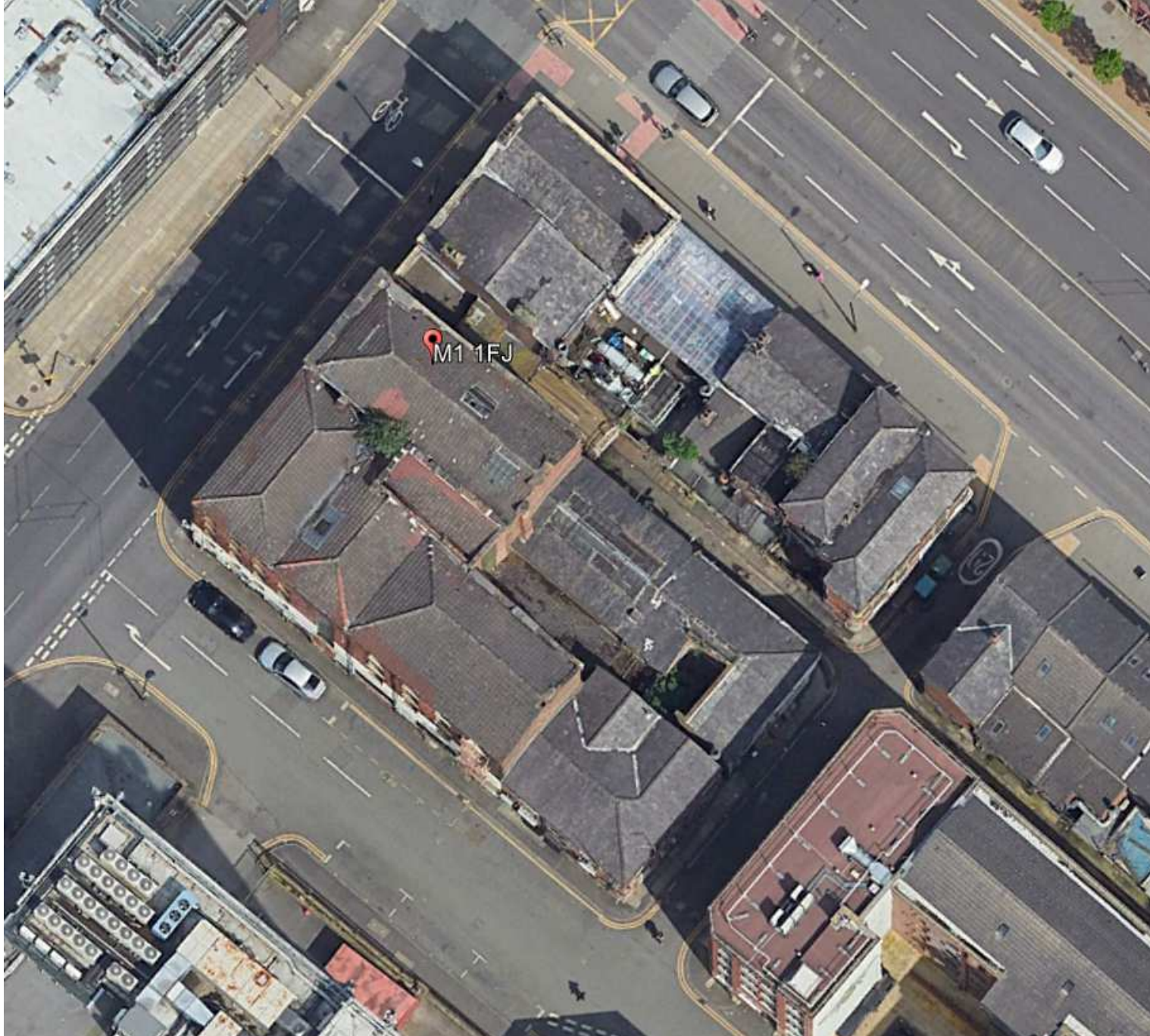




LEVER STREET, ANCOATS, MANCHESTER

WRITTEN SCHEME OF INVESTIGATION

Client: Orion Heritage



December 2025

1 INTRODUCTION

1.1 Planning Background

A block of industrial and domestic town houses formed by Lever Street, Great Ancoats Street, Little Lever Street and Houldsworth Street in Ancoats, Manchester, is proposed to be demolished as part of a redevelopment which will entail preservation of a public house, and the retention of the north west and south west facades. The buildings set off from Great Ancoats Street date to the late eighteenth century and the warehousing to the rear of the block date to before the mid nineteenth century. A condition of the planning application (139778/FO/2024) submitted by Soller Nine Ltd)) requires the following:

No demolition, (in respect to the historic building investigation only) , relating to the historic building investigation shall take place until the applicant or their agents or their successors in title has secured the implementation of a programme of archaeological works in accordance with a Project Design that has been submitted to and approved in writing by the local planning authority.

