



A30 Innis Downs to Dunheved Bridge CHAMP



Cornwall Archaeological Unit

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The fieldwork was undertaken by CAU Project Archaeologist Adam Sharpe and Archaeological Consultant Richard Mikulski.

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Data management was undertaken by CAU Archaeologists Francis Shepherd and Peter Dudley.

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The Project Manager within CAU was Dr. Andy Jones.

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

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Cover illustration

Traffic backing up on Brockabarrow Common at the eastern end of the Higher Carblake to Temple Junction works area in early September 2015.

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Abbreviations

CAU	Cornwall Archaeological Unit
CC	Cornwall Council
CHAMP	Cultural Heritage Asset Management Plan
CHF	Cultural Heritage Feature
EM	EM Highway Services Ltd (now Kier Highways Ltd)
Gdb	Geodatabase
HA	Highways Agency
HE	Historic England
HER	Cornwall and the Isles of Scilly Historic Environment Record
HLC	Historic Landscape Character
LB	Listed Building
MCO	Monument number in Cornwall HER
NMP	National Mapping Programme
NMR	National Monuments Record
OASIS	The web portal accessing the online Archaeology Data Service.
OS	Ordnance Survey
SM	Scheduled Monument
ZTV	Zone of Theoretical Visibility

1 Summary

Cornwall Archaeological Unit (CAU), Cornwall Council was commissioned by Kier Highways Ltd in 2015 to produce a Cultural Heritage Asset Management Plan (CHAMP) for the 39.47 km long section of the A30 trunk road through Cornwall from Innis Downs near Bodmin to Dunheved Bridge, near Launceston.

The project involved researching the background history of the road, the collation of GIS data for the roadline and buffer zones within its viewshed at 100m 500m and 1000m distances from the road centreline, field visits to all sites located in the road corridor that are within the Highways England estate, and selected sites within the buffer zones to check detail relating to them within the Cornwall and Scilly Historic Environment Record (HER), taking record photographs of them and preparing condition and management reports for sites or features within the road corridor. The Historic Landscape Character (HLC) of the landscape through which the road passes was also taken into account, in particular the relationships between the HLC of the landscape out to 1km from the A30 and the roadline itself. The fieldwork was undertaken in mid-September 2015.

The road now designated as the A30 follows a long-distance route through Cornwall which is likely to have medieval, if not earlier, origins. Between 1769 and 1836, much of it was improved through the formation of turnpike trusts, though long-distance travellers from Launceston to Penzance tended to divert from Carland Cross to Truro before heading westward to Redruth, and the section from Carland Cross to Chiverton Cross was not upgraded until the mid-19th century, allowing its incorporation into what became, during the early 20th century, the A30. Until only a few decades ago, the route of the eastern section of the A30 between Innis Downs and the River Tamar followed a long traditional course through Bodmin and across Bodmin Moor to Launceston. Large-scale dualling schemes undertaken along this section of the road during the 1970s and 1990s by-passed all of the towns and hamlets along the route; some of the road adjustments were along entirely new corridors. These dualling schemes were to modern standards, and consequentially these upgraded sections contain few surviving archaeological features.

One section of road, between Higher Carblake and Temple Junction to the east of Bodmin remained only partially improved until 2015, when a major dualling scheme was set in hand, the intention being to complete the work by 2017. Although some widening and straightening operations had already been undertaken within this section, the additional land take involved in these earlier improvements was relatively limited, and all junctions were on the level, limiting impacts on the cultural heritage adjacent to this part of the A30 prior to the current improvements.

Whilst the original roadline in this section of the A30 had linked two relatively large population centres – Bodmin and Launceston - it also influenced the development of a small number of hamlets along its length, most of these developing around inns established to serve passing travellers; during the 20th century some of these settlements also sited roadside garages and petrol stations. The eastern section of the A30 through Cornwall largely runs across Bodmin Moor, where Bolventor is the only settlement on the roadline, though to the east of the Moor the route of the road formerly ran through Trewint, Five Lanes, Polyphant, Hicks Mill and Tregadillett. Bypassing has relieved formerly substantial traffic pressure on the two towns at either end of this section of the A30, but has removed the original *raison d'être*s of these smaller settlements.

The modernised sections of the A30 are largely terrain oblivious, designed to minimise traffic pressure on the landscape and reduce journey times. Nevertheless, the A30 continues to influence the landscape through which it passes, and is a constant audible presence along most of its route, even at sites which are some distance from it.

Only one cultural heritage feature (CHF) was found to survive within the core hard estate (the road itself), this being a turnpike era bridge. Others lie within or

immediately adjacent to the soft estate (the land flanking the highway under the management of Highways England), these consisting of a turnpike era double bridge, turnpike trust milestones, medieval wayside crosses, post-medieval guidestones and boundary stones, a former coaching inn, a disused church, a prehistoric barrow and a possible barrow and a cropmark late prehistoric settlement. Other CHF's survive beside or flanking now by-passed sections of the original route of the A30. A number of designated CHF's were found to no longer be in their documented locations; their current locations are unknown.

This written report has been produced detailing the results of the desk-based survey and field visits, together with summary condition reports and management recommendations for each of the zones considered during the study. Updated data was produced for incorporation into the Highways England EnvIS GIS-based management database, and an entry to the Historic England OASIS database was also created.

2 Introduction

2.1 Project background

Cornwall Archaeological Unit (CAU), Cornwall Council was requested by Peter Williams, Environmental Manager (Area 1) for Kier Highways Ltd in May 2015 to produce a method statement for a Cultural Heritage Asset Management Plan (CHAMP) covering the 39.47 km long section of the A30 trunk road through Cornwall from Innis Downs near Bodmin to Dunheved Bridge near Launceston (Appendix 1). Following the acceptance of a method statement and risk assessment for the work, and approval of the proposed project budget, CAU was commissioned to undertake the work on 22 June 2015.

2.2 Aims and objectives

The principal aims of the A30 CHAMP were:

- To research the background history of the development of the road.
- To identify Cultural Heritage Features (CHFs) within the areas occupied by the hard and soft estates (the road corridor).
- To identify CHFs (including designated landscapes) within the viewshed of the road within buffer zones at 100m, 500m and 1000m from the road centreline.
- To investigate the condition and management requirements of CHFs within the hard and soft estates, together with selected CHFs within the flanking buffer zones.
- To produce a photographic record of CHFs within the hard and soft estates, together with selected features flanking the roadline, views of the road within the landscape and landmark historic sites within the landscape traversed by the road.
- To produce GIS shapefiles and underlying tables summarising the extent of CHFs within the various zones and their conditions and management requirements (where relevant) for incorporation into Highways England's GIS-based EnvIS database.

The objectives of the A30 CHAMP were:

- To produce a report summarising the findings of the desk-based assessment, fieldwork and subsequent analysis.
- To produce a database summarising the results of the various elements of the survey.
- To complete an OASIS record for the project.
- To recommend management actions for sites along and adjacent to the roadline.

2.3 Desk-based Assessment methodology

The methodological approach set out below is based on that set out in the Highways England document *Design Manual for Roads and Bridges* (DMRB) Volume 10, Section 6, Part 2 and *Interim Advice Note* (IAN) 84/10, Part 4, Amendment 2. The methodology also takes into account the advice contained within DMRB Volume 11 and IAN 15/08 Revision 1.

In accordance with the guidelines, a range of historical databases and archives were consulted in order to produce a background history for the western Cornish section of the A30 and its precedents, together with a desk top inventory of Cultural Heritage Features (CHFs) within the study area, including available information about their history, current condition and survival. The sources consulted were as follows:

2.3.1 Baseline information

- Cornwall Historic Environment Record (HER).
- Historic England on-line listed buildings database.
- Maps and photographs incorporated into the CC HER.
- Stereo vertical aerial photographs held by CC including those taken by the RAF in 1946 and for Cornwall County Council in 2005.

- Cornwall Council Historic Landscape Characterisation projects and method statements (1994, 1998, 2002, 2011).
- Third party data derived from sources including the Defence of Britain Project.

2.3.2 GIS sources

The following information was sourced from existing GIS databases accessible to Cornwall Archaeological Unit:

World Heritage Site	Polygons	ESRI Layer
Scheduled Monuments	Polygons	ESRI Layer
Registered Parks and Gardens	Polygons	ESRI Layer
Historic Battlefields	Polygons	ESRI Layer
Listed Buildings	Polygons	ESRI Layer
Conservation Areas	Polygons	ESRI Layer
Historic Landscape Characterisation	Polygons	ESRI Layer
Local area designations	Polygons	ESRI Layer
Sites and Monuments Record	Points, lines and polygons	ESRI Layer
1807 OS 1" mapping	Georeferenced rasters	ESRI image catalogue
1880 and 1907 OS 25" mapping	Georeferenced rasters	ESRI image catalogue
Circa 1840 Tithe Maps	Georeferenced rasters	ESRI image catalogue
National Mapping Programme data	Vector and raster data	ESRI Layer and ESRI image catalogue
Highways England soft estate vegetation types	Polygons	ESRI Layer

Table 1: Sources and types of GIS data.

2.3.3 Other information

See References, Section 17.

Other sources consulted in developing the background history for the road included:

- Facsimiles of historic maps produced by Martyn, Norden, and Gascoyne during the 17th and 18th centuries. On-line images of other early historic maps.
- Published histories and descriptions of sites and localities, travel accounts.
- Relevant internet pages, in particular those relating to the A30 and its antecedents, and those depicting early historic maps of Cornwall.

2.3.4 Historic Landscape Characterisation

A key resource for the desk-top survey in the pilot study was the ready availability of the digitised Cornwall Historic Landscape Character mapping. The county-wide characterisation undertaken in 1994 was used to provide information relating to land-use character; HLC can also assist in documenting landscape change along the road corridor during the relatively recent past.

2.3.5 GIS methodology

The CHAMP GIS database records key attribute fields for each CHF included in the desk study and the fieldwork survey inventory. Attribute data for each CHF was uploaded into an ArcView project geodatabase. This allowed the generation of a spatial database with attribute values.

The CHAMP database is a stand-alone database that has been designed to be compatible with Highways England's Environmental Database (EnvIS) as outlined in DMRB, Vol. 10.

2.3.6 Definition of selection criteria and zones

In defining the criteria for data collection Kier Highways specifically required two particular categories of CHF information - whether a CHF location or designation exists either:

- Within the core network estate (this comprising the hard and soft estate zones);
- Adjacent to the core network estate boundary within the wider landscape context of the road.

These coarse zones were then subdivided further to allow varying criteria for data inclusion (according to the perceived significance of each zone for management purposes) to be applied to govern what data was collected for each zone, to form a baseline dataset.

A desktop assessment of the impacts of the proposals within the area surrounding the A30 was undertaken following the guidelines and methodological approaches set out in Historic England (2011) (formerly English Heritage) guidance on the setting of heritage assets. The methodology employs ArcGIS software and a Digital Terrain Model (DTM), which ignores potentially temporary surface features such as buildings, woodland, vegetation, etc. to provide a surface model of potential intervisibility between the line of the A30 and key heritage assets within the surrounding landscape. This 'bare earth' modelling provides a clear baseline from which to assess impacts that could result from the presence of the road within the landscape. A viewshed or ZTV (Zone of Theoretical Visibility) was generated from a regular sequence of observer locations along the length of the roadline between Innis Downs and Dunheved Bridge. These observer points were extrapolated from a line drawn along the central reservations and centre lines of the A30 as recorded on the Ordnance Survey Mastermap (2015).

When performing viewshed analyses, several variables are used to limit or adjust the calculation including offset values, limitations on horizontal and vertical viewing angles (azimuth) and distance parameters (radius) for each observer point. For the eastern section of the A30 in Cornwall, the composite viewshed was based on an 'overall observer elevation value' made up of the 'elevation value' or height above sea level of the ground at the observer viewpoint, with added to this an additional offset of 2m to represent the viewing height from an average vehicle. The radius selected was 1000m; this allowed the selection of an oversized data set. This data set was subsequently buffered to aid in the identification of sites at prescribed distances (see below).

This viewshed was checked on the ground where practicable, given that vegetation and other factors can often substantially block views of and from key sites. A shortlisted group of significant heritage assets within the theoretical viewsheds were visited (where access was possible) and the landscape within which they sit was considered to determine likely intervisibility with the roadline, inclusion within key views, and the natures of their settings, both locally and at a distance to inform the likely scales and types of any visual impacts which might affect their settings, as required by Historic England (2011). A viewshed radius of 1km from the road centreline was utilised for this aspect of the assessment.

Sites identified through intersection of the ZTV modelling with GIS layers containing designated and undesignated heritage assets produced data sub-sets which were filtered according to their intersection with zones representing 100m, 500m and 1000m from the road centreline.

The site types within these data sets were then analysed to determine their likely sensitivity to impacts on settings. Site types which have no setting (documented, destroyed or cropmark sites) were excluded from further analysis.

- All extant sites were captured out to 100m from the road centreline.
- Designated sites and structures, together with designated landscapes, were captured out to 500m and 1000m from the roadline.
- HLC polygons were captured out to 1km from the roadline.

2.3.7 Determination of core network estate boundary and buffer zones

The extent of the soft estate was determined from GIS based digital mapping (polygons) supplied by the Managing Agent for Area 1 (Kier Highways Ltd.). Zone boundaries are measured as shown below.

CHAMP Zone	Measured from	Data capture level
Soft Estate	N/A	All CHF's (desktop and field survey)
100m rural areas	Road centreline	All CHF's (desktop survey), selected CHF's (field survey)
100m to 500m rural areas	Road centreline	All SMs, LBs and other designations (desktop survey)
100m urban areas	Road centreline	All CHF's (desktop survey), selected CHF's (field survey)
100m to 500m rural areas	Road centreline	All SMs, LBs and other designations (desktop survey)
500m to 1000m zone	Road centreline	HLC plus selected designated sites and areas (desktop survey), selected CHF's (field survey)

Table 2: CHAMP zones and level of data capture.

2.3.8 Data structure

The initial desktop assessment generated various feature classes hosted in a geodatabase (gdb). These feature classes formed the basis of the survey and were developed through the project's GIS. Subsets of the key data sets were loaded onto handheld devices using the ESRI Collector Application. Following the completion of the assessment this gdb was used to populate Highway England's EnvIS GIS-based database.

2.3.9 Database information standards

The archaeological data was collated and collected to current heritage information standards and best practice by complying with the [MIDAS](#) inventory and [National Monuments Record](#) (NMR) thesauri as set out in Sections 9.2.2 and 9.2.3 in *Highways Agency Guidance for the Development of Cultural Heritage Management Plans*.

2.3.10 Metadata

The Archaeology Data Service's (ADS) '[GIS Guide to Good Practice](#)' defines metadata as '... the means by which your data are transformed into information, interpretable to and re-usable by those other than yourself. In other words, metadata is a label for the extra details associated with any data set which enable someone else to place them into some form of context.' Metadata is, effectively, 'data about data'. In the study of geo-spatial information or that with a geographic information component this usually refers to the What, Who, Where, When and How of the data with particular emphasis on the Where element.

Metadata is an essential part of this project if its results and conclusions are to be widely disseminated and made readily accessible not only to project partners and specialist consultants but also to the wider community.

The GIS archive generated by this project conforms to NGDF, Dublin Core and ISO 19155 metadata standards.

2.4 Fieldwork Methodology

The walk over survey was conducted in mid-September 2015 in accordance with a method statement and safety plan agreed with Kier Highways prior to fieldwork being undertaken (Sections 15 and 16 in this report: Appendices 1 and 2).

2.4.1 Recording methods

The survey was achieved through a combination of a drive-through of the whole road route and a walk-over within relevant sections of the soft estate and in adjacent locations containing potentially sensitive CHF. CHF identified during the desk-based survey as being potentially extant were visited, whilst accessible sections of both the hard and soft estate were inspected for previously unrecorded sites, including historic fabric associated with the road itself (for example, bridges, revetment walling). Now by-passed sections of the A30 were also inspected. Where sites had been plotted by the Ordnance Survey (or by previous CAU surveys) existing grid references have been used. New sites (or those found to have dubious or vague grid references) were located utilising a GPS unit built into the ruggedized tablet used for site recording (this having a general accuracy of +/- 5m).

Information collected during the fieldwork was entered onto a pro forma recording sheet on the tablet computer using the Collector app, this being based on the GIS database table created during the desk-based survey phase of the project. Each site was given a unique reference number (CHAMP_ID). Each record includes a written description and a condition summary, together with short notes on current impacts and management recommendations. Representative high resolution (>10Mp) digital photographs were taken of each CHF using a DSLR. Photographs were also taken of the settlements and landscapes traversed by the road route, of sections of the road in its landscape setting, of key monuments within the landscape traversed by the road and views illustrating the Historic Character of the landscape through which the route runs.

Although all accessible sites were visited on foot, certain parts of the road and its environs were only viewed from the vehicle due to Health and Safety considerations. The section between Higher Carblake and Temple Tor is currently the site of major upgrading activities and this, and sections of the A30 to its west and east which were coned off as approaches to the works area were not accessible to the survey team. CAU have already undertaken a detailed archaeological assessment of this area (Parkes 2012, 2013) and was also undertaking an archaeological watching brief during the works programme, so base-level information relating to CHF within this area was available in drawing up this report. It was not possible, however, to check the current condition of any of the CHF within this and the wider works area.

A drive through assessment of the whole of the route was undertaken to assess the ways in which the viewshed were perceived by travellers, the visibility (or lack of it) of CHF within the hard/soft estate and of selected extant CHF within the buffer zones, as well as the ways in which the road itself contributes to its wider landscape setting. The road was also viewed and photographed from selected overbridges and lay-bys, and from viewpoints within the surrounding landscape.

All fieldwork was undertaken following the approaches set out in an approved risk assessment (Appendix 2). Fluorescent yellow jackets and over-trousers with reflective stripes were worn at all times during the site visits, whilst the survey vehicle was fitted with approved reflective stripes and signage to its rear and sides. Kier Highways Ltd. had requested that survey signs should be set out at 1 kilometre intervals for those sections of the road on which the survey team undertook field visits exceeding 15

minutes at any one time, or on which it was felt that advance warning of the team's presence was required. In the event, these proved not to be required.

2.4.2 The Wider Context

The wider landscape context was considered during the fieldwork. Survey of these elements of the landscape was conducted with the following in mind:

- The nature of the adjacent historic landscape character, as this might influence future landscaping activities within the soft estate.
- Key sites in the viewshed within the buffer zones whose settings might be affected by operational or development activities.
- Any needs or opportunities for management, for example, screening, mitigating setting impacts or enhancing access to sites close to the roadline. It is recognised, however, that the management of sites not in the hard or soft estates is the responsibility of landowners other than Highways England.

2.4.3 Fieldwork risk assessment

Prior to carrying out on-site work Cornwall Archaeological Unit carried out a Risk Assessment in line with Highways England IAN 115/08, Revision 1 (see Appendix 2, Section 16 of this report). This was approved by Kier Highways Ltd.

3 Location and setting

3.1 Overview

See Figure 1.

The A30 is one of the three arterial roads serving Cornwall, running from Launceston to Land's End. The other two principal roads through Cornwall are the A38 linking Plymouth to the A30 at Bodmin and the A39 linking Bude to the A30 at the Highgate Interchange near Indian Queens. The A395 connects the A30 and the A39 between Kennards House and Davidstow just to the north-east of Camelford, whilst the A386 links the A30 at Launceston to the A38 at Saltash and the A391 links the A30 at Innis Downs to the A390 at St. Austell. The A30 and A38 are classed as Class 5 roads on the relevant Cornwall Council's GIS mapping.

3.2 Topographical and geological background

3.2.1 Topography

See Figure 2.

As the crow flies, the distance between Bodmin and Launceston measures 31.75km, of which 14km represents the distance travelled by the A30 across Bodmin Moor. The road between these two towns is slightly longer than this, though it by and large follows a north-easterly course from the former to the latter.

The topography of the landscape followed by the A30 eastwards from Innis Downs is predominantly influenced by the presence of the granite uplands of Bodmin Moor which it traverses for much of its length. The countryside flanking the road rises gently up towards the moor to its south-west, whilst to its east the landscape takes the form of a dissected saddle between the granite uplands of Bodmin Moor and Dartmoor. The road builders generally followed watersheds between the principal watercourses in the eastern part of Cornwall, these being the rivers Fowey, Camel and Tamar, and their tributaries: the De Lank, St. Neot, the Warleggan or Bedalder, the Penpont Water, the Lynher and the Inney.

At its western end, the road traverses a landscape of small rolling hills, effectively a dissected plateau which now contains few streams of any note, though the landscape has been dissected by formerly quite substantial tributaries of the River Fal, whose valley lies close by to the east. The deep but narrow valley running northwards from its junction with the River Fal near Bodmin Parkway Station to meet the A30 at Callywith was formed by one of the larger examples of these tributary streams, and its presence would have long determined the alignments of the roads leading to both Launceston and Liskeard from the eastern edge of Bodmin.

To the north of the roadline, tributaries of the northern section of the River Camel have influenced the topography of the landscape, whilst to the south of the A30 the influence of the Warleggan River is felt in the western part of Bodmin Moor, this watercourse rising in the marshes near Temple. In the western part of the moor the roadline follows watersheds to a substantial degree, though in places this has necessitated crossing marshy or peaty areas, such as those around Temple, as the upper part of the moor is relatively level.

To the west of Temple the A30 crosses the upper valley of the eastern arm of the Warleggan River at Hawkstor, whilst the St. Neot River (another tributary of the Fal) has its headwaters close to the A30. The upper sections of this river were dammed at Colliford in the early 1980s, forming a substantial, triple-armed reservoir whose northern ends are not far to the south of the A30 between Lordswaste and Deep Hatches.

The area between Bolventor and Higher Canaframe forms the high point on Bodmin Moor along the line of the A30. Just to the east of Bolventor the road crosses the upper reaches of the River Fowey at Palmersbridge before climbing the final section of downs

at Higher Cannaframe and then descending towards Fivelanes near the valley of the Penpont Water, which flows eastwards through Altarnun to join the River Inny at Polyphant.

The remaining eastern section of the route of the A30 traverses a series of west-north-west to east-south-east aligned ridges as it progresses towards Launceston, the road staying, where possible, on the higher ground, though having to cross the valley where the River Inney and the Penpont Water converge at Two Bridges near Polyphant. The final section of the modern route runs occupies a ridgetop location to Launceston, beyond which it runs down the western slopes of the Tamar Valley, which it crosses on a modern viaduct at Dunheved Bridge before rising up onto Lifton Downs on the Devon bank of the river.

3.2.2 Geology

See Figures 3 and 4.

The route of the A30 in Cornwall follows the high ground underlain by the granite batholith which gives Cornwall and west Devon their characteristic shape and topography, this being exposed at surface (from east to west) on Dartmoor, Bodmin Moor, the Hensbarrow moors, Carnmenellis, Tregonning Hill, in West Penwith and on the Scillies. The bedrock within the countryside between the exposed granite uplands is (from east to west) formed of Carboniferous, Upper, Middle and Lower Devonian mudstones and siltstones together with some small areas of sandstones and limestones which formed as seabed deposits during the Palaeozoic Period (Fig 3).

The section of road from Colvannick Tor near Pounds Caunce to Trewint Marsh is wholly on the Bodmin Moor granite, though crosses several areas where the British Geological Survey (BGS) records substantial superficial deposits of peat overlying soils of the Crowdy 2 type. Some alluvial deposits overlies bedrock within the bases of the river and stream valleys crossed by the A30 (Fig 4).

To the west of the moor, the bedrock underlying the roadline consists of Lower Devonian mudstones, siltstones, sandstones and conglomerates, with small areas of igneous intrusions running east-west between Lanivet and Lanhydrock, these including economically-exploitable mineral deposits within some of their sections. Similar though north-west to south-east aligned igneous dykes traverse the countryside immediately to the west of the moor and are intersected by the road line.

To the north-east and east of the moor the bedrock is formed by the convoluted exposures of a series of Upper Devonian mudstones, siltstones and sandstones to Holyway Cross, eastwards of which the bedrock alternates between the Carboniferous Holsworthy and Teign Valley supergroups (locally referred to as the Culm measures) with occasional exposures of Upper Devonian bedrock where this has been up-thrust by folding.

Significant *in situ* mineralisation is rare along this section of the A30 route. On Bodmin Moor, deposits of lode tin were almost completely eroded away through geological time following their deposition, though the recovery of material which had become concentrated within alluvial and eluvial deposits on and flanking the moor through tin streaming made this industry internationally important during the medieval period when Cornish streamworks supplied markets as far afield as the Mediterranean. These deposits continued to be re-worked throughout the post-medieval period, and at some locations around West Moor, Bray Down and Buttern Hill on the north-eastern edges of Bodmin Moor into the modern period (Fig 43). Opencast operations for gravels with tin as a by-product at Trewint Marsh ceased work only a few decades ago. Examples of tin streamworks originally worked during the medieval period survive near the A30 at Deep Hatches and St. Lukes near Bolventor, along the Fowey Valley to the north, south and west of Palmersbridge and on the eastern edge of Hendra Downs. Most of the river valleys and marshy areas of Bodmin Moor are likely to have been prospected or worked for alluvial or eluvial tin during the medieval period, as can be seen from the extensive

range of sites documented on *Foweymore* during this period (Gerrard 1985) and as mapped during the Bodmin Moor Project (Herring *et al* 2008).

Tin was mined from the stockworks sunk on the igneous deposits at Wheal Prosper near Lanivet and near their eastern extensions at Tretoil to the south of Bodmin. The only other deep tin mine near the route of the A30 from Innis Downs to Dunheved Bridge was that at Vincent Mine at the western end of Trewint Marsh (Fig 48), and even this was relatively unsuccessful, despite a considerable investment in steam engines to attempt to exploit the deposits found there. The mine was recorded as having been worked for tin between 1872 and 1881 by up to 20 people, and was prospected for wolfram (the principal ore of tungsten) between 1913 and 1930, in part by the Ministry of Munitions, since tungsten was a strategic war material, used in the hardening of ordnance and in the manufacture of machine tools. The mines near Tretoil to the south of Bodmin (worked as Tretoil Consolidated Mines and as Lanivet Consols, and including the setts of Wheal Messer, Tregullon and Blackheath or East Tretoil) produced copper, tin, iron and zinc ores during the middle decades of the 19th century.

Relatively short-lived attempts were made to exploit the kaolinised deposits (china clay) near Temple during the 19th century and into the 20th century at a number of sites in the western part of the moor – notably at Burnt Heath (*circa* 1870 to *circa* 1900), Temple (1876-1880, *circa* 1908-1942), Merrifield (1866-1880), Glynn Valley (1875-*circa* 1877, 1912-1914, 1919-1942) and the Hawkstor works (1870-1971). For the layouts of some of the Temple pits see Figure 49. Other small-scale pits were tried during the second half of the 19th century on the moorland fringes at Carwen, Durfold, Gazeland, Henneward, Menniridden, Northwood (otherwise known as Hulker or Carboulf) and Poldue.

The larger-scale (Parson's) Park works to the south of Temple in the parish of St. Neot worked from 1918 until 1942 and from 1945 until 1997, whilst the Stannon pit near Davidstow worked from *circa* 1870-1875 and from 1906-2000. With the exception of the deposits at Hawkstor, Park and Stannon the clay deposits on Bodmin Moor were considered inferior to those available from the works established on the Hensbarrow Moors to the south-west, and almost all pits working during the 20th century these pits were abandoned during a major phase of rationalisation within the industry which occurred during the mid-20th century.

4 The context for the road

4.1 Settings

In the CHAMP guidance (Appendix 1), methodologies for locating and mapping cultural heritage features within the 'setting' of the road is required to be considered. Historic England (2013) has recently issued guidance on the means by which the setting of a site or monument should be assessed, together with methodologies for assessing potential setting impacts on it.

The setting of a site is effectively the area of landscape surrounding it which it influences by virtue of its existence, with which it interacts and within which it is experienced. This is primarily visual, though great houses (for instance) can also have had considerable influence on the historic land-use of the countryside surrounding them. Sites can also have audible settings, so that, for example, the experience of a site can be modified by noise-producing activities within their settings.

Some settings were deliberately created, as for instance in the case of hilltop monuments such as barrows or hillforts where extensive visibility was part of their essential character and function. Church towers and spires also had deliberately extensive settings which were not only visual but also in the case of the bells they contained, audible. Great houses, particularly those set within parks, almost always had impressive approaches, as well as designed rides and vistas, the last often being embellished with additional structures or aligned on significant landscape features (for example, see Figure 45). The peripheries of such sites may also have been deliberately closed off with tree screens to limit visibility into or out of them, and control was also often exercised over some aspects of the surrounding countryside. The principal streets of towns such as Bodmin and Launceston were also deliberately aligned, and had significant structures constructed at locations along them (for instance the Shire Hall at the eastern end of Bore Street, Bodmin, Fig 50).

More vernacular houses or sites tend to have relatively limited settings, though some were clearly designed to be ornaments to or embellishments of the local landscape (for example, the beech avenue planted along the access track to Thorne near Colvannick Tor was clearly intended to enhance the approach to this house). Some classes of monument such as barrows and hillforts would also have been constructed as elements of very extensive landscapes of other similar contemporary sites – established in locations where they would be intervisible with other monuments of the type.

Features like roadside milestones, guideposts/fingerposts or wayside crosses were originally intended to have limited, but important settings – their visibility and legibility was integral to their original functions. When originally set up, they would have been approached on foot or by horse, allowing time for the important information they provided to be read and understood. The development of alternative methods through which travellers can now establish their locations and predict journey times (particularly Satnavs), means that the original functions of these roadside features have been lost. The much higher speeds at which they are approached have also greatly eroded their settings, so that appreciation of them is fleeting, if at all. In 2000, milestones were declared to no longer be functional 'highway furniture', and were reclassified as 'historic roadside features' (Thomson 2013). Many are now Grade II Listed Buildings. As a result, whilst the recognition of their historical importance has increased, their functional importance has been almost wholly lost; in most cases this has increased their vulnerability. The Milestone Society, a national charity dedicated to their celebration and preservation, was formed as a result, but their maintenance remains in the hands of the agencies responsible for the roads beside which they stand. A partnership between the Cornwall Council and the Milestone Society has been suggested as one means by which some milestones could be appropriately cared for.

The road itself also has a setting. In places where it is long-established, it will have influenced landscape development – for instance in the establishment and growth of roadside settlements, and it may have influenced the planting of trees on its flanking

hedgerows which will have become mature, established landscape features. It is also likely to be the principal communications route within a landscape, providing a sense of alignment within it – in the case of primary roads such as the A30, travelling along them is generally associated with more important activities than using roads which lead away from them. Within the landscape, the road also influences activity and perceptions of place – road junctions are at a limited number of locations and the sections of road which lie between them have a different and less defined character to those surrounding them. Settlements such as Five Lanes often developed near historic road junctions. Within settlements which were formerly not by-passed, the road itself was often a dividing feature. The road's frontage was also likely to site a settlement's most important and architecturally significant structures, as well as most of its public buildings and structures such as inns and shops. Historically, settlements which were not on principal road routes tended to be far less developed than those which lay on them, highlighting the significance of communications in the growth of places, particularly during the post-medieval period.

The road also facilitated the development of industry – the exploitation of china clay deposits in the Temple area would have only been practicable once a road of suitable quality was available to allow the transport of large amounts of finished clay from these sites to market (Figs 47 and 49). Some of the china clay deposits on the moor which were far distant from its principal roads were unable to be effectively exploited until the development of long-distance pipelines which would allow liquid products to be transported to processing works on the periphery of the moor, an example being the Glynn Valley works to the south-west of Temple, whose clay was finished at dries adjacent to the mainline railway at Bodmin Parkway Station during its 20th century phase of operation.

In contrast to early roads, modern trunk routes tend to avoid settlements through often extensive bypasses, and are deliberately designed to run through the 'emptier' sections of the landscape. Cuttings, intended to as far as possible remove hills from the route, also visually isolate such roads from the surrounding landscape, making them virtually invisible from it, and (with tree screens and other plantings) greatly reduce their audibility within the surrounding landscape. As a result the road traveller loses almost all views of the surrounding countryside and, given the application of standardised rock and soil engineering approaches in the construction of such features, road users tend to experience relatively homogeneous roadscapes wherever they are on the national road network. As a result, the sections of the A30 which incorporate significant stretches of cuttings have very limited settings, and thus little influence on or interaction with the landscapes through which they pass. In contrast, embanked sections of road or stretches which run on the level through the landscape, for instance across much of the upland areas of Bodmin Moor, have high visibility, an often considerable audible presence and both provide wide views across the flanking landscapes and are visible from some distance away; their settings are significantly extensive within such sections (for example, see Figs 59 and 61).

In the case of modern roads, efforts are made to reduce their audible impacts within sensitive areas of the surrounding landscape through the use of cuttings (which contain or deflect much road noise upwards) and tree screens or other sound-dampening approaches such as barrier fencing, though the road may still be audibly evident at some distance from it from higher ground further away from the road. The potential to limit audible impacts of sections of the road running through open areas of the landscape (as across Bodmin Moor) is clearly very limited. Low noise road surfacings can, however, help to reduce such audible impacts to some degree. Conversely from some sections of the A30 which have not been re-surfaced for some while, tyre noise is audible at locations over a kilometre away from the road.

Roads which still follow their traditional routes tend to have considerably greater audible impacts given that they tend to run through hamlets, villages and towns, though all settlements along the route of the eastern section of the A30 have now been by-passed (see for example, Figs 68, 70, 72-76), and isolated farmsteads are now the

only dwellings adjacent to the road. Whilst Bodmin Moor is a characteristically exceptionally quiet part of the Cornish landscape, the calls of sheep and skylarks being amongst the loudest sounds usually experienced, within those areas flanking the roadline the sounds of traffic are inescapable and, dependant on wind direction and topography, this impact can be experienced some distance away from the roadline itself.

One further potential impact of the road on the settings of sites within the countryside through which it passes relates to its use during the hours of darkness. Vehicle headlights can significantly affect the settings of flanking sites and settlements, particularly during times of heavy use – for instance during peak travel periods in the early morning and evening during winter months, or during the summer holiday season. Blocking fences or tree screens to limit light pollution impacts exist along the sides of some sections of the A30 where they are close to built-up areas (for instance where the road runs through the southern part of Launceston), but most sections of the road have not been so treated. From elevated ground flanking the road, much of it is visible during the hours of darkness as a potentially distracting ribbon of white and red light. Only a small number of sections of the eastern A30 are currently lit at night, these being the Innis Downs interchange, the Carminow roundabout at the junction of the A30 and A38 near Bodmin, a stretch of road at Two Bridges and the A388 overbridge at the eastern end of Launceston.

Inevitably, there is the potential for setting impacts to result to those classes of site whose characters are vulnerable to such factors, most notably on Bodmin Moor, which is rich in archaeological sites dating to the prehistoric and medieval periods - a location within which, from prehistory until the early decades of the last century, artificial light (other than that produced by domestic oil lamps and candles) was entirely unknown. Given the general absence of settlements and its distance from major towns, Bodmin Moor is almost completely free of artificial light pollution, with the exception of that produced by vehicles on the A30.

4.2 Historic Landscape Character

See Figures 15 to 21.

A basic premise of this method of analysing landscape development and the influence it has had on its character is that the whole of Britain is one continuous but multifarious historic landscape. All natural habitats in Britain are 'semi-natural', being the products of various land use systems (whether deliberate, like woodland management, grazing of heathlands, and creation of pastures, or incidental to other processes, like the silting of estuaries as a result of tinning, or the creation of marginal habitats alongside roads). Semi-natural habitats are thus part of the historic environment and therefore there are no parts of Britain that do not have a definable historic character.

It is for this reason, amongst others, that HLC has been identified as a robust model by which to contextualise the road. This model was favoured over Viewshed and Line-of-Sight Analyses which tend to focus on individual monuments in the landscape.

The baseline data on which this analysis is undertaken was the 1994 Historic Landscape Characterisation undertaken by Cornwall Archaeological Unit as part of a general Landscape Assessment for the Countryside Commission (now the Countryside Agency), English Heritage (now Historic England), Cornwall County Council, and the District Councils (published as Cornwall County Council 1996). Some areas of Cornwall have been subjected to more detailed analysis as parts of subsequent projects.

4.2.1 Methodology

For the 1994 assessment various systematic sources were studied in order to establish the predominant historic landscape character of each parcel of land in the county. The mapping demonstrated that the historic landscape of Cornwall comprises a mosaic of blocks of land whose predominant historical landscape character is both various but also repeating. This quality allows parcels to be assigned to one of around twenty

clearly distinguishable types (some of which can be further subdivided). Most types can be found scattered across the whole of Cornwall.

For the A30 (east) CHAMP, the road was buffered to 1000m as this was felt to give a reasonable indication of the character of the landscape through which the road passes. The HLC for the study area was captured as a number of adjoining polygons (parcels of area) in the GIS.

4.2.2 Summary description of the HLC of the road route

See Figures 15 to 21.

The landscape through which the eastern section of the A30 from Innis Downs to Launceston passes is almost wholly rural in character, and although it runs through long established farmland in its western and eastern sections, the majority of the route runs through former downland and moorland (Upland Rough Ground – URG).

The Innis Downs interchange is sited at the eastern end of a ridge of former downland (URG) which was largely enclosed to agriculture during the 19th century (REL), see Figure 54, but not far to its east the road corridor traverses a section of the landscape between Lanivet and Treffry whose fields have medieval origins (AEL), whilst to the north of the road on Tregillon Moor former industrial land has been converted into a golf course (REC). The road then skirts Lanhydrock Park (Figure 55). To the east of this section, between Treffry and Racecourse Downs, the road again runs through former downland to the south-east, east and north-east of Bodmin, the former county town of Cornwall. Patches of this downland on Cardinham Downs are still unimproved Upland Rough Ground (URG). Deep valleys occupying tributaries of the River Fal lie to the east of these former downs, these supporting extensive areas of mixed deciduous woodland (WDD) and plantations (PLA), in particular Deviock Wood, Hurtstocks Wood, Lidcutt Wood and Callywith Wood, whilst the Ornamental Landscape (ORN) of Lanhydrock Park is sited between the A30 and the Fal Valley to the south-east of Bodmin, the western edge of the Park immediately bordering the A30. Small sections of the urban settlement of Bodmin (SET) lie within one kilometre of the roadline on its western side.

From the eastern end of Cardinham Downs through Higher Carblake to Pounds Caunce the A30 runs through a tongue of medieval farmland (AEL) fringing the western flanks of Bodmin Moor. The farms here tend to be small in size and settlements are infrequent, Millpool being the only one of any size close to the A30. The fields associated with Pounds Caunce and with Trethorne and Higher Penstroda to its north marks the limit of this enclosed farmland, Peverell's Cross having been erected on this transition point during the medieval period. A small modern airfield (MIL) is sited on the eastern edge of Cardinham Downs.

The majority of the section of the route across Bodmin Moor from Pounds Conce to Bolventor runs through a landscape characterised as Upland Rough Ground (URG), though the modern route skirts an area of medieval farmland at Temple (AEL), and the road is flanked by areas of disused industrial land (INDD) which were exploited by china-clay works during the 19th and early 20th centuries. At Colquite and Lords Waste to the south of the road near Colliford Lake, areas of fields which have characteristically straight boundaries and rectangular layouts mark the locations of small post-medieval (generally 19th century) farmsteads (REL). Focussed on Bolventor, but extending to its north to Priddacombe and Tolborough, to its south through Deep Hatches and Toddy Park to Lower Minziesdowns and Pinnockshill and to its north-east as far as Palmersbridge is a relatively large area of these pioneering late farmsteads set on the high moor. There are also small areas of modern coniferous plantation (PLA) at Hawkstor (Fig 117), on Sprey Moor to the north of the A30 and near Meadows Downs to its south, whilst the 1km buffer intersects the northern part of the eastern arm of Colliford Reservoir (RES).

The Fowey Valley, intersected by the A30 at Palmersbridge, was settled during the medieval period, despite the elevation and exposure of this part of the moor, the nearest farmsteads to the roadline being Lonkeymoor, Carne and Higher Cannafame,

these being elements of a narrow ribbon of early farms and associated farmland (AEL) occupying the upper reaches of the valley of the River Fowey.

Beyond Lonkeymoor the road passes through a further area of post-medieval farmland at Cannaframe. The northern part of East Moor to the south of the road is now occupied by a large area of plantation woodland (Halvana Plantation, PLA) between Carneglos Tor and Halvana, this overlying areas of moorland which contain evidence for occupation during prehistory and the medieval period, as well as tin streamworks worked predominantly during the medieval period and a small 19th century mine at Halvana on the fringes of the moor. To the north of the road there is further evidence for prehistoric occupation of the moor near Hendra, itself a farm with medieval origins.

Trewint marks the eastern edge of Bodmin Moor, both topographically and in terms of its HLC, and from this point eastwards the historic landscape character of the landscaped traversed by the A30 is predominantly Anciently Enclosed Land (AEL), though the road passes through some areas of former downland which were only enclosed to agriculture during the post-medieval and modern periods (REL) – for example at Scrylands and Trecorner and at Strayerpark and at Higher Trevell, where there are quarries adjacent to the road (INDD), and around the high point marked by the long-standing road junction at Kennards House. A small area of parkland surrounds the Wilderness to the south of Trebursye (ORN)

At the eastern end of this section of the A30, modern Launceston (SET) has expanded into former medieval farmland and now flanks the A30 on both sides. To the east of Launceston the road traverses farmland of medieval origin (AEL).

The A30 has influenced the HLC of the landscape it traverses by virtue of its long existence as a primary communications route. The existence of the settlements of Bodmin and Launceston determined its original alignment, whilst smaller hamlets like Temple, Altarnun and Polyphant developed into important nodes along its route during the medieval and post-medieval periods. Coaching inns were established at Pounds Conce (Fig 111), Bolventor and Trewint to service the needs of travellers during the 18th and 19th centuries and a garage and petrol station operated at Trewintmarsh through much of the 20th century. A further petrol station is sited adjacent to the A30 at Plusha Junction (Fig 64) whilst there are two small filling stations (Penlan Garage and Darcroft Garage – the latter no longer selling fuel) on the north side of the A30 near Higher Carblake.

Given the topography and the nature of the historic uses of the landscape which the original road between Bodmin and Launceston traversed, the requirement to by-pass settlements to remove bottlenecks and ease the flow of traffic was far less significant than in the section of the A30 in the west of Cornwall, though the modern road now avoids running through Bodmin, Temple, Bolventor (Figs 35 and 70), Trewint and Fivelanes (Figs 72 and 73), Polyphant, Tregadillett and Launceston. The majority of the roadline follows its ancient spine route onto and across the moor, though it now occupies a wider footprint than was the case through much of its long history.

Given its modern width and the construction of cuttings and intersections the road imposes a sometimes commanding linear presence across very extensive swathes of countryside, particularly across Bodmin Moor, where the character of this very modern feature is in stark contrast to the anciently occupied landscape which it traverses.

5 Landscape Area Designations

5.1 Overview

See Figures 8 to 14.

The 39.47 km section of the A30 between Innis Downs and Dunheved Bridge passes through a landscape of considerable variety and time depth. In Britain, landscapes of national importance may be designated as Areas of Outstanding Natural Beauty (AONB), Registered Parks and Gardens (RPG) or Registered Battlefields (RB). Scheduled Monuments (SMs) can, in some cases be extensive. Ecologically or geologically important landscapes are designated as Sites of Special Scientific Interest at the national level and Special Areas of Conservation at the European level. Area designations such as Areas of Great Scientific Value (AGSV), Areas of Great Landscape Value (AGLV) and Areas of Great Historic Value (AGHV) have been designated at County level, as well as County Wildlife Sites (CWS) and Regionally Important Geological and Geomorphological Sites (RIGS).

5.1.1 Areas of Outstanding Natural Beauty (AONB)

See Figure 10.

AONBs are landscapes designated by the Countryside Agency as being *'of such special national and regional importance that it is the general will to see them protected from inappropriate forms of development that could permanently harm their distinctive character'*. The whole of Bodmin Moor along the roadline from Preeze Cross just to the west of Pounds Conce to Fivelanes is designated as an AONB.

5.1.2 Registered Parks and Gardens

See Figure 8.

The Historic England Register of Parks and Gardens includes and protects through designation Historic Parks and Gardens of special historic interest in England. The registration of a park or garden depends primarily upon the age of its main layout and features, its rarity as an example of historic landscape design and the quality of the surviving landscape. The Register was established in recognition that historic parks and gardens are a finite and fragile resource.

Although the inclusion of an historic park or garden on the Register in itself brings no additional statutory controls, local authorities are required by central government to make provision for the protection of the historic environment in their policies and their allocation of resources. Local planning authorities are also specifically guided towards protecting registered parks and gardens when preparing development plans. As a result, most Local Development Frameworks now contain policies to help safeguard such landscapes:

- Grade I sites are of exceptional interest.
- Grade II* sites are particularly important, of more than special interest.
- Grade II sites are of special interest, warranting every effort to preserve them.

The majority of the sites identified on the Register are awarded a Grade II status. Around 27% of the 1,600 sites are awarded Grade II* status, and a further 9% are classified as Grade I.

The western length of this section of the A30 passes immediately adjacent to the western boundary of the Grade II* Lanhydrock Park (National ref: 1000449) to the south-east of Bodmin.

5.1.3 Registered Battlefields

The Historic England Register of Battlefields was established to offer them protection and to promote a better understanding of their significance, given their historical significance and archaeological potential, and because they are the final resting places of the thousands of fighting men who died on them.

This section of the A30 does not traverse or pass close to any of Cornwall's small number of Registered Battlefields.

5.1.4 Scheduled Monuments

See Figure 5.

A schedule has been kept since 1882 of monuments considered to be of national importance by the government. The current legislation, the Ancient Monuments and Archaeological Areas Act 1979, supports a formal system of Scheduled Monument Consent for any work to a designated monument. Scheduling is the only legal protection specifically relating to archaeological sites and areas.

Cornwall contains more Scheduled Monuments (1,912) than any other county in England. There are 15 SMs within the viewshed extending to 1km of the road centreline, all of these being within 500m of it, and 8 within 100m. No Scheduled Areas are traversed by the roadline, though nearby sites such as Castle Canyke, Blacktor Downs and large areas on East Moor are so designated.

Scheduled Monuments may have extensive settings, particularly if they were originally intended to be prominent features of the landscapes which surround them, or important elements within contemporary multi-site landscapes.

5.1.5 Conservation Areas

See Figure 8.

Conservation Areas (usually urban areas) are defined as '*areas of special architectural interest, the character of which it is desirable to preserve or enhance*', and are protected by law (the Planning (Listed Buildings and Conservation Areas) Act 1990) against undesirable changes.

Within the zone adjoining the eastern section of the A30 in Cornwall, the following are designated as Conservation Areas: Bodmin, Berry Tower (Bodmin), Blisland, Altarnun, Polyphant, Hicks Mill and Launceston. Conservation Areas are considered to have settings extending beyond their designated boundaries.

5.1.6 Areas of Great Historic Value

See Figure 9.

AGHVs represent those parts of Cornwall which were designated at local level to identify those areas of the landscape which were deemed to be of particular historic importance and worthy of protection via the planning system. Although they were incorporated into the 1997 Structure Plan, the subsequent 2004 Structure Plan stated: '*The coverage, role and objectives of the former Areas of Great Historic Value ... will be more effectively achieved through the proposed character approach (Historic Landscape Character) complemented by the protection of key sites and areas of County importance*'. AGLVs and AGSVs are similarly now of diminished importance within the planning system, given the move to the character-based approaches which underpin strategic planning policy making.

The A30 traverses a large area designated as an AGHV on Bodmin Moor from Preeze Cross to Trewint.

5.1.7 Areas of Great Landscape Value (AGLV)

See Figure 11.

AGLVs represent those parts of Cornwall *'which are of sufficient quality to merit special protection in a County context because of their landscape beauty'*, and former Local Plans noted that *'the conservation of natural beauty and amenity is to be given particular emphasis in considering proposals for development and the management of change'*.

Four sections of the landscape traversed by this section of the A30 are designated as AGLV, these being from Callywith Junction to Preeze Cross, to the north of the A30 from Five Lanes to Strayerpark Plantation, and to both the east and the west of the A30 from Strayerpark to Holyway Cross.

5.1.8 Special Areas of Conservation (SAC) and Sites of Special Scientific Interest (SSSI)

See Figure 13.

Various sections of the landscape traversed by the A30 are also covered by a number of designations relating to their scientific and nature conservation importance.

A Special Area of Conservation is a specially-protected site designated under the EC Habitats Directive, intended to make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended). No areas adjacent to the route of the A30 are currently designated as Special Areas of Conservation (SAC).

The statutory nature conservation agencies have a duty under the Wildlife and Countryside Act 1981 (as amended) to notify any area of land which in their opinion is *'of special interest by reason of any of its flora, fauna, or geological or physiographical features'*. Such areas are known as Sites of Special Scientific Interest (SSSIs).

A large area designated as SSSI comprises the moorland to the north of the A30 between Peverell's Cross and Deep Hatches at the western end of Bolventor (with the exception of Hawkstor clayworks and the adjacent downland).

5.1.9 Areas of Great Scientific Value (AGSV)

See Figure 12.

AGSV's have been designated at County level *'to act as buffers around the most important and sensitive nature conservation sites, provide links between sites, and to emphasise the most important areas of the County for nature conservation where resources for management will be concentrated'*.

Relevant areas designated as AGSV comprise the landscape to the east of the A30 from Castle Canyke to Higher Carblake and land to the north and south of the A30 from Higher Carblake to Trewint.

5.1.10 County Wildlife Sites

See Figure 14.

Sites identified as being of county wildlife importance have been identified at a local level as CWS, and can be a material consideration within the planning process. Adjacent to and along the line of the A30 these comprise Lanhydrock Park and its environs, the deciduous woods in the valleys to the east of Bodmin, parts of Cardinham Downs to the south of the A30, Cardinham Downs, Hawkstor Downs, Blacktor Downs, Colliford Lake, Minzies Downs, the upper Fowey Valley, Trewint Downs and East Moor.

6 Individual site designations

6.1.1 Scheduled Monuments

See Figure 5.

A schedule has been kept by the English Government since 1882 of monuments considered to be of national importance. The current legislation, the Ancient Monuments and Archaeological Areas Act 1979, supports a formal system of Scheduled Monument Consent for any work to a designated monument. Scheduling is the only legal protection specifically relating to archaeological sites and areas. As well as Scheduled Areas, individual sites of national significance are included on the Schedule of Ancient Monuments.

There are 15 individual SMs within the viewshed extending to 1km of the road centreline, 15 of these being within 500m of it, and 8 within 100m. These are a mixture of prehistoric barrows, cairns, late prehistoric hillforts, medieval bridges (at Temple), medieval wayside and churchyard crosses.

Scheduled Monuments may have extensive settings, particularly if they were originally intended to be prominent features of the landscapes which surround them (as in the case of hillforts or the larger hilltop cairns and barrows), or important elements within contemporary multi-site landscapes.

6.1.2 Listed Buildings

See Figures 6 and 7.

Buildings or structures deemed to be of national importance by virtue of their architectural or historical significance are placed on the Statutory List of Buildings of Architectural or Historic Interest, the relevant legislation initially being the Town and Country Planning Act 1947, this being superseded by the Planning (Listed Buildings and Conservation Areas) Act 1990. The list is maintained by Historic England (in England). The Act allows for three categories of Listed Building: Grade I buildings are of exceptional interest, Grade II* buildings are of more than special interest and Grade II buildings are of special interest '*warranting every effort to preserve them*'.

Listing confers a substantial degree of statutory protection, preventing demolition, extension or alteration without permission (Listed Building Consent) from the local planning authority (or in the case of high grade Listed Buildings, from Historic England).

There are a substantial number of Listed Buildings adjacent to the line of the A30 and its predecessors between Innis Downs and Dunheved Bridge which directly relate to the route, including all of its surviving milestones, a number of guidestones and a disused double bridge at Two Bridges. Most of the early farmhouses adjacent to the A30 are Listed Grade II, though a number are Listed at Grade II*; the former coaching inns at Bolventor and Trewint are also Listed, as is the school at Bolventor and churches in the settlements near the road. A number of historic houses and cottages in settlements close to the road and several early farmhouses are also so designated.

Some Listed Buildings such as parish churches may have extensive settings, as many were intended when constructed to be prominent landscape features. Country houses such as Lanhydrock are a further class of high grade Listed Building which often had deliberately designed settings, these often being aligned along avenues, rides, vistas and views, both from the houses and within the parks and gardens which usually surround them.

