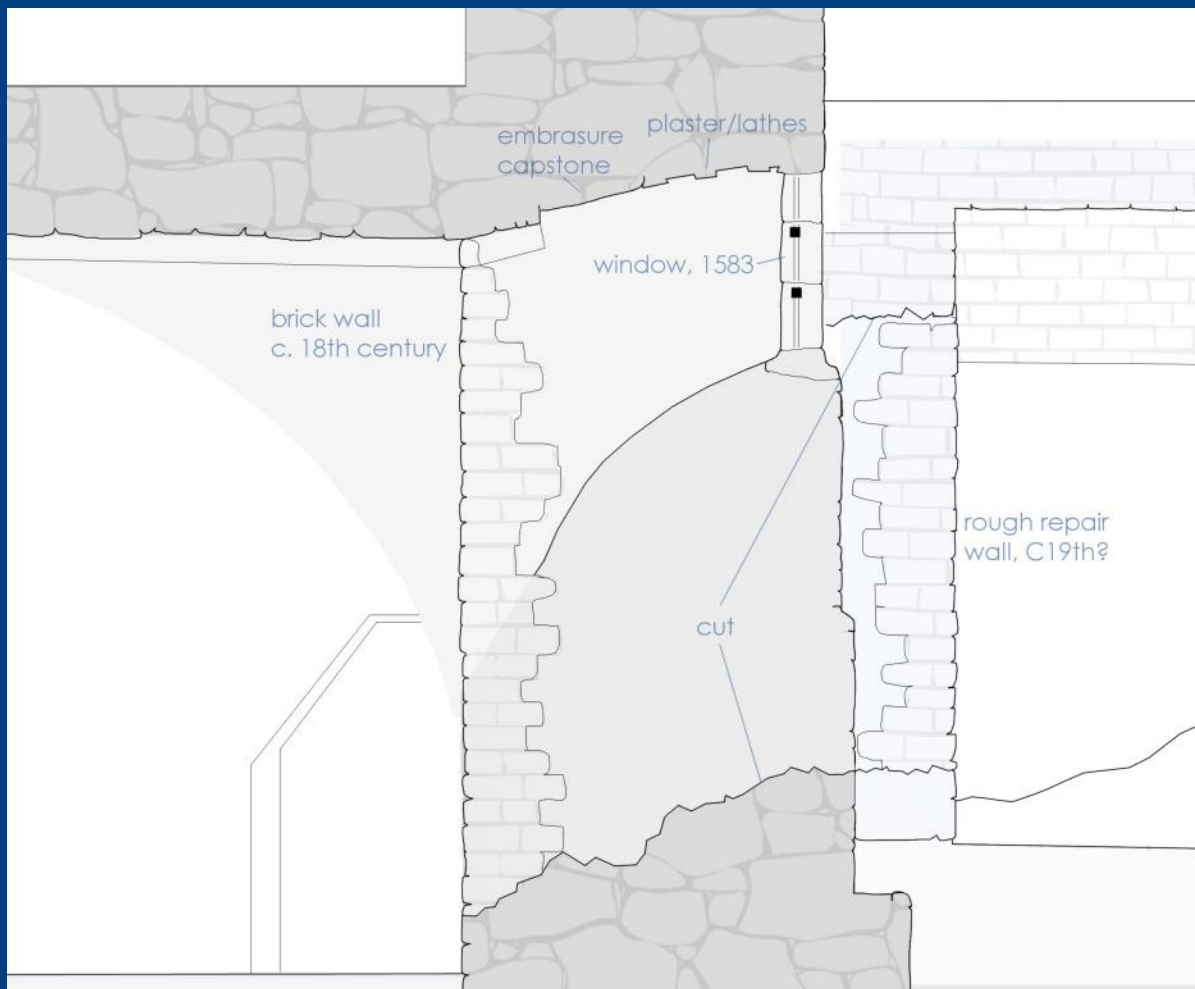


Rathfarnham Castle excavations 2016



GIACOMETTI

23/08/2016

LICENSE E4468

SITE NAME

Rathfarnham Castle, Basement Opening-up Works 2016, Rathfarnham Road, Dublin 14

CLIENT

Office of Public Works, 52 St. Stephen's Green Dublin 2

LICENCE

Ministerial Consent E4468 (C562)

REPORT AUTHORS

Antoine Giacometti BSc MA MIAI

DATE

23 August 2016

ARCHAEOLOGICAL TEAM

Director	Antoine Giacometti
Supervisors	Paula Kehoe Steven McGlade
Site Assistants	Aidan Holmes
Architects	Eithne Moran OPW Architectural Services
Groundworks	Dunwoody & Dobson

ABBREVIATIONS USED

DoAH&G	Department of Arts, Heritage and the Gaeltacht
NMI	National Museum of Ireland
NMS	National Monuments Service
OS	Ordnance Survey
RMP	Record of Monuments and Places
NIAH	National Inventory of Architectural Heritage
LAP	Local Area Plan

Table of Contents

Phase 1	Record and Assess
Phase 2	Visual Inspection
Phase 3	Excavation of Wall Cavity
Phase 4	Opening into coal cellars
Phase 5	Assessment of Coal Cellars
Phase 6	Cleaning of Coal Cellars

Report summary

This report is a compilation of six reports describing a programme of archaeological recording, assessment and excavation at Rathfarnham Castle during 2016. The work consisted of opening up a blocked room from the basement which led under the current entrance to Rathfarnham Castle.

The key findings of the works are:

- a new 16th century window in the castle basement
- a 16th or 17th century paved surface outside the castle
- two new early georgian (c. 1725) coal cellars
- Later georgian (c. 1770) elements retained in existing entrance

Rathfarnham 2016 Opening Up Works Phase 1: Record and Assess

E4468 (C562) RMP DU022-014 NM 628

Background

In 2014 two possible blocked doorways in the basement of Rathfarnham Castle, Co. Dublin, were identified (Giacometti 2014) and the existence of a blocked 16th century room was theorised. The OPW now wishes to see if it exists.

Phase 1 of the works ('Record and Assess') was carried out from 18-20/4/16.

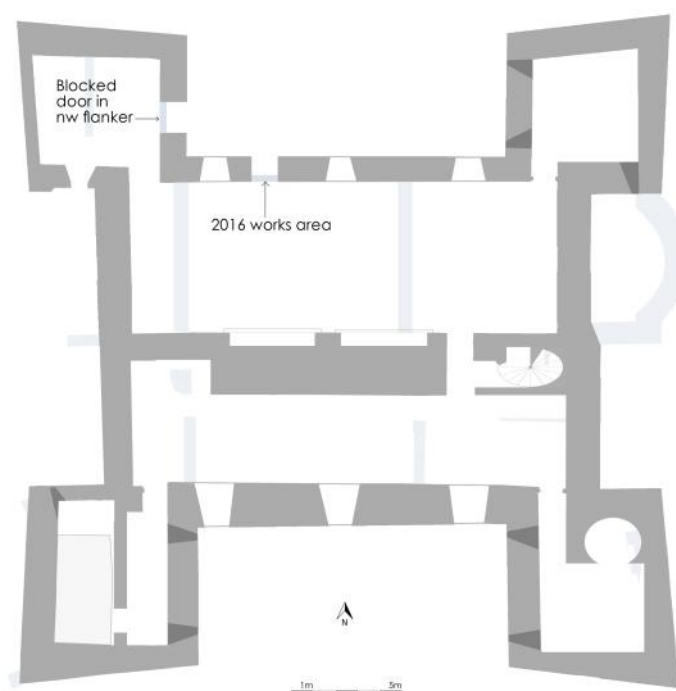
Location of works

The works area was a north-facing section of internal basement wall. The works area measured 2.64m in width (E-W) and 3.23m in height, from floor almost to the ceiling. The room in which the work area is situated is the larger of the two rooms in the northern half of the basement main block. The northern wall of this room measures 10.03m in length E-W, and the works area was situated between 2.40m and 5.04m from the northwest corner.

The works area is centred on a feature which appears to be a blocked opening, the central of three possible blocked openings in the room. The other two blocked openings are almost certainly windows, and match similar open windows on the southern side of the basement, unlike this feature which does not.

Recording of works area prior to works

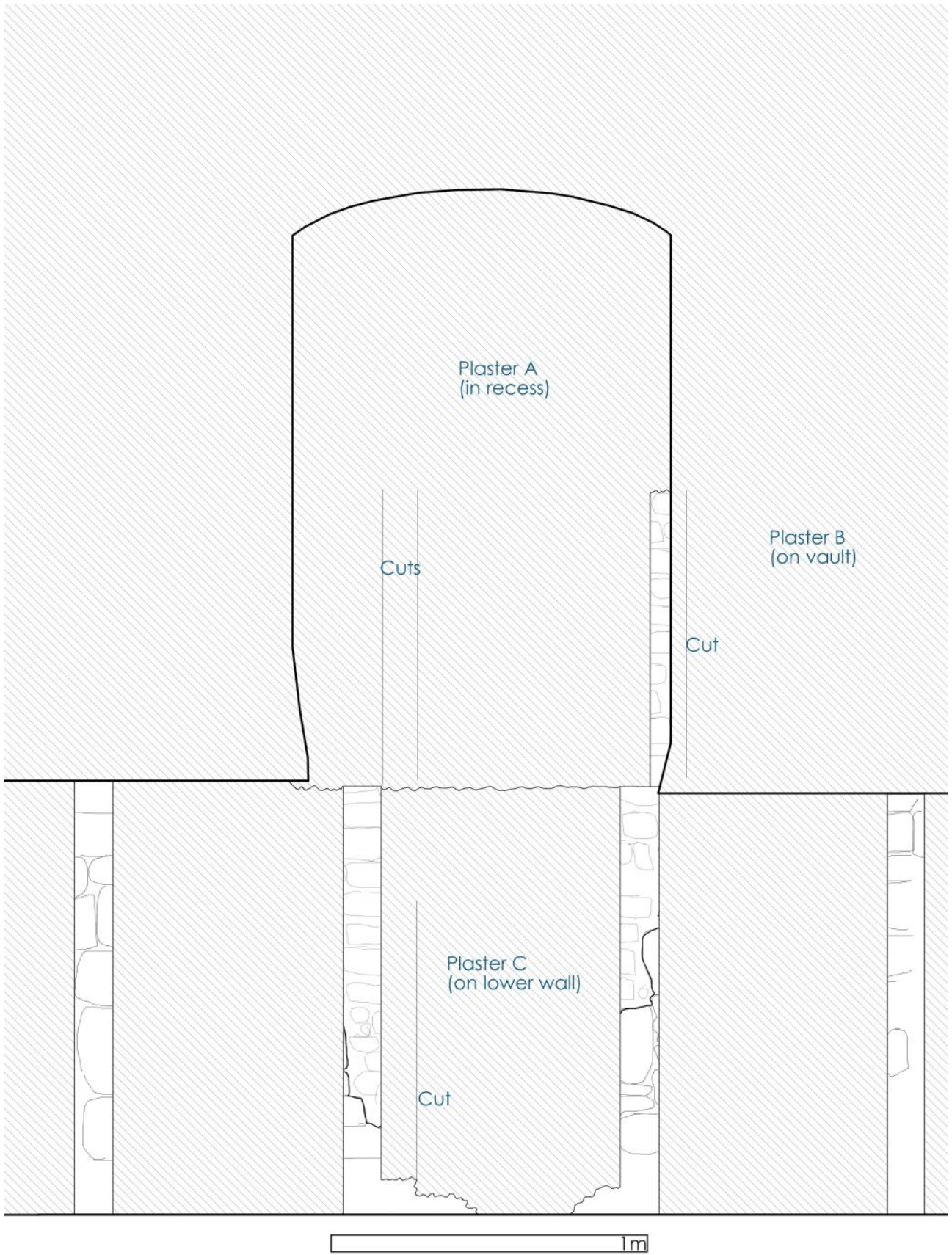
The works area is centred on a feature resembling a blocked opening in the vaulted upper half of the north wall. The feature begins 1.35m up from the floor level, which is approximately the springer line for the stone vault. The feature measures 1.15m in width (E-W) and 1.88m in height (from springer line) with straight sides to east and west and a gently curving surround on top with



Plan of basement showing 2016 works area

sharp corners to the sides.

