



## Refurbishment Survey

Survey Reference Number: L-14437

Survey Date: 06 August 2020

Client Specified Areas

St Grada and Holy Cross Church

Grade

Helston

Cornwall

TR12 7LQ



## Report Authorised by

Name: Alicia Davey

Signed:



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## Table of Contents

|   |    |
|---|----|
| Section 1.0: Executive Summary.....                                 | 4  |
| Section 2.0: Introduction .....                                     | 5  |
| Section 2.1: Survey Scope .....                                     | 5  |
| Section 2.2: Limitations.....                                       | 6  |
| Section 2.3: Details.....   | 7  |
| Section 2.4: Survey Type .....                                      | 7  |
| Section 3.0: Survey Method .....                                    | 8  |
| Section 4.0: General Comments .....                                 | 9  |
| Section 5.0: Terminology .....                                      | 11 |
| Section 5.1: Material Assessment Score Algorithm & Risk rating..... | 12 |
| Section 5.2: Recommended Actions Explained.....                     | 13 |
| Section 6.0: Survey Findings & Room Construction.....               | 14 |
| Appendix 1: Floor Plans .....                                       | 17 |
| Appendix 2: Certificate of Bulk Sample Analysis.....                | 18 |

## Section 1.0: Executive Summary

An Asbestos Refurbishment Survey was carried out in accordance with in-house asbestos surveying procedures and HSE guidance documentation *HSG 264: Asbestos: The Survey Guide* to client specified areas at St Grada and Holy Cross Church.

The Survey was carried out by Allium Environmental Ltd on behalf of Scott & Co on 06 August 2020.

The purpose of this survey was to locate as far as reasonably practicable the presence and extent of all suspected Asbestos Containing Materials (ACMs) in the building survey area which could be damaged or disturbed during planned refurbishment activities.

During the survey 2 samples were taken for analysis.

A Refurbishment Survey aims to locate all ACMs within the survey area. There is no requirement to assess the condition or 'Priority' information for management purposes. This is because it is presumed that all ACMs found will be removed as part of the planned refurbishment works. However, should any material remain in situ or if the related works are not undertaken then all ACMs identified should be re-assessed and managed in accordance with the recommended action set out in HSG 264 or CAR 2012. To manage the risk from ACMs, it is the Duty Holder's responsibility to keep and maintain an up-to-date record of the location, condition, maintenance and removal of all ACMs on the premises. If there is a risk of exposure due to the condition or location of the ACMs then they should be repaired, encapsulated and labelled, or removed. It is the responsibility of the Duty Holder to maintain ACMs in a good state of repair and regularly monitor the condition; the Duty Holder should inform anyone who is liable to disturb the ACMs about their location and condition.

| Item No. | Building Name                  | Room No. & Name | Asbestos Containing Product | Recommended Action                                 | Risk     |
|----------|--------------------------------|-----------------|-----------------------------|--|----------|
| 2        | St Grada and Holy Cross Church | External        | Cement Panel - Roof         | Remove if affected by proposed refurbishment works | Very Low |

Inaccessible areas encountered during the time of the survey, for which no information was obtained, along with areas where access was limited:

| Item No. | Building Name                  | Room No. & Name          | Restriction   |
|----------|--------------------------------|--------------------------|---|
| 1        | St Grada and Holy Cross Church | Ground Floor, 001 - Nave | No access gained to rooms due to no keys available at time of survey. |

## Section 2.0: Introduction

Allium Environmental Ltd was instructed by Joe Davidson of Scott & Co to undertake an Asbestos Refurbishment Survey to ascertain the presence of any Asbestos Containing Materials (ACMs) within: St Grada and Holy Cross Church.

The site consists of:

- 13th century church built using traditional construction techniques including stone walls and pitched roof.

The survey was carried out on 06 August 2020 by Stephen Wicks of Allium Environmental Ltd.

