

Valley Tidal Doors Anglesey



Archaeological Survey

GAT Project No. G1942

Report No. 684

July 2007

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Prepared for The Environment Agency

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VALLEY TIDAL DOORS, VALLEY, ANGLESEY
ARCHAEOLOGICAL SURVEY (G1942)

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VALLEY TIDAL DOORS, VALLEY, ANGLESEY

ARCHAEOLOGICAL SURVEY (G1942)

1 INTRODUCTION

Gwynedd Archaeological Trust was asked by the Environment Agency to carry out an archaeological survey in advance of improvements to the tidal doors set within the dam sited at SH 289 782 south of Valley.

2 SPECIFICATION AND PROJECT DESIGN

A brief was provided for this work by the Environment Agency (see Appendix I), which specified a programme of targeted recording to RCHME Level 3, to be accompanied by a desk-based study.

3 METHODS AND TECHNIQUES

3.1 Desk top study

This comprised the consultation of maps, documents, computer records, written records and reference works, which form part of the Historic Environment Record (HER), located at GAT, Bangor. The Penrhos and Baron Hill manuscript collections held by the University of Wales, Bangor were consulted. The indices at the county record office, Llangefni, were consulted, and the Lewis Morris charts and tithe maps were examined.

Information about listed buildings was consulted by means of Cadw records held in the Gwynedd HER and by consultation of CARN (Core Archaeological Index), which is the online index of the Royal Commission on Ancient and Historic Monuments, Wales.

3.2 Field survey

This was undertaken in June 2007 during low tides.

3.3 Report

The available information was synthesised to give a summary of the archaeological and historic background and of the site as set out below.

The archive is stored with GAT as Project No. G1942

4 SITE HISTORY

4.1 Location

The site lies on the west coast of Anglesey at SH 289 782 on the outfall of the Afon Cleifiog, opposite Holy Island. The doors lie within a stone-built dam that crosses the narrow mouth of the estuary. Prior to the construction of the dam a large area of now reclaimed land lay within the inter-tidal zone, and was known as the Cleifiog Sands. This included part of the area now occupied by the village of Valley. The river was

also known as the Afon Cruglas, and occasionally as the Afon Llana – the cob or dam is often referred to as the Cruglas dam. It formed the boundary between the ecclesiastical parishes of Llanynghenedl and Llanfair yn Neubwll. To the north the land was owned by Lord Bulkeley of Beaumaris, and to the south by Sir John Stanley of Penrhos.

4.2 History

The dam was built in the later 18th century by the Trustees of the Anglesey Turnpike, who wished to construct a new road across the sands, in order to avoid using a more circuitous route at High Water and a difficult road across the sands at Low Water. Sir John Stanley was unhappy with the decision, and tried, unsuccessfully, to stop the building of the road. The documentation would suggest that this was partly out of spite because he had not been consulted, and was under the impression it would damage his farm at Ty Mawr (see UWB Penrhos III 233-243). On 19 Oct, 1776, Henry Hughes, Clerk to the Trustees of the Anglesey Turnpike, writes to Sir John Stanley saying the Trustees wish to make an offer for Ty Mawr, and that they believe it will be a great advantage to the farm as many acres will be drained (UWB Penrhos III, 242). The reply is not known, but it is likely the dam was built shortly after, though no evidence has been found to date the construction with certainty. One account says 'sometime between 1780 and 1790 the Viscount raised a small dyke near the place we know as Valley to conserve his tenants lands' (Williams 1953, 55).

The earliest detailed map evidence for the dam is the 1889 OS map, which shows a single channel through the dam on the west side. This is represented by the extant western opening. It would appear, therefore, that the construction of the London to Holyhead Road by Telford c. 1824, and the construction of the Chester to Holyhead Railway c. 1848 had little impact upon the dam.

The second edition OS map of 1900 shows the eastern openings had been built by then. This date is confirmed by a plaque on the north side of the bridge which is inscribed RWB 1888. The RWB may stand for Richard Williams Bulkeley, the landowner of the western side of the estuary. It is not known if the dam was reconstructed at this period, or if substantial alterations were made to it.

5. SITE DESCRIPTION

The cob is stone-faced with roughly coursed stones laid vertically. The faces slope gradually out from the top to the base of the dam to a maximum width of some 17m.

The river runs through the west end of the cob. There are currently three openings. That furthest west is the earliest, and on the landward side is visible as a rounded arch approximately 5m across with radial stone voussoirs and a slightly projecting horizontal string course above the arch. The tunnel entrance is set level with the top of the dam, and the sloping sides are reveted with flanking wing walls on either side. The landward side is now faced with concrete, in which is built a timber tidal door.

To the west of this opening is a line of boulders running south from the dam. The function of these is uncertain, though they are listed within the HER as a possible quay. They are indicated on the first edition OS map of 1889, though not on subsequent editions.

East of the earlier opening is a pair of arches built within a recess some 8m long. On the seaward side the upper courses of masonry are limestone blocks, the lowest course of which contain a series of hinges that relate to former tidal doors. The lower part has been re-faced in concrete, and contains two later hinged tidal doors. Stone revetment walls flank the recess, and are capped with large rectangular limestone slabs. On the landward side the tunnels are visible as two segmental-arched openings in well-dressed masonry with radial voussoirs. The upper wall is of constructed of local stone, though carefully laid in regular courses. Along the top runs a series of dressed limestone slabs with a rebate along the lower edge – these carry on down the revetment walls on the side, though without the rebate. A datestone recording 'RWB 1888' is set onto the wall above the arches.

