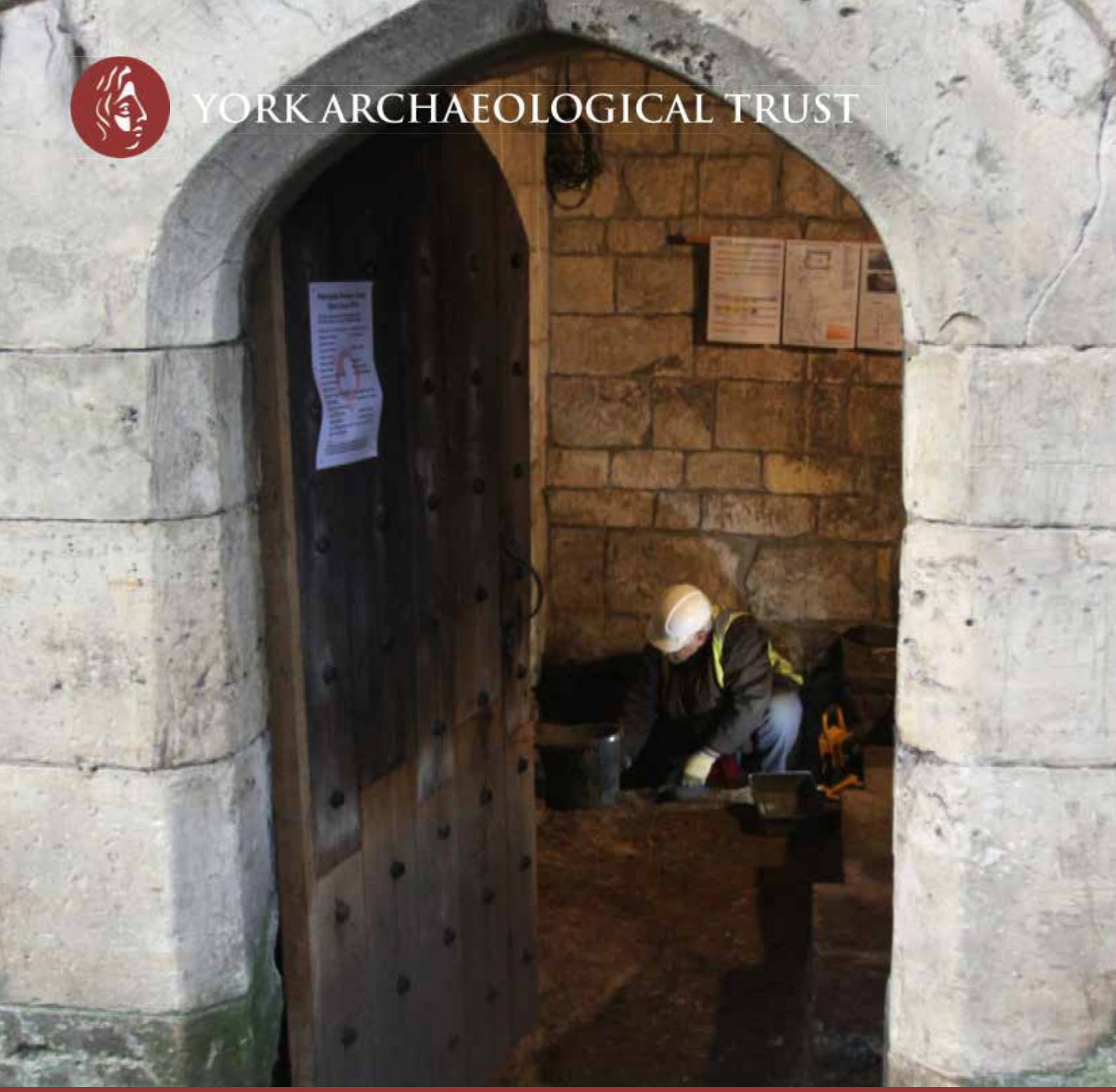

YORK ARCHAEOLOGICAL TRUST

Archaeological Investigations at
Fishergate Postern Tower, Piccadilly, York

By Arran Johnson

YAT Assessment Report 2019/6 January 2019

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Abbreviations

AOD – Above Ordnance Datum

BGL – Below Ground Level

CYC – City of York Council

FOYW - Friends of York Walls

NPG – Northern Powergrid

Pers. comm. – Personal Communication

PPE - Personal Protective Equipment

YAT – York Archaeological Trust

NON-TECHNICAL SUMMARY

Between the 10th and the 21st December 2018, York Archaeological Trust (YAT) led a community excavation at Fishergate Postern Tower, Piccadilly, York (SE 60680 51320).

The work was undertaken for City of York Council (CYC) who are working with the Friends of York Walls (FOYW) and Northern Powergrid (NPG) to install an electricity supply into the tower. The work was based on a Written Scheme of Investigation produced by YAT and involved the excavation and recording of a trench measuring 8.50m in length and 0.50m to 1.50m in width. The trench was excavated to a depth of 0.60m BGL.

Outside of the tower, a series of surfaces, make-up deposits and cut features dating to the 19th century were excavated. Two small sections of stone footings relating to the tower were also exposed. Within the tower, evidence of previous brick floors and the footings of an 18th/19th century timber staircase were found to overlie a series of make-up layers and cut features. In addition, the footings of the original internal south tower wall and a layer of dumping that pre-dates the construction of the tower were also investigated.

KEY PROJECT INFORMATION

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1 INTRODUCTION

Between the 10th and the 21st December 2018, YAT carried out a community archaeology project at Fishergate Postern Tower, Piccadilly, York (SE 60680 51320) (Figure 1).

The work was undertaken for City of York Council and formed part of a broader restoration project at Fishergate Postern Tower being carried out by the Friends of York Walls. In accordance with the Written Scheme of Investigation (WSI), excavation ceased at a depth of 0.60m BGL. While the sequence outside of the tower was primarily 19th and 20th century in date, two small areas of original tower footings were exposed. Inside the tower, 18th century footings and deposits were found to overlie a medieval pit and the foundations of the south interior tower wall. In addition, a deposit pre-dating the construction of the building was also investigated.

2 METHODOLOGY

The methodology followed the WSI (Appendix 6) and the conditions of the Scheduled Monument Consent provided by Historic England. Prior to the commencement of the excavation, CYC staff laid out a roughly linear trench aligned east-west (Figure 2) and manually lifted the present surfaces of flagstones, stone setts, ceramic setts and concrete flags.

The excavation area was laid out by eye based on a brief agreed by CYC, FOYW and YAT (Figure 2). All excavated features and deposits were planned from a single baseline running along the length of the trench. This baseline was located by triangulation from known points on surrounding buildings and temporary benchmarks were established inside and outside of the tower to relate all drawings to the Ordnance Datum.

Lighting for the internal trench was provided by a mobile lighting rig powered by a petrol generator supplied by CYC, with supplementary battery powered LED lighting. Only CYC and suitably trained YAT staff operated or moved the generator. The generator was kept outside of the tower at all times during use to avoid the build-up of exhaust fumes in the work area.

All excavated features were recorded using the standard YAT single context recording system, as detailed in the YAT Fieldwork Manual (YAT 2009). Colour digital photography was used to document archaeological contexts and to capture working shots of the excavation. Each context was assigned a unique four digit context number, drawn in plan and recorded on a proforma context card.

All deposits were excavated by hand with the exception of the concrete bedding of the present surface outside the tower (Context 1001) which was broken up with a hand-held pneumatic breaker by suitably trained CYC staff. All up-cast materials were stored on-site in rubble sacks. Finds were retrieved and bagged by individual context number. The excavation area was left open upon completion to allow for the installation of ducting by CYC. The internal and external excavation areas were separated by a 200mm wide, 0.50m high baulk left in place beneath the threshold stone of the tower entrance. This material was left in place to ensure that nothing of the fabric of the tower was disturbed by the works.

The recording and excavation was carried out by a team of volunteers from FOYW and associates with supervision, tuition and guidance from at least one YAT staff member. Each

volunteer received a full site induction and wore appropriate personal protective equipment (PPE) at all times when working in the excavation area. The public thoroughfare across the site was closed during the works and secured with Heras fencing. To promote public engagement with the project, explanatory signage was placed on the fencing and staff and volunteers were encouraged to explain the results of the excavation to visitors and passers-by.

The results of the excavation were spread to a broader audience through regular updates posted to the YAT social media accounts (@YATFieldwork on Facebook, Twitter and Instagram). All participants signed GDPR consent forms and were given the option not to appear in any publicity.

All site records for this excavation are currently stored with York Archaeological Trust under the project number 6111. The site archive has been digitised and entered into York Archaeological Trust's Integrated Archaeological Database (IADB Project 6111).

3 LOCATION, GEOLOGY & TOPOGRAPHY

The site is located at Fishergate Postern Tower, Piccadilly, York (Figure 1&2). The external and internal ground surface around the tower are presently a combination of stone flags, brick paving and stone setts at a height of 10.10m to 9.90m AOD. The west elevation of the tower faces onto the southern end of Piccadilly, looking across Castle Mills Bridge towards Tower Street. Lead Mill Lane runs along the north side of the tower and the City Walls connect to the southern elevation. Prior to its canalisation in the 18th century, the River Foss ran close to the north and west sides of the tower.

The superficial geology of the site is of the Alne Glaciolacustrine Formation of clays and silts formed between 116 and 11.8 thousand years ago during the Quaternary period. Bedrock is Sherwood Sandstone Group sandstone, sedimentary bedrock formed between 272.3 and 237 million years ago during the Permian and Triassic periods (British Geological Survey).

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The history of Fishergate Postern has been extensively researched and the following is a brief summary based primarily on the RCHME survey of York's Defences (RCHME 1972). The first definitive reference to a Postern Tower on this site dates to 1406, although the present building was constructed between 1502 and 1505 (Wilson and Mee 2005, 13). Fishergate Postern was initially one of the lesser gateways into the city, with the nearby Fishergate Bar providing the main route from the Fishergate area. A revolt of 1489 caused extensive damage to Fishergate Bar and the gateway was subsequently blocked up. Increased traffic in the area led to the Corporation of York ordering the construction of a "Substantial Postern Tower" in 1502, with work certainly completed by 1507 (RHCME 1972, 139-159).

The roof of the tower was originally open with crenellated parapets, although a pitched roof was added later in the 16th century and is visible on Speed's map of 1610. Fishergate Postern is the only surviving gateway for foot traffic of the seven medieval posterns built during the medieval period and would have been furnished with a portcullis in addition to a strong oak door. Rent records detail numerous tenants over the lifetime of the building, with keyholders monitoring and controlling the flow of people into the city until the final recorded watch of

1803. The tower ceased to be used as a defensive structure at this point and was leased to a private tenant. Numerous pieces of restoration work have taken place, most notably in 1838 and 1960 that give the building its present layout (ibid.). The Friends of York Walls and CYC are presently involved in a long-term restoration project that is currently focused on the installation of an electricity supply.

Field Archaeology Specialists (FAS) carried out a Historic Building Recording survey in 2009 that included dendrochronological dating of timber from the tower (Clark 2009). Unfortunately, the dendrochronology was not successful in providing tighter dating evidence, although the results of the survey broadly complimented the dating sequence suggested by historic sources.

5 RESULTS

The results of the excavation will be discussed by phase, in chronological order.

5.1 Phase 107 – Medieval Dumping

The earliest context identified during the excavation was a dump of friable, mid-brownish orange sandy silt (Context 1042; Figure 3; Plate 1). The upper surface of the deposit was highly compacted and contained a moderate amount of mortar flecks, possibly as a result of trampling during the construction of the tower. The deposit contained relatively few inclusions and appeared to be primarily made up of re-deposited alluvial material.

Dating evidence was limited as the deposit contained few finds. Alongside a small amount of Roman brick and colour coated ware, however, a single sherd of a Humber type earthenware was recovered, which is likely of 14th to early 16th century date and corresponds well with the construction date of the tower. A single intrusive sherd of 18th/19th century English stoneware was also recovered; this was likely introduced to the context through later disturbance.

The upper surface of the deposit was located at a height of 9.62m AOD and it continued beyond the maximum excavated depth of 9.29m AOD.

Plate 1 West facing view of Context 1042, a dump deposit pre-dating the construction of the tower (0.50m scale)

5.2 Phase 106 – Construction of Fishergate Postern Tower

In the external excavation area, two small areas of substantial limestone footings were observed below the current threshold (Group 1007; Figure 4; Plate 2). The footings were made of roughly faced magnesian limestone blocks bonded with a lime mortar and were exposed to a height of 0.25m and up to 0.39m across.

The southernmost of the two footings (Context 1044) was built directly below the south side of the door jamb. The northernmost (Context 1043) was not built directly below the north side of the door jamb, instead being built offset approximately 0.20m to the south (Plate 2). As only a small area of the footings was exposed, the reason for this is unclear at present.

Plate 2 West facing view of Group 1007, stone footings below the tower threshold (0.20m scale). The north footing on the right side of the image is not built directly below the door jamb.

Inside the tower, dump deposit 1042 (Section 5.1) was truncated by the construction cut of the east wall of the building (Set 1030 in Group 1015; Figure 5). While the upstanding wall was not within the excavation area, a roughly L-shaped area of wall core measuring 1.70m x 1.60m was exposed adjacent to the doorway (Plate 3; Figure 4). The wall core comprised of compacted limestone rubble and mortar at a height of 9.65m AOD and was recorded and left *in-situ*.

Following the construction of the main external walls, an east/west aligned internal wall (Set 1029 in Group 1015; Figure 4; Plate 3) was added to the south end of the building to house the spiral staircase. The wall abuts the main east and west walls of the tower and the construction cut of the northern face of the wall was fully exposed in plan within the current excavation area. The construction cut was roughly linear in plan and measured 2.75m in length and up to 0.66m in width. The cut was excavated to a depth of 0.33m (9.44m AOD) to expose the wall footings, although its full depth remains unknown.

