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**CAF Data Structure Report No. 105**

AE/14/04

**Excavations at Carrickfergus Castle,**

**Co. Antrim**

ANT:052: 059

*6<sup>th</sup> August 2014*

On behalf of





**Excavations at Carrickfergus Castle, Co. Antrim**

Excavations carried out on behalf of  
The Northern Ireland Environment Agency: Built Heritage

by

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*6<sup>th</sup> August 2014*

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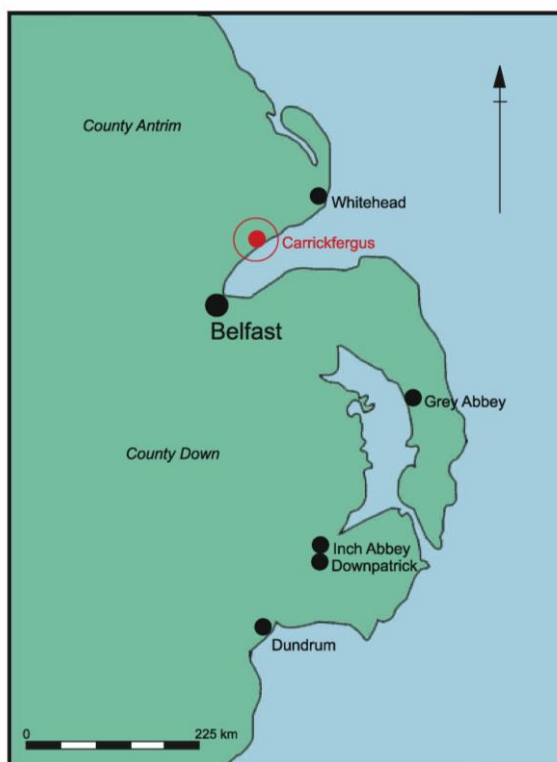
**Plate 43**

Outer Ward. Trenches 5-8 from the roof of the Keep/ Great Tower. The wall at the bottom of shot is the Middle Ward wall. From south.

## 1. Summary

### Introduction

An archaeological excavation was carried out in Carrickfergus Castle, Co. Antrim, by the CAF in behalf of the NIEA in Spring 2014 (AE/14/04; Figs 1-2). The excavation took place over an eight-week period during February to April 2014. The primary research aims of the excavation were to enhance visitor experience at the monument by establishing the nature, depth and survival of archaeological strata and masonry at various points in the castle. To this end eight trenches were excavated within the Inner Ward and four in the Outer Ward. Prehistoric, Medieval and Post-Medieval masonry, strata and artefacts were uncovered in the twelve manually excavated trenches.



**Fig. 1. Location map.**

### *Prehistoric activity*

In four of the eight trenches excavated in the Inner Ward, a layer of clay with a very high flint content was recorded immediately over or close to the bedrock. The flint assemblage comprised more than 7,000 fragments of debitage. It included material from the Late Mesolithic (c.5500 BC-c.4000 BC) but most dated to the Early-Middle Neolithic (c.4000 BC- c.3500 BC). There were a small number of scrapers in the

assemblage but few formalized tools. The evidence from the 2014 excavation, along with those previously carried out in the Inner Ward, suggests that the promontory on which the castle was later built may have been used in the Neolithic as a seasonally occupied industrial area for the working of flint.

#### *Medieval activity*

A substantial mortared Medieval stone wall, 1.20m wide, was uncovered in the Inner Ward, butting the inner face of the eastern curtain wall. Built over the layer containing the Neolithic flint debitage, the wall would appear to represent the southern gable of an Anglo-Norman stone building, possibly a great hall constructed at the end of the twelfth century. Sherds of Medieval Saintonge, Scottish Grey and Scottish White Gritty wares, locally made Carrickfergus wares and a silver English Short-Cross penny of the early 13th century were all uncovered during the excavation.

#### *Early Modern activity*

A cobbled surface and wall of probable 17th century date as well as later walls from a barracks building were uncovered in the trenches in the Outer Ward. In the Inner Ward, in addition to the discovery of a hoard of more than two hundred late-18th century gunflints, one of the largest found in Ireland to date, the excavation uncovered the substantial remains of a Late-Victorian munitions railway constructed in the late-1880s to bring in anti-submarine mines that were to be laid in Belfast Lough. The mines were to be unloaded from ships moored at the pier adjacent to the castle and brought directly into the castle through a tunnel hewn through the promontory bedrock and sections of this fascinating structure were uncovered in six of the excavated trenches. The tunnel surfaced in the middle of the Inner Ward where it split into two lines, one delivering munitions to a building in the Inner Ward, the other leading to the Outer Ward. Although the munitions railway seems to have been active for only a few years before the mine-laying scheme was scrapped the structure was not subsequently destroyed, and the excavation revealed that the railway tunnel was simply filled in with deposits of clay and building rubble. Consequently, much of the railway tunnel and lines appear to survive intact below the modern surface within the castle. This discovery represents a new and exciting strand to the archaeological story of the monument.

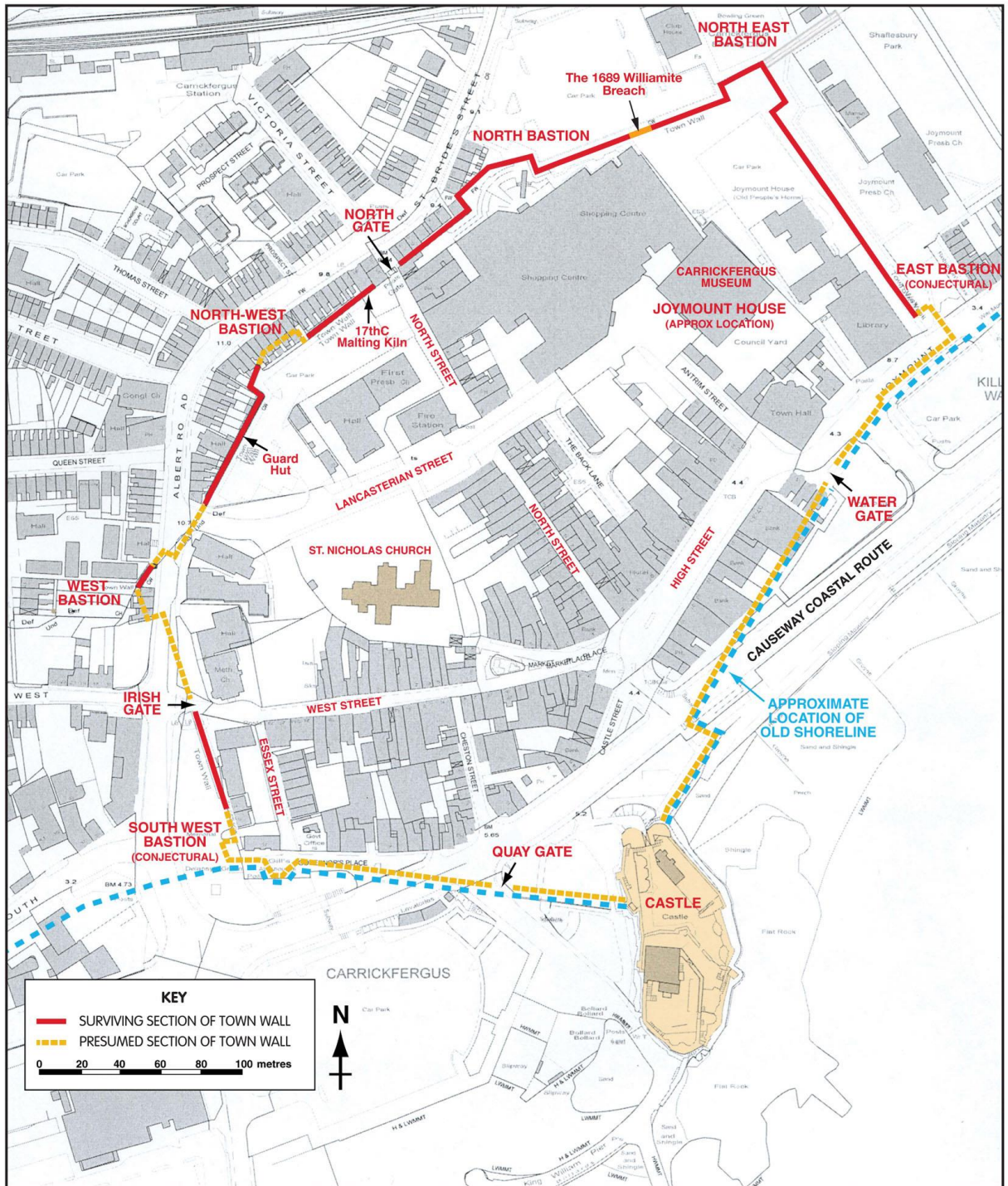
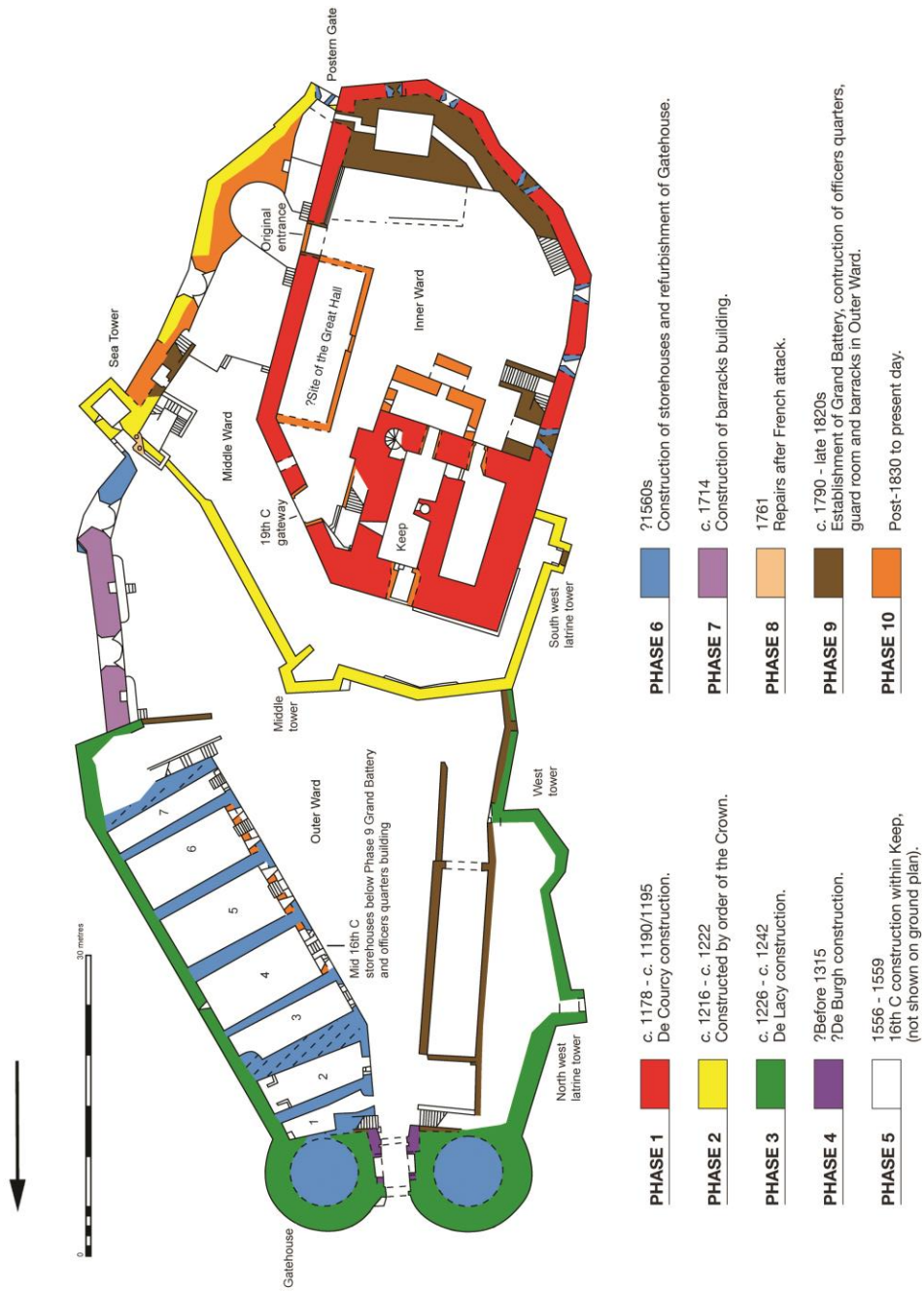


Fig. 2. Plan of Carrickfergus showing the Castle and principal monuments in the town.



Prepared by E Lammont, R O Scahill & N Carver. Based on Nicholls 1981.

Fig. 3 Plan of Carrickfergus Castle, showing the main phases of development.

## **2. Introduction and background**

### **2.1 General**

This data structure report (DSR) details the results of an archaeological excavation undertaken at Carrickfergus Castle (ANT 052:059; grid ref J 41430 87250; State Care Monument in spring 2010 by the Centre for Archaeological Fieldwork (CAF) on behalf of the Northern Ireland Environment Agency: Built Heritage (NIEA). The excavations were carried out in both the Inner and Outer Wards. The excavation was carried out over eight weeks from February 11th to April 4th, 2014 and was directed by Ruairí Ó Baoill (Licence No. AE/14/04).

### **2.2 Historical background**

Carrickfergus Castle is the best-preserved Anglo-Norman castle in Ulster. It has a long history and has been continuously occupied since John de Courcy constructed it in the late-1170s. The fortification occupies a sea-girt dolerite promontory on the north shore of Belfast Lough, and continued in occupation as a military garrison through to 1928 when it was handed over to the new Northern Ireland government and became a State Care monument.

The promontory on which the castle was constructed contains a natural well of fresh water. The combination of a good defensive site that could be supplied from both land and sea, the natural harbour for ships that lay beside the promontory and the source of fresh water available on the rock made the site very attractive to the Anglo-Normans.

#### *2.2.1 Castle history: a brief overview (Fig 3)*

Much has already been written about the architecture of the castle and it is not the purpose of this report to give a detailed account of this aspect of the fortification. For further reading please consult the *Reference* section of this report (page 87).

In summary, the castle was constructed in three main phases (Figure 1; McNeill 1981; Ó Baoill 2008, 16-27). The first involved the construction of the Keep and Inner Ward at the southern end of the promontory. This fortification was surrounded by a deep extra-mural rock-cut ditch or moat dug into the rock on the northern side. This meant that when the drawbridge was pulled up, the castle was surrounded by water on all sides. The Keep (or great tower) was the strongest and safest place within the castle, and is located in the north-western corner of the Inner Ward. Still

the most prominent part of the castle it has four floors, is almost 30 metres high and has walls between three and four metres thick. An archaeological excavation carried out in 1993 revealed that construction commenced between 1177 and 1181 when the new Anglo-Norman settlement at Carrickfergus was under constant threat from the Irish living in the surrounding areas. (Donnelly *et al* 2005). The main role of the Keep was not only defensive, but also allowed the lord and his family a comfortable home within the castle. The height of the Keep meant that it could also be used as a watchtower by the garrison to look out for enemies who might approach Carrickfergus either by land or sea.

The Inner Ward (an open courtyard or area of a castle enclosed by walls) was, along with the Keep, the first part of the castle to be built by John de Courcy. It consists of a high curtain wall enclosing the Keep and a small bailey. The Keep is built against and over the north-west angle of the curtain wall. Within the courtyard and opposite the eastern wall of the Keep are the masonry remains of a rectangular building, usually interpreted as the surviving evidence of a two-storey Medieval Great Hall, where John de Courcy and his wife Affreca could have entertained visiting guests. This interpretation is based on the position of two arched Medieval sandstone windows with window seats in the eastern curtain wall of the Inner ward. A store house was later built in this part of the Inner Ward and this building is illustrated on an 1811 map of the castle.

The area between the Keep and the defensive walls of the Inner Ward would have enclosed several other buildings needed for the functioning of the castle. These buildings were probably constructed of wood and stone, and may have included kitchens, a small chapel, a blacksmiths and stables for the horses of the lord and his knights.

In the first quarter of the 13th century the castle was enlarged when the Middle Ward was constructed. New additions included four new mural towers (the Sea Tower-also known as the north-east angle tower-, the Middle Tower, the south-west latrine tower and the south-east latrine) three of which still survive above ground. It was still defended by the extra-mural rock-cut ditch.

In the second quarter of the 13th century the new resident lord, Hugh de Lacy, further enlarged the castle by filling in the extra-mural ditch, constructing the Outer Ward, including two projecting mural towers on the western side, and a large Gatehouse,

consisting of two cylindrical towers linked by masonry above the gate. When these new building works were finished the castle completely occupied the promontory.

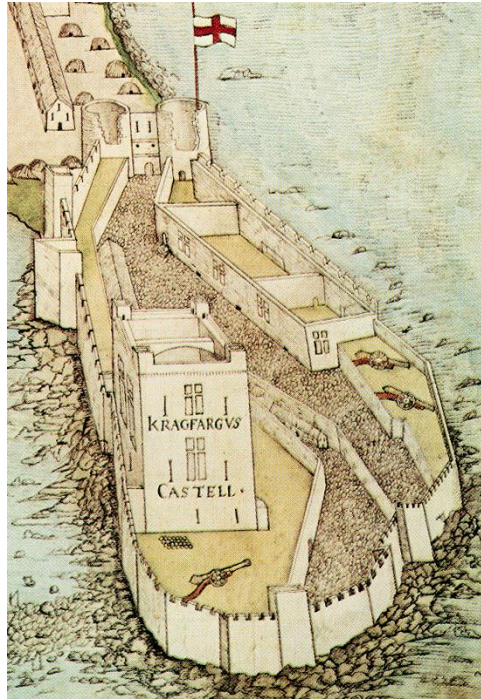
During the 16th and 17th centuries the castle underwent various improvements such as the Gatehouse towers being lowered to facilitate the mounting of ordnance. The Middle Ward walls were lowered in the 18th century to provide more room within the castle. Later the castle was used as a prison at the time of the 1798 Rebellion and was heavily defended during the Napoleonic Wars of the early 19th century.

The castle stopped being used as an infantry barracks in the 1830s but became the base for the Antrim Artillery in 1855 and more building took place within the castle then (McSkimin 1909, 226; McNeill 1981, 50). A military munitions railway was constructed in 1889 leading from the pier beside the castle into the castle. According to McSkimin (McSkimin 1909, 226-227) 'it was entered by a tunnel five feet in diameter at the south-west corner of the Inner Ward, and ended at a crane in the middle of the Inner ward, which hoisted munitions and other materials up to the ground level. From here the tramway led through the present entrance to the storehouses on the east side of the Outer Ward, and perhaps along the north wall of the Keep to the hoist'. It is uncertain exactly how long this railway was in use. McNeill noted that 'the last section of its tracks was covered in July 1978' (McNeill 1981, 51). Substantial evidence of this railway was uncovered during the 2014 excavation. The castle remained in use as a magazine and armoury in the 19th and early 20th centuries. In 1928 it was handed over to the Ministry of Finance of the new Northern Ireland government and became a State Care monument.

### *2.2.2 Cartographic evidence*

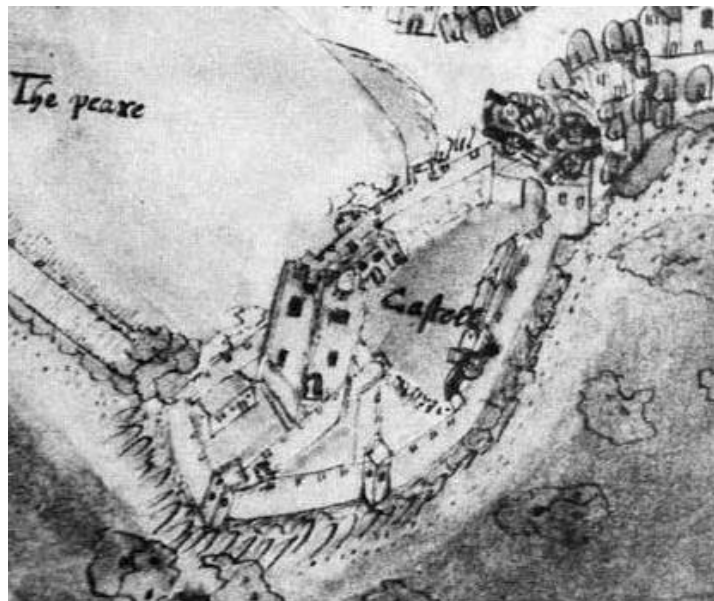
Carrickfergus was the earliest mapped town in Ulster, recorded in 1560, reflecting its importance as a garrison, settlement and port. The castle is portrayed on all this and subsequent maps but the level of detail about the minor buildings within the castle varies from map to map and it is difficult to know how accurate this information is. However, with these reservations in mind, they are still probably a good indicator of some of the buildings, at least from the 16th century onwards, that were in the castle. For evidence of the earlier minor buildings that once stood within the castle walls only excavation will bring these to light.





**Plate 1. Detail of Carrickfergus Castle from the *circa* 1560 map of Carrickfergus (BL Cotton Augustus I ii 42).**

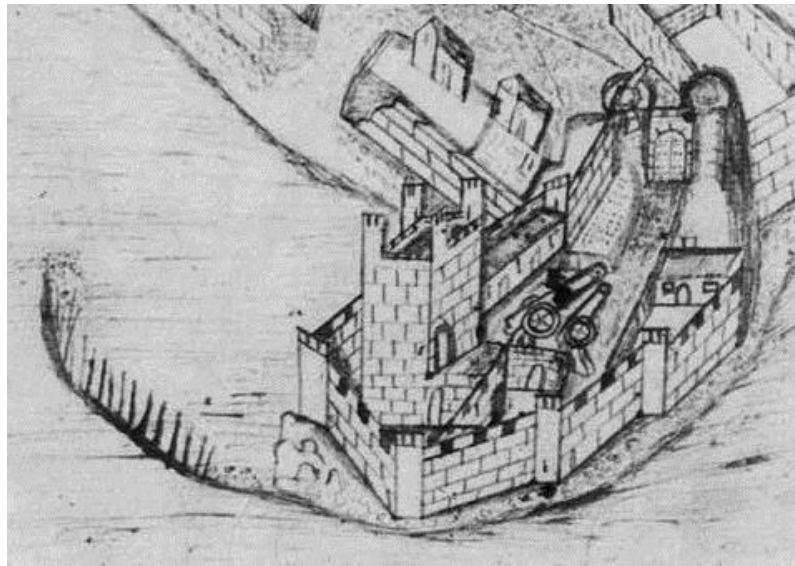
The earliest map of Carrickfergus from *circa* 1560 (Plate 1), compiled nearly 400 years after the castle was constructed, shows no buildings in the Inner Ward other than the Keep/ Great Tower but a long narrow building is shown in the Outer Ward close to where Trenches 5-8 were located.



**Plate 2. Detail of Carrickfergus Castle from the 1567 Robert Lythe map of Carrickfergus (Trinity College, Dublin, MS 1209 (26)).**

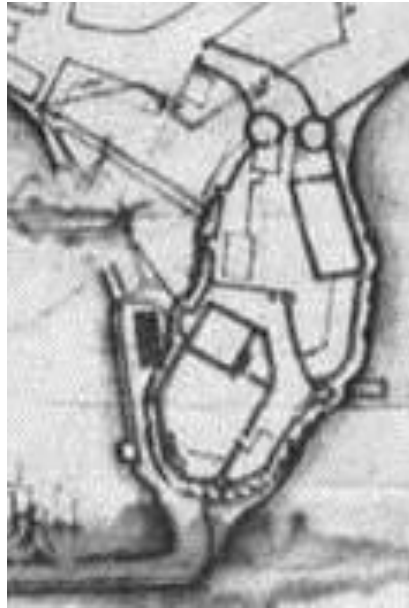
Robert Lythe's map of Carrickfergus in 1567 (Plate 2) shows a building in the south-western corner of the Inner Ward and a building is along the western wall of the Outer Ward, again close to where Trenches 5-8 were located.

The third 16th-century map of Carrickfergus, drawn *circa* 1596 (Plate 3), during the period of the Nine Years' War, appears to show a stone building adjacent to the stairs leading up to the Keep/ Great Tower in the Inner Ward. Once again, a long narrow building is illustrated in the Outer Ward hard against the western curtain wall.



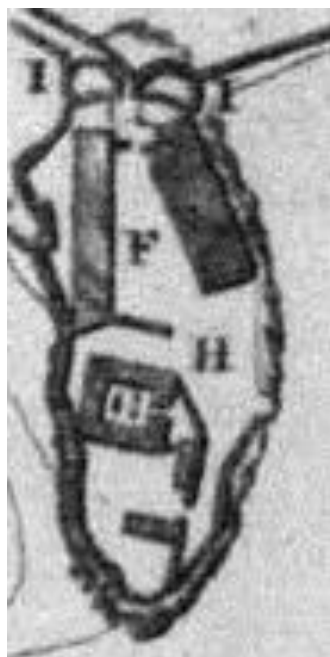
**Plate 3. Detail of Carrickfergus Castle from the *circa* 1596 map of Carrickfergus (Public Record Office, London, MPF 98 (ex SP 64/1/31)).**

Thomas Phillips' 1685 map of Carrickfergus (Plate 4) shows walls emanating at right angles from the eastern curtain wall of the Inner Ward, roughly where the later Store House was sited but it is unclear if these represent a building. A series of buildings are shown along the western side of the Outer Ward.



**Plate 4. Detail of Carrickfergus Castle from Thomas Phillips' 1685 map of Carrickfergus (National Library of Ireland, MS 3137 (42)).**

The map of Carrickfergus drawn up in May 1760 (Plate 5), just months after the French troops of Commodore François Thurot had stormed and occupied the town, portrays buildings along the eastern curtain wall and in the south of the Inner Ward. A long building is illustrated along the western side of the Outer Ward, stretching from the wall of the Middle Ward up to close to the Gate Tower of the castle.



**Plate 5. Detail of Carrickfergus Castle from *Plan of Carrickfergus*, 1760 (British Magazine, May 1760).**



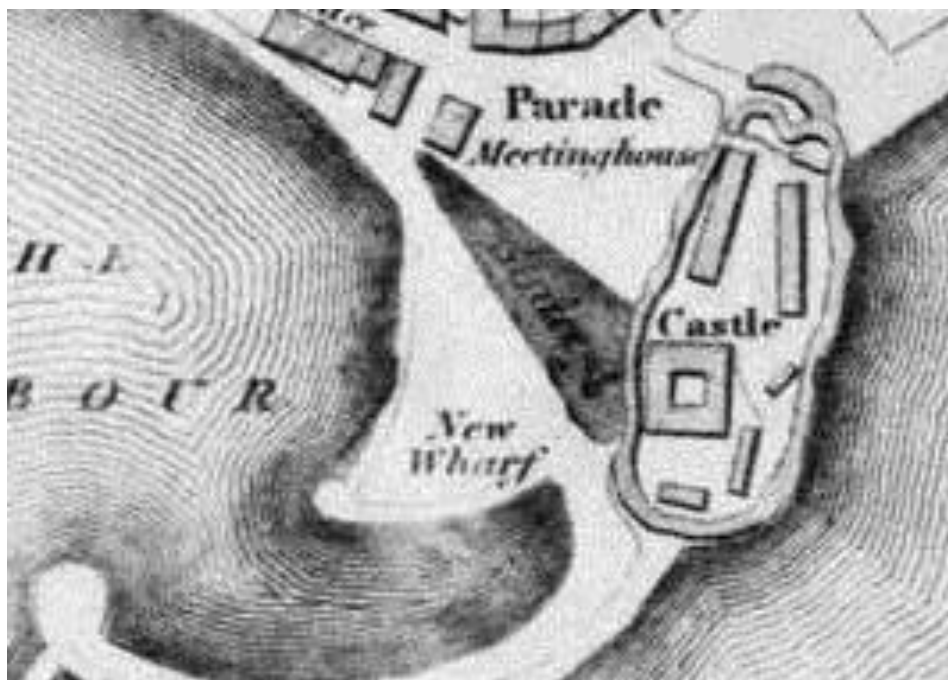


Plate 7. Detail of Carrickfergus Castle from *Carrickfergus, 1821* by James O' Kane (copy in the Public Record Office of Northern Ireland, D. 1954/6/13).



Plate 8. Detail of Carrickfergus Castle from Ordnance Survey map of Carrickfergus, circa 1840.

### **2.3 Previous excavations in Carrickfergus Castle**

In the last fifty years there have been a number of archaeological excavations and evaluations undertaken at various locations within Carrickfergus Castle.

#### *2.3.1 Archaeological investigations in the Inner Ward*

Nick Brannon carried out archaeological work within the Inner Ward in 1991. This involved the excavation of 'a long, narrow trench running from the west vault of the Keep to the main gate' (Brannon in Bennett 1992, 1-2). Artefacts recovered during this investigation dated from the 'medieval to modern, with traces of 17th- to 18th-century masonry and brick structures' (*ibid*). Bedrock was found at 'high levels in and around' the Keep and at the Gatehouse.

The second excavation within the Inner Ward took place in 1993 (Donnelly *et al*, 1998 and 2005) and examined the base of the stairway on the eastern side of the Keep, in advance of the replacement of the stairway leading into the Keep. This excavation showed that construction of the lower section of the Inner Ward curtain wall began before that of the Keep was started, but that work on the Keep was carried out before the curtain wall was completed and that these building works date to between 1177 and 1181. A small area close to the junction of the stairs and the inner face of the curtain wall was also investigated and showed that the natural bedrock of the promontory slopes away or shelves here.

In 2002 another excavation was carried in the Inner Ward in advance of the construction of a lift shaft within a single storey building abutting the south wall of the Keep (Ó Néill and Logue 2002). The excavation recorded that the southern Keep wall had been built on prehistoric deposits. Many struck Neolithic flint pieces were recovered at horizons close to the bedrock, which appears to have been fairly level at this point on the promontory.

Between 2008 and 2011 there were three small evaluation excavations carried out within the Inner Ward. The first of these took place in 2008 (Welsh 2009) and examined the corridor of the 19th century Flash Room, located at the southern end of the Inner Ward. This room was probably built to serve as a magazine for the guns that were sited on the Grand Battery on the eastern side of the castle in the Outer Ward (McSkimin 1909; McNeill 1981, 49). The second was carried out in 2010 (Welsh 2011a) and involved the monitoring of a trench to facilitate the insertion of an electricity cable from an existing source within the Keep across the Inner Ward to the

Flash Room to provide electricity for lighting the Flash Room and its associated corridor. A series of 18th and 19th century surfaces and walls were observed and recorded within the excavated trench. The third evaluation was carried out in 2011 and involved the archaeological monitoring and recording of three trenches at the battlements of the Keep (Welsh 2011b). The work was undertaken in advance of repairs and replacement of the existing roof, with the aim of uncovering information about previous architectural features.

### *2.3.2 Archaeological investigations in the Middle Ward*

In 1955 and 1962 a series of trenches were excavated across the line of the curtain wall of the Middle Ward, lowered in the 18th century. Although these investigations remain unpublished, a summary of the results has been provided by McNeill (McNeill 1981, 39-40 and 61-84). The excavations uncovered the full line of the curtain wall, including the Middle Tower, exposed the inner face of the then blocked-up Postern Gate and investigated a portion of the extra-mural rock-cut defensive ditch.

### *2.3.3 Archaeological investigations in the Outer Ward*

In 2010 the first ever archaeological excavation in the Outer Ward was undertaken on the Grand Battery, the upper storey of a range of buildings that run along the eastern curtain of the Outer Ward (Murray 2010 and 2011). At least ten phases of activity were recorded 'spanning the 1560s, or earlier, through to the 20th century' (Murray 2010, 18).

### *2.3.4 Archaeological investigations in the area of the Gatehouse*

Excavations at the entrance to Carrickfergus Castle in 1950 uncovered the drawbridge pit protecting access to the Gatehouse (Waterman 1952) and which was dated to the late-13th or early 14th centuries. Another investigation close by in 2008, monitoring the replacement of service pipes north of the Gatehouse, uncovered only a modern wall (McSparron 2008).

## **3. The 2014 Excavation**

### **3.1 Circumstances of the Excavations**

Between 11th February and 4th April 2014 archaeological investigations were carried out within Carrickfergus Castle by the Centre for Archaeological Fieldwork, School of Geography, Archaeology and Palaeoecology, Queen's University Belfast under the direction of the writer. The work was carried out on behalf of the NIEA. During the

2014 excavation a total of twelve trenches were investigated, eight within the Inner Ward and four in the Outer Ward.

### 3.1.2 *The trenches in the Inner Ward*

The excavation of the trenches in the Inner Ward were carried out to help clarify the following questions:

1. Whether the prehistoric activity noted in previous excavations in the Inner Ward (Ó Néill and Logue 2002, 11-12 and Figure 6) extended across to those areas of the Inner Ward to be investigated in 2014.
2. Whether the underlying bedrock of the promontory was shelved or level in the parts of the Inner Ward to be investigated in 2014.
3. What is the nature and extent of earlier buildings (such as a Medieval Hall), surfaces, strata or other features in those parts of the Inner Ward to be investigated?
4. How do any earlier buildings uncovered relate to the construction of the Inner Ward curtain wall and what is the foundation regime of the Inner Ward curtain wall, itself.
5. The nature of the late-19th century munitions railway and how much of it still survives.

### 3.1.3 *The trench locations*

Seven of the eight trenches excavated in the Inner Ward were either within the low remains of a late 18th/ early 19th century stone building (Trenches 1-3) or against its outside face (Trench 2 Northern Extension, Trench 2B, Trench 3B and Trench 9). The building is located immediately east of the Keep and is illustrated on the 1811 plan of the castle where it is described as a *Store House*. It is also the presumed location of the earlier, Medieval, Great Hall. This identification is based on the two extant first floor Medieval windows in the eastern curtain wall of the Inner Ward. The eighth trench (Trench 4) within the Inner Ward was located in the grassed area in the middle of the Inner Ward, immediately east of the existing manhole cover.

