

Land at Bennett Street, Manchester

Archaeological Evaluation Report

For Kellen Homes

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Ecus Ltd

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Executive Summary

Ecus Ltd was commissioned by Kellen Homes Ltd to carry out an archaeological evaluation on land to the north of Bennett Street, Ardwick, Manchester (Fig. 1), the site of the former Olympic Freight container yard (hereafter the Site). The evaluation was carried out to support a planning application (ref. 134504/FO/2022) seeking residential development of the Site and followed methodology outlined in a WSI (Nexus Heritage 2022) approved by the Greater Manchester Archaeological Advisory Service.

Eight trenches were excavated across the Site, targeting the 19th-century remains of Bennett's Iron Foundry, Burgess Villa and Hyde Road football stadium, the former ground of Manchester City Football Club (Fig. 2).

Trenches 1, 2 and 3 revealed the footprint of brick buildings of the former Bennett's Iron Foundry and contained a potential flue structure, stone-capped culverts, machine bases and elements of services and machinery still in situ, in addition to thick deposits of waste material including slag and casting sand. A brick platform of the foundry weighing station was recorded in Trench 4.

Trench 5 uncovered a flagstone floor and footing of a brick wall relating to Burgess Villa, although in this area it appeared that the building had been comprehensively demolished to ground level.

In Trench 6, three square concrete pads situated within a cut appeared to define the north-western corner of the 19th-century Hyde Road stadium, although all evidence of the above-ground structure of the west stand had been removed.

Although no structural remains were identified in Trenches 7 and 8, thick deposits of industrial waste were recorded, indicating an attempt to level the Site following the demolition of the foundry and the stadium in the 1920s.

It is considered that the evaluation results demonstrate good potential for survival of further elements of Bennett's Iron Foundry beneath substantial made-ground deposits and that additional archaeological work appropriate to the non-designated asset would elucidate important aspects of its form, function and contents. Evidence for Burgess Villa was less compelling, with no significant discovery made, as the structure appeared to survive only at footings/floor level. The potential for survival of meaningful remains associated with Hyde Road stadium is also considered to be low, with only minor structural evidence identified following its comprehensive demolition.

1. Introduction

1.1 Project Background

- 1.1.1 Ecus Ltd was commissioned by Kellen Homes Ltd to carry out an archaeological evaluation on land to the north of Bennett Street, Ardwick, Manchester, formerly a container storage yard (National Grid Reference SJ 86197 97047, Fig. 1). The evaluation was undertaken to discharge part of a condition applied to planning application ref. 134504/FO/2022, seeking permission for residential development of the Site. The evaluation followed methodology outlined in a Written Scheme of Investigation (WSI; Nexus Heritage 2022b), approved by the Greater Manchester Archaeological Advisory Service (hereafter GMAAS).
- 1.1.2 The area of the Site included archaeological heritage assets identified in the Greater Manchester Historic Environment Record (GMHER), primarily Bennett's Iron Foundry (GMHER ref. 9683.1.0), Burgess Villa (GMHER ref. 13852.1.0) and Hyde Road football stadium (GMHER ref. 13854.1.0). The archaeological evaluation consisted of eight trenches, targeted to evaluate these assets and address research questions outlined in the Northwest Regional Research Framework, specifically relating to archaeology of the Industrial and 20th-Century periods (Brennand 2006, 2007; <https://researchframeworks.org/nwrf/industrial/>).
- 1.1.3 This report presents the results of the archaeological evaluation.

1.2 Site Description

- 1.2.1 The Site is situated to the North of Bennett Street, Manchester and encompasses an area of c.4.88ha, being roughly trapezoidal in plan. The Site is bounded by Bennett Street to the south-east, a railway viaduct to the south-west, a car park to the north and residential properties to the east (Fig. 1).
- 1.2.2 The majority of the Site has been utilised as a container storage yard, with surfaces comprising tarmac, concrete and the remains of building footings relating to 20th-century offices and a former parcel depot.
- 1.2.3 The British Geological Survey (<https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/>) identifies the underlying bedrock to the east of the Site as belonging to the "Manchester Marls Formation", comprising mudstone and siltstone formed within the Permian period. To the west of the Site, the bedrock geology is ascribed as sandstone belonging to the "Chester Formation", formed during the Triassic period.
- 1.2.4 The superficial deposits are identified as Till, Devensian Till – Diamicton, a deposit formed during the Quaternary Period in a local environment previously dominated by ice age conditions.

1.2.5 The Cranfield Soil and AgriFood Institute (CSAI) *Soilscapes Viewer* (<http://www.landis.org.uk/soilscapes/>) identifies the soils covering the area of the Site as slowly permeable seasonally wet acid loamy and clayey soils. However, the industrial usage of the Site and extent of the made-ground deposits meant that original soil horizons were not exposed by the evaluation.

1.3 Acknowledgements

- 1.3.1 Ecus wishes to extend thanks to the team at Kellen Homes, to Ian Miller of GMAAS and to Andrew Ainsworth of the Ecus North-West office
- 1.3.2 The archaeological work was managed for Ecus by Therese Falk and carried out by Holly Drinkwater with assistance from Jack Blackett, all from the Ecus Barnard Castle office,

2. Archaeological and Historical Background

2.1 Introduction

- 2.1.1 The following summary is based upon information provided from a Desk-based Assessment (Nexus Heritage 2022a) and Written Scheme of Investigation (Nexus Heritage 2022b) produced in support of the current planning application.

