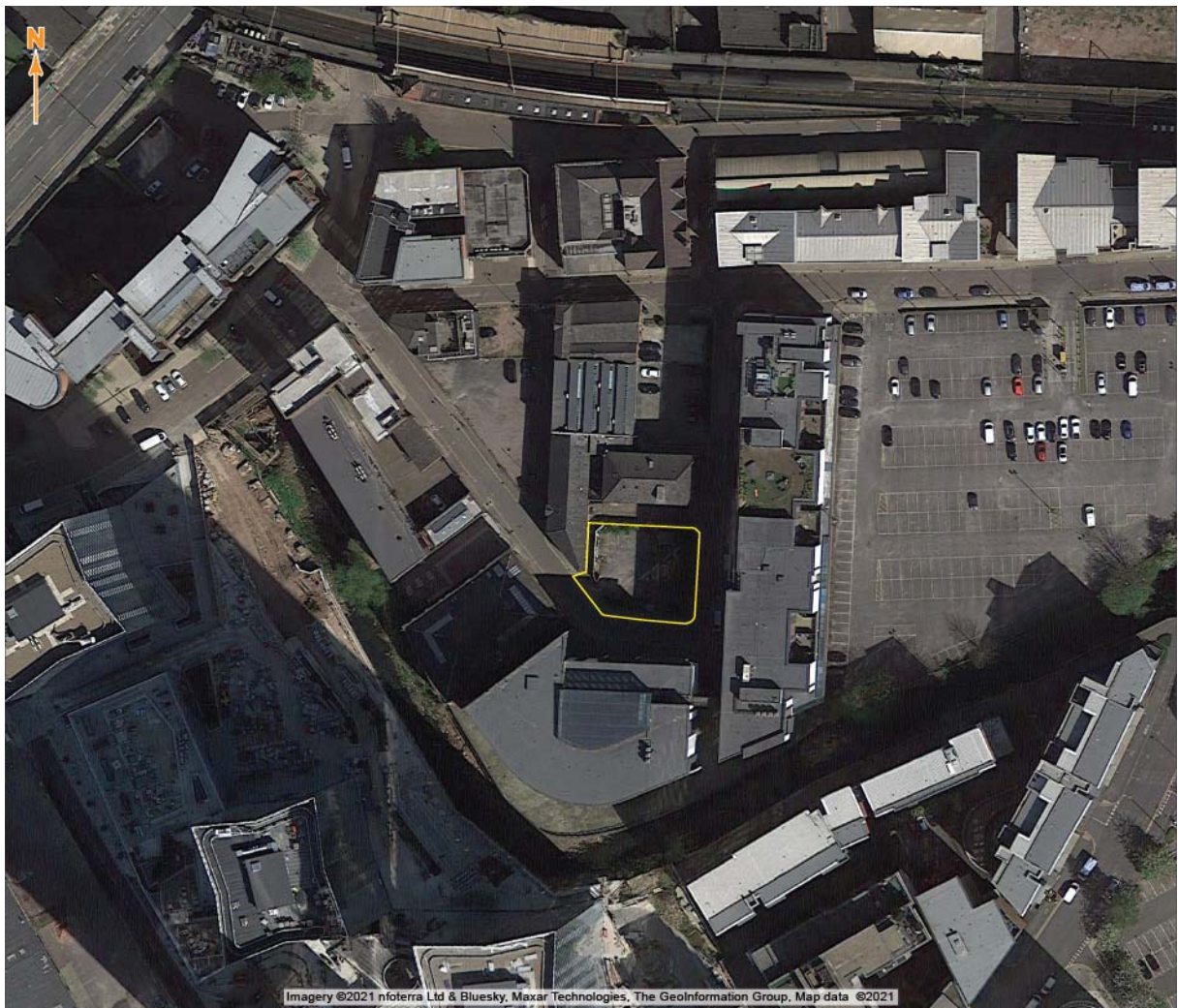


Land at Alpha Place, Jordan Street, Manchester, M15 4PP (120113/FO/2018)



Written Scheme of Investigation for an Archaeological Evaluation

**Document No: 3565.R01a
August 2021**

Nexus Heritage Controlled Document – Commercial-in-Confidence

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Note on Transcriptions of Historic Maps

Historical mapping, both Ordnance Survey (OS) and individual cartographer's work relies on the accuracy of the data input into it and the projection used to produce a two dimensional image from three dimensional data. Techniques of survey have evolved and improved over the centuries but pre-OS maps are of widely varying quality and their accuracy is limited by the technology used to create them.

Creating an overlay of historic mapping (including 1st and 2nd edition OS Maps) and modern OS data can never be completely accurate. Creating a good approximation relies on using digital technologies to estimate and extrapolate the projection, orientation and scale of original maps by correlating known points on the modern OS grid with the historic mapping. This georeferencing 'distorts' the historic mapping to fit the modern grid using a set of known points chosen by the cartographer/illustrator.

Modern digitally produced OS mapping has a stated accuracy tolerance. The most detailed mapping at 1:1,250 (urban) will have a relative error of $\pm 0.5\text{m}$ up to 60m. On the ground that equates to an error between two points which are 60m apart on the ground. 95% of the time the scaled measurement would be between 59.1m and 60.9m (paraphrased from <https://www.gov.uk/government/publications/land-registry-plans-the-basis-of-land-registryapplications/land-registry-plans-the-basis-of-land-registry-plans-practice-guide-40-supplement-1>.)

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INTRODUCTION

Fraser Morgan (hereafter the Client) has secured full planning permission (ref. 120113/FO/2018) from Manchester City Council (hereafter the Council) for:

Erection of a seven storey apart-hotel (use class C1), comprising 59 rooms on the upper floors, with reception area and ancillary residents' lounge and breakfast area on the ground floor.

at Land at Alpha Place, Jordan Street, Manchester, M15 4PP (hereafter the Site).

A condition (no. 4) has been applied to the permission requiring the implementation of a programme of archaeological works.

4) No development shall take place until the applicant or their agents or successors in title has secured the implementation of a programme of archaeological works. The works are to be undertaken in accordance with a Written Scheme of Investigation (WSI) submitted to and approved in writing by Manchester Planning Authority.

The WSI shall cover the following:

a. A phased programme and methodology of investigation and recording to include: - an archaeological evaluation by machine assisted trial trenching - open area excavation (where justified by the evaluation results);

b. A programme for post investigation assessment to include: - production of a final report on the significance of the archaeological and historical interest represented;

c. Deposition of the final report with the Greater Manchester Historic Environment Record;

d. Dissemination of the results commensurate with their significance;

e. Provision for archive deposition of the report and records of the site investigation;

f. Nomination of a competent person or persons/organisation to undertake the works set out within the approved WSI.

Reason - To investigate the archaeological interest of the site and record and preserve any remains of archaeological interest, pursuant to saved policy DC20.1 of the Unitary Development Plan for the City of Manchester and guidance in Section 16 of the National Planning Policy Framework.

The Client has commissioned Nexus Heritage to prepare a WSI sufficient in scope to address item a. of condition no. 4 and those relevant elements of items b, c, d, e and f.

Discussions have been held with the Senior Planning Archaeologist at GMAAS (Mr. B. Dyson) regarding the aims and details of an evaluation strategy, which are contained within this document.

This draft version of this document is offered for consideration to the Council, via GMAAS for verification with reference to condition no. 4, best practice and the relevant provisions in NPPF. Observations on the draft document made by the Council and GMAAS will be taken into account during preparation of the final version.

LOCATION AND SITE INFORMATION

The Site is located in the southwest of Manchester City Centre within the Deansgate area (Fig.1) at national grid reference SJ 83463 97400.

The Site extends to c. 0.045 ha, is unoccupied and currently boarded up. It is surfaced with gravel after a previous building was demolished several years ago, but a small structure on a rectangular footprint is thought to be present towards the Site's north-eastern corner. The Site is bounded to the north by Alpha Place, beyond which lies office buildings and a car park. Office buildings also border the site to the west, Commercial Street borders the site to the south and west, with Jordan Street bordering the site to the east.

