

A30 Chiverton Cross to
Carland Cross Road
Improvement



Fieldwalking Survey



Oxford Archaeology

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A30 Chiverton Cross to Carland Cross Road Improvement

ARCHAEOLOGICAL FIELD WALKING REPORT

CONTENTS

Summary.....	1
1 Introduction	1
1.1 Location and scope of work	1
1.2 Limitations of the survey.....	1
2 Project Aims and Methodology.....	2
2.1 Aims	2
2.2 Methodology.....	2
3 Results	3
3.1 Distribution of sites	3
4 Finds.....	3
4.1 Pottery by Edward Biddulph OA	3
4.2 Ceramic building material	5
4.3 Worked stone by Ruth Shaffrey and Hugo Lamdin-Whymark (OA)	5
4.4 Struck flint by Hugo Lamdin-Whymark	5
4.5 Slag.....	6
5 Interpretation and comparison with other data sources.....	6
Bibliography and references.....	7
APPENDICES.....	8
Appendix 1 Summary of Site Details.....	8
Appendix 2 Other pottery finds.....	8

LIST OF FIGURES

- Fig. 1 Plan of proposed route and offline sections of the route walked.
Fig. 2 Area 4 detailed plan showing finds distribution

SUMMARY

In December 2004 Oxford Archaeology (OA) carried out a fieldwalking survey along part of the route of the proposed A30 Carland Cross to Chiverton Cross road improvement scheme. The 14 km route passes through a landscape of archaeological potential, and it was therefore decided to define this potential further through a programme of non-intrusive fieldwalking. The survey recovered archaeological material from two areas, one of which is a potential previously unrecorded medieval site.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 In December 2004 Oxford Archaeology (OA) carried out a programme of archaeological field walking along parts of the offline sections of a proposed road improvement to the A30 between the Chiverton Cross junction, north of Truro, and the Carland Cross roundabout.

1.1.2 Following the selection of a preferred route for the proposed improvement, a programme of archaeological surveys in accordance with DMRB Stage 3 was drawn up for the Highways Agency on behalf of Hyder Consulting (OA 2004a Draft Archaeological Mitigation Strategy). This document set out the strategy for fieldwalking, which was to examine all offline sections of the route under cultivation except those on steep slopes (OA 2004a, Fig. 1).

1.1.3 A visit was made to Cornwall in late spring 2004 to clarify which parts of the route were then under cultivation, and on the basis of this information a series of areas for walking were identified (OA 2004a, Figures 1-3).

1.1.4 A Written Scheme of Investigations (WSI) detailing the methodology (OA 2004b) was prepared in advance of the work, and was approved by Cornwall County Council and English Heritage.

1.2 Limitations of the survey

1.2.1 Due to crop rotation, the areas under cultivation in late spring 2004 were not all the same as those cultivated by the time the survey took place, in late November to early December 2004. A significant number of the fields earmarked for survey were not being cultivated when the fieldwork took place, and so were unavailable for fieldwalking.

1.2.2 The survey was programmed to take place in autumn 2004, between September and December. Due to delays in approving the work, and in negotiating access from landowners, the crops in a significant proportion of the fields under cultivation were already far advanced by the time the survey commenced, and had either reduced visibility to the point where fieldwalking was no longer practicable, or would have suffered significant damage had fieldwalking been attempted.

- 1.2.3 Access to a proportion of the cultivated fields was refused by the landowners.
- 1.2.4 As a result of these limitations, only five lengths of the offline proposed route could be walked, totalling approximately 2.40 km of the route. South of the existing A30 at Chiverton Cross fieldwalking continued further east than the area of impact from the proposed route (see Fig. 1); this additional length walked is not included in the total.

2 PROJECT AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The fieldwalking aimed to identify specific foci of past human activity that may be present, as reflected in surface distributions of artefacts in the ploughsoil.
- 2.1.2 To provide artefactual dating evidence for identified foci of past human activity along the line of the route.
- 2.1.3 To make available the results of the investigation.