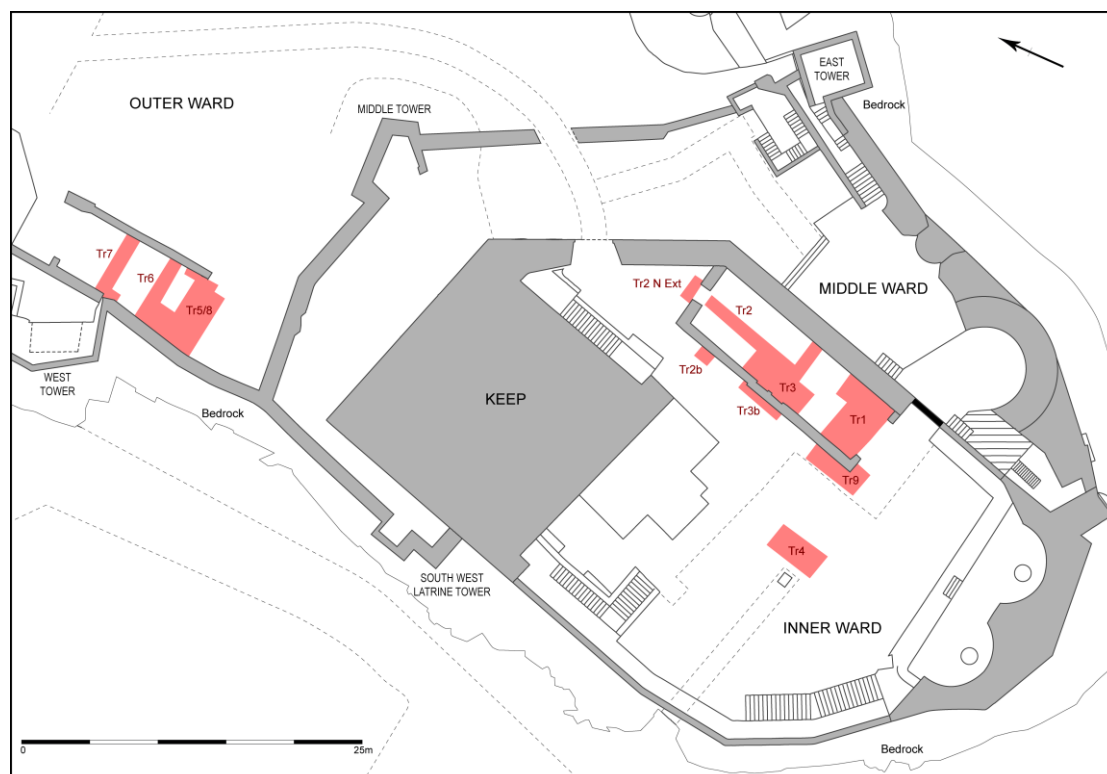
### 3.1.4 *The trenches in the Outer Ward*

The reason for excavation taking place in the Outer Ward was to provide new information about the nature of and depth of strata, structures and features in this area of the castle. The decision was taken not to completely excavate any of the trenches in the Outer Ward to bedrock level so that it was not possible to show whether or not prehistoric activity was present on this area of the promontory



### 3.1.5 The trench locations

The four trenches excavated in the Outer Ward (Trenches 5-8) were located along the western side of the ward, at right angles to the curtain wall in the area immediately south of the Visitor Centre. The trenches were all located within or immediately south of the low remains of a rectangular stone barracks building that was probably of 18th or 19th century date. Most of the area between Trenches 5 and 6 was later excavated and given the new designation Trench 8.



**Fig. 4. Carrickfergus Castle. Map showing the location of the excavated trenches in 2014.**

## 3.2 Methodology

### 3.2.1 General

All of the twelve trenches were excavated manually. Although only four trenches were fully or partially excavated to bedrock level a broad sequence of six phases of human activity were identified across the site (See Appendix 1: the Harris matrices and Section 4 of this report).

### 3.2.2 Recording methodology

The context records for the excavation were created using the standard context

recording method: all built features and deposits were assigned a unique context number and a pro-forma (Context sheet) was completed for each. All features were photographed both prior to, and following, excavation and a series of plans and section drawings were completed throughout the excavation at scales of 1:10 or 1:20, as appropriate. A field notebook was also maintained.

The Harris Matrices are presented in Appendix 1 and The Context Register is detailed in Appendix 2. The Drawing Register is presented in Appendix 3 and the Sample Register is catalogued in Appendix 4. The Photographic Register is contained in Appendix 5 and the Small Finds Register is Appendix 6.

### 3.2.3 Archiving

Copies of this report have been deposited with the NIEA. All site records and finds are temporarily archived within the School of Geography, Archaeology and Palaeoecology, Queen's University, Belfast.

### 3.3 Acknowledgements

The writer would like to thank the following people: *In The Centre for Archaeological Fieldwork (CAF), School of Geography, Archaeology and Palaeoecology, Queen's University Belfast*: Naomi Carver, Ruth Logue, Sarah Gormley, Grace McAllister, Dermot Redmond, Dr Harry Welsh, Stuart Alexander, Sapphire Mussen who worked on the excavation, often in extremely inclement weather.

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Dermot Redmond, Stuart Alexander and Ruth Logue The Appendices for this report were compiled by. Naomi Carver and Sapphire Mussen compiled the drawings.

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*NIEA Operatives*: Sam, Davy, Alan and Craig.

Carrickfergus Castle: Janis Smith, Nyree Mayne,

Robert Heslip, Tom McNeill, Graham X, John Meneely



**Fig. 5. Location of trenches in the Inner Ward.**

### **3. 4 Account of the 2014 Excavation**

#### **3.4.1 Trench 1 (Figs 4-10; Plates 9-16, 32, 36)**

Trench 1 was a maximum of 5m long, east-west, x 4m wide, north-south. The trench was excavated across the full width of the southern end of the store house building (walls C. 147 and C. 148) and against the inner face of the eastern curtain wall of the Inner Ward (C.107; footings C.149-C.151). There was a maximum depth of 2.25m of stratigraphy encountered in the (eastern end of the) trench. The trench also contained the infilled and intact remains of the late- Victorian munitions railway tunnel which occupied roughly the central third of the trench, and which is discussed below

### *Early features*

The underlying geology within the whole trench was dolerite bedrock (C.145) that shelved and was deeper as it was uncovered towards the eastern side of the trench, close to the inner face of the eastern curtain wall of the Inner Ward.

In the east of the trench two layers of silty and sandy loam lay directly on top of the bedrock (C.145). The lowest of these layers (C.146) contained large beach pebbles and possible fragments of washed out mortar. The upper layer (C.140), located directly below the Medieval wall, contained frequent deposits of flint and may represent industrial working of flint in the Neolithic period.

Directly above the bedrock (C.145) in the west of Trench 1 was a layer of mid-brown clay loam (C.144). Above this in the north-west of the trench was a layer of large stones (C.143), averaging 0.20m-0.38m in length within a layer of mid-brown loamy clay. This horizon may be the result of degraded bedrock as observed in the nearby Trench 3. Immediately above it was a layer of grey-brown clay loam (C.136) that was 0.16m deep. Nearly 50% of this layer consisted of struck and unstruck flint and it clearly represents a prehistoric soil horizon where flint-knapping has been taking place and it may be the same horizon as C.140 in the east of Trench 1 but separated from it by the later insertion of the Victorian munitions railway.



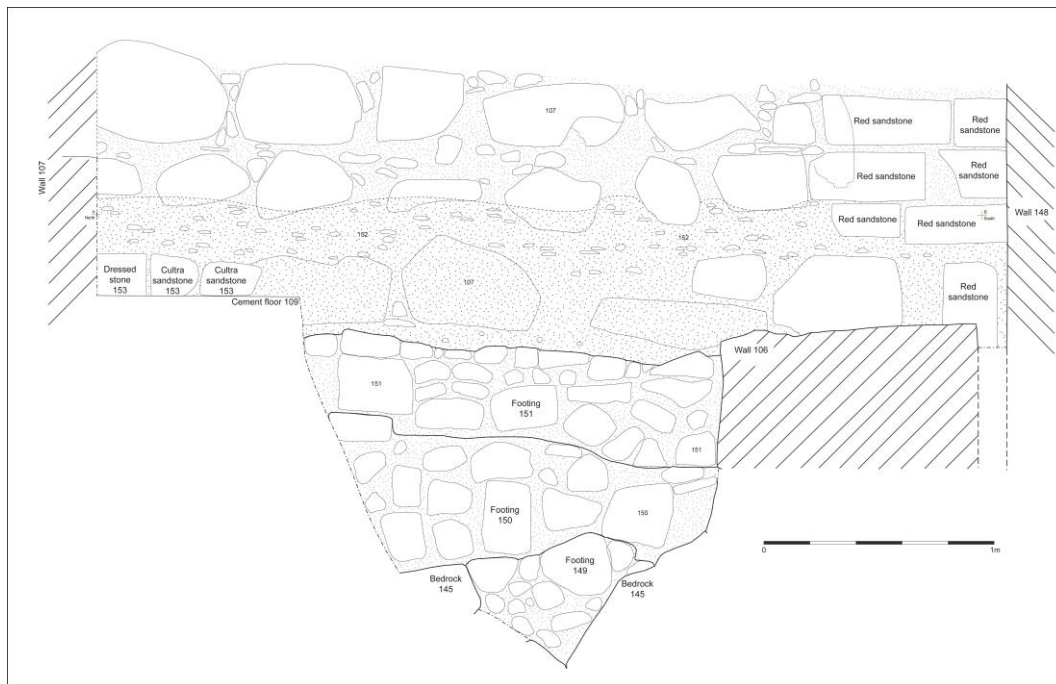
**Plate 9. Inner Ward. Western side of Trench 1. Flint-rich layer C.136 during excavation. From south.**

### *Medieval Masonry and strata*

The earliest masonry feature uncovered in Trench 1 was the eastern curtain wall of the Inner Ward. This took the form of the wall proper (C.107) sitting on top of three tiers of mortared basalt stone offset footings. The curtain wall itself was built in very definable courses of large basalt stones, heavily mortared together. The bottom 0.70m of the inner face of the wall was covered in a slate-rich render.

The offset footings contained no definable courses and were not level. They were a recorded maximum depth of 1.60m below the base of the curtain wall.

The stones of the lowest footing (C.149) were a recorded maximum depth of 0.60m within the trench and the stones, a mixture of small, medium and large mortared basalt stones, were bonded to and between the gaps in the bedrock on which the castle was built to give a level surface for the wall courses above. Consequently at the base of the masonry, where it met the bedrock, it extended out irregularly for a maximum distance of 0.30m from the face of the footing.



**Fig 6. Inner Ward. Trench 1. West-facing elevation of the base and footings of the eastern wall of the Inner Ward, Medieval wall C. 106 and bedrock.**

The middle of the three plinth footings (C.150) was composed of mostly medium and large mortared basalt stones. It was a maximum recorded depth of 0.70m and was

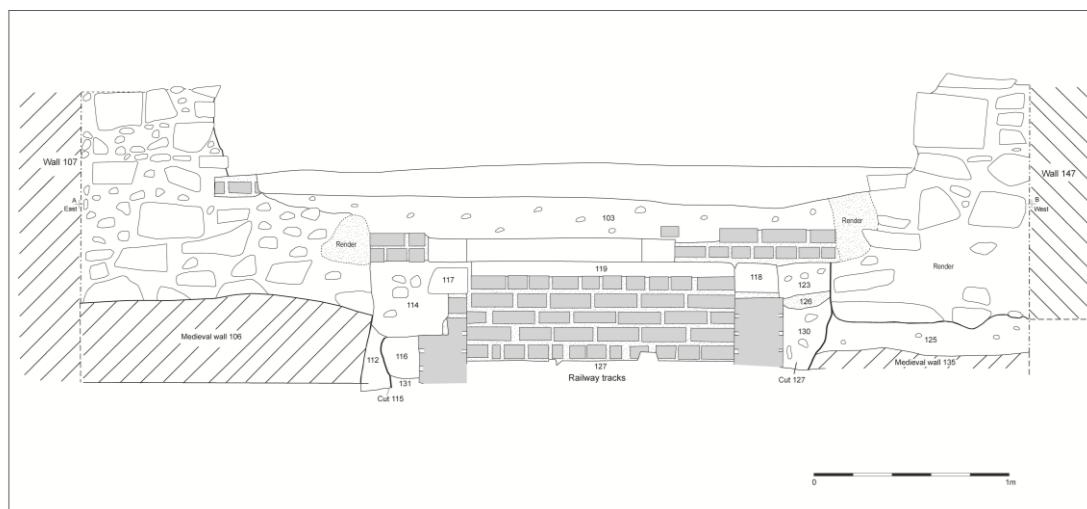
constructed both on top of the lowest plinth and the bedrock. It projected out a maximum of 0.12m from the course above.

The top offset footing (C.151), on which the eastern curtain wall of the Inner Ward was directly constructed, was also composed of mostly medium and large mortared basalt stones. It was a maximum recorded depth of 0.70m and projected out a maximum of 0.05m at its junction with the base of the curtain wall.

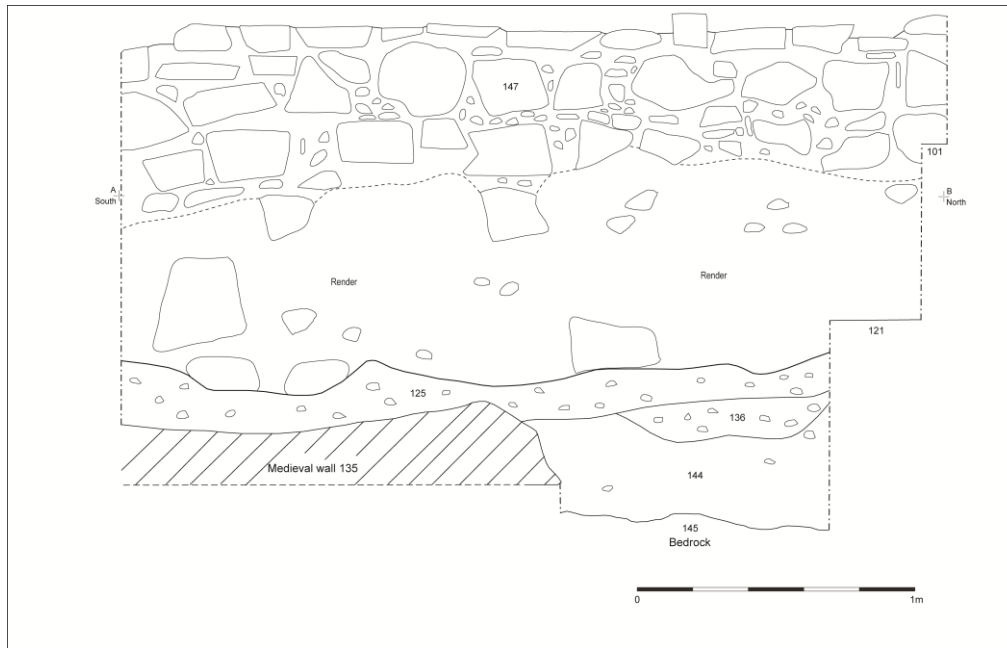
### *The Medieval Wall*

At the very south of the trench was located the remains of a very substantial masonry wall, aligned east-west, consisting of heavily-mortared medium and large basalt stones. The middle section of the wall was subsequently built over during the construction of one of the two main sections of the Late-Victorian railway in the 19th century.

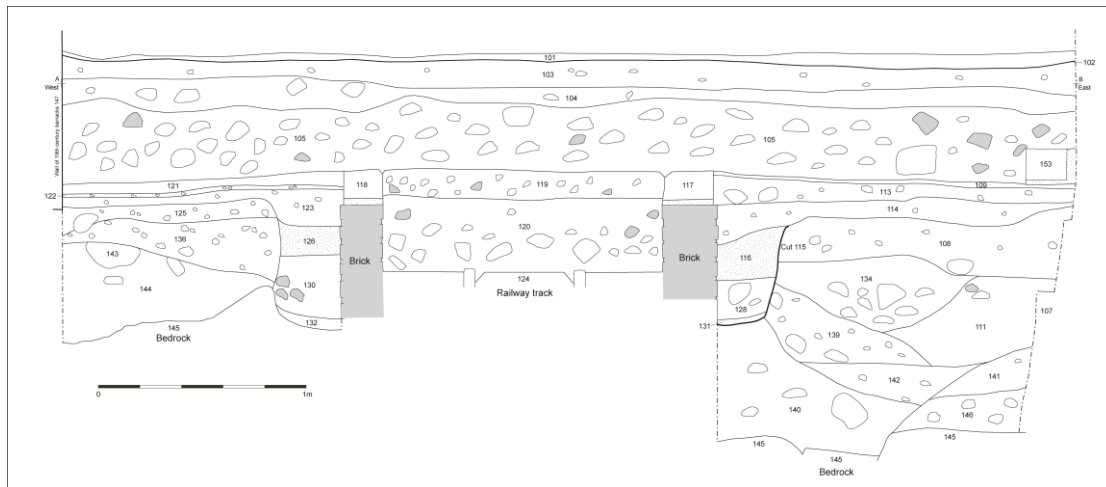
In the eastern part of Trench 1 the Medieval wall (numbered C.106 in this part of the trench and C.135 in the western section, either side of the Victorian railway) was roughly 1.20m wide and 0.50m high. The Medieval wall was founded on two layers of silty and sandy loam that were themselves directly on top of the bedrock (C.145). The lowest of these layers (C.146) contained large beach pebbles and possible fragments of washed out mortar. The upper layer (C.140), located directly below the Medieval wall, contained frequent deposits of flint and may represent industrial working of flint in the Neolithic period.



**Fig 7. Inner Ward. Trench 1. North-facing elevation of Medieval wall C. 106/ C.135, the Victorian railway and the south wall of the store house.**



**Fig 8. Inner Ward. Trench 1. East-facing elevation of Medieval wall C. 135, the west wall of the store house, C.147.**



**Fig 9. Inner Ward. Trench 1. Inner Ward. Trench 1. South-facing section showing prehistoric and Medieval strata, the Victorian railway, and the later infilling and demolition horizons.**



**Plate 10. Inner Ward. Trench 1. Base and footings of the eastern wall of the Inner Ward, Medieval wall C. 106, bedrock and the eastern wall of the Victorian railway. From north.**



**Plate 11. Inner Ward. Eastern side of Trench 1. Base and footings of the eastern wall of the Inner Ward, Medieval wall C. 106 and bedrock. From west.**



In Trench 1, west of the Victorian railway was another section of the substantial Medieval wall (here given the number C.135) was uncovered. This was a recorded length, east-west, of 1.46m and width, north-south, of 1.20m. The wall survived to a depth of 0.10m. As in the east of Trench 1 it was constructed of heavily mortared large basalt stones. It was cut and cut through prehistoric layer C.145 down to just above bedrock (a thin remnant of the soil from C.144 was recorded being present),

At the inter-face of layer C.136, which contained the large quantities of struck flint, and the layer of dark-grey brown loam (C.125) immediately above it, were uncovered large amounts of Medieval pottery. This would appear to be primary evidence of the Anglo-Norman occupation of the promontory in the late-12th century.

It was at this level (C.125) that the base of the west wall of the late-18th/early-19th century store house was constructed on and also the foundation trenches for the construction of the Late-Victorian munitions railway were cut. These two episodes- the construction of the store house and the construction of the munitions railway appear to have removed much of the earlier stratigraphy in this part of the castle to close to bedrock level. They did not, however, destroy the Medieval wall and the suspicion has to be that if this

Medieval masonry is, in fact, evidence for an Anglo-Norman 'Great Hall' that the other walls of this building survive elsewhere below ground in the Inner Ward.



**Plate 12. Inner Ward. Western side of Trench 1. Medieval wall C.135. From south.**



**Plate 13. Inner Ward. Western side of Trench 1. Medieval wall C.135. From north.**

*Post-Medieval disturbance.*

In the east of Trench 1 a large Post-Medieval pit (cut C.152) was uncovered that had been dug down almost to the level of bedrock. This irregularly-shaped feature was roughly 2.30m long, east-west, x 0.40-1m wide, north-south and had a maximum recorded depth of 0.90m. The pit was filled with a mix of silty loams with medium-large stones, occasional fragments of red brick fragments of cut sandstone and rounded beach pebbles (C.108, C. 111, 134 and C.142). The function of the pit is uncertain but may have been used as a rubbish dump. The western edge of the pit was cut by the foundation cut (C. 115) for the construction of the late-Victorian light munitions railway.

#### *The late-Victorian light munitions railway*

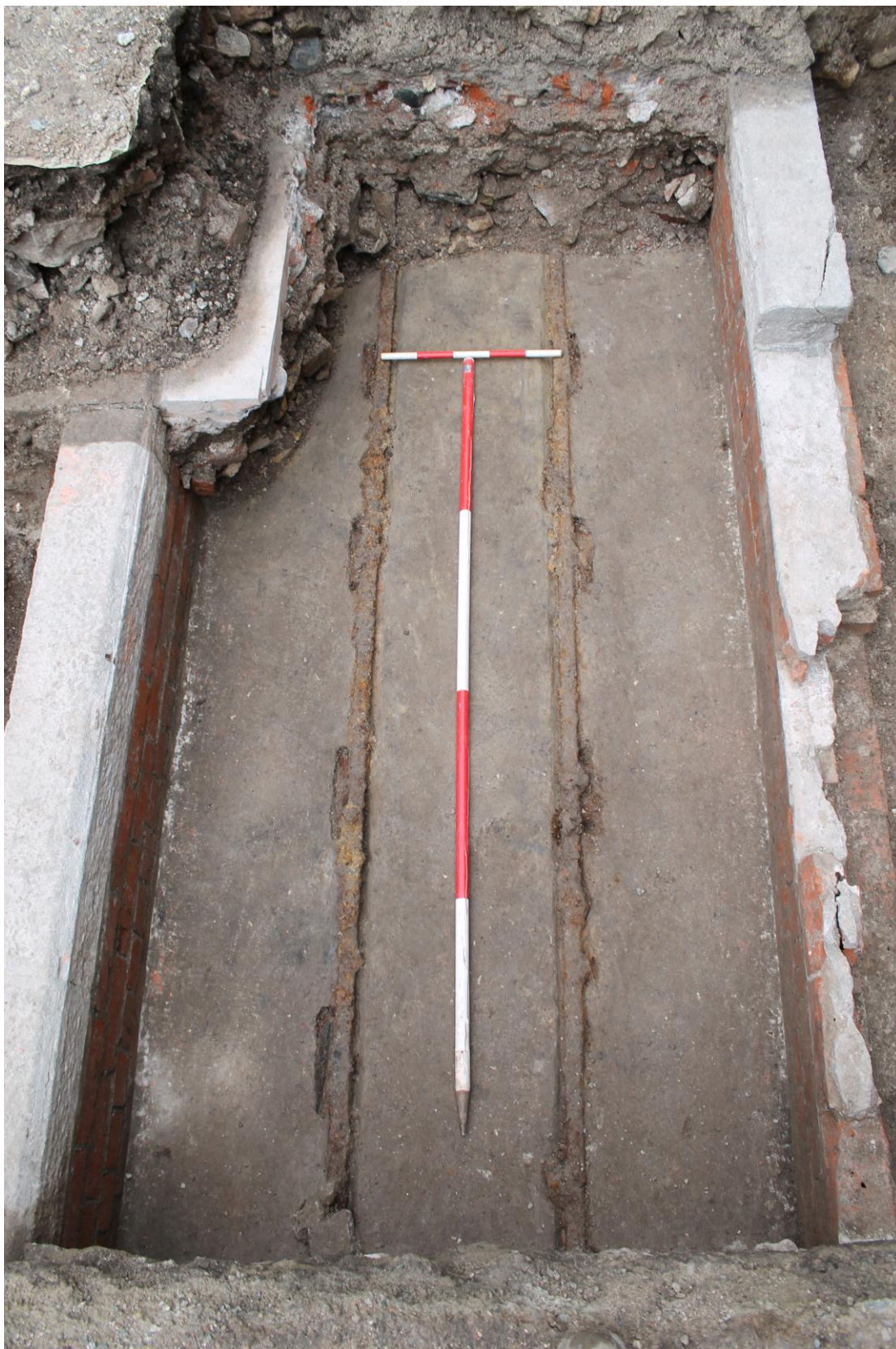
Substantial evidence for the late-Victorian light munitions railway was found in Trench 1. A three metre long section of the structure was uncovered within the trench. The railway was aligned north-south and emerged into the store house through the entrance in the south gable, severely damaging but not completely destroying that portion of the Medieval wall that it was built over.

The foundation cuts for the railway tunnel (in the west of Trench 1 cut C. 127, in the east cut C. 115) each contained three fills each (C.116, C.128 and C.131; in the east C.126, C.130 and C.132), comprising deposits of sand, clay loams and red brick building rubble. The railway tunnel was 1.40m wide and the sides were 0.50m high. The walls of the railway tunnel (C. 117 and C.118) were constructed of two granite sleepers sitting on piers consisting of six courses of mortared red brick. The centrally placed railway lines (C.124) were 0.50m apart.

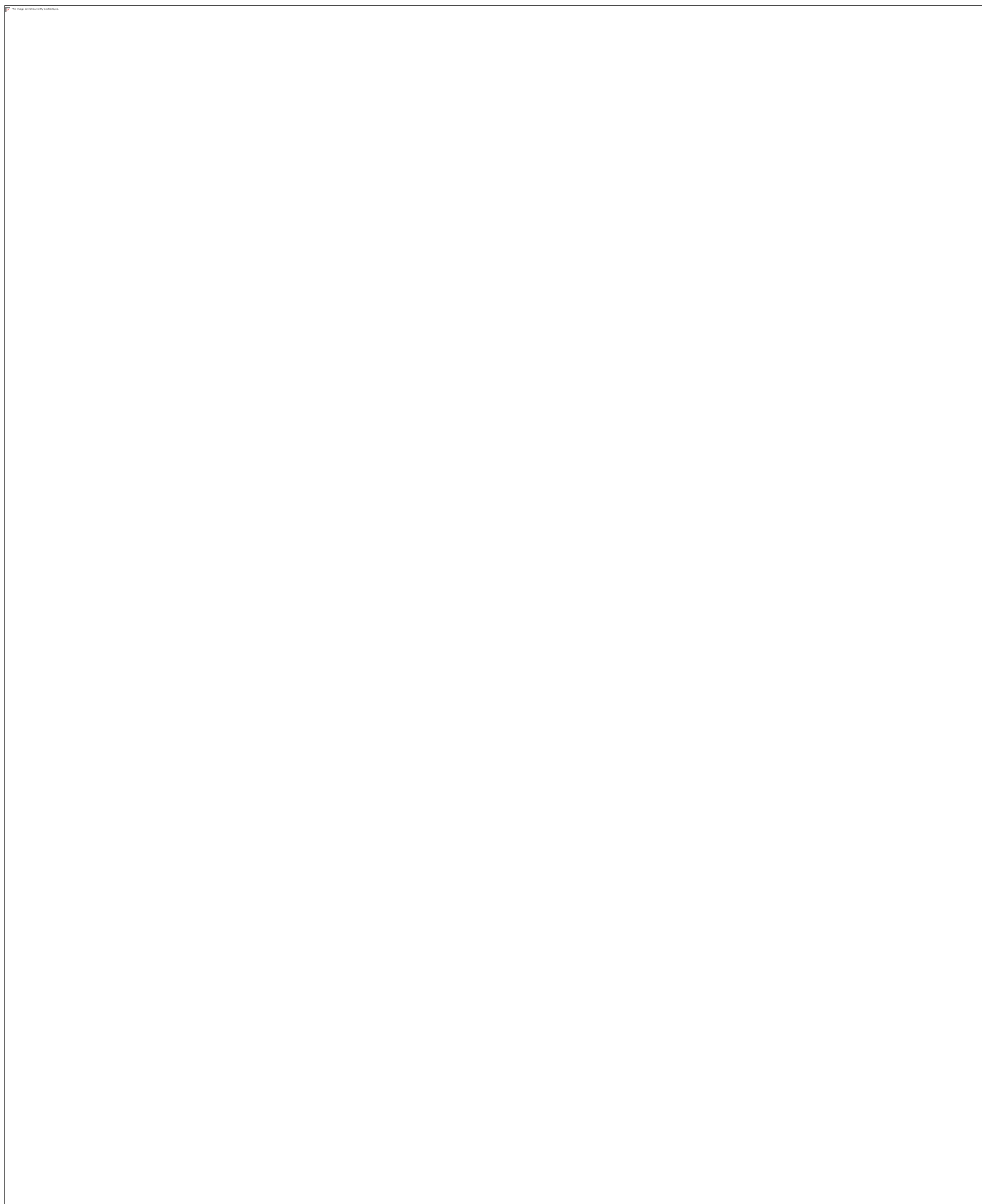
After the railway had become obsolete, the section straddling the entrance in the south gable of the store house was bricked up. The interior of the railway tunnel was then infilled with a thick layer of grey-brown gritty sand containing frequent inclusions of stone, worked granite, mortar and smashed fragments of sandstone (C.120) to a depth of 0.35m. The top 0.15m, between the two granite sleepers that flanked the railway line, a surface of hard concrete (C.119) had been laid down. A shallower concrete surface extended both east (C.109) and west (C.121) of the centrally placed railway and extended across the whole of the interior of the store house.

#### *Demolition of the Victorian buildings in the store house*

Above the concrete surface of the infilled Victorian light railway was a thick deposit of rubble (C.105), up to 0.40m thick, and consisting of loose mortar, red brick and small, medium and large stones. It probably represents the demolition of the latest barracks buildings in this part of the castle in the years after the fortification became a State Care monument in 1928.



**Plate 14. Inner Ward. Trench 1. Detail of the Victorian railway and later infill layers. From south.**



**Fig 10. Inner Ward. Trench 1. Plan of the Medieval wall C.106/C.135 crossed by the Victorian railway.**



**Plate 15. Inner Ward. Trench 1. The Medieval wall C.106/C.135 crossed by the Victorian railway. From east.**



**Plate 16. Inner Ward. Trench 1. The Medieval wall C.106/C.135 crossed by the Victorian railway. From south.**

#### *Modern surfaces within the store house*

The demolition layer was covered by a clay leveling deposit (C.104) that in turn was below the most recent surfaces within the store house. These included a clay bedding layer (C.103), a protective textile membrane (C.102), a layer of compacted grey quarry dust (C.102) and a layer of large gravels that was the modern ground surface. These last four surfaces (the gravels and contexts C.102-104) were found across the whole interior of the store house.

#### **3.4.2 Trench 2 (Figs 4-5; Plates 17-18)**

This trench was aligned north-south along the middle of the northern end of the long axis of the 18th/ 19th century store house. Set at right angles to the entrance in the north wall of the building, it was 1m wide (east-west) x 8m long (north-south). At its southern end it met Trench 3 at a right angles towards the centre of the store house. There was a maximum of 0.75m depth of stratigraphy encountered within the trench when excavation ceased at the level of the concrete surface (C.210). This was the earliest horizon encountered when excavation ceased within Trench 2 and it covered the whole trench base and was the surface of the infilled Late-Victorian munitions railway. Directly above this was a thick layer of loose demolition rubble (C.209), up to 0.50m deep, consisting of a mix of red brick, slate, stone and mortar. Small finds included 19th and 20th century ceramics, fragments of a leather belt and its buckle and nails.

The rubble probably represents the demolition of standing Victorian buildings that took place around the time the castle was handed over from military control to the Ministry of Finance of the new Northern Ireland government, presumably in the late 1920s or early 1930s. The loose and deep nature of the demolition rubble fills above the concrete floor of the building meant that further excavation below this horizon within the available area was potentially unsafe and investigations in Trench 2 stopped at this level.

Above the deep rubble horizon was a layer of grey-brown gritty and loamy clay containing small amounts of mortar and redbrick fragments (C.207) which was a maximum of 0.15m deep. The layer may have been laid down as a leveling deposit above the rubble. Above this were thin layers of builder's sand (C.205 = C.305) and fine gravel (C.204) which may also have been leveling deposits.





**Plate 17. Inner Ward. Trench 2. Demolition layers and concrete surface C. 210. From south.**

The latest deposits recorded in Trench 2 were probably related to landscaping works in this part of the castle carried out in recent decades which included a possible old sod layer (C.203), a geo-textile membrane (C.202) covered by a layer of compacted grey quarry dust (C.201) and a layer medium-sized gravel and small pebbles (C.200). This last deposit was the modern ground surface within the 18th/19th century building when excavation commenced in 2014.



**Plate 18. Inner Ward. Trench 2. South-facing section. Detail of demolition layers and concrete surface C. 210. From south.**

### **3.4.3 Trench 2 Northern Extension (Figs 4-5, 11-12; Plates 19-20)**

This excavation took place immediately beyond and north of the gap in the northern wall of the store house that was apparently a doorway. The trench was 2m long, east-west, x 1m wide, north-south and was excavated both to examine the foundations of the two sections of northern wall and to see if any earlier masonry remains survived here.

The earliest strata encountered before excavation within the trench before was curtailed was a brown clay loam (C.230) containing charcoal flecking and medium-sized sub-rounded stones. Because of health and safety concerns relating to the stability of the adjacent sections of northern wall of the store house, excavation ceased at this level. Above C.230 was a midden layer (C.229) that was a mixture of grey-brown clay loam containing many shells (mostly winkles but also mussels, oysters and cockles) and animal bones. This, in turn, was below a charcoal-rich grey-brown clay loam (C.226) out of which were recovered more than two hundred 18th-century gun spalls and gunflints. No evidence of a barrel, bag or other container that would have held the gunflints was observed within the trench although this may have rotted away in recent centuries. Above C.226 was a thin layer of mortar

(C.224) possibly a dump relating to the rendering or construction of nearby buildings and a thick layer of dark brown loam (C.218/ C.225) that was up to 0.40m deep. This horizon may be the same as C.337 in Trench 3.



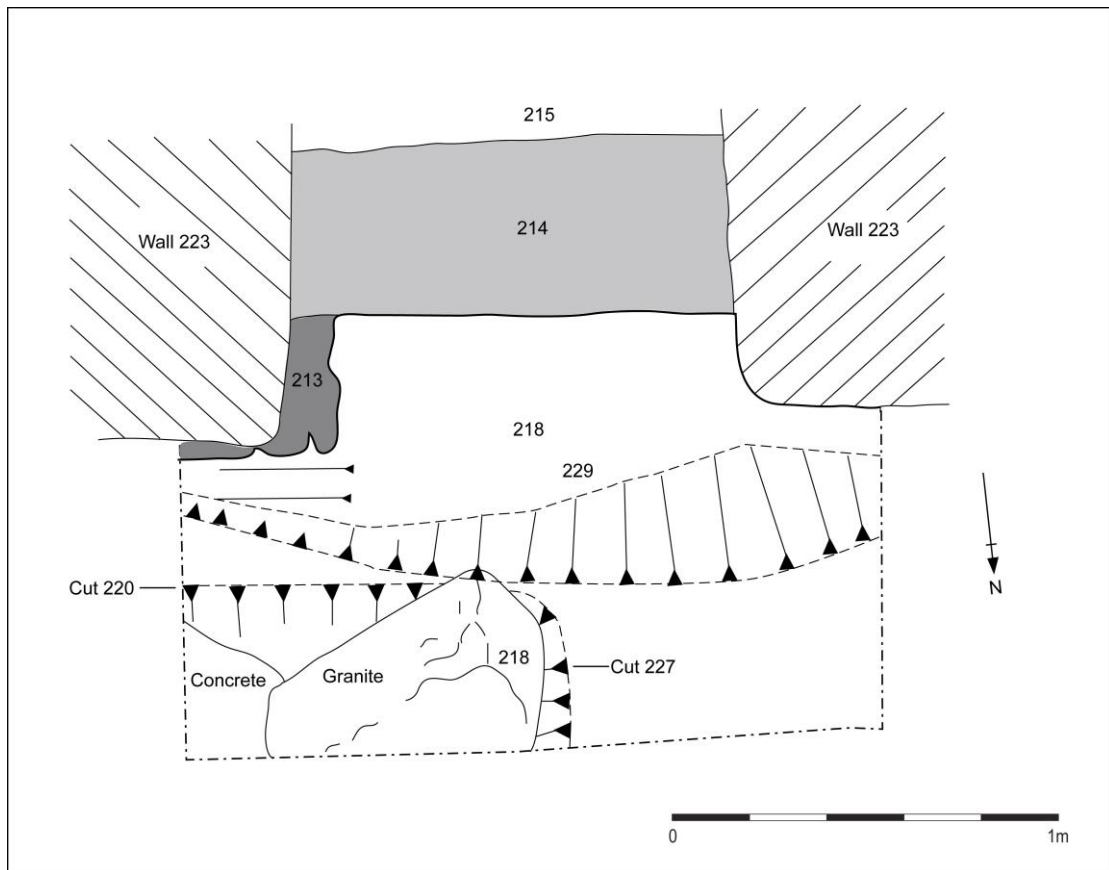
**Plate 19. Inner Ward. Trench 2 Northern Extension. Midden layer C.229. From south.**



**Plate 20. Inner Ward. Trench 2 Northern Extension. Threshold and shallowly founded northern 'gable' of the store house. From north.**

Cut into C.218 and down to the level of C.230 in the north-east of the trench was a large modern pit (C.227), filled with a grey-brown clay loam (C.228) and a large granite bollard with a cement base, presumably dumped because it had become obsolete. The pit, which extended north and west beyond the limits of the trench, was a recorded maximum depth of 1m long (east-west) x 0.48m wide (north-south) x 0.75m deep. The bollard was subsequently removed from the trench and disposed of by NIEA in late April 2014, after the excavation had been completed and in advance of the trench being backfilled.

