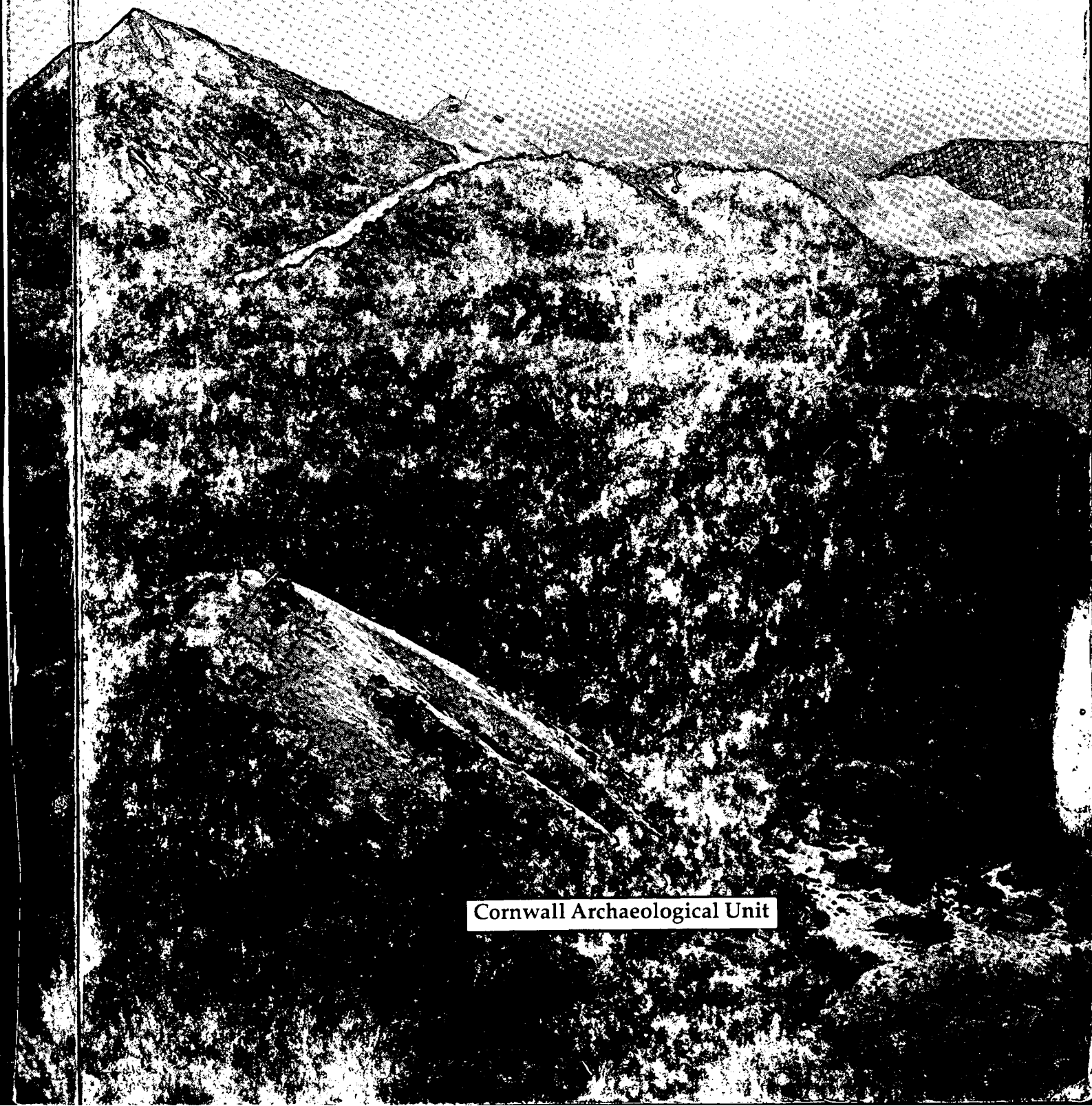
The Archaeology of the St. Austell China-Clay Area



Cornwall Archaeological Unit

The Archaeology of the St. Austell China-Clay Area

An Archaeological and Historical Assessment

Peter Herring
John R. Smith

Sponsored by:
English Heritage & English China-Clay International Ltd

Cornwall Archaeological Unit

Cornwall Archaeological Unit
Planning Department
Cornwall County Council
Old County Hall
Station Road
Truro
Cornwall TR1 3EX

ISBN 1 871162 61 0

CORNWALL
COUNTY COUNCIL

092-D-CAU-CLAYSURV-1091-KK

FOREWORD

The china-clay industry's long-term strategy in the St Austell China Clay District entails the loss, over the next 60 years, of 70 square kilometres of historic landscape within the Winning and Working Area; 30 square kilometres have already gone. This report, incorporating the results of a reconnaissance survey and an assessment of the area's archaeological and historical importance, presents the proposals of the Cornwall Archaeological Unit for the preservation and recording of the area's archaeological heritage.

The report recognises the importance of the china-clay industry within the county's economy, and notes the extensive protection and encouragement given to the industry by the planning authorities involved (see section 5.2.3). It also recognises that the china-clay companies have increasingly attempted to safeguard and improve certain aspects of the environment of the area.

By endorsing the CBI sponsored Code of Practice for Mineral Operators, the China-Clay Association has recognised the importance of archaeological remains. Their importance has also been stressed by the Secretary of State for the Environment in a recent Planning Policy Guidance document (PPG16).

The report outlines four objectives for the future of the China-Clay Area:

* to ensure that the archaeological resources of the area have been fully identified;

* to ensure that important archaeological sites and areas are preserved for posterity;

* to ensure that an adequate record (excavation, survey, photography etc) of a site or area is made whenever preservation is not possible;

* to ensure that information on the area's historic heritage is made more widely available to the general public.

To achieve these objectives it will be necessary to discuss with the industry the following:

* agreement on those sites and areas to be preserved (see section 5.3 and appendix 6.6). This must be regarded as a priority in the light of the huge areas now being lost.

* agreement on the procedures for, and the funding of, recording of those sites affected by the short and long term plans which cannot be preserved (see sections 5.4 and 5.5)

Such agreements will form the basis of a new, positive relationship between china-clay and archaeology, which would leave both parties satisfied that the archaeological sites in this historically important area are fully respected and recorded.

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Interleaved with the Gazetteer (end of the report) are site distribution maps.

LIST OF ABBREVIATIONS

CAU	*Cornwall Archaeological Unit*
CCRA	*Cornwall Committee for Rescue Archaeology (now CAU)*
ECCI	*English China-Clays International*
ECLP	*English Clays, Lovering and Pochin and Co*
HBMC(E)	*Historic Buildings and Monuments Commission (England)*
ICS	*Institute of Cornish Studies*
MPP	*Monument Protection Programme*
RCHM	*The Royal Commission on Historical Monuments*
SAM / SM	*Scheduled Ancient Monument / Scheduled Monument*
SMR	*Sites and Monuments Record for Cornwall and Isles of Scilly*

ACKNOWLEDGEMENTS

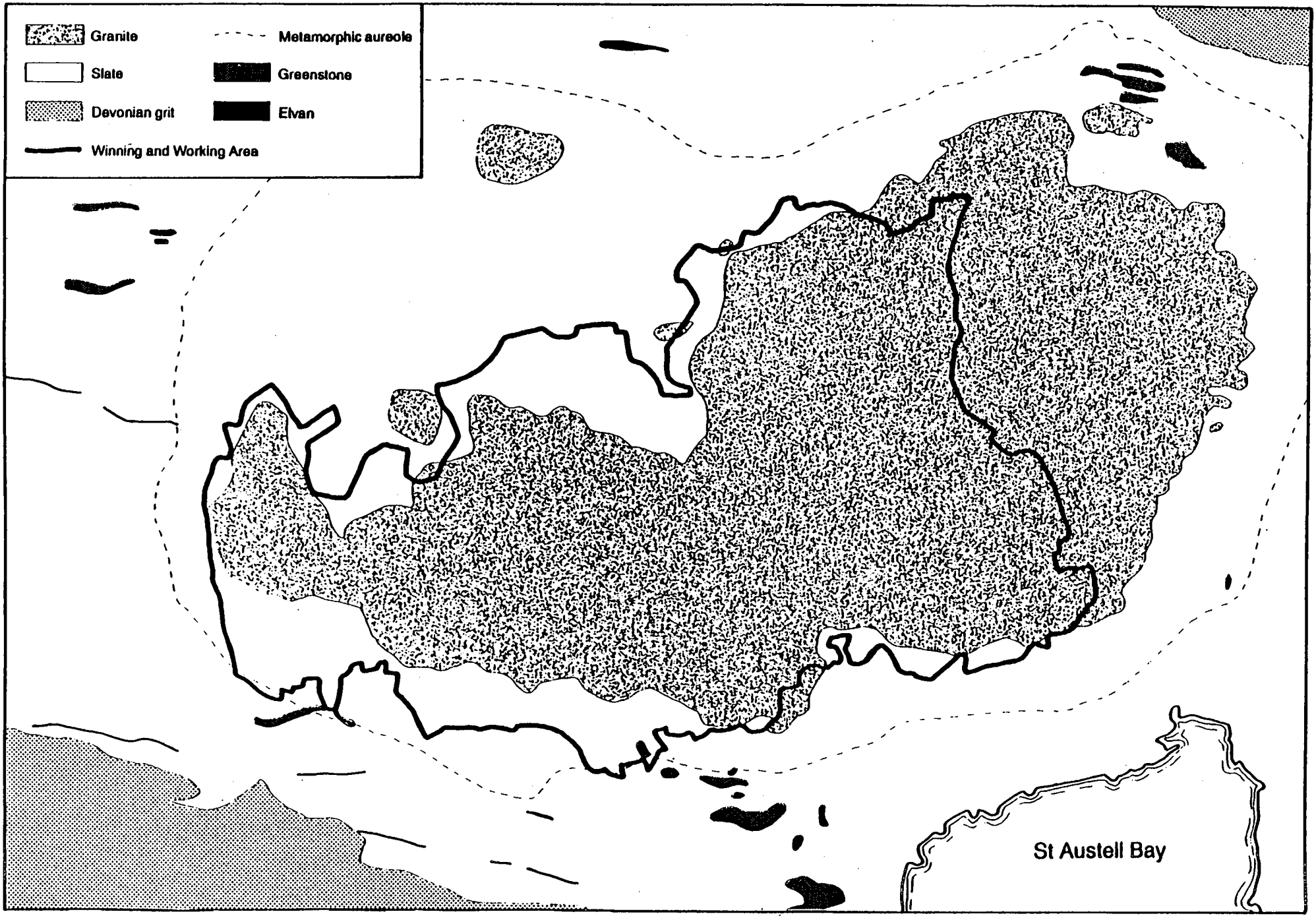
The Cornwall Archaeological Unit would like to thank the joint sponsors of this survey, English China-Clays International Ltd (ECCI) and the Historic Buildings and Monuments Commission (England) (English Heritage). ECCI provided, through George Musket, considerable help and advice including wide-ranging permissions and much essential preliminary map work. The various ECCI captain's and their staff were accommodating and helpful in the field. Thanks must also be directed to the many landowners and occupiers whose land and farms were visited, and who expressed such a keen interest in the history of their area.

The Cornwall County Record Office, the Royal Institution of Cornwall, the Redruth Local Studies Library and the Morrab Library at Penzance were hospitable and generous providers of documentary and cartographic material. The staff at Wheal Martyn Museum and Mr Bracher of Carthew provided access to archive photographs.

The report benefitted from close reading by Nicholas Johnson, County Archaeologist, and Peter Rose, Senior Field Officer of the Cornwall Archaeological Unit; section 5.2 was also read by Mark Jones, the County Minerals and Area Planning Officer. Jenny McLynn of CAU word-processed the text with great patience and skill, before Kevin Kerslake of the Technical Support Group did the layout and design for Desk-Top Publishing. Barry Mills and Paul Webber of the same department prepared the maps from material supplied by the authors.

Introduction

Map 1 Geology



1. INTRODUCTION

The Hensbarrow uplands lie north and west of St Austell in mid-Cornwall. Like the moorland areas of Bodmin Moor and West Penwith, Hensbarrow (or Blackmore as it was previously known) is a granite mass which was forced up into the overlying slate or killas when in a molten state; the slate was then eroded to expose the granite. This moor is of no great height, rising to a maximum of only 1027 feet (313m) at Hensbarrow itself, and is also relatively small in extent compared with the greater uplands of Bodmin Moor in the east of the county, and Dartmoor in Devon.

Until the late medieval period Blackmore was essentially a rural area with numerous farming hamlets on the lower ground and along the steep valley sides, with extensive and important open pastures on the higher hills. To this busy agricultural world was added in this period the major extractive industry, tinning. The Blackmore streamworks made this one of the most important of the stannaries. Unlike the tin mining areas to the west, however, the tin lodes proved poor in depth and no great mine to rival Dolcoath or Botallack was ever established. The enormous deposits of kaolin or china-clay, although known to the tinners and used by them on a local basis, were unrecognised for their own value until William Cookworthy promoted them in the late 18th century. From 1800 the steady growth in china-clay and china-stone production, at first insignificant in economic terms, made it a boom industry. By the end of the 19th century it had entirely replaced metal mining in terms of employment and production, and has continued to expand throughout the 20th century to the present day.

This success has also brought with it the metamorphosis and destruction of a beautiful and historic landscape. Unlike deep metal mining, china-clay is extracted by opencast quarries; the process of clay extraction not only produces ever-deepening and widening pits but also massive dumps of waste sand and rock. With increasing demand for china-clay in world markets, the pressure on the landscape is ever more intense. Within thirty years, if the current estimates are correct, some 70 square kilometres of upland will have disappeared, to be replaced by an entirely new landscape; Blackmore will have ceased to exist.

1.1 Aims and Objectives for the Study

To date there has been no systematic record or interpretation of the archaeology of the Hensbarrow area. A previous rapid assessment of the area was of limited scope, and response from the Cornwall Archaeological Unit (CAU) to impending destruction of specific sites or areas has of necessity relied on incomplete and often inaccurate information. As a result, many archaeological sites and landscapes have disappeared without proper record; these include forty-nine barrows or cairns, nine enclosed prehistoric settlements (rounds), twenty-five settlements of medieval origin, 208 more recent settlements, a large Victorian mansion, five corn mills, and a great number of 19th century industrial monuments. The aim of the CAU Hensbarrow Project was therefore to establish a mechanism for the adequate funding of the study of the history of the Hensbarrow area, based on sound data collection, site recording, and a planned research framework.

The principal objective was to establish the aims, priorities and programme for the long-term investigation and record of the landscape in advance of its near-total destruction over some 70 square kilometres. This was achieved by the compilation of information from the existing Sites and Monuments Record, the examination of

the Tithe Maps (c.1840) and early Ordnance Survey sheets (1880, 1907) for the area, checking of aerial photograph coverage, documentary sources, secondary literature, and field visits to all sites identified as still extant. As a result, the findings as presented in this report will outline and describe our present understanding of the archaeology of the area, and identify major research aims as the structure within which future work will take place. In addition, proposals are detailed for a long-term programme of survey and excavation, including recommendations for those sites and areas deserving of protection and conservation management.

1.2 Study Area

The area selected as the subject of this Project comprises the 70 square kilometres within the Winning and Working Area, as defined by the china-clay industry Policy Document of 1974. The study has taken the view that, by implication, **all** sites within the area are at risk, with the exception of those areas defined as "Island Settlements"; however, the Island Settlement boundaries are subject to review, and sites within them should also be taken into account where they are of historic significance.

The area lies within the District administrations of Restormel Borough Council and Carrick District Council. It comprises the western two thirds of the Hensbarrow granite but also includes metamorphosed slates along its northern and southern edges (see map2). A central massif, with Hensbarrow Beacon (313 metres) at its summit, and with other dominant hills at Caerloggas Downs, Longstone Downs and Watch Hill, rises above two important areas of lowland towards the western and eastern edges through which the rivers Fal and Luxulyan flow. Fraddon and Burthy Downs form another upland ridge along the area's western boundary (see map2). It includes parts of the parishes of St Columb Major, St Enoder, Ladock, St Dennis, Roche, St Stephen in Brannel, St Mewan, St Austell, St Blazey and Luxulyan (see map2).

1.3 Land Ownership

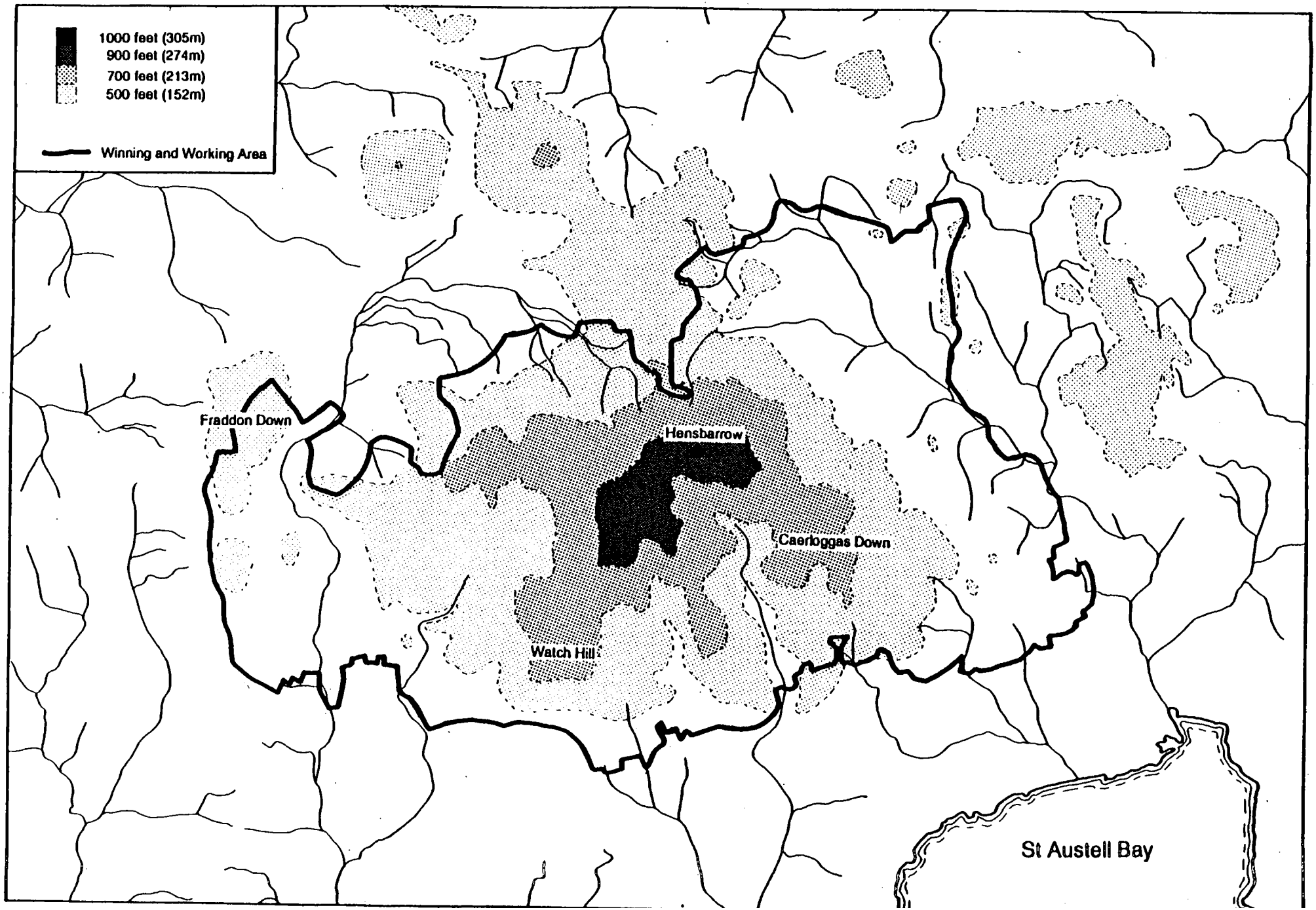
By far the greater part of the study area is directly controlled by English China-Clays International under freehold or leasehold ownership. This is true also of many of the farms and settlements in the area, including some within the Island Settlements. A substantial landowner on Hensbarrow is Lord Falmouth and the china-clay company of which he is a Director, Goonvean and Rostowrack. Another mineral landowner is Steetly Burke, who have two active pits (Greensplat and Bodelva).

1.4 Past Work and Extent of Existing Information

Past Work

The existing Sites and Monuments Record (SMR) for the Hensbarrow area includes all the currently available information for the prehistoric and early medieval landscape, but is not supported by recent fieldwork in the area. The Record for the medieval, post-medieval and industrial landscape is in outline form only. There are major aspects of the land-use history about which little or nothing is known, for example evidence for prehistoric settlement sites. Previous work in the area is as follows:

Map 2 Drainage and relief



* The St Austell Granite attracted only a little antiquarian interest, mostly in the identification of barrows, though early finds of metalwork including bronze flat axes and spearheads are known.

* "Parochial Checklists" (Cornwall Archaeological Society) have been published for the area, based on more thorough search of secondary sources and limited fieldwork. These have formed the basis for the SMR of the area.

* Several sites were excavated in the early 1970s in advance of destruction by the china-clay industry: a standing stone on Longstone Downs (Miles and Miles, 1971); six cairns at Cocksbarrow, Caerloggas, Watch Hill, and Trenance Downs (Miles and Miles, 1971; Miles 1973); and Trethurgy Round (Quinnell, in preparation). Pollen analysis in association with the excavation of the cairns has provided useful information about the early environment.

* A rapid assessment in 1977 by the Cornwall Committee for Rescue Archaeology (now Cornwall Archaeological Unit) led to several additional sites being designated as Scheduled Ancient Monuments (SAMs). Site lists were also provided for inclusion in the local area plans (Central Restormel and St Austell Plans).

* An unpublished BA undergraduate dissertation on hillforts (Neil Beagrie).

* Fieldwork from 1983 to 1985 by J R Smith identified many industrial sites.

* The Luxulyan Valley Project directed by CAU (1987-8) included some sites within the Winning and Working Area.

Although some of these information gathering exercises were funded in part by the china-clay industry, there has never been any provision for the systematic updating of the record for the area.

Extent of Previous Archaeological Information

Prehistory

The earlier prehistory of the St Austell uplands appeared from previous records to be represented mostly by Bronze Age ritual and ceremonial monuments: a series of barrows mainly scattered over the higher ground, and a few standing stones. No hut circle settlement had been identified, and no field systems; this was in marked contrast with Bodmin Moor and West Penwith, two other Cornish granite uplands. Later prehistory was characterised by one possible hillfort (St Stephen's Beacon) and several univallate settlement enclosures or "rounds".

The Medieval Period

Approximately 110 settlements in the threatened area were known to have had medieval documentation. At least 33 of these (with place name elements *tre, bod,* or *ker*) were very probably of early medieval origin (pre Norman Conquest). Deserted medieval settlements had yet to be identified but were thought likely to exist. Only one extensive strip field system was known to survive in moorland (at Treskilling), but most existing field patterns associated with settlements of early origin probably fossilised elements of the early layout. As the Stannary of Blackmore the Hensbarrow district was the major tin-producing area in the county before 1700,

with some 450 documented tinworks. Many tin streamworks and their associated features were expected to be identified during the course of this project.

18th, 19th, and 20th centuries

Although the information available to the Archaeological Unit has been fragmentary at best, it was nonetheless clear that field evidence for the development of the china-clay industry itself has become threatened in recent times. Throughout the 18th and 19th centuries, an industrial landscape of unique and international significance had been created, only to be swallowed up, the victim of its own success. Some fieldwork had been done in recent years to identify industrial sites and monuments in the area, but there was little published information. The project was expected to identify a large number of industrial sites from the 18th century onwards, as well as farms and settlements belonging to this later period.

1.5 The Time Scale for Destruction

The rapid expansion of the china-clay industry has already destroyed not only farmland, settlements, and open moorland, but also much of the evidence for the early (18th century) and 19th century industry itself. The industry's development plans are set out in a long-term strategy ("The St Austell China-Clay Area - Statement of Policy by Cornwall County Council", 1974) and in a series of short term seven year plans. By 1984 the industry covered 2989 hectares (30 square kilometres) of Hensbarrow. As set out in the long-term strategy some 6970 hectares (70 square kilometres) will eventually be destroyed by excavation, dumping of waste, or the siting of processing plant; originally it was thought that this might be achieved by 2020, but the demand for china-clay dictates the pace of change and this may fluctuate. The implication, however, is plain; virtually the whole of the Winning and Working Area except for the designated Island Settlements will be destroyed by a date which is likely to fall within the first half of the 21st century.

Study Methodology

2. STUDY METHODOLOGY

The need for a new assessment of the Hensbarrow area has been discussed in Chapter 1. CAU had been considering such a project for some time, and in 1988-1989 fresh approaches were made to ECCI, Goonvean and Rostowrack, and English Heritage, with the result that funding was provided by ECCI and English Heritage as Project Sponsors for a study which commenced in 1989.

2.1 Type and Scale of Assessment

The principal method adopted to achieve the objectives of the study (see 1.1) was to make an overall assessment of the nature and current state of all known historic sites and monuments in the Hensbarrow district. The time scale to be covered was from remote prehistory to 1939, and the area for study was defined by the China-Clay Industry's own Winning and Working Area (see maps); this encompasses some 70 square kilometres. It was decided to undertake the work in three distinct phases:

* **Phase I** Preparatory work; documentary research; cartographic research; aerial photograph study.

* **Phase II** Field visits to all target sites.

* **Phase III** Preparation of this report.

At the end of the Project, all known surviving and upstanding historic Sites and Monuments in the area should have been visited in the field, and assessed for their importance within the overall contexts of Local, County and National archaeology. It was not intended, and would not have been possible within the time-scale allowed, to make a detailed record of individual sites which would be input to the full Sites and Monuments Record. The intention of the study was that this broad but comprehensive overview would allow a future strategy for the area to be arrived at as part of a joint initiative between Cornwall Archaeological Unit and the China-Clay Industry; and that recommendations for such an initiative should form part of this report (see section 5). The information gathered should also be of a quality sufficient for the Archaeological Unit to respond to all cases of impending site destruction with an appropriate level of advice and/or action.

2.2 Selection of Study Targets

Within the project area, all remaining moorland was regarded as a potential reservoir of prehistoric sites, and also possible abandoned medieval settlement. The enclosed farmland should reflect the pattern of medieval and later enclosure and would include more prehistoric sites; all farmsteads and settlements pre-dating 1879 were to be visited and evaluated for their historic features.

The present extent of active china-clay working limits and defines the availability of industrial sites to be included. All extractive industries, including tin streamworks, deep mining, quarrying for stone, and china-clay working, were to be visited, with a cut-off date of 1939 beyond which sites were deemed to be outside the scope of this Project. The first task for the industrial study was therefore to identify from the available maps all sites of pre-1939 origin, and then to assess the number and extent of those remaining at the date of the Project (1989) by plotting

the extent of currently active areas from aerial photographs. Many sites have of course been destroyed as older pits are re-worked and early features over-dumped by sand and mica. Also included were railways and tramways, 19th century industrial housing, non-conformist chapels, water-mills, leats, brickworks, and all service industries associated with the area.

Cornwall as a county is notably rich in 19th century industrial sites, and the Hensbarrow area was, at its peak circa 1910, one of the most complex and highly developed industrial areas in the county. Despite much later destruction, it was hoped that sufficient would remain to give a representative cross-section of this varied landscape.

2.3 Documentary and Cartographic Research

Standard and comparative texts were consulted, and these are listed in the Bibliography (Section 6.7), but there was little time available for original documentary research. Medieval place-names provided important information on settlements; the indexes produced by Gover (1948) and by Oliver Padel for the Institute of Cornish Studies (ICS) enabled many early medieval farms and farming hamlets to be identified. Published medieval charters and, of course, Domesday Book (1086) were also studied. The earliest maps to be consulted were the relevant plans in the 1695-6 Lanhydrock Atlas and Martyn's Map of Cornwall of 1748. These were followed by the 1st edition OS of 1809 and the parish Tithe Maps of the late 1830s and early 1840s. These sources were not of great use for the industrial study, as clayworks shown on the Tithe Map were greatly developed at a later date. For farmsteads and settlements, however, they were of great value, particularly in establishing a chronology for the district. Of more utility to the industrial part of the Project were the OS 1st edition 1:2500 of 1879 and the OS 2nd edition 1:2500 of 1906, which span the period of maximum expansion and complexity within the china-clay industry.

The 2nd edition OS 1:10,560 map was the basis for a set of composite 1:10,000 overlays drawn up to show all known industrial sites and clay workings for the area circa 1910; as far as is known, this is the first time such a map, identifying every clay work by name, has been attempted. Information was drawn from the OS, and from aerial photographs dating from the 1960s and 1970s. The maps now form part of the CAU Archive (GRH 2), and will be of use to future researchers. Another set of overlays, again at 1:10,000, was prepared from the 1977 OS and a set of colour aerial photographs commissioned by the County Council in 1988-89, to show the extent of the present active workings. When this was overlaid onto the historic maps, it was immediately apparent which sites remained available for study, and the results could be transferred to the fieldwork key maps.

Two sets of 1:10,000 OS maps for the area were annotated with sites identified as extant study targets; one set of maps for the prehistoric, medieval, and non-industrial archaeology, the other set covering all industrial sites. This synthesis was the product of the documentary and cartographic research outlined above added to the information contained in the current Cornwall Sites and Monuments Record and its companion Industrial Register (prepared by ICS), with that obtained from various sets of aerial photographs. Thorough preparation of this nature, while very time-intensive, was of great value in making the subsequent fieldwork more efficient, and also enabled a significant degree of site interpretation and monument class assessment to take place in advance of the field visits.

2.4 Fieldwork

Forty field-working days were allocated within the Project schedule to the Industrial and the non-industrial archaeology respectively, giving a total of 80 days in the field. Given the large area to be covered, and the inaccessible and often overgrown nature of many of the sites, it was essential that the fieldwork method was streamlined and carefully planned if the work was to be completed within the time. In this respect, the time spent on cartographic and aerial photograph research paid many dividends.

Within the study area, there had been identified prior to fieldwork some 300 industrial sites, and 118 prehistoric, 227 medieval, 132 post-medieval non-industrial, and 386 settlement sites to be visited. It was obvious that within the 80 working days only a relatively brief visit could be made to each site, allowing also for time spent driving between sites and possible long walks across difficult terrain. It was therefore necessary to devise a recording method which would be concise and rapid, but also thorough and accurate enough to form the basis of an updated Sites and Monuments Record.

Two sets of 1:10,000 OS maps for the area were annotated with sites identified as extant and of historic importance and copies submitted to ECCI to obtain permission to visit those which fell under ECCI ownership. The size of the sites involved ranged from a single small structure such as a roadside chapel, to a large claywork covering many hectares.

Site Recording

In order to cover the maximum number of sites within the time, the Project Field Officers worked alone and not as a team. While more efficient in terms of numbers of sites visited it posed certain problems of safety when industrial sites were visited. The Field Officers carried with them on site visits copies of the 1906 OS 1:2500 maps to identify surviving ground features, copies of the annotated 1:10000 maps for navigation and updating, and a recording form devised specifically for this Project (layout as in the gazetteer). This form allows for the quick assessment of a site in a format which is compatible with the computer SMR Database, although the information recorded is in outline only.

The PRN, or **Primary Record Number**, for each site is taken from two allocated blocks: 27000 to 27999, and 33000 to 33150; where sites already have a PRN in the SMR a new number was not allocated. NGR, or **National Grid Reference**, is usually given to eight figures; **Site Name** is taken from the OS where possible. **Site Type** follows the preferred terms used in the CAU SMR, as do the **Features** within each site. The size of the form severely restricts the amount of information which may be detailed here, and this was felt to be beneficial in that it would speed up the recording process.

A method of quick-scoring the following categories was devised: for Condition, Survival, Site Value, Buildings Value (for settlements) and Group Value each site was graded as A, B, C or U (Unknown). This reflects the basic method adopted by English Heritage for their Monument Protection Programme (MPP), although the system adopted by them is numeric rather than alphabetical. **Condition** reflects the present state of the site, in terms of its preservation, vegetation coverage, etc. **Survival** was assessed as far as possible from the OS 1st and 2nd edition 1:2500 maps, or, for earlier sites, from past experience of sites of similar type. **Site Value**

and **Buildings Value** was an evaluation made on a basis of background research, monument rarity, landscape and environmental value, and historic significance. "A" represents sites of National Importance, "B" sites of County Importance, and "C" sites of Local Importance. **Group Value** represents an additional weighting for each site where its presence contributes significantly to the value of other monuments in the immediate locality, or where the site is part of a larger grouping. **Land Use** describes the vegetation and topography of the site. **Action** indicates essential work which should be undertaken in case of threat to the site; some categories should be carried out as part of an on-going programme of work as outlined in Chapter 5, regardless of threat or impending destruction. The information gathered on these forms has been collated and is presented in this report as the **Gazetteer of Extant Sites.**

In addition to updating the 1:10,000 OS map and making an entry on the Fieldwork Record Form, a description of each site was made on a small portable tape recorder. This method was acceptably rapid, and the transcripts of these tapes will allow the eventual compilation of a full SMR description. Where conditions allowed, 35mm colour transparencies or B/W prints were taken of the site; these are for interim purposes only, and will have to be supplemented by formal record photography at a later date.

Fieldwork in Practice

Despite good preparation, problems were experienced in the field. Poor weather (the survey was carried out during the winter months) was to a degree offset by thinner vegetation cover at this time of year. Nonetheless, very dense willow scrub, rhododendron, brambles and gorse, meant that in practice it was not possible to fully investigate all sites in detail. Not all sites were affected in this way, but those that were tended, by their nature, to be amongst the most historically significant. Many of the old workings have disused shafts, wheelpits, and other hazards; when these are concealed by vegetation a potentially dangerous situation exists. These factors meant that the survey of industrial sites was somewhat slower than expected. Full and helpful co-operation by the management of ECCI and its employees made access to sites on their land straightforward.

The Project Archive

The results of the fieldwork are now part of the CAU archive, and consist of the following elements (see section 6.9 for details):

* **Fieldwork Record Forms** (the original documents)
* **Site Gazetteer** (appended to this Report)
* **Annotated 1:10,000 and 1:2500 (non-industrial) Maps** showing all sites and their PRNs
* **Site Description Transcripts** from the original tapes
* **Colour Transparencies or B/W prints** of certain sites and monuments
* **1:10,000 Constraint Maps** of archaeological sites and monuments.

The Historical Background

3. THE HISTORICAL BACKGROUND

3.1 Prehistory (Maps 3 and 4)

The Hensbarrow uplands, the heart of the "winning and working area", derive their name from a remarkable prehistoric site, the enormous Bronze Age cairn on the summit of the area's highest hill (Hensbarrow Downs) which could, until very recently, be seen from throughout central Cornwall. (A massive clay tip now encroaches to within 50 metres of the cairn on its south-east side.)

The wealth of prehistoric archaeology on the other granite uplands of South-West England (especially Dartmoor, Bodmin Moor and West Penwith) would lead us to expect similar riches on Hensbarrow and there are indications that land use prehistory here was very like that of Bodmin Moor. Unfortunately, due in part to post-medieval agricultural enclosures, but mainly to the destruction of relict moorland by the clay industry, very few prehistoric sites, other than barrows or cairns and rounds, survive as surface remains in the Hensbarrow region (see maps 3 and 4).

To produce an outline prehistory of the area which can serve as a background to later discussions and proposals it is necessary to integrate this relatively limited material into a more general model of Cornish prehistory. Close attention will also be paid to the detailed survey work undertaken recently on Dartmoor, Bodmin Moor and the West Penwith uplands, the three most similar landscapes in the region.

3.1.1 Palaeolithic

Traces in Cornwall of the earliest gatherers and hunters, those of the long Palaeolithic period, are slight; just a few flint and chert artefacts, chance finds, scattered through the county, enough to confirm "at least sporadic human activity" (Berridge and Roberts 1986, 8-10). The nearest find to our area was a small chert hand-axe, of probable Middle Palaeolithic date, located at Treffry Wood near Lanhydrock c. 3 kilometres north-east of Lockengate (Irwin 1976, 81 and fig 31).

Given the absence of caves in Cornwall, we will continue to rely on finding stray objects, those lost or discarded by these nomadic communities, rather than collections of material from occupation sites, to increase our knowledge of this remote period. Any fieldwalking programme within the winning and working area would be designed to include a search for Palaeolithic material, in particular objects from the later or Upper Palaeolithic period which is significantly under-represented in Cornwall compared with Devon and Somerset (see Berridge and Roberts 1986, 10).

3.1.2 Mesolithic

Much more is known of the last purely gatherer-fisher-hunter societies of Cornwall, the Mesolithic people of the early post-glacial period who led lives which were probably at least partly nomadic.

Again, finds of stone artefacts form the bulk of our information but now we have proper assemblages, not just stray finds, and the material itself is much more varied. Tiny flint microliths, exquisitely crafted and rarely more than an inch long, which were often elements of composite tools and weapons (harpoons, arrows etc), flint scrapers, picks, choppers, awls, axes and adzes are found alongside pebble hammers

and bevelled pebbles. Lost now, except in waterlogged sites (none found yet in Cornwall), is all the organic equipment made from wood, leather, horn and bone. We are still not sure how some objects were used, but they do illustrate the broad range of activities undertaken by Mesolithic women, men and children, reflecting their interdependence with and closeness to the natural environment.

Although it is becoming increasingly clear that people had begun to manipulate nature, loosely herding certain large mammals and burning off areas of forest to produce the clearings so useful for both gathering certain plants and fruits and for attracting the grazing animals they hunted, it seems probable that they were not permanently settled (see Mercer 1986, 37-38). Instead they moved considerable distances each year keeping close to and caching in on the most productive parts of the natural world as the seasons changed it. It is likely that the small Mesolithic communities began to define vague territories by regularly visiting certain parts of the landscape: the sea-shore and the sea itself (exploited via simple boats), dunes and cliffs, estuaries, valleys and forests (and the natural or created clearings), and expanses of upland open grazing land. In the winning and working area the main central massif which would have been open country and two lowland valleys (the Fal and the Luxulyan River), heavily forested from early in the post-glacial period, may have formed one territory; Fraddon and Burthy Downs, a separate block of open upland, perhaps part of a second.

Pollen analysis on Bodmin Moor (Brown 1977) has provided an outline of the early post-glacial vegetational history of Cornwall. After the Ice Age tundra, Cornwall was covered by open grassland, gradually colonised by birch woodland, itself replaced from c. 7000 BC by oak and hazel dominated forests which overwhelmed most of the county, leaving only the highest hills where scrub and open grassland would have survived. Analysis of the pollen in soils buried beneath several excavated Early Bronze Age round barrows in the study area appears to confirm that the background environment, if not the immediate hill-top environments, had once been more heavily wooded (Bayley 1975, 60- 66).

The Hensbarrow district can be expected to contain hundreds of Mesolithic sites, judging from comparative areas in Cornwall. On the basis of fieldwalking a sample area of the Lizard, it has been estimated that c. 1300 sites would exist in that small part of Cornwall (Smith 1987, 65) and on Bodmin Moor fieldwalking just eight hectares of a ploughed hillside on Butterstor located nearly forty discrete flint scatters, ten of which contained definitely Mesolithic objects (Herring and Lewis, forthcoming; see also Berridge and Roberts 1986, 29). Confirmation of the expected density of Mesolithic sites in the study area came from the excavation in the 1970s of several Bronze Age barrows. Five out of the six barrows, whose locations could in no way have been directly influenced by invisible Mesolithic sites dating from at least 2000 years before, produced residual Mesolithic material (mostly microliths) either from buried land surfaces or from the soil and turves used to build the mounds:

Cocksbarrow - 1 microlith plus possible scrapers (Miles and Miles 1971, 20 and fig 9);
Watch Hill - 1 microlith (Miles 1975, 20 and fig 9);
Trenance Downs - 5 microliths and chert adze (Miles 1975, 55 and fig 28);
Caerloggas I - 5 microliths (Miles 1975, 40 and fig 19)
Caerloggas III - 5 microliths (Miles 1975, 48 and fig 23).

ST. AUSTELL CHINA CLAY AREA ARCHAEOLOGICAL SURVEY

- Winning and Working Area
- Island Settlements and Par Corridor
- Hilltop enclosure
- Stone circle (destroyed)
- Stone row (destroyed)
- Menhir △ (field name) ▲ (destroyed)
- Barrow/Cairn ○ (field name) ◉ (destroyed)
- Possible Settlement
- Boundary
- Artefact ★ (site destroyed)

RESORMEL DISTRICT

Map 3 Early Prehistory

These Mesolithic sites, the only ones so far known in the area, are all on hill-tops. We expect to find sites in all the other ecological zones in the area, although not necessarily in equal densities. We ought also to pick up sites of varying size; large home-bases with hundreds of flints, where traces of shelters and other structures might be found on excavation, and smaller, transitory sites, with fewer flints, may be occupied for only a few days or even hours, and perhaps representing temporary camps, kill/butchery sites, tool manufacturing sites etc (see Berridge and Roberts 1986, 20-23).

Variety in equipment, the size and composition of artefact scatters forming sites, and the ecological zones exploited vividly illustrate the richness of Mesolithic peoples' life. Their likely diet (from excavated material - see Berridge and Roberts 1986, 22) would be based on vegetable food (nuts, fruits, seeds, roots, tubers, leaves, shoots, fungi) supplemented whenever possible by honey and meat from large and small mammals (red deer, elk, wild pig and aurochs to hare, pine marten etc), birds (grebe, swan, crane etc), freshwater and sea fish, shellfish and sea mammals (seal etc).

3.1.3 Neolithic

The later Mesolithic trend towards increased domestication of the animals being hunted, from simple killing to culling, and the continued alteration of the native vegetation, mainly by burning, formed the background to the greatest and most dramatic change in human history, the Neolithic revolution. The adoption of agriculture, the domestication of plants and animals, in Southern Britain may have been gradual (see Mercer 1986, 35-42) but its consequences were profound and still affect our landscape and lives today.

Permanent settlements were established and territories apparently defined within which groups of farmers worked. Local and regional centres developed, the latter supporting, and being supported by, short and long distance trade. Immediately recognisable, then, are the bare essentials of civilisation and, sadly, these also include warfare. A regional centre at Carn Brea, near Redruth, a fortified hill-top site, or tor enclosure, was apparently besieged and sacked some time in the early Neolithic (c. 3500 BC) (Mercer 1981, 63). Such a dispute presumably developed over access to valuable resources, either the materials and products which were the objects of long distance or elite trade (eg in greenstone axes), controlled by society's higher levels, or the cultivable land which must, at least in the early years, have been confined by the dense forests on intractable heavy soils, to the relatively clear and light-soiled uplands.

A number of other defended regional centres, or tor enclosures, have now been tentatively identified in Cornwall. These include Helman Tor, just two kilometres east of the study area, whose Neolithic date has been confirmed by recent excavation (Mercer 1986, 53-54). Tor enclosures appear to be a Cornish variation (based on the availability of dramatic tor-topped hills and clitter runs) on the fairly widespread early Neolithic practice of building defended hill-top settlements (see Mercer 1981, 187-198). Where there are no such convenient tor-topped hills, defences would be entirely created, as in South Devon at Hembury, Haldon Hill, Hazard Hill and High Peak (see Mercer 1981, 189 and Todd 1987, 67-81). Most hills in the study area have rounded tops with only the most insignificant tors; any Neolithic defended regional centre here would need to be wholly created.

St Stephen's or Foxhole Beacon, a discrete rounded hill with extensive views to the south, has a ditch-less defence around its summit, created by cutting back into the slope and dumping material downhill to form a level platform, suitable perhaps for a wooden palisade. There are no known parallels for such a defence in Cornwall; it is certainly unlike the rampart of any Iron Age hillfort. Two attached apron-like enclosures, one to the north-west, the other to the south-east, have heavy stony banks for ramparts (up to 6 metres wide, 1.5 metres high), similar to the ramparts of some Cornish tor enclosures. Found in disturbed ground immediately inside the main defensive ring was a small scatter of flints which included an end-scraper, the dominant scraper type in the Carn Brea Neolithic flint assemblage (Saville 1981, 132).

St Stephen's Beacon appears, then, to be a Neolithic regional centre; it is only 12.5 kilometres south-west of Helman Tor but is separated from it by the high ground of Hensbarrow. It is tempting to see the eastern half of our study area being within the sphere of influence, or territory, of Helman Tor and the western half within that of St Stephen's Beacon.

Searching for traces of the lower levels of Neolithic society, in particular farming settlements, has always proved extremely difficult and no early Neolithic farm has yet been located in Cornwall. We may expect, from excavations elsewhere in the British Isles, that their houses were wooden and rectangular. They are most likely to be located by fieldwalkers picking up scatters of Neolithic flint (and perhaps also pottery).

More visible in Cornwall is an intermediate organisational level, roughly equivalent to historical parishes, and lying between the farming settlements (which would probably have been hamlets, groups of co-operating farmers) and the regional centres, the regions being similar to historic hundreds, fore-runners of District Councils. Judging from their Bodmin Moor and West Penwith distributions, ritual or ceremonial monuments appear to have been built at this intermediate level where they would probably have served functions similar to those of medieval parish churches. Local communities would gather at them for rituals and ceremonies (burial, marriage, initiation etc) and it is difficult to believe that the people did not take the opportunity these meetings offered to solve problems, to exchange products, to meet potential marriage partners etc (Herring 1986 Vol 1, 78-80). In the early Neolithic period, contemporary with the defended hill-top sites, such local centres appear to have been either portal dolmens (chambered tombs like Lanyon or Trethevy Quoits) or long mounds; cairns or barrows with facades and chambers at one end (Barnatt 1982, 43-48; Mercer 1986, 57). Unfortunately none appears to survive in the study area although two portal dolmens, Lesquite Quoit and Devil's Coyt lie just 3 kilometres to its north-east and north respectively (see Miles and Trudgian, 1976; Johnson 1979), and we must assume that examples did once exist (referring again to the distributions on Bodmin Moor and in West Penwith).

Farming settlements and their fields are no easier to find from the later Neolithic. There were, however, major changes in the form of ritual and ceremonial monuments. Circular sites, perhaps better designed as meeting places and activity centres, but probably also reflecting now unknowable changes in rituals and ceremonies (and, more fundamentally, changes in belief systems), appear to have replaced the portal dolmens and long mounds. Best known are the stone circles, dating from around the turn of the second millennium BC (ie c. 2500 to c. 1600 BC), and so common on Dartmoor, Bodmin Moor and in West Penwith (see Barnatt 1982,

53-76). No stone circle survives in the study area but one may well have existed in the vicinity of Ninestones in St Austell parish (c. SX 0156) as the word Nine is often used to name circles (Barnatt 1982).

Probably contemporary with the earliest stone circles but more substantial, and perhaps replacing hill-top defended sites or tor enclosures as regional centres, are the henges, large roughly circular enclosures with ditches *inside* banks. Three have so far been positively identified in Cornwall and one, Castilly, is just 1 kilometre north of the study area, near Lockengate. These sites probably also acted as exchange centres, as the earlier hill-top sites had done before. Long distance trade in greenstone axes, and probably also other raw materials and finished products, had become well-established by the Later Neolithic and the locations of the new centres reflect this by being re-positioned either near raw materials sources (eg Castlewich henge near greenstone quarries, close to Callington) or, as at Castilly, near major ridgeway routes (see Barnatt 1982, 89-91; Mercer 1986, 73).

By the end of the Neolithic period, then, say c. 2300 BC, Cornish society was surprisingly mature. Agriculture, supplemented no doubt by gathering, hunting and fishing, formed the foundation for a complex superstructure which included local and regional exchange systems both supporting and dependent on craft and perhaps even agricultural specialisation; a developed belief system, revealed by its well-designed monuments; and, most significantly, the division of the population itself into more or less privileged groups, those with more or less influence or power, a division to some extent created and justified by these exchange and belief systems.

The changes which allow us to define a new period, the Bronze Age, will not have affected this society fundamentally. Our definition of the Bronze Age is based on the recognition of the adoption or development, over a number of centuries, of certain archaeologically recognisable artefact or monument types.

3.1.4 Bronze Age

The division of prehistory into named periods helps keep information under chronological control and often reflects genuine changes in lifestyles, power structures, belief systems, environment etc. Separating out a period recognised for nearly a century as the Bronze Age, however, now presents archaeologists with some difficulties.

Firstly, it is now known that certain distinctively Bronze Age features overlap with others which are usually regarded as Neolithic. For instance the earliest metalworking (in copper) was introduced in the mid-3rd millennium BC (c. 2700 BC) while entrance graves, traditionally Neolithic, were still being built (see Christie 1986, 81-2). Stone circle building, on the other hand, begun in the later Neolithic (see above) apparently continued into the early Bronze Age (Barnatt 1982, 53-55). Secondly, the end of the Bronze Age is also indistinct with a very gradual change from bronze to iron as the main metal used "for the tools of fighting and farming" (Quinnell 1986, 112).

Thirdly, and most importantly, the period itself divides at c. 1300 BC into two quite discrete periods, Earlier and Later Bronze Age (see Christie 1986, 81-83 for details).

Perhaps surprisingly, we know much more about life in the Earlier rather than the Later Bronze Age. This is partly because the earlier rituals and ceremonies were performed at sites whose remains are famously durable - many of the best known

archaeological sites come from this period; barrows, stone rows, stone circles, standing stones. Equally important were the benign environmental conditions, particularly the warm, dry climate which allowed fairly intensive agriculture to be practised on land which is now very marginal. Our earliest surviving farms and fields belong to the second half of this early period and their ruins are widespread on Bodmin Moor and Dartmoor and also exist in Carnmenellis, West Penwith and Scilly.

After c. 1300 BC the climate apparently began to deteriorate, becoming wetter and cooler, and the upland farms seem to have been abandoned, removing settlement evidence from our view. At around the same time people also stopped using barrows for rituals and burials, further depriving us of information about Later Bronze Age society.

Returning to look in more detail at the Early Bronze Age, relatively good information on the environment of the higher parts of Hensbarrow comes from pollen in soils buried beneath five barrows excavated in the early 1970s (see below). The hills were open with grassland, rather than heathland, dominant. There are also suggestions that woodland cover in the general area, probably on the lower slopes and in the valleys, was being gradually reduced, perhaps through clearance by human communities (Bayley 1975, 60-66; also see Caseldine 1980, 10-14).

Unfortunately we have not yet positively identified any settlements from the very earliest Bronze Age, either on Hensbarrow or on the other South-Western granite uplands, although it is felt that some of the many unexcavated settlement sites on Dartmoor and Bodmin Moor ought to belong to this period (Fleming 1987, 114). The concentrations of Early Bronze Age ceremonial and ritual monuments certainly suggest that large numbers of people were already living and working on the higher moors (including.Hensbarrow) at this time.

Ceremonies, repeatable and multi-purpose (see Neolithic, above), would most likely have been performed at open sites such as stone circles, stone rows and standing stones (menhirs). Stone rows, once thought to be largely a Dartmoor phenomenon, are now being discovered in Cornwall; seven on Bodmin Moor (Johnson and Rose, forthcoming) and others are known on St Breock Downs (Barnatt 1982, 221), in Zennor (Herring 1986) and on St Martins, Scilly (Ratcliffe 1990). At least one may have existed in the study area; the place-name Stanraewe (from stone row?) was used in a AD 1049 description of Trerice bounds (see 3.2) How such sites were used is unclear although they are often associated on Dartmoor with ceremonial or ritual sites (Emmett 1979; Todd 1987, 103-106). They may have been symbolic territorial markers or, perhaps more likely, processional ways (see Barnatt 1982, 93-5).

How stone circles were used is also still uncertain. They may have been regarded as enclosing sacred ground with the ring itself representing eternity, or the seasonal cycle. The stones in most circles are spaced as if to allow dancing or processing people to weave in and out of the circle, weaving in and out of sacred and secular ground.

Menhirs, large isolated standing stones, appear to have been erected primarily as ritual or ceremonial monuments with burials occasionally incorporated into the rituals at some. The menhir with the most complex history so far known in Cornwall actually comes from our study area: the Long Stone, once on the boundary between St Mewan and St Stephen-in-Brannel, which gave Longstone Downs its name, and which now stands, re-erected, in Roche. Henrietta Quinnell excavated it in 1970 in

ST. AUSTELL CHINA CLAY AREA ARCHAEOLOGICAL SURVEY

Winning and Working Area

Island Settlements and Par Corridor

Hillfort

Round (defended settlement) (destroyed)

Round (place-name) (destroyed)

Round (field-name) (destroyed)

Enclosure visible on aerial photographs

RESTORMEL DISTRICT

ST AUSTELL

Map 4 Later Prehistory

advance of clay working. Briefly, an upright wooden post had a rectangular pit dug beside it, possibly for a burial - nine small rounded quartz pebbles were deposited within it, typical magical offerings. A stone menhir was erected in a pit dug on the site of the post which must have been still standing and a rectangular area of cobbling (c. 3m square) laid around the stone received considerable wear suggesting that the stone received regular visits. This stone was later replaced by the Long Stone itself, a slab of granite 3.1m high, 1.4m wide at its base but tapering to a point at its top, and 0.15m thick. The north-west edge of the stone had been roughly dressed to enhance its beauty (Miles and Miles 1971, 7-12).

The Hensbarrow uplands have also yielded some of the most detailed and exciting information on those darker, more mysterious rituals whose material remains are sealed beneath the large round barrows or cairns. Quinnell excavated six cairns (Cocksbarrow, Watch Hill, Caerloggas I, II and III and Trenance Downs) in advance of their destruction by the clay industry (Miles and Miles 1971 and Miles 1975). It is partly through her seminal work here that the larger barrows and cairns are now recognised as being important ritual monuments to be placed alongside the more open sites like stone circles and stone rows. They are no longer seen as primarily burial monuments for important people; indeed many have no evidence for burial or cremation at all. Instead they are regarded as monuments designed to benefit living communities (Miles and Miles 1975, 73-5).

There is considerable variety in the size and form of barrows and cairns. On Bodmin Moor, where survival is much better than on Hensbarrow, recent survey has recorded over 400 cairns (in an area of c. 200 km^2) compared with a maximum of just 72 known extant or destroyed cairns in the 70 km^2 of our study area). Bodmin Moor cairns vary from just 2 to a massive 34m in diameter but nearly three-quarters are less than 10m in diameter (Johnson and Rose, forthcoming). It is these smaller cairns, often on slopes rather than hill-tops, which have been destroyed in the winning and working area; no surviving cairn is less than 10m in diameter (Hensbarrow itself is 36m) and virtually all are in the small patches of relict moorland, usually on or near hill-tops. On Bodmin Moor most cairns (over 300) are simple, looking like upturned bowls; others are platform cairns, complex platform cairns (with rims or central mounds, or both), ring cairns (ie circular banks with interiors not infilled) and tor cairns (built around natural tors). Cairns can also have components like kerbs (over 100 on Bodmin Moor), cists (stone built grave boxes) and menhirs (Johnson and Rose, forthcoming). The smaller, distorted sample of Hensbarrow cairns does not display quite such variety. No cists are known and kerbs were only discovered on excavation at Caerloggas I and III. There are, however, several platform cairns, one possible tor cairn (Carn Grey) and one surviving ring cairn (near Cocksbarrow; another was excavated as Caerloggas I).

Such variety in size and design must have meaning. Many of the smaller Bodmin Moor cairns would have been primarily burial monuments, particularly those with central cists. Variety in large, so-called 'fancy' cairns, however, probably has more to do with differences in ritual practice. Excavations revealing their true complexity tend to confirm this; no two large cairns excavated so far in Cornwall share internal structural design; each appears unique. There are, however, certain themes which, if not universal, are common in Cornish cairn design.

Many cairns incorporate circular enclosures: circles of posts (Cocksbarrow, Caerloggas I) or stones (Draynes; Wainwright 1965) or circular turf banks or stone walls (Watch Hill, Caerloggas I, Trenance Downs). The enclosures may represent

sacred areas or they may have been used for the deposition of human bodies (Miles 1975, 74).

Most of these enclosures were buried beneath mounds of earth, small stones or turves; elsewhere mounds were made where no clearly defined enclosure ever existed. They performed at least two functions: sealing off areas where rituals had taken place and acting as markers, sometimes to be seen from afar and perhaps signalling ownership of land.

Individual cairns and barrows had complex histories, not easily simplified, in which the 'enclosure' and 'mound' elements merely provided, if they even existed, respectively a setting and an ending. A simplified history of the cairn excavated on Watch Hill, St Stephen illustrates the ritual detail (Miles 1975, 8-24).

Before excavation it appeared to be a platform cairn, 24m diameter, 1.2m high, with a slight central mound and traces of an external ditch.

The first enclosure was the substantial ditch (c. 2.5m wide, 1.6m deep) which had no entry gap although two ledges on opposite sides (NE and SW) probably took plank bridges. Within this circle a cairn ring with an external stone face and a northern entrance was built. At its centre a rectangular pit had been filled with stones, silt and subsoil on which two wooden coffins had been placed on top of each other. A small turf and stone mound built over the pit was covered by a larger mound of upside down turves and the cairn ring's entrance was carefully blocked. Selected decorated pot sherds were placed, apparently as votive offerings, in the now partially silted up ditch; other offerings on the site included flint tools, quartz crystals, fruits and nuts. Careful closure of the site continued; a layer of peaty soil over the inner mound was followed by a larger mound of turves covering the whole site except the ditch. Next a ring of creamy, yellow and orange clay was applied to this mound's outer edge, making it a vivid beacon. The ditch had by now been deliberately backfilled. The final act in this strange sequence was to cancel out the clay's colour by covering mound and ditch with black gritty soil.

The impression gained is of intricate, serious rituals with many levels of meaning and relevance to the people performing them, rituals which may have been much more sombre than those performed at stone circles and not open-ended (ie: capable of repetition on the same site). There are indications of a carefully respected power to whom the offering of clearly domestic objects was considered worthwhile.

The overlapping of the ritual and spiritual with the domestic and secular is particularly interesting. As well as suggesting the invocation or appeasement of now mysterious spiritual powers, perhaps, but not certainly, in relation to agricultural or reproductive problems, this appears to confirm that in Early Bronze Age society, as in our own, the objects of everyday life were filled with symbolic meaning.

Barrows and cairns, then, for so long regarded as fairly simple burial mounds, are now recognised as being of the greatest archaeological and historical importance and while Quinnell's work in the study area in the 1970s was of considerable value, it remains a tragedy that so many large hill-top barrows within it have been destroyed in the last 150 years.

Moving on to the Earlier Bronze Age settlements, it is surprising that not one dwelling has been certainly identified in the Hensbarrow district, especially as c. 1,600 round houses (or 'hut circles'), of presumed Earlier Bronze Age date, have so far been recorded on Bodmin Moor in c.200 discrete settlements (Johnson and Rose, forthcoming). Their absence is unlikely to be real; the area would have been at least as hospitable as Bodmin Moor and as well supplied with the building materials of houses, enclosures and fields (moorstone). It may reasonably be assumed to have once contained a similar density and variety of settlement sites and their disappearance is probably due to destruction, first by medieval and later agricultural settlements and then by the clay industry. Settlements, usually on lower slopes, and containing relatively flimsy structures, are much more vulnerable than the large hill-top barrows and cairns. Some, however, may still be re-discovered through fieldwalking in historically enclosed farmland.

Earlier Bronze Age houses on Bodmin Moor and the other South-Western uplands are circular and vary considerably in construction and in size, (from 2m to 12m in diameter, 3 to 113m^2 internal area), presumably reflecting a variety of uses, from shed, through single person accommodation and family home, to communal structure (Ibid). Variety in numbers of houses in settlements and in the form of their associated enclosures and fields is also great. Valuable information about social structure and agricultural strategies can be obtained from their careful study.

Broadly, three settlement types can be identified on Bodmin Moor; examples of each may be expected to have existed in the Hensbarrow district. Most were identifiable clusters of farms, loose hamlets, whose irregular fields, often with curving boundaries, were laid out around the settlements, new fields being attached to older ones as the field systems grew. It is often possible to pick out individual farms; house, sheds, yards, tracks and fields (Ibid).

Other settlements had houses scattered through more orderly rectilinear field systems with roughly parallel boundaries (Ibid). Such systems, recognised throughout upland Cornwall in recent years, with West Penwith and Kit Hill examples adding to those on Bodmin Moor (Herring and Thomas 1988), are roughly similar to the more extensive Dartmoor 'reave' systems which have been used to demonstrate that rural society in parts of the South-West was clearly structured by the end of the Earlier Bronze Age (c. 1300 BC). Briefly, and working upwards from the lowest organisational levels, we can see individual households, presumably families, the basic producers of agricultural wealth. These were gathered into co-operative or neighbourhood groups, hamlets, and worked together on the land, sharing various resources. Several such groups formed a 'community', roughly equivalent to a medieval manor or parish; working together they laid out the more extensive rectilinear field systems and organised more extensive common resources. Above these three levels was a 'regional authority' which controlled large tracts of land, such as the southern half of Dartmoor (Fleming 1984, 8-15); others may have controlled the whole of Bodmin Moor or the upland part of Hensbarrow. The two highest levels will be recognised as successors to the two visible layers of early Neolithic society (see above). With these carefully laid out Earlier Bronze Age agricultural landscapes we see clearly, for the first time, how the higher levels of society were integrated with the lower.

The third settlement type, with either a few small enclosures or even with none, is assumed to have been occupied by specialist pastoralists, even transhumants, and could complement and be contemporary with either or both of the other settlement

types, or it may be later and be using the moors in a more limited way after the general Later Bronze Age retreat. A poorly preserved small oval enclosure (PRN 27805) on Carn Grey's disturbed northern slopes, in our study area, may be a remnant from this type of settlement while a long bank on Hensbarrow Downs (PRN 27812 and 27818) may be like the apparently Bronze Age pasture boundaries dividing up blocks of north-west Bodmin Moor (see Johnson 1980).

The study area lowlands may also have been partially cleared and settled. The countywide distribution of barrows (presumably serving local populations) and the chance discovery of lowland Earlier Bronze Age settlements elsewhere in Cornwall, at Trevisker, Gwithian, Trethellan Farm etc (Ibid, Nowakowski 1987 and forthcoming) certainly suggest it.

Bronze production required tin, rare in north-west Europe outside South-West England and most easily obtained from alluvial deposits, such as those in the lowland eastern quarter of the study area. Chance discoveries of prehistoric artefacts, including Bronze Age ones, in modern re-workings of alluvial streamworks, including many in and around the study area, suggest that some may have been exploited (Penhallurick 1986, 173-224); another incentive to move to the lowlands.

As noted earlier, the Later Bronze Age (c. 1300 to c. 600 BC) is characterised in Cornwall by the virtual absence of settlement and ritual information. High ground was abandoned as the climate worsened, peat formed and the soils deteriorated. Population levels may have fallen (Todd 1987, 151) or, more likely, the people simply shifted to the lowlands, leaving the uplands as summer grazing (see Iron Age, below). We should expect to see this shift in the study area, from the slopes of the central uplands to the western and eastern valleys, and fieldwalking may yet provide us with the evidence.

3.1.5 Iron Age

The transition from the Later Bronze Age to the Iron Age in Cornwall at c. 600 BC is again rather unreal; the change from bronze to iron as the main metal used appears not to have coincided with any other major changes, either in society or in the objects its members made and used. Although evidence is, of course, scanty, there is no indication of significant changes in settlement form or pattern; few defences were being erected around sites before the 5th century BC. Local pottery styles run essentially unchanged through the divide, from c. 800 to c. 400 BC (Quinnell 1986, 111-2). The first 200 years of the Iron Age, the Early Iron Age, to c. 400 BC are, then, as mysterious and little understood as the Later Bronze Age.

Much more is known of the Later Iron Age, from c. 400 BC, because many settlements were defended with ramparts and ditches, making them easily visible to archaeologists. These are the hillforts, cliff castles and the earliest 'rounds', the small defended farming settlements (see Johnson and Rose 1982 for details).

Hillforts (and cliff castles), judging from a distribution pattern not unlike medieval churches, accommodated the equivalent of the Earlier Bronze Age 'community' level of rural society (see above). Now, though, individuals or groups of individuals, perhaps successors of those who had previously possessed some authority at this level, had apparently crystallised the obligations and dependencies of members of the lower levels (the individual farmers and their groupings, or hamlets) and turned them into explicit power relations. The hillforts' defences, often multivallate, (more

than one rampart), were built with considerable labour, and their interiors were usually intensively occupied with considerable capacity to store agricultural produce (granaries within the main enclosure and, possibly, livestock corralled between the widely spaced ramparts).

Much of this produce would have come from inhabitants of rounds (the defensively enclosed farms or farming hamlets) and open farming settlements, as difficult to locate as Later Bronze Age settlements but known to exist elsewhere in the county (eg at Carn Euny in West Cornwall). The individual farming household would still be the foundation stone of society but its status might now vary. Those in defended sites were, perhaps, relatively 'free', to use a term from medieval history, with licence from the hillfort level to erect defences (ramparts) and, with absolute possession of certain products, something to protect. Those in open settlements, however, may have been 'unfree', bonded to the hillfort level or even to occupants of rounds.

Wealth was thus concentrated upwards, into the hands of the occupants of hillforts. It may be assumed that these people also benefitted from the tin industry which would have continued through this period (Quinnell 1986, 121), no doubt affecting our study area.

It is unlikely that access to the spiritual world, with all the ritual and ceremonial associated, was not also controlled by society's higher levels. Shrines and ritual structures are sometimes found within hillforts although it is believed that most rituals were performed at sacred natural places - springs, rivers, groves, large rocks etc (Cunliffe 1978, 320-326). Burials were grouped into cemeteries, the bodies placed within stone cists or deep oval and sub-rectangular pits, in crouched positions and in their best dress (Whimster 1977; Nowakowski 1987). None has so far been located in the study area.

Now that St Stephen's Beacon is seen as possibly an early Neolithic hill-top site we are only left with one hillfort, St Dennis, in our area although several others nearby would have had influence over it: Prideaux, Castle-an-Dinas, Demelza, Resugga. There are, however, a number of rounds distributed through the lowland parts of the area, nineteen have been identified so far of which ten survive (see map 4); some may have Late Iron Age origins but others will be Romano-British, including the excavated site at Trethurgy (see below, Roman period). We should also expect careful fieldwalking to locate open settlements.

The uplands, although no longer permanently occupied, would, like Bodmin Moor, have been used as summer grazing, probably using transhumance. Selected members of each family would accompany the herds and flocks on the summer pastures, tending and milking them and producing cheese, butter and cloth (see Herring 1986, Vol 1, 96).

3.1.6 Roman

The Roman armies conquered the South-West, the tribal area of the Dumnonii, in c. 55 AD. A fortress at Exeter and several forts in Devon were constructed at about this time but only one Roman fort, also of this early period, has so far been positively located in Cornwall, quite close to the study area at Nanstallon, near Bodmin (see Fox and Ravenhill 1972).

Cornwall was not, it seems, permanently occupied by the Roman military. Instead it was apparently administered by local native leaders, probably those who had previously occupied hillforts, most of which had been abandoned before the Romans came. They probably carried on trade and collected taxes for the Romans but would otherwise have continued much as before. Agricultural life certainly changed very little; many rounds remained in occupation from the Late Iron Age through to the 2nd century AD when there appears to have been a significant settlement shift with many being abandoned and others created (see Quinnell 1986, 124). The latter included Trethurgy round (in the study area) excavated by Henrietta and Trevor Miles in the early 1970s ahead of china-clay working (Miles and Miles 1973; Quinnell 1986, 126-7).

Trethurgy remains the only Cornish round to have had the whole of its interior excavated, enabling the layout of houses and other features to be viewed at each of the various phases of its long history (Quinnell 1986, 126 and forthcoming). It was occupied from the mid-Roman period, the late 2nd century, well into the post-Roman period, the 6th century and the sequence of phases involve between 3 and 5 oval houses together with various raised granaries,byres, animal husbandry areas and other activity areas. The oval house form had replaced the circular, current in Cornwall for over 2000 years from the late Neolithic, early in the Roman period. Its ridged roof needed no supporting posts, clearing the floor for the first time - an obvious advantage (Quinnell 1986, 126).

Cornish tin appears to have been relatively unimportant in the first 150 years of the Roman occupation when the imperial forces obtained theirs from Spain. Once these sources declined, Cornwall's tin workings, no doubt still alluvial streamworks, came into their own and the settlement shift noted above may well have been to some extent influenced by this (Quinnell 1986, 129-130). Trethurgy, for instance, would be well-placed to exploit the alluvial deposits in the eastern part of our area.

As for the Later Bronze Age and Iron Age, the detection of Roman period unenclosed or open farming settlements in Cornwall is proving difficult. Few are known apart from West Penwith's open courtyard house hamlets. These do, however, suggest that open sites should be at least as common as rounds and ought to be located by fieldwalking in the study area.

3.2 Early Medieval (Map 5)

The early medieval period, running from c.AD 410 when direct Roman influence ceased to AD 1066 when the Normans arrived, is one of gradual but fundamental change in the Cornish countryside. Popularly known as the Dark Ages, the period is becoming fairly well understood, thanks partly to Oliver Padel's detailed work on Cornish place-names (Padel 1985). It is now clear that the basic structure of the modern Cornish settlement pattern was established either by or during this period, it being recognised that many early medieval farms have Romano-British, Iron Age or even Bronze Age origins. We know, for instance, that some Romano-British rounds were still occupied in the early medieval period. Trethurgy, in our study area, appears not to have been abandoned until the 6th century (Quinnell 1986, 126).

Open or unenclosed settlements, notoriously difficult to detect archaeologically for later prehistory, become visible in large numbers in the early medieval through place-names, especially names with *tre* (farming estate) and *bod* (dwelling) elements (Padel 1985; Preston-Jones and Rose 1986). Their distribution complements that of

ST. AUSTELL CHINA CLAY AREA ARCHAEOLOGICAL SURVEY

Winning and Working Area

Island Settlements and Par Corridor

Pre-Norman Place-names

- Ker
- Tre
- Hendre
- Bod

Pre-Norman documentary reference

Domesday Book (1086) reference

Church

Parish Boundary

ST COLUMB MAJOR

ST WENN

WITHIEL

LANIVET

ROCHE

ST DENNIS

ST ENDER

LUXULYAN

ST STEPHEN-IN-BRANNEL

RESTORMEL DISTRICT

ST AUSTELL

ST MEWAN

ST BLAZEY

TYWARDREATH

LADOCK

PROBUS

ST EWE

Map 5 Early Medieval

the surviving rounds, farming hamlets with *ker* names (Carnegga, Carvear, Kerrow, etc in the study area). It shows a fairly full landscape with major gaps only in the upland areas of Hensbarrow and, to the north of the study area, in the marshy Goss Moor (see map 5). The rounds were either gradually abandoned in the 5th, 6th and 7th centuries or, perhaps more typically, their occupants simply neglected their defences and these hamlets began to resemble the small open hamlets which we believe characterised the settlements on *tre* estates (see Preston-Jones and Rose 1986, 145-146).

No less than 27 settlements with *tre* names exist or existed in the study area to which can be added 10 *ker* names, 5 *bod* names, 1 *lann*, 2 *hendre*, one other settlement recorded in Domesday Book and one in a charter of 1049 to produce a minimum of 47 early medieval settlements. Others also exist among those farming settlements whose Cornish names derive from either personal names or from local topography but which cannot be so readily recognised as early medieval. As noted above early medieval settlement was concentrated in the lowland parts of the study area, particularly in the eastern quarter, along the northern and southern fringes and in the Fal valley. That the central massif and, along the western edge, Fraddon and Burthy Downs, were not settled but were, apparently, used for summer grazing is indicated by farming settlements with *hendre* place-names fringing these uplands. The *hendre* (winter homestead, home farm) was the main settlement, with arable fields etc, from which transhumants, usually just one or two members of each household, went with the animals to the grazing grounds for the summer, living in the *havos* (summer dwelling) (see Herring 1986, Vol 1).

Farmers from the surrounding lowlands would have had particular rights to graze these uplands which would probably have been open commons, like Bodmin Moor and Dartmoor. Administration of the pastures, the organisation of occasional drifts to check for overstocking or trespass would probably have fallen, at least early in this period, to the hundred of Powder (see Herring 1986, Vol 1). By the end of the early medieval period estates appear to have claimed blocks of the uplands. These are visible in the parish boundaries and may have been essentially multiple estates, groupings of several farming hamlets (see Jones 1976 and Preston-Jones and Rose 1986, 137-138) comparable with the Neolithic and Bronze Age communities (see 3.1.3 and 3.1.4). Hensbarrow Downs was carved up between estates which became St Austell, St Stephen-in-Brannel and Roche parishes while Fraddon and Burthy Downs went to the forerunner of St Enoder.

Smaller estates are also detectable within these larger ones; for example part of the curving boundary of an area including Treviscoe, Kernick and possibly Trethosa is visible in the north-west part of St Stephen-in-Brannel (see map 5) This appears to pre-date Trerice to the north whose bounds were recorded in a charter of 1049 which includes valuable details of local pre-Norman topography: "first up from Faele (River Fal) from Hyrt-ar-thugan (Retew) along the highway to the lane. Thence up the old dike to the heathfield. So along the way to Trefotcere (Treviscoe) dike corner. So west to the heathfield to the old dike. So to the Stone Row (Anglo-Saxon Stanraewe). Thence straight to Faele. Upstream again to Retew. And be the enclosures and the barleyland and the mill and the outleap common" (Finberg 1962, 27). Here then, in 1049, was a landscape with roads which could be distinguished between highway (St Enoder and Fraddon to St Dennis?) and lane, with dikes, presumably major boundaries (as Treviscoe dike), some of them already "old", with fields which could be qualified according to land use ("heathfield", "barleyland"),

with commons and a mill, a landscape which would not have been out of place in the later medieval period.

Two more estates smaller than those which became parishes are visible in Luxulyan which appears, on the map, to have once been split along a line to the south of Lower Menadue (Trevillyn and Bodiggo estates of Domesday Book?). The estates which became St Mewan and St Dennis, while clearly secondary to St Austell and St Stephen-in-Brannel respectively, are nevertheless likely to be early medieval as their centres, Trewoon and Domellick, were both recorded as estates in Domesday Book. Local folklore and the name itself (Domellick = *din* 'fortress' + a personal name), hinting at an early medieval re-use of the hillfort at St Dennis, less than a mile east of Domellick, were apparently used by Geoffrey of Monmouth to propose, in his 1130 History of the Kings of Britain, that here was the secondary stronghold *Damelioc* of Gorlois, Duke of Cornwall; Castle-an-dinas in St Columb Major being his chief fortress (Henderson 1928, 85; Thomas 1965, 31-35; Preston-Jones and Rose 1986, 138). There are, however, considerable archaeological doubts that these forts were really re-occupied in this period (Thomas 1965, 34-35).

The indications are rather of a full, flourishing and peaceful landscape, at least at the end of the early medieval period. Returning to the Trerice bounds of 1049 noted above, the "common" use of enclosures, barleyland (open field?), mill and outleap implies more than one farmer living in a hamlet and practising mixed agriculture (dikes retain stock which would graze the outleap). Scores of similar hamlets are indicated by the place-names and the unpopulated areas, uplands and relict woodlands, would also have been fully utilised.

Integrated into this secular landscape was the spiritual. Christianity, apparently introduced into Cornwall in the 5th and 6th centuries, mainly from Wales and Ireland but also from continental Europe, was carefully fitted into the agricultural landscape. The earliest foundations often re-used rounds or built circular enclosures (*lanns*) which resembled them (Preston-Jones and Rose 1986, 106) and they appear to have farmed blocks of land in the same way as their neighbours living in hamlets (*ibid*, 143). At first Christian communities may have been largely introspective but it seems that they gradually began to serve the spiritual, ritual and ceremonial needs of the secular population; this included providing sacred places for burial. By the end of the early medieval period the small estates attached to the religious communities were being absorbed into the larger estates of local landowners who also included Anglo-Saxons. In their place priests, supported by tithes, burial fees and small glebelands, serviced populations circumscribed by carefully defined parish boundaries (Preston-Jones and Rose 1986, 160) which can reasonably be expected to follow those of the larger estates (see above). St Austell, St Stephen-in-Brannel, Roche and Luxulyan appear to have been the dominant early parishes in our study area with St Dennis, St Mewan and St Blazey possibly later medieval parishes.

Little material survives in the winning and working area that can be reliably ascribed to the early medieval church. Two decorated high crosses in St Dennis and Roche churchyards probably belong to the end of the period, post-dating the two churchyards themselves, as well as that of St Stephen-in-Brannel. The sites of six holy wells (which may have had pre-Christian origins but were possibly re-used in the early medieval period) are known in the study area but none appears to survive. An enigmatic oval enclosure in moorland near Whitemoor contains the ruins of a small rectangular building which may be an early medieval chapel. If so, it would

be of considerable importance as very few undamaged examples of such sites survive in Britain (see Thomas 1971).

It is now considered likely that the Cornish early medieval tin industry was "healthy" and "thriving" (Penhallurick 1986, 237-243). It would have still been exploiting alluvial deposits and sporadic but busy activity in our area's valleys should be expected and be set alongside the mellow ways of the farming communities working along the valley sides and on the lower hillslopes.

Domesday Book, prepared in 1086 but referring back to the 1066 situation, provides a valuable if slightly hazy view of landholding and to some extent land use at the end of our period, in the mid-11th century. The places named in the Book, produced for William I, the Conqueror, to assess the value of his new land (see Thorn and Thorn 1979), are less likely to be manors in the generally accepted sense than the centres of multiple estates (see above). The named place, then, will usually be just one of several farming hamlets within an estate. The information concerning Domesday Book estates complements that obtained from parish boundaries dealt with above, especially when the former are ranked according to key variables (hidage, ploughlands, people and value). So the fairly small estate of Trewoon sits alone in the tiny parish of St Mewan while the very important Brannel and Tremoddrett estates are probably co-terminous with, respectively, the large and early parishes of St Stephen-in-Brannel and Roche. Elsewhere the position is less clear with 3 small estates (Trenance, Treverbyn and 'Trenance') in the northern half of St Austell and 4 small ones (Trerice, Carsella, Domellick and Gothers) in St Dennis.

Only four Domesday estate centres (Trewoon, Trenance, Treverbyn and Gothers) are actually in the study area but others, just outside its boundary, will have had farming hamlets, pastures and woods within it: Trevillyn and Bodiggo (Luxulyan) to the east, Brannel (St Stephen) to the south, Burthy and St Enoder to the west and Trerice, Carsella, Domellick and Tremoddrett to the north. The extent of their pastures confirm this with the 4 x 2 leagues in both Brannel and Tremoddrett almost certainly including large chunks of the uplands in our area (although Tremoddrett would also have had pastures on Goss Moor). Other estate centres with large blocks of pasture in and around the area are Domellick (0.5 x 0.5 league), Bodiggo (1 league), Trewoon (1 x 0.5 league) and Gothers (0.5 x 0.5 league).

