DIG Portobello















FINAL REPORT

DIG PORTOBELLO: SUMMARY

Portobello was once an important centre of Scottish industry, with a wide range of goods being manufactured there from the end of the 18th century onwards. During the 19th century, Portobello became a fashionable watering place and then a holiday destination of the working classes, becoming Scotland's most popular seaside resort. Industry and leisure existed side by side until the mid-20th century. This might have been an incongruous mix but it has produced a unique heritage.

Portobello Heritage Trust (PHT) aims to protect, promote and explore the historical, architectural and landscape heritage of Portobello and its environs. In 2013-14, PHT oversaw the restoration of Portobello's last two bottle kilns, which they hope will now stand tall over Bridge Street for another hundred years, and in 2014 then turned their attention to *Dig Portobello*!

In 2014 PHT developed a *Dig Portobello*, a public archaeology project centred on the Industrial history of Portobello. Particular concern was with the late 18th century activity, particularly pottery. PHT successfully applied for and received funding from the Heritage Lottery Fund (HLF) to undertake the exciting project. In addition, the City of Edinburgh Council kindly offered 'in kind support' to the project.

Aside from the strong research focus of the project concern was on engaging communities in their shared heritage. A series of lectures and school visits were run with the central show piece of the project being a two day archaeological 'big dig' weekend, which took place at the end of August. The weekend included a series of test-pitting across salient parts of Portobello; geophysical surveys of those parts of the area where below ground remains were believed to be located, guided tours of the area, finds workshops and other hands-on learning sessions. All the events were co-ordinated to give the participants an insight into the work of an archaeologist.

This report summaries the key aspects and outcomes of *Dig Portobello* and will be available for free to all interested parties.

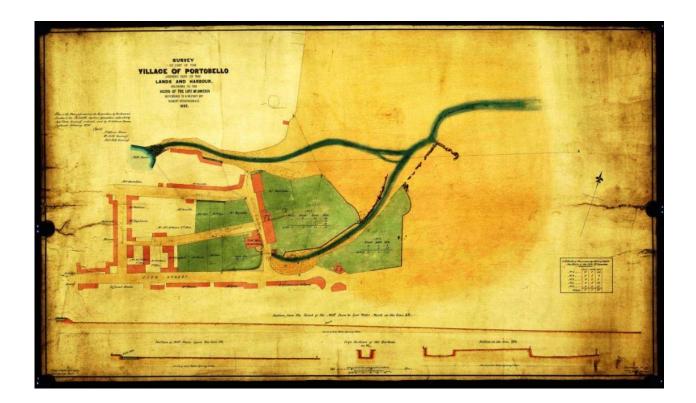
PROJECT BACKGROUND: PORTOBELLO INDUSTRIES

The area of Portobello reputedly got its name from a house built around 1750 by a sailor who had been present at the taking of the town of Portobello in Panama ten years earlier. The house was built on the desolate Figgate Whins, an otherwise undeveloped section of the coast between Leith and Musselburgh. In 1765, rich clay deposits were discovered just to the west of the Figgate Burn and this led to the establishment of brickworks, tileworks and potteries, a soapworks, a white lead works and associated workers' houses. Portobello Potteries were born.

The industries of Portobello were stimulated by the founding of a small harbour at the mouth of the Figgate Burn in 1787.



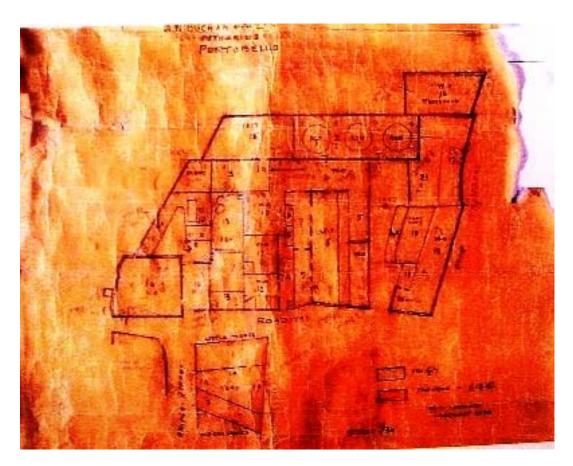
Extract from Wood's 1824 Plan of Town of Portobello. Image courtesy of John Lawson, City of Edinburgh Council.