The Site (Fig. 2) as mapped in 2017 was predominantly flat with a slight slope down towards the southwest. The highest level at approximately 29.35m AOD is located in the northeast of the site and the lowest point at approximately 28.74m AOD is located in the southwest.

The spatial attribute information for Site is provided in the table below and relates to the spatial data as illustrated in Fig. 2 below.

Field Name	Data
Project No.	3523
Project Name	Land at Alpha Place, Jordan Street, Manchester, M15 4PP (120113/FO/2018) - Written Scheme of Investigation for an Archaeological Evaluation
Organisation	Nexus Heritage
Date	August 2021
Digitisation Source	Formby Surveys
Digitisation Scale	Plotted scale = 1:100 at A1

The underlying bedrock is characterised by the British Geological Survey as Chester Formation Sandstone, a sedimentary bedrock formed approximately 247 to 250 million years ago in the Triassic Period. The superficial deposits are characterised as Glaciofluvial Sheet Deposits, Devensian sand and gravel formed up to 2 million years ago in the Quaternary Period in a local environment previously dominated by ice age conditions.



Fig. 1: Site Location Map (reproduced from Ordnance Survey mapping with the permission of Ordnance Survey on behalf of HMSO © Crown Copyright Nexus Heritage-SRI Licence No. 100048549)

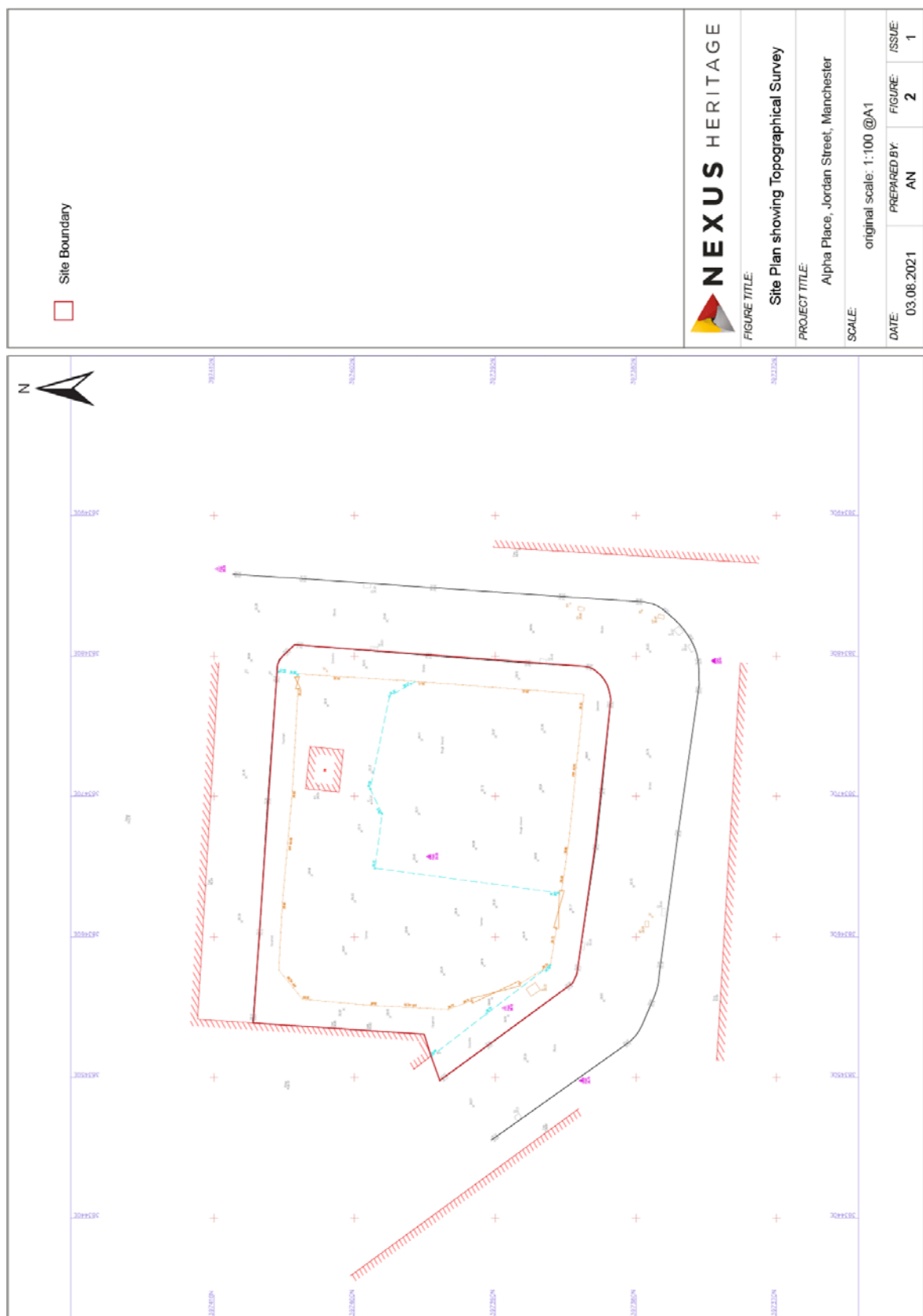


Fig. 2: Site Plan (reproduced from Formby Surveys Drawing no. 9808_T:100:1:1, 2017)

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

An archaeological desk-based assessment for the Site was prepared in 2008 (Castlering Archaeology 2008).

In summary the assessment charts the known development and land-use of the Site and acknowledges that the Site was within a zone of late 18th and early 19th century development associated with the construction and operation of the nearby Bridgewater Canal.

The first buildings recorded on the Site appear to date to the late 18th century. Green's map of 1794 shows that in the last decade of the 18th century a building stood within the Site. It is depicted against the Site's southern boundary, between what was to become Omega Street and Commercial Street. Its plan form is unusual, appearing as two intersecting circles. There are also enclosure walls on the Site and what appears to be a north-south hedge/tree boundary the alignment of which was later to become Jordan Street. Johnson's map of 1819 lacks sufficient detail to identify the building, but it does appear to suggest that no other part was developed until the mid-19th century. The Ordnance Survey (OS) map of 1848 shows that the entire Site had been totally developed with back-to-back houses organised fronting the south side of Alpha Street, both sides of Omega Street and fronting onto Commercial Street on its southern margin.

There are no known prehistoric sites within the Site and the potential for prehistoric remains is considered to be very low/negligible. The potential for Roman, early medieval and medieval remains to survive *in-situ* within the Site is similarly considered to be equally low/negligible, reflecting the absence or low-intensity of known archaeological remains from this period in the vicinity and the intensive development of the Site from the mid-19th century onwards. The greatest potential for buried archaeological remains derives from the construction and use of structures at the Site during the late 18th century, the 19th century and the 20th century.

Some of the potential archaeological remains are related to domestic premises. Any such remains would be categorised as non-designated archaeological assets. The archaeology of the domestic arrangements and living conditions of Manchester during the 19th century is a recognised research priority for North West England (Brennand 2007, 144-145) and the opportunities provided at the Site to address the research topics identified in the first decade of the 21st century remain valid and can be augmented by the Northwest Regional Research Framework (Updated Research Framework). The opportunities are expanded upon below in the examination of the project's aim and objectives.

TERMS AND CONDITIONS OF APPOINTMENT AND PERFORMANCE STANDARDS

Nexus Heritage acts as Archaeological Consultant to the Client. The evaluation will be undertaken by a team of suitably qualified and experienced archaeological practitioners.

Nexus Heritage operates in accordance with:

- The Chartered Institute for Archaeologist's *Code of Conduct* (2019 edition).
- The Chartered Institute for Archaeologist's *Regulation for Professional Conduct* (2019 edition).
- The Chartered Institute for Archaeologist's *Standard and Guidance for Archaeological Evaluation* (2020 edition).
- The Chartered Institute for Archaeologist's *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (2020 edition).
- The Chartered Institute for Archaeologist's *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (2020 edition)

AIMS AND OBJECTIVES

The broad aims of the archaeological evaluation are:

- to enhance knowledge and understanding of the historic environment of Manchester in particular, and north-western England in general;
- to effectively and rapidly disseminate the results of the project, and to archive them, enabling the project findings to be widely and readily accessed by professional and non-professional audiences alike
- to ensure that professional expertise and experience is advanced by the continual improvement of archaeological method and practice

The detailed objectives of the archaeological evaluation are:

- to make a full and proper record of any archaeological structures, deposits, features, artefacts and ecofacts within the relevant areas of the Site, permitting a reconstruction of the Site's history and formation processes. To recover a sample of artefact and ecofact samples from deposits of potential
- To analyse the Site records, artefacts and ecofacts to produce a report on the archaeological potential of the site, identify the research implications of the Site with reference to the regional research agenda and recent work in Manchester in particular and the Greater Manchester area/north-west England in general.