2.2 Methodology

- 2.2.1 All areas that were in a suitable condition (i.e. recently ploughed, with minimal crop growth), and for which access had been granted by the landowner, were subject to fieldwalking (Fig. 1).
- 2.2.2 The fieldwalking followed ploughing and a period of weathering (usually at least 3 weeks).
- 2.2.3 Within the offline route a strip 50 m wide was walked. This strip was divided into transects 10 m apart, with collection units 20 m in length along each transect. Each area identified in the Mitigation Strategy for fieldwalking was divided into transects and collection units in advance at Oxford Archaeology, and unique context numbers were assigned to each collection unit to facilitate plotting of the finds. The transects and collection units were constructed and stored in Autocad. The distance from the edges of the strips where they crossed field boundaries to the nearest field corners was also calculated and supplied to the fieldwalking team supervisor.
- 2.2.4 The location of each strip for walking was made on site using hand-held GPS equipment. Check measurements along field boundaries to the edges of the strips were taken to limit any errors in the GPS positioning.
- 2.2.5 Six transects were laid out across all areas to be walked and were each covered by a single person. Transects were spaced 10 m apart with each individual finds collection unit measuring 20 m in length. Any finds recovered were bagged according to the unique context number for that specified 20 m unit.
- 2.2.6 Any modern finds such as glass and modern building materials were examined in the field and their presence noted on the maps of the strips in the field. They were then discarded on site in accordance with the WSI (OA 2004b).

- 2.2.7 Weather conditions and ground conditions were recorded daily and can be found in the archive. Although the time of year limited the length of daylight, in general conditions (and in particular visibility) were good.
- 2.2.8 In each field that was walked the condition of the soils was checked for any discoloration (for instance darkening by charcoal) or concentrations of stone or other materials that might be archaeologically significant. No such anomalies were seen in the fields that were walked.
- 2.2.9 The work was carried out by a team consisting of a mixture of field staff from Oxford Archaeology and from the Cornwall Archaeological Unit, supervised by Brian Matthews from Oxford Archaeology. Brian has considerable experience of fieldwalking for linear schemes, and the mix of staff was used to provide both individuals with local knowledge of the soils and OA's wider experience from similar schemes across the UK.

3 RESULTS

3.1 Distribution of sites

- 3.1.1 Archaeological finds (other than modern material) were retrieved in only two of the five sections walked.
- 3.1.2 Area 1 contained two pieces of pottery (see Fig. 1).
- 3.1.3 Area 4 yielded the only concentration of archaeological material (see Figs 1 and 2). Finds indicative of Medieval activity (pottery, worked stone and possibly slag) were found over a distance of 120 m, concentrated towards the south-west end of the field. The main pottery concentration covered an area some 80 m in length and at least 30 m wide (see Section 4.1 below). Two worked stone objects were found at the north-east end of this concentration (Section 4.3), while a piece of smithing slag was found still further north-east (Section 4.5; see Fig. 2). The single struck flint flake was found at the south-west end of the field.

4 FINDS

4.1 Pottery by Edward Biddulph OA

4.1.1 Methodology

A total of 22 sherds, weighing 316 g, was recovered. The pottery was assessed to determine its chronological and typological range. Sherds were examined microscopically (x20 magnification). The sherds from each fieldwalking length (given unique context numbers) were weighed and counted. A breakdown of the material by context is given in Table 1.