Stevenson's map of Portobello, 1822

It was on the 12th of July 1765 that William Jamieson, an Edinburgh architect and speculative builder, feud his first plot of 3 acres at Portobello, from Baron William Muir of Caldwell. Jamieson quickly enlarged this to just over 10 acres and this land lay to the east and adjacent to the Frigate burn and was bounded to the north by the sea and to the south by the Kings highway. Later some of this ground was named Brick Field

There are a number of other contracts listed which show how William Jamieson quickly built up his considerable holdings in Portobello (to in excess of 43 acres). Allowing a year for construction, this suggests that the earliest possible date for the production of bricks and tiles on Jamieson's first 10 acres was 1766. Jamieson also constructed a pottery to manufactured coarse red earthenware. Jamieson also went on to construct a white ware pottery, almost certainly for the manufacture of creamware and, later, pearlwares. Exactly when it was constructed is not known, but evidence from a letter shows that it was in operation by 1784. We also know that by 1795 his white ware pottery had been leased to Cookston & Jardine, Edinburgh china retailers. This pottery later had a number of names including Buchan's, Waverly and Thistle, and occupied the area between Bridge Street and Pipe Street. In 1827 the works was purchased by William Creelman, a stoneware potter, and this ware was to be the focus of its production for the rest of its life. It was enlarged by John Tough, who purchased it in 1840, and enlarged again in 1867 when the business was sold to AW Buchan, later joined by JF Murray to form the Murray and Buchan Company. In 1877 the firm was renamed AW Buchan and Co, also known as the Thistle Pottery (see Figure 3 below). Three kilns were added between 1903 and 1911, two of which still survive and both are listed and scheduled. The pottery remained at the site until 1972, when it relocated to Crieff.



Plan of the Waverley pottery during the Buchan Period

The later named Midlothian Pottery was founded in 1805 by Thomas Rathbone, situated next to Jamieson's redware pottery and opposite the harbour. A flint mill was built to grind material for glazes in 1775, and a second was constructed by Rathbone, also next to the harbour, coming into use by the 1790s.

Prior to a recent archaeological excavation by AOC Archaeology Group, little was known of the ceramic wares produced during the late 18th century at Portobello, and we still have much to learn. Great strides have already been made, and work is ongoing towards the compiling of Portobello's complicated ceramic history.

With this in mind, and their recent successful work on the Portobello kilns, PHT decided to embark on *Dig Portobello*. In summary, they wished to deliver a public archaeology project centred on the industrial history of Portobello, focusing primarily on 18th century activity and potteries in particular.

DIG PORTOBELLO

Getting started: planning the dig

In order to inform any community work PHT commissioned AOC Archaeology Group and leading pottery expert George Haggarty to produce a desk-based assessment in order to ascertain the wider heritage context of the project. As is common with such studies their assessment drew upon historical sources and existing archaeological records as well as a full map regression, site visits and analysis of aerial photography. This stage, therefore, collated all known archaeological information on the industries and the surrounding landscape area, providing a sound basis for the project. This baseline data was then used to create a general history and archaeology of the area in and around the proposed project site.



Following this AOC discussed the project with the City of Edinburgh Council (CEC) who were integral to the whole project, particularly their Archaeologist, John Lawson.

Getting started: community involvement

PHT strongly believes in providing opportunities for local communities and the wider public to actively engage in the rediscovery of their heritage in and around Portobello. They wholeheartedly believe heritage belongs to all and that a sense of ownership and participation can be a strong and

unifying factor in the long term understanding and preservation of heritage. Thus, aside from researching the Portobello Industries the Dig Portobello Project also focused heavily on a series of activities and events which allowed people of all ages to participate in their heritage.

