



CPR highway scheme, South Crofty Mine, Pool, Cornwall

Historic building record



Cornwall Archaeological Unit

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South Crofty Mine, Pool, Cornwall
Historic building record**

Client	Cornwall Council (Strategic Planning and Transportation)
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Report authors	Nigel Thomas, Adam Sharpe and Eric Berry
Checked by	Andy Jones
Approved by	Andrew Young

Cornwall Archaeological Unit

Cornwall Council

Fal Building, County Hall, Treyew Road, Truro, Cornwall, TR1 3AY

Tel: (01872) 323603

Email: cau@cornwall.gov.uk Web: www.cornwall.gov.uk/archaeology

Acknowledgements

This study was commissioned by John Foskett, Parsons Brinckerhoff, on behalf of Cornwall Council (Strategic Planning and Transportation) and was carried out by Cornwall Archaeological Unit, Cornwall Council.

Photography of the building complex was carried out by Adam Sharpe and Eric Berry.

The Project Manager was Andy Jones.

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

Freedom of Information Act

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005.



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Chartered Institute for Archaeologists

Cover illustration

View of South Crofty Mine in 2010, looking northeast.

Photo courtesy of Adam Sharpe

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Fig 28. The north eastern corner of the mill, showing the Humphrey spiral building (left), fine ore bins and conveyor (centre) and maintenance workshop (right).

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Fig 31. The original South Crofty air compressor houses.

Fig 32. The South Crofty smithy building, constructed in the early 20th century on the site of a smithy associated with Bartle's Foundry within the yard to its rear.

Abbreviations

CAU	Cornwall Archaeological Unit
CC	Cornwall Council
CIfA	Chartered Institute for Archaeologists
DSLR	Digital single lens reflex (camera)
GIS	Geographical Information System (electronic mapping datasets)
EH	English Heritage
HER	Cornwall and the Isles of Scilly Historic Environment Record

NGR	National Grid Reference
OD	Ordnance Datum – height above mean sea level at Newlyn
OS	Ordnance Survey
SLR	Single lens reflex (camera)
WSI	Written Scheme of Investigation

1 Summary

Cornwall Council's Strategic Planning and Transport team have designed and are constructing a road scheme to upgrade and improve the road network around Pool and create a new link to Dolcoath. This scheme which has secured government funding, is known as the CPR Link Road.

An archaeological assessment was carried out to examine the likely impacts of the road on the historic environment (Parkes 2007). This study identified sites of potential historic environment interest within the projected road corridor.

Following the announcement of government backing for the road scheme early in 2013, preparations were put in hand by CC to start work on the project, including mitigation for historic environment sites. An archive quality photographic survey was commissioned for the recording of the large but very derelict tin dressing mill and related structures at South Crofty Mine which lay in the path of the Link Road, and which were scheduled for demolition in 2014.

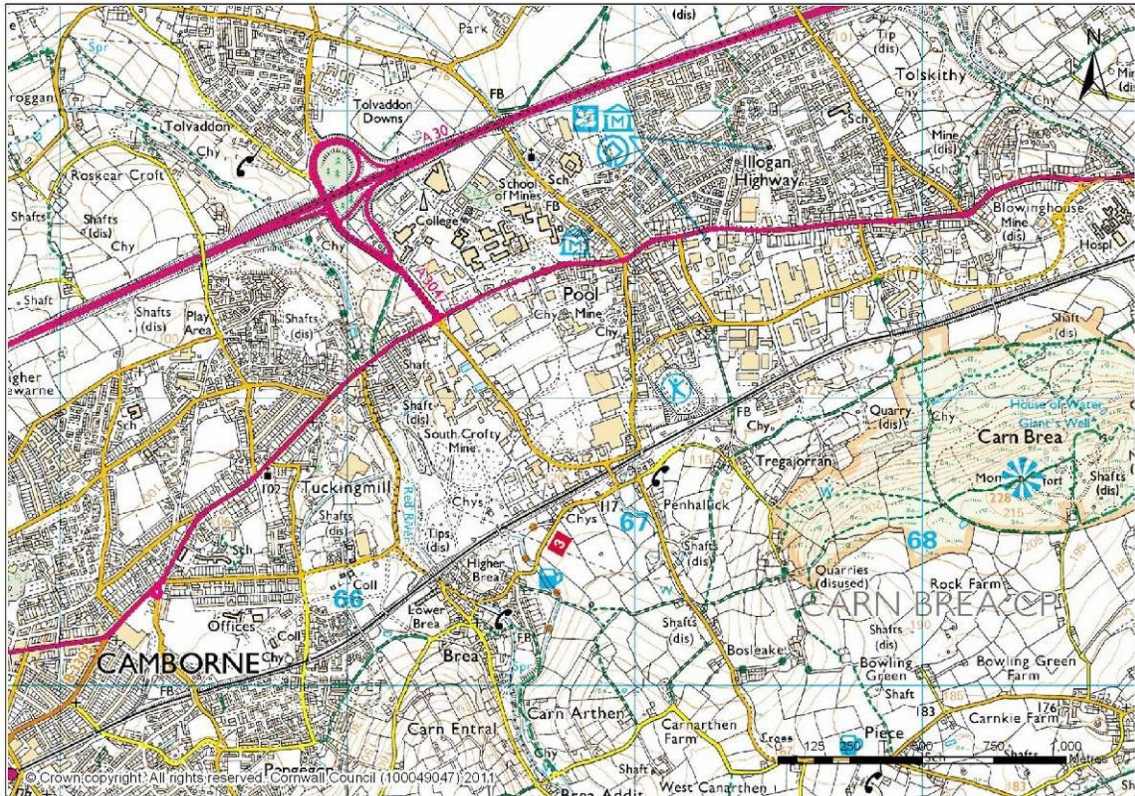


Fig 1. Location map.

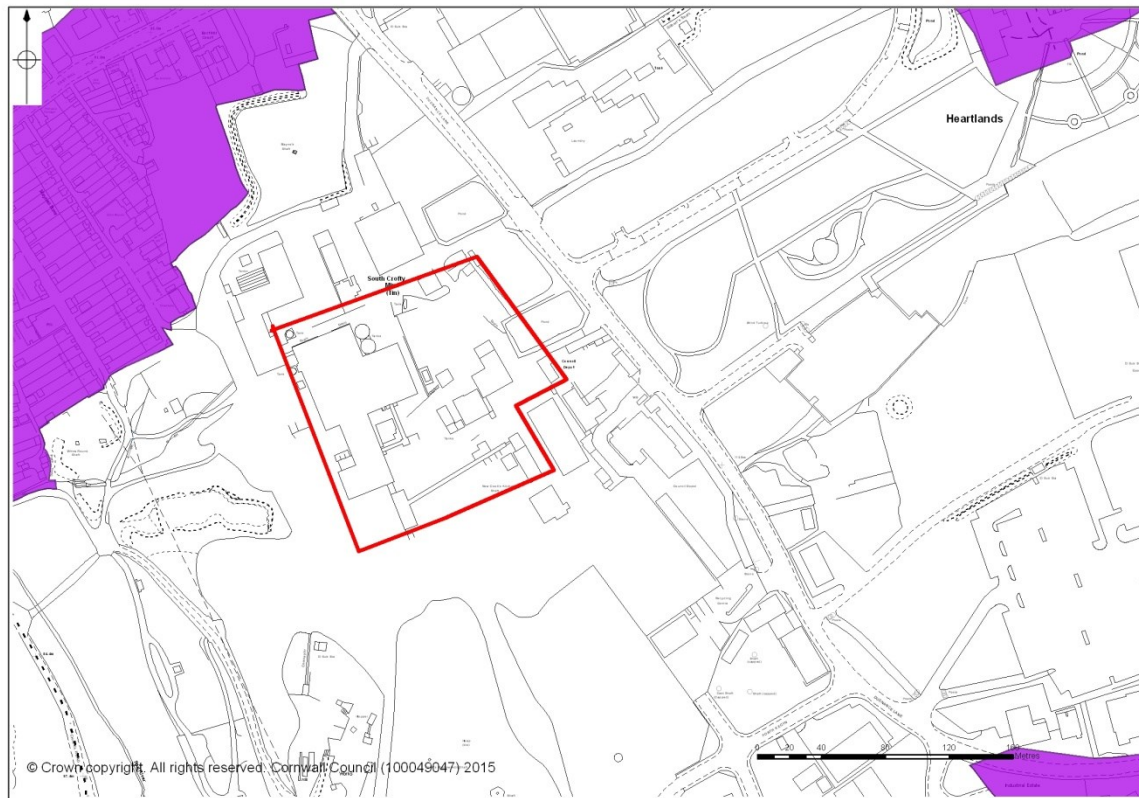


Fig 2. The extent of the project area outlined in red. The purple shading indicates the local extent of the Cornish Mining World Heritage Site.

