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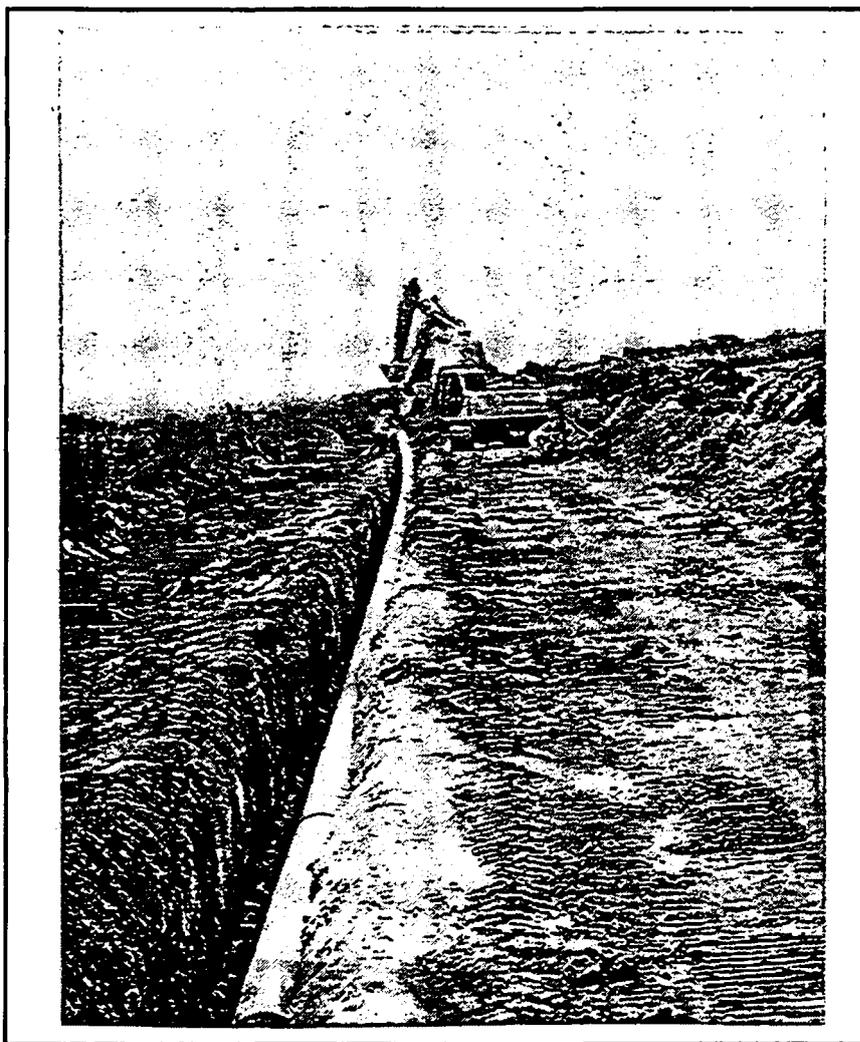
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St Day to Redruth Gas Main Pipeline

An Archaeological Watching Brief



CORNWALL ARCHAEOLOGICAL UNIT

A Report for Transco

**St Day to Redruth
Gas Main Pipeline**

Archaeological Watching Brief

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March 2001

CORNWALL ARCHAEOLOGICAL UNIT

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Acknowledgements

This study was commissioned by Transco. The project engineer Paul Trevaskis, Site Agent Ken Agar, Supervisor Robin Gumm and all staff in the field provided frequent, affable and valuable assistance with regard route alterations, route access points, health and safety issues (re: pipe testing) and works time-tabling.

The Archaeological Assessment (carried out by John Hawkes of AC Archaeology) and the Geological and Ground Risk Assessment (carried out by RSK Environment LTD) provided valuable information throughout the fieldwork and during the writing of this report.

Within the Cornwall Archaeological Unit, the Project Manager and report editor was Peter Rose. John Gould assisted with the gathering of historic maps prior to the start of fieldwork, Peter Dudley drew up the boundary sections, and Andy Jones assisted with occasional fieldwork. Imogen Wood processed the finds, carried out the initial identification and wet sieved the soil samples Carl Thorpe created the tables, checked dates and commented on their significance. Julie Jones (associated with Bristol University) undertook the palaeoenvironmental work.

Cover illustration

Pipe trenching in progress, looking west across Area 2.

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Contents

Summary	2
2 Introduction	3
2.1 Project background	4
2.2 Aims	4
2.3 Methods	4
2.3.1 Desk top assessment	4
2.3.2 Fieldwork	5
2.3.3 Boundary recording	5
3 Background	7
3.1 Geographical location	10
3.2 Topography and geology	10
3.3 Historic Landscape Zones	10
3.3.1 Anciently Enclosed Land (AEL)	10
3.3.2 Recently Enclosed Land (REL)	11
3.3.3 Predominantly Industrial Land (PIL)	11
3.3.4 Urban or Residential Development (URD)	12
3.3.5 Steep-sided valleys (SSV)	12
4 Results	13
4.1 Area 1 - Todpool to Tolgullow	14
4.1.1 Assessment	13
4.1.2 Fieldwork - features and finds	14
4.1.3 Boundaries	16
4.1.4 Conclusions	18
4.2 Area 2 - Tolgullow to Treskerby	20
4.2.1 Assessment	26
4.2.2 Fieldwork - features and finds	26
4.2.3 Boundaries	31
4.2.4 Conclusions	33
4.3 Area 3 - Treskerby to Railway line	35
4.3.1 Assessment	46
4.3.2 Fieldwork - features and finds	46
4.3.3 Boundaries	47
4.3.4 Conclusions	49
4.4 Area 4 - Railway line to Treleigh	51
4.4.1 Assessment	56
4.4.2 Fieldwork - features and finds	56
4.4.3 Boundaries	58
4.4.4 Conclusions	60
5 The finds	68
5.1 The general finds report (by Carl Thorpe)	68
5.2 The flint, chert and pebble report (by A Lawson Jones)	68
The pebbles	68
Worked quartz	69
Flint and chert	69

5.3	The Palaeoenvironmental report (by Julie Jones)	71
6	Discussion	71
	The ditched features	72
	The boundaries	72
	The mining features	73
	The finds	74
7	Appendices	75
7.1	List of contexts	75
7.2	Boundary recording results	82
7.3	List of SMR sites	92
7.4	The General Finds Catalogue	94
7.5	Flint and pebble finds list and descriptions	
	117	
8	References	121
8.1	Primary sources	121
8.2	Publications	121
9	Project archive	123

Abbreviations

AOD	Above Ordnance Datum
CAU	Cornwall Archaeological Unit
CRO	Cornwall County Record Office
EH	English Heritage
NGR	National Grid Reference
RCM	Royal Cornwall Museum
PRN	Primary Record Number in Cornwall SMR
SMR	Cornwall and the Isles of Scilly Sites and Monuments Record

List of Figures

- Fig 1 Location map showing the route of the pipeline and the parish boundaries.
- Fig 2 Location map showing Areas 1 and 2, plus all field numbers.
- Fig 3 Location map showing Areas 3 and 4, plus all field numbers.
- Fig 4 Annotated topographical profile across pipeline route.
- Fig 5 CAU boundary classifications (Johnson and Rose 1994,17).
- Fig 6 SMR sites located during the assessment within area 1.
- Fig 7 Feature numbers and locations within area 1.
- Fig 8 Sections through ditch [285], ditch 283] and layer [266].
- Fig 9 Boundary locations and numbers within area 1.
- Fig 10 Recorded boundary sections within eastern area 1.
- Fig 11 Recorded boundary sections within western area 1.
- Fig 12 SMR sites located during the assessment within area 2.
- Fig 13 Feature numbers and locations within area 2.
- Fig 14 Culvert entrance [270] and section through adit [271].
- Fig 15 Sections through ditch [259], bank [299] and associated ditches, and lode back trench [248].
- Fig 16 Sections through adit [276] and ditch [246].
- Fig 17 Plan and associated sections showing curvilinear features [204], [206] and [286].
- Fig 18 Boundary locations and numbers within area 2.
- Fig 19 Recorded boundary sections within eastern area 2.
- Fig 20 Recorded boundary sections within western area 2
- Fig 21 SMR sites located during the assessment within area 3.
- Fig 22 Feature numbers and locations within area 3.
- Fig 23 Plan showing boundary ditch [229] and a series of overlying, later boundaries.
- Fig 24 Boundary locations and numbers within area 3.
- Fig 25 Recorded boundary sections within eastern area 3.
- Fig 26 SMR sites located during the assessment within area 4.
- Fig 27 Feature numbers and locations within area 4.
- Fig 28 Plan showing ditches, removed boundaries and mining related features across fields 54-60.
- Fig 29 Boundary locations and numbers within area 4.
- Fig 30 Recorded boundary sections within eastern area 4.
- Fig 31 Recorded boundary sections within eastern area 4.

Summary

An archaeological watching brief was carried out along the 4.8km long route of a natural gas pipeline running between northern St Day and north eastern Redruth during July, August and September 1999, by CAU on behalf of Transco. Fieldwork involved the monitoring of alltopsoil stripping along the corridor, the recording and selective excavation of features, the recovery of artefacts and the sampling of potentially environmentally rich soils for further analysis. Following the topsoil strip a pipe trench was mechanically cut along the length of the corridor. This too was monitored and resulted in the discovery of a large number of previously invisible subsurface features. In addition a comprehensive programme of boundary recording took place along the length of the pipeline.

Of the features recorded approximately half represent ditches and landscape divisions (removed boundaries) - many of which date to the medieval period (or earlier). The vast majority of the remaining features are later in date and relate to mining, many being subsurface features associated with known mines (Fields 6, 12, 16-19 and 35-37). Finds ranged from prehistoric worked flint scatters, to medieval domestic pottery associated with nearby medieval settlements, to post-medieval clay pipes, pottery and crucibles and modern glass.

Other significant finds included evidence for previously unsuspected later prehistoric enclosed settlements or 'rounds', with associated field systems radiating out into the corridor (ditches in Fields 8, 16 and 22), plus finds of Romano-British pottery (Field 9) which are likely to date to the use of these round sites. A ring ditch and potential early settlement complex located within Field 21 probably dates to the later prehistoric or the early medieval period.

The boundary sections have shown that many of the field divisions are long-lived, showing signs of lynchetting, repair work, enlargement and shift, some of the earlier phases within the extant boundaries being contemporary with grubbed out boundaries recorded during topsoil stripping. Other boundaries were more recent in date, being constructed from mine waste. Three of these boundaries had soil samples taken from their basal layers.

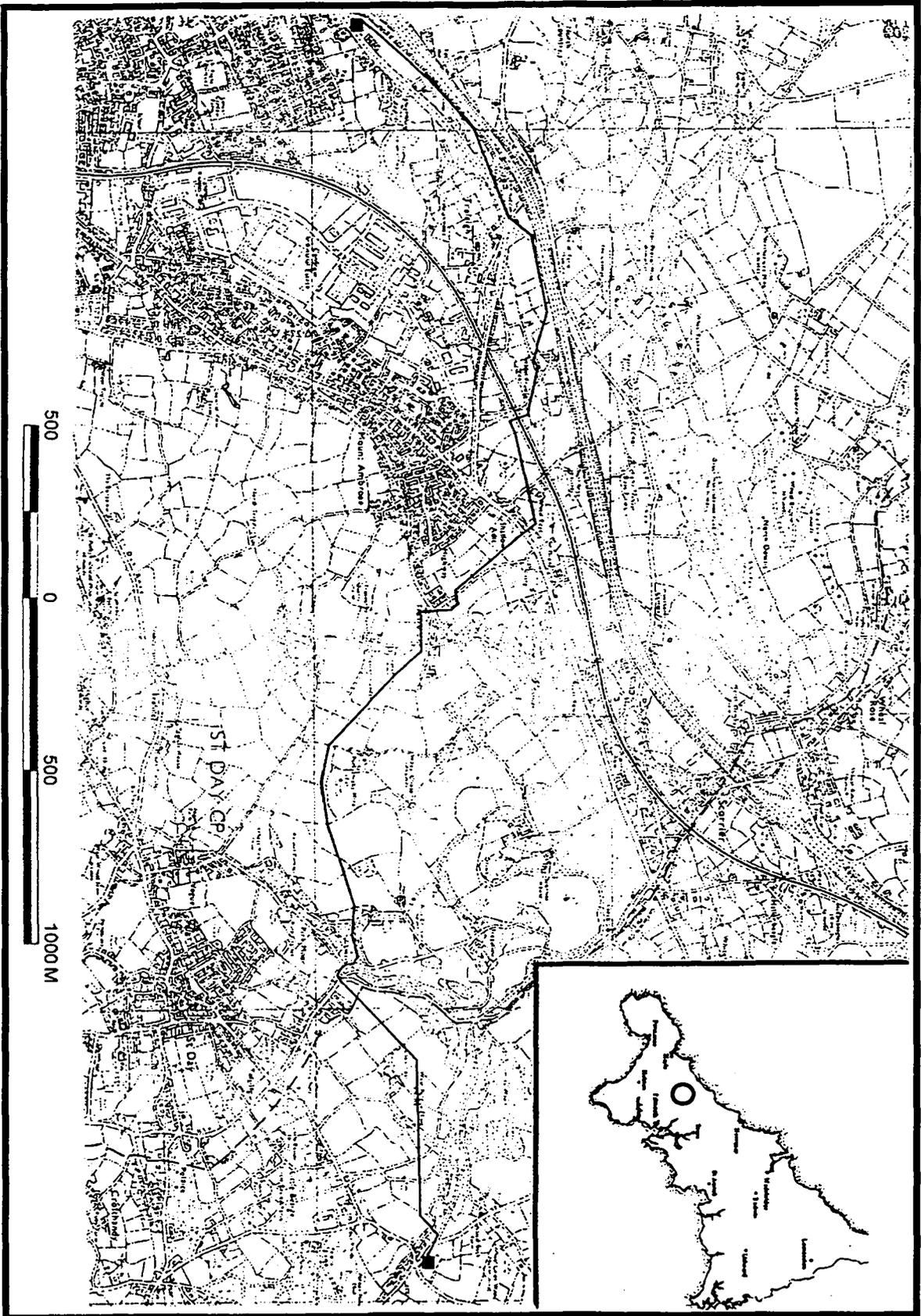
This programme of archaeological work has shown that not only does the area have a very long and varied history, but also that a surprisingly large number of medieval (and earlier) landscape features have survived the later and misleadingly destructive appearance of the mining industry and the growing road infrastructure, (particularly at the western end of the route).

The project has helped to draw out the contrast between the eastern and western halves, ie between Areas 1/2 and Areas 3/4. Areas 1 and 2 are predominantly Anciently Enclosed Land and produced the bulk of the medieval finds. It is here too that evidence has been found for later prehistoric or Romano-British settlement (fields 8 and 9, 21 and 22). This supports the notion that areas of medieval farmland were farmed and settled from at least late prehistory.

Areas 3 and 4 by contrast have no later prehistoric sites or finds and very few medieval sherds. Historically, this is likely to have been predominantly an area of heathland or downland, not enclosed until the post-medieval period; an exception may be the western half of Area 4, with its more irregular boundaries and a few medieval sherds.

Earlier prehistoric flints (some Mesolithic, but mostly Neolithic or Bronze Age) have been found in small numbers only in about one in four of the fields, suggesting wide-spread, low level activity. Again most of the flints came from Areas 1 and 2, perhaps suggesting an early preference for this area, though the almost complete absence of flints from Area 4 could be due to later disturbance.

Fig. 1. Location map showing the route of the pipeline.



2 Introduction

2.1 Project background

The Cornwall Archaeological Unit (CAU) was commissioned by Transco to conduct an archaeological watching brief along the route of a new gas mains pipeline running from Todpool, north east of St Day, to the Avers Roundabout (A30T), north of Redruth. The pipeline has a near five kilometre long route, and is designed to reinforce gas supplies to the south west network.

The pipeline runs through a variety of historic landscape zones and areas of known and potential archaeological remains (Hawkes 1999). These include areas of dense mining activity focussed around the western half of the pipeline and in pockets to the east. Anciently enclosed fields along the eastern half of the route along with a series of known medieval settlements including Treleigh, Tolgallow and Treskerby all had the potential for early remains to be disturbed by the works. In addition a cropmark to the immediate east of the eastern terminal of the pipeline suggests a Bronze Age presence, a Tithe award reference to 'Round Field' suggested the presence of a late prehistoric enclosure just to the south of Treskerby, a possible Roman road crossed the line of the pipeline at SW 7131 4366, and an early ore tramline (Portreath Tramway) crossed the route at SW 7350 4336.

The topsoil stripped corridor had an average 10.0m width, while the pipe trench itself had a c1.0m width and was cut down to an approximate 1.5m depth (although this varied according to gradient and geology) through the subsoil and into the underlying bedrock. In addition a total of forty-eight boundaries were sectioned and recorded. Three of these had soil samples taken (see section 5.3).

To ease management of the project and presentation of the results the pipeline route has been subdivided into four sections (named Area 1 to 4, from east to west).

2.2 Aims

The aim of this project was to look at the character and development of the historic landscape through which the pipeline passed. Four main objectives were to be addressed during this project:

- The identification and recording of surface and sub-surface archaeological features.
- The identification and collection of artefact scatters (by field and/or context).
- The recording of boundaries breached along the line of the route.
- The sampling of any potentially significant or informative deposits – particularly buried and undisturbed soils.

2.3 Methods

The project involved three different types of work: a rapid desktop assessment, an archaeological watching brief and the systematic recording of breached boundaries along the route.

2.3.1 Desk top assessment

RSK Environment Ltd (Consulting Environmental Scientists, Landscape Architects, Engineers and Planners) contracted out the desktop assessment to John Hawkes of AC Archaeology. During the desktop assessment historical databases and archives were consulted in order to obtain information about the history of the site and the structures and features that were likely to survive. The assessment looked at a corridor, which

extended 200m to either side of the proposed pipeline. The main sources consulted during this pre-works assessment were as follows:

- The Sites and Monuments Record (SMR) for Cornwall and the Isles of Scilly, held by the Cornwall Archaeological Unit.
- Un-disclosed documents held by the Cornwall Record Office, Truro.
- A range of historic maps including the Tithe maps and awards, and the early Ordnance Survey maps.
- A site walkover to validate and check information gathered from the sources listed above and to provide an understanding of the topography and present land use of the route.

2.3.2 Fieldwork

The archaeological watching brief involved a series of visits to the site during the ground works in order to record, describe and interpret the artificially and naturally derived layers and deposits visible within the topsoil stripped corridor and pipe trench. Initially fields were walked as (or immediately after) they had been topsoil stripped. All finds and features were collected or recorded in the form of a series of measured and annotated archaeological sketch plans. Where time permitted, or features appeared to be particularly significant limited excavation was undertaken to ascertain dimensions, date and function. Plans took the form of detailed, annotated measured sketches, and sections were drawn at a scale of either 1:10 or 1:20. In all cases the location was marked on a 1:2500 base map (provided by Transco). A photographic record was made of all features.

Following this initial phase of the watching brief, further visits were made to each field during the mechanical excavation of the 1.0m wide pipe trench. This formed an invaluable check on the previous work (particularly since approximately 60% of the route did not have the underlying natural geology exposed during topsoil removal, meaning that there was a high potential for features to have been missed). A few features were located beneath the remnant sub-soil layers cutting into the natural (primarily linear ditches), but the majority of newly exposed features seen in the trench were related to mining (either in the form of wide, sheer trenches or below ground tunnels and adits). All of these newly located features were only seen and recorded in section. The location of each was recorded on the 1:2500 base maps. A photographic record of each feature was made where possible, (although the narrowness and depth of the trench limited this).

A collection was made of all artefactual material found during excavation work. Where huge quantities of modern pottery was located – usually as a result of recent infilling and landscaping associated with mining disturbance, this collection of material was much more selective. The location of all finds scatters were recorded by field (or by context) and CAU's finds specialists subsequently examined these.

2.3.3 Boundary recording

The route of the pipeline resulted in a total of seventy-one boundaries being crossed, fifty eight were breached and forty eight were recorded in detail. Thirteen either no-longer existed or were not breached due to the presence of gateways. Boundaries form an integral part of the rural landscape and inform us about the development of and changes to the appearance of the landscape over time. Much of the pipeline route passes through Anciently Enclosed Land, which is typically characterised by pre-seventeenth century AD farming settlements of irregular field patterns with medieval or prehistoric origins (Countryside Commission 1996).

All boundaries breached by the pipeline trench and corridor were recorded. The only exceptions were those that were very recent in origin, or those that were tunnelled beneath. In each case a detailed measured sketch was made, with annotations regarding current state or status, phasing, different contexts etc. These were subsequently drawn up (at a scale of 1:20) and are included within this report. In addition a photographic record was made of each.

All the boundaries were recorded using the CAU's boundary classification system – fig.4 (which was devised during the West Penwith surveys and described in the Bodmin Moor survey – Johnston and Rose, 1994, 17-18). The classification system allows for a standardisation of boundary recording and description within the landscape (see section 7.2).

The recording of the boundaries along this pipeline route will provide valuable information about the history of landuse in this part of Cornwall. This information will be added to the growing database of similarly recorded boundaries in the county.

Sampled boundaries

Three boundaries were selected for their potential to provide palaeoenvironmental information: boundaries 123, 128 and 141.

- A) Boundary 123 was a parish boundary which was large in size and further to its north appeared to form one side of a field called 'Round Field' in the Title Apportions.
- B) Boundary 128 appeared to contain a near complete pre-stockproof, potentially medieval strip field division/boundary.
- C) Boundary 141 consisted of a completely buried stockproof boundary within a larger boundary.

All three of the above appeared to contain an undisturbed buried soil at their base.

The samples were processed/wet sieved by Imogen Wood (part time archaeologist employed by the CAU) and subsequently analysed by palaeoenvironmentalist Julie Jones. The results are presented in section 5.3. Unfortunately no material was found which was suitable for radiocarbon dating.

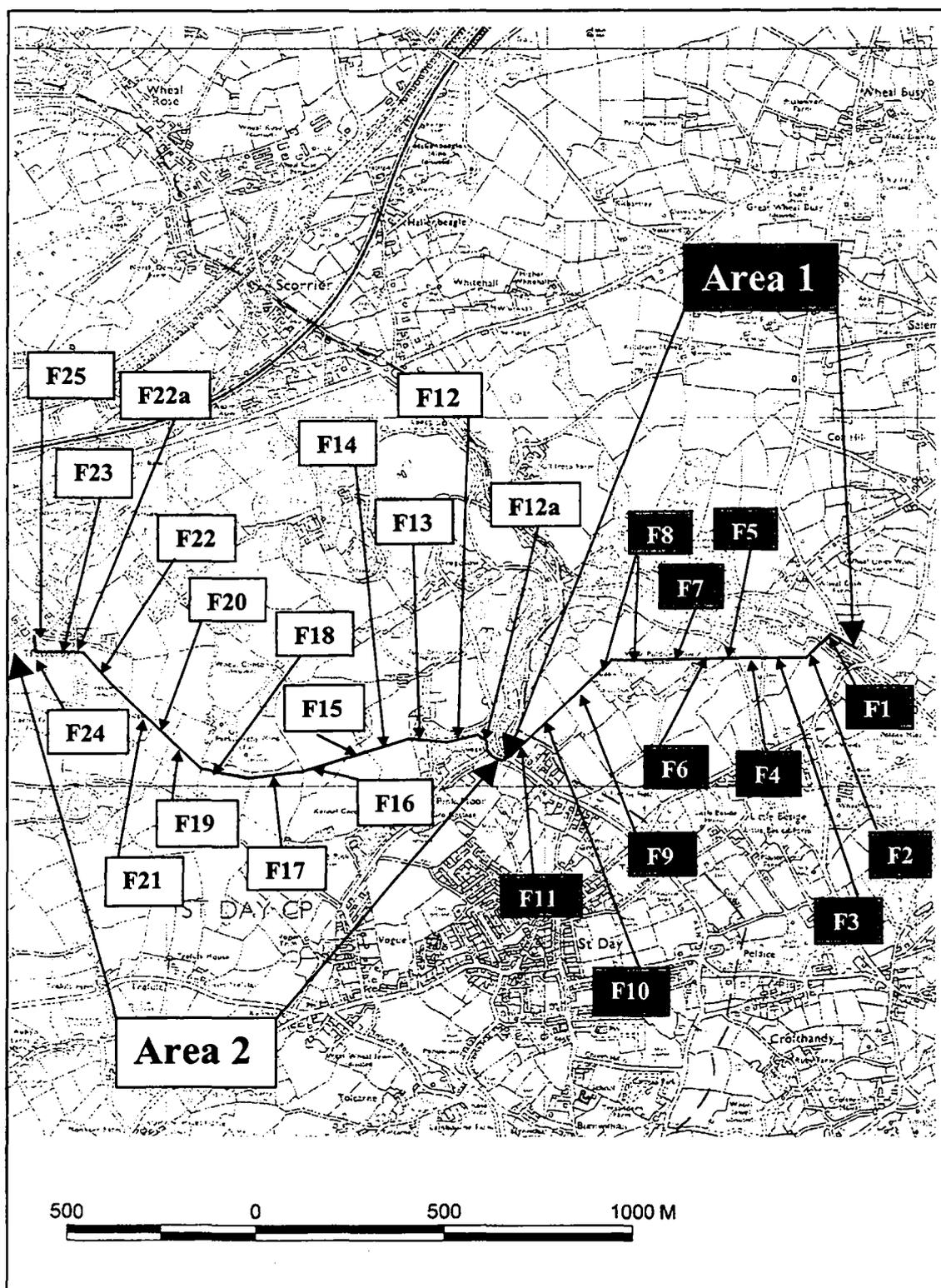


Fig.2. Location map showing Areas 1 and 2, plus all field numbers.

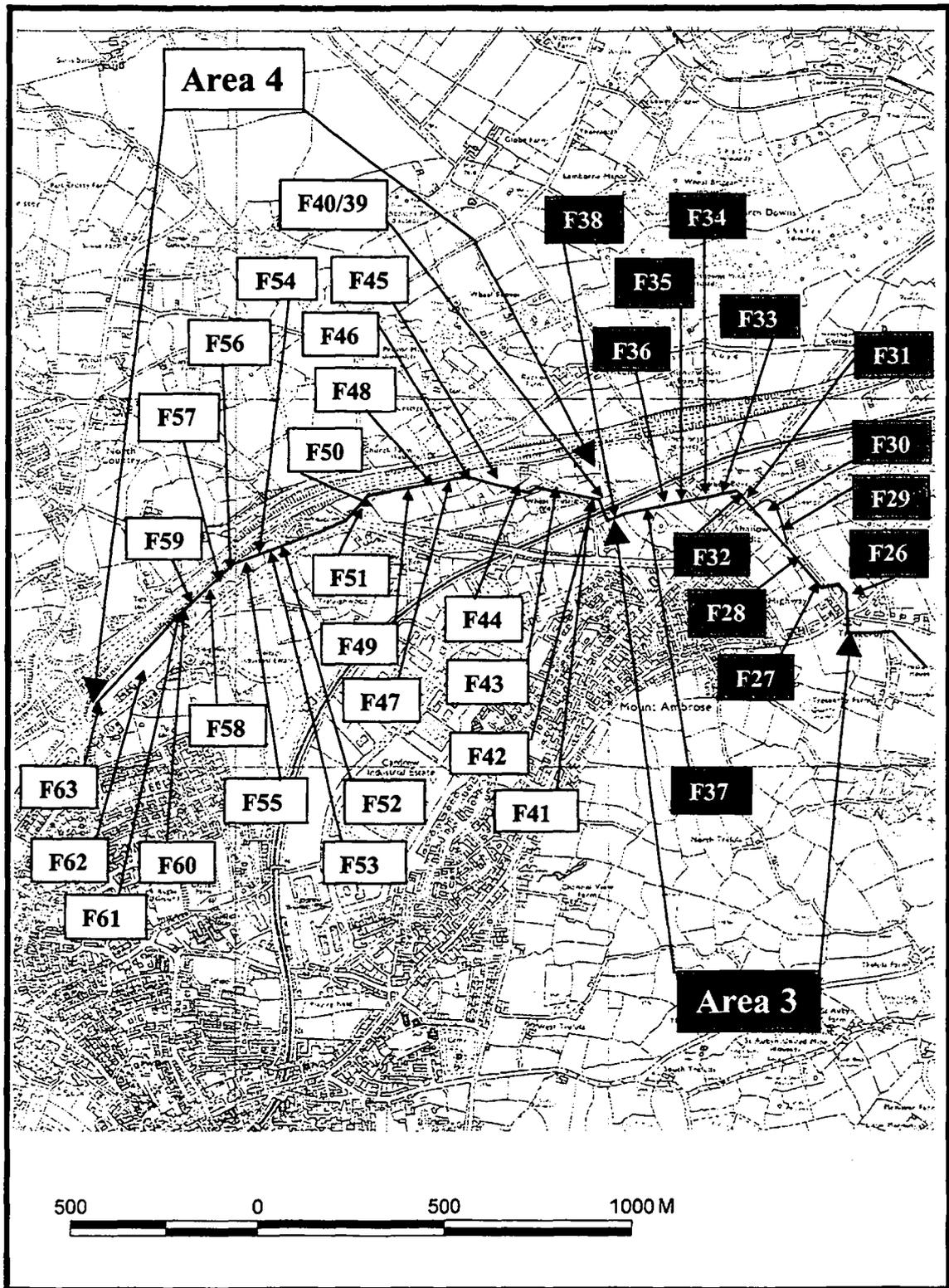


Fig.3. Location map showing Areas 3 and 4, plus all field numbers.

LONG PROFILE	GENERIC NAME	SPECIFIC NAME	SURVEY CONVENTION AND ABBREVIATION
	SINGLE-STONE WALL	Boulder wall	BW
		Bookshelf wall	BS
		Orthostatic wall	OW
		Slab wall	SW
CROSS-SECTION			
	SINGLE-STONE WALL	Dry-stone wall	DSW
	WALL	Stone-faced wall	SFW
		stone wall	SFSW
		earth wall (Cornish hedge)	SFEW
		Turf wall	TW
	STONE-FACED BANK	Stone-faced bank	SFB
		stone bank	SFSB
		earth bank	SFEB
	BANK	Bank	B
		Stone bank	SB
		Stony bank	SeB
		Stone-cored bank	SCB
		Earth bank	EB
	HEDGE	Hedge	H
	DITCH	Hollow-way	Ho
		Ditch	D
	LYNCHET	Lynchet	L
		Stony lynchet	SL
		Revetted lynchet	RL

Fig.4. CAU's boundary classifications (Johnson and Rose, 1994,17).

3 Background

This section looks at the geographical, geological and topographical setting of the pipeline. It also looks at the historic landscape classifications through which the route passes.

3.1 Geographical location

The pipeline follows a slightly meandering east to west course linking the northern portion of St Day to the northern tip of Redruth, in central inland Cornwall. It runs through a series of quite different environments, including ancient rural fields, former industrial wasteland, known medieval settlements, a steep valley and former downland (described as North Downs in the Tithe Apportions).

3.2 Topography and geology

Topographically the pipeline runs through a gently undulating landscape. The central area runs across the top of a broad flat raised area of former downland, while the western end very gradually drops down to run between the old and new A30 roads. At the junction between areas 1 and 2 runs a very pronounced east-facing valley slope. The highest elevation occurs at Treskerby (SW 717 433), half way along the length of the pipeline at a height of 145m AOD. The lowest point lies at the extreme eastern end of the route (SW 737 434) with a height of 60m AOD (Fig.5).

Geologically the pipeline runs through Devonian Slate (Porthtowan Formation). This consists of a grey to grey-green slate with occasional sandstone beds. Intruded into the Devonian Slate is Carboniferous Granite represented along the pipeline route by satellite granite bosses associated with southern Carnmenellis, and contemporary, un-mapped Elvan dykes. The route of the pipeline runs parallel to the strike of Devonian Strata, the Elvan dykes and the majority of the outcropping mineral lodes. (RSK Environment Ltd 1999).

3.3 Historic Landscape Zones

During 1994, CAU carried out a map-based assessment of historic land use across the whole of Cornwall, using field patterns and other physical indicators as a means of characterising the landscape (Countryside Commission, 1996). This characterises the landscape today in terms of the historic processes that shaped it, dividing the county into a series of repeating zones which reflect particular historic processes and tend to contain a predictable range of archaeological and historical sites and features. The pipeline ran through four different zones and skirted around a fifth. What follows is a brief account of each zones chief characteristics (based on the Countryside Commission's 1996 report).

3.3.1 Anciently Enclosed Land (AEL)

The agricultural heartland, with farming settlements documented before the 17th century AD and irregular field patterns with either medieval or prehistoric. AEL tends to be on relatively sheltered land, not too steep and not too poorly drained, but can extend onto the high downs. Networks of winding lanes and roads cut by people, animals and vehicles over hundreds or thousands of years connect farming settlements whose layouts are typically irregular and often clearly shrunken from hamlets. Churchtowns and a few larger villages are scattered through the zone, which also contains most of the county's ancient towns.

Much, even most of this zone will have been enclosed and farmed since the later Bronze Age (from c.1500 BC). The characteristic Cornish enclosed settlements or 'rounds' of the Iron Age and Romano-British period (400 BC - AD 400) are also found predominantly in Anciently Enclosed Land. Land cleared and improved in later prehistory or in the Early Medieval period was re-organised in the later medieval period into extensive 'strip' field

systems. Many of these are still recognisable, either as bundles of enclosed strips or as enclosed furlongs or cropping units. These systems were associated with hamlets of co-operating families. More solitary farmers laid out more irregular medieval field systems.

The gradual enclosure of 'open' strip fields, mainly from the 14th century to the 17th, transformed this zone, leaving fields of various sizes and shapes, but almost all with sinuous sides whose boundaries are substantial stockproof hedges and walls, supporting rich and varied fauna and flora. At the same time, the communal society of the co-operative hamlets gave way to a more individualistic one of self-contained farming families, a society which survives today.

Consultation of the Tithe map has shown that AEL represents the vast majority of the pipeline route. An amazingly small proportion of the field boundaries appear to have seen any change in their route, although in a few cases some of the intervening boundaries have been removed – thus creating larger fields. Some of the fields around Treskerby exhibit this pattern. In terms of the actual settlements, the pipeline route crosses either through or close to a number of early hamlets. Treleigh and Tolgullo have an early medieval origin, while Treskerby, Poldice and Scorrier probably have slightly later medieval origins (according to the SMR and the placename evidence).

3.3.2 Recently Enclosed Land (REL)

Land enclosed in the 17th, 18th, 19th and 20th centuries, usually from medieval commons, which were generally in relatively high, exposed or poorly drained parts of the county. Fields are distinguished by having straight sides and often hedges or walls (which have less mature or varied vegetation). Roads are walled or hedged and straighter than elsewhere. Settlements mostly comprise single farmsteads or smallholdings. Being exposed there is usually less woodland than in Anciently Enclosed Land, but more evidence of its previous vegetation in gorse, heather, ling etc. on hedges and in corners of fields.

Although some of this zone was enclosed in the second half of the 18th century and in the 20th, the great part was taken in from rough ground in the 19th century. These new enclosures were not normally established in waste ground, but in summer grazing and fuel grounds, usually held by tenants in common but actually owned by lords of manors or estates (Countryside Commission, 1996).

There is very little REL located along the pipe route, and where it has been it tends to correlate with industrial activity which has since seen landscaping and the re-erection of boundaries. One pocket has been located running along the western most arm of the pipeline (where it runs adjacent to the current A30T). An additional possible pocket of REL exists in what was formerly downland (as referred to in the Tithe Map Apportionments) located to the east of Treskerby.

3.3.3 Predominantly Industrial Land (PIL)

This landscape zone has been limited to areas in excess of 50has in the Countryside Commission report (1996), but on a smaller scale, islands of predominantly industrial activity can be seen to have significantly contributed to the landscape that the pipeline passes through.

Surface working of tin and copper has taken place in Cornwall since the Bronze Age, but later working has subsequently swamped much of the evidence for this. During the Medieval period large scale surface stream working took place. When these easily available deposits of alluvial and eluvial shode were exhausted, lode working began during the fifteenth and sixteenth centuries. As rock breaking and pumping technologies improved, mining 'proper' began. By the late eighteenth century deep tin and copper mines were flourishing, but decline set in via cheap imports and the exhaustion of known deposits, and

by the later nineteenth century operations had significantly reduced. Today, with the closure of South Crofty there are no mines left working in Cornwall.

Located at the far-western end of the pipeline (approximately the final 500m length) there are the frequent remains of mine waste. Interspersed with this are small, newly landscaped fields- much of the topsoil for which has been imported in from elsewhere and lies directly over the top of flattened mine waste. Further areas of mining activity were located (mostly via sub-surface remains) towards the eastern terminal of the pipeline in the area of West Poldice Mine, and possibly around the steeply sloped valley to the west of the lodge and its associated ornamental grounds.

3.3.4 Urban or Residential Development (URD)

This zone includes any built up areas (from the largest villages up-wards), plus urban industrial estates. Many of these areas have Medieval or earlier roots, although with the exception of the churches the vast majority of the buildings are post-medieval or modern. Medieval settlements tend to be evenly spaced and arose principally as markets for the agricultural hinterland, or as industrial bases (particularly Stannary towns where smelted tin was coined), or they developed via their harbour facilities and fishing. These old settlements gradually increased during the post-medieval period until the eighteenth century when the affects of mining, new wealth and commercial activity caused selective expansion and the development of new towns associated with mining and china clay.

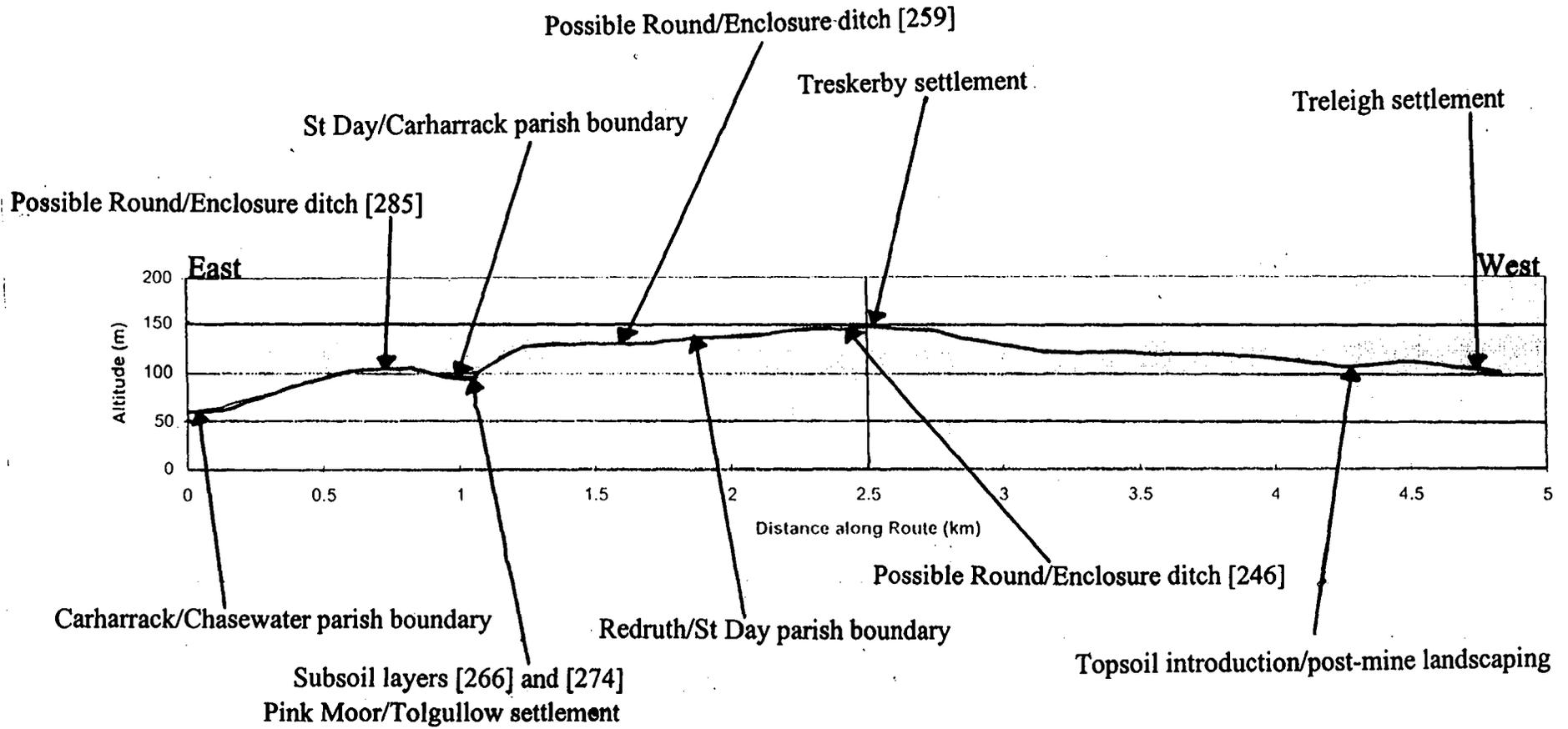
Both Redruth and St Day are settlements that developed and expanded through industrial activity. The wealth generated by mining during the Victorian period is still visible in the form of substantial municipal buildings surrounded by terraces of smaller mining cottages. Since their heyday, piecemeal development and expansion has continued (clearly visible when comparing historic maps with the current OS). In addition the huge expansion of the A30T has brought about major changes - particularly at the western end of the scheme. Much of the current A30T route (area 4) post-dates the 1906 OS map, while to the south of it runs the smaller but still busy old A30. A series of new roundabouts, linking roads and associated junctions have also been constructed.