The wall in the works area was covered in plaster. This plaster post-dates 1720 based on the 2014 excavation results, as it is later than the floor which was laid down in 1720 at the earliest. Three possible types or phases of plaster were recorded in the works area (Types A, B and C) however on reflection all are likely to be roughly contemporary and 1720+. The plaster is hard, very white in colour, and lime-based with inclusions of small stones. It matches the mortar between the bricks in the 18th century phase of the castle elsewhere (Giacometti 2014). Plaster type A was noted in the upper half of the blocked opening (115m wide and 1.88m high). Parts of Plaster A lap over Plaster B, so it post-dates it. Plaster B covers the stone vault, and is identical to



South-facing profile of works area prior to any intervention, showing plaster

Plaster A. Plaster C covers the walls of the basement below the springer line (up to 1.35m high) in the east and west walls. This plaster is also identical to Plaster A however it must predate it. Plaster types A, B and C must all post-date 1720 based on their relationships to the stone floor (1720s), western wall of room (1720+ as it rests on the floor), and coal bunkers (1720+ as they rest on the floor and abut western wall). No possible 16th or 17th century plaster was noted in the works area.

A sample (Sample 11) of possible 16th or 17th century plaster was collected in 2014 from the southeast flanker tower (Giacometti 2014). This sample contained coarse animal hair, which was absent in the three samples (A, B and C) from the 2016 works, further suggesting this plaster is later.

Traces of burning (3 certain, one possible) were noted on Plaster B in the roof of the vault. These appear to be evenly spaced and are located just beyond the coal bunkers, possibly suggesting they date to the period when the coal bunkers were in use (?mid-late 18th century? and into 19th century?). None were situated in the works area.

Seven features were noted in the plaster. Three of these are linear cut marks in Plaster A running from 1.35m up to 1.70m above the floor. These are almost certainly related to the construction or the use of the coal bunkers below as they roughly line up. They were recorded. The other four features are imprints of small brick walls of coal bunkers in Plaster C, visible as rectangular areas 1.35m high from the floor and 120mm in width where plaster is absent. Plaster C lips along the edges of the features, showing it post-dates them.

A fragment of a brick wall was located in the works area, abutting the eastern side of the feature. It ran from the springer line (1.35m above the floor) to a break at 2.30m above the floor, and measured 70mm thick. This wall fragment abutted plaster A, and is thus later than the coal bunkers (see below). It is likely to represent the remains of a storage structure built over the coal bunkers at a later date, and is almost certainly related to the linear cut marks noted above.

The 'coal bunkers' were previously situated all around the north, east and south walls of this room, as noted from similar rectangular features

around these walls. They are termed 'coal bunkers' here however there is little evidence of what they were used for. To the east and south these features carry up to roof level, however to the north and works area they only extend to springer level.

The 'coal bunkers' are no longer present, however their form can be reconstructed from the plaster on the walls. They comprised a row of brick compartments 720mm-750mm wide (E-W), 760mm long (N-S), and 130mm high (internal dimensions) abutting the north wall. The walls were 120mm thick which is the width of one brick. The brick wall to the front of the compartment was 860mm high and topped with a timber 140mm wide and 60mm thick, which supported a sloping timber lid 6mm thick. It is likely that the timber lid incorporated an opening in the sloping part, as with a standard coal bunker form.

Works area prior to any intervention, showing plaster





Traces of coal bunkers visible by areas of missing plaster in wall of basement

These coal bunkers were built up against the walls of the room before it was plastered, and after the opening in the works area (more on this below) was blocked. The absence of plaster behind them suggests that the blocking up of the opening and the building of the coal bunkers were conducted within a relatively short space of time. The same observation is true for the east wall. This ties in to the separate stratigraphy of the northwest flanker (see Giacometti 2014) and suggests that the construction of the coal bunkers is contemporary with the conversion of the tower into a coal cellar, which most likely took place between the 1720s and the 1790s (ibid).

Removal of the plaster

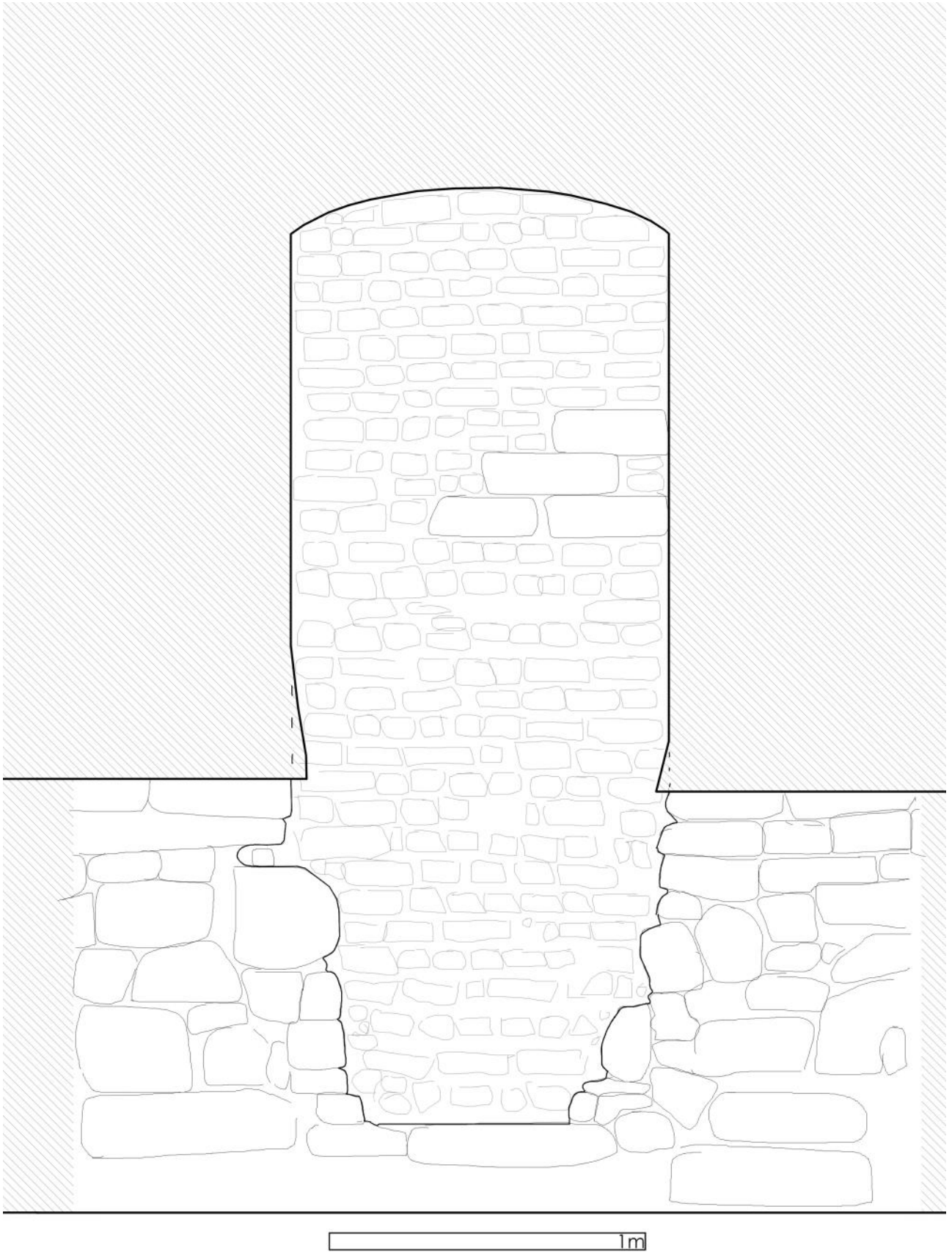
The plaster was removed in the works area from 19/4/16 to 20/4/16, revealing the underlying brick and stone. The original 16th century walls were exposed and construction was of masonry with a lime mortar, as elsewhere in the castle. A cut through the stone wall was apparent, starting

280mm above the floor and extending the full height of the feature (3.23m above the floor), and the full width of the feature (1.15m). The edges of the cut were straight in the upper half, but ragged and very rough in the lower half.

This was disappointing as we had hoped to identify 16th century door jambs, however no jambs or dressed stone was noted and it is now apparent that this is not the location of a blocked 16th century opening leading to a blocked room.

On the other hand, it is almost certain that there is a blocked room behind this wall (see Giacometti 2014). The 16th century castle walls are at least 1.2m thick (and become much thicker in the vault) so it is very unlikely that no opening was located here prior the c. 18th century cut. The 16th century opening may have taken the form of an internal window or defensive gunloop, now removed, rather than a doorway.

The opening was blocked with badly-fired brick,



South-facing profile of works area following removal of plaster, showing cut in 16th century wall



Works area and surrounding room and openings, following removal of plaster

of a similar type to that used in the coal cellar conversion of the northwest flanker tower, bonded with a lime-based mortar identical to Plaster Type A. These bricks were probably manufactured at the castle in the 18th century to be used in areas that were not intended to be visible. This is a further evidence that the coal bunkers were constructed immediately after the blocking up of the opening (as there was no plaster between the brick blocking and bunker wall).

The second feature identified after the removal of the plaster was the original line of the springer for the stone vault. This was lower than it currently appears (due to the plaster) and the vault begins between 1.12m and 1.27m from the current floor.

Drilling holes through brick

Two holes were drilled through the brick to ascertain its thickness. Hole 1 measured 20mm in diameter and was situated 320mm from the western side of the cut and 690mm above the floor. The drill bit was 200mm in length and the wall was thicker than the drillbit was long. A new drillbit

was fitted (12mm diameter) and the hole was extended to 340mm in depth, which was the thickness of the wall. Hole 2 measured 12mm in diameter and was situated 580mm from the western side of the cut and 1.47m above the floor. This also found the wall measured 340mm thick. Both drill holes identified a cavity behind the wall. The blocking wall is made entirely of red brick one-and-a-half brick-lengths thick.

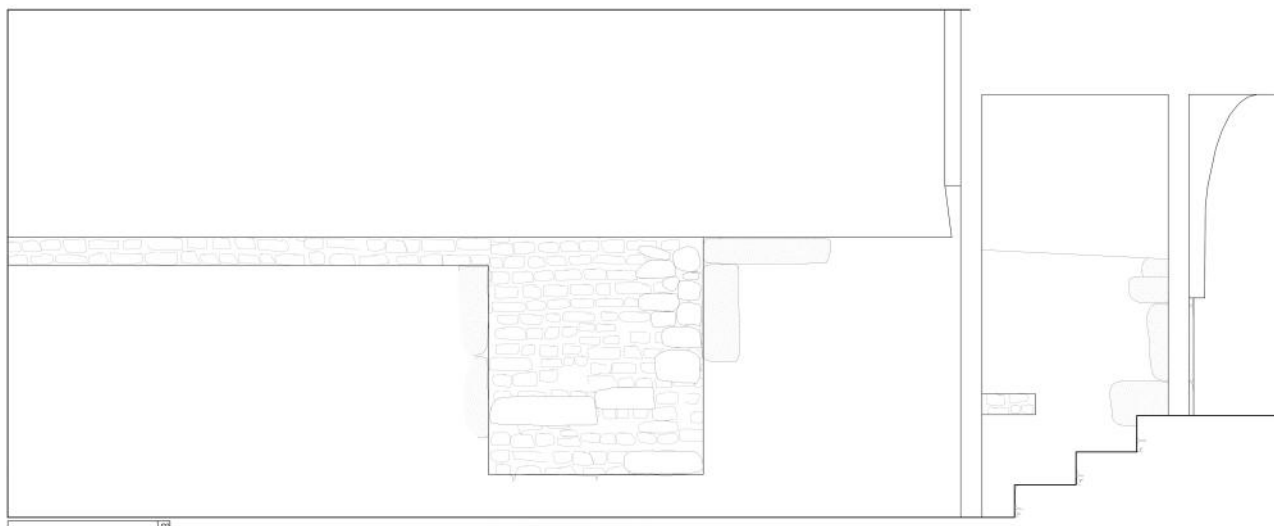
Blocked opening in northwest flanker

Although outside the works area, this opening was fully recorded (drawn, written and photographed).

