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**Investigation in the Ice House (Pit Room), The Keep, Castle Garth,  
Newcastle upon Tyne NE1 1RQ  
(NGR: NZ250 638)**

**On behalf of Newcastle City Council**

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*OASIS no. northern2 – 292091*



*The Keep from the south-west, showing the pilaster turret  
(extensively re-faced), the lower part of which contains the  
Ice House.*

Northern Counties Archaeological Services, August 2017

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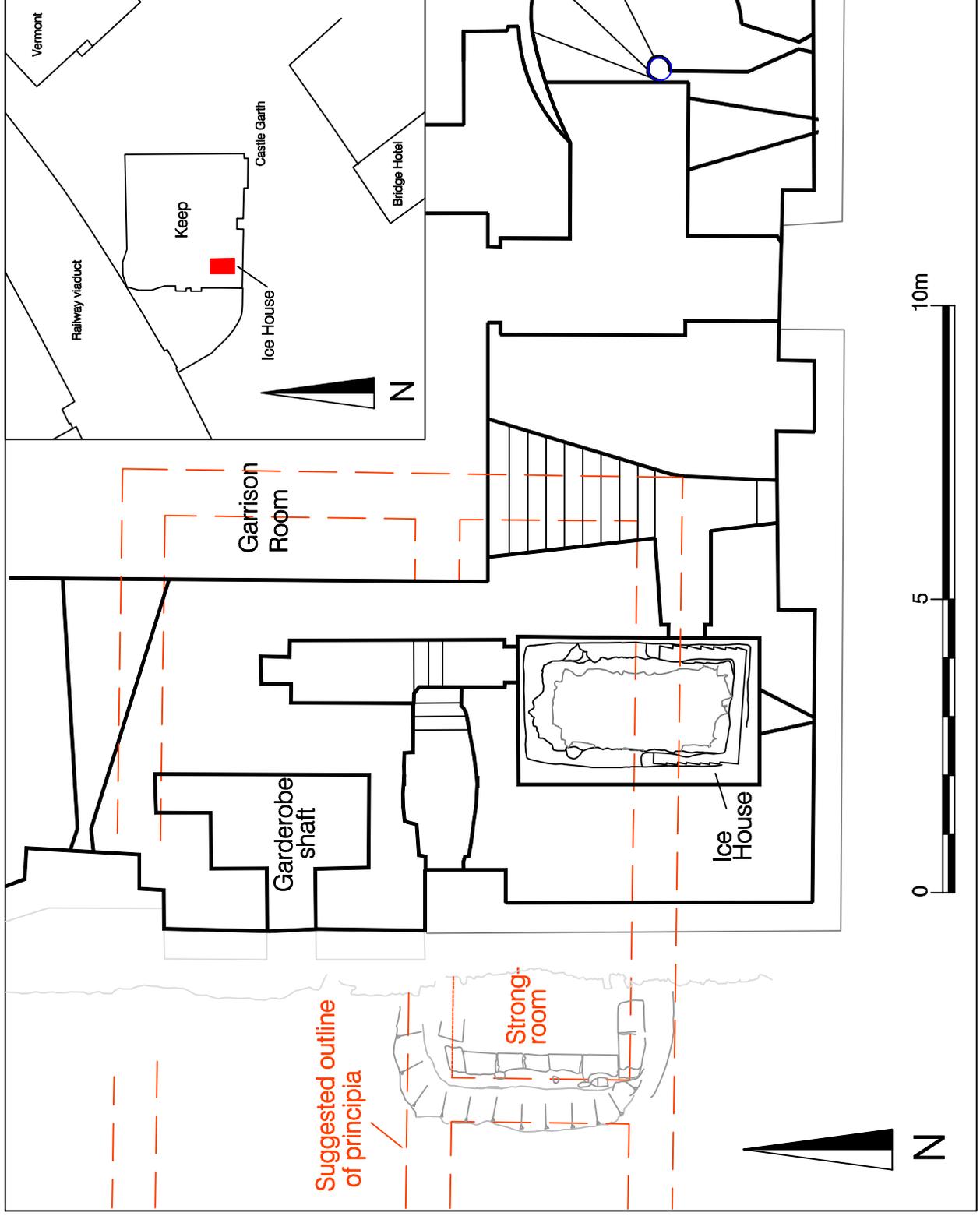


Fig. 1. Site location (inset) and south-west angle of the Keep showing the principia strong-room eacavated in 1979. Suggested outline of the principia (dashed red line) is taken from Snape and Bidwell, 2002 (1:100)

## **Archaeological Investigation in the Ice House (Pit Room), The Keep, Castle Garth, Newcastle upon Tyne (NZ 250 638).**

### **Scheduled Ancient Monument SM No. 32753,HA1020126**

#### **Summary**

*This report describes the results of a brief archaeological investigation in the base of the south-west angle of the 12<sup>th</sup> century Castle Keep, Newcastle upon Tyne, a Scheduled Ancient Monument and Grade 1 Listed Building owned by Newcastle City Council and managed by the Old Newcastle Project.*

*The investigation took place in a deep void hacked out of the medieval core and foundation-work in the late 18<sup>th</sup> or early 19<sup>th</sup> century and known as the Ice House. The investigation was limited to removal of clearly post-medieval material without intruding into any earlier archaeological remains.*

*One of the objectives of the investigation was to establish if the existing earthen floor of the Ice House represented archaeological deposits pre-dating the construction of the Keep, or if this had accumulated during post-medieval use as the Ice House. The second objective, if the latter was shown to be the case, was to establish if the full depth of the medieval foundations had been removed in forming the Ice House, record their thickness, and determine if any pre-12<sup>th</sup> century deposits survived below.*

*It quickly became apparent that the earthen floor was a comparatively recent formation, and overlay a layer of medieval foundation-work undisturbed except for a ragged intrusion in the centre of the floor. This was found to contain fragments of late 18<sup>th</sup>-19<sup>th</sup> century material, but excavation was abandoned when it rapidly filled with ground water, making identification of potentially earlier deposits uncertain.*

*The intrusion is likely to represent a post-medieval attempt to plumb the depth of the Keep foundations, possibly by John Collingwood Bruce in the 1840s, though he does not specifically mention working in the Ice House.*

#### **1 Project background.**

1.1 Scheduled Monument Consent for the project was issued in June 2016 (Historic England reference SOO138151). The area for investigation was a deep sunken void or pit below a mural chamber in the south-west angle of the Keep, at the base of which was a dark soil deposit. This chamber, generally referred to as the Pit Room, and by association the void beneath, have long been known as the 'Ice House' (Figs.1 and 2).