6. SITE INTERPRETATION

The cob and the western tunnel almost certainly date from the original construction c. 1776. The line of boulders along the shore west of the cob may also be late 18th century in date. The eastern two tunnels were built in 1888, according to the map evidence and the date plaque. The original doors have been replaced, though parts of the hinges remain above the two eastern openings of earlier doors.

Though the idea of building a dam across an estuary mouth in order to keep the sea out had been used for centuries, there is no evidence for their construction in north Wales prior to the late 18th century. The idea for a cob and sluice bridge at Malltraeth was discussed in the early 17th century, but it was not until 1781 that work was to begin, and it was not finally completed until 1811. Similarly the Traeth Mawr cob at Porthmadog was started late in the 18th century, and completed 1813 (see Gwyn 2006, 175-9). These two major schemes were seen as a means of obtaining considerable acreages of land from the sea. The construction of the dam at Cruglas, however, was driven more by the need to secure a good road through to Holyhead than by the desire for land. A similar small dam lies on the opposite shore of Holy Island at Dinas. The date of this is not known, though it is considered to be 18th century in origin, and its construction may well have been influenced by the Cleifiog dam.

7. RECOMMENDATIONS

It is recommended that the western opening on the seaward side is retained in its present form. Also that the boulders forming the potential 'quay' are not disturbed. Any works that have potential to reveal new evidence concerning the construction of the cob and its chronological development should be accompanied by a watching brief, with time allowed for appropriate survey should it be necessary.

8. REFERENCES AND OTHER SOURCES CONSULTED

- Barnes, F. A., 1988 'Land Tenure and Landscape in Llanynghenedl, Anglesey', *Transactions of the Anglesey Antiquarian Society*, 31-114.
- Dodd, A H., 1925 'The Roads of North Wales 1750-1850', *Archaeologia Cambrensis*, Vol LXXX, Part I, 121-149.
- Gwyn, D., 2006 *Gwyned Inheriting a Revolution: The archaeology of industrialisation in North-West Wales*, Phillimore.
- Jones, G. T., 1989 *The Rivers of Anglesey*, Research Centre Wales, Bangor.
- Lewis, S., 1833 *Topographical Dictionary of Wales*.
- Ogilby, J., 1675 'Plate 24: The road from Chester to Holyhead', *Britannia*.
- Quatermaine, J., Trinder, B., Turner, R., 2003 *Thomas Telford's Road: The A5 in north Wales*, CBA Report 135.
- Williams, E. A., 1953 *The Day Before Yesterday: Anglesey in the 19th century*, Translated by G W Griffith, 1988, Beaumaris.

Maps

- Lewis Morris 1737-8 Cambrian Coasting Pilot Chart 2: Holy Island
- UWB Penrhos II 773 c. 1769 Map 17 Ty Mawr
- UWB Maps 116 Survey of Cleifiog Sands and Marsh c. 1780
- Evans, J. 1797. *A Map of North Wales*
- Tithe Maps for the parishes of Llanfair yn Neubwll and Llanynghenedl c. 1841 (Anglesey Record Office, Llangefni)
- Ordnance Survey County Series Anglesey Sheets XI.12 and XI.16 First edition 1889
- Ordnance Survey County Series Anglesey Sheets XI.12 and XI.16 Second edition 1900

APPENDIX I

PROJECT BRIEF

1 Non-technical summary

The Environment Agency are currently proposing a programme of archaeological building recording of Valley Tidal Doors in advance of the works to the structure.

2 Site location

The tidal doors are located at national grid reference SH 289 782 .

3 General and specific aims of fieldwork

Archaeological field work has been designed to mitigate the physical impact of the proposed construction process. A programme of targeted building recording is proposed.

4 Field Methodology

4.1 Examination of any available maps (printed and manuscript), aerial photographs and other relevant background material including data held at the Historic Environment Record;

4.2 Building Recording is to be carried out to RCHME Level 3 (Recording Historic Buildings – A Descriptive Specification, Third Edition 1996, RCHME)

4.3 Following the initial examination of documentary sources and the site phase of the building recording programme a meeting will take place between the Environment Agency Archaeologist, the archaeological contractor and the Planning Archaeologist to review the methodology for additional archaeological mitigation.

5 Proposal

5.1 A **detailed** proposal, including the following, should be prepared by potential contractors and submitted to the local authority archaeologist and the Environment Agency Archaeologist;

5.2 A consideration of the whole range of investigative techniques and a statement justifying the proposed omission of any technique;

5.3 A description of the proposed methods of survey and recording system;

5.4 A projected timetable for work on site, including staff structure and numbers;

5.5 A projected timetable for all post excavation work, including staff numbers and specialist sub-contractors;

5.6 Any significant variations to the proposal must be agreed by the local authority archaeologist and the Environment Agency Archaeologist in advance.

5.7 The project should be managed in accordance with MAP2.

6 Site Monitoring

6.1 The local authority archaeologist and the Environment Agency Archaeologist will be responsible for monitoring the archaeological work. A minimum of one week's notice of the commencement of fieldwork must be given by the archaeological contractor to the local authority archaeologist and the Environment Agency Archaeologist so that arrangements for monitoring can be made;

7 Reporting Requirements

7.1 The archaeological work should result in a report including a description of the methodology employed; plans showing survey areas; plans and sections at an appropriate scale showing location and position of features located; section drawing should include heights OD; plans should include OD spot heights for all principal strata and features; a list of and spot date for any significant finds recovered and a description and interpretation of the deposits identified.