The blocked doorway is situated in the eastern internal wall of the northwest flanker. It measures 1.32m internal width, situated between 2.95m and 4.27 from the northeast corner of the room. The base of the opening was noted 260mm above the floor, and comprises a large rectangular threshold stone. Four jamb stones are visible, comprising large rectangular limestone blocks c. 780mm long by 200mm wide that have been



Rectified photograph (ie. to scale) of works area following removal of plaster, showing cut in 16th century wall



West-facing profile of northwestern flanker basement wall, showing blocked 16th century doorway, note second 16th century in situ door to right side of profile. Pecked jamb stones shown by stippling

densely pecked. They consistent rectangular shape, straight faces and pecking mark them out from the ordinary rough stone of the castle walls, and these jambs are similar to other 16th century doorjambs in the basement. The upper jamb on the southern side is on its side and appears to be ex-situ, but the other three are in situ. Further jamb stones are obscured by plaster.

The doorway has been blocked with bad-quality red brick and some masonry.

The 16th century masonry wall either side of the doorway has no other features, and the absence of gunloops in this tower is the primary reason to suspect the existence of a defensive guardroom to the east under the original entrance stairs.

The 16th century door jamb to leading from the northwest flanker into the main basement block was also recorded. This survives to four jambstones (rectangular, well-faced densely pecked limestone blocks) 1m in height over the existing floor of the main block (the main block floor is 620mm higher than the northwest basement floor, thus both 16th century opening jambstones survive to the same height, which is presumably the original height of the 16th century doorway arch as recorded for the southwest flanker (see

Giacometti 2014).

Conclusion.

There is no blocked 16th century doorway leading to a blocked room at this location. However, it is likely that there was a smaller opening such as a gunloop or internal window. The doorway in the northwest flanker is likely to have provided the only internal access to the blocked room in the 16th and 17th centuries. This is problematic for defensive reasons, calling into question my own theories.

Based on the stratigraphic and physical evidence, the most likely scenario explaining the cut in the wall at this location is as follows. Sometime between the 1720s and ?1790? extensive works were carried out in the castle. These works included the conversion of the northwestern half of the basement into fuel stores (probably for coal), and included renovations to the northwest flanker to build a coal access chute (replacing old basement entrance) and brick vaulted coal cellars, and the construction of a series of storage bunkers in the northern basement room. As part of these works or not too soon before them, the main entrance to the castle was redesigned. A cut was made in the wall to gain access to the defunct 16th century 'guardroom?' that was under the 16th century entrance, and the substructure of



northwestern flanker basement wall, showing blocked 16th century doorway

the new entrance (possibly brick vaults for the large double-staired 18th century brick entrance identified by Judith Carroll in the 1990s) was constructed. The hole was then blocked.

Proposed next phase

A section of the bricks will be removed to gain access to the space behind, hopefully finding remains of the 16th century blocked room, modified with brick arches for an 18th century entrance substructural support.

The section will be at chest height and measure approximately 500mm by 500mm across. I will assess the cavity behind and get back to the NMS with my conclusions. These works will take place on 25/4/16.

If the hole needs to be repaired, this will be done using historic red brick and lime mortar.

20/04/2016

Antoine Giacometti
Archaeology Plan archaeological consultancy
32 Fitzwilliam Place Dublin 2
01 6761373 0872497733
email@archaeologyplan.com

Rathfarnham 2016 Opening Up Works

Phase 2: Visual Inspection

E4468 (C562) RMP DU022-014 NM 628

Background

In Phase 1, 18th century plaster was removed from a section of the basement wall in Rathfarnham Castle revealing a blocked opening.

Phase 2 works

Phase 2 of the works ('Visual Inspection') was carried out on 25/4/16.

A 430mm wide and 370mm hole was drilled into the 18th century brick wall (width=350mm) which was recorded in Phase 1. I monitored these works. The hole was situated centrally in the brick wall, 1.4m up from the floor. The purpose of the hole was to provide a visual inspection of the cavity behind it.

Visual inspection of cavity

The cavity behind the wall measures approximately 1.35m long (N-S), 1m wide (E-W) and 2.5m high.

The upper half of the cavity is a blocked 16th century window opening. Unworked masonry with surviving plaster line either side and top, and the top half of a sandstone? frame of a square-headed 16th century? mullioned window. No in situ glass was evident. It was hard to get a good view of the feature from the small hole. The window frame measures c. 500mm wide and c. 750mm high (broken). The window is blocked by brick and stone, probably from the inside.

The lower half of the cavity was formed by the mining out of a tunnel through the c. 2m thick outer masonry wall of the 16th century castle. This tunnel was formed below the 16th century window opening, slopes upwards gently (from c. 400mm above floor to S, to c. 600mm above floor to N) and bends to the right. Either side or base comprises roughly broken masonry. The break in the 16th century wall continues (presumably to the exterior of the wall) but it is blocked by a rough wall of brick and stone. This wall is probably of 18th century date and appears to have

Works area showing hole in wall





Process of creating hole in brick wall



View straight through hole, showing original 16th century broken masonry to left and right, and brick and stone wall blocking far end of passage to rear



View downward through hole, showing thin layer of sediment with fragments of plaster and a broken glass bottle



View upwards through hole, showing 16th century window opening and original? stone window frame

been constructed from this side (ie the south side).

The base of the cavity has a thin (c. 1-inch?) layer of dark brown dust and soil. One broken green glass bottle lies on this. The bottle may be of mid-late 18th century date from visual inspection by torchlight. Fragments of plaster from the overlying window opening are also visible.

Implications of finding

The location of this 16th century window is completely unexpected. It does not conform with our theories about 1) the presence of a sub-access-stair guardroom at or near this location; or 2) symmetrical fenestration of the 16th century fortified house. This implies that the frontage of the original fortified house has been misinterpreted.

The discovery of the 16th century window is also important because such windows are rare. A number other possible 16th century windows have been identified at Rathfarnham Castle (Giacometti 2014) but they have all been heavily modified during the 18th, 19th and 20th centuries. A 17th century(?) casement window was identified by Nessa Roche (unpublished thesis) at Rathfarnham Castle, and this discovery was considered of significant importance. The discovery of a possible 16th century window adds to the significance of the National Monument.

Proposal for Phase 3

A third phase of work is now proposed.

- a) Enlarge opening in 18th century brick wall to 700mm x 1200mm.
- b) Make work area safe for archaeologists (gas testing; confined space methodology and best practice; structural engineer assessment)
- c) Archaeologist (ie me) to enter cavity and record. Dust on floor to be carefully planned, photographed and excavated (all material sieved to 1.4mm) and all finds dealt with to NMI standard. Particular attention will be paid to the recovery of potential window glass. No environmental samples are proposed based on lack of potential.
- d) Archaeological recording (drawn, written and photograph) of 16th century window, invitation of Nessa Roche to inspect and give opinion on window.



16th century blocked window opening in northeast of basement, missing window frame, showing what 16th century window might have looked like originally prior to the 18th century

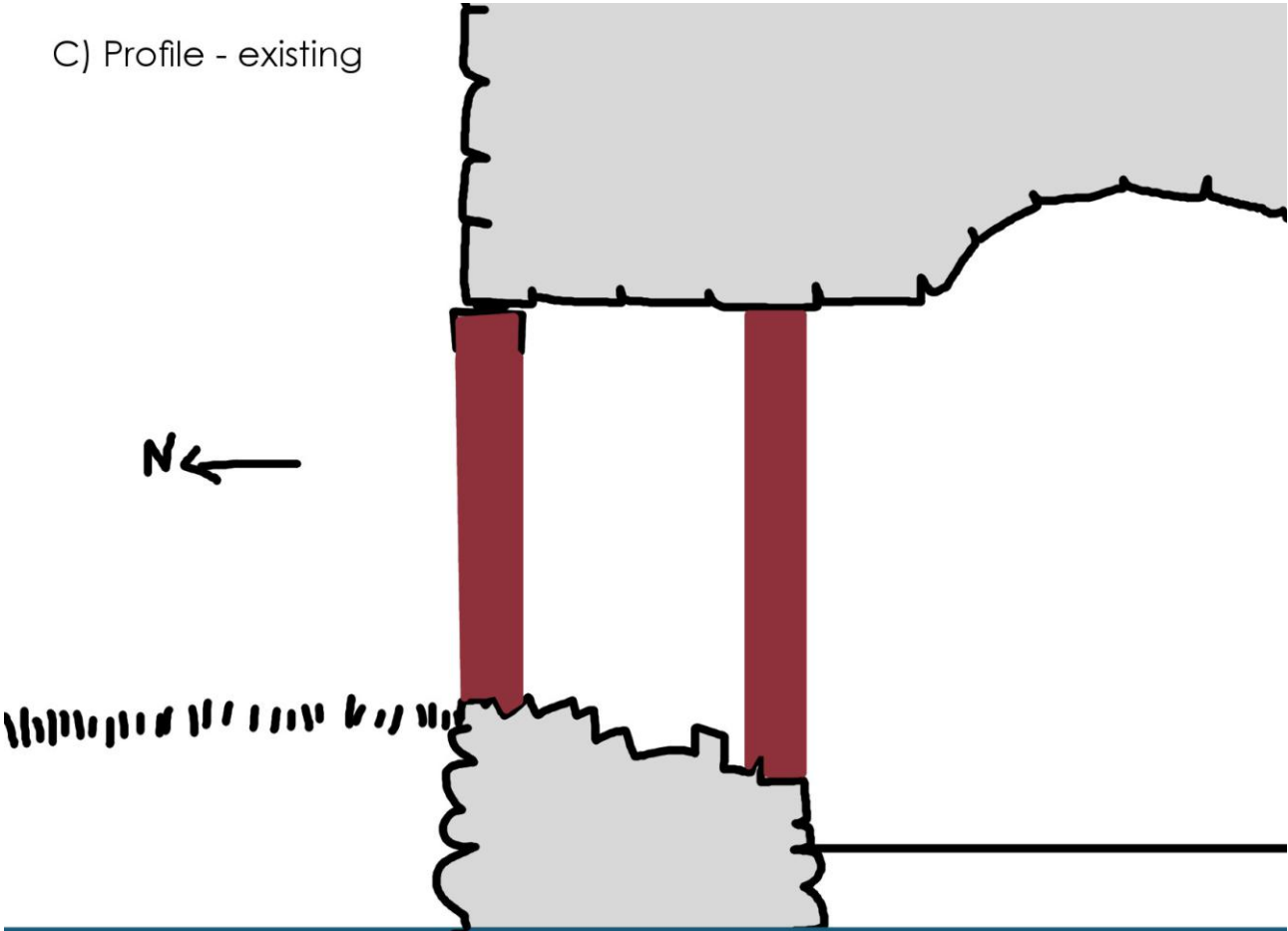
- e) Report on the above to NMS.

National Monuments and National Museum are invited to come and view the site at any time of their convenience, though it's hard to see much at the moment.

