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Engineering Archaeological Services Ltd.

Porth Mawr, Caernarfon
Archaeological Watching Brief
March/April 2019

I.P. Brooks

EAS Client report 2019/05

Project Commissioned

by

Recclesia Ltd

on behalf of

Cadw

Fieldwork

by

I.P. Brooks

Engineering Archaeological Services Ltd.

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Archaeological Watching Brief
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registered in England

No 2869678

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Introduction

Grid Reference:	**SH 47904 62808**
Listed Building No.	**3869**
Scheduled Monument reference number	**CN034**
NPRN	**302416**
PRN	**3098**

Location (Figure 1)

Porth Mawr is located on the junction between High Street and Stryd y Porth Mawr (East Gate Street), Caernarfon (Figure 1) and was originally the main eastern gateway into the town. It is attached to the town walls both to the north and south and it also incorporates the range of buildings on the inner face of the town wall along Hole in the Wall Street. Indeed 3 Hole in the Wall Street is the focus of this study.

Background

Cadw wish to refurbish Porth Mawr (East Gate), Caernarfon as part of a programme of works (Planning application C14/0073/14/LL) including the conversion of the South Gatehouse, and the adjoining 3 Hole in the Wall Street, into self-catering holiday accommodation. They also wish to open the North Gatehouse to the public as a way of providing public access to town walls.

Porth Mawr is of very high historical value as a component element in a Medieval burgess town which has been inscribed as a World Heritage site; it is of very high historical value as the site of the main landward entrance to the medieval bastide, and as the location of the Exchequer, the financial and administrative centre for the shire counties of North-west Wales. The building, itself has a complex constructional history with the latest phases dating from as late as the 1960's

An archaeological assessment was commission by Donald Insall Associates, on behalf of Cadw, in late 2016 from Engineering Archaeological Services Ltd (Brooks and Gwyn 2017). This involved a desk-top study, standing building recording and the excavation of a trial trench within the northern gatehouse. This trial trench demonstrated the preservation of significant archaeological features with the northern gatehouse including a substantial stone wall and pitched stone surfaces. Partly as a result of the archaeological assessment Cadw commissioned the full excavation of the northern gatehouse down to the level of the pitched stone floor and the excavation of two trenches in the South Gatehouse and 3 Hole in the Wall Street (Brooks and Jones 2017). These trenches were along the line of the planned services for the conversion of this side of the gatehouse.

The current work is part of the works to allow the conversion of the South Gatehouse and 3 Hole in the Wall Street to holiday accommodation involving the digging of a new sewer line within Hole in the Wall Street and limited works within the building to allow holes to be bored through the western wall of the building (Figure 2).

SUMMARY

An archaeological watching brief on works associated with the conversion of the South Gatehouse of Porth Mawr and 3 Hole in the Wall Street to holiday accommodation took place between 25/3/2019 and 3/4/2019. The work was undertaken by Engineering Archaeological for Recclesia Ltd.

Within 3 Hole in the Wall Street a continuation of the previously recorded pitched stone surface was recorded. The footings of the western walls of 3 Hole in the Wall Street and the South Gatehouse were also recorded.

Gwnaed prosiect goruchwylio archeolegol ar waith oedd yn gysylltiedig â throsi Porthdy'r De o Borth Mawr a rhif 3 Twll yn y Wal yn llety gwyliau, a hynny rhwng 25/3/2019 a 3/4/2019. Gwnaed y gwaith gan gwmni Engineering Archaeological ar gyfer Recclesia Ltd.

O fewn rhif 3 Twll yn Wal, cofnodwyd rhagor o'r arwynebedd o gerrig ar oleddf a gofnodwyd o'r blaen. Cofnodwyd sylfeini muriau gorllewinol rhif 3 Twll yn y Wal a Phorthdy'r De hefyd.

Methodology

The project involved the close observation of the ground works associated with the construction of a new sewer from 3 Hole in the Wall Street to an existing chamber in the road near to the north eastern corner of the South Gatehouse. Work was also undertaken within 3 Hole in the Road Street to record the pit dug to allow holes to be bored through the western wall of the building. Unfortunately, initially a trench approximately 1.75 x 1 m and 0.90 m deep had been dug before the archaeologist was appointed, however when this trench was extended the work was carried out under archaeological control.

All contexts were recorded with the appropriate written, drawn and photographic record and the contexts defined are summarised in Appendix 1.

Overlapping digital photographs were also taken to record a pitched stone surface within 3 Hole in the Wall Street. These were processed using Agisoft Metashape Standard v 1.5.1 to produce a three-dimensional model from which the photogrammetric plans (Figure 4) could be extracted

Results

Inside 3 Hole in the Wall Street

Before the archaeologist was appointed to the project a trench had been dug, by mistake, on the inside of the western wall of 3 Hole in the Wall Street as preparatory works to allow the boring of holes through the wall to link the proposed services to those within Hole in the Wall Street. This extended to area already examined in 2017 (Brooks and Jones 2017) forming a trench approximately 1.75 x 1 m and 0.90 m deep along the western wall of the building. It revealed the back face of the western wall of the building. (Figure 5, Plate 2) including two courses of larger stones (up to 570 x 200 mm in size) which protrudes from the main line of the wall by approximately 100 mm (Context 96). It is assumed that this is the footings for the wall above and the same context was also evident in the new sewer trench outside (see below).