7.2 The objective account of the archaeological evidence recovered should be clearly distinguished from the interpretation of those features. The methodology used should be critically reviewed.

7.3 The project is to comply with the Institute of Field Archaeologists Standards and Guidance for the archaeological investigation and recording of standing buildings or structures (Revised 2001).

7.4 Draft copies of the archaeological report should be submitted to the local authority archaeologist and The Environment Agency Archaeologist within 8 weeks of the completion of site works.

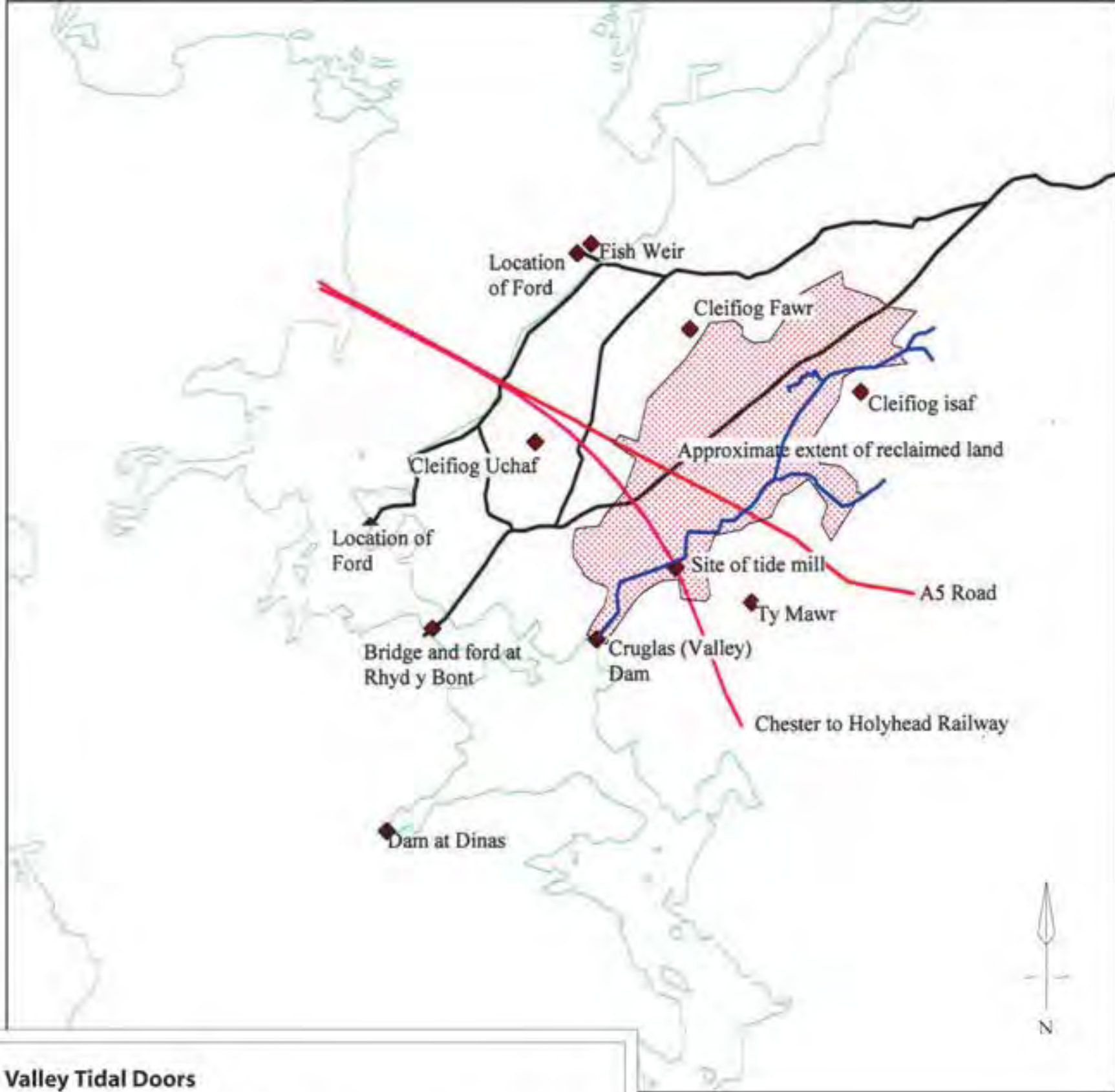
7.5 Four copies of the archaeological report should be deposited with the Historic Environment Record, on the understanding that it will be made available as a public document after an appropriate period (not exceeding 6 months from the completion of fieldwork); a further copy to be sent to the Environment Agency Archaeologist.

7.6 The results of the work should be published in an appropriate journal or other publication and should include an account of any structures located and full details of significant finds, illustrated as appropriate. Details of the place and date of publication must be notified to the Historic Environment Record.

8 Deposition of Archive and Finds

8.1 The archaeological archive arising from the archaeological work should be deposited in an appropriate local institution, in a format to be agreed with that institution. The Historic Environment Record must be notified of the arrangements made. Any finds of archaeological interest should be appropriately conserved and deposited in an appropriate institution: any finds which cannot be so deposited should be fully analysed and published.

Environment Agency
March 2007



Valley Tidal Doors

Figure 1. Location of the dam at Cruglas showing approximate location of reclaimed land and early roads.