1.2 The aims were to establish if the soil floor of the Ice House was a product of that post-medieval usage, or represented archaeological deposits pre-dating the 12<sup>th</sup> century foundations. If this proved to be the case, the investigation would provide an opportunity to record the full depth of the medieval foundations, and assess the date and preservation of any pre-12<sup>th</sup> century deposits surviving below. It was also hoped to establish if the sunken pit or void had originally been a medieval chamber below the mural chamber, with consequent opportunities for interpretation and display.

1.3 Internally the Ice House is accessed from the east by steep steps leading up into a widely-splayed window embrasure at the south-west corner of the 'Garrison Room'. From the top of the steps a low, narrow, passage leads west into a mural chamber, the door of which is checked for a door opening outwards and secured externally by a draw-bar. This arrangement has traditionally been interpreted as evidence that the mural chamber was a prison.

1.4 The mural chamber is lit by a splayed loophole in the south wall. The walls are ashlar-faced with a chamfered cornice along the east and west sides. The floor is modern timber deck, resting on a scarcement formed by cutting a chase into one of the lower courses of ashlar facing. Two undamaged ashlar courses continue below the present floor level (Fig.2).

1.5 In the north-east corner, an opening leads into a long narrow passage ending at a wall containing a squared recess. This is described in old guidebooks as a garderobe but is at present too full of lumber to be accessible. On the west side of the passage three steps lead up to a rough passage hacked through the thickness of the west wall of the Keep. This ends in an undefended doorway some 3.5m above present paved ground level, which is clearly a secondary feature possibly formed by enlarging an original loop. Its date and function are uncertain, but the late Barbara Harbottle suggested it was associated with the construction and use of the Ice House.

1.6 Below the modern timber floor of the mural chamber is a void (here termed the upper and lower voids) some 4m deep (Fig. 2). The two courses of squared, faced, ashlar lying below the timber floor suggest the medieval floor level was considerably lower. This would however mean a drop of some 0.5m from door sill to floor level, and there is no evidence that there were ever any steps down into the chamber.

1.7 Below the lowest ashlar course the upper void has uneven sides, apparently rubble core-work thickly rendered with white lime mortar (context [2]), incorporated into which are numerous fragments of red pantile, and a single sherd of transfer-printed pottery (see Fig. 13 and The Finds). The sides taper inwards slightly to end at an irregular, narrow offset at approximately 27.77m OD. Prior to the investigation it was suggested, on the basis of what appeared to be brick impressions in mortar, that the offset had acted as the springing for a brick vault as part of the Ice House structure.

1.8 Below the offset a narrower, lower, void continues down for another 1.26m to a surface of moist dark soil at approximately 26.49m OD. The sides of this lower void are irregular sandstone rubble with no evidence for having ever been rendered. Seen in section the rubble had been laid in 'layers' with bands of mortar between (Figs. 2, 4 - 7). It was unclear if the absence of render relates to the functioning of the Ice House, or if the lower void is a second stage of intervention into the medieval fabric.

## **2 Methodology**

2.1 The investigation was carried out from 28 - 30 March 2017 by John Nolan of Northern Counties Archaeological Services, who worked on excavations at the Castle initially as site assistant and latterly as director, from 1980 until their conclusion in

1992. John has published reports on the early cemetery at the Castle, and the post-medieval Castle Garth, and is preparing the publication report on the excavations of the medieval phases of the Castle.

2.2 Two one-metre wide 'trial trenches' were marked out and manually excavated into the soil deposits forming the floor of the lower 'void' of the Pit Room, one at the north end (Tr.1) and one at the south end (Tr.2). Excavation involved only the removal of identifiably modern debris and ceased when undisturbed deposits were encountered. Spoil was raised by rope and grapple to the level of the modern timber floor of the mural chamber above, transferred into rubble sacks, and removed.

2.3 Deposits and features were allocated context numbers in a running number sequence and a drawn record was made on permatrace. The photographic record was taken using a Sony Alpha digital SLR camera. All photographs included a north point, metric scale, and context/feature number. A datum related to the Ordnance Survey Bench Mark on the south face of the Keep (at 28.72m OD) was established on the underside of the modern timber deck of the mural chamber, and levels taken by measuring upwards using a *Leica Disto* laser measurer.

2.4 Initially all finds were recovered, though only a representative sample of bulk finds such as post-medieval brick/tile debitage has been kept. The assemblage is very small, not particularly informative, and of doubtful retention value given the current costs and problems of museum storage. It is proposed instead that the retained finds will be offered to the Old Newcastle Project as teaching/interpretation material.

2.5 In May 2016 the Tyne and Wear Archaeology Specialist commissioned an as-existing photographic record of the Ice House by rotating laser scan. This was carried out by a specialist from Newcastle College. Copies of the scans are held by the Tyne and Wear Historic Environment Record.

### **3 Historical background.**

3.1 The Castle was founded in 1080 by Robert Curthose, son of William I, on a site which had been occupied by the Roman bridgehead fort of *Pons Aelius* from the late 2<sup>nd</sup> to the early 5<sup>th</sup> centuries (Snape and Bidwell 2002), and used as a Christian cemetery from perhaps the late 7<sup>th</sup> century (Nolan 2010). The Keep was built c.1168 - 1178 as part of a re-fortification in stone. The final phase of castle development was the addition of a barbican now known as the Black Gate, between 1247 and 1250. By the late 14<sup>th</sup> century the castle was enclosed by the town walls and gradually fell into neglect.

3.2 The Castle site was leased by the Crown in the seventeenth-century and rapidly developed into a distinct community – a town within a town. By this date the Keep was roofless, but accessible chambers within the thickness of walls were used for workshops and storage. As part of this re-use, an Ice House was formed in the late 18<sup>th</sup> century in the base of the south-west angle. Ice houses, used to keep ice for domestic purposes, became common in the 18<sup>th</sup> century. The form most generally known comprises a cylindrical brick-lined chamber with a domed vault. Some incorporated a drain to remove meltwater (Crossley, 72).

3.3 There appears to be no record of the actual date of construction of the Ice House. It is not mentioned by John Brand in his description of the Keep (Brand), nor is it obviously shown on the earliest known floor plans of the Keep, apparently drawn by John Dobson in 1817 but not published until 1835 (*Vetusta Monumenta*). The ground floor plan shows the mezzanine chamber as a simple rectangular outline with a loophole in the south wall and another (blocked) in the west. The east door and passage leading from the Garrison Room south-east window embrasure is also shown blocked, and the chamber could only be accessed from an inserted external doorway high in the west wall of the Keep (Fig. 11, A).

3.4 The first known reference to the Ice House appears in the Calendar of Common Council Minutes for 24th June 1824, when John Forman, Confectioner, petitioned the Corporation for renewal of his twenty-year lease of a

'vault or cellar under the Old Castle & used as an ice house'

Foreman's lease had been granted by John Turner, then leaseholder of the castle, on 1 August 1804. The application was rejected, and the Council ordered that on expiry of the lease, the ice house should become an appurtenance of the Mansion House (then in the Close) for the use of the Mayor 'for the time being' (Tyne and Wear Archives 589/19).