The Exeter version of Domesday Book includes notes on the livestock kept on the demesne farms (those worked by the landholders or lords themselves) of some estates. These show that sheep dominated in this part of central Cornwall (cattle:sheep ratio rarely less than 1:10), no doubt reflecting the extent of upland grazing, possibly still being worked by transhumance (see above). Although sheep and goats were milked in the medieval period, it is unlikely that the largest flocks (200 at Trenowth and at Tywardreath, 100 at Brannel) were; they were probably kept for their meat and wool. Cattle (never more than 12 and usually less than 6 in a herd) were probably milked, as were the goats (6 to 12) while pigs (2 to 12) would have been eaten and unbroken mares (20 and 21) kept for breeding.

Arable was probably worked under a form of the ley or alternate husbandry which Cornish farmers have used right down to the post-war years. Each field, or cropping unit (furlong) if in an open field, would be cropped for 2 or 3 years and then sown with grass seed before being used as ley meadow or best grazing for between 5 and 10 years; the passive manuring by grazing animals supplemented by rest and other

preparations (sea sand, seaweed, farmyard manure, ashes, beat-burning etc) returned fertility and structure to the soil in readiness for the next round of cultivation. This regime is suggested in Domesday Book by the ratio between ploughlands (ie cultivable land) and actual ploughs (ie area under the plough at any one time); this was rarely less than 2:1 and usually c.3:1 suggesting, perhaps, a 3 to 6 year ley.

The Book was produced to record the information required by a tax assessor, not the details of everyday life, so omissions need not indicate non-existence. The lack of references to tinning for example is due to it being a royal property and therefore not assessed for taxation (Penhallurick 1986, 237). Its silence on mills, however, is more difficult to understand but probably relates to tenants not always paying directly for milling. Thus Trerice mill, recorded in 1049 (see above), may not be mentioned in Domesday Book because tenants used it as part of their common rights. It is quite likely, then, that mills were less rare in early and later medieval Cornwall than was previously thought (eg Ravenhill 1967, 334).

3.3 Later Medieval (Map 6)

The settlement history of our area is confused by uncertainty over dates of origin of many farms and farming hamlets first recorded in documents of the 13th, 14th and 15th centuries. We know that many places with reliably early medieval names in *tre, bod* and *ker* do not find their way into documents until this time (see Appendix 6.18). For example, in St Stephen seven places in the study area have *tre* names but only one, Treviscoe, also has a definitely early medieval (1049) documentary reference; the other six, Terras (1270), Tregascoe (1320), Trethosa (1327), Trevear (1327), Tregargus (1356) and Treneague (1380), all appear, from a first glance at these dates, to be later medieval (dates obtained from Gover 1948 and from Oliver Padel's place-names index, Institute of Cornish Studies). While there is no difficulty in assigning these *tre, bod* and *ker* places to the early medieval period (see Padel 1985) the problem arises with those others with less distinctively early medieval names. It would be unreasonable, without independent archaeological investigations, to treat them all as later medieval and to suggest that they represent infilling of the landscape although some, particularly those few with English rather than Cornish names (eg Bilberry-1260 and Bodella-1554), may well be relatively late.

It does seem likely, however, that a band of settlements along the east side of the central massif, from Hallew and Molinnis in the north to Carluddon and Cannamanning in the south and including Carnsmerry (now called Bugle), Chynoweth and Penwithick, which have earliest references between 1357 and 1469, represents colonisation of marginal land in this late period. A similar process has recently been documented on Bodmin Moor with early medieval and 12th and 13th century farms along sheltered valleys being used as springboards for the 14th, 15th and 16th century settlement of more exposed sites (Johnson and Rose, forthcoming).

A preliminary study of field systems in the area suggests that most settlements occupied in the later medieval period were farming hamlets; 63% of systems associated with medieval settlements appear to have originally been subdivided or strip field systems, indicative of sharing between two or more farmers. Although only two strip field systems survive in their medieval condition, and then only partially (Treskilling/Lestoon and Old Pound), with low stony banks defining long narrow strips held by various individuals in the hamlet, there are another 95 wholly enclosed field systems which either 'fossilise' some parallel, slightly curving strip

Map 6 Medieval settlement and field systems

boundaries in their field patterns (good examples at Gothers, Rescorla, Lower Menadue and Bodwen) or fossilise the larger, roughly rectangular cropping units, or furlongs, which would have been bundles of several strips (good examples at Menear, Tregascoe, Bodella and Polskeys). The other 37% were irregular field systems, not obviously subdivided, and perhaps always belonging to single farms. It is possible, however, that some of these may also have been worked by hamlets; some may be re-using prehistoric field systems as many medieval hamlets in West Penwith are known to have done (CAU, forthcoming) while others may be strip field systems whose enclosure destroyed all traces of their original forms (see Herring 1986, Vol 2, 161- 165 for details of these processes): (see map 6.)

With no definite example in the study area of a settlement abandoned in the later medieval period (with the possible exception of Chegwins, see below) we rely heavily on the study of abandoned sites on Bodmin Moor to gain an impression of life in medieval farms and farming hamlets. In a hamlet small numbers of farmsteads (2 to c.10?) would have been loosely arranged around an open communal area, the 'townplace'. Each farmstead would probably have had one principal dwelling, usually a long-house with, clustered around it, several small outhouses, sometimes including secondary dwellings (for workers or dependent relatives), and two or three enclosures (yard, mowhay, garden). Various features in the hamlet would have been communal, shared by all the farmsteads; these might have included the well or stream which provided water, one or more corn-drying barns (for drying and ripening grain harvested either wet or unripe), and a bread oven. The townplace itself, the open space through which animals and people passed between farmstead and fields and where children played among the chickens, ducks and cats, would also have been communal as would the various lanes and tracks leading away from it to the fields, meadows and pastures and beyond them to the church, courts, markets, towns etc (see Herring 1986, Vol 2, 116-138). Although no hamlet in the study area survives with these medieval features visible, a number still comprise clusters of dwellings (mainly 17th to 19th century buildings) and retain essentially medieval irregular layouts, determined principally by townplaces and the lanes and tracks. Good examples include Trethosa, Retillick, Penisker, Higher and Lower Menadue and Lower Biscovillack while old Polskeys, abandoned in the 19th century and with no standing buildings, closely resembles a Bodmin Moor abandoned medieval hamlet with at least five building platforms. Remains of medieval buildings and farmstead features will exist below ground level at these sites and at all others with medieval origins.

On the basis of archaeological evidence from Bodmin Moor, Dartmoor and North Cornwall, most 12th to 15th century farmhouses in our study area can be expected to have been long-houses. These single-storeyed rectangular buildings, whose long axes ran down the slope, housed both people and animals (usually cattle) who shared two entrances, opposite each other, roughly centrally placed in the long walls. Animals were wintered in the downhill end and may also have been milked here during the rest of the year. Well-constructed timber and stone stalls and mangers ran along one or both long walls and a stone-covered drain carried liquid manure out of a drainhole in the lowest end. Built into the roof above the animals would have been a hayloft. Uphill of the cross-passage defined by the two entrances was the domestic end of the house where the people lived. The main room had an open fireplace with a granite fireback, smoke probably finding its way out through the thatched roof. Fixed wooden furniture, usually built around the insides of the walls, included benches and cupboards, and perhaps also beds. There was also plenty of space for mobile furniture and domestic equipment (rotary querns, looms etc). Often

an unheated inner room led off uphill from this main room; this was probably used for storage and as relatively private sleeping quarters (perhaps for parents). A sleeping and storage loft constructed over this inner room would have further increased accommodation, but the main room would have been left open to the roof (Herring 1986, Vol 2, 70-95).

Long-houses, known from at least c.1100 and possibly having early medieval origins, were very well-built structures, the homes of comfortable tenant farmers working 15 to 25 acres of good land (Herring 1986, Vol 2, 148-151). Barns and other outhouses would be equally well-built and there is no reason to doubt that gardens were well-stocked with a variety of vegetables, fruit, herbs and flowers and mowhays and yards filled with stacks of hay, corn, bracken (ferns), gorse (furze) and turf (peat) (ibid).

A possible ruined long-house located during this survey at Chegwins, east of Foxhole, was c.4.0m wide internally and, although damaged at its downhill, shippon end, its length can be estimated at c.15.5m, both dimensions typical of Cornish medieval long-houses (see Herring 1986, Vol 3, Tables 20 and 21). Two small enclosures were attached to the house, one still containing overgrown lazy beds, the remains of spade-dug raised garden beds. A field to the south contains the low corrugations, or ridge-and-furrow, of farming cultivation, presumably contemporary with the house. Other buildings may have existed to its north but these would have been destroyed by the post-medieval road which cuts through here. Only excavation could demonstrate this is a medieval long-house; excavation would also provide valuable comparative information on architectural detail, fittings, pottery and other objects from here in South Cornwall to set alongside that obtained from long-houses excavated on Bodmin Moor and Dartmoor. As noted above, other long-houses are expected to survive, at least to floor level, beneath more recent buildings and farmyard features on all settlements with medieval origins in the clay district.

The families living in a typical medieval hamlet co-operated closely in the fields and pastures. Each family held a number of narrow strips in the several arable fields and consumed or sold the produce from them, storing it in their own mowhays and barns. They helped each other, however, in working the ground (using spade and plough) and in the harvest and shared decisions concerning which fields were to be cultivated, used for hay or just grazed in any particular year. Pastures, turbaries, meadows, woodlands and waste would be used in common. The natural products of commons and meadows appropriated by and used in individual households and farmsteads would include hay for fodder, bracken for bedding, furze and peat for fuel, rushes for thatching and for wicks, fish, wild fowl and their eggs, wild animals, the fruits, nuts, roots, stems and leaves of wild plants and honey etc. Stones and underwood timber could be collected for use in buildings and in the farmsteads (Herring 1986, Vol 2, 1-63).

Farmers probably operated ley or alternate husbandry regimes (see early medieval section). Each field system appears to have had between 5 and 10 cropping units or fields rather than the 2 or 3 of the better-known medieval open fields of the English Midlands which had either a half or a third of the land fallow (ploughed but uncropped) in any one year. In ley husbandry there was no fallow as grass seeds sown with the final crop of each cultivation cycle allowed all fields to be productive, either of crops or of hay/grass. The much longer husbandry cycle (up to 10 years; 2 or 3 years cropping and 5 to 8 years ley) required more cropping units to maintain

flexibility and productivity. Crops would have been mainly grain (oats, pillas (naked oats) and rye perhaps dominant on the acid granite soils with more barley and wheat on the lower slate-based soils) although legumes and root crops would have also been grown (ibid, 148-160).

Together, the products of the various commons, the gardens and farmyards (domesticated fowl, pigs, pigeons etc), the field crops and the various livestock (cattle, horses, sheep, goats, geese etc) provided medieval farming families with full, varied and healthy diets.

Beyond the field systems and small commons belonging to particular farming hamlets and farms there were still, in the later medieval period, large areas of open high ground which would have been used by several farming hamlets in common, with the shepherds and cowherds who tended the large intermingled flocks, herds and gaggles provided or supported by the various farmers. Long stock-proof pasture boundaries and natural boundaries like streams subdivided these open downs and curving ring-fences (in fact strong Cornish hedges) protected the private commons and field systems from straying stock.

As in the early medieval period, farming hamlets were not autonomous units but were grouped into estates or 'manors', their inhabitants tenants of 'lords' or estate owners often living within the estates in farms or hamlets not unlike those of their tenants. Medieval tenants in Cornwall usually paid money rents and performed very few labour services (Hatcher 1970, 52-79). They also paid heriots (tributes of their best beast or a sum of money) to their lords on the deaths of named tenants and entry fines whenever tenancies were re-negotiated (ibid) and were probably also obliged to have their grain ground, for a fee, in manorial mills scattered around the edge of the clay district. The open upland grazing noted above would have belonged to certain estates who gave them some of their names - Trelavour, Burthy and Rostowrack Downs, Burngullow Common - and the common rights tenants held carefully defined. Pounds, for retaining livestock using the commons illegally (exceeding stocking levels and trespassing from other estates) were constructed within most estates and several survive as place and field names (eg Old Pound, on the south-west edge of Longstone Downs).

Exchanges and sales of land, marriage bargains involving gifts of land, and other similar mechanisms meant that estates or manors rarely maintained fixed extents through the medieval period. As shapes and sizes changed so centres or home farms often also changed, and estate names with them (see Rowse 1969, 46). Too little work has been done on later medieval landholding in the study area to enable the more important estates of this period to be identified.

Parishes, however, as areas supporting priests and their works (through tithes and other less regular fees paid by parishioners), were quite firmly established by the 12th century, at least, and possibly by the end of the early medieval period. The priests affirmed the Christian beliefs of the area's inhabitants and performed the various Christian rituals and ceremonies. The people of a parish were bound together by allegiance and obligations to their church and were also responsible for part of the upkeep of the church and churchyard.

Only three of the ten parishes extending into the study area actually have their churches within it and those are all within Island Settlements (Roche, St Dennis and St Stephen-in-Brannel). All three were restored in the 19th century, Roche and

St Dennis especially severely (Sedding 1909, 346). These restorations either destroyed or damaged many medieval features but it is still possible to piece together outline early histories of each building.

It is clear that each had a Norman church and probable that St Stephen and Roche also had pre-Norman churches. All three retain Norman fonts, those at Roche and St Stephen being excellent examples of the ornate "Bodmin type" of c.1150 to 1180 (Sedding 1909, Plates 138 and 152) while the simpler circular font at St Dennis is considerably earlier, c.1080 to 1100. St Stephen has a rebuilt and slightly damaged Norman south door in a south wall of probably Norman stonework (Sedding 1909, 362 and Plate 153) and the lower parts of the transept and north walls of nave and chancel at Roche may also be Norman (ibid, 346).

Most Cornish churches were refurbished, enlarged and often entirely rebuilt in the 14th and 15th centuries, partly on the back of the county's unusually industrialised and commercialised economy which saw wealth trickle down through the parishioners' purses into the church's lockers. St Dennis' short but attractive west tower belongs to the 14th century (Sedding 1909, 91-2) and there is evidence of a partial rebuild in the early 14th century at Roche (Payne 1946, 26). Most surviving medieval work in our three churches, however, is 15th century. The lofty pinnacled west towers of St Stephen and Roche (pinnacles now lost from the latter); the south aisles of Roche and St Dennis; the fine north aisle of St Stephen and most windows and doors are of this century. Very little of the old woodwork survives (some in the roof of St Stephen's north aisle) and few fittings (a 15th century bell at St Dennis) (see Sedding 1909, Fox 1912 and Brown 1973 for details).

Holy wells, surviving into modern times, must have continued to be used into and through the later medieval period. Wayside crosses, small wheel-headed or latin affairs made from single blocks of granite, are difficult to date because of their extreme simplicity but are generally regarded as later rather than early medieval (Preston-Jones and Rose 1986, 160). These were set up along the lanes and paths leading from farming hamlets to the church but only one is known to survive in place in the study area (Tregonning - see Langdon 1988, 206-7) although several others have been shifted to nearby churches (not always those of the relevant parishes) in the last two centuries. Still others are suggested by field-names.

Domestic chapels, oratories for private devotions, were often installed within the homes or grounds of local landowners in the later medieval period. This may have involved little more than setting aside a room for the purpose (Adams 1957, 60-1) although some freestanding chapels were built, for example at Meledor where fragments of carved stonework (including a cresset stone and two stone heads) survive in the present buildings. Other domestic chapels are recorded at Treneague, Tregonhay, Treverbyn and St Stephen and field-names hint at at least two more at Trebilcock and Prideaux (Luxulyan). The chapel on Roche Rock built, with a cell for a chaplain or hermit below it, in 1409 and dedicated, like many chapels in high places, to St Michael is one of central Cornwall's most famous landmarks (see Payne 1946, 49-52). Why it was built is still unclear but it may have provided a light or beacon for guiding travellers across the moors (Adams 1957, 58).

Another important feature of Cornwall's human landscape, the basic system of highways (based on natural ridgeways and navigable rivers), local roads and minor lanes, was also in place by the medieval period; its detail shaped by topography, field systems and commons and its age confirmed by the numerous medieval bridges

still surviving and being used throughout the county (see Henderson and Coates 1928). Only Lavrean bridge in the study area has medieval documentation but others would have existed. At parish level, lanes and paths connected hamlets first with their fields and pastures and then with estate/manor centre and church. Unless settlements moved or field systems were re-organised, there was no need to alter these local networks. Thoroughfares connected them to neighbouring parishes and the nearest towns, Grampound, Lostwithiel, Bodmin, Fowey and St Columb Major (St Austell was still just a village). It was at the towns, and places where regular livestock fairs were held (places like Roche, St Dennis, St Austell, Summercourt, St Columb Major and Tregonetha) that the farming people conducted their business. Their rents and other monetary obligations, as well as their need for items they could not produce themselves, forced all farming households into the marketplace and onto the fairground.

This was not just an inward-looking, self-sufficient rural backwater; it had connections, mainly through trade and industry, with the exceptionally busy commercial world that was medieval Cornwall, one of the earliest industrialised regions in Europe (see Hatcher 1969). The medieval Cornish economy was remarkably diversified. Its base was market-orientated agriculture with all the usual small-scale ancillary industries (pottery, ironworking, leather-making etc) but there was also tinning (see section 3.4 for our area), cloth making, stone and slate quarrying, fishing, boat-building and victualling (Hatcher 1969).

One of the most important contributions to the shaping of the Cornish landscape of this early commercialism was the impetus it gave to the breaking up of the co-operative farming hamlets which had dominated the countryside since Neolithic times. Now individual farmers, working to produce surpluses for flourishing markets, opted out of the old communal ways, enclosing their holdings and working alone. Many hamlets broke up, more shrank through amalgamation of holdings to the single farms now so common in our area and throughout Cornwall (see Herring 1986, Vol 2).

While many peasant farmers were edged out of agriculture by this process others profited and improved their economic and social positions. The architecture of their homes reflected this and the long-houses were gradually replaced by more substantial two-storey houses used solely by people, not shared with cattle. One of the best surviving medieval houses in Cornwall is in our study area. Methrose, in Luxulyan, "is remarkable in having survived as a dwelling house with its principal medieval features unaltered" from the late 15th or early 16th century (Chesher and Chesher 1968, 30-31). It is a hall-house with the main room, the hall (entered from a cross-passage below), open to the roof and with a laterally placed fireplace with chimney stack. An inner-room which existed uphill from the hall may have had a first floor; certainly the service room downhill from the cross-passage was two-storeyed, built out over the cross-passage to jut into the hall like a screened-off gallery (ibid).

3.4 Later Medieval industry - tinning (Map 7)

Blackmore Stannary, of which the study area forms part, was Cornwall's dominant tin-working area in the early 14th century and probably throughout the early part of the later medieval period. In 1305 no less than 450,357 pounds (weight) of tin were presented for coinage (taxation) at Lostwithiel, the coinage town serving Blackmore; this compared with 166,329 pounds presented at Bodmin from Foweymore (roughly co-terminous with Bodmin Moor), the second most important

Stannary and a total of 248,876 pounds presented by the two western Stannaries of Tywarnhaile and Penwith-Kerrier (see Maclean 1874, 190) and gave Blackmore 52% of the total quantity of tin presented for coinage that year. As the more easily worked alluvial (river valley) and eluvial (valleyside and plateau) deposits of Foweymore and Blackmore exploited by these early streamworkers were gradually exhausted and as the best and most easily worked lodes began to be mined (by openworks and the simplest of shafts) so the importance of Blackmore dwindled and the western Stannaries flourished (Gerrard 1987, 9-11). The equivalent statistics for 1577, at the very end of the later medieval period, show just 128,688 pounds coined at Lostwithiel, representing only 13.5% of the total weight of tin coined in Cornwall that year; the great bulk (78.1%) was now coined in Tywarnhaile and Penwith-Kerrier (Maclean 1874, 190).

Although the heart of Blackmore, the Hensbarrow massif, is within our study area its most productive tinning grounds were to the north, east and south. These were the important alluvial deposits of Goss Moor to the north, Innis, Trescoll, Lowerton and Red Moors to the north-east and the lower valleys behind St Blazey, Crinnis and Pentewan to the south (see Penhallurick 1986, 175-201 for post-medieval stream-working in these areas).

Documentary evidence for particular medieval streamworks and mines in Cornwall is very sketchy and while there are scores of references to "tinworks" and their bounds in Blackmore in the relatively quiet years of the late 16th and 17th centuries there are just a few from the busy medieval period and those are mostly late (Gerrard 1986, 304-329, Table 1). They do, however, conform to a pattern detectable in the archaeological remains; that is for alluvial streamworks to be concentrated in the low flat valleys of the eastern half of the study area, in particular the western tributaries of the Luxulyan River. So we have, working from north to south, Tremoddrett (1512), Bradmore (1508), Lavrean (12th century) and Rescorla (1501) on this river system and Restineas (1508) and Mary Maudlin (1507) on the Tregrehan stream to its south. Gilley (1522) is on the Fal River at the edge of the extensive Goss Moor workings. Unfortunately these alluvial streamworks have been regularly re-worked and disturbed from the early post-medieval period to the 20th century (Penhallurick 1986, 175-201) and detailed survey is required to distinguish any surviving medieval cuttings, leats and dumps. The present survey was not detailed enough to achieve this although "hatches" identified at Pendulaw (27762) and "cuesta works" at Little Lavrean/Treskilling (27772 and 27766) may well be medieval. It must also be noted that there would have been a succession of re-workings and extensions of workings within the medieval period itself and that some streamworks will have early medieval or even prehistoric origins.

The various methods of medieval alluvial streamworking have been dealt with recently by Sandy Gerrard (1986 and 1987). In essence such works exploited deposits of cassiterite detached from lodes, subjected to weathering and then transported to valley bottoms where they have been sorted by alluvial action. A well-preserved alluvial streamworks will comprise patterns of dumps of "stent" (the waste, including stones) thrown aside from the "tyes", the cuttings or working areas. Drainage channels, lower than tyes and into which water drained with fine waste in suspension, and diversion channels, along which the streams themselves were diverted to keep workings reasonably dry, will also be found (ibid and also see Rose and Herring 1990, 353-356).

ST. AUSTELL CHINA CLAY AREA ARCHAEOLOGICAL SURVEY

Winning and Working Area

Island Settlements and Par Corridor

Eluvial streamworks

(destroyed)

Alluvial steamworks

(destroyed)

Surface mining

(destroyed)

Leat

Map 7 Streamworks and Early Mining

On Bodmin Moor it appears there is less likelihood of post-medieval and modern re-working and thus destruction of the other form of streamwork common in the medieval period, the eluvial streamwork (Rose and Herring 1990, 367). In this tinners exploited deposits of detached and weathered cassiterite not sorted by alluvial action (Gerrard 1987, 22), material known as 'shode'. This could also be worked 'dry', in shambles of small sub-rectangular pits, termed shode-workings, but wherever possible the tinners preferred to use water, brought by leats and stored in reservoirs, to separate, hydraulically, heavy cassiterite from lighter waste. Shode-works, which need not always be medieval, tend, then, to be confined to higher slopes or plateaux where water could not be easily brought (examples on Trelavour Downs, Caerloggas Downs, St Stephen's Beacon and on Burngullow Common). Eluvial streamworks are distinguished from alluvial ones by being located away from river bottoms; they also usually possess leats and reservoirs and, because the sites are not waterlogged and peat formation is thus limited, their features (particularly their cuttings and dumps) are more clearly defined (Gerrard 1987, 22). Although damage through re-working is usually relatively slight, their locations on slopes make their leats and reservoirs in particular, and sometimes whole complexes, vulnerable to being erased by agricultural improvement. This, coupled with their sharing the same topographical zones (upland slopes) as china-clay workings, whose destructive powers are comprehensive, has no doubt led to a significant distortion of our record of the original distribution and importance of eluvial streamworks. A few, however, survive in very good condition and are thus extremely valuable monuments to medieval extractive industry (see Rose and Herring 1990, 368 for a discussion of their national importance). That on the north slopes of Hensbarrow Downs (PRN 27814) is one of the finest examples in Cornwall with at least eight reservoirs surviving in the heath above the main cutting.

As noted above, working of the tin lodes themselves is likely to have commenced in Cornwall in the later medieval period, possibly by the late 13th century (Gerrard 1987, 9). Opencast working of lode-bearing rock produced the narrow linear gullies known as openworks. The large pit which preceded the clay works at Carclaze, unusual in being very broad as it devoured several closely-packed lodes, is traditionally regarded as having 15th century origins (Dines 1956, 539) and Great Beame mine (now lost beneath the dumps of Goonbarrow clayworks) has a 1616 reference (Gerrard 1986, 311). Menear Pit, another openwork reworked into the 20th century, may have been included in the tinbounds of Menear dated 1652 (ibid, 318).

Sinking lines of simple shafts onto backs of lodes produced the so-called lode-back pits, most of which will be early post-medieval (16th and 17th centuries) although some are no doubt later medieval (Rose and Herring 1990, 347). Apart from restricted groups on Hensbarrow Downs, Trelavour Downs and Burngullow Common, most lode-back workings in the study area (suggested by documents and early maps) have been destroyed by china-clay working.

Tin streaming and early mining had a double effect on the landscape of the study area. First there was the physical impact on it of the works themselves. As well as the often extensive extraction sites, with all their supporting leats, reservoirs, tinners' shelters, tracks etc there were ancillary sites such as stamping mills (serving the openworks and early mines) and blowing houses, smelting the cassiterite. All would have created relatively short-term disturbances but left permanent scars. More fundamental was the effect on the agricultural landscape. Many miners would have been part-time farmers and would have enclosed and

rented land for small holdings from local estate owners, or lords, adding to the gradual colonisation (Hatcher 1970, 35; Austin et al 1989). Established farms would also have flourished as the miners would not have been wholly self-sufficient and would have added to the already buoyant demand for agricultural products. It has already been noted (end of section 3.3) that this demand was probably a major cause of the break-up of the traditional Cornish farming hamlet.

3.5 Post-medieval Settlement and Farming (Maps 8 to 11)

In the early post-medieval period, in the 16th, 17th and early 18th centuries, the study area continued to gradually revert to being an essentially agricultural region, a process begun towards the end of the later medieval period when the streamworking industry peaked and then declined. Tin mining did continue through this period but at a greatly reduced level and it would be reasonable to characterise this as one of the quieter phases in the area's history. Even in the second half of the 18th century, after the historic recognition of china-clay (kaolin) in the 1740s and with the earliest pits opening in the uplands and valleys, farming and its associated local industries still dominated the area's landscape and economy. The first trickle of new settlements accommodating clay workers had, however, begun and quickly swelled to the 19th century flood when small farming hamlets like Nanpean and Trethurgy became industrial villages and labourers' cottages sprang up all over the moors and downs, creating looser villages like Whitemoor and Lanjeth (map 8). Life in the district has never been the same since and, with the re-arrangements of landscape now taking place, never will be wholly or largely agricultural again.

Enclosure of medieval open or subdivided fields continued in the early post-medieval period so that by the late 16th century they were rare in Cornwall generally and presumably also in our study area (see Herring 1986, Vol 2). Farming hamlets shrank as holdings were amalgamated, brought into the hands of more successful tenants; many hamlets became the single farms so common today. New farms also continued to be created, filling in the valleys and the lower hill-slopes. In the two centuries between 1550 and 1748, when Thomas Martyn made his fairly detailed map of Cornwall and just three years after china-clay was recognised in the area, another 32 farms appear to have been set up, places like Old Pound, Fenton Farm, Scarcewater and Mount Stamper.

Early post-medieval farms would not have looked unfamiliar today; dwellings after the late 16th and early 17th century Great Rebuild were fairly impressive, two-storeyed with many decorative features. The cosy low medieval long-houses were apparently swept aside, replaced by houses offering more rooms, privacy and space and which were outward looking, designed to be appreciated by visitors and passers-by, houses like those surviving at Meledor, Trevear, Resugga and Methrose (see Chesher and Chesher 1968). The farmyard, often a short way away from the house, would have contained barn, cows' house (shippon), stable, pigsty etc. Fields and enclosures were defined by Cornish hedges and farming practices would have been little different from those of the medieval period; certainly agricultural technology was little different even if the tenurial arrangements of the 13th and 16th centuries were. Peasants who had been fairly equal in the medieval period were becoming either yeomen or farm labourers, landed or landless, wealthier or poorer.

Churchtowns and larger hamlets would contain local craftsmens' shops, the blacksmith, carpenter, wheelwright and cooper; artisans who had existed in medieval times but who become more and more visible as we move towards the 19th

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Winning and Working Area

Island Settlements and Par Corridor

- Farming hamlet
- Farm
- Small farm
- Cottage

Map 8 Rural Settlement (pre-1880)

century. In the countryside were tanners, transforming skins of dead farm animals into leather; fullers, pounding and stretching the woven wool of hairy Cornish sheep in water-powered mills; millers grinding farmers' oats, wheat, barley and rye; and other rural industrial workers, those like charcoal burners, chair and clog makers and tinkers leaving little or no mark on the landscape (map 9).

Back in the churchtown, just outside the churchyard walls, at least at St Dennis and St Stephen, was the pleasure piece or playing place, perhaps once the plain-an-gwary. Miracle plays may have been enacted here, supplementing sermons, getting the word of God across to the people in vivid, exciting ways. The same ground shook on other occasions to the falls of wrestlers or to the thud of dancing feasters, moving to the rhythms of local or travelling musicians, their heads if not their feet lightened by the products of malthouse and cider press.

On certain nights, Midsummer and Midwinter and perhaps other days sacred to the old religion, people gathered on the beacon hills to light fires celebrating nature and its spirits and cementing wider community relationships, the flickering fires of neighbouring parishes spotting the dark horizons. During the 16th century bonfires or more controlled fires, in braziers on poles, were lit on these same beacon hills to alert the people to danger, to pass information across country quickly, and to muster the levies and later the militia. These were the days of Spanish Armadas, when the nation came down to the people who worked the land and entered their lives. This military use of beacons was short-lived, however, being replaced by the end of the century by slower but more explicit means of communication (Carew 1953, 156); the celebratory gatherings of locals with their longer history and deeper meaning continued into the 19th century (Bottrell 1880, 179) and with the encouragement of Old Cornwall societies beacon fires are still lit at Hensbarrow and on St Stephen's Beacon each Midsummer.

The houses of ordinary people were, by the end of the 17th century, being influenced by the Classical Revival; symmetry was everywhere sought after and in the second half of the 18th century even the facades of the humblest dwellings, single-storeyed cabins, had central doors with single windows on each side and buttress chimneys at each end. In the farmyards barns (now two-storeyed with stable or shippon under the threshing loft), shippons and even piggeries were also carefully designed; many survive to display the care and pride invested in them by Hensbarrow farmers. The large barn at Lower Menadue (PRN 27759), the smaller one at Goonamarris (PRN 19955), the pigsty at Restowrack (PRN 21202); all are as impressive as any contemporary dwelling in the area.

In the 130 years from the first china-clay workings the process of extending cultivated land and setting up farms in the valleys and on the lower slopes speeded up, no doubt encouraged by the demand for foodstuffs generated by the clay industry and a resurgent tinning industry. Between 1748 and 1805 another 30 farms were created, almost as many as in the previous 200 years (32), and in the next 35 years to 1840, another 32 were created. It appears, however, that viable farmland was now becoming fully taken up as just 18 new farms were established in the next 40 years, to 1880, and very few have been created since.

These were proper farms, with 30 or 40 acres of reasonable arable/pasture land and access to the diminishing roughland on the commons. Each was occupied by a full-time farmer and had a substantial barn housing 12 to 20 cattle. They are to be distinguished from the 'small farms' a phenomenon of the early modern period. The

history of small farms is inextricably interwoven with those of local extractive industries (china-clay and tin). Only 13 of the 170 recorded in the area can confidently be dated to before 1748 and some of these will have shrunk from more substantial farms or hamlets. The other 157 were created in the 132 years between 1748 and 1880 (Martyn's Map and the 1st edition OS 1:2500 map respectively): 24 between 1748 and 1805, 89 between 1805 and 1840 and 44 between 1840 and 1880. There was a surge, then, in the first half of the 19th century, the period when the clay industry was establishing itself and required a permanent workforce (see below for details of population increase in this period). Small farms, working 5 to 10 acres, with a modest dwelling, often a chall-house (dwelling and two-storeyed barn as a single range, under one roof) plus two or three small farm buildings arranged around a tiny yard, were occupied by families of clay workers, tin miners and farm labourers. These people were encouraged to enclose and improve heathland by local landlords (whose return from their property was thus increased), by their own straitened household economies (they needed to supplement their income and produce as much of their own food as possible), and by a contemporary social morality, vigorously supported by Methodism, which urged people to be thrifty, frugal and hard-working. The men, women and children, tired from long days in the pit, down the shaft, or on the processing floor, spent much of their limited spare time establishing and then working their few acres. They would, however, have been envied by some of the inhabitants of the lowliest form of settlement, the cottage.

Throughout the district, but concentrated in areas which saw most clay-working activity in the early decades of the 19th century, are cottages, the homes of landless workers, isolated or in small groups where they are not in expanded hamlets (Nanpean, Goverseth, Foxhole, Treviscoe, Whitemoor, Carbis, Bugle, Penwithick, Stenalees, Trethurgy, Rosevean, Ruddlemoor, Carthew, Tresayes, Trewoon, Trelavour). Away from Island Settlements (largely these hamlets) no less than 214 sites of cottages extant by 1880 were recorded; these include as sites, terraces or pairs of cottages so that approximately 360 separate dwellings were noted.

Most cottages are 19th century although 40 were recorded on the 1805 1 inch OS map. These would have accommodated families of tinners, clayworkers and farmworkers of the second half of the 18th century. Between 1805 and 1840 no less than 87 new cottage sites were created and in the next 40 years, to 1880, another 85. So while the establishment of new farms and small farms tailed off after 1840 the need for homes for workers in the burgeoning clay industry kept the demand for cottages up through to the beginning of the present century. The council houses and modern housing estates in settlements like Penwithick, Foxhole and Trewoon suggest that the demand has continued although many of these house people made homeless by the destruction of older cottages which, rather than being concentrated into several strategic clusters (the Island Settlements), had been scattered through the countryside, allowing workers to walk to pit or plant (see Clemo 1948 for vivid descriptions of the closeness of people and work-place in the clay district).

Censuses of the 19th century and the first part of the 20th record the population expansion in the clay district. The population of Roche parish grew by 113% between 1801 and 1841 but then declined gradually through the rest of the century. Clayworkings around Tresayes, Great Wh. Prosper and Gracca must have stimulated the early growth. In St Stephen-in-Brannel there was a slower start to the 19th century with just a 9.5% population rise between 1801 and 1811 but this was followed by a 30% spurt to 1821. Unlike Roche, the population of St Stephen continued to rise all through the 19th century and into the 20th century so that it

ST. AUSTELL CHINA CLAY AREA ARCHAEOLOGICAL SURVEY

Winning and Working Area

Island Settlements and Par Corridor

- Mill
- Smithy
- Tannery (field-name)
- Wheelwright
- Feed mill
- (field-name)
- (field-name)

RESTORMEL DISTRICT

Map 9 Rural Industry

climbed by 291% between 1801 and 1921 (see table below). The churchtown grew during this period but most of the new inhabitants found homes within our area, largely in settlements like Foxhole, Nanpean and Treviscoe, but also in the small farms and isolated cottages noted above. Luxulyan parish, despite some relatively minor clay works and alluvial streamworks in its western half and busy industrial works in the Luxulyan valley, had a demographic pattern virtually indistinguishable from the scores of non-industrialised agricultural parishes in Cornwall. The early 19th century growth (a rise of 46% between 1801 and 1821 and another 18.5% to 1841) was followed by steady decline until the end of the century and a slight rise in the early part of the 20th century.

	1801	1811	1821	1831	1841	1851	1861
Roche	954	1164	1425	1630	2041	1863	1882
St Stephen	1738	1904	2479	2477	2643	2711	3045
Luxulyan	875	1047	1276	1288	1512	1439	1329
	1871	**1881**	**1891**	**1901**	**1911**	**1921**	**1931**
Roche	1863	1681	1626	1624	1827	1950	1965
St Stephen	3110	3228	3590	4146	4831	5064	4801
Luxulyan	1248	1098	937	970	1016	1019	1010

The growing population was served by several forms of public institution (map 11). Inns and public houses opened at many of the larger hamlets; the Bugle Inn opened in 1840 at Carnsmerry and eventually gave its name to that settlement. Elsewhere there were the Rock Inn (High Street), Grenville Arms and Queen's Arms (both at Nanpean), Sawles Arms (Carthew), the Commercial Inn (Trelavour), Rock Inn (Roche), Kings Arms and Queen's Head (both at St Stephen) and the Miner's Arms (at Hendra, near St Dennis). A lonely pub on the Reperry Cross to Luxulyan road was the Seven Stars just south of Conce, now simply a dwelling but retaining two cartsheds and a stable. Besides these licensed pubs there were probably a number of smaller unlicenced houses, kiddlywinks, selling illicit drink to the poorer people (see Jenkin 1945, 203-206).

More impressive than this list of drinking places was the large number of preaching places or Methodist chapels. Most of the 31 chapels known in our area still stand and many are still used. The established church, the Church of England, had the three medieval churches and another seven parishes reached into the study area. After 1847 there was also a new parish within it, Treverbyn having been cut out of the large St Austell parish. Treverbyn's simple gothic church, built in 1850, has a nave, chancel, porch and bellcote. Two of the three medieval churches (St Dennis and Roche) were severely overhauled in the early 19th century, partly as a vain response to the pressure Methodism was exerting on Anglicanism; they were made to appear "as much like.... mere preaching-houses as possible" (Sedding 1909, 346).

The origins of Methodism in Cornwall have been well documented (see Brown 1964, 67-77). The movement, inspired in the mid-18th century by John Wesley, has been placed against a wider historical background, not just the failings of the Church of England and the rise of critical theology and neo-Puritanism but also the development of an industrialised society and the broadening perceptions of the liberalisation of European culture and the movement towards democracy of various

institutions. Methodism and other non-conformist churches gave local middle classes rare opportunities to have some control over their public lives (see Thompson 1968).

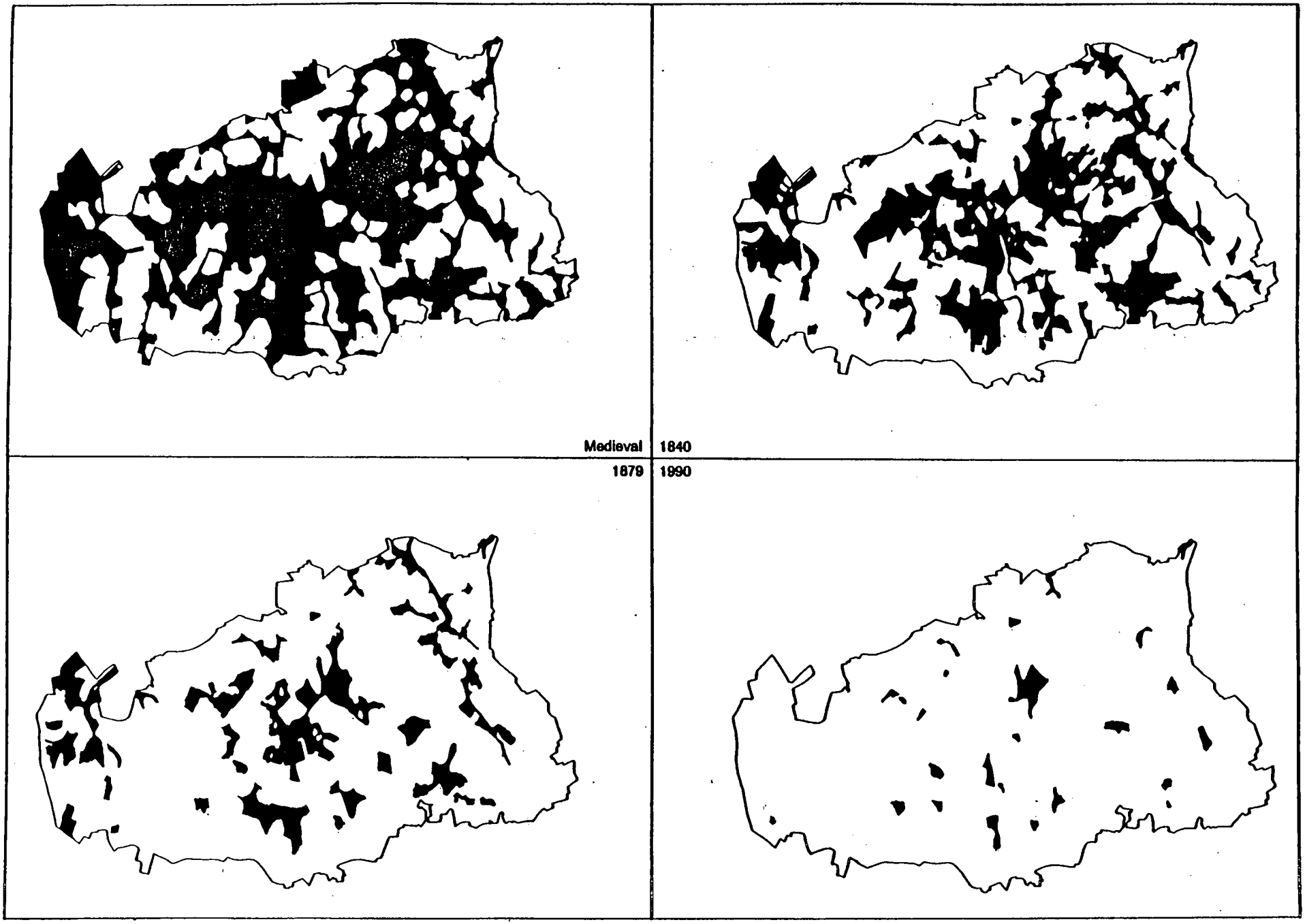
Much more problematic is the adoption of Methodism by so many members of the working classes in our area. It was clearly not simply because they lived among mines and pits some distance from the churches (Brown 1964, 66) nor because the old churches were too small to take the large numbers of labourers (see Cook 1958,56). The real reason appears to have been based on the powerful combination of the needs of the employers (in our case owners of mines and claypits and those farmers employing waged labourers) for regular, hard-working men, women and children and the much more vigorously burnished and clearly presented visions and promises of resurrection, as the reward for virtue, that Methodism offered. Wesleyan Methodism inculcated the vital importance of hard work, frugality and, most crucially, obedience to authority. It also insisted that grace was universal, not based on election, and that anyone, however humble, could, by renouncing sin, and with God's will, be saved. The gateway to heaven was opened to the poor, as long as they did not sin again, served Methodism (an overtly evangelical church), and submitted to "a methodical discipline in every aspect of life. Above all, in labour itself..." (Thompson 1968, 401). Thus intertwined, Methodism and industrialism, so dependent on a reliable workforce, flourished together (ibid, 390-404). The spiritual needs of a large part of the population were thus served by the new chapels which did much to mould the strong, modest and cheerful character of Cornish people which survives today, notably in such industrialised areas as the clay district.

The earliest Methodists in our area met in private homes but continued to regularly attend services in the Churches. Methrose in Luxulyan, and a cottage at Tresayes were used as meeting places in the later 18th century (Payne 1946, 69-71; Shaw 1967, 88); John Wesley himself often stayed and preached at Methrose and the medieval font in the garden is believed to have been re-used by him (Pearce 1964). Society or Preaching Houses, like that at Tresayes, built from at least the 1760s were small and simple, often built of cob, thatched, and with basic furniture (Shaw 1967, 35). Few survive in Cornwall and none, except a single wall at Tresayes (27414), in our study area. In the 19th century more substantial structures with dressed granite and tall arched windows were built as Methodist Societies flourished.

By 1840 (the Tithe Maps) there were at least eight chapels in the study area: Wesleyan chapels at Roche and Lanjeth, Primitive Methodists' at High Street, and Bible Christian (or Bryanite) at Ebenezer, St Dennis, Scarcewater, Trezaise and Gracca. The Bible Christians, an important splinter group, formed by William Bryant of Luxulyan in 1815 thrived in Devon and Cornwall, particularly in the poorer rural parts, where their lively, if slightly eccentric, behaviour was fully appreciated. Despite being ridiculed by contemporary observers as ranters and maniacs (see Shaw 1967, 90) they continued to expand and by 1880 (first edition OS 1:2500 maps) had another six chapels in our area, at Bugle, Whitemoor, Carthew, Trethosa, Old Pound and Sparnon. Gracca chapel, however, had been abandoned.

The Primitive Methodists, another splinter group, who had launched a Cornish circuit in the 1820s, had opened two more chapels in our area by 1880; like High Street, they were in small, fairly remote hamlets, at Molinnis and Rescorla.

Map 10 Loss of undeveloped land



Wesleyan chapels were also opened; by 1880 those at St Dennis (Trelavour), Stenalees, Rosemelling, St Stephen, Trethurgy and Trewoon were built and Hendra by 1905.

While the Bible Christians and Primitive Methodists were splinter groups whose departure from Methodism caused little damage, the reformers who left in the 1850s to eventually form the United Methodist Free Churches caused deep divisions with about 100,000 members leaving the main body nationally (Brown 1964, 95). United Free Methodist chapels were opened in Nanpean, Greensplat and Foxhole.

The various strands of Methodism were re-united in 1932 and the church is still extremely well-supported throughout the study area.

It would be inaccurate to suggest that people simply chose between attending either the Church of England services or those of the various Methodist denominations. The 1851 census showed that 51% of Cornwall's population attended no religious service.

Life was hard for most labouring people in the clay district in the 19th century. They worked long hours for little reward and tiredness and a limited diet must have affected their health. It must be hoped that Methodism, the public houses, the continuance of some feast days and other watered-down versions of medieval and early post-medieval pleasure gatherings brought some light and sparkle to their lives. Merriment holes drilled into tors at Carn Gray and Bodwen to create loud bangs (with gunpowder) on festival days suggest that 19th century faces were not always as long as some historians have drawn them.

Until legislation of the 1870s and 1880s made education for under-10s compulsory, there would have been minimal schooling for children in our district. Sunday Schools provided basic teaching of reading and writing alongside moral and religious education and there would have been a few 'Dame Schools' run by well-meaning but often less than qualified women and men; parents paid a few pence a week to send their children here, a cost too high for most rural families. Many young children were anyway working long days (12-15 hours) in the fields and on mine and clayworks dressing floors. Opportunities to learn basic arithmetic or the alphabet were limited and, apart from working out their own private accounts, the need to apply such learning either in childhood or adulthood was depressingly limited (see Jenkin 1945, 251-254).

The 1870 Education Act set up elementary schools run by local Boards in areas where schooling was inadequate and in 1876 legislation established that all children should receive elementary education; this was complemented by restrictions on the extent of child employment. Then in 1880 a second Education Act made attendance at school up to age 10 compulsory. Further legislation followed: elementary education was made free in 1891; School Boards were replaced by County Council Education Authorities; and secondary schools (grammar schools for boys, high schools for girls) provided by them in 1902 (Richardson 1975, 147-8.

The first purpose-built Board-run elementary 'Boys and Girls' schools in the area appear on the 1st edition OS map of 1880 at Roche, Bugle, Trelavour, Nanpean, Carthew, Trethurgy, St Stephen, Lanjeth and Polskeys. By 1908 (2nd edition OS), Polskeys school was closed and those at Bugle and Lanjeth had been replaced by

larger ones. There were also new schools at Treverbyn, Meledor, Trethosa and Whitemoor.

Mainly substantially constructed buildings using much shaped granite, with high gabled roofs and tall windows, these schools would have appeared as grand as the Methodist chapels which many children also attended. Most schools had separate wings for boys and girls, and had walled playgrounds with outdoor loos. The recently abandoned school at Trethosa, built for St Stephens School Board and now a listed building, is a particularly fine example.

As noted earlier, underlying all the frantic 19th century activity in the study area was the china-clay industry. Many chapels, pubs and schools would never have been built if the industry had not attracted thousands of workers. Agriculture would at best have stagnated and most likely retreated from its upland margins if the increased population had not supplied a valuable new local market for its produce. Instead of shrinking it expanded, as we have seen, with dozens of new farms and scores of smallholdings being created. Many of the older farms were also revitalised; new dwellings, barns and other outhouses being built. In the hamlets and in the valleys smithies, wheelwright shops and mills flourished again, many being rebuilt during this century. Roads were improved to help the clay waggons along and networks of railway lines were laid. The clay industry cannot be said to have entirely created the study area's character as there was, as we have seen in the earlier sections, a complex human landscape here already. But it has certainly had the most dramatic physical and human impact on it.

In the 19th century the clay industry fitted into the overall landscape relatively unobtrusively, at least compared with today. Travellers to Cornwall were even encouraged to visit the china-clay works; particularly the famous Carclaze pit, a tinners' openwork turned clay quarry (see Murray 1859, 243-4; Tregellas 1878, 63-65; Moncrieff 1898, 95-96). The industry was certainly causing irreparable damage to particular areas and we know that many important archaeological sites will have been destroyed then, along with natural habitats and agricultural panoramas. Its pits and dumps were, however, of a more human scale and its extent was areally confined by fragmented properties and tenancies (see 3.7 below). The study area at the turn of the century was exciting and full but the clay industry was expanding, its methods were developing and the problems created by having many small companies, each spatially restricted, were becoming increasingly obvious. It must have seemed inevitable in the early years of the 20th century that amalgamations would come, that the new larger companies would expand their pits and dumps onto previously untouched ground and that the clay industry and its host landscape would be transformed.

And so it has proved to be. This has been the century, or at least the half-century from the end of the Second World War, when large zones of the study area have been utterly destroyed by the industry. The very topography has been changed, hills and valleys lost, cut away or dumped upon. Inevitably this process has also damaged the historic or archaeological landscape. Details of the calculated and estimated numbers of the various types of monument lost to the clay industry are given in section 6.2. Bare statistics of course tell only part of the story. The cumulative effect on the collective psychology of the area's inhabitants, especially those who have seen their farms, cottages, homes, fields, lanes and heaths disappear, as well as the old clay pits and dries, their old workplaces, cannot be quantified but is no less real. The clay industry is accepted and certainly respected by the inhabitants but

ST. AUSTELL CHINA CLAY AREA ARCHAEOLOGICAL SURVEY

- Winning and Working Area
- Island Settlements and Par Corridor
- Church (C of E)
- Methodist chapel
- School
- Public House
- Plain-an-gwarry/Playing Place
- Beacon
- Merriment hole

Map 11 Post-medieval Community

affection for it is necessarily mixed as loved landscapes are lost. The countryside has also been, in the last half-century, gradually de-populated with people increasingly confined to the Island Settlements. Farms whose land is encroached upon by the workings become unviable and are abandoned; cottages are destroyed. Only in the eastern quarter and in parts of the southern and northern fringes of the area can farms be regarded as functioning with optimism, investing in buildings (covered yards, Dutch barns etc) and machinery. Elsewhere farms simply tick over (their owners or tenants apparently resigned to their eventual loss) with stock cattle and sheep grazing neglected pastures. Archaeologically this tendency is not entirely negative as the overall pessimism has left undamaged much vernacular architecture and many farmyard features which elsewhere in Cornwall would be highly vulnerable to being either damagingly modernised or swept aside.

In summary, the 20th century has seen the industry's role within the area change from being an equal player with agriculture to being the dominant force. The developments within the industry have, of course, been necessary in its own terms; the vast pits and the unwieldy tipping patterns are economic, allowing the companies to be competitive and profitable and enabling them to retain their workforces - they are still the principal employers in central Cornwall. The industry also makes serious attempts to restrict its impact on the landscape, notably in recent years through the shaping and early seeding of redundant tips. Nevertheless it must be stressed that it has been mainly in the last 50 years that a rich physical, natural and human landscape, the history of the latter outlined in this and the preceding sections, has been badly damaged. What the next 50 years will bring is perfectly clear but already the Hensbarrow District, named after that Bronze Age barrow which crowns its peak, has become the China-Clay Area.

3.6 The China-Clay Industry pre-1800

The commercial exploitation of china-clay in the West of England has a relatively recent history, William Cookworthy's recognition of the material in Cornwall at Tregonning Hill and St Stephen in Brannel being generally accredited to 1745 (Barton 1966, p18 et seq). This mineral is the result of a partial decomposition of the granite mass in localised areas; the process, known as kaolinisation, results in the conversion of the feldspar component to aluminium silicate which is accompanied in greater or lesser proportion by the unaltered mica and quartz in the form of sand. The soft, talc-like kaolin or china clay forms an essential ingredient in the production of hard-paste porcelain; the other necessary mineral is china-stone, granite which has been partially kaolinised but in a somewhat different fashion. The extraction of china-clay involves washing the material in a stream of water followed by subsequent gravity separation of the waste products, whereas china-stone is quarried in the same manner as any other rock.

The development of the china-clay industry in its formative years from 1750 to 1800 was entirely fuelled by the demand for whiter and finer ware in the pottery industry, and as such the process of extraction was by the 1790s largely in the hands of the potters themselves (Ibid, 26 et seq). Cookworthy, Champion and Wedgwood had been the leaders and instigators of the development of the industry during this period. The complex history of the leases and agreements by which the potters initially established a viable supply of china-stone and clay for their kilns in Staffordshire has been well described elsewhere (Ibid), and its relevance to this report lies in the essentially small-scale nature of the industry as it entered the 19th century.

China-clay pits and quarries known to have been in production by 1800 include Carloggas Moor, Trethosa, Treviscoe, Trelavour Downs, Hendra Downs, Gonnamarris, and Goonvean. At this time all would have been very shallow and small-scale workings by present-day standards. In 1807 Trethosa was "one of the largest works", but produced only "about 300 tons per annum" (Collins 1878, 16). The average depth of the pits ca 1800 was 9 feet (3m), and it is likely that clay works of the period would have expanded laterally rather than in depth to avoid the pumping difficulties that deep working would have entailed.

Little in the way of fixed equipment or permanent structures was required by the industry in this period. If pumping was mechanised at all, it would be by the use of a waterwheel and bucket-lift pump; there was not enough profit in china-clay to warrant the sort of high technology then being applied to deep metal-mining. The processing of the finished clay was a lengthy and labour-intensive process, relying on the natural agencies of wind and sun to dry the slurry to a marketable condition.

A visitor to Hensbarrow in 1807 wrote: *"The overburden having been removed to a considerable extent, the clay itself is dug progressively in steps, the discoloured portions being picked out and thrown away. The selected clay is then wheeled to the washing place or strake, and washed with a stream of water. A large quantity of sand is at once separated, and this is shovelled away continually. The clay and finer mica are carried on by the flowing stream to pits and ponds, which are rectangular receptacles built of rough stone, cemented by lime; the pits are five or six feet in the side and four feet deep, the ponds 20 feet by 12 feet and of the same depth. The first pit receives the fine sand and coarser mica, the second, and perhaps the third, the fine mica, while the fine clay settles in the last or passes on to the ponds. When the ponds are full their contents are transferred to shallow pans lined with granite, about 40 feet by 12 feet and from 14 to 18 inches deep. In these pans it remains from four to eight months, often from September to the following May. It is by that time stiff enough to be cut up into square blocks, which are further dried by exposure to the sun, scraped and rammed into casks. The scrapings and waste are wheeled back to the strake and re-washed." (Dr Fitton, 1807)*

Despite the small-scale nature of the industry, by the 1790s the problems of transporting the finished materials to market had already begun to act as constraints upon it; in an area with poor roads, no canals, and as yet no railway or tramway systems, the lack of adequate harbour facilities was an additional barrier to the production and export of a material which had no market within Cornwall. The construction of Charles Rashleigh's harbour at Charlestown near St Austell, although the first of several such schemes, was the only one which falls within the period pre-1800. In 1796 at *"Mr C Rashleigh's new quay great quantities of the china stone or decomposed granite from St Stephens about 5 miles north of St Austle were laying to be shipped for Liverpool or to be sent to Worcestershire and Staffordshire for the Porcelain Ware"* (Hatchett 1796, 26).

3.7 Industrial Development on Hensbarrow 1800 to 1900 (Map 12)

As a product of low intrinsic value per ton (unlike tin or copper ores), the cost of transport to the nearest port or railway was always a vital factor in determining the ultimate viability of any clay and stone workings, and the development of the china-clay industry was accompanied by a gradual improvement of the roads, harbours, and later tramway and rail systems of the district. As the demand for china-clay increased during the 19th century, the technology used to prepare and refine the clay for sale was unable to satisfy the expanding market. After the

ST. AUSTELL CHINA CLAY AREA ARCHAEOLOGICAL SURVEY

Winning and Working Area

Island Settlements and Par Corridor

Good survival

Partial survival

Destroyed

Map 12 China Clay Works (pre 1939)

introduction of the coal-fired pan-kiln in the 1850s, the subsequent technological revolution in the industry placed further strain on the transport systems which serviced it.

The transport of the finished china-clay and quarried china-stone and coal for the pan-kilns was, until the completion of the national railway network into Cornwall, exclusively by sea. The construction of adequate harbour facilities in St Austell Bay was therefore a priority, and was begun by the building of Charlestown harbour in the 1790s, followed by Pentewan and Par in the 1820s. Fowey, although an excellent deep-water anchorage, was not used to ship china-clay in large quantity until connected by railway to the clay-producing district in the 1870s. Pentewan, Par and Fowey were ultimately to be linked by rail to the producing areas (or St Austell, in the case of Pentewan), and Newquay for a time became a china-clay port when it, too, was connected to the northern area of Hensbarrow by a tramway. Initially, the rail systems used were simple horse-drawn tramways, the rails supported on stone blocks, and the lines served local needs from pit to port with no thought of connection to the rest of the county, much less to a national network. Even when in the 1870s the china-clay district obtained its own purpose-built rail system (the Cornwall Minerals Railway), this was not linked to the trunk route through Cornwall to London, as the difference in gauge prevented vehicle interchange and through communication.

Despite all the attempts to improve communications in the area, until well into the 20th century large quantities of china-clay were moved laboriously from the works high on the Hensbarrow Moors to Charlestown and Par by horse-drawn waggons. The norm in St Austell was for streets made slick with a fine white mud, congested by the waggoners and their three-horse teams.

Cookworthy's discoveries in the mid 18th century had led to a gradual expansion of what was in 1800 a very localised and small scale industry, producing less than 2000 tons per annum, to one which by 1858 was producing 65,600 tons per annum, and by 1900 552,384 tons per annum. By far the greater part of this output was produced in the Hensbarrow area, although other deposits had been recognised in the granite areas elsewhere in the County: at Leswidden and Towednack in Penwith, the original deposit at Tregonning Hill, and also in Devon on Lee Moor. In the 1860s, china-clay deposits on Bodmin Moor had also been recognised and were to be exploited despite difficulties with their high mica content. Of these areas, only Hensbarrow and Lee Moor were to prove of major significance in the long-term development of the industry.

Two factors made this expansion possible: improved technology for the winning and working of clay, and the proliferation of local entrepreneurs who were willing to risk their capital in new pits. Barton (op cit) lists over 60 individual companies active in clay production on Hensbarrow (not counting paper-making companies or later amalgamations), and many of these would have controlled only one pit. Each of these producers had their own arrangements for the marketing, transport and shipping of their products; each had its own strictly defined sett boundaries, within which it had to undertake the extraction and processing of its clay, and also the disposal of its waste products. Inevitably, this led to the dumping of waste rock and sand on good clay ground, to a duplication and proliferation of process areas, and to an increasing pressure on the landscape as pits deepened and widened. The old methods of flat-topped dumping (see 2.8, Methods of Extraction) gave way to the use of pyramidal dumps or sky-tips in an effort to conserve space.

Although by 1900 some companies were still using the 18th century methods of processing and air-drying their clay, by this time a technological revolution had swept through the industry. Pressure hoses were used to wash the clay from the working face; mica-drags separated the fine sand and mica from the clay stream; and coal-fired pan-kilns dried the clay in a fraction of the time that had been previously required. Where the clay pit was remote from a railway or port, it was now common practice to pipe the liquid clay direct to process works more conveniently sited but often many miles from the producing pit. The deepening pits demanded more efficient means of pumping to drain them, and the use of cornish engines became commonplace in the later years of the 19th century; steam was also now used to wind waste sand onto the dumps.

As the industry entered the 20th century, the landscape of Hensbarrow had thus become transformed into a unique and extraordinary patchwork of small pits, conical dumps, settling pits and tanks. The chimneys of engine houses and pan-kilns punctuated this landscape, whose bare upland aspect was relieved only by the deeply wooded valleys of the Fal, Barn, Gover, Trenance, and Par rivers.

3.8 Industries and Communications from 1900

In addition to its original uses in the ceramic industry, china-clay came to have a variety of other applications as a cheap, inert filler during the later 19th and 20th centuries: in paper-making, pharmaceuticals, cosmetics and the production of rubber and plastics. For use in all these industries, the purity and quality of the processed material is of vital importance, and the clays found on Hensbarrow are notably superior to those found elsewhere in Cornwall.

This additional and growing demand for the products of the industry was curtailed by the effects of two world wars, during both of which the clay industry came virtually to a standstill as export markets were rendered inaccessible. The effects of the 1939 to 1945 war were particularly long-lasting, as many pits were closed in an attempt to streamline and rationalise the industry. Several of these war-time casualties remain abandoned in the present-day, and are thus repositories of industrial archaeology relating to a now-vanished era.

The Great War and the trade depression of the 1930s created pressure on the industry to rationalise and modernise its production methods. It had become obvious that the multiplicity of small companies was now a barrier to the efficient working of the clay resource, as deposits had now been located underneath dumps placed on ground previously regarded as barren. To expand existing pits was impossible where they adjoined land leased by separate companies. In 1919 an amalgamation of companies produced English China-Clays Ltd, or ECC, controlling 50% of the industry's production. This process was continued in 1932 by the formation of English Clays, Lovering, Pochin & Co (ECLP) controlling 75% of the industry. Centralisation and rationalisation of the china-clay industry is a process which has continued unabated to the present.

Technological change during the first half of the 20th century was a process of refinement of existing methods, combined with the introduction of new power sources. Gas and oil engines were used both as prime movers, replacing steam, and also to generate electricity; the use of electric power became widespread for pumping and waste disposal. The older technology of the 19th century was remarkably persistent, however, and the last cornish engine to work in Cornwall was the engine

ST. AUSTELL CHINA CLAY AREA ARCHAEOLOGICAL SURVEY

Winning and Working Area

Island Settlements and Par Corridor

- ◆ Surviving
- ◈ Engine in house
- ◇ Destroyed

Map 13 Engine Houses

at Greensplat Pit (shut down in 1959). The coal-fired pan-kiln remained in general use, albeit with some refinements in its design, until the 1960s.

The effect on the landscape after 1945 was one of inexorable pressure, both on the older patterns of settlement and farmsteads as they were swallowed up, and on the mosaic of small pits and dumps created by the industry in the 19th century. The merging of smaller pits into larger units, and the disposal of waste mica in impounding lagoons rather than into sreams and rivers, has consumed areas of moorland and enclosed ground alike.

The modernisation of china-clay extraction and production during the 20th century also led to change in the service industries which had grown up on Hensbarrow. Cooperages became redundant as transport in wooden casks was no longer used; horse-drawn waggons gave way to the motor lorry after the Great War; and with the passing of the pan-kiln, brick and tile works also disappeared. Railway expansion continued into the 1920s with the construction of the Trenance Valley Branch (a remarkably late date for new railway schemes), and rail transport still plays a vital role in moving the industry's finished products, despite many closures in the post-1945 period. In general, however, there has been a revolution in transport systems to match that of the production process itself.

3.9 Methods of Extraction

The extraction of china-clay has always been a hydraulic process. The extent and nature of the clay deposit was first determined by sinking a series of shallow excavations or **prospecting pits**, in the same manner as for any other mineral. From the area of the **sett** the surface soil or **overburden** was removed to reveal the kaolinised granite; the top layer of which, discoloured by leached minerals, would also be discarded.

Stream and Strake

The original method of extraction was by **stream and strake**; a stream of water was directed over the exposed clay ground, washing the kaolinised material away from the unaltered rocks or **stent**. Workers using shovels and short picks known as dubbers stood in the clay stream and broke up the material; as the stream deepened the channel thus formed in the working face it formed a gully or **strake**. In the early phase of extraction hillside sites were chosen for preference and the clay flowed by gravity to the process area; as the pit deepened and this was no longer possible, it was necessary to either drive an **adit** from the bottom of the pit or sink a **shaft** from the top through which the clay was pumped to surface.

The first pumps used were simple plunger devices made from hollowed logs and operated by hand; while the depth of the openwork was shallow this sufficed, but as the works deepened and expanded a water wheel would be installed to drive a series of lift pumps similar to those used in underground tin and copper mines.

A shaft was sunk on the edge of the clay ground, and a level or adit driven from the bottom of this to a point below the centre of the intended work area. A **rise** was then driven up to the surface, by now stripped of overburden, and a **button-hole launder** placed in this shaft. This device was in essence a vertical wooden pipe of square section, having a series of holes bored in one face throughout its length; the holes were normally plugged by a series of wooden pegs. The top plug was removed

to allow the clay stream to flow through the adit to the pumping shaft, and as the pit deepened so further pegs were removed.

If water was unavailable in sufficient quantity on site to drive a wheel for pumping, this could be sited some distance away and the drive transmitted via a series of reciprocating iron rods, or **flat rods**. Failing this, a steam engine would be installed for the same purpose.

In 1927 the first centrifugal electric pumps were installed on Hensbarrow, and this method of pumping direct from the **sump** or lowest part of the openwork is now universal.

Pressure Hose

The first use of a high-pressure hose to wash the clay from the working face was at Blackpool Pit in 1890, using a steam fire-engine as the source of power. Special high-speed pumps were developed to perform the same role, often fed from older flooded workings. By the mid 1920s this method was accepted practice in the Hensbarrow area. Modern development of this concept has resulted in the **monitor**, a high-pressure jet directed by remote control from a weatherproof cabin.

Gravel and Stent

Primary separation of the heavier waste elements took place in the strake itself, the dubbers removing the stent as they worked. The coarse gravel and sand was eliminated from the clay stream before pumping to surface by running the stream through a series of pits, the gravel depositing in them and the clay running off the top. At intervals the stream would be diverted to another pit and the waste material dug out. These **gravel pits** in time became more sophisticated and incorporated a certain amount of mechanisation to speed emptying, but the basic principle remained unchanged until recent years.

Disposal of these wastes from shallow workings was originally performed by **shammelling**, the material being dug by hand and thrown back up a series of stepped excavation platforms. This back-breaking labour was replaced by mechanical haulage up a tramway incline or **skip-road**, power for this being provided by a horse-whim, water-wheel, or steam engine.

The dispersal of the sand, gravel and stent at surface displays an evolution through two distinct forms. Initially the wastes were barrowed out along flat topped dumps which spread, fan-like, from the margins of the excavation to cover the nearby moor. Barrows were in time replaced by tramways and hand-pushed skips to speed this process. These **finger dumps** were a notable feature of many of the Hensbarrow works, but very few survive to the present day.

As the bounds of the sett became pressured by the expansion of the excavations and increasing amounts of dump material, so it became necessary to rationalise the methods of waste disposal. In an effort to conserve available land, the skip road from the pit was extended upwards and the material dumped directly off the top; as the mound of materials grew, so the skip road was extended, resulting in the characteristic conical mound of white sand, or **sky-tip**. This also eliminated the labour intensive tramming by hand of material along the flat-topped dumps.

Modern practice is to remove coarse wastes by large diesel trucks to flat-topped dumps, arranged in the manner of a stepped pyramid.

Sand and Mica

The clay stream arriving at surface, although purified to some extent, still contained large quantities of waste materials. These consisted of fine quartz sand and even finer mica. The original method of separation involved the use of three rectangular pits, stepped one below the other; as the stream flowed through the pits the waste was deposited in each, sand in the first, fine sand and some mica in the second, and mica only in the third. The stream was then allowed to flow to settling pans for thickening.

The clay thus produced was far from pure, and it became necessary to improve the method of separation as consumers demanded a higher quality product. The clay stream was run into a relatively deep, narrow channel, in the bottom of which the quartz sand was deposited. At intervals the stream would be diverted and the sand dug out from the bottom of this **sand drag**. From the sand drags the clay flowed through a broader, shallower series of channels, sectioned by boards to further divide the flow.

As the clay stream slowed so the fine mica was deposited in these **mica drags**, and the pure product was then run through mesh screens to remove humic material. In later years these mica drags were considerably expanded in size and complexity, often covering large areas of ground.

The current technique employed in handling these wastes involves the pumping of the clay stream through **hydrocyclones** which separate the material in a series of cuts.

The disposal of the sand was to the dumps or **burrows** as for the coarser material from the bottom of the pit. Mica from the drags is a very fluid material, and on Hensbarrow was normally directed to the nearest convenient watercourse and allowed to find its own way to the sea. This had three immediate results: the destruction of all aquatic life in the stream, the silting of ports and harbours, and the establishment of numerous small **mica works** downstream of the large producers. Mica lagoons are the current method of dealing with this material.

Water Removal

Before the clay could be presented for sale it had to be dried. Initially it was run into stone-lined **settling pits**; these might be rectangular or circular in shape. Here the clay was allowed to settle and the clear top water run off via **pin-hole launders** (similar to button-hole launders but with smaller holes). When the clay had thickened by the required amount it was **landed** or run off via a sluice in the base of the tank to the next stage in the process. The earliest settling pits were of relatively shallow section, and these led in turn to **clay pans** where the clay was allowed to dry gradually in the open air. When sufficiently de-watered to be cut into blocks, it was removed and stacked in open-sided sheds or **air drys** till ready for sale.

This method of working, used in places until the 1920s, was inherently slow and labour intensive. In the 1850s **pan kilns** were introduced to the industry. Usually built into a slope to take advantage of a natural gravitational feed through the building, the kiln had as its lower front portion a **linhay** or storage area for the clay. The raised portion at the rear formed the pan; here a series of brick flues connecting a furnace at one end of the kiln with a chimney or **stack** at the other were covered with semi-porous earthenware tiles. These formed a heated floor onto which the

semi-fluid clay was run, the moisture being driven from the clay by means of the hot gases circulating beneath. At the rear of the kiln were **settling tanks** into which the clay was landed from the settling pits and further thickened before being run on to the pan.

To further speed the de-watering process, **filter-presses** were introduced in the 1920s as an intermediate stage between the settling tanks and the pan kiln. These removed water content by subjecting the clay slurry to hydraulic pressure, the resultant **press-cake** being dried on the pan in the usual fashion.

Present day practice is to thicken the clay slurry in large (140 foot diameter) settling tanks, and then to dry the material in **rotary** or **buel** driers. A certain proportion is also delivered to consumers in slurry form.

Packing and Distribution

Until recent years, china-clay was always delivered to the consumer in bulk form. The blocks of clay were loaded from the linhay into carts or directly into railway wagons and transported to the nearest harbour, there to be loaded into the holds of ships destined for the Potteries and paper-makers. Some clay intended for shipment overseas was packed into 5cwt casks, and this mode of transport was increasingly used for markets where contamination of the clay had to avoided. Only since 1945 have these methods of packing and shipment been radically altered, as the clay products themselves have become more specialised and highly refined. Clay slurry for papermaking is transported in tank wagons or lorries, and bagged clay in plastic sacks is now preferred by many consumers.

Bricks and Tiles

Following the general introduction of pan-kilns during the 1870s, brick and tile making became equally established as an ancillary industry in the St Austell area. Providing bricks for chimneys and furnace arches, and bricks and tiles for the hypercaust and floor of the pan, they served the china-clay industry and the wider industrial and domestic markets until the introduction of new technology in the 1960s made them redundant.

The material used for brickmaking was the poorer quality or discoloured china-clay, in which a proportion of quartz sand and mica was allowed to remain; it was found that this mixture fired to form a naturally refractory or heat-resistant brick, well suited to its use in furnaces and kilns.

3.10 Mining

Metal mining on Hensbarrow after the main alluvial and eluvial deposits had been worked out was at best intermittently successful, and never rich at depth. While mines outside the study area, but on its periphery, were successful (examples being the copper mines of St Austell and Tywardreath, tin mines at Polgooth and Great Hewas, and iron mines at Toldish and Lostwithiel), the mines within the Hensbarrow granite were worked sporadically and had little economic impact on the district.

Mining had a long history in the area, with Carclaze and Old Beam having been worked from the time of Henry VII (Collins 1878, 37). Stennagwyn has a documented reference of 1584 (British Library add 24746/231). Many of these mines were worked as beams or openworks, extracting tin in the form of widely dispersed

veinlets in a matrix of kaolinised granite. Such workings were often locally rich, as "bunches" of tin were discovered, but the ore was not good in depth when attempts were made in the 19th century to sink the mines below the level of the openwork floor.

There were exceptions; Rocks mine near Bugle proved to have rich deposits of tin, but again these were relatively shallow. As the mines deepened, the expense of erecting steam engines to pump them dry was not defrayed by increased production in the majority of cases. When the price of tin plummeted in the 1870s, those mines that could turned to china-clay to supplement their income; the others abandoned their levels and stopes to the incoming water.

Collins, writing in 1878, summed up the state of mining in the district:

"Mining.... is now at a very low ebb; at the moment of writing, June 1878, I am not aware that there is single mine, whether of tin or iron, actually at work within the granite mass. ...on the whole, it would appear.... that the future prosperity of the district must consist in the continued development of the china-clay and china-stone, for the former of which new uses are being found almost every year."

There was a brief revival of fortune for some mines in the 1900s, but it was to be short-lived; history proved Collins to be correct.

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The Archaeological Resource

4. THE ARCHAEOLOGICAL RESOURCE

4.1 Introduction

This section of the report assesses the extent to which sites and landscapes survive, and the potential of various forms of field work and archaeological investigation for locating more sites and recovering information likely to improve our knowledge of the area's prehistory and history.

In general terms there is only fairly patchy survival of archaeological sites and archaeological landscapes within the winning and working area (also known as the study area). This is especially so when the area is compared with other granite uplands of South-West England like Bodmin Moor, Dartmoor and West Penwith (see Rose and Herring 1990; Worth 1953 and Fleming 1988; Russell 1971). Many impressive and valuable monuments do exist, however (Hensbarrow itself, St Stephen's Beacon hilltop enclosure, Chegwins medieval settlement; Methrose house, Carbis brickworks, Goonvean and Parkandillack engine houses), and the area is also very important for certain types of site, notably, of course, for those produced by early china-clay and china-stone working but also for Bronze Age barrows, Iron Age and Romano-British rounds, early medieval farming settlements and medieval tin streamworks.

Prehistoric and early medieval sites would have been damaged or even destroyed by later medieval and early post-medieval agriculture in the lowlands and on the lower slopes of the hills, but they can be expected to have survived in good condition into the early modern period on the central and western uplands. Here, on land too marginal for viable mixed farming since the climatic deterioration of the Later Bronze Age, monuments built of the ubiquitous granite (stone circles, stone rows, cairns/barrows and round house settlements, field systems etc) would have lain relatively undamaged by the less intensive use made of the high downs (mainly summer grazing). Contemporary monuments would have survived side by side in what may be termed articulated prehistoric landscapes; the cairn groups on Watch Hill, Caerloggas Downs, Trenance Downs and Fraddon Downs (all now destroyed) are examples. Approximately 34 square kilometres of undamaged upland would have still existed in the early post-medieval period (see map 10).

In the last 250 years these upland reserves of prehistoric archaeology have been decimated, first by small china-clay and china-stone works with their attendant settlements and farms and now, in the second half of the 20th century, by the vast pits and dumps of the modern industry. Only small patches of undamaged heathland or relict moorland survive (the northern slopes of Hensbarrow Downs, St Stephen's Beacon, and small patches of Caerloggas Downs, Carn Grey, Burngullow Common, Trenance Downs, Trelavour Downs and Longstone Downs), barely 4 square kilometres in total. This represents just 12% of the moorland extant in the early post-medieval period; it is not surprising, therefore, that the archaeological resource is now limited. The fragmentary nature of the extant moorland means that only glimpses of the once coherent prehistoric and medieval landscapes (with their tin streamworks) can now be obtained.

Away from the uplands there are, as noted above, many important archaeological monuments and landscapes. Within the farming landscape, itself largely a product of later medieval enclosure of subdivided fields, some later prehistoric rounds are still visible as earthworks and we can be confident that systematic field walking

and geophysical survey will produce the artefact scatters and readings which will reveal other prehistoric settlements. Medieval and early post-medieval settlements will lie beneath many modern farms and we should locate abandoned early and later medieval settlements by field walking and geophysical survey. Farmsteads and hamlets in the area contain much in the way of valuable vernacular architecture including several early houses and many well preserved farm buildings.

The china-clay industry was partly responsible for the development of other features in the countryside; the hundreds of smallholdings and cottages and the chapels, elementary schools and pubs which served their occupants. More important are the earlier tin workings; streamworks and primitive lode-back pits and openworks. Again some survive but as many of these workings will have been on the open moors most have gone the way of the prehistoric monuments.

Blackmore's later industrial history is well represented in the landscape, despite the rapid and continuing expansion of the modern china-clay industry. The sheer quantity and density of the monuments and sites associated with the china-clay industry on Hensbarrow has ensured a relatively high survival rate into the present day, although the great majority of these survivors are now at risk. Early surface mining for tin, in the form of eluvial and alluvial streamworks, is less well represented, probably because many of these sites were later re-exploited for china-clay (Garker, Carne Stents). Deep mining for tin is also poorly represented, as there were few deep deposits on Hensbarrow, and many of these were likewise re-worked for clay (Carclaze, Bunny, Great Beam). Quarrying for stone is largely associated with the china-clay companies and their supply of china-stone to the Potteries of Staffordshire, and the survival of these quarries in particular is now poor, as many have been backfilled in recent years. Other quarrying activities have also made a substantial impact on the landscape, as at Carn Grey (granite) and Tresayes (feldspar).

Support and service industries associated with china-clay and mining include cooperages, foundries, brickworks, railways and harbours. All these are again well represented in the present-day landscape, although many are outside the Winning and Working Area and therefore outside the scope of this Report. Those within the Project area are once again very vulnerable to expansion and re-development.

4.2 The Prehistoric and Historic Landscapes and their survival

Appendix 6.2 details, from current knowledge, estimates of the original populations and the levels of survival of each type of archaeological monument known, or expected, to have existed within the study area. It forms the basis of most of the proposals relating to future archaeological work in the area. Table 1 summarises the information contained within this appendix and also details the numbers of each site type receiving statutory protection (Scheduled Monuments and Listed Buildings) and those for which protection is proposed.

Clearly the value of a site increases considerably if it can be related to others with which it was once associated either as parts of an articulated landscape, with contemporary features and the spaces between them clearly visible, or as parts of a more general picture of settlement patterns, land use zones etc. If data can also be presented which illuminates the state of the natural environment in which people lived and worked so much the better.

