene	DETSC 3432	1	ug/l		< 1		< 1
1,1,2-trichloroethane	DETSC 3432	1	ug/l		< 1		< 1
Tetrachloroethylene	DETSC 3432	1	ug/l		< 1		< 1
1,3-dichloropropane	DETSC 3432	1	ug/l		< 1		< 1
Dibromochloromethane	DETSC 3432	1	ug/l		< 1		< 1
1,2-dibromoethane	DETSC 3432	1	ug/l		< 1		< 1
Chlorobenzene	DETSC 3432	1	ug/l		< 1		< 1
1,1,1,2-tetrachloroethane	DETSC 3432	1	ug/l		< 1		< 1
Ethylbenzene	DETSC 3432	1	ug/l		< 1		< 1
m+p-Xylene	DETSC 3432	2	ug/l		< 2		< 2
o-Xylene	DETSC 3432	1	ug/l		< 1		< 1
Styrene	DETSC 3432	1	ug/l		< 1		< 1
Bromoform	DETSC 3432	1	ug/l		< 1		< 1
Isopropylbenzene	DETSC 3432	1	ug/l		< 1		< 1
1,1,2,2-tetrachloroethane	DETSC 3432	1	ug/l		< 1		< 1
Bromobenzene	DETSC 3432	1	ug/l		< 1		< 1

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Water VOC/SVOC Samples

Our Ref 19-00769
Client Ref 3043
Contract Title Westgate, Cleckheaton

			Lab No	1445466	1445467	1445469	1445470
			Sample ID	US	US	DS	DS
			Depth				
			Other ID	2	3	2	3
			Sample Type	WATER	WATER	WATER	WATER
			Sampling Date	14/01/19	14/01/19	14/01/19	14/01/19
			Sampling Time	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
1,2,3-trichloropropane	DETSC 3432	1	ug/l		< 1		< 1
n-propylbenzene	DETSC 3432	1	ug/l		< 1		< 1
2-chlorotoluene	DETSC 3432	1	ug/l		< 1		< 1
1,3,5-trimethylbenzene	DETSC 3432	1	ug/l		< 1		< 1
4-chlorotoluene	DETSC 3432	1	ug/l		< 1		< 1
Tert-butylbenzene	DETSC 3432	1	ug/l		< 1		< 1
1,2,4-trimethylbenzene	DETSC 3432	1	ug/l		< 1		< 1
sec-butylbenzene	DETSC 3432	1	ug/l		< 1		< 1
p-isopropyltoluene	DETSC 3432	1	ug/l		< 1		< 1
1,3-dichlorobenzene	DETSC 3432	2	ug/l		< 2		< 2
1,4-dichlorobenzene	DETSC 3432	1	ug/l		< 1		< 1
n-butylbenzene	DETSC 3432	1	ug/l		< 1		< 1
1,2-dichlorobenzene	DETSC 3432	1	ug/l		< 1		< 1
1,2-dibromo-3-chloropropane	DETSC 3432	1	ug/l		< 1		< 1
1,2,4-trichlorobenzene	DETSC 3432	1	ug/l		< 1		< 1
Hexachlorobutadiene	DETSC 3432	1	ug/l		< 1		< 1
Naphthalene	DETSC 3432	1	ug/l		< 1		< 1
1,2,3-trichlorobenzene	DETSC 3432	1	ug/l		< 1		< 1
MTBE	DETSC 3432*	1	ug/l		< 1		< 1
SVOCs							
Phenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Aniline	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2-Chlorophenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Benzyl Alcohol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2-Methylphenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Bis(2-chloroisopropyl)ether	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
3&4-Methylphenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Bis(2-chloroethoxy)methane	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2,4-Dimethylphenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2,4-Dichlorophenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
1,2,4-Trichlorobenzene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Naphthalene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
4-Chloro-3-methylphenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2-Methylnaphthalene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Hexachlorocyclopentadiene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2,4,6-Trichlorophenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2,4,5-Trichlorophenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2-Chloronaphthalene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2-Nitroaniline	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2,4-Dinitrotoluene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Acenaphthylene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
3-Nitroaniline	DETSC 3434*	1	ug/l	< 1.0		< 1.0	

Key: * -not accredited. n/s -not supplied.

Summary of Chemical Analysis
Water VOC/SVOC Samples

Our Ref 19-00769
Client Ref 3043
Contract Title Westgate, Cleckheaton

			Lab No	1445466	1445467	1445469	1445470
			Sample ID	US	US	DS	DS
			Depth				
			Other ID	2	3	2	3
			Sample Type	WATER	WATER	WATER	WATER
			Sampling Date	14/01/19	14/01/19	14/01/19	14/01/19
			Sampling Time	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
Acenaphthene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
4-Nitrophenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Dibenzofuran	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2,6-Dinitrotoluene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2,3,4,6-Tetrachlorophenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Diethylphthalate	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
4-Chlorophenylphenylether	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Fluorene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
4-Nitroaniline	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Diphenylamine	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
4-Bromophenylphenylether	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Hexachlorobenzene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Bis(2-ethylhexyl)ester	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Pentachlorophenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Phenanthrene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Anthracene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Di-n-butylphthalate	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Fluoranthene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Pyrene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Butylbenzylphthalate	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Benzo(a)anthracene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Chrysene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Bis(2-ethylhexyl)phthalate	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Di-n-octylphthalate	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Benzo(b)fluoranthene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Benzo(k)fluoranthene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Benzo(a)pyrene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Indeno(123cd)pyrene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Dibenzo(ah)anthracene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Benzo(ghi)perylene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
1,4-Dinitrobenzene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Dimethylphthalate	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
1,3-Dinitrobenzene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
2,3,5,6-Tetrachlorophenol	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Azobenzene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
Carbazole	DETSC 3434*	1	ug/l	< 1.0		< 1.0	
1-Methylnaphthalene	DETSC 3434*	1	ug/l	< 1.0		< 1.0	

Key: * -not accredited. n/s -not supplied.

