

Appendix B – Coal Authority Consultants Report



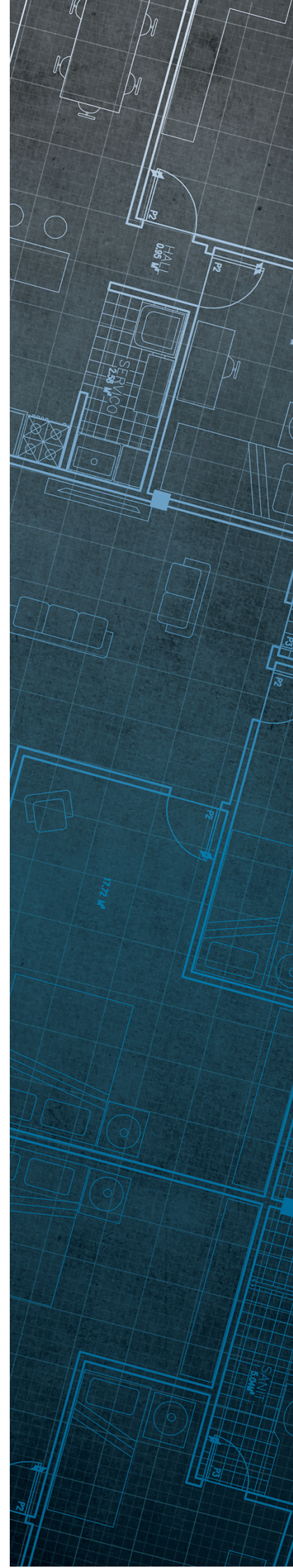
The Coal
Authority

Consultants Coal Mining Report

Whittaker Street
Radcliffe
Bury
M26 2TD

Date of enquiry:	11 October 2024
Date enquiry received:	11 October 2024
Issue date:	11 October 2024

Our reference:	51003456088001
Your reference:	G24271



Consultants

Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

GEOINVESTIGATE

Enquiry address

Whittaker Street
Radcliffe
Bury
M26 2TD

How to contact us

0345 762 6848 (UK)
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Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
unnamed	ROGER	Coal	3Z30	66	Beneath Property	9.5	South-East	190	1883
unnamed	RAMS	Coal	3YQV	98	Beneath Property	9.5	South-East	170	1880
unnamed	ROGER	Coal	3Z40	107	West	9.5	East	200	1900

Probable unrecorded shallow workings

Yes.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

None recorded within 100 metres of the enquiry boundary.

Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

3428	1507	NW1556
3428A	16820	NW1060
3001A	1249	NW983

Please contact us on 0345 762 6848 to determine the exact abandoned mine plans you require based on your needs.

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
INCE NEW	Coal	Yes	6.1	North-West	39

Geological faults, fissures and breaklines

Please refer to the 'Summary of findings' map (on separate sheet) for details of any geological faults, fissures or breaklines either within or intersecting the enquiry boundary.

Fault under or close to the property recorded.

Opencast mines

None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations

None recorded within 50 metres of the enquiry boundary.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining

None recorded.

Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

Court orders

None recorded.

Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

MINE GAS: Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at groundstability@coal.gov.uk.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk**.

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

Mine water treatment schemes

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

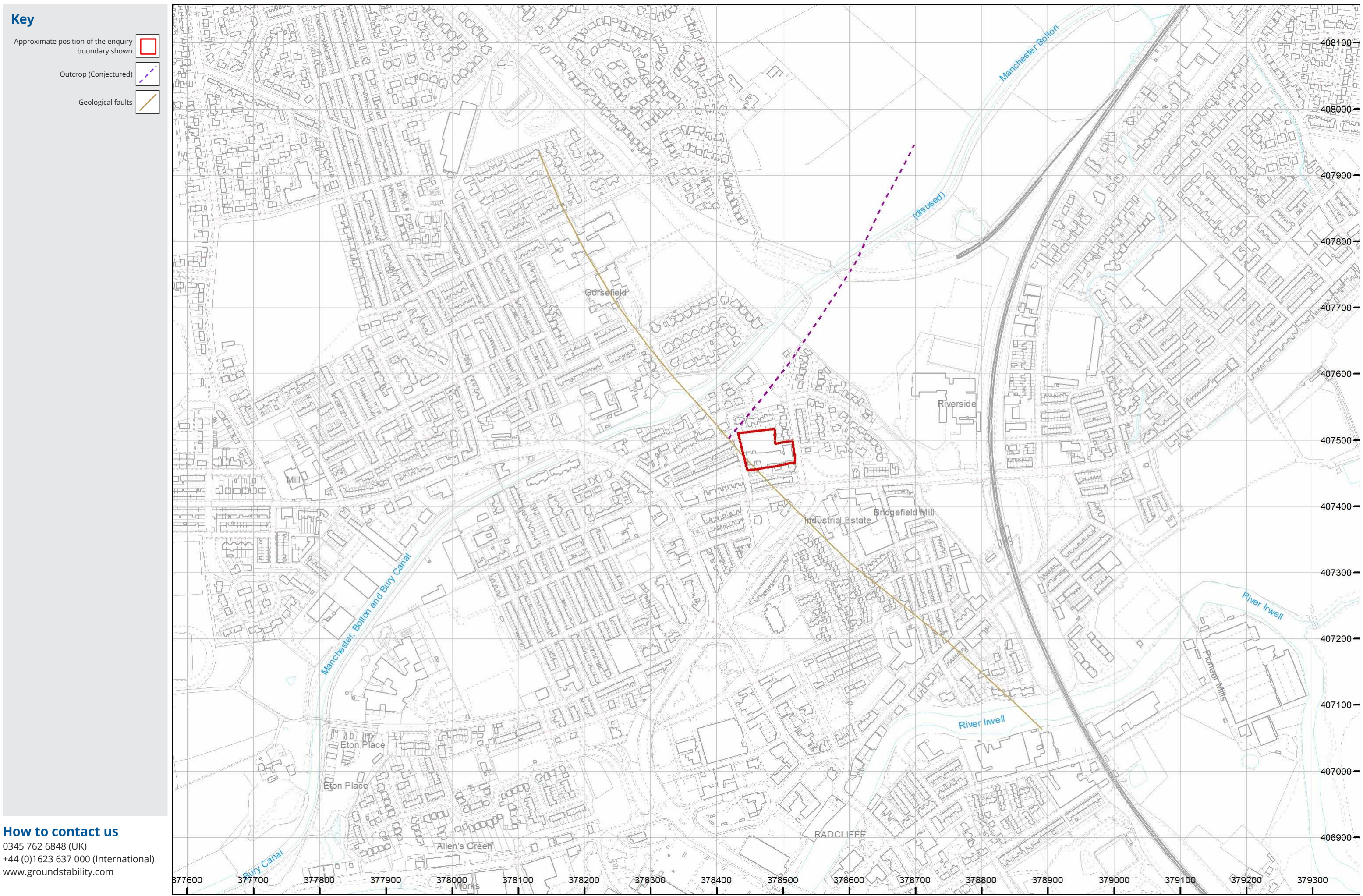
Withdrawal of support notices

Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

Payment to owners of former copyhold land

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

The map highlights any specific surface or subsurface features within or near to the boundary of the site.



