MORWELLHAM QUAY HIGHWAYS WORKS, GULWORTHY, DEVON

(NGR SX 44590 69780)

Results of historic building recording and archaeological monitoring and recording

Historic England Scheduled Monument Consent reference: S00241283 (conditions g-i)

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On behalf of:
SLR Consulting

Report No: ACD2117/3/0

Date: November 2021

AC archaeology

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Client	SLR Consulting
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Report Author	Stella Smith and Laurence Vinnels
Contribution	Naomi Payne
Checked by	Simon Hughes
Approved by	Simon Hughes

Acknowledgements

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The views and recommendations expressed in this report are those of AC archaeology and are presented in good faith on the basis of professional judgement and on information currently available.

CONTENTS

Summary

Historic building recording and archaeological monitoring and recording (controlled watching brief) was undertaken by AC archaeology during November 2019 and June 2021 at Morwellham Quay, Gulworthy, Devon (SX 44590 69780). The work comprised the monitoring of groundworks associated with repairs to the retaining wall bounding the highway into Morwellham Quay from the north.

The site is in Tamar Valley Mining District with Tavistock of the Cornwall and West Devon Mining Landscape World Heritage Site, with the adjacent highway and its retaining wall within the Scheduled Monument area of Morwellham Quay.

Historic building recording of the retaining wall suggested that it had probably been partially rebuilt in the time following the removal of a building range shown on late 19th century mapping. The reconstruction groundworks exposed an undated section of stone wall that was likely to have formed an element of the former building range. The groundworks also exposed part of an 18th to 19th century probable rubbish pit.

1. INTRODUCTION

1.1 This document sets out the results of historic building recording and archaeological monitoring and recording (controlled watching brief) undertaken by AC archaeology during November 2019 and June 2021 ahead of and during wall stabilisation works at Morwellham Quay, Gulworthy, Devon (SX 44590 69780; Fig.1). The archaeological work was required as conditions of Scheduled Monument Consent reference S00241283 granted by Historic England.

1.2 The site is situated adjacent to the highway leading to Morwellham Quay from the north. It comprises the roadside retaining wall forming the focus of the works and part of a grass-covered plot to the south (Plate 1). Located to the northwest of the River Tamar, the site is situated at around 14m above Ordnance Datum on ground that slopes moderately steeply down towards the quayside. The underlying solid geology consists of Devonian slate of the Tavy Formation (British Geological Survey 2021).

1.3 This report incorporates historic building recording and results from the monitoring of geotechnical investigations that were presented in an interim report (De-Villiers 2019).

2. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

2.1 Morwellham Quay is located within Area A10ii (Tamar Valley Mining District with Tavistock) of the Cornwall and West Devon Mining Landscape World Heritage Site inscribed by the World Heritage Committee of UNESCO in 2006. The highway itself, including the adjacent boundary, but not the land to the south, fall within the Scheduled Monument of *'Morwellham Quay: transport infrastructure, part of the water control system and a manganese mill'* (National Heritage List for England no. 10211461).

2.2 Morwellham is first recorded as a port in 1238 and became the port for Tavistock particularly following the rise in power and wealth of Tavistock Abbey. After the dissolution of Tavistock Abbey in 1539 the manor of Morwell came into the possession of Lord John Russell, ancestor of the Earls and Dukes of Bedford who retained possession of the land until 1959.

2.3 Morwellham Quay (Devon Historic Environment Record (HER) MDV7160) is documented from the mid-17th century and the current highway was constructed in 1744 replacing an earlier road. The quay prospered during the late-18th and early-19th centuries, when it served the Dukes of Bedford's nearby mines, most notably from the 1840s the Great Devon Consols Mine – the richest copper mine in the world at the time. Much of the layout and many of the buildings at Morwellham Quay date from this period of extensive local metal mining (Booker 1974).