Above C.218 was a grey brown gritty loam (C.216) which was a bedding horizon for a modern cobbled surface (C.211), modern ground surface in this corner of the Inner Ward. Cut through this surface, parallel to walls C.233 and C.253, was a trench (C.220) associated with castle maintenance works. It contained an orange-brown clay, (C.217), a grey clay loam (C.221) and a cement drainage gully. All of these would appear to be modern and contemporary with the cobbled surface (C.211).

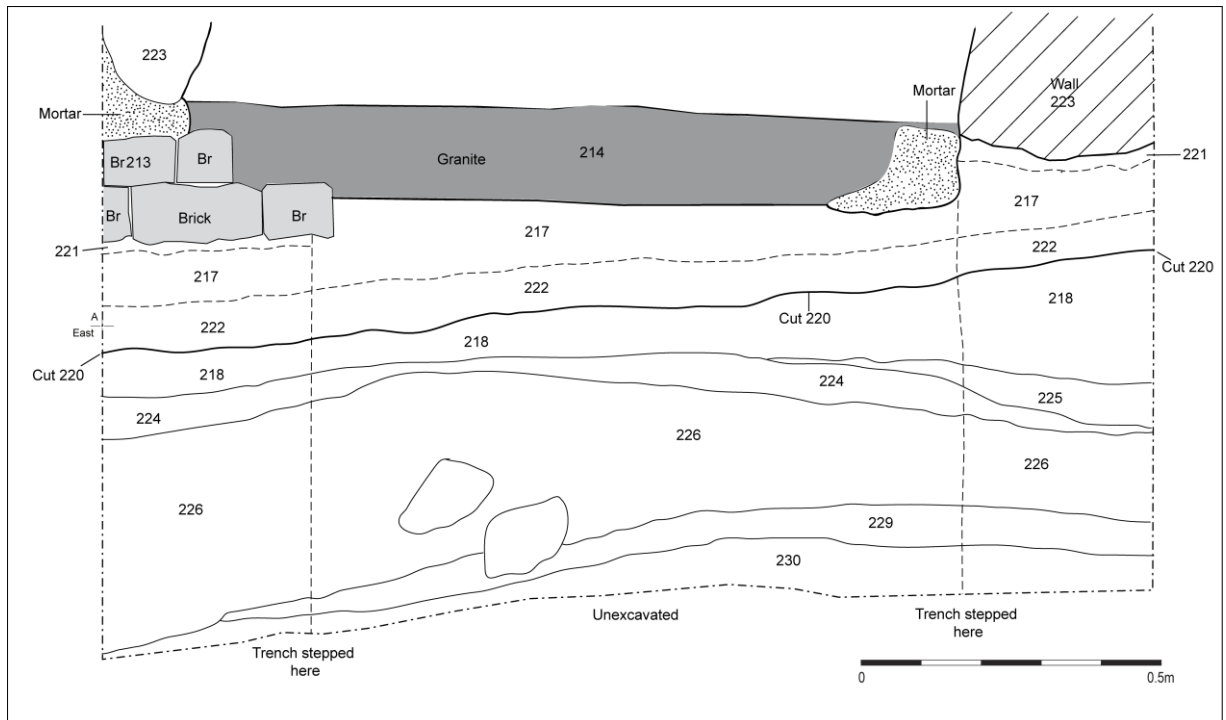


**Fig 11. Inner Ward. Trench 2 Northern Extension. Plan of trench showing cuts C.220 and C.227.**

A large cut granite stone (C.214) that made up the 'door step' in the north wall, between walls C.223 and C.253, was also sitting on C.217, implying it is of modern date. This cut stone was 1.2m long x 0.40m wide x 0.15m deep. At either end of the granite step both sections of wall were sitting on a thin layer of grey clay loam (C.221) that appears to have been removed to facilitate the insertion of the granite step. A single row of heavily-mortared medium- sized stones has in recent years been laid along the southern edge of the stone.

*The northern walls of the late 18th/ 19th Store House*

The northern wall of the building currently comprises two sections of masonry (C.223 and C.253) either side of the granite 'doorstep' (C.214). Both sections are each (suspiciously) 2m long x 0.90m wide, significantly wider than the western and southern walls of the building. The line of the northern wall does not sit at right angles to the eastern curtain wall of the Inner Ward as the southern gable does. The fact that the northern wall of the building partially obscures the beautiful sandstone arch of the northern window in the eastern curtain wall, and would also have blocked light coming in from it, suggests the two sections of the northern gable wall are, in fact, a much later construction, erected to give a definite shape to this building in the Inner Ward and make it look more 'hall-like'.



**Fig 12. Inner Ward. Trench 2 Northern Extension. North-facing section.**

The north-eastern section of the northern gable wall (C.223) was composed of large basalt stones mortared together. The wall is not of uniform width and is narrower at the top, again suggesting it was not built to be load-bearing and is not the gable end of an earlier building. The wall is not bonded to the inner face of the eastern curtain wall and at various points red brick can be clearly seen in the masonry. Small mortared pieces of slate adhering to portions of the wall also mark that conservation work has been carried out on the masonry in recent years. More tellingly the wall, where exposed within the northern extension to Trench 2, was observed to rest on a single course of red bricks (C.213) and has not deep foundations.

The north-western section of northern gable wall (C.253) is also constructed of large and medium-sized basalt stones, heavily mortared together. Close to its western corner re-used Medieval sandstone has been inserted used in the construction of the outer face to give the appearance of a Medieval wall. Where it was exposed within the northern extension to Trench 2 the wall was observed to have no foundations and it merely sat on layer C.217.

When it was discovered that both sections of the northern wall (C.223 and C.253), where exposed in the trench, had no foundations the excavation within Trench 2 Northern Extension was abandoned on health and safety grounds after consultation with a CPD Structural Engineer. Excavation ceased at the level of C.230, roughly 1m below modern ground surface. Bedrock and the possible levels of the Neolithic flint-working surface or Medieval strata were not uncovered when excavation ended within the trench.

#### **3.4.4 Trench 2B (Figs 4-5, 13-14; Plate 21)**

Trench 2B was located 1m south of the north-west corner of the store house building, immediately against the outer face of the west wall (C.250). It measured 1.10m, north-south, x 0.90m, east west. A maximum depth of 1.15m of stratigraphy was recorded in the trench above the natural bedrock. The size of the trench was constrained by the need to ensure safe access for the public between the Keep and the trench. The trench was excavated to further examine the footings of the west wall to see if it sat on earlier masonry and to try to locate any potential northern gable of a Medieval 'Great Hall'. No earlier masonry was observed within the trench.

The earliest horizon, as elsewhere on the excavations was bedrock. Directly above this was a layer of grey-brown clay loam (C.252) with a very high flint content. This was clearly the 'flint layer' also uncovered in Trench 3 (C.341) and Trench 1 (C.136/C.140) and which seems to have covered much of the area of the promontory now occupied by the Inner Ward. Elsewhere within the trench a thick layer of orange-brown clay (C.247), up to 0.25m deep, also covered the bedrock. Above this, in the eastern side of the trench, was a thick layer of grey brown clay (C.251) that was located directly below the substantial masonry footings (C.249) of the west wall of the late 18th/ early 19th century store house (C.250). The footing took the form of one course of large mortared stones 0.30m deep and projecting out 0.20m from the line of the wall.

#### *The Late-Victorian light munitions railway*

In the western side of the trench the layer of orange-brown clay (C.247) was cut by the construction trench for the eastern side of the Late-Victorian munitions railway (cut C.248). The railway was aligned north-south and ran beyond the limits of the trench both in the direction of the 19th-century arched entrance into the Inner Ward and back towards the turning circle uncovered in Trench 9 (see below). Within the cut for the railway was a line of red bricks, of uncertain function, and consisting of two courses of brick at the southern end of the trench and one at the north (C. 243 and C.246), set on a thick bedding layer of mortar stone and red brick rubble (C.244), 0.35m deep. Above the brick pier of the eastern side of the Victorian railway was, as uncovered elsewhere on the excavation (in Trenches 1, 3B, 9 and 4), a granite sleeper (C.239) that was 0.12m wide and 0.15m thick. The upper fills of the foundation trench for the railway were a series of brown loam deposits with moderate stone content (C.238, C.241 and C.242).

As the edge of the eastern edge of the railway tunnel formed the western side of Trench 2B the infilling layers deposited when the railway was out of use at the end of the Victorian period were not uncovered.

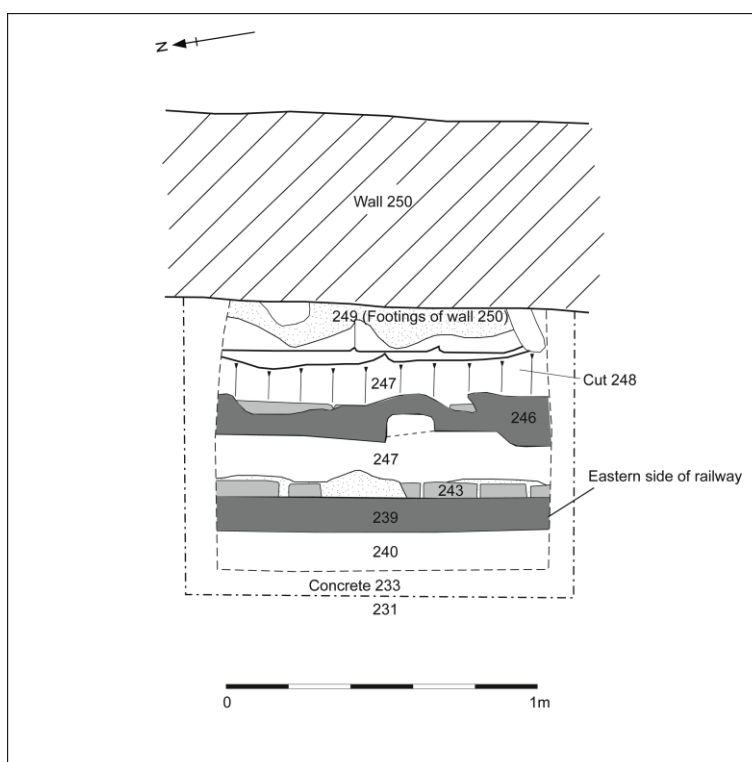
#### *Modern surfaces*

Above the level of the railway were layers of dark brown clay loam containing brick, mortar and slate, granite chippings small stones and pebbles (C.234 and C.235). The rubble content might suggest that these horizons date to the period of the demolition of castle barracks buildings post-1928. More recent horizons above these

included a thick layer of concrete (C.233), and the modern grey brick paving surface of this part of the castle (C.231 and the bedding layer below it C.232).

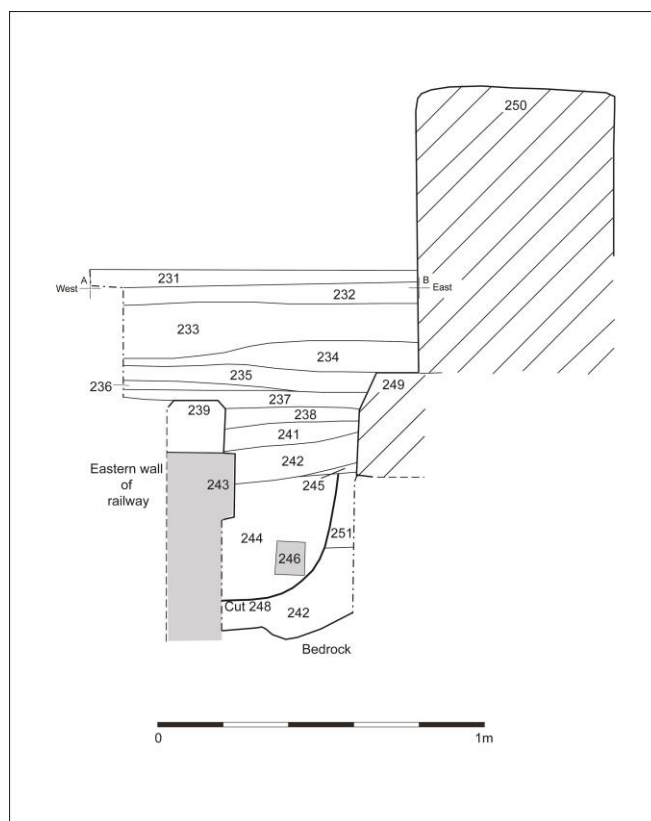


**Plate 21. Inner Ward. Trench 2B. From west showing footings of the west wall of the store house, the east wall of the Victorian railway and the red brick pier structure C.243/ C.246.**



**Fig 13. Inner Ward. Trench 2B. Plan of main features.**





**Fig 14. Inner Ward. Trench 2B. South-facing section.**

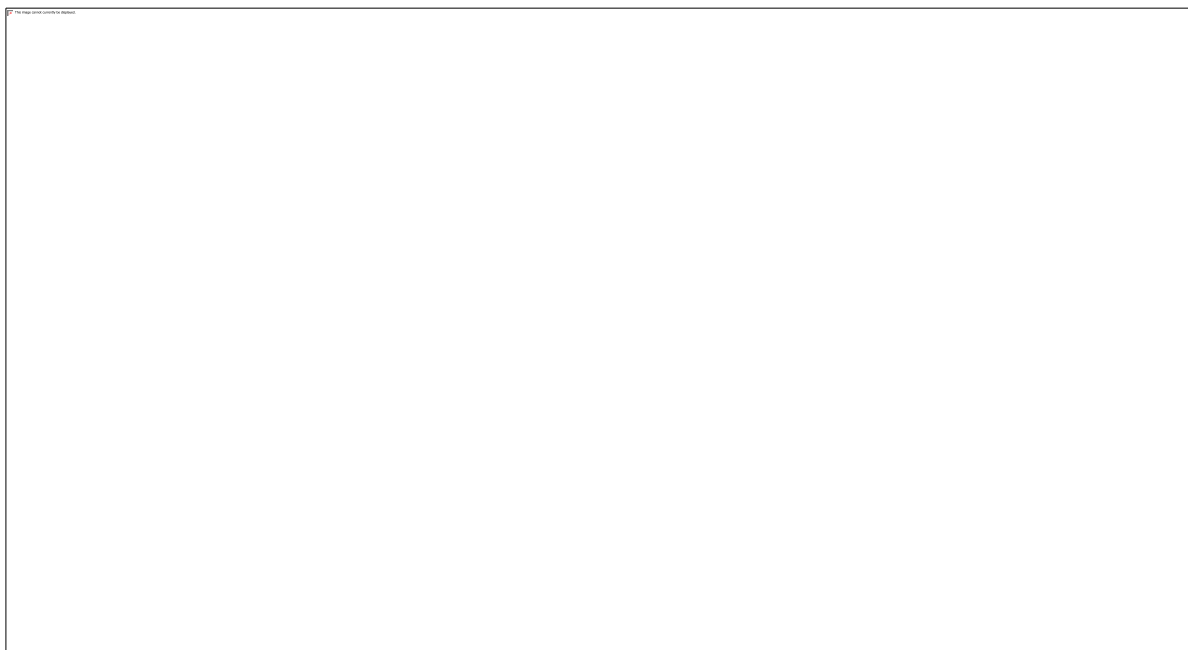
### **3.4.5 Trench 3 (Figs 4-5, 15-20; Plates 22-26)**

Trench 3 was initially a 1m wide x 5.5m long trench, aligned east-west, and excavated across the centre of the 18th/ 19th century store house. It ran from the inside face of the eastern curtain wall of Inner Ward wall across to the blocked-up entrance in the west wall of the late 18th century/ early 19th century store house.

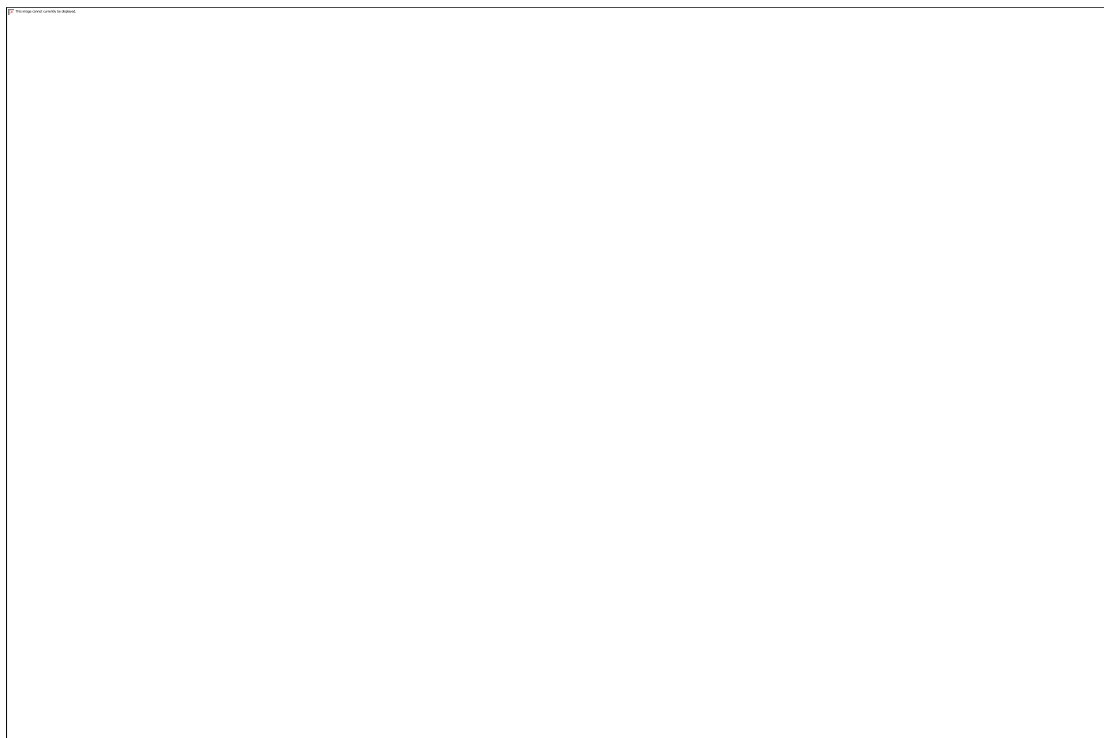
At the western end the trench was later extended both to the north and south, hard against the inside face of the west wall of the storehouse (C. 314, C. 312 and C. 316) so that the blocked-up entrance could be safely investigated and recorded. It was the only portion of the trench excavated to undisturbed bedrock. The dimensions of this part of Trench 3 were 4.40m long, north-south, x 1.50m wide, east-west. The eastern limit of this section of the extended western section of Trench 3 was the outside face of the brick and granite wall that comprised the western side of the late-Victorian munitions railway (C.331). Uneven bedrock was located at between 0.90m and 1.30m below modern ground surface.

*Prehistoric archaeology within Trench 3*

Directly above the bedrock in the southern extension to Trench 3 was a concentration of flint. At the other end of the trench directly above the bedrock was an orange-brown clay sand deposit containing occasional flint and charcoal flecking (C.344). Above this was a deposit of dark brown loam with a high concentration of flint, both worked and unworked, and occasional charcoal flecking (C.343). Directly above this was a small area of un-bonded paving (C.342), again limited to northern limit of the trench extension. This paving took the form of a rough surface comprising medium-sized flat, sub-rounded stones, approximately 0.15-0.30m in diameter and up to 0.08m thick. The area of paving was irregularly-shaped and the part exposed within the trench measured a maximum of 1.40m, east-west, by 1.10m, north-south. The paving sat below a layer of dark brown loam with occasional flint (C.345) up to 0.15m thick. These deposits and features were locally positioned within the trench. However, directly above them all and in the centre of the trench bedrock, was a thick layer of dark brown loam (C.341), up to 0.35m deep in places. This layer was also flint-rich, the flint being a mixture of nodules, water-rolled and shattered pieces and debitage.



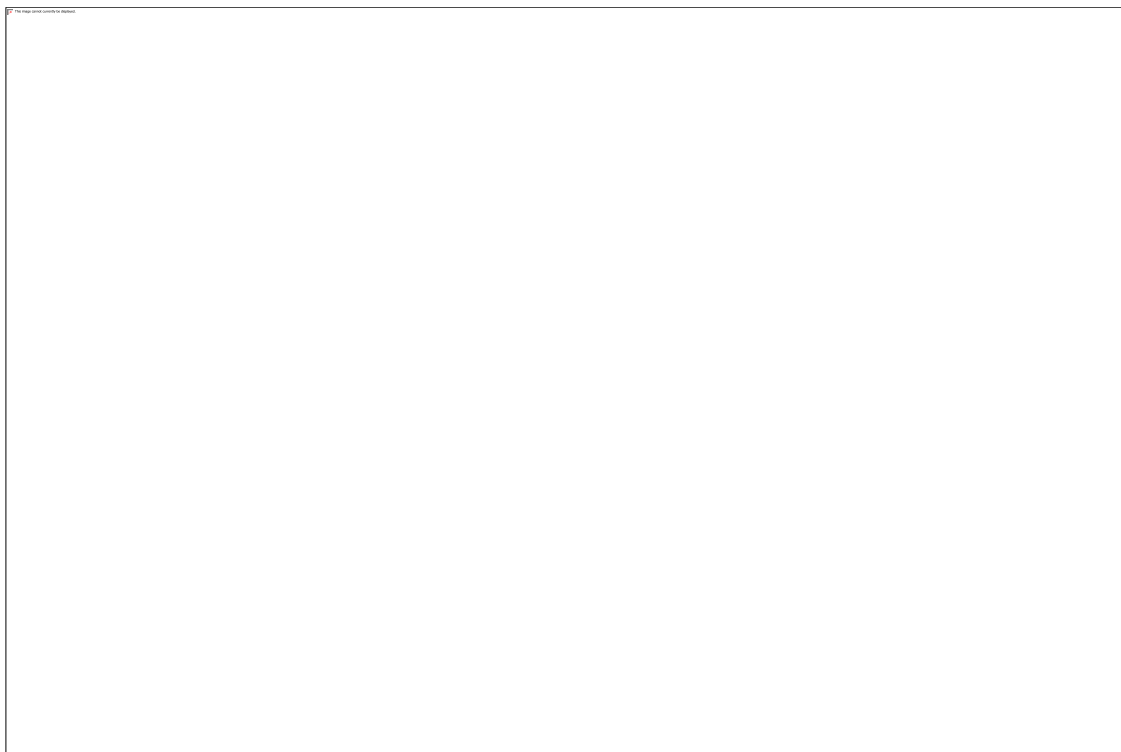
**Fig 15. Inner Ward. Trench 3. Western end. Plan of paving C.342, bedrock and the blocked-up entrance in the west wall of the store house.**



**Plate 22. Inner Ward. Trench 3. Western end. Paving C.342, the blocked-up entrance in the west wall of the store house and the western wall of the Victorian railway. From east.**

The flint deposits and area of paving may represent further evidence from the 2014 excavation of industrial flint-working in the Neolithic period on the promontory. If the material is *in situ*, this suggests that the area of paving probably also relates to the period of Neolithic flint-working and the feature may represent a platform created over the uneven bedrock where this activity may have been carried out.

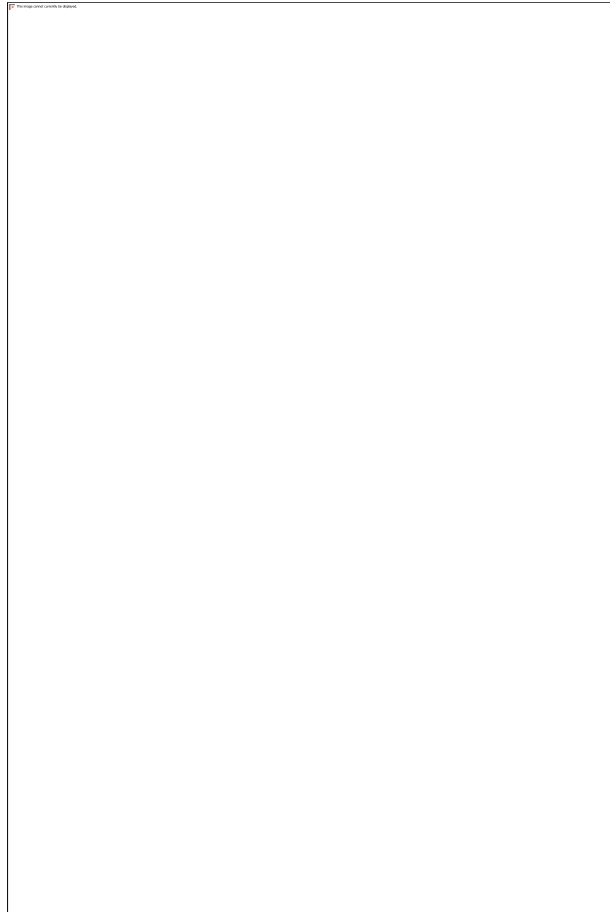
Above the flint-rich loam layer (C.341) was a layer of dark brown gravelly clay (C.337), up to 0.50m deep that contained fragments of degraded sandstone and mortar. Other finds from this layer included a copper-alloy thimble, animal bone, flint and pottery. The layer might be the same horizon as that encountered in Trench 2 Northern Extension (C.218). This is also the level that the western wall of the post-medieval store house is founded on.



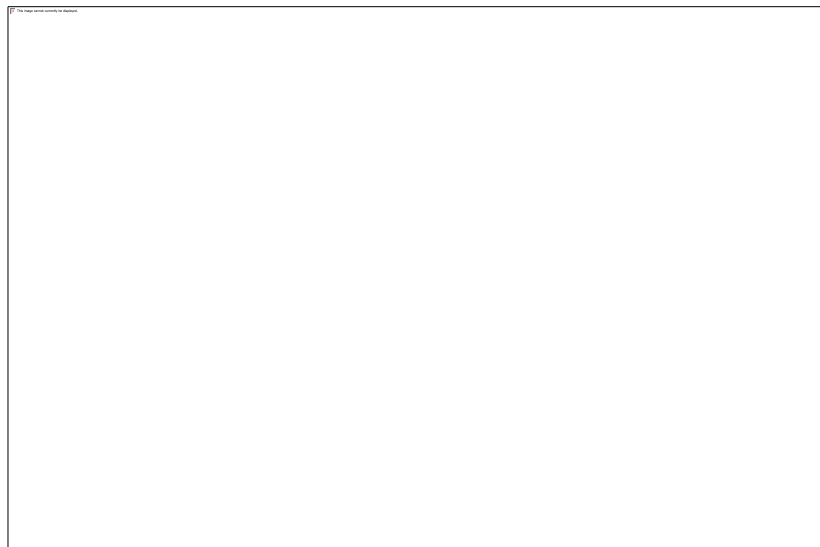
**Plate 23. Inner Ward. Trench 3. Western end. Detail of paving C.342. Also visible is the western wall of the Victorian railway. From south.**

*Medieval masonry within Trench 3*

At the eastern end of Trench 3 the uppermost two footings (C.310) of the foundations of the eastern curtain wall (C.309) of the Inner Ward were uncovered flush with the cement floor (C.308). The wall footings consisted of roughly-squared basalt stones ranging from 0.20-0.40m in diameter. The curtain wall itself was also constructed of bigger square-cut basalt stones ranging from 0.25-0.60m in diameter. The courses were bonded together with a shell-rich mortar and there was also evidence of internal render, of uncertain date but probably from its use as a barracks, on the face of the wall towards the base.



**Plate 24. Inner Ward. Trench 3. Eastern end. Footings of the eastern wall of the Inner Ward, the line of the Victorian railway concrete surface C.308 and later demolition horizons. From west.**



**Plate 25. Inner Ward. Trench 3. Eastern end. Footings of the eastern wall of the Inner Ward, the line of the Victorian railway concrete surface C.308 and later demolition horizons. From south.**

*The west wall of the Store House and the blocked-up entrance*

The west wall of the store house (C.314) was constructed of sub-rectangular basalt stones, 0.1-0.45m in diameter and bonded together with mortar. Smaller stones were used in the upper courses and these may reflect modern conservation of the walls of the store house. The wall ran parallel to the eastern curtain wall of the Inner Ward (C.309) and together they made up the two long walls of the store house. It was founded on layer C.308.

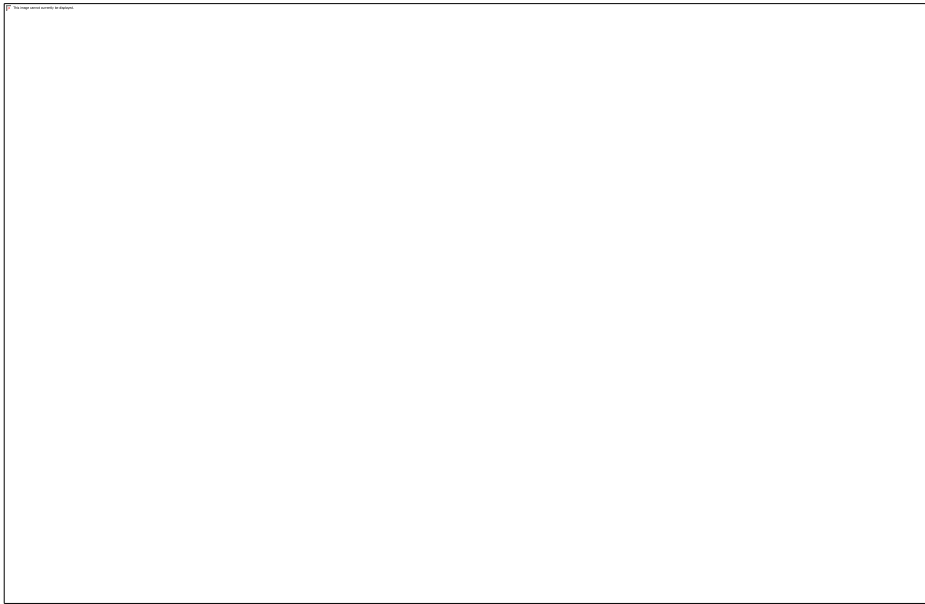
The west wall survives to a maximum height of 1.30m of which roughly 0.40m is above modern ground level. The wall on either side of the blocked-up entrance is approximately 0.63m wide at the top but narrows to a width of 0.53m at distance of 0.40m north of the entrance. The lower half of the inner face of the wall displays render which extends across the blocked-up entrance showing that this had been applied after the entrance was infilled.

The entrance in the west wall was 2.50m wide. The entrance way was divided into two symmetrically identical sections by the remains of a centrally-located redbrick pier (C.312), set in line with the internal face of the wall (C.314). The pier survived to a height of 0.96m and 0.38m wide. Because of the infilling around the pier it was impossible to get an accurate measurement of how deep it was when originally constructed. The pier consisted of ten courses of red brick sitting on a slightly wider base that was 0.42m wide. The top five courses of brick had been hacked back in line with the later courses of mortared basalt stone infilling which was set back 0.12m from the line of the internal face of the western store house wall. The entrance way had later been blocked and infilled by courses of large basalt stones mortared together (C.316). The external face of the infilled entrance that constituted the eastern side of Trench 3B (discussed below) was filled in by continuous courses of mortared basalt and the original centrally-located red brick pier is not visible.

The pier would originally have divided the entranceway into two distinct doorways perhaps for access and egress. The blocked-up entrance is clearly that represented as being in the west wall of the store house on the 1811 plan of the castle.