This section combines the information gathered about particular monument types presented in section 6.2 and relates it to the background history of chapter 2 to present outlines, or provisional models, of the archaeological and historical landscapes of our area at various periods from the Palaeolithic to the Modern. It is intended that gaps in our knowledge and areas of historical and archaeological debate will be made explicit so that the subsequent sections on the potential for future work (4.3 to 4.11) are made as relevant as possible.

Palaeolithic (see 3.1.1)

Systematic reconnaissance field walking undertaken to search for artefact scatters of later periods (Mesolithic, Neolithic, Bronze Age etc) will, it is hoped, yield stray palaeolithic finds. There is still a very basic need in Cornwall for more items from this long period because the very limited material previously collected does not permit even the crudest models of exploitation patterns to be drawn up.

Mesolithic (see 3.1.2)

Much more work needs to be done on the environmental or vegetational history of the area. At present we only have limited data from soils beneath Bronze Age barrows (Bayley 1975; Staines 1975) and we rely for our knowledge of the environment in earlier periods, such as the Mesolithic, on pollen analysts working on Bodmin Moor (principally Brown 1977). It will be extremely useful to have a background vegetational history of the study area which stretches back to the end of the last Ice Age against which to set the patterns of Mesolithic flint scatters which systematic field walking and watching briefs are expected to yield. It will be difficult, otherwise, to fully explain the expected variety in the size and contents of these scatters and to reconstruct possible Mesolithic "territories", areas of regular seasonal exploitation. At present we can predict that the open uplands will have been fairly heavily used by the hunters of Mesolithic society while the forested lowlands and valleys were used as sources of vegetable food, fish etc. The amount of upland left for study is being constantly reduced and a programme of regular and systematic field walking needs to be put in place as soon as possible if meaningful patterns of sites are to be obtained.

Neolithic (see 3.1.3)

The comments regarding the need for a vegetational history of the area made above (Mesolithic) apply equally to the Neolithic. Now we would need to be able to reconstruct the extent that the earliest farmers adapted their environment and how far their settlement and land use patterns were still determined by it. We would expect, for instance, to see a gradual reduction in forest cover as the farmers cleared it for their fields and pastures.

Our current model of the area in the Neolithic period depends to a great extent on the recognition of the defended enclosure on St Stephen's Beacon as an early Neolithic hill-top enclosure of the Carn Brea type, a key central place, a seat of local or regional authority. Realistically, only excavation of the site can confirm this. Using Bodmin Moor and West Penwith as analogous areas we then expect there to have been two or three contemporary ceremonial and ritual centres, either long cairns or chambered tombs, probably located on the higher ground. None has been located so far although intensive reconnaissance survey in the few areas of relict moorland may yet produce one. Again, no early Neolithic farming settlement has yet been located either in the study area or in the whole of Cornwall. Systematic field walking and watching briefs could produce the artefact scatters (flints and

pottery) which would reveal them. It should be noted that very little field walking has so far been undertaken in Cornwall in areas, like the uplands, where we have some confidence that Neolithic settlements existed. The early Neolithic tor enclosure at Helman Tor and the two chambered tombs at Lesquite (Lanivet) and Quoit (St Columb Major), all just to the north or north-east of our area, together with St Stephen's Beacon, do indicate that there is real potential here.

For the later Neolithic period, settlements are again elusive but should be found as artefact scatters. A henge just one kilometre north of the study area at Castilly would probably have been a regional centre and we should expect, using Bodmin Moor as our model, two or three stone circles to have existed within the area and it is possible that intensive reconnaissance survey of relict moorland will produce one or more collapsed examples; poorly preserved stone circles, with most stones now fallen, are still being discovered in Cornwall (three in the 1980s at Leskernick, Manor Common and Crowan).

The limited extent of surviving relict moorland and the continual shrinking of the area of farmed uplands make the need for reconnaissance survey and field walking programmes urgent.

Bronze Age (see 3.1.4)

The lack of systematic field walking and detailed survey in our area makes the reconstruction of the Bronze Age landscape problematic. Again, the loss of so much of the uplands and relict moorland makes the need for immediate site location work imperative if the tantalising Earlier Bronze Age remains, the rich cairns or barrows (some already excavated), are to be set in a meaningful context. We could still find surface remains of settlements (round houses or hut circles), field systems and enclosures in the few areas of relict moorland and detailed survey should allow us to pick out more Bronze Age pasture boundaries. The possible settlements at Bodwen, Ebenezer and Carn Grey need further investigation, perhaps excavation. Again field walking, watching briefs and perhaps geophysical survey, will produce settlement sites and activity areas, not just on the uplands but also in the valleys and in the lowlands.

The study area, with its extensive lowland areas, provides a valuable opportunity to tackle the problem of the Later Bronze Age when it is assumed that the South-Western uplands were abandoned as the climate deteriorated. We should expect, first of all, to locate only Earlier Bronze Age settlements in the uplands and a mix of Earlier and Later Bronze Age settlements in the lowlands. Later Bronze Age sites of any kind are extremely rare in the South-West and the opportunity to search for them should not be missed.

To back up our models of climatic change we need any study of vegetational history in the area to extend its range through the Bronze Age period.

Iron Age (see 3.1.5)

The earliest centuries of the Iron Age, to c.400 BC, provide a continuum from the Later Bronze Age, and are equally obscure. No sites from this period have so far been found in the study area; we expect that settlements existed in the lowland parts of the east, south and west and will rely on field walking or watching briefs to locate them.

In the Later Iron Age (c.400 BC to c. AD 50) defended sites are found. Hillforts, local centres with substantial ramparts and ditches, encircle our area but only one, at St Dennis, is within it and further excavation is required here to confirm its identification. There are, however, a number of rounds within the area (28 recorded so far). Some of these defended farming hamlets will have been created in the Later Iron Age (others in the succeeding Romano-British period). Complementing the rounds will have been undefended or open settlements, small clusters of farmsteads set within field systems. These are much more difficult to locate, lacking the ramparts and ditches of the rounds (which often survive as earthworks, even in farmland, and are also visible as crop-marks from the air). The distribution of the known rounds suggests that the uplands were still not permanently settled in the Iron Age but were probably used as summer grazing grounds, as we believe they had been from the Later Bronze Age and were to be until the later medieval period.

Systematic field walking, geophysical survey and watching briefs will locate examples of the open settlements as well as further rounds. Geophysical survey will also help find traces of the field systems which would have surrounded the farming settlements. Aerial photography and close examination of fields called "Round Field", including trial excavations will also be extremely useful in locating rounds.

Once again we will need to have a clear picture of the local vegetational history, not just to see the natural constraints on settlement but also to obtain details of agricultural practices.

Romano-British (see 3.1.6)

As Cornwall appears not to have been permanently occupied by the Roman military and was, it seems, administered by local native leaders, we see only minor changes in the way of life of the ordinary people living in our study area during this period. The hillforts were probably abandoned but rounds continued to be occupied and new ones (like the excavated example at Trethurgy) were being built. Open settlements would also have continued. People still did not recolonise the uplands although there is evidence of movement within the lowlands, a process which requires explanation. One suggestion is that some settlements shifted to be closer to the deposits of alluvial tin which streamworkers were exploiting more intensively after c.200 AD when the Romans apparently began to obtain much of their tin from Cornwall.

Field walking, aerial photography, geophysical survey, watching briefs and trial excavations of rounds and artefact scatters will be necessary to fill out our knowledge of the settlement pattern and to refine the chronology of individual sites which will be required before the processes of the settlement shifts can be properly understood. Once again a vegetational history is required.

Field systems associated with the rounds and open settlements can be fruitfully sought within the more irregular medieval systems.

Early Medieval (see 3.2)

Although no rounds appear to have been built in the early medieval period a number were occupied into its earlier centuries (eg Trethurgy in our study area). These were gradually abandoned, or had their defences dismantled if they were not, so that it seems by the 7th century all farming settlements were open and undefended. Many of these settlements are still occupied and are recognisable by their Cornish place-names in *tre, bod, ker*, and *hendre*. An early medieval settlement pattern is discernible through plotting sites with these names (see map 5). This confirms that

the uplands were still not occupied and the *hendre* names indicate that they were being used for transhumance. The flimsy summer shelters of the transhumants are being recognised now on Bodmin Moor and detailed investigation of relict moorland in the study area might produce further examples. The pounds used for restraining illegally grazing stock rounded up in periodic drifts will, however, be more elusive.

The field systems associated with the early medieval farming hamlets are still little understood but an oblique reference in the boundary clause of a 1049 charter referring to Trerice in St Dennis hints that the "barley land" there was in "common", presumably subdivided or open. Trial excavations at strategic points in well-preserved later medieval field systems may enable us to test this intriguing possibility.

Trial excavations within surviving *tre, bod, ker* and *hendre* settlements should confirm their early medieval dating and may produce remains of structures. Other later medieval farming settlements may also have had early medieval origins and further trial excavations should demonstrate this. Systematic field walking, watching briefs and geophysical survey will also produce more settlement sites, those which were not occupied into or through the later medieval period.

In the valleys will have been early medieval tin streamworks, some of which will survive as earthworks. Here too there would have been the corn mills which the 1049 Trerice charter confirms did exist in the early medieval period. We would expect them to lie beneath or very close to later medieval mills and trial excavations should be used to test this.

Early Christianity is generally poorly represented in the study area. The three medieval churches are probably on the sites of early medieval Christian settlements and an enigmatic enclosure with a small rectangular building within it at Whitemoor may be a rare early chapel still within its simple oval enclosure; trial excavation is required here. A number of holy wells are recorded in local tradition but with the possible exception of Mary Maudlin's Well none has been satisfactorily located as yet; more detailed investigative work is needed.

Again, a detailed vegetation history, obtained from pollen cores, will be essential for a proper understanding of this period. As we move into periods for which we have independent historical evidence for land use, pollen data can help produce a very refined picture of agricultural practices (see Austin et al 1989).

Later Medieval (see 3.3 and map 6)

The extent to which the settlement pattern of the later medieval period was already in place in the early medieval (and perhaps even the Romano-British) needs to be determined. Certain farming hamlets with documentation back to at least the 13th and 14th centuries in the lowland parts of the area could be subjected to trial excavations to search for earlier material and structures. The possibility of a partial colonisation of the uplands in the later 14th and 15th centuries (see 3.3) could be similarly tested.

It appears at present that the majority of farming settlements were indeed hamlets and had extensive subdivided strip fields. More detailed cartographic analysis of the fields, together with documentary research and selective excavation, will provide a clearer understanding of medieval agricultural practice and of the enclosure process; in addition the two areas of unenclosed strips at Treskilling and

Old Pound need detailed surveys, as do the several smaller patches of medieval cultivation (ridge-and-furrow and lazy beds). There is a fragment of an articulated medieval landscape at Chegwins, near Foxhole, where lazy beds are directly associated with a probable medieval long-house; this would be the only example of this once common house type with above ground remains known in southern Cornwall although it is probable that all farming settlements with medieval origins possess the remains of long-houses and associated enclosures and outhouses beneath them. The Chegwins house is a likely repository of detailed information on regional architecture and the living conditions and domestic economy of later medieval farmers in this part of Cornwall; it is a prime candidate for excavation as it has to be considered unlikely that another in such good condition will be discovered in the region.

More detailed survey work is needed in the remaining areas of relict moorland to locate the later medieval pasture boundaries (such as that at St Stephen's Beacon) which enable us to see how the extensive commons were organised.

Medieval communications systems and the dynamics of the countryside will be better understood if the numerous historical river crossings and the lanes and roads with which they were associated are studied more closely. Wayside crosses and Church Paths will also require attention. Local services like mills, smithies, carpenters, coopers etc need to be studied; documentary research will complement the archaeological here. Chapels are known to have existed at some of the more important settlements (Meledor, Treverbyn etc) and further detailed study of these sites may yet locate their positions. Again close examination of standing buildings could yield more fragments of later medieval houses to set alongside the famous hall-house at Methrose.

Medieval Tinning (see 3.4 and map 7)

Tinning and farming shared the same medieval landscape; many tinners would have also been farmers and the two principal industries of the area were closely meshed. It is accepted that Blackmore stannary, in which the study area lies, was for long periods the main tin-producing region in Cornwall, itself one of the most heavily industrialised parts of the medieval world. The few surviving medieval tinworks are, therefore, of considerable importance and others will probably be located - alluvial streamworks and openworks in the wooded valleys where earthworks are obscured on aerial photographs; shode workings, lode-back pits and prospecting pits in relict moorland; and eluvial streamworks on older aerial photos (eg the 1940s RAF coverage). Many important sites visible on 19th century maps have already been destroyed; excellent eluvial streamworks at Goonamarth and on Burngullow Common shown on the St Mewan Tithe map of 1838 for instance. Medieval alluvial streamworks in the eastern quarter will only be picked out of the extensive post-medieval workings by detailed fieldwork - sketch surveying at the very least.

Post-medieval non-industrial (see 2.9)

The inhabitants of the established medieval farming settlements continued to transform their field systems by enclosing strips or bundles of strips as they moved, in the later medieval and early post-medieval periods, from communal to individual farming economies. The new farms created on the higher slopes for individual farming families had irregular field systems of 30 to 40 acres until, in the mid-18th century, land surveyors laid out strictly rectilinear fields with perfectly straight

sides. These field systems and the long pasture boundaries associated with them can best be studied through the early modern maps (Tithe and OS).

The farmsteads themselves, the groups of buildings and enclosures arranged around or near the farmhouses, require detailed archaeological study. As well as often being on the sites of much earlier farming settlements, particularly in the lowland parts of the area, the standing buildings and other farmyard features are remarkably rich sources of information for the histories of agricultural regimes, of agricultural technology, and of agricultural investment in the various topographical zones of our region. In addition, of course, they contain information on local architectural styles and building materials.

In this present survey only c.20 minutes, on average, could be spent in each historic (pre-1880) farmstead and only the briefest of notes on structures and features could be made. This was sufficient, however, to determine the great potential for further, more detailed work. Not only would more sites be found within farmsteads but their details would be properly recorded.

More documentary and cartographic research, as well as inspection of buildings in the field, is needed to identify further examples of the corn mills, feed mills, fulling mills, blacksmith shops, wheelwrights' shops and the workplaces of the other rural industries servicing agriculture.

The greatly increased population, comprising mainly working-class people, was served in the late 18th, 19th and 20th centuries by Methodist chapels, of various denominations. Most of the later ones have been identified but documentary research coupled with fieldwork is needed to identify the late 18th century preaching places. Similarly early 19th century dame schools and their like should still exist and documentary research might locate them.

Moving back to the earlier post-medieval period, we might expect to locate another playing place at Roche to go with those known at St Dennis and St Stephen. Detailed research should identify further beacon sites.

Post-Medieval Industrial (see 3.6 to 3.10, 6.2)

It is this phase of activity which has been responsible for the destruction of much of the evidence for earlier periods. Changes in technology since 1939 have meant that the sites and monuments relating to Hensbarrow's own industrial revolution are now themselves threatened by destruction. Mining for tin and iron, quarrying for china-stone and china-clay, and their associated communications and service industries left a uniquely intensive landscape which itself is now being swallowed by a new generation of extractive industry.

This destruction has proceeded at a pace which has left little opportunity to study, record, or interpret the remains of earlier industry, and the pressing need for future work is to establish an understanding of monuments and sites which, like the pan-kiln, are now redundant and increasingly threatened. The identification of these sites is, with the completion of this report, now well-advanced; their record and interpretation has hardly begun.

Further documentary research is required to enhance our knowledge of the various monument classes, and this will involve close study of maps, journals, and newspapers of the period. Fieldwork will be needed to locate further sites where

they may be hidden by vegetation, and recording by survey and photography will be essential for certain monuments, whether or not they are threatened by imminent destruction.

The range and number of sites within the study area represents a unique opportunity to study a 19th century industrial landscape of a particularly intensive type, which is found no-where else in the British Isles. It is essential that the chance should not be missed to understand the mechanisms whereby an essentially small-scale, rural activity becomes a highly mechanised and technologically advanced industry. It is also desirable that the area should come to appreciate the true worth of the industrial structures which achieved their own, distinctively Cornish form, as part of the older technology of the china-clay industry.

Pre-1800 Industrial Monuments

There is substantial documentation for late-medieval and post-reformation industrial activity on Blackmore (Gerrard 1986); the bulk of this documentation relates to the extraction of tin, but there is little doubt that quarrying for stone and perhaps small quantities of clay would also have taken place prior to Cookworthy's "discoveries" of c. 1745. Unless precise documentary evidence is available, and there has been no subsequent re-working or development, it is notoriously difficult to ascribe a precise date to the physical remains of extractive industry where these comprise disturbed ground, pits, and dumps of waste material. This is particularly true on Hensbarrow, where areas of surface mining are likely to have been re-worked many times during their history, and shallow surface workings may in fact have been worked for both tin and clay.

Certain tin openworks are known to be of considerable antiquity: Carclaze, Great Beam, and Menear Pit all have their origins pre-1800. Carclaze and Great Beam became clay works and expanded to destroy all traces of their early form; Menear Pit's outline in recent times reflects that of its more recent 19th century form.

After Cookworthy initiated an active commercial demand for china-clay and stone in the 1750s, the industry grew slowly through the second half of the 18th century (see 3.5). Clay works which are known to have been active prior to 1800 include Carloggas Moor (Cookworthy's original sett), Trethosa, Treviscoe, Goonvean, Trelavour, and Hendra (Barton 1966, 30 et seq). Of these, only Carloggas Moor has any potential for early remains, as the other works expanded greatly throughout the 19th and into the present century. The china-clay industry did not become mechanised until the mid 19th century, and the methods of production used before this technological watershed did not involve the use of substantial structures or permanent processing sites. Consequently, the chance of positively identifying pre-1800 features was regarded as slight during the Project planning stage, and subsequent experience in the field confirms this view. Further documentary research of an intensive nature would be required to locate precisely those areas where future fieldwork should be concentrated.

Many of the corn mills within the project area will date originally to a period before 1800, but only a close study of the fabric of each building, excavation and documentary research would allow more precise dating to be made as in most cases the surviving structure and machinery will have a mid-19th century date.

Post-1800 Industrial Monuments

Most of the industrial sites identified during the course of this Project fall within the mid to late 19th century, and within the first half of the 20th century. This was a period of technological innovation and great expansion within the china-clay industry (see 3.6, 3.7), and it is not surprising that the majority of the present-day remains should belong to this group. In fact, no sites relating to the china-clay industry before ca 1860-1870 could be positively identified in the field, although many of the extractive sites were known to be active in earlier times. Where documentary or cartographic evidence was available for pre-1860 sites and structures, in every case examined their present-day form had been greatly altered by later expansion. Only one structure, the stack at Carn Grey, could be positively identified as definitely pre-1840 in origin. Further research, however, may well establish secure dating for other sites in the pre-1840 period.

Many of the site and monument types unique to the china-clay industry are, in any case, of relatively recent origin. Coal-fired pan-kilns were introduced in the 1850s; china-stone mills were not introduced into Cornwall until the 1870s. This was despite the fact that such technology had been in use in the potteries a hundred years before. Although many of the monuments on Hensbarrow are representative of a technology imported from elsewhere, they were developed into new and distinctive forms in their now wholly Cornish context.

The surviving field evidence, despite the large-scale losses in recent times, is remarkable for its diversity and richness despite the narrow range of extractive processes upon which it was based. Monument classes which are almost unique to Hensbarrow such as pan-kilns, mica-drags, and china-stone mills, display a full range of technological development within the extant site-types; it was quickly realised during the course of the Project that there is no such thing as a "standard" pan-kiln, for example. Although all monuments within a certain class exhibit similarity of form and function, the diversity of solutions to technical and topographical problems remains one of the great strengths of the archaeological resource within the Project area.

4.3 The potential for field survey

Three forms of field survey can be usefully applied in the study area, one (reconnaissance survey) to locate sites, the other two (measured and sketch) to obtain the necessary information from known sites to properly assess their importance and to make adequate records of them before their likely destruction.

Reconnaissance survey will be most valuable in the remaining areas of relict moorland, in the wooded valleys towards the edges of the area, in the irregular medieval field systems, and within historic farmsteads (inspecting standing buildings and investigating farmstead enclosures). This is a recognition that there were insufficient resources within the present survey to enable systematic reconnaissance survey. Only sites which were already known could be visited, and then fleetingly. In relict moorland reconnaissance survey would involve sweeping backwards and forwards at approximately 15 metre intervals across the heath (intensity varies according to the visibility vegetation allows); in woodland much more thorough ground cover, often in groups of two or more for safety reasons is needed; in field systems a field by field search for lynchets, banks and other traces of earlier fields and enclosures is required; and in farmsteads sight needs to be obtained of the exteriors and interiors of all buildings and enclosures.

In relict moorland we can still expect to locate sites of potentially national importance including Neolithic **long cairns** and **stone circles**, Bronze Age **stone rows, menhirs, barrows/cairns, settlements, field systems, enclosures** and **pasture boundaries**, Iron Age/Romano-British **field systems**, early medieval **transhumants' shelters** and medieval **ridge-and-furrow, pasture boundaries, shode works** and **lode-back pits.**

In woodland valleys we may locate early and later medieval **corn mills, stamping mills, blowing houses, fulling mills**, tin **open works**, and **alluvial streamworks** and various forms of china clay and china stone processing plant, including **pan-kilns** and **settling tank** groups.

In irregular field systems there may be traces of Bronze Age, Iron Age, Romano-British and early medieval **field systems** and **enclosures** and Iron Age/ Romano-British **rounds**, all of which would potentially be of national importance.

Within farmsteads we may locate traces of **later medieval houses** as well as post-medieval **houses, farm buildings** and **farmyard features** of county and local importance.

Measured survey (plane table, off-set or EDM, depending on the survey's requirements) would be used not just to provide an accurate record of a monument (eg a cairn), a complex (eg a clayworks or a farming hamlet) or an articulated landscape (eg the northern slopes of Hensbarrow Downs with its various tinworks, early clay works and leats). It would also be used to more precisely identify and interpret the site so that it can be used to enhance our knowledge of the area's history. It also allows us to more objectively assess the site's archaeological importance so that decisions can be taken regarding possible conservation or the need for further investigative work (eg geophysical survey, trial or full-scale excavation or fieldwalking).

Sketch survey, using large-scale OS base maps enhanced by information from aerial photographs and other historical maps and then, in the field, plotting earthwork features by pacing, has proved to be a useful method for producing intelligible records of certain types of industrial complex (eg streamworks), sufficient, at least, to allow certain archaeological decisions to be made. Although they would not constitute a full archaeological record of sites of national or county importance, sketch surveys would be of value for less important sites. Their principal value, however, lies in their fairly rapid gathering together of field information in preparation for more detailed work.

4.4 The potential for excavation

Excavation is one of the archaeologist's most powerful tools, producing a wealth of information about many aspects of a site's history, and its considerable potential for enhancing the more general prehistories and histories of the area, region and country is self-evident. It can be profitably applied to virtually every kind of site. The excavation of a Mesolithic **flint scatter**, for instance, may find concentrations of different types of flints in various parts of the site; some of these might be associated with hearths or shelters. Henrietta Quinnell's excavations of **barrows/ cairns** within our study area have shown how complex and exciting these ritual monuments can be (Miles 1975). Even menhirs, apparently simple, can be shown to have complicated histories (eg Miles and Miles 1971). The development of **field systems** can be elucidated by excavating key junctions (eg Fleming 1988) and most

industrialised sites, from **mills** and **tanneries** to **pan kilns** and **engine houses** will have valuable information hidden below ground. The most rewarding excavations, however, are often those of the apparently most mundane sites, the **settlements**, whether prehistoric, medieval or post-medieval, open or defended (as **hill-top enclosures, rounds** or **hillforts**). The data they produce is usually diverse and rich and often covers many generations, sometimes several centuries, and occasionally millennia. Buried walls, drains, post-holes, stake-holes etc provide architectural detail; deposits, spreads and layers, carefully recorded and sequenced (through stratigraphic relationships) reveal cultural and natural episodes; artefacts and objects obtained from these layers help them to be dated and interpreted; organic material can be used for dating and for the reconstruction of environments and economies.

A drawback of excavations is that they always destroy, at least partially, the site being examined. This, however, is of minor significance in the study area as most sites are likely to be destroyed anyway. Indeed "rescue" excavations of sites due to be lost to development are now by far the most common in Britain, it being recognised that it is often only excavation that can provide an adequate record of a site considered to be of national or even county importance.

Excavations tend to be expensive (labour and equipment costs on site, post-excavation and publication costs) and although the "polluter pays" principle would make the clay industry responsible for them (see below, section 5.2) it must be accepted that not all sites due to be destroyed will be excavated. Those which are of national importance (mainly prehistoric, a few medieval and post-medieval), generally ought to be and others of county importance will also be proposed although an attempt will be made to prioritise sites (see section 5.3).

Excavations can vary considerably in scale; those discussed above are large-scale, open area, but very small trial pits also have considerable value. They can be used to de-turf junctions in field systems and to expose problematic sections of walling in an industrial site. Alternatively they can be used to investigate sites with little or no surface features by searching for material (artefacts etc) or buried structures, pits, ditches etc. Such trial pits can be very useful on sites identified by geophysical survey, field walking or aerial photography, in particular **rounds** and prehistoric **settlements**. It is also anticipated that trial pits will locate traces of early medieval settlements on **farms** with **tre, bod, ker** and **hendre** names, or those with other early medieval references. Early medieval **mills** may also be sought beneath later mills.

A third form of "excavation" is the so-called shovel test in which a Cornish shovel-full of earth is dug up at regular intervals across a landscape which cannot realistically be field walked. Artefacts are sought in the earth and plotted; it is a simple site location method which has proved effective in the Mediterranean and in France and should be workable in the clay district, especially its upland part where ploughing is quite restricted. It is expected that all types of site which produce artefact scatters would be found using this method.

4.5 The potential for field walking

Virtually all of the sites listed in the gazetteer (Appendix 6.10) have above-ground remains, relatively easy to locate. Many of the most important sites, however, particularly prehistoric **settlements** (from the Mesolithic to Romano-British periods and even on into the medieval), will leave no surface remains and will only

be found by the application of various specialist site-location techniques. One of the cheapest and most effective is field walking, the systematic collection of surface finds (flints, pottery sherds, metalwork etc) in ploughed fields. So far no field walking has been undertaken in the study area although a few flint scatters have been recorded by farmers but even these have not been followed up by systematic field walking. As well as settlements, artefact scatters can reveal other kinds of activity areas (eg butchery sites in the Mesolithic, industrial sites in later prehistory) and the extent of low-level scatters of artefacts can be used to reconstruct the areas regularly manured (for relatively intensive cultivation) around a settlement, domestic rubbish often finding its way onto fields with midden material.

Apart from the possible early Neolithic hilltop enclosure on St Stephen's Beacon and three very uncertain Bronze Age round houses (Bodwen, Ebenezer and Carn Grey), there are no pre-Iron Age **settlements** known so far within the area. This represents a serious gap in our knowledge; all the other early sites have greatly reduced historical value if they cannot be related to the places where their creators lived. Settlements themselves are, of course, extremely rich sources of information about architecture, rural economy, agriculture, social structure, culture, lifestyle etc. Unless a field has been particularly deeply ploughed a settlement located by field walking can be expected to yield, on excavation, information relating to all of these aspects of prehistoric and early historic life. Even without excavation the location of a settlement site and its approximate dating (through finding diagnostic pottery or flints etc) adds considerably to our knowledge of the area. For periods like the Iron Age/Romano-British the location of undefended or **open settlements** to set alongside the more easily discovered **rounds** (to fill out the settlement pattern) and, with the rough dating of sites through artefact scatters, the reconstruction of the movements of people through desertions and shifts will be of great archaeological value.

Field walking, as hinted at above, can also be used to refine our dating or interpretation of a known site. This would be particularly useful for the **rounds** which may have been occupied from c.400 BC to c. AD 600, a period of a thousand years.

The obvious constraint on field walking in the study area is the fairly limited amount of ploughing undertaken. This is especially the case in the upland areas.

4.6 The potential for watching briefs

The stripping of topsoil by clay companies prior to the creation or extension of dumps and pits provides an opportunity for archaeological site location work, particularly in the important upland areas. Exposed ground could be intensively field walked (as described above, 4.5) and the range of sites expected to be located would include those, like **settlements**, Mesolithic to medieval, chiefly identifiable by artefact scatters and those, like **settlements** again, **field systems, enclosures, pasture boundaries** etc (of all periods) which will have underground traces of collapsed hedges, walls and infilled ditches and pits.

Special attention ought to be given to undertaking watching briefs in areas where field-names or aerial photograph evidence provide indications of the existence of sites not visible on the ground. Field-names may yield **rounds, barrows, crosses, menhirs, tanneries** etc and aerial photographs have indicated a number of circular features which require investigation and may, on stripping, be revealed as **rounds, enclosures, pounds** or **barrows**.

Clearly close liaison between the Industry and archaeologists is necessary for watching briefs to work. It is recognised that the length of time available will often be limited; that the obvious dangers (blasting near pits, tumbling stones near tips, proximity to large earth-moving machinery on site) will have to be considered; and that there will be little opportunity for preservation or indeed for further archaeological recording work should an important site be located. The chances which watching briefs present will, however, be extremely valuable for refining our knowledge of the distributions of prehistoric and medieval settlements in the area.

4.7 The potential for geophysical survey

Geophysical survey can be used to both locate new sites not visible at the surface and to provide further information on underground features on known sites. Both uses can be justified in the study area.

Geophysical site location is suitable for those archaeological features which will not usually be associated with artefact scatters, features like field hedges, walls and ditches and many kinds of prehistoric, medieval and even post-medieval industrial sites (eg **tanneries** or **fulling mills**). As geophysical survey covers the ground quite slowly, great care has to be taken in designing the sampling strategy for reconnaissance work. It is perhaps best used to test fairly precise hypotheses concerning the locations of particular types of site rather than to attempt to blanket cover large areas. The elusive open or unenclosed settlements of the Iron Age and Romano-British periods may be profitably sought in the spaces between **rounds**.

The enhancement of information on known sites through geophysical survey can again be applied to **rounds**, both within their ramparts (searching for houses, pits etc) and beyond, searching for associated enclosures and field boundaries. Other sites which would benefit from geophysical survey within or adjacent to them include the **hill-top enclosure** on St Stephen, the **hill-fort** at St Dennis, any prehistoric or medieval **settlements** located by field walking or other means. Farms on early or later medieval farming settlements will have below ground remains of earlier houses and other structures which could be located by geophysical survey.

Three principal methods of geophysical survey are used by archaeologists; two, the resistivity meter and the conductivity meter, use variability in electrical resistivity in the soil caused by created features such as ditches or buried walls and the other, the proton magnetometer, uses the fact that certain kinds of human activity, such as lighting fires for kilns, fix the magnetic orientation of features which become anomalous once the background magnetism changes, as it regularly does.

Magnetometer survey has been shown to be very effective in many parts of Cornwall, but the susceptibility of the granite areas has yet to be established, and should be evaluated as a priority.

4.8 The potential for aerial photography

Like geophysical survey, aerial photography can be used both to locate new sites and to enhance our knowledge of previously recorded ones. Aerial photographs are also used in sketch survey (see 4.3).

Features and sites can show up on aerial photographs in several ways. In moorland stone built walls or structures stand out in tone and colour from the background vegetation. Features with height or depth (ie structures or earthworks) cast

shadows in low light. Differential vegetation growth on created features, which produce local drainage anomalies, are often visible on aerial photos, such as lines of bracken along stony banks in moorland or patches of unripe rape or grain crops on the sites of ditches or other dug features beneath arable crops. Areas of burning, stone spreads and darker occupation debris may be visible as soil marks in ploughed fields. Drifting light snow may highlight very shallow features, such as low ridge-and-furrow.

There is a real need for systematic aerial photography in the area. Traverses covering the whole district should be made at different times of the year: when the moorland vegetation is low (early spring); when crops are ripening (early summer-June/July); when fields are ploughed (autumn and late winter). Aerial photography is a relatively inexpensive and efficient method of site location; work in the last decade has demonstrated how productive it can be in Cornwall (Hartgroves, forthcoming). The photographs produced will also provide a valuable record of the rapidly changing landscape of use to other bodies with interests in the area. We can expect aerial photography to be particularly useful in locating ploughed down **barrows/cairns** in enclosed farmland, Bronze Age **field systems, enclosures, pasture boundaries** and, perhaps, **settlements** in relict moorland, Iron Age **hillforts** and Iron Age/Romano-British **rounds** (both will show as ovals or circles, the former larger and on hill-tops the latter on slopes and in the lowlands). A number of features, mainly circles or ovals have already been picked up on aerial photos of the area; these require further investigation both on the ground (field walking, geophysical survey etc) and from the air (repeat shots in different conditions).

There should also be a systematic examination of existing sources, for example those of the RAF in the 1940s, will repay careful study as they will contain information on parts of the area now lost to the clay industry. Relict moorland in the upland parts was considerably more extensive only 50 years ago. The periodic flights commissioned by ECCI should also be searched.

4.9 The potential for documentary/cartographic research

The use of old maps and documents in this survey was necessarily limited by time and was confined to the main 19th and early 20th century maps (OS and Tithe), plus parts of the 1695-6 Lanhydrock Atlas and Martyn's 1748 map of Cornwall. None was exhaustively studied and generally only the most obviously relevant data was extracted; much remains to be done. For example the Lanhydrock Atlas, with its fairly detailed late 17th century plans of settlements and field systems, including names, acreages and land use of individual fields, can help us understand early modern agriculture and the enclosure of the medieval subdivided arable. For the study area there are, in the Atlas, plans of Treskilling and Lestoon, Carne (south), Bodwen, Higher Menadue and Chenethro in Luxulyan parish (some of the most substantial farms in the area), Tresayes in Roche, Carpalla in St Stephens, Ruddle in St Austell and Burngullow in St Mewan, the last including a plan of Burngullow Common and part of Longstone Downs.

Later maps, especially the Tithe maps (late 1830s, early 1840s) and the large scale OS plans (1870s, 1900s, 1930s) can provide considerable detail on buildings, boundaries, industrial complexes, lanes, local services etc. For mining and clayworking there will also be surviving working plans and sections which often contain detailed information not just regarding layout but also, through labelling, usage and internal history.

Mapwork, especially if it can be done in Cornish record offices, is a cheap and efficient source of information.

For the earlier historical periods, ie pre-1695 or 1748 we have no maps and largely rely on archaeology and various documents. Environmental history also provides information and, especially in recent years with the work of Oliver Padel, place-name studies or toponymy has enabled early medieval settlement patterns to be reconstructed. More subtle work on the place-names will refine our history of this crucial period in the history of Cornwall and the clay district. For the later medieval period other documents may supplement our knowledge. Domesday Book, of 1086, can bear more stringent analysis than has often been attempted (see Herring forthcoming) and the 1049 Trerice charter (Hooke and Herring, forthcoming) provides a glimpse of the pre-Norman rural landscape in one corner of the area. The latter needs further consideration - what, for instance, does the charter mean by an"outleap" or "barleyland" and can a "common" barleyland be an open or subdivided strip field system?

Part of the south-eastern quarter of the study area falls within the ancient Duchy manor of Tewington and will have fairly thorough documentation from the late 13th century onwards. Some of this is available in published, translated records (eg Midgley 1942-5; Hull 1971; Pounds 1982) but most is not and is held in London at the Duchy Record Office. The area involved includes Biscovillack, Ruddle, Treverbyn, Penrose and Tregrehan.

For the rest of the study area we rely on the chance survival of deeds, references in court rolls, subsidy rolls, feet of fines etc. for our medieval coverage. In the post-medieval period land deeds, indentures, contemporary topographical descriptions (eg Leland, Fiennes, Maton etc), tin bounds, journals, directories and newspapers will all provide valuable information to elucidate archaeological data.

Very little historical research has been undertaken in the study area - hence the lack of ready-made historical backgrounds for most subjects other than the clay industry itself (adequately dealt with by Barton 1966) - and there is a great need for a qualified medieval historian to sort out the land use history of the early and later medieval periods.

4.10 The potential for oral history

One of the most vivid and relevant sources of information for the most recent period is oral history. It is of use both for locating sites (using detailed local knowledge) and, perhaps more importantly, for explaining the workings and meanings of known features. Local people will also have opinions and inside knowledge about recent historical trends and will be able to communicate local sentiment regarding the archaeological heritage and the future of the area.

An area of research where oral testimony will be especially valuable is the history of the clay industry itself. Many retired workers will remember sites and working methods of the first half of the 20th century and some will be able to pass on stories and memories which they heard from people whose experience reached back well into the 19th century. Other people will be able to throw similar light on farming, tinning, schools, chapels, roads and railways etc.

People will also often have old photographs, papers and objects which will be of great value in reconstructing the recent past.

As oral history depends largely on talking to the more elderly people a programme of visits and recordings should be initiated as soon as possible.

4.11 The potential for environmental history

A detailed vegetation history, based on environmental history, preferably covering the whole of the post-glacial or Flandrian period, from the latest Upper Palaeolithic and Mesolithic archaeological periods to the modern, will be of considerable value when the prehistory and history of the area is written and should be regarded as a priority. Not only would it inform us of the wild, semi-wild and domesticated vegetation at key periods but it would also reveal climatic changes and with careful study, provide insights into agricultural practices.

Bogs in the South-Western granite uplands have provided several fairly deep peat cores which have yielded reasonably good pollen data (see Brown 1977 and Caseldine 1980). As the extent of relict moorland decreases in our area so the opportunities to obtain similar cores slip away. Detailed survey of the eastern bogs may allow us to isolate natural, and hopefully ancient bogs, from those created relatively recently as a result of alluvial streamworking. Reconnaissance survey in the uplands (see 4.3) should include an assessment of all marshes and bogs with a view to selecting at least one for sampling.

Soils buried beneath substantial archaeological monuments, such as barrows/cairns but also the ramparts of hillforts and rounds, can be subjected to pollen analysis and soil structure analysis (see Bayley 1975 and Staines 1975). This should be incorporated into any suitable excavation proposals.

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Recommendations

5. RECOMMENDATIONS

5.1 Introduction: Aims and Objectives

This report has identified four important areas of archaeological concern:

1. Large gaps exist in our current knowledge and understanding of the prehistory and history of the study area; see section 3, itself based on the data tabulated in the gazetteer and expanded in subsections 4.2 and 6.2. One consequence is the difficulty in assessing the historical or archaeological importance of certain sites.
2. It is clear that many archaeological sites of national, county and local importance have not yet been identified. These will include prehistoric and early medieval settlements which have left no easily visible surface remains. Other sites will lie in areas which could not be thoroughly inspected in the time allowed for fieldwork in this project.
3. Large numbers of sites of national, county and local importance have been destroyed by the china-clay industry without adequate records being made.
4. Many other important sites are vulnerable to destruction by the industry in the short, medium or long terms.

Elsewhere (subsections 4.3 to 4.11) it has been suggested how various archaeological and historical techniques will assist in locating undiscovered sites and how other techniques will, when applied to these and the already known sites, greatly refine our understanding of the area's prehistory and history. Other research programmes, integrated with the archaeological, will considerably enhance the study of the area's prehistory and history; in particular environmental history, detailed documentary and cartographic research and oral history. The last three will, of course, also help locate further sites.

There is, with reference to the fourth problem listed above, a need to identify those sites and archaeological landscapes whose continued preservation and management should be secured and also a need to establish a set of procedures which will enable all sites which cannot be so protected to at least be adequately recorded, whether this simply requires, at one extreme, a few ground photographs, or, at the other, an archaeological excavation to be undertaken. Some sites will require no action to be taken, sites of local or even county importance whose recording will not significantly add to our historical knowledge.

The information collected for this survey (more detailed than that which could be incorporated in the gazetteers) and that obtained in any future archaeological work within the area needs to be placed in a publicly accessible archive, ideally the Cornwall Sites and Monuments Record (SMR) held by the Cornwall Archaeological Unit. In addition there is a need to make the information gathered for this report more readily accessible to the general public in the form of both detailed and more general publications. Likewise the results of any future work should also be promptly published. In all cases any assistance given by the various china-clay companies, as well as other bodies, should be positively and prominently acknowledged.

In summary, then, there are six main strands to future work, each of which will be considered in more detail in separate subsections below:

5.3 Preservation of key sites and landscapes

5.4 "Rescue" investigation of sites threatened by the clay industry - preservation by record

5.5.1 Reconnaissance/site location work

5.5.2 Refinement of the prehistory and history of the area by investigating carefully selected sites and landscapes and undertaking other related research (environmental, documentary and oral history etc)

5.5.3 Archiving of all information gathered

5.5.4 Prompt and professional publication of results in both academic and popular works

Clearly there is a need for close liaison between the clay companies and the archaeologists. This should, if possible, be formalised and be based on the CBI sponsored Code of Practice for Mineral Operators and the Planning Policy Guidance notes "Archaeology and Planning" (PPG 16) as well as on current attitudes to the protection of the environment and historical sites. Such a relationship will be discussed in the following sub-section.

5.2 The relationship between archaeology and the clay industry

5.2.1 The importance of archaeology

The Secretary of State for the Environment has recently (November 1990) issued an authoritative outline of the importance of archaeological sites as part of a Planning Policy Guidance document "Archaeology and Planning" (PPG 16). It provides a clear statement of Government policy against which the following discussion on the need for a new, more positive relationship between the china-clay industry and those responsible for safeguarding Cornwall's archaeological heritage can be set.

Archaeological remains are finite, providing irreplaceable evidence of the past development of our civilisation. They are part of our national culture and are valuable for their own sake as well as for their educational role. They include the archaeological landscape, the product of human activity over thousands of years from palaeolithic hunter-gatherer camps to the remains of 20th century activities and include farms and fields, factories, clayworks and mines. Archaeological remains are often very fragile, vulnerable to damage and destruction and appropriate management is therefore essential to ensure they survive in good condition. Particular care must be taken to ensure that they are not "needlessly or thoughtlessly destroyed" (summarising PPG 16, paras 3 to 6).

Elsewhere, in guidance to Mineral Planning Authorities, the Secretary of State has noted that while it is in the national interest that the planning system does not impose an unnecessary and unreasonable burden of regulation on new mineral developments, not all proposals will be acceptable. The Government is also firmly

committed to other objectives including the preservation of "the nation's heritage" (MPG 1, Jan 1988, para 39).

These statements, among many others, reflect the increasing weight given by successive governments during the 1970s and 80s to archaeological remains, the material "heritage", as elements of the environment worthy of respect and protection.

The rationalisation of planning procedures which flowed from the Ancient Monuments and Archaeological Areas Act 1979 led to the drawing up in 1982 by the Confederation of British Industry of a Code of Practice for Mineral Operators. In return for adhering to the Code, which greatly increased co-operation with archaeologists and Mineral Planning Authorities, mineral operators were exempted from certain sections of the Act. The China-Clay Association endorsed the Code of Practice.

5.2.2 The importance of the archaeology of the St Austell china-clay area

The archaeological importance of Cornwall is firmly established. The county contains nearly 1,100 of the total of c.13,000 Scheduled Monuments in England. It is not only rich in terms of numbers of nationally important sites; it has its own distinctive prehistory and history and, with its long period of industrialisation, retains a culture visible in its more recent archaeology markedly different from that of the rest of southern England.

After Bodmin Moor and alongside West Penwith and Carnmenellis, the Hensbarrow massif forms one of Cornwall's chief upland zones. Enough fragments survive to show that it contained, probably into the early modern period and the advent of china-clay working, a wealth of prehistoric archaeology. Monuments of farming and industry dominate the later archaeology. The winning and working area as a whole is of particular importance in possessing large blocks of lowland alongside the uplands. Wealthy medieval hamlets in Luxulyan and St Austell parishes worked land which had been farmed in the Iron Age and Roman periods by people living in the hamlets and rounds scattered through these lowlands. Tin streamworks, in part at least, may date back to the Bronze Age and many are certainly medieval. The china-clay industry has produced, over the last 250 years, its own dramatic, complex and important archaeology. There are also tin mines (some very early) and numerous stone quarries, all with various ancillary structures and transport systems.

The industrial remains punctuate a landscape which has until the last century been, despite the sound and the fury of extractive industry, stubbornly agricultural and which contains some excellent vernacular farm architecture. Beneath many modern farms will be traces of later medieval and even early medieval hamlets and most field systems have essentially medieval layouts.

Section 2, above, provides a background prehistory and history of the area and sub-sections 4.2 and 6.2, together with the gazetteer of sites illustrate the known extent of surviving archaeological remains. It will be clear from these that, despite the destruction of the 18th, 19th and 20th centuries, the clay area still possesses a rich archaeology. In contrast to the other archaeologically rich upland areas of Cornwall the china-clay area has been neglected by archaeologists, despite being under constant threat.

As the china-clay industry's long term strategy envisages the almost total destruction, in archaeological terms, of all land within the Winning and Working Area, apart from Island Settlements and Protected Roads, it is felt that a more coherent and archaeologically responsible approach to the preservation (if feasible) and recording (if not) of the area's archaeological remains is warranted, and is indeed overdue.

The Cornwall Archaeological Unit welcomes the support and encouragement given by English China-Clays International (via the English China Clays Group Charitable Trust) in the production of this report and regards it as another recognition by the company of the importance of the archaeological remains as an aspect of the area's environment.

5.2.3 The China-Clay Industry; its importance and protection

The UK is a leading world producer of china-clay, exporting a substantial part of that extracted and contributing significantly to the national balance of payments. Minerals can only be worked where they occur (see Revised Code of Practice for Mineral Operators, para 1.3) and the distribution of kaolin deposits is very restricted, the country to the north of St Austell being Britain's most important extraction area (producing c.80% of the country's total). The clay industry dominates not only the landscape but also the economy of this part of the county, being the major employer, and also brings considerable wealth into the wider Cornish economy. The china-clay industry is therefore important and there are various conditions and statements in national, county and local plans reinforcing and protecting the industry's position.

The national importance of the mineral led to the establishment in 1955 by the China-Clay Standing Conference (the industry, local planners, the China-Clay Council and relevant government departments) of the China-Clay Consultation Area "designed to ensure that clay bearing ground is not unnecessarily sterilised by other forms of development" (MPG 1, para 63; MPG 2, para 27). This, with other conference recommendations, was embodied in the County Development Plan (Joint Working Party Report, 1971).

A major study in the late 1960s led to the production of a Long Term Strategy (with a revised Consultation Area boundary) which, after some adjustments from the County Council (notably additions to the protected Island Settlements and the subjection of some tipping proposals to "special consideration" on environmental grounds), was adopted by the County Council in 1974 as a non-statutory Statement of Policy for the area. A series of detailed Short Term (Seven Year) Development Plans have been produced by the industry, the current one ending in 1991.

Although control of mineral working is the County Council's responsibility, under the Town and Country Planning (Minerals) Act 1981, it was not able in the early 1980s to prepare a Minerals Plan for the area and policies on mineral working were, therefore, included in two Restormel Borough Council Local Plans - those for the St Austell Area (1983) and Central Restormel (1987). These elaborate on the County Council's Structure Plan policies and also take into account its Statement of Policy relating to china-clay. While they reiterate certain policies intended to improve the environment both local plans follow the County Structure Plan Policy 16D which states that within the St Austell China-Clay Area "there will be a presumption in favour of china-clay working" (Central Restormel Local Plan, 11.5.5; St Austell Area District Plan, 14.4.4).

The County Council, as Minerals Planning Authority, resolved in 1987 to prepare a Minerals Local Plan for the china-clay area. It was felt that the County Council should not have to rely solely on documents prepared by Restormel Borough Council and by the Industry itself (Griffin 1989, paras 7 and 8).

Among the problems the Minerals Development Plan will tackle is the continuing relevance of the Long Term Strategy, now 20 years old, possibly no longer reflecting the Industry's intentions, and possibly no longer entirely in accordance with recent environmental trends. The Strategy will therefore be reviewed before it is incorporated in a statutory development plan (ibid, para 10).

The Minerals Development Plan will run from 1991 to 2001 and will provide a framework for the China-Clay Industry's continued development. As well as safeguarding land for mineral development it also intends to protect the environment of local communities (ibid, paras 12-14). In reviewing the details of the Long Term Strategy the Minerals Development Plan will assess, amongst other factors including "semi-natural habitats", "landscape quality" and "agricultural considerations", the importance of "**archaeological features**" (ibid, para 17)

5.2.4 The relationship between archaeology and the china clay industry

If the proposals set out in the industry's present Long Term Strategy are met then the great bulk of the archaeological sites within the china-clay area, many of them of national or county importance, will inevitably be destroyed.

If certain archaeological sites and archaeological areas are considered sufficiently important for Mineral Planning Authorities to recommend that they are preserved in situ then the nationally important china clay industry will suffer through areas intended by it for pits, tips or plant being, in its terms, "sterilised". The conflict of interests is, therefore, straightforward.

Any relationship between archaeology and the china-clay industry is likely to be sensitive and that which has existed through the 1970s and 1980s has been low-key. The Ministry of Works, and subsequently the Department of the Environment, sponsored a small number of rescue investigations of sites under immediate threat. Most notable were the excavations of several barrows, a menhir and a round undertaken in the early 1970s with the consent of ECLP and Berk Ltd. Both companies allowed the finds and records to be deposited in the Royal Cornwall Museum (Truro). ECLP also gave practical assistance with accommodation, machinery and back-up services (see Miles and Miles 1971 and 1973; Miles 1975). ECLP (now ECCI) were founder members of the Cornwall Committee for Rescue Archaeology (January 1975) and continue to sit on the Advisory Group for the Cornwall Archaeological Unit. For a period of seven years the Company gave the Unit a covenanted grant towards its work. More recently, in 1978, the Cornwall Committee for Rescue Archaeology (now Cornwall Archaeological Unit) prepared, in co-operation with ECLP, a gazetteer of archaeological sites in the china-clay area. Its intention was to determine the rate of destruction of archaeological sites and to list those meriting permanent preservation and those requiring archaeological investigation before destruction. It was based on the then current Sites and Monuments Record, then still in its infancy and thus incomplete, and did not include medieval and post-medieval settlements and contained a very uneven sample of industrial remains. Nevertheless it formed the basis of a useful working relationship between the Industry and the Committee who were able to produce photographic

records of certain sites prior to their destruction (eg Penhale engine house and Woon farm).

The need to improve on this 1978 gazetteer and a wish to formalise the aims of archaeologists in terms of preservation, research and record have resulted in the production of this report, funded by English China-Clays International (via the ECC Group Charitable Trust) and English Heritage. Both Industry and Archaeology are therefore expressing their concern that a new working relationship is developed.

5.2.5 Problem resolution through the planning process

In the same guidance notes as those in which he outlined the importance of archaeological remains (see 5.2.1) the Secretary of State for the Environment indicated that positive planning and management can help produce sensible solutions to the treatment of archaeological remains and reduce areas of potential conflict between development and preservation. The key to the future of the great majority of archaeological sites and historic landscapes lies with local authorities (PPG 16, para 14).

He went on to stress the importance of Development Plans, such as the Minerals Development Plan currently being drawn up by Cornwall County Council for the china-clay area (see 5.2.3 above) which should reconcile the need for development with the interests of conservation including archaeology. Detailed development plans (ie local plans and unitary development plans) should include policies for the protection, enhancement and preservation of sites of archaeological interest and their settings as shown on proposals maps. Scheduled Monuments should normally be earmarked in development plans for preservation; authorities should bear in mind that not all nationally important remains meriting preservation will necessarily be scheduled; other unscheduled archaeological remains of more local importance, may also be identified in development plans as particularly worthy of preservation (PPG 16, paras 15 and 16).

Mineral operators recognise in the draft revised Code of Practice (para 1.3) "that **in situ** preservation of archaeological sites is usually preferable to [archaeological] excavation". Both they and archaeologists appreciate the need to weigh the archaeological importance of each site with the extent to which its preservation sterilises important minerals and both understand that in the same way that preservation is not always possible so "some sites are of such [archaeological] importance as to outweigh the need for extraction" (ibid).

Where preservation **in situ** is not feasible, and the archaeologists accept that in the china-clay area this will most often be the case, then "preservation by record" may be acceptable as a second-best option. This would involve making an archaeological record of the site and, for most prehistoric, Roman and medieval sites will require full excavation (PPG 16, paras 13 and 24 and see below, subsection 5.4, for more details on adequate recording of sites to be destroyed in the clay area).

5.2.6 Organisation and funding of "preservation by record"

The Code of Conduct of the Institute of Field Archaeologists (IFA), the professional body of British archaeologists, enshrines the principle that the archaeologist has a responsibility for the conservation of the archaeological heritage (IFA Code of Conduct, Principle 2). This is expanded as Rule 2.1: "an archaeologist shall strive to conserve archaeological sites and material as a resource for study and enjoyment now and in the future and shall encourage others to do the same. Where such

conservation is not possible he or she shall seek to ensure the creation and maintenance of an adequate record through appropriate forms of research, recording and dissemination of results". Professional archaeologists are therefore obliged to work for the preservation of sites either in situ or by record.

English Heritage, the body set up by the National Heritage Act 1983 and whose duties include the securing, wherever practicable, of the preservation of Ancient Monuments, has recently issued a policy document "The Management of Archaeology Projects" which clearly states that "the responsibility for producing a record of archaeological deposits which are unavoidably threatened by development and which cannot be preserved in situ lies with the developer" (PPG 16, annex 3, para 18). Only when the developer is a non-profit making community body (eg a charitable trust or a housing association) or is an individual with insufficient funds would English Heritage itself considers funding the recording of a threatened site (PPG 16, para 25). This is, of course, a significant change from the situation in the 1970s when the series of barrow, round and menhir excavations within the china clay area were all funded by the Ministry of Public Buildings and Works or its successor, the Department of the Environment (see Miles and Miles 1971 and 1973; Miles 1975). (More recent work by CCRA and CAU has not been funded.)

It is obviously preferable if the developer enters into a voluntary agreement to fund any necessary archaeological recording following the "polluter pays" principle which applies to the meeting of other acceptable environmental standards (as agreed between industry and local planning authorities) (see MPG 1, para 10).

Planning authorities must also be fully aware of the archaeological implications of their decisions and policies and should satisfy themselves that proper provision will be made to enable adequate recording to be carried out.

When planning permission is being sought and the preservation of a site in situ is not considered justified the Secretary of State believes that it would be entirely reasonable for the planning authority to satisfy itself before granting planning permission, that the developer has made appropriate and satisfactory provision for the excavation and recording of the remains and for their subsequent publication (PPG 16, para 25). This is best achieved through voluntary agreements but the planning authority is able to impose fair, reasonable and practicable conditions securing excavation and recording (see PPG 16, paras 25,26,29 and 30).

As the Industry already has extensive long-term planning permissions over much of the china-clay area the creation of such agreements or the attachment of such conditions will not usually be feasible. Instead it is suggested that voluntary agreements for the Industry to fund a fair and reasonable long term programme of archaeological recording should be incorporated into the acceptable environmental standards section of the forthcoming Minerals Development Plan. The form such a programme takes would be agreed with the industry and the Minerals Planning Authority and would be seen to form one part of a continually improving set of measures which the industry has adopted, voluntarily and through consultation with county and local planners, to improve the environment of the china-clay area.

The draft Revised Code of Practice for Mineral Operators notes that the "Confederation of British Industry supports the practice of mineral operators offering financial or practical assistance to archaeological investigations" (para 2.10) and also stresses that "the archaeological contractor.... will be conscious of the

potential public relations benefits to Operators of publicising their work. In any publicity, financial or other support from the Operator shall be recognised in a manner approved by the Operator" (para 2.12). There can be no doubt that the china-clay industry would receive considerable positive and affirmative publicity from being seen to fund such a programme. Public interest in archaeology is growing rapidly and professional archaeologists are now much more aware of the need to present their work to the public in exciting ways. Recent (1990) Cornwall Archaeological Unit excavations at Tintagel received extensive local television and radio coverage as well as regular write-ups in the national and local press and brought the sponsor, Mobil Oil, a national award. A long-term rolling programme of archaeological work in the china-clay area would maintain public interest and extend positive publicity.

5.2.7 "Preservation by record" as part of a broader programme of archaeological work

"Preservation by record" is essentially reactive; work commences only when a site is under immediate threat of destruction. In the winning and working area all sites, with the possible exceptions of all or some of those noted below, in 5.3 and Appendix 6.5, will be destroyed under the present Long Term Strategy. It is considered essential to design an archaeological recording programme which incorporates "preservation by record" into a broader more pro-active strategy which includes the reconnaissance/site location programme and more explicitly "research orientated" archaeological work described below in subsections 5.5.1 and 5.5.2.

The publication of annual reports summarising the results of such a programme, together with other spin-off publications is likely to provide positive publicity for the china-clay industry.

5.3 Preservation of key sites and landscapes

Ranking of sites by archaeological importance

Sites listed in the gazetteer are graded A, B or C according to Site Value. Grade A sites are considered of National Importance and some are already protected by statute as Scheduled Monuments (see Appendix 6.4). The remainder will be recommended for scheduling during the forthcoming HBMC (E) review of Scheduled Monuments, the Monument Protection Programme (MPP). Scheduled Monuments are protected by **The Ancient Monuments and Archaeological Areas Act 1979, as amended by the National Heritage Act 1983** and any proposed work which will affect such sites requires Scheduled Monument Consent from the Secretary of State for the Environment.

Grade B sites are considered of "county importance" and, while their protection is not supported by statute, they should also be preserved wherever possible (see the Countryside Local Plan, sections 4.6 and 4.7; and DoE PPG 16, paragraph 16).

Grade C sites are of "local importance" and again should be preserved where possible. While their grade should not be regarded as a measure of unimportance it is conceded that it will not be possible to justify the preservation of all grade C sites.

Protection of individual sites

DoE PPG 16 suggests, with reference to Nationally Important (grade A) sites, that there "should be a presumption in favour of their physical preservation" (para 8) and the "desirability of preserving an ancient monument and its setting is a material consideration in determining planning applications whether that monument is scheduled or unscheduled" (para 18). There will be occasions, however, especially where less important sites are concerned, when the planning authorities may decide that archaeological significance is outweighed by other material considerations, including the need for development, and will allow development to proceed provided they are satisfied that "the developer has made appropriate and satisfactory arrangements for the excavation and recording of the archaeological remains and the publication of the results" (PPG 16, para 28; and see 5.4 below). This represents "preservation by record", an archaeologically acceptable second best option (PPG 16, para 13).

A number of sites (99 in all) have been identified, however, which should be preserved in situ as recognised by Mineral Operators in paragraph 1.3 of the draft Revised Code of Practice which states that, while preservation is not always possible, "some sites are of such importance as to outweigh the need for extraction" (see Appendix 6.5 and map 14). As discussed above (5.2.5), it is important that a balance is achieved which reflects the archaeological importance of the site and "the extent to which its preservation would sterilise important minerals" (draft Revised Code of Practice, para 1.3).

A number of buildings within the study area receive protection by being "listed" as of special architectural or historical interest. Lists of such buildings are compiled by Inspectors of the Historic Buildings and Monuments Commission for England for the Secretary of State for the Environment to guide local planning authorities acting under the Town and Country Planning Act 1971 augmented by the Town and Country Planning (Listed Buildings and Buildings in Conservation Areas) Regulations 1987; see DoE Circular 8/87. Buildings are graded to show, in descending order, their relative importance:

Grade I Of exceptional interest (c.2% of the total of listed buildings)

Grade II* Of more than special interest (c.4%)

Grade II Of special interest (c.94%)

The listed buildings and structures (bridges, millstones, crosses etc) in the study area are presented in Appendix 6.3. This incorporates the results of a nationwide resurvey of listed buildings begun after the criteria for selecting buildings was revised in 1970. At the time of writing (November 1990) the results of the resurvey of the parishes of St Austell and St Blazey, forming roughly one third of the study area, had not been received by the Cornwall County Council Planning Department.

There are two Grade I buildings in the study area, 19839 Roche Rock chapel and 20964 St Stephens Church, and eight Grade II* buildings, 27026 Parkandillick engine house and chimney, 21106.5 Goonvean engine house and chimney, 19800.2 St Dennis Church, 19830 Roche Church, 20858 Meledor house, 20871 Trevear house, 5049 Methrose house and, listed separately, its courtyard walls and font. The remainder are Grade II and "warrant every effort being made to preserve them" (DoE Circular 8/87, Appendix I).

Map 14 shows the distribution of listed buildings in the study area. As well as highlighting the lack of a resurvey of St Austell and St Blazey parishes, it draws attention to the very uneven cover given to the rest of the area by the resurveyors. The area around Roche, Carbis and Woon is much more densely covered than anywhere else even though the buildings here are not generally any more historically important than those elsewhere in the area. It is worth noting the principles of selection of listed buildings as approved by the Secretary of State. They cover four groups:

"All buildings built before 1700 which survive in anything like their original condition are listed. Most buildings of 1700 to 1840 are listed, though selection is necessary.

Between 1840 and 1914 only buildings of definite quality and character are listed, and the selection is designed to include the principal works of the principal architects. Between 1914 and 1939, selected buildings of high quality are listed" (DoE Circular 8/87, Appendix I).

It is suggested here that a number of buildings falling into the second category (1700 to 1840) and a smaller number falling into the third (1840 to 1914) qualify for listing and will be put forward to the relevant Inspectors. In both categories only a small selection from the total of such buildings will be made on the basis of special architectural and historical value.

Protection of archaeological landscapes

In addition to the discrete sites either protected or put forward for protection, discussed above, there are also several blocks of archaeologically or historically very important landscape which are considered worthy of protection (see map 14 and figs 15 to 24).

St Stephen's Beacon (map 15)

A small rounded hill and containing a possibly Neolithic hill-top enclosure (PRN 20651; grade A) an associated flint scatter (20651.1; A), a round (20650; A), a round cairn (20636;A), a medieval pasture boundary (27455; A), two buildings (27452;A and 27451; B), a beacon (20695; B), an old china-clay works (20756;C) and a tin mine (20655;B) an area of surface mining (27448; B) and a roadstone quarry. The hill also forms an important open space amenity enjoyed by local people.

Hensbarrow Downs (map 16)

An area of c.87 hectares of heathland, the remaining northern and the higher southern and western slopes of the highest hill in the area. Panoramic views are still enjoyed to the north over central Cornwall. The area contains Hensbarrow itself, a large Bronze Age barrow (19842; A), another two barrows, one platform (19844; A), one oval (27817; A) and a probably prehistoric pasture boundary (27812 and 27818; A). As well as these prehistoric sites there is a very important complex of surface mining remains including the best preserved medieval eluvial streamworks in the ancient Blackmore stannary (27814; A) and several areas of shode and lode-back working (27806, 27807, 27809, 27822, 27823, 27824, 27831, 27832, 27833; all B) as well as a number of leats and reservoirs (27811, 27815, 27819, 27820, 27821,27825, 27826, 27827, 27828; all B). There is also an early china-clay works (27090.1; B), a pattern of possibly medieval hollow-ways (27808; B), a medieval hedge (27810; B), a modern field (27813; C), two sets of bound-stones

(27816 and 27829; both C) and at Gunheath three fine 19th century cottages (27925; B).

Gover Valley (map 17)

An area comprising the Gover Stream and the associated valley slopes from the railway viaduct in the south to Goonamarth in the north. The area contains a range of significant china-clay works and their associated process areas, including Forest (20782;A), Gover (20786;A), and Carne Stents clay works (20783;C) Wheal Jacob mine and clay works (20804;A); air drying pans (27112 and 27110; both A); and pan kilns and settling tank complexes (27105, 27106, 27099, 27101, 27100, grades B and C). There are also important settlements including four medieval hamlets, Biscovillack (20813;A), Higher Biscovillack (27604;A), Penisker (20825;A) and Trevanion (20834;A) and one medieval farm, Goonamarth (20819;A). These all have medieval field systems (27320-27325;all B) and there is also a patch of ridge-and-furrow (27591;B) at Penisker. Trevanion settlement contains an excellent horse engine (20834.1;A) and there is a hull at Higher Biscovillack (27604.1;C). In the Gover valley itself there are several cottages (27589-27591 and 27593; all C). In the Higher Goonamarth valley are the sites of a mine (33016;C), a blowing house (20671;B) and two stamping mills (20670 and 27587; both B). The industrial sites are all now long-abandoned and have re-vegetated, providing a landscape of great beauty and an important ecological resource.

Goonabarn / Tregargus Valley (map 18)

The lower part of the Goonabarn Valley, running from Tregargus, a medieval hamlet (20865;A) just north of St Stephen to Wheal Arthur. It contains a series of china stone mills of great historic importance, with their associated quarries and leat systems: Wheal Arthur (20869;A), Tregargus (20986.1 and 20986.2; both A)), Trevear (27064;A), and lower Tregargus (27065;A). Chapel Mill (20876;A), although not within the area, should also be conserved as part of this group.

Trethowel Valley (map 19)

The Carthew/Trethowel Valley, from Menacuddle in the south to Carthew in the north, is proposed as a protected area, to include the valley slopes and the associated disused china-clay works. Important china clay works, now disused and re-vegetated, are: Trethowel (20453;A), Lansalson (27035 and 20086;B), Ruddle (27038;B), Gomm (20087;A) and the Wheal Martyn Museum (20021;A). The valley also contains fifteen important pan-kilns and their associated tanks including Trethowel (20433;A), Boskell (20534.1, 20534.4; both A) Bojea (27034;B); and the trackbed of the Trenance Valley Railway (20445;B). The railway, and other green lanes in the valley, could form a footpath network. There are also five important medieval hamlets, Ruddle (20204;A), Lansalson (20545;A), Boskell (20534;A), Trethowel (20562;A) and Bojea (27639;A) and three well-preserved mills (20019, 20302 and 20413; all B) as well as medieval field systems.

St Dennis Consols and Gothers (map 20)

Comprises an area of upland china-clay working, to be contrasted with the valley workings of Gover and Trethowel (above). It includes the disused workings of St Dennis Consols (19897;C), Wheal Frederick (19899;C), and Gothers (27066;C), together with their engine houses (19897.1, 27066.1; both B), and two important pan-kilns at Gothers itself (19900.1, 19900.2; A and B).

Carn Grey (map 21)

The eastern end of Carclaze Downs with Carngrey Rock, a natural tor and heathland (c.10 hectares) running away to the north and east. There is a possible Bronze Age barrow (27799; A) at the summit and, on the north-east slopes, traces of a prehistoric field system (27803; A), a possible round house (27804; A) and a possible prehistoric enclosure (27805; A). Medieval pasture boundaries (27801 and 27802; both B) and an area of stone-splitting (27800; C) are on the northern slopes. Two impressive granite quarries (20089, 20090) are on the higher eastern slopes and a ruined china-clay works (Pentruff, 20098.1) is on the lower slopes. A merriment hole has been drilled into the summit carn (27798; B).

Treskilling, Lestoon and Tretharrup (map 22)

An important block of medieval agricultural landscape (c.76 hectares) with two certain early medieval (Dark Ages) settlements, Treskilling (20183; A) and Tretharrup (20184; A) and possibly a third, Lestoon (20176; A). Each is surrounded by enclosed but fossilised medieval strip field systems (27341, 27342 and 27343; A, A and B respectively) while on Treskilling Downs is the best-preserved relict medieval strip-field system (with original banks etc) in central southern Cornwall (20056; A). In the flat valley bottoms to the north-west and north-east of the area are alluvial streamworks of probably medieval date (27766, 27771 and 27772; A, B and A respectively). Tretharrup settlement contains two rare well-houses (20184.1 and 20184.2; both B) and a beebole (20184.3; B). A well-preserved sweep-type horse engine survives at Treskilling (20183.1; B).

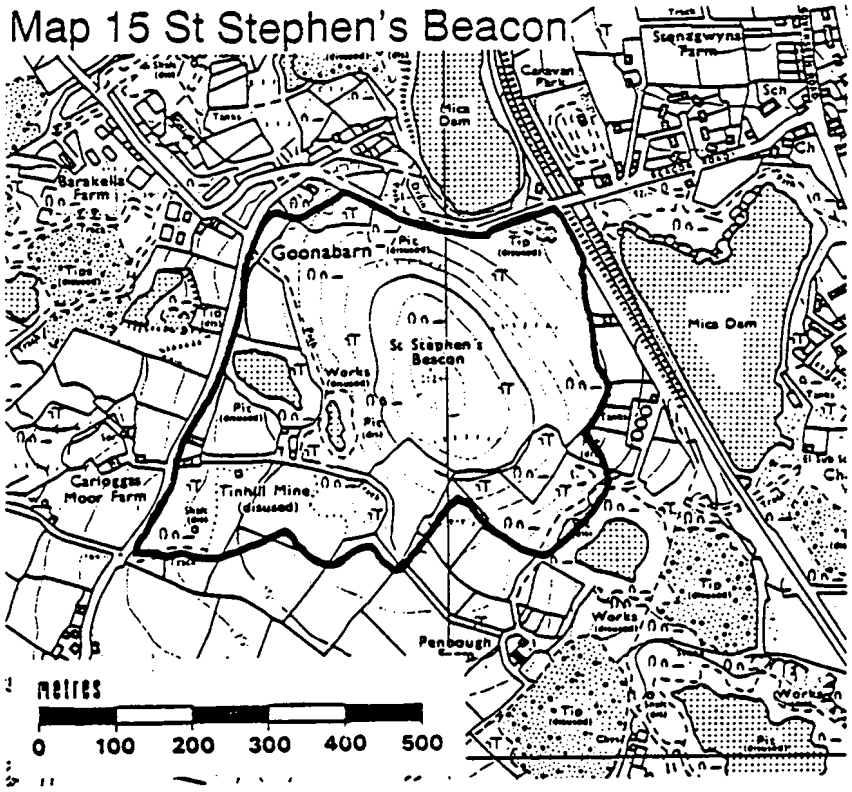
Bodwen, Higher Menadew and Lower Menadue (map 23)

An area of medieval agricultural landscape (c.210 hectares) containing three important medieval farming hamlets, Bodwen (27710; A), Higher Menadew (27743; A) and Lower Menadue (27759; A), each surrounded by enclosed but fossilised medieval strip field systems (33033, 27738 and 27340; all A). There is a possible prehistoric round house at Bodwen (21262; A) and a possible round at Higher Menadew (27447; A) while field-names hint at the site of a barrow at Higher Menadew (20036; B) and a menhir at Lower Menadue (27760; B). Cross sites are suggested by field-names at Higher Menadew (20035; C) and Bodwen (21265; B) and another field-name at Bodwen reveals the site of a pound (21268; B). There are three fine gooseholes at Higher Menadew and others at Lower Menadue (27759.1; B) where there is also a cider-mill roller stone (27759.2; C) and a bone mill with a remote water-wheel pit (20067; B). A cider mill base also survives at Bodwen (27710.1; C). In the fields of Bodwen there is a small natural carn into which has been drilled a merriment hole (27738; B), a medieval eluvial streamworks (27683; B) and the site of a mine (27682; C). A number of post-medieval settlements, small farms and cottages, have been set up on the edges of the field systems of Bodwen and Higher Menadew (27711, 27739, 27744, 27745, 27748, 27749; B and C).

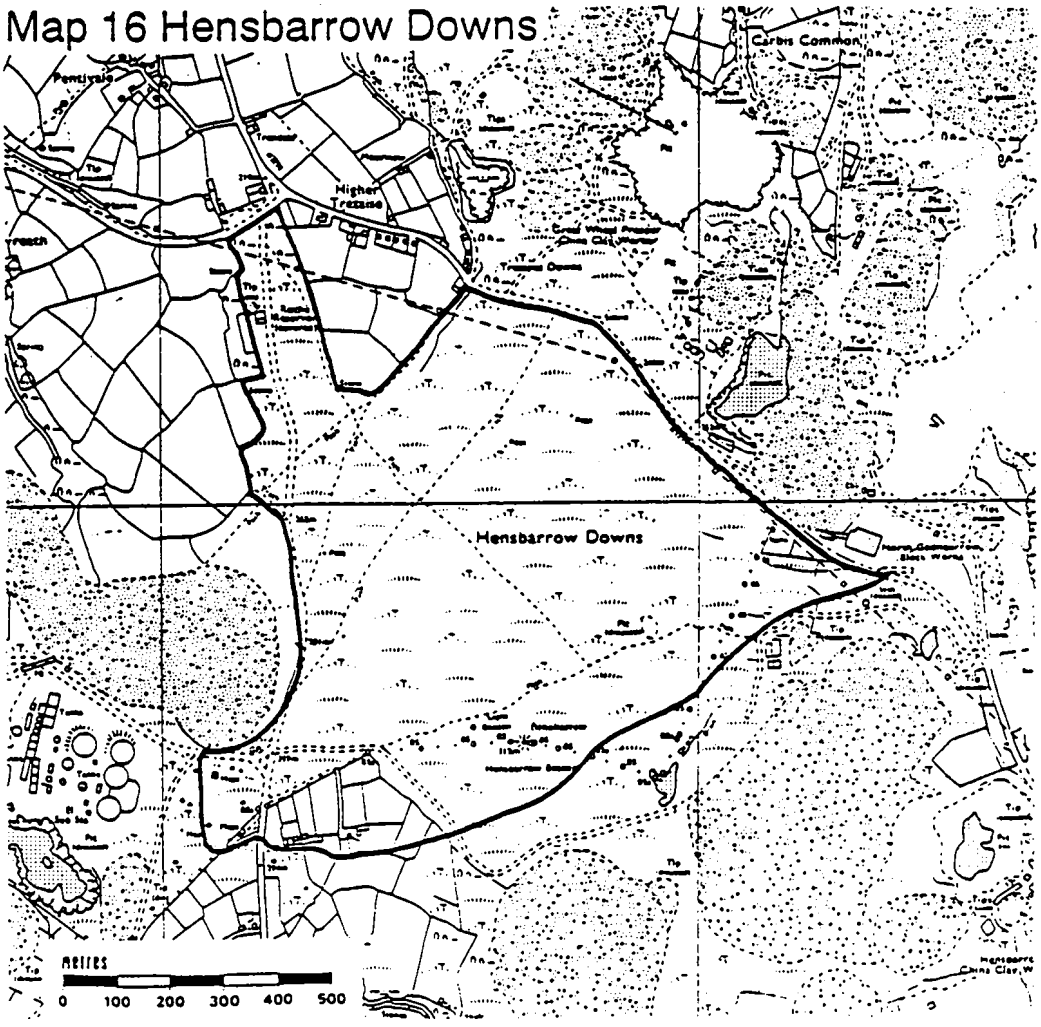
Trerice Bridge (map 24)

A small area (c.2.5 hectares) to the north of Trerice Bridge, an early 19th century bridge (21129; B), which includes Wh. Remfry brickworks (21151; A), a stamping mill (21164; B), a ruined small farm (27852; C) and fragments of two medieval field systems (27469 and 27470; both B).