Plate 3 East facing view of exposed tower wall core (Set 1030) below the threshold and the footings of the internal wall (Set 1029; 1.00m and 0.50m scales).

Three courses of the footings of the internal wall were exposed during the excavation (Group 1015; Figure 4). From a height of 9.80m AOD at the base of the standing wall, the footings stepped out three times to a maximum width of 0.51m, with the lowest course built at 9.47m AOD (Plates 3 and 4). The full depth of the footings is presently unknown.

Roughly rectangular blocks of magnesian limestone measuring up to 0.85m x 0.22m were the predominant building material, although some sandstone blocks were also present; a pale grey lime mortar was used throughout. The sandstone may represent recycling of masonry and in some cases was in very poor condition. The footings were covered with a construction backfill deposit of mortar and sandy clayey silt. Alongside a small amount of animal bone, a small assemblage of Roman pottery and 13th-16th century tile was recovered from this deposit.

Plate 4 South-east facing working view of the internal wall footings (Set 1029) being exposed.

5.3 Phase 105 – Medieval Pit

This phase of activity comprised a single pit located at the western limit of excavation (Group 1014; Figures 5 and 6; Plate 5). The pit was sub-circular in plan and measured 1.20m x 1.15m, continuing beyond the northern limit of excavation. The pit was part-excavated to a depth of 0.30m (9.31m AOD) and, while the south edge of the cut was quite diffuse, it clearly appeared in plan to truncate the construction backfill of the south wall of the tower (Set 1029) and completely obscured the construction cut of the west wall. The artefactual assemblage and inclusions were primarily animal bone, charcoal, mortar flecks and pottery, suggesting disposal of domestic waste. Twenty sherds of primarily Roman pottery were recovered from the pit fill, although the assemblage also contained early medieval material up to 11th century in date.

5.4 Phase 104 - Post-Medieval Activity

The construction horizon of the tower and the pit discussed in Sections 5.2 and 5.3 were sealed by a thin layer of mortar-rich material that raised the ground level up to 9.69m AOD (Set 1027; Figure 7). This deposit was cut by a sub-oval cut that measured 0.34m x 0.22m x 0.19m and was interpreted as a possible post hole (Set 1026; Figure 7). This phase was dated to the 18th century and may relate to internal alterations to the tower.

Plate 5 West facing view of 16th century pit (Set 1028) cutting into the construction backfills of the tower (0.20m scale).

5.5 Phase 103 – 18th/19th Century Structures and Surfaces

The earliest features within this phase of activity were a pair of brick footings immediately inside the tower entrance (Group 1012; Figure 8). These rough structures were one course in height and width and built flush to the wall against the doorway at 9.70m AOD, perhaps to support a former threshold. The footings were un-mortared and comprised of entirely re-used brick dating to the 16th-18th century.

These footings and all earlier material were sealed by thin make-up layer of dark greyish orange brown silty sand with a moderate amount of clinker and pebbles (Context 1015; Group 1009). A range of 16th to 19th century ceramics were recovered from the deposit, although the small amount of 19th century material could be intrusive. Domestic waste such as animal bone, oyster shell, glass, fired clay tobacco pipe and an iron nail was present, as well as a ceramic marble and a near-complete ivory comb dated to the post-medieval period (SF1; see Section 6.5 for further discussion). Context 1015 served as a bedding deposit for a series of roughly-built brick structures which demonstrate a previous layout of the tower's interior.

The principal structure was an east-west aligned, L-shaped group of un-mortared footings comprised of re-used medieval and post-medieval brick and brick fragments; the latest brickwork was dated between the mid-18th and mid-19th centuries (Group 1009; Figure 8; Plate 6). As a whole, the footings measured 2.62m x 1.35m and survived to a maximum of two courses in height at 9.81m AOD. These structures were interpreted as the footings for a timber staircase that formerly provided access to the first floor.

Plate 6 Working shot of brick footings and floors being investigated (Groups 1009 and 1010), looking west. The entrance to the former staircase would be to the immediate right of the archaeologist.

Following the construction of the staircase, a brick floor was built flush to the footings, and two small areas of this brick floor survived within the excavation area (Contexts 1005 and 1008 in Group 1010; Figure 8; Plates 6 and 7). Both surfaces were a single course in height (9.70m AOD) and made of un-mortared, re-used 16th-18th century brick with a worn upper surface. The westernmost of the two surfaces (Context 1008) featured a clear rectangular pattern of sooting on its upper surface and increased ware at its junction with the staircase footings (Plate 7).

A further L-shaped brick footing from the same phase was built adjacent to the eastern brick surface (Context 1004; Figure 8). As only three bricks from this structure survived, little further inference can be made into its function.

Plate 7 South facing view of Context 1008 (in Group 1010) with rectangular sooting pattern (0.20m scale).

5.6 Phase 102 – 19th-20th Century Activity

Outside of the tower, the stone wall footings described above (Group 1007; Section 5.6) were sealed by a levelling deposit (Context 1034 in Group 1006; Figure 9; Plate 8). This context was one of a series of three similar layers of dark greyish, orange brown silty sandy clay with a moderate amount of brick and mortar rubble inclusions (Group 1006). These deposits created a roughly flat surface at around 9.50m AOD that followed the gentle slope towards the tower that is present across the broader area. As well as rubble, a moderate amount of slag and clinker was present within this sequence, possibly by-products from neighbouring industrial premises. An 18th-19th century date was provided by the ceramic finds.

The levelling material was cut by a single sub-square post hole measuring 0.17m x 0.16m x 0.15m (Context 1036; Figure 9). Fragments of re-used 17th century pan tile used as packing material remained *in-situ* within the cut, although the post was clearly removed in antiquity.

A further mixed levelling dump with frequent CBM fragments (Context 1028 in Group 1005; Figure 10) raised the ground level up to 9.60m AOD. This was overlain by another dump deposit (Context 1024 in Group 1004; Figure 10) at the eastern limit of excavation and cut by a shallow linear cut feature closer to the tower (Context 1027 in Group 1004; Figure 10). Only a small area of this rectangular cut was exposed; measuring 0.46m x 0.38m x 0.16m and dated to the 19th century by ceramics and a fragment of fired clay tobacco pipe stem.

Plate 8 North-west facing view of 19th century levelling deposits (Group 1006, 1.00m scale).

These features were sealed by a worn, heavily compacted surface comprised of fragments of sandstone flags and clinker and CBM rubble (Context 1022 in Group 1003; Figure 11). The surface was laid at some point after 1850 at 9.75m AOD and was dated by finds of brick and pottery. Context 1022 was subsequently covered by a compacted make-up deposit of dark-brownish grey sandy silt with frequent cinder, clinker, slag, CBM, mortar and charcoal (Context 1017 in Group 1003; Figure 12). This context raised the ground level to 9.80m AOD and contained ceramics ranging in date from the 17th to the 18th century.

The final feature within this phase was a 0.62m x 0.35m area of a stone sett surface in the north-east end of the excavation area (Context 1014 in Group 1002; Figure 12; Plate 9). The surface was heavily truncated but well-laid, with rows of rectangular granite setts laid on edge against a north-east/south-west aligned sandstone kerb. A small amount of bitumen was used as bonding material and the setts were laid in a thin bed of sand, with no concrete or rubble foundation. The alignment of the kerbing would suggest that this was a pathway leading to the door of the tower.

The surface of the kerbstone stood 50mm proud of the make-up material that the surface is cut into (Context 1017), suggesting that a surface of flagstones may have previously been laid against the kerb. This surface was tentatively dated to the early 20th century.

Plate 9 North-east facing view of a 19th/20th century paved surface (Group 1002). Group 1001, a robber cut, is visible in the left of the image (0.50m scale).

5.7 Phase 101 – 20th Century Robbing

The surfaces discussed in Section 5.6 appear to have become redundant in the mid-20th century, as a robber cut (Context 1013; Figure 12, Plate 9) removed a 0.80m x 0.40m area of the stone sett surface discussed above (Group 1002). The cut was 0.40m in depth and appears to have been excavated to recover stone setts for re-use.

5.8 Phase 100 – 20th Century Surfaces

This phase was assigned to the surfaces that represent the latest contexts in the archaeological sequence. Outside of the tower, the present surface is a mixture of concrete flags, stone setts and ceramic setts set in a bed of concrete (Group 1000). This surface slopes gently from east to west from around 10.10m AOD to 9.90m AOD. Within the tower, the surface comprises of York Stone flags in a bedding of sand and mortar laid at 9.91m AOD (Group 1008). Excavation of the make-up deposit produced a large assemblage of earthenware's with possible evidence of industrial use (BF29; Appendix 5).

Both of the surfaces were lifted by CYC staff prior to the commencement of the excavation.

6 DISCUSSION

6.1 Phase 107 – Medieval Dumping

As the only deposit investigated during the excavation that definitively pre-dates the construction of the tower, this phase offered an insight into prior land use and demonstrated the presence of intact medieval archaeology only 0.30m below the present floor level of the tower. The single levelling deposit that made up this phase continued beyond the limit of excavation and appeared to be part of a substantial landscaping event (Context 1042; Figure 3; Plate 1).

The deposit was comprised of alluvial silts and sands that had clearly been re-deposited. As the course of the River Foss would have been far closer to Fishergate Postern Tower prior to its canalisation in 1793, it is likely that this material would have been sourced from the nearby waterfront (Tillot 1961, 506-510). The scale of the deposit may suggest that it was laid to provide a level surface immediately prior to the construction of the tower, however, as the non-intrusive finds assemblage was almost entirely Roman in date, this interpretation cannot be confirmed at this point. The single sherd of Humber type earthenware does, however, complement the hypothesis, which could be pursued further in future investigations of the site.

No evidence of the predecessor to the present tower was observed during this excavation, although it is entirely possible that structural remains could survive beneath the medieval levelling deposit detailed above.

6.2 Phase 106 – Construction of Fishergate Postern Tower

The results of the excavation within the tower offered little new knowledge regarding its construction sequence, although the data does provide useful evidence which complements the history of the structure as it is presently known. Spot dates provided by ceramics recovered from this phase work well with the 1502-7 construction of the tower referred to in historic documents (RHCME 1972, 139-159).

The wall footings exposed on the exterior of the tower are of greater interpretive potential, despite only a small area of them being exposed (Group 1007; Figure 4; Plate 2). These stepped footings do not align with the present doorway that is built over them and could be taken as evidence of an earlier, narrower entrance into the tower. This is an intriguing possibility, but further excavation of the external footings would be required to offer any further inference.

6.3 Phase 105 – Medieval Pit

The single, partially-excavated pit that formed the sole feature within this phase provides evidence of activity immediately post-dating the construction of the tower (Set 1028; Figure 6; Plates 5 and 10). The finds assemblage did not provide a tight date for the feature as it primarily comprised re-deposited Roman and early medieval ceramics. Refuse pits are not typical features within standing buildings of this period, however, construction work may still have been in progress when the pit was dug.

As the pit only received limited investigation, a further possibility must be considered. The pit's stratigraphic relationships with the surrounding deposits were very clear in plan; however, the southern edge of the cut was noted to be quite diffuse during excavation. It therefore remains possible that the pit actually pre-dates the construction of the south tower wall (Set 1029). If this interpretation were proved to be correct, this feature would less likely represent a pit that obscures the construction cut of the west wall of the tower, rather the construction cut itself. As the archaeological resource beneath the floor of the tower is well-preserved, this ambiguity could certainly be resolved with further excavation.

Plate 10 Working view of a medieval pit (Set 1028) being cleaned prior to excavation, facing south-west.

6.4 Phase 104 – Post-Medieval Activity

The excavation within the tower revealed little in the way of post-medieval deposition, although this is likely a result of the floors of the tower interior being maintained. It is likely that successive surfaces will have been laid, cleared and replaced over this period, although no evidence of these appears to survive.

The spread of mortar and the small post hole attributed to this phase yielded little in the way of dating evidence (Sets 1026 and 1027; Figure 7), but the presence of 18th century ceramics would suggest that any medieval surfaces are likely to have been lost to later alterations/repairs.

6.5 Phase 103 – 18th/19th Century Structures and Surfaces

The internal layout of the tower underwent numerous changes in the 18th and 19th centuries. The footings of a timber staircase and an associated brick floor dating to this period (Groups 1009, 1010 and 1011; Figure 8; Plates 6 and 7) had survived in good condition after the superstructure was dismantled in 1960 (RCHME 1972, 156). The L-shaped footprint of the footings demonstrated that the foot of the stairway would have faced northwards and was built flush to the west wall of the tower. The steep angle of the staircase is still visible as a mark in the wall (Plate 11).

A rectangular patch of sooting on the surface of the brick floor adjacent to the staircase (Group 1010; Plate 7) indicates that a further structure is likely to have been present in this location. There is little evidence to infer much regarding the form or function of this structure, however, there was clearly a small void beneath it that was large enough to let in soot and dust but too tight to allow cleaning.

A near-complete ivory comb (SF1) recovered from the make-up beneath the brick floors (Context 1015) represents the most significant personal object recovered from the excavation, possibly owned by a former tenant of the tower. The comb was a simple, single-sided type which was used across the post-medieval period (Nicola Rogers, pers. comm.). The ivory is most likely that of an African elephant but may also be mammoth (Mags Felter, pers. comm.). Mammoth ivory is by far the less likely source material of the comb, as it requires very particular conditions to survive in a sufficient level of preservation to be workable (MacGregor 1985, 40). Ivory combs were not uncommon in the post-medieval period and were widely traded across Europe. Manufacture at this point was particularly intensive in the Netherlands and was at its peak between the 17th and 18th centuries, a date which correlates well with that of the comb from Fishergate Postern Tower (Rijkelijkhuizen 2009, 14).