2.2 Baseline

- 2.2.1 The area of the Site includes a number of archaeological heritage assets identified in the Greater Manchester Historic Environment Record (GMHER), primarily Bennett's Iron Foundry (GMHER ref. 9683.1.0), Burgess Villa (GMHER ref. 13852.1.0) and Hyde Road football stadium (GMHER ref. 13854.1.0). Due to the industrial development of the Site during the 19th century, there is low potential for any archaeological remains pre-dating this period to survive.
- 2.2.2 The archaeological evaluation was targeted to evaluate these assets and address research questions outlined in the Northwest Regional Research Framework (Brennand 2006, 2007; <https://researchframeworks.org/nwrf/industrial/>). The primary objectives of the work are listed in the WSI (Nexus Heritage 2022b) and reproduced in Section 3.2 below.

2.3 Previous Archaeological Works

- 2.3.1 No previous archaeological work has been carried out at the Site. However, ground investigation (GI) works had been carried out prior to the archaeological evaluation (e3p 2022) to examine the below-ground conditions and identify potential obstructions.
- 2.3.2 The investigations comprised 39 window sample probe-holes, three cable-percussive boreholes and five rotary boreholes, ranging in depth from 0.15m to 50m below ground level (bgl). Results of the GI works concluded that made ground was present across the footprint of the Site and comprised thick, gravelly deposits of industrial waste material to a maximum depth of 5.45m bgl. The interventions also encountered relict wall foundations and floor surfaces, indicating that upstanding archaeological remains survived at the Site below the modern ground surface.

3. Methodology

3.1 Standards

3.1.1 The project conformed to the current national guidance as set out in the Chartered Institute for Archaeologists' *Standard and Guidance for Archaeological Evaluation* (CIfA 2020a); *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA, 2020b); and *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives* (CIfA, 2020c).

3.2 Aims and Objectives

The broad aims of the archaeological evaluation were:

- 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 were:

- 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 artefacts and ecofact/industrial residue samples from deposits of potential
- to analyse the Site records, artefacts, ecofacts and residues 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 regional objectives of the project aim to enhance knowledge and understanding of the historic environment of Manchester and north-west England, particularly in reference to the research agenda of the Industrial and 20th-Century period outlined in the Northwest Regional Research Framework (Brennand 2007). The key objectives can be categorised within the following topics, as

outlined in the WSI (Nexus Heritage 2022b):

The Environment and Urban Landscape

- *Ind01*: What evidence is there for the impact of Industrialisation on health, diet and natural resources?
- What is the survival and significance of historic water management features for industrial purposes?
 - o Specifically, the culverting of Corn Brook and its potential route through Bennett's Iron Foundry.
- *Ind21*: How did industrial period towns affect the pre-existing historic landscape?
 - o Do any archaeological remains survive that pre-date Bennett's Iron Foundry, specifically relating to Burgess Villa?

Technology and Production

- *Ind53*: What can archaeology tell us about the production and use of consumer products and their typologies from the late 18th to early 20th centuries?
 - o Can waste residues shed light on the production methodology in the potential absence of extant machinery?
 - o Was non-ferrous metal processing also occurring within the iron foundry?
- *Ind56*: How can we improve our understanding of 20th-century factory organisation?
 - o Can we identify any evidence for process flow and spatial arrangement of production areas within the iron foundry?
 - o Is there evidence for ancillary activities at the iron foundry – e.g. offices, yards, stables, storage rooms?
 - o What is the evidence for power generation and management within the iron foundry workshops?
- *Ind60* – How can we make sense of the relative significance of historic industrial processes and building types perceived as poorly understood and recorded?

Leisure and Recreation

- *Ind87*: How did public and private sport, recreation and leisure spaces develop during this period?
 - o Is there surviving archaeological evidence of the Hyde Road football stadium and can it provide any additional information to that currently available in the historic record?

3.3 Methodology

General

- 3.3.1 All work was undertaken by experienced Ecus staff who are corporate members of the ClfA and who demonstrably work to appropriate standards of fieldwork.
- 3.3.2 The evaluation trenches were located to target heritage assets depicted on historic Ordnance Survey maps within the Site. The trench locations were outlined in a WSI (Nexus Heritage 2022) and agreed by GMAAS.
- 3.3.3 Eight trenches were excavated across the site, ranging from 10m to 30m long by 2m to 3m wide, depending on the depth of made ground deposits. The corners of each trench were located on the ground using differential Global Positioning System (dGPS) technology.
- Trenches 1, 2, 3, 4 and 7 to the north and west of the Site were located to target structures relating to Bennet's Iron Foundry.
 - Trench 5 was situated over Burgess Villa.
 - Trenches 6 and 8 were located over the stands of Hyde Road football stadium.
- 3.3.4 A ninth trench was originally situated to target the east stands of Hyde Road stadium, but the area of the proposed trench was beneath a large earth bund and span of metal fencing and it was not possible for it to be excavated within the designated timeframe of the evaluation.
- 3.3.5 The majority of the Site was covered by either concrete or tarmac, beneath which were limestone setts (Plate 1). These deposits were removed across the footprint of each trench using a mechanical excavator fitted with a hydraulic breaker. The underlying deposits often consisted of compacted demolition rubble or indurated slag deposits that necessitated the use of a toothed bucket to remove them. All mechanical excavation was conducted in a controlled manner under archaeological supervision and a toothless ditching bucket was fitted as soon as it was practical to do so.
- 3.3.6 It was agreed that where archaeology was present, trenches would be excavated to a depth no greater than 2m and would be stepped and battered appropriately to allow access for manual cleaning and recording. Where standing building remains were identified, most of the overburden was removed carefully with the machine under constant supervision, ceasing where in situ floor surfaces were identified. Further cleaning and excavation was then conducted by hand.
- 3.3.7 Where no structural remains were present, excavation was conducted by machine to 2m or to the depth of the natural geology to record the made-ground deposits. These deposits were frequently loose and unstable, meaning that accessing certain trenches for manual cleaning was unsafe. This

was the case in Trenches 4 and 7, which were opened, photographed and then immediately backfilled. The remaining trenches were fenced with Heras fencing and remained open for assessment by GMAAS.