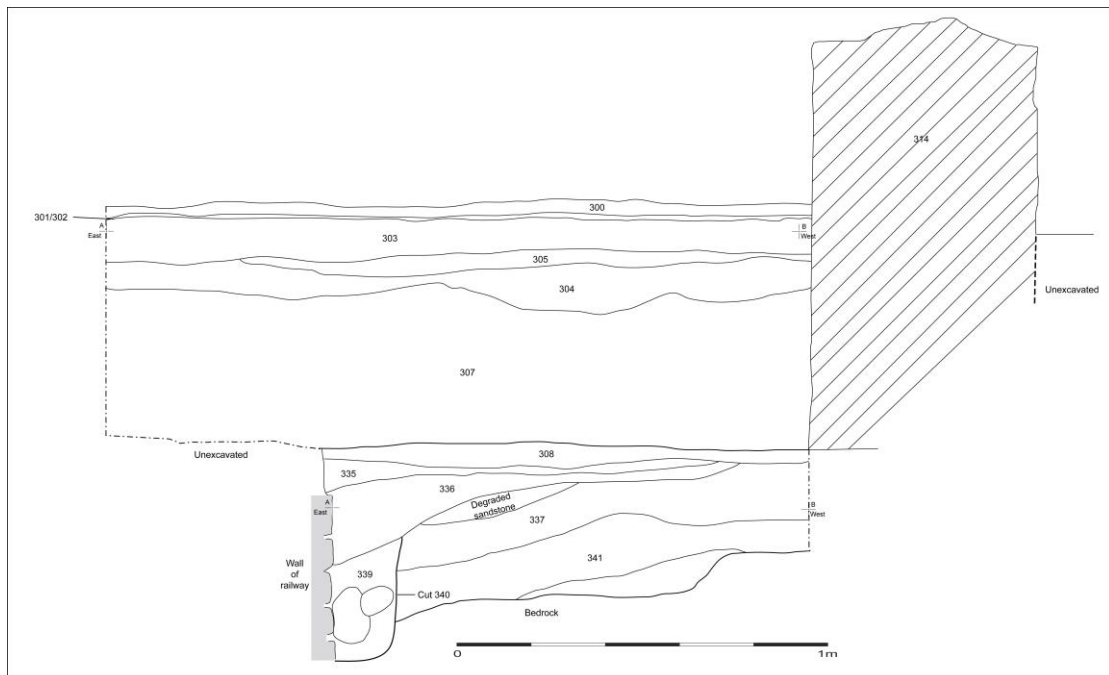
**Fig 16. Inner Ward. Trench 3. Western end. East-facing elevation of the blocked-up entrance in the west wall of the store house.**



**Fig. 17. Inner Ward. Trench 3. Western end. Plan of the blocked-up entrance in the west wall of the store house, cement pier C.311 and the line of the Victorian railway.**

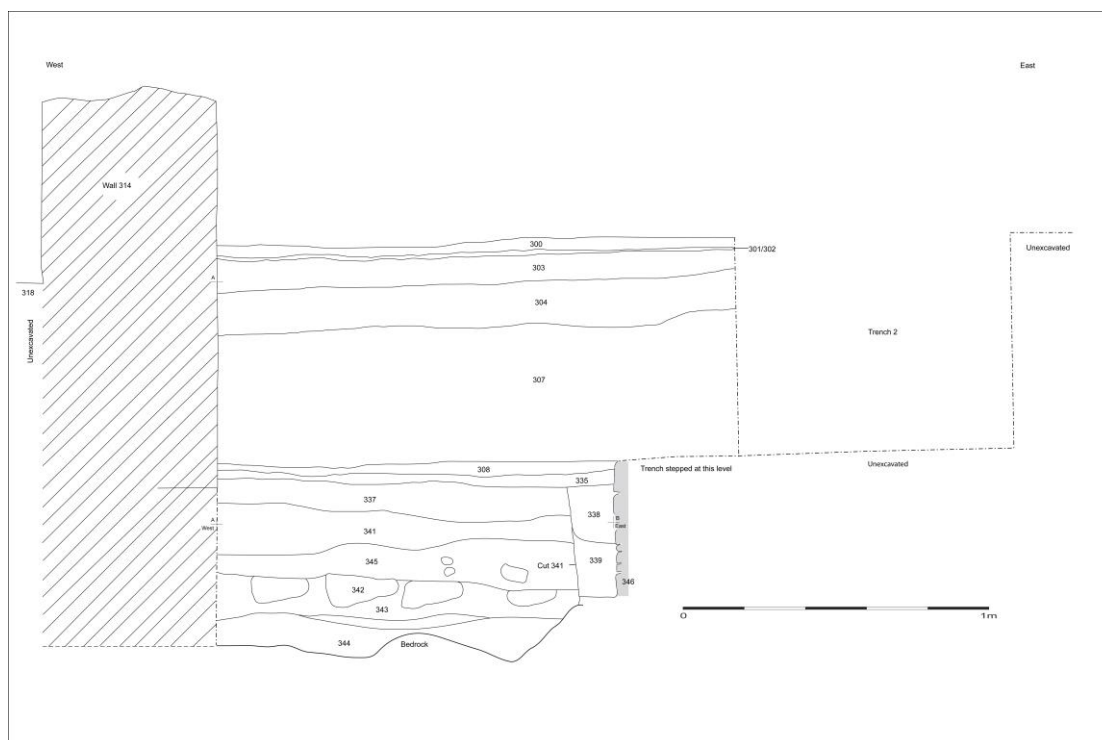


**Plate 26. Inner Ward. Trench 3. Western end. Blocked-up entrance in the west wall of the store house, cement pier C.311 and the line of the Victorian railway. From north.**



**Fig 18. Inner Ward. Trench 3. Western end. North-facing section adjacent to the west wall of the store house.**





**Fig. 19. Inner Ward. Trench 3. Western end. South-facing section adjacent to the west wall of the store house.**

#### *The Late-Victorian munitions railway*

The cut (C.340) for the western side of Late-Victorian munitions railway was inserted through all these layers and deposits down to bedrock. The cut was filled with deposits of sand (C.336), loose clay loam containing a rubble mix of stone, brick and occasional mortar (C.338) and grey-brown loamy clay that included a dump of cobbles and mortar (C.339). The western wall of the railway tunnel consisted of a four courses of red brick (C.346) capped with a granite sleeper (C.331) that sat on a bed of mortar (C.347) and was a maximum height of 0.60m.

Above this was the bedding layer (C.335) for the concrete floor (C.308) which represents the infilling of the railway and the horizon where excavation stopped in the eastern, narrow, portion of Trench 3.

#### *Internal masonry remains*

The only internal masonry remains associated with the concrete floor within the store house was a rectangular cement pier (C.311), presumably for an internal structural column within the late-18th century building. This was located 0.90m east of the blocked-up entrance in the west wall of the store house and directly in line with its red brick pier. The cement pier base was battered and was 0.66m long by 0.46m wide at

the bottom narrowing to 0.40m x 0.30m at the top. It was 0.38m high and set into the concrete floor C. 308.



**Fig. 20. Inner Ward. Trench 3. Elevation of the outside face of the western side of the Victorian railway.**

#### *20th century stratigraphy*

The 20th century stratigraphy of the trench was virtually identical to that elsewhere within the Store House. Above the concrete floor (C.308/ C.334 = C.210 in Trench 2; = C.109/C.119/C.121 in Trench 1) that was laid down when the munitions railway was infilled was a deep layer of demolition rubble (C.307), up to 0.45m in depth, and which consisted of loose mortar, angular stones, red brick and slate. It was clearly the result of the demolition of buildings on this location post-1928. Above this were two deposits- a grey brown gravel (C.304) in the west of the trench and a grey silty loam (C.306) in the east of the trench. A leveling deposit of orange-brown loamy sand (C.305 = C.205) had been laid over the two layers used as a leveling layer. The layer of modern protective geo-textile (C.302) covered these and above this was the layer of compacted quarry dust (C.302). This was the bedding for the modern ground surface that was, as elsewhere within the store house, a layer of medium-sized gravel (C.300).

Because of the narrowness of the trench and the loose nature of the rubble deposits excavation in the eastern end of the trench ceased at the level of the concrete floor. However, the eastern line of the filled in Late-Victorian munitions railway (C.332) was still visible running north-south in the concrete floor.

#### **3.4.6 Trench 3B (Figs 4-5, 21-22; Plates 27-28)**

Trench 3B was located immediately west of Trench 3 but on the other side of the blocked-up entrance in the west wall of the store house. Excavation took place here to try to locate the potential western wall of any earlier Medieval 'Great Hall'. Unfortunately, due to the presence of later masonry that could not be removed, the

space to excavate within the trench was limited and no Medieval wall was observed within the area available for investigation. The underlying geological horizon, as elsewhere on the promontory, was dolerite bed rock.

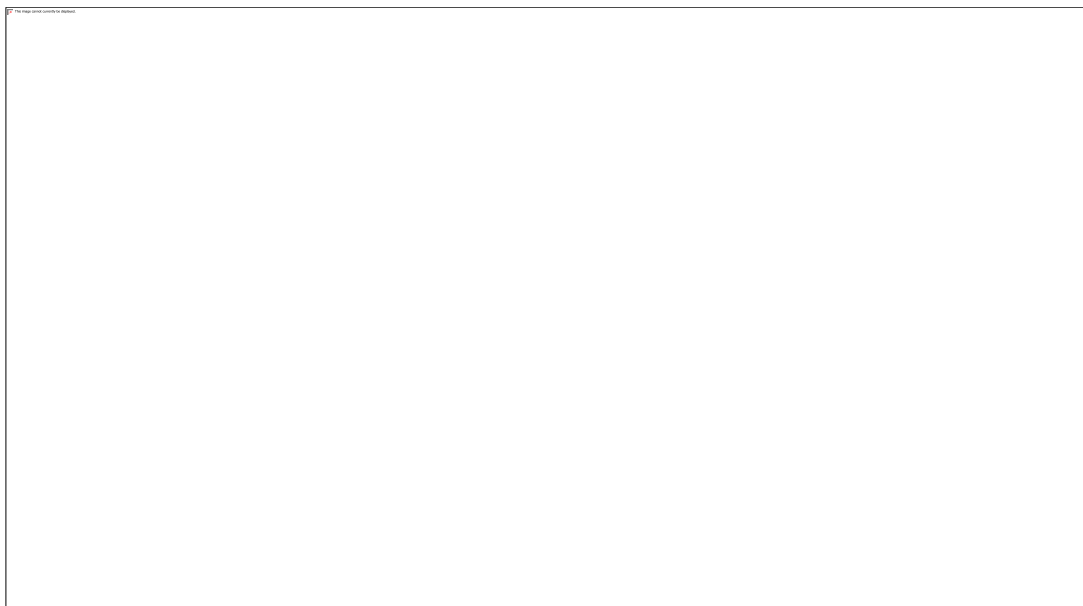
Trench 3B was 3.80m long, north-south. It was 1.20m wide, east-west, at the top narrowing (because of exposed masonry within the trench) to approximately 0.40m wide at the base. The trench was bounded to the east by the western wall of the store house and to the west by the eastern side of the second section of the Late-Victorian light munitions railway that ran parallel to the store house and was intended to ferry munitions to buildings in the Outer Ward. A maximum of 1.1m depth of stratigraphy recorded within the trench.

#### *Prehistoric levels*

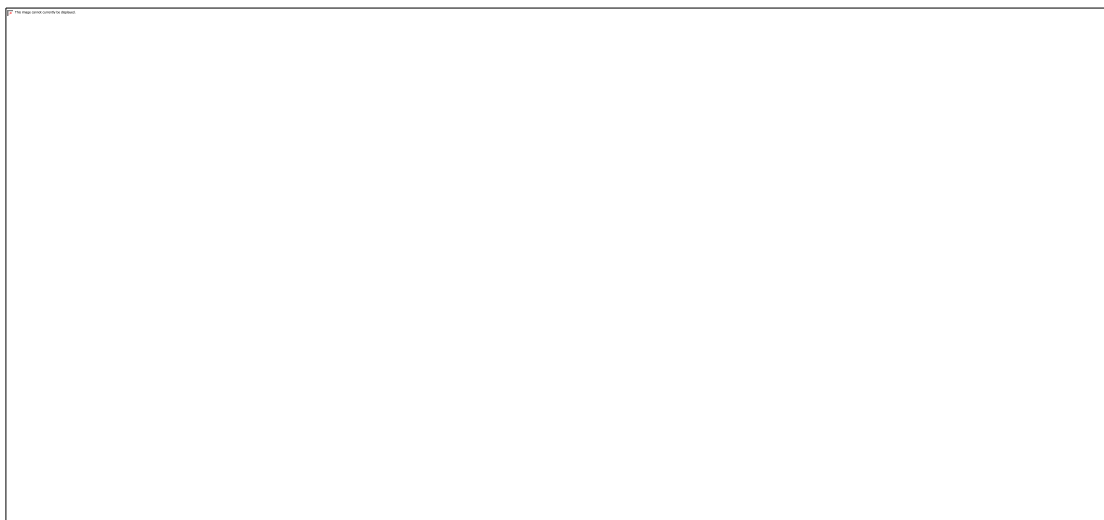
The earliest deposits above the bedrock encountered within the trench were identical to those found in the adjacent Trench 3. At the northern end of Trench 3B was a mottled orange-brown clay sand (C.344) containing occasional flint and charcoal flecking. It was a maximum recorded depth of 0.15m. Due to health and safety concerns about the narrowness and depth of the trench, excavation ceased at this level at the northern end of the trench. The deposit may represent material brought in to level the uneven bedrock that ran higher at the southern end of the trench. Above C.344 was a layer of brown loam (C.343) which was flint-rich and probably reflects the use of the promontory for flint working during the Mesolithic and Neolithic periods. In Trench 3B this layer was a recorded maximum depth of 0.30m.

#### *The red brick masonry structure*

Located in the middle of the trench and cut through the flint-rich layer down to the level of the bedrock were the remains of a redbrick structure. It took the form of a basal remains of red brick wall (C.350) aligned east-west and 0.50m wide. It survived to a maximum height of 0.20m and two courses deep. The wall ran westwards beyond the limit of excavation. Immediately adjacent and south of the red brick wall was a surface or floor comprised of broken laid brick (C.351). The surface/floor ran for a maximum distance of 0.88m south from the red brick wall. The red brick wall and surface clearly date to the Post-Medieval period and are, perhaps, contemporary with the period of the store house. They predate the blocking up of the entrance in the west wall of the store house.



**Fig. 21. Inner Ward. Trench 3B. West-facing elevation of the blocked-up doorway in the west wall of the store house and the features uncovered below it.**



**Fig. 22. Inner Ward. Trench 3B. Plan of the main features.**



**Plate 27. Inner Ward. Trench 3B. Base of west wall of store house, red brick structure C.350/C.351 and the east wall of the Victorian railway. From west.**



**Plate 28. Inner Ward. Trench 3B. Base of west wall of store house, red brick structure C.350/C.351 and the east wall of the Victorian railway. From north.**

Above the flint-rich layer and directly under the west wall of the store house in most places was a thick layer of grey-brown loamy clay (C.354), up to 0.35m deep, containing medium-sized stone inclusions. In the area where the entrance had been blocked-up there were thin deposits of C.353 and C.308 between it and the base of the infilled courses. To the south of the trench it sat directly on bedrock.

#### *The Late-Victorian munitions railway*

Cut through all of these deposits to the level of bedrock was the construction cut (C.349) for the Late-Victorian light munitions railway. The cut contained the eastern side wall of the railway tunnel that also was the western limit of Trench 3B. The side wall of the railway tunnel comprised five courses of brick (C.350), 0.50m high and capped with a granite sleeper (C.330), 0.14m thick. The remainder of the foundation cut was filled with a brown clay loam (C.348) with occasional small stones. Finds recovered from this included pottery, slate, metalwork, animal bone and glass.

#### *Modern horizons*

Above the infilled Victorian railway were a series of 20th century Inner Ward horizons including a cobbled surface (C.325), clay leveling deposits (C.324 and C.326), a thick layer of concrete (C.320) and a drain (C.323; fill C.322). Modern ground level in this part of the Inner ward was a surface of grey cement bricks (C.318) on a bedding layer of cement (C.319).

### **3.4.7 Trench 9 (Figs 4-5, 23-26; Plates 29-32, 36)**

Trench 9 was sited immediately outside and against the south-west corner of the store house. The trench was excavated to investigate whether the remains of the western, long, wall of the supposed 'Great Hall' could be exposed here and thus proving that the Medieval wall (C.106/ C.135) uncovered in the nearby Trench 1 was part of such an earlier building.

Unfortunately, due to the presence of a substantial portion of the Late-Victorian munitions railway it was not possible to confirm the presence of the earlier wall. The trench was 'dog legged' around the south-west corner of the store house being a maximum of 4.5m long x 1.20m wide, north south. The 'dog leg' continued around the south-west corner of the store house for a distance of 0.90m, east-west, by 1.30, north-south.



Plate 29. Inner Ward. Trench 9. Eastern walls of Victorian railway, C.920 and C.921. From west.

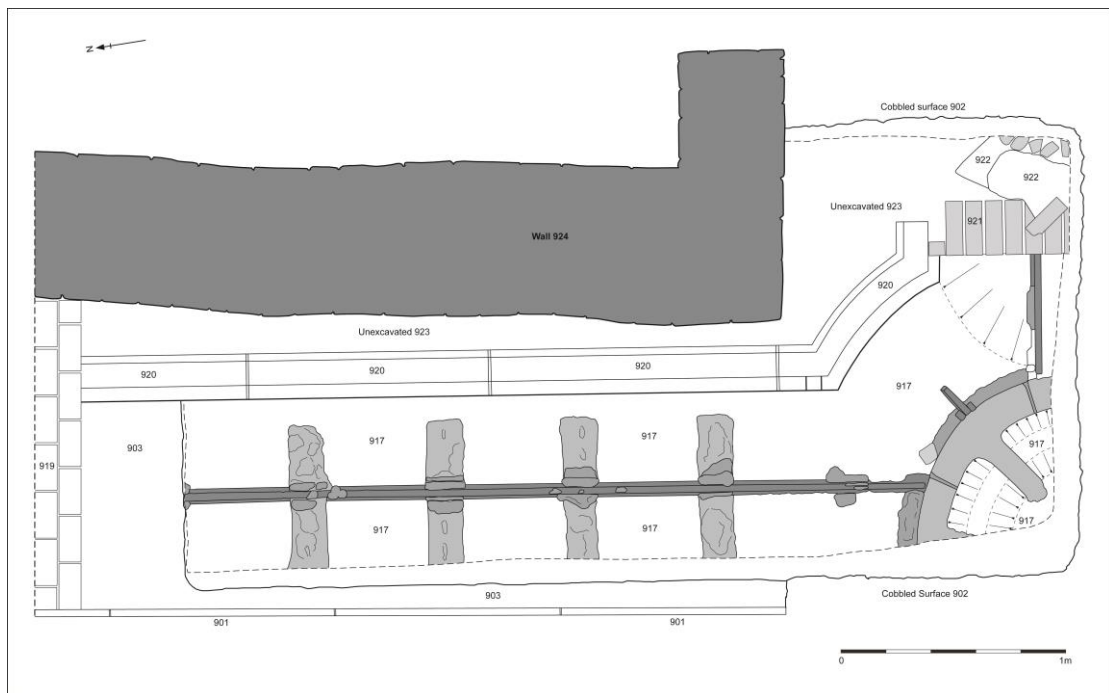


Fig 23. Inner Ward. Trench 9. Plan of the Victorian railway.



**Plate 30. Inner Ward. Trench 9. Detail of the exposed portion of the turntable of the Victorian railway C.920 and C.921. From west.**



**Plate 31. Inner Ward. Trench 9. Detail of the exposed portion of the turntable of the Victorian railway C.920 and C.921. From north.**



Excavation of Trench 9 exposed the remains of the Late-Victorian munitions railway and the material that been deposited to fill it in after the railway was put out of use. Excavation was halted once the later infilling had been removed. Consequently nearly all of the material recovered from the excavated trench was of 19th and 20th century date.

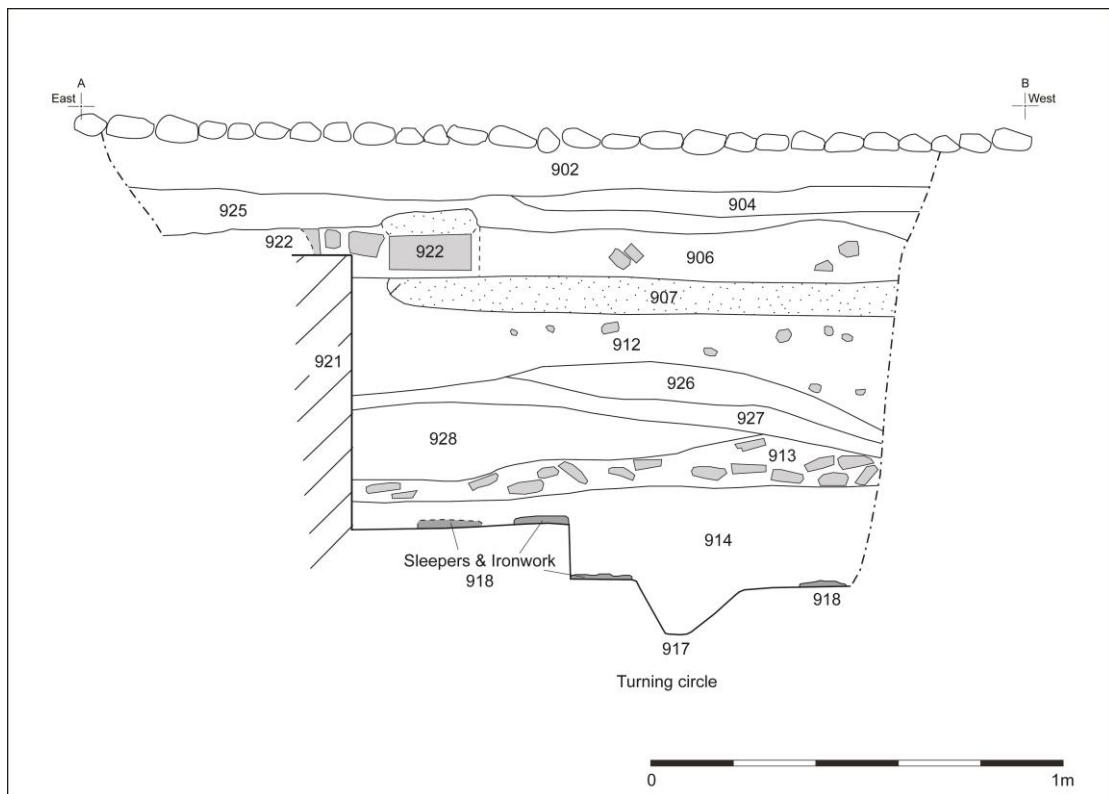
#### *The Late-Victorian munitions railway*

A portion of the eastern half of one section of the Late-Victorian railway was uncovered in the trench. It was bounded to the east by a wall (C.920/ C.921) that consisted five courses of mortared red brick topped with a granite sleeper, to a height of approximately 0.65m. The base consisted of a concrete floor (C.917) on which the rails of the railway were laid. The eastern of the two rails (C.918) was uncovered and was 0.06m wide. It sat on sleepers set into the concrete that were a recorded length of 0.60m (east-west) x 0.15m wide (north-south) within the trench. Four of the sleepers were recorded within the trench and these were roughly 0.45m apart.

At the south-west corner of Trench 9 part of the turntable, the mechanism which facilitated the division of the railway tracks, was uncovered. At this point the linear red brick wall and granite coping stones of the railway tunnel curve to the south-east. This change in shape was to facilitate the positioning of a railway turntable. A segment of the actual mechanism of the turntable wheel was uncovered in the south-west corner of Trench 9. It took the form of an iron wheel (C.918) set into a concrete pit (C.917). The wheel must have facilitated the rotation of a platform (known as a bridge) to enable the railway carriage to run off at right angles from the tunnel emerging above ground close to Trench 4. The turntable bridge (the part of the turntable that included the tracks and that swivelled to turn the equipment) may have had a span of six feet (approximately 1.8m) and the one in Carrickfergus Castle would be an example of one of the smallest types. The railway carriage may have been pushed by soldiers from the garrison or horsepower may have been employed, or perhaps a combination of the two. The railway turntable would have needed a locking system to allow for the stable alignment of the bridge rails with the new (exit) section of track that it was lining up with. The turntable was probably rotated manually; either by manpower or the use of a windlass system once the carriage was on the bridge.



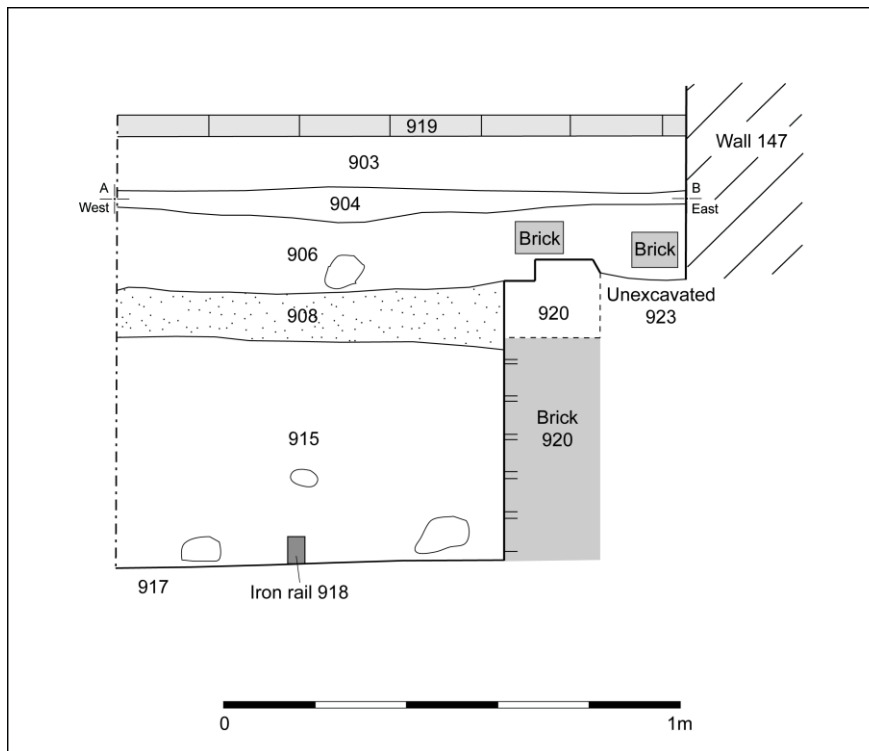
**Fig. 24. Inner Ward. Trench 9. West-facing elevation of the eastern walls of the Victorian railway C.920 and C.921.**



**Fig. 25. Inner Ward. Trench 9. North-facing section of trench.**

The railway line that was uncovered in Trench 9 was a section of line running parallel but outside the store house to that found in Trenches 1 and 3. The railway uncovered in Trenches 1 and 3 was clearly intended to deliver munitions for storage into the building that succeeded the store house. The section of railway line uncovered in Trenches 9, 3B and 2B was intended to take munitions out to buildings located in the Outer Ward.

The two lines of railway emanated from the single tunnel hewn through the promontory. At some point close to Trench 4 the railway clearly split into two different sections. One section led into the store house in the Inner Ward and one ran parallel to it alongside the outer face of the west wall of the storehouse and into the Outer Ward.



**Fig. 26. Inner Ward. Trench 9. South-facing section of trench.**

*The infilling of the Late-Victorian railway tunnel*

As found elsewhere on the excavation, the Late-Victorian railway tunnel was infilled to the top with a series of late-Victorian or 20th century deposits. There appeared to be several phases of deposition. The initial phase consisted of layers or lenses of clay and mortar-rich brick rubble (C.907, C.908, C.911, C.912 and C.915) and ash (C.926 and C.927) to a depth of 0.60m above the base of the railway tunnel. Cut into

this was a later pit (C.915) that was dug across the middle of the tunnel down to the level of the concrete base. It measured approximately 2m wide, north-south.

Above this was a gravel layer (C.904) that was probably bedding layer the modern pathways and surfaces (C.901-C.903). The latest horizon encountered in the trench (C.901) was a layer of concrete, 0.10m thick, which acted as edging between the modern cobbled surface (C.902) in this part of the Inner Ward and the western wall of the store house.



**Plate 32. Inner Ward. Sections of the Victorian railway line visible in Trenches 1, 3, 9 and 3B. It was also located in Trench 2B and 4, not visible in this photograph. From roof of the Keep/ Great Tower.**

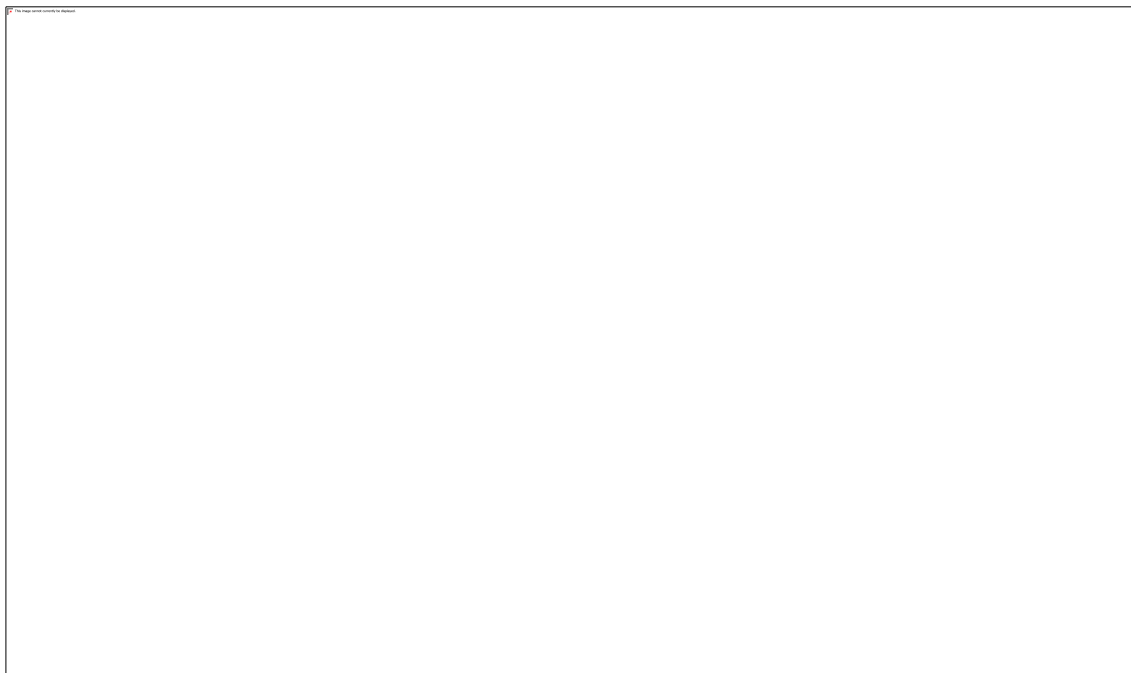
#### **3.4.8 Trench 4 (Figs 4-5, 27-28; Plates 33-35)**

Trench 4 was excavated in the central grassy area of the Inner Ward, east of the manhole cover and 6m west of the 18th/ 19th century building building. It was aligned north-south and measured 4m long by 2m wide. It was hoped that undisturbed Medieval strata might survive in the area of the trench and investigation of these might supply information about the earliest phases of activity in the Inner Ward. Unfortunately, because of extensive disturbance caused by the construction of the Late-Victorian munitions railway and, after it had gone out of use, 20th century

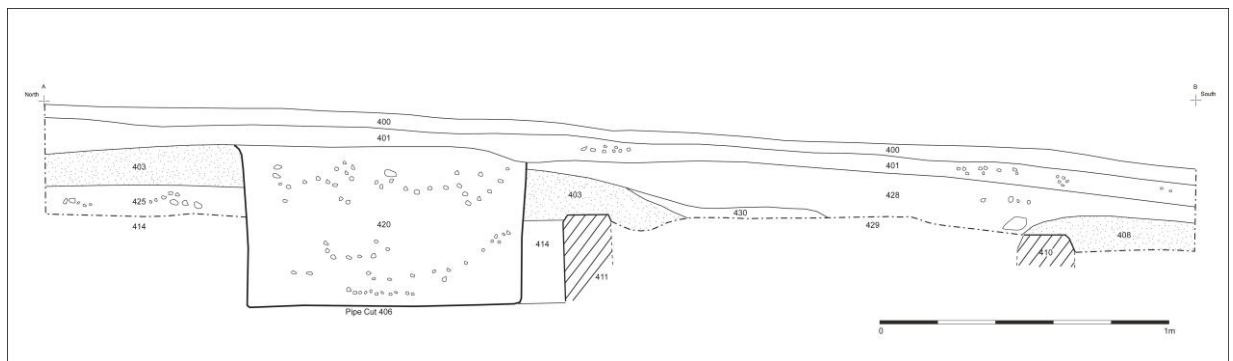
service trenches, Medieval horizons were not encountered when excavation ceased within Trench 4.

*The Late-Victorian munitions railway*

The earliest features encountered were related to the Late-Victorian munitions railway. These took the form of two parallel granite sleepers (C.410 and C.411) located in the middle and south of the trench, aligned east-west, which marked the two sides of the tunnel structure containing the railway line as it started to emerge over ground within the Inner Ward. The granite sleepers were 0.12m wide and were 1.50m apart and both sat on red brick piers.



**Fig. 27. Inner Ward. Trench 4. Plan showing the line of the Victorian railway and later service trenches cut through it.**



**Fig. 28. Inner Ward. Trench 4. West-facing section showing the granite sleepers of the Victorian railway and later service trenches.**



**Plate 33. Inner Ward. Trench 4. The visible granite sleepers of the Victorian railway and the later manhole cover. From east.**

It is clear that this underground section of the railway tunnel was simply covered over at some point after construction, probably in the late 19th or early 20th century. Unlike the sections of the railway uncovered in Trenches 1 and 9, the whole tunnel was not infilled. The covering over in Trench 4 took the form of a hard concrete rubble mix (C.413) into which was later cut a concrete block with a substantial ring (C.412; cut C.416) that allowed access to the tunnel. At the same time the railway tunnel was blocked by two red brick walls, visible below ground when the concrete block was lifted but which were not fully investigated during the excavation because of health and safety concerns.

It would appear that this section of the Victorian railway tunnel had been later used as a soak away or septic tank for pipes emanating from buildings in the Inner Ward. Two such services running into the railway tunnel were recorded within Trench 4 (and more were visible in the walls of the railway tunnel below the trench). The first was a ceramic pipe (C.422), diameter 0.12m, which lay within a cut (C.404) that was sharp-sided and flat bottomed. The cut was aligned north-east/ south-west. The pipe

trench was uncovered for a distance of 1.90m within the trench and disgorged into the blocked up railway tunnel. It was a recorded depth of 0.65m wide x 0.48m deep and contained two fills. The lower of these was a dark brown gritty loam (C.421), the upper a rubble-rich mixture of red brick, stone, mortar and dark brown clay (C.405).



**Plate 34. Inner Ward. Trench 4. Shows the line of the Victorian railway and later service trenches cut through it. From north.**

The second service pipe (C.423) was a narrow iron water pipe. It ran parallel but 0.36m east of the ceramic pipe trench in Trench 4. The pipe sat within a pipe trench (cuts C.406/ C.418) that was recorded within the trench for a distance of 1.76m, running in a north-east/ south-west alignment either side of the railway tunnel. Excavation within the trench ceased at these 20th century horizons.