The pottery recovered from this phase was primarily post-medieval through to 18th century in date; the small amount of 19th century material may be intrusive – possibly introduced during alterations to, or the demolition of, the staircase.

Plate 11 South-west facing pre-excavation view of the south internal tower wall (Group 1015). A diagonal mark in the wall descending left to right shows the location of the former staircase (Group 1009). Image courtesy of Friends of York Walls.

6.6 Phase 102 – 19th-20th Century Activity

The archaeological sequences observed in the internal and external areas of the excavation were markedly different. Where inside the tower, deposition was limited by maintenance of successive floors at a fixed level, the area outside proved to be far more dynamic and reveals a constant process of use and renewal.

Group 1006, a series of levelling dumps and a single post hole, were the earliest features within this phase (Figure 9). The post hole may relate to a lean-to structure that formerly abutted the tower. There is little evidence regarding this structure, although numerous putlog holes remain visible in the tower wall (Plate 12).

This horizon was sealed by a succession of dumps, cuts and roughly laid surfaces (Groups 1003, 1004 and 1005, Figure 10 & 11). This sequence is suggestive of a busy landscape, where surfaces were laid and renewed in an ad-hoc manner, making use of locally sourced materials. The frequency of industrial waste within this phase can be attributed to the proximity of the Phoenix Iron Foundry which occupied the land to the east of the tower in the 19th century and is discussed further in Section 6.8.

The latest surface within this phase (Context 1014 in Group 1002, Figure 12) was of notably higher quality, with stone setts and sandstone kerbing instead of recycled industrial waste. Whether this surface relates to early 20th century improvements associated with the clearance of 'slum' housing is difficult to say with such limited evidence, although it is a definite possibility (Tillott 1962, 293-300).

Plate 12 Working shot of archaeological recording, facing north-east. Putlog holes are visible in the wall to the left of the doorway.

6.7 Phase 101 – 20th Century Robbing

This phase details a robbing event, presumably aiming to recover building materials (Group 1001). As the present day surface (Group 1000; see Section 6.8) makes use of the same granite setts seen in Group 1002 (Section 6.6), this phase may well be contemporaneous with the development of the current social housing within the City Walls in the mid-late 20th century.

6.8 Phase 100 – 20th Century Surfaces

The present surfaces in and around the tower are all of 20th century date and primarily make use of modern materials, although the stone setts outside the tower were likely sourced from the surface detailed in Section 6.6 (Group 1002). Further evidence of re-use of earlier materials was observed in the make-up deposit beneath the present flagstone surface of the tower interior (Group 1008). The deposit comprised a substantial assemblage of earthenware vessels with a pale white concretion on the inner face that may relate to some form of industrial use. The likely source for such material would seem to be the former Phoenix Iron Foundry, which occupied the land to the immediate east of the tower in the 19th century until the works were relocated to the Leeman Road area in 1874 (Fawcett, Ives and Sinclair 2013, 52). The Fishergate foundry appears to have been demolished immediately following its relocation as it does not feature on the 1888-1913 OS map of York. Instead, the domestic buildings flanking the short-lived run of Leicester Street occupied the site at this point.

It is likely that building materials and waste products from the ironworks will have been utilised across the locality in the years following its demolition; indeed, iron slag and clinker were used in some quantity as surface make-up outside the tower at this point (Groups 1003, 1004 and 1005; Section 6.6). While the make-up deposit inside the tower presently supports a 20th century floor, it may originally been laid in the 1870s and could have been used as the foundation for a succession of floors since.

6.9 Conclusions

The community excavation at Fishergate Postern Tower was a successful exercise in collaboration, public engagement and archaeological practice. This was in no small part down to the hard work and dedication of the Friends of York Walls and the assistance of City of York Council.

Though small in scale, the excavation has demonstrated that a varied and well-preserved archaeological resource survives below Fishergate Postern Tower. Inside the building, the discovery of *in-situ* medieval archaeology just 0.30m below the present floor is significant. As the ground appears to have been raised in advance of the building's construction (see Section 6.1), it is possible that remains of the earlier 14th century tower may survive. The medieval horizon is of high interpretive potential and could provide new information on the changing landscape of the area and the development of the city's defences.

The archaeological sequence outside the tower is markedly different, but also of high potential for future research. The palimpsest of early modern surfaces has the potential to illuminate an important era of York's development, while the medieval footings observed beneath the threshold certainly warrant further investigation.

The early modern horizon is of particular interest. Between the 18th and 20th centuries, the imposing and unchanging mass of Fishergate Postern Tower stood as sentinel to a flurry of construction, decay and renewal as the townscape around it changed. Future research into the lives of former residents and caretakers of the tower could offer a fascinating insight into the human experience of this period.

LIST OF SOURCES

British Geological Survey http://mapapps.bgs.ac.uk/geologyofbritain3d/index.html? (accessed 15/01/19)

REFERENCES

Clark, J. 2009. Fishergate Postern Tower, York. Historic Building Recording Report FAS Report FAS2009 441 YFP389

Fawcett, B., Ives, J. A., and Sinclair, A. 2013. *York Central: Audit of Heritage Assets*. City of York Council

MacGregor, A., 1985. *Bone, Antler, Ivory and Horn. The Technology of Skeletal Materials Since the Roman Period*. Croom Helm

RCHME, 1972. An Inventory of the Historical Monuments in City of York, Volume 2, the Defences (London, 1972), British History Online http://www.british-history.ac.uk/rchme/york/vol2 [accessed 18 January 2019].

Rijkelijkhuizen, M. Int J Histor Archaeol (2009) 13: 409. https://doi.org/10.1007/s10761-009-0091-0 [accessed 05/06/19]

Tillott, P. M. (ed.), 1961. *A History of the County of York: the City of York.* London

Wilson, B. and Mee, F., 2005. *The City Walls and Castles of York: The Pictorial Evidence* The Archaeology of York Supplementary Series, York Archaeological Trust

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Site Photography: Volunteers and excavation team

Survey: Arran Johnson, Katie Smith

Illustrations: Arran Johnson, Katie Smith

APPENDIX 1 – INDEX TO ARCHIVE

Item	Number of items
Context sheets	45
Levels register	6
Photographic register	N/A
Sample register	N/A
Drawing register	1
Original drawings	30
B/W photographs (films/contact sheets)	N/A
Colour slides (films)	N/A
Digital photographs	546
Written Scheme of Investigation	1
Report	1

Table 1 Index to archive

APPENDIX 2 – CONTEXT LIST

Context Number	Set	Group	Phase	Description
1000	1000	1000	100	Modern surface comprised of stone flags, ceramic setts and stone setts.
1001	1000	1000	100	Concrete footing and make-up for 1000.
1002	1014	1008	100	Surface make-up for 1003.
1003	1014	1008	100	Flagstone surface.
1004	1021	1011	103	Brick footing.
1005	1019	1010	103	Brick surface.
1006	1017	1009	103	Brick footing.
1007	1018	1009	103	Brick footing.
1008	1020	1010	103	Brick surface.
1009	1022	1009	103	Brick footing.
1010	1016	1009	103	Brick footing.
1011	1015	1009	103	Brick footing.
1012	1001	1001	101	Backfill of robber cut 1013
1013	1001	1001	101	Robber cut.
1014	1002	1002	102	Stone sett surface.
1015	1023	1009	103	Make-up deposit for brick floor and staircase footings.
1016	1002	1002	102	Construction cut for surface 1014.
1017	1003	1003	102	Make-up deposit.
1018	1026	1013	104	Backfill of post hole 1019.
1019	1026	1013	104	Post hole.
1020	1024	1012	103	Brick footing.
1021	1025	1012	103	Brick footing.
1022	1004	1003	102	Rough surface.
1023	1027	1013	104	Make-up deposit.
1024	1006	1004	102	Dump.
1025	1028	1014	105	Pit backfill within 1030.
1026	1005	1004	102	Backfill of pit 1027.
1027	1005	1004	102	Cut of pit/linear.
1028	1007	1005	102	Make-up deposit.
1029	1029	1015	106	Construction backfill of wall 1041.
1030	1028	1014	105	Pit cut.
1031	1008	1006	102	Fill of post hole 1036.
1032	1009	1006	102	Levelling deposit.
1033	1011	1006	102	Dump.
1034	1010	1006	102	Dump.
1035	1008	1006	102	Tile packing within post hole 1036.
1036	1008	1006	102	Post hole cut.
1037	1030	1015	106	Stone wall footing.
1038	1030	1015	106	Construction cut for wall footing 1037.
1039	1029	1015	106	Stone wall footing.
1040	1030	1015	106	Construction cut for wall 1041.
1041	1029	1015	106	Stone tower wall.

Context Number	Set	Group	Phase	Description
1042	1031	1016	107	Dump.
1043	1013	1007	106	Stone wall footing.
1044	1012	1007	106	Stone wall footing.

Table 2 Context list

APPENDIX 3 – THE CERAMIC BUILDING MATERIAL

By Jane McComish

INTRODUCTION

This assessment relates to 47.039kg of ceramic building material (CBM) recovered from the archaeological excavation at Fishergate Postern Tower (York Archaeological Trust project code 6111). The CBM ranged in date from Roman to modern, though the majority of the collection was of post-medieval date.

METHODOLOGY

The collection was recorded to a standard YAT methodology (McComish 2015) whereby each sherd is individually recorded on a pro-forma sheet which details the project code, the context number, the weight in grams, the fabric type, the surviving complete dimensions (length, width, thickness, flange height) and any other relevant information (surface marks, glazes, unusual features etc.). A question mark is placed after the form name if the identification is uncertain, for example 'Imbrex?', while the form of non-standardised sherds is listed as 'Other'. The fabric is determined by comparing the sherd to a York fabric reference collection held by York Archaeological Trust (YAT).

RESULTS

The various forms present are summarised by historical period on Table 1, while a summary of the forms present in relation to context is given on Table 2.

Roman

The Roman CBM accounted for 0.4% of the total volume of CBM from the site. The two sherds in question were too small to determine the original form. Both were in fabrics typical for York.

Medieval

Medieval CBM accounted for 11.4% of the total volume of CBM from the site. The forms present included roofing tiles of 13-16th century date (peg and plain) and bricks of 14-16th century date.

Later medieval roofing tiles were flat rectangles which could be fixed to the roof either by a projecting nib which hooked over the laths of the roof (nib tiles) or by a wooden peg or nail (peg tiles). Where the method of fixing is unclear due to the fragmentary nature of the material in question the tiles are termed plain tiles. These tiles were laid in overlapping courses on a roof (as with present day roofs).

A single peg tile was present, which was 19mm thick; the square peg hole was insufficiently preserved to determine the dimensions.

The plain tiles examined ranged from 11-19mm in thickness (48 examples), but no other dimensions survived. Smoothing lines parallel to the edge of the tile were present on four

examples, indented borders were present on two sherds and two of the plain tile sherds had reduced cores.

One sherd of medieval brick was present 36mm in thickness and 134mm in breadth, the length did not survive. The brick was made in a sanded mould. There were an additional two sherds of brick for which no edges survived, these were probably of medieval date, given the date of the context in question overall (C1015).

The medieval CBM was in sizes and fabrics typical for York as a whole.

Post-Medieval

The post-medieval CBM accounted for 73.5% of the total volume of CBM from the site. The forms present included bricks of 16-18th century date, pan tiles of 17th century and later date and a paver of 17th century or later date. In the case of the pan tiles, this form continues in use to the present day; the recorded sherds could therefore be of modern, rather than post-medieval date.

The post-medieval bricks were 49-59mm in thickness (26 examples), 109-117mm in breadth (16 examples) and 145-230mm in length (7 examples). Bricks of this date were made in wetted moulds, a technique termed slop-moulding. The upper surface of one brick was smoothed parallel to the stretcher, one brick had three pronounced finger prints on one stretcher from being lifted while wet. Fourteen of the bricks had a turning mark on the base and one had a circular indent on the base. Thirteen had straw marks on the basal bed from being dried on the ground prior to firing. One had a reduced core. Three had a worn bed resultant from use in a floor/step.

Pan tiles have a shallow S shaped profile and a nib on the reverse for attaching the tile to a roof. These tiles were introduced into eastern Britain from the Netherlands and came into widespread use from the 17th century (Lemmen 2013, 8). The examples at the site were 14-16mm in thickness, but no other dimensions survived. A single bib was present which was rectangular and 53mm x 26mm x 17mm in size (the thickness includes the thickness of the tile.

The post-medieval bricks and pan tiles were in sizes and fabrics typical for York as a whole.

Pavers are post-medieval floor tiles. The single example from the site was 66mm thick and in excess of 140mm x 170mm in size. These are comparatively rare finds on most excavations within York.

Modern

The modern CBM accounted for 14.5% of the total volume of CBM from the site. The forms present included hand-made bricks of late-18th century and later date, a machine-made brick of mid-19th century or later date and a machine-made floor tiles of mid-19th century or later date.

The mid-18th-mid-19th bricks were made in the same way as post-medieval bricks, i.e. slop moulding, they were, however, larger. This was as a response the Brick Taxes of 1784-1850 which were initially levied per 1000 bricks, encouraging an increase in brick size to avoid the tax (Brunskill 1997, 38). In 1803 as a response to the increased size of bricks the tax was altered to be double duty on bricks more than 150cu inches in volume, which curbed the growth in the size of bricks (ibid., 38). The examples from the present site were 236mm long (1

example), 113-118mm wide (2 examples) and 67-71mm thick (3 examples). One had a turning mark on the base.

Machines for the mass production of pressed bricks were invented in the mid-19th century (Brunskill 1997, 25). A single sherd of pressed firebrick was present, though no dimensions survived. These were manufactured using fireclay which is often found in association with coal deposits (Dillon 1985, 9). Fireclay has a high proportion of alumina and is free of lime, magnesia and metallic oxides (Brunskill 1979, 42).