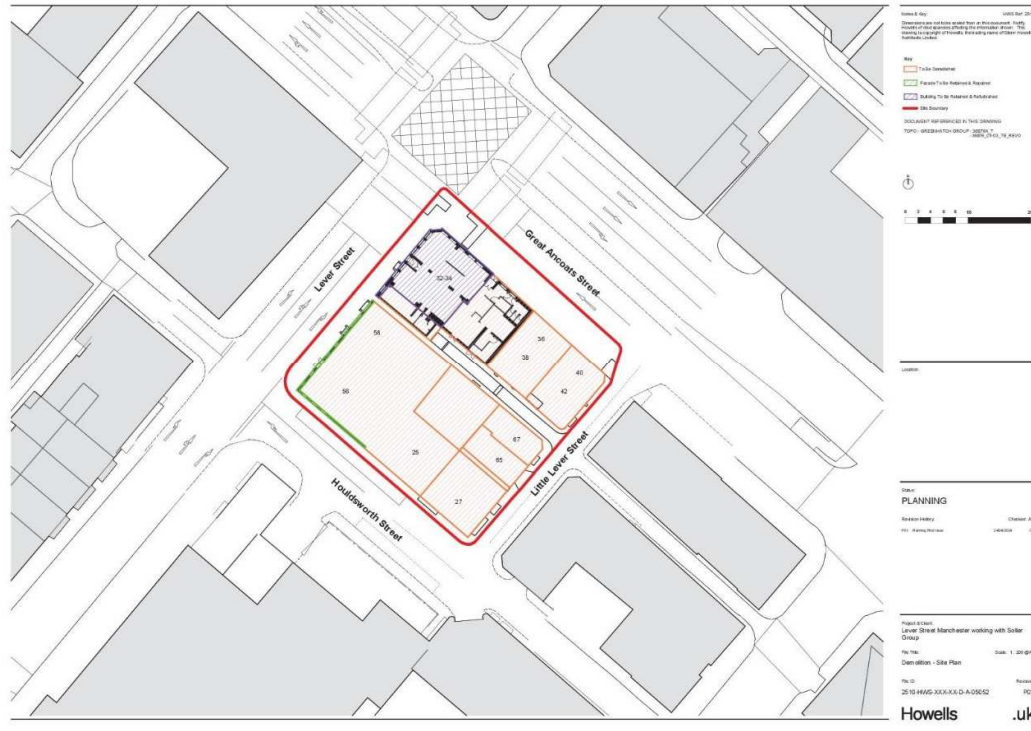
The Project Design shall cover the following:

1. A phased programme and methodology of investigation and recording to include:
2. An historic building investigation (Level 3) of all standing historic buildings or structures that are to be removed or altered (including the building's facades) during the course of the development

The present document provides a Written Scheme of Investigation for the Level 3 Survey of the buildings.

1.2 Site Location

The town block is located in the northern quarter of Historic Manchester within the industrial area of Ancoats, and is edged by Lever Street, Great Ancoats Street, Little Lever Street and Houldsworth Street. It is located at NGR SJ 847 985.



1.3 Legislative Framework and Guidelines for the Level 3 Survey

The recording programme will be undertaken in accordance with the present Written Scheme of Investigation. The recording is undertaken in accordance with the following planning guidance:

National Planning Policy Framework (NPPF): The proposed development has a planning requirement and is bound by the policy framework set by the National Policy Framework government guidance. The *National Planning Policy Framework* (NPPF) sets out national planning policies relating to historic environment conservation (MHCLG 2023). *It is normally accepted that non-designated sites will be preserved by record, in accordance with their significance and the magnitude of the harm to/loss of the site, to minimise or avoid conflict conservation and development (MHCLG 2023, section 129).*

Historic England – Understanding Historic Buildings: The building survey has been undertaken in accordance with specifications defined in Historic England's *Understanding Historic Buildings: A Guide to Good Recording Practice* (2016). This provides guidelines for the recording of historic buildings and defines the requirements for the different levels of building recording. In this instance it provides the guidance for the Level 1 (photographic) survey of the conveyor and the Level 3 survey of the Goods Shed.