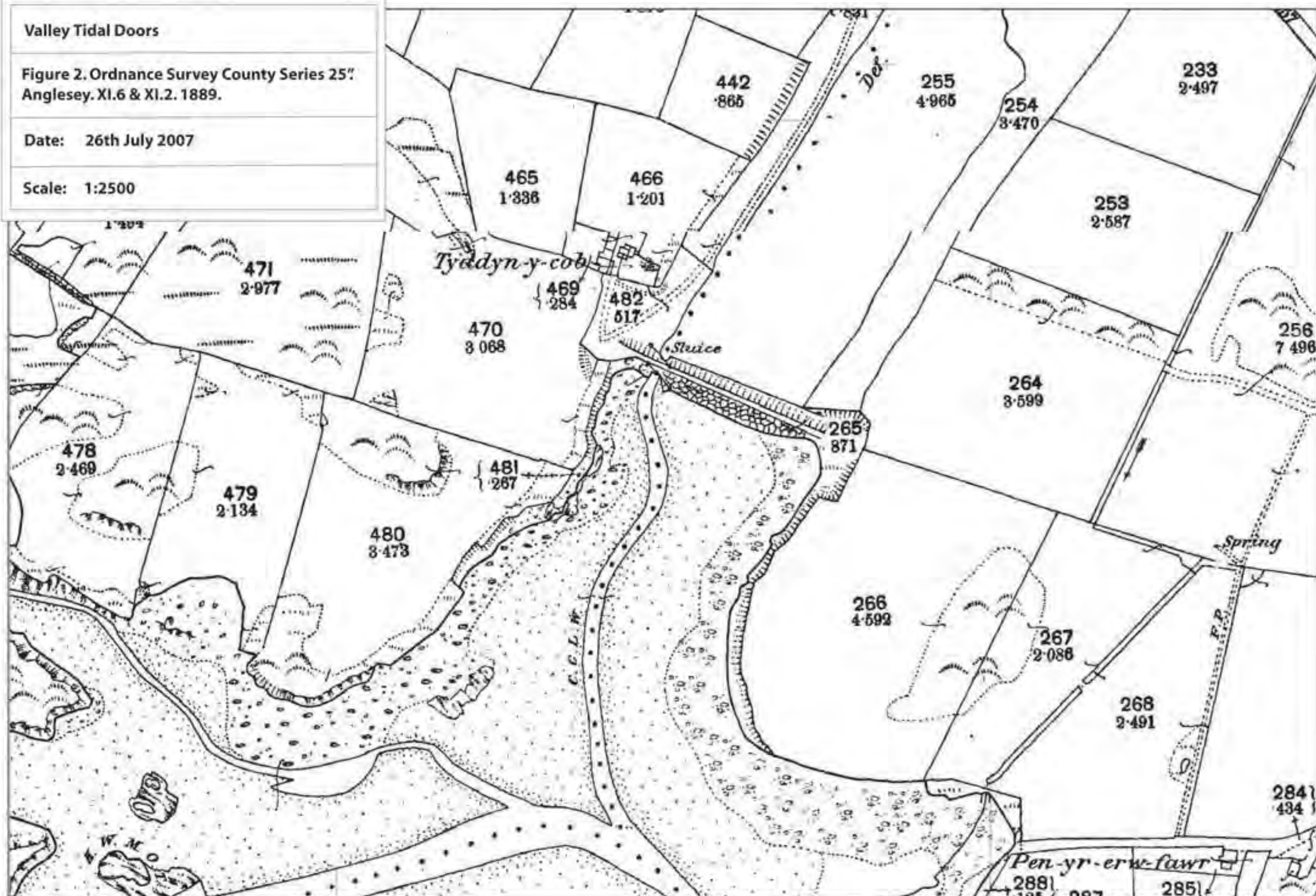
Date: 26th July 2007

Valley Tidal Doors

Figure 2. Ordnance Survey County Series 25"
Anglesey. XI.6 & XI.2. 1889.