Excavation and Recording Methodology

- 3.3.8 All archaeological deposits were recorded using a continuous numbered context system defined by trench number. A written record of each trench and the archaeological features/deposits within was created using pro-forma trench sheets and context sheets in accordance with industry standards.
- 3.3.9 Excavated features were planned using dGPS and sections drawn at 1:10, and located on an overall site plan. Drawings were made in pencil on permanent drafting film.
- 3.3.10 A full photographic record was maintained, using a digital camera equipped with an image sensor of not less than 10 megapixels. Digital images will be subject to managed quality control and curation processes which will embed appropriate metadata within the image and ensure long term accessibility of the image set. Output will be in TIFF/JPEG format. Digital records created as part of the project comply with specific data standards (Historic England 2015).

Finds

- 3.3.11 Finds were treated in accordance with the Chartered Institute for Archaeologists' *Standard and Guidance for Archaeological Evaluation* and *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (2020a and b).
- 3.3.12 The finds recovered from the evaluation were of little archaeological value and were therefore photographed (Plate 20) and discarded in agreement with GMAAS.

4. Trench Results

4.1 Introduction

- 4.1.1 The following section presents the results of the archaeological evaluation. The context descriptions for recorded archaeological features are reproduced in Appendix 1.
- 4.1.2 The evaluation consisted of eight mechanically excavated trenches. The trench locations are shown in Figure 2 and they are discussed in numerical order.

4.2 Trench 1 (Fig. 3.1)

- 4.2.1 Trench 1 measured 30m by 3m and was orientated north-west to south-east across structures at the north-west of Bennett's Iron Foundry, as shown on the Ordnance Survey map of 1891.
- 4.2.2 Removal of the modern overburden (**100**) and a 0.5m-thick demolition horizon of brick rubble (**103**) revealed the footprint of a room c.9m wide, defined by brick walls **101** to the north-west and **123** to the south-east (Plate 2). Both walls were constructed in stretcher bond, four courses (0.5m) wide and surviving up to eight courses high (0.8m).
- 4.2.3 Wall **123** was established within a vertical foundation trench (**111**) 1.1m wide, cut into alluvial clay (**108**) and backfilled with a mixed deposit of black silt, clay and mortar (**110**). Cut **111** was flanked to the south by a ceramic drain running parallel to the base of wall **123**. Along the northern edge of cut **111** ran a parallel slot (**122**), 0.4m wide, lined along its base with slate topped with a deposit of grey sand (**115**) and capped with a possible timber sleeper (**116**).
- 4.2.4 No foundation trench was visible for wall **101**, the southern edge having most likely been removed by a later ditch (**113**). The ditch ran across the interior of the room on an east to west alignment between walls **101** and **123** and had been backfilled with loose black ash and clinker (**124**).
- 4.2.5 A linear alignment of limestone bricks/setts (Plate 3), laid in stretcher bond (**118**), ran 1m to the north of wall **101**, measuring three courses wide (0.3m). The setts were situated within a wide cut (**109**), at least 1m deep, cut into grey alluvial clay (**106**) and which had been backfilled with a mixture of clay, ash and sand (**105**). The area between wall **101** and **118** could not be excavated during the evaluation and therefore the relationship between the two features was not determined.
- 4.2.6 Within the room outlined by walls **101** and **123** was brick structure **102**, comprising an L-shaped area of brick pavement flanked to the south-west by a stepped brick wall of up to seven courses high visible in the trench section (Plate 4). A sandstone-capped culvert lined with clay (**119**) ran along a north-east to south-west alignment between the two segments of brick paving and a square concrete drain defined the southern edge of structure **102**. A potential machine base, comprising

a rectangular sandstone block with vestigial iron fittings, was situated at the corner of the L-shaped pavement, directly to the north-west of culvert **119**.

- 4.2.7 The area to the south-west of structure **102** was covered by a floor surface of compacted clay and indurated metallurgical waste (**114**), which abutted wooden sleeper **116**. Although the composition of surface **114** clearly demonstrated nearby metal-working activity, no finds or diagnostic material were recovered to indicate the function of structure **102** or the specific industrial processes occurring in the vicinity.
- 4.2.8 No further structural remains were identified in Trench 1. A large refuse pit (**120**), over 3m in diameter, was recorded at the south-east end of the trench and was excavated by machine to reveal a mixed rubble fill of crushed brick, ash, clinker, broken pottery and glass (**121**) to a depth in excess of 2m. It probably belongs to a period of demolition following the dissolution of the iron foundry (Plate 5).

4.3 Trench 2 (Fig. 3.2)

- 4.3.1 Trench 2 measured 20m by 3m and was orientated north to south across the north-west corner of Bennett's Iron Foundry, as shown on the 1891 Ordnance Survey map.
- 4.3.2 Removal of 0.4m of modern overburden (**200**) and a 0.4m-thick demolition horizon of brick rubble (**203**) revealed a series of heavily disturbed wall footings to the north of the trench and a substantial brick platform (**202**) in the centre.
- 4.3.3 Running from north-east to south-west at the north end of the trench were two parallel brick walls, each 0.4m wide and separated by c.2m. The most southerly of these was wall **206**, surviving up to six courses (0.6m) high. Wall **206** was abutted along its north-west edge by a yellowish-brown potential floor surface comprising large pieces of slag and burnt clay (**212**). Deposit **212** ran beneath the north-most wall (**207**), of which only three courses (0.3m) survived, indicating that wall **207** post-dated **206**. The space between the two walls had been infilled by demolition deposit **203**.
- 4.3.4 Approximately 3m to the south of wall **206** was a 4m-wide brick platform (**201**), also orientated north-east to south-west, which survived in excess of six courses (0.6m) at its south-east edge (Plate 6). The north-west edge of platform **201** was defined by a stone-capped brick culvert infilled with demolition rubble **203**. The base of the culvert opened onto a square brick chute descending into a chamber below the platform (Plate 7). A comparable opening was visible opposite, denoting the likely presence of a second culvert feeding into the chamber beneath platform **102**. The top of the platform had been truncated by a north-west to south-east drain, but remnants of a potential brick flue outlined with cream-coloured fire bricks remained, as did a brick platform capped with concrete at the north-west corner.

