

We have completed the Ground Investigation works at Pioneer House School in Wythenshawe on Saturday 8th October 2022 and below is a preliminary overview of our findings. Attached are the draft exploratory hole logs and the exploratory hole location plan.

Site Works

- 6 No. windowless sampling boreholes (WS01 to WS06) were drilled to depths between 1.65m and 3.45m bgl using a Dando Terrier window sampling rig.
- Soil percolation testing was carried out at two locations (SuDS1 and SuDS2) at depths of 1.3m and 1.6m bgl.

Ground Model

Surfacing

The surfacing of site generally comprised two main strata:

- Dark brown slightly clayey sandy topsoil with minor constituents of brick, concrete and glass (WS04 to WS06, SuDS1 and SuDS2 to depths of between 0.2m and 0.25m).
- Tarmac was encountered within WS01 to WS03 to 0.1m bgl.

Made Ground

Made Ground was recorded in all exploratory holes to depths of between 0.7m and 1.4m bgl and generally comprised three main populations:

- Dark grey slightly gravelly occasionally ashy sand with minor constituents of tarmac and concrete was encountered in WS01 to WS03 from a depth of 0.1m to depths of between 0.3m and 0.8m bgl.
- Red brown sandy gravel of brick was present in WS01 to WS03 from depths of between 0.3m and 0.8m bgl to depths of up to 1.3m bgl.
- Orange brown / black slightly ashy gravelly sand with minor constituents of brick, concrete, coal, chert, glass and occasional clinker was present in WS04 to WS06 and SuDS1 to SuDS2 from depths of between 0.2m and 0.25m bgl to depths of between 0.6m and 1.4m bgl.

Locally in WS02 and WS06, firm gravelly clay with minor constituents of brick, chert and coal was observed from depths of between 0.6m and 1.3m bgl to depths of between 0.7m and 1.65m bgl.

Natural Strata

The natural strata comprised two main stratifications:

- Medium dense to very dense light brown clayey occasionally very clayey slightly gravelly becoming gravelly Sand with minor constituents of chert and quartzite was encountered within all exploratory holes from depths of between 0.7m and 1.4m bgl to depths of between 1.65m and 3.0m bgl.
- Soft slightly gravelly Clay was encountered within WS04 at depths of between 1.2m and 1.8m bgl.
- Stiff dark brown Clay was present within WS04 at depths of between 3.0m and 3.45m bgl.

Bedrock

Bedrock was not encountered during the Ground Investigation.

Groundwater

Groundwater was encountered in WS04 at 3.0m bgl at the base of the natural sand deposits.

Observations

No evidence of olfactory contamination was noted during the Ground Investigation.

Visual evidence of contamination was recorded across the site in the form of ash and rare clinker.

Ground Engineering

Traditional shallow foundations are considered to be a feasible option for the proposed development constructed within the natural sand deposits.

Evidence of very poor infiltration rates were observed during soil percolation testing and SuDS drainage is not likely to be considered feasible.

Land Quality

Made Ground was encountered across the site and testing has been scheduled based on the observations during the ground investigation works.

The comments made within this email are preliminary only and are subject to change within the final report.

We trust the above meets with your requirements, however if you have any queries please do not hesitate to contact us.

Kind Regards

Luke Harrison

Consulting Engineer

Groundtech Consulting Limited

First Floor | Lloyd House | Orford Court | Greenfold Way | WN7 3XJ

(M) 07592525033

(T) 0161 820 1368



www.groundtechconsulting.com

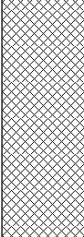


GROUNDTECH CONSULTING	CLIENT	DATE			Status		Notes APPROXIMATE POSITION OF WINDOWLESS SAMPLE BOREHOLE APPROXIMATE POSITION OF SOIL PERCOLATION TEST
	AA PROJECTS	OCTOBER 2022			Preliminary		
	PROJECT TITLE	SCALE			Draft		
	PIONERR HOUSE NEW-BUILD PROJECT	NTS			Issued		
	PLAN TITLE	PLAN NUMBER			For Comment		
	PROJECT LOCATION PLAN	GRO-22228-P04	Rev.	Details	Date	Approved	

Trial Pit Log

Trialpit No
SuDS1
Sheet 1 of 1

Project Name:	PIONEER HOUSE NEW-BUILD PROJECT	Project No.	GRO-22228	Co-ords:	-	Level:		Date	08/10/2022
Location:	WYTHENSHAW			Dimensions (m):	2			Scale	1:25
Client:	AA PROJECTS			Depth	1.30	0.6		Logged	CJH

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.20			MADE GROUND: Grass over dark brown slightly clayey gravelly sandy topsoil. Gravel is angular to subangular fine to coarse of mixed lithologies including brick, glass and concrete.	
	0.50	ES					MADE GROUND: Orange brown gravelly fine to coarse sand. Gravel is angular to subangular fine to coarse of mixed lithologies including brick, glass and concrete.	
	1.20	D		1.00			Light grey very clayey gravelly fine to medium sand. Gravel us angular to subrounded fine to medium of mixed lithologies including chert and quartzite.	1
				1.30			End of pit at 1.30 m	
								2
								3
								4
								5

Remarks: 1. Pit sides unstable. 2. No groundwater encountered. 3. Soil percolation test carried out at 1.3m bgl. 4. Backfilled with arisings.