2 Introduction

2.1 Project background

For several years Cornwall Council's Strategic Planning and Transport team have been in the process of designing a scheme to upgrade and improve the road network around Pool and create a new link to Dolcoath. This scheme which has now secured government funding, is known as the CPR Link Road.

Planning application NR/08/00355/CC ENV was submitted on the 23rd July 2008 and was to undertake Phase 1 of highway improvement works (including widening) on Dudnace Lane, Station Road and Wilson Way and adjacent side roads and to construct a new road between Station Road and Wilson Way at Carn Brea Lane.

Following this Planning application PA09/01295/F was submitted on the 2nd October 2009 for the Phase 2 construction a new highway between Dolcoath Avenue and Dudnace Lane and to undertake highway works (and highway modification and improvement works) on Dudnace Lane, Chapel Road, Dolcoath Road, Dolcoath Avenue and adjacent side road.

Both applications were approved subject to conditions that required that:

'No development shall commence until the applicant has secured and implemented a programme of archaeological work in accordance with a written scheme of investigation to be submitted to and approved by the local planning authority. The approved road shall be implemented in accordance with the approved archaeological work.'

A programme of archaeological assessment was carried out to examine the likely impacts of the road on the historic environment (Parkes 2007). This study identified sites of potential historic environment interest within the projected road corridor. The likely impacts and potential mitigation measures were assessed.

Following the announcement of government backing for the road scheme early in 2013, preparations were put in hand by CC to start work on the project, including mitigation for historic environment sites. For the purposes of scheme management the project has been split into the following elements:

- Red River and western section
- South Crofty mine
- Bartles Foundry
- Dudnace Lane–Wilson Way.

A series of planning briefs outlining the required historic building and archaeological recording works were prepared by Philip Markham, Historic Environment Planning Advice Officer (HEPAO) (Appendix 1).

Historic Environment Projects (now Cornwall Archaeological Unit) was subsequently contacted by John Foskett (of Parsons Brinckerhoff, acting for CC). Following agreement of initial costs for recording above-ground structures, HEP prepared Written Schemes of Investigations for each part of the scheme (Appendix 2).

2.2 Aims

The principal aim of the work was to gain a high quality record of the mine site and buildings, in advance of demolition works for the proposed road corridor. This included a photographic record of the buildings prior to their demolition, centred on the large and long derelict tin dressing mill and associated structures. In accordance with the Planning brief the specific aims were to:

- To record all historic buildings and structures prior to demolition.
- Establish the presence/absence of archaeological remains.

- Determine the extent, condition, nature, character, date and significance of any archaeological remains encountered.

2.3 Methods

Full details of the methodology can be found in the WSI (see Appendix 2).

2.3.1 Desk-based assessment

Preliminary desk-based research was not needed as sites in the road corridor had been assessed as part of an earlier study (Parkes 2007).

2.3.2 Fieldwork

A site visit was undertaken by a photographic team (Adam Sharpe and Eric Berry), to record the dressing mill complex and related sites using archive quality monochrome film photography and colour digital imagery. Equipment used during this visit included an Olympus 35mm SLR camera (loaded with archive quality 100 ASA film) set up on a tripod. Digital photographs were taken using an interchangeable-lens Olympus digital camera (with a resolution of 16 million pixels) and a Nikon D200 DSLR camera with a resolution of 10 million pixels.

As the mill complex was in a serious state of decay, internal access was not generally possible due to safety considerations. The photo record therefore covered the exterior only, although in a few places it was possible to safely view some areas of the interior through doorways/openings.

Brief follow up visits were made as the mill site was demolished, and an additional photographic record was made of the process.

2.3.3 Post-fieldwork

Following the site visits all the recorded data was processed and prepared for analysis and long-term storage.

Digital photos were downloaded, edited where necessary using Adobe PhotoShop Elements software, and the images have been stored on Cornwall Council's computer network.

Monochrome photographs were processed by a professional laboratory and the negatives and contact sheet have been stored in accordance with HER guidelines.

3 Location and setting

The core part of the former South Crofty Mine lies on the east side of the Red River valley close to Tuckingmill, between Pool and Camborne, Cornwall (Fig 1). The mine site is centred on New Cooks Shaft with its prominent (and now preserved headframe) and comprises numerous buildings, yards and dumps. Before its eventual demolition the tin-dressing (processing) mill also dominated the local skyline, especially when viewed when travelling along Dudnance Lane or from across the Tuckingmill valley.

The tin-dressing mill was situated on an upper valley side location (at 100 – 110m OD) between the Red River and Dudnance Lane, at SW 66346 40999. The bedrock geology here is Upper Devonian Rocks (undifferentiated) comprising mudstone, siltstone and sandstone. The local geology is heavily affected by the presence of mineral lodes.

In recent years the surrounding area of Dudnance Lane has been progressively developed as industrial estates. The road scheme through the South Crofty site will connect Dudnance Lane directly with the Dolcoath area and will accelerate the re-development of Tuckingmill and Pool.

4 Designations

No conservation designations are directly applicable to the modern surface extent of South Crofty Mine. The mine is close to the boundary of the Cornish Mining World Heritage Site (see Fig 2), but was deliberately excluded from it to allow the future re-opening of the mine, should this prove practicable.

5 Brief history

Mineral extraction in the area of the present South Crofty mine site has a history at least extending back to the 17th century. The mine was recorded by its owners as occupying the former setts of 34 smaller older mining operations and the present site is centred on an area formerly known as Penhellick Vean. Initially the mine was worked extensively for copper; as reserves of this mineral diminished, tin lodes were located at deeper levels and were successfully developed. A relatively detailed summary of the mine's history from origins to present day is given in Wikipedia (see References).

South Crofty Mine is recorded in Cornwall HER as site 169905. The following text is a copy of the HER entry, with minor edits:

In 1899 South Wheal Crofty successfully combined with New Cook's Kitchen and became South Crofty in 1906, under which name it traded successfully during the 20th century.

The mine developed from east to west, absorbing the sett of North Wheal Crofty. The original production centre lay near Station Road, where Bickford's and Palmer's Shafts lay close to the company offices. Dressing floors were developed on the eastern slopes of the Red River Valley and were linked to the production shafts by an embanked tramway. Robinson's Shaft was subsequently developed at the mid-point of this tramway during the early 20th century, the eastern shafts being by this time close to abandonment, and provided pumping, haulage and man-riding facilities. Subsequently New Cook's Shaft was developed as the principal production shaft to the west of Dudnance Lane. Robinson's Shaft was retained for man-riding and the surrounding buildings (including loco workshop, carpenters' shop and dry) serviced the mine. Robinson's Shaft was closed in 1996, following concerns over the condition of the shaft and secondary man-riding facilities were established at the recently refurbished New Roskear Shaft to the north of Tuckingmill.

Robinsons engine house at SW 6679 4125 was erected in 1903 and the 1st Edition 1:2500 OS Map shows engine houses at SW 6696 4131, 6696 4127, 6634 4106 and 6639 4110. Extensive remains are visible on air photographs.