Table 1

Context	Sherd count	Wt (g)	Comments	Date
1756	1	8	Bodysherd, grey micaceous earthenware with internal glaze	Medieval/post-medieval
1757	1	6	Bodysherd, coarse micaceous ware	Medieval
1758	3	22	Glazed bodysherds, including micaceous earthenwares	Medieval/post-medieval
1759	1	62	Rim sherd of Bowl? micaceous oxidised ware	Medieval
1761	5	45	Grey micaceous earthenware bodysherds, some with internal glaze; oxidised bodysherds; bowl rim sherd in micaceous oxidised ware	Medieval/post-medieval
1762	1	20	Base sherd, coarse micaceous ware	Medieval
1763	1	34	Bowl or jar base sherd in coarse micaceous ware	Post-medieval
1766	1	5	Bodysherd, micaceous oxidised ware	Medieval/post-medieval
1767	2	45	Micaceous earthenware flange-rimmed bowl or dish; coarse micaceous ware bodysherd	Medieval/post-medieval
1768	1	26	Coarse micaceous oxidised ware with internal green glaze	Medieval
1773	1	4	Bodysherd, micaceous oxidised ware	Medieval
1783	2	11	Bodysherds, coarse micaceous ware	Medieval
2501	1	10	Bodysherd, glazed earthenware	Post-medieval
2508	1	18	Oxidised ware rim sherd from jar or flagon, with white-slip under glaze	?Medieval
TOTAL	22	316		

4.1.2 Results

None of the sherds in this small assemblage appears to date before the medieval period. A number of fabrics are represented, although nearly all are distinctively micaceous and are likely to derive from the same source or region. Contexts 1757, 1762, 1763, 1767 and 1783 yielded coarse, unglazed, ?handmade pieces typically in a grey fabric with buff or dark red surfaces. External surfaces were sooted, possibly from use. This pottery is consistent with material attributed to the Lostwithiel region of Cornwall dating to the 13th-15th centuries (Laing 2003, 103; O'Mahoney 1989). Micaceous oxidised fabrics - usually pink-buff throughout and recovered from contexts 1759, 1761, 1766, and 1773 - are likely to share source and date.

Coarse glazed earthenwares were recovered from contexts 1756, 1758, 1768 and 1761. These were wheel-thrown and probably later than the ?handmade pieces; a 16th/17th century date seems to be appropriate, though some fabrics may date a little earlier and span the medieval/post-medieval transition. Contexts 1767 contained a rim sherd belonging to a dish or shallow bowl in an unglazed sandy earthenware. The form can be placed in the early post-medieval period; again, a 16th/17th century date is likely. Context 1763 yielded a base sherd in an identical fabric and shares this date. All of this later medieval/early post-medieval material was micaceous, and it is not unreasonable to assume a similar source to that of the ?handmade pieces.

The source of the white-slipped and glazed ware from context 2508 was not determined in this assessment, and would require further study. However, a local source is possible, while a medieval date is almost certain. The latest sherd, a relatively fine glazed earthenware was found in context 2501. This may date up to the 19th century.

4.2 Ceramic building material

4.2.1 Occasional fragments of modern tile were recovered. These were discarded in accordance with the brief set out in the WSI (OA 2004b).

4.3 Worked stone by Ruth Shaffrey and Hugo Lamdin-Whymark (OA)

4.3.1 A stone object measuring 150 x 150 x 55 mm was recovered from Area 4, collection unit 1759. This was examined with the aid of a x10 magnification hand lens. It has one worked flat surface and one curved convex face that is worn very smooth and slightly polished. This has certainly been used as a rubber, and the slight concave nature and carefully dressed surface of the opposite face suggests it may have started life as a small saddle quern. It appears to be made of a quartz porphyry, but this tentative identification should be checked against a reference collection. It is not possible to pinpoint a source without further research, but rocks of this material may have been found within the intrusive igneous rhyolites etc. just to the north of the site (BGS 4th ed.). The suggestion that this object was originally part of a saddle quern would indicate a prehistoric date, although its reuse as a rubbing stone could also date to a later period, and could therefore be contemporary with the medieval and post-medieval pottery found adjacent.

4.3.2 A second stone object was also found in Area 4, also in collection unit 1759. This is a cylindrical object measuring 25 mm in diameter by 11 mm thick. Weight 10 g. It is made from a pale fine-medium grained metamorphic rock, probably a phyllite or schist.. The sides of the artefact exhibit slight facets from grinding. The object is probably a counter from a board game, though it could conceivably have been used as a weight; such objects are fairly common on medieval and post-medieval sites throughout Britain.