3.5 The Mayor continued to reside at the Mansion House until 1835 (Fraser, 1995), though it is not clear if the Ice House was in use right up to that date. The next known mention appears in Eneas Mackenzie's History of Newcastle (1827), in a description of the former ground floor county prison (now the Garrison Room). Speculating on the possible existence of a 'dungeon' within the building, this refers to the supposition that

'the small apartment on the *north (my italics)* side of the ground-floor, long used as an ice-house, was anciently the dungeon.' (Mackenzie, 100 *n.*)

This statement may imply the Ice House was disused by the time Mackenzie was writing. Mackenzie also speaks of 'the small room on the north side of the dungeon' as being at that time walled up.

3.6 Mackenzie's description is confusing because the 'room' now called the ice-house or Pit Room is on the *west* side of the Keep. Was Mackenzie actually referring to the mezzanine room below the Queen's Chamber? The ground plan of the Keep (a version of that of 1817 by Dobson) in Mackenzie's History shows the passage from the south-east embrasure of the 'Garrison Room' to the mural chamber as blocked – but so too apparently are the steps down to the mezzanine room from the Queen's Chamber. The plan does not show the doorway in the center of the north wall of the 'Garrison Room' which now also gives access the mezzanine room, which implies the mezzanine room could also at that time be described as 'walled up'. Presumably Mackenzie muddled his rooms and their orientation.

3.7 The Dobson ground floor plan used by Mackenzie and subsequently published in *Vetusta Monumenta* raises a further question. As mentioned in paragraph 3.3, a large, blocked, loophole is shown in the west wall of the mural chamber. A rather

ragged loophole/slot *is* visible on the external west face of the Keep at this point (see Fig. 11, B) but there is no trace of any internal opening at this level in west wall of the mural chamber. Could Dobson have been showing a loop serving a lower chamber? The western loop appears again on the plan published in Bruce's 1847 *Guide* (facing p.32) and possibly based on Dobson's drawings.

3.8 Bruce's plan shows the passage from the south-east window embrasure of the Garrison Room as open, though in the text he states that the mural chamber 'is at present walled up' (ibid, 55). He suggested the chamber had been a store room: presumably the blocking in the passageway meant Bruce was unaware of the external door checks and draw-bar tunnel which imply a prison, and he had presumably gained access to the mural chamber through the doorway in the west wall.

3.9 Bruce does however positively identify the mural chamber as the Ice House, stating it had been used for that purpose 'some years ago' and explaining that

'when put to this use, the bottom of the room was excavated some feet below its original level. The original builders, however with a view to the security of this part of the castle, had built up the wall quite solid to the level of the passage'.

It is difficult to be sure whether Bruce was referring to the upper or lower of the voids below the mural chamber, though he evidently interpreted the roughness of the sides as evidence that a mass of core-work had been removed

3.10 Shortly before publishing his *Guide* Bruce made a number of interventions – partly by excavation and partly by boring - into the Keep foundations, looking for evidence of a supposed subterranean 'dungeon'. One was made in the ante-room which he termed the Vestry (west of the Chapel), where he reported reaching a depth of 6' 6" (1.98m) without any change in the foundation-work. Investigations in the nave of the Chapel to a depth of 5' 6" (1.68m) and in the Garrison Room 'to a depth of about 5' (1.52m) were similarly unsuccessful. However he makes no reference to any investigation in the Ice House/Pit Room. Bruce was surprised by the solidity of the floors he probed, and noted that they were a mass of rubble which became firmer the deeper he went. He concluded the foundations were

'a solid square of rough masonry well compacted with mortar and built up from a depth, of perhaps, twelve or fourteen feet.'

3.11 W. H. D. Longstaffe's 'The *New Castle upon Tyne*' written in 1859, alludes to

'One little room...formerly used as an icehouse.' (Longstaffe, 86).

The ground plan accompanying his article shows no loops serving the mural chamber – perhaps they were still blocked. W.H. Knowles (1926) briefly describes the chamber and suggests on the basis of the external door-checks and drawbar (concealed by blocking as late as Longstaffe's day) that it was a prison, but makes no reference to any later usage. Knowles shows only one loophole in the south wall, and that as being open. Neither article makes any mention of the deep void below

the chamber – the ‘room’ itself being described as the Ice house. The Ice House – the mural chamber and the void below - were named the 'Pit Room' when the Keep was restored in the 1970s and early 1980s.

#### **4 The investigation. (Context numbers are given in square brackets).**

4.1 Loose debris [3], which included pieces of cardboard, plywood, and a biro top was removed from floor of the lower void, and the rubble forming the sides of the lower void [1] was brushed down. The floor of the void was an undulating surface of compact, dark grey-black, damp silty soil [3], on which the two trial trenches were marked out at the north and south ends.

4.2 In Tr.1 at the north end, context [3] was only 30-50mm thick, and without any perceptible change came down onto a firm level of yellow mortar and small sandstone rubble with pockets of dirty, re-deposited, boulder clay [5] at a depth of 26.45m OD (Fig. 8). The mortar contained frequent small fragments of carbonised material initially thought to be charcoal but subsequently found to be burnt coal. This deposit had the characteristics of mortar spreads forming the capping of the Keep foundation raft noted in an earlier investigation in the Garrison Room (Fraser 1982). In Tr.1 this deposit extended under the lowest layer of rubble (see paragraph 1.8) on the east, north and west sides and was clearly part of the 12<sup>th</sup> century foundation raft.

4.3 In the southern trench (Tr.2) the same depth and sequence of deposits occurred, though larger pieces of sandstone rubble were visible within the surface of foundation raft [7] at approximately 26.51m OD (Fig. 9). One face of a squared ashlar block was visible, close to the projected line of the south wall of the *principia* of the Roman fort (Fig.3). At the north-west edge [3] became deeper, with pieces of loose brick and sandstone, suggesting an area of disturbance.

4.4 As the deposits appeared so shallow, following consultation with the Client it was decided to also remove the remaining narrow central strip of [3] in order to leave a consistent surface across the floor of the void. As this central strip was being removed it became obvious that the disturbed area noted in Tr. 2 was the edge of a larger feature which cut into the foundation raft (Fig.10). After cleaning the whole surface of the exposed foundation raft, this was defined as a sub-circular pit 0.8m - 1m diameter [9], filled with dark, moist silt and rubble [8] consisting of broken brick, pieces of sandstone, lumps of mortar, and a piece of Roman tile (Figs. 11, 14).