The archaeological works are to be implemented with reference to a research design which reflects the ambitions of the North-West England Regional Research Agenda, specifically relating the Industrial and Modern periods (Brennand 2007).

The specific aims of the evaluation are to investigate:

- The uncharacterised building at the Site dating to the late 18th century
- The mid-19th century back-to-back dwellings along Omega Street, Alpha Place and Commercial Street;

Some detailed objectives to address include:

- What is the evidence for the date of construction of the structures?
- What can the Site of the structures tell us about settlement pattern and settlement change within Manchester from the late 18th century into the 20th century?
- What can the Site contribute to an understanding of the relationship of the urban settlement pattern during the 18th and 19th centuries?
- Can the archaeology of the Site add to regressive projections of earlier settlement patterns or land use?
- Does the archaeology of the Site have anything to say about (voluntary?/compulsory?) abandonment of urban dwellings in the period after WW2?
- Does the Site have any potential to elicit reasons for abandonment?
- Is there evidence at the Site for changes in consumption patterns linked to the social status of the occupants across the centuries?

In addition the Northwest Regional Research Framework (Updated Research Framework) has been developed as part of a national strategy to create a series of self-sustaining regional

historic environment research frameworks for England. It builds on the original North West Region Archaeological Research Framework (Brennand 2006 and 2007). The Industrial and 20th Century Period benefits from a series of refreshed research questions <https://researchframeworks.org/nwrf/industrial/> focused on a number of period-related themes which the Site may be able to address.

The Environment:

- What evidence is there for the impact of Industrialisation on health, diet and natural resources?

This question can be addressed by recovering palaeoenvironmental data from cess pits and other suitable cut features to inform on diet, health, natural resource use and consumption patterns

The Urban Landscape:

- How did industrial period towns affect the pre-existing historic landscape?

Test for evidence of any impact the historic landscape had on the development of the Site from at least the late 18th century

- How can an understanding of the impact of industrialisation on the working class and their living conditions be taken forward?

Opportunities to be taken for archaeological investigation of urban cellars to examine evidence for cellar dwellings and workshops in working class houses and areas of now undeveloped and cleared former working class areas regarded as slums.

- What evidence do we have for the improvement of urban public health during this period?

Opportunities to be taken for archaeological investigation of provision for sewerage, drainage, drinking water, sanitation in urban dwellings.

ARCHAEOLOGICAL EVALUATION

The Client will be responsible for securing information on known services within the excavation areas and providing such information to the archaeological contractor. The Client will undertake a scheduled works enquiry with The National Grid Electricity and Gas Enquiry System (EAGLES) website prior to the commencement of archaeological work on site. The location and extent of all intrusive archaeological excavations would be advised utilising the information from the enquiry and follow the requirements of the HSE Guidance Notes HSG47 - *'Avoiding Danger from Underground Services'* and GS6 - *'Avoidance of danger from overhead electric power lines'*.

Any area that requires ground penetration will be CAT scanned by the archaeological contractor using trained staff following a Safe System of Work for Avoiding Buried Services using a radio detection CAT³ in avoidance mode. All signals will be marked on the ground and investigated to determine location, direction and, where possible, depth of service and areas for archaeological investigation will be modified as appropriate. All services will be treated as live.

The archaeological contractor will take all reasonable precautions to avoid damage to services. Where necessary the Client will arrange for decommission/disconnection of live services.

Prior to the archaeological works commencing the Client will arrange for demolition of the brick-built structure in the north-eastern corner of the Site and removal of demolition debris to a non-hazardous location within the Site that will not compromise or otherwise adversely affect the operation of the archaeological works.

The rationale underpinning the evaluative archaeological works at the Site involves the recovery of archaeological information from the excavation of x2 areas located as shown on Figures 3, 4, 5 and 6. During the fieldworks the archaeological contractor will keep in mind the updated Research Framework to ensure that if additional research avenues come to the fore during on-Site investigation and recording they can be tied back to the framework.

The appearance of the Site in the late 18th century is highlighted by Green's *Plan of Manchester and Salford*, 1794 and Area 1 targets the late 18th century building (Fig. 3).

The appearance of the Site in the mid-19th century is highlighted by the *Ordnance Survey Five foot to one mile (1:1,056) Town Plan of Manchester*, c. 1849 and Area 1 targets the back-to-back housing between Alpha Place and Commercial Street and Area 2 targets the back-to-back housing between Alpha Place and Omega Street (Fig. 4). An extract of Adshead's *Twenty Four illustrated maps of the Township of Manchester, 1850-1851* accurately depicts the Site only a couple of years after the publication of the OS map (Fig. 5).

Figure 6 shows the archaeological area Overlaid onto the current Site Plan.

The broad characteristics of the number, size, orientation and distribution of the evaluation area are considered to be appropriate and have been agreed with GMAAS.

The evaluation areas have been designed to determine feature presence/absence, by means of a strip-map-and record process with a contingent facility designed for Site characterisation should features be present, the characteristics of which are insufficiently resolved within the initial area provision.

Contingent areas will be optional, upon the discovery of archaeological artefacts, deposits, features or structures the characteristics of which can only be sufficiently determined upon further spatial investigation. The contingent excavation is limited to a further 50m² of area or reasonable additional depth.

Groundwater may be present at the Site and localised pumping or de-watering may be required in order to expose the deposits which may contain archaeological evidence. The control of water during the excavation works will be the responsibility of the archaeological contractor.

The archaeological Areas will be opened using a mechanical excavator equipped with a hydraulic pecker and wide toothless blade under the constant direction of the archaeologist and any material will be removed in spits of no more than 0.3m in thickness. After the Areas have been opened, excavation will be by hand. Surfaces will be cleaned and prepared as appropriate in order to allow visual inspection for the presence/absence of archaeological remains, deposits, features and structures. Upon exposure of the first horizon exhibiting archaeological artefacts, deposits, features or structures the use of the mechanical excavator will cease. Under no circumstances will the mechanical excavator be used to excavate archaeological deposits features or structures, unless extraordinary circumstances apply associated with large-scale homogenous, archaeologically sterile and/or modern deposits in which case dispensation may be provided to permit selective and controlled excavation with a mechanical excavator. Every effort will be made to ensure that both Areas will conform to the stated dimensions at their base (subject to the presence of sub-surface services and any other insurmountable obstructions) shoring/stepping will be employed as appropriate.

Surviving structural elements such as stone/brick walls, culverts, flues, fireplaces, floors etc. will be exposed and cleaned.