Date: 26th July 2007

Scale: 1:2500

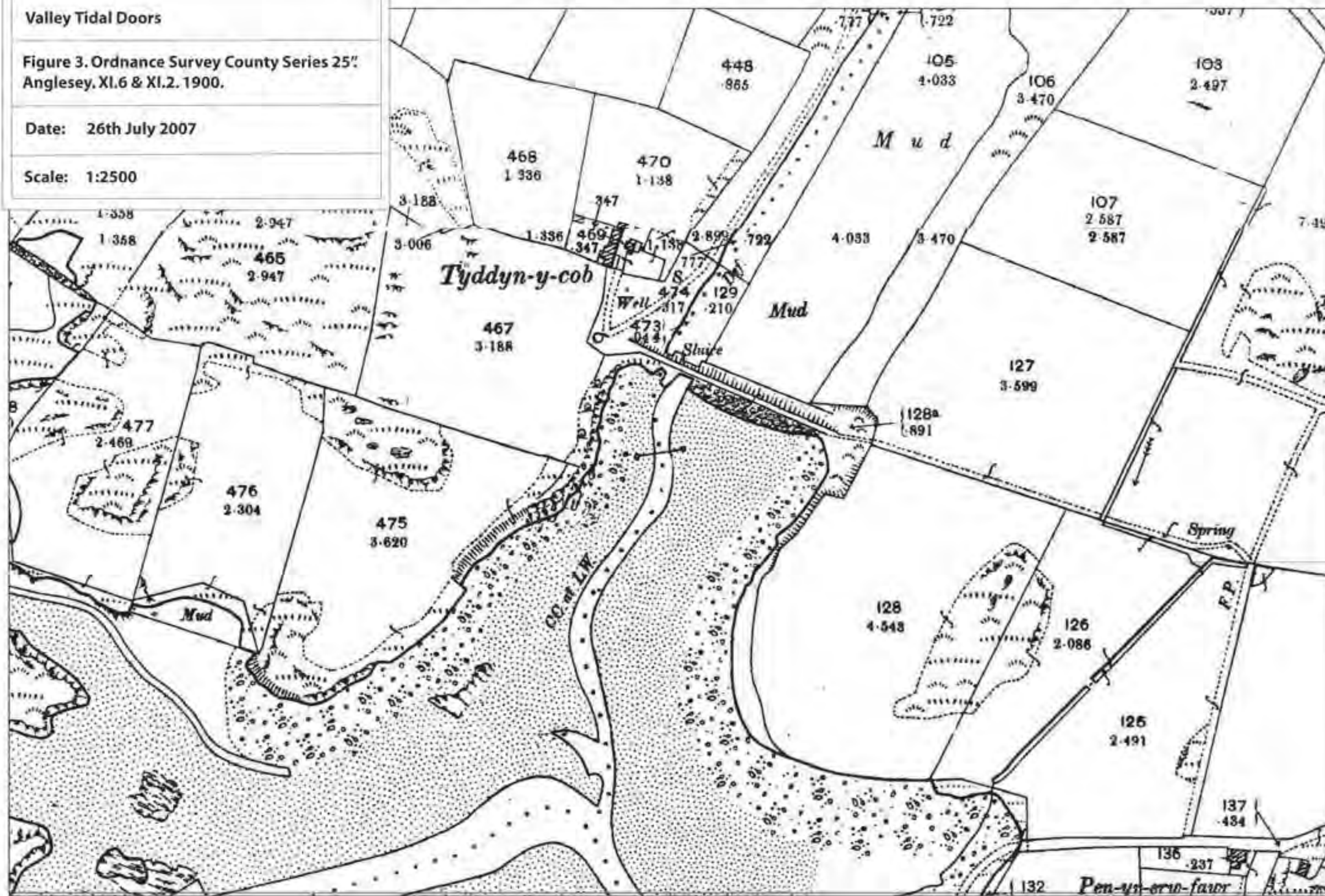


Valley Tidal Doors

Figure 3. Ordnance Survey County Series 25"
Anglesey, XI.6 & XI.2. 1900.

Date: 26th July 2007

Scale: 1:2500





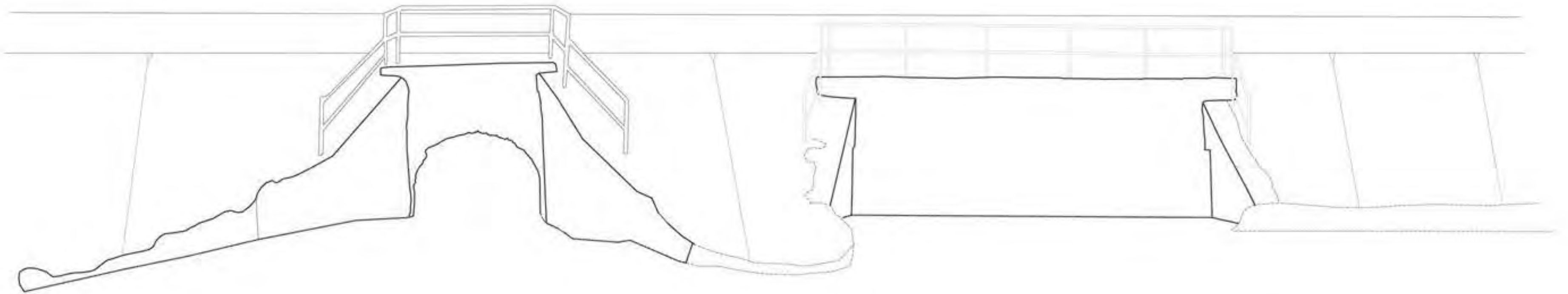
Valley Tidal Doors

Figure 4. Plan of Valley tidal doors and dam

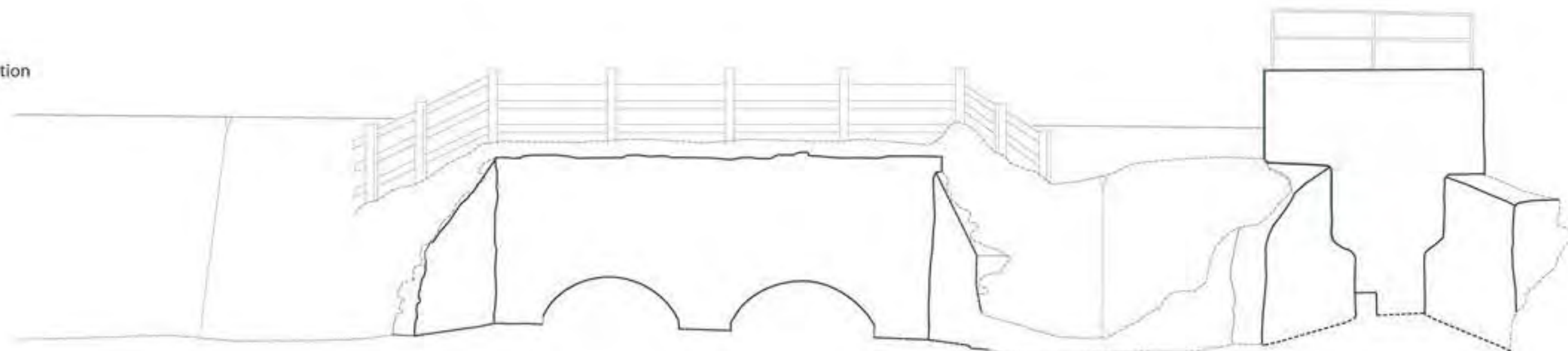
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Seaward (south) elevation