Both the c1880 and c1907 OS maps show the South Crofty complex to the west of Dudnance Lane (Figs 5 and 6). At this time the North Wheal Crofty branch of the Great Western Railway connected this site (and others to the north) to the main railway line. A large processing floor (including an engine house, stamping mill, buddles and an extensive bank of arsenic calciners with an associated labyrinth and chimney) is clearly visible. The extensive replacement dressing plant centred at SW 66346 40999 (the subject of this project) was created in the later 20th century. Its construction, plus the development of other newer buildings, largely removed almost all elements of the mine layout shown on the older large scale OS maps.

South Crofty was acquired by the Siamese Tin Syndicate Limited in 1967 and this change of ownership led to investment in and development of the tin dressing mill. The mill at South Crofty then also processed ore from Pendarves Mine. Following dramatic decreases in the price of tin in 1985 following the International Tin Crash in October of that year Pendarves Mine was closed and ore from South Crofty was then transported and processed at Wheal Jane, with the result that the South Crofty dressing plant was abandoned, though most of its machinery was retained *in situ*.

The new facilities, including dressing floors, two winder houses, maintenance workshops, offices and a miners' dry (change house) were housed in buildings of modern form and

materials, most being steel framed, and clad either with steel sheet panels or asbestos reinforced corrugated cement sheeting. The dressing mill was accompanied by three tall reinforced concrete primary ore bins linked to New Cook's Shaft by an ore conveyor, and by a second group of fine ore bins to provide buffer storage for the ore following primary crushing and concentration. The removal of some equipment (particularly from the primary crushing area of the building and the deterioration of both structural elements of the buildings and the roof and wall cladding eventually resulted in the building being deemed to be too dangerous to enter.

South Crofty was the last surviving operational Cornish tin mine and after years of depressed tin prices, eventually ceased production in 1998. Given steadily rising international mineral prices, attempts have been made to re-open the mine in recent years, and a new mill has been proposed at the southern end of the site adjacent to its decline shaft on the site of the former Cook's Kitchen dressing floors. Financial backing for the mine is currently in abeyance and neither development nor production has taken place, though an extensive programme of diamond drilling has established substantial potentially workable reserves of ore. The company controlling the mine entered administration in 2013.

The Robinsons Shaft complex, east of Dudnace Lane (at SW 66766 41274) now forms the centre of the Heartlands visitor attraction. This site includes an extant engine house and engine, now protected by Listing.

6 Results

The fieldwork at South Crofty was not primarily an analytical exercise, but concentrated on gaining a high quality photographic record in advance of demolition works. A series of photographs was taken progressing around the exterior of the dressing mill, to record views and its principal elevations. Where possible, photographs were taken of the interior of the mill at locations where its wall cladding had been substantially lost. Related buildings within the road corridor and/or in the immediate vicinity were also photographed.

Selected copies of the digital images are included in this report as Figures 7 to 32.

7 Significance

In its later years, South Crofty was the largest tin mine operating in Cornwall and also the final metalliferous mine in Cornwall to close. The mine's closure therefore marked the end of a period of tin production in Cornwall which had lasted, more or less continuously, since the medieval period, though there is increasing archaeological evidence that tin has been won from Cornwall's tin deposits since prehistory.

The tin-dressing mill was a large complex, typical of the small number of Cornish plants constructed during the 20th century, and one of the very few to survive into the 21st century. That at Geevor Mine in Pendeen, West Penwith, is now the only surviving example of this type of industrial complex left in Britain, and as such, is designated as a Scheduled Monument of national significance.

8 References

8.1 Primary sources

British Geological Survey datasets on CC GIS system

Margary, H, 1977. *The Old Series Ordnance Survey Maps, Vol II: Devon, Cornwall and West Somerset* Lympne (Reproduction of OS 1st Series 1 Inch Map, c1809)

Ordnance Survey, c1880. *25 Inch Map First Edition* (licensed digital copy at CAU)

Ordnance Survey, c1907. *25 Inch Map Second Edition* (licensed digital copy at CAU)

Ordnance Survey, 2011-2015. *Mastermap Digital Mapping*

Tithe Map and Apportionment, 1840. *Parish of Illogan* (digital copy at CRO)

8.2 Publications

Buckley, J.A. 1982, *South Crofty Mine*, Dyllansow Truran

Bullen, L.J. 2004, *Mining in Cornwall Volume Seven: South Crofty Mine – the East Pool and Agar Mines*

Parkes, C, 2007. *Camborne, Pool, and Redruth road scheme, Cornwall: Archaeological assessment* Historic Environment Projects, Truro

Sharpe, A. 1993, *South Crofty and Cooks Kitchen: archaeological assessment, Cornwall* Archaeological Unit report to Kerrier District Council

Sharpe, A. 2003, *An archaeological assessment of the proposed Dudnace Lane to Station Road development area, Pool, Redruth, Cornwall*, CAU report 2003R064

Sharpe A. 2004, *An archaeological assessment of the proposed development area at South Crofty, Pool, Redruth*, Report for Crofty Developments Ltd.

8.3 Websites

http://en.wikipedia.org/wiki/South_Crofty

Wikipedia entry for South Crofty Mine

<http://www.heritagegateway.org.uk/gateway/>

English Heritage's online database of Sites and Monuments Records, and Listed Buildings

9 Project archive

The CAU project number is **146245**

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit, Cornwall Council, Fal Building, County Hall, Treyew Road, Truro, TR1 3AY.

English Heritage/ADS OASIS online reference: cornwall2-207894

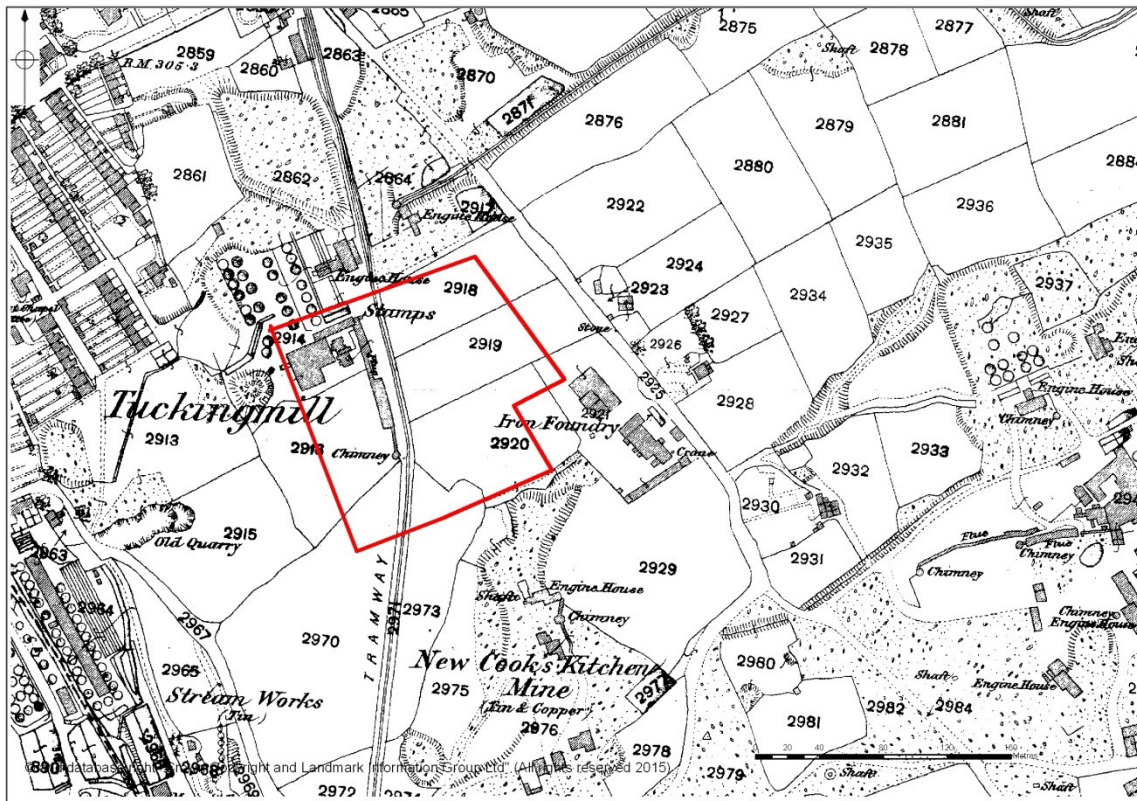


Fig 5. An extract from the 1st Edition Ordnance Survey 25" to a mile mapping, circa 1878, showing the steam stamps and dressing floors established by South Wheal Crofty.