4.4 Struck flint by Hugo Lamdin-Whymark

4.4.1 A single struck flint flake was recovered from the fieldwalking. The flake, which is in fairly fresh condition, has a small simple platform with no preparation to the platform edge. The diffuse bulb indicates the flake was probably struck using a soft hammer percussor, such as antler. Scars on the dorsal surface of the flake indicate the flint was removed from a small carefully worked core rotated at least once during its' reduction. The dating of single non-diagnostic flints, or even small assemblages, is notoriously difficult, but the technology employed on this flake is more characteristic of Neolithic flintworking than of Mesolithic or Bronze Age industries.

4.4.2 Flint is not local to the area, and must have been imported. Beach flint was quite commonly used in Cornwall, and the nearest beaches are some 20 km to the south; otherwise the nearest possible source of flint is at Beere Head in Devon, at least 60 km away.

4.5 Slag

4.5.1 One fragment of smithing slag weighing 171 g was found in context 1791. Although this may be associated with the medieval/early post-medieval activity represented by the pottery scatter within the same field, this is only a single fragment, and is undated.

5 INTERPRETATION AND COMPARISON WITH OTHER DATA SOURCES

5.1.1 This section considers the results in relation to previously gathered archaeological information such as cropmarks, maps and other documentary evidence, and also provides an indication of the probable significance of the results.

5.1.2 Finds scatter north-east of Marazanvose (Area 4; Figs 1 and 2). Twenty sherds of pottery were recovered, together with two worked stone objects, a struck flint and one possibly associated piece of smithing slag. Although this is a small assemblage, and the slag, struck flint and worked stone finds are not all of the same date, the coincidence of these materials suggests the proximity of an occupation site of the later medieval and early post-medieval period, dating between the 13th and the 16th/17th centuries.

5.1.3 No archaeological sites or previous findspots are indicated from the DMRB Stage 2 surveys in this field (OA 2004c, Figures 4 and 10).

5.1.4 The sherds and other finds were concentrated in towards the south-west side of the field, in an area only 100 m by 30 m, although the slag and two potsherd were found further to the north-east. This concentration is around 200 m from the documented medieval settlements of Nancarrow and Marazanvose. As there is a light scatter of material extending further north-east, it is possible that all but the prehistoric material is derived from manuring onto the field from these settlements. It is however just as likely that the finds represent a separate focus of activity, possibly the site of a small homestead of this date alongside the old A30, either an extension of the roadside settlement of Marazanvose or one associated with Nancarrow.

5.1.5 The struck flint and the possible fragment of saddle quern reused as a rubber could indicate prehistoric activity of Bronze Age or earlier date in this area. There is no evidence from other sources at present for such activity. As the worked stone object has been reused, however, it is possible that it was retrieved from elsewhere. Geophysical survey around a cropmark enclosure (OA 2005a Site 7; OA 2004c, site OA 191) indicates a significant later prehistoric settlement some 500 m to the south, for example, from which it could have come.

- 5.1.6 Finds scatter north-east of Chiverton Cross roundabout (Area 1; Fig. 1). Nothing of archaeological interest other than a parish boundary stone is indicated by the DMRB Stage 2 surveys in the vicinity of the finds scatter (OA 2004c, Figures 1 and 7). The material recovered constitutes only two finds of any antiquity, and can reasonably be interpreted as material manured onto the fields from the nearby settlement of Chiverton Cross in the medieval and post-medieval periods. As such it does not represent an archaeological site of any significance.
- 5.1.7 These results are limited, but for the areas examined provide a good background for any subsequent intrusive evaluation phase. Consideration should be given to targeted evaluation by trenching of that part of Area 4 where fieldwalking recovered a concentration of finds, both to establish whether there is a buried medieval settlement, and to establish the nature of the possible prehistoric activity.
- 5.1.8 The absence of material from the other fieldwalked areas should be treated with caution, and should not be assumed to indicate areas without archaeology except in conjunction with other lines of evidence such as geophysical survey and possibly intrusive test-trenching.