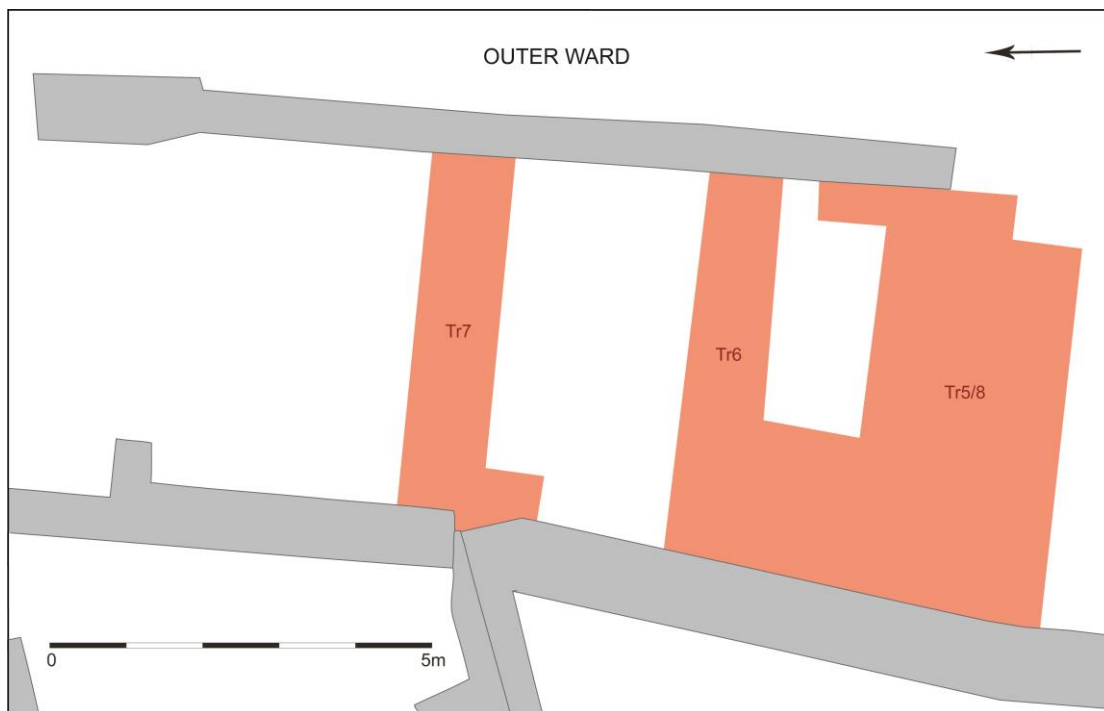


**Plate 35. Inner Ward. The still extant subterranean Victorian railway as seen after being accessed from the manhole cover adjacent/ west of Trench 4. Looking west down the railway tunnel.**





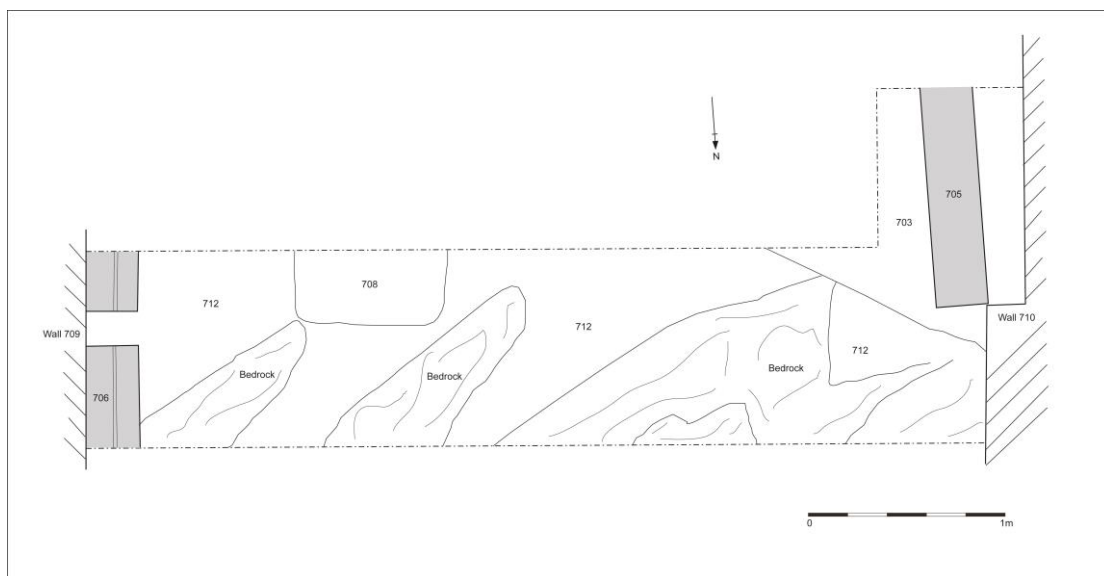
**Plate 36. Excavation in the Inner Ward. From south.**



**Fig. 29. Location of trenches in the Outer Ward.**

### 3.4.9 Trench 7 (Figs 4, 29, 31; Plates 37, 43)

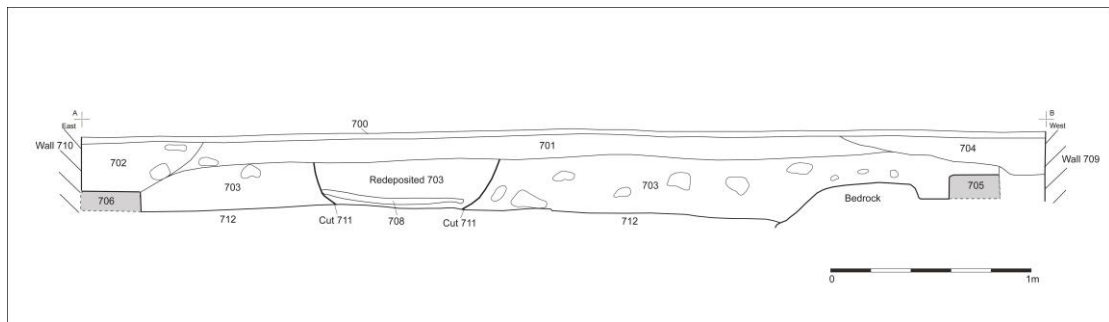
Trench 7 was the most northerly of the excavated trenches in the Outer Ward. It was 4.65m long, east-west, by 1m wide, north-south. The western limit of the trench was the inner face of the western Outer Ward wall (C.709), the eastern limit the inner face of the long wall of the 18th/19th century barracks building (C.710).



**Fig. 30. Outer Ward. Trench 7. Plan of main features.**

At either end and immediately within the limits of the trench, butting against the Outer Ward wall and the 18th/19th century wall were two narrow red brick foundations (C.705 and C.706). These took the form of two rows of mortared bricks approximately 0.26m wide and were clearly structural footings, possibly the base for a timber superstructure and relating to the last phase of usage of the barracks building that occupied this part of the castle before it became a State Care monument.

The floor of the building was constructed of mortar and compacted red brick fragments (C.707). An interesting observation within Trench 7 was that the shelved bedrock was very high there, in some cases less than 0.20m below modern ground surface.



**Fig. 31. Outer Ward. Trench 7. North-facing section.**



**Plate 37. Outer Ward. Trench 7. From east showing bedrock rising high, the possible pet burial (covered over) and red brick foundations C.705 and C.706.**

The cement floor had been inserted between the uneven rock with no attempt to create a natural flat surface across the whole area of the building interior. It is possible that this rudimentary floor originally had a secondary cover of perhaps wooden planks or stone flagging, later removed, but evidence for a secondary surface was not recorded within the trench.

Immediately above the floor was deposit, up to 0.30m deep in places, of building rubble (C.703). It probably represents the demolition of the last building on the site prior to the change in usage of the castle in 1928. It was observed from the nature of

the rubble that the building the material derived from may not have been very substantial.

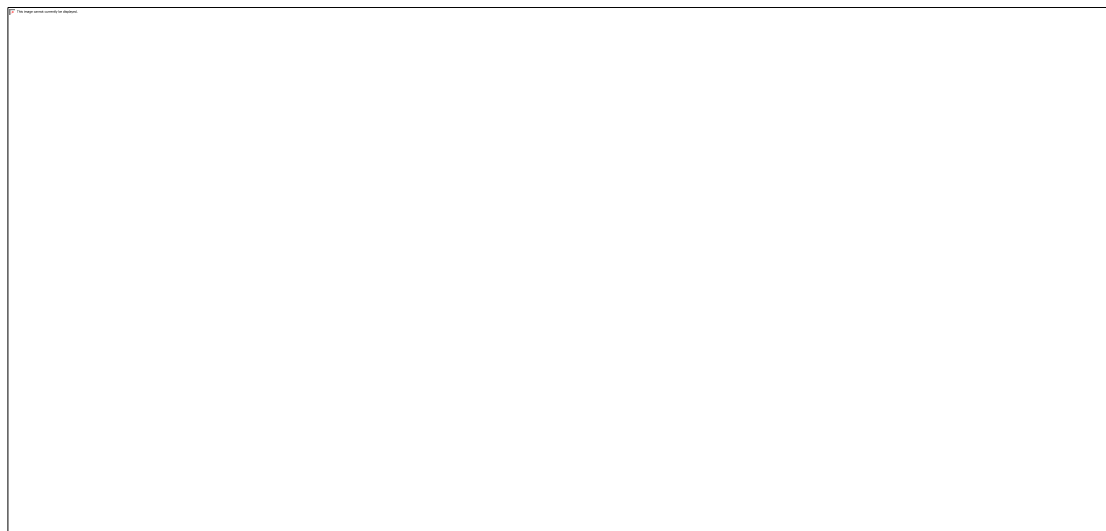
Above this horizon were two layers of dark brown sandy soil (C.701 and C.702) that were the topsoil layers immediately below the modern grass surface (C.700). Cut from the level of C.701 down to bedrock was a pit (cut C.711) that may have been the burial of a pet animal in recent decades. This feature was not excavated.

The level of bedrock dived considerably from Trench 7 southwards and was not encountered in the most southerly trench (Trench 5) when excavation ceased here at a depth of 1.20m below modern ground level.

#### **3.4.10 Trench 6 (Figs 4, 29, 32-34; Plates 38, 43)**

The remains of the barracks building uncovered in Trench 7 were also uncovered in Trench 6, located 2.5m south of Trench 7. Although Trench 6 was laid out parallel to Trench 7 because of the inconsistencies in the line of the Outer Ward wall (C.616; footings C.615) it was actually slightly longer, 5m east-west, and was 1m wide, north-south.

The internal red brick footings of the long walls of the barracks building were again uncovered at either end of the trench (C.603 and C.606). As in Trench 7, the foundations in both took the form of two rows of mortared red brick that were 0.26m wide. Because the line of the Outer Ward wall is not straight there was actually a gap of roughly 0.40m between the red brick foundation and the Medieval curtain wall.



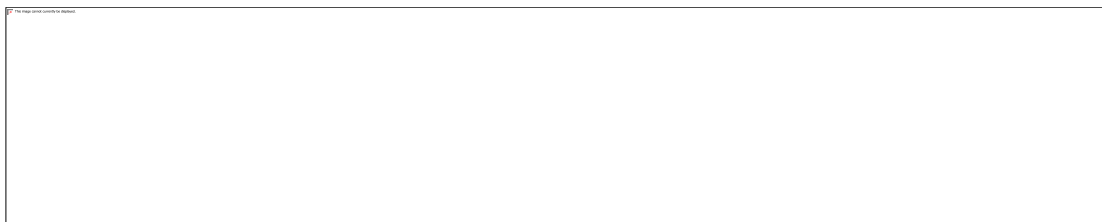
**Fig. 32. Outer Ward. Trench 6. Plan of main features.**

The floor of the building was once again mortar with compacted redbrick fragments (C.605). However, unlike Trench 7 there was a clear shadow of a feature visible running across the middle of the trench, north-south, and dividing the floor into two symmetrically equal areas. This shadow (C.618) was approximately 0.26m wide, the same dimensions as the western and eastern brick foundations, and it is possible that there originally had been a third, internal brick foundation used as a partition, running down the centre of the barracks building that was later removed. Excavation in Trench 6 proper ceased at the level of the floor surface of the barracks building. As in Trench 7, a thick layer of mortar-rich demolition rubble (C.604) had been deposited above the floor, to a maximum depth of 0.18m, marking the leveling of the building after the castle had become a State Care monument in 1928. Later infilling layers included a dark-brown sandy loam (C.610) that included mortar, brick, slate and rounded stones and topsoil deposits (C.601 and C.602).

Although the barracks building had redbrick founds along both of its long walls, when Trench 6 was extended southwards towards Trench 5 and the newly excavated area was designated Trench 8, a stone southern gable wall (C.809) was uncovered at its southern end.



**Plate 38. Outer Ward. Trench 6. From west showing brick foundation C. 606, mortar floor C.605 and the east wall of the barracks building.**



**Fig. 33. Outer Ward. Trench 6. South-facing section.**

#### **3.4.11 Trench 8 (Figs 4, 29, 34-35; Plates 39-43)**

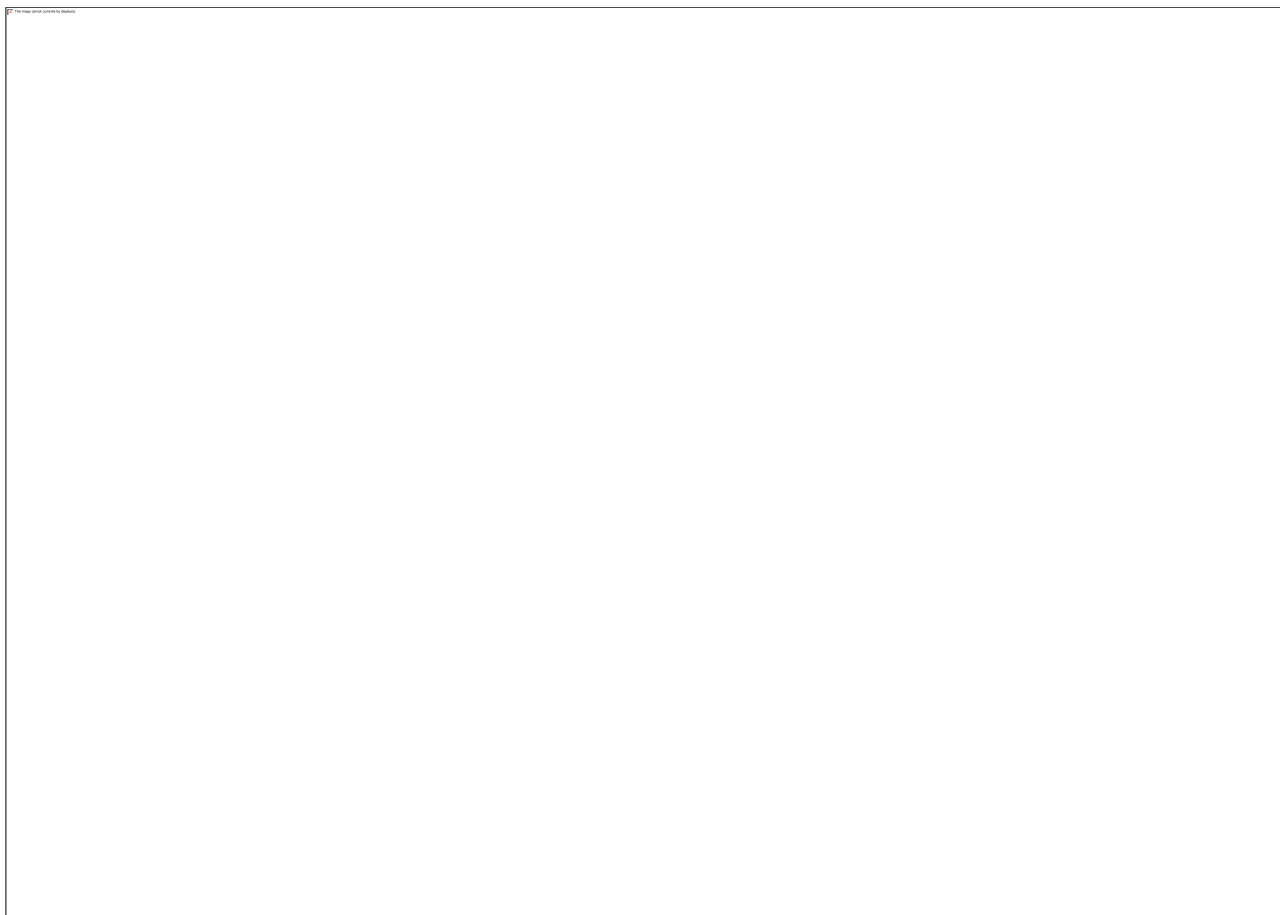
Trench 8 was the area excavated between Trenches 5 and 6. It was 3m wide, north south. The substantial southern stone gable wall (C.809) of the barracks building was uncovered in Trench 8. It was a maximum of 0.52m thick and survived to a depth of 0.35. The wall sat on two off-set foundation plinths (C.818) that were nearly 0.60m deep. These plinths were constructed using mostly mortared sub-angular and angular basalt stones with occasional red brick and slate included in the rough finish.

The upper foundation plinth consisted of two courses, the upper containing bigger stones than the lower. The plinth projected out southwards from the line of the gable proper for a distance of 0.12m and was 0.30m deep.

The lower foundation plinth also consisted of courses of two roughly equally-sized mortared stone. It projected out southwards a distance of 0.28m from the upper course and was also 0.28m deep.

The foundations of the southern gable of the barracks building sat upon a cobbled surface (C.819). The cobbles were sub- to well-rounded beach-rolled stones varying in length from 50mm to 160mm. The cobbled surface occupied the whole of the base of Trench 8 and was uncovered at a depth of 1.20m below modern ground surface. Finds from elsewhere in the trench directly above the cobbles were of 17th century date and this surface was the earliest feature to be uncovered in the trenches excavated in the Outer Ward. A decision was taken not to excavate below the level of the cobbled surface so it is unknown how much earlier stratigraphy and features survives *in situ* below it.

Given that bedrock was uncovered at around 0.20m below modern ground surface in Trench 7, roughly 6m north of Trench 8, but was not observed at a depth of 1.2m within Trench 8 shows that the underlying bedrock either slopes drastically in this part of the castle or else had been removed at some point in the past.



**Fig. 34. Outer Ward. Trenches 5, 6 and 8. Plan of main features, especially the southern gable and footings of the barracks building (C.809 and C.818), walls C.508, C. 510 and C.512 and cobbled surface C.819.**

As Trenches 5 and 8 were located several metres north of the Middle Ward wall of the castle and this stretch of the fortification was defended by a rock-cut ditch until the second quarter of the 13th century it would appear that the cobbled surface represents a later phase of infilling and re-use of this space.

Two later walls (C.508 and C.510) were built against the southern, outer, face of the stone gable wall of the barracks building. Both were aligned north-south and both were located at the western end of Trenches 5 and 8. The most westerly of these walls (C.508/C.810) was a roughly rectangular platform of heavily-mortared large basalt stones which also abutted the inside face of the Outer Ward curtain wall as well as the southern gable of the barracks building (C.809). It was a maximum recorded length within Trenches 5/8 of 2m, north-south, by 1m wide, east- west. The purpose of this masonry is uncertain but it may originally date to the 19th century.



The surface of the wall has been heavily cemented suggesting that it was altered at a later stage, possibly in the 20th century.

Running parallel and 0.20m east of wall C.510 was a less substantial masonry structure (C.510), composed of two courses of mortared stone. It was a maximum recorded length within Trenches 5/8 of 1.90m north-south and was 0.40m wide, east-west. Like wall C.508 it butted against the southern gable of the barracks building and is probably 19th century in date. The function of this slighter wall is also uncertain.

Both the later walls were cut through the western end of a possible 17th century wall (C.512; described below) and also through the dark brown clay loam (C.511) that covered this wall. They were not founded on the cobbled surface (C.819).



**Plate 39. Outer Ward. Trenches 5 and 8. The southern gable and footings of the barracks building (C.809 and C.818), walls C.510 and C.512. From south.**



**Plate 40. Outer Ward. Trenches 5 and 8. The southern gable and footings of the barracks building (C.809 and C.818), walls C. 508, C. 510 and C.512. From south-east.**

#### **3.4.12 Trench 5 (Figs 4, 29, 34-35; Plates 39-43)**

Also sitting on the cobbled surface (C.819) was another, smaller, wall originally uncovered in part during the excavation of Trench 5 and which was the most southerly of the four trenches excavated in the Outer Ward of Carrickfergus Castle.

The wall (C.512) was aligned east-west and was 0.90m south of the stone gable of the barracks building (C.809) and only 0.45m south at the base where the foundations of the gable projected further out. A 3.10m long stretch of the wall was uncovered in Trenches 5/ 8. It was a maximum width of 0.65m and survived to a height of 0.70m. The wall was constructed of heavily mortared basalt stones but with some fragments of red brick in the build. The date of the wall is uncertain but the fact that it contained some red brick means that it is cannot be earlier than the second half of the 16th century, at the earliest, and given the number of 17th century finds from layers above the cobbled surface the wall might well date to the 17th century. As excavation ceased at the level of the cobbled surface (C.819) in both Trenches 5 and 8 it is uncertain what function the wall played.

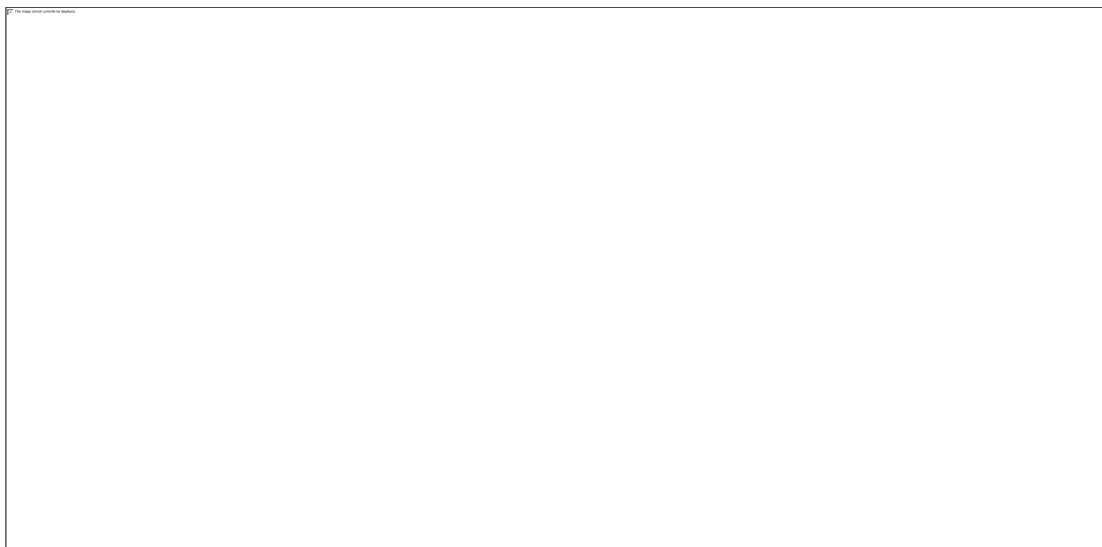
Wall C.512 was cut at its western end by the two later walls C.508 and C.510. It was below a thick layer of clay-loam (C.511) that was up to 0.60m deep and looked as if it had been deposited around the wall in a major episode of infilling. Later horizons within the trench included deposits of sand (C.503 and C.507), building debris (C.502, C.505 and C.506) and topsoil (C.501).



**Plate 41. Outer Ward. Trenches 5 and 8. Wall C.512, cobbles C.819, the southern gable and footings of the barracks building (C.809 and C.818) with later walls C. 508 and C.510 butting against the footings. From east.**



**Plate 42. Outer Ward. Trenches 5 and 8. Wall C.512, cobbles C.819, the southern gable and footings of the barracks building (C.809 and C.818) and the junction with the above-ground east wall of the building. From west.**



**Fig. 35. Outer Ward. Elevation across Trenches 5 and 8. Shows wall C.512, cobbles C.819, and the southern gable and footings of the barracks building (C.809 and C.818).**



**Plate 43. Outer Ward. Trenches 5-8 from the roof of the Keep/ Great Tower. The wall at the bottom of shot is the Middle Ward wall. From south.**

### **3.5 The Finds**

A varied assemblage of artefacts was recovered from the twelve excavated trenches. The most numerous were the more than 7,000 fragments of prehistoric flint but more than 200 late-18th century gunflints were also uncovered. Architectural debris included slate, bricks, cut stone, corroded metalwork. The pottery retrieved included Medieval types such as Medieval Saintonge, Scottish Grey and Scottish White Gritty wares, locally made Carrickfergus wares. Post-Medieval types included Sgraffito, German stonewares and Spongewares. A silver English Short-Cross penny of the early 13th century was the earliest coin from the excavation. Other small finds included clay tobacco pipes, copper alloy thimbles and buttons and slate gaming pieces.

### **4. Discussion**

The 2014 excavation in Carrickfergus Castle uncovered important new and exciting information about the earliest human activity that took place on the promontory where the Medieval castle was later constructed and also about little-known periods of activity within the castle at various periods. All the evidence shows, as is to be expected on a site that has been continuously occupied for more than 800 years, that there are still deep and complex archaeological horizons and structures surviving below the ground here.

McNeill (1981, 68) observed from the, infilled, rock-cut ditch visible below the north-west angle of the Middle curtain wall and from information gleaned from the 1955 and 1962 excavations at the castle that the 'bedrock clearly sloped originally, probably in steps, from the west down to the east'. The 2014 excavations carried out in Trenches 7 in the north to Trench 5 in the south appear to show that the bedrock also slopes from the north down to the south, at least on parts of the promontory.

During the course of the 2014 excavations in Carrickfergus Castle the search for earlier masonry and strata within the Inner Ward was restricted by the virtually intact survival of the late Victorian munitions railway tunnel. In several important locations where earlier walls could have been expected to have survived, the search for Medieval masonry would have required excavation below and hence have caused damage to this important and little known part of the castle. Due to a mixture of health and safety considerations based on the depth of the trenches, loose strata and the lack of foundations of some of the adjacent masonry and the decision not to

excavate through later features uncovered in the trenches, meant only four of the twelve trenches (Trench 1, Trench 2B, Trench 3 (western section) and Trench 7) were fully or partially excavated to bedrock level. Despite this a sequence of six main phases of human activity was recorded across the twelve trenches.

#### 4.1 Prehistoric activity

In four of the excavated trenches (Trench 1, Trench 3 (western section), Trench 2B and Trench 3B) within the Inner Ward layers of clay with a very high flint content was recorded immediately over the bedrock. This flint assemblage comprised more than 7,000 fragments of debitage, mostly Early-Middle Neolithic in date but apart from a couple of flint scrapers contained virtually no formalized tools (Brian Sloan *pers. comm*). The evidence from the 2014 excavations, along with those previously carried out in the Inner Ward (especially Ó Néill, J. and Logue, R. 2002), suggests that the promontory that the castle was later built on was used as an industrial area for the working of flint in the Neolithic. The lack of completed tools indicates that the flint tools being fashioned on the promontory were taken back to the nearby Neolithic settlements for final working.

#### 4.2 Medieval activity

A substantial mortared stone wall, roughly 1.20m wide and Medieval in date, was uncovered close to the southern gable of the store house in Trench 1. The Medieval wall butted the inner face of the eastern curtain wall at the level of the curtain wall footings and ran westwards across the whole of Trench 1, below the west wall of the store house and beyond the limit of excavation. It was built directly on top of the Neolithic flint debitage layer. The wall would appear to represent the southern gable of a Medieval stone building in the Inner Ward, possibly the 'Great Hall' built by John de Courcy. The top course of wall footings of the eastern Inner Ward curtain wall was also uncovered at the eastern end of Trench 3, further north.

The Medieval strata uncovered in Trench 1 would have been the ground floor level of any Medieval building, the area where food was stored and servants would have worked.

It is uncertain why the southern gable of the Store House was not built directly on top of the Medieval wall uncovered in Trench 1 and why this early wall did not survive to a higher level. If was the 'Great Hall' from John de Courcy's time perhaps most of the good masonry was taken away to help construct Hugh de Lacy's new hall in the



outer ward several decades later. Alternatively, perhaps only the lower courses of de Courcy's 'Great Hall' were constructed of stone to protect the hall against water damage and the vast majority of the building's superstructure was constructed of timber.

Amongst the Medieval pottery recovered from the 2014 excavation were sherds of Saintonge (France), Scottish Grey and Scottish White Gritty wares, as well as locally made Carrickfergus wares. A silver English Short-Cross penny of the early 13th century was also discovered.

Evidence for the northern gable of an Anglo-Norman 'Great Hall' was not located in Trench 2 Northern Extension excavation. Apart from the later building stone-such as red brick and slate-evident in the build, the location of the current northern gable of the building in this part of the Inner Ward does not make architectural sense. It both blocks light coming in from the more northerly of the two Medieval windows and obscures some of the architectural detail of the window itself. If there was symmetry to the Anglo-Norman building and given the location of the two extant windows, the projected dimensions of this earlier building suggest that its northern gable probably lie in what is now the Middle Ward, somewhere beyond but close to where the eastern curtain wall of the Inner Ward currently turns back towards the Keep/ Great Tower.

This would mean that the northern section of the Inner Ward wall is a later construction to that of John de Courcy's time and the original northern wall of the Inner Ward may have been longer than currently stands and that it originally met the north-west corner of the Keep at a less extreme angle rather than the 45° junction it current sits at. If it is the case, it could be that the north-east corner of the Inner Ward was altered either when the Middle Ward curtain wall was being constructed-the projected north-west corner of the keep would have been very close to this wall or, possibly, when the extra-mural ditch was filled in and the Outer Ward and the southern half of the promontory was built upon in the second quarter of the 13th century. McNeill has postulated the original use of the buildings known as the Stores below the much later Grand Battery as the location of Hugh de Lacey's 'Great Hall'. If he moved this important building from the Inner to the Outer Ward perhaps the curtain wall of the Inner Ward was altered at this time.

Only future archaeological and geophysical investigation will uncover if this is the case.

#### 4.3 17th century

Wall C.512 and the associated cobbled surface (C.819) uncovered in Trenches 5/8 in the Outer Ward probably reflect 17th century activity in the castle. These features appear to be built over the deposits used to fill up the extra-mural rock-cut ditch that in Medieval period lay in front of the Middle Ward wall.

#### 4.4 Late 18th-early 19th century: *The Store House*

The extant remains of the store house building probably date to the late-18th or early-19th century. The low remains of two of the store house walls, the southern gable and the long western wall survive to a height of roughly 0.60m above modern ground level. There is a blocked-up doorway in the south wall and a blocked-up double doorway in the west wall. The store house used the Medieval eastern curtain wall of the Inner Ward as its long eastern side.

McSkimin notes that buildings within the castle were constructed or rebuilt between 1793 and the winding-down of the castle as an active base between 1816, when it ceased to be an infantry barracks. As the building is noted described as a *Store House* on the 1811 map, it may be that it was constructed in the years after 1793. A cache of more than two hundred late-18th century gunflints uncovered on the excavation, one of the biggest collections ever discovered at a site in Ireland, may also date to this period.

The two stretches of masonry separated by a central granite doorstep that currently make up the northern gable of the store house are more problematic. The wall butts the eastern curtain wall but at not at a right angle and it also partially blocks light coming in though the most northerly of the Medieval windows in the eastern curtain wall of Inner Ward. Excavation against the outer face of the walls and doorstep found that they had virtually no foundations and the walls are all probably a post-1928 construction to make the northern end of the masonry remains in this part of the Inner Ward look more *hall-like*.

Post-Medieval pottery recovered from the excavation included fragments of North-Devon gravel tempered and gravel free ware, Sgraffito ware, German Stoneware, Saintonge Polychrome, Bristol- Staffordshire tankards, Tin glazed earthenware and

Brown and Black glazed earthenware. Fragments of North Devon gravel tempered roof tile and North Devon gravel free tiles were also recovered.

Unsurprisingly for a castle that was continuously occupied for hundreds of years many of the small finds reflected this. These included a thimble, buttons, slate gaming pieces and clay tobacco pipes

#### *4.5 The Late-Victorian Munitions Railway*

The second main Post-Medieval feature to be investigated in the Inner Ward was the late-Victorian munitions light railway. This was constructed in the late 1880s and was intended to facilitate the storage of sea mines, to be deployed in defence of Belfast Lough. These mines were to be unloaded from boats that moored at the pier adjacent to and west of the castle and were to be delivered into the castle by means of a tunnel cut through the rock of the promontory. It is uncertain whether the railways were actually ever put to use

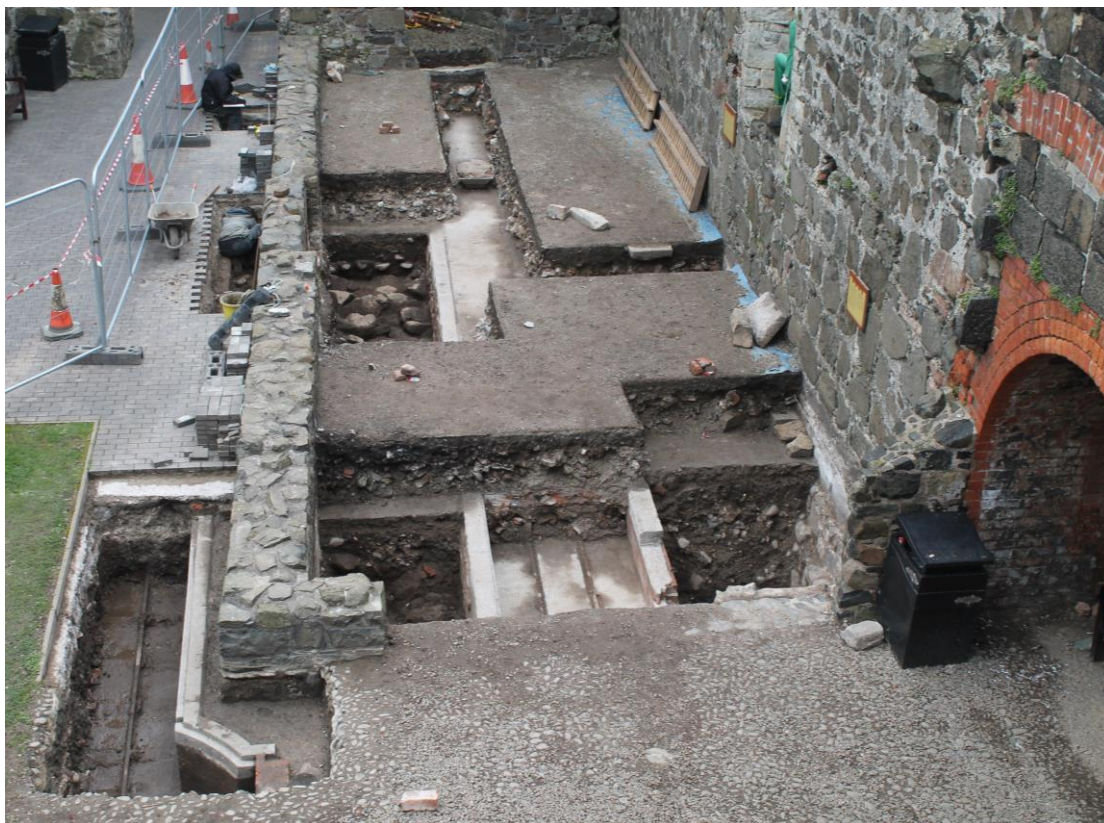
Trench 4 was excavated in the middle of the Inner Ward close to where the munitions railway tunnel broke surface. The line of the tunnel was marked by two parallel granite sleepers, 1.50m apart and aligned roughly east-west, sitting on redbrick piers. A concrete manhole cover with an iron ring was uncovered during the excavation and marked the covering over of the railway tunnel probably in the early 20th century.

When opened, the tunnel and railway line was observed to be still intact several feet below.

Close and east of the location of Trench 4 the munitions line split into two parallel lines and a portion of the turning platform was recorded in Trench 9. The first line, partially uncovered in Trenches 9, 3B and 2B, ran parallel and immediately west of the store house in the direction of the Middle and Outer Ward. The second line ran directly into the store house through the existing entrance in the south gable and its construction removed much, but not all, of the middle section of the Medieval wall in Trench 1.