During these set up stages a range of opportunities for involvement were planned, in order to provide and maximise public participation. Planned activities included: training in geophysical survey techniques; talks; guided walks; participation in excavations; excavation of test pits in participants' own gardens (see above); workshops on ceramics and other artefacts; finds washing; and Wee Pottery Workshops for children.

Further, to ensure a high level of public enthusiasm and participation, a programme of promotion and publicity was implemented in the weeks leading up to the project. This include local promotion (e.g. posters distributed locally, flyers distributed in libraries etc) but also through local schools subject to agreement) and wider promotion online via social media and the national press. All such publicity was based by Heritage Lottery Fund prior to release.



One of the many publicity vehicles used throughout the project

To encourage wider interest and dissemination of the results PHT also created a website and utilized social media throughout the project. Throughout the duration of the project scores of tweets and facebook entries were made. With the website and the wider social media presence there can be little doubt that 1000 of people nationally and internationally heard about *Dig Portobello*.

The Big Dig Weekend: 29th to 31st August

The main activities took place during a warm glorious weekend at the end of summer.

Community base camp

Critical to the project was the establishment of a 'Base Camp' within Portobello which acted as a meeting point for volunteers, provided space for 'off-site' activities and a venue for the talks and lectures.

Prior to the actual fieldwork (see below) an introductory session took place within the 'Base Camp', during which the programme and objectives of the project were discussed and a talk given on the archaeology of the area and the excitement that could be generated by the project. Full briefing on health and safety was also given (subsequent volunteers who arrived later to the project were briefed on health and safety issues upon arrival). Volunteers were also briefed on other logistics such as HLF permissions etc.

Geophysical Survey

The fieldwork began on 29th August with a programme of geophysical survey which comprised a detailed magnetometer and resistivity survey of four council owned land parcels. Unfortunately, the made ground in the area were inconclusive. However, the activity was largely aimed at training local volunteers.

The excavations

The Big Dig weekend comprised excavation at two areas owned by City of Edinburgh Council and volunteers' gardens scattered across Portobello.

The two areas owned by the Council were a pavement area (Area 1) adjacent to the car park and a grassy area adjacent to the promenade (Area 2), on the sea front. These areas were chosen as they were believed to contain both upstanding archaeological remains and deeply stratified made ground (John Lawson pers. comm). All excavation on Council-owned land was supervised by AOC's experienced field archaeologists. The test-pits aimed to measure 1 by 1 m in size and were excavated to a depth of up to 1 m. All test-pitting was undertaken according to AOC Archaeology Group's standard operating procedures. Re-instatement was undertaken by City of Edinburgh Council as part of their 'in Kind' payment.

In terms of research the objectives of the archaeological works were to:

- (i) determine the character, extent, condition, quality, date and significance of any archaeological remains within the proposed area by means of an intrusive field evaluation (test-pitting) across the four identified areas;
- (iii) undertake post-excavation analysis on recovered material.

In summary, the archaeological works revealed previously unknown material and structures. Evidence of the existing ceramic works was recovered in Area 1, while a series of in-filling deposits

and several substantial structural remains were identified in Area 2, including stone walls, a brick and timber structure, a brick structure and a mortar surface. A significant dump of early pottery was also recovered from Area 2. Together, these small evaluations give tantalising glimpses into the early potteries of Portobello and demonstrate that there is still much to learn in the future. A few hours digging revealed a huge history in Portobello's past.

Area 1

Area 1 comprised a single trench which was excavated through an existing pavement which itself overlay the road running through the Portobello Soapworks and subsequent Portobello Pottery. The trench was excavated through 0.60 m of made ground including modern brick paving [101], levelling deposit [102], tarmac surface [103] and associated levelling deposit [104], before the buildings were actually revealed.



General working shot of Area 1

On excavation, the trench was found to contain at least two different buildings, which demonstrated at least three phases of activity.

Structure 1

Structure [110], was identified at the northern part of the trench, and comprised an east to west aligned boundary wall [109] to the south, and an internal floor surface [113]. That the boundary

wall [109] is built over two earlier foundations or walls ([111] and [121]) demonstrates that the building forms the final phase of a series of structures built and re-used on the same location. The lower foundation of the building [121], constructed of rough, undressed stone, was only partially exposed. The wall forms the northern edge of the building identified on Wood's 1824 map. Although no foundation cut was identified, it seems likely that the building was excavated into the lower deposits [119].



