Report No: 2014R025

King Edward Mine Museum
Artefact Store, Camborne, Cornwall
Archaeological Watching Brief

Historic Environment Projects

Report No	Report Name	Report Author
2014R025	Watching Brief King Edward Mine Museum Artefact Store	Ryan P Smith

Event Type

Evaluation excavation	Watching brief record		

Client Organisation	Client Contact
Cornwall Council Culture Team	Tamsin Daniel

Monuments (MonUID)

MCO56539					

Fieldwork dates (From)	(To)	(Created By)	(Create Date)
25/10/13	17/3/14	Ryan P Smith	March 2014

Location (postal address; or general location and parish)

King Edward Mine Museum, Troon.

King Edward Mine Ltd, c/o Polstrong Cottage, Polstrong, Camborne, TR14 0QA

(Town – for urban sites)	(Postcode)
Camborne	TR14 0QA

(Easting) X co-ord	(Northing) Y co-ord		
SW 66283	38824		

Historic Environment, Cornwall Council is a Registered Organisation with the Institute for Archaeologists

Cover Illustration

View looking SW over project area post turf removal

List of Figures

Figure 1: Location of site

Figure 2: Tithe map of Camborne c1841 showing location of site.

Figure 3: 1877 Ordnance Survey map 1st edition showing proposed location of artefact store and buddles.

Figure 4: Location of evaluation trenches

Figure 5: SW facing section of trench 1 located in the corner of excavation.

Figure 7: SW facing section trench 1 located in the SW corner of excavation.

Figure 7: South facing section of trench 3.

Figure 8: Location of foundation pits.

Figure 13: NW facing section pit 2

Figure 14: NW facing section pit 6

Figure 15: NW facing section pit 7

Figure 16: NW facing section pit 9

Project background

The Historic Environment Projects team were commissioned by Trevor Humphreys Associates on behalf of Tamsin Daniel, Cornwall Council, to undertake an archaeological evaluation of the proposed site for a new Trevithick Society/King Edward Mine (KEM) artefact storage building at King Edward Mine Museum, Troon near Camborne (Fig 1), (SW 66323 38844 - Planning Application PA13/07587),

The Historical Environment Record (HER) and historical mapping indicate that the proposed positioning of the artefact store was on the site of four large buddles of late 19th century date (a circular pit with rotating brushes for concentrating tin ore) (Fig 3) and a calciner ore dressing building (Buck 2013, 20).

Phil Markham (Historic Environment Planning Advice Officer, Cornwall Council) recommended that should planning permission be granted an archaeological recording condition be attached to include a site evaluation stage prior to any site foundation excavation. Depending on the results of the site investigation, an archaeological watching brief would also be needed during the subsequent development/excavation phase (email dated 11/11/2013)

A Written Scheme of Investigation was produced (WSI) by James Gossip (Appendix 2), to carry out a phased evaluation of the proposed site with an initial investigation requiring the excavation of four trenches by a mechanical digger to a depth of 1m (Trenches 1-3 measured 2m x 2m x 1m and Trench 4, 1m x 2m x 1m). These trenches would be within the footprint of the proposed artefact store (Fig 5).

KEM proposed that the artefact building be erected on eight concrete pad footings (each 1m x 1m x 1m), the floor constructed as a concrete slab (min 0.5m thick), and the surrounding area cleared from between 0.15m to 0.6m in depth (JSJ Design 2013). An evaluation excavation was carried out on the proposed site of the artefact store in October 2013. The results indicated that no standing remains were present within the footprint of the proposed building. However, given that the foundation excavations would be deeper than the evaluation excavation Colin Buck advised that archaeological recording during the foundation excavations would be necessary. This recommendation was agreed by Phil Markham (11/11/2013). Under archaeological supervision, excavations for the foundation pads of the artefact store were started in March 2014. In total eleven foundation pits measuring approximately 1.2m x 0.6m x 0.9m were excavated within the footprint of the new building.

The site archaeologist was Ryan Smith and project manager, Colin Buck.

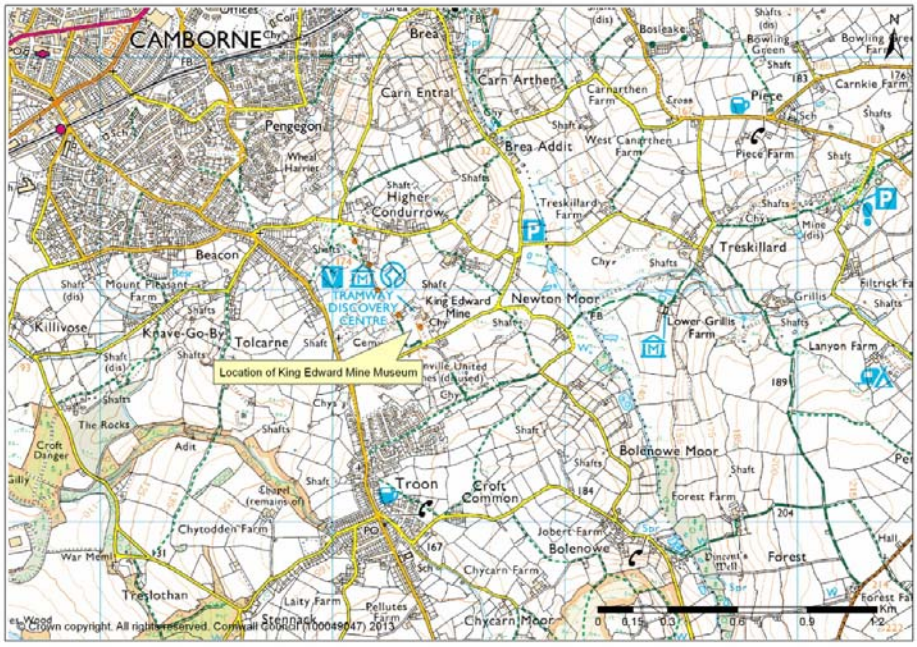

Figure 1: Location of site

Site history

Historical mapping (Camborne Tithe Map *c*1840) (Fig 2) shows the land now occupied by the mine as being a croft (entry 2817), owned by Elizabeth Prideaux (Cornwall Record Office 2013).

