

HIGH-LEVEL TACTILE INSPECTIONS

SAMPLING PHASE 1
REPORT

Arbroath Abbey Abbot's House
PIC007



HISTORIC
ENVIRONMENT
SCOTLAND

ÀRAINNEACHD
EACHDRAIDHEIL
ALBA

CONTROL SHEET

Document Control

| | |
|-------------------|--|
| Title: | High-Level Tactile Sample Inspection Project Phase 1 Report PIC007 Arbroath Abbey Abbot's House |
| Authors: | [REDACTED] |
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| Approved by: | [REDACTED] |
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Version Control

| Version | Date | Status | Prepared by | Amendments |
|---------|------------|----------|-------------|-------------------------------------|
| V0001 | 02/08/2021 | Draft | [REDACTED] | First draft |
| V0100 | 05/08/2021 | Approved | [REDACTED] | Approved |
| V0200 | 27/08/2021 | Approved | [REDACTED] | Identified Risk drawings revision A |
| | | | | |
| | | | | |
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HLTI Sampling: Report - Introduction



| | | | | | |
|--------------------------|------------|-----------------------|------------------------------|-------------------|------------|
| PIC ID # ↓ | PIC007 | Site name | Arbroath Abbey Abbot's House | | |
| Inspection start | 27/07/2021 | Inspection end | 28/07/2021 | Submission | 30/08/2021 |
| Lead HBFA | [REDACTED] | | | | |
| Sample Inspectors | [REDACTED] | | | | |

Introduction:

As a result of findings on the first four full site High Level Tactile Inspections, SMT endorsed an accelerated programme that will see high-level tactile sample inspection carried out initially to 16 sites identified as having a high risk potential.

Sample inspection for Arbroath Abbey Abbot's House was carried out in accordance with HES Management of Risk presented by High-level Fabric Policy and High level Tactile Inspection Procedures.

Tactile inspections of Two sample areas, West elevation and section of South elevation (agreed in advance by the T1 team and the Region) of the Abbot's House were carried out and completed using a MEWP.

The Sample Inspection Report only reports on high level fabric risks within pre-determined areas and does not provide any assessment of risk in other areas on site.

HLF Inspection Risk Matrix:

HES-T1C-HLF-RAS-X-X-V0200-RiskMatrix

| Consequence | | 1 | 2 | 3 | 4 | 5 |
|-------------|-----------------------------|-----------|--------------|-----------------|--------------|-------------------------------|
| | | No injury | Minor injury | Moderate injury | Major injury | Fatal or life-altering injury |
| Probability | | | | | | |
| 5 | Fabric fall almost certain | 5 | 10 | 15 | 20 | 25 |
| 4 | Fabric fall highly likely | 4 | 8 | 12 | 16 | 20 |
| 3 | Fabric fall likely | 3 | 6 | 9 | 12 | 15 |
| 2 | Fabric fall unlikely | 2 | 4 | 6 | 8 | 10 |
| 1 | Fabric fall highly unlikely | 1 | 2 | 3 | 4 | 5 |

