

Site : Preston Western Distributor Road, Preston


Job Number
41455E

Client : Lancashire County Council

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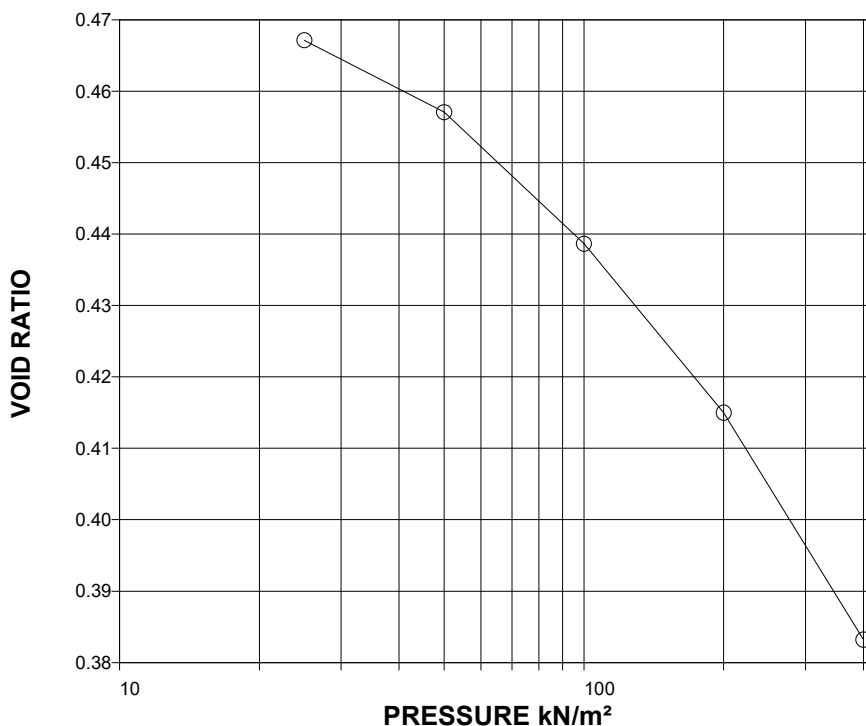
ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Description
BH223	5.00	U18	Firm brown silty CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical

Diameter (mm)	75.05
Particle Density (Mg/m ³)	2.65 (Assumed)
Swelling Pressure (kN/m ²)	
Lab Temp (°C)	21

	Initial	Final
Height (mm)	19.07	17.62
Wet Weight (g)	180.05	176.84
Moisture Content (%)	20	19
Bulk Density (Mg/m ³)	2.13	2.27
Dry Density (Mg/m ³)	1.78	1.91
Void Ratio	0.489	0.387
Degree of Saturation (%)	105.67	127.91



Pressure kN/m ²	Mv m ² /MN	Cv m ² /year	Void Ratio
25	0.60	13	0.467
50	0.29	2.6	0.457
100	0.27	2.6	0.439
200	0.17	2.4	0.415
400	0.12	2.0	0.383

Pressure kN/m ²	Mv m ² /MN	Cv m ² /year	Void Ratio

Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

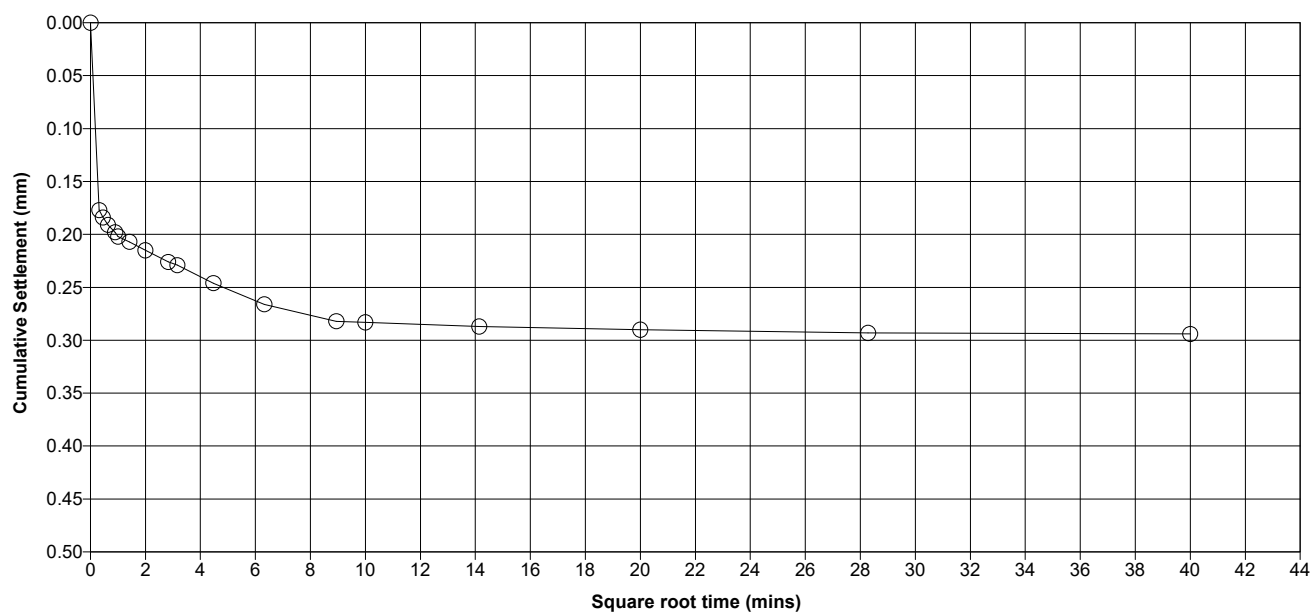
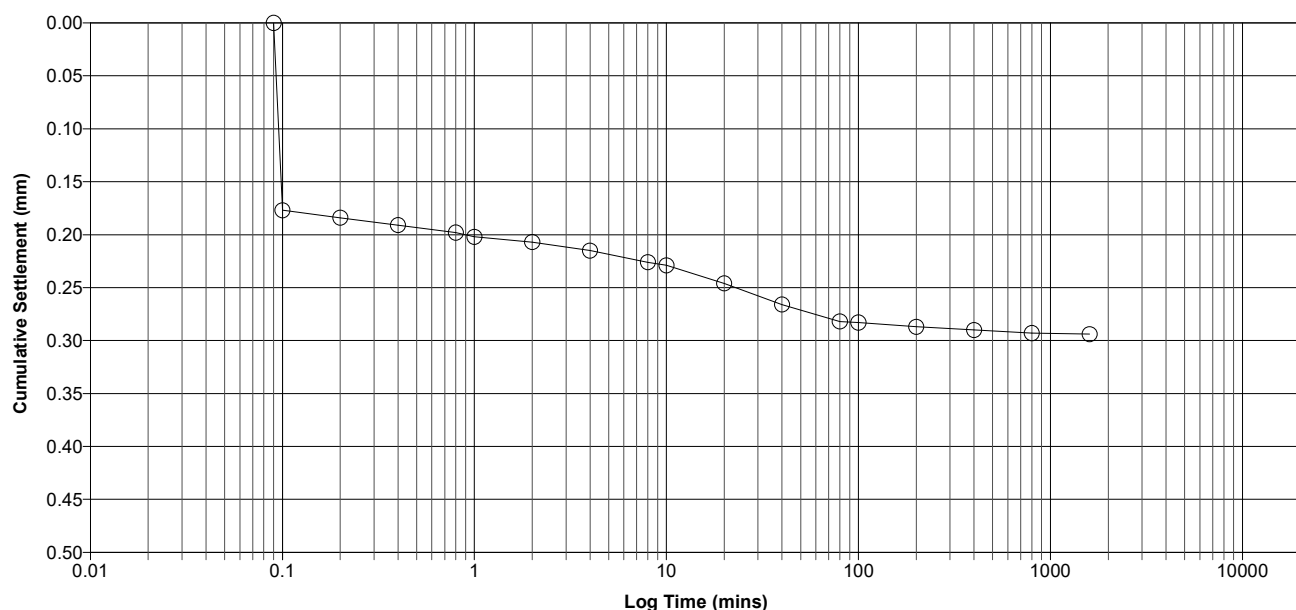
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH223	5.00	U18	1	Firm brown silty CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

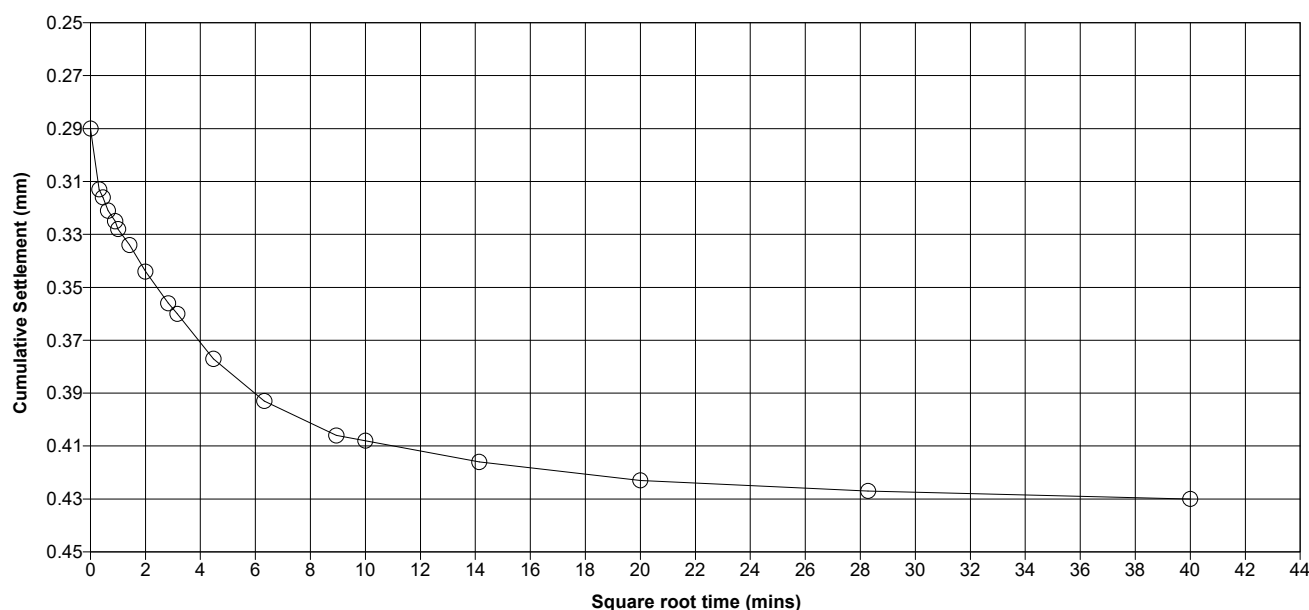
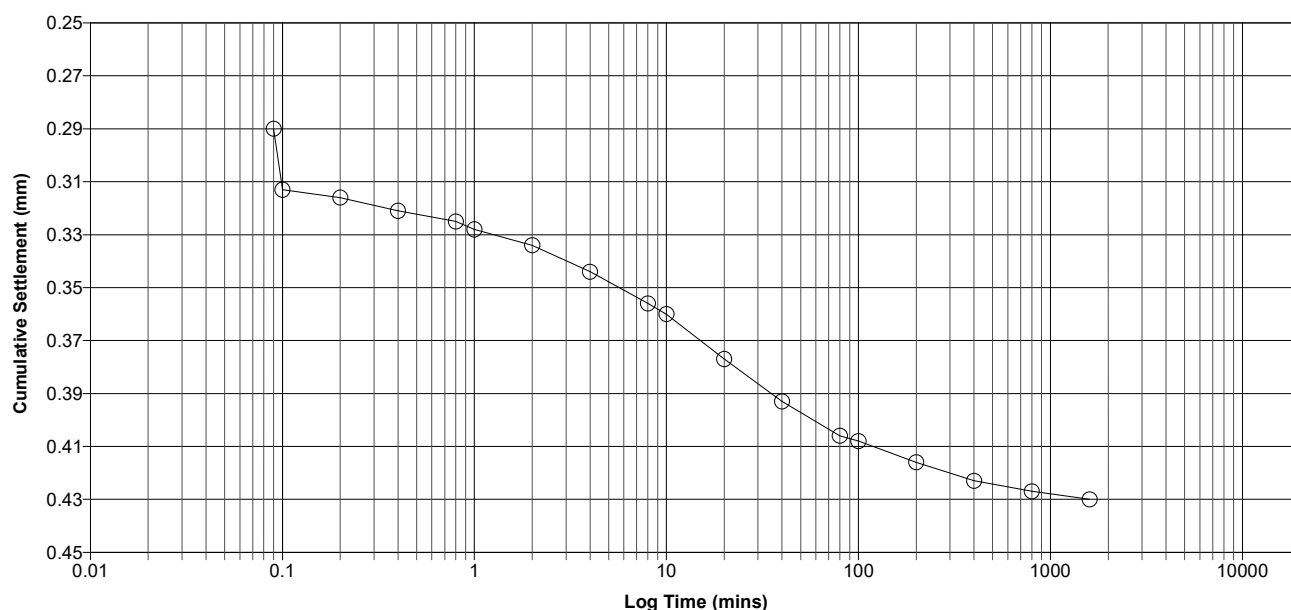
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH223	5.00	U18	2	Firm brown silty CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

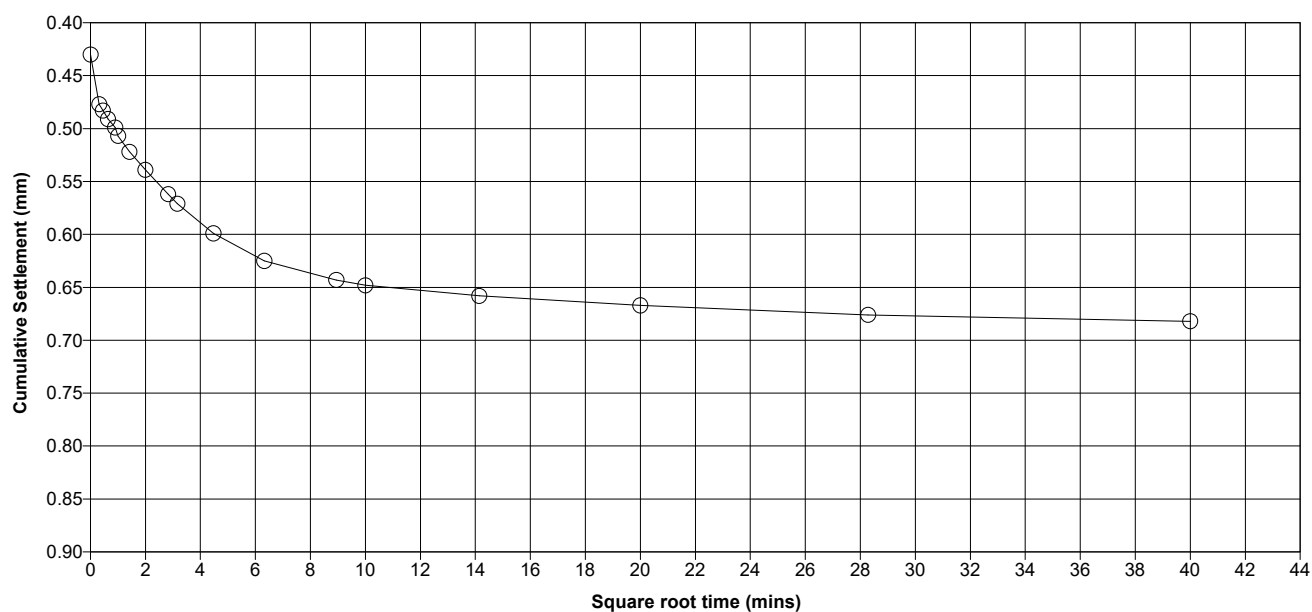
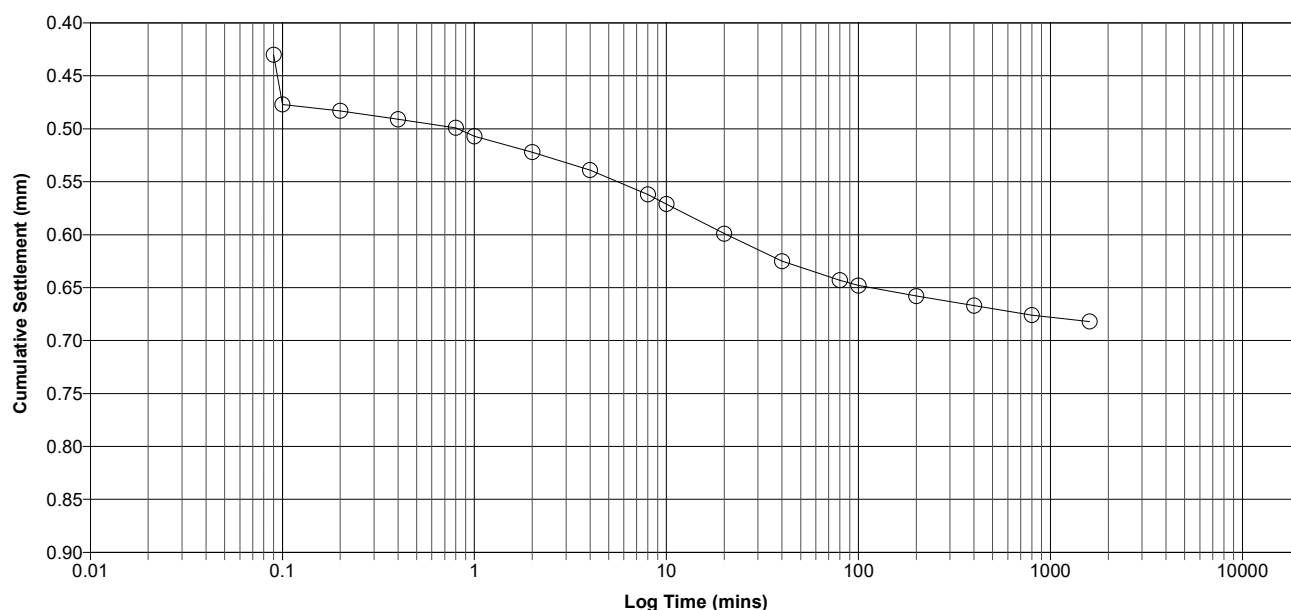
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH223	5.00	U18	3	Firm brown silty CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

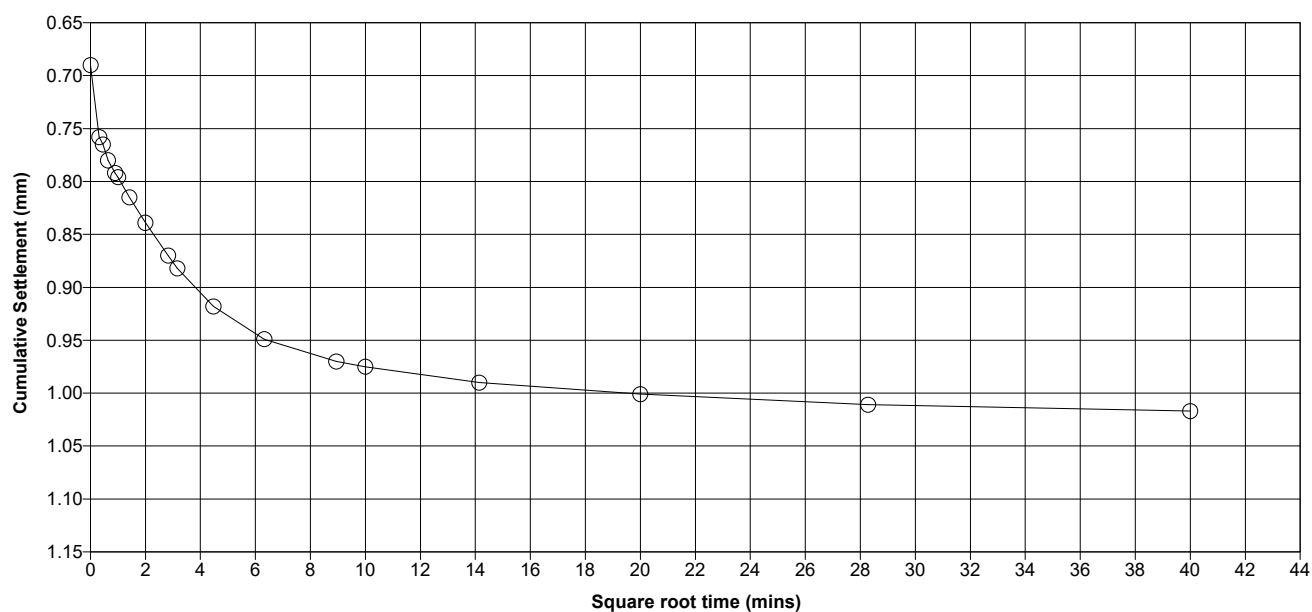
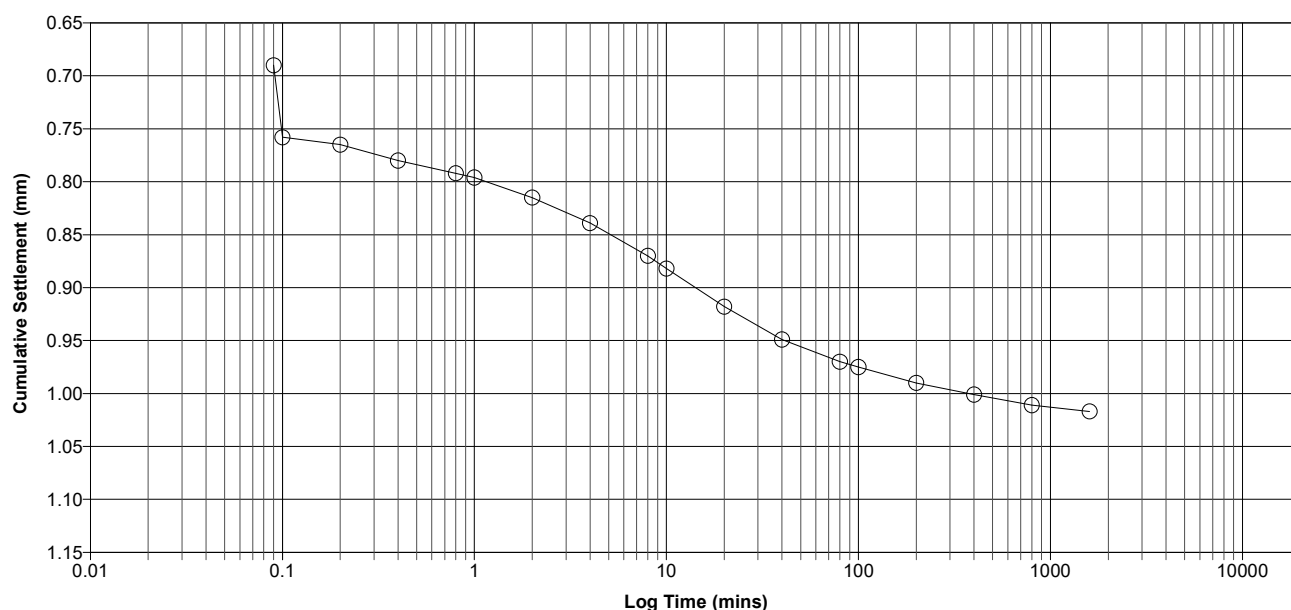
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH223	5.00	U18	4	Firm brown silty CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

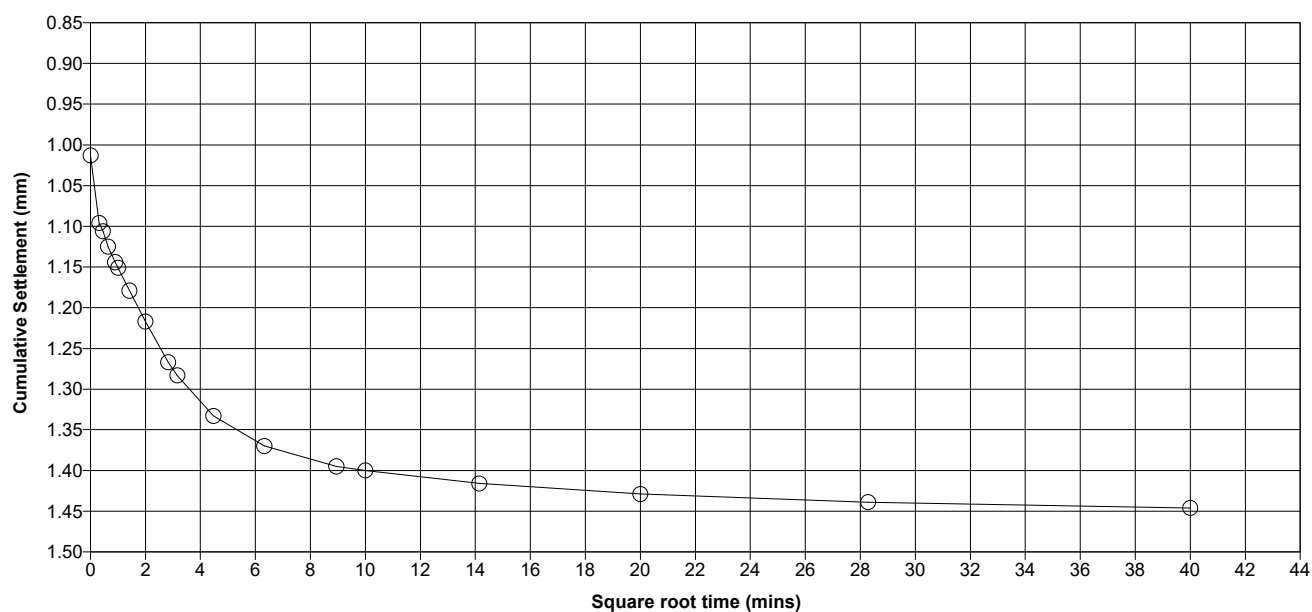
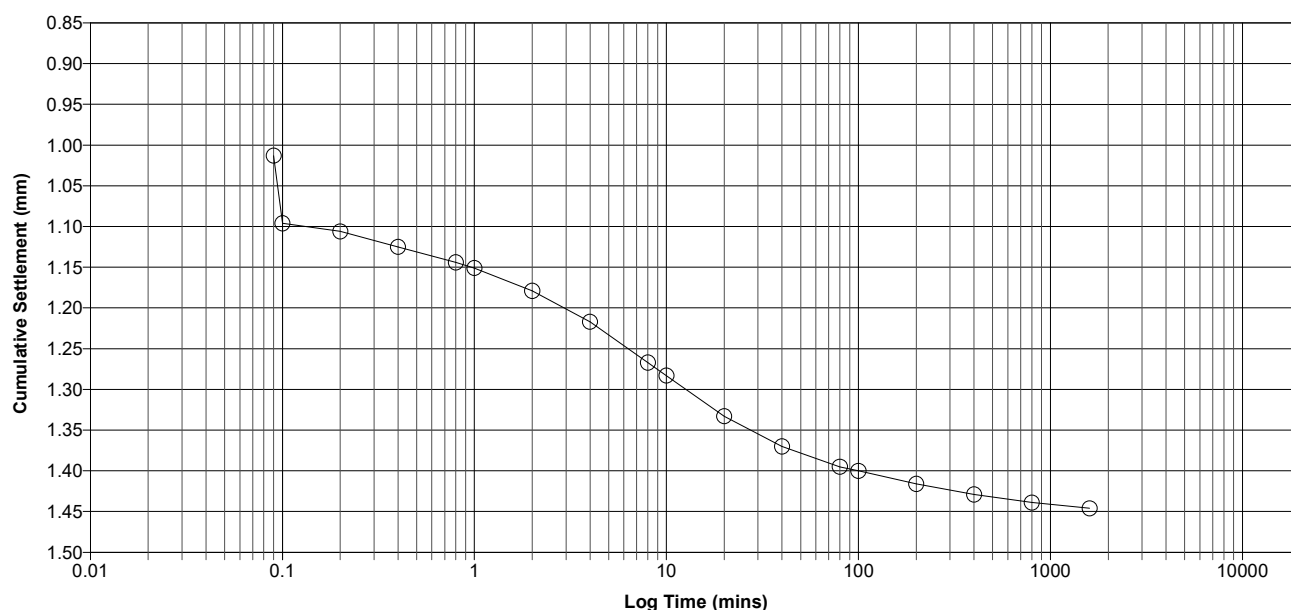
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH223	5.00	U18	5	Firm brown silty CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston


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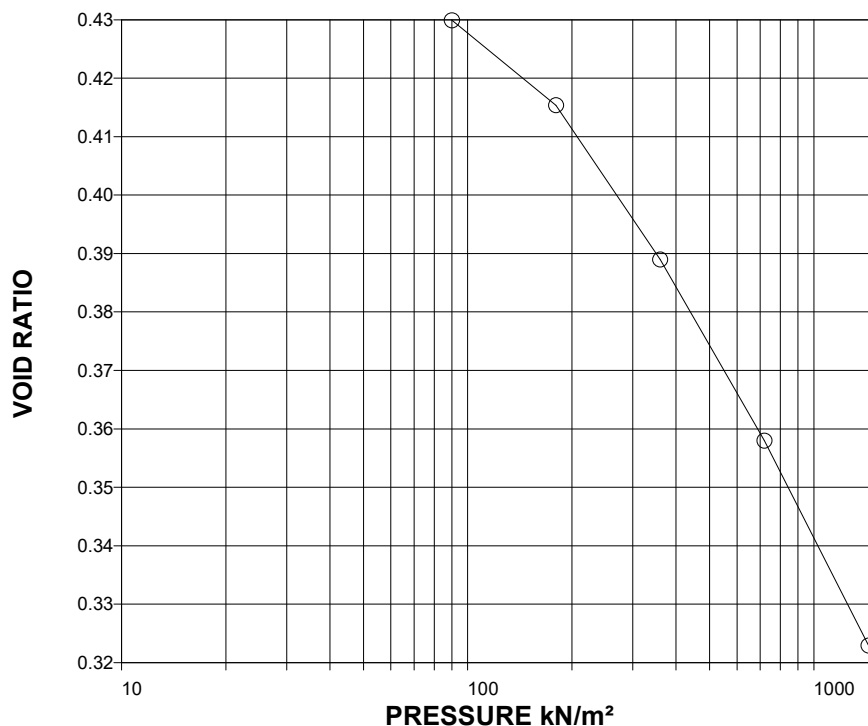
ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Description
BH223	17.00	U47	Brown sandy gravelly CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical

Diameter (mm)	75.09
Particle Density (Mg/m ³)	2.65 (Assumed)
Swelling Pressure (kN/m ²)	
Lab Temp (°C)	21

	Initial	Final
Height (mm)	19.02	17.15
Wet Weight (g)	178.57	176.19
Moisture Content (%)	16	17
Bulk Density (Mg/m ³)	2.12	2.32
Dry Density (Mg/m ³)	1.83	1.99
Void Ratio	0.448	0.332
Degree of Saturation (%)	95.23	133.14



Pressure kN/m ²	Mv m ² /MN	Cv m ² /year	Void Ratio
90	0.18	22	0.430
180	0.13	14	0.415
360	0.11	8.8	0.389
720	0.07	6.3	0.358
1440	0.04	4.0	0.323