Following the establishment of Camborne Mining School in the late 1880s, the eastern section of South Condurrow Mine (1864-1896) was leased from the Pendarves Estate and renamed King Edward Mine (KEM) in 1901. Three years later after the mine was equipped with new surface machinery, buildings and a new Mill, it was successfully operating as a training facility (above and below ground) for students of Camborne School of Mines, the main practical mine training school in the country.

King Edward Mine is now the oldest complete mine site left in Cornwall. The entire site contains a number of buildings, many grouped into larger complexes; for example the Count House, Assay Office and Carpenters' Shop complexes (all these are unoccupied and deteriorating), and the hugely significant Mill complex. All of the main buildings on the site are Grade II* Listed due to their individual or group value, with the exception of South Condurrow Stamps Engine House, which is Grade II. Of special significance to this site is the rare survival of collections of original mine machinery, rare milling equipment and smaller steam engines. It is also a museum for the Trevithick Society's collection of mining machinery, some of which are the only remaining examples in the world. The entire CMP area is within the Cornish Mining World Heritage Site (WHS). KEM has Outstanding Universal Value as the best preserved mine head complex within the WHS for the 1700 – 1914 period for which the WHS was inscribed by UNESCO. The museum receives an annual grant from Cornwall Council.

The King Edward Mine Conservation Management Plan (Buck 2013, Fig 13 Sites 49 and 51), indicates that the proposed location of the artefact store has been identified as formerly siting a large mid/late 20th century dressing floor and buddles south of the South Condurrow Mine Stamps engine house (visible on the Ordnance Survey plan of 1879, Fig 3). The site is now a grass field and all features of the dressing floor have now gone, leaving no visible trace of their existence.

Aims and objectives

The aims of the project were:

- To ensure that the site works associated with the development are carried out in such a way as to allow adequate recording.
- To record archaeological features and deposits affected by the scheme.
- To recover and record artefacts uncovered by the works.
- To disseminate the results of discoveries appropriately.

Working methods

Fieldwork

All archaeological fieldwork undertaken for this project followed the professional IfA working methods as outlined in the WSI (Appendix 2).

The archaeological fieldwork was undertaken in 2013 as an 'archaeological evaluation' with the material being stripped to a depth of 1m under archaeological supervision. The excavation of the site involved the use of a 1.5 tonne wheeled excavator fitted with a 1.5m toothless bucket, excavating three pits measuring approximately 2m square and 1m in depth. The purpose of these pits was to evaluate the potential for any standing remains to be present within the upper surface of the known mine waste.

In March 2014 as a result of the archaeological evaluation carried out in 2013, an 'archaeological watching brief' was undertaken, with eleven pits excavated under archaeological supervision within the footprint of the proposed artefact store. Excavation of the site involved a 3 tonne excavator fitted with a 0.6m wide toothed bucket to a

depth not exceeding 0.9m. Digital images were recorded and information noted of the pits contents (which confirmed the findings of the evaluation excavation of October 2013).

Results

Evaluation report: (25th October 2013, Figs 5-8)

The excavation took place in an area of grassland south west to the museum buildings, (SW 66328 38839). The surface of the field was comprised of field grass and clumps of wetland grasses, the area exhibiting a lot of surface water, pooling in various locations within the area.

All trenches, although varied in their content, exhibited what appeared to be material dumped, spread and re-deposited from previous ground works and activities within the site. However, at a depth of 1m, none of the trenches appeared to reach the natural.

The results from the evaluation trenching are presented in appendix one by the order in which they were excavated. Trenches 1-3 (Figs 6-11) were excavated to an area of 2 x 2 x 1 m, trench 4 the area of the soakaway was excavated to 2m x 1m x 1m. Full descriptions of the soils are given in Appendix 1.

Trench 1 (Figs 6 & 7) Located in the south corner of the excavation area, the soil profile of the trench was varied. The south west section was recorded as it produced the most contexts of interest. After the removal of topsoil all trenches produced large granite stones within their fills, accompanied by debris, comprised of various sized stones, gravels and sands. This material was very loose, and collapsed during the recording of this section.

Topsoil was a mid to dark brown loamy material topped with field grass. Topsoil was no more than 0.1m in depth (context 100), and was immediately on top of a sandy gravel type material, grey in colour with large stones (possibly granite) as inclusions (102); the stones were not formed into any recognisable features. This material was above what appeared to be the remains of a tip (104), and appeared to comprise waste material which had been dumped, and was adjacent to (103); a black lens of sandy deposit with no stone inclusions which appeared to be waste material. Contexts (105) and (106) were variations of this material and again appear to have been dumped *in situ*. No artefacts or features or archaeological significance were recovered from the trench.

Trench 2 (Figs 8 & 9) Located in the middle of the building footprint, trench 2 again produced large stones from the second fill. The topsoil was no more than 0.1m in depth, this sat directly onto a light to mid grey clay mix of shillet type material similar to (104). The material was extremely wet to the touch, but solid to the trowel.

Trench 3 (Figs 10 & 11)

Located in the north part of the excavation area, this trench revealed a similar fill to the previous two trenches; the irregularity of the materials would indicate an area of dumping. The grey material observed (301) appeared similar to mine dressing waste from a buddle, which has been separated from the finer materials as part of the refining process. The compactness of the deposit would imply deliberate dumping and not deposition through normal industrial methods, the lack of banding within the section wall would confirm this supposition.

During excavation by the digger, large stones which appeared to be granite were removed. No artefacts were recovered. **Trench 4**

Due to the instability of trench 4, a section drawing was not made, although a description recorded, this was to be the area of the soakaway for the associated building.

Archaeological Watching Brief (17 March 2014, Figs 12-16)

In total eleven pits were excavated within the footprint of the artefact store, each pit measured approximately 1.2 metres long, 0.6m wide, and no more than 0.9m deep. The depth of the pits was determined by the level of the site and the condition of the strata beneath the proposed foundations of the building.