3.3.5 Steep-sided valleys (SSV)

Steep-sided valleys have been characterised (Countryside Commission, 1996), as rarely including ancient boundaries and as frequently being wooded. The pipeline near to Tolgallow crossed a single, short length of very steep-sided valley. This wooded valley slope will have provided both a valuable timber (probably coppiced) and charcoal resource. Mining activity - as evidenced by the watching brief, will have temporarily altered its tranquil wooded character, but this has since reverted back.

Steep-sided valleys often came to mark estate or parish boundaries, and in this case it did both. It marks the western periphery of a branch of Ornamental landscape associated with Scorrier House, and it is close to the parish boundary between St Day and Carharrack.

Fig. 5. Annotated topographical profile along the pipeline route. (Based on the RSK Environment Limited Geological and Ground Risk Assessment - April 1999, 17).



4 Results

4.1 Area 1 - Todpool to Tolgullow

Area 1 - Todpool to Tolgullow is the eastern-most area, located between boundaries 101 and 115 (SW 7377 4341 to SW 7289 4309). From east to west Area 1 covers fields 1 to 11, and landscape characterisation zones AEL and SSV.

4.1.1 Assessment (all sites referred to are shown on fig. 6 and listed in the appendices - section 7.3)

The assessment identified four SMR Sites located along the route of the pipeline and additionally referred to a disused tramline. The earliest site -PRN 19306 marked the site of a possible barrow cropmark, located off to the north of the eastern terminal. The pipeline did not affect this, although its presence indicated that other prehistoric/Bronze Age sites or finds could be within the vicinity.

PRN 40988 represents the eastern-most of a number of mines located along the pipeline. West Poldice Mine (located at Tolgullow Vean) extended into the area of the pipeline corridor and features related to it were, as a result expected during the watching brief. PRN 40981 marks the former site of the Unity Safety Fuse Company. It was located well to the south of the pipeline, and as such was not affected by the pipeline works. PRN 40980 is the former site of a Velvet Factory. This too was located well to the south of the pipeline (close to PRN 40981) and was unaffected by works.

Located between Unity Wood (to the north) and Little Beside (to the south) is the Portreath to Poldice Tramline which runs north to south across the pipeline. This site represents the oldest surface tramline constructed in Cornwall. It originated in 1809 and includes the granite sets which supported the only 'plateline' in Cornwall - a term used to describe the 'L' shaped plates on which the carriages ran - rather than standard rails. (Acton 1997, Thorpe 2000). In view of the significance of this site, CAU recommended that the pipeline should be tunnelled under, rather than cut through (prior to the start of the watching brief).

4.1.2 Fieldwork - features and finds (all feature locations are shown on fig. 7, selected sections are shown on fig. 8 and a descriptive list can be found in the appendices - section 7.1).

The fieldwork produced a number of features. These comprised 8 linear/curvilinear features, 4 post-medieval mining features, 2 layers and 2 modern features. With the exception of field 6, every field produced finds. The following text looks at the features located along the length of Area 1, working from east to west.

Field 1 did not produce any features. Field 2 produced [226] - a previously removed and formerly lynched boundary, which comprised a topsoil sealed eastern ditch with a wide ridge of natural to the west. There was a 0.5+m difference in height between land to the east and west of the lynchette. It ran N-S across the corridor. Further to the north of the pipeline corridor the boundary was still in use. The presence of the lyncheting implies that this boundary had been in existence for some time - implying a potential Late Medieval/Early Post Medieval date. Field 3 produced feature [225] a machine cut trench, which ran diagonally NW-SE across the corridor. It was interpreted as a probable field drain. Fields 4 and 5 did not produce any features.

Field 6 produced a small concentration of mining features associated with West Poldice Mine (PRN 40988). Mine waste bank [221] ran closely parallel to the eastern edge of Boundary 110. It had a 3.0m width and a 1.0m height. To the immediate east of [221] ran [222] - a 2.0m wide trench filled with mine waste. Feature [317] consisted of a number of

amorphous spreads of mine waste, which varied in depth from 0.1 to 0.4m. Feature [318] was a trackway made of crushed mine waste. It had a maximum 4.0m width and ran NE-SW across the corridor. No sub-surface tunnels etc were seen when the pipe trench cut through this section. However, the 1999 Geological and Ground Risk Assessment carried out for Transco shows a series of both shallow and deep lode workings running across this area. The majority trend SW-NE but there are N-S exceptions.

Field 6 additionally produced a single removed boundary running NNW to SSE, which consisted of two parallel running ditches [223] and [224], flanking a slight ridge of natural. The upper fill of each ditch was composed of mine waste, which would indicate that this potential Late Medieval boundary was removed during mining activities at West Poldice Mine (but never re-instated).

Field 7 produced feature [220], a probable modern, sheer cut narrow trench in excess of 1.5m deep with stones along the western edge. The function of this feature was not ascertained. It could be a mining related feature, despite the lack of mine waste in the immediate vicinity, or it could be a later service trench or drain.

Field 8 produced four features. Feature [219] was a track, which ran along the eastern edge of Boundary 112. It was composed of mine waste and as such either relates to contemporary operations at West Poldice Mine or post-dates it – representing the re-use of mine waste for a farm track. Feature [284] was a removed lynchetted boundary. Visible as a slight but distinct break of slope beyond the edge of the corridor it was seen within the topsoil stripped corridor as a 1.5m wide ridge of natural with associated stones – representing the now removed, extant portion of the boundary. It is probable that this feature represents a Medieval boundary. It is clearly shown on the Tithe Map as the eastern perimeter of a well defined curvilinear area, which today includes fields 11, 10, 9 and the western half of field 8.

Also in field 8 was feature [285] (see fig 8) a relatively substantial ditch with a near 'V' shaped profile. It had a 2.0m width, a 1.0m depth and contained two (un-numbered) fills. The upper fill consisted of dense orange brown clay while the basal fill was pale silty clay. The 0.5m depth of this basal deposit would suggest that the ditch had been open for some time and that it had gradually silted up through natural erosion. The ditch appearance and dimensions closely concur with the results of a probable late prehistoric hill enclosure site at Lanhainsworth, near St. Columb Major (Lawson Jones, forthcoming). The ditch was similarly only seen in a pipe trench section, had a 2.0m width and a 1.4m depth with two similar fills (in different quantities). Unfortunately access to the pipe trench was not possible at the time of recording, meaning that a soil sample could not be taken for environmental analysis and possible dating. Interpretation of this feature (in terms of likely function) has been left open. Its depth and profile would suggest that it represents something more than a 'normal' field boundary – perhaps a late prehistoric enclosure or Round?

In addition field 8 produced a small but note-worthy assemblage of thirteen flints indicating an earlier prehistoric (Neolithic/Bronze Age) presence within the immediate vicinity. The final feature located within this field was [293] – a probable removed boundary, which was only visible as a linear arrangement of stones sealed beneath the current topsoil.

Field 9 did not produce any features. However, it did produce a small assemblage of Romano-British pottery (in addition to much Late Medieval pottery), which would concur with the possibility of there having been a late prehistoric/Romano-British enclosure in the area. Field 9 may well represent the internal portion of such a site.

Field 10 produced subsoil layer [266], which was sealed beneath the topsoil and ran along most of the length of the field. It varied in depth from approximately 0.1m in the east to 0.4m deep at the lower western end (where the field drops down slope). The layer is a compact silty clay loam – probably representing a sealed old plough surface. It produced a significantly large assemblage of finds, including much Medieval pottery and a possible Early Medieval sherd of pottery. This assemblage probably relates to the Medieval settlement of Tolgallow (see section 7.3), which is located just to the south of the pipeline corridor. In the centre of field 10, a ditch was located. Ditch [283] ran NW-SE across the corridor. It had a 1.4m width and was 0.5m deep, with concave sides and a narrow flat base. Its unusual profile, surprising depth and the fact that it was sealed beneath layer [266] see fig 8 might suggest a relationship with potential Romano-British or Early Medieval activity (located in fields 8 and 9). Fieldwork and the study of air photographs by the CAU since the 1970s has shown that field systems regularly appear around round sites (Quinnell 1986, Johnson and Rose 1982). More recent excavation work at Penhale Round, Indian Queens (Nowakowski 1998) has shown a strong link between the workings of a round and its perimeter with the surrounding field system and landscape in general. The large, approximate 240m distance between ditches [285] and [283] would make it very unlikely that both ditches relate to the diameter of the round itself (based on currently known round dimensions). However, they could represent ditches from two separate rounds. It is not unusual for rounds to be this close.

Field 11 contained layer [274], which had collected along the valley bottom for a 35.0m length of the corridor. It had a depth of approximately 0.8m, was damp and humic and overlain by the current pastoral topsoil. It has collected naturally via hill wash and/or ploughing down slope. It did not produce any finds (despite a fairly exhaustive search) which would concur with this.

4.1.3 Boundaries (all boundaries referred to are shown on fig.9, sections are shown on figs 10 and 11, and listed within the appendix – section 7.2).

There were a total of thirteen boundary sections recorded within Area 1. These are dealt with in numerical order from east to west.

Boundary 101 was not seen in section. Boundaries 102 and 103 flank a 10.0m wide pre-1840 trackway, which cuts diagonally across a west facing hillslope. Up-slope lynched boundary 102 may originally have formed the boundary between Kea and Gwennap, and is much more substantial than boundary 103, and preserves in its section the original bedrock level. It is almost certainly Late Medieval in date. Both boundaries were stone faced against the trackway in an attempt to stabilise their 2.0m plus height above its level. (This height is further enhanced by tree growth). The track itself has cut down through the natural via prolonged use, weathering and probably drainage. Neither boundary produced evidence for ditches, which would suggest that the trackway itself gradually provided the bulk of the boundary matrix, ie context [3] and [2]. It may be that ditches did flank one (or both) boundaries, but that they have disappeared due to the constant deepening of the track through erosion and maintenance (see above).

Boundary 104 (like 102) was lynched and shown on the Tithe Map. The earliest phase of the boundary could be seen in the cleaned section as contexts [3], [6] and [5]. Context [5] representing the old ground level, context [3] the core of up-cast material, and [6] the remnant original stone facing. Context [1] and [2] represent a later phase of build-up, which would have rendered it stock proof. Since the creation of stone face [4] small-scale build-up of material has occurred on the up-slope side of the boundary.

Boundaries 105 and 106 (like 102 and 103) flank a trackway. Both are shown on the Tithe Map. Boundary 105 is substantially larger than 106, and shows some evidence for

lynchetting. Context [3] in boundary 106 and [5] in 105 represent the remnant (pre-boundary) old land surface preserved beneath each boundary. Boundary 106 appears to have undergone either a slightly more complicated development, or perhaps a slightly longer period of use. Boundary 105 shows stone facing [6] directly on top of the old land surface, while stone facing [4] of boundary 106 (in contrast) starts below the level of the old land surface. This means that there must originally have been a ditch on each side, into which the stone facing has slid, or that there was an earlier boundary or bank which had preserved the original ground level.

Boundaries 107 and 108 were tunnelled beneath, and as such not seen in section. Tunnelling was recommended prior to excavation along the pipeline corridor due to the archaeological status of the mineral tramway located between them (see PRN 18011 in appendix section 7.3). Both boundaries will date to approximately 1809 – based on the known operation dates of the tramway. Both the tramway and the two boundaries are shown on the Tithe Map.

Boundary 109a is shown on the Tithe Map, and today defines the eastern edge of an elongated field which has the angular jagged appearance of a long standing boundary that has had many attached boundaries removed. The section was simple, consisting of probable ditch excavation material [5], ditch clearance material [3], stone facing [4], collapse and repair? [2] and [6] and finally recently produced topsoil and leaf litter. Associated ditches were not seen, but there must have been at least one and possibly two (based on contexts [5] and [3]).

Boundary 109b is an example of a boundary that has shifted slightly due to a substantial increase in size. The addition of mine waste [2] and [3] (and possibly [5]) from the east - associated with working at West Poldice Mine, has completely swamped the pre-existent boundary. Contexts [7], [6] and [4] pre-date mining activity in the area, and probably represent the boundary shown on the Tithe Map. The suggestion of a ditch was seen flanking the western side of this earlier boundary. The eastern side of the boundary was not seen to a sufficient depth to ascertain the presence of a sealed, underlying ditch.

Boundaries 109a, 109b and 110 are all located within the heart of what became West Poldice Mine. Boundary 109a appears to have been left intact throughout the mine's operations, but boundaries 109b and 110 did see some alteration in the form of enlargement. This implies that the land ownership/divisions they marked were significantly important to be maintained. Both the 1880 and 1907 OS maps show a series of shafts well defined within boundaries 109a and 110.

Boundary 110 (like boundary 109b) has slightly shifted due to the large-scale deposition of mine waste against its eastern side. Unlike 109b, boundary 110 was seen almost to its base. At least three phases or essentially different boundaries were seen – all running along the same alignment. Two parallel ditches [6]/[5] and [7] (positioned 3.0m apart) underlay the later boundaries. It is uncertain as to what form this original linear landscape division took. It may have represented a trackway with two flanking ditches only one of which ([7]) was maintained (later to be infilled with mine waste), or it may simply have been a single ditch ([6]) which was subsequently overlain by the second boundary ([4] and [3]).

Ditch [6] and upper fill [5] definitely belong to the earliest boundary seen in section 110, are probably Medieval in date, and subsequently fell into disuse due to a shift in the boundary. Ditch [7] may have been equally early but maintained, or it may be significantly later (perhaps excavated since the mine waste was deposited - which has since slumped in). The second boundary consisted of bank [4] and a single, western outer stone facing [3]. This pre-dates mining in the immediate vicinity, and is probably the boundary shown on

the Tithe Map. The bulk of today's boundary relates to 19th and possibly early 20th century mining activity. Despite this it follows earlier origins.

Boundary 111 is located in the centre of what became West Poldice Mine. This boundary revealed a very simple section consisting of a core of redeposited [2] clay shillet (attained from the still partially visible ditch [3] on its eastern side), rooty loam [1] (with tree and bush growth) and a piecemeal stone facing [4]. Its relatively substantial width, tree growth, and dilapidated stone facing all suggest that it is the boundary shown on the Tithe Map.

Boundary 112 has a more complicated section - revealing an early boundary or core within an expanded boundary (which has been added to from the eastern - track [219] side). Contexts [5], [4], [3] and [6] all belong to the original boundary, which would have been too insubstantial to have been stock proof. Context [5] represents the possible remains of a disturbed buried soil, while [6] represents a probable remnant of stone facing. Contexts [2] and [7] represent a period of enlargement or renewal (with stone facing [7] appearing to continue down beneath the edge of the trackway). The boundary's later phase would have been sufficiently substantial to enclose livestock. Context [1] represents the latest addition to the boundary. It consisted of a loose loamy, rooty soil that may very well have been generated by ditch clearance and trackway maintenance.

Boundary section 113 was relatively simple. It consisted of four fills with a stone facing. Context [2] and probably [3] represent ditch excavation and clearance - although a ditch was not seen in section since the base of the boundary was not seen. Context [4] was a relatively deep, compact clay loam underlying these ditch deposits, but it had undergone disturbance and as such was not clearly identifiable as a buried soil. The stone facing [5] appeared to continue down beyond the recorded section. This boundary is shown on the 1840 Tithe Map.

Boundary 114 (like 113) had a simple section consisting of three layers and a stone facing. It forms the boundary between St Day and Carharrack, but never formed an 'ancient' parish boundary. Boundary 114 runs across a south-west facing slope which has caused a ridge of natural - [4] - to be left beneath the boundary via slight lynchetting. Flanking ditches were not seen in section, but they must have been present since context [3] and probably [2] represent ditch up-cast material. Stone facing [5] has started to become partially submerged by soil creeping down from the brow of the hill towards it, while the base of the stone face on the down slope side has been fully exposed.

Boundaries 112, 113 and 114 are all relatively straight and simple in plan suggesting that they represent post-medieval reorganisation of the farming landscape.

Boundary 115 is probably Medieval (or earlier) in date. It marks the edge of a curvilinear enclosure (clearly visible on the Tithe Map) which contains fields 11, 10, 9 and the western half of 8. The eastern half of field 8 is located beyond the eastern perimeter - located during the watching brief and numbered [284]. Boundary 115 was located at the base of the valley, on the eastern edge of the road linking Scorrier to St Day. It consisted of a central ridge of natural ([7]) cut away on either side by ditches ([5] and [6]) which were overlain by later boundary component [4]. Neither ditch was seen to its base, but ditch [5] was seen to be at least partially overlain by the road. Contexts [3] and [2] represent ditch clearance and excavation material, while context [1] represents the latest phase of deposition. Both contexts [1] and [4] show a similar flattened 'spread-like' effect which is probably a result of the boundary's low-lying, frequently waterlogged position.

4.1.4 Conclusions

To conclude Area 1 has produced a scatter of lost ditches and removed boundaries typical of an Anciently Enclosed Landscape (as classified by the Cornwall Landscape Assessment

1996). The majority relate to field subdivisions and, in the case of removed lynched boundary [284] and extant boundary 115, Medieval field system demarcation. It has been suggested that ditch [285] (and perhaps [283]) may in fact represent a late prehistoric enclosure based on its scale and profile and the small scatter of Romano-British pottery found nearby.

The post-medieval mining features are concentrated in plan and relate specifically to West Poldice Mine. They are typical of surface features associated with disused mines. The area in which they were located has since been re-absorbed back into the agricultural landscape, while boundary sections show that old field divisions have been retained and enlarged by the whole-sale addition of large quantities of mine waste (ie boundaries 109b and 110).

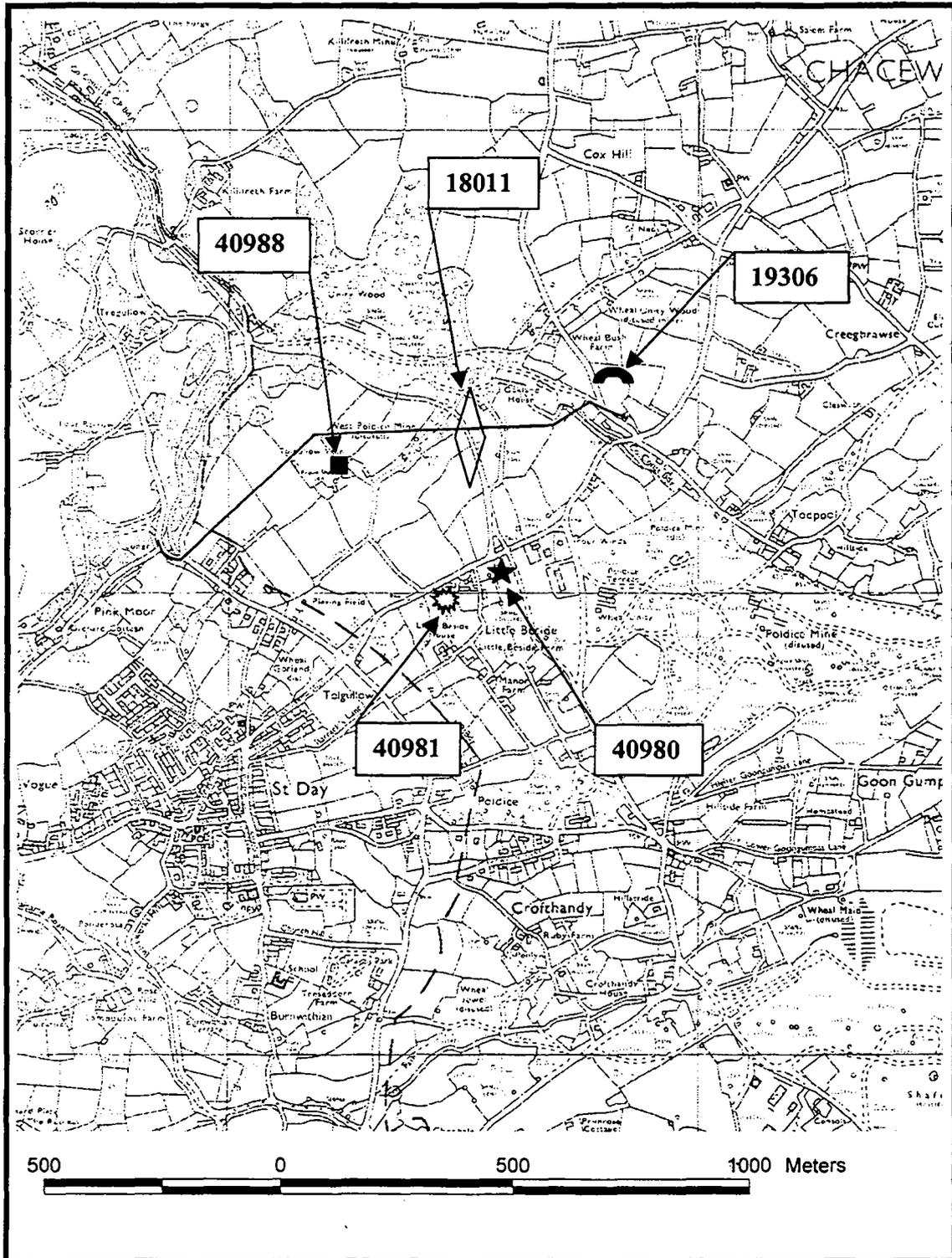
Area 1 produced the greatest number of prehistoric flints found along the pipeline (see 5.2), with a modest concentration of 13 flints in field 8; this is indicative of activity in this area in the Neolithic and Bronze Age.

Fields 8 to 11 also produced a considerable scatter of medieval pottery, presumably reflecting cultivation of fields associated with the medieval settlement of Tolgullow.

The two layers located at the western end of Area 1 within fields 10 and 11 are specifically associated with their valley slope and bottom location - where the scouring affects of ploughing have been lessened due to the deeper soil build-up. Within layer [266] a significant quantity of Later Medieval pottery was found, indicating a probable date for this layer and illustrating the protection from ploughing that it has had (in terms of disturbance - which is highly destructive of pottery). The Tithe Map lists the majority of the up-slope fields as being under arable cultivation at the time - although many of these fields today are under pasture. Fields described as arable in use (in the Tithe Map apportionments) were under cultivation for a few years and then left fallow or under grass for a few years - essentially forming a rotation system. This arable cultivation will have continued back into the past - spanning the Early Post-Medieval, the Later Medieval (and potentially the Early Medieval) periods based on the finds seen within fields 9, 10 and 11.

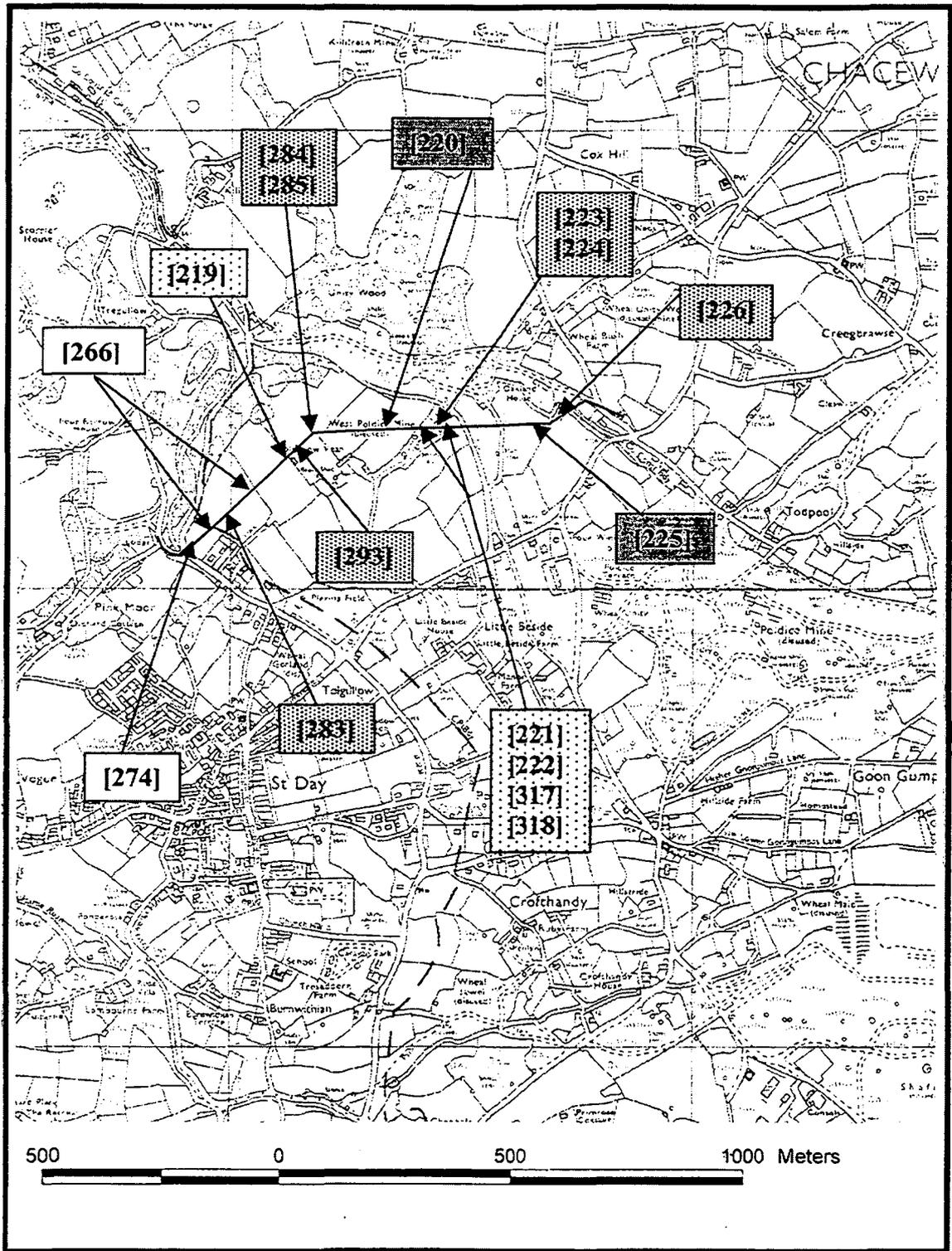
Area 1 spans three modern parishes - St Day in the west, Carharrack in the middle and the western edge of Chasewater parish. Boundary section 102 represents the Carharrack/Chasewater boundary, and 114 represents the St Day/Carharrack boundary.

The later post-medieval and modern features are few in number and represent the continuing, mostly pastoral use of the landscape.



- Assessment mine site
- ◊ Portreath to Poldice tramway
- ◐ Possible barrow cropmark
- ☀ Unity Safety Fuse Co.
- ★ Velvet factory

Fig 6. SMR sites located during the assessment within Area 1.



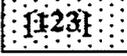
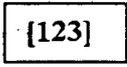
-  [284] Agricultural features – ditches and removed boundaries.
-  [219] Post-Medieval mining features.
-  [220] Miscellaneous modern features.
-  [266] Naturally accumulated agriculture-related layers.

Fig. 7. Feature numbers and locations within Area 1.

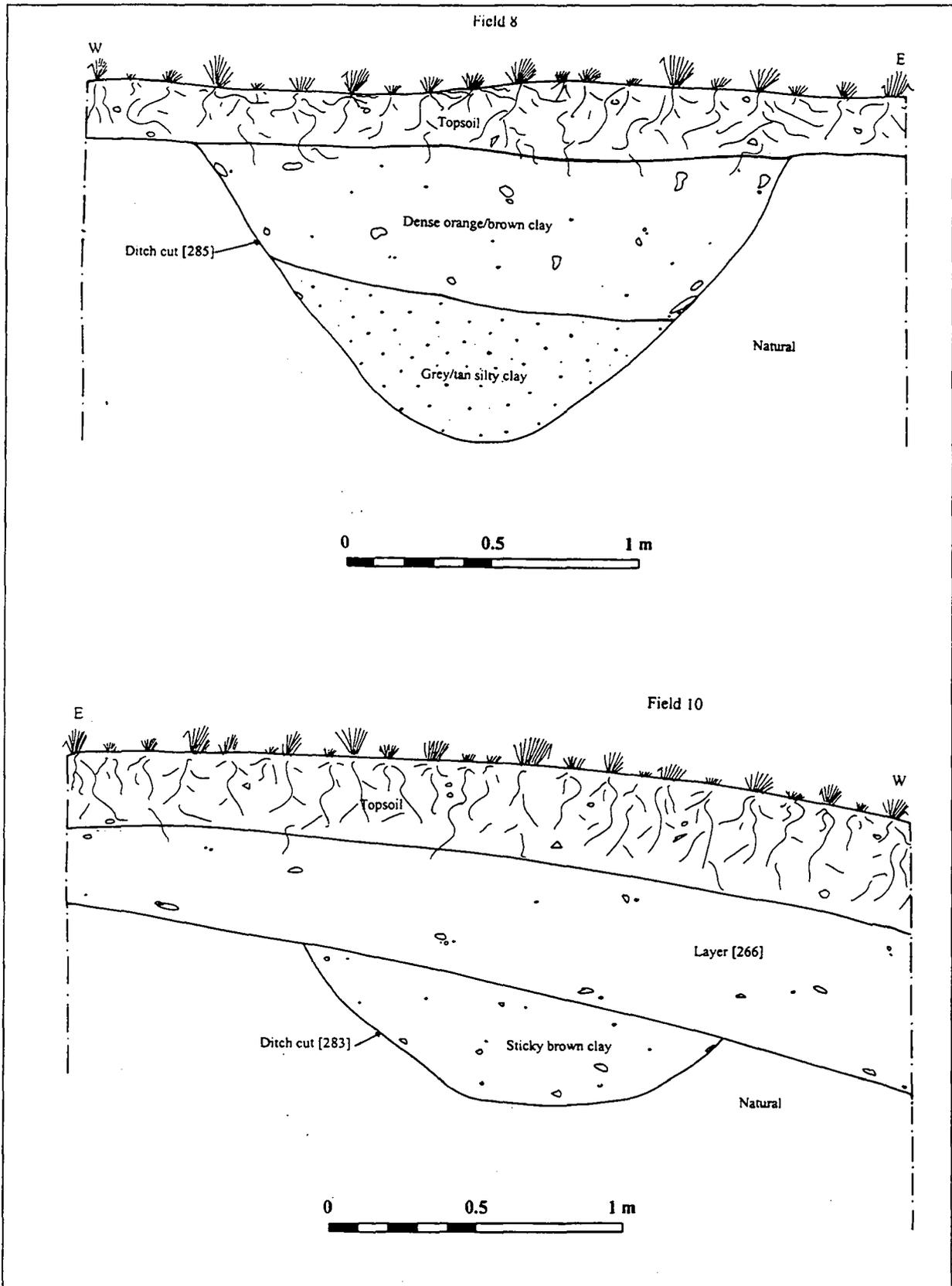
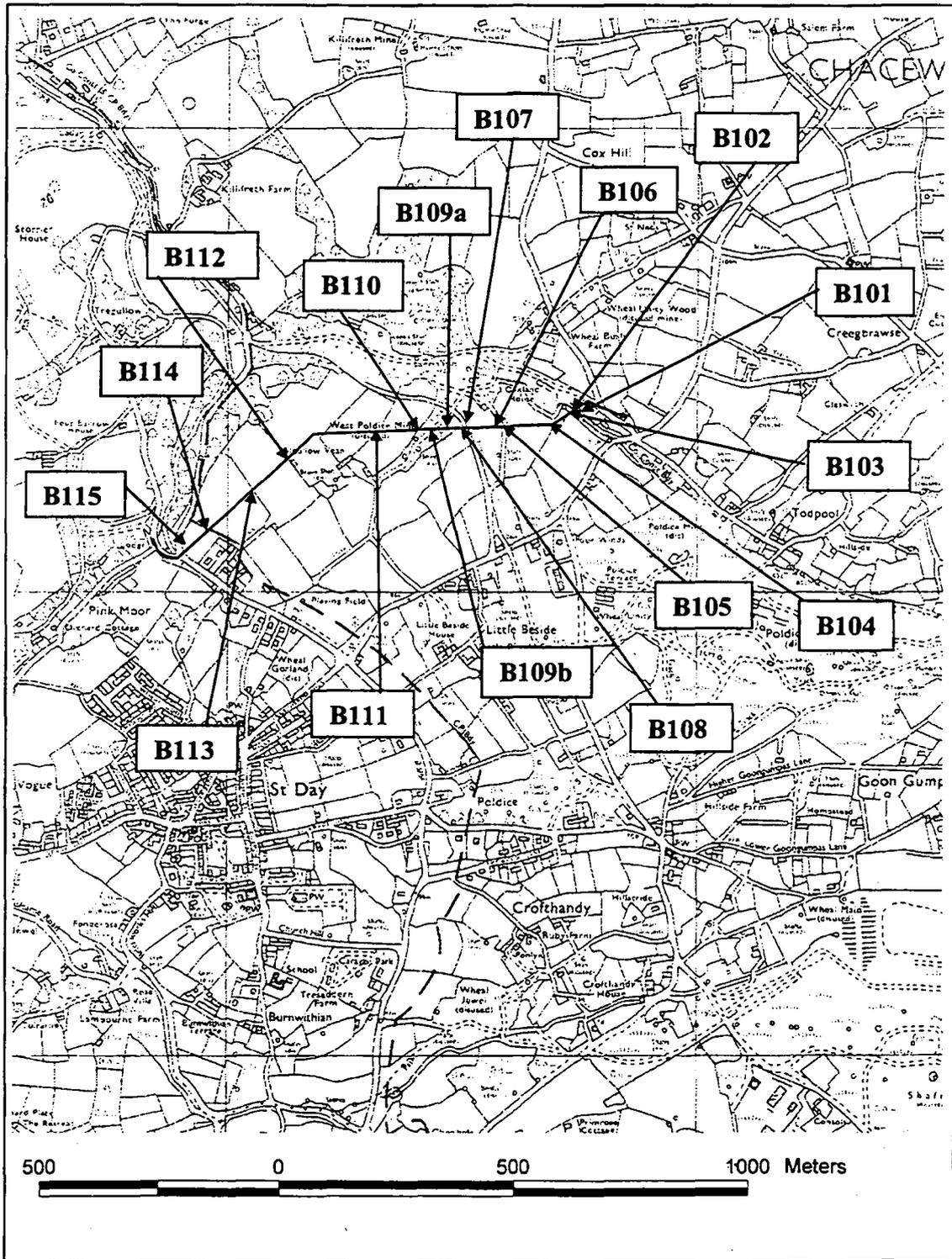


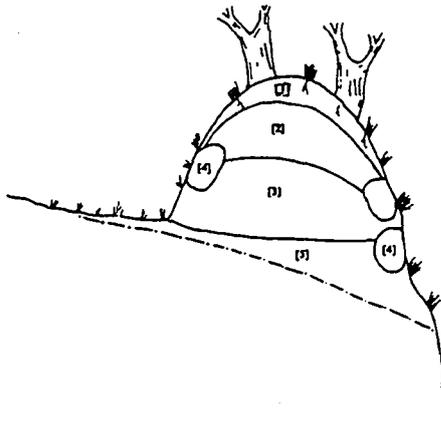
Fig. 8. Sections through ditch [285], ditch [283] and layer [266].



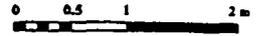
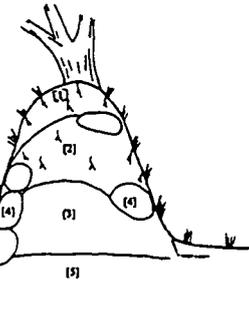
B123 = Boundary alignments shown on the 1840s Tithe Map.

Fig.9. Boundary locations and numbers within Area 1.

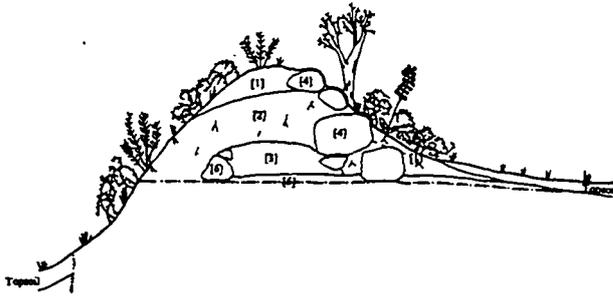
Boundary 102
North Facing Section



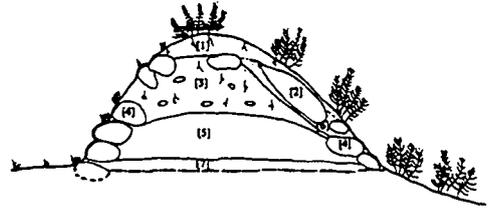
Boundary 103
North Facing Section



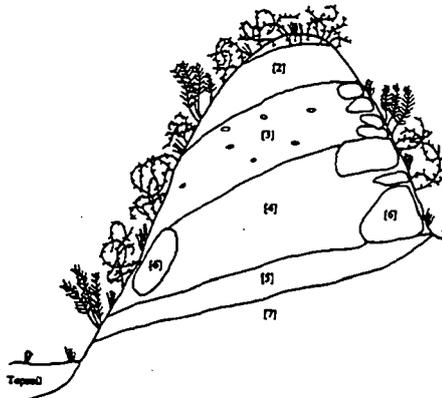
Boundary 104
North Facing Section



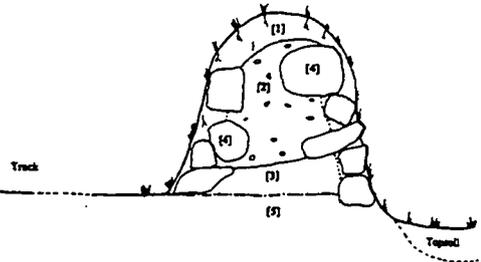
Boundary 109a
North Facing Section



Boundary 105
North Facing Section



Boundary 106
North Facing Section



Boundary 109b
North Facing Section

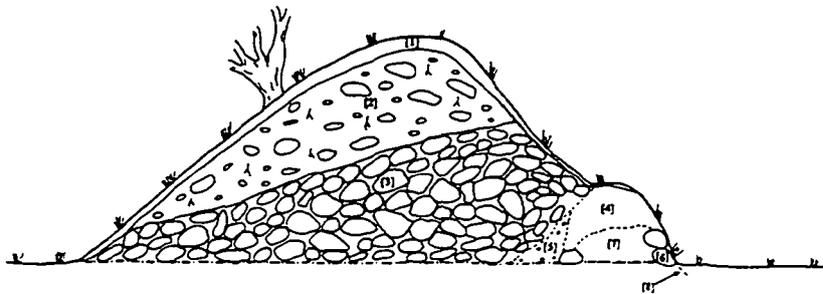
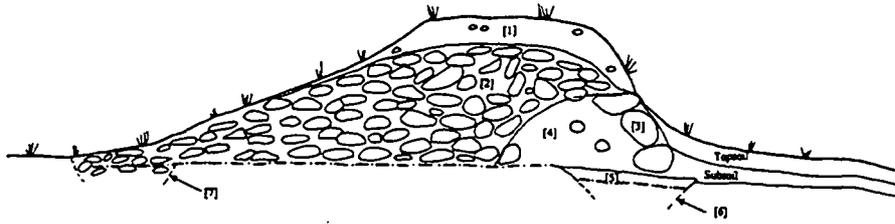
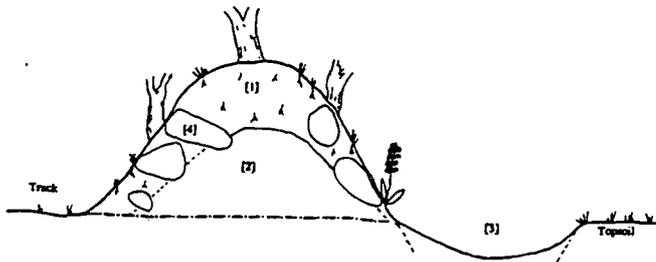


Fig. 10. Recorded boundary sections within Area 1. (Eastern end)

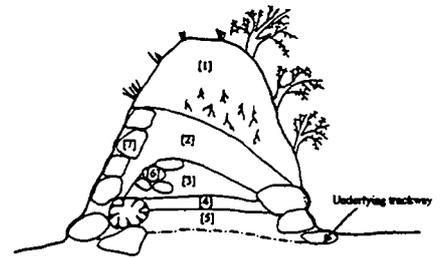
Boundary 110
North Facing Section



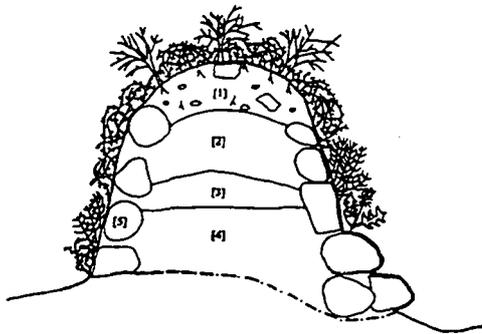
Boundary 111
South Facing Section



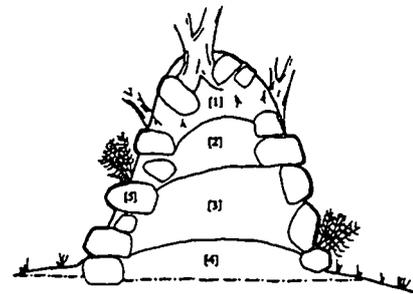
Boundary 112
South Facing Section



Boundary 113
North Facing Section



Boundary 114
North Facing Section



Boundary 115
South Facing Section

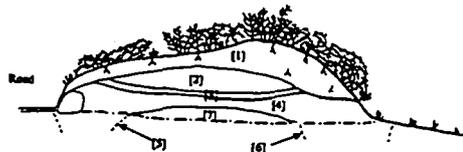


Fig. 11. Recorded boundary sections within Area 1. (Western end).