A machine-made grey quarry tile was present. This was 22mm thick but no other dimensions survived. Part of a frog was present on the back.

The post-medieval CBM was in sizes and fabrics typical for York as a whole.

SUMMARY AND RECOMMENDATIONS FOR FURTHER RESEARCH

The collection of CBM from the site was for the most part typical for periods in question in terms of the forms, fabrics and dimensions present. It offers little potential for further research, mainly being of use for dating the contexts in question. None of the material was worthy of museum display.

RECOMMENDATIONS FOR RETENTION/DISCARD

For excavations within the City of York, YAT routinely adopts a record and discard policy, whereby only a representative selection of CBM from each site is retained. For this site a single brick was retained, as all the other material was typical for York as a whole.

Period	Form	No. of sherds	Weight in grams	% of total weight
Roman	Brick	2	175	0.4
Medieval	Brick	3	600	1.3
	Peg	1	125	0.3
	Plain	51	4634	9.9
Post-medieval	Brick	17	29405	62.5
	Pan	17	2850	6.1
	Paver	1	2425	5.2
Modern	Brick	4	6725	14.3
	Floor	1	100	0.2

Table 3. CBM by form in relation to period.

Context	Dating	Forms present
1001	1850+	Floor, Plain
1002	Mid 18th+	Brick, Pan, Post medieval brick, Plain
1004	Mid 18th - mid 19th	Brick, Post medieval brick
1005	16-18th	Post medieval brick
1006	16-18th	Post medieval brick
1007	16-18th	Post medieval brick
1008	16-18th	Post medieval brick
1009	17th+	Paver?, Post medieval brick
1010	Mid 18th-mid 19th	Brick, Post medieval brick
1015	14-16th	Medieval brick, Medieval brick?, Plain
1017	17th+	Pan, Peg, Plain, Roman brick, Stone peg?
1020	17th+	Post medieval brick
1021	16-18th	Post medieval brick
1022	1850+	Brick, Plain
1023	13-16th	Plain
1024	17th+	Pan
1028	17th+	Medieval brick, Pan, Post medieval brick, Plain, Stone peg?
1029	13-16th	Plain
1034	17th+	Pan
1035	17th+	Pan
1042	1st-4th	Roman brick

Table 4. CBM in relation to context

APPENDIX 4 – THE STONE BUILDING MATERIAL

BY Jane McComish

INTRODUCTION

This assessment relates to 105g of stone roofing and floor tiles recovered from the archaeological excavation at Fishergate Postern Tower (York Archaeological Trust project code 6111).

METHODOLOGY

The stone roof and floor tiles are recorded to a standard YAT methodology (McComish 2015) whereby each sherd is individually recorded on a pro-forma sheet which details the project code, the context number, the weight in grams, the stone type, the surviving complete dimensions (length, width, thickness) and any other relevant information (e.g. peg-hole size). A question mark is placed after the form name if the identification is uncertain, for example 'stone peg?'''. The data is stored on YATs internal computer system (which is backed up daily to prevent data loss) under the project code 6111.

DISCUSSION

Two small fragments of micaceous sandstone were present, one in C1017 and one in C1028. Though neither had a peg hole surviving, they were probably originally from roof tiles given their thicknesses of 8mm and 12mm. These are probably of Roman date originally. They offer little scope for further research. Neither was worthy of retention.

REFERENCES

Brunskill, R. W., 1997. *Brick Building in Britain*. Victor Gollancz

Dillon, M. J., 1985. *Bricks tiles and Teracotta from Wrexham and Ruabon*. Wrexham Maelor Borough Council

McComish, J.M., 2015. *York Archaeological Trust Ceramic Building Material and Stone Tile Recording Methodology*. York Archaeological Trust unpublished internal guidelines.

Van Lemmen, H, 2013. *Ceramic Roofware*. Shire Publications

APPENDIX 5 – POTTERY ASSESSMENT

By Anne Jenner

INTRODUCTION

One hundred and ninety-four sherds of pottery were retrieved from excavations at Fishergate postern tower community excavation (Project 6111). They range in date from the Roman period to the 19th century. The Roman, Anglo-Scandinavian and medieval wares were principally domestic in nature, while the largest number of sherds came from 19th century industrial bowls; the latter were probably used in the nearby iron works.

DISCUSSION

Roman

Roman sherds occur in three contexts (1025; 1029; 1042). They are all from vessels which were generally used in everyday life, though occasionally they occur in funerary assemblages. Sherds include Samian, perhaps from a bowl (1025), Grey ware probably from jars (1025; 1029) and a colour coated ware, probably from a beaker (1042). There is also a sherd of Coarse ware (1029) as well as a Calcite Gritted and a white ware (1025).

Samian wares suggest a late 1st/2nd century date of use, the White, Coarse, Colour Coated and Grey wares may have been in use in the 2nd and 3rd centuries. The Calcite Gritted ware may well be a later product, in circulation from the late 3rd century and into the 4th century. As such, this rather scant evidence of Roman activity spans most of the period of Roman occupation in York and is entirely residual.

Anglo-Scandinavian and Medieval

There are only a few Anglo-Scandinavian and medieval wares represented. They include an 11th century type Torksey ware (1025) and one Humber type ware is also present (1028). Humber ware mostly occurs from the 13th century to the 15th century in York. There are a number of kiln sites producing this type of ware in East Yorkshire and Humberside (Mainman and Jenner 2013, 1275). While the name of the ware derives from its production centres in Humberside, manufacture was certainly more widespread, with three production sites now known in York alone. These include one at Fishergate (ibid.) and another at Walmgate (ibid.). A further kiln site is presently under investigation close to Marygate (MAP forthcoming).

Post medieval

A number of post-medieval wares have been recovered from the Fishergate Postern Tower excavation, including Cistercian ware (1015), earthenwares (1002, 1015), Slipwares (1015) and banded slipware (1017). Cistercian ware was predominantly in use in the 16th century and was almost entirely used at the table, with the majority of forms from individual drinking vessels including cups, beakers and mugs (Brears 1971, 18-23).

Earthenwares with green and brown glazes may have been used for storage and food preparation from the 16th and 17th centuries. Late 17th and 18th century Slipware bowls may have been used in similar situations, although when decorated, they may have been used to serve food in an informal family setting.

Banded slipwares of the late 17th and 18th century are a finer, industrially produced ware which again would have been used in an informal situation.

Finer wares include pearl (1002) and transfer printed (1015; 1017; 1028; 1032), as well as porcelain (1002), but none of these would be out of context in a relatively poor household.

A sherd of White Salt Glazed (1017) ware suggests a mid to late 18th century date of use. These wares are quite fine and perhaps denote a degree of affluence. As there is only one sherd of this type, however, there is limited evidence of wealth.

The 'Chinese porcelain' is a bowl of a type which may still be used today in Chinese restaurants. It too does not signify any great level of wealth or status.

19th century

The majority of the sherds from this assemblage are of shallow earthenware bowls (1002). They have a red oxidised clay body and are either unglazed or with a green-brown or black glaze. This assemblage was recovered from a floor make-up deposit and the ceramics were almost certainly waste products from the nearby Phoenix iron foundry which was in operation until the 1870s when it was relocated to the Leeman Road area (Fawcett, Ives and Sinclair 2013, 52).

Similar wares were found during excavations at Walker's iron foundry, though it is not clear exactly which process they were used in (Santana, Mainman and Ottaway 2006, 73). Many have fine white powdery deposits on the interior that may be from white lead, kettle fir or mortar. Deposits of this kind could indicate their use for preparing lacquers, quenching hot items in water or other chemical or industrial processes. Similar deposits were found on the bowls from Walker's Iron Foundry.

Imported wares

The Fishergate Postern Tower assemblage contained only one sherd of imported pottery. It is from a Westerwald stoneware, perhaps a chamber pot, though the sherd is too small to be certain.

The lack of wares from abroad suggests that this assemblage was owned by a relatively low paid, poor household.

Conclusion

The wares described above are all relatively commonplace in York. The relatively large number of industrial wares from excavations at Fishergate Postern Tower are less frequently found, but they have been noted in similar industrial contexts in York.

Recommendations for further work

Samples of the deposits on the industrial bowls could be taken and analysed. A specialist in industrial archaeology may help to shed light on the processes used in the iron industry as well as the lives of those who worked and lived in its vicinity.

Bibliography

AY Addyman, P.V. (ed.). *The Archaeology of York* (London)

16 *The Pottery*

9 Mainman, A. and Jenner, A. 2013. *Medieval Pottery from York*

Brears, P. C. D., 1971. *English Country Pottery: Its History and Techniques*. David and Charles

Fawcett, B., Ives, J. A., and Sinclair, A. 2013. *York Central: Audit of Heritage Assets*. City of York Council

Santana, J., Mainman, A., and Ottaway, P. 2006. *Walker's Iron Foundry, Dixon's Yard, Walmgate, York. A Report on and Archaeological Excavation* YAT Report 2006/21

Context Number	Find	Quantity	Dating	Details	Phase
1001	BF28	2	19TH CENTURY	1 English brown stoneware bottle base; 1 post medieval fine oxidised earthenware with brown internal glaze. Small to medium sherds	100
1002	BF29	100	19TH CENTURY	1 Chinese porcelain bowl rim with blue foliate decoration outside and gold blue and orange inside; 2 pearl ware. All small sherds. 54 post medieval fine oxidised industrial earthenware wide shallow flanged bowl with black shiny internal glaze - large sherds smashed; 6 post medieval fine oxidised earthenware wide shallow flanged bowl with light brown internal glaze including one straight sided bowl sherd with dark brown internal glaze - large sherds; 5 post medieval fine oxidised earthenware wide shallow bowl with light green brown glaze internally - large sherds; 30 post medieval fine oxidised earthenware wide shallow bowl with straight/slightly everted sides including one sherd with burnt interior. All sherds have white lead concretions in and out; 1 English brown stoneware jug/bottle with applied thumb imprint suggesting a handle; 1 English brown stoneware jar rim.	100
1015	BF30	27	19TH CENTURY	11 post medieval fine oxidised unglazed earthenware wide shallow bowl with straight/slightly everted sides; 4 post medieval fine oxidised earthenware flanged bowl with shiny black glaze; 2 post medieval fine oxidised earthenware with light green brown glaze inside. All large sherds. 1 post medieval fine oxidised earthenware jar rim with dark green brown shiny glaze outside - medium sherd; 1 pearl; 2 Chinese porcelain bowl with blue foliate decoration outside and thin blue line at rim; 1 transfer printed with willow pattern in blue; 1 English buff stoneware; 1 Cistercian mug base; 1 slipware dish base with trailed lines and dot; 1 slipware closed form abraded. All very small sherds. 1 scrap.	103

Context Number	Find	Quantity	Dating	Details	Phase
1017	BF31	23	LATE 18TH CENTURY	1 post medieval fine oxidised earthenware small bowl base with slip and yellow glaze inside; 1 English brown stoneware closed form - large sherd; 2 banded slipware plain; 1 English stoneware marmalade jar with legend 'MARM(ELADE); 4 post medieval fine earthenware unglazed; 1 English brown stoneware with ribbed external surface; 1 brown glazed white earthenware; 4 transfer printed small; 1 bowl rim with light blue decoration; 1 White Salt glazed fine bowl base with foot ring; 1 white stoneware with maroon legend 'PRO...'; 3 matt English stoneware unglazed; 2 transfer printed saucer rim 1 pearl. All very small sherds with maroon band.	102
1022	BF32	5	LATE 18TH/ 19TH CENTURY	2 post medieval fine oxidised drain end; 1 English brown stoneware drain; 2 Cream ware including ribbed jar.	102
1023	BF33	1	18TH CENTURY	3 post medieval reduced ware jar rim with traces of shiny brown glaze – overfired.	104
1025	BF35	20	11TH CENTURY	1 Roman Calcite gritted; 9 Roman Grey ware; 1 Samian; 1 white Gritty base; 2 Roman fine ware; 1 Stamford unglazed; 1 Roman red ware burnt; 1 Torksey type; 1 Roman white ware; 2 miscellaneous glazed ware.	105
1028	BF36	5	18TH/ 19TH CENTURY	1 transfer printed small bowl rim - small sherd; 1 white stoneware; 1 post medieval moderately gritted oxidised earthenware rod handle with central groove and light green brown glaze; 1 post medieval earthenware jug/jar rim with buff fabric and light green brown glaze; 1 late Humber type with internal glaze.	102
1029	BF37	3	ROMAN	1 Roman coarse ware reduced sooted; 1 Roman grey ware; 1 miscellaneous fine hard buff red ware.	106
1032	BF38	3	18TH/ 19TH CENTURY	1 Westerwald stoneware scrap; 1 transfer printed; 1 Nottingham type brown stoneware bowl base.	102
1034	BF39	2	18TH/ 19TH CENTURY	1 English brown stoneware; 1 transfer printed.	102
1042	BF40	3	14TH/ 15TH CENTURY	1 Roman colour coated ware; 1 English stoneware; 1 post medieval fine oxidised earthenware with run of Humber type glaze.	107

Table 5. Pottery quantification

APPENDIX 6 – WRITTEN SCHEME OF INVESTIGATION

YORK ARCHAEOLOGICAL TRUST

WRITTEN SCHEME OF INVESTIGATION FOR

ARCHAEOLOGICAL EXCAVATION

Site Location: **Fishergate Postern Tower, Piccadilly, York**

NGR: **SE 60680 51320**

Proposal: **Community Archaeology Project**

Planning ref: **N/A**

Prepared for: **City of York Council**

Document Number: **2018/169**

Version	Produced by		Edited by		Approved by	
	Initials	Date	Initials	Date	Initials	Date
1	AJ	5/12/18	IDM	07/12/18	IDM	07/12/18

1 SUMMARY

1.1 City of York Council (CYC) have appointed York Archaeological Trust (YAT) to carry out a community archaeology project at Fishergate Postern Tower, Piccadilly, York (SE 60680 51320). The scheme will include the excavation of one external trench and one internal trench to allow for the insertion of a new electricity supply to Fishergate Postern.