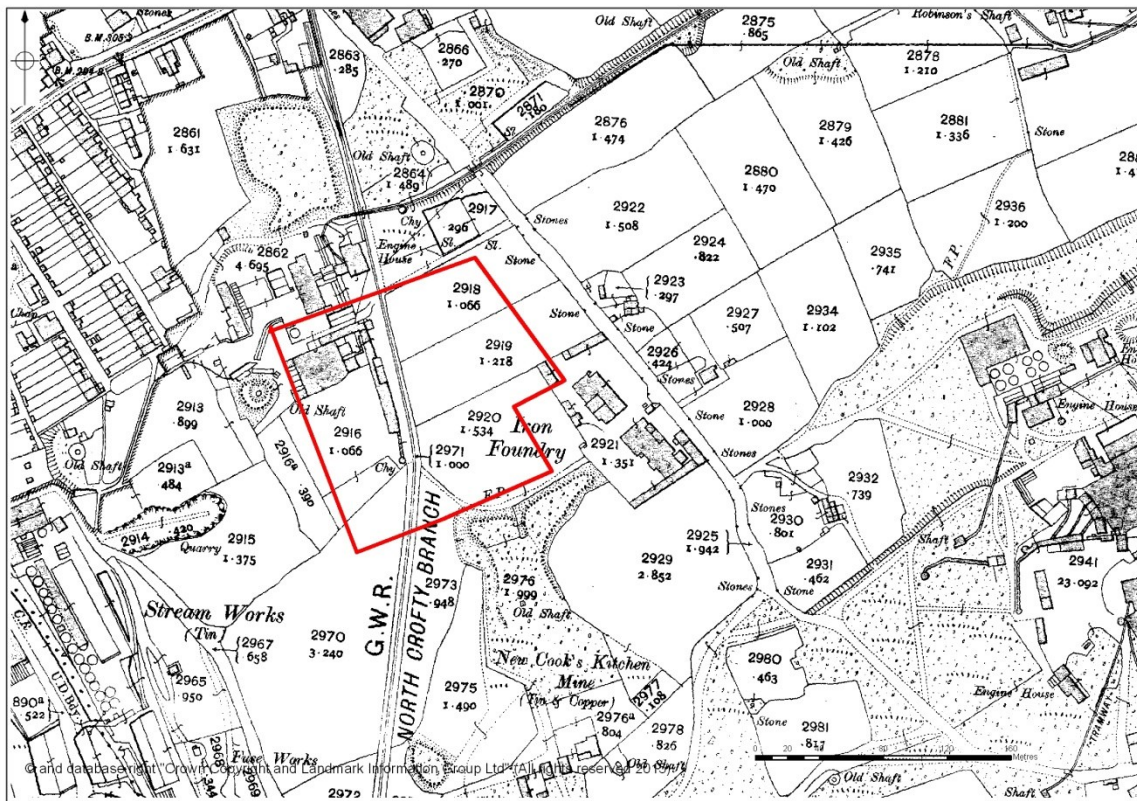


Fig 6. An extract from the 2nd Edition of the OS 25" mapping, circa 1908, showing the early 20th century redevelopment of the South Crofty dressing floors.



Fig 7. The headframe on New Cook's Shaft, scaffolded in preparation for conservation works and repainting in April 2013.



Fig 8. The primary ore bins (right) and primary crusher building (left), which had already lost considerable amounts of its cement asbestos sheet wall cladding.



Fig 9. The primary ore bins (left), primary crusher house (centre) and the conveyor leading to the fine ore bins (right) viewed from the south east.



Fig 10. The large ball mill in situ within the primary crusher building.



Fig 11. The large cone crusher in situ within the primary crusher building.



Fig 12. The tall building in the north eastern part of the South Crofty mill which housed banks of Humphrey spirals as well as other concentration plant.



Fig 13. The north eastern part of the mill, showing the conveyor from the western section of the plant to the fine ore bins, as well as the building housing the Humphrey spirals.



Fig 14. The north eastern section of the mill, showing the conveyor to the fine ore bins and the Humphrey spiral plant. The building to its left housed ball mills.



Fig 15. The primary crushing plant and ore conveyer from the east.



Fig 16. The Humphrey spirals building, ore conveyer and fine ore bins from the east.



Fig 17. A general view of the mill from the east prior to its demolition.



Fig 18. The primary crusher building and coarse ore bins viewed from the west.



Fig 19. The northern end of the mill viewed from the south west. The roofless building in front of the fine ore bins sited the shaking tables and flotation plant.



Fig 20. The southern section of the tabling and milling plant viewed from the west.



Fig 21. The north western corner of the mill, this building housing shaking tables and flotation cells, as well as other equipment.



Fig 22. The table plant building viewed from the west.



Fig 23. Detail of the western elevation of the table plant building. The function of the feature in the foreground is unknown.



Fig 24. The interior of the northern end of the table plant. Most of the equipment had been stripped from this area of the mill, leaving only their concrete bases, though tables, ball mills and other equipment survived in the eastern section of the mill.



Fig 25. Part of the western elevation of the mill, showing its rendered blockwork construction and corrugated cement sheet cladding.



Fig 26. A view of the mill from the north. The mine offices were sited in the single storey buildings to the left.



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Fig 28. The north eastern corner of the mill, showing the Humphrey spiral building (left), fine ore bins and conveyor (centre) and maintenance workshop (right).



Fig 29. The early 20th century sub-station building at South Crofty.



Fig 30. Another view of the South Crofty substation building adjacent to the former mine entrance road.



Fig 31. The original South Crofty air compressor houses.



Fig 32. The South Crofty smithy building, constructed in the early 20th century on the site of a smithy associated with Bartle's Foundry within the yard to its rear.

Appendix 1: Planning brief

BRIEF FOR HISTORIC BUILDING RECORDING AND ARCHAEOLOGICAL INVESTIGATION FOR SOUTH CROFTY MINE, POOL

Date: 28th November 2012

Scheme: CPR East – West Link Road Phase 1 Dudnace Lane, Station Road and Wilson Way, Pool

Site: South Crofty Mine, Pool

Application: PA09/01295/F & 08/00355/CCENV

HBSMR: CC05347

Applicant: Cornwall Council Executive (Strategic Planning and Transportation)

Agent: Mouchel, 2 North Crofty, Tolvaddon Energy Park, Camborne TR14 0HX

Historic Environment Planning Advice Officer: Phil Markham, Cornwall Council, Historic Environment Service, Kennall Building, Old County Hall, Truro TR1 3AY. t. 01872 322546 e. pmarkham@cornwall.gov.uk

Local Planning Authority Officer: Chantal McLennan, Cornwall Council, Planning & Regeneration, Dolcoath Avenue, Camborne TR14 8SX t. 01209 616965

e. Chatal.Mclennan@cornwall.gov.uk

This brief is only valid for six months. After this period the Historic Environment Planning Advice Officer (HEPAO) should be contacted. Any written scheme of investigation (WSI) resulting from this brief shall only be considered for the same period. The contractor is strongly advised to visit the site before completing their WSI as there may be implications for accurately costing the project.

Contractors Written Scheme of Investigation (WSI)

No ground works are to be undertaken until the HEPAO and the Local Planning Authority (LPA) have approved the archaeological contractor's WSI.

1 Introduction

1.1 This brief has been written by the HEPAO and sets out the minimum requirements for archaeological recording at the South Crofty Mine site.