4.2 Area 2 - Tolgullo to Treskerby

Area 2 - Tolgullo to Treskerby is the central eastern area, located between boundaries 116 and 130 (SW 7281 4314 to SW 7164 4341). From east to west Area 2 covers fields 12a to 25, and landscape classification zones -AEL and probable REL.

4.2.1 Assessment (all sites are shown on fig. 12 and listed within the appendices - section 7.3).

The assessment identified six SMR sites along the length of the pipeline assessment corridor. PRN 19289 the probable site of a late prehistoric enclosure is the earliest of the SMR sites. It is located to the north of Park An Chy Mine and the pipeline corridor, and is based upon a reference in the Tithe Map apportions of 'Round Field'. It is uncertain whether 'Round Field' relates to the Ancient Fort referred to on Richard Thomas's 1819 Map (in the vicinity of PRN 40987).

Treskerby settlement (PRN 19361) was first documented in 1394 and represents a Medieval site which may have altered considerably in plan over the years. There was thus a potential for Medieval structural and artefactual remains to be found in this vicinity during the watching brief. Related to this site is PRN 19331, a potentially early post-medieval dovecote located within the area of modern Treskerby.

Mining sites PRN 40986 and 40987 relate to Wheal Clinton and Park An Chy Mine (which was a part of Treskerby Mine). Both sites are located to the north of the central portion of Area 2, close to a probable round. Both mines potentially extended in to the area of the pipeline, particularly in terms of sub-surface features. Again located to the north of the pipeline was PRN 41046 - the Fourbarrow Ropewalk, which originated in about 1819. Thomas's map of 1819 shows that it would have crossed the pipeline corridor (although the likelihood of any remains being recognisably part of it were seen as small).

4.2.2 Fieldwork - features and finds (all features are shown on fig. 13 and listed within the appendices - section 7.1).

The fieldwork for Area 2 produced a large number of features. Half were directly associated with mining. With the exception of one modern trial pit the remainder consisted of linear and curvilinear ditches and removed boundaries. These features are dealt with by field from east to west.

Field 11/12a produced two sub-surface features located towards the base of the steep valley edge marking the boundary between Areas 1 and 2. Feature [270] (see fig 14) was a substantial, open stone lined culvert, the top of which was seen during pipe trenching along the road. Its south-western terminal was recorded just beyond the pipeline corridor (see appendices 7.1 for dimensions and description). From the entrance the culvert appeared to continue on towards Scorrier House Lodge (although the 1880s OS map shows it as veering away towards the north). No reference is made to it on the Tithe Map, suggesting that it was constructed between 1840 and 1880. The rather 'grand' entrance is a probably reflection of the wealth, importance and proximity of Scorrier House and its landscaped grounds. The Tithe Map refers to the area as Clinton Ford Hill, indicating that prior to the construction of the culvert the road had crossed the stream with a ford. Feature [271] (see fig 14) was an adit, which was aligned SW-NE and (like the culvert) continued beneath the road. Only the upper most section of this feature was open, revealing a stone lined roof below decaying bedrock. The majority of the feature was filled with [298], which was primarily composed of decaying mine waste and bedrock. It would have been associated with Wheal Clinton mine workings.

Field 12 produced a lost boundary, a disused boundary, a mining feature and two domestic wall features. Feature [268] was a partially robbed out wall within a square cut foundation

trench. It extended into the pipeline corridor from the south, turned a 90-degree angle and ended with a square ended terminal – suggestive of this having been an entrance. A structure is shown on the Tithe Map in this location and listed in the accompanying apportions as a ‘dwelling house, plantation, stable and yard.’ It is not shown on modern maps of the area. Related to this feature is [267] an almost completely robbed out wall foundation trench.

Feature [269] was a mining trench located 5.0m to the west of wall [267]. It was filled with decaying mine debris and silty loam, and ran N-S across the corridor. Visible to the south of the corridor were the telltale signs of overgrown mining waste dumps – one of which looked distinctly like a shaft cone (although it is not shown as such on any of the maps consulted). Reference to ‘old lode’ workings is made on the mine search maps contained within the (1999) Geological and Ground Risk Assessment carried out for Transco. The mine to which these workings relate was probably Wheal Clinton.

Feature [217] was composed of a ridge of natural with a ditch on the western edge. It represents a former field boundary. Feature [218] was a disused bank boundary, which was still just visible as a surface feature. It had the same N-S alignment as [217], but unlike [217] is not shown on the Tithe Map. However, it is likely that these features had broadly contemporary (pre-1840) origins.

Field 13 did not produce any features during the watching brief. Field 14 produced a whole series of removed banks and boundaries, plus a good assemblage of Late Medieval pottery. The most easterly group of features includes ditch [265], ditch [264], ridge/bank [299] and ditch [263] (in that order from east to west, see fig 15). They are located as a group on the western crest of the valley and represent a possibly multi-phased or shifting boundary. Ditch [265] is located 2.0m to the west of ditch [264] which flanks the western side of ridge [299]. Ditch [264] was (in its last period of use) associated with ditch [263] (which flanks the eastern edge of [299]), but it may originally have been associated with [265]. As a group they are most likely to represent the pre-cursor to Boundary 118, (approximately 5.0m east of [299]) which is shown on the Tithe Map. It may be that they are associated with the thirteenth century and later development of the original manor site around which Scorrier House is now focussed, and with the relative concentration of Late Medieval pottery found in this field.

Located approximately 10.0m west of ditch [263]/ridge [299] was ditch [213], and approximately 11.0m west of [213] were stones and possible ditch [214]. The similarity in distance between these ditched boundaries suggests that they belong to the same field system and that they are broadly contemporary in date and almost certainly Medieval in origin, perhaps strip fields. Feature [213] (like [214]) had associated flanking stones representing the remnants of probable low-lying banks of material.

On the western edge of field 14 was trackway [212] with flanking bank and ditches [215] and [216]. The partially metalled track ran NW-SE across the corridor and had an approximate 2.0m width today, plus a 2.0m wide ‘verge’ on either side. Banks [215] and [216] do not currently exceed 0.3m in height. They are shown on the Tithe Map as flanking a short ‘funnel’ shaped track – perhaps a livestock droveway?

Field 15 did not produce any features. However, field 16 produced two ditches and two mining related features, plus a notable assemblage of Late Medieval pottery. In the east of the field was ditch [259], (see fig 15) a relatively substantial, NW-SE aligned, truncated ditch – 0.8m deep and 1.2m wide with a steeply concave profile and a ‘lip’ half way down the western edge. It was not typical of a lost or removed boundary ditch, its scale and profile suggesting something more than a field division, while the ‘lip’ reflects a later phase of re-cutting or renewal. Basal fill [260] relates to a pre-final abandonment phase while

[261] belongs to abandonment. Neither fill appeared to have developed gradually, but instead had been laid down fairly rapidly. It is uncertain as to what process caused this. The Tithe Map shows adjacent mining activity in the form of a number of 'tooth-like' irregularities along the northern edge of the field, and a small enclosure named 'Shaft Pile'. Despite this recorded activity, no mining remains were found during the watching brief. It is as a result considered likely that [259] is of medieval date or earlier. Its alignment seemed to broadly mirror that of boundary 119, which is shown on the Tithe Map (although only a short length of it was seen within the topsoil stripped corridor). This would suggest that it may link in with the medieval/post-medieval field system represented by boundaries 119 and 120, and the late medieval pottery found in the vicinity reflecting the fertilisation of fields with domestic midden material.

Alternatively it could perhaps relate to a stock-proof boundary associated with a late prehistoric enclosure. Enclosures (or rounds) of this date do often have associated, radiating stock-proof ditches/boundaries.

To the west feature [258] was located. It was slightly amorphous in plan, 1.0m deep and interpreted as a mining feature. It was located approximately in the area shown on the Geological and Ground Risk Assessment carried out for Transco by RSK (1999) as an area of lodes and old workings - between Park-An-Chy, Wheal Clinton and Wheal Pink. In the central western portion of the field 16 corridor removed boundary [201] was located. [201] consisted of a ridge of natural and a linear scatter of stones. This feature was not seen in section and no ditches were recorded in plan (although the ridge probably did have at least one associated ditch flanking its side). Feature [257] was located to the west and interpreted as a lode-back trench. This feature was located exactly on top of the lode marked on the Geological map (referred to above) and formed part of the Park-An-Chy Mine.

Field 17 produced two ditches and a mining feature. Mining feature [256] was a sub-surface tunnel (possible adit) located during pipeline trenching. It was almost completely choked with decaying killas - some of which represented the gradual decay and collapse of the tunnel itself (although at least half of it was mining waste). Ditch [292] was recorded as running N-S across the corridor. It was not seen in section, and was not shown on the historic maps consulted. It may well form part of a medieval strip field system. Feature [208] was a shallow, narrow, truncated curvilinear ditch. A 3.0m length was recorded, protruding out from the northern edge of the topsoil stripped corridor. Its southern end had been truncated (probably from past ploughing) and a thin layer of surviving old plough soil was preserved between the natural clay shillet and the current thick topsoil, which overlay ditch [208]. (The Tithe Map apportions for this field describes it as being under arable use). It is possible that ditch [208] relates to a field called 'Round Field' in the Tithe Map apportions, located approximately 250m to the WNW. If this was the location of a round (or late prehistoric enclosure) then curvilinear ditch [208] could well be an associated late prehistoric remnant. Recent work carried out by CAU has shown that rounds could and did have a pronounced association with the surrounding landscape divisions and boundaries.

Field 18 produced six mining features associated with the former Park-An-Chy Mine. From east to west these consisted of [255] - a probable lode-back pit; [254] - a 2.2m wide N-S aligned track with metalling composed of mine waste; [252] - a sub-surface tunnel or adit; [253] - a lode-back trench; [251] - a sub-surface adit or tunnel; and [250] - a collapsed sub-surface adit/tunnel. All of these features are located within an area shown on the Geological maps (RSK 1999) as criss-crossing lodes, an adit and a path. These features are likely to correspond with those found during the watching brief (with the exception of the path, which had a markedly different alignment).

Forming the northern boundary to fields 17 and 18 was a large, curvilinear lynched boundary. Ground level was approximately 1.5m higher on its northern side, suggesting that it had acted as a boundary for a very considerable period of time. The Tithe Map records the now removed long, east to west aligned field which ran along the northern edge of this boundary as being called 'Long Chy'. 'Chy' is a Cornish word meaning 'house' (Padel 1988, 186; Gover 1948, 694) - although there is no sign of a house on the Tithe Map the remains of a structure were noted during the watching brief incorporated within Boundary 122, against the northern lynched boundary described above. (The structure was outside the corridor and was not affected by the route of the pipeline). Inserted in to the probable structural wall was a later stone stile, which was totally over grown and partially infilled with later boulders. In addition two large upright granite gateposts were recorded on either side of the corridor, incorporated within Boundary 122 (the northern gatepost representing the northern side of the stile). To the immediate west of 'Long Chy' field was a field called 'The Round'. If this was indeed the location of a late prehistoric round then this might account for the longevity of the curvilinear boundary.

Field 19 produced a single removed boundary and a series of fourteen mining features. From east to west these consist of [276] - a sub-surface adit (see fig 16); [310], [309] and [308] - a series of shallow, concave, loam filled features located 1.0m apart from each other (and only seen in the pipeline trench section); and [307], [306] and [305] which were 2.0m apart from each other and primarily contained shillet and loam. Located 4.0m to the west of feature [305] was 3.0m wide track [304]. This was primarily composed of compacted, partially redeposited natural (or possibly decayed mine waste). Located 2.0m to the west of the track were features [303], [302] and [301]. These were concave loam filled ditches located 1.0m apart from each other. Broader loam filled feature [300] was located 2.0m west of [301]. Specific interpretation of this series of features (none of which were visible in plan) is difficult. There was no obvious mine waste or slimes etc associated with dressing floors, and no finds were found within the features themselves. Since the Geological (RSK 1999) map shows there to be a series of lodes, an adit and a possible shaft in the approximate line of the corridor it has been assumed that these features are likely to relate to shallow surface mine activity.

Feature [248] (see fig 15) was located 2.0m west of [300] and was a very much deeper feature, with near sheer sides. The base was not seen but it has been interpreted as a probable lode-back working. Feature [247] was a stone filled, concave profiled, 2.0m wide, 0.75m deep 'trench'. The positioning of some of the stones gave the impression of them having formed a foundation course - perhaps for a wall or the support of surface machinery. No hint as to its location or function is given on the maps. Feature [202] was located prior to the pipe trench being cut, and as such was seen in plan, running through the western side of field 19. It was interpreted as a field ditch, probably marking a former field boundary. It was filled with a brown loam overlying a silty clay basal deposit. It is the presence of this basal deposit which allows feature [202] to reasonably be interpreted as a field ditch - as opposed to a shorter lived mine feature (as was the case for the similarly profiled, loam filled features [305]-[310] located further to the east in this field).

Field 20 did not produce any features during the watching brief. Field 21 produced seven features, which included a series of curvilinear ditches (see fig 18) and a removed boundary. From east to west these involve broad, curvilinear, truncated ditch [291]; removed natural ridge and ditched boundary [289] and single broad ditch [290]. Unfortunately 2.0m wide ditch [290] was not seen in section. In the western half of the field, 32m west of [290] was 5.0m long curvilinear ring-like ditch [286]. Both its eastern and western ends were missing through later (probable ploughing) activity. Located internally (to the north) was an area of shallow disturbance [287], which may represent contemporary

activity associated with the possible ring ditch. Interpretation of features [286] and [287] is difficult, but based on similarities between [286] and the two ring ditches located at Lanhainsworth during a recent water pipeline project (Lawson Jones, forthcoming) which produced a 5th-6th century AD radiocarbon date, they may be Early Medieval in origin. Similar slightly angular ring-ditch-like features were found at Gwithian – huts 2 and 3 (Thomas 1958). In addition to being Early Medieval, ring ditches can also represent the sites of Iron Age houses and Bronze Age barrows.

Located approximately 4.0m west of [286] was ditch [206]. It is uncertain as to whether the excavation and use of ditch [206] was responsible for the later truncation and removal of the western continuation of ring ditch [286] – implying that [206] and [204] are later and not contemporary with [286] and [287]. Ditches [204] and [206] appear to be contemporary features. Both are 'L' shaped in plan and mirror each other's position. [206] had a flat base in section and short, sheer edges. [204] was deeper and had a distinctly rounded, concave profile. There was a complete lack of associated features ie. postholes, pits, deposits or finds making interpretation of these features very difficult. The most likely explanation would appear to be that of ephemeral, potentially Early Medieval/ Medieval enclosures – perhaps livestock corrals or seasonal domestic structures, which may relate to the earliest Medieval origins of Treskerby.

Field 22 produced a series of linear ditched features. Ditch [246] (see fig 17) ran 6.0m to the west of Boundary 126 – on a parallel course. It had a 1.0-1.2m deep rounded 'V' shaped profile and contained two un-numbered fills. The upper fill was a brown loam with peagrit. The lower fill was a silty brown loam. Between the lower fill and the underlying natural was a hard, nodular crust of mineralization caused by long term seepage of mineral-rich water through the feature. The relatively considerable depth of this ditch suggests a function other than the simple demarcation of a field. It may represent an enclosure ditch – perhaps of late prehistoric date. It is possible that ditch [290] to the east in field 21 represents the other side of this enclosure and that [204], [206], [286] and [287] are associated with the enclosure. Located just to the west is the Medieval settlement of Treskerby, which has documented fourteenth century origins (but which may in fact be considerably earlier – see above comments). Evidence for Early Medieval rural settlement in Cornwall has frequently been found to coincide with Late Prehistoric/Romano-British enclosed (or un-enclosed) sites (Preston-Jones and Rose 1986, 146). In addition Padel (1985, 24, 144) lists the prefix *tre* as an Early Medieval settlement place-name element – hence Treskerby.

Removed boundary [200] was located 26.0m to the west of Boundary 126, running across the corridor at an angle – aligned NE-SW. It consisted of a ridge of surviving natural with a single flanking ditch. Located 22.0m to the west of [200] was ditch and stone alignment [203]. Located 24.0m to the west again was removed boundary [210], which consisted of a ridge of natural flanked by two ditches. A 68.0m length of ditch-free corridor then extended westwards (which contained probable trial pit [245] and a barbed wire fence field division between field 22 and 22a) before removed boundary [244] was recorded. This consisted of a ridge and two flanking ditches. It was located 20.0m to the east of extant Boundary 127.

With the exception of ditch [246], all the removed boundaries almost certainly represent boundaries shown on the 1840s Tithe Map surrounding the eastern side of Medieval Treskerby. They had been removed prior to 1880 and typify an Anciently Enclosed Landscape (Countryside Commission 1996). The Tithe Map apportions name the fields surrounding Treskerby (covering both Area 2 and 3) giving a good indication of their use ie. Clothes Field, Wheaten Field, Goats Field, Cabbage Close, Horse Park, Goose Field,

Barn Close, Shaft Close, Field below Shaft Close, and Treskerby Common. These names are typical of field names associated with small rural settlements. They reflect domestic, arable, pastoral and (in this case) mine related functions.

Fields 23, 24 and 25 did not produce any features during the watching brief.

4.2.3 Boundaries (all boundaries referred to are shown on fig. 19, 20, 21 and 20, and listed within appendices - section 7.2).

There were a total of thirteen boundary sections recorded within Area 2. These will be dealt with from east to west. Boundary 116 was not recorded in section. Boundary 117 was located near the brow of a very steep, east facing valley slope. Its up-slope, western side had accumulated a considerable build up of material against it. This consisted of the current topsoil and an under lying, paler subsoil which preserved the hillslope profile. Basal contexts [3] and [4] relate to the earliest phase of the boundary. They are located directly upon natural and probably directly relate to the sloping trackway located on the eastern side of the boundary. The Tithe Map shows a short length of trackway running up-slope from Wheal Clinton (in the south) to a dwelling house and stable (called Tolgullow). Context [2] and [5] belong to a later phase - the profile of which has been preserved beneath the subsequent topsoil build-up.

Boundary 118 was not seen in section. Curvilinear boundary 119 was very small in comparison to many of the boundaries looked at. It was simple in section, consisting of three layers and a remnant stone facing at the base of each side. Both main contexts [3] and [2] relate to up-cast from a flanking ditch - although no ditches were recorded in section. Context [1] represents the latest soil build-up. Due to the insubstantial dimensions of this boundary it now has a barbed wire fence running along its top.

Curvilinear boundary 120 contains two or three phases. The earliest phase is probably Medieval in date and includes contexts [7] and [8], a ditch cut and fill; [4], a section of probable buried soil; [3], ditch up-caste, and [6], the original stone facing. There may in addition have been a second ditch flanking the western side of the boundary. Context [9] overlies this possible western ditch and represents a later addition to the original core. Incorporated within this is a stone face, which may or may not be contemporary with [5] on the eastern side of the boundary. Context [2] and [1] represent the latest phase of the boundary, and like context [9] mark its enlargement to a stock proof boundary.

Curvilinear boundary 121 was large and produced a relatively straightforward section, despite the presence of active burrows within context [3]. It is shown as a major, significant curvilinear boundary on the Tithe Map, and is almost certainly of Medieval origin - perhaps representing the boundary between two farms in the vicinity. Context [3], [2] and [4] all represent a single phase of construction, against which context [5] has built up. No ditches were seen in the section despite the large size of the boundary.

Boundary 122 has three phases within its section, and is likely to have been stockproof since its first phase. The earliest phase contains context [6] the old land surface, [5] the ditch up-cast, [9] the ditch cut, and [10] the upper ditch fill. Context [7] represents a probable contemporary stone facing - positioned on the inner edge of the ditch. Context [4] and [3] represent the next phase of boundary enlargement. The final phase (contexts [2] and [8]) again increased the scale of the boundary. The earliest phase of the boundary is almost certainly Medieval in date, its associated ditch having fallen completely out of date by the time the second phase was constructed. The boundary alignment itself is shown on the Tithe Map in its current form - including the centrally located shaft to the south. (See earlier features and finds section regarding the walling and stile inserted in to the boundary to the immediate north of the corridor).

Slightly curvilinear boundary 123 marks the boundary between Redruth and semi-parochial St Day, and formed the boundary between Redruth and Gwennap. It had a large 4.0m width, plus three separate phases of construction. The first phase consists of ditch cut [8], ditch fill [7], buried soil/ditch up-cast [6] and stone facing [9]. This element is likely to be Medieval – or perhaps earlier based on the location of a probable Round to the immediate north (which boundary 123 respects). This first boundary consisted of a low, single stone-faced bank with a single ditch. The Tithe Map shows a track running up its western side. (It is not known how early this now lost track was, but since trackways and parish boundaries often coincide it is likely that it is at least Medieval in date). The second phase of the boundary consists of contexts [5], [4] and [3]. This phase of the boundary has two stone faces. Context [2] was added at some point after this date, and then the final phase – consisting of [10] and [1] were added. Parish boundaries are very often significantly early and substantial in size, frequently marking either a natural barrier/pronounced break in slope or river etc, or an earlier pre-existent boundary often defined by an associated routeway. This boundary, as already mentioned, is no exception.

Boundary 124 has a very straight alignment and shows signs of minimal shift to the east. The first phase is represented by ditch [6], which is partially overlain by today's boundary. Ditch [5] is probably later and directly related to the extant boundary. Context [3] is composed of probable ditch [5] up-cast, overlain by [2] and enclosed within double stone facing [4], which is positioned on top of ditch [6]. Context [1] represents the latest addition of material to the top of the boundary probably following subsidence of the upper eastern side of the boundary. Boundary 124 possibly represents a boundary that has been re-built or perhaps straightened at some point.

Boundary 125 is shown on the 1840 Tithe Map as an irregular boundary, running NE-SW where breached by the pipeline corridor. Ditch cut [6] and buried soil [4] relate to the original possibly Medieval boundary, since which the ground surface on either side has been reduced, leaving [10] as a ridge of natural within the topsoil stripped corridor. Contexts [3], [5] and [8] all relate to the second phase of the boundary, when it appears to have been remodelled (probably making it stock proof). Contexts [2], [9] and [1] represent the latest phase of the boundary and were probably added after the silting up of ditch [6] with fill [7].

Curvilinear boundary 126 is shown on the Tithe Map. The section revealed two phases of construction, focused on an alignment of out cropping bedrock (as was very clearly seen in the pipe trench section). Possible buried soil horizon [5] and ditch cut [8] relate to the earliest phase. Following the infilling of the ditch by [9], a new larger boundary was constructed. Context [3] and stone face [4] overlie ditch fill [9], while contexts [2] and [1] make up the bulk of this potentially early boundary alignment.

Roadside boundaries 127 and 128 flank a minor Treskerby through road. Boundary 127 has been rebuilt. The pre-cursor is represented by probable buried soil context [4] and ditch cut [6]. The ditch was then filled with [7], prior to the construction of the current boundary, which consisted of contexts (from top to bottom) [1], [2], [3] and stone facing [5]. Boundary 128 was considerably larger and contains an almost complete boundary encased within later material, which has butted up against it, primarily through collapse from above. Contexts [12], [11], [10], [5], [4], [3] [2] and [6] all relate to this 'fossilised' original boundary. Context [7] was then produced on the western side of the boundary (probably via slumping down from above) followed by [1]. Context [8] was similarly formed via slumping on the eastern side of the boundary. It was then faced with stones [9] – probably as a means of stabilising material and preventing slippage down on to the road.

Boundary 129 produced a relatively simple section with five separate contexts, including a piecemeal stone facing and a probably contemporary ditch. This boundary was seen to its base. The section revealed possible disturbed buried soil [4], ditch up-cast [3], rooty loam [2] and topsoil [1]. Stone facing [5] has survived best on the eastern side and the ditch on the western side has completely silted up. This boundary is not shown on the Tithe Map, but despite this natural to either side has been notably reduced in height. It may be that a boundary has existed on this alignment for a considerable length of time – based on its slightly curvilinear appearance, but that it had been removed or was in a state of disuse or decay when the Tithe Map was made.

Roadside boundary 130 flanks the eastern side of the main Treskerby through road. Its section shows it to have doubled in width and shifted slightly westwards towards the road. The ridge of natural and western ditch [6] represent the earliest phase of the boundary. The original extant boundary is no longer visible - probably having slumped to form context [4] and [8]. Context [3] represents ditch [7] up-cast. Stone facing [5] represents the stabilisation of contexts [4], [3] and [2] against the edge of the road, and overlies the earliest ditch. Context [1] is the latest phase of the boundary – overlying the stone facing and merging with ditch fill [9]. The boundary 130 alignment is shown on the Tithe Map as marking a well-established route associated with Treskerby. Treskerby has late fourteenth century origins and as such it is likely that the earliest phase of this boundary is Medieval.

4.2.4 Conclusions

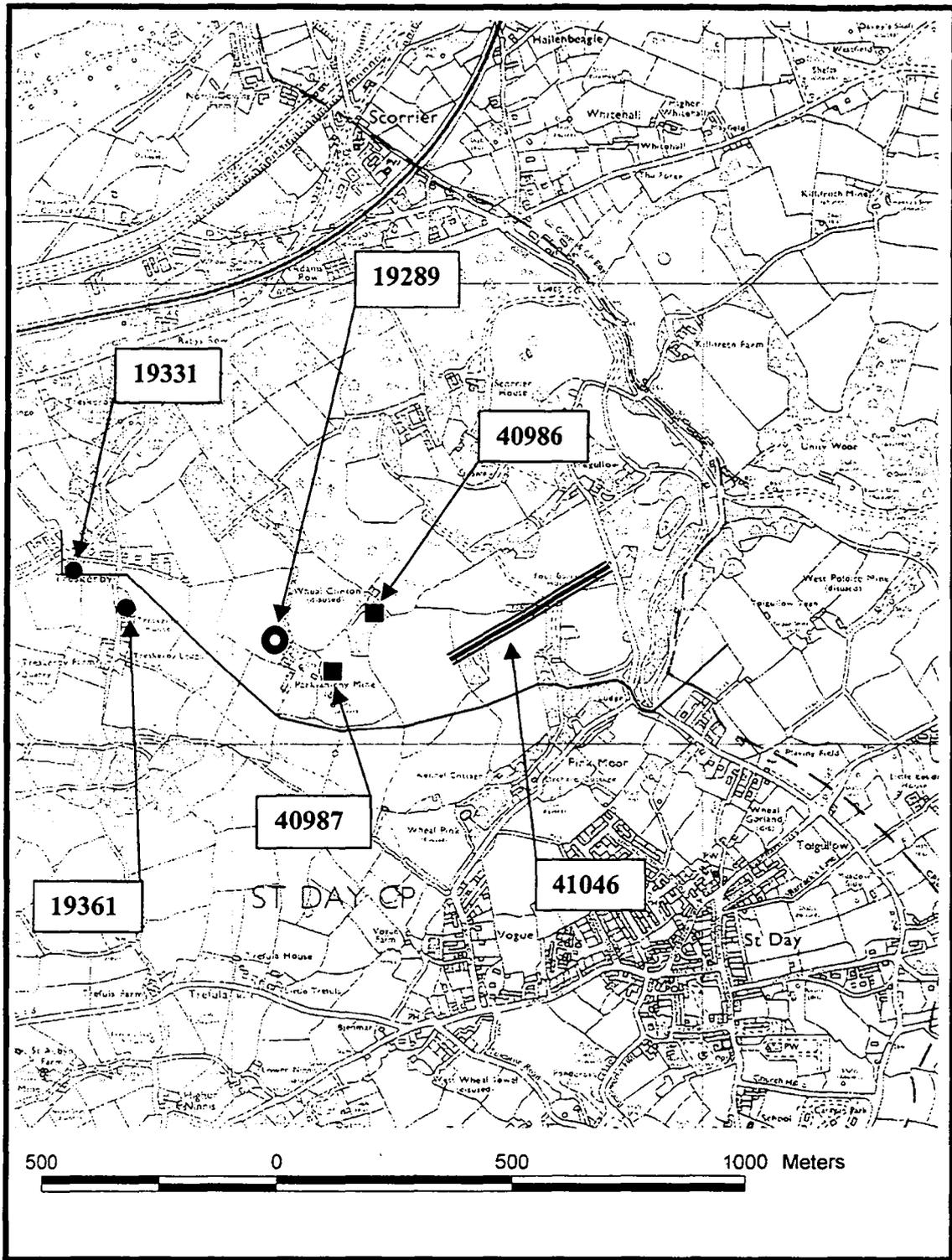
The watching brief for Area 2 produced the densest concentration of features found along the length of the pipeline. Some thirty ditches and removed boundaries were located, many of which predate the Tithe Map and which are likely to be early Post-Medieval or Medieval in origin. Others could be later prehistoric in date – potentially associated with such sites as the probable ‘round’ referred to in the Tithe Map apportionments (located to the north of field 19) or Thomas’s ‘Ancient Fort’. An additional probable later prehistoric or early medieval complex of curvilinear features and a ring ditch in fields 21 and 22, plus ditches associated with another closely located possible round also fall into this category of fairly dense activity at this early period. This type of dense spread of features typifies what might be expected within an area of Anciently Enclosed Land (Countryside Commission 1996), where remnants of the Medieval field systems survive as great curvilinear boundaries (ie boundary 121 and parish boundary 123), while smaller boundary divisions have been removed. In some cases post-Tithe Map boundaries have been inserted into the landscape. Typically these are less complicated in section and show little sign of shift or lynchetting.

Features associated with the now closed mines of the area are more concentrated in plan and primarily associated with Park-An-Chy. With the exception of the occasional shaft surrounded by its retaining wall (and frequently tree growth), it would be hard to recognise the effect that mining once had in this general area – particularly in terms of sub-surface tunnels and adits etc. Boundary alignments have been barely affected and no sign of surface landscaping or topsoil reintroduction was found.

The fact that so many ‘surface’ archaeological features (in the form of removed boundaries, ditches, other cut features and finds) can survive above natural (sealed by topsoil), while later, subsurface features exist just below bedrock level illustrates well the potential for archaeological watching briefs in such areas. A similar surprisingly high survival rate of potentially early agricultural/boundary related features with still apparent surface mining remains was found during this project at the western end of the pipeline – nestled between the old and the new A30.

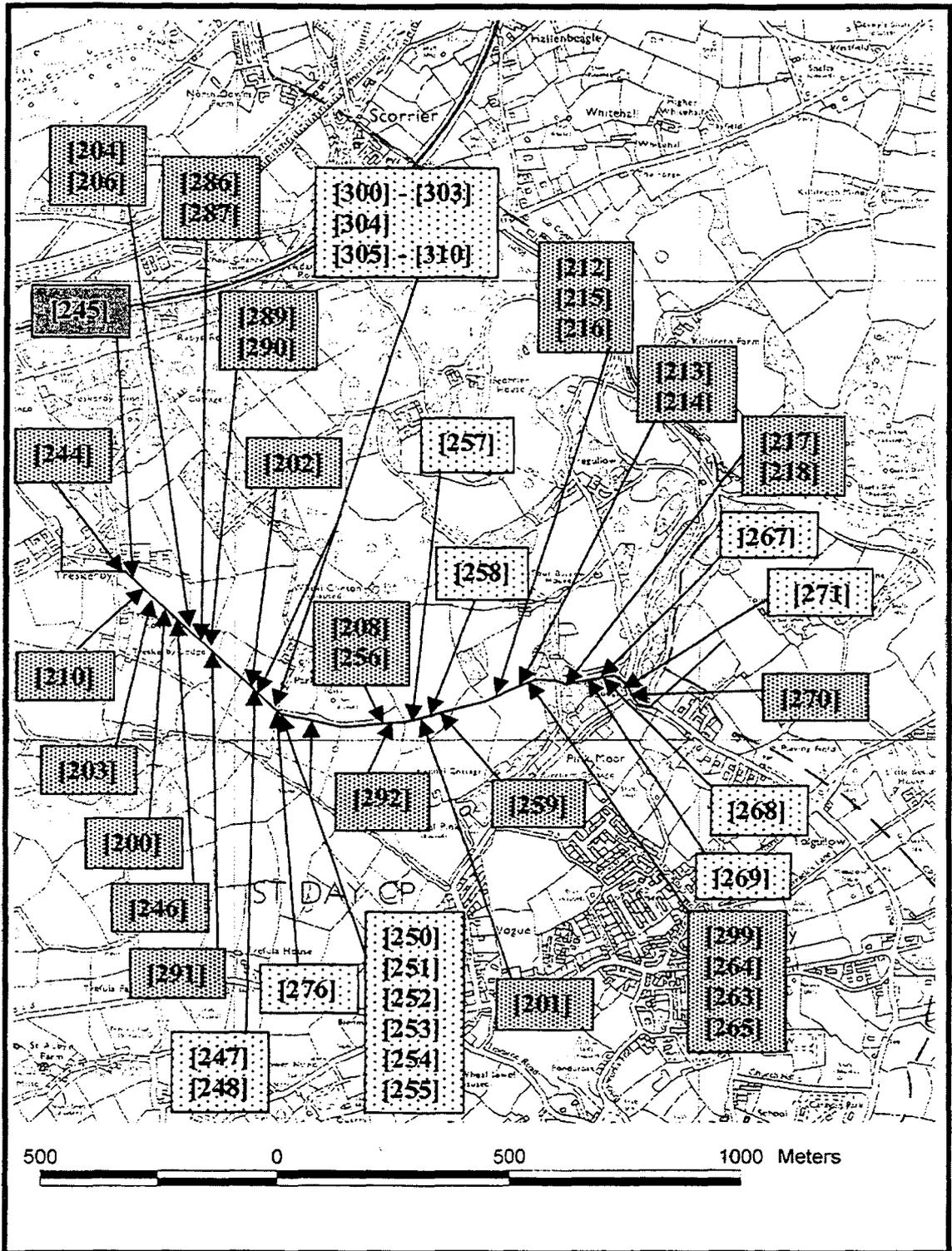
Area 2 produced only a few prehistoric flints (see 5.2) providing evidence for only limited Neolithic and Bronze Age activity here. On the other hand, a considerable scatter of

medieval pottery in fields 14 to 19 presumably reflects medieval cultivation in the area, although it is not clear with which settlement or settlements this was associated. The Tithe Map apportionments refer to the land as belonging to Treskerby in the west and Tolgullow in the east.



- Assessment mine sites
- Assessment settlement site & dovecote
- ◉ 'Round Field' (as called on the Tithe Map)
- ▬▬ Fourbarrow ropewalk (as shown on the 1819 OS map)

Fig.12. SMR sites located during the assessment within Area 2.



-  Agricultural features – ditches and removed boundaries.
-  Post-Medieval mining related features.
-  Miscellaneous modern features.

Fig. 13. Feature numbers and locations within Area 2.

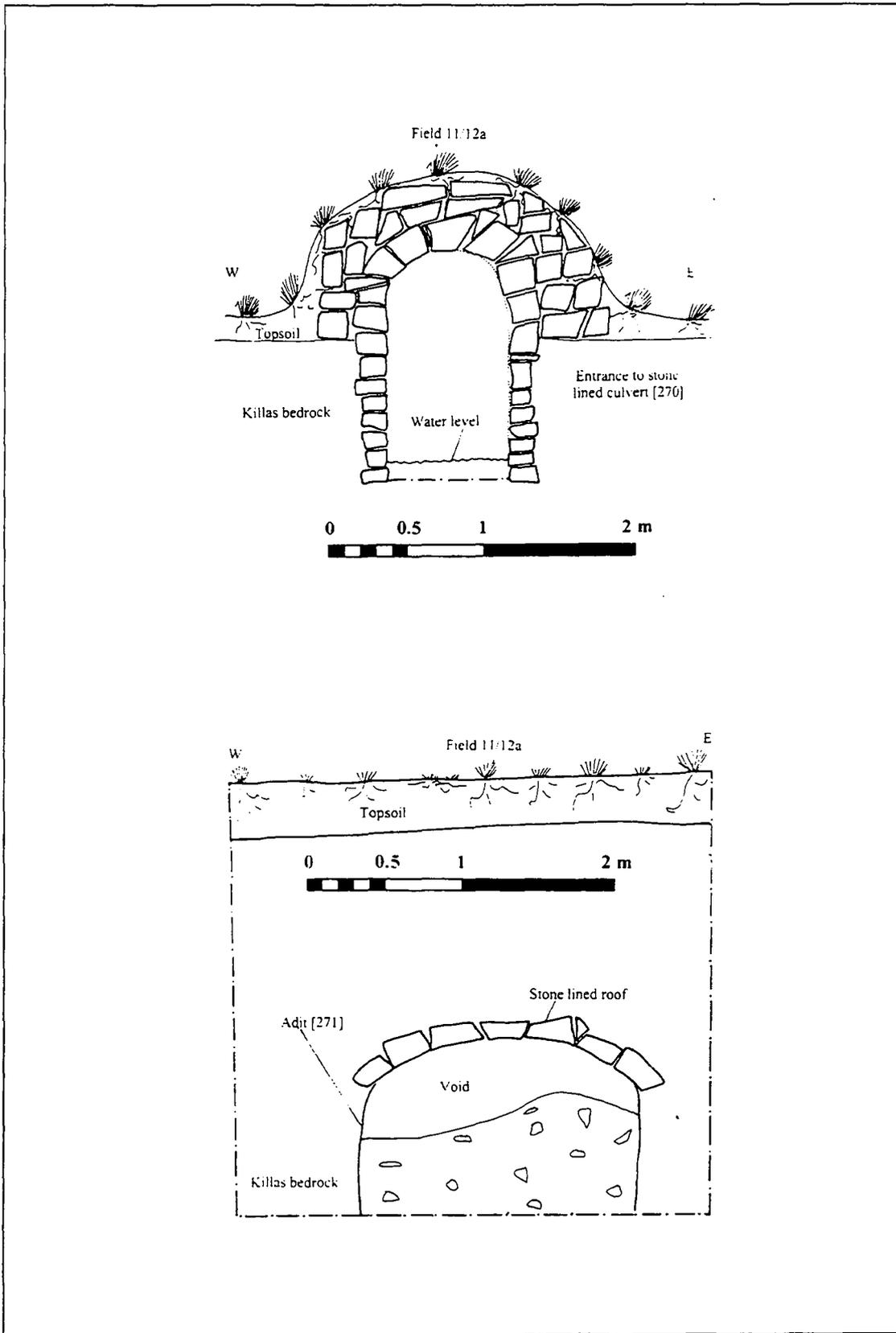


Fig.14. Culvert entrance [270] and section through adit [271].

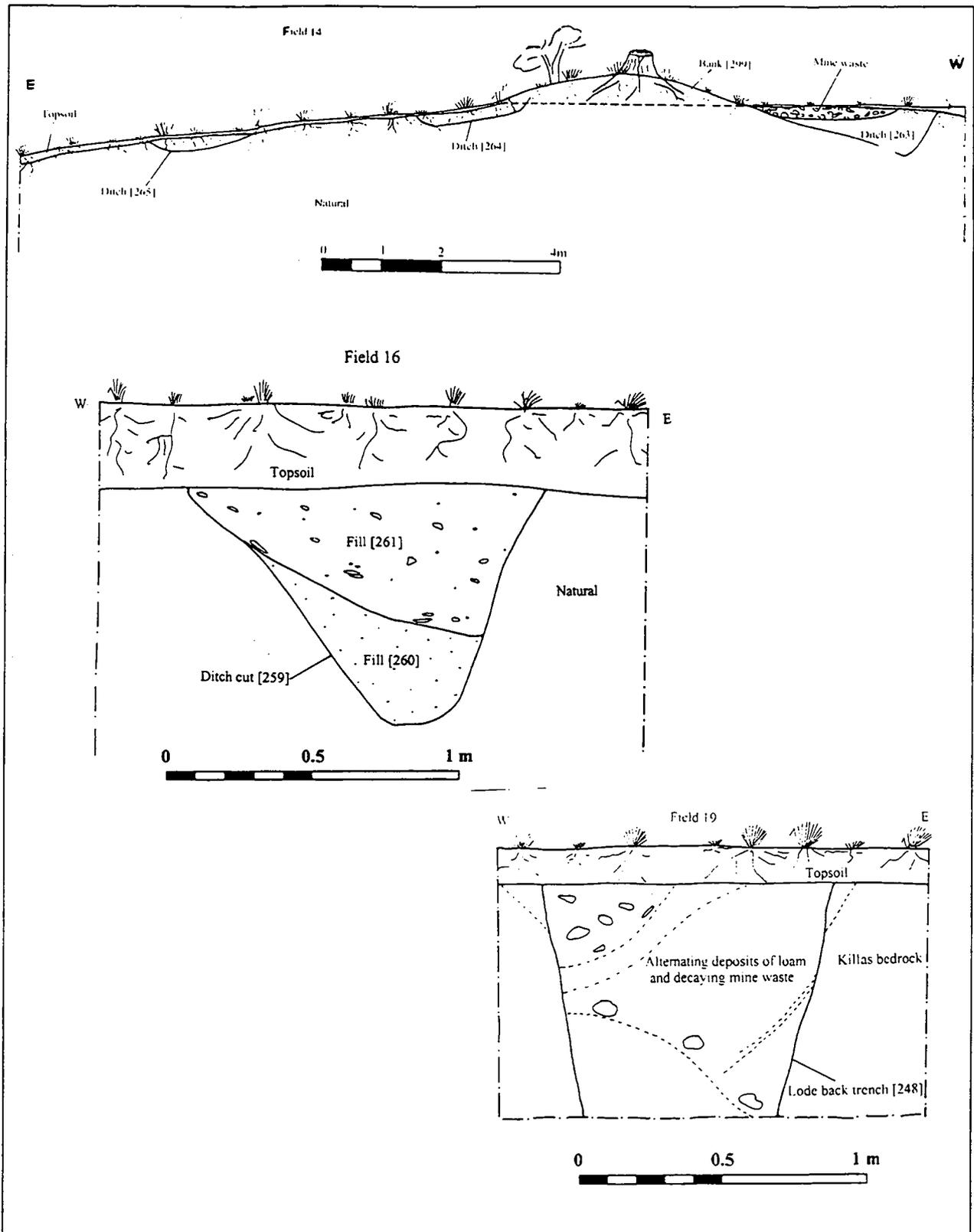


Fig. 15. Sections through ditch [259], bank [299] and associated ditches, and lode back trench [248].