Pressure kN/m ²	Mv m ² /MN	Cv m ² /year	Void Ratio

Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

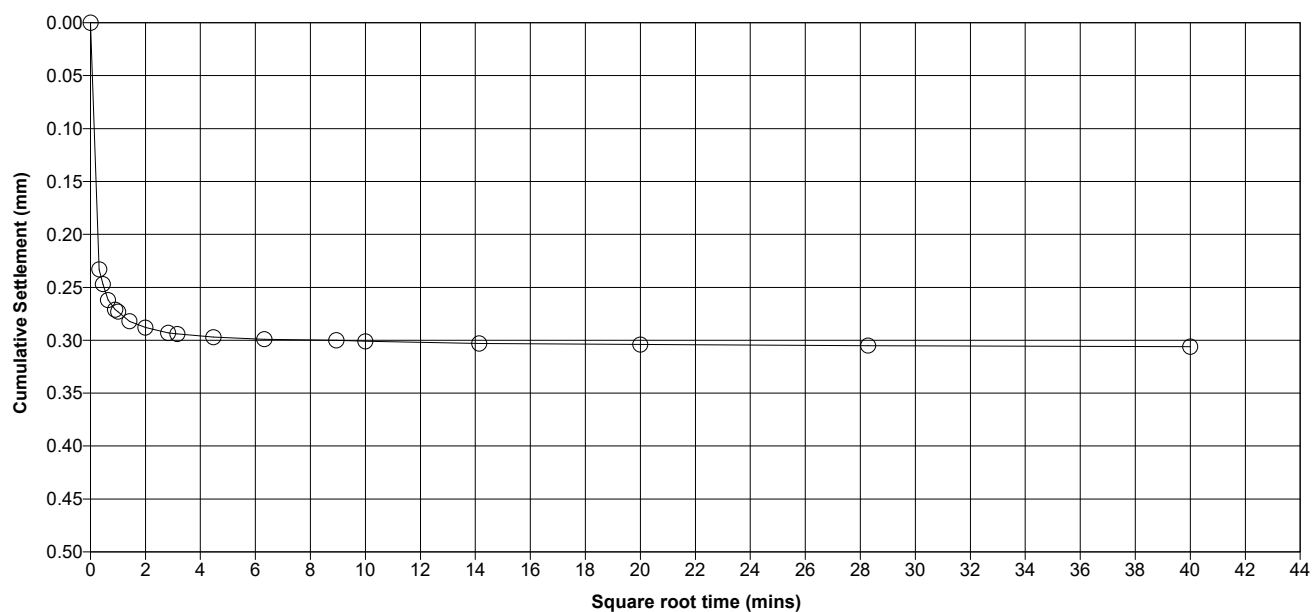
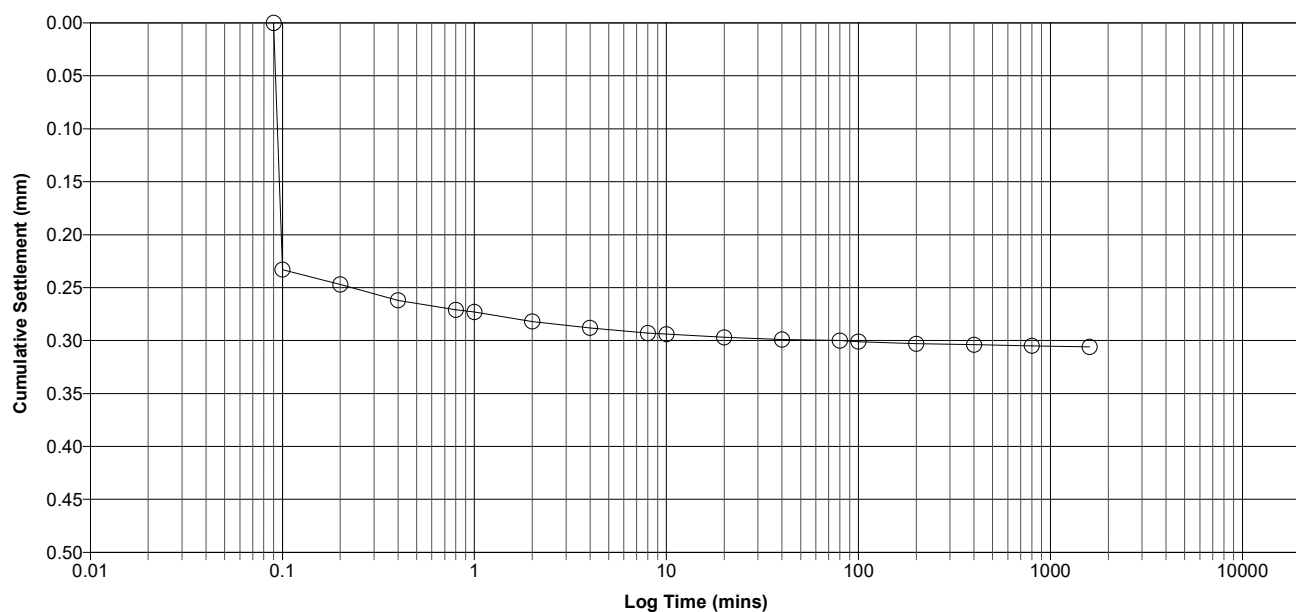
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH223	17.00	U47	1	Brown sandy gravelly CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

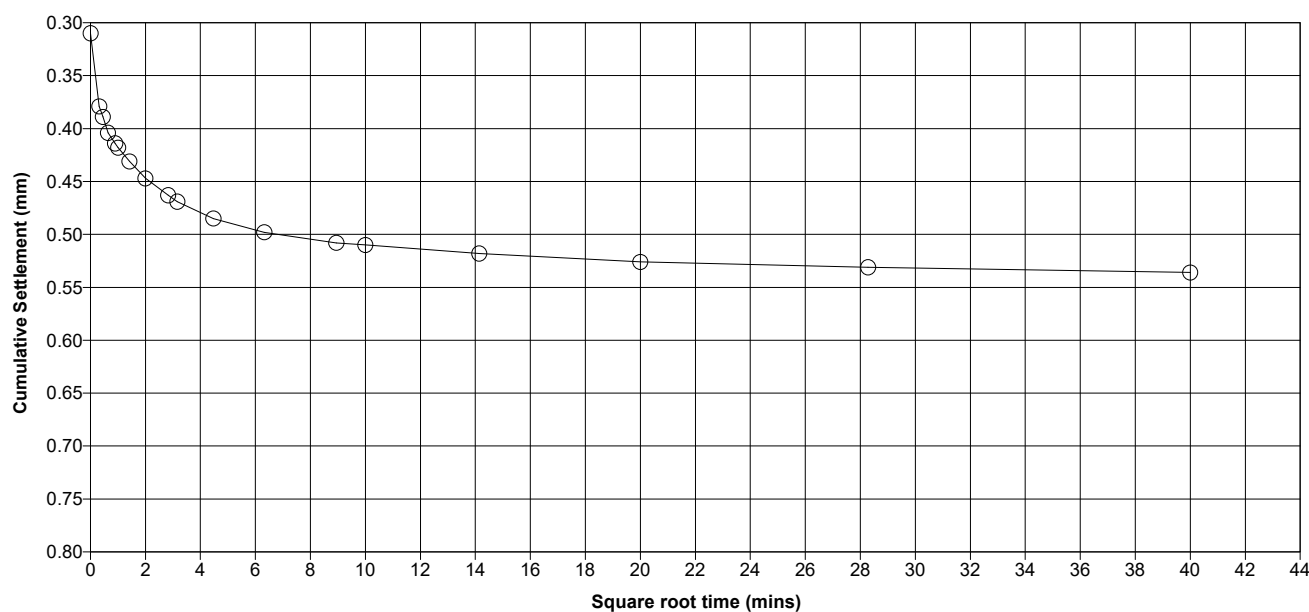
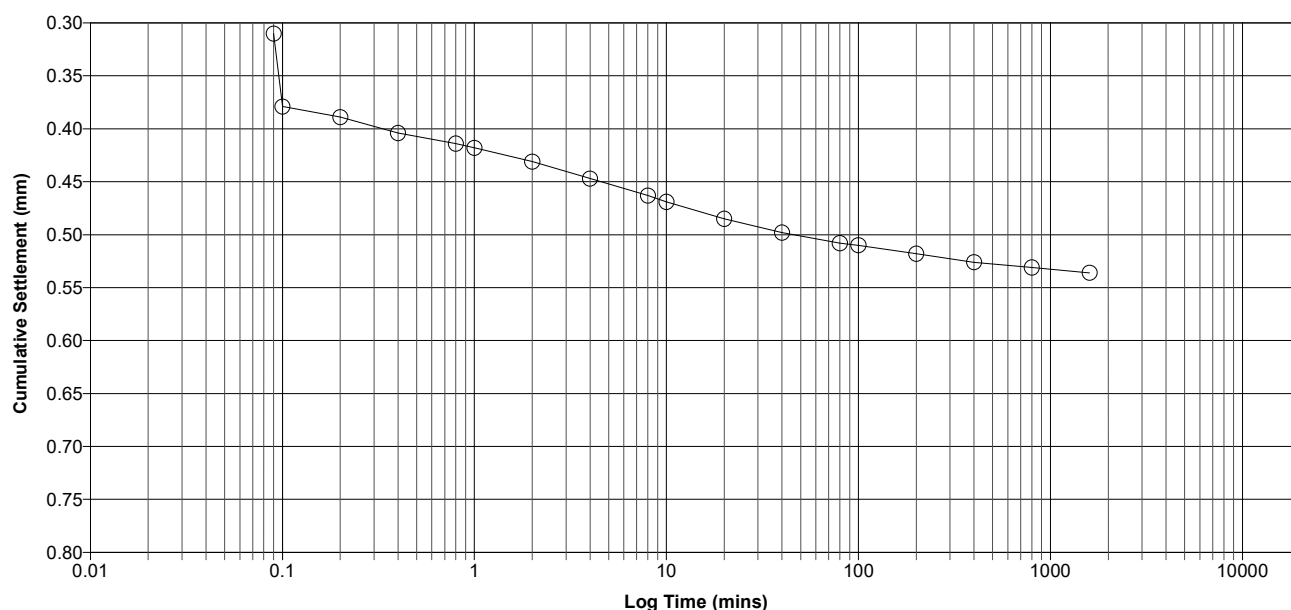
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH223	17.00	U47	2	Brown sandy gravelly CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

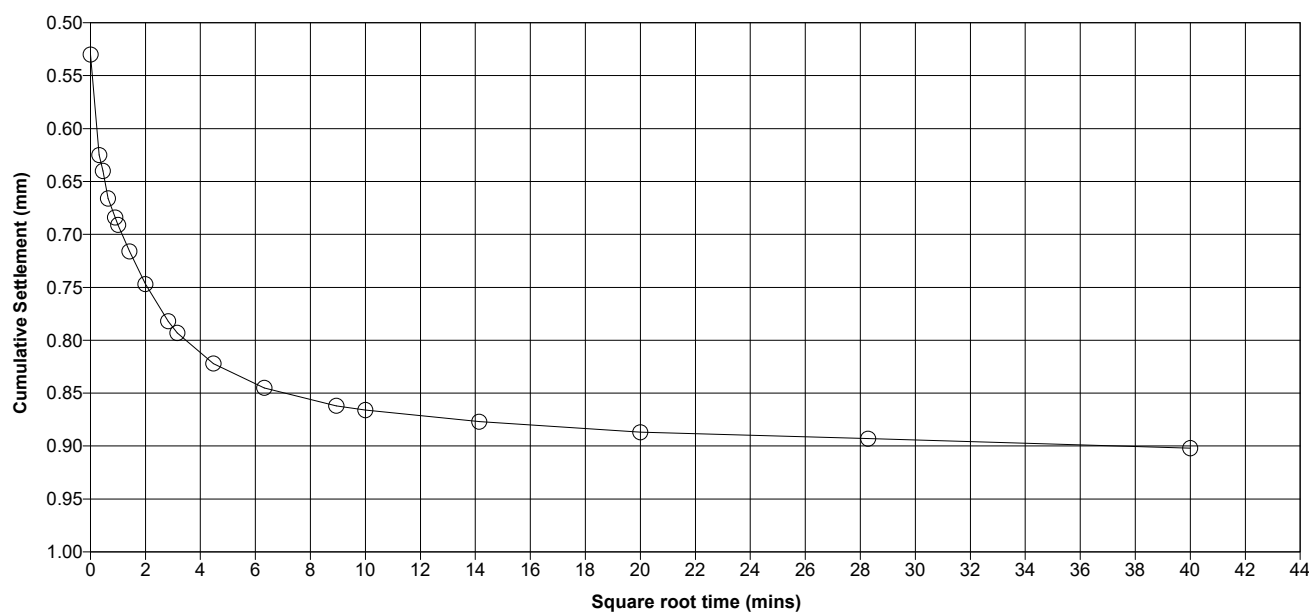
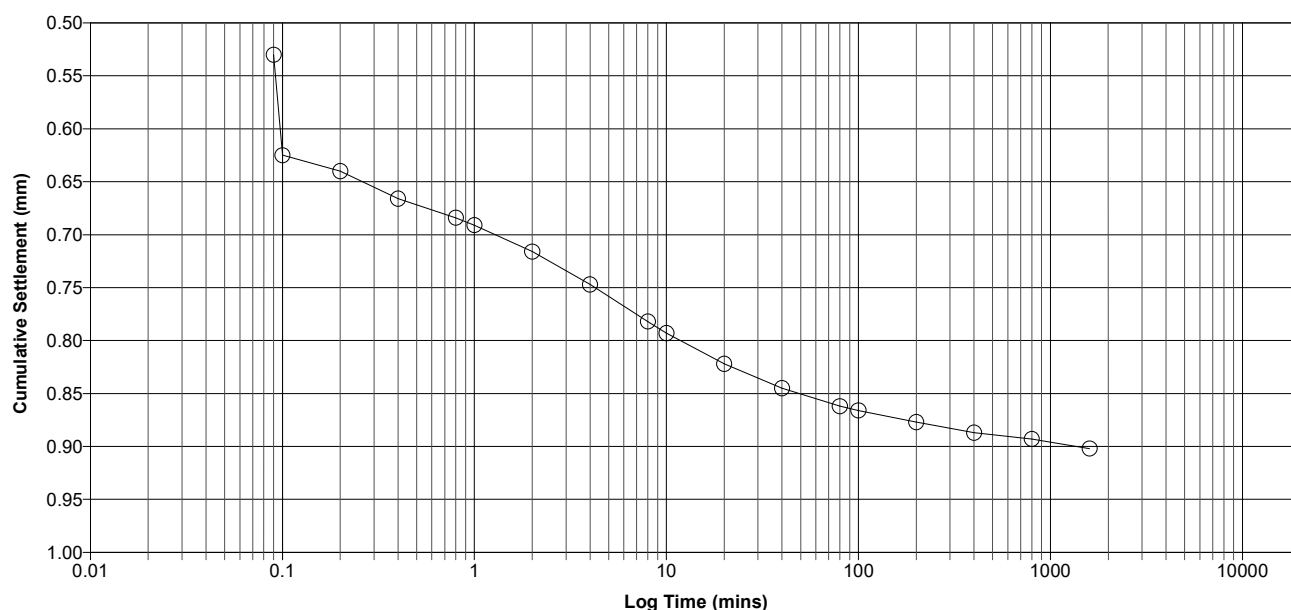
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH223	17.00	U47	3	Brown sandy gravelly CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

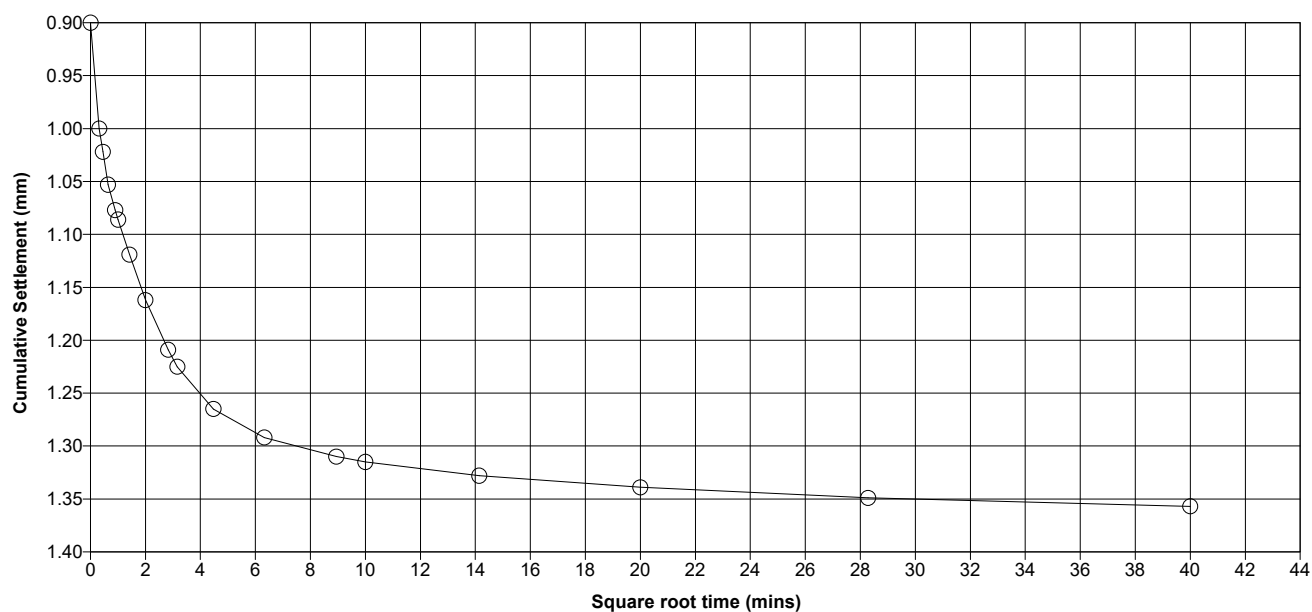
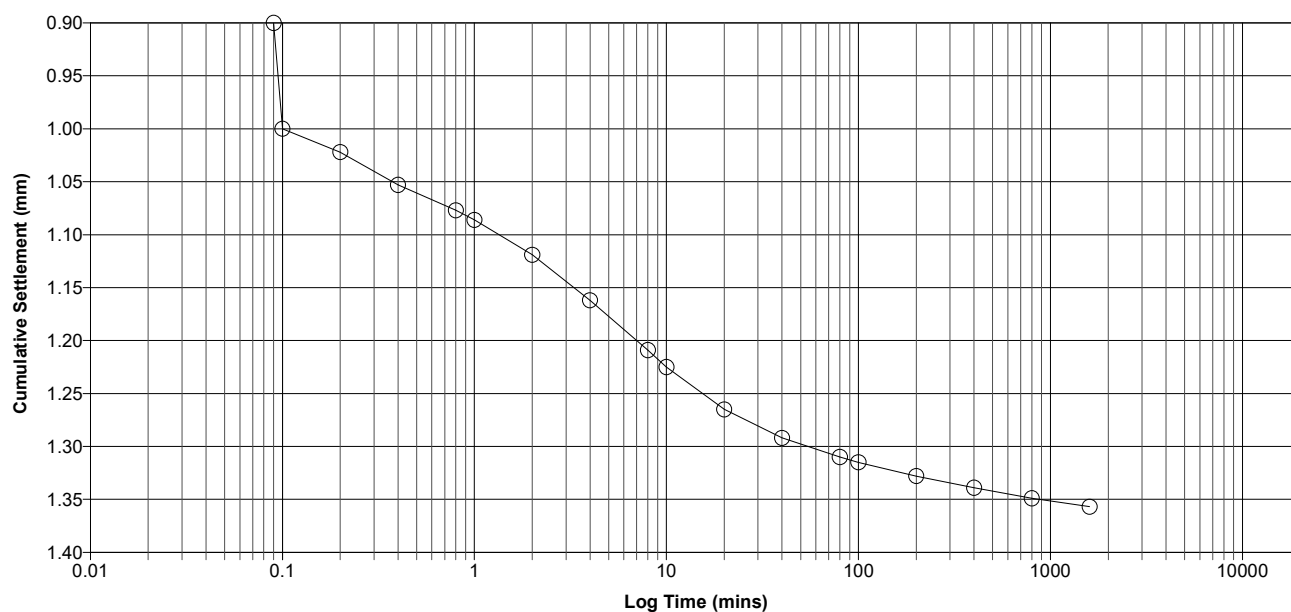
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH223	17.00	U47	4	Brown sandy gravelly CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

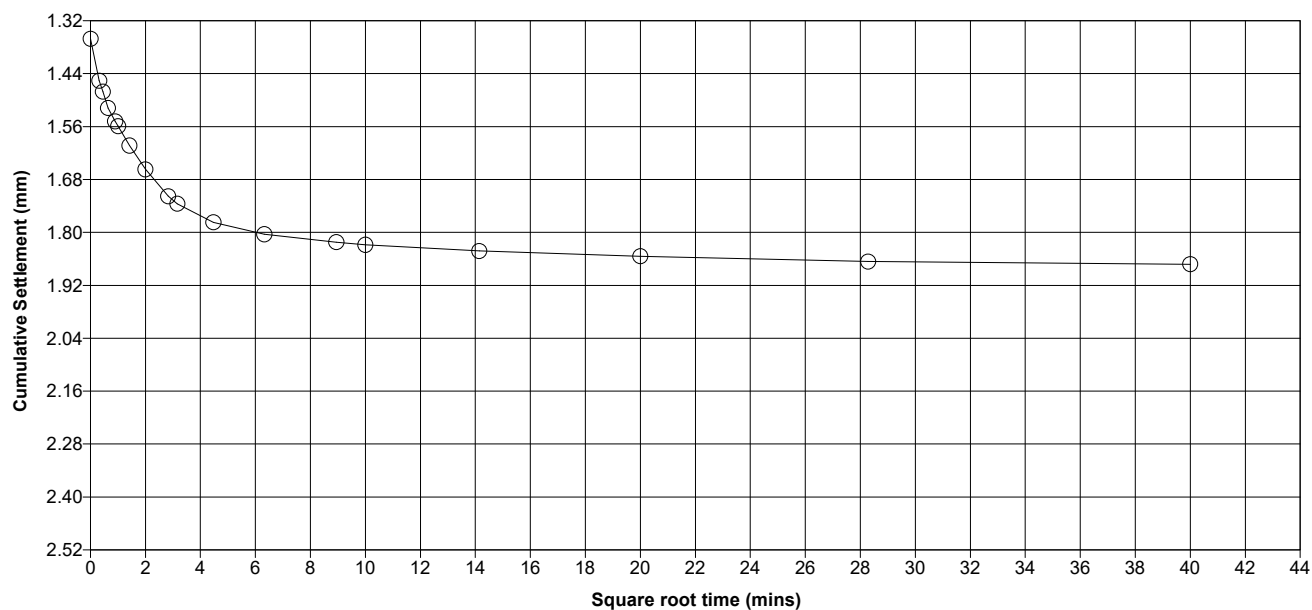
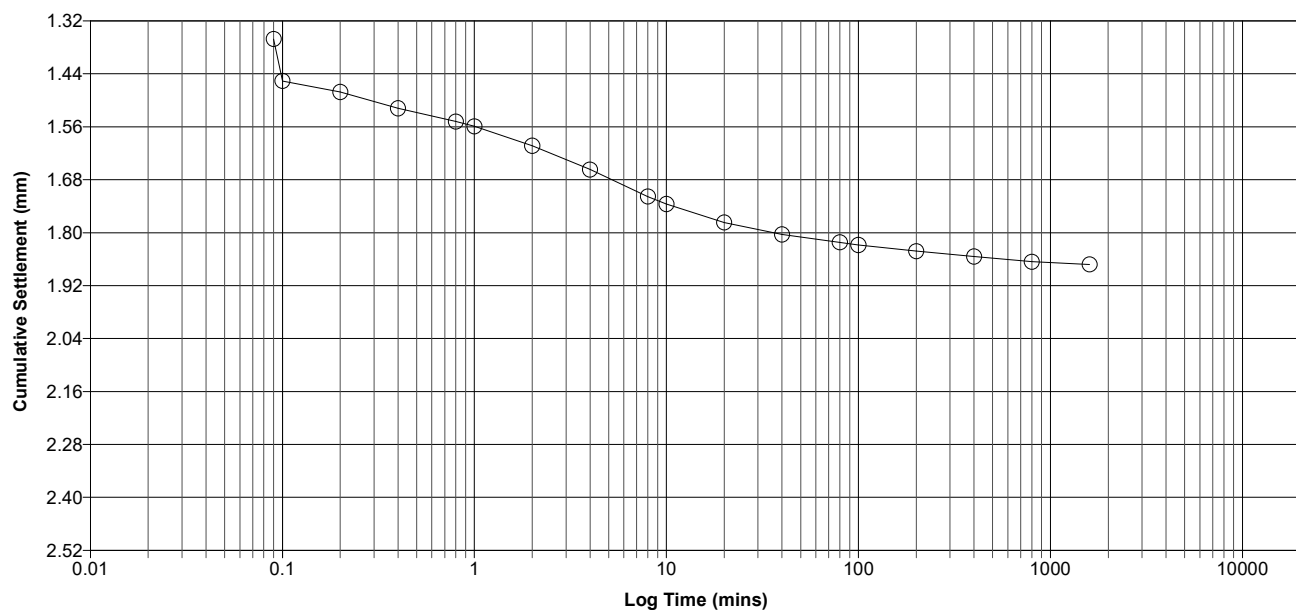
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH223	17.00	U47	5	Brown sandy gravelly CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

413640-2

SAL Reference: 413640 Project Site: Western Distributor Road, Preston Customer Reference: 41455												
Soil	Analysed as Soil											
Miscellaneous												
SAL Reference		413640 019	413640 020	413640 021	413640 022	413640 023	413640 024	413640 025	413640 026			
Customer Sample Reference		BH222	BH224	BH45	BH71	BH73	BH76	BH85	BH92			
Date Sampled		14-JUL-2014	14-JUL-2014	07-JUL-2014	21-JUL-2014	21-JUL-2014	18-JUL-2014	11-JUL-2014	09-JUL-2014			
Depth		0.50	0.50	0.50	0.25	0.50	0.50	0.90	0.60			
Type		Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Determinand	Method	Test Sample	LOD	Units								
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

SAL Reference: 413640													
Project Site: Western Distributor Road, Preston													
Customer Reference: 41455													
Soil		Analysed as Soil											
MCERTS Preparation													
SAL Reference		413640 001	413640 002	413640 003	413640 004	413640 005	413640 006	413640 007	413640 008	413640 009			
Customer Sample Reference		BH10	BH119	BH121	BH121	BH121	BH125	BH127	BH128	BH128			
Date Sampled		16-JUL-2014	18-JUL-2014	17-JUL-2017	17-JUL-2017	22-JUL-2014	21-JUL-2014	16-JUL-2014	16-JUL-2014	15-JUL-2014			
Depth		0.25	0.50	1.00	3.00	5.00	0.25	0.50	1.80	3.80			
Type		Topsoil	Sandy Soil	Clay	Clay	Clay	Topsoil	Clay	Clay	Clay			
Determinand	Method	Test Sample	LOD	Units									
Moisture @ 105 C	T162	AR	0.1	%	12	15	15	20	14	18	14	15	16

SAL Reference: 413640													
Project Site: Western Distributor Road, Preston													
Customer Reference: 41455													
Soil Analysed as Soil													
MCERTS Preparation													
SAL Reference				413640 010	413640 011	413640 012	413640 013	413640 014	413640 015	413640 016	413640 017	413640 018	
Customer Sample Reference				BH223	BH49	BH79	BH101	BH115	BH117	BH13	BH210	BH216	
Date Sampled				25-JUL-2014	17-JUL-2014	07-JUL-2014	11-JUL-2014	15-JUL-2014	04-JUL-2014	14-JUL-2014	14-JUL-2014	14-JUL-2014	
Depth				0.50	0.50	0.50	0.50	0.25	0.80	0.50	1.00	0.50	
Type				Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	
Determinand	Method	Test Sample	LOD	Units									
Moisture @ 105 C	T162	AR	0.1	%	13	15	11	13	15	15	19	12	18

<div>SAL Reference: 413640 Project Site: Western Distributor Road, Preston Customer Reference: 41455</div> <div>Soil MCERTS Preparation</div> <div>Analysed as Soil</div>												
SAL Reference		413640 019	413640 020	413640 021	413640 022	413640 023	413640 024	413640 025	413640 026			
Customer Sample Reference		BH222	BH224	BH45	BH71	BH73	BH76	BH85	BH92			
Date Sampled		14-JUL-2014	14-JUL-2014	07-JUL-2014	21-JUL-2014	21-JUL-2014	18-JUL-2014	11-JUL-2014	09-JUL-2014			
Depth		0.50	0.50	0.50	0.25	0.50	0.50	0.90	0.60			
Type		Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Determinand	Method	Test Sample	LOD	Units								
Moisture @ 105 C	T162	AR	0.1	%	13	13	<0.1	17	14	26	19	16

SAL Reference: 413640 Project Site: Western Distributor Road, Preston Customer Reference: 41455 Soil Analysed as Soil PAH US EPA 16 (B and K split)												
SAL Reference				413640 019	413640 020	413640 021	413640 022	413640 023	413640 024	413640 025	413640 026	
Customer Sample Reference				BH222	BH224	BH45	BH71	BH73	BH76	BH85	BH92	
Date Sampled				14-JUL-2014	14-JUL-2014	07-JUL-2014	21-JUL-2014	21-JUL-2014	18-JUL-2014	11-JUL-2014	09-JUL-2014	
Depth				0.50	0.50	0.50	0.25	0.50	0.50	0.90	0.60	
Type				Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	
Determinand	Method	Test Sample	LOD	Units								
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PAH(total)	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

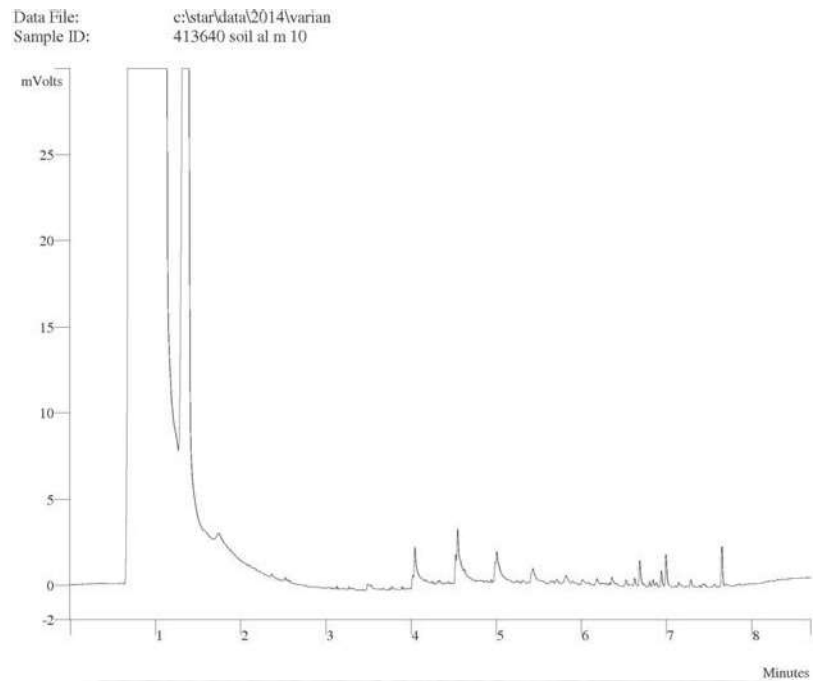
SAL Reference: 413640 Project Site: Western Distributor Road, Preston Customer Reference: 41455 Soil Analysed as Soil Total Petroleum Hydrocarbons with Speciation												
SAL Reference				413640 001	413640 002	413640 003	413640 004	413640 005	413640 006	413640 007	413640 008	413640 009
Customer Sample Reference				BH10	BH119	BH121	BH121	BH121	BH125	BH127	BH128	BH128
Date Sampled				16-JUL-2014	18-JUL-2014	17-JUL-2017	17-JUL-2017	22-JUL-2014	21-JUL-2014	16-JUL-2014	16-JUL-2014	15-JUL-2014
Depth				0.25	0.50	1.00	3.00	5.00	0.25	0.50	1.80	3.80
Type				Topsoil	Sandy Soil	Clay	Clay	Clay	Topsoil	Clay	Clay	Clay
Determinand	Method	Test Sample	LOD	Units								
TPH Speciation	T206	M105			N.D.	N.D.	N.D.	Fraction Start CNo (56) 14	N.D.	N.D.	N.D.	N.D.
								Fraction Peak CNo (56) 24				
								Fraction End CNo (56) 40				
								Heavy Mineral Range Organics (56)				

SAL Reference: 413640													
Project Site: Western Distributor Road, Preston													
Customer Reference: 41455													
Soil Analysed as Soil													
Total Petroleum Hydrocarbons with Speciation													
SAL Reference				413640 010	413640 011	413640 012	413640 013	413640 014	413640 015	413640 016	413640 017	413640 018	
Customer Sample Reference				BH223	BH49	BH79	BH101	BH115	BH117	BH13	BH210	BH216	
Date Sampled				25-JUL-2014	17-JUL-2014	07-JUL-2014	11-JUL-2014	15-JUL-2014	04-JUL-2014	14-JUL-2014	14-JUL-2014	14-JUL-2014	
Depth				0.50	0.50	0.50	0.50	0.25	0.80	0.50	1.00	0.50	
Type				Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	
Determinand	Method	Test Sample	LOD	Units									
TPH Speciation	T206	M105			N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	

SAL Reference: 413640												
Project Site: Western Distributor Road, Preston												
Customer Reference: 41455												
Soil Analysed as Soil												
Total Petroleum Hydrocarbons with Speciation												
SAL Reference		413640 019	413640 020	413640 021	413640 022	413640 023	413640 024	413640 025	413640 026			
Customer Sample Reference		BH222	BH224	BH45	BH71	BH73	BH76	BH85	BH92			
Date Sampled		14-JUL-2014	14-JUL-2014	07-JUL-2014	21-JUL-2014	21-JUL-2014	18-JUL-2014	11-JUL-2014	09-JUL-2014			
Depth		0.50	0.50	0.50	0.25	0.50	0.50	0.90	0.60			
Type		Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Determinand	Method	Test Sample	LOD	Units								
TPH Speciation	T206	M105			Fraction Start CNo	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
					14							
					Fraction Peak CNo							
					28							
					Fraction End CNo							
					40							
					Heavy Mineral Range Organics							

