HARVEY'S FOUNDRY, HAYLE.
BLOCKED OPENING IN PATTERN SHOP.

Archaeological Evaluation

Cornwall Archaeological Unit
A Report for Stride Treglown Architects

Harvey's Foundry, Hayle.
Blocked Opening in Pattern Shop,
Archaeological Evaluation

Richard Cole BA

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Acknowledgements

This study was commissioned by Stephen Taylor of Stride Treglown Architects.

The partial demolition of the walling was carried out by staff from Penwith District Council's direct labour organisation.

Within Cornwall Archaeological Unit, the Project Manager was Nigel Thomas.

Cover illustration

The blocked opening within the retaining wall.

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Abbreviations

CAU Cornwall Archaeological Unit
CRO Cornwall County Record Office
EH English Heritage
NGR National Grid Reference
RCM Royal Cornwall Museum
PRN Primary Record Number in Cornwall HER
HER Cornwall and the Isles of Scilly Historic Environment Record
1 Introduction

1.1 Project background

CAU were commissioned by Stephen Taylor of Stride Treglown Architects to carry out a small-scale archaeological evaluation of a blocked opening in a retaining wall on the Hayle Foundry site (see Figs. 1 and 2). An evaluation of the yard surface above the retaining wall had been carried out by CAU in 2001 (Thomas and Sturgess 2001) and this revealed that clay and decayed killas (mudstone) was present in the area behind and above the opening. It was therefore considered likely that a subterranean feature might be present running into the bank from the retaining wall.

1.2 Aims

The client is involved with the redevelopment of the Foundry site to the west of the opening and was unaware what lay behind the blocking. The aim of the evaluation was therefore to ascertain whether the opening concealed a tunnel or other feature, or to appraise the nature of the deposits to the rear of the retaining wall.

1.3 Methods

The site was visited on two occasions. On the 12th February, a record of the blocked opening was made. The second visit took place on the 22nd February, when portions of the various walls blocking the opening were removed by staff from Penwith District Council’s direct labour organisation. Half of the concrete walling at the edge of the opening was removed and this revealed earlier granite blocking. An area of less than one metre square in the top right-hand corner of this older walling was dismantled, due to concerns about the stability of the granite roof of the opening.

The removal of this small amount of walling did however allow the characteristics of the retaining wall to be assessed and the rear of the blocking to be viewed. Field recording consisted of written notes, sketch survey and a detailed photographic record.

After the opening had been recorded, supports were inserted to prevent any collapse of the walling. Wooden boarding was then placed over the opening to make it inaccessible.

2 Background

The blocked opening is situated within a retaining wall, which lies to the west of what is now the car park for the Booker Cash and Carry in Hayle (see Figs. 1 and 2).

This retaining wall previously formed the rear wall of a Pattern Shop which was recorded on a map dating to 1853 (Smith and Buck 1995i, 15). It is certainly older than that and predates, or is at least contemporary, with the Boring Mill constructed immediately to its east in c.1840 (Smith and Buck 1995i, 14).

On the 1879 Ordnance Survey map (see Fig. 3), the Pattern Shop is shown with a feature recorded in the exact location of the opening being evaluated through this project. The area to the west is shown as a ‘yard.’

By 1907 (see Fig. 4), the yard to the west had been enclosed and by the 1930s (see Fig 4), the Boring Mill was no longer extant and the Pattern Shop was shown as an unroofed structure. The eastern wall of the Pattern Shop recorded in the 1930s no longer survives.

For a more detailed history of the Hayle Foundry site, see Smith and Buck 1995i and 1995ii.
3 Results

The retaining wall, which formed the rear of the Pattern Shop, is constructed of granite blocks and stands to a height of approximately 6.5m (see Fig. 8). It is wider at its base than its top, and running along the retaining wall at a higher level than the opening, there is a row of protruding blocks [F], c. 0.25-0.3m in width. It is likely that these blocks were supports for flooring or a roof for the Pattern Shop.

The blocked opening is 1.7m wide and 2.7m high, the bottom of the opening being 1.0m above the present level of the car park. The bottom of the opening projects out 0.25m further than the top of the same opening. Initial inspections also showed that both sides of the opening were lined with red brick.

3.1 Concrete walling

The opening was blocked with the remains of two separate phases of concrete block walling [B and D].