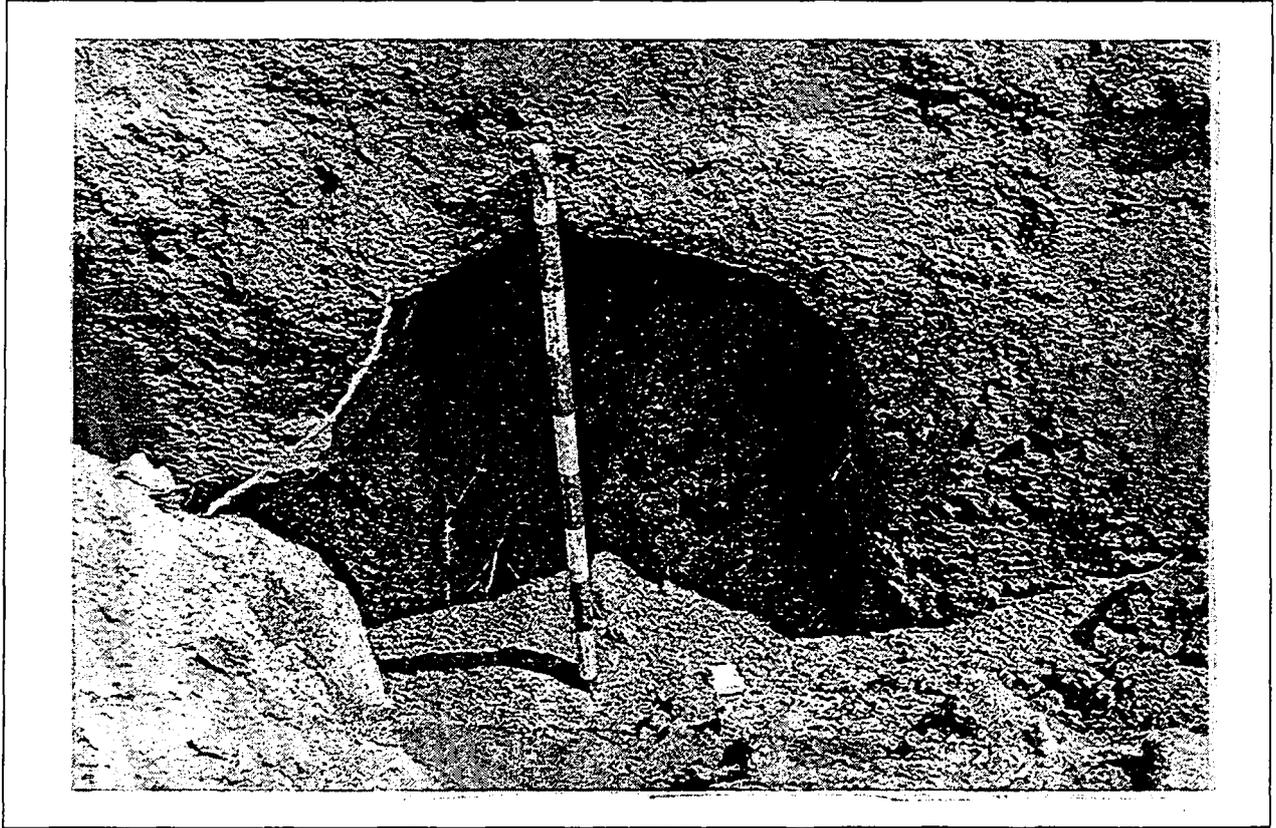


Fig. 16. Adit [276] in field 19 after the partial backfilling of the pipe trench.

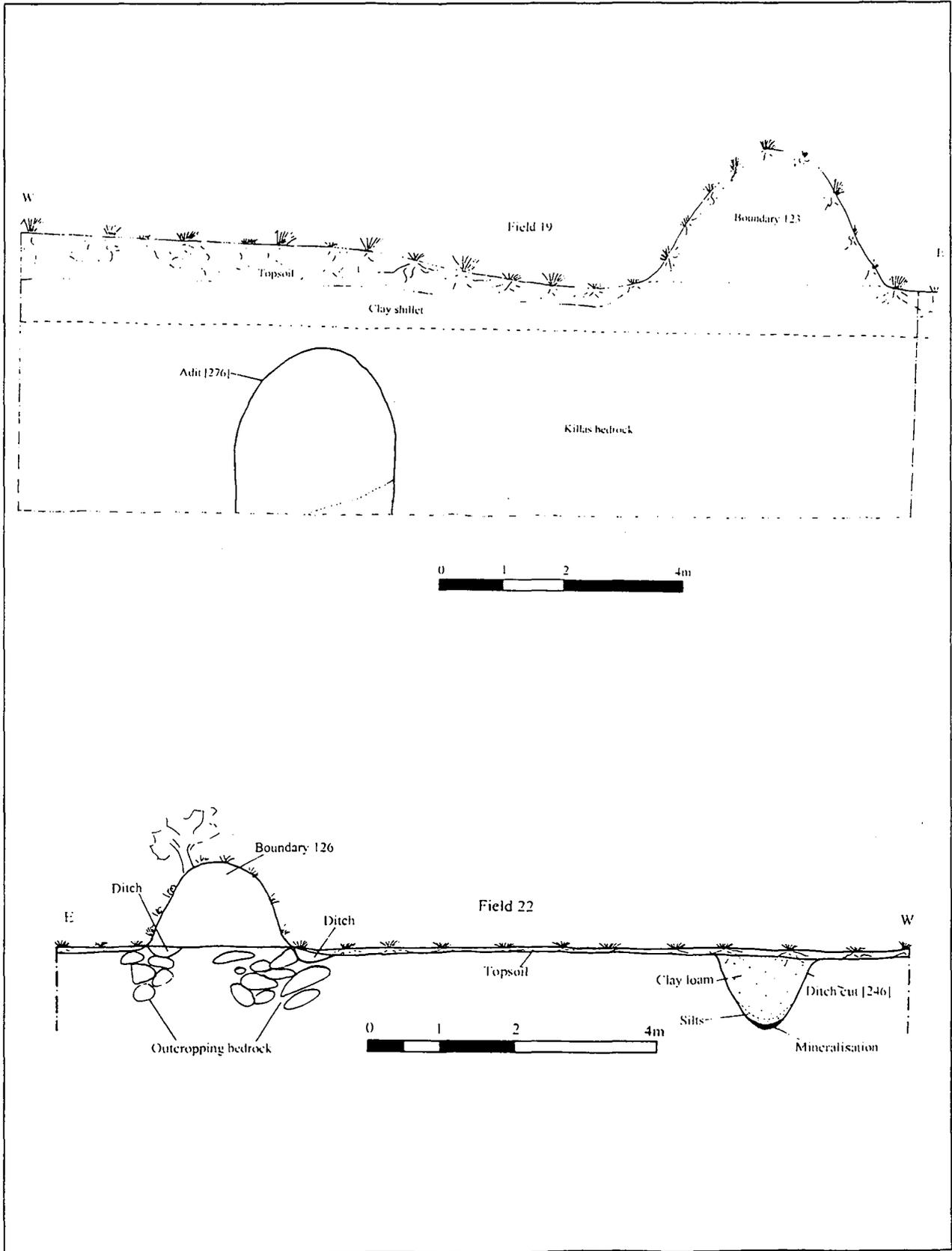


Fig. 17. Sections through adit [276] and ditch [246].

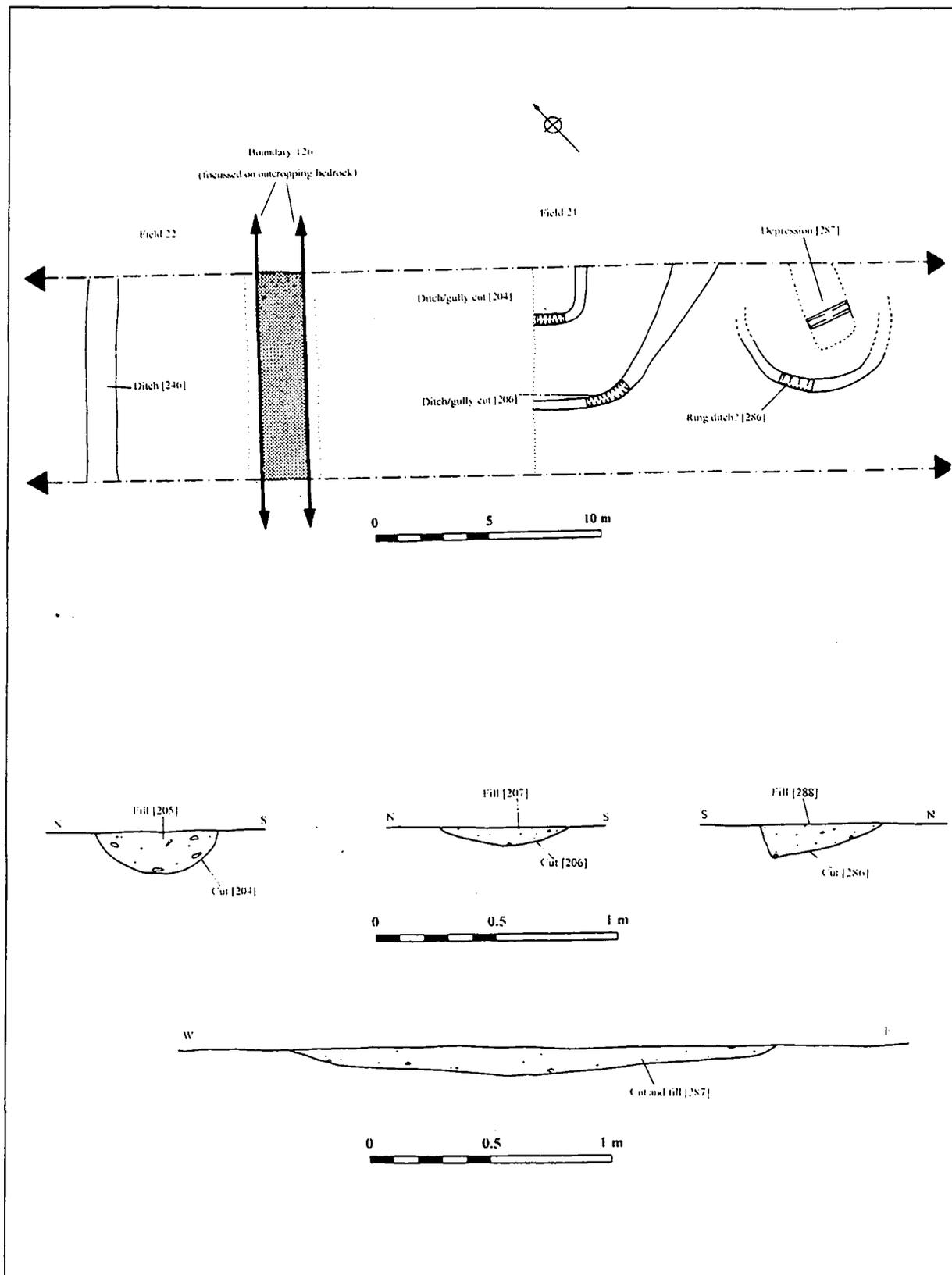
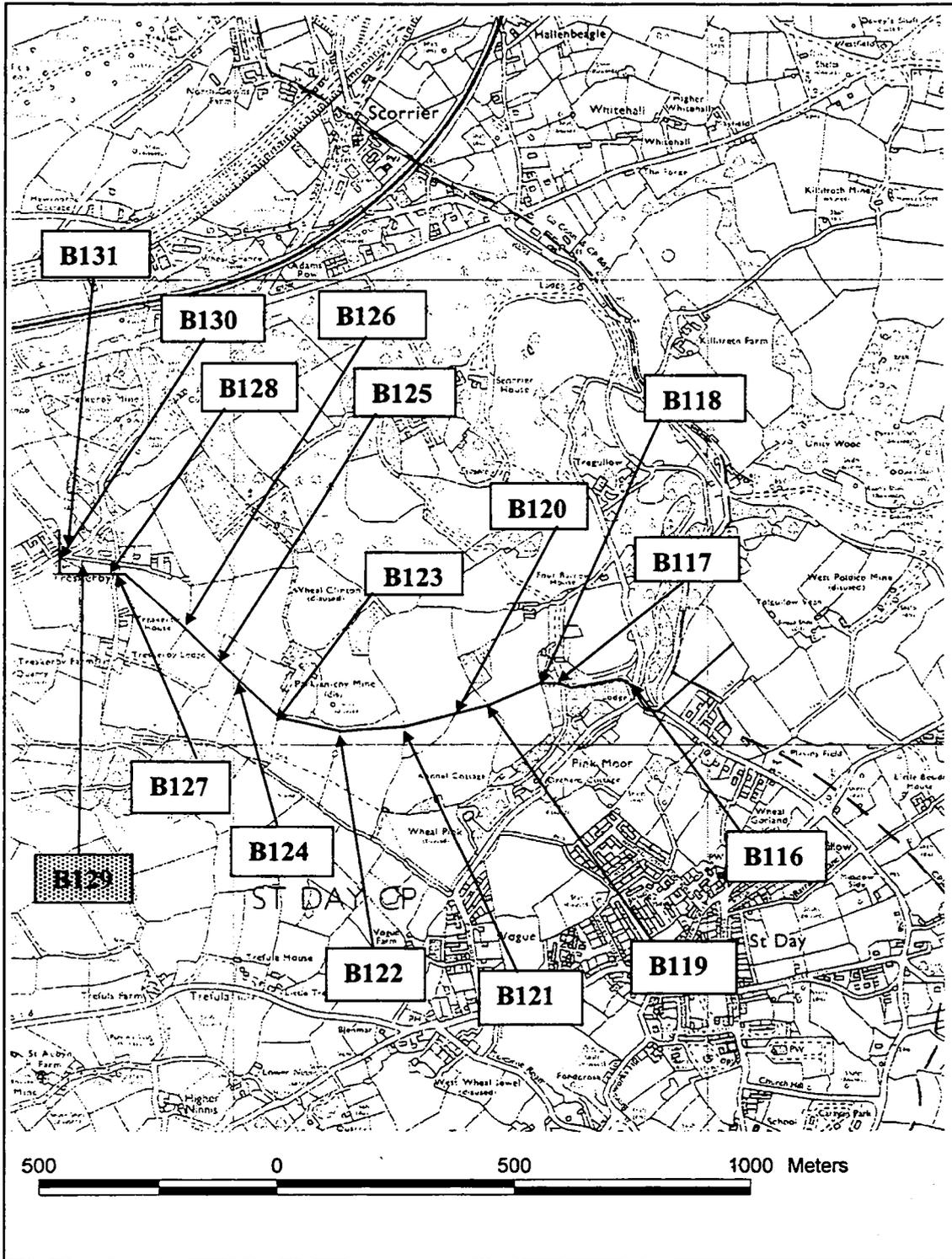


Fig. 18. Plan and associated sections showing curvilinear features [204], [206] and [286].



B123

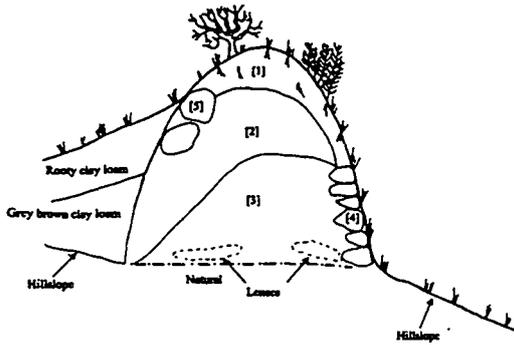
= Boundary alignments shown on the 1840s Tithe Map.

B123

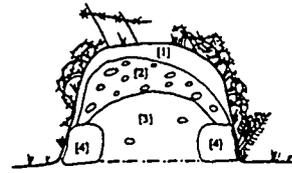
= Boundary alignments post-dating the 1840s Tithe Map.

Fig.19. Boundary locations and numbers within Area 2.

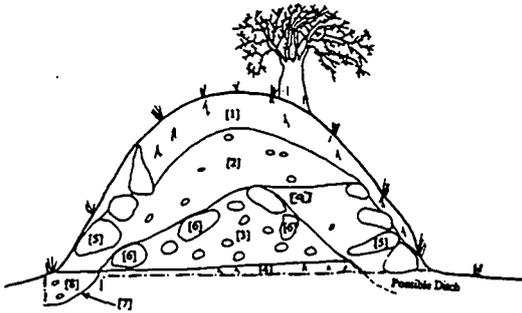
Boundary 117
South Facing Section



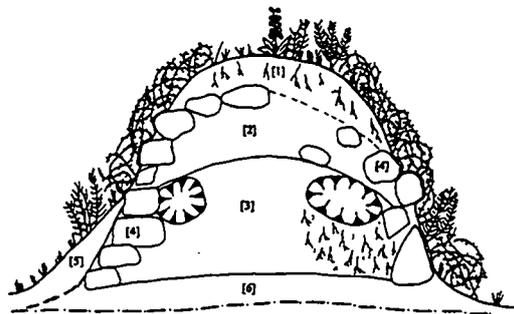
Boundary 119
South Facing Section



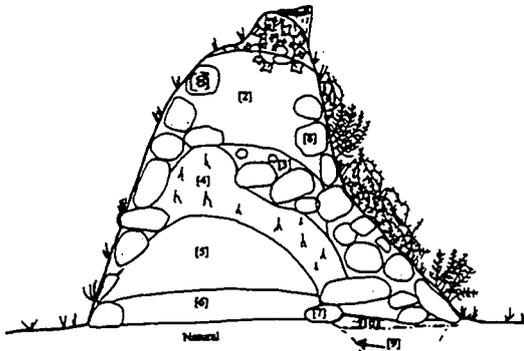
Boundary 120
South Facing Section



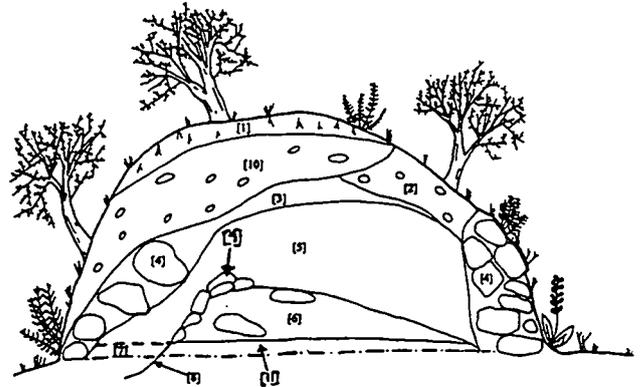
Boundary 121
North Facing Section



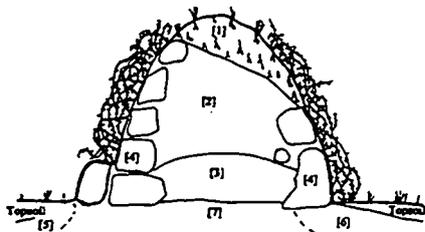
Boundary 122
South Facing Section



Boundary 123
South Facing Section



Boundary 124
South Facing Section



Boundary 125

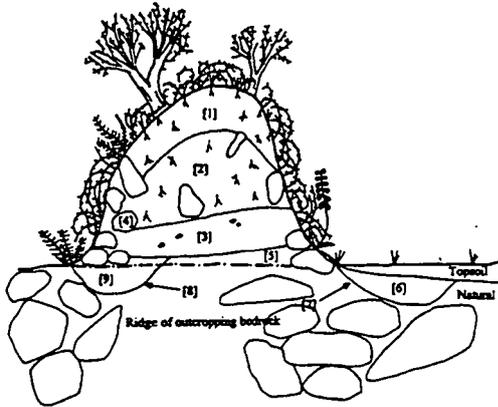


Fig.20. Recorded boundary sections within Area 2. (Eastern end).

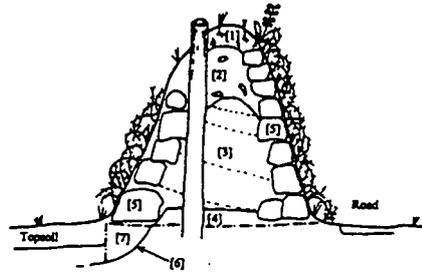


Fig.21. Boundary section 123 (after the partial collapse of context [4]).

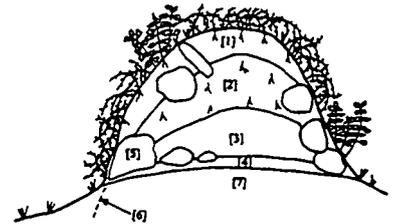
Boundary 126
North Facing Section



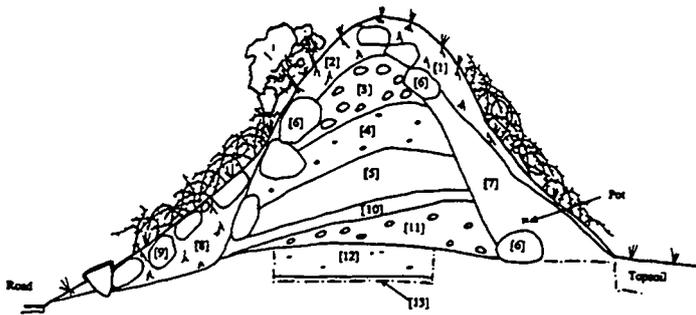
Boundary 127
North Facing Section



Boundary 129
South Facing Section



Boundary 128
North Facing Section



Boundary 130
South Facing Section

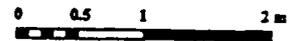
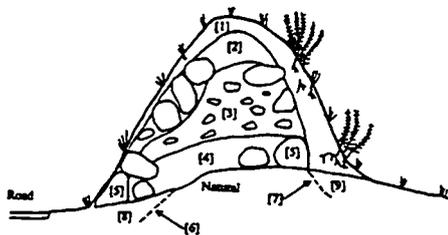


Fig. 22. Recorded boundary sections within Area 2. (Western end).

4.3 Area 3 - Treskerby to Railway line

Area 3 - Treskerby to the Railway line is the central western area, located between boundaries 131 and 148 (SW 7164 4343 to SW 7100 4373). From east to west the area covers fields 26 to 38, and, also from east to west, landscape classification zones - AEL, REL and PIL. REL represents by far the majority of Area 3 on the 1880 OS map.

4.3.1 Assessment (all sites referred to are shown on fig. 23 and listed within the appendices - section 7.3).

The assessment recognised four SMR sites within the assessment corridor. Possible Roman Road - PRN 19288 crossed the corridor obliquely. However the archaeological assessment suggests that it may in fact have been located further to the south based on the finding of a Roman milestone in the 1940s.

The remaining three sites all relate to mining activity. PRN 41030 (Wheal Fortune Mine), PRN 40978 (Wheal Boys Mine) and PRN 40977 (Treskerby Mine). Wheal Boys and Wheal Fortune extended in to the area of the pipeline corridor (particularly their sub-surface features - as found during the watching brief). Treskerby Mine may well have had workings that extended south into the line of the pipe corridor, but it is difficult to assign specific features with specific named mines when there are a number in the same vicinity. Extant mine related structures associated with Treskerby Mine were noted within the assessment as being of Listed Building Status (these were not affected by the route of the pipeline).

4.3.2 Fieldwork - features and finds (all features referred to are shown on fig. 24 and listed within the appendices - section 7.1).

Area 3 produced nine ditched or boundary related features, five mining related features and two modern features during the watching brief. Finds assemblages were collected from all fields, with the exception of fields 31, 36 and 38. The features are dealt with in this section from field 26 to 38, from east to west.

Close to the eastern side of field 26 (near Boundary 131) ditched feature [227] was located. It was filled with a single dark loam and relates to one of the probable Medieval field boundaries shown on the Tithe Map surrounding Treskerby. The exact boundary could not be identified on the Tithe Map, which might suggest that it had been removed prior to 1840. Positioned between Boundary 131 and Boundary 132 (at the western edge of field 26) were a series of amorphous shaped depressions [319] filled with a near black silty, slightly humic loam. The origin of these features is uncertain. Some of them had the distinct appearance of tree boles (the site of former trees). However, Treskerby Mine was operating to the immediate north of the corridor prior to 1840 and as such it is possible that some of them relate to mining disturbance. Area 2 produced similar near black loamy filled features in field 19, although these appeared more linear in plan, associated with Park An Chy Mine. Alternatively they may relate to Medieval/Post-Medieval domestic or agricultural activity (a Medieval sherd as well as later material was retrieved from this field as part of the artefact assemblage).

Running WNW-ESE across field 26 was single removed boundary [229] (see fig 25) consisting of a ridge of natural and two flanking ditches. This feature was aligned in such away that a considerable length of it was seen within the corridor, crossing fields 26, 27 and 28. It is not shown on the Tithe Map and appeared to have been overlain by removed boundary [228] in field 27 and boundary 132 and 133 (both of which feature on the Tithe Map). Boundary [229] may represent an early re-arrangement of the field system in this area since it is itself overlain by subsequently constructed boundaries (one of which has since been removed). The character of [229], with its flanking ditches, suggests that it is of

medieval origin, but boundaries 132 and 133 which overlie it both appear complex and are likely to themselves be of medieval origin, suggesting that the field system was re-organised during the medieval period. (A single sherd of Medieval pottery was found within this field). Feature [228] (see fig 25) in field 27 was a removed boundary, which consisted of a central ridge of natural and two flanking ditches. It probably represents the boundary shown on the tithe Map as separating 'Town Field' and 'Field by Burrow'.

Fields 29 and 30 did not produce any features during the watching brief. Field 30 produced two removed boundaries. Boundary [237] consisted of a shallow ditch and a stony ridge of natural representing the original hedge position. Ditches [238] and [239] represent the two flanking ditches of another removed boundary. Ditch [238] appeared to represent the latest (perhaps re-cut) ditch, despite being the shallowest, while ditch [239] appeared to be earlier with a pale silty fill. Combined these ditches appear to represent a field boundary, which underwent either periodic maintenance or perhaps reconstruction.

Fields 31 and 32 did not produce any features. However a small scatter of flints was collected from across fields 30-33 suggesting short-term prehistoric activity within the vicinity. Located between fields 32 and 33 a double ditched boundary was recorded. This represents removed Boundary 140 (which has been removed recently). In field 33 modern, machine cut trench [312] was located running N-S across the corridor. It may represent either a field drain or a service trench.

Field 34 did not produce any features. Field 35 produced four mining related features – [273], [315], [314] and [316]. Feature [273] consisted of a build up of landscaped mine waste located to the immediate east of Boundary 145. It was in excess of 1.0m high and extended for 20.0m along the corridor. To the west of [273], three individually numbered fingers of mine waste or linear dumps were recorded extending into the topsoil stripped corridor. Dump [315] came in from the south and terminated in the centre of the corridor. Dump [314] came in from the north and extended almost the whole way across the corridor. Feature [316] extended into the corridor from the extreme SW corner of the field, hugging against the side of Boundary 144. These features are associated with operations at Wheal Boys Mine located to the north, or Wheal Fortune Mine located to the south. The Tithe Map does not show any workings in the areas adjacent to this field, but by 1880 Wheal Fortune shaft (in field 36) is shown to the immediate south. The Geological and Ground Risk Assessment (RSK 1999) refers to a further shaft in field 37 – Smith Shaft, along with a number of surface lode outcrops and old workings running through the majority of the fields which make up Area 3.

Fields 36 and 37 were recorded during the watching brief as containing a large mass of landscaped mine waste [272], primarily waste associated with Wheal Fortune Shaft and Smith Shaft (as referred to above). Boundary 145 defines the eastern limit of [272] – from which it extended N, S and W. Located above this 0.6m deep mine waste deposit were two layers of redeposited topsoil. The lower topsoil layer did not contain any finds, but an assemblage of material was collected from the upper layer – necessitating allocation of context number [275]. The original topsoil in these fields had been removed (probably during surface mining operations associated with Cardrew and Prussia Mine) prior to the creation of dump [272]. Within the field 37 area, and covered by mine waste dump [272] an earlier, removed boundary alignment was recorded. It had a N-S alignment and terminated in the centre of the corridor – the original location of a gate or field entrance.

4.3.3 Boundaries (all boundaries referred to are shown on fig. 26 and 27 and listed within the appendices – section 6.2).

There were a total of nine boundary sections recorded within Area 3. (A further five had been identified from the maps prior to field work, but these were no-longer extant). Four

were not seen in section, including the two tunnelled boundaries flanking the main railway line. The boundary sections are described below from east to west.

Boundary 131 is located on the opposing side of the main Treskerby through road to boundary 130 (dealt with in Area 2). It had a simple profile consisting of a ditch on the western side, from which ditch up-cast [3] originated, which was then overlain by context [2], stone face [4] and rooty topsoil matrix [1] (which included slumped stones etc overlying the silted up ditch). This boundary is shown flanking the western side of the road on the Tithe Map.

Boundary 132 was very much more substantial than 131. It consisted of at least three separate phases. The earliest phase consisted of ditch [9] and ridge of natural [12], plus deposits [6] and probably [5]. Butted up against and over the western side of context [5] was redeposited natural context [11], which appeared to represent track maintenance or clearance activity. Context [11] was positioned over ditch fill [9], (resulting in the deliberate narrowing of the western side of the track) and was subsequently partially overlain by [4]. Context [4] (like [11]) probably represents track clearance or maintenance. It contained pebbles, which almost certainly originated from the trackways surfacing. Dumped above this was a core of redeposited natural - [3], again interpreted as ditch or track maintenance up-cast. The whole boundary was then topped by deposit [2] and partially surviving stone face [8]. This would appear to mark the culmination of a series of deposits broadly representing a prolonged phase 2. It is not certain whether stone facing [7] on the western side against the track belongs to this phase or is later and associated with its latest phase. At a later date the boundary was then further enlarged by the addition of context [1] and stone facing [7], which partially exists on either side of the current boundary (see previous comments). Ditch [10] may relate to either an early or a later phase of the boundary - perhaps it represents the source of redeposited natural [3].

Boundary 132, the trackway and boundary 133 are all clearly shown on the Tithe Map, close to an old shaft. It is likely that some of the rebuilds found within boundary 132 are associated with activity focussed around that shaft (although no actual mining waste was used). Boundary 133 consists of three identifiable phases. The earliest phase consists of ditch cuts [10] and [11], context [8], ditch up-cast [7] and stone facing [6]. The ditches gradually silted up through time (context [9]), prior to the later deposition of bulk context [4], on to which was added two distinct lenses of redeposited ditch or track clearance material [2] and [3]. Contexts [2] and [3] probably represent a similar phase to that of [11] and [3] in boundary 132. At about the same time stone facing [5] was added, forming a stock proof boundary. This was subsequently overlain by [1], which now supports a mass of vegetation.

Boundary 134 runs along the same alignment as a boundary shown on the Tithe Map, but has almost certainly been totally reconstructed. It had an absolutely typical 'new boundary' profile and section. It was narrow and tall with an intact stone facing [2], a single fill [3] consisting of brought in material (as opposed to adjacent excavated ditch material), and did not have an associated ditch or ditches. The reasoning behind its complete removal and then reconstruction is not immediately apparent, but it is likely to have been triggered by mining in the vicinity. The Tithe Map does show a shaft located to the north, associated with Treskerby Mine.

Boundary 135 was not seen in section. Boundary 136 contained two phases. The first phase includes ditches [5] and [6], ridge of natural [7] and overlying ditch up-cast [3]. Following the silting up of the two flanking ditches, context [2], remnant stone facing [4] and finally topsoil [1] was added, representing the latest phase. This boundary had seen some recent burrowing activity at the junction between phases one and two.

Boundary 137 may have been removed prior to 1907, however the watching brief did pick up its associated ditches [238] and [239]. Boundary 138, 139 and 140 (like 137) were no longer extant.

Boundary 141 is a fairly substantial boundary and consisted of three phases. The first phase included context [7], [6], [5], [8] (and possibly ditch [9]). Redeposited natural context [6] overlies disturbed probable buried soil [7]. Overlying [6] was loamy context [5] and stone facing [8]. These could well represent a non-stock proof Medieval element to the boundary (perhaps a strip division). Subsequently probable ditch up-cast [3] was added to the eastern side of the boundary, which significantly increased its size and may well be the result of the excavation / re-excavation of ditch [9] (and may be an unseen eastern flanking ditch). Ditch [9] then filled with context [10] – probably the result of slumping and weathering, before the introduction of bulk context [2] and remnant stone facing [4], which represent the final phase.

Boundary 142 was not seen in section. It flanks the eastern side of a lane, which is shown on the Tithe Map, connecting Shallow Adit to Radnor. Boundary 143 has recently been rebuilt, and runs along the western side of this lane. As with boundary 134 it had a simple section, consisting of a series of ditch deposits which alternate between near black organic material and redeposited natural, topped by a near intact stone facing and a thick uppermost deposit of rooty topsoil. Unlike boundary 134, this boundary did appear to contain immediate, locally derived ditch deposits etc (visible as the banded redeposited natural and dark loamy contexts) rather than the uniformly mixed core or bulk of material probably transported in for boundary 134.

Boundary 144 was no longer extant. Boundary 145 is shown on the Tithe Map as a long and broadly curvilinear feature running across the landscape in a NNE-SSW direction. It almost certainly follows a Medieval alignment, and in section shows at least two phases. The earliest phase is represented by ditch cuts [6] and [7], a ridge of natural, mixed probable buried soil context [4], and [3] - the ditch up-cast. This original boundary potentially relates to the Medieval period. Following the filling of ditches [6] and [7] with contexts [8] and [9], the second phase of the boundary took place. This consisted of context [2], stone facing [5] and perhaps context [1]. This second phase converted the boundary into a much larger stock proof barrier.

Curvilinear boundary 146 was not unfortunately seen to its base. It is almost certainly a fossilised Medieval alignment. What was recorded may only represent the latest phase of its total construction. Alternatively it may represent a total rebuild following on from mining related removal and subsequent reconstruction. Five uncomplicated contexts were revealed, of which context [2] represents ditch up-cast and context [5] the remnants of probable double-sided stone facing.

Boundary 147 and 148 define the eastern and western sides of the main railway line and were not seen in section since this section of the gas pipe was laid via tunnelling.

4.3.4 Conclusions

The watching brief for area 3 has produced a number of features, including a series of ditches and removed field boundaries, post-medieval mining features and two modern features.

A number of the features located between extant boundaries 136 and 141 will be directly associated with boundaries known to have been removed before 1907 – some of which could have Medieval origins. Medieval (potentially Early Medieval) ditch [229] was located running through fields 26, 27 and 28. It was removed prior to the Tithe Map and has been overlain by a series of later boundaries, one of which has since been removed. It relates to

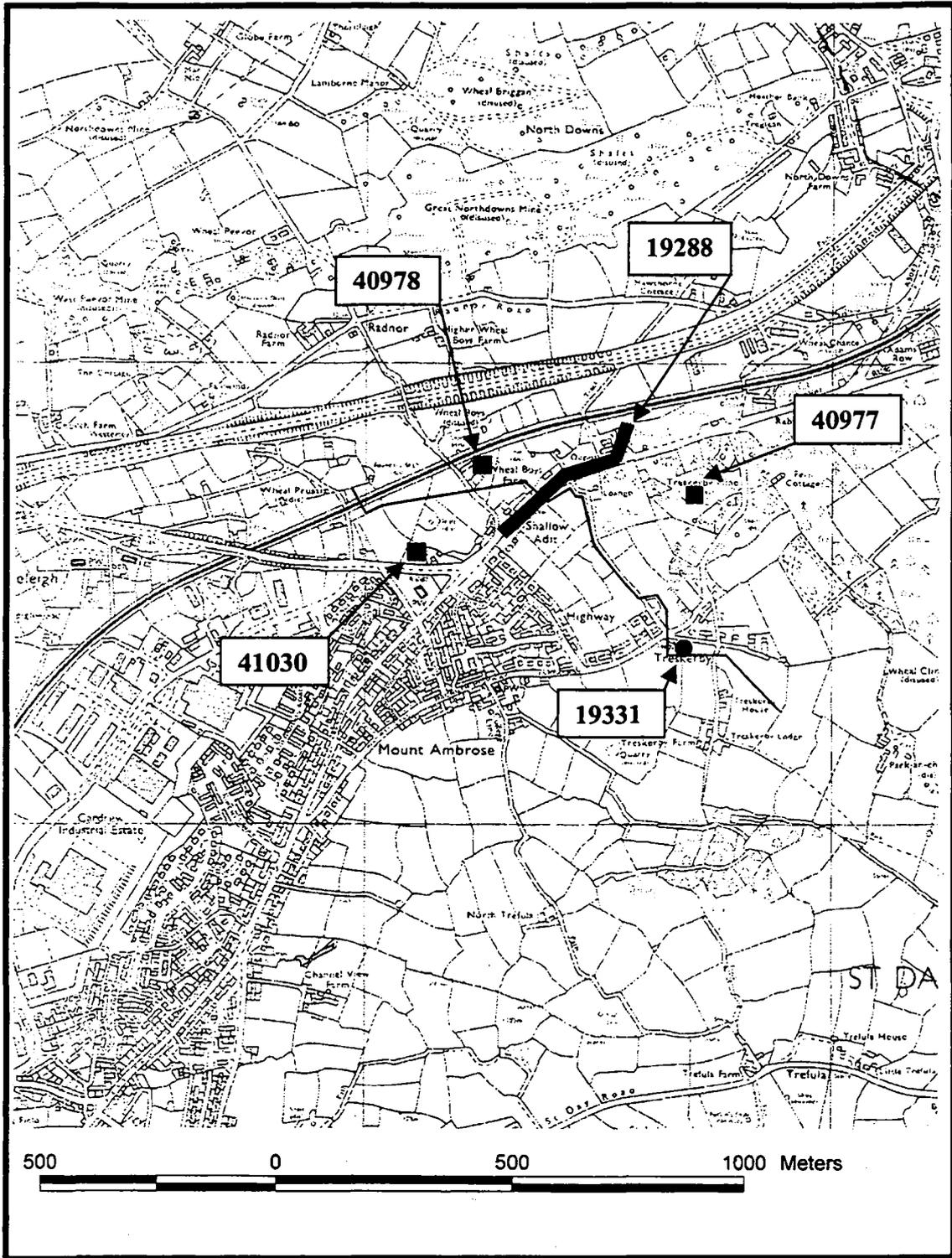
an early field system which has been re-arranged or overlain (and since seen modification). It would as a result be reasonable for [229] at least to have Medieval origins.

Some limited Neolithic or Bronze Age activity in the area is suggested by a small number of flints, including a group of seven from field 32/33. Only one sherd of late medieval pottery was found, in field 26, perhaps suggesting that the field patterns here are of post-medieval rather than medieval origin; ie it seems to contradict the evidence of the field boundaries outlined above.

Concentrations of mining features to the immediate south of the railway line are associated with operations at Wheal Boys Mine (PRN 40978) and perhaps Wheal Fortune Mine (PRN 41030). The majority of the mine features and dumps are post-1840 in date according to the cartographic evidence, with clear mining operations not being shown by map until 1880. The degree of disturbance caused by later post-medieval mining activity is illustrated by the bringing in of topsoil at the westernmost end of area 3 (in fields 36 and 37). This is a fairly common characteristic of formerly agricultural land, which has seen heavy industrial usage prior to being reclaimed as farmland. Because this land was in-effect on lease, pre-existent field boundaries needed to be either maintained or reconstructed on their former alignments following closure of the mine. Boundary 134 might be an example of this.

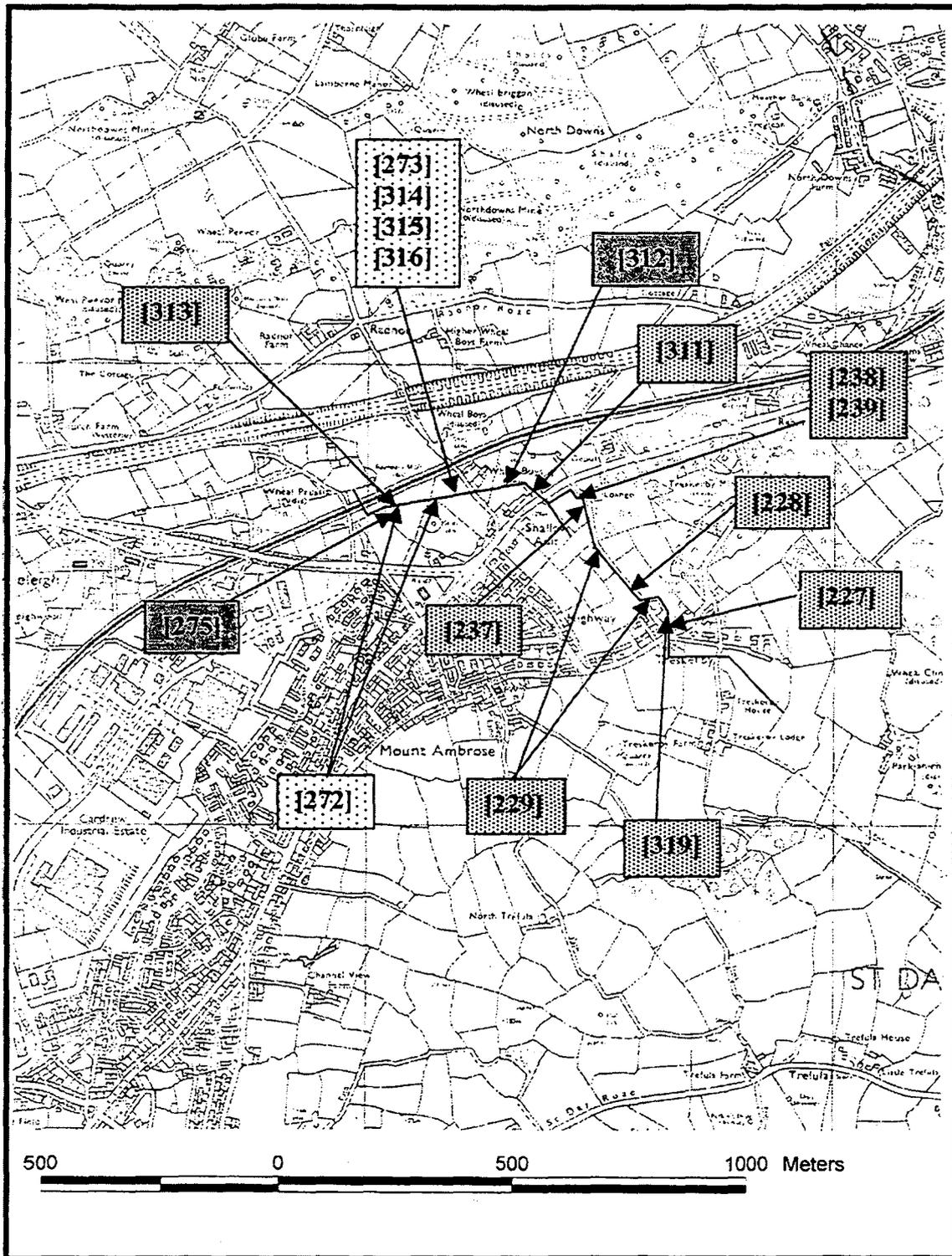
As with Area 2, the discovery of occasional modern features, such as landscaping layer [275] represents the continuing use of the landscape.