2 Site Location and Description

2.1 South Crofty Mine is an industrial landscape located in Pool, Cornwall at Ordnance Survey Grid Reference SW 6634 4099.

3 Planning Background

3.1 Planning application 08/00355/CCENV was submitted on the 23rd July 2008 and was for highway improvement works (including widening) on Dudnace Lane, Station Road and Wilson Way and the adjacent side roads and to construct a new road between Station Road and Wilson Way at Carn Brea Lane. This application has been approved subject to 11 conditions. Condition 6 states:

3.2 *Prior to the commencement of development (including any site preparation works), the applicant shall have submitted to and had approved in writing by the CPA a programme of archaeological recording in accordance with a written scheme of investigation within the area of the approved site (to include details of*

the identification and method of recording of any sites and features of archaeological interest).

3.3 Reason: In the interests of archaeological investigation and recording

Relevant Policies: Cornwall Structure Plan Policy 2.

4 Historic Buildings/Archaeological Background

4.1 The Cornwall and Scilly Historic Environment Record (HER) records the following for the site: In 1899 South Wheal Crofty successfully combined with New Cook's Kitchen and became South Crofty in 1906, as which it traded as successfully during the C20. The mine developed from east to west, absorbing the sett of North Wheal Crofty. The original production centre lay near Station Road, where Bickford's and Palmer's Shafts lay close to the company offices. Dressing floors were developed on the eastern slopes of the Red River Valley and were linked to the production shafts by an embanked tramway. Robinson's Shaft was subsequently developed at the mid-point of this tramway during the early 20th century, the eastern shafts being by this time close to abandonment, and provided pumping, haulage and man-riding facilities. Subsequently New Cook's Shaft was developed as the principal production shaft to the west of Dudnace Lane. Robinson's Shaft was retained for man-riding and the surrounding buildings (including loco workshop, carpenters' shop and dry) serviced the mine. Robinson's Shaft was closed in 1996, following concerns for the condition of the shaft and the intention to provide secondary man-riding facilities at the newly re-furbished New Roskear Shaft to the north of Tuckingmill. Robinsons engine house at SW 6679 4125 was erected in 1903 and the 1st Edition 1:2500 OS Map shows engine houses at SW 6696 4131, 6696 4127, 6634 4106 and 6639 4110. Extensive remains are visible on air photographs and were plotted as part of the NMP.

5 Building Recording Aims & Methodology

5.1 The present proposals will culminate in the destruction of historic environment assets. It is therefore important that these are recorded to an appropriate level; and that the results are made available to interested parties. An English Heritage level 2-4 record for all sites and buildings of historic merit or that add character to the area will be required. Any architect/applicant drawings may be used or adapted as required. The recorder(s) will need to consider the following as a minimum:

- Site layout and organisation
- Ground make up of the surface (concrete, foundation remains, stub walls, metal, ceramic etc.) and dumped material.
- Character
- Function
- Materials, methods of construction
- Internal arrangement details of any foundations
- Fenestration
- Original fixtures and fittings
- Subsequent fixtures and fittings
- Evidence of use and status

- Relationship/relevance to the Outstanding Universal Value (OUV) of the Mining World Heritage Site
 - Date/period of initial builds and subsequent alterations
 - The mapped recorded features will be linked to earlier mapped features and photographic evidence where possible.
- 5.2 The photographic record shall be a comprehensive record to archive standard of the existing buildings and structures, both externally and internally. The photographs will be taken with black and white 35mm or medium format film producing archive quality prints and negatives. Colour photography may be utilised for general shots and where it is appropriate for detail shots. For both general and specific photographs, a photographic scale shall be included.
- 5.3 The drawn record will be comprehensive where required and act principally to support the photographic and written descriptive record. Where appropriate it should include measured plans of all floors, a site plan at 1:500, a phased plan if the buildings constructional complexity warrants this and a plan annotated to show the location, shot number and direction of all photographs. If the building displays evidence more than two building phases then a phased plan should be produced.
- 5.4 Plans may be based on existing architectural drawings where these exist but these must be checked in the field to ensure acceptable accuracy and should be recast where necessary to standard archaeological conventions.

6 Building Recording Results

- 6.1 The full report including any specialist assessments shall be submitted within a length of time (but not exceeding six months) to be agreed between the applicant and the archaeological contractor, Cornwall Council Historic Environment Service and the Royal Cornwall Museum. It would probably be appropriate for there to be a single report including the building recording and the archaeological recording. A further digital copy shall be supplied on CD-ROM preferably in 'Adobe Acrobat' PDF format.
- 6.2 The archaeological contractor will undertake the English Heritage/ads online access to the index of archaeological investigations (OASIS).
- 6.3 This report will be held by the Cornwall and Scilly Historic Environment Record (HER) and made available for public consultation.
- 6.4 The report must contain:
- A table of contents.
 - The building's precise location in National Grid and address form.
 - A brief history of the site.
 - A concise non-technical summary of the project results.
 - The aims and methods adopted in the course of the investigation.
 - The date of the record, name of recorder(s) and the location and contents of the deposited archive.
 - A location map, copies of any plans/drawings and copies of such photographs as necessary to illustrate the written description with appropriate annotation.
 - A written description of the building and its structure, materials and layout.
 - A full bibliography where external sources have been used.
 - A copy of the brief and approved written scheme of investigation (WSI) will be included as an appendix.
 - A digital copy of all photographs (in .TIFF format) making up the archive record to be bound into the rear cover of the HER / HEPAO copy of the report on CDR or DVDR.

6.5 A contingency shall be made within the costs for full publication in an appropriate journal. The HEPAO will notify the contractor of such a need within four weeks of receipt of the report.

6.6 The archive should follow that for the archaeological recording.

7 Archaeological Recording Aims & Methodology

7.1 Ground works associated with the development may disturb buried remains of earlier phases of the site.

7.2 The site specific aims are to:

- Establish the presence/absence of archaeological remains
- Determine the extent, condition, nature, character, date and significance of any archaeological remains encountered
- To establish the nature of the activity on the site
- To identify any artefacts relating to the occupation or use of the site
- To provide further information on the history and development of Bartle's Foundry and the Bartle's site in general from any archaeological/building remains encountered

7.3 The general methodology:

7.4 All stages of the investigation shall be supported by a written scheme of investigation (WSI).

7.5 The archaeological contractor is expected to follow the code of the Institute for Archaeologists (IfA).

7.6 Details including the name, qualifications and experience of the site director and all other personnel (including specialist staff) shall be included within the WSI.

7.7 All of the latest Health and Safety guidelines shall be followed on site.

7.8 The IfA's Standards and Guidance should be used for additional guidance in the production of the WSI, the content of the report and the general execution of the project.

7.9 Terminology will be consistent with the English Heritage Thesaurus.

7.10 Prior to the commencement of on site works the archaeological contractor should familiarise themselves with the site by examining the information held by the Cornwall and Scilly Historic Environment record (HER), the Cornwall Records Office at Truro and the Cornwall Centre at Redruth, where appropriate.

7.11 A toothless ditching bucket can be used for the removal of any overburden until the first archaeological horizon is exposed. This will then be hand cleaned as appropriate.

7.12 Any surviving remains which will be disturbed or destroyed by the development shall be archaeologically excavated and recorded.

7.13 Details of how all archaeological contexts and artefacts will be excavated, surveyed, recovered and recorded shall be provided. The site will be tied into the national grid.

7.14 Details of the site planning policy shall be given in the WSI. The normal preferred policy for the scale of archaeological site plans is 1:20 and sections 1:10, unless circumstances indicate that other scales would be more appropriate.

7.15 The photographic record shall consist of prints in both black and white and colour together with the negatives. Digital photography may be used for report illustration. For both general and specific photographs, a photographic scale shall be included. In the case of detailed photographs it may be appropriate to include a north arrow. The photographic record shall be accompanied by a photographic register detailing as a minimum, feature number, location and direction of shot.