1.2 The excavation and recording will be carried out by YAT staff and volunteers from the Friends of York Walls.

1.3 This Written Scheme of Investigation (WSI) has been prepared in response to a Brief supplied by CYC and the Friends of York Walls. The work will be carried out in accordance with the Brief and this WSI.

2 SITE LOCATION & DESCRIPTION

2.1 The proposal site is at Fishergate Postern Tower, Piccadilly, York (Figure 1). The external and internal ground surface around the tower are presently a combination of stone flags, brick paving and stone setts at a height of approximately 10.30m AOD. The west elevation of the tower faces onto the southern end of Piccadilly, looking across Castle Mills Bridge towards Tower Street. Lead Mill Lane runs along the north side of the tower and the City Walls connect to the southern elevation. Prior to its canalisation in the 18th century, the river Foss ran close to the north and west sides of the tower.

3 DESIGNATIONS & CONSTRAINTS

3.1 Fishergate Postern is Grade 1 listed (list entry 1259296) and a Scheduled Monument (DYO1586). The site lies within the York Central Historic Core Conservation Area and the City Centre Area of Archaeological Importance.

4 ARCHAEOLOGICAL INTEREST

4.1 The history of Fishergate Postern has been extensively researched and the following is a brief summary based primarily on the RCHME survey of York's Defences (RCHME 1972). The first definitive reference to a Postern Tower on this site dates to 1406, although the present building was constructed between 1504 and 1507. Fishergate Postern was initially one of the lesser gateways into the city, with the nearby Fishergate Bar providing the main route from the Fishergate area. A revolt of 1489 caused extensive damage to Fishergate Bar and the gateway was subsequently blocked up. Increased traffic in the area led to the Corporation of York ordering the construction of a, "Substantial Postern Tower" in 1502 with work completed in 1507.

4.2 The roof of the tower was originally open with crenellated parapets, although a pitched roof was added later in the 16th century and is visible on Speed's map of 1610. Fishergate Postern is the only surviving gateway for foot traffic of the seven medieval posterns built during the medieval period and would have been furnished with a portcullis in addition to a strong oak door. Rent records detail numerous

tenants over the lifetime of the building, with keyholders monitoring and controlling the flow of people into the city until the final recorded watch of 1803. The tower ceased to be used as a defensive structure at this point and was leased to a private tenant. Numerous pieces of restoration work have taken place, most notably in 1838 and 1960 that give the building its present layout. The Friends of York Walls and CYC are presently involved in a long-term restoration project that is currently focused on the installation of an electricity supply.

4.3 Field Archaeology Specialists (FAS) carried out a Historic Building Recording survey in 2009 that included dendrochronological dating of timber from the tower (Clark 2009). Unfortunately, the dendrochronology was not successful in providing tighter dating evidence, although the results of the survey broadly complimented the dating sequence suggested by historic sources.

5 GROUNDWORKS TO BE MONITORED

5.1 The area for investigation will be stripped of flagstones and paving material by hand by CYC staff in advance of the archaeological investigation. A north-east/south-west aligned trench measuring approximately 3.50m x 0.50m will be excavated from the tower entrance to the metal railings on the west side of the tower. This trench will connect to a 4.80m x 0.80m trench inside the tower running east/west along the inner face of the south wall (Figure 2). Both of these trenches will house ducting for the forthcoming electricity supply and will be excavated to a depth of 0.50m.

5.2 Upon the completion of the excavation of the internal and external cable trenches, there is scope to open up additional areas as part of the site's Scheduled Monument consent. These will extend no more than 3m to the north of the cable trenches and will be excavated solely for research purposes (Figure 2). If significant archaeological remains are discovered within the additional areas, excavation will cease and the remains will be recorded in plan and left *in-situ*.

6 EXCAVATION METHODOLOGY

6.1 The cable trenches will be CAT scanned by CYC prior to the commencement of intrusive works. Excavation of additional areas will be carried out following CAT scanning undertaken by YAT and any suspected services will be investigated as appropriate.

6.2 All tools, materials and equipments to be used during the excavation will be kept within the fenced off area around the tower at all times during work hours. Equipment will be stored within the tower overnight. There will be no public access to the work area at any time.

6.3 To maximise the public benefit of the project, excavation and recording will be primarily carried out by volunteers from the Friends of York Walls. No more than five volunteers will be on-site at any time and volunteers will work under the supervision and guidance of at least one member of YAT staff at all times.

6.4 As there is presently no electrical supply to the tower, lighting for the internal

trench will be provided by a mobile lighting rig and petrol generator that will be supplied, fuelled and maintained by CYC. If necessary, supplementary battery powered lighting will be provided by YAT. Only CYC and suitably trained YAT staff will operate or move the generator. The generator will be kept outside of the tower at all times during use to avoid the build-up of exhaust fumes in the work area.

6.5 Spoil from the excavation will be stored in rubble sacks within the fenced off area and stacked against the west wall of the tower. If it is not required for reinstatement, spoil will be taken from site by CYC staff.

7 RECORDING METHODOLOGY

7.1 All plans will be taken from a single baseline running from the interior of the tower to the exterior. The baseline will be located by triangulation from surrounding buildings/boundaries or by GPS as appropriate.

7.2 Each context will be assigned a unique number and will be described in full on a pro forma context record sheet in accordance with the accepted context record conventions.

7.3 Archaeological deposits will be planned at a basic scale of 1:20. Cross-section of features will be drawn to a basic scale of 1:10 or 1:20 depending on the size of the feature. All drawings will be related to Ordnance Datum. Where it aids interpretation, structural remains will also be recorded in elevation. All drawings will be drawn on inert materials. All drawings will adhere to accepted drawing conventions

7.4 Photographs of archaeological deposits and features will be taken using a digital camera. This will include general views of entire features and of details such as sections as considered necessary. All site photography will adhere to accepted photographic record guidelines.

7.5 All finds will be collected and handled following the guidance set out in the CIfA guidance for archaeological materials. Unstratified material will not be kept unless it is of exceptional intrinsic interest. Material discarded as a consequence of this policy will be described and quantified in the field. Finds of particular interest or fragility will be retrieved as Small Finds. General finds from discrete contexts will be collected as Bulk Finds.

7.6 All artefacts and ecofacts will be appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication First Aid for Finds, and recording systems must be compatible with the recipient museum. All finds that fall within the purview of the Treasure Act (1996) will be reported to HM Coroner according to the procedures outlined in the Act, after discussion with the client and the local authority.

7.7 Judgement sampling will involve the removal of samples from secure contexts which appear to present either good conditions for preservation (e.g. burning or waterlogging) or which are significant in terms of archaeological interpretation or stratigraphy.

7.8 If appropriate, a soil sampling programme will be undertaken for the recovery and

identification of charred and waterlogged remains where suitable deposits are identified. The collection and processing of environmental samples will only happen following consultation with CYC and will be undertaken in accordance with Historic England guidelines (Campbell, Moffatt and Straker 2011). Environmental and soil specialists will be consulted during the course of the evaluation with regard to the implementation of this sampling programme.

7.9 It is possible that evidence of industrial activity may be present on-site. If industrial activity of any scale is detected, CYC will be consulted and industrial samples and process residues may also be collected. Separate samples (c. 10ml) may be collected for micro-slags (hammer-scale and spherical droplets) (Historic England 2015).

7.10 Where appropriate, other samples may be taken, as appropriate, in consultation with CYC, YAT specialists and the Historic England Regional Science Advisor, as appropriate (e.g. dendrochronology, soil micromorphology, monolith samples, C14, etc.). Samples will be taken for scientific dating where necessary for the development of subsequent mitigation strategies. Material removed from site will be stored in appropriate controlled environments.

7.11 In the event of human remains being discovered during the excavation, these will be left in-situ, covered and protected, in the first instance. The removal of human remains will only take place in compliance with environmental health regulations and following discussions with, and with the approval of, the Ministry of Justice. If human remains are identified, the Ministry of Justice and curator will be informed immediately. An osteoarchaeologist will be available to give advice on site.

- If **disarticulated** remains are encountered, these will be identified and quantified on site. If trenches are being immediately backfilled, the remains will be left in the ground. If the excavations will remain open for any length of time, disarticulated remains will be removed and boxed, for immediate reburial.
- If **articulated** remains are encountered, these will be excavated in accordance with recognised guidelines (see 7.15) and retained for assessment.
- Any grave goods or coffin furniture will be retained for further assessment.

7.12 Where a licence is issued, all human skeletal remains will be properly removed in accordance with the terms of that licence. Where a licence is not issued, the treatment of human remains will be in accordance with the requirements of Civil Law, CIfA Technical Paper 13 (1993) and Historic England guidance (2005).

8 REPORT & ARCHIVE PREPARATION

8.1 Upon completion of the groundworks, a report will be prepared to include the following:

a) A non-technical summary of the results of the work.

b) An introduction which will include the planning reference number, grid reference and dates when the fieldwork took place.

c) An account of the methodology and results of the operation, describing structural data, associated finds and environmental data.

d) A selection of photographs and drawings, including an overall plan of the site accurately identifying the areas monitored.

e) Specialist artefact and environmental reports as necessary.

f) Details of archive location and destination (with accession number, where known), together with a catalogue of what is contained in that archive.

g) A copy of the key OASIS form details

h) Copies of the Brief and WSI

i) Additional photographic images may be supplied on a CDROM appended to the report

8.2 Copies of the report will be submitted to the commissioning body and the HER/SMR (also in PDF format).

8.3 The requirements for archive preparation and deposition will be addressed and undertaken in a manner agreed with the recipient museum. In this instance the Yorkshire Museum is recommended and an agreed allowance should be made for the curation and storage of this material.

8.4 Provision for the publication of results, as outlined in the Brief, will be made.

8.5 The owner of the Intellectual Property Rights (IPR) in the information and documentation arising from the work, would grant a licence to the County Council and the museum accepting the archive to use such documentation for their statutory functions and provide copies to third parties as an incidental to such functions. Under the Environmental Information Regulations (EIR), such documentation is required to be made available to enquirers if it meets the test of public interest. Any information disclosure issues would be resolved between the client and the archaeological contractor before completion of the work. EIR requirements do not affect IPR.

9 HEALTH AND SAFETY

9.1 Health and safety issues will take priority over archaeological matters and all archaeologists will comply with relevant Health and Safety Legislation.

9.2 A Risk Assessment will be prepared prior to the start of site works.

10 TIMETABLE & STAFFING

10.1 The timetabled excavation will run for two weeks, Monday to Friday, from December 10th to 21st 2018.

10.2 Specialist staff available for this work are as follows:

- Human Remains - Malin Holst (York Osteoarchaeology Ltd)

- Palaeoenvironemtal remains – PRS Ltd.
- Head of Curatorial Services - Christine McDonnell
- Finds Researcher - Nicky Rogers
- Medieval Pottery Researcher - Anne Jenner
- Finds Officers – Nienke Van Doorn
- Archaeometallurgy & Industrial Residues – Dr Rod Mackenzie & Dr Roger Doonan
- Conservation – Ian Panter

11 MONITORING OF ARCHAEOLOGICAL FIELDWORK

11.1 As a minimum requirement, John Oxley will be given a minimum of one week's notice of work commencing on site, and will be afforded the opportunity to visit the site during and prior to completion of the on-site works so that the general stratigraphy of the site can be assessed.

11.2 York Archaeological Trust will notify John Oxley of any discoveries of archaeological significance so that site visits can be made, as necessary. Any changes to this agreed WSI will only be made in consultation with John Oxley.

12 COPYRIGHT

13 KEY REFERENCES

Brown, D. H., 2007. *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation.* CIfA/AAA

Campbell, G., Moffett, L., and Straker, V. (eds.), 2011. *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation (second edition).* English Heritage (Portsmouth)

CIfA. Chartered Institute for Archaeologists, 1993. McKinley, J. I., and Roberts, C. (eds.). Ex*cavation and Post-Excavation Treatment of Cremated and Inhumed Human Remains*. Technical Paper No. 13

CIfA. Chartered Institute for Archaeologists, 2011. Brown, D.H. *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation (second edition).*

CIfA. Chartered Institute for Archaeologists, 2014. *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.*

CIfA. Chartered Institute for Archaeologists, 2014. *Standard and Guidance for Archaeological Field Evaluation*

Clark, J. 2009. *Fishergate Postern Tower, York. Historic Building Recording Report* FAS Report FAS2009 441 YFP389

Department for Communities and Local Government, 2012. National Planning Policy Framework.

Historic England, 2002. *With Alidade and Tape – Graphical and Plane Table Survey or Archaeological Earthworks.*

Historic England, 2005. *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England*.

Historic England, 2006. *Guidelines on the X-Radiography of Archaeological Metalwork*.

Historic England, 2007. *Understanding the Archaeology of Landscape – a Guide to Good Recording Practice.*

Historic England, 2015. *Archaeometallurgy. Guidelines for Best Practice.*

Historic England, 2015. *Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record.*

Historic England, 2015. *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide.*

Historic England, 2015. *Piling and Archaeology. Guidelines and Best Practice.*

Historic England, 2015. *Where on Earth are We? The Role of Global Navigation Satellite Systems (GNSS) in Archaeological Field Survey.*

Historic England, 2016. *Preserving Archaeological Remains. Decision-taking for Sites under Development.*

Historic England, 2008. *Investigative Conservation. Guidelines on How the Detailed Examination of Artefacts from Archaeological Sites can Shed Light on their Manufacture and Use.*

Leigh, D., Neal, V., and Watkinson, D. (eds.), 1998. *First Aid for Finds: Practical Guide for Archaeologists.* United Kingdom Institute for Conservation of Historic & Artistic Works, Archaeology Section; 3rd Revised Edition.