4.5 At the north-eastern edge of feature [9] the fill material was shallow and came down onto large pieces of sandstone rubble, the ends of which were still embedded in the foundation raft. The pit then reduced to a rough oval. An attempt was made to half-section this feature. The upper level of the fill contained a corroded 1971 decimal halfpenny and some offcuts of electric cable, all probably intrusive from context [3].

4.6 Lower down the rubble became more compact and produced a fragment of late glazed white earthenware (see Finds). As the rubble was removed, the resulting voids quickly filled with groundwater (Fig.12) and when no more brick fragments appeared it was not possible to be confident that the rubble being removed was part of the backfill or fractured but basically *in situ* parts of the 12<sup>th</sup> century foundation raft. Excavation consequently ceased at a depth of approximately 26.20m OD. The partly-

excavated pit was lined with plastic and backfilled level with the surrounding foundation raft. The whole surface area of the exposed foundation raft was sheeted.

## 5 Discussion.

5.1 There is no uniquely physical evidence for the use of the voids as an Ice House, apart from documentary references, and its form does not closely correspond to that of purpose-built Ice Houses recorded elsewhere (Crossley). It appears to have been an *ad hoc* adaptation.

5.2 No evidence was found to support one of the original the suggestions, that the lower part of the 'void' had been covered by a brick-arched vault as part of its use as an Ice House. The possible brick impressions in mortar on the east and west sides of the offset surrounding this lower void were, after cleaning, found to be left by planking laid across the southern part (Figs.3, 6, 7, 9). The mortar was a grey Portland cement, and the planking was probably put in during the restorations of the 1970s and 1980s to provide a level base for an access ladder. The offset itself closely coincides with the level of the base of the external chamfered plinth of the west side of the Keep, at 27.69m OD, and probably represents the level of the 12<sup>th</sup> century 'foundation raft', which clearly continues below the level of the floor of the lower void.

5.3 The lower void, with its un-rendered sides, is somewhat enigmatic. The raggedness of these sides suggests this space was not intended to be used for storage or any 'clean' activity. It was presumably always part of the Ice House, unless it actually represents a secondary intrusion for which there appears little justification. It seems unlikely that it was associated with Bruce's investigations: removal of so much large sandstone rubble would surely have been impracticable (see paragraph 5.5). It is more likely that it served as a soak-away for meltwater from ice stored in the upper void, with the offset carrying a boarded floor.

5.4 The render on the sides of the upper void implies that this space was to be used and was intended to be kept clean. The pantile fragments embedded in the render are not closely datable but this roofing material does not appear to have been recorded in archaeological contexts until the late 16<sup>th</sup> century (Harbottle and Ellison, 173). The fragments have the appearance of being considerably later, and included in the plaster was a sherd of transfer-printed pottery suggesting a date for the rendering no earlier than the 1820s-1840s. Possibly this relates to the latest period of Ice House use, after 1824, as an appurtenance to the Mansion House.

5.5 It may be questioned if Bruce was correct in his interpretation of the void below the mural chamber: that there was a solid mass of 12<sup>th</sup> century foundation which had been 'dug out' to create the Ice House. This would mean there had been a thickness of some 3.5m of rubble and mortar core-work here, greater than that at the north-west multangular tower. If so, constructing the ice-house would have involved hacking out and removing from the Keep perhaps some 30 cubic metres of large rubble. If the internal doorway was blocked, this would have all had to be carried out through the irregular passage to the doorway in the west wall of the Keep, and even if the internal doorway was open removal of such a volume of rubble would still have been a demanding operation for a 'confectioner'.

5.6 Alternatively it might be suggested that the upper 'void' could in part always have been an open space such as a sub-chamber below the mural chamber, perhaps serving as an *obliette* or as a 'safe'. There is just enough depth between the presumed medieval floor level of the mural chamber and the offset between the upper and lower voids for a low-roofed space. Conversion into an Ice House would conceivably then have been more feasible proposal, perhaps involving pulling away the ashlar facings and removing a shallow vault, thus enlarging a space already known to be deep and cool. If such a sub-chamber had originally existed, the blocked loop-hole in the west wall (Fig.15, B) may have served to give some light and/or ventilation via a mural shaft. This is however conjecture.

5.7 The intrusion ([9]) into the floor of the lower void may have been an unsuccessful attempt by Bruce at probing the depth of the foundation raft. However the possibility this represents a more recent 'exploration', during the restoration of the Keep in the 1970s- 1980s, cannot be ruled out. Groundwater was encountered at the level of the natural glacial till in excavations north and west of the Keep, but has not been noted in other investigations of the foundation raft. Its presence in the Ice House may simply be due to the foundation raft here being cut into the glacial till, though the in-filled strong room of the *principia* which partly underlies the south-east angle of the Keep, may also have affected groundwater levels and retention.

### **Finds. (J. Nolan)**

#### **Context 2.**

Embedded in the render of the north side of the upper 'void' was a sherd of glazed white earthenware, probably from the base of a plate, with part of a manufacturer's trade mark or pattern name in blue transfer-print (Fig.9). This may date from the second quarter of the 19<sup>th</sup> century.

#### **Context 5.**

This contained a single fragment of Roman brick/tile in an abraded, mid-red, sandy fabric with traces of coarse yellow-brown lime mortar. Possibly residual Roman material incorporated into the 12<sup>th</sup> century foundation raft.

#### **Context 6.**

This contained a single sherd of late glazed white earthenware (late 19<sup>th</sup>-20<sup>th</sup> century). There were two brick/tile fragments, one mid-red, the other burned grey-brown, both post-medieval and probably fallen from the render on walls of the upper 'void'. A lump of off-white, gritty, mortar with small coal inclusions and a small piece of thin sheet iron with similar mortar adhering may have been disturbed from the 12<sup>th</sup> century foundation raft.

#### **Context 8. (see Fig. 14)**

Apart from a single sherd of late glazed white earthenware (mid-19<sup>th</sup>-20<sup>th</sup> century) and the probably intrusive pieces of plastic cable and a 1971 decimal halfpenny, all finds were pieces of building material. These included two flakes of sandstone from the edges of dressed blocks, possibly deriving from cutting the chase for the timber floor of the mural chamber above, and a scale-shaped fragment of possible sandstone roof-tile.

The earliest ceramic building material was a fragment of pale red Roman tile 300mm thick with some surface scoring. There were five fragments of mid 18<sup>th</sup>- early 19<sup>th</sup> century brick with lime mortar on the bedding faces, two light red, pantile fragments with traces of lime mortar adhering, probably fallen from the rendering of the upper void, and several lumps of white lime mortar.

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### **Acknowledgements.**

NCAS wishes to thank David Heslop, former Tyne and Wear Archaeology Specialist, Conservation Team and Newcastle City Council, Ian Ayris, Conservation Team Manager, Newcastle City Council. Also Paul MacDonald, Warden of the Keep 1995-2017, and staff from the Old Newcastle Project.