- 7.16 If significant archaeological deposits are exposed, all works must cease and a meeting convened with the client and the HEPAO to discuss the most appropriate way forwards.

8 Finds

- 8.1 All finds, where appropriate, will be retained from each archaeological context excavated.
- 8.2 All finds, where appropriate, shall be washed.
- 8.3 All pottery, and other finds, where appropriate, shall be marked with the site code and context number.
- 8.4 The WSI shall include an agreed list of specialist consultants, who may be required to conserve and/or report on finds, and advise or report on other aspects of the work including environmental sampling.
- 8.5 The requirements for conservation and storage shall be agreed with the appropriate museum prior to the start of work, and confirmed in writing to the HEPAO.
- 8.6 Finds work should be to accepted professional standards and adhere to the Institute for Archaeologists *Guidelines for Finds Work*.
- 8.7 Environmental sampling should be guided by *Environmental Archaeology* (English Heritage Centre for Archaeological Guidelines. 2001/02).
- 8.8 Further English Heritage guidance that may be helpful includes *Geoarchaeology* (2004) and *Archaeometallurgy* (2001).
- 8.9 The English Heritage Advisor for Archaeological Science will be able to provide archaeological science advice if required (Vanessa Straker 0117 975 0689).

9.0 Human Remains

- 9.1 Any human remains which are encountered must initially be left in situ and reported to the HEPAO and the appropriate authorities (the Coroner), where appropriate. If removal is necessary this must comply with the relevant Government regulations. If burials are encountered their legal status must be ascertained and recording and/or removal must comply with the legal guidelines.
- 9.2 If human remains are not to be removed their physical security must be ensured, preferably by back filling as soon as possible after recording.
- 9.3 If human remains are to be removed this must be done with due reverence and in accordance to current best practice and legal requirements. The site must be adequately screened from public view. Once excavated human remains must not be exposed to public view.

10 Results Archaeological Recording

- 10.1 The full report including any specialist assessments shall be submitted within a length of time (but not exceeding six months) to be agreed between the applicant and the archaeological contractor, Cornwall Council Historic Environment Service and the Royal Cornwall Museum. It would probably be appropriate for there to be a single report including the building recording and the archaeological recording. A further digital copy shall be supplied on CD-ROM preferably in 'Adobe Acrobat' PDF format.
- 10.2 This report will be held by the Cornwall and Scilly Historic Environment Record and made available for public consultation.
- 10.3 The report must contain:

- A concise non-technical summary of the project results.
 - The aims and methods adopted in the course of the investigation.
 - A discussion of the archaeological findings in terms of both the site specific aims and the desk based research.
 - A location map, a drawing showing those areas examined as part of the archaeological recording, and copies of any archaeological plans and sections. All plans shall be tied to the national grid.
 - All specialist reports and assessments.
 - A summary of the archive contents and date of deposition.
 - A context register with brief descriptions shall be included as an appendix.
 - A copy of the brief and the approved WSI will be included as an appendix.
- 10.4 A contingency shall be made within the costs for full publication in an appropriate journal. The HEPAO will notify the contractor of such a need within four weeks of the receipt of the report.

11 Archive Deposition

- 11.1 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 project. The requirements for archive storage shall be agreed with the Royal Cornwall Museum.
- 11.2 If the finds are to remain with the landowner a full copy of the documentary archive shall be housed with the Cornwall County Record Office and with the Courtney Library of the Royal Institution of Cornwall.
- 11.3 The archive including a copy of the written report shall be deposited with the Royal Cornwall Museum within two months of the completion of the full report and confirmed in writing with the HEPAO.
- 11.4 Where there is only a documentary archive this will be deposited with the Cornwall Record Office as well as the Courtney Library of the Royal Institution of Cornwall.
- 11.5 A copy of the report will be supplied to the National Monuments Record (NMR) in Swindon.
- 11.6 A summary of the contents of the archive shall be supplied to the HEPAO.
- 11.7 Only on completion of 11.1 to 11.5 (inclusive) and the completion of the other Phase 1 recording will there be a recommendation for the discharge of the archaeological recording condition.

12 Monitoring

- 12.1 The HEPAO will monitor the work and should be kept regularly informed of progress.
- 12.2 Notification of the start of work shall be given preferably in writing to the HEPAO at least one week in advance of its commencement.
- 12.3 Any variations to the WSI shall be agreed with the HEPAO, preferably in writing, prior to them being carried out.

10 Appendix 2: Written Scheme of Investigation



Client: Cornwall Council (Strategic Planning and Transportation)
Client contact: John Foskett, Parsons Brinckerhoff
Client tel: 01872 245860
Client email: John.Foskett@pbworld.com

Project background

Planning application 08/00355/CCENV was submitted on the 23rd July 2008 and was for highway improvement works (including widening) on Dudnance Lane, Station Road and Wilson Way and the adjacent side roads and to construct a new road between Station Road and Wilson Way at Carn Brea Lane. This application has been approved subject to 11 conditions. Condition 6 states:

Prior to the commencement of development (including any site preparation works), the applicant shall have submitted to and had approved in writing by the CPA a programme of archaeological recording in accordance with a written scheme of investigation within the area of the approved site (to include details of the identification and method of recording of any sites and features of archaeological interest).

Reason: In the interests of archaeological investigation and recording

Relevant Policies: Cornwall Structure Plan Policy 2.

In 2008 an archaeological assessment of the road route was undertaken by Historic Environment Projects which set out recommendations for further archaeological work at the site (Parkes 2009). As the majority of the mine buildings are of historic significance, a brief (dated 28th Nov 2012) outlining requirements for an historic building record and archaeological investigation has been issued by Phil Markham, Historic Environment Planning Advice Officer, Cornwall Council. Historic Environment Projects was requested to provide an estimate of costs and Written Scheme of Investigation (WSI) for the historic building record and archaeological excavation.

This document sets out HE Project's approach, methodology and arrangements for monitoring.

Site history

The Cornwall and Scilly Historic Environment Record (HER) records the following for the South Crofty site:

In 1899 South Wheal Crofty successfully combined with New Cook's Kitchen and became South Crofty in 1906, as which it traded as successfully during the 20th century. The mine developed from east to west, absorbing the sett of North Wheal Crofty. The original production centre lay near Station Road, where Bickford's and Palmer's Shafts lay close to the company offices. Dressing floors were developed on the eastern slopes of the Red River Valley and were linked to the production shafts by an embanked tramway. Robinson's Shaft was subsequently developed at the mid-point of this tramway during the early 20th century, the eastern shafts being by this time close to abandonment, and provided pumping, haulage and man-riding facilities. Subsequently New Cook's Shaft was developed as the principal production shaft to the west of Dudnance Lane. Robinson's

Shaft was retained for man-riding and the surrounding buildings (including loco workshop, carpenters' shop and dry) serviced the mine. Robinson's Shaft was closed in 1996, following concerns for the condition of the shaft and the intention to provide secondary man-riding facilities at the newly re-furbished New Roskear Shaft to the north of Tuckingmill. Robinsons engine house at SW 6679 4125 was erected in 1903 and the 1st Edition 1:2500 OS Map shows engine houses at SW 6696 4131, 6696 4127, 6634 4106 and 6639 4110. Extensive remains are visible on air photographs and were plotted as part of the NMP.

South Crofty was the last remaining tin mine to work in Cornwall when it stopped output in 1998.

Brief analysis of large scale OS maps from 1880 and later indicates that the site was previously occupied by a stamping and dressing floor powered by a beam engine within an engine house. A railway siding also crossed the site. the route also includes a former arsenic works including calciners, flues and labyrinth. There are also likely to be near-surface mine working within the road corridor, as well as unrecorded pre-19th century structures.

The complex has changed radically in the later 20th century, with virtually all buildings and the railway siding swept away and replaced by the later 20th century ore processing mill and related structures.