The potential for the survival of early Post-Medieval, Late Medieval or earlier archaeological features and finds to be found by watching brief, despite the known later mining activity has been illustrated well by this pipeline. A similar pattern has been seen in Area 4 particularly (where both mining activity and the affects of a substantially altered and enlarged transport network of roads and junctions has dissected the area), but also in Area 2, where (less obvious) activity associated with Park An Chy Mine was found in close proximity to earlier features.

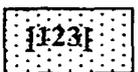


- Assessment mine sites
- Assessment dovecote site
- Assessment possible Roman road

Fig. 23. SMR sites located during the assessment of Area 3.



Agricultural features – ditches and removed boundaries.



Post-Medieval mining related features.



Miscellaneous modern features.

Fig. 24. Feature numbers and locations within Area 3.

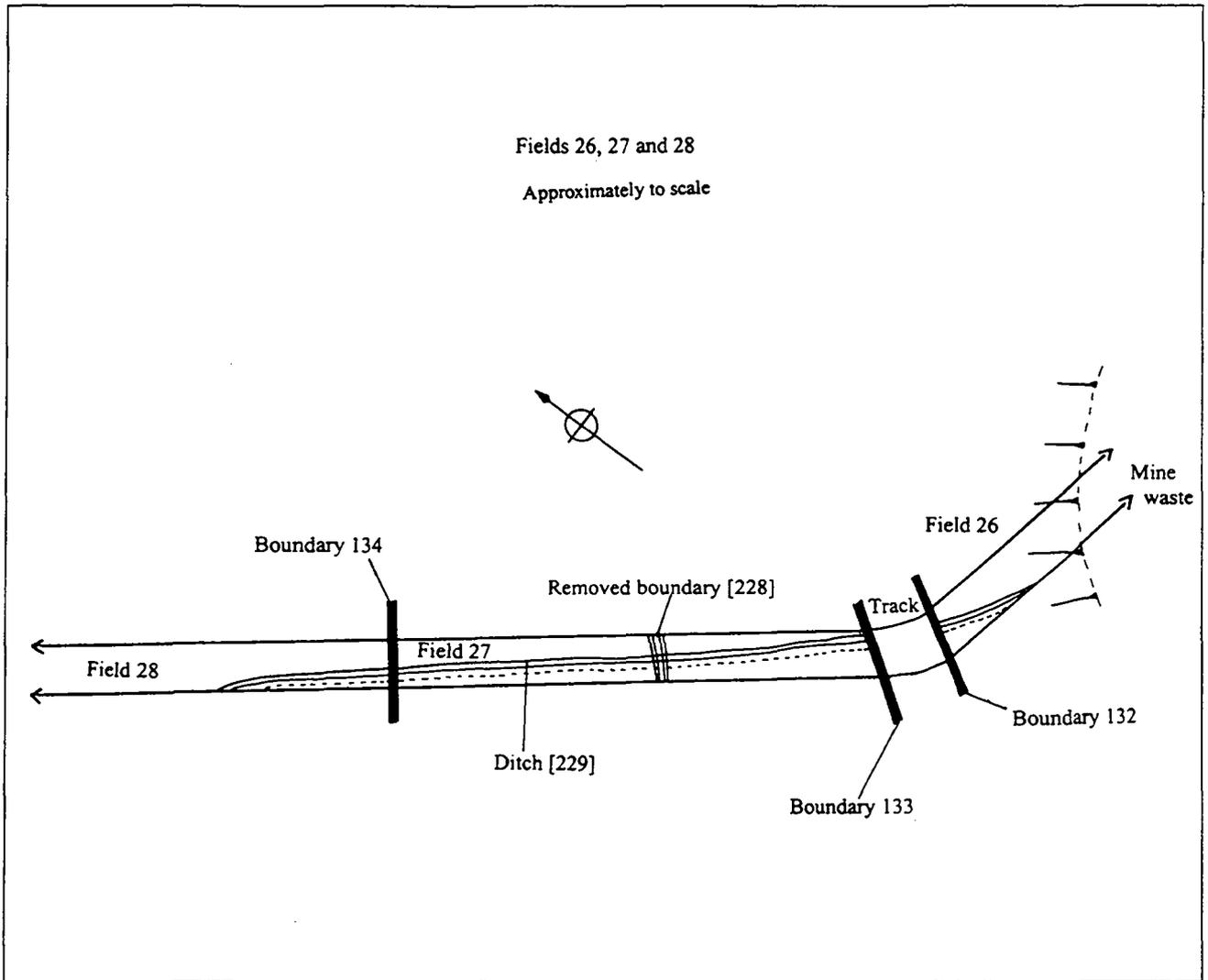
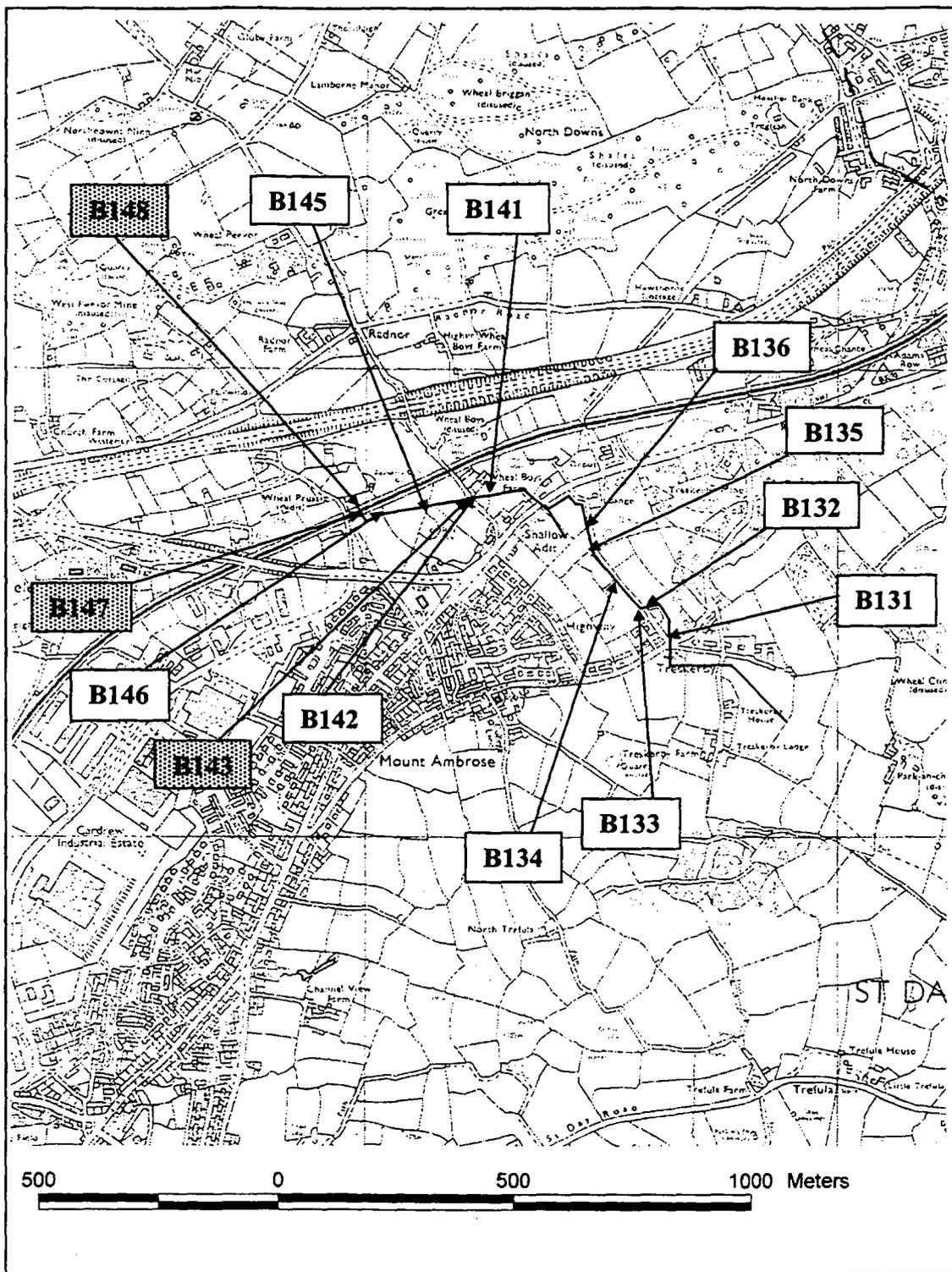


Fig. 25. Plan showing boundary ditch [229] and a series of overlying later boundaries.



B123

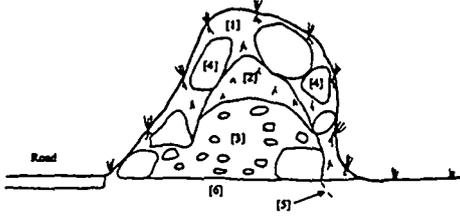
= Boundary alignments shown on the 1840s Tithe Map.

B123

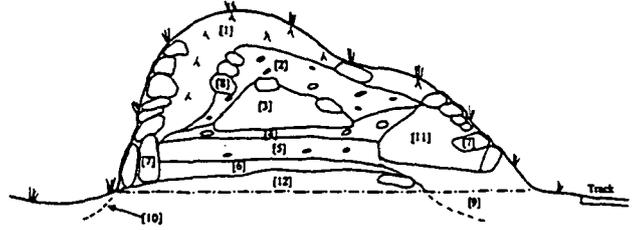
= Boundary alignments post-dating the 1840s Tithe Map.

Fig.26. Map showing boundaries within Area 3.

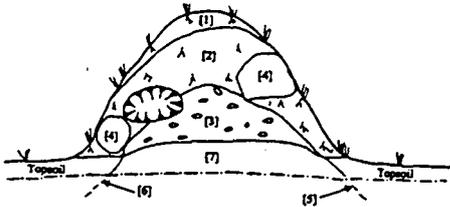
Boundary 131
North Facing Section



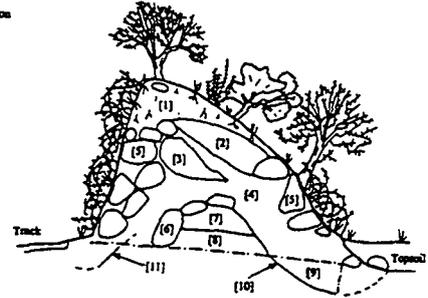
Boundary 132
North Facing Section



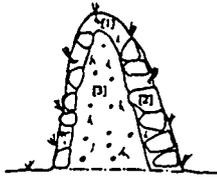
Boundary 136
South Facing Section



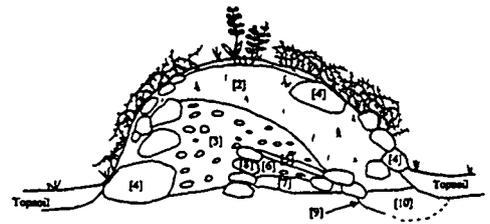
Boundary 133
North Facing Section



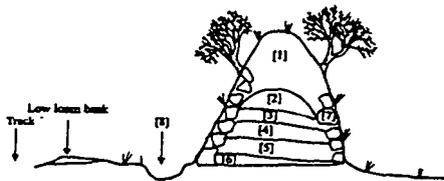
Boundary 134
North Facing Section



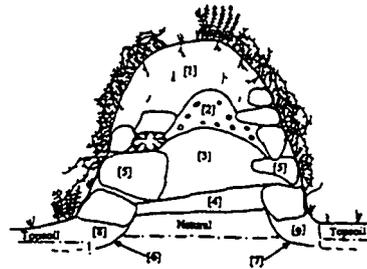
Boundary 141
North Facing Section



Boundary 143
North Facing Section



Boundary 145
South Facing Section



Boundary 146
South Facing Section

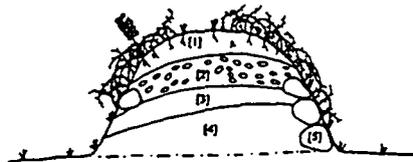


Fig. 27. Recorded boundary sections within Area 3.

4.4 Area 4 - Railway line to Treleigh

Area 4 – the Railway line to Treleigh is the western-most area, located between boundaries 149 and 171 (SW 7095 4372 to SW 6959 4314). From east to west the area covers fields 39/40 to 63, and landscape characterisation zones – PIL and REL. Fields 40 to 50 are primarily the result of REL.

4.4.1 Assessment (all sites referred to are shown on fig. 28 and listed within appendices – section 7.3).

The assessment identified seven SMR sites, and of these six are post-medieval mining sites. Treleigh settlement – PRN 19345 is the earliest site listed, and was first documented in 1280. As with Treskerby (in Area 2) there was a potential for early Medieval/Medieval structural remains or finds scatters to be located within the topsoil stripped pipeline corridor.

Of the mining sites Wheal Prussia Mine (PRN 40979), Wheal Diamond Mine (PRN 41031) and Treleigh Wood Mine (PRN 95) were nearest to the corridor. It was expected that all three sites would have extended either as surface or as sub-surface features into the corridor. The remaining three sites – Cardrew and Prussia Mine (PRN 41042), Good Success Mine (PRN 41032) and Wheal Maria Mine (PRN 41033) were all located further away but could have extended into the corridor as sub-surface tunnels etc.

It was noted during the assessment walkover that the last c500m (at the western end of the pipe route) consisted of extensive landscaping and reclamation (indicative in this part of Cornwall of fairly intensive past mining activity).

4.4.2 Fieldwork – features and finds (all features referred to are shown on fig. 29 and listed within the appendices – section 7.1).

Area 4 produced a number of features during the watching brief, the vast majority of which relate to ditches and removed boundaries. Field 39/40 and 41 did not produce any features. Field 42 contained a post-medieval railway maintenance track way, associated with the railway line located at the extreme eastern end of Area 4. It was partially metalled and overgrown with bramble vegetation etc. The railway line itself was constructed between 1840 and 1880. Field 43 contained removed boundary [235], which consisted of one clearly defined ditch, a ridge of natural and a possible second ditch. It represents a probable post-medieval boundary which is shown on the Tithe Map but which has been removed since 1907. Positioned 4.0m to the south of Boundary 154 is shallow, single ditch [236]. It is aligned E-W and almost certainly represents a removed boundary – although it was not shown as an extant feature on the maps consulted. If it does mark a former boundary, then it was removed prior to 1840.

Field 44 did not produce any features. Field 45 contained a central removed boundary [233], which consisted of two ditches flanking a ridge of natural. This relates to the probable post-medieval boundary shown on the 1880 OS map (which was removed prior to 1907). Fields 46, 47 and 48 did not produce any features. Field 49 produced three removed boundaries, at least two of which are shown on the Tithe map. Removed boundary [231] consisted of a ridge of natural and two flanking ditches. Ditch [232] ran N-S across the corridor and consists of a single ditch running parallel to [231] (located 3.0m to the east). Removed boundary [230] consisted of two ditches running NW-SE across the corridor with an internal ridge of stony natural. These features all represent previous field divisions, the majority of which are likely to be post-medieval in origin.

Fields 50, 51 and 52 did not have any features recorded within the corridor. Field 53 did not produce any features. Field 54 produced a possible removed boundary. Feature [243] consisted of a slight ridge of natural located centrally within the field. No flanking ditches

were seen after the topsoil strip. Field 54 additionally produced a Late Medieval pot lid sherd. Field 55 produced removed boundary [242], which consisted of a ridge of natural and a single, shallow flanking ditch. This boundary does not appear to be shown on the Tithe Map, but due to the number of changes which have taken place due to mining activity and more recent changes to the roads in the area it is difficult to be categorical about this. Located between what had provisionally been called fields 55 and 56 was removed boundary [241] (which relates to Boundary 164). Field 56 (see fig 31) produced feature [240], a removed boundary composed of a ridge of stony natural and two probable flanking ditches. This almost certainly represents the removal of Boundary 165, which separated fields 56 and 57. Field 56 produced (among later finds) a single Medieval 14th-15th century sherd of pottery. Field 57 (see fig 31) produced four features. Features [277] and [278] represent two ditches flanking either side of a ridge of natural. Features [279 and [280] represent a curvilinear (probable Medieval) removed boundary composed of two ditches and an internal ridge of natural. Both of these removed boundaries are shown on the Tithe Map, and appear to have at least partially survived extensive mining activity associated with Wheal Harmony and Treleighwood Mine.

The central western portion of Area 4 contains a number of small and notably irregular shaped fields (fields 52-61), not all of which are shown on the Tithe Map. This is likely to represent a pocket of Anciently Enclosed Land associated with the Medieval settlement of Treleigh, which has seen alteration via surface mining disturbance related to Treleighwood Mine. Today this area is located to the north and east of Treleighwood Mine and west south west of Lowmeadows.

All the fields between 54 and 57 produced patchy evidence for partial, shallow infilling either with local domestic waste or material brought in from elsewhere as landscaping material. Some of this material survived after the topsoil strip as small amorphous spreads of very dark material lying directly on top of the natural. However the majority of it was removed during the main topsoil strip and was seen in the corridor sections as a 0.3-0.4m deep layer. This is as a direct result of mining activity. Deliberate selection of finds from across this area took place. Only those from what appeared to securely *in situ* topsoil were collected, as opposed to those associated with the notably dark imported topsoil. Although it is not possible to categorically state that the Medieval finds from field 54/56 were local it is considered very likely that they do reflect local Medieval activity.

Field 58 did not produce any features during the watching brief. Fields 59 and 60 (see fig 31) contained feature [249] - a probable cone surrounding a shaft, located at the junction between these two fields. It was located on the immediate southern edge of the corridor, had an approximate 13.0m diameter, and an associated spread of mine waste extending out across the pipeline corridor in fields 59, 60 and 61. Other than this spread of mine waste fields 61 and 62 did not produce any features. However, field 62 did produce a Late Medieval sherd of pottery. Field 63, positioned right at the extreme western terminal of the pipeline corridor (within the area of a mini-works compound), produced features [282] and [281]. Feature [282] was an ephemeral, slightly curvilinear ditch. It was aligned E-W across the corridor and sealed beneath a layer of redeposited topsoil. Potentially associated with [282] was ephemeral double ditched feature [281]. Neither features are clearly discernible on the Tithe Map, suggesting that they either represent field boundaries removed prior to 1840 in the wake of mining associated with Treleighwood Mine, or that they are significantly earlier. The curvilinear alignments of both features do suggest a Medieval date of origin.

4.4.3 Boundaries (all boundaries referred to are shown on fig. 32, 33 and 34 and listed within the appendices – section 6.2).

There were a total of thirteen boundary sections recorded within Area 4. These are dealt with in numerical order from east to west.

Boundary 149 and 150 were no-longer standing. Boundaries 51 and 152 were not seen in section. Boundary 153a flanks the western side of a lane, which may be shown on the Tithe Map (although alterations since this date and activities associated with Wheal Prussia make it difficult to be certain). Its section is relatively straight-forward. Above the slight ridge of underlying natural is compacted context [3] (which may represent a disturbed pre-mining land surface?). Above this is the main bulk of the boundary – ditch up-cast [2]. This almost certainly originates from flanking ditch cut [5]. Associated with [2] is stone facing [4] and [1]. Boundary 153b is again simple in section, with a probable late western flanking track, stony up-cast and stone facing [3].

Boundary 154 and 155 were not seen in section. Boundary 156 contains a tiny portion of (possible) old land surface [4], topped by a slanting bulk context [3] of redeposited natural (probably from ditch cuts [6] and [7]). Contexts [4] and possibly [3] may represent an early phase to the boundary – although this was not clear from the section. Context [2] appeared to have been built up at the same time as stone face [5] was erected. (Again it was uncertain from the section as to whether this was contemporary with the deposition of [3]). Context [1] represents the latest phase of topsoil and leaf litter build-up.

Boundary 157 is shown on the Tithe Map. Its section showed an earlier and a later phase of development. The earliest phase was composed of context [4] – located directly above an underlying ridge of natural [6] and ditch cut [7]. Following the silting up of ditch [7] a build up of probable plough soil [3] against the eastern side of the boundary developed. The boundary then underwent partial reconstruction. With its centre of axis shifting slightly towards the east this plough soil became incorporated within the boundary itself. Ditch [8] and possibly [9] were then dug, which provided the raw material for context [2] which constituted the bulk of the boundary. In conjunction with [2], stone facing [5] was constructed, and gradually a leafy topsoil [1] developed. The earliest part of the boundary may well be Medieval in date (based in part on the significant difference in height of natural today, as compared to that preserved within the base of the boundary). However, it should be borne in mind that boundary 157 is located within the vicinity of Wheal Diamond Mine, and that as such surface mining operations may have speeded up the drop in surrounding levels of natural.

Boundary 158 produced a simple section of possible disturbed buried soil [3], overlain by ditch up-cast (or redeposited natural) [2], ditch cut [5], stone facing [4], and later topsoil covering [1]. Today the boundary is overgrown and neglected, and the stone facing has partially slipped down into the blocked eastern ditch. This boundary alignment is shown on the Tithe Map.

Boundary 159 is more massive than the majority of the boundaries within Area 4. It consists of mixed probable buried soil [5] at the base, which is overlain by a series of redeposited natural deposits – [4], [3] and [2]. Context [2] may represent a markedly later deposit since it represented a clearly defined ‘ball’ of undisturbed material. In retrospect it is felt likely that stone face [6] represents two phases – the lowest, largest stones forming the first phase (bounding contexts [5], [4] and probably [3]), and the smaller, higher stones representing the later phase – probably contemporary with the redeposition of context [2] and [1]. This boundary is likely to have been flanked by at least one (and possibly two) ditches, although these were not seen during the watching brief. It is likely that the Tithe Map recorded the earliest boundary seen within the section.

Boundary 160 was no-longer standing although it was recorded during the watching brief as feature [231]. Boundaries 161 and 162 were both of recent construction, with simple intact double-sided stone facings and a minimal number of internal deposits. Both appear to follow Tithe Map boundary alignments and as such almost certainly represent boundaries which were removed in the wake of mining activity, only to be reconstructed following the cessation of surface mining activity in the area.

Boundary 163 represents a boundary constructed (perhaps reconstructed) after the demise of surface mining activity in the immediate vicinity. It was constructed over a thin spread of compacted mine waste material [4], over which lay mixed deposits of mine waste and ditch up-cast [3] and [2]. Contexts [4], [3] and [2] were all contained within stone facing [5] and topped by topsoil deposit [1]. Flanking either side of the boundary were ditches [6] and [7]. It is uncertain from the Tithe Map whether this boundary is shown or not.

Boundary 164 was no-longer standing, but it was recorded during the watching brief as [241]. Its alignment is shown on the Tithe Map as marking the western edge of an elongated N-S running field. Boundary 165 was not drawn. It is uncertain whether this boundary represents the arc of boundary shown on the Tithe Map (in this approximate location) or not. Boundary 166 is a broad boundary, which primarily consists of mine waste deposits associated with Treleigh Mine. The Tithe Map shows the boundary as being located to the immediate east of a double N-S aligned mine structure (not seen within the corridor). Basal context [6] represents a preserved layer of mine waste, over which mounded waste deposits [4] (on the eastern side) and later [3] (on the western side) were dumped. The eastern side of deposit [4] was then given a stone facing ([5]), prior to the formation of topsoil contexts [2] and [1].

Boundary 167 and 168 were not drawn. Boundary 169 marks the eastern side of a trackway (which is only partially shown on the Tithe Map), while boundary 170 defines the western side. Boundary 169 consists of an underlying ridge of loamy domestic waste [3] (which contained post-medieval pottery), topped by a bulkier deposit of mine waste [2], with stone facing [4] (against the trackway) and later topsoil development [1]. The base of the boundary was not seen, but it was obvious that surface mine disturbance and the build up of the ground surface with landscaped mine waste had taken place within the vicinity. By 1880 the eastern edge of the trackway had been at least partially formalised (shown as a dotted line on the OS map). Underlying loamy ridge [3] probably represents this dotted line, while the subsequently enlarged and stone-faced phase of the boundary is probably that shown on the 1907 OS map.

Boundary 170 (as referred to above) relates to the western edge of a trackway. Located below the western edge of the boundary was ditch [7] - which represents the earliest phase of the boundary. Directly overlying this was context [5] - a mixed deposit of loam and shillet, which then had a layer of redeposited natural [4] and stony lens [6] placed against its eastern edge. Context [4] appeared to be present on either side of [6], and as such may represent a severely slumped deposit. Eastern stone face [3] was then added, along with upper context [2] and finally [1]. It is probable that this boundary has been reconstructed from scratch - it may have been dismantled during mining operations and subsequently reconstructed, or it may have been re-built as the track became more formalised or saw heavier use. Perhaps the creation of a stock proof boundary was suddenly required due to changes in land use or ownership.

Boundary 171 was not drawn because it was of modern construction, associated with very recent road alterations.

4.4.4 Conclusions

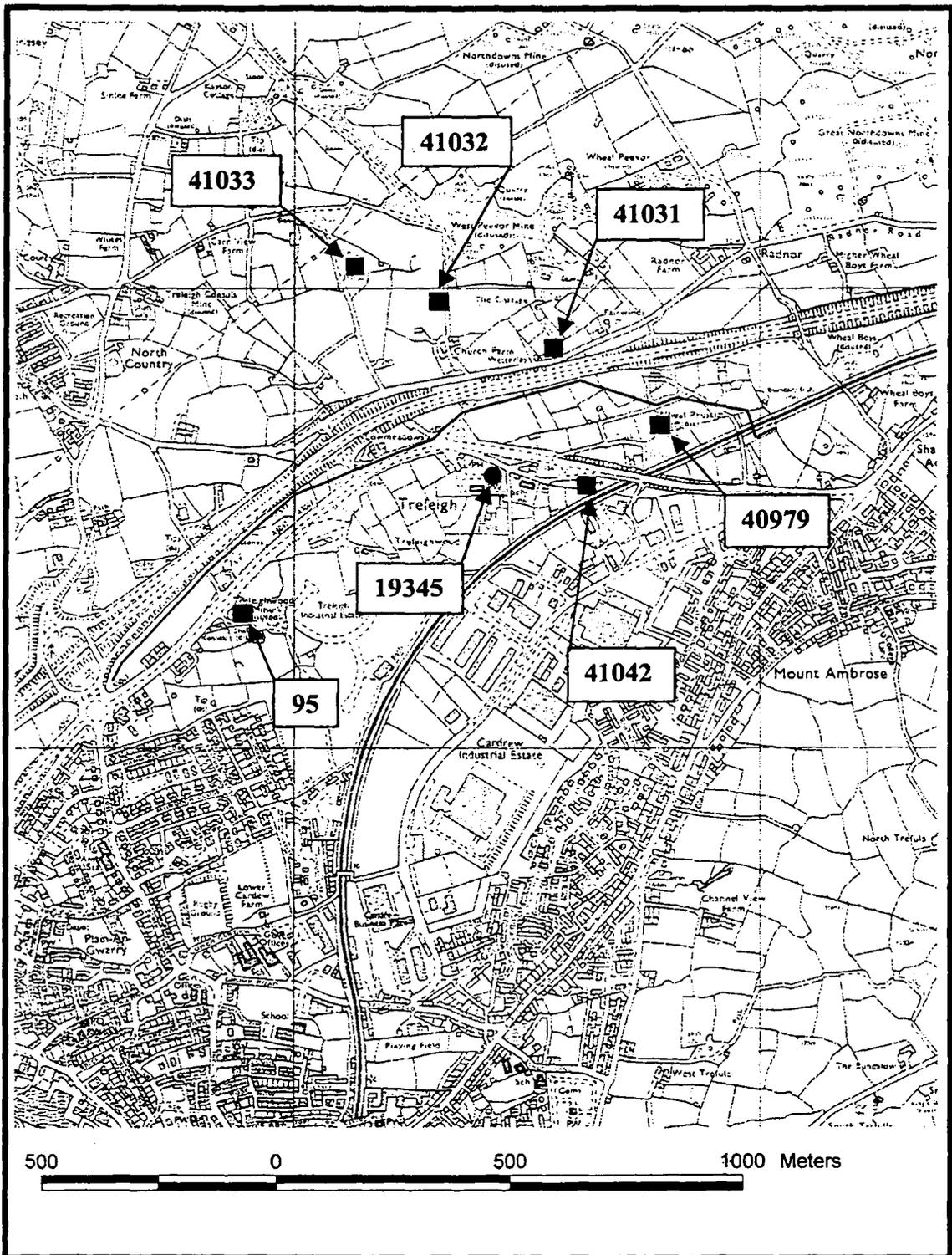
The watching brief for Area 4 has produced a number of ditches and removed boundaries criss-crossing the pipeline route. Some of these – particularly the curvilinear ditches ([279], [280], [281] and [282]) may well be Medieval in origin. All four of these ditches (representing three separate boundaries) are located at the extreme western end of the route). Ditches [279] and [280] are shown on the Tithe Map but [281] and [282] are not (nor are they shown on the later OS maps consulted), showing that they had fallen out of use and were essentially lost by 1840. Late Medieval finds, although sparse, were collected from fields in the western part of Area 4 indicating that there was late Medieval domestic activity in the vicinity.

As mentioned above, every effort was made to separate introduced or imported finds (associated with a dark slightly sticky loam) from those that were locally derived and associated with a paler grey brown silty loam.

The western half of Area 4 (fields 54 to 63), with its occasional medieval sherds and more irregular field patterns, is probably a fragment of Anciently Enclosed Land, associated with the medieval settlement of Treleigh, though heavily disguised by mining and the road systems. The eastern half, with its small, more regular fields and lack of medieval finds, is probably an area of 18th/19th century enclosure.

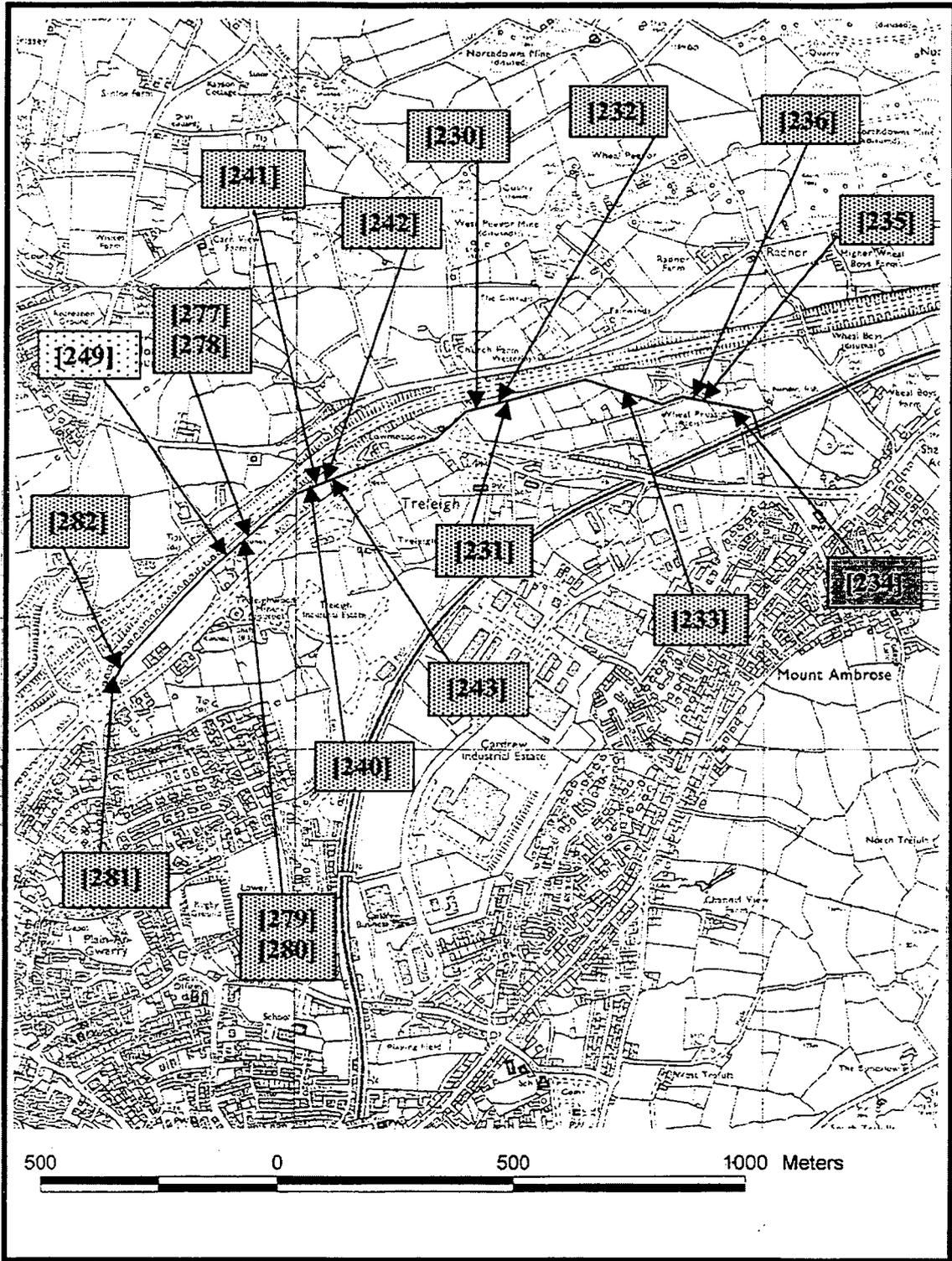
Much of the western half of Area 4 has seen considerable alteration since 1840 due to surface mining activity. This has made the accurate identification of both individual boundaries and the pipe route itself difficult. The Tithe Map shows a large expanse of essentially unenclosed mine land and structures, associated with Treleigh Mine, with very little in the way of extant boundaries. Landscaping of mine waste, the enlargement of existent boundaries with mine waste and the construction of new boundaries over mine waste all illustrate the degree of change along this section of the pipeline route. The only specifically numbered mine feature in this area was [249] – a shaft cone (which could be the one shown on the Tithe Map – although it is difficult to accurately locate the pipeline on it) positioned just to the south of the pipeline. In terms of the finds assemblage a selection of post-medieval wares, clay pipes etc were collected, all indicative of domestic (and perhaps industrial) activity in the area.

As with Area 3 a significant number of the features recovered during the watching brief were unrelated to mining, and are likely to pre-date it. This illustrates well the survival rate of earlier features and finds within areas which have undergone a relatively substantial scale of later (industrial and road related) change and development. They have even survived the rigours of landscaping and land reclamation.



- Assessment mine site
- Assessment settlement site - Medieval

Fig 28. SMR sites located during the assessment of Area 4.



Agricultural features – ditches and removed boundaries.



Post-Medieval mining related features.



Miscellaneous modern features.

Fig.29. Feature numbers and locations within Area 4.