The filled-in railway line was recorded as far northwards as the middle of Trench 3 in the store house but its terminal was not uncovered during the excavation.

The projected use of the Castle to store sea mines does not appear to have happened and within a few years, possibly around 1900, the railway tunnel was filled in and concreted over. The 2014 excavation revealed that this fascinating feature in



**Plate 44. Inner Ward. The Victorian railway visible in most of the excavated trenches. From south.**

the castle had been backfilled and concreted over but still substantially survives intact below ground. The decision not to excavate below the level of the exposed Victorian munitions railway meant that it was not possible to ascertain the dimensions of the Medieval building. The projected south-west corner and the long western wall of this early building, if they survive, appear to lie underneath the Victorian munitions railway which also runs parallel and west of the long wall of the store house.

The concrete surface of the filled-in munitions railway covers virtually all of the internal area of the store house. Above this was discovered an approximately 0.80m deep layer of loose demolition rubble- brick, stone and mortar and a clay leveling layer on the surface, almost at modern ground level. This rubble is clearly the remains of the Victorian buildings within the castle, previously used by the military, which were leveled post-1928 as part of works transforming the castle into a more visitor-friendly monument.



**Plate 45. Inner Ward. The Victorian railway visible and emanating from Trench 4 before it splits into two parallel sections of track and changing direction, as uncovered in the excavated trenches.**

#### *4.6 The castle in the 20th and 21st centuries.*

Carrickfergus Castle has undergone many changes in the last hundred years. These include the castle winding down as a fortification, its handing over to the new Northern Ireland government and becoming a State Care monument after 1928, and its transformation into one of Northern Ireland's most iconic heritage sites. Many of these changes over that century have involved the demolition of Victorian (and possibly older) barracks buildings. The deep deposits that were later dumped into the Victorian munitions railway to fill up the space and the equally deep demolition deposits encountered within the store house are all testimony to the radical changes that took place. With specialist examination of the artefact assemblages from these various horizons it might be possible to distinguish more clearly the various changes that occurred over this last century of the castle's history

## 5. Conclusions

The excavations in 2014 have filled-in some of the gaps in the historical and architectural story of Carrickfergus Castle. Although speculated on by some previous archaeologists, the extent of prehistoric activity uncovered in those trenches excavated to bedrock in 2014 suggests that significant prehistoric activity took place on the promontory millennia before the castle was built there. The survival of the wide Medieval wall in Trench 1 also hints that stone buildings from this period may still survive in the Inner Ward and perhaps elsewhere in the castle. The sequence of Post-Medieval walls in the Outer Ward, uncovered along the western side of the curtain wall, bears out the cartographic evidence and also proved that- in places at least- deep archaeological strata still survive *in situ*. Finally, the excavation showed that much of the late-Victorian munitions railway survives virtually intact in the Inner Ward (and perhaps beyond). The 2014 excavation has shone a light on this little-recorded aspect of castle history and ironically, given the long and exciting history of the castle, it was the railway that seemed to grab the imagination of many of the several thousand people who visited the excavation while it was being carried out.

## **6. Recommendations for Further Work**

### 6.1 Specialist analysis

It is recommended that suitable specialists are commissioned to identify and provide reports on the main collections of finds including the coin, the pottery, the large amounts of prehistoric flint, the animal bones, gunflints and metal artefacts. For the final report the site director can provide descriptions and accounts on the collection of clay pipes and slate.

### 6.2 GPR survey

It would be of interest to undertake a thorough GPR scan survey of the area immediately adjacent to the outside face of the west wall of the store house to see if earlier Medieval walls can be identified. A similar survey in the Middle Ward along the projected line of the east curtain wall of the Inner Ward might also determine if this circuit of this structure was significantly altered in the past.

### 6.3 Publication

It is recommended that a full excavation report be published in a peer-reviewed journal and/or in a new monograph on the castle.

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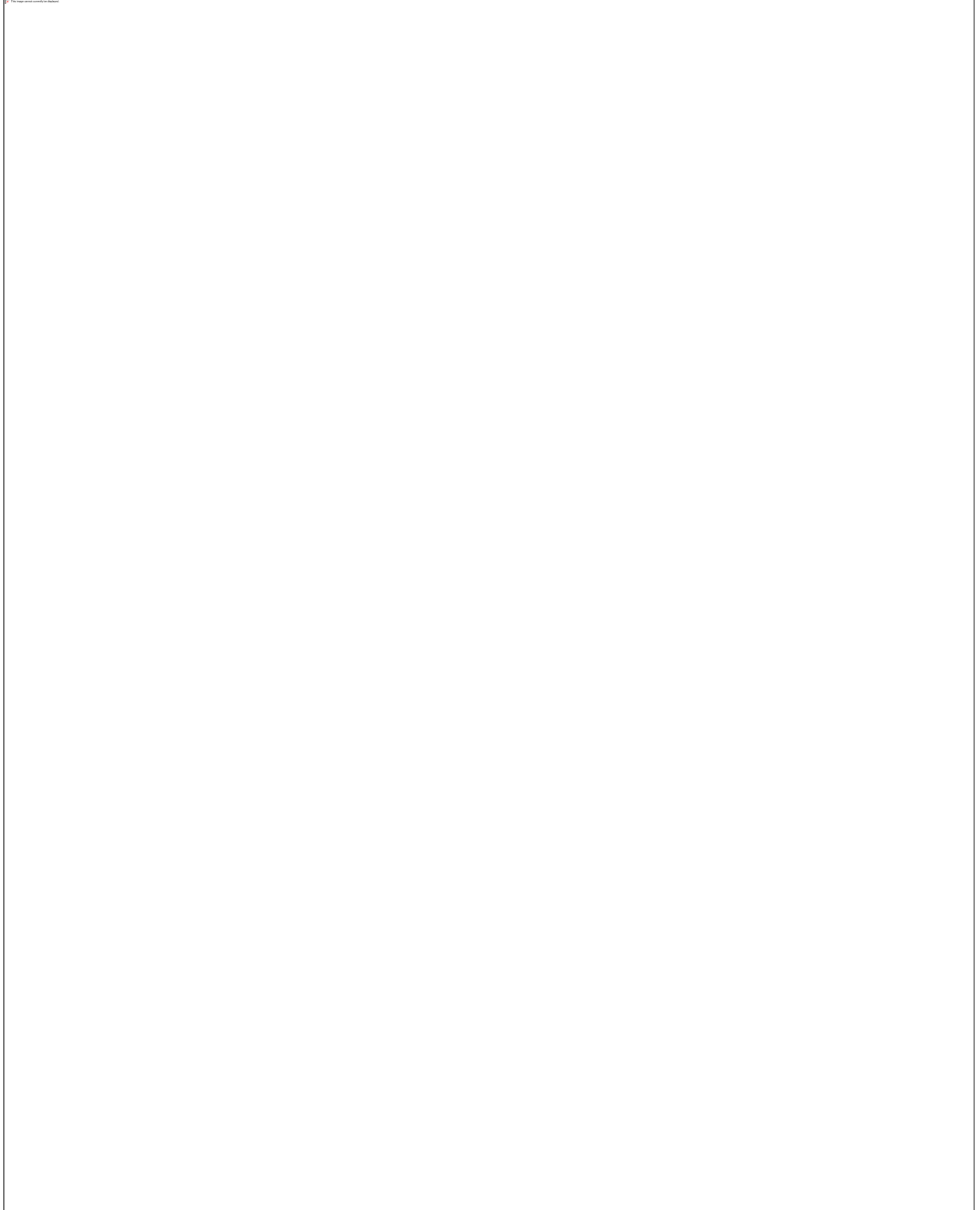
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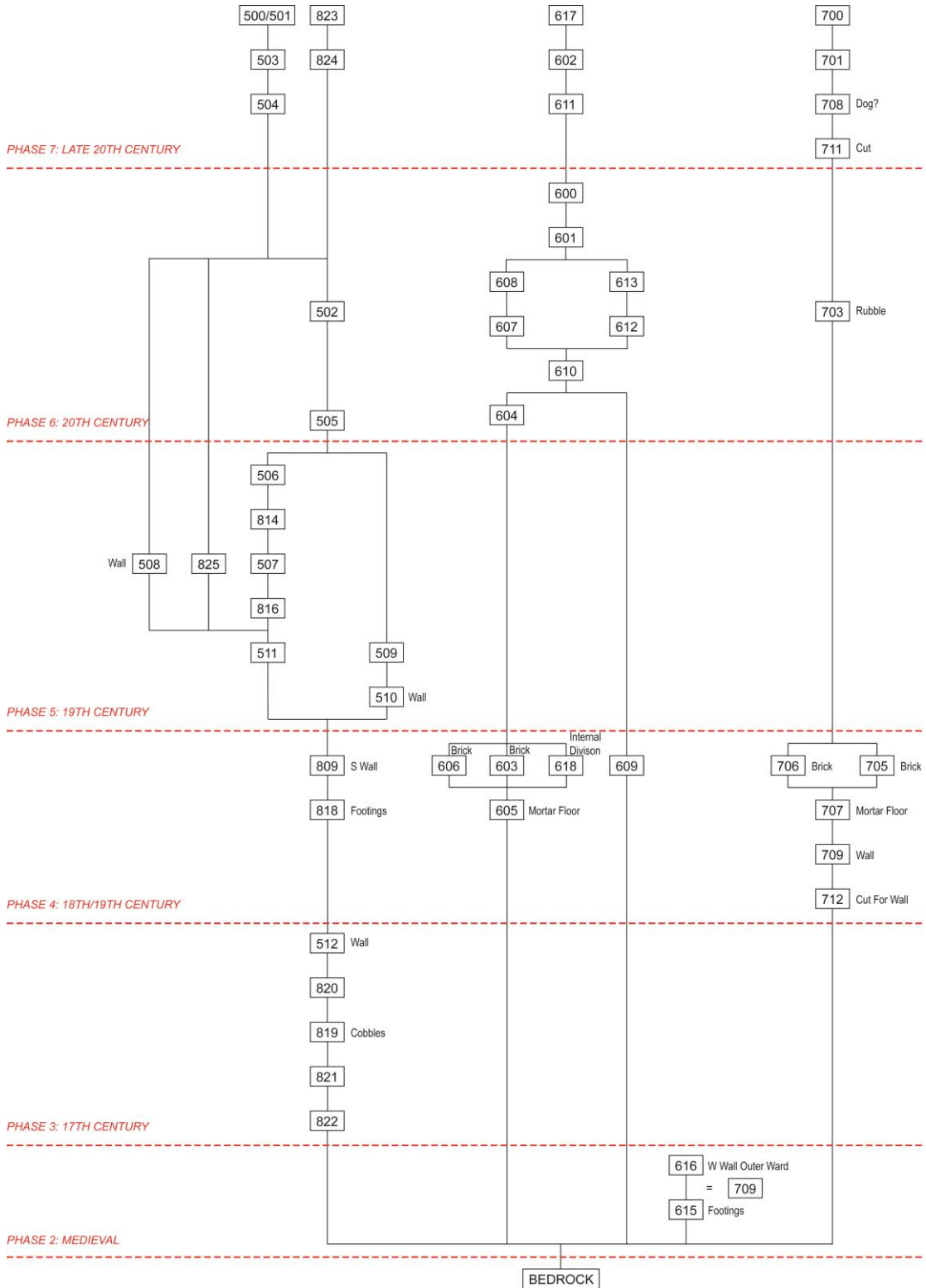
## **8. Appendices**

### **Appendix 1: Harris Matrices**

**Site matrix for the trenches excavated in the Inner Ward (Trenches 1, 2, 2B, 2  
Northern Extension, 3, 3B, 4 and 9)**



**Site matrix for trenches excavated in the Outer Ward (Trenches 5-8)**



## Appendix 2: Context Register

### Carrickfergus Castle: Trench 1

<i>Context No.</i>	<i>Trench 1 Area.</i>	<i>Type.</i>	<i>Description</i>
101	A,B,C	Layer	Gravel dust on membrane - modern
102	A,B,C	Layer	Plastic membrane - modern
103	A,B,C	Layer	Dark brown clay loam - universal deposit
104	A	Layer	Interface between c.103 and rubble c.105
105	A,B,C	Layer	Layer of voided rubble -over c.109 and beside wall c.106
106	A	Masonry	1.15m thick mortar bonded medieval wall
107	A	Masonry	Inner face of eastern stretch of Inner Ward wall
108	A	Layer	Grey brown silty loam - under sand of floor c.109
109	A	Layer	Cement floor - stops at brick wall c.117
110	A	Layer	Cement, possible floor- under c.108
111	A	Layer	Grey brown silty loam - similar deposit to c.108
112	A	Layer	Voided rubble layer - covering c.109 and down the side of wall
113	A	Layer	Layer of small stones and silt - used to level up for floor c.109
114	A	Layer	Layer of sand - under c.113
115	A	Cut	Cut for slot trench - for wall c.117
116	A	Fill	Mortar rich fill - of cut c.115
117	A,B	Masonry	Brick wall, topped with granite
118	B,C	Masonry	Brick wall, topped with granite
119	B	Layer	Thick concrete floor
120	B	Layer	Gritty sandy layer - directly under c.119
121	C	Layer	Cement floor - stops at wall c.118, same as c.109
122	C	Layer	Layer of small stones and silt - used to level up for floor c.121
123	C	Layer	Layer of Sand - under c.122, same as c.114
124	B	Structure	Railway track for munitions tunnel - same as the tracking in Trench
125	C	Layer	Grey brown silty loam - similar to c.108
126	C	Fill	Mortar rich fill - of cut c.127, similar to c.116
127	C	Cut	Cut for slot trench - for wall c.118
128	A	Fill	Fill of slot trench c.115 - below c.116
129	A	Fill	Fill of slot trench c.115 - below c.128
130	C	Fill	Fill of slot trench c.127 - below c.128
131	A	Layer	Sandy layer - at base of slot trench c.115
132	C	Layer	Sandy layer - at base of slot trench c.127, same as c.131
133	A	Layer	Silty layer - found under c.108, between c.110 and c.106
134	A	Layer	Silty clay layer - found under c.108, between c.110 and section
135	C	Masonry	Thick mortar bonded medieval wall - beneath c.125
136	C	Layer	Flint rich brown clay loam - beneath c.125
137	A	Layer	Mortar rich deposit - at base of slot trench c.117
138	A	Layer	Mid brown silty loam to the north of Wall c.106
139	A	Layer	Mortar rich deposit - foundation deposit?
140	A	Layer	Silty loam layer

141	A	Layer	Sandy gravelly layer - beside footings
142	A	Layer	Mid brown silty loam
143	C	Layer	Deposit of large stones - beneath c.136
144	C	Layer	Dark brown silty loam under stones c.143
145	A,C	Layer	Natural bedrock
146	A	Layer	Sandy clay with beach pebbles and washed out mortar
147	C	Masonry	Wall of 19th century barracks building
148	A	Masonry	Wall of 19th century barracks building

### **Carrickfergus Castle: Trench 2**

<i>Trench</i>			
<i>Context No.</i>	<i>No.</i>	<i>Type.</i>	<i>Description.</i>
200	2	Layer	Gravel/pebble layer
201	2	Layer	Quarry dust/hard core layer
202	2	Layer	Dark brown clay loam layer
203	2	Layer	Plastic membrane
204	2	Layer	Fine gravel layer
205	2	Layer	Orange brown, loamy sand
206	2	Layer	Gritty loam, patches of mortar, grey brown
207	2	Layer	Gritty loam, patches of mortar, grey brown
208	2	Layer	Northern end of trench 2, compact stony below 205
209	2	Layer	Mortar layer
210	2	Layer	Possible concrete layer
211	2 ext	Layer	Cobbles
212	2 ext	Layer	Cement gully
213	2 ext	Layer	Brick line, bedded in mortar
214	2 ext	Layer	Granite Block
215	2 ext	Layer	Mortared stone setting
216	2 ext	Layer	Gritty loam bed for cobbles
217	2 ext	Fill	Orange-brown clay
218	2 ext	Layer	Compact clay-loam mottled with mortar
219	2 ext	Layer	Light orange-brown clay patch
220	2 ext	Cut	Cut associated with modern castle maintenance works
221	2 ext	Fill	Grey clay-loam which charcoal flecks beneath c.213
222	2 ext	Fill	Red-brown clay
223	2 ext	Wall	East-west castle wall
224	2 ext	Layer	Mortar layer beneath c.218
225	2 ext	Layer	Yellow sand within c.218
226	2 ext	Layer	Grey brown clay, charcoal rich
227	2 ext	Cut	Cut into 224 and 226 filled by 228
228	2 ext	Fill	Gritty clay loam, fill of c.277
229	2 ext	Layer	Shell midden
230	2 ext	Layer	Mid-brown clay loam (below midden)
231	2b	Layer	Modern dark grey, brick paving
232	2b	Layer	Bedding for brick paving (c.232)

233	2b	Layer	Concrete layer
234	2b	Layer	Loose, dark brown, clay loam with brick and mortar
235	2b	Layer	Compact, dark brown, clay loam with brick and mortar
236	2b	Layer	Thin mortar spread at west of trench
237	2b	Layer	Compact, dark loam with high small stone and some pebble content
238	2b	Layer	Mid-brown, gritty loam
239	2b	Layer	Granite Sleeper
240	2b	Layer	Pebbles set to west of granite sleeper
241	2b	Layer	Grey brown, gritty loam with mortar and brick
242	2b	Layer	Brown, gritty loam with degraded bedrock, brick etc
243	2b	Layer	Brick pier for c.239
244	2b	Layer	Mortar rubble
245	2b	Layer	Brown, clay loam
246	2b	Layer	Brick pier for c.239
247	2b	Layer	Orange brown clay
248	2b	Cut	Cut for light railway through orange brown clay (c.247)
249	2b	Wall	Lower course of north-south wall
250	2b	Wall	Upper course of north-south wall
251	2b	Layer	Grey brown clay immediately below wall (c.249)
252	2b	Layer	Flint layer above bedrock

### **Carrickfergus Castle: Trench 3**

<i>Context No.</i>	<i>Trench No.</i>	<i>Type.</i>	<i>Description.</i>
300	3	Layer	Gravel layer
301	3	Layer	Quarry dust
302	3	Layer	Geotextile layer
303	3	Layer	Dark brown, clay loam
304	3	Layer	Gritty, mortar layer
305	3	Layer	Orange brown sand
306	3	Layer	Mortary loam with clay patches
307	3	Layer	Loose mortar layer
308	3	Layer	Cement floor
309	3	Masonry	Eastern wall of Inner Ward
310	3	Masonry	Footing stones of Inner Ward (c.309)
311	3	Masonry	Cement pillar/pier base
312	3	Masonry	Brick wall at north-west side of trench
313	3	Masonry	Modern top of wall
314	3	Masonry	Corners of wall (either side of recess)
315	3	Masonry	Footings of c.314
316	3	Masonry	Later rebuild of wall (square, flat stones)
317	3	Masonry	Possible earlier stonework below c.316
318	3b	Layer	Paving stones
319	3b	Layer	Cement layer
320	3b	Layer	Concrete layer

321	3b	Layer	Tarmac deposit to the south of trench
322	3b	Fill	Loamy deposit cut through c.320
323	3b	Cut	Cut trough c.320 filled by c.322
324	3b	Layer	Compact gravel under c.321
325	3b	Layer	Deposit of cobble shaped stones
326	3b	Layer	Mortary sand deposit
327	3b	Layer	Mottled deposit with brick, mortar etc
328	3b	Layer	Dark, gravelly loam under c.325
329	3b	Layer	Mixed deposit - brick, mortar, slate etc
330	3b	Masonry	Granite sleeper/kerb running north-west
331	3	Masonry	Granite sleeper/kerb running north-west
332	3	Masonry	Granite sleeper/kerb running north-west parallel to c.331
333	3	Layer	Concrete between c.331 and c.332
334	3	Layer	Concrete layer (same as c.308)
335	3	Layer	Gravel bedding layer for c.334
336	3	Layer	Sand layer below c.335
337	3	Layer	Compact, mottled, mixed clay deposit
338	3	Fill	Rubble fill of clot trench (c.340)
339	3	Fill	Sandy fill of slot trench (c.340) below c.338
340	3	Cut	Cut for slot trench filled by c.338 and 339
341	3	Layer	Loamy flint layer, overlying bedrock
342	3	Layer	Flat stone layer forming rough paving/cobbling
343	3	Layer	Flint layer in dark loam soil matrix
344	3	Layer	orange clayey sand
345	3	Layer	Dark brown loam, similar to c.343, under c.341
346	3	Masonry	Brick and mortar wall supporting granite sleeper/kerb (c.331)
347	3	Masonry	Cement base for granite pier (c.331)
348	3b	Fill	Fill of cut c.329
349	3b	Cut	Cut for construction of light railway line (c.352)
350	3b	Masonry	Red brick wall running east-west under
351	3b	Layer	Surface construction of broken red brick
352	3b	Masonry	Brick wall supporting granite sleeper/kerb (c.330)
353	3b	Layer	Gravel under c.308
354	3b	Layer	Gravelly stony soil

#### **Carrickfergus Castle: Trench 4**

<i>Context No.</i>	<i>Trench No.</i>	<i>Type.</i>	<i>Description</i>
400	4	Layer	Sod layer
401	4	Layer	Dark brown loam - topsoil
402	4	Layer	Dark brown gritty loam - levelling deposit beneath c.401
403	4	Surface	Mid grey compact mortar - at north east of trench
404	4	Cut	Cut into the west of mortared surface c.403 for sewer pipe c.422
405	4	Layer	Dark brown rubble rich deposit
406	4	Cut	Cut for water pipe - into the east of mortared surface c.403



408	4	Surface	Mortar rich deposit at the south of trench
410	4	Masonry	Dressed granite to the south of trench
411	4	Masonry	Dressed granite to the north of trench
412	4	Masonry	Concrete manhole cover with iron ring
413	4	Masonry	Concrete rubble deposit adjacent to c.412
414	4	Surface	Grey brown mortar clay mix surface at the north-east of trench
415	4	Surface	Grey brown mortar clay mix surface at the north-west of trench
416	4	Cut	Cut for manhole cover c.412 into c.413
418	4	Cut	Cut for water pipe at south of trench
419	4	Fill	Dark brown gritty loam - fill of cut 406 for water pipe
420	4	Fill	Dark brown gritty loam - fill of cut 406 for water pipe
421	4	Fill	Dark brown gritty loam - fill of cut c.404 for sewer pipe
422	4	Pipe	Sewer pipe at the north of trench
423	4	Pipe	water pipe at the north of trench
425	4	Layer	Grey brown sandy loam - beneath c.403 and cut by c.404
426	4	Layer	Grey brown sandy loam - beneath c.402 at north-west of trench
427	4	Layer	Grey brown sandy loam rubble at the south-east of trench
428	4	Layer	Dark brown clay loam - adjacent to c.410 and c.411
429	4	Layer	Compact greyish cream mortar - adjacent to c.413
430	4	Layer	Thin deposit of clinker adjacent to c.403, c.410, c.411

#### **Carrickfergus Castle: Trench 5**

<i>Context No.</i>	<i>Trench No.</i>	<i>Type.</i>	<i>Description.</i>
500	5	Layer	Sod Layer
501	5	Layer	Dark brown loam - Topsoil
502	5	Layer	Dark brown loam with mortar and brick
503	5	Layer	Mid brown sandy loam
504	5	Layer	Grey brown loam at the north end of trench
505	5	Layer	Mortar deposit beneath c.502 - same as c.812
506	5	Layer	Mixed deposit of mortar, soil and stone - same as c.813
507	5	Layer	Sand layer - same as c.815
508	5	Masonry	Wall with cemented top at western end of trench, possible platform
509	5	Rubble	Rubble deposit between c.508 and c.510 - same as c.811
510	5	Masonry	Remains of wall to the east of c.509 and c.508 - same as c.826
511	5	Layer	Dark brown loamy clay between wall c.512 and north facing section
512	5	Masonry	Wall aligned east-west

#### **Carrickfergus Castle: Trench 6**

<i>Context No.</i>	<i>Trench No.</i>	<i>Type.</i>	<i>Description.</i>
600	6	Layer	Sod Layer
601	6	Layer	Dark brown loamy clay - topsoil
602	6	Layer	Sand associated with catapult platform - modern

603	6	Masonry	Brick wall at western end of trench - same as c.805
604	6	Layer	Rubble and mortar deposit - same as c.814
605	6	Surface	Concrete floor
606	6	Wall	Wall at eastern end of trench
607	6	Cut	Cut for wall c.606
608	6	Fill	Dark brown sandy loam fill of cut c.607
609	6	Layer	Rubble and mortar deposit at western end of trench
610	6	Layer	Dark brown sandy loamy rubble layer above c.604
611	6	Cut	Cut for catapult platform
612	6	Cut	Possible cut associated with wall c.603
613	6	Fill	Dark brown sandy loam fill of cut c.612
614	6	Masonry	Stone wall at eastern end of trench
615	6	Masonry	Outer ward wall
616	6	Masonry	Outer ward wall footings
617	6	Layer	Concrete upper layer of catapult platform
618	6	Surface	Change in concrete c.605 - possible partition

#### Carrickfergus Castle: Trench 7

<i>Context No.</i>	<i>Trench No.</i>	<i>Type.</i>	<i>Description.</i>
700	7	Layer	Sod Layer
701	7	Layer	Dark brown sandy loam - topsoil
702	7	Layer	Dark brown loam at eastern edge of trench
703	7	Layer	Mortar rich rubble deposit in centre of trench
704	7	Layer	Dark brown loam adjacent to curtain wall c.710
705	7	Masonry	Brick wall at western end of trench
706	7	Masonry	Brick wall at eastern end of trench
707	7	Mortar Floor	Mortar floor in centre of trench
708	7	Bag	Plastic rubble sack under c.703
709	7	Masonry	Low wall at east of trench
710	7	Masonry	Inner face of western outer ward curtain wall
711	7	Cut	Cut for plastic rubble sack
712	7	Cut	Cut for stone wall c.709 in east of trench
713	7	Layer	Rubble fill to west of c.705

#### Carrickfergus Castle: Trench 8

<i>Context</i>			
<i>No.</i>	<i>Trench No.</i>	<i>Type.</i>	<i>Description.</i>
801	8	Layer	Sod Layer
802	8	Layer	Topsoil
803	8	Layer	Dark brown mixed loam, rubble and mortar - same as c.610
804	8	Layer	Rubble and mortar mix - same as c.604
805	8	Masonry	Brick wall - same as c.603
806	8	Surface	Concrete floor - same as c.605

807	8	Layer	Mortar layer to the west of c.805 - same as c.609
808	8	Lens	Gravelly layer beside Trench 5
809	8	Masonry	Wall aligned east-west
810	8	Masonry	Cemented bit at western end of trench - same as c.508
811	8	Layer	Rubble deposit to the east of c.810 - same as c.509
812	8	Layer	Mortar layer - same as c.505
813	8	Layer	Sandy layer below c.812 - same as c.506
814	8	Layer	Compact dark greyish brown sandy clay
815	8	Layer	Yellowish brown to greenish brown sand - same as c.507
816	8	Layer	Compact mixed clay below c.815
817	8	Layer	Dark brown mixed deposit of clay, mortar, brick, stone and loam
818	8	Masonry	Foundation plinth
819	8	Surface	Cobbles at base of trench
820	8	Layer	Dark brown clay between cobbles c.819
821	8	Layer	Dark orange brown clay below cobbles c.819
822	8	Layer	Yellow brown sand below clay c.821
823	8	Masonry	Modern kerb at eastern end of trench
824	8	Layer	Cement/stone at eastern end of trench
825	8	Masonry	Stones at eastern end of trench
826	8	Masonry	same as c.510

#### **Carrickfergus Castle: Trench 9**

<i>Context No.</i>	<i>Trench No.</i>	<i>Type.</i>	<i>Description.</i>
901	9	Layer	20th/21st century concrete path edging
902	9	Layer	Cobbles set into concrete
903	9	Layer	Concrete surface, contemporary with c.901 and c.902
904	9	Layer	Grey-green rubbly layer - prep surface for c.901-903
905	9	Layer	Earlier concrete pathway/surface
906	9	Layer	Shaley, grey clay with brick, below c.904 and c.905
907	9	Layer	Deposited layer of morar rubble, south end of trench
908	9	Layer	Deposited layer of morar rubble, north end of trench
909	9	Layer	Thick deposit of grey clay with mortar and brick
910	9	Layer	Voided brick layer railway line
911	9	Layer	Pinkish mortar rubble deposit, south end of the trench
912	9	Layer	Sticky, grey brown clay with brick and mortar
913	9	Layer	Voided grey brown clay, brick rich
914	9	Layer	Deposited mortar rubble with stone , loose and voided
915	9	Layer	Sticky, grey brown clay with brick and mortar
916	9	Cut	Almost vertical cut through C.907 and c.908
917	9	Structure	Concrete light railway turntable
918	9	Structure	Light railway turntable, original ironwork, rails and sleepers
919	9	Layer	Grey concrete-brick, pathway/surface - 21st century
920	9	Masonry	Granite edging for light railway line
921	9	Masonry	Brick blocking light railway line to the east of trench
922	9	Layer	Deposited rubble material with brick and concrete

923	9	Layer	Unexcavated area between c.920 and c.924
924	9	Masonry	Upstanding wall running through trench
925	9	Layer	Clay over 922/906
926	9	Layer	Ash layer below c.912
927	9	Layer	Ash layer below c.926
928	9	Layer	Ash layer below c.927

### Appendix 3: Drawing Register

Drawing No.	Trench No.	Type	Scale	Description
1	4	Plan	1:20	Mid-ex plan showing C403&C408
2	2	Section	1:10	West facing section C200-210
3	2	Section	1:10	North facing section C200-210
4	4	Plan	1:20	Post-ex plan C412, 413, 410
5	4	Section	1:10	North facing section
6	4	Section	1:10	South facing section
7	4	Section	1:10	East facing section
8	4	Section	1:10	West facing section
9	3 East	Section	1:10	North facing section
10	3 East	Section	1:10	South facing section
11	3 East	Section	1:10	East facing section
12	3 East	Elevation	1:10	West facing section
13	3 East	Plan	1:20	Post-ex plan, surface of C308
14	3 West	Section	1:10	West facing section
15	3 West	Section	1:10	South facing section
16	3 West	Section	1:10	North facing section
17	Baulk 3	Section	1:10	North facing section of baulk between 3E and 3W
18	1 East	Plan	1:20	C105-109
19	1 West	Section	1:10	West facing section
20	1 East	Plan	1:20	Following removal of C105
21	3	Elevation	1:10	East facing elevation of western wall
22	2 Ext	Plan	1:20	Plan showing C213-218
23	7	Section	1:10	East facing section
24	7	Section	1:10	South facing section
25	7	Section	1:10	West facing section
26	7	Section	1:10	North facing section
27	7	Plan	1:20	Post-ex plan
28	2 Ext	Plan	1:20	Post-ex plan
29	2 Ext	Section	1:10	West facing section
30	5	Section	1:20	North facing section
31	5	Section	1:20	South facing section
32	5	Plan	1:20	Post-ex plan
33	5	Section	1:20	West facing section
34	6	Plan	1:20	Post-ex plan
35	6	Section	1:10	West facing section
36	6	Section	1:10	South facing section
37	6	Section	1:10	North facing section
38	2 Ext	Plan	1:20	Post removal C218
39	1	Plan	1:20	Post extension of trench
40	7 Ext	Plan	1:20	Post ex plan of extension
41	2 Ext	Plan	1:20	Plan of C229 & C227

42	6	Plan	1:20	Overlay of Drawing No.34
43	2 Ext	Section	1:10	South faing section
44	2 Ext	Section	1:10	West facing section
45	2 Ext	Section	1:10	North facing section
46	2 Ext	Section	1:10	East facing section
47	1	Plan	1:20	Following excavation of C115 & C127
48	8	Plan	1:20	Walls and C806-814
49	1	Plan	1:20	Surfaces of C140 and C143
50	3	Plan	1:20	Following removal of concrete
51	3	Plan	1:20	Overlay of Drawing No. 50
52	3	Section	1:10	South facing section
53	3	Section	1:10	North facing section
54	3	Section	1:10	East facing section
55	3	Plan	1:20	Bedrock
56	1	Plan	1:20	Extent of excavations and bedrock
57	1 East	Section	1:10	East facing section
58	1	Section	1:10	South facing section
59	3	Section	1:10	North facing section
60	3	Section	1:10	South facing section
61	1	Section	1:10	East facing section
62	3	Section	1:10	West facing section
63	1	Section	1:10	North facing section
64	1	Section	1:10	West facing section
65		Section	1:10	
66	2b	Plan	1:20	Showing Cut C248
67	9	Plan	1:10	Post-ex plan
68	5/6/8	Plan	1:20	Plan of Trenches 5,6 & 8
69	9	Section	1:20	East facing section
70	5/8	Profile	1:10	Profile through walls
71	5/8	Section	1:20	Adiition to Drawing No. 33
72	2b	Section	1:10	West facing section and elevation
73	8	Section	1:10	West facing section
74	5/8	Section	1:10	East facing section
75	9	Section	1:10	South facing section
76	9	Section	1:10	North facing section
77	9	Elevation	1:10	West facing section
78	2b	Section	1:10	North facing section
79	2b	Section	1:10	South facing section
80	2b	Section	1:10	East facing section
81	2b	Plan	1:20	Post-ex plan
82	3b	Plan	1:10	Post-ex plan
83	3b	Elevation	1:10	West facing section and elevation
84	3b	Section	1:10	North facing section
85	3b	Section	1:10	South facing section
86	3b	Elevation	1:10	East facing elevation of western wall

#### Appendix 4: Sample Register

<i>Trench No.</i>	<i>Type.</i>	<i>Context No.</i>	<i>Sample No.</i>	<i>No. of Bags/Bricks</i>	<i>Reason for Sampling</i>
1	Mortar	110	2	2	
2B	Soil	247	6	1	
2B	Soil	251	7	1	
2 Ext	Soil	229	1	8	
2B	Brick	246	17	1	
3	Soil	341	3	1	
3	Soil	343	4	1	
3	Soil	344	5	2	
5	Brick	512	14	Half a brick	
5	Mortar	512	15	1	
8	Brick	805	16	1	Barrick building/ brick plinth
8	Brick	809	12	1	Foundations of wall
8	Mortar	809	13	1	Foundations of wall
8	Brick	818	8	1	Foundations of wall
8	Mortar	818	9	1	Foundations of wall
8	Brick	818	10	7 fragments	Foundation plinth of wall
8	Mortar	818	11	1	Foundations of wall

## Appendix 5: Photographic Register

### 11<sup>th</sup> February 2014

Photo No.	Trench	Description
IMG_0278		Inner Ward. Store House. Removing modern gravel. From south.
IMG_0279		As IMG_0278.
IMG_0282	4	Trench pre-excitation. From south-west.
IMG_0283	4	As IMG_0282.
IMG_0284	4	As IMG_0282.
IMG_0289	4	As IMG_0282.
IMG_0291	4	Checking for service cables pre-excitation. From south-east.
IMG_0292	4	As IMG_0291.
IMG_0293	4	As IMG_0291. From east.
IMG_0294	4	As IMG_0293.
IMG_0295	4	As IMG_0291.
IMG_0298	3	Laying out Trench 3. From south.
IMG_0300	2/3	Laying out Trenches 2 and 3. From south.
IMG_0301	2/3	Laying out Trenches 2 and 3. From south.
IMG_0304	4	De-sodding Trench 4. From south.
IMG_0305		As IMG_0304.
IMG_0307	2/3	Preliminary excavation of Trenches 2 and 3. From south.
IMG_0310	2/3	Preliminary excavation of Trenches 2 and 3. From south.
IMG_0311	4	De-sodding Trench 4. From south-east.
IMG_0312	4	De-sodding Trench 4. From south-east.
IMG_0313	2	Preliminary excavation of Trench 2. From south.
IMG_0314	2	Preliminary excavation of Trench 2. From south.
IMG_0316	2	Removal of gravel onto modern plastic membrane. From south.
IMG_0317	2	As IMG_0316.
IMG_0318	2	As IMG_0316.
IMG_0319	2	C.203. From south.
IMG_0320	2	C.203. From south.
IMG_0321	2	C.203. From south.
IMG_0322	2	C.203. From south.
IMG_0323	2	C.203. From south.
IMG_0324	2	C.203. From south.
IMG_0327	4	C.401. From north.
IMG_0328	4	C.401. From north.
IMG_0329	4	C.401. From south
IMG_0330	4	C.401. From south.