It became necessary to extend the initial trench as the space required by the boring machine had been underestimated. The initial trench was widened to approximately 2.0 m revealing the stratigraphy destroyed by the initial trench. Below approximately 100 mm of concrete (Context 88), that formed the floor of 3 Hole in the Wall Street, was a thick layer of dumped material containing modern bricks and other building debris (Context 90) up to 650 mm thick. This abutted the line of a brick wall (Context 89), which continued the line of the standing dividing wall within the building, and sat on a thin layer of trampled soil (Context 91) which, in turn, sat on and amongst a surface of pitched stones (Context 92, Figures 3 and 4, Plate 3). Context 91 contained a few sherds of Buckley Ware and Brown Glazed Earthenware together with a single clay pie stem and an oyster shell (Plate 9) suggesting a broadly nineteenth century date. The pitched stone surface (Context 92) is a continuation of a surface recorded in the trench dug in 2017 (Context 52), Brooks and Jones 2017, 6-7) which does not appear to be an internal floor, having the characteristics of an external yard surface.

Sewer Trench

The trench for the new sewer ran for approximately 12 m alongside the western wall of 3 Hole in the Wall Street and the South Gatehouse (Figure 2, Plate 5). Although it ran nearly parallel to the wall it only joined it at two places where the holes were to be bored to link the internal services with their supplies. At the southern end of the trench it was slightly wider (approximately 1.8 m) reaching the outer wall of the cellars for Porth Mawr Jewellers on the opposite side of the street. More typically the trench was 700 mm wide and 500 mm deep.

A very similar stratigraphy was recorded for the whole of this trench with the modern street paving (Context 93. Plate 4) sat on a thick raft of concrete (Context 94) up to 260 mm thick. Below this was a highly disturbed layer (Context 95) with multiple service pipes and cables running through it.

Where exposed the footings of the western wall to 3 Hole in the Wall Street (Context 96, Plate 6) were of larger stone blocks than the rest of the wall above. Located approximately 500 mm below the street level, the footings protrude from the line of the general wall by 280 mm and form a block of masonry at least 360 mm deep which possibly sits on the natural clay. The small size of the exposure of this possible natural clay, however, makes this assumption difficult to confirm. Three boreholes were drilled through this section of wall, from the inside of the building.

Below the window in the western wall of the South Gatehouse the new sewer trench also exposed the below ground walling (Context 97, Plate 7). In this case the exposed wall was set back (under) from the wall above, by approximately 50 mm, and appeared to be of built with more care. Although it is was difficult to determine the size of the blocks used, partly because of the small size of exposure, but largely because of the lime mortar slopped over the surface. This wall is the outer face of the wall (Context 45) exposed in the western end of the trench dug in the South Gatehouse in 2017 (Brooks and Jones 2017, 6) giving a total thickness of this wall of 1.20 m. Two boreholes, each 167 mm in diameter were drilled through this wall (Plates 8 and 9) giving some indication of the construction of the wall. Because of the restrictions of the size of the trench inside the gatehouse and the morphology of the deposits exposed, these boreholes were drilled at an angle of approximately 33° from the top surface of the wall inside the gatehouse.

Discussion

The watching brief on the groundworks associated with new services in the South Gatehouse and 3 Hole in the Wall Street revealed relatively little new archaeology. Within the 3 Hole in the Wall Street the pitched stone surface extended the area known where this feature was exposed. It is unfortunate that the initial trench within 3 Hole in the Wall Street was dug without archaeological monitoring as it is likely that the pitched stone surface extended over the whole of this area and the relationship between the pitched stone surface and the western wall of the building has been lost. It would seem probable that the current structure of the building cut through the pitched stone surface and is therefore later, however this remains pure speculation. Given its character, one possibility is that the pitched stone surface relates to the "Exchequer Dunghill, adjoining the New Town Hall" recorded in a lease granted to Henry Jones Mercer in 1785 (Evans 1972, 133).

Outside, in Hole in the Wall Street, itself, at least the top 750 mm of the deposits have been disturbed by multiple modern services. There is a relatively restricted area available as the cellars for the Porth Mawr Jewellers extend below Hole in the Wall Street for 1.84 m leaving only a corridor 1.6 m wide through which all the modern services must pass. The main sewer, for the properties along the street, must be at a depth much greater than those encountered by the current work. Although a pipe was exposed, this proved to be for the drainage of the surface water and is linked to the shallow gutter running down the centre of Hole in the Wall Street. Even within the relatively small trench dug in the road at least the storm water drain, three electricity cables, two water pipes, a gas pipe and a telephone cable were encounters showing the level of modern disturbance.

It is assumed that the walling exposed where the proposed services from 3 Hole in the Wall street exit into the road, is the footing for the current structure. This would give well made footings approximately 850 mm thick on which the superstructure was built with a wall approximately 620 mm thick.

The walling below the window in the western end of the South Gatehouse, may be the footings for the current structure, however, it would seem more likely that this is the remains of an earlier structure, probably medieval in date. The character of this section of walling, being 1.20 m thick and of similar appearance to the wall at the western end of the North Gatehouse (Context 6, Brooks and Jones 2017, 4, Figures 3 and 12) would suggest that they may be part of a single phase of construction and relate to one of the earlier phases of the gatehouse.