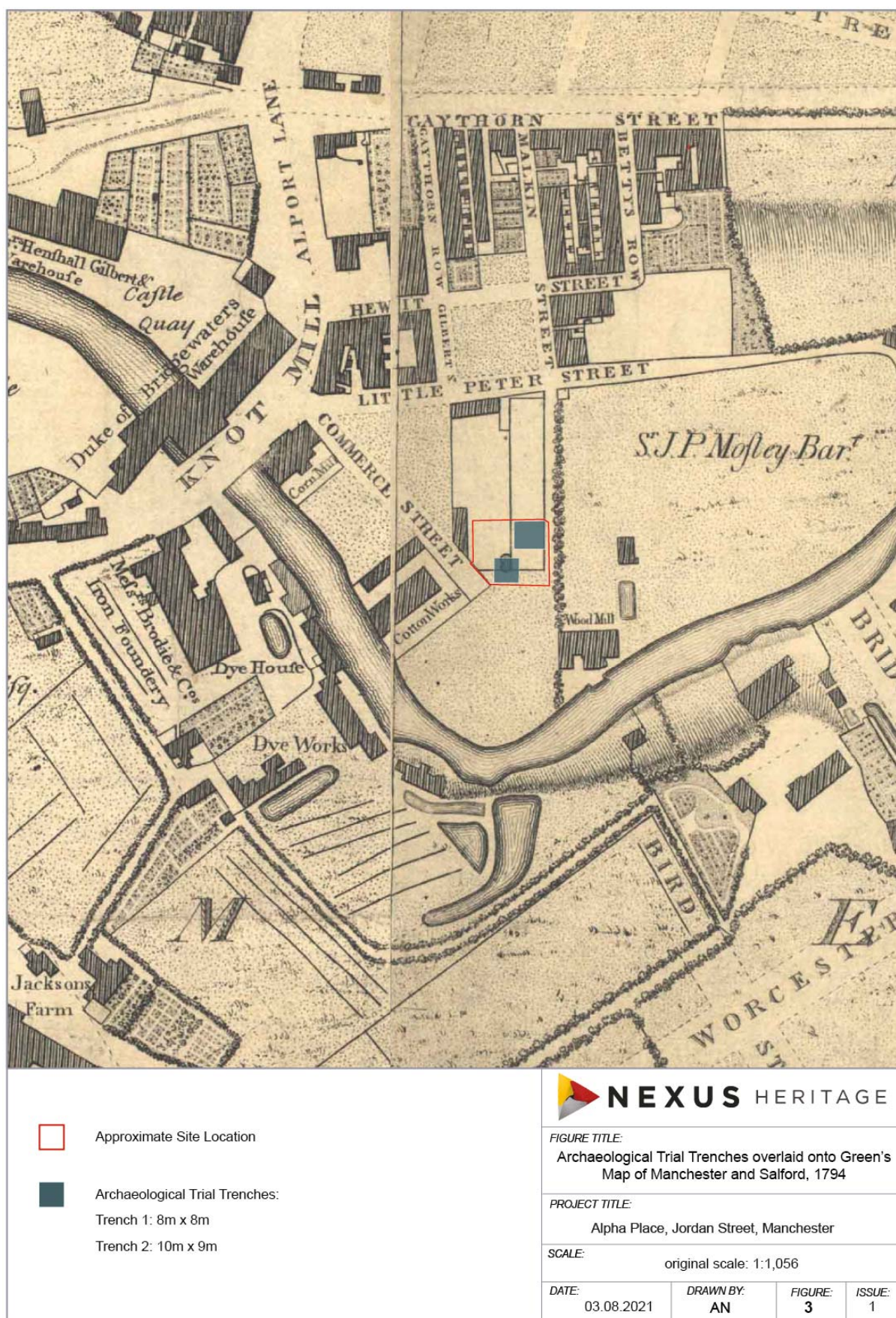


Fig. 3: Archaeological Areas Overlaid onto Green's Plan of Manchester and Salford, 1794