The topsoil appeared to consist of a mid brown clay loam (100) with common stone inclusions, the stones were a mixture of igneous and sedimentary materials, interspersed with modern pottery and material from modern waste. The depth of topsoil was no more than 0.2m, and the area was reasonably level.

The solidity of the surface material varied, but in all cases large granite stones were present and a mix of compressed materials consistent with those reported in the evaluation section of this report (see above). The description of the pit contexts is designed to highlight the frequency and similarity of the various deposits within the pits showing the consistency of the material throughout the area excavated.

Pit 1. Contained large granite stones and a mixture of typical waste material associated with the dumping of waste across this former dressing floor. The surface material consisted of large granite and other stones, more than 0.2m in size. The matrix of the fill material was a mix of sandy and solid grey/brown material. The lower context was a solid grey clay mix containing varying sizes of stones and other material. These materials are similar in all respects to (102).

Pit 2.(Fig 10) This included a dark brown/grey layer (see 105), very solid in appearance with a mixture of waste materials comprising a compact sand, but there were fewer larger stones present, although this pit was part of evaluation test pit (1), excavated last year.

Pit 3. The surface material was a stony and gravel layer, unsorted but varying in size, a layer of clinker type deposit was present within 0.3m of the surface, again this section was similar to that seen in the 2013 evaluation pits (103) and (105). The base layer included a compact dark grey clay, which was difficult to excavate. The section revealed more large stones and waste material within the upper fill of the pit, which was mixed with a deposit of black clinker (similar to trench 1). All of these fills overlay the grey clay, which was compact and difficult to excavate (see (201) in trench 2).

Pit 4. The surface material was the same as in pit 3 but with fewer larger stones. There appeared to be a finer silty layer mixed with clay and some large stones, the colour of this deposit was a dark grey and brown, with some lighter patches. The secondary material was a mixture of the solid grey material mixed with more ferrous appearing deposits of material (see (201)), all of which is solid and difficult to excavate, the larger stones were fewer in number and density.

Pit 5. North west corner of the building footprint, contained large stones within the lower fill of the pit, area of the upper fill contained the brown sandier deposit which again was solid. The lower area of the pit contained the compact grey clay type layer (see (201)).

Pit 6.(Fig 11) Surface material appeared to be a grey sandy material with a mixture of clays and more waste material, very compact in appearance and difficult to excavate with the machine (see 201), some large stones, possibly granite unsorted, but compacted *in situ*. Lower layer was a dark brown deposit slightly easier to excavate, more of a sandy texture, but still compact, some smaller stone inclusions, appeared to have retained some moisture (see (301)).

Pit 7.(Fig 12) Upper surface material comprised of the pale grey clay (see 102) type material, very compacted and blended with other materials from within the local waste. This layer appeared to continue to the base of the pit.

Pit 8. North east corner of the building footprint, softer, dark organic appearing layer, similar to that recorded in the 2013 evaluation pit. More sands and again mine waste apparent within the mix of the materials. Clay deposits and modern rubbish were recorded along with organic materials, possibly as a result of surface roots.

Pit 9.(Fig 13) The material in this pit was similar in appearance to the contents of pit 8. Stony gravel matrix, very compact, re-deposited waste material from the area (201), some large stones present when excavated. The surface material comprised loose stones, within a matrix of stones and coarse sandy material, the base layer was the dark grey/brown compact clays which also proved difficult to excavate.

Pit 10. More organic in appearance (similar to (105)), some very large stones possibly remnants from a demolished building were present, but no cut or indications of construction or foundation were evident within the section.

Pit 11. Similar in appearance to pit 1, the surface material was a grey coarse sandy deposit (see 301) with some large stones present, although of note was the presence of a mid to dark brown more organic looking material, possible, which appeared to be natural, but could have been as a result of the dumping within the site, appeared to be more clay in constancy than a loam, some stone inclusions were present but were irregular in shape and unsorted. Base of trench contained a red brown organic appearing material although was more attributable to mine waste (see (304)).

Conclusion

Evaluation

All trenches, although varied in their content, exhibited what appeared to be material dumped from previous groundworks and demolition activities for some time across the site. At a depth of 1m, none of the trenches appeared to reach the natural. The test trenching carried out revealed no buildings nor remnants of any constructs *in situ*, although the larger stones revealed during the excavation were typical of material from a large building and would not go amiss in the walls of the engine house north of the site..

The recorded layers were different in each of the trenches and appeared typical of deposits having been dumped over a period of time and probably during a period of levelling at some time in the past.

Watching brief

The excavation of the eleven pits by the excavator proved to be a difficult task for the three tonne excavator. The solidity of the ground and the matrix of the materials encountered (which were almost akin to concrete in places), and the number of large stones removed from the pits, were similar to the evaluation results; both indicative of the demolition remnants of a building or construct within the vicinity of the site. Perhaps considering its past history and the number of building remains within the immediate vicinity, this was to be expected. The black clinker material was consistent with the former site of a calciner in close proximity, this being probable waste material dumped into the surrounding area, and subsequently levelled as the usage of the site changed.

The appearance of possible soil in the south east corner of the site was interesting, but again may be as a result of re-deposited material from previous interference of the site when remodelling its interior. The height of the field above the local roadway appears to be nearly 2m and would imply an artificially raised platform.

Any archaeological standing remains within the site would in all probability be at least 2m below the present ground level, any interference by the present construction of this buildings or other with reasonably shallow foundations would be at most minimal .

References

Primary Sources

Ordnance Survey, *c*1880. 25 Inch Map First Edition (licensed digital copy at HE)

Ordnance Survey, *c*1907. 25 Inch Map Second Edition (licensed digital copy at HE)

Ordnance Survey, 2007. Mastermap Digital Mapping

Tithe Map and Apportionment, 1841. Parish of Camborne (licensed digital copy at HE)

Publications

Buck, C 2013. *King Edward Mine Conservation Plan*. Historic Environment, Cornwall Council.