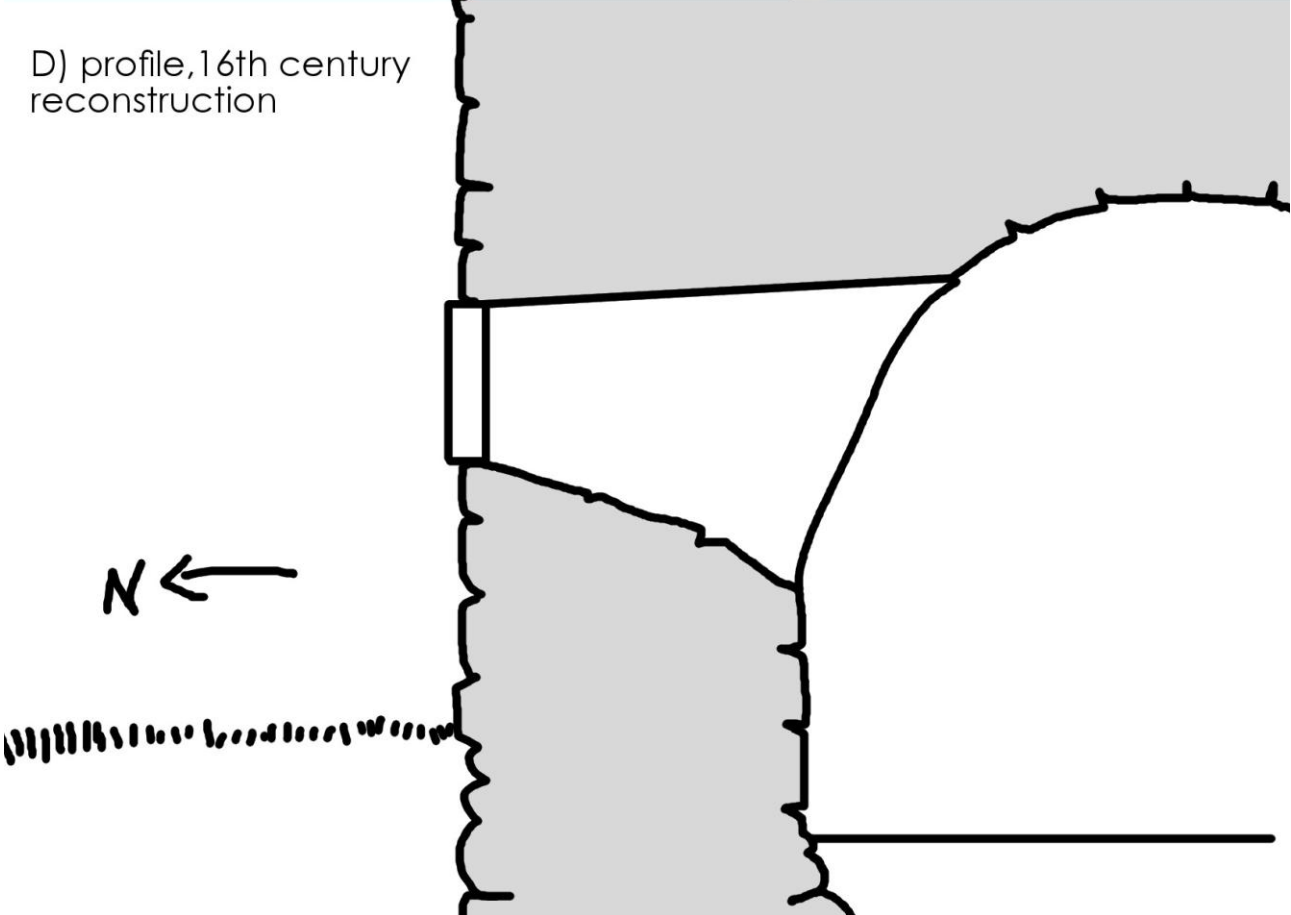
26/04/2016

Antoine Giacometti
Archaeology Plan archaeological consultancy
32 Fitzwilliam Place Dublin 2
01 6761373 0872497733
email@archaeologyplan.com

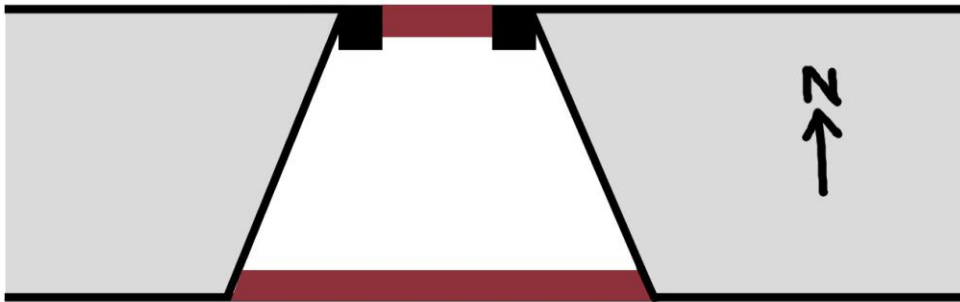
C) Profile - existing



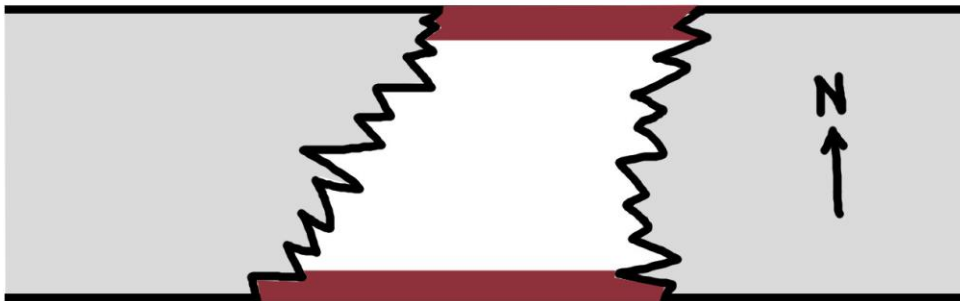
D) profile, 16th century reconstruction



A) plan view sketch of top half of opening



B) plan view sketch of bottom half of opening



Terrible plan and profile sketches are not-to-scale

Rathfarnham 2016 Opening Up Works

Phase 3: Excavation of Wall Cavity

E4468 (C562) RMP DU022-014 NM 628

Background

In Phase 1, 18th century plaster was removed from a section of the basement wall in Rathfarnham Castle revealing a blocked opening.

In Phase 2, a hole was drilled into the 18th century brick wall revealing a cavity within the wall and a blocked 16th century window frame.

Phase 3 of works

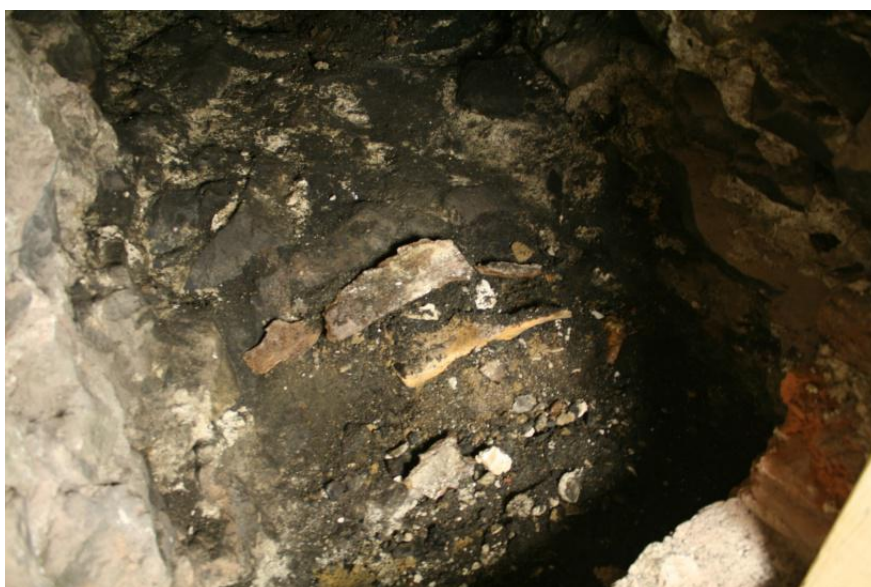
Phase 3 "Excavation of wall cavity") was carried out from 19-20/5/16. The Phase 2 hole through the brick wall was widened to 1310mm tall and 720mm high to provide access into the cavity for the archaeologists, who entered, excavated a thin layer of material on the floor, and recorded the window and a second wall within the cavity.

Cavity

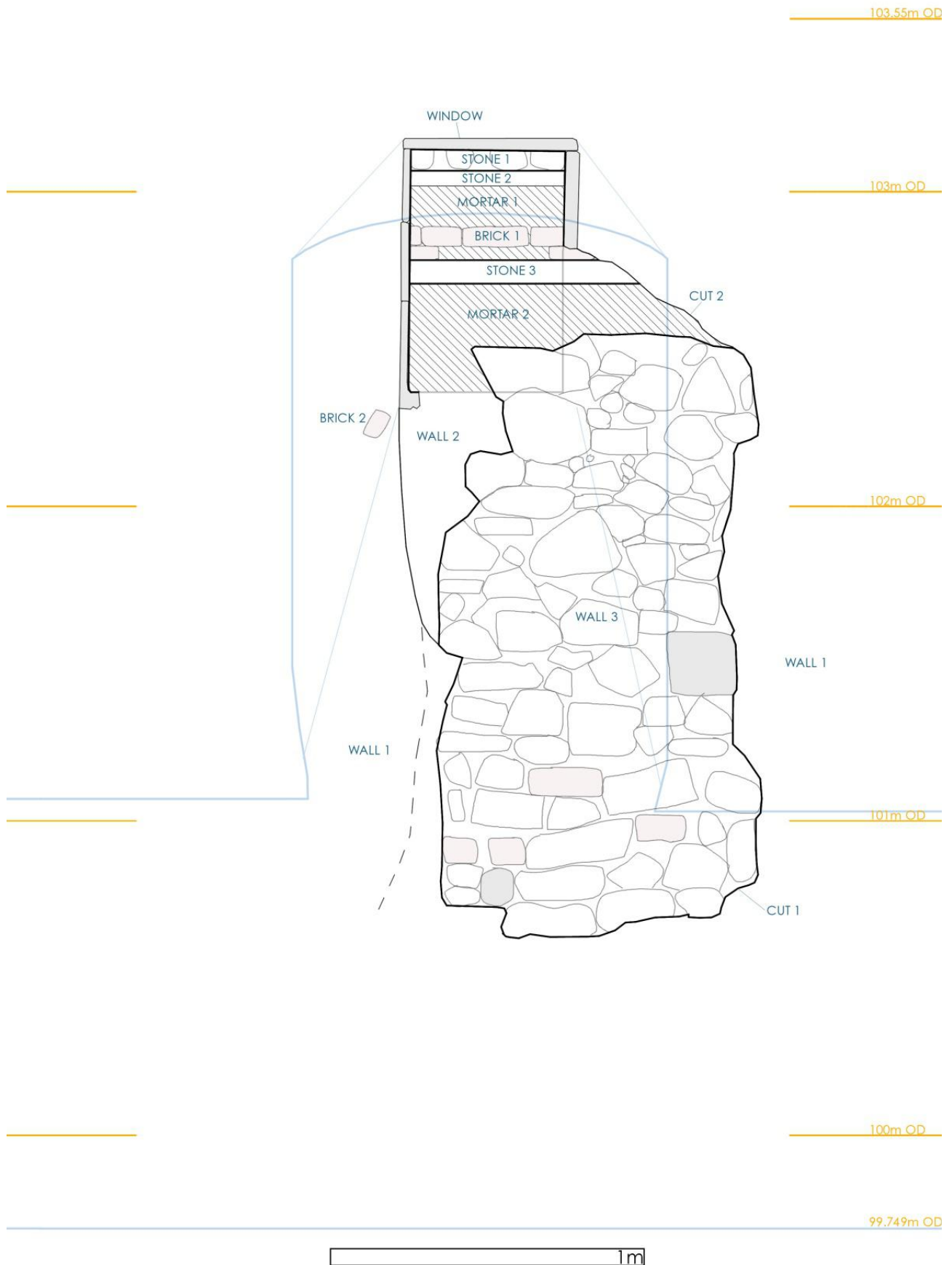
The cavity results from a rough hole quarried through the north basement wall of the castle directly below a window opening. Both ends of the hole were blocked, leaving a cavity measuring 1.4m N-S, 700mm-900mm wide, and c. 2m high. The base of the quarried hole slopes up (from 400mm above the basement floor in the south to 900mm above the floor to the north) and veers slightly to the right.