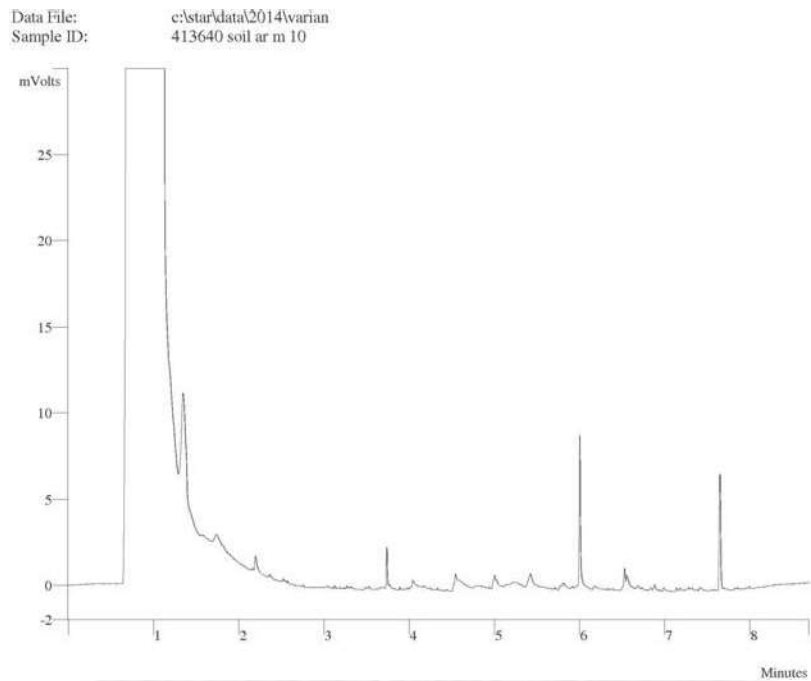
413640-al-10.jpg

413640 010 - BH223



413640-ar-10.jpg

413640 010 - BH223



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**DETERMINATION OF MOISTURE CONTENT, LIQUID LIMIT AND PLASTIC LIMIT
AND DERIVATION OF PLASTICITY AND LIQUIDITY INDEX**

Borehole/ Trial Pit	Depth (m)	Sample	Natural / Sieved	Natural Moisture Content %	Sample Passing 425µm Sieve		Liquid Limit %	Plastic Limit %	Plasticity Index %	Liquidity Index	Class	Description / Remarks
					Percentage %	Moisture Content %						
BH223	16.00	D45	Natural	16								Brown sandy CLAY
BH223	17.00	D46	Natural	16								Brown sandy CLAY
BH223	17.00	U47	Natural	16								Brown sandy CLAY
BH223	17.50	D48	Natural	18								Brown sandy CLAY
BH223	17.80	D49	Natural	18								Brown sandy GRAVEL
BH223	19.00	D51	Natural	8.0								Brown sandy GRAVEL
BH223	19.50	D52	Natural	15								Brown sandy GRAVEL
BH223	20.50	D54	Natural	28								Brown sandy GRAVEL
BH224	0.25	D1	Natural	28								Dark brown sandy CLAY includes organic matter
BH224	0.50	D4	Natural	3.5								Mottled brown grey sandy CLAY
BH224	1.20	U6	Natural	9.4	88	10	31	18	13	-0.62	CL	Mottled light brown dark brown light grey sandy gravelly CLAY includes organic matter
BH224	1.70	D7	Natural	9.4								Mottled brown grey sandy gravelly CLAY
BH224	1.80	D8	Natural	15								Brown sandy gravelly CLAY
BH224	2.00	U9	Natural	15								Brown sandy gravelly CLAY
BH224	2.50	D10	Natural	12								Brown sandy gravelly CLAY
BH224	2.80	D11	Natural	21								Brown sandy gravelly CLAY
BH224	3.00	D13	Natural	16								Brown sandy gravelly CLAY
BH224	3.80	D14	Natural	16								Brown sandy gravelly CLAY
BH224	4.00	U15	Natural	16								Soft brown sandy gravelly CLAY
BH224	4.50	D16	Natural	16								Brown sandy gravelly CLAY
BH224	4.80	D17	Natural	16								Brown sandy gravelly CLAY
BH224	5.00	U18	Natural	16	93	17	27	14	13	0.23	CL	Firm brown sandy CLAY
BH224	5.50	D19	Natural	15								Brown sandy gravelly CLAY
BH224	5.80	D20	Natural	16								Brown sandy gravelly CLAY
BH224	6.00	U21	Natural	15								Firm brown sandy gravelly CLAY
BH224	6.50	D22	Natural	24								Brown silty CLAY
BH224	6.80	D23	Natural	25								Brown silty CLAY
BH224	7.00	U24	Natural	16								Firm brown silty gravelly CLAY
BH224	7.50	D25	Natural	25								Brown silty CLAY
BH224	7.80	D26	Natural	19								Brown silty gravelly CLAY
BH224	8.00	U27	Natural	27								Firm brown silty CLAY
BH224	8.50	D28	Natural	22								Brown silty CLAY
BH224	8.80	D29	Natural	16								Brown silty sandy CLAY
BH224	9.00	U30	Natural	17								Firm brown sandy gravelly CLAY
BH224	9.50	D31	Natural	16								Brown sandy gravelly CLAY
BH224	9.80	D32	Natural	16								Brown sandy gravelly CLAY

Method of Preparation : BS 1377:PART 1:1990:7.4 Preparation of samples for classification tests BS 1377:PART 2:1990:4.2 & 5.2 Sample preparations

Method of Test : BS 1377:PART 2:1990:3.2 Determination of moisture content 4.3 Determination of the liquid limit 5.3 Determination of the plastic limit and plasticity index

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**DETERMINATION OF MOISTURE CONTENT, LIQUID LIMIT AND PLASTIC LIMIT
AND DERIVATION OF PLASTICITY AND LIQUIDITY INDEX**

Borehole/ Trial Pit	Depth (m)	Sample	Natural / Sieved	Natural Moisture Content %	Sample Passing 425µm Sieve		Liquid Limit %	Plastic Limit %	Plasticity Index %	Liquidity Index	Class	Description / Remarks
					Percentage %	Moisture Content %						
BH224	10.00	U33	Natural	15	100	15	31	14	17	0.06	CL	Firm brown sandy gravelly CLAY
BH224	10.50	D34	Natural	24								Brown silty CLAY
BH224	10.80	D35	Natural	24								Brown sandy gravelly CLAY
BH224	11.00	U36	Natural	24								Stiff brown sandy gravelly CLAY
BH224	11.50	D37	Natural	23								Brown sandy gravelly CLAY
BH224	12.00	D38	Natural	22								Brown silty CLAY
BH224	13.80	D41	Natural	19								Brown SAND
BH224	14.00	D43	Natural	22								Brown SAND
BH224	15.40	D44	Natural	16								Brown sandy CLAY
BH224	15.50	U45	Natural	14	100	14	31	17	14	-0.21	CL	Stiff brown CLAY
BH224	16.00	D46	Natural	15								Brown sandy CLAY
BH224	16.90	D47	Natural	11								Brown silty gravelly SAND
BH224	17.00	D49	Natural	14								Brown gravelly SAND
BH224	18.00	D50	Natural	12								Brown gravelly SAND
BH224	18.50	D52	Natural	14								Brown gravelly SAND
BH224	19.50	D53	Natural	13								Brown gravelly SAND
BH224	20.00	D55	Natural	13								Brown gravelly SAND
BH45	0.25	D1	Natural	20								Dark brown clayey SAND includes organic matter
BH45	0.40	B3	Natural	15								Mottled brown grey gravelly CLAY
BH45	0.50	D4	Natural	16								Mottled brown grey gravelly CLAY
BH45	1.20	U6	Natural	15								Mottled brown grey gravelly CLAY
BH45	1.70	D7	Natural	14								Mottled brown grey gravelly CLAY
BH45	1.80	D8	Natural	16								Brown silty gravelly CLAY
BH45	2.00	U10	Natural	15								Brown silty gravelly CLAY
BH45	2.80	D11	Natural	14								Brown silty gravelly CLAY
BH45	3.00	U12	Natural	15								Stiff brown gravelly CLAY
BH45	3.50	D13	Natural	14								Brown gravelly CLAY
BH45	3.80	D14	Natural	15								Brown gravelly CLAY
BH45	4.00	D16	Natural	7.7								Brown gravelly CLAY
BH45	4.80	D17	Natural	8.2								Brown gravelly CLAY
BH45	5.00	U18	Natural	16								Firm brown gravelly CLAY
BH45	5.50	D19	Natural	16								Brown gravelly CLAY
BH45	5.80	D20	Natural	14								Brown gravelly CLAY
BH45	6.00	U21	Natural	20								Stiff brown CLAY
BH45	6.50	D22	Natural	19								Brown gravelly CLAY
BH45	6.80	D23	Natural	17								Brown silty gravelly CLAY

Method of Preparation : BS 1377:PART 1:1990:7.4 Preparation of samples for classification tests BS 1377:PART 2:1990:4.2 & 5.2 Sample preparations

Method of Test : BS 1377:PART 2:1990:3.2 Determination of moisture content 4.3 Determination of the liquid limit 5.3 Determination of the plastic limit and plasticity index

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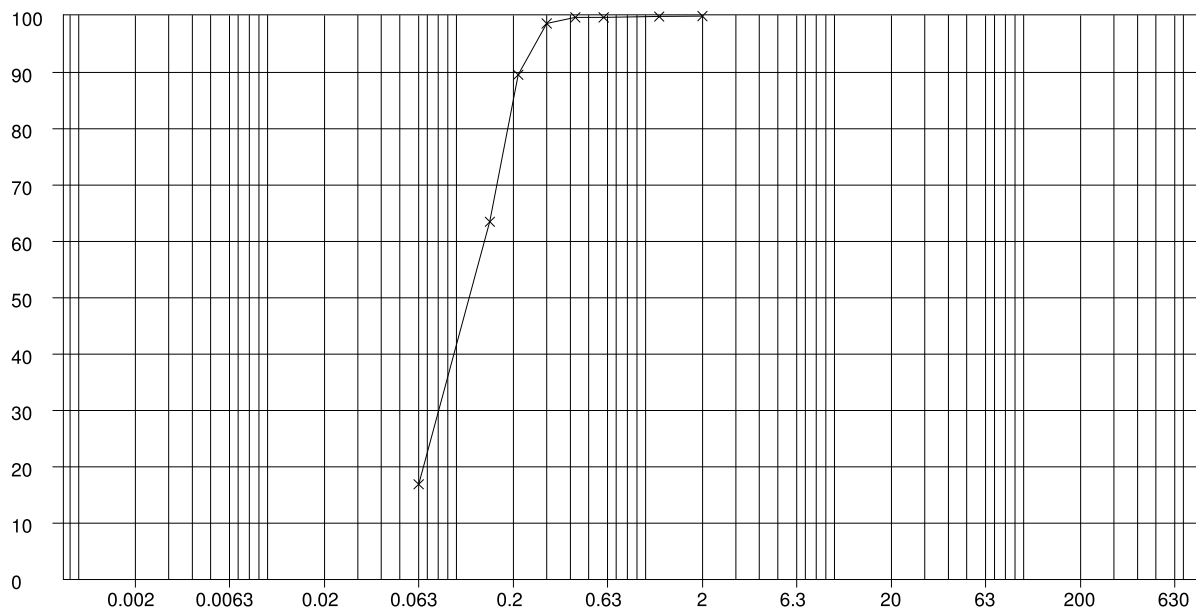
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DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Pipette/ Hydrometer	Description
BH224	14.00	B42	N/A	Brown silty fine to medium SAND



Sieve / Particle Size	% Passing
200 mm	100
150 mm	100
125 mm	100
90 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	100
28 mm	100
20 mm	100
14 mm	100
10 mm	100
6.3 mm	100
5 mm	100
3.35 mm	100
2 mm	100
1.18 mm	100
600 µm	100
425 µm	100
300 µm	99
212 µm	90
150 µm	64
63 µm	17

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Grading Analysis	
D60	143.4 µm
D10	-
Uniformity Coefficient	-

Particle Proportions	
Cobbles + Boulders	0%
Gravel	0%
Sand	83%
Silt/Clay	17%

Method of Preparation : BS 1377:PART 1:1990:7.3 Initial preparation 7.4.5 Particle size tests

Preparation Details : Sample washed with no dispersant used, Oven Dried at 105 - 110 °C

Method of Test : BS 1377:PART 2:1990:9 Determination of particle size distribution

Remarks :

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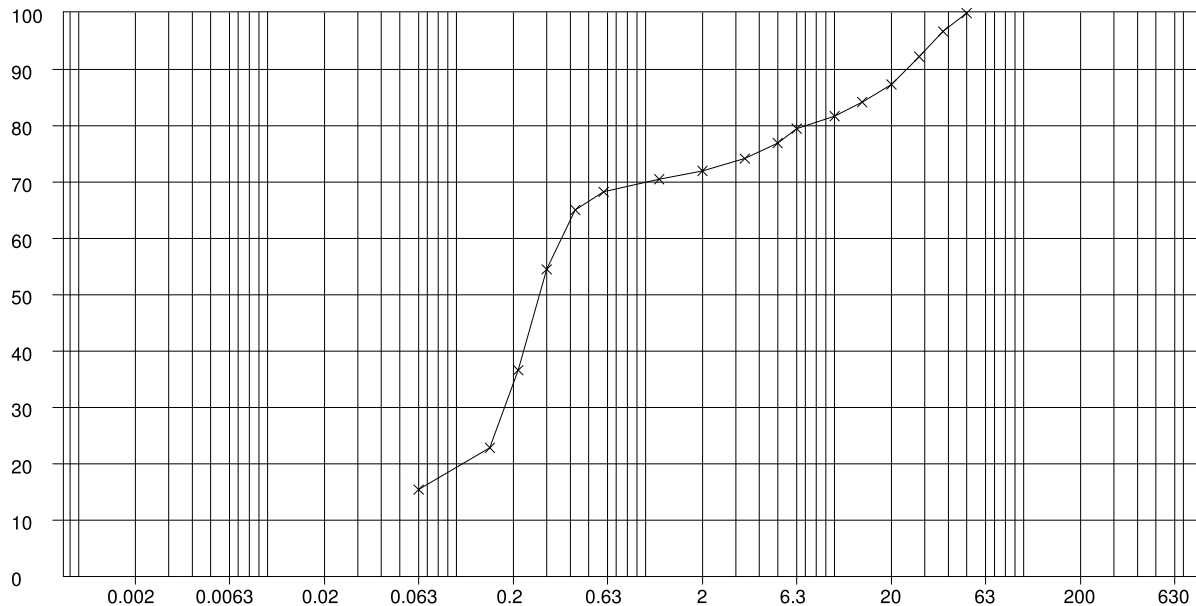
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DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Pipette/ Hydrometer	Description
BH224	18.50	B51	N/A	Brown silty very gravelly fine to medium SAND



Sieve / Particle Size	% Passing
200 mm	100
150 mm	100
125 mm	100
90 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	97
28 mm	92
20 mm	87
14 mm	84
10 mm	82
6.3 mm	80
5 mm	77
3.35 mm	74
2 mm	72
1.18 mm	71
600 µm	68
425 µm	65
300 µm	55
212 µm	37
150 µm	23
63 µm	15

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES	BOULDERS
	SILT			SAND			GRAVEL				

Grading Analysis	
D60	365.0 µm
D10	-
Uniformity Coefficient	-

Particle Proportions	
Cobbles + Boulders	0%
Gravel	28%
Sand	57%
Silt/Clay	15%

Method of Preparation : BS 1377:PART 1:1990:7.3 Initial preparation 7.4.5 Particle size tests

Preparation Details : Sample washed with no dispersant used, Oven Dried at 105 - 110 °C

Method of Test : BS 1377:PART 2:1990:9 Determination of particle size distribution

Remarks :

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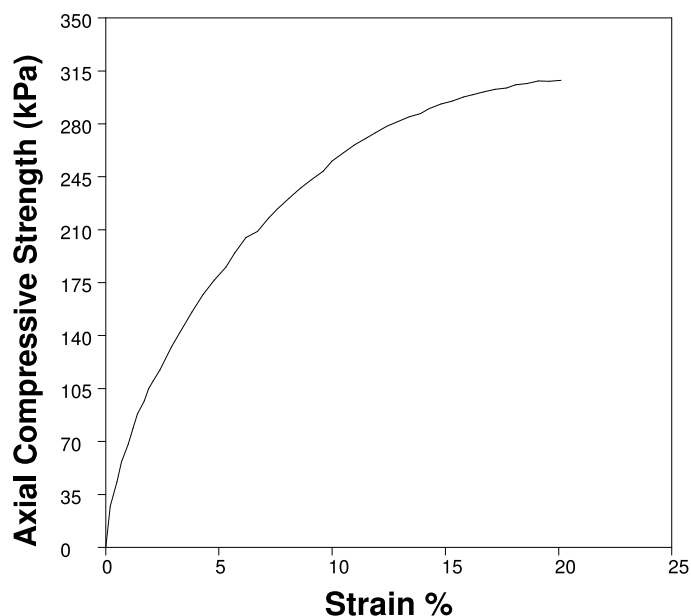
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**DETERMINATION OF MOISTURE CONTENT, DENSITY AND UNCONFINED COMPRESSIVE STRENGTH
(LOAD FRAME METHOD)**

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	2.00	U9	Brown sandy gravelly CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical
Length of Specimen (mm)			209.4
Diameter of Specimen (mm)			102.4
Moisture Content (%)			15
Bulk Density (Mg/m³)			2.22
Dry Density (Mg/m³)			1.93
Rate of Strain (%/min)			0.73
Test Results	Strain at Failure (%)		20.1
	Unconfined Compressive Strength (kPa)		309
	Mode of Failure (B/P/C)		Plastic


Method of Preparation : BS 1377:PT1:1990:7.4.2 Moisture Content, BS 1377:PT1:1990:8.3 Preparation of undisturbed samples for testing or BS 1377:PT1:1990:7.7.5.2 Preparation of disturbed samples for testing.

Method of Test : BS 1377:PT2:1990:3.2 Determination of moisture content, BS 1377:PT2:1990:7.2 Determination of density by linear measurement BS 1377:PT7:1990:7.2 Determination of unconfined compressive Strength using the Load Frame Method

Remarks :

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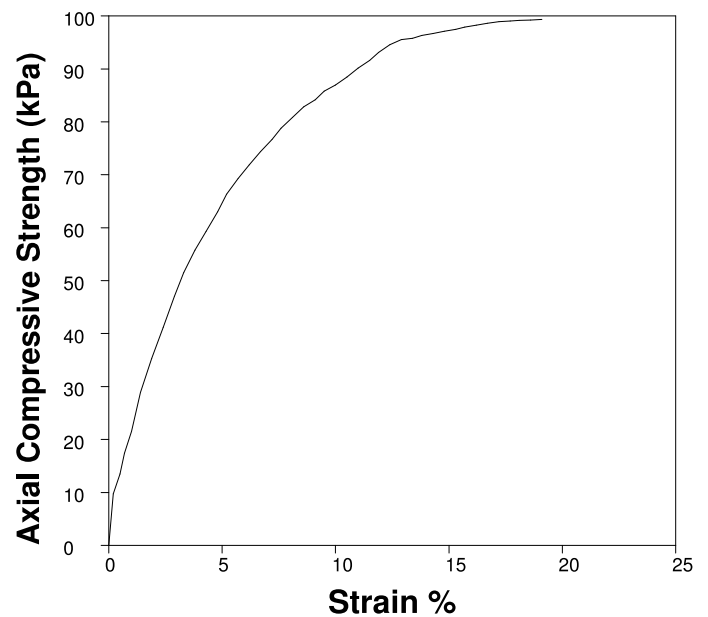
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DETERMINATION OF MOISTURE CONTENT, DENSITY AND UNCONFINED COMPRESSIVE STRENGTH (LOAD FRAME METHOD)

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	4.00	U15	Soft brown sandy gravelly CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical
Length of Specimen (mm)		209.5	
Diameter of Specimen (mm)		102.2	
Moisture Content (%)		16	
Bulk Density (Mg/m³)		2.22	
Dry Density (Mg/m³)		1.91	
Rate of Strain (%/min)		1.91	
Test Results	Strain at Failure (%)	19.1	
	Unconfined Compressive Strength (kPa)	99	
	Mode of Failure (B/P/C)	Plastic	


Method of Preparation : BS 1377:PT1:1990:7.4.2 Moisture Content, BS 1377:PT1:1990:8.3 Preparation of undisturbed samples for testing or BS 1377:PT1:1990:7.7.5.2 Preparation of disturbed samples for testing.

Method of Test : BS 1377:PT2:1990:3.2 Determination of moisture content, BS 1377:PT2:1990:7.2 Determination of density by linear measurement BS 1377:PT7:1990:7.2 Determination of unconfined compressive Strength using the Load Frame Method

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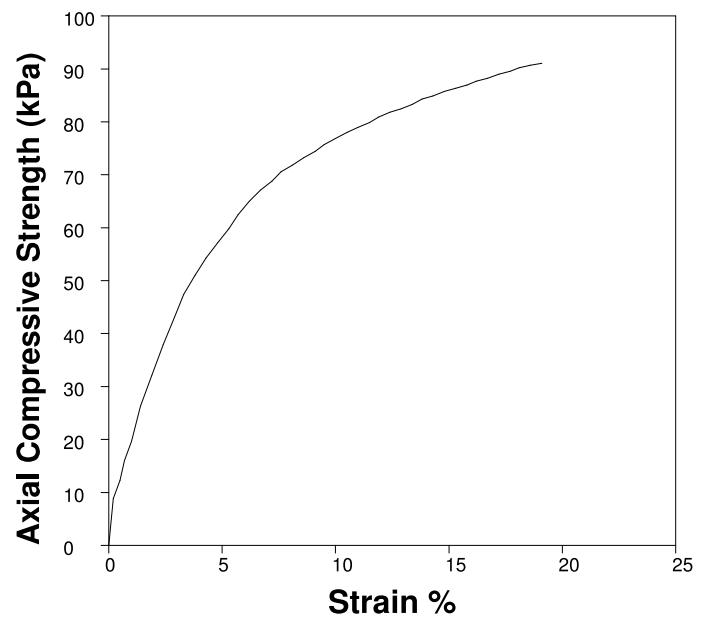
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DETERMINATION OF MOISTURE CONTENT, DENSITY AND UNCONFINED COMPRESSIVE STRENGTH (LOAD FRAME METHOD)

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	5.00	U18	Firm brown sandy CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	80
		Condition of Sample:	Undisturbed
		Orientation:	Vertical
Length of Specimen (mm)		209.5	
Diameter of Specimen (mm)		102.5	
Moisture Content (%)		16	
Bulk Density (Mg/m³)		2.17	
Dry Density (Mg/m³)		1.86	
Rate of Strain (%/min)		1.91	
Test Results	Strain at Failure (%)	19.1	
	Unconfined Compressive Strength (kPa)	91	
	Mode of Failure (B/P/C)	Plastic	


Method of Preparation : BS 1377:PT1:1990:7.4.2 Moisture Content, BS 1377:PT1:1990:8.3 Preparation of undisturbed samples for testing or BS 1377:PT1:1990:7.7.5.2 Preparation of disturbed samples for testing.

Method of Test : BS 1377:PT2:1990:3.2 Determination of moisture content, BS 1377:PT2:1990:7.2 Determination of density by linear measurement BS 1377:PT7:1990:7.2 Determination of unconfined compressive Strength using the Load Frame Method

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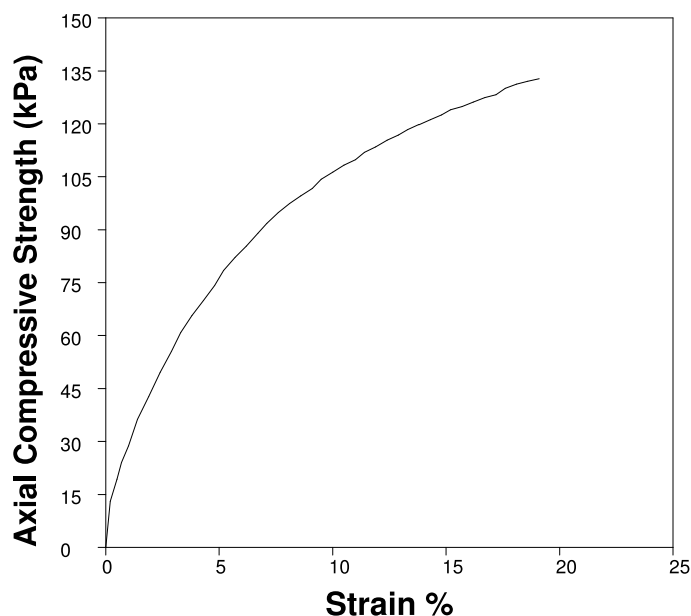
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**DETERMINATION OF MOISTURE CONTENT, DENSITY AND UNCONFINED COMPRESSIVE STRENGTH
(LOAD FRAME METHOD)**

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	6.00	U21	Firm brown sandy gravelly CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical
Length of Specimen (mm)			209.8
Diameter of Specimen (mm)			102.4
Moisture Content (%)			15
Bulk Density (Mg/m³)			2.20
Dry Density (Mg/m³)			1.92
Rate of Strain (%/min)			1.91
Test Results	Strain at Failure (%)		19.1
	Unconfined Compressive Strength (kPa)		133
	Mode of Failure (B/P/C)		Plastic


Method of Preparation : BS 1377:PT1:1990:7.4.2 Moisture Content, BS 1377:PT1:1990:8.3 Preparation of undisturbed samples for testing or BS 1377:PT1:1990:7.7.5.2 Preparation of disturbed samples for testing.

Method of Test : BS 1377:PT2:1990:3.2 Determination of moisture content, BS 1377:PT2:1990:7.2 Determination of density by linear measurement BS 1377:PT7:1990:7.2 Determination of unconfined compressive Strength using the Load Frame Method

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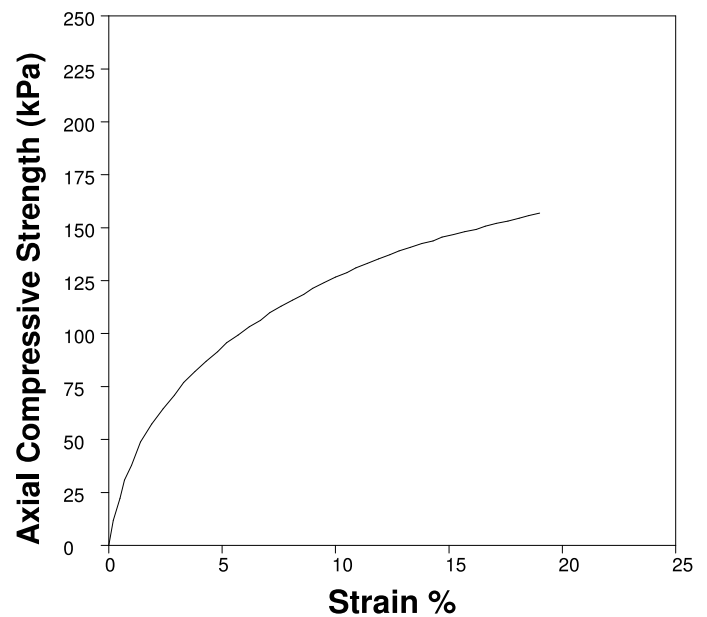
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DETERMINATION OF MOISTURE CONTENT, DENSITY AND UNCONFINED COMPRESSIVE STRENGTH (LOAD FRAME METHOD)

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	7.00	U24	Firm brown silty gravelly CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical
Length of Specimen (mm)		210.3	
Diameter of Specimen (mm)		103.8	
Moisture Content (%)		16	
Bulk Density (Mg/m³)		2.16	
Dry Density (Mg/m³)		1.86	
Rate of Strain (%/min)		1.90	
Test Results	Strain at Failure (%)	19	
	Unconfined Compressive Strength (kPa)	157	
	Mode of Failure (B/P/C)	Plastic	


Method of Preparation : BS 1377:PT1:1990:7.4.2 Moisture Content, BS 1377:PT1:1990:8.3 Preparation of undisturbed samples for testing or BS 1377:PT1:1990:7.7.5.2 Preparation of disturbed samples for testing.

Method of Test : BS 1377:PT2:1990:3.2 Determination of moisture content, BS 1377:PT2:1990:7.2 Determination of density by linear measurement BS 1377:PT7:1990:7.2 Determination of unconfined compressive Strength using the Load Frame Method

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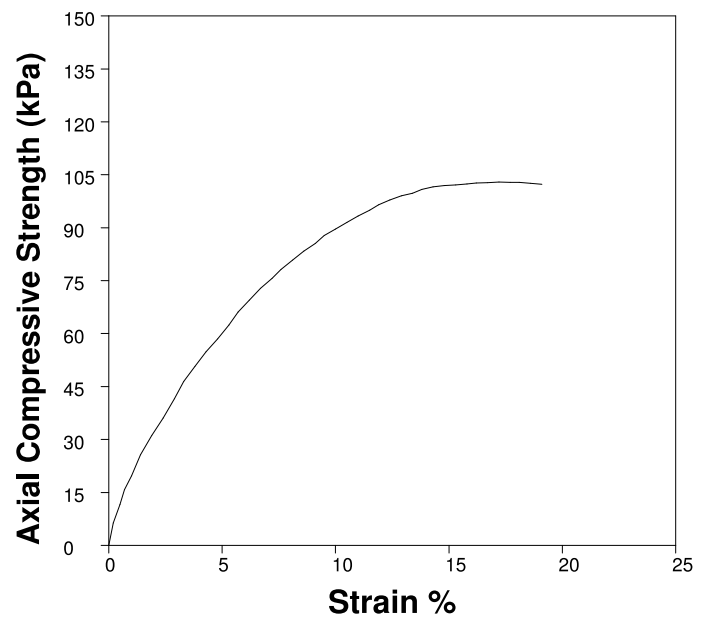
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DETERMINATION OF MOISTURE CONTENT, DENSITY AND UNCONFINED COMPRESSIVE STRENGTH (LOAD FRAME METHOD)

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	8.00	U27	Firm brown silty CLAY

Initial Specimen		Length of Sample (mm)	340
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical
Length of Specimen (mm)		209.5	
Diameter of Specimen (mm)		102.6	
Moisture Content (%)		27	
Bulk Density (Mg/m³)		2.03	
Dry Density (Mg/m³)		1.60	
Rate of Strain (%/min)		1.91	
Test Results	Strain at Failure (%)	17.2	
	Unconfined Compressive Strength (kPa)	103	
	Mode of Failure (B/P/C)	Plastic	


Method of Preparation : BS 1377:PT1:1990:7.4.2 Moisture Content, BS 1377:PT1:1990:8.3 Preparation of undisturbed samples for testing or BS 1377:PT1:1990:7.7.5.2 Preparation of disturbed samples for testing.

Method of Test : BS 1377:PT2:1990:3.2 Determination of moisture content, BS 1377:PT2:1990:7.2 Determination of density by linear measurement BS 1377:PT7:1990:7.2 Determination of unconfined compressive Strength using the Load Frame Method

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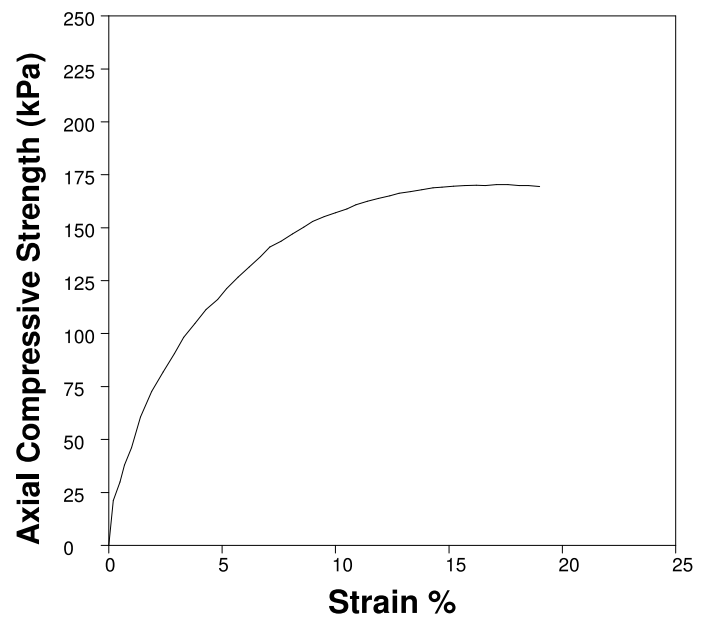
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DETERMINATION OF MOISTURE CONTENT, DENSITY AND UNCONFINED COMPRESSIVE STRENGTH (LOAD FRAME METHOD)

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	9.00	U30	Firm brown sandy gravelly CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical
Length of Specimen (mm)			210.4
Diameter of Specimen (mm)			102.7
Moisture Content (%)			17
Bulk Density (Mg/m³)			2.16
Dry Density (Mg/m³)			1.85
Rate of Strain (%/min)			1.90
Test Results	Strain at Failure (%)		17.6
	Unconfined Compressive Strength (kPa)		170
	Mode of Failure (B/P/C)		Plastic


Method of Preparation : BS 1377:PT1:1990:7.4.2 Moisture Content, BS 1377:PT1:1990:8.3 Preparation of undisturbed samples for testing or BS 1377:PT1:1990:7.7.5.2 Preparation of disturbed samples for testing.

