

TOLGULLOW VEAN REDRUTH CORNWALL

Results of Archaeological Monitoring & Recording



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Tolgulow Veau, Redruth, Cornwall
Results of Archaeological Monitoring & Recording

For

Mr Mark Pascoe

By



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Historic Environment Planning Advice Officer: Philip Markham
Project Director: Colin Humphreys
Fieldwork: Lee Bray
Report: Lee Bray
Report Editing: Deb Laing-Trengove
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July 2011

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Summary

The former engine house at Tolgullow Vean is a detached stone building, formerly an engine house for the Tolgullow United Mine (also known as West Poldice Mine), and now redundant. Archaeological monitoring and recording of the excavation of a pipe trench as part of the conversion of the Tolgullow Vean engine house to a dwelling, revealed evidence for a possible ancillary structure and a spread of material associated with the production of lime mortar. Unfortunately, no dating evidence was recovered that would allow these features to be related to the use of the building

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Acknowledgements

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Mr Mark Pascoe
Phil Markham, CCHES

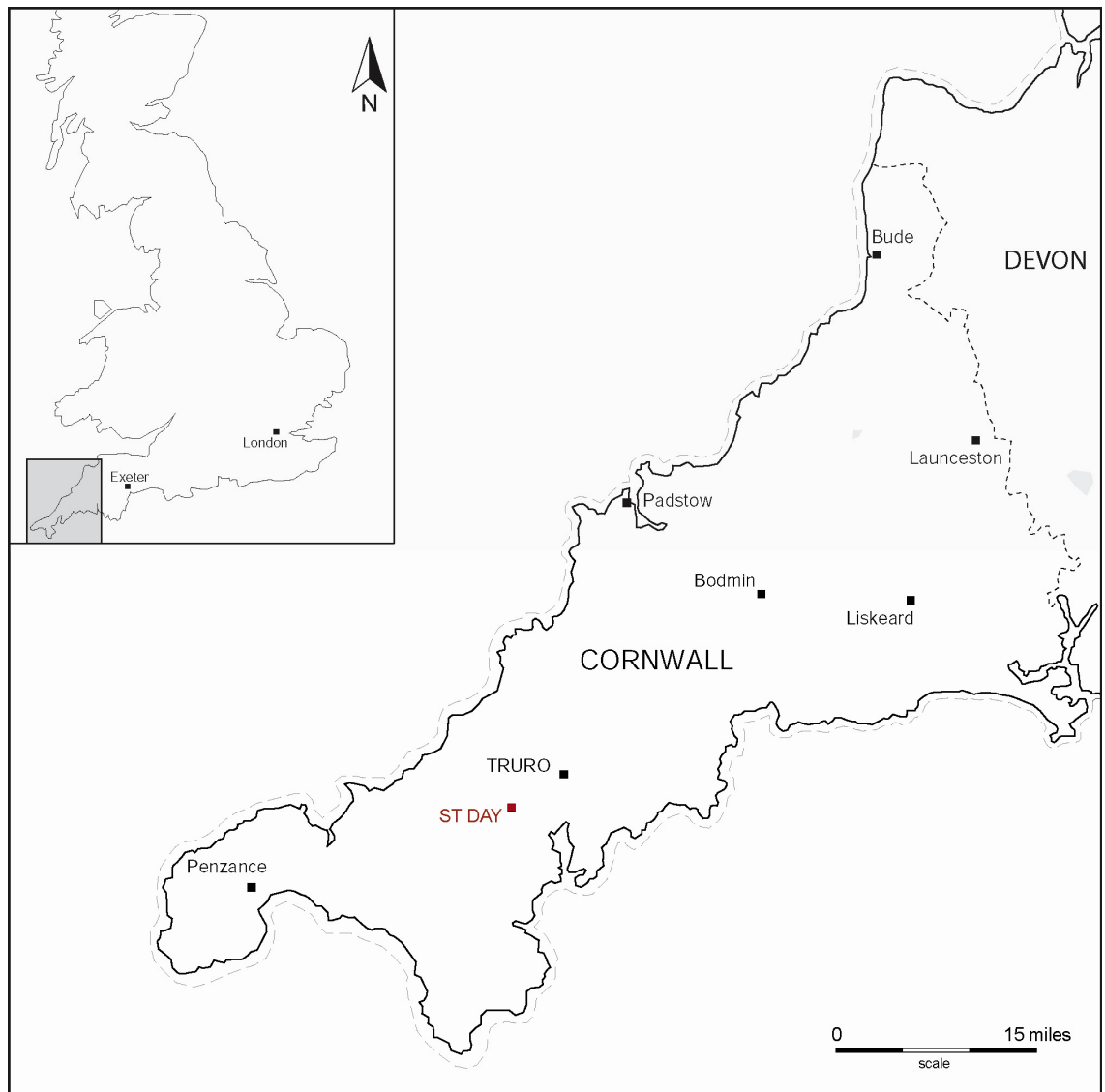


Figure 1: Regional location.

1.0 Introduction

Location: Tolgullow Vean
Parish: Tolgullow
County: Cornwall

1.1 Background

South West Archaeology Ltd were engaged by Mark Pascoe (the Client) to undertake monitoring and recording of the installation of a drain and inspection chamber at Tolgullow Vean, Tolgullow, near St Day, Cornwall. The work was undertaken in accordance with a WSI (Appendix 1) which was compiled in consultation with Phil Markham, Historic Environment Planning Advice Officer (HEPAO).