6 BIBLIOGRAPHY AND REFERENCES

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- Oxford Archaeology 2004a *A30 Chiverton Cross to Carland Cross Road Improvement. Draft Archaeological Mitigation Strategy*, unpublished client report prepared for the Highways Agency on behalf of Hyder Consulting.
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- Oxford Archaeology 2004c *A30 Chiverton Cross to Carland Cross Improvement. Cultural Heritage Resource Assessment*, unpublished client report prepared for the Highways Agency on behalf of Hyder Consulting.

APPENDICES

APPENDIX 1 SUMMARY OF SITE DETAILS

Site name: A30 Carland Cross to Chiverton Cross Road Improvements.

Site code: CCCC O4.

Grid reference: NGR: 187 5400 - 1747 4700.

Date and duration of project: December 2004.

Area of site: c.14 km in the region of the existing A30.

Summary of results: Two main areas yielded finds scatters. An area around Chiverton Cross and an area near Marazanvosc. Pottery, CBM, flint, slag and worked stone were recovered from these locations.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES.

APPENDIX 2 OTHER POTTERY FINDS

Four sherds of pottery were recovered from three locations during walkover surveys of the route undertaken in 2004. Two were recovered from a track adjacent to Trevalso, a documented medieval settlement (OA 33), one from just east of an earthwork south of Garvinack Brake, the site of the former 'Rome' tenement (OA 564) and one from a track just south of Chiverton Cross roundabout (SW 1747 4666). The pottery is reported upon below.

Additional sherds from Cornwall *by Edward Biddulph*

Context	Sherd Count	Weight (g)	Comments	Date
Rome Tenement (OA 564)	1	16	Glazed earthenware jar rim, thickened and internally expanded, in a micaceous oxidised ware; from ?Lostwithiel	15th-16th century
SW 1747 4666	1	4	Glazed earthenware bodysherd in a micaceous oxidised ware; from ?Lostwithiel	13th-16th century
Trevalso (OA 33)	2	60	Bodysherd in granitic-tempered sherd; jug handle in sandy fabric, possibly from North Devon	16th-17th century

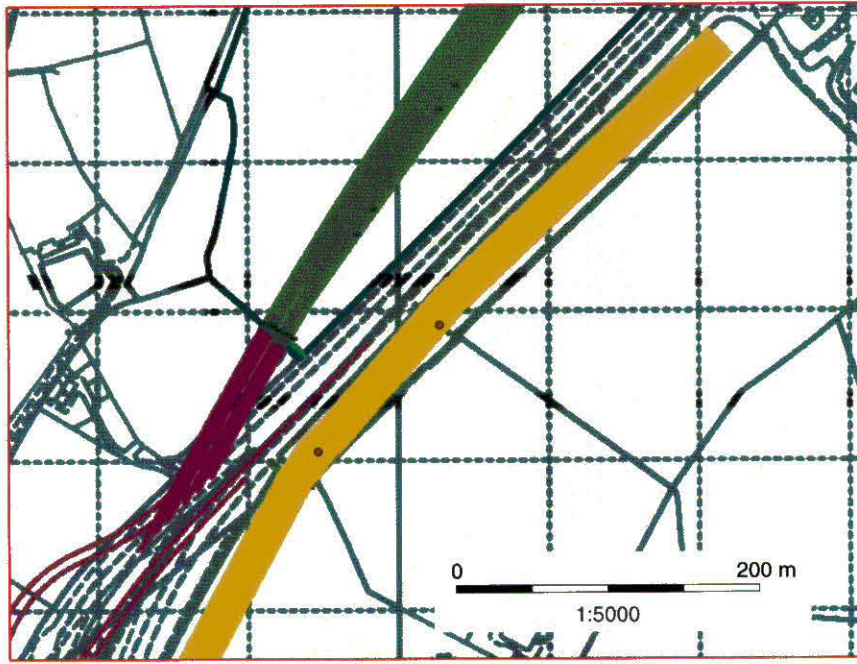
The sherd from 'Rome' tenement and that from Chiverton Cross were made in an identical, micaceous, fabric and date up to the 15th/16th century. Their source, as seems likely for micaceous fabrics in Cornwall, may well be found in the Lostwithiel region.