JSJ Design and Engineering 2013, *Ground floor plan showing ground floor construction and foundations under*, electronic copy

Web Site

http://www.heritagegateway.org.uk/gateway/English Heritage's online database of Sites and Monuments Records, and Listed Buildings

http://mapping.cornwall.gov.uk/website/ccmap/ Cornwall Council online mapping web site, includes Historical information relating to archaeological features

Project archive

The HE project number is **146315**

The project's documentary, photographic and drawn archive is housed at the offices of Historic Environment, Cornwall Council, Fal Building, County Hall, Treyew Road, Truro, TR1 3AY. The contents of this archive are as listed below:

1. A project file containing site records and notes, project correspondence and administration.
2. Field plans and copies of historic maps stored in an A2-size plastic envelope (GRE 810/1-3).
3. Digital images stored in the directory ..\Historic Environment (Images)\SITES.I-L\King Edward Mine WB 146315
4. Electronic drawings stored in the directory ..\Historic Environment (CAD)\CAD Archive\Sites K\King Edward Mine\KEM Evaluation 2013
5. English Heritage/ADS OASIS online reference: cornwall2-175993

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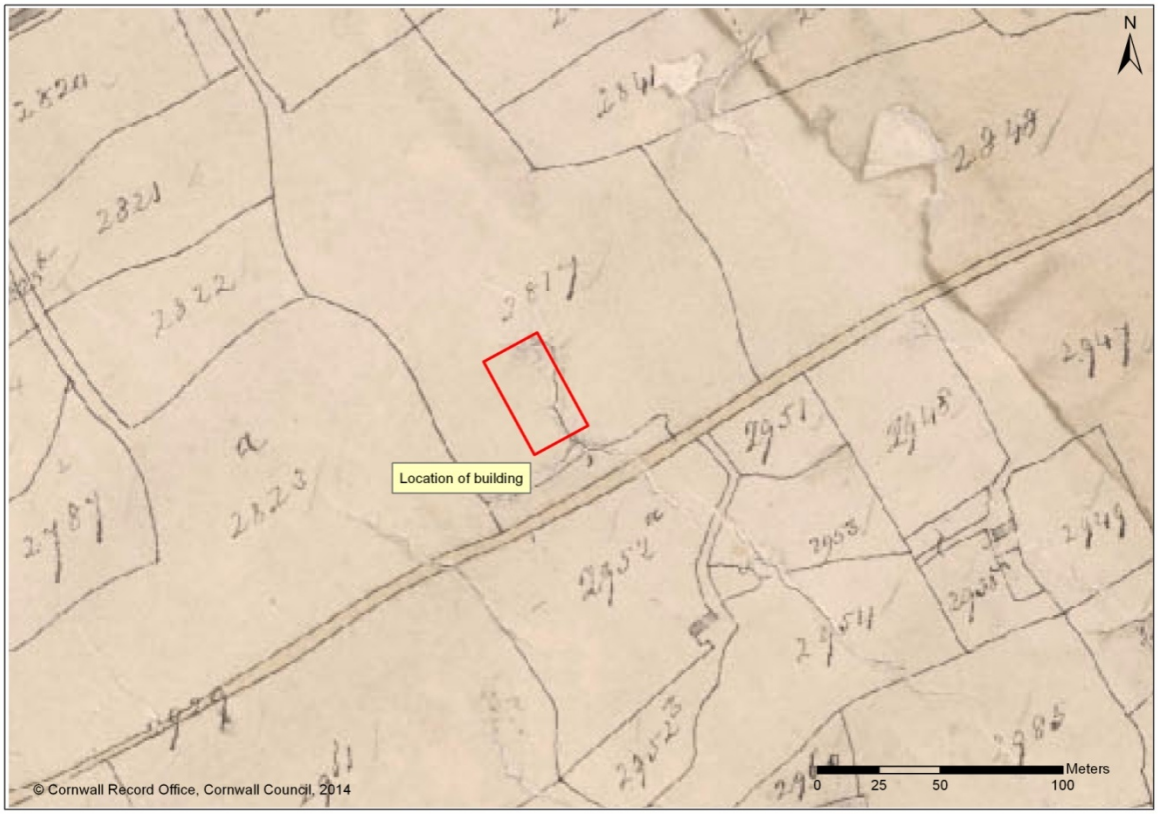

Figure 2: Tithe map of Camborne c1841 showing location of site.