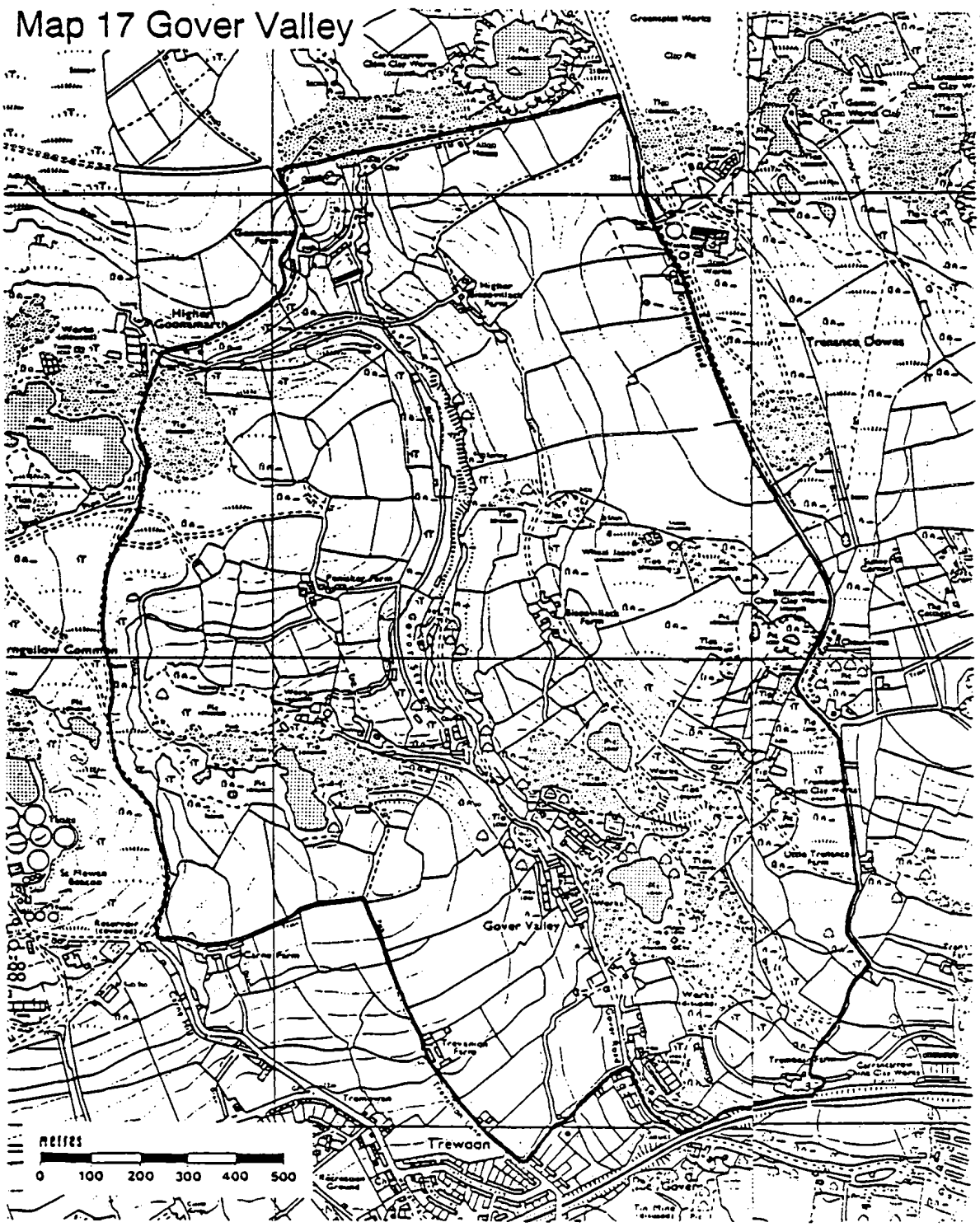
Map 15 St Stephen's Beacon



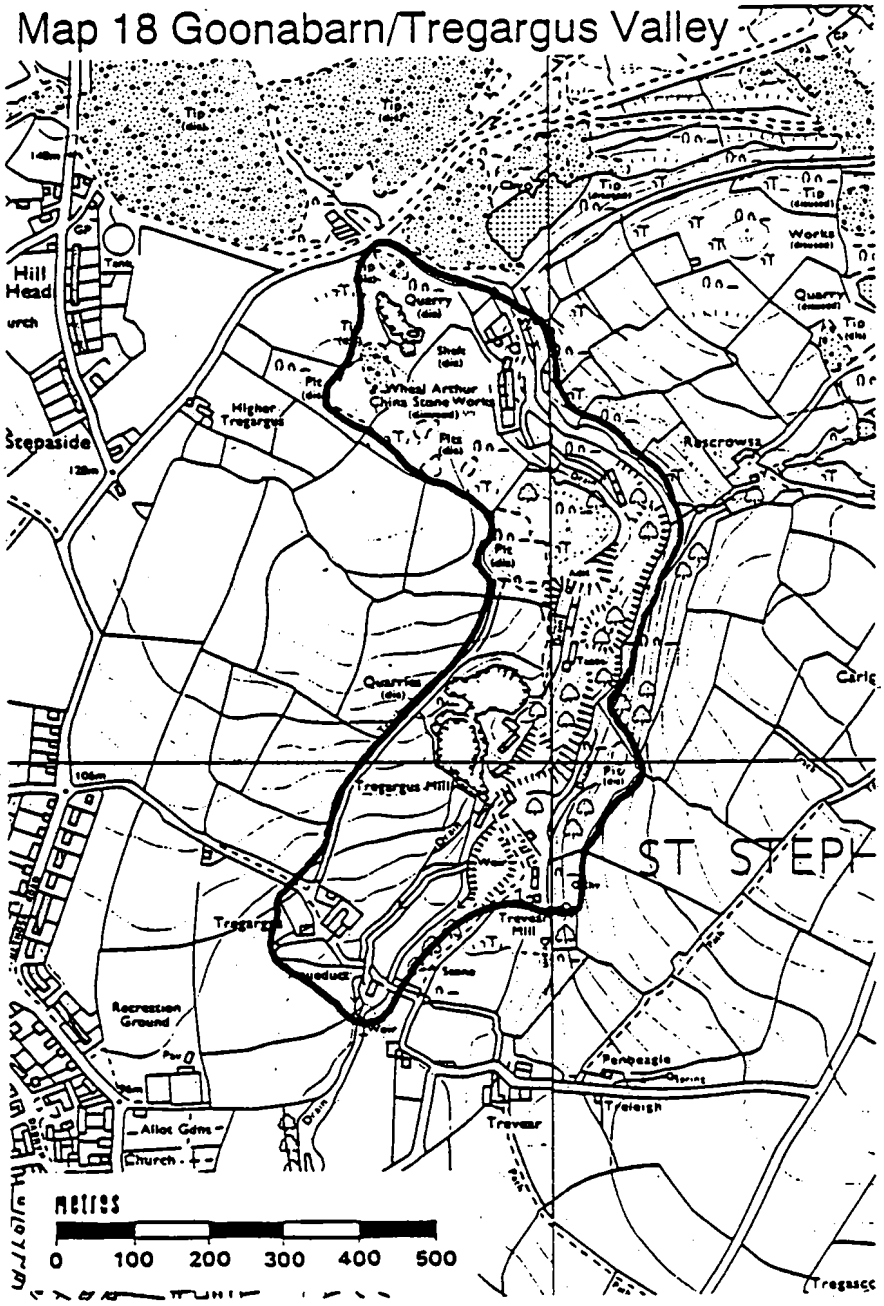
Map 16 Hensbarrow Downs



Map 17 Gover Valley

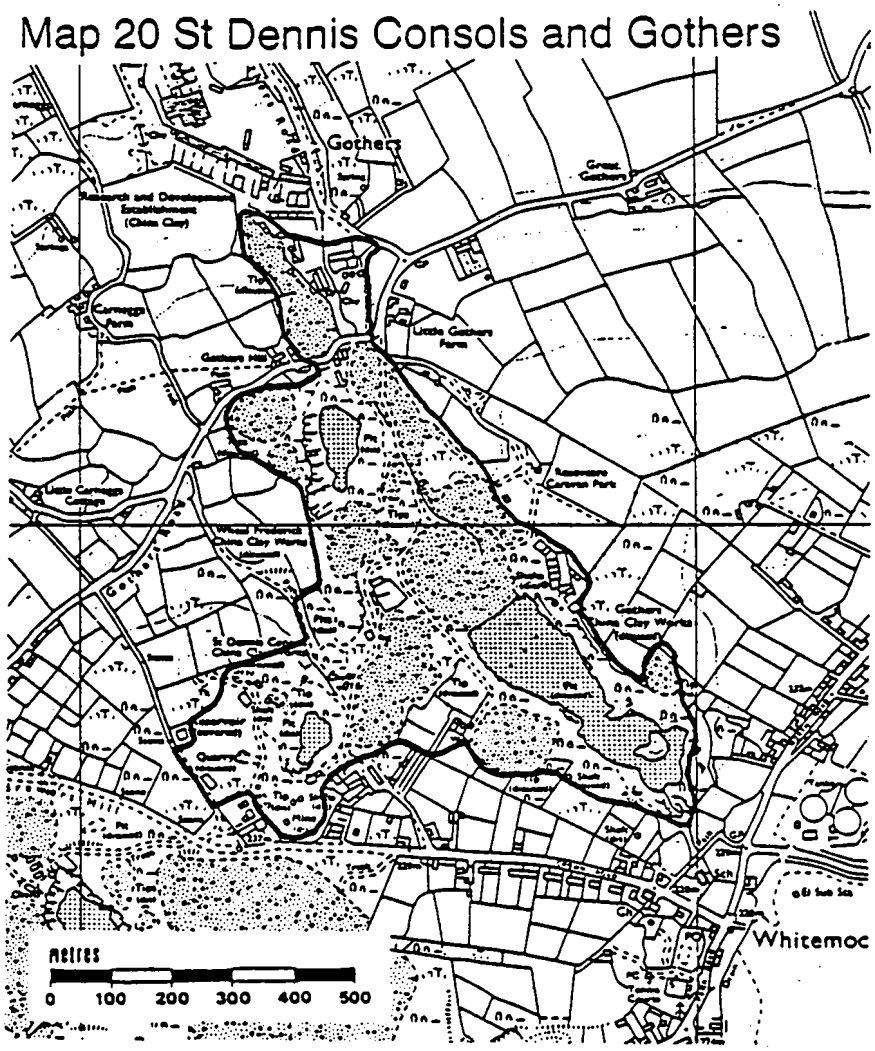


Map 18 Goonabarn/Tregargus Valley

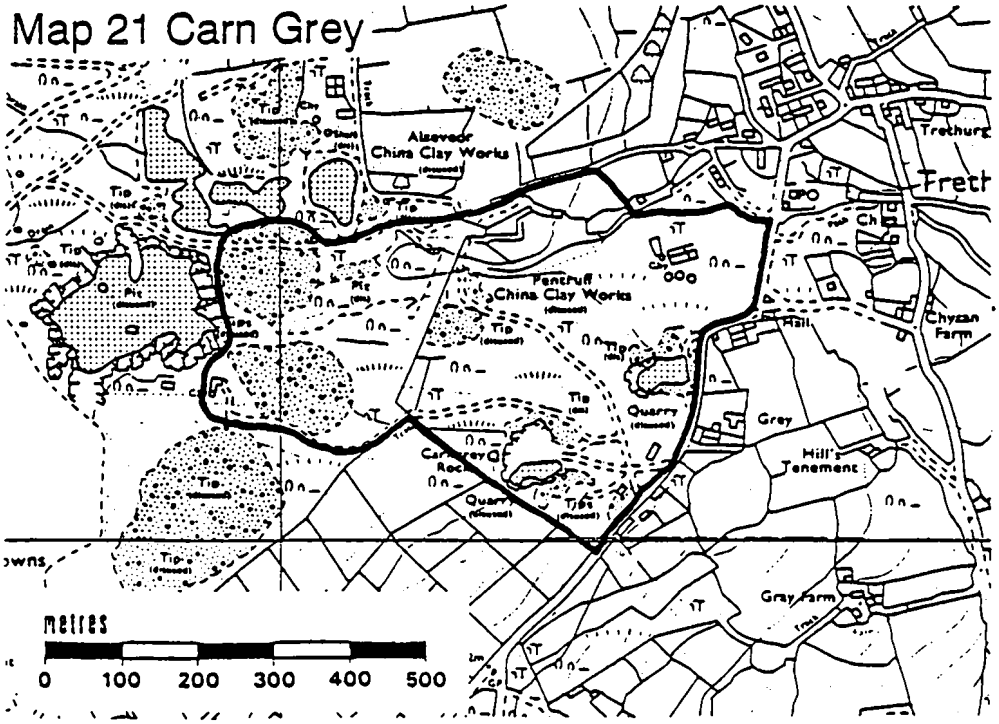


Map 19 Trethowel Valley

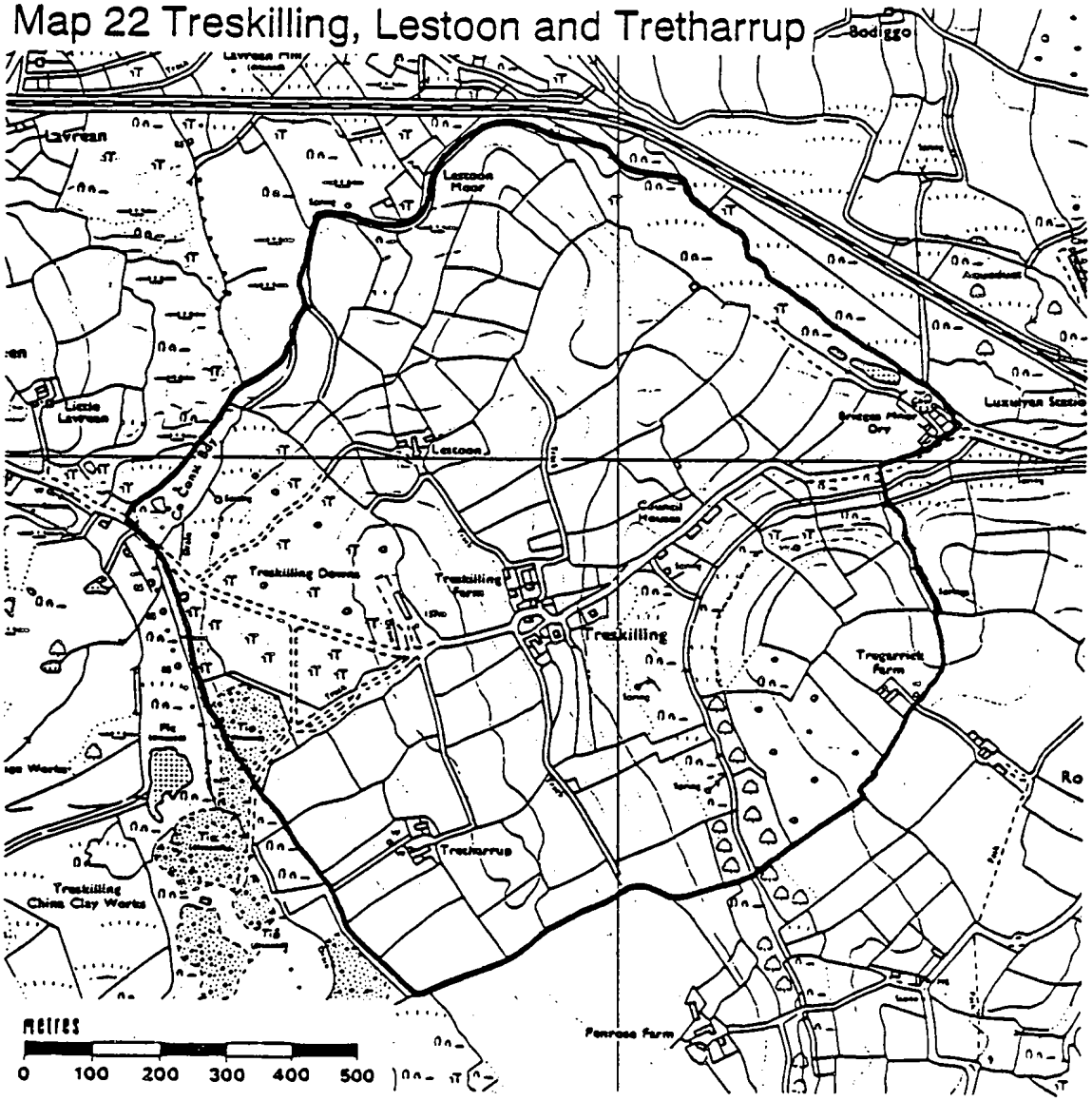
Map 20 St Dennis Consols and Gothers



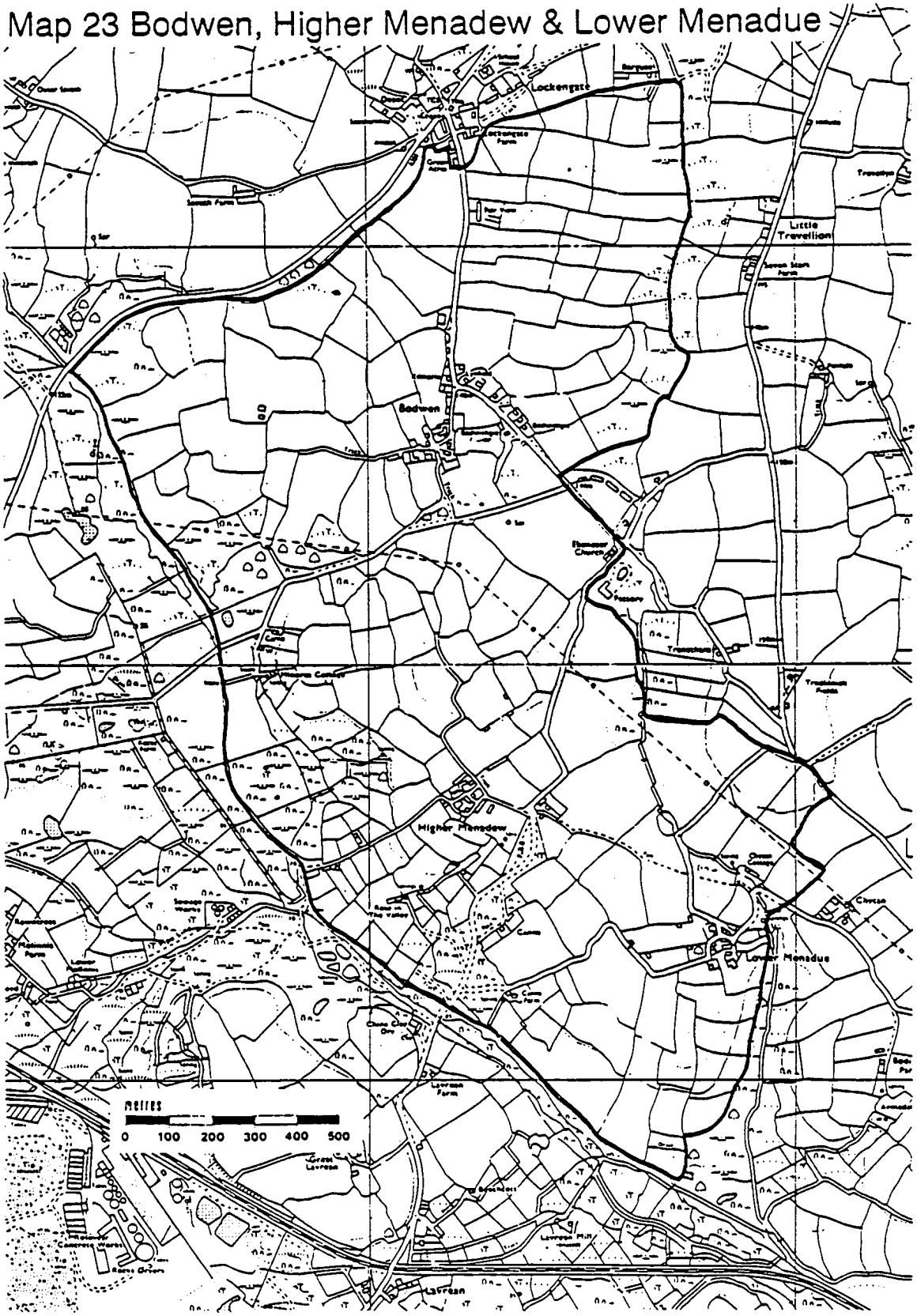
Map 21 Carn Grey



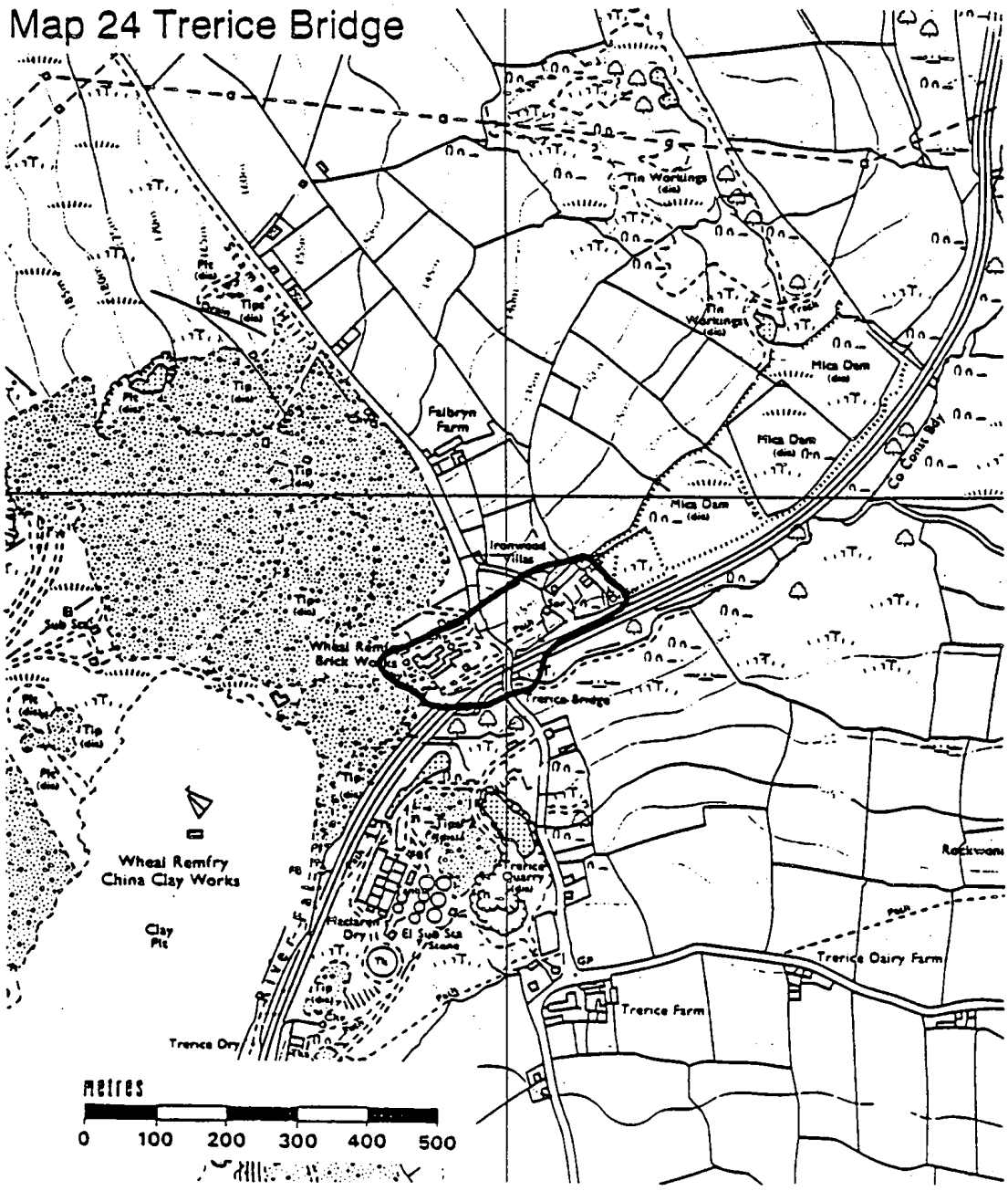
Map 22 Treskilling, Lestoon and Tretharrup



Map 23 Bodwen, Higher Menadew & Lower Menadue



Map 24 Trerice Bridge



5.4 Preservation by record

Where it is not feasible to preserve archaeological remains in situ "an acceptable alternative may be to arrange prior excavation, during which the archaeological evidence is recorded" (PPG 16, para 24). In the study area not all sites warrant excavation but most should be recorded in some way. The minimum archaeological work required for each known site has been presented in the ACTION column of the site gazetteer. These Actions reflect the National, County or Local importance of the sites (A, B or C respectively in the Site Value column; see 5.3, above, for notes on the meaning of each level of importance). It is essential that a procedure is established, along the lines presented in sub-section 5.2.6 above, which enables reasonable archaeological work to be carried out on each site which is to be destroyed.

Actions recommended are similar to those outlined in subsection 5.5, below, dealing with research work. Further detail of some methods is given within section 4. In summary, the various actions recommended in the gazetteer are:

NA - no further action The site has already been adequately recorded, either through previous work or during the present survey.

FV - field visit The site was either not visited during the present survey and should be to determine whether more detailed work is required or should be the subject of a further field visit to determine appropriate action.

WB - watching brief Qualified archaeologists should be permitted on site during its destruction and be given the opportunity to undertake the speedy recording of any features revealed.

GP - Ground photography Comprehensive black-and-white and colour photographs should be taken of the site, using a tripod and flash where necessary.

AP - Aerial photography Low-level oblique and vertical aerial photographs (black-and-white prints and colour slides) should be taken of the site.

FW - Field walking The site, and an area immediately around it, should be systematically fieldwalked to record and collect artefact scatters and to enhance our knowledge of the site.

GS - Geophysical survey Parts or the whole of the site, depending on its size and importance, should be subjected to a geophysical survey to determine the nature of subterranean features.

SS - site survey The site should be recorded by a measured survey at a suitable scale using accepted CAU methods and conventions.

SK - sketch survey The site should be recorded by sketching onto an enlarged and annotated Ordnance Survey plan incorporating information from aerial photographs, historic maps etc.

BS - building survey Large-scale measured plans and elevations should be drawn of selected buildings and selected walls on them. Scale and amount of detail will vary.

EX - excavation The site or carefully selected parts of it should be professionally excavated to obtain structural, chronological, cultural and environmental information.

It will be clear that some of these actions are essentially reconnaissance (FV, AP, FW, GS) and may need to be followed up by others (eg SS or EX). Provision should be allowed for such developments.

5.5 A rolling programme of site location work and archaeological/historical research

5.5.1 Reconnaissance/site location programme

The location of sites of national, county and local importance within the study area is incomplete. Prehistoric settlements, in particular, are heavily under-represented (see 4.2), but our knowledge of certain medieval and post-medieval settlement features is also severely limited by inadequate reconnaissance fieldwork. Traces of the earliest china clay workings may also survive in unexplored moorland or overgrown valleys.

The potential of a number of reconnaissance techniques has been described in section 4 (above). Ideally, these should not be used separately but as elements within a two-stage programme so that, for instance, reconnaissance field survey is used not only to examine unexplored terrain but also to confirm the existence of sites identified by other means.

The **first stage** of such a programme would involve undertaking the following:

Aerial photography (see 4.8): three flights covering the whole area systematically in the early spring (low vegetation), early summer (ripening crops) and autumn (ploughing). Old aerial photographs should also be inspected.

Cartographic research (see 4.9) detailed inspection of large scale 19th century maps; the 1695 Lanhydrock Atlas; 18th and 19th century plans and sections of clayworks and mines; the OS 1:2500 first and second edition; and any surviving estate maps.

Documentary research (see 4.9): detailed study of the medieval Earldom and Duchy of Cornwall records of Tewington manor; loose medieval and post-medieval documents held by the County Record Office and the Royal Institution of Cornwall; antiquarian and travellers' descriptions; and journals, directories and newspapers.

Oral history (see 4.10): especially useful for more recent types of site. A number of elderly local men and women have already been identified as useful subjects.

The **second stage** involves work in the field:

Reconnaissance field survey (see 4.3): intensive checking of all patches of relict moorland; all wooded valleys; all irregular medieval field systems; and all historic farmsteads.

Field walking (see 4.5): a procedure needs to be developed so that, with permission, all ploughed fields can be systematically walked.

Watching briefs (see 4.6): a procedure also needs to be developed so that, with the permission and guidance of the clay companies, all areas stripped of topsoil by the Industry can be checked for artefact scatters and sub-surface features.

Shovel tests (see 4.4): in areas where ploughing is either infrequent or not practised and field walking is therefore inappropriate the systematic digging of small shallow pits, in lines or in grids, can locate artefact scatters. This will be most useful in the uplands and wooded valleys but may also be applied to the farmland which is now perpetual pasture. A careful sampling strategy is required.

Geophysical survey (see 4.7): most valuable in the areas around and between known prehistoric sites, especially Iron Age/Romano-British rounds. Needs to have a carefully designed sampling strategy.

Although this two-stage site location programme is the ideal, in practice it will have to be adapted to the often rapid changes in the area and to the Short Term Development Plans of the clay companies in particular. Those blocks of land due to be lost to quarrying, dumping or other damage will need to be thoroughly checked, preferably in the periods when the Short Term Plans are being drawn up so that appropriate action (preservation **in situ** or by record etc) can be taken with regard to any important sites which might be located.

Attention is drawn here to the draft revised (1991) CBI Code of Practice for Mineral Operators paragraphs 2.1, 2.4, 2.5 and 2.7.

The DoE Planning Policy Guidance (PPG 16) "Archaeology and Planning" notes the value of early knowledge of the industry's plans so that negotiations can allow for the preservation (either in situ or by record) of important sites (para 12). See also paragraph 20, which suggests that developers may wish to commission a professionally qualified archaeological organisation or consultant to produce their own assessment; such an assessment would, however, need to make proper use of the same archive and methods (field walking, geophysical survey etc). Paragraph 21 notes that "it is reasonable for the planning authority to arrange for an archaeological field evaluation to be carried out before any decision on the planning application is taken". Planning authorities can, if developers do not voluntarily produce such an evaluation, consider whether it would be appropriate to direct the applicant to supply further information under the provisions of Regulation 4 of the Town and County Planning (Applications) Regulations 1988. If necessary authorities may consider refusing inadequately documented proposals (PPG 16, para 22).

5.5.2 Detailed investigation of selected sites and related historical research

A number of sites have been identified which should be subjected to various forms of archaeological investigation so that our understanding of the prehistory and history of the clay district can be enhanced and so that the archaeological importance of these sites can be properly assessed (see Appendix 6.6). Some are enigmatic sites which cannot, as yet, be properly dated or interpreted; others are expected to yield detailed information which will help tackle specific problems. The lists of sites cannot be considered finite as the site location programme outlined above (5.5.1) will produce more sites worthy of close examination. It should be made clear that the proposals made here are not dependent on the sites being directly or immediately threatened with destruction. Some are likely to be put forward as

requiring protection (5.3). See 5.4, above, for details on the "preservation by record" of sites directly threatened by the clay industry.

The lists (Appedix 6.6) are organised by methods, 1:10,000 maps and the general categories used to subdivide the gazetteer.

Excavation (see Appendix 6.7 for list of sites)

Excavation has been divided into 'extensive' and 'trial'. the latter involving the digging of small trenches to determine the nature or date of a site, the former to obtain more detailed structural, chronological, cultural and environmental information.

Extensive excavations are recommended for fifteen sites including St. Stephen's Beacon hill-top enclosure (20651), four barrows, one menhir, one possible round house, five rounds, one hillfort (19800, St Dennis), one long-house (27522.1, Chegwins) and a building within an enclosure (19851, Whitemoor).

Trial excavations are recommended for five barrows, four possible barrows, one possible round house (27804 Carn Grey), two enclosures, four rounds, four possible rounds, one possible long-house (20206.1, Treverbyn) and a deserted medieval settlement (21506, Tregarrick). All farms whose names contain early medieval elements *tre, bos* and *ker* and any others with early medieval documentation should also be subjected to trial excavation.

Site survey (see Appendix 6.6)

This will involve measured survey, whether using an EDM plane-table or offsets. Method and scale will vary according to the nature of the site. A total of 89 sites are recommended for site survey ranging in scale from two prehistoric enclosures and ten barrows to eight farming hamlets and three field systems (see Appendix 6.7 for details). In addition to these individual sites there are a number of blocks of relict moorland which appear from the current survey to contain complex archaeological landscapes. It is recommended that these are surveyed at 1:1000 in conventional CAU fashion (as Kit Hill, the Luxulyan Valley and parts of Bodmin Moor and West Penwith):

Hensbarrow Downs, St. Stephen's Beacon, Carn Grey, Caerloggas Downs, Trelavour Downs.

Sketch survey (see Appendix 6.6)

This involves plotting features by pacing onto an underlay incorporating OS fixed points and information from aerial photographs, 19th century maps etc. It is most suitable for extensive industrial sites.

Building survey (see Appendix 6.6)

To record information about design, materials, phases etc, structures with standing walls (not necessary roofed) can be drawn at large scales (plans and elevations). This method will be most often applied to dwellings, farm buildings and industrial structures. A total of 67 structures have been recommended for detailed building survey.

Ground photographs (see Appendix 6.6)

Where building survey cannot be justified, comprehensive black-and-white photography will produce useful information. It has been recommended for 45 sites, mostly buildings or structures.

Fieldwalking (see Appendix 6.6)

Although most often used to locate previously undiscovered sites this technique (see 4.5) can also be used to refine the dating or interpretation of a known site. A total of 46 sites are recommended for intensive fieldwalking, mostly prehistoric and especially those, such as Round Fields and enclosures located by aerial photography, whose interpretation is uncertain.

Geophysical survey (see Appendix 6.6)

Although they can be used to locate sites (see 5.5.1) geophysical prospecting techniques are most often applied to known sites to locate and define subterranean features. Their use is recommended on 37 sites, mainly prehistoric ones whose interpretation is at present uncertain.

Aerial photography (see Appendix 6.6)

Again, aerial photography can be used to enhance knowledge of known sites as well as to locate previously undiscovered ones. Relatively low level flights taking oblique as well as vertical shots are recommended for 31 sites, most of which are either prehistoric or medieval.

Field visit (see Appendix 6.6)

A small number of possible sites and others whose nature is uncertain were not visited, for various reasons, during this survey. It is recommended that they (17 in all) be visited.

In some cases results obtained by one method will stimulate further work in another, so fieldwalking a possible round may lead to geophysical survey and then a trial excavation before an extensive one.

Alongside this programme of research archaeology should run another producing supplementary or complementary histories, based on documentary, cartographic and oral sources, and an environmental history based on pollen and soil analyses. The inspection of historical maps and post-medieval documents, and the interviewing of local people can best be undertaken by archaeologists who will know what questions to ask of the material and people. Specialist environmental historians would need to be employed, however, as would medievalists capable of transcribing, translating and interpreting medieval documents.

Documentary research

A first stage in a documentary research programme would be an assessment of the potential of the resource. We know that the ancient Earldom and Duchy of Cornwall manor of Tewington incorporated the south-eastern corner of the study area and its records (held at the Duchy Record Office, London) will provide rich detail on medieval and post-medieval rural organisation and agriculture. Other medieval documents relating to the area will be held at the Public Record Office, London although some will have been transcribed and will be either published or lodged in one of the two principal Cornish record offices (Cornwall Record Office and the Royal

Institution of Cornwall, both in Truro). These two offices, together with local libraries (especially the Local Studies Library, Redruth) and museums, will also hold the bulk of useful post-medieval documents (see 4.9 for more details). Once such an assessment has been produced a programme of research can be designed.

Cartographic research

During the preliminary assessment stage of the documentary research programme a few early estate maps and mining and clayworking plans may be discovered. These should be added to the 17th to 20th century plans and maps which will form the basis of detailed cartographic research (see 4.9 for details). The 1695 Lanhydrock Atlas should be copied and the field systems, land use, buildings etc analysed. Martyn's 1748 map of Cornwall, although at a small scale, can also bear some critical study but the principal source will be the large-scale Tithe maps of the late 1830s and early 1840s with their detailed information on land use, field-names, tenurial arrangements, buildings etc. These, with the earlier editions of the Ordnance Survey maps, and the specialist mine and clayworks plans, will be a key source of information on the clay industry and metal mines of the area.

Oral history

See 4.10 for details of the potential of oral history for reconstructing and interpreting the recent past in the area. It should be stressed again that this source naturally depends on elderly people and that a programme of visits and recordings should be started as soon as possible. A number of suitable individuals have already been identified during the current survey.

Environmental history

As noted in 4.2, there is a need to produce an environmental history of the area ideally based on one or more deep peat cores which can yield, via pollen analysis, details of the major vegetational and climatic changes of the post-glacial period. Suitable bogs will now be rare in the study area and should be carefully sought during reconnaissance field survey (see 4.11). Most excavations, whether extensive or trial, of prehistoric and early medieval sites, will provide opportunities to obtain samples of buried soils which can be subjected to various environmental analyses. Provision for such work should be built into excavation programmes.

5.5.3 Maintenance of archive material

The material collected for this report and that which will be obtained during further work will need to be placed in a publicly accessible archive. Each site listed in the gazetteer has been given a PRN (Primary Record Number) which will allow it to be slotted into the computerised Cornwall Sites and Monuments Record (SMR) held and staffed by CAU, part of the Planning Department of Cornwall County Council. It is recommended in the Mineral Operators' draft Revised Code of Practice that the SMR and the relevant archaeological body is consulted during the planning process "to ascertain whether the proposal will affect any area of known or likely archaeological interest" (para 2.3).

Many sites (439), those previously recorded, already have entries which will need to be up-dated but the great majority (826) are newly recorded and their details will need to be input together with all the background information systematically included in an entry into the SMR. All sites located in the future by reconnaissance work (5.5.1) will also need to be entered into the SMR and further work on known sites will require their entries to be up-dated.

The 1:2500 and 1:10,000 OS maps showing the locations of the sites recorded during this survey are held by CAU as are the transcriptions of the tape-recorded site notes and the black-and-white photographs and colour slides taken during site visits.

It is recommended that the expanding archive on the archaeology of the china-clay area should continue to be held at CAU. The archive will include the field and inked up drawings made during and after excavations, site surveys, sketch surveys and building surveys. The reports of geophysical surveyors and environmental historians will be held in CAU offices as will copies of historic maps and plans and transcriptions of historic documents. The transcriptions of the tape-recorded interviews made during the oral history programme will also be lodged with CAU.

Drafts and master copies of reports and other publications will also be held (on paper and computer disk) at the offices of CAU.

For increased security as well as ease of access copies of all or parts of the archive may also be held at other offices including the Cornwall Record Office, the Royal Institution of Cornwall and, of course, if desired, at the offices of the various china-clay companies.

Artefacts recovered during fieldwalking and excavation are legally the property of the landowners. The Mineral Operators Code of Practice ensures that the archaeologists will recognise this and will advise owners on conservation requirements as well as advising Mineral Operators of the special legal requirements relating to human burials and treasure trove. Mineral Operators undertake, through the draft Revised Code of Practice, to ensure that the archaeologists retain the artefacts for a reasonable time for study and to "recognise the desirability of depositing all artefacts and records in an appropriate museum as a complete long term archive for future study" (paras 2.14 and 2.15).

5.5.4 Publication

It is considered that the extensive material gathered together for this report ought to be properly published in attractive and affordable ways. This will include publication of the present report, entire. The results of future archaeological work should, of course, also be published. An obligation ensuring that professional archaeologists publish their work is incorporated into the Code of Conduct of the Institute of Field Archaeologists. Planning authorities have also received recent guidance making clear that archiving, analysis and publication are integral parts of programmes of "preservation by record" of threatened archaeological sites (PPG 16, para 25).

If an ongoing and positive programme of archaeological investigation in the china-clay area is put in place then one form that publication might take would be the production of well-finished annual reports. The interested reader would be able to relate their contents back to a published version of the present report and could then follow the development of a better understanding of the area's prehistory and history.

As work progresses a series of popular booklets dealing with specific aspects of the archaeology of the area could also be published. (A general history of the china-clay industry has already been prepared by one of the authors of this report, John Smith, for publication by the Twelveheads Press.)

At the same time, more comprehensive and academic interim or final reports on particular sites or aspects of the archaeological or historical investigations of the area will be published, either in recognised academic journals or, perhaps, as occasional China-Clay Area Project monographs.

The Mineral Operators' draft Revised Code of Practice insists that the archaeologists "report regularly to the Mineral Operator on the progress of work undertaken on their land and in particular any discoveries" (para 2.12). Archaeologists will also be "conscious of the potential public relations benefits to Operators of publicising their work. In any publicity, financial or other support from the Operator shall be recognised in a manner approved by the Operator" (Mineral Operators' draft Revised Code of Practice, para 2.12). Implicit in this part of the Code is the expectation that the archaeologists will use other media (newspapers, local radio and television etc) to publicise their work.

5.5.5 The organisation of the rolling programme and a suggested first year's work

The various strands of recommended future work need to be controlled and co-ordinated to ensure that each remains relevant and productive. This would be achieved by designing a rolling programme of work in which certain tasks from each of the strands are dealt with each year and their archiving and publication is completed before the succeeding round is started. Such a programme would need to run alongside separate more reactive work dealing with immediate threats to archaeological sites and landscapes. The latter, however, can also be controlled to some extent in the future by being tied into the production of the Industry's Short Term Development Plans and through a responsible relationship between clay companies and archaeologists. With care this can eventually be incorporated into the rolling programme in the same way that responses to the threat to the archaeology of Scilly, the eroding shorelines, are included in the annual programmes of archaeological work undertaken there.

The design of the rolling programme will ensure that all tasks identified as being of first priority will be tackled. These can be summarised as:

1. The reconnaissance/site location programme outlined in 5.5.1.
2. The various detailed site recording and investigation tasks and associated researches outlined in 5.5.2.
3. The consolidation, where necessary, and the management of protected sites; see 5.3.
4. The archiving of all archaeological material collected; see 5.5.3.
5. The publication of an annual report on this China Clay Area Archaeological Programme as well as any other suitable literature; see 5.5.4.

Tasks of second or third priority, as well as some of first priority, will be dealt with as parts of the parallel programme of 'rescue' recording of those sites under immediate threat (see 5.4 for details).

A provisional first year programme might be as set out below:

1. Archiving: inputting the material gathered for the present report onto the Cornwall Sites and Monuments Record.

2. Publication of this report.

3. Reconnaissance: Relict Moorland Survey:

- Hensbarrow Downs
- Trelavour Downs
- Burngullow Common
- Trenance Downs
- Caerloggas Downs

Field Walking

- design a procedure
- approach local farming bodies
- c.10 days fieldwalking

4. Record:

Site Survey

-	St Stephen's Beacon (area outlined in 5.3)
- 27552	Chegwins, medieval settlement and fields
- 27664	Carvear, round(?)
- 27929	Cocksbarrow, ring cairn(?)
- 19842	Hensbarrow, cairn
- 27607	Littlejohns, platform cairn
- 19961	Retillick, settlement
- 27026, 27027	Parkandillack, engine house and mica drags.
- 19900.1	Gothers, pan-kiln
- 27077	Goonamarris, pan-kiln
- 20869	Wheal Arthur, stone-mill complex
- 27112	Gover Valley, air pans
- 20000	Carbis, brickworks

Sketch Survey

Barn Valley china-stone mills (20869, 20876, 20986.1, 20986.2, 27064, 27065)

Geophysical Survey -

27664 Carvear, round(?)

Trial Excavation

- 27664 Carvear, round(?)
- 19961 Retillick, settlement

Building Survey

- 27919 Penrice, house and outhouses
- 20834.1 Trevanion, horse engine
- 21106.5 Goonvean, engine house
- 27064 Trevear, china-stone mill

Ground Photography

- 20834.1 Trevanion, horse engine
- 27573.1 Newgate, wheelwright's shop

Aerial Photography -

one systematic flight and sites listed in 5.5.2

Environmental History -

design a project

Documentary History -

assess potential; search through CRO and RIC indexes

Cartographic Research -

copy relevant maps from 1695 Lanhydrock Atlas. Study OS 1st and 2nd edition 1:2500 for industrial site information.

Oral History -

5 days interviewing?

APPENDICES

6.1 Glossary of Terms

ADIT A level tunnel driven into the hillside in order to give access to a mine. Might be used for drainage or hauling of the broken ore. Elsewhere in Britain a LEVEL or DRIFT.

ADZE (MESOLITHIC) Heavy flint axe sharpened by removing a large flake.

ALIDADE Sighting instrument used to obtain direction of fixed points for surveying.

ALLUVIAL DEPOSIT Water-sorted deposit of heavy material, especially tin-bearing stone, usually in valley bottoms.

AQUEDUCT A bridge carrying water across an obstacle in the landscape.

ARTEFACT Transportable object deliberately created.

ASSEMBLAGE A set of objects found in association with each other.

AWL Flint blade steeply retouched on both sides to form an acute point; probably for boring.

BALANCE BOB A rocking beam and balance-box used to counter the weight of the pump-rods in a shaft, thereby easing the load on the water-wheel or beam engine.

BARROW Mound of earth usually covering a Later Neolithic or Earlier Bronze Age ritual and burial site. See also cairn.

BATTER The slight slope on a wall or bank necessary to give stability.

BEAM *Openwork*, produced by underhand stoping from surface.

BEAM-ENGINE A type of steam-engine much favoured in Cornwall for use in pumping, winding, and treating ores on Cornish mines. Power from a large cylinder set vertically in the engine-house was transferred via a rocking beam or bob to the pumps in the shaft outside; for winding and crushing, the bob was instead attached to a flywheel and crank.

BEAT-BURNING The paring off of the turf, its drying and then slow burning; the ashes being then scattered on the ground. All in preparation for cultivation. Local South-Western term.

BEVELLED PEBBLE Long water-rounded pebble worked to a bevel at one or both ends. Uncertain function. (Mesolithic)

BLOWING HOUSE Structure containing furnace (burning charcoal) whose draught was provided by water-wheel driven bellows. Used from the later medieval to the early 19th century for smelting tin.

BOILER HOUSE A building designed to contain the boilers for a steam engine on a mine or other works; usually associated with an adjacent stack.

BOND TENURE; the tenant subjected to severe constraints from the lord, virtual serfdom.

BOUNDS Agreed boundary of a defined area, often marked by distinctive features, natural, specially made or re-used.

BRONZE An alloy comprising mainly copper and tin.

BRONZE AGE Period of prehistory delimited by the development of bronze c.2000 BC and the change to using iron c.600 BC. Usefully divided into Earlier Bronze Age (c.2000 to c.1300 BC) and Later Bronze Age (c.1300 to c.600 BC).

BUDDLE A device for concentrating tin ore. In the mid-19th century became established on Cornish mines as a circular pit with rotating brushes; the tin from the stamps was fed into the centre of the pit and flowed by gravity to the edge, concentrating the heavy ore at the centre of the buddle.

BURIED LAND SURFACE Turf and soil sealed and protected by a substantial construction (eg a boundary or a barrow) or by a natural deposit (eg hillwash). Provides an opportunity to study an ancient soil and its contents (such as pollen).

BYRE Cattle accommodation (sometimes shippon or cowshouse).

CAIRN Mound of stones usually covering a Later Neolithic or Earlier Bronze Age ritual and burial site. See also barrow.

CALCINER A furnace and heating chamber in which ores were roasted to drive off impurities such as sulphur and arsenic.

CAPSTAN A manually operated winding drum, usually installed on a mine to raise pitwork from the shaft for maintenance or repair.

CASSITERITE Native tin dioxide.

CEMETERY A group of inhumed or cremated burials.

CHAIR See Saddle.

CHALL-HOUSE Dwelling and barn, with cowhouse or stable under, built as a single range under one roof. Separate entrances to each part (cf long-house).

CHAMBER (NEOLITHIC) Stone chamber, often in a cairn or a barrow, used for burials and probably also for rituals.

CHERT Stone, rather like flint, which flakes and keeps a strong edge and hence was used for tool making in prehistory. Most Cornish chert is from greensand.

CHINA-CLAY Powdery white mineral produced by the decomposition of feldspar in granite; this process is known as kaolinisation. Extracted from the remaining quartz and mica by directing a stream of water over the kaolinised mass; the resulting clay slurry is then purified and dried.

CHINA STONE Granite which has been only partially kaolinised, and is therefore quarried in lump form. The stone is ground and mixed with china-clay in porcelain manufacture.

CIST (BRONZE AGE) Simple rectangular stone box, with slab capstone, used for inhumation burial in the Earlier Bronze Age. Often in cairns or barrows.

CLIFF CASTLE Promontory, usually into the sea, whose neck was defended by one or more banks and ditches.

COB Mix of clay, gravel, straw and other bulking and strengthening materials used mainly for structural walling but also for garden walls.

COFFIN Local term for an openwork, usually refers to disused site.

COINAGE Each Stannary had a coinage town to which all smelted tin was taken to be taxed, anciently Liskeard, Lostwithiel, Truro and Helston. Twice a year Royal officers came to receive taxes and assay or test the tin by chiselling corners (coins) from the ingots. Once approved the ingot received the Duchy stamp of approval.

COMMONS Lands or resources in which a community shared rights.

CORBEL Stone or timber projection from a wall or structure, acting as a supporting bracket.

CORNISH HEDGE A stock-proof boundary having two battered stone faces and an inner core of earth and small stones.

COURTYARD HOUSE Romano-British dwellings common in but unique to West Cornwall and Scilly. A central courtyard was surrounded by rooms built into a thick wall.

CROSS-PASSAGE The short corridor between two opposed doorways. Hall to one side and shippon to the other in a long-house, hall and service room in a hall-house.

CUESTA WORKS A form of alluvial streamworking in which ranks of cuesta-shaped dumps were created, probably by barrowing waste/stent from the tye. A cuesta has a shallow ramp and a steep dip corresponding to the barrow tip.

DOMESTICATION The bringing of animals and plants under human control.

DRESSED Tooled to give smooth finish (of stone surface).

DRIFT Driving of livestock on common pastures to one place on appointed day to determine ownership etc.

DUMNONII Iron Age tribal group occupying Cornwall, Devon and parts of Somerset, named by its Roman conquerors.

DUMPY LEVEL Telescopic sighting device used to establish levels across a site.

EARLY MEDIEVAL Post-Roman and pre-Norman ie AD 410 to 1066.

ELEMENTARY SCHOOL Where elementary subjects were taught to young children. Made universal in Britain by the 1870 and 1880 Education Acts.

ELUVIAL DEPOSITS Cassiterite detached from the lode, weathered and often transported but not sorted by alluvial action; cf *alluvial deposit*.

END-SCRAPER Mesolithic or Early Neolithic flint tool; a long blade or flake with steep retouch at one end.

ENGINE HOUSE A building designed to contain a steam, gas, or oil engine on a mine or other works.

ENTRANCE GRAVE Later Neolithic or Early Bronze Age burial and ritual monument of West Cornwall and Scilly. Round kerbed cairn with a single chamber opening through the kerb. Chamber covered with several capstones.

EXCAVATION The examination of an archaeological site by skilfully and carefully unearthing it, keeping detailed records of all forms of evidence.

FIELD WALKING Searching for sites by walking systematically over an area of ground. Soil colouration, upstanding features and, most commonly, scatters of finds are sought.

FILTER PRESS An hydraulic device for de-watering china-clay slurry. Produces Press-Cake for the Pan.

FINE Sum of money paid by incoming tenant in consideration of relatively low rent.

FINGER DUMP A linear dump of waste material from a mine or quarry, flat-topped to allow material to be barrowed or trammed along it.

FLAT RODS Iron rods which were used to transfer power from a steam-engine or water-wheel to a remote location.

FLINT SCATTER Discrete cluster of flint objects, usually of one period, usually located by fieldwalking.

FLY WHEEL A wheel attached to a crank driven by a reciprocating engine, used to store energy and smooth the transfer of power.

FORT (ROMAN) Permanent military base; rectangular with rounded corners and a rampart and ditch. Standard internal layout with barracks, stores and administrative buildings.

FORTRESS (ROMAN) Permanent base for legionary troops. Often became towns.

FREE TENURE Not in bondage to lord.

FULLER Person who cleanses and thickens cloth.

FURLONG Group of strips in a subdivided field system often with a stock-proof hedge around and usually the unit of crop rotation.

GATHERERS-AND-HUNTERS People who subsisted by obtaining food principally from wild fruits, nuts, leaves, roots etc, supplemented by occasional meat or fish hunted or caught from the wild. In Britain this way of life began to die out with the close of the Mesolithic period.

GLEBELAND Area of land attached to a clergyman's benefice and providing revenue and food.

HAMLET Small cluster of dwellings without the amenities expected in a village.

HAND-AXE Multi-purpose flint or chert tool of the Palaeolithic period.

HATCH Form of alluvial streamwork - possibly prospecting; a large pit with spoil heaps arranged around it.

HENGE Ceremonial circular Neolithic enclosure with ditch inside bank. Of the 3rd and 2nd millennia BC.

HERIOT Tribute paid to lord on tenant's death. Originally the best beast; usually commuted to a money payment. Medieval origin.

HIDAGE Value of an estate (Domesday Book). Based on multiples (or fractions) of a hide, a measure of the land capable of supporting a free family and dependents.

HILLFORT Fortified enclosure of Later Bronze Age and Later Iron Age; most are Iron Age. Uncertain function; much variety in internal organisation. But likely to be local centres, trading posts, ritual centres and retreats. Some had permanent settlements within.

HOLLOW-WAY A lane or trackway which has, through intensive use, become lower than the surface of the surrounding landscape.

HORIZONTAL ENGINE A steam engine where the cylinder(s) are laid on a horizontal bed and the piston rods are attached to a crank and flywheel.

HORSE WHIM Similar to a capstan, but in this case power supplied by a horse walking around a circular platform was applied to an overhead winding drum; frequently used for winding from small shafts on Cornish mines.

HUNDRED Subdivision of county or shire, having its own court.

HUT CIRCLE Prehistoric round house whose wall footings survive as an earthwork or as upright stones. Usually Earlier Bronze Age.

INCLINED PLANE An earthwork which enables a tramway or canal to ascend a steep rise; laid with rails and powered by water or steam.

INITIATION Rites of introduction to a society or aspect of a society.

IRON AGE c.600 BC to c.55 AD. The Early Iron Age, to c.400 BC is little understood compared with the Later Iron Age to which most of the large defended sites, hillforts and cliff castles, belong.

KIDDLEYWINK "...professedly only beer-shops.... on occasions of a run of smuggled goods in the vicinity, supplied with more ardent spirits..... found the tinners an easy prey... whilst the poor man's families starved at home" (Jenkin 1927, 145).

LATER MEDIEVAL Between 1066 and c.1540.

LAUNDER A wooden or steel trough used to carry water across or around an obstacle, also to feed water onto the buckets of a water-wheel.

LAZY BED Spade-dug seed bed c.2.5m wide, separated by trenches from its neighbours. Runs downslope.

LEAGUE Varying measure of distance, usually considered to be between 1 and 3 miles. Used in Domesday Book to record large blocks of pasture, woodland etc.

LEAT Water-course, excavated. Often originally lined with stone, clay or wood. Usually has downhill bank. Served streamworks, mills, clayworks and processing floors.

LEY Grass sown with the last of 2 or 3 years grain crops. Used for hay and as best pasture for 5 to 10 years as the recuperative part of the typical ley or convertible husbandry regime.

LIME KILN An upright coal-fired kiln used to roast limestone in the manufacture of agricultural lime.

LINHAY The storage area at the front of a china-clay pan-kiln.

LINTEL Horizontal timber or stone support above an opening in a wall or structure.

LOADING The masonry platform in front of an engine-house (or elsewhere on a mine) on which machinery such as cranks, flywheels and angle-bobs was mounted.

LODE An area of mineralisation within the mass of underground rock. In other parts of Britain a VEIN.

LODE-BACK PIT Shallow shaft dug onto the upper part of a mineral lode from the surface.

LONG CAIRN/BARROW Neolithic ritual monument. Long earth and stone mound, usually trapezoidal with a chamber at broad end.

LONG-HOUSE Principal peasant house of the later medieval period. A cross-passage between two opposed entrances separated the cow-house from the peoples' quarters, animals and humans sharing the same door. Substantial, well-built and comfortable.

MAGAZINE Small strongly built store containing explosives (gunpowder or dynamite); often circular, sometimes with additional enclosing walls to contain blast.

MENHIR Upright stone, usually considered Bronze Age and thought to be associated with rituals or ceremonies.

MESOLITHIC Period immediately after last Ice Age, c.8000 to c.3500 BC, when people lived by gathering and hunting. "Middle Stone Age".

MICROLITH Tiny beautifully made flints, rarely more than 3 cm long, elements of composite tools and weapons made by Mesolithic people (c.8000 to c.3500 BC).

MICROPTIC ALIDADE Alidade with telescope attached, used to obtain distance and direction when surveying with Plane Table.

MILLENNIUM Period of 1000 years.

MOWHAY Enclosure on a farm where ricks of corn and hay were built.

MULTIPLE ESTATE Groups of early medieval farming hamlets with administrative centre and possibly also religious centre.

MULTIVALLATE Having more than one rampart. Usually refers to hillforts and cliff castles.

NEOLITHIC "New Stone Age". The period when people domesticated animals and began cultivating crops and so became settled. In Cornwall it runs from c.3500 to c.2300 BC.

OPENWORK A mineral extraction site open to the surface rather than underground; similar to a quarry but usually distinguished by its narrow and precipitous form.

ORATORY Small chapel for private worship; usually medieval.

OVERBURDEN Earth and subsoil removed in the process of opening or extending a quarry.

PALAEOLITHIC The earliest period of human occupation in Britain. Gatherers-and-hunters, the people left only a few flint tools in Cornwall.

PAN Floor heated from below via a series of brick-lined flues in a pan-kiln.

PAN-KILN Process building used to dry china-clay slurry on a floor heated by warm air from a coal-fired furnace.

PARISH Area with its own church and clergyman.

PHOSPHATE ANALYSIS Seeking traces of phosphate, from decayed bone or dung to detect burials or settlement sites.

PILLAS Avena nuda, naked oat, a nearly extinct grain which was a major crop on marginal farms in SW England until the 19th century.

PLAIN-AN-GWARY Sub-circular earthwork theatres of later medieval or early post-medieval date used in Cornwall for the performance of miracle plays etc.

PLANE TABLE Drawing table mounted on a tripod used for surveying with an Alidade.

PLOUGHLAND As much land as could be ploughed by one plough-team in one year. Domesday Book.

PLUG and FEATHER Steel tapered plug and wedges used to split rock when inserted into a drilled hole and hammered tight; also known as Tare and Feather.

POLLEN ANALYSIS Reconstruction of vegetational history through the identification of pollen preserved in acid or anaerobic soil or peat.

PORTAL DOLMEN A massive capstone on two portal stones with a stone chamber behind which also helps support the capstone. Early Neolithic (4th Millennium BC) in Cornwall? Often called Quoits in Cornwall.

POUND Enclosure for restraining livestock found trespassing on private or communally held land. Had strong internal face and lockable gate. Early and later medieval and post-medieval.

PREHISTORY The longest and earliest part of the human past, before written records. Conventionally pre-Roman (ie pre AD 55) in Cornwall but here extended to include the Roman period (ie to AD 410).

PROSPECTING PIT A small pit dug in search of minerals.

RAMPART Earthwork comprising substantial bank, of varying internal construction, with external ditch, often originally topped with palisade. Formed defensive enclosure which could have several lines of ramparts.

REAVE Dartmoor dialect for low stony banks, in fact collapsed Bronze Age field boundaries. They are elements of very extensive boundary systems dividing the Dartmoor landscape and subdividing the better land through parallel allotment walls.

REVETMENT A stone facing to a bank or earth face.

RIDGE-AND-FURROW The corrugations caused by cultivation in beds with open drainage channels between. Produced by fixed mouldboard ploughs or spades.

RING CAIRN Bank of stone, sometimes earth, enclosing an area in which burials were placed.

ROMAN In Cornwall c.55 to c.410 AD.

ROTARY QUERN Hand-operated mill with an upper stone moved by a handle over a fixed lower stone.

ROTATIVE ENGINE A beam engine where the reciprocating motion of the beam is converted to rotary motion via a sweep rod, crank, and flywheel.

ROUND Small defended farming hamlet of Iron Age or Romano- British date. Some were used into the early medieval period.

ROUND HOUSE Also known as Hut Circle. Circular building (dwelling or ancillary) with low stone walls and presumably originally a conical roof. Current from Early Bronze Age to Later Iron Age and into the early decades of the Roman period.

RUNNER STONE Granite block which was rotated in the Grinding Pan of a china-stone mill.

SADDLE Support for Tramway rails, usually of cast-iron. Chair in 20th century usage.

SCRAPER Flint or chert tool with steeply retouched working edge which forms a strong face probably used for scraping various animal and vegetable materials. Current from Palaeolithic to Bronze Age in various forms.

SETT The legal boundary within which a mine or quarry could extract minerals.

SETT A granite or other stone block, used to pave a road or to support rails on a Tramway.

SETTLING TANK Masonry-lined open tanks at the rear of a pan-kiln where china-clay slurry was allowed to settle and thicken.

SHAFT A vertical or near-vertical tunnel sunk to access minerals; often connected to an Adit.

SHERD Broken piece of pottery.

SHIPPON Cow's house (east Cornwall).

SHODE Tin ore detached from the lode by weathering.

SINK An area in the floor of a quarry which has been excavated below the surrounding level.

SOPWITH STAFF Sighting target used with Microptic Alidade to obtain distance when surveying.

STACK A chimney on an industrial site, used to carry away smoke or fumes from boilers, furnaces and calciners. Often situated at the end of a Flue.

STAMPS A mechanical device for crushing ore-bearing rock to a fine sand. Heavy iron-shod wooden beams were lifted and dropped onto the rock by a series of cams mounted on a rotating drum; usually driven by a water-wheel or rotative steam engine. Generally associated with dressing floors. Later medieval to modern.

STENT Waste, including rocks, thrown aside in streamworks or removed from a mine or clayworks.

STONE MILL Mill used to grind china-stone to a fine powder for use in the porcelain industry (as a glaze and in the body of the ware).

STOPE Underground cavern produced during the extraction of ore-bearing rock. Also the area in a china-clay pit which is being actively worked.

STREAMWORK Tin working exploiting tin ore weathered from lodes. Used water to help remove stent and to separate the heavy tin from the waste. Can work both alluvial and eluvial deposits. Characterised by cuttings containing dumps of stent, by leats and reservoirs and by drainage gullies.

SUBDIVIDED FIELDS Field system worked by several farmers together. Usually medieval with holdings in scattered strips. Strip boundaries not stock proof although those of larger fields were.

SWEEP ROD Bar used to connect the beam of a Cornish Engine to a crank and Fly Wheel.

TAILINGS The waste sand and slime from stamps and buddles, not containing workable quantities of mineral.

TAILRACE The channel along which water flows after having passed over or under a water-wheel and is then returned to the river.

TINNERS' SHELTER Small building, drystone or turf built, within or alongside a streamworks or other early tinworks. Used as shelters or stores.

TOR CAIRN Bronze age cairn deliberately built around and incorporating a natural tor, apparently making it sacred.

TOR ENCLOSURE Early Neolithic (4th Millennium BC) defended hill-top, usually incorporating natural tors or granite hills.

TRAMWAY A railway constructed to a lighter or more temporary standard than that accepted for "main-line" routes. Often, though not always, powered by horses; on mines, small wagons were pushed by hand.

TRANSHUMANCE The movement of people (usually just part of a household) and livestock onto marginal land in the summer. To make use of this land and to free the less marginal land for cultivation and haymaking.

TURNOUT Junction where one line of rails splits into two.

TYE Excavated trench in streamworks through which water was run to carry off waste and leave tin-bearing ground.

UPCAST Material thrown up from an excavation or pit.

UPPER PALAEOLITHIC End of Palaeolithic, Old Stone Age; also end of Last Glacial period (Ice Age). Materials characterised by fine workmanship (flints, bone weapons etc).

WAGGON 19th century form of the later wagon; used to distinguish references to early Tramway vehicles from those to later railway wagons.

WATER-WHEEL Wheel fitted with buckets or paddles around its periphery, and driven by the force of a stream of water directed onto them.

WHEEL-HEADED CROSS Medieval stone cross with flat circular head, the front usually carved with an equal-armed cross (resembling a wheel). The back and all sides of the shaft often also carved.

WHEELPIT A structure built to house a water-wheel, often excavated and stone-lined, but sometimes free-standing.

WHIM A winding gear used for hauling from a shaft; consists of a power source and a winding drum. See Horse-Whim.

WHIM PLAT The level and usually circular platform on which a horse-whim was sited.

6.2 Monument Classes and their survival

Classes are arranged chronologically following the organisation of the historical background (section 3, above).

After each class has been described, any variability within it discussed, and its importance assessed: national, county, local - based largely on the pilot Monument Protection Programme (MPP) study made for Bodmin Moor (Rose and Herring 1990) - a set of simple statistics is presented to illustrate the survival of examples from the class in the study area. For most classes, estimates of the likely size of the original population will be made before the number of examples known to have existed is given. The former (estimated population) will be based on a combination of comparisons with other topographically similar but better preserved regions in the South-West (notably Bodmin Moor, Dartmoor, West Penwith and Carnmenellis) and basic archaeological and historical model-building and the latter (known) will use all available archaeological and historical sources.

These figures will be followed by another which records the number of examples of the class known to be surviving in the study area (based on the research for this survey; details in the gazetteer) and then two more showing how many of the known sites have thus been destroyed, and how many of the predicted original population. In calculating the last figure the 43% by area destruction so far by clayworking may sometimes be used. For some monument classes, particularly prehistoric and medieval ones, further comments will be made on the most efficient means of both detecting sites with no easily visible surface remains and improving our knowledge of the extent and distribution of the original population.

6.2.1 Prehistory

6.2.1.1 Palaeolithic

Artefact

Stray objects lost or discarded by nomadic gatherer-hunter communities. Usually individual flints rather than groups; will include hand-axes and more sophisticated Upper Palaeolithic pieces. Of national importance.

Estimated population: ? Not possible to model the behaviour of palaeolithic gatherer-hunters.

Known: (0) This is an unreal figure as there has been no field-walking in the study area.

Further site location work: Systematic field walking.

6.2.1.2 Mesolithic

Flint scatter

Mesolithic sites have scatters of distinctive flints and other stones. Will include microliths. Scatters will vary in area and density, reflecting function, permanence and importance of various kinds of site. Excavations may reveal traces of shelters and other structures. Of national and county importance.

Estimated population: c.500? Based on fieldwalking projects in the Lizard and on Bodmin Moor. Sites will exist in all ecological zones.

Known: 5 All located by chance during the excavations of Bronze Age cairns. The figure is unreal as there has been no fieldwalking in the study area.

Destroyed (known): 5 The excavations were undertaken in advance of destruction by the clay industry.

Destroyed (population): (c215?) Lack of fieldwalking makes it difficult to compute a figure but as c.43% of the area has been destroyed we may expect c.215 of the estimated population of 500 flint scatters to have gone.

Further site location work: Systematic field walking.

6.2.1.3 Neolithic

Hill-top enclosure

Defended regional centre, probably 4th millennium BC. Most Cornish examples are tor enclosures where stony ramparts link naturally defensible and visually dramatic rock outcrops. Few suitable hills exist in the study area and the only example, identified as a hill-top enclosure by this survey, St Stephen's Beacon, has no natural tors and the defences are entirely created. Of national importance.

Estimated population: 1 Cornish hill-top enclosures appear to be at least 10 miles apart.

Known: 1 St Stephen's Beacon (PRN 20651)

Surviving: 1

Long cairn/chambered tomb

Early Neolithic ritual and ceremonial sites, 4th and early 3rd millennium BC. Long cairns are trapezoidal or oval mounds, up to 30m long in Cornwall, containing chambers and sometimes with facades at their broad ends. Chambered tombs will be portal dolmens; stone chambers of large slabs with outsize slab capstones and often set in low stony mounds. Both types may have been used in burial practices. Distributions overlap but there are more long cairns in the eastern half of Cornwall and more portal dolmens in the west; the study area is located at the overlap so both types may be expected. There are portal dolmens within 3km of the study area at Lesquite Quoit and the "Devil's Coyt" in St Columb Major (Johnson 1979). Of national importance.

Estimated population: 2 or 3 Their distribution on Bodmin Moor and in West Penwith is similar to that of parish churches.

Known: 0

Destroyed: 2 or 3? See above

Further site location work: Detailed investigation of relict moorland.

Stone circle

Upright stones spaced 1 to 3m apart in a perfect or approximate circle between c.10 and 45m in diameter. Ritual and ceremonial monuments of the later Neolithic and early Bronze Age (ie c.2500 to c.1600 BC). Fifteen examples known on Bodmin Moor and seven more in the rest of Cornwall. Of national importance.

Estimated population: 2 or 3 Distribution on Bodmin Moor and in West Penwith similar to that of parish churches.

Known: 1? Place-name Ninestones suggests former existence of one (PRN 20018). Fallen circles may survive in relict moorland.

Destroyed (known): 1? The area around Ninestones has been destroyed by clay working.

Destroyed (population): 2 or 3?

Further site location work: Detailed investigation of relict moorland.

Settlement, flint scatter and artefact

Neolithic houses were probably wooden and will be difficult to locate. Artefact scatters, particularly flints, may mark settlements. Likely to have been confined to the granite uplands where soils were lighter and forests less dense. Stray objects, lost or discarded, will also be found as will the smaller scatters created by activities carried out away from the main farms. Settlements will be of national importance as will the largest and richest scatters. Others will be of county importance.

Estimated population: c.70 settlements c.200 other scatters and stray finds. Can expect at least one settlement per square kilometre to have developed over this long period (c.2000 years). Other scatters and stray finds will be more common.

Known: 1 settlement, St Stephen's Beacon (20651) hill-top enclosure. Flints including an end-scraper.

2 stray finds: Polished flint axe at Wh. Remfrey (21091); leaf arrowhead at Savath (21276). These figures are unreal as there has been no fieldwalking in the area. The three recorded were all chance finds.

Surviving: 1 settlement and 1 stray find site

Destroyed (known): 1 Wh. Remfrey (21091)

Destroyed (population): c.30 settlements c.85 other scatters and stray finds. Based on c.43% of the area having already been destroyed

Further site location work: Systematic field walking and watching briefs.

6.2.1.4 Bronze Age

Stone Row

Early Bronze Age alignment of upright stones (to c.2.0m high but usually less than 1m). Apparently ceremonial and ritual and often associated with other ceremonial monuments (menhirs, cairns etc). Range in length from just 12m to 2 kilometres. Seven rows recently located on Bodmin Moor and four others known from elsewhere in Cornwall. Of national importance.

Estimated population: 2 or 3 Based on the 7 known on Bodmin Moor.

Known: 1? Based on early medieval place-name, Stanraewe, near Trerice (21086). Others may survive, fallen, in relict moorland.

Destroyed (known): 1? The likely site of Stanraewe is now enclosed farmland.

Destroyed (population): 2 or 3?

Further site location work: detailed investigation of relict moorland.

Menhir

Large isolated standing stones, early Bronze Age ritual and ceremonial monuments, sometimes associated with burials. May replace upright timber posts (as at Longstone Downs) and may have complexes of buried features in their immediate vicinities. In Cornwall vary from just 0.5m to 5.1m high. Of national importance.

Estimated population: 10-15? Based on comparison with Bodmin Moor, West Penwith and the Lizard.

Known: 2 (13) Two certain sites and eleven suggested by field- names.

Surviving: 1 Menear (20319)

Destroyed (known): 1 Longstone Downs (19825) in advance of clayworking; the stone itself is now at Roche (21505). Two fields with names suggesting menhirs also destroyed, at Hensafraen and Hallew.

Destroyed (population): 4-6? Based on 43% of estimated population.

Further site location work: Detailed investigation of relict moorland.

Barrow or cairn

Mounds of earth and/or stones thrown up over ritual sites to act as both markers and seals. Late Neolithic and early Bronze Age although most in Cornwall are between c.2000 and 1600 BC. Considerable variety in size (diameters 2.0 to 36.0m, heights 0.2 to 6.5m) and external shape (upturned bowls, platforms, rimmed platforms, tor cairns, ring cairns, kerbed cairns etc). Even more variety in internal structure and buried features (rings of timber posts or stones, internal walls, pits, cists (stone burial boxes), burials, votive offerings, natural tors, menhirs etc). Of national importance.

Estimated population: c.160 Based on surviving totals for Bodmin Moor (403 in an area of 200km2).

Known: 62 (72)(Ten suggested by field-names.) The shortfall of c.100 on the estimated population would comprise smaller sites which would have escaped the notice of earlier fieldworkers. Nearly 70% of Bodmin Moor cairns are less than 10m in diameter while all known surviving and most destroyed ones in our study area are or were greater than 10m. Small cairns may survive in relict moorland; others may be detected by aerial photography.

Surviving: 13 Subdivided by external form:

bowl barrow 6 (includes Hensbarrow - 19842); platform 4; ring cairn 1 (Cocksbarrow - 27929); oval cairn 1 (Hensbarrow Downs - 27817); tor cairn 1 (Carn Grey - 27799)

Destroyed (known): 49 (ie 79% of total known). 42 destroyed by clay industry and 7 by agriculture or other methods.

Destroyed (population): c.147 Based on estimated population.

Further site location work: Detailed investigation of relict moorland; systematic aerial photography; systematic field walking; geophysical survey; watching briefs.

Settlement

Round houses (hut circles where they survive as earthworks), usually in groups (up to 90 in Bodmin Moor settlements). The houses, which would have had thatched conical roofs, can survive as circles of stones or turf, 2 to 12m internal diameter ($3m^2$ to $113m^2$ floor area) with most between 5 and 7m diameter. Generally associated with fields or enclosures. The relatively few excavations of hut circles in Cornwall and on Dartmoor suggest most are of the later part of the Earlier Bronze Age (c.1600 to c.1300 BC) although a few are Iron Age (Todd 1987). About 200 round house settlements on Bodmin Moor and c.50 elsewhere in Cornwall (Rose and Herring 1990). Surprising, then, that no definite round house settlement is known on the granite of the Hensbarrow district. Houses may, like some on Dartmoor and those in lowland Cornwall, have been timber. The area also saw little 19th century antiquarian activity and it is most likely that sites of settlements, unreclaimed moorland, have since been destroyed. Of national importance.

Estimated population: c.70 Based on Bodmin Moor (200 sites in 200km2).

Known: (3) All doubtful sites: Bodwen 21262 - possible single house; Carn Grey 27804 - possible single house; Ebenezer 27679 - two circular platforms.

Surviving: (3) The possible site at Bodwen (21262) has been damaged by the erection of an agricultural building.

Destroyed (population): c.30 Based on 43% estimated population.

Further site location work: Systematic field walking; detailed investigation of relict moorland, systematic aerial photography; watching briefs.

Field System

Most Bronze Age settlements in the South-Western uplands are incorporated into field systems, either curvilinear or rectilinear. Boundaries survive as low stony banks with occasional upright stones. Heaps of small stones cleared onto natural boulders are often found and confirm that the fields were cultivated. Of national importance.

Estimated population: c.45 Based on Bodmin Moor (122 examples in $200km^2$)

Known: 1 Possible prehistoric field boundaries on Carn Grey (27803).

Surviving: 1

Destroyed (population): c.20 Based on the estimated population.

Further site location work: Detailed investigation of relict moorland; systematic aerial photography; watching briefs.

Enclosure

South-Western Bronze Age settlements not within field systems often have small curvilinear enclosures associated. Possibly used for stock control, as pens or folds; their boundaries tend to be fairly substantial. Of national or county importance, depending on quality of associations.

Estimated population: c.12 Based on Bodmin Moor (35 examples in 200km^2)

Known: (1) Possible site at Carn Grey (27805).

Surviving: (1)

Destroyed (population): c.5 Based on the estimated population.

Further site location work: Detailed investigation of relict moorland; systematic aerial photography; watching briefs.

Pasture boundary

On Dartmoor, Bodmin Moor and in West Penwith some long substantially constructed boundaries (now collapsed into stony banks), are clearly associated with round house settlements and appear to divide areas of open grazing into large blocks, presumably either along property lines or as aids to livestock management. Of national or county importance, depending on quality of associations.

Estimated population: 10 Can expect several such boundaries to have subdivided the central upland massif.

Known: 1? On Hensbarrow Downs (27812 and 27818).

Surviving: 1

Further site location work: Detailed investigation of relict moorland; systematic aerial photography; watching briefs.

Flint scatter

Scatters and stray finds of Bronze Age flint (including barbed-and-tanged arrowheads) need not always be settlement sites as Bronze Age people would have hunted and carried out activities away from home. Scatters can, however, assist in locating the elusive Bronze Age settlements. The richest scatters will be of national importance, others of county importance.

Estimated population: c.70 settlements predicted (see **settlement**) c.200 other scatters and stray finds (as for Neolithic)

Known: 0 scatters 3 stray finds All barbed-and-tanged arrowheads 20032.1 Restineas, 20057 Carludden, 20420 Trethowel. Figures unrealistic, as there has been no fieldwalking in the area. The three recorded were all chance finds.

Surviving: 3 stray finds findspots.

Destroyed (population): c.30 settlements scatters c.85 other scatters and stray finds.

Based on the 43% of the area already destroyed.

Further site location work: Systematic field walking; watching briefs.

Artefact

Artefacts other than flints (pottery sherds etc); settlement sites, lost/discarded or deposited. The latter include items of Later Bronze Age metalwork, either hoarded or deliberately placed in streams, presumably as votive offerings. Of national or county importance.

Estimated population: 70/? Difficult to model the behaviour of hoarders and those who lose, discard and deposit objects. 70 settlements.

Known: 2 Pair of Later Bronze Age cauldrons from streamworks at Savath (21286); bronze spearhead from "barrow" at Roche (19867.1).

Surviving: 2? The findspots of both known sites are uncertain.

Future site location work: Systematic field walking.

6.2.1.4 Iron Age

Hillfort

Important local centre, usually permanently occupied, and often with considerable storage facilities. Hill-top location with one or more circuits of defences (ramparts with external ditches). Usually Later Iron Age (c.400 to 0 BC) although some now known to be Early Iron Age or even Later Bronze Age. Dramatic; usually on hills with extensive views. Of national importance.

Estimated population: 1 Possibly only St Dennis. Others nearby would have exerted influence over the study area (eg Prideaux Warren, Castle-an-dinas).

Known: 1 St Dennis (19800)

Surviving: 1

Further site location work: Aerial photography may locate ploughed down sites.

6.2.1.5 Iron Age/Romano-British

Round

Small univallate (single rampart and external ditch) defended farmsteads and hamlets, usually on hill slopes rather than hill-tops. Excavations reveal small groups of round or oval houses within. Later Iron Age to end of the Romano-British period and also occupied into early medieval (but none, apparently, constructed then). Ramparts and ditches often no longer visible at surface, but may be visible on aerial photographs. Artefact scatters can also be expected, particularly pottery sherds. Some rounds will exist beneath medieval settlements, particularly those with *ker* type place-names; *ker* being early medieval Cornish word for a round. Others may be found in fields named Round Field. Those with physical remains or ker names will be of national importance; "Round" fields are provisionally of county importance.

Estimated population: c.50? Only a fraction of the 26 Round Fields were rounds, say c.5. These can be added to the 28 known sites (physical remains or *ker* names); others will have escaped detection; NB 6 new sites located during this survey without systematic fieldwalking.

Known: 28(54) The 28 comprise 17 with physical remains of rampart or ditch visible at surface and 11 settlements with *ker* names. A further 26 suggested by field-names.

Surviving: 19(41) The 19 comprise 10 with physical remains and 9 with *ker* names. 22 field-names suggestive of rounds also survive.

Destroyed (known): 9(12) Of the 9, seven had physical remains. Three fields with names suggestive of rounds have also been destroyed.

Destroyed (population): 31? Based on the estimated population. More survivors may be located, especially as rounds tend to be found on the slopes of the lower ground, beyond the central massif where the clay industry has been concentrated.

Further site location work: Systematic field walking; systematic aerial photography; geophysical survey; watching briefs in "Round" fields and elsewhere.

Open settlement

Likely that there were at least as many unenclosed, or open settlements, probably hamlets, in the Later Iron Age and Romano-British period as rounds (Johnson and Rose 1982). Much less easy to identify as they lack obvious earthworks. Not surprising, therefore, that very few have been found in Cornwall and none in our study area. It will be by fieldwalking locating scatters of artefacts or geophysical survey locating subterranean features (walls, pits, ditches etc) that these settlements will be found. Of national importance.

Estimated population: 60-80? Can expect at least as many open settlements as rounds, judging from Romano-British West Penwith. Settlement shift probably easier for open settlements than rounds and original population has been estimated as slightly greater.

Known: 0

Destroyed (population): 25-34? Based on the 43% of the area already destroyed. The actual figure destroyed may be smaller as these settlements are expected to be found on lower slopes, alongside rounds.

Further site location work: Systematic field walking; large scale geophysical survey and watching briefs.

Field system

Rounds and open settlements as farming hamlets would have possessed field systems. Fields of this period in West Penwith are mainly rectilinear and small (usually less than 0.5 hectare each). Lynchets, scarps left when boundaries removed by later farmers reveal built-up soil at bottoms of fields, are often pronounced. Field systems of neighbouring settlements will often be contiguous. Many, or most, will have been wholly or partially re-used by later farmers, in the medieval and post-medieval periods. Of national or county importance.

Estimated population: c.110-130 Based on the estimated numbers of rounds and open settlements.

Known: 1 Gray (27657); pattern of small lynchetted fields.

Surviving: 1 Figure may be increased by intensive fieldwork in relict moorland and irregular medieval field systems.

Destroyed (population): 47-55 Based on the 43% of the area already destroyed. As rounds and open settlements are expected to be concentrated in the lowlands, more field systems may be expected to survive.

Further site location work: Detailed investigation of relict moorland and irregular medieval field systems; watching briefs.

Artefact

More substantial, individual artefacts, particularly items of metalwork, may also be found deposited or hoarded, away from settlements. In the Romano-British period these will include Roman coins.

Estimated population: c.200 scatters and individual artefacts.

Known: 2 20907 Hallivick, Romano-British pewter bowl found in streamworks; 20723 Carpalla, Roman coin, of Constantius.

Surviving: 1 Carpalla.

Destroyed (known): 1 Hallivick, beneath a mica lagoon.

Destroyed (population): c.86 based on the 43% figure for the area already destroyed by the clay industry.

Further site location work: Systematic field walking.

6.2.1.6 Prehistoric - uncertain date

Flint scatter (undated)

Scatter of worked flints with none diagnostic of date. Will still provide information about the location of a prehistoric site, the details of which may be determined by excavation. Can also be returned to and re-walked when diagnostic flints may emerge. Of national or county importance.