Appendix C – Plate Load Testing Report



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

Client : P McVey Building Systems

Engineer :

Job Number
24.237

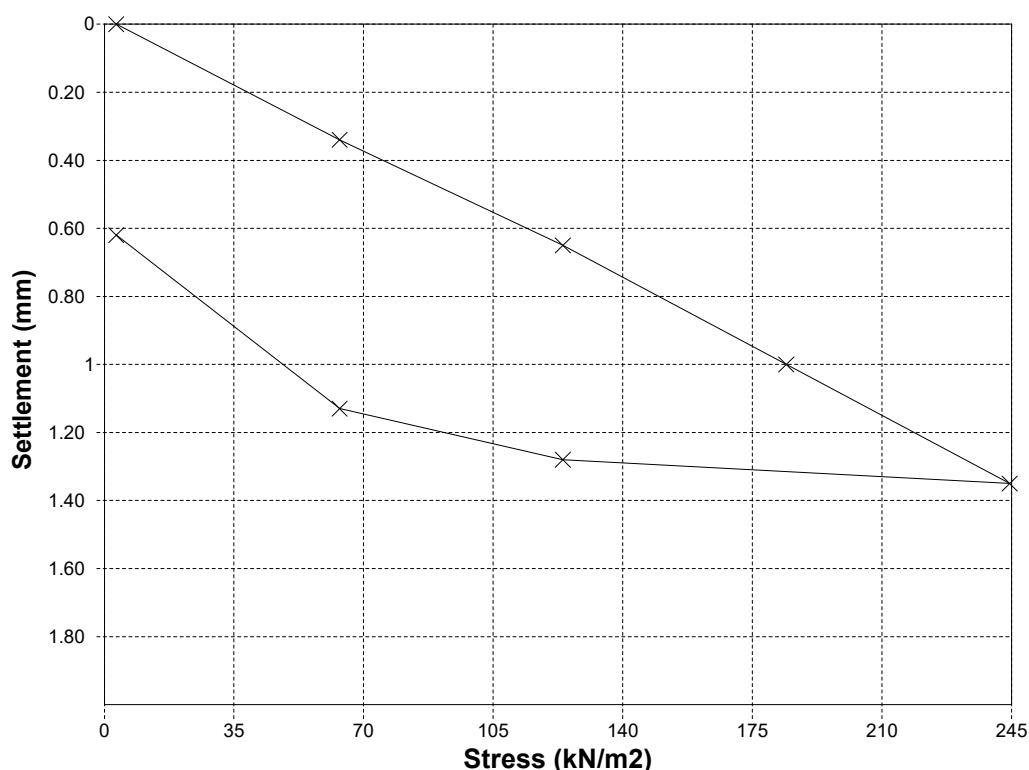
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1 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT01	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m ³)	N/A	Description	TARMAC
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m ²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	32	33	37		34.00	0.34	63.53
19.61	62	64	69		65.00	0.65	123.80
29.42	104	97	98		99.67	1.00	184.14
39.23	152	130	123		135.00	1.35	244.47
19.61	135	126	124		128.33	1.28	123.80
9.81	115	112	113		113.33	1.13	63.53
0.00	61	62	63		62.00	0.62	3.20



Max applied pressure (kN/m ²)	244.47	Stress at 1.25mm plate settlement (kN/m ²)	227.23	Max deformation (mm)	1.35
Constrained Soil Modulus (MN/m ² /m)		Modulus of Subgrade Reaction (MN/m ² /m)	114.36	Equivalent CBR value (%)	36

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

Client : P McVey Building Systems

Engineer:

Job Number
24.237

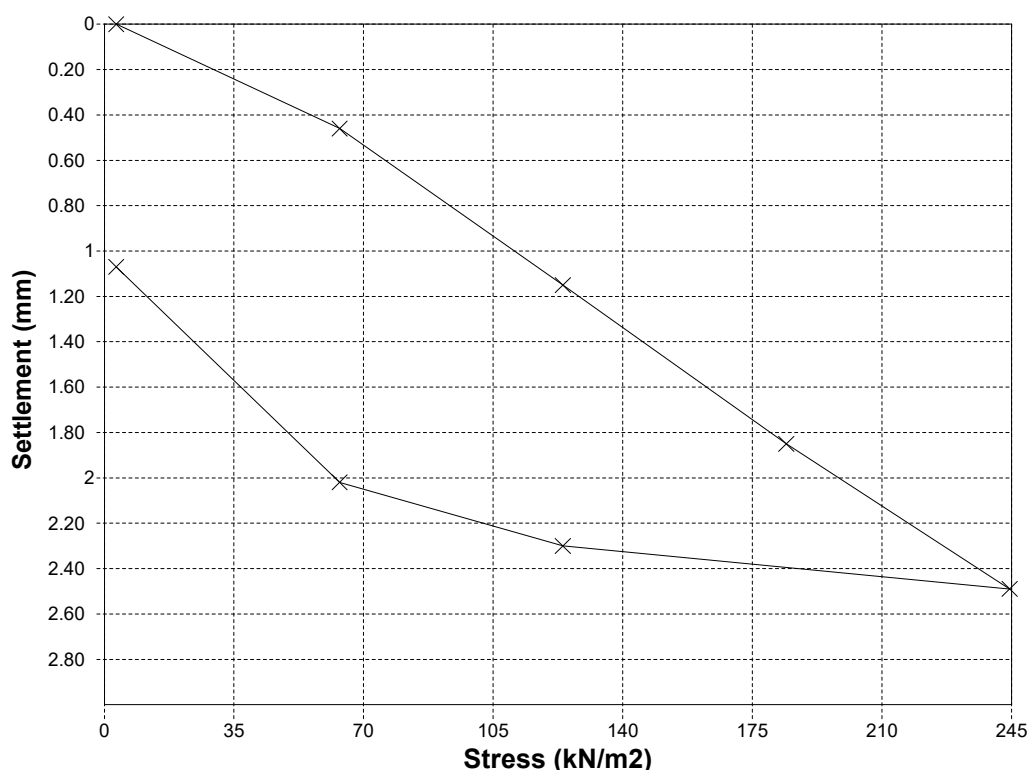
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2 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT02	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m ³)	N/A	Description	ASPHALT
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m ²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	41	51	47		46.33	0.46	63.53
19.61	102	122	122		115.33	1.15	123.80
29.42	165	196	195		185.33	1.85	184.14
39.23	242	260	246		249.33	2.49	244.47
19.61	209	242	240		230.33	2.30	123.80
9.81	177	212	218		202.33	2.02	63.53
0.00	94	107	120		107.00	1.07	3.20