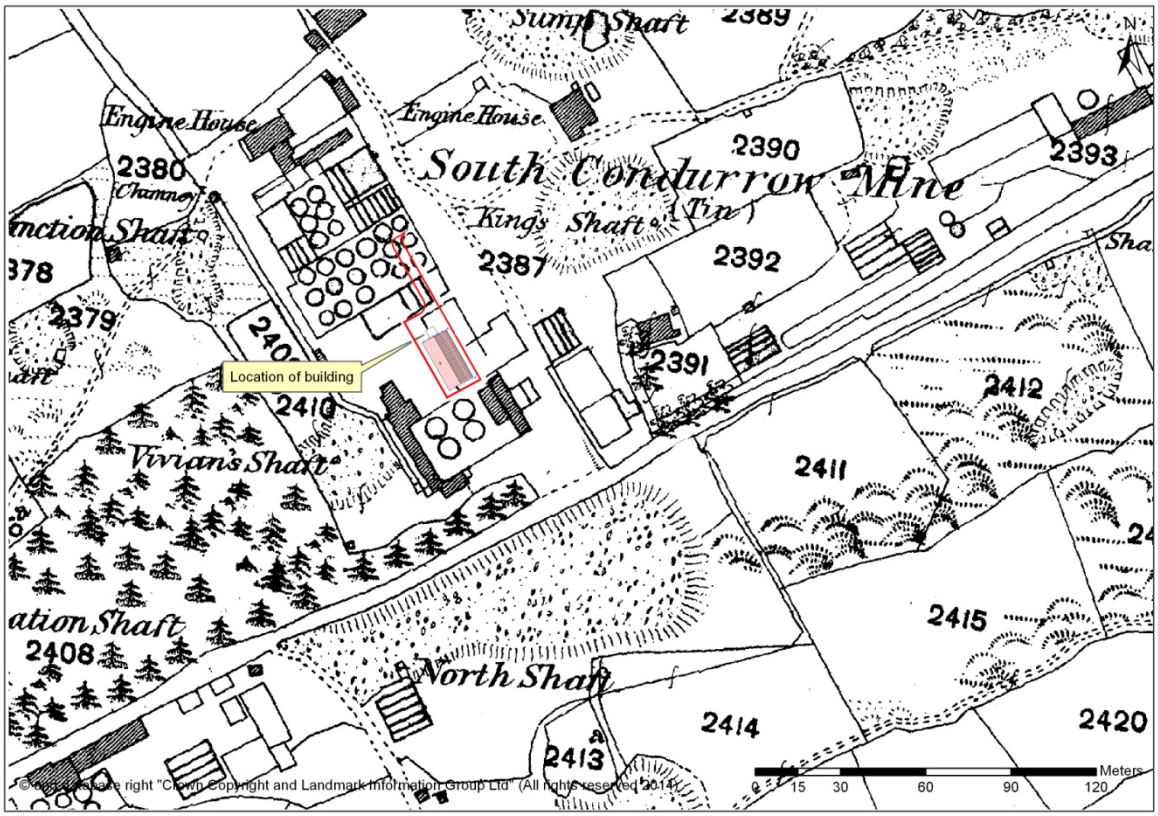

Figure 3: 1877 Ordnance Survey map 1st edition showing proposed location of artefact store and buddles.

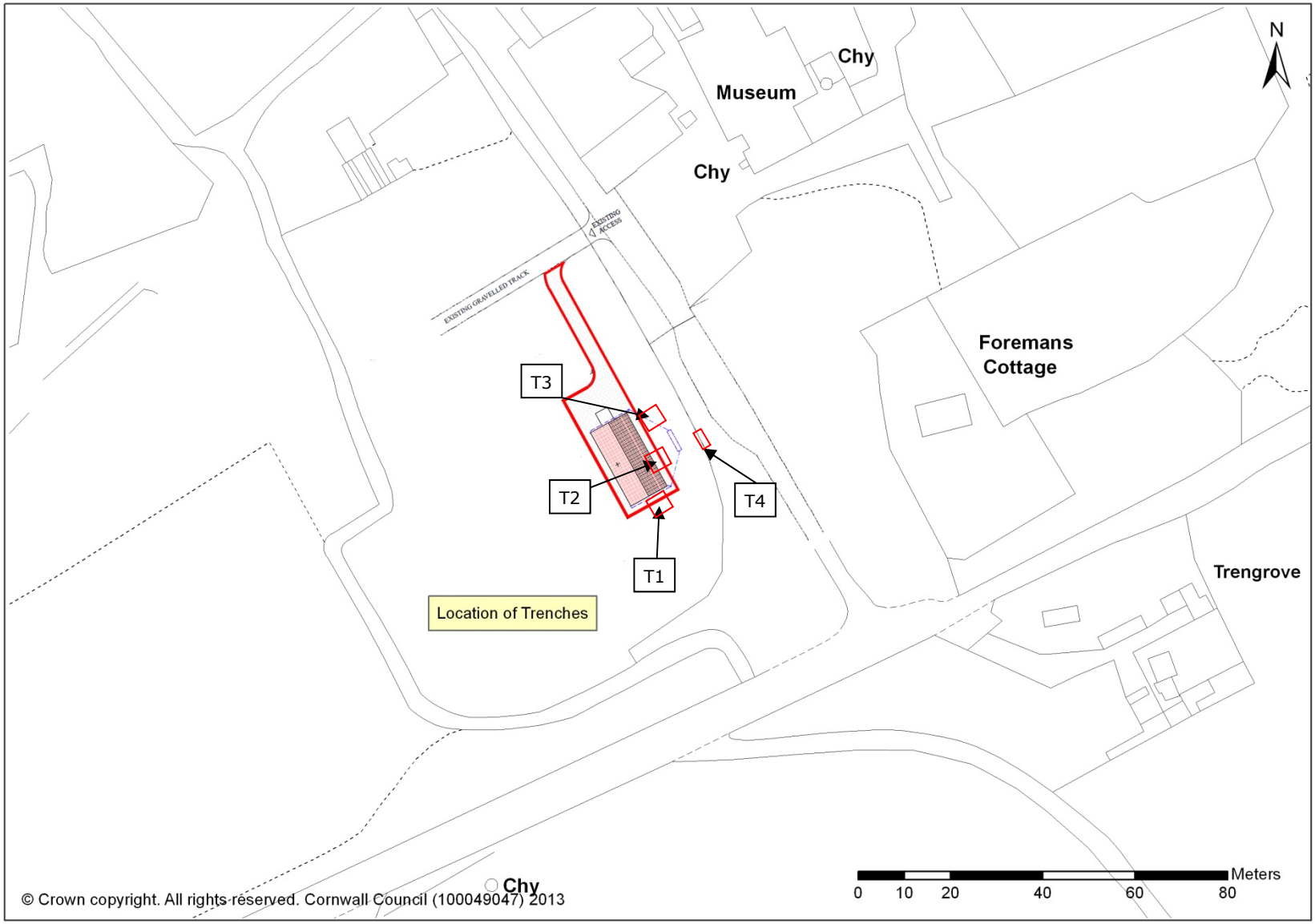

Figure 4: Location of evaluation trenches

Figure 5: South west facing section of trench 1 located in the corner of excavation.

Figure 6: South west facing section of trench 2.

Figure 8: South facing section of trench 3.