References

Brooks, I.P. and Gwyn, D. 2017. *Porth Mawr, Caernarfon Archaeological Assessment*. EAS Client Report 2017/01

Brooks, I.P. and Jones M. 2017 *Porth Mawr, Caernarfon Archaeological Excavation.* EAS Client Report 2017/02

Evans, K. 1972 A Survey of Caernarvon 1770 - 1840: part 1b. *Transactions of the Caernarvonshire Historical Society 33,*

Acknowledgments

The watching brief was commissioned by Recclesia Ltd on behalf of Cadw, however the initial approach was made by Franziska Sieck of Donald Insall Associates and the support of all the people involved is gratefully acknowledged. The groundwork itself was carried out by GT Williams Ltd. The project was monitored for the Gwynedd Archaeological Planning Service by Jenney Emmett and for Cadw by Ian Halfpenney

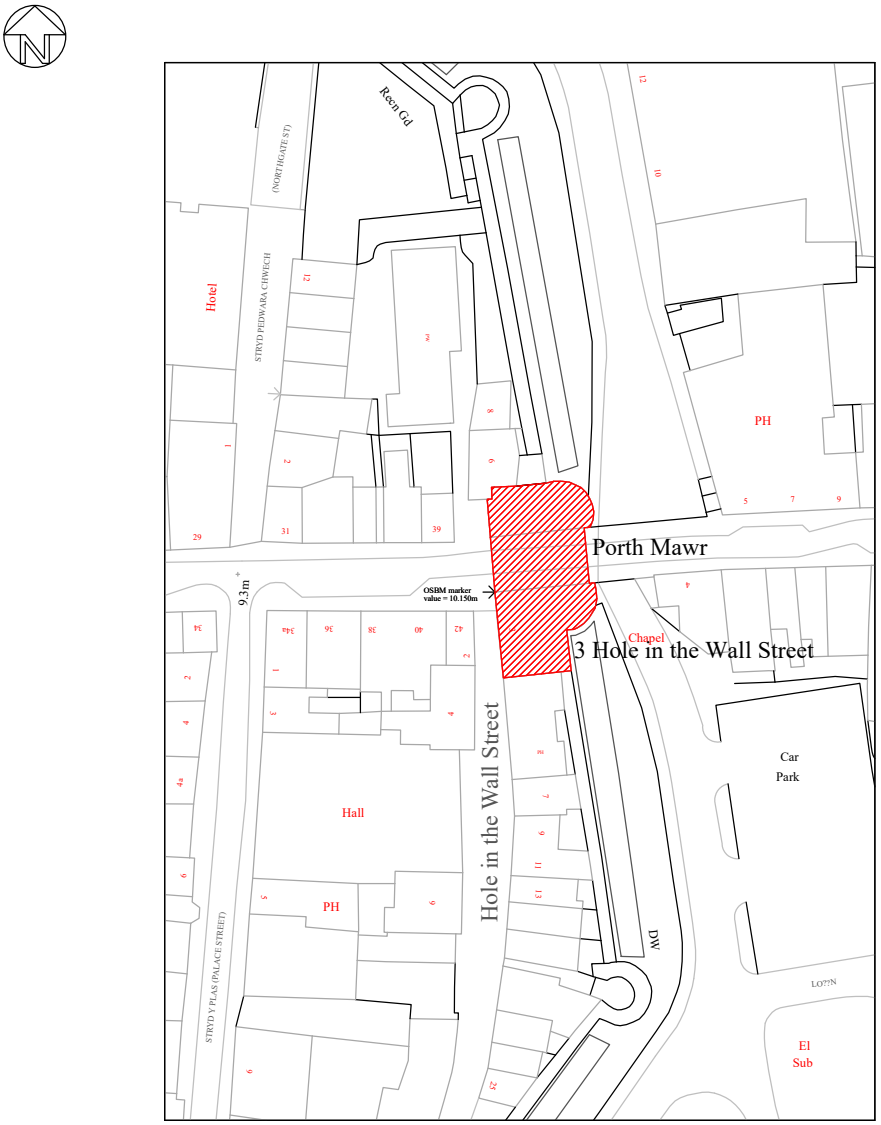


Figure 1: Location
Scale 1:1000

Based on drawing QD1217/01
by Russell Geomatics Ltd

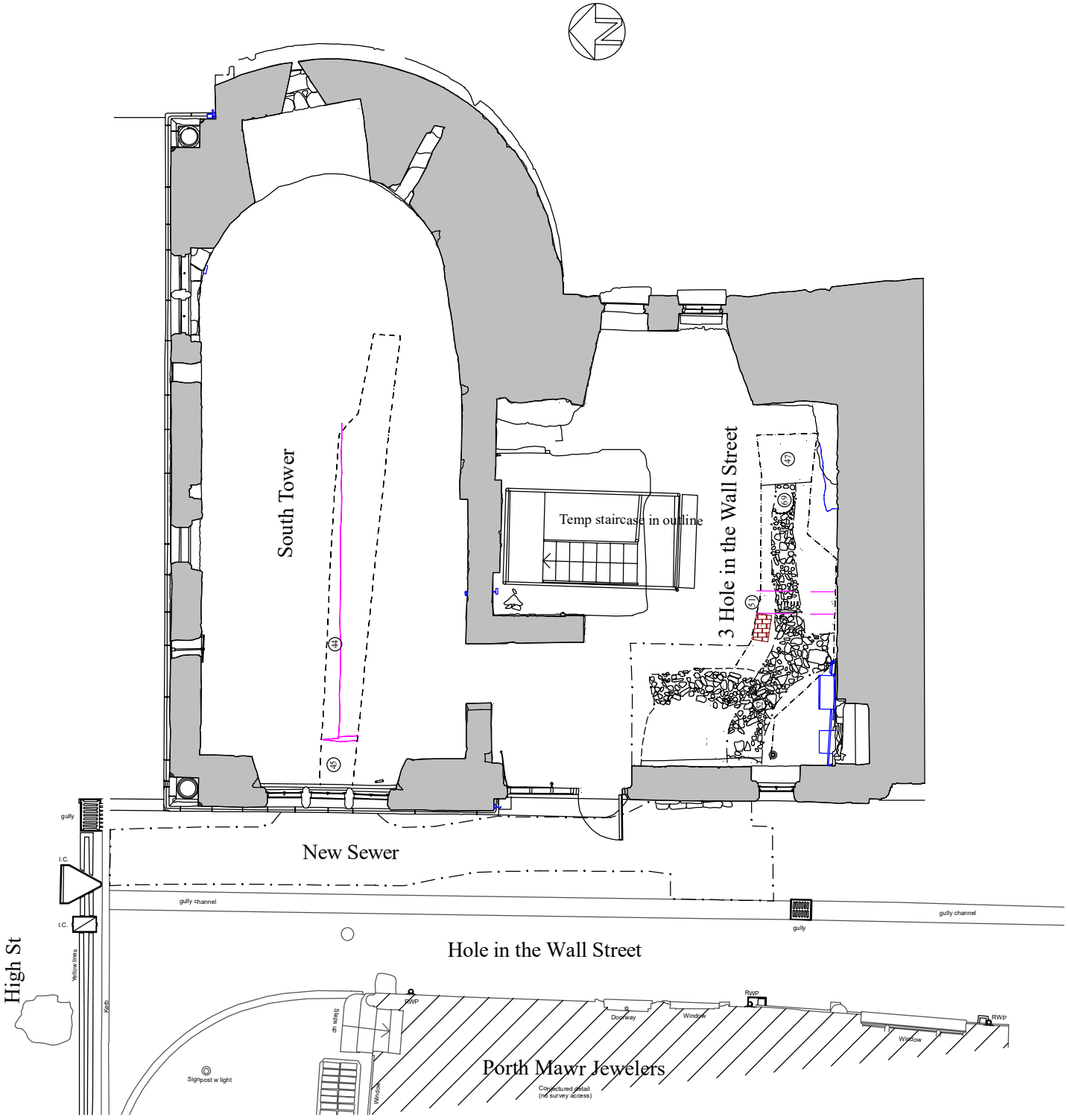
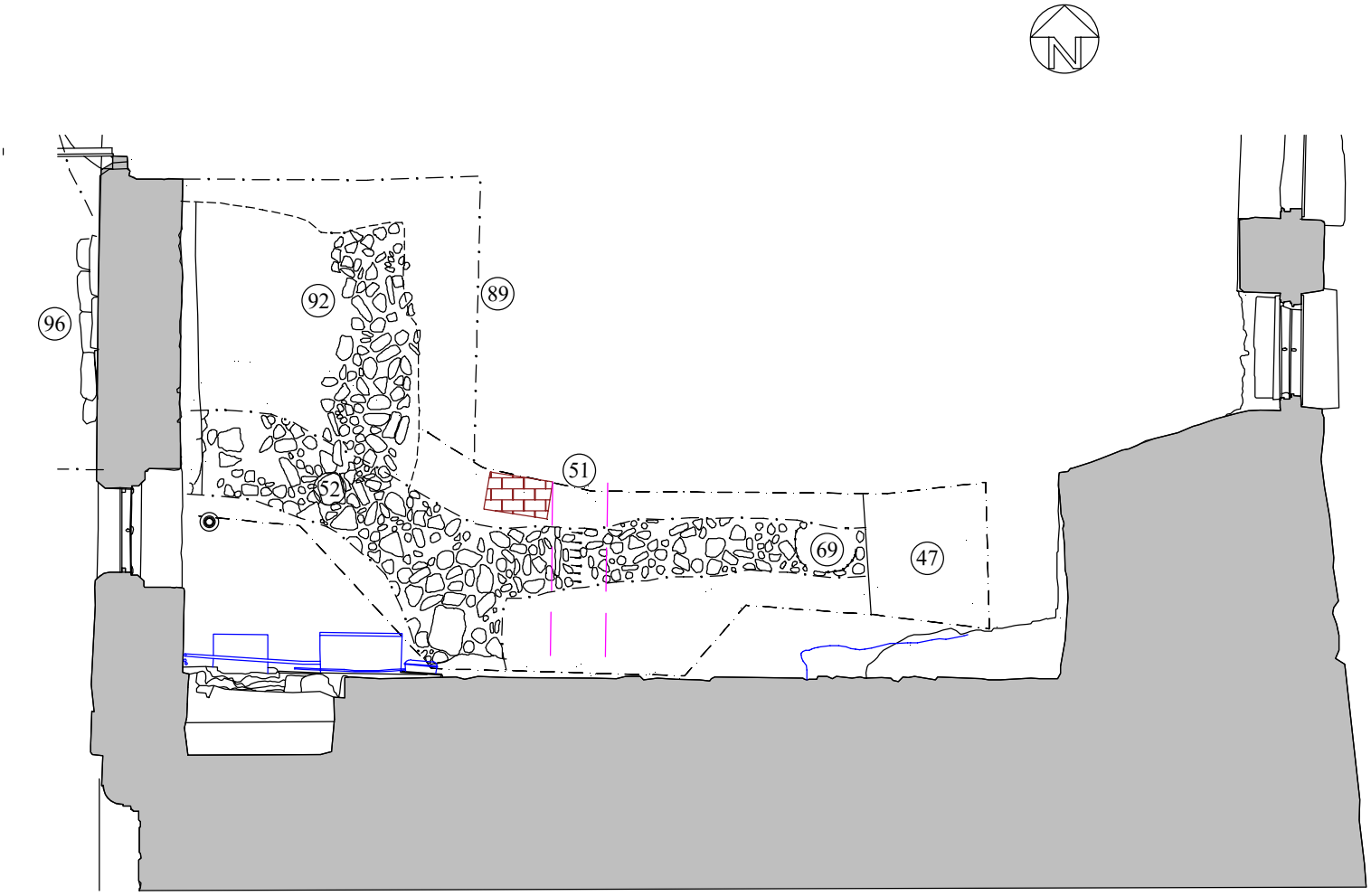