Max applied pressure (kN/m ²)	244.47	Stress at 1.25mm plate settlement (kN/m ²)	132.42	Max deformation (mm)	2.49
Constrained Soil Modulus (MN/m ² /m)		Modulus of Subgrade Reaction (MN/m ² /m)	66.64	Equivalent CBR value (%)	14

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

Client : P McVey Building Systems

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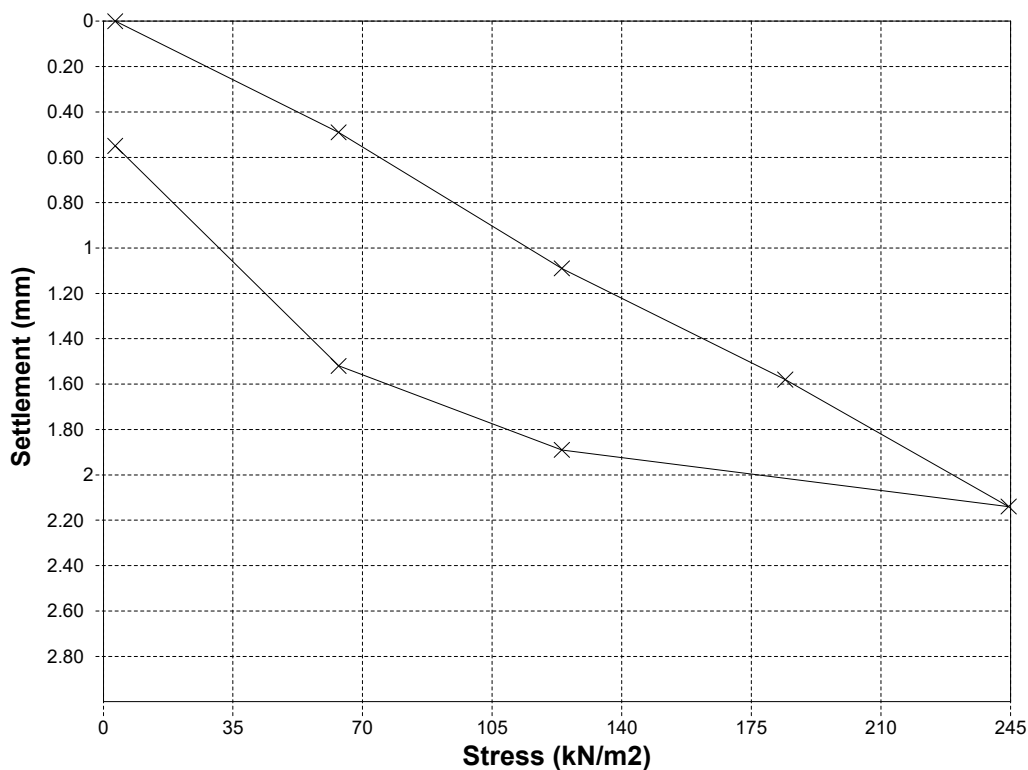
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3 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT03	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m ³)	N/A	Description	ASPHALT
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m ²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	63	47	37		49.00	0.49	63.53
19.61	130	106	90		108.67	1.09	123.80
29.42	186	154	134		158.00	1.58	184.14
39.23	258	207	176		213.67	2.14	244.47
19.61	220	184	162		188.67	1.89	123.80
9.81	177	148	132		152.33	1.52	63.53
0.00	80	49	35		54.67	0.55	3.20



Max applied pressure (kN/m ²)	244.47	Stress at 1.25mm plate settlement (kN/m ²)	143.50	Max deformation (mm)	2.14
Constrained Soil Modulus (MN/m ² /m)		Modulus of Subgrade Reaction (MN/m ² /m)	72.22	Equivalent CBR value (%)	16

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

Client : P McVey Building Systems

Engineer:

Job Number
24.237

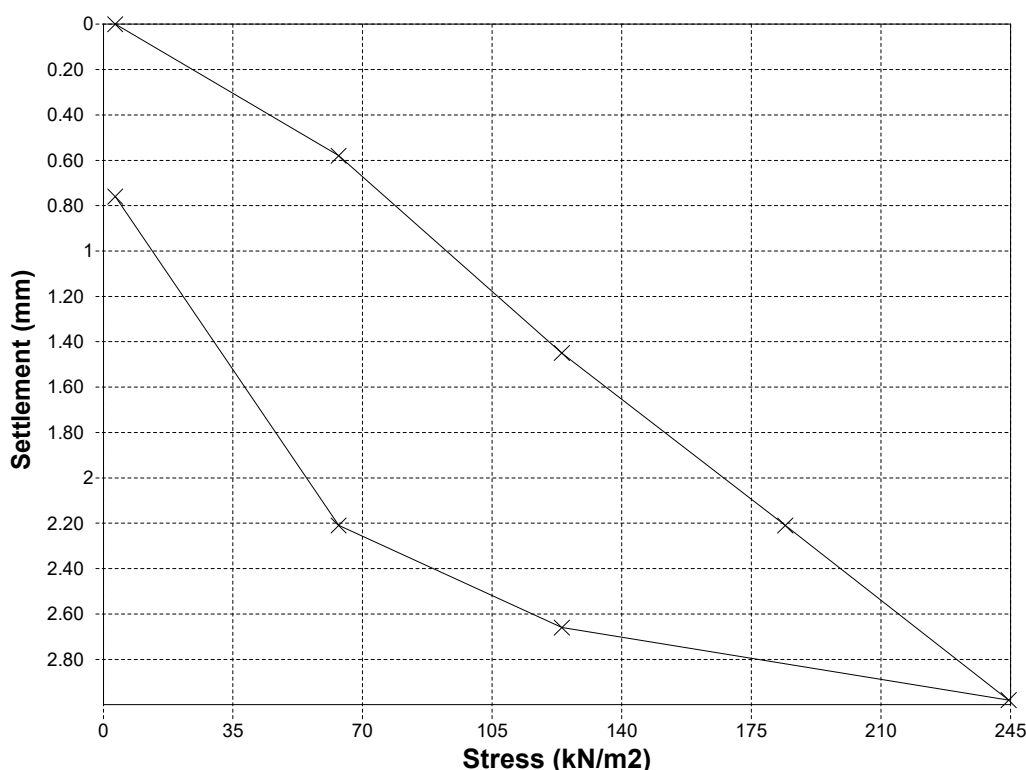
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4 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT04	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m ³)	N/A	Description	ASPHALT
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m ²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	62	57	55		58.00	0.58	63.53
19.61	150	143	141		144.67	1.45	123.80
29.42	229	218	215		220.67	2.21	184.14
39.23	320	294	281		298.33	2.98	244.47
19.61	273	257	267		265.67	2.66	123.80
9.81	217	221	226		221.33	2.21	63.53
0.00	73	77	78		76.00	0.76	3.20



Max applied pressure (kN/m ²)	244.47	Stress at 1.25mm plate settlement (kN/m ²)	109.94	Max deformation (mm)	2.98
Constrained Soil Modulus (MN/m ² /m)		Modulus of Subgrade Reaction (MN/m ² /m)	55.33	Equivalent CBR value (%)	10.0

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

Client : P McVey Building Systems

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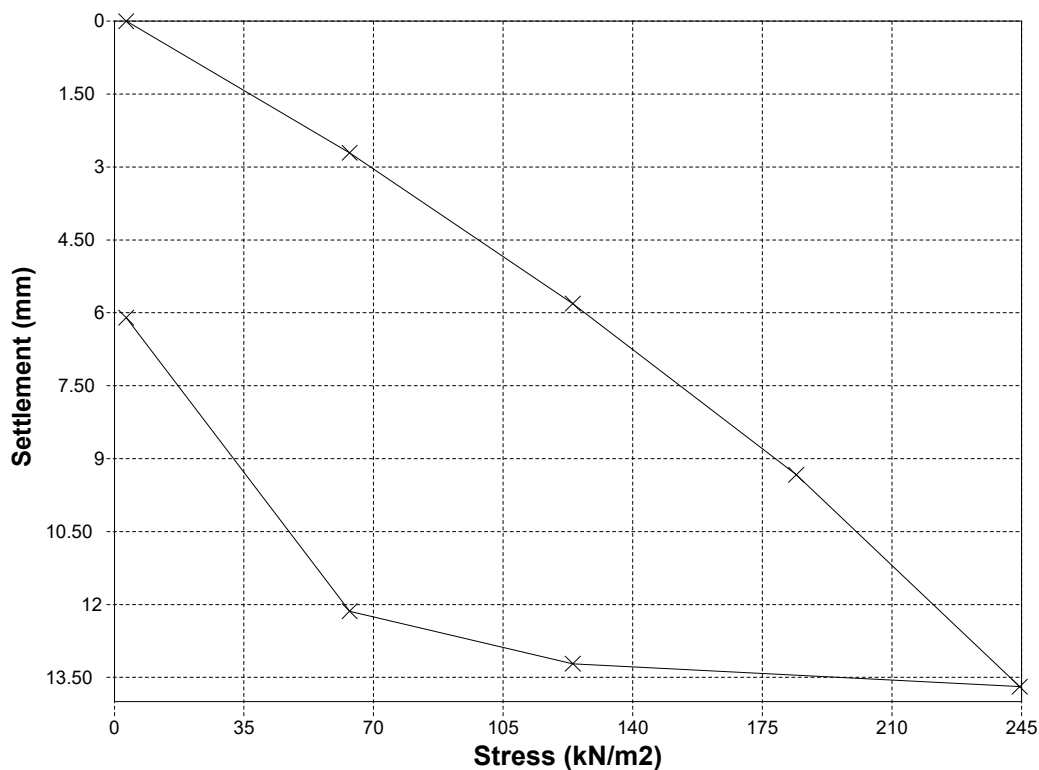
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5 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT05	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m³)	N/A	Description	MADE GROUND
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	247	276	291		271.33	2.71	63.53
19.61	551	589	604		581.33	5.81	123.80
29.42	893	942	965		933.33	9.33	184.14
39.23	1308	1383	1415		1368.67	13.69	244.47
19.61	1258	1339	1369		1322.00	13.22	123.80
9.81	1149	1231	1261		1213.67	12.14	63.53
0.00	515	632	683		610.00	6.10	3.20



Max applied pressure (kN/m²)	244.47	Stress at 1.25mm plate settlement (kN/m²)	31.03	Max deformation (mm)	13.69
Constrained Soil Modulus (MN/m²/m)		Modulus of Subgrade Reaction (MN/m²/m)	15.62	Equivalent CBR value (%)	1.1