7 Historical background

7.1 Early roads

According to one source quoted (but not named) in an article in the *West Briton* in 2010, the spine route westwards through Cornwall was, in 1239, known as the '*Great Road of the Wagons*', and in 1260 as the '*Royal Cornish Way*'.

If these claims are correct (no other reference to these names could be found), they suggest that the route leading westwards from the River Tamar across Bodmin Moor and down to west Cornwall had long been an important communications route linking Cornwall with the rest of Britain. It might indeed have been a long-distance route during prehistory, its course along the spine of the peninsula passing through some of the few areas of the landscape which were not then densely wooded and along which natural features such as distinctive carns (tors) would have provided waymarks whose locations and sequence may well have been communicated down the generations in songs, stories and myths.

Such routes would have allowed travellers to avoid the many wooded valleys found further out towards the coast, and the often difficult river crossings to be encountered within them, as well as the increasingly settled and farmed areas on the more fertile lower ground where local people might have been wary of outsiders, often with good reason. Similar long-distance routes following ridge-tops have been suggested elsewhere in Britain, although secure dating is inevitably problematic in the absence of sound archaeological evidence. During the Bronze Age, many ridge-tops and some areas of Bodmin Moor became populated with barrow cemeteries, perhaps marking their control of particular areas by local kin groups, examples such as those crowning Brown Gelly to the south of the A30 at Bolventor being particularly prominent. During the Iron Age, strategically-sited hillforts (such as that at Castle Canyke) controlled access to and along many of these routes.

There is likely to have been a road across at least the western part of Bodmin Moor during the 13th century when Temple was founded by the Knights Templar as a hospice for pilgrims and travellers following traditional pilgrimage route across Cornwall from north to south between the Camel and Fowey estuaries. The hospice was taken over by the Knights of St. John of Jerusalem after the suppression of the Templars in 1307-8 (Maclean 1876, 87-88). Wayside crosses mark the route from Bodmin to this island of solace in the middle of what must, at the time have been considered to have been a bleak and trackless waste. A place named *Pontiesu* or *Pontiesou* in a charter of 1241 (the site of the post medieval settlement at Pounds Conce) appears to refer to a medieval bridge here, the name being interpreted as meaning *Jesus' Bridge*. This was probably the site of a further causeway and clapper bridge, and there is a suggestion (Parkes 2013) that the site was also associated with a chapel or cross. Further eastwards on the moorland, Parkes has also recorded two sections of a holloway, one section on Trehudreth Downs, the second to the west of Temple and south of the A30, which may represent surviving sections of the medieval route across the moors in this area. This route appears to be associated with the medieval Peverell's Cross (this possibly being the *White Cross* mentioned in a 1613 account of the bounds of Cardinham parish (Parkes 2013) (Fig 87) and the example which formerly stood at Preeze Cross (of which a fragment may be incorporated into a building there (*Ibid*)), and which is also recorded in several *Cross Park* field names around the junction. A further cross seems likely to have been sited at the point where the Temple to St. Breward road crosses the line of the A30, the Lanhydrock Atlas of *circa* 1699 (Holden *et al* 2010) naming this location *Badway Cross*, the name no doubt referring to the marshy ground traversed by the road to the north of the junction.

During the early part of the medieval period, taxes were levied for the creation and maintenance of strategic bridges, whilst the maintenance of the road system became the responsibility of the Hundred Courts. The Church, in particular, was involved in keeping roads in a fit state of repair, and during the 15th Century many of Cornwall's

bridges were constructed (Thompson 2013), some as the result of Indulgences. It has been suggested that the former causeway and bridge at Pounds Conce might have been constructed in this fashion (Parkes 2012, 2013). During this period the route linking Bodmin and Launceston was known as 'the Kings Road' (*regiam viam*), this being recorded in the Stannary Rolls for 1513 (CRO SC 2/159/16), suggesting that it was considered to be a strategic route, one which would, for example, enable troops to move rapidly across the kingdom in the event of insurrection or invasion.

The first Highways Act was enacted in 1555 during the reign of Queen Mary requiring each parish to appoint two surveyors to supervise the repair of highways leading to market towns. This Act was renewed in 1562 to include compulsory powers to obtain materials for road repairs and an increase in the requirement for statute labour to undertake this work (*Ibid*). Parishes through which a long distance road passed often found these requirements onerous. The amount of long-distance land traffic in Cornwall during this period is unclear, most accounts suggesting that many travellers and goods would have been conveyed by sea, suggesting that such roads as existed were established for and used by essentially local traffic. Longer-distance travellers are known to have used this route, however. In 1478, for example, the antiquarian traveller William Worcester recorded that '*I rode from Launceston Priory in the afternoon across the Moor where my horse fell down; I reached Bodmin and talked with Brother Mohun etc.*' (Harvey 1969, 38-39).

7.2 The post-medieval period

Even during the early post-medieval period, most of Cornwall's roads remained essentially local, linking farms to churchtowns and these parish centres to local market towns such as Bodmin or Launceston or to coastal ports. From the 16th century, certain bridges were deemed to be so important that their maintenance became the responsibility of the County Court – such bridges were designated County Bridges. In 1697, an Act of Parliament established a requirement for the erection of direction signs or posts '*for the better convenience of travelling in such Parts of the Kingdome which are remote from Towns and where several Highways meet.*' This suggests that by this date, the need had arisen for the establishment of signposted roads fit for longer-distance travellers who would be unfamiliar with the countryside they were passing through.

Most commercial traffic from England to Cornwall during this period still utilised coastwise shipping, whilst the long distant land routes were still relatively undeveloped, their condition being notoriously awful. In 1602, Carew said of the County's roads '*those laid out of later times [during the post-Roman period] are in the eastern part of Cornwall uneasy, by reason either of the mire or stones, besides many uphill and downhill. The western are better travelable, as less subject to these discommodities.*' By '*uneasy*' Carew meant 'difficult'. The doughty Celia Fiennes, describing a tour through Cornwall *circa* 1695 on horseback, also mentioned the poor state of the local roads on more than one occasion:

'Here Indeed I met wth more jnclosed Ground and soe had more Lanes and a Deeper Clay Road w^{ch} by by the raine y^e night before had made it very Dirty and full of water in many places, in the Road there are many holes and sloughs where Ever there is Clay Ground, and when by raines they are filled with water its difficult to shun Danger; here my horse was quite down in one of these holes full of water'

'I went over some Little heath Ground but mostly Lanes, and those stony and Dirty...'

At this time, however, few travellers (Fiennes included), braved the by and large unmarked route from Launceston to Bodmin which traversed Bodmin Moor, preferring to pass to its north or south. A large number of topographical maps of Cornwall were produced between the early 17th century and the beginning of the 19th century, some of these showing the major roads running through the county to inform potential travellers of available major routes within Cornwall (for example, Figs 26 to 29).

One of the first of the county maps to depict most of the major elements of Cornwall's road network in detail was that produced by Joel Gascoyne in 1699. Although this map depicts a route running across the moor, contemporary accounts suggest that this route was not easy to follow, and that travellers using it generally employed guides.

In 1716, Cornwall's Summer Assize Court was moved from Launceston to Bodmin to place it at a more central location, necessitating improvements to the road between the two towns. The road improved to facilitate this change was, however, that running around the north of Bodmin Moor via Camelford.

Until perhaps the early 18th century, it is clear from most early maps (for instance as clearly shown on the example produced by Bowen in 1756, Fig 29) that the route now followed by the A30 was not regarded as one of the principal roads from Devon westwards through Cornwall, these being (to the north) via Launceston, Camelford and St. Columb to Truro and (to the south) through Callington, Liskeard, Lostwithiel and Grampound to Truro (more or less the route followed by Celia Fiennes half a century earlier).

In 1742, it is recorded that posts were set up along the route across Bodmin Moor – an indication of the rudimentary nature of the highway and, presumably the ease with which travellers like John Wesley could still become lost. In 1743, Wesley wrote *'We rode forward [from Exeter]. About sun-set we were in the middle of the first great pathless moor beyond Launceston. About eight we were quite out of the way (i.e. lost); but we had not got far before we heard Bodmin bell. Directed by this, we turned to the left, and came to the town before nine.'* When he returned to Cornwall in the winter of the following year he employed the services of Digory Isbell, an inhabitant of Trewint (whose house is now called Wesley Cottage), to guide him when continuing his journey across Bodmin Moor – a wise move, as there had been significant recent snowfall, and most of the landmarks which he might otherwise have used to guide his way would have been difficult to make out.

Martyn's map of around the same date and Thomas Osborne's map of 1748, depicted a route across the moor along the line of that now more or less followed by the A30, and depicted a number of guideposts along the route of the road to the east of Temple (Fig 28), but again, contemporary accounts and county maps suggest that most travellers utilised the routes to the north and south (see for instance Bowen's Map of 1756, Fig 29).

In 1754 a series of milestones were set up along the moorland route by a publically-spirited Bodmin innkeeper, as was noted by the *Western Flying Post* in the following year:

'... Mr Lewis, Master of the White Hart at Bodmin, has at his own Expence, erected Mile Stones for twenty two miles over the large Moors, that lay between Launceston and Bodmin; the road over which was so difficult before, that those not acquainted with it, used to choose to take a Circuit of 33 Miles, to pass from the one Town to the other, tho' the Way over the Moors is no more than 24 Miles.'

The newspaper's editor commented:

'A very noble and laudable Example this; worthy of being imitated and deserving the Notice and Acknowledgement of all Travellers who pass that Way, as it must give everyone Pleasure, as well as be of vast use to all that are Strangers in those Parts.'

Although Lewis erected these undoubtedly useful milestones, there is no record of any other improvements having been made to the moorland road during this period. These guideposts are shown on Martyn's Map of Cornwall (Fig 28).

7.3 The Turnpike Trusts

See Figure 22.

Turnpike Trusts came relatively late to Cornwall, possibly because it already had a number of well-established long-distance routes communicating with Devon and had

long relied on the sea for much of its commercial traffic. Nevertheless, many local roads were of poor quality, inhibiting communications around the county and between its population centres and there was a clear and growing need during the 18th century to rectify this. The first Turnpike Trust covered the 'Truro Roads' in 1754, reflecting the rapidly-growing economic importance of the mines around Redruth and Camborne, and the mercantile and commercial growth of Truro.

Those sections of former turnpikes subsequently incorporated into the route subsequently designated as the A30 were:

- The road between Penzance and Redruth - the 1825 Hayle Bridge Causeway turnpike - this being further upgraded in 1837 and 1839.
- A section of a 1754 Truro turnpike linking Truro to Redruth and Camborne via Chacewater.
- The section of the current A30 between Mitchell and Marazanvose was not turnpiked.
- The section of the A30 from Penhale to Mitchell was part of a 1760 Camelford, Wadebridge and St. Columb turnpike.
- The road from Higher Fraddon to Bodmin was turnpiked in 1829, this being the Truro Road following the A389 from Bodmin through Lanivet and the A30 to Indian Queens. This section of road was specifically mentioned as to be improved in an Act of 1769, though the route appears to have run from Redtye in the east via Colbiggan Belowda, Castle-an-Dinas and Higher Fraddon, passing to the north of Goss Moor. The exceptionally straight section from Town End to Lanivet was constructed following an Act of 1833.
- The major element of the 1769 Bodmin to Launceston turnpike followed the line of the current A30 from Bodmin across Bodmin Moor to Kennards House, work having begun on improving this route in 1756.
- The principal 1760 Launceston turnpike covered a section of the London Post Road from a little west of Okehampton (where it met the Okehampton Turnpike) crossing the River Tamar at Polson Bridge and continuing westwards to a junction with the Wadebridge and Bodmin roads at Kennards House.

It can be seen, therefore that the development of the A30 as a major highway in Cornwall was a piecemeal affair, the earliest stages of improvement being between Launceston and Bodmin and from Penhale to Mitchell during the 1760s. A second round of improvements had to wait until the early decades of the 19th century, when the road from Penzance to Redruth was improved, together with the section from Higher Fraddon to Bodmin.

In 1769 the Bodmin Turnpike Act (9 GIII c.lxix) included specifications for the route from *'Kennards House in the parish of South Petherwin, over Hicks Mill Bridge through the parishes of Lawanack, Altonon, St. Neot, Cardinham, Temple to Bodmin'*.

By 1770, the road from Launceston to Truro via Bodmin had become one of the four principal routes from Devon which travellers might use to reach Truro – the others being via Launceston, Camelford and Wadebridge, via Callington and Liskeard, and utilising ferries across the Tamar and then passing through Liskeard.

Thompson (2013) includes a description of a journey by coach from Launceston to Indian Queens in 1795 which indicates the transformation of the moorland route from one which was rough and difficult to follow into what was to become the preferred route from Devon into Cornwall: *'Launceston to Five Lanes. Eight miles of good road over several mountains – quite barren, nothing but heath. Views of distant mountains right and left. The road sparkles when the sun shines, it seems to be all spar. Five Lanes has a single house [the King's Head], only a makeshift, but good stabling. Five Lanes to Bodmin – 13 miles of good road over several mountains, which are quite barren, with scarce a tree or hedge.'*

Another contemporary traveller described the make-up of the road: *'The road in general is good. For a considerable way the stones are covered with a kind of rough sand, or small gravel, apparently the loose materials of which the granite is composed;*

making an admirable road. The moors are open: except some small enclosures about Temple, &c.' (Marshall 1796, 287). The road surface remained surfaced in this fashion well into the 20th century (see for example, Fig 35, a postcard depicting the western entrance to the hamlet of Bolventor).

In 1815, Worgan noted that in Cornwall *'the roads, with some exceptions, are tolerably good throughout this county; much better than in many parts of Devonshire.'* He also noted that *'The parochial roads are numerous, narrow, and intricate, some of them mere gullies, worn by torrents; their high banks, and tall overhanging hedgewood, render many of them dark labyrinths. I have heard many travellers express a wish that there were more guideposts in the county; indeed I have, myself, had frequent occasion to wish for such friendly monitors.'* (Worgan 1815).

A requirement for the erection of guidestones had been established by Act of Parliament in 1697 (8 & 9 WIII c.XVI) authorising Justices in Highway Sessions to require Surveyors of Highways to set up direction stones or posts at *cross highways 'for the better convenience of travelling in such Parts of the Kingdome which are remote from Towns and where several Highways meet'* (Thompson 2013), but it appears that their absence was still resulting in travellers getting lost a century later.

In 1817, C.S. Gilbert again mentioned that direction posts were *'much wanting'* in Cornwall, as were milestones, both of which were generally a specific responsibility of the turnpike trusts. The accurate survey of a road and the erection of milestones at one Statute Mile intervals (1,760 yards, rather than the Long Miles and local miles previously used) was a specific requirement on the Trustees of a Turnpike Trust. These road improvements were paid for by the levying of a range of tolls on travellers, toll houses and gates being set up to enable this (for the former location of one of these toll houses at Palmersbridge, see Fig 34).

Gilbert specifically mentioned that in 1770 *'a good road was made over the downs that intervene between Launceston and Bodmin, which taking a direction westward of the latter town, connects itself, at the distance of thirteen miles, with the old road leading from St. Columb to Truro'.*

In 1829 a further Bodmin Turnpike Act (10 GIV c.XIX) proposed three further improvements to the road from Bodmin to Launceston.

The first of these was within Bodmin itself from Brewery Lane to the first milestone to the east.

The second section bypassed the old route through Temple, being *'a new Piece of Road diverging from or near the Five Mile Stone from Bodmin to Launceston, through the estate of Greenborough and Menacrin Marsh, to or near the Seventh Mile Stone, to join the present road from Bodmin.'* This avoided the narrow causeways carrying the road across the marshes and ancient narrow bridges to the east and west of Temple, establishing the current route of the A30 near Temple (Figs 31 and 58).

The third proposed improvement constituted *'a new Piece or Road from the present Turnpike Road at Five Lanes, over and through the present Highway leading from Plasha [Plusha] Cross, and from thence through certain Inclosures over Two Bridges to or near Holloway Cross Turnpike Gate in the parish of Southpetherwin to join the present turnpike road from Hick's Mill Bridge to Launceston.'* This new section of road ran to the south of the original route, avoiding Polyphant (Fig 76) and the steep hills on the original route near Hick's Mill (near Polyphant) and Trerithick Bridge across Penpont Water (Fig 75).

The 1877 OS 25" to a mile mapping marks several guide stones or guide posts at crossroads along the route of the turnpikes between Innis Downs and Launceston, together with the sites of a large number of milestones, so it appears that the turnpike trusts eventually addressed Gilbert's concerns (see for example, Fig 33 showing the locations of the guidepost and milestone at Council Barrow on Racecourse Downs to the north-east of Bodmin). Many of these formerly essential features have now been lost. For examples of some of the surviving milestones see Figures 102 to 107.

A30 Innis Downs to Dunheved Bridge CHAMP

Milestone locations recorded by the Ordnance Survey along the original section of the road from Bodmin to Launceston (or close to it) were as follows:

NGR	Location	Inscription
SX 08292 67379	Formerly on Launceston Road near Cooksland. Removed.	BODMIN 1
SX 07721 66754	East of Bodmin.	Lanson Bodmin
SX 08929 68861	Formerly near Cardinham Lodge on Racecourse Downs. Removed.	BODMIN 2
SX 09896 70146	Just south of Council Barrow.	BODMIN 3
SX 10318 70459	Cardinham Downs.	Blisland 2 B3
SX 09895 70146	Cardinham Downs.	L XIX B3
SX 11281 70975	Higher Carblake.	BODMIN 4
SX 12351 72031	Formerly near Trethorne. Removed.	Bodmin (5)
SX 13397 73110	Formerly next to Temple clayworks. Removed.	BODMIN 6
SX 14484 74016	Formerly north of Temple Tor. Removed.	BODMIN 7
SX 16025 74110	Formerly near Temple east junction south side. Removed.	BODMIN 8
SX 17240 75096	Lords Waste.	B9
SX 18017 76453	West of Bolventor.	Launceston 12 Bodmin 10
SX 19203 77566	Formerly near Palmersbridge. Removed.	BODMIN 11
SW 20368 78654	Formerly near Cannaframe. Removed.	BODMIN 12
SX 21292 80014	Trewintmarsh.	B13
SX 22624 80647	Five Lanes.	Launceston 8 Bodmin 14
SX 24216 80341	Strylands.	Launceston 7 Bodmin 15
SX 25751 80308	East of Plusha.	Launceston 6 Bodmin 16
SX 26689 81283	Formerly on Lewannick slip road. Removed.	Launceston 5 Bodmin 17
SX 27614 82395	To the east of Holyway Cross where the carriageways converge. Removed.	BODMIN 18
SX 29136 83271	A395 Kennards House. Removed.	Launceston 3 Bodmin 19 Camelford 13
SX 30481 84081	East of Tregadillett.	Launceston 2 Bodmin 20 Camelford 14
SX 32063 83786	West of Launceston.	Launceston 1 Bodmin 21 Camelford 15
SX 08055 64021	Near Trevithick overbridge to the north-west of Lanhydrock.	2B

Table 3: Locations of turnpike era milestones.

In addition, early maps indicate the sites of a number of guideposts at junctions along the roadline. Most no longer survive. Documented guidepost or guidestone sites along the earlier route of the A30 from Mount Pleasant near Victoria to Polson Bridge were at:

- Hill House just to the east of Mount Pleasant;
- Innis Downs;
- Immediately to the south-east of Bodmin;
- Cooksland to the east of Bodmin;
- On Racecourse Downs next to Council Barrow;
- Preeze Cross;
- North of Cardinham Clayworks near Temple;
- Where the old road through Temple met the re-aligned turnpike to its east;
- Bowden (to the east of Trerithick Bridge);
- Plusha Junction;
- Higher Trevell;
- Kennards House;
- Exeter Street, Launceston.

For examples of these guideposts, see Figures 93 to 96.

A.K. Hamilton-Jenkin, in his 'The Story of Cornwall' described the coach route from Falmouth to Launceston as follows: *'In 1859, the "Quicksilver" left Falmouth each day at 11:00 a.m. The principal stopping places on the route were the Norway Inn, Perran Wharf; the Royal Hotel, Truro; the Falmouth Arms, Ladock; the Indian Queens, Goss Moor; the Royal Hotel, Bodmin; and the Jamaica Inn, Bolventor. Launceston was reached at a comfortable hour the same evening'*. The Tally Ho coach had been established between Truro and Plymouth in 1848, taking five and a half hours for the journey. It is perhaps indicative of the state of the Cornish roads at the time that the journey from Plymouth on to London took only seven and a half hours.

Inns and hotels had been established along the route to provide food, lodgings and changes of horses for travellers, particularly those using the coaches which carried the post and those set up by local entrepreneurs. Those identified from Tithe Maps and from the 1st Edition 25" to a mile mapping along the route of the eastern part of the A30 in Cornwall were: (see Figs 72 and 111, for examples):

- Bodmin – two hotels and an inn along Bore Street;
- The London Inn, Pound's Conce;
- The Jamaica Inn, Bolventor;
- The King's Head, Five Lanes;
- The Square and Compass, Higher Tregadillett
- Launceston – the Westgate Inn.

Another class of facilities which were essential to early travellers consisted of roadside smithies, and, in 1877, the Ordnance Survey mapping shows that these were to be found along the Bodmin to Launceston Road at the west end of Bore Street, Bodmin, at Preeze Cross, at Five Lanes (two examples), at Plusha Junction, at Kelly's House to the east of Plusha, at Tregadillett and near Polson Bridge.

The profits of the Turnpike Trusts were substantially affected by the arrival of the main line railways during the 1850s and they were progressively wound up from the late 1870s, the roads being transferred to local boards and then to the County Council following its formation.

In 1835, the Highways Act had finally removed the requirement for statute labour, replacing it with a highway rate to pay for the maintenance of roads within parishes (excluding those maintained by the Turnpike Trusts). In 1862, Cornwall's parishes were grouped together into seventeen Highways Districts, the major roads being administered by a District Highways Board. In 1878, as many of the turnpike trusts were being wound up, the *Highways and Locomotives Act* created 'Main Roads' – principally former turnpikes, and in 1899, with the creation of Cornwall County Council,

a Highways Committee was formed to take on the maintenance of these principal highways, Cornwall being subdivided into East and West Divisions.

7.4 The eastern section of the A30 at the end of the 17th century

Joel Gascoyne's very high quality and relatively detailed 1699 map of Cornwall (see Figs 26 and 27) represents an important cartographic source for landscape studies in the county and depicts the pre-turnpike alignment of its road system. In relation to the route of the A30, the road from Bodmin to Launceston is clearly shown as an established route (Fig 26), the route running from Bodmin across '*Bodmin down*' (Cardinham Down) where it entered open moorland, continuing via a direct route to Temple, on to '*Deip hatches*' (subsequently to become the location of Bolventor and the Jamaica Inn). At this location the map shows a cluster of high hills (depicted as mountains), this area being named '*The Temple Moores*'. The road then crossed the River Fowey at '*Palmer bridge*' and continued (Fig 27) via '*Trewince*' (Trewint) and Trevithick (where there was a now-lost pre-turnpike toll bridge on the crossing point over the Penpont Water), then via '*Kenners house*' and '*Trebersy*' (Trebursey) to Launceston. The River Tamar was crossed at '*Poulson bridge*'.

7.5 The eastern section of the A30 in the early 19th century

Circa 1810 the Ordnance Survey's first published 1" to a mile survey of Britain showed the route of the A30 between Bodmin and Launceston (Figs 31 and 32). The mapping is stylised and not particularly detailed, but clearly shows the Bodmin turnpike from Mount Pleasant into Bodmin and from Bodmin eastwards via Callywith (Fig 31) onto Baron Down (the name given by the OS to Racecourse Downs and Cardinham Downs at the time). Beyond Peverell's Cross, the OS showed the road still running through Temple along causeways to its east and west and on across the moor via '*Four Holes Cross*' to Jamaica Inn (the settlement of Bolventor not having developed to any extent by this date). The road was shown as continuing on across '*Palmer's Bridge*' (where there was a toll house until the road was dualled between 1989 and 1991) and then to Trewint on the eastern side of the moor. From here eastwards the courses of the original road and the modern A30 diverge, the old road being shown running from Five Lanes across Trevithick Bridge to Polyphant and Hicks Mill to '*Holloway Cross*' (Fig 32) from where the two routes share a common alignment through '*Kenners House*', '*Trebursey*' and '*Tresmarrow*', the turnpike diverting from the route of the present A30 to the south of Launceston, running north into the centre of the town and then continuing to its east to cross the Tamar at '*Poulson Bridge*'.

7.6 The eastern section of the A30 at the end of the 19th century

Circa 1877, the OS mapped the route from Bodmin to Launceston in considerable detail.

The turnpike route ran in a virtually straight line from Hill House near Mount Pleasant (close to the recently-constructed Cornwall Services at Victoria) across Colbiggan Downs to Redtye, where it turned to the north-east, cutting across the line of substantial tin stockworks which had been excavated as Wheal Prosper and passing the local Volunteer rifle range to meet the Bodmin to St. Austell road at Lamorick to the north of the village of Lanivet. From here it skirted the western side of Bodmin Beacon past Lanival and Laveddon and the St. Lawrence's County Lunatic Asylum to enter Bodmin along Higher and Lower Bore Streets, running eastwards along the medieval spine of the town to St. Petrock's Church.

Continuing to the east, the turnpike ran along Castle Street past the Union Workhouse north-east to Callywith, where it passed out of the enclosed land and out onto downland.

From this point, the un-hedged road ran north-north-east past Cardinham Lodge onto Racecourse Downs along the line still followed by the A30. Small roadside quarries marked on this mapping probably represent the sources of material used for road

repair. An elongated boundary paralleled the road to the south-east. At the north-eastern end of Racecourse Downs, the formerly prominent Council Barrow marked the junction of a network of tracks heading north-west and south across the downs (quite possibly the location where Wesley had become lost in 1743). By 1877 a guidestone had been erected at this location (Fig 33). The Bodmin Volunteer rifle range lay to the south of the road near this point.

Beyond Cardinham Downs the road passed through the enclosed land of Higher Carblake to Preeze Cross, a medieval waymarker along the medieval route to Temple, and on to the London Inn at '*Pound's Cawnse*' at the foot of the steep hill leading up around the western flanks of Colvannick Tor onto the moor proper.

This section of the road was bordered to the west by enclosed land around Stokely and Thorne, but by open moorland to the east, the summit of the hill and the limits of the enclosed land to the west being marked by Peverell's Cross, another waymarker on the medieval route to Temple.

The Cardinham Works china clay works at Burnt Heath lay close to the south of the nearby road (Figs 47 and 49), its development no doubt enabled by its presence, as also must have been Temple china clay works not far to the north-east. Across this section of Trehudreth Downs and Greenbarrow Downs the road was bordered by a hedge only on its southern side until it passed between the islanded moorland settlements of Greenbarrow and Medland. The original route had continued north-eastwards along causeways across marshy sections of the moor to Temple, but from 1829 the road had been diverted to the west and north of the Temple clayworks and around Temple Tor through the northern edges of the medieval field systems of Tor and Temple – the route now followed by the A30. The Hawkstor china clay works had been started to the north of the road in 1870.

The road crossed a marshy valley (the site of a former tin streamworks) at Temple New Bridge onto the southern edge of Brockabarrow Downs, climbing upwards around their edge and being re-joined by the eastern end of the old road through Temple.

High up on the moor, the turnpike arrived at the hamlet of Bolventor where there was a much-needed coaching inn – the Jamaica Inn (Fig 35). Bolventor developed around this inn established by the Rodd family of Trebartha (the family being former Governors of Jamaica, hence the name of the hostelry) and the small church constructed here in 1846 (Fig 120), and was the centre of a cluster of late 18th century pioneering farmsteads deliberately established to achieve the agricultural improvement of areas of the high moor. The name Bolventor derives from '*Bold Venture*' possibly the name of one of the tin streamworks which had worked alluvial and eluvial deposits in the nearby streams.

North-east of Bolventor, the road descended to Palmersbridge where there was formerly a toll house (Fig 34), this was demolished when the road was improved in 1989-91), the plantation established on the site of the former Dryworks tin streamwork and the early farmstead of Lonkeymoor, again climbing up onto the high ground to the north-east through a landscape of partly-improved moorland and further abandoned streamworks like those near Cannaframe. Fourhole Cross (Fig 88), one of the wayside crosses which had guided travellers across the moor since the medieval period, stood near the top of the hill between Sprey Moor and Minzies Downs which the road crosses to the north-east.

From just to the east of Cannaframe the road descended the north-eastern flanks of the moor towards Altarnun and Five Lanes, passing yet another wayside cross (Vincent Cross, Fig 89) and passing through the site of Vincent Mine, which at this date incorporated several beam engines working its pumps, winding gear and stamps (Fig 48). One of its principal shafts – Horseborough – lay immediately to the south of the original roadline, a mine tramway running under the turnpike between this shaft and the mine's steam stamps and dressing floors. Passing on its north-east the medieval farmstead of Trewintmarsh and the abandoned flooded streamworks to its south, the road arrived at Trewint.

John Wesley repeatedly stayed at Trewint with Digory Isbell on his journeys through Cornwall, and there is still a non-conformist chapel in this hamlet, as well as Isbell's house, now known as *Wesley Cottage* (Fig 123). Fivelanes lies just to the east, where the King's Head was an established coaching inn (Fig 72), whilst the parochial centre at Altarnun is not far to the north, sited on both banks of the Penpont Water (Fig 121).

The original route of the turnpike had headed north-east from Fivelanes through Polyphant (Fig 76) and Hicksmill towards Launceston, but had been diverted to the south in 1829 to avoid steep climbs out of two valleys along the original route. The realigned road ran east from Fivelanes, broadly following the modern line of the A30 through medieval fieldscapes past Trebant and Stryland and on to Plusha, the old road running to the south of the present A30. At Plusha the realigned road ran on eastwards towards Lewannick before turning to the north to Two Bridges (Fig 78) and then northwards to meet the old road at Holyway Cross (Fig 90) – another medieval wayside cross sited along the old route across the moor.

From this point, four miles from Launceston, the modern A30 follows the route of the old road north-east to Kenner's (Kennards) House, the site of another guidepost, for some distance, though diverts to its south just to the east of the junction. The turnpike route continued through long-established farmland associated with Tregadillett, Trebursye, Tresmorrow and Landerends, cutting across medieval field boundaries and passing another wayside cross at Chapel, entered Launceston to its south-west at the junction with the turnpike road to South Petherwin. From this point, the traveller had the option of heading north to Stratton through the centre of the town (Figs 79 and 80), passing the castle (Figs 42 and 126) and priory and crossing the river Kensey at St. Thomas' Bridge, heading south to Callington and the river crossing point at New Bridge, Gunnislake or continuing eastwards along the road to the crossing point on the River Tamar at *Polston* (Polson) Bridge (Fig 81). The Launceston branch of the Great Western Railway crossed the Tamar a little to the south of this point, whilst the site of the modern A30 Dunheved Bridge is 270m downstream again. The road into Devon continued up onto Lifton Down, through Lifton and Lewtrenchard and on to Okehampton.

7.7 The 20th century

Motor vehicles began to appear on Cornwall's roads at the beginning of the 20th century, and detailed maps expressly designed to inform and assist the growing numbers of commercial drivers and touring motorists using the road began to be produced by companies such as Bartholomew and Michelin (for example, Figs 36 and 37).

The classification of the national road system was begun in 1913 by the Government's Road Board, but this work was interrupted by the outbreak of the Great War. The Ministry of Transport, formed in 1919, took up the work and created a classification system – Class I for major routes and Class II for minor routes – a definitive list being published in 1923. The numbering system for England and Wales was based on a radial pattern focussed on London – Zone 3 comprised the south-west of England, hence the '3' prefix to major roads in Cornwall, including the A30. The road numbers began to be included on maps produced by the Ordnance Survey and cartographers such as Bartholomew shortly after the mid-1920s.

7.7.1 Bypasses and widenings

See Figure 23.

Whilst the Turnpike roads established during the 18th century had replaced many early, narrow lanes, greatly improving the speed at which travellers could make their way through Cornwall, their principal purpose was to link up major centres of population. Given that the A30 effectively became the principal trunk route through Cornwall during the 20th century, the rapid rise in road traffic following World War 2 necessitated the construction of at first widenings of the carriageway and subsequently by-passes and

new dual-carriageways. By the mid-20th century, as a result of rising volumes of traffic, the towns and villages along the route of the A30 in east Cornwall - Bodmin, Bolventor, Trewint, Five Lanes, Tregadillett and Launceston - had become bottlenecks for long distance travellers and life in those settlements was becoming increasingly intolerable as a result of the constant traffic passing through them. The two lane road across Bodmin Moor was long and narrow, and best avoided during the summer months, when it was often clogged with long, slow-moving convoys of visitors' cars and coaches, and by the commercial vehicles which were increasingly replacing the railway network as a means of transporting goods over long distances in Britain.

A small-scale realignment of the line of the A30 allowed Pound's Conce to be by-passed in 1965 (Fig 57). The Launceston by-pass was completed in 1976 (Fig 65) and the Bodmin by-pass (from Innis Downs to Higher Carblake, see Figs 53 to 56) in the following year as part of a major upgrading of the A30 in Cornwall. The roadway to the north of Temple Tor was widened on its northern side in 1977 at the same time as former sections of turnpike at Trethorne and adjacent to Greenburrow were cut off by re-alignments. Bolventor and Trewint were by-passed between 1989 and 1991.

Only one section of the A30 from Innis Downs to Dunheved Bridge is, in 2015, not yet a fully-modernised road - this being the section from Higher Carblake to Temple Junction - though the initial stages of the dualling of this section of the road are currently (Summer 2015) under way, the work being scheduled for completion in 2017.

The works being undertaken within the section of road between Higher Carblake and Temple Tor have been the subject of a detailed assessment (Parkes 2012, 2013), and are covered by an archaeological watching brief. However, the majority of the previous major road improvements within the section of the A30 from Innis Downs to Launceston were not the subject of equivalent investigations, the exceptions being a preliminary assessment and subsequent watching brief of the Bodmin by-pass in 1975 by Cornwall Archaeological Society (Irwin 1975) and an assessment and an evaluation during junction improvements at Kennards House (Jones, A. and Lawson Jones, A. 1993 and Jones, A. 1997).

Most CHFs formerly on the verge of the old A30 were re-positioned onto new sites in the soft estate during these improvement works, though a few appear to have been lost during these works.

8 Archaeological results

For the purposes of the survey, the 39.47km of the A30 from Innis Downs to Dunheved Bridge has been divided into six sections (Fig 1) which reflect the differing characters of each part of the route, as follows (from west to east):

1. Innis Downs to Callywith Junction – the Bodmin By-pass (4.78 km)

This section of the A30 is a full dual carriageway along a wholly new route, as the original road followed sections of the Bodmin turnpikes from Mount Pleasant near Victoria to Lamorick (Lanivet), into the centre of Bodmin, and, via Castle Road and Callywith Road out onto the moors. The old route was replaced in the late 1970s by the Bodmin By-Pass running to the south and east of the town.

2. Callywith Junction to Higher Carblake (3.78 km)

Constructed as part of the same programme of improvements as the Bodmin By-Pass, this section of dual carriageway followed the line of the turnpike and preceding route from Callywith Road across Racecourse Downs to Higher Carblake. This section of the road runs through former downland to the north-east of Bodmin Moor.

3. Higher Carblake to Temple (north) (4.12 km)

This is currently the only section of un-dualled road along the length of the A30 from Bodmin to Launceston, though is currently (2015) the subject of a major improvement scheme which will result in it being upgraded to a dual carriageway and equipped with two new junctions. The western part of this section of the A30 follows a traditional route across the western approaches to the moor from a point not far to the west of the former coaching inn at Pounds Conce. To its east the earlier route ran directly through the medieval settlement of Temple along causeways to its west and east, but this section was by-passed by the Bodmin Turnpike Trust in 1829, the re-aligned road looping to the north of Temple Tor.

4. Temple (north) to Five Lanes, Trewint (11.24 km)

The dualling of the route of the A30 from the northern point of the 1829 Temple by-pass to Trewint was completed in 1991, including the present by-pass to the west of Bolventor and the remodelled junction at Trewint. This section of the road almost wholly follows a long-established route across the eastern part of the moor. Just to the south-west of Trewint the modern road crosses the site of the 19th century Vincent Mine.

5. Five Lanes to Kennard's House (8.44 km)

This section of dual carriageway was completed in 1991. It followed the former Bodmin Turnpike route except where new separated carriageways were constructed near Polyphant and in some sections of the road to its east. The current alignment through Two Bridges to Kennards House had replaced the earlier turnpike route from Five Lanes via Polyphant and Hicks' Mill. There is a modern interchange at Kennards House linking the A30 with the A395, which connects the A30 to the A39 at Davidstow. Most of this section of the A30 runs through farmland of medieval origin.

6. Kennard's House to Dunheved Bridge – the Launceston By-pass (7.11km)

The easternmost part of the A30 in Cornwall, this section of the road is entirely dual carriageway. Its eastern end is formed by the Launceston by-pass, the upgrading of this section of road having been completed in 1991. The route of

the earlier road runs a little to its north through Tregadillett and Trebursye, whilst the line of the A388 from its junction with the A30 to Launceston Castle and north-eastwards across Polson Bridge follows the line of one of the former Launceston turnpikes.

Parishes

The present route of the eastern part of the modern A30 traverses a number of Cornwall's ecclesiastical parishes (see Fig 25), in many sections following the boundary between them. The first section to the west follows the boundary between the parishes of Luxulyan to the south and Lanivet to the north, subsequently crossing the small parish of Lanhydrock. It then runs through the eastern part of the parish of Bodmin before traversing the northern part of the large moorland parish of Cardinham, then following the boundary between the parishes of Blisland to the north and Cardinham to the south. To the east again, the road runs through the small parish of Temple, before re-entering the parish of Blisland and then following the boundary between Blisland to the north and St. Neot to the south. After running through the northern part of St. Neot, the road then traverses the large central moorland parish of Altarnun, entering the parish of Lewannick to its east. Not far to the west of Kennards House the A30 passes into the parish of South Petherwin, running along its northern edge near the boundary with the parish of St. Thomas by Launceston. The road then follows the boundary between Launceston St. Mary and St. Thomas by Launceston, the final section of the A30 being within the parish of Lawhitton.

As noted above, the route of the A30 formerly followed the boundary between two parishes in several places, these being:

- Luxulyan and Lanivet.
- Cardinham and Blisland.
- Blisland and St. Neot.
- South Petherwin and St. Thomas by Launceston.
- Launceston St. Mary and St. Thomas by Launceston.

The earlier route of the Bodmin to Launceston road formerly followed the boundary between several other parishes, though its 20th century realignment has reduced this number. These alignments would not have been fortuitous; as noted in section 7.1, from 1555 the maintenance of important roads had become the financial responsibility of the parishes through which they ran. By running such roads along the boundaries between two parishes, the costs associated with their upkeep could be shared by both, rather than borne by the inhabitants of a single thinly-populated parish with limited financial resources, particularly on Bodmin Moor.

Between Bodmin and the Warleggan River near Hawkstor the A30 runs close to the boundary between the ancient hundreds (large-scale administrative early medieval land divisions below the county level) of Trigg and West and through East Hundred between the Warleggan River and the Tamar (the western section of this part of the route running close to the southern boundary of (Les)Newth Hundred), hundreds being an early large-scale form of land division and administration below the county level and made up of groups of ecclesiastical parishes. Parkes (2012, 2013) identified several early 19th century boundary stones sited on a hundredal boundary within the area to the north of the section of the A30 between Higher Carblake and Temple Junction (for example, Figs 97 and 100), and it is possible that others survive (presently unrecorded) in the buffer zone beyond the roadline where other hundredal boundaries exist.

Waymarkers

The section of the original road from Bodmin to Launceston is notable for the number of medieval roadside crosses which survive adjacent to it (Figs 82 to 91).

A cluster of these are sited around Bodmin to its south, south-east and north-east, associated with routes out of the town (Figs 82 and 83), but those specifically associated with the original line of the road through Bodmin to Launceston include the

examples at Lanivet Church, those which would have stood near St. Leonard's Chapel, Bodmin Church, Priory and Friary, those at Carminow and Cooksland (Figs 85 and 86), a pair at Callywith immediately to the north-east of the town, Preeze Cross (now lost) and Peverell's Cross to the west of Temple (Fig 87), Badway Cross (now lost), the crosses at Temple Church, Fourhole Cross to the east of Bolventor (Figure 88) and Vincent Mine Cross at the eastern edge of Bodmin Moor (Fig 89). The Altarnun churchyard cross a little way to the north of the A30 is likely also to have been a waypoint which medieval travellers would have utilised when traversing the moor. The cross to the east of Fivelanes, Holyway Cross to the east of Polyphant (Fig 90), a possible cross at Pennygillam (and another just to its east, the parts of which have been jointly re-erected as Dunheved Cross, Fig 91), the cross at Chapel on the south-western outskirts of Launceston and crosses in Launceston churchyard also lay on the route between Bodmin and Launceston. It is possible that there would have been additional crosses along this route, as the documented examples on the moor and in the areas running up to it on its western and eastern sides appear to be rather widely spaced. The missing examples have probably been recycled as gateposts or lintels or relocated; the remains of one probable example are incorporated into a modern boundary wall around the building at Preeze Cross (Parkes 2012/2013).

Other early landmarks which would have determined the route across the moor are likely to have included Council Barrow at the northern end of the Racecourse Downs ridge (the site of a turnpike era guidepost, Fig 33), the col between Greenburrow Downs and Little Care Hill, Temple Tor, the low col between Brockabarrow Common and Blacktor Downs, the high point of Minzies Downs, the fording/bridging point at Palmersbridge and the col between Trewint Downs and the unnamed hill to the north-east of Trespettigue. Some of the medieval wayside crosses seem to have been erected to fill in gaps along the route between these moorland landmarks.

As noted in Section 7.2, twenty-two milestones were set up across Bodmin Moor in 1754 by a Mr. Lewis of Bodmin, seventeen of these being depicted on Martyn's Map between Temple and Trewintmarsh (see Fig 28 for the locations of those between Temple and Deep Hatches). Four of these were sited between Temple and the crossing over the Warleggan River between Hawkstor and Brockabarrow Common (in a formerly relatively featureless section of level moorland), one was at the summit of Brockabarrow Common, five were sited between Fourhole Cross and Deep Hatches (at the time an open and exposed section of the road across the moor), five were set up between Deep Hatches and Palmersbridge (a large number for such a short distance, though probably required because the road ran very close to boggy land which had been extensively worked over by tin streamers) and one strategically placed example was located near Canaframe on the road between Palmersbridge and Trewintmarsh. These original waymarkers do not seem to have survived, and might well have been simple, vertically-set stones erected beside what is likely to have, at the time, been an ill-defined poorly surfaced track. They were replaced by the milestones erected by the Bodmin Turnpike Trust fifteen years later in 1769, those set up along the original route through Temple being re-sited on the section of the road to the north of Temple Tor which was realigned in 1829.

8.1 The hard estate

The hard estate is the modern road surface that is regularly maintained, including the hard shoulder, slip-roads, bridges, flanking drains, lay-bys and other features directly associated with the operation of the highway. Road improvements along most of the route have resulted in the earlier road routes being straightened in most places; redundant sections of road are sometimes reused as lay-bys to serve road users, but sometimes as unmaintained cut-offs (for example, as near Temple clayworks, Pounds Conce or Two Bridges).

Given that almost the whole of the A30 between Innis Downs and Dunheved Bridge is now a dual carriageway and has consequently been widened and upgraded to modern road engineering standards, almost all former sites such as bridges within the original

line of the carriageway have been replaced, with the exception of that at Palmersbridge (Site 25) which has been extended to the north (Fig 108). The original turnpike multiple-arched bridge and causeway at Two Bridges (Site 31) is immediately adjacent to the A30. It is possible that a small number of original bridges, culverts and causeways were overbuilt and still survive beneath the modern highway, though this could not be determined during the 2015 fieldwork.

The present road was brought up to modern standards in 1976 (the Kennards House and Launceston by-pass section), 1977 (the Bodmin by-pass and its extension to Higher Carblake) and between 1998 and 1991 (the remaining parts of the route with the exception of the section from Higher Carblake to Temple which is currently being dualled and equipped with modern interchanges). No sections of the current route retain their original appearances, though remnant sections of the earlier road survive only partially modified where they have been by-passed, including the turnpike from Mount Pleasant to Bodmin, Old Callywith road to the north-east of Bodmin, two short sections to the north and south of the A30 at Pounds Conce, a section currently used as a lay-by at Peverell's Cross, a small loop to the west of Temple, the original causeways to the east and west of Temple, the old route of the A30 through Bolventor, a short section at Two Bridges, the former line of the northern route from Trewint to Holyway Cross, parts of the former route from Kennards House to Launceston and the road from Launceston to Polson Bridge.

8.2 The soft estate

The soft estate is essentially the verge and associated land owned by Highways England which adjoins the hard estate. Where the road has not been significantly upgraded (until 2015-17 solely the section between Higher Carblake and Temple) there is no soft estate of significance (though land-take for the current road improvements will change this as the new road design requires additional land take for the three new interchanges and for the second carriageway). Where road improvements have been carried out, new land has been brought within the ownership and management of Highways England. Elsewhere, the soft estate extends out to the edges of cuttings and flanking hedgelines, and includes slip roads, lay-bys and interchanges.

The character of the road itself has been greatly changed through the road improvements undertaken during the 20th century. Along most of its route, historic field boundaries have been removed and replaced with either new Cornish hedges, wood fences with low thorn hedges or man-made barriers. In sections of the A30 off Bodmin Moor, tree plantings along verges and cuttings in the soft estate are common (for example, see Figs 53 to 56, 63 and 65). On Bodmin Moor, the roadline was traditionally not hedged or walled, and this by and large remains the case (see Figs 58 and 59). Some improved sections of the modern A30 run within cuttings, these restricting views of the wider landscape (for example, at Callywith, Figure 56), though most sections of the A30 across Bodmin Moor run on the level (Fig 59). Very few sections of the section of the A30 between Innis Downs and Dunheved Bridge are currently on embankments and the only viaduct on this section of the A30 is that crossing the River Tamar at Dunheved Bridge.

The whole of the road has been significantly widened to produce carriageways suitable for modern traffic; straightening and smoothing of the route and the removal of original road hedges has also taken place along almost the whole of the route, whilst most cuttings have very similarly angled engineered side slopes.

Several features survive within the soft estate, these including a number of milestones, a guidepost, a number of crosses and several boundary stones. The majority of these have been relocated during previous road improvements.

8.3 Potential for palaeoenvironmental remains

There is proven potential in some parts of the route of the eastern part of the A30 for the survival of palaeoenvironmental remains which can be analysed to provide

information about past climates and vegetation types, as well as potential dating material, in particular on Bodmin Moor, where peat deposits, marshland and valley alluvials are likely to incorporate deposits which will preserve such material (see Fig 4 for locations). Work has already been done in some areas of the moor to determine the potential of such material to throw light on early human activity and its impacts on the vegetation and soils of this area (see for example, Johnson and Rose 1994, Gearey 1996, Hopla 2007). Works undertaken within the corridor of the A30, in particular major roadworks on the high moor and drainage improvement schemes which are likely to intersect peat and alluvial deposits, have particular potential in this respect; the design of archaeological mitigation proposals within such schemes should always include a provision for palaeoenvironmental sampling and subsequent analysis.

9 Inventory

The total number of extant CHF within the hard and soft estates and significant (designated) CHF within the 100m zone from the road, all of which fall within its viewshed, are indicated in the table below. These are part of a larger total which includes sites for which the only known evidence consists of documentation or place names and sites which are known to have been wholly destroyed. These are not included within the totals in the tables below. **Priority CHFs** are those of particular significance which require management action. **Important CHFs** are those which would require consideration should any significant changes to the soft estate be planned. Monuments recorded as cropmarks are not included in the total of extant CHFs to avoid double counting, as these are also included within the HER Monuments layer, though the sites newly revealed by geophysical survey between Higher Carblake and Temple Junction are assessed here.

CHAMP ZTV buffer zone	Total extant CHFs	Priority CHF	Important CHF
Hard estate	1	0	1
Soft estate	22		22
100m zone LB (individual or groups)	25	0	25
100m SM (individual or groups)	7	0	7
100m undesignated extant CHF/group, including two cropmarks	78	0	10
100m sites identified through geophysical survey, Higher Carblake to Temple section	6	3	0
Totals	136	3	64

Table 4: CHF numbers and types within the 100m zone.

Statutory Designations

Of the CHFs identified within the core network estate (the hard and soft estates), twenty within or immediately bordering the Soft Estate are covered by statutory protection, this comprising either Scheduled Monument or Listed Building status. Where CHFs are both Scheduled Monuments and Listed Buildings they are included in the following table as Scheduled Monuments to avoid double counting.

Road section:	1	2	3	4	5	6
SM	2	0	1	2	1	1
LB	1	2	1	5	3	1

Table 5: Numbers of Scheduled Monuments and Listed Buildings by road section.

The totals for sites within the viewshed buffer zones are shown in the table below.

	0 to 100m	to 500m check	to 1000m
Extant CHF (all types)	78	295	433
Scheduled Monument	7	14	14
Listed Building	23	66	97

Table 6: Total CHFs within the viewshed buffer zones.

Site type	Out to 100m	Out to 500m	Out to 1000m
Barrow	1	1	1
Cairn	1	1	1
Standing stone	0	1	1
Wayside or churchyard cross	6	8	8
Hillfort/Camp	1	1	1
Henge	0	1	1
Bridge/causeway/ford	0	1	1
Totals	7	14	14

Table 7: Types and numbers of Scheduled Monument within the viewshed

Note: sites containing more than one element may have multiple designation entries.

Site type	Out to 100m	Out to 500m	Out to 1000m
Arch	0	0	1
Bridge	1	1	3
Boundary stone	1	1	1
Carriage House/Stables	0	0	3
Church	1	1	2
Church Hall	0	1	2
Farmhouse	2	9	11
Gates/walls	1	3	8
Guidestone/guidepost	0	4	4
Ha Ha	0	0	1
House/Cottage	3	10	19
Lodge	1	3	3
Manor House	0	1	1
Milestone/milepost	11	15	15
Gravestone, tomb chest	0	0	2
Farm outbuilding	0	8	10

A30 Innis Downs to Dunheved Bridge CHAMP

Pinnacle	0	1	0
Public house, inn, hotel	0	1	1
School	0	1	1
Telephone box	0	0	1
Tower	0	1	0
Vicarage	0	1	1
Wayside or churchyard cross	4	6	7
Totals	25	66	97

Table 8: Types and numbers of Listed Building within the viewshed

Note: sites containing more than one element may have multiple designation entries.

Site type	Out to 100m	Out to 500m	Out to 1000m
Adit	0	1	2
Aircraft obstruction	0	0	1
Architectural fragment	0	0	1
Barrow	1	3	3
Battery	0	1	1
Boundary bank	0	0	2
Bridge	1	2	5
Building	3	5	7
Cairn	0	1	10
Cemetery	1	1	1
China clay works	0	20	21
Church	1	2	3
Cist	0	1	1
Corn mill	0	1	1
Count house	0	1	1
Country house	0	1	1
Crane, quarry	0	0	1
Cross	8	11	16
Deserted medieval settlement	0	1	1
Ditch	0	1	1
Drain, boundary	0	1	1
Drain, field system	1	1	1
Enclosure	0	2	3
Engine house	1	2	2
Extractive pit	5	14	17

A30 Innis Downs to Dunheved Bridge CHAMP

Farmhouse	0	1	1
Field boundary	0	12	18
Field system	3	9	17
Field system, hut circle settlement	0	2	7
Finger post	1	1	1
Footbridge	0	0	1
Grave	0	0	1
Henge	0	1	1
House	0	0	1
Hillfort	0	1	1
Holloway	0	1	1
Horse engine house	0	0	1
Hut	0	1	1
Hut circle	0	59	97
Hut circle settlement	0	2	2
Leat	0	3	5
Limekiln	0	0	1
Longhouse, settlement	0	1	1
Machinery	1	2	2
Milestone	10	14	14
Military site	1	1	1
Mine	3	7	13
Mine, streamworks	1	1	1
Mound	0	1	1
Mound, rifle butts	0	1	1
Non-conformist chapel	1	1	3
Non-conformist meeting house	1	1	1
Open-cast mine	0	0	2
Peat cutting	1	4	5
Peat stand	1	5	6
Pit	0	1	1
Plain an Gwarry	0	1	1
Police Station	0	0	1
Powder magazine	1	1	2
Prospecting pit	0	1	3
Quarry	16	27	32
Railway bridge	0	2	6

Reservoir	1	2	2
Ridge and furrow	1	4	7
Round (possible site)	0	0	1
School	0	4	6
School, Sunday School	0	1	1
Settlement	5	15	19
Shaft	1	3	7
Signpost	0	4	4
Spoil heap	0	2	2
Stamping mill	0	1	1
Standing stone	0	1	2
Stone alignment	0	0	1
Stone working site	0	1	1
Streamworks	3	11	16
Threshing mill	0	0	1
Toll house	0	0	1
Trackway	3	4	6
Tramway	0	0	1
Transmission rods	0	0	1
Tunnel	0	2	2
Totals	78	290	433

Table 9: Monument types documented as being extant and within the viewshed.