## Section 2.1: Survey Scope

The scope of the survey as defined by Scott & Co is to carry out a Refurbishment Survey to client specified areas within St Grada and Holy Cross Church:

- Areas included in the survey:
  - Areas prior to re-roofing, re-pointing & replacing areas of plaster internally (as indicated on the client provided plans) only within St Grada and Holy Cross Church were included in the survey.
- Agreed areas of exclusion from the survey scope:
  - All other areas of St Grada and Holy Cross Church were excluded from the survey.

## Section 2.2: Limitations

During the course of the survey all reasonable efforts were made to identify the presence of Asbestos Containing Materials within the surveyed areas. However, Asbestos Containing Materials (ACMs) are sometimes concealed within the fabric of a building or sealed building voids, and so it is not always possible to regard the findings of a survey as being definitive. Therefore, it must always remain a possibility that further Asbestos Containing Materials may be found during any alterations, refurbishment or demolition works. Asbestos Containing Materials (ACMs) may be hidden within the fabric of a building and may not be visible until the building is dismantled; it is therefore recommended that a complete review of the Asbestos register is undertaken before commencement of any works. Where areas have been identified as inaccessible within the report, it indicates that the area specified was not accessible to the surveyor at the time of the inspection either because such areas were locked despite requests for access to be arranged, or to gain entry would require an unreasonable degree of dismantling to the structure of the building. The client is therefore advised to the possibility of there being Asbestos Containing Materials in such areas.

HSE guidance: HSG 264: Asbestos: the survey guide states it is now recognised that even with 'complete' access demolition surveys, all ACMs may not be identified and this only becomes apparent during demolition itself. Therefore in buildings that are occupied, due to be re-occupied or due to extenuating circumstances, following the completion of the survey it may be required to undertake additional inspections or sampling prior to/during proposed refurbishment works to account for all hidden Asbestos Containing Materials (ACMs). Where this is likely a provision may need to be made to allow for a possible revisit, this may include inaccessible areas that will be listed in this report.

- Inaccessible areas encountered during the survey:
  - 1 - Ground Floor, 001 - Nave, No access gained to rooms due to no key available at the time of survey.
- Agreed Variations or Deviations from the standard HSG 264 method:
  - None

## Section 2.3: Details

Site Address:

- St Grada and Holy Cross Church, Grade, Helston, Cornwall, TR12 7LQ

Client Name & Address:

- Scott & Co, 3 Lemon Villas, Truro, Cornwall, TR1 2NX

Client Contact:

- Joe Davidson

Survey Start Date:

- 06 August 2020

Survey Completion Date:

- 06 August 2020

Survey Conducted by:

- Stephen Wicks

Assisted by:

- N/A

Report Produced:

- 14 August 2020

## Section 2.4: Survey Type

The nature of the survey is a Refurbishment Asbestos Survey as detailed in HSE publication: *HSG 264 Asbestos: The Survey Guide*. HSE guidance publication *HSG 264: Asbestos: The Survey Guide* describes a Refurbishment survey as a fully intrusive survey. A full sampling programme is undertaken to identify possible ACMs and estimates of volume and surface area made. A Refurbishment survey is required for all work which disturbs the fabric of the building in areas where the management survey has not been intrusive.

This report presents the findings of the survey and analysis reports of any bulk samples taken.

## Section 3.0: Survey Method

Allium Environmental Ltd conducts Refurbishment surveys in accordance with our in-house Asbestos Surveying procedures and HSE guidance publication *HSG 264: Asbestos: The Survey Guide*. While the survey is fully intrusive, disruptive and non-destructive, it may involve penetrating all parts of the building structure, using aggressive inspection techniques to lift carpets and tiles, break through walls, ceilings cladding and partitions, and open up floors.

A Refurbishment survey uses a combination of visual inspection and bulk sampling to confirm the presence of Asbestos. Any area(s) inaccessible at the time of the survey must be presumed to contain Asbestos, and any inaccessible area(s) must have access restricted, and should be inspected prior to access or the commencement of any works.