A primary assessment of the building by South West Archaeology (SWARCH report no. 110512) resulted in the recommendation that groundworks associated with the conversion should be archaeologically monitored for any buried remains, potentially from the 19th century mining activity but also from any earlier medieval/early medieval agricultural or domestic phases of use which may be impacted by the works. The work reported here represents an initial phase of archaeological monitoring; future development works in areas identified in the initial report will also be subject to monitoring (See Appendix 3).

1.2 Location and Topography

The site is situated *c.*500m to the north-east of St. Day, Cornwall (Figure 1) on land sloping gently towards the south-east. According to the British Geological Survey the bedrock on the site consists of mudstones and sandstones of the Middle Devonian Porthtowan Formation which have been metamorphosed by the intrusion of the Carnmenellis Granite less than a kilometre to the south-west. Soils are podzols of the Manod Association.

1.3 Methodology

The archaeological monitoring was undertaken by Dr Lee Bray on Wednesday 13th July 2011. The work was carried out in accordance with IfA guidelines (2008).

2.0 Results of the Archaeological Monitoring & Recording

2.1 The Monitored Area

Archaeological monitoring and recording was undertaken during the excavation of trench dug to accommodate a waste water pipe and inspection chamber. Initially, the turf was stripped from an area measuring *c.* 11m long by *c.* 3-5m wide adjacent to the western side of the building, exposing the topsoil. The pipe trench, orientated in a north-south direction, was then dug by a mechanical excavator using a 0.5m bucket to a maximum depth of 0.8m, although the southernmost 2m, the site of the inspection chamber, reached a width of 0.9m (Figures 2 and 3). All work was carried out under strict archaeological supervision and a drawn and photographic record was compiled.