Figure 2: Extent of the Works
Scale 1:100



Based on Drawing QD 1217/03
by Russell Geomatic Ltd

0 5 m

Figure 3: Pitched Stone surface within
3 Hole in the Wall Street
Scale 1:50

Figure 4: Photogrammetric Plan of Context 92
Scale 1:20

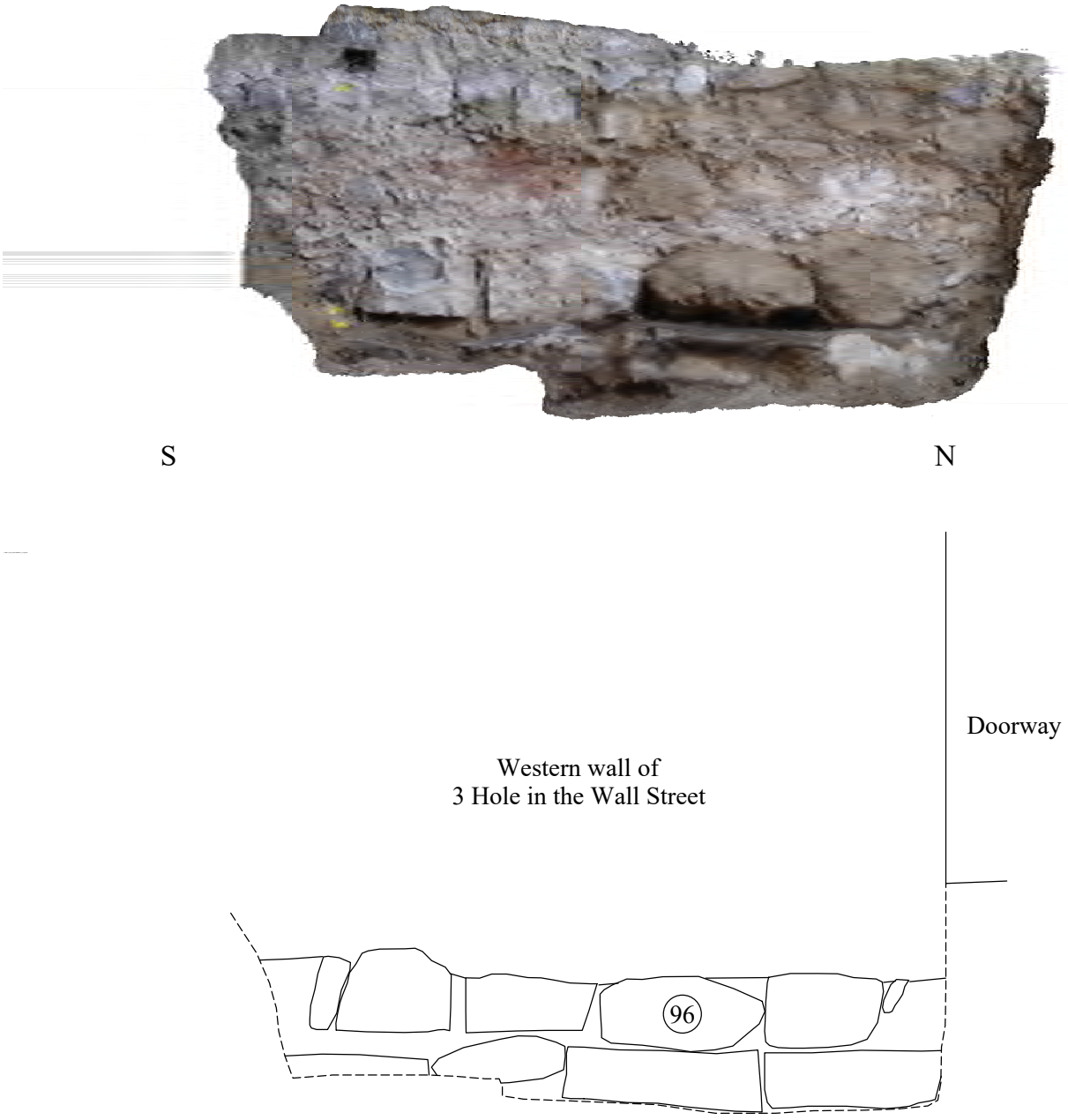


Figure 5: Wall Footings in 3 Hole in the Wall Street
Scale 1:20

Plate 1: Trench within 3 Hole in the Wall Street

Plate 2: Footings of western wall of 3 Hole in the Wall Street

Plate 3: Pitched stone surface (Context 92)

Plate 4: Hole in the Wall Street before excavation

Plate 5: The new sewer trench during construction

Plate 6: Footing of 3 Hole in the Wall Street in new sewer trench

Plate 7: Footings of the South Gatehouse

Plate 8: Boreholes through Context 97

Plate 9: Section of the core through the wall of the South Gatehouse

Plate 10: Finds from Context 91

Appendix 1: Context Summary

Context	Location	Description	Relationships
2017			
45	South Gatehouse	Dump of lime mortar and stone forming the foundations below western wall of the current gatehouse structure below the western window. At least 800 mm wide and at least 500 mm thick. It is likely that this foundation is earlier than the current structure and may be equivalent to Context 6 in the North Gatehouse	Below 43, 44
46	3 Hole in the Wall Street	Layer of limestone chippings forming the floor of the eastern half of 3 Hole in the Wall Street. Modern layer up to 50 mm thick.	Above 47
47	3 Hole in the Wall Street	Probable line of the back of the town wall, aligning with a break in the standing masonry and a block of masonry in the floor of 3 Hole in the Wall Street on the northern side of the building. Squared stone blocks up to 350 x 420 x 200 mm in size with lime mortar bonding.	Below 46, 48 Abuts 49
48	3 Hole in the Wall Street	Pad of bricks making up the level between the *in-situ* stone blocks of the town wall (Context 47) and the standing structure of the south wall of the building. 540 x 240 x 140 mm in size, the layer contains machine made bricks in a cement mortar.	Below 46 Above 47
49	3 Hole in the Wall Street	Loose dump of building debris in a thin matrix of crushed mortar. The layer contains fragments of broken concrete and machine-made bricks together with an iron drain surround. It also contained modern ceramic and metal pipes leading towards the stanchion on the west wall. This layer runs under Context 48 and in front of the probable town wall (Context 47). To the east of the wall (Context 51) this layer is up to 500 mm thick, whilst west of Context 51 it is up to 700 mm thick.	Below 46 Above 50, 51 Abuts 47