Any samples collected during the survey will be analysed in-house to ISO/IEC 17025 for the identification of Asbestos fibres in bulk samples, and in accordance with HSE guidance note: *HSG 248: The Analysts' guide for sampling analysis and clearance procedures and best practice* or subcontracted to an approved independent laboratory, which is also UKAS accredited to ISO/IEC 17025 for the identification of Asbestos fibres in bulk samples, and in accordance with HSE guidance note: *HSG 248: The Analysts' guide for sampling analysis and clearance procedures and best practice*. Where applicable and where samples are sub-contracted this will be clearly displayed on the bulk sample test report and within the survey report. Completed Fibre Identification Report for all samples taken can be found in Appendix 2. (Representative samples were also taken of any materials that may be mistaken for potential ACMs). Sampling location stickers, bearing the individual samples unique identification number, have been applied to all sample points where practicable, for future reference.

Products that are very unlikely to contain Asbestos were not sampled (e.g. wallpaper, plasterboard, chipboard, wood etc.).

An item record is completed for each suspect sample taken; for materials strongly presumed to contain Asbestos (i.e. materials visually similar to positively identified ACMs); for areas presumed to contain Asbestos (i.e. areas where no access could be gained at the time of the survey; and non-accessed items of (electrical) equipment and plant).

Each item record contains a colour photograph, individual material assessment scores (as prescribed under HSG 264), management recommendations and general observations / comments (where appropriate).

The item records are combined together to form a site-specific Asbestos Register.



## Section 4.0: General Comments

This report relates to the situation on the day(s) of the inspection and cannot take into account subsequent changes in circumstances. Samples were taken of any materials historically known or presumed to contain Asbestos. This report contains findings based upon visual inspection and results of laboratory analysis

All figures and measurements quoted in the Asbestos Register detailing the extent of ACMs are estimates, based upon visual inspection on the day of the survey and should be used as a guide. It is the responsibility of contractors quoting for Asbestos Removal Works to take their own measurements to determine the exact extent of Asbestos to be removed. Unless otherwise stated pipework insulation and heating plant was not inspected in their entirety. Representative samples were taken at random intervals where suspect material was observed. The scope of the works did not permit complete exposure and assessment of all pipework and heating plant.

No responsibility can be taken for any misinterpretation of this report by third parties.

A limited inspection of pipework concealed by overlying non-Asbestos insulation has been conducted. Inspection of pipework has been restricted primarily to insulation visible. The presence of Asbestos debris to pipework, which is not readily visible or would require the full removal and replacement of overlying insulation, has therefore not been investigated.

No responsibility will be accepted for the presence of Asbestos in voids (under floor, or behind wall or ceiling) or pipework ducts other than those opened up during the survey.

The survey is limited to those areas accessed at the time of the survey.

We have not reported on concealed spaces, which may exist within the fabric of the building, and where the extent and presence of these is not evident, due to inaccessibility or insufficient knowledge of the structure at the time of the survey.

Due to the nature and variety of Asbestos used in building construction and the complex nature of some buildings, especially where modified over the years, it is possible that some ACMs may not have been identified in the survey. Where refurbishment is to follow a refurbishment Survey, it would be prudent in any contract to allow a contingency sum to provide for such possibility.

#### **Section 4.0: General Comments (Continued)**

Certain 'Artex' type textured coatings and decorative plasters may contain very small quantities of Asbestos. In situ, these coatings are often composed of different batches of product, or may have been repaired / patched at different times. It is therefore possible that any 'Artex' samples taken may not be representative of the entire coating. Recent research suggests that in some cases, the fibres may have diameters below 0.1  $\mu\text{m}$ . These may not be visible by the optical microscopy method described in HSE guidance publication HSG 248: Asbestos: The Analysts' Guide for Sampling, Analysis and Clearance Procedures.

At the time of the survey no access was gained to materials and/or void areas located above, behind or attached to suspect Asbestos Containing Materials sampled or presumed throughout the site. To do so would have required surveyors to break through suspect ACMs, such as textured coating and insulating board, potentially contaminating themselves and the work area with Asbestos. Therefore, it is recommended that site operatives are made aware of this survey limitation, and instructed to exercise caution when breaking through materials and/or areas located above, behind or attached to suspect ACMs that have been found to contain Asbestos following laboratory analysis.