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



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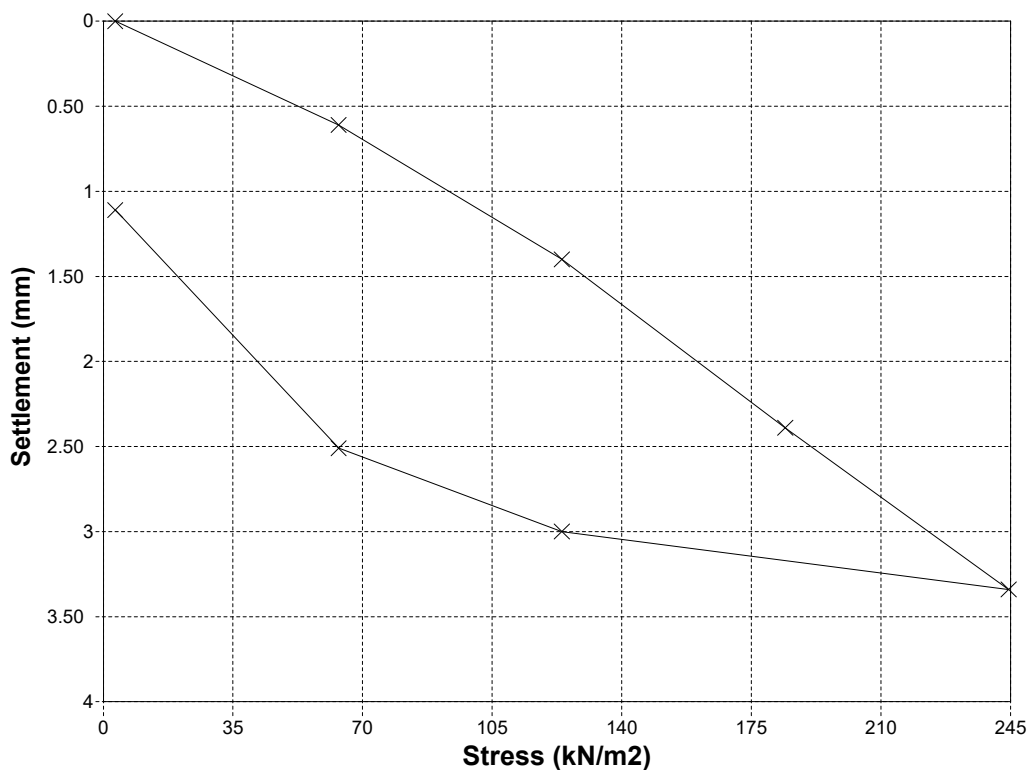
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6 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT06	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m³)	N/A	Description	MADE GROUND
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	60	60	63		61.00	0.61	63.53
19.61	139	137	143		139.67	1.40	123.80
29.42	244	235	239		239.33	2.39	184.14
39.23	346	330	325		333.67	3.34	244.47
19.61	306	296	298		300.00	3.00	123.80
9.81	255	247	250		250.67	2.51	63.53
0.00	112	113	109		111.33	1.11	3.20



Max applied pressure (kN/m²)	244.47	Stress at 1.25mm plate settlement (kN/m²)	112.36	Max deformation (mm)	3.34
Constrained Soil Modulus (MN/m²/m)		Modulus of Subgrade Reaction (MN/m²/m)	56.55	Equivalent CBR value (%)	11

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

Client : P McVey Building Systems

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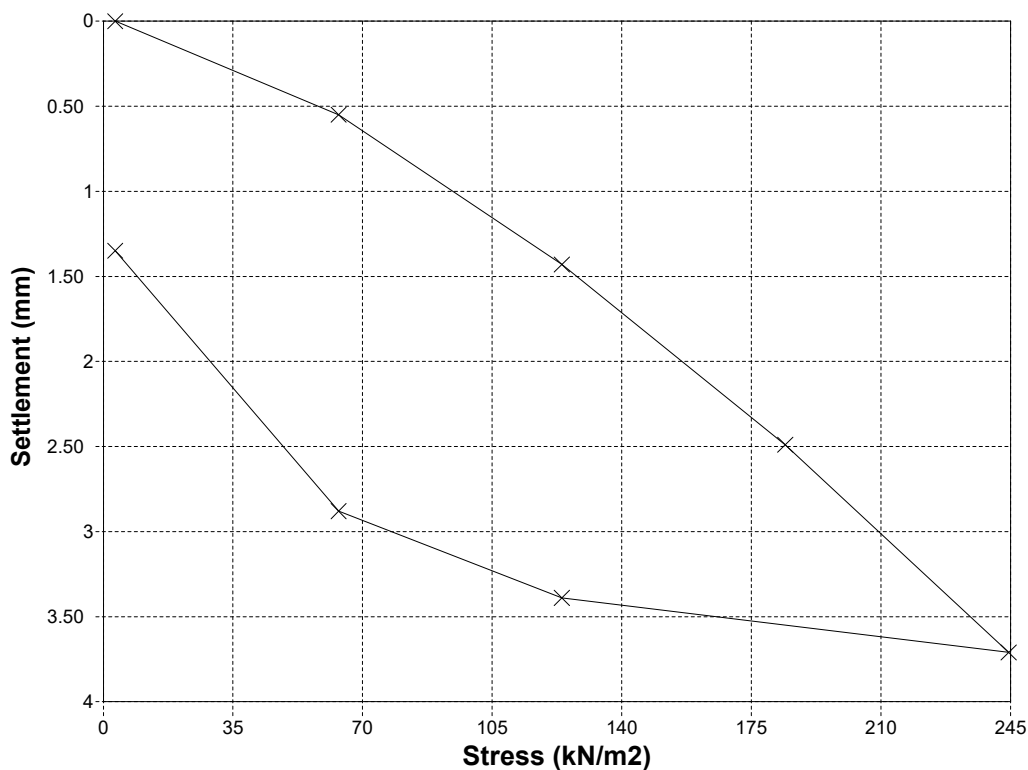
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7 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT07	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m ³)	N/A	Description	ASPHALT
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m ²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	53	54	59		55.33	0.55	63.53
19.61	133	145	151		143.00	1.43	123.80
29.42	239	253	256		249.33	2.49	184.14
39.23	373	377	364		371.33	3.71	244.47
19.61	331	343	344		339.33	3.39	123.80
9.81	278	290	296		288.00	2.88	63.53
0.00	130	135	140		135.00	1.35	3.20



Max applied pressure (kN/m ²)	244.47	Stress at 1.25mm plate settlement (kN/m ²)	111.47	Max deformation (mm)	3.71
Constrained Soil Modulus (MN/m ² /m)		Modulus of Subgrade Reaction (MN/m ² /m)	56.10	Equivalent CBR value (%)	10.0

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

Client : P McVey Building Systems

Engineer:

Job Number
24.237

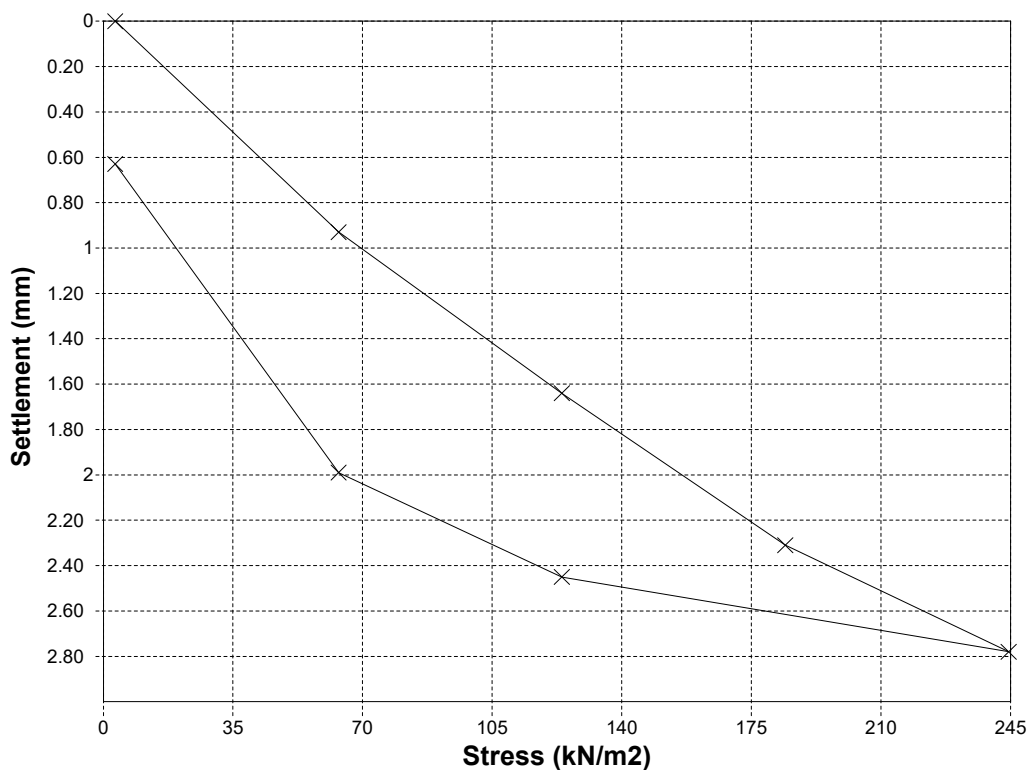
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8 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT08	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m ³)	N/A	Description	ASPHALT
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m ²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	53	100	125		92.67	0.93	63.53
19.61	144	168	180		164.00	1.64	123.80
29.42	239	233	222		231.33	2.31	184.14
39.23	335	261	238		278.00	2.78	244.47
19.61	278	241	217		245.33	2.45	123.80
9.81	215	197	184		198.67	1.99	63.53
0.00	101	56	32		63.00	0.63	3.20



Max applied pressure (kN/m ²)	244.47	Stress at 1.25mm plate settlement (kN/m ²)	90.69	Max deformation (mm)	2.78
Constrained Soil Modulus (MN/m ² /m)		Modulus of Subgrade Reaction (MN/m ² /m)	45.64	Equivalent CBR value (%)	7.2

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

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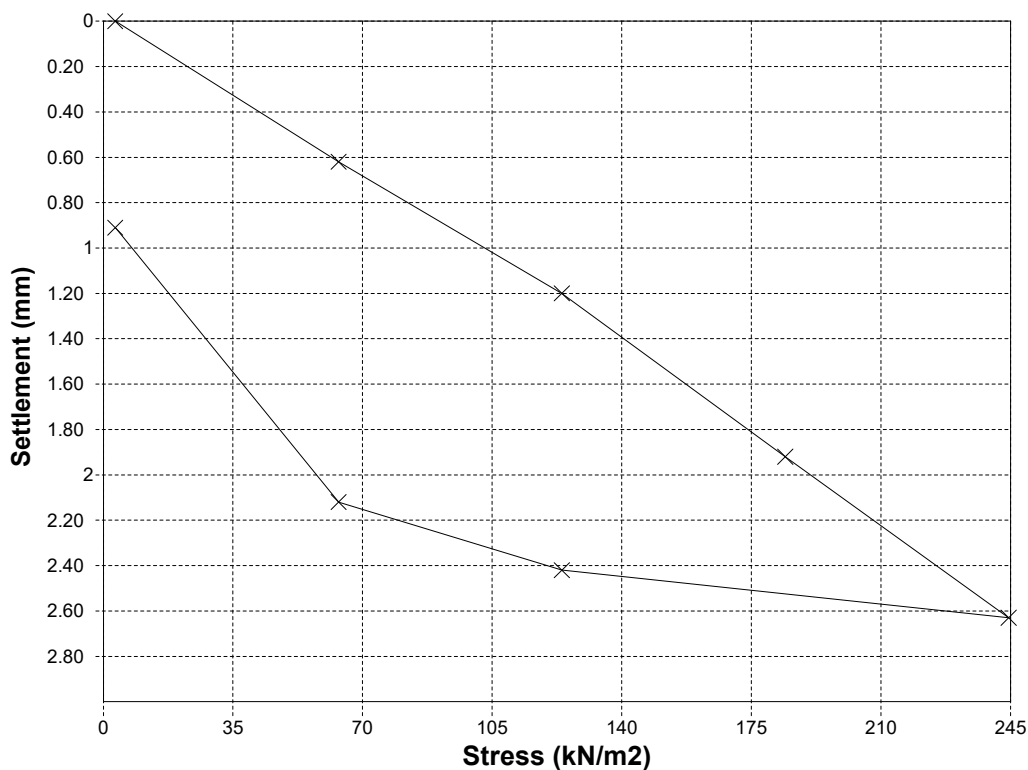
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9 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT09	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m³)	N/A	Description	MADE GROUND
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	58	62	65		61.67	0.62	63.53
19.61	114	120	127		120.33	1.20	123.80
29.42	183	192	201		192.00	1.92	184.14
39.23	266	261	263		263.33	2.63	244.47
19.61	226	243	258		242.33	2.42	123.80
9.81	186	216	235		212.33	2.12	63.53
0.00	84	92	96		90.67	0.91	3.20