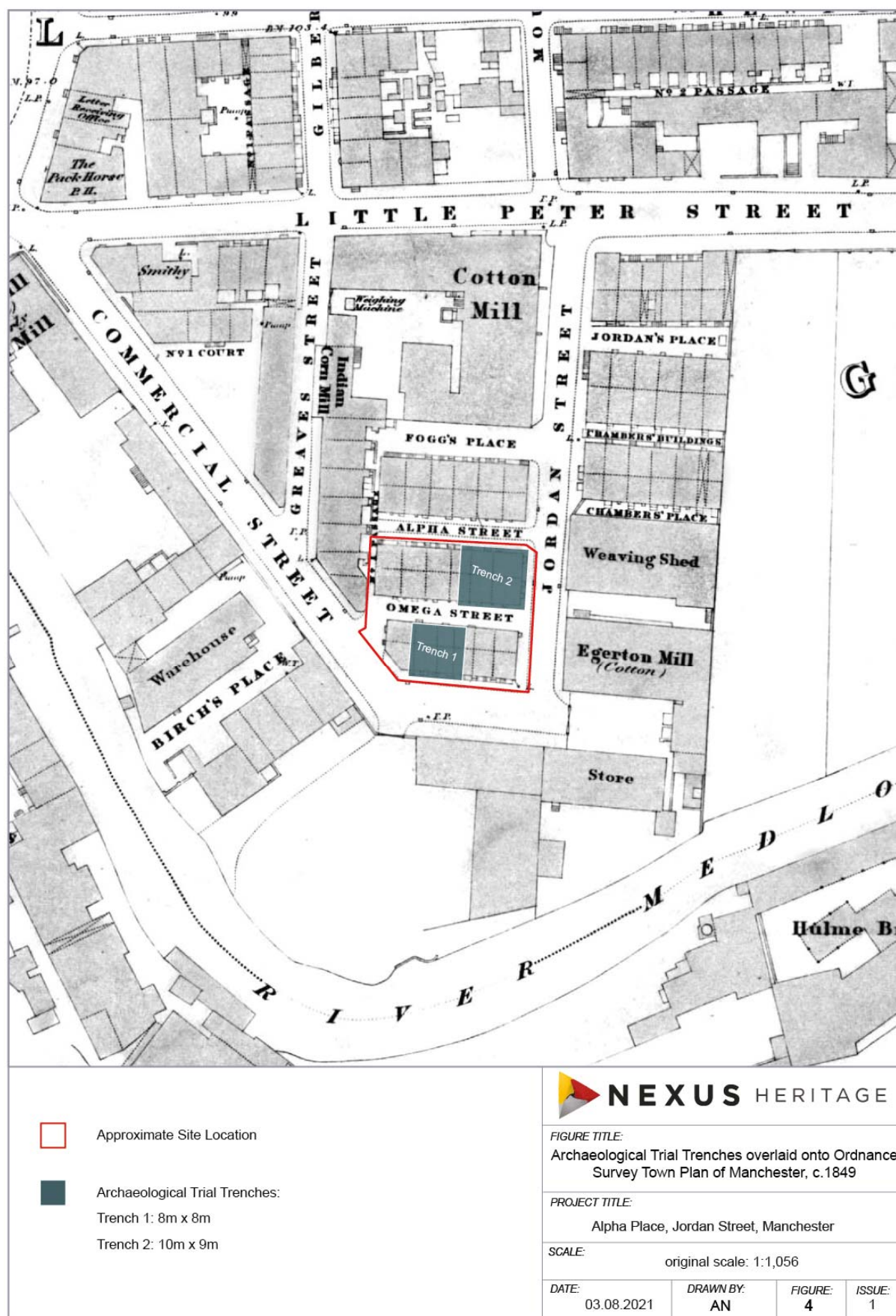
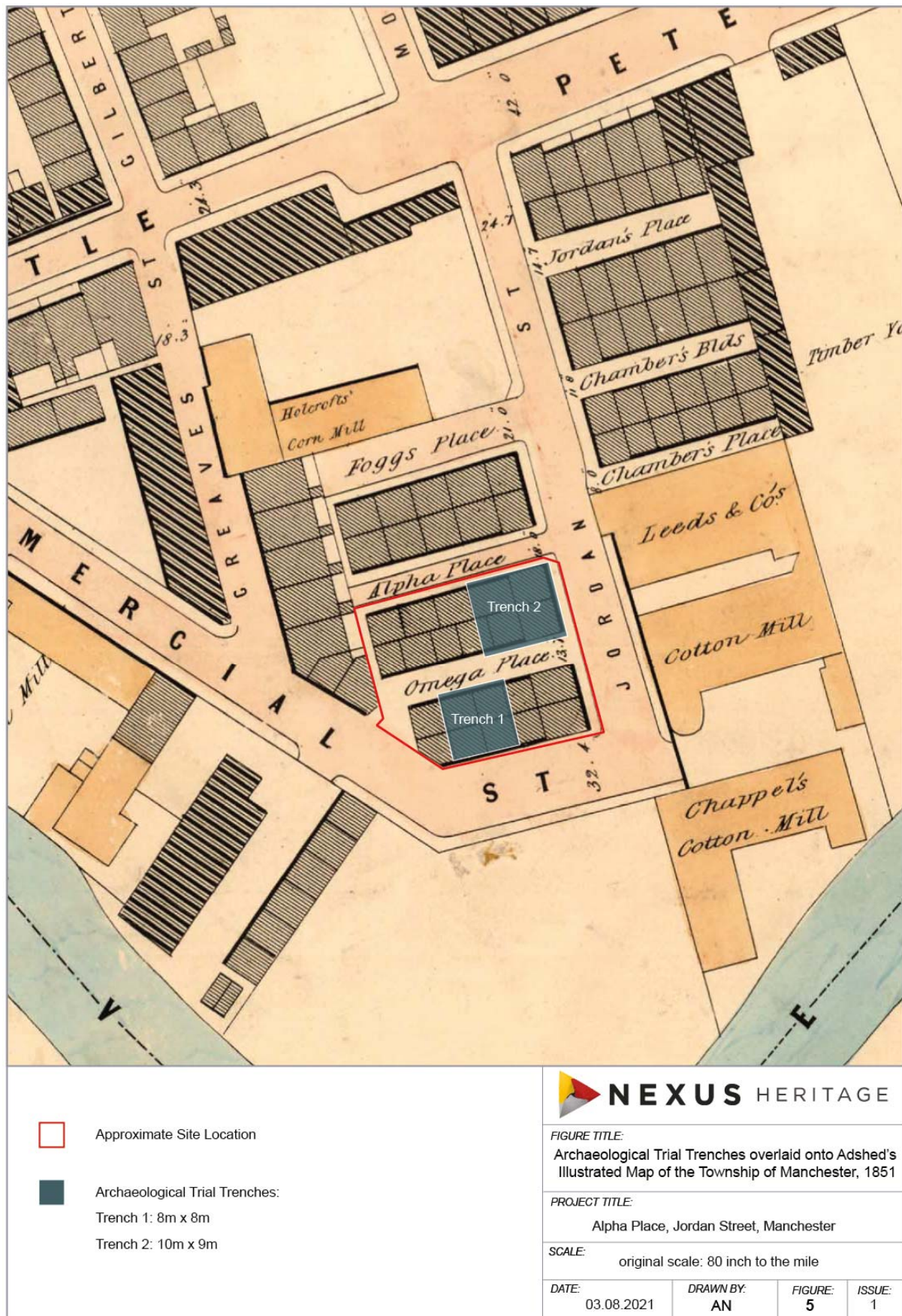
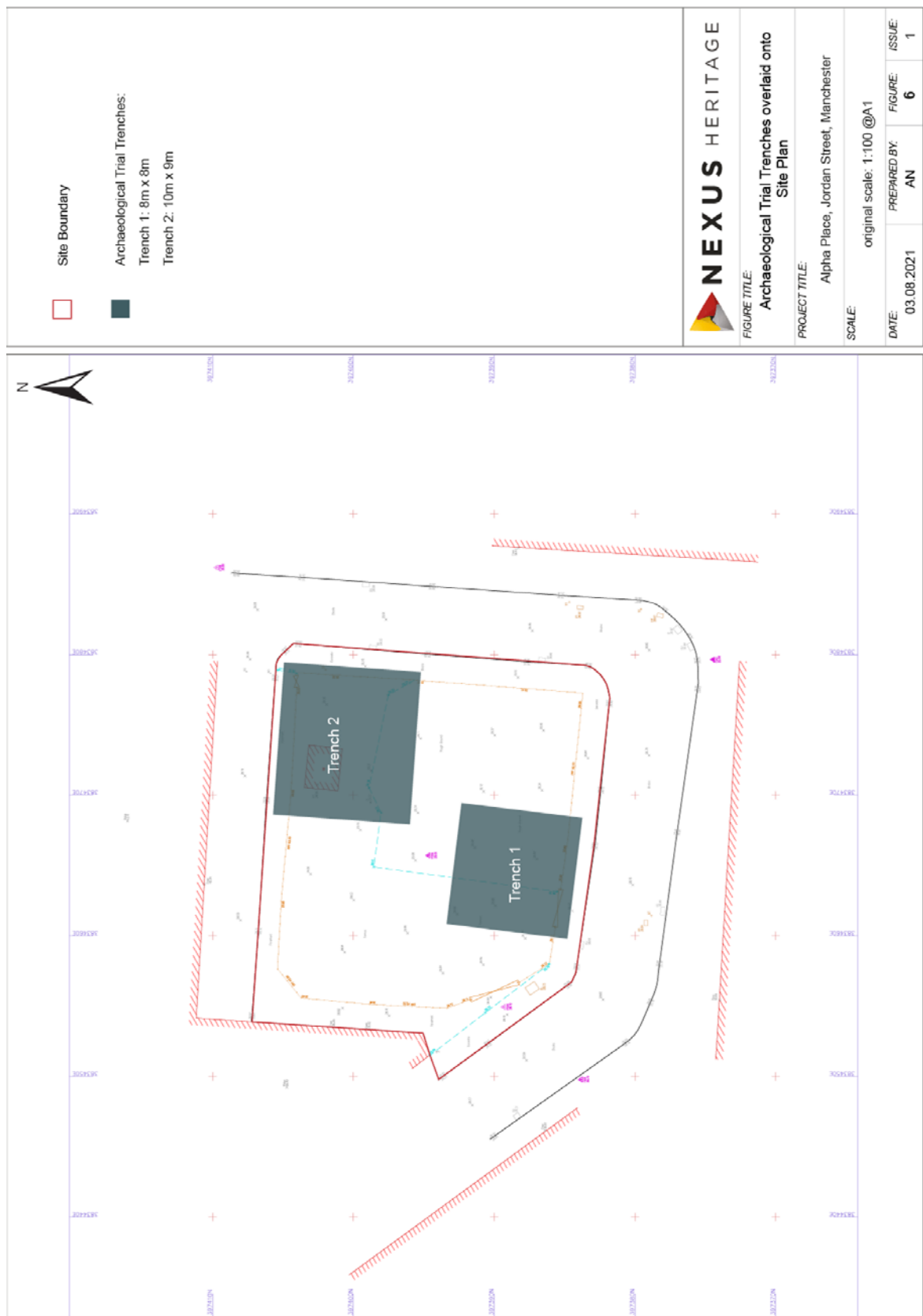


Fig. 4: Archaeological Areas Overlaid onto the Ordnance Survey Five foot to one mile (1:1,056) Town Plan of Manchester, c. 1849.





The archaeological works will be surveyed with respect to the nearest Ordnance Survey datum point and to the Ordnance Survey National Grid. The Areas, and any artefacts deposits, features and structures within them will be accurately located on a site plan prepared at an appropriate scale.

Archaeological artefacts, deposits, features and structures will be excavated manually using best-practice techniques and in a controlled and stratigraphic manner sufficient to address the aims and objectives of the project. An appropriate level of sample excavation in order to determine and demonstrate the presence/absence of archaeological remains and their state of preservation adequate to provide a site-wide deposit model will be undertaken. With this in mind it may not be necessary to excavate the complete stratigraphic sequence to geologically lain deposits but the inter-relationships between archaeological deposits, features and structures will be investigated sufficiently and the complete stratigraphic sequence to geologically lain deposits will be investigated where practicable. The cessation of excavation in any Area prior to the establishment of the level at which geologically lain material survives may be agreed with the GMAAS during the course of the field work.

The method of recording will adopt best-practice techniques and the stratigraphy of each Area will be recorded in written descriptions even where no archaeological deposits have been identified. The drawn record will comprise plans of the site at an appropriate scale, e.g. Area plans at scale 1:20 and sections at scale 1:10. Electronic hardware and software may be used to prepare site drawings and context data as appropriate.

All artefacts discovered will be retained for processing and analysis except for unstratified items dating to the twentieth or twenty-first centuries AD which will be recorded by material type, form, identification and weight, and discarded, excepting significant and coherent groups of 20th century material associated with WW1, WW2 or the Cold War where consideration will be given to their retention following assessment by a relevant specialist. All finds will be assessed in order to recover information that will contribute to an understanding of their date and function. All retained finds will be stabilised and packaged in accordance with best practice and current ClfA standards and guidance, and the requirements of the organisation nominated to receive the archive.