- 4.3.5 Abutting platform **202** to the south-east was a deposit of fine orange sand with black ashy lenses (**208**) up to 1m thick, which probably represented waste material from sand casting (Ian Miller, pers. comm.), a technique that would have been utilised in Bennett's Foundry to produce detailed ornamental ironwork (Plate 8).

4.4 Trench 3 (Fig. 3.3)

- 4.4.1 Trench 3 measured up to 30m by 5m and was orientated north-west to south-east along the south-west edge of Bennett's Iron Foundry, as shown on the Ordnance Survey map of 1891.
- 4.4.2 Removal of a thick concrete pad associated with a modern office building demonstrated the archaeological remains of foundry structures to be close to the surface, beneath up to 0.5m of rubble (**300**), and as a result had been heavily truncated. A number of wooden sleepers, iron rail chairs and a disturbed section of iron railing were removed with the concrete and would have been located c.10m from the south-west end of Trench 3.
- 4.4.3 The footing of a brick wall (**309**) was revealed running on a north-west to south-east alignment over a span of 5m, from the north-west end of the trench to where it met a perpendicular brick wall running north-east to south-west belonging to a raised brick platform (**301**). A 0.15m-thick horizon of mortar and brick rubble (**306**) indicated that wall **309** had been demolished to be superseded by a floor surface abutting the northern wall of **301**. The floor comprised a thin layer of compacted sand, perhaps a levelling deposit, upon which a deposit of black ashy material (**307**) containing numerous fragments of corroded iron had accumulated (Plate 9).
- 4.4.4 Structure **301** was 5m wide and was separated into three irregularly spaced bays defined by brick walls (Plate 10). Removal of the rubble within the northern bay revealed a loose, reddish brown sandy deposit containing degraded wood, corroded iron and slag (**314**).
- 4.4.5 To the south of structure **301** was a heavily disturbed flagstone surface (**303**); one flagstone retained an iron fitting and had a heavy concentration of metallurgical waste adhering to it (Plate 11). A central area within **303** was devoid of flagstones and was potentially the location of metal processing equipment. A linear trench extending from this void to the south-east (**315**) contained a corroded length of iron pipe in situ, with a further length of iron pipe protruding upwards from the rubble to the east.
- 4.4.6 On a parallel south-east alignment to pipe trench **315**, and c.2m to the west, was a brick footing (**302**), potentially for a wall, that continued over a span of 10m and beyond the south-east limit of Trench 1. A brick chute (**317**) measuring 0.4m by 0.6m adjoined the south-west face of **302** and retained an iron hinge that indicated it was originally covered by a hatch (Plate 12). Along the north-east face of **302** was a square cut (**310**) 2m wide that had been filled by orange sand (**311**). A

sondage excavated within cut **310** revealed a corroded iron cylinder (**304**) that appeared to be an element of machinery deliberately situated alongside brick footing **302** (Plate 13). It is possible that cut **310** contains further mechanical elements relating to **304** and to specific manufacturing processes that were being undertaken within the area of the foundry covered by Trench 1.

- 4.4.7 A c.1m length of iron pipe with a stop-cock valve was recorded directly to the west of footing **302** and suggests that the recorded lengths of iron pipe within Trench 1 were related to water transfer and supply within the foundry.

4.5 Trench 4

- 4.5.1 Trench 4 measured 10m by 2m and was orientated north-west to south-east across the weighing station belonging to Bennett's Iron Foundry, as shown on the Ordnance Survey map of 1887.
- 4.5.2 Removal of 0.4m of modern overburden (**400**) and a 0.15m-thick band of orange sand (**401**) revealed the south-west end of the weighing station (**405**). The weighing station measured 2.4m wide and was constructed of brick, edged by concrete. The upper surface had a central square aperture, 1m wide, that was edged by two rows of brick laid in stretcher bond.
- 4.5.3 A 1.2m-thick deposit of sand, clay and rubble (**402**) was removed from around the weighing station by machine and showed it to survive to a height of over 1m (Plate 14). Clay layer (**402**) had accumulated above a 0.2m-thick horizon of ash and burnt brick (**403**), which potentially marked the ground surface contemporary with the weighing station at a depth of 1.8m below the modern ground surface. The natural alluvial clay (**404**) was recorded below deposit **403** at a depth of 2m.
- 4.5.4 Aside from hand cleaning of the top of the weighing station, the instability of the trench sections due to waterlogged ground conditions in the north of the Site meant that further hand excavation was unsafe. Following photographic recording of the archaeology, Trench 4 was immediately backfilled.

4.6 Trench 5 (Fig. 3.4)

- 4.6.1 Trench 5 measured 20m by 3m and was orientated north to south across Burgess Villa, as shown on the 1848 Ordnance Survey map.
- 4.6.2 Removal of 0.4m of modern overburden (**500**), 0.7m of tarmac (**509**) at the north end of the trench and a trench-wide demolition horizon (**508**) up to 1m thick, revealed the footings of a building likely belonging to Burgess Villa.
- 4.6.3 At the north end of the trench was a flagstone floor (**501**), extending 2m into the trench from the northern edge (Plate 15). Its southern limit was edged by two rows of brick, with a cobbled area at

the south-east corner potentially denoting a doorway. Finds from directly above floor surface **501** consisted solely of post-medieval transfer-printed ceramics and were not retained.