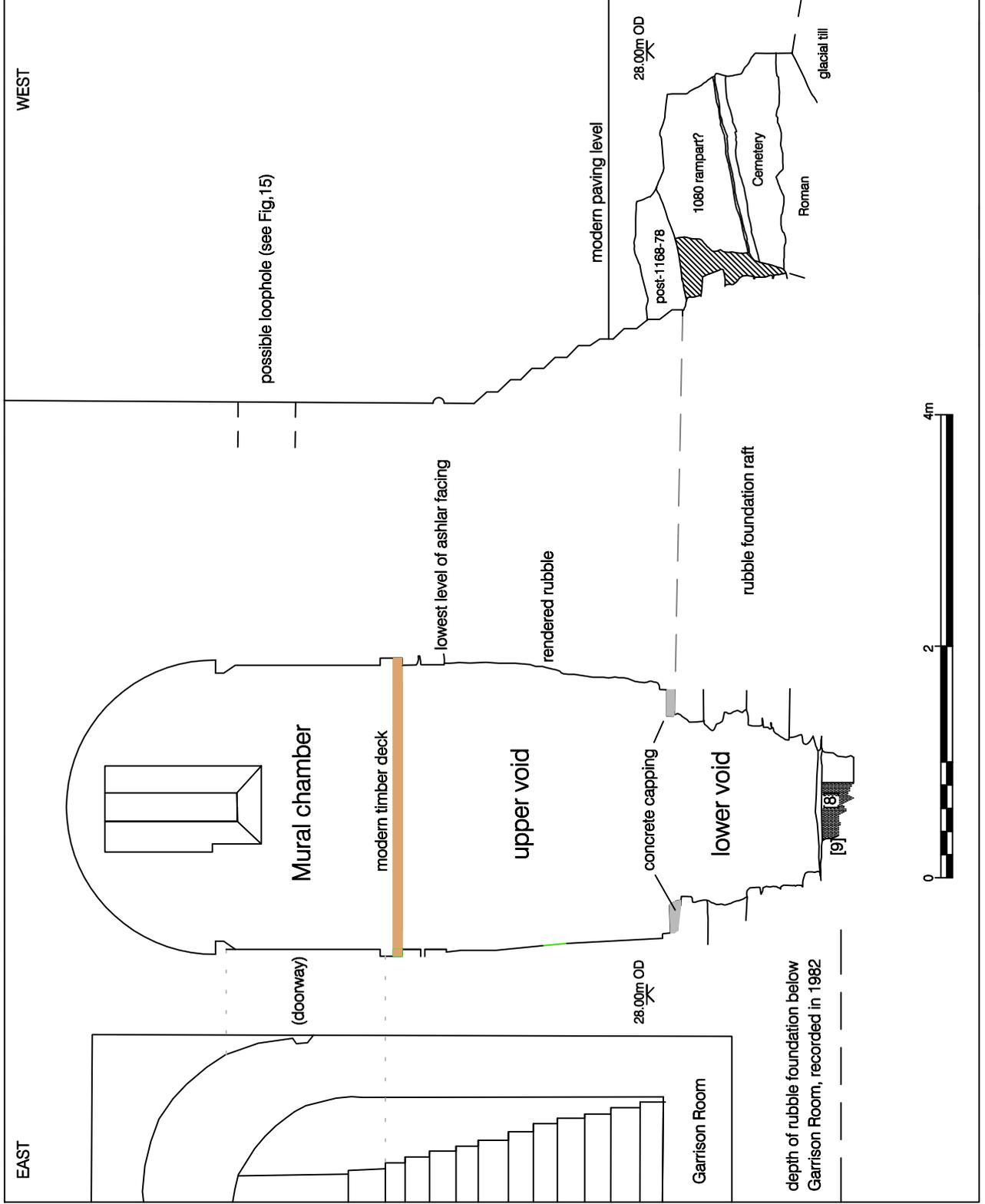


Fig. 2. Section across the Ice House, also showing stratigraphy recorded to the west in 1979 (1:50)