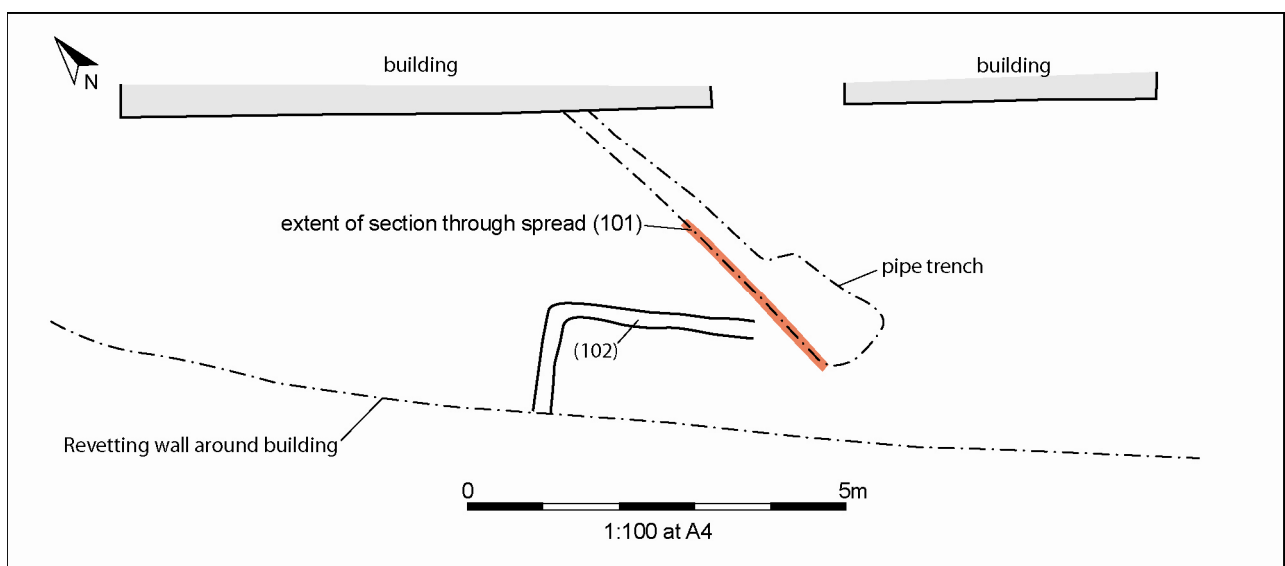


Figure 2: Site plan showing the pipe trench in relation to the engine house.

2.2 Results

Removal of the turf revealed the upper surface of the topsoil to contain a heterogeneous mixture of material including patches of pinkish clay, gravel and fragments of stone, roofing slate and charcoal. This material, probably generated during the construction and use of the former engine house building, was only present within the upper part of the topsoil. Excavation of the pipe trench revealed the topsoil below to be very clean, consisting of single layer, *c.* 0.4m thick, of mid-brown clayey silt containing occasional sub-rounded to sub-angular stone inclusions up to *c.* 50mm thick (see Figure 3). The underlying subsoil consisted of a homogenous, reddish silty clay.

Two archaeological features were noted during the course of the work. The first was a heterogeneous spread of material overlying the topsoil at the southern end of the stripped area (101). This consisted of a mixture of pale yellow clay, broken stone and lime mortar combined with probable fragments of slaked lime. The deposit petered out towards the north and east while its western edges were beyond the stripped area and it did not appear to extend to the south beyond the end of the pipe trench. Where it was cut by the pipe trench it reached a maximum depth of *c.* 200mm (Figure 4). This spread of material seems most likely to be waste



Figure 3: The pipe trench, viewed from the south (2m scale).



Figure 4: View of the east-facing section of the pipe trench showing context (101)(2m scale).

derived from the slaking of lime to produce lime mortar either during the construction of the engine house or its subsequent modification and repair. The lack of archaeological structure and the significant proportion of clay and stone within the deposit suggest it is not *in situ*, but is perhaps a dump of material from the mortar production site which is presumably located somewhere in the vicinity of the building.

The second feature (102) was located to the north of (101) and consisted of a 0.3m wide linear trending approximately east-west at its northern end before turning through a right angle to a broadly north-south alignment (Figure 5). A rectilinear area *c.*3m long and 1.5m wide was thus defined, with any western edge outside the stripped area.. The presence of a cut or the depth of the material comprising the linear could not be ascertained without further excavation, but it was composed of compact clay mixed with mortar and broken stone and is possibly the remains of wall footings belonging to a structure associated with the engine house or later barn. It was not possible to determine the stratigraphic relationship between (101) and (102) within the scope of the work.

No artefactual finds were recovered during the course of monitoring and recording.



Figure 5: View of the southern end of the stripped area, showing feature (102).

3.0 Conclusions

Archaeological monitoring and recording of the excavation of a pipe trench as part of the conversion of the Tolgulloch Vein engine house to a dwelling, revealed evidence for a possible ancillary structure and a spread of material associated with the production of lime mortar. Unfortunately, no dating evidence was recovered that would allow these features to be related to the use of the building.

4.0 Bibliography and References

Published Sources:

Institute of Field Archaeologists 1994 (Revised 2001 & 2008): *Standard and Guidance for Archaeological Watching Brief*.

Institute of Field Archaeologists. 1995 (Revised 2001 & 2008): *Standard and Guidance for Archaeological Excavation*.

Institute of Field Archaeologists. 2001 (Revised 2008): *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials*

Soil Survey of England and Wales 1983: *Legend for the 1:250,000 Soil Map of England and Wales (a brief explanation of the constituent soil associations)*.