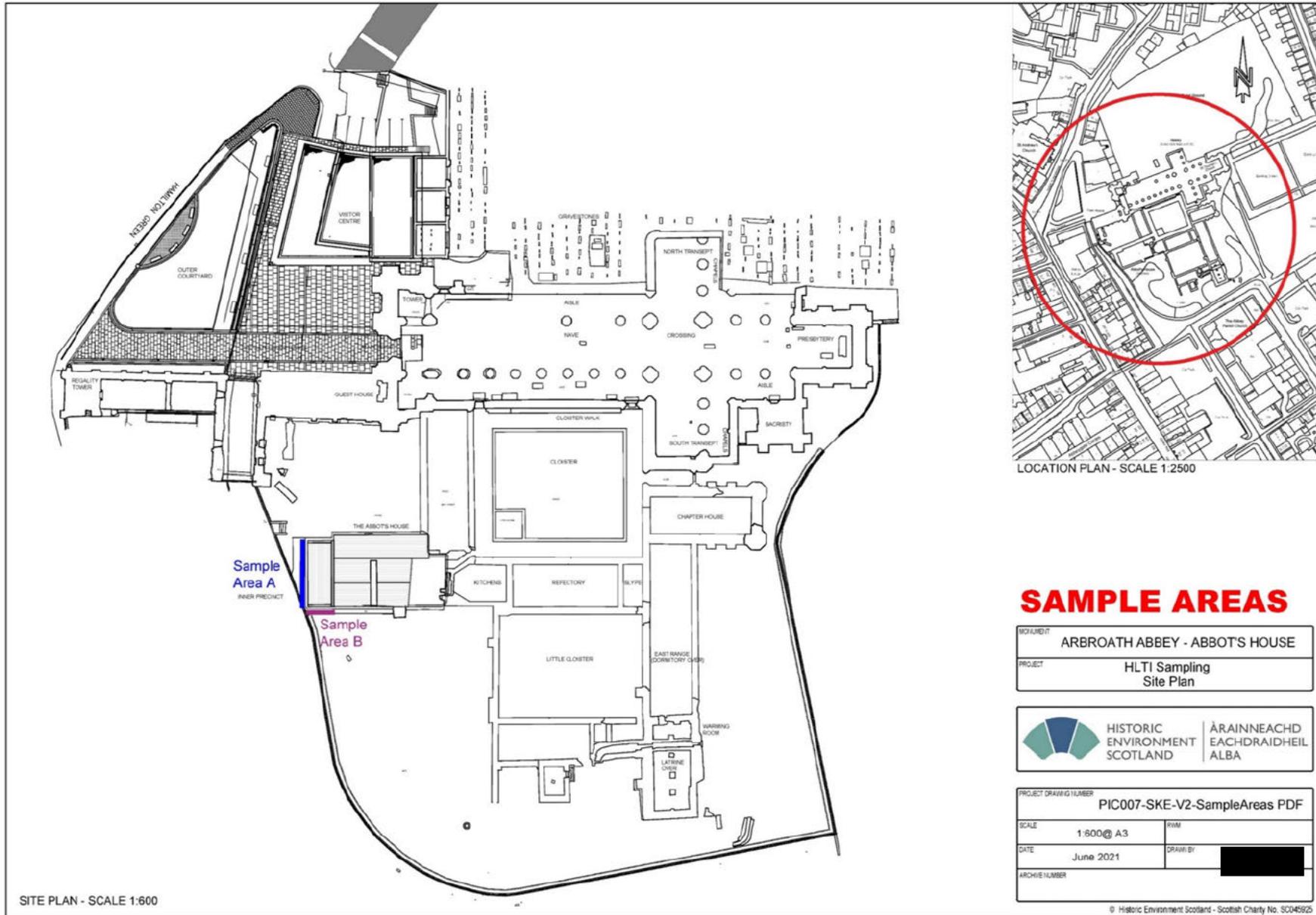
| RISK RATING | RISK SCORE RANGE |
|-------------|------------------|
| High | 15-25 |
| Medium | 10- 14 |
| Low | 1-9 |

HLTI Sample Areas:

| Area: | Colour: | Sample Area Name: |
|-------|----------|--|
| A | [Blue] | Abbott's House West Elevation |
| B | [Purple] | Abbott's House South Elevation, West Section |



Click on link to open drawing in PDF viewer: [PIC007-SKE-V2-SampleAreas.pdf](#)





HLTI Sampling: Report - Summary dashboard



| | | | |
|---------|--------|------------|------------|
| PIC ID# | PIC007 | Submission | 30/08/2021 |
|---------|--------|------------|------------|

| | |
|--|-----------|
| Select Sample area of which data should be displayed ↓ | All areas |
|--|-----------|

| | |
|------------------------|----|
| Number of observations | 24 |
|------------------------|----|

Identified Risk



Residual Risk



Inspection Action:

| Class V Report = Fabric detached during tactile inspection | Access Restriction = Risk of fabric falling and causing harm | | | Monitor Observation / Plan Repairs = No immediate action |
|--|--|-------------------------------|--------------------------------|--|
| | High = Full site closure | Medium = Partial site closure | Low = Minor access restriction | |
| 3 | 0 | 0 | 1 | 20 |

| | | | | |
|-------------------|---------|----|--------|---|
| Inspection types: | Tactile | 23 | Visual | 1 |
|-------------------|---------|----|--------|---|

Key comments:

The Abbot's house is built from soft fluvial sandstone (devonian red sandstone) with conglomerate inclusions. Surface scaling, bossing and stone delamination along bedding planes are the predominant symptoms of decay with many surfaces being severely eroded, at times exposing harder pebble inclusions of varying sizes. Most surface scaling is likely to occur in relatively small and thin sections which are unlikely to cause a potential risk to life. However, some face bedded stones e.g. from the window lintels and mullions were found to be delaminating and are at risk of larger fabric losses. Window putty is often cracked and loose. A couple of loose roof slates were removed from the West gable. Most of the west pitch roof slates could only be visually inspected.