A thin (c. 2mm) deposit of dark brownish-black fine silt with high organic content was spread out over the base of the cut. It appears to have been caused by settling dust, coal dust, lime dust and decayed wood. This was carefully excavated by an archaeologist with a trowel and brush, leaving in situ all artefacts. The soil was sieved through 1.4mm fly-mesh to find small fragments of glass and animal bone.

Mid-excavation views of deposit within cavity and artefacts in situ



South-facing profile of cavity, showing 16th century window and 18th or 19th century cut





Wall 3

18 artefacts were identified during the excavation and planned in situ (refer plan). These comprise seven glass artefacts (from at least two wine bottles and one wine glass), eight bones (from at least two mammals) and three fragments of timber (from one plank). Once planned and photographed, the artefacts were lifted and retained.

CUT, INT FACE OF WALL BTM/TOP: 100.15/101.10 mOD
 CUT, EXT FACE OF WALL BTM/TOP: 100.65/102.49 mOD

Wall 3

The wall blocking the north side of the cavity ('Wall 3') measures 700mm-1m in width and 1.9m in height. It is constructed very roughly and haphazardly of large limestone blocks with rare granite and red brick. The mortar is very rough, and appears to be lime-based but is difficult to examine due to the cave-like conditions within the cavity. The wall runs WSW to ENE, at an angle to the other walls.

The brick wall (Wall 4) blocking the south side of the cavity was recorded and described in Phase 1.

WALL 3 BOTTOM/TOP: 100.65 / 102.49 mOD

Window



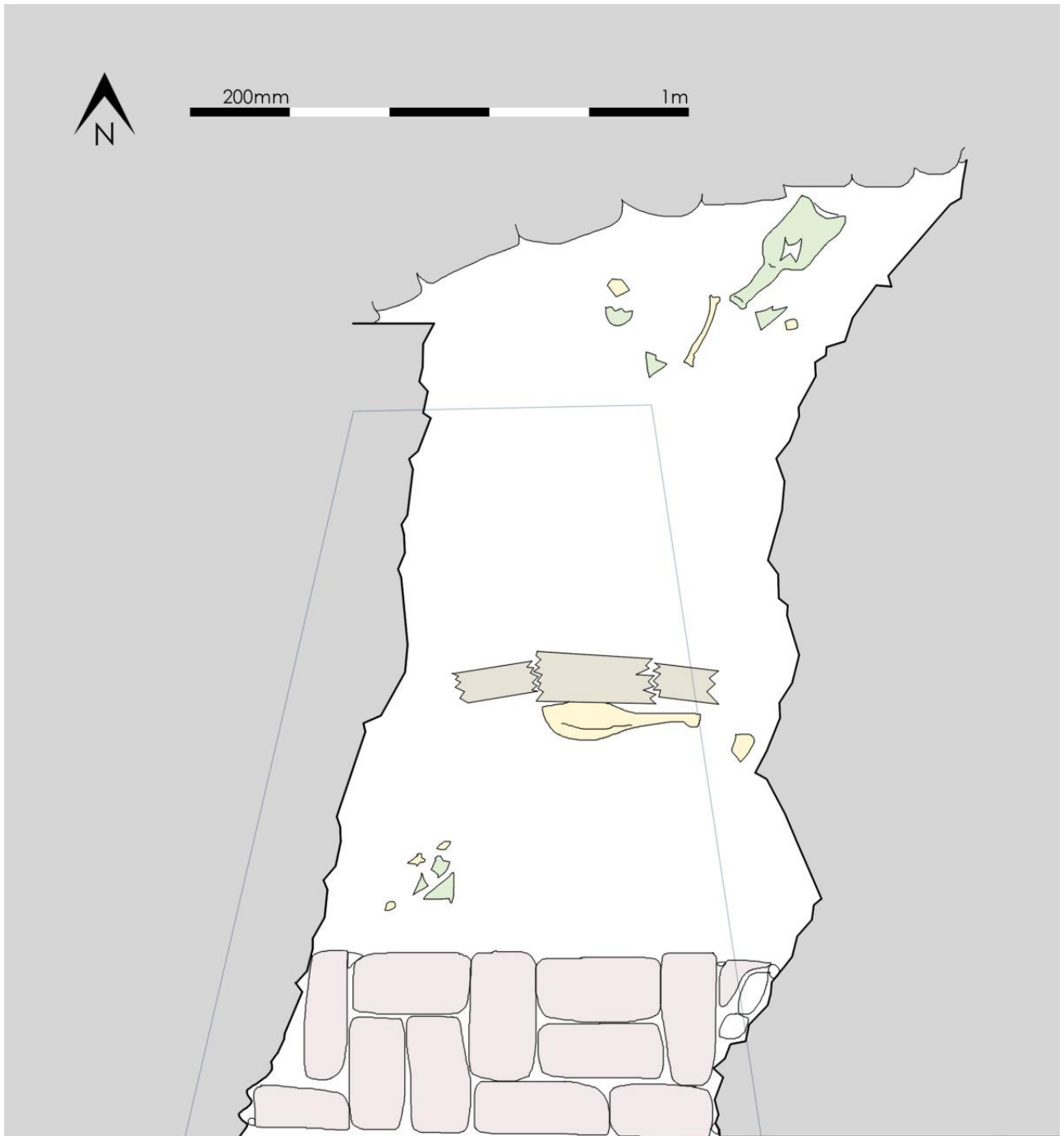
Wall 1

This is the basement wall of the 16th century castle, constructed c. 1583. It appears to be contemporary with the embrasure and probably the stone window frame. It measures c. 2m in width. The external face of the wall was identified at the end of the cavity.

The embrasure

The window embrasure is visible at the top of the cavity, and corresponds to the embrasure visible on the internal northern basement wall. Flush

Plan of cavity, showing location of artefacts



with the internal basement wall, the embrasure measures 1.15m in width (E-W) and 1.88m in height (from springer line), situated 1.35m from the floor. The embrasure extends 1.40m deep into the wall to the window frame, narrowing to 600mm in width and 900mm in height. The embrasure slopes noticeably upwards:

EMBRASURE BTM/TOP INTERNAL WALL: 101.10/102.98 mOD
EMBRASURE BTM/TOP AT WINDOW: 102.30/103.20 mOD

The window

The quarters of the stone frame of a rectangular mullioned window survives in situ in the upper-north end of the cavity. The lower left corner of the window has been truncated by the cut. The window frame measures 50mm high and 78mm high internally. Jambstones are well made, chamfered, have holes for bars and slits for fitting panes. Nessa Roche and Jacqui Donnelly postponed an inspection of the window in June, however it is anticipated that their insights will provide information. In the meantime, the window appears to be original to the castle construction c. 1583. No window glass or window lead was identified during this phase of works.

WINDOW LIGHT INTERNAL BASE/TOP: 102.35 / 103.13 mOD

Wall 2

Part of a wall that abutted Wall 1 was identified at the far end of the cavity. It was constructed up against the external façade of Wall 1 (the main wall of the castle), and also appears to have partially blocked the window. It may have held a raised entrance feature providing access to the main entrance, possibly represented by Mortar 2 and Stone 3. As with Wall 1, Wall 2 was cut by the tunnel quarried through the wall. Wall 2 was constructed of limestone blocks bonded by lime mortar.

Mortar 2

A c. 350mm thick layer of lime mortar abutting the window, overlying Wall 2, and perhaps serving as bedding for Stone 3. Mortar 2 is cut by the tunnel quarried through the wall.

Stone 3

Limestone paving stone c. 750mm long and 70mm thick sitting over Mortar 2. Possibly part

of an entrance feature. Top of paving stone at 102.95mOD.

Brick 1

Two courses of brick sitting over Stone 3, possibly a later entrance feature.

Mortar 1

A c. 140mm thick layer of lime mortar abutting the window, overlying Brick 1, and perhaps serving as bedding for Stone 2.

Stone 2

Limestone paving stone c. 500mm long and 50mm thick sitting over Mortar 1. Possibly part of an entrance feature. Top of paving stone at 103.24mOD. For comparison, the current entrance is at 103.55mOD, so Stone 2 predates it.

Stone 1

Four large rounded stones c. 100mm in diameter, resting on the surface of Stone 2. May be from a cobbled surface, or more likely just fill for the existing entrance platform.

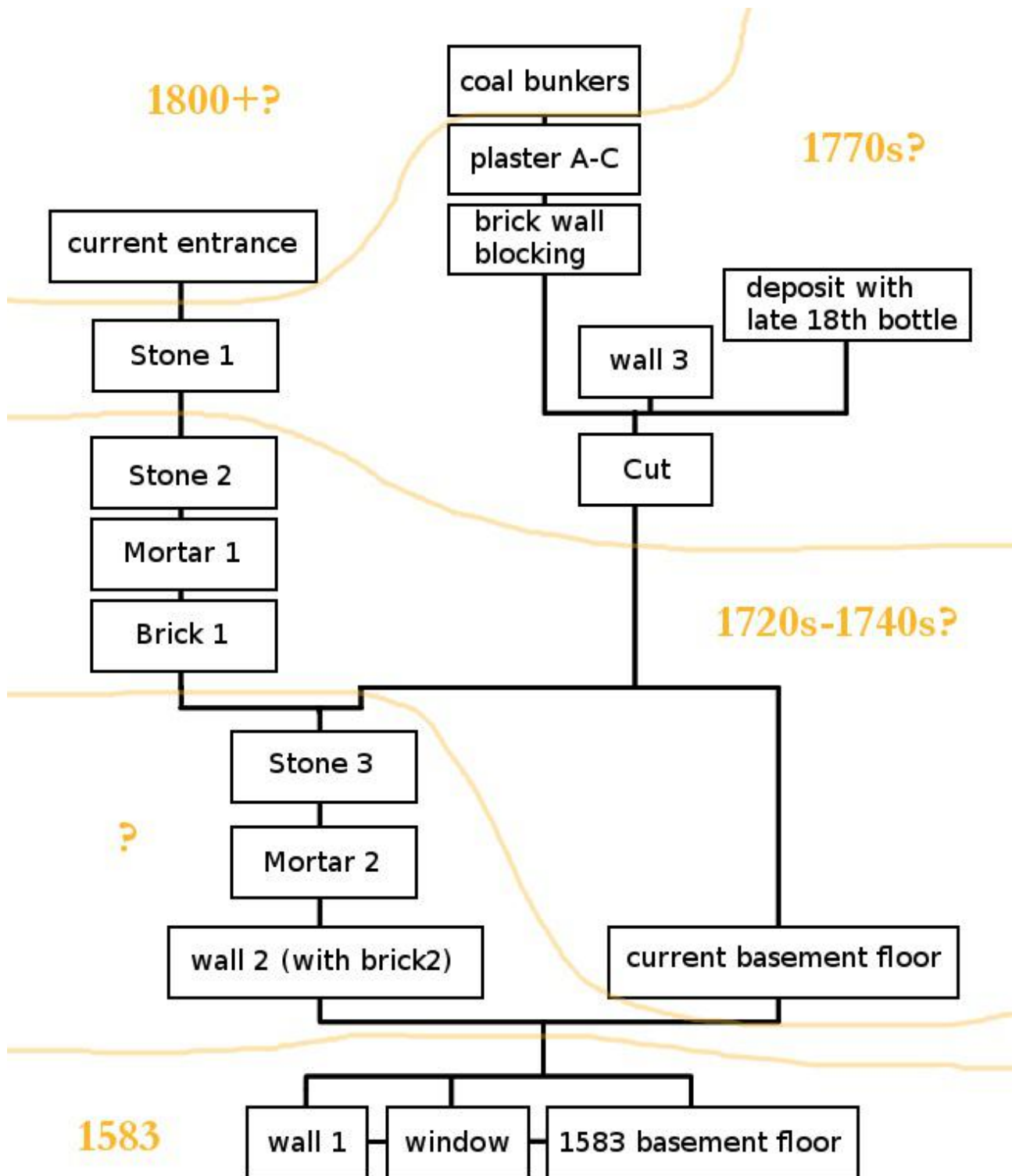
Interpretation

Multiple phases of construction have been exposed during the excavation of the cavity. The stratigraphy is complex; perhaps even more complex than anticipated if Stone 2 and Stone 3 are the top and underside of a masonry arch holding up the existing entrance. A more likely interpretation is that they represent two earlier surfaces.