2.4 Adjacent to the area of repairs are a series of workshops (HER MDV63008) of 19th century date. Maps produced in the 1960s or 1970s show these to be in use as farm outbuildings and indicate that these buildings formerly continued westwards as a longer range into the area of repairs. These buildings are also recorded on an estate map of 1867 (Waterhouse 2004, fig. 3), which shows further narrower, buildings along with a group of three larger structures to the south. Earlier estate drawings of 1813-17 (*ibid.,* fig. 2) show the northern and southern groups of buildings but not the middle narrower group. None are shown on a lease map of 1803 (*ibid.,* fig. 1).

2.5 A survey by Cynthia Gaskell-Brown in 1977 gives the following description of the area, under the name *'Sheds/outbuildings north of Ship Inn'*, and site number 14:

> *North of the Ship Inn dining room is a row of sheds and calf-house in a walled yard. The date stone on the eastern gable of this range is 1880. This group apparently replaced a very much older complex of buildings which might well have dated back to the 16th century. SM2 (1784/86) and SM4 (1803) both show buildings north-west of the Ship Inn: SM4 notes that these were older than 1787. SMII (1784/86) indicates the shape and position of these buildings most clearly and P2 perhaps shows part of them as ruinous. It seems likely that they constituted the stables and barns mentioned in 1803, which in 1868 were noted as having been demolished (Patrick, 1974, p.113).*
>
> *These 19th-century buildings are useful, if of no particular interest. There is a slight chance that excavation of the area, now grassed over immediately east of the Ship Inn, might locate foundations of earlier structures.*

3. AIMS

3.1 The first aim of the investigation was to prepare an historic building survey of the retaining wall prior to works commencing. The aim of the subsequent archaeological monitoring and recording was to preserve by record any archaeological features or deposits exposed during groundworks associated with the scheme. This is with reference for the potential for remains of previous buildings associated with Morwellham Quay.

4. METHODOLOGY

4.1 Historic Building recording

A level 2-3 record (as set out in Historic England's 2016 *Understanding Historic Buildings: A guide to good recording practice*) of the parapet of the retaining wall was prepared prior to its removal.

4.2 Monitoring and recording

The monitoring and recording was undertaken in accordance with a project design prepared by SLR Consulting (2021), a supplementary Method Statement prepared by

AC archaeology (Passmore 2019), and with reference to the Chartered Institute for Archaeologists' *Standard and Guidance for an Archaeological Watching Brief* (2014, revised 2020*)*.

4.3 All features and deposits revealed were recorded using the standard AC archaeology pro-forma recording system, comprising written, graphic and photographic records, and in accordance with AC archaeology's *General Site Recording Manual, Version 2* (revised August 2012). Detailed sections and plans were produced at a scale of 1:10 or 1:20.

5. RESULTS: HISTORIC BUILDING RECORDING (Plan Fig. 2)

5.1 The faces of the retaining wall are constructed of rubble local slates, laid in rough courses and bonded with an off-white lime mortar (Plate 2). The parapet has been topped with stones set on their ends creating a rough crenulation, but only a few remain *in situ*; others have moved but remain on top of the wall with the remainder missing altogether. The wall projects forward slightly of the outbuilding to the east, and at its east end it returns at an angle to meet the corner of the structure. The two lengths of masonry are not structurally connected. This short return was retained as part of the works. During the dismantling of the wall, it was observed that the structure contained a rubble core, and both this and the facework on the north, highway elevation, had been damaged by deep root penetration. Much of the stonework was very loose, and a section of the facework on the north elevation had collapsed exposing the core. On the south face there are traces of repointing and remnants of white paint, mainly surviving at the base of the lower revetment section. At the east end at ground level a ceramic drainpipe passes through the wall. This terminates in a brick-lined sump attached to the wall.