Known: 3 Little Innisvath (21228), Savath (21278) and Caerloggas Downs (20059). All collected by local farmers.

Surviving: 2

Destroyed (known): 1 Caerloggas Downs (20059); clayworks dump on site.

Further site location and enhancement work: Systematic field walking.

Circular crop-mark on aerial photograph

Differential growth or ripening of ley-grass, grain crops or rape often reveals subterranean features like ditches and buried walls, banks and mounds when viewed from the air. Circular features which stand out as being unnatural. Most are the size of rounds, c.30-50m diameter but they may also be pounds, enclosures or ditched barrows. Fieldwalking, geophysical surveys and excavation will help in their elucidation. Further aerial photography sorties will probably throw up more sites. Provisionally of county importance; some will be of national importance when further details are known.

Estimated population: c.80 Based on estimated totals of **barrows, rounds, enclosures** and **pounds** we may expect c.230. Unrealistic as many of these will not be expected in cultivated fields. Instead we may reduce the figure to c.80.

Known: 5

Surviving: 5

Destroyed (population): c.34 Based on the 43% figure for the area already destroyed.

Further site location work: Systematic aerial photography, especially in early summer when conditions are best.

6.2.2 Early Medieval

Farming settlement

Probably small hamlets, from 2 to c.8 farmsteads, their occupants farming communally. Some earlier hamlets (5th to 7th century?) will have occupied defended rounds, constructed in the Later Iron Age and Romano-British periods. These were often called, in Cornish, *ker*. More will have been open, undefended and *ker* sites also lost their defensive features to end the period indistinguishable from the more common *tre* and *bod* places. These distinctive place-name prefixes allow accurate reconstruction of the early medieval settlement pattern which provides a useful model for predicting locations of earlier open settlements; Later Bronze Age, Iron Age and Romano-British.

Early medieval open settlements may have had layouts similar to those of the later medieval (see 6.2.3).

Dwellings were probably stone-built or at least had stone footings. Early houses were oval (as at Trethurgy Round in the 5th and 6th centuries), later ones rectangular, possibly long-houses (see 6.2.3).

Most early medieval settlements would have been occupied through the later medieval and post-medieval periods into modern times. Few are likely to have been entirely abandoned. Traces of

the earliest buildings and enclosures are expected to survive beneath the re-used settlements so all those with *tre, ker* and *bod* names or with other pre-Norman names or references will be considered of national importance.

Estimated population: c.80 Of these 47 are known (through place-names and documents).

Known: 47 Comprising 27 with *tre* names, 10 with *ker* and 5 with *bod*, 1 with *lan* and 2 with *hendre*. Another (Gothers) was recorded in the Domesday Book and one (Retew) in a document of 1049.

Surviving: 42

Destroyed (known): 5 Retew, Carrancarrow, Alseveor by clay working; and Trevanion and Tregarrick by agriculture.

Destroyed (population): c.15? Less than the 34 calculated by taking 43% of the estimated population as it is likely that clay industry has had less impact on lowlands where early medieval settlements were probably located (judging from distribution of *tre, bod* and *ker* names).

Further site location work: Systematic field walking; trial excavations within later medieval settlementsl watching briefs.

Transhumants' shelter

On Bodmin Moor sub-rectangular huts used by early medieval transhumants have recently been recognised. Usually in small groups, sometimes with pens or folds; each hut housing just one or two people. Hendre names given to the winter bases from which transhumants came to the upland summer grazings confirm that the system operated in our area and we should expect groups of these huts in its uplands, particularly on the central massif. Of national importance if well preserved; otherwise of county importance.

Estimated population: c.10 groups of huts, most in the Hensbarrow massif but perhaps also 1 or 2 on the Fraddon/Burthy Downs ridge.

Known: 0 Some may survive in the areas of relict moorland.

Destroyed (population): c.6 We must expect the clay industry to have had considerable impact on these vulnerable sites which would have been concentrated in the same uplands as the most important clayworks.

Further site location work: Detailed investigation of relict moorland.

Pound

Livestock grazing common pastures illegally (trespass or overstocking), would be liable to impounding in the hundred, estate or "manor" pound. Usually located at edges of main blocks of upland grazing, as Old Pound is. Some, perhaps all, of the pounds recorded in the area will be later rather than early medieval. Would have been fairly small rectangular or oval enclosures with strong hedges or walls and secure gates. Well preserved pounds of clearly early medieval date will be of national importance; others county importance.

Estimated population: c.15 Based on likely major early medieval estates plus Powder hundredal pound.

Known: 10 3 had physical remains documented in last 150 years. Remainder are recorded in field or place-names.

Surviving: 9

Destroyed (known): 1 31008 Hensafraen.

Destroyed (population): c.5 Based on estimated population.

Early Christian Settlements

First Christian settlements in Cornwall (5th and 6th centuries) were lanns, circular enclosures, sometimes re-using later prehistoric rounds. Contained small chapels and cells for members of the religious community and would also have been used as cemeteries. Some became the centres of parishes with more substantial later medieval churches built within them, as at Roche and St Stephen-in-Brannel and possibly also St Dennis (built within circular prehistoric hillfort). Others abandoned in 9th, 10th and 11th centuries as ecclesiastical landscape changed and parishes developed. A possible early Christian settlement may survive in moorland to north of Whitemoor (19851); an oval enclosure contains a small rectangular building. Of national importance.

Estimated population: c.10 Based on the three later medieval churches, the possible Whitemoor site and estimate for lost similar sites.

Known: 3(4) Three churches and site at Whitemoor (19851).

Surviving: 3(4)

Destroyed (population): c.6? Based on estimated population.

Further site location work: Field walking on the sites of rounds; watching briefs.

Decorated cross

Many early medieval Cornish churchyards contained tall intricately decorated crosses. Can stand to 5m high although most are between 2 and 3m. Usually wheel-headed with decoration on all four sides of rectangular shafts. Crucifixion often portrayed on one face of head. Of national importance.

Estimated population: 3 (originally one at St Stephen-in-Brannel?)

Known: 2 19800.4 St Dennis; 31042 Roche

Surviving: 2

Holy well

Natural springs, often some distance from the Christian settlements with which they became associated. Many probably used as sacred sites by earlier Celtic societies; Christians adopted them to legitimise their own beliefs and practices. Springs often contained by stonework; some have carefully built well-houses, even chapels. Most of these though are later medieval constructions. Some wells take the name of local saints or other important religious figures (eg Mary Maudlin's (Magdalen) well). Well-preserved wells will be of national importance; others are of county importance.

Estimated population: c.10? Some neglected during medieval and post-medieval periods.

Known: 5(6) All except Mary Maudlin's Well (20326), are uncertain sites, surviving in local tradition only.

Surviving: 5(6) Most cannot be accurately located.

Destroyed (population): c.5? Based on estimated population.

Artefact

Individual artefacts secreted, hoarded or lost. Will include coins. Depending on the artefact's intrinsic historical value, of national, county or local importance.

Estimated population: c.50 artefacts may be expected in an area of 70km2.

Known: 1 20725 Saxon penannular brooch and coins at Gwindra.

Surviving: 1? Precise location of the Gwindra findspot is unknown. Some disturbance in the area.

Destroyed (known): 1? See above.

Destroyed (population): c.21 Taking the 43% figure for the area already destroyed by the clay industry.

Further site location work: Systematic field walking.

Mill

The 1049 documentary reference to Trerice mill confirms that these did exist in the early medieval Cornish countryside. In an area with fairly steep valleys and strong streams it seems likely that most estates would have had a water-powered mill for grinding flour and grist at least by the end of the early medieval period. May have originated as horizontal mills, wheel fixed to vertical axle, but overshot and pitchback wheels on horizontal axles will have been adopted before the Norman conquest. Can expect these mills to have had sites re-used by later medieval and post-medieval mills; would have been located in best valley side positions and their leat and tailrace systems, and perhaps millpools, would have helped determine later mills' sites. So expect early medieval mills on or near important modern mills like Bojea, Trethowel and Trevanion.

Estimated population: c.12-15 Based on likely number of early medieval estates.

Known: 1 Trerice. Location now uncertain.

Surviving: 1? Considerable clay-working disturbance in the Fal valley, probable site of the Trerice mill. Other early medieval mills are expected to survive beneath or near later mills.

Destroyed (known): 1? The probability is that Trerice mill was destroyed by the clay industry.

Destroyed (population): c.5-7 Based on 43% of the estimated population. This may be an underestimate as the valley bottoms have been heavily disturbed by clay-processing plant, itself using water from the streams.

Further site location work: Detailed investigation of undisturbed valley sides; trial excavation at later mills.

6.2.3 Later Medieval

Settlement

Many of the 85 settlements in the study area (excluding Island Settlements) recorded in later medieval documents which do not have recognisably early medieval names will be early medieval but for the present, until excavation proves otherwise, will be regarded as later medieval.

Most were farming hamlets, as determined by examination of associated field systems - those with subdivided or strip fields regarded as having been groups of two or more farmsteads. Substantial minority, however, 34 (or 39%), appear to have been single farms, with irregular field systems, although these too can be associated with hamlets (see historical background, section 3.3).

Hamlets will have been loose clusters of farmsteads arranged around communal townplaces. Principal houses probably more substantial in later medieval period, long-houses (see below), and probably more ancillary buildings, barns, animal houses etc. Communal features included well, corn-drying barn and, perhaps, bread oven.

Single farms were simply individual farmsteads with two or three small, secure enclosures (garden, mowhay, yard), one or two ancillary buildings, the well or spring and long-house.

Most settlements were occupied into the modern period although many hamlets had shrunk to single farms and some farms into smallholdings, even cottages. Medieval buildings and farmyard features will survive to the level of wall and hedge footings, at least, beneath modern features. These sites will be of at least county importance, sometimes national.

Estimated population: c.150 Combining known early medieval settlements, 47, with those first recorded in the later medieval, 85, plus c.18 for those lost, through desertion and those which did not find their way into documents.

Known: 132

Comprising 92 farming hamlets and, apparently, 40 farms. (These figures include Early Medieval settlements).

Surviving: 109 Comprising 78 hamlets and 31 farms. Others may survive as earthworks or artefact scatters.

Destroyed (known): 25 4 early medieval hamlets and 1 farm noted above (6.2.2)

Of later medieval date, 10 farming hamlets:

Kernick (21184)
Gunvean (21106)
Drinnick (19956)
Methrose (St Mewan) (20822)
Newton
Hensafraen (21183)
Burgotha (21180)
Tolbenny (27511)
Woon (20171)
Carbean (27912)

and 10 farms:

Alviggan
Higher Woon
Gum Penheddra (20198)
Hallivet (20191)
Penhale (27888)
Gilly (19961)
Rosavallen
Rosevear (20203)
Rosevean (20202)

Destroyed (population): c.41 Based on estimated population.

Further site location work: More detailed documentary and cartographic work; systematic field walking; watching briefs.

Field System

Two main types of field system are associated with medieval farming settlements. Most (63%) are apparently subdivided, with more than one farmer sharing arable land, holding several narrow strips scattered through several large roughly rectangular fields. Strip boundaries were not stock-proof but those of fields were as the farmers used them successively for cultivation and hay/grazing. When cultivated a strip's product belonged to its holder but when under ley grass it would be grazed in common.

Survivals of medieval strips with original stony banks are rare in Cornwall away from Bodmin Moor (Johnson and Rose, forthcoming; Herring 1986, Vol 2). Those at Treskilling are, then, of considerable importance; the Old Pound strips have been subjected to agricultural improvement and are poorly preserved.

At the end of the later medieval period and in the early post-medieval most subdivided field systems were fundamentally changed as individual farmers enclosed their holdings. Sometimes narrow strips were fossilised (as at Rescorla); sometimes the rectangular fields (as at Polskeys).

The second type of field system was irregular with boundaries sinuous and not parallel and with fields varying considerably in size. Possibly the field systems of solitary farmers with no need for strip shaped fields. Some, however, may be re-used prehistoric or early medieval field systems and others may be subdivided (strip) field systems whose enclosure involved complete re-organisation of the boundaries.

As field systems are extensive it is difficult to quantify destruction or survival. Many will have been damaged, not wholly destroyed. This is made visible in the following statistics by recording conditions (A,B,C in descending order - see gazetteer). Those in condition A may be regarded as of national importance; the others of county importance. Those with relict banks etc are of national importance.

Known population: 153 Comprising 97 subdivided field systems and 56 irregular ones.

Surviving: 129 Includes 80 subdivided field systems of which 7 are in condition A (essentially complete), 54 are in condition B and 19 are in condition C. There are 2 surviving fragments of original strip systems, with low banks etc, at: 20056 Treskilling; 19871 Old Pound. There are 41 surviving irregular field systems of which 3 are in condition A.

Destroyed (known): 24 Of this figure 9 were subdivided and 15 irregular field systems:

It will be noted that while subdivided systems dominate (63%) the total population it is the irregular field system that has suffered most (62.5%). This is due to hamlets (and subdivided fields) being concentrated on the less marginal lowland while single farms (with irregular fields) are found on the higher ground most affected by the clay industry.

Ridge and furrow

Low corrugations of medieval (and early post-medieval) cultivation, created either by fixed mouldboard plough or spade and shovel, the "lazy beds" of more recent highland British agriculture. Most surviving patches are at the margins of medieval field systems not destroyed by later cultivation. Ridges rarely more than 0.2m high, usually between 2.0 and 3.5m wide with furrows, or ditches, c.1.0m wide 0.2m deep. Furrows drained the ground and ridges, or seed-beds increased soil depth.

Rare in Cornwall away from Bodmin Moor and imparked estates (Lanhydrock, Trelissick etc) but would have been ubiquitous. Of national or county importance.

Known: 6 3 patches visible on aerial photographs; 3 on the ground.

Surviving: 6

Destroyed (known): 0 Detailed examination of earlier aerial photographs (eg 1940s RAF pictures) may yield examples of destroyed sites.

Further site location work: Systematic aerial photography; detailed investigation of relict moorland.

Long-house

Apparently the principal dwelling-house in rural medieval Cornwall. People and animals housed under same roof, sharing same entrance; humans usually occupying uphill end of a long stone-built single-storeyed structure whose long axis runs across contour. Main living room with central hearth open to thatched roof, lofts over unheated inner domestic rooms and downhill cow-house. Houses well-built with well-finished fixtures and fittings. Ancillary rooms often attached to sides or ends. Freestanding farm buildings also found, barns, cow-houses, corn-drying barns etc.

Long-houses apparently not built in Cornwall after c.1400 although some continued in use after this time, often with cow-house end used as domestic accommodation; others re-used as farm buildings (Herring 1986, Vol 2, 70-77; Parkes 1987, 57-68). Most have been demolished, at least to foundation level, and built over. Much information, however, will survive including room layout, fixed furnishings, domestic debris etc. Some long-houses survive as earthworks; over 80 known on Bodmin Moor and others are found along the north Cornish coast and in West Penwith. Two possible long-houses were recorded during this survey, within the study area (see below). Where surface remains survive these will be of national importance; otherwise county.

Estimated population: c.550 Based on assuming each of the c.100 hamlets had 5 farmsteads, each with one long-house. To this is added the c.50 single farms. Figure likely to be conservative as long-houses would have been re-built several times during the 3-400 years that they were in currency.

Known: 2 Chegwins (27552.1) and Treverbyn (20206.1), the latter less certain. Although no long-houses have been identified at them, it is probable that all 132 medieval settlements will have below-ground remains.

Surviving: 2

Destroyed (known): 81? Calculated from the 14 hamlets (70 long-houses) and 11 single farms certainly destroyed.

Further site location work: Geophysical survey; trial excavations beneath later buildings on abandoned sites.

Pasture Boundary

Ruinous stock-proof boundaries run across patches of moorland. Most are clearly associated with medieval field systems and appear to be breaking up open moors into more manageable blocks. Some would have been property markers, others perimeter boundaries or ring-fences of farms or farming hamlets. Most were substantial Cornish hedges ditched on one or both sides.

Of national or county importance.

Estimated population: c.20 Difficult to quantify as separating out individual sites is problematic when several boundaries depend on each other. Figure refers to probable complexes of pasture boundaries on higher hills but excludes perimeter boundaries regarded here as elements of field systems.

Known: 2 No systematic search; the two recorded were found incidentally while investigating other sites:

Surviving: 2

Destroyed (population): c.5? Like field systems, extensive boundary complexes are rarely wholly obliterated. Most examples on higher ground will at least be damaged by the clay industry.

Further site location work: Detailed investigation of relict moorland; systematic aerial photography; cartographic research.

Church

Most Cornish parish churches were established in the centuries immediately before and after the Norman conquest, often on sites of earlier chapels and cemeteries. Many retain Norman features (font, door, arcade or stretches of walling). Countywide rebuilding and extensive refurbishment in later 14th and 15th centuries when most fine square towers and elegant aisles were built. Further restorations (and rebuildings) in the 19th century were necessary (as woodwork and some stonework had decayed) but were usually excessive, destroying much valuable medieval material (screens, benches, wall-paintings etc).

New church built in 19th century at Treverbyn, a parish carved out of St Austell in 1847 to serve the increased population (mainly clay workers and tin streamers) in this remote part of the old parish. Of national importance.

Known: 4

Surviving: 4

Wayside cross

Small, usually simple crosses made from single blocks of granite, often fitted into morticed cross bases, erected alongside some tracks and paths leading from farms and hamlets to church. Some latin but most in Cornwall were wheel-headed crosses; often a crudely carved crucified Christ on one face. Most less than 1.5m high.

Many removed to churchyards, rectories etc. in 19th and early 20th centuries; more had fallen and become overgrown or had been re-used as gate-posts etc.

Some former sites revealed by field-names, particularly those recorded in 1830s for Tithe Maps. One recently unearthed at Tregonning (5031) in a field called Cross Park (Langdon 1988). Extant crosses are of national importance.

Estimated population: c.50 No attempt made to calculate an average number of wayside crosses per parish or per mile of medieval track. There will, anyway, be considerable variability in numbers between parishes. Figure is, then, very uncertain.

Known: 13(24) Of these just 5 are known to have been extant in modern times, three of them have been removed to churchyards; and the other two are or were probably in their original places. Another 8 sites are known, the crosses or cross-bases having been removed and there are ten known examples of field-names suggestive of crosses and one place-name, Rescrowsa.

Surviving: 12(23)

Destroyed (known): 1 21092 Halwyn (cross-base)

Destroyed (population): c.21? Based on the 43% of the area already destroyed by the clay industry.

Further site location work: Close examination of hedges of "Cross" fields.

Chapel

Later medieval chapels were very common in Cornwall; as many as 600 suggested, mostly domestic oratories, usually not licenced for performance of mass (Adams 1957). Also, among other types, well chapels, hermitage chapels (as, perhaps, Roche Rock's chapel to St Michael). Very few survive making those that do, such as Roche Rock, particularly important. Likely that many domestic chapels were just rooms set aside for prayer within houses but it is known that discrete chapels existed at Treverbyn and Meledor. Of national importance if remains survive; otherwise county.

Estimated population: c.15? As most domestic chapels were not licenced we must expect several to have not been documented in medieval period.

Known: 6(9) The six definite sites include 19839 Roche Rock (St Michael's) and five others with documentary reference. Three more chapels are suggested by field-names.

Surviving: 6(9)

Destroyed (known): 0

Destroyed (population): c.6? Based on 43% of estimated population. Likely however to be an over-estimate as most chapels will be in medieval settlements, mainly in lowland areas so far relatively undisturbed by clay industry.

Historical river crossings

Include bridges, causeways and fords and obviously relate to roads, lanes and paths. Fords most common, with causeways and simple pack-horse or foot bridges (often clapper bridges) fairly rare. Well-constructed arched bridges were mainly on highways not on by-ways of our area although there is a 12th century reference to a bridge at Lavrean. Of county or local importance, unless physical remains survive, then of national importance.

Estimated population: c.75 Based on mapwork, following lanes and tracks to streams and rivers.

Known: c.75 No fieldwork undertaken but mapwork noted above allows the 75 to be regarded as known.

Surviving: c.56 Taken to mean that crossings have not been shifted or obliterated. (Most crossings will have been altered since medieval times by construction of simple bridges).

Destroyed (known): 19 These are the crossings (not in gazetteers) shifted or obliterated by clay industry. At or near: Garkar, Rosevean, Molinnis, Rosevear, Lansalson, Ruddle, Newton, Gunheath, Gum, Gover, Goonamarth, Dubbers, Cleers, Gurrian, Goonamarris, Treviscoe, Meledor, Kernick and Retew.

Roads, lanes and paths

Pattern of highways, lanes and paths shaped by topography and the distribution of settlements they served. Paths and lanes possibly confined to one hamlet, connecting settlements to fields and pastures, or they may have run on through other hamlets to the church or higher moors, becoming thoroughfares. Others were proper highways connecting towns, fairs, ports and villages. Most were capable of taking wheeled transport (revealed by widths of medieval bridges).

Lanes usually sinuous, following shapes of fields they skirted and valleys they ran along, but were straighter as they crossed open downs and lowland marshes. These would have been open but lanes through arable fields and meadows would have been hedged in. Of county importance.

Estimated population: c.275

Comprising c.15 highways, c.60 local thoroughfares and c.200 local lanes, paths etc. Likely to be underestimates on all counts, being based on early modern maps.

Known: c.275 As above.

Surviving: c.250 Most lanes survive to some extent but many have been cut and made redundant by clayworkings. Others have been partially re-routed. Some highways (not in gazetteers) have been altered by the clay industry to some extent:

Lockengate, Carthew, St Austell
Roche, Carnsmerry (Bugle), Penwithick, St Austell
Roche, Luxulyan
St Stephen, St Dennis
Fraddon, Retew, St Dennis
Indian Queens, St Stephen
Roche, Greensplat, St Austell
High Street, Nanpean, St Dennis
Treviscoe, Roche

Destroyed: 25(48) These are short local lanes, mainly in the areas of Melbur, Blackpool, Wh. Remfrey, Goonbarrow, Rocks, Gunheath, Wh. Martyn, Goonvean and Treviscoe clay pits.

A number of local thoroughfares (23) have also been made completely redundant and thus effectively destroyed by clay pits or dumps cutting them. Most have not been replaced.

Later-medieval houses

At the very end of the period some peasant farmers began replacing long-houses with dwellings built solely for humans. Some were quite substantial two-storeyed structures and a few survive in Cornwall, usually out-houses now but occasionally still lived in. One of the finest of the latter is the late 15th century hall-house at Methrose, Luxulyan. There are also a number of worked stones, re-used in later dwellings and barns, which betray the former existence of relatively grand yeoman farmers' houses of the latest medieval or early post-medieval period. Of national importance when all or part of the structure survives; otherwise of county or local importance.

Estimated population: c.100

Known: 1(7) Methrose (5049.1) the only known extant later medieval house but six other sites have shaped stones re-used in later buildings (not in gazetteer): 20871 Trevear, 27759 Lower Menadue, 20853 Tregascoe, 20184 Tretharrup (S), 27757 Lavrean smithy, 20043 Knightor.

Surviving: 1(7) Other traces likely to be discovered when more buildings are subjected to closer examination.

Destroyed (known): 0

Destroyed (population): c.43? Based on the 43% destruction of the area. Likely to be an over-estimate as most would have been in lowlands, away from centres of clay industry.

Further site location work: Detailed examination of standing buildings.

6.2.4 Medieval tinning

Alluvial streamworks

Exploiting tin (detached from lodes, subjected to weathering, and transported to valley bottoms where it had been sorted by alluvial action, alluvial streamworks are found alongside running streams. Sites often extremely boggy, the works themselves having impeded natural drainage. Water encouraged by streamers to run through the exposed deposits, often in cuttings through 5 to 10m of overburden, to separate heavy tin from other lighter minerals.

Remains of streamworks visible at surface will contain patterns of dumps of stent, the waste, including stones, thrown aside from tyes, the cuttings or working areas. Will also be water channels, some for drainage, lower than the tyes and usually marshy now, and some for diverting stream and

feeding water from it in leats to the tyes. Ancillary features will include tinners' shelters and stores, tracks and reservoirs.

Several different types of alluvial streamwork, hatchworks, cuesta works and parallel works have been recently identified by Sandy Gerrard (1987). No apparent chronological basis to this classification; variability more likely a function of depth of overburden and extent to which working was systematic.

Alluvial streamworks probably also created in Bronze Age, Iron Age, Romano-British and early medieval periods but most which survive as earthworks will be later medieval and post-medieval. Some in Criggan, Molinnis, Lavrean, Lestoon area known to have been worked in 20th century. Detailed survey of earthworks usually allows later workings to be separated from earlier ones. Has not been possible to classify sites in the area according to Gerrard's types; this requires further survey. Those streamworks which can be identified as medieval (or earlier) will be of national importance. Otherwise county or local importance.

Estimated population: c.35 Often difficult to separate out individual workings along a river as they run into each other. Estimate based on assumption that all streams will have contained alluvial deposits and would have been worked, however successfully, in later medieval boom.

Known: 17 Based on fieldwork, aerial photography and early 19th century maps. A "known" site has visible earthworks. Some valleys have deep layers of peat which may obscure alluvial streamworks.

Surviving: 14

Destroyed (known): 3 27461 Cleers, 27466 Kerrow Moor, 27467 Rosevean. Further detailed study of early aerial photographs and 19th century maps will probably reveal more destroyed sites.

Destroyed (population): c.15 Based on the 43% figure for the area already destroyed by the clay industry.

Further site location work: Detailed examination of wooded valleys; examination of early aerial photographs.

Eluvial streamworks

These streamworks exploited deposits of tin detached from the lode and exposed to weathering but not sorted by alluvial action. This, then, is the same material sought in dry **shode workings.**

Eluvial streamworks have many features in common with **alluvial streamworks** (cuttings, dumps of stent, tyes, drainage channels, leats, reservoirs, tinners' shelters etc) but are distinguished by their location, away from valley bottoms and by being less waterlogged and thus less overwhelmed by peat; their features (especially cuttings and dumps) are much clearer. Also have more extensive leat and reservoir systems as water had to be brought to them, often over considerable distances, and used carefully.

Sandy Gerrard (1986) has classified eluvial streamworks into those with few dumps, with straight linear dumps parallel to the cutting's sides, with curving dumps, and with straight linear dumps angled to the cutting's sides. The dumps formed one side of the tye through which water was brought to separate tin from waste. Variety appears to be a function of gradient and tinners' attempts to create a "critical work area gradient", by angling tyes, at which lighter wastes were removed by water to leave the heavier tin behind (Gerrard 1986).

Cuttings are linear but sinuous and vary from as little as 0.5m to as much as 4.0m deep.

Eluvial working in the modern period appears to have been relatively small-scale, compared with alluvial streamworking, and probably caused significantly less damage to earlier (medieval) sites. Many were, however, re-worked by earliest china-clay ventures using fairly similar methods (see "stream-and-strake" in section 3.9). Also in vulnerable locations, on slopes of higher ground, areas most heavily worked by modern clay industry.

Some sites, however, are extremely well-preserved and are of the greatest value as rare monuments to medieval extractive industry; of national importance.

Estimated population: c.40

Known: 19 Based on fieldwork, aerial photographs and early modern maps.

Surviving: 12 Include 27814 Hensbarrow Downs (one of the best preserved sites in Cornwall).

Destroyed (known): 7 27462 Carrancarrow, 31010 Currian Vale, 31011 Dubbers, 31015 Longstone Downs, 27640 Higher Goonamarth, 31018 Alviggan, 31020 Burngullow Common. Further detailed study of early aerial photographs and 19th century maps will probably reveal more destroyed sites.

Destroyed (population): c.17 Based on the 43% figure for the area already destroyed by the clay industry.

Further site location work: Detailed examination of early aerial photographs.

Shode-works

Where water could not be collected and used to work a deposit of shode (tin ore detached from the lode by weathering) in an eluvial streamworks, for instance on hill tops and on flat land, the deposit would have been dug over, creating a "shambles" of overlapping small, subrectangular pits.

Once excavated the shode would be taken downslope to be dressed where water was available (Gerrard 1986, 234).

Shode works are often found in direct association with eluvial streamworks, usually at their upper end, higher than the point where water could easily be brought.

As they are geographically confined, shode works are relatively rare. They are generally regarded as being later medieval or early post-medieval in date. Well-preserved examples will be of national importance; otherwise county or local.

Estimated population: 25

Known: 18 (Many have shode pits intermixed with **prospecting** and **lode-back** pits and so will be repeated under those monument classes).

Surviving: 18

Destroyed (known): 0 Some shode workings may have been included in the 6 areas of destroyed surface working noted under **General surface working**.

Destroyed (population): c.7 Based on estimated population.

Further site location work: Detailed investigation of relict moorland; detailed examination of early aerial photographs.

Openwork

Among the earliest methods of mining the tin lode itself was opencast in narrow cuttings sometimes called beams or coffins. Some cuttings have vertical or steeply sloping faces on all four sides but more were cut into hill sides, enabling ore and spoil to be removed downhill (rather than pulled up out of the pit) and also easing drainage problems. Openworks were still being cut in the 19th and even 20th centuries but most will be early post-medieval or later medieval, possibly going back as far as the 13th century (Rose and Herring 1990, 342). Most later openworks were quite sophisticated with shafts and adits cut into sides and floors and tramways, engine-houses and sometimes dressing (processing) floors arranged within them. Medieval openworks will be of national importance; otherwise county or local.

Estimated population: c.12

Known: 6

Surviving: 3

Destroyed (known): 3

31005 Carnsmerry, 31006 Carnsmerry, 20455 Carclaze Downs. The last was an enormous pit, over a mile in circumference, and working many closely-packed lodes, later re-used for china-clay working.

Destroyed (population): c.5?

Further site location work: Detailed investigation of wooded valleys.

Lode-back works

Primitive shafts, with drives underground along lodes. Usually only sunk down to the water table although sometimes crude pumping devices were used to drain deeper pits. Usually found less than 10m apart along line of lode and either circular or ovoid and up to c.8.0m across, c.6.0m deep. Spoil heaps can reach c.3.5m high.

Generally thought to have been first sunk in the later medieval period (from the late 13th century) but probably not common until the 15th and 16th centuries when shode and alluvial deposits of tin were becoming more expensive to work. Well preserved examples will be of national importance; otherwise county or local.

Estimated population: c.25 sites.

Known: 15 Many of these have lode-back pits intermixed with **shode** and **prospecting** pits and so will be repeated under those monument classes.

Surviving; 15

Destroyed (population): c.10 Based on the estimated population.

Further site location work: Detailed investigation of relict moorland.

Prospecting pit

Small sub-rectangular or, occasionally, circular pits dug by miners searching either for parent lode or shode, or both. Survive, usually overgrown, as pits up to c.2.5m across and c.1.3m deep with downhill crescentic heaps of spoil to c.1.3m high. Usually in untidy lines running counter to usual lode line.

Associated with various forms of mining from medieval streamworks and early lode mining (openworks and lode-back pits) to modern shaft mining although the latter made good use of subterranean prospecting methods (digging cross-courses or drilling bore-holes). Occasionally found in isolation, presumably because they failed to locate workable lodes or deposits.

Prospecting pits were also probably used by china-clay works to find good kaolinized granite. In these, and in many mines, the exploitation of the material found usually completely obliterated the prospecting pits. Importance will depend on the nature of associations; prospecting pits with well-preserved medieval (or earlier) mines or streamworks, for instance, will be of national importance. Otherwise county or local.

Estimated population: c.40 sites

Known: 15 Others will be among the **general surface working sites**.

Surviving: 15

Destroyed (population): c.25? Based on estimated population.

Further site location work: Detailed investigation of relict moorland.

General surface mining

A number of areas of surface mining visible on aerial photographs but now destroyed are dealt with here under a general heading. These will have included some or all of the monument classes **shode works, lode-back works** and **prospecting pits**.

Destroyed (known): 7

27891 Penhale, 31019 Alviggan, 27463 Hensbarrow Downs, 27468 Carluddon, 27464 Hensbarrow Downs, 27459 Trenance Downs, 27465 Caerloggas Downs.

6.2.5 Post-medieval Settlement and Farming

Settlement

Post-medieval **settlements** have been broken into three separate categories, **farm** (including farming hamlet), **small farm** and **cottage**, to allow the background and typical components of each to be discussed separately as each is the product of quite different social and economic processes.

Farm

Includes groups of farms clustered into small hamlets, usually with medieval origins, but most farming settlements are single, isolated farmsteads. That post-medieval farms were built on marginal land is confirmed by the pattern of destruction by the clay industry, itself centred on the uplands. Just 23 (17.5%) of the 132 known medieval farming settlements have been destroyed by the industry while no less than 49 (44%) of the 112 post-medieval farms have.

A typical farm will have a fairly substantial **dwelling**, and a yard with several buildings, sometimes arranged around a courtyard but usually grouped around an irregular yard. Other enclosures include gardens, mowhays or rickyards and folds. The various buildings and other farmyard structures are considered separately (below). Most farms have several basic buildings: **barn, shippon, piggery, cartshed** or **linhay**. Presence of others was determined by wealth and sometimes specialisation: **horse engines** or **water-wheels**, sources of power for a farm's machinery, **dairy, smithy, goosehole, hull** (subterranean cold-store), **bee-bole, pigeon-holes** etc.

Most working farms have been modernised to some extent but the vernacular architecture of the area is remarkably well-preserved.

Very few (8) barns have been converted to dwellings or domestic accommodation and it is likely that the clay industry itself has had a significant benign effect in preserving historic farm buildings. Clay companies have no interest in converting buildings they own to accommodation and only those farms at the very edges of the winning and working area can feel secure enough to invest large amounts of money in modernising farm buildings.

Each farm is different and each is a rich storehouse of material information about agricultural, social and economic history. Farm buildings are often the last examples of local vernacular architecture in a region and the loss of any is regretted. The study area has, at present, an enviably fine array of such buildings. It should also be noted that many farms will conceal below-ground evidence of medieval and even prehistoric settlements. Those with medieval origins will be of national or county importance.

Estimated population: c.250 A cut-off date was imposed: 1880, the date of the first large-scale OS map, and the period when farm buildings and dwellings became standardised and lost much of their historical value. Unlikely that many post-medieval farms will have left no trace in maps or documents so just 6 have been added to the 244 known farms. (Island Settlements have not been included).

Known: 244

Surviving: 171 Contain no less than 912 stone-built, pre-1880 buildings:

206 dwellings (including 48 cottages)	
189 barns	109 animal houses (shippons and stables)
121 outhouses	62 piggeries
28 domestic outhouses	116 cartsheds
24 linhays	37 privies
10 dairies	3 smithies
3 gooseholes	2 hulls
1 kennel	1 crow

Destroyed (known): 73 This is 29.92% of the total known and 42.69% of the number surviving. Using the last figure we can suggest that approximately 389 buildings will have been destroyed.

Small Farm

Settlements on smallholdings (5 to 10 acres), an essentially post-medieval phenomenon, their history inextricably interwoven with that of china clay working. Just 13 other small farms can confidently be dated to before 1748 (Martyn's map). The other 157 were created in the 132 years between 1748 and 1880, most in the first half of the 19th century when the clay industry was establishing itself and required a permanent workforce. Small farms were occupied by clay workers, tin miners and farm labourers.

A typical small farm would have a modest **dwelling**, plus two or three small farm buildings arranged around a yard. Most had a **barn** (with shippon/stable under) and one or two **outhouses**, multipurpose small sheds used as piggeries, calf-sheds and stores. Other buildings recorded on small farms include **shippons, piggeries, cartsheds** and **domestic outhouses**.

Comments on value of surviving buildings and nature of threats to them made in entry for farm (above) equally relevant here. Of county or local importance.

Estimated population: c.175 Same 1880 cut-off date as for farm. Island Settlements not included.

Known: 170

Surviving: 89 These contain 214 stone-built, pre 1880 buildings: 96 houses, 25 barns, 7 shippons, 58 outhouses, 17 piggeries, 11 cartsheds.

Destroyed (known): 81 47.6% of total known and 91% of number surviving. Using the last figure, can suggest approximately 194 buildings will have been destroyed. The high figure, nearly half of all known small farms, is due to their being located mainly in the same marginal upland areas as the clay industry.

Cottage

Concentrated in areas which saw most early clay working activity are cottages, either isolated or in small groups, often with large gardens and sometimes an acre or so of land with one or two small agricultural buildings and accommodating families of clayworkers, tinners and farm labourers. Most are 19th century although 40 sites are recorded on 1805 1st edition 1 inch map. Between 1805 and 1880 another 172 sites were created. There are also many cottages within larger settlements, farms and small farms (48 and 32 respectively), not included in the statistics, which mainly housed agricultural workers' families although some will have also been used by clayworkers and tinners.

Cottages are often grouped together either in terraces or in very tight clusters. There are also a number of loose settlements with several cottages 20 to 100 yards apart and small villages of cottages, some on the sites of medieval farming hamlets. Perhaps most surprising is the terrace of mid-19th century eight back-to-backs at Carvear Moor (27632). A few of county importance, most of local importance.

Estimated population: c.220 Cut off date 1880. Island Settlements not included.

Known: 214

Surviving: 139 Contain 231 cottages, 26 outhouses, 1 cartshed, 3 loos and 1 goosehole.

Destroyed (known): 79 37% of total known. Lower destruction rate than small farm because many cottages were built towards edges of area, away from pits and dumps, while small farms were forced to be where remaining unenclosed land was, in the heart of clay-working country.

House

Covers all standing dwellings within **farm, small farm** and **cottage**. With the exception of Methrose hall-house, all are post-medieval and few are earlier than mid-17th century. Most are later 18th or 19th century. Most are two-storeyed; exceptions being four single-storeyed cabins and two three-storeyed large farm-houses (at Knightor and Bojea). Most are stone although some (18 recorded so far), are partially cob (usually first floor only). Only one house has a thatched roof (Enniscaven, 27424) and most were built to take slate roofs (usually rag slates originally although many now have cut slate and some have asbestos, either "slates" or corrugated sheets). A few houses have slate cladding on their walls, an apparently late 18th or early 19th century feature.

The later 16th and early 17th centuries saw many farmers replace their medieval long-houses and hall-houses, usually single-storeyed, with relatively impressive two-storeyed houses with more specialised rooms. Most incorporated various forms of decoration, mouldings and mullions. Excellent examples of houses of this period survive in our area, notably at Methrose (5049), Meledor (20858) and Trevear (20871) and on many other sites stones have been re-used in later houses or buildings.

The late 17th century Classical Revival in public architecture influenced the vernacular producing houses with strictly rather than roughly symmetrical facades.

The nature of smaller houses of the early post-medieval period (16th and 17th centuries), the cottages and houses of humbler farmers and farm and industrial workers, is still largely unknown. The lack of closely dateable features in simpler dwellings makes it possible that some with asymmetrical facades could date back into the 17th century, houses such as that at Enniscaven (27424) or those at Hendra (27405), Pentivale (19970) and Gray (27655). In the 18th and 19th centuries differences between farmhouses and ordinary cottages lessen and the two are distinguished mainly by size and finish. Most houses were still one room deep with gable end chimneys, often with massive buttress stacks at least up to c.1850 when integral brick chimneys became virtually universal. A few larger houses were two rooms deep to two storeys, as at Higher Menadew (27743) but some cottages were also built two rooms deep (eg 27949 Goonamarris). Facades were perfectly symmetrical except in the smallest cottages and in the chall-houses which had two-storeyed barns either attached or of one build under the same roof-line as the house (32 examples recorded in the study area).

An unusual dwelling, possibly of considerable importance for understanding the history of the poorest peoples' homes, is the cabin, the single storeyed dwelling familiar in Ireland and the Scottish highlands. The four recorded are all pre-1840; that at Little Resugga (27775) may be pre-1805. All had simple 2-room plans, their roof-spaces used as sleeping and storage lofts.

Although house design from the early 18th century was moving towards standardisation, local traditions and fashions were still important. Segmented lintels were restricted to the south and west of our area while two-storeyed cupboard outshuts were confined to smaller houses of the north and east, two virtually complementary distributions divided by the upland massif.

Many houses have projecting oven surrounds (52 were noted), usually attached to buttress chimney stacks, which contained small cloam or stone-built bread ovens. A high proportion of houses retain 18th and 19th century sash and casement windows and some their original doors. Interiors were not inspected but it may be expected that these too will often be relatively unmodernised, retaining original features like fireplaces, built-in cupboards, subdividing walls etc. 16th and 17th century houses in good condition will be of national importance. Most others will be of local rather than county importance.

Estimated population: c.880 Cut off date 1880. Based on ratios of dwellings to surviving **farms** (1.2:1), **small farms** (1.08:1) and **cottage** settlements (1.66:1). If the same on the 73 farms, 81 small farms and 79 cottage settlements destroyed 306 dwellings would have been destroyed. Add 533 for surviving dwellings and c.41 to cover those dwellings not recorded on this survey to reach 880.

Surviving: 533 Of these 206 were on **farms**, 96 on **small farms** and 231 on **cottage** settlements. 10 houses largely or wholly 16th or 17th century:

20858 Meledor	5049 Methrose (Tudor wing)
20871 Trevear	20201 Resugga
27710 Bodwen	27424 Enniscaven
27655 Gray	20184 Tretharrup (S)
19970 Pentivale	27743 Higher Menadew (now a barn)

Another 23 sites contain shaped stones from houses of this period and 17th century datestones, all re-positioned, were recorded at 20001 Carbis Mill (1681), 20186 Carbean (1656), 20043 Knightor (1623).

Of the later houses (18th and 19th centuries) there were four single-storeyed cabins and 32 chall houses. One house, Penrice (27919) at Karslake has three round buttress chimneys, the only ones recorded in the area (see Weaver 1967).

Destroyed (estimated): c.306 A calculated figure based on the 1.2:1 ratio of houses to **farms** (yielding 88 dwellings on the 73 destroyed farms), the 1.08:1 ratio of houses to **small farms** (87

dwellings on 81 destroyed small farms) and the 1.66:1 ratio of dwellings to **cottage** settlements (131 dwellings on 79 destroyed cottage settlements).

Further site location work: Early houses, or fragments of them will survive in old buildings in farmyards.

Barn

For this survey a barn was defined as a two-storeyed building with a first floor threshing floor and hay loft. Beneath was usually a shippon (cows-house) and/or a stable with, in many cases, also a cartshed. Although these are strictly shippons or stables (depending on the dominant ground floor function) the word barn is used because most farmers referred to them as such and because it was necessary to distinguish two-storeyed buildings from shippons and stables with no loft over.

Traditional ground floor barns do not exist in the study area and are rare in Cornwall. Considerable variety in age, size and form (including bank-barns and chall-houses). Most are 18th or 19th century. The dominant buildings in most farmyards, barns were often carefully designed to look attractive and impressive. Some had symmetrical facades; door and window surrounds were usually well-finished. Roofs are usually gabled but some are hipped or half-hipped. Original roofing material is generally rag-slate. A few barns were partly built with cob. Many barns retain old slatted and hepsed doors and part-glazed, part-slatted windows. The rear first floor door is usually reached by a flight of external granite steps or by a ramp. Ventilation slits are often provided for ground floor animal houses and old wooden stalls survive in some barns.

Pigeon holes (see below, **farmyard features**) are built into the walls of many barns. Several barns retain traces of original power sources by which various late 18th and 19th century crop-processing machines were operated (see **waterwheel** and **horse engine**).

Very few barns have been converted to dwellings compared with the rest of Cornwall; only 8 out of the 214 noted.

Most will be of county or local importance.

Estimated population: c.350 Surviving in 1880. This figure is based on the assumption that ratios of barns to **farms** (1.1:1) and **small farms** (0.28:1) was the same in the 73 destroyed **farms** and 81 destroyed **small farms**. This yields, with the 214 surviving barns, a total of 318 to which has been added 32 to cover barns which escaped recording on this survey.

Known: 214 Of these 189 were on **farms** and 25 on **small farms**. They include at least 27 bank-barns and 32 chall-houses.

Destroyed (known): c.104 A calculated figure (see estimated population, above).

Shippon (cow's house)

Distinguished from **barn** through being a single-storeyed animal house with relatively low and narrow doors (compared with **stable**). Term shippon a Devon and East Cornwall one. The ground floors of the 214 barns also incorporated shippons and many **farms** and **small farms** had no separate shippons; most common on more substantial farms with larger herds of cattle. Shippons were usually attached to barns, sometimes as wings of formal courtyards but were generally not as well finished as barns. Several had cartsheds built at one end, under the same roof. Slatted doors and windows, ventilation slits, old wooden feeding ways and stalls and cobbled or paved floors survive on and in many shippons. Most are 18th or 19th century. Of county or local importance.

Estimated population: c.185 Surviving in 1880. Based on ratios of shippons to surviving **farms** (0.61:1) and **small farms** (0.08:1). Suggests 51 shippons destroyed on the 73 farms and 81 small farms destroyed. Add 111 for surviving shippons and c.23 for shippons not recorded on this survey.

Known: 111 104 on **farms** and 7 on **small farms**.

Destroyed (known): c.51 A calculated figure (see estimated population, above).

Stable

Most stables were incorporated into ground floors of **barns**. Distinguished from **shippons** through having higher and wider doors and higher ceilings. Of county or local importance.

Estimated population: c.6

Known: 4

Surviving: 4

Piggery

Small specially built piggeries were found on many farms. Pigs were useful consumers of left-overs from the house and, on dairy farms, the whey and skimmed milk left over from making butter, cream and cheese. They turned waste into fat, meat and (when sold) money. It may be assumed that pigs were kept on all farms; where no piggery or pigsty existed they would shelter in corners of the yard or in with calves and even the milking cattle (Peters 1981, 72).

The piggeries recorded were single-storeyed buildings, sometimes with hipped roofs (usually rag slate originally), with, along one long wall, several fairly narrow doors each serving a separate compartment, defined by low granite walls. Of county or local importance.

Estimated population: c.140 Surviving in 1880. Based on ratios of piggeries to surviving **farms** (0.36:1) and **small farms** (0.19:1). c.41 piggeries would have been destroyed on the 73 destroyed farms and 81 destroyed small farms. Add 79 for surviving piggeries and c.20 to cover those not recorded on this survey.

Known: 79 62 on **farms** and 17 on **small farms**.

Destroyed (known): c.41 A calculated figure (see estimated population, above)

Cartshed

Single-storeyed buildings housing horse-drawn implements, waggons, carts, gigs etc. Distinguished from linhays. Usually located towards the peripheries of farms. Most had gabled rag slate roofs, the open gables usually infilled with planked timber and the roof-spaces used as storage lofts. Keeping-places, rectangular holes with small lintels over, often built into interior wall-faces. Of county or local importance.

Estimated population: c.210 Surviving in 1880. Based on ratio of cartsheds to surviving **farms** (0.68:1) and **small farms** (0.12:1). c.60 cartsheds would have been destroyed on the 73 farms and 81 small farms destroyed. Add 128 for surviving cartsheds and c.22 for those not recorded on this survey.

Known: 128 116 on **farms**, 11 on **small farms** and 1 with a cottage.

Destroyed (known): c.60 A calculated figure (see estimated population, above).

Linhay

Cart sheds with one long side open and with several bays (c.3m wide) separated at their entrances by piers, usually single granite posts. Technically cartsheds but term linhay still used in east Cornwall and noted in 1811 (Worgan, 25). Most linhays recorded have three bays although several have had at least one opening blocked up and have been re-used as loose litters. Of county or local importance.

Estimated population: c.40 Surviving in 1880. Based on ratio of linhays to surviving **farms** (0.14:1). If the same on the 73 destroyed farms 10 would have been destroyed. Add 24 for surviving linhays and c.6 for those not recorded on this survey.

Known: 24 All on **farms**.

Destroyed (known): c.10 A calculated figure (see estimated population, above).

Horse Engine (farm)

In the late 18th century and early 19th century threshing machines and various other machines (winnowers, graders, grinders, chaff-cutters, root cutters etc) were invented. Most have now gone and we see them archaeologically through the two principal sources of motive power, horse engine and **water-wheel**.

Traces of two types of horse engine survive in the area; the earliest (late 18th century) in round houses had overhead gearing; the later (from c.1840), the sweep, usually cast-iron with horses stepping over the drive shaft were usually not roofed over. Traces can be slight, a drive-hole, a curved indent in a wall, or extensive, a round house or parts of the machine itself, as at Trevanion (20834.1) and Treskilling (20183.1). Well preserved engines will be of national importance, otherwise county or local.

Estimated population: c.30 May well be an underestimate.

Known: 11

Destroyed (known): 0

Destroyed(population): c.9 Based on the 30% of **farms** destroyed.

Water-wheel (farm)

Waterwheels were usually erected in stone-lined pits immediately adjacent to barns. Once common throughout Cornwall but now rare and the three surviving examples in the study area are of some importance; that at Coldvreath Mill (19833.1) still operates a belt-driven grinder. Most waterwheels have either been scrapped or have rotted away; usually leaving only the course of the leat, perhaps a dried-out millpool and the wheel-pit. Wheels tended to be relatively small, less than 5m diameter and were often partly or wholly cast-iron, made by local foundries.

Estimated population: c.12

Known: 9

Surviving: 9 These include three intact waterwheels, all in good condition:

20853.1 Tregascoe (wheelpit now roofed over to protect the wheel). Drivewheel survives.
20016.1 Carthew; drivewheel also survives.
19833.1 Coldvreath Mill; grinder and millpool survive.

Farmyard features

This survey was not able to study each farmstead thoroughly, only c.20 minutes (on average) being spent at each site, and many details, agricultural artefacts of the last two or three centuries, will not have been recorded. Those that were, the mounting blocks, the beautifully carved troughs, discarded tools and implements, disused pigeon holes in barn walls etc, were found incidentally as a farm's principal buildings were noted. Such details, do, however, have considerable historical value, especially when they can still be related to the farmyard and farming practices. Most will be of county or local importance although exceptionally well-preserved features may be of national importance.

As these features were not systematically recorded they are presented here without full statistics. Further site location work will clearly involve systematic inspection of all surviving farmsteads.

Rick platform

Most farms had rick-yards or mowhays, small enclosures with stock-proof hedges, in which hay, corn and bedding (bracken) were stored in ricks or stacks on low stone platforms, either circular or square. Two sites with rick platforms were recorded.

Staddle stone

Staddle stones or "stone mushrooms" were supports for ricks or wooden granaries, designed to keep vermin out. Most are of granite. No groups of staddle stones were recorded in their original positions.

As they are attractive stone features, many staddle stones have been moved into gardens or put on display at farm entrances. Staddle stones were recorded at 24 settlements.

Cider mill and cider press base

Among the pieces of worked granite now commonly displayed in gardens and at farm entrances are the roller stones, mill bases and press bases used in cider making. No cider mill or press was recorded intact but 4 mill bases, 2 cider-press bases and 1 roller stone were.

Cheese-press base

Stone cheese-press bases survive throughout Cornwall. Circular slabs of granite (c.0.4 to 0.7m diameter, c.0.15m thick) with a flat top and a groove cut just inside the circumference and two more at rightangles across the main surface, these have often been confused with medieval wheel-headed crosses (see Robertson and Gilbert 1979, 8). One example (Rosemellyn, 20170) recorded so far.

Beebole

Recesses built into walls and hedges to accommodate the straw skeps which were used from at least medieval times to house hives of honey bees. Most have squared openings but some are arched and some also have curved backs. Usually found in small groups built into south or east facing hedges and walls, near orchards and gardens and within farmsteads. Pre-date the introduction of moveable wooden frames, in c.1862. Carthew (20016.2) has possibly the finest beeboles in Cornwall, thirteen arched ones in two rows. Eight other sites have been recorded so far.

Goosehole

Square compartments built into the bases of hedges towards the peripheries of farmsteads. Seven sites recorded so far.

Kennel

Few farms had specially made kennels; only two recorded so far.

Crow

Multipurpose freestanding hut constructed entirely from stone and turf, covering a square or polygonal plan (rarely exceeding 2.5m across) defined by drystone walls and with a slightly corbelled roof, usually topped with slabs. The low entrance, defined by upright granite jambs or well-constructed heads had a wooden door, the only perishable feature. The single crow (Penhale 27887.1) recorded is the first example from this part of Cornwall.

Hull

Subterranean chambers, cold-stores, mainly rab-cut but sometimes with stone, even brick linings and entrances with stone jambs and lintels. Five examples recorded so far.

Well-house

Some wells retain their original "houses", the structures which kept out foreign bodies and which supported the winding mechanism used for lowering and raising the bucket. Three recorded so far.

Ten hand pumps were also recorded including 4 rare lead pumps and 1 long-case pump.

Tank

Superb products of local stoneworkers. Some formed from single pieces of granite, with remarkably thin walls; others are made from 5 sawn slates bolted together. Used to collect rainwater from roofs. So far 16 granite and 3 slate tanks recorded.

Mounting block

Small stone structures with flights of 3 or 4 steps leading to a level platform c.0.8m high from which people mounted horses. Four recorded so far.

Pigeon hole

Built near the tops of walls of barns. Each hole had a right-angled corner leading into a more sheltered inner compartment where the pigeon or dove made its rudimentary nest. Openings usually defined by small brick or granite jambs and lintels with single slates below for perches. Sometimes large numbers of holes in one building. Forty-six groups recorded on 29 farms so far.

Implement and tool

In the study area, where relatively few old farm buildings have been radically altered (see farm), a large number of tools and implements from the 19th and early 20th centuries also survive. These include ploughs, rollers and cultivators, seed drills, horse-drawn mowers, horse-drawn hay rakes, binders and scythes, waggons, tilt-carts, old wooden wheel-barrows and gurries. Implements for processing crops, fixed and driven by belts or drives from horse engines and waterwheels, were also found. These include several grinders and at Methrose (5049) a superb 19th century hand-driven winnowing-machine. Sack weighing- machines, hand-driven chaff-cutters and tool-sharpening grindstones were also found.

Corn Mill

Medieval and post-medieval water-powered mills were located in valleys; weirs on streams and rivers fed leats bringing water to over-shot wheels positioned beside sturdy and often substantial buildings in which miller and family lived beside or above the mill. One or more pairs of millstones were worked, via gears, by the water-wheel. In the 19th century many mills were rebuilt and enlarged but most will have had later medieval or even early medieval origins (see **mill** in 6.2.2). Medieval sites will be of national importance but most surface remains will be of local or county importance.

Estimated population: c.30

Known: 19(26) Includes 19 definite sites, 2 based on field-names and 5 inferred from presence of millstones.

Surviving: 14(21) 14 extant mill sites, in varying states of survival from simple "sites of" (Rocks and Treverbyn) to those retaining a water-wheel and some machinery (Carthew, Trethowel, Lavrean). Two sites are based on field-names and 5 on extant millstones.

Destroyed (known): 5 At Mellanvose (near Halwyn), Kernick, Drinnick, Retew and Trerice

Feed Mill

The use of concentrates (processed grains with minerals and other additives) and oilcake to feed stock, especially over winter, begun in the late 18th century, was not important in the South-West until the later 19th century when agricultural production intensified. Cornwall's mild winters, long grass-growing seasons and plentiful hay-ground meant that it also had less need for artificial food. By the early decades of this century there were many local feed mills grinding farmers' dredge crops and producing concentrates for resale. That at Treneague (20914) was operating by 1939 (Kelly's Directory). Of local importance.

Known: 1

Surviving: 1

Fulling Mill

Fulling mills, apparently invented in the late 12th century, enabled the Devon and Cornwall rural woollen and cloth industries to grow quickly, at the expense of the town-based eastern English cloth-makers. Fast-flowing streams powering mills and large areas of upland sheep grazing provided ideal conditions for the industry. Woven cloth was shrunk and felted (fulled) to increase density and strength. Previously done by trampling cloth in vats of water and fuller's earth, fulling mills operated wooden hammers raised and dropped onto the cloth. Fulled cloth was hung out to dry and stretched on tender frames before being teased and sheared. The South-Western wool industry continued into the late 18th and early 19th centuries when further mechanisation favoured other regions. The only fulling mill known in our study area, near Kernick at Trethosa Moor (20862), first recorded in 1372, was still working in 1840 (Henderson 1935, 207; St Stephen Tithe Map).

Estimated population: c.5 Other fulling mills will have existed in an upland area (with good grazing for sheep) with deep valleys suitable for mills.

Known: 1

Surviving: 0

Destroyed (known): 1 20862 Trethosa Moor (now beneath a mica dam).

Beacon

Bonfires, or more controlled fires, in braziers on poles, lit on prominent hills in post-medieval and early modern times to alert people to danger, to pass information across country quickly, to muster volunteers, and to celebrate certain traditional festivals. Most parishes had one including lesser hills like St Stephen's Beacon and St Mewan Beacon. Hensbarrow Beacon (on the barrow) visible over the whole of central Cornwall, was clearly a strategic beacon used by the military. Other hills which may well have been local beacons include Fraddon Down, Carn Grey, Caerloggas Downs, Trelavour Downs and St Dennis Hill.

Beacons leave few material remains; layers of charcoal, sometimes stone platforms. Their importance lies partly in their role in national history in the Tudor and Stuart periods and partly in the insights they allow into the ways local landscapes were perceived and used by the rural Cornish from much earlier times right down to the present. Beacon fires are still lit at Hensbarrow and on St Stephens Beacon each Midsummer. Of county or local importance.

Estimated population: c.8 Based on likely hills (see above)

Known: 3

Destroyed (population): 3 Of the likely sites, Caerloggas Downs, Fraddon Down and Trelavour Down have been buried by spoil heaps.

Merriment Hole

Small holes (less than 0.02m diameter, 0.04m deep) drilled into horizontal surfaces of rocks, usually natural tors. Some in groups but most often single. Used on feast days and other days of celebration; gunpowder was sprinkled into them and a trail or fuse laid to the holes. When lit the lighter retreated and the local populace enjoyed a loud bang. A peculiarly 19th century pleasure. Of local importance.

Estimated population: c.10 Limited by availability of natural tors.

Known: 2

Further site location work: All surviving tors to be inspected.

Inscribed stone

Apart from boundstones, milestones, memorials in graveyards and churches and the datestones found on buildings, post-medieval inscribed stones are unusual in Britain. That at Goonbarrow (20058), now erect but horizontal when found in 1883, is thus of some interest (see Iago 1885, 287-292). It has two pairs of letters, IC and either PO or RO, roughly inscribed, each pair facing a different direction and looking odd now the stone is vertical. They are probably initials of two people, perhaps lovers. Local folklore suggests that the stone commemorates an unknown soldier killed during the Civil War (pers comm, an old lady living at Gunheath, c.1 mile away). There is no record of a battle here although the date would fit the lettering style. Of county importance.

Surviving: 1

Culver House

Freestanding structures, usually circular, housing pigeons which, with their eggs and squabs, were a rare source of meat in medieval and early post-medieval times. Field-names reveal how common culver-houses were in rural Cornwall (over 175 recorded). Few structures, however, survive.

Estimated population: c.5

Known: 1

Surviving: 0

Destroyed (known): 1 Kernick (21089)

Malt-house

A substantial rectangular building shown on the 1840 St Enoder Tithe Map in the valley of the Fal below Retew, is recorded as "Malt-house" and was presumably a place for preparing and storing malt, a substance obtained by steeping, germinating and drying barley grain and used in brewing and vinegar-making. The Retew malt-house, located next to a river, may have also been used for beer-making; certainly its size suggests a commercial or industrial venture.

Estimated population: 1 Difficult to model the distribution of such an under-studied monument type. Presumably commercial beer-making factories were quite rare until the later 19th century, most beer, cider, mead etc being made on local farms.

Known: 1

Surviving: 0

Destroyed (known): 1 Retew (31023)

Wheelwright's Shop

At Newgate, near Lanjeth, is one of the best preserved wheelwright's shops in Cornwall. Used by local clay companies in the 19th and early 20th centuries (pers. comm. the owner) it retains many internal features, notably strong wooden benches and many patterns, planes, drawknives, chisels, etc. still hanging from pegs on the walls. There also appears to be part of a simple lathe and there is an associated cartshed to its rear. Other wheelwrights shops would have existed servicing both the clay industry (heavily dependent on the heavy wagons which rumbled down to south coast ports from Hensbarrow) and local farmers and tradesmen. Of county importance.

Estimated population: c.10

Known: 1

Surviving: 1

Ropewalk

Ropes were made by twisting material (hemp, sisal, flax etc) in long straight plots of ground, usually partly covered in. Ropemaking, for long a manual job (cords and ropes are preserved on some prehistoric sites), was rapidly mechanised in the 19th century. Rope-makers would, of course, have been most common in those areas where their product was in greatest demand: ship-building, clayworking, mining and quarrying all needed prodigious lengths of rope of varying thicknesses and types. Agriculture and other industries also required some. We should expect the industrialised region of Hensbarrow, with the clay ports to its south to have had several ropewalks, although most would have been in the towns and ports.

Estimated population: c.5

Known: 1 Lanjeth (20681), shown on 1839 Tithe Map.

Surviving: 0

Destroyed (known): 1

Tannery

Two field-names (at Penrose and Ashcombe) indicate the former existence of tanneries (both on the 1840 Tithe maps). Tannin, an astringent, acidic substance obtained from bruised oak bark was used in leather-making. Raw hide was converted into durable leather by soaking it in a liquid containing tannin. An unpleasant job as the hide was de-haired before tanning and arrived not "on the hoof"

and fresh but at least a couple of days dead. Tanneries and tanyards were usually on edges of towns or in the countryside, the effluent being as foul-smelling as the dead animals. Shipping, clayworking and mining required leather, as did increasing populations, and the late 18th century boom in leather-making led to the closure of small-scale tanneries and the opening of industrial-scale ones. Archaeologically a tannery should yield sheds, stone-lined tanning pits and hanging frame footings. These field-names will be of local importance.

Estimated population: c.5

Known: 2

Surviving: 2 As field-names but as the fields have not been destroyed traces may survive below ground level.

Destroyed (known): 0

Cooper's Shop

The clay industry needed casks by the thousand for exporting dried clay and although wood for staves was often imported (through Charlestown and other southern ports) the items themselves were made within the district. Coopers' shops which, with benches and large multi-paned windows, would be indistinguishable from wheelwrights' or carpenters' would be recognised through discarded or preserved tools. Some china-clay cask cooperages are recorded on OS maps or in documents. Barrels were also used by brewers and farmers and coopers also made pails, bins, churns, kegs etc. Stave-made buckets and barrels are known from at least the Roman period so we should expect coopers to have worked in our area for 2000 years. Of local importance.

Estimated population: c.8 Most will be china-clay cooperages of the last 250 years but rural cooperages should be expected in most larger hamlets (Roche, St Dennis, Trewoon, St Stephen etc).

Known: 3 Two are china-clay cooperages (Drinnick/Goonamarris and Little Treviscoe); the other, at Trewoon, may have had earlier origins.

Surviving: 2

Destroyed (known): 1 Drinnick/Goonamarris (19804)

Plain-an-gwary/Playing Place

The pleasures of organised sport and entertainment in rural Cornwall before the modern period appear to have centred on hurling and wrestling and on attendance at performances of gwaries, miracle plays. The latter were performed in circular enclosures, primitive amphitheatres with ranks of simple seats cut into embankments allowing an audience to look down on a central stage. This was theatre in the Round or the plain-an-gwary, the Cornish name for these earthworks which must have medieval origins although most were either destroyed or refurbished as they were re-used in post-medieval times. Hurling, a rumbustious game played over extensive areas of countryside (from village to village) left little archaeological trace but wrestling was more confined and required space for an audience. Wrestling rings, then, were often re-used plain-an-gwaries; in the medieval period they were probably used for both drama and fighting, the Cornish were renowned wrestlers from medieval times onwards. Of county importance.

Estimated population: 3 One in each of the three churchtowns.

Known: 2

Surviving: 2 That at St Stephen-in-Brannel (20873) is now built over but that at St Dennis (31054) is extant.

Smithy

Smithies, or blacksmith's shops, were scattered throughout the countryside. There was enough work from local farmers, gentlefolk and traders for at least one in each hamlet or beside each major highway. Rural blacksmiths were often also farriers, although their main skill was in working iron or "blackmetal", fashioning it to make tools and machinery for farmers and for other local craftsmen and women. Smithies were usually single-storeyed buildings with one broad door (wide and high

enough for a cart-horse) and multi-paned windows. Within was a forge, an open fire on a raised platform with a hood or canopy over (feeding into a chimney) and with a controlled draught supplied by bellows. Nearby, and usually not fixed, was the anvil. Benches and tool-racks lined most walls.

Like most rural crafts, smithies also existed in the medieval period but our current evidence for them is almost wholly confined to the 19th century. Many 19th century smithies will be on the sites of earlier ones, particularly those in churchtowns. Of local or county importance.

Estimated population: c.50

Known: 24 Based mainly on Tithe and early OS maps.

Surviving: 22 Not all were visited.

Destroyed (known): 2 These were at Retew and Scredda.

School

Until the late 19th century Education Acts set up elementary schools under local boards, there would have been minimal schooling for children in our district: a few Sunday Schools or "Dame Schools".

The first purpose-built schools appear on the 1st edition OS map of 1880. Substantially constructed buildings using shaped granite, with high gabled roofs and tall windows. Most were segregated, with separate wings for boys and girls, and there were playgrounds with outdoor toilets. In recent years many late 19th century schools have been closed, some (like Lanjeth) being re-used as dwellings. A few new ones have been built as local primary education has been rationalised. Those closed now include Carthew, Trethurgy, Meledor (destroyed), Trethosa and Lanjeth. Of local importance.

Estimated population: c.40 Number of Dame Schools and other pre-1870 schools difficult to determine. May have been no greater than 20 in the whole area and most would be dwelling houses. The 18 schools recorded on late 19th and 20th century maps are likely to be the total of "National" schools.

Known: 18

Surviving: 17 Some are virtually unrecognisable as former schools.

Destroyed (known): 1 Meledor (33110)

Bound-stone

Positioned along certain boundaries (parishes, estates, holdings, commons etc) are small upright granite stones, some roughly dressed, others carefully shaped. Letters and/or numbers are inscribed on most and their styles can be used to date most bound-stones to the 18th and 19th centuries. Few are higher than c.0.6m. Bound-stones are fairly well recorded on OS maps and were not systematically visited on this survey. There are stones along the following parish boundaries: Roche/Luxulyan, St Stephen/St Dennis, St Stephen/St Mewan and St Stephen/St Austell. Other boundaries will be mainly defining estates. Of local importance.

Estimated population: c.25 groups. Assumes c.5 sets will have slipped past the Ordnance surveyors' eyes

Known: 20 groups

Surviving: 14 Comprising the 4 parish boundaries noted above plus lines of stones at: Hensbarrow Downs (x2), Carbis, Little Lavrean/Rescorla, Tregonning, Trenance Downs, Carnegga/Mena, Trelavour Downs, Trerank/Gilley, Caerloggas Downs.

Destroyed (known): 6 At: Longstone Downs, Carrancarrow, Gunheath, Carnsmerry, North Goonbarrow, Restowrack Downs.

Hollow-way

Trackways across open ground which have become gullies through intensive or long-term use. Deepest where they cross softer ground (peaty soil especially), steeper ground, and where

constrictions (gateways, hedges etc) funnel several into one. Usually, however, freedom of movement allowed a fan or an array of hollow-ways to develop (good example on northern slopes of Hensbarrow Downs). Usually made by people on horseback, herds and flocks of animals and teams of packhorses and donkeys. Few are wide and flat-bottomed enough to have been made or used by wheeled vehicles or sledges. They are most easily dated through their relationships with other features and most are later medieval or early post-medieval. Of county or local importance.

Known: 3 Hollow-ways were not systematically sought in this survey.

Methodist chapel

Society or Preaching Houses, like that at Tresayes, had been built from the 1750s. Small and simple, often built of cob and thatched, and with basic furniture, few of these early meeting houses survive in Cornwall and none, except one wall at Tresayes (27414), in our study area.

In the 19th century more substantial structures were built as the various Methodist Societies flourished. Dressed granite was used and tall arched windows were fitted. Roofs were of cut slate and internal fittings, pews, pulpits, galleries etc were well finished. Most chapels surviving in the area are from the second half of the century, some replacing earlier smaller ones, many of which were re-used as Sunday Schools. Most are still used for regular worship although one or two have been closed. That at Rosemelling is now a dwelling; Stenalees Wesleyan church has been demolished. Many are Listed Buildings. Of local importance.

Estimated population: c.35 One or two short-lived chapels, especially from the late 18th and early 19th centuries, may have slipped through the net of 19th and early 20th century maps.

Known: 31

Surviving: 28 Include 13 Bible Christian, 7 Wesleyan, 2 Primitive Methodist, 3 United Free Methodist and 3 other chapels.

Destroyed (known): 3 One by the clay industry at Gracca. The others at Stenalees and Molinnis were presumably demolished by the church members themselves.

6.2.6 China-Clay Industry

China-Clay Works

This group of sites covers all identifiable workings for china-clay within the study area which, from the map evidence (and fieldwork where they survive), appear to have been discrete entities and not merely part of some greater complex. This task of identification is in itself a difficult one, as there are only a small number of historical windows onto the geography of this rapidly-changing landscape; the Tithe Maps of ca 1840, and the OS surveys of 1880, 1906, and 1932. Many workings for china-clay are difficult to distinguish on the maps from china-stone quarries, and some openworks from the earlier period may in fact be for tin rather than clay.

The use of the term **china-clay works** in this appendix is used to include the immediate area concerned with the extraction of china-clay: the pit or openwork, the dumps and tips of waste material, and such processing plant as may be judged an integral part of this complex. It does not include processing areas, kilns and other plant remote from the site of extraction.

One aspect of the documentary research was an attempt to associate each working pit with its name, and this information has been used in the Gazetteer and is also recorded on the key 1:10,000 maps prepared for the industrial fieldwork. The inevitable uncertainty attached to any such assessment of this fluid landscape means that the true number of individual workings which has existed in the study area may well be greatly in excess of the figures given here. Barton (1966) details in her index 180 china-clay pits in the St Austell area; some of these, however, may well be the same pit under different ownerships, or a sub-division of a large pit into two ownerships or working areas.

Where the site includes a well preserved range of features, of national importance. Otherwise, of county or local importance.

Estimated Population: 150 Taken as an estimated figure between Barton's total and the cartographic evidence.

Known: 113 (pre-1939) Taken from a study of the maps detailed above.

Surviving: 57 (50%) These were inactive workings at the date of the study fieldwork (1989/90); some are in use as water reservoirs for active pits, but in all cases are identifiable pre-1939 extraction sites.

Air Drying Pan (groups)

The processing of china-clay was a relatively unsophisticated process during the first 100 years of the industry on Hensbarrow (see section 3.6). Clay was allowed to dry naturally in open-air lagoons or pans, and then stacked in open-sided air-drys to further de-water. The air-drying sheds themselves were insubstantial structures and would have left little trace, but the pans survive in some locations; being of relatively early date they are of special significance to the history of the industry.

This method of air-drying was in use from the very earliest days of the industry, and although rapidly superseded by the coal-fired pan-kiln lingered on in some locations until the 1920s.

Examples of this class are found only in Cornwall as far as is known; therefore, of national importance where well-preserved; otherwise, of county or local importance.

Estimated Population: not assessed. The cartographic evidence is insufficient to establish a total, as by the date of the first detailed OS maps (1880) the pan-kiln had already replaced the air-dry on most pits.

Known: 20 (groups)

Surviving: 7 (groups)(35%) The few survivors of this once ubiquitous type are often hidden in the most overgrown and inaccessible parts of the study area; it is therefore by no means certain that all have been identified during the course of the project. Of those that have been located, Wheal Prosper (27091.1), Gover Valley (27112), and Trembear (20450) are particularly well-preserved. Carne Stents (27110) may have great potential, but is so thickly vegetated that an assessment was impossible.

Mica Drag (and associated Settling Pits)

A feature of china-clay works (the extractive sites) or located remotely as part of china-clay processing. Mica drags were an essential and very numerous feature of all clay works from the 1860s onwards, and display great variations in size and complexity. They are often found as part of a complex of settling pits, tanks, and pan-kilns, but may also be in locations remote from any of these features. The class in this section of the appendix includes individual mica drags, and also those found as part of a complex including round or rectangular settling pits; it does not include mica drags constructed as an integral part of a pan-kiln.

Later well-preserved complexes of national importance; otherwise of county or local importance.

Estimated Population: 150 (at least one for each china-clay pit)

Known: not assessed. Mica drags are difficult to identify from maps, although this might be possible with a thorough study of the 1:2500 OS for 1880 and 1906.

Surviving: 24 These sites range from the very small (Gover Valley, 27113) to large and complex sites of the later period (Trethosa, 21107.2). The last working mica drag is at Carbis (27092), and an example is preserved complete at the Wheal Martyn Museum (20021.4).

Settling Pit and Tank (groups not associated with kilns)

Settling pit and tank groups are found as part of a china-clay processing complex, often at a point where the clay stream was halted for primary de-watering before proceeding to kilns lower down slope or at a more remote location. The largest examples comprise stepped groups of multiple granite-built tanks in the Gover and Trenance Valleys.

Large groups are rare even within the study area, and should be regarded as of national importance; otherwise, of county or local importance.

Estimated Population: not assessed.

Known: not assessed. To arrive at figures for these categories would require a lengthy study of the 1:2500 Os maps for 1880 and 1906. Tanks and pits are difficult to distinguish on maps from other features such as mica drags, air pans, and unroofed kilns.

Surviving: 25 The largest groups are at Gover (27105) and Trethowel (20453.3).

Pan Kiln

The introduction of the coal-fired pan-kiln to the china-clay industry of the 1850s revolutionised the production of the mineral. For the first 100 years of their existence, the china-clay producers had been involved in a low-technology industry, which owed much to the ethos of traditional agriculture in its methods and organisation; production was seasonal, according to the exigencies of the wet Cornish weather, and the neatly thatched air-dries and stacking areas looked much like the hay-ricks and peat stacks from which they borrowed their form. Even the terminology in use, the two "gatherings" each year of the finished clay, was reminiscent of the language of agriculture or fishing.

The pan-kiln, although limited in its effect initially, was to initiate a change of attitude and concept in the industry which was by the end of the 19th century all-embracing. The production of clay had quintupled; over 100 separate clay companies were in existence; and the winning of china-clay had become an industrial process, independent of natural water sources, able to operate regardless of weather or even the hour of day.

Kilns, also known simply as "dries" in the St Austell area, became a familiar and integral part of the landscape, often situated many miles from the producing clay-pit. The asymmetric roof covering a squat profile, the use of natural stone and slate, and the punctuating stack made them a truly vernacular feature of the clay district.

The pan-kiln as a monument class is restricted to Devon and Cornwall, and although until recent times numerous (particularly in the study area) kilns are now threatened as redundant industrial structures for which there is no obvious or simple re-use. Where well preserved, examples of all types are of national importance; otherwise, of county or local importance.

Estimated Population: 200

Known: 162 Kilns are relatively easy to identify from maps, as their ground plan is distinctive. Some kilns were identified in the field which were not represented on any of the maps consulted. Because of the fluid nature of the landscape, others will have been destroyed without cartographic representation.

Surviving: 102 (63%) These have been provisionally divided into four phases representative of the technological evolution of the pan-kiln as a monument class, phase one being the earliest form and phase four the most recent. No surviving kilns of phase one were located; the one example known to survive until recent times (Truscott's Kiln at Parkandillack) was destroyed by the owners prior to this survey. Phase two kilns are rare, and should receive immediate protection. Examples exist at Gothers (19900.1), Wheal Rashleigh (27055), just outside the area, and Pentruff (20098.1). Excellent examples of developed phase three kilns are Carancarrow (27032), Goonamarris (27077) and Vounder (27045). This type and its variants (often much-modified) are the most numerous. Phase four kilns are rare, and are usually large in size; examples exist at Carpalla (20777.2) and South Fraddon (27020).

Engine House

The introduction of steam power for pumping and the winding of waste material from the pit was relatively late in the China-Clay District, compared to its early adoption for deep mining elsewhere in the county. It is probable that water-wheels were regarded as an adequate means of pumping in the early days of the industry, when pits were shallow and often sited so as to make use of gravity drainage via adits. China-clay companies were generally small in the first half of the 19th century, and the production of clay was perceived as an enterprise requiring minimal capital investment. This attitude would not have favoured the purchase of expensive plant.

The earliest documented proposal for erecting a Cornish Engine in the area is for Single Rose clay works in 1837 (Barton, 1966, 123). By 1850 a few engines were at work, but the numbers remained small until the 1870s (Ibid).

Cornish beam-engine houses are always potentially of national importance; all should now be Listed Buildings. Horizontal steam-engine houses are much rarer than beam-engine houses in Cornwall, and should be regarded as having special significance in county terms.

Within the study area, the 14 surviving houses include two of the most important in the county, and these are also of prime national significance. Goonvean (21106.5) and Parkandillack (27026) both have their Cornish engines intact and in-situ within the house.

The remaining engine houses within the study area form an interesting and often idiosyncratic group. There were no beam engines larger than 50 inch cylinder erected in the china-clay district, and so there are no large houses, but many of the examples which do remain exhibit a particularly complete range of features.

Estimated Population: 100

Known: 79

Surviving: 14 (17%) From a maximum of c.80 houses identifiable from OS maps within the Project area. This represents a survival rate of 17% on present evidence. It should be noted, however, that the total of known engine houses includes horizontal steam winders, and probably also includes a proportion of gas and oil engines as well, as these are not distinguishable from steam engines on the OS 1:10000 maps used for the assessment.

Railway and Tramway

The development of an efficient communications infrastructure was a vital factor in the success of the china-clay industry as a major economic force. Early clay producers faced the same problems as the deep metal mines of the county; poor roads, difficult harbours on exposed coasts, and terrain unsuited to the construction of canals. These factors combined to raise costs and prevent the growth of extractive industry during the first part of the 19th century.

The development of the ports serving the china-clay district, although having direct influence on the study area, is outside the scope of this report. Railways and tramways came early to the area, and linked the clay-producers to the coast; these, like the Pentewan Railway and the Treffry tramway system, were purely local concerns with no links to a county or national network. Later development established links to the Cornwall Railway via Burngullow, and provided an integrated transport system reaching deep into the heart of the clay district with the Cornwall Minerals Railway. The importance of rail transport in the china-clay district may be judged by the fact that the last railway to be built in Cornwall (or indeed, in the West Country), was the Trenance Valley Branch in the 1920s.

Some railway features in the study area are distinctive to the Hensbarrow district, such as the granite-cobbled loading wharfs: the remaining examples (Drinnick, 27074) are of national importance. Evidence for the early tramway systems, such as the Hendra Incline (21108), is also of national importance. Other features are of county or local importance.

Estimated Population: 9 (plus tramway systems). This total includes: the Treffry Tramway system; Gothers Tramway; Cornwall Junction Railway (Burngullow to Drinnick); St Dennis Branch (CMR); Goonbarrow Branch (CMR); Wheal Rose Branch (CMR); Carbis Branch (CMR); Retew Branch (CMR); Trenance Valley Branch (GWR). There were also an unknown but large number of internal quarry and processing tramway systems of narrow gauge, often simply using horse or human power but in some cases locomotive or rope-hauled.