50	3 Hole in the Wall Street	Hard, rammed/trampled surface of mottled yellowish brown gritty sandy clay with patches of mid brown more “soily” areas. The layer appears to form a hard-packed surface. It is assumed that it formed against the back of the town wall (Context 47) although its relationship with the wall (Context 51) is not certain	Below 49 Above 51, 52 Abuts 47

Context	Location	Description	Relationships
51	3 Hole in the Wall Street	Slightly ragged wall probably 250 mm thick and at least 300 mm deep, consisting of sub-angular and sub-rounded stone blocks up to 370 x 120 mm in size in white lime mortar. The western side extends out for about 260 mm probably representing the associated floor level. There are a series of machine-made bricks set at right angles at the northern end which probably mark the position of a supporting brick pier. The line of this wall is roughly in line with the standing wall dividing 3 Hole in the Wall Street. The wall was only three courses high sitting on Context 50	Below 49 Above 50
52	3 Hole in the Wall Street	Cobble floor. A rather rough floor looking more like a yard surface than an internal floor surface. A somewhat random arrangement of rounded and sub-rounded stones with the stone varying in size between 70 x 50 mm and 250 x 160 mm in size and one large block 400 x 300 mm in size. Slightly disturbed at its western end its relationship with the standing structure is not entirely clear. Between the stones is a dark grey brown sandy soil which contained ?18th or 19th century finds including fragments of glass, clay pipe and ceramic. The rare fragment of coal was also noted. The layer extends to the back of the town wall (Context 47). It also includes a drain defined by a linear hollow and a line of upright elongated stone cobbles defining the west side of the drain.	Below 49, 50, Above 72, 73, 74 Cut by 68
53	3 Hole in the Wall Street	Layer of stone slabs 600 x 700 x 30 mm in size forming the floor of 3 Hole in the Wall Street to the west of the wall (Context 51)	Above 54 Abuts 46
54	3 Hole in the Wall Street	Sand bed for the stone slabs (Context 53). Layer of yellowish sand up to 50 mm thick.	Below 53 Above 49
68	3 Hole in the Wall Street	Near circular cut through the cobbles at the eastern end of Tr3, 330 mm in diameter. The function of this feature is uncertain, but possible post hole	Below 50 Cuts 52 Filled with 69
69	3 Hole in the Wall Street	Mid brown sandy loam with flecks and small fragments of lime mortar, up to 20 mm in size. Other inclusions include the occasional sub-angular stone up to 50 mm in size and rare rounded pebble.	Below 50 Fills 68