Method of Test : BS 1377:PT2:1990:3.2 Determination of moisture content, BS 1377:PT2:1990:7.2 Determination of density by linear measurement BS 1377:PT7:1990:7.2 Determination of unconfined compressive Strength using the Load Frame Method

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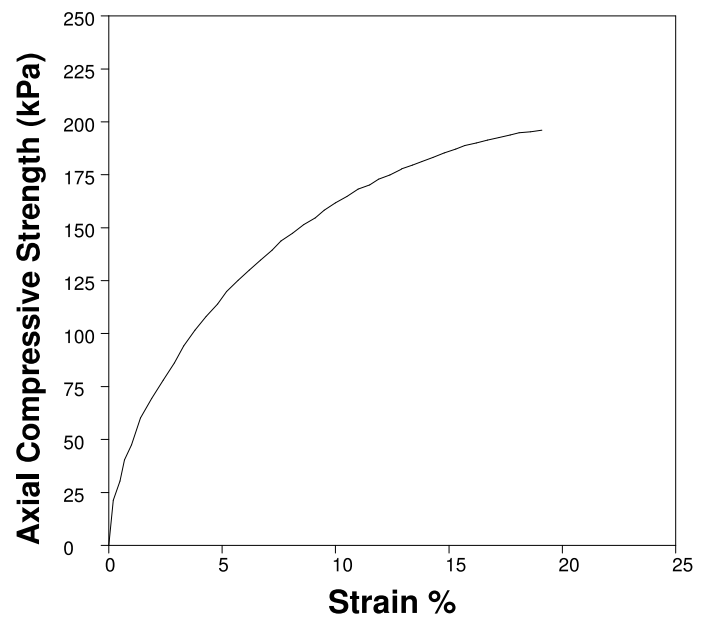
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DETERMINATION OF MOISTURE CONTENT, DENSITY AND UNCONFINED COMPRESSIVE STRENGTH (LOAD FRAME METHOD)

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	10.00	U33	Firm brown sandy gravelly CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical
Length of Specimen (mm)			209.6
Diameter of Specimen (mm)			102.3
Moisture Content (%)			15
Bulk Density (Mg/m³)			2.21
Dry Density (Mg/m³)			1.92
Rate of Strain (%/min)			1.91
Test Results	Strain at Failure (%)		19.1
	Unconfined Compressive Strength (kPa)		196
	Mode of Failure (B/P/C)		Compound


Method of Preparation : BS 1377:PT1:1990:7.4.2 Moisture Content, BS 1377:PT1:1990:8.3 Preparation of undisturbed samples for testing or BS 1377:PT1:1990:7.7.5.2 Preparation of disturbed samples for testing.

Method of Test : BS 1377:PT2:1990:3.2 Determination of moisture content, BS 1377:PT2:1990:7.2 Determination of density by linear measurement BS 1377:PT7:1990:7.2 Determination of unconfined compressive Strength using the Load Frame Method

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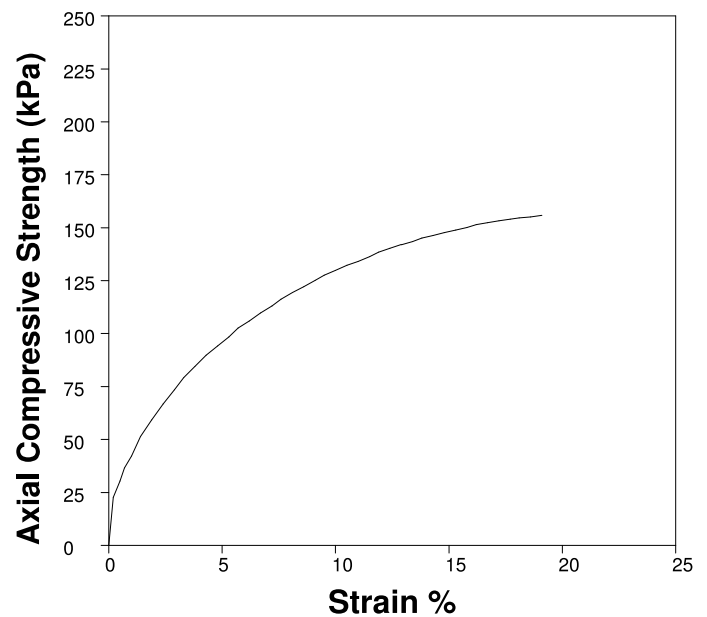
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DETERMINATION OF MOISTURE CONTENT, DENSITY AND UNCONFINED COMPRESSIVE STRENGTH (LOAD FRAME METHOD)

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	11.00	U36	Stiff brown sandy gravelly CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical
Length of Specimen (mm)		209.5	
Diameter of Specimen (mm)		102.5	
Moisture Content (%)		24	
Bulk Density (Mg/m³)		2.02	
Dry Density (Mg/m³)		1.63	
Rate of Strain (%/min)		1.91	
Test Results	Strain at Failure (%)	19.1	
	Unconfined Compressive Strength (kPa)	156	
	Mode of Failure (B/P/C)	Plastic	


Method of Preparation : BS 1377:PT1:1990:7.4.2 Moisture Content, BS 1377:PT1:1990:8.3 Preparation of undisturbed samples for testing or BS 1377:PT1:1990:7.7.5.2 Preparation of disturbed samples for testing.

Method of Test : BS 1377:PT2:1990:3.2 Determination of moisture content, BS 1377:PT2:1990:7.2 Determination of density by linear measurement BS 1377:PT7:1990:7.2 Determination of unconfined compressive Strength using the Load Frame Method

Remarks :

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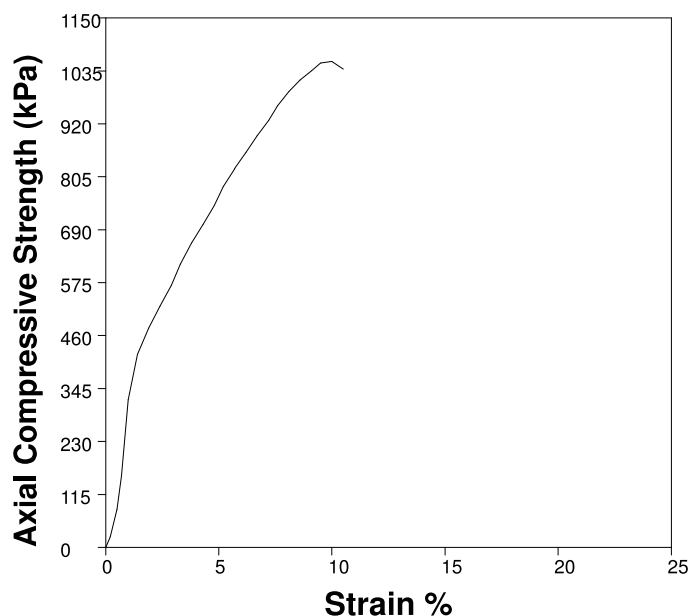
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**DETERMINATION OF MOISTURE CONTENT, DENSITY AND UNCONFINED COMPRESSIVE STRENGTH
(LOAD FRAME METHOD)**

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	15.50	U45	Stiff brown CLAY

Initial Specimen		Length of Sample (mm)	300
		Depth from top of sample (mm)	40
		Condition of Sample:	Undisturbed
		Orientation:	Vertical
Length of Specimen (mm)		209.7	
Diameter of Specimen (mm)		102.1	
Moisture Content (%)		14	
Bulk Density (Mg/m³)		2.25	
Dry Density (Mg/m³)		1.97	
Rate of Strain (%/min)		1.91	
Test Results	Strain at Failure (%)	10	
	Unconfined Compressive Strength (kPa)	1055	
	Mode of Failure (B/P/C)	Brittle	


Method of Preparation : BS 1377:PT1:1990:7.4.2 Moisture Content, BS 1377:PT1:1990:8.3 Preparation of undisturbed samples for testing or BS 1377:PT1:1990:7.7.5.2 Preparation of disturbed samples for testing.

Method of Test : BS 1377:PT2:1990:3.2 Determination of moisture content, BS 1377:PT2:1990:7.2 Determination of density by linear measurement BS 1377:PT7:1990:7.2 Determination of unconfined compressive Strength using the Load Frame Method

Remarks :

Site : Preston Western Distributor Road, Preston


Job Number
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Client : Lancashire County Council

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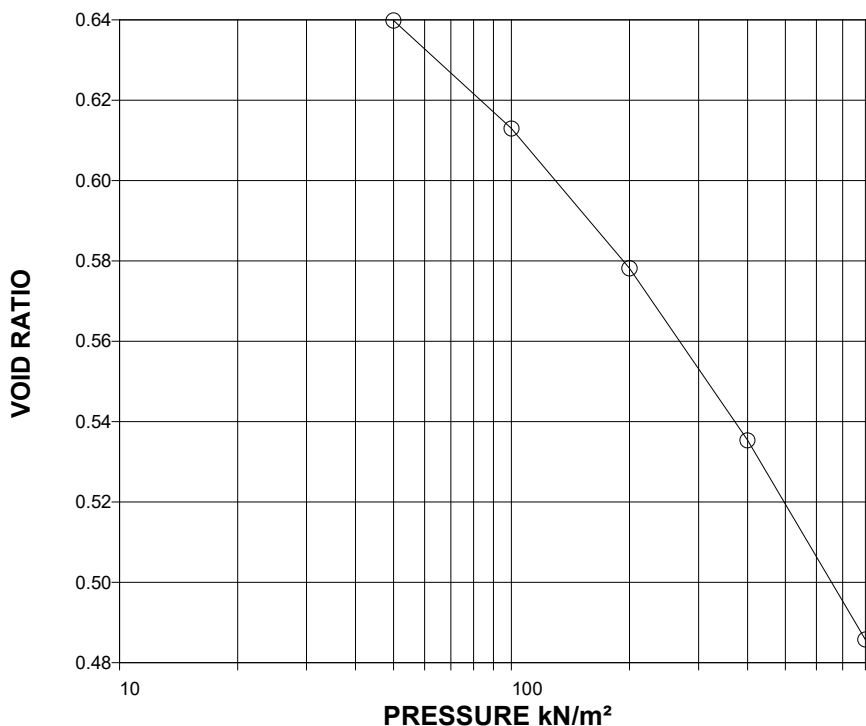
ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Description
BH224	8.00	U27	Firm brown silty CLAY

Initial Specimen		Length of Sample (mm)	450
		Depth from top of sample (mm)	50
		Condition of Sample:	Undisturbed
		Orientation:	Vertical

Diameter (mm)	75.08
Particle Density (Mg/m ³)	2.65 (Assumed)
Swelling Pressure (kN/m ²)	
Lab Temp (°C)	21

	Initial	Final
Height (mm)	19.03	16.78
Wet Weight (g)	169.67	163.47
Moisture Content (%)	27	24
Bulk Density (Mg/m ³)	2.01	2.20
Dry Density (Mg/m ³)	1.58	1.78
Void Ratio	0.677	0.489
Degree of Saturation (%)	105.69	129.19



Pressure kN/m ²	Mv m ² /MN	Cv m ² /year	Void Ratio
50	0.45	1.4	0.640
100	0.33	4.5	0.613
200	0.22	3.0	0.578
400	0.14	2.7	0.535
800	0.08	2.7	0.486

Pressure kN/m ²	Mv m ² /MN	Cv m ² /year	Void Ratio

Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

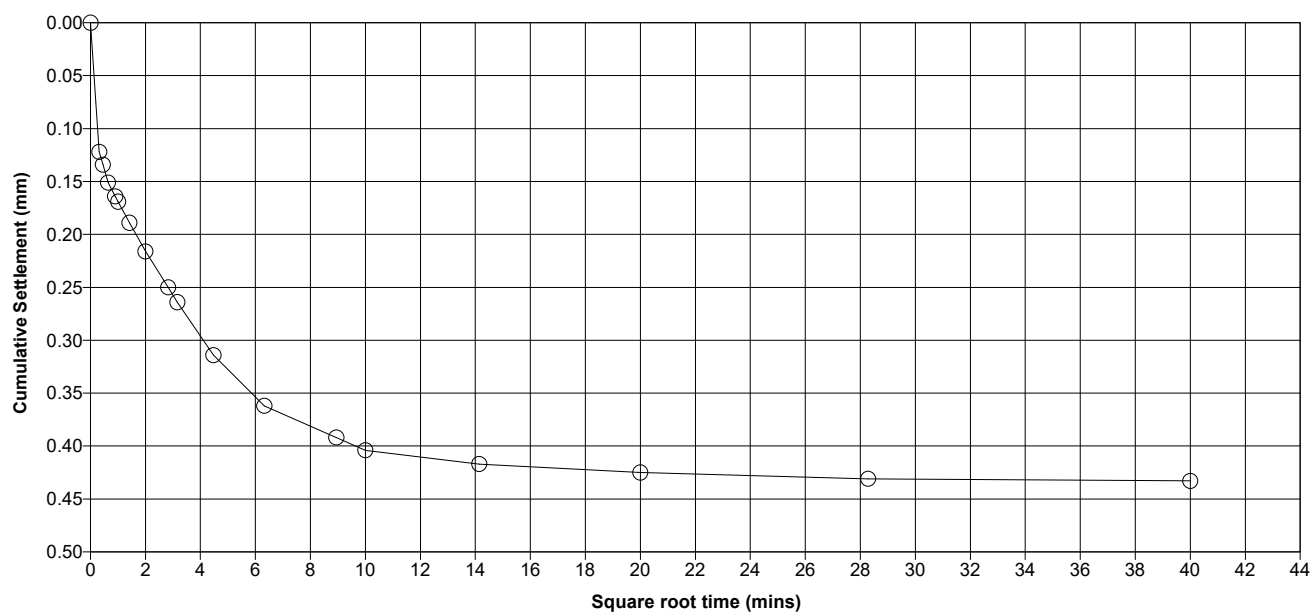
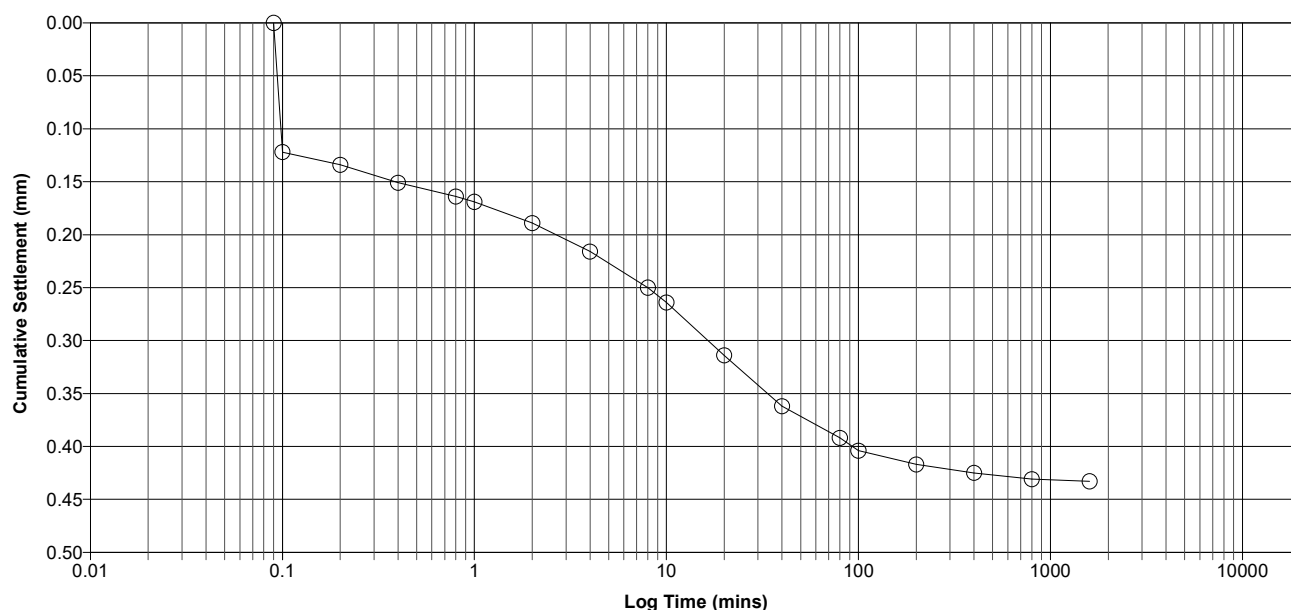
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH224	8.00	U27	1	Firm brown silty CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

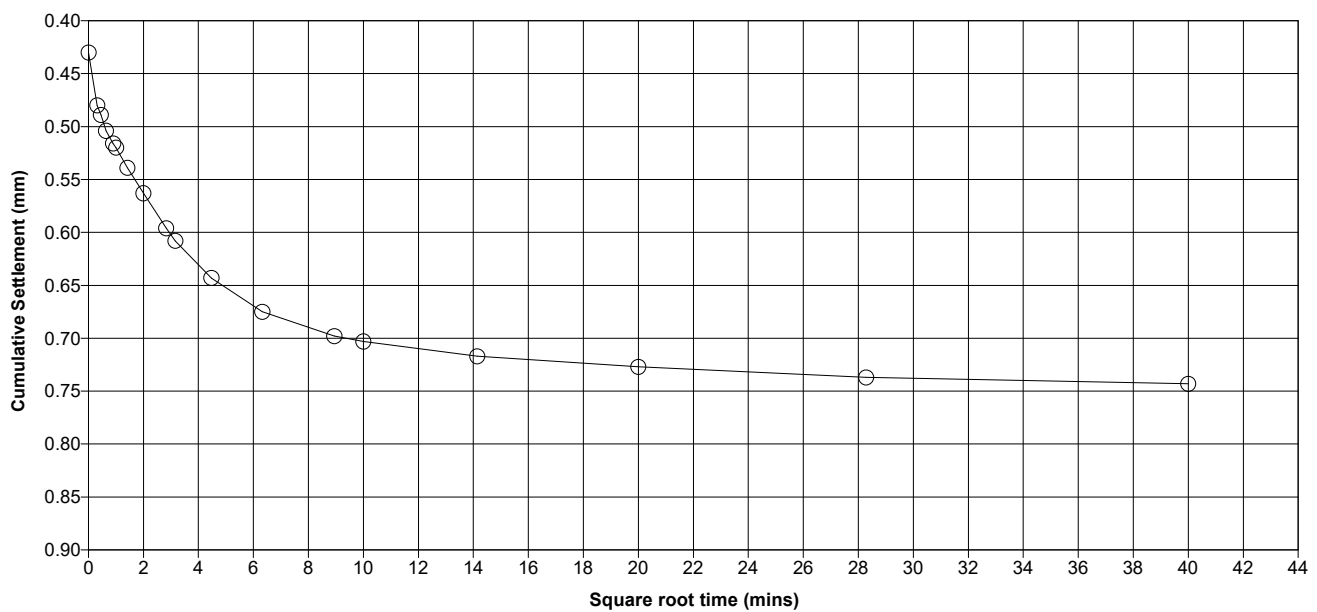
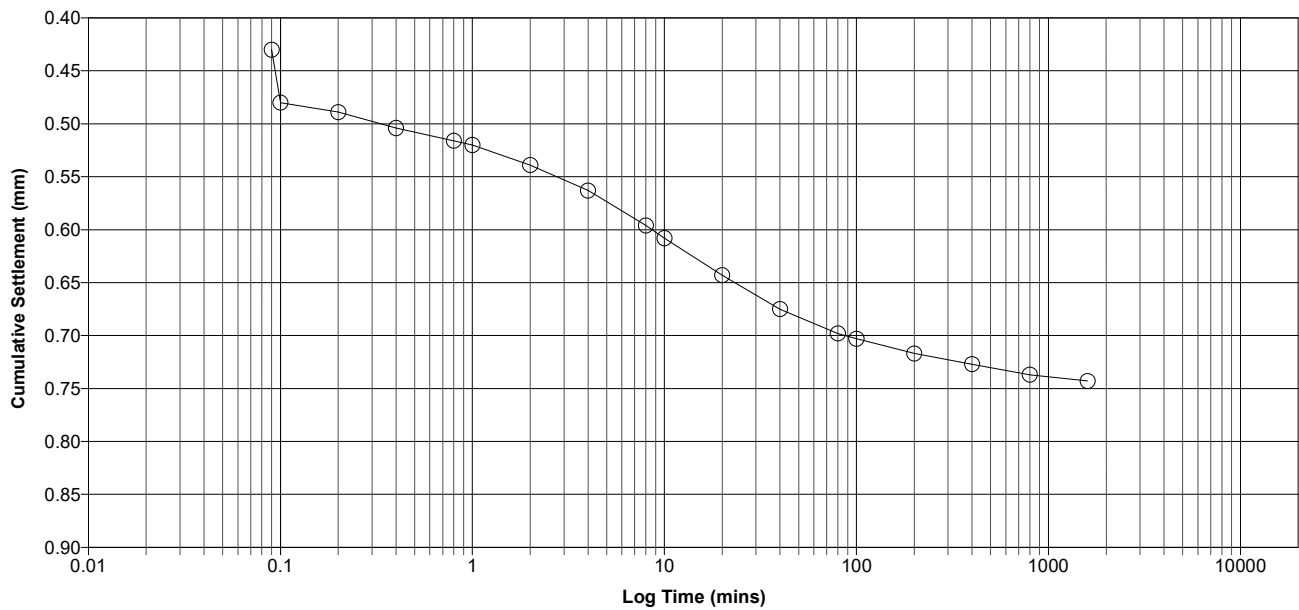
Job Number
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH224	8.00	U27	2	Firm brown silty CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

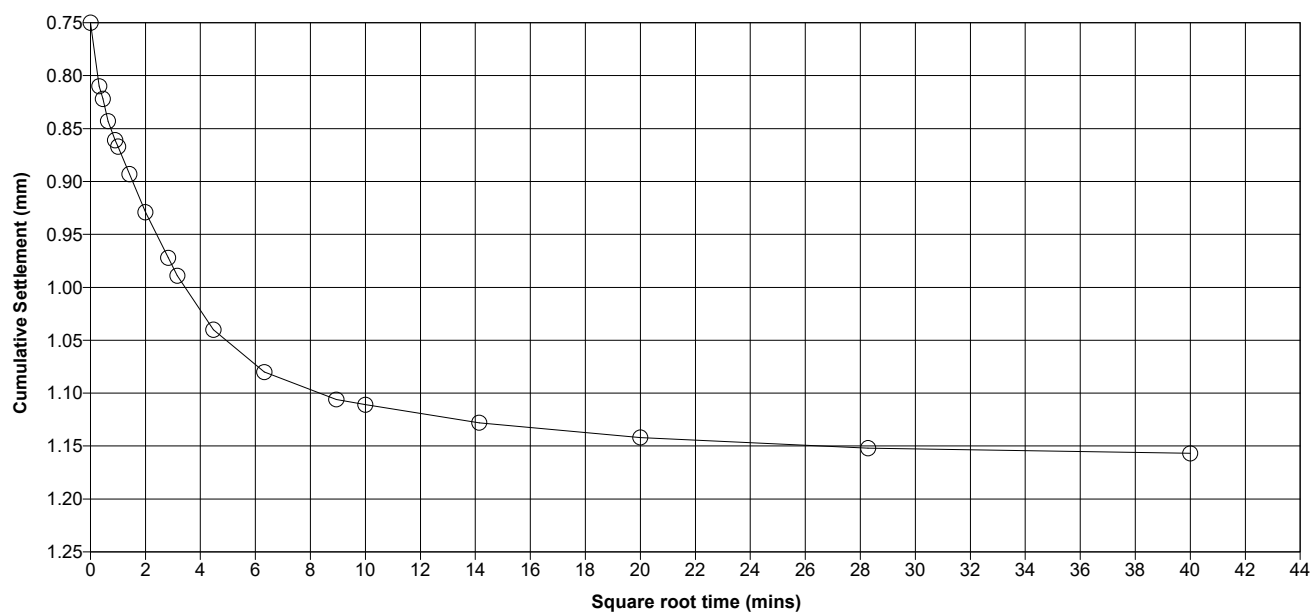
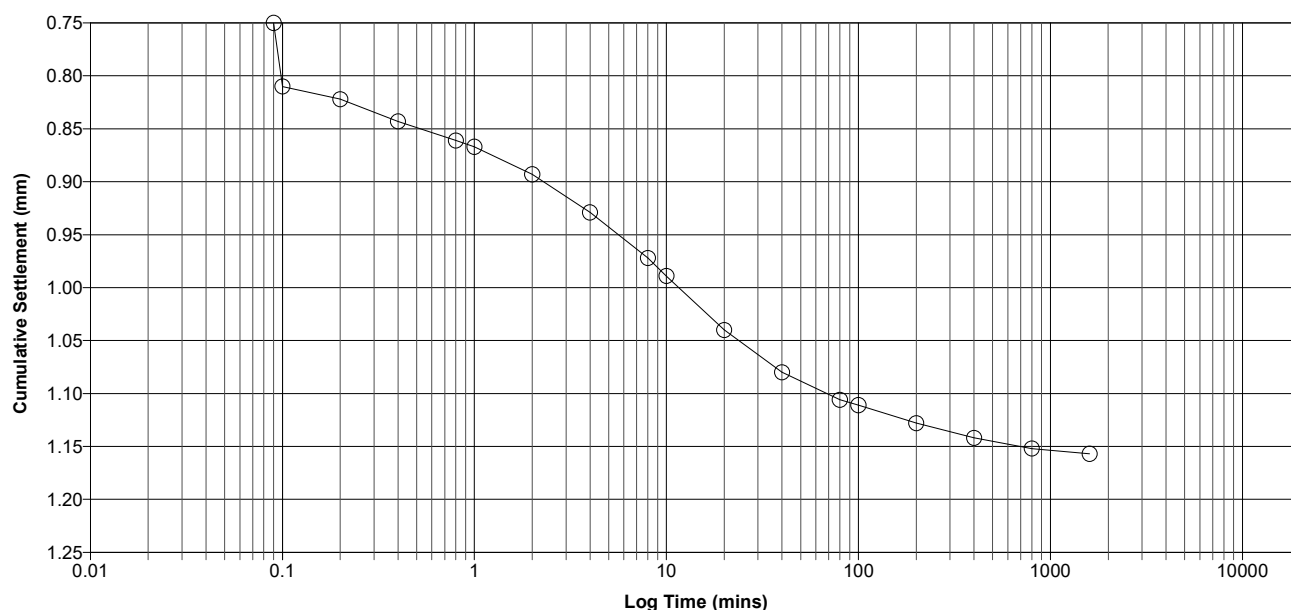
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH224	8.00	U27	3	Firm brown silty CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

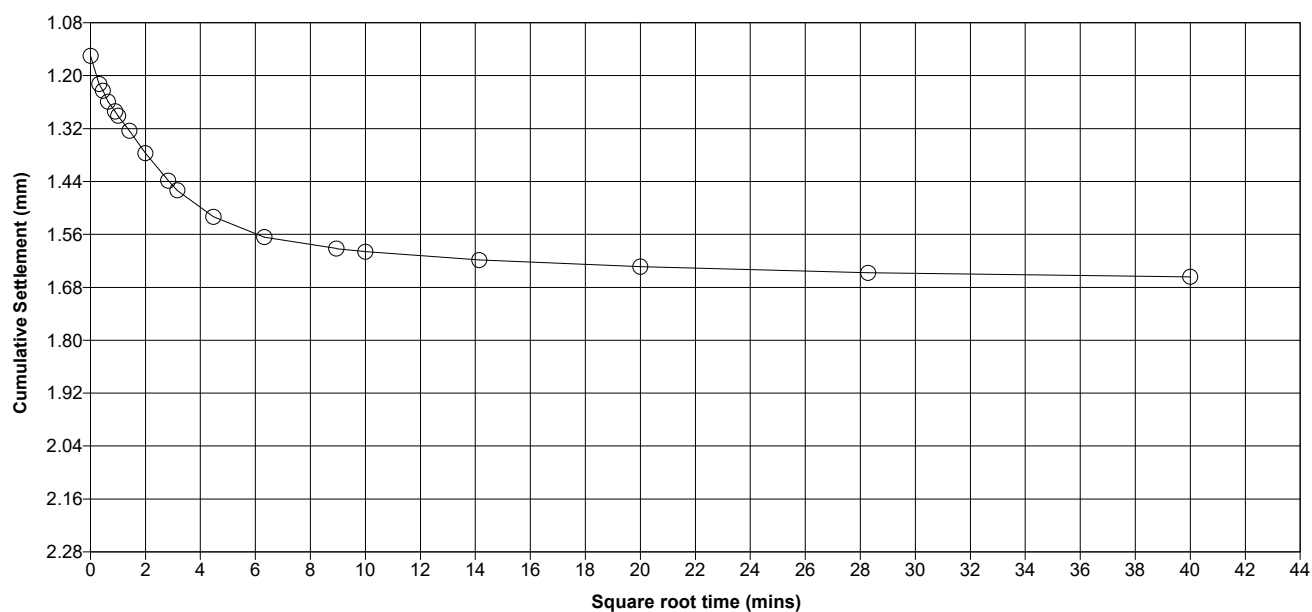
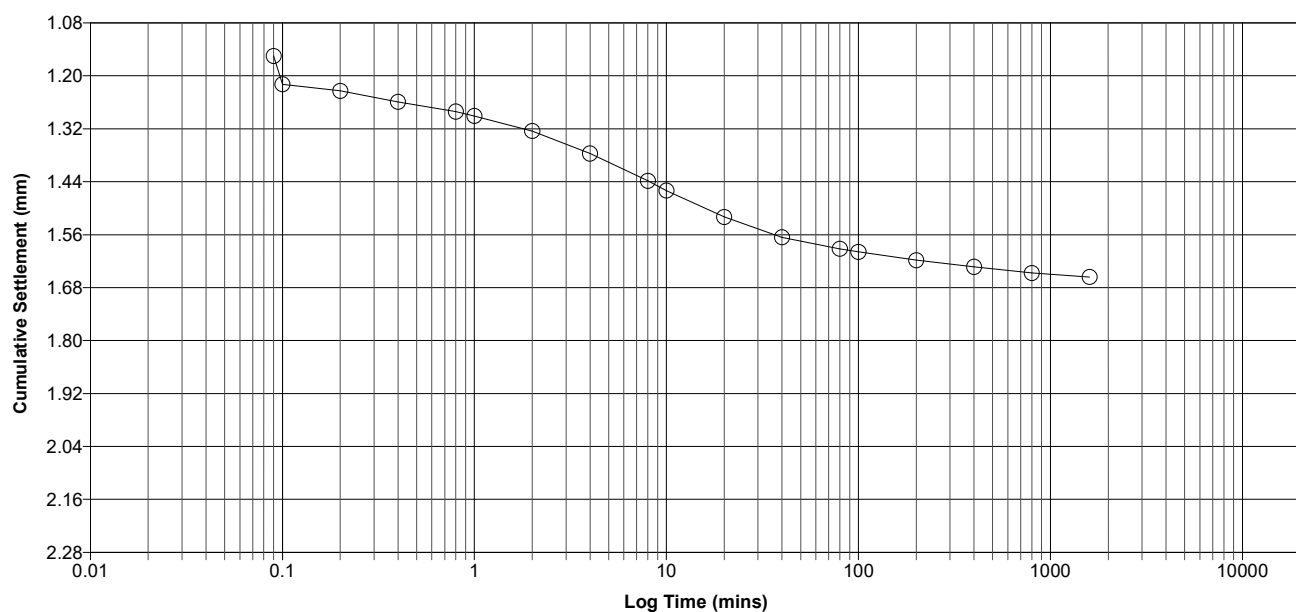
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH224	8.00	U27	4	Firm brown silty CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