Landward (north) elevation



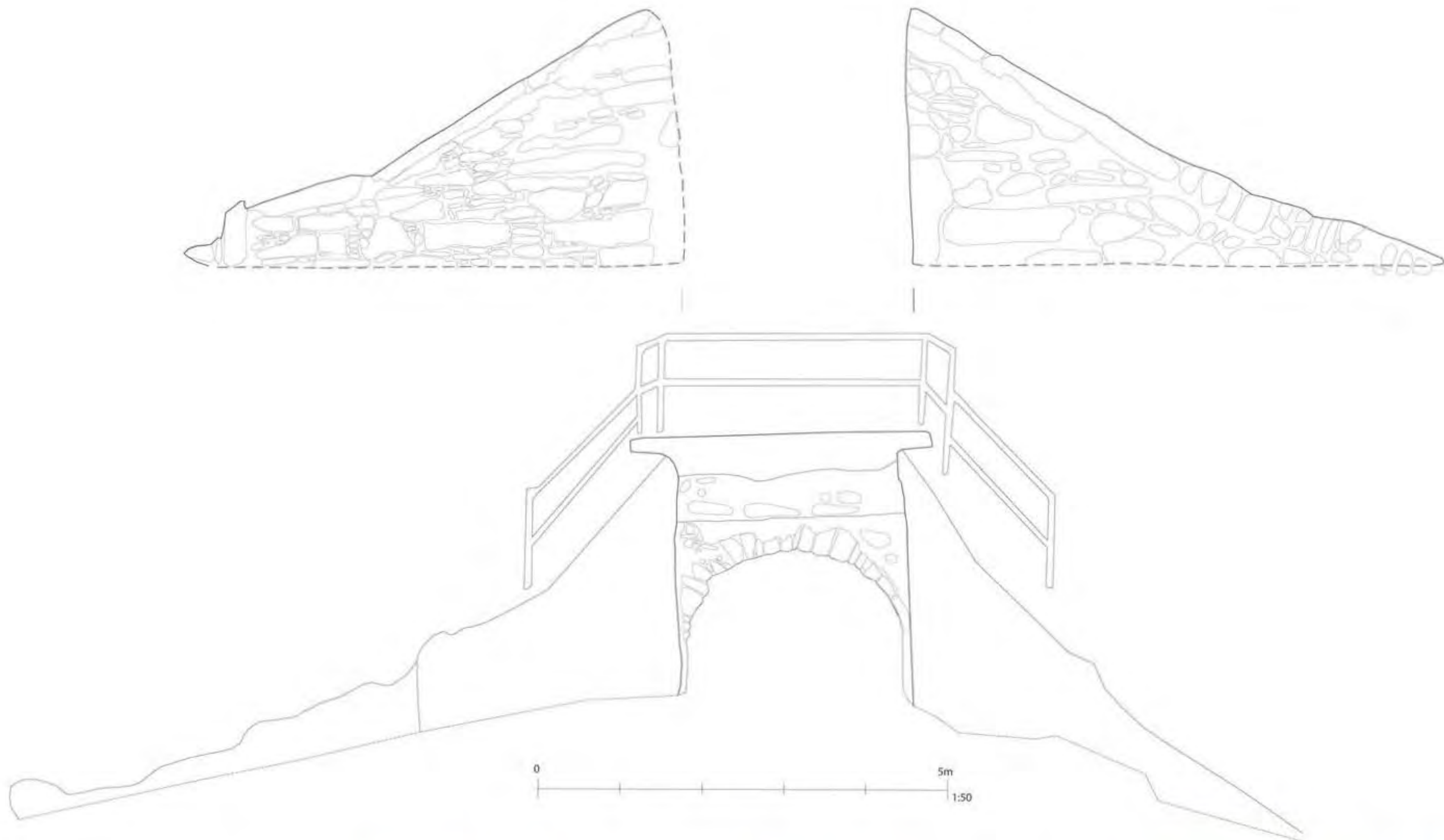
Valley Tidal Doors

Figure 5. Principle elevation of tidal doors

Date: 26th July 2007

Scale: 1:100





Valley Tidal Doors

Figure 6. South elevation of western tidal door.