A desk-based documentary study has already been undertaken by Turley Heritage, and the outstanding requirements are for an accurate and representative fabric survey of

the structure, a full photographic record of the building and a detailed description and assessment of its development based on fabric observation.

2 THE TEAM

2.1 Zenith Built Heritage

Zenith Built Heritage is a specialist team of buildings and landscape archaeologists dedicated to providing heritage consultancy services, and we work closely with clients to identify potential heritage impacts and opportunities and help to enhance the environment and sense of place.

Our team are members or affiliates of the Chartered Institute for Archaeologists (CifA), and we professionally conform to the CifA code of conduct.

The proposed team that will undertake the archaeological survey of the Lever Street Block will be Jamie Quartermaine, Andy Phelps and Debbie Lewis. Jamie and Andy have considerable experience of the recording and analysis of historic buildings and archaeological landscapes, and have previously worked for Oxford Archaeology, based in Lancaster, and much of their heritage-based work has concentrated on buildings and landscapes across northern England, which particularly includes Cumbria, North Yorkshire Lancashire, and Greater Manchester. They have particular experience of the recording of industrial buildings and extractive landscapes (eg Quarry Bank Mill, Hotties Glassworks, Daisy Mill Building survey, Augill Smelt Mill and Railway features such as Blackburn Railway Station and the Al Badaii Railway Station (AlUla) in Saudi Arabia.

They have particular experience of the recording of industrial landscapes from around the region, which include the Backbarrow Ironworks, the Lead mines and smelt mills of Greenside, Nenthead (both in Cumbria), Snailbeach (Shropshire), and also the Quarry Bank Mill in Cheshire.

Jamie Quartermaine, B.A., Project Manager

Jamie Quartermaine, as the Project Manager, will ensure that the project remains on schedule and that the scientific integrity of the work is of the highest standards. Mr. Quartermaine will also act as the primary point of contact for the client. With over four decades of experience working in the region. Mr. Quartermaine is uniquely qualified for this essential role.

Andy Phelps, MA, Site Director

Andy Phelps will take the lead for undertaking the fieldwork and producing the subsequent report, drawing on his knowledge of the region and period to provide a comprehensive interpretive record of the building. He is a very experienced buildings and landscape archaeologist with the expertise to undertake such studies and will be able to compile the results of the evaluation and to DBA to assess the heritage.

Debbie Lewis, Building Assessment

Debbie will take the lead for the processing of the photogrammetric, laser scanning data and the generation of the CAD draughting. Debbie is a very experienced archaeological surveyor and also has considerable involvement with GIS projects.