Site : Preston Western Distributor Road, Preston

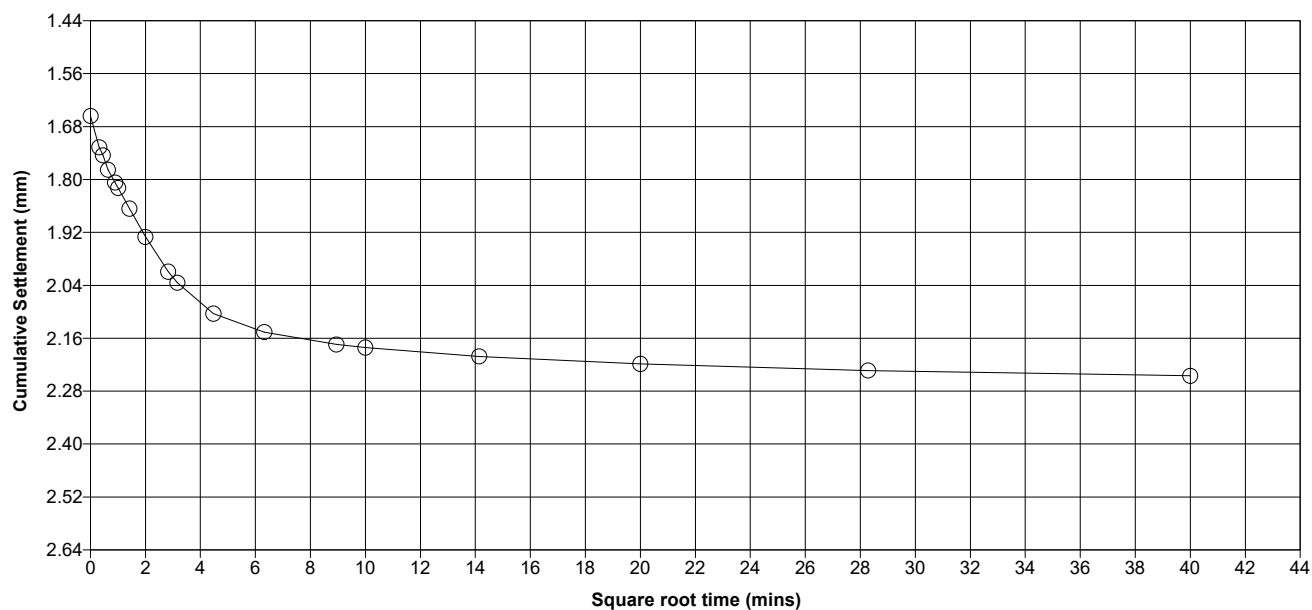
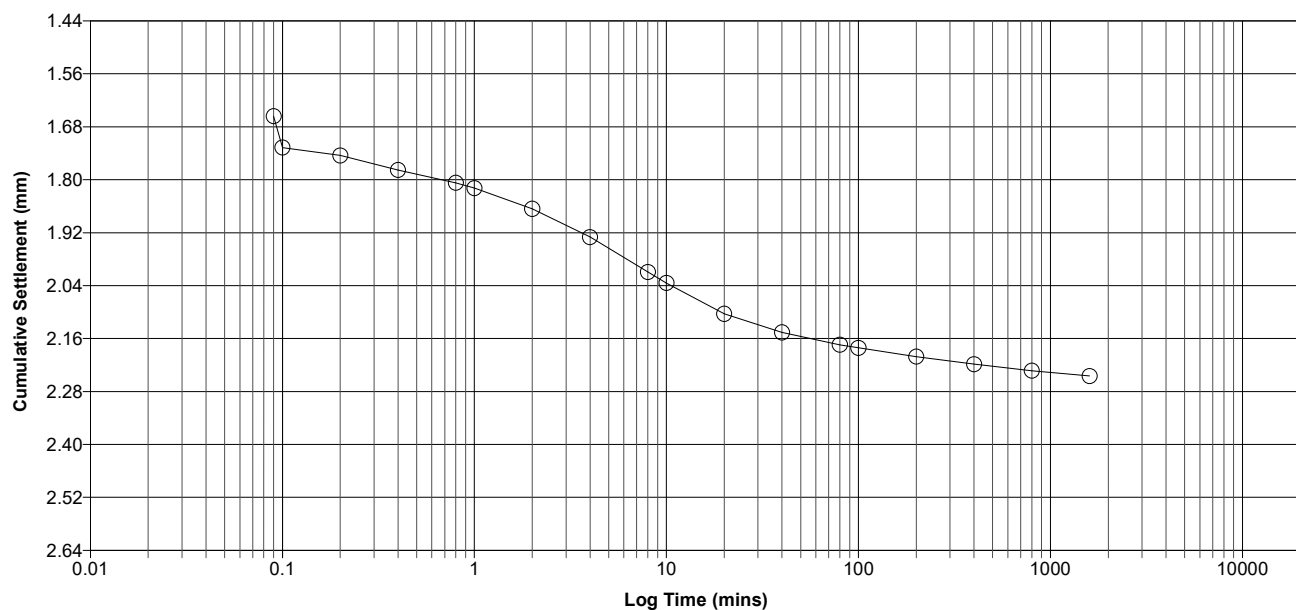
Job Number
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ONE-DIMENSIONAL CONSOLIDATION TEST

Borehole / Trial Pit	Depth (m)	Sample	Stage	Description
BH224	8.00	U27	5	Firm brown silty CLAY


Method of Preparation : BS 1377:PART 5:1990:3.3, 3.4

Method of Test : BS 1377:PART 5:1990:3.5

Remarks :

413640-2

SAL Reference: 413640 Project Site: Western Distributor Road, Preston Customer Reference: 41455												
Soil		Analysed as Soil										
Miscellaneous												
SAL Reference		413640 019	413640 020	413640 021	413640 022	413640 023	413640 024	413640 025	413640 026			
Customer Sample Reference		BH222	BH224	BH45	BH71	BH73	BH76	BH85	BH92			
Date Sampled		14-JUL-2014	14-JUL-2014	07-JUL-2014	21-JUL-2014	21-JUL-2014	18-JUL-2014	11-JUL-2014	09-JUL-2014			
Depth		0.50	0.50	0.50	0.25	0.50	0.50	0.90	0.60			
Type		Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Determinand	Method	Test Sample	LOD	Units								
Asbestos ID	T27	AR			N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

SAL Reference: 413640													
Project Site: Western Distributor Road, Preston													
Customer Reference: 41455													
Soil		Analysed as Soil											
MCERTS Preparation													
SAL Reference		413640 001	413640 002	413640 003	413640 004	413640 005	413640 006	413640 007	413640 008	413640 009			
Customer Sample Reference		BH10	BH119	BH121	BH121	BH121	BH125	BH127	BH128	BH128			
Date Sampled		16-JUL-2014	18-JUL-2014	17-JUL-2017	17-JUL-2017	22-JUL-2014	21-JUL-2014	16-JUL-2014	16-JUL-2014	15-JUL-2014			
Depth		0.25	0.50	1.00	3.00	5.00	0.25	0.50	1.80	3.80			
Type		Topsoil	Sandy Soil	Clay	Clay	Clay	Topsoil	Clay	Clay	Clay			
Determinand	Method	Test Sample	LOD	Units									
Moisture @ 105 C	T162	AR	0.1	%	12	15	15	20	14	18	14	15	16

SAL Reference: 413640													
Project Site: Western Distributor Road, Preston													
Customer Reference: 41455													
Soil Analysed as Soil													
MCERTS Preparation													
SAL Reference				413640 010	413640 011	413640 012	413640 013	413640 014	413640 015	413640 016	413640 017	413640 018	
Customer Sample Reference				BH223	BH49	BH79	BH101	BH115	BH117	BH13	BH210	BH216	
Date Sampled				25-JUL-2014	17-JUL-2014	07-JUL-2014	11-JUL-2014	15-JUL-2014	04-JUL-2014	14-JUL-2014	14-JUL-2014	14-JUL-2014	
Depth				0.50	0.50	0.50	0.50	0.25	0.80	0.50	1.00	0.50	
Type				Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	
Determinand	Method	Test Sample	LOD	Units									
Moisture @ 105 C	T162	AR	0.1	%	13	15	11	13	15	15	19	12	18

<div>SAL Reference: 413640 Project Site: Western Distributor Road, Preston Customer Reference: 41455</div> <div>Soil MCERTS Preparation</div> <div>Analysed as Soil</div>												
SAL Reference		413640 019	413640 020	413640 021	413640 022	413640 023	413640 024	413640 025	413640 026			
Customer Sample Reference		BH222	BH224	BH45	BH71	BH73	BH76	BH85	BH92			
Date Sampled		14-JUL-2014	14-JUL-2014	07-JUL-2014	21-JUL-2014	21-JUL-2014	18-JUL-2014	11-JUL-2014	09-JUL-2014			
Depth		0.50	0.50	0.50	0.25	0.50	0.50	0.90	0.60			
Type		Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Determinand	Method	Test Sample	LOD	Units								
Moisture @ 105 C	T162	AR	0.1	%	13	13	<0.1	17	14	26	19	16

SAL Reference: 413640 Project Site: Western Distributor Road, Preston Customer Reference: 41455 Soil Analysed as Soil PAH US EPA 16 (B and K split)												
SAL Reference				413640 019	413640 020	413640 021	413640 022	413640 023	413640 024	413640 025	413640 026	
Customer Sample Reference				BH222	BH224	BH45	BH71	BH73	BH76	BH85	BH92	
Date Sampled				14-JUL-2014	14-JUL-2014	07-JUL-2014	21-JUL-2014	21-JUL-2014	18-JUL-2014	11-JUL-2014	09-JUL-2014	
Depth				0.50	0.50	0.50	0.25	0.50	0.50	0.90	0.60	
Type				Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	
Determinand	Method	Test Sample	LOD	Units								
Naphthalene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(123-cd)Pyrene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)Anthracene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)Perylene	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PAH(total)	T207	M105	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

SAL Reference: 413640 Project Site: Western Distributor Road, Preston Customer Reference: 41455 Soil Analysed as Soil Total Petroleum Hydrocarbons with Speciation												
SAL Reference				413640 001	413640 002	413640 003	413640 004	413640 005	413640 006	413640 007	413640 008	413640 009
Customer Sample Reference				BH10	BH119	BH121	BH121	BH121	BH125	BH127	BH128	BH128
Date Sampled				16-JUL-2014	18-JUL-2014	17-JUL-2017	17-JUL-2017	22-JUL-2014	21-JUL-2014	16-JUL-2014	16-JUL-2014	15-JUL-2014
Depth				0.25	0.50	1.00	3.00	5.00	0.25	0.50	1.80	3.80
Type				Topsoil	Sandy Soil	Clay	Clay	Clay	Topsoil	Clay	Clay	Clay
Determinand	Method	Test Sample	LOD	Units								
TPH Speciation	T206	M105			N.D.	N.D.	N.D.	Fraction Start CNo (56) 14	N.D.	N.D.	N.D.	N.D.
								Fraction Peak CNo (56) 24				
								Fraction End CNo (56) 40				
								Heavy Mineral Range Organics (56)				

Soil	Analysed as Soil
Total Petroleum Hydrocarbons with Speciation	

	SAL Reference	413640 010	413640 011	413640 012	413640 013	413640 014	413640 015	413640 016	413640 017	413640 018
	Customer Sample Reference	BH223	BH49	BH79	BH101	BH115	BH117	BH13	BH210	BH216
	Date Sampled	25-JUL-2014	17-JUL-2014	07-JUL-2014	11-JUL-2014	15-JUL-2014	04-JUL-2014	14-JUL-2014	14-JUL-2014	14-JUL-2014
	Depth	0.50	0.50	0.50	0.50	0.25	0.80	0.50	1.00	0.50
	Type	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay
Determinand	Method	Test Sample	LOD	Units						
TPH Speciation	T206	M105			N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

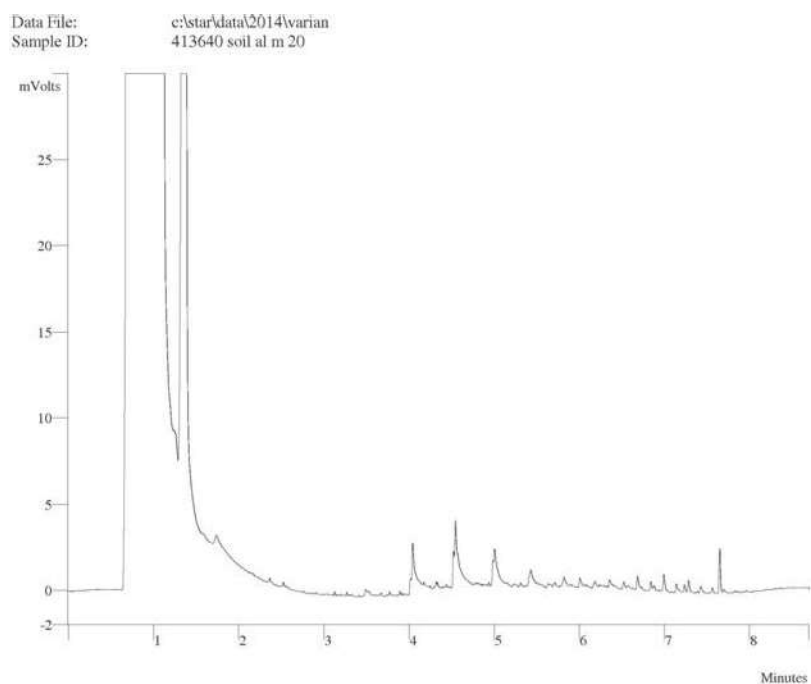
Soil	Analysed as Soil
Total Petroleum Hydrocarbons with Speciation	

SAL Reference					413640 019	413640 020	413640 021	413640 022	413640 023	413640 024	413640 025	413640 026
Customer Sample Reference					BH222	BH224	BH45	BH71	BH73	BH76	BH85	BH92
Date Sampled					14-JUL-2014	14-JUL-2014	07-JUL-2014	21-JUL-2014	21-JUL-2014	18-JUL-2014	11-JUL-2014	09-JUL-2014
Depth					0.50	0.50	0.50	0.25	0.50	0.50	0.90	0.60
Type					Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay

Determinand	Method	Test Sample	LOD	Units								
TPH Speciation	T206	M105			Fraction Start CNo	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
					14							
					Fraction Peak CNo							
					28							
					Fraction End CNo							
					40							
					Heavy Mineral Range Organics							

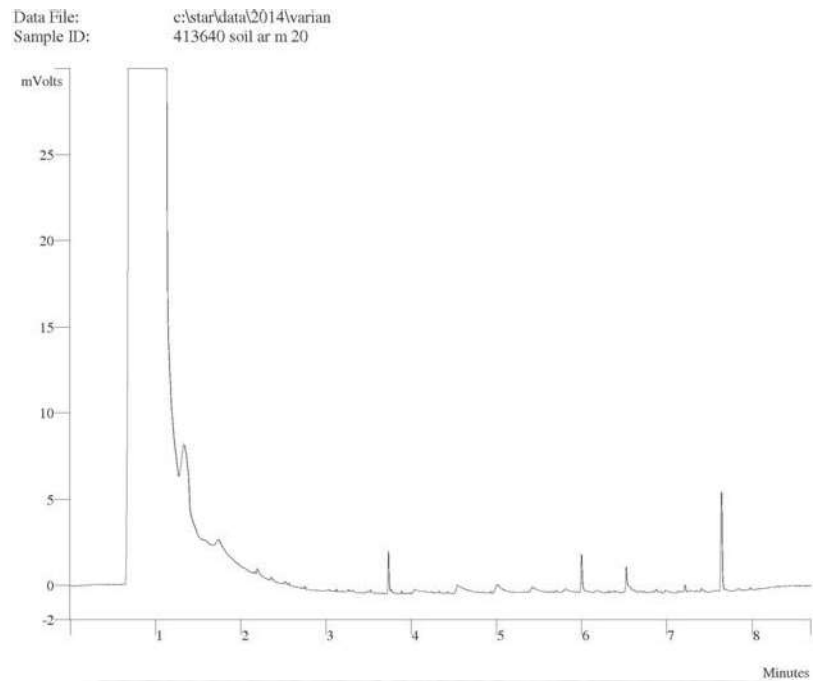
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413640 020 - BH224



413640-ar-20.jpg

413640 020 - BH224



**Site** : Preston Western Distributor Road, Preston**Job Number**
414551**Client** : Lancashire County Council**Page**
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AND DERIVATION OF PLASTICITY AND LIQUIDITY INDEX**

Borehole/ Trial Pit	Depth (m)	Sample	Natural / Sieved	Natural Moisture Content %	Sample Passing 425µm Sieve		Liquid Limit %	Plastic Limit %	Plasticity Index %	Liquidity Index	Class	Description / Remarks
					Percentage %	Moisture Content %						
WS212	1.30	D10	Natural	14	95	14	25	13	12	0.08	CL	Brown silty CLAY
WS212	1.70	D11	Natural	14								Brown silty CLAY
WS212	2.00	D12	Natural	18								Brown silty CLAY
WS212	2.30	D15	Natural	15								Brown silty CLAY
WS212	2.70	D16	Natural	24								Brown silty CLAY
WS213	0.70	D8	Natural	15								Brown gravelly silty CLAY
WS213	1.00	D9	Natural	16								Brown gravelly silty CLAY
WS213	1.30	D12	Natural	13								Brown gravelly silty CLAY
WS213	1.70	D13	Natural	12								Brown gravelly silty CLAY
WS213	2.00	D14	Natural	13								Brown gravelly silty CLAY
WS213	2.30	D17	Natural	13								Brown gravelly silty CLAY
WS213	2.70	D18	Natural	14								Brown gravelly silty CLAY
WS213	3.00	D19	Natural	22								Brown gravelly silty CLAY
WS226	0.50	D5	Natural	14	98	14	29	15	14	-0.07	CL	Brown sandy gravelly CLAY
WS226	0.70	D7	Natural	14								Brown sandy gravelly CLAY
WS226	1.00	D8	Natural	12								Brown sandy gravelly CLAY
WS226	1.30	D11	Natural	11								Brown sandy gravelly CLAY
WS226	1.70	D12	Natural	12								Brown sandy gravelly CLAY
WS226	2.00	B13	Natural	14								Brown sandy gravelly CLAY
WS226	2.30	D15	Natural	14								Brown sandy gravelly CLAY
WS226	2.70	D16	Natural	14								Brown sandy gravelly CLAY
WS226	3.00	D17	Natural	15								Brown sandy gravelly CLAY
WS226	3.30	D18	Natural	16								Brown silty CLAY
WS226	3.70	D19	Natural	14								Brown silty CLAY
WS226	4.00	D20	Natural	15								Brown silty CLAY
WS226	4.50	D22	Natural	18								Brown silty CLAY
WS226	4.70	D23	Natural	17								Brown silty CLAY
WS226	5.00	D24	Natural	16								Brown silty CLAY
WS227	0.70	D7	Natural	34								Brown sandy gravelly CLAY
WS227	1.00	D8	Natural	28								Brown sandy gravelly CLAY
WS227	1.30	D11	Natural	23								Brown sandy gravelly CLAY
WS227	2.00	D12	Natural	18								Brown silty CLAY
WS227	2.30	D13	Natural	17								Brown sandy CLAY
WS227	2.70	D14	Natural	20								Brown silty gravelly CLAY
WS227	3.00	D15	Natural	15								Brown silty gravelly CLAY
WS227	3.30	D16	Natural	16								Brown silty gravelly CLAY

Method of Preparation : BS 1377:PART 1:1990:7.4 Preparation of samples for classification tests BS 1377:PART 2:1990:4.2 & 5.2 Sample preparations**Method of Test** : BS 1377:PART 2:1990:3.2 Determination of moisture content 4.3 Determination of the liquid limit 5.3 Determination of the plastic limit and plasticity index



Site : Preston Western Distributor Road, Preston

Client : Lancashire County Council

Job Number
41455I

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**DETERMINATION OF MOISTURE CONTENT, LIQUID LIMIT AND PLASTIC LIMIT
AND DERIVATION OF PLASTICITY AND LIQUIDITY INDEX**

Borehole/ Trial Pit	Depth (m)	Sample	Natural / Sieved	Natural Moisture Content %	Sample Passing 425µm Sieve		Liquid Limit %	Plastic Limit %	Plasticity Index %	Liquidity Index	Class	Description / Remarks
					Percentage %	Moisture Content %						
WS227	3.50	B17	Natural	17	100	18	34	17	17	0.06	CL	Brown silty gravelly CLAY
WS227	3.70	D18	Natural	21								Brown silty gravelly CLAY
WS227	4.00	D19	Natural	16								Brown silty gravelly CLAY
WS227	4.30	D20	Natural	20								Brown silty CLAY
WS227	4.70	D21	Natural	17								Brown silty gravelly CLAY
WS227	5.00	D22	Natural	15								Brown gravelly silty CLAY
WS26	1.00	D7	Natural	20								Brown gravelly sandy CLAY
WS26	1.30	D9	Natural	18								Brown silty CLAY
WS26	1.70	D10	Natural	22								Brown silty CLAY
WS26	2.00	D11	Natural	20								Brown silty CLAY
WS26	2.00	D12	Natural	24								Brown silty CLAY
WS26	2.30	D14	Natural	18								Brown silty CLAY
WS26	2.70	D15	Natural	23								Brown silty CLAY
WS26	3.00	D16	Natural	21								Brown silty CLAY

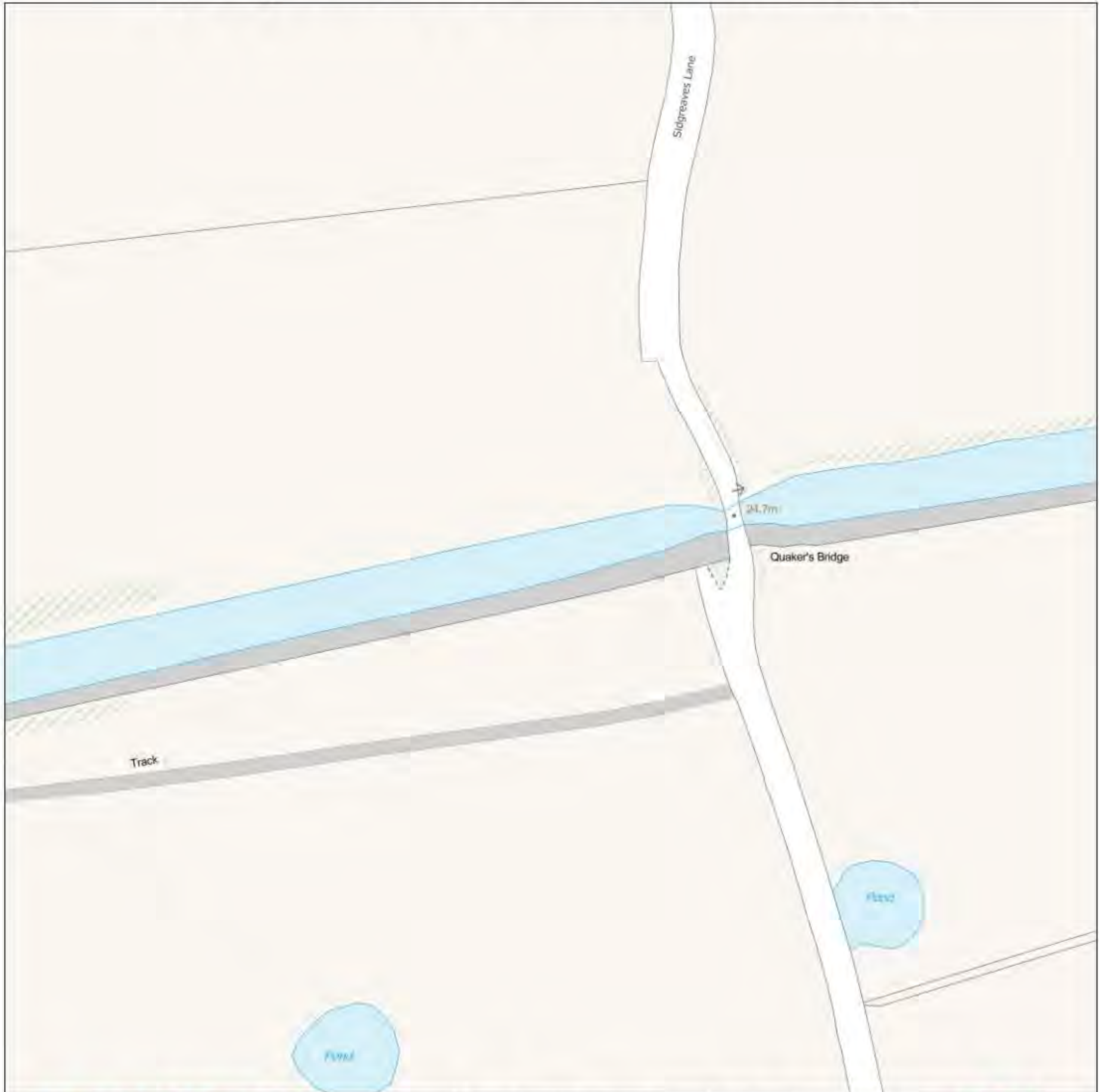
Method of Preparation : BS 1377:PART 1:1990:7.4 Preparation of samples for classification tests BS 1377:PART 2:1990:4.2 & 5.2 Sample preparations

Method of Test : BS 1377:PART 2:1990:3.2 Determination of moisture content 4.3 Determination of the liquid limit 5.3 Determination of the plastic limit and plasticity index

Appendix D

Service information

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG

FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

email cbyd@openreach.co.uk



















ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd








Accidents happen

If you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

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KEY TO BT SYMBOLS

KEY TO BT SYMBOLS			Change Of State	+	Hatchings	
	<i>Planned</i>	<i>Live</i>	Split Coupling	×	Built	
PCP			Duct Tee		Planned	
Pole			Building		Inferred	
Box			Kiosk		Duct	
Manhole			<p>Other proposed plant is shown using dashed lines. BT Symbols not listed above may be disregarded. Existing BT Plant may not be recorded. Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.</p>			
Cabinet						

	<i>Pending Add</i>	<i>In Place</i>	<i>Pending Remove</i>	<i>Not In Use</i>
Power Cable				
Power Duct				N/A

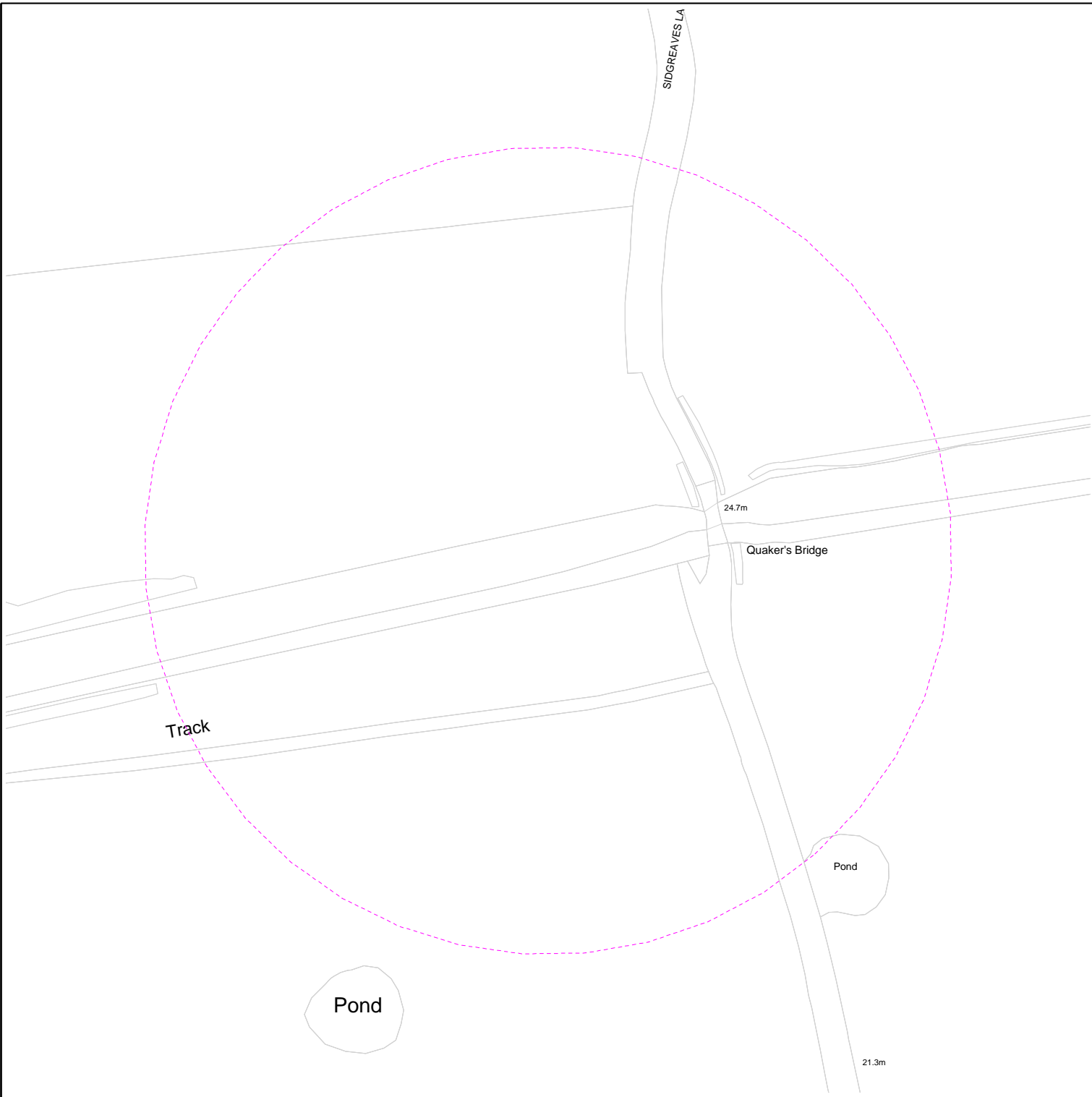
BT Ref : QLC04036J

Map Reference : (centre) SD4902331622



Easting/Northing : (centre) 349023,431622




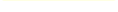




Issued : 20/11/2020 16:03:17


WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk



Requested by: Mark Kingsley
Company: Lancashire County Council
Date Requested: 20/11/2020
Job Reference: 20596462
Your Scheme/Reference: Cottam Parkway A

Dig Sites:
Area  Line 

Operating Voltage	Colour Code	Line Colour
132kV	Black	
33kV	Green	
22kV-25kV	Yellow	
11kV	Red	
6kV-6.6kV	Blue	
1kV-6kV	Violet	
LV	Orange	
Unknown Voltage	Brown	



Data Management
Electricity North West
Linley House
Dickinson Street
Manchester, M1 4LF
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk

Scales on A4 paper:
1:1250 Area dig site
1:250 Line dig site

Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

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Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines".

Electricity North West Limited 304 Bridgewater Place, Birchwood Park, Warrington WA3 6XG. Registered in England and Wales. Registered No 02366949

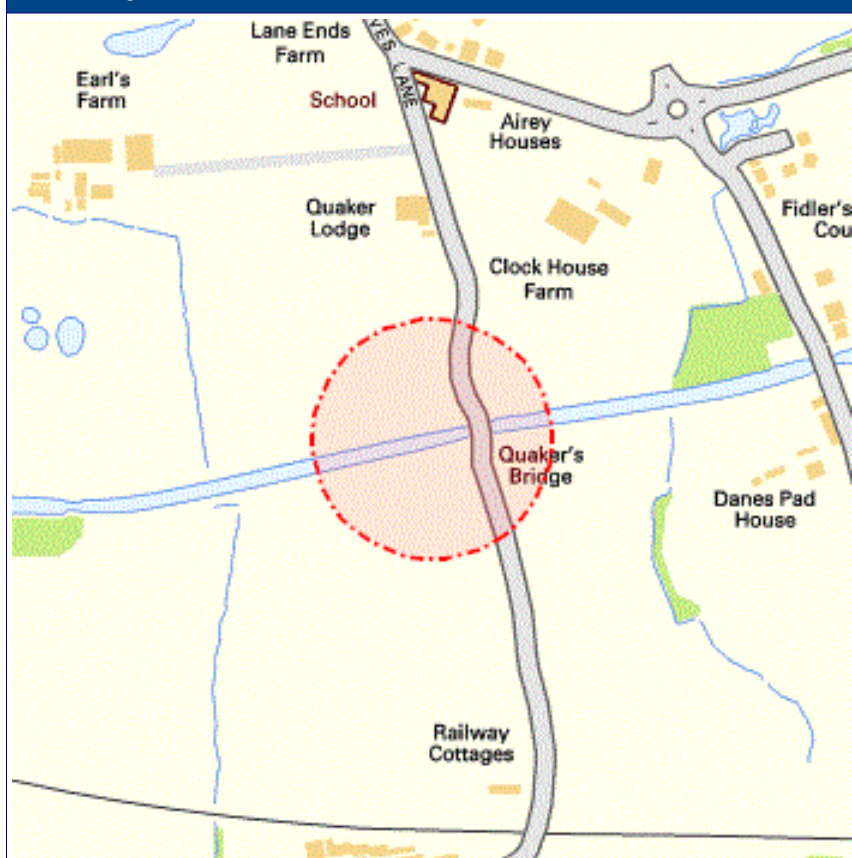
Enquirer

Name	Mr Mark Kingsley	Phone	01772 536473
Company	Lancashire County Council	Mobile	Not Supplied
Address	Design & Construction County Hall PRESTON Lancashire PR1 8XJ		
Email	mark.kingsley@lancashire.gov.uk		

Enquiry Details

Scheme/Reference	Cottam Parkway Access Bridge		
Enquiry type	Initial Enquiry	Work category	Excavations Non Utility
Start date	30/11/2020	Work type	Multiple excavations site
End date	04/12/2020	Site size	200 metres diameter
Searched location	XY= 349023, 431622	Work type buffer*	25 metres
Confirmed location	349024 431621		
Site Contact Name	Not Supplied	Site Phone No	Not Supplied
Description of Works			

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.

Site Map


Asset Owners

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.lineasearchbeforeudig.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

Notes. Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LineasearchbeforeUdig accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Asset Owners & Responses. Please note the enquiry results include the following:

1. "LSBUD Members" who are asset owners who have registered their assets on the LSBUD service.
2. "Non LSBUD Members" are asset owners who have not registered their assets on the LSBUD service but LSBUD is aware of their existence. Please note that there could be other asset owners within your search area.

Below are three lists of asset owners:

1. **LSBUD Members who have assets registered within your search area. ("Affected")**
 - a. These LSBUD Members will either:
 - i. Ask for further information ("Email Additional Info" noted in status). The additional information includes: Site contact name and number, Location plan, Detailed plan (minimum scale 1:2500), Cross sectional drawings (if available), Work Specification.
 - ii. Respond directly to you ("Await Response"). In this response they may either send plans directly to you or ask for further information before being able to do so, particularly if any payments or authorisations are required.
2. **LSBUD Members who do not have assets registered within your search area. ("Not Affected")**
3. **Non LSBUD Members who may have assets within your search area.** Please note that this list is not exhaustive and all details are provided as a guide only. It is your responsibility to identify and consult with all asset owners before proceeding.

National Grid. Please note that the LSBUD service only contains information on National Grid's Gas above 7 bar asset, all National Grid Electricity Transmission assets and National Grid's Gas Distribution Limited above 2 bar asset.

For National Grid Gas Distribution Ltd below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com

LSBUD Members who have assets registered on the LSBUD service within the vicinity of your search area.

List of affected LSBUD members

Asset Owner	Phone/Email	Emergency Only	Status
Electricity North West Limited	08001954141	08001954141	Await response

LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD Members make regular changes to their assets and this list may vary for new enquiries in the same area.