5.2 No features were visible in the base of the collapsed portion of the parapet wall. The boundary wall to Tamarisk Cottage to the west has a clean face against the position of the collapsed wall, which may represent evidence for a former opening. Alternatively, this may indicate that that the boundary wall to Tamarisk Cottage (on its north and east sides) is a continuous feature, and a separate structure from the collapsed retaining wall.

6. RESULTS: MONITORING AND RECORDING

6.1 Geotechnical investigations (Fig. 2; Plates 3-4)

The monitored geotechnical investigations comprised the excavation of a test pit and four window samples. The location of these is shown on Fig. 2.

6.2 *Test pit*

The test pit measured 0.30m wide by 0.40m long and was excavated to a depth of 0.90m below existing levels. The following stratigraphic sequence was exposed:

- 0-0.18m topsoil consisting of mid-brown loamy-sand with rare sub-angular slate inclusions;
- 0.18-0.46m made ground consisting of mid grey-brown loamy-sand with common sub-angular slate and rare brick and very small lime mortar fragments;
- 0.46-0.52m lens of gravel; and
- 0.52m+ slate bedrock.

6.3 *Window sample 1*
This was drilled to a depth of 1.5m. The following stratigraphic sequence was exposed:

- 0-0.16m topsoil;
- 0.16-0.45m made ground;
- 0.45-0.52m lens of gravel; and,
- 0.52m + bedrock.

6.4 *Window sample 2*
This was drilled to a depth of 2m. In this, topsoil, measuring 0.75m deep, directly overlaid the bedrock.

6.5 *Window sample 3*
This was excavated to a depth of 1.9m. The following stratigraphic sequence was exposed:

- 0-0.20m topsoil;
- 0.20-0.40m made ground; and
- 0.40m+ bedrock.

6.6 *Window sample 4*
This was excavated to a depth of 2.5m. The following stratigraphic sequence was exposed:

- 0-0.30m topsoil;
- 0.30-1.35m made ground; and
- 1.35m+ bedrock.

6.7 **Retaining wall repair groundworks** (Fig. 2; Plate 1)
Following the initial monitoring of geotechnical investigations, the groundworks for the retaining wall repairs comprised the excavation of five footings trenches. These were approximately 2m long and 1m wide for four new buttresses, and a trench measuring 4m by 1.5m for a set of new steps. The trenches were excavated in the grass-covered plot to the south of the highway retaining wall.

Natural subsoil (context 101), which consisted of light-yellow clay was exposed at a maximum depth of 0.5m beneath a dark greyish brown silty loam topsoil and mixed made ground (100). Archaeological features comprising a pit (F102) and a wall (S105) were recorded. These are described below.

6.8 **Pit F102** (Figs 2 and 3a-b; Plate 5)
Pit F102 was partially exposed in the footings trench excavated for the new set of steps. The pit measured 2.26m across by 0.91m deep with steeply sloping sides and a flattish base. It contained a single fill (103) composed of mid yellowish brown silty clay, from which four pieces of iron were recovered.

6.9 **Wall S105** (Figs 2 and 3c-d; Plate 6)
Wall S105 was exposed in the sections of two of the buttress footings trenches. The wall, which extended perpendicular to the highway retaining wall between the two footings trenches, measured 1.2m wide and was constructed on the natural subsoil to a height of 0.57m. It was constructed of six courses of lime mortar bonded unfaced slate blocks and rubble. It appeared to be keyed into the retaining wall with the highway and shared a consistent construction style. No associated surfaces were exposed.

7. THE FINDS *by Naomi Payne*

7.1 Four iron bars were recovered from context 103, fill of pit F102. One bar appears to be complete at a length of 800mm. It has a flattened rectangular cross-section, c. 32mm by 12mm, along most of its length. At each end the bar narrows and the cross-section becomes circular, at one end for a length of c. 40mm and the other end, for c. 75mm. Two of the other bars are similar but slightly shorter at 730mm and 750mm, apparently because one of the narrowed ends is missing. The fourth bar has the same cross-section but is a broken fragment with a length of 360mm. The bars are perhaps iron railing components. They are made from cast iron and are therefore very likely to be of 18th or 19th century date.