3 ARCHAEOLOGICAL BACKGROUND

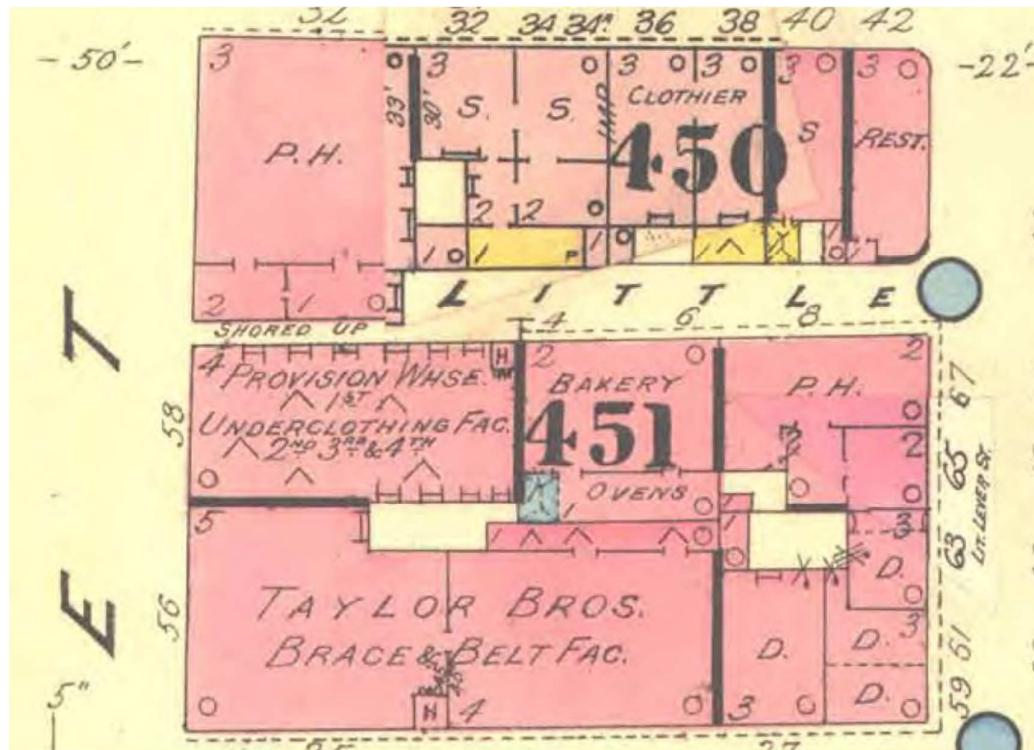
3.1 Lever Street Block

The historical background below is based upon the Heritage Assessment produced by Turley Heritage (2024).

The area of investigation was formerly an area of open countryside and owned by Sir Ashton Lever of Alkington until 1780 when William Stevenson acquired the land and set out a grid of streets centred on Stevenson Square, now known as the Northern Quarter. The earliest available map in 1793 (Laurent map) shows 32-42 Great Ancoats Street and a parallel building on the site of 65-67 Levens Street. The subsequent Green map of 1794 shows the incorporation of 27 Houldsworth Street. By 1819 the Site was fully developed with a mixture of residential and commercial development.

In approximately 1830-40 a probable warehouse (which was to become a Tin Plate factory) was constructed on the south western side of the block (56 Lever Street and 25 Houldsworth Street).

The best indicator of the building functions is provided by the 1888 GOAD fire insurance plan showing that by this date the warehouse was the Taylor Brothers Brace and Belt factory which had been established in 1858.



In the 1930s the Threlfalls Brewery updated the Griffin Public House on the corner of the Site at Lever Street and Great Ancoats Street and was extended, reclad and renamed Land O' Cakes Hotel.

4 SURVEY METHODOLOGY

4.1 Introduction – Overall Strategy

The level 3 survey will be undertaken in accordance with Historic England's *Understanding Historic Buildings: A Guide to Good Recording Practice*. This requires that the building should incorporate research into the building's history. A Heritage Statement (2024) has previously been prepared by Turley Heritage on behalf of Soller Nine. While this is a very effective basis for understanding the heritage, a request has been made by GMAAS for additional research into the building which would be looking for architects or historical plans of the buildings and also would provide a reliable determination of the functions of the original industrial buildings. It is therefore proposed to enhance and augment the original documentary study to serve as the basis for the present study.



Figure 1: Numbered buildings for purposes of Survey

Project Scope: The buildings within the scope are buildings 3-12, where access is available as deemed by health and safety constraints (Building 1 is not part of the development and Building 2 is not presently available). Access is not available to all elements of each building, and in particular there are restrictions to the upper floors of some buildings. The floors are decaying and it will not be possible to walk across the floors for health and safety reasons. Scanning will therefore be undertaken only from one side of the room, and this can result in gaps within the record to either closed rooms on the opposite side of a dangerous floor or alcoves.

In order to satisfy the requirement for a detailed survey of the building fabric, it is proposed to undertake a 3D modelled survey of the extant structure. However, this process is inhibited by collapse and areas of the building where there is no safe access by virtue of its instability. There is also dense scaffolding covering the north west and south west elevations and which is difficult to record by photogrammetry. It is therefore proposed to survey the building by means of a combination of laser scanning and photogrammetry for individual elevations. Given the restricted access to the building the latter survey will be undertaken in part using a small drone which will enable remote photography from above the tree canopy. Given the considerable restrictions on access to the external facades of the building it is proposed to use a hand-held laser scanner, which as it is mobile can ensure that there are no shadows caused by the vegetation and scaffolding, and which would be a major issue for a static scanner.

The building is in an unstable and unsafe condition, and there are spaces where there is no safe access, including upper floors. It is therefore proposed to scan using a scanner inserted through holed floors to enable upper floor recording.

4.2 Enhancement of the Historical Study

The proposed desk-based assessment will draw on the earlier study and will incorporate the historical information from it into a new report, and will seek to access design and earlier plans for the buildings. There are various repositories which may potentially have the relevant documentation, and which will be consulted in turn. The earlier map regression will be enhanced to incorporate cartographic information identified by the present search, and will also include aerial photography and orthophotography to chart the development of the site and more specifically the more recent history of the building.