List of not affected LSBUD members

AWE Pipeline	Balfour Beatty Investments Limited	BOC Limited (A Member of the Linde Group)
BP Exploration Operating Company Limited	BPA	Carrington Gas Pipeline
CATS Pipeline c/o Wood Group PSN	Cemex	Centrica Storage Ltd
Chrysaor Production (UK) Limited	CLH Pipeline System Ltd	CNG Services Ltd
Concept Solutions People Ltd	ConocoPhillips (UK) Teesside Operator Ltd	Diamond Transmission Corporation
DIO (MOD Abandoned Pipelines)	DIO (MOD Live Pipelines)	Drax Group
E.ON UK CHP Limited	EirGrid	ENI & Himor c/o Penspen Ltd
EnQuest NNS Limited	EP Langage Limited	ESP Utilities Group
ESSAR	Esso Petroleum Company Limited	Fulcrum Pipelines Limited
Gamma	Gas Networks Ireland (UK)	Gateshead Energy Company
Gigaclear Ltd	Gtt	Heathrow Airport LTD
Humbly Grove Energy	IGas Energy	INEOS FPS Pipelines
INEOS Manufacturing (Scotland and TSEP)	INOVYN Enterprises Limited	Intergen (Coryton Energy or Spalding Energy)
Jurassic Fibre Ltd	Mainline Pipelines Limited	Manchester Jetline Limited
Manx Cable Company	Marchwood Power Ltd (Gas Pipeline)	Melbourn Solar Limited
Murphy Utility Assets	National Grid Gas (Above 7 bar), National Grid Gas Distribution Limited (Above 2 bar) and National Grid Electricity Transmission	Northumbrian Water Group
NPower CHP Pipelines	NYnet Ltd	Oikos Storage Limited
Ørsted	Perenco UK Limited (Purbeck Southampton Pipeline)	Petroineos
Phillips 66	Portsmouth Water	Premier Transmission Ltd (SNIP)
Redundant Pipelines - LPDA	RWE - Great Yarmouth Pipeline (Bacton to Great Yarmouth Power Station)	RWEnpower (Little Barford and South Haven)
SABIC UK Petrochemicals	Scottish and Southern Electricity Networks	Scottish Power Generation
Seabank Power Ltd	SES Water	SGN
Shell	Shell NOP	SSE Enterprise Telecoms
SSE Generation Ltd	SSE Utility Solutions Limited	Tata Communications (c/o JSM Construction Ltd)
Total (Colnbrook & Colwick Pipelines)	Total Finaline Pipelines	Transmission Capital
UK Power Networks	Uniper UK Ltd	University of Cambridge Granta Backbone Network

Vattenfall	Veolia ES SELCHP Limited	Veolia ES Sheffield Ltd
Wales and West Utilities	West of Duddon Sands Transmission Ltd	Western Power Distribution
Westminster City Council	Zayo Group UK Ltd c/o JSM Group Ltd	

The following Non-LSBUD Members may have assets in your search area. It is **YOUR RESPONSIBILITY** to contact them before proceeding. Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.

Non-LSBUD members (Asset owners not registered on LSBUD)

Asset Owner	Preferred contact method	Phone	Status
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08000232023	Not Notified
Cadent Gas	plantprotection@cadentgas.com	0800688588	Not Notified
CenturyLink Communications UK Limited	plantenquiries@instalcom.co.uk	02087314613	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Energetics Electricity	plantenquiries@lastmile-uk.com	01698404646	Not Notified
ENGIE	nrsua.uk@engie.com	01293 549944	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
KPN (c/-Instalcom)	kpn.plantenquiries@instalcom.co.uk	n/a	Not Notified
Lancashire County Council	highways@lancashire.gov.uk	03001236701	Not Notified
Mobile Broadband Network Limited	mbnlplantenquiries@turntown.com	01212 621 100	Not Notified
Sky UK Limited	nrsua@sky.uk	02070323234	Not Notified
Sota	SOTA.plantenquiries@instalcom.co.uk		Not Notified
Teliasonera	check-network@teliacompany.com	0800526015	Not Notified
United Utilities	WastewaterDeveloperServices@uuplc.co.uk	08707510101	Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified

Disclaimer

Please refer to LineSearchbeforeUdig's Terms of Use for full terms of use available at www.linesearchbeforeudig.co.uk

The results of this Enquiry are personal to the Enquirer and shall not be shared with or relied upon by any other party. The asset information on which the Enquiry results are based has been provided by LSBUD Members, therefore LineSearchbeforeUdig will provide no guarantee that such information is accurate or reliable nor does it monitor such asset information for accuracy and reliability going forward. There may also be asset owners which do not participate in the enquiry service operated by LineSearchbeforeUdig, including but not exclusively those set out above. Therefore, LineSearchbeforeUdig cannot make any representation or give any guarantee or warranty as to the completeness of the information contained in the enquiry results or accept any responsibility for the accuracy of the mapping images used. LineSearchbeforeUdig and its employees, agents and consultants accept no liability (save that nothing in this Enquiry Confirmation excludes or limits our liability for death or personal injury arising from our negligence, or our fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by English law) arising in respect thereof or in any other way for errors or omissions including responsibility to any person by reason of negligence.

Conditions and information regarding electricity mains

These general conditions and precautions apply to the electricity distribution system of Electricity North West Limited.

Please ensure that a copy of these conditions is passed to your representative and contractor on site.

1. There may be other Electricity North West Limited apparatus in the vicinity, which is not indicated on the cable records. Other apparatus may also be present which a third party owns other than Electricity North West Limited
2. Before any machines are used all of Electricity North West's underground apparatus should be located by manual excavation taking the appropriate safety precautions in accordance with the **Health and Safety Executive Guidance note HS(G)47 "Avoiding danger from underground services"**. This contains advice to site personnel when working near underground services.

Underground services, particularly electricity and gas, can be dangerous. Damage to electricity cables can cause a dangerous flash, leading to severe burns or even death. Gas leaks can cause fire or explosion.

Damage can result from excavation or penetration of the ground, e.g. by a road pin.

Underground services may be found in roads, footpaths and on sites. Always assume that they are present. Treat any services found anywhere as live.

Accidents have happened because people have mistaken one service for another, e.g. black plastic covered electricity cables look like black plastic water pipes and cast iron gas and water mains look alike. Check before you act.

3. Before starting work you must:
 - Make sure you have plans of the underground services in the area. This may not always be possible for emergency or unforeseen works. **Remember that service connection cables and pipes from the main to building or streetlight may not be shown.**
 - Use a cable and pipe locator to trace electricity cables and metal pipes.
 - Look for signs of service connection cables or pipes, e.g. a gas meter or service connection entry into a house or a streetlight.
 - Hand dig trial holes (as many as necessary) to confirm the position of services in close proximity to the area of work.

4. When you start work:

- Hand dig near buried services whenever possible. Spades and shovels are safer than picks, pins or forks.
- Remember that cables may be embedded in concrete. Electricity cables embedded in concrete **must** either be made dead before the concrete is broken out or another safe way of working agreed with the cable owner.
- Watch out for signs of services as work continues.
- Report damage to a cable, pipe or pipe coating however slight.
- Do not use hand held power tools within 0.5m of the marked position of an electricity cable, unless this is impracticable and the line of the cable has been identified by plans and positively confirmed by a locator.
- Do not use hand held power tools directly over the marked line of cable unless:
 - a) You have already found the cable at that position by careful hand digging beneath the surface and it is at a safe depth (at least 300mm) below the bottom of the surface to be broken, or
 - b) Physical means have been used to prevent the tool striking it.
- If an excavator is used near an electricity cable keep everyone clear of the bucket while it is digging. Buckets should not be used near cable – hand dig.
- Do not use exposed services as a convenient step or handhold.
- Do not handle or attempt to alter the position of an exposed service.
- Do not install plant close to an existing service.
- Do not build existing services into a manhole or other structure or encase them in concrete.

Would you also ensure that all site operators have this information and if any electrical apparatus is damaged, they/you should contact Electricity North West Limited fault desk on **0800 195 4141 (option 1)**

5. Overhead lines are not necessarily shown on the Electricity North West Limited cable records but may be present. In the event of work being carried out adjacent to overhead lines (including access, storage etc.) please always ensure strict adherence to the requirements of the **Health and Safety Executive's Document GS6 "Avoidance of Danger from Overhead Electric Lines"**.

Extreme personal danger can result from contact, or near contact, with live conductors or overhead lines.

Treat all overhead lines and other electrical apparatus as live. If in doubt, get advice.

6. Electricity North West Limited must be consulted if work is to take place within 15 metres of overhead lines on steel towers or 9 metres of overhead lines on wood, concrete or steel pylons. (All distances should be measure at ground level from a position estimated by eye to be vertically under the outermost conductor at a tower or pole position) Any person involved in work in the vicinity of overhead lines should:
- Understand and follow the instructions given on safe working areas and methods of work.
 - Make sure that warning notices are in the cabs of machines working in the vicinity of an overhead line.
 - Make sure that barriers and warning notices are erected as required.
 - Not tip soil or stack material underneath overhead lines as this may reduce the clearance to an unsafe distance.
 - Make sure when handling or using platforms, scaffold, poles, piping, ladders, hand tools etc., that they are kept at a safe distance from overhead lines.
 - Not steady a suspended load, skip, hoist wire, slings etc., unless satisfied that there isn't any danger from overhead lines.
 - Remember that when mobile plant, such as a crane or excavator, is operating near overhead lines, the raising or slewing of the jib may introduce danger.
 - Always keep overhead lines in view when manoeuvring mobile plant.
 - Never operate a machine unless carefully guided by an experienced banksman.
 - Not approach or touch any broken or fallen conductors or any plant in contact with an overhead line before Electricity North West Limited confirms that conditions are safe. Warn others to keep well clear.

Machine operators should note that: if a machine comes into contact with an overhead line and cannot be disentangled by backing off, remain seated in the cab and warn others to keep clear of the machine until Electricity North West Limited confirms that conditions are safe. If it is essential to

leave the machine while it is in contact with the overhead line, for example if it catches fire, jump well clear – and **do not** attempt to climb down in the normal way nor touch any part of the machine when on the ground.

7. Electricity North West Limited provides approximate locations of its electricity mains or apparatus according to its records but these records are not necessarily accurate or complete and do not always show the position of private cables from mains to properties. No person or company shall be relieved from liability for any damage caused by reason of the actual positions and/or depths being different from those indicated.

8. Care should be taken when excavating near cables. Known road crossings are highlighted on the enclosed plans. Should any cable, or Electricity North West Limited apparatus indicated on the attached plans, be affected by your proposals please contact us as follows:

Data Management
Linley House
Dickinson St
Manchester
M1 4LF

Telephone: **0800 195 4141 (option 2)**

Details of diversion costs, if any, will be provided on request once your firm proposals have been submitted.

9. Please note that service cables may be affected by some of the works being carried out on site.

If any services do require temporary disconnection please phone **0800 195 4141 (option 2)** for domestic and commercial disconnection, so that arrangement can be made to disconnect before work commences on site.

10. For information regarding supplies please contact us on **0800 195 4141 (option 2)**.

11. Please note that cable records supplied may not be up to date, or may be incomplete, if the area concerned is a new site.

12. For information regarding wayleave or easement agreements contact:

Manchester	08433 115157
Preston	08433 113969
Kendal	08433 115155

13. The latest cable records are always available for inspection during normal working hours and you should satisfy yourself that the information you have is up to date at the time you commence work. This service is consistent with the requirement of Regulation 36 of the Electricity Supply Regulations and paragraph 79 of the New Road and Street Works Act.

Please contact Data Management on **0800 195 4141 (option 2)** to arrange an appointment to view the records.



304 Bridgewater Place
Birchwood Park
Warrington
WA3 6XG

www.enwl.co.uk

Registered in England and Wales
Registered Number 2366949



Electricity North West
Data Management,
Electricity North West
Linley House
Dickinson Street
Manchester, M1 4LF
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk
Web: www.enwl.co.uk

Mr Mark Kingsley
Lancashire County Council
Design & Construction County Hall
PRESTON Lancashire
PR1 8XJ

Our Reference: 20596462

Your Reference: Cottam Parkway Access Bridge

Dear Mr Mark Kingsley

Electricity Network Plans

I acknowledge with thanks your request dated 20/11/2020 04:16:25 PM for information on the location of our services.

Please find enclosed plan(s) showing the approximate position of our apparatus known to be in the vicinity of this site.

I attach Conditions and information regarding electricity mains, which details contact numbers for additional services (i.e. new supplies, connections, diversion). In addition you should ensure they are made available to anyone carrying out any works which may affect our apparatus.

Yours sincerely,

Data Management

Mark Kingsley
Lancashire County Council
Design & Construction
Geotechnical Team
County Hall
PRESTON
Lancashire
PR1 0LD

Plant Protection
Cadent
Block 1; Floor 1
Brick Kiln Street
Hinckley
LE10 0NA
E-mail: plantprotection@cadentgas.com
Telephone: +44 (0)800 688588

National Gas Emergency Number:
0800 111 999*

National Grid Electricity Emergency Number:
0800 40 40 90*

* Available 24 hours, 7 days/week.
Calls may be recorded and monitored.

www.cadentgas.com

Date: 20/11/2020
Our Ref: NW_GW1B_3SWX_753914
Your Ref: Cottam Parkway
RE: Proposed Works, Cottam Parkway Access Bridge

Thank you for your enquiry which was received on 20/11/2020.

An assessment has been carried out with respect to Cadent Gas Limited, National Grid Electricity Transmission plc's and National Grid Gas Transmission plc's apparatus. Please note it does not cover the items listed in the section "Your Responsibilities and Obligations", including gas service pipes and related apparatus.

For details of Network areas please see the Cadent website (<http://cadentgas.com/Digging-safely/Dial-before-you-dig>) or the enclosed documentation.

Searches based on your enquiry have identified that there is no record of apparatus in the vicinity of your enquiry.

As your works are at a "proposed" stage, any maps and guidance provided are for information purposes only. This is not approval to commence work. You must submit a "Scheduled Works" enquiry at the earliest opportunity and failure to do this may lead to disruption to your plans and works. Plant Protection will endeavour to provide an initial assessment within 14 days of receipt of a Scheduled Works enquiry and dependent on the outcome of this, further consultation may be required.

In any event, for safety and legal reasons, works must not be carried out until a Scheduled Works enquiry has been completed and final response received.

Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking your scheduled activities at this location.

It is your responsibility to ensure that the information you have submitted is accurate and that all relevant documents including links are provided to all persons (either direct labour or contractors) working for you near Cadent and/or National Grid's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to Cadent Gas Limited, National Grid Electricity Transmission plc (NGET) and National Grid Gas Transmission plc (NGGT) and apparatus. This assessment does **NOT** include:

- | Cadent and/or National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to Cadent and/or National Grid's assets in private land. You must obtain details of any such restrictions from the landowner in the first instance and if in doubt contact Plant Protection.
- | Gas service pipes and related apparatus
- | Recently installed apparatus
- | Apparatus owned by other organisations, e.g. other gas distribution operators, local electricity companies, other utilities, etc.

It is **YOUR** responsibility to take into account whether the items listed above may be present and if they could be affected by your proposed activities. Further "Essential Guidance" in respect of these items can be found on either the [National Grid](#) or [Cadent](#) website.

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to Cadent and/or National Grid's easements or wayleaves nor any planning or building regulations applications.

Cadent Gas Limited, NGGT and NGET or their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

If you require further assistance please contact the Plant Protection team via e-mail ([click here](#)) or via the contact details at the top of this response.

Yours faithfully

Plant Protection Team

GUIDANCE

Standard Guidance

Essential Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>

General Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=35103>

Excavating Safely in the vicinity of gas pipes guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/A3D37677-6641-476C-9DDA-E89949052829/44257/ExcavatingSafelyCreditCard.pdf>

Excavating Safely in the vicinity of electricity cables guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/35DDEC6D-D754-4BA5-AF3C-D607D05A25C2/44858/ExcavatingSafelyCreditCardelectricitycables.pdf>

Copies of all the Guidance Documents can also be downloaded from the [National Grid](#) and [Cadent](#) websites.

ENQUIRY SUMMARY

Received Date

20/11/2020

Your Reference

Cottam Parkway

Location

Centre Point: 349022, 431620

X Extent: 20

Y Extent: 30

Location Description: Cottam Parkway Access Bridge

Map Options

Paper Size: A4

Orientation: PORTRAIT

Requested Scale: 500

Actual Scale: N/A

Real World Extents: N/A

Recipients

mark.kingsley@lancashire.gov.uk

Enquirer Details

Organisation Name: Lancashire County Council

Contact Name: Mark Kingsley

Email Address: mark.kingsley@lancashire.gov.uk

Telephone: 01772 536473

Address: Design & Construction, Geotechnical Team, County Hall, PRESTON, Lancashire, PR1 0LD

Description of Works

Site Investigation

Enquiry Type

Proposed Works

Activity Type

General Excavation

Work Types

Work Type: Deep Excavation (greater than or equal to 0.3m)

Work Type: Hand Digging

Work Type: Shallow Excavation (less than 0.3m)

Work Type: Boring/Moling/Horizontal Drilling less than or equal to 300mm

Work Type: Boring/Moling/Horizontal Drilling greater than 300mm

United Utilities Maps for Safe Dig

Date : 20/11/2020
16:19:01

Centre X : 349023

Centre Y : 431622

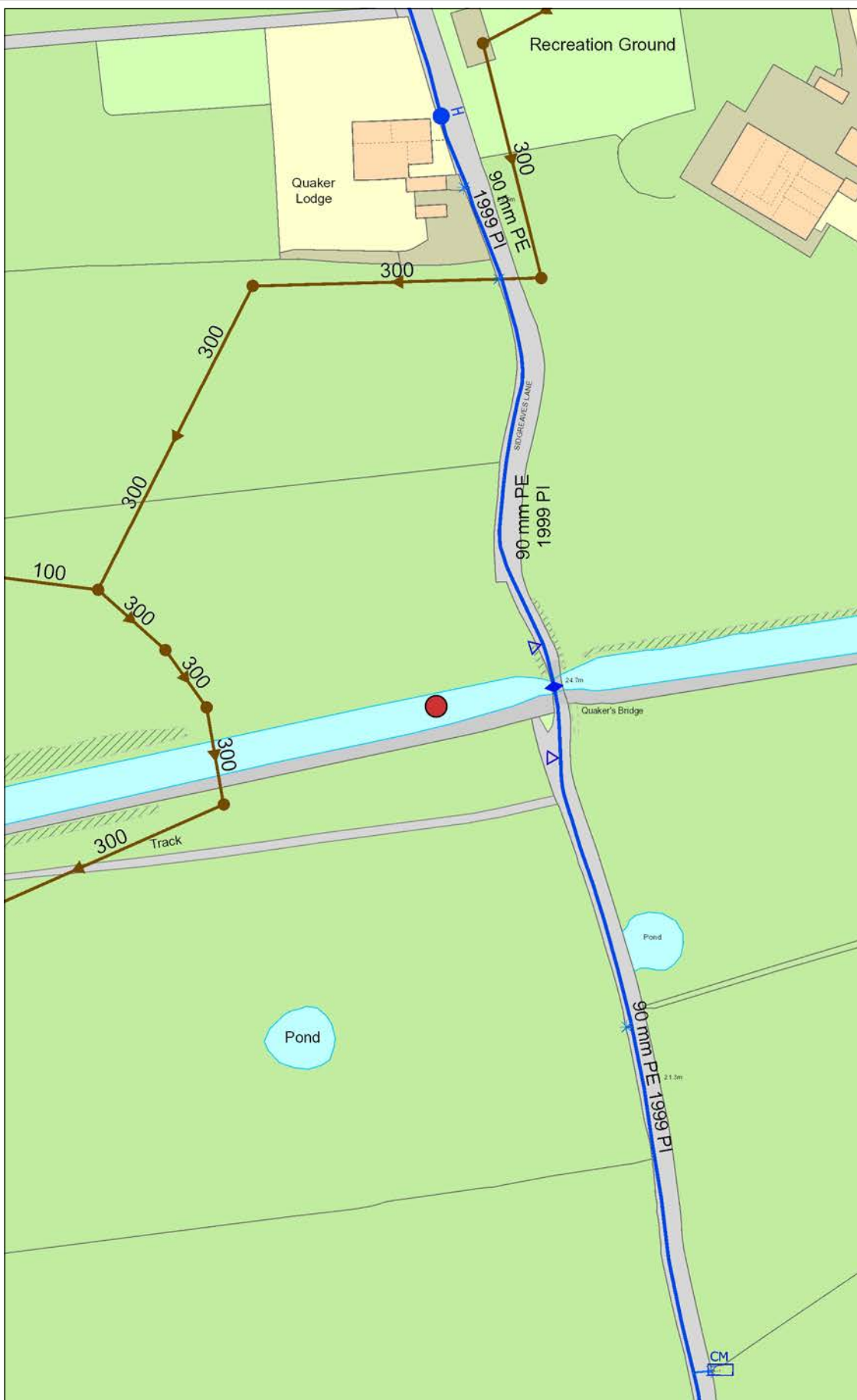
Scale : 2000

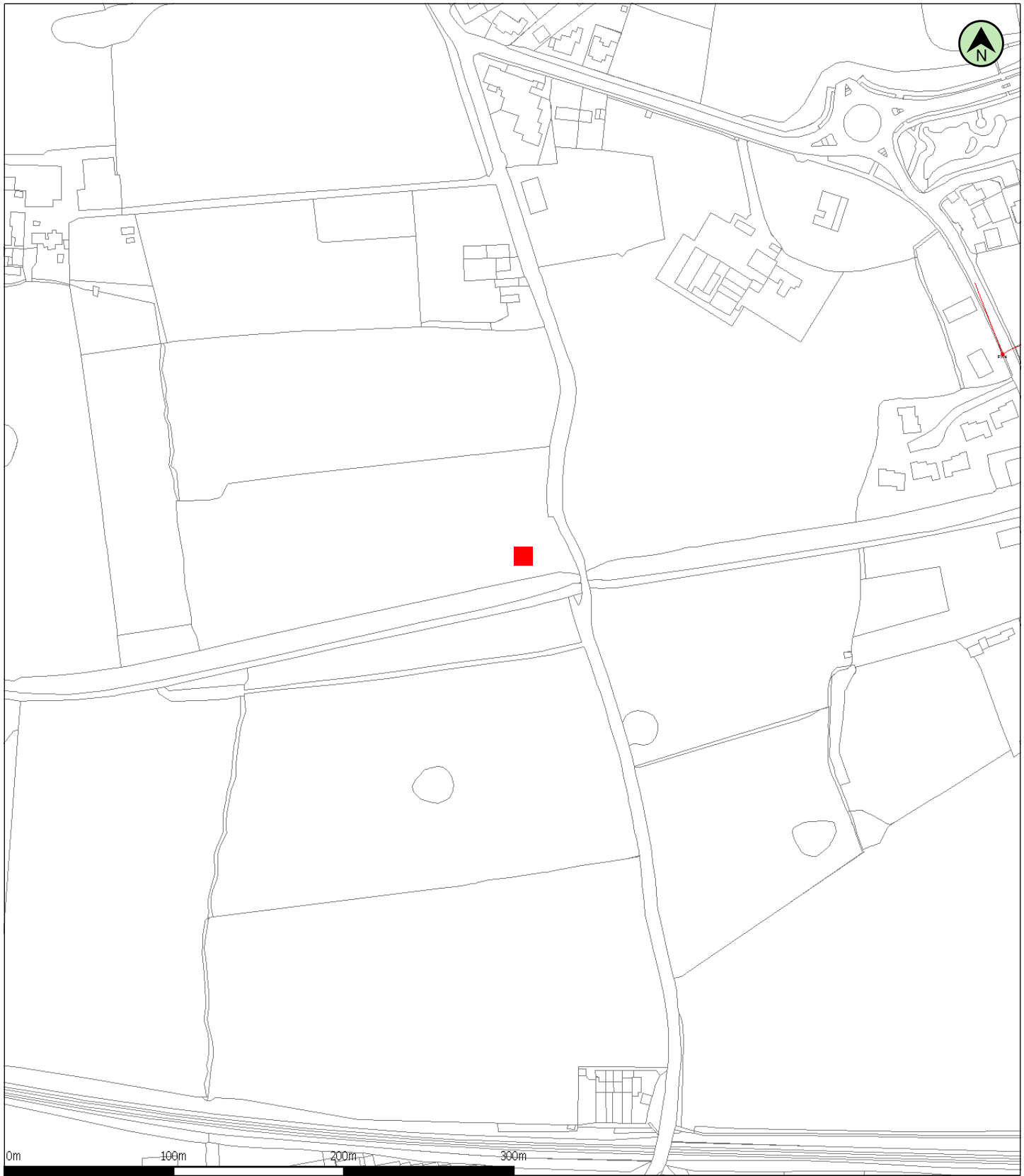
UserName: LCCBBC

Extract from maps of United Utilities' Underground Assets

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. The actual positions may be different from those shown on the plan and private service pipes may be shown by a blue broken line. United Utilities Water will not accept liability for any damage caused by the actual position being different from those shown.

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Data updated: 01/10/20

Scale: 1:3150
Map Centre: 349023,431622

Date: 20/11/20
Telecoms Plan A4
Powered by digdat

Duct, Trench	Chamber	Cabinet

mark.kingsley@lancashire.gov.uk
Cottam Parkway

Important Information - please read The purpose of this plan is to identify Virgin Media apparatus. We have tried to make it as accurate as possible but we cannot warrant its accuracy. In addition, we caution that within Virgin Media apparatus there may be instances where mains voltage power cables have been placed inside green, rather than black ducting. Further details can be found using the "Affected Postcodes.pdf", which can be downloaded from this website. Therefore, you must not rely solely on this plan if you are carrying out any excavation or other works in the vicinity of Virgin Media apparatus. The actual position of any underground service must be verified by cable detection equipment, etc. and established on site before any mechanical plant is used. Accordingly, unless it is due to the negligence of Virgin Media, its employees or agents, Virgin Media will not have any liability for any omissions or inaccuracies in the plan or for any loss or damage caused or arising from the use of and/or any reliance on this plan. This plan is produced by Virgin Media Limited (c) Crown copyright and database rights 2020 Ordnance Survey 100019209.

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG

FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

Accidents happen

If you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

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KEY TO BT SYMBOLS

	Planned	Live	Change Of State	+	Hatchings	
			Split Coupling	X	Built	
PCP			Duct Tee	▲	Planned	
Pole			Building		Inferred	
Box			Kiosk	K	Duct	
Manhole			Other proposed plant is shown using dashed lines. BT Symbols not listed above may be disregarded. Existing BT Plant may not be recorded. Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.			
Cabinet						
	Pending Add	In Place	Pending Remove	Not In Use		
Power Cable						
Power Duct				N/A		

BT Ref : HRJ04018P

Map Reference : (centre) SD4910331413

Easting/Northing : (centre) 349103,431413

Issued : 09/12/2020 16:01:42

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

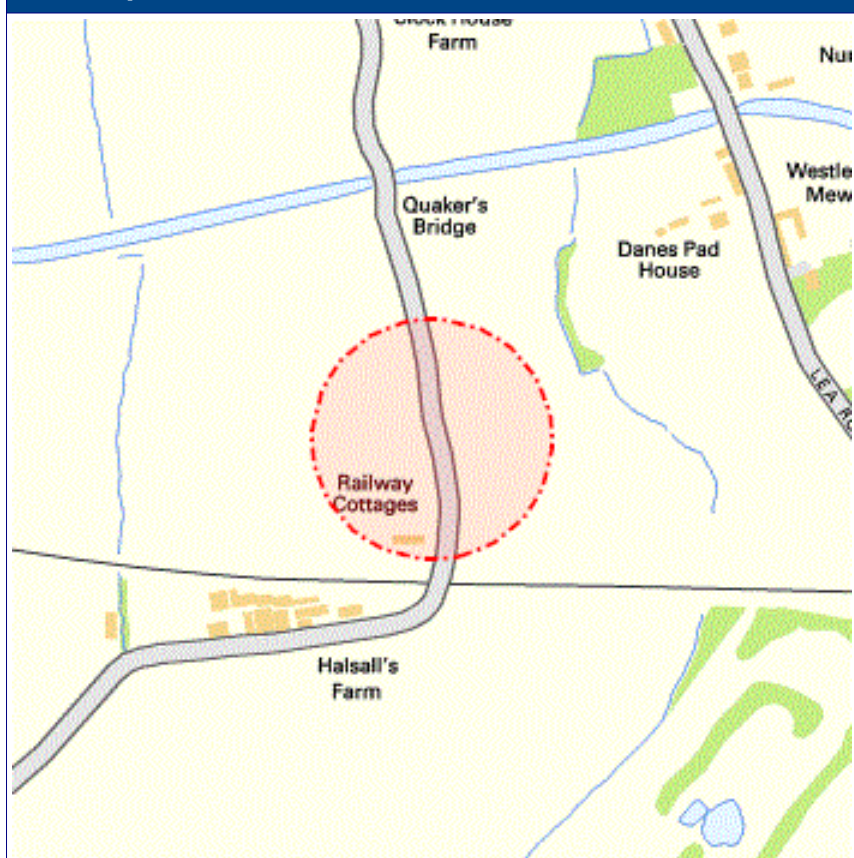
Enquirer

Name	Mr Mark Kingsley	Phone	01772 536473
Company	Lancashire County Council	Mobile	Not Supplied
Address	Design & Construction County Hall PRESTON Lancashire PR1 8XJ		
Email	mark.kingsley@lancashire.gov.uk		

Enquiry Details

Scheme/Reference	Cottam Parkway Station		
Enquiry type	Initial Enquiry	Work category	Excavations Non Utility
Start date	14/12/2020	Work type	Multiple excavations site
End date	18/12/2020	Site size	200 metres diameter
Searched location	XY= 349103, 431413	Work type buffer*	25 metres
Confirmed location	349104 431414		
Site Contact Name	Not Supplied	Site Phone No	Not Supplied
Description of Works			

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.

Site Map


Asset Owners

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.lineasearchbeforeudig.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

Notes. Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LineasearchbeforeUdig accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Asset Owners & Responses. Please note the enquiry results include the following:

1. "LSBUD Members" who are asset owners who have registered their assets on the LSBUD service.
2. "Non LSBUD Members" are asset owners who have not registered their assets on the LSBUD service but LSBUD is aware of their existence. Please note that there could be other asset owners within your search area.

Below are three lists of asset owners:

1. LSBUD Members who have assets registered within your search area. ("Affected")
 - a. These LSBUD Members will either:
 - i. Ask for further information ("Email Additional Info" noted in status). The additional information includes: Site contact name and number, Location plan, Detailed plan (minimum scale 1:2500), Cross sectional drawings (if available), Work Specification.
 - ii. Respond directly to you ("Await Response"). In this response they may either send plans directly to you or ask for further information before being able to do so, particularly if any payments or authorisations are required.
2. LSBUD Members who do not have assets registered within your search area. ("Not Affected")
3. Non LSBUD Members who may have assets within your search area. Please note that this list is not exhaustive and all details are provided as a guide only. It is your responsibility to identify and consult with all asset owners before proceeding.

National Grid. Please note that the LSBUD service only contains information on National Grid's Gas above 7 bar asset, all National Grid Electricity Transmission assets and National Grid's Gas Distribution Limited above 2 bar asset.

For National Grid Gas Distribution Ltd below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com

LSBUD Members who have assets registered on the LSBUD service within the vicinity of your search area.

List of affected LSBUD members

Asset Owner	Phone/Email	Emergency Only	Status
Electricity North West Limited	08001954141	08001954141	Await response

LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD Members make regular changes to their assets and this list may vary for new enquiries in the same area.

List of not affected LSBUD members

AWE Pipeline	Balfour Beatty Investments Limited	BOC Limited (A Member of the Linde Group)
BP Exploration Operating Company Limited	BPA	Carrington Gas Pipeline
CATS Pipeline c/o Wood Group PSN	Cemex	Centrica Storage Ltd
Chrysaor Production (UK) Limited	CLH Pipeline System Ltd	CNG Services Ltd
Concept Solutions People Ltd	ConocoPhillips (UK) Teesside Operator Ltd	Diamond Transmission Corporation
DIO (MOD Abandoned Pipelines)	DIO (MOD Live Pipelines)	Drax Group
E.ON UK CHP Limited	EirGrid	ENI & Himor c/o Penspen Ltd
EnQuest NNS Limited	EP Langage Limited	ESP Utilities Group
ESSAR	Esso Petroleum Company Limited	Fulcrum Pipelines Limited
Gamma	Gas Networks Ireland (UK)	Gateshead Energy Company
Gigaclear Ltd	Gtt	Heathrow Airport LTD
Humbly Grove Energy	IGas Energy	INEOS FPS Pipelines
INEOS Manufacturing (Scotland and TSEP)	INOVYN ChlorVinyls Limited	INOVYN Enterprises Limited
Intergen (Coryton Energy or Spalding Energy)	Jurassic Fibre Ltd	Mainline Pipelines Limited
Manchester Jetline Limited	Manx Cable Company	Marchwood Power Ltd (Gas Pipeline)
Melbourn Solar Limited	Murphy Utility Assets	National Grid Gas (Above 7 bar), National Grid Gas Distribution Limited (Above 2 bar) and National Grid Electricity Transmission
Northumbrian Water Group	NPower CHP Pipelines	NYnet Ltd
Oikos Storage Limited	Ørsted	Perenco UK Limited (Purbeck Southampton Pipeline)
Petroineos	Phillips 66	Portsmouth Water
Premier Transmission Ltd (SNIP)	Redundant Pipelines - LPDA	RWE - Great Yarmouth Pipeline (Bacton to Great Yarmouth Power Station)
RWEnpower (Little Barford and South Haven)	SABIC UK Petrochemicals	Scottish and Southern Electricity Networks
Scottish Power Generation	Seabank Power Ltd	SES Water
SGN	Shell	Shell NOP
SSE Enterprise Telecoms	SSE Generation Ltd	SSE Utility Solutions Limited
Tata Communications (c/o JSM Construction Ltd)	Total (Colnbrook & Colwick Pipelines)	Total Finaline Pipelines
Transmission Capital	UK Power Networks	Uniper UK Ltd
University of Cambridge Granta Backbone	Vattenfall	Veolia ES SELCHP Limited

Network		
Veolia ES Sheffield Ltd	Wales and West Utilities	West of Duddon Sands Transmission Ltd
Western Power Distribution	Westminster City Council	Zayo Group UK Ltd c/o JSM Group Ltd

The following Non-LSBUD Members may have assets in your search area. It is **YOUR RESPONSIBILITY** to contact them before proceeding. Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.