## Section 5.0: Terminology

**Asbestos** – A term used for the fibrous form of several naturally occurring silicate minerals, used primarily because of its low thermal conductivity, high tensile strength, resistance to chemical attack, flexibility and incombustibility. *The Control of Asbestos Regulations 2012* defines and regulates asbestos as the fibrous forms of the following minerals or any mixture containing them. “Asbestos” means the following fibrous silicates;

***Chrysotile*** (White Asbestos)

***Crocidolite*** (Blue Asbestos)

***Fibrous Grunerite*** - commonly known as *Amosite* (Brown Asbestos)

***Fibrous Tremolite***

***Fibrous Anthophyllite***

***Fibrous Actinolite***

**ACM(s)** - Asbestos Containing Material(s). Any material, substance or product that contains or has been made with Asbestos.

**SPTCA** - Strongly Presumed To Contain Asbestos.

**PTCA** - Presumed To Contain Asbestos.

**NAD** - No Asbestos Detected.

**AD** - Asbestos Detected.

## Section 5.1: Material Assessment Score Algorithm & Risk rating

| Sample Variable                              | Score | Example of Scores  |
|--|-------|--|
| Product Type (including debris from product) | 1     | Asbestos-Reinforce Composite (Plastic, Resin, Mastic, Roofing Felts, Vinyl Floor Tiles, Semi-Rigid Paints or Decorative Finishes, Asbestos Cement)           |
|  | 2     | Asbestos Insulating Board (AIB), Millboards, Other Low-Density Insulating Boards, Asbestos Textile, Gasket, Ropes and Woven Textile, Asbestos Paper and Felt |
|  | 3     | Thermal Insulation (e.g. Pipe and Boiler Lagging), Sprayed Asbestos, Loose Asbestos, Asbestos Mattresses and Packing.  |
| Extent of damage/deterioration               | 0     | Good condition: no visible damage  |
|  | 1     | Low damage: a few scratches or surface marks, broken edges on board, tiles etc.  |
|  | 2     | Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose fibres.                              |
|  | 3     | High damage or delamination of materials, Sprays and Thermal Insulation. Visible Asbestos debris   |
| Surface treatment                            | 0     | Composite materials containing Asbestos: Reinforced Plastic, Resins, Vinyl Tiles.  |
|  | 1     | Enclosed Sprays and Lagging, AIB (with exposed face painted or encapsulated), Asbestos Cement Sheets etc.  |
|  | 2     | Unsealed AIB, or encapsulated Lagging and Sprays.  |
|  | 3     | Unsealed Lagging and Sprays.   |
| Asbestos type                                | 1     | Chrysotile   |
|  | 2     | Amphibole (Amosite) Asbestos excluding Crocidolite   |
|  | 3     | Crocidolite  |

### Potential to release Asbestos Fibres

- Materials with an assessment score of 10 or more are deemed to have a high risk and potential to release fibres, if subject to minor disturbance, e.g. walking in the vicinity of the material.
- Materials with an assessment score between; 7-9 are deemed to have a medium risk and potential to release fibres.
- Materials with an assessment score between; 5-6 are deemed to have a low risk and potential to release fibres.
- Materials with an assessment score of 4 or less are deemed to have a very low risk and potential to release fibres.

## Section 5.2: Recommended Actions Explained

**Monitor Condition** - This material can stay in situ and be managed accordingly. Monitor condition regularly and record condition.

**Label** - Label the ACM with approved warning signs

**Encapsulate** - Use suitable encapsulating material to seal surface. Work with this material to be carried out in accordance with HSE Publication: *The Control of Asbestos Regulations 2012*.

**Repair** - This material requires repair. Work with this material to be carried out in accordance with HSE Publication: *The Control of Asbestos Regulations 2012*.

**Restrict Access** - Restrict access to area and communicate with employees, contractors and others to keep area free from personnel. Work with this material to be carried out in accordance with HSE Publication: *The Control of Asbestos Regulations 2012*.