- 4.6.4 Extending southwards from floor **501** was a wall footing (**502**) of sandstone slabs with two surviving courses of brickwork (Plate 16). Wall **502** appeared to define a room to the west, denoted by crushed brick and mortar (**511**) that probably would have been a foundation layer for a flagstone floor, like **501** to the north. A 2m-wide break between floor surface **501** and wall **502** plausibly related to a second doorway.
- 4.6.5 The building footings represented by **501** and **502** were cut into a compacted deposit of cinders (**512**), which overlay the natural alluvial clay (**506**) 1.8m below the modern ground level.
- 4.6.6 At the south end of Trench 5 was evidence of a cut, in excess of 3m wide, running from east to west (**503**). Within cut **503**, there was a double row of bricks and evidence of disturbed sandstone capping (**505**) that could represent culverting of a watercourse, of which several are known to run across the north part of the Site (M. Hudson, pers. comm.). Cut **503** had been backfilled with loose cinders (**504**) and had been capped with a thick layer of yellowish-brown clay and sand (**507**) that extended across the southern area of Trench 5 to where it met wall footing **502**.

4.7 Trench 6 (Fig. 3.5)

- 4.7.1 Trench 6 measured 25m by 2m and was orientated east to west across the north-west corner of the former Hyde Road stadium, as shown on the Ordnance Survey map of 1889.
- 4.7.2 Removal of a 0.8m-thick horizon of demolition rubble (**600**) revealed a compacted surface of purple cinders (**607**) at the east end of the trench. An irregular east to west cut (**604**) had been made through surface **607** into which had been set three irregularly spaced square concrete pads (**601**, **602**, **603**, Plate 17). The pads each measured 0.6m by 0.6m with a thickness of 0.3m and were set within a black deposit of cinders (**608**) that contained domestic refuse and elements of a leather shoe. The location of the concrete pads strongly suggest they belonged to the earliest phase of the Hyde Road stadium and probably supported a superstructure that was largely wooden, no remains of which were identified.
- 4.7.3 Cut **604** extended for 9m to the west, where it cut through a layer of industrial waste comprising large and compacted fragments of slag (**605**). A sondage through deposit **605** at the west end of the trench demonstrated it to be up to 1m thick. Undoubtedly, deposit **605** originated from Bennett's Iron Foundry and potentially represents the levelling of a slag heap to provide a solid foundation for the construction of Hyde Road stadium in the late 19th century.
- 4.7.4 Natural yellow clay (**606**) was exposed at the west end of the trench at a depth of 2m below the

modern ground level.

4.8 Trench 7

- 4.8.1 Trench 7 measured 20m by 2m and was orientated north-west to south-east across an L-shaped wall and area of railway sidings relating to Bennett's Iron Foundry, as shown on the Ordnance Survey map of 1889.
- 4.8.2 Removal of 0.4m of modern overburden (**700**) revealed a disturbed section of railway sidings at the north-west end of the trench, comprising a 0.2m-thick cinder bedding deposit (**704**) within which survived a single wooden sleeper (Plate 18).
- 4.8.3 Truncating sidings **704**, was a steep-sided cut (**705**) backfilled by a very loose deposit of yellow sand and abraded sandstone (**708**), and which extended southwards across the remaining 15m of the trench and beyond its south-eastern limit. At the south-west end of the trench, deposit **708** was in excess of 1.5m thick, at which point excavation in this area was terminated as the sections began to collapse. The sterile nature of deposit **708** indicates it belongs to modern levelling activity, commensurate with the more recent usage of the site in the latter half of the 20th century.
- 4.8.4 Below deposit **708**, in the central area of the trench was a compacted surface of purple and green cinders (**706**) across which ran two parallel rows of brick rubble (**707**), 0.6m wide, on a north-east to south-west alignment. Feature **707** potentially aligns with the L-shaped wall on the 1894 map, however all structural evidence had been comprehensively removed.
- 4.8.5 It appeared that the cinder surfaces of **706** ascended up a bank to the north-west, likely to the level of the railway sidings although any relationship had been removed by cut **705**. The bank was constructed of mixed rubble and clay (**703**), up to 1m high, and which had been established upon a 0.15m-thick burnt horizon of brick rubble and ash (**702**).
- 4.8.6 The natural clay (**701**) was revealed below deposit **702**, 1.8m below the modern ground level.

4.9 Trench 8

- 4.9.1 Trench 8 measured 20m by 2m and was orientated north to south across the north stand of the Hyde Road stadium, as shown on the Ordnance Survey map of 1889.
- 4.9.2 No archaeological features were recorded within the trench. Natural alluvial clay (**804**) was exposed at a depth of 1.4m, cut through by four ceramic land drains, equally spaced and running on an east to west alignment. Sealing the land drains and natural clay was a 0.2m-thick horizon of burnt brick rubble and ash (**802**), above which was a 1m-thick midden deposit of burnt material containing abundant domestic refuse; significantly crockery, jars and glass and earthenware bottles

dating from the 19th and early 20th centuries (Plate 19, Plate 20).