Museum and Galleries Commission, 1992. *Standards in the Museum Care of Archaeological Collections.*

RCHME, 1972. *An Inventory of the Historical Monuments in City of York, Volume 2, the Defences* (London, 1972), British History Online http://www.british-history.ac.uk/rchme/york/vol2 [accessed 4 December 2018].

RCHME, 1999. *Recording Archaeological Field Monuments – a Descriptive Specification.*

Standing Conference of Archaeological Unit Managers (SCAUM), 2007. *Health and Safety in Field Archaeology*

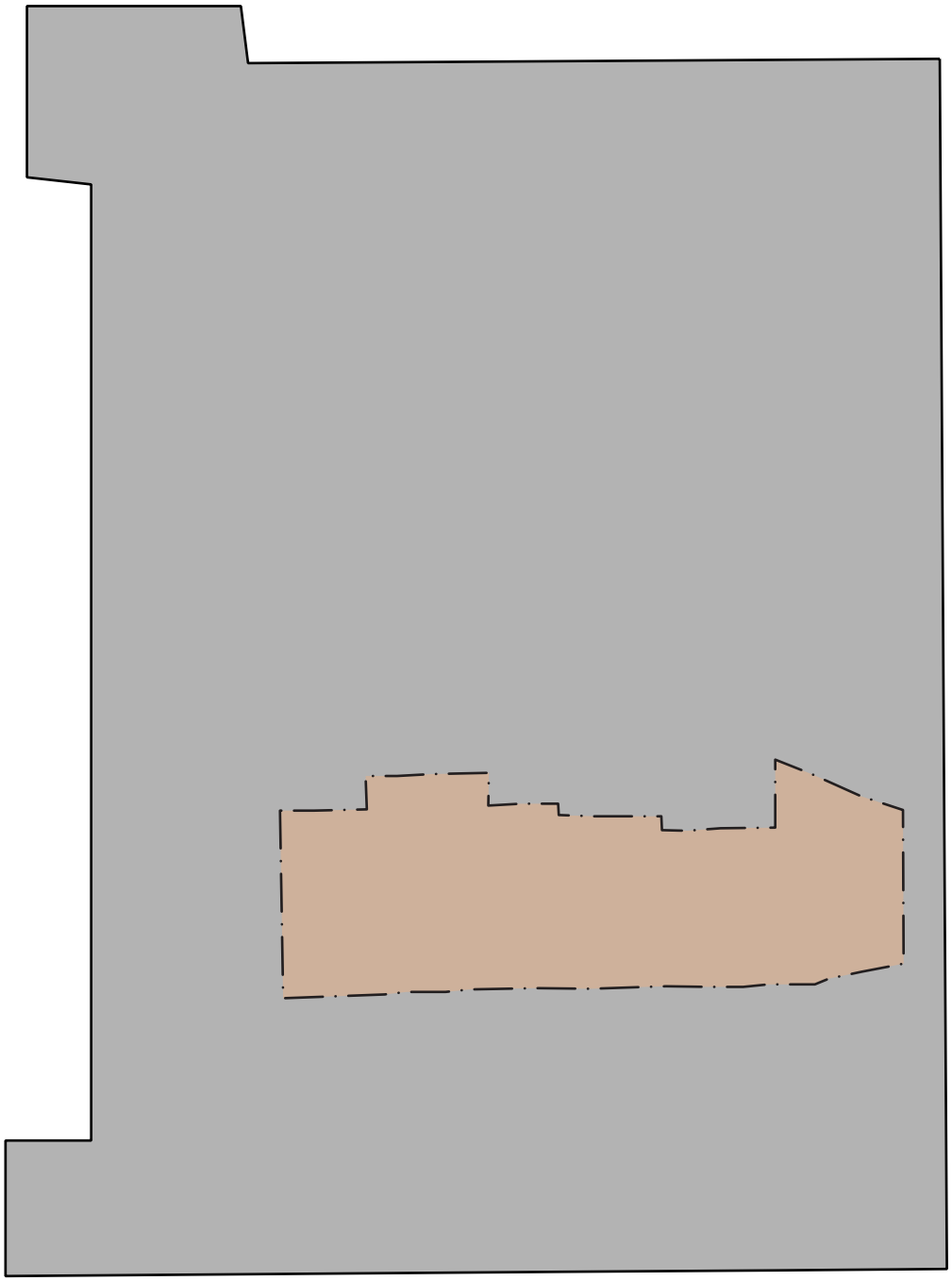
For the latest Historic England guidance documents see:

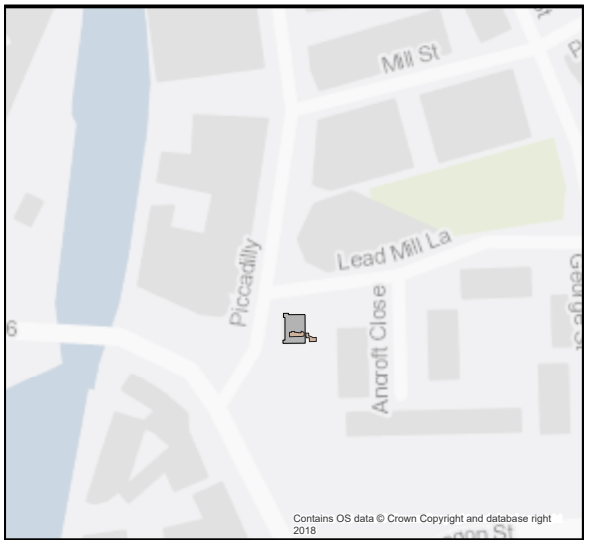
https://historicengland.org.uk/advice/latest-guidance/

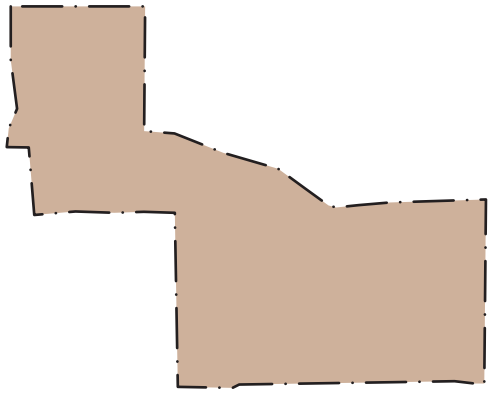
FIGURES

Figure 1 Site location at 1:200 and 1:2000

Figure 1. Site location at 1:200 and 1:2000







scale 1:50

Fig. 2 Tower outline (grey) with approximate trench locations.

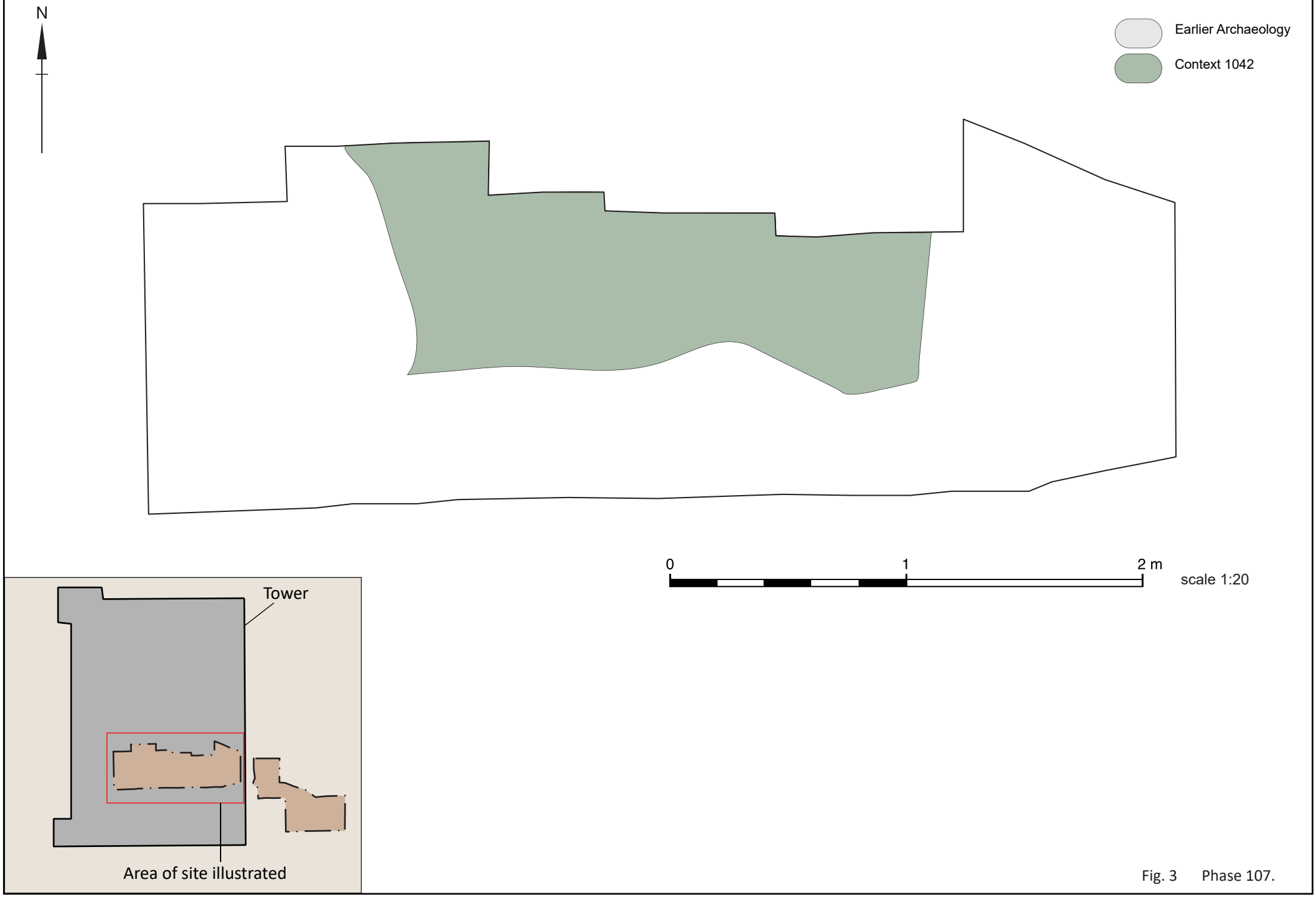


Fig. 3 Phase 107.

N

Wall core

Group 1015

Standing wall

Group 1007

Phase 106

Earlier Archaeology

Tower

Area of site illustrated

0 1 2 m

scale 1:20

Fig. 4 Phase 106

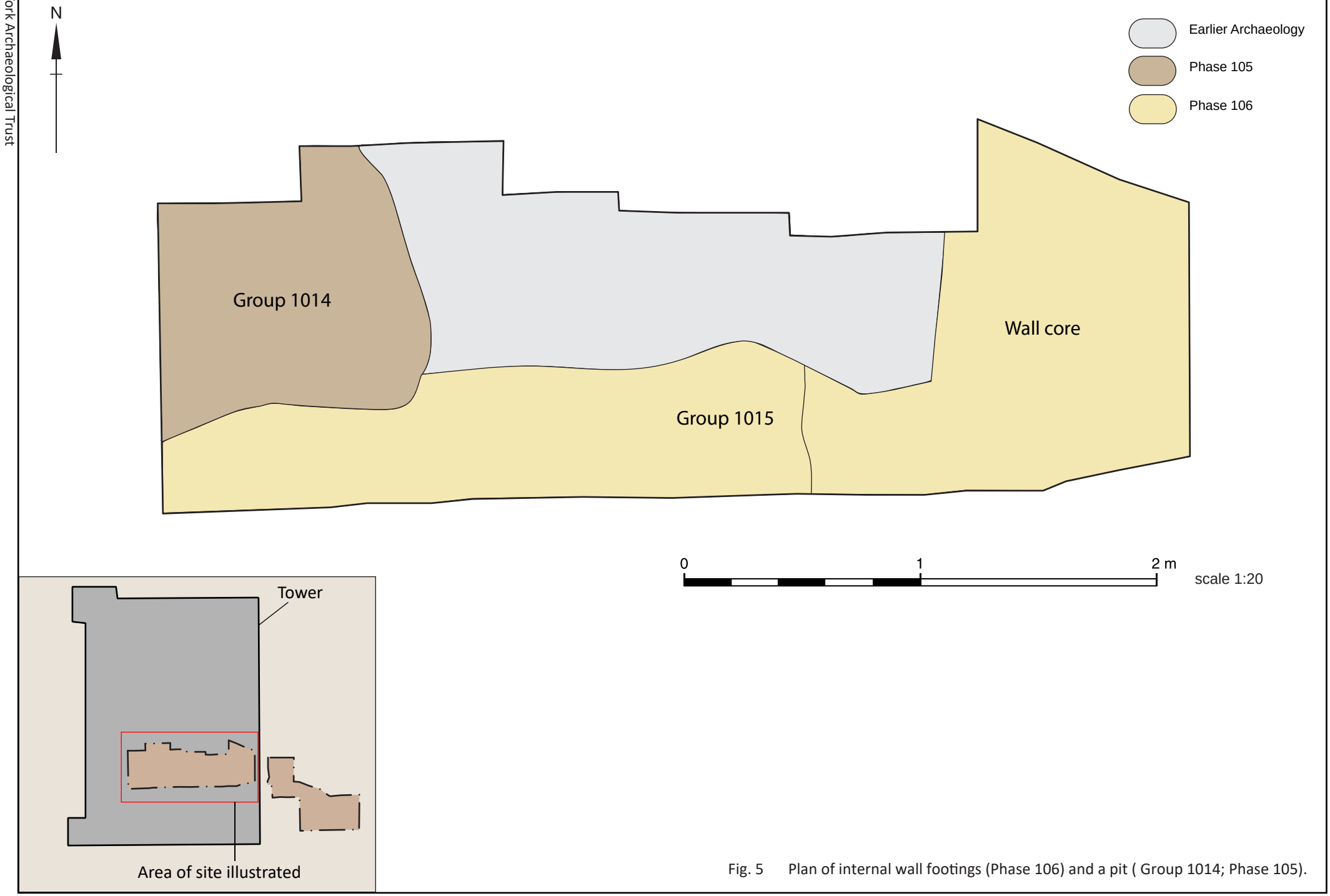


Fig. 5 Plan of internal wall footings (Phase 106) and a pit (Group 1014; Phase 105).