8. DISCUSSION

8.1 *Historic building recording*

Other than the retaining wall as a probable former structural element (and with some surviving paint on the lower courses), there was no visible evidence for the former buildings recorded on historic maps in this location south of the highway. The wall retained no associated architectural detailing (such as evidence for a roof or divisions) and had probably been at least partially rebuilt with a new parapet after the building went out of use.

In view of the difference in height between the highway and the current field it seems unlikely that the break in the adjacent boundary wall represents an opening; rather this is interpreted as evidence that the collapsed section of retaining wall was structurally distinct from the upstanding boundary of Tamarisk Cottage.

8.2 *Monitoring and recording*

The groundworks exposed two features within the five excavated trenches. Pit F102, which was partially exposed in the trench excavated for the new steps, had an uncertain function. Nevertheless, based on the sections of recovered 18th to 19th century iron bar, it is likely to be broadly contemporary with the historic use of the quay and may simply have been a rubbish pit.

Wall F105 may represent an element of the previous building range that is represented on the Ordnance Survey 25-inch maps of 1885 and 1906 or earlier buildings identified in Cynthia Gaskell-Brown's 1977 survey. Although no evidence for it as a scar in the retaining wall above was visible, as it was keyed into the lower courses of the retaining wall, it is likely that it was contemporary at least with this portion.

9. CONCLUSIONS

9.1 Historic building recording of the retaining wall suggested that it had probably been partially rebuilt in the period following the removal of a building range shown on late 19th century mapping. The reconstruction groundworks exposed an undated section of stone wall below existing ground level that was likely to have formed an element of the former building range. The groundworks also exposed part of an 18th to 19th century probable rubbish pit.

10. ARCHIVE AND OASIS

10.1 The finds, paper and digital archive are stored at the offices of AC archaeology in Bradninch, under the project code **ACD2117**. The contents of the archive will be reviewed by the Plymouth City Museum, Plymouth, and if they are considered worthy of retention then they will be transferred to the museum with the agreement of the landowner. Material not retained by the museum or the landowner will be discarded three months from acceptance of the final report.

10.2 An online OASIS entry has been completed using the unique identifier **365363**, which includes a digital copy of this report.

11. SOURCES CONSULTED

Booker, F., 1974, *The Story of Morwellham*, Dartington Amenity Research Trust publication no. 2.

British Geological Survey Online Viewer, 2021, www.bgs.ac.uk.

Devon CC Environment Viewer, 2021, http://map.devon.gov.uk/dccviewer/

De-Villiers, S., 2019, *Morwellham Quay highway works, Gulworthy, Devon: Results of building recording and archaeological watching brief – Interim report on Phase 1 works*. Unpublished AC archaeology report, ref. ACD2117/2/2.

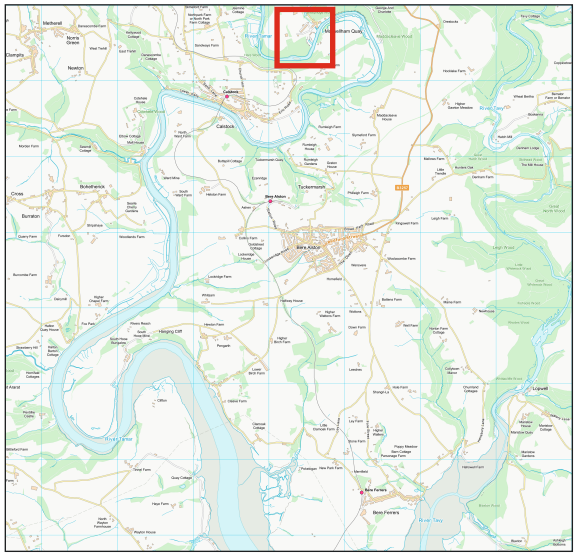
National Heritage List for England website, https://www.historicengland.org.uk/listing/the-list/