Appendix 1

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL RECORDING AT TOLGULLOW VEAN, TOLGULLOW, REDRUTH, CORNWALL.

Location: Tolgullow Veian, Tolgullow, Redruth TR16 5PD
Parish: Tolgullow
County: Cornwall
NGR: SW 73210 43220
Planning Application No: PA12/1441/08/R
Proposal: Conversion of a disused barn into one residential dwelling
WSI ref: SWARCHTVR11
Date: 24th March 2011

1.0 INTRODUCTION

- 1.1 This document forms a Written Scheme of Investigation (WSI) which has been produced by South West Archaeology (SWARCH) at the request of M. Pascoe (the Client), and sets out the methodology for archaeological monitoring and recording at the site of a former engine house at Tolgullow Veian, Tolgullow, Redruth and for related off site analysis and reporting. The WSI and the schedule of work it proposes was devised in consultation with the Cornwall County Council Historic Environment Service Historic Environment Planning Advice Officer, Phil Markham (HEPAO).
- 1.2 The programme of work to be carried out by SWARCH and covered by this WSI consists of:
- 1.2.2 Investigation, excavation and recording of any surviving below-ground archaeological artefacts and deposits revealed during groundworks.
- 1.2.3 Related analysis and reporting.

2.0 ARCHAEOLOGICAL BACKGROUND

- 2.1 The Cornwall and Scilly Historic Environment Record (HER) notes that the building is within the Mining World Heritage Site and that it appears to be present on the OS map of 1880. This map indicates that the building was an engine house, probably of the West Poldice/Tolgullow United Mine. The HER records the following for West Poldice: West Poldice was also known as Tolgullow United. The mine is shown on the OS map of 1877 with an engine house at SW 7323 4326 and is marked on the OS map of 1963. A line of shafts and associated spoil tips are visible on air photographs and were plotted as part of the NMP. Initial investigation and recording of the building by South West Archaeology (SWARCH report no. 110512) resulted in the recommendation that groundworks associated with the conversion should be archaeologically monitored for any buried remains, potentially from the 19 century mining activity but also from any earlier medieval/early medieval agricultural or domestic phases of use which may be impacted by the works

3.0 AIMS

- 3.1 The principal objectives of the programme are:
- 3.1.1 Establish the presence/absence of archaeological remains
- 3.1.2 Determine the extent, condition, nature, character, date and significance of any archaeological remains encountered;
- 3.1.3 To establish the nature of the activity on the site;
- 3.1.4 To identify any artefacts relating to the occupation or use of the site;
- 3.1.5 To provide further information on the archaeology of Tolgullow from any archaeological remains encountered.

4.0 METHOD

- 4.1 The IFA's Standards and Guidance will be used throughout the execution of the project.
- 4.2 The Client will provide SWARCH with details of the location of proposed groundworks within the site area, and of the proposed construction programme.
- 4.3 Health and Safety requirements will be observed at all times by any archaeological staff working on site, particularly when working with machinery. As a minimum: high-visibility jackets, safety helmets and protective footwear will be worn.
- 4.3.1 Appropriate PPE will be employed at all times.
- 4.3.2 The site archaeologist will undertake any site safety induction course provided by the Client.
- 4.3.3 If the depth of trenching exceeds 1.2 metres the trench sides will need to be shored or stepped to enable the archaeologist to examine and if appropriate record the section of the trench. The provision of such measures will be the responsibility of the client.
- 4.4 The archaeological work will be carried out in accordance with the Institute of Field Archaeologists (IFA) *Standard and Guidance for an Archaeological Excavation (1995), revised 2008* and the *Standard and Guidance for an Archaeological Watching Brief (1994), revised 2008*.
- 4.4.1 All topsoil, plough soil and modern overburden will be removed down to the first significant archaeological horizon or undisturbed subsoil using a 360° tracked or wheeled JCB-type machine with a toothless grading bucket, under strict archaeological supervision. If archaeological deposits are reached at a level above the intended formation or invert level, they will be excavated by the site archaeologist down to the latter, by hand.
- 4.4.2 Spoil will be examined for the recovery of artefacts.