**Protect/Enclose** - Use suitable material to protect / enclose ACM to minimise risk of impact damage.

**Remove if Affected** - If this material is likely to be disturbed by/during the proposed refurbishment works then material will need to be removed prior to work commencing. Work with this material to be carried out in accordance with HSE Publication: *The Control of Asbestos Regulations 2012*.

**Remove** - This material requires removal. Work with this material to be carried out in accordance with HSE Publication: *The Control of Asbestos Regulations 2012*.

**No Access/Exercise Caution** - Surveyors were unable to obtain access to material, item, room, area or building to conduct inspection for potential ACMs. Therefore, the area is assumed to contain Asbestos and the Duty Holder should exercise caution.

Please Note:

- Allium Environmental Ltd cannot be held responsible for the way in which the client may interpret or act upon the results of this report.
- Please refer to HSE Publication: *The Control of Asbestos Regulation 2012* prior to undertaking any remedial works on ACMs.
- In some instances more than one recommendation may be used.

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## Section 6.0: Survey Findings & Room Construction

Please note

- Where areas were inspected and no ACMs were identified or presumed an entry has been placed into the report findings stating “No Asbestos Detected” within the respective area.

**Room/Area Name & No: 001 - Nave**


**Floor: Ground Floor**

**Building: St Grada and Holy Cross Church**

| Room Construction / Description |                        |                 |                  |
|---------------------------------|------------------------|-----------------|------------------|
| Ceiling                         | Plasterboard           | Riser/Boxing    | N/A              |
| Firebreak                       | N/A                    | Voids           | N/A              |
| Walls                           | Brick, Stone           | Pipework        | N/A              |
| Doors                           | Timber                 | Plant/Equipment | N/A              |
| Windows/Sills                   | Stone                  | Staircases      | N/A              |
| Floor                           | Timber & Ceramic Tiles | Other           | No Access Gained |
| Under Floor Ducts               | N/A                    | Comments        |                  |

### Positive Survey Findings - None Identified

#### No Access Areas

|                |   |                          |      |  |
|----------------|---|--------------------------|------|--|
| Reference      | 1   | Product Type (A)         | N/A  |  |
| Sample No      | No Sample Taken   | Condition (B)            | N/A  |  |
| Description    | No Access Gained - Internals  | Surface Treatment (C)    | N/A  |  |
| Accessibility  | Low   | Asbestos Type (D)        | N/A  |  |
| Risk Rating    | Low   | Material Score (A+B+C+D) | N/A  |  |
| Extent         | 2no.  | Identification           | PTCA |  |
| Recommendation | Exercise Caution – See section 5.2  |                          |      |  |
| Comments       | Presumed to contain asbestos until proven otherwise. No access gained to rooms due to no keys available at time of survey. Both the Office and the Bell vestry. The bell tower chamber is also unsafe to be under as signed, so no access to any part of the tower. |                          |      |  |

#### Negative Survey Findings - Not Applicable


**Room/Area Name & No: Main Building**

**Floor: External**

**Building: St Grada and Holy Cross Church**


| Room Construction / Description |                                   |                 |                   |
|---------------------------------|-----------------------------------|-----------------|-------------------|
| Walls                           | Stone                             | Ducts/Pipe Runs | N/A               |
| Cladding                        | N/A                               | Ground          | Cement Roof Tiles |
| Roof                            | Cement Panel, Natural Slate Tiles | Windows/Sills   | N/A               |
| Rainwater Goods                 | N/A                               | Soffit Fascia's | N/A               |
| Soil Stacks                     | N/A                               | Staircases      | N/A               |
| Flues/Cowls                     | N/A                               | Other           | N/A               |
| Plant/Equipment                 | N/A                               | Comments        |                   |