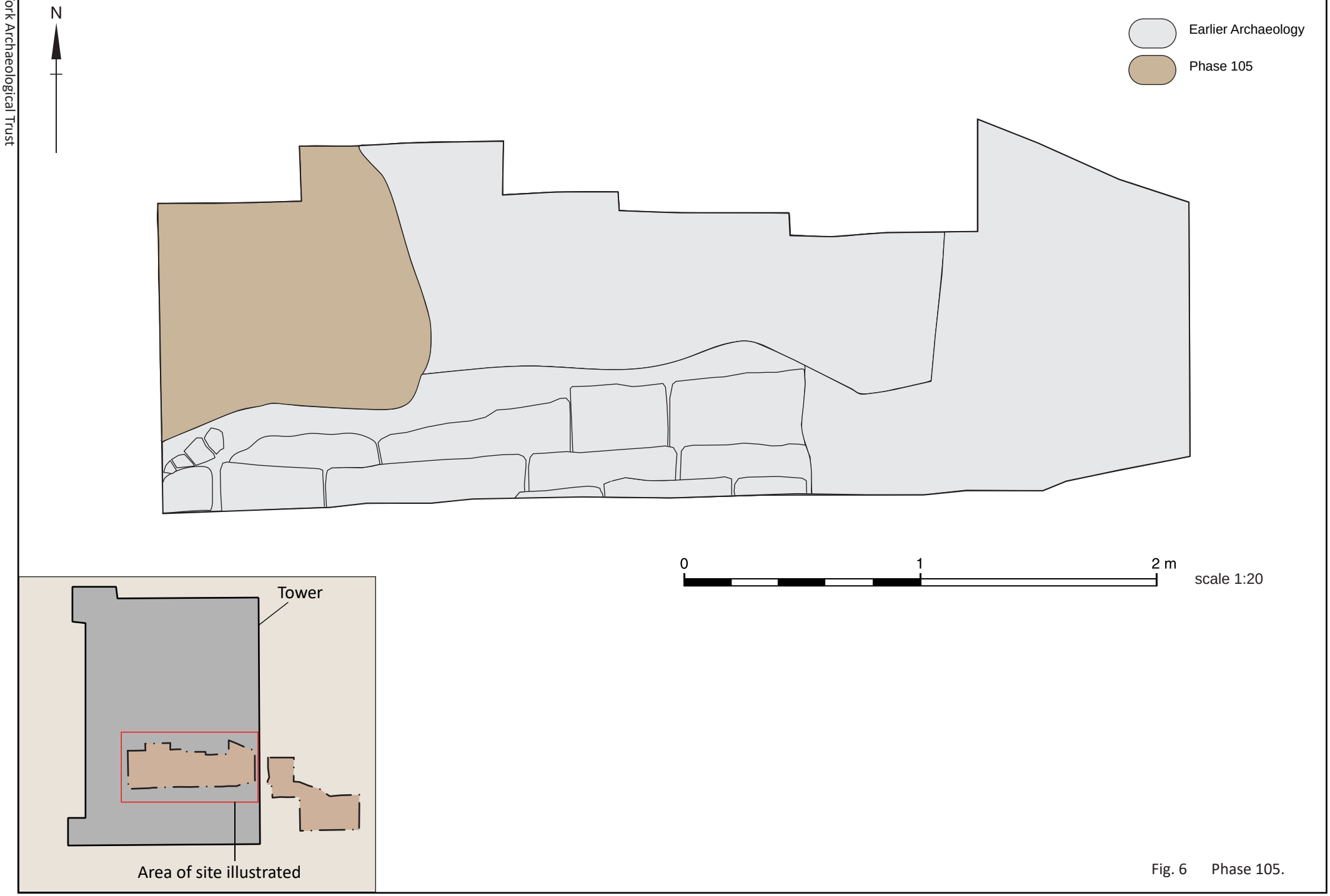


Fig. 6 Phase 105.

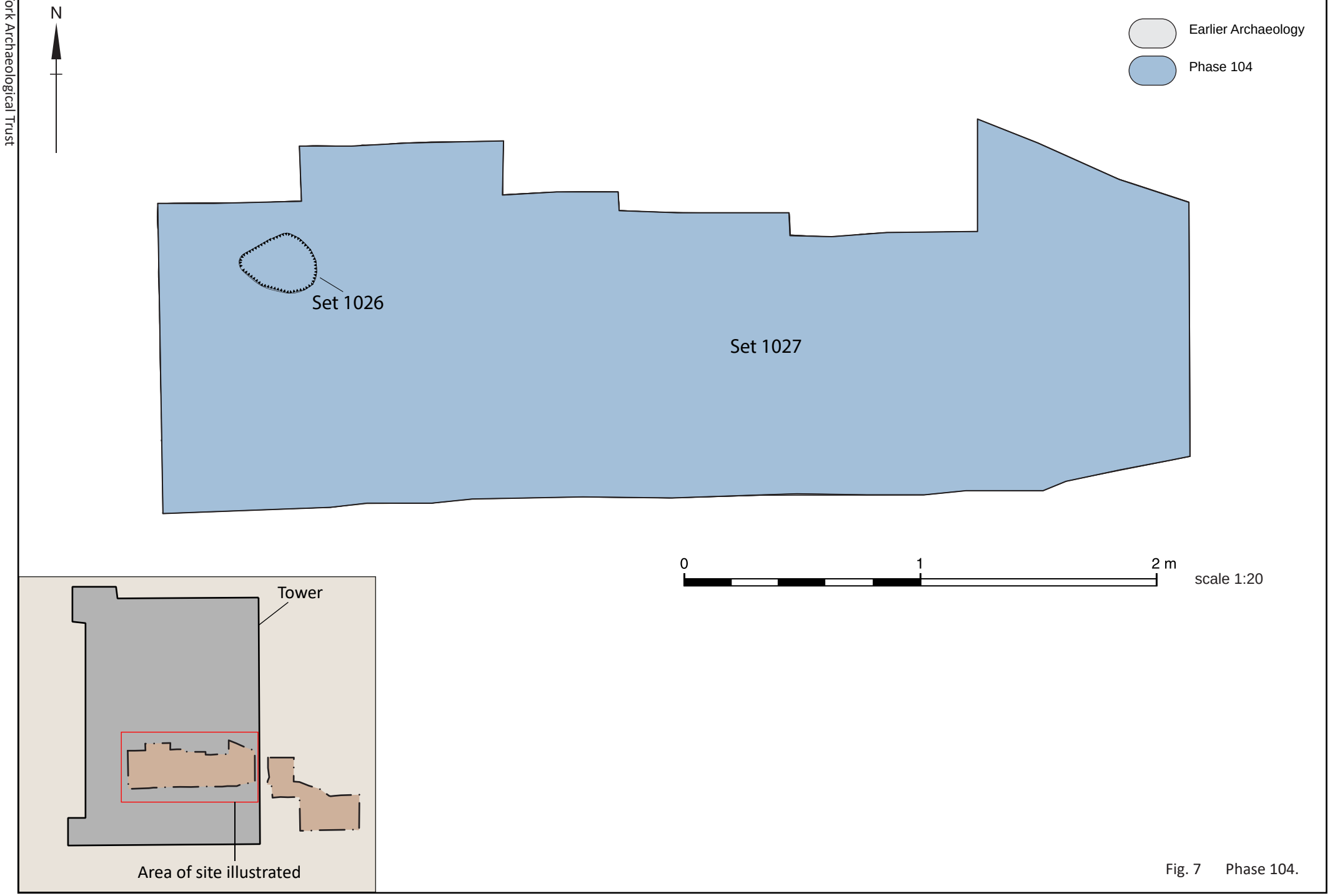


Fig. 7 Phase 104.

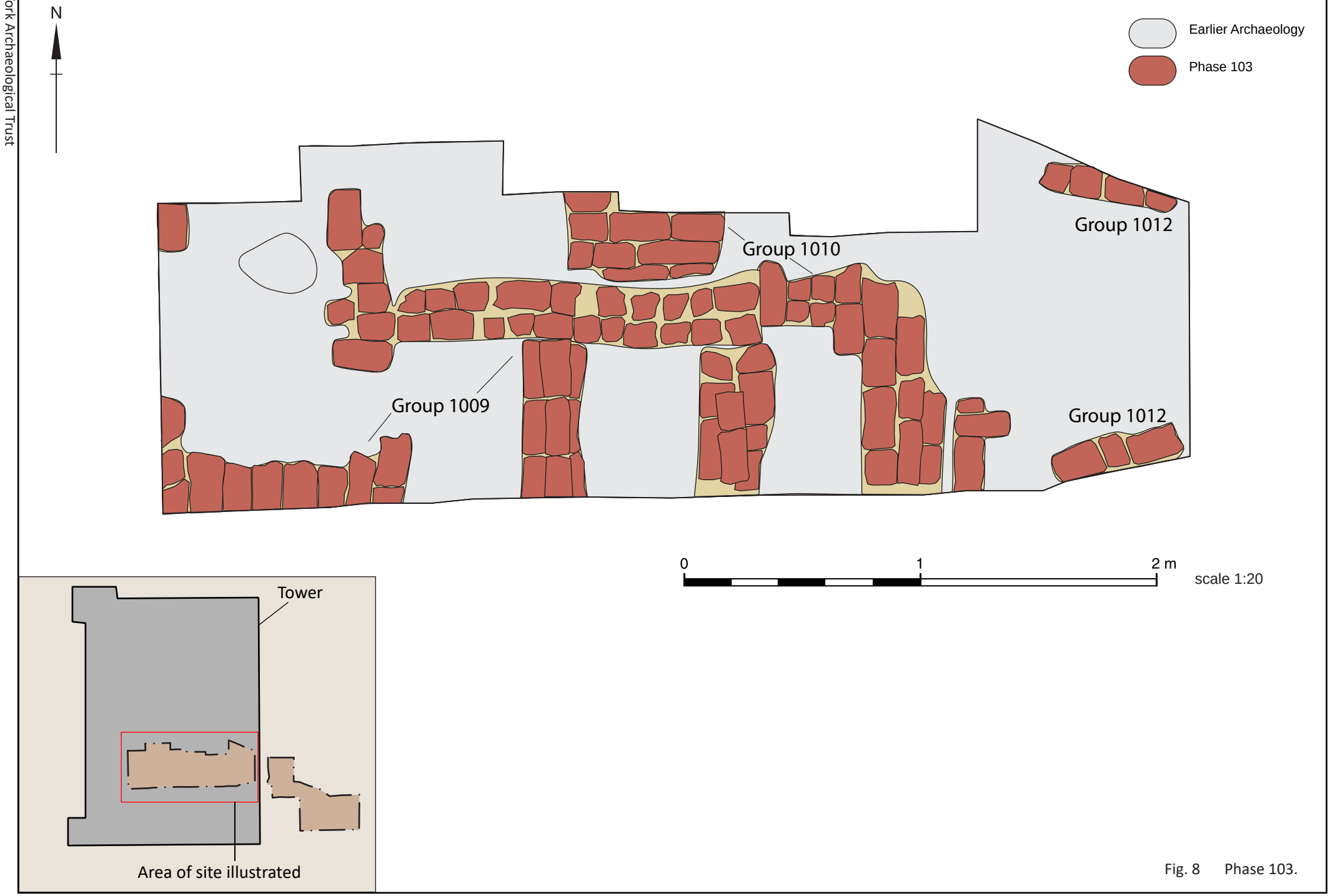


Fig. 8 Phase 103.