Known: 9

Surviving: 9 All the examples listed above have some surviving remains, but monuments of this class are linear features of great size and incorporate many other features which are essentially classes in their own right. These features include **bridges, wharfs** and **platforms**, structures such as **offices** and **sheds, inclined planes, tunnels** and **crossings**.

Brickworks

Brick-making became an important activity on Hensbarrow after 1850, when demand arose for tiles and bricks for pan-kilns; these had to be renewed at regular intervals, and also had to be made of a suitably refractory material. For this the china-clay itself was ideal, mixed with a proportion of the

natural quartz. Such bricks were also in demand outside the Hensbarrow area for furnaces and calciners in mines, smelting houses, and foundries. The Hensbarrow brickworks thus achieved a status which made them of significance throughout the county. Brickwork sites may include the **clay-pit, tramways, pug-mills, drying sheds** and **kilns** associated with the brick-making process.

The site at Carbis (20000) is a remarkable survival of a Cornish brickworks including two cupola downdraught kilns and their stack. Given the rarity of such kilns, Carbis must be of National Importance. Wheal Remfry (21151) has substantial remains of its kiln complex and stacks, and is of county importance.

Estimated Population: 7 Five definite brick-making sites are known to exist in the study area, but there are two further documentary references which have not so far been substantiated by cartographic or field evidence.

Known: 5

Surviving: 2 (40%)

Destroyed: Carloggas; Burthy; Gaverigan. The stump of a stack survives at Gaverigan, but nothing else of significance.

China Stone Mill

The working of china-stone involves not merely its quarrying from the ground and subsequent crushing to lump form, but the grinding of the lump stone into a fine powder. This powder is then mixed with water to form a slip by the potter, suitable for applying as a glaze or for mixing with china-clay in the manufacture of high-grade porcelain. In the early days of the industry, all china-stone was shipped to the Potteries as lump stone, where the Staffordshire potters ground it in their own mills. Some stone was ground in Cornwall from ca 1870 onwards; the potters still insisted on the best quality stone being shipped to them in lump form (in order that they had a check on its quality), but the poorer quality stone was ground in Cornish stone-mills.

Many of these were working until relatively recent times (c. 1960), and the stone mill, although always rare as monument type, is a distinctive and often very impressive feature of the Hensbarrow area.

China-stone mills as a monument class are confined to Cornwall and Staffordshire. Good examples must all be of national importance. Chapel Mill (20876) is the most complete, with all its machinery derelict but insitu. Others are more impressive from an architectural point of view, although they lack machinery, such as Tregargus Lower Mill (27065) and Trevear (27064).

Estimated Population: 10

Known: 10

Surviving: 7 (70%) Of these survivors within the study area, one (at Tregargus, 20986.1) is almost completely destroyed. The remaining 6 are relatively intact, with a good range of features.

Quarry (China-Stone)

The principal china-stone quarrying areas were Rostowrack Downs and the Tregargus Valley, although there were many other stone quarries in various parts of the study area.

As the only British source for a mineral of historic significance in the porcelain industry, the remaining quarries must be of national importance. The best remaining are the examples at Slip (27028) and Quarry Close (27073). Slip has a working Blondin (aerial hoist) still in-situ, and Quarry Close has the remains of a vertical hoist. One working quarry, at Rostowrack, is still in commercial production.

Estimated Population: 50

Known: Not assessed. To distinguish china-stone quarries from clay pits on the OS maps is very difficult, as they are only occasionally identified by name. It is also difficult in some cases to identify china stone quarries as distinct from granite quarrying. Fieldwork only can clarify the issue where sites remain for study.

Surviving: 4 Definitely identified as china stone quarries. All remaining sites are now threatened by infill with waste material, and many have been destroyed in recent years.

Water-wheel

The water-wheels considered in this section are those associated with mining or the extraction of china-clay and stone, not those associated with corn mills or agriculture (see 6.2.5). The total number of wheels active in the study area must have been very large, as the introduction of the steam engine to the area merely lessened the seasonal dependence of the clay producers on water power; for many applications, the water-wheel remained the preferred, robust, and cheap means of power.

Where conserved and in good order, of national importance. Otherwise of county importance.

Estimated Population: over 150

Known: Not assessed. Identifying wheels from the maps is a difficult and lengthy process, and was not attempted within this project.

Surviving: 11 The surviving wheels are almost all in a derelict state, and cannot survive much longer without active conservation. Exceptions are the two preserved wheels at Wheal Martyn.

Quarry (other than china-stone)

Within the study area, there have been numerous extractive sites for granite; the stone was used for domestic building and also for the full range of industrial structures. Before c.1800, most of the requirements for building stone would have been met by surface splitting and shaping of moorstone, as elsewhere in the county's upland regions. During the 19th century, it became increasingly necessary to work the granite in depth to obtain suitable stone, resulting in the establishment of large stone quarries in other parts of Cornwall. Within the study area, however, there would have been a large surplus of waste stent or stone from both the china-clay pits and also china-stone quarries, which would have reduced the need for the specific working of granite. Of local importance.

Estimated Population and Known: Not assessed. This can only be dealt with by a detailed and intensive study of the available maps.

Surviving: 5 Includes Tresayes feldspar quarry (19929), and Carn Grey granite quarry (20089).

Power House and Power Station

Electricity as a power source for lighting and pumping was first used in the clay industry during the 1870s; by the early 1920s, electric pumps and winders had begun to displace the steam engine as a prime mover. Power houses were built to contain this new equipment, the generators usually being driven by a large horizontal gas or oil engine, and these buildings rapidly became a familiar feature of the area. After 1945, the use of power from the local or national grid became widespread, and the power houses were redundant. Few now survive intact.

In 1936, ECLP brought into operation its own central power station at Drinnick Mill; this was coal-fired, and served 11 sub-stations in the clay area via a ring-main.

Power houses of this type are a rare feature in a Cornish industrial context, and therefore are of county importance. The Drinnick Power Station is now redundant, and represents the only survival in Cornwall or Devon of a coal-fired establishment; it is therefore potentially of national importance.

Estimated Population and Known: Not assessed for this report. As power houses are a late feature, it would be necessary to make a close study of the 1932 revision OS 1:2500 maps to establish their location and numbers.

Surviving: 4 Include good examples at Drinnick (27075.3) and Hendra (27069.2), and Drinnick Power Station itself (27076).

6.2.7 Post-medieval mining

Mine

Deep mining of tin, iron, and a little copper was never of great economic importance within the study area, unlike the earlier streamworking of alluvial and eluvial tin deposits (see 6.2.4). Certain mines were of significant local importance for short periods, and one, Carclaze, was sufficiently rich for it to become famous as a producer of tin. The study of the Hensbarrow mines is confused by the tendency for tin workings to become china-clay works, as the tin ores were often combined in a kaolinised granite matrix. Old Beam, Carclaze, and Bunny are examples of tin workings which later became china-clay works, and are now absorbed into modern active working areas. In a sense, the present sample is unrepresentative of the area's mining, as many well-preserved and significant mining sites lie just outside the Winning and Working Area in the metamorphosed granite/killas junction. The mining sites identified also include features such as engine-houses, dumps, buddles, adits and shafts.

Where a complete range of surface features survives, of national importance. Otherwise, of county or local importance. Many of these surviving sites have little more than a few dumps and collapsed shafts remaining at surface, and are difficult to distinguish from similar evidence for china-clay working (Treviscoe, 27010; Wheal Jacob, 20804). A particularly well-preserved mine is the site at Tregrehan Consols (20325).

Estimated Population: 50

Known: 29 This figure is arrived at by combining information available in the standard texts for the area (Dines, Hamilton Jenkin, and Collins).

Surviving: 25

Stamping Mill

Stamps and stamping-mills may often be features of mining sites, or may be found in isolation as parts of ore processing sites. Such sites are difficult to identify from maps, and often the best way of locating these features is from a thorough study of the available documentary evidence, for which there was no provision within this project.

Examples with machinery in-situ are always of national importance; otherwise, of county or local importance.

Estimated Population: not assessed. All tin mines within the project area would have required stamps for the processing of their ore, so the number of stamps must have been in excess of 30.

Known: 4

Surviving: 2 Of these, the set of stamps at Woon (20060) is the best survival, with its water-wheel and small set of stamps in-situ but derelict.

Table 1: Summary of Appendix 6.2 Monument Classes and their Survival

	Estimated Population	*Known Population*	*Surviving, Estimated*	*Surviving, Known*	*Destroyed, Estimated*	*Destroyed, Known*	*Recommended for Preservation*	*Additional sites in area Recommended for Preservation*	*Total*	*Scheduled*	*Listed Building*
Mesolithic											
Flint scatter	500	5	285	0	215	5					
Neolithic											
Hill-top enclosure	1	1	1	1	0	0	1	0	1	1	
Long cairn/chambered tomb	2/3	0	1	0	2/3	0					
Stone circle	2/3	1	1	0	2/3	1					
Settlement (flint scatter)	70+	1	40	1	30	0	0	1	1		
Minor scatter	200	2	115	1	85	1					
Bronze Age											
Stone row	2/3	1	1	0	2/3	1					
Menhir	10-15	2/13	2	1	4-6	1-3	1	0	1	2	
Barrow	160	62	13+	13	147	49	5	1	6	2	
Settlement	70	3	40	3	30	0	0	2	2		
Field system	45	1	25	1	20	0	0	1	1		
Enclosure	12	1	7	1	5	0	0	1	1		
Pasture boundary	10	1		1		0		1			
Flint scatter	70	0	40	0	30	0		1			
Minor scatter	200	3	115	3	85	0					
Iron Age											
Hillfort	1	1	1	1	0	0	1	0	1		
Iron Age/Romano-British											
Round	50	28	19+	19	9	31	5	2	7	1	
Open settlement	70	0	40	0	30	0					
Field system	120	1	70	1	50	0					
Prehistoric (uncertain date)											
Flint scatter		3		2		1					
Circular crop-mark	80	5	46	5	34	0					
Early Medieval											
Farming settlement	80	47	65	42	15	5					
Transhumants' shelter	10	0	4	0	6	0					
Pound	15	10	10	9	5	1					
Early Christian site	10	3	4	3	6	0					
Decorated cross	3	2	2	2	1	0	2	0	2	1	
Holy well	10	5	5	5	5	0					
Mill	12-15	1	7	1	6	1					
Later Medieval											
Settlement	150	132	109+	109	41	25	16	1	17		
Field system		153		129		24	2	19	21		
Ridge and furrow		6		6		0	1	3	4		
Long-house	550	2	(470)	2	(81)	(81)	1	0	1		
Pasture boundary	20	2	15	2	5	0	0	2	2		
Church	4	4	4	4	0	0	2	0	2		3
Wayside cross	50	13	29	12	21	1	3	0	3		2

	Estimated Population	Known Population	Surviving, Estimated	Surviving, Known	Destroyed, Estimated	Destroyed, Known	Recommended for Preservation	Additional sites in area Recommended for Preservation	Total	Scheduled	Listed Building
Chapel	15	6	9	6	6	0	2	0	2	1	1
Historical river crossing	75	75	56	56	19	19		1	1		
Roads, lanes, paths	275	275	250	250	25	25					
Later medieval houses	100	1		1	43	0	1	0	1		
Medieval Tinning											
Alluvial streamworks	35	17	20	14	15	3	1	3	4		
Eluvial streamworks	40	19	23	12	17	7	5	1	6		
Shode works	25	18	18	18	7	0	0	8	8		
Openwork	12	6	7	3	5	3	1	0	1		
Lode-back works	25	15	15	15	10	0	0	4	4		
Prospecting pit	40	15	15+	15	25	0		3	3		
Post-medieval											
Settlement-Farm	250	244	171	171	73	73	16	12	28		
Small farm	175	170	89	89	81	81	0	4	4		
Cottage	220	214	139	139	79	79	0	10	10		
House	880	-	533		346						22
Barn	350	214	246	214	104	-					9
Shippon	185	111	134	111	51	-					1
Stable	6		4	4	2						2
Piggery	140	79	99	79	41	-					1
Cartshed	210	128	150	128	60	-					1
Linhay	40	24	30	24	10	-					
Horse engine (farm)	30	11	21	11	9	-	1	1	2		
Water-wheal (farm)	12	9	-	9	-	-	2	2	4		
Corn mill	30	19		14		5	1	4	5	2	
Feed mill		1		1							
Fulling mill	5	1		0		1					
Beacon	8	3		2	3	3	0	1	1		
Merriment Hole	10	2		2			0	2	2		
Inscribed stone		1		1			1	0	1		
Culver house	5	1				1					
Malt-house	1	1			1	1					
Wheelwright's shop	10	1		1			1	0	1		
Ropewalk	5	1		0		1					
Tannery	5	2		(2)							
Cooper's shop	8	3		2		1					
Plain-an-gwary	3	2	1-2	1	1-2	1					
Smithy	50	24		22		2		1	1		
School	40	18	17	17	1	1		1	1		1
Bound-stone	25	20		14		6		2	2		1
Hollow-way		3		3				2	2		
Methodist Chapel	35	31	28+	28	3+	3		2	2		9
19th century mine	50	29	25	25	25	4	2	4	6		
Stamps	30+	4		2		2	1	3	4		
China-clay works	150	113	57	57	93	56	5	12	17	1	
Air drying pan		20	10	7			0	2	2		

	Estimated Population	*Known Population*	*Surviving, Estimated*	*Surviving, Known*	*Destroyed, Estimated*	*Destroyed, Known*	*Recommended for Preservation*	*Additional sites in area Recommended for Preservation*	*Total*	*Scheduled*	*Listed Building*
Mica drag	150		27	24+				1	1		
Settling pit and tank			25	25			3	6	9		
Pan kiln	200	162	104	102	96	60	14	18	32		3
Engine house	100	79	14	14	86	65	6	10	16		6
Railways and tramways	9	9	9	9			1	3	4		
Brickworks	7	5	2	2	5	3	2	0	2		1
China-stone mill	10	10	7	7	3	3	5	1	6	1	1
Quarry, china-stone	50			4				2	2		
Water-wheel (CC)	150+		14	11	136		1				
Quarry (stone)				5				2	2		
Power house/station				4							

6.3 Buildings and structures which are protected as Listed Buildings

Details, produced by HBMC(E) for the Secretary of State for the Environment, are held by Restormel Borough and Carrick District Councils and by Cornwall County Council as well as owners. PRN is the Primary Record Number of the Sites and Monuments Record. The first part of the listing number is an abbreviation of the relevant parish: Lux - Luxulyan; R - Roche; St A - St Austell; St D - St Dennis; St M - St Mewan; St S - St Stephen-in-Brannel. (Listed Buildings records are organised by parish). (See map 14)

SW95NW

PRN	Name	Listing No and Grade	Brief Notes
21129	Trerice Bridge	St D 95NW 12/280 II	Bridge of 1800. 2 arches
27026	Parkandillick	St D 95NW 12/339 II*	Engine house, boiler house and detached chimney. C19. Beam engine within IS St Dennis St D 95NW 12/289 II Mid C19 house
27838	Trethosa School	St S 95NW 1/128 II	Late C19 school. St Stephens School Board
21106.5	Goonvean	St S 95NW 1/133 II*	Engine house with beam engine. Dated 1910. Chimney.
21106.2-3	Goonvean	St S 95NW 1/134 II	Two pan kilns, late C19/early C20. 2 chimneys "DELETED"
21106.1	Goonvean	St S 95NW 1/135 II	Late C19 engine house and chimney

SW95NE

PRN	Name	Listing No and Grade	Brief Notes
19925.1	Greensplat	St A 95NE 5/573 II	Engine house and chimney
33024	Carne Hill Chapel	St D 95NE 13/279 II	1872 Methodist church and Sunday School
19800.2	St Dennis Church	St D 95NE 13/281 II*	Late C14/C15. C15 tower. 1847 rebuild. 1987 rebuild
19800.2	St Dennis Church	St D 95NE 13/282 II	C12 font
19833	Coldvreath Mill	R 95NE 5/203 II	Late C19 corn mill. Part cob. Wheelpit with cast iron wheel.
27405	Hendra	R 95NE 5/208 II	Late C18 house. Part cob
27403	Cornubia Mine	R 95NE 5/213 II	Boundstone. C18
19839	Roche Rock	R 95NE 5/222 I	St Michael's Chapel, licenced in 1409. Chaplain's room below chapel
19830	Roche Church	R 95NE 5/230 II*	C14, rebuilt C15. Altered in 1822.
19830	Roche Church	R 95NE 5/236 II	Late C18 stile to churchyard
19829	Roche	R 95NE 5/237 II	Wheelheaded medieval cross. Wayside
31043	Roche	R 95NE 5/238 II	Late medieval cross
31025	Trezaise Chapel	R 95NE 5/239 II	1853 Bible Christian chapel and schoolroom (1890)
31025	Trezaise Chapel	R 95NE 5/240 II	Wall, railings and gate of c.1890
27082	Old Pound Chapel	St S 95NE 2/110 II	1886 Bible Christian chapel
27080	Nanpean	St S 95NE 2/137 II	C19 Church
IS	Nanpean	St S 95NE 2/138 II	War memorial
27081	Nanpean	St S 95NE 2/130 II	C19 Methodist Chapel
19880.3	Bloomdale	St S 95NE 2/114 II	C19 engine house and chimney

SW95SW

PRN	Name	Listing No and Grade	Brief Notes
20858	Meledor	St S 95SW 3/116 II*	Late C16/Early C17 house with C18 additions and C19 alterations.
20986.2	Tregargus Mill	St S 95SW 3/123 II	Chinastone mill. Early/mid C19

ST. AUSTELL CHINA CLAY AREA ARCHAEOLOGICAL SURVEY

Winning and Working Area

Island Settlements and Par Corridor

◆ Scheduled Monuments

▲ Listed Buildings

○ Additional sites proposed for protection

Areas proposed for protection

RESTORMEL DISTRICT

ST AUSTELL

Map 14 Archaeological Protection

PRN	Name	Listing No and Grade	Brief Notes
27062	Trethosa Chapel	St S 95SW 3/127 II	1876 Bible Christian chapel. Sunday School
20871	Trevear	St S 95SW 3/129 II*	Early C17 farmhouse. Extended mid C19
20964	St Stephens Church	St S 95SW 3/144 I	C12 features, most C15. C19 N aisle. Restored in C19
IS	St Stephen	St S 95SW 3/163 II	Mid C19 Public House "Queens Head Inn"
IS	St Stephen	St S 95SW 3/164 II	Church room and almshouses, late C19
31026	St Stephen	St S 95SW 3/131 II	C19 Methodist church

SW95SE

PRN	Name	Listing No and Grade	Brief Notes
32097	Gover Viaduct	St M 95SE 4/81 II	1859 piers and 1898 viaduct
27573.2	Newgate	St S 95SE 4/115 II	Early C19 house/pub
20853	Tregascoe	St S 95SE 4/124 II	Late C17 house, rebuilt 1795 and altered mid C19. Hipped
20853	Tregascoe	St S 95SE 4/125 II	Farm building, early C19 with some C17 materials
20853	Tregascoe	St S 95SE 4/87 II	Barn, mid C19 with cartshed
20853	Tregascoe	St S 95SE 4/126 II	Barn, wall and piggeries. Dated c.1830
27096	Foxhole	St S 95SE 4/132 II	1894 Methodist church and Sunday School
27098	Lanjeth	St S 95SE 4/136 II	C19 Methodist church

SW96SE

PRN	Name	Listing No and Grade	Brief Notes
31028	Roche	R 96SE 1/228 II	1835 Wesleyan Methodist church. 1874 schoolroom

SX05NW

PRN	Name	Listing No and Grade	Brief Notes
20019	Carthew	Mill St A 05NW 6/6 II	C19 mill. 1837 date. Hipped. Waterwheel
20606	Restineas	St A 05NW 6/199 II	C18 house. Half hipped
20200	Rescorla Farm	St A 05NW 6/451 II	C18 and poss earlier, house
20200	Rescorla	St A 05NW 6/452 II	C18/C19 cottage
20200	Rescorla	St A 05NW 6/453 II	C17/C18 cottage
20201	Resugga	St A 05NW 6/454 II	C17 house. Arched doors
20205	Trethurgy	St A 05NW 6/576 II	C17/C18 cottage
33137	Treverbyn Church	St A 05NW 6/577 C	1850 Gothic church, nave, chancel, porch, bellcote.
27743	Higher Menadew	Lux 05NW 6/148 II	c.1840 farmhouse
27743	Higher Menadew	Lux 05NWS 6/157 II	c.1830 farmhouse, garden and yard
-	Rosemelling	Lux 05NW 6/163 II	Early C19 milestone
27251	Bilberry	R 05NW 6/199 II	Late C19 pan kiln chimney
20000	Carbis brickworks	R 05NW 6/201 II	Late C19, 3 beehive kilns and chimney
20172	Lower Woon	R 05NW 6/205 II	Late C17 house with C19 barn
27239	Gt.Wh. Prosper	R 05NW 6/206 II	Pan kiln with chimney, late C19
27243	Woon	R 05NW 6/209 II	Pan kiln chimney. Late C19
20078.1	Rosemellyn	R 05NW 6/210 II	Pan kiln chimney. Late C19
20078.1	Rosemellyn	R 05NW 6/211 II	Pan kiln chimney. Late C19
20170	Rosemellyn	R 05NW 6/219 II	Farmhouse C.1830. Hipped
27248	Wh. Rose	R 05NW 6/224 II	Clayworks; tanks, two pan kilns, two chimneys. Late C19
27730	Woon	R 05NW 6/225 II	Early C19 farmhouse

PRN	Name	Listing No and Grade	Brief Notes
27227.1	Gt.Wh. Prosper	R 05NW 6/223 II	Engine house

SX05NE

PRN	Name	Listing No and Grade	Brief Notes
5049	Methrose	Lux 05NE 7/154 II*	c.1400 with later wing of early C16. Kitchen C17. Hall house core earliest
5049	Methrose	Lux 05NE 7/155 II*	Courtyard walls and font (used by John Wesley). Walls mid C17, font medieval
5049	Methrose	Lux 05NE 7/156 II	Bank barn, late C18/early C19
-	Carne	Lux 05NE 7/164 II	Late C18 milestone
27667	Tregonning	Lux 05NE 7/168 II	Late C18/early C19 house re- uses C17 stones. Shippon
27667	Tregonning	Lux 05NE 7/169 II	Late C18/early C19 Barn with attached C19 Barn

SX06SW

PRN	Name	Listing No and Grade	Brief Notes
27676	Conce Farm	Lux 06SW 2/143 II	Late C17/early C18 house and late C18 stable
27259	Ebenezer Chapel	Lux 06SW 2/144 II	1859 Methodist (Bible Christian) church
27708	Little Innisvath	Lux 06SW 2/153 II	Late C17 house and C18 stable
27711	Ivy Cottage	Lux 06SW 2/171 II	Mid C19 house
27710	Bodwen	Lux 06SW 2/172 II	Early C18 house
27710	Bodwen	Lux 06SW 2/173 II	Early C19 barn
27710	Bodwen	Lux 06SW 2/174 II	C17 house
27710	Bodwen	Lux 06SW 2/175 II	C18 barn
27710	Bodwen	Lux 06SW 2/176 II	C18 barn
27252	Rosemellyn	R 06SW 2/218 II	Late C19 engine house. Chimney

6.4 Scheduled Monuments in the Study Area

A Scheduled Monument is one designated by statute as a site of national importance, and is protected by current ancient monument legislation: **The Ancient Monuments and Archaeological Areas Act 1979, as amended by the National Heritage Act 1983**. By law, any proposed work affecting such sites requires Scheduled Monument Consent from the Secretary of State for the Environment. Enquiries should be addressed to: The Historic Buildings and Monuments Commission for England, Fortress House, 23 Savile Row, London W1X 2HE. (See map 14)

SW95NE

PRN	Name	SAM No/PRN	Site Type
19800.4	St Dennis	840/27092	Decorated cross
19825	Longstone	638/27097	Menhir (SOF)
19839	Roche Rock	191/17886	Chapel
19842	Hensbarrow	552/17880	Barrow
19844	Littlejohn's	1072/11343	Barrow

SW95SW

PRN	Name	SAM No/PRN	Site Type
20986.2	Tregargus Mill	668/20034	China Stone Mill

SW95SE

PRN	Name	SAM No/PRN	Site Type
20650	St Stephen's Beacon	1071/10224	Round
20651	St Stephen's Beacon	591/10206	Hillfort/Tor Enclosure

SW96SE

PRN	Name	SAM No/PRN	Site Type
21505	(Longstone)	638/27097	Menhir

SX05NW

PRN	Name	SAM No/PRN	Site Type
20012.1	Caerloggas Downs	551a/Descheduled	Barrow
20012.3	Caerloggas Downs	551b/Descheduled	Barrow
20021	Wheal Martyn	1066/27088	China-Clay Works

SX05SW

PRN	Name	SAM No/PRN	Site Type
20319	Menear	1054/20037	Menhir

6.5 List of sites recommended for protection (see section 5.3)

SW 95 NW

China-Clay

21106.1	Goonvean	Engine House
21106.5	Goonvean	Engine House
21108	Hendra	Tramway Incline Plane
27026	Parkandillack	Engine House

Miscellaneous

21151	Wheal Remfrey	Brickworks

SW 95 NE

Prehistoric

19844	Littlejohns	Barrow
19842	Hensbarrow	Barrow
19800	St Dennis	Hillfort
27817	Hensbarrow	Downs Barrow
27929	Cocksbarrow	Barrow

Miscellaneous

19833.1	Coldvreath Mill	Waterwheel
19833.2	Coldvreath Mill	Millpool

Churches, Chapels and Schools

19800.2	St Dennis	Church
19800.4	St Dennis	Cross
19829	St Dennis	Cross
19839	Roche Rock	Chapel
19830	Roche	Church
33042	Roche	Cross
33043	Roche	Cross
19851	Whitemoor	Building and enclosure

Mining

27921	Vale Pleasant	Eluvial streamworks
27946	Old Pound	Eluvial streamworks
27835	Currian Vale	Eluvial streamworks
27854	Trelavour Downs	Eluvial streamworks
27814	Hensbarrow Downs	Eluvial streamworks

China-Clay

19900.1	Gothers	Pan-Kiln
19900.2	Gothers	Pan-Kiln
27077	Gonamarris	Pan-Kiln
27069.1	Hendra	Engine House

SW 95 SW

Churches, Chapels and Schools

20875	St Stephen	Church

Settlements

27514	Trethosa	Farming hamlet
20858	Meledor	Farming hamlet
20871	Trevear	Farming hamlet

China-Clay

20869.1	Wheal Arthur	Pan-kiln
20869.2	Wheal Arthur	China stone-mill
20986.2	Tregargus	China stone-mill
27064	Trevear	China stone-mill
27065	Tregargus	China stone-mill
20876	Chapel Mill	China stone-mill

SW 95 SE

Prehistoric

20651	St Stephen's Beacon	Hilltop enclosure
20636	St Stephen's Beacon	Barrow
20650	St Stephen's Beacon	Round

Miscellaneous

27552	Chegwins	Medieval long-house + fields
20853.1	Tregascoe	Waterwheel
27573.1	Newgate	Wheelwright's shop
20834.1	Trevanion	Horse Engine

Settlements

20813	Biscovillack	Farming hamlet
20853	Tregascoe	Farming hamlet

China-Clay

20777.1	Carpalla	Engine house
20782	Forest	China-clay works
20786	Gover	China-clay works
20804	Wheal Jacob	China-clay works, mine
27105	Gover	Pan-kiln, tanks
27101	Gover	Pan-kiln

SX 05 NW

Prehistoric

27741	Rosemellyn	Round
20032	Restineas	Round

Miscellaneous

20058	N. Goonbarrow	Inscribed stone

Field Systems

20056	Treskilling	Medieval fields
27342	Treskilling	Field system
20016.1	Carthew	Waterwheel
20016.2	Carthew	Beeboles

Settlements

27743	Higher Menadew	Farming hamlet
27759	Lower Menadue	Farming hamlet
20184	Tretharrup	Farming hamlet
20183	Treskilling	Farming hamlet

20606	Restineas	Farming hamlet
20206	Treverbyn	Farming hamlet
20201	Resugga	Farming hamlet
27775	Little Resugga	Farming hamlet

Mining

27780	Innis Moor	Streamworks
20060	Woon	Stamping Mill

Miscellaneous

20000	Carbis	Brickworks

China-Clay

20078.1	Rosemellyn	Pan-kiln
20139	Lantern	China-clay works
20021	Wheal Martyn	Museum complex
27209	Lansalson	Pan-kiln

SX 05 NE

Prehistoric

5047	Prideaux	Round

Miscellaneous

5049.1	Methrose	Medieval house

Churches, Chapels and Schools

5031	Tregonning	Cross

Settlements

5049	Methrose	Farming hamlet
27667	Tregonning	Farming hamlet

SX 05 SW

Prehistoric

20319	Menear	Menhir

Settlements

27639	Bojea	Farming hamlet

Mining

20328	Vounder	Openwork
20325	Tregrehan Consols	Mine

China-Clay

20433	Trethowel	Pan-kiln
20534.1	Boskell	Pan-kiln
20534.4	Boskell	Pan-kiln
27032	Carancarrow	Pan-kiln, tanks
27040	Carn Grey	Stack
27047	Tregrehan	Pan-kiln

SX 06 SW

Prehistoric

27695	Rosemellyn	Round

Settlements

27710	Bodwen	Farming hamlet
27676	Conce	Farming hamlet

China-Clay

27252	Rosemellyn	Engine House

6.6 Sites selected for Detailed Investigation

EXTENSIVE EXCAVATION

SW 95 NE

Prehistoric

19844	Littlejohns	Barrow
27929	Cocksbarrow	Barrow
19842	Hensbarrow	Barrow
19800	St Dennis	Hillfort

Churches, Chapels and Schools

19851	Whitemoor	Building and enclosure

SW 95 SE

Prehistoric

20651	St Stephen's Beacon	Hill-top enclosure
20636	St Stephen's Beacon	Round
20650	St Stephen's Beacon	Barrow

Miscellaneous

27522.1	Chegwins	Long-house

SX 05 NW

Prehistoric

27741	Rosemellyn	Round
20032	Restineas	Round

SX 05 NE

Prehistoric

5047	Prideaux	Round

SX 05 SW

Prehistoric

20319	Menear	Menhir

SX 05 SE

Prehistoric

27695	Rosemellyn	Round
21262	Bodwen	Round house

TRIAL EXCAVATION

SW 95 NW

Prehistoric

27854	Rostowrack	Round?

SW 95 NE

Prehistoric

19853	St Dennis	Reservoir Barrow?
19850	Carnegga	Round
19859	Carnegga	Round

27607	Greensplat	Barrow
27817	Hensbarrow Downs	Barrow

SW 95 SW

Prehistoric

27510	Meledor	Barrow
27519	Hillhead	Barrow

SW 95 SE

Prehistoric

27551	Chegwins	Barrow?
20655	Carne	Round?
20654	Carne	Stents Round?

SW 96 SE

Miscellaneous

21506	Tregarrick	Medieval settlement

SX 05 NW

Prehistoric

27799	Carn Grey	Barrow?
27804	Carn Grey	Round house?
27805	Carn Grey	Enclosure
27447	Higher Menadew	Round?

Miscellaneous

20206.1	Treverbyn	Long-house?

SX 05 SW

Prehistoric

20374	Trethowel	Barrow
27656	Gray	Round
27664	Carvear	Round

SX 06 SW

Prehistoric

27679	Ebenezer	Enclosures
27707	Ennisvath	Barrow?

Also all farms with *tre, bos* and *ker* early medieval names.

SITE SURVEY

SW 95 NW

Prehistoric

27854	Rostowrack	Round?

Settlement

21202	Rostowrack	Farm

China-Clay

21106.5	Goonvean	Engine House
21107.2	Trethosa	Mica Drags
21116.2	Wheal Benallack	Engine House

21151	Wheal Remfrey	Brickworks
27024	Slip	Sidings
27025	Rostowrack	Pan-Kiln
27026	Parkandillack	Engine house
27027	Parkandillack	Mica Drags

SW 95 NE

Prehistoric

19850	Carnegga	Round
27607	Greensplat	Barrow
27929	Cocksbarrow	Barrow
19842	Hensbarrow	Barrow
27817	Hensbarrow Downs	Barrow
19800	St Dennis	Hillfort

Field Systems

19871	Old Pound	Medieval fields

Churches, Chapels and Schools

19851	Whitemoor	Enclosure and building

Settlement

19961	Retillick	Farming hamlet
27919	Penrice	Small farm

China-Clay

19900.1	Gothers	Pan-Kiln
19900.2	Gothers	Pan-Kiln
27066.1	Gothers	Engine House
27077	Goonamarris	Pan-kiln
27090.1	Hensbarrow	CCW
27091.1	Wheal Prosper	Air-Pans
27091.2	Wheal Prosper	Pan-Kiln

SW 95 SW

Prehistoric

27510	Meledor	Barrow
27519	Hillhead	Barrow

Settlement

20858	Meledor	Farming hamlet
20871	Trevear	Farming hamlet

China-Clay

20869	Wheal Arthur	Stone Mill Complex
20986.2	Tregargus China	Stone Mill
27064	Trevear China	Stone Mill
27065	Tregargus China	Stone Mill

SW 95 SE

Prehistoric

20651	St Stephen's Beacon	Hilltop enclosure
10650	St Stephen's Beacon	Barrow

Miscellaneous

27552	Chegwins	Medieval settlement and fields
27443	Goonamarth	Medieval settlement
27451	St Stephen's	Beacon Building
27452	St Stephen's	Beacon Building

Settlement

20813	Biscovillack	Farming hamlet
20819	Goonamarth	Farm

China-Clay

27112	Gover Valley	Air Pans
27105	Gover	Pan-Kiln and Tanks
27101	Gover	Pan-Kiln
20782.1	Forest	Engine House
27106	Gover	Pan-Kiln

SX 05 NW

Prehistoric

27741	Rosemellyn	Round
27804	Carn Grey	Round house
27799	Carn Grey	Barrow?
27803	Carn Grey	Field system
27805	Carn Grey	Enclosure
27447	Higher Menadew	Round?

Miscellaneous

20067	Lower Menadue	Bone mill

Field Systems

20056	Treskilling	Medieval fields

Settlement

20184	Tretharrup	Farming hamlet
20206	Treverbyn	Farming hamlet
27761	Pendulaw	Farm

China-Clay

20000	Carbis	Brickworks
20078.1	Rosemellyn	Pan-Kiln
20078.2	Rosemellyn	Micas
27237	Hallew	Pan-Kiln
20021	Wheal Martyn	Site Complex
20098.1	Pentruff	Pan-Kiln
20139	Lantern	CCW
27209	Lansalson	Pan-Kiln
27211	Ruddle	Engine House

SX 05 NE

Prehistoric

5047	Prideaux	Round

Settlement

5049	Methrose	Farming hamlet

SX 05 SW

Prehistoric

20374	Trethowel	Barrow
27656	Gray	Round?
27657	Gray	Fields
27664	Carvear	Round?

China-Clay

20450	Trembear	Air Pans
20453.3	Trethowel	Tanks
20534.1	Boskell	Pan-Kiln
20534.4	Boskell	Pan-Kiln
27031	Trenance	Pan-Kiln
27032	Trenance	Pan-Kiln
27035.1	Lansalson	Pan-Kiln and Tanks
27035.2	Lansalson	Pan-Kiln and Tanks
27047	Tregrehan	Pan-Kiln

Mining

20325	Tregrehan Consols	Mine

SX 06 SW

Prehistoric

27695	Rosemellyn	Round
27679	Ebenezer	Enclosures
21262	Bodwen	Round house
27707	Ennisvath	Barrow?

Settlement

27697	Polskeys	Farming hamlet

China-Clay

27252	Rosemellyn	Engine House

SKETCH SURVEY

China-Clay

21116	Wheal Benallack	China Clay Works
27017	New Halwyn	China-Clay Works
19897	St Dennis Consols	China-Clay Works
27066	Gothers	China-Clay Works
19899	Wheal Frederick	China-Clay Works
20869	Wheal Arthur	Stonemill and Pan-Kiln
20986	Tregargus	Stonemills
27064	Trevear	Stonemill
27065	Tregargus	Stonemill

Entire Gover Valley and Carne Stents; Lansalson and lower Trenance Valley

BUILDING SURVEY

SW 95 NW

Settlement

21202	Rostowrack	Piggery

Miscellaneous

27006	Wheal Remfrey	Brickworks

China-Clay

27017.6	New Halwyn	Engine House
27026	Parkandillack	Engine House
21106.1	Goonvean	Engine House
21106.5	Goonvean	Engine House
27260.1	Wheal Retallick	Engine House

SW 95 NE

Churches, Chapels and Schools

19830	Roche Rock	Chapel

Settlement

19833	Coldvreath Mill	Mill
27919	Penrice	House + outhouses
27996	Gothers	Cabin
27424	Enniscaven	House
27440	Castle View	Chall-house
27925	Gunheath	Cottage

China-Clay

19897.1	St Dennis Consols	Engine House
27069.1	Hendra	Engine House
19925.1	Greensplat	Engine House

SW 95 SW

Settlement

20858	Meledor	House
20871	Trevear	House

China-Clay

20986.1	Tregargus	China Stone Mill
27064	Trevear	China Stone Mill
27065	Tregargus	China Stone Mill

SW 95 SE

Miscellaneous

20834.1	Trevanion	Horse engine
20853.1	Tregascoe	Waterwheel
27573.1	Newgate	Wheelwright's shop

Settlement

20834	Trevanion	Barn
20853	Tregascoe	Barn
27558	Hillcrest	Cabin

China-Clay

20777.1	Carpalla	Engine House

SX 05 NW

Miscellaneous

20067	Lower Menadue	Bone mill
20184.2	Tretharrup	Well-house

20183.1	Treskilling	Horse engine
20034	Restineas	Horse engine
20206.1	Treverbyn	Long-house?
20001.2	Carbis Mill	Hull
27887.1	Penhale	Crow
20016.1	Carthew	Waterwheel
20016.2	Carthew	Beeboles

Settlement

20000	Carbis	Brickworks
27743	Higher Menadew	House
27759	Lower Menadue	House; Barn
20184	Tretharrup	Chall-house
20201	Resugga	House
20186	Carbean	House
20170	Rosemellyn	Cheese-press
20043	Knightor	Barn
27716	Higher Goonleigh	Chall-house
27775	Resugga	Cabin
20016	Carthew	2 barns
20172	Lower Woon	Chall-house

SX 05 NE

Miscellaneous

5049.1	Methrose	Medieval house

Settlement

5049	Methrose	2 barns

SX 05 SW

Miscellaneous

20560.1	Trenance	Horse engine

Settlement

20560	Trenance	Barn
27639	Bojea	Barn
20562	Trethowel	Barn

China-Clay

20453.1	Trethowel	Engine House

SX 05 SE

Settlement

20603	Bodelva	Linhay
27632	Carvear Moor	Cottages

SX 06 SW

Settlement

21360	Tresibble	House
27710	Bodwen	House
27676	Conce	House
27708	Little Innisvath	House
27674	Ebenezer	Cabin

GROUND PHOTOGRAPHY

Comprehensive black and white photography, using a tripod where necessary to ensure square-on shots. All sites to be the subject of site survey or building survey will also be photographed. All industrial sites of the following classes: Engine Houses, Pan-Kilns, China-Stone Mills, Brickworks, Power-Houses, and Water-Wheels, should be photographed as part of the programme for the area.

SW 95 NW

Churches, Chapels and Schools

27838	Trethosa	School

SW 95 NE

Prehistoric

19842	Hensbarrow	Barrow
19800	St Dennis	Hillfort

Miscellaneous

19833.1	Coldvreath Mill	Waterwheel

Churches, Chapels and Schools

27079	Nanpean	School
19800.4	St Dennis	Cross
19829	Roche	Cross
19839	Roche Rock	Chapel
33042	Roche	Cross
33043	Roche	Cross

Settlement

27988	Menawortha	Cottage
27990	Carne	Cottage

SW 95 SW

Miscellaneous

20914	Treneague Mill	Feed mill

Churches, Chapels and Schools

20858.1	Meledor	Chapel, stones
20911	St Stephen	Cross
20912	St Stephen	Cross

Settlement

20865	Tregargus	Barns

SW 95 SE

Prehistoric

20651	St Stephen's Beacon	Hill-top enclosure

Miscellaneous

20834.1	Trevanion	Horse engine
20853.1	Tregascoe	Waterwheel
27573.1	Newgate	Wheelwright's shop

Settlement

20825	Penisker	House
27604	Higher Biscovillack	Chall-house
20834	Trevanion	Barn

SX 05 NW

Miscellaneous

27758	Rosemellyn	Cheese-press
20067	Lower Menadue	Bone mill
20058	N. Goonbarrow	Inscribed stone
20184.1	Tretharrup	Well-house
20184.2	Tretharrup	Well-house
20183.1	Treskilling	Horse-engine
20034	Restineas	Horse-engine
20001.2	Carbis Mill	Hull
27887.1	Penhale	Crow
20016.1	Carthew	Waterwheel
20016.2	Carthew	Beeboles

Settlement

27743	Higher Menadew	Goosehole
20001	Carbis Mill	House
27911	Coon's	Barn

SX 05 NE

Miscellaneous

5049.1	Methrose	House

Churches, Chapels and Schools

5031	Tregonning	Cross

Settlement

27667	Tregonning	House

SX 05 SW

Prehistoric

20319	Menear	Menhir

Miscellaneous

20302	Bojea Mill	Mill
20413	Trethowel Mill	Mill

SX 06 SW

Settlement

21360	Tresibble	Shippon
27709	Outer Savath	Cottage

FIELDWALKING (SEE 4.5)

SW 95 NW

Prehistoric

21101	Trerice	AP enclosures
21064	Rostowrack	Round (FN)
21063	Domellick	Round (FN)

SW 95 NE
Prehistoric

19852	Carne	Round (FN)
19861	Mena	Round (FN)
19803	Menawartha	Round (FN)
27934	Hillcrest	AP circles
19850	Carnegga	Round
19859	Carnegga	Round (PN)
19862	Carnegga	Round (FN)
19868	Roche	AP circle

SW 95 SW
Prehistoric

20913	Trethosa	Round (FN)
20872	Tregargus	Round (PN)

SW 95 SE
Prehistoric

20728	Tregascoe	AP enclosure
20655	Carne	Round (FN)
20654	Carne Stents	Round (FN)
20683	Goonamarth	Round (FN)

SW 96 SE
Miscellaneous

21506	Tregarrick	Medieval Settlement

SX 05 NW
Prehistoric

27741	Rosemellyn	Round
20008	Rescorla	Round (FN)
20011	Resugga	Round (FN)
20036	Higher Menadew	Round (FN)
20032	Restineas	Round
27447	Higher Menadew	Round
20017	Carthew	Round (FN)
20057	Carluddon	Flint scatter
20032.1	Restineas	Flint scatter
20192	Kerrow	Round (PN)

SX 05 NE
Prehistoric

5030	Trevanney	AP enclosure
5081	Penince	AP enclosure
5047	Prideaux	Round
5051	Trevanney	Round (FN)

SX 05 SW
Prehistoric

20420	Trethowel	Flint scatter
27602	Biscovillack	AP enclosure
27640	Bojea Round	Round (FN)
20320	Boscoppa	Round (FN)
27656	Gray	Round
27653	Menear	AP circle
27664	Carvear	Round

20537	Carwollen	Round (PN)
20322	Garkar	Round (PN)

SX 06 SW
Prehistoric

27695	Rosemellyn	Round
27679	Ebenezer	Enclosures
21228	Little Innisvath	Flint scatter
21276	Savath	Flint scatter
21278	Savath	Flint scatter
21238	Criggan	Round (PN)

GEOPHYSICAL SURVEY (SEE 4.7)

SW 95 NW
Prehistoric

21101	Trerice	AP enclosures
27854	Rostowrack	Round?
21064	Rostowrack	Round (FN)
21063	Domellick	Round (FN)

SW 95 NE
Prehistoric

19852	Carne	Round (FN)
19861	Mena	Round (FN)
19803	Menawartha	Round (FN)
19859	Carnegga	Round (FN)
19862	Carnegga	Round (FN)
19850	Carnegga	Round
19868	Roche	AP enclosure

SW 95 SW
Prehistoric

20913	Trethosa	Round (FN)
20872	Tregargus	Round (PN)

SW 95 SE
Prehistoric

20651	St Stephen's Beacon	Hill-top enclosure
20650	St Stephen's Beacon	Round
20655	Carne	Round (FN)
20654	Carne Stents	Round (FN)
20683	Goonamarth	Round (FN)

SW 96 SE
Miscellaneous

21506	Tregarrick	Medieval settlement

SX 05 NW
Prehistoric

27741	Rosemellyn	Round
27805	Carn Grey	Enclosure
20032	Restineas	Round
27447	Higher Menadew	Round?

SX 05 NE
Prehistoric

5030	Trevanney	AP enclosure
5081	Penince	AP enclosure
5047	Prideaux	Round
5051	Trevanney	Round (FN)

SX 05 SW
Prehistoric

27602	Biscovillack	AP enclosure
27640	Bojea Round	Round (FN)
20320	Boscoppa	Round (FN)
27656	Gray	Round
27653	Menear	AP enclosure
20319	Menear	Menhir
27664	Carvear	Round

SX 06 SW
Prehistoric

27695	Rosemellyn	Round
21262	Bodwen	Round house
27679	Ebenezer	Enclosures

AERIAL PHOTOGRAPHY (SEE 4.8)

SW 95 NW
Prehistoric

21101	Trerice	AP circles

SW 95 NE
Prehistoric

27934	Hillcrest	AP circles
19850	Carnegga	Round
27812	Hensbarrow Downs	Bank
27818	Hensbarrow Downs	Bank
19868	Roche	AP circle

Field Systems

19871	Old Pound	Field system
27437	Enniscaven	Ridge-and-furrow

Churches, Chapels and Schools

19851	Whitemoor	Enclosure

Transport and Communications

27808	Hensbarrow Downs	Hollow-ways

SW 95 SE
Prehistoric

20728	Tregascoe	AP enclosure
20651	St Stephen's Beacon	Hill-top enclosure
20650	St Stephen's Beacon	Round

Miscellaneous

27552	Chegwins	Medieval settlement + fields

Field Systems

27596	Biscovillack	Field system

Transport and Communications

27597	Biscovillack	Hollow-way

Field Systems

27598	Biscovillack	Ridge-and-furrow

SX 05 NW

Prehistoric

27741	Rosemellyn	Round
27804	Carn Grey	Round house?
27803	Carn Grey	Fields
27805	Carn Grey	Enclosure

Field Systems

27801	Carn Grey	Pasture boundary
27802	Carn Grey	Boundary
20056	Treskilling	Med fields

SX 05 NE

Prehistoric

5030	Trevanney	AP enclosure
5081	Penince	AP enclosure

SX 05 SW

Prehistoric

27602	Biscovillack	AP enclosure
27653	Menear	AP circle

SX 06 SW

Prehistoric

27695	Rosemellyn	Round
21262	Bodwen	Round house
27659	Ebenezer	Enclosures

FIELD VISIT

SW 95 NW

Prehistoric

21086	Trerice	Stone row

SW 95 NE

Prehistoric

19824	Longstone Downs	Barrow
19801	St Dennis	Barrow?
19802	St Dennis	Barrow?
19867	Roche	Barrow

19855	St Dennis	Barrow?
19868	Roche	AP circle

SW 95 SW

Prehistoric

20879	Creak-a-vose	Round (PN)
20878	Creak-a-vose	Barrow (FN)

Miscellaneous

20873	St Stephen	Wrestling Ring

SW 95 SE

Miscellaneous

20664	Rescrowsa	Mill
20694	Trewoon	Pound
33041	St Mewan's Beacon	Beacon
27110	Carne Stents	Air Pans

SX 05 NW

Prehistoric

20017	Carthew	Round (PN)
20033	Carluddon	Barrow (FN)
20192	Kerrow	Round (PN)

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6.8 Record Archive

The Cornwall archaeological Unit holds the results of this project as a publicly accessible archive:

* annotated 1:10000 and 1:2500 OS maps showing all sites (GRH 2)
* 1:10000 constraints maps of archaeological sites (GRH 2)
* fieldwork record forms (see section 2)
* site description transcripts (from the original tape rcordings)
* tracings of Tithe Maps (GRH 2)
* colour transparencies or monochrome prints of certain sites and monuments.

Key to the Gazetteer of Sites

The Gazetteer is arranged by OS 1:10000 map; a reduced version of the relevant section of the 1:2500Q OS maps showing all sites follows each section. The Gazetteer is divided into eight classes of site:

Prehistoric
Settlement
Field Systems
Churches, Chapels and Schools
Miscellaneous
China-Clay
Mining
Transport and Communications

Except for the settlements, each entry is organised as follows:

PRN: Primary Record Number, the unique reference number which identifies the site in the Cornwall and Isles of Scilly Sites and Monuments Record (SMR).

NGR: National Grid Reference, normally to 8 figures.

Site Name: Usually the nearest named settlement. (IS) indicates that the site is within the area of an Island Settlement.

Site Type: Usually the preferred term from the CAU SMR.

Features: Main components of the site.

C: Condition; the present state of the site (preservation, vegetation cover, etc). Graded in descending order from A to C, plus U, unknown (eg site not visited or inaccessible).

S: Survival; the extent to which the original site survives. Graded A to C and U, as above.

SV: Site Value; A, National Importance; B, County Importance; C, Local Importance.

GV: Group Value; reflects the extent to which the site is part of an important group of related monuments. Graded A B C U.

LU: Land Use; codes follow SMR categories.

FLD:	flooded
FUN:	farmland, unspecified
GIM:	grassland, improved
GMD:	moorland
OBE:	over-built environment
OCB:	churchyard
ODT:	over-dumped or tipped
OMX:	mineral extraction
WDE:	woodland, deciduous
WSC:	scrub
WTS:	wetland
WUN:	woodland, unspecified

ACTION: Essential archaeological work which should be undertaken in case of threat to the site (not exhaustive).

AP:	aerial photography
BS:	building survey
CC:	conservation & consolidation
EX:	excavation
FV:	field visit
FW:	field walking
GP:	ground photography
GS:	geophysical survey
LS:	listing
NA:	no action
SC:	scheduling
SK:	sketch survey
SS:	site survey
WB:	watching brief

For settements the PRN, NGR, Site Name, SV and Action categories are the same as for other classes. Additional are:

Type: type of settlement.

FH:	farming hamlet
F:	farm
SF:	small farm C: cottage

Origins: the likely period when the settlement was first established.

EM:	early medieval (pre-1066)
M:	medieval (1066 to 1540)
PM:	post-medieval (1540 to 1800)
19:	19th century

Bracketed is the earliest recorded documentary reference.

Features: components, usually buildings (see abbreviations below for details).
(*) building recommended for listing; * listed building.

Occ: occupied. Yes, No, or Unknown.

No: number of buildings; gives an indication of settlement size.

C/S: condition and survival combined. Grades A B C and U.

BV: building value. A general score for the architectural importance of the surviving buildings.

Abbreviations used in the Gazetteer

All:	alluvial	AP:	aerial photograph
B/hse:	boiler house	Bldg:	building
Blr:	boiler	Bn:	barn
BrAge:	bronze age	Brg:	bridge
B+T:	barbed & tanged	Chch:	church
C:	century	CHse:	challhouse
Conv:	converted	Cot:	cottage
Ctg:	cutting	Cts:	cartshed
Ctyd:	courtyard	Dai:	dairy
DB:	dutch barn	Diam:	diameter
Doc:	documentary reference	DomOut:	domestic outhouse
DS:	datestone	DW:	drive wheel
El:	eluvial	Elev:	elevator
Encl:	enclosure	EWks:	earthworks
FB:	field barn	Flds:	fields
Fn:	fieldname	Foss:	fossilised
GH:	goosehole	Gdn:	garden
Gnd:	grinder	Ho:	house
Hse:	house	Imp:	implements
Irreg:	irregular	Ken:	kennel
LBA:	later bronze age	LBPits:	lode-back pits
Ldgs:	loadings	Lin:	linhay
MB:	mounting block	MCH:	machinery
Med:	medieval	Mica:	mica-drag
Mow:	mowhay	MS:	milestone
Mst:	millstone	Norm:	Norman
Orch:	orchard	OS:	Ordnance Survey
Out:	outbuilding	PH:	pigeon-hole
Pig:	piggery	PN:	place-name
Pott:	pottery	Pp:	pump
Prosp:	prospecting	RB:	Romano-British
Rect:	rectangular	Ref:	reference
Res:	reservoir	RP:	rick platform
S/Box:	signal box	Sett Pit:	settling pit
Shi:	shippon	Smi:	smithy
SOF:	site of	Sq:	square
Sta:	stable	Stad:	staddle stones
TA:	Tithe Apportionment	Tk:	tank
Tnpl:	townplace	Tro:	trough
Twr:	tower	Vis:	visible
W:	well	W/bridge:	weighbridge
WH:	wellhouse	WP:	wheelpit
Wpit:	wheelpit	WW:	water wheel
Yd:	yard	I, II*, II:	Listed Building grades.

SW95NW

PREHISTORIC

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21063	9454 5839	Domellick (IS)	Round (FN)	TA. No ewks vis.			B		GIM	GS,FW,WB
21064	9472 5723	Rostowrack	Round (FN)	TA. No ewks vis.			B		GIM	GS,FW,WB
21086	9335 5680	Trerice	Stone row (PN)	Stanraewe, in 1049			B		GIM	FV
21101	9298 5704	Trerice	Enclosure (AP)	Concentric. Not vis.	U	U	A		GIM	WB,FW,GS,AP
27854	9460 5721	Rostowrack	Round?	Bank	C	C	A		GIM	GS,FW,WB,SS

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
21188	9382 5633	Treviscoe(IS)	FH	EM (1350)	Not visited	U	U	U	U	A	FV
21202	9465 5718	Rostowrack	F	M (1211)	Sta,Loo,Out,CY,DB, Shi,2Bn,Cts,Tro, Pig(*)	Y	10	B	B	A	SS,BS,GP,LS
27841	9452 5566	Little Treviscoe	C	P-M (1748)	5 cots, Tnpl	Y	5	B	B	C	GP
27842	9425 5593	(Treviscoe)	C	19 (1880)	3 cots	Y	3	B	C	C	GP
27843	9434 5624	(Treviscoe)	C	19 (1880)	2 cots	Y	1	B	B	C	GP,BS
27845	9435 5697	Bodella	FH	M (1554)	Hse,Tnpl,Ctyd,DomOut Yd,Pig,4Shi,4Cts,Out, CY,DW	Y	13	A	A	A	SS,BS,GP
27847	9428 5625	(Treviscoe)	C	19 (1880)	2 cots	Y	1	B	C	C	GP
27849	9228 5694	Benallack	F	M (1244)	Hse,DomOut,Gdn,Yd 2Bn,Pig,Loo,Out	N	7	B	B	A	BS,GP
27850	9226 5686	Benallack	SF	M (1244)	Hse,Gdn,Yd,Bn,Cts, Pig,Tk,Loo	N	5	B	C	A	GP,BS
27851	9258 5650	Halwyn	F	19 (1880)	Hse,Gdn,MS	Y	5	B	B	C	GP
27852	9304 5788	(Trerice Brdg)	SF	P-M (1840)	Bdg,Yd	N	1	C	B	C	GP,BS,SS
27853	9414 5757	Lower Bodella	C	19 (1880)	Cot,Gdn	Y	1	B	C	C	GP

SW95NW

FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27469	935 585	Gaverigan Bridge	Field system	Medieval; irreg.	B	B	B	B	GIM	NA
27470	9325 5825	Trerice Bridge	Field system	Medieval; irreg.	B	B	B	A	GIM	NA
27471	946 570	Rostowrack	Field system	Medieval; irreg.	C	C	B	A	GIM	FV
27472	942 571	Bodella	Field system	Med; foss. strips	B	B	B	A	GIM	NA
27473	934 571	Trerice	Field system	Med; foss. strips	B	B	B	A	GIM	NA
27474	936 564	Treviscoe	Field system	Med; foss. strips	C	C	B	A	GIM	NA
27475	930 553	Burgotha	Field system	Med; foss. strips	C	C	B	A	GIM	NA
33001	922 569	Benallack	Field system	Medieval; irreg.	C	C	B	A	GIM	NA

CHURCHES CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27012	9401 5651	Treviscoe (IS)	Chapel (Meth)		A	A	C		OCB	GP,LS
27838	9434 5505	Trethosa School	School	School, Yard (II)	A	A	B	B	OBE	GP
33112	9500 5743	Hendra (IS)	Chapel (Meth)	Built 1905	U	U	C		OCB	FV

MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21130	9416 5757	Lower Bodella	Mill	Leat	B	C	C		OBE	FV
21136	9214 5714	Retew	Smithy	Demolished	C	C	C		WSC	SS
21151	9290 5775	Wheal Remfrey	Brickworks	Kiln, Stack	B	B	A		ODT	SS,BS,GP,CC
21169	9455 5564	Little Treviscoe	Cooperage	Office, Yard	A	B	C		OBE	GP
21202.1	9464 5715	Rostowrack	Horse engine(SOF)	House, re-roofed	B	B	C	A	OBE	BS,LS,GP
27003	9280 5810	Gaverigan	Brickworks	Stack	B	C	C		ODT	FV
27004	9300 5750	Trerice	Quarry	Quarry	B	A	C		FLD	GP
27007	9292 5790	Ironwood Villas	Building	Brick, tile	A	A	C		OBE	GP
27841.1	9452 5570	Little Treviscoe	Smithy	2 storeyed	A	A	C		OBE	GP,BS
27845.1	9435 5695	Bodella	Cider press	1.6m diam. granite	A	A	B		OBE	BS,LS,GP
27846	9411 5709	Bodella	Well	Drinking hole	C	C	C		GIM	NA

SW95NW

CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21106.1	9480 5545	Goonvean	Engine House	Boiler Hse, Stack	B	A	B	A	ODT	SC,CC,BS
21106.2	9485 5540	Goonvean	Pan-Kiln	Tank, Kiln, Stack	B	A	A	A	OBE	SS,GP
21106.3	9495 5540	Goonvean	Pan-Kiln	Mica, Kiln, Stack	B	A	B	A	OBE	SS,GP
21106.5	9495 5528	Goonvean	Engine House	Stack, Beam Engine	A	A	A	A	OBE	SC,CC,BS
21107.1	9440 5530	Trethosa	China Clay Works	Power House	A	A	C	B	OMX	GP
21107.2	9430 5530	Trethosa	Mica Drag	Settling Pit	A	A	B	B	OMX	GP,SS
21116	9230 5681	Wheal Benallack	China Clay Works	Pit, Dump	C	B	B	B	WSC	GP,SS
21116.1	9240 5686	Wheal Benallack	Pan-Kiln	Tank	C	C	C	B	WSC	FV
21116.2	9230 5681	Wheal Benallack	Engine House	Stack	B	B	B	A	WSC	GP,SS
21126	9210 5723	Trewhela	China Clay Works	Pit	C	C	C		ODT	FV
21132	9490 5695	Parkandillack	China Clay Works	Pit, Dump	B	B	C		WSC	FV
27000	9141 5690	Trewhela	Pan-Kiln	Tank, Pan	C	C	C		WSC	FV
27001	9182 5792	Higher Fraddon	Pan-Kiln	Stack, Linhay	B	B	C		OBE	GP
27008	9285 5805	Hit or Miss	Pan-Kiln	Linhay	C	C	C		WSC	FV
27011	9366 5603	Virginia	Water Wheel	Water Wheel, Leat	B	A	C		WUN	FV,GP
27013	9477 5556	Tregears	Mica Works	Stack	B	C	C		ODT	GP
27015	9280 5745	Maclarens Dry	Pan-Kiln	Linhay, Pan	B	B	C	B	OBE	GP
27017	9230 5650	New Halwyn	China Clay Works	Pit, Dump	B	A	B	A	WSC	GP,SS
27017.1	9240 5672	New Halwyn	Mica Lagoon	Mica Dam, Lagoon	B	A	C	A	WSC	SS
27017.2	9232 5667	New Halwyn	Mica Drag	Settling Pit, Drag	B	A	C	A	WSC	SS
27017.3	9230 5655	New Halwyn	Sky Tip	Incline, Winch	A	A	C	A	ODT	GP
27017.4	9250 5660	New Halwyn	Mica Drag	Drag, Settling Pit	C	B	C	A	WSC	SS
27017.5	9235 5662	New Halwyn	Clay Pit		C	B	C	B	FLD	GP
27017.6	9247 5657	New Halwyn	Engine House	Boiler Hse, Stack	B	B	B	A	WSC	SS
27017.7	9215 5660	New Halwyn	Clay Pit		B	A	C	A	FLD	GP
27019	9268 5720	Trerice Dry	Pan-Kiln	Linhay, Pan, Tank	A	A	B	B	OBE	FV,GP
27020	9272 5694	South Fraddon Dry	Pan-Kiln	Stack, Pan, Linhay	A	A	B	B	OBE	GP,BS
27021	9300 5635	Grove Dry	Pan-Kiln	Linhay, Stack	C	C	B	B	ODT	GP
27022	9285 5657	Mellangoose	Pan-Kiln	Linhay, Stack	C	C	C	B	ODT	GP
27023	9225 5505	Rosevallen Dry	Pan-Kiln	Stack, Kiln, Tank	A	A	B	B	OBE	FV,GP
27025	9497 5585	Rostowrack	Pan-Kiln	Linhay, Tunnel	C	B	B	A	OBE	FV,SS
27026	9480 5685	Parkandillack	Engine House	Stack, Beam Engine	A	A	A	A	OBE	SC,CC,BS
27027	9478 5675	Parkandillack	Mica Drag	Drag, Settling Pit	B	A	B	A	WSC	SS,GP
27260	9175 5600	Wheal Retallick	China Clay Works	Clay Pit, Dump	C	C	C		WSC	GP
27260.1	9165 5607	Wheal Retallick	Engine House	Stack, House	B	B	A	A	WSC	FV,GP

SW95NW

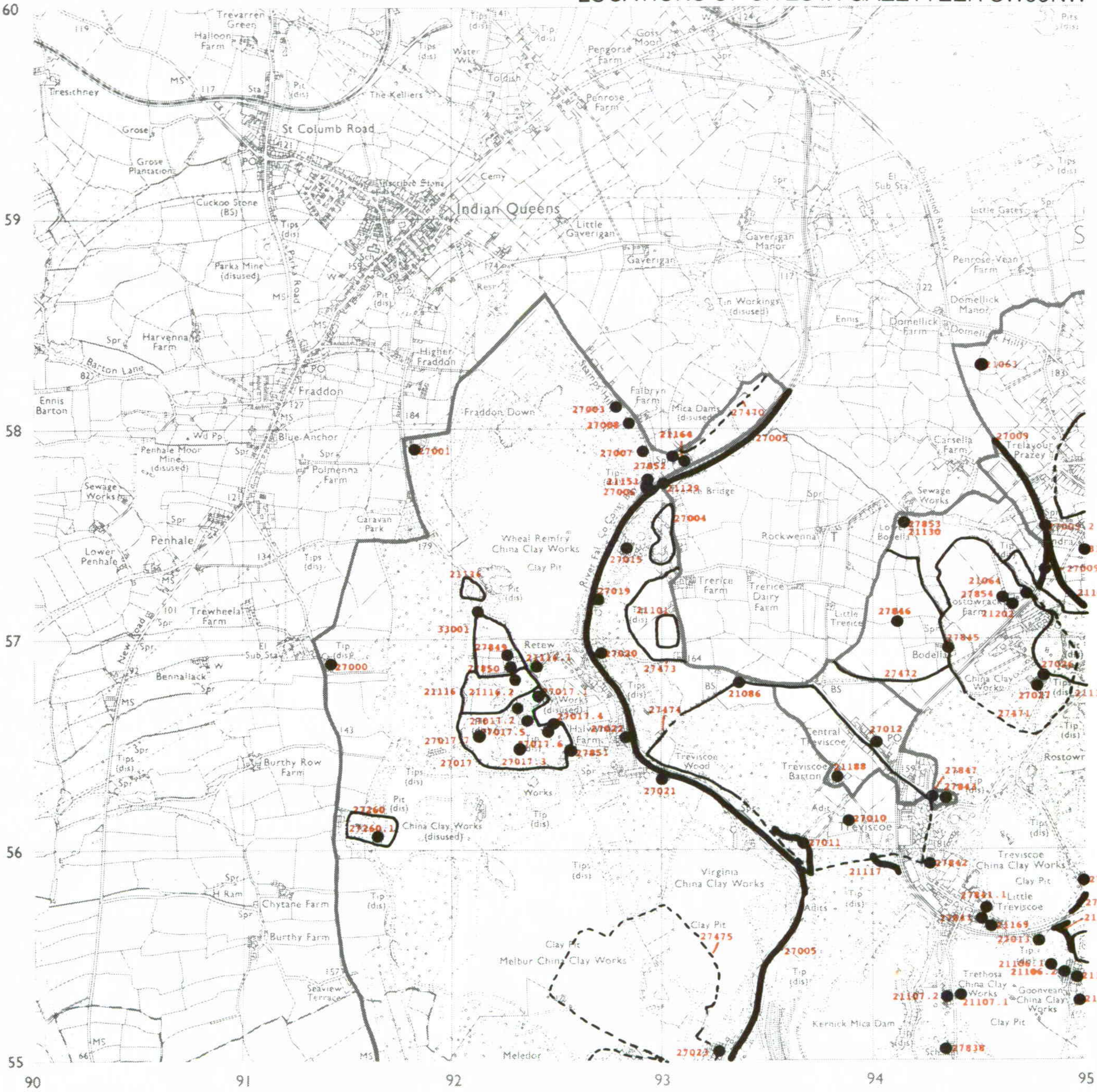
MINING

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21164	9307 5787	Trerice Bridge	Stamping mill	Platform, leat	C	C	B		WDE	SS
27010	9390 5615	Great Treviscoe	Mine	Openwork, dump	B	U	C		WUN	FV,SS

TRANSPORT AND COMMUNICATIONS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21106.6	9480 5560	Goonvean	Railway	Siding, Wharf	C	B	C	A	WSC	FV,GP
21108	9534 5695	to								
21108	9485 5741	Hendra Incline	Tramway	Incline Plane	B	B	A	B	WSC	SC,CC
21117	9400 5590	Great Treviscoe	China Clay Works	Incline Plane	C	C	C	B	WSC	FV
21129	9300 5773	Trerice Bridge	Bridge	1800 datestone (II)	A	A	B		OBE	BS,GP
27005	9320 5440	to								
27005	9360 5976	Retew Branch	Railway	Bridge, Siding	B	B	B		WSC	FV,CC
27006	9300 5770	Trerice Crossing	Railway	Crossing, Siding	C	C	C	C	WSC	FV
27009.01	9470 5750	Whitegate	Railway	Siding, Wharf	B	A	C	B	WSC	GP
27009.02	9482 5754	Hendra	Railway, Tramway	Bridge	A	A	B	B	WSC	SC,GP
27009.03	9481 5733	Hendra	Railway	Bridge	A	A	C	A	FUN	GP
27024	9495 5575	Slip	Railway, Tramway	Siding, Crusher	C	B	B	A	ODT	FV,SS

LOCATIONS OF SITES IN GAZETTEER SW95NW



SW95NE

PREHISTORIC

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
19800	9507 5832	St Dennis (IS)	Hillfort	Bivallate	B	B	A		OCB	EX,SS,GP,CC
19801	9516 5819	St Dennis (IS)	Barrow (SOF)	C19 reference	U	U	B		GIM	FV,WB
19802	9520 5817	St Dennis (IS)	Barrow (SOF)	C19 reference	U	U	B		OBE	FV,WB
19803	9576 5791	Menawartha	Round (FN)	TA. No ewks vis.			B		GIM	GS,FW,WB
19810	9963 5675	Currian Vale	Round (FN)	TA. No ewks vis.			B		OBE	GS,FW,WB
19823	9841 5532	Longstone Downs	Barrow (SOF)	Destroyed?	C	C	B	A	GMD	WB
19824	9822 5522	Longstone Downs	Barrow (SOF)	Not found	U	U	B	A	GMD	WB,FV
19836	982 598	Roche (IS)	Artefact	Ingot,coins(Roman?)	U	U	A	B	GIM	NA
19842	9968 5754	Hensbarrow	Barrow	Bowl, 36m	A	A	A		GMD	SS,EX,GP,CC
19844	9912 5745	Littlejohns	Barrow	Platform, 17m	A	A	A		GMD	SS,EX,SC,GP
19850	9603 5812	Carnegga	Round	Hedge + bank	B	B	A	B	GIM	SS,GS,SC,EX
19852	9557 5848	Carne	Round (FN)	TA. No ewks vis.			B		GIM	GS,FW,WB
19853	9616 5767	St Dennis Res.	Barrow	Platform, 20m	B	B	A	C	GMD	SS,EX,SC
19855	9533 5842	St Dennis (IS)	Barrow?	Doubtful site	U	U	B		GUN	FV
19857	9525 5777	St Dennis (IS)	Menhir (FN)	Pound Menear - TA	U	U	B		OBE	FV
19859	9606 5835	Carnegga	Round (PN)	Ker Circ.fld to E			A	B	GIM	SS,GS,FW,EX
19861	9565 5816	Mena	Round (FN)	TA. No ewks vis.			B		GIM	GS,FW,WB
19862	9617 5851	Carnegga	Round (FN)	TA. No ewks vis.			B	B	GIM	GS,FW,WB
19863	9616 5798	Gothers Road	Round (FN)	TA. No ewks vis.			A		GIM	GS,FW,WB
19867	982 598	Roche (IS)	Barrow	Opened	U	U	A	B	GIM	FV
19867.1	982 598	Roche (IS)	Artefact	Br.Age spears + axes	U	U	A		GIM	FV
19868	9916 5926	Roche (IS)	Ring ditch	AP cropmark	U	U	A		GUN	FV,GS,FW,AP
27607	9953 5514	Greensplat	Barrow	Bowl, 15m	B	B	A		GIM	SS,EX,SC
27812	9924 5793 to									
27812	9937 5796	Hensbarrow Downs	Bank	Bank	A	B	A		GMD	SS,SC,AP
27817	9952 5797	Hensbarrow Downs	Barrow	Oval, 12 x 9m	B	B	A		GMD	SS,EX,CC,SC
27818	9960 5796 to									
27818	9982 5816	Hensbarrow Downs	Bank	Bank	A	B	A		GMD	SS,SC,AP
27929	9903 5707	Cocksbarrow	Ring cairn	Bank, 29m	B	B	A		GMD	SS,EX,SC.CC
27934	9749 5507	Hillcrest	Circular AP marks	No ewks. visible	U	U	A	C	GIM	GS,FW,WB,AP

SW95NE

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
19812	9778 5943	Gilley Mill	F	P-M (1840)	Hse,Gdn,Yd,Mill,MS	Y	3	B	B	B	SS,BS,GP
19833	9871 5841	Coldvreath Mill	F	P-M (1805)	Hse,Gdn,Bn(cob) * Cts,Shi,Imp,MS	Y	5	A	A	A	SS,BS,GP
19951	9544 5825	Mena Wollas(IS)	FH	M (1302)	Not visited	U	U	U	U	A	FV
19953	95 58	St Dennis (IS)	FH	M (1334)	Not visited	U	U	U	U	A	FV
19954	952 578	Trelavour (IS)	FH	EM (1302)	Not visited	U	U	U	U	A	FV
19955	9541 5501	Goonamarris	F	M (1290)	Hse,Gdn,Yd,2Bn(*) Cts,Stad	Y	4	B	A	A	SS,BS,GP,LS
19957	961 561	Nanpean (IS)	FH	M (1332)	Not visited	U	U	U	U	A	FV
19959	9857 5850	Coldvreath	FH	M (1243)	2Hse,3Cot,Tnpl,3Gdn, Loo,2Yd,Pig,Cts,Out, 2Bn,Dai	Y	12	A	A	A	SS,BS,GP
19959											
19960	9845 5814	Higher Coldvreath	SF	M (1281)	CHse(*),Bn,Gdn,Tro, Stad	Y	2	B	A	A	BS,GP,LS
19969	9734 5926	Retillick	FH	M (12th cent)	2Hse,Tnpl,2Gdn, 2Bn(*),Shi,4Cts,4Out, Smi,2Yd,Loo	Y	15	A	A	A	SS,BS,GP,EX
19970	9897 5880	Pentivale	FH	M (1285)	Tnpl,Cot(cob)(*),Out other buildings	Y	2	B	B	A	GP,BS,LS,SS
19971	98 60	Roche (IS)	FH	M (1201)	Not visited	U	U	U	U	A	FV
19972	993 600	Tregarrick (IS)	FH	EM (1250)	Not visited	U	U	U	U	A	FV
19973	983 594	Trerank (IS)	FH	EM (1260)	Not visited	U	U	U	U	A	FV
19974	990 591	Tresaize (IS)	FH	EM (1260)	Not visited	U	U	U	U	A	FV
27400	9996 5974	(Carbis)	C	19 (1880)	Cot, Gdn	Y	1	B	C	C	NA
27401	9988 5969	(Carbis)	SF	P-M (1840)	Hse(*),Gdn,Yd,Out,W, Tro,MS,Loo	Y	4	B	B	B	BS,GP,LS
27402	9966 5975	(Carbis)	SF	P-M (1840)	Hse,Gdn,Yd,2Out,Bn	Y	4	B	B	C	GP
27404	9986 5962	(Carbis)	SF	P-M (1840)	CHse, Bn, Gdn, Out	Y	2	B	B	C	GP,BS
27405	9957 5939	Hendra	F	EM (1270)	Hse *,Gdn,Yd,Bn, 2Out,Cts	Y	5	A	A	A	BS,GP
27406	9968 5928	(Carbis)	SF	19 (1880)	Hse,Gdn,Yd,Pig, DomOut,MS	Y	4	B	B	C	GP,BS
27408	9953 5913	(Hendra)	SF	P-M (1805)	Bn, Hse, Yd	N	2	B	B	C	BS,GP
27410	9994 5898	(Carbis)	C	19 (1880)	Cot, Gdn, Out	Y	2	B	B	C	GP
27411	9994 5915	(Carbis)	SF	P-M (1840)	CHse,Bn,Gdn,Yd,Cts	Y	2	B	B	C	BS,GP
27412	9929 5898	Polpuff	C	19 (1880)	Cot, Gdn	Y	1	B	C	C	GP

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SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27413	9921 5911	Trezaise Sq	C	P-M (1748)	3 Cots(*), Gdn	Y	1	B	A	B	BS,GP,LS
27416	9993 5949	(Carbis)	C	P-M (1840)	Cot, Gdn	Y	1	B	B	C	GP
27417	9993 5928	Lower Goonleigh	F	M (1293)	CHse,Gdn,2Bn,Out,MS	N	5	B	B	A	BS,GP
27418	9985 5943	(Carbis)	SF	P-M (1840)	Hse(SOF),2Out,2Cts	D	4	C	C	C	GP
27421	9909 5859	Hillside	F	P-M (1805)	Hse, MS	Y	5	B	C	C	GP
27423	9663 5767	Roley Poley	F	P-M (1840)	Hse,Gdn,Yd,2Out,Cts, GH	N	4	B	B	C	SS,BS,GP
27424	9647 5927	(Enniscaven)	SF	(M) (1201)	Hse(cob)(*),2Cots, Gdn,Pig,Out	Y	4	B	A	B	BS,GP,LS
27425	9846 5878	Lower Coldvreath	F	P-M (1805)	Hse(cob),Gdn,Yd,Bn, Shi,MS	Y	4	B	B	C	BS,GP
27426	9845 5899	Lower Trerank	F	P-M (1840)	CHse(cob)(*),Gdn,Yd, Pig,MS,Cot,Tro,Stad	Y	4	A	A	B	BS,GP,LS
27427	9826 5917	Trerank Moor	F	P-M (1805)	Shi,Hse,Yd	D	2	C	B	C	GP
27428	9858 5888	Reeshill	C	P-M (1840)	4 Cots	Y	2	B	B	C	BS,GP
27429	9602 5838	Carnegga	F	EM (1284)	Hse,Gdn,Yd,2Out,2Bn, Shi,Pig,PH,Cts,MS	Y	9	B	B	A	BS,GP
27431	9634 5886	Gothers Moor	SF	P-M (1840)	Hse,Bn,Yd,MS	Y	3	B	B	C	BS,GP
27432	9624 5878	Carnegga Moor	SF	19 (1880)	Hse(cob),Gdn,Yd,Cts, Out,Pig	Y	4	B	B	C	BS,GP
27433	9653 5835	Little Gothers	F	M (1334)	Hse,Gdn,Yd,Bn,DB, Gnd,5Shi	Y	8	B	B	A	BS,GP
27434	9634 5826	Gothers Hill	C	P-M (1805)	6 Cots	Y	2	B	C	C	GP
27435	9623 5823	(Gothers)	SF	P-M (1805)	Hse,2Out,Yd,Gdn	Y	3	B	B	C	GP
27436	9675 5808	Roseveare	C	P-M (1840)	Cot, Gdn	Y	1	B	C	C	GP
27438	9788 5940	(Trerank)	SF	19 (1880)	Hse,Gdn,Yd,Loo,Tro, MS,Stad	Y	3	B	B	C	BS,GP
27440	9735 5847	(Castle View)	SF	P-M (1840)	CHse(*),Bn,Gdn,Out	Y	2	B	B	B	BS,GP,LS
27442	9693 5857	Great Gothers	FH	EM (1086)	Hse,Gdn,Loo,DomOut, 3Bn,Yd,2Shi,2Cts	Y	10	A	A	A	SS,BS,GP,EX
27445	9656 5527	Higher Goverseth	F	P-M (1685)	Hse,Gdn,Yd,Bn,Cts, Out	Y	4	B	B	B	BS,GP
27913	9785 5523	Noppies	F	P-M (1805)	2 cots, MS	D	3	C	C	C	GP
27914	9949 5563	Carrancarrow	SF	P-M (1805)	2 Cots, Yd, Out	Y	2	B	C	C	GP
27916	9938 5529	Carrancarrow	SF	P-M (1748)	Hse, Out, Yd	D	2	C	C	C	GP
27917	9963 5572	Greensplat	SF	P-M (1748)	Hse, Yd, Out	N	2	C	B	C	GP