Note: the HER also contains references to sites which are known to have been destroyed, which are represented by cropmarks whose interpretation is uncertain, whose locations are inferred from place names, or whose documented locations are so imprecise that they cannot be mapped. These are not included in Table 9.

9.1 Innis Downs to Callywith Junction

The majority of this section of the route has only been part of one of Cornwall's primary roads since 1977, when the Bodmin by-pass was constructed between Innis Downs and Higher Carblake, passing to the south and east of Bodmin and removing the bottleneck previously formed by traffic having to pass through the centre of the historic town.

The landscape through which this section of the A30 runs is a combination of former downland and long-established farmland, much of the latter having been likely to have been enclosed during prehistory, though substantially reorganised during the medieval period.

This is entirely a modern road whose route would have been selected primarily on engineering grounds, designed to avoid extensive sections of cuttings or embankments and avoiding centres of population, whilst producing a route with gentle changes in elevation and direction. The new route incorporated a junction with the St. Austell road (the A391) at its western end at Innis Downs Interchange (Fig 53) and with the Bodmin to Liskeard road (the A38) near its central point at Carminow Junction. The other major factor which would have determined the route of the road near its central point was the presence of Lanhydrock Park (Figs 45 and 46), the landscape surrounding the Grade I

Listed house being protected as a Grade II* Registered Park and Garden, both being open to the public (Fig 8). Lanhydrock is managed by the National Trust and sites its Regional Office.

The western section of the route starts at Innis Downs (known in 1840 as Trescoll Downs) near the Neolithic Innis Downs henge and former Bronze Age barrow cemetery, where the road runs under the intersection with the A391; the road then heads eastwards on a small embankment in the shallow valley to the north of Reperry Manor Farm before climbing a gentle hill immediately to the north of St. Ingunger Farm, which it passes in a cutting. Both farms have medieval origins, the latter being the site of a medieval holy well and associated chapel. The road on the hillcrest to the south of these two farms seems likely to have been a medieval roadway, being marked by a pair of early crosses (Figs 82 and 83).

To the east of St. Ingunger, the road skirts the former mining area at Tretoil and Tregullon immediately to its south and, at Treffry begins to arc to the north, skirting the edge of Lanhydrock Park near its West Lodge, the closest distance between the A30 and Lanhydrock House being just under 600m. Plantations of deciduous trees (The Belts) screen the house and its western parkland from the road (Fig 55).

To the north of Lanhydrock the road heads for Carminow Junction where the A38 runs off towards Plymouth. The Bodmin and Wenford Railway (formerly the Bodmin branch line from the Cornwall main line at Bodmin Parkway in the Fowey Valley, now run as a preserved railway) passes under the A30 just to the south of this junction. The road continues across now-enclosed former downland and commons past Castle Canyke. This Iron Age hillfort was strategically sited, commanding the valley of the River Fal and its local tributaries to the south-east (Fig 38).

The A30 runs under the junction with the A38 at this point and the section of road to the north is substantially within a cutting, rendering invisible to the traveller the industrial estates to the north of Bodmin which flank the A30 to its east at Newtons Margate and Cooksland (Fig 56). Callywith Junction to the north is marked by an asymmetrical junction with extended slip roads and an overbridge. Callywith and Callywigh wayside crosses, near the junction, marked the western end of the medieval trans-moorland route, and were apparently re-located when this junction was improved.

9.1.1 CHFs within the hard estate

There are no archaeological features or sites within the road corridor.

9.1.2 CHFs within the soft estate

The GIS mapping indicates the sites of a number of CHFs within this zone, though many of these predate the construction of the modern route of the A30 in 1977 and were lost to development when the road was constructed, amongst these being elements of the mines around Tretoil and Tregullon to the south of Bodmin. Only those CHFs which are extant are included below.

- Milestone at SX 080 640, Listed Building Grade II [1327933]
- Carminow Cross, Scheduled Monument [1008177], Listed Building Grade II* [1298242]. Site No 1.

9.1.3 Documented extant CHFs within the 100m buffer zone

- Callywith Cross, Scheduled Monument [10031657], Listed Building Grade II [1298240], [MCO5073]. Site No 2.
- Callywigh Cross, Listed Building Grade II [1195247]. Site No 3.
- C18 milestone near Treffry on the B3268, Listed Building Grade II [1327933], [MCO48560].
- Medieval holy well at St. Ingunger [MCO780].

9.1.4 Designated sites and landscapes within the 100m to 500m buffer zone

- Round barrow on Innis Downs, Scheduled Monument [1005451].
- Innis Downs earthwork (henge), Scheduled Monument [1006684].
- Reperry Cross, Scheduled Monument [1010840], Listed Building Grade II [1158164].
- St. Ingunger Cross, Scheduled Monument [1007951].
- Canyke Castle, Scheduled Monument [1006660].
- St Benet's Abbey, Listed Building Grade II* [1143103].
- Tower about 15m west of St. Benet's Abbey, Listed Building Grade II* [1158186].
- Pinnacle about 18m east of St. Benet's Abbey, Listed Building Grade II [1327901].
- Guidestone at SX 046 633, Listed Building Grade II [1264248].
- Guidestone at SX 046 633, Listed Building Grade II [1158127].
- Tretoil Farmhouse, Listed Building Grade II [1327922].
- Guidepost at SX 076 632, Listed Building Grade II [1143085].
- Treffry Farmhouse, Listed Building Grade II* [1143088].
- The Old Vicarage, Listed Building Grade II [1143086].
- Barn in Lanhydrock estate yard with attached wall and cart shed, Listed Building Grade II [1143094].
- Garage in Lanhydrock estate yard immediately north of the barn, Listed Building Grade II [1158066].
- Pair of lodges with attached walls at the north entrance to Lanhydrock House, Listed Building Grade II* [1143096].
- Guidepost at SX 088 647, Listed Building Grade II [1237156].
- Milestone south of Chy-Praze, A38, Listed Building Grade II [1393078].
- Lanhydrock Park, Registered Park and Garden Grade II* [1000449].
- Area of Great Landscape Value.
- Area of Great Scientific Value.

9.1.5 Designated sites and landscapes within the 500m to 1km buffer zone

- Churchyard Cross in Lanivet Churchyard, Scheduled Monument [1014230].
- Fenton Pits Cross, 210m WSW of Penburthen Farm, Scheduled Monument [1012507].
- Lesquite Cross, Scheduled Monument [1010861].
- Dolmen 400m NE of Lesquite, Scheduled Monument [1003047].
- Pomery monument in burial ground of Innis Bible Christian Chapel, Listed Building Grade II [1144214].
- Allen monument in burial ground of Innis Bible Christian Chapel, Listed Building Grade II [1311642].
- O'Bryan monument in burial ground of Innis Bible Christian Chapel, Listed Building Grade II [1327349].
- Innis Bible Christian Chapel, Listed Building Grade II [1311674].
- Milestone at SX 136621, Listed Grade II [1158183].
- Milestone at SX 035621, Listed Building Grade II [1144217].
- Riverside, Listed Building Grade II [1327926].
- Churchtown farmhouse, Listed Building Grade II [1158271].
- Thomas monument in Lanivet churchyard, Listed Building Grade II [1143070].
- Wellington monument in Lanivet churchyard, Listed Building Grade II [1158267].
- Unidentified monument in Lanivet churchyard, Listed Building Grade II [1158265].
- Cross in Lanivet churchyard, Listed Building Grade II* [1143069].
- Cross slab in Lanivet churchyard, Listed Building Grade II [1327924].
- Unidentified monument in Lanivet churchyard, Listed Building Grade II* [1143068].
- Tremeere Manor farmhouse, Listed Building Grade II [1143064].
- Trebell farmhouse, Listed Building Grade II [1143063].

- Trebyan farmhouse, Listed Building Grade II [1143098].
- Trebyan House, Listed Building Grade II [1143098].
- Trebyan Forge, Listed Building Grade II [1158122].
- Lanhydrock War Memorial Club, Listed Building Grade II [1311622].
- Holy well 15m SW of Joseph's Cottage, Listed Building Grade II [1311676].
- Joseph's Cottage, Listed Building Grade II [1143093].
- Urn in the Higher Garden, Listed Building Grade II [1143092].
- Coffin rest in Lanhydrock churchyard, Listed Building Grade II [1327897].
- Unidentified monument in Lanhydrock churchyard, Listed Building Grade II [1158045].
- Church of St. Hydroc, Listed Building Grade I [1158013].
- Cross in Lanhydrock churchyard, Listed Building Grade II [1143091].
- Walls and gates to the east of Lanhydrock Park, Listed Building Grade II* [1143090].
- Group of 8 urns in the garden to the east of Lanhydrock House, Listed Building Grade II [1327896].
- Gatehouse 40m east of Lanhydrock House, Listed Building Grade I [1157994].
- Coach house with attached screen walls, gateway and retaining walls to the SE of Lanhydrock House, Listed Building Grade II* [1143089].
- Service buildings in the stable yard 10m south of Lanhydrock House, Listed Building Grade II* [1157977].
- Lanhydrock House, Listed Building Grade I [1157870].
- Treffry Cross, Listed Building Grade II [1158056].
- Stables and attached walls, Listed Building Grade II [1158081].
- Milestone at SX 09897 65564, Listed Building Grade II [1393198].
- Guide post at Junction of Priory Road and Launceston Road, Listed Building Grade II [1024996].
- Gate piers and screen walls to west of Barn Park, Listed Building Grade II [1025122].
- Barn Park, Listed Building Grade II [1195272].
- Garden wall, shippon and well house north of Barn Park, Listed Building Grade II [1298213].
- Barn, attached wall and horse trough 30m north of Barn Park, Listed Building Grade II [1187693].
- Stone cross at SX 0785 6754 at junction with Old Callywith Road, Listed Building Grade II [1195252].
- Lanhydrock Park, Registered Park and Garden Grade II* [1000449].
- Area of Great Landscape Value.
- Area of Great Scientific Value.

9.1.6 The Historic Landscape Character within 1km of the roadline

See Figure 16.

The Innis Downs interchange is sited at the eastern end of a ridge of former downland which was only enclosed to agriculture during the 19th century, but not far to its east the road corridor traverses a section of the landscape between Lanivet and Treffry whose fields have medieval origins. To the north, between Tretoil and Tregullon, the landscape includes a number of small-scale abandoned mine sites, though these are not specifically plotted on the HLC mapping. The Ornamental Landscape of Lanhydrock Park, which includes sections of managed deciduous woodland, is sited between the A30 and the Fal Valley to the south-east of Bodmin, the western edge of the Park bordering the A30. Deep valleys occupying tributaries of the River Fal lie to the east of these former downs, these supporting extensive areas of deciduous woodland, in particular Deviock Wood, Hurtstocks Wood, Lidcutt Wood and Callywith Wood.

9.2 Callywith Junction to Higher Carblake

This section of the A30 was created in 1977 as the northern section of the Bodmin Bypass, and follows a long-standing route from the north-eastern edge of Bodmin to the

western fringes of Bodmin Moor. Some of the dualling was achieved by creating a new carriageway parallel to but separated from the original roadline, particularly across Cardinham Downs. The northern half of this section of the route of the A30 partly overlies the original road and occupies a substantially wider footprint than its predecessor; the southern section is newer and runs parallel to the original route.

Old Callywith Road, which runs parallel to and immediately to the west of the modern A30 out across Racecourse Downs represents part of the original route of the A30 prior to its improvement.

Much of the section of the A30 from Callywith Junction onto Racecourse Downs is in an elongated cutting; the surrounding landscape is former downland, enclosed to agriculture during the post-medieval period. At Racecourse Downs this remains unenclosed, and was, historically, the site of Bodmin's Georgian period racecourse. Council Barrow at the northern end of Racecourse Downs (Fig 33) was evidently an important local landmark determining the route of the precursors to the A30 and was the site of a post-medieval guidepost (Fig 33). Racecourse Downs was also the site of a short-lived golf course shown on the 2nd Edition OS 25" mapping dating to *circa* 1907.

The final part of this section of the A30 to Higher Carblake runs across the northern part of Cardinham Downs, the site of the 600 yard long Bodmin Voluntary Militia rifle range from the 1860s until the end of the 19th century, the north-eastern part of Cardinham Downs siting a small private airfield (probably established during WWII as an overspill landing site). Beyond, the road passes through a small section of medieval farmland between Tren creek (to the north) and Higher Carblake (to the south).

9.2.1 CHFs within the hard estate

There are no archaeological features or sites within the road corridor.

9.2.2 CHFs within the soft estate

- Milestone 130m south of Council Barrow, Listed Building Grade II [1394412], [MCO53398]. Site No 4.
- Milestone at Blisland Junction Ref 1394411, SX 10301 70462, Grade II Listed. Site No 5.
- Boundary stone at SX 10643 70705. Site No 8.
- Post-medieval extractive pit at Lemar [MCO41472].

9.2.3 Documented extant CHFs within the 100m buffer zone

- Reservoir south of Racecourse Farm at SX 08736 68610.
- Council Barrow, Scheduled Monument [1004476], [MCO2485].
- Racecourse Farmhouse, Listed Building Grade II [1143112].
- Post-medieval quarry on Racecourse Downs, [MCO41471].
- Boundary stone at SX 10348 70516. Site No 6.
- Boundary stone at SX 10477 70603.
- Boundary stone adjacent to the A30 south of Tren creek Cross at SX 10473 70596.
- Boundary stone adjacent to the A30 south of Tren creek at SX 10668 70715.

9.2.4 Designated sites and landscapes within the 100m to 500m buffer zone

- Milestone on Racecourse Downs, Listed Building Grade II [1394410].
- Area of Great Landscape Value.
- Area of Great Scientific Value.

9.2.5 Designated sites and landscapes within the 500m to 1km buffer zone

- Early Christian memorial stone at Lancarffe, Scheduled Monument [1016751].
- Stone crosses in the garden of Trewardale, Scheduled Monument [1005457].
- Stable about 35m west of Lancarffe, Listed Building Grade II* [1143120].

- Lencarffe, Listed Building Grade II* [1146396].
- Cross about 40m east of Lencarffe, Listed Building Grade II [1146412].
- Holton farmhouse, Listed Building Grade II [1143119].
- Guidestone 275m SE of Broads Cottages, Listed Building Grade II [1396159].
- Gateway in garden to west of Trewardale, Listed Building Grade II [1157931].
- Ha Ha to south of Trewardale, Listed Building Grade II [1142402].
- Trewardale, Listed Building Grade II* [1311725].
- Carriage house and stables to north of Trewardale, Listed Building Grade II [1142401].
- Area of Great Landscape Value.
- Area of Great Scientific Value.

9.2.6 The Historic Landscape Character within 1km of the roadline

See Figure 17.

To the east of Bodmin between Callywith and Racecourse Downs, the road runs through former downland to the north-east of Bodmin, the former county town of Cornwall. Patches of this downland on Cardinham and Racecourse Downs are still unimproved Upland Rough Ground. Around Higher Carblake, a tongue of farmland of medieval origin traverses the road.

9.3 Higher Carblake to Temple (north)

The section of the A30 between Cardinham Junction (to the west of Higher Carblake) and Temple Junction (east) was not available for survey in 2015 given the road improvements being undertaken and the temporary closure of almost all junctions with side roads in this section. The core section of this part of the A30 (between Higher Carblake and Temple (north)) was archaeologically assessed in 2012 and 2013 (Parkes 2012, 2013), and works in this section are the subject of an archaeological watching brief (Smith forthcoming).

This section of the A30 follows a traditional route running towards and onto the western edges of Bodmin Moor, passing through medieval farmland at its western end, before climbing the western flanks of Colvannick Tor to emerge onto Bodmin Moor at Peverell's Cross. Its eastern section incorporates the western half of a bypass constructed by the Bodmin Turnpike Trust in 1829 to replace the original medieval route through Temple, this having run across sections of marshland to both its east and west and which had therefore been constructed on causeways; this earlier road also incorporated narrow stone bridges (one of which is shown in Fig 119).

The western section of the road includes Preeze Cross, the former site of one of the medieval waymarkers along the original route. This was also the site of a guidepost marking the junction with the Millpool road and of a roadside smithy (Fig 112).

At Pounds Conce (alternatively 'Pound's Caunce' or Pound's Cawnse, but probably originally called *Pontiescu* – Jesus' Bridge), a small loop of road to the south of the A30 and another to the north preserve the original route of the Bodmin Turnpike and its predecessors. Pound's Conce itself was the site of the London Inn – one of the small number of coaching inns on the road across the moor which served mail coaches and travellers. The inn survives (Figs 57 and 111), though is now a private house. The medieval bridge and causeway here might have been lost to historic road improvements, though may have been overbuilt. The exploration of this possibility is the subject of a watching brief during the 2015-2017 road improvements. This location was, during the early 19th century, the site of an annual fair established for the sale of moorland horses, cattle and sheep.

The southern flanks of Colvannick Tor preserve evidence for Middle Bronze Age roundhouse settlements and fields, a newly-discovered stone row, and medieval outfield strips. To the west of the road is Trethorne Farm, the detailing of whose entrance road suggests some deliberate attempt at ornamentation through the planting of an avenue of beech trees (Parkes 2012, 2013). The summit of the climb (where

there is a small lay-by formed from part of the original turnpike) is marked by Peverell's Cross, set at the interface between the medieval enclosed fields and the open moor (Fig 87).

To the north of the road is Trehudreth Downs, a notably open and level area of moorland with extensive views across Greenbarrow Downs and Newton Downs towards Manor Common and the Trippet Stones stone circle (Fig 39), and to Brown Willy in the far distance. The peat which had developed here in marshy areas was cut and stacked on turf steads - small platforms where it was left to dry before being carted away for use as fuel (Figs 44 and 115). Manor Common, to the north, was the site of very extensive anti-glider landing defences during World War Two, some of which survive.

The altered granite underlying the area traversed by the road at this point was worked for china clay at sites including the Burnt Heath and Temple works on the southern side of the A30 (Figs 47 and 49). Neither is particularly well developed, and hence Burnt Heath (Fig 47) preserves the layout of an early and relatively undeveloped form of china clay works which has been wholly lost to subsequent pit and tip expansion on Hensbarrow Downs, the modern centre of china clay working in Cornwall. Clay raised at the pits at the Temple works was transferred by pipeline via settling tanks to the north of the A30 to processing works at Tresarret in the Camel Valley to their west, whilst the pumps in this pair of pits were powered by a 50 foot diameter waterwheel at Gawns near Blisland, power being transferred to the works by a 2km run of flat rods running across the moors (Fig 49). The pits at both Burnt Heath and Temple are now flooded, the latter being used as fishing lakes. A further, more extensive and more developed clayworks is the Glynn Valley Works just to the east of Little Care Hill. This worked into the 20th century, its clay, during the early 20th century, being piped to dries near Bodmin Parkway Station. Little Care Hill is currently an active firing range, and is marked '*Danger Area*' on modern maps.

The original route of the road across the moors diverged from the modern A30 just to the east of the summit of Colvannick Hill, heading for Temple Tor - an island of higher ground amongst extensive areas of marshland. Temple had been established by the Knights Templar during the 13th century as a roadside hospice for travellers crossing Cornwall from the Camel Estuary to Fowey en route for the Holy Land, the hospice and associated chapel subsequently being run by the Knights of St. John of Jerusalem (the Knights Hospitallers) post 1307/8 when the Knights Templar were suppressed. The small medieval church of St. Catherine of Alexandria at Temple was built *circa* 1120 on the site of the original Knights Templar chapel. After becoming ruinous in the late 18th century, it was rebuilt by Sylvanus Trevail in 1883 (Fig 118). The churchyard incorporates the remains of a medieval preceptory - the chapter house of a military order of knights - and fragments of eight medieval crosses, including two cross slabs. One farm nearby is named *Abbey Farm*, and whilst the settlement of Temple was first recorded in 1200, it is now the site of a cluster of small post-medieval farms centred on a school, a non-conformist chapel and a war memorial. Evidence for medieval farming (in the form of ridge and furrow cultivation) survives on the northern flanks of Temple Tor.

The eastern end of this original section of the road crosses an early stone-built bridge (Fig 119), before running along a medieval causeway across the marshes to the north of Blacktor Downs, which is itself the site of an extensive Scheduled prehistoric roundhouse settlement and its associated fields.

Returning to the modern route of the A30, this route was laid out in 1829 by the Bodmin Turnpike Trust to avoid the narrow bridge and causeway to the east of Temple Tor. The road now sweeps to the west of the abandoned Temple clayworks, leaving an abandoned loop of the 19th century road to its west. The flat rods running from a massive water wheel at Gawns near Durfold to power the pumps at Temple clayworks ran beneath this earlier road in a small tunnel. To the north of Temple Tor, the open, level marshy southern section of Manor Common sited further areas of World War 2 anti-glider defences.

This section of road terminates at the crossroads where the Blisland to Temple road crosses the A30. This is to be replaced with a modern road junction by 2017.

9.3.1 CHFs within the hard estate

There are no archaeological features or sites within the road corridor.

9.3.2 CHFs within the soft estate

- Milestone to east of Glenavon, Listed at Grade II, LB ref UID 67312, SX 09895 70151, Grade II Listed. Site No 10.
- Peverell's Cross, Scheduled Monument [1006641], [MCO5657]. Site No 12.
- Guide post at SX 13635 73625. Site No 17.

9.3.3 Documented extant CHFs within the 100m buffer zone

- Preeze Cross smithy [MCO9261].
- Pounds Conce post medieval settlement [MCO16494].
- Pounds Conce causeway [MCO22293]. Site No 11.
- Peverell's Cross quarry [MCO52543].
- Boundary stone at SX 12603 72311. Site No 13.
- Boundary stone at SX 12947 72489. Site No 14
- Boundary stone at SX 13208 72535.
- Greenbarrow Downs quarry [MCO52545].
- Greenbarrow medieval settlement [MCO14618].
- Greenbarrow Downs ridge and furrow [MCO52117].
- Greenbarrow Downs quarry pit [MCO24216].
- Temple Marsh tin streamworks [MCO23982].
- Temple Tor fingerpost monolith [MCO56848].
- Manor Common boundary stone [MCO22279].
- Menacrin Downs peat stand [MCO23987].

9.3.4 Designated sites and landscapes within the 100m to 500m buffer zone

- Barrow group on Greenbarrow Downs (4 sites), Scheduled Monument [1005458].
- Trethorne, Listed Building Grade II [1142400].
- Area of Great Historic Value.
- Area of Great Landscape Value.
- Area of Great Scientific Value.
- Area of Outstanding Natural Beauty.

9.3.5 Designated sites and landscapes within the 500m to 1km buffer zone

- Barrow group on Greenbarrow Downs, Scheduled Monument [1005458].
- Pair of gate piers, flanking wall and railings at south-east entrance to Trewardale, Listed Building Grade II [1311735].
- West Penstroda and garden walls to front, Listed Building Grade II [1142361].
- Area of Great Historic Value.
- Area of Great Landscape Value.
- Area of Great Scientific Value.
- Area of Outstanding Natural Beauty.

9.3.6 The Historic Landscape Character within 1km of the roadline

See Figure 18.

From the eastern end of Cardinham Downs through Higher Carblake to Pounds Caunce the A30 runs through a tongue of medieval farmland (Anciently Enclosed Land - AEL) fringing the western flanks of Bodmin Moor. The farms here tend to be small in size and settlements are infrequent, Millpool being the only one of any size. The fields associated with Pounds Conce and with Trethorne and Higher Penstroda to its north

mark the limit of this enclosed farmland, Peverell's Cross having been erected on this transition point during the medieval period. From Peverell's Cross eastwards the road traverses an open area of Upland Rough Ground, within which are small areas occupied by abandoned clayworks (INDD). The south-eastern side of Temple Tor contains an islanded area of farmland of medieval origin (AEL).

9.4 Temple (north) to Five Lanes, Trewint

This dual carriageway was constructed between 1989 and 1991 in order to improve a substantial section of the A30 running across Bodmin Moor between Temple and Fivelanes. The context for the road is wholly that of the moorland through which it runs, though in some areas (particularly around Bolventor and to the east of Palmersbridge) in some cases substantial areas of moorland adjacent to the roadline were enclosed to rough pasture and smallholdings during the 19th and 20th centuries.

The road largely follows its traditional route, which sweeps around the flanks of the hills along its course, hugging the lower parts of Temple Tor to avoid the often waterlogged ground of Menacrin Marsh to the north. Eastwards, to the north of the road is the site of the Hawkstor china clay works, the last to work on this part of Bodmin Moor. Now abandoned, its flooded pit is a prominent landmark on the northern side of the A30 (Fig 116). The open, close-grazed rolling Brockabarrow Common to its east is the site of a large number of prehistoric roundhouses, together with a small number of ridge-top cairns.

In contrast, the former moorland to the south of the A30 around Colquite, including that associated with Colliford Lake Park, Lord's Waste Farm, Meadows Downs and Bois House has been enclosed to fields. Although Colquite has medieval origins, its fields and the others flanking the road are large and rectangular, typical of those laid out during the 19th century and into the 20th century on moorland and downland. Further small farms are scattered across the moorland to the north of the road – at Stanning Hill on Sprey Moor, and at Priddacombe, South Priddacombe, Roughlands Farm, Higher Tober and West Tober to its north.

These represent attempts to settle, enclose and farm the high moor around Minzies Downs adjacent to the A30 from the 18th century through the 19th century within an area focussed on the hamlet of Bolventor (the original name *Bold Venture* probably being that of a tin streamworks nearby). The farm names here reflect their recent origin – Tober Barton, Dairywell Hill, Dairywell Farmhouse, Vicarage Farm, Blackdon, Blackhill and North Tolborough to the north of the road, Higher and Lower Minziesdowns, Toddy's Park, Higher St. Lukes, Deep Hatches (again the name of a former tin streamwork), Todda Park, St. Lukes, Littleworth and Dryworks (a tin streamwork name) to the south of the road.

Bolventor itself grew up around a coaching Inn established by the Rodd family of Trewartha, these having been Governors of Jamaica, hence the name. This small hamlet deep in the heart of the moor would have provided a welcome stop for travellers using the long road from Launceston to Bodmin, especially in foul weather, and eventually sited a small school and a church. Daphne du Maurier's 1930 *Jamaica Inn* gave this hostelry a particular notoriety with its tales of smuggling and dark deeds, something which has since been exploited by the Inn, and its Museum of Smuggling and Smugglers' Bar continue to attract large numbers of tourists, despite the bypassing of the hamlet by the modern A30 during the late 20th century. Parts of the original turnpike still survive here, though much modified (Fig 70).

The A30 crosses the upper reaches of the River Fowey at Palmersbridge, long a crossing point on this moorland river and formerly the site of a Bodmin Turnpike Trust toll house (demolished during road late 20th century road improvements, Fig 34). The original stone-arched bridge survives here, forming the eastern part of the current river crossing (Fig 108).

The road climbs the eastern side of the Fowey Valley past Lonkey Moor, a small farm first recorded in 1674, and the site of Mesolithic flint finds, a Bronze Age roundhouse

and artefacts from the Iron Age. Passing through further sections of post-medieval farmland the road reaches Cannaframe, the highest point on the moor traversed by the A30. To the south, the closely-planted conifers in Halvana Plantation cover a large swathe of moorland, as well as the shafts and ruins of Halvana Mine. To the north of the road the slopes of Hendra Downs site prehistoric and medieval field systems, small-scale mines and medieval streamworks, whilst West Moor to the north again is the location of some of the most extensive and complex tin streamworks and associated leats to be found anywhere on Bodmin Moor (Fig 43), as well as two prehistoric stone circles and a stone row.

From Cannaframe, the road descends to the valley of the Penpont Water between Trewint Downs and the northern end of Halvana, where again there are prehistoric roundhouse settlements, an abandoned medieval farmstead and evidence for medieval outfield cultivation. A standing stone on the hill to the north of Trespettigue seems to have been deliberately sited on the edge of the moor, whilst views from Trewint Moor just to the west of the A30 (Fig 63) extend out to Morwenstow, Hartland Point, Kit Hill, Twelve Men's Moor, Caradon Hill, and the eastern flanks of Dartmoor, 25 miles away.

Unseen by the modern traveller, the road passes across the site of Vincent Mine, including its principal shaft – Horseborough (Fig 48). There are now almost no visible traces of its engine houses, stamps and dressing floors amidst the overgrown scrubland to the north of the road, nor of the formerly busy gravel pits and alluvial tin extraction site in Trewint Marsh to the east of the A30. The petrol station on the western side of the road at Trewintmarsh which had long served travellers heading across Bodmin Moor is now closed.

9.4.1 CHFs within the hard estate

There are no archaeological features or sites within the road corridor other than the Turnpike era Palmers Bridge, which is preserved below the modern road surface under the eastern carriageway of the A30.

9.4.2 CHFs within the soft estate

- Boundary stone at SX 16276 74175. Site No 20
- Brockabarrow downs quarry [MCO48646].
- Brockabarrow Downs cross base [MCO5061].
- Four Hole Cross 200m north of Lords Waste Farm, Scheduled Monument [1016286], [MCO5272]. Site no 21.
- Middle Lords Waste milestone, Listed Building Grade II [1393085], [MCO52812]. Site No 22.
- Milestone 40m to the south of Holy Trinity Church, Listed Building Grade II [1142774], [MCO48452]. Site NO 23.
- Lonkeymoor rab pit [MCO24083].
- Higher Cannaframe quarry [MCO24082].
- Boundary stone 220m to the NE of Higher Cannaframe Farm, Listed Building Grade II [142827]. Site No 26.
- Vincent Mine Cross, Scheduled Monument [1008175], MCO6255]. Site No 27.
- Milestone 800m to the SW of Trewint Marsh, Listed Building Grade II [1137914], [MCO48451]. Site No 28.

9.4.3 Documented extant CHFs within the 100m buffer zone

- Boundary stone at SX 14374 74040. Site No 18.
- Boundary stone at SX 14691 74065. Site No 19.
- Holy Trinity Church, Listed Building Grade II [1328081], [MCO6281]. Site No 24.
- Vicarage Farm farmhouse, Listed Building Grade II [1328082].
- Boundary stone north-east of Colquite at SW 16565 74463.
- Pair of cottages adjoining and to the north of Wesley Cottage, Listed Building Grade II [1142788].
- Wesley's Cottage, Listed Building Grade II [1328088].
- Meadowside, Listed Building Grade II [1158701].

- Menacrin Downs quarry pits [MCO52129].
- Menacrin downs drainage system [MCO52121].
- Menacrin Downs extractive pits [MCO52120].
- Temple Tor cropmark enclosure [MCO21832].
- Menacrin Downs cropmark enclosure [MCO21696].
- Temple Tor medieval field system [MCO22274].
- Brockabarrow Common cross base [MCO5061].
- Lords Waste peat cutting [MCO23821].
- Deep Hatches settlement [MCO14244].
- Jamaica Inn [MCO22796].
- Palmers Bridge tin streamworks [MCO24092].
- Lonkeymoor post medieval settlement [MCO15486].
- Lonkeymoor rab quarry [MCO24083].
- Higher Cannafrae quarry pit [MCO24082].
- Higher Cannafrae post-medieval settlement [MCO14895].
- Cannafrae extractive pit [MCO48033].
- Wildmoor post-medieval settlement [MCO18355].
- Cannafrae early medieval trackway [MCO48027].
- Vincent mine engine house base [MCO23733].
- Horseborough Shaft, Vincent Mine [MCO23730].
- Vincent Mine tramway [MCO23736].
- Vincent Mine reservoir [MCO23735].
- Vincent Mine pits [MCO48138].
- Vincent Mine explosives magazine [MCO23731].
- Vincent Mine building [MCO23727].
- Vincent Mine concrete plinths [MCO23734].
- Trewint marsh post-medieval settlement [MCO18069].
- Trewintmarsh tin streamworks [MCO47338].
- Trewintmarsh tin streamworks [MCO23711].
- Trewint non-conformist meeting house [MCO32570].
- Trewint early Medieval field system [MCO47335].

9.4.4 Designated sites and landscapes within the 100m to 500m buffer zone

- Temple old bridge with adjacent ford and causeway, Scheduled Monument [1020638].
- Platform cairn 450 WSW of Colquite Farm, Scheduled Monument [1011788].
- Prehistoric standing stone 500m NNE of Spettigue Farm, Scheduled Monument [1011504].
- Church Hall, Bolventor, Listed Building Grade II [1328084].
- House 40m to the south of Jamaica Inn including front garden wall, Listed Building Grade II [1142777].
- Moor View and house adjoining on left, Listed Building Grade II [1142776].
- Bolventor School and walls to front, Listed Building Grade II [1328083].
- Dairywell Farmhouse, Listed Building Grade II [1142824].
- Trebeard Cottage, Listed Building Grade II [1158671]. Tor View, Listed Building Grade II [1142787].
- Area of Great Historic Value.
- Area of Great Scientific Value.
- Area of Outstanding Natural Beauty.

9.4.5 Designated sites and landscapes within the 500m to 1km buffer zone

- Unenclosed hut circle settlement, field boundaries, enclosure and cairn on Blacktor Downs, Scheduled Monument [1011701].
- Two platform cairns centred 485m south-west of Colquite Farm, Scheduled Monument [1011711].
- Platform cairn 450m WSW of Colquite Farm, Scheduled Monument [1011788].
- Cairn 485m WSW of Colquite Farm, Scheduled Monument [1011789].

- Stone hut circle 525m WSW of Colquite Farm, Scheduled Monument [1011782].
- Blacktor Downs irregular aggregate field system and clearance cairn, Scheduled Monument [1011725].
- Unenclosed hut circle settlement, field boundaries, enclosure and cairn on Blacktor Downs, Scheduled Monument [1011701].
- Prehistoric hut circle settlement on Stanning Hill, Scheduled Monument [1016921].
- Prehistoric coaxial and regular field systems, incorporated hut circles and adjacent deserted medieval settlement, driveway and longhouse on Tregune Farm, Scheduled Monument [1008261].
- Late medieval to early post-medieval bridge 55m south-east of t. Nun's Church, Scheduled Monument [1020239], Listed Building Grade II [1138194].
- Wayside medieval cross in Altarnun churchyard, Scheduled Monument [1014857].
- Building to the south of Church of St. Catherine, Listed Building Grade II [1142377].
- Church of St. Catherine, Listed Building Grade II* [1311621].
- Barn to south-east of Somerton farmhouse, Listed Building Grade II [1142376].
- Somerton farmhouse, Listed Building Grade II [1158200].
- Barton farmhouse, Listed Building Grade II [1142822].
- Dryworks farmhouse, Listed Building Grade II [1142826].
- East Trezelland and attached outbuilding, Listed Building Grade II [1138087].
- Hendra farmhouse on north side of farm at Hendra, Listed Building Grade II [1127880].
- Darras farmhouse, Listed Building Grade II [1142825].
- Altarnun Methodist Church, Listed Building Grade II [1142811].
- Chy Meyn, Listed Building Grade II [1158302].
- Gate, gate piers and flanking walls at north entrance to Altarnun Wesleyan Church, Listed Building Grade II [1328062].
- Figsbury, Listed Building Grade II [1158311].
- Phylroy and house adjoining on right, Listed Building Grade II [1142812].
- Pair of cottages 10m to east of Mary Anns and Cissys, Listed Building Grade II [1158317].
- Cissys, Listed Building Grade II [1328061].
- Mary Anns, Listed Building Grade II [1158299].
- House adjoining on north of Mary Anns, Listed Building Grade II [1142810].
- House directly to front of Merlin's Cottage, Listed Building Grade II [1158289].
- House adjoining on south of Penpont Mill, Listed Building Grade II [1142813].
- Penpont Mill, Listed Building Grade II [1158335].
- K6 telephone box to south-west of post office, Listed Building Grade II [1328060].
- Penpont House, Listed Building Grade II [1311927].
- Chygrsys, Listed Building Grade II [1328063].
- Maid Marian foodstore and adjoining house on left, Listed Building Grade II [1158359].
- Altarnun post office and Corner Cottage, Listed Building Grade II [1142814].
- Homeleigh, Listed Building Grade II [1158379].
- Pinnacle in garden 40m to east of Penpont House, Listed Building Grade II [1148209].
- Row of cottages including No 2 and Penpont Lodge 50m to the south-east of Altarnun Bridge, Listed Building Grade II 1328064].
- Gate and gate piers at east entrance to Penpont House, Listed Building Grade II [1311375].
- Riverside and houses adjoining to right and left, Listed Building Grade II [1142808].
- Church Hall, Listed Building Grade II [1138215].
- House 10m to SW of Rosebridge Cottage, Listed Building Grade II [1328059].
- Cosy Cottage and Rosebridge Cottage, Listed Building Grade II [1142807].

- Isbell Tomb in Church of St. Nonna, Listed Building Grade II [1386520].
- Gate and gate piers, wall to right and mounting block at SE entrance to churchyard of St. Nonna, Listed Building Grade II [1328058].
- Church of St. Nonna, Listed Building Grade I [1142805].
- North-east entrance to churchyard of Church of St. Nonna, Listed Building Grade II [1138163].
- Cross in garden to south of Oak House, Listed Building Grade II [1142804].
- Tombchest of J Lawers and headstone of J Stephens, Listed Building Grade II [1138153].
- North-west entrance to churchyard of Church of St. Nonna, Listed Building Grade II [1142806].
- Blocked arch 20m to south-west of Oak House, Listed Building Grade II [1138127].
- Oak House, Listed Building Grade II [1142802].
- Outbuildings 15m to west of Oak House, Listed Building Grade II [1123112].
- Carriage house and stables 15m NW of Oak House, Listed Building Grade II [1142803].
- Pair of gate piers at north entrance to Oak House, Listed Building Grade II [1312015].
- Area of Great Historic Value.
- Area of Great Scientific Value.
- Area of Outstanding Natural Beauty.

9.4.6 The Historic Landscape Character within 1km of the roadline

See Figure 19.

The majority of the section of the route across Bodmin Moor from Colvannick Tor to Bolventor runs through a landscape characterised as Upland Rough Ground (URG), though from Bolventor eastwards substantial sections of former moorland were enclosed to agriculture during the post-medieval and modern periods and are mapped as Recently Enclosed Land (REL). The western fringes of Fivelanes are mapped as farmland of medieval origin (AEL).

9.5 Five Lanes to Kennard's House

Dualled between 1989 and 1991 along the line of the pre-existing route of the amended line of the turnpike road, this section of the A30 runs through largely medieval farmland to the east of Bodmin Moor.

Trewint at the western end of this section was traditionally viewed as the gateway to the moor when travelling west. Heading towards Launceston from Bodmin, the character of the road here changes radically from the high, open moor and the superimposed landscape of 19th century farmsteads to a more intimate and closed-in landscape of medieval farmland, wooded valleys and small patches of former downland.

Trewint, Fivelanes and Tregadillett are essentially post-medieval roadside settlements, whereas Altarnun to their north was a medieval parish centre and lay on the route of the early road from Launceston to Bodmin.

The original turnpike road from Trewint to Launceston went through Fivelanes and then headed north past Tredaule and through Trerithick to Polyphant. This turnpike route had to negotiate steep descents and ascents across the valley carved out by the Penpont Water at Trerithick Bridge (Fig 75) meeting a minor road heading around the north side of Bodmin Moor near Bowden, where a guidepost still stands (Figure 96). From here, the road skirted the south side of the hill occupied by Trethinna Round, running into the medieval settlement of Polyphant (Fig 76), then down into the deep valley at Hicks Mill before heading on to Holyway Cross (Fig 90) at the junction of this early road with the route of the modern A30. As well as Trethinna Round, this landscape through which the road runs has strong indications of early settlement in the

form of additional enclosed Romano-British farming settlements (rounds) at Trecorner and Cargely to the south of the turnpike route.

In 1829, the turnpike route was modified between Trewint and Holyway Cross to avoid the difficulties experienced by horse-drawn vehicles when crossing the valleys of the Penpont Water at Trevithick Bridge and its tributary at Hicks Mill. The diversion ran due east from Fivelanes along a course still largely followed by the modern A30 as far as Plusha Junction, where the old road diverted to the south of the modern route through Higher Trevell. It then continued across the confluence of the River Inney and the Penpont Water along a causeway and a multiple-arched bridge at Two Bridges (Fig 78). There has been some minor straightening of the original road at Two Bridges, where the original 1829 turnpike bridges and causeway are now to the east of the A30 and have been converted into a serviced lay-by (Fig 77). To the north near Holyway Cross the modern A30 is carried on two separated carriageways, the eastern of these being added when this section of the road was dualled in the late 20th century.

The final part of this section of the A30 runs up onto former downland at Kennards House, a longstanding junction on the Bodmin to Launceston road where the A395 to Davidstow (where it meets the A39 St. Columb to Bude road) branches off. To its south this road originally continued to South Petherwin. A complex late prehistoric earthwork lies close to the A30 on its southern side near Treguddick Cottages (Fig 40).

9.5.1 CHFs within the hard estate

There are no archaeological sites within the road corridor, unless an early western bridge at Two Bridges is preserved beneath the modern road surface.

9.5.2 CHFs within the soft estate

- Milestone 80m to the south-west of Strylands, SX 24220 80336, Listed Building Grade II [1142833]. Site No 29.
- Milestone on slip road to Lewannick, SX 26688 81285, Listed Building Grade II [1392045]. Site No 30.
- Holyway Cross, Listed Building Grade II [1155083], [MCO5387]. Site No 32.

9.5.3 Documented extant CHFs within the 100m buffer zone

- Strylands medieval settlement [MCO16921].
- Higher Trevell quarry [MCO45872].
- Disused bridges at Two Bridges, Listed Building Grade II [1249171], [MCO9770]. Site No 31.
- Tolpetherwin Mine [MCO12603].
- Treguddick cropmark prehistoric enclosure [MCO24690].
- Kennards House post-medieval nonconformist chapel [MCO32716].

9.5.4 Designated sites and landscapes within the 100m to 500m buffer zone

- House 50m to the SW of the Kings Head Hotel, Listed Building Grade II [1158461].
- Kings Head Hotel, Listed Building Grade II [1142779].
- Milestone 100 SE of the Kings Head Hotel [1158491].
- Trebant Farmhouse, Listed Building Grade II [1142835].
- Meadowside and house adjoining on east, Listed Building Grade II [1249299].
- North Lodge and gate piers to front, Listed Building Grade II [1277519].
- Milestone 200m to east of Plusha, Listed Building Grade II [1249060].
- Milestone 500m to the NE of Plusha, Listed Building Grade II [1248886].
- Terraces of houses of Kelly's House, Listed Building Grade II [1248882].
- East entrance to Trevell Farmhouse, Listed Building Grade II [1277573].
- Trevell Farmhouse, Listed Building Grade II [1249162].
- Group of farm buildings 25m to the north of Trevell Farmhouse, Listed Building Grade II [1249163].

- Strayerpark Farmhouse, Listed Building Grade II [1277638].
- Barn 15m to the north of Strayerpark Farmhouse, Listed Building Grade II [1248888].
- Pump house immediately west of Treguddick, Listed Building Grade II [1142743].
- Treguddick, Listed Building Grade II* [1142741].
- Bank barn immediately north of Treguddick, Listed Building Grade II [1155167].
- Stables immediately SE of Treguddick, Listed Building Grade II [1155158].
- Barn and cart shed about 30m east of Treguddick, Listed Building Grade II [1142742].
- Area of Great Landscape Value.
- Area of Great Scientific Value.
- Area of Outstanding Natural Beauty.

9.5.5 Designated sites and landscapes within the 500m to 1km buffer zone

- Beechgrove, Listed Building Grade II [1311428].
- Trevague farmhouse and adjoining barn, Listed Building Grade II [1142801].
- Footbridge 90m to the south-east of Trevague, Listed Building Grade II [1142830].
- Range of farm buildings to the north of Upton Barton, Listed Building Grade II [1277580].
- Upton Barton, Listed Building Grade II [1249241].
- Farm building 10m to the north-east of Upton Barton, Listed Building Grade II [1277542].
- Knighton farmhouse, Listed Building Grade II [1249014].
- Range of shippens or pigs houses on east side of yard, open fronted stalls on south side and wall on west side of yard at Knighton Farm, Listed Building Grade II [1249045].
- Bridge over Penpont Water to south of Polyphant, Listed Building Grade II [1277710].
- Trewanta Park, Listed Building Grade II [1277579].
- Trewanta Hall, Listed Building Grade II [1277574].
- Gate piers to east of Trewanta Hall, Listed Building Grade II [1039552].
- Cottage in yard to north of Trewanta Hall, Listed Building Grade II [1277578].
- Threshing barn on north side of yard at Trewanta Hall, Listed Building Grade II [1277561].
- Cross shaft 350m to the north of Lewannick, Listed Building Grade II [1248938].
- Doctor's surgery to west of Pen-Inney, Listed Building Grade II [1277518].
- Pen-Inney cottage, Listed Building Grade II [1249297].
- Steers Villa, Listed Building Grade II [1249305].
- Small cottage 10m to the north-west of Steers Villa, Listed Building Grade II [1249453].
- Darkes Farmhouse, Listed Building grade II [1249304].
- Coombe farmhouse, Listed Building Grade II [1277522].
- K6 telephone kiosk on Polyphant Green, Listed Building grade II [1249380].
- Converted stables of Manor House, Listed Building Grade II [1249303].
- Jasmine, Listed Building Grade II [1249302].
- Rose Cottage, Listed Building Grade II [1249301].
- 1, 2 and 3 Polyphant Green [Listed Building Grade II [1277520].
- House 10m to the east of the post office, Listed Building Grade II [1249300].
- Hicksmill House and adjoining cottage and outbuilding, Listed Building Grade II [1249175].
- Jasmine Cottage, Listed Building Grade II [1263810].

- Outbuilding 10m to the north-west of Jasmine Cottage, Listed Building Grade II [1249178].
- Polyphant Bridge, Scheduled Monument [1004452], Listed Building Grade II [1155097].
- Milestone at NGR 276832 600m north-east of Trevosper, Listed Building Grade II [1328101]
- Milestone at NGR SX 2756 8317, Listed Building grade II [1291176].
- Trethevy farmhouse, Listed Building Grade II [1155192].
- Area of Great Landscape Value.
- Area of Great Scientific Value.
- Area of Outstanding Natural Beauty.

9.5.6 The Historic Landscape Character within 1km of the roadline

See Figure 20.

Trewint marks the eastern edge of Bodmin Moor, both topographically and in terms of its HLC, and from this point eastwards the historic landscape character of the landscaped traversed by the A30 is predominantly Anciently Enclosed Land (Farmland Medieval), though the road passes through some areas of former downland which were only enclosed to agriculture during the post-medieval and modern periods – for example at Scrylands and Trecorner and at Strayerpark and at Higher Trevell, where there are a pair of quarries adjacent to the road, and around the high point marked by the long-standing road junction at Kennards House.

9.6 Kennard's House to Dunheved Bridge

The modern dual carriageway (incorporating the Launceston By-pass) was created along parts of the original roadline in this section of the route, the work being completed in 1976. In order to by-pass Launceston, the original route at its eastern end (now the A388) was downgraded and a new route was cut from just to the south of Launceston to a new crossing over the River Tamar on an elevated viaduct at Dunheved Bridge.

The turnpike from Kennards House eastwards ran through the southern side of Tregadillett and through Trebursye (Fig 125) and Trebursye Oak, but following the 1976 dualling this section of the original road was bypassed to the south through Trebursye Farm. Eastwards from this point to the A30/A398 interchange, the A30 is abutted to the south by extensive industrial estates, whilst to the north, roadside vegetation screens obscure most views of Launceston and its medieval castle (Figure 65).

The outskirts of Launceston extend out to the A30 from just to the west of Pennygillam Junction and on to its east where, at Page's Cross, the A388 is carried across the A30 on an overbridge.

The original turnpike route followed the western leg of the A388 directly towards the centre of the town near Launceston Castle (Figs 51, 79 and 80), the historic heart of the former capital of Cornwall and the seat of its Norman overlords in the 11th century. From here, long-standing routes subsequently adopted by the Launceston Turnpike Trust radiated out to the north (the northern branch of the A388) through St. Thomas by Launceston, the site of the priory and Newport Bridge, towards Holsworthy, to the south (again the A388) through Callington and Saltash and by ferry to Plymouth – a traditional route from Devon into Cornwall (though at Callington from 1520 there was the option to cross the River Tamar at New Bridge, Gunnislake on the road to Tavistock), or via the eastern branch of the A388 across Polson Bridge, a medieval bridge rebuilt in 1835 and strengthened in 1934 (Fig 81), and via Lifton Downs to Okehampton and eventually to Exeter.

The modern A30 to the east of Launceston was diverted from its earlier route in 1976 and now runs through land formerly farmed by Withnoe, Stourscombe Farm, Higher, Middle and Lower Banham Farms and Bulsworthy Farm to a new viaduct crossing over the River Tamar at Dunheved Bridge (whose name derives from the old name for Launceston). At Scorscome, cropmark and earthwork evidence indicates the site of a Romano-British round within a landscape of fields laid out during the medieval period.

9.6.1 CHFs within the hard estate

There are no archaeological sites within the road corridor.

9.6.2 CHFs within the soft estate

- Milestone at NGR SX 2910 8322, Listed Building Grade II [1220018]. Site No 33.

9.6.3 Documented extant CHFs within the 100m buffer zone

- Gate piers immediately north of Trebursye Lodge, Listed Building Grade II [1155116].
- Trebursye Lodge, Listed Building Grade II [1142736].
- Milestone adjacent to Home Park, Listed Building Grade II [1392042].
- Launceston cemetery [MCO37943].
- Launceston post-medieval quarry [MCO37954].
- Dunheved Cross 80m west of Launceston Hospital, Scheduled Monument [1010855], [MCO5461].

9.6.4 Designated sites and landscapes within the 500m buffer zone

- Milestone at SX 3047 8410, Listed Building Grade II [1220017].
- Milestone at SX 32198 83351, Listed Building Grade II [1392043].
- Granary and threshing barn south of Badash farmhouse, Listed Building Grade II [1206593].
- Badash farmhouse and attached garden walls and pump, Listed Building Grade II [1195990].
- Wash house immediately to the rear of Badash farmhouse, Listed Building Grade II [1297859].
- Scarne farm buildings and attached outbuildings, Listed Building Grade II [1280177].
- Granary and implement shed NE of Scarne farmhouse, Listed Building Grade II [1297858].
- Barn and attached horse engine house NE of Scarne farmhouse, Listed Building Grade II [1206565].
- Implement shed north of Scarne farmhouse, Listed Building Grade II [1280153].
- Newham Manor, Listed Building Grade II [1328080].
- Area of Great Landscape Value.

9.6.5 Designated sites and landscapes within the 500m to 1km buffer zone

- West Kestle Farmhouse, Listed Building Grade II [1291171].
- Launceston Castle motte, bailey and shell keep, Scheduled Monument [1017575], Listed Building Grade I [1297840].
- Perimeter walls of Launceston Castle, Listed Building Grade II [1187246].
- The North gatehouse of Launceston Castle, Listed Building Grade I [1280359].
- Stables to south-east of Eagle House Hotel, Listed Building Grade II [1206145].
- 24 Broad Street, Listed Building Grade II [1206133].
- 3 Madford Lane, Listed Building Grade II [1206606].
- 12 and 14 High Street, Listed Building Grade II [1297856].
- 5 and 7 Southgate Street, Listed Building Grade II* [1196027].
- Dockacre House and attached road frontage walls, Listed Building Grade II* [1195976].
- 6 Southgate Place, Listed Building Grade II [1298815].