Max applied pressure (kN/m²)	244.47	Stress at 1.25mm plate settlement (kN/m²)	127.99	Max deformation (mm)	2.63
Constrained Soil Modulus (MN/m²/m)		Modulus of Subgrade Reaction (MN/m²/m)	64.41	Equivalent CBR value (%)	13

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

Client : P McVey Building Systems

Engineer:

Job Number
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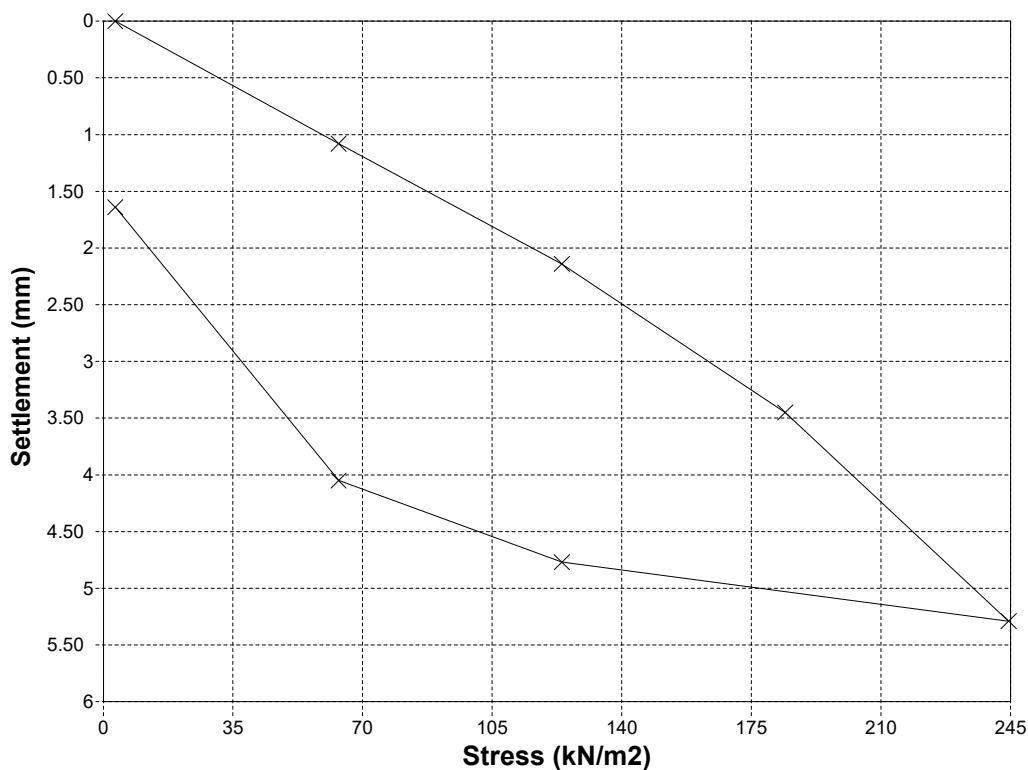
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10 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT10	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m³)	N/A	Description	MADE GROUND
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	105	107	111		107.67	1.08	63.53
19.61	208	214	221		214.33	2.14	123.80
29.42	334	345	355		344.67	3.45	184.14
39.23	519	533	535		529.00	5.29	244.47
19.61	459	481	491		477.00	4.77	123.80
9.81	383	410	422		405.00	4.05	63.53
0.00	157	166	169		164.00	1.64	3.20



Max applied pressure (kN/m²)	244.47	Stress at 1.25mm plate settlement (kN/m²)	73.20	Max deformation (mm)	5.29
Constrained Soil Modulus (MN/m²/m)		Modulus of Subgrade Reaction (MN/m²/m)	36.84	Equivalent CBR value (%)	5.0

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

Client : P McVey Building Systems

Engineer:

Job Number
24.237

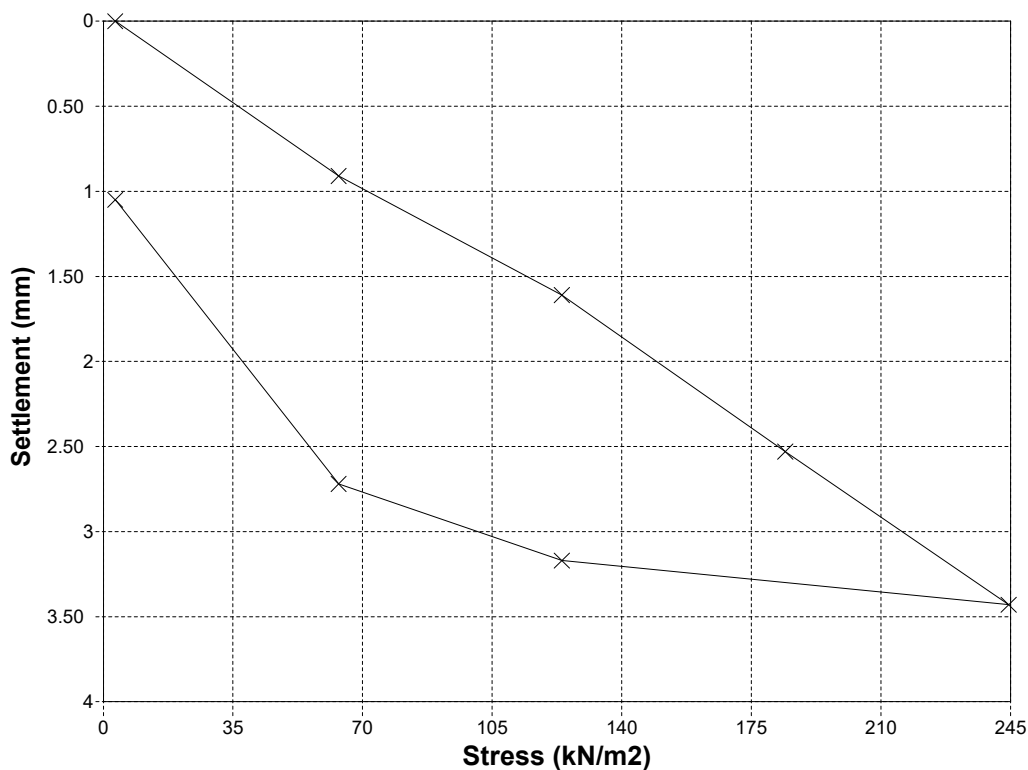
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11 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT11	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m³)	N/A	Description	MADE GROUND
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	81	93	99		91.00	0.91	63.53
19.61	159	163	161		161.00	1.61	123.80
29.42	266	252	241		253.00	2.53	184.14
39.23	388	338	302		342.67	3.43	244.47
19.61	345	314	291		316.67	3.17	123.80
9.81	291	271	254		272.00	2.72	63.53
0.00	134	102	80		105.33	1.05	3.20