Non-LSBUD members (Asset owners not registered on LSBUD)

Asset Owner	Preferred contact method	Phone	Status
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08000232023	Not Notified
Cadent Gas	plantprotection@cadentgas.com	0800688588	Not Notified
CenturyLink Communications UK Limited	plantenquiries@instalcom.co.uk	02087314613	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Energetics Electricity	plantenquiries@lastmile-uk.com	01698404646	Not Notified
ENGIE	nrswa.uk@engie.com	01293 549944	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
KPN (c/-Instalcom)	kpn.plantenquiries@instalcom.co.uk	n/a	Not Notified
Lancashire County Council	highways@lancashire.gov.uk	03001236701	Not Notified
Mobile Broadband Network Limited	mbnlplantenquiries@turntown.com	01212 621 100	Not Notified
Sky UK Limited	nrswa@sky.uk	02070323234	Not Notified
Sota	SOTA.plantenquiries@instalcom.co.uk		Not Notified
Teliasonera	check-network@teliacompany.com	0800526015	Not Notified
United Utilities	WastewaterDeveloperServices@uuplc.co.uk	08707510101	Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified

Disclaimer

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The results of this Enquiry are personal to the Enquirer and shall not be shared with or relied upon by any other party. The asset information on which the Enquiry results are based has been provided by LSBUD Members, therefore LineasearchbeforeUdig will provide no guarantee that such information is accurate or reliable nor does it monitor such asset information for accuracy and reliability going forward. There may also be asset owners which do not participate in the enquiry service operated by LineasearchbeforeUdig, including but not exclusively those set out above. Therefore, LineasearchbeforeUdig cannot make any representation or give any guarantee or warranty as to the completeness of the information contained in the enquiry results or accept any responsibility for the accuracy of the mapping images used. LineasearchbeforeUdig and its employees, agents and consultants accept no liability (save that nothing in this Enquiry Confirmation excludes or limits our liability for death or personal injury arising from our negligence, or our fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by English law) arising in respect thereof or in any other way for errors or omissions including responsibility to any person by reason of negligence.

Conditions and information regarding electricity mains

These general conditions and precautions apply to the electricity distribution system of Electricity North West Limited.

Please ensure that a copy of these conditions is passed to your representative and contractor on site.

1. There may be other Electricity North West Limited apparatus in the vicinity, which is not indicated on the cable records. Other apparatus may also be present which a third party owns other than Electricity North West Limited
2. Before any machines are used all of Electricity North West's underground apparatus should be located by manual excavation taking the appropriate safety precautions in accordance with the **Health and Safety Executive Guidance note HS(G)47 "Avoiding danger from underground services"**. This contains advice to site personnel when working near underground services.

Underground services, particularly electricity and gas, can be dangerous. Damage to electricity cables can cause a dangerous flash, leading to severe burns or even death. Gas leaks can cause fire or explosion.

Damage can result from excavation or penetration of the ground, e.g. by a road pin.

Underground services may be found in roads, footpaths and on sites. Always assume that they are present. Treat any services found anywhere as live.

Accidents have happened because people have mistaken one service for another, e.g. black plastic covered electricity cables look like black plastic water pipes and cast iron gas and water mains look alike. Check before you act.

3. Before starting work you must:
 - Make sure you have plans of the underground services in the area. This may not always be possible for emergency or unforeseen works. **Remember that service connection cables and pipes from the main to building or streetlight may not be shown.**
 - Use a cable and pipe locator to trace electricity cables and metal pipes.
 - Look for signs of service connection cables or pipes, e.g. a gas meter or service connection entry into a house or a streetlight.
 - Hand dig trial holes (as many as necessary) to confirm the position of services in close proximity to the area of work.

4. When you start work:

- Hand dig near buried services whenever possible. Spades and shovels are safer than picks, pins or forks.
- Remember that cables may be embedded in concrete. Electricity cables embedded in concrete **must** either be made dead before the concrete is broken out or another safe way of working agreed with the cable owner.
- Watch out for signs of services as work continues.
- Report damage to a cable, pipe or pipe coating however slight.
- Do not use hand held power tools within 0.5m of the marked position of an electricity cable, unless this is impracticable and the line of the cable has been identified by plans and positively confirmed by a locator.
- Do not use hand held power tools directly over the marked line of cable unless:
 - a) You have already found the cable at that position by careful hand digging beneath the surface and it is at a safe depth (at least 300mm) below the bottom of the surface to be broken, or
 - b) Physical means have been used to prevent the tool striking it.
- If an excavator is used near an electricity cable keep everyone clear of the bucket while it is digging. Buckets should not be used near cable – hand dig.
- Do not use exposed services as a convenient step or handhold.
- Do not handle or attempt to alter the position of an exposed service.
- Do not install plant close to an existing service.
- Do not build existing services into a manhole or other structure or encase them in concrete.

Would you also ensure that all site operators have this information and if any electrical apparatus is damaged, they/you should contact Electricity North West Limited fault desk on **0800 195 4141 (option 1)**

5. Overhead lines are not necessarily shown on the Electricity North West Limited cable records but may be present. In the event of work being carried out adjacent to overhead lines (including access, storage etc.) please always ensure strict adherence to the requirements of the **Health and Safety Executive's Document GS6 "Avoidance of Danger from Overhead Electric Lines"**.

Extreme personal danger can result from contact, or near contact, with live conductors or overhead lines.

Treat all overhead lines and other electrical apparatus as live. If in doubt, get advice.

6. Electricity North West Limited must be consulted if work is to take place within 15 metres of overhead lines on steel towers or 9 metres of overhead lines on wood, concrete or steel pylons. (All distances should be measure at ground level from a position estimated by eye to be vertically under the outermost conductor at a tower or pole position) Any person involved in work in the vicinity of overhead lines should:
- Understand and follow the instructions given on safe working areas and methods of work.
 - Make sure that warning notices are in the cabs of machines working in the vicinity of an overhead line.
 - Make sure that barriers and warning notices are erected as required.
 - Not tip soil or stack material underneath overhead lines as this may reduce the clearance to an unsafe distance.
 - Make sure when handling or using platforms, scaffold, poles, piping, ladders, hand tools etc., that they are kept at a safe distance from overhead lines.
 - Not steady a suspended load, skip, hoist wire, slings etc., unless satisfied that there isn't any danger from overhead lines.
 - Remember that when mobile plant, such as a crane or excavator, is operating near overhead lines, the raising or slewing of the jib may introduce danger.
 - Always keep overhead lines in view when manoeuvring mobile plant.
 - Never operate a machine unless carefully guided by an experienced banksman.
 - Not approach or touch any broken or fallen conductors or any plant in contact with an overhead line before Electricity North West Limited confirms that conditions are safe. Warn others to keep well clear.

Machine operators should note that: if a machine comes into contact with an overhead line and cannot be disentangled by backing off, remain seated in the cab and warn others to keep clear of the machine until Electricity North West Limited confirms that conditions are safe. If it is essential to

leave the machine while it is in contact with the overhead line, for example if it catches fire, jump well clear – and **do not** attempt to climb down in the normal way nor touch any part of the machine when on the ground.

7. Electricity North West Limited provides approximate locations of its electricity mains or apparatus according to its records but these records are not necessarily accurate or complete and do not always show the position of private cables from mains to properties. No person or company shall be relieved from liability for any damage caused by reason of the actual positions and/or depths being different from those indicated.

8. Care should be taken when excavating near cables. Known road crossings are highlighted on the enclosed plans. Should any cable, or Electricity North West Limited apparatus indicated on the attached plans, be affected by your proposals please contact us as follows:

Data Management
Linley House
Dickinson St
Manchester
M1 4LF

Telephone: **0800 195 4141 (option 2)**

Details of diversion costs, if any, will be provided on request once your firm proposals have been submitted.

9. Please note that service cables may be affected by some of the works being carried out on site.

If any services do require temporary disconnection please phone **0800 195 4141 (option 2)** for domestic and commercial disconnection, so that arrangement can be made to disconnect before work commences on site.

10. For information regarding supplies please contact us on **0800 195 4141 (option 2)**.

11. Please note that cable records supplied may not be up to date, or may be incomplete, if the area concerned is a new site.

12. For information regarding wayleave or easement agreements contact:

Manchester	08433 115157
Preston	08433 113969
Kendal	08433 115155

13. The latest cable records are always available for inspection during normal working hours and you should satisfy yourself that the information you have is up to date at the time you commence work. This service is consistent with the requirement of Regulation 36 of the Electricity Supply Regulations and paragraph 79 of the New Road and Street Works Act.

Please contact Data Management on **0800 195 4141 (option 2)** to arrange an appointment to view the records.



304 Bridgewater Place
Birchwood Park
Warrington
WA3 6XG

www.enwl.co.uk

Registered in England and Wales
Registered Number 2366949



Electricity North West
Data Management,
Electricity North West
Linley House
Dickinson Street
Manchester, M1 4LF
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk
Web: www.enwl.co.uk

Mr Mark Kingsley
Lancashire County Council
Design & Construction County Hall
PRESTON Lancashire
PR1 8XJ

Our Reference: 20761378

Your Reference: Cottam Parkway Station

Dear Mr Mark Kingsley

Electricity Network Plans

I acknowledge with thanks your request dated 09/12/2020 04:12:21 PM for information on the location of our services.

Please find enclosed plan(s) showing the approximate position of our apparatus known to be in the vicinity of this site.

I attach Conditions and information regarding electricity mains, which details contact numbers for additional services (i.e. new supplies, connections, diversion). In addition you should ensure they are made available to anyone carrying out any works which may affect our apparatus.

Yours sincerely,

Data Management

Mark Kingsley
Lancashire County Council
Design & Construction
Geotechnical Team
County Hall
PRESTON
Lancashire
PR1 0LD

Plant Protection
Cadent
Block 1; Floor 1
Brick Kiln Street
Hinckley
LE10 0NA
E-mail: plantprotection@cadentgas.com
Telephone: +44 (0)800 688588

National Gas Emergency Number:
0800 111 999*

National Grid Electricity Emergency Number:
0800 40 40 90*

* Available 24 hours, 7 days/week.
Calls may be recorded and monitored.

www.cadentgas.com

Date: 09/12/2020
Our Ref: NW_GW1B_3SWX_761560
Your Ref: Cottam Parkway Station
RE: Proposed Works, Cottam Parkway Station

Thank you for your enquiry which was received on 09/12/2020.

An assessment has been carried out with respect to Cadent Gas Limited, National Grid Electricity Transmission plc's and National Grid Gas Transmission plc's apparatus. Please note it does not cover the items listed in the section "Your Responsibilities and Obligations", including gas service pipes and related apparatus.

For details of Network areas please see the Cadent website (<http://cadentgas.com/Digging-safely/Dial-before-you-dig>) or the enclosed documentation.

Searches based on your enquiry have identified that there is no record of apparatus in the vicinity of your enquiry.

As your works are at a "proposed" stage, any maps and guidance provided are for information purposes only. This is not approval to commence work. You must submit a "Scheduled Works" enquiry at the earliest opportunity and failure to do this may lead to disruption to your plans and works. Plant Protection will endeavour to provide an initial assessment within 14 days of receipt of a Scheduled Works enquiry and dependent on the outcome of this, further consultation may be required.

In any event, for safety and legal reasons, works must not be carried out until a Scheduled Works enquiry has been completed and final response received.

Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking your scheduled activities at this location.

It is your responsibility to ensure that the information you have submitted is accurate and that all relevant documents including links are provided to all persons (either direct labour or contractors) working for you near Cadent and/or National Grid's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to Cadent Gas Limited, National Grid Electricity Transmission plc (NGET) and National Grid Gas Transmission plc (NGGT) and apparatus. This assessment does **NOT** include:

- | Cadent and/or National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to Cadent and/or National Grid's assets in private land. You must obtain details of any such restrictions from the landowner in the first instance and if in doubt contact Plant Protection.
- | Gas service pipes and related apparatus
- | Recently installed apparatus
- | Apparatus owned by other organisations, e.g. other gas distribution operators, local electricity companies, other utilities, etc.

It is **YOUR** responsibility to take into account whether the items listed above may be present and if they could be affected by your proposed activities. Further "Essential Guidance" in respect of these items can be found on either the [National Grid](#) or [Cadent](#) website.

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to Cadent and/or National Grid's easements or wayleaves nor any planning or building regulations applications.

Cadent Gas Limited, NGGT and NGET or their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

If you require further assistance please contact the Plant Protection team via e-mail ([click here](#)) or via the contact details at the top of this response.

Yours faithfully

Plant Protection Team

GUIDANCE

Standard Guidance

Essential Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>

General Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=35103>

Excavating Safely in the vicinity of gas pipes guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/A3D37677-6641-476C-9DDA-E89949052829/44257/ExcavatingSafelyCreditCard.pdf>

Excavating Safely in the vicinity of electricity cables guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/35DDEC6D-D754-4BA5-AF3C-D607D05A25C2/44858/ExcavatingSafelyCreditCardelectricitycables.pdf>

Copies of all the Guidance Documents can also be downloaded from the [National Grid](#) and [Cadent](#) websites.

ENQUIRY SUMMARY

Received Date

09/12/2020

Your Reference

Cottam Parkway Station

Location

Centre Point: 349106, 431421

X Extent: 102

Y Extent: 92

Location Description: Cottam Parkway Station

Map Options

Paper Size: A4

Orientation: PORTRAIT

Requested Scale: 1250

Actual Scale: N/A

Real World Extents: N/A

Recipients

mark.kingsley@lancashire.gov.uk

Enquirer Details

Organisation Name: Lancashire County Council

Contact Name: Mark Kingsley

Email Address: mark.kingsley@lancashire.gov.uk

Telephone: 01772 536473

Address: Design & Construction, Geotechnical Team, County Hall, PRESTON, Lancashire, PR1 0LD

Description of Works

Site Investigations

Enquiry Type

Proposed Works

Activity Type

General Excavation

Work Types

Work Type: Deep Excavation (greater than or equal to 0.3m)

Work Type: Hand Digging

Work Type: Shallow Excavation (less than 0.3m)

Work Type: Boring/Moling/Horizontal Drilling less than or equal to 300mm

Work Type: Boring/Moling/Horizontal Drilling greater than 300mm

United Utilities Maps for Safe Dig

Date : 09/12/2020
16:13:31

Centre X : 349103

Centre Y : 431413

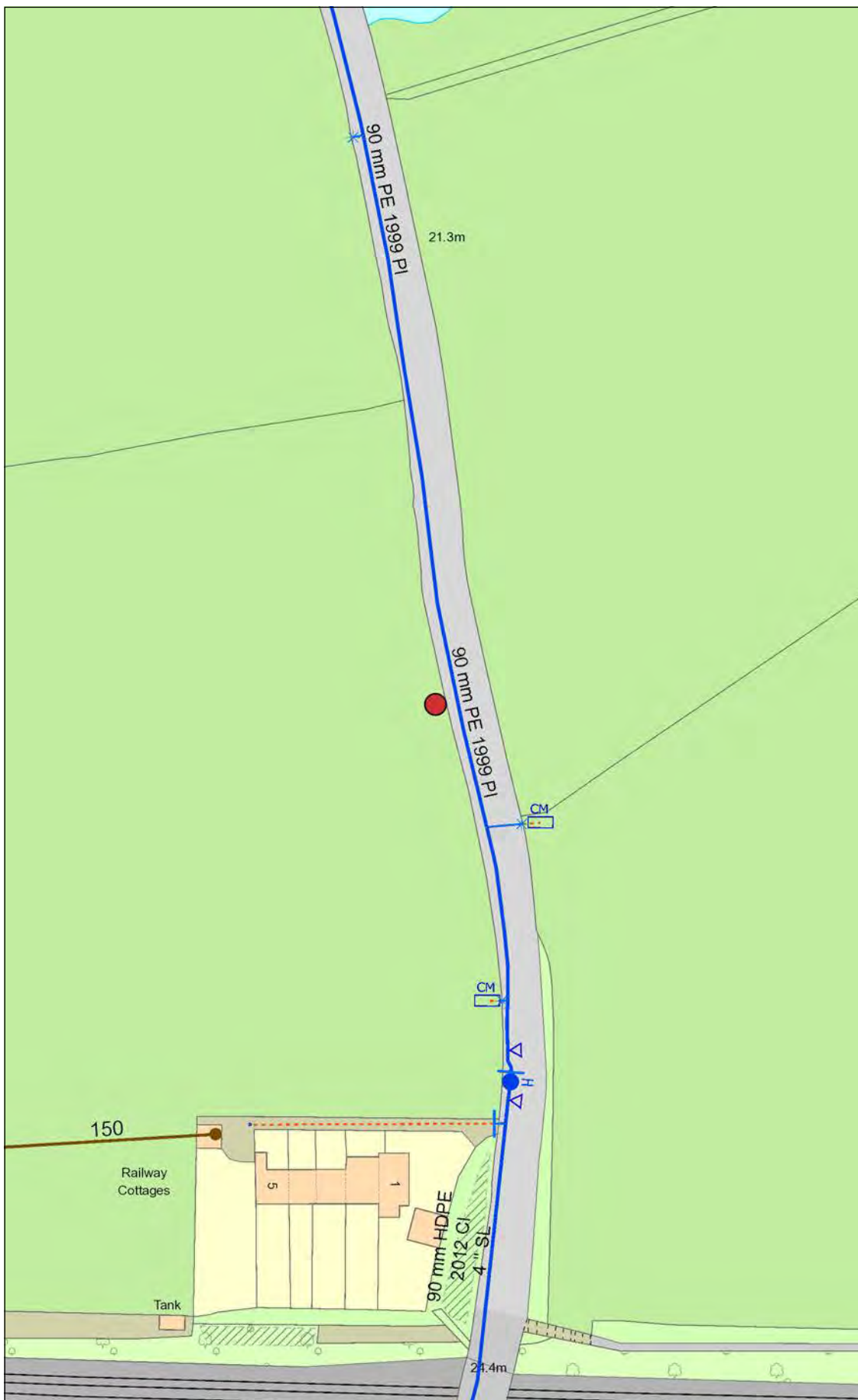
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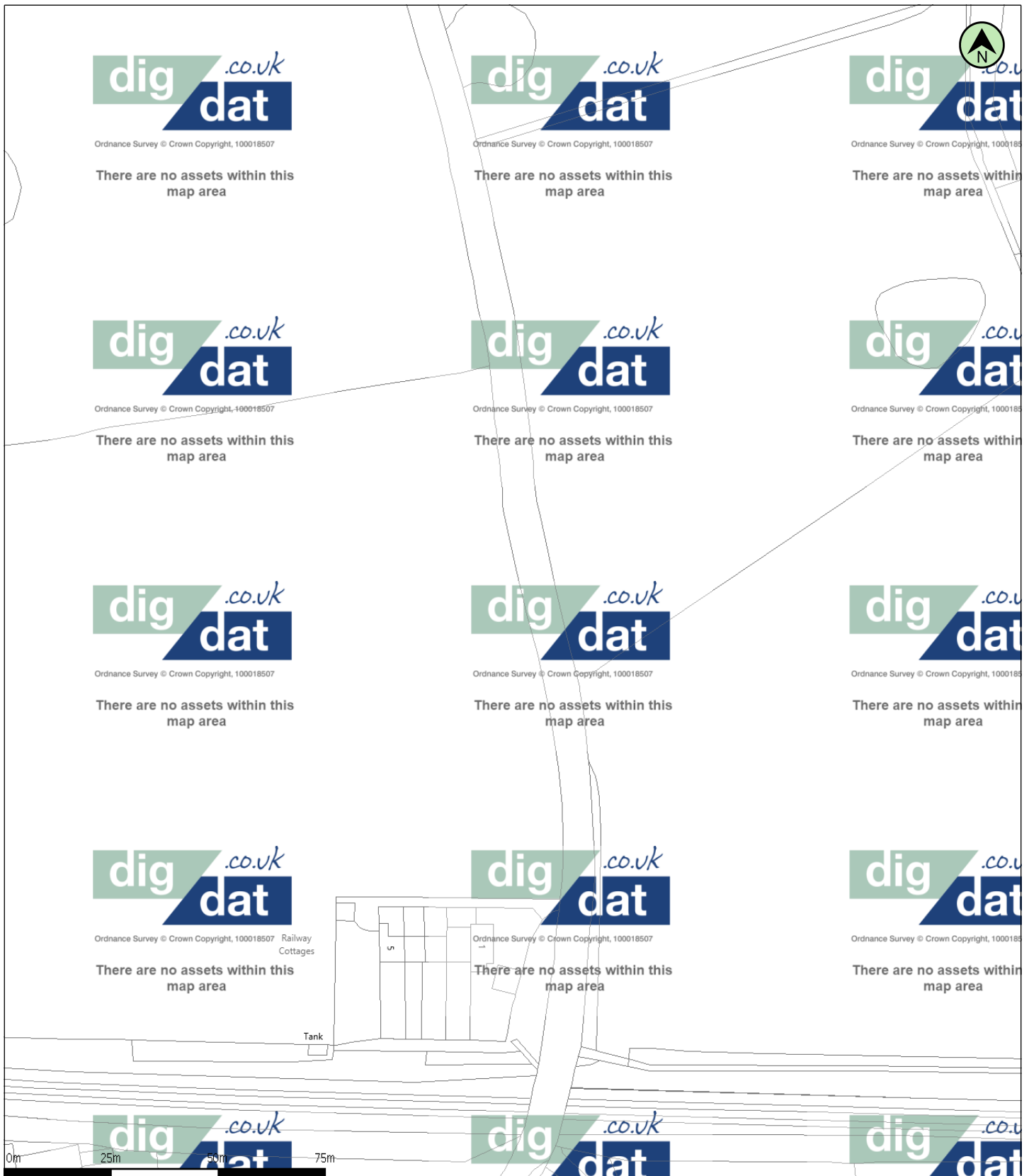
UserName: LCCBBC

Extract from maps of United Utilities' Underground Assets

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. The actual positions may be different from those shown on the plan and private service pipes may be shown by a blue broken line. United Utilities Water will not accept liability for any damage caused by the actual position being different from those shown.

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Data updated: 01/12/20

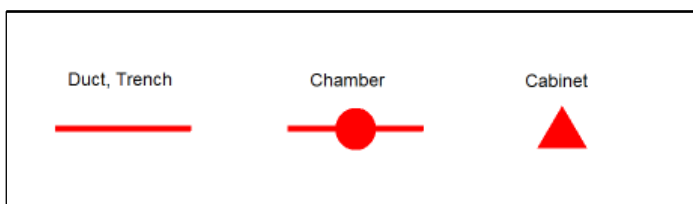
Scale: 1:1250

Map Centre: 349103,431413

Date: 09/12/20

Telecoms Plan A4

Powered by digdat



mark.kingsley@lancashire.gov.uk
Cottam Parkway

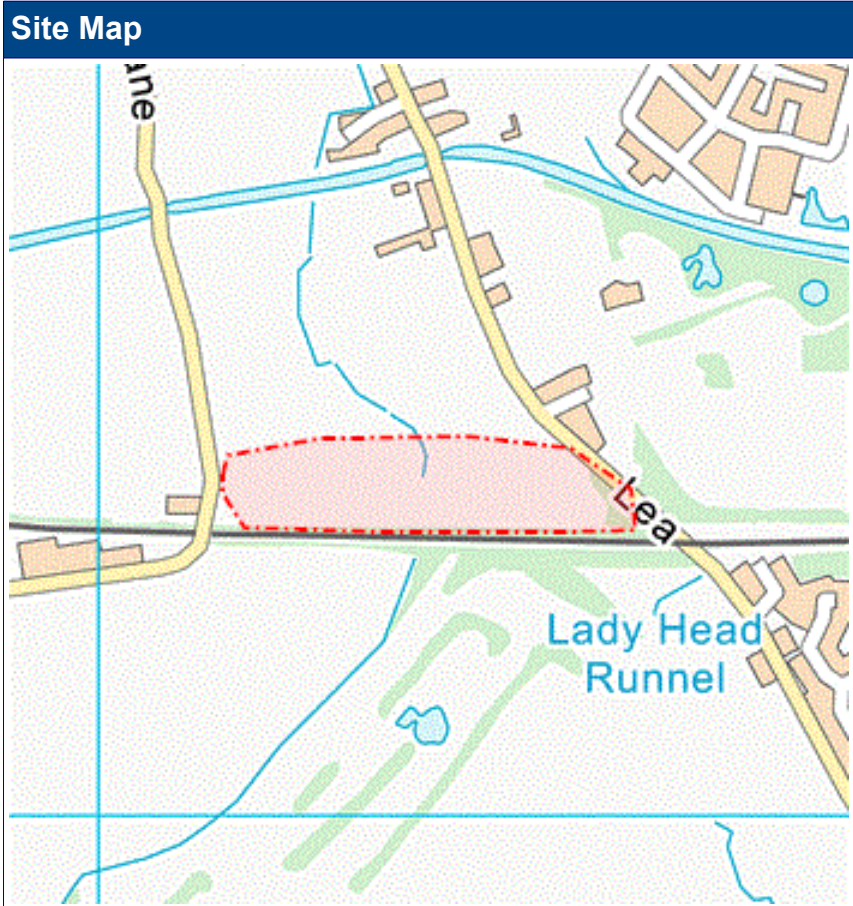


Important Information - please read The purpose of this plan is to identify Virgin Media apparatus. We have tried to make it as accurate as possible but we cannot warrant its accuracy. In addition, we caution that within Virgin Media apparatus there may be instances where mains voltage power cables have been placed inside green, rather than black ducting. Further details can be found using the "Affected Postcodes.pdf", which can be downloaded from this website. Therefore, you must not rely solely on this plan if you are carrying out any excavation or other works in the vicinity of Virgin Media apparatus. The actual position of any underground service must be verified by cable detection equipment, etc. and established on site before any mechanical plant is used. Accordingly, unless it is due to the negligence of Virgin Media, its employees or agents, Virgin Media will not have any liability for any omissions or inaccuracies in the plan or for any loss or damage caused or arising from the use of and/or any reliance on this plan. This plan is produced by Virgin Media Limited (c) Crown copyright and database rights 2020 Ordnance Survey 100019209.

Enquirer			
Name	Mr Luke Thornton	Phone	07539698283
Company	Lancashire County Council	Mobile	Not Supplied
Address	44 Bay View Ave Lancaster Lancashire LA2 6JS		
Email	luke.thornton@lancashire.gov.uk		

Enquiry Details			
Scheme/Reference	CLM07 Cottam Parkway Station West		
Enquiry type	Planned Works	Work category	Excavations Non Utility
Start date	01/03/2021	Work type	Multiple excavations site
End date	31/03/2021	Site size	37028 metres square
Searched location	XY= 349339, 431345	Work type buffer*	25 metres
Confirmed location	349340 431348		
Site Contact Name	Luke Thornton	Site Phone No	07539698283
Description of Works			

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.



Asset Owners

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.lineasearchbeforeudig.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

Notes. Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LineasearchbeforeUdig accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Asset Owners & Responses. Please note the enquiry results include the following:

1. "LSBUD Members" who are asset owners who have registered their assets on the LSBUD service.
2. "Non LSBUD Members" are asset owners who have not registered their assets on the LSBUD service but LSBUD is aware of their existence. Please note that there could be other asset owners within your search area.

Below are three lists of asset owners:

1. **LSBUD Members who have assets registered within your search area. ("Affected")**
 - a. **These LSBUD Members will either:**
 - i. **Ask for further information ("Email Additional Info" noted in status).** The additional information includes: Site contact name and number, Location plan, Detailed plan (minimum scale 1:2500), Cross sectional drawings (if available), Work Specification.
 - ii. **Respond directly to you ("Await Response").** In this response they may either send plans directly to you or ask for further information before being able to do so, particularly if any payments or authorisations are required.
2. **LSBUD Members who do not have assets registered within your search area. ("Not Affected")**
3. **Non LSBUD Members who may have assets within your search area.** Please note that this list is not exhaustive and all details are provided as a guide only. It is your responsibility to identify and consult with all asset owners before proceeding.

National Grid. Please note that the LSBUD service only contains information on National Grid's Gas above 7 bar asset, all National Grid Electricity Transmission assets and National Grid's Gas Distribution Limited above 2 bar asset.

For National Grid Gas Distribution Ltd below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com

LSBUD Members who have assets registered on the LSBUD service within the vicinity of your search area.

List of affected LSBUD members

Asset Owner	Phone/Email	Emergency Only	Status
Electricity North West Limited	08001954141	08001954141	Await response

LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD Members make regular changes to their assets and this list may vary for new enquiries in the same area.

List of not affected LSBUD members

AWE Pipeline	Balfour Beatty Investments Limited	BOC Limited (A Member of the Linde Group)
Box Broadband	BP Exploration Operating Company Limited	BPA
Carrington Gas Pipeline	CATS Pipeline c/o Wood Group PSN	Cemex
Centrica Storage Ltd	Chrysaor Production (UK) Limited	CLH Pipeline System Ltd
CNG Services Ltd	Concept Solutions People Ltd	ConocoPhillips (UK) Teesside Operator Ltd
Diamond Transmission Corporation	DIO (MOD Abandoned Pipelines)	DIO (MOD Live Pipelines)
Drax Group	E.ON UK CHP Limited	EirGrid
ENI & Himor c/o Penspen Ltd	EnQuest NNS Limited	EP Langage Limited
ESP Utilities Group	ESSAR	Esso Petroleum Company Limited
Fulcrum Pipelines Limited	Gamma	Gas Networks Ireland (UK)
Gateshead Energy Company	Gigaclear Ltd	Gtt
Heathrow Airport LTD	Humbly Grove Energy	IGas Energy
INEOS FPS Pipelines	INEOS Manufacturing (Scotland and TSEP)	INOVYN ChlorVinyls Limited
INOVYN Enterprises Limited	Intergen (Coryton Energy or Spalding Energy)	Jurassic Fibre Ltd
Mainline Pipelines Limited	Manchester Jetline Limited	Manx Cable Company
Marchwood Power Ltd (Gas Pipeline)	Melbourn Solar Limited	Murphy Utility Assets
National Grid Gas (Above 7 bar), National Grid Gas Distribution Limited (Above 2 bar) and National Grid Electricity Transmission	Northumbrian Water Group	NPower CHP Pipelines
NYNet Ltd	Oikos Storage Limited	Ørsted
Perenco UK Limited (Purbeck Southampton Pipeline)	Petroineos	Phillips 66
Portsmouth Water	Premier Transmission Ltd (SNIP)	Redundant Pipelines - LPDA
RWE - Great Yarmouth Pipeline (Bacton to Great Yarmouth Power Station)	RWEpower (Little Barford and South Haven)	SABIC UK Petrochemicals
Scottish and Southern Electricity Networks	Scottish Power Generation	Seabank Power Ltd
SES Water	SGN	Shell
Shell NOP	SSE Enterprise Telecoms	SSE Generation Ltd
SSE Utility Solutions Limited	Tata Communications (c/o JSM Construction Ltd)	Total (Colnbrook & Colwick Pipelines)
Total Finaline Pipelines	Transmission Capital	UK Power Networks
Uniper UK Ltd	University of Cambridge Granta Backbone	Vattenfall

	Network	
Veolia ES SELCHP Limited	Veolia ES Sheffield Ltd	Wales and West Utilities
West of Duddon Sands Transmission Ltd	Western Power Distribution	Westminster City Council
Zayo Group UK Ltd c/o JSM Group Ltd		

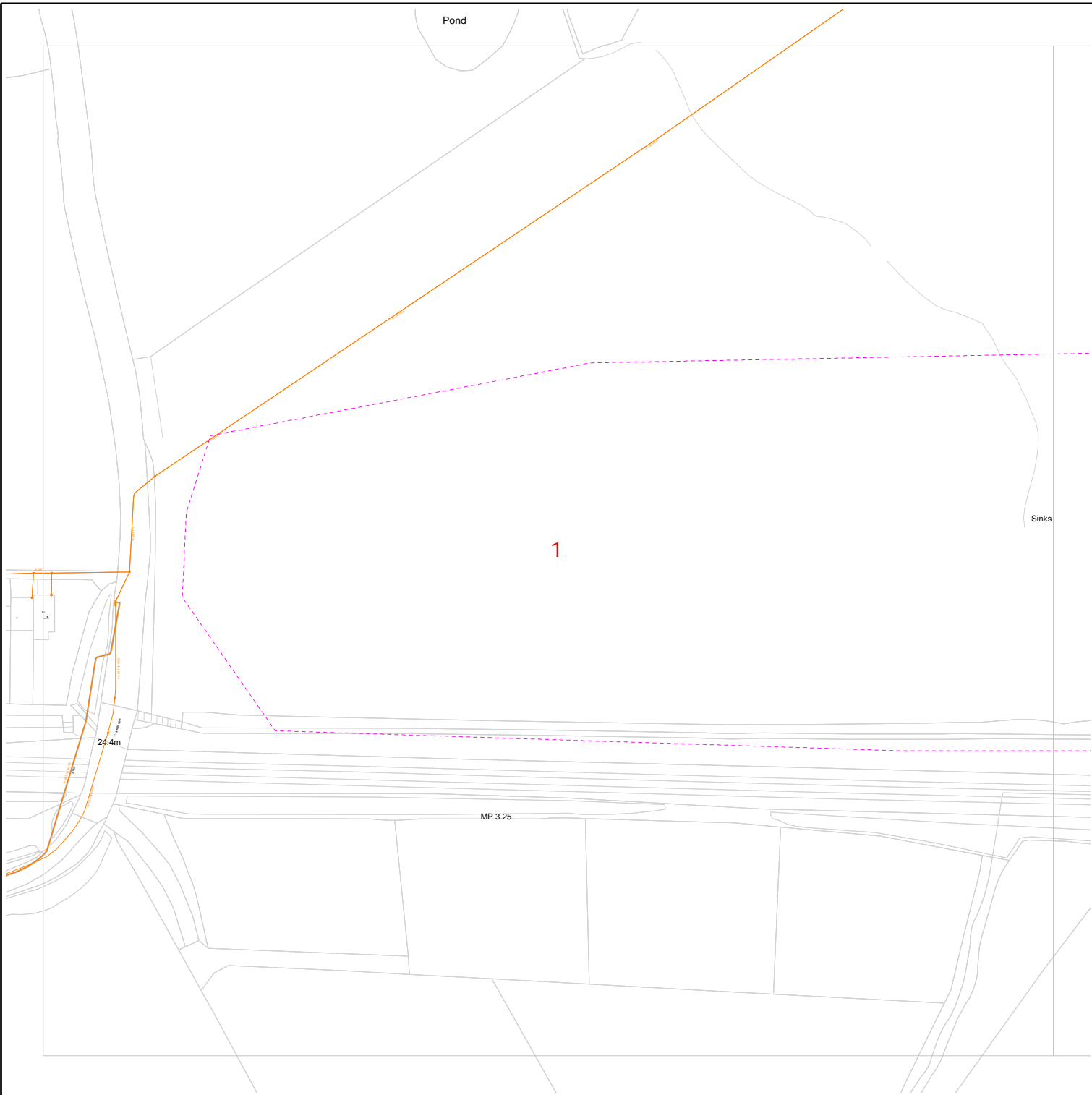
The following Non-LSBUD Members may have assets in your search area. It is **YOUR RESPONSIBILITY** to contact them before proceeding. Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.