- 11, 13 and 13A High Street, 12 Broad Street, Listed Building Grade II* [1206510].
- 26 Church Street, Listed Building Grade II* [1206285].
- 8 High Street, Listed Building Grade II [1206508].
- Barclays Bank, Listed Building Grade II [1206111].
- 28 Church Street, Listed Building Grade II [1195972].
- 2 Madford Lane, Listed Building Grade II [1195991].
- 2 Southgate Street, Listed Building Grade II [1297836].
- 16 Church Street, Listed Building Grade II [1206256].
- 10 Church Street, Listed Building Grade II [1195969].
- 14 Church Street, Listed Building Grade II [1206245].
- Madford Lodge, 4 Southgate Place, Listed Building Grade II [1187195].
- 7 and 9 High Street, Listed Building Grade II [1195986].
- 7 and 9 Church Street, Listed Building Grade II [1280337].
- Store at rear of 16 and 18 Church Street, Time Wells Lane, Listed Building Grade II [1196030].
- 6 Southgate Street, Listed Building Grade II [1052265].
- The White Hart Hotel, 15 Broad Street, Listed Building Grade II [1297883].
- Church Stile, Market Street, Listed Building Grade II [1195992].
- Cross 5m east of Church of St. Mary Magdalene, Church Street, Listed Building Grade II [1206341].
- 8 Southgate Street, Listed Building Grade II [1196028].
- 9 and 11 Broad Street, Listed Building Grade II [1280362].
- Launceston Town Walls Angel Hill, Launceston Town Walls Dockacre Road, Listed Building Grade II* [1195978].
- The South Gate, Southgate Place, Listed Building Grade I [1298820].
- 2 High Street, Listed Building Grade II [1206464].
- 11 Angel Hill, Listed Building Grade II [1297880].
- Gateway and wall attached to east of Health Offices, Market Street, Listed Building Grade II [1206642].
- Baker's Arms public house, 9 Southgate Street, Listed Building Grade II [1052273].
- 1 and 3 Broad Street, Listed Building Grade II [1195961].
- Old House, 11 Exeter Street, Listed Building Grade II [1195984].
- 14 Broad Street, Listed Building Grade II [1195960].
- 22 Church Street, Listed Building Grade II [1206277].
- 1 Exeter Street, 5 Southgate Place, Listed Building Grade II [1297835].
- 12 Church Street, Listed Building Grade II [1280307].
- 7 Broad Street, Listed Building Grade II [1195963].
- Market House, Market Street, Listed Building Grade II [1206648].
- 1 Madford Lane, Listed Building Grade II [1206602].
- Wesley Methodist Church and attached schoolroom, vestry and iron railings, Church Street, Listed Building Grade II [1195975].
- 6 High Street, Listed Building Grade II [1280192].
- 18 Church Street, Listed Building Grade II [1195971].
- Bank House, 9 Exeter Street, Listed Building Grade II [1206424].
- 20 and 20A Church Street, Listed Building Grade II [1297850].
- 3 Race Hill, Listed Building Grade II [1297863].
- 13 Church Street, Listed Building Grade II [1195970].
- 15 and 17 Church Street, Listed Building Grade II [1297849].
- 19, 19A and 21 Church Street, Listed Building Grade II [1280285].
- 5 Broad Street, Listed Building Grade II [1297882].
- 18 to 24 and attached forecourt walls and steps, 18 to 24 Exeter Street, Listed Building Grade II [1297855].
- Launceston War Memorial, The Square, Listed Building Grade II [1052240].
- Kensey Place, Dockacre Road, Listed Building Grade II [1195977].
- 4 Broad Street, Listed Building Grade II [1195962].

- Church of St. Mary Magdalene, Church Street, Listed Building Grade I [1280301].
- 2 Broad Street, Listed Building Grade II [1297881].
- 4 Madford Lane, Listed Building Grade II [1297860].
- 4 Southgate Street, Listed Building Grade II [1187182].
- The Launceston Arms public house, 3 Exeter Street, Listed Building Grade II [1280238].
- Health Offices, Market Street, Listed Building Grade II [1280143].
- Claremont House, 12 Exeter Street, Listed Building Grade II [1206434].
- 1 Southgate Place, Listed Building Grade II [1196006].
- No 4 High Street incorporating the Judge's Kitchen, Listed Building Grade II* [1195985].
- 11 Southgate Street, Listed Building Grade II [1372295].
- St. Dominick House and attached walls, railings and gate piers, The Walk, Listed Building Grade II [1372309].
- 4 Exeter Street, Listed Building Grade II [1297854].
- 2 Angel Hill, 3 Southgate Place, Listed Building Grade II [1280103].
- 8 and 12 Southgate Place, Listed Building Grade ii [1196026].
- 10 and 12 Southgate Street, Listed Building Grade ii [1297837].
- Ornamental drinking fountain opposite 8 Race Hill, Listed Building Grade II [1196002].
- Medieval churchyard cross head and medieval cross shaft in St. Mary Magdalen's churchyard, Scheduled Monument [1014023].
- Southgate, Launceston, Scheduled Monument [1004485], Listed Building Grade I [1196033].
- 13 and 15 Westgate Street and attached steps and forecourt walls, Listed Building Grade II [1196032].
- Oddfellows Hall, Listed Building Grade II [1187236].
- 11 Western Road, Listed Building Grade II [1298806].
- The Guildhall and Town Hall with attached coach house, Listed Building Grade II [1297841].
- 35 Westgate Street, Listed Building Grade II [1196035].
- The Westgate Inn, Listed Building Grade II [1298764].
- 20, 20a and 22 Westgate Street, Listed Building Grade II [1196034].
- National Westminster Bank, Listed Building Grade II [1187228].
- Water pump at Launceston Castle, Listed Building Grade II [1187219].
- 3 and 5 Windmill Lane, Listed Building Grade II [1187336].
- Tamar Terrace and attached front garden walls, Listed Building Grade II [1196029].
- Colhay, Listed Building Grade II [1142909].
- Pair of gate piers and north entrance to Treniffle House, Listed Building Grade II [1219179].
- Pigsties and yard walls to north-west of Hurdon farmhouse, Listed Building Grade II [1280175].
- Threshing barn and attached building south-west of Hurdon farmhouse, Listed Building Grade II [1195988].
- Farm buildings to south-west of Hurdon farmhouse, Listed Building Grade II [1195987].
- Hurdon farmhouse, Listed Building Grade II [1206519].
- Gazebo in garden of Hurdon farmhouse, Listed Building Grade II [1206531].
- Hurdon farmhouse gate piers and gate south and south-east of farmhouse, Listed Building Grade II [1297857].
- Newton farmhouse, Listed Building Grade II [1219235].
- Bee boles in wall approximately 10m SE of Newton Farmhouse, Listed Building Grade II [1219237].
- Treniffle, Listed Building Grade II [142772].
- Footbridge 20m to the NE of St. Leonards, Listed Building Grade II [1160768].
- Polson Bridge, Listed Building Grade II [1142732].

- Launceston Conservation Area
- Area of Great Landscape Value.

9.6.6 The Historic Landscape Character within 1km of the roadline

See Figure 21.

The majority of the landscape traversed by this eastern section of the A30 consists of farmland of medieval origin (AEL), though the Kennards House Junction sites within a small area of improved former downland. Launceston itself straddles the A30, and the HLC for the landscape immediately adjoining the A30 at this point is recorded as Urban.

10 The viewshed for the A30 from Innis Downs to Dunheved Bridge

See Figures 127 to 132.

A viewshed was created for the section of the A30 from Innis Downs to Dunheved Bridge out to 1km on both sides of its centreline. This was not only used to capture intervisible sites and designated landscapes out to 1km from the roadline, but also the historic landscape character of the landscape it traverses.

A Digital Terrain Model (DTM or bare-earth) was utilised when modelling the viewshed; this excludes the blocking effects on intervisibility of potentially temporary features such as buildings or trees. In the absence of any detailed 3D modelling of the roadline and its earthworks, this viewshed is theoretical rather than actual and does not fully take account of the loss of views of the landscape and sites surrounding the road when the observer is within cuttings. As a result, the viewshed was field-checked to determine those sites falling within it.

As a linear feature, the traveller's experience of the viewshed is partial, dynamic and cumulative (unlike the mapping in this report, Figs 127 to 132, which plots the totality of the viewshed out to 1km as a single feature from multiple locations). In many places the viewshed extends well beyond 1km, but this distance was chosen as it was felt likely to represent the maximum area within which the road and the landscape would interact with one another to a significant degree. On Bodmin Moor, however, it is recognised that this interaction will occur to a greater degree given that the road runs on the level through much of this upland area, and is surrounded by elevated viewpoints, many of these being hills siting significant prehistoric and medieval archaeology.

Areas of the landscape and the sites they contain come into view and are then lost to sight as a driver progresses along the road, and the views experienced during an east-west journey are different from those available on a west-east journey. The nature and extent of the viewshed can also be significantly affected by weather, particularly when fog or mist descends on the moors, or during heavy downpours.

In some off-moor sections of the A30 incorporating extensive sections of cuttings, the only views available to the driver are those of the road ahead, though these can sometimes include distant landscapes framed by the sides of the cuttings, as for instance on the Bolventor By-Pass heading east or on the eastbound approach to Dunheved Bridge.

The viewshed heading east

The viewshed modelling covering the far western end of this section of the A30 (as field-checked) shows that views from and of the road are relatively constrained by both local topography and engineered cuttings, though include the high ground of Innis Downs to the south of the road (Fig 53). To the east of the junction the views open out to include St. Ingunger Farm and the ridgeline to its south (Fig 54) and (fleeting) to the north the views extend out towards the landscape around Bodmin, Gilbert's

Monument on The Beacon being the most prominent feature within these views (Fig 109). Continuing eastwards, further fleeting views of Bodmin are available through the tree screen on the northern side of the A30, though as Lanhydrock Park is approached dense tree plantings close off all views beyond the roadline on both sides (Fig 55). Beyond the wooded parkland, the hill siting Castle Canyke comes into view immediately to the west of the A30 (Figure 38), though the hillfort itself is not visible, and cuttings at and beyond the Carminow interchange soon restrict views to the road ahead and to the flanking soft estate. From limited locations, views to the east of the A30 open out across woodland occupying valleys running down to the Fowey at Bodmin Parkway.

Within the second section of the A30 heading eastwards from Callywith Junction the viewshed theoretically extends beyond 1km to the east and south-east, though in practice it remains restricted by the cutting through which the A30 runs (Fig 56), and it is only at the point where the road rises onto the higher sections of Racecourse Downs and Cardinham Downs that glimpses of the surrounding landscape to the north and south of the A30 again become available beyond the roadside hedges. The view across Cardinham Downs to the north-east of the road also includes views of hilltops beyond. Trees flanking the roadline tend to constrain views between this point and Preeze Cross, though from there eastwards Colvannick Tor and the western edge of the moor come into view. Views also open out across the south-western edge of Bodmin Moor.

Between Pounds Conce and Temple, the road rises up onto the western edge of Bodmin Moor, climbing the western flanks of Colvannick Tor in the process. Views in the first part of this section heading east are principally of the nearby moorland edge at Colvannick Tor, Fore Downs, Bury Castle and Warleggan Moor. The now closed lay-by at Peverell's Cross provided a particularly good viewpoint across the country to the west, north and east of this point. From the crest of the road beyond this point the landscape opens up substantially, particularly to the north and west of the A30, with views out across Menacrin Downs and Manor Common towards Carbilly Tor and the more distant Garrow Tor (Fig 41), Roughtor and Brown Willy. To the south and east of the road, the viewshed extends across the nearby abandoned clayworks as far as distant Caradon Hill, Stowe's Hill and Kilmar Tor on the south-eastern edge of Bodmin Moor. Ahead, the view is of Temple Tor.

From Temple Junction eastwards to Bolventor the A30 crosses the most extensive and open section of Bodmin Moor traversed by the road and the views within this section tend to be open. To the north of the road they include Hawkstor clayworks and Brockabarrow Common, Roughtor, Garrow Tor and Brown Willy being distinct elements of the landscape beyond these. To the south of the road, there are fewer distinctive landscape features, though again, some of the higher hills in the south-east of the moor form the horizon.

Approaching Bolventor, the landscape is only intermittently visible given the cuttings through which the road passes, though from the hillcrest to the west of the settlement, the width of the cutting allows open views eastwards to Palmersbridge, Lonkeymoor, East Moor and Hendra Downs. Bolventor church lies close to the A30 on its northern side (Fig 120), whilst the pioneer farms stretching up onto Tolborough Tor are also clearly visible (Fig 61).

Hendra Downs forms the skyline to the north of the A30 on the level section of the A30 through Canaframe, though to the south of the road, Halvana Plantation blocks views to East Moor. Beyond, the A30 begins to descend the eastern flanks of the moor, the landscape around and beyond Trewint, Fivelanes and Altarnun filling the view ahead (Figure 63).

Beyond Fivelanes, the road has been extensively engineered, and although the theoretical viewshed extends out into the countryside to the north and south of the A30, in practice it is considerably more restricted by roadside plantings and field hedges, and only glimpses of the surrounding landscape are gained, except around the junction with the Callington Road near Plusha, from where the landscape can be seen stretching out to the south-east towards the central Tamar Valley. The views open out

ahead on the approach to Two Bridges, though on the descent into the Penpont valley mature trees close in all views to the east and west. The elevation of the section of the A30 to the east of Holyway Cross opens up some views to the south of the road, particularly from the eastern carriageway. Ahead, the landscape surrounding the approach to Kennards House is largely blocked by hedge vegetation and soft estate engineering.

In a similar fashion, from Kennards House to Launceston the views are mainly restricted to those ahead of the vehicle, these including the western flanks of Dartmoor. From Trebursye 2km to the west of Launceston some elements of its roadside industrial estates and housing are glimpsed through the trees which line the A30, but little of Launceston itself is visible to the road user and beyond the junction with the A388 the A30 road enters a deep cutting, closing off all views to north and south. Ahead, however, the landscape forming the western part of Lifton Downs is framed by the sides of the cutting, Dartmoor becoming an ever more dominating landscape presence in the distance. From Dunheved Viaduct itself there are fleeting views southwards down the wooded Tamar Valley.

The viewshed heading west

Driving eastwards from Liftondowns, the viewshed from the A30 extends across the western side of the Tamar Valley to the outskirts of Launceston, but, as mentioned above, the 2.4km long cutting which extends from Dunheved Bridge to the junction with the A388 closes off all views except those of the road ahead. Likewise, the straightness and level nature of the road eastwards from this point to Trebursye Farm (a distance of just under 3km) tends to focus attention on the road ahead (Fig 65); the industrial estates flanking the A30 to its south in this section are the only notable features in the landscape close to the road, though are largely screened from it. From Trebursye to Kennards House views of the landscape to the north and south of the road are restricted by vegetation, though the eastern edge of Bodmin Moor starts to enter the view ahead.

Beyond Kennard's House the viewshed is, to a substantial degree, constrained by the topography of the valley of the Penpont Water, and in practice is more extensive to the south of the road than to its north. At Two Bridges and beyond to Strayerpark, flanking woodland and the rise of the hill ahead again close off views from the road, as well as concealing it within the landscape. From the crest of the hill westwards from Plusha Junction however, Bodmin Moor becomes a dramatic and approaching landscape presence.

At Trewint, the road turns to the south-west and climbs the eastern flank of Bodmin Moor, some of whose hills are visible from the road. From Cannafraze westwards, the viewshed is most extensive towards Hendra Downs to the north-west of the A30, and extends out to The Beacon and Elephant Rock at the high point of this hill. As the A30 descends into the valley of the River Fowey past Lonkeymoor the view ahead is extensive, including Tolborough Tor, Priddacombe Downs and Brockabarrow Common, with Dozmary Downs to the south of the road. Brown Willy is briefly glimpsed in the far distance to the north, though is soon hidden by hills nearer the road.

The road cutting across Higher Minzies Downs briefly cuts off almost all views from the road heading west, but as the A30 reaches Sprey Moor and begins to drop into the valley of the Warleggan River the viewshed again opens out dramatically to the sides of the road and ahead of it (cover image). Here the road descends 100m, and the resulting views extend northwards along the valley between Brockabarrow Common and Hawkstor, down across the southern part of the moor towards Warleggan Downs and ahead to Blacktor Downs and Hawkstor.

To the north of Temple Tor junction the viewshed extends well beyond 1km across Manor Common out to the Trippet Stones stone circle, to Hawkstor Downs, Carkees Tor and Carbilly Tor with Garrow Tor and Roughtor visible further away again. This section of the road has the most extensive viewshed out across moorland anywhere within the

eastern section of the A30. Between Greenbarrow and Peverell's Cross the viewshed extends across Burnt Heath clayworks and Cardinham Moor to St. Bellarmin's Tor and Great Care Hill to the south-east of the A30.

Peverell's Cross marks the western edge of the moor, and the views westwards across the mid-Cornish landscape from this point are extensive, particularly as the road here descends from 250m OD at the summit to 180m OD at Pounds Conce (Fig 57). Beyond the edges of the moor, the Hensbarrow moors are distinctive skyline features in the view to the west. However, from the foot of the hill within the section of the road between Pounds Conce and to Higher Carblake the viewshed is constrained by the local topography and roadside vegetation.

From Higher Carblake, the road follows a relatively level route across Racecourse Downs and the viewshed from road level is very limited to the north-west and south-east. At the southern end of Racecourse Downs the A30 enters an almost continuous 3.5m section of cutting which extend beyond Callywith Junction as far as Carminow Junction, from which almost nothing can be seen of the landscape traversed by the A30, though the sides of the cutting frame the landscape ahead out to Hensbarrow Downs at its south-western end. These road cuttings end at Moorgate just to the north of Carminow Junction, but the view of the local landscape to the south-west is at this point closed off by the woodland edge of Lanhydrock Park. Beyond Halgavor Plantation to the north of the road and Lodge Plantation to its south, the road curves gently to the west, and the viewshed extends to the ridge of Penvivian Downs to the south of the A30 and out towards Bodmin, to Gilbert's Monument on The Beacon just to its south and across the landscape of north Cornwall out towards Bears Downs and St. Breock Downs to the north-west.

The road crests near St. Ingunger Farm, and from here westwards, although there are sections of cutting which close off local views to the north and south of the road, there is a more or less continuous view of the rising ground of Innis Downs to the west and out to the north-west towards Bears Downs. Beyond Innis Downs interchange Hensbarrow again comes into view ahead and to the south-east, whilst the hilltops of Belowda and Castle-an-Dinas become substantial presences to the north-west of the road.

The road in the landscape

Despite the dramatic nature of much of Bodmin Moor through which much of this section of the A30 passes, the trunk road from Innis Downs to Dunheved Bridge is, at most times of the year, a fast road, having been engineered to modern standards. As a result, drivers using it have few opportunities to pay much attention to the landscape which they are traversing, and there are only a limited number of readily recognisable archaeological sites close to the road. However, the changing character of the landscape traversed by the A30 is likely to be readily appreciable to drivers on some sections of the road, particularly as they rise up onto Bodmin Moor at Colvannick Tor on its western side and as they climb the flanks of Trewint Downs on its eastern edge.

Inevitably, a modern road passing through this landscape which combines landscapes characterised by fieldsapes established during the medieval period and sections of elevated moorland which have only to a very limited degree been affected by human activities during the past 4,000 years is likely to give rise to some visual and other impacts. The moorland through which the A30 passes contains many high viewpoints and archaeological sites from which the A30 is often visible. Though these views of the road can be from some considerable distances, the contrast between the moorland landscape and the often large and colourful vehicles following the modern road which are visible from such points can be stark (Figs 58-60, 62).

At the time of writing this report, there are no high level interchanges in the moorland section of the A30, reducing the visual impacts that such structures would have on then surrounding landscape. Undulations within the landscape make the A30 an intermittent element of the view ahead for the driver rather than a continuous one, though in

places, such as from Temple to Hawkstor, when crossing the valley of the Warleggan River or from the western end of the Bolventor By-pass, the A30 to the east is a highly visible component of the moorland landscape (Fig 61). The three new split level interchanges to be constructed at Cardinham Downs Junction, Preeze Cross Junction and Temple Junction will be necessary but visually intrusive elements within the landscape traversed by the A30, particularly that at Temple Junction, which will be located in level moorland where the carriageway of the A30 is currently the only modern feature.

The moorland through which the A30 passes is almost wholly bereft of clearly modern constructions. There are no solar farms nor any wind turbines close to the A30 on Bodmin Moor or visible from it, given that Cornwall Council's planning policy (based on its Landscape Character Assessments) has determined that such developments are inappropriate within the moorland landscape except in the case of very small, farm-scale wind turbines. Applications have been made for small-scale turbines near Temple and at Blisland. Constructed examples close to the A30 elsewhere between Innis Downs and Dunheved Bridge consist of a 34.45m turbine at Steppes Farm, Callywith and a 20.75m high turbine at Wallhouse, Blisland to the west of the Moor, and, to the east of the Moor, a 77m high turbine at Blackaton Farm near Polyphant, a 27.13m high turbine at Bowden Farm, Polyphant, a 35m turbine at Trewanta Park, Lewannick, two highly prominent 77m turbines at Treguddick and Papillon near Kennards House, and there is a 19.8m turbine to the south of the A30 close to Launceston. There are few modern farm buildings within the landscape traversed by the A30 in its moorland section, though 20th century agricultural sheds are visible from the road at farms to the north and south of Cannaframe. Such structures are more prevalent in the off-moor areas (for example, the substantial group at St. Ingunger Farm immediately adjacent to the A30 in its western section), though they tend not to be particularly visible given the presence of abundant hedge and woodland vegetation within the off-moor areas of the landscape. Likewise, the abundant large box-shaped metal sheet clad units making up the industrial estates immediately to the south of the A30 near Launceston and on the outskirts of Bodmin tend to be hidden by roadside vegetation or by road cuttings.

The Ordnance Survey 1:50,000 mapping includes three 'picnic table' symbols marking locations provided for visitor stop-offs within the moorland section of the A30. The westernmost of these is the (currently-closed) lay-by at Peverell's Cross just to the west of the summit of Colvannick Tor. Another is sited at the eastern junction with the old Temple road at Burnt Heath, whilst the easternmost is to the north of Temple Tor (Fig 60). All commonly site mobile fast-food outlets and provide extensive views out across the surrounding landscape. At present, however, their potential for the interpretation of Bodmin Moor's landscape, archaeology and ecology has not been exploited. Off-moor pull-ins are found near Preeze Cross (where there is a filling station and a food outlet), at Plusha Junction (again a filling station and food outlet, Fig 64) and at Two Bridges where there is a serviced lay-by with a small café and public toilets (Fig 77).

11 Impact assessment

An assessment of the potential impacts which might result from road operation, maintenance and upgrading has been undertaken to determine those which might affect the historic environment and sites of historic and archaeological importance within the hard and soft estates. These are addressed under two separate headings: operational impacts and development impacts.

11.1 Operational Impacts

Most operational impacts tend to be primarily physical in character, and have been identified as those deriving from:

- The activities of road users, particularly as a result of collisions with CHFs;
- Natural conditions (e.g., deterioration through weather);
- Soft estate management works including tree and scrub management, grassland management, swathe cutting and verge flailing;
- Soft estate enhancement planting and aftercare;
- Ad hoc maintenance to drainage and boundaries;
- Ad hoc maintenance to the hard estate (surfacing and repairs), etc., together with utility and bridge maintenance;
- Bridge upgrading;
- Traffic control measures.

There is also the potential for setting impacts to occur, both in relation to CHFs within the soft estate and those within the buffer zones, in particular as a result of:

- Existing or proposed soft estate planting schemes;
- Existing or proposed roadside signage;
- Existing or proposed highway lighting schemes;
- Other significant modifications to the hard or soft estates.

The management of individual CHFs is considered in Section 13 of this report, in particular the potential for traffic impacts with traffic on CHFs positioned close to the road corridor.

Maintenance activities may impact on specific CHFs. These may result in positive, neutral or negative effects. The CHAMP should be consulted and local assessments made when planning operational works to identify opportunities for protection, conservation or enhancement of CHFs, and identify constraints that may exist through local area designations and statutory protections.

The following activities are of particular importance in assessing potential effects on the historic environment within the hard and soft estates.

11.1.1 Verge maintenance

Given that all of the CHFs within the soft estate consist of milestones, wayside crosses and boundary stones on road verges set between a couple of metres and less than one metre from the highway, it is evident that verge maintenance activities have a particular potential to impact on these features. Although road verges were historically trimmed by mobile gangs of men equipped with hand tools, these days, soft vegetation on verges is cut back using ride-on mowers, strimmers and brush cutters, and trees and shrubbery are maintained by periodic flailing using tractor-mounted machinery. This machinery can be powerful, tractor-mounted flails utilising rapidly rotating hardened steel cutters housed in an extendable boom arm to chop through vegetation on a progressive basis. The position of the boom is controlled visually by the tractor driver, who must also pay attention to the progress of the vehicle and to other traffic. Such operations are usually undertaken in coned off sections of the road, and traffic is always alerted to such activities by fixed or mobile signage. Where features like milestones, crosses, guideposts and boundary stones are set close to sections of

vegetation which need to be maintained, they are clearly at risk of accidental damage; possible impact damage was noted on some of the recorded examples.

It is recommended that sections of vegetation adjacent to such historically-important features are maintained using hand tools or strimmers, so that mechanical vegetation maintenance is not required in their vicinity in the future.

11.1.2 Milestones, crosses and guideposts

Some original turnpike era milestones survive along the eastern section of the A30 in Cornwall. All seem to have been relocated during episodes of the widening of the A30 during the 20th century. Nevertheless all are still within a few metres of the carriageway. A few show signs of former rough handling (possibly during their relocation). Some have been repainted recently, particularly those on former sections of the A30.

Those milestones which were originally painted should be repainted on a periodic basis (within a maximum of four years) to maintain their visibility, and to reflect their importance as elements of the historic road infrastructure. These features are traditionally painted white with lettering picked out in black. Scrub vegetation should be cleared from the surroundings of these features to increase their visibility and enhance their settings.

In a small number of cases, the proximity of some milestones and crosses to the highway places them at a high risk of accidental impact damage. Consideration should be given to the relocation of these CHF's to lower-risk sites at greater distances from the highway. The continuing visibility of these features to vehicle drivers and to maintenance workers is essential to ensure that they are not accidentally damaged.

It was noted that some milestones have been removed in the past during road improvements and not re-set, or have possibly been stolen. The present locations of these removed CHF's are unknown and they are assumed to either be in temporary storage or to have been stolen. If the latter is the case, this is a very serious matter given that all are nationally designated as Listed Buildings, and the micro-chipping of the surviving soft estate milestones should be considered to assist in the recovery of any examples which might be misappropriated in the future. This approach was undertaken for all of the wayside crosses in the Highways England estate and bordering it in 2006 (Langdon 2006).

11.1.3 Boundary feature maintenance

Field boundaries were not assessed individually as CHF's as there are a very large number of them along the route, and they have been considered collectively. The majority of the boundaries flanking modern sections of the road are all 20th century features and of low archaeological significance. Those flanking unimproved (in 2015) sections of the road include some 19th century and earlier hedges and banks, though most of these sections of road have been widened to some degree and new (20th century) hedgelines have been created on at least one side of the road corridor, except on some sections across Bodmin Moor.

The importance of boundaries as archaeological features is twofold, namely for their archaeological potential (i.e. the information they contain about their history, development and changing character), and for their amenity value (as attractive features, as visible components of the historic landscape and links to past/historic land-use in the area, sometimes showing visible evidence of time-depth through signs of their development over a period of time).

It is recommended that the nature and style utilised in any boundary repair should be consistent with the existing walling or with the type of boundary where these are not of modern construction. The materials used in any repairs should reflect those used in the existing boundary, reusing as much stone from the original boundary, wherever possible.

11.1.4 Hard estate surfacing and repairs

Resurfacing of, repairs to or the upgrading of elements of the hard estate will be restricted to the modern roadway and are therefore unlikely to affect CHFs.

The positioning of work compounds or other temporary land-take should take account of any CHFs identified in this CHAMP as lying within the soft estate or adjacent to it.

11.1.5 Structural maintenance or upgrading works

Bridges along the route of the modern A30 are all entirely modern structures, though one example (at Palmersbridge) overlies and incorporates well-preserved earlier physical remains. There is also the potential for elements of a medieval causeway to survive beneath the roadline at Pounds Conce. The turnpike double bridges and causeway at Two Bridges are immediately adjacent to the soft estate and adjoin a serviced lay-by. Where the fabric of historic bridges or similar structures may be adversely affected by maintenance or development works, an impact assessment should be carried out using the CHAMP data to establish any consents or mitigation actions required. These may include the use of sensitive materials or design, and/or archaeological survey, recording or observation works.

11.1.6 Setting impacts

A further range of impacts may result from infringement on the settings of some CHFs, whether within the soft estate or within the buffer zones, particularly those which are within the soft estate or close to the roadline. The degree of impact will depend on:

- Proximity of the asset to the roadline;
- The degree of intervisibility between the asset and the A30;
- The inclusion of the road within key views of the asset;
- The degree of planned intervisibility between the asset and other contemporary or linked assets;
- The degree to which the asset was originally intended to have a wide landscape setting or landscape dominance;
- The sensitivity of the asset to impacts on its setting;
- The degree of survival of the asset;
- Factors which have already modified or otherwise degraded the setting of the asset – for instance prominent modern structures close to it;
- Inherently-variable weather-dependant factors, in particular visibility and wind direction, as these may either increase or limit visual and aural impacts on settings.

Within the soft estate, the settings of the milestones and stone crosses consist of limited sections of the road itself, though these settings have changed over time as the A30 has been progressively modernised. As an example, Fourhole Cross, which originally stood alongside a rough-surfaced moorland track is now somewhat incongruously re-set high up on the edge of a shallow engineered cutting next to a busy dual carriageway running through an area of 19th century fields (Fig 88). The settings of the rab quarries which survive beside the A30 in some moorland locations again now consist of the modern A30, as do those of the moorland boundary stones (for example, Figs 98 to 101). The settings of the former smithy at Preeze Cross and the London Inn at Pounds Conce immediately adjacent to the soft estate were the adjacent turnpike road, and still relate to the modern A30 (Fig 57), though the scale of the adjacent road has now altered considerably, and these sites are now physically and visually divorced from the road which brought them into being.

The most sensitive assets within the buffer zones include prehistoric monuments such as henges, stone circles and stone rows which functioned as communal focal points within often otherwise 'empty' parts of the landscape, Bronze Age barrows and cairns which were intended as highly visible kin-group or clan territory identifiers (these often again being in 'open' and prominent locations), and hillforts which were high status, topographically strategically-located foci within the Iron Age landscape. Most are, however, relatively distant from the A30 or hidden from it, and, in views from them,

the road tends to be a relatively minor feature. All such assets originally functioned within landscapes within which the levels of ambient noise which are sometimes currently experienced were entirely absent. Modern noise-producing sources such as busy trunk roads can impact on their settings, therefore.

During the medieval period churches functioned as parish foci, their often prominent towers being intended to be visible for considerable distances within the landscapes surrounding them; the towers and spires incorporated into these ecclesiastical buildings were far and away the tallest and most prominent features constructed during this period with the exceptions of castles. Churches are also generally little-altered almost wholly medieval structures. Church towers are particularly sensitive to the intrusion of modern vertical features such as pylons, wind turbines and mobile phone masts within their settings, or within views of them. Churches are also vulnerable to the intrusion of other modern features within views of them or in proximity to them. Such intrusions might include prominent road signs which might intrude into views of them or nearby noisy roads. Within this section of the A30 there are very few churches close to the roadline with the exception of the now-disused example at Bolventor. This example suffers from considerable aural intrusion from vehicles using the adjacent road.

Most medieval and post-medieval houses, cottages, farms and their outbuildings tended to be small scale and to have limited settings, though manor houses and country houses quite often incorporated designed settings, vistas and approaches, as well, in many cases, deliberately designed parks and gardens. Visual intrusion along the designed alignments formed by drives and planned vistas in such locations has been specifically identified by Historic England as having the potential to result in significant negative impacts on the settings of manor houses, country houses and their associated parks and gardens. No such impacts were identified in relation to Lanhydrock House and park, the largest and most important high status house and the most extensive area of parkland adjacent to the A30. The planned landscape of Trebursye House to the east of Launceston is now bisected by the modern A30, its north lodge being to the north of the roadline, whilst the house and other associated buildings are to its south.

Specific assets where some degree of negative setting impact from the A30 is considered possible as a result of visual or aural intrusion into their settings include:

Within the soft estate

- Carminow Cross (LBII*) (Site 1)
- Boundary stones near Trenchcreek (Sites 7 and 8)
- Peverell's Cross (SM) (Site 12)
- Four Hole Cross (SM) (Site 21)
- Boundary stone near Cannafraze (LBII) (Site 26)
- Vincent Mine Cross (SM) (Site 27)
- Disused bridges at Two Bridges (LBII) (Site 31)
- Holyway Cross (LBII) (SM) (Site 32)

Within the buffer zones

- Innis Downs henge (SM)
- Canyke Castle (SM)
- Callywith Cross (SM, LBII) (Site 2)
- Callywigh Cross (LBII) (Site 3)
- Council Barrow (SM)
- Racecourse Farmhouse (LBII)
- Boundary stone near Trenchcreek (Site 6)
- Pounds Conce former inn and brewhouse (adjoins Site 11)
- Boundary stones on Trehudreth Downs (Sites 13 and 14)
- Colvannick Tor stone row
- Bolventor Church (LBII) (Site 24)
- Bolventor vicarage (LBII)
- Wesley's Cottage (LBII)
- Trewint non-conformist chapel
- Kennards House non-conformist chapel

- Trebursye House, north lodge and associated buildings (LBII)
- Dunheved Cross (SM)

11.2 Development impacts

Development impacts are defined as '*specific improvements and realignments, bridge replacements, traffic control measures or safety measures.*'

Where non-regular improvements or developments are planned the CHAMP should be consulted as a first step in assessing the need for detailed impact assessment, consultation, consents and/or mitigation actions. During this study only limited information was available on which assessments might be made on specific improvements or alterations which are being or might be planned.

Major road improvements are only likely to take place within the section of the A30 between Innis Downs and Dunheved Bridge where the road is currently not fully improved, the features most likely to be affected being those within the soft estate, adjacent to it, or within any area of new land-take.

In the case of the Higher Carblake to Temple (north) section of the A30, the highway upgrading to a dual carriageway will follow the current road alignment, though will necessarily occupy a larger footprint and it will also incorporate three new road junctions at Higher Carblake, at Preeze Cross and at Temple Tor. An assessment of the potential impacts of this road scheme incorporating geophysical surveys was undertaken by CAU (Parkes 2012, 201). The walkover and geophysical surveys identified the sites of two possible Bronze Age barrows, three potentially early enclosures and a possible later Bronze Age roundhouse. Other features of significance within the study area included a hundredal boundary, early bound stones (Figs 94, 97 to 99), a potential buried medieval bridge, causeway and chapel at Pounds Conce (Site 11), the Scheduled Peverell's Cross (Site 12, Fig 87), the possible remains of a further wayside cross, two Listed turnpike era milestones (Sites 5 and 10, Figs 102 and 103), the remains of a former guidepost (Site 17, Fig 94) and indications of an unsurfaced road pre-dating the turnpike on its eastern side. The surviving remains of the coaching inn at Pounds Conce (Figs 57 and 111), the former smithy at Preeze Cross (Fig 112) and evidence for tin prospecting, road-making and repairs, clay working and peat harvesting were also noted as being of local significance. The extended setting for this section of the road was noted as containing several Scheduled ceremonial monuments, together with potentially associated round house settlements and field systems.

Setting impacts likely to result from these road improvements were considered to include visual intrusion into the settings of a number of sites flanking the road (most being of National significance), and of the moorland landscape as a whole as a result of the highway improvements, and most particularly through the construction of a new overbridge at Temple Tor junction, the reinforcing of the physical barrier made by the roadline between historically coherent and linked sections of the moorland on either side of the A30, and associated visual and aural impacts on the flanking moorland and its archaeological sites.

Mitigation of the assessed physical impacts resulting from this improvement scheme is currently (2015) being addressed by means of an archaeological watching brief undertaken by CAU.

A further section of the A30 where there is the potential for future highway improvements is at the junction between the A30 and the B3257 at Plusha Junction to the east of Altarnun (between Strylands and Blackaton). This junction is currently on the level, though the B3257 forms a sometimes busy link between the A30 and Callington. Proposals are therefore currently being considered to upgrade the existing junction.

CAU has undertaken a desk-based assessment of the potential impacts of these proposals on heritage assets within the area at Plusha Junction for the CORMAC Consultancy (Fleming 2014). This identified an area of elevated archaeological potential

to the north of the currently line of the A30, including the approximate site of a potential Bronze Age barrow (MCO56602). An archaeological watching brief during the preliminary groundworks for any road junction enhancement scheme at this location has been recommended to mitigate any negative physical impacts on its archaeology which would otherwise result from the works.

An assessment has been undertaken of the potential archaeological impacts of the proposed improvements to an agricultural crossing on the A30 at Helland Junction (Parkes 2014). This desk based assessment identified a number of sites which might be affected by the proposal, including features associated with Council Barrow, a possible early enclosure, an early linear earthwork known as the Great Ditch, farmland associated with an early 19th century farmstead, tin prospecting pits, a number of post-medieval boundstones and the site of a Georgian racecourse. An archaeological walkover survey and a watching brief during the works have been recommended.

Most recently, an assessment has been made of proposed junction improvements at Callywith Gate (Lawson Jones 2015). This identified the potential from impacts on the Scheduled and Listed stone crosses at this location, as well as on a number of undesignated sites recorded in the Cornwall and Scilly HER. A follow-up walkover survey followed by possible evaluation trenching at selected locations and an archaeological watching brief during the works programme was recommended.

11.3 The potential for the enhancement of the setting of the A30

One or more of the three lay-bys in the western section of Bodmin Moor (mentioned above) has the potential for the provision of interpretative information concerning the landscape, archaeology and ecology of Bodmin Moor. Those at Peverell's Cross (which may no longer be available following the current road improvements) and Temple North are adjacent to the eastbound carriageway of the A30, whilst the Burnt Heath lay-by is adjacent to the westbound carriageway. Other moorland lay-bys exist at Colquite (westbound), Lordswaste (westbound), Minzies Downs (both westbound and eastbound), Deep Hatches to the west of Bolventor (eastbound) and Lonkey Moor (eastbound).

Off the moor to its west, there are a number of lay-bys in the section between Innis Downs Junction and Carminow Junction, but these are on fast sections of road lacking particularly good landscape views. Another lay-by exists near Callywith Junction, and, there is the potential for a pull-off area at Pounds Conce on the old section of the A30 (eastbound), though this may no longer be available once the current road improvements here have been completed. To the east of the moor there are lay-bys at Strylands, a small fuel station and cafe between Preeze Cross and Pounds Conce, a serviced parking area at Two Bridges on the by-passed section of the A30 (Fig 77) which is only accessible westbound, at Plusha Junction on the westbound carriageway (Fig 64) and others near Tregadillett, near Pennygillam Junction, and between Launceston and Dunheved Bridge (these last being within substantial cuttings).

GIS data provided by the Highways England indicates that the vegetation covering most of the verges of the A30 between Innis Downs and Dunheved Bridge (with the notable exception of those on Bodmin Moor) is classed as 'woodland', this being further identified in the associated attribute table as a mix of 'native' species (types 1 to 11) and 'ornamental' species (all type 6 with one small area of type 5 at Plusha Junction). A series of vegetation codes are utilised to identify different planting types, nine of these being present in the section of the A30 under consideration in this report. In practice the vegetation within the soft estate is most often scrub hedging or mixed scrub and native tree planting; in places the trees are both densely planted and now fairly mature. Whilst the denser and taller plantings provide efficient visible and audible screening of the A30 from adjacent settlements and dwellings, they often also close off views from the road of the surrounding countryside. Within valleys such as that occupied by the Penpont Water, this type of mature vegetation in the soft estate is appropriate to the topographical location within which it has been planted, but in some sections of the road, for instance between Kennards House and Launceston or on the

western approaches to Lanhydrock, the A30 effectively runs through a corridor of homogeneous, similarly-aged greenery through which little of the flanking landscape can be seen. On Bodmin Moor, the vegetation type 'woodland' most often denotes low scrub hedges planted against fencelines which do not block landscape views.

There are a few individual sites near the road where there is the potential for enhancement through the selective removal or thinning of roadside vegetation screens in the soft estate, the principal example being near Castle Canny near Bodmin, though there may be the potential to open up views of Launceston and its Castle through the clearance of some of the tree screen flanking the northern side of the eastbound carriageway near Trebursye. Some tree management on the northern side of the eastbound carriageway between Innis Downs and Lanhydrock would open up views towards Bodmin and the landscape to the north of the road, whilst the thinning of some of the more homogenous mature plantings elsewhere on the lowland sections of the route would open up views of the surrounding landscape and add interest to travellers' journeys through it.

12 Management Action Plan

The aim of the CHAMP is to identify practical and realistic actions and targets for the beneficial management of the hard and soft estates. Implementation of the CHAMP guidance and review of the content of the EnvIS database allows the identification of actions that can be considered within the period for which the CHAMP will apply.

The CHAMP is designed to allow identification of CHF, identification of local area designation and statutory planning conditions, an assessment of the overall landscape character adjacent to the route, identification of priority and important sites and an assessment of the condition and urgency for conservation and enhancement measures.

Given the natures of the relatively small number of CHF within the soft estate and their current conditions, no urgent priorities for works have been identified other than for those within the Higher Carblake to Temple section of the road, for which measures designed to mitigate physical impacts have been identified elsewhere (Parkes 2012, 2013). Almost all recorded CHF require periodic maintenance, and a small number are considered to be vulnerable from operational impacts, given their particular proximity to the highway.

Specific management recommendations for CHF within and immediately adjacent to Highways England soft estate are included within section 14 of this report.

A priority matrix has been used to determine the management needs of individual CHF, taking into account their significance, vulnerability and current condition, as follows:

		VULNERABILITY		
		ROBUST	ADEQUATE	FRAGILE
VALUE	HIGH	Medium	High	High
	MEDIUM	Low	Medium	High
	LOW	Low	Low	Medium
PRIORITY				

The timetable for actions recommended for each of the Priority ratings is as follows, in accordance with Highways England guidance:

High Priority : action needed within 12 months

Medium Priority : action needed within 24 months

Low Priority : review condition in 4 years

12.1 Proposals for sites within the hard estate, soft estate and buffer zones

12.1.1 Structural components making up the hard estate

The modern eastern section of the A30 in Cornwall utilises no early structural fabric, with the exception of the Turnpike era bridge over the Fowey at Palmersbridge which has been incorporated within the modern roadline. A medieval causeway and bridge might also have been incorporated into the by-passed section of turnpike road at Pounds Conce, though this is currently undetermined. The potential survival of this feature is currently (2015) being investigated by an archaeological watching brief during the road improvements between Higher Carblake and Temple Junction.

12.1.1.1 Management proposals

The conditions of historic features within the hard estate should be monitored on a regular basis in order to ensure that their fabric is not damaged by the pressures of road traffic, vibration, etc.

Site No	Site Name	Priority
11	Pounds Conce bridge/causeway (not designated)	Medium
25	Palmersbridge (not designated)	Low

Table 10: Management proposals for CHFs within the hard estate.

12.1.2 CHFs within the soft estate

There are a number of archaeological features within the soft estate, these principally consisting of historic milestones, medieval wayside crosses, a guidepost and a number of boundary stones. Only a few of these are likely to be in their original locations, most having been relocated onto new verge sites following road widening operations during the 20th century.

Milestones and wayside crosses are important historic features, illustrating the historical development of the road route. All of the milestones are Grade II Listed Buildings, whilst almost all of the crosses are both Listed Buildings and Scheduled Monuments. Such designations confer on them a high degree of statutory protection as nationally important monuments. Works to such features, unless covered by class agreements, must not be undertaken unless specific Scheduled Monument or Listed Building Consents (as appropriate) have been obtained for such operations from the relevant authority, this being Historic England in the case of Scheduled Monuments and Cornwall Council in the case of most classes of work to Listed Buildings.

The painting of milestones in white with lettering picked out in black, has been a long-standing and traditional form of maintenance for most examples within this section of the A30. For the majority of these features in the soft estate this work appears to have been undertaken relatively recently. As a result, most of these milestones continue to be relatively obvious roadside features, though masking vegetation growth adjacent to some of them can potentially place them at an elevated risk of impact damage, particularly those which are sited close to the carriageway in areas where there is little in the way of soft estate. Repainting is important as it enhances their visibility as historic features, and raises public awareness of their historic importance.

Milestones and other roadside CHFs sited within areas where significant vegetation growth needs to be periodically managed are potentially at risk of accidental damage during such activities, as this is now almost universally carried out using powerful tractor-mounted flails and mowers. Milestones adjacent to scrubby hedges or in areas where annual vegetation growth is vigorous are considered to be those most at risk of being rendered invisible during management operations.

12.1.2.1 Management proposals

- A programme of cyclic milestone and guidestone maintenance should be set in place. This will predominantly consist of the re-painting on a regular (maximum four-yearly) basis of those which were traditionally maintained in this way to maintain their visibility as important historic roadside features. Members of the Milestone Society may be interested in assisting in undertaking this work, subject to health and safety constraints.
- Milestones, guidestones and boundary stones within the soft estate should not be repositioned or their immediate settings modified unless this can be justified on an individual basis as a means to reduce their vulnerability to vehicle impact, to enhance their accessibility or in locations where their current locations will be affected by highway improvements (as in the cases of those in the section of the

A30 between Higher Carblake and Temple Junction). Statutory consent would be required for any such operations in all cases, as all are designated as Listed Buildings.

- Verge maintenance adjacent to milestones and wayside crosses should be undertaken using hand tools only and on a regular basis sufficient to prevent them becoming partially or wholly invisible. Drivers of vehicles equipped with mechanical flails or mowers undertaking verge maintenance should be made aware of the locations of these milestones, made aware of their designated statuses and the importance of avoiding damage to them.

No	Site name	Priority
1	Carminow Cross (SM, LB Grade II*)	Low
4	Milestone SW of Council Barrow (LB Grade II)	Low
5	Milestone at Blisland Junction (LB Grade II)	Low
7	Boundstone on Trenchcreek Common	Low
8	Boundstone on Trenchcreek Common	Low
9	Possible barrow west of Higher Carblake	Medium
10	Milestone east of Glenavon (LB Grade II)	Low
15	Boundary stone at Burnt Heath Junction	Low
16	Boundary stone on old A30 to the west of Temple	Low
17	Temple Tor guide post	Low
20	Boundstone adjacent to Temple east junction (not designated)	Low
21	Four Hole Cross (SM)	Medium
22	Milestone at Middle Lordswaste (LB Grade II)	Low
23	Milestone near Bolventor Church (LB Grade II)	Medium
26	Cannaframe boundary stone (LB Grade II)	Medium
27	Vincent Mine Cross (SM)	Medium
28	Milestone 800m SW of Trewintmarsh (LB Grade II)	Medium
29	Milestone 80m SW of Strylands (LB Grade II)	Low
30	Milestone on slip road to Lewannick (LB Grade II)	High
32	Holyway Cross (SM, LB Grade	Low

	II)	
33	Milestone on slip road at Kennards House interchange (LB Grade II)	High

Table 11: Management priorities for CHF's within the soft estate.

12.1.3 CHF's adjacent to the soft estate

Whilst the management of archaeological sites or features within the buffer zone adjoining the A30 is under the control of their site individual owners rather than Highways England, such management works will be subject to the approval of statutory agencies where the features or sites are designated. Activities along the roadline can sometimes have impacts on them, most particularly on their settings. Such works could include plantings, landscaping operations, new hedging or fencing, the felling or clearance of trees and scrub, and signage and road lighting proposals. Such activities would have the potential for the greatest impacts where the A30 passes close to settlements where there are likely to be designated historic buildings or in those areas where they might impact on HLC. The rural landscapes traversed by the road, particularly those which were formerly downland and moorland, have a particular open, undeveloped character, and are therefore particularly susceptible to negative impacts from some classes of work, particularly schemes including tree planting, which would introduce features of types alien to such landscapes, or the signage or lighting of junctions.

A number of CHF's lie very close to the Highways England soft estate, and are worthy of considering in the site inventory for management. These are included within Table 14 (below).

Site No	Site Name	Priority
2	Callywith Cross	Medium
3	Callywigh Cross	Medium
18	BS adjacent to the A30 on Manor Common	Low
19	BS adjacent to the A30 on Manor Common	Low
24	Holy Trinity Church, Bolventor	Low
31	Disused double bridge at Two Bridges	Low

Table 12: Management proposals for CHF's very close to the soft estate.

Some significant, and generally (but not always) nationally designated CHF's lie close to the soft estate and could potentially be affected by physical works within the soft estate such as tree felling, scrub management, drainage works, lighting or signage schemes or boundary management activities. For some CHF's in this zone there may be the potential for their enhancement through activities within the soft estate, though in most cases the responsibility for management enhancements will remain with the relevant landowners.

Name	Location	Designation	Issues and management recommendations
Innis Downs henge	SX 03109 62746	SM	Scrub growth developing on henge banks. No access. An appropriate vegetation management scheme should be agreed between Historic

			England and the landowner.
Milestone near Treffry overbridge	SX 08068 63955	LB Grade II	Generally good condition, though currently loose in its socket.
Lanhydrock Park	Centred SX 08529 63605	RPG Grade II*	Some limited visual and aural impacts to the western edge of the Park. No recommendations as tree screens already in place.
Castle Canyke	SX 08561 65828	SM	Publicly accessible, but not readily apparent as an important monument. Interpretation by others would be appropriate at this location.
Council Barrow	SX 09947 70229	SM	Significant scrub growth largely obscures this monument close to the A30. An appropriate vegetation management scheme should be agreed between Historic England and the landowner.
Former smithy at Preeze Cross	SX 11496 71094	None	Immediately adjacent to the soft estate and partially within new junction. Screening between the dwelling and the A30 might be appropriate to reduce visual and aural impacts.
Former London Inn, Pounds Conce	SX 12030 71520	None	Road improvements will place this site immediately adjacent to the soft estate. Screening between this complex and the A30 might be a means of reducing aural and visual impacts.
Medieval fields north of Temple Tor	Centred SX 13898 73596	None	Adjacent to soft estate. Some setting impacts identified. No recommendations.
Streamworks at Deep Hatches	Centred SX 18154 76096	None	Adjacent to soft estate. Very limited setting impacts. No recommendations.
Streamworks near Palmersbridge	Centred SX 18789 77504	None	Adjacent to soft estate. Limited setting impacts. No recommendations.
Field systems on Trewint Downs	Centred SX 21103 80120	None	This site overlooks the A30 and scrub development was noted during site visit. Appropriate vegetation management is recommended by the landowner.
Streamworks in Trewint Marsh	Centred SX 21751 80212	None	Immediately adjacent to road corridor. Significant willow carr development. No recommendations.

Enclosure near Strayerpark Quarry	SX 26382 8107	None	Close to A30 road corridor and partially destroyed during previous road improvements. Only recorded as a cropmark. Requires geophysical survey to determine the degree of survival of archaeological stratigraphy.
Prehistoric enclosure near Treguddick	SX 28190 82417	None	Immediately adjacent to A30 soft estate. Geophysical survey recommended to determine the survival of archaeological deposits.
Dunheved Cross	SX 33147 83632	SM	Immediately adjacent to soft estate. Moderate to high aural impacts. Further screening probably not possible.

Table 13: Management recommendations for selected CHF's flanking the soft estate.

12.1.3.1 Management proposals

- Proposals for operations within and flanking the soft estate should take account of potential impacts on the settings of CHF's within the adjoining buffer zone.
- Care should be taken when drawing up roadside planting or management schemes to ensure that CHF's and HLC within the flanking zone are not negatively impacted upon, particularly through the introduction of groups of trees in areas where these traditionally do not form significant components of the character of the area through which the road passes. The planting of trees in locations where such activity would close off existing views of landmark CHF's should be avoided.
- The design of new lighting or signage schemes should be carefully considered to prevent impacts on the settings of designated or significant CHF's within areas flanking the soft estate.
- In areas where accessible CHF's in rural areas close to the highway currently experience significant audible impacts on their settings, noise dampening tree plantings within the soft estate may be considered as a means of partially mitigating such effects. Native species consistent with the HLC of the local landscape should be used to achieve this. In practice, this approach would not be suitable on Bodmin Moor, where the prevailing vegetation consists almost wholly of low grassland on often semi-waterlogged soils, and audible impacts on CHF's within the surrounding landscape are probably incapable of mitigation.
- The adoption of 'intelligent' LED-based road lighting schemes would be one means of reducing light pollution within the landscape surrounding the A30 where it is currently lit. Such approaches have already been adopted in some other areas of Britain.
- Consideration should be given to selected lay-by based landscape interpretation proposals.
- Other opportunities for enhancement are described within Section 11.3 above.