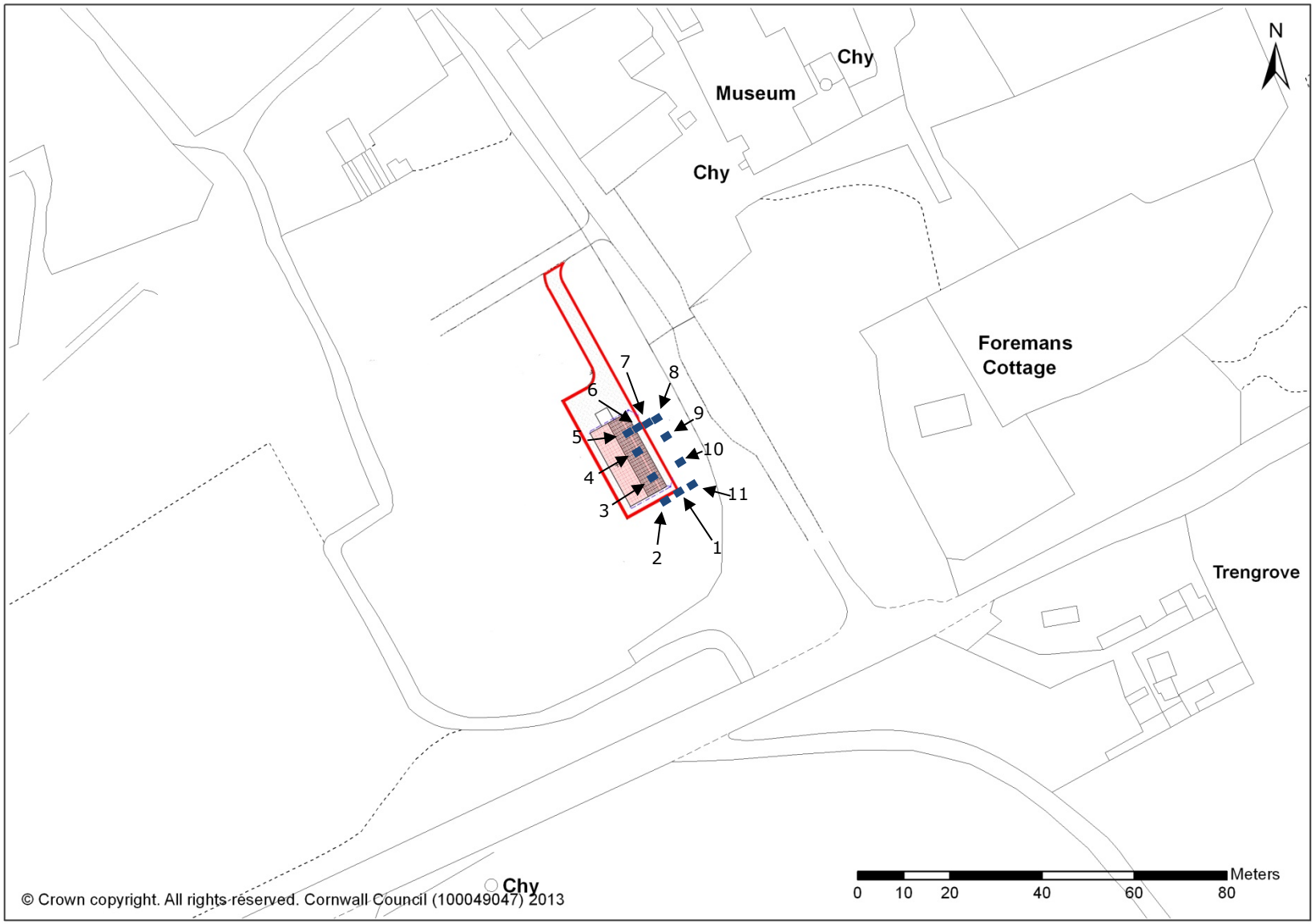

Figure 9: Location of foundation pits.

Figure 10: North west facing section pit 2

Figure 11: North west facing section pit 6

Figure 12: North west facing section pit 7

Figure 13: North west facing section pit 9

Appendix 1 Table of Contexts

Context No	Description & Interpretation	Depth (if app)
(100)	Topsoil, mid to dark brown loamy material with grass topping, some stone inclusions, small, sparse, irregular shapes <3mm in size.	<0.10m
(101)	Not this section	
(102)	Pale grey sandy gravel material with large stone inclusions, sparse large mixture of regular and irregular shapes probably old building stone, granite? At over 0.4m in size, the material could be demolition rubble.	
(103)	Black lens of coarse sandy material, no stone inclusions, appears to be waste material, possibly been subjected to heat.	
(104)	Mid brown to grey in colour, compacted and solid to the touch.	
(105)	Silty black/brown material, with some stone inclusions, rare small unsorted <2mm in size. Lens of material was less than 0.07m in thickness.	
(106)	Appears to be similar material as (103).	
(200)	Topsoil, mid to dark brown loamy material with grass topping, some stone inclusions, small, sparse, irregular shapes <3mm in size.	<0.10m
(201)	Light to mid grey material, solid to the touch, moisture content was high, but no indication of instability within the material when excavated. Contained large stones in the upper layers when removed by machine, but none present in the section. Smaller stones were present as part of the material, irregular shapes, unsorted, <0.3m in size.	
(300)	Topsoil, mid to dark brown loamy material with grass topping, some stone inclusions, small, sparse, irregular shapes <3mm in size.	<0.10m
(301)	Grey, sandy material very friable, small particulates, very wet, some stones, <3cm, unsorted, irregular shapes, very similar in appearance to material from the upper areas of a buddle (separated during initial process of removal). Although material when removed by machine appeared solid when struck by the bucket, it was only on deposit by the bucket that this material appeared more friable.	
(302)	Solid pinkish coloured material with various greys and browns in the mix, very compact to the touch, possible demolition material.	

(303)	Dark grey sandy material, some silt within its matrix, sparse stone inclusions, small, irregular shapes, unsorted.	
(304)	Reddish brown band of material, possible result of water percolating through the upper material and depositing ferrous material within this area.	