The terms of the *Treasure Act* (1996) will be followed with regard to any items discovered to which the Act would apply. Such items will be removed to a safe place and reported to the local coroner as required. Where removal cannot be effected on the day of discovery suitable security measures will be taken to protect the items from unlawful removal.

Animal bones will be treated in line with the Historic England document *Animal Bones and Archaeology - Recovery to Archive* (2019).

The aims, objectives and expectation of a palaeoenvironmental strategy will parallel the overarching goals for the project, and proceed in accordance with the guidance provided in *Geoarchaeology - Using earth sciences to understand the archaeological record* (Historic England, 2015a).

Reservoirs of palaeo-environmental data, including alluvial sequences and palaeo-channels, which may be of intrinsic interest, will be identified and sampled on site subject to health and safety considerations and where contamination does not prohibit retrieval. Bulk samples will be taken for wet-sieving with flotation to recover plant macro fossils, pollen, insects, molluscs, fish/animal bone, charred cereal remains, seeds, small bones or other small remains. Due to the low density of palaeoenvironmental remains expected from prehistoric

contexts samples will be of around 40-60 litres. A range of samples will be taken from contexts with the potential to be datable and to contain remains to represent all feature types, areas and phases of the site. Target contexts will include appropriate stratified deposits within pits, ditch or gully terminals, refuse/waste deposits in ditches, domestic contexts, and burnt features. Features of other periods will be sampled as appropriate if encountered and other particular samples such as spot samples from intense concentrations of bones or seeds are found will be taken. Middens, if present, would require a specific investigation sampling strategy, possible on a grid pattern in order to recover remains systematically. Waterlogged: deeper features, if present, will be investigated for the preservation of organic remains including plant macrofossils, pollen and possibly insect remains, which may provide evidence of the environment or land use. If buried soils are encountered sampling for micromorphological/phosphate analysis by taking monoliths with sub-samples for soil chemistry composition will be considered and budgeted for.

Soil and other samples from stratified deposits will be taken for assessment of archaeo-industrial remains where appropriate (including slag, furnace lining, hammerscale, hearth/forge residues and other metallurgical residues). Samples will be taken from appropriate deposits where secure stratigraphic relationships are present, subject to Health and Safety considerations and where contamination does not prohibit retrieval. Assessment will be conducted by means of coarse sieving, floatation and other techniques as appropriate. All soil samples will be tested for the presence of hammerscale using magnets.

Recommendations for further analysis (including the sub-sampling volumes) will be made in accordance with the Historic England guidance (2015a). It is expected that the scientific sampling strategies will evolve subject to the requirements of the project's aims and objectives. Any deviation from the sampling procedures outlined in the above guidance documents will be discussed and agreed with GMAAS in advance of implementation.

Upon discovery human remains will be left *in situ* and protected. Nexus Heritage will notify the Client and the relevant authorities of the presence of human remains at the earliest opportunity. If removal is necessary and mandated by the relevant regulatory authorities the remains will be excavated archaeologically in accordance with the English Heritage document *Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England* (Second Edition 2017) and any conditions imposed by the Ministry of Justice and/or the Local Planning Authority Environmental Health Directorate. Any assessment and reporting work on recovered human remains will be undertaken in accordance with the document *Updated Guidelines to the Standards for Recording Human Remains* (CIfA 2017) and the Historic England document *The Role of the Human Osteologist in an Archaeological Fieldwork Project* (2018a).

In the event of the discovery of organic residues they will be treated in line with the document *Organic Residue Analysis and Archaeology – Guidelines for Best Practice* (Historic England 2017).

The photographic record will be secured by photographs taken using a digital camera of minimum 16mb resolution. The images would be taken as RAW image files and converted to 8-bit TIFFs and high and low resolution JPEGs. An archive numbering system for the photographs originating with ****_001 will be employed.

Contingency will be allocated for the recovery and processing of sufficient C¹⁴ and/or archaeo-magnetic samples and/or optically-stimulated luminescence samples and or

dendrochronological samples in order to fulfil the aims and objectives of the project. In the event that discoveries during excavation warrant refinement of the overall scientific dating strategy a sampling strategy will be agreed with a suitably qualified and experienced dating specialist. The scientific dating strategies will follow the relevant English Heritage/Historic England guidance (see below) and the advice and information at <https://www.bradford.ac.uk/archaeomagnetism/>.

Every effort will be made by the Client, Nexus Heritage and the appointed archaeological contractor to allow public engagement with the archaeological resource. Nexus Heritage recognises that opportunities for members of the public to participate in archaeological fieldwork are a useful tool for training, engaging interest and increasing an appreciation of the historic environment. Therefore, with reference to the ClfA's policy statement on the use of volunteers (ClfA 2016), volunteers can be involved in archaeological projects managed by Nexus Heritage. However, due to operational constraints, and other factors it may not be possible to allow members of the public to participate in the on-site archaeological works. In order to manage public participation appropriately it is proposed that Manchester Region Industrial Archaeology Society (MRIAS) and the Archaeological Society, University of Manchester (UoM ArchSoc) will be advised of the archaeological attendances and should members of the Societies wish to take part in the archaeological works then consideration will be given to any request received. Where feasible the works and their results will also be transmitted to the public by the use of outreach strategies such as newspaper and radio interviews, lectures to amenity societies and if circumstances allow and adequate health and safety measures deployed, an open day towards the end of the archaeological works. Upon Client agreement information for the public may be made available during the archaeological work to explain why it is happening. Any such notices would be A3 size with a minimum 16 point font. Nexus Heritage will manage, on behalf of the Client, all matters pertaining to publicity and outreach arising from the archaeological works and for any public education/outreach events or matters, as appropriate.

The appointed archaeological contractor will be responsible for securing the site during the excavation works. The appointed archaeological contractor will be responsible for maintaining and locking any fencing/gates etc. around the archaeological excavations within the site in accordance with health and safety provisions. Any damage to or breakage of the fencing/security provisions will be reported by the appointed archaeological contractor to Nexus Heritage as soon as possible after discovery.

At or towards the conclusion of the archaeological excavation a Site meeting will be convened at which the works can be inspected with a view to confirming completion of the archaeological investigations. Upon such confirmation the areas can be backfilled (if the Client requires) in accordance with the ongoing obligations related to condition no. 4.

The archaeological contractor will assume that all excavations are to be backfilled with the material excavated.

At the conclusion of the fieldwork, a brief summary of the results will be prepared after the recovered artefacts have been cleaned, identified, labelled, assessed and dated.

After the completion of the evaluative archaeological fieldwork a report will be prepared. The report will, as appropriate, contain (but not necessarily be restricted to) the following:

A non-technical summary

A table of contents

An introduction with acknowledgements, including a list of all those involved in the project and the location and description of the site

A statement of the project aims and objectives

An account of the project methodology undertaken, with an assessment of the same

A factual summary of the history, development and use of the site

A summary description of the investigation results including any archaeologically significant features/deposits identified within the proposed development site. A brief description of the stratigraphy of each Area will be given, even where no archaeological features or deposits are identified

A discussion of the location, nature, extent, date, quality, condition, and significance of any archaeological deposits/features uncovered, together with a discussion of their relationship with known archaeological features and/or historic buildings in the vicinity

A general site plan indicating the position and size of the Areas and the locations of archaeological deposits identified and recorded during the watching brief

Area plans at appropriate scales. Each area in which archaeological remains were discovered will be presented in the report with at least one plan (scale 1:50 or 1:20) and section (scale 1:20 or 1:10) as well as appropriate photographs. All plans and sections will be related to the Ordnance Survey datum levels and to the National Grid

Other maps, plans, drawings, stratigraphic matrices and photographs as appropriate

Summary assessment reports on the artefact, bio-archaeological, dating and other assessments/analyses

Appendices to the report will include artefact catalogues, reports on assessments/analyses and an index to the project archive, a statement on its location/proposed repository and an OASIS report.

Reference will be made to the updated Research Framework during report preparation, to ensure that if additional research avenues come to the fore during consideration of the results they can be tied back to the framework.