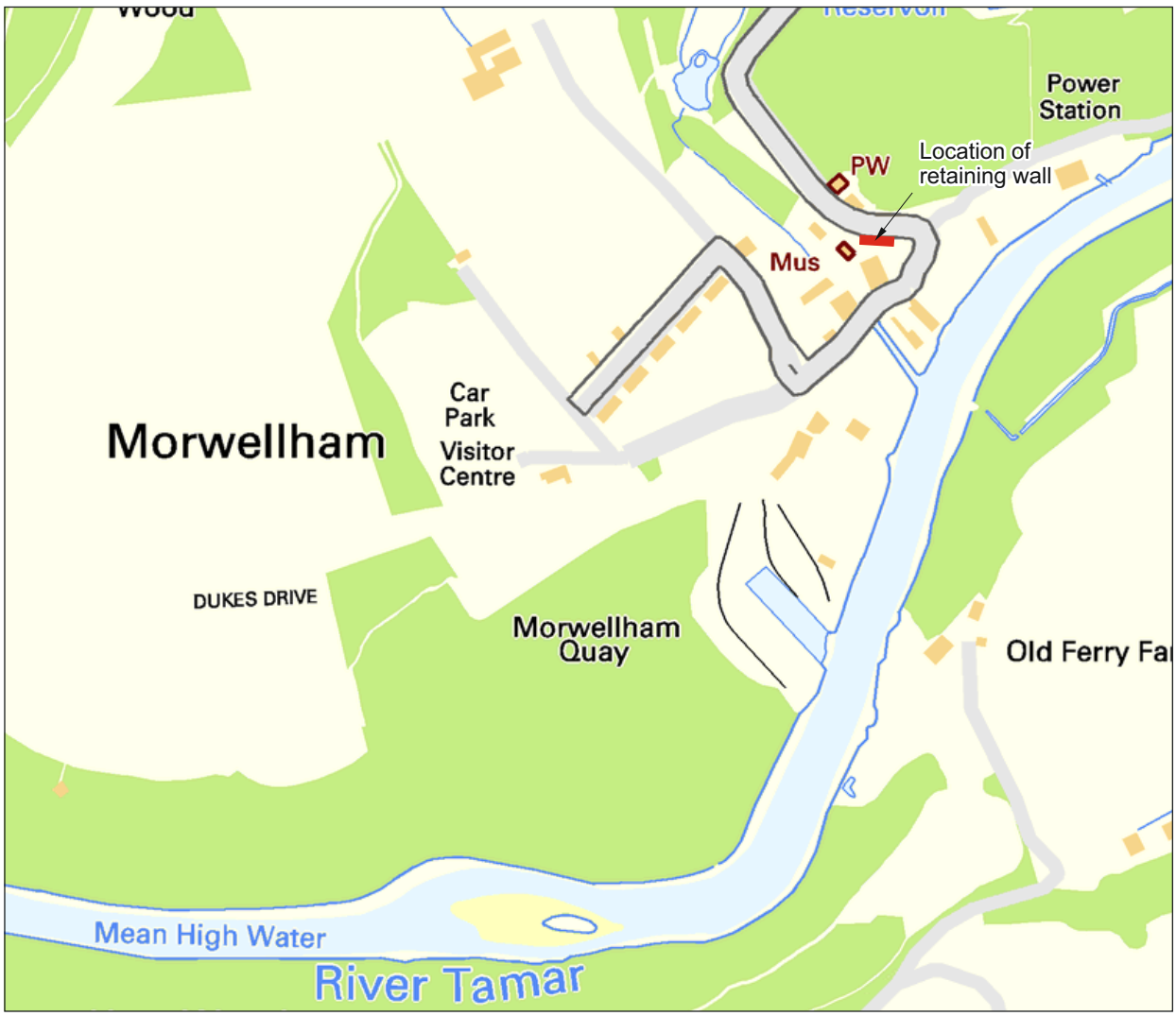
Ordnance Survey 25-inch Devonshire map sheet VXI.2 First Edition, surveyed 1882, published 1885 Second Edition, revised 1905, published 1906.