Project extent

The core of the site is the New Cooks Kitchen Shaft to the west of Dudnace Lane, centred at NGR SW 66361 41008. Demolition in advance of the road construction will remove the large buildings which contained the ore processing plant and also the north and south winder houses, shaft bank shelter, dry, engineering workshop, although the shaft headframe (at SW 66457 40951) will remain.

The road corridor also includes the heavily industrialised valley to the west of the mine and a narrow strip of farmland where the proposed new road links to Dolcoath Road.

Aims and objectives

The principal aim of the work is to gain a full historic building record of the surface buildings associated with the mining complex prior to their demolition and undertake an archaeological watching brief following their removal.

Working methods

Stage 1 building recording

All recording work will be undertaken according to the Institute for Archaeologists *Standards and Guidance for Archaeological Investigation and Recording*. Staff will follow the IfA *Code of Conduct* and *Code of Approved Practice for the Regulation of Contractual Arrangements in Archaeology*. The Institute for Archaeologists is the professional body for archaeologists working in the UK.

An English Heritage level 2-4 record of all buildings and structures has been requested in the planning brief. Safety considerations however dictate that due to rotten floors and dangerous roofs it will not be possible to enter the mill buildings to obtain a detailed photographic or measured survey. So the proposed methodology includes photography description and analysis of the building exteriors and (safely accessible) parts of the interiors.

Fieldwork: photographic recording

To include:

1. Black and white photographs using a medium format or 35mm camera on fine grain archive quality film.
2. Supporting colour photographs taken with a digital camera (with a resolution of 8 million pixels or higher).

The photo record will comprise:

- General views.
- Examples of structural and architectural detail.

Methodology for the archive standard photography is set out as follows:

- Photographs of details will be taken with lenses of appropriate focal length
- A tripod will be used to take advantage of natural light and slower exposures.
- Difficulties of back-lighting will be dealt with where necessary by balancing the lighting by the use of flash
- A metric scale will be included in all views, except where health and safety considerations make this impractical.
- A plan of photo directions will be produced. This will be based upon an enlarged copy of OS mapping (at 1:500 or larger scale) or copies of road scheme drawings as appropriate.

Fieldwork: building descriptions

Analysis of the fabric will be undertaken on site (recorded as notes) to allow building descriptions to be written up at the archive stage.

Stage 2: archaeological mitigation during construction works

Controlled archaeological strips and watching brief

Ground works associated with the construction of the road corridor may also disturb buried remains of 18th 19th and 20th century industrial activity and there may also be traces of prehistoric/Romano-British activity.

The archaeological investigation during this phase will comprise an archaeological watching brief along the road corridor (costs for this work are not included in the supplied estimate – Thomas 23/1/2013).

The archaeological programme will follow three stages: fieldwork; archiving, and archive report production. Where significant deposits are encountered further stages of assessment; analysis; final publication may be required.

Watching brief

The archaeological investigation will comprise an archaeological watching brief undertaken to cover the area following demolition of the surviving buildings.

The site works should be carried out under archaeological supervision. A mechanical excavator will be used to strip the site. Modern deposits (for example concrete or hard standing) may be removed by a toothed bucket. Once the overburden has been removed a toothless bucket will be used. Any significant archaeological features exposed in the excavated area will be carefully excavated by hand and archaeologically recorded by written description, plan, section and photographic record as appropriate by an HE Projects archaeologist.

During the archaeological recording the archaeologist will identify and record any archaeological features that are revealed in the excavated area; the level of recording will be appropriate to the character/importance of the archaeological remains. Where necessary the detailed archaeological recording may include:

- Excavation of archaeological features exposed in the excavated area and plotting them onto a base map.
- Production of plans and section drawings of the excavated features and recording of features using a continuous numbering system.
- Retrieval of artefacts.

Recording: general

- A location plan will be made, plotting the excavated areas/features onto the existing building plan.
- The location of features recorded during the excavation will be plotted on drafting film. Plans and sections will be created where appropriate.
- All archaeological contexts will be described to a standard format linked to a continuous numbering sequence. All contexts recorded will be recorded via the medium of HE pro forma context recording sheets.
- Registers of drawings, photographs, finds and contexts, samples will be maintained during the fieldwork.
- The excavated spoil will be carefully inspected for finds.

Site planning policy

- Site drawings (plans, sections, locations of finds) will be made by pencil (4H) on drafting film; all plans will be linked to the prepared location map and to the national grid; all drawings will include standard information: site details, personnel, date, scale and north-point.
- Site plans will be drawn at 1:20 and sections at 1:10, unless circumstances indicate that other scales would be more appropriate.
- Site drawings (plans and sections) will be digitised and converted into AutoCAD drawings.

Photographic record: excavation

- The photographic record will consist of prints in black and white together with the negatives. Digital photography will be used for report illustration.
- For both general and specific photographs, a photographic scale will be included.
- In the case of detailed photographs a north arrow will be included if appropriate.
- The photographic record will be accompanied by a photographic register detailing as a minimum, feature number, location and direction of shot.

Finds

- Significant finds will be retained (all finds pre dating 1800 and diagnostic modern find, for example pottery with makers marks, etc) each archaeological context excavated. The collection policy will be reviewed during the excavation.

- All retained finds, where appropriate, will be washed.
- Retained pottery, and other finds where appropriate, will be marked with the site code and context number.
- The requirements for conservation and storage will be agreed with the appropriate museum.
- Finds work will be to accepted professional standards and adhere to the Institute for Archaeologists' *Guidelines* (IFA 2001b).

Sampling

There may be some opportunity for environmental sampling during the course of the work.

- The English Heritage Advisor for Archaeological Science will be consulted for advice if required (Vanessa Straker 0117 975 0689).
- Environmental sampling will be guided by *Environmental Archaeology* (English Heritage 2004).
- The archaeologist undertaking the excavation will assess the potential for environmental sampling.
- If suitable deposits are identified the following types of sample may be taken as appropriate:
 - Bulk sampling
 - Monolith sampling
 - Macro & Micro Flora Analysis (including pollen analysis)
 - Macro & Micro Fauna Analysis
 - Radiocarbon dating for artefact analysis

Specialists

Creation of site archive

To include:

- Archiving of black and white photographs to HER standards.
- Digital colour photographs (stored according to HER guidelines and copies of images made available to the client).
- Finalisation of any site drawings.
- Detailed site/building descriptions.
- Collation of watching brief records.
- Completion of the English Heritage/ADS OASIS online archive index.

Archive report

A written report will include:

- Summary
- Project background
- Aims and objectives
- Methodology
- Location and setting
- Designations

- Site history
- Building descriptions
- Archaeological results
- Chronology/dating evidence
- Significance
- References
- Project archive index
- Supporting illustrations: location map, historic maps, plans, elevations/sections, photographs

A paper copy and a digital (PDF) copy of the report, illustrations and any other files will be held in the Cornwall HER. Paper copies of the report will be distributed to the client, to local archives and national archaeological record centres.

Archive deposition

An index to the site archive will be created and the archive contents prepared for long term storage, in accordance with HE standards.

The archiving will comprise the following:

1. All correspondence relating to the project, the WSI, a single paper copy of the report together with an electronic copy on CD, stored in an archive standard (acid-free) documentation box
2. A2 drawn archive storage (plastic wallets for the annotated record drawings)
3. Archive standard negative holders and archive print holders, to be stored in the HES system until transferred to the Royal Cornwall Museum.
4. The project archive will be deposited initially at ReStore PLC, Liskeard and in due course (when space permits) at Cornwall Record Office.

Timetable

The first stage building recording is anticipated to be commenced during March 2013 and this will be followed by a second stage which will include the controlled soil and watching brief. HE will require at least two weeks' notice before commencement of work, in order to allow the allocation of field staff time and arrangement of other logistics.

The archive report will be completed within 6 months of the end of the fieldwork. The deposition of the archive will be completed within 3 months of the completion of the archive report.

Monitoring and Signing Off Condition

Monitoring of the project will be carried out by Phil Markham, Historic Environment Planning Advice Officer. Where the Historic Environment Planning Advice Officer is satisfied with the archive report and the deposition of the archive written discharge of the planning condition will be expected from the local planning authority (LPA).