16th century phase

Wall 1, the embrasure and the window are almost certainly part of the original construction of Rathfarnham Castle c. 1583. This is the only surviving original window opening in the basement of the castle. The 16th century floor level in the basement was identified at c. 98.90m OD in 2014, which would make the bottom of the window 3.45m above the floor and the top at c. 4.23m above the floor; almost as high above the basement floor as a window in an upper story. This is not surprising for a lower window in a defensive castle.

Stratigraphic matrix showing phases of construction identified during opening up works



Undated phase1

Wall 2, mortar 2, and stone 3 appears to represent an extension to the front façade of the castle, which blocked the window, probably for a raised entrance feature. This phase is mostly of stone with one thin red brick noted. It may date to the 17th or early 18th century.

Undated phase2

Brick 1, Mortar 1 and stone 2 appear to post-date Undated phase 1, and appear to represent a later raised entrance feature. It is unclear if this phase is late 18th century date (and thus broadly contemporary with the cut), or not.

Current basement floor

The current basement floor (at 99.749mOD) dates to c. 1720-1740.

The cut

The cut through the 16th century and undated phase appears to date to the late 18th century based on a late-18th century bottle found within the cavity. This corresponds to an extensive phase of rebuilding at the castle by Henry Loftus in the c. 1770s. This cut may have been formed to allow temporary works on a new entrance feature which required the construction of vaults. This cut was almost certainly formed after the basement floor had been raised in the early 18th century. The cut was blocked by the brick wall and stone wall (Wall 3), which are also broadly contemporary.

The artefacts

The presence of a broken but complete green glass bottle, sherds from a second similar bottle a foot sherd of a clear wine glass, timber, and mixed animal bone within the cavity, is interesting. The timber may have been used during the temporary works. The glass bottle(s) and wine glass fragment may indicate beverage consumption within the cavity as it was closed up; for example, a toast to a job well done! However, the absence of clay pipe (indicating smoking) and lack of the rest of the drinking glass makes this unconvincing. A more likely interpretation is that the (already broken?) bottle was used to hold a candle during the works within the cavity. It may have rested in a nook noted in the upper west of Wall 3, then fallen to its current position. In this interpretation, the animal bone,



bottle glass from the cavity





wine glass from the cavity



timber (above); animal bone (below) from cavity



sherds of second bottle and wineglass fragment are residual, perhaps churned up from the front of the castle. The artefacts would therefore not be indicative of the date of the interventions, which could date to the late 18th or 19th century.

Proposals for Phase IV

The next step is to make a small hole in Wall 3 to allow visual inspection of the space behind it. We would expect to find a cavity here with the brick or stone arches holding up the existing raised entrance. Once confirmed, we will open the hole large enough to provide access. This will allow the archaeologist to enter the cavity and draw a N-S profile of the cut showing the width of Wall 3 and assess the multiple entrance phases identified. This will also allow the OPW engineers to check the structural integrity of the late 18th century/19th century entrance.

Placeholder text line 1

Placeholder text line 2

Placeholder text line 3

Background

Placeholder text for Background section

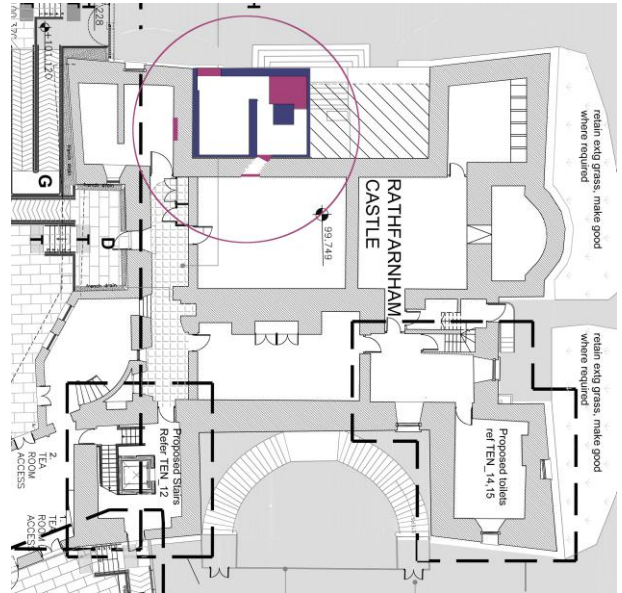
Phase 4 works description

Placeholder text for Phase 4 works description section

Placeholder text for Phase 4 works description section

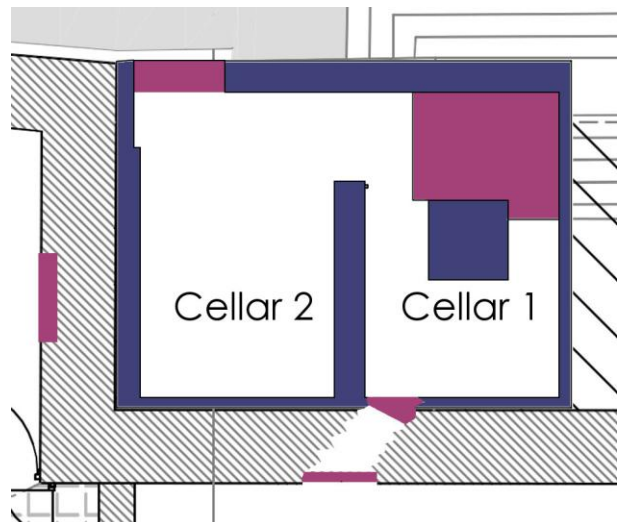
Coal Cellar 1

Placeholder text for Coal Cellar 1 section



Placeholder text line 4

Placeholder text line 5

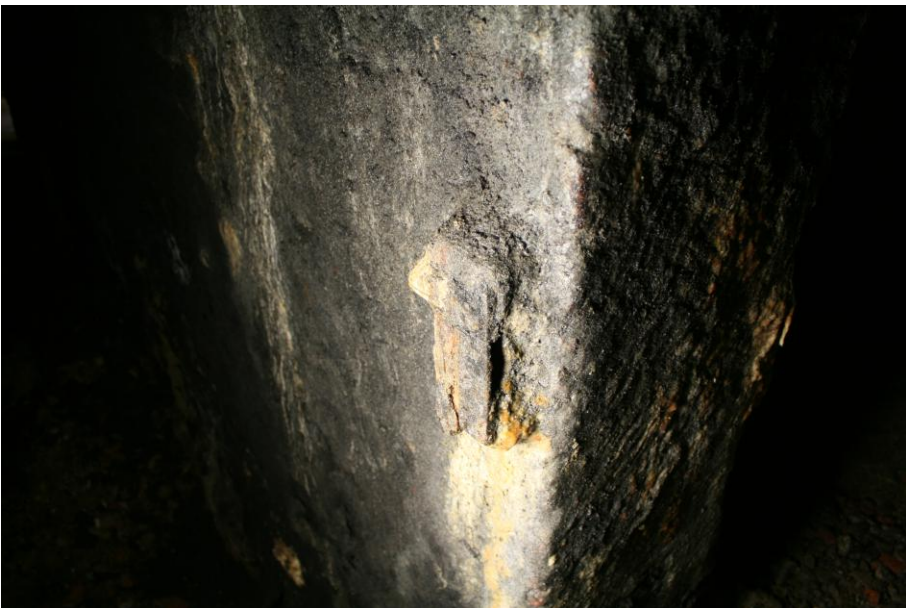




□□□□ □□□□ □□□□ □□□□ □□□□ □□□□
□□□□□□□□□□□□□□ □□ □□□□□□
□□□□□ □□□□□ □□□□□□



□□□ □□□ □□□□□□□□□□ □□□□□
□□□ □□□□□□□□□□□□□ □□□□□□
□□□□□□ □□□□□□□□□□ □□□□□□



□□□□ □□□□□□ □ □□□ □□
□□ □□□□□ □□□□□□ □□□□□
□□□□□ □□□□□ □□

... ..

... ..

... ..

Coal Cellar 2

... ..

... ..

... ..

Interpretation

... ..

... ..

... ..

Proposals for next phase of works

... ..

... ..

... ..

... ..

Rathfarnham 2016 Opening Up Works Phase 5: Assessment of Coal Cellars

E4468 (C562) RMP DU022-014 NM 628

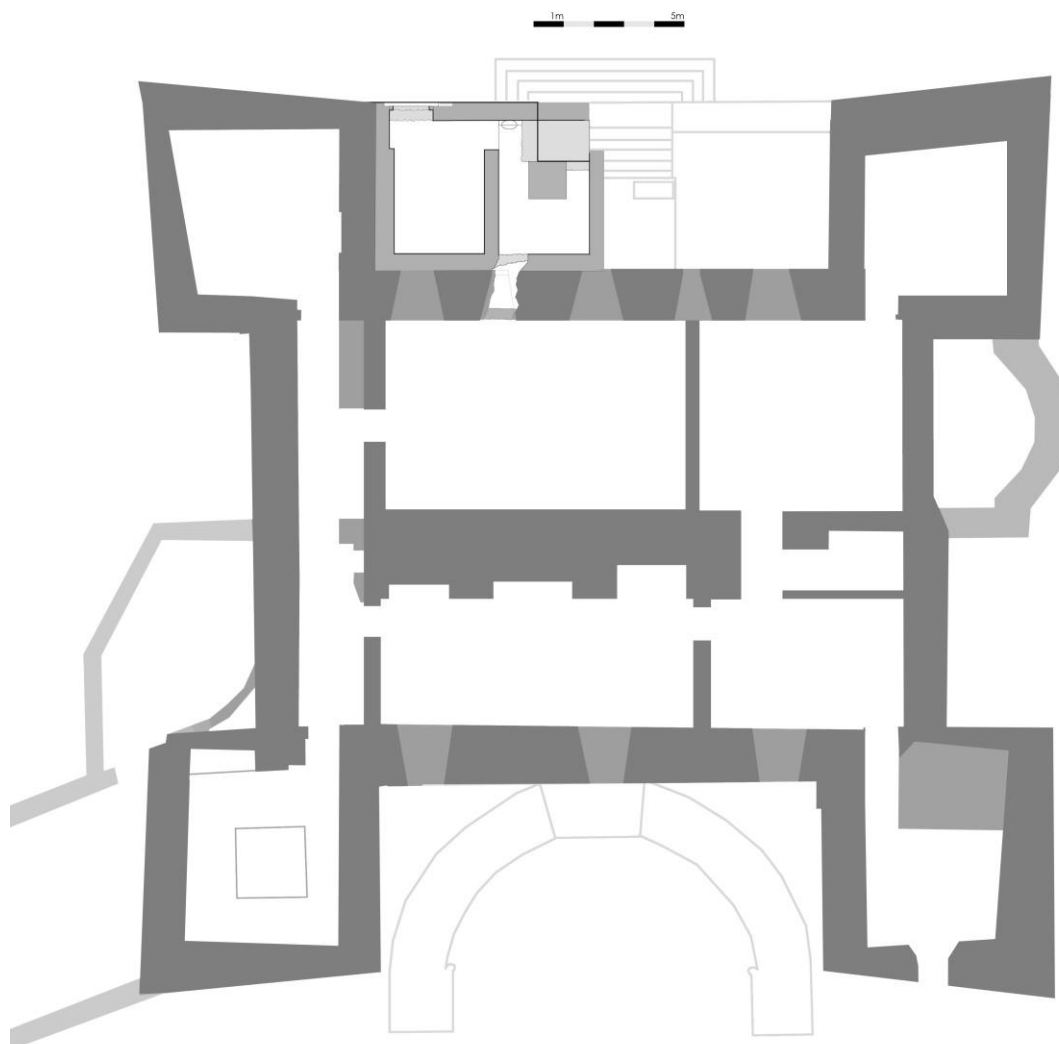
Background

In Phase 1, 18th century plaster was removed from a section of the basement wall in Rathfarnham Castle revealing a blocked opening. In Phase 2, a hole was drilled into the 18th century brick wall revealing a cavity within the wall and a blocked 16th century window frame. In Phase 3, this cavity was excavated and recorded, and second blocked wall (c. 19th century) was iden-

tified. In Phase 4, the second blocked wall was opened up and two coal cellars were exposed.