12.1.4 Significant CHF's within the wider viewshed of the roadline

Whilst the majority of the archaeological or historical sites within the landscape flanking the roadline are passed by unnoticed by most travellers on the A30, a small are of high significance, and a number are sometimes highly visible landmarks.

At the western end of this section of the A30, the Neolithic henge at Innis Downs, just to the south of the A30 is nationally important as a Scheduled Monument, but its low form, incorporation into the surrounding fields and the fact that the nearby A30

interchange is set within a cutting significantly limits its visibility from all points on roadline. The remains of St Benet's Abbey and leper hospital are close by to the north, adjacent to the A369 road through Lanivet to Bodmin, but are hidden from the A30 by cuttings and surrounding woodland.

To the east of Innis Downs, the obelisk on Bodmin Beacon (Gilbert's Monument) is a prominent, though relatively distant landmark to the north of the road line (Fig 109); the A30 is largely invisible from the public space surrounding it. Bodmin itself contains a large number of historic buildings but few can be individually discerned from nearly two kilometres away, and the engineering of the road and its soft estate vegetation by and large afford only limited, fleeting glimpses of the landscape to north of the A30 and of the A30 from Bodmin itself. To the south of the road, the medieval wayside crosses at Reperry and St. Inguner Farm (Figs 82 and 83) sited on the northern side of the nearby ridgetop cannot be seen from the highway. Despite the proximity of Lanhydrock Park to the nearby A30, both the Park and House are invisible to the driver, whilst tree screens both block views of the A30 from the Park and dramatically attenuate road noise from it, even from close by.

The substantial Iron Age hillfort of Castle Canyke, overlooking the A30/A38 interchange to the east of Bodmin (Fig 38), goes largely unnoticed by most drivers given the combination of its agricultural appearance, its hedgeline vegetation and plantings within the soft estate; again, the A30 is largely invisible from this area of Open Access Land. The designated Carminow Cross (Site 1, Fig 85) is a highly visible feature near the centre of a roundabout at the interchange between the A30 and the A38. Cooksland Cross is on the Old Callywith Road to the north-east of Bodmin (Fig 86) whilst Callywith Cross and Callywigh Cross (Site 2 and 3) are sited near an industrial estate adjacent to the slip road onto the eastbound carriageway of the A30 at the northern end of Bodmin, but are completely hidden from view in dense scrub.

Heading eastwards from Bodmin, the road runs gently up onto the high ground of Racecourse Down past the very low and scrubbed over remains of Council Barrow, a Scheduled site which would benefit considerably from the management of the gorse and other vegetation which cloaks and surrounds it. The site of the former London Inn at Pounds Conce (Figs 57 and 111), close to the soon to be dualled section of the A30 was an important feature in the operation of the Bodmin to Launceston road until the 20th century. To the east the road climbs onto the western edge of Bodmin Moor around the flanks of Colvannick Tor, and it is from here that Bodmin Moor first comes into view, with views of its tor-crowned uplands. The surrounding landscape is open and rich in archaeological sites, including the prehistoric settlements, stone row and medieval field systems on Colvannick Tor, the medieval Peverell's Cross (Site 12, Fig 87), the 19th century clayworks surrounding Temple Tor with their flooded pits (Figs 47 and 49), and the Bronze Age stone rows, cairns and standing stones on the level land to the north of the road making up Trehudreth Downs and Manor Common. Few of these sites are apparent from the A30, however, though the landscape within which they are sited can be readily appreciated from the road and from lay-bys along it. Temple Tor, though not a major landscape feature, sites a diminutive ancient church (Fig 118), and was the site of a Templar hospice, though these sites are shielded from the A30 by the intervening hilltop and their wooded situation. The roads to and from Temple are low causeways across the marshes, and incorporate an early Scheduled bridge and a causeway (Fig 119). The Early Bronze Age Trippet Stones circle on Manor Common to the north of the road at Temple is a distant presence (Fig 39), whilst the Neolithic Stripple Stones henge is sited high up on a ridge to the north of Hawkstor Downs. Current work to re-erect some of its fallen stones will result in this site becoming more visible as a skyline feature from the Temple (north) layby. Garrow Tor, Carbilly Tor, Roughtor and Brown Willy are more distant features within the complex archaeological landscape to the north of the road, whilst Brown Gelly and the large cairns on its summit to its south beyond Colliford Lake are also prominent features from some points on the road. The A30 is virtually invisible from sites on these prominent hills.

Brockabarrow Downs to the north of the A30 beyond Temple New Bridge is open and close-grazed, but the extensive prehistoric round house settlement on its western flank consists of low rocky features on its grassy slopes, and like the cairns on its summit, is hard to pick out from the road. There is, at present, no lay-by adjacent to this part of the moor from which these sites can be explored, despite their Open Access status under the CROW Act 2000.

Around Bolventor the pattern of late enclosure fields becomes apparent, but the modern road bypasses the Jamaica Inn and its associated settlement in a cutting, and the views to the east are of Lonkeymoor near Palmersbridge and the rising ground to the nearby Beacon on Hendra Downs and Trewint Tor to the north of the road (these again being Open Access areas under the Crow Act 2000 which can be accessed from Westmoorgate after turning off the A30 at Trewint). These hills site significant archaeological sites and offer superb views over the surrounding countryside. The more distant high ground of Leskernick Hill, flanked by round house settlements and field systems is also glimpsed from the road in the eastern part of the Moor. Two Early Bronze Age stone circles and a stone row are sited to the immediate south-east of this hill, but lie behind The Beacon. Roughtor, Garrow Tor and Brown Willy are closer to the A30 at this point, and are garlanded by many important archaeological sites (for an overview of some of the complex group of sites on Garrow Tor, see Fig 41), but their distance from the road renders these invisible.

The highest point of Bodmin Moor in this section of the road is at 299m OD on Webb's Downs just to the south-west of Canaframe, and from this point onwards the road runs more or less on the level to the north-east before descending to Trewintmarsh. East Moor, to the south of the A30, is rich in prehistoric round house settlements with their associated field systems and the tor which forms its summit is crowned with substantial prehistoric cairns, whilst West Moor to the north of the A30 contains some of the most extensive and best-preserved tin streamworks to be found anywhere on Bodmin Moor (Fig 43).

The moorland landscape is characteristically open, and much of the route of the A30 across it runs on the level, allowing views of, if not specific monuments, of the prominent hills on and around which they are sited and the character of the moorland within which they are sited. In contrast, from the moorland edge north-eastward from Trewint, the monuments within the countryside fringing the road tend to be hidden by road cuttings or by roadside vegetation, as well as the often mature hedges bordering the long-established fields through which this part of the route runs. Likewise, the roadline is almost universally invisible from sites in the surrounding landscape.

Altarnun and Lewannick churches are both less than a kilometre from the A30, but are almost always hidden from it by the local topography. Holyway Cross (Site 32, Fig 90) is, however, close to the northern section of the A30 near Hicks Mill and is briefly glimpsed when passing along the east-heading section of the carriageway. Rings Wood hillfort, though well preserved is, as its name implies, within deciduous woodland and just over a kilometre to the north of the Kennard's House interchange, and is thus not intervisible with the A30. The medieval-derived character of the farmland flanking this section of the A30 is not readily apparent, given that much of this section of the road is either within cuttings, or is flanked by mature roadside tree plantings.

Despite being a site of very considerable importance during the medieval period, Launceston Castle (Figs 51, 79 and 126) is almost invisible when approaching the town along the A30 from the west given the tree screens adjacent to the road, though the castle dominates the surrounding settlement from closer up.

Only a few classes of highway management activities have the potential to negatively impact on the appreciation of these distant monuments. These primarily comprise tree planting or new hedging within the soft zone, the erection of intrusive signage or road lighting or the creation of other forms of screening which might obscure or detract from current views of roadside or more distant monuments.



There are, however, some opportunities to enhance these archaeological monuments and landscapes. Many of the sites on Bodmin Moor are within open access land under the CROW Act 2000; a substantial number lie only short distances from the route of the A30, and are potentially readily accessible by visitors, though existing lay-bys do not often abut access points onto the moorland.



Bodmin Moor's rich archaeology is not currently interpreted for those who pass through it along the A30. Given the presence of several lay-bys along the road route, there is clearly the potential for these to site interpretation panels, especially at those locations which provide particularly good viewpoints across the nearby moorland, some of which could be enhanced as picnic/rest stops. It is understood that the lay-by off the eastbound carriageway near Peverell's Cross is likely to be closed down as a result of the current highways improvements, but the lay-bys at the junction of the A30 and the western road to Temple at Burnt Heath and next to the eastbound carriageway to the north of Temple would be suitable locations for such interpretative material. There might also be some potential to further enhance the picnic stop at Two Bridges to provide information about the landscape which travellers will subsequently traverse on their journeys westwards.

Tree planting in the soft estate seems to have been a deliberate element of the road improvements undertaken along the A30 in its off-moor sections. Whilst this has helped to mask the presence of the road, both locally and within the wider landscape, along some sections of the road, these plantings now take the form of a homogenous and impenetrable visual screen through which no feeling for the character of the landscape through which the road passes can be got. The thinning or removal of some of the linear belt of trees in the soft estate of the A30 on its northern side of the A30 between Innis Downs and Lanhydrock would open up views of Bodmin and the landscape surrounding it, and there might be the potential to take a similar approach in places between Kennards House and Launceston.



13 Condition and management recommendations for CHF within and immediately adjacent to the Highways England estate

See Figures 133 to 140 for site locations.


Site	Site name	Status	Location	Priority / Condition	Description and recommendations	Photograph
1	Carminow Cross	SM, LBII*	SX 08823 65692	<p><u>Priority:</u> Low</p> <p><u>Condition:</u> Good. On roundabout at junction of A30 and A38. Re-sited.</p>	This tall medieval wayside cross has been re-sited on a roundabout at the interchange between the A30 and the A38, and is within the Highways England estate. The current management is considered appropriate, and should be continued.	
2	Callywith Cross	SM, LBII	SX 08572 67951	<p><u>Priority:</u> Medium</p> <p><u>Condition:</u> Rather poor. Within dense undergrowth adjacent to the Highways England estate.</p>	This medieval wayside cross is documented at a location immediately adjacent to the Highways England estate. Despite its designated status, this CHF is poorly displayed. The proposed reorganisation of Callywith Junction may provide an opportunity to rectify this.	


3	Callywigh Cross	LBII	SX 08568 67953	Priority: Medium	This medieval wayside cross is documented at a location immediately adjacent to the Highways England estate. Despite its designated status, this CHF is poorly displayed. The proposed reorganisation of Callywigh Junction may provide an opportunity to rectify this.	
				Condition: Poor. Within dense undergrowth adjacent to the Highways England estate.		
4	Milestone SW of Council Barrow	LBII	SX 09894 70150	Priority: Low	This turnpike era milestone is sited within the Highways England estate. No maintenance is required except for periodic repainting. Mechanical flails should not be used within 5m of the feature.	
				Condition: Good. Extant though possibly re-sited.		


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5	Milestone at Blisland Junction	LBII	SX 10304 70461	<p><u>Priority:</u> Low</p>	<p>This turnpike era milestone is sited within the Highways England estate on the road verge close to the carriageway. Its site was not accessible during the 2015 fieldwork.</p> <p>Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature.</p> <p>Clean and paint milestone and lettering on a regular basis.</p>	
				<p><u>Condition:</u> Good. To be re-set back from highway on new verge.</p>		
6	Boundary stone on Trencreek Common	None	SX 10348 70516	<p><u>Priority:</u> Low</p>	<p>A boundstone on an early manorial, parish and hundredal boundary adjacent to the eastbound carriageway of the A30 (Parkes 2012 site 5). Not accessible during the 2015 fieldwork.</p> <p>Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature.</p>	
				<p><u>Condition:</u> Good, though surrounding area somewhat overgrown.</p>		

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7	Boundary stone on Trencreek Common	None	SX 10463 70695	<u>Priority:</u> Low	Probable boundstone in scrubbed in area close to the eastbound carriageway of the A30 (Parkes 2012 site 8). Not accessible during the 2015 fieldwork. Identify whether this CHF survives. Keep surrounding vegetation from encroaching.	No image available.
				<u>Condition:</u> Uncertain.		
8	Boundary stone on Trencreek Common	None	SX 10643 70705	<u>Priority:</u> Low	Broken, recumbent boundstone on early manorial manor, parish and hundredal boundary immediately adjacent to the A30 (Parkes 2013 site 9). Not accessible during the 2015 fieldwork. A report produced by Preston-Jones (2014) set out the methodology for re-siting this feature at the conclusion of the road works programme. Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of the feature.	
				<u>Condition:</u> Fair. It is understood that this CHF will be re-sited as part of the current road works.		

9	Possible barrow west of Higher Carblake	None	SX 10675 70627	<u>Priority:</u> Medium	A possible barrow near Higher Carblake identified by Parkes (2012 site 15) which will be within the road loop of the new interchange being constructed at this location. Not accessible during the 2015 fieldwork. It has been recommended that the design for the interchange protects the archaeological potential of this site.	No image available.
				<u>Condition:</u> Uncertain. Substantially ploughed down, though still surviving as a low earthwork.		
10	Milestone to the east of Glenavon	LBII	SX 11276 70969	<u>Priority:</u> Low	This turnpike era milestone is sited within the Highways England estate on the road verge close to the carriageway. Not accessible during the 2015 fieldwork. It has been proposed that it is removed from its current location and relocated adjacent to the re-designed carriageway following the completion of the roadworks. A methodology for these works is set out by in a CAU report (Preston Jones 2014). Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature. Clean and paint milestone and lettering on a regular basis.	
				<u>Condition:</u> Good. To be re-set back from highway on new verge.		


11	Pounds Conce bridge site, London Inn and associated buildings	None	SX 12096 71556	<p><u>Priority:</u> Medium</p> <p><u>Condition:</u> Although some of the structures associated with this roadside settlement have been lost, the former inn and Brewhouse are in fair to good condition, though are now physically separated from the road which brought them into being. No above ground traces of the bridge/causeway or chapel/cross are visible.</p>	<p>A former coaching inn, brewhouse, stables and associated infrastructure on the northern side of the A30 just to the west of Colvannick Tor. This was also the site of an annual fair during the post-medieval period and was the site of a medieval bridge, causeway and chapel or cross. Not accessible during the 2015 fieldwork.</p> <p>The current roadworks will impinge negatively on the setting of this complex, and may damage buried archaeology associated with the bridge and causeway. Physical impacts will be mitigated by an archaeological watching brief during the 2015-2017 works programme. Tree screening would probably be inappropriate in this moorland fringe setting, and it is difficult to see how these impacts could be diminished.</p>	
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12	Peverell's Cross	SM	SX 12503 72231	<p><u>Priority:</u> Low</p>	<p>This Scheduled medieval wayside cross is sited at its original location at the interface between the open moorland and the enclosed land to the west, having been built into a hedgeline immediately adjacent to the edge of the Highways England soft estate. It is to be protected from accidental damage during the 2015 to 2017 roadworks by temporary fencing. Not accessible during the 2015 fieldwork.</p>	
				<p><u>Condition:</u> Good. To be protected from damage during current roadworks.</p>		
13	Boundary stone on Trehudreth Common	None	SX 12611 72316	<p><u>Priority:</u> Low</p> <p><u>Condition:</u> Good.</p>	<p>Boundstone marking the edge of the Trehudreth Estate sited in grassy downland to the north of the eastbound carriageway of the A30 Parkes 2012 site 60). Not accessible during the 2015 fieldwork.</p> <p>Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature.</p>	No image available


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14	Boundary stone on Trehudreth Common	None	SX 12947 72489	<u>Priority:</u> Low	Boundstone marking the Cardinham/Blisland boundary on Trehudreth Downs in grassy downland to the north of the eastbound carriageway of the A30 (Parkes 2012 site 72). Not accessible during the 2015 fieldwork. Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature.	
				<u>Condition:</u> Good.		
15	Boundary stone at Burnt Heath Junction	None	SX 13207 72533	<u>Priority:</u> Low	This boundstone is sited adjacent to the lay-by at Burnt Heath Junction, and appears to have been relocated from its documented site a few metres to the north. Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature.	
				<u>Condition:</u> Good.		
16	Boundary stone adjacent to former route of A30 west of Temple	None	SX 13452 73505	<u>Priority:</u> Low	The OS document a boundstone at this location. This location was not accessible during the 2015 fieldwork. This now disused section of the former A30 is being used by construction traffic. A report produced by Preston Jones in 2014 sets out the methodology to be used for re-siting this feature once the roadworks have been completed.	
				<u>Condition:</u> Good in 2014.		



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17	Temple Tor guidepost	None	SX 13635 73625	<u>Priority:</u> Low	This guidepost was relocated from the northern side of this junction during previous road improvements. It is to be lifted, placed into secure storage and relocated near its original location as part of the improvement scheme. A replica frame and finger boards are to be fitted to the guidestone during the works.	
				<u>Condition:</u> Good, though missing its fingerboards and their supporting iron brackets. Temporarily removed from its former location pending re-location.		
18	Boundary stone on Manor Common	None	SX 14374 74040	<u>Priority:</u> Low	The OS mapping documents a boundstone immediately adjacent to the soft estate next to the eastbound carriageway of the A30. Location not accessible during the 2015 fieldwork. If the boundstone survives, the surrounding vegetation should be managed to prevent encroachment.	No image available
				<u>Condition:</u> Uncertain, possibly removed.		
19	Boundary stone on Manor Common	None	SX 14693 74086	<u>Priority:</u> Low	The OS mapping documents a boundstone immediately adjacent to the soft estate next to the eastbound carriageway of the A30. Location not accessible during the 2015 fieldwork. If the boundstone survives, the surrounding vegetation should be managed to prevent encroachment.	No image available
				<u>Condition:</u> Uncertain, possibly removed.		


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20	Boundary stone adjacent to Temple east junction	None	SX 16276 74175	<p><u>Priority:</u> Low</p> <p><u>Condition:</u> Uncertain, possibly removed.</p>	<p>The OS mapping documents a boundstone on the verge of the westbound carriageway of the A30 adjacent to the eastern Temple junction. Location inaccessible during the 2015 fieldwork.</p> <p>If the boundstone survives, the surrounding vegetation should be managed to prevent encroachment.</p>	No image available
21	Four Hole Cross	SM	SX 17151 74956	<p><u>Priority:</u> Medium</p> <p><u>Condition:</u> Fair. Re-sited onto side of cutting in soft estate. Fair, though surrounding encroaching vegetation does not appear to have been cut back for some time.</p>	<p>This Scheduled medieval wayside cross has been relocated onto the top of the slope of the road cutting near its original location.</p> <p>Keep surrounding scrub vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature.</p>	

A30 Innis Downs to Dunheved Bridge CHAMP


22	Milestone at Middle Lordswaste	LBII	SX 17250 75095	<p><u>Priority:</u> Low</p>	<p>This turnpike era milestone is located on the verge adjacent to the southern carriageway of the A30. It is located immediately behind a section of crash barrier.</p> <p>No specific works are recommended for this CHF, though it should be repainted on a regular basis. Hand tools rather than flails should be used within 5m of this feature.</p>	
				<p><u>Condition:</u> Good. Both protected by and somewhat masked by the adjacent crash barrier.</p>		
23	Milestone near Holy Trinity Church, Bolventor	LBII	SX 18007 76438	<p><u>Priority:</u> Medium</p>	<p>This turnpike era milestone is sited on the road verge adjacent to the western carriageway of the A30, and is close to the highway.</p> <p>Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature. Clean and paint milestone and lettering on a regular basis.</p>	
				<p><u>Condition:</u> Fair, though at risk from traffic impacts.</p>		

24	Holy Trinity Church, Bolventor	LBII	SX 18011 76546	<p><u>Priority:</u> Low</p>	<p>This mid-19th century church became separated from the associated settlement of Bolventor when the nearby by-pass was constructed. The A30 passes very close to the church and its associated cemetery, resulting in significant visual and audible impacts.</p> <p>Thought should be given to the provision of additional tree screening between the churchyard and the A30 to reduce these impacts.</p>	
				<p><u>Condition:</u> Fair, though significant setting impacts. The church is currently being conserved by its private owners.</p>		
25	Palmersbridge	None	SX 19228 77612	<p><u>Priority:</u> Low</p>	<p>A stone-arched turnpike era bridge carrying the west-heading carriageway of the A30 over the River Fowey.</p> <p>Unless significant bridge-strengthening activities are proposed, no management activities are recommended.</p>	
				<p><u>Condition:</u> Good. Incorporated into modern highway under westbound carriageway.</p>		

26	Boundary Stone near Higher Cannaframe	LBII	SX 19892 78179	<p><u>Priority:</u> Medium</p>	<p>A small pyramidal-headed boundstone set close to the westbound carriageway, apparently relocated from a site adjacent to the eastbound carriageway. This location was not safely accessible during the 2015 fieldwork.</p> <p>The relocation of this CHF slightly further away from the highway might be advantageous. Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of the monument.</p>	No image available.
				<p><u>Condition:</u> Good though impacted upon by its close proximity to the highway.</p>		
27	Vincent Mine Cross	SM	SX 20825 79337	<p><u>Priority:</u> Medium</p>	<p>This medieval wayside cross is sited within the Highways England soft estate adjacent to a lay-by off the eastbound carriageway of the A30.</p> <p>Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature.</p>	
				<p><u>Condition:</u> Fair. This short Latin cross is rather hidden in long grass beside a lay-by and is at some risk of collision damage in its current surroundings.</p>		

28	Milestone 800m SW of Trewintmarsh	LBII	SX 21269 79993	<p><u>Priority:</u> Medium</p> <p><u>Condition:</u> Fair, though at some risk of impact damage given the long vegetation which surrounds and partially masks it.</p>	<p>This turnpike era milestone is sited immediately adjacent to the northern carriageway of the A30 close to a prominent road sign for the eastbound Trewint junction.</p> <p>This milestone is somewhat hidden by vegetation and at risk of vehicle impact, or damage by mechanical flails during verge maintenance. The vegetation surrounding this milestone should be cut back to maintain the visibility of the CHF. Hand tools rather than flails to be used within 5m of this feature. Clean and paint milestone and lettering on a regular basis.</p>	
29	Milestone 80m SW of Strylands	LBII	SX 24115 80336	<p><u>Priority:</u> Low</p> <p><u>Condition:</u> Good.</p>	<p>This turnpike era milestone is in a lay-by adjacent to eastbound carriageway of the A30.</p> <p>Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature. Clean and paint milestone and lettering on a regular basis.</p>	

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30	Milestone on slip road to Lewannick	LBII	SX 26690 81284	<p>Priority: High</p> <p>Condition: No longer at documented location.</p>	<p>This turnpike era milestone is documented as being sited within a narrow triangle of ground between the A30 to the north and a slip road off the westbound carriageway of the A30.</p> <p>The current location of this milestone should be established and it should be re-positioned at its recorded location if found.</p>	No image available
31	Disused double bridge at Two Bridges	LBII	SX 27056 81662	<p>Priority: Low</p> <p>Condition: Within a by-passed section of the A30, currently used as a serviced parking area adjacent to the modern roadline. The unusual double bridge is in good condition, though very obscured by shrubby vegetation. There are significant fly-tipping issues at this site.</p>	<p>A complex, substantially well-preserved turnpike era stone-constructed double arched bridge on a section of the former A30 to the east of the modern carriageway. Its southern arch is abutted by a strip of woodland within the Highways England soft estate. The stream course to the north appears to have been culverted on its western side where the arch is no longer visible, its location now lying under levelled ground adjacent to the soft estate which has been converted into a visitor parking area. The Penpont Water and River Inny are carried under the A30 through a concrete bridge. Keep surrounding vegetation including tree growth from encroaching on the bridge.</p>	

A30 Innis Downs to Dunheved Bridge CHAMP


32	Holyway Cross	SM LBII	SX 227278 82323	<p><u>Priority:</u> Low</p> <p><u>Condition:</u> Good. Re-sited on soft estate. Set on the road verge well away from passing traffic.</p>	<p>This medieval wayside cross is sited on an open grassy area within the Highways England soft estate at the junction between the northern carriageway of the A30 and the Polyphant road.</p> <p>The cross is readily visible and set back from the edge of the carriageway, though its setting is somewhat intruded upon by modern road signage.</p> <p>Keep surrounding vegetation from encroaching. Hand tools rather than flails to be used within 5m of this feature.</p>	
33	Milestone at SX 2910 8322 near Kennards House interchange	LBII	SX 29145 83268 HER records the site as SX 29100 83273	<p><u>Priority:</u> High</p> <p><u>Condition:</u> No longer at either documented location.</p>	<p>This turnpike era milestone was re-sited on a grass verge adjacent to the slip road onto the northern carriageway of the A30 at the Kennards House interchange, but has since been removed from this location.</p> <p>The current location of this milestone should be established and it should be re-positioned at its recorded location.</p>	No image available.

Table 14: Condition and management recommendations for CHF's within and immediately adjacent to the Highways England estate.

14 Conclusions/discussion

Research has revealed much of the long history of the road now designated as the A30. The route taken by the road along the spine of Cornwall from Launceston to Penzance suggests that it may well have long been part of a significant long distance communications network, though this was not formalised until the 18th century, and even into the early 19th century alternative routes existed for long distance road users travelling into Cornwall from Devon. A small number of hamlets developed along the A30 between Bodmin and Launceston to serve the needs of travellers, but on Bodmin Moor the only example was Bolventor, whose Jamaica Inn must have been a welcome sight to early road users.

During the 20th century, the advent of motorised vehicles and increasing levels of traffic on the A30 necessitated increasing improvements to this trunk route, these culminating in the construction of a series of bypasses to remove bottlenecks, and dual carriageways to increase traffic flow through the county. The road now avoids, rather than links, the settlements of Bodmin, Temple, Bolventor, Fivelanes, Polyphant, Tregadillett and Launceston which were formerly on the route of the road we now call the A30.

Almost the whole of the course of the A30 from Innis Downs to the River Tamar at Dunheved Bridge has been upgraded to a dual carriageway, and the only section which had, until 2015, not been upgraded is currently (2015-2017) the subject of major improvement works.

All sections of the modern A30 roadline now (2015) overlie or replace the earlier turnpike routes and have been upgraded to modern trunk road standards. The hard and soft zones of these dualled sections of the A30 now contain very few archaeological features or sites, and there are therefore effectively almost no cultural heritage constraints on the future operation of these parts of the road. Few requirements for management recommendations to specific CHF's have emerged during this study as a result.

The sites of thirty-seven CHF's within or immediately adjacent to the Highways England soft estate were recorded, these consisting of ten turnpike era milestones, eight medieval wayside crosses, eleven boundary stones, a guidepost, a turnpike era bridge, a 19th century church, a coaching inn, a barrow, a possible barrow and a cropmark late prehistoric enclosed settlement. The hard estate contains one known CHF: a turnpike era bridge beneath the modern road corridor at Palmersbridge, though there is the possibility for parts of a medieval bridge and causeway to survive beneath the highway at Pounds Conce.

The designated milestones which have been removed from their documented locations have been graded red; the remainder of the CHF's within the Highways Estate have been graded either green or amber dependant on their condition and vulnerability to damage.

Until very recently, most of the milestones erected by the turnpike trusts remained active elements of the road infrastructure, and were thus both retained and maintained. These have now been declared officially redundant. Most, whether in the Highways England estate or adjacent to the former route of the A30 are in fair to good condition, and many appear to be relatively recently maintained and painted. Modern hedge and verge-cutting methods using powerful tractor-mounted flails and mowers can, however, put these features at considerable risk of accidental damage. Significantly, some Grade II Listed milestones are no longer at their documented locations, and are assumed to have been removed, either legally or illegally. The current locations of these roadside features should be investigated, and, if these designated features still survive, they should be reinstated in either their original locations or in ones near these which ensure their visibility without compromising their safety. The surviving extant milestones and crosses are all nationally designated, but

most require a relatively low level of maintenance attention. A small number of roadside features are considered to be at elevated risk of vehicle collision, and their relocation further back from their current sites on the edge of the highway might be an appropriate means of reducing the potential for damage to occur to them. All surviving milestones should be kept clear of vegetation and repainted in order to restore their original prominence next to the road. Consideration should be given to carrying out a programme of micro-chipping all nationally designated roadside milestones to assist in their identification should they be illegally removed from their current locations.

Where significant road improvements have been carried out in recent years (or are currently being undertaken), the losses of important archaeological sites have been archaeologically mitigated in advance of their removal. A number of other archaeologically-significant sites are currently (2015) being fully recorded in advance of their loss to construction activities. This was not the case during most previous road improvement schemes, however, and the degree of loss of archaeological information during road improvements during the 1970s and 1980s cannot be quantified, though might have been substantial.

Full archaeological assessments should be undertaken in advance of any proposed new road schemes, including road widenings and the redesign of existing level grade junctions, to determine the potential for impacts on archaeological features, sites and landscapes, including below-ground archaeology. Appropriate mitigation measures should be undertaken where such assessments identify potential negative impacts on significant sites, or areas with elevated archaeological potential.

The road exerts its presence on much of the landscape through which it passes, though this impact varies in its nature and significance. Where the road has been dualled and largely runs through cuttings, this interaction is generally reduced to audible impacts within fairly restricted zones on either side of the highway. From Colvannick Tor to Trewint the road traverses Bodmin Moor and substantial parts of the route are on the level and open to the surrounding moorland. As a result, both visible and audible impacts result, but are in most cases incapable of mitigation. Open, high-speed sections of the route as a whole, particularly those with rougher or older surfacings, can exert an audible presence on sites within the surrounding landscape to distances in excess of 1km, dependant on weather conditions.

15 Appendix 1: Agreed project methodology

Extent of the CHAMP

The CHAMP will cover the section of the A30 from Innis Downs roundabout to the west of Bodmin to Dunheved Bridge across the River Tamar just to the east of Launceston.

Methodology

The methodological approach set out below is based on that set out in the Highways England document *Design Manual for Roads and Bridges* (DMRB) Volume 10, Section 6, Part 2 and *Interim Advice Note* (IAN) 84/10, Part 4, Amendment 2. The methodology also takes into account the advice contained within DMRB Volume 11 and IAN 15/08, Revision 1.

Review of existing Database

The EM (now Kier Highways Ltd.) Environment team will supply Cornwall Archaeological Unit with an inventory of existing cultural heritage assets on the section of the A30 from Innis Downs to Dunheved Bridge and a copy of the relevant entries in the EnvIS database of asset locations. The completeness of this database will be reviewed through comparison with data sources held by or accessible to Cornwall Archaeological Unit, Cornwall Council, including information relating to sites and landscapes which are designated at either national or local levels, sites which are recorded in the Cornwall and Scilly Historic Environment Record (HER) and sites which have been recorded from the analysis of aerial photographs.

Data Collection

Data collection will cover

- The Soft Estate
- Its wider context

The following data capture protocols (based on the A38 pilot CHAMP for the A38 (East Cornwall)) will be utilised:

CHMP Zone	Measured from	Data capture level
Hard/soft estate (rural areas)	N/A	All CHF's (desktop and field survey)
100m buffer (rural area)	Road centreline	All CHF's (desktop only)
500m buffer (rural area)	Road centreline	Scheduled Monuments, Listed Buildings and non-statutory designations (desktop study only)
Hard/soft estate (urban zone)	N/A	All CHF's (desktop and field survey)
100m buffer (urban area)	Road centreline	All CHF's (desktop only)
1000m buffer	Road centreline	HLC and significant sites within the viewshed

In the first instance a search corridor will be established by buffering the road centreline to distances of 50m, 100m, 500m and 1000m on each side using ArcGis tools to allow the capture of historic environment assets (including Historic Landscape Character) within each of the buffer zones. A DTM-based viewshed will be created, again based on the road centreline (but in this instance out to 1km from it), to identify individual historic environment assets and landscape areas which are theoretically

intervisible with the road corridor within each of the buffer zones. This approach will also provide a tool for the identification of significant sites or landscapes whose setting may be affected by the road or which form key elements of the landscape flanking the road.

The project will also research the history and development of the road itself, including the identification and significance of any surviving historic elements.

Desk Study

GIS Layers

GIS digital mapping linked to a database will form the basis of the survey and will be developed utilising data sources accessed by Cornwall Council's Historic Environment Record's GIS. This includes many of the data sources outlined in the CHAMP Guidance, notably those relating to:

- The Cornish Mining World Heritage Site
- Scheduled Monuments
- Registered Parks and Gardens
- Historic Battlefields
- Listed Buildings
- Areas of Outstanding Natural Beauty
- Conservation Areas
- County designations, including Areas of Great Historic Value
- Historic Landscape Character
- The Cornwall and Scilly Sites and Monuments Record
- Historic mapping, including the *circa* 1807 1st Edition 1" to a mile mapping, *circa* 1840 parish tithe maps and *circa* 1880 and 1907 Ordnance Survey 25" to a mile mapping.
- The National Mapping Programme data which has plotted all archaeological sites visible on aerial photographs.

15.1 Historic Landscape Character

A Cornwall-wide historic landscape characterisation was undertaken in 1994. More detailed reviews of the original characterisation have been undertaken in some parts of Cornwall. The results of both the original characterisation and subsequent studies are accessible via GIS layers which will be interrogated during the desk-study.

The database

The information generated during the data collection stage will be utilised to create data tables which will sit behind the GIS layers; this information will be stored in a DBF format which will adhere to the MIDAS standard. The data will be capable of display in the form of polygons, points and lines (dependant on the nature of the individual assets). The GIS archive will conform to the Dublin Core Metadata Standards. Terms used in the database terms will conform to the English Heritage approved thesaurus.

The outputs from the database will generate maps utilised during the fieldwork stage and for the report displaying:

- identified sites
- extant sites
- historic landscape characterisation mapping

- designations (WHS areas, Registered Parks and Gardens, Conservation Areas, Scheduled Monuments and Listed Buildings)
- viewshed mapping showing the extents of visual links between the road and both individual sites and landscapes in the areas flanking it.

Fieldwork

The fieldwork strategy will conform to the requirements of Highways England in relation to working adjacent to a highway and will be submitted to EM for approval in advance of the fieldwork being undertaken. Appropriate pre-fieldwork training for the field staff (in cases where this training was not received in 2014) will be in the form of an induction to be arranged with Alan Wood of EM (07748 146894) at the CORMAC Scorrier depot. A risk assessment will also been completed and submitted for approval. Arrangements will be made with Alan Wood for 'survey signs' to be set out in both directions along the highway at 5km intervals (or shorter distances where appropriate) on days when survey will be undertaken and field staff will be walking adjacent to the highway.

The fieldwork stage of the project will involve the assessment of already-recorded sites and landscapes, as well as the identification of previously unrecorded sites, should these be found to exist. Historic components of the road itself will also be recorded, as will the landscape which flanks its corridor.

The following will be visited during the fieldwork phase of the project:

- All sites identified during the desk-study which lie within the Soft Estate and the 100m buffer zone (unless no public access is available to these).
- Locations identified either during the desk study or during the preliminary drive through survey where it is considered that there may be the potential for the presence of unrecorded archaeological or historical sites.

Within the flanking zone out to 1km from the road centreline the following will be considered:

- The Historic Landscape Character of the landscape which the road traverses, as this may influence management decisions within the Soft Estate.
- Key sites whose setting may be affected by highway management actions, or which are particularly significant elements of the landscape through which the highway runs.
- Opportunities for management to enhance the settings of sites within and flanking the highway corridor.

Visits will also be made to selected sites and locations within the landscape flanking the Soft Estate to assess both the influence of the highway on their settings and to take photographs illustrating the character of the landscape through which the road passes and its contribution to that landscape.

Information for each archaeological site or area within the Soft Estate and the 100m buffer zone will be recorded to a standard format, which will include descriptions and assessments of significance, condition and vulnerability. Priority ratings will be identified for each component within the hard and soft estates. Data collection will be undertaken utilising a tablet computer running software which will allow the transfer of the fieldwork results into the GIS database.

The fieldwork will be undertaken as a preliminary drive through assessment followed by walkover surveys to selected sites, and will include:

- Visits to sites and areas identified from the desk based assessment.
- High definition (minimum 10 Mp) digital photography of accessible features within the Soft Estate, together with selected sites and landscapes within

the buffer zones, particularly those which display particularly good examples of Historic Landscape Character. A device attached to the camera will allow for incorporation of GPS positional information within the image EXIF data.

- A review of the Historic Landscape Characterisation areas captured during the desk based survey
- An assessment of the issues affecting and management needs of sites and landscapes within the Soft Estate.
- A consideration of opportunities for the potential enhancement of relevant sites and landscapes within the landscape flanking the road corridor.

Note: the section of the A30 between Temple and Carblake is currently being dualled and there will be no access to this section of the A30 for fieldwork. Data and condition surveys carried out by CAU in advance of the road works taking place will be utilised to inform the CHAMP, in particular the study carried out by Parkes in 2012 and 2013.

Updating of database

The GIS mapping and underlying database will be updated following the completion of the fieldwork.

Production of CHAMP report

The proposed report structure is outlined below. A distinction will be made throughout between the Soft Estate and the corridor or environs, and for descriptive purposes the road will be divided into manageable sections, according to general historic landscape zones and/or topography. The A30 between Innis Downs and Dunheved Bridge will be described in separate sections, as follows:

- Innis Downs to Callywith Junction (the Bodmin Bypass)
- Callywith Junction to Higher Carblake (Bodmin Moor western approaches)
- Higher Carblake to Temple Junction (the road section currently being improved)
- Temple Junction to Fivelanes Junction (Bodmin Moor)
- Fivelanes Junction to Kennard's House (Bodmin Moor eastern approaches)
- Kennard's House to Dunheved Bridge (Launceston Bypass)

Report structure

- Summary
- Introduction
 - Background
 - Objectives
 - Methods
- Historical and archaeological summary
 - Overview
 - For each section of the road line:
 - Soft Estate - the road, history, features, etc.
 - Buffer zone - historic character, key sites
- Significance
 - Overview
 - For each section of the road line:
 - Designations
 - Statement on key sites, heritage values etc.
- Impacts and issues

- Individual features within the Soft Estate
- Impacts of the road on the significance and setting of sites and landscapes within the buffer zone
- Management recommendations
 - The report will identify practical and realistic actions and targets for cultural heritage features and for beneficial management of the Soft Estate (and where relevant, selected features / sites within the buffer zone) for the period 2015 – 2019

Soft Estate: proposals on a site by site basis

Buffer zone: proposals for specific selected sites

Outputs

The project outputs will consist of the following:

- A30 Innis Downs to Dunheved Bridge CHAMP report with associated figures and appendices.
- Updated EnvIS data.

A draft version of the CHAMP report and the associated EnvIS data will be supplied to EM on DVD for review by Highways England.

The final version of the CHAMP report, maps, associated documentation and the EnvIS data will be provided to EM on a DVD. Two hard copies of the CHAMP report will also be supplied.

Project timetable

The initial data collection stage of the project will be undertaken in July 2015, subject to approval of the draft method statement, agreement of a cost breakdown, the signing off of Part 2 of briefing statement ref: HA1-4433828. Approval of a finalised method statement and risk assessment will be required before the commencement of the fieldwork stage.

Key dates

- End September 2015: Project progress meeting, Cornwall Archaeological Unit office, Truro.
- 20th November 2015: Draft CHAMP and EnvIS data to be provided to EM Project Manager for review and check on data compatibility.
- 18th December 2015: Comments of report draft and EnvIS data to be returned to CAU.
- 12th February 2016: Final CHAMP and EnvIS data to be supplied to EM. Project signoff by EM.

Archiving

An ordered and integrated site archive will be prepared in accordance with Management of Research Projects in the Historic Environment (MoRPHE) English Heritage 2006 upon completion of the project. As the project is likely to produce solely a documentary archive this will be deposited with the Cornwall Record Office as well as the Courtenay Library of the Royal Institution of Cornwall.

The archiving will comprise the following:

1. All correspondence relating to the project, the WSI, a single paper copy of the report together with an electronic copy of the report and database on DVD, stored in an archive standard (acid-free) documentation box.
2. The project archive will be deposited initially at ReStore PLC, Liskeard and in due course (when space permits) at Cornwall Record Office.

Systems and standards

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

Cornwall Archaeological Unit is a Registered Organisation with the Chartered Institute for Archaeologists and follows their Standards and Code of Conduct.

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

Contract

Cornwall Archaeological Unit is part of Cornwall Council. If accepted, the contract for this work will be between the client and Cornwall Council.

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

Project staff

The project will be managed by a nominated Senior Archaeologist (Adam Sharpe BA MCIfA) who will:

- Discuss and agree the detailed objectives and programme of each stage of the project with the client and the project staff, including arrangements for health and safety.
- Monitor progress and results for each stage.
- Edit the project report.
- Liaise with the client regarding the budget and related issues.

All work will be carried out by suitably qualified and experienced Cornwall Archaeological Unit staff. The survey team will comprise:

- Adam Sharpe BA MCIfA, Senior Archaeologist, asharpe@cornwall.gov.uk, tel: 07968 892146
- Richard Mikulski, Archaeological Consultant, rmikulski@cornwall.gov.uk, tel: 01872 323509

Copyright

Copyright of all material gathered as a result of the project will be reserved to Cornwall Archaeological Unit, Cornwall Council. Existing copyrights of external sources will be acknowledged where required. Use of the material will be granted to the client.

Freedom of Information Act

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005. Cornwall Archaeological Unit will ensure that all information arising from the project shall be held in strict confidence to the extent permitted under the Act. However, the Act permits information to be released under a public right of access (a "Request"). If such a Request is received Cornwall Archaeological Unit may need to disclose any information it holds, unless it is excluded from disclosure under the Act.

Health and safety statement

As part of Cornwall Council, Cornwall Archaeological Unit follows the Council's *Statement of Safety Policy*.

Prior to carrying out on-site work Cornwall Archaeological Unit will carry out a Risk Assessment in line with Highways England IAN 115/08, Revision 1.

Insurance

As part of Cornwall Council, Cornwall Archaeological Unit is covered by Public and Employers Liability Insurance.

This WSI was prepared by:

Adam Sharpe BA MCIfA

Senior Archaeologist

2 June 2015

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References

Parkes, C. 2012, *A30 dualling, Temple to Higher Carblake, Cornwall: detailed archaeological assessment*, CAU report 2013R015

16 Appendix 2: Fieldwork risk assessment

Background

Cornwall Archaeological Unit has been commissioned to undertake an assessment of cultural heritage assets on and bordering the route of the section of the A30 from Innis Downs to Dunheved Bridge. The nature, condition and management requirements of extant assets will be assessed both within the soft zone flanking the highway and within a zone extending to 100m out from the road centreline. Selected assets and locations within a wider zone out to 1.5km from the road centreline will also be visited during the fieldwork for the project.

The A30 between these points is currently almost wholly a dual carriageway. Following the improvements current being undertaken between Higher Carblake and Temple, the road will be wholly a dual carriageway and subject to the National Speed Limit.

The recording process for those sites within the soft zone will require the survey team to park, walk and work adjacent to the highway. The Highways England document *Interim Advice Note (IAN)115/08 (Revision 1): requirements and guidance for works on the hard shoulder and road side verges on high speed dual carriageways* will form the basis for the risk assessment and the identification of the safest methods of working for this element of the survey.

Risk management relating to working within the soft zone

The majority of the carriageway is likely to be accompanied by a hard shoulder and traffic is likely to be travelling at speeds of up to 70mph. Within the section between Higher Carblake and Temple where improvement works are currently taking place, one carriageway is likely to be closed and speed restrictions and other traffic management measures are likely to be in place. **There will be no access for a walking survey within this section of the A30.**

Whilst engineering applied to the course of the road tends to provide for reasonably extensive forward visibility, drivers' view ahead may be obscured by large commercial vehicles, and drivers may be distracted by features or activities adjacent to the highway, activities within their vehicles or by other road users. Most stops for recording are likely to be less than 15 minutes, but there may be a series of features to be recorded along any single section of the road route, requiring repeated frequent stops.

The following risks relating to working within the soft zone have been identified:

- Being struck by a vehicle moving along the adjacent carriageway.
- Involvement in a road traffic accident.
- Being insufficiently visible to the travelling public which working within this zone.
- Parking in an inherently unsafe location.
- Breakdown of the survey vehicle.
- Insufficient advance warning of the survey activity taking place.
- Extremes of weather and related poor visibility.
- Personal issues relating to members of the survey team (alcohol, drugs, physical incapacity or illness).
- Distractions leading to an appropriate level of care being taken whilst engaged in survey activity within this zone.

The following safe working practices will be followed to minimise the above risks:

- Any vehicle to be used during the survey will be roadworthy, carry an appropriate amount of fuel, be covered by a current MOT test certificate and Road Tax and will be insured for business use.
- Vehicles will be equipped with the required number of amber flashing lights (to be used in accordance with the requirements of IAN 115/08 section TMI(2)).

Vehicle will be of a conspicuous colour with reflective yellow stripes fitted along both sides, they will also carry a 'Highway Maintenance' sign if required.

- Vehicles will only be operated by suitably licenced drivers, who will abide by the requirements of the Highway Code. Vehicle drivers incapacitated by reason of drugs, alcohol, illness or incapacity will not be allowed to undertake survey work and will in addition be deemed to be in serious breach of Cornwall Council staff rules. Should either of the survey staff members feel unwell, survey will be abandoned immediately.
- Unless wholly unavoidable, vehicles will be parked in public laybys, over-bridges, side roads or other safe places and not on the hard shoulder or verge. Should the latter be required, any necessary personnel protection arrangements and working methods will be discussed with the client before such places are utilised. Where parking locations adjacent to active carriageways are less than 1.2m away from them, staff will exit and enter the vehicle through the passenger door.
- Survey signs will be placed at 1km intervals to warn road users of the activity on the stretch of road ahead.
- In the event of a vehicle breakdown, staff will alert the rescue services and remove themselves to a safe location (not in the vehicle unless in a layby or other safe location).
- IAN115/08 sections 5 PI (1 to 8) require persons working adjacent to the highway to wear Hi-Vis clothing (at a minimum a Hi-Vis jacket) to BS EN 471 Table 1 Class 3. Cornwall Archaeological Unit will recommend the wearing of Hi-Vis trousers. Safety boots must also be worn.
- Staff will work in pairs at all times.
- Survey staff will, at all possible times, face the oncoming traffic in the adjacent highway lane.
- Staff will maintain a minimum distance of 1.2m clearance between themselves and active traffic lanes when working on dual carriageways. This may not be possible on single carriageway side roads, but staff will maintain the largest possible safe distance between the carriageway and themselves at all times.
- Staff **must not** cross any live Highways England carriageway, in line with EM guidance.
- The surveyors must not carry any survey pole or survey staff given the potential for this to accidentally project into an adjacent active carriageway.
- Staff will not make or answer mobile telephone calls when walking along or working beside the highway.
- Staff will pay attention to weather conditions. If these are such that visibility is likely to be significantly decreased, survey work will be abandoned until conditions improve. No work will be allowed during periods of darkness or near darkness.
- On each fieldwork day, the survey team will adhere by Cornwall Archaeological Unit's Lone Working procedures in order that administrative staff are aware of their intended times and places of work.

Working within the buffer zones is likely to be in many ways inherently safer than on high speed routes. However, archaeological features sited in this area may well be on or adjacent to much narrower, more winding minor roads, where drivers' forward visibility is likely to be more constrained than on major highways. Particular care will have to be taken when driving, parking and working in this zone, given that some of the risks associated with them are likely to be less readily manageable. As well as the

requirements set out for working within the soft zone, the following safe working methods will be adhered to:

- Only safe parking locations will be utilised.
- Full PPE will be worn at all times.
- Staff will at all possible times face the oncoming traffic and will walk in single file.
- When walking to sites, staff will maintain a space between themselves in order to give drivers the best possible advance warning of their presence on the edge of the highway.

All accidents and incidents, including near-misses will be reported to the project manager at the earliest possible opportunity. Where it appears possible that adherence to a recommended working method has contributed to the incident all fieldwork will cease until a thorough review has been undertaken.

Adam Sharpe BA MCIfA

Senior Archaeologist

Cornwall Archaeological Unit

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Email: asharpe@cornwall.gov.uk

Date of risk assessment: 1st June 2015

Useful contact names and numbers (Hospital, Air Ambulance, Doctor, Coastguard, etc.):

CAU office 01872 323603

CAU lone working phone number **07973 813566**

Accident & Emergency departments:

Royal Cornwall Hospital, Treliske, Truro TR1 3LJ

01872 250000

Minor injuries units at community hospitals:

Bodmin Hospital, Boundary Road, Bodmin PL31 2QT
251577

01208

Launceston Hospital, Launceston PL15 9JD

01566 765653

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17.3 Websites

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<http://www.sabre-roads.org.uk/wiki/> A comprehensive description of the A30, together with other national roads.

<http://www.devon.gov.uk/efswg-dasts-phase-1-report.pdf> - The Exeter and far south-west gateway study DaSTS Phase 1 report, June 2010 produced by Devon County Council and partners

<http://www.westbriton.co.uk/A30-8211-moorland-journey-sense-history/story-11503054-detail/story.html> - the only reference to the terms 'Great Road of the Wagons' and the 'Royal Cornish Way' being applied to the route which became the A30.

<http://www.visionofbritain.org.uk/travellers/Fiennes> - a digital version of Celia Fiennes accounts of her travels through Britain in the 17th century, popularly known as 'Through England on a Side Saddle in the time of William and Mary'.

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Ogilby's strip map, 1675

Robert Morden's map of Cornwall, 1695

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Badeslade's map of Cornwall, 1742

Thomas Osborne's map of Cornwall, 1748

Strip maps of the route from London to Land's End published in the Gentleman's Magazine, 1760, 1775

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John Cary's maps of Cornwall, 1790, 1812, 1814

Neele's map of Cornwall. 1814

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Thomas Moule's maps of Cornwall, 1836, 1845

Pigot and Co.'s map of Cornwall. 1840

17.4 CAU/CC digital sources

Cornwall and Scilly Historic Environment Record

GIS mapping:

- Designated sites and areas
- Sites and Monuments
- National Mapping Programme aerial photograph plots
- Physical geography
- Public Rights of Way
- Ordnance Survey MasterMap and raster mapping at larger scales

Other:

- Cornwall Council stereo aerial photographs sets dating to 1999 and 2005
- RAF 1946 aerial photographs
- CAU digital aerial photograph collection

18 Project archive

The CAU project number is **146499**

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

English Heritage/ADS OASIS online reference: [cornwall2-225962](#)

A30 Innis Downs to Dunheved Bridge CHAMP



Fig 1. The sections of the A30 between Innis Downs and Dunheved Bridge described in this report.

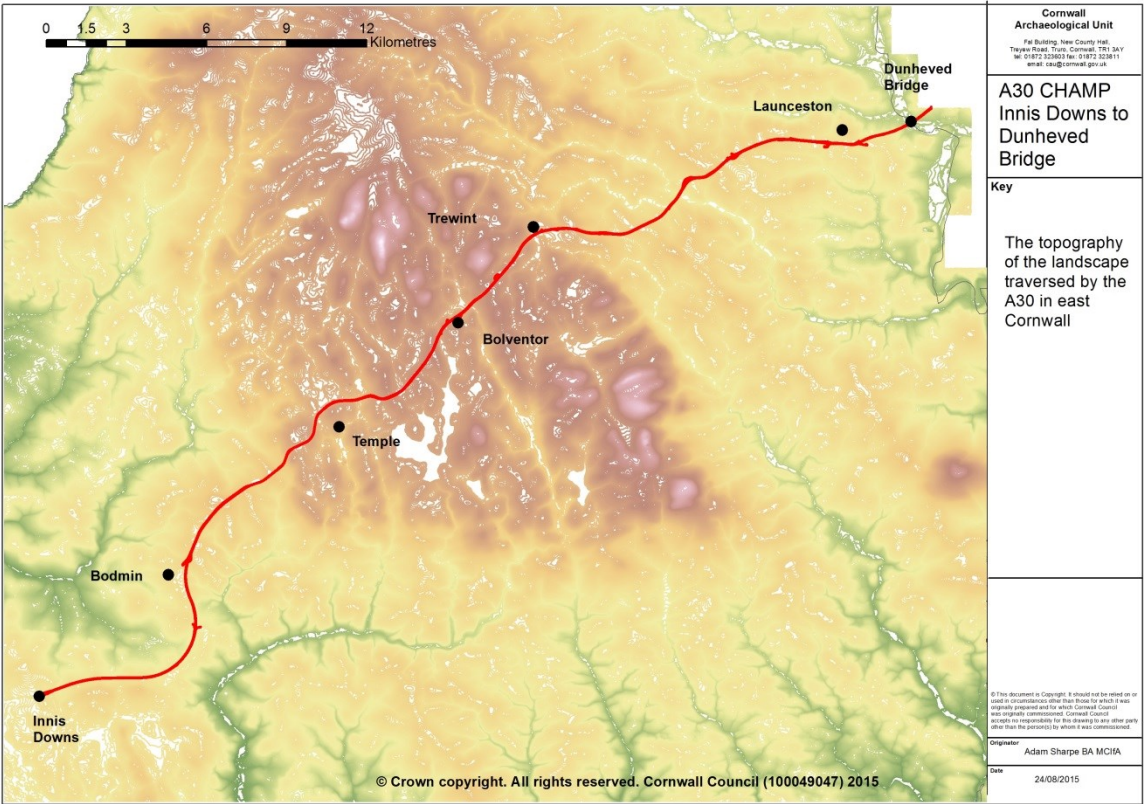


Fig 2. The topography of the route followed by the modern A30.