Stability: Unstable



Trial Pit Log

Trialpit No
SuDS2
Sheet 1 of 1

Project Name:	PIONEER HOUSE NEW-BUILD PROJECT	Project No.	GRO-22228	Co-ords:	-	Level:		Date	08/10/2022
Location:	WYTHENSHAW			Dimensions (m):	2			Scale	1:25
Client:	AA PROJECTS			Depth	1.60			Logged	

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.25			MADE GROUND: Grass over dark brown slightly clayey gravelly sandy topsoil. Gravel is angular to subangular fine to coarse of mixed lithologies including brick, glass and concrete.	
	0.60	ES					MADE GROUND: Orange brown gravelly fine to coarse sand. Gravel is angular to subangular fine to coarse of mixed lithologies including brick, glass and concrete.	1
	1.50	D		1.40			Light grey very clayey gravelly fine to medium sand. Gravel us angular to subrounded fine to medium of mixed lithologies including chert and quartzite.	
				1.60			End of pit at 1.60 m	2
								3
								4
								5

Remarks: 1. Pit sides unstable. 2. No groundwater encountered. 3. Soil percolation test carried out at 1.3m bgl. 4. Backfilled with arisings.

Stability: Unstabe





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Borehole Log

Borehole No.

WS01

Sheet 1 of 1

Project Name: PIONEER HOUSE NEW-BUILD PROJECT

Project No.
GRO-22228

Co-ords: -

Hole Type
WS

Location: WYTHENSHAW

Level:

Scale
1:25

Client: AA PROJECTS

Dates: 08/10/2022 -

Logged By
LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10			0.10			MADE GROUND: Tarmac.	
		0.20	ES		0.35			MADE GROUND: Dark grey slightly gravelly slightly ashy sand. Gravel is angular to subangular fine to coarse of mixed lithologies including tarmac and concrete.	
		0.50	ES		0.80			MADE GROUND: Red brown sandy angular to subangular fine to coarse gravel of brick with low cobble content of brick.	
		1.00	D		1.00			Light brown slightly clayey slightly gravelly fine to medium SAND. Gravel is subangular to rounded fine to coarse of chert and quartzite. Rootlets present.	
		1.20	ES		1.65			Becoming very dense and gravelly from 1.2m bgl.	
				N=50 (5,6/50 for 235mm)				End of borehole at 1.65 m	

Remarks

1. Hand dug inspection pit to 1.2m bgl. 2. No groundwater encountered. 3. Hole terminated due to SPT refusal. 4. Monitoring standpipe installed to 1.2m bgl (0.5m plain, 0.7m slotted).





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Borehole Log

Borehole No.

WS02

Sheet 1 of 1

Project Name: PIONEER HOUSE NEW-BUILD PROJECT

Project No.
GRO-22228

Co-ords: -

Hole Type
WS

Location: WYTHENSHAW

Level:

Scale
1:25

Client: AA PROJECTS

Dates: 08/10/2022 -

Logged By
LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10			0.10			MADE GROUND: Tarmac.	
		0.20	ES					MADE GROUND: Dark grey slightly gravelly slightly sand. Gravel is angular to subangular fine to coarse of mixed lithologies including tarmac and concrete.	
		0.50	ES						
		0.80			0.80			MADE GROUND: Red brown sandy angular to subangular fine to coarse gravel of brick with low cobble content of brick.	1
		1.20		N=5 (1,0/1,1,1,2)					
		1.35	D		1.30			MADE GROUND: Firm grey slightly gravelly clay. Gravel is angular to rounded medium of mixed lithologies including chert, brick and coal.	
								No recovery between 1.65m and 2.0m bgl.	
		2.00		N=50 (6,9/50 for 235mm)	2.00			End of borehole at 2.00 m	2
									3
									4
									5

Remarks

1. Hand dug inspection pit to 1.2m bgl. 2. No groundwater encountered. 3. Hole terminated due to SPT refusal. 4. Backfilled with arisings.





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Borehole Log

Borehole No.

WS03

Sheet 1 of 1

Project Name: PIONEER HOUSE NEW-BUILD PROJECT

Project No.
GRO-22228

Co-ords: -

Hole Type
WS

Location: WYTHENSHAWE

Level:

Scale
1:25

Client: AA PROJECTS

Dates: 08/10/2022 -

Logged By
LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.10			MADE GROUND: Tarmac.	
		0.20	ES		0.30			MADE GROUND: Dark grey slightly gravelly slightly sand. Gravel is angular to subangular fine to coarse of mixed lithologies including tarmac and concrete.	
		0.50	ES					MADE GROUND: Red brown sandy angular to subangular fine to coarse gravel of brick with low cobble content of brick.	
		1.00	D		0.90			Light brown slightly clayey slightly gravelly fine to medium SAND. Gravel is subangular to rounded fine to coarse of chert and quartzite. Rootlets present.	1
		1.00	ES						
		1.20	D					Becoming very dense and gravelly from 1.2m bgl.	
		1.20		N=50 (4,6/50 for 235mm)	1.65			End of borehole at 1.65 m	2
									3
									4
									5

Remarks

1. Hand dug inspection pit to 1.2m bgl. 2. No groundwater encountered. 3. Hole terminated due to SPT refusal. 4. Monitoring standpipe installed to 1.2m bgl (0.5m plain, 0.7m slotted).