Detail of Walls [109], [111] and [121]

Structure 2

Structure was built to the immediate south of Structure 1, clearly post-dating it. The building was comprised of at least two phases. The later phase consisted of a concrete floor [112], which abutted wall [109] and overlay the entire southern area of the trench. A concrete pillar base [105] provided the internal roof support of the structure. The building is likely to date to the rebuilding of the structures, between the publication of John Wood's 1824 and 1854 maps. An earlier phase of building was identified one metre below floor [112] and consisted of a concrete floor [116], present only at the southern end of the trench. This probably relates to the final phase of use of the buildings in the Portobello Paper Mill (OS Map 1898, 1909, 1919, 1952).

Both structures were built over various deposits of made ground which were dumped in an attempt to reclaim coastal land. A sondage excavated through the centre of the trench demonstrated up to

one metre of made ground containing soft sediments [115], [118] and [119]. Deposit [119] contained a few shards of early ceramic likely to have come from the Rathbone Pottery (George Haggarty pers comm; see below).



Plate 3: Detail of made deposits within Trench 1a

Area 2: The Promenade

Area 2 was located within the promenade. Various test-pits were excavated through a series of deposits of made ground to reveal structural remains including truncated sandstone walls [404-903], and brick and timber structures [503-703].

All of the test-pits were excavated through a succession of in-filling industrial deposits consisting of an initial ash/cinder/sand [102], [202], [303], [402], [502], [602], [803], [1102], [1103], and [1104], ranging from 0.40 m to 0.50 m in depth.

These overlaid foundation deposits of mixed clay/cinder [304], [104], [1105], and [1106], gravel [203] and rubble [802], [403], [603], [804], [1002], and [1110]. A compact thin layer of crushed sandstone, blaise and brick [1003], [904], and [204] 0.08 m thick lay underneath these deposits in both Test Pits 9 and 10. Deposits of natural sand [405], [504], [702], [704], [805], [1004], and [1103] was encountered across the test excavations. This was pale brown in colour with occasional rubble and clay inclusions.

Sandstone walls

The excavation of Test-Pit 4 revealed the remains of a truncated sandstone wall [404] at a depth of 0.60 m. This was aligned east to west and was set partially within the north facing section. The wall was lime mortar bonded and composed of rectangular roughly fashioned sandstone blocks set into

natural sand [405]. The wall was visible for 0.20 m in width, north to south, and was overlain by an in-filling demolition deposit of rubble and brick [403].

Trench 1a was excavated as an extension of Test-pit 5. A sandstone wall was revealed at a depth of 0.54 m aligned north to south across the trench (Figure 7; Plate 4). The wall was 0.64 m in width and was two courses in height (0.30 m). The wall was set within deposits of sand/cinder [1106] and sand/clay [1107] and abutted by similar deposits [1104-1110]. The wall was overlain by cinder and ash [1102]. The wall was again lime bonded.

A second sandstone wall was recorded within Test-Pit 9. This wall was again partially visible within the north facing section. The wall was 0.35 m below the current ground surface underlying a layer of sandy rubble [902]. The wall was again lime bonded and composed of sandstone blocks. The wall was two courses (0.30 m) in depth and rested on the natural sand [906]. Made ground deposits of crushed sandstone/brick [904] and dark brown silty sand [905] abutted the wall to the north.

Brick and timber structures

The excavation of Test-Pit 5 revealed an ephemeral feature consisting of two brick footings and a timber beam [503]. The structure was recorded at 0.31 m in depth within a deposit of ash/cinder [502]. The footings were spaced 0.34 m apart and arranged north-east to south-west, 0.13 m from the east facing section. The most southerly footing was directly overlain by a large timber beam aligned north-west to south-east.