### Positive Survey Findings

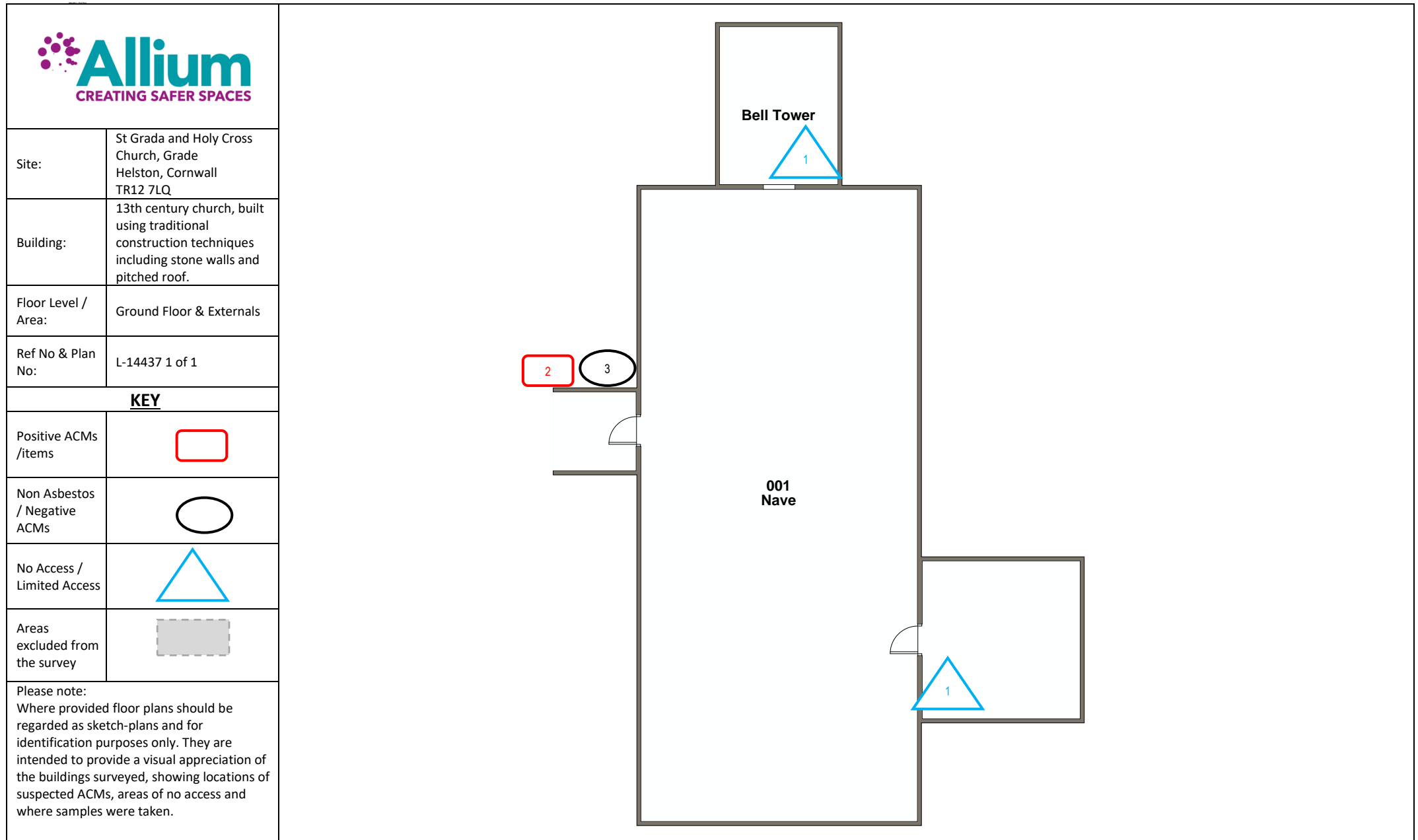
|                |  |                          |    |   |
|----------------|--|--------------------------|----|---|
| Reference      | 2  | Product Type (A)         | 1  |  |
| Sample No      | 14437/SW/001   | Condition (B)            | 1  |   |
| Description    | Cement Panel - Roof  | Surface Treatment (C)    | 1  |   |
| Accessibility  | Low  | Asbestos Type (D)        | 1  |   |
| Risk Rating    | Very Low   | Material Score (A+B+C+D) | 4  |   |
| Extent         | 0.25m²   | Identification           | AD |   |
| Recommendation | Remove if affected by proposed refurbishment works – See section 5.2 |                          |    |   |
| Comments       | Single cement panel below roof tiles.                                |                          |    |   |