Passmore, A., 2019, *Morwellham Quay Highway Works, Gulworthy, Devon: Method Statement for historic building recording and an archaeological watching brief.* Unpublished AC archaeology document ref. ACD2117/1/2.

SLR Consulting, 2019, *Morwellham Quay Highway Repairs, Written Scheme of Investigation (WSI)*, SLR Ref: 422.03019.00071.

Waterhouse, R., 2004, 'The lost dock of Morwellham: excavation at the Lime Kiln Quay, 2002', *Tamar, Journal of the Friends of Morwellham* 26, 4-22.





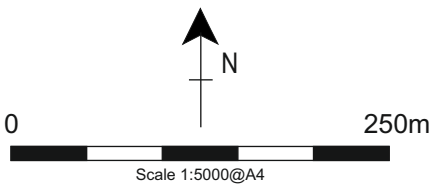


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Fig. 1: Site location

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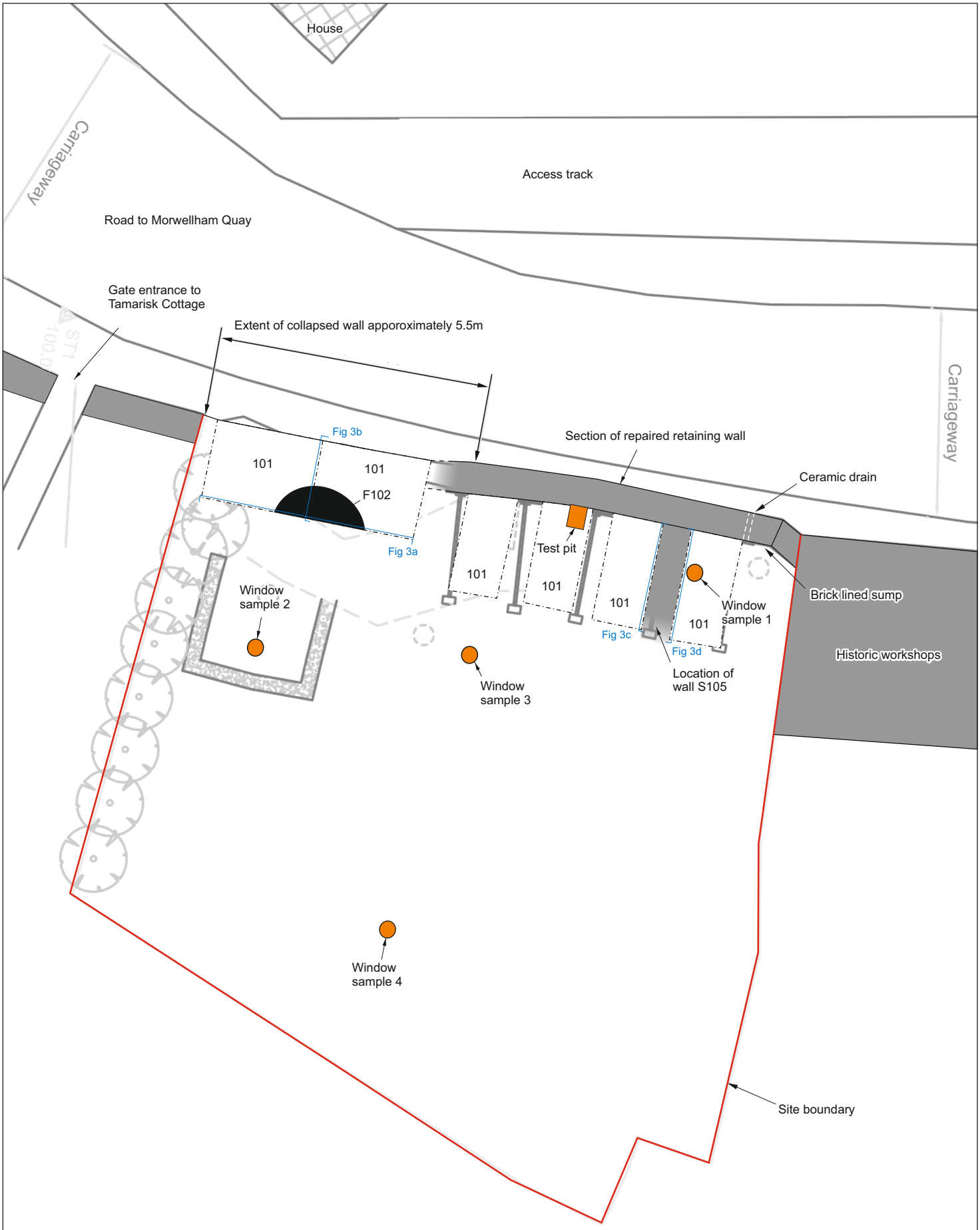