A further brick and timber structure [703] was recorded within Test-Pit 7. This consisted of a single brick footing situated within the south facing section and set into the natural sand deposit [704] at a depth of 0.30 m. A large timber beam 0.85 m in length was recorded at 0.20 m below the current ground surface. The beam was aligned east to west and ran out of the west facing section. Though not in direct stratigraphic association, it would appear very similar to the arrangement within Test-Pit 5.

Another brick and timber structure [1109] was recorded to the immediate south of Test-Pit 5. This consisted of two brick footings [1109] situated within the southern part of the trench and set into the sand deposit [1103] at a depth of 0.35 m. A large timber beam measuring 0.70 m in length, was recorded at 0.25 m below the current ground surface. The beam was aligned east to west and ran out of the west facing section. This would appear very similar to the arrangement within Test-Pit 5 and is probably associated.



A timber and brick structure

It is difficult within these small test pits to be sure what these structures are. It is likely that the sandstone walls relate to undefined structures lurking beneath the promenade. Perhaps some relate and date to pottery industry? And were the brick and timber structures part of structures or perhaps wagon ways, again associated with the Portobello industries?

In an attempt to find some answers PHT turned to George Haggarty and hoped that his analysis would help.

What the Objects tell us

In the following weeks after the excavation the pottery and other finds were analysed by George Haggarty at AOC Archaeology

As was to be expected a significant proportion of the material related to 20th century and 19th century material. All of this pottery is, as one might expect, locally produced Victorian stoneware and standard white earthenwares from Scottish potteries in Glasgow, Kirkcaldy, Bo'ness and the vast Staffordshire industry.

However, during the analysis George found some wonderful discoveries that add a new chapter to Portobello's heritage industry.

During his analysis of the pottery from the promenade (Area 2 test pits) George unexpectedly, recovered one of the most important group of pottery discovered in the area, a tightly dated c. 1820 assemblage. It is assumed that this was dumped from the nearby manufactory of Thomas Rathbone. The new assemblage discovered during the *Dig Portobello* weekend consists of pearlwares, rouletted and banded ware, and transfer printed wares (Standard Willow), both bisque and glazed. As if this wasn't enough a number of yellow glazed shards that when conjoined make up a substantial fragment of a unique well-modelled dog, was another remarkable discovery. To date, there are no known parallels for these sherds.



The yellow sherds recovered by children on the promenade



The yellow sherds reconstructed!

And Area 1 also uncovered exciting new finds. During excavation of the built up material pottery from around the same period (or possibly ten years earlier), and also from Rathbone's pottery, was recovered, in the form of a few shards of dipped and banded ware. This equally exciting assemblage was probably derived from within the area of what became the large stoneware pottery of Thomas Tough and later Buchan's. This again suggests potential for the recovery of earlier pottery from this area.

Summary

The small-scale exploratory works at Portobello were a huge success, identifying the presence of previously unrecorded structures, confirming the presence and survival of buildings relating to the ceramic works, and recovering material related to the early ceramic industry of the area.

As noted, the trench excavated across the existing council pavement (Area 1) demonstrated that buildings related to the 19th century activity on the site survived the demolition and clearance work that is known to have removed much of the industrial buildings that previously occupied the site. Although the adjacent car park and housing estate was cleared to the natural sand in the 1970s, following the dereliction of the site, it is now clear that this work did not remove all of the archaeology and the areas of higher ground seem to protect the underlying archaeological resource.

The structures within Area 1 identified probably relate to at least three phases of occupation, but while the buildings in themselves are interesting, the underlying material is perhaps more so. Although, only a small area was excavated the small sondage in underlying material should that the the area has been built up using material dumped from the early phases of the ceramic works. The pottery analysis shows that the material recovered may be from the early 19th century. The obvious conclusion to be drawn for this is that the underlying material may contain even earlier ceramic.

Despite currently being a flat grass area within the modern promenade excavations in Area 2 should also revealed tantalizing archaeology, again in the form of structures and early pottery dumps.

The potential of these 2 areas for future research are very significant. The two days community *Dig Portobello* could not have been more of a success.

COMMUNITY AND OUTREACH

Aside from the research aims a key aim of *Dig Portobello* was to encourage participation from the local community and wider interested parties.