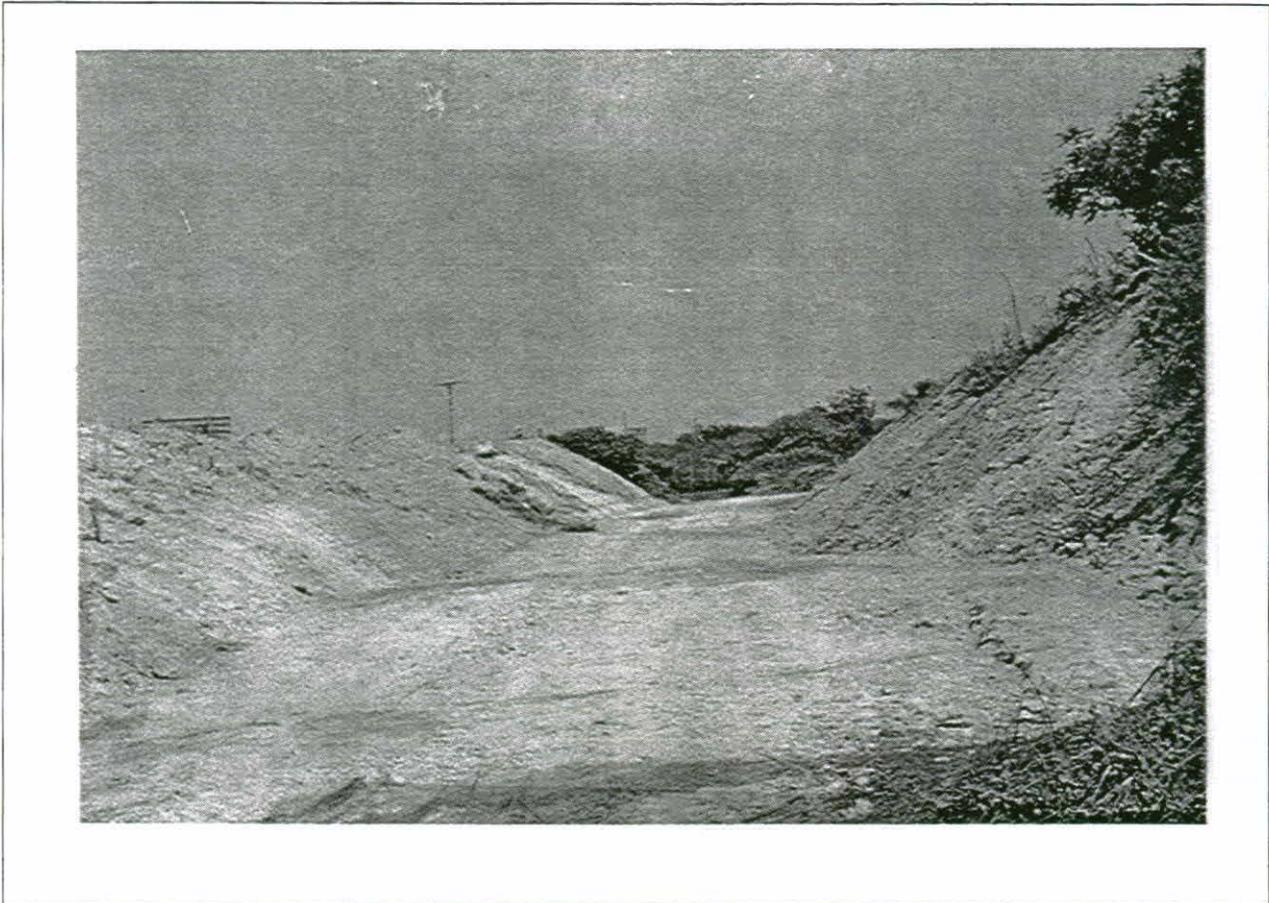
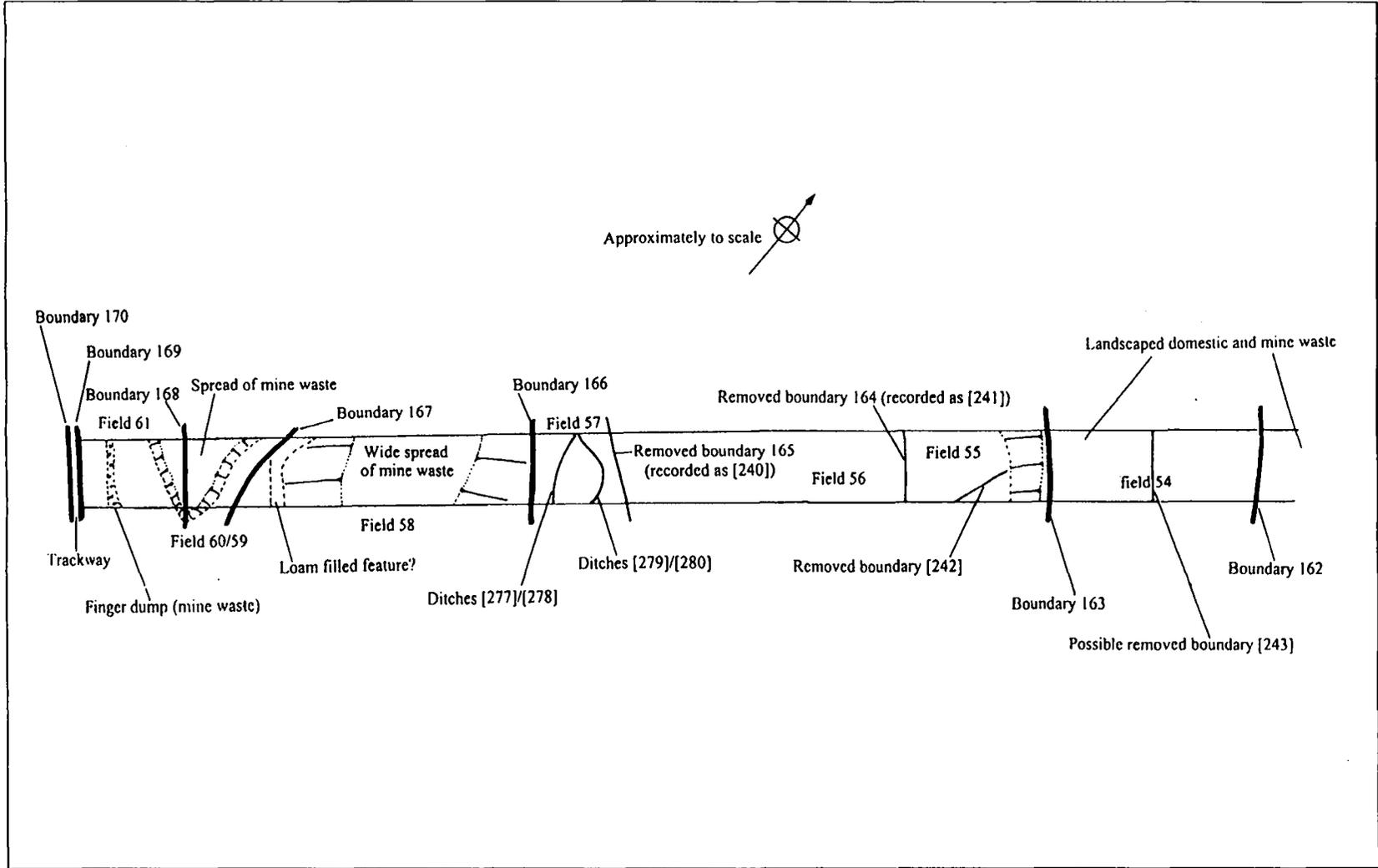
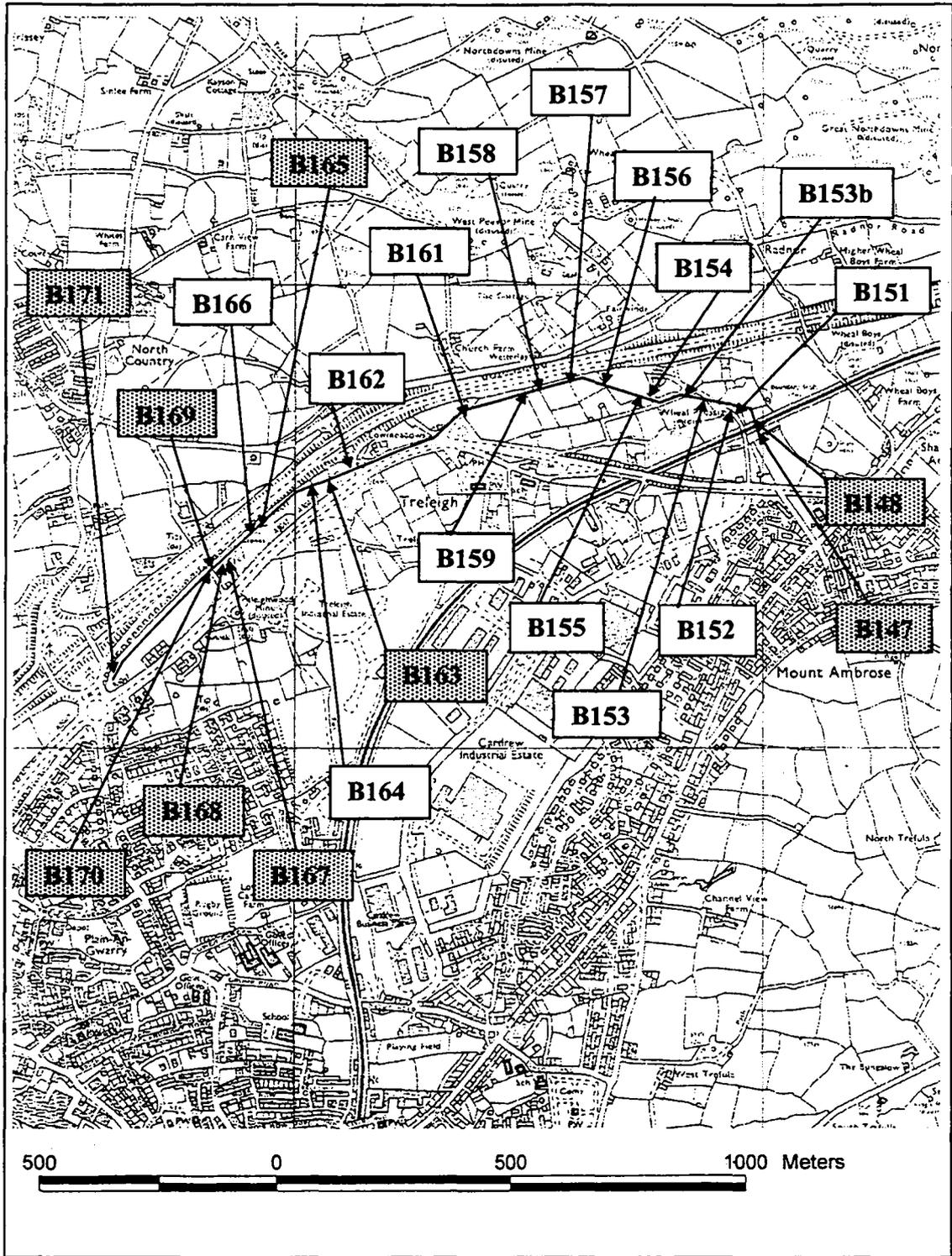


Fig.30. The topsoil stripped pipeline corridor (near Treleigh) running through landscaped mine waste. Note the linear markings crossing the corridor – these represent former boundary alignments.

Fig. 31. Plan showing ditches, removed boundaries and mining related features across fields 54-60.



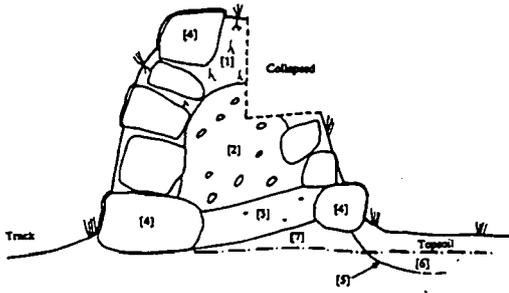


B123 = Boundary alignments shown on the 1840s Tithe Map.

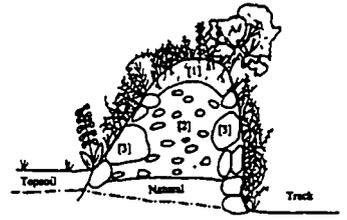
B123 = Boundary alignments post-dating the 1840s Tithe Map.

Fig.32. Boundary locations and numbers within Area 4.

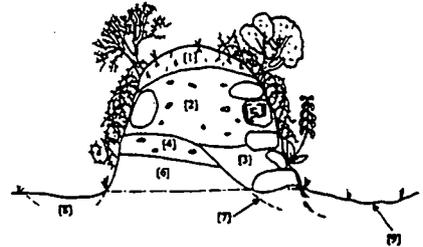
Boundary 153a
South Facing Section



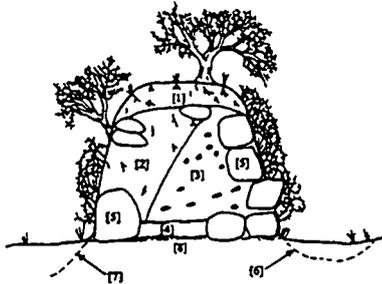
Boundary 153b
North Facing Section



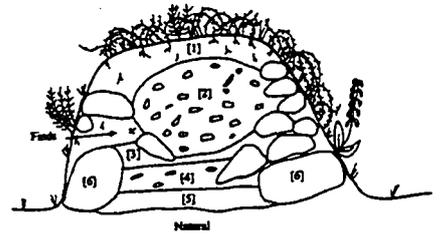
Boundary 157
South Facing Section



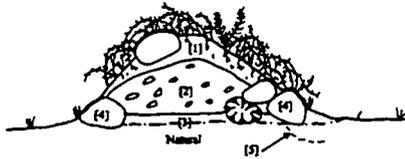
Boundary 156
South Facing Section



Boundary 159
North Facing Section



Boundary 158
South Facing Section



Boundary 161
North Facing Section

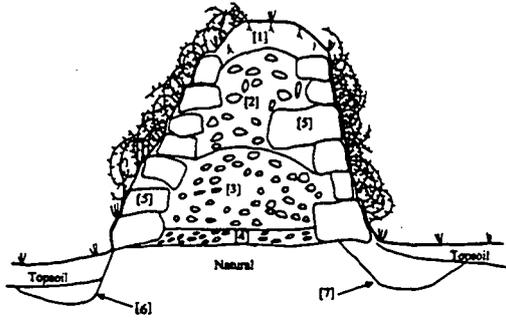


Boundary 162
North Facing Section

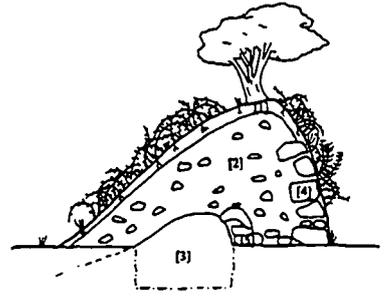


Fig.33. Recorded boundary sections within Area 4. (Eastern end).

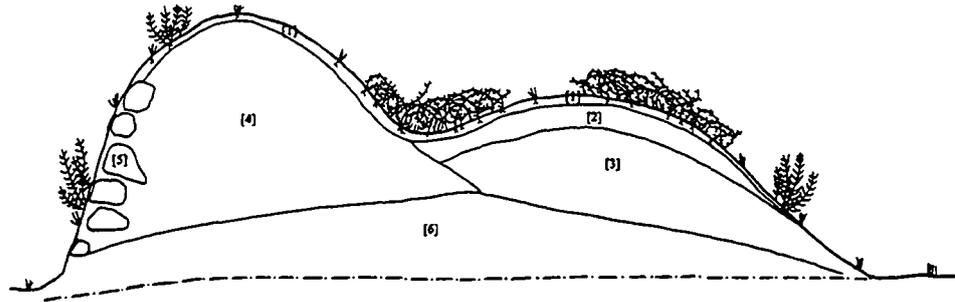
Boundary 163
South Facing Section



Boundary 169
North Facing Section



Boundary 166
North Facing Section



Boundary 170
North Facing Section

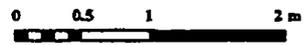
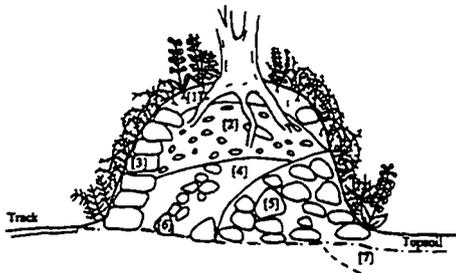


Fig.34. Recorded boundary sections within Area 4. (Western end).

5 The finds

5.1 The general finds report (Carl Thorpe)

The artefacts found are typical of assemblages obtained from most Cornish fields close to farming communities, the finds being derived from domestic midden material being utilised for the manuring and improvement of the fields.

The greatest concentrations are found in F8, F9, F10, F14, F16, F49, F54, F55, and F62. This may reflect the close proximity of these fields to settlements, or the original poor quality of the soil within them.

The earliest material recovered appears to be Romano-British (most likely 3rd or 4th century AD) ware of gabbroic fabric, from F9, though the sherds are small and identification is tentative. A possible prehistoric sherd was recovered from F14.

A single rim-herd of Early Medieval "Sandy Lane" ware was found in F8 (dating from the 11th to 12th centuries) suggesting a nearby settlement of this period, with possible Early Medieval sherds also occurring in F10 [266] and F14. Being gabbroic fabric and small in size it is possible that these could be prehistoric.

There is very little medieval pottery of the 13th to 14th centuries, 55 sherds being found from fields F8, F9, F10, F14 and F26 which suggests that up to this period little in the way of improvement had been made to the ground or that domestic rubbish was not normally included with the manure spread in the fields.

Artefacts rapidly increase in number from the late medieval period (15th to 16th centuries) throughout the Post-Medieval (16th to 17th centuries) to reach a maximum in the 18th and 19th centuries. All fields produced artefacts of the 18th, 19th and early 20th centuries.

5.2 The flint, chert and pebble report (A Lawson Jones)

The pebbles

It was attempted during the watching brief to separate those fields, which had undergone active past soil improvement (via the introduction of sand from the local beaches) from those which had not. This was primarily done on the basis of an initial scan of the upturned topsoil. When the first field walkover was completed an impression of the pebble content was gained. When (relative ie more than ten miscellaneous shaped) concentrations of pebbles occurred, particularly in conjunction with occasional shell fragments, it was taken that this indicated past, small-scale soil improvement having taken place. When notably few pebbles were located these were collected on the basis that they potentially represented small-scale, deliberate introduction. When such small-scale assemblages were found, they were noted as primarily consisting of quartz. When notable concentrations of shell and post-medieval pottery etc were located it was assumed that this represented kitchen midden fertilisation of plots.

In total 40 pebbles were collected on this basis. Of these 31 were quartz, 5 were metamorphosed killas, 2 were flint and 2 were ironstone. The quartz stones were almost without exception flattened and circular in shape with a 2.0-2.5cm dimension, but with no obvious sign of use. One however was significantly larger with slight battering at one end, suggesting that it may have been used as a hammerstone (field 62). Very similar in size and shape to this hammerstone were two ironstone pebbles (fields 18 and 54). Both showed signs of having been used as hammerstones - one of which had been broken into quarter by a blow. In contrast the two flint pebbles found could represent misplaced or lost potential flint cores. Of the five metamorphosed killas pebbles, one had a flaked removal

from its short edge suggestive of it having been used as a lever (it is difficult to see how else this damage could have occurred!). With the exception of 7 of the pebbles, all 33 of the remaining pebbles were found in conjunction with worked flint. This further implies a link between the known prehistoric use of flint and chert and at least some (if not all) of the pebbles.

Worked quartz

Quartz crystals were noted during the watching brief as being a relatively unusual occurrence. Only those five that appeared to have seen some modification or use were collected. Of the five, one had probably seen use as a borer / awl, three had definitely been used as such, and one had undergone all round crushing to form a poorly shaped ball. The longest crystal had 2.5cm of its total 4.5cm length altered by abrasion, with a transverse removal at what would have been its 'pointed' end, while the opposing end was blunt and bulbous - ideally shaped for hand held use. Two other elongate crystals showed pronounced abrasion along their narrowest length - one of them appearing to have had notches cut in to its sharp edges near the bulbous end suggestive of modification either for hand held comfort, or perhaps for hafting?

Prehistoric working of quartz has only recently been recognised as both a widespread and long-lived practice. Hayden (1989) notes that small, worked, quartzitic pieces quite often feature in landscapes used by hunter-gatherers since they were "*perfectly suitable for butchering small or moderate-sized game*". Earlier Palaeolithic use of quartz has been recorded by MacRae (1986) and Masson Phillips (1982) in Britain as a whole, and more specifically coastal southern Devon. A Mesolithic and Neolithic flint scatter at Nether Exe (Devon) produced one definite quartz object (Silvester, Berridge and Uglow, 1987), and Penhale Point in Cornwall produced a worked quartz flake (Smith, 1988). Work at Lundy Island in the Bristol Channel had a significant 4% of the total lithic assemblage made of quartz, including a retouched quartz blade (Schofield, 1994). Work at Four Burrows wind farm, Kenwyn also produced worked quartz (Lawson Jones 1995).

Flint and chert

This project produced 35 pieces of worked flint (3 of them nodular) and a further 5 pieces of chert (in addition to the worked quartz). Although perhaps a surprisingly small assemblage, sufficient material has been found to give a flavour of the kind of activities which were going on during the prehistoric period along the length of the corridor.

Flint is not found naturally in Cornwall, although surprisingly large and varied quantities of flint/chert can be found on the surrounding beaches. Nodular flint was transported into the county in the form of un-modified nodules, partially prepared nodules (or cores), blanks, or as finished pieces. The most likely and closest source for nodular flint would have been from the chalk outcrop at Beer Head, located on the south-east Devon coast (Tingle 1998), more than 100kms away. During the Early Neolithic period Beer Head became an important early flint quarry site (Care 1982), supplying Cornwall with much of its nodular flint. However, closer secondary sources of flint and chert can be found in the head and gravel deposits of western Devon (Wainwright and Smith 1980).

Proportionately the largest number of flint/chert (25 pieces) came from the eastern end of the pipeline, in Area 1. Of the 11 fields within Area 1, 7 produced flint material - field 8 producing the largest number of flints (for any field along the corridor length). As a whole this area produced cores, core rejuvenation flakes and waste flakes, indicative of on-site knapping and flint working; scrapers, a knife and cutting flakes, representing the processing of meats and skins; a shaft straightener, perhaps suggesting hunting; miscellaneous retouched flakes and blades and a burnt piece. The worked quartz pieces were primarily

borers, and would fit in well with the processing of skins and leather (and perhaps the working of bone), perhaps forming seasonal sites which may have been revisited on an annual basis. Combined these pieces represent a fairly typical array of material, indicating wide spread and varied use of the landscape, which would have certainly included settlement. Broadly this material dates to the Neolithic and Bronze Age period, although little is diagnostically datable. The earliest material identified along the whole length of the pipeline dated to the Mesolithic/Early Neolithic period and was located at the foot of the steep valley at the western end of Area 1 in field 11.

Area 2 produced six pieces of worked flint/chert plus an un-tried flint pebble and a hammerstone. Only 4 of the 14 fields within Area 2 produced lithic material. Primarily this material consisted of tried pebbles and/or cores, a probable knife and a retouched flake. Considering the length of pipeline covered by this area it is surprising that such a small assemblage was found. The majority of the material is not datable, although the knife belongs to the Neolithic/Bronze Age. It may be that the limited quantity of material and the lack of any recognisable concentration is a reflection of the former (though relatively low-lying) downland setting averaging 130m above sea-level with reasonably good views out to the south and east.

Area 3 produced twelve flint/chert pieces, from 4 of the 12 fields within the area. Field 32/33 produced the second largest field concentration of flint (7 pieces) found along the length of the pipeline. The area as a whole produced primary flakes, core rejuvenation flakes and waste material, which are all indicative of on-site knapping and working of flint/chert. The blades and retouched pieces suggest processing activities, while the possible projectile/arrow head blank relates to hunting. Much of the material is Neolithic (field 30a and 32/33) to Neolithic/Bronze Age in date, although there is the possibility of an Early Neolithic/Mesolithic element as well (in field 32/33). Topographically this area drops very gradually down from Treskerby (which is centred on the highest point of the route).

Area 4 contained 23 separate fields, but only produced a single piece of worked flint and two probable hammerstones of potentially prehistoric date. This area has seen considerable, patchy disturbance via mining activity, plus the bringing in of topsoil to complete subsequent landscaping work. As a result it is probably dangerous to place too much emphasis on the apparent lack of prehistoric artefacts from this area. The single piece of flint that did come to light was not diagnostically datable, but probably represents only a tiny proportion of what was here.

In conclusion, the lithic assemblage discussed above (and listed and described within the appendices) represents the only definite evidence for prehistoric activity found along the pipeline. Typologically the finds present the picture of a landscape which was settled and utilised throughout the majority of the Neolithic and Bronze Age, and extending back into the Mesolithic (potentially ranging from 10,000BC to 1,400BC). The bulk of these finds represent a broadly domestic range of functions, including the cutting and slicing of animal and vegetable produce (knives, cutting flakes and blades); the skinning and scraping of animal hides (blades and scrapers); hunting (arrowhead blank, shaft straightener and quartz borers); and cores (the raw material of tool production).

Pipelines invariably produce flint, chert and occasionally worked quartz. Due to the durability of this material, such assemblages frequently represent the only evidence for a prehistoric presence and use of the landscape. In this case, the small size of the scatters would suggest that the pipeline corridor did not cross any permanent or substantial occupation sites. The frequent mix of worked flint, worked quartz, hammerstones (and lone quartz pebbles) from across the pipeline suggests that the whole landscape was being

used, although possibly to different degrees, or in different ways according to the topography and date. Broadly the more undulating, less exposed areas appear to see the densest activity, while the higher 'downland' areas (referred to as North Downs on the Redruth Tithe Map) appear to have been less so. (Area 4 - as already mentioned is less easy to assess in terms of prehistoric activity).

5.3 Palaeoenvironmental report (J. Jones)

The archaeological watching brief along the route of the St. Day to Redruth Pipeline, recorded the existence of field boundary sections, many thought to be medieval or earlier in date. Three of these boundaries had soil samples taken from their basal layers and these were examined for the presence of charred plant macrofossil remains.

The results are shown below.

Site	Sample	Charred plant remains/charcoal	Other remains
Park-an-ehy Mine Boundary 123	Context [6] Sample C Buried soil	Flot 6ml	Modern material only
Treskerby Boundary 128	Context [12] Sample A	Flot 6ml 2 small fragments of charcoal	
Highways Boundary 141	Context [7] Sample B Buried soil	Flot 5ml <5 small fragments of charcoal 3 small charred twigs	

The results of the assessment have shown that there was very little charred plant macrofossil or charcoal evidence preserved in the samples examined. None of the charred material present would be suitable for radiocarbon dating.

6 Discussion

This project has resulted in the collection of a very considerable amount of data, which will make a valuable contribution to understanding the historic character of the area. This includes:

- Detailed information on field patterns and historic field boundaries, both extant and removed.
- Identification of previously unknown areas of later prehistoric, Romano-British or early medieval settlement in at least two locations.
- Scatters of medieval pottery, providing evidence for the main areas of medieval activity.
- Finds of prehistoric flints, providing evidence for how the area was used in the Neolithic and Bronze Age.
- Concentrations of below-ground mining remains, providing detail of features associated with known mines.

The discussion below looks at some of these aspects and ends with an overview of the pipeline area.

The ditched features

The analysis and subsequent writing up of this report has illustrated the close relationship between most of the ditches found in the watching brief and the extant boundaries. Although the two are discussed separately, they should be seen as complementing each other.

The majority of the features fall into two categories: the removed boundaries mostly of the Medieval and Post-Medieval period; and the mining related features of the Later Post-Medieval (and Modern) period. Most of the boundary features were linear or broadly curvilinear and are represented by single ditches or double ditches with or without associated ridges of natural. Exceptions include the more angular and the potentially circular gully features found within field 21 – which may represent small scale Early Medieval enclosures or houses, and the differently profiled and larger proportioned single ditches found in fields 8 (ditch [285]), 16 (ditch [259]) and 22 (ditch [246]). These may (as referred to in the text) relate to late prehistoric or Romano-British enclosure boundaries – particularly [285] and [259].

The majority of the linear features clearly represent past field divisions – some of which fitted neatly in with today's extant field system and some of which appeared to pre-date it (at least in part). For example, ditch [229], which ran across fields 26, 27 and 28 and was overlain by later boundaries; or curvilinear ditches [291] in field 21 and [282] in field 63.

It is uncertain where the crossover point is between single ditched features and the more obvious double ditched removed boundaries. It may be that the majority of the single ditched features also relate to removed boundaries, but ones of a different and perhaps more ephemeral nature than those that we are used to seeing today. In general they seem to represent a chronologically earlier boundary type. They do not appear to have been sufficiently substantial to be stock proof and are likely to have only consisted of a single, shallow ditch with a low-lying bank to one side. Ploughing or cultivation to either side has frequently preserved a very shallow ridge of natural below what would have been the bank. In effect they would have 'defined' an area rather than have formed an impassable barrier. Examples from the watching brief include ditches [227] in field 26 and [236] in field 43.

Some of these early single ditched divisions have become incorporated within, or fossilised beneath today's boundaries, for example within boundaries 104, 115, 133, 141 and 157. It is considered likely that the remnants of small-scale straight boundaries in particular represent Medieval strip field divisions, many of which were removed due to changes in agricultural practice, while the more curvilinear ones could date to the Medieval period or earlier (potentially the later prehistoric period).

Many of the double ditched boundaries do appear to relate quite well with the current field system. A good proportion of them are visible on the historic maps, but have since been removed either to increase the size of fields or to clear areas in proximity to mines. In general these double ditched boundaries would appear to have been more substantial and probably stock proof. Very few of them show visible signs of having been stone faced – ie they do not show any evidence of stones having slipped down into flanking or open ditches. The boundary sections show this to have quite often been the case with extant stone-faced boundary ditches.

The boundaries

The boundaries looked at during this watching brief include probable Medieval, Post-Medieval and recently constructed or re-constructed ones. Without exception they consist of both stone and soil in various quantities and from various sources. Some additionally include mine waste within or beneath their construction. The vast majority have (or had) a

recognisable stone facing – visible as either a single or a double sided face. The majority contained at least some redeposited natural, which usually originated from an associated flanking ditch (or ditches). In some cases a potential buried soil was recorded directly overlying the original natural subsoil (or rock-head). This was normally a relatively thin context due in part to compaction from the overlying boundary. Frequently these potential buried soils had undergone severe disturbance ie animal burrowing, mixing by worms or root growth.

The boundaries with probable Medieval or earlier origins tend to be fairly large, if still in use and maintained over the years and include the three parish boundaries, boundary 102, 114 and 123. Alternatively they may be smaller, having fallen into semi-disuse, ie those located along the valley slope above Pink Moor, to the west of Tolgullow and the lodge – bank feature numbers [217] and [218]. The basal deposits tend to be more numerous and complicated in older boundaries, ie through shift, enlargement, ditch re-cutting, changes in function ie from a strip-field division to a stock proof barrier. Boundary sections that appeared to have preserved the fossilised remains of strip field divisions include boundaries 104, 112, 115, 123, 133 and potentially 169. Frequently the preserved original ground level is higher (sometimes substantially higher) than today's topsoil level, which illustrates well the erosive power of the plough through the years.

The post-medieval boundaries looked at along this pipeline route essentially fall into two categories. They either related to alterations caused by mining activities (ie the wholesale clearance or partial removal of former AEL boundaries in advance of surface mining), or to the much more angular field divisions incorporated into formerly established AEL enclosures (still visible along the route of the pipeline as large curvilinear boundaries).

Mining activity had a number of affects on the existent boundaries. Some were simply uprooted and never re-instated, some were removed and subsequently reconstructed on mine waste eg boundary 163, or using mine waste, while others were simply swamped by a sea of mining waste eg boundary 109b and 110.

The very recent or modern boundaries tend to be instantly recognisable, in terms of external appearance and section. Usually the section will have a tall, thin profile and show a single, uniform fill with a stone facing on either side. The latest boundaries tend not to have flanking ditches for a number of reasons. The availability of easily imported stone and soil (via a lorry) negates the need to excavate a ditch as a source for the construction material. The laying of sub-surface field drains means that the excavation of ditches alongside boundaries to remove surface water is no longer so necessary. Additionally changes in field use from arable (as listed in the Tithe Map apportions for much of the pipeline route) to pastoral means that year-round drainage is less of a necessity.

The mining features

Industrial remains found along the length of the route relate to known mines located north and south of the pipeline – the majority of which are listed within the SMR List of sites. Approximately half of these features relate to sub-surface tunnels and adits, or trenches and ephemeral gullies, which were not visible in plan after the initial topsoil strip, but were seen and recorded in section along the pipe trench. The chief concentration of these features was associated with Park An Chy Mine (within fields 18 and 19). Other concentrations existed in field 6 as part of West Poldice Mine; in fields 11, 12 and 12a – probably part of Wheal Gorland; in fields 35, 36 and 37 - Wheal Fortune and/or Wheal Boys Mine; and in fields 59 and 60 where surface workings related to Treleigh Wood Mine were recorded. The perhaps surprising paucity of mining related features in and around Treleigh Mine is less easy to understand, particularly since this is the one mine where

surface mining operations (structures and shafts) are shown in the vicinity of the pipeline corridor on the Tithe Map. Pre-mine features were often overlain by mine waste, while mine features were removed, reclaimed or remodelled via landscaping works and the introduction of new topsoil etc.

Ironically (in terms of the watching brief results) the densest mining remains were found along a length of the pipeline that today is green and pastoral with very little in the way of obvious surface signs of mining. In contrast the western c500m of the corridor very obviously contained nearby surface mining remnants and recent landscaping and yet significantly few mine features were discovered within the corridor itself.

The finds

The finds assemblage for the pipeline as a whole was relatively large and spanned the prehistoric period through to the modern day. Primarily it consisted of miscellaneous stonework, variably dated and sourced pottery, clay pipes and crucibles.

The prehistoric period was represented by the worked flint, chert and quartz pieces, and potentially the hammerstones and the quartz pebbles. Romano-British activity is indicated by eight sherds found in fields 9 and 14 (both of which are very close to areas suggested to have contained late prehistoric/Romano-British activity on the basis of ditched features. Its presence would indicate at least small-scale domestic activity in the vicinity. At a later date Early Medieval pottery from fields 8, 10 and 14 was found, again indicating near-by settlement and/or the fertilisation of local fields with domestic waste and kitchen midden material. Mid-Late Medieval pottery is slightly more abundant and partially reflects the origins of current settlements ie. at Treskerby and Tolgallow.

The steady increase in pottery finds from the Late Medieval, through the early to later Post-Medieval periods suggests an intensification of field fertilisation and perhaps an increase in the quantity of domestic waste available for spreading on the fields. Finds become both more numerous and more widely dispersed as the later post-medieval period progresses. The 1840 Tithe Map Apportions illustrates this well – listing much of the pipeline length as being under arable cultivation, ie a rotation system of a few years of cultivation followed by a few years of non-cultivation. (Today the vast majority of it is pastoral). This might suggest that fixed settlements are steadily expanding through time. Proximity to the mines around St Day and Redruth may have generated a greater demand for local produce or have put a premium on cultivated land due to the loss of formerly cultivated land to surface mining operations. The mining maps show this whole area to have been liberally scattered with known, worked, mineral rich surface/sub-surface lodes and the names of mines.

The affects of mining (and its related industries) have left its mark on the finds assemblage. Remnant crucibles were found within fields 9, 11, 26, 29, 32/33, 49, 55 and 58. Clay pipes were found scattered along the length of the pipeline, and are a ubiquitous characteristic from finds assemblages associated with similar projects from across the country.

7 Appendices

7.1 List of contexts

Context number	Field number	Description and comments
[200] SW 7184 4331	22	Removed boundary. Ridge of natural flanked by one E parallel running ditch. 4.5m total width. Runs diagonally SW-NE across corridor - possibly part of a lost field system associated with [210].
[201] SW 7236 4307	16	Removed boundary. Seen in plan as a surviving ridge of slightly raised natural clay shillet with occasional stones. No associated ditches seen in plan. Runs N-S across the centre of field 16.
[202] SW 7204 4316	19	Ditch. Runs NNE-SSW across the central area of the field 19 corridor. No associated ditch, stones or obvious ridge of natural. 0.8m wide, 0.3m deep. Concave in profile. Filled with a brown loam, overlying a silty clay.
[203] SW 7180 4333	22	Removed boundary - ditch with occasional flanking W stones. 0.8m wide ditch. Runs N-S across the corridor.
[204] SW 7190 4325	21	Ditch. Rounded right angle ('L' shaped) in plan. 4.0m NE-SW, 2.0m SE-NW, 0.5m wide, 0.18m deep. Located at extreme W end of field 21 corridor. Steep edges and a concave base. Possible association with [286] and [287].
[205] SW 7190 4325	21	Fill of [204]. Mottled, grey brown, silty clay loam and occasional shillet.
[206] SW 7190 4325	21	Ditch. Rounded right angle ('L' shaped) in plan. Mirrors outer E edge of [204] - which is 3.5m away). 6.0m NE-SW, 7.0m N-S, 0.55m wide (E-W section), 1.8m wide at N edge, 0.08m deep. Steep edges, near flat base. Possible association with [286] and [287].
[207] SW 7190 4325	21	Fill of [206]. Mixed (disturbed/burrowing) orange brown loamy clay. No shillet.
[208] SW 7231 4304	17	Curvilinear ditch cut. c3.0m N-S length visible, S end merges with natural. Located in eastern half of field 17. Steeply concave shaped profile. 0.45m wide at top and 0.2m deep.
[209] SW 7231 4304	17	Fill of [208]. Compact dark brown gritty loam. No stones.
[210] SW 7179 4335	22	Removed boundary. Ridge of natural flanked by two parallel running ditches. 3.0m total width. Runs diagonally SW-NE across corridor - possibly part of a lost field system associated with [200].
[211] SW 7195 4323	21	Fill of [291]. Mid grey brown silty loamy clay with occasional shillet.
[212] SW 7255 4311	14	Partially metalled track. 2.0m wide. Runs NW-SE across the corridor, on the W side of field 14. Associated with [215] and [216].
[213] SW 7259 4312	14	Removed boundary. Ridge of natural with a ditch flanking the W side. Runs NNW-SSE across the corridor. Occasional stones along the ridge. 1.8m width in total. Located in E side of field 14.
[214] SW 7249 4312	14	Probable removed boundary consisting of a line of stones (up to 0.4m in size). Runs WNW-ESE across the corridor. In E half of field 14.
[215] SW 7255 4311	14	Partially disused, redeposited natural clay shillet bank, flanking E side of [212]. 1.0m wide, c0.3m high. Possible ditch located within the 2.0m gap between the bank and the track. W side of field 14
[216] SW 7255 4311	14	Partially disused, redeposited natural clay shillet bank, flanking W side of [212]. 1.0m wide, c0.2m high. Possible ditch located within the 2.0m gap between the bank and the track. W side of field 14.

[217] SW 7271 4313	12	Disused boundary. 2.2m wide slight ridge of natural - topped with 0.15m high, redeposited natural and leaf litter, 1.5m wide flanking ditch. Ditch on W side. Possibly formerly associated with [218]. Located at W end of field 12.
[218] SW 7271 4313	12	Disused boundary - ephemeral bank marking start of tree growth to the E, and the start of a more pronounced break of slope towards the E. Probably associated with [217]. Shown on the Tithe Map.
[219] SW 7310 4330	8	Track. Post-medieval. 3.0m wide, 0.5m high build up of redeposited, crushed shillet/killas. Runs along the E edge of boundary 112 (which has shifted/grown to slightly overlie it).
[220] SW 7333 4338	7	Ditch cut. 0.4-0.6m wide, 1.5m+ deep - seen in pipe trench section. Sheer sided cut - base not seen. Uncertain function - post medieval / modern in date. Stones along W edge.
[221] SW 7341-4336 7347-4337	6	Bank of mine waste 3.0m wide and 1.0m high. Runs adjacent to E edge of boundary 110.
[222] SW 7341-4336 7347-4337	6	Trench - mine feature. Runs parallel to [221]. 2.0m wide and 0.6m deep. Filled with silty pale grey brown mine waste.
[223] SW 7343 4337	6	Ditch - part of a removed boundary. Associated with [224]. Flanks W side of a band of natural. 0.8m wide and filled with mine waste.
[224] SW 7343 4337	6	Ditch - part of a removed boundary. Associated with [223]. Flanks E side of a band of natural. 0.8m wide and filled with mine waste.
[225] SW 7367 4337	3	Ditch / trench. Machine cut, modern probable drain or service trench. 0.8m wide. Ran diagonally NW-SE across field 3.
[226] SW 7370 4340	2	Partially removed lynchett boundary. Consisted of a ditch and a ridge of natural. The ridge was 3.5m wide. To the E was a 1.2m wide ditch. To the N of the corridor the removed boundary was still extant. Visible 0.5m high lynchette.
[227] SW 7164 4343	26	Ditch. Located in the W side of field 26. 0.5m wide and up to 0.3m deep. Steeply concave in profile. Ran diagonally across the corridor. Contained a well defined dark brown loam.
[228] SW 7157 4349	27	Removed boundary. Consists of two 1.4m wide ditches flanking a ridge of natural. Located 25.0m W of boundary 133. Runs in a NE-SW direction across the corridor.
[229] SW 7148-4360 7160-4348	26/27/28	Removed boundary. Consists of two ditches flanking a low ridge of natural. N ditch was 1.6m wide, S ditch was 1.0m wide and the ridge was 2.0m wide. Runs obliquely across the corridor (WNW-ESE) in three fields. Part of a lost field system - cut by [228], boundaries 133 and 132.
[230] SW 7038 4373	49	Removed boundary. Consists of two ditches (0.6m and 0.9m wide) flanking a 1.3m wide ridge of natural. Runs NW-SE across the corridor.
[231] SW 7044 4375	49	Removed boundary. Two ditches flanking a 1.0m wide ridge of natural. Runs N-S across the corridor. W ditch 1.0m wide, E ditch 1.3m wide.
[232] SW 7042 4375	49	Ditch located 3.0m to the E of [231]. 1.6m wide and runs N-S across the corridor.
[233] SW 7070 4376	45	Removed boundary. Two ditches flanking a ridge of natural. 2.5m total width. No visible stones. Runs NE-SW across the corridor.
[234] SW 7086 4377	42	Post-medieval railway maintenance track. Rarely used, slightly overgrown, partially metalled.
[235] SW 7984 4377	43	Removed boundary. Located centrally within field 43. Consists of a 1.2m wide ditch on the S side of a 3.0m wide band of natural and a possible ditch on the N side. The clear ditch contained a dark stony loam, was concave in profile and 0.35m deep. E-W aligned.
[236] SW	43	Ditch. Runs E-W across the corridor of field 43. 0.9m wide and contains a dark stony

7083-4377		loam. It was 0.2m deep and had short steep edges and a near flat base.
[237] SW 7146-4370	30	Probable removed boundary, consisting of a 1.3m wide ditch located on the N side of an E-W running stony ridge of natural.
[238] SW 7144-4371	30	Ditch associated with [239]. The N ditch of two ditches which flanked a 3.0m wide ridge of natural. Very truncated. 0.3m wide and 0.05m deep. Steep sides and a flat base - appeared to be late (perhaps represents a re-cut feature?)
[239] SW 7144-4371	30	Ditch associated with [238]. The S ditch of two ditches which flanked a ridge of natural. 2.0m wide, 0.35m deep. Concave in profile.
[240] SW 7003-4356	56/57	Removed boundary represented by a ridge of stony natural flanked by two probable ditches. Runs N-S across the corridor. 2.6m wide in total. Represents removed Boundary 165 - separated fields 56 and 57.
[241] SW 7003-4357	55/56	Removed boundary. Single ditch running along the E side of a ridge of natural. Total width of 2.2m. Represents removed Boundary 164 - separated fields 55 and 56..
[242] SW 7005-4358	55	Removed boundary. Single ditch and ridge of natural running diagonally E-W across corridor. Ridge is topped by a number of stones up to 0.4m in size. Ditch runs down E side of ridge.
[243] SW 7007-4360	54	Possible removed boundary, visible as a slightly raised ridge of natural, 1.4m wide. Centrally located within field 53.
[244] SW 7175-4338	22a	Removed boundary. Slight ridge of natural with ditches flanking W and E side. Occasional stones between ridge and W ditch. Total width of 3.2m. Runs N-S across corridor.
[245] SW 7176-4337	22	Square / machine cut feature with sheer sides. 6.0m long and 3.0m wide. Filled with redeposited killas bedrock. Probable trial pit.
[246] SW 7188-4325	22	Ditch. Runs parallel to boundary 126 (6.0m to its W). 1.3m wide, 1.0-1.2m deep, rounded 'V' shape in profile. Seen in pipe trench section. Filled with a brown peagrit and loam. The lowest part contained a silty brown loam above a mineralised crust, which formed the base of the cut.
[247] SW 7206-4315	19	Stone filled 'trench?', 2.0m wide 0.75m deep, steeply concave in profile. Some of the stones had collapsed prior to recording, but what was left suggested a possible wall foundation trench. The stones were well packed to provide a stable support / base. Runs NE-SW across the corridor. Sealed by a 0.25m depth of topsoil.
[248] SW 7206-4315	19	Lode back trench. 1.5m wide at top, 1.5m deep. Near sheer edges. Base not seen. Cuts bedrock on either side, and is sealed by topsoil. Contains alternating pockets of silty loam, decayed silty clay shillet. Probably follows a surface lode.
[249] SW 6985-4341	59/60	Probable cone surrounding a shaft located on the immediate S edge of the corridor, between boundary 167 and 168. Associated mine waste surrounds the 10-13m diameter cone and extends across the corridor - covering the majority of field 59/60 and the W side of field 61.
[250] SW 7209-4305 7215-4304	18	Collapsed adit / tunnel. 2.0m deep, 0.9-1.1m wide. Amorphous shaped, vertical feature filled with bands of loose, pale sandy mine waste, collapsed natural and a later stony mine waste and loam fill (which appeared ditch shaped in plan and profile - probably as a result of collapse from below). W side of field 18.
[251] SW 7209-4305 7215-4304	18	Adit / tunnel. 1.4m wide, 0.4m+ deep. Arched, rock cut roof below 1.0m of killas bedrock. Only the top of the feature was seen in the pipe trench, almost completely blocked with [294]. Runs N-S across the corridor, in the W part of field 18.
[252] SW 7209-4305 7215-4304	18	Adit / tunnel. 1.6m wide, 0.7m+ deep. Partially collapsed roof. Blocked with [295]. Runs N-S across the corridor, in the W half of field 18. Below 1.0m of bedrock.
[253] SW 7209-4305 7215-4304	18	Mining trench seen in pipe trench. 1.5m wide at top, 1.0m wide at base. 1.3m+ deep, near sheer edges. Natural bedrock on both sides. Runs N-S across the corridor. W side of field 18. Probably follows a surface lode.