Information in Support of the Analytical Results

Our Ref 19-00769
Client Ref 3043
Contract Westgate, Cleckheaton

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1445465	US WATER	14/01/19	PB 1L		
1445466	US WATER	14/01/19	GB 1L		
1445467	US WATER	14/01/19	GV x2		
1445468	DS WATER	14/01/19	PB 1L		
1445469	DS WATER	14/01/19	GB 1L		
1445470	DS WATER	14/01/19	GV x2		

Key: P-Plastic B-Bottle G-Glass V-Vial

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Chemtest
The right chemistry to deliver results
Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

UKAS TESTING 2183

mCERTS THE ENVIRONMENT AGENCY'S MONITORING CERTIFICATION SCHEME

Amended Report

Report No.:	19-01615-2		
Initial Date of Issue:	04-Feb-2019	**Date of Re-Issue:**	11-Feb-2019
Client	Lithos Consulting		
Client Address:	Walton Road Wetherby LS22 5DZ		
Contact(s):	Alan Swales Josh Jones Liz Hart		
Project	3043 - Westgate, Cleckheaton		
Quotation No.:		**Date Received:**	17-Jan-2019
Order No.:	PO14065/JEJ/3043	**Date Instructed:**	23-Jan-2019
No. of Samples:	37		
Turnaround (Wkdays):	14	**Results Due:**	11-Feb-2019
Date Approved:	11-Feb-2019		

Approved By:

Details: Martin Dyer, Laboratory Manager

Chemtest
The right chemistry to deliver results

Results - Soil

Project: 3043 - Westgate, Cleckheaton

Client: Lithos Consulting				**Chemtest Job No.:**	19-01615	19-01615	19-01615	19-01615	19-01615	19-01615	19-01615	19-01615	19-01615
Quotation No.:				**Chemtest Sample ID.:**	755608	755609	755610	755611	755612	755613	755614	755615	755616
				Client Sample ID.:	1	3	1	1	2	3	5	1	2
				Sample Location:	TP434	TP434	TP435	TP436	TP436	TP436	TP436	TP437	TP437
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):	0.10	2.90	0.10	0.10	0.90	1.40	3.20	0.10	0.40
				Date Sampled:	14-Jan-2019	14-Jan-2019	14-Jan-2019	14-Jan-2019	14-Jan-2019	14-Jan-2019	14-Jan-2019	14-Jan-2019	14-Jan-2019
				Asbestos Lab:	COVENTRY		COVENTRY	COVENTRY	COVENTRY			COVENTRY	COVENTRY
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-		-	Free Fibres	-			-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected		No Asbestos Detected	Amosite	No Asbestos Detected			No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-		-	Stereo Microscopy	-			-	-
Asbestos by Gravimetry	U	2192	%	0.001				0.001					
Total Asbestos	N	2192	%	0.001				0.001					
Moisture	N	2030	%	0.020	13	10	7.6	18	27	13	11	19	24
Soil Colour	N	2040		N/A	Brown,	Brown,	Brown,	Brown,	Brown,	Brown,	Brown,	Brown,	Brown,
Other Material	N	2040		N/A	Stones,	Stones,	Stones,	Stones,	Stones,	Stones,	Stones,	Stones,	Stones,
Soil Texture	N	2040		N/A	Sand,	Sand,	Sand,	Sand,	Sand,	Sand,	Sand,	Sand,	Sand,
pH	M	2010		N/A	9.1	7.0	9.3	8.0	6.8		7.2	8.0	7.6
Magnesium (Water Soluble)	N	2120	g/l	0.010	0.012		< 0.010	0.010	0.12			< 0.010	< 0.010
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.077	0.14	0.015	0.69	15		1.1	0.20	0.26
Total Sulphur	M	2175	%	0.010				0.52	0.25	0.25		1.0	1.3
Chloride (Water Soluble)	M	2220	g/l	0.010	< 0.010		< 0.010	< 0.010	0.094			0.028	0.010
Nitrate (Water Soluble)	N	2220	g/l	0.010	< 0.010		< 0.010	< 0.010	< 0.010			< 0.010	< 0.010
Cyanide (Total)	M	2300	mg/kg	0.50				< 0.50	< 0.50	< 0.50		< 0.50	< 0.50
Vanadium	U	2450	mg/kg	5.0	26		40	47	25			53	58
Total Organic Carbon	M	2625	%	0.20	2.4		3.2	4.7	0.26	0.58		12	25
TPH >C6-C10	N	2670	mg/kg	1.0	< 1.0		< 1.0	< 1.0	< 1.0			< 1.0	< 1.0
TPH >C10-C21	N	2670	mg/kg	1.0	86		9.6	< 1.0	< 1.0			26	9.3
TPH >C21-C40	N	2670	mg/kg	1.0	200		42	< 1.0	< 1.0			170	37
Total TPH >C6-C40	M	2670	mg/kg	10	280		52	< 10	< 10			200	46
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0									
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0									
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0									
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0									
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0									
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0									
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0									
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0									
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0									
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0									
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0									
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0									
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0									
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0									