Context	Location	Description	Relationships
72	3 Hole in the Wall Street	Rough cobbled/slab floor consisting of large limestone slabs up to 500 x 300 mm in size together with rounded cobbles up to 150 x 100 mm forming a rough surface below the pitched stone floor (Context 52). The western extent of this floor has been lost and it extend under 52 to the east.	Below 52 Above 73
73	3 Hole in the Wall Street	Patch of burnt clay with a dark, burnt surface appearing from below Context 72. The full extent and form of this possible feature is impossible to determine given the restricted nature of the trench.	Below 72 Above 74
74	3 Hole in the Wall Street	Orange brown sandy clay with the rare stone block up to 200 x 200 x 80 mm in size. The layer also includes the occasional fleck of lime mortar.	Below 73
2019			
88	3 Hole in the Wall Street	Concrete floor at the western end of 3 Hole in the Wall Street. Modern concrete floor approximately 0.1 m thick. This layer abuts the remains of a wall (Context 56) which extends the line of the dividing wall in this part of the building	Abuts 89 Above 90
89	3 Hole in the Wall Street	Line of bricks and faced stones on the edge of the trench, only exposed to less than one course. This would appear to be a wall extending the line of the existing wall dividing 3 Hole in the Wall Street	Abuts 88 Equivalent to 51
90	3 Hole in the Wall Street	Loose dump of building debris in a thin matrix of crushed mortar. The layer contains fragments of broken concrete and machine-made bricks	Below 88 Above 91 Equivalent to 49
91	3 Hole in the Wall Street	Trampled mottled yellowish brown gritty sandy clay with patches of mid brown more “soily” areas	Below 90 Above 92 Equivalent to 50
92	3 Hole in the Wall Street	Layer of pitched stones consisting of closely packed, rounded cobbles typically 170 x 70 mm in size, but up to 200 x 100 mm in size.	Below 91 Equivalent to 52
93	3 Hole in the Wall Street	Paving slabs up to 70 mm thick stone slabs. Modern street surface	Above 94
94	Hole in the Wall Street	Concrete up to 260 mm thick raft of concrete in two layers, the top 60 mm being a fine textured bedding for the stone slabs and the remaining coarse concrete below being the sealing layer for the services below.	Below 92 Above 93

Context	Location	Description	Relationships
95	Hole in the Wall Street	Disturbed fill. Fill from multiple services highly disturbed with multiple service pipes/cables running through including a sewer, at least three electricity cables, two water pipes, a gas pipe and a BT cable. A few cobbles in the northern end of the trench suggests that High Street may have been cobbled at some stage.	Below 94 Abuts 96 and 97
96	Hole in the Wall Street	Footings of 3 Hole in the Wall Street revealed at a depth of 500 mm below the street level. Protruding by 280 mm from the line of the standing wall above. 360 mm depth of this layer exposed.	Abuts 95 Cuts 59
97	Hole in the Wall Street	Footings below the South Gatehouse. Set back from the face of the North Gatehouse wall by 50 mm. A well-made wall of large coursed blocks with slopped mortar. At least 650 mm deep	Abuts 95 Equivalent to 45

Appendix 2: Specification for the Recording of Works Undertaken in Association with the Conversion of the South Gatehouse of Porth Mawr (CN034), Caernarfon

Specification written by I.P. Brooks 27/02/2019

1. Background

1.1. Cadw wish to conserve and refurbish Porth Mawr/East Gate, Caernarfon, including refurbishing the southern gatehouse as holiday accommodation.

1.2. The proposed works includes the excavations of the new drainage and service trenches within the Southern Gatehouse which will link into the existing services in Hole in the Wall Street, Caernarfon. The works will include core drilling through the western wall of the Southern Gatehouse in several places and the digging of trenches within Hole in the Wall Street to link in to the existing services.

1.3. Three phases of archaeological works have already been carried out on the site by Engineering Archaeological Services Ltd including a desk-top study and building recording, excavation of an evaluation trench in the Northern Gate House and the excavation of the upper deposits of the Northern Gatehouse and the proposed line of the internal drainage within the Southern Gatehouse.

1.4. This specification is based on;

1.4.1. An email from Franziska Sieck of Donald Insall Associates

1.4.2. Previous experience of the site

2. Aims

2.1. To record any archaeologically significant deposits or features disturbed by the proposed works

3. Method

3.1. A suitably qualified archaeologist will be present during all groundworks associated with the works associated with the new drains/services to monitor and record any archaeological deposits/features revealed by the works.

3.2. It is understood that this all works will be directly archaeologically supervised with the ability to interrupt the works to allow for archaeological recording to take place.