The base of the opening is partially lined with red brick [A] which is 0.1m high and slopes down 0.25m to the edge of the wall. A deposit of mass concrete [B] 0.15m thick overlays the red brick and forms the foundation for the concrete block walling [C] (4 inch block) which blocks the remainder of the opening. Upon removal of part of this wall, it became clear that prior to its construction, a lintel [D] had been removed from the top of the opening and as a result the concrete walling now actually supported the granite wall which survived above it.

At some stage, a hole was pierced through this wall. It measured 0.70m by 0.95m, and a lintel made up of a concrete slab and two rows of firebrick, measuring 0.9m by 0.25m, had also been inserted directly above it. An earlier wall is visible 0.3m inside of this wall (see Section 4.2).

A later piece of concrete block walling [E] had also been added on the outside of the earlier concrete block walling. This survives in the bottom left-hand corner of the opening.

3.2 Inner blocking

Behind the concrete walling, there was a further wall which had been built at a much earlier date to block the opening. It was constructed of square granite pieces, held together by a very earthy mortar.

There was the remains of a wooden lintel directly above this inner wall (see Fig 7). The wall itself was partially removed and shown to be 0.6m thick.

3.3 The opening

Once a small amount of the inner wall had been removed, it was possible ascertain further details about the opening itself. The retaining wall was 1.1m thick at the top of the opening and the return of the wall was noted.

The right-hand side of the opening had a red brick lining for 0.85m with the inner 0.25m being of granite block. There was also a slight recess, 0.1m by 0.1m, over the red bricks for the lintel. The brickwork splayed inwards which, if replicated on the left-hand side of the opening, would mean the opening on the western side of the wall opening would only be 1.1-1.2m wide.

To the rear of the retaining wall, there is a loose mottled dark brown/black silty loam soil, suggesting that the area to the rear of the retaining wall had been deliberately infilled.
4 Discussion and recommendations

The nature and dimensions of the opening have been recorded, but the actual function of this feature is still not known. A feature in the very same position is marked on the 1879 OS map and it is possible that the opening was blocked after this date and, it might also be suggested, the yard surface to the west was increased in height with the ground being made up.

This would not be supported by other evidence however. In 2001, Nigel Thomas and Jo Sturgess excavated a trench (Trench 2) in the yard to the immediate west of the opening. This excavation uncovered natural deposits; “a mottled orange silty clay with light bluish grey decaying killas blocks” behind and above the opening (Thomas and Sturgess 2001, 36).

The retaining wall stands 2.4m above the level of this yard to the west. The ground surface of the old yard area is therefore only 0.2-0.4m¹ above the top of the opening.

If further works are deemed necessary to investigate the rear of the opening or the nature of the deposits to the west of the retaining wall, this could be done by revisiting the 2001 excavation trench and excavating down to the actual opening.

The foundry site remains an archaeologically sensitive area and such works would need to be carried out under archaeological supervision.

¹ The measurement given is an estimate, as the full height of the retaining wall above the opening was also estimated.
5 References

5.1 Primary sources
1879 OS 25 inch map
1907 OS 25 inch map

5.2 Publications
Smith, J R, and Buck, C, 1995, Hayle Town Survey and Historic Audit, CAU, Truro

6 Project archive

The CAU project number is PR2005.

The project's documentary, photographic and drawn archive is housed at the offices of Cornwall Archaeological Unit, Cornwall County Council, Kennall Building, Old County Hall, Station Road, Truro, TR1 3AY. The contents of this archive are as listed below:

1. A project file containing site records and notes, project correspondence and administration.
2. Field plans and copies of historic maps stored in an A2-size plastic envelope (GRE426).
3. Black and white photographs archived under the following index numbers: GBP 1432, 1433.
4. This report held in digital form as: G:\CAU\DOCUMENT\SITES\SITES H\HARVEYS FOUNDRY TUNNEL SEARCH\HAYLE FOUNDRY BLOCKED OPENING - REPORT.DOC
Fig. 1  Location of blocked opening on Harvey's Foundry site.
Fig. 2  Location of blocked opening in retaining wall.
Fig. 3

Opening as recorded on annotated copy of 1879 Ordnance Survey map (from Smith and Buck 1995).
Fig. 4  Study area in 1907 showing Pattern Shop and Boring Mill (from OS map)
Fig. 5  Study area in 1930s showing Pattern Shop (from OS map)
Fig. 6  Wooden lintel above inner blocking.

Fig. 7  Removal of inner blocking in progress.
Fig. 8 The blocked opening.