Based on drawing prepared by Devon County Council Engineering Design Group

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0 5m

Scale 1:100@A4

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Fig. 2: Plan of monitored works

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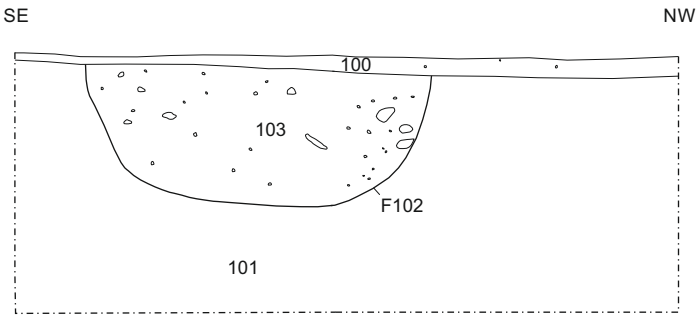
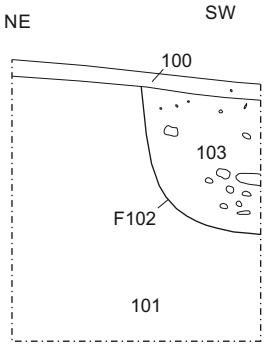
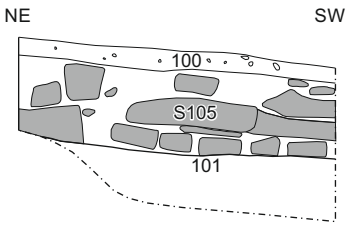
a) Section of pit F102



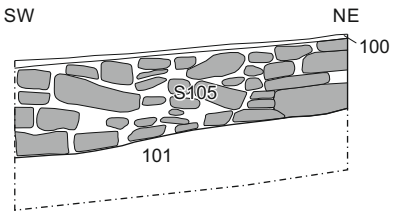
b) Section of pit F102



c) Section of wall S105



d) Section of wall S105



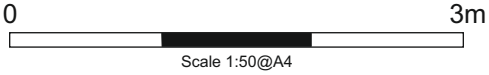


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Fig. 3: Sections

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Plate 1: General working view during construction groundworks. Looking north

Plate 2: Pre-commencement view of retaining wall parapet showing collapse of the face (left of scale) and surviving capping (right). Looking southwest (scale 1m)

Plate 3: Working view during geotechnical investigations, looking northeast

Plate 4: View of geotechnical test pit with the retaining wall to the rear. Looking northeast (scale 1m)

Plate 5: Pit F102, view to southeast (scale 1m)

Plate 6: Wall S105, view to northwest (scale 1m)

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