3.3. All features or archaeologically significant deposits revealed by the ground works will be fully recorded including:

3.3.1. A written description of deposit: type, components etc.

3.3.2. Drawn plans and sections at suitable scales

3.3.3. Photographs will be taken with Nikon D5300 Digital SLR Camera at a resolution of 24.2 MP at a resolution of 24.2 MP in RAW, subsequently converted to TIFF and JPEG for archiving and presentation

3.3.4. Plan drawing showing extent of deposit.

3.3.5. Section drawing of any feature recorded to record vertical stratigraphy

3.3.6. Cadw and The Gwynedd Archaeological Planning service will be notified immediately if significant archaeological deposits, features or artefacts are located.

3.3.7. The photographs will include metric scales

3.3.8. All artefacts and ecofacts will be recorded by context.

3.3.9. Each deposit, feature or layer will be identified by a unique context number to which all other records will be related

3.3.10. Where possible, features will be sampled to obtain dating and functional evidence.

3.3.11. Where possible, elevation drawings of feature half sections to record vertical stratigraphy.

3.3.12. Where appropriate, deposits will be sampled for environmental, dating or technological evidence. Samples will be fully recorded and packed appropriately for future analysis.

3.3.13. Sampling will be carried out in accordance with the procedures outlined in English Heritage. 2011. Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post-excavation.

3.3.14. If human remains are encountered all works will stop until the appropriate permissions have been obtained.

3.4. Finds

3.4.1. Post medieval finds will be recorded by M. Jones of CR Archaeology.

3.4.2. If any other finds are recovered, they will be studies by an appropriate specialist. The selection of the specialist will be made in consultation with Cadw and the Development Control Archaeologist

3.4.3. Any metal or other special finds will be studied by an appropriate specialist to be agreed in consultation with the Cadw and the Development Control Archaeologist

3.4.4. All ceramic, bone and stone artefacts will be cleaned and processed immediately following the watching brief.

3.4.5. Metal artefacts will be stored and managed on site according to the UK Institute of Conservation Guidelines.

3.4.6. Any samples taken for environmental analysis will be assessed and studied by an appropriate specialist to be agreed in consultation with Cadw and the Development Control Archaeologist.

3.4.7. All finds will be bagged by context with the exception of closely datable or "special" finds which will be recorded with a 3 D position and will be bagged separately

3.4.8. The requirement for specialist archaeological reports will be discussed with Cadw and the Development Control Archaeologist. The extent and cost of any such report will be discussed with the client and a suitable level of response formulated in discussion between the Archaeologist, Cadw and the Curatorial Archaeologist.

3.5. Archive Preparation and Report Preparation

3.5.1. On competition of fieldwork an archive of the results will be prepared.

3.5.2. The digital records will be archived with the Royal Commission on Ancient and Historic Monuments of Wales

3.5.3. The digital archive will be prepared in line with Royal Commission on Ancient and Historic Monuments of Wales. 2015. Guidelines for digital archives

3.5.4. The deposition of any find with a local museum will be discussed with Cadw and the development control archaeologist with a strong recommendation that any finds are deposited in a suitable local museum.

3.6. A summary report on the findings of the investigations will be prepared and completed within four weeks from completion of the project. This will summarise the results of the project including;

3.6.1. A site location plan

3.6.2. A plan of the site locating any features or archaeological deposits located.

3.6.3. An outline methodology

3.6.4. The results excavations.

3.6.5. A full bibliography

3.6.6. A copy the agreed specification

3.6.7. An assessment of the potential for further archaeological investigation

3.6.8. Up to five copies of the report will be provided.

3.6.9. A digital copy of the report will also be provided.

3.6.10. A digital copy of the report will be supplied to the Gwynedd Historic Environment Record

3.6.11. A digital copy of the report will be supplied to Gwynedd Archaeological Planning Service

3.6.12. A draft copy of the report will be submitted to the Cadw Inspectorate for comment within one month of the completion of the fieldwork

3.7. The preparation of the report will conform to the Welsh Archaeological Trusts 2018 "Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)"

4. Personnel

4.1. The project will be directed by Dr I.P. Brooks MCIfA FSA

4.2. Project Staff will include Dr I.P. Brooks MCIfA FSA

4.3. Engineering Archaeological Services Ltd was formed in 1993 and has carried out numerous archaeological projects including the assessment and evaluation of Porth Mawr.

5. General

5.1. IFA Code of Conduct

5.1.1. All staff will abide by, and all procedures be carried out in accordance with the Institute of Field Archaeologists' Code of Conduct.

5.2. Health and Safety

5.2.1. EAS Ltd adopt and adhere to safe working practices at all times. A copy of the company's general statement of policy is available on request.

5.3. Liaison

5.3.1. Cadw and the Gwynedd Archaeological Planning Service will be informed in advance of the works being carried out.

5.3.2. Procedures will be put in place for the monitoring of the project by the Gwynedd Archaeological Planning Service and Cadw

5.4. Insurance

5.4.1. EAS Ltd carries all necessary Public and Employee Liability Insurances.

5.4.2. EAS Ltd carries Professional Indemnity Insurance.

5.5. Copyright

5.5.1. EAS Ltd shall retain full copyright of any commissioned reports, tender documents or other project documentation, under the Copyrights, Designs and Patents Act 1988 with all rights reserved: excepting that it hereby provides an exclusive license to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.

5.5.2. EAS Ltd is prepared to assign copyright at the request of the client.

6. Timetable

6.1. The timetable for this project will be dependent on the programme of works for the main contractor.