### 12<sup>th</sup> February 2014

Photo No.	Trench	Description
IMG_0355	2	C.205 and C.206. From west.
IMG_0357	2	C.205, C.206 and C.207. From south.
IMG_0358	2	After removal of C.205. From south.



IMG_0359	2	As IMG_0358. Detail. From west.
IMG_0360	4	C.402 and C.403. From north.
IMG_0361	4	C.402 and C.403. From south.

**13<sup>th</sup> February 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_0362	2	C.209. From south.
IMG_0363	2	C.209. From west.
IMG_0364	2	C.209. Detail. From south.
IMG_0365	2	C.209 during excavation. From south.
IMG_0366	4	Manhole cover (C.412), tarmac surface (C.413) and southern sleeper of Late-Victorian munitions railway (C.410). From south.
IMG_0367	4	Manhole cover (C.412), tarmac surface (C.413), southern sleeper of Late-Victorian munitions railway (C.410) and layer C.429. From south.
IMG_0368	4	Manhole cover (C.412), tarmac surface (C.413) and southern sleeper of Late-Victorian munitions railway (C.410). From east.
IMG_0370	4	Manhole cover (C.412), tarmac surface (C.413), southern sleeper of Late-Victorian munitions railway (C.410) and layer C.429. From north.
IMG_0372	4	Manhole cover (C.412), tarmac surface (C.413) and southern sleeper of Late-Victorian munitions railway (C.410). From west.
IMG_0375	4	Manhole cover (C.412), tarmac surface (C.413), southern sleeper of Late-Victorian munitions railway (C.410) and layer C.429. From south-east.
IMG_0376	4	Manhole cover (C.412), tarmac surface (C.413), southern sleeper of Late-Victorian munitions railway (C.410) and layer C.429. From south.
IMG_0377	4	Manhole cover (C.412), tarmac surface (C.413), southern sleeper of Late-Victorian munitions railway (C.410) and layer C.429. From south.
IMG_0379	4	Manhole cover (C.412), tarmac surface (C.413), southern sleeper of Late-Victorian munitions railway (C.410) and layer C.429. From north.
IMG_0380	2	Dermot removing the last of C.209 onto concrete surface C.210. From north-west.
IMG_0381	2	Grace removing the last of C.209 onto concrete surface C.210. From south-west.

**14<sup>th</sup> February 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_0384	2	South-facing section face at level of concrete floor C.210. From north.
IMG_0385	2	As IMG_0384.

IMG_0386	2	West- facing section face at level of concrete floor C.210. Detail. From west.
IMG_0387	2	West- facing section face at level of concrete floor C.210. Detail. From west.
IMG_0388	2	Grace and Sarah cleaning concrete surface C.210. From south.
IMG_0389	2	Grace and Sarah cleaning concrete surface C.210. From south.
IMG_0391	2	Working shot of trench being excavated at level of C.210. From south.
IMG_0392	4	Working shot of trench being excavated. From south-east.
IMG_0394	2	Trench at level of C.210. From south-west.
IMG_0395	2	Trench at level of C.210. From south.
IMG_0398	2	Detail of west-facing section at level of C.210. From west.
IMG_0399	2	Trench at level of C.210. From south-west.

**17<sup>th</sup> February 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_3926	4	Contexts 410-415. From north.
IMG_3927	4	Manhole cover (C.412), tarmac surface (C.413), sleepers of Late-Victorian munitions railway (C.410 and C.411). From east.
IMG_3928	2	Trench fully excavated to level of concrete floor C.210. From south.
IMG_3930	2	As IMG_3928.
IMG_3931	2	Trench fully excavated to level of concrete floor C.210. From north.
IMG_3932	2	Trench fully excavated to level of concrete floor C.210. From north.
IMG_3933	2	Trench fully excavated to level of concrete floor C.210. From north.
IMG_3941	2	Detail of south-east corner of trench excavated to level of concrete floor C.210. From north.
IMG_3942	2	South-facing section of trench excavated to level of concrete floor C.210. From south.
IMG_3943	2	Detail of north-east corner of trench excavated to level of concrete floor C.210. From west.
IMG_3944	2	Detail of west-facing section of trench excavated to level of concrete floor C.210. From west, moving southwards along the trench.
IMG_3945	2	Detail of west-facing section of trench excavated to level of concrete floor C.210. From west, moving southwards along the trench.
IMG_3946	2	Detail of west-facing section of trench excavated to level of concrete floor C.210. From west, moving southwards along the trench.
IMG_3947	2	Detail of west-facing section of trench excavated to level of

		concrete floor C.210. From west, moving southwards along the trench.
IMG_3948	2	Detail of west-facing section of trench excavated to level of concrete floor C.210. From west, moving southwards along the trench.
IMG_3949	2	South-east corner of trench excavated to level of concrete floor C.210. From north-west.
IMG_3950	2	North-facing section of trench excavated to level of concrete floor C.210. From north.
IMG_3951	3	Eastern end of trench. C.303. From west.
IMG_3952	2/3	C.303 and southern end of Trench 2. From west.
IMG_3953	3	Eastern end of trench. C.304 and C.305. From west.
IMG_3954	3	Eastern end of trench. C.304 and C.305. From south.
IMG_3955	3	Eastern end of trench. C.305 fully uncovered. From west.
IMG_3956	4	Water pipe C.423 in cut C.406, sewer pipe C.422 in cut C.404, C.415, manhole cover (C.412), tarmac surface (C.413), sleepers of Late-Victorian munitions railway (C.410 and C.411). From north.
IMG_3958	4	As IMG_3956.
IMG_3959	4	Detail of where modern sewer pipe C.422 in cut C.402 cuts through the southern wall of the Late Victorian munitions railway. From north.

**18<sup>th</sup> February 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_3966	3	Western end of trench and blocked-up entrance in the west wall of the Store House. C.305. From east.
IMG_3967	3	Western end of trench. C.305. From west.
IMG_3968	3	Western end of trench and blocked-up entrance in the west wall of the Store House. C. 305. From north.
IMG_3969	3	Eastern end of trench. Trench excavated to level of concrete. Floor C.308 and stone footings of the eastern wall of the Inner Ward also visible. From west.
IMG_3970	3	Eastern end of trench. Trench excavated to level of concrete. Floor C.308 and stone footings of the eastern wall of the Inner Ward also visible. From north.
IMG_3971	3	As IMG_3970.
IMG_3972	3	Eastern end of trench. Trench excavated to level of concrete. Floor C.308 and stone footings of the eastern wall of the Inner Ward also visible. From south.
IMG_3974	3	As IMG_3972.
IMG_3975	3	Eastern end of trench. Temporary east-facing section of trench at level of concrete floor C.308. From east.
IMG_3976	3	As IMG_3975.
IMG_3977	3	As IMG_3975.
IMG_3980	3	Eastern end of trench. South-facing section of trench at level of concrete floor C.308. From south.
IMG_3981	3	Eastern end of trench. Stone footings of the eastern wall of

		the Inner Ward. From west.
IMG_3982	3	As IMG_3981.
IMG_3983	3	Eastern end. Line of eastern side of filled-in Late-Victorian railway visible in base of trench at level of concrete C.308.
IMG_3984	3	Eastern end of trench. Stone footings of the eastern wall of the Inner Ward. From west.
IMG_3985	3	As IMG_3984.
IMG_3986	3	Eastern end of trench. Detail of south-facing section. From south.
IMG_3987	3	Eastern end. Eastern side of filled-in Late-Victorian railway visible in base of trench at level of concrete C.308.
IMG_3988	3	Eastern end of trench. North-facing section of trench at level of concrete floor C.308. From north.
IMG_3989	3	Eastern end of trench. South-facing section of trench at level of concrete floor C.308. From south.
IMG_3990	4	Manhole cover (C.412) removed and looking down into the Late-Victorian munitions railway with later water pipes cut into it. From south.
IMG_3991	4	As IMG_3990 but from west.
IMG_3992	4	As IMG_3990.
IMG_3993	4	As IMG_3990. Detail.
IMG_3994	4	Harry photographing the Late-Victorian munitions railway below Trench 4. From south.
IMG_3995	4	Manhole cover (C.412) removed and looking down into the Late-Victorian munitions railway. From west.
IMG_3996	4	Red brick wall below Trench 4.
IMG_3997	4	Later water pipes inserted through the south wall of the Victorian munitions tunnel.
IMG_3998	4	Later water pipes inserted through both the wall that blocked the Late-Victorian munitions railway and the walls of the railway tunnel itself.
IMG_3999	4	Below Trench 4. The later redbrick wall, aligned north-south, blocking the Late-Victorian munitions railway tunnel and containing a water pipe almost at the level of the railway lines. From west.
IMG_4000	4	As IMG_3999.

**19<sup>th</sup> February 2014**

Photo No.	Trench	Description
IMG_4001	4	Manhole cover (C.412) removed and looking down into the Late-Victorian munitions railway with later water pipes cut into it. From east.
IMG_4003	3	Western end of trench. South-facing section. Trench excavated to level of concrete floor C.308. From south.
IMG_4005	3	Western end of trench at level of concrete floor C.308. Blocked-up entrance in west wall of Store House. From east.
IMG_4006	3	Western end of trench at level of concrete floor C.308.

		West-facing section from west. Also visible is the eastern end of Trench 3 and temporary baulk and to the left the southern end of Trench 2.
IMG_4008	3	As IMG_4006. Detail.
IMG_4009	3	Western end of trench. North-facing section. Trench excavated to level of concrete floor C.308. From north.
IMG_4010	3	As IMG_4009.
IMG_4011	3	Western end of trench. South-facing section and blocked-up doorway in west wall of the Store House. Trench excavated to level of concrete floor C.308. From south.
IMG_4012	3	As IMG_4011.
IMG_4013	3	Western end of trench at level of concrete floor C.308. Line of western edge of Late-Victorian munitions railway visible in the concrete. From west.
IMG_4014	2 Nth Ext/ 2	Modern material C.200 removed prior to excavation proper beginning. From north.
IMG_4016		2 nth Ext/ 2 As IMG_4014.
IMG_4017	1	Eastern end of trench. Medieval wall C.106/C.135. Also in shot is the inner face of the eastern curtain wall of the Inner Ward and the south wall of the Store House. From west.
IMG_4018	1	As IMG_4017.
IMG_4019	1	As IMG_4017.
IMG_4020	1	As IMG_4017.
IMG_4021	1	As IMG_4017 but from north.
IMG_4022	1	As IMG_4021.
IMG_4023	1	As IMG_4017.

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Photo No.	Trench	Description
IMG_4027		Outer Ward. General location of Trenches 5-8 pre-excavation and after model battering ram and trebuchets had been removed. From north.
IMG_4028		As IMG_4027 but from south.
IMG_4029	1	Northern extension to eastern side of trench at level of C.104. From west.
IMG_4030	1	As IMG_4029.
IMG_4031	1	As IMG_4029 but from north.
IMG_4032	1	As IMG_4031.
IMG_4034	6	Trench after de-sodding. From east.
IMG_4035	5	Trench after de-sodding. From east.
IMG_4036	5	As IMG_4035.

**21<sup>th</sup> February 2014**

Photo No.	Trench	Description
IMG_4038	1	Northern extension to eastern side of trench. Rubble C.105 removed onto concrete surface C.109. From north.
IMG_4041	1	As IMG_4038 but from west.

IMG_4042	1	Eastern end of trench. Medieval wall C.106/C.135. Also in Shot is the inner face of the eastern curtain wall of the Inner Ward and the south wall of the Store House. From north.
IMG_4043	1	As IMG_4042.
IMG_4045	1	The outside face of the eastern red brick wall of the Late-Victorian munitions railway C.117 as first uncovered. From east.
IMG_4046	1	Cut stone immediately above concrete surface C.109 and against the inner face of the eastern curtain wall of the Inner Ward. From north.
IMG_4047	1	As IMG_4046.
IMG_4048	1	Eastern side of trench. Overhead shot showing Medieval wall C.106/C.135, the inner face of the eastern curtain wall of the Inner Ward, the south wall of the Store House and concrete surface C.109. From south.
IMG_4051	1	As IMG_4048.
IMG_4052	5	Surface of C.502. From east.

**24<sup>th</sup> February 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_4053	3	Northern extension to western end of trench to uncover more of the blocked-up entrance in the west wall of the Store House. Trench excavated to level of concrete surface C. 308. From south.
IMG_4054	3	Detailed shots of the blocked-up entrance in the west wall of to the Store House at the level of concrete surface C.308. Shots
IMG_4060		move from the north to south. All taken from the east.
IMG_4061 to IMG_4066:		Trench 3, more detailed shots of the blocked-up entrance in the west wall of the Store House at the level of concrete surface C.308. From various angles.
IMG_4067	3	As IMG_4053.
IMG_4068 to IMG_4082		Trench 3, more detailed shots of the blocked-up entrance in the west wall of the Store House at the level of concrete surface C.308. From various angles.
IMG_4083	1	As IMG_4042.
IMG_4085	1	As IMG_4042.
IMG_4087	1	Base of the inner face of the eastern curtain wall of the Inner Ward (C.107), top offset footing (C.151) and the top of the middle offset footing (C.150) and junction of Medieval wall C.106/ C.135 during excavation. From west.
IMG_4088	1	As IMG_4087.
IMG_4089	1	As IMG_4087 but from north-west.
IMG_4090	1	As IMG_4089.
IMG_4091	1	East-facing section, southern end, of the temporary baulk in the middle of the trench. From east.
IMG_4092	1	East-facing section, middle section, of the temporary baulk

		In the middle of the trench. The outside face of the eastern red brick wall C.117 of the Late-Victorian munitions railway is visible. From east.
IMG_4093	1	East-facing section, northern section, of the temporary baulk in the middle of the trench. From east.
IMG_4094	2 Nth Ext	Trench after C.216 removed. From west.
IMG_4095	7	Trench after removal of topsoil C.701. From east.
IMG_4096	7	Trench after removal of topsoil C.701. From west.
IMG_4097	7	Eastern end of trench after removal of C.702. <u>Red brick Plinth C.706</u> starting to be uncovered. From west.
IMG_4098	7	Western end of trench after removal of C.704. <u>Red brick plinth C.705</u> starting to be uncovered. Immediately adjacent to the inner face of the Outer Ward curtain wall. From west.
IMG_4099	1	Western side of trench excavated to the level of concrete surface C.109. Temporary baulk to right of shot. From south.
IMG_4100	1	Western side of trench excavated to the level of concrete surface C.109. West-facing section of temporary baulk. From west.

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Photo No.	Trench	Description
IMG_4104	5	Masonry C.508/C.810, C.510/C.826, surface of C.507 and C.509. From east.
IMG_4105	5	Masonry C.508/C.810, C.510/C.826, surface of C.511 and C.512. From west.
IMG_4106	5	As IMG_4023.
IMG_4107	7	Walls C.709, C.706, surface C.712 and bedrock. From east.
IMG_4108	7	As IMG_4107 but from west.
IMG_4109	7	As IMG_4023 but from overhead.
IMG_4110	1	Eastern side of trench. Surfaces of C.108, C.116 and cut C.115, Medieval wall C.106/C.135. From north.
IMG_4111	1	As IMG_4110.
IMG_4112	1	As IMG_4110 but from south.
IMG_4113	1	As IMG_4012.
IMG_4115	1	As IMG_4012. Overhead shot.

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Photo No.	Trench	Description
IMG_4116	2 Nth Ext	Cut C.220 in C.218. From west.
IMG_4117	2 Nth Ext	Cut C.220 in C.218. From north.
IMG_4119	2 Nth Ext	Cut C.220, fills C.217, C.221 and C.222. From north.
IMG_4120	2 Nth Ext	Cut C.220, fills C.213, C.217, C.221 and C.222. From north.
IMG_4121	1	Eastern side of trench. Temporary baulk now removed. Medieval wall C.106/C.135, the inner face of the eastern curtain wall of the Inner Ward, the south wall of the Store House, concrete surface C. 109, and the eastern red brick

		side of the Late-Victorian munitions railway C.117. From north.
IMG_4122	1	As IMG_4121.
IMG_4123	1	As IMG_4121 but from west.
IMG_4124	1	As IMG_4123.
IMG_4125	1	Medieval wall C.106/C.135, the south wall of the Store House, concrete surface C.109, and the eastern red brick wall of the Late-Victorian munitions railway C.117. From south.
IMG_4126	1	As IMG_4125.
IMG_4127	1	Eastern side of trench. Temporary baulk now removed. Medieval wall C.106/C.135, the inner face of the eastern curtain wall of the Inner Ward, the south wall of the Store House, concrete surface C.109, and the eastern red brick side of the Late-Victorian munitions railway C.117. From west.
IMG_4128	1	As IMG_4127.
IMG_4129	1	Medieval wall C.106/C.135, the inner face of the eastern curtain wall of the Inner Ward, the south wall of the Store House, concrete surface C.109, and the eastern red brick side of the Late-Victorian munitions railway C.117. From south.
IMG_4130	1	As IMG_4129.
IMG_4131	1	As IMG_4129. Detail of eastern half of trench.
IMG_4132	1	As IMG_4131.
IMG_4133	1	As IMG_4129.
IMG_4134	1	As IMG_4129.
IMG_4135	6	Floor C.605 and red brick plinths C.603 and C.606. From south.
IMG_4136	6	As IMG_4135.
IMG_4137	6	Floor C.605 and red brick plinth C.603. From south.
IMG_4138	6	As IMG_4137. Detail.
IMG_4140	6	As IMG_4138. From north.
IMG_4142	6	Detail of red brick plinth C.603. From east.

**27<sup>th</sup> February 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_4150	2 Nth Ext	Surface of C.224. From west.
IMG_4152	1	After the removal of the concrete surface in the middle and west of the trench. Both sides of the Late-Victorian munitions railway now exposed. Overhead shot. From south.
IMG_4153	1	As IMG_4152.
IMG_4154	1	As IMG_4152.
IMG_4155	1	As IMG_4152 but from east.
IMG_4156	5	Trench completely excavated. Shows wall C.512, C.508/C.810 and C.510/C.826.
IMG_4157	5	Wall C.512. From south.
IMG_4158	5	Wall C.512. From east.



IMG_4159	5	C.508, C.509, C.510 and western wall of outer ward. From east.
IMG_4160	5	C.508, C.509 and C.510. From north.
IMG_4161	5	North-facing section, middle part. From north.
IMG_4162	5	North-facing section and south-east corner of trench. From north.
IMG_4163	5	C.508 to C.511. From south.
IMG_4164	5	Wall C.512. From west.
IMG_4165	5	West-facing section and robbed-out part of wall C.512. From west.
IMG_4166	1	Munitions railway, working shot. From south.
IMG_4167	1	As IMG_4166.
IMG_4168	1	As IMG_4166.
IMG_4169	2 Ext	Surface of C.226. From west.
IMG_4170	2 Ext	As IMG_4169.
IMG_4171	2 Ext	As IMG_4169 but from north.

**28<sup>th</sup> February 2014**

Photo No.	Trench	Description
IMG_4172	3B	Pre-excavation. From south.
IMG_4173	3B	As IMG_4172.
IMG_4174	1	<b>Section B</b> , following removal of C.120, munitions tracks. From south.
IMG_4175	1	As IMG_4174.
IMG_4176	1	As IMG_4174 but from west.
IMG_4177	1	As IMG_4176.
IMG_4178	1	As IMG_4174 but from <b>ward</b> wall.
IMG_4179	1	As IMG_4178.
IMG_4180	3B	Cobble surface C.325. From north.
IMG_4181	3B	As IMG_4180.
IMG_4182	3B	Close-up of cobbles C.325 to south end of trench, from above.
IMG_4183	3B	As IMG_4182.
IMG_4184	3B	As IMG_4182.
IMG_4185	3B	As IMG_4182 but from north.
IMG_4186	3B	As IMG_4185.
IMG_4187	3B	As IMG_4180.

**3<sup>rd</sup> March 2014**

Photo No.	Trench	Description
IMG_4188	6	Concrete floor. From east.
IMG_4189	6	As IMG_4188.
IMG_4190	6	Close-up of brick/concrete floor. From north.
IMG_4191	6	As IMG_4188.
IMG_4192	6	As IMG_4188.
IMG_4193	6	As IMG_4190.
IMG_4194	6	As IMG_4188, but from west.

IMG_4195	3B	Granite sleeper. From south.
IMG_4196	3B	As IMG_4195.
IMG_4197	3B	As IMG_4195, but from north.
IMG_4198	5	C.510 and western end of C.512 after removal of rubble C.509. From north.
IMG_4199	5	As IMG_4198 but from south.
IMG_4200	5	Inside corner of wall C.512 below C.510. From east.
IMG_4201	5	C.508 and C.510 after removal of rubble C.509. From east.
IMG_4202		C.229, shell midden. From south.
IMG_4203		As IMG_4202.
IMG_4204		As IMG_4202.
IMG_4205	2 Ext	North-facing section. From north.
IMG_4207	?2 Ext	Granite pillar, record shot. From south.

**5th March 2014**

**Photo Trench No.**

IMG_002	2 Ext
IMG_003	2 Ext
IMG_004	2 Ext
IMG_005	2 Ext
IMG_006	2 Ext
IMG_007	2 Ext
IMG_008	2 Ext
IMG_009	2 Ext
IMG_010	2 Ext
IMG_011	2 Ext

IMG_012	2 Ext
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IMG_013	1
IMG_014	1
IMG_015	1
IMG_016	1
IMG_017	1
IMG_018	1
IMG_019	1

IMG_020	1
IMG_021	1
IMG_022	1
IMG_023	1
IMG_024	1
IMG_025	1
IMG_026	1
IMG_027	1
IMG_028	1

**NEW CAMERA**

**Description**

East-facing section, down to shell midden C.229. From east.
West-facing section, down to shell midden C.229. From west.
North-facing section, down to shell midden C.229. From north.
South-facing section, down to shell midden C.229. From south.
As IMG_005.
Surface of shell midden C.229. From south.
Granite pillar and cut C.227, through C.229. From south.
East-facing section.
North-facing section.
North-facing section, beneath eastern part of C.223. From north.
North-facing section, beneath western part of C.223. From north.
Surface of C.124, and walls C.117 and C.118. From south.
As IMG_013.
Surface of C.125, C.126, cut C.127 and wall C.118, <b>in plan</b> .
As IMG_015.
Walls C.106 and C.117, <b>in plan</b> .
As IMG_017.
Section A of trench, C.016, C.108, C.109, C.110, C.112, C.115 and C.116.
As IMG_019.
As IMG_019.
As IMG_019.
Inner faces of C.106 and C.107.
As IMG_023.
Inner face of C.107.
As IMG_025.
Inner face of wall C.106.
As IMG_027.

IMG_029	1	Surface of cement C.110.
IMG_030	1	As IMG_029.
IMG_031	1	Whole trench <b>in plan</b> .
IMG_032	1	As IMG_031.
IMG_033	1	As IMG_031.
IMG_034	1	As IMG_031.
IMG_035	6	Close-up of wall C.603 and mortar C.609 at west end. From east.
IMG_036	6	As IMG_035.
IMG_037	6	Close-up of wall C.606 at east end. From west.
IMG_038	6	General view of trench. From east.
IMG_039	6	As IMG_038.
IMG_040	6	As IMG_038 but from west.
IMG_041	6	As IMG_040.
IMG_042	6	Close-up of wall C.609. From east.
IMG_043	6	As IMG_042.
IMG_044	7	General view of trench. From east.
IMG_045	7	As IMG_044.
IMG_046	7	As IMG_044 but from west.
IMG_047	7	As IMG_046.
IMG_048	7	Wall of eastern end of trench. From west.
IMG_049	7	As IMG_048.
IMG_050	7	Close-up of wall at western end. From east.
IMG_051	7	As IMG_050.
IMG_052	7	Western end of trench. From south.
IMG_053	7	South-facing section, part 1. From south.
IMG_054	7	As IMG_053, part 2.
IMG_055	7	As IMG_053, part 3.
IMG_056	7	North-facing section, part 1. From north.
IMG_057	7	As IMG_056, part 2.
IMG_058	7	As IMG_056, part 3.
IMG_059	7	West-facing section. From west.
IMG_060	7	West-facing section close-up. From west.
IMG_061	7	As IMG_059.
IMG_062	7	East-facing section. From east.
IMG_063	7	Close-up of wall at west end. From west.
IMG_064	7	North-facing section of trench extension. From north.
IMG_065	7	Juncture between walls at west end. From south.
IMG_066	6	North-facing section, part 1. From north.
IMG_067	6	As IMG_066, part 2.
IMG_068	6	As IMG_066, part 3.
IMG_069	6	East-facing section. From east.
IMG_070	6	As IMG_069.
IMG_071	6	East-facing section, close-up. From east.
IMG_072	6	South-facing section, part 1. From east.
IMG_073	6	As IMG_072, part 2.
IMG_074	6	As IMG_072, part 3.
IMG_075	6	West-facing section. From west.
IMG_076	6	West-facing section, close-up. From west.
IMG_077	1	Post-excavation view of foundation cut C.127. From west.
IMG_078	1	As IMG_077 but from south.

IMG_079	1	Post-excavation view of north end of C.127. From south.
IMG_080	1	Post-excavation view of south end of C.127. From south.
IMG_081	1	Post-excavation view of C.127. From south.
IMG_082	2 Ext	North-facing section, to surface of C.230. From north.
IMG_083	2 Ext	East-facing section, to surface of C.230. From east.
IMG_084	2 Ext	South-facing section, to surface of C.230. From south.
IMG_085	2 Ext	As IMG_084.
IMG_086	2 Ext	West-facing section, to surface of C.230. From west.
IMG_087	2 Ext	As IMG_082.
IMG_088	2 Ext	Surface of C.230. From west.
IMG_089	2 Ext	As IMG_088 but from north.
IMG_090	2 Ext	As IMG_089.
IMG_091	5	General view of trench. From east.
IMG_092	5	As IMG_091.
IMG_093	5	Eastern end of trench. From north.
IMG_094	5	Mid section of trench. From north.
IMG_095	5	As IMG_094.
IMG_096	5	Wall C.???. From south.
IMG_097	5	General view of trench. From west.
IMG_098	5	As IMG_097.
IMG_099	5	Wall C.???. From south.
IMG_100	5	Wall C.???. From east.
IMG_101	5	As IMG_100.
IMG_102	5	As IMG_100.
IMG_103	5	West-facing section. From west.
IMG_104	5	North-facing section, part 1. From north.
IMG_105	5	As IMG_104, part 2.
IMG_106	5	As IMG_104, part 3.
IMG_107	5	As IMG_104, part 4.
IMG_108	5	South-facing section, part 1. From south.
IMG_109	5	As IMG_108, part 2.
IMG_110	5	As IMG_108, part 3.
IMG_111	5	Wall (outer ward) at west end of trench. From west.

**6<sup>th</sup> March 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_112	2	Concrete floor, with ranging rod. From south.
IMG_113	2	As IMG_112.
IMG_114	2	Concrete floor, without ranging rod. From south.
IMG_115	2	As IMG_114.
IMG_116	2	South-facing section, with ranging rod.
IMG_117	2	As IMG_116.
IMG_118	2	South-facing section, without ranging rod.
IMG_119	2	As IMG_118.
IMG_120	2	West-facing section, with ranging rod.
IMG_121	2	As IMG_120.
IMG_122	2	As IMG_120.
IMG_123	2	As IMG_120.
IMG_124	2	West-facing section, without ranging rod.

IMG_125	2	As IMG_124.
IMG_126	2	As IMG_124.
IMG_127	2	As IMG_124.
IMG_128	2	East-facing section, with ranging rod.
IMG_129	2	As IMG_128.
IMG_130	2	As IMG_128.
IMG_131	2	As IMG_128.
IMG_132	2	East-facing section, without ranging rod.
IMG_133	2	As IMG_132.
IMG_134	2	As IMG_132.
IMG_135	2	As IMG_132.
IMG_136	3	Cement floor, with ranging rod. From west.
IMG_137	3	As IMG_136.
IMG_138	3	As IMG_136 but from south.
IMG_139	3	As IMG_138.
IMG_140	3	Cement floor, without ranging rod. From west.
IMG_141	3	As IMG_140.
IMG_142	3	As IMG_140 but from south.
IMG_143	3	As IMG_142.
IMG_144	3	Detail of granite runners. From west.
IMG_145	3	As IMG_144.
IMG_146	3	West-facing section, with ranging rod.
IMG_147	3	West-facing section, without ranging rod.
IMG_148	3	South-facing section, with ranging rod.
IMG_149	3	As IMG_148.
IMG_150	3	South-facing section, without ranging rod.
IMG_151	3	As IMG_150.
IMG_152	3	East-facing section, with ranging rod.
IMG_153	3	As IMG_152.
IMG_154	3	East-facing section, without ranging rod.
IMG_155	3	As IMG_154.
IMG_156	3	North-facing section, with ranging rod.
IMG_157	3	As IMG_156.
IMG_158	3	North-facing section, without ranging rod.
IMG_159	3	As IMG_158.
IMG_160	3	As IMG_158.
IMG_161	3 Ext	Trench <b>in plan</b> , with ranging rod.
IMG_162	3 Ext	As IMG_161.
IMG_163	3 Ext	Trench <b>in plan</b> , without ranging rod.
IMG_164	3 Ext	As IMG_163.
IMG_165		Photograph of possible gun flints from Trench 2 Ext.
IMG_166		As IMG_165.
IMG_167		As IMG_165.
IMG_168		As IMG_165.
IMG_169		As IMG_165.
IMG_170		As IMG_165.
IMG_171		As IMG_165.
IMG_172		As IMG_165.
IMG_173	1	Slot trench cut C.115. From south.
IMG_174	1	As IMG_173.
IMG_175	1	As IMG_173 but from north.

IMG_176	1	As IMG_175.
IMG_177	1	Detail of wall and mortar <b>level up</b> for C.117.
IMG_178	1	As IMG_177.
IMG_179	1	Overall view following excavation of cuts C.115 and C.127.
IMG_180	1	As IMG_179.
IMG_181	1	As IMG_179.
IMG_182	1	As IMG_179.
IMG_183	1	As IMG_179.
IMG_184	1	As IMG_179.
IMG_185	1	As IMG_179.
IMG_186	1	As IMG_179.
IMG_187		Possible gun flints from Trench 2 Ext and Trench 3.
IMG_188		As IMG_187.

**7th March 2014**

Photo No.	Trench	Description
IMG_189		<b>Med coin (John De Courcy)</b>
IMG_190		As IMG_189.
IMG_191		As IMG_189.
IMG_192	1	Surface of C.110. From east.
IMG_193	1	As IMG_192.
IMG_194	1	Surface of C.110 <b>in plan</b> .
IMG_195	1	Surface of C.110. From south.
IMG_196	1	Possible worked stone within C.134. From south.
IMG_197	1	As IMG_196.
IMG_198	1	As IMG_196.
IMG_199	1	As IMG_196.
IMG_200	1	Surfaces of C.110, C.133 and C.134. From north.
IMG_201	1	As IMG_200.
IMG_202	1	As IMG_200 but from south.
IMG_203	1	As IMG_202.
IMG_204		Munitions tunnel.
IMG_205		As IMG_204.
IMG_206		As IMG_204.
IMG_207		As IMG_204.
IMG_208		As IMG_204.
IMG_209		As IMG_204.
IMG_210		As IMG_204.
IMG_211		As IMG_204.
IMG_212		As IMG_204.
IMG_213		As IMG_204.
IMG_214		As IMG_204.
IMG_215		As IMG_204.
IMG_216		As IMG_204.
IMG_217		As IMG_204.
IMG_218		As IMG_204.
IMG_219		As IMG_204.
IMG_220		As IMG_204.

**10th March 2014**

Photo No.	Trench	Description
IMG_221	1	Surface of wall C.135 following excavation of C.125. From north.
IMG_222	1	As IMG_221 but from south-east.
IMG_223	1	View of trench following excavation of C.125. From south-east.
IMG_224	?	Working shot. From south.
IMG_225	?	As IMG_224.
IMG_226	?	As IMG_224.
IMG_227	?	As IMG_224, but from south-west.

### 11th March 2014

Photo No.	Trench	Description
IMG_228	1	Trench following extension. From wall of outer ward.
IMG_229	1	As IMG_228.
IMG_230	1	As IMG_228.
IMG_231	1	As IMG_228.
IMG_232		<b>General shots of excavation, visit from BBC, Minister and Dr O’Keeffe.</b>
IMG_233		As IMG_232.
IMG_234		As IMG_232.
IMG_235		As IMG_232.
IMG_236		As IMG_232.
IMG_237	1	Extension of trench, showing wall C.135. From north.
IMG_238	1	As IMG_237.
IMG_239	1	Eastern half of trench, wall C.106. From south.
IMG_240	1	As IMG_239.
IMG_241		<b>Dr O’Keeffe and RÓB filming with BBC.</b>
IMG_242		As IMG_241.
IMG_243		As IMG_241.
IMG_244		As IMG_241.
IMG_245		As IMG_241.
IMG_246	3 Ext	C.308 and C.311. From north.
IMG_247	3 Ext	As IMG_246.
IMG_249		?????????????????. From north.
IMG_250	3	C.308 and C.311. From east.
IMG_251	3 Ext	From north.
IMG_252	3 Ext	From north-east.
IMG_253	3 Ext	From south-east.
IMG_254	3 Ext	From south.
IMG_255	3 Ext	From north.
IMG_256	3	Elevation of western wall.
IMG_257	3	As IMG_256.
IMG_258	3	As IMG_256.
IMG_258	3	Cement pier C.311. From east.
IMG_260	3	Granite sleeper. From north.
IMG_261	3	As IMG_260.
IMG_262	3 Ext	Trench from above.
IMG_263	3 Ext	As IMG_262.
IMG_264	3 Ext	As IMG_262.