[254] SW 7209-4305 7215-4304	18	Metalled track. 2.2m wide, 0.3m maximum deep. Metalling composed of small crushed killas/shillet in a silty brown clay matrix. Was seen in pipe trench, sealed beneath topsoil. W side of field 18.
[255] SW 7209-4305 7215-4304	18	Probable lode back pit / shaft? 1.8m wide at top, near sheer edges, not bottomed, only clearly visible in one section. Cuts bedrock. W side of field 18.
[256] SW 7231-4304	17	Adit / tunnel located during pipeline trenching. A subsurface feature at the E end of field 17. Related to mining. 1.5m wide, c1.2m below ground level, rock cut, choked with decayed killas (gritty clay shillet).
[257] SW 7235-4307	16	Lode back trench. 1.9m wide, 1.5m+ deep. Seen in pipe trench section. Cuts natural clay shillet, and drops down almost vertically. Filled with redeposited natural and occasional large bedrock pieces. Located in W side of field 16.
[258] SW 7239-4306	16	Depression - probable mining related feature. 2.8m wide, 1.0m deep. Slightly amorphous, concave profile. Contained a pale brown mixed loam and silty clay. The basal fill was slightly more silty. Located in the centre of field 16 corridor.
[259] SW 7243-4306	16	Ditch. 1.2m wide at top. 0.8m deep. Steeply concave in profile with a lip on the W side. Seen in pipe trench only. Contains two non-mining related fills. Cuts natural. Runs N-S across field 16 corridor.
[260] SW 7243-4306	16	Fill of [259]. Basal fill of ditch [259]. Dark brown sticky clay loam. No stones.
[261] SW 7243-4306	16	Fill of [259]. Upper fill of ditch [259]. Very dark orange brown silty clay loam with occasional small decayed shillet pieces.
[262] SW 7157-4349	27	Probable trench. Runs NE-SW across the corridor, in the S half of the field. Seen in pipe trench. 2.0m wide, at least 1.6m deep. Base not seen. Vertical lower sides, upper sides broaden out. Filled with near black loam and stones. Late feature, associated with mining. Backfilled in one rapid phase of activity. Dumps of mining waste and topsoil etc in the immediate vicinity.
[263] SW 7262-4312	14	Re-cut ditch located on E side of field 14, on W side of ridge [299]. 3.5m wide, 0.8m deep. Contains dark grey brown silty loam topped by a thin deposit of probable killas mining waste. Possibly associated with [264]. Steep W side, gently sloping E side, concave base.
[264] SW 7262-4312	14	Ditch. Located on E side of field 14, on E edge of [299]. 2.5m wide, c0.3m deep. Contains a dark grey brown, rooty loam. Concave profile.
[265] SW 7262-4312	14	Ditch. Located on E side of field 14, 2.0m to E of [264]. 2.0m wide and 0.4m deep. Contains a dark grey brown loam. Concave profile.
[266] SW 7296-4314 7305-4321	10	Subsoil layer. Compact grey brown and orange, silty clay loam. Varied in depth from 0.1m to 0.4m deep. Ran across majority of field 10 length - deeper towards the base of the slope. Sealed by the topsoil. Produced finds.
[267] SW 7277-4314	12	Mining related feature - trench/wall foundation trench. 1.5m wide and 1.3m deep. Seen in pipe trench and plan. Extends c1.5m into corridor from the N. Wall foundations located c0.5-1.0m to the E. Filled with loose, loamy, rooty, silty clay. No obvious mine waste. Steep straight sided, flat bottomed feature.
[268] SW 7277-4314	12	Wall - mining related? 1.1m wide, 1.4m deep, vertical sides and a flat base. Partially robbed out stone wall foundation trench. Turns 90 degrees in the corridor, and then returns c3.0m to the W (where it had a square ended terminal - 0.6m wide and 1.2m high).
[269] SW 7275-4313	12	Trench - mining related. 1.3m wide at top, 1.5m deep. Seen in pipe trench section 5.0m W of [267]. Steep sides, flat based (with a step on the W edge). Runs N-S across the corridor. Filled with bands of decaying mining waste and silty loam.
[270] SW 7283-4311	11/12a	Stone lined culvert (extant). Located between field 12a and the road. Runs WNW-ESE. 1.5m high, 0.8m wide culvert plus stone faced edges and arched roof. Seen at open W terminal. Continues under road as an open feature and appears to run towards the lodge.

		The lower half cuts bedrock while the upper half is surrounded by a raised mound of stonework and topsoil.
[271] SW 7280 4314	11/12a	Stone topped adit / tunnel. Runs SW-NE under road. 1.8m wide, 1.0m deep. Cuts natural on all sides. Arched top is formed stonework topped by a 1.6m depth of natural bedrock.
[272] SW 7104-4369 7113-4370	36/37	Landscaped mine waste. 0.6m deep to immediate W of boundary 145. Extends N, S and W of this point. Sealed by two layers of introduced topsoil --the top one has been given context number [275].
[273] SW 7118 4372	35	Landscaped mine waste located to the immediate E of boundary 145. 1.1m deep, 20.0m wide and extends N and S of the corridor. Overlain by re-introduced topsoil covering
[274] SW 7290 4309	11	Valley bottom with 0.8m deep, 35.0m wide, NW-SE aligned subsoil build up. Broad concave profile. Low-lying, damp, slightly humic, topsoil sealed dark brown clay loam.
[275] SW 7104 4369	37	Dump of topsoil and occasional shillet representing latest redeposition of topsoil. It has been given a number because post-medieval finds were collected from it as a surface scatter.
[276] SW 7208 4306	19	Adit. Runs 4.0m W of boundary 123, at the E edge of field 19. 1.0m wide, 1.3m+ deep and 0.6m below bedrock level. Rock cut with vertical sides and an arched roof. Partially blocked on E side by decayed clay shillet - but essentially an open feature. This feature was only visible in the N side of the pipe trench, and extended as an open feature N for at least another 2.0m. Appeared to stop abruptly to the S of this point.
[277] SW 6990 4347	57	Removed boundary ditch (associated with [278]). Located on W side of a line of natural. Runs diagonally across corridor SE-NW. 0.7m wide.
[278] SW 6990 4347	57	Removed boundary ditch (associated with [277]). Located on E side of a line of natural. Runs diagonally across corridor SE-NW. 0.8m wide.
[279] SW 6989 4347	57	Removed curvilinear boundary ditch, running N-S diagonally across the corridor. Flanks W side of a low ridge of natural. Associated with ditch [280].
[280] SW 6989 4347	57	Removed curvilinear boundary ditch, running N-S diagonally across the corridor. Flanks E side of a low ridge of natural. Associated with ditch [279].
[281] SW 6960 4314	63	Removed boundary. Consists of two ditches flanking a ridge of natural. Both were fairly ephemeral and slightly curvilinear in plan. Not seen in section. Maximum total width of 2.3m. Located S of boundary 171 - in the works entrance area to the immediate W of the pipeline terminal. Lies beneath probable imported topsoil / landscaping material.
[282] SW 6963 4318	63	Ditch. Positioned S of boundary 171 - in the works entrance area to the immediate W of the pipeline terminal. Ephemeral, slightly curvilinear ditch. Lies beneath probable imported topsoil / landscaping material. Runs c EW across the corridor.
[283] SW 7299 4315	10	Ditch located in the central portion of field 10. 1.4m wide, 0.5m deep. Concave slopes and a narrow flat base. Runs NW-SE straight across the corridor. Sealed beneath layer [266], and contained a sticky brown clay. Probably functioned as a drainage ditch in this low-lying location.
[284] SW 7317 4338	8	Removed lynched boundary - not clearly seen. Consisted of a visible break of slope in the natural. A line of stones (up to 0.6m in size), define the surviving 1.5m wide ridge of natural.
[285] SW 7317 4338	8	Ditch. 2.0m wide, 1.0m deep. Seen in pipe trench section. 'V' shaped in profile. Contained 0.5m deep upper fill of dense orange brown clay and a 0.5m deep lower fill of tan/grey silty clay.
[286] SW 7193 4323	21	Curvilinear gully / ditch. 0.5m wide, 0.15m deep. c5.0m long arc towards the SW. N continuation of both arms = missing / truncated. Short steep outer edge with gentle concave base and inner edge. Possibly associated with [204] and [206].
[287] SW 7193 4323	21	Rectangular feature. A 3.0m long, 2.0m wide area of 0.05 - 0.1m deep disturbance of mixed loamy silty clay. Uncertain interpretation, but does appear to either be contained by [286]. It did not produce any finds.

[288] SW 7193-4323	21	Fill of [286]. Mottled very pale grey brown, loamy clay silt.
[289] SW 7194-4323	21	Removed boundary. Slight ridge of natural with two flanking ditches. 3.0m width. W central side of field 21.
[290] SW 7194-4323	21	Ditch. 2.0m wide, runs NNE-SSW across the corridor. Located centrally within field 21.
[291] SW 7195-4323	21	Curvilinear ditch, located at the E end of field 21. A 4.0-6.0m length was visible. Extends beyond N edge of corridor. SW extension missing / truncated. 1.5m wide, 0.2m deep. Short steep sides and sloped base.
[292] SW 7233-4305	17	Ditch. 1.8m wide. Runs N-S across the corridor. Not seen in section.
[293] SW 7312-4331	8	Removed boundary. Seen as a line of stones running N-S across the corridor.
[294] SW 7209-4305 7215-4304	18	Fill of [251]. Pale, gritty, creamy grey coloured, decayed clay and shillet.
[295] SW 7209-4305 7215-4304	18	Fill of [252]. Pale grey brown, decayed silty loamy clay and shillet.
[296] SW 7209-4305 7215-4304	18	Fill of [253]. Redeposited natural pale creamy grey clay shillet with mixed bands of brown loamy silt.
[297] SW 7209-4305 7215-4304	18	Fill of [255]. Compact dark brown gritty silty loam and sandy grit.
[298] SW 7280-4314	12a	Fill of [271]. Adit [271] almost completely filled with decayed bedrock and possible mine waste? Pale grey brown, damp.
[299] SW 7262-4312	14	Removed boundary consisting of a ridge of natural 4.0m wide, 0.5m high, composed of redeposited natural. Flanked by ditches [263] and [264]. Located at E end of field 14, and marks a pronounced break of slope.
[300] SW 7206-4315 7208-4306	19	Mining related feature? Western-most feature of eleven shallow, linear concave profiled features located within field 19. 3.0m long, 0.5m deep. Filled with a brown loam. Similar to [305].
[301] SW 7206-4315 7208-4306	19	Mining related feature? One of eleven shallow, linear, concave profiled features located within field 19. 1.0m long and 0.5m deep, dark brown loam filled ditch – directly related to identical features [302] and [303]. Located 2.0m E of [300].
[302] SW 7206-4315 7208-4306	19	Mining related feature? One of eleven shallow, linear, concave profiled features located within field 19. 1.0m long and 0.5m deep, dark brown loam filled ditch – directly related to identical features [301] and [303]. Located 1.0m E of [301].
[303] SW 7206-4315 7208-4306	19	Mining related feature? One of eleven shallow, linear, concave profiled features located within field 19. 1.0m long and 0.5m deep, dark brown loam filled ditch – directly related to identical features [301] and [302]. Located 1.0m E of [302].
[304] SW 7206-4315 7208-4306	19	Mining related track? One of eleven shallow, linear, concave profiled features located within field 19. 3.0m wide, 0.25m deep. Not metallised. Consists of a broad linear band of redeposited, crushed, decaying bedrock overlying natural clay shillet and beneath the topsoil. Located 2.0m E of [303].
[305] SW 7206-4315 7208-4306	19	Mining related feature? One of eleven shallow, linear, concave profiled features located within field 19. 3.0m wide, 0.4m deep loam and shillet filled feature. Very similar appearance to [300]. Located 4.0m E of [304].
[306] SW 7206-4315	19	Mining related feature? One of eleven shallow, linear, concave profiled features located within field 19. 1.0m wide and 0.5m deep. Filled with redeposited silty shillet. Located

7208-4306		2.0m E of [305].
[307] SW 7206-4315 7208-4306	19	Mining related feature? One of eleven shallow, linear, concave profiled features located within field 19. 3.0m wide, 0.4m deep shillet filled feature. Located 2.0m E of [306].
[308] SW 7206-4315 7208-4306	19	Mining related feature? One of eleven shallow, linear, concave profiled features located within field 19. 3.0m deep, 0.3m deep. Dark brown loam fill. Located 0.10m E of [307].
[309] SW 7206-4315 7208-4306	19	Mining related feature? One of eleven shallow, linear, concave profiled features located within field 19. 2.0m wide, 0.3m deep, dark brown loam filled feature. Located 1.0m E of [308].
[310] SW 7206-4315 7208-4306	19	Mining related feature? Eastern-most feature of eleven shallow, linear, concave profiled features located within field 19. 2.0m wide, 0.3m deep, dark brown loam filled feature. Located 1.0m E of [309].
[311] SW 7135-4372	32/33	Removed boundary. Consists of two ditches flanking a band of natural. 3.8m wide in total. Represents boundary 140.
[312] SW 7131-4376	33	Trench / ditch. Modern, machine cut feature, running cN-S across the corridor - at the point where the corridor changed alignment. 0.4m wide.
[313] SW 7104-4369	37	Possible old boundary. Ridge of natural 0.2m higher than the surrounding natural level. 1.6m wide. Terminates in centre of corridor and runs due N. Later mine waste [272] on all sides.
[314] SW 7118-4372	35	Bank of mine waste, running N-S across the corridor. 4.0m wide and 0.6m high. Overgrown. Part of a series of mine dumps in the area.
[315] SW 7118-4372	35	Bank of mine waste. Terminates in centre of corridor. Runs due S. from this point. 3.0m wide, 0.4m deep. Overgrown.
[316] SW 7118-4372	35	Bank of mine waste located at the E edge of boundary 144. 4.0m wide and 1.3m high.
[317] SW 7341-4336 7347-4337	6	Differential spreads of mine waste. 0.1-0.4m deep deposits.
[318] SW 7341-4336 7347-4337	6	Track composed of crushed of mine waste 4.0m wide and 0.3m high in section. Runs NE-SW across the corridor.
[319] SW 7163-4345	26	A miscellaneous series of amorphous shaped patches of black humic material in pockets or undulations on the surface of the natural. Some of these patches produced modern / post-medieval pottery.

7.2 Boundary recording results

Key: P = Prehistoric 1500 BC to AD 43.

M = Medieval c.13th century to 16th century AD.

PM = Post Medieval post 16th century.

SFEW = Stone-faced earth wall (Cornish hedge))

SFB = Stone-faced bank)

SB = Stone bank)

EB = Earth bank)

See Fig. 4 for CAU boundary classifications.

No.	Location	NGR	Origin	Archaeological Record	Comments
101	West of Todpool	SW 7377 4341	M	Not seen in section	Not breached
102	West of Todpool	SW 7375 4340	M	2.0m wide, 2.3m high. [1] Rooty, loamy leaf litter. [2] Dark brown loamy clay. [3] Redeposited orange brown mixed loamy clay. [4] Remnant stone facing. [5] Natural clay shillet.	SFEW Track on west side. Lynchett. May have originally been the boundary between Gwennap and Kea parish.
103	West of Todpool	SW 7374 4339	M	1.6m wide, 1.6m high. [1] Rooty, loamy leaf litter. [2] Dark brown loose, rooty silty loam. [3] Brownish grey loamy clay. [4] Remnant stone facing. [5] Natural clay shillet.	SFEW Track on east side.
104	West of Todpool	SW 7368 4337	M	2.8m wide, 1.0m high. [1] Loose brown loamy leaf litter. [2] Rooty, very dark grey brown loam. [3] Firm, mottled orange brown loamy clay. [4] Final stone facing. [5] Old Land Surface - firm, mixed silty loam. [6] Earliest stone facing.	SFB (was SFEW) Lynchett.
105	West of Todpool	SW 7357 4337	M	3.0m wide, 2.4m high. [1] Rooty brown topsoil. [2] Firm, brown loamy topsoil. [3] Loose orange grey brown silty loam with occasional stones. [4] Firm, silty loamy clay / redeposited natural. [5] Compact, dusty grey brown silty loam. [6] Remnant stone facing. [7] Natural clay shillet.	SFEW Lynchett. Track on western side.
106	West of Todpool	SW 7356 4337	M	1.8m wide, 1.6m high. [1] Brown rooty loam topsoil. [2] Redeposited yellowish brown silty clay. [3] Old Land Surface - mixed loamy grey yellow silty clay. [4] Remnant stone facing. [5] Natural	SFEW Track on east side.

				clay shillet.	
107	West of Todpool	SW 7349 4337	PM	Not seen in section. Ran along the alignment of a pre-1840 (M) boundary.	Tramline boundary - Tunnelled beneath.
108	West of Todpool	SW 7348 4337	PM	Not seen in section. Ran along the alignment of a pre-1840 (M) boundary.	Tramline boundary - Tunnelled beneath.
109a	Tolgallow Vean	SW 7345 4336	M	2.5m wide, 1.2m high. [1] Rooty topsoil and leaf litter. [2] Redeposited natural clay and shillet lense. [3] Loose, rooty grey silty clay loam. [4] Remnant stone facing. [5] Compact, mustard brown, slightly loamy silty clay. [6] Dark brown organic loam. [7] Natural clay shillet.	SFEW
109b	Tolgallow Vean	SW 7342 4336	PM	5.1m wide, 2.0m high. [1] Loose, leafy topsoil. [2] Rooty, pale grey brown, loamy silts and stone mine waste. [3] Pale greyish cream stone mine waste. [4] Loose grey brown loam. [5] Brown loam with shillet fragments. [6] Remnant stone face - early phase. [7] Firm grey brown loam. [8] One side of ditch - base not seen.	SB (was SFEW) Original boundary overlain by later more massive one primarily composed of mine waste associated with West Poldice Mine. This boundary post-dates the 1907 OS map.
110	Tolgallow Vean	SW 7339 4336	M	5.0m wide, 1.2m high. [1] Brown topsoil and leaf litter. [2] Pale grey brown stone mine waste. [3] Remnant stone face - early. [4] Orange brown silty clay. [5] Dark grey brown loam - upper fill of ditch. [6] Early ditch cut - base not seen. [7] Later ditch cut - base not seen. [8] Mine waste upper ditch fill.	SB (was SFEW) Original boundary overlain by later more massive one primarily composed of mine waste associated with West Poldice Mine. The earliest ditch appears to pre-date the earliest visible embankment. Produced artefacts.
111	Tolgallow Vean	SW 7328 4334	M	2.5m wide, 1.3m high. [1] Thick, loose, rooty grey brown loam. [2] Dry and decayed redeposited clay shillet core. [3] Ditch cut - visible as a surface feature. [4] Remnant stone facing.	SFEW Track on western side.
112	Tolgallow Vean	SW 7312 4328	M	2.0m wide, 1.6m high. [1] Loose, loamy dark brown topsoil. [2] Firm, silty grey brown loam. [3] Brownish grey silty loam. [4] Redeposited natural clay shillet. [5] Very dark grey silty loam - possible old land surface. [6] Remnant stone facing - early. [7] Remnant stone facing - late.	SFEW Underlying track way [219] on east side.
113	Tolgallow	SW 7304 4322	M	2.0m wide, 1.8m high. [1] Loose, rooty, grey brown topsoil	SFEW

				and occasional stones. [2] Stone-free, orange brown clay loam. [3] Compact, pale grey brown clay silt. [4] Compact grey brown loamy clay. [5] Stone facing.	
114	Tolgulow	SW 7294 4314	M	2.0m wide, 1.8m high. [1] Loose, rooty, loamy, dark brown topsoil. [2] Rooty, grey brown, loamy silt with stones. [3] Stony and compact yellowish grey redeposited natural. [4] Yellowish brown, very compact loamy, natural subsoil.	SFEW Forms the boundary between semi-parochial St Day and Carharrack. It is not an ancient parish boundary.
115	Tolgulow	SW 7289 4309	M	2.5m wide, 0.6m high. [1] Loose, rooty, grey-brown topsoil. [2] Orange brown, loamy silty clay - ditch clearance material? [3] Organic, rooty black material. [4] Grey brown, loamy, silty clay. [5] Ditch cut. [6] Ditch cut. [7] Natural clay shillet.	EB Road on western side.
116	Pink Moor	SW 7281 4314	M	Not seen in section.	Gate entrance was used.
117	Pink Moor	SW 7267 4314	M	2.0m wide, 1.85m high. [1] Loose, rooty, dark brown organic clay loam. [2] Loose, yellowish grey brown clay loam. [3] Firm yellowish grey brown clay loam, with silty loam lenses along the base - possibly representing a remnant basal buried soil. [4] Stone facing - early. [5] Remnant stone facing - later.	SFEW Lynchett. Track on eastern side.
118	Pink Moor	SW 7263 4313	M	Not seen in section.	Not drawn.
119	Pink Moor	SW 7251 4310	M	1.5m wide, 1.0m high. [1] Loose, dark brown organic topsoil. [2] Stony, light yellowish brown, loose clay loam. [3] Firm, mid yellowish brown clay loam. [4] Remnant stone facing.	SFEW
120	Pink Moor	SW 7245 4309	M	3.0m wide, 1.6m high. [1] Loose, rooty, brown leaf litter and topsoil. [2] Firm redeposited natural silty clay with some shillet and loam lenses. [3] Grey brown silty clay loam with shillet - original core. [4] Compact pale grey brown silty loam - probably representing an old land surface. [5] Remnant stone facing - late [6] Remnant stone facing - early. [7] Ditch cut - early. [8] Upper ditch fill - Grey brown silty clay loam. [9] Organic, loose grey brown loam.	SFEW Has a second possible flanking ditch. Produced artefacts.
121	Park-an-chy Mine.	SW 7234 4306	M	3.4m wide, 2.0m high. [1] Loamy, brown, rooty topsoil. [2] Loose, rooty, grey loam. [3] Rooty,	SFEW

				firm mid grey brown loam. [4] Remnant stone facing, [5] Loose, rooty, slumped topsoil and dead vegetation. [6] Natural orange clay grit.	
122	Park-an-chy Mine.	SW 7221 4303	M	3.0m wide, 2.5m high. [1] Decaying tree stump, leaf litter and ivy. [2] Dark blackish brown organic silty loam. [3] Pale brown loamy clay. [4] Dark grey brown gritty loam. [5] Redeposited, gritty, pale creamy yellow silty clay. [6] Compact grey brown gritty clay loam. [7] Stone facing -early? [8] Probable later stone facing. [9] Ditch cut - early. [10] Upper ditch fill - pale, silty clay loam.	SFEW
123	Park-an-chy Mine.	SW 7208 4305	M	4.0m wide, 2.0m high. [1] Dark brown organic rooty loam. [2] Pale grey slightly stony loam. [3] Pale grey brown, mixed, loamy, silty gritty clay. [4] Stone facing - possibly repaired. [5] Redeposited natural - loose, unstable pale creamy grey clay grit. [6] Compact, gritty black loam - Old Land Surface / ditch up-cast. [7] Brown loam - upper ditch fill. [8] Ditch cut - early. [9] Stone facing - early. [10] Pale grey brown, silty, stony, gritty clay and shillet. [11] Natural.	SFEW Boundary between semi-parochial St Day and Redruth. (It formed the boundary between Gwennap and Redruth).
124	Treskerby	SW 7200 4313	M	2.2m wide, 1.5m high. [1] Rooty, very dark grey brown loam. [2] Pale creamy grey brown silty, gritty loamy clay. [3] Redeposited pale creamy grey natural. [4] Remnant stone facing. [5] Ditch cut - subsequently seen in plan. [6] Ditch cut - subsequently seen in plan. [7] Natural orange clay grit.	SFEW
125	Treskerby	SW 7195 4317	M	2.0m wide, 1.5m high. [1] Rooty brown loam and leaf litter. [2] Rooty, loose grey brown silty loam and occasional stones. [3] Loose black, redeposited topsoil. [4] Compact grey brown clay loam Old Land Surface. Small stones. [5] Stone facing - early. [6] Ditch cut - early. [7] Upper ditch fill - grey brown clay loam. [8] Lense of yellow, gritty redeposited natural clay. [9] Remnant stone face - late. [10] Natural yellow clay grit.	SFEW A number of similarly dated boundaries within the vicinity (as shown on the Tithe Map) have since been removed.
126	Treskerby	SW 7188 4326	M	2.0m wide, 1.4m high. [1] Loose, rooty, grey brown organic	SFEW A number of similarly dated

				topsoil. [2] Loose, brownish grey silty loam. [3] Compact gritty dark grey brown clay loam with patches of natural. [4] Remnant stone facing. [5] Compact mid grey brown silty clay loam - Old Land Surface. [6] Upper ditch fill - brown silty clay loam. [7] Ditch cut. [8] Ditch cut seen in plan. [9] Silty grey brown to yellow clay.	boundaries within the vicinity (as shown on the Tithe Map) have since been removed.
127	Treskerby	SW 7174 4336	M	1.7m wide, 1.6m high. [1] Loose, rooty brown topsoil. [2] Brown loam with occasional shillet. [3] Alternating bands of organic black material and redeposited pale silty clay (ditch cleanings?) [4] Compact mid brown silty loam - Old Land Surface. [5] Stone facing. [6] Ditch cut. [7] Dark, silty, grey brown loam - ditch fill.	SFEW Road on western side.
128	Treskerby	SW 7173 4337	M	4.4m wide, 2.1m high. [1] Loose, rooty grey brown topsoil. [2] Firmer, rooty grey brown topsoil. [3] Redeposited greyish orange clay and stone. [4] Compact dark grey brown silty loam and small stones. [5] Redeposited yellowish grey clay. [6] Remnant stone facing - earliest. [7] Firm dark grey brown loam. [8] Firm brown rooty loam. [9] Stone facing - very late. [10] Black organic loam. [11] Redeposited yellowish clay. [12] Compact dark grey brown silty loam and small stones. [13] Natural yellow clay shillet.	SFEW Road on eastern side. Produced artefacts.
129	Treskerby	SW 7166 4340	M/PM	2.0m wide, 1.2m high. [1] Loose, rooty, grey brown topsoil. [2] Firm, rooty, brown loam. [3] Redeposited, root / burrow disturbed, greyish brown and orange, loamy clay. [4] Disturbed and compacted silty, loamy clay - old land surface? [5] Stone facing. [6] Ditch cut. [7] Natural orange stony clay.	SFEW Slightly lynched.
130	Treskerby	SW 7164 4341	M	2.0m wide, 1.4m high. [1] Brown loam topsoil. [2] Grey brown silty clay loam. [3] Redeposited orange brown clay and shillet. [4] Compact dark brown silty loam. [5] Stone facing. [6] Ditch cut - early. [7] Ditch cut - early. [8] Pale grey brown, silty clay shillet. [9] Pale grey brown, silty clay shillet.	SFEW Road on western side. Produced artefacts.
131	Highway	SW 7164 4343	M	2.0m wide, 1.4m high. [1] Brownish grey loam topsoil.	SFEW Road on eastern side.

				<p>[2] Firm brown, rooty, silty loam.</p> <p>[3] Grey brown, silty clay shillet core.</p> <p>[4] Stone facing. [5] Ditch cut.</p> <p>[6] Natural clay shillet.</p>	
132	Highway	SW 7158 4350	M	<p>3.5m wide, 1.5m high.</p> <p>[1] Loose, rooty, brown loam.</p> <p>[2] Mixed grey brown loam and clay shillet. [3] Pale greyish cream redeposited clay shillet. [4] Brown loam (with pebbles?). [5] Grey brown mixed loam and natural. [6] Compact, mixed, dark brown loam and natural. [7] Remnant stone facing - late. [8] Remnant stone facing - early. [9] Ditch cut - early. [10] Ditch cut. [11] Redeposited natural pale grey, clay shillet. [12] Natural clay shillet.</p>	<p>SFEW</p> <p>Track on western side.</p>
133	Highway	SW 7157 4350	M	<p>2.0m wide, 1.4m high.</p> <p>[1] Loose, rooty brown topsoil and leaf litter. [2] Lense of yellow redeposited natural. [3] Lense of yellow redeposited natural. [4] Very dark brown, loose silty loam. [5] Stone facing - late. [6] Stone facing - early. [7] Redeposited natural yellowish clay. [8] Compact, grey brown silty clay. [9] Grey brown loam - ditch fill. [10] Ditch cut - early. [11] Ditch cut - early.</p>	SFEW
134	Highway	SW 7150 4356	M/PM	<p>1.0m wide, 1.3m high.</p> <p>[1] Brown rooty loam topsoil. [2] Recent stone facing. [3] Uniform, loose, rooty silty loam core with shillet.</p>	<p>SFEW</p> <p>Has recently been rebuilt - but runs along the same alignment as its Medieval predecessor.</p> <p>Between boundaries 134 and 135 a single boundary has been removed since 1840.</p>
135	Highway	SW 7144 4361	M	Not seen in section.	<p>Not drawn.</p> <p>Between boundaries 134 and 135 a single boundary has been removed since 1840.</p>
136	Highway	SW 7142 4364	M	<p>2.0m wide, 1.4m high.</p> <p>[1] Rooty, brown, loose topsoil. [2] Rooty and burrowed brown loam. [3] Redeposited natural silty clay shillet, greyish orange. [4] Remnant stone facing. [5] Ditch cut - early. [6] Ditch cut - early. [7] Natural clay shillet.</p>	SFEW
137	Highway	SW 7135 4370	M	No longer extant.	<p>Removed prior to 1907.</p> <p>Recorded during watching</p>

				Not seen in section.	brief as ditches [238] and [239].
138	Highway	SW 7133 4372	M	No longer extant. Not seen in section	Removed since 1907.
139	Highway	SW 7132 4373	M	No longer extant. Not seen in section.	Removed since 1907.
140	Highway	SW 7131 4374	PM	No longer extant. Not seen in section.	Boundary constructed and removed since 1907.
141	Highway	SW 7125 4373	M	2.6m wide, 1.2m high. [1] Rooty, loamy topsoil. [2] Loose grey brown silty loam. [3] Redeposited natural grey and orange silty clay. [4] Remnant stone facing - late. [5] brown loam layer. [6] Redeposited natural grey orange silty clay. [7] Compact grey brown loam - Old Land Surface. [8] stone facing - early. [9] Ditch cut - early. [10] Ditch fill - grey brown silty clay loam.	SFEW
142	Highway	SW 7122 4372	M	Not seen in section.	Not drawn.
143	Highway	SW 7120 4372	M	1.3m wide, 1.1m high. [1] Dark brown, rooty, loamy topsoil. [2] Redeposited orange silty clay. [3] Black organic silty loam. [4] Redeposited orange silty clay. [5] Black organic silty loam. [6] Redeposited orange silty clay. [7] Stone facing. [8] Partially maintained ditch.	SFEW Running parallel to partially open ditch [8] on the eastern side of this boundary is a low loam bank (flanked on the east by a track). Contexts [2] to [6] (inc.) represent ditch clearance layers.
144	Highway	SW 7120 4372	M	No longer extant. Not seen in section.	Removed since 1907.
145	Highway	SW 7111 4371	M	2.0m wide, 1.6m high. [1] Rooty, grey brown, loamy shillet. [2] Redeposited grey brown shillet - burrowed. [3] Mixed redeposited grey brown shillet and silty loam. [4] Compact, mid grey brown, silty loam - Old Land Surface. [5] Stone facing. [6] Ditch cut. [7] Ditch cut. [8] Compact grey brown silty clay loam. [9] Compact grey brown silty clay loam.	SFEW
146	Highway	SW 7102 4370	M	2.0m wide, 1.0m high. [1] Loose, rooty, grey brown loam. [2] Pale stony mine waste. [3] Dry, dark brown, organic / reedy looking layer. [4] Humic dark grey to black loam. [5] Stone facing.	SFEW

147	Highway	SW 7100 4371	PM	Not seen in section.	Not drawn. Defines eastern edge of railway line.
148	Treleigh	SW 7100 4373	PM	Not seen in section.	Not drawn. Defines western edge of railway line.
149	Treleigh	SW 7095 4372	?	Not extant	Not extant
150	Treleigh	SW 7094 4372	M	No longer extant. Not seen in section.	Removed prior to 1907.
151	Treleigh	SW 7093 4371	M	Not seen in section.	Not drawn. Track on western side.
152	Treleigh	SW 7092 4371	M	Not seen in section.	Not drawn. Track on eastern side.
153a	Treleigh	SW 7088 4372	M	2.3m wide, 1.95m high. [1] Rooty brown loam. [2] Redeposited clay shillet. [3] Very mixed grey brown and orange silty clay loam and occasional shillet - Old Land Surface. [4] Stone facing. [5] Ditch cut. [6] Silty clay loam - ditch fill. [7] Natural clay shillet.	SFEW Between boundaries 153a and 153b an additional boundary is shown on the 1907 OS map.
153b	Treleigh	SW 7084 4377	M	1.2m wide, 1.2m high. [1] Loose, rooty, grey brown loam. [2] Redeposited, pale grey brown shillet and silty clay core. [3] Stone facing. [4] Natural clay shillet.	SFEW Between boundaries 153a and 153b an additional boundary is shown on the 1907 OS map.
154	Treleigh	SW 7075 4376	M	Not seen in section.	Not drawn. Between boundaries 154 and 155 an additional boundary is shown on the 1880 OS map.
155	Treleigh	SW 7072 4377	M	Not seen in section.	Not drawn. Between boundaries 154 and 155 one additional boundary is shown, and between boundaries 155 and 156 two extra boundaries are shown on the 1880 OS map.
156	Treleigh	SW 7064 4379	M	1.45m wide, 1.1m high. [1] Rooty, loose loam. [2] Firm, rooty, dark brown, loam. [3] Redeposited, pale grey brown, clay shillet. [4] Very compact, mineral rich, dark grey brown, silty clay - possible Old Land Surface. [5] Remnant stone facing. [6] Ditch cut. [7] Ditch cut. [8] Natural decayed clay shillet.	SFEW Between boundaries 155 and 156 two additional boundaries are shown on the 1880 OS map.
157	Treleigh	SW 7058	M	1.6m wide, 1.2m high.	SFEW

		4378		[1] Rooty loam topsoil. [2] Redeposited, pale grey clay shillet. [3] Compact, stone free, dark brown loam - remnant, early ditch fill. [4] Slightly stony, dark brown loam. [5] Stone facing. [6] Natural bank of compact, orange/grey, decayed clay shillet. [7] Ditch cut - early. [8] Ditch cut - late. [9] Ditch cut - late.	Ditch cuts [8] and [9] are still just visible as surface features.
158	Treleigh	SW 7051 4376	M	2.0m wide, 0.7m high. [1] Rooty, brown loam. [2] Redeposited, pale grey brown, clay shillet - burrowed. [3] Compact, mid grey brown, silty loam. Burrowed, possible Old Land Surface? [4] Remnant stone face. [5] Ditch cut.	SFEW
159	Treleigh	SW 7048 4376	M	2.5m wide, 1.4m high. [1] Rooty, brown loam topsoil. [2] Redeposited, orange clay shillet. [3] Dark brown loam with pockets of redeposited clay. [4] Redeposited orange natural clay and shillet. [5] Compact, brown silty loam - Old Land Surface? [6] Remnant stone facing.	SFEW Produced artefacts. Context [1] produced some clay pipe stems.
160	Treleigh	SW 7038 4371	M	No longer extant. Not seen in section.	Removed since 1907. Recorded during the warching brief as [231].
161	Treleigh	SW 7035 4371	M	1.3m wide, 1.5m high. [1] Brown rooty loam. [2] Pale grey brown silty clay. [3] Pale grey brown silty clay loam and shillet. [4] Stone facing.	SFEW Recently reconstructed boundary running along the medieval alignment.
162	Treleigh	SW 7006 4359	M	1.5m wide, 1.7m high. [1] Loose, brown, rooty topsoil. [2] Brown loam and shillet. [3] Redeposited natural shillet. [4] stone facing. [5] Ditch cut.	SFEW Recently reconstructed boundary running along the medieval alignment.
163	Treleigh	SW 7002 4357	PM	1.9m wide, 1.7m high. [1] Loose, rooty, brown topsoil. [2] Grey brown shillet and loam. [3] Pale grey brown, redeposited clay shillet. [4] Thin spread of mine waste. [5] Stone facing. [6] Ditch cut - late. [7] Ditch cut - late.	SFEW Boundary fairly recently constructed - lies above mine waste.
164	Treleigh	SW 6996 4352	M	No longer extant.	Removed since 1907. Recorded during the warching brief as [241].
165	Treleigh	SW 6996 4352	PM	Not seen in section.	Not drawn
166	Treleigh	SW 6994 4349	M	6.0m wide, 2.0m high. [1] Loose, rooty, dark brown topsoil.	EB (was SFEW) Boundary contains mine

				[2] Firm, mid brown loam. [3] Mixed brown loam and pale silty clay shillet - mine waste? [4] Compact, creamy grey, gritty clay mine waste. [5] Partial stone facing. [6] Mixed silty loam and redeposited natural/mine waste.	waste throughout most of its contexts.
167	Treleigh	SW 6985 4345	PM ?	Not seen in section.	Not drawn. Possibly shown on the Tithe Map.
168	Treleigh	SW 6983 4342	PM ?	Not seen in section.	Not drawn. Not shown on the Tithe Map.
169	Treleigh	SW 6980 4338	PM	2.0m wide, 1.15m high. [1] Rooty loam topsoil. [2] Grey/white, compact, shillet based mine waste. [3] Dark brown loam bank, containing domestic PM debris. [4] Stone facing - late. [5] Stone facing - earlier.	SFEW Track on western side. Produced artefacts. Not shown on the Tithe Map, but partially shown on the 1880 OS map.
170	Treleigh	SW 6977 4338	PM	2.0m wide, 1.1m high. [1] Brown loam and leaf litter. [2] Redeposited pale tan, silty clay shillet. [3] Stone face. [4] Pale brown silty clay and shillet. [5] Dark brown loamy silt with larger shillet stones. [6] Stony lense - (sealed on either side by slumping [4]). [7] Probable ditch cut. [8] Pale brown silty clay and shillet.	SFEW (was SB) Track on eastern side. The boundary alignment is shown on the Tithe Map.
171	Redruth	SW 6959 4314	PM	Not recorded in section - very recent.	Not drawn.

7.3 List of SMR sites

This table represents a modified and amended list of all sites listed within the Cornwall SMR (from in and adjacent to the pipeline corridor), which was produced by the pre-field work assessment.

PRN	NGR	Site Description	Comments	Period	Status
19306	SW 7380 4350	Possible barrow cropmark visible on NMR air photo SW 7343/2.	Beyond topsoil stripped corridor.	BA ?	A
19289	SW 7165 4304	Called 'Round Field' on Tithe award - possible late prehistoric enclosure.	Beyond topsoil stripped corridor.	IA ?	B
19288	SW 7131 4366	Possible Roman road from Mt Ambrose towards Bodmin.	No evidence found during the watching brief to confirm this site.	RB	C
19345	SW 7000 4300	Treleigh settlement, first recorded in 1280 (numerous name variants).	No Medieval structural remains or artefacts were found during the watching brief.	EM/M	C
19359	SW 7300 4300	Tolgallow settlement, first recorded as a manor by 1086.	No Medieval structural remains or artefacts were found during the watching brief.	M	(B)
43	SW 7000 4300	Treleigh Mill, first recorded in 1446 (possible precursor of later stamping mill).	Beyond topsoil stripped corridor.	M	C
19291	SW 7254 4358	Two wheel-headed cross (one relocated) on Scorrier House grounds.	Beyond topsoil stripped corridor.	M	SAM 168
19357	SW 7370 4250	Poldice settlement, first recorded in 1512 (probably earlier).	No Medieval structural remains or artefacts were found during the watching brief.	M	C
19358	SW 7250 4410	Scorrier settlement, first recorded in 1331.	No Medieval structural remains or artefacts were found during the watching brief.	M	C
19361	SW 7180 4330	Treskerby settlement, first recorded in 1394.	No Medieval structural remains or artefacts were found during the watching brief.	M	C
19290	SW 7252 4378	Scorrier House - Georgian with 13 th C elements (on site of earlier manor).	Beyond topsoil stripped corridor.	M/PM	(B)
93	SW 6910 4310	Wheal Montague - c1819.	Possible associated features found during the watching brief.	PM	B
95	SW 6990 4330	Treleigh Wood Mine.	Probable associated features found during the watching brief.	PM	(B)
19331	SW7100 4300	Dovecote at Treskerby - general site only, based on documentation.	Beyond topsoil stripped corridor ?	PM	C
40561	SW 6980 4340	Wheal Harmony Mine - working in 1773 and shown in 1819.	Probable associated features found during the watching brief.	PM	B
40977	SW 7140 4370	Treskerby Mine (extant remains have Listed Building status).	Extant remains located to the north of the topsoil stripped corridor.	PM	LBII

40978	SW 7120 4380	Wheal Boys Mine - c1878.	Probable associated features found during the watching brief.	PM	B
40979	SW 7080 4370	Wheal Prussia Mine - c1819 (also shown as Carew Downs Mine on Tithe Map).	Probable associated features found during the watching brief.	PM	B
40986	SW 7230 4330	Wheal Clinton - 1877.	Probable associated features found during the watching brief.	PM	B
40988	SW 7330 4330	West Poldice Mine - c1877. (Engine House at SW 7323 4326).	Probable associated features found during the watching brief.	PM	C
41030	SW 7110 4360	Wheal Fortune Mine - c1770.	Probable associated features found during the watching brief.	PM	C
41031	SW 7050 4380	Wheal Diamond Mine.	Probable associated features found during the watching brief.	PM	C
41032	SW 7030 4390	Good Success Mine.	Beyond topsoil stripped corridor.	PM	C
41033	SW 7010 4400	Wheal Maria Mine - c1819.	Beyond topsoil stripped corridor.	PM	B
41042	SW 7060 4350	Cardrew and Prussia Mine - c1819.	Beyond topsoil stripped corridor.	PM	C
41046	SW 7268 4330	Fourbarrow ropewalk - c1819, probable site in lane leading to Fourbarrow.	Beyond topsoil stripped corridor.	PM	C
40981	SW 7348 4304	Unity Safety Fuse Co. - worked from 1846 to 1918.	Beyond topsoil stripped corridor.	PM / Mod	B
40987	SW 7210 4320	Park An Chy Mine (was part of Treskerby Mine), reopened in 1910 to mine wolfram.	Probable associated features found during the watching brief.	PM / Mod	B
19292	SW 7254 4357	Granite pillar - marks site of Penhalryngan Cross (SMR 19291).	Beyond topsoil stripped corridor.	Mod	C
40980	SW 7351 4303	Velvet Factory - closed in 1949.	Beyond topsoil stripped corridor.	Mod	C

Additional SMR site

PRN	NGR	Site Description	Comments	Period	Status
18011	SW 7350 4336	Portreath to Poldice tramway. Operated 1809-1866/7. Earliest surface tramway in Cornwall. Carried ore from mining district to developing Portreath harbour. Only 'Plateway' in Cornwall - ie. the carriages ran on 'L' shaped plates rather than rails.	Original route of the tramway still clearly visible. The granite setts for supporting the 'L' shaped plates still exist (within the pipeline corridor). This site was tunnelled beneath during the current pipeline works. Today it forms part of the public footpath of the Mineral Tramways Project	PM	A

BA = Bronze Age (2000 - 750 BC)

IA = Iron Age (750 BC - AD 43)

RB = Romano-British (AD 43 - 450)

EM = Early Medieval (AD 450 - 1066)

M = Medieval (AD 1066 - 1485)

PM = Post-Medieval (AD 1485 onwards)

Modern = (20th century)

PRN = Primary Record Number in Cornwall SMR

SAM = Scheduled Ancient Monument (with County No.)