Appendix 2.
Historic Environment Projects, Cornwall Council

King Edward Mine artefact store: Written Scheme of Investigation for archaeological watching brief

Client: Trevor Humphreys Associates on behalf of Cornwall Council

Client contact: Tamsin Daniel

Client tel: 01872 326818

Client email: tamsin.daniel@cornwall.gov.uk

Project background

Historic Environment Projects team have been requested by Trevor Humphreys Associates on behalf of Tamsin Daniel, Cornwall Council to provide a written scheme of investigation (WSI) and estimate for a programme of archaeological investigation and watching brief during groundworks for the construction of new artefact store at King Edward Mine Complex Newton Moor, Troon Camborne Cornwall, TR14 9HW (Planning Application PA13/07587).

This Written Scheme of Investigation has been guided by discussions between the Historic Environment Planning Advice Officer (HEPAO) and Colin Buck, Senior Archaeologist Historic Environment (Projects), Cornwall Council.

The HEPAO requires that archaeological investigation is undertaken prior to construction and 'watching brief' carried out during the initial development phase. No demolition/development shall take place/commence until a programme of archaeological work including a Written Scheme of Investigation has been submitted to and approved by the local planning authority in writing.

The applicant, their agents and any subcontractors should note that where there are other conditions requiring satisfaction in advance of the commencement of works on site; it is the responsibility of the applicant to liaise with the planning officer concerned to ensure that the timetabling of these works is managed.

Site history

King Edward Mine is an important element of the Camborne and Redruth Mining District of the Mining World Heritage Site.

The Cornwall and isles of Scilly HER includes the following for this site:

King Edward Mine was part of South Condurrow and was given to the Camborne School of Mines in 1897. It now comprises a museum containing various kinds of dressing equipment which may be seen at the mine's surface. All of the buildings, count house and attached blacksmiths workshop, dry house and attached carpenter's shop, timber cutting building and office, stamps engine house and attached stamps together with dressing plant, assay office, calciner, survey office

are all grade II Listed with the ruined engine house to the SW being grade II Listed.*

The King Edward Mine Conservation Management Plan (Buck 2013) indicates that the proposed location of the artefact store has been identified as a large dressing floor and buddles (Site 46) south of the South Condurrow Mine Stamps engine house (Site 44) and visible on the Ordnance Survey plan of 1879. The site is now a grass field and all features of the dressing floor have now gone, leaving no visible trace of their existence.

Project extent

The initial site investigation will comprise the machine excavation of two trenches measuring 2m x 2m, 1m deep located diagonally across the proposed footprint of the new building. A HE Projects archaeologists will monitor the excavation of these trenches and record any archaeological deposits present.

The subsequent watching brief will involve the inspection by a HE Projects archaeologists of pad footings, foundation slab, associated soakaways and service trenches.

Aims and objectives

The development area has the potential to contain important buried archaeological features associated with historic mining. The archaeological investigation of this area therefore provides an opportunity to better understand the character and potential of this resource by recording sites and features affected by it.

To ensure that the site works associated with the development are carried out in such a way as to allow adequate recording.

To record archaeological features and deposits affected by the scheme.

To recover and record artefacts uncovered by the works.

To disseminate the results of discoveries appropriately.

Key objectives are:

To locate and record any archaeological deposits within the area of the development.

Working methods

The archaeological programme will follow six stages: preparation, fieldwork; archiving; assessment; analysis; report (although stages subsequent to fieldwork will be reviewed in the light of fieldwork results).

Preparation

Prior to undertaking the fieldwork the project officer will familiarize themselves with the archaeological potential of the area. This will involve the reading of pertinent data held in the HER.

Discussions regarding the work have already taken place between Colin Buck, Senior Archaeologist HE Projects and the client to discuss:

Health and Safety arrangements.

Working methods across the development area and programme.

Fieldwork

Archaeological recording will comprise initial investigation and then monitoring (watching brief) during machine excavation of foundations or other groundworks. **NB Costs submitted to the client by Colin Buck (Senior Archaeologist HE Projects) assume provision of ground excavation plant by the client.**

Archaeological monitoring/watching brief

Works associated with the development may disturb archaeological evidence. It is therefore important that a suitably qualified archaeologist is available during these works in order to identify and record any features of interest.

The site specific aims are to:

Record and archaeological/architectural features which are uncovered

Determine the extent, condition, nature, character, date and significance of any archaeological/architectural features encountered

Excavation should be carried out under archaeological supervision using a machine fitted with a toothless bucket. The soil will be stripped cleanly to a level at which archaeological features or layers can be expected to be revealed (ie, top of the "natural subsoil"). Machines will not run over any stripped areas/trenches and contractors will not enter or work within stripped areas/trenches until recorded by the archaeologist.

Where significant remains are encountered the site archaeologist will be given the opportunity to make an appropriate record before work proceeds; where a temporary stop of work is required the site archaeologist will request this via the resident engineer/site manager.

If archaeological deposits of regional or national importance are uncovered, then a contingency should be allowed within the construction programme to review options to ensure their preservation *in situ.* In the event that remains cannot be preserved *in situ* then full-scale excavation may be required. The significance of the remains should be agreed between the archaeologist and the HEPAO.

Excavation

Excavations will only take place where the development will lead to the removal of complex or extensive archaeological remains. Following the excavation of foundation slab/pads/trenches/service trenches the site archaeologist in consultation with the HEPAO will decide where full-scale excavation is required.

Where complex/extensive remains are encountered the site archaeologist will be given the opportunity to make an appropriate record before work proceeds; a programme to achieve this will be agreed with the Contractor.

Recording - general

Site drawings (plans, sections, locations of finds) will be made by pencil (4H) on drafting film; all plans will be linked to the Ordnance Survey landline map; all drawings will include standard information: site details, personnel, date, scale, north-point

All features and finds will be accurately located at an appropriate scale.

All archaeological contexts will be described to a standard format linked to a continuous numbering sequence.

Photography: in the event of the discovery of significant archaeological deposits/structures scaled monochrome photography will be used, otherwise digital images will be used as the principal record and for illustrative purposes. A photographic scale will be used and a north arrow included as appropriate. A photographic register will be kept, giving feature number, location and direction of shot.

A location plan will be made linking the site with features that have been mapped by the Ordnance Survey.

The heights of all features will be tied into the Ordnance Datum.