The present study will investigate all available sources for the group of buildings between Lever Street and Little Lever Street. It will also include a study of the buildings that are proposed to be retained (32-34). An earlier Heritage Statement has been generated, and the proposed Documentary study will draw upon that. This additional work is requested by Ian Miller and will include the following sources:

- Greater Manchester County Record Office,
- Greater Manchester HER (held by GMAAS),
- Central University Library
- Lancashire Archives,
- Historic Newspapers
- Trade Directories
- Greater Manchester Lives
- Aerial Photography: a survey of the historic extant air photographic cover will be undertaken, and will include consultation with the NMR.

It will also draw on any available secondary sources (eg Miller and Wild 2007 on the Ancoats Mills), as well as on line sources. It is anticipated that the search of the HER will result in examples of grey literature that relate to the industrial development of Ancoats. It will include a full map regression drawing upon archive and OS mapping that relates to the building, as well as aerial photographic sources.

4.2 Survey Control

For the most part the survey controls will be ground control points and will be a mix of temporary and permanent points; some will be left on site to enable the subsequent restoration of the control network if required. The control points will be located so as to be visible from aerial photography, and up to five will be located around the building to serve as control for the laser scanning. The survey markers will be surveyed by closed traverse using a total station, and will be located by DGPS. A minimum of 12 control point will be located around the site and will be intended to provide adequate photogrammetric control cover for the site.

4.3 Laser Scanning

Laser scanning will be used to record the buildings building externally, and internally at all levels where there is safe access. However, it is possible to access remotely to floor levels where there is no physical access by extending the scanner on a mast through apertures through the floor ceiling. A mobile Horizon Geoslam Zeb scanner will be used to record a high-resolution point cloud of areas and structures. The Zeb Horizon scanner has a 100m scan range, and spatial control will be maintained using ground control points marked by survey spheres.

Post-survey processing and georectification will be undertaken using Geoslam Connect, and then collated in Cloud Compare software. Where possible point clouds from the scanner will be merged with point clouds from the photogrammetry within Agisoft Metashape. PointCab Origins will then be used to generate highly detailed orthoviews and cross-sections through the point cloud to create elevations, cross sections and plans. Digitisation of these outputs will be undertaken in Autocad and linked to the geodatabase.

The mobile laser scanner will be particularly pertinent for recording the elevations presently obscured by scaffolding. As the scanner is mobile, and generated from multiple locations it will prevent the formation of shadows from the scaffolding. The scaffolding will be digitally removed from the model to leave a representation of the elevation surface; however, it will leave the wooden boards up against the elevation surface.

4.4 Photogrammetry

A photogrammetric survey of the exteriors will be undertaken of the structures using a combination of drone photography and static cameras. The static photographic coverage will be generated using DSLR cameras with a very wide-angle lens. A 5m

photographic mast will provide a 3D texture model of the external elevations of the structures, with orthophotos to enhance mapping of ground-floor plans. Spatial control will be maintained using a series of ground control points established by traverse.

A drone survey coverage of the exteriors will be used, where possible, to provide photography for all of the buildings. A DJI mini 4 pro drone will be used, as it is very small, and specifically under 250g, and has full anti-collision sensors making it possible to get close to structure without risk of collision with or obstacles. Being light weight it does not necessitate normal legal constraints for drone operations.

Photogrammetric processing will be carried out using Agisoft Metashape to produce textured 3D models (.obj format) and georectified orthomosaics of floor plans and external elevations.

4.5 Site Description

A detailed description of the buildings will be carried out to Historic England Level 3 guidelines, utilising *pro-forma* sheets. Each discrete space will be examined, and the results of the assessment will be compiled to build up a story for the overall structures. This will provide an analytical interpretation of the relevant parts of the structures.

The written account will provide the understanding required in order to place the building in its historical, architectural and cultural context. The descriptive record will include the following accounts:

- The buildings' location, statutory designation, the date of the record
- An outline of the buildings form, function and development
- A general description of the buildings, which will include details of the plan, form and function. Allied to this, a detailed description of the materials used and development sequence and phasing, including any alterations, repair and rebuilding.
- An account of the past uses of the building, and any evidence of demolished structures.
- An account of the wider context within which the buildings are situated. For example, its relationship to places and buildings within the local area, as well as its historical relationship to the area.
- An appropriate description of those elements of the buildings that will be affected by the development.