Date: 26th July 2007

Scale: 1:50

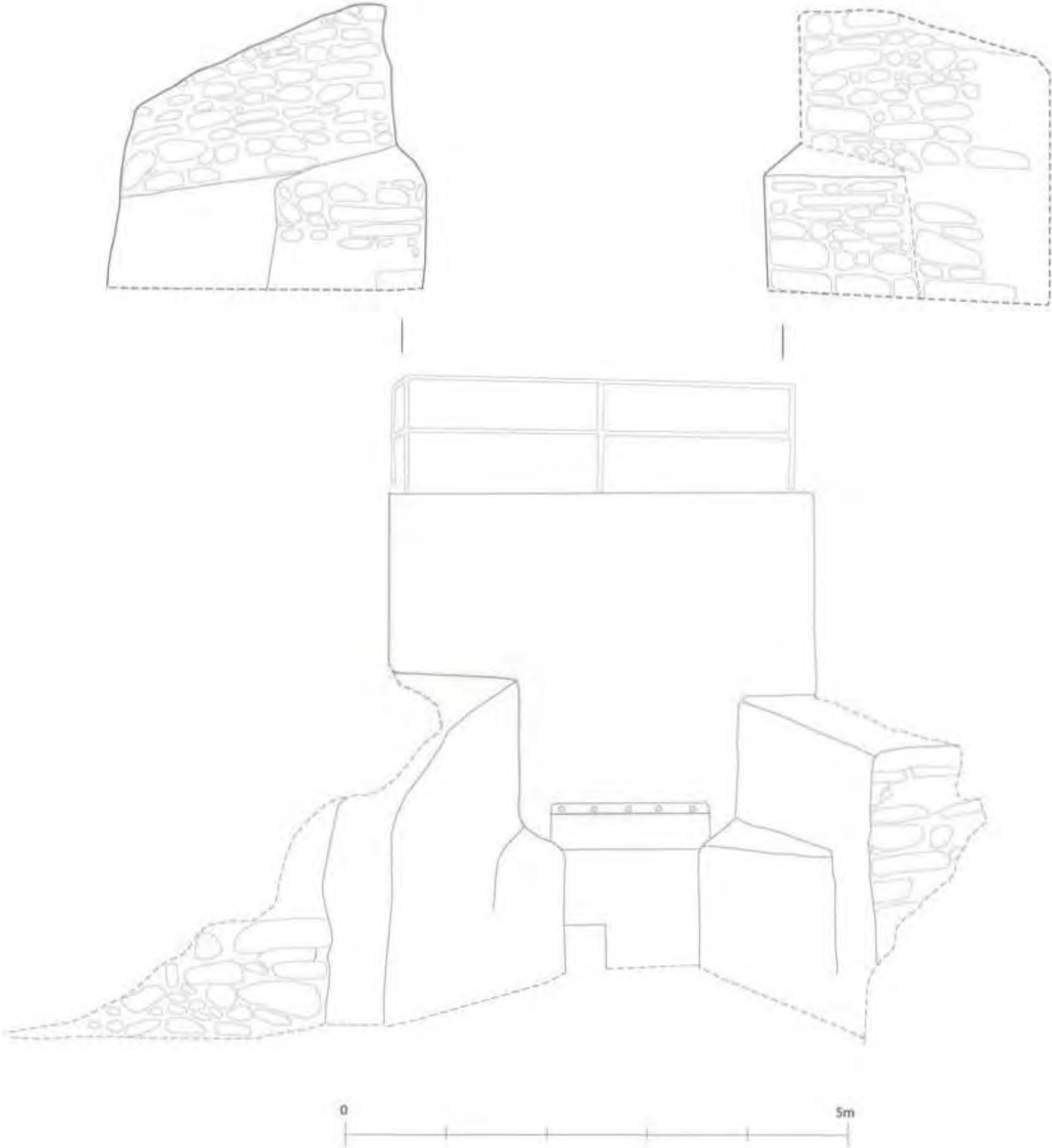


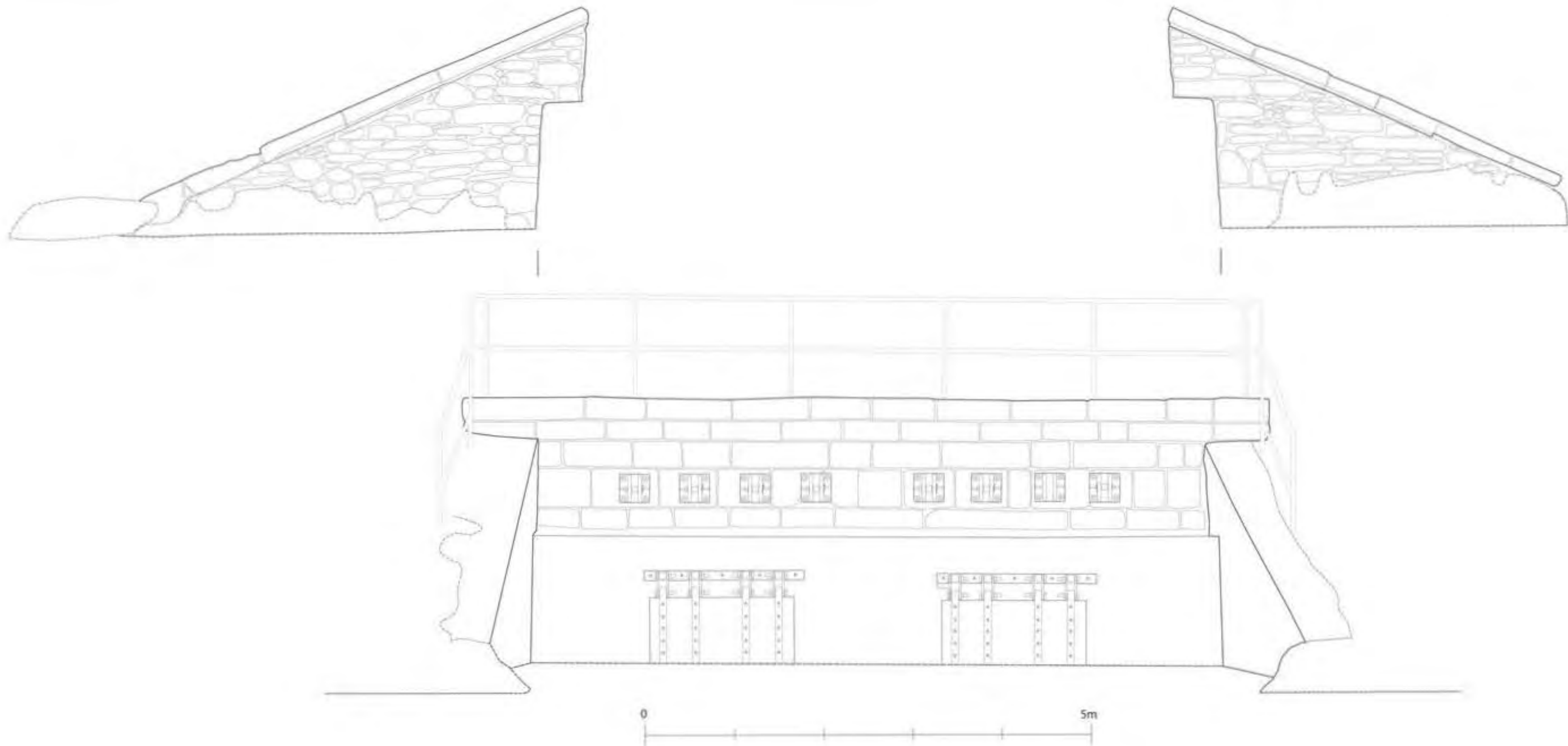
Valley Tidal Doors

Figure 7. North elevation of western tidal doors

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Scale: 1:50