Phased plans and sections at a scale of 1:10 and 1:20 will be made of all excavated features.

Sealed/undisturbed archaeological contexts in the form of buried soils, layers or deposits within cut features (ditches and pits, etc) will be sampled for environmental evidence and dating material. Advice may be needed from Vanessa Straker (Regional Advisor for Archaeological Science).

The spoil from the controlled stripping will be adequately inspected for finds.

Treatment of finds

The fieldwork has the potential to produce artefactual/environmental material.

Any significant stratified contexts (eg, settlement features) should be plotted on a scaled base plan and described. Post-medieval or modern finds may be disposed of at the cataloguing stage. This process will be reviewed ahead of its implementation.

All appropriate finds will be collected in sealable plastic bags which will be labelled immediately with the context number or other identifier.

Significant, sealed archaeological contexts will be considered for sampling for environmental material and the strategy will be discussed with the project manager. All recovered samples will be evaluated at the assessment stage and some may be disposed of. Only flots will be retained for inclusion within the project archive.

POST FIELDWORK STAGES

(to be reviewed in light of fieldwork)

Archiving

Following review with the HE Project Manager, the results from the fieldwork will be collated as an archive. This will involve washing and cataloguing of finds, the indexing and cross-referencing of photographs, drawings and context records. Initial processing of any palaeoenvironmental samples will be undertaken. This will involve flotation of bulk samples to recover plant macrofossils and other remains.

All finds and samples, etc will be stored in a proper manner (being clearly labelled and marked and stored according to HE guidelines).

All records (context sheets, photographs, etc) will be ordered, catalogued and stored in an appropriate manner (according to HE guidelines).

A summary of the results will be presented to the Historic Environment Planning Advice Officer.

The site archive and finds will initially be stored at HE premises and transferred to the Royal Cornwall Museum and the RCM conditions for archives will be followed.

The RCM will be notified of the commencement of the project and included in discussions for sampling and disposal as appropriate.

Archive report

The results from the archaeological fieldwork will be presented in a concise archive report. Copies of the report will be distributed to the Client, the County Archaeologist and the main archaeological and local record libraries.

This will involve:

producing a descriptive text;

producing maps and line drawings;

selecting photographs;

report design;

report editing;

dissemination of the finished report

deposition of archive and finds in the Royal Cornwall Museum, Truro

An OASIS record will be completed for the project

The archive report will have the following contents:

Summary

Introduction	-	background, objectives, methods
Results	-	factual description of the results of the various aspects of the project, with separate sections as necessary for discussion/interpretation
Discussion	-	discussion of the interpretation of the results, highlighting information gained on a chronological or thematic basis
Archive	-	a brief summary and index to the project archive
Illustrations	-	general location plan
	-	detailed location plans to link fieldwork results to OS map
	-	selected plans and section drawings (as appropriate)
	-	finds drawings (if appropriate)
	-	photographs (if appropriate)

Assessment/analysis

On completion of the archive report an assessment stage will be carried out. This will involve assessment of structural and stratigraphic data and artefactual material, etc. The outline of the assessment report, and the work required to produce it will also be determined.

Liaise with specialists (environmental samples, radiocarbon dating and artefacts, etc) to arrange for assessment of the potential for further analysis and reporting.

Send off artefacts (ceramics, etc) to the appropriate specialist for further study.

Send off residues from residues from environmental samples to appropriate specialists.

Sort out and send off suitable material for radiocarbon dating.

Project design for further analyses and publication.

Academic/Final publication

In the event of significant remains being discovered there may be a further stage of analyses leading to formal publication. This will involve the analysis of structural and stratigraphic data, artefacts, and environmental samples to be governed by an updated project design agreed with the Historic Environment Advice Officer. The scope and final form of the report will be reviewed; for example in addition to an archive report the results should be published in an academic journal (eg, *Cornish Archaeology*) and would include:

Discussion of the significance of the results in relation to Local, Regional and National research objectives.

A synthesis of the results from the earlier evaluations will be incorporated into any final publication.

Project staff

An experienced archaeologist employed by HE Projects will carry out the archaeological fieldwork under the supervision of a project manager.

The report will be compiled by experienced archaeologist(s) employed by HE Projects.

If appropriate relevant experienced and qualified specialists will be employed to undertake appropriate tasks during the assessment and analysis stages of the project.

The project will be managed by a member of staff who is a member of the Institute of Field Archaeologists, or the equivalent standard, who will:

Take responsibility for the overall direction of the project.

Discuss and agree the objectives and programme of each stage of the project with project staff, including arrangements for Health and Safety.

Monitor progress and results for each stage.

Edit the project 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

Timetable

The archiving and archive report will be completed within 12 months of the ending of the excavations. The timetable for further stages of assessment, analyses and publication will be agreed with Historic Environment Planning Advice Officer in the light of the results of the excavations.

Health and safety during the fieldwork

Health and safety statement

The Historic Environment is within the Environment Planning and Economy Department of Cornwall Council. HE Projects follows the Council's *Statement of Safety Policy*.

Prior to carrying out any fieldwork HE Projects will carry out a risk assessment. A Health and Safety plan will be produced if excavations are required

Copyright

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

Use of the material will be granted to the client.

Insurance

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

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 staff

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.

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.

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.

NOTES:

HE Projects will require 2 weeks notification before commencing the fieldwork project.

The area of the archaeological investigation will be agreed in advance of the project with the client and the Historic Environment Planning Advice Officer, and this will be marked out on the ground by the client in advance of the archaeological fieldwork.

Historic Environment Projects staff will not be responsible for the direction of Plant other than to ensure the level of the soil stripping is adequate. Historic Environment staff will not operate any machinery.

The costs of plant hire are not included in this project and estimate. This project design and estimate does not include the costs of site accommodation, or toilets, etc. If these are required the estimate will be revised.

The Historic Environment Projects will not be responsible for reinstating the ground after excavations or making it safe.

It is intended that the programme for archiving, assessment, analysis and reporting is reviewed in the light of the fieldwork results.

James Gossip 12/10/13

Historic Environment Projects

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