One digital .PDF copy of a draft version of the report will be made available by Nexus Heritage to the Client and GMAAS for review for comment within three weeks of the completion of the fieldwork.

Nexus Heritage will take into account any observations on the content of the draft report made by the Client and GMAAS during preparation of the final version of the report.

Should the delivery of the report depend on the incorporation of reports arising from specialist and/or laboratory work then a revised timetable for delivery of the draft report may be agreed upon conclusion of the fieldwork stage.

Report copies in the appropriate numbers, formats and media (e.g. digital .PDF/A format generated using Adobe Acrobat) of the final report will be prepared and submitted to the NMR, and the GMHER.

COPYRIGHT

Copyright to any commissioned reports and any other project documents prepared by the appointed service providers will be retained by the appointed service providers under the Copyright, Designs and Patents Act of 1988; excepting that an exclusive licence will be provided to the Client, the Council, and GMAAS for the use of such documents by the Client, the Council, and the GMAAS in all matters directly relating to the project.

The copyright of this document remains with Nexus Heritage, subject to the same exclusive licence.

CONFIDENTIALITY

Nexus Heritage will treat as confidential all information obtained directly or indirectly in connection with the archaeological works and will not, without the prior consent of the Client, disclose any information relating to the project or publicise the project in any way. The Client will manage all matters pertaining to publicity arising from the archaeological works and for any public education/outreach events or matters, as appropriate.

HEALTH AND SAFETY

Nexus Heritage will be responsible for obtaining all relevant certification regarding Health and Safety prior to any site works. Nexus Heritage and its sub-contractors will adhere to all relevant health and safety legislation and be guided by, *inter alia*, the *Health and Safety at Work Act* (1974), *Control of Substances Hazardous to Health (COSHH) Regulations* (2002), *Construction Design and Management (CDM) Regulations* (2015), *Management of Health and Safety at Work Regulations* (1999), the *Work at Height Regulations* (2005), the *Confined Spaces Regulations* (1997) and the *Personal Protective Equipment at Work Regulations* (2002).

While carrying out the archaeological works Nexus Heritage will operate in accordance with all applicable Health and Safety Legislation. All site staff and site visitors will be provided with all necessary protective clothing and equipment.

It is understood that contaminated material may be present within surface and subsurface deposits on the Site. Archaeological work may therefore encounter contaminants. The potential for acute exposure to archaeological practitioners is a material consideration and a risk. Accordingly, Nexus Heritage will manage any potential acute exposure risk to its staff and adjacent site users during the archaeological works in accordance with, *inter alia*, the *Control of Asbestos Regulations* (2012). Nexus Heritage is prepared to implement a series of control measures as follows:

- Provision of a site specific toolbox talk training session for all operatives on site,
- the use of basic 5 point PPE (hard hat, to include a chin strap when working from height or in windy conditions, high visibility vest/jacket, un-laced protective footwear to provide toe, sole and heel protection, gloves, safety eye-wear),
- the use of disposable coveralls (Type 5 BS EN ISO 13982-1) if contaminants are discovered,

- Respiratory Protective Equipment (RPE) EN149 (type FFP3) or EN1827 (type FMP3), or Half mask respirator (to standard EN140) with P3 filter and an appropriate filter change regime, if contaminants trigger the use of RPE,
- Request for dust suppression, if airborne contamination is a possibility
- Compliance with material handling requirements (keep number of operatives working in the area of contaminated material to a minimum and handle carefully potentially contaminated materials avoiding double-handling where possible)
- Decontamination washing of footwear, tools and equipment, if contamination is discovered
- Removal of disposable PPE/RPE upon leaving area/Site, if contamination is discovered.

In addition, if contamination is discovered during the archaeological works the archaeological contractor will ensure that its Site staff wear coveralls one size larger than the normal fit for the individual to prevent tearing at the seams, that loose cuffs are sealed with tape to reduce the risk of contaminating clothing, that the coverall legs are worn over footwear to prevent dust / contamination entering the footwear, that the hood is worn over the straps of the RPE and that coveralls are removed by turning them inside out to facilitate disposal.

Coveralls will be the outer layer of clothing and high visibility vest/jacket should not be worn over the coverall. In some cases, white coveralls may be classed as high visibility clothing; this will be considered by the archaeological contractor prior to commencing work. In cases where high visibility clothing cannot be avoided, garments should be disposed of when work in that area is completed if they have been exposed to significant levels of contamination that precludes decontamination and re-use.

Should contamination be discovered, such contamination may need to be dealt with by an appropriately qualified contractor. Nexus Heritage will not take responsibility for the removal of contaminated material from the excavation area or Site.

Where contaminated material is present in the surface or sub-surface deposits at the Site appropriate measures will be taken into account by the archaeological contractor to ensure the health and safety of its staff which may come into contact with contaminants. In case of encountering contaminated material, Nexus Heritage will inform the Client immediately.

In the event of encountering contaminated material, it may be necessary for Nexus Heritage to produce a revised method statement. Nexus Heritage will forward the revised method statement to GMAAS for reference.

In the light of the Site's location, the UXO risk is considered to be moderate/high. The Client will share any Detailed UXO Risk Assessment with the archaeological contractor in order that its staff can familiarise themselves with the risk profile and devise appropriate actions to be undertaken in the event of a suspected or actual UXO discovery. Appropriate actions in the event of UXO discovery are a vital part of the general safety requirement and contribute to evidencing conformity with the principles laid down in the CDM regulations 2015. All archaeological operatives working on the Site will receive a general briefing concerning the identification of UXO what actions they should take to keep people and equipment away from such a hazard.

A Health and Safety Plan (including a Risk Assessment) and/or a Risk Assessment Method Statement (RAMS) will be submitted by the archaeological contractor to the Client for verification before archaeological Site works commence. Such documentation may also be reviewed by a third party H&S expert. The archaeological contractor will take into account any comments made by the Client on the Health and Safety Plan (including a Risk Assessment) and/or a Risk Assessment Method Statement (RAMS) and revise as appropriate.

ARCHIVE

The project and its resulting archive would be undertaken within a Digital Data Management Plan environment maintained by the archaeological contractor.

Digital Data Management Plan

Type of study

Archaeological evaluation by means of strip-map-and-record of two areas.

Types of data

Digital text, digital photographs, vector and raster images, digital spreadsheets, hand-written notes.

Format and Scale of the Data

Photographs taken in RAW format and later converted to TIFF format for long term archiving and JPEG format for use in the digital report, converted using Adobe Photoshop. All photographs to be renamed using AF5 freeware (or equivalent) with the prefix (project code_frame number) and a photographic metadata created using Microsoft Excel (.xlsx) or Access (.accdb).

Written descriptions taken in digital .txt format and sent via email to ensure a digital backup copy at time of record.

Plans scanned as .PDF files.

For GIS creation, the metadata relating to each spatial feature will be contained in the attribute table. This will include:

- Date of creation
- Date of any edits and modifications
- Ordnance Survey Grid reference
- Extent

Methodologies for Data Collection / Generation

Digital data will be collected / generated in line with recommendations made in the Chartered Institute for Archaeologists (CIfA) *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (2014. Rev 2020). Sections 3.3.1 and 3.3.3 are relevant:

Project Specifications, Research Designs or similar documents should include a project specific Selection Strategy and a Data Management Plan.

Project designs or schedules of works etc. should outline the methodology used in recording all information, in order to demonstrate that all aspects of archive creation will ensure consistency;

for instance in terminologies and the application of codes in digital data sets, highlighting relevant data standards where appropriate

Data Quality and Standards

Consistency and quality of data collection / generation will be controlled and documented through the use of standardised procedure as outlined in the WSI. This will include the use of standardised data capture file formats, digital *proformae*, data entry validation, peer review, and use of controlled vocabularies.

Managing, Storing and Curating Data

All digital data will be organised into the contractor's project file systems and backed up to the cloud with additional copies made to external physical hard drive.

Metadata Standards and Data Documentation

Digital metadata created using Microsoft Excel (.xlsx) or Access (.accdb) of all photographic plates.

GIS data will be georeferenced using the Ordnance Survey National Grid and saved as ESRI shapefiles which will contain the associated attribute tables including metadata. Attribute tables will also be exported as .csv files.