A30 Innis Downs to Dunheved Bridge CHAMP

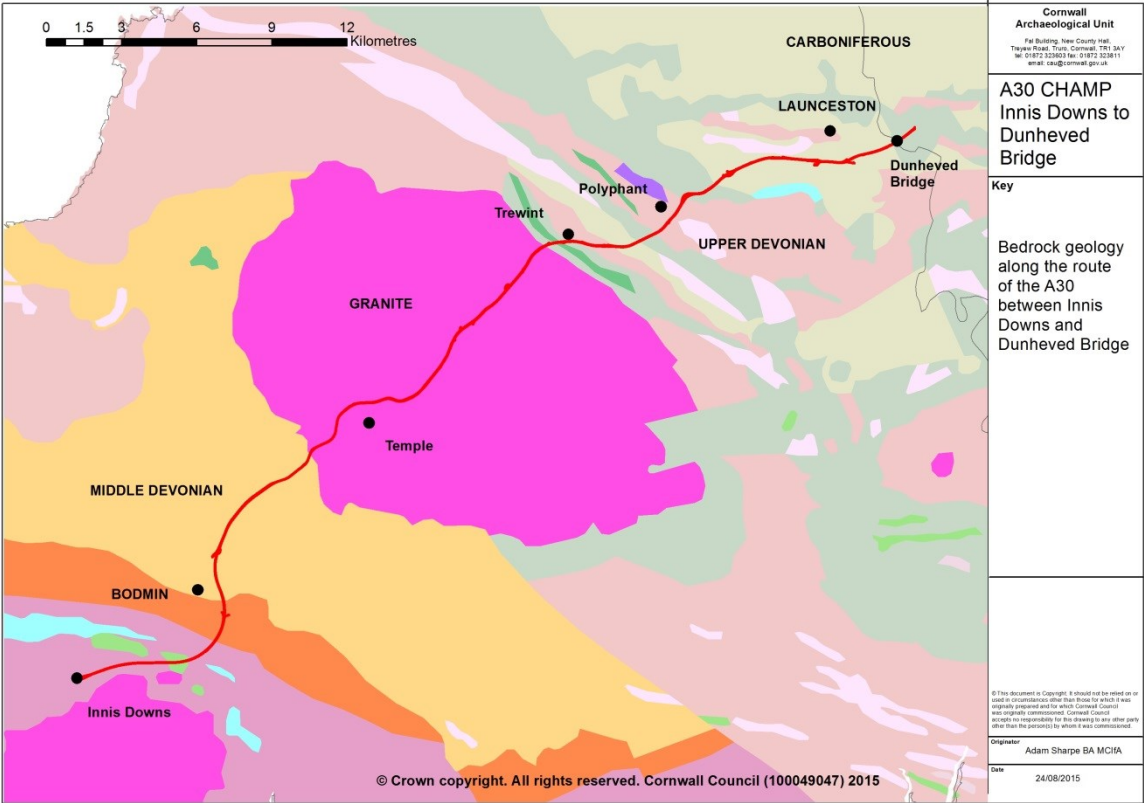


Fig 3. The bedrock geology traversed by the A30 in east Cornwall.

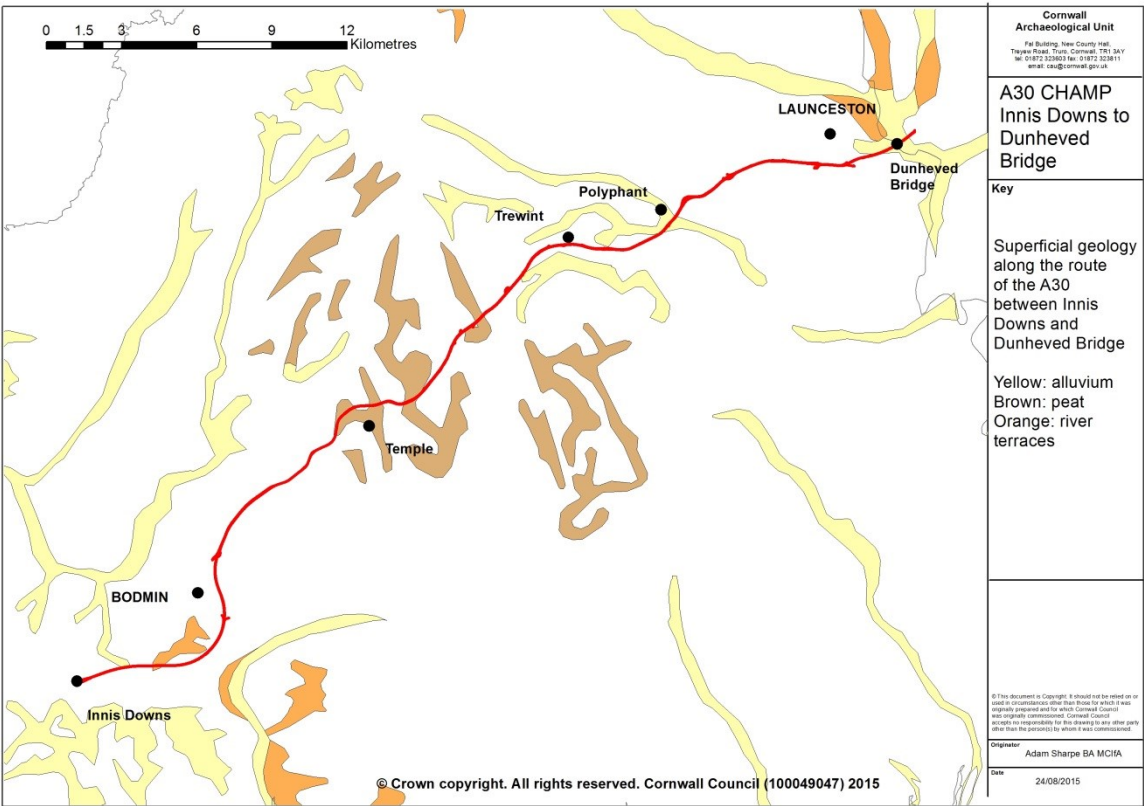


Fig 4. The superficial geology of the landscape traversed by the A30 in east Cornwall.

A30 Innis Downs to Dunheved Bridge CHAMP

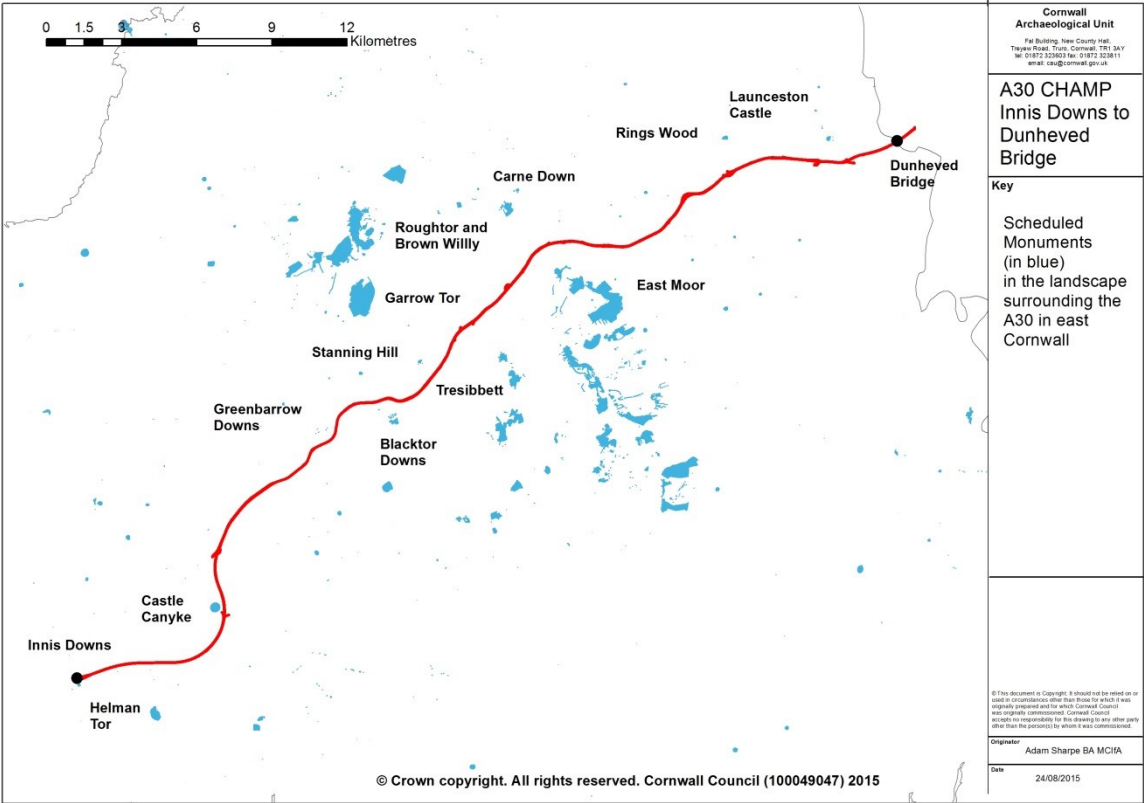


Fig 5. Scheduled Monuments within the landscape traversed by the eastern section of the A30 in Cornwall.

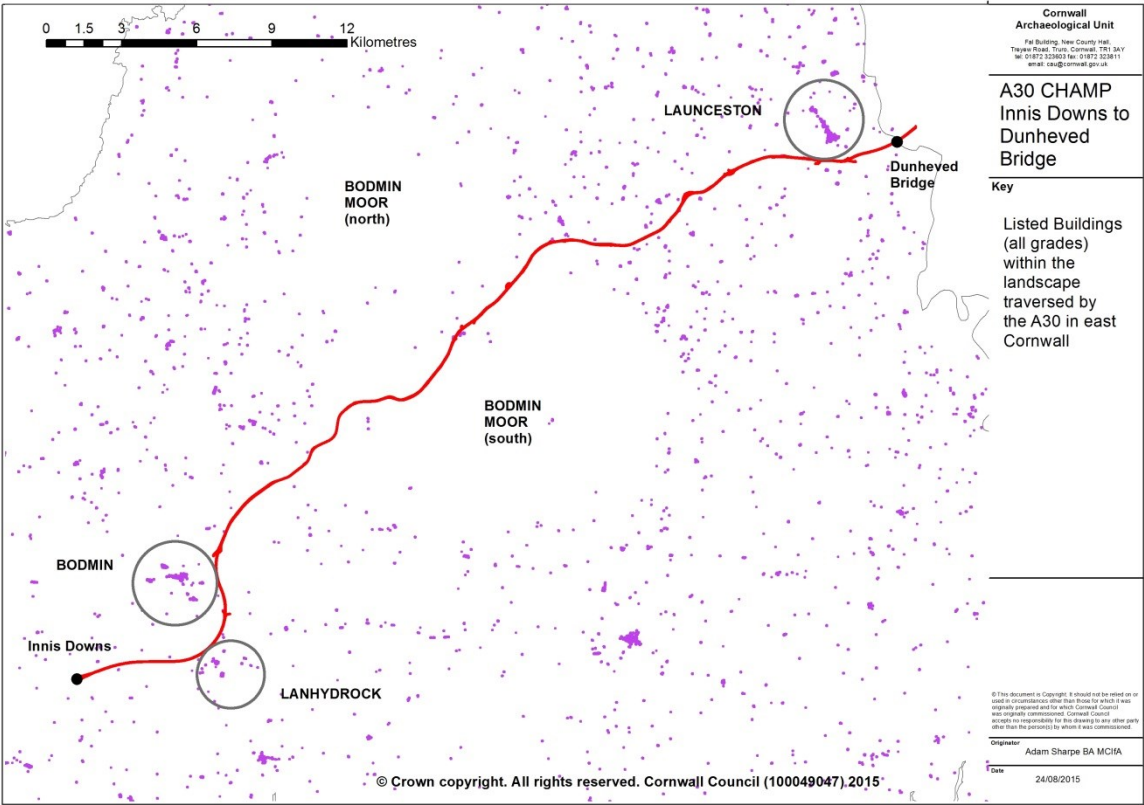


Fig 6. Listed Buildings (all grades) within the landscape traversed by the eastern section of the A30 in Cornwall.

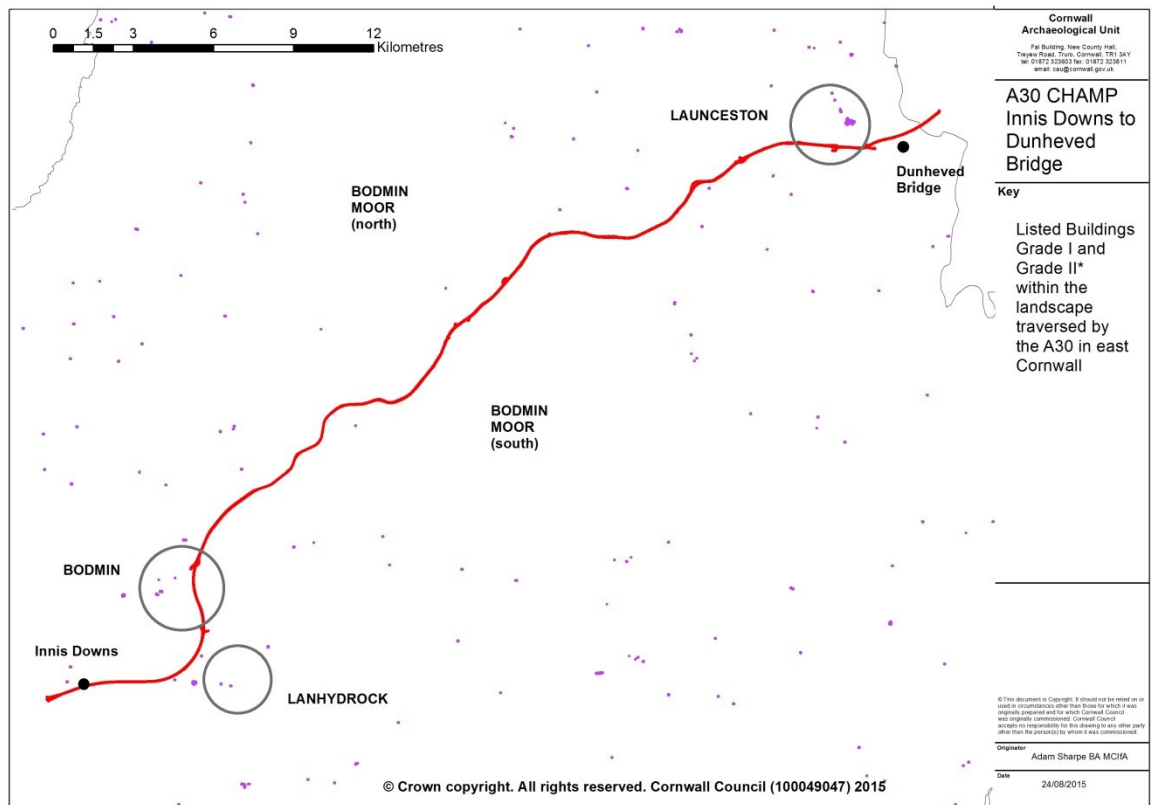


Fig 7. Grade I and Grade II* Listed Buildings within the landscape traversed by the A30 in east Cornwall.

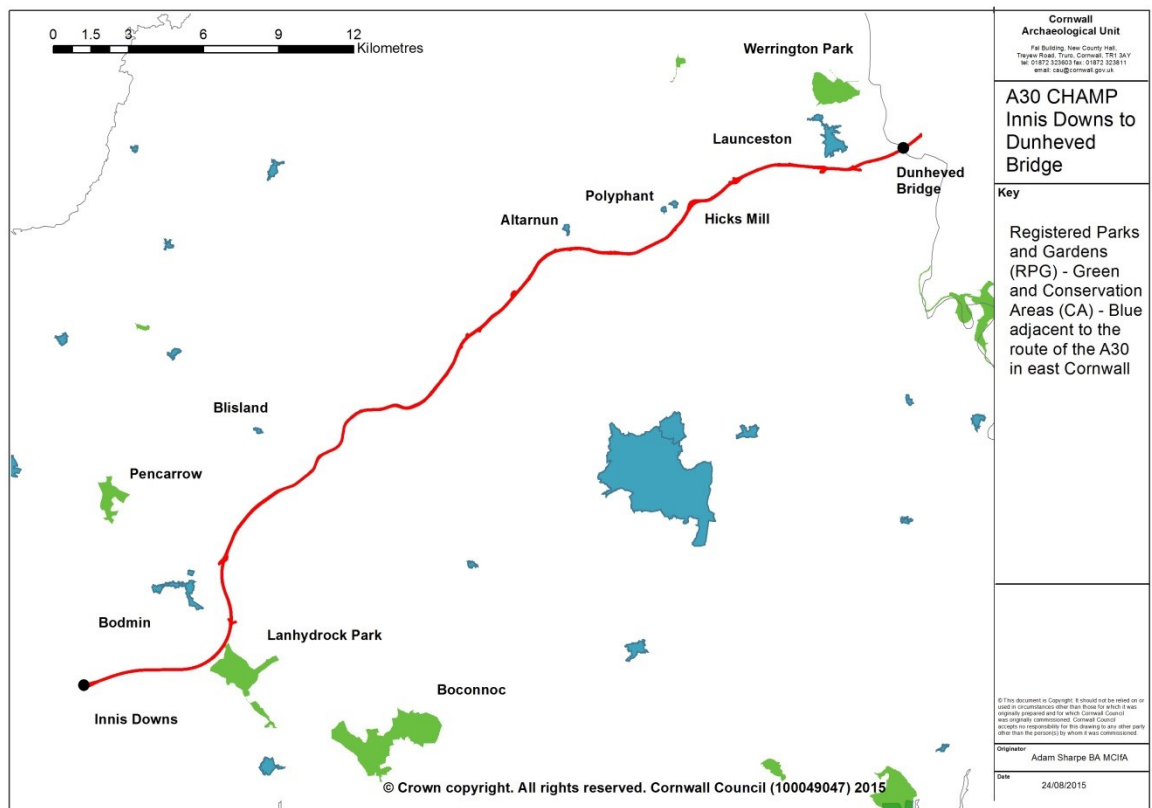


Fig 8. Registered Parks and Gardens and Conservation Areas within the landscape traversed by the A30 in east Cornwall.

A30 Innis Downs to Dunheved Bridge CHAMP

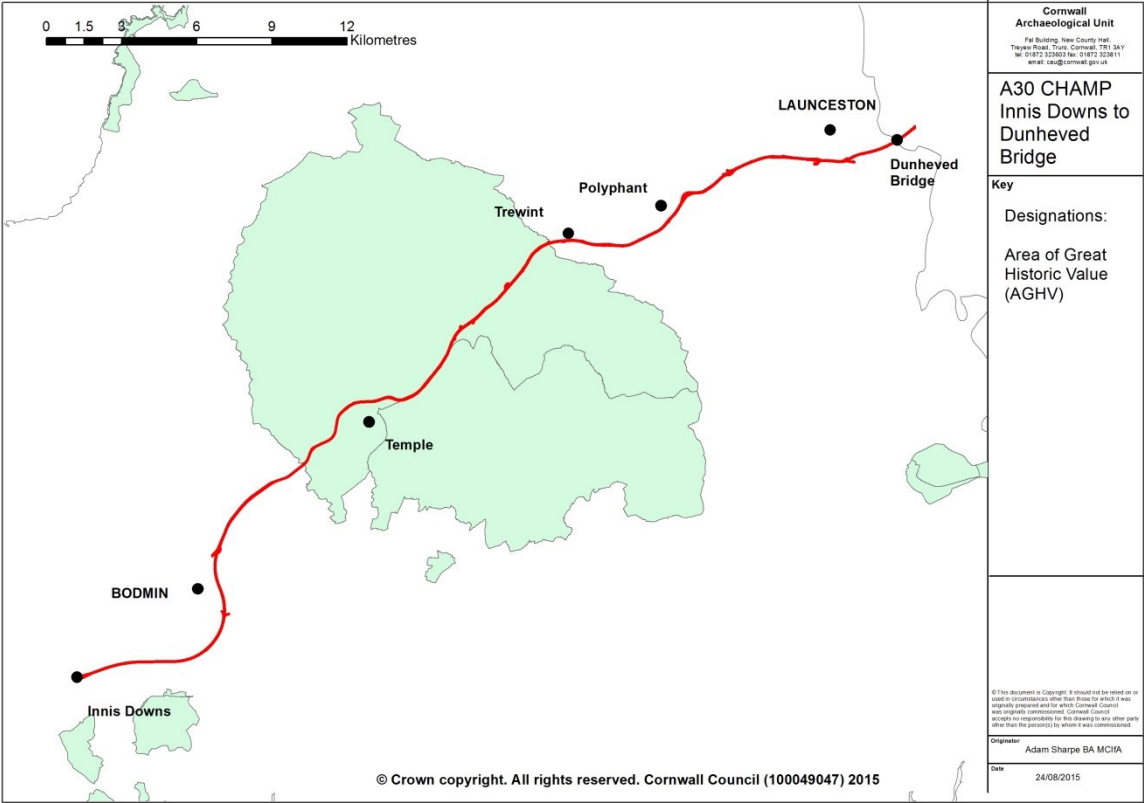


Fig 9. Areas designated as being of Great Historic Value in the landscape traversed by the A30 in east Cornwall.

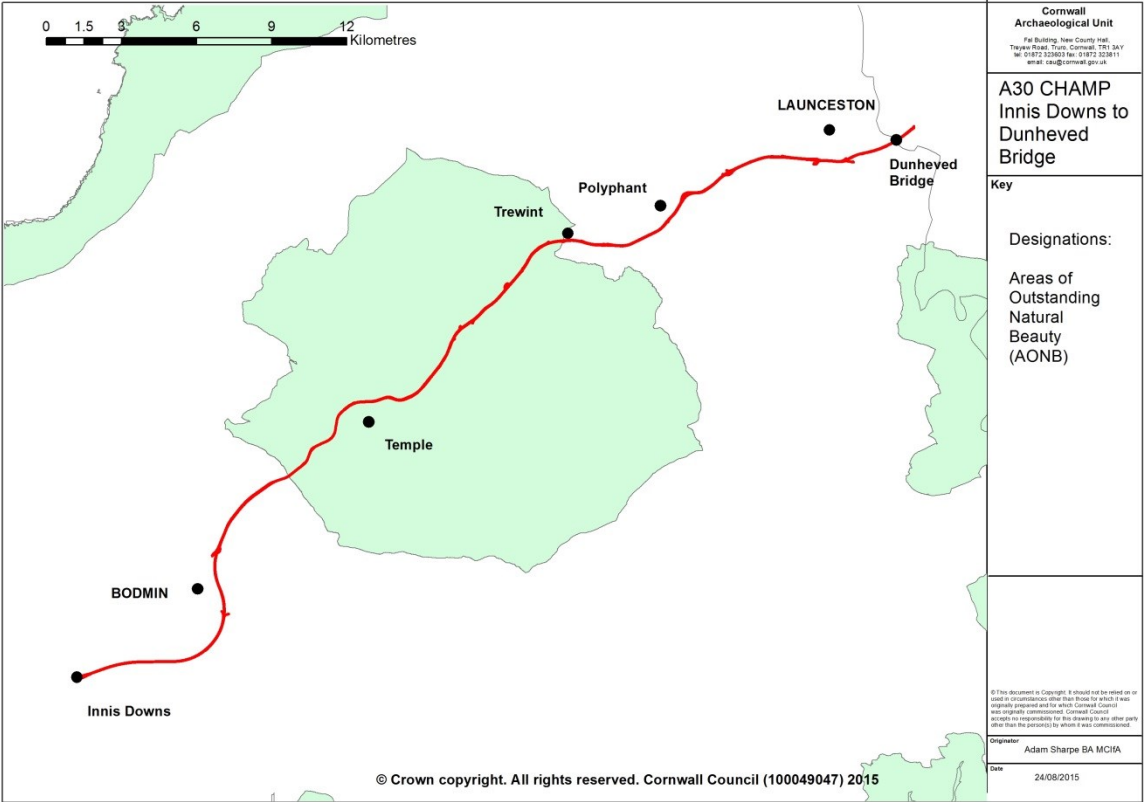


Fig 10. Areas of Outstanding Natural Beauty in the landscape traversed by the A30 in east Cornwall.

A30 Innis Downs to Dunheved Bridge CHAMP

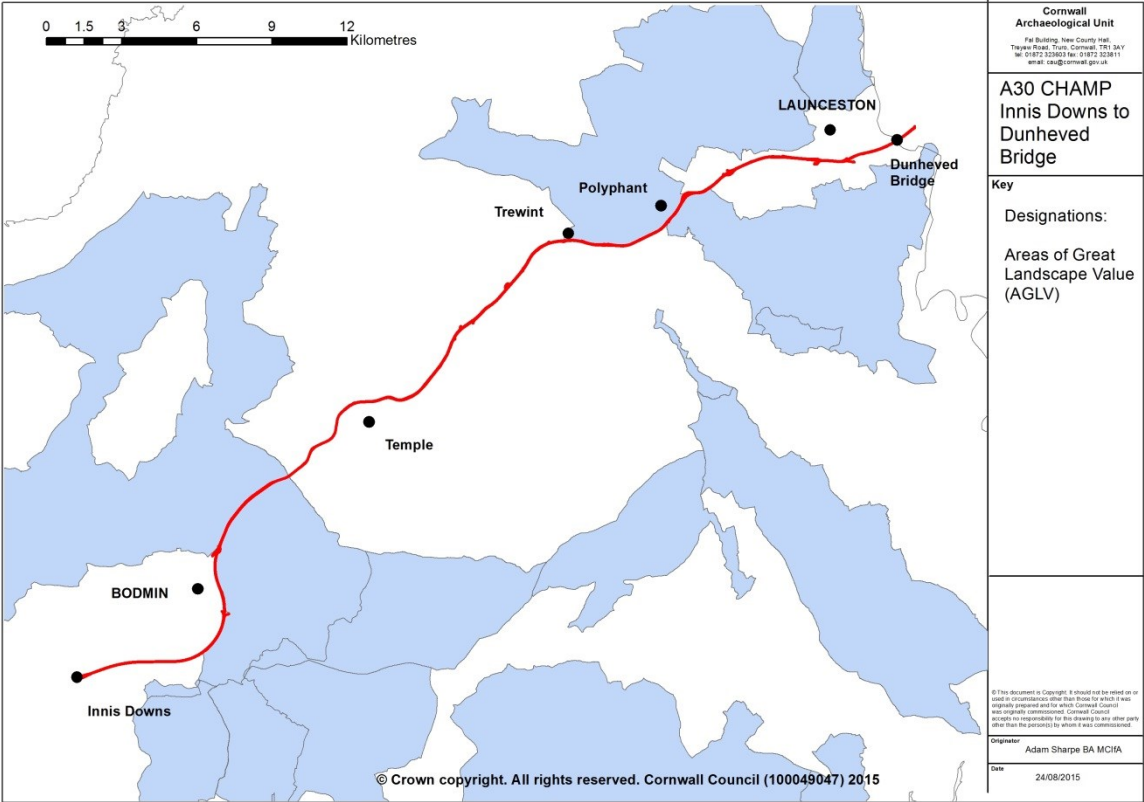


Fig 11. Areas designated as being of Great Landscape Value in the landscape traversed by the A30 in east Cornwall.

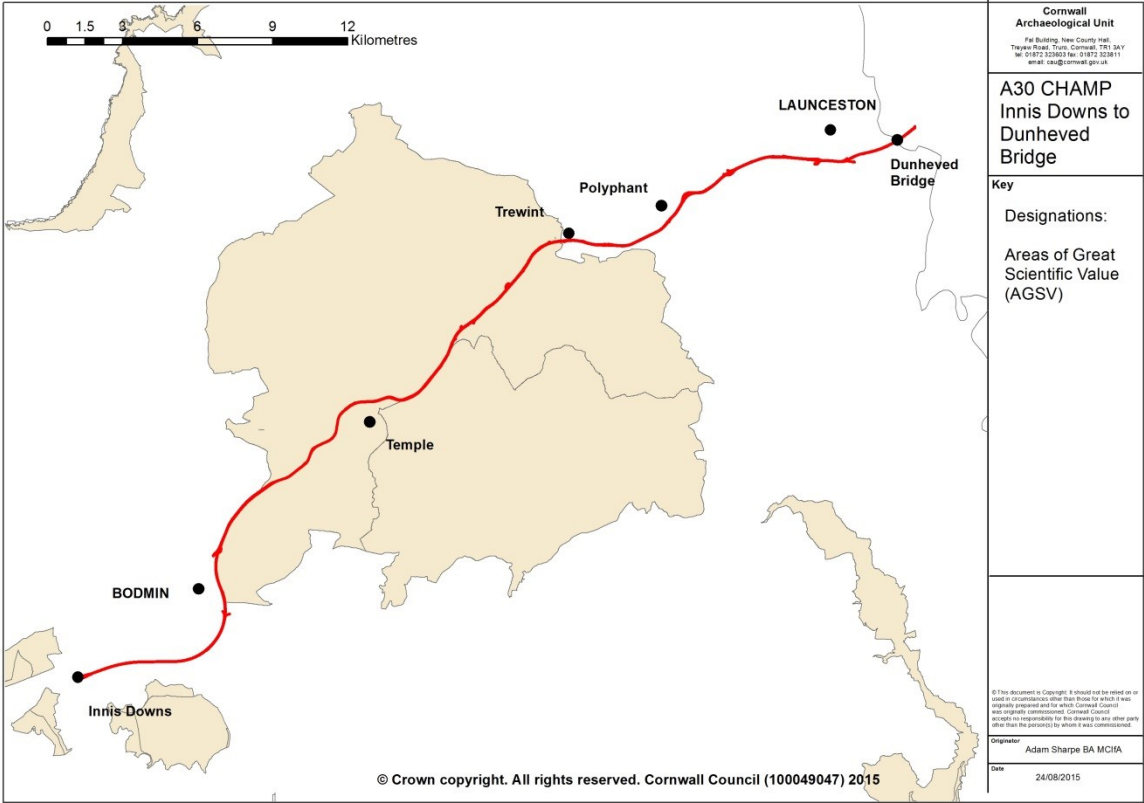


Fig 12. Areas designated as being of Great Scientific Value within the landscape traversed by the A30 in east Cornwall.

A30 Innis Downs to Dunheved Bridge CHAMP

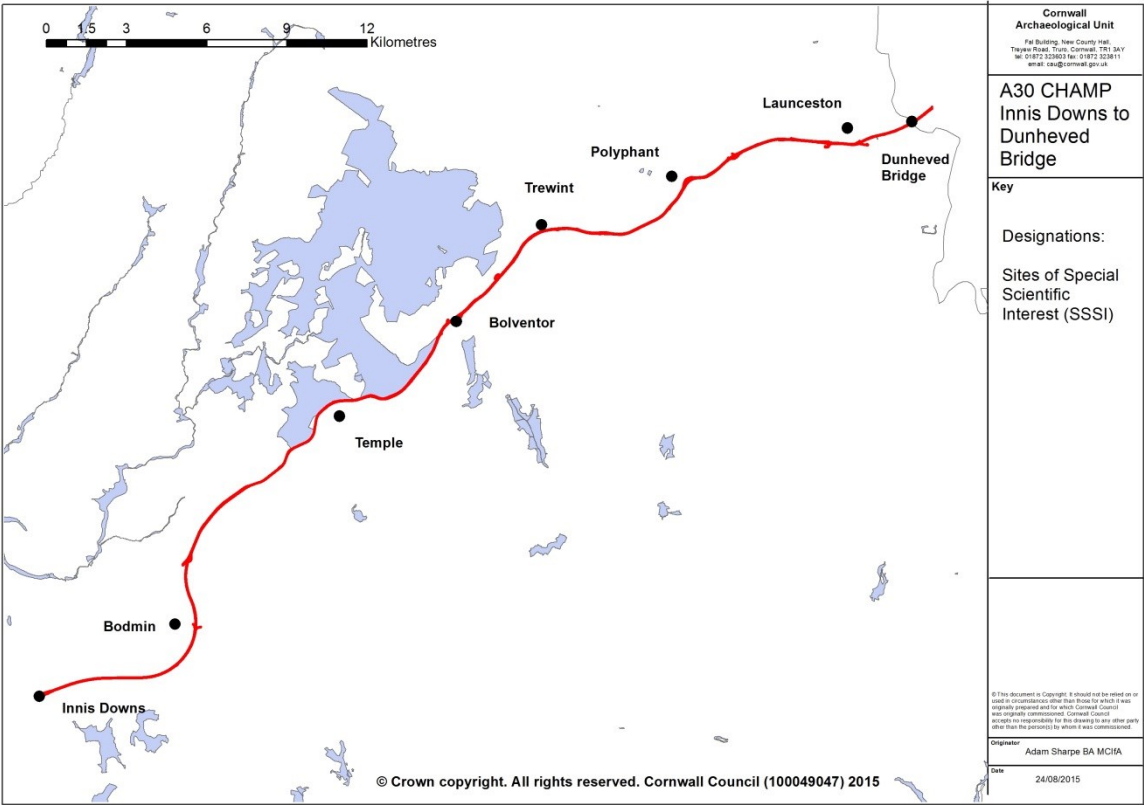


Fig 13. Areas designated as Sites of Special Scientific Interest in the landscape traversed by the A30 in east Cornwall.

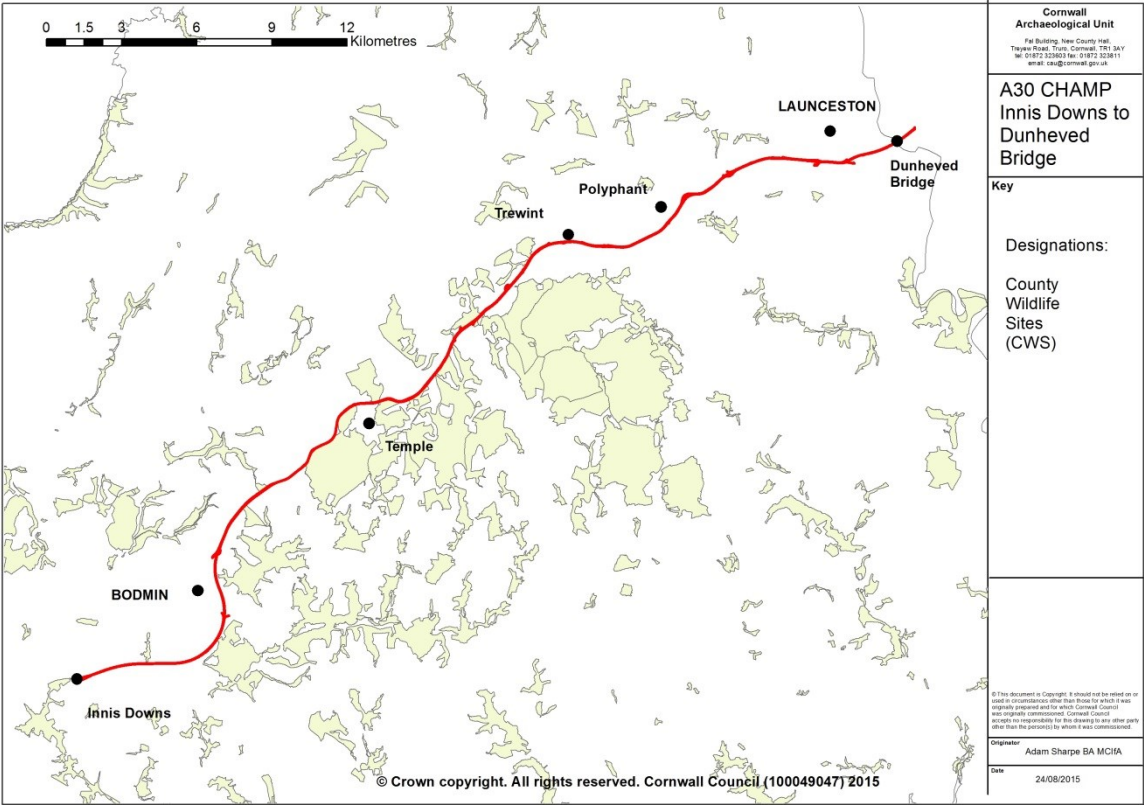


Fig 14. Areas designated as County Wildlife Sites in the landscape traversed by the A30 in east Cornwall.

A30 Innis Downs to Dunheved Bridge CHAMP

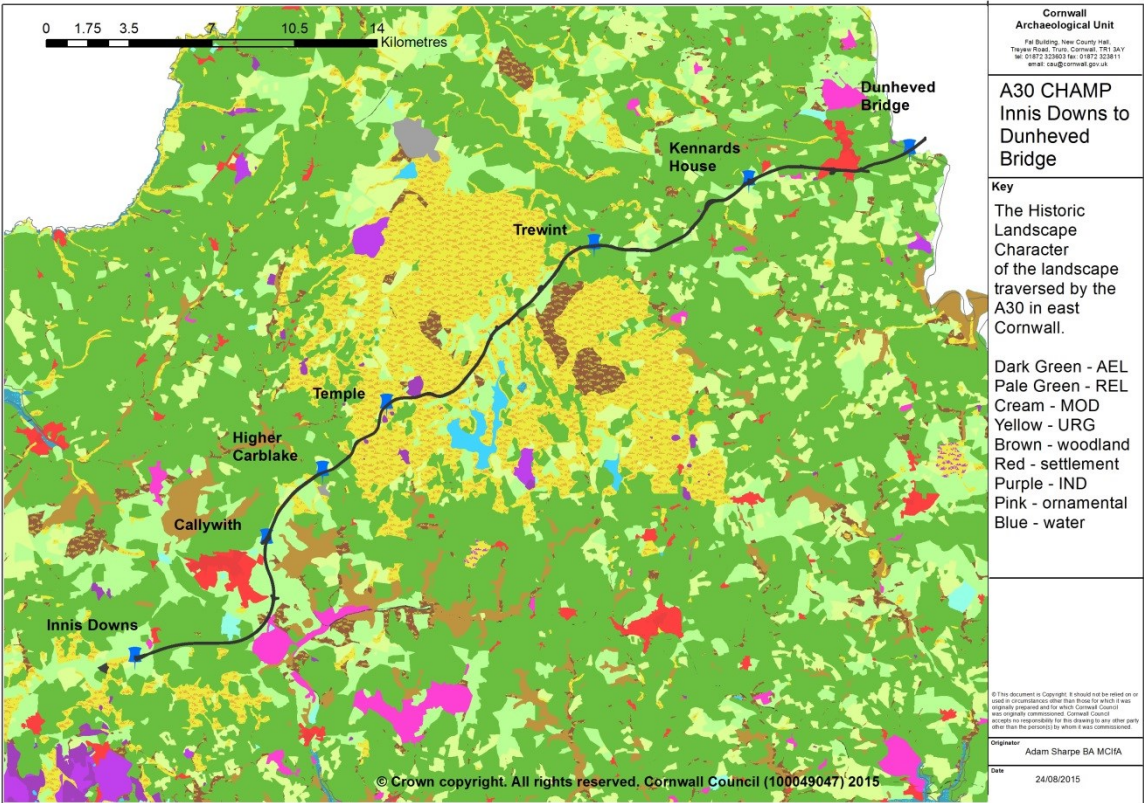


Fig 15. The Historic Landscape Character of the landscape traversed by the A30 in east Cornwall.

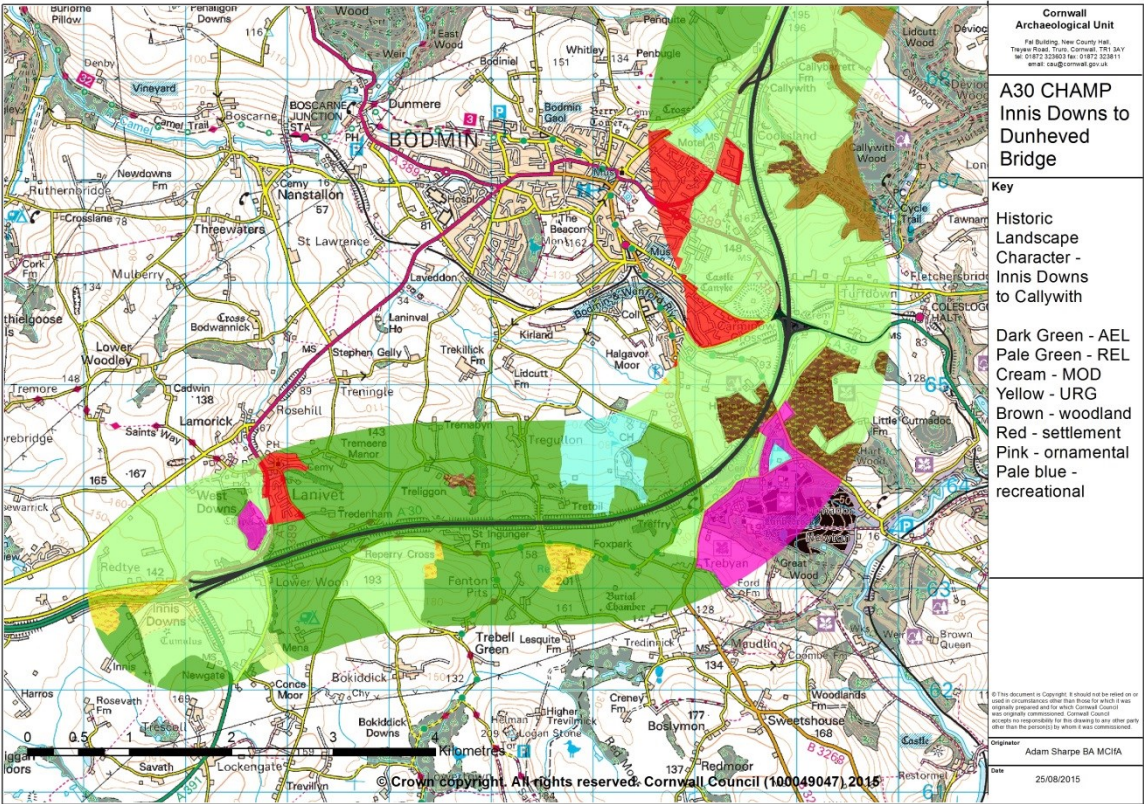


Fig 16. The Historic Landscape Character within the 1km buffer zone around the A30 between Innis Downs and Callywith Junction.

A30 Innis Downs to Dunheved Bridge CHAMP

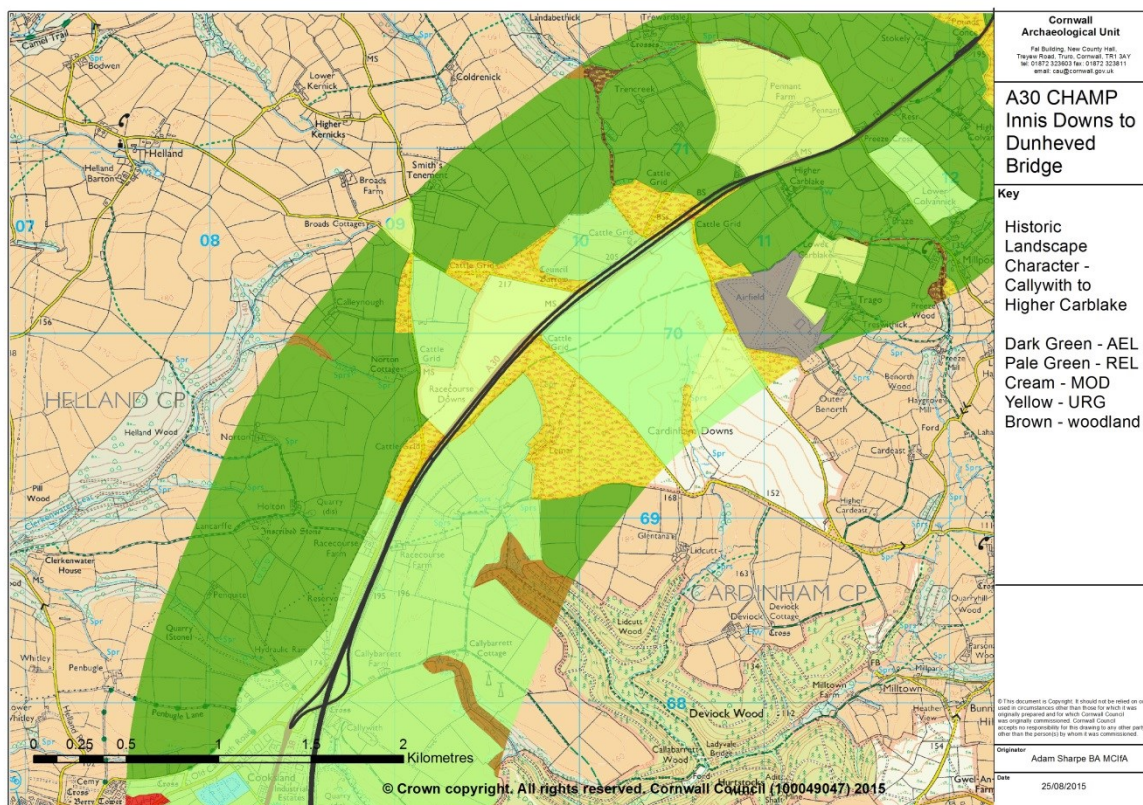


Fig 17. The Historic Landscape Character within the 1km buffer zone around the A30 between Callywith Junction and Higher Carblake.

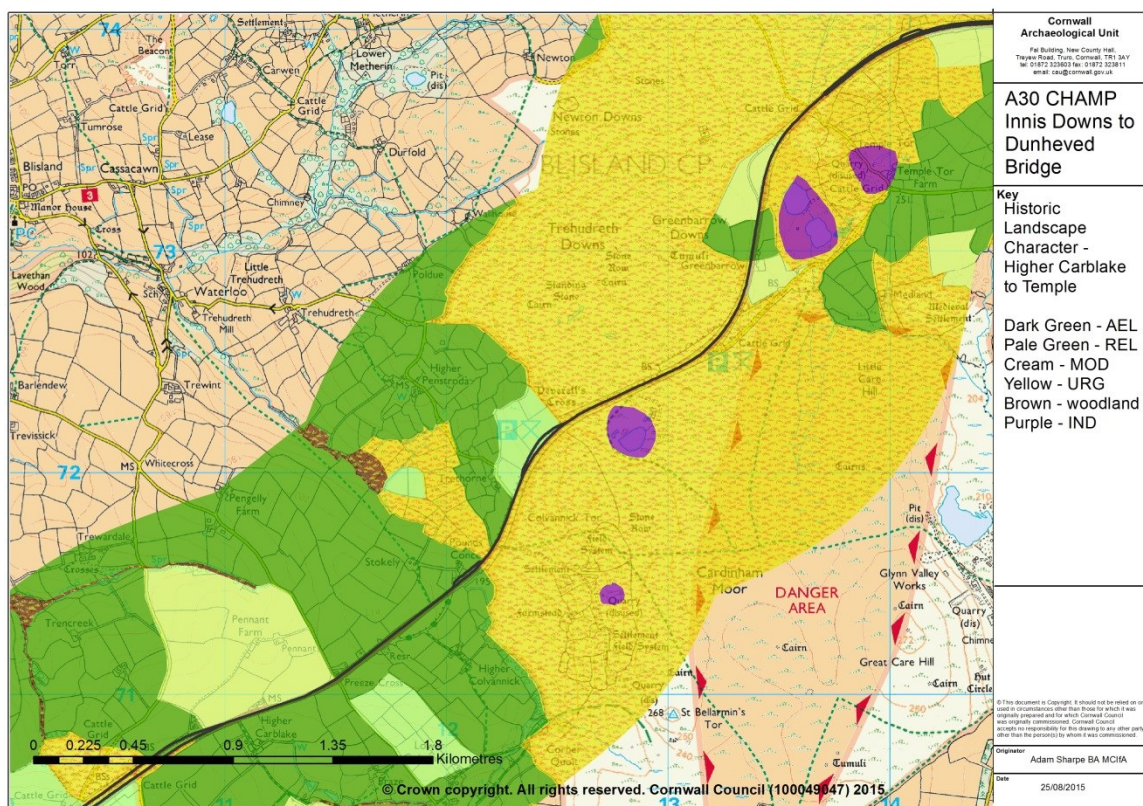


Fig 18. The Historic Landscape Character within the 1km buffer zone around the A30 between Higher Carblake and Temple Tor.

A30 Inns Downs to Dunheved Bridge CHAMP

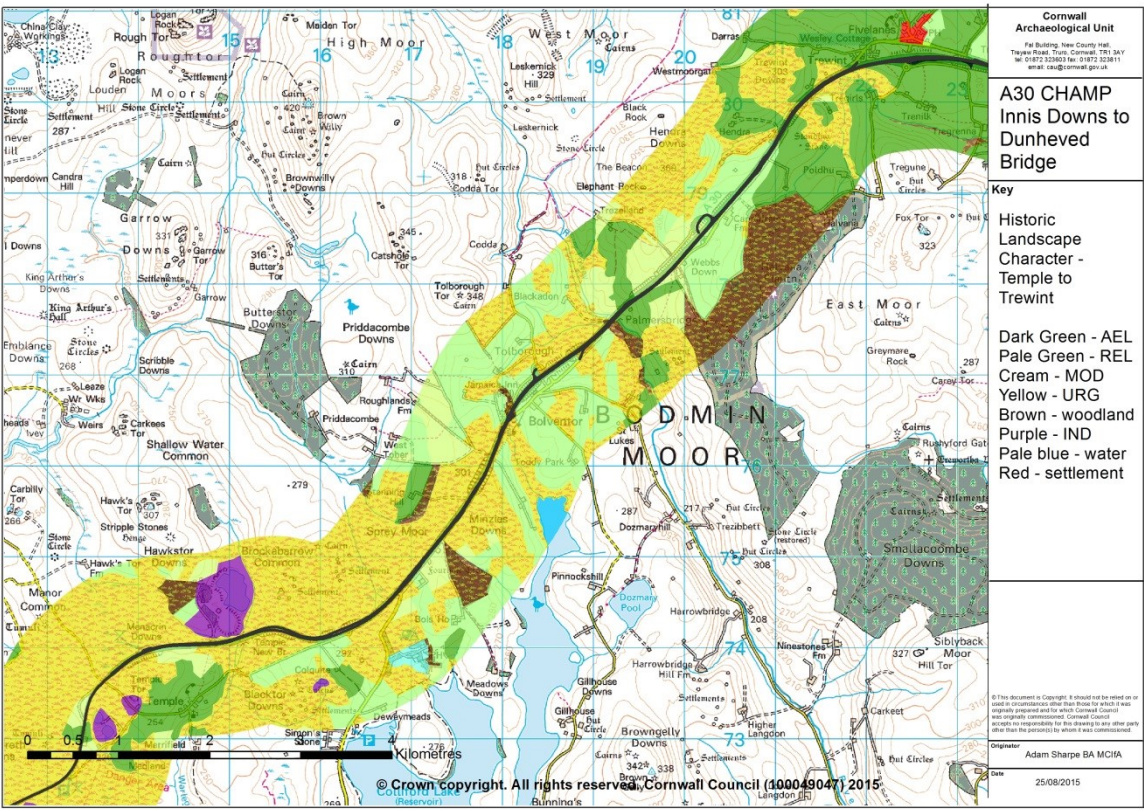


Fig 19. The Historic Landscape Character within the 1km buffer zone around the A30 between Temple Tor and Trewint.