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SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27918	9927 5642	Penrice	C	19 (1880)	2 Cots	N	1	B	B	C	BS,GP
27919	9919 5637	Penrice	SF	19 (1880)	Hse(*),DomOut(*), Cts(*),Loo(*),Out(*)	N	5	B	A	C	SS,BS,GP,LS
27922	9968 5671	Gunheath	F	M (1310)	Bn,DW,Pig,DB,Tnpl	N	3	B	A	A	BS,SS,GP
27923	9954 5678	Higher Moor	F	P-M (1840)	Shi, Yd	D	2	B	B	C	SS,BS,GP
27925	9930 5737	(Gunheath)	C	P-M (1840)	3Cots(*),Out,3Gdn,MS	Y	5	B	B	B	BS,GP,LS
27926	9917 5720	Cocksbarrow	SF	P-M (1840)	2Cots,Gdn,Bn,Yd,Out	Y	3	B	B	C	BS,GP
27930	9956 5666	Vale Pleasant	F	P-M (1840)	Bn,Yd,Loo,Pig,Cts, Out	N	5	A	A	B	SS,BS,GP,LS
27933	9761 5516	Hillcrest	SF	19 (1880)	2 Cots, MS	Y	3	B	C	C	GP
27935	9762 5537	Old Pound	SF	19 (1880)	Hse, Out, Yd, Pig	Y	3	B	C	C	GP
27936	9768 5545	Longstone Cott	C	19 (1880)	Cot, Gdn	Y	1	B	C	C	GP
27937	9740 5544	Old Pound	F	P-M (1748)	Hse, MS	Y	4	C	C	C	GP
27938	9738 5551	Old Pound	C	19 (1880)	Cot, Gdn	Y	1	B	B	C	GP,BS
27940	9736 5563	Old Pound	F	P-M (1748)	Hse,Gdn,Yd,Bn,2Shi, Dai,Cts	N	6	B	B	C	BS,GP
27941	9735 5567	Old Pound	SF	19 (1880)	Out, MS	N	2	C	B	C	GP
27942	9734 5571	Vigus/Menakirk	F	P-M (1805)	2 Out, Yd	N	2	C	C	C	SS,BS,GP
27944	9728 5554	Trelock	F	P-M (1840)	Hse,Gdn,Yd,Bn(*), 2Out,Pp(*)	Y	4	B	B	B	SS,BS,GP,LS
27945	9708 5566	Stonegwins	F	P-M (1805)	CHse(*),Bn(*),Gdn, Yd,Cts,Pig,Gnd,Imp	Y	4	B	A	B	SS,BS,GP,LS
27949	9525 5506	(Goonamarris)	C	19 (1880)	2 Cots(*), Gdn	Y	1	B	B	C	GP,LS
27950	9504 5582	Slip Cottages	C	19 (1880)	2 Cots, Gdn	Y	1	B	C	C	GP
27951	9545 5509	(Goonamarris)	SF	P-M (1805)	CHse, Bn	Y	1	B	B	C	GP,BS
27952	9554 5515	(Goonamarris)	C	P-M (1840)	Cot, Out, Gdn	Y	2	B	C	C	GP
27953	9563 5543	Bloomdale	F	P-M (1805)	Hse,Gdn,Yd,3Bn,Shi, Cts,Loo,MB	Y	7	B	B	C	BS,GP
27954	9568 5606	(Nanpean)	C	19 (1880)	Cot, Out, Gdn, Pp	N	2	B	B	C	GP,BS
27956	9569 5619	Hallew Cottages	C	19 (1880)	Cot, Gdn	Y	1	C	C	C	GP
27959	9688 5576	(Old Pound)	SF	19 (1880)	Hse, Gdn, Pig	Y	2	B	C	C	GP
27960	9676 5576	(Old Pound)	C	19 (1880)	3 Cots	Y	1	B	C	C	GP
27961	9674 5579	(Old Pound)	C	19 (1880)	2 Cots, MS	Y	2	B	C	C	GP
27964	9654 5553	Goverseth Hill	C	19 (1880)	3 Cots, Gdn	Y	1	B	C	C	GP
27965	9649 5678	St Morrish	C	19 (1880)	Cot, Gdn	Y	1	B	C	C	GP

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SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27966	9648 5682	Currian Vale	F	19 (1880)	Hse,Gdn,Yd,Shi,Out, Cts,Loo,MS	D	6	B	B	C	GP
27967	9656 5678	Currian Vale	C	19 (1880)	Cot, Gdn	Y	1	B	C	C	GP
27968	9660 5684	Currian Vale	C	19 (1880)	Cot, Gdn	Y	1	B	C	C	GP
27969	9664 5688	Fenton Farm	F	P-M (1748)	Hse,Gdn,Yd,Bn,Out,MS	Y	4	B	B	C	BS,GP
27970	9662 5676	Currian Vale	C	19 (1880)	Cot, Gdn	Y	1	B	C	C	GP
27972	9654 5638	Menmundy	F	P-M (1805)	2Hses,Yd,Gdn,2Bn,Tk, Cts,FB	Y	5	B	B	C	SS,BS,GP
27974	9673 5686	Currian Farm	F	19 (1880)	Hse,Gdn,Yd,Bn,Out, Pig,Shi,Dai,PH	N	6	B	B	C	SS,BS,GP
27976	9707 5696	Higher Cottages	SF	P-M (1805)	2 Cots, Out, Gdn	Y	3	B	C	C	GP
27980	9594 5761	(Menawartha)	C	P-M (1832)	Cot, Gdn	Y	1	B	C	C	GP
27984	9590 5778	(Menawartha)	C	P-M (1840)	Cot	Y	1	B	C	C	GP
27986	9607 5802	(Carnegga)	C	19 (1880)	Cot, Gdn	Y	1	B	C	C	GP
27987	9593 5805	Little Carnegga	C	P-M (1805)	Cot, Gdn	Y	1	B	C	C	GP,BS
27988	9574 5808	(Menawartha)	SF	P-M (1840)	Cot(*), Gdn, MS	Y	2	B	B	C	GP,BS,LS
27989	9543 5835	(Menawollas)	SF	19 (1880)	Bn	Y	1	B	B	C	GP
27990	9532 5847	Carne	C	P-M (1840)	Cot(*), Gdn	Y	1	B	B	C	GP,BS,LS
27991	9540 5859	Carne	FH	M (1798)	Hse,Gdn,Yd,Bn,Out,MS	N	4	B	B	A	SS,BS,GP
27992	9549 5867	(Carne)	C	P-M (1840)	Cot(*), Gdn	Y	1	B	B	C	GP,BS,LS
27994	9588 5804	(Menawartha)	C	P-M (1805)	Cot, Gdn	Y	1	B	B	C	BS,GP
27996	9614 5893	(Gothers)	SF	P-M (1840)	Cabin(*),Gdn,2Out	N	3	B	A	B	SS,BS,GP
27997	9584 5870	Carneggo	SF	P-M (1840)	Hse, MS	Y	3	B	C	C	GP
27998	9574 5874	Newmoor	C	P-M (1840)	Cot, Out, Gdn	Y	2	B	B	C	GP
27999	9996 5982	Carbis Green	F	P-M (1748)	CHse(*),Bn,Gdn,Out, Shi	Y	4	B	B	B	BS,GP,LS

FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
19871	9700 5542	Old Pound	Field system	Med strips, banks	B	B	A	B	GIM	SS,AP
27302	966 551	Higher Goverseth	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
27303	954 551	Goonamarris	Field system	Medieval; irreg.	C	C	B	A	GIM	NA
27437	9651 5890	Enniscaven	Field system	Ridge and furrow	B	B	B		WSC	SS,AP
27481	955 585	Carne	Field system	Med; foss. strips	B	B	B	A	GIM	NA

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FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27482	961 584	Carnegga	Field system	Medieval; irreg.	B	B	B	A	GIM	FV,EX
27483	963 581	Gothers Hill	Field system	Medieval; irreg	C	C	B	A	GIM	NA
27484	969 586	Gothers	Field system	Med; foss. strips	A	A	B	A	GIM	AP,FV,EX
27485	967 593	Enniscaven	Field system	Med; foss. strips	B	B	B	A	GIM	NA
27486	973 594	Retillick	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27487	977 593	Gilley	Field System	Medieval; irreg.	C	C	B	C	GMD	NA
27488	984 594	Trerank	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27489	987 584	Coldvreath	Field system	Med; foss. strips	B	B	B	A	GIM	FV,EX
27490	990 589	Pentivale	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27492	994 584	Higher Trezaise	Field system	Med; foss. strips	C	C	B	B	GIM	NA
27493	995 569	Gunheath	Field system	Medieval; irreg.	B	B	B	B	GIM	FV
27495	993 555	Carrancarrow	Field system	Med; foss. strips	C	C	B	B	GIM	NA
27496	974 554	Old Pound	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
27497	968 554	Lower Goverseth	Field system	Medieval; irreg.	B	B	B	B	GIM	FV
27498	961 562	Nanpean	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27810	9919 5824 to									
27810	9933 5823	Hensbarrow Downs	Field system	Hedge	B	B	B	B	GMD	SS
27813	9973 5826	Hensbarrow Downs	Enclosure	Modern	B	A	C		GMD	SS
27840	958 579	Mena Wartha	Field system	Med; foss. strips	B	B	B	A	GIM	NA
33002	996 594	Hendra	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
33044	952 579	St Dennis (IS)	Field system	Med; foss. strips	C	C	B	C	OBE	NA
33045	955 581	Mena Wollas (IS)	Field system	Med; foss. strips	B	B	B	A	GIM	NA

CHURCHES CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
19800.2	9507 5832	St Dennis (IS)	Church	Churchyd,font(II*)	C	C	A	A	OCB	BS,EX,CC,GP
19800.4	9507 5832	St Dennis (IS)	Cross	Decorated,C11,2.0m h	A	A	A	A	OCB	CC,GP
19809	9649 5678	St. Morrish	Holy Well (SOF)	Based on placename	U	U	B		OBE	WB
19829	9873 5998	Roche (IS)	Cross	Wheel-headed (II)	B	A	A	A	OBE	CC,SC,GP
19830	9879 5979	Roche (IS)	Church	Listed (II*)	A	A	A	A	OCB	CC,EX,BS,GP
19834	9880 5854	Coldvreath	Cross (FN)	Cross field (1840)			C		GIM	NA
19839	9911 5961	Roche Rock (IS)	Chapel	Listed (I)	A	B	A		GMD	BS,CC,GP
19840	9912 5952	Roche Rock (IS)	Holy well	No remains?	U	U	B		GMD	FV
19849	9609 5601	Nanpean (IS)	Holy well	Possible site	U	U	B		OBE	FV

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CHURCHES CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
19851	9732 5816	Whitemoor	Enclosure	Oval, c.30 x 20m	B	A	A	A	GMD	SS,SC,AP,CC
19851.1	9732 5816	Whitemoor	Building	Rect c. 3.5 x 1.5m	B	A	A	A	GMD	SS,SC,EX,CC
19864	9610 5822	Carnegga	Cross (FN)	Cross field (1840)			C		GIM	NA
21527	9805 5815	Coldvreath	Holy well	Uncertain location	U	U	B		WSC	FV
27079	9625 5594	Nanpean (IS)	School	Belfry	A	A	C		OBE	GP
27080	9636 5591	Nanpean (IS)	Chapel (Meth)	Belfry (II)	A	A	C		GUN	GP
27081	9600 5625	Nanpean (IS)	Chapel (Meth)	Sunday School (II)	A	A	C		OCB	GP
27082	9735 5555	Old Pound	Chapel (Meth)	Chapel (II)	A	A	C		OCB	GP
27082.1	9733 5556	Old Pound	Chapel (Meth)	Roofless	B	B	C		OCB	GP
27084	9960 5556	Greensplat	Chapel (Meth)	Sunday School	A	A	C		OCB	GP
27414	9923 5913	Trezaise Square	Chapel (SOF)	Platform	C	C	C	B	OBE	WB,SS
33024	9511 5814	St Dennis (IS)	Chapel (Meth)	Listed (II)	U	U	C		OCB	FV,GP
33025	9903 5910	Trezaise (IS)	Chapel (Meth)	Listed (II)	U	U	C		OCB	FV,GP
33038	9692 5739	Whitemoor (IS)	Chapel (Meth)		U	U	C		OCB	FV,GP
33039	9700 5741	Whitemoor (IS)	School		U	U	C	B	OBE	FV,GP
33042	9875 5976	Roche (IS)	Cross	Decorated high cross	A	A	A	A	OCB	CC,GP
33043	9865 5999	Roche (IS)	Cross	Wheel headed	B	A	A	A	OBE	CC,GP
33102	9887 5980	Roche (IS)	School	Extant 1880	U	U	C	B	OBE	FV
33105	9517 5784	Trelavour (IS)	School	Extant 1880	U	U	C	B	OBE	FV
33111	9514 5770	Trelavour (IS)	Chapel (Meth)	Extant 1880	U	U	C	A	OCB	FV

MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
19805	956 551	Goonamarris	Mill (FN)	Mill meadow			C		OBE	NA
19812.1	9776 5945	Gilley Mill Farm	Waterwheel(SOF)	Wheelpit. Millhouse	B	B	C	A	OBE	BS,GP
19820	9741 5537	Old Pound	Pound (FN)	Pound field(1840)			B		GIM	WB
19833.1	9869 5839	Coldvreath Mill	Waterwheel	Oatey & Martyn (II)	A	A	A	A	OBE	BS,GP,CC
19833.2	9872 5837	Coldvreath Mill	Mill pool	Leat, sluice	A	A	B	A	WSC	SS,GP,CC
19833.3	9869 5840	Coldvreath Mill	Beebole	In barn. Round top	A	A	B	A	OBE	GP,BS
19838	9883 5985	Roche (IS)	Pound (FN)	TA			C		OBE	NA
19865	9514 5790	St Dennis (IS)	Pound	Built over	C	C	C		OBE	NA
19929	9960 5860	Tresayes	Feldspar Quarry	Quarry, Dump	C	B	C		WSC	FV
19969.1	9734 5926	Retillick	Waterwheel (SOF)	Wheelpit	B	B	B	A	OBE	BS,GP
19969.2	9740 5917	Retillick	Millpool	Leat	A	A	B	A	WTS	SS

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MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27403	9997 5690	Carbis	Boundstone	18th cent? (II)	A	A	B		WSC	GP
27415	9912 5952	Roche Rock (IS)	Settlement	Post-med, house	B	B	B	B	GMD	SS,EX
27429.1	9601 5835	Carnegga	Horse engine(SOF)	Building	B	B	C	A	OBE	BS,GP
27816	9940 5787	Hensbarrow Downs	Boundstones	TF1, TF2, etc	A	U	C	B	GMD	GP
27829	9949 5753	to								
27829	9971 5754	Hensbarrow Downs	Boundstones	T on several	A	U	C	B	GMD	GP
27922.1	9970 5670	Gunheath	Horse engine(SOF)	Drivewheel,bldg(SOF)	B	B	C	A	OBE	BS,GP
27923.1	9952 5679	Higher Moor Farm	Hull	Rab-cut	A	A	C	A	OBE	BS,GP
33014	9625 5812	Gothers	Mill (FN)	Mill close			C		GIM	FV
33054	9510 5828	St Dennis (IS)	Playing place	Circular enclosure	B	B	B	B	GUN	SV
33125	9879 5998	Roche (IS)	Smithy	Extant 1880	U	U	C	B	OBE	FV
33126	9999 5960	Carbis	Smithy	Extant 1880	U	U	C	B	OBE	FV
33127	9515 5787	Trelavour (IS)	Smithy	Extant 1880	U	U	C	B	OBE	FV
33128	9508 5764	Trelavour (IS)	Smithy	Extant 1880	U	U	C	B	OBE	FV
33129	9593 5618	Nanpean (IS)	Smithy	Extant 1880	U	U	C	B	OBE	FV
33132	9880 5990	Roche (IS)	Smithy (SOF)	Extant 1880	C	C	C	B	OBE	NA

CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
19872	9950 5530	Carrancarrow	China Clay Works	Clay Pit	B	B	C		FLD	GP
19879	9520 5565	Goonamarris	China Clay Works	Clay Pit, Sky Tip	B	A	C		WSC	GP
19880	9530 5535	Bloomdale	China Clay Works	Clay Pit, Sky Tip	B	A	B	A	WSC	GP
19880.1	9553 5530	Bloomdale	Pan-Kiln	Kiln, Stack, Tank	B	B	B	B	WSC	GP,SS
19880.2	9545 5535	Bloomdale	Pan-Kiln	Kiln, Stack, Tank	C	B	C	B	WSC	GP
19880.3	9538 5339	Bloomdale	Engine House	Stack, Shaft	C	C	C	B	WSC	GP
19895	9605 5730	Trelavour	China Clay Works	Clay Pit, Sky Tip	B	A	C	A	GMD	GP
19895.1	9593 5742	Trelavour	Settling Pit	Pit	C	C	C	B	WSC	GP
19897	9640 5765	St Dennis Consols	China Clay Works	Clay Pit, Sky Tip	B	B	C	A	WSC	GP
19897.1	9643 5774	St Dennis Consols	Engine House	Stack, Boiler Hse	B	A	B	A	WSC	GP
19897.2	9630 5773	St Dennis Consols	Engine House	Boiler Hse, Resvr	C	C	C	B	WSC	GP
19899	9643 5815	Wheal Frederick	China Clay Works	Clay Pit, Sky Tip	B	B	C	B	WSC	GP
19899.1	9643 5829	Wheal Frederick	Settling Pits	Drag, Pit	B	A	C	B	WSC	FV,GP
19900.1	9640 5840	Gothers	Pan-Kiln	Kiln, Tank, Stack	C	A	A	A	WSC	SS,CC

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CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
19900.2	9645 5844	Gothers	Pan-Kiln, Tramway	Tank, Stack, Mica	B	A	B	A	WSC	SS,CC
19900.3	9635 5846	Gothers	Pan-Kiln	Stack	B	C	C	B	WSC	GP
19916	9980 5910	Great St George	China Clay Works	Clay Pit	C	B	C		WSC	FV
19921	9915 5671	West Gunheath	China Clay Works	Clay Pit, Dump	B	B	C		WSC	GP
19925.1	9968 5542	Greensplat	Engine House	Hse, Stack	B	A	B		ODT	GP
27025.1	9505 5595	Rostowrack	Settling Pit	Micas, Pit	C	B	C	B	ODT	GP
27028	9510 5555	Slip	China Stone Qury	Blondin, Power Hse	B	B	B	A	OMX	FV,GP
27066	9680 5770	Gothers	China Clay Works	Clay Pit, Sky Tip	B	A	C	B	WSC	GP
27066.1	9680 5788	Gothers	Engine House	Boiler, Smithy	B	B	B	A	WSC	GP,SS
27068	9575 5705	Hendra	Settling Pit	Pit	B	A	C	B	WSC	FV,GP
27069	9575 5655	Hendra	China Clay Works	Clay Pit, Dump	B	B	C	C	WSC	GP
27069.1	9581 5685	Hendra	Engine House	Hse, Stack, Loadg	B	B	B	A	GMD	GP
27069.2	9565 5641	Hendra	Power House	House	A	A	C	B	WSC	GP
27069.3	9567 5636	Hendra	Pan-Kiln	Kiln, Stack, Tank	C	B	C	B	WSC	GP
27070	9595 5675	Hallew	China Clay Works	Clay Pit, Sky Tip	C	B	C	B	WSC	FV,GP
27071	9535 5690	Old Hendra	China Clay Works	Clay Pit, Lodge	C	B	C		GMD	GP
27072	9540 5672	Fanfire	China Clay Works	Clay Pit, Dump	C	B	C		GMD	GP
27072.1	9538 5663	Fanfire	Engine House	Stack	A	C	B	B	ODT	GP,BS
27073	9560 5587	Quarry Close	China Stone Qury	Quarry, Hoist	B	B	C		FLD	GP
27075.1	9601 5565	Drinnick	Pan-Kiln	Stack	A	C	C	B	OBE	GP
27075.2	9605 5545	Drinnick	Pan-Kiln	Stack	C	C	C	C	OBE	GP
27075.3	9595 5543	Drinnick	Power House	Hse, Boiler Hse	A	A	B	B	OBE	FV,GP
27076	9583 5533	Drinnick	Power Station	Cooling Twr, Drop	A	A	B	A	OBE	GP
27077	9565 5514	Drinnick	Pan-Kiln	Kiln, Stack, Tank	C	B	B	B	WSC	FV,GP
27086	9965 5886	Wheal Prosper	Engine House	Winder House	B	A	C	C	GMD	GP
27088	9807 5825	Cleers	Process Area	Sett Pit	C	C	C		WSC	NA
27089	9818 5804	Coldvreath	Process Area	Air Pan, Lagoon	C	U	U		GMD	FV
27090.1	9990 5775	Hensbarrow	China Clay Works	Clay Pit, Dump	B	A	B	A	GMD	FV,SS
27091.1	9960 5915	Wheal Prosper	Process Area	Air Pan, Pond	B	U	A	A	GMD	SS
27091.2	9967 5902	Wheal Prosper	Pan-Kiln	Kiln, Pit, Tank	C	C	A	A	WSC	SS
27092	9988 5928	Great Whl Prosper	Process Area	Mica, Sett Pit	A	A	B	A	OBE	GP
27099	9932 5508	Carancarrow	Pan-Kiln	Stack	A	C	C		ODT	GP

SW95NE

MINING

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
19886	9627 5520	Stennagwyn	Mine	Stack, shaft	C	C	C		ODT	SK
19907	9634 5753	St Dennis Crown	Mine	Shaft	C	C	C	C	GMD	FV
19932	9800 5972	Dyehouse	Streamworks (All)	Dump, shaft	C	U	B		WSC	FV
19958	9977 5966	Cornubia Mine	Mine	Shaft, dumps	B	B	B	B	GIM	SK
19958.1	9977 5966	Cornubia Mine	Engine house	Blr hse,stack,ldgs	B	B	B	B	GIM	SS
27409	9952 5872	to								
27409	9954 5909	Hendra	Streamworks (El)	Cutting,heaps,drains	B	B	B	B	GMD	SK
27441	9750 5855	to								
27441	9746 5823	Briar Patch	Streamworks (El)	Cutting	B	B	B		GIM	NA
27806	9916 5805	to								
27806	9938 5820	Hensbarrow Downs	Surface mining	Prosp + shode pits	B	A	B	A	GMD	SS
27807	9915 5808	to								
27807	9929 5825	Hensbarrow Downs	Surface mining	Prosp,shode+LB pits	B	A	B	A	GMD	SS
27809	9924 5845	Hensbarrow Downs	Surface mining	Shode pits	B	A	B	A	GMD	SS
27811	9924 5797	to								
27811	9993 5821	Hensbarrow Downs	Leat	Reservoir	A	A	B	A	GMD	SS
27814	9933 5802	to								
27814	9960 5854	Hensbarrow Downs	Streamworks (El)	Cut,hps,leats,res.	A	A	A	A	GMD	SS,CC
27815	9935 5784	to								
27815	9995 5800	Hensbarrow Downs	Leat		B	B	B	A	GMD	SS
27819	9960 5802	to								
27819	9994 5812	Hensbarrow Downs	Leat		B	B	B	A	GMD	SS
27820	9924 5763	to								
27820	9996 5796	Hensbarrow Downs	Leat		B	B	B	A	GMD	SS
27821	9978 5795	Hensbarrow Downs	Reservoir	Sluice gap	B	A	B	A	GMD	SS
27822	9989 5797	Hensbarrow Downs	Surface mining	Shode pits	A	A	B	A	GMD	SS
27823	9969 5749	to								
27823	0008 5768	Hensbarrow Downs	Surface mining	Prosp,shode,LB pits	B	B	B	A	GMD	SS
27824	9993 5782	Hensbarrow Downs	Surface mining	Shode pits	B	B	B	A	GMD	SS
27825	9990 5794	Hensbarrow Downs	Reservoir	Drain	A	A	B	A	GMD	SS
27826	9924 5754	to								
27826	9990 5794	Hensbarrow Downs	Leat		B	B	B	A	GMD	SS
27827	9940 5756	to								
27827	9996 5776	Hensbarrow Downs	Leat	Reservoir	A	A	B	A	GMD	SS

SW95NE

MINING

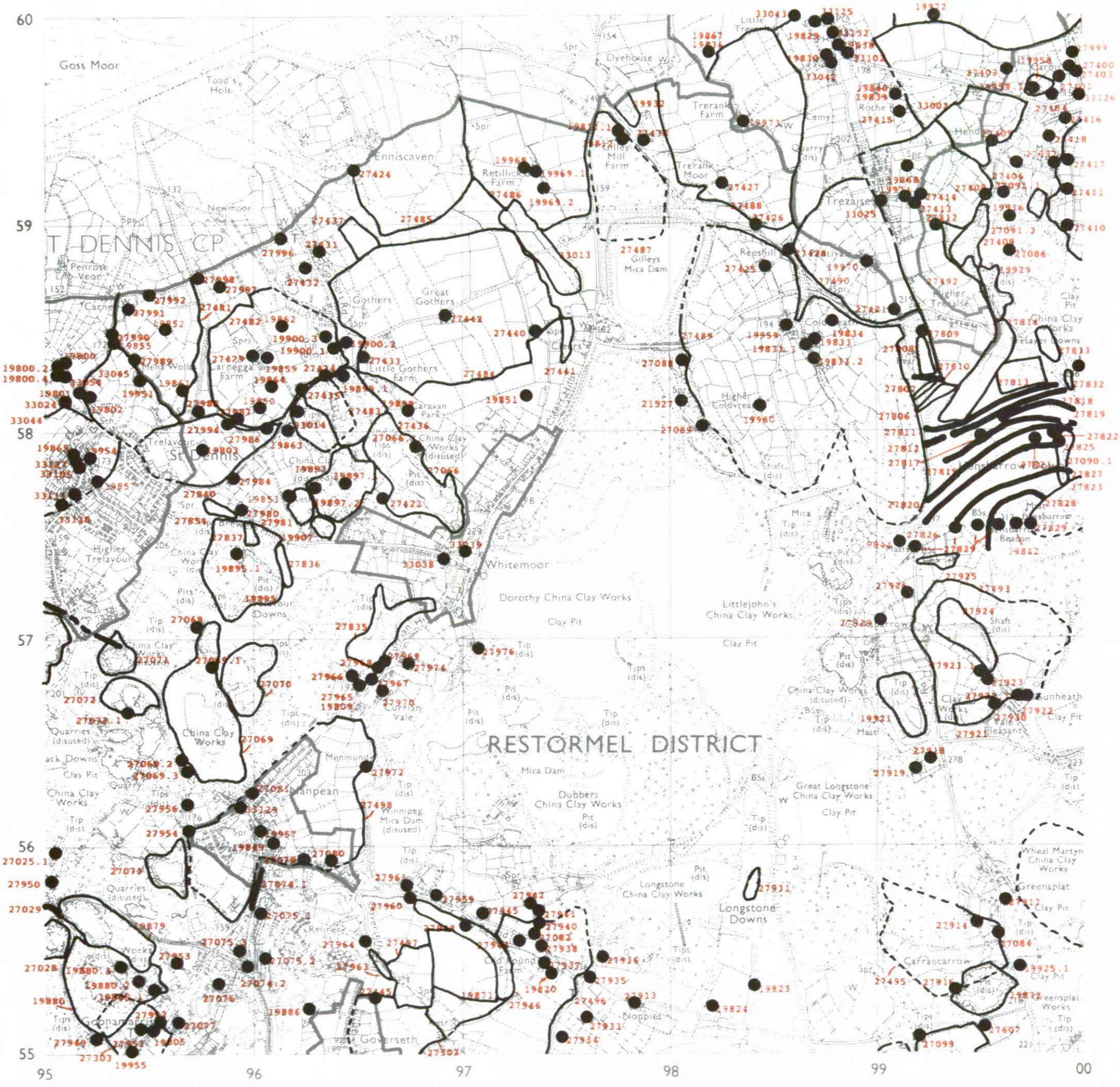
PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27828	9960 5740	to								
27828	9982 5765	Hensbarrow Downs	Leat	Reservoir	A	A	B	A	GMD	SS
27832	9995 5825	Hensbarrow Downs	Surface mining	Shode + LB pits	B	B	B	A	GMD	SS
27833	9984 5840	Hensbarrow Downs	Surface mining	Prosp,shode+LB pits	C	B	B	B	GMD	SK
27835	9656 5686	to								
27835	9695 5715	Currian Vale	Streamworks (El)	Cutting,heaps,drains	A	A	A	A	GMD	SK,CC
27836	9608 5745	to								
27836	9614 5726	Trelavour Downs	Surface mining	Prosp,shode+LB pits	B	B	B	B	GMD	SK
27837	9598 5751	Trelavour Downs	Surface mining	Prosp,shode+LB pits	B	B	B	B	GMD	SK
27854	9586 5761	Trelavour Downs	Streamworks (El)	Cutting,heaps,drain	A	A	A	A	GMD	SK,CC
27921	9950 5664	Vale Pleasant	Streamworks (El)	Cutting,heaps,drains	A	A	A	A	WDE	SK,CC
27924	9948 5700	Gunheath	Streamworks (El)	Cutting,heaps,drains	A	A	A	A	GMD	SK
27931	9840 5576	Longstone Downs	Surface mining	LB pits	B	B	C		GMD	SK
27946	9721 5525	to								
27946	9677 5574	Old Pound	Streamworks (El)	Cutting,leat,heaps	A	A	A	A	GMD	SK,CC
27948	9701 5561	Old Pound	Mine	Adit	B	B	C		GMD	SK
27963	9660 5542	Lower Goverseth	Streamworks (El)	Cutting, heaps	B	B	B		WSC	SK
27981	9623 5766	St Dennis Consols	Surface mining	Shode + LB pits	B	B	B	B	GMD	SK
33013	974 587	Great Gothers	Streamworks	The Workings(TA map)	B	B	B		GMD	SK

TRANSPORT AND COMMUNICATIONS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27029	9505 5570	Slip	Railway	Siding, Wharf	C	B	C	A	WSC	GP
27074.1	9600 5575	Drinnick	Railway	Wharf, Weighbridge	B	A	B	A	OBE	CC,GP
27074.2	9597 5540	Drinnick Mill Sta	Railway	Siding, Cabin	A	B	C	B	OBE	GP
27808	9921 5854	to								
27808	9926 5818	Hensbarrow Downs	Hollow-ways		A	A	B		GMD	SS,AP

SW95NE

LOCATIONS OF SITES IN GAZETTEER SW95NE



SW95SW

PREHISTORIC

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20872	947 538	Tregargus	Round (PN)	Ker No ewks vis.			A		OBE	GS,FW,WB
20878	939 537	Creak-a-vose(IS)	Barrow (FN)	Cruc (TA)			B		GIM	FV,WB
20879	939 537	Creak-a-vose(IS)	Round (PN)	Ker? no remains?			A		OBE	FV,FW,WB
20907	935 534	Hallivick	Pewter Bowl	R-B In streamwork	U	U	A		OMX	NA
20913	941 545	Trethosa	Round (FN)	TA No ewks vis.			B		GIM	GS,FW,WB
27510	9293 5429	Meledor	Barrow	Bowl, 15m	B	B	A		GIM	GS,EX,SS
27519	9452 5464	Hillhead	Barrow	Bowl, 28m	A	A	A		GIM	SS,EX,SC

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
20858	9275 5483	Meledor	FH	M (1201)	Hse*(IIStar),Gdn, Shi,3Cts,2Out,CY, Tnpl,2Loo,Yd,2Bn(*), Pig,FB,PH,MS	Y	14	A	A	A	SS,BS,CC,EX
20865	9470 5380	Tregargus	FH	EM (1356)	Hse(*),Cot,Gdn, MB(*),3BN(*),Yd,Ctyd, DomOut,Lin(*),Shi, Stad,2Mst,3PH,WP,CY	Y	8	A	A	A	SS,BS,EX,LS
20867	9400 5398	Treneague Bart.	F	EM (1380)	Hse,Bn,Pig,Shi,CY,Yd	Y	5	B	C	A	SS,BS,GP
20871	9486 5360	Trevear	FH	EM (1327)	Hse*(II Star),Cot, Lin,PH,MS,Tro Gdn,Orch,Yd,2Bn(*),	Y	5	A	A	A	SS,BS,EX,CC
21024	938 535	Creak-a-vose	FH	EM (1346)	Not visited	U	U	U	U	A	FV
21025	9453 5317	Egloshellings	FH	M (1297)	Not visited	U	U	U	U	A	FV
27502	9176 5446	Sunbury Farm	SF	P-M (1805)	Hse(cob), MS	Y	1	C	B	C	GP
27503	9175 5465	Southlands, W	C	P-M (1840)	Cot, MS,Imp	Y	3	B	C	C	GP,BS
27504	9180 5469	Southlands, E	C	P-M (1840)	2 Cots	Y	1	B	C	C	GP
27505	9169 5483	Scarcewater	F	P-M (1748)	Hse(cob),Gdn	N	1	C	B	C	BS,GP
27506	9270 5839	Pennance	FH	M (1380)	2Hse(1cob),Tnpl,2Yd, 2Bn(*),4Pig,Dai,Cts, Gnd,CY,4MS,Loo,Gdn	Y	16	A	B	A	SS,BS,GP,LS
27513	9392 5394	Treneague	F	EM (1380)	Hse,Bn,Shi,Cts,Yd	Y	4	B	B	A	BS,GP

SW95SW

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27514	9415 5452	Trethosa	FH	EM (1327)	3Hse(1cob),Cot,Tnpl, 2Yd,CY,2Bn,Shi,Cts, Pig,Out,Gdn,Imp, Stad,Tro,Tk,Mst	Y	16	A	A	A	SS,BS,CC,EX
27515	9420 5473	Tellam House	C	19 (1880)	Cot, Cts	Y	2	B	C	C	GP
27516	9436 5474	Hillhead	C	19 (1880)	2 Cots, Wkshop	Y	3	B	B	C	GP,BS
27517	9444 5440	Stepaside	C	P-M (1805)	4 Cots, FB	Y	5	B	C	C	GP,BS
27518	9453 5447	Trethewys	C	P-M (1840)	Cot, Out	Y	2	B	C	C	GP,BS
27520	9481 5360	Moor Cottage	C	19 (1880)	Hse, Cot, Out	Y	3	B	B	C	GP,BS

FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27304	927 538	Pennance	Field system	Med; foss. strips	A	A	B	A	GIM	AP,FV,EX
27305	929 546	Meledor	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27306	937 543	Tolbenny	Field system	Med; foss. strips	C	C	B	B	GIM	NA
27307	941 544	Trethosa	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27308	947 539	Tregargus	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27309	949 536	Trevear	Field system	Med; foss. strips	B	B	B	A	GIM	FV
33138	940 539	Treneague	Field system	Med; foss. strips	B	B	B	A	GIM	FV
33139	931 540	Tresweeta	Field system	Med; foss. strips	B	B	B	A	GIM	FV

CHURCHES CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20858.1	9279 5482	Meledor	Chapel (SOF)	Font,stones,cresset	C	B	A	B	OBE	WB,GP
20866	939 540	Treneague	Chapel	1381 licence. lost	U	U	B			NA
20874	949 533	Chapel Mill	Cross (FN)	Cross close (TA)			B		GIM	FV
20875	9482 5316	St Stephen (IS)	Chapel	1598 ref. No remains	U	U	B		OBE	FV
20877	941 534	St Stephen (IS)	Cross (FN)	TA 'Cross Close'			B		OBE	FV

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CHURCHES CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20910	940 540	Treneague	Cross (SOF)	Moved to chch(20911)			B			NA
20911	9448 5331	St Stephen (IS)	Cross	Wheel-headed (II)	B	A	A	B	OCB	FV
20912	9449 5331	St Stephen (IS)	Cross shaft	0.8m long.Octagonal	C	C	B	B	OCB	FV
20964	9448 5332	St Stephen (IS)	Church	Norm.door + font (I)	A	A	A	A	OCB	FV,EX,GP,CC
21021	94 54	Trethosa	Holy well	St. Bernards. lost	U	U	B			NA
27061	9201 5386	Scarcewater	Chapel (Meth)	Chapel, porch	A	A	C		OCB	GP
27062	9426 5460	Trethosa	Chapel (Meth)	Sunday School	A	A	B		OCB	GP,LS
33026	9441 5347	St Stephen (IS)	Chapel (Meth)	Listed (II)	U	U	C		OCB	FV
33113	9446 5341	St Stephen (IS)	School	Extant 1880	A	A	C	A	OBE	GP

MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20860	9323 5460	Meledor Mill	Mill	Wall	C	C	C		WDE	NA
20865.1	9473 5381	Tregargus	Waterwheel (SOF)	Wheelpit,2 millstnes	B	B	C	A	OBE	BS,GP
20873	9446 5340	St Stephen (IS)	Plain-an-gwarry	1658 ref.	C	C	B		OBE	FV
20914	9393 5397	Treneague Mill	Feed mill	Elev,hoppers,barn	B	B	C		OBE	GP,BS
20984	9448 5323	St Stephen (IS)	Smithy	1880 OS. Bldg extant	U	U	C	B	OBE	FV
20991	9424 5466	Trethosa	Smithy	Platform	C	C	C		WSC	NA
21013	9369 5363	Terras (IS)	Smithy	1840 TA. No remains	U	U	C	B	OBE	FV
27514.1	9412 5457	Trethosa	Millstone	2 stones, c.1.2 diam	A	B	C	C	OBE	GP

CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20869.1	9495 5450	Wheal Arthur	Pan-Kiln	Kiln, Tank, Stack	B	A	B	A	WSC	SS,GP
20869.2	9495 5453	Wheal Arthur	China Stone Mill	Mill, Waterwheel	B	A	A	A	WSC	SS,GP
20869.3	9496 5456	Wheal Arthur	Process Area	Sett Pit, Tank	C	A	B	A	WSC	SS,GP
20869.4	9480 5458	Wheal Arthur	C/Stone Quarry	Adit, Tunnel	B	A	B	A	WSC	SS,GP
20876	9487 5310	Chapel Mill	China Stone Mill	Mill, Kiln, Stack	B	A	A		WSC	CC,SC
20986	9490 5406	Tregargus	C/Stone Quarry	Quarry	C	B	B	A	WSC	SS,GP
20986.1	9493 5399	Tregargus	C/Stone Mill	Base of Mill	C	C	A	A	WSC	GP
20986.2	9492 5394	Tregargus	C/Stone Mill	Mill, Waterwheel	B	A	A	A	WSC	GP,BS,SS,CC
27057	9325 5470	Melbur	Water Wheel	Wheel	B	B	B	B	WSC	GP

SW95SW

CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27058	9320 5450	Collins Dryer	Pan-Kiln, Rotary	Kiln, Tank, Rotary	B	A	B	B	WSC	GP
27063	9497 5427	Rescrowsa	China Clay Works	Clay Pit	C	B	C	A	WSC	FV,GP
27064	9498 5385	Trevear	C/Stone Mill	Mill, Kiln, Stack	B	A	A	A	WSC	SS,CC
27064.1	9497 5390	Tregargus	Tramway	Bridge	B	A	B	A	WUN	BS,GP
27065	9477 5370	Tregargus	C/Stone mill	Mill, Tramway	A	A	A	A	WSC	SS,CC

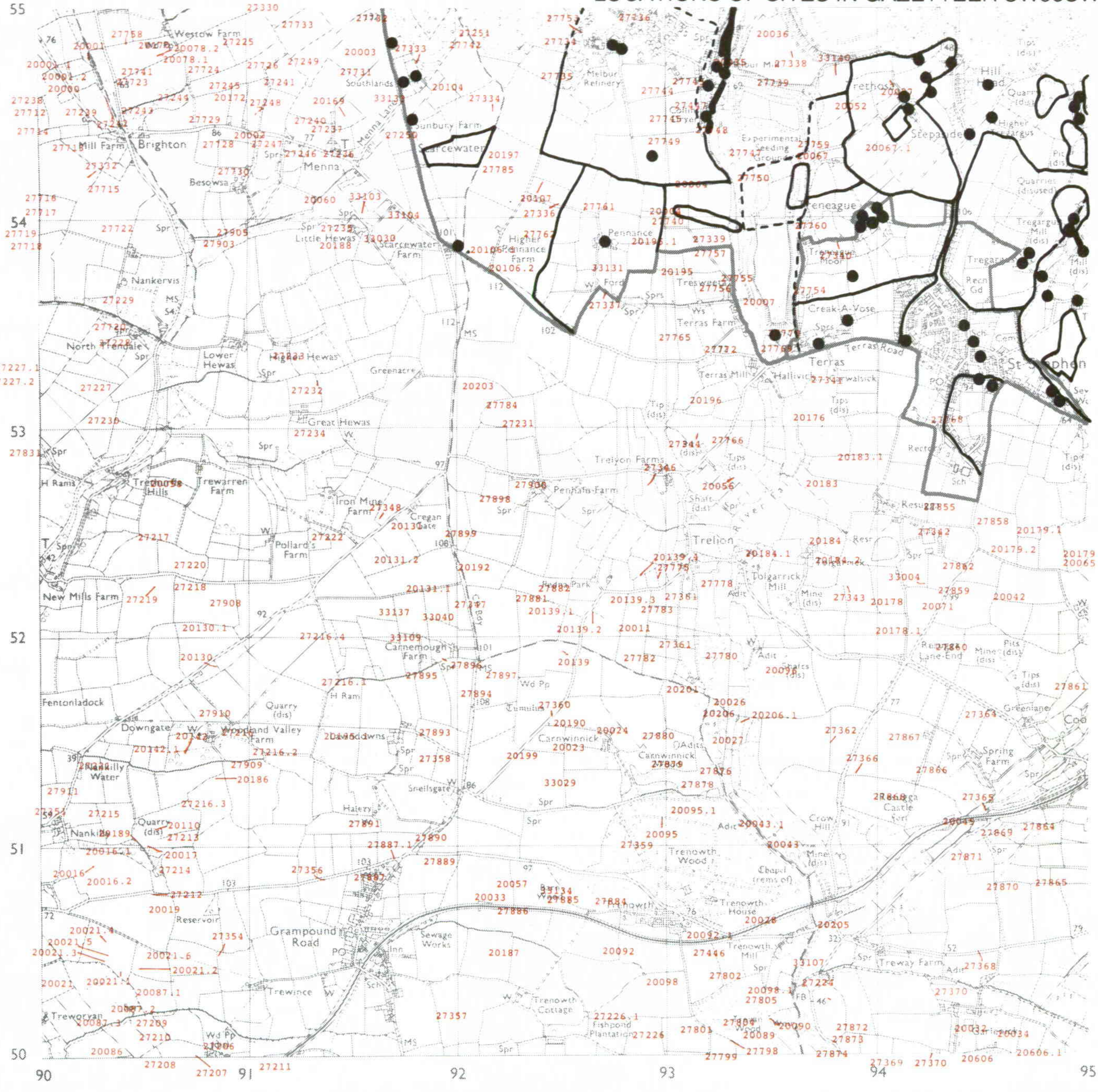
MINING

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27501	9200 5430	Scarcewater	Mine (FN)	Miners downs (1840)	C	C	C		GIM	NA
27508	9305 5403	Pennance	Mine	Shaft, Adit	B	B	C		GIM	SK
27059	9370 5420	Tolbenny	Streamworks (All)	Hatch (?)	B	U	B		WSC	SK

TRANSPORT AND COMMUNICATIONS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21020.1	9327 5466	Melbur Crossing	Railway	Gate	C	B	C	B	WSC	GP
21020.2	9323 5467	Melbur	Railway	Gatepost	A	B	C	B	WSC	GP,CC
21020.3	9330 5480	Melbur	Railway	Wharf	C	B	C	B	WSC	GP

LOCATIONS OF SITES IN GAZETTEER SW95SW



SW95SE

PREHISTORIC

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20636	9598 5451	St Stephens Beacon	Barrow	Platform? 21m	B	B	A	A	GMD	SS,EX,AP,CC
20639	9995 5455	Trenance Downs	Barrow (SOF)	Destroyed?	U	U	A	B	ODT	WB
20650	9588 5434	St Stephens Beacon	Round	Rampart, ditch	A	A	A	B	GMD	SS,GS,EX,CC
20651	9600 5450	St Stephens Beacon	Hilltop enclosure	Hilltop encl. Neo?	A	A	A	A	GMD	SS,GS,EX,CC
20651.1	9605 5458	St Stephens Beacon	Flint scatter	End scraper + flints	U	U	A	A	GMD	FW
20654	9917 5365	Carne Stents	Round (FN)	TA.Poss.rampart			B		GIM	GS,FW,WB
20655	9879 5318	Carne	Round (FN)	TA.Slight earthwork			B		GIM	GS,FW,WB
20683	9908 5493	Goonamarth	Round (FN)	TA. No ewks vis.			B		GIM	GS,FW,WB
20723	967 541	Carpalla (IS)	Artefact	Roman coin,Constant.	U	U	A		GUN	NA
20728	9575 5376	Tregascoe	Enclosure (AP)	No ewks visible	U	U	A		GIM	GS,FW,AP,WB
27528	9565 5450	Carloggas Moor	Menhir (FN)	TA'Rock Park'not vis			B		GIM	NA
27551	9702 5456	Chegwins	Barrow?	Cairn, 20m	B	B	B		GMD	SS,EX
33052	9968 5434	Biscovillack	Barrow (FN)	No ewks vis.			B		GMD	GS,FW,WB

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
20813	9958 5408	Biscovillack	FH	EM (1169)	3Hse,Tnpl,2Yd,Gdn, 3Shi,Cts,Pig,Loo,Tro, Ctyd,2DomOut,2Bn, Imp	Y	12	A	A	A	SS,BS,CC,EX
20818	9886 5337	Carne	FH	M (1453)	Hse,Gdn,Yd,Bn,Lin, Cts,Shi(cob),Pig,MS, DomOut	Y	8	B	A	A	SS,BS,GP
20819	9905 5487	Goonamarth	F	M (1347)	Hse,Gdn,Yd,2Bn,2Shi, 3Cts,DB,CY,Imp	Y	10	A	A	A	BS,GP,SS,EX
20825	9908 5415	Penisker	FH	M (1327)	2Hse(1*),Tnpl,Gdn, 2Yd,2Bn(1*),3Shi,Dai, Imp,2Tro CY,MS,2Pig(1*),Cts,	Y	15	A	A	A	SS,BS,GP,LS
20834	9934 5316	Trevanion	FH	EM (1327)	Hse,Gdn,Yd,2Bn (1cob)(1*),Lin, Sta,Shi,PH,Tro,CY	Y	7	A	A	A	BS,EX,LS,SS

SW95SE

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
20840	9550 5413	Carloggas	FH	EM (1284)	3Hse,3Gdn,Tnpl,Ctyd, 2Bn(*),Shi,5Out,3Pig 2Yd,Loo,DomOut, (1cob),2PH,CY	Y	16	A	A	A	SS,BS,EX,LS
20841	9657 5378	Carpalla (IS)	F	M (1336)	Yd,Bn,Shi,MS	Y	3	B	B	A	BS,GP
20847	9582 5474	Goonabarn	C	M (1312)	Cot, Out	Y	2	B	C	A	GP
20852	9609 5413	Penbough	FH	M (1320)	Hse(*),Gdn,Out,Yd, Bn(*),Cts,Mow,RP,Tnpl	Y	4	A	A	A	BS,GP,LS
20853	9541 5324	Tregascoe	FH	EM (1320)	Hse*,Gdn,Tnpl, Shi,Pig*,WW(*),DW, DomOut*,Yd,2Bn 2*, Cts,Loo,Tro,Tk,CY,DB	Y	8	A	A	A	SS,BS,EX,LS
27522	9503 5303	Riverside	C	P-M (1840)	3 Cots (cob)	Y	3	B	B	C	GP,BS
27523	9580 5307	Pollard's Mill	C	19 (1880)	2 Cots	Y	2	C	C	C	GP
27524	9525 5340	Rescrowsa	F	M (1695)	Hse,Gdn,Yd,Bn,Cts, Out,Ken	N	4	B	A	A	BS,GP
27525	9567 5443	Beacon House	SF	P-M (1805)	Hse,Gdn,Loo,Pig,Stad	Y	3	B	C	C	GP
27526	9559 5441	Carloggas Moor	SF	P-M (1840)	Hse,Cts,Yd,MS	Y	2	B	B	C	GP
27529	9550 5480	Barakella	F	P-M (1748)	Out	D	1	C	C	C	SS
27532	9570 5471	Strippers Point	C	19 (1880)	Cot, Out, Yd	Y	2	B	B	C	GP
27533	9588 5482	Goonabarn	C	19 (1880)	3 Cots, 3 Out	Y	6	B	C	C	GP
27535	9613 5475	Goonabarn Cott	C	19 (1880)	Cot, Out	Y	2	B	B	C	GP
27537	9645 5496	Foxhole (IS)	C	19 (1880)	2 Cots, Gdn	Y	2	B	C	C	GP
27538	9648 5485	Foxhole (IS)	C	P-M (1748)	5 Cots, PO	Y	6	B	B	C	GP
27539	9668 5434	Gribbs Frm(IS)	F	P-M (1748)	CHse,Hse,Cot,Gdn,Bn, Pig,PH,Out,Mow	Y	6	B	B	B	BS,GP
27540	9665 5427	(Carpalla) (IS)	F	P-M (1748)	Hse,Gdn,Mow,Bn	Y	2	B	B	C	BS,GP
27541	9663 5403	Carpalla Cott	SF	19 (1880)	Hse, Shi	Y	2	C	C	C	GP
27542	9651 5382	Carpalla Hse	F	19 (1880)	Hse	Y	1	C	C	C	GP
27543	9650 5352	Carpalla,S	F	19 (1880)	Hse,Gdn,Yd,Bn,Shi	Y	3	A	B	C	BS,GP
27544	9639 5364	Lower Carpalla	SF	P-M (1748)	3Cots,Yd,Pig,Out, Cts,PH,Mow	Y	6	B	B	C	GP,BS
27545	9668 5325	High Street	C	19 (1880)	6 Cots	Y	6	B	C	C	GP
27546	9653 5314	Hensavisten	F	M (1748)	Hse,Cot,2Yd,2Bn(*), 2Cts,Shi,Pig,Out,MS	Y	10	A	A	B	BS,GP,LS

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SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27547	9594 5335	Lwr Hensavisten	F	P-M (1748)	Hse(cob)(*), Bn(cob)(*),Yd,Cts, Tk,DB	N	4	A	A	B	SS,BS,GP,LS
27549	9685 5428	Highr Carpalla	SF	P-M (1805)	Hse,Out,MS,Gdn	Y	3	C	C	C	GP
27550	9692 5451	Chegwins (IS)	SF	19 (1880)	Hse,Gdn,MS	Y	2	C	C	C	GP
27554	9695 5491	Hoopers	F	P-M (1805)	Hse,Bn,Shi,Imp	Y	3	B	B	C	BS,GP,LS
27556	9690 5496	Middle Hill	SF	19 (1880)	Hse, MS	Y	2	B	C	C	GP
27558	9730 5356	Hill Crest	C	P-M (1840)	Cab (*), MS	Y	2	A	A	C	BS,GP,LS
27559	9732 5352	Higher Henmoor	C	P-M (1840)	2 Cots	Y	2	B	C	C	GP
27560	9723 5351	Highr Henmoor	SF	P-M (1805)	2Cots, MS, Gdn	Y	4	B	C	C	GP
27561	9735 5345	Henmoor House	SF	P-M (1805)	Hse, Gdn, MS	Y	2	C	C	C	GP
27563	9743 5320	Lanjeth	C	19 (1880)	2 Cots	Y	2	B	C	C	GP
27564	9726 5324	Lanjeth	C	P-M (1805)	Cot	Y	2	B	C	C	GP
27566	9741 5312	Mount Pleasant	C	P-M (1805)	Hse, Out	Y	2	C	C	C	GP
27567	9738 5305	Rickard's Cott	SF	P-M (1840)	2Cots,Out,Shi	Y	4	B	B	C	GP
27568	9717 5323	Hr Galvinney	C	P-M (1805)	2 Cots	Y	2	B	C	C	GP
27569	9710 5322	Moonraker	C	19 (1880)	2 Cots, MS	Y	2	C	C	C	GP
27570	9686 5321	Stray Park	C	P-M (1805)	Cot	Y	1	C	C	C	GP
27571	9753 5324	Tiller's Cott	SF	P-M (1805)	Hse, Bn	Y	2	B	C	C	GP
27572	9756 5304	Plosh Farm	SF	P-M (1805)	Hse, MS	Y	4	C	C	C	GP
27573	9765 5315	Lanjeth	C	P-M (1805)	Cot	Y	1	A	B	C	GP,BS
27573.2	9768 5315	Newgate	C	P-M (1805)	Inn*	Y	1	A	A	B	BS,GP
27574	9771 5319	Lanjeth	C	P-M (1805)	Cot, Gdn	Y	1	B	B	C	BS,GP
27575	9790 5300	Lanjeth	SF	P-M (1805)	2Cots,Bn,Yd,Shi,MS Gdn	Y	5	B	B	C	GP,BS
27576	9791 5304	Lanjeth	C	P-M (1805)	2 Cots	Y	1	B	B	C	BS,GP
27577	9796 5305	Lanjeth	C	P-M (1840)	Cot, Out, Gdn	Y	2	B	B	C	BS,GP
27581	9826 5296	Prideaux	SF	P-M (1840)	Hse, Pig	Y	2	B	C	C	GP
27582	9839 5307	Prideaux Cott	C	P-M (1840)	Cot, Gdn	Y	1	B	C	C	GP
27583	9921 5302	Trewoon	C	P-M (1805)	4 Cots	Y	2	B	C	C	GP
27584	9892 5318	Carne Cotts	C	P-M (1840)	3 Cots (cob)	Y	1	B	B	C	GP,BS
27585	9884 5326	Carne Cott	C	P-M (1840)	Cot	Y	1	C	C	C	GP
27589	9976 5320	Gover Valley	C	19 (1880)	4 Cots	Y	4	B	B	C	GP
27590	9918 5383	Carne Stents	C	P-M (1805)	Cot, Gdn	Y	1	B	B	C	GP
27592	9931 5403	(Penisker)	C	19 (1880)	Cot, Gdn	N	1	C	C	C	GP
27593	9972 5366	Gover Valley	C	19 (1880)	Cot, Gdn	Y	1	B	C	C	GP

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SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27599	9982 5462	Greensplat	SF	P-M (1840)	Out	D	1	C	C	C	GP
27601	9984 5481	Greensplat	SF	P-M (1840)	2Cots,2Out,MS	Y	5	B	C	C	GP
27604	9938 5476	Hgher Biscovillack	FH	EM/M(1748)	CHse(*),Hse,Gdn, Tnpl,3Yd,Loo,Bn,Shi, 2Out,Cts,CY,MS,Imp,PH	N	10	B	A	A	SS,BS,EX,LS
27786	9793 5318	Vivian's Cott	C	P-M (1805)	Cot	N	1	B	B	C	GP,BS
27787	9794 5334	Hopper's Cott	C	P-M (1840)	Cot, Out, Gdn	Y	2	B	B	C	GP,BS

FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27310	966 545	Foxhole	Field system	Medieval; irreg.	C	C	B	A	OBE	FV
27311	966 542	Lower Carpalla	Field system	Medieval; irreg.	C	C	B	A	OBE	FV
27312	967 536	Carpalla	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
27313	960 541	Penbough	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27314	959 534	Lower Hensavisten	Field system	Medieval; irreg.	B	B	B	A	GIM	FV,SS,EX
27315	964 533	Hensavisten	Field system	Medieval; irreg.	C	C	B	A	GIM	FV,SS,EX
27316	974 533	Lanjeth	Field system	Medieval; irreg.	C	C	B	B	GIM	FV
27317	981 526	Higher Burngullow	Field system	Med; foss. strips	C	C	B	C	GIM	FV
27318	985 527	Highr Tregonhenwyn	Field system	Medieval; irreg.	C	C	B	C	OBE	NA
27319	989 528	Methrose	Field system	Med; foss. strips	C	C	B	C	OBE	NA
27320	991 536	Carne	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27321	995 533	Trevanion	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27322	996 539	Biscovillack	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27323	994 547	Highr Biscovillack	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27324	991 542	Penisker	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27325	990 548	Goonamarth	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
27326	952 543	Rescrowsa	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
27327	955 541	Carloggas	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27455	9604 5469 to									
27455	9594 5443	St Stephens Beacon	Pasture boundary	Collapsed; medieval	B	A	A		GMD	SS
27530	9528 5470	Barakella	Field system	Post.med. Banks	B	B	C	C	GMD	NA
27552.4	9690 5472	Chegwins	Field system	Ridge + furrow	B	B	A	A	GMD	SS,CC,SC,AP
27557	9680 5496	Middle Hill	Field system	Turf banks;modern	B	B	C		GMD	NA
27591	9929 5419	Penisker	Field system	Ridge & furrow	B	B	B		WSC	SS,AP

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FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27596	9970 5403	Lower Biscovillack	Field system	Banks	B	B	B		GMD	SS,AP
27598	9977 5393	Lower Biscovillack	Field system	Ridge & furrow	C	C	B	B	GMD	SS,AP
27606	996 547	Highr Biscovillack	Field system	Banks	C	C	C	B	GIM	SK,AP
33049	996 527	Trewoon (IS)	Field system	Med; foss. strips	B	B	B	B	OBE	NA

CHURCHES CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20626	9527 5438	Rescrowsa	Cross (PN)	Cornish 'crous'			B			NA
20678	9794 5299	Lanjeth	Cross (SOF)	C19 ref.			B	B	OBE	NA
20693	9967 5266	Trewoon (IS)	Cross (SOF)	C19 refs	U	U	B		OBE	NA
20724	9952 5302	Trevanion	Cross (FN)	Cross (1840)			C		GIM	NA
27094	8655 5332	High Street	Chapel (Meth)	Sunday School	A	A	C		OCB	GP
27096	9646 5482	Foxhole (IS)	Chapel (Meth)	Sunday School	A	A	C		OCB	GP
27098	9768 5287	Lanjeth	Chapel (Meth)		A	A	C		OCB	GP
27104	9968 5337	Sparnon	Chapel (Meth)		B	B	C		WSC	GP
27203	9740 5317	Lanjeth	School	Yard. Replaced 33100	A	A	C		OBE	GP
33027	9924 5290	Trewoon (IS)	Chapel (Meth)	Not visited	U	U	C		OCB	FV
33100	9745 5321	Lanjeth	School	Extant 1880	U	U	C	A	OBE	FV

MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20664	9513 5420	Rescrowsa	Mill (DOC)	19th century			C	B	WDE	FV
20671	9907 5310	Trewoon	Poor House	Destroyed			C		GIM	NA
20674	9963 5329	Trevanion	Grist Mill	Millhouse, dwelling	C	B	C		WSC	GP,BS
20679	9780 5307	Lanjeth	Pound (FN)	Pound (1840)			C		GIM	WB
20681	9727 5327	Lanjeth	Ropewalk (SOF)	Destroyed?			C		OBE	NA
20692	9928 5378	Trewoon (IS)	Cooper's shop	1840(TA) Not visited	U	U	C		OBE	FV
20694	9960 5270	Trewoon (IS)	Manor Pound	1840 (TA). Extant	U	U	B		OBE	FV
20695	960 545	St Stephens Beacon	Beacon (SOF)	Post-med refs			B		GMD	NA
20725	95 52	Gwindra	Brooch + coins	Saxon	A		B			NA
20726	95 52	Gwindra	Coins	Medieval HII+EdIII			B			NA
20733	9689 5318	High Street	Smithy	1880s OS	U	U	C	B	OBE	FV

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MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20735	9776 5311	Newgate	Smithy	1880s OS	U	U	C	B	OBE	FV
20834.1	9935 5314	Trevanion	Horse engine	Machinery,house	A	A	A	A	OBE	LS,GP,BS,CC
20853.1	9544 5326	Tregascoe	Waterwheel	Cast-iron,drivewheel	A	A	A	A	OBE	LS,GP,BS,CC
20861	9727 5327	Lanjeth	Ropewalk (SOF)	Destroyed?			C		OBE	NA
27097	9915 5485	Goonamarth	Industrial Hsg	Closet, Pigs House	C	C	C		FUN	GP
27202	9865 5355	Burngullow Common	Quarry	Finger Dump	C	U	C		GMD	GP
27443	9903 5484	Goonamarth	Settlement	Medieval enclosure	B	U	A	B	WDE	SS,SC
27451	9588 5451	St Stephens Beacon	Building	Magazine?	B	B	B	B	GMD	SS,EX,GP
27452	9588 5451	St Stephens Beacon	Building	Medieval?	B	B	A		GMD	SS,EX
27552	9690 5467	Chegwins	Settlement	Medieval farm	B	B	A	A	GMD	SS,EX,CC
27552.1	9690 5478	Chegwins	Long-house	c.15.5 x 4.0 int.	B	B	A	A	GMD	SS,EX,CC,SC
27552.2	9692 5478	Chegwins	Enclosure		B	B	A	A	GMD	SS,CC SC
27552.3	9686 5475	Chegwins	Enclosure	Lazy-beds	A	A	A	A	GMD	SS,CC,SC
27553	9703 5469	Chegwins	Pond	(Modern)	A	A	C		GMD	NA
27573.1	9766 5314	Newgate	Wheelwright shop	Machinery,benches	A	A	A	A	OBE	LS,GP,BS,CC
27604.1	9941 5477	Highr Biscovillack	Hull	Blocked entrance	A	A	C	A	OBE	BS,GP
27605	9949 5481	Highr Biscovillack	Pound (FN)	TA			C		GIM	WB
33041	9856 9350	St Mewan's Beacon	Beacon (SOF)	Place-name	U	U	C		GMD	FV
33135	9953 5274	Trewoon	Smithy (SOF)	Extant 1880	U	U	C		OBE	FV

MINING

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20665	9573 5438	Tinhill	Mine	Eng. Hse, shaft	C	U	B		FUN	SK,GP
20670	9878 5465	Higher Goonamarth	Stamping mill	Platform	C	C	B	B	WSC	SS
20671	9905 5466	Higher Goonamarth	Blowing hse(SOF)		C	C	B	B	WSC	WB,SS
20672	9897 5445	Goonamarth	Surface mining	Prosp,shode+LB pits	B	B	B	B	GIM	SK
20729	9873 5456	Higher Goonamarth	Count house		B	B	C		GMD	BS
20804	9980 5424	Wheal Jacob	Mine, CC Works	Adit, Dump, Shaft	B	A	A	B	FUN	SS
27448	9590 5456	St Stephens Beacon	Surface mining	Prosp + shode pits	A	A	B		GMD	SS
27449	9577 5469 to									
27449	9577 5464	St Stephens Beacon	Leat		B	B	C		GMD	SS
27450	9579 5472 to									
27450	9585 5449	St Stephens Beacon	Leat		B	B	C		GMD	SS
27548	9703 5390	Higher Carpalla	Surface mining	Prosp,shode+LB pits	B	B	B	B	GMD	SK

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MINING

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27586	9904 5430	to								
27586	9910 5434	Penisker	Leat	Med? Streamworks?	B	C	C		GMD	SK
27587	9890 5463	Higher Goonamarth	Stamping mill	Platform, drain	C	C	B	B	WSC	SS
27788	9859 5426	Burngullow Common	Reservoir	Leat, sluice gap	A	A	B	B	GMD	SK
27789	9858 5423	Burngullow Common	Surface mining	Prosp. pits	A	A	B	B	GMD	SK
27790	9855 5424	to								
27790	9842 5395	Burngullow Common	Leat	Med? Streamworks?	B	B	B	B	GMD	SK
27791	9834 5428	to								
27791	9836 5407	Burngullow Common	Leat		B	C	B	B	GMD	SK
27792	9850 5403	Burngullow Common	Surface mining	Prosp,shode+LB pits	A	A	B	B	GMD	SK
27793	9854 5396	Burngullow Common	Surface mining	Prosp + shode pits	B	B	B	B	GMD	SK
27794	9860 5424	to								
27794	9873 5361	Burngullow Common	Leat		B	B	B	B	GMD	SK
27795	9868 5378	Burngullow Common	Mine	Adit	B	B	C	B	GMD	SK
27796	9870 5378	Burngullow Common	Streamworks (El)	Cutting,heaps,drains	B	B	A	A	WSC	SK
27797	9865 5355	Burngullow Common	Surface mining	Prosp pits	B	B	B	B	GMD	SK
33016	9911 5480	Goonamarth	Mine (SOF)	Adit/pits on TA map	U	U	C		GIM	WB

CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20756	9585 5448	Goonabarn	China Clay Works	Clay Pit	B	A	C		WSC	GP
20777	9640 5400	Carpalla	China Clay Works	Clay Pit, Dump	C	A	C	A	WSC	GP
20777.1	9635 5393	Carpalla	Engine House		A	B	B	A	ODT	GP,BS
20777.2	9633 5383	Carpalla	Pan-Kiln	Stack, Linhay	C	B	C	B	ODT	GP
20777.3	9613 5383	Carpalla	Pan-Kiln	Stack	C	C	C	C	WSC	GP
20777.4	9640 5385	Carpalla	Settling Pits		C	B	C	C	WSC	GP
20782	9980 5350	Forest	China Clay Works	Clay Pit, Sky Tip	B	A	A	A	WSC	FV,GP
20782.1	9984 5340	Forest	Engine House	Stack, Shaft, MCH	C	B	A	B	WSC	FV,CC
20783	9900 5380	Carne Stents	China Clay Works	Clay Pit, Dump	C	A	C		WSC	FV
20786	9970 5380	Gover	China Clay Works	Clay Pit, Dump	B	A	A	A	WSC	GP
20792	9555 5470	Barakellis	China Clay Works	Clay Pit, Dump	C	U	C		WSC	FV
20795	9807 5294	Burngullow	Process Area	Drag, Sett Pit	C	A	B	B	WSC	GP
20804	9980 5424	Wheal Jacob	Mine, C C Wks	Adit, Dump, Shaft	B	A	A	B	FUN	SS
27063.1	9502 5416	Rescrowsa	Process Area	Sett Pit, Mica	C	A	C	A	WSC	FV, GP

SW95SE

CHINA CLAY

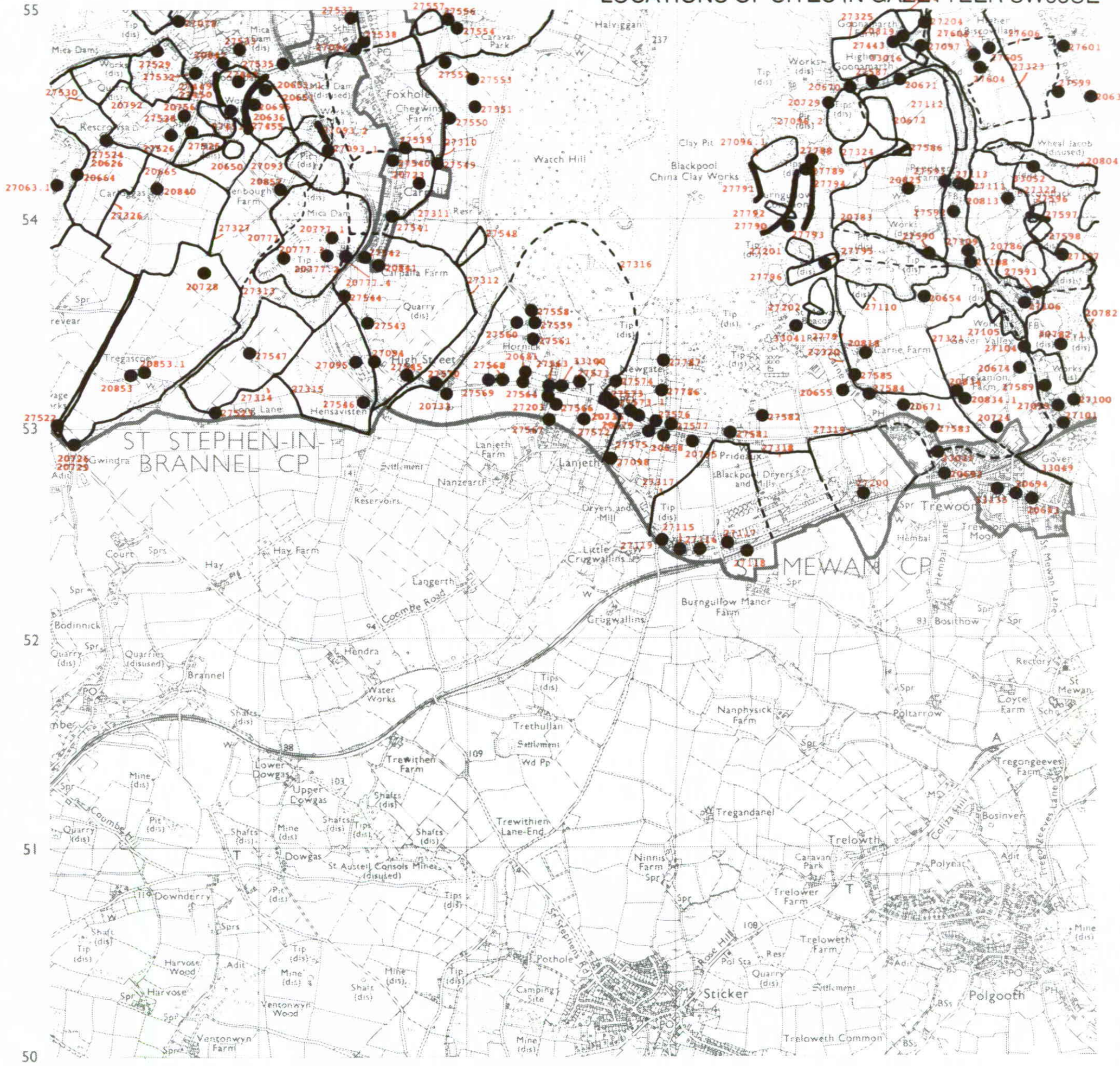
PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27078	9560 5495	Carloggas	Water Wheel	Wheel, Bal Bob	C	B	C	B	WSC	GP
27082.1	9984 5340	Forest	Engine House	Stack, Shaft, MCH	C	B	A	B	WSC	FV, CC
27093	9620 5430	Penbough	China Clay Works	Clay Pit, Dump	B	A	C		WSC	GP
27093.1	9633 5435	Penbough	Engine House		C	C	C		ODT	GP
27093.2	9630 5442	Penbough	Railway	Wharf, Siding	C	C	C		WSC	GP
27094	8655 5332	High Street	Chapel	Sunday School	A	A	C		OBE	GP
27095	9647 5332	High Street	Pan-Kiln	Kiln, Tramway	C	C	C		WSC	GP
27096.1	9850 5430	Great Halviggan	Sky Tip		B	A	B	B	WSC	GP
27096.2	9880 5450	Great Halviggan	Sky Tip		B	A	B	B	WSC	GP
27097	9915 5485	Goonamarth	Industrial Housing	Closet, Pigs House	C	C	C		FUN	GP
27099	9982 5310	Forest	Pan-Kiln	Kiln, Stack, Tank	B	A	C	B	WSC	GP
27100	9990 5315	Forest	Process Area	Drag, Sett Pit	C	A	B	B	WSC	SS, CC
27101	9987 5303	Gover	Pan-Kiln	Kiln, Stack, Tank	C	B	B	A	WSC	SS
27102	9988 5290	Gover	Mine	Engine House	B	U	B	B	WUN	GP
27105	9960 5350	Gover	Pan-Kiln	Kiln, Stack, Tank	B	A	B	A	WSC	SS, CC
27106	9965 5362	Gover	Pan-Kiln	Kiln, Stack, Tank	C	B	C	B	WSC	GP, SS
27107	9984 5383	Gover	Engine House		C	B	C	C	FUN	GP
27108	9940 5380	Carne Stents	Pan-Kiln	Pan, Tank, Set Pit	C	C	C	C	WSC	GP
27109	9940 5385	Carne Stents	Pan-Kiln	Pan	C	C	B	C	WSC	GP
27110	9890 5365	Carne Stents	Process Area	Air Pan, Lagoon	C	U	A	B	WSC	SS
27111	9937 5412	Gover Valley	Process Area	Air Pan, Mica	B	U	A	B	WUN	GP
27112	9935 5450	Gover Valley	Process Area	Air Pan, Leat	C	U	A	B	WSC	SS
27113	9935 5416	Gover Valley	Mica Drag	Round Head	B	U	B	B	WUN	GP
27115	9800 5242	Burngullow	Pan-Kiln	Kiln, Stack, Wharf	A	A	B	A	WSC	CC, GP
27116	9810 5242	Burngullow	Pan-Kiln	Kiln, Tank, Siding	B	A	C	A	OBE	GP
27117	9820 5243	Burngullow	Pan-Kiln	Stack	C	C	C	C	ODT	GP
27119	9796 5245	Burngullow	Pan-Kiln	Kiln, Siding	A	A	B	A	WSC	GP
27200	9890 5267	Burngullow	Pan-Kiln	Stack, Siding	C	C	C	C	WSC	GP
27201	9860 5385	Burngullow Common	China Clay Works	Clay Pit, Dump	C	B	C		WSC	GP
27202	9865 5355	Burngullow Common	Quarry	Finger Dump	C	U	C		GMD	GP
27204	9918 5495	Goonamarth		Building	B	A	U		FUN	FV

SW95SE

TRANSPORT AND COMMUNICATIONS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27093.2	9630 5442	Penbough	Railway	Wharf, Siding	C	C	C		WSC	GP
27118	9825 5240	Burngullow	Railway	W/bridge, S/Box	B	U	C	B	OBE	GP
27597	9968 5404 to									
27597	9981 5398	Lower Biscovillack	Hollow-way		B	U	B	B	GMD	SS,AP

LOCATIONS OF SITES IN GAZETTEER SW95SE



SW96SE

PREHISTORIC

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21505	9867 6012	Roche (IS)	Menhir	PRN 19825 resited	A	C	B		OBE	GP

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
21566	9925 6090	Trebilcock (IS)	FH	EM (1250)	Not visited	U	U	U	U	A	FV
21567	9968 6045	Tregonhay	FH	EM (1293)	Hse(cob),Tnpl,Gdn, Loo,2Yd,Bn(*), 2Shi(*),Sta,MS, Lin(*),Tro	Y	8	A	A	A	SS,BS,EX,LS

FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27329	993 606	Tregonhay	Field system	Med; foss. strips	B	B	B	A	GIM	FV
33050	994 602	Tregarrick (IS)	Field system	Med; foss. strips	B	B	B	A	GIM	AP
33051	992 607	Trebilcock (IS)	Field system	Med; foss. strips	B	B	B	A	GIM	NA

CHURCHES, CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21507	9970 6045	Tregonhay	Chapel (SOF)	1428 licence	C	C	B		OBE	WB
21508	9970 6045	Tregonhay	Cross Base (SOF)	Lost in 1940s	C	C	C		OBE	NA
21509	9925 6077	Trebilcock (IS)	Chapel (FN)	TA			B		GIM	FV
21510	992 609	Trebilcock (IS)	Cross Base (SOF)	Tradition. Lost?	U	U	B		OBE	FV
33028	9886 6029	Roche (IS)	Chapel (Meth)	Not visited. (II)	U	U	C		OCB	FV

MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21506	9938 6008	Tregarrick (IS)	House (SOF)	Pre-Norman? On APs	U	U	A		GIM	FV,FW,EX
21553	9860 6012	Roche (IS)	Smithy	1908 OS	U	U	C		OBE	FV

SW96SE

LOCATIONS OF SITES IN GAZETTEER SW96SE

SX05NW

PREHISTORIC

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20004	0303 5910	Lavrean Bridge	Round (FN)	TA no ewks vis.			B		GMD	GS,FW,WB
20008	0275 5770	Rescorla	Round (FN)	TA no ewks vis.			B		GIM	GS,FW,WB
20009	0246 5742	Rescorla	Barrow (FN)	TA no ewks vis.			B		GIM	GS,FW,WB
20011	0276 5707	Resugga	Round (FN)	TA no ewks vis.			B		GIM	GS,FW,WB
20017	003 559	Carthew (IS)	Round (PN)	Ker Circular field			A		OBE	FV,GS,FW,WB
20023	0274 5642	Hallaze	Barrow (FN)	TA prob.mine dumps			B		GIM	NA
20028	0346 5564	Trethurgy	Round (SOF)	Excavated in 1970s	C	C	A		WSC	NA
20028.1	0347 5564	Trethurgy	Artefact	C3-C6 AD pott,coins			A	A	WSC	NA
20032	0447 5509	Restineas	Round	Rampart to 1.4m high	B	B	A	B	GIM	SS,GS,SC,EX
20032.1	0446 5511	Restineas	Artefact	B + T arrowhead			A		GIM	FW
20033	022 558	Carluddon (IS)	Barrow (FN)	TA			B		GIM	FV,FW,WB
20036	0352 5992	Higher Menadew	Barrow (FN)	TA no ewks vis.			B		GIM	GS,FW,WB
20037	0390 5965	Chytan	Round (FN)	TA no ewks vis.			B		GIM	GS,FW,WB
20057	02 55	Carluddon (IS)	Artefact	B + T arrowheads			A		GIM	FW
20192	020 573	Kerrow (IS)	Round (PN)	Ker			A		OBE	FV,FW,WB
27447	0322 5960	Higher Menadew	Round	Fragment of curv.ewk	B	C	A	B	GIM	GS,FW,EX,SS
27741	0037 5974	Rosemellyn	Round	Rampart, Outwork	B	B	A	B	GIM	SC,SS,EX,CC
27760	0370 5893	Lower Menadue	Menhir (FN)	TA no ewks vis.			B		GIM	WB
27782	0288 5686	Resugga	Menhir (FN)	TA no ewks vis.			B		GIM	WB
27783	0287 5715	Little Resugga	Menhir (FN)	TA no ewks vis.			B		GIM	WB
27799	0327 5510	Carn Grey	Barrow	Tor cairn, 10m	B	B	A	B	GMD	SS,EX
27803	0343 5523	Carn Grey	Field System	Banks & lynchets	B	B	A	A	GMD	SS,AP
27804	0343 5522	Carn Grey	Round House?	3m diam.	B	B	A	A	GMD	SS,EX,AP
27805	0336 5527	Carn Grey	Enclosure	Curvi. 20m diam.	B	B	A	A	GMD	SS,EX,GS,AP
27862	0443 5733	Tregarrick	Menhir (FN)	TA no ewks vis.			B		GIM	WB
27876	0327 5643	Treverbyn	Menhir (FN)	TA no ewks vis.			B		GIM	WB
27890	0190 5603	Penhale	Menhir (FN)	TA no ewks vis.			A		OBE	WB