Two sherds were found at Trevalso. A jug fragment with a simple squared rim and a two-ribbed handle in a multicoloured quartz fabric may have come from North Devon. An accompanying bodysherd apparently made in a granitic fabric was however probably manufactured in Cornwall; the use of the material is well known in the region (eg Harrad 2004). A 16th or 17th century date can be attributed to both pieces on typological grounds.

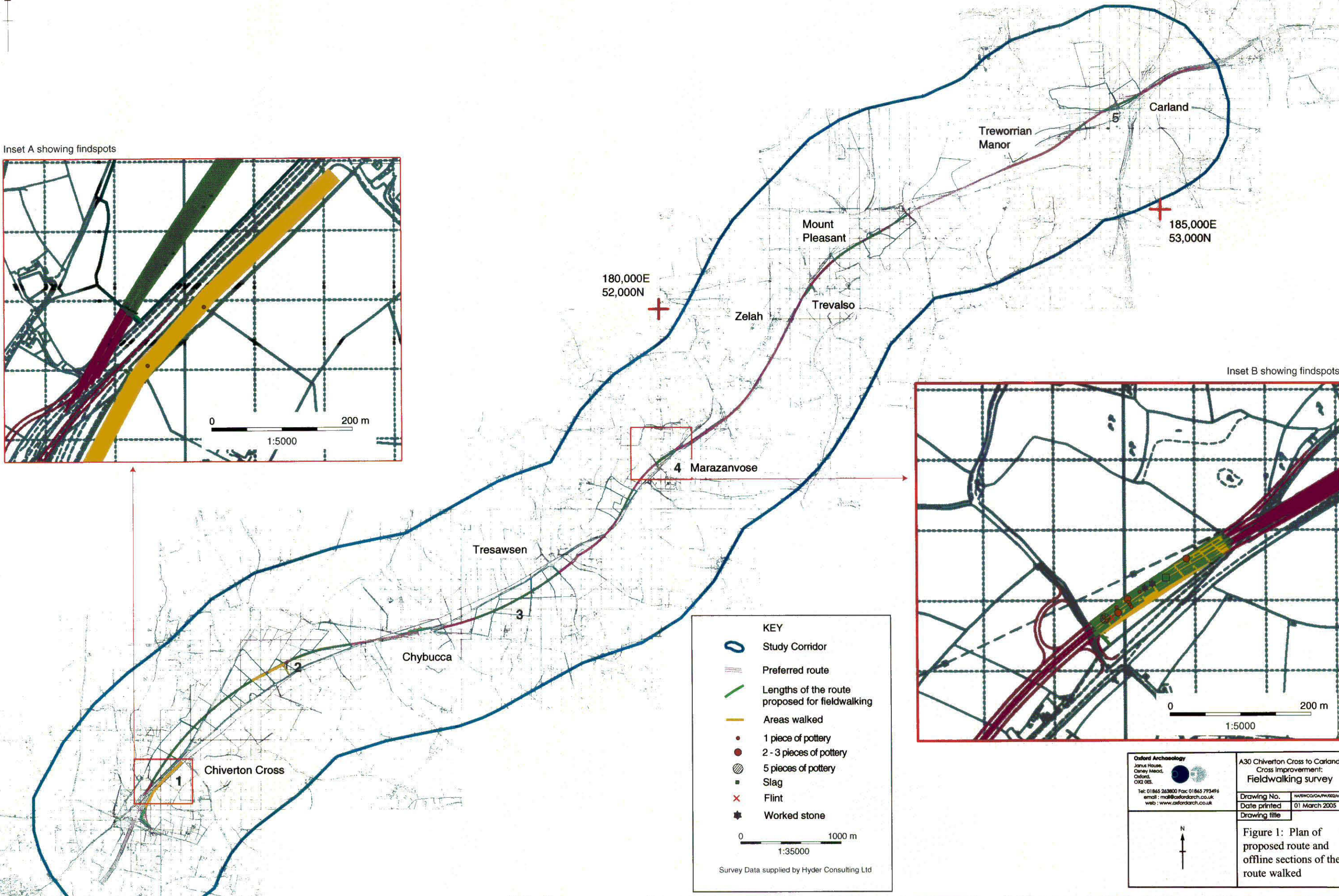
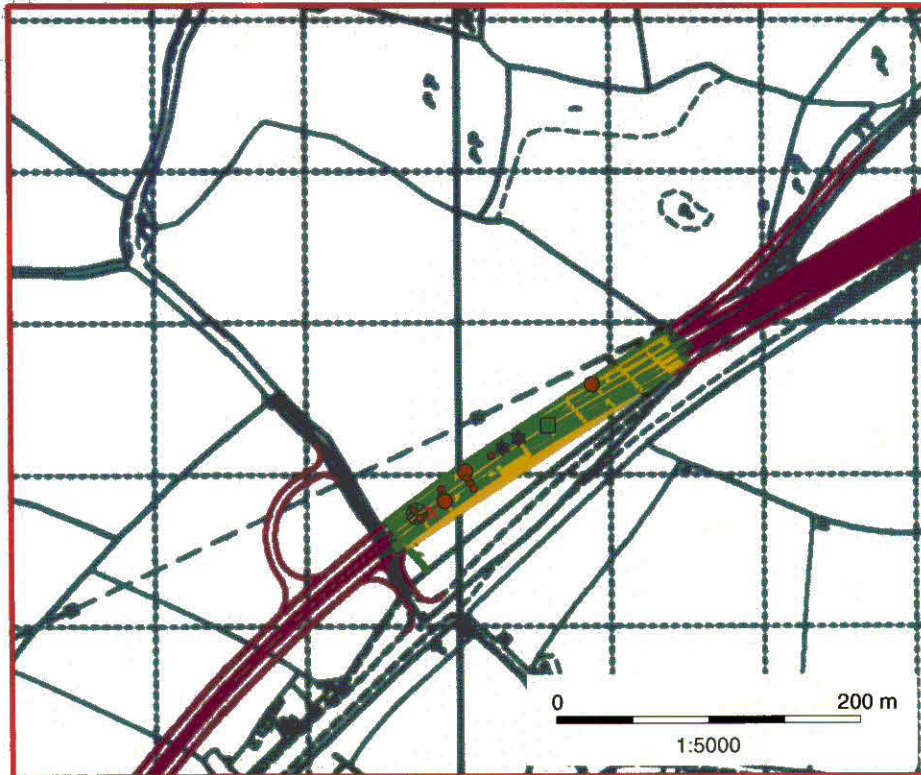
Harrad, L, 2004 Babboic clay sources in Cornwall: a petrographic study of prehistoric pottery and clay samples, *Oxford Journal of Archaeology* 23 (3), 271-86