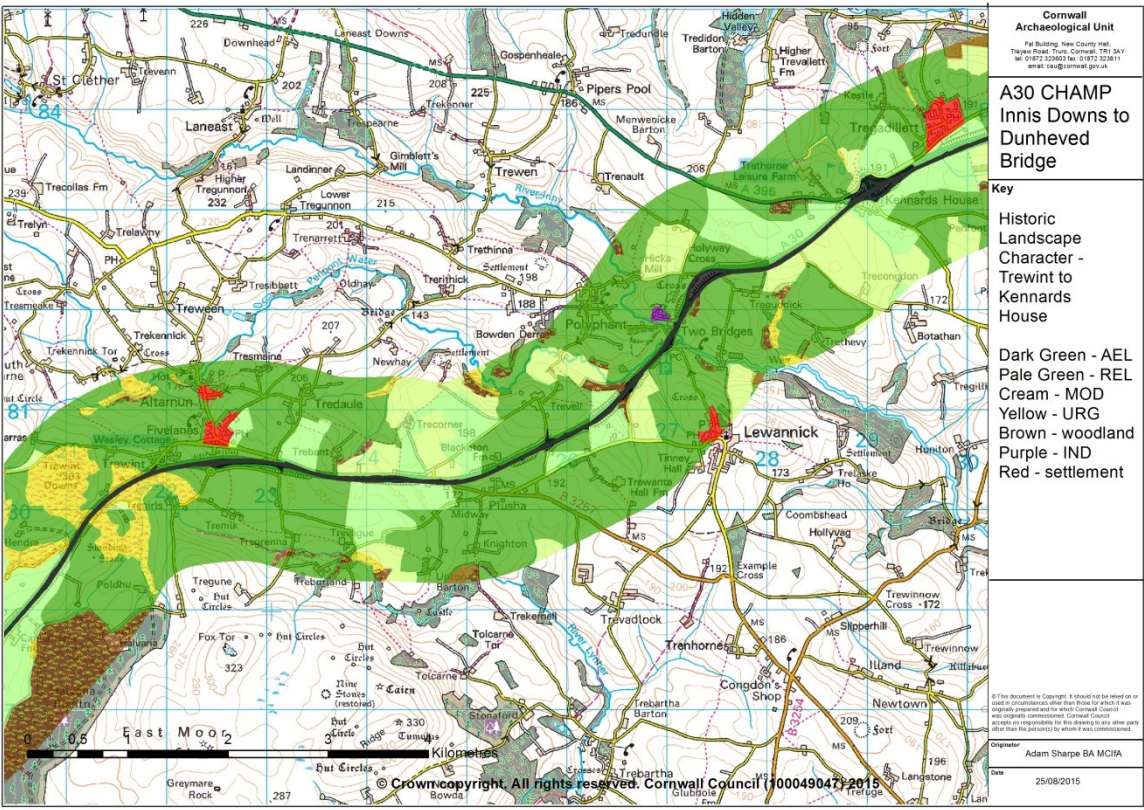


Fig 20. The Historic Landscape Character within the 1km buffer zone around the A30 between Trewint and Kennards House.

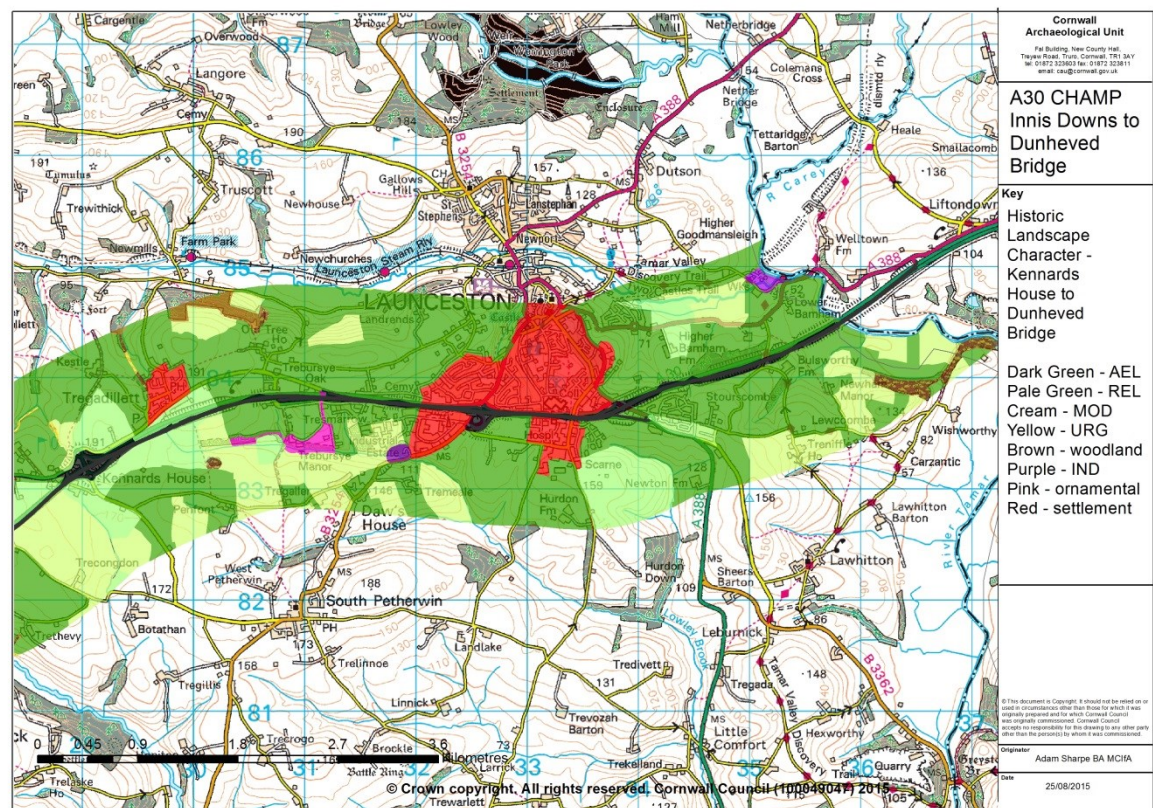


Fig 21. The Historic Landscape Character within the 1km buffer zone around the A30 between Kennards House and Dunheved Bridge.

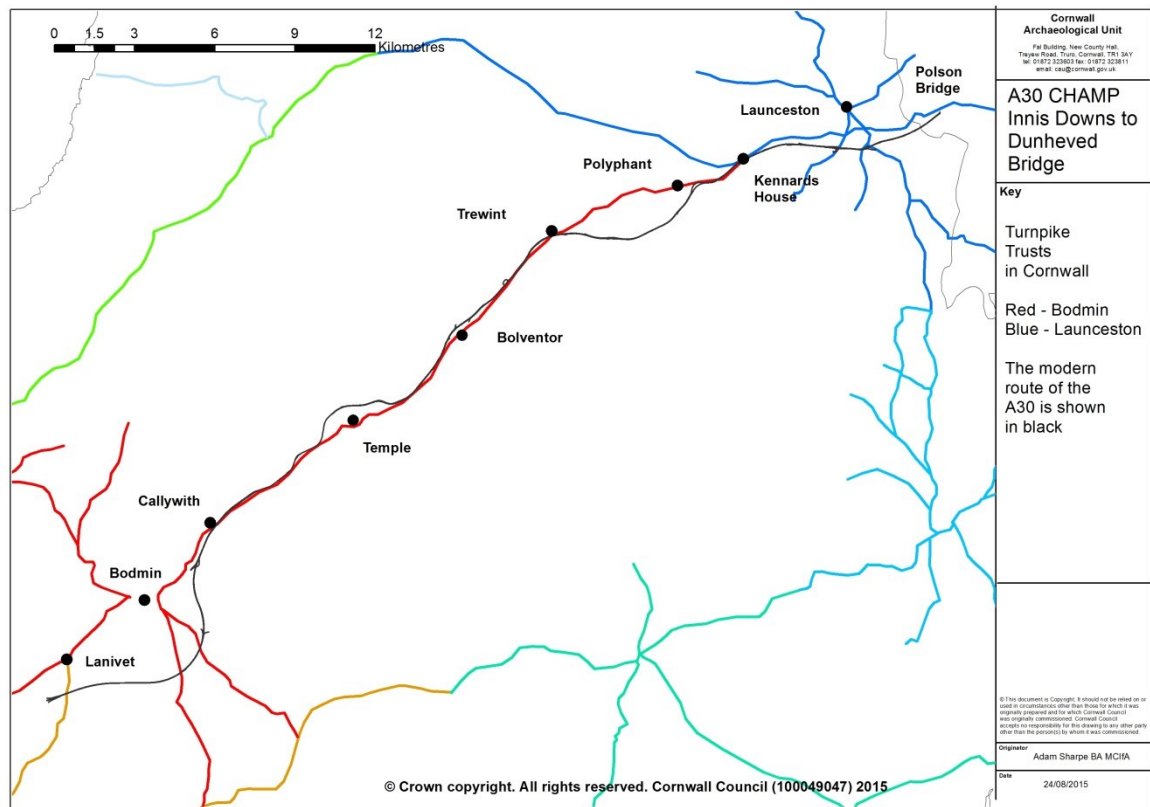


Fig 22. The routes of the roads upgraded by the Cornwall Turnpike Trusts in east Cornwall.

A30 Innis Downs to Dunheved Bridge CHAMP

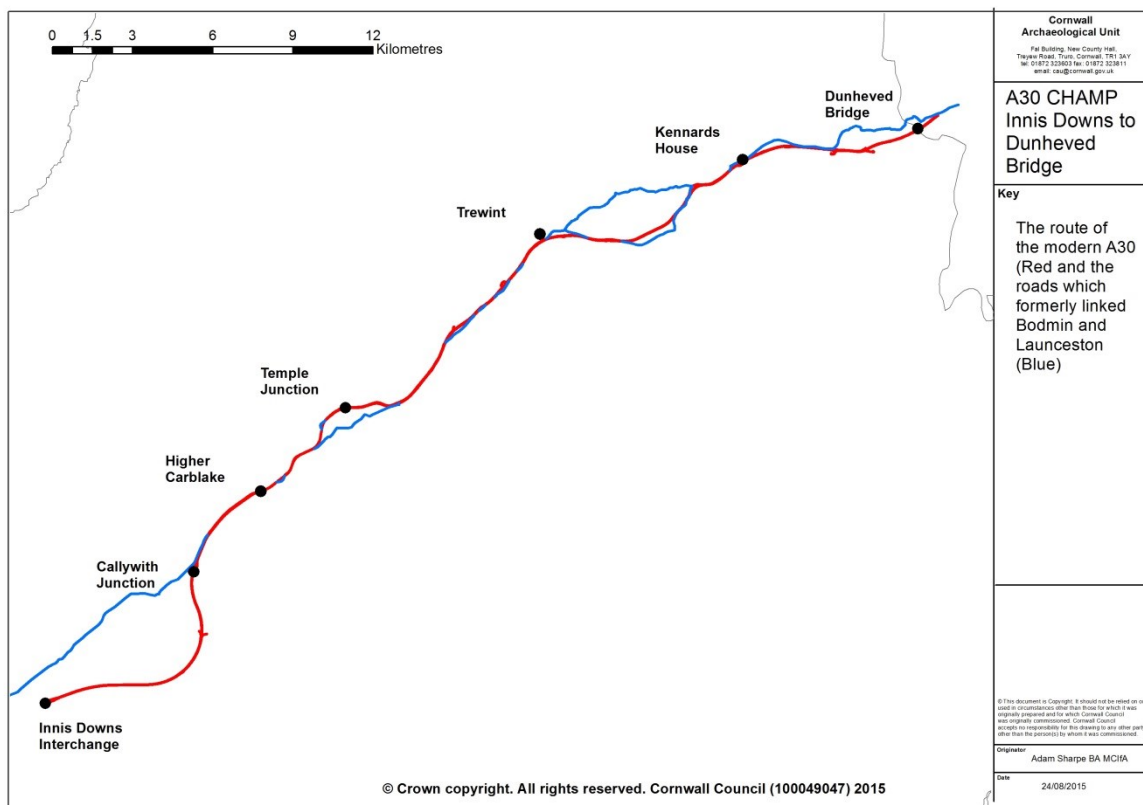


Fig 23. The route of the modern A30 (in red) and the now by-passed sections of the earlier route between Bodmin and Launceston (in blue).

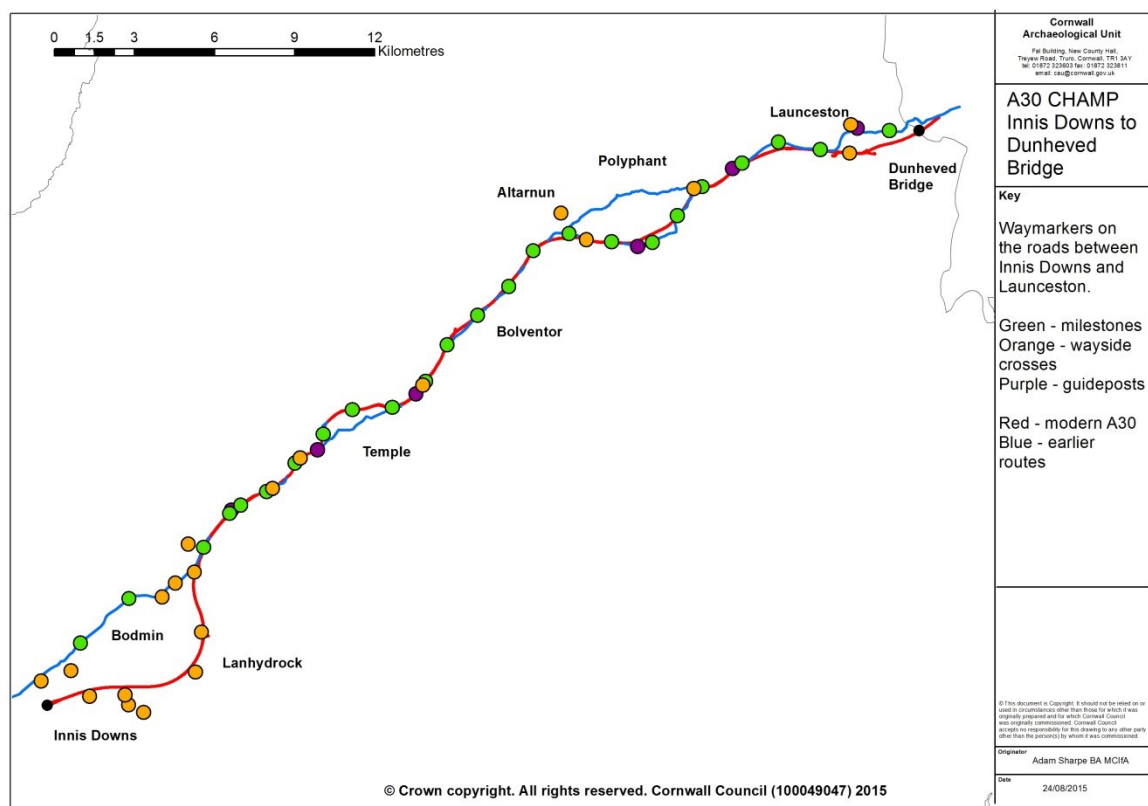


Fig 24. The sites of historic waymarkers along the modern and former routes of the road between Bodmin and Launceston.

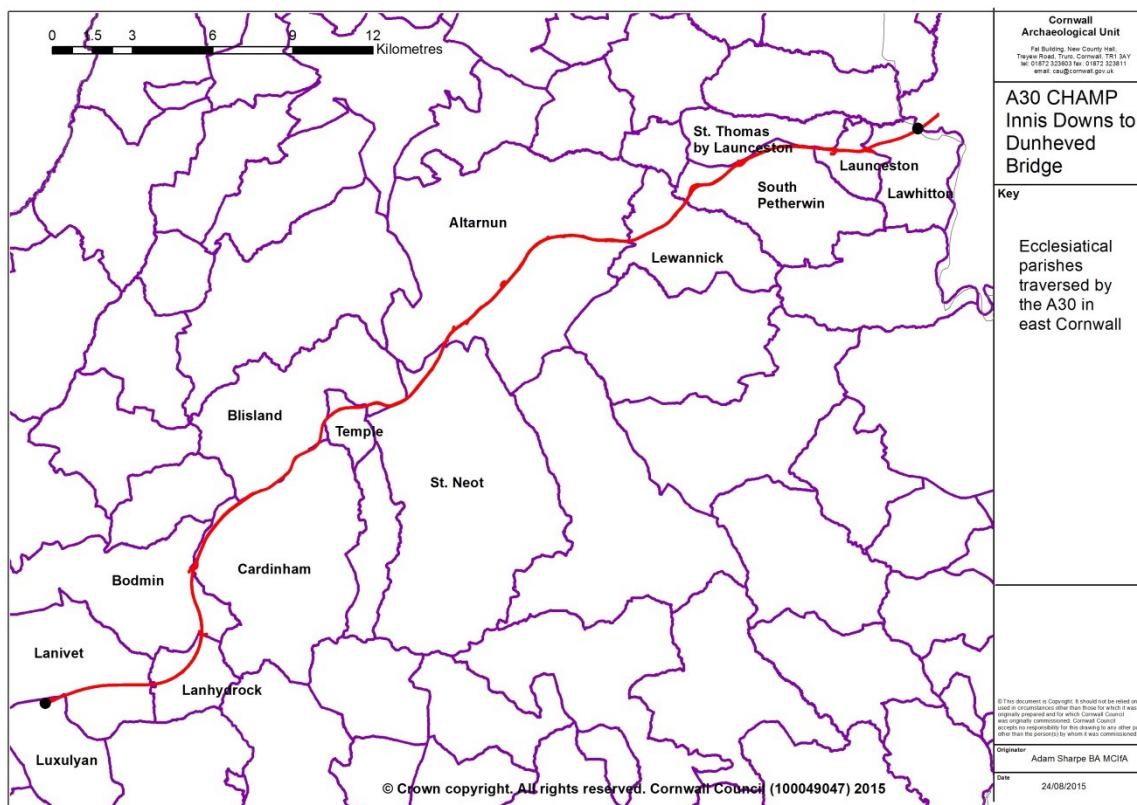


Fig 25. Ecclesiastical parishes traversed by the A30 in east Cornwall.

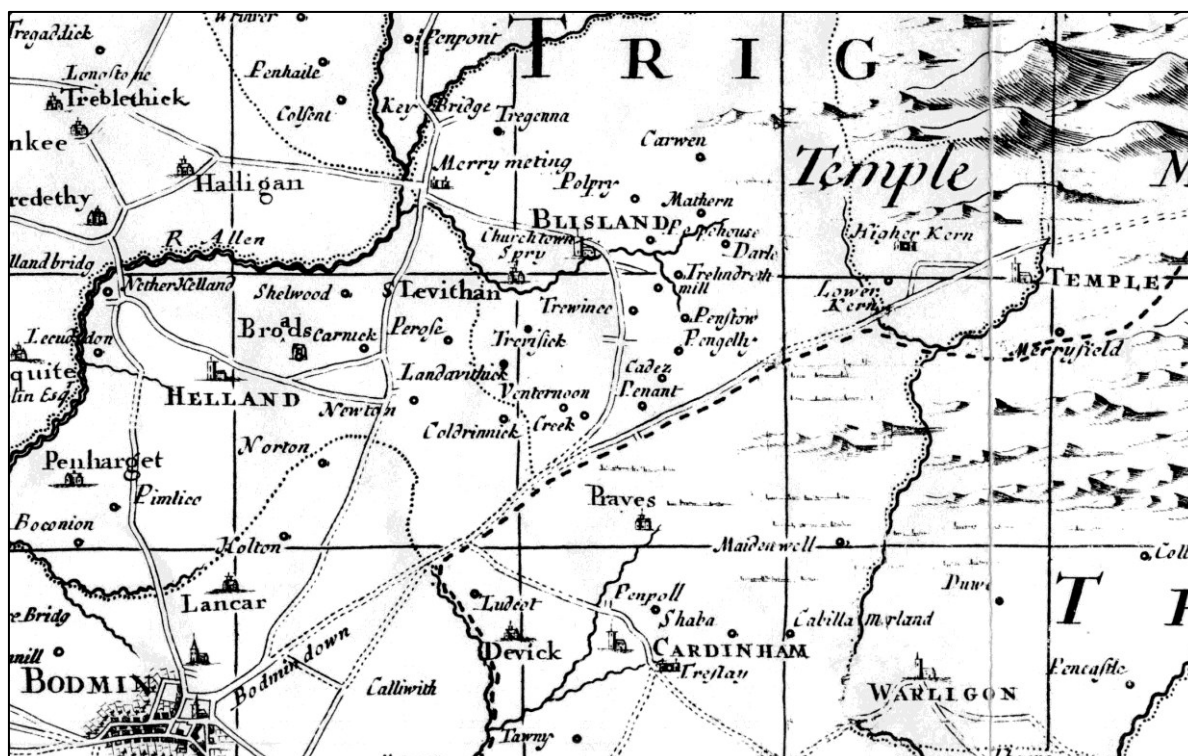


Fig 26. An extract from Joel Gascoyne's 1699 map of Cornwall showing the western end of the pre-turnpike road from Bodmin to Launceston across the 'Temple Moors'. The pecked sections of road were un-hedged.



Fig 27. An extract from Joel Gascoyne's 1699 map showing the section of the route between Trewint ('Trewince') and Launceston. The map includes parish churches, larger houses (in two grades of importance), small settlements and farms.

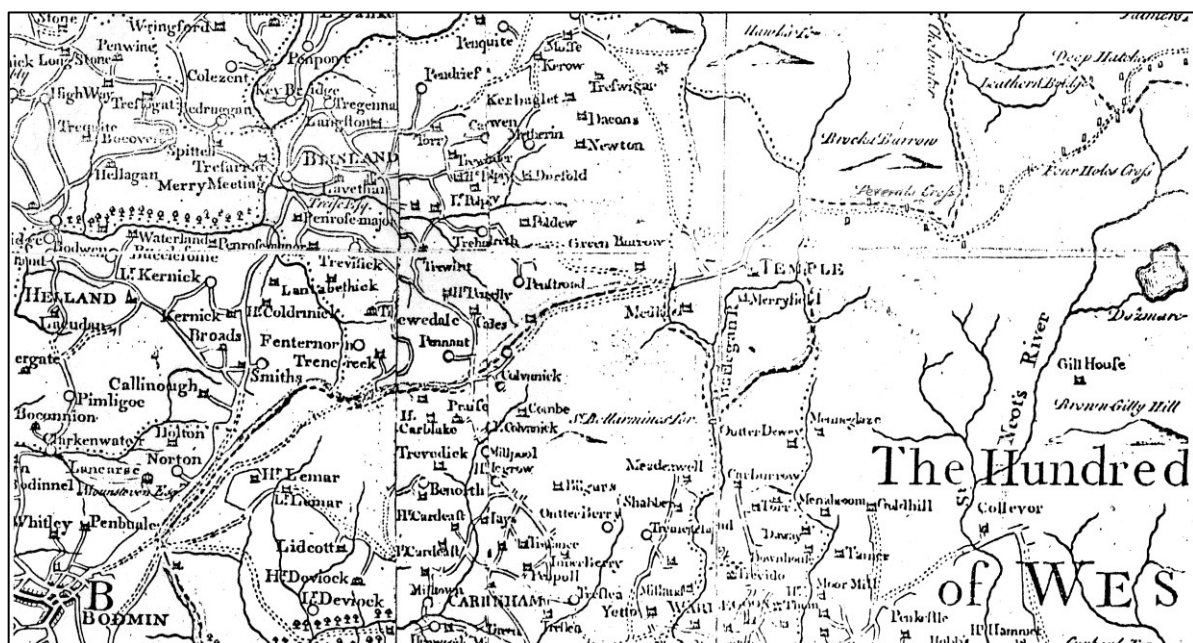


Fig 28. An extract from Thomas Martyn's 1748 map of Cornwall showing the section of the road from Bodmin to Deep Hatches at Bolventor. Of note are the guideposts shown along the route of the road to the east of Temple.



Fig 29. Emmanuel Bowen's 1756 map of Cornwall is typical of many of the time in not depicting a road across Bodmin Moor.

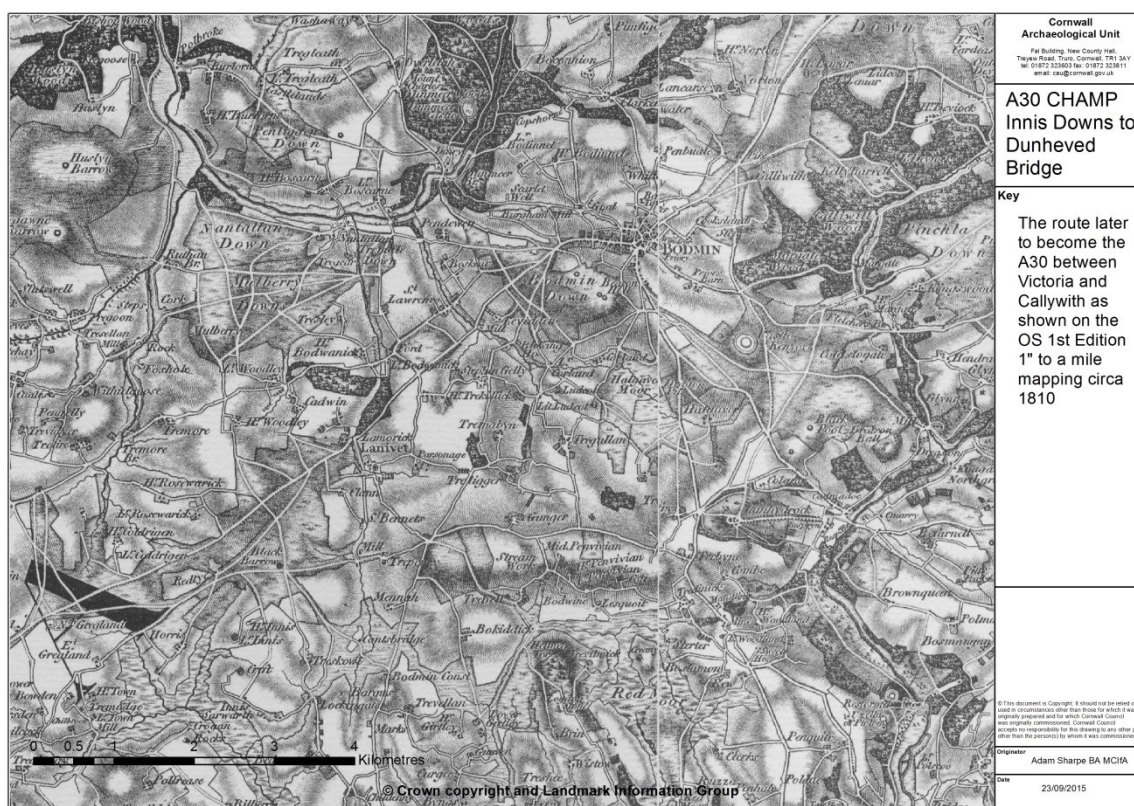


Fig 30. The route of the road which became the A30 between Victoria and Callywith, showing the original turnpike route through Lanivet and Bodmin, as shown on the circa 1810 OS 1st Edition 1" to a mile mapping.



Fig 31. The road across the moor from Peverell's Cross to Trewint Marsh on a revision of the 1st Edition OS 1" to a mile mapping, dating to post 1829 when the turnpike was re-routed to the north of Temple.



Fig 32. The original route of the turnpike from Five Lanes to Holyway Cross via Polyphant, as shown on the circa 1810 OS mapping.

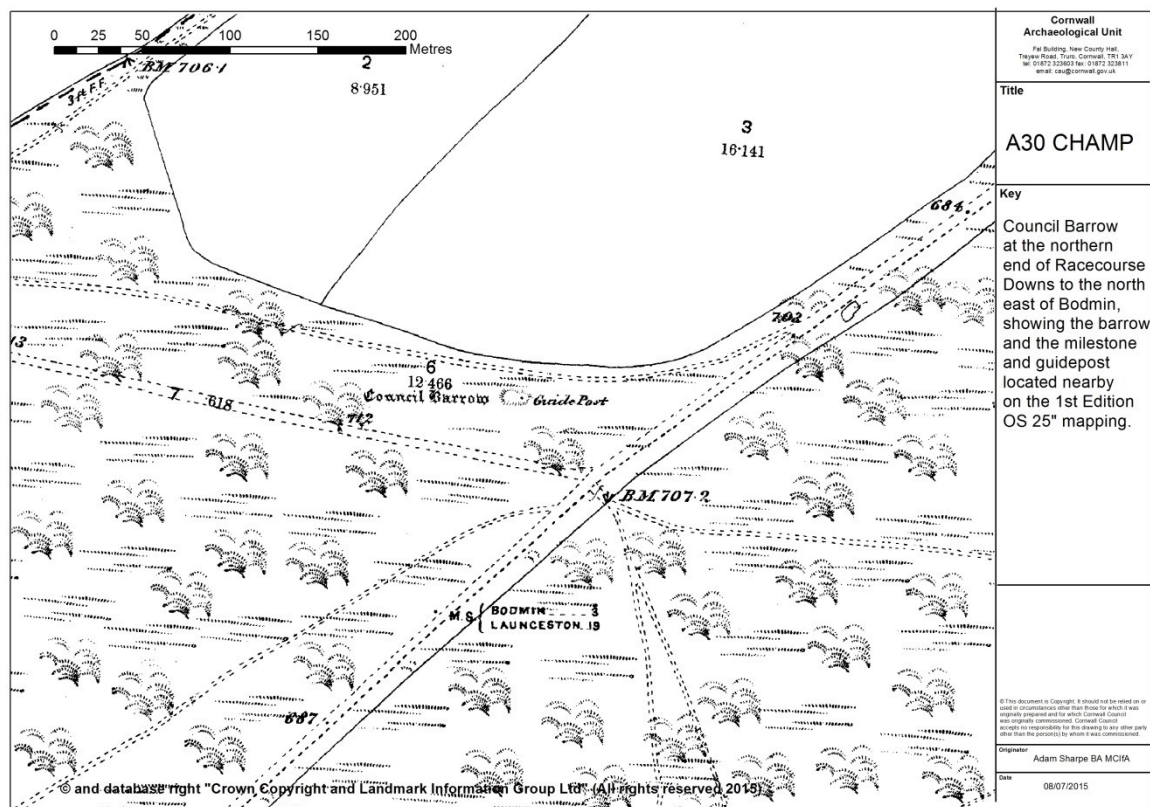


Fig 33. The improvements brought about by the turnpiking of the road between Bodmin and Launceston shown on the 1st Edition of the OS 25" to a mile mapping circa 1877 included the milestone and guide post on Racecourse Downs.

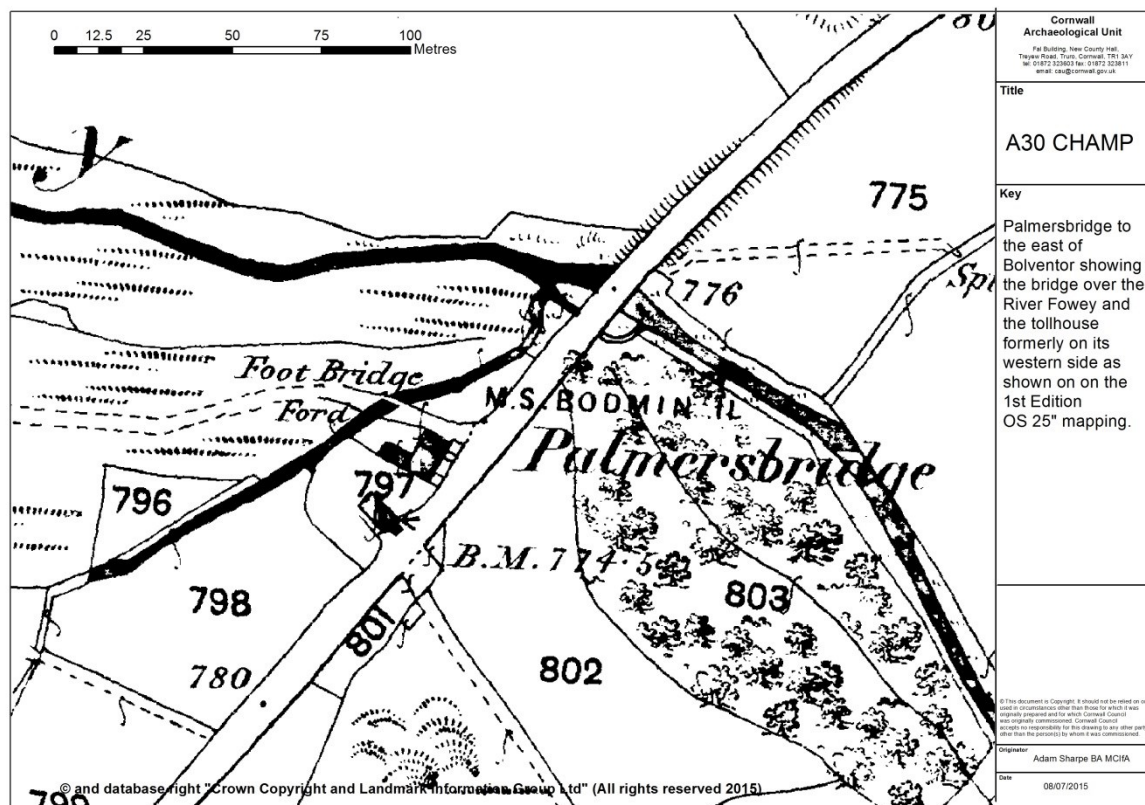


Fig 34. Another extract from the circa 1877 OS 25" mapping showing the milestone and toll house just to the west of Palmersbridge, both lost to 20th century road improvements.



Fig 35. An early 20th century postcard showing the western end of Bolventor. Note the absence of tarmac on the road surface, the cast iron road sign and (in the background) the signboard advertising the Jamaica Inn (Author's Collection).

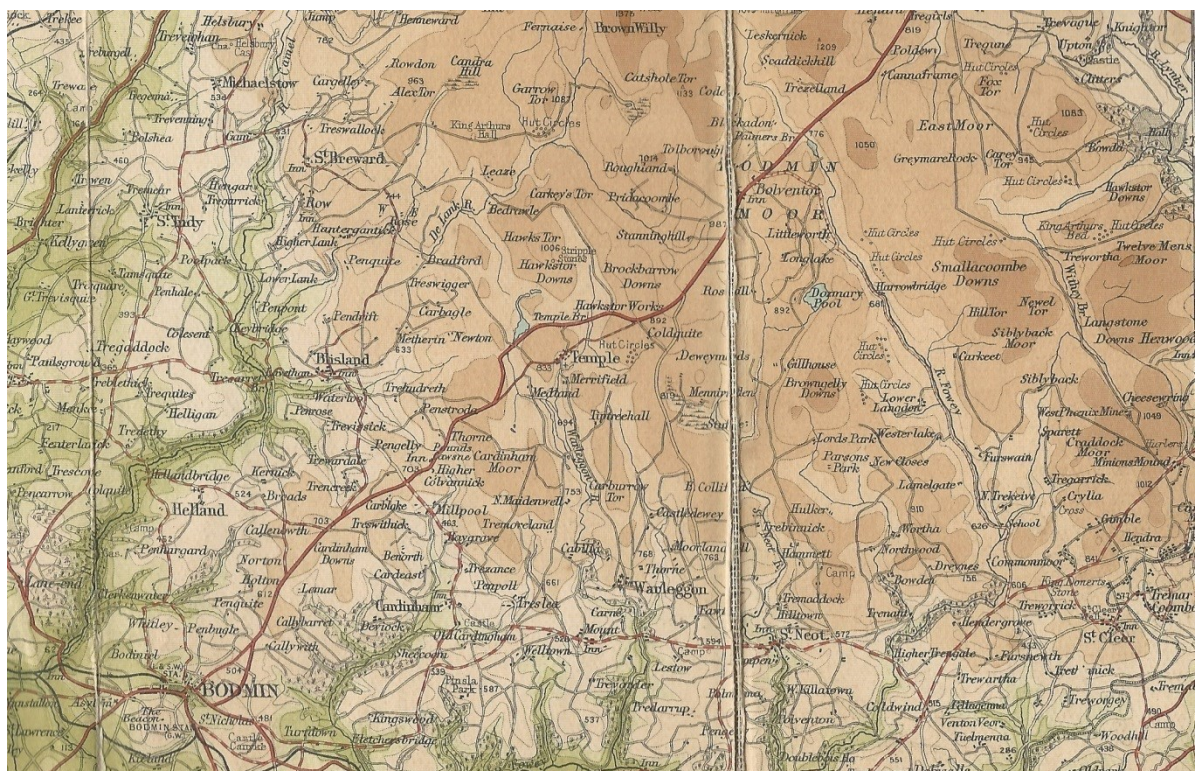


Fig 36. A section of one of the motoring maps produced by Bartholomew in the first decade of the 20th century, showing the route from Bodmin to Canaframe. Roadside inns are labelled at Pounds Conce and Bolventor.

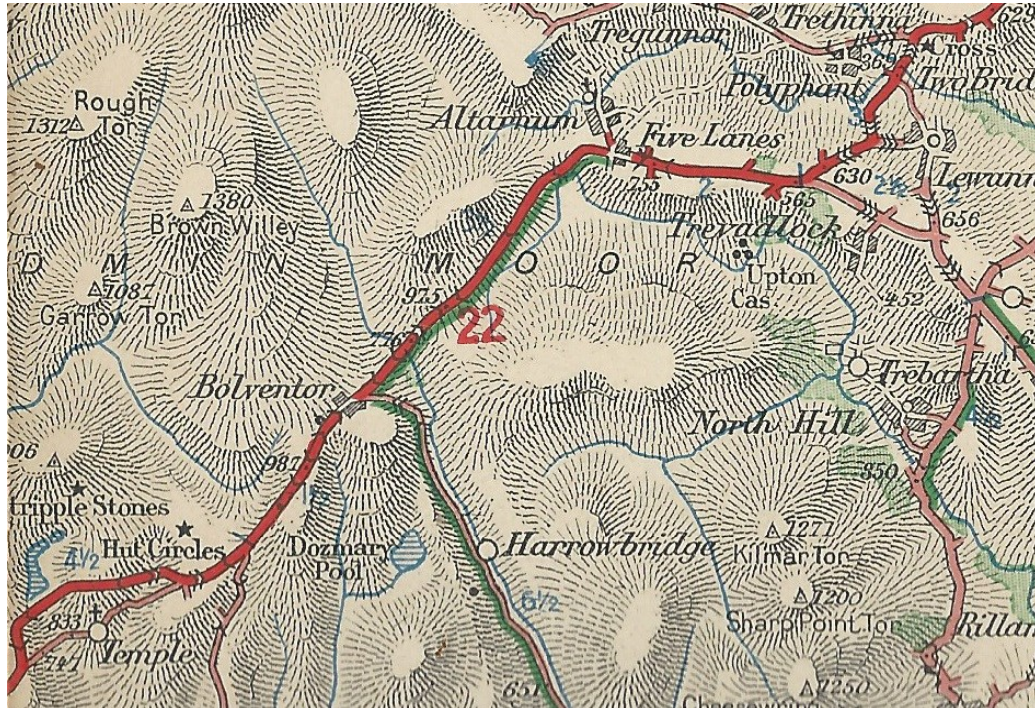


Fig 37. An extract from an early 20th century Michelin motorist's map. This indicates distances between main towns, heights along the roadline and (using arrows) indications of the steepness of the hills which would be encountered. Some archaeological sites are also depicted.



Fig 38. Transport networks to the east of Bodmin. The modern A30 Bodmin by-pass and the A38 join here at Carminow interchange below Castle Canyke hillfort (centre), whilst the road running from centre to top right continues to Callywith Junction. CAU aerial photograph (F75-094).



Fig 39. The Early Bronze Age Trippet Stones stone circle sited at the northern end of Manor Common. Brown Willy and Roughtor are on the skyline.

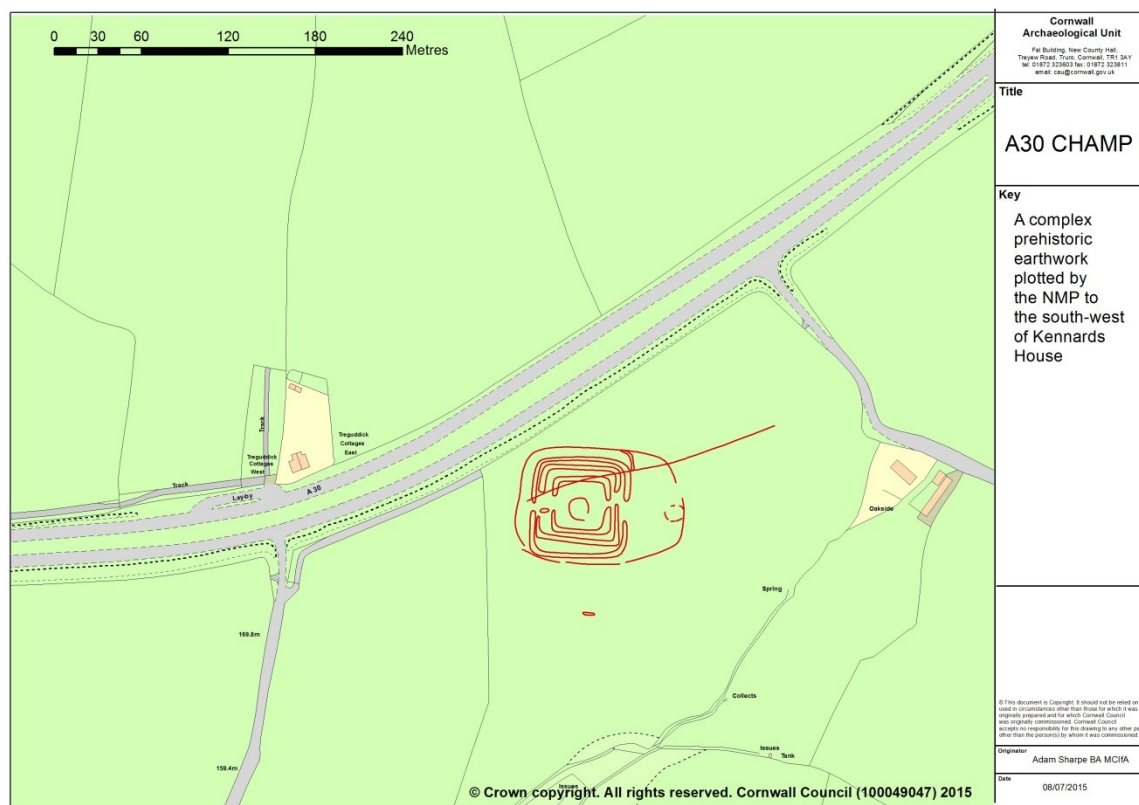


Fig 40. The multivallate late prehistoric earthwork recorded by the NMP close to the A30 near Kennards House.



Fig 41. The exceptionally well-preserved medieval long house settlement and its fields on Garrow Tor. The valley here has been extensively worked by tin streamers.



Fig 42. The motte and bailey of Launceston Castle, together with the surrounding early section of the settlement. (Cornwall HER image).

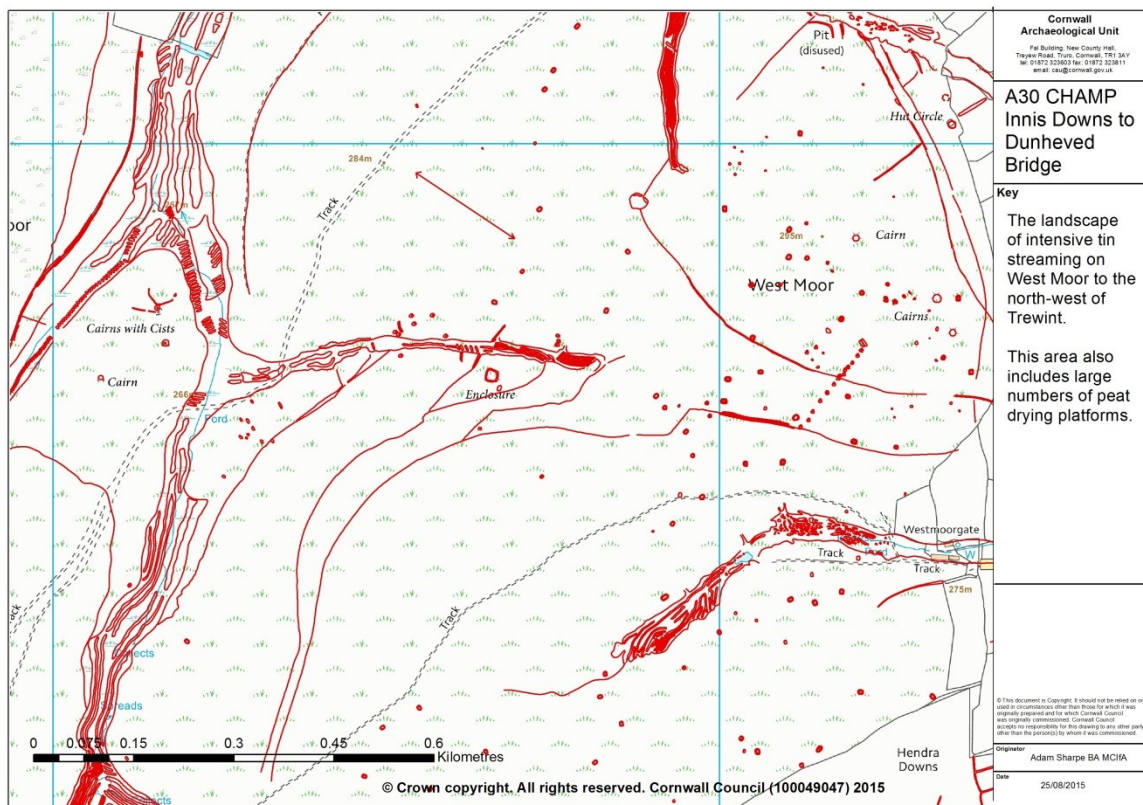


Fig 43. Many areas of Bodmin Moor contain good evidence for the activities of medieval and later tin streamers, but none more so than West Moor to the north of the A30 near Trewint. NMP aerial photo plot.

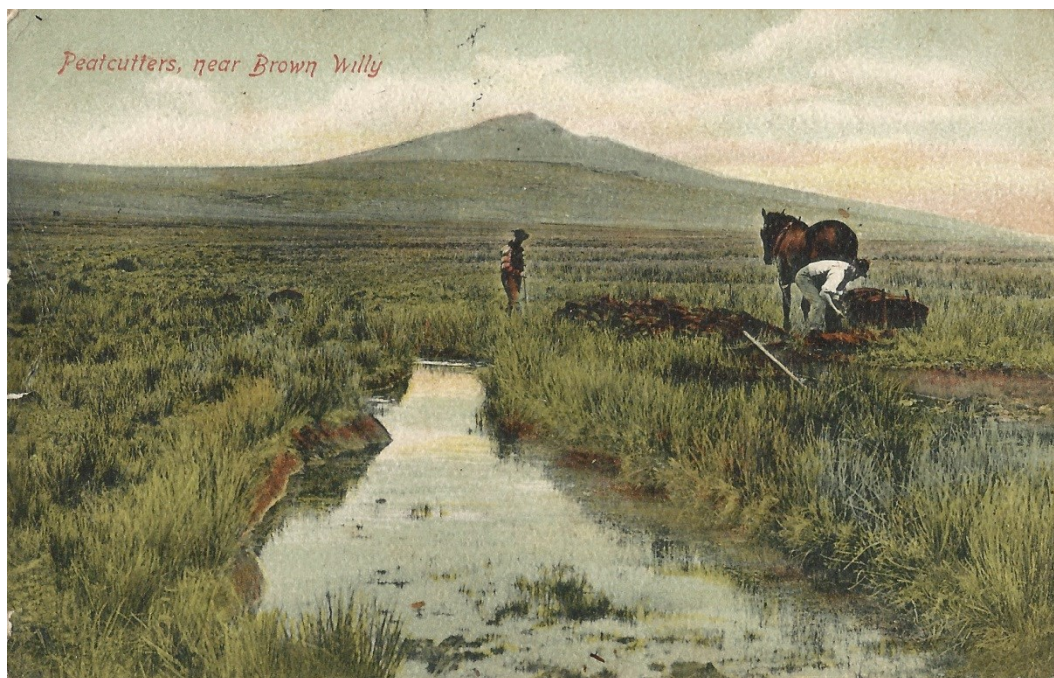


Fig 44. The peat deposits found in many areas of Bodmin Moor have long provided an important source of fuel in this treeless landscape, and have left a distinctive archaeology of cuttings and drying platforms. (Author's collection).



Fig 45. Lanhydrock's great house, associated buildings, formal and kitchen gardens, avenue, designed parkland and flanking woodland are the only example of an Ornamental Landscape near the eastern section of the A30 in Cornwall.



Fig 46. The North Lodge complex at Lanhydrock Park is the closest element of the Park to the A30, being separated from it by a relatively narrow belt of mature trees.



Fig 47. The Burnt Heath china clay works near Temple was small-scale and was only worked for a short period. Its site preserves some now-rare features, including air dries where the finished clay was dried in the open air.

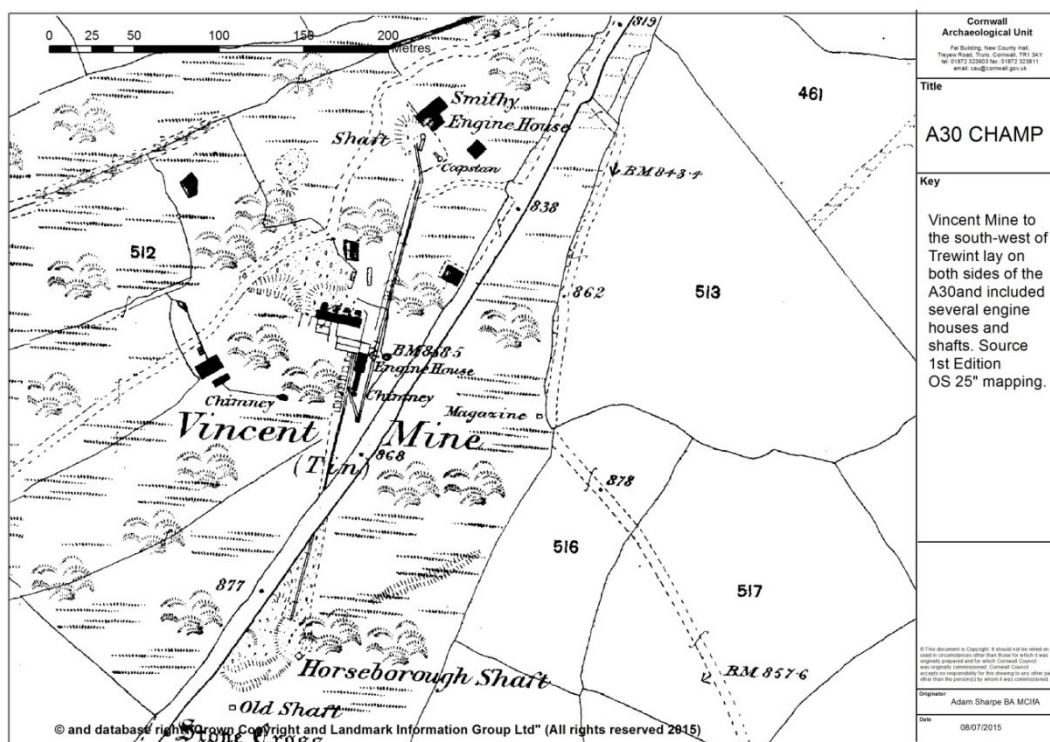


Fig 48. Vincent Mine just to the south of Trewintmarsh is one of the few mines of any scale adjacent to the eastern section of the A30 in Cornwall. Little survives of its engine houses and dressing floors or the tramway shown on the 1877 OS 25" mapping. Horseborough Shaft (now capped) is under the soft estate of the modern A30.