Data Preservation Strategy and Standards

Long term data storage will be through the submission of digital (.PDF) reports to the regional Historic Environment Record (HER); submission of digital (.PDF) reports and a project completion form to the Oasis database; submission of the scanned (.PDF) archive, photographic plates (.TIF), and metadata (.xlsx) (.accdb) to the Archaeology Data Service (ADS); and retention of copies of all digital files at Nexus Heritage on physical external hard drive and uploaded to the cloud.

Suitability for Sharing

All digital data will be placed within the public realm (through the channels above) except for where project confidentiality restricts the sharing of data. All data sets will be selected / discriminated by Nexus Heritage and written permission will be sought from all project specific Clients prior to the sharing of data.

Discovery by Potential Users of the Research Data

Potential users of the generated digital data (outside of the organisation) will be able to source the data and identify whether it could be suitable for their research purposes through access granted via the ADS and OASIS websites. Requests can also be made for data through the regional HER's and directly to the archaeological contractor.

Governance of Access

The decision to supply research data to potential new users will be via the associated website request (ADS, OASIS, HER) or via the archaeological contractor.

Exclusive use of the data by the Generating Organisation

There is a requirement is for timely data sharing, with the understanding that a limited, defined period of exclusive use of data for primary research is reasonable according to the nature and value of the data, and that this restriction on sharing should be based on simple, clear principles. This time period is expected to be six months from completion of the project however the archaeological contractor can reserve the right to extend this period without notice if primary data research dictates.

Restrictions or Delays to Sharing, with Planned Actions to Limit Such Restrictions

Restriction to data sharing may be due to participant confidentiality or consent agreements. Strategies to limit restrictions will include data being anonymised or aggregated; gaining participant consent for data sharing; and gaining copyright permissions. For prospective projects, consent procedures will include provision for data sharing to maximise the value of the data for wider research use, while providing adequate safeguards for participants.

Regulation of Responsibilities of Users

External users of the data will be bound by data sharing agreements provided by the relevant organisation or directly through the archaeological contractor.

Responsibilities

Responsibility for project-wide data management, metadata creation, data security and quality assurance of data will be through the archaeological contractor when concerning data generation and early/mid-term storage. Upon deposition with digital depositories the project-wide data management, metadata creation, data security and quality assurance of data will be the responsibility of the specific organisations themselves.

Organisational Policies on Data Sharing and Data Security

The archaeological contractor will demonstrate existence of the following policies:

Archive Deposition Policy

Quality Assurance Policy

Conflict of Interest Policy

Outreach Policy

Digital Management Policy

The anticipated recipient organisation for the project archive is the Manchester Museum. The contact at the Museum of Liverpool is Bryan Sitch (Tel: 0161 306 1582, Email: bryan.sitch@manchester.ac.uk). The archaeological contractor will contact Manchester Museum to confirm collection policies and whether or not Museum is receiving archaeological archives.

The archaeological contractor will conform to the arrangements for archive preparation and submission prior to commencing the works and provide copies of the relevant correspondence and accession number to GMAAS.

The archaeological contractor will maintain the archive until the period of report preparation is complete. The archaeological contractor will prepare the archive in accordance with the any guidelines adopted by and published by the recipient organisation. The archive is to be prepared, compiled and presented for long term storage according to the format requirements of the recipient organisation and as set out relevant standards including

- The Institute for Archaeologists' *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (2020 edition).
- The Institute for Archaeologists' *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (2020 edition)

The archaeological contractor will be responsible for the security of the project archive. An indexed project archive will be prepared. The project archive will comprise all primary written documents, maps, plans and plots, unprocessed raw data and photographs.

Legal title to any artefacts or other items identified and/or recovered during the archaeological works remains vested in the land owner. The archaeological contractor will request deposition of the artefact archive along with the remainder of the archive by means of an agreement to transfer legal title to the artefacts from the landowner to the archive repository. Should the land owner not wish to donate the artefact component of the project archive to the recipient organisation the archaeological contractor will request that the landowner retains the artefact archive and makes it available, on a cost-free, fair-usage basis to those individuals and/or organisations with a legitimate research therein.

MONITORING

GMAAS will act on behalf of the Council. A minimum of one week's notice of the commencement of the archaeological evaluation will be given by Nexus Heritage to GMAAS so that arrangements for monitoring can be made.

Reasonable access to the site works will be provided by Nexus Heritage to representatives of the Client, the Council and GMAAS in order to monitor the works. A site tour and opportunity to scrutinise site records will be provided to the monitors.

Nexus Heritage will ensure that any significant results recovered during the archaeological investigations are brought to the attention of the Client who will notify the relevant organisations/authorities as soon as is practicably possible, and certainly within 24 hours.

Any monitoring visits or communications will be documented by Nexus Heritage and copied to the Client.

Consultations between the Nexus Heritage, the Client and GMAAS will be convened periodically during the project. The purpose of these consultations is to advise the monitors on the manner in which the objectives of the project have been addressed and secure agreement that the milestone elements of the project have been concluded to the satisfaction of the Client and the Council. A series of consultations is suggested in the table below with potential outcomes.

Milestone	Purpose of Consultation	Participants	Format	Outcome
Draft of WSI	To discuss draft WSI, areas for strip-map-and-record excavation, timetable, etc.	Nexus Heritage Client GMAAS	Telephone/e-mail	Authorisation of WSI and issue of final WSI. Authorisation to begin evaluation. Confirmation that the pre-commencement obligations of the condition have been addressed.
At half-way point of evaluation excavations	To confirm compliance with WSI	Nexus Heritage Client GMAAS	Site meeting Telephone/e-mail	Continuation of archaeological investigations
Upon completion of archaeological evaluation excavations	To review results	Nexus Heritage Client GMAAS	Telephone/e-mail	Confirmation of completion of archaeological excavations and compliance with the WSI. Authorisation to commence reporting.
Production of the draft evaluation report.	To review results of data assessment and to authorise continuation to next stage	Nexus Heritage Client GMAAS	Telephone/e-mail	Authorisation to commence production of final report
Production of final evaluation report	To review results	Nexus Heritage Client GMAAS	Telephone/e-mail	Confirmation of completion of reporting in compliance with the WSI.
Preparation of project archive	To confirm that all tasks have been completed with reference to the WSI and to formally close the project	Nexus Heritage Client GMAAS	Telephone/e-mail	An ordered and indexed project archive
Discussion	To determine need for and scope of archaeological mitigation works	Nexus Heritage Client GMAAS	Telephone/e-mail	Conclusion of project as appropriate and discharge of condition upon application/or mobilisation for mitigation works in the form of further archaeological works.

RESOURCES AND PROGRAMMING

The archaeological works will be undertaken by a team of demonstrable competence and experience.

The overall delivery of the project objectives will be managed by Anthony Martin, a Director of Nexus Heritage with over 30 years' experience in the heritage and archaeology sector. He is a Member of the Chartered Institute for Archaeologists (Mem. No. 1091) and has a BA (Hons) in History and an MA in Scientific Methods in Archaeology.

The evaluation will be carried out by a field team with relevant experience and qualifications and will be drawn from one of the regional archaeological contractors with experience working in Greater Manchester and familiarity with the relevant topics within the emerging regional research agenda. The field team will not be deployed until confirmed as appropriate by the Client and GMAAS.

Nexus Heritage will provide target dates for the start and completion of the Site works and the submission of reports, publications and archival material.

COMMUNICATION PATHS

Anthony Martin is identified as the Project Manager on behalf of Nexus Heritage.

Any questions or requests for clarification arising from examination of this document are to be submitted in writing to Nexus Heritage.

SOURCES

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https://archaeologydataservice.ac.uk/advice/DataManagementPlans_10

ADS (2) *Guides to good practice* <http://guides.archaeologydataservice.ac.uk/g2gp/Main>

ADS (3) *Guidelines for Depositors*
<https://www.archaeologydataservice.ac.uk/advice/guidelinesForDepositors>

ADS (4) *Guidance for the selection of material for deposit and archive*
<https://www.archaeologydataservice.ac.uk/advice/selectionGuidance.xhtml>

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