Max applied pressure (kN/m²)	244.47	Stress at 1.25mm plate settlement (kN/m²)	92.80	Max deformation (mm)	3.43
Constrained Soil Modulus (MN/m²/m)		Modulus of Subgrade Reaction (MN/m²/m)	46.71	Equivalent CBR value (%)	7.5

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Site : The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD

Client : P McVey Building Systems

Engineer :

Job Number
24.237

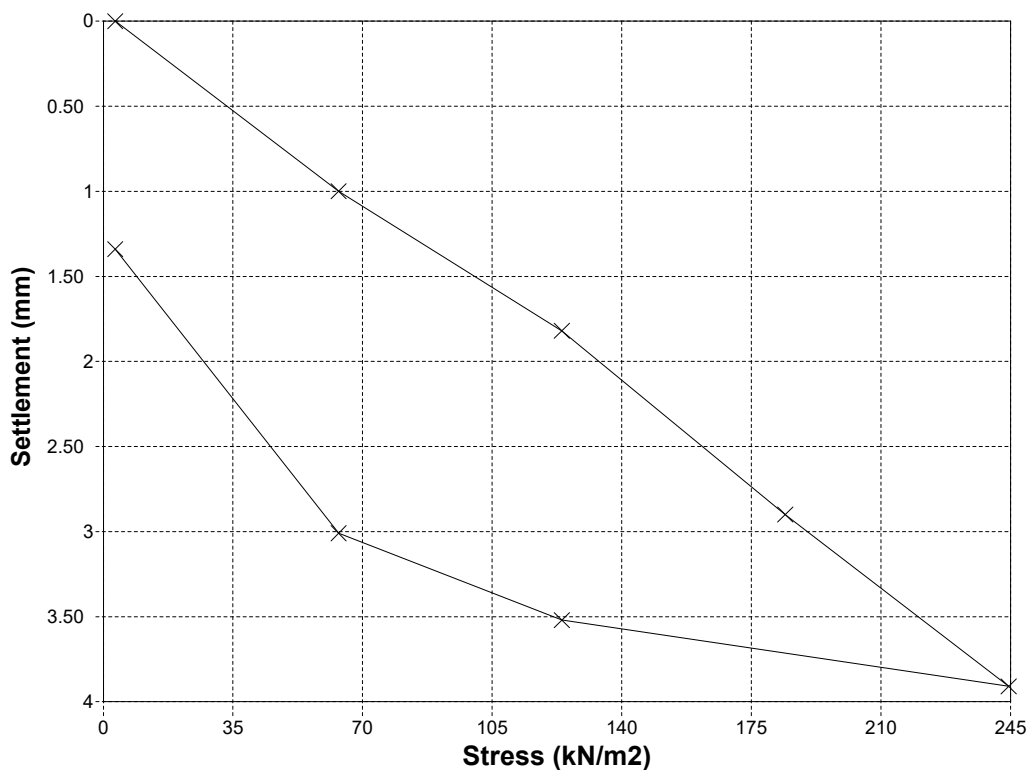
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12 / 12

**REPORT ON THE DETERMINATION OF THE VERTICAL DEFORMATION AND STRENGTH CHARACTERISTICS
BY THE PLATE LOADING TEST TO BS 1377:Part 9: 1990: Clause 4.1**

Test Ref	Test no	Location	Date Tested
PLT12	1		24/09/2024

Plate Diameter (mm)	455	Weight of apparatus (kg)	53.00	Type of Test	Incremental
Depth (m)	GL	In-situ density (Mg/m³)	N/A	Description	MADE GROUND
Distance from side wall (m)	N/A	Moisture Content (%)	N/A	Reaction Load	5 ton

Force (kN)	Gauge Reading					Settlement (mm)	Stress (kN/m²)
	1	2	3	4	Avg.		
0.00	0	0	0		0.00	0.00	3.20
9.81	103	108	90		100.33	1.00	63.53
19.61	182	195	170		182.33	1.82	123.80
29.42	288	306	277		290.33	2.90	184.14
39.23	393	410	371		391.33	3.91	244.47
19.61	341	368	347		352.00	3.52	123.80
9.81	284	312	306		300.67	3.01	63.53
0.00	120	136	147		134.33	1.34	3.20



Max applied pressure (kN/m²)	244.47	Stress at 1.25mm plate settlement (kN/m²)	81.91	Max deformation (mm)	3.91
Constrained Soil Modulus (MN/m²/m)		Modulus of Subgrade Reaction (MN/m²/m)	41.22	Equivalent CBR value (%)	6.1

Remarks

Test results should be interpreted by a qualified Engineer taking into account all relevant factors including overall settlement and the shape of the load-penetration curve. Testing carried out in accordance with BS 1377-9:1990 with determination of parameters as set out in MCHW1 Series 600 & Interim Advice Note 73/06 Revision 1 (2009)



Key:

Approximate plate load test location and reference

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Site: The Whitefield Centre, Pupil Referral Unit, Radcliffe, M26 2TD
Job No.: 24.237
Drawing Title: EXPLORATORY HOLE LOCATION PLAN
Date: September 2024
Drawing No: 24.237/01
Scale: Not to Scale @ A4

Appendix D - References

¹ <https://www.gov.uk/guidance/planning-applications-coal-mining-risk-assessments>

² The Coal Authority, 2017, "Risk based approach to development management. Guidance for developers.", Version 4.

³ The Coal Authority, 2023, Interactive Map Viewer, <https://mapapps2.bgs.ac.uk/coalauthority/home.html>.

⁴ The Coal Authority, March 2015, "Coal seams with a history of spontaneous combustion", <https://www.gov.uk/government/publications/coal-seams-with-a-history-of-spontaneous-combustion>.

⁵ <https://planning.bury.gov.uk/online-applications/search.do?action=simple&searchType=Application>

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