

Client: Torsion Projects

Aug 2023

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Job Number	AP1662
Job Name	Stoney Ridge Road Bingley
Date	Aug 2023
Report	Phase 4 Validation Report
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August 2023



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Appendix A Proposed Care Home Layout

Appendix B Proposed Levels –cut / fill

Appendix C Borehole Location Plan



1.0 Introduction

Ardmore Point Ltd was commissioned by Torsion Projects Ltd in May 2023, to complete a Remediation Strategy and follow up Validation Report for a proposed care home development at Stoney Ridge Road , Bingley.

This validation report has been prepared in accordance with British Standards BS5930:2015 and BS10175:2011+A2:2017 and all normative references, including Environment Agency guidance report CLR 11, *Model Procedures for the Management of Land Contamination*, adopted by SEPA and local authorities as good practice in Scotland.

This report was undertaken in consideration of the Phase 1 Desk Study and Phase 2 Ground Investigation Report both provided by Ardmore Point Ltd to identify the relevant factors for the remedial method statement.

This report has been prepared for Torsion Projects Ltd and their professional advisors and may not be relied upon by a third party for any purpose without the written consent of this practice.



2.0 Context & Purpose

2.1 Proposed Development

It is understood that Torsion Projects Ltd proposes to redevelop the site for use as an care home with associated access road, parking and green spaces.



2.2 Previous Reporting

2.2.1 Phase 1 Desk Study

In 2022 Ardmore Point Ltd completed a Phase 1 Desk Study Report for the site at proposed care home at Stoney Ridge Road, Bingley. The site is brownfield site with the previous development on site, formerly the Stoney Ridge Hospital which has been demolished. Made ground was identified as potential source of contamination on site.

2.2.2 Phase 2 Ground Investigation

In June 2022 Ardmore Point Ltd completed a Phase 2 Ground Investigation Report for the site, plan of borehole positions shown below.

2.2.2.1 Ground Conditions

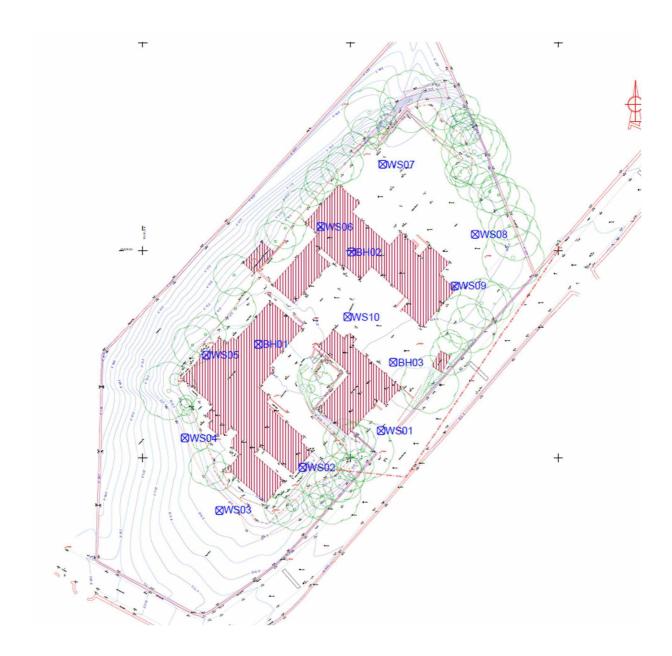
Made ground was encountered across the site in all exploratory positions to a typical proven depth of 0.8-1.0m. Made ground generally consisted of reworked sands , gravels with some rubble, brick , concrete



mixed in. The 2022 investigation included 10 shallow window sample boreholes and 3 deep rotary boreholes to investigate the bedrock

Superficial deposits were recorded across the site in some of the exploratory positions. Superficial deposits generally consisted of upon sandy clay and gravel.

Bedrock or possible bedrock was recorded across the site as a weathered mudstone with the upper layers exhibiting this as a weathered sandstone gravel.





2.2.2.2 Contamination

The results of laboratory tests, from the intrusive site investigation together with consideration of the conceptual and exposure models for the proposed development led to the remediation strategy recommendation to address the presence of asbestos locally encountered in WS08.

3.0 Remedial Works

The remedial works shall include localised excavation of the known asbestos hotspot documented in the Phase 2 Report , ie around borehole WS08 ,was excavated to form a 3m x 3m x 1m section and the material removed form site to licenced landfill site. Following this samples were collected from the base and sides of this excavation , and then subsequent soil testing was carried, these works were carried out on 18/07/2023 and testing as carried out by I2 analytical.

Results show the sides and base to be free from further contamination .

5.0 Post Remediation Conceptual Site Model

Following the completion of remediation works this final validation report should be present to the local CLO.





John Lamb

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Analytical Report Number: 23-45940

Project / Site name: Bingley Samples received on: 19/07/2023

Your job number: C1021 Samples instructed on/ 19/07/2023

Analysis started on:

Your order number: SC015 Analysis completed by: 28/07/2023

Report Issue Number: 1 **Report issued on:** 28/07/2023

Samples Analysed: 5 soil samples

Signed:

Anna Goc PL Head of Reporting Team

For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are : soils - 4 weeks from reporting

leachates - 2 weeks from reporting waters - 2 weeks from reporting asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies.

An estimate of measurement uncertainty can be provided on request.



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Analytical Report Number: 23-45940 Project / Site name: Bingley Your Order No: SC015

Lab Sample Number				2753606	2753607	2753608	2753609	2753610
Sample Reference				C1021	C1021	C1021	C1021	C1021
Sample Number				/2	/3	/4	/5	/6
Depth (m)				None Supplied				
Date Sampled				18/07/2023	18/07/2023	18/07/2023	18/07/2023	18/07/2023
Time Taken				1700	1700	1700	1700	1700
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Asbestos in Soil	Туре	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	FWS	FWS	FWS	FWS	FWS

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected





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Analytical Report Number: 23-45940

Project / Site name: Bingley

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.