### No Access Areas - None Identified

### Negative Survey Findings

|                |  |                          |            |   |
|----------------|--|--------------------------|------------|---|
| Reference      | 3                                      | Product Type (A)         | N/A        |  |
| Sample No      | 14437/SW/002                           | Condition (B)            | N/A        |   |
| Description    | Cement Roof Tiles - Ground             | Surface Treatment (C)    | N/A        |   |
| Accessibility  | High                                   | Asbestos Type (D)        | N/A        |   |
| Risk Rating    | N/A                                    | Material Score (A+B+C+D) | N/A        |   |
| Extent         | 3no.                                   | Identification           | <b>NAD</b> |   |
| Recommendation | No Action                              |                          |            |   |
| Comments       | Cement roof tiles stored against wall. |                          |            |   |





• THIS PLAN SHOULD BE READ IN CONJUNCTION WITH THE MAIN BODY OF THE REPORT AND INDIVIDUAL ITEM RECORDS

## Appendix 2: Certificate of Bulk Sample Analysis



6093

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### BULK ANALYSIS TEST REPORT



|                        |  |                   |               |                 |          |             |
|------------------------|--|-------------------|---------------|-----------------|----------|-------------|
| Report Number:         | L-14437  | Issue No:         | 1             | Date Reported:  | 14/08/20 | Page 1 of 1 |
| Comments:              |  |                   |               |                 |          |             |
| Client:                | Scott & Co   |                   |               |                 |          |             |
| Client Address:        | 3 Lemon Villas, Truro, Cornwall, TR1 2NX                           |                   |               |                 |          |             |
| Site Address/Location: | St Grada and Holy Cross Church, Grade, Helston, Cornwall, TR12 7LQ |                   |               |                 |          |             |
| Date Sampled:          | 06/08/20   | Sampled By:       | Stephen Wicks |                 |          |             |
| Date Samples Received: | 06/08/20   | Client Order No.: |               | No. of Samples: | 2        |             |
| Date Analysed:         | 06/08/20   | Analysed by:      | Gary Lowe     |                 |          |             |

Analysis of samples was carried out in accordance with the documented 'in-house' procedures and methods based upon HSE Guidance Document HSG 248 Appendix 2. Comments, opinions and interpretations herein are outside the scope of UKAS accreditation. This report may not be reproduced except in full, without written approval of the laboratory.

### ANALYSIS RESULTS

| Lab Sample Ref. No. | Client Ref. | Sample Type | Sample Details/location/description           | Asbestos Type (s)    |
|---------------------|-------------|-------------|---|----------------------|
| 001                 |             | Cement      | External, External/Roof - Cement Panel        | Chrysotile           |
| 002                 |             | Cement      | External, External/Ground - Cement Roof Tiles | No Asbestos Detected |

- Materials have been referred to as Asbestos Insulating Board or Asbestos Cement based upon their asbestos content and visual appearance alone.
- Where samples have not been taken by Allium Environmental Ltd the results apply to the sample as received, it can only report analysis results. No responsibility can be taken for any consequences arising from the client's sampling strategy or procedures, for the acts or omissions of others, or the use of these results in subsequent reports.
- Samples marked \$ in this report have been subcontracted to a UKAS accredited laboratory.
- Quantification of the amount of asbestos is not permitted, if 1 or 2 fibres are observed and identified as asbestos, the term 'trace asbestos identified' will be reported.
- Sample(s) were examined for the presence of 6 types of asbestos fibres: Crocidolite (blue), Amosite (brown), Chrysotile (white), Anthophyllite, Actinolite and Tremolite.
- Where samples have been taken by Allium Environmental Ltd this has been to the in-house surveying/sampling procedure AL003, a copy of which is available on request.

|                       |                       |   |
|-----------------------|-----------------------|---|
| Additional Comments:  | Analyst:              | Gary Lowe   |
|                       | Analysts Signature:   |  |
|                       | Approved by:          | Alicia Davey  |
|                       | Authorised Signature: |  |
| E N D O F R E P O R T |                       |   |