Phase 5 of works

The coal cellars were planned and profiled and the mounds of spoil were assessed for archaeological material. The floor of one of the cellars was identified.



Rathfarnham Castle basement; scale 100 pixels = 1m; Giacometti 22/7/16

Description of coal cellars

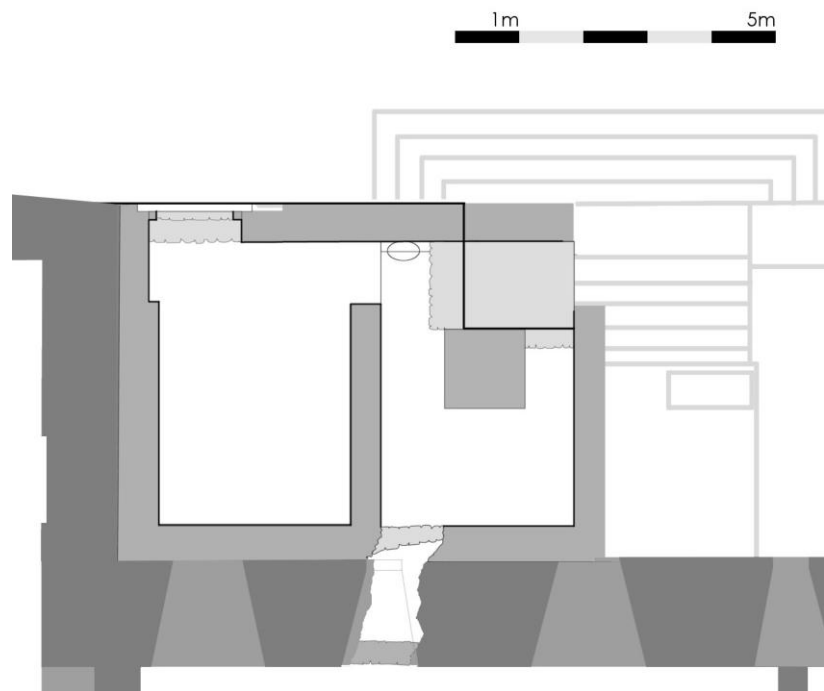
Two empty coal cellars of 18th century date were exposed (Coal Cellar 1 to east and 2 to west). These are in good condition and are stable. A scaled plan and a scaled profile of the cellars was produced.

Coal Cellar 1

Coal Cellar 1 measures 4420mm N-S by 3000mm E-W, has four masonry walls (Wall 2) and a brick arch roof oriented N-S. A break 970mm wide in the south wall, roughly blocked from the interior with masonry (Wall 4), provided our access. A doorway (980mm wide) in the west wall provides access to Coal Cellar 2. Presumably a second doorway in the east wall provided access to a third and fourth cellar to the east but this has been roughly blocked in the c. 19th century (Wall 7). The floor level steps up 100mm at a step inside the doorway. This step also extends along the northern wall of the cellar to a width of 160mm. This step may indicate the original intended floor level of the coal cellar, c. 100mm above the current unlined cellar floor.

A large square column (Wall 5), 1230mm-50mm across, in the centre of the coal cellar supports the brick arch roof and lies directly under a pair of columns on the entrance platform. This is a later (c. late 18th century?) intervention into the cellar. A break in the roof in the north is approximately the shape and size of a coal hole (300mm by 500mm). A lock mechanism of timber and ferrous metal is located at the doorway between cellars 1 and 2.

The walls of the cellar are made of masonry, as is the doorway surround. The vault is made of red brick bonded with lime mortar and the springer of the vault is situated 2080mm-2280mm above the cellar floor. The highest point of the ceiling is 2780mm above the floor. The western wall measures 460mm in width and the southern wall measures 560mm in width. All four walls and the roof of the cellar are coated with a thick layer of black coal dust. This is not



Plan of coal cellars: cellar 1 to right and cellar 2 to left

View northwards into cellar 1





cellar 1 spoil and rubble mounds facing east



cellar 1 test trench through spoil to original floor



cellar 1 wall 7 facing north. Note how cellar wall to right of image is blackened with coal dust, while wall 7 and wall 5 (to left of image) is not, indicating the coal cellar became disused following construction of wall 5



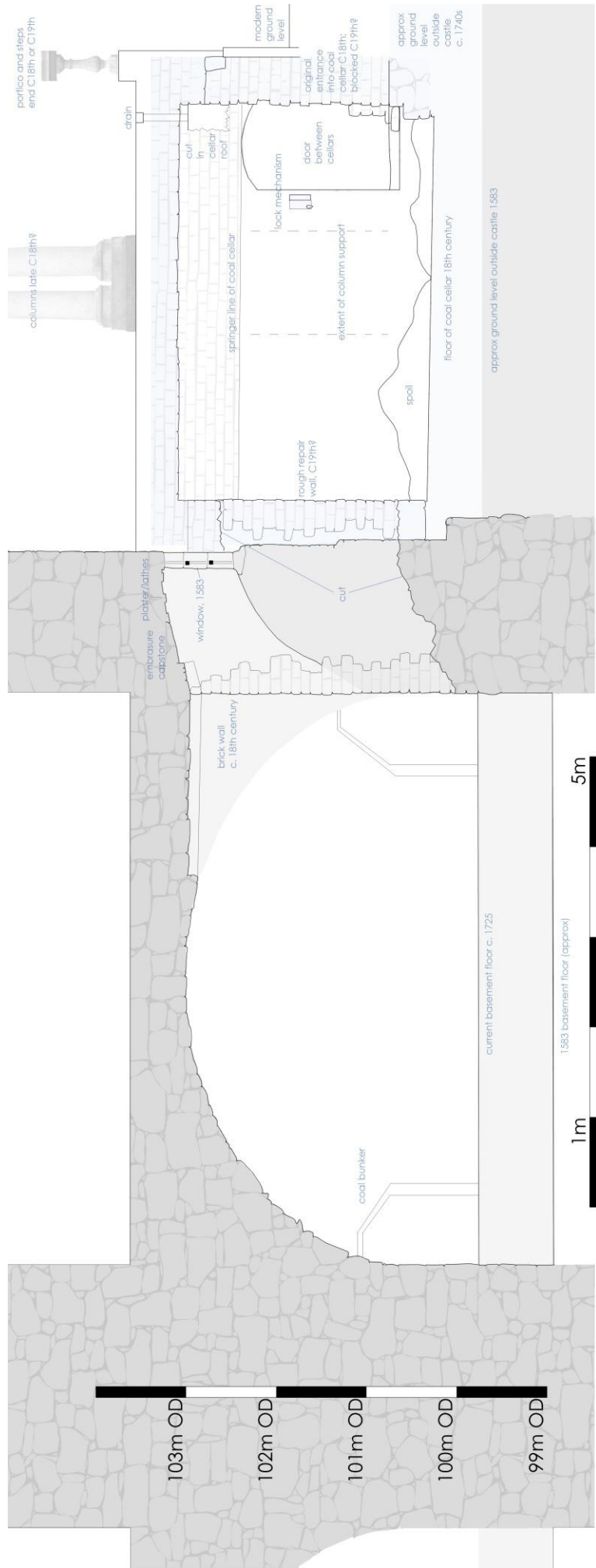
cellar 1 hole in ceiling (for drain)



cellar 1/cavity, 16th century window frame

present on the later walls (Walls 4, 5, 6 & 7) suggesting these post-date the use of the coal cellar for coal.

The floor of the cellar was exposed in three test-pits. It comprises packed natural clay covered in coal dust, with occasional flattish stones. It is likely that this floor was originally cobbled, however the cobbles do not survive. Three large mounds of brick and stone demolition rubble with frequent lime mortar and redeposited natural subsoil sit on the floor. These are piled up to a maximum height of 700mm high and are estimated to be 2.3m³ in volume. These are likely to have resulted from 19th century interventions to the cellars. No artefacts were noted within the material in the three test-pits excavated.



Rathfarnham basement profile showing new coal cellars, Giacometti 22/7/16

north

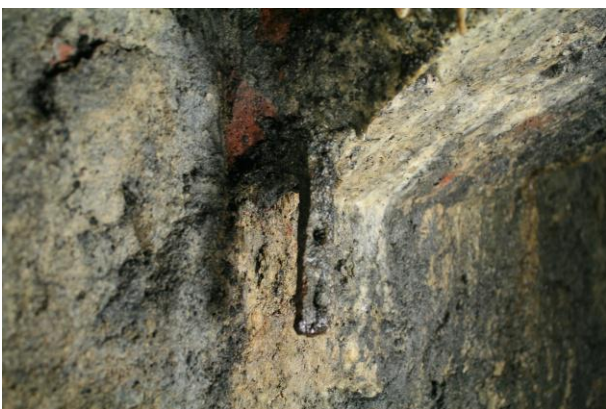
south



cellar 1 raised step at doorway, facing north



cellar 1 lock mechanism at doorway



cellar 2 doorway mechanism

Coal Cellar 2

Coal Cellar 2 measures c. 4200mm N-S by 3000mm E-W (identical dimensions to cellar 1), has four masonry walls (Wall 2) and a brick arch roof oriented N-S. Access to Cellar 1 is via the door in the west. A 100mm recess in the eastern wall is almost certainly not an opening and instead relates to the northern door. A blocked opening is present in the northern wall and measures 143mm wide, stepping in at a well-made granite doorframe to 120mm in width. This appears to be the original entrance into the coal cellars from the outside of the castle, and is lined with brick with space for a wooden lintel 1440mm by 130mm which partially survives, though is mostly rotted. The blocking of this entrance (Wall 6) is very rough, and resembles Wall 7. Behind this, the rear of the granite front portico facing to Rathfarnham Castle is visible, with daylight poking through where the stones have apparently been cut. This distinctive feature was previously identified from the front of the castle.

A patch of modern cement render low on the north wall of the cellar has been inscribed with graffiti reading 'PWH [illegible] N ... 1929.

The floor of this cellar was not identified. It is covered by a domed layer of dense and mineralised lime plaster, presumably fallen from the roof, which could not be excavated by hand. Coal dust was noted trapped under this layer of plaster, suggesting the real floor survives below.

Interpretation

The stratigraphic matrix for the coal cellars demonstrates the complexity of the numerous phases of construction and intervention identified here.