5. Conclusions

- 5.1.1 The archaeological evaluation at Bennett Street has demonstrated that there is mixed potential for archaeological remains to be preserved across the footprint of the Site, most significantly relating to the 19th-century iron foundry and associated railway sidings. Remains of Burgess Villa and potentially of Hyde Road stadium were also observed.
- 5.1.2 Well-preserved structural remains of the Bennetts Iron Foundry were recorded in Trenches 1, 2, 3 and 4.
- 5.1.3 Trench 1 identified the north-west wall of the foundry buildings and a room complete with brick flooring and a potential machine base. A stepped brick structure extended into the south-west edge of the trench, and its interpretation is, as yet, unclear.
- 5.1.4 Trench 2 identified another north-west wall of the foundry buildings and a room containing a substantial brick structure complete with a potential fire-brick flue. Thick waste deposits of probable casting sand had accumulated to the south of the platform, intimating that the brick platform and flue were utilised in the casting process. The platform was constructed over two culverts that opened onto a large void, aligned with the northern watercourse depicted on the Ordnance Survey map of 1848, and into which wastewater from the casting process was likely channelled.
- 5.1.5 Water management systems for the foundry were also recorded in Trench 3, where two parallel trenches with iron pipes in situ ran towards a flagged area that potentially originally housed machinery, denoted by accretions of metallurgical waste and in situ iron fittings on the flagstone floor. A stopcock on a section of iron pipe indicated that these pipes carried water, significant volumes of which would be required in the foundry's manufacturing processes. A sondage excavated within a sand-filled cut to the south-east of Trench 3 revealed corroded remains of machinery and highlighted the potential that further mechanical elements could survive within the cut, and also beneath remaining deposits within Trench 3 that could not be fully excavated.
- 5.1.6 It was only possible to record the south-west end of the foundry weighing station in Trench 4, although it was seen to be well-preserved, visibly surviving to over 1m high.
- 5.1.7 In Trench 5, two rooms of Burgess Villa were recorded—one with an in situ flagstone floor—and a culverted watercourse. Only the lower footings of a single wall remained, along with the vestiges of an external cinder path surface, indicating the villa building had been razed to ground level. Although an acceptable record of its character and condition has been made, the comprehensive demolition of the villa suggests reduced potential for survival of further meaningful remains associated with the building.

- 5.1.8 The former Hyde Road stadium had also, seemingly, been comprehensively demolished, following its vacation in the early 1920s. Trench 6 revealed three concrete pads within a cut that potentially represent the footings of the north-west corner of the west stand. Trench 8 was located across the north stand, but no structural evidence survived. The evaluation results are considered to be typical of the below-ground survival of the structure and its demolition appears to have been almost total. The few photographs that remain of the stadium show the stands to be constructed primarily of timber and it is therefore unsurprising that few traces of the structure remain.
- 5.1.9 A burnt horizon of ash and brick, up to 0.2m thick, was identified overlying alluvial clay in Trenches 4, 7 and 8 at a depth of 1.4 to 1.6m below modern ground level. This horizon was overlain in Trench 7 by a compacted surface of purple cinders, which was also recorded in Trench 6 at a comparable depth. It is plausible that, together, these deposits represent the original ground level across the Site, contemporary with Bennett's Iron Foundry and with the original form of Hyde Road stadium.
- 5.1.10 The limited window through archaeological horizons provided by evaluation trenches makes the interpretation of the features and structures recorded during the work problematic, as does the depth of made-ground deposits at the Site, which often made hand-excavation unfeasible and unsafe. The substantial demolition and made-ground deposits have, however, meant that well-preserved remains of the Bennett's Iron Foundry buildings still survive in situ and there is potential for the full footprint of archaeological features recorded in the evaluation to survive and thus be subject to interpretation in their entirety.

6. Archiving

6.1 General

- 6.1.1 The complete project archive will be prepared and arrangements for the deposition of the archive on completion of the project will be made in accordance with guidelines for the preparation of excavation archives for long-term storage (ClfA 2020c).
- 6.1.2 The archive is currently held at the Ecus office in Barnard Castle, Co. Durham, under the project code 2195, and will be deposited with GMHER following completion of all archaeological work at the Site and approvals by GMAAS of all associated reporting. An OASIS form (OASIS ID: ecusltd1-511783) has been created and copy of the final, approved version of this report will be uploaded to the Archaeology Data Service via the OASIS form.

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On site communications

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Appendix 1: Context descriptions