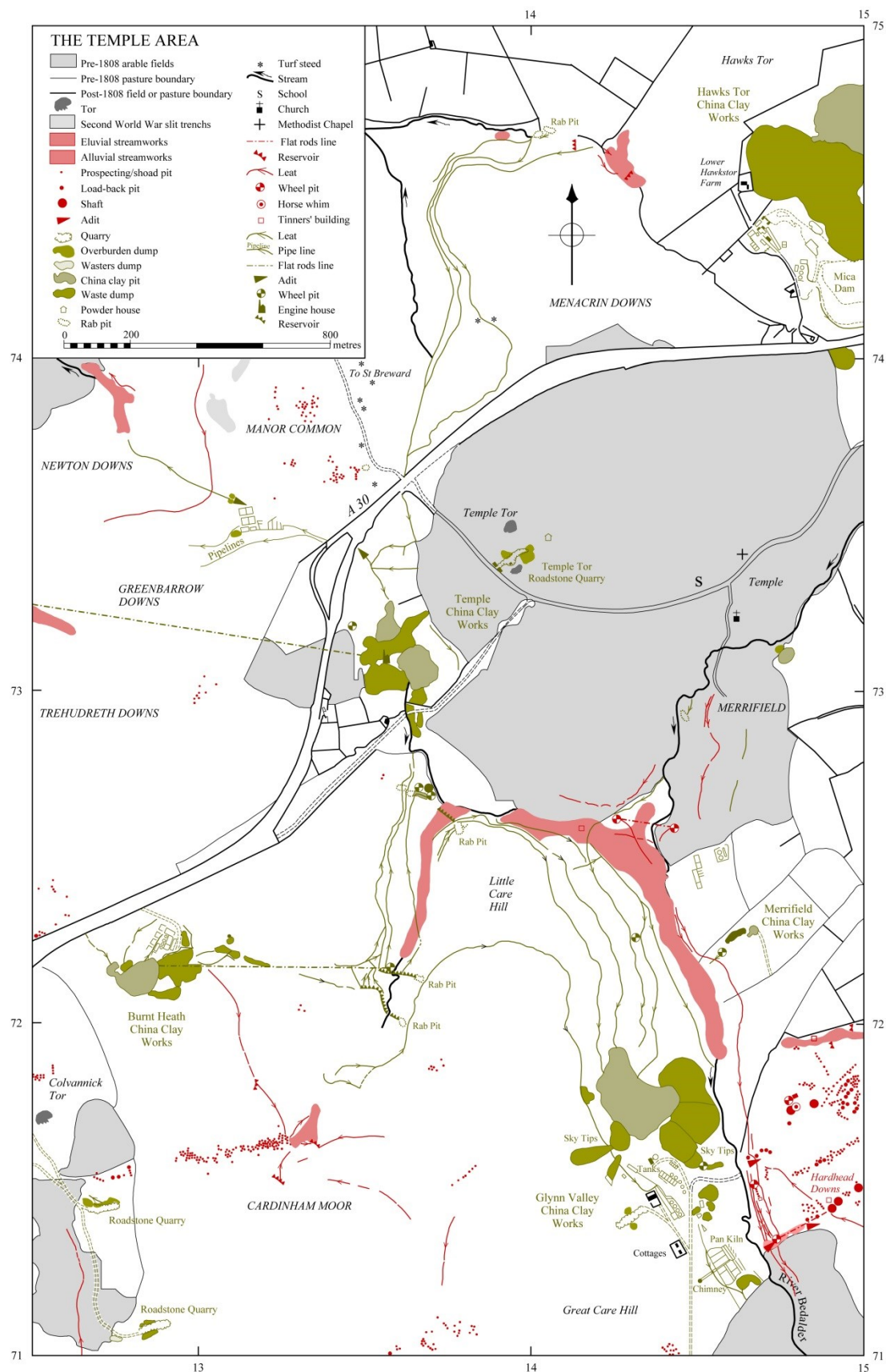


Fig 49. The industrial archaeology of the Temple area includes four china clay works, tin streaming and mining sites and a roadstone quarry on Temple Tor (Source Herring et al 2008).



Fig 50. The historic core of Bodmin, which developed around the site of the 6th century monastery of St. Petrock. Bodmin was, from 1835 to the 20th century, the county town of Cornwall and the site of the county's Shire Hall, gaol and lunatic asylum.



Fig 51. The historic core of Launceston. Formerly known as Dunheved, the town developed around the 11th century castle and was the de facto county town of Cornwall from the 13th century until 1835.

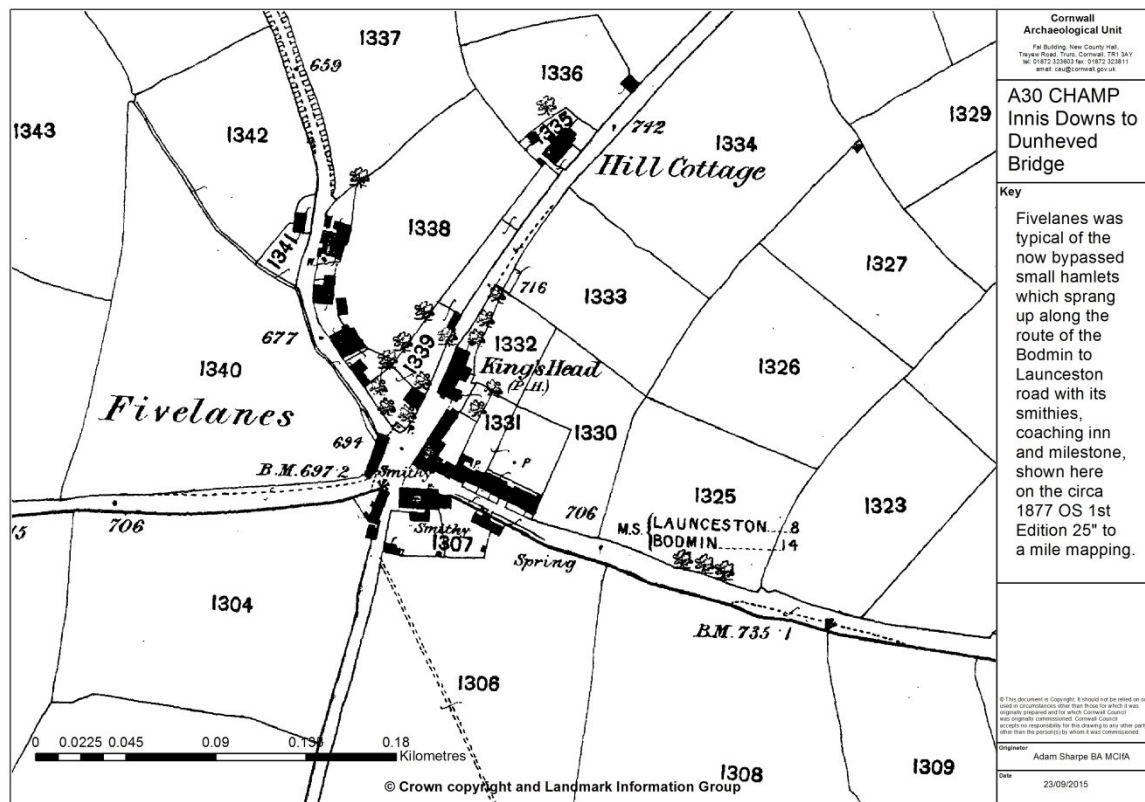


Fig 52. Fivelanes is one of the small hamlets which grew up along the route of the Bodmin and Launceston turnpikes to service the needs of passing travellers.



Fig 53. The A30 immediately east of Innis Downs Junction. Innis Downs henge and barrow cemetery occupy the high ground on the southern side of the junction.



Fig 54. The ridgeline near Reperry viewed from Bodmin Beacon. The A30 runs through this landscape (upper centre), but is almost wholly invisible given the tree screen along its northern side. Helman Tor is visible on the skyline.



Fig 55. Dense tree plantings along the southern side of the A30 at Lanhydrock almost wholly limit any setting impacts on the adjacent designated Park and House.



Fig 56. The A30 near Callywith Junction. The modern road here is in a deep vegetated cutting, closing off views of the surrounding landscape.



Fig 57. The A30 viewed from Colvannick Tor. The view includes the former coaching inn at Pounds Conce (right centre), and a loop of the former route of the A30 (centre). This section of the A30 is currently being upgraded to a dual carriageway.



Fig 58. The A30 skirting the north side of Temple Tor on the western edge of Bodmin Moor running along the 1829 Turnpike Trust by-pass around Temple.



Fig 59. A view near Temple typifying the appearance of the A30 as it crosses Bodmin Moor. Roadside screening is almost wholly absent, and archaeological sites are often intervisible with the highway.



Fig 60. This scene at Temple lay-by shows something of the range of roadside clutter which can negatively impact on the settings of archaeological sites in the nearby landscape.



Fig 61. From some viewpoints, as here, looking west from Lonkeymoor near Bolventor, the A30 can be very prominent within the moorland landscape. Note the far smaller impact of the former route of the A30 to the left of the modern roadline.



Fig 62. Negative setting impacts on the graveyard at Bolventor resulting from the proximity of the A30 are readily apparent in this image.



Fig 63. The A30 to the east of Trewint, as viewed from Trewint Tor. Given the character of the landscape through which it passes, setting impacts on sites within the area flanking the road tend to be limited.



Fig 64. The filling station and facilities at Plusha Junction are typical of those which have lined the A30 throughout the 20th century, but which are now increasingly rare.



Fig 65. The westbound A30 at Pennygillam. Dense tree screens along both sides of the A30 block views of nearby Launceston, but also greatly limit potential negative visual impacts, and assist in reducing impacts from road noise.



Fig 66. The old turnpike route of the A30 heading eastwards from Mount Pleasant towards Lanivet and Bodmin.



Fig 67. The tree-lined route of the old A30 where it runs through St. Laurence's in the western end of Bodmin.



Fig 68. The western end of Bore Street, Bodmin, which formed part of the route of the A30 prior to the construction of the Bodmin By-Pass.



Fig 69. The road to the south of Temple Tor, by-passed by the Bodmin Turnpike Trust in 1829.



Fig 70. Despite the continuing popularity of the Jamaica Inn to visitors, the road through Bolventor is now quiet. A couple of decades ago large volumes of traffic streamed through this moorland hamlet day and night.



Fig 71. Some sections of the old A30, such as that at Cannaframe, survive adjacent to the modern road. This length now serves as a farm track.



Fig 72. The Kings Head at Fivelanes, built in 1662, is typical of the formerly busy coaching inns which were established along the road from Bodmin to Launceston, but which are now by-passed.



Fig 73. The A30 at Fivelanes formerly ran through the hamlet (right), which has now been by-passed twice.



Fig 74. The old road at Bowden Cross heading towards Polyphant. The earlier sections of the A30 in the east of Cornwall are characterised by mature tree plantings along their verges.



Fig 75. The original route of the Bodmin to Launceston road between Fivelanes and Holyway Cross crossed steep-sided valleys at Trerithick Bridge (shown here) and at Hick's Mill.



Fig 76. Before its diversion through Two Bridges during the mid-19th century, the Bodmin to Launceston road ran through the now-peaceful hamlet of Polyphant.



Fig 77. An old section of the A30 at Two Bridges has been converted into a popular serviced lay-by and picnic area.



Fig 78. The now by-passed mid-19th century turnpike double bridge at Two Bridges (Site 31) is well-preserved but almost wholly unappreciated, being significantly obscured by un-managed vegetation.



Fig 79. The southern entrance to Launceston, a constricted and problematic section of the route of the A30 prior to the construction of the Launceston By-Pass.



Fig 80. The centre of Launceston, quite clearly entirely unsuitable for the route of a major trunk road by the later decades of the 20th century.



Fig 81. Polson Bridge, the crossing point on the River Tamar for the A30 until the construction of the Launceston By-Pass and Dunheved Bridge.



Fig 82. Reperry Cross.



Fig 83. St. Ingunger Cross.



Fig 84. A possible roadside cross near Treffry, south of Bodmin.



Fig 85. Carminow Cross (Site 1).



Fig 86. Cooksland Cross.



Fig 87. Peverell's Cross (Site 12).



Fig 88. Fourhole Cross Site 21).



Fig 89. Vincent Cross (Site 27).



Fig 90. Holyway Cross (Site 32).



Fig 91. Dunheved Cross.



Fig 92. Reperry cross guidestone.



Fig 93. Reperry Lanivet road guidestone.



Fig 94. The guidestone pillar at Badway Cross to the north of Temple (Site 17). This is to be re-sited and replacement direction boards and frames will be added to it.



Fig 95. The guidepost to the west of Council Barrow.

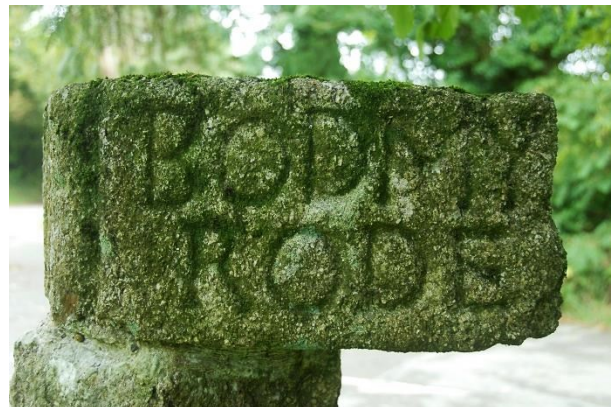


Fig 96. Bowden Cross guidepost.



Fig 97. A manorial, parish and hundredal boundstone adjacent to the A30 near Blisland Junction (Site 6).



Fig 98. One of the boundstones on the northern and western sides of Temple Tor.



Fig 99. A boundstone adjacent to the lay-by at Burnt Heath Junction (Site 15).



Fig 100. A 19th century boundstone on a hundredal boundary adjacent to the A30 on Trehudreth Common (Site 14).



Fig 101. A possible boundstone base (lower centre, beneath tree roots) exposed during roadworks near Temple.



Fig 102. An early and atypical turnpike era milepost on Racecourse Downs near Bodmin (Site 10).



Fig 103. A Bodmin Turnpike milestone adjacent to the Blisland turning off the A30 (Site 5).



Fig 104. The Bodmin Turnpike Trust milestone at Lordswaste (Site 22).



Fig 105. A Launceston Turnpike milestone near Bolventor Church (Site 23).



Fig 106. A Launceston Turnpike milestone west of Trebursye.



Fig 107. The Launceston Turnpike milestone adjacent to the lay-by at Strylands (Site 29).



Fig 108. The eastern elevation of the turnpike era Palmersbridge, the only surviving CHF within the hard estate of the eastern section of the A30 in Cornwall (Site 25).



Fig 109. The prominent Gilbert Monument on Bodmin Beacon.



Fig 110. The former St. Laurence's Lunatic Asylum adjacent to the former route of the A30 in the western part of Bodmin.



Fig 111. The pillared porch entrance to the former coaching inn at Pounds Conce.



Fig 113. A boundstone adjacent to the old road through Temple.



Fig 112. The former roadside smithy at Preeze Cross.



Fig 114. The small granite quarry on Temple Tor.



Fig 115. A peat drying platform on Manor Common close to the A30.



Fig 116. The abandoned Hawkstor china clay works is a prominent feature of the landscape of central Bodmin Moor from the A30.



Fig 117. Hawkstor Plantation is one of several on Bodmin Moor close to the A30 which negatively affect its historic landscape character.



Fig 118. Temple Church, founded by the Knights Templar and rebuilt during the late 19th century.



Fig 119. The Scheduled Temple Old Bridge on the old road to the south-east of Temple Tor.



Fig 120. Bolventor Church (Site 24), now closed as a place of worship, is very close to the route of the nearby by-pass and is separated by it from the village it formerly served.



Fig 121. Altarnun, not far from the A30 would have been visited by medieval travellers crossing Bodmin Moor, but was by-passed by the Turnpike Trusts. Note the narrowness of the early packhorse bridge in the foreground.



Fig 122. Treffry farmhouse close to the A30 at Lanhydrock.



Fig 123. Wesley's Cottage at Fivelanes, the former home of Digory Isbell.



Fig 124. The Listed Trevell Farm building complex, within the theoretical viewshed of the A30.



Fig 125. The Listed Trebusye North Lodge, immediately adjacent to the A30.



Fig 126. The motte and shell keep of the Scheduled Launceston Castle, close to the former route of the A30.

A30 Innis Downs to Dunheved Bridge CHAMP

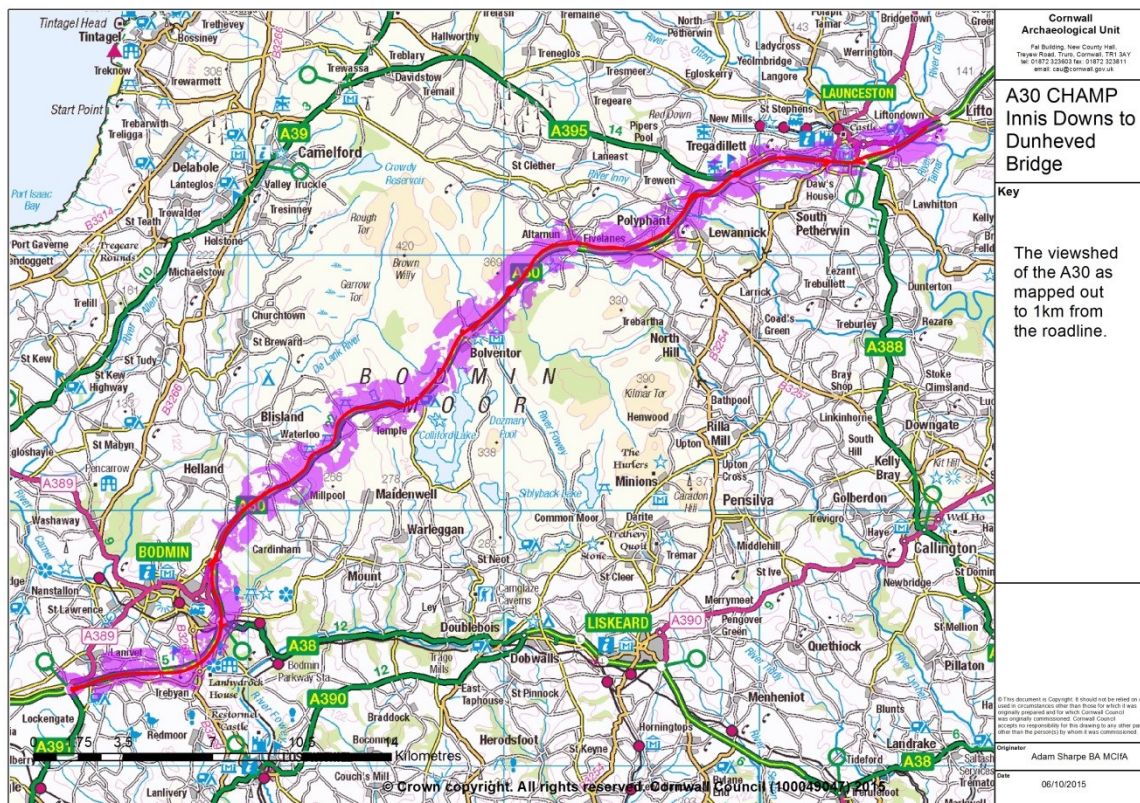


Fig 127. The viewshed for the A30 as plotted out to 1km from the centre of the roadline.

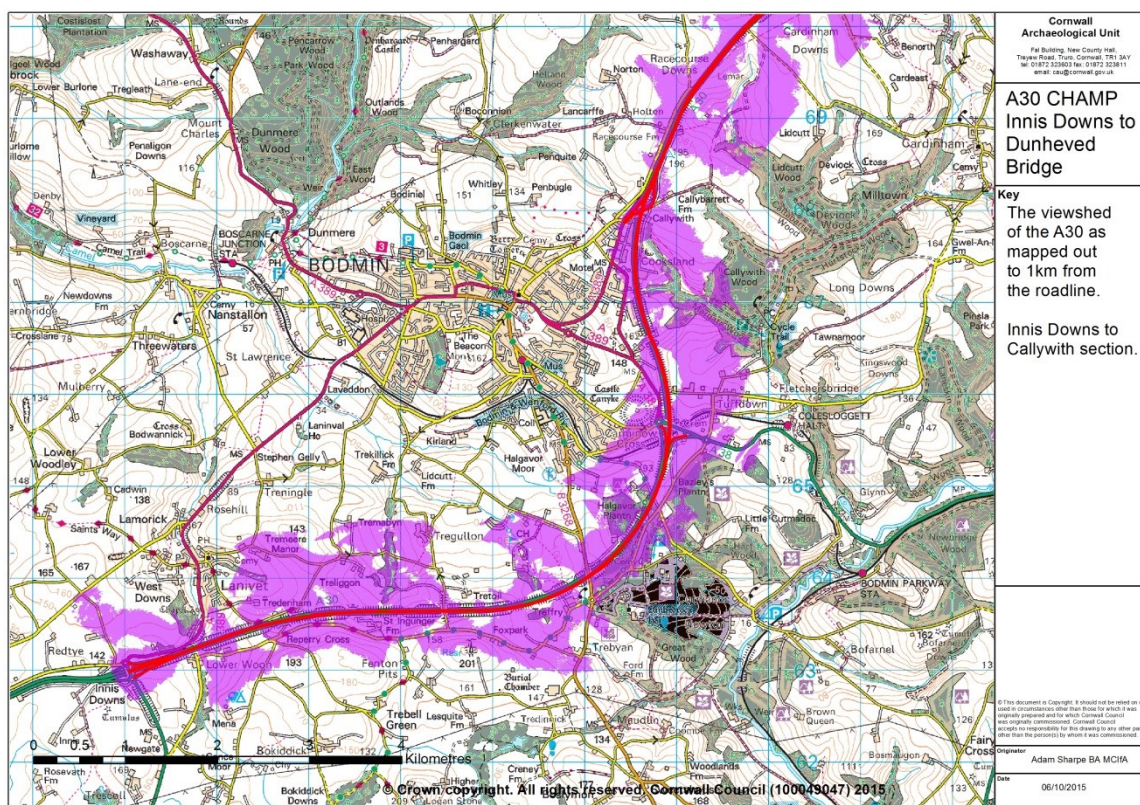


Fig 128. The 1km radius viewshed of the A30 between Innis Downs and Callywith.

A30 Innis Downs to Dunheved Bridge CHAMP

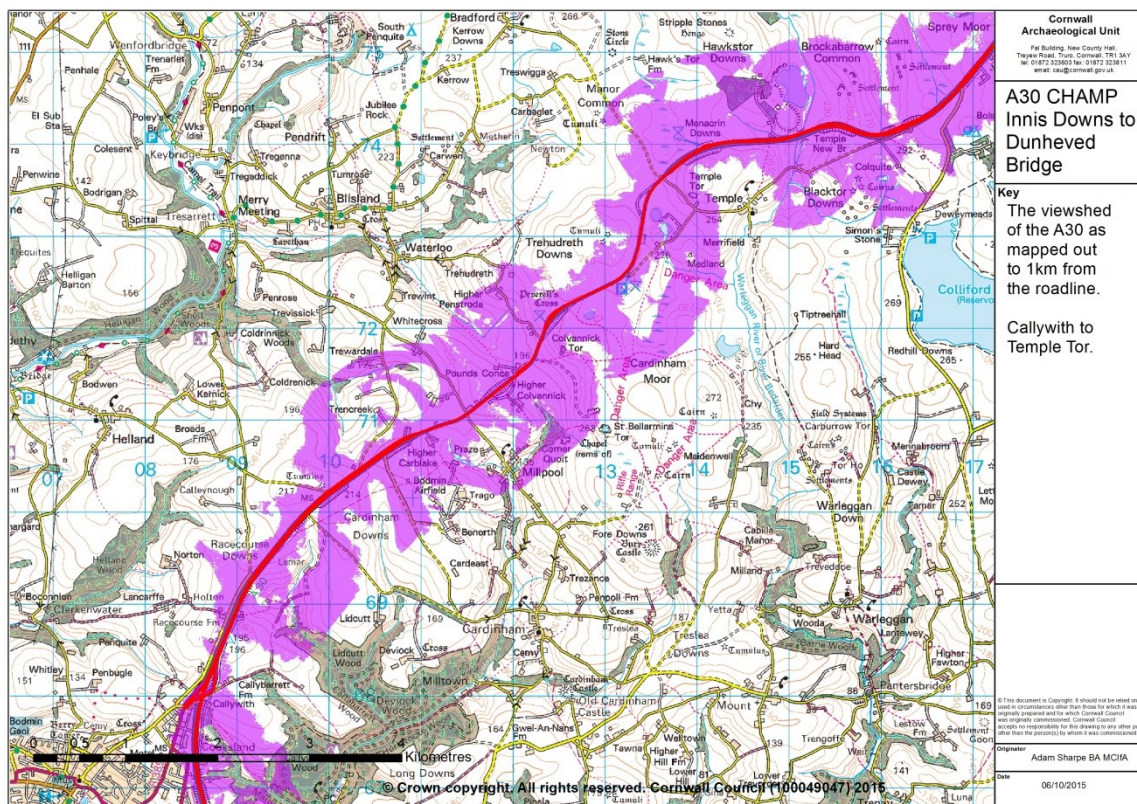


Fig 129. The 1km radius viewshed of the A30 between Callywith and Temple Tor.

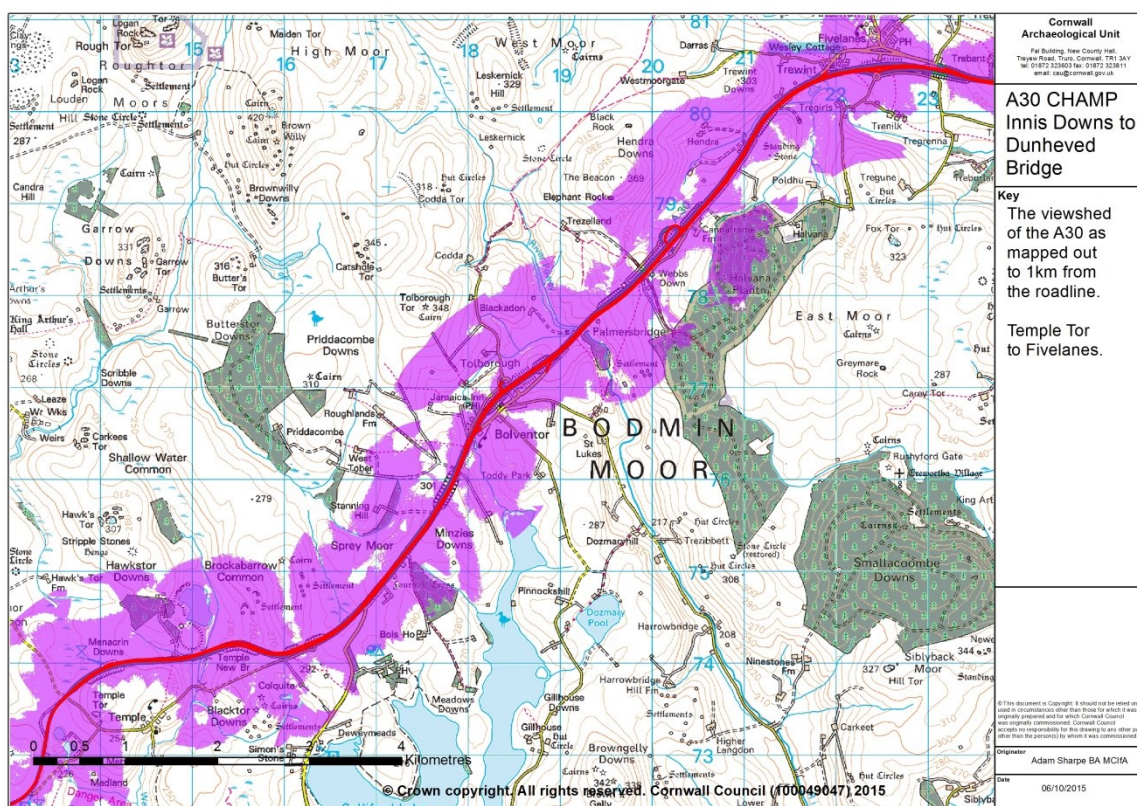


Fig 130. The 1km radius viewshed of the A30 between Temple Tor and Fivelanes.

A30 Innis Downs to Dunheved Bridge CHAMP

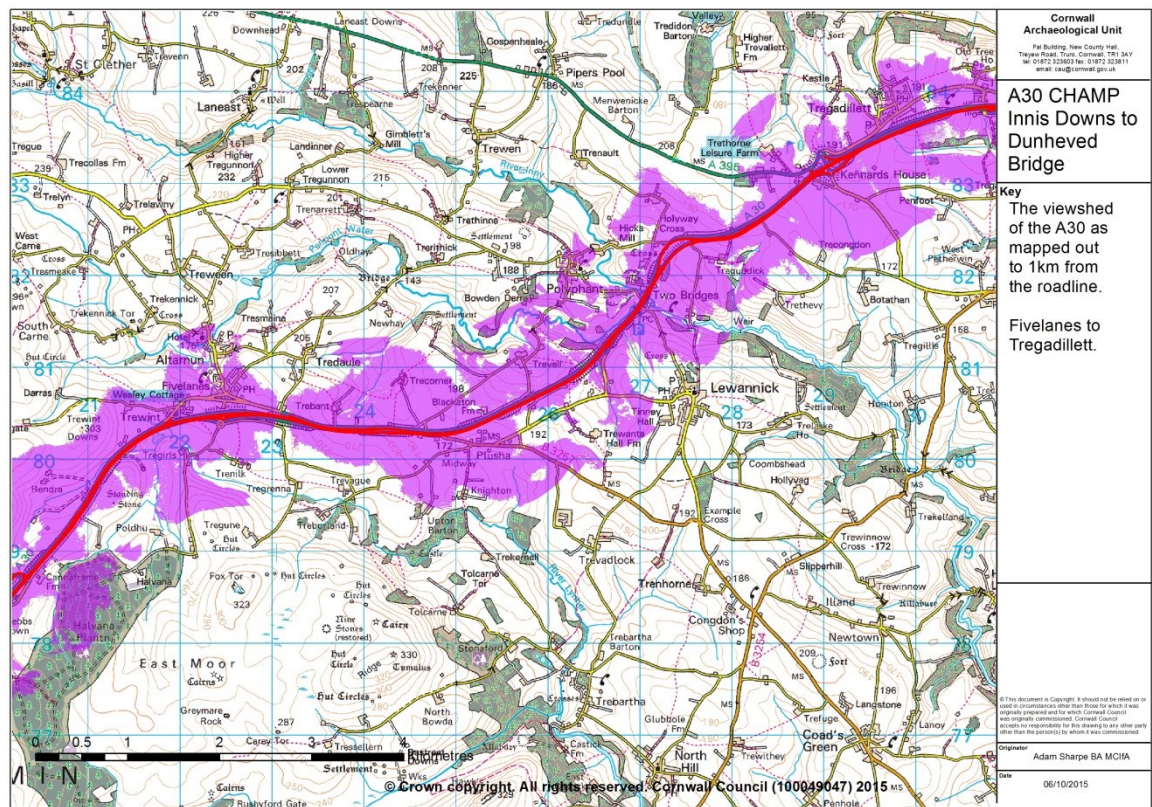


Fig 131. The 1km radius viewshed of the A30 between Fivelanes and Tregadillett.

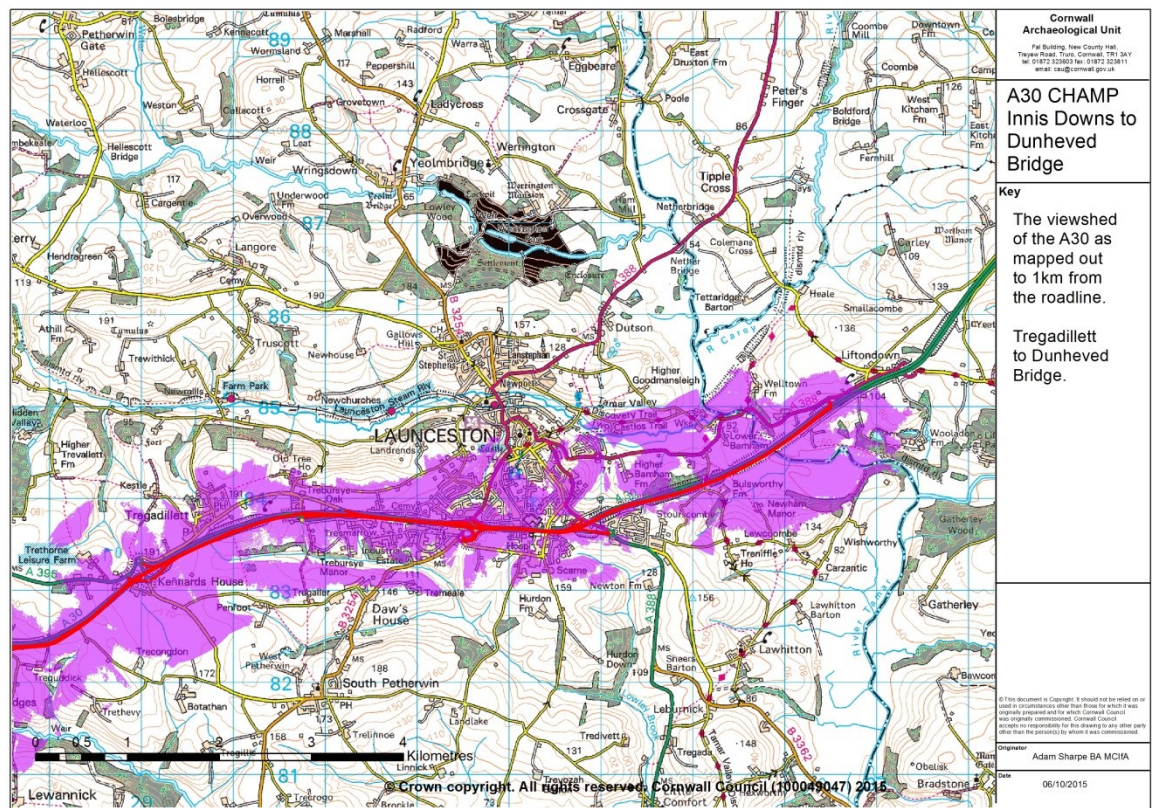


Fig 132. The 1km radius viewshed of the A30 between Tregadillett and Dunheved Bridge.

A30 Innis Downs to Dunheved Bridge CHAMP

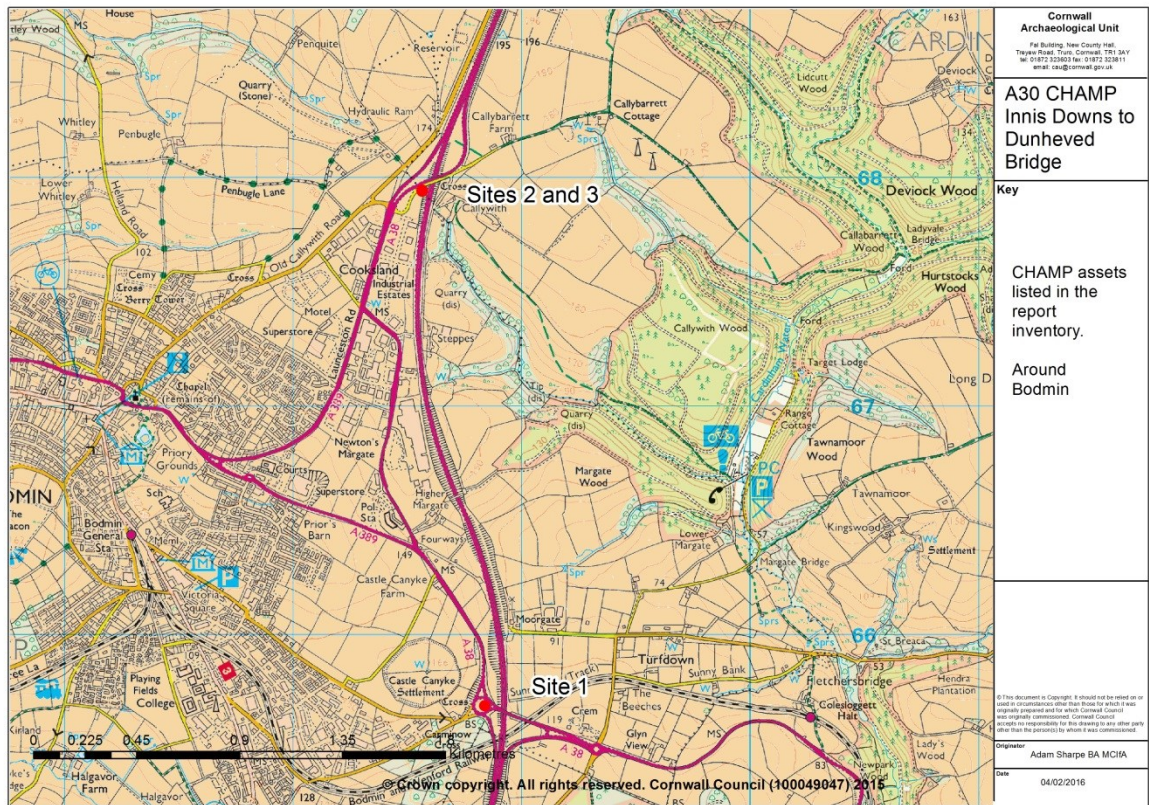


Fig 133. The locations of CHAMP inventory sites 1 to 3.

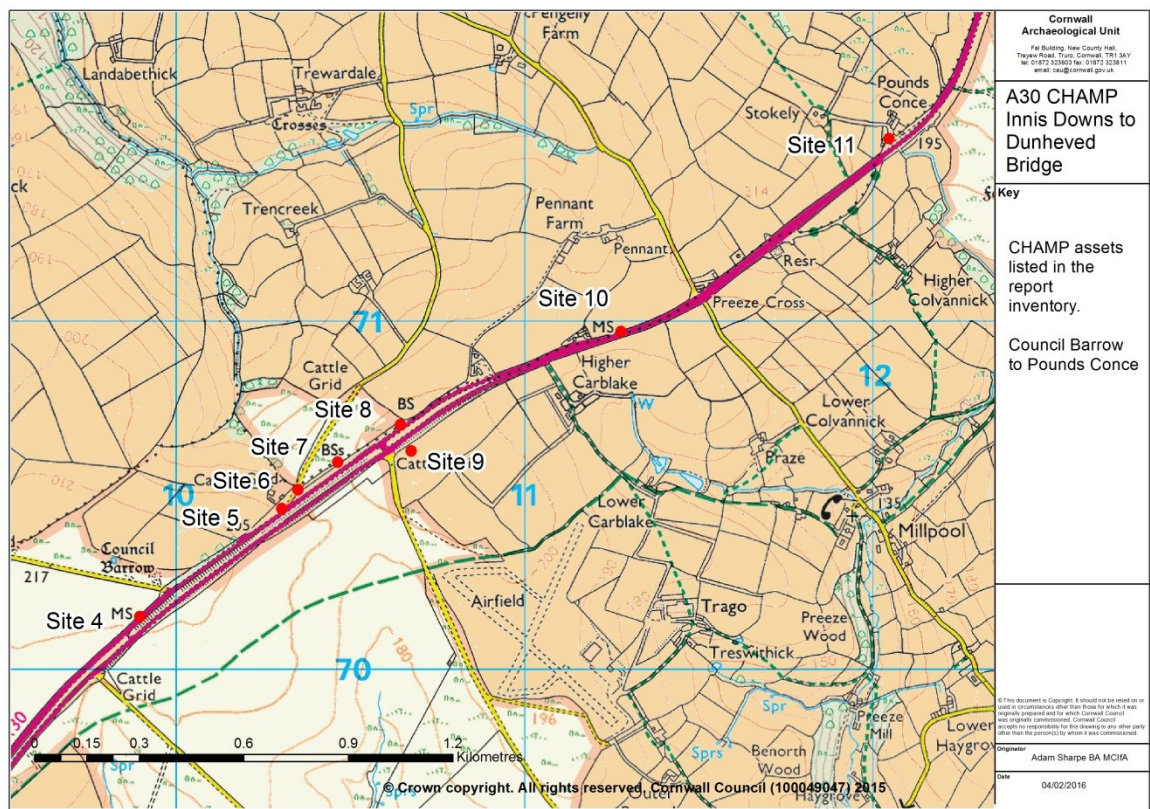


Fig 134. The locations of CHAMP inventory sites 4 to 11.

A30 Innis Downs to Dunheved Bridge CHAMP

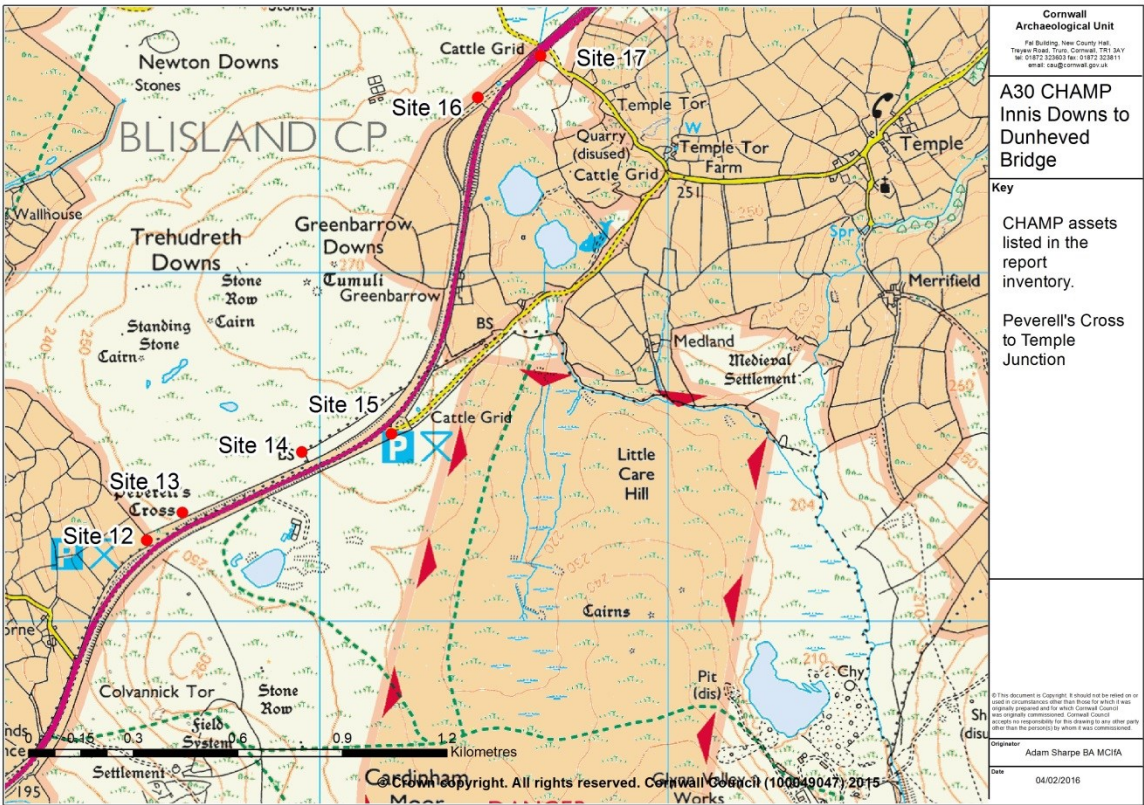


Fig 135. The locations of CHAMP inventory sites 12 to 17.



Fig 136. The locations of CHAMP inventory sites 18 to 20.

A30 Innis Downs to Dunheved Bridge CHAMP

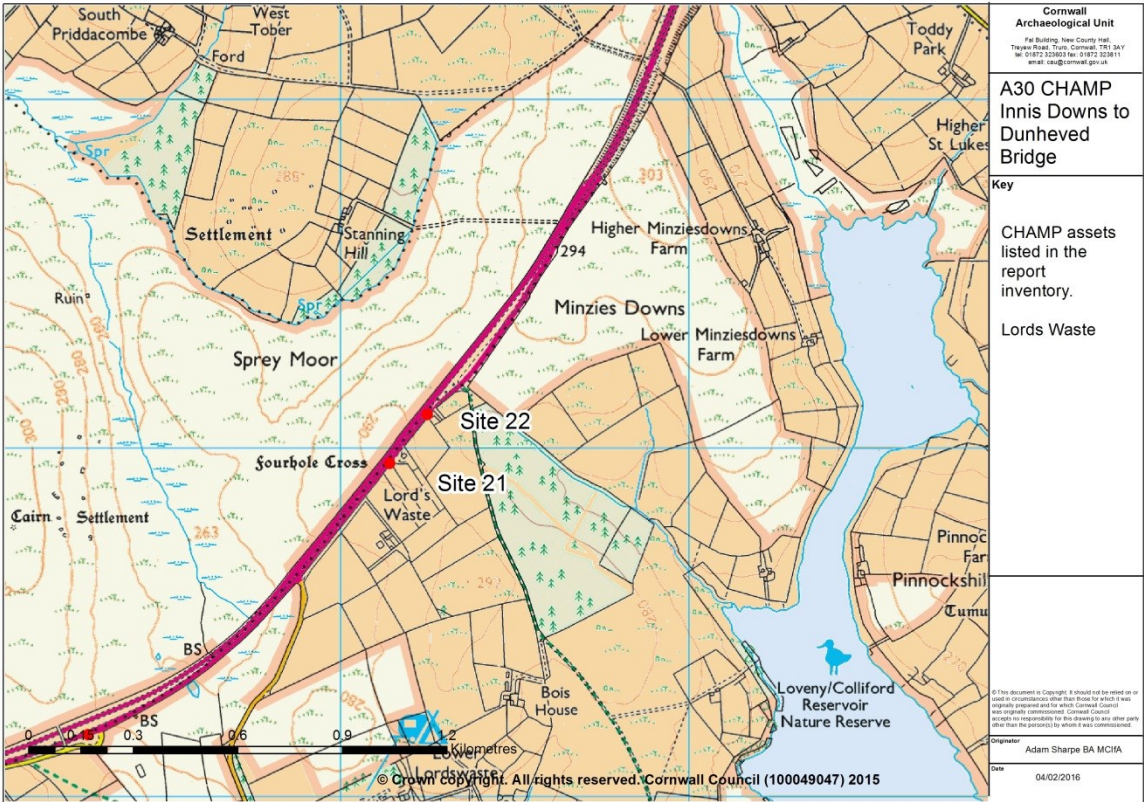


Fig 137. The locations of CHAMP inventory sites 21 and 22.

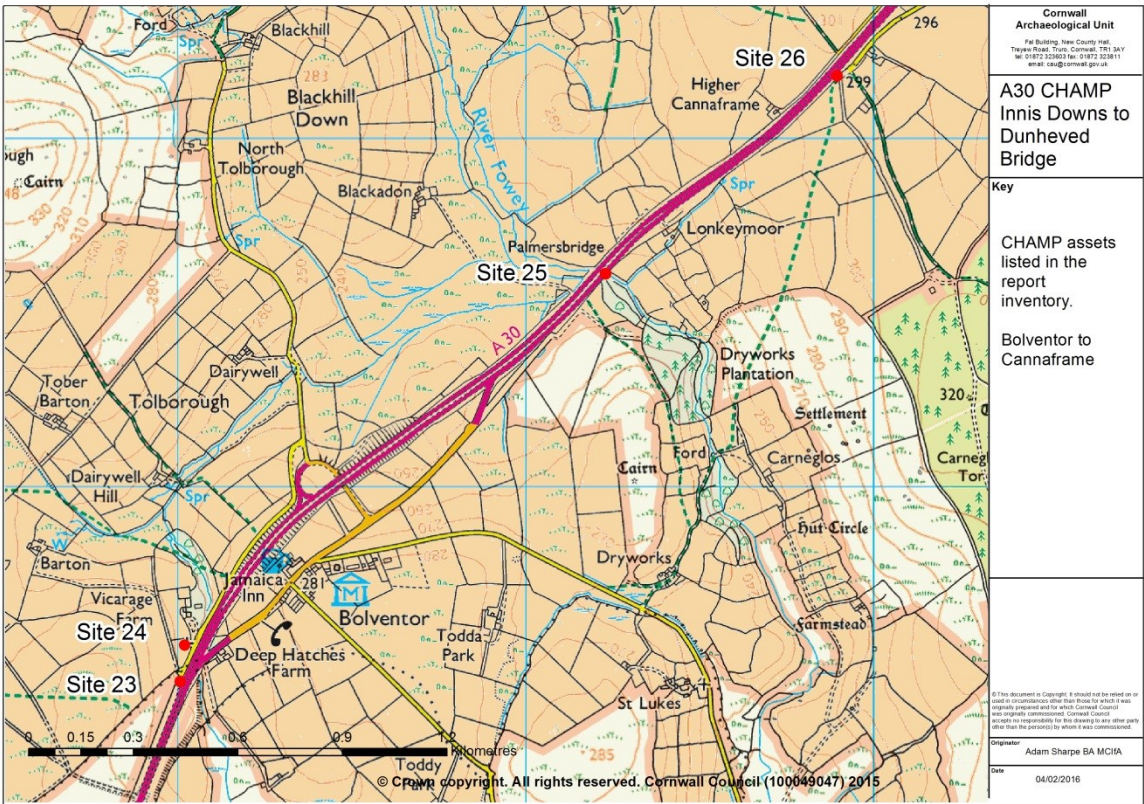


Fig 138. The locations of CHAMP inventory sites 23 to 26.

A30 Innis Downs to Dunheved Bridge CHAMP

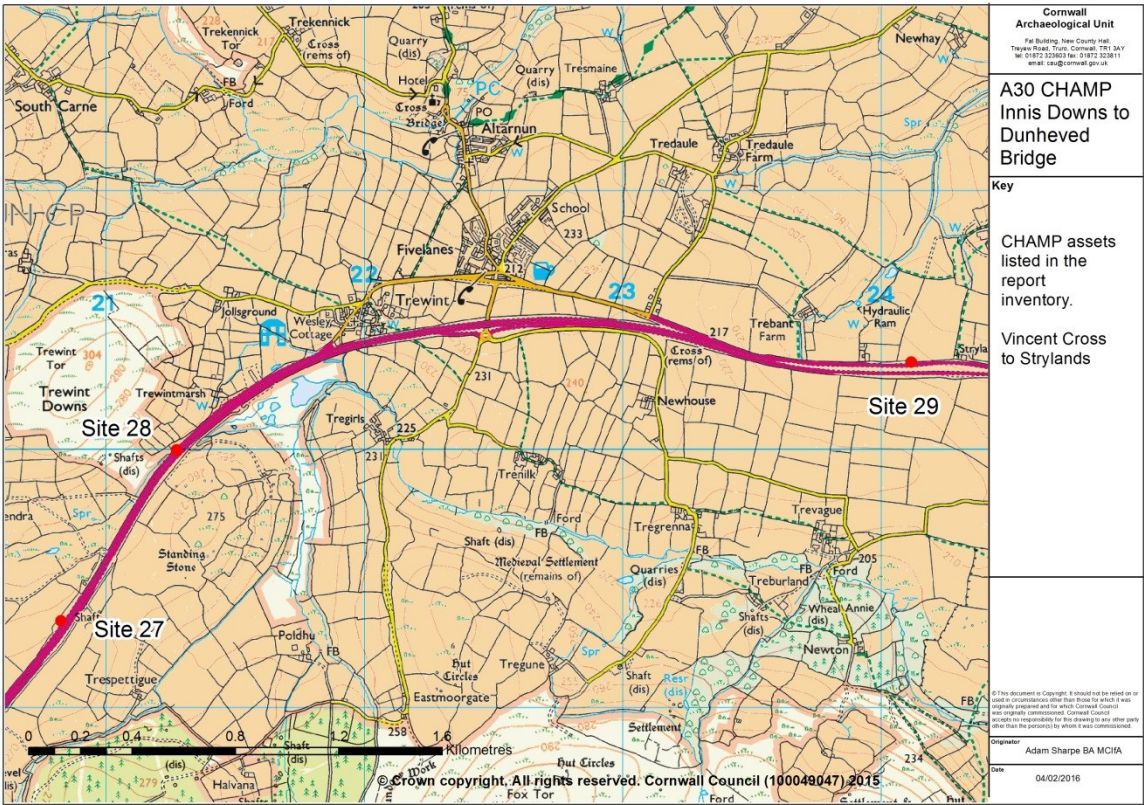


Fig 139. The locations of CHAMP inventory sites 27 to 29.



Fig 140. The locations of CHAMP inventory sites 30 to 33.