The original 1583 phase of the castle was identified (Wall 1), abutted by the coal cellar. A 16th century window was partially blocked by the coal cellars, indicating extensive changes outside the castle during the 18th century when the coal cellars were constructed. These cellars were not accessible from inside the house, and were instead accessed from outside only, probably from below the contemporary 18th century entrance identified by Judith Carroll in 1995-6. An exterior access door into the cellars was identified and it is almost certainly original.



cellar 2 north facing



cellar 2 west facing



cellar 2 east facing



cellar 2 north facing, showing roof



cellar 2 east facing, showing door to cellar 1



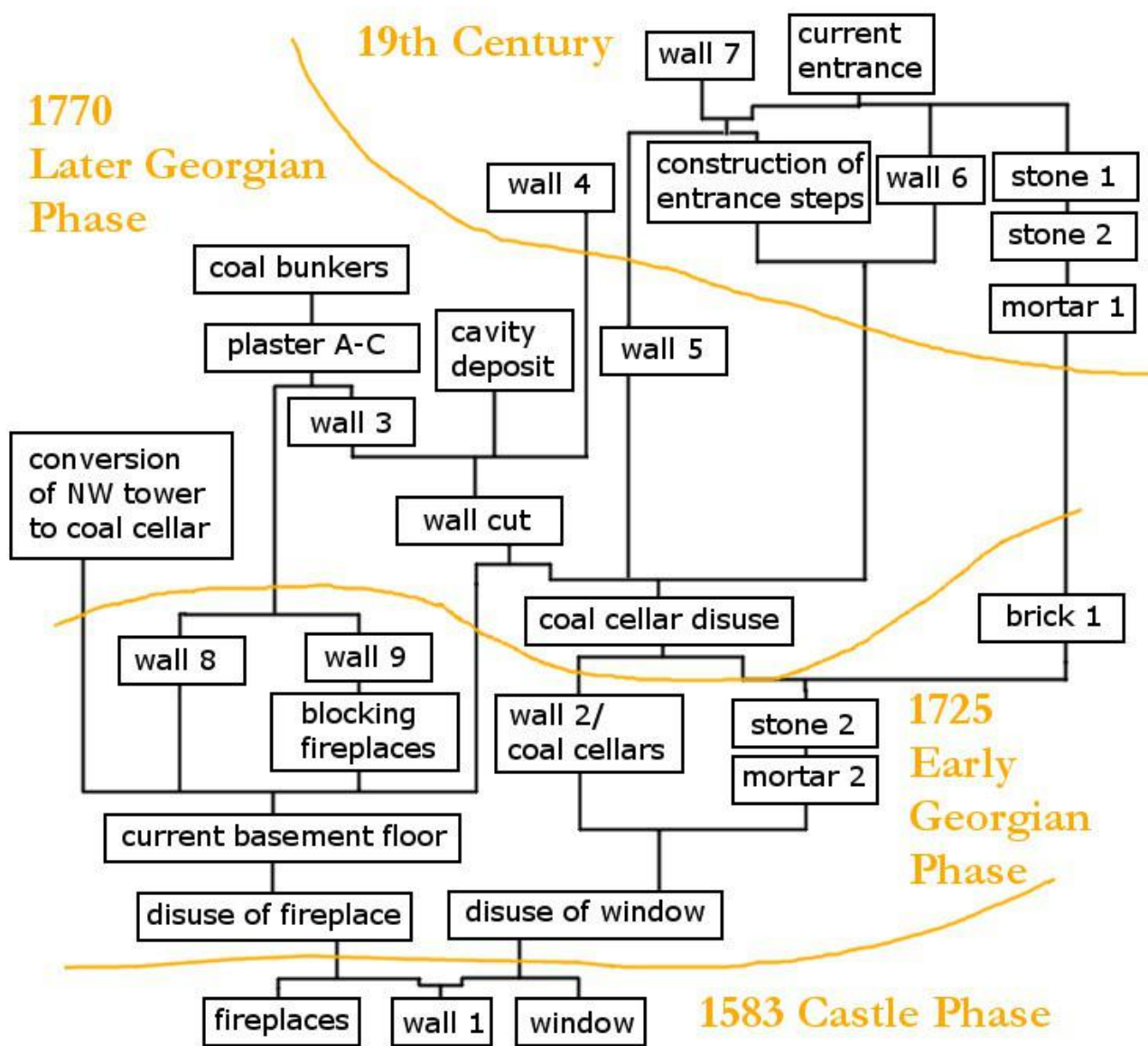
cellar 2 north facing, showing original entrance to cellar



cellar 2 south facing



cellar 2 north facing, showing graffiti detail



Considering that the construction of these cellars (and probable new entrance) blocked the five original 16th century windows in the castle basement north façade, the basement was likely reconfigured at this point. The 2014 excavations demonstrated that a major alteration to the basement took place in the early 18th century (c. 1720s) whereby the ovens in the north room were blocked, the floors were raised, and the main kitchen moved to the southern side of the basement. This phase is likely broadly contemporary with the construction of the coal cellars, suggesting an early 18th century date for them too.

Later on, a large support column was constructed in the centre of one of the coal cellars. This supports an entrance column of the portico on the entrance above. The coal cellar does not appear to have been used after this date, judging from the absence of coal dust on the support column. It is likely that the quarried tunnel through the basement wall was created in order to construct this support column. This suggests a major phase of reconfiguration of the entrance, and this phase seems most likely to date to the extensive Loftus remodelling of the house in the c. 1770s. Since the coal cellars were abandoned at this date, a new (smaller) coal cel-

lar was probably constructed in the northwest flanker to replace them. It is possible that one of the original coal cellars (the western one) remained in use during this time.

At a later point the entrance was remodelled once again and the current granite-faced stepped entrance was constructed. This phase of works involved the demolition of part of the cellars and the construction of a new set of supports inside the cellars. This phase also completely blocked up all access into the original coal cellars. The mortar used in this phase is cement-based rather than lime-based suggesting a 19th century date.

Proposals for next phase of works

The 2.3m³ of spoil and rubble within the cellars will be cleaned out to expose the original cellar floor. This will be conducted under archaeological supervision with archaeological hand excavation on the floor. It is intended that these two coal cellars will be opened up to the public in the future.

Antoine Giacometti
02/08/2016

Archaeology Plan
32 Fitzwilliam Place
Dublin 2

Rathfarnham 2016 Opening Up Works Phase 6: Cleaning of Coal Cellars

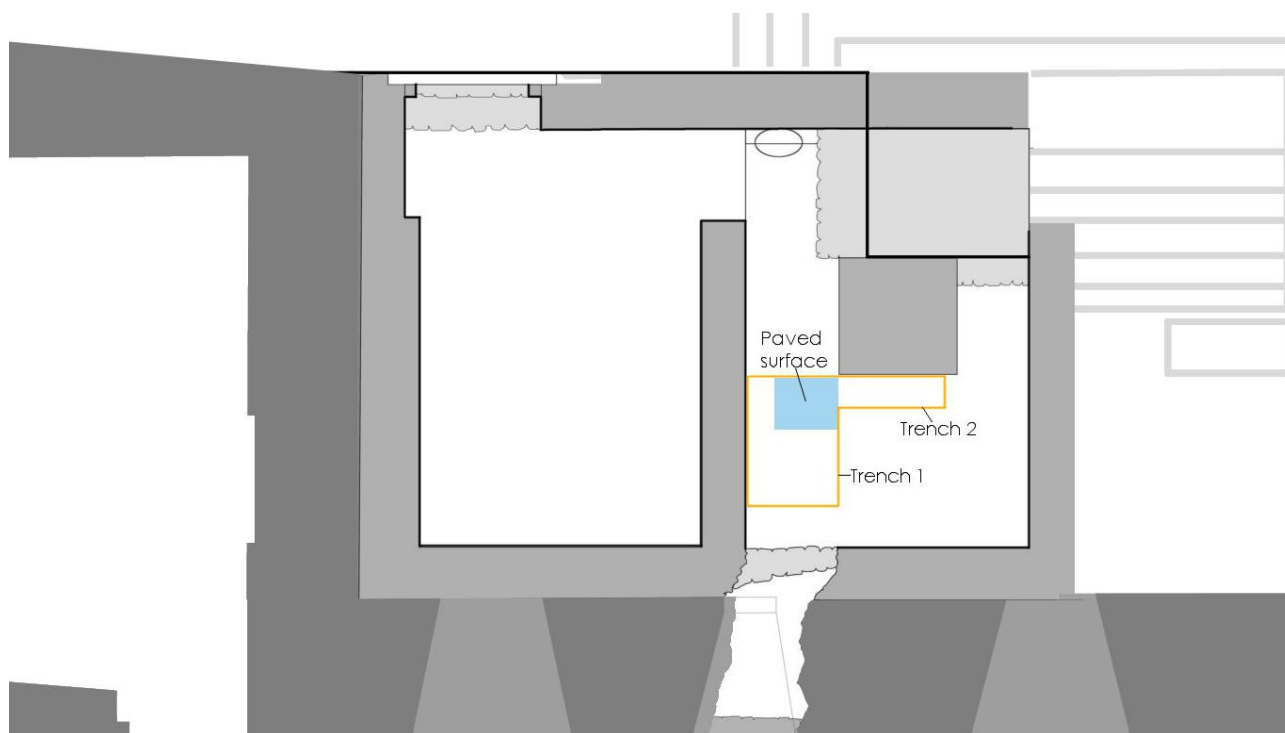
E4468 (C562) RMP DU022-014 NM 628

Background

In Phase 1, 18th century plaster was removed from a section of the basement wall in Rathfarnham Castle revealing a blocked opening. In Phase 2, a hole was drilled into the 18th century brick wall revealing a cavity within the wall and a blocked 16th century window frame. In Phase 3, this cavity was excavated and recorded, and

Phase 6 of works

The mounds of spoil over the floor of the coal cellars was removed by hand and sorted for artefacts (there were none). The original earth floor of coal cellar 1 was exposed. Part of an earlier feature was also identified.



Coal cellar plan, showing detail of Trench 1 & Trench 2

second blocked wall (c. 19th century) was identified. In Phase 4, the second blocked wall was opened up and two coal cellars were exposed, and these were recorded and assessed in Phase 5.

Spoil heaps

Three large mounds of brick, stone and mortar demolition rubble with frequent lime mortar and redeposited natural subsoil lay on the floor of cellar 1. These were piled up to a maximum height of 700mm high and were 2.3m³ in



Trench 1: Flagstone visible below coal cellar floor

volume. These are likely to have resulted from 19th century interventions to the cellars. These were fully excavated. No artefacts were noted within.

Layer of trample

A thin (10mm) patchy layer of pale brown silty clay was present over much of cellar 1, below the spoil heaps and sitting on the coal cellar floor. This contained no artefacts, and is likely to be formed from trample by late 18th or 19th century building activity.

Collapsed plaster layer

The floor of Cellar 2 was covered in collapsed lime plaster, from the roof, which was not excavated as it was too hard to remove. This layer partially continued into the northeastern part of Cellar 1, where it was much thinner and excavated (with difficulty). The plaster layer sealed a thin layer of black coal-dust, indicating that it post-dated the use of the coal cellar and was not a lime mortar floor surface.

Coal cellar floor

The floor of Cellar 1 comprised packed natural clay covered in coal dust. No evidence for cobbles or paving stones was found, which is very surprising as a packed earth floor would appear to be unsuitable for a floor meant to be shovelled on. Nevertheless, the presence of a thick layer of black coal dust sitting directly on

the packed earth floor demonstrates it functioned as the floor surface of the coal cellar.

Identification of earlier phase

It was not intended to excavate below the level of the 18th century coal cellar floor during this phase of works. However, during the removal of the collapsed plaster layer, part of a flagstone was exposed at a slightly lower level (40mm) than the coal cellar floor (10.25m OD). Since this may have functioned as an earlier phase floor of the coal cellar, it was decided to investigate the nature and purpose of these flagstones by excavating two small hand-excavated test-trench through the clay floor.

Trench 1 was oriented North-South and measured 1.40m by 0.89m and 40mm deep. Trench 2 was oriented East-West and measured 1.13m by 0.36m and 40mm deep.

The stratigraphy of Trench 1 comprised a 4mm layer of pale brown sandy-silt redeposited natural subsoil overlying paving stones (at 10.25m OD). The paving stones were cut by construction associated with the support column (c. late 18th century). The stratigraphy of Trench 2 comprised natural subsoil only with no evidence for pre-coal cellar activity.

The absence of coal dust over the Trench 1 paving stones, and the absence of paving stones

in trench 2, suggests that they predate the coal cellars, and probably form part of a late 16th century or 17th century feature in front of the castle.

Further work

No further work is planned.

Antoine Giacometti
23/08/2016

Archaeology Plan
32 Fitzwilliam Place
Dublin 2