IMG_265	3 Ext	As IMG_262.
IMG_266	3 Ext	As IMG_262.
IMG_267	3 Ext	As IMG_262.
IMG_268	3 Ext	As IMG_262.
IMG_269	3 Ext	As IMG_262.
IMG_270	3 Ext	As IMG_262.
IMG_271	8	C.809 and C.810. From west.
IMG_272	8	As IMG_271 but from east.

#### 12th March 2014

Photo No.	Trench	Description
IMG_273	3 Ext	After removal of concrete. From south.
IMG_274	3 Ext	As IMG_273 but from north-east.
IMG_275	3 Ext	As IMG_273 but from north.
IMG_276	3 Ext	As IMG_273.
IMG_277	1	Following removal of C.110, C.133 and C.134. From north.
IMG_278	1	As IMG_277.
IMG_279	1	As IMG_277 but from west.
IMG_280	1	As IMG_279.
IMG_281	8	Following removal of C.803, showing wall C.809. From east.
IMG_282	8	As IMG_281.
IMG_283	8	Following removal of C.803, western end. From west.
IMG_284	8	Following removal of C.803. From east.
IMG_285	1	Surface of C.126. From south.
IMG_286	1	As IMG_285.
IMG_287	1	In situ pottery on surface of C.126.

#### 13th March 2014

Photo No.	Trench	Description
IMG_288	3	Cobbles within C.339, in slot trench (cut C.340). From above.
IMG_289	3	As IMG_288.
IMG_290	3	Slot trench cut C.340. From south.
IMG_291	3	As IMG_290.
IMG_292	3	As IMG_290 but from north.
IMG_293	3	As IMG_292.
IMG_294	1	Following removal of C.138. From north.
IMG_295	1	As IMG_294.
IMG_296	1	Detail of C.139 and C.140. From south.
IMG_297	1	As IMG_296.
IMG_298	1	Following removal of C.138. From south.
IMG_299	1	As IMG_298.
IMG_300	1	Flint in deposit C.136. From south.
IMG_301	1	As IMG_300.
IMG_303	1	Showing continuation of wall C.106 under wall C.117. <b>In plan.</b>
IMG_304	1	As IMG_303.
IMG_305	1	As IMG_303 but from north.
IMG_306	1	As IMG_305.



IMG_307	1	As IMG_305.
IMG_308	1	As IMG_305.
IMG_309	1	Following removal of C.111 and C.139. From north.
IMG_310	1	As IMG_309.
IMG_311	1	As IMG_309 but from south.
IMG_312	1	As IMG_311.

**14th March 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_313	3	After removal of C.337. From south.
IMG_314	3	As IMG_313.
IMG_315	8	Western end of trench following removal of C.803. From east.
IMG_316	8	Close-up of west end of trench. From east.
IMG_317	8	General view of trench following removal of C.803. From east.
IMG_318	1	C.135 and C.143 following removal of C.136. From south.
IMG_319	1	As IMG_318.
IMG_320	1	Following removal of C.141, showing C.140 across trench. From north.
IMG_321	1	As IMG_320.
IMG_322	1	Footings of wall C.107. From west.
IMG_323	1	As IMG_322.
IMG_324	1	As IMG_322.
IMG_325	1	As IMG_322.
IMG_326	1	Walls C106, C.107 and footings. From north-west.
IMG_327	1	As IMG_326.
IMG_328	1	As IMG_320 but from south.
IMG_329	1	As IMG_328.
IMG_330	1	Whole trench viewed <b>in plan</b> .
IMG_331	1	As IMG_330.
IMG_332	1	As IMG_330.
IMG_333	1	As IMG_330.
IMG_334	1	As IMG_330.
IMG_335	1	As IMG_330.

**18th March 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_336	1	Surface of C.144, following removal of C.143. From south.
IMG_337	1	As IMG_336.
IMG_338	1	As IMG_336.
IMG_339	1	As IMG_336 but from north.
IMG_340	1	As IMG_339.

**19th March 2014**

Photo No.	Trench	Description
IMG_341	8	Trench following removal of C.812. From east.
IMG_342	8	As IMG_341.
IMG_343	8	As IMG_341 but from south.
IMG_344	8	As IMG_341 but from west.
IMG_345	8	Masonry at east end. From west.
IMG_346	8	Wall at west end. From east.
IMG_347	8	Face of wall at north end. From east.
IMG_348 to IMG_364:		Trench 4, photos of trench cleaned up with new camera. No ranging rods. Northern and southern halves of trench. From various directions.
IMG_365 to IMG_381:		Trench 4 cleaned up for final site photos. From various directions.
IMG_382 to IMG_390:		Trench 4 cleaned up for final site photos. No ranging rod. From various directions.

**20th March 2014**

Photo No.	Trench	Description
IMG_391	8	Surface of C.816 following removal of C.815. From east.
IMG_392	8	As IMG_391.
IMG_393	8	As IMG_391 but from west.
IMG_394	8	As IMG_393.
IMG_395 to IMG_398:		Trench 4, south-facing section, with and without ranging rods. From south.
IMG_399 to IMG_443:		Trench 4, final trench photos. From various directions.
IMG_444 to IMG_449:		Trenches 1 to 4, general shots from the battlements. From various directions (but mostly south and west).
IMG_450 to IMG_464:		Trenches 1 to 4, inner ward various working shots. From various directions (but mostly south and west).
IMG_465	8	Surface of C.817 following removal of C.816. From east.
IMG_466	8	As IMG_465.
IMG_467	8	As IMG_465 but from west.
IMG_468	8	As IMG_467.
IMG_469	8	Wall/stones beside outer ward wall. From south.
IMG_470	8	As IMG_469.
IMG_471	8	As IMG_469 but from north.
IMG_472	8	As IMG_471.

**21st March 2014**

Photo No.	Trench	Description
IMG_473	3 Ext	Bedrock and surface C.342. From north.
IMG_474	3 Ext	As IMG_473 but from east.
IMG_475	3 Ext	As IMG_473 but from south.
IMG_476	3 Ext	As IMG_473.
IMG_477	3 Ext	As IMG_473.

IMG_478	3 Ext	As IMG_473 but from south.
IMG_479	3 Ext	Surface of C.342, from above.
IMG_480	3 Ext	As IMG_479.
IMG_481	3 Ext	As IMG_479 but from south.
IMG_482	3 Ext	As IMG_479.
IMG_483	3 Ext	As IMG_479 but from east.
IMG_484	3 Ext	As IMG_483.
IMG_485	3	Surface of C.342. From east.
IMG_486	1	Following removal of C.146, surface of bedrock C.145 and wall C.106. From south.
IMG_487	1	As IMG_486.
IMG_488	1	As IMG_486 but from north.
IMG_489	1	As IMG_488.
IMG_490	1	Footings of wall C.107 and bedrock C.145. From west.
IMG_491	1	As IMG_490.
IMG_492	1	Surface of bedrock C.145 and wall C.106. From north.
IMG_493	1	As IMG_492.
IMG_494	1	As IMG_490.
IMG_495	1	As IMG_490.
IMG_496	1	Footings of wall C.107, bedrock C.145 and wall C.106. From north-west.
IMG_497	1	As IMG_496.
IMG_498	3	C.344 with bedrock protruding <b>north extension of trench</b> . From south.
IMG_499	3	<b>As IMG_498.</b>
IMG_500	3	<b>As IMG_498.</b>
IMG_501	3	<b>As IMG_498.</b>

**22nd March 2014**

Photo No.	Trench	Description
IMG_502 to IMG_506:		Health and safety precautions for open day.
IMG_507	1	Extent of excavations, bedrock and medieval wall, <b>in plan</b> .
IMG_508	1	As IMG_507.
IMG_509	1	As IMG_507.
IMG_510	1	As IMG_507.
IMG_511	1	As IMG_507.
IMG_512	1	As IMG_507.
IMG_513		As IMG_502 to IMG_506
IMG_514		As IMG_502 to IMG_506.
IMG_515	1	Railway for munitions, C.124, and walls C.117 and C.118. From south.
IMG_516	1	As IMG_515.
IMG_517	1	Medieval wall C.135 and bedrock C.145. From south.
IMG_518	1	As IMG_517.
IMG_519	1	As IMG_517 but from north.
IMG_520	1	As IMG_519.
IMG_521	1	As IMG_517.
IMG_522	1	As IMG_517.
IMG_523	1	As IMG_519.

IMG_524	1	As IMG_519.
IMG_525	1	Munitions railway C.124 and walls C.117 and C.118. From north.
IMG_526	1	As IMG_525.
IMG_527	1	As IMG_525 but from south.
IMG_528	1	As IMG_527.
IMG_529	1	Extent of excavations, bedrock and medieval wall, <b>in plan</b> .
IMG_530	1	As IMG_529.
IMG_531	1	As IMG_529.
IMG_532	1	As IMG_529.
IMG_533	1	As IMG_529.
IMG_534	1	As IMG_529.
IMG_535	3	South-facing section.
IMG_536	3	As IMG_535.
IMG_537	3	East-facing section.
IMG_538	3	As IMG_537.
IMG_539	3	As IMG_537.
IMG_540	3	As IMG_537.
IMG_541	3	North-facing section.
IMG_542	3	As IMG_541.
IMG_543	3	South-facing section.
IMG_544	3	As IMG_543.
IMG_545	3	East-facing section.
IMG_546	3	As IMG_545.
IMG_547	3	As IMG_545.
IMG_548	3	As IMG_545.
IMG_549	3	As IMG_545.
IMG_550	3	North-facing section.
IMG_551	3	As IMG_550.
IMG_552	3	As IMG_550.

#### 24th March 2014

Photo No.	Trench	Description
IMG_553	8	General view. From east.
IMG_554	8	Close-up of base of trench. From east.
IMG_555	8	As IMG_554.
IMG_556	8	General view of <b>walls</b> . From east.
IMG_557	8	View of <b>walls</b> towards outer ward wall. From east.
IMG_558	8	<b>View of walls</b> . From west.
IMG_559	8	As IMG_558.
IMG_560	8	<b>Close-up of walls</b> . From west.

#### 25th March 2014

Photo No.	Trench	Description
IMG_561	8	<b>Walls C.809 etc</b> following clean up. From north-east.
IMG_562	8	As IMG_561 but from east.
IMG_563	8	Wall C.809. From south.
IMG_564	8	Walls C.509 and C.510. From south.

IMG_565	8	<b>Walls C.809 etc.</b> From west.
IMG_566	8	As IMG_565 but from north.

**26th March 2014**

Photo No.	Trench	Description
IMG_567	8	<b>Walls C.809 etc</b> and foundations. From east.
IMG_568	8	As IMG_567.
IMG_569	8	As IMG_567 but from south.
IMG_570	8	As IMG_569.
IMG_571	8	<b>Walls C.809 etc and founds.</b> From west.
IMG_572	8	As IMG_571, but from north.
IMG_573	8	Cobbles below C.817. From east.
IMG_574	8	As IMG_573.
IMG_575	8	As IMG_573.
IMG_576	8	As IMG_573 but from west.
IMG_577	8	As IMG_573 but from north.

**27th March 2014**

Photo No.	Trench	Description
IMG_578 to IMG_585:		Working shots
IMG_586	2B	Surface of C.236 and C.237. From east.
IMG_587	2B	As IMG_586 but from south.
IMG_588	2B	South-facing section, showing C.231, C.232, C.233, C.234, C.235 and surface of C.236.
IMG_589	2B	C.236 removed, showing C.237. From south.
IMG_590	2B	As IMG_589.
IMG_591 to IMG_606:		Trench 9, working shots with rubble removed at level of C.903 and rails exposed. Taken from all cardinal points.
IMG_607	2B	C.238, C.239 and C.240. From above, from east.
IMG_608	2B	As IMG_607, but from south.
IMG_609	2B	C.241 on removal of C.238. From south.
IMG_610	2B	As IMG_609 but from east.

**28th March 2014**

Photo No.	Trench	Description
IMG_611	2B	Surface of C.242, showing <b>C.243</b> , C.239 and <b>C.243</b> . From east.
IMG_612	2B	<b>As IMG_611</b> but from south.
IMG_613	2B	Surface of C.244 and C.245. From south.
IMG_614	2B	As IMG_613.
IMG_615 to IMG_643:		General shots of Trenches 5 to 8 with walls and cobbled surface. From various directions.
IMG_644	2B	Surface of C.244. From south.

**29th March 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_645 to IMG_676:		Inner Ward. Various shots of the Open Day at the excavation. Taken from both the battlements and ground level.

**31st March 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_678	2B	North to south wall, C.249 and C.250. From west.
IMG_679	2B	North to south wall, C.249. From above.
IMG_680	2B	North-facing section. From north.
IMG_281	2B	South-facing section. From south.
IMG_682	2B	C.239, C.243, C.246, C.247 and C.249. From east.
IMG_683	2B	As IMG_682

**1st April 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_685	2B	On removal of brick plinth C.246, showing C.247. From south.
IMG_686	2B	As IMG_685.
IMG_687	2B	On removal of brick plinth C.246, south-facing section.
IMG_688	2B	As IMG_687.
IMG_689	2B	On removal of brick plinth C.246, north-facing section.

**2nd April 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_691	2B	Wall C.249 and C.250. From west.
IMG_692	2B	As IMG_691.
IMG_693	2B	As IMG_691.
IMG_694	2B	Post-excavation, bedrock. From north.
IMG_695	2B	As IMG_694 but from east.
IMG_696	2B	South-facing section. From south.
IMG_697	2B	North-facing section. From north.
IMG_698	2B	Bedrock. <b>From ????</b>
IMG_699 to IMG_732:		Shots taken from top of the castle keep of the excavated trenches both in the Inner and Outer Wards. From various directions.
IMG_733	9	Post-excavation view. From south.
IMG_734	9	As IMG_733.
IMG_735	9	As IMG_733.
IMG_736	9	As IMG_733 but from north.
IMG_737	9	As IMG_736.
IMG_738	9	West-facing section. From west.
IMG_739	9	As IMG_738.
IMG_740	9	As IMG_738.
IMG_741	9	East-facing section. From east.

IMG_742	9	As IMG_741.
IMG_743	9	As IMG_741.
IMG_744	9	As IMG_741.
IMG_745	9	As IMG_741.
IMG_746	9	Turntable. From north-east.
IMG_747	9	As IMG_746.
IMG_748	9	As IMG_746.
IMG_749	9	As IMG_746.
IMG_750	9	As IMG_746.
IMG_751	9	As IMG_746 but from north.
IMG_752	9	As IMG_751.
IMG_753	9	As IMG_751.
IMG_754	9	As IMG_751.
IMG_755	9	East-facing section. From east.
IMG_756	9	As IMG_755.
IMG_757 to IMG_795:		<b>General site shots of the excavation and Trench 9.</b> Mostly from the battlements, from various directions.

**3rd April 2014**

Photo No.	Trench	Description
IMG_796	5/8	After removal of part of wall C.510, C.508 and cobbles C.??? exposed. From north.
IMG_797	5/8	Following C.510 partial removal, showing that no cobbles C.??? found on south side of wall C.512. From east.
IMG_798	5/8	As IMG_797 but from south.
IMG_799	5/8	As IMG_797.
IMG_800	5/8	As IMG_797.
IMG_801	5/8	As IMG_797.
IMG_802	5/8	As IMG_798.
IMG_803	5/8	As IMG_798.
IMG_804	5/8	As IMG_797 but from north.
IMG_805	6	East-facing part of Outer Ward wall at western end of Trench 6. From east.
IMG_806	6	As IMG_805.
IMG_807	6	As IMG_805.
IMG_808	6	As IMG_805.
IMG_809	6	As IMG_805.
IMG_810	8	Cobbles C.819. From west.
IMG_811	8	Sand below cobbles C.822. From west.
IMG_812	8	As IMG_810 but from north.
IMG_813	8	West-facing section. From west.
IMG_814	8	As IMG_813.
IMG_815	8	As IMG_813.
IMG_816	8	As IMG_813.
IMG_817	3B	Post-excavation, showing C.330, C.350 and C.351. From south.
IMG_818	3B	Red brick wall and surface, C.350 and C.351. From above.
IMG_819	3B	As IMG_818.
IMG_820	3B	As IMG_817 but from north.
IMG_821	3B	North-facing section showing cut C.349.

IMG_822	3B	South-facing section showing cut C.349.
IMG_823	3B	As IMG_822.
IMG_824	3B	As IMG_817 but from east.
IMG_825	3B	As IMG_824.
IMG_826	3B	South-facing section.
IMG_827	3B	As IMG_826.
IMG_828	3B	North-facing section.
IMG_829	3B	As IMG_828.
IMG_830	3B	C.350 and C.351. From above.
IMG_831	3B	As IMG_830.
IMG_832	3B	As IMG_830.
IMG_833	3B	Close-up of C.350.
IMG_834	3B	Red brick wall C.350. From north.
IMG_835	3B	As IMG_834.
IMG_836	3B	Post-excavation. From north.
IMG_837	3B	Blocked-up doorway, northern end.
IMG_838	3B	As IMG_837.
IMG_839	3B	As IMG_837.
IMG_840	3B	Blocked-up doorway, southern end.
IMG_841	3B	West-facing elevation <b>of wall?</b>
IMG_842	3B	West-facing elevation <b>of wall?</b> , starting at north end, 1 of 4.
IMG_843	3B	As IMG_842, 2 of 4.
IMG_844	3B	As IMG_842, 3 of 4.
IMG_845	3B	As IMG_842, 4 of 4.
IMG_846	3B	Blocked-up entrance at north end.
IMG_847	3B	Blocked-up entrance at south end.
IMG_848	3B	West-facing elevation of wall.
IMG_849	3B	As IMG_848.
IMG_850	3B	As IMG_848.
IMG_851	3B	West-facing elevation of wall, starting at south end, 1 of 4.
IMG_852	3B	As IMG_851, 2 of 4.
IMG_853	3B	As IMG_851, 3 of 4.
IMG_854	3B	As IMG_851, 4 of 4.
IMG_855	3B	Post-excavation. From north.
IMG_856	3B	As IMG_855.
IMG_857	3B	C.350 and C.351. From above.
IMG_858	3B	As IMG_857.
IMG_859	3B	As IMG_857.
IMG_860	3B	As IMG_857.
IMG_861	3B	Oblique view of wall starting at north end, 1 of 6.
IMG_862	3B	As IMG_861, 2 of 6.
IMG_863	3B	As IMG_861, 3 of 6.
IMG_864	3B	As IMG_861, 4 of 6.
IMG_865	3B	As IMG_861, 5 of 6.
IMG_866	3B	As IMG_861, 6 of 6.
IMG_867	3B	Termination of wall. From south-west.
IMG_868	3B	Footings <b>of what? From ????</b>
IMG_869	3B	Footings? and concrete floor under blocked doorway. <b>From ????</b>
IMG_870	3B	Recess in wall. <b>From ????</b>
IMG_871	3B	As IMG_870.
IMG_872	3B	Post-excavation. From south.



IMG\_873      3B      As IMG\_872.

**4th April 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_874	5 to 8	John Meneely laser scanning.
IMG_875		Stunt bike riding being filmed at the castle.
IMG_876	5 to 8	John Meneely laser scanning.
IMG_877	5 to 8	Over view of Trenches 5 to 8. From south.
IMG_878	5 to 8	As IMG_877.
IMG_879	8	Steps of wall C.809. From south.
IMG_880	8	As IMG_879.
IMG_881	8	As IMG_879 but from south-east.
IMG_882	8	As IMG_879 but from south-west.
IMG_883	8	As IMG_879 but from east.
IMG_884	8	As IMG_879 but from west.
IMG_885 to IMG_910:		General site shots. From various directions.

**7th April 2014**

<b>Photo No.</b>	<b>Trench</b>	<b>Description</b>
IMG_911	3B	Brick railway C.362, starting from south, 1 of 7.
IMG_912	3B	As IMG_911, 2 of 7.
IMG_913	3B	As IMG_911, 3 of 7.
IMG_914	3B	As IMG_911, 4 of 7.
IMG_915	3B	As IMG_911, 5 of 7.
IMG_916	3B	As IMG_911, 6 of 7.
IMG_917	3B	As IMG_911, 7 of 7.
IMG_918	3B	Brick railway C.352, starting from south, 1 of 4.
IMG_919	3B	As IMG_918, 2 of 4.
IMG_920	3B	As IMG_918, 3 of 4.
IMG_921	3B	As IMG_918, 4 of 4.

## Appendix 6: Small Finds Register

<i>Trench</i>	<i>Context</i>	<i>Description</i>	<i>Quantity</i>	<i>Weight (g)</i>
Inner Ward	Unstratified	Animal bone		231.8
Inner Ward	Unstratified	Clay pipe stem	3	
Inner Ward	Unstratified	Flint	22	
Inner Ward	Unstratified	Flint Scraper	1	-
Inner Ward	Unstratified	Metalwork	39	
Inner Ward	Unstratified	Pottery	21	
Inner Ward	Unstratified	Shell	2	
Inner Ward	Unstratified	Slate	3	
1	Unstratified	Clay pipe stem	1	
1	102	Animal bone		100.8
1	102	Brick - Fragment	1	
1	102	Clay pipe stem	1	
1	102	Flint	4	
1	102	Glass	2	
1	102	Metalwork	4	
1	102	Pottery	9	
1	103	Animal bone		345.4
1	103	Brick - Fragment	1	
1	103	Clay pipe stem	2	
1	103	Flint	9	
1	103	Glass	2	
1	103	Metalwork	6	
1	103	Pottery	17	
1	103	Tile	1	
1	104	Animal bone		105.6
1	104	Flint	1	
1	104	Glass	1	
1	104	Metalwork	12	
1	104	Metalwork - Coin (1996)	1	
1	104	Pottery	2	
1	104	Stone - Cobble	3	
1	104	Tile	1	
1	105	Animal bone		1124.3
1	105	Clay pipe stem	4	
1	105	Flint	3	
1	105	Flint Core	1	-
1	105	Glass	1	
1	105	Metalwork	25	
1	105	Metalwork - Belt buckle	1	
1	105	Pottery	7	
1	105	Slate	1	
1	105	Stone - Cobble	1	

1	105	Stone - Dressed	2	
1	105	Stone - Dressed granite	2	
1	105	Stone - Dressed sandstone	3	
1	108	Animal bone		285.1
1	108	Clay pipe stem	2	
1	108	Flint	3	
1	108	Glass	3	
1	108	Metalwork	3	
1	108	Pottery	9	
1	111	Animal bone		273.9
1	111	Brick - Fragment	2	
1	111	Flint	24	
1	111	Metalwork	1	
1	112	Flint	1	
1	112	Metalwork	3	
1	112	Pottery	2	
1	113	Animal bone		21.8
1	113	Flint	4	
1	113	Glass	1	
1	113	Metalwork	1	
1	114	Animal bone		9.2
1	114	Flint	3	
1	114	Metalwork	3	
1	114	Pottery	2	
1	116	Animal bone		24.6
1	116	Clay pipe stem	2	
1	116	Flint	7	
1	116	Metalwork	4	
1	120	Animal bone		53.2
1	120	Brick - Handmade	1	
1	120	Clay pipe stem	1	
1	120	Metalwork	2	
1	120	Pottery	1	
1	120	Stone - Sandstone, dressed but broken	95	
1	122	Animal bone		116.4
1	122	Clay pipe stem	1	
1	122	Metalwork	3	
1	123	Animal bone		47.7
1	123	Flint	1	
1	123	Glass	2	
1	123	Metalwork	11	
1	123	Pottery	3	
1	125	Animal bone		1275.4
1	125	Clay pipe stem	4	
1	125	Flint	89	

1	125	Metalwork	1	
1	125	Pottery	2	
1	125	Shell	1	
1	126	Animal bone		21.9
1	126	Pottery	2	
1	128	Animal bone		6.9
1	128	Flint	9	
1	128	Metalwork	1	
1	129	Animal bone		74.1
1	129	Flint	10	
1	129	Possible Gun Flint	1	
1	129	Metalwork	2	
1	129	Pottery	1	
1	130	Animal bone		193.5
1	130	Brick - With slag attached	2	
1	130	Flint	40	
1	130	Metalwork	2	
1	130	Pottery	3	
1	131	Animal bone		8.4
1	131	Flint	11	
1	131	Metalwork	1	
1	131	Pottery	2	
1	132	Flint	5	
1	133	Animal bone		310.7
1	133	Flint	14	
1	133	Metalwork	1	
1	133	Pottery	21	
1	134	Animal bone		759.1
1	134	Brick - Handmade	2	
1	134	Flint	3	
1	134	Metalwork - Projectiles	3	
1	134	Pottery	2	
1	136	Animal bone		184.8
1	136	Pottery	18	
1	136	Flint	2206	-
1	136	Flint Blade	1	-
1	136	Possible Gun Flint	1	-
1	137	Animal bone		4.1
1	137	Flint	2	
1	137	Metalwork	1	
1	138	Animal bone		177.9
1	138	Flint	15	
1	138	Metalwork	2	
1	140	Animal bone		67.9
1	140	Flint	1085	
1	141	Animal bone		105.9

1	141	Brick - Fragment	4	
1	141	Flint	5	
1	141	Metalwork	1	
1	142	Animal bone		20.4
1	143	Flint	4	
1	144	Flint	2	
1	146	Animal bone		3.2
1	146	Flint	59	-
2	Unstratified	Animal bone		36.8
2	Unstratified	Flint	17	
2	Unstratified	Metalwork	1	
2	Unstratified	Pottery	3	
2	203	Animal bone		41.7
2	203	Glass	3	
2	203	Metalwork	4	
2	203	Pottery	13	
2	204	Clay pipe stem	1	
2	205	Animal bone		2.2
2	205	Brick - Fragment	1	
2	207	Animal bone		110.5
2	207	Brick - Fragment	4	
2	207	Flint	2	
2	207	Glass	1	
2	207	Metalwork	3	
2	207	Pottery	2	
2	207	Slate	1	
2	209	Animal bone		71.9
2	209	Brick - Fragment	3	
2	209	Glass	3	
2	209	Leather (Shoe)	1	
2	209	Metalwork	15	
2	209	Metalwork - Belt buckle	1	
2	209	Pottery	4	
2	209	Render	1	
2	209	Slate	4	
2	216	Animal bone		62.5
2	216	Flint	1	
2	217	Animal bone		762.4
2	217	Flint	2	
2	217	Pottery	20	
2	218	Animal bone		457.8
2	218	Brick - Fragment	1	
2	218	Flint	6	
2	218	Human bone		2.6
2	218	Glass	1	
2	218	Metalwork	5	

2	218	Pottery	15	
2	218	Stone - Dressed sandstone	7	
2	218	Stone - Granite	1	
2	218	Gun Flint	1	-
2	221	Pottery	1	
2	224	Flint	1	
2	226	Gun Flint	7	-
2	226	Animal bone		94.8
2	226	Flint	41	
2	228	Animal bone		28.8
2	228	Flint	9	
2	228	Gun Flint	197	-
2	228	Pottery	5	
2	228	Slate	3	
2	228	Stone - Granite	6	
2	230	Animal bone		102.6
2	230	Flint	9	
2	230	Shell	2	
2	235	Animal bone		5.8
2	235	Metalwork	3	
2	241	Glass	1	
2	241	Metalwork	2	
2	242	Metalwork	1	
2	242	Pottery	1	
2	242	Slate	1	
2	244	Flint	1	
2	244	Metalwork	3	
2	244	Pottery	1	
2	246	Brick - Fragment	1	
2	251	Pottery	1	
2	252	Flint	9	
3	303	Animal bone		183.9
3	303	Clay pipe stem	4	
3	303	Flint	7	
3	303	Glass	9	
3	303	Metalwork	11	
3	303	Pottery	26	
3	303	Plastic	1	
3	303	Slate	1	
3	304	Animal bone		23.4
3	304	Flint	1	
3	304	Metalwork	2	
3	304	Pottery	1	
3	306	Flint	1	
3	306	Metalwork	3	
3	306	Pottery	2	

3	307	Animal bone		243.7
3	307	Brick - Fragment	4	
3	307	Flint	1	
3	307	Glass	1	
3	307	Metalwork	28	
3	307	Pottery	6	
3	307	Render	1	
3	307	Slate	9	
3	307	Stone - Dressed	2	
3	325	Flint	1	
3	327	Glass	1	
3	327	Tile	1	
3	328	Human bone		2.0
3	328	Metalwork	4	
3	336	Animal bone		109.7
3	336	Clay pipe stem	1	
3	336	Flint	8	
3	336	Metalwork	2	
3	336	Tile	4	
3	336	Stone with cut marks	1	-
3	337	Animal bone		1626.9
3	337	Brick - Fragment	4	
3	337	Flint	33	
3	337	Metalwork	6	
3	337	Pottery	12	
3	337	Shell	3	
3	338	Animal bone		76.6
3	338	Flint	6	
3	338	Glass	1	
3	338	Metalwork	1	
3	339	Animal bone		132.5
3	339	Flint	5	
3	339	Glass	1	
3	339	Metalwork	5	
3	339	Pottery	1	
3	341	Animal bone		930.6
3	341	Metalwork	1	
3	341	Shell	17	
3	341	Flint	3762	-
3	343	Animal bone		17.3
3	343	Flint	1085	
3	344	Flint	5	
3	348	Animal bone		172.8
3	348	Glass	1	
3	348	Metalwork	3	
3	348	Pottery	1	

3	348	Slate	1	
4	Unstratified	Flint	3	
4	Unstratified	Metalwork	11	
4	Unstratified	Pottery	5	
4	401	Flint	8	
4	401	Glass	44	
4	401	Pottery	56	
4	402	Animal bone		73.1
4	402	Brick - Fragment	19	
4	402	Flint	7	
4	402	Glass	28	
4	402	Metalwork	18	
4	402	Pottery	45	
4	402	Slate	5	
4	405	Animal bone		122.5
4	405	Brick - Fragment	1	
4	405	Metalwork	3	
4	405	Pottery	6	
4	405	Slate	2	
4	405	Tile	1	-
4	421	Animal bone		126.2
4	421	Flint	1	
4	421	Pottery	2	
4	423	Metalwork	3	
4	426	Animal bone		55.4
4	426	Flint	3	
4	426	Metalwork	4	
4	426	Pottery	6	
4	428	Animal bone		149.8
4	428	Brick - Fragment	3	
4	428	Flint	4	
4	428	Glass	3	
4	428	Metalwork	6	
4	428	Pottery	8	
4	428	Stone - Cobble	2	
4	428	Tile	1	
5	501	Animal bone		2259.7
5	501	Flint	2	
5	501	Glass	5	
5	501	Metalwork	5	
5	501	Pottery	9	
5	501	Shell	4	
5	502	Animal bone		687.8
5	502	Clay pipe stem	4	
5	502	Flint	1	
5	502	Glass	11	



5	502	Metalwork	7	
5	502	Pottery	36	
5	502	Shell	5	
5	504	Glass	1	
5	504	Metalwork	1	
5	504	Pottery	1	
5	506	Animal bone		17.0
5	506	Clay pipe bowl	2	
5	506	Clay pipe stem	2	
5	506	Flint	2	
5	506	Glass	2	
5	506	Pottery	30	
5	506	Shell	10	
5	506	Slate (Possible gaming piece)	1	
5	507	Animal bone		85.0
5	507	Clay pipe stem	1	
5	507	Flint	2	
5	507	Glass	3	
5	507	Metalwork	1	
5	507	Pottery	32	
5	507	Shell	13	
5	507	Tile	1	
5	509	Flint	1	
5	509	Metalwork	3	
5	509	Pottery	1	
5	511	Animal bone		1569.3
5	511	Clay pipe stem	3	-
5	511	Flint	5	
5	511	Glass	19	
5	511	Metalwork	5	
5	511	Pottery	35	
5	511	Shell	35	
5	511	Tile	2	
6	601	Animal bone		9.4
6	601	Glass	7	
6	601	Metalwork	2	
6	601	Pottery	5	
6	603	Metalwork	1	
6	603	Pottery	1	
6	604	Animal bone		72.4
6	604	Flint	1	
6	604	Metalwork	4	
6	604	Pottery	7	
6	605	Animal bone		72.9
6	609	Animal bone		9.4

6	609	Flint	1	
7	701	Animal bone		33.3
7	701	Clay pipe stem	1	
7	701	Flint	5	
7	701	Glass	6	
7	701	Metalwork	2	
7	701	Pottery	4	
7	702	Glass	3	
7	703	Animal bone		20.3
7	703	Glass	1	
7	703	Metalwork	5	
7	703	Pottery	6	
7	703	Stone - Dressed sandstone	1	
7	704	Animal bone		94.7
7	704	Glass	1	
7	704	Pottery	1	
8	802	Animal bone		474.5
8	802	Metalwork	1	
8	802	Metalwork - Coin (Modern penny)	1	
8	802	Pottery	3	
8	803	Animal bone		1924.6
8	803	Clay pipe stem	7	
8	803	Flint	7	
8	803	Glass	11	
8	803	Metalwork	16	
8	803	Plastic	4	
8	803	Pottery	101	
8	803	Shell	19	
8	803	Slate	1	
8	803	Slate (Possible gaming piece)	1	
8	803	Tile	1	
8	803	Worked bone	1	
8	804	Animal bone		39.5
8	804	Metalwork	1	
8	809	Glass	1	
8	811	Animal bone		142.5
8	813	Animal bone		32.3
8	813	Clay pipe bowl	1	
8	813	Clay pipe stem	3	
8	813	Glass	1	
8	813	Metalwork	4	
8	813	Pottery	24	
8	815	Animal bone		177.6
8	815	Clay pipe stem	2	

8	815	Flint	3	
8	815	Glass	1	
8	815	Metalwork	5	
8	815	Pottery	10	
8	815	Shell	4	
8	816	Animal bone		123.2
8	816	Clay pipe stem	1	
8	816	Flint	5	
8	816	Glass	3	
8	816	Metalwork	1	
8	816	Pottery	18	
8	816	Shell	2	
8	816	Tile	1	
8	817	Animal bone		1616.3
8	817	Clay pipe bowl	2	
8	817	Clay pipe stem	19	
8	817	Flint	17	
8	817	Glass	2	
8	817	Metalwork	3	
8	817	Pottery	19	
8	817	Shell	19	
8	817	Tile	2	
9	Unstratified	Flint	2	
9	912	Animal bone		836.2
9	912	Flint	6	
9	912	Glass	3	
9	912	Metalwork	26	
9	912	Metalwork - Lids	2	
9	912	Metalwork - Tins	4	
9	912	Pottery	6	
9	912	Tile	1	