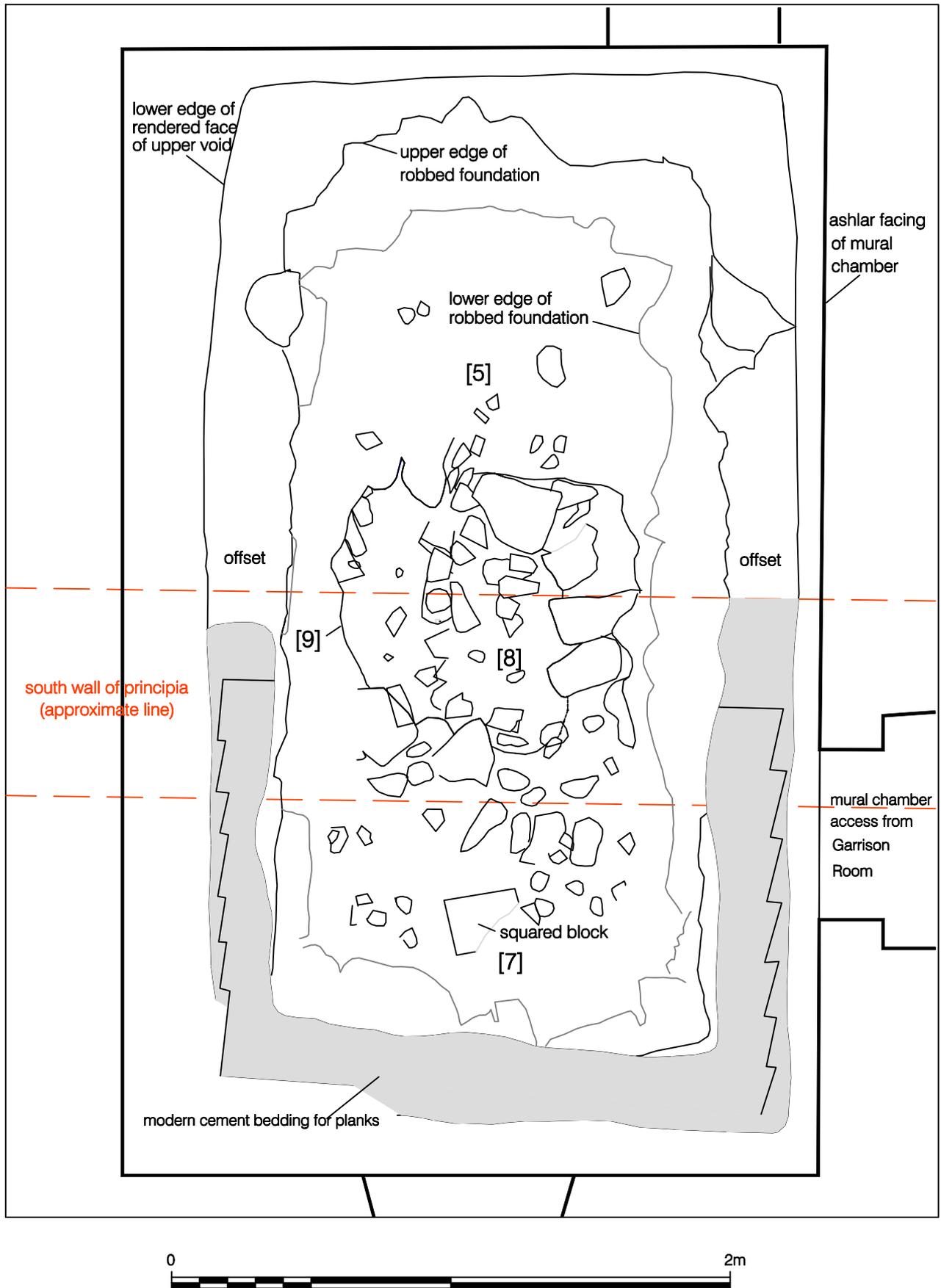


Fig.3. Showing the offset between the upper and lower voids, and the surface of surviving layer of the foundation raft cut into by feature [9]. (1:20)



Fig. 5. Looking south, showing layering within foundation rubble of the lower void, the offset, and the mortar and pantile render of the upper void. Lower ashlar courses of mural chamber above. Scale 2m.



Fig. 4. Looking north, showing layering in the exposed foundation rubble of the lower void, the offset, and the mortar and pantile render of the upper void. Lower ashlar courses of mural chamber above. Scale 2m.



Fig. 6. Looking east, showing the exposed foundation rubble of the lower void, offset, and mortar and pantile render of the upper void above. Scale 2m.



Fig.7. Looking west, showing exposed foundation rubble [1] of the lower void, with a whin boulder on the offset (right), and mortar and pantile render of the upper void above. Scale 2m.



Fig. 8. Tr.1 after removal of [4], showing surface [5] of gritty clay and small sandstone fragments. Scale 1m.



Fig. 9. Tr. 2 after removal of [6], showing the surface of mortar and rubble forming a layer of the foundation raft [7]. On the right (west) are the impressions of planking in a modern cement fillet on the offset. Scale 1m.



Fig. 10. After removal of central baulk, showing the mortar and rubble surface forming a layer of the rubble foundation raft extending across the 'floor' of the Ice House, with a disturbed area [8] and [9] in centre. Scales 1m.



Fig. 11. Feature [9] cutting the mortar and rubble layer, and fill [8]. Large pieces of sandstone incorporated into the foundation raft at top right. Scales 1m.



Fig. 12. Feature [8] showing half-section of feature [9] halted by groundwater ingress. Scales 1m.



Fig.13. Detail of render on the north face of the upper void, showing a transfer-printed pot fragment embedded in the mortar. Scale 10cm.



Fig. 14. Some finds from the fill of feature [9]: top, sandstone roof-tile fragment; lower right, Roman tile; lower left, late 18<sup>th</sup>-early 19<sup>th</sup> century brick fragment.

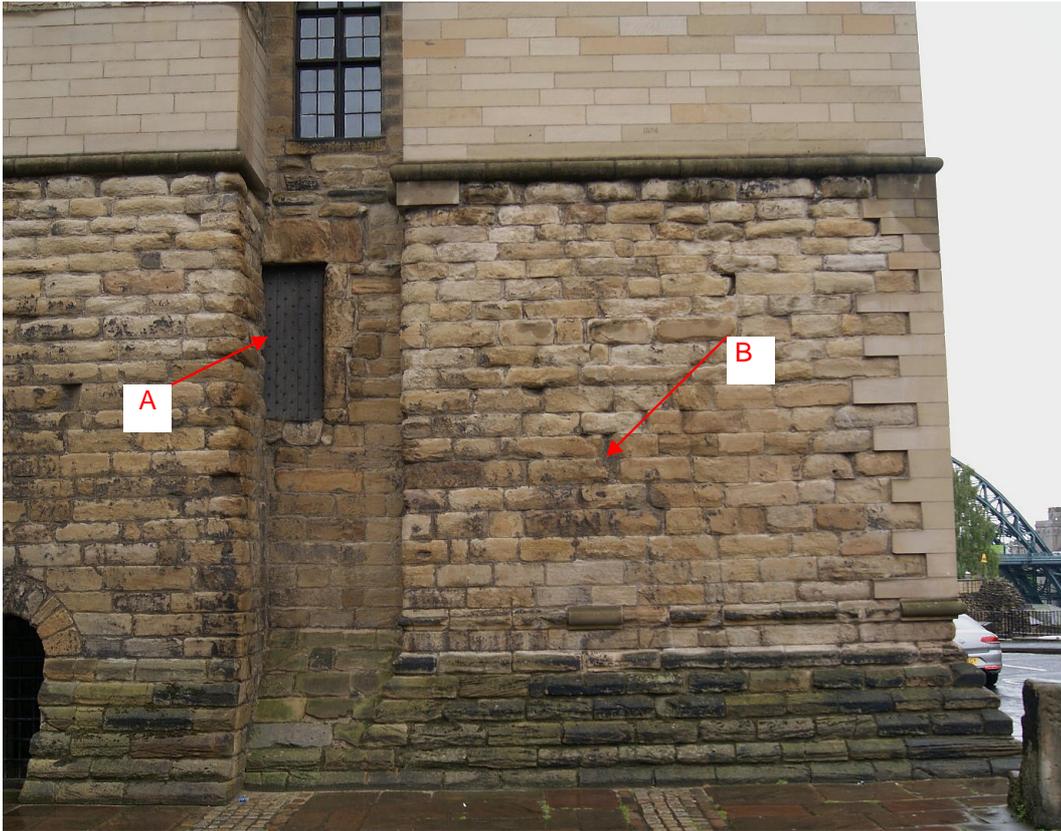


Fig. 15. Lower south-west face of the Keep, showing (A) the inserted doorway probably associated with construction and use of the Ice House, and (B) blocked loop-hole or vent shown on the *Vetusta Monumenta* plan. Cobbles mark the position of the walls of the Roman fort's strongroom.

## APPENDIX 1. Context list and matrix of horizontal stratigraphy

[1] Exposed sandstone rubble in lower void, laid in bands with layers of mortar between. 12<sup>th</sup> century foundation raft of the Keep.

[2] Heavy white lime mortar render over irregular faces of upper void, contains frequent pantile fragments.

[3] Loose surface debris.

[4] Compact, moist, dark grey-black silty soil with frequent flecks of white lime mortar/render.Tr.1.