4.6 Photography

A photographic archive will be generated for the buildings. This will include external views and will include general oblique and face on views of the elevations where possible, although given the proximity of the vegetation this may not be possible. A general photographic record will be generated for the internal detail.

The photography will be undertaken using DSLR of 24-megapixel resolution using a wide-angle lens. Given the difficulty in taking clean photographs from the ground, opportunity will also be taken to use a drone to produce general oblique photography of the structure.

The digital photography will be recorded in JPG, and Tiff formats. The latter will be incorporated with appropriate metadata including the location, site and photograph details. A metric scale or ranging rod, as appropriate, will be used for the photography, though where drones are used for remote photography then the use of scales will not be possible in these instances.

4.7 CAD Documentation

Digital outputs from the laser scans and photogrammetry will be used to generate detailed 3D point clouds from which will be extracted 2D profiles which will be output into a CAD system for the generation of scaled CAD plans and elevations, which will include:

- A general site plan showing the location of the Study Area and buildings.
- Ground, first, second and third floor plans of the buildings (where safe access is enabled) with annotations indicating features and fabric as described in the report.
- External elevations of the buildings; annotated to indicate the location of features and fabric as discussed in the report.
- Internal cross sections of the buildings show relative floor levels and ceilings. This will encompass A cross section through buildings 6, 7, 9 and 10, a cross section through buildings 5, 8 and 12, and a cross section through buildings 3 and 4.
- A photographic plan of the buildings showing the location and direction of accompanying photographs.

There is a caveat that survey will only be undertaken where this is safe access for photogrammetry or laser scanning. This means that where there are access restrictions then there may be gaps in the record.

4.8 Reporting, Dissemination

A fully illustrated Level 3 archaeological building recording report will be made available within 6 weeks of the completion of the on-site survey. In accordance with the Historic England guidance (2016), this will include as a minimum, the following:

- **Non-technical summary:** One-page summary outlining project background and circumstance, the principal reason for the work and when it was undertaken and by whom, its objectives, main results, and where appropriate, recommendations.
- **Introduction.** This will set out the circumstances of the project such as planning background and the reason for the work and will include the aims and specific research objectives reflected or reiterated in this methodology.

- **Historical background.** A summary of the history and background of the buildings. This will incorporate the existing documentary work by Turley Heritage.
- **Survey methodology.** The methods used. This will include the details of any variation to the agreed methodology and the reasons for such.
- **Results of Survey** – presenting graphic results, descriptive assessment and photographic archive
- **Building Descriptions** – descriptions of each of the individual buildings within the block. This would incorporate analysis of the building's origins, development, and use over time, based on historical and evidence-based analysis and discussion of the evidence supporting the analysis.
- **Conclusions and Recommendations:** this will put the results of the programme in context and will assess the proposed development and further work.
- **Bibliography:** A list of all sources used. The final destination of the archive (records and finds) will be noted in the report along with the site code assigned by the relevant project archive repository.
- **Drawings:** Illustrations and location plans.

Digital outputs will comprise:

- Photographs of the site (JPEG or TIF format)
- An orthorectified image (a mosaic of all images to provide a spatially accurate nadir perspective) (in GeoTiff format).
- All floor plans of the site
- Scaled photogrammetric external elevations of the structures with measured points of reference from datum.
- Scaled internal cross-sections of structures from laser scan surveys.

4.9 Archiving

The proposed archaeological survey will not entail any capture of artefacts and there will not be a requirement to archive finds material. A digital copy of the report will be deposited with GMAAS, and a copy of the report and digital drawings will be deposited with the Archaeology Data Service (ADS).

4.10 Health and Safety

Full regard will, of course, be given to all Health and Safety considerations. The Zenith Built Heritage Health and Safety plan conforms to all CDM (2015) regulations, CIfA best practice standards, and the Fame (Federation of Archaeological Managers and Employees) guidance. Risk assessments are undertaken as a matter of course for all projects, and will anticipate the potential hazards arising from the project.

Some parts of the building will be unsafe to access, particularly where there are unsafe floors and a risk of collapse. In these instances, there survey will be restricted and may result in omissions to the final results.

The building can be unsafe during strong winds and heavy rains and in these instances survey will be suspended.

4.11 Insurance

The insurance in respect of claims for personal injury to or the death of any person under a contract of service with the Unit and arising in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. For all other claims to cover the liability of ZBH in respect of personal injury or damage to property by negligence of any of its employees there applies the insurance cover of £10m for any one occurrence or series of occurrences arising out of one event.

5 BIBLIOGRAPHY

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