LB = Listed Building (with grade if known)

Grades A, B and C are non-statutory designations used in the SMR

A = Sites considered to be of national importance.

B = Sites of county / regional importance.

C = Sites of local importance.

7.4 The General Finds Catalogue

A total of 856 artefacts were recovered during this project. Pottery comprises the largest group 584 sherds in total, some 68% of the collection. There is also flint (see report by Anna Lawson-Jones), stone, animal bone, metalwork, glass and shell within the assemblage.

Currently all the artefacts are being temporarily stored in the CAU finds store, Kennall Building, Old County Hall, Truro, Cornwall.

Only 79 finds (9.2% of the total) came from recognisable features, the rest were collected from the spoil heaps derived from topsoil stripping of the pipeline trench so are unstratified.

The total number of finds from each field are summarised in the tables below.

CONTEXT NO: Field F1 Unstratified.

SW 7377 4341-7375 4340

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	60g	2
Modern	18g	2
Metalwork		
Iron	48g	1
DESCRIPTION		
2 Sherds Post Medieval Glazed Red Earthenware		18 th to 19 th centuries
2 sherds Modern White Glazed Stoneware		19 th to 20 th centuries
1 iron fragment		

CONTEXT NO: Field F2 Unstratified.

SW 7374 4339-7368 4337

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	4g	1
Post-medieval	141g	2

Clay		
Other Clay pipe	>0.5g	1
Glass		
Post-medieval	50g	1
DESCRIPTION		
1 Sherd Cornish Late Medieval Coarseware (Lostwithiel ware)		15 th to 16 th centuries
2 Sherds Post Medieval Glazed Red Earthenware		18 th to 19 th centuries
1 Shard green bottle glass		18 th century
1 Clay pipe stem fragment		18 th to 19 th centuries

CONTEXT NO: Field F2 [226]. SW 7370 4340

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	220g	13
Modern	25g	1
DESCRIPTION		
13 Sherds Post Medieval Glazed Red Earthenware		17 th to 19 th centuries
1 Sherd Modern Yellow Glazed Stoneware		19 th to 20 th centuries

CONTEXT NO: Field F3 Unstratified. SW 7368 4337-7357 4337

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	105g	7
Modern	19g	5
Metalwork		
Iron	28g	1
Stonework		
Flint	25g	2
Pebble	10g	1
Glass		
Modern	22g	1
DESCRIPTION		
4 Sherds Post Medieval Glazed Red Earthenware		18 th to 19 th centuries
2 Sherds Modern White Glazed Stoneware		19 th to 20 th centuries
2 Sherds Modern Flower pot		19 th to 20 th centuries
2 Sherd Modern "Black Basaltz" ware		19 th to 20 th centuries
3 Clay pipe stem fragments		18 th to 19 th centuries
1 Shard of glass		19 th century

1 Iron donkey shoe	19 th century
1 Quartz pebble	
2 Flints	Prehistoric

CONTEXT NO: Field F4 Unstratified. SW 7356 4337-7349 4337

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	7g	3
Modern	7g	2
Metalwork		
Iron	22g	1
Industrial material	0.5g	1
Stonework		
Quartz	15g	1
DESCRIPTION		
1 Sherd Post Medieval Cornish Coarseware		16 th to 17 th centuries
2 Sherds Modern White Glazed Stoneware		19 th to 20 th centuries
2 Clay pipe stem fragments		18 th to 19 th centuries
1 Iron fragment		
1 Slag fragment		
1 Quartz crystal - worked point		Prehistoric

CONTEXT NO: Field F5 Unstratified. SW 7348 4337-7345 4336

MATERIAL	WEIGHT	COUNT
Pottery		
Modern	3g	1
Stonework		
Flint	13g	1
DESCRIPTION		
1 Sherd Modern White Glazed Stoneware		19 th to 20 th centuries
1 Flint		Prehistoric

CONTEXT NO: Field F7 Unstratified. SW 7339 4336-7328 4334

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	67g	11

Metalwork		
Iron	112g	5
Industrial material	58g	1
Stonework		
Flint	5g	1
Quartz	13g	2
DESCRIPTION		
6 Sherds Post Medieval Glazed Red Earthenware		18 th to 19 th centuries
1 Sherd Post Medieval Saltglazed Stoneware (Bristol Ware)		19 th century
2 Fragments of clay pipe		18 th to 19 th centuries
5 Iron fragments		
1 Slag fragment		
2 Quartz crystals		Prehistoric
3 Flints		Prehistoric

CONTEXT NO: Field F8 Unstratified. SW 7328 4334-7312 4328

MATERIAL	WEIGHT	COUNT
Pottery		
Early Medieval	12g	13
Medieval	147g	12
Post-medieval	82g	7
Modern	26g	11
Metalwork		
Iron	176g	5
Industrial material	1g	1
Stonework		
Flint	52g	14
Pebble	214g	4
Other	256g	3
Clay		
Other Clay pipe	45g	15
Glass		
Modern	25g	3
DESCRIPTION		
1 Rimsherd "Sandy Lane Ware" Gabbroic fabric		Early Medieval 11 th to 12 th centuries
7 Sherds Cornish Medieval Coarseware (Bunnings Park / Stuffle Ware)		12 th to 13 th centuries
2 Sherds Cornish Medieval Coarseware		13 th to 14 th centuries

1 Sherd Cornish Late Medieval Coarseware (St Germans Ware)	14 th to 15 th centuries
2 Sherds Cornish Late Medieval Coarseware (Lostwithiel Ware)	14 th to 15 th centuries
6 Sherds Post Medieval Glazed Red Earthenware	17 th to 19 th centuries
1 Rimsherd Post Medieval Yellow Glazed Red Earthenware (Bristol / Staffordshire Ware)	18 th century
10 Sherds Modern White Glazed Stoneware	19 th to 20 th centuries
1 Sherd "Black Basaltz" Ware	19 th to 20 th centuries
3 Shards Modern Glass	19 th to 20 th centuries
3 Stones	
1 Cinder fragment	
4 Quartz pebbles	
13 Flints	Prehistoric

CONTEXT NO: Field F9 Unstratified.

SW 7312 4328-7304 4322

MATERIAL	WEIGHT	COUNT
Pottery		
Romano-British	54g	7
Medieval	206g	18
Post-medieval	97g	10
Modern	4g	2
Metalwork		
Iron	53g	1
Stonework		
Flint	2g	1
Pebble	183g	5
Other	800g	6
Clay		
Object Crucible	17g	1
Other Clay pipe	15g	5
Glass		
Post-medieval	15g	2
DESCRIPTION		
7 Sherds Romano-British Ware		Romano-British
6 Sherds Cornish Medieval Coarseware		13 th to 14 th centuries
4 Sherds Cornish Medieval Coarseware (Bunnings Park / Stuffle Ware)		13 th to 14 th centuries
4 Sherds Cornish Late Medieval Coarseware (St Germans Ware)		15 th to 16 th centuries
4 Sherds Cornish Late Medieval Coarseware		15 th to 16 th centuries
1 Sherd Beauvais Ware		16 th to 17 th centuries

9 Sherds Post Medieval Glazed Red Earthenware	17 th to 18 th centuries
2 Sherds Modern White glazed Stoneware	19 th to 20 th centuries
1 Crucible fragment	19 th century
5 Clay pipe stem fragments	18 th to 19 th centuries
1 Iron fragment	
2 Shards Modern green glass	19 th to 20 th centuries
6 Stones	
5 Pebbles (4 = quartz)	
1 Flint	Prehistoric

CONTEXT NO: Field F10 Unstratified. SW 7304 4322-7294 4314

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	274g	24
Modern	344g	22
Unknown	19g	2
Metalwork		
Iron	219g	5
Stonework		
Flint	12g	2
Pebble	192g	7
Other	410g	3
Clay		
Other Clay pipe	44g	16
Glass		
Modern	10g	1
DESCRIPTION		
5 Sherds "Ham Green Ware"		14 th to 15 th centuries
19 Sherds Cornish Late Medieval Coarseware		15 th to 16 th centuries
7 Sherds Post Medieval Earthenware		16 th to 18 th centuries
1 Sherd Post Medieval yellow Glazed Red Earthenware		18 th century
(Bristol / Staffordshire Ware)		
2 Sherds Modern White Glazed Stoneware		19 th to 20 th centuries
16 Clay pipe stem fragments		18 th to 19 th centuries
1 Shard Modern Glass		19 th to 20 th centuries
3 Stones		
7 Pebbles (6 = quartz)		
2 Flints		Prehistoric

CONTEXT NO: Field F10 [266].

SW 7296 4314-7305 4321

MATERIAL	WEIGHT	COUNT
Pottery		
Early Medieval	12g	1
Medieval	187g	39
Post-medieval	89g	8
Stonework		
Flint	7g	1
Pebble	83g	2
Other	105g	2
Clay		
Other Clay pipe	9g	3
Grab		
DESCRIPTION		
1 Undiagnostic possibly Early Medieval bodysherd		10 th to 12 th centuries
5 Cornish Medieval Coarseware rimsherds		14 th to 15 th centuries
34 Cornish Medieval Coarseware bodysherds		14 th to 15 th centuries
1 Sherd Post Medieval Coarseware (Lostwithiel Ware)		16 th to 17 th centuries
7 Sherds Post Medieval Glazed Red Earthenware		17 th to 19 th centuries
3 Clay pipe stems		18 th to 19 th centuries
2 Stones		
2 Pebbles (1 = quartz)		
1 Flint		

CONTEXT NO: Field F11 Unstratified.

SW 7294 4314-7289 4309

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	150g	7
Post-medieval	53g	4
Modern	52g	7
Stonework		
Flint	44g	2
Pebble	64g	1
Quartz	18g	1
Other	46g	1
DESCRIPTION		
7 Sherds Cornish Medieval Coarseware		13 th to 15 th centuries
2 Sherds Post Medieval Glazed Red Earthenware		18 th Century

1 Sherd Post Medieval Salt Glazed Stoneware (Westerwald Ware)	17 th to 18 th centuries
4 Sherds Modern Glazed Red Earthenware	19 th to 20 th centuries
2 Sherds Modern White Glazed Stoneware	19 th to 20 th centuries
1 Crucible fragment	19 th century
1 Stone	
1 Quartz pebble	
1 Quartz crystal	Prehistoric
2 Flints	Prehistoric

CONTEXT NO: Field F14 Unstratified. SW 7263 4313-7251 4310

MATERIAL	WEIGHT	COUNT
Pottery		
Romano-British	3g	1
Medieval	232g	25
Post-medieval	121g	12
Modern	7g	2
Stonework		
Flint	118g	1
Slate	2g	1
Pebble	21g	2
Other	135	2
DESCRIPTION		
1 Small bodysherd RB ware (possibly early medieval ?)		Romano-British ?
4 Rimsherds Cornish Medieval Coarseware		13 th to 15 th centuries
22 Sherds Cornish Medieval Coarseware		13 th to 15 th centuries
7 Sherds Post Medieval Glazed Red Earthenware		16 th to 18 th Centuries
2 Sherds Modern Glazed Red Earthenware		19 th to 20 th centuries
1 Slate pencil		19 th century
1 Burnt granite rubbing stone		Prehistoric
1 Stone		
5 Clay pipe stem fragments		18 th to 19 th centuries
2 Pebbles (1 = quartz)		
1 Flint		Prehistoric

CONTEXT NO: Field F15 Unstratified. SW 7251 4310-7245 4309

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	40g	3

Clay		
Other Clay pipe	15g	2
DESCRIPTION		
1 Rimsherd Cornish Late Medieval Coarseware (Lostwithiel ware)		15 th to 16 th centuries
2 Sherds Cornish Late Medieval Coarseware (Lostwithiel ware)		15 th to 16 th centuries
1 Clay pipe bowl		19 th century
1 Clay pipe stem fragment		19 th century

CONTEXT NO: Field F16 Unstratified. SW 7245 4309-7234 4306

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	151g	15
Post-medieval	58g	6
Modern	20g	3
Stonework		
Flint	6g	1
Granite	136g	1
Pebble	53g	2
Quartz	6g	1
Bone		
Animal	11g	1
Glass		
Post-medieval	34g	1
DESCRIPTION		
2 Rimsherds Cornish Late Medieval Coarseware		15 th to 16 th centuries
13 Sherds Cornish Medieval Coarseware		14 th to 15 th centuries
6 Sherds Post Medieval Glazed Red Earthenware		17 th to 18 th Centuries
2 Sherds Modern White Glazed Stoneware		19 th to 20 th centuries
1 Shard Post-Medieval green bottle glass		18 th to 19 th centuries
1 Animal tooth		
1 Stone		
2 Pebbles (1 = quartz)		
1 Quartz crystal		
1 Flint		Prehistoric

CONTEXT NO: Field F17 Unstratified. SW 7234 4306-7221 4303

MATERIAL	WEIGHT	COUNT
Pottery		

Medieval	17g	4
Post-medieval	2g	1
Stonework		
Flint	6g	2
Pebble	19g	1
DESCRIPTION		
4 Sherds Cornish Medieval Coarseware		14 th to 15 th centuries
1 Sherd Post Medieval Glazed Red Earthenware		17 th to 18 th Centuries
1 Quartz pebble		
2 Flints		Prehistoric

CONTEXT NO: Field F18 Unstratified. SW 7221 4303-7208 4305

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	25g	3
Post-medieval	83g	8
Stonework		
Flint	10g	2
Pebble	176g	2
Bone		
Animal	4g	1
Clay		
Tile (roofing)	37g	1
Other Clay pipe	6g	2
Glass		
Post-medieval	12g	1
DESCRIPTION		
3 Sherds Cornish Late Medieval Coarseware		15 th to 16 th centuries
2 Sherds Cornish Post-Medieval Coarseware		15 th to 16 th centuries
5 Sherds Post Medieval Glazed Red Earthenware		17 th to 18 th Centuries
1 Sherd Post-Medieval Salt Glazed Stoneware (Frechen ware)		17 th century
1 Post-Medieval roofing tile fragment		17 th to 18 th centuries
1 Animal tooth		
2 Clay pipe stem fragments		18 th to 19 th centuries
2 Pebbles (1 = flint, 1 = quarter iron stone pebble)		Prehistoric
2 Flint pebbles		Prehistoric

CONTEXT NO: Field F19 Unstratified. SW 7208 4305-7200 4313

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	47g	3
Stonework		
Pebble	53g	1
Glass		
Post-medieval	6g	1
DESCRIPTION		
1 Rimsherd Cornish Late Medieval Coarseware (Lostwithiel ware)		15 th to 16 th centuries
2 Sherds Cornish Medieval Coarseware		14 th to 15 th centuries
1 Shard Post-Medieval green glass		18 th to 19 th centuries
1 Pebbles		

CONTEXT NO: Field F21 Unstratified. SW 7195 4317-7188 4326

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	46g	6
Modern	85g	5
Metalwork		
Iron	54g	2
Stonework		
Slate	34g	1
DESCRIPTION		
5 Sherds Post Medieval Glazed Red Earthenware		17 th to 18 th Centuries
1 Sherd Post Medieval Glazed Red Earthenware (Donyatt ware)		17 th to 18 th Centuries
1 Sherd Modern Stoneware		19 th to 20 th centuries
4 Sherds Modern White Glazed Stoneware		19 th to 20 th centuries
1 Slate fragment		
2 Iron fragments		

CONTEXT NO: Field F22 Unstratified. SW 7188 4326-7176 4334

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	33g	1
Modern	33g	8
Metalwork		
Iron	21g	1

Stonework		
Pebble	26g	1
Bone		
Animal	4g	1
Clay		
Other Clay pipe	2g	2
Glass		
Post-medieval	15g	1
Modern	49g	2
DESCRIPTION		
1 handle sherd Cornish Late Medieval Coarseware		15 th to 16 th centuries
1 Sherd Modern White Glazed Stoneware		19 th to 20 th centuries
7 Sherds Modern Glazed Red Earthenware		19 th to 20 th Centuries
2 Clay pipe stem fragments		18 th to 19 th centuries
1 Shard Post-Medieval green glass		18 th century
2 Shards Modern glass		19 th to 20 th centuries
1 Animal tooth		
1 Iron fragment		
1 Quartz pebble		

CONTEXT NO: Field F22 A Unstratified. SW 7176 4334-7174 4336

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	51g	3
DESCRIPTION		
3 Sherds Post Medieval Glazed Red Earthenware		18 th to 19 th Centuries

CONTEXT NO: Field F23 Unstratified. SW 7173 4337-7166 4340

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	175g	6
Modern	28g	5
Metalwork		
Other	44g	1
Clay		
Other Clay pipe	2g	1
DESCRIPTION		
6 Sherds Post Medieval Glazed Red Earthenware		18 th to 19 th Centuries

5 Sherds Modern White Glazed Stoneware	19 th to 20 th centuries
1 Clay pipe stem	18 th to 19 th centuries
1 Metal object	

CONTEXT NO: Field F25 Unstratified. SW 7166 4340-7164 4341

MATERIAL	WEIGHT	COUNT
Pottery		
Modern	78g	6
Metalwork		
Iron	13g	1
Stonework		
Pebble	144g	1
Other	45g	1
Asbestos Sheeting	74g	3
Clay		
Other Clay pipe	4g	1
Mollusca		
DESCRIPTION		
4 Sherds Modern Glazed Red Earthenware		19 th to 20 th centuries
2 Sherds Modern White Glazed Stoneware		19 th to 20 th centuries
1 Clay pipe stem fragment		18 th to 19 th centuries
3 Fragments of asbestos sheeting		20 th century
1 Iron fragment		
1 Stone		
1 Quartz pebble		

CONTEXT NO: Field F26 Unstratified. SW 7164 4343-7158 4350

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	9g	1
Modern	60g	6
Metalwork		
Iron	274g	2
Other Crucible	7g	1
Clay		
Other Clay pipe	4g	1
Glass		
Post-medieval	85g	2

DESCRIPTION	
1 Sherd Cornish Medieval Coarseware	14 th to 15 th centuries
5 Sherds Modern Glazed Red Earthenware	19 th to 20 th Centuries
1 Sherd Modern White Glazed Stoneware (dolls head)	19 th to 20 th centuries
1 Crucible sherd	18 th to 19 th centuries
1 Shard Post-Medieval "seal" bottle dated 1719	
1 Shard Post-Medieval glass	18 th to 19 th centuries
2 Iron fragments	

CONTEXT NO: Field F27 Unstratified. SW 7157 4350-7150 4356

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	4g	1
Modern	4g	1
DESCRIPTION		
1 Sherd Post-Medieval Yellow Glazed Earthenware (Bristol / Staffordshire ware). 17 th century		
1 Sherd Modern Glazed Red Earthenware 19 th to 20 th Centuries		

CONTEXT NO: Field F28 Unstratified. SW 7150 4356-7144 4361

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	67g	5
DESCRIPTION		
5 Sherds Post Medieval Glazed Red Earthenware 17 th to 19 th Centuries		

CONTEXT NO: Field F29 Unstratified. SW 7144 4361-7142 4364

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	48g	4
DESCRIPTION		
3 Sherds Post Medieval Glazed Red Earthenware 18 th to 19 th Centuries		
1 Crucible sherd 19 th century		

CONTEXT NO: Field F30 A Unstratified. SW 7142 4364-7135 4370

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	78g	6

Modern	234g	16
Stonework		
Flint	8g	3
Pebble	27g	1
Other Coal	1g	1
DESCRIPTION		
4 Sherds Post Medieval Glazed Red Earthenware		18 th to 19 th Centuries
11 Sherds Modern Flower Pot		20 th century
5 Sherds Modern White Glazed Stoneware		19 th to 20 th centuries
2 Clay pipe stem fragments		
1 Coal Fragment		
1 Quartz pebble		
3 Flints		Prehistoric

CONTEXT NO: Field F30 B Unstratified. SW 7142-4364-7135 4370

MATERIAL	WEIGHT	COUNT
Pottery		
Modern	6g	2
DESCRIPTION		
1 Sherd Modern Stoneware		19 th to 20 th centuries
1 Sherd Modern White Glazed Earthenware (Cream ware)		19 th century

CONTEXT NO: Field F32/33 Unstratified. SW 7133 4372-7132 4373

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	36g	3
Modern	83g	5
Metalwork		
Iron	18g	1
Industrial material	33g	3
Stonework		
Flint	27g	7
DESCRIPTION		
1 Sherd Post-Medieval Glazed Red Earthenware		18 th to 19 th centuries
1 Crucible sherd		19 th century
5 Sherds Modern Glazed Red Earthenware		19 th to 20 th centuries
1 fragment clay pipe stem		18 th to 19 th centuries
3 Fragments of slag		

1 Iron fragment	
7 Flints	Prehistoric

CONTEXT NO: Field F34 Unstratified. SW 7125 4373-7122 4372

MATERIAL	WEIGHT	COUNT
Metalwork		
Copper alloy	79g	2
Other	9g	2
Stonework		
Slate	13g	2
Pebble	46g	2
Clay		
Other Clay pipe	3g	1
Glass		
Post-medieval	9g	1
DESCRIPTION		
1 Fragment clay pipe stem		18 th to 19 th centuries
2 Slate fragments		
1 Glass bottle stopper		19 th century
2 Iron fragments		
2 Slag fragments		
2 Pebbles (1 = quartz, 1 = flint)		

CONTEXT NO: Field F35 Unstratified. SW 7120 4372-7120 4372

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval		
Post-medieval	125g	8
Stonework		
Flint	3g	1
DESCRIPTION		
8 Sherds Post-Medieval Glazed Red Earthenware		17 th to 18 th centuries
1 Flint		Prehistoric

CONTEXT NO: Field F37 Unstratified. SW 7111 4371-7102 4370

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	79g	3

Modern	9g	1
Stonework		
Pebble	22g	1
Glass		
Post-medieval	15g	1
DESCRIPTION		
1 Sherd Post-Medieval Glazed Red Earthenware		17 th to 18 th centuries
1 Sherd Modern Terracotta		19 th to 20 th centuries
1 Fragment of Post-Medieval roofing tile		18 th to 19 th centuries
1 Clay pipe stem fragment		18 th to 19 th centuries
1 Shard Post-Medieval glass		18 th to 19 th centuries
1 Quartz pebble		

CONTEXT NO: Field F40 Unstratified. SW 7100 4371-7100 4373

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	22g	1
Modern	24g	5
DESCRIPTION		
1 Sherd Post-Medieval Glazed Red Earthenware		17 th to 18 th centuries
3 Sherds Modern Glazed Red Earthenware		19 th to 20 th centuries
1 Sherd Modern White Glazed Stoneware		19 th to 20 th centuries
1 Sherd Modern Yellow Glazed Stoneware		19 th to 20 th centuries

CONTEXT NO: Field F42 Unstratified. SW 7093 4371-7092 4371

MATERIAL	WEIGHT	COUNT
Pottery		
Modern	32g	1
Metalwork		
Iron	139g	1
DESCRIPTION		
1 Sherd Modern Salt Glazed Stoneware (Nottingham ware)		19 th to 20 th centuries
1 Iron hook		

CONTEXT NO: Field F43 Unstratified. SW 7088 4372-7084 4377

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval		

Modern	2g	1
Clay		
Other Clay pipe	8g	5
DESCRIPTION		
1 Sherd Modern Terracotta		19 th to 20 th centuries
5 Clay pipe stem fragments		18 th to 19 th centuries

CONTEXT NO: Field F45 Unstratified. SW 7072 4377-7064 4379

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	28g	2
Modern	12g	1
DESCRIPTION		
2 Sherds Post-Medieval Glazed Red Earthenware		17 th to 18 th centuries
1 Sherd Modern Salt Glazed Stoneware (Nottingham ware)		19 th to 20 th centuries

CONTEXT NO: Field F47 Unstratified. SW 7058 4378-7051 4376

MATERIAL	WEIGHT	COUNT
Pottery		
Modern	178g	10
DESCRIPTION		
6 Sherds Modern Terracotta		19 th to 20 th centuries
2 Sherds Modern Yellow Glazed Stoneware		19 th to 20 th centuries
1 Sherd Modern White Glazed Stoneware		19 th to 20 th centuries
1 Fragment Modern black glazed tile		20 th century

CONTEXT NO: Field F48 Unstratified. SW 7051 4376-7048 4376

MATERIAL	WEIGHT	COUNT
Pottery		
Modern	29g	2
Clay		
Other Clay pipe	1g	2
DESCRIPTION		
2 Sherds Modern White Glazed Stoneware		19 th to 20 th centuries
2 Fragments clay pipe stem		18 th to 19 th centuries

CONTEXT NO: Field F49 Unstratified. SW 7048 4376-7035 4371

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	116g	6
Modern	651g	20
Metalwork		
Iron	20g	2
Stonework		
Pebble	18g	1
Quartzite	60g	1
Other Chalk	44g	1
Asbestos	59g	1
Bone		
Animal	15g	2
Clay		
Tile Crucible	48g	2
Other Clay pipe	12g	5
Glass		
Modern	17g	1
DESCRIPTION		
6 Sherds Post-Medieval Glazed Red Earthenware		17 th to 18 th centuries
17 Sherds Modern Glazed Red Earthenware		19 th to 20 th centuries
2 Sherds Modern Stoneware		19 th to 20 th centuries
1 Sherd Modern Salt Glazed Stoneware (Nottingham ware)		19 th to 20 th centuries
5 Clay pipe stem fragments		18 th to 19 th centuries
2 Animal bones		
1 Modern quartzite whetstone		20 th century
1 Chalk fragment		
1 Shard Modern glass		19 th to 20 th centuries
2 Iron fragments		
2 Crucible fragments		19 th century
1 Fragment of asbestos roofing		20 th century
1 Quartz pebble		

CONTEXT NO: Field F53 Unstratified. SW 7006 4359-7002 4357

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval		

Modern	285g	3
Glass		
Modern	51g	1
DESCRIPTION		
3 Sherds Modern Stoneware		19 th to 20 th centuries
1 Complete miniature glass bottle		19 th century

CONTEXT NO: Field F54 Unstratified. SW 7002 4357-6996 4352

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	8g	1
Post-medieval	101g	2
Modern	431g	26
Metalwork		
Iron	40g	1
Other	3g	1
Stonework		
Flint	13g	1
Pebble	201g	2
Glass		
Modern	17g	2
DESCRIPTION		
1 Rimsherd (pot lid) Cornish Late Medieval Coarseware (Lostwithiel ware)		15 th to 16 th centuries
1 Sherd Post-Medieval Stoneware		16 th to 17 th centuries
2 Sherds Modern Stoneware		19 th to 20 th centuries
27 Sherds Modern Glazed Red Earthenware		19 th to 20 th centuries
2 Modern perfume glass bottles		
1 Iron fragment		
1 Carbon rod		
2 Pebbles (1 = quartz, 1 = iron stone)		
1 Flint		

CONTEXT NO: Field F55 Unstratified. SW 6996 4352-6996 4352

MATERIAL	WEIGHT	COUNT
Pottery		
Modern	241g	20
Unknown	22g	1
Metalwork		

Iron	19g	1
Industrial material	170g	3
Other Crucible	39g	1
Stonework		
Pebble	12g	1
Glass		
Modern	11g	1
DESCRIPTION		
15 Sherds Modern Glazed Red Earthenware		19 th to 20 th centuries
1 Sherd Modern White Glazed Stoneware		19 th to 20 th centuries
3 Sherds Modern Stoneware		19 th to 20 th centuries
1 Sherd Modern Black Glazed Stoneware		19 th to 20 th centuries
10 Clay pipe stem fragments		18 th to 19 th centuries
1 Ceramic King Charles Spaniel		18 th to 19 th centuries
1 Crucible base		19 th century
1 Shard Modern green bottle glass		19 th century
1 Iron nail		
3 Fragments of slag		
1 Quartz pebble		

CONTEXT NO: Field F56 Unstratified. SW 6996 4352-6995 4350

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	23g	1
Post-medieval	15g	2
Modern	11g	1
Clay		
Other Clay pipe	4g	2
Glass		
Modern	7g	1
DESCRIPTION		
1 Sherd Cornish Medieval Coarseware		14 th to 15 th centuries
2 Sherds Post-Medieval Glazed Red Earthenware		17 th to 18 th centuries
1 Sherd Modern White Glazed Stoneware		19 th to 20 th centuries
2 Clay pipe stem fragments		18 th to 19 th centuries
1 Modern glass bottle stopper		19 th century

CONTEXT NO: Field F58 Unstratified. SW 6996 4352-6994 4349

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	25g	3
Modern	335g	6
DESCRIPTION		
2 Sherds Post-Medieval Glazed Red Earthenware		17 th to 18 th centuries
1 Crucible fragment		19 th century
6 Sherds Modern Glazed Red Earthenware		19 th to 20 th centuries

CONTEXT NO: Field F62 Unstratified. SW 6977 4338-6959 4314

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	9g	1
Post-medieval	39g	3
Modern	530g	26
Stonework		
Slate	2g	1
Pebble	222g	2
Other	48g	2
Bone		
Animal	6g	1
Glass		
Modern	45g	2
Mollusca		
Marine	4g	1
DESCRIPTION		
1 Sherd Cornish Late Medieval Coarseware		15 th century
3 Post-Medieval crucible sherds		19 th century
11 Sherds Modern flower pot		20 th century
9 Sherds Modern White Glazed Stoneware		19 th to 20 th centuries
1 Sherd Modern Stoneware		19 th to 20 th centuries
4 Clay pipe fragments		18 th to 19 th centuries
1 Drain pipe fragment		
2 Shards of Modern glass		19 th to 20 th centuries
1 Animal bone		
1 Limpet shell		
1 Slate pencil fragment		

2 Quartz pebbles
1 Fragment of asbestos roofing

CONTEXT NO: Boundary 110. SW 7339-4336

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	15g	1
DESCRIPTION		
1 Rimsherd (pot lid) Cornish Late Medieval Coarseware (Lostwithiel ware) 15 th to 16 th centuries		

CONTEXT NO: Boundary 120. SW 7245-4309

MATERIAL	WEIGHT	COUNT
Pottery		
Medieval	11g	1
DESCRIPTION		
1 Sherd Cornish Medieval Coarseware (Lostwithiel ware) 13 th century		

CONTEXT NO: Boundary 128. SW 7173-4337

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	8g	1
DESCRIPTION		
1 Sherd Post-Medieval Glazed Red Earthenware 18 th to 19 th centuries		

CONTEXT NO: Boundary 130. SW 7164-4341

MATERIAL	WEIGHT	COUNT
Pottery		
Post-medieval	93g	1
DESCRIPTION		
1 Sherd Post-Medieval Glazed Red Earthenware 18 th to 19 th centuries		

CONTEXT NO: Boundary 159. SW 7048-4376

MATERIAL	WEIGHT	COUNT
Clay		
Other Clay pipe	1g	1
DESCRIPTION		
1 Clay pipe fragment 18 th to 19 th centuries		

CONTEXT NO: Boundary 169. SW 6980-4338

MATERIAL	WEIGHT	COUNT
Pottery		
Modern	126g	4
DESCRIPTION		
3 Sherds Modern flower pot		20 th century
1 Clay pipe bowl		19 th century

7.4 Flint and pebble finds list and descriptions

Field no. Context	Date	Description
F3 SW 7368-4337 7357-4337		1 x Quartz pebble
	BA?	1 x Flint pebble, multi-platformed flake/blade core.
	Neo/BA	1 x Flint pebble blade with lateral and distal retouch, plus possible notches/ use damage.
F4 SW 7356-4337 7349-4337	Prehist.	1 x Quartz crystal point/awl. Bulbous hand-held end with marked abrasion and crushing plus a transverse removal at the tapered end. Abrasion seen for a 2.5cm length (of the total 4.5cm length).
F5 SW 7348-4337 7345-4336	BA?	1 x Flint pebble. A battered, multi-platformed core. Abraded and of poor quality.
F7 SW 7339-4336 7328-4334	Prehist?	1 x Quartz crystal. Severe crushing all over.
	Prehist.	1 x Quartz crystal. Long, regular shaped borer or awl. Abraded, crushed and narrowed at one end. 4.0cm long.
	Prehist.	1 x Flint pebble. Faulted, possible core rejuvenation flake.
	Prehist.	1 x Tertiary flint flake with one short, laterally retouched edge. Possibly was a core rejuvenation flake.
F8 SW 7328-4334 7312-4328		4 x Quartz pebbles
	Prehist.	1 x Probable flint pebble. Severely hear blistered probable borer?
	Prehist.	1 x Chert pebble. Probable core rejuvenation waste flake.
	Prehist.	1 x Tertiary waste flake.
	Prehist.	1 x Flint pebble, thick waste flake.
	Neo?	1 x Flint pebble, distal flake with steep distal retouch.
	Prehist.	1 x Flint pebble primary waste.
	Prehist.	1 x Flint pebble flake. No modification, but possible distal use damage.
	Neo/BA?	1 x Tertiary green chert flake. Lateral retouch on straight edge.

	Neo/BA	1 x Tertiary bulbar end of a flint blade, with large snapped lateral removals and bulbar retouch. End scraper.
	Neo	1 x Nodular flint with dorsal bladelette scars. Possible core rejuvenation flake.
	Neo/BA?	1 x Tertiary flint with steeply retouched distal end. End scraper.
	Prehist.	1 x Tertiary flint. Thick, faulted and with lateral retouch.
	Neo?	1 x Large, opaque flint blade. Retouched down both edges and notched on both sides towards the bulbar end.
F9 SW: 7312 4328 7304 4322		4 x Quartz pebbles
		1 x Metamorphosed killas pebble.
	Prehist.	1 x Flint pebble primary flake with tiny lateral retouch.
F10SW 7304 4322 7294 4314		6 x Quartz pebbles
		1 x Metamorphosed killas pebble.
	Prehist.	1 x Tertiary flint flakelette (bulbar end missing) with tiny lateral retouch.
	Neo (BA?)	1 x Flint pebble. Thick, short end scraper with retouched notch on bulbar lateral edge. Multi-purpose scraper/shaft straightener?
F10 [266] SW: 7296 4314-7305 4321	Prehist/Nat	1 x Quartz pebble
	Prehist/Nat	1 x Metamorphosed killas pebble.
	Neo/BA	1 x Flint pebble flake. Abraded, backed, bulbar end of a knife.
F11 SW: 7294 4314 7289 4309		1 x Quartz pebble
	Prehist.	1 x Quartz crystal with a heavily abraded, crushed pointed end, plus modification of all sharp crystal edges at opposing bulbous end = possible hafting?
	Neo	1 x Flint pebble flake. Very abraded, large, retouched and thinned (tapered on all sides) piece of unknown purpose.
	Meso/Neo	1 x Flint pebble blade with fine dorsal bladelette removal scars, patchy bifacial retouch and a possible distal notch.
	Meso?	1 x Tertiary, pale blue flint blade/bladelette core. (Kept by the pipe-layer who found it in the adjacent spoil heap).
F14 SW: 7263 4313 7251 4310		1 x Quartz pebble
		1 x Metamorphosed killas pebble.
	Prehist.	1 x Chert/poor quality flint, large quartered pebble. Tried core.
F16 SW: 7245 4309 7234 4306		1 x Quartz pebble
	Prehist?	1 x Metamorphosed killas pebble - possible levering damage at end
	Prehist?	1 x Quartz crystal - no very obvious modification, but may have an abraded tip?
	Neo/BA	1 x Flint pebble. Distal end of a thick flake/blade with lateral retouch down straight edge. Probable backed knife.
F17 SW: 7234 4306 7221 4303		1 x Quartz pebble
		1 x Flint pebble flake. Lateral retouch and distal use damage.

		1 x Exhausted flint flake core? Bifacial retouch down one side.
F18 SW 7221 4303-7208 4305		1 x Flint pebble
	Prehist?	1 x Ironstone hammerstone (broken in quarter)
	Prehist.	1 x Flint pebble - small tried core.
	Prehist.	1 x Flint pebble - small tried core.
F19 SW 7208 4305-7200 4313		1 x Quartz pebble
F22 SW 7188 4326-7176 4334		1 x Quartz pebble
F25 SW 7166 4340-7164 4341		1 x Banded quartz pebble.
F30a SW 7142 4364-7135 4370		1 x Quartz pebble
	Neo	1 x Nodular flint primary waste flake.
	Neo	1 x Nodular flint secondary waste chip.
	Neo/BA	1 x Tertiary, broken flint piece consisting of a retouched notch (possible barb?) with dorsal bladelette scars.
F32/33 SW 7133 4372 - 7132 4373	Meso/Neo	1 x Flint pebble blade. Long fine blade with lateral retouch and bulb preparation removals
	Neo/BA	1 x Chert flake. Very broad, hard hammer removed, hinged flake with minimal lateral retouch.
	Neo/BA	1 x Chert flake. Possible core rejuvenation flake with patchy, probable use-related lateral damage.
	Neo/BA	1 x Flint pebble primary blade/flake. Large and thin, with lateral retouch. A slicing flake.
	Prehist.	1 x Tertiary, hinged flint flake.
	Prehist.	1 x Tertiary flint flake with probable use-related damage around lateral and distal edges.
	Meso/Neo?	1 x Tertiary flint flake with pronounced bulbar preparation (or thinning flake) removals. Distal end has snapped off. Possible use-related lateral damage.
F34 SW 7125 4373-7122 4372		1 x Quartz pebble
		1 x Flint pebble
F35 SW 7120 4372-7120 4372	Neo/BA	1 x Pebble flint flake. Possible heavy butted projectile point? Possible arrowhead blank.
F37 SW 7111 4371-7102 4370		1 x Quartz pebble
F49 SW 7048 4376-7035 4371		1 x Quartz pebble
F54 SW 7002 4357-6996 4352		1 x Quartz pebble
	Prehist?	1 x Ironstone pebble hammerstone
	Prehist.	1 x Pebble flint flake. Hard hammer removed, very broad, hinged piece with patchy lateral retouch.

F55 SW 6996 4352 6996 4352		1 x Quartz pebble
F62 SW 6977 4338 6959 4314		1 x Quartz pebble
	Prehist?	1 x Quartz pebble hammerstone?

Key to terms:

Primary - Initial flakes removed from core, with c50%+ corticated surface.

Secondary - Flakes removed from core with 5-50% corticated surface.

Tertiary - Core removals with 5% or less corticated surface.

8 References

8.1 Primary sources

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9 Project archive

The CAU project number is 1999064

The project's documentary, photographic and drawn archive is housed at the offices of Cornwall Archaeological Unit, Cornwall County Council, Kennall Building, Old County Hall, Station Road, Truro, TR1 3AY. The contents of this archive are as listed below:

1. A project file containing site records and notes, project correspondence and administration.
2. Field plans and copies of historic maps stored in an A2-size plastic envelope
GRE : 377 1-17.
3. Finished plans and sections are stored as:
GRH : 326 1-13
4. Black and white photographs archived under the following index numbers:
GBP 999/3-13, GBP 1008/12-15, GBP 1154/2-36, GBP 1155/2-37,
GBP 1156/1-9,22-37, GBP 1157/3-24,30-31
5. Colour slides archived under the following index numbers:
GCS 29438 - 29557
6. This report held in digital form as: H:\DOCUMENT\SITES\SITES S\ST DAY
TO REDRUTH GAS MAIN WB 1999064\SDR99 WB REPORT.DOC.

Artefacts and environmental material retrieved during the project are stored at the offices of CAU, Truro; it is intended that they will be deposited at the Royal Cornwall Museum, River Street, Truro. Site code: SDR99.