- 4.4.3 Once the level of the archaeology has been reached all archaeological material will be excavated by hand down to the depth of the archaeology.
- 4.4.4 If archaeological features are exposed, then *as a minimum*:
- i) small discrete features will be fully excavated;
 - ii) larger discrete features will be half-sectioned (50% excavated);
 - iii) long linear features will be excavated to sample 20% of their length – with investigative excavations distributed along the exposed length of any such feature.
- Whether any further excavation is required will be confirmed with HEPAO. Should the above excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined, full excavation of such features/deposits will be required. Additional excavation may also be required for the taking of palaeoenvironmental samples and recovery of artefacts.
- 4.4.5 Should archaeological or palaeoenvironmental remains be exposed, the site archaeologist will investigate, record and sample such deposits. All excavation of exposed archaeological features shall be carried out by hand, stratigraphically, and fully recorded by context to IfA guidelines.
- 4.4.6 In exceptional circumstances where materials of a particularly compact nature are encountered, these may be removed with a toothed bucket, subject to agreement with archaeological staff on site.
- 4.4.7 Human remains will be left *in-situ*, covered and protected. Removal can only take place under appropriate Ministry of Justice and environmental health regulations. Such removal must be in compliance with the relevant primary legislation and with due reverence – the remains will not be exposed to the public view.
- 4.4.8 Should gold or silver artefacts be exposed, these will be removed to a safe place and reported to the local coroner according to the procedures relating to the Treasure Act 1996 (revised). Where removal cannot be effected on the same working day as the discovery suitable security measures will be taken to protect the finds from theft.
- 4.4.9 If complex or extraordinary archaeological deposits are exposed then the need for further mitigation will be agreed in consultation with the HEPAO and the client.
- 4.4.10 Finds resulting from the excavation will be excavated, retained and treated in accordance with the Institute of Field Archaeologists (IFA) *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* and in consultation with the Royal Cornwall Museum as appropriate.
- 4.6 SWARCH will agree monitoring arrangements with the HEPAO who will be informed of the start of the fieldwork, will be regularly informed of progress and will monitor the project throughout, and may wish to inspect the works in progress.
- 5.0 ARCHAEOLOGICAL RECORDING**
- This will be based on IFA guidelines and those advised by the HEPAO and will consist of:
- 5.1 Standardised single context recording sheets, survey drawings in plan, section and profile at 1:10, 1:20, 1:50 and 1:100 as appropriate and black and white prints supplemented by digital photography.
- 5.2 Survey and location of features.
- 5.3 Labelling and bagging of finds on site, post-1800 unstratified pottery may be discarded on site after a representative sample has been retained.
- 5.4 Should suitable deposits be exposed (e.g. palaeoenvironmental) then scientific assessment/analysis/dating techniques will be applied to further understand their nature/date and to establish appropriate sampling procedures. The project will be organised so that specialist consultants who might be required to conserve or report on other aspects of the investigations can be called upon.
- Any variation of the above shall be agreed in consultation with the HEPAO.
- 6.0 ARCHIVE AND REPORT**
- 6.1 An ordered and integrated site archive will be prepared in accordance with Management of Research Projects in the Historic Environment (MoRPHE) English Heritage 2006 upon completion of the entire project. The documentary archive will be produced to the relevant archive standards. This will include relevant correspondence together with context sheets, field drawings, and environmental, artefactual and photographic records and a copy of the project report. The archive will be deposited with the Royal Cornwall Museum in Truro. Conditions for the deposition of the archive will be agreed with the Museum. Where there is only a documentary archive resulting from these works, this will be deposited with the Cornwall Record Office and the Courtney Library of the Royal Institution of Cornwall.
- 6.2 Archaeological finds resulting from the investigation (which are the property of the landowner), will also be deposited with the above museum in the project archive in a format to be agreed with the museum, and within a timetable to be agreed with the HEPAO. The museum's guidelines for the deposition of archives for long-term storage will be adhered to and any sampling procedures will be carried out prior to deposition and in consultation with the museum. If ownership of all or any of the finds is to remain with the landowner, provision and agreement will be made for the time-limited retention of the material and its full analysis and recording, by appropriate specialists.
- 6.3 A summary of the contents of the archive shall be supplied to the HEPAO.
- 6.4 An illustrated summary report will be produced as soon as possible following completion of fieldwork, specialist reports allowing, and submitted to the HEPAO, and the Client.
- 6.5 A report will be produced. This will include the following elements:
- 6.5.1 A report number;