SX05NW

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
20001	0023 5975	Carbis Mill	F	P-M (1805)	Hse(*),Gdn,Yd,Cts, Shi,MS,Mill(*)	Y	5	A	A	B	BS,GP,LS
20016	0032 5592	Carthew	F	P-M (1805)	Hse(*),Gdn,DomOut, 2Shi(*),Cts,Pig, Loo,2Yd,4Bn(*), Smi,PH,DW,Lin,DS	Y	13	A	A	B	BS,GP,LS
20043	0350 5605	Knightor	FH	M (1305)	Hse,Gdn,2DomOut, 2Out,Tro,Shi,2Bn(1*), Pig,PH,MS,Cts,Yd	Y	11	B	A	A	SS,BS,GP,LS
20169	0150 5950	Hallew	FH	M (1364)	6Cots,Bn,Out,Tnpl	Y	8	B	B	A	SS,GP
20170	0045 5984	Rosemellyn	FH	M (1233)	Hse*,Tnpl,Yd,MS, Cts,2Bn(2*),Shi	Y	6	A	A	A	SS,BS,GP,LS
20172	0082 5958	Lower Woon	SF	M (1350)	CHse*,Bn	N	1	B	A	A	BS,GP
20176	0370 5802	Lestoon	FH	M (1200)	Hse,Gdn,Yd,DB,Bn, 2Cts,2Shi,Pig,Out	Y	9	B	B	A	SS,BS,GP
20178	0414 5710	Penrose	F	M (1200)	Hse,Gdn,Yd,Bn(*), Shi,CY,MS,PH,Tro,Stad	Y	5	B	B	A	SS,BS,GP,LS
20179	0489 5744	Rosemelling	FH	M (1296)	3Hse(2*),5Cot,Tnpl, 4Gdn,3Bn(1*),2Pig,2Cts, Lin,Out,Shi,MS,PH,WH	Y	19	B	B	A	SS,BS,CC,LS
20183	0386 5776	Treskilling	FH	EM (1180)	2Hse(1*),Tnpl, 2Yd,3Bn(1*),Shi,2Cts, Imp,4Cot,Pig,Out,Tro, DomOut,3Gdn,Orch,Loo, Stad,MS,CY	Y	18	A	A	A	SS,CC,EX,LS
20184	0369 5741	Tretharrup	FH	EM (1180)	2CHse(1*),Tnpl,2Gdn, 2Yd,2Bn,Pig(*),Out, Loo,Sta,Shi,Stad,2WH	Y	9	A	A	A	SS,CC,EX,LS
20186	0083 5635	Carbean	FH	M (1357)	Hse(*),2Gdn,Loo,DS, 2Bn,2Pig,2Yd,Lin(*), Cts	Y	8	A	A	A	SS,BS,GP,LS
20187	0223 5546	Carluddon	FH	M (1357)	2Hse,2Gdn,Tnpl,2Yd, 3Bn,2Cts,Pig,PH,Imp	Y	8	B	B	A	GP,BS,SS
20188	015 589	Carnsmerry (Bugle) (IS)	FH	M (1362)	Not visited	U	U	U	U	A	FV
20189	0052 5604	Carthew (IS)	FH	EM (1201)	Not visited	U	U	U	U	A	FV

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SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
20190	0256 5655	Hallaze (IS)	FH	M (1356)	Not visited	U	U	U	U	A	FV
20192	020 573	Kerrow (IS)	FH	EM (1327)	Not visited	U	U	U	U	A	FV
20195	0296 5882	Great Lavrean	FH	M (1150)	Hse,Gdn,Tnpl,DomOut, Yd,Bn(*),Shi,Cts,Mow, MS	Y	6	B	A	A	SS,BS,GP
20196	0314 5810	Little Lavrean	FH	M (1150)	Hse,DomOut,Gdn,Yd, Tnpl,Mow,Out,2Shi, Bn,Cts,Imp,PH	N	7	B	A	A	SS,BS,GP
20197	0215 5932	Molinnis	FH	M (1357)	2Hses,3Cots,Tnpl, DomOut,2Gdn,2Bn,Shi, Pig,Yd,Loo,Out,MS, Mow,Imp	Y	13	B	B	A	SS,BS,GP
20199	0232 5649	Penwithick (IS)	FH	M (1357)	Not visited	U	U	U	U	A	FV
20200	028 575	Rescorla (IS)	FH	M (1170)	Not visited	U	U	U	U	A	FV
20201	0306 5681	Resugga	FH	M (1317)	Hse*,Tnpl,DomOut, Hull,Gdn,2Yd,Shi,Cts, Lin,2Bn(*),2Out,CY, Imp,RP,PH,Mow	Y	10	A	A	A	SS,BS,EX,LS
20203	0224 5822	(Rosevear)	C	P-M (1840)	Cot,Gdn	Y	1	B	C	C	GP
20205	038 556	Trethurgy (IS)	FH	EM (1200)	Not visited	U	U	U	U	A	FV
20206	0333 5660	Treverbyn	FH	EM (1086)	3Hse,Cot(*),2Gdn, 3Bn(1*),2Yd,5Out, DomOut,2Loo,Tnpl, 2Shi,Pig,Mow,3Cts,MS,Pp	Y	22	A	A	A	SS,BS,GP,LS
20606	0463 5506	Restineas	FH	M (1265)	Hse(*),Cot(*),Tnpl, Gdn,2Yd,Bn(*),5Shi, Cts,DomOut,Stad,Tro, Loo,Out	Y	12	A	A	A	SS,CC,EX,LS
27446	0324 5546	Pentruff	F	P-M (1805)	Shi	D	1	B	B	C	GP
27712	0006 5952	Carbis Tenement	SF	P-M (1840)	CHse(*),Gdn,Yd,Bn, Out	Y	3	B	A	B	BS,GP,LS
27713	0013 5941	Carbis	C	P-M (1840)	Cot,Loo,MS,Gdn,Yd, Gnd	Y	3	B	B	C	BS,GP
27714	0008 5944	Carbis	C	P-M (1840)	Bdg	D	1	C	C	C	GP
27715	0020 5917	Carbis	C	P-M (1840)	Cot	Y	1	C	C	C	GP

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SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27716	0013 5913	Hr Goonleigh	F	M (1293)	CHse,(*),Bn(*), Gdn,Yd,Bn,Out	Y	4	B	A	A	BS,GP,LS
27717	0014 5905	Carbis	F	19 (1880)	Hse,Gdn,Yd,Bn,Out, Cts	Y	4	B	B	C	BS,GP
27718	0006 5893	Carbis	C	P-M (1840)	Cot,Out	Y	2	C	C	C	GP
27719	0002 5899	Carbis	SF	P-M (1840)	Cot(*),Yd,Shi,Cts	Y	3	B	B	B	BS,GP,LS
27720	0023 5851	Carbis Common	SF	P-M (1840)	Cot,Out,Pig	Y	3	C	C	C	BS,GP
27723	0054 5968	(Rosemellyn)	C	19 (1880)	Cot	Y	1	C	C	C	GP
27724	0090 5973	Fernlea	C	P-M (1840)	Cot,Gdn	Y	1	C	C	C	GP
27725	0095 5983	Rosemellyn Cott	C	P-M (1840)	Cot,Gdn,Out	Y	2	C	C	C	GP,BS
27726	0097 5976	Rosemellyn Cott	C	P-M (1840)	Cot,Gdn,Loo	D	2	C	C	C	GP
27728	0088 5943	Woon Mill	C	P-M (1805)	3 Cots,Gdn	Y	1	B	B	B	GP,BS
27729	0091 5950	Woon	SF	M/P-M(1840)	Hse,Out,Shi,Gdn	Y	2	B	B	C	GP,BS
27730	0103 5926	Woon	C	P-M (1840)	Cot*,Out,Gdn	Y	2	B	A	B	GP,BS
27734	0251 5983	Great Rock	F	P-M (1840)	Hse,Gdn,Yd,Bn(*)	Y	2	B	B	C	BS,GP,LS
27736	0277 5998	Minorca	SF	P-M (1840)	CHse(*),Bn,Gdn	Y	1	B	B	B	BS,GP,LS
27739	0341 5967	Higher Menadew	C	P-M (1805)	3 Cots,Gdn	Y	3	B	C	C	GP
27740	0314 5902	Lavrean	F	M (1150)	Hse,Gdn,Yd,Bn,Shi, Stad,Mst	Y	3	B	B	A	BS,GP
27742	0197 5986	Mill Cottage	C	P-M (1840)	Cot,Gdn	Y	1	B	C	C	GP
27743	0324 5967	Higher Menadew	FH	M (1200)	3Hse2*(*)(1cob), GH(*),PH,Pp,Tk, Ctyd,4Yd,6Bn(2*), 2Cots,3Gdn,Tnpl, 9Cts,6Out,4Shi(*), Lin(*),Dai,Smi(*), 3Mow,Imp,CY	Y	34	A	A	A	SS,CC,EX,LS
27744	0297 5958	(Higher Menadew)	SF	P-M (1840)	CHse,Bn,DomOut,Gdn	Y	2	B	B	C	BS,GP
27745	0293 5952	(Higher Menadew)	SF	P-M (1840)	Cot(*),2Out,Gdn	Y	3	B	B	B	BS,GP
27747	0333 5938	Canna	C	P-M (1840)	Cot,Gdn	Y	1	B	C	C	GP
27748	0323 5950	Higher Menadew	C	P-M (1840)	2 Cots,Gdn	Y	1	B	C	C	GP
27749	0307 5954	Rose in Valley	C	P-M (1840)	4 Cots,Gdn,MS	Y	2	B	C	C	GP
27750	0334 5920	Canna	F	P-M (1840)	CHse(*),Bn,Gdn,Yd, Cts,Shi,Pig,Out, Stad,Tro	Y	5	B	B	B	BS,GP,LS
27754	0378 5862	Lestoon Moor	SF	P-M (1840)	Bdg	N	1	C	B	C	BS,GP

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SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27755	0324 5874	Beechcott	C	P-M (1840)	Cot,MS	Y	1	B	C	C	GP
27756	0313 5870	(Lavrean)	SF	P-M (1840)	Hse,Gdn,Yd,Bn	Y	2	B	B	C	BS,GP
27759	0383 5933	Lower Menadue	FH	M (1200)	2Hse(1cob)(*),5Cots, Pig,GH,PH,Pp,Tro,Stad, 3Yd,3Out,Lin(*),3Cts, Tnpl,3Bn(*),2Gdn,Shi, DB,Mst,Imp,Gnd,MB	Y	20	A	A	A	SS,CC,EX,LS
27761	0258 5907	Pendulaw	F	M/P-M(1805)	Hse,Gdn,Yd,Pig,Cts, 3Out,Hull,Loo	N	6	B	B	B	BS,GP
27765	0302 5832	(Lavrean)	SF	P-M (1840)	Hse,Gdn,Yd,MS	Y	3	B	C	C	BS,GP
27768	0446 5804	Bridges	SF	P-M (1840)	Hse,Gdn,Bn	Y	2	B	B	C	BS,GP
27769	0365 5840	Lestoon Moor	SF	P-M (1840)	CHse,Yd,Gdn,Bn	N	1	B	B	C	BS,GP
27770	0368 5846	Lestoon Moor	SF	P-M (1840)	Hse,Gdn,Out,Pig	N	3	B	A	B	BS,GP
27775	0296 5727	Little Resugga	F	P-M (1805)	Hse,Cabin(*),Gdn,Yd, Bn,Shi,Pig,Lin,Cts,Loo	Y	8	A	A	B	BS,GP,LS,CC
27784	0233 5814	(Rosevean)	C	P-M (1840)	4 Cots,Gdn	Y	4	B	B	C	GP
27785	0232 5924	Lower Molinnis	SF	P-M (1840)	2Cots,Gdn,Bn	Y	2	B	B	C	BS,GP
27855	0455 5754	Tregarrick	F	P-M (1840)	Bn,Out,Shi,Yd	N	3	B	B	C	BS,GP
27859	0448 5724	Wind Whistle	F	19 (1880)	Hse,Bn	Y	2	B	B	C	BS,GP
27860	0436 5693	Croft Farm	F	P-M (1748)	CHse,Bn,Bn,Out,Yd	Y	3	B	B	C	BS,GP
27861	0492 5683	Penince	C	P-M (1805)	Cot	Y	1	B	C	C	GP
27865	0485 5588	Carne	FH	M (1200)	Bdg, CY	D	1	C	C	A	GP
27866	0427 5633	Penrean	C	P-M (1840)	Cot,Gdn	Y	1	B	C	C	GP
27867	0414 5649	Innis	C	M (1554)	Cot,Gdn	N	1	B	C	C	GP
27868	0397 5625	Starrick	F	P-M (1805)	Cot,Gdn,Bn,Pig,2Out, Cts,Loo,Yd	Y	7	B	B	C	BS,GP
27869	0447 5608	Carne Cottage	C	P-M (1840)	Cot,Gdn	Y	1	B	C	C	GP
27870	0453 5583	Little Carne	SF	P-M (1840)	Cot,Yd,Gdn,Pig	Y	2	B	B	C	BS,GP
27871	0445 5593	(Carne)	C	P-M (1840)	2 Cots	Y	1	B	C	C	GP
27872	0379 5516	(Chytan)	C	P-M (1840)	Cot	Y	1	C	C	C	GP
27873	0377 5512	Hills Tenement	C	P-M (1840)	Cot	Y	1	C	C	C	GP
27874	0393 5501	(Chytan)	C	P-M (1840)	2 Cots	Y	1	C	C	C	GP
27879	0303 5637	Lower Hallaze	C	P-M (1840)	Cot,Gdn	Y	1	B	C	C	GP
27880	0293 5651	Hallaze	SF	P-M (1805)	CHse,Bn,Pig,Cts, Loo,Yd,Shi	Y	6	B	B	C	BS,GP
27881	0249 5719	(Rescorla)	C	19 (1880)	Cot,Gdn	Y	1	B	B	C	GP

SX05NW

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27882	0259 5724	(Rescorla)	SF	19 (1880)	Hse,2Out,Gdn	Y	3	B	B	C	BS,GP
27885	0245 5572	East Farm	SF	P-M (1840)	Hse,Pig,Gdn	Y	2	C	B	C	BS,GP
27886	0240 5573	Tonkins Row	C	P-M (1840)	3 Cots	Y	1	B	C	C	GP
27887	0171 5591	Penhale	F	M (1200)	Hse,Gdn,Yd,FB,Bn, Shi,Dai,Pig,Cts	Y	8	B	A	A	SS,BS,GP
27889	0182 5594	(Penhale)	SF	P-M (1840)	Hse,MS	Y	1	C	C	C	GP
27898	0215 5761	Kerrow Moor	F	19 (1880)	CHse,Gdn,Yd,Bn,Cts, Pig	Y	4	B	B	C	BS,GP
27899	0207 5756	Kerrow Moor	SF	P-M (1840)	Hse,Bn	Y	2	B	B	C	GP,BS
27903	0098 5889	Beam House	SF	19 (1880)	Hse,Gdn	Y	1	C	C	C	GP
27905	0104 5894	Gracca	F	P-M (1840)	2Cots,Gdn,Out,Bn, Pig,DB,MS	N	6	B	B	C	BS,GP
27908	0089 5712	(Stenalees)	SF	19 (1880)	Hse,Out	N	2	B	C	C	GP
27909	0091 5644	(Carbean)	SF	P-M (1840)	Hse,Out,Gdn	Y	2	B	C	C	GP
27910	0097 5664	(Stenalees)	C	19 (1880)	Cot,Gdn	Y	1	B	C	C	GP
27911	0016 5634	Coon's	F	P-M (1805)	Hse,Gdn,Yd,Bn(*), Pig,2Out,Loo,Imp	N	6	A	A	B	BS,GP,LS

FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20056	035 578	Treskilling	Field system	Strips, banks	A	A	A	A	GMD	SS,GP,CC,SC
27330	005 599	Rosemellyn	Field system	Med; foss. strips	C	C	B	A	GIM	FV
27332	000 593	Goonleigh	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
27333	015 595	Hallew	Field system	Medieval; irreg.	C	C	B	A	GIM	FV
27334	021 594	Molinnis	Field system	Medieval; irreg.	C	C	B	A	OBE	FV
27336	026 591	Pendulaw	Field system	Medieval; irreg.	C	C	B	A	WSC	FV
27337	029 589	Great Lavrean	Field system	Med; foss. strips	B	B	B	A	GIM	FV,AP
27338	032 597	Higher Menadew	Field system	Med; foss. strips	A	A	A	A	GIM	AP,FV,EX
27339	032 589	Lavrean	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
27340	037 594	Lower Menadew	Field system	Med; foss. strips	A	A	A	A	GIM	AP,FV,EX
27341	037 582	Lestoon	Field system	Med; foss. strips	B	B	B	A	GIM	FV,EX
27342	040 578	Treskilling	Field system	Med; foss. strips	A	A	A	A	GIM	AP,CC,FV
27343	036 574	Tretharrup	Field system	Med; foss. strips	B	B	B	A	GIM	FV

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FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27344	031 582	Little Lavrean	Field system	Med; foss. strips	B	B	B	A	GIM	FV,AP
27346	026 576	Rescorla	Field system	Med; foss. strips	B	B	B	A	GIM	FV,EX,AP
27347	020 574	Kerrow	Field system	Med; foss. strips	C	C	B	A	GIM	NA
27348	014 576	Chynoweth	Field system	Medieval; irreg.	C	C	B	B	OBE	NA
27351	002 558	Carthew	Field system	Med; foss. strips	C	C	B	B	GIM	NA
27354	009 553	Ruddle	Field system	Med; foss. strips	B	B	B	B	GIM	FV
27356	018 560	Penhale	Field system	Med; foss. strips	C	C	B	A	GIM	FV
27357	021 556	Carluddon	Field system	Medieval; irreg.	C	C	B	A	OBE	NA
27358	022 565	Penwithick	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27359	026 561	Cannamanning	Field system	Med; foss. strips	C	C	B	B	OBE	NA
27360	028 564	Hallaze	Field system	Medieval; irreg.	C	C	B	A	GIM	NA
27361	029 569	Resugga	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27362	034 565	Treverbyn	Field system	Med; foss. strips	B	B	B	A	GIM	FV,EX
27364	045 568	Croft	Field system	Medieval; irreg.	C	C	B	A	OBE	NA
27365	047 558	Carne	Field system	Med; foss. strips	B	B	B	B	GIM	AP,FV,EX
27366	037 560	Knightor	Field system	Med; foss. strips	C	C	B	A	GIM	FV
27367	030 557	Penheddra	Field system	Medieval; irreg.	C	C	B	B	ODT	NA
27368	040 557	Trethurgy	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27369	040 551	Chytan	Field system	Medieval; irreg.	B	B	B	B	GIM	FV
27370	046 553	Restineas	Field system	Med; foss. strips	B	B	B	A	GIM	FV,EX
27801	0328 5511 to									
27801	0324 5526	Carn Grey	Pasture boundary	Medieval?	B	B	B		GMD	SK,AP
27802	0307 5527 to									
27802	0332 5530	Carn Grey	Perimeter bdy	Medieval?	B	B	B	B	GMD	SK,AP
33004	046 575	Rosemelling	Field system	Med; foss. strips	B	B	B	A	GIM	FV
33140	039 596	Chytan	Field system	Med; foss. strips	B	B	B	A	GIM	FV

CHURCHES CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20027	033 566	Treverbyn	Chapel (SOF)	1690 ref	C	C	B		OBE	WB
20035	0332 5970	Higher Menadew	Cross (FN)	Cross Field (1840)			B		GIM	NA
20042	0455 5720	Rosemelling	Cross (FN)	'Cross Park' (TA)			B		GIM	NA
20045	0435 5610	Carne	Cross (SOF)	Latin.Now in St.Aus.			B		GIM	NA

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CHURCHES CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20052	0389 5950	Chytan	Chapel (SOF)	On 1840 TA map			B		OBE	WB
20179.1	0479 5747	Rosemelling	Chapel (Meth)	Conv. to dwelling	B	B	C		OBE	BS,GP
27212	0053 5580	Carthew (IS)	Chapel (Meth)		A	A	B		OCB	GP
27214	0055 5591	Carthew (IS)	School		A	U	U		OBE	FV,GP
27223	0273 5750	Rescorla (IS)	Chapel (Meth)		A	A	C		OCB	GP
27224	0380 5542	Trethurgy (IS)	Chapel (Meth)	Sunday School	A	A	C		OCB	GP,LS
33029	0242 5632	Penwithick (IS)	Chapel (Meth)	Not visited	U	U	C		OCB	FV
33030	0159 5897	Bugle (IS)	Chapel (Meth)	Not visited	U	U	C		OCB	FV
33040	0181 5708	Treverbyn (IS)	Chapel (Meth)	Not visited	U	U	C		OCB	FV
33103	0156 5901	Bugle	School	Extant 1880	U	U	C	B	OBE	FV
33104	0163 5897	Bugle	School	Replaced 33103	U	U	C	B	OBE	FV
33107	0380 5544	Trethurgy	School	Extant 1880	U	U	C	B	OBE	FV
33109	0167 5702	Treverbyn	School	Extant 1880	U	U	C	B	OBE	FV
33137	0167 5709	Treverbyn	Church	Built 1850 (Listed)	A	A	B	A	OCB	GP,BS

MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20000	0012 5959	Carbis	Brickworks	Kiln, Stack, Wheel	B	B	A	A	OBE	CC,SC
20001.1	0022 5975	Carbis Mill	Waterwheel (SOF)		C	C	C		OBE	NA
20001.2	0026 5972	Carbis Mill	Hull	Arched entrance	A	A	B	A	OBE	LS,BS,GP
20007	0347 5866	Lavrean Mill	Corn mill	House, millstone	B	B	B		OBE	BS,GP,SS,LS
20007.1	0346 5866	Lavrean Mill	Waterwheel	Wheelpit, leat	B	B	B	A	WSC	BS,GP,SS,LS
20016.1	0034 5594	Carthew	Waterwheel	Cast iron.Derry+Sons	A	A	B	A	OBE	LS,GP,BS,CC
20016.2	0034 5591	Carthew	Beebole	13. Arched tops	A	A	A	A	OBE	LS,GP,BS,CC
20019	0057 5575	Carthew (IS)	Corn mill	Waterwheel, mill	A	B	B		OBE	GP,BS
20026	0343 5670	Treverbyn	Mill (SOF)	Platform	C	C	C		WSC	SS,WB
20034	0462 5505	Restineas	Horse engine(SOF)	House, cobbled floor	A	B	B	A	OBE	GP,BS
20043.1	0348 5605	Knightor	Horse engine(SOF)	Drivehole	C	C	C	A	OBE	GP
20058	0052 5773	North Goonbarrow	Inscribed stone	Post-med. Civil War?	A	A	B		GMD	GP,CC,LS
20065	0479 5747	Rosemelling	Mill (PN)	Melyn (place-name)			C		OBE	WB
20067	0383 5932	Lower Menadue	Bone mill	Mill house,machinery	B	B	B	A	OBE	BS,GP,LS,SS
20067.1	0394 5933	Lower Menadue	Waterwheel	Wheelpit, trench	B	B	B	A	WDE	BS,GP,LS
20071	0420 5716	Penrose	Tannery (FN)	Tanhouse field(1840)			C		GIM	WB
20089	0335 5512	Carn Grey	Quarry	Quarry, Dump	B	A	C		WSC	GP

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MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20090	0350 5523	Grey	Quarry	Quarry, Dump	B	A	C		FLD	GP
20178.1	0416 5708	Penrose	Cider press	c.1.1 diam. granite	A	B	C		OBE	GP
20179.2	0480 5749	Rosemelling	Well-house		B	B	C	A	OBE	GP,BS
20183.1	0384 5781	Treskilling	Horse engine	Machinery,crusher	B	B	B	A	OBE	GP,BS
20184.1	0366 5740	Tretharrup	Well-house	Spindle, handle	A	A	B	A	OBE	GP,BS,LS
20184.2	0368 5739	Tretharrup	Well-house	Spindle, handle	A	A	B	A	OBE	GP,BS,LS
20184.3	0369 5741	Tretharrup	Beebole	In hedge (several)	B	B	B		OBE	GP
20186.1	0082 5633	Carbean	Beebole	4 in hedge	B	B	B		OBE	GP
20195.1	0296 5885	Great Lavrean	Goosehole	In hedge	B	A	C		OBE	GP
20206.1	0333 5660	Treverbyn	Longhouse (?)	12m x 4m (int)	B	B	A	A	OBE	BS,EX,SC
20413	0120 5373	Trethowel Mill	Corn Mill	Waterwheel, Mill hse	B	A	B	A	OBE	GP,BS,SS,CC
20606.1	0463 5503	Restineas	Cider press	c.1.2m dia, granite	A	B	C		OBE	GP
27735	0251 5976	Rocks Farm	Mill (SOF)	TA map	C	C	C		GIM	WB
27736.1	0278 5997	Minorca	Hull	Blocked	C	C	C	A	OBE	GP
27740.1	0314 5901	Lavrean	Cider press	c.1.2 diam. granite	A	B	C		OBE	GP
27757	0311 5884	Lavrean	Smithy	2 hearths	B	B	B	A	WDE	BS,GP
27758	0042 5983	Rosemellyn	Cheese press base	0.5m square; granite	A	A	B		OBE	SS,GP,LS
27759.1	0384 5931	Lower Menadue	Goosehole	3 in a row, in hedge	A	A	B	A	OBE	BS,GP
27759.2	0384 5931	Lower Menadue	Cider press	Roller stone	B	B	C		OBE	GP
27778	0326 5723	Little Resugga	Mound	Stone	B	U	C		WTS	FV
27798	0328 5511	Carn Grey	Merriment Hole	On natural tor	A	A	B		GMD	GP
27800	0325 5514	Carn Grey	Stone splitting		B	B	C		GMD	SK
27864	0480 5606	Carne	Smithy (SOF)	Smith Field,platform	C	C	C		GIM	WB
27887.1	0172 5593	Penhale	Crow	c.2.0m sq.Slab roof	A	A	B	A	OBE	LS,GP,BS
27895	0183 5687	Caerloggas Downs	Building	Modern shed	C	B	C		GMD	NA
33130	0054 5607	Carthew	Smithy	Extant 1880	U	U	C	B	OBE	FV
33131	0277 5883	Great Lavrean	Smithy (SOF)	Extant 1880	C	C	C	B	GMD	NA
33133	0179 5958	Hallew	Smithy (SOF)	Extant 1880	C	C	C	B	GMD	NA
33134	0241 5575	Cannamanning	Smithy (SOF)	Extant 1880	C	C	C	B	OBE	NA

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CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20021	0024 5538	Wheal Martyn	China Clay Works	Dump	B	C	A	A	WSC	SS
20021.1	0037 5545	Wheal Martyn	Pan-Kiln	Kiln, Stack, Tank	A	A	A	A	OBE	GP,SS
20021.2	0045 5545	Wheal Martyn	China Clay Works	Waterwheel	A	A	A	A	OBE	GP
20021.3	0031 5545	Wheal Martyn	Process Area	Waterwheel, Pump	A	A	A	A	OBE	GP,SS
20021.4	0035 5553	Wheal Martyn	Process Area	Sand Drag, Mica	A	A	A	A	OBE	GP,SS
20021.5	0032 0050	Wheal Martyn	Pan-Kiln	Kiln, Tank	B	A	A	A	OBE	GP,SS
20024	0282 5652	Hallaze	Engine House	House, Stack	A	A	B		OBE	GP
20078.1	0065 5972	Rosemellyn	Pan-Kiln	Stack, Kiln, Tank	B	A	B	A	WSC	GP,CC
20078.2	0055 5976	Rosemellyn	Process Area	Mica, Sett Pit	B	A	C	A	WSC	GP,CC
20086	0550 5515	Lansalson	China Clay Works	Clay Pit, Dump	B	A	C	A	WSC	GP
20087.1	0050 5540	Gomm	Pan-Kiln	Stack, Pit, Kiln	A	B	A	A	OBE	GP,SS
20087.2	0037 5528	Gomm	Engine House	Winding Drum	C	B	B	B	WSC	GP
20087.3	0028 5523	Gomm	Engine House	House	B	B	A	A	WSC	GP,CC
20092	0307 5546	Alseveor	China Clay Works	Clay Pit, Dump	B	U	C		WSC	GP
20092.1	0305 5556	Alseveor	Engine House	Stack	C	U	C		WSC	GP
20095	0285 5620	Carbis	China Clay Works	Clay Pit, Dump	C	B	C		WSC	FV
20095.1	0306 5625	Carbis	Aqueduct		A	A	C		WSC	GP
20096	0348 5687	Cannamaning	Pan-Kiln	Stack	U	U	U		WSC	FV
20098	0315 5535	Pentruff	China Clay Works	Clay Pit, Dump	C	U	C		WSC	GP,FV
20098.1	0353 5538	Pentruff	Pan-Kiln	Kiln, Stack, Tank	B	A	B		WSC	SS,CC,GP
20104	0186 5963	Little Whl Rose	Pan-Kiln	Kiln, Stack, Tank	C	B	C	B	WSC	GP
20106.1	0220 5895	Wheal Henry	Pan-Kiln	Stack, Tank, Kiln	C	B	C		ODT	GP
20106.2	0212 5877	Wheal Henry	Engine House	Stack	B	U	U		WSC	GP
20107	0241 5921	Molinnis	Pan-Kiln	Stack, Tank	C	C	C		WSC	GP
20110	0055 5606	Carthew	Smithy	Hearth	A	A	C	A	OBE	GP
20130	0095 5680	Bluebarrow	China Clay Works	Clay Pit, Dump	B	B	C		WSC	GP
20130.1	0094 5704	Bluebarrow	Engine House	Loading	C	U	C	B	ODT	GP
20131	0170 5736	Kerrow	China Clay Works		U	U	U	U	WSC	FV
20131.1	0177 5733	Kerrow	Pan-Kiln	Tank, Kiln, Stack	C	A	U	A	WSC	SS,GP
20131.2	0180 5735	Kerrow	Pan-Kiln	Tank, Kiln, Stack	C	A	U	A	WSC	SS,GP
20135.1	0138 5660	Singlerose	Pan-Kiln	Stack, Kiln	C	B	B		OBE	GP
20139	0250 5702	Lantern	China Clay Works	Clay Pit, Dump	B	A	B		WSC	GP
20139.1	0262 5714	Lantern	Engine House	Stack, Boiler Ho	C	B	B	A	WSC	FV,GP
20139.2	0266 5715	Lantern	Process Area	Sett Pit	B	U	B	A	WSC	GP
20139.3	0273 5720	Lantern	Pan-Kiln	Tank, Stack, Kiln	C	B	C	A	WSC	GP
20139.4	0289 5729	Lantern	Process Area	Air Pan, Struct	C	U	U	A	WSC	SS,GP

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CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20142	0060 5635	Carbean	China Clay Works	Clay Pit, Dump	B	A	C	B	WSC	GP
20142.1	0058 5644	Carbean	Engine House	Stack	B	C	C	B	WSC	GP
27207	0072 5503	Lansalson	Engine House	Stack, Boiler Ho	C	B	B	A	ODT	GP
27208	0072 5501	Lansalson		Stack	U	U	U	C	ODT	CC,GP
27209	0068 5516	Lansalson	Pan-Kiln	Kiln, Tank	C	B	A	A	ODT	CC,EX,SS
27210	0067 5512	Lansalson	Leat	Tunnel	A	U	B	B	ODT	FV
27211	0115 5503	Ruddle	Engine House	Stack, Ho, Shaft	B	A	B	A	WSC	SS,CC,GP
27213	0060 5607	Lower Ninestones	Pan-Kiln	Stack, Pan	A	C	C	A	OBE	GP
27215	0045 5618	Carthew	Pan-Kiln	Stack, Tank, Pan	B	B	C	A	OBE	GP
27217	0050 5733	Shilton	China Clay Works	Clay Pit	B	U	C		ODT	GP
27218	0063 5727	Shilton	Process Area	Mica, Sett Pit	B	B	C		ODT	GP
27219	0061 5728	Shilton	China Clay Works	Smithy, Stack	B	U	C		ODT	GP
27220	0065 5732	Shilton	Process Area	Mica, Sett Pit	A	U	C		ODT	GP
27221	0030 5633	Gunheath	Weighbridge	Bridge, Cabin	C	A	C		WSC	GP
27222	0131 5755	Caudledown	Pan-Kiln	Stack, Kiln, Tank	B	B	C		WSC	GP
27225	0415 5540	Trethurgy	China Clay Works	Clay Pit, Dump	B	U	C		WSC	GP
27226	0300 5520	Pentruff	China Clay Works	Dump	B	B	B	B	WSC	FV
27226.1	0291 5520	Pentruff	Engine House	Hse, Shaft, Stack	B	B	C		ODT	GP
27227	0012 5825	Wheal Prosper	China Clay Works	Clay Pit, Dump	B	A	C	A	WSC	GP
27227.1	0005 5830	Wheal Prosper	Engine House	Hse, Stack, B/Hse	B	A	B	A	WSC	GP
27227.2	0000 5828	Wheal Prosper	Process Area	Mica, Sett Pit	C	U	C	A	WSC	FV,GP
27228	0025 5843	West Goonbarrow	Engine House	Wall	C	C	C		ODT	NA
27229	0028 5863	West Goonbarrow	Pan-Kiln	Stack, Kiln, Tank	C	A	B		WSC	GP
27230	0030 5802	North Goonbarrow	Engine House	Stack	C	C	C		ODT	GP
27231	0242 5806	Bowling Green	Pan-Kiln	Kiln, Stack	C	U	C		WSC	FV,GP
27232	0135 5828	Imp Goonbarrow	Pan-Kiln	Kiln, Stack	B	A	C	A	OBE	GP
27233	0134 5837	Imp Goonbarrow	Pan-Kiln	Kiln, Stack	B	A	B	A	OBE	GP
27234	0142 5805	Rocks	Pan-Kiln	Kiln, Stack	A	A	C	A	OBE	GP
27236	0157 5937	Hallew	Pan-Kiln	Stack, Tank	C	C	C	B	WSC	FV,GP
27237	0147 5940	Hallew	Pan-Kiln	Kiln, Stack, Tank	C	B	B	B	WSC	FV,GP
27238	0005 5957	Carbis	Pan-Kiln	Kiln, Stack, Tank	A	A	C	A	OBE	GP
27239	0019 5960	Carbis	Pan-Kiln	Kiln, Stack, Tank	A	A	B	A	OBE	GP,LS
27243	0043 5958	Carbis	Pan-Kiln	Pan, Stack, Tank	C	B	C	B	WSC	GP
27245	0080 5965	Lower Woon	Pan-Kiln	Kiln, Stack, Tank	A	A	C	B	OBE	GP
27246	0125 5938	Wheal Rose	Pan-Kiln	Kiln, Tank	A	B	C	A	OBE	GP
27247	0110 5946	Wheal Rose	Pan-Kiln	Kiln, Stack, Tank	C	B	C	A	OBE	GP

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CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27248	0100 5951	Wheal Rose	Pan-Kiln	Kiln, Stack, Tank	C	B	C	A	OBE	GP
27249	0140 5975	Hallew	Pan-Kiln	Kiln, Stack, Tank	C	B	C	B	WSC	GP
27251	0200 5990	Hallew	Pan-Kiln	Stack, Kiln	B	A	C	A	WSC	GP

MINING

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20002	0094 5946	Woon	Stampg mill(SOF)		C	C	C	B	WSC	WB
20003	0145 5981	Hallew	Stampg mill(SOF)		C	C	C	B	GIM	WB
20060	0125 5915	Woon	Stamping mill	W/wheel, stamps	B	A	A		WSC	CC,SS,GP
27731	0143 5971	Hallew	Stampg mill (SOF)		C	C	C	B	GMD	WB
27732	0157 5997	Tresibble	Streamworks (All)	Cuesta heaps,cutting	B	B	A	A	GIM	SK
27733	0125 5990	Hallew	Streamworks (All)	Cutg,drn,cuesta hps	A	A	A	A	GMD	SK
27753	0357 5874	Lavrean	Streamworks (All)	Lin+cuesta hps,leats	A	B	A	A	GMD	SK
27762	0257 5890	Pendulaw	Streamworks (All)	Hatches,lin + cuesta	A	A	A	A	GMD	SK
27766	0335 5810	Little Lavrean	Streamworks (All)	Dumps,ctg,drains	A	A	A	A	GMD	SK
27771	0393 5850	Lestoon Moor	Streamworks (All)		B	B	B	A	WTS	WB
27772	0327 5845	Little Lavrean	Streamworks (All)	Dumps,ctg,drains	A	A	A	A	WTS	SK
27780	0328 5691	Innis Moor	Streamworks (All)	Lin+cuests hps,ctg	A	A	A	A	WSC	SK,CC
27831	0006 5788	Hensbarrow Downs	Surface mining	LB pits	A	A	B	A	GMD	SS
27858	0455 5745	Rosemelling	Mine (FN)	Pit close (1840)	C	C	C		GIM	WB
27878	0313 5647	Treverbyn	Streamworks (El)	Cutting,heaps,drain	B	B	B	B	WDE	SK
27884	0238 5555	to								
27884	0290 5571	Carluddon	Streamworks (All)	Heaps, pits	B	B	A		WSC	SK
27891	0155 5614	Penhale	Surface mining	Destroyed	C	C	C		OBE	NA
27893	0156 5664	to								
27893	0193 5633	Caerloggas Downs	Leat	Post-med	B	C	B	B	GMD	SK
27894	0190 5670	Caerloggas Downs	Surface mining	Shode pits	B	B	B	B	GMD	SK
27896	0188 5690	to								
27896	0197 5693	Caerloggas Downs	Leat	Modern	B	B	C	C	GMD	SK
27897	0163 5676	to								
27897	0224 5677	Caerloggas Downs	Leat	Post-med	B	B	B	B	GMD	SK
27900	0237 5770	Kerrow Moor	Streamworks (All)	Cutting, heaps	B	B	A		WSC	SK

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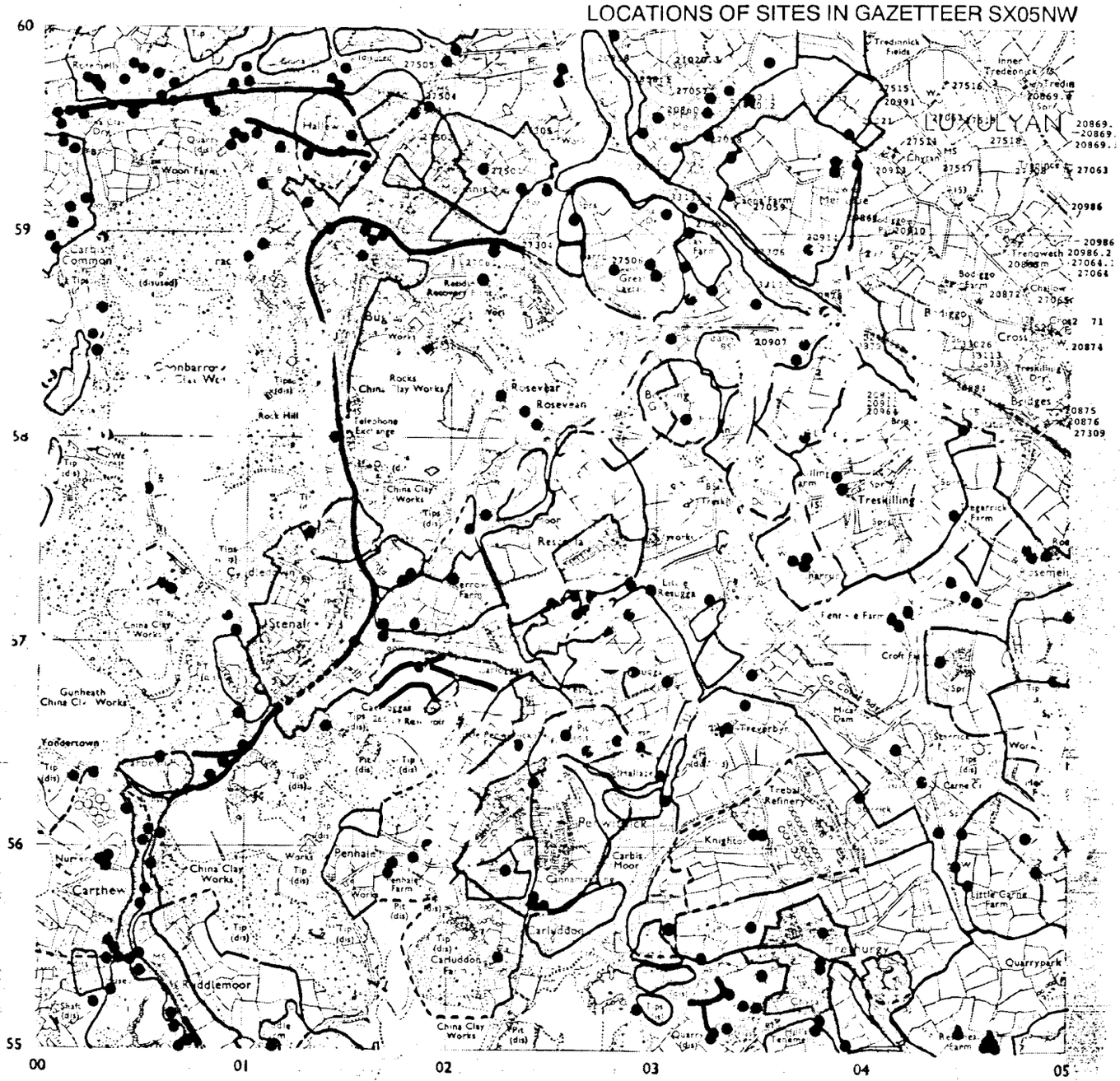
TRANSPORT AND COMMUNICATIONS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20021.6	0050 5545	Wheal Martyn	Bridge		B	A	B	A	OBE	GP
20021.7	0050 5546	Wheal Martyn	Bridge	Granite Pillar	A	A	A	A	OBE	GP
20064	0316 5915	Lavrean	Bridge	1200 ref	A	A	B		OBE	GP,BS
27206	0075 5510	Ruddlemoor	Railway	Wharf, Siding	C	C	C	A	ODT	GP
27216	0075 5630	to								
27216	0230 5890	Goonbarrow Branch	Railway		B	B	C	B	WSC	CC
27216.1	0130 5676	Stenalees	Railway	Tunnel	A	A	C	B	WSC	GP
27216.2	0098 5648	Stenalees	Railway	Bridge	B	C	C	B	WSC	GP
27216.3	0070 5625	Carthew	Railway	Warf, Siding	C	B	C	B	WSC	GP
27216.4	0153 5700	Treverbyn	Railway	Bridge	A	A	C	A	WSC	GP
27235	0138 5902	Bugle	Railway	Bridge	A	A	C	C	WSC	GP
27240	0097 5953	to								
27240	0160 5936	Wheal Rose Branch	Railway	Siding, Wharf	B	B	C	A	WSC	FV,GP
27241	0012 5960	to								
27241	0148 5963	Carbis Branch	Railway	Siding, Wharf, Brg	A	A	C	A		FV,GP
27242	0032 5963	Carbis Branch	Bridge	Iron Girder	A	A	C	B	OBE	GP
27244	0062 5965	Rosemellyn	Level Crossing	Gates	A	A	B	B		GP
27250	0175 5927	Bugle	Station	Platform, Wharf	B	B	C	B	OBE	GP
27722	0027 5896	Carbis Common	Hollow-way	Gully	B	U	C		GMD	NA

LOCATIONS OF SITES IN GAZETTEER SX05NW



LOCATIONS OF SITES IN GAZETTEER SX05NW

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PREHISTORIC

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27637	0505 5565	Carne	Barrow (FN)	TA no ewks vis.			B		GIM	GS,FW,WB
27669	0537 5727	Tregonning	Chambered Tomb?	TA no ewks vis.	U	U	B		GIM	NA
5030	0524 5689	Trevanney	Enclosure (AP)	No ewks vis.	U	U	A	C	GIM	FW,GS,AP,WB
5047	0547 5597	Prideaux	Round	Rampart to 0.8m high	B	B	A		GIM	SS,GS,SC,EX
5048	0540 5610	Prideaux	Round (FN)	TA see 5047						
5051	0531 5690	Trevanney	Round (FN)	TA no ewks vis.			B		GIM	GS,FW,WB
5054	0555 5585	Prideaux	Round (FN)	TA see 5047						
5081	0507 5693	Penince	Enclosure (AP)	No ewks vis.	U	U	A	C	GIM	FW,GS,AP,WB

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27633	0597 5543	Nanscawen	F	M (1338)	Hse,Gdn,Yd,2Bns, Shi,Lin,Tro	Y	5	B	B	A	SS,BS,GP
27634	0507 5514	(Bodelva)	SF	P-M (1748)	Hse, Out	Y	2	B	C	C	GP
27635	0504 5517	(Bodelva)	F	P-M (1748)	Out	D	1	C	C	C	GP
27636	0507 5543	Quarry Park	SF	P-M (1748)	Hse, Out	Y	2	C	C	C	GP
27666	0548 5656	Trevanney	FH	EM (1433)	Hse,Tnpl,Yd,Bn, 4Out,Shi(cob),Imp, Gdn,DomOut,2Cts, Gnd,MS	Y	10	B	A	A	SS,BS,GP,EX
27667	0502 5716	Tregonning	FH	EM (1327)	Hse*,Gdn,Tnpl, Pp,Gnd,Tro,Orch,PH, 2Out,Lin,Pig,Loo,Yd, 2Bn 1*,2Shi 1*, Mow,DB	Y	11	A	A	A	SS,BS,CC,EX
27671	0526 5743	(Tregonning)	C	P-M (1840)	Building	D	1	C	B	C	GP,BS
5049	0505 5632	Methrose	FH	M (1277)	2Hse*(IIstar) (2*),2Shi,Out, Lin(*),PH,Orch, CY,Tro,Gnd,Imp,Yd, Tnpl,2Gn,3Bn 1* Ctyd*(IIstar)	Y	10	A	A	A	SS,EX,CC,LS

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FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27372	052 572	Tregonning	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27373	055 567	Trevanney	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27374	051 563	Methrose	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27375	056 560	Prideaux	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27376	055 556	Prideaux	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27377	060 554	Nanscawen	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
27378	061 551	Little Nanscawen	Field system	Medieval; irreg.	C	C	B	B	ODT	NA
27379	053 551	Bodelva	Field system	Med; foss. strips	B	B	B	A	GIM	FV

CHURCHES CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
5031	0544 5706	Tregonning	Cross	Wheel; irreg.	A	B	A		GIM	CC,GP
5045	0578 5625	Prideaux	Chapel (FN)	Church Park (TA)			C		GIM	WB
5046	0555 5615	Prideaux	Chapel (FN)	Chapel Close (TA)			C		GIM	WB
5052	0522 5660	Methrose	Cross (SOF)	Wheel; at Menabilly			A		GIM	GP,LS,BS
5084.2	0505 5565	Carne	Cross (FN)	3 flds Cross Burrows			B		GIM	NA

MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
5049.1	0506 5631	Methrose	Medieval house	Hall house.Late C15	A	A	A	A	OBE	GP,BS,CC,EX
5049.2	0504 5634	Methrose	Horse engine(SOF)	House, drivehole	B	B	C	A	OBE	LS,BS,GP
5059	0562 5580	Prideaux	Pound	Rect; destroyed	C	C	C		GIM	SS
27262	0525 5620	Charlestown Leat	Tunnel	Leat Tunnel	B	A	B	A	WUN	GP
27633.1	0596 5543	Nanscawen	Mill	House, leat	B	B	C		OBE	NA

CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27053	0600 5515	Wheal Rashleigh	China Clay Works	Pit, Dump, W/Wheel	B	B	C		WSC	FV,GP
27261	0510 5585	Wheal Par	China Clay Works	Pit, Dump, Str	B	U	C		WSC	GP
27261.1	0530 5380	Wheal Par	Process Area	Mica, Sett Pit	B	U	C	A	WSC	GP

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MINING

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27051	0545 5540	Wheal Treffry	Mine	W/pit,shaft,dump	B	B	C		WUN	SK
27052	0525 5530	Bodelva	Mine	Adit, shaft	C	U	C		WSC	FV
27638	0540 5594	Prideaux	Surface mining	Prosp,shode+LB pits	B	B	B		WDE	SK
27668	0526 5726	Tregonning	Mine (DOC)	Mine park (1840)			C	B	GIM	FV
27670	0527 5737	Tregonning	Surface mining	LB pits, shaft?	B	B	B	B	WSC	SK
33021	0552 5509	Bodelva	Mine (FN)	Mines Park (TA map)	U	U	C		GIM	FV

LOCATIONS OF SITES IN GAZETTEER SX05NE

SX05SW

PREHISTORIC

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20312	0282 5464	Carn Grey	Barrow (SOF)	Not found	U	U	B		GMD	WB
20319	0344 5447	Menear	Menhir	1.8m high	A	A	A		GIM	SS,GS,EX,CC
20320	0367 5402	Boscoppa	Round (FN)	TA no ewks vis.			B		GIM	GS,FW,WB
20322	042 548	Garkar	Round (PN)	Ker in name			A		OBE	FW,WB
20323	049 545	Carvear	Round (PN)	Ker in name			A		OBE	FW,WB
20324	0461 5463	Vounder	Barrow (FN)	TA no ewks vis.			B		ODT	WB
20374	0102 5377	Trethowel	Barrow	Bowl, 19m	B	B	A	B	GIM	SS,EX,SC
20420	0086 5368	Trethowel	Artefact	B + T Arrowhead			A	B	GIM	FW
20537	0194 5412	Carwollen	Round (PN)	Ker no ewks vis.			A		OBE	GS,FW,WB
27602	0003 5430	Biscovillack	Oval Encl.(AP)	Earthworks	B	B	A		GIM	SS,GS,FW,AP
27640	0181 5415	Bojea Round	Round (FN)	TA no ewks vis.			B		GIM	GS,FW,WB
27646	0327 5466	Little Menear	Circ.feature(AP)	Probably natural	C	C	C		GIM	NA
27653	0394 5445	Menear	Circ.feature(AP)	No ewks vis.	U	U	A		GIM	GS,FW,WB,AP
27656	0364 5484	Gray	Round	Defined by hedges	B	B	A	A	GIM	GS,FW,SS,EX
27657	0365 5494	Gray	Field system	Lynchets	B	B	A	A	GIM	SS,AP
27664	0474 5435	Carvear	Round	Bank to 1.0m high	B	B	A	B	GIM	SC,GS,SS,EX

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
20204	0111 5499	Ruddle	FH	M (1296)	Hse,Gdn,Yd,3Bn,2Cts, Lin(*),Pig,Sta,Out, CY,Stad	Y	11	A	A	A	SS,BS,GP,LS
20308	0194 5412	Carwollen	FH	EM (1224)	Hse,Gdn,Yd,Bn,2Cts, Shi,Pig,Loo,Orch,Imp	N	7	B	B	A	SS,BS,GP,EX
20534	0076 5441	Boskell	FH	EM (1371)	CHse,Gdn,Yd,Bn,Pig Cts	Y	4	B	B	A	SS,BS,GP,EX
20545	0074 5482	Lansalson	FH	EM (1354)	Hse,Gdn,Yd,DomOut, Bn(*),2PH,Shi,Cts, DB,Tro,Stad	Y	6	A	A	A	SS,BS,EX,LS
20548	0354 5443	Menear	FH	M (1525)	2Hse(1cob),Gdn,Tnpl, Yd,2Bns,Shi,Cts, Out(cob),PH,CY,Imp	Y	8	B	B	A	SS,BS,GP

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SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
20559	0008 5309	Trembear	FH	EM (1334)	CHse(*),Bn(*),Imp, Pig,2Yd,DB,2Shi	Y	6	B	B	A	SS,BS,EX,LS
20560	0043 5333	Trenance	FH	EM (1086)	Hse,3Bn(2*),Shi,2Yd, Tnpl,DomOut,Mst,Imp	Y	7	B	A	A	SS,BS,EX,LS
20562	0103 5353	Trethowel	FH	EM (1314)	Hse(*),Gdn,Yd, 2Bn(1*),Pig,Pp, Tro,MS	Y	5	A	A	A	SS,BS,EX,LS
20569	0460 5491	Vounder	FH	M (1354)	CHse(*),Hse,Tnpl, 2Yd,2Bn,Shi,DomOut, PH,Lin	Y	7	B	B	A	SS,BS,GP,LS
27594	0026 5333	Buggins	F	P-M (1805)	Hse,Yd,Out,Bn,Cts	N	4	B	B	B	SS,BS,GP
27595	0024 5356	Litt Trenance	F	P-M (1805)	Hse,Bn,PH	Y	2	B	B	C	BS,GP
27603	0000 5394	(Biscovillack)	SF	P-M (1840)	2Cots,Yd,Cts,Shi,Out	N	4	B	B	C	BS,GP
27608	0031 5422	Sunny Corner	SF	19 (1880)	Hse,Out	Y	2	B	C	C	GP
27609	0043 5412	The Cottage	C	19 (1880)	Cot,Gdn	N	1	B	B	C	BS,GP
27610	0046 5423	Brecombe	C	19 (1880)	2 Cots, Gdn	Y	1	B	C	C	GP
27611	0063 5405	Homeleigh	SF	19 (1880)	Hse,Yd,Bn,Out	Y	3	B	B	C	GP
27612	0068 5414	Palace Close	SF	19 (1880)	Hse, MS	Y	3	B	C	C	GP
27613	0176 5430	Mount Stamper/ Higher Bojea	FH	P-M (1748)	2Hses,Gdn,Tnpl,Bn, Out,MS	Y	4	B	B	B	BS,GP
27615	0124 5479	Colchester	C	P-M (1805)	Cot, Gdn	Y	1	B	C	C	GP
27617	0176 5480	(Scredda)	C	19 (1880)	2 Cots	D	1	C	C	C	GP
27618	0174 5474	The Hollow	SF	19 (1880)	Hse, Gdn, 2 Out	Y	3	B	C	C	GP
27619	0160 5474	Crane House	C	P-M (1805)	Cot, Gdn	Y	1	B	C	C	GP,BS
27621	0183 5468	(Scredda)	SF	19 (1880)	Cot, Yd, Pig	Y	2	B	C	C	GP
27622	0207 5470	(Scredda)	SF	19 (1880)	Hse, 2 Out	Y	3	C	C	C	GP
27623	0198 5460	(Scredda)	C	19 (1880)	Cot, Gdn	Y	1	C	C	C	GP
27624	0186 5462	Blue Anchor	C	19 (1880)	Cot, Gdn	Y	1	C	C	C	GP
27639	0147 5408	Bojea	FH	EM (1296)	Hse(*),Gdn,3Bns(*), 3Cts(1*),4Out,Gnd, Tnpl,Yd,PH,Dai, Pp,Stad,DW	Y	12	A	A	A	SS,CC,EX,LS
27641	0236 5472	Pitt Cottage	C	19 (1880)	2 Cots,Gdn	Y	1	C	C	C	GP
27643	0293 5464	Clear View	C	19 (1880)	Cot,Gdn,GH	Y	1	C	C	C	GP,BS
27644	0298 5464	Carn Grey	C	19 (1880)	Cot,Gdn	Y	1	C	C	C	GP
27645	0312 5470	Carn Grey	C	19 (1880)	3 Cots, Out, Gdn	Y	4	C	C	C	GP

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SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27648	0341 5479	Grey Cottage	SF	P-M (1840)	Cot, Out, Gdn	Y	2	B	B	C	GP,BS
27649	0348 5475	(Gray)	C	P-M (1840)	Cot, Loo	D	2	C	C	C	GP,BS
27655	0376 5492	Gray	F	P-M (1748)	Hse(*),Gdn,MB(*), Yd,2Bn,Dai,DomOut, Loo,Out,DB,Imp	Y	8	A	A	A	BS,GP,LS
27658	0396 5483	Gray Cottage	C	19 (1880)	Cot, Gdn	Y	1	C	C	C	GP
27659	0418 5474	Garkar	C	EM (1354)	3 Cots, Gdn	Y	3	C	C	A	GP
27660	0439 5450	Mount Pleasant	C	P-M (1748)	Cot	Y	1	C	C	C	GP
27661	0437 5446	(Carvear)	C	19 (1880)	Cot	Y	1	C	C	C	GP
27662	0429 5413	(Tregrehan)	C	P-M (1805)	Cot, Out, Gdn	Y	2	C	C	C	GP
27663	0477 5444	Carvear	FH	EM (1327)	Hse,Yd,2Bn(1*), 2Lin(*),Shi,PH,Out	N	7	A	A	A	SS,BS,EX,LS

FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27380	007 548	Lansalson	Field system	Med; foss. strips	C	C	B	A	GIM	NA
27381	007 544	Boskell	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27382	009 539	Trethowel	Field system	Med; foss. strips	C	C	B	A	GIM	FV
27383	009 534	Trethowel	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27384	005 535	Trenance	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27385	002 532	Trembear	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
27386	013 542	Bojea	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27387	017 544	Mount Stamper	Field system	Medieval; irreg.	B	B	B	A	GIM	FV
27388	020 542	Carwollen	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27389	035 544	Menear	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27390	038 541	Tregrehan	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27391	037 549	Gray	Field system	Medieval; irreg.	B	B	B	A	GIM	FV,EX,SK
27392	041 549	Garkar	Field system	Medieval; irreg.	B	B	B	B	GIM	FV,SK
27393	046 547	Vounder	Field system	Med; foss. strips	C	C	B	A	GIM	FV
27394	045 544	(Vounder)	Field system	Medieval; irreg.	B	B	B	B	GIM	NA
27395	048 543	Carvear	Field system	Med; foss. strips	B	B	B	A	GIM	FV
27620	0105 5456	Bojea	Field system	Ridge & furrow	A	U	B	B	GMD	SS
27651	0342 5431	Menear	Field system	Post-med	C	C	C		GIM	NA
27665	0452 5450	Carvear	Field system	Post-med. Banks	B	B	C	B	GIM	SK

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CHURCHES, CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20321	0406 5446	Menear	Cross (FN)	Cross field (1840)			C		GIM	NA
20326	0432 5431	Mary Maudlins Well	Holy Well (SOF)	Spring/Adit	C	C	B		WDE	NA

MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20302	0101 5434	Bojea Mill	Corn mill	Mill house, Penstock	B	B	B		OBE	GP,BS
20413	0120 5373	Trethowel Mill	Corn Mill	Waterwheel,Millhouse	B	A	B	A	OBE	GP,BS,SS,CC
20454	0102 5427	Bojea	Smithy (SOF)	Extant 1880	C	C	C		OBE	NA
20516	0173 5482	Scredda	Smithy	Destroyed	C	C	C		ODT	NA
20560.1	0047 5327	Trenance	Horse engine(SOF)	Internal;bowed walls	B	B	B	A	OBE	GP,BS
20560.2	0042 5333	Trenance	Horse engine(SOF)	Drivehole	C	C	C	A	OBE	GP
27044	0438 5480 to									
27044	0384 5168	Charlestown Leat	Leat	Sluice	A	A	B		FUN	FV,GP
27048	0433 5455	Tregrehan	Aqueduct	Launder, Rail	A	A	B	A	WUN	GP
27639.1	0144 5409	Bojea	Waterwheel (SOF)	Wheelpt;bearing stne	B	B	C	A	OBE	GP,BS
27643.1	0293 5464	Clear View	Goosehole		A	A	C	A	OBE	GP,BS
27655.1	0377 5494	Gray	Beebole	In hedge	A	B	C		OBE	GP
27663.1	0477 5444	Carvear	Horse engine(SOF)	On TA map			C	A	OBE	FV

CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20442	0230 5410	Carclaze	China Clay Works	Mica, Sett Pit	C	C	C	B	WSC	FV
20442.1	0250 5421	Carclaze	Mica Drag		C	C	C	C	WSC	FV
20442.2	0243 5418	Carclaze	Settling Pit		C	U	U	U	WSC	FV
20442.3	0240 5408	Carclaze	Pan-Kiln	Tank, Kiln, Stack	C	C	B	B	WSC	FV
20442.4	0245 5403	Carclaze	Pan-Kiln	Tank, Kiln, Stack	A	A	C	B	WSC	GP
20449	0060 5360	Trenance	China Clay Works	Pit, Shaft	C	B	C		WSC	FV
20450	0007 5365	Trembear	China Clay Works	Pit, Air Pan, Str	C	U	A		WSC	FV,SS
20451	0010 5405	Biscovillet	China Clay Works	Pit, Dump	B	A	C		WSC	GP
20453	0080 5380	Trethowel	China Clay Works	Pit, Dump	C	B	C	B	WSC	FV
20453.1	0065 5375	Trethowel	Engine House	Stack, Boiler Hse	B	A	B	B	WSC	CC,BS
20453.2	0100 5398	Trethowel	Engine House	Stack, Boiler, Eng	C	B	A	B	WSC	CC,SS

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CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20453.3	0120 5380	Trethowel	Settling Pit	Tank, Pit, Leat	C	B	B	A	WSC	GP,SS
20453.4	0120 5388	Trethowel	Pan-Kiln	Stack, Kiln	B	B	C	A	WSC	GP,SS
20534.1	0095 5420	Boskell	Pan-Kiln	Stack, Tank, Liny	C	A	A	A	WSC	SC,CC,SS
20534.3	0065 5430	Boskell	Clay Pit		C	B	C		WSC	FV
20534.4	0095 5432	Boskell	Pan-Kiln	Stack, Tank, Liny	B	A	A	A	WSC	SC,CC,SS
27031	0065 5305	Greensplat Works	Pan-Kiln	Linhay, Boiler	B	A	B	B	WSC	GP,SS
27032	0040 5310	Carancarrow	Pan-Kiln, Mica	Stack, Kiln, Pit	B	A	A	B	WSC	SC,CC,SS
27033	0020 5395	Trembear	China Clay Works	Pit	C	A	C		WSC	FV
27034	0110 5423	Bojea	Pan-Kiln	Tank, Pan , Stack	B	A	B	B	WSC	FV,GP
27034.1	0105 5430	Bojea	China Clay Works	W/Wheel, Mica, Pit	C	A	B	B	WSC	SS
27035.1	0086 5477	Lansalson	Pan-Kiln	Stack, Kiln, Mica	A	A	B	A	WSC	GP,FV
27035.2	0085 5472	Lansalson	Pan-Kiln	Stack, Kiln, Pit	A	A	B	A	WSC	FV,GP
27036	0098 5455	Lansalson	Pan-Kiln	Tank, Stack, Kiln	C	B	C	B	WSC	FV,GP
27037	0037 5479	Lansalson	Engine House	Reservoir	C	B	C	C	GMD	GP
27038	0135 5490	Ruddle	China Clay Works	Pit, Dump	B	A	B	A	WSC	FV,GP
27038.1	0115 5490	Ruddle	Pan-Kiln	Linhay	C	C	C	C	WSC	FV
27038.2	0094 5482	Ruddlemoor	Pan-Kiln	Stack, Tank	C	C	C	C	WSC	FV
27039	0223 5433	West Carclaze	Pan-Kiln	Kiln, Stack	A	B	C	B	OBE	GP
27040	0318 5467	Carn Grey	Engine House	Stack	B	U	A		FUN	SC,GP
27041	0400 5465	Garker	China Clay Works	Pit, Dump, Leat	C	B	B		WSC	FV
27041.1	0427 5468	Garker	Pan-Kiln	Tank, Pit, Mica	C	C	B	A	WSC	FV,GP
27041.2	0408 5472	Garker	Smithy	Hearth, Hood	C	B	C	B	WSC	GP
27042	0430 5477	Garker	Pan-Kiln	Stack, Tank	C	C	C	B	WSC	FV
27043	0437 5474	Garker	Water Wheel	W/pit, Leat, Adit	B	U	C	C	WUN	FV,GP
27045	0442 5464	Vounder	Pan-Kiln	Tank, Kiln, Stack	A	A	C	B	WSC	GP
27046	0435 5462	Garker	Stack	Stack, Structure	B	U	U	U	FUN	FV
27047	0435 5427	Tregrehan	Pan-Kiln	Kiln, Tank, Stack	C	A	A	A	WSC	SS,CC,SC
27049	0418 5492	Trethurgy	China Clay Works	Mica, Sett Pit	C	U	C		WSC	FV

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MINING

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20325	0440 5418	Tregrehan Consols	Mine	Eng Hse, Buddle	B	B	B	C	WSC	SS
20328	0441 5473	Vounder	Openwork	Shafts,Adits,Tracks	A	A	A	B	WDE	SS,CC
20456	0315 5405	Menear Pit	Openwork		C	C	B		GIM	FV
27647	0334 5472	Carn Grey	Surface mining	Prosp + LB pits	B	B	B	C	GMD	SK
27652	0374 5432	Menear	Mine (FN)	Tinners Meadow(1840)	C	C	C		GIM	WB
27654	0288 5423	Carclaze	Mine	Adit	B	B	B	C	GMD	SK

TRANSPORT AND COMMUNICATIONS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20445	0114 5280 to									
20445	0080 5500	Trenance Branch	Railway	Bridge, Siding	B	A	B	B	WSC	CC
20445.2	0098 5445	Bojea	Railway	Wharf, Siding	C	B	C	B	WSC	GP
20445.3	0090 5473	Lansalson	Railway	Crossing	B	A	B	B	WSC	SC,GP
27030	0050 5308	Trenance Siding	Railway	Bridge, Siding	C	B	C	B	WSC	GP

SX05SW

LOCATIONS OF SITES IN GAZETTEER SX05SW

SX05SE

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
20603	0545 5492	Bodelva	FH	EM (1293)	2Hses,Gdn,Tnpl, DomOut,Yd,Bn(cob), Shi,Cts,2Pig,Out, Lin(*),CY,Tro,Stad	Y	11	B	A	A	SS,BS,EX,LS
27625	0525 5487	Higher Bodelva	F	P-M (1748)	Hse,Gdn,Yd,2Bn, DomOut,Pig,Cts	Y	6	B	B	C	BS,GP
27626	0524 5485	Higher Bodelva	C	P-M (1840)	2 Cots	Y	1	C	C	C	GP
27627	0530 5484	Higher Bodelva	C	P-M (1840)	Cot, Gdn	Y	1	C	C	C	GP
27628	0570 5457	Ashcombe	C	P-M (1840)	2 Cots, Gdn	Y	1	C	C	C	GP
27630	0544 5446	(Tanner's Park)	C	P-M (1840)	3 Cots, Gdn	Y	3	B	C	C	GP
27631	0522 5436	Liskey	C	P-M (1805)	Cot, Gdn	Y	1	B	C	C	GP
27632	0518 5444	Carvear Moor	C	19 (1880)	8 Cots(*),Gdns	Y	1	B	B	C	GP,BS,LS

MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
20465	0537 5450	Ashcombe	Tannery (FN)	Tanners Park (1840)			C		GMD	NA
20603.1	0545 5490	Bodelva	Cider-press	c. 1.2m, base	A	A	C		OBE	GP

MINING

33022	0523 5430	Wheal Vor Mine	Mine	(TA Map)	U	U	B		WDE	FV

CHINA CLAY

27050	5526 5432	Carvear	Pan-Kiln	Kiln, Stack, Tank	B	A	B		WSC	GP
27263	0700 5278	Par	Pan-Kiln	Kiln	A	B	C	A	OBE	GP
27264	0670 5281	Par	Pan-Kiln	Kiln	A	B	C	B	OBE	GP
27265	0715 5280	Par	Pan-Kiln	Kiln, Stack	A	A	C	A	OBE	GP
27266	0735 5292	Par	Pan-Kiln	Kiln, Stack	A	B	C	A	OBE	GP
27267	0745 5310	Par	Pan-Kiln	Kiln	U	U	C	A	OBE	FV,GP

SX05SE

LOCATIONS OF SITES IN GAZETTEER SX05SE

SX06SW

PREHISTORIC

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21228	0213 6114	Little Innisvath	Flint scatter	No details known	U	U	A		GIM	FW
21238	013 606	Criggan	Round (PN)	Ker name			A		GIM	FW,WB
21240	0190 6045	Bilberry	Barrow (FN)	TA no ewks vis.			B		GIM	WB
21262	0277 6062	Bodwen	Round House	Largely destroyed	C	C	A		OBE	SS,EX,GS,AP
21276	0261	Savath	Flint scatter	Leaf arrowhead	U	U	A	C	GIM	FW
21278	0261	Savath	Flint scatter	Not specified	U	U	A	C	GIM	FW
21286	020 613	Savath	Bronze cauldrons	2 LBA in streamworks	U	U	A		OMX	NA
27679	0338 6035	Ebenezer	Circ.features(AP)	2 Circles & bank	B	B	A	B	GIM	SS,GS,FW,EX
27680	0307 6018	Carne	Menhir (FN)	TA no menhir visible			B		GIM	WB
27695	0060 6015	Rosemellyn	Round	Rampart to 0.4m high	B	B	A	B	GIM	SS,CC,SC,EX
27707	0216 6134	Ennisvath	Barrow	Bowl, 14m	B	B	A		GIM	SS,EX,SC

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
21345	0277 6008	Carne	F	P-M (1840)	Hse,Gdn,Yd,Bn,Pig	Y	3	B	B	C	BS,GP
21350	0271 6113	Savath	FH	M (1319)	Hse,Gdn,2Yds,2Bns, Out,3Cts,Shi,Pig,Loo, CY,DB,Imp,Tk	Y	12	A	A	A	SS,BS,GP,LS
21356	0155 6070	Criggan Farm	SF	EM (1250)	Hse, MS	Y	1	C	C	A	GP,SS,EX
21358	0074 6082	Polskeys	F	19 (1880)	Hse,Bn,Gdn,Yd	Y	2	B	B	C	GP
21360	0148 6006	Tresibble	FH	EM (1294)	2Hse(1*),Tnpl,2Yd, 3Cts,3Out,Bn,DB, 2Gdns,DomOut,Shi(*), Imp,Loo,Stad	Y	13	A	A	A	SS,BS,EX,LS
27672	0383 6003	Trenethans	F	EM (1633)	Hse,Gdn,2Yds,Bn, Dai,Cts,Lin,Out, Pig,DB	Y	8	B	B	A	BS,GP,EX
27673	0379 6023	Chenethro	FH	M (1696)	Bdg	D	1	C	C	B	GP
27674	0368 6044	(Ebenezer)	C	P-M (1840)	Cabin (*)	Y	1	B	A	C	BS,GP,LS
27675	0391 6096	Seven Stars	F	P-M (1840)	CHse,Gdn,Yd,Bn,Out, 2Lin,Pig,Tro,Stad	Y	6	B	B	B	BS,GP
27676	0414 6164	Conce	FH	M (1613)	Hse*,Gdn,Yd,Bn, 2Out,Loo,Tro,Stad	Y	5	B	A	A	BS,GP,CC
27677	0414 6172	Conce Cott	C	P-M (1748)	Cot, Out, Gdn	Y	2	A	A	C	BS,LS,GP

SX06SW

SETTLEMENT

PRN	NGR	SITE NAME	TYPE	ORIGINS	FEATURES	OCC	No	C/S	BV	SV	ACTION
27678	0390 6168	Conce Round	F	P-M (1840)	Hse,Yd,Bn,Pig,Imp, Stad,Mst	Y	3	B	B	C	BS,GP
27681	0290 6018	Carne	SF	P-M (1840)	Hse (cob)	Y	1	C	C	C	GP
27685	0160 6051	Moor View	C	P-M (1840)	2 Cots	Y	1	C	C	C	GP
27688	0143 6060	Lilac Cottage	SF	P-M (1840)	Hse, Gdn, Bn	Y	2	B	B	C	GP,BS
27689	0134 6073	Anchorage Farm	SF	P-M (1840)	Hse	Y	1	C	C	C	GP
27690	0125 6076	Sunny View	SF	P-M (1840)	Hse, Pig, Gdn	Y	2	C	C	C	GP
27691	0123 6081	(Criggan)	C	P-M (1840)	Cot, Gdn	Y	1	B	C	C	GP
27692	0110 6073	Raylside Farm	C	P-M (1840)	Cot, Gdn	Y	1	B	C	C	GP
27693	0034 6076	Little Rosemellyn	F	P-M (1840)	Hse,Gdn,Yd,Bn,Out, Stad,PH,Imp	Y	3	B	B	C	BS,GP
27697	0100 6044	Polskeys	FH	M (1250)	Tnpl,Encl,5Bdg plat	N	5	B	B	A	SS,SC
27699	0134 6102	(Criggan)	C	P-M (1840)	Cot, Out	Y	2	C	B	C	GP,BS
27700	0135 6108	(Criggan)	C	P-M (1840)	Cot(cob), Gdn	Y	1	C	B	C	GP,BS
27701	0160 6082	Moor View	F	P-M (1840)	Hse,Gdn,Yd,Bn,Cts, 2 Out	Y	5	B	B	C	BS,GP
27703	0164 6064	Criggan Tenement	SF	P-M (1840)	Hse, Gdn, Pig	Y	2	B	B	C	GP,BS
27704	0197 6010	Bilberry	FH	M (1260)	2Hse,Tnpl,Yd,Bn,3Cts 3Cots(1*),4Out,Shi (cob)	Y	14	B	B	A	SS,BS,GP,LS
27705	0257 6114	Savath	F	M (1319)	Bn, Yd	N	1	C	B	A	BS,GP
27708	0208 6121	Little Innisvath	F	M (1319)	Hse*,Gdn,Yd,Cot, Cts,Stad,Tro	Y	3	A	A	A	BS,GP
27709	0220 6136	Outer Savath	FH	M (1319)	Hse,Cot(*),Gdn,Tnpl, Yd,3Out,Cts,Bn,MS,DB	N	9	B	A	A	SS,BS,GP,LS
27710	0315 6052	Bodwen	FH	EM (1662)	5Hse 2*,4Gdn,Tnpl, CY,Lin(*),Out,Tro,Imp 6Cts,Pig,Dai,PH,MS, 4Bn 3*(1*),4Shi,4Yd, DomOut,3Loo,	Y	29	A	A	A	SS,CC,EX,LS
27711	0320 6064	Ivy Cottage	C	P-M (1805)	Cot*, Gdn	Y	1	A	A	B	BS,GP

SX06SW

FIELD SYSTEMS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
27396	007 605	Polskeys	Field system	Med; foss. strips	A	A	A	A	GIM	AP,FV,EX,SK
27397	012 613	Tremoddrett	Field system	Med; foss. strips	B	B	B	A	GIM	NA
27398	014 607	Criggan	Field system	Medieval; irreg.	C	C	B	B	OBE	NA
27399	015 602	Tresibble	Field system	Med; foss. strips	B	B	B	A	GIM	FV
33031	019 601	Bilberry	Field system	Med; foss. strips	B	B	B	A	GIM	FV
33032	024 612	Savath	Field system	Med; foss. strips	B	B	B	A	GIM	FV
33033	031 607	Bodwen	Field system	Med; foss. strips	A	A	A	A	GIM	AP,FV,EX,SK
33034	035 613	Barguse	Field system	Med; foss. strips	C	C	B	A	GIM	FV
33035	040 614	Conce	Field system	Med; foss. strips	B	B	B	A	GIM	FV
33036	038 603	Chenethro	Field system	Med; foss. strips	B	B	B	A	GIM	FV
33037	038 600	Trenethans	Field system	Medieval; irreg.	B	B	B	A	GIM	FV

CHURCHES CHAPELS AND SCHOOLS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21239.1	0402 6123	Trevellion	Cross (SOF)	Wheel; Lockengate			B		OBE	NA
21265	0315 6070	Bodwen	Cross (FN)	Cross park (X2)			B		GIM	NA
27259	0357 6027	Ebenezer	Chapel (Meth)		B	A	C		OCB	GP
33101	0074 6082	Polskeys	School	Extant 1880	B	B	C	B	OBE	GP

MISCELLANEOUS

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21237	0095 6070	Polskeys	Pound (FN)	Pound field (1840)			C		GIM	WB
21268	0318 6054	Bodwen	Pound (FN)	Pound (TA)			B		GIM	NA
21272	0393 6103	Little Trevellion	Smithy	Recently converted	C	C	C		OBE	NA
21350.1	0272 6114	Savath	Beebole	2 in hedge	A	A	B	A	OBE	GP
27672.1	0384 6003	Trenethans	Beebole	4 in hedge	A	A	B	A	OBE	GP
27694	0024 6013	Rosemellyn	Mound	Oval; in bog	B	U	C		WTS	FV
27696	0048 6015	Rosemellyn	Bearing stone	Re-used as gatepost	A	A	C		GIM	GP
27697.1	0097 6042	Polskeys	Beebole	In hedge	B	B	B	A	WSC	GP
27710.1	0312 6048	Bodwen	Cider-press	Base, c.1.2m diam.	A	A	C		OBE	GP
27738	0262 6070	Bodwen	Merriment hole	In natural tor	A	A	B		GIM	GP

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CHINA CLAY

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21273	0205 6132	Savath	China Clay Works	Clay Pit, Dump	B	B	C	B	WSC	GP
21273.1	0205 6118	Savath	Smithy		B	B	C	B	WSC	GP
21287	0069 6008	Rosemellyn	Smithy	On 1900s OS	U	U	C	A	OBE	FV
27252	0072 6004	Rosemellyn	Engine House	House, Stack	B	B	A	A	WSC	CC,GP
27253	0090 6010	Rosemellyn	China Clay Works	Clay Pit, Dump	B	A	C	A	WSC	GP
27254	0150 6085	Criggan	China Clay Works	Clay Pit, Dump	C	U	C		WSC	FV
27254.1	0150 6072	Criggan	Pan-Kiln	Tank, Mica	C	U	U	A	WSC	FV
27255	0170 6010	Bilberry	China Clay Works	Clay Pit, Dump	C	B	C		WSC	GP
27257	0227 6080	Savath	Pan-Kiln	Tank, Weighbridge	C	C	C	C	WSC	GP

MINING

PRN	NGR	SITE NAME	SITE TYPE	FEATURES	C	S	SV	GV	LU	ACTION
21290	0130 6050	Criggan	Mine	Shaft, structure	C	U	C		WSC	FV
27256	0135 6095	Criggan	Mine	Pit, Struct, Bob	C	U	B	B	WSC	FV,GP
27258	0211 6125	Little Innisvath	Mine	Shaft, plinth	B	U	C	B	WUN	GP,SK
27682	0300 6035	Bodwen	Mine	Shaft (SOF)	C	C	C		GIM	FV,WB
27683	0325 6042	Bodwen	Streamworks (El)	Cutting	C	C	B	B	GIM	SK
27706	0242 6136	Savath	Mine (FN)	Mine park (1840)	C	C	C		GIM	WB
33053	016 613	Criggan Moors	Streamworks(All)	Dumps, drains	A	A	A	A	WTS	SK
33136	0019 6020	Polskeys	Streamworks(All)	Dumps, drains	B	B	A		WTS	SK

SX06SW

LOCATIONS OF SITES IN GAZETTEER SX06SW

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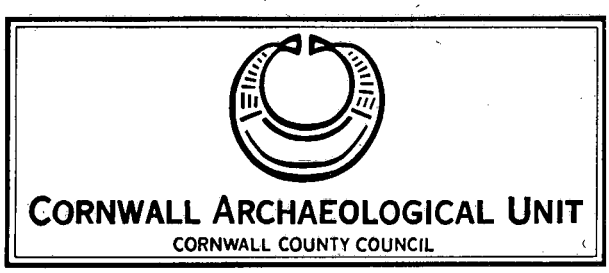

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ISBN 1 871162 61 0