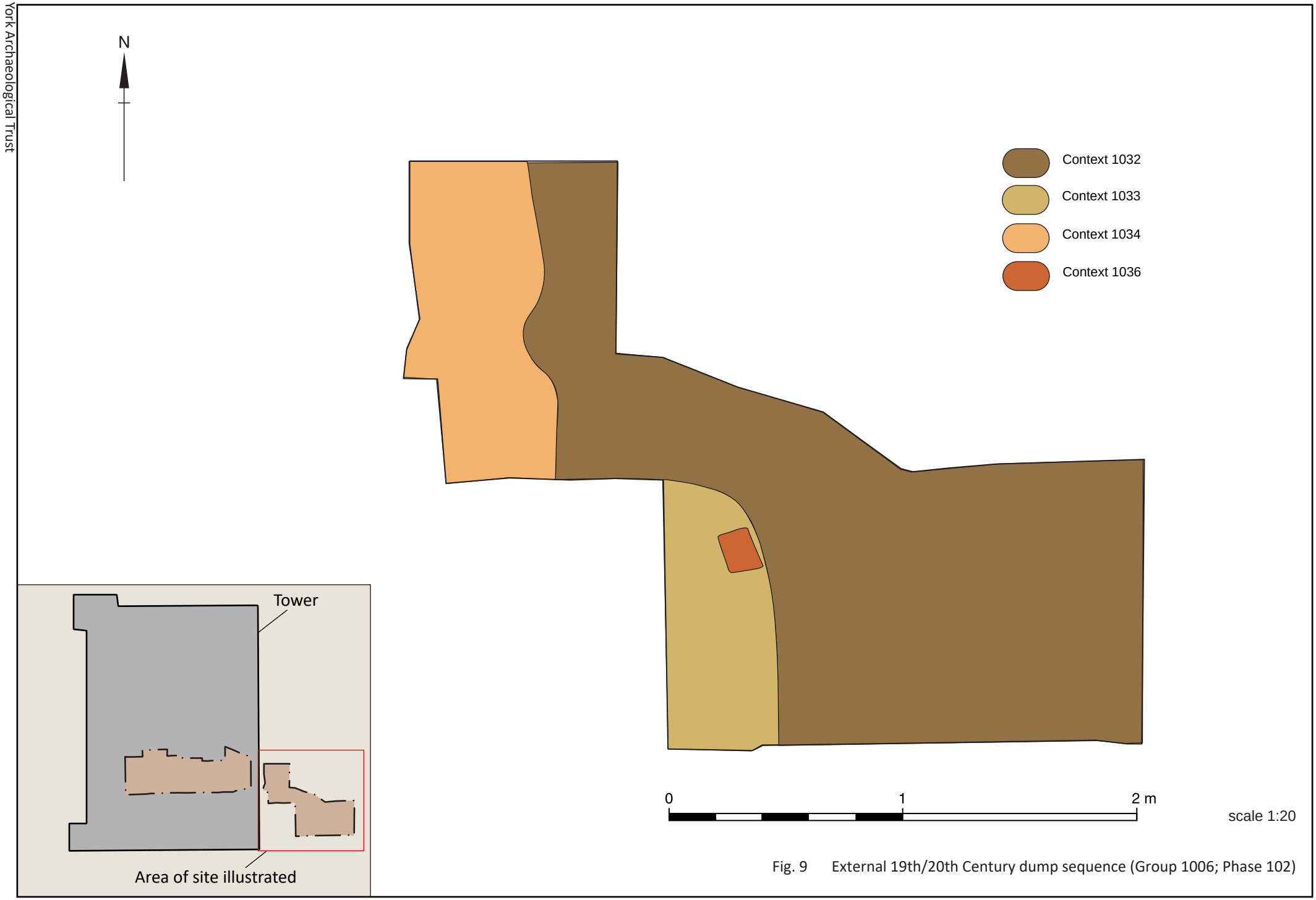


Fig. 9 External 19th/20th Century dump sequence (Group 1006; Phase 102)

(See Figure 4).

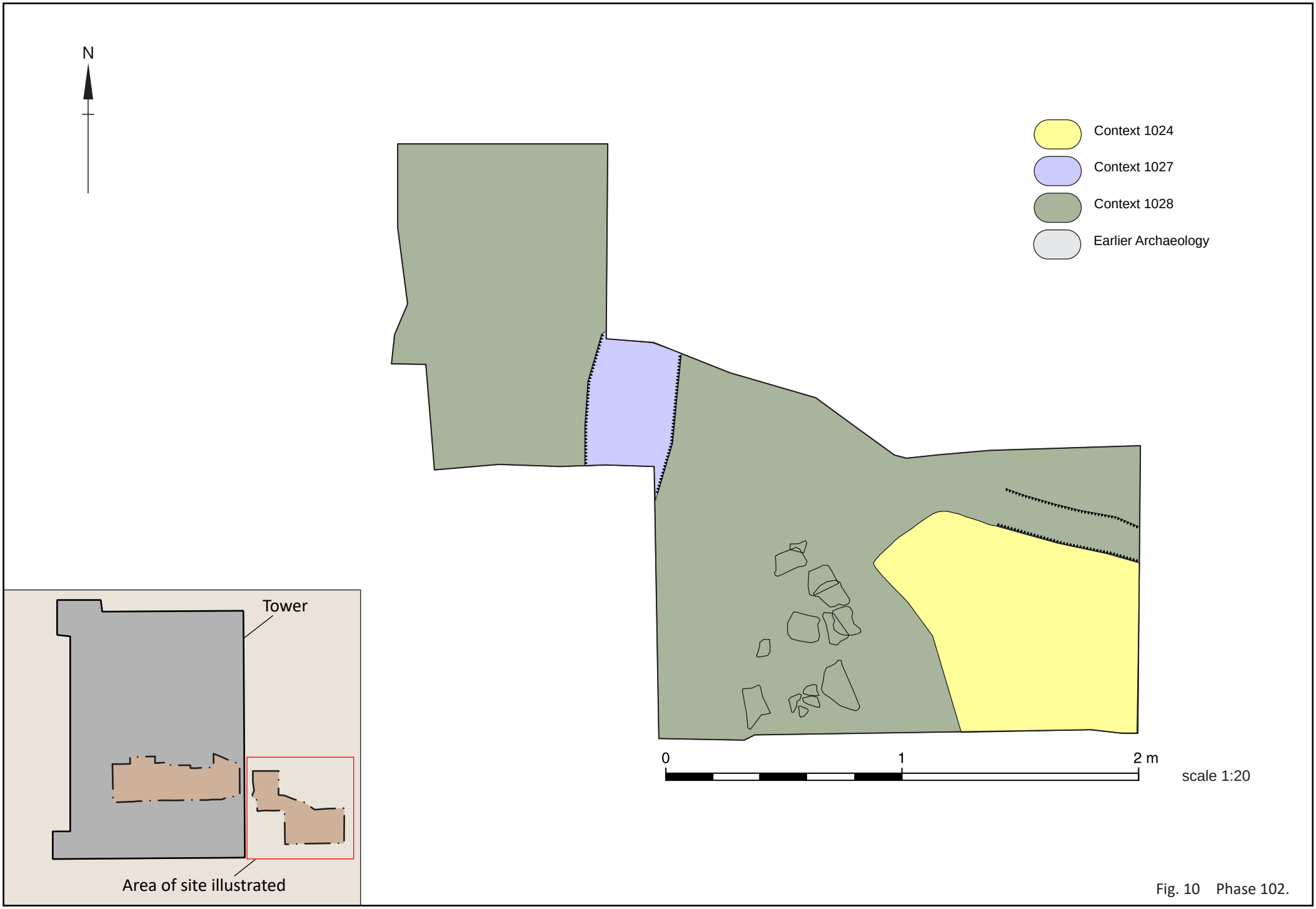


Fig. 10 Phase 102.

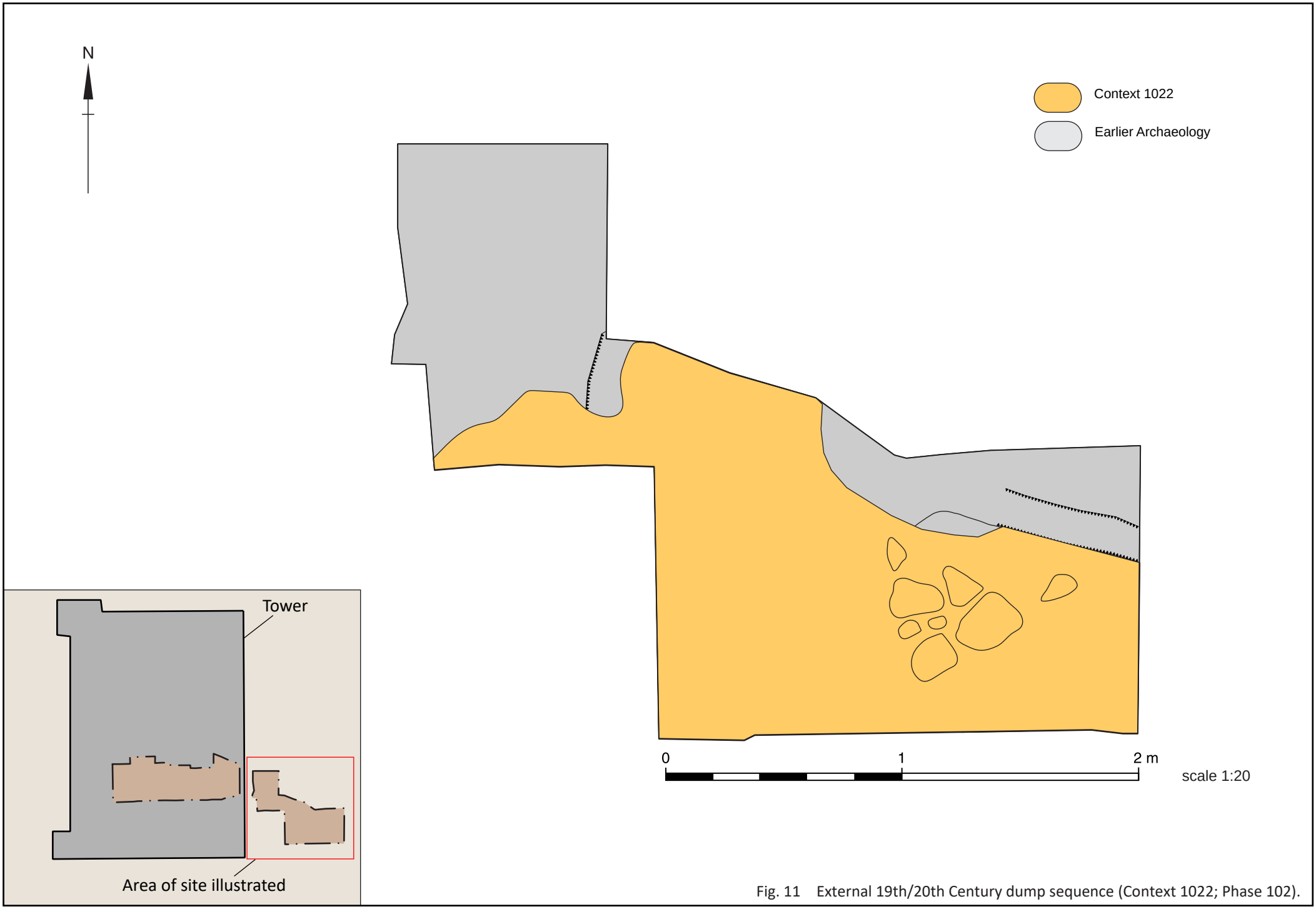


Fig. 11 External 19th/20th Century dump sequence (Context 1022; Phase 102).

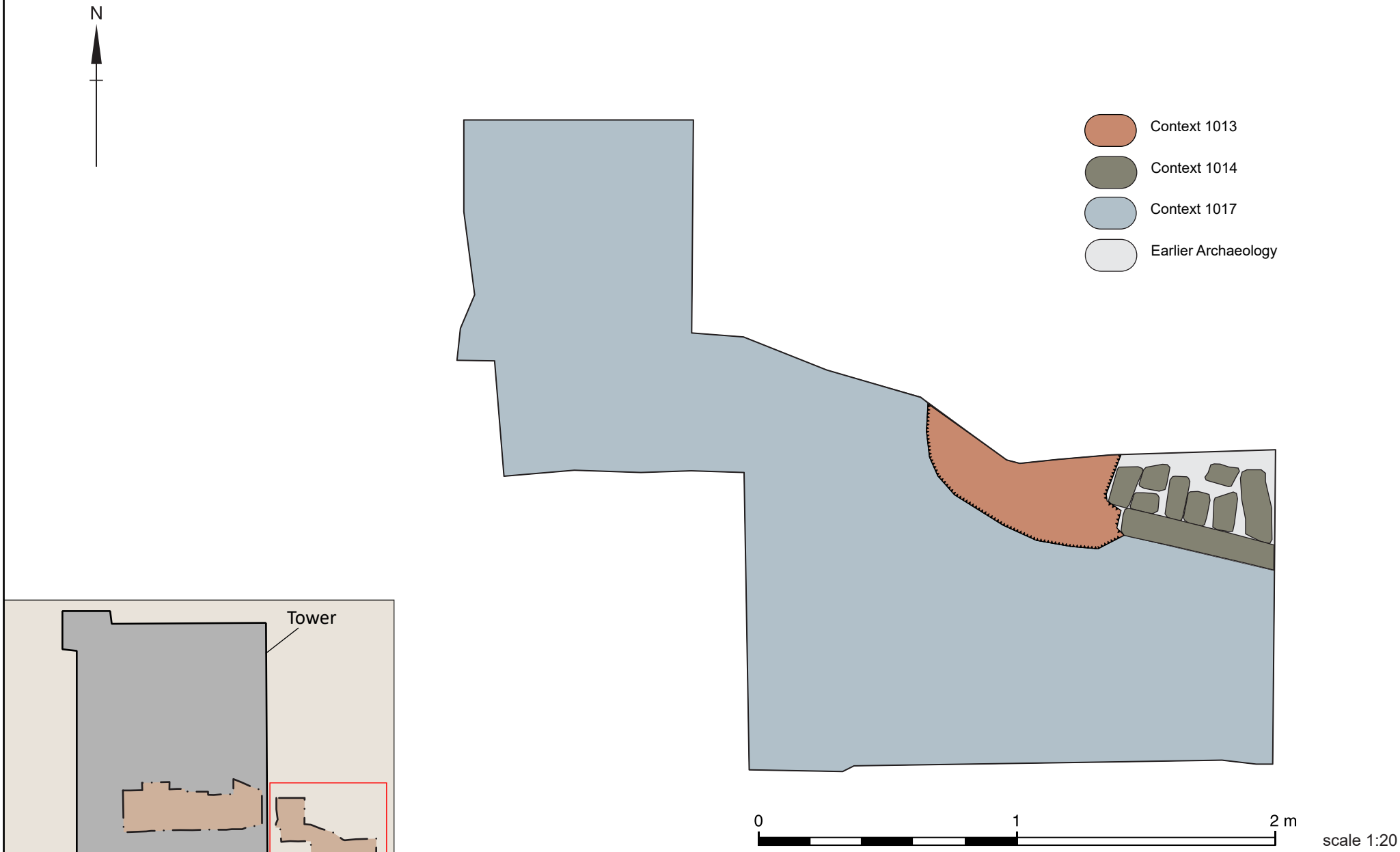


Fig. 12 20th Century dump, stone sett surface and robber cut in external trench.

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