- 6.5.2 A location plan and overall site plan showing the distribution of existing groundworks and any archaeological features;
 - 6.5.3 A summary of results of the project;
 - 6.5.4 Plans and sections of exposed features or deposits at a relevant scale;
 - 6.5.5 A description of any remains and deposits identified including an interpretation of their character and significance;
 - 6.5.6 Any specialist reports commissioned;
 - 6.5.8 Discussion of the archaeological deposits encountered;
 - 6.5.9 A copy of this WSI, a summary of the archive contents and a context list shall be included as appendices.
- 6.6 The HEPAO will receive the report within three months of completion of fieldwork, dependant on the provision of specialist reports, radiocarbon dating results etc, the production of which may exceed this period. If a substantial delay is anticipated then an interim report will be produced. The report will be supplied to the HEPAO on the understanding that one of the hard copies will be deposited for public reference in the HER. In addition to the hard copies of the report, one copy will be provided to the HES in digital Adobe Acrobat PDF format, on the understanding that it may in future be made available to researchers via a web-based version of the HER.
- 6.7 A copy of the report will be supplied to the National Monuments Record (NMR) in Swindon.
- 6.8 A copy of the report detailing the results of these investigations will be submitted to the OASIS (*Online Access to the Index of archaeological investigation*) database.
- 6.9 Should they merit it; the results of these investigations will be published in an appropriate academic journal. If required, after the production of a summary report, a programme and timetable for this will be submitted to the HEPAO and the Client for approval.
- 7.0 PERSONNEL**
- 7.1 The project will be managed by Colin Humphreys; site work will be directed by Brynmor Morris and undertaken by SWARCH personnel (see Appendix 1 below). Where necessary appropriate specialist advice will be sought, (see list of consultant specialists in Appendix 2 below).

Deb Laing-Trengove

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Appendix 1

Specialist List

Building recording

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Tel: 01271 830891

Curatorial

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Thomas Cadbury Curator of Antiquities Royal Albert Memorial Museum

Bradninch Offices, Bradninch Place, Gandy Street, Exeter EX4 3LS Tel: 01392 665356 Fax: 01392 421252

Geophysical Survey

Ross Dean

South West Archaeology Limited.

GSB Prospection Ltd.

Cowburn Farm, Market Street, Thornton, Bradford, West Yorkshire, BD13 3HW Tel: 01274 835016 gsb@gsbprospection.com

Human Bones

Louise Lou Head of Heritage Burial Services, Oxford Archaeology, Janus House, Osney Mead, Oxford, OX2 0ESTel: 01865 263 800

Lithics

Martin Tingle Higher Brownston, Brownston, Modbury, Devon, PL21 OSQ martin@mtingle.freeseve.co.uk

Metallurgy

Sarah Paynter, Centre for Archaeology, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD Tel: 02392 856700

sarah.paynter@english-heritage.org.

Palaeoenvironmental/Organic

Vanessa Straker English Heritage SW, 29 Queen Square, Bristol BS1 4ND Tel: 0117 9287961 vanessa.straker@english-heritage.org.uk

Dana Challinor (wood identification)

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Tel. 01869 810150

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Julie Jones (plant macro-fossils) juliedjones@blueyonder.co.uk

Heather Tinsley (pollen analysis) heathertinsley@aol.com

Ralph Fyffe (pollen analysis) University of Plymouth

Pottery

John Allen, Exeter Archaeology, Custom House, The Quay, Exeter, EX2 4AN Tel: 01392 665918