Non-LSBUD members (Asset owners not registered on LSBUD)			
Asset Owner	Preferred contact method	Phone	Status
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08000232023	Not Notified
Cadent Gas	plantprotection@cadentgas.com	0800688588	Not Notified
CenturyLink Communications UK Limited	plantenquiries@instalcom.co.uk	02087314613	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
ENGIE	nrswa.uk@engie.com	01293 549944	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
Lancashire County Council	highways@lancashire.gov.uk	03001236701	Not Notified
Last Mile	plantenquiries@lastmile-uk.com	plantenquiries@lastmile-uk.com	Not Notified
Mobile Broadband Network Limited	mbnl.plant.enquiries@turntown.com	01212 621 100	Not Notified
Sky UK Limited	nrswa@sky.uk	02070323234	Not Notified
Sota	SOTA.plantenquiries@instalcom.co.uk		Not Notified
Teliasonera	check-network@teliacompany.com	0800526015	Not Notified
United Utilities	WastewaterDeveloperServices@uuplc.co.uk	08707510101	Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified



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Requested by: Luke Thornton
Company: Lancashire County Council
Date Requested: 25/02/2021
Job Reference: 21408049
Your Scheme/Reference: CLM07 Cottam Pa

Dig Sites:
Area  Line 

Operating Voltage	Colour Code	Line Colour
132kV	Black	
33kV	Green	
22kV-25kV	Yellow	
11kV	Red	
6kV-6.6kV	Blue	
1kV-6kV	Violet	
LV	Orange	
Unknown Voltage	Brown	



Data Management
Electricity North West
Linley House
Dickinson Street
Manchester, M1 4LF
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk

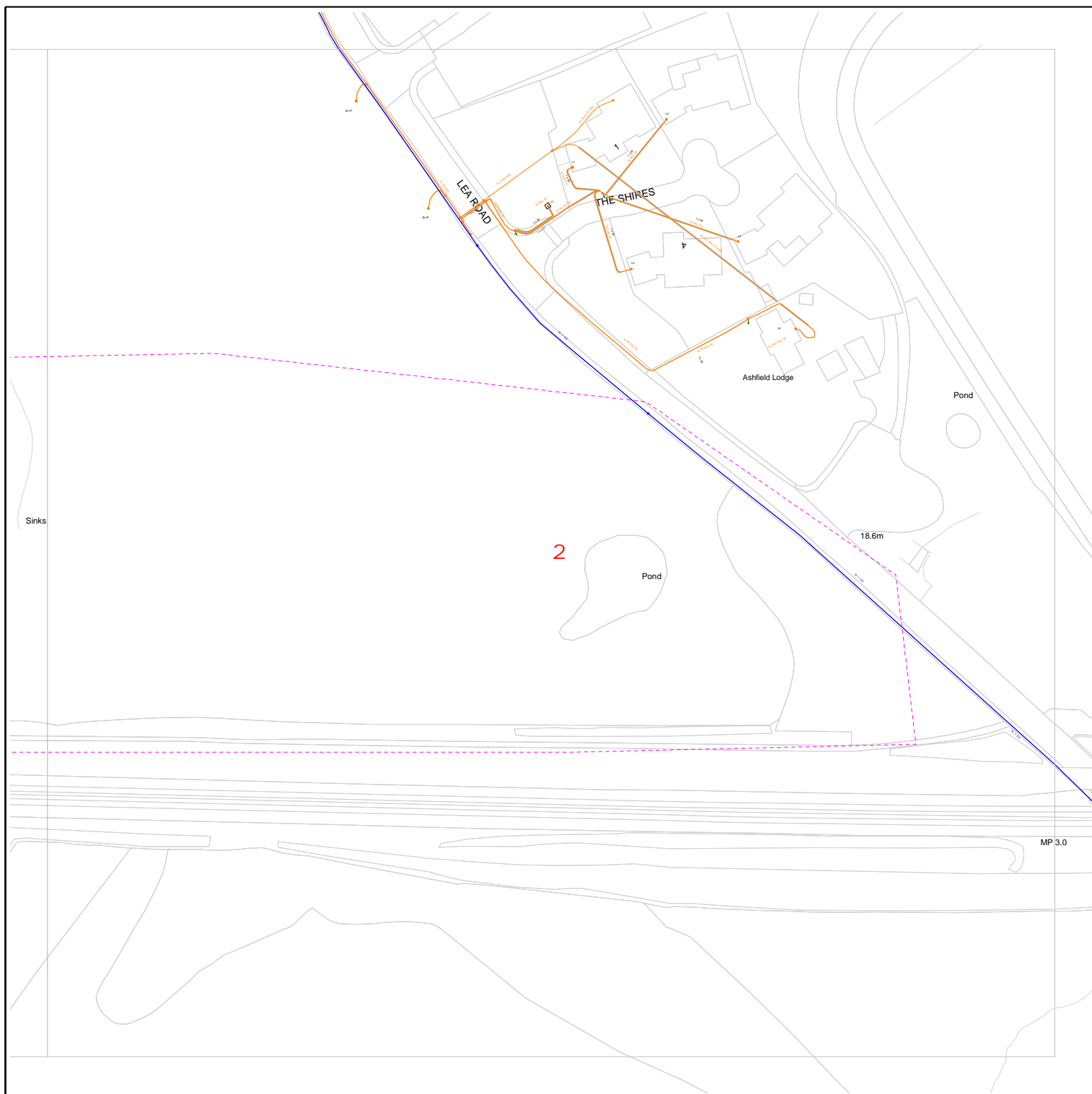
Scales on A4 paper:
1:1250 Area dig site
1:250 Line dig site

Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

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Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines".

Electricity North West Limited 304 Bridgewater Place, Birchwood Park, Warrington WA3 6XG. Registered in England and Wales. Registered No 02366949



Requested by: Luke Thornton

Company: Lancashire County Council

Date Requested: 25/02/2021

Job Reference: 21408049

Your Scheme/Reference: CLM07 Cottam Pa

Dig Sites:

Area  Line 


Operating Voltage

Colour Code

Line Colour

132kV

Black



33kV

Green



22kV-25kV

Yellow



11kV

Red



6kV-6.6kV

Blue



1kV-6kV

Violet



LV

Orange



Unknown Voltage

Brown



electricity
north west

Data Management
Electricity North West
Linley House
Dickinson Street
Manchester, M1 4LF
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk

Scales on A4 paper:
1:1250 Area dig site
1:250 Line dig site

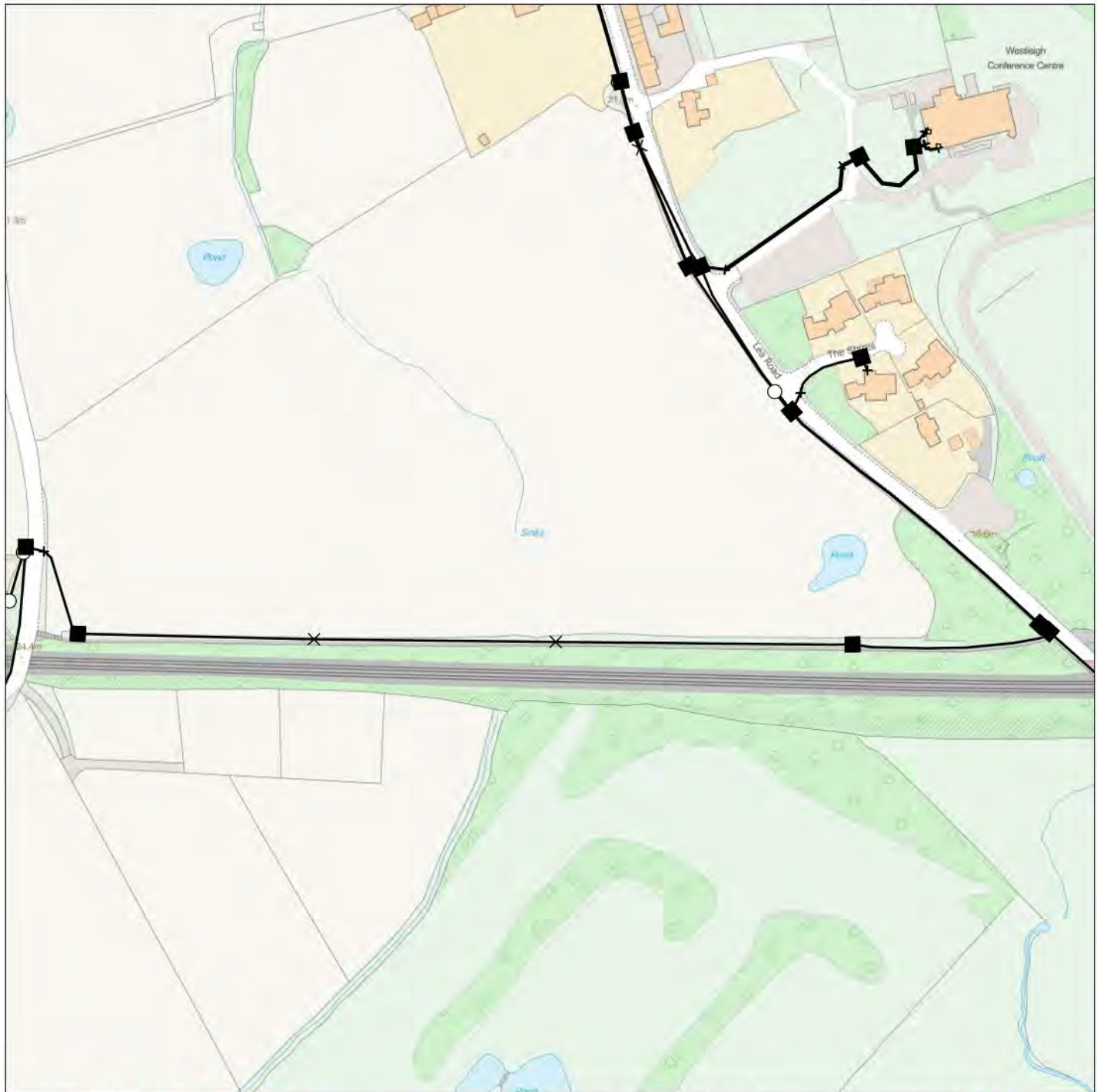
Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

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Electricity North West Limited 304 Bridgewater Place, Birchwood Park, Warrington WA3 6XG. Registered in England and Wales. Registered No 02366949

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG

FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

Accidents happen

If you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

KEY TO BT SYMBOLS

	Planned	Live	Change Of State	+	Hatchings	
PCP			Split Coupling		Built	
Pole			Duct Tee		Planned	
Box			Building		Inferred	
Manhole			Kiosk		Duct	
Cabinet			Other proposed plant is shown using dashed lines. BT Symbols not listed above may be disregarded. Existing BT Plant may not be recorded. Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.			
	Pending Add	In Place	Pending Remove	Not In Use		
Power Cable						
Power Duct				N/A		

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BT Ref : YWO10322C

Map Reference : (centre) SD4935431344

Easting/Northing : (centre) 349354,431344

Issued : 25/02/2021 10:32:37

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Luke Thornton
Lancashire County Council
County Hall
Pitt Street
Preston
Preston
Lancashire
PR1 8XB

Plant Protection
Cadent
Block 1; Floor 1
Brick Kiln Street
Hinckley
LE10 0NA
E-mail: plantprotection@cadentgas.com
Telephone: +44 (0)800 688588

National Gas Emergency Number:
0800 111 999*

National Grid Electricity Emergency Number:
0800 40 40 90*

* Available 24 hours, 7 days/week.
Calls may be recorded and monitored.

www.cadentgas.com

Date: 25/02/2021
Our Ref: NW_GW1B_3SWX_791507
Your Ref: CLM07 Cottam Parkway Station West
RE: Proposed Works, Cottam West

Thank you for your enquiry which was received on 25/02/2021.

An assessment has been carried out with respect to Cadent Gas Limited, National Grid Electricity Transmission plc's and National Grid Gas Transmission plc's apparatus. Please note it does not cover the items listed in the section "Your Responsibilities and Obligations", including gas service pipes and related apparatus.

For details of Network areas please see the Cadent website (<http://cadentgas.com/Digging-safely/Dial-before-you-dig>) or the enclosed documentation.

Searches based on your enquiry have identified that there is no record of apparatus in the vicinity of your enquiry.

As your works are at a "proposed" stage, any maps and guidance provided are for information purposes only. This is not approval to commence work. You must submit a "Scheduled Works" enquiry at the earliest opportunity and failure to do this may lead to disruption to your plans and works. Plant Protection will endeavour to provide an initial assessment within 14 days of receipt of a Scheduled Works enquiry and dependent on the outcome of this, further consultation may be required.

In any event, for safety and legal reasons, works must not be carried out until a Scheduled Works enquiry has been completed and final response received.

Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking your scheduled activities at this location.

It is your responsibility to ensure that the information you have submitted is accurate and that all relevant documents including links are provided to all persons (either direct labour or contractors) working for you near Cadent and/or National Grid's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to Cadent Gas Limited, National Grid Electricity Transmission plc (NGET) and National Grid Gas Transmission plc (NGGT) and apparatus. This assessment does **NOT** include:

- | Cadent and/or National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to Cadent and/or National Grid's assets in private land. You must obtain details of any such restrictions from the landowner in the first instance and if in doubt contact Plant Protection.
- | Gas service pipes and related apparatus
- | Recently installed apparatus
- | Apparatus owned by other organisations, e.g. other gas distribution operators, local electricity companies, other utilities, etc.

It is **YOUR** responsibility to take into account whether the items listed above may be present and if they could be affected by your proposed activities. Further "Essential Guidance" in respect of these items can be found on either the [National Grid](#) or [Cadent](#) website.

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to Cadent and/or National Grid's easements or wayleaves nor any planning or building regulations applications.

Cadent Gas Limited, NGGT and NGET or their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

If you require further assistance please contact the Plant Protection team via e-mail ([click here](#)) or via the contact details at the top of this response.

Yours faithfully

Plant Protection Team

GUIDANCE

Standard Guidance

Essential Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>

General Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=35103>

Excavating Safely in the vicinity of gas pipes guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/A3D37677-6641-476C-9DDA-E89949052829/44257/ExcavatingSafelyCreditCard.pdf>

Excavating Safely in the vicinity of electricity cables guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/35DDEC6D-D754-4BA5-AF3C-D607D05A25C2/44858/ExcavatingSafelyCreditCardelectricitycables.pdf>

Copies of all the Guidance Documents can also be downloaded from the [National Grid](#) and [Cadent](#) websites.

ENQUIRY SUMMARY

Received Date

25/02/2021

Your Reference

CLM07 Cottam Parkway Station West

Location

Centre Point: 349359, 431335

X Extent: 452

Y Extent: 76

Postcode: PR4 0RE

Location Description: Cottam West

Map Options

Paper Size: A4

Orientation: LANDSCAPE

Requested Scale: 2500

Actual Scale: N/A

Real World Extents: N/A

Recipients

luke.thornton@lancashire.gov.uk

Enquirer Details

Organisation Name: Lancashire County Council

Contact Name: Luke Thornton

Email Address: luke.thornton@lancashire.gov.uk

Telephone: 07539698283 (07539698283)

Address: County Hall, Pitt Street, Preston, Preston, Lancashire, PR1 8XB

Description of Works

Luke Thornton 07539698283. site investigation

Enquiry Type

Proposed Works

Activity Type

General Excavation

Work Types

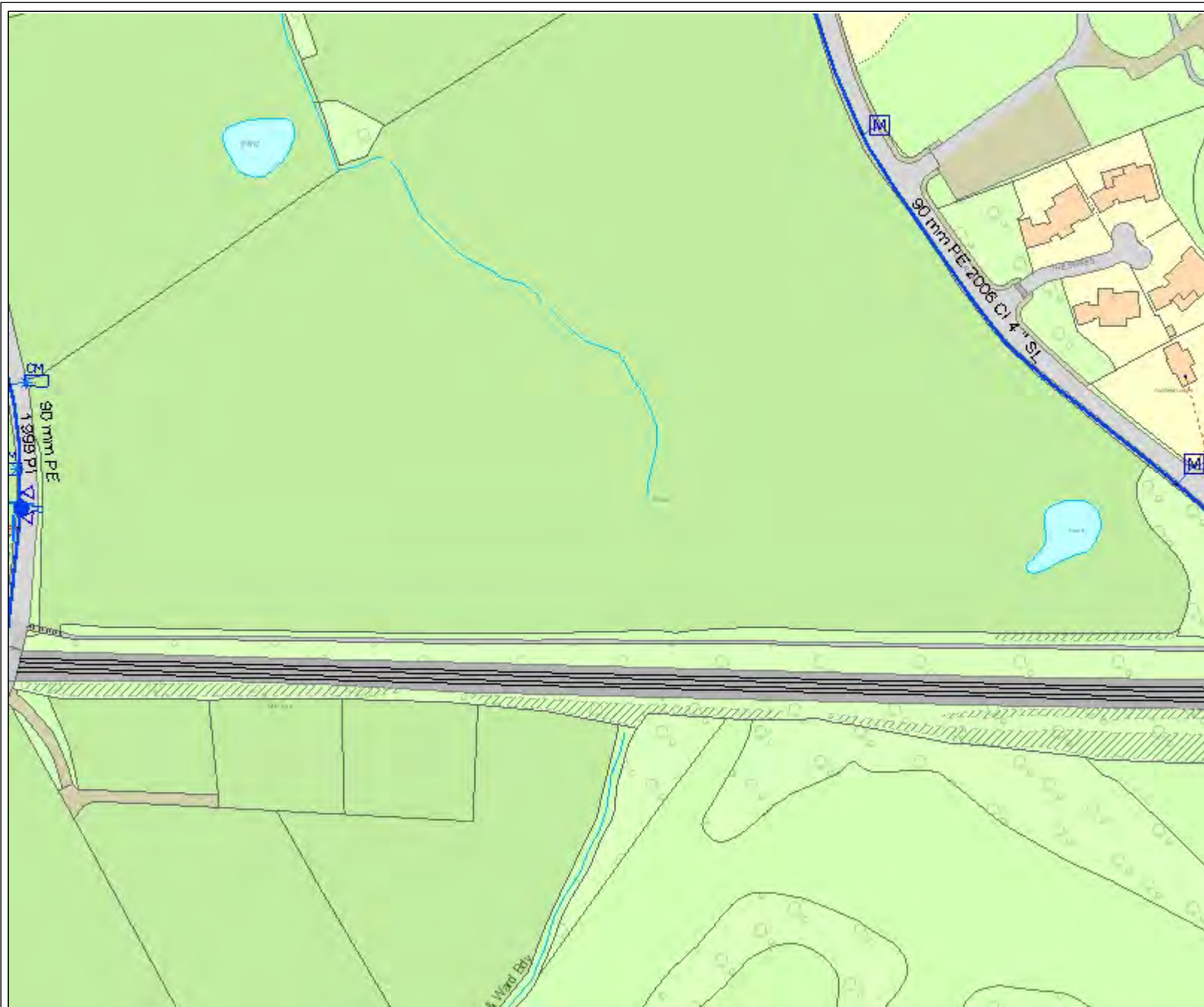
Work Type: Deep Excavation (greater than or equal to 0.3m)

Work Type: Hand Digging

Work Type: Shallow Excavation (less than 0.3m)

Work Type: Boring/Moling/Horizontal Drilling less than or equal to 300mm

Work Type: Boring/Moling/Horizontal Drilling greater than 300mm



United Utilities Maps for Safe Dig

Date : 25/02/2021 10:45:45

Centre X : 349325

Center Y : 431347

Scale : 2000

UserName: LCCBBC

Extract from maps of United Utilities' Underground Assets

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. The actual positions may be different from those shown on the plan and private service pipes may be shown by a blue broken line. United Utilities Water will not accept liability for any damage caused by the actual position being

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Important Information - please read The purpose of this plan is to identify Virgin Media apparatus. We have tried to make it as accurate as possible but we cannot warrant its accuracy. In addition, we caution that within Virgin Media apparatus there may be instances where mains voltage power cables have been placed inside green, rather than black ducting. Further details can be found using the "Affected Postcodes.pdf", which can be downloaded from this website. Therefore, you must not rely solely on this plan if you are carrying out any excavation or other works in the vicinity of Virgin Media apparatus. The actual position of any underground service must be verified by cable detection equipment, etc. and established on site before any mechanical plant is used. Accordingly, unless it is due to the negligence of Virgin Media, its employees or agents, Virgin Media will not have any liability for any omissions or inaccuracies in the plan or for any loss or damage caused or arising from the use of and/or any reliance on this plan. This plan is produced by Virgin Media Limited (c) Crown copyright and database rights 2020 Ordnance Survey 100019209.

Duct, Trench



Chamber



Cabinet



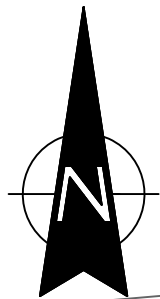
luke.thornton@lancashire.gov.uk

CLM07 Cottam West

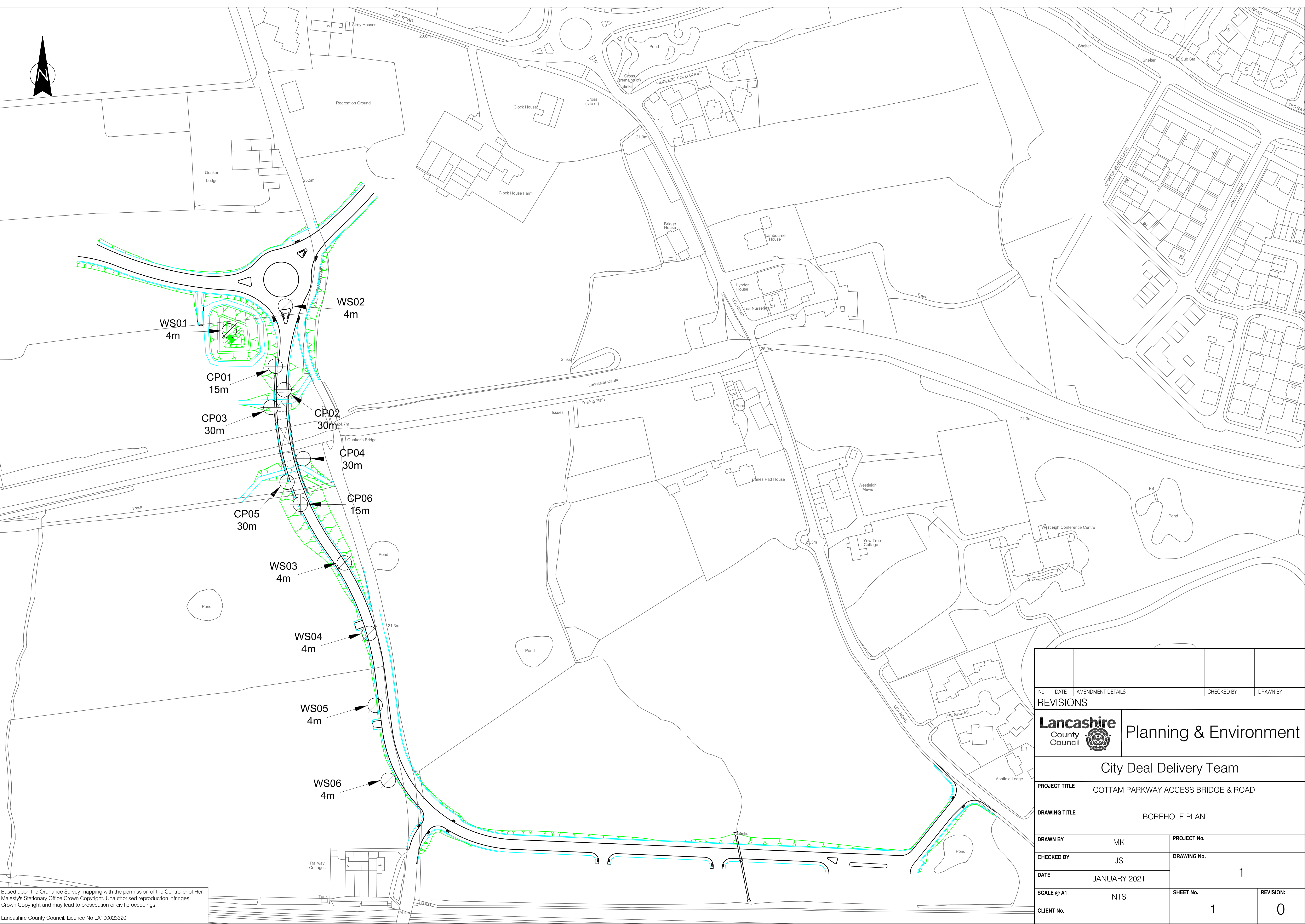


Appendix E

Preliminary site investigation model



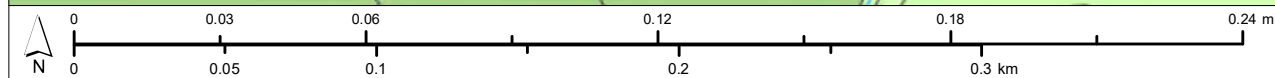
No.	DATE	AMENDMENT DETAILS	CHECKED BY	DRAWN BY
REVISIONS				
<div>Lancashire County Council</div> <div></div>		Planning & Environment		
City Deal Delivery Team				
PROJECT TITLE		COTTAM PARKWAY ACCESS BRIDGE & ROAD		
DRAWING TITLE		BOREHOLE PLAN		
DRAWN BY		MK	PROJECT No.	
CHECKED BY		JS	DRAWING No.	
DATE		JANUARY 2021	1	
SCALE @ A1		NTS	SHEET No.	
CLIENT No.			1	REVISION: 0



Car Park Borehole Plan

Author:

Date Created: 01/03/2021



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Map Scale: 1:2,500
Map Centre: 349,295 431,400

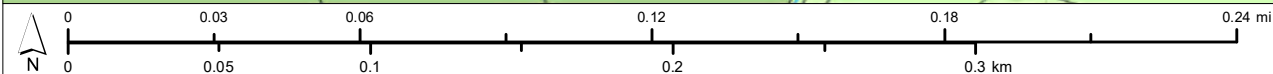
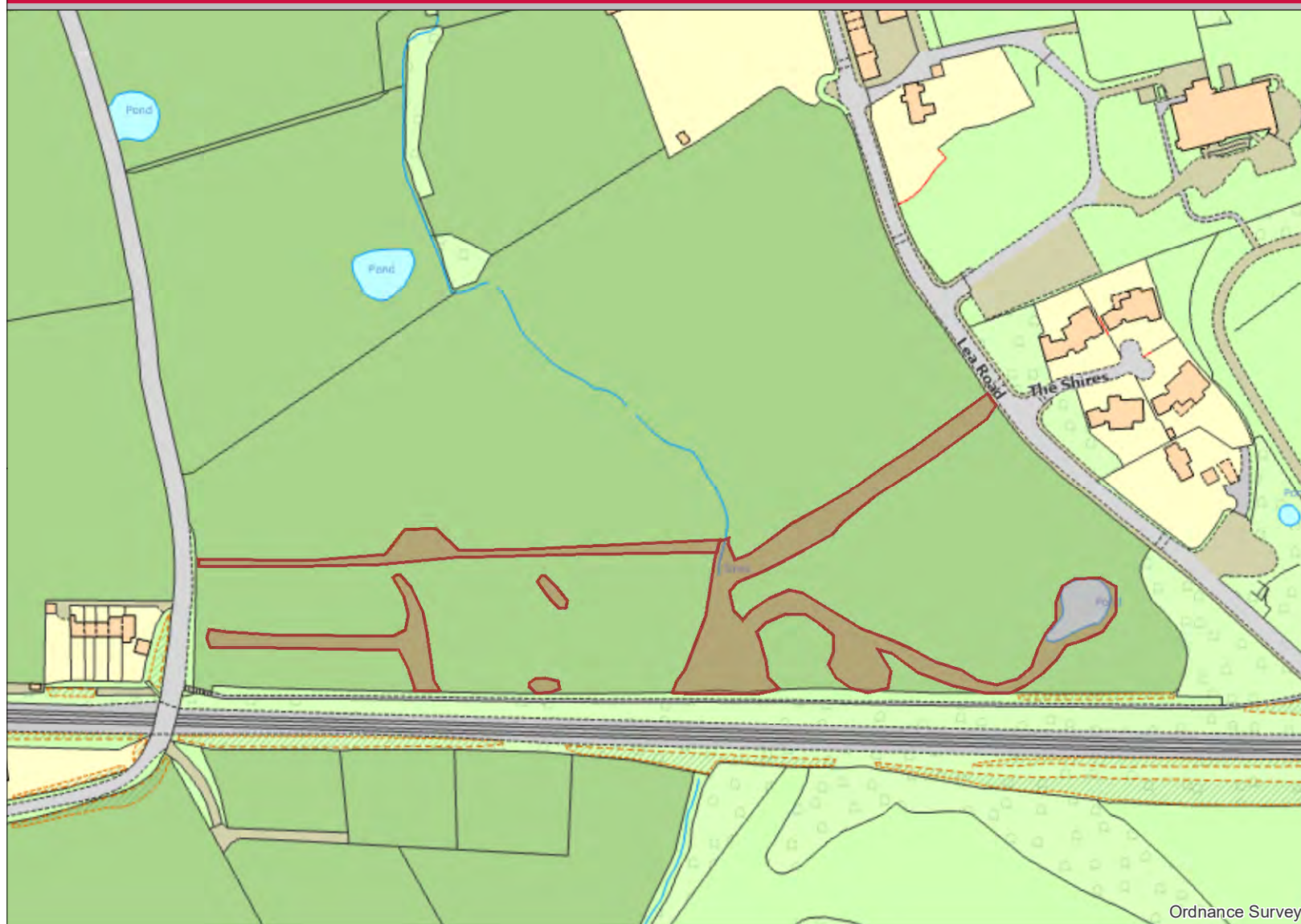
Appendix F

Additional topographical map

South-Eastern Ditches Map

Author:

Date Created: 14/05/2021



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Map Scale: 1:2,500
Map Centre: 349,314 431,396