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Borehole Log

Borehole No.

WS04

Sheet 1 of 1

Project Name: PIONEER HOUSE NEW-BUILD PROJECT

Project No.
GRO-22228

Co-ords: -

Hole Type
WS

Location: WYTHENSHAW

Level:

Scale
1:25

Client: AA PROJECTS

Dates: 08/10/2022 -

Logged By
LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.25			MADE GROUND: Grass over dark brown slightly clayey slightly gravelly sandy topsoil. Gravel is angular to subangular fine to coarse of mixed lithologies including brick, glass and concrete.	1
		0.50	ES					MADE GROUND: Black slightly gravelly ashy sand. Gravel is angular to subangular fine to coarse of mixed lithologies including brick, sandstone, glass, clinker coal and chert.	
		0.70	ES		0.65			MADE GROUND: Soft to firm brown slightly gravelly clay. Gravel is angular to subangular fine to medium of coal.	
		1.20	ES	N=0 (0,0/0,0,0,0)	1.20			Soft brown slightly gravelly CLAY. Gravel is angular to subangular fine to medium of coal.	2
		1.30							
		1.50	D						
					1.80			Light brown slightly clayey slightly gravelly fine to medium SAND. Gravel is angular to subrounded medium to coarse of chert and quartzite.	3
		2.00	D	N=13 (2,3/3,3,3,4)					
		2.50							
		3.00	D	N=48 (3,5/10,9,11,18)	3.00			Stiff dark brown CLAY.	
		3.00 - 3.45							
					3.45			End of borehole at 3.45 m	4
									5

Remarks

1. Hand dug inspection pit to 1.2m bgl. 2. Groundwater encountered at 3.0m bgl. 3. Hole terminated due to collapse. 4. Monitoring standpipe installation to 4.0m bgl (1.0m plain, 3.0m slotted).





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Borehole Log

Borehole No.

WS05

Sheet 1 of 1

Project Name: PIONEER HOUSE NEW-BUILD PROJECT

Project No.
GRO-22228

Co-ords: -

Hole Type
WS

Location: WYTHENSHAW

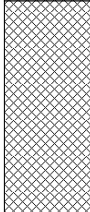
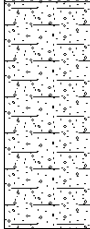
Level:

Scale
1:25

Client: AA PROJECTS

Dates: 08/10/2022 -

Logged By
LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES	N=50 (8,11/50 for 165mm)	0.20			MADE GROUND: Grass over dark brown slightly clayey slightly gravelly sandy topsoil. Gravel is angular to subangular fine to coarse of mixed lithologies including brick, glass and concrete.	1
		0.50	ES					MADE GROUND: Black slightly gravelly ashy sand. Gravel is angular to subangular fine to coarse of mixed lithologies including brick, sandstone, glass, clinker coal and chert.	
		1.00 1.00 - 1.45	ES D		0.90			Light brown slightly clayey slightly gravelly fine to medium SAND. Gravel is angular to subrounded medium to coarse of chert and quartzite.	
		1.20							
					1.65		End of borehole at 1.65 m		2
									3
									4
									5

Remarks

1. Hand dug inspection pit to 1.2m bgl. 2. No groundwater encountered. 3. Hole terminated due to SPT refusal. 4. Backfilled with arisings.





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Borehole Log

Borehole No.

WS06

Sheet 1 of 1

Project Name: PIONEER HOUSE NEW-BUILD PROJECT

Project No.
GRO-22228

Co-ords: -

Hole Type
WS

Location: WYTHENSHAW

Level:

Scale
1:25

Client: AA PROJECTS

Dates: 08/10/2022 -

Logged By
LH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		1.20		N=50 (7,10/50 for 235mm)	0.22			MADE GROUND: Grass over dark brown slightly clayey slightly gravelly sandy topsoil. Gravel is angular to subangular fine to coarse of mixed lithologies including brick, glass and concrete.	1
					0.60			MADE GROUND: Dark brown slightly gravelly sand. Gravel is angular to subrounded fine to coarse of mixed lithologies including brick, glass and quartzite.	
					0.70			MADE GROUND: Firm dark brown slightly gravelly sandy clay Gravel is angular to subrounded fine to coarse of mixed lithologies including brick and quartzite.	
								Light brown slightly clayey fine to medium SAND. <i>Becoming slightly gravelly at 0.9m bgl.</i>	
					1.65			End of borehole at 1.65 m	2
									3
									4
									5

Remarks

1. Hand dug inspection pit to 1.2m bgl. 2. No groundwater encountered. 3. Hole terminated due to SPT refusal. 4. Backfilled with arisings.