Monitoring points during the study will include:

- Approval of the WSI
- Completion of fieldwork
- Completion of archive report

- Deposition of the archive

Historic Environment Projects

Historic Environment Projects is the contracting arm of Historic Environment, Cornwall Council (HE). HE employs some 20 project staff with a broad range of expertise, undertaking around 120 projects each year.

HE is committed to conserving and enhancing the distinctiveness of the historic environment and heritage of Cornwall and the Isles of Scilly by providing clients with a number of services including:

- Conservation works to sites and monuments
- Conservation surveys and management plans
- Historic landscape characterisation
- Town surveys for conservation and regeneration
- Historic building surveys and analysis
- Maritime and coastal zone assessments
- Air photo mapping
- Excavations and watching briefs
- Assessments and evaluations
- Post-excavation analysis and publication
- Outreach: exhibitions, publication, presentations

Standards



HE is a Registered Organisation with the Institute for Archaeologists and follows their Standards and Code of Conduct.

As part of Cornwall Council, the HES has certification in BS9001 (Quality Management), BS14001 (Environmental Management), OHSAS18001 (Health, Safety and Welfare), Investors in People and Charter Mark.

Terms and conditions

Contract

HE Projects is part of Historic Environment, Cornwall Council. If accepted, the contract for this work will be between the client and Cornwall Council.

The views and recommendations expressed will be those of the HE projects team and will be presented in good faith on the basis of professional judgement and on information currently available.

Project team

The project will be managed by a nominated Senior Archaeologist who will:

- Discuss and agree the detailed objectives and programme of each stage of the project with the client and the field officers, including arrangements for health and safety.

- Monitor progress and results for each stage.
- Edit the project report.
- Liaise with the client regarding the budget and related issues.

Historic Environment Projects staff:

Nigel Thomas BA MIfA

Senior Archaeologist who has worked with HE and its predecessors since 1987. Responsible for management of projects relating to historic building recording and surveys of historic landscapes. Past work has included recording and structural analysis at Launceston and Restormel Castles, medieval chapels at Rame, Bodmin and Hall (Bodinnick), as well as landscape surveys at Lanhydrock park and Godolphin gardens. Project manager for historic building analyses at Tintagel Old Post Office, Cotehele House, St Michael's Mount summit complex and Trevice for the National Trust. Has recorded numerous industrial structures including Harveys Foundry, Loggans Mill (Hayle), Town Mills at St Columb Major, and china-clay area features including the waterwheel at Virginia CC Works, Greensplat engine house and Carrancarrow chapel. Project team leader for the Lostwithiel Town Characterisation Study. Member of the IfA's Buildings Group and Graphic Archaeology Group. An experienced user of AutoCAD and is responsible for HE's survey methodology.

Adam Sharpe BA MIfA

Senior Archaeologist specialising in the recording, interpretation and conservation management of industrial buildings, sites and landscapes, having worked with HE and its predecessors since 1984 and has published guidance on the conservation of mine buildings. Major projects during the past two and a half decades have included the Bodmin Moor and West Penwith Projects, the St. Just survey and all of the related National Trust and Objective One conservation projects, the Minions Survey, most elements of the Mineral Tramways Project and the recent conservation of Trewavas mine. Adam has been closely involved with the development of Geevor into a major heritage site since its closure in 1991 and managed the data collection and boundary identification stages of the successful Cornish Mining World Heritage Site Bid. Member of the IfA Buildings Group.

Specialists (may include one or more of the following)

Eric Berry: A freelance **Historic Buildings Consultant**, with extensive experience of Listing reviews for English Heritage and has surveyed and photographed numerous early buildings in Cornwall. Eric formerly worked as a Conservation Officer for Carrick DC and serves on the committee of the Cornish Buildings Group.

John Allan MPhil – Medieval/post-medieval pottery specialist: John is the leading authority on medieval and post-medieval pottery in south- west England and author of many publications. He will carry out the pottery assessment and analysis in the event of medieval or post-medieval pottery being recovered

Henrietta Quinnell BA, MIFA, FSA – Prehistoric, Roman, post-Roman pottery: Henrietta is a freelance pottery specialist and the leading authority on prehistoric pottery in the south-west. She will carry out the pottery assessment and analysis in the event of prehistoric pottery being recovered.

Julie Jones BA – Archaeobotanist: An experienced freelance archaeobotanical specialist based in Bristol, Julie has carried out palaeoenvironmental assessments and analyses for numerous HES projects.

Dana Challinor MA, MSc – Freelance Charcoal Specialist: Dana's main area of expertise is charcoal analysis and wood species identification, but she also has experience with charred plant remains. For her Masters degree she specialised in Archaeobotany and received a distinction for her dissertation on charcoal in Bronze Age cremation burials. She has produced numerous assessment and evaluation reports, as

well as reports for publication in journal and monograph formats and was formerly Head of the Environmental Department at Oxford Archaeology. She will undertake assessment and analysis of any suitable charcoal samples, including identification of samples suitable for radiocarbon dating.

Ralph Fyfe, PhD, Palynologist: Ralph is lecturer in environmental change in the School of Geography at the University of Plymouth. He has carried out numerous archaeological evaluations for a variety of organisations, including English Heritage, County Councils, National Parks and Archaeological Consultancies and will undertake assessment and analysis of pollen samples if required.

Laura Ratcliffe-Conservationist, BSc: Laura graduated In Archaeological Conservation from Cardiff University in 2001. Since then she has gained a wide variety of experience both on excavations and in a lab working on a wide variety of archaeological and historical material. Previously based at the Royal Cornwall Museum where she was the museum's Collections Manager. Now a freelance Conservationist. Laura will carry out the assessment and conservation of pottery and metalwork on a freelance basis if required.

Radiocarbon Dating Laboratory: Scottish Universities Environmental Research Centre, Radiocarbon Dating Laboratory (University of Glasgow), Scottish Enterprise Technology Park, Rankine Avenue, East Kilbride G75 0QF

Report distribution

Paper copies of the report will be distributed to the client, to local archives and national archaeological record centres.

A digital copy of the report, illustrations and any other files will be held in the Cornwall HER and also supplied to the client on CD or other suitable media.

Copyright

Copyright of all material gathered as a result of the project will be reserved to the Historic Environment, Cornwall Council. Existing copyrights of external sources will be acknowledged where required.

Use of the material will be granted to the client.

Freedom of Information Act

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005.

HE will ensure that all information arising from the project shall be held in strict confidence to the extent permitted under the Act. However, the Act permits information to be released under a public right of access (a "Request"). If such a Request is received HE may need to disclose any information it holds, unless it is excluded from disclosure under the Act.

Health and safety statement

HE follows the Council's *Statement of Safety Policy*. For more specific policy and guidelines HE uses the manual *Health and Safety in Field Archaeology* (2002) endorsed by the Standing Conference of Archaeological Unit Managers and also the Council for British Archaeology's Handbook No. 6 *Safety in Archaeological Field Work* (1989).

Prior to carrying out on-site work HE will carry out a Risk Assessment.

Insurance

As part of Cornwall Council, HE is covered by Public and Employers Liability Insurance, with a policy value of £50m. The Council also has Professional Negligence insurance with a policy value of £5m.

References

English Heritage, 2006. *Understanding Historic Buildings: A guide to good recording practice*. Swindon

English Heritage, 2007. *Understanding the Archaeology of Landscapes: A guide to good recording practice* Swindon

Parkes, C, 2009. *Phase 2 Camborne, Pool and Redruth Road Scheme, Cornwall: Archaeological Assessment*, Historic Environment Projects, Cornwall Council

Nigel Thomas

Senior Archaeologist

18th February 2013

Historic Environment Projects

Cornwall Council

Fal Building, New County Hall,

Station Road,

Truro, Cornwall. TR1 3AY

Tel: 01872 322360 Fax: 01872 323811

Email: nthomas@cornwall.gov.uk