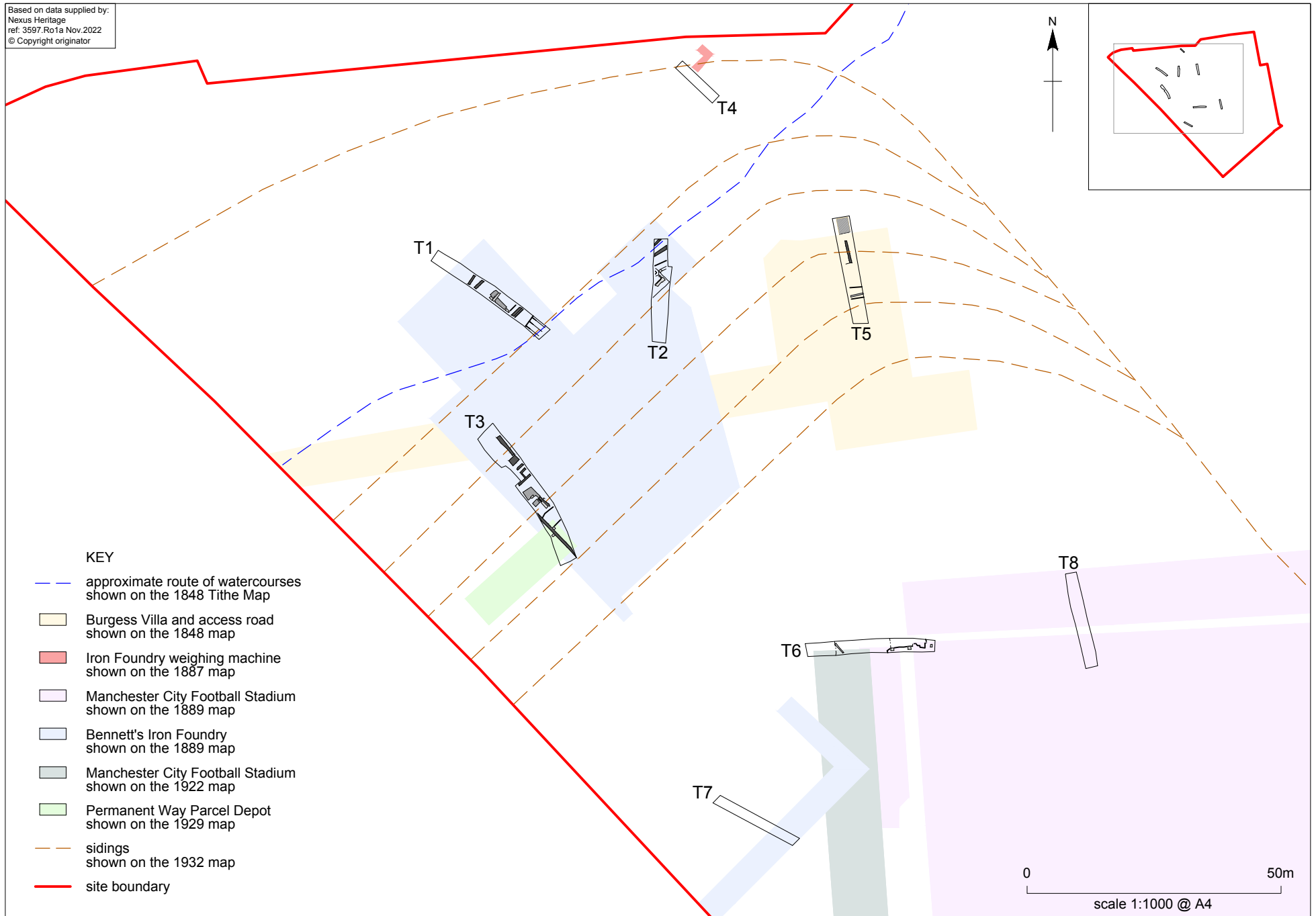
Context	Interpretative description	Same as	Trench
100	Modern overburden		1
101	NE-SW brick wall (NW)		1
102	Brick structure		1
103	Black rubble in cut 113		1
104	Band of charred material over 101, 118 and 109		1
105	Bands of clay, sand and clinker in 109		1
106	Grey sandy clay cut by drains		1
107	Orange grey clay under 110		1
108	Alluvial clay at SE of trench	107	1
109	Cut north of 118		1
110	Grey clay fill of cut 111		1
111	Construction cut for wall 123		1
112	Clay lining of cut 119		1
113	E-W cut of ditch over structure 102		1
114	Compact surface of clay, stone and slag within 102		1
115	Loose sandy silt and slate in construction cut 122		1
116	Grey and orange mortar with timber over 115		1
117	Compact mortar deposit over 116		1
118	Double row of stone setts parallel to 101		1
119	Cut of channel parallel to N wall/floor of 102		1
120	Cut of large rubbish pit		1
121	Fill of 120		1
122	Internal construction cut for wall 123		1
123	NE-SW brick wall (SE)		1
124	Fill of ditch 113		1
200	Modern overburden	100	2
201	Brick structure, potential flue		2
202	Construction cut for 201		2
203	Demolition layer overlying 201		2
204	Grey waste deposit S of wall 206		2
205	Construction cut for wall 206		2
206	NE-SW wall		2
207	NE-SW wall, N of 206		2
208	Red and black casting sand S of 201		2
209	Black ashy fill of cut 211		2
210	Construction cut for wall 207		2
211	Cut filled by 209		2
212	Indurated slag layer against 206		2
300	Modern overburden	200	3
301	Brick bays		3
302	NW-SE brick wall		3
303	Flagstone floor S of 301		3
304	Conduit containing metal machinery		3
305	Sandy surface over wall 309		3
306	Rubble and mortar from demolition of wall 309		3
307	Black deposit containing iron objects		3
308	Construction cut for wall 309		3
309	NW-SE wall N of 301		3

Context	Interpretative description	Same as	Trench
310	Square cut infilled with orange sand, overlying 304		3
311	Sandy fill of 310		3
312	Mixed waste deposit, level of machine stripping		3
313	Natural alluvial clay at N end T3		3
314	Fill of northern bay of 301		3
315	Cut of pipe trench		3
316	Fill of pipe trench		3
317	Brick chute off wall 302		3
400	Modern overburden	300	4
401	Orange sand		4
402	Grey clay, sand and rubble		4
403	Horizon of burnt brick rubble		4
404	Natural alluvial clay		4
405	Brick base of weighing machine		4
500	Modern overburden	400	5
501	Flagstone floor		5
502	N-S wall footing		5
503	Cut of culverted water course		5
504	Fill of 503		5
505	E-W row of bricks within 504		5
506	Natural alluvial clay		5
507	Yellow sand and clay		5
508	Demolition rubble, ash and brick		5
509	Tarmac infill over 501		5
510	Brick inspection chamber		5
511	Crushed brick and mortar floor within 502		5
512	Cinder surface		5
600	Demolition deposit		6
601	Concrete pad (E)		6
602	Concrete pad (Middle)		6
603	Concrete pad (W)		6
604	Cut for stadium footing		6
605	Layer of foundry waste		6
606	Natural alluvial clay		6
607	Compacted layer of purple cinders		6
608	Black fill of cut 604		6
700	Modern overburden	500	7
701	Natural alluvial clay	606	7
702	Horizon of burnt brick rubble		7
703	Mixed deposit slag, rubble and clay		7
704	Cinder bedding for tramway tracks		7
705	Wide cut		7
706	Compacted cinder surfaces green/purple		7
707	Parallel rows of crushed brick		7
708	Thick deposit of sand/crushed sandstone		7
800	Modern overburden	700	8