Inset A showing findspots



Inset B showing findspots



KEY

- Study Corridor
- Preferred route
- Lengths of the route proposed for fieldwalking
- Areas walked
- 1 piece of pottery
- 2 - 3 pieces of pottery
- 5 pieces of pottery
- Slag
- Flint
- Worked stone

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1:35000

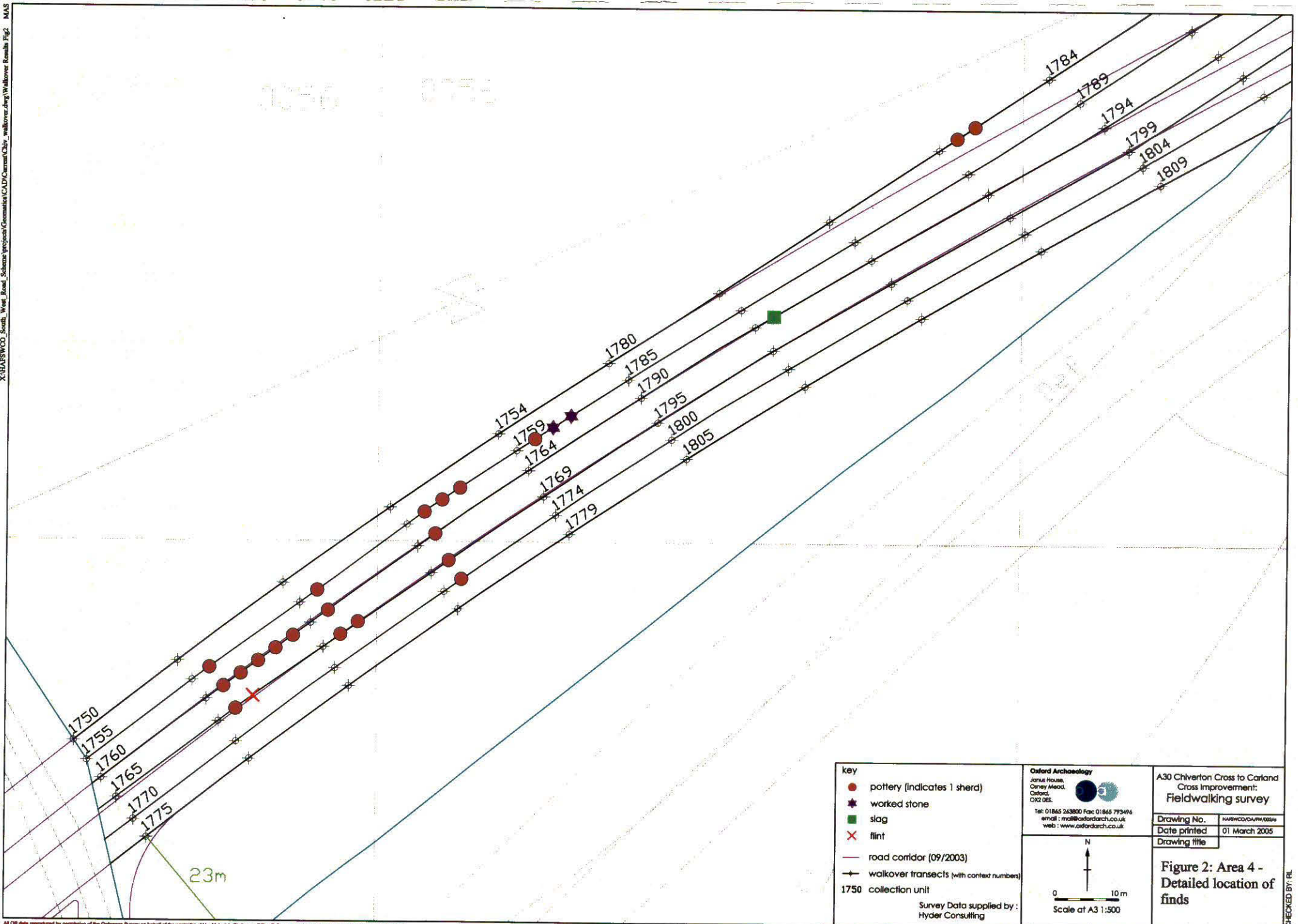
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A30 Chiverton Cross to Carland
Cross improvement:
Fieldwalking survey

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Figure 1: Plan of proposed route and offline sections of the route walked



key

- pottery (Indicates 1 sherd)
- ★ worked stone
- slag
- ✕ flint
- road corridor (09/2003)
- walkover transects (with context numbers)
- 1750 collection unit

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**A30 Chilverton Cross to Carland
Cross Improvement:
Fieldwalking survey**

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**Figure 2: Area 4 -
Detailed location of
finds**

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