Hands on archaeology

The archaeological dig (see above) aimed to involve as wide a demographic of local residents as possible. Although many participants were local residents, participation was open to all and many non-locals were involved. In all, 62 people participated in the geophysical survey and excavations, a very healthy figure given the small duration of the onsite work.



Community participation in Area 1



Community participation in Area 2

Off-site community participation

As well as taking part in the exciting excavations PHT and their associates also delivered a structured series of off-site events and 'hands-on' activities over the weekend. These included introductory and closing lectures; guided tours and a children's pottery session. Over 40 people attended these events.

Walking tours

Two bespoke walking tours took place around Portobello, explaining both its heritage and the history. These walks enabled participants to appreciate the underlying heritage of the area,

particularly its rich 18th and 19th century industries and the key historical figures. These tours were run by George Haggarty and PHT experts.



Pottery expert George Haggarty undertakes a walking tour around Portobello

Finds workshop

Back in base camp a finds workshop was hosted by AOC staff and George Haggarty. This included a session entitled 'What do Objects Tell us? Finds Processing and Assessment'. This practical session looked at the post-excavation treatment of finds and what information objects can tell us. Specialists trained the local community in finds processing (washing and marking etc.), and held discussions around typologies and wider artefact analysis (e.g. pottery, metalwork). Taken together these workshops allowed visitors to appreciate that once an excavation is finished the work is half done, and that analysing all the discoveries in order to draw out the maximum amount of information possible, can in some instances take months if not years.



Volunteers washing and examining the pottery recovered from the excavations

Make your own pottery

A hugely successful 'make your own pot' session (primarily aimed at school children) run by a PHT Director ensured that there was an activity for all ages. Air-drying clay was used to make coil-built pots that participants took home with them. The link with Portobello potteries was obvious and many children who took part in the dig also took part in the workshops.



Children making their pots!

Summary lecture

On the final afternoon of the Dig Portobello weekend PHT hosted a closing session in the Base Camp in which AOC staff and specialists both discussed the results of the project and set them within their historical context.

School visits

A key aim of the project was to involve school children. To this end two local primary schools participated in Dig Portobello: three classes of P5 pupils from Towerbank Primary School, and two classes of P4 pupils from St John's RC Primary School., comprising around 150 pupils in total.



These groups participated in archaeology workshops including finds handling, as well as beach-combing and excavation on Portobello Beach, close to the Figgate Burn, which brings a great deal of material related to Portobello's industries down onto the beach. Once the finds had been washed and assessed, a short presentation was delivered at an assembly for P5-7s (around 420 pupils) at Towerbank in November 2014, to update the pupils on the significance of their findings.

Temporary exhibition

Although not part of the HLF funding application PHT and their associates decided to create a temporary exhibition in the local Portobello library which ran during March and April 2015. This temporary exhibition – comprising finds secured within cases and associated pop up panels – could be viewed by all of the many hundreds of visitors that attend the library on a weekly basis. Further, the pop-up panels will be utilised by PHT in future heritage outreach events.



The temporary exhibition at Portobello Library



Some of the finds on secure display at Portobello Library

Final lecture at PHT AGM

The full project findings were also presented by AOC with PHT at their AGM in April 2015. 55 people attended the packed event. The enthusiasm and feedback was exceptional and everyone agreed that the project was a huge success. Indeed, many individuals wanted a Dig Portobello 2!



PHT has offered to present the results of the project to the 2015 Edinburgh, East Lothian and Scottish Borders Council Archaeology Conference.

CONCLUSION

Dig Portobello was a huge success, providing new information for the occupation, development and survival of the industry of Portobello. The works have demonstrated that despite the urban development of the town in the 19th and 20th centuries, pockets of early 19th century heritage, and possibly earlier, exists across the area. There is huge potential for further works.



As importantly, the public participation in the project was an enormous success and the large numbers of local volunteers showed that there is considerable public interest in Portobello's history.

PHT would like to thank everyone who took part; with particular thanks to City of Edinburgh Council, their archaeologist John Lawson, local pottery expert George Haggarty and the Heritage Lottery Fund.