Henrietta Quinnell 9 Thornton Hill, Exeter EX4 4NN

Tel: 01392 433214

Timber Conservation

Liz Goodman

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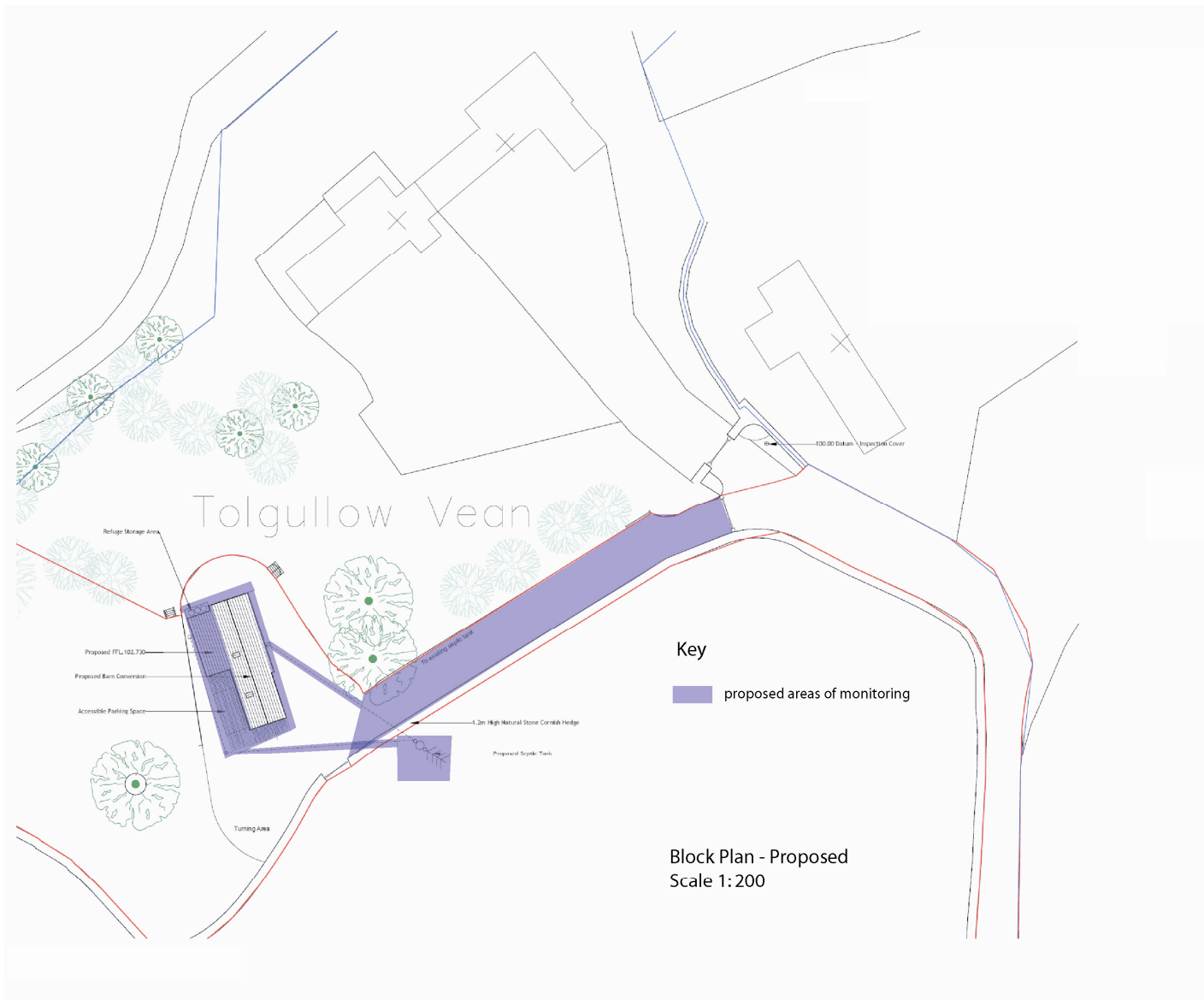
Appendix 2

List of Jpegs on CD to the rear of the Report

<i>Photo Number</i>	<i>Description</i>	<i>From</i>	<i>Scale</i>
TVR11 (1)	Development area, pre-excavation.	S	-
TVR11 (2)	Development area, pre-excavation.	SE	-
TVR11 (3)	Development area, pre-excavation.	NW	-
TVR11 (4)	Development area during turf stripping	NW	-
TVR11 (5)	Southern end of development area, post turf stripping	W	-
TVR11 (6)	Southern end of development area, post turf stripping	NW	-
TVR11 (7)	East-facing section of pipe trench	E	2m
TVR11 (8)	Pipe trench w/ board	S	2m
TVR11 (9)	Pipe trench	S	2m

Appendix 3

Areas to be Subject to Future Monitoring





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