Context	Interpretative description	Same as	Trench
801	Lenses of cinders, ash and rubbish		8
802	Horizon of burnt brick rubble and clay		8
803	Field drains cut into natural clay		8
804	Natural alluvial clay		8



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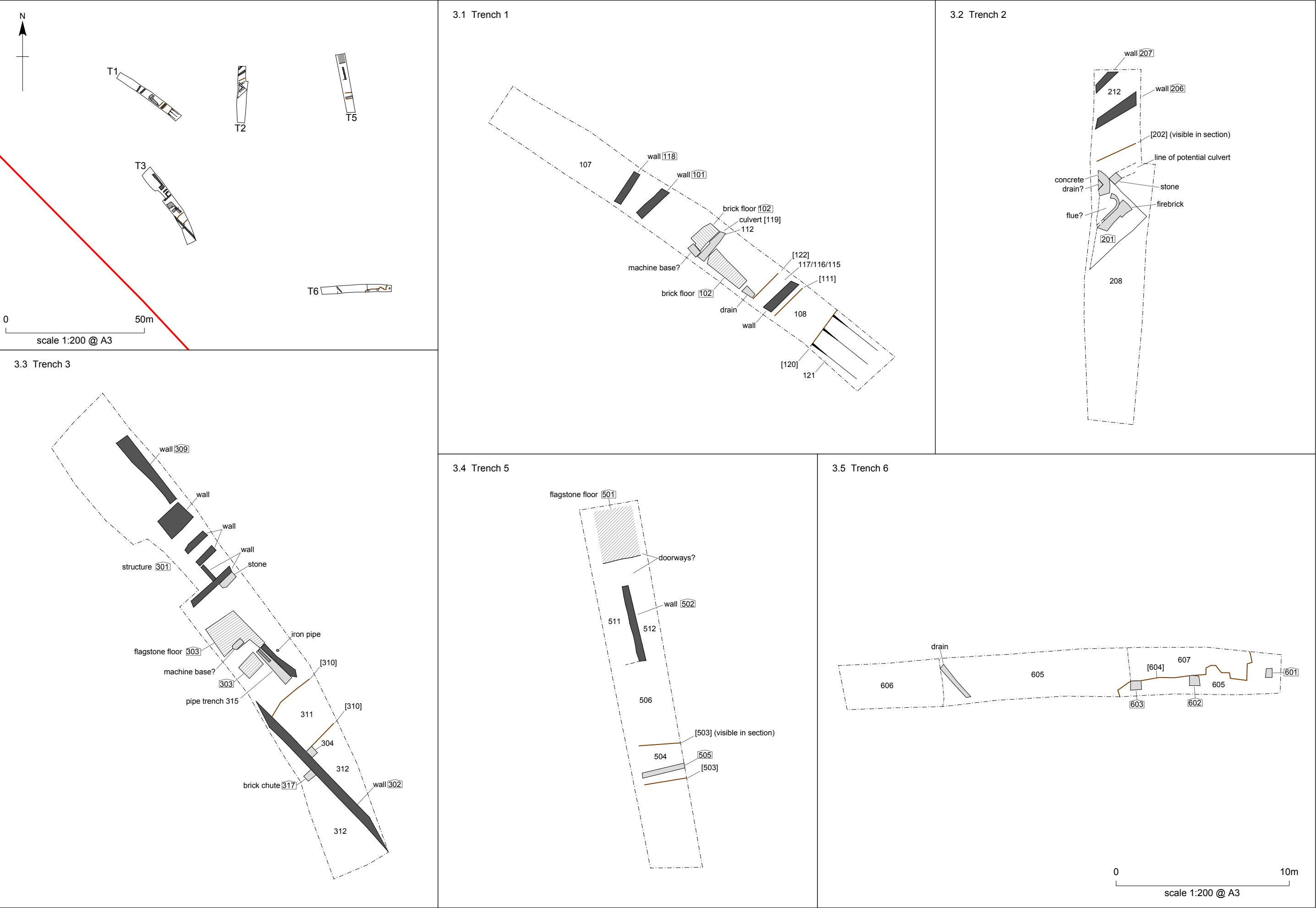




Plate 1 - Limestone setts in situ, overlying the location of Trench 2



Plate 2 - Trench 1. Overview, looking north-west



Plate 3 - Trench 1. Wall 101 and limestone setts 118



Plate 4 - Trench 1. North-east-facing section showing structure 102



Plate 5 - Trench 1. North-east-facing section of pit 120



Plate 6 - Trench 2. Overview of brick structure 201, looking south-west



Plate 7 - Trench 2. Brick chute below platform 201



Plate 8 - Trench 2. Casting sand 208, to the south of platform 201



Plate 9 - Trench 3. Overview of north-western end of Trench 3 showing potential floor surfaces



Plate 10 - Trench 3. Brick bays within structure 301



Plate 11 - Trench 3. Flagstone floor 303 and pipe trench 315, looking north-west



Plate 12 - Trench 3. Brick chute 317



Plate 13 - Trench 3. In situ machinery 304, within cut 310



Plate 14 - Trench 4. Upstanding remains of weighing station and burnt horizon 403



Plate 15 - Trench 5. Flagstone floor 501, looking north



Plate 16 - Trench 5. Wall footing 502 and mortar deposit 511, looking north-west



Plate 17 - Trench 6. Cinder surface 607, showing concrete pads set within cut 604



Plate 18 - Trench 7. North-east-facing section showing loose sand deposit 708, sleeper 704, cinder surface 706, potential wall footing 707, clay bank 703 and burnt horizon 702



Plate 19 - Trench 8. Overview of trench, looking south-east



Plate 20 - Trench 8. Assemblage of finds recovered from midden deposit 801