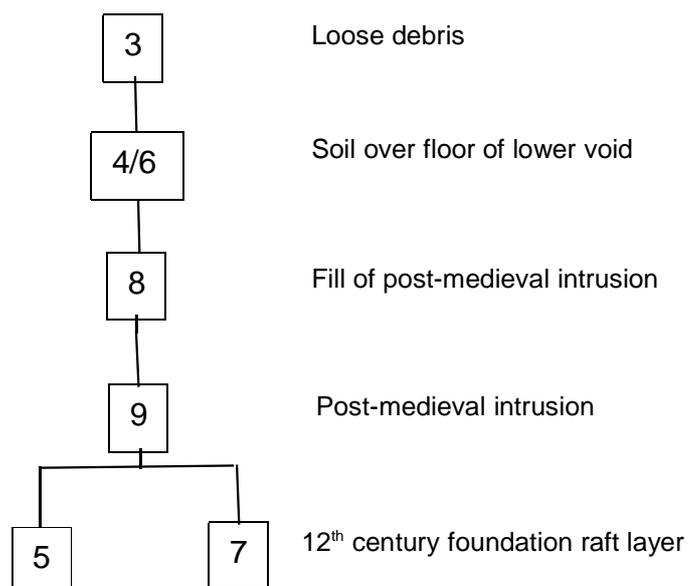
[5] Firm, yellow-brown, mortar wit frequent coal inclusions, and gritty clay patches with small sandstone fragments. Layer of mortar within foundation raft. Tr. 1. Equal to [7].

[6] Dark grey – black moist silty soil with frequent white lime mortar/render and occasional chips of ceramic building material. Tr. 2. Equal to [4].

[7] Tr. 2 Firm, yellow-brown, mortar with frequent coal/carbon inclusions and patches of gritty clay. Surface of at least one squared ashlar visible. Tr. 2. Equal to [5].

[8] Very moist dark grey gritty soil with frequent inclusions of white lime mortar, brick and pantile fragments, pot, decomposed wood. Becomes liquid slurry as groundwater enters. Fill of [9].

[9] Irregularly-circular pit cutting [5] and [7], filled with [8]. Partly half-sectioned.



## **APPENDIX 2. Written Scheme of Investigation for the Ice House/Pit Room.**

### **1 Introduction.**

1.1 It is proposed to carry out limited archaeological investigation in the base of the late 18th century Ice House in the Keep of the Castle of Newcastle upon Tyne.

1.2 The Keep forms part of the Scheduled Ancient Monument of the Castle of Newcastle upon Tyne, and is a Grade 1 listed building.

1.3 The Keep is owned by Newcastle City Council, and managed by the Old Newcastle Project.

### **2 Brief historical background.**

2.1 The Castle was founded in 1080 by Robert Curthose, son of William I. The Keep was built between 1168 and 1178 as part of a re-fortification in stone. The final phase of castle development was the addition of a barbican now known as the Black Gate, between 1247-1250. By the late 14<sup>th</sup> century the castle was enclosed by the town walls and gradually fell into neglect.

2.2 The Castle site was leased by the Crown in the seventeenth century and rapidly developed into a distinct community – a town within a town. The Keep was roofless, but accessible chambers within the thickness of walls were used for workshops and storage.

2.3 As part of this re-use, the Ice House was formed in the late 18<sup>th</sup> century in the south-west angle, below a chamber originally designed as a prison room. This may have involved removal of a medieval sub-chamber below the prison room, and deeper but less extensive intervention into the mortared rubble foundation raft on which the keep superstructure was built.

2.4 The Ice House seems to have been abandoned when the Keep was first restored in 1810-12 and no record of its appearance survives. Subsequently both levels of the Ice House were boarded out with timber floors. The lower level was used for storage until recently. An as-existing photographic record (by rotating laser scan) has recently been completed.

### **3 Purpose of investigation.**

3.1 To investigate the depth and nature of mixed debris deposits forming the dirt floor of the base of the Ice Room by means of trial trenching.

3.2 To establish if undisturbed archaeological deposits or features survive within this space.

3.3 To establish if the rubble foundation raft of the Keep extends below the level of modern accumulated debris, and if there is any evidence that this lower space was utilised in the medieval period.

3.4 To inform strategies and cost implications for clearance of post-medieval debris across the whole floor of the space.

3.5 To achieve a better understanding of this previously un-investigated part of the Keep, and contribute information for interpretation and display.

## **4 Methodology.**

4.1 The work will be carried out by a work placement member of the Old Newcastle Project team, who has previous archaeological experience, with assistance from volunteers and under the direction of John Nolan, Northern Counties Archaeological Services. John Nolan has published reports on the early cemetery at the Castle, and the post-medieval Castle Garth, and is preparing the publication report on the excavations of the medieval phase.

4.2 Plastic sheeting will be laid on the base of pit, and all exposed masonry will be cleaned of loose material using soft had brushes. Dust masks and disposable overalls will be worn.

4.3 Manually excavate, using trowels and hand shovels, two 1m-wide 'trial trenches' into the deposits forming the floor of the pit, one at the north end and one at the south end.

4.4 Excavation will extend only to removal of identifiably modern debris, which is likely to including any white lime mortar and brick debitage from the postulated brick capping of the Ice House.

4.5 Excavation will cease when undisturbed archaeological deposits are encountered or when natural glacial till is reached. No in-situ structural features associated with the post-medieval use of the space, such as brick or flag flooring will be disturbed.

4.6 Deposits will be contexted in a running number sequence and recorded on pro-forma record sheets. A drawn record will be made on permatrace at a scale of 1:20 for plans, and sections at 1:10

4.7 A photographic record will be maintained using a digital camera as this is the most effective tool for ensuring good quality image capture in such a confined area with difficult light levels. All photographs will include a north point, metric scale, and context/feature number as appropriate.

4.8 All finds will be recovered and recorded, but only representative sample of bulk finds such as post-medieval brick/tile debitage will be kept.

## **5 Post-excavation and reporting.**

5.1 A report describing the investigation will be produced, with photographs, plans and sections illustrative of the works and their results. Copies of the report will be produced for English Heritage and the Tyne and Wear County Historic Environment Record.

5.2 The report will include a location plan, plan(s) of principal excavated deposits and/or features, at least one section, a selection of photographs illustrating the excavation, a Harris matrix, and a context list.

5.3 An OASIS report will be completed, and a pdf copy of the report uploaded. The results will be summarised in the forthcoming Medieval Castle report, to be submitted to *Archaeologia Aeliana*.

5.4 Finds and site archive will be deposited with the Great North Museum, which has succeeded the Museum of Antiquities as the collecting area museum for the Castle.