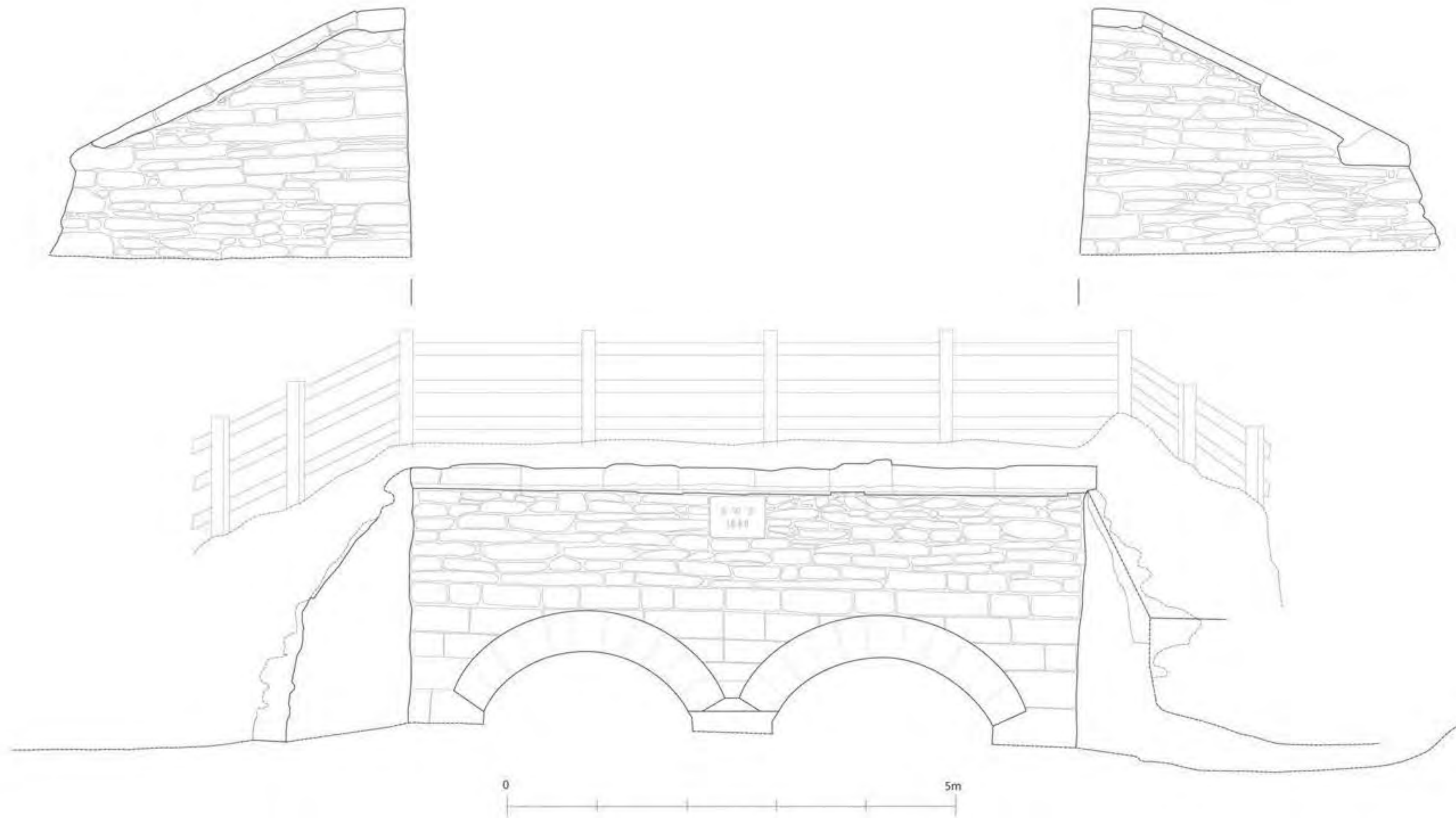
Valley Tidal Doors

Figure 8. South elevation of eastern tidal door

Date: 26th July 2007

Scale: 1:50





Valley Tidal Doors

Figure 9. North elevation of eastern tidal doors

Date: 26th July 2007

Scale: 1:50