**APPENDIX 3. Copy of Scheduled Monument Consent for investigation of the Ice House.**

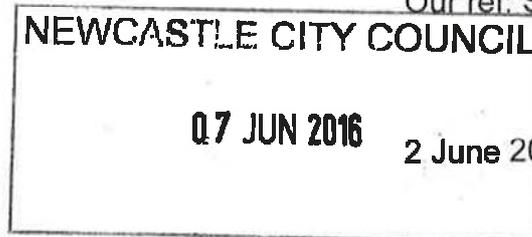


NORTH EAST OFFICE

Mr David Heslop  
Newcastle City Council  
9th Floor Civic Centre  
Barras Bridge  
NEWCASTLE UPON TYNE  
Tyne and Wear  
NE1 8PH

Direct Dial: 0191-269-1239

Our ref: S00138151



Dear Mr Heslop

**Ancient Monuments and Archaeological Areas Act 1979 (as amended); Section 2 control of works  
Application for Scheduled Monument Consent**

**THE CASTLE KEEP, CASTLE GARTH, NEWCASTLE UPON TYNE  
Scheduled Monument No: SM 32753, HA 1020126  
Our ref: S00138151  
Application on behalf of Newcastle City Council**

1. I am directed by the Secretary of State for Culture, Media & Sport to advise you of the decision regarding your application for Scheduled Monument Consent received 19 May 2016 in respect of proposed works at the above scheduled monument concerning 1) attachment of 2 new display figures onto modern keep roof; 2) display of Anglo-Saxon / Norman grave stones south-west of the Keep; and, 3) investigation and recording of archaeological levels within the "Ice House" of the Castle Keep. The works were detailed in the following documentation submitted by you:

- Location of Castle Keep (Keep SAM Boundary.jpg)
- Location of grave stones within tower of Saxon church (Gravestone display Location.pdf)
- Ice House location plan (Ice House location.pdf)
- Method statement

2. In accordance with paragraph 3(2) of Schedule 1 to the 1979 Act, the Secretary of State is obliged to afford you, and any other person to whom it appears to the Secretary of State expedient to afford it, an opportunity of appearing before and being heard by a person appointed for that purpose. This opportunity was offered to you by Historic England and you have declined it.

3. The Secretary of State is also required by the Act to consult with the Historic



BESSIE SURTEES HOUSE 41-44 SANDHILL NEWCASTLE-UPON-TYNE NE1 3JF

Telephone 0191 269 1255  
HistoricEngland.org.uk



*Historic England is subject to the Freedom of Information Act 2000 (FOIA) and Environmental Information Regulations 2004 (EIR). All information held by the organisation will be accessible in response to an information request, unless one of the exemptions in the FOIA or EIR applies.*

*Historic England will use the information provided by you to evaluate your application for Scheduled Monument Consent. Information contained in this application and any information obtained from other sources will be retained in all cases in hard copy form and/or on computer for administration purposes and future consideration where applicable.*



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Buildings and Monuments Commission for England (Historic England) before deciding whether or not to grant Scheduled Monument Consent. Historic England considers the effect of the proposed works upon the monument to be beneficial for the presentation and public enjoyment of the monument, but necessitating unavoidable but on balance acceptable interference with the historic fabric and / or some ground disturbance. Necessary archaeological recording arrangements are included within the application.

I can confirm that the Secretary of State is agreeable for the works to proceed providing the conditions set out below are adhered to, and that accordingly Scheduled Monument Consent is hereby granted under section 2 of the 1979 Act for the works described in paragraph 1 above, subject to the following conditions:

- (a) The works to which this consent relates shall be carried out to the satisfaction of the Secretary of State, who will be advised by Historic England. At least 4 weeks' notice (or such shorter period as may be mutually agreed) in writing of the commencement of work shall be given to Ms. Lee McFarlane, Inspector of Ancient Monuments, Historic England, Bessie Surtees House, 41-44 Sandhill, Newcastle, NE1 3JF; lee.mcfarlane@HistoricEngland.org.uk; 0191-269-1239, in order that an Historic England representative can inspect and advise on the works and their effect in compliance with this consent.
- (b) The specification of work for which consent is granted shall be executed in full.
- (c) All those involved in the implementation of the works granted by this consent must be informed by the owner, occupier and/or developer that the land is designated as a scheduled monument under the Ancient Monuments and Archaeological Areas Act 1979 (as amended); the extent of the scheduled monument as set out in both the scheduled monument description and map; and that the implications of this designation include the requirement to obtain Scheduled Monument Consent for any works to a scheduled monument from the Secretary of State prior to them being undertaken.
- (d) Equipment and machinery shall not be used or operated in the scheduled area in conditions or in a manner likely to result in damage to the monument/ ground disturbance other than that which is expressly authorised in this consent.
- (e) The specification/ research design/ project design (including analysis, post-excavation and publication proposals) for which consent is granted shall be executed in full, unless variations have been agreed under the terms of condition (a).
- (f) A report on the archaeological recording shall be sent to the Tyne and Wear



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Historic Environment Record and to Lee McFarlane (as above) at Historic England within 3 months of the completion of the works (or such other period as may be mutually agreed).

- (g) The contractor shall complete and submit an entry on OASIS (On-line Access to the Index of Archaeological Investigations - <http://oasis.ac.uk/england/>) prior to project completion, and shall deposit any digital project report with the Archaeology Data Service, via the OASIS form, upon completion.

4. By virtue of section 4 of the 1979 Act, if no works to which this consent relates are executed or started within the period of five years beginning with the date on which this consent was granted (being the date of this letter), this consent shall cease to have effect at the end of that period (unless a shorter time period is set by a specific condition above).

5. This letter does not convey any approval or consent required under any enactment, bye law, order or regulation other than section 2 of the Ancient Monuments and Archaeological Areas Act 1979.

6. Your attention is drawn to the provisions of section 55 of the 1979 Act under which any person who is aggrieved by the decision given in this letter may challenge its validity by an application made to the High Court within six weeks from the date when the decision is given. The grounds upon which an application may be made to the Court are (1) that the decision is not within the powers of the Act (that is, the Secretary of State has exceeded the relevant powers) or (2) that any of the relevant requirements have not been complied with and the applicant's interests have been substantially prejudiced by the failure to comply. The "relevant requirements" are defined in section 55 of the 1979 Act: they are the requirements of that Act and the Tribunals and Inquiries Act 1971 and the requirements of any regulations or rules made under those Acts.

Yours sincerely

**Lee McFarlane**

Inspector of Ancient Monuments

E-mail: [lee.mcfarlane@HistoricEngland.org.uk](mailto:lee.mcfarlane@HistoricEngland.org.uk)

For and on behalf of the Secretary of State for Culture, Media and Sport

cc: Mrs Jenny Morrison, Archaeology Officer, Tyne and Wear Specialist Conservation Team, Newcastle City Council, Civic Centre, Barras Bridge, Newcastle, NE1 8PH



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