



CAMBRIAN
ARCHAEOLOGICAL
PROJECTS

Wear Point, Milford Haven Pembrokeshire

Archaeological Desk Based Assessment



By
Chris E Smith BA (Hons) MA AIFA

Report No. 544

Cambrian Archaeological Projects Ltd
Old Chapel Farm, Llanidloes
Powys SY18 6JR
Telephone: 01686 413857
E-mail: info@cambarch.co.uk





CAMBRIAN
ARCHAEOLOGICAL
PROJECTS

Wear Point, Milford Haven Pembrokeshire

Archaeological Desk Based Assessment

Prepared For: Bridget Savage

On Behalf of: Royal Haskoning Ltd

Edited by

Signed:

Position:

Date:

Authorised by

Signed:

Position:

Date:

By

Chris E Smith BA (Hons) MA AIFA

Report No: **544**

Date: November 2008



CONTENTS

1	Introduction	1
1.1	Location and scope of work	1
1.2	Geology and topography	1
1.3	Archaeological and historical background	2
2	Aims and Objectives	5
4	The Desk-Based Assessment – Search Data	6
5	Historic Map Regression	7
5.2	Aerial Photographs	8
6	Discussion and Interpretation	10
6.2	Overall Interpretation	10
7	Predicted impacts	11
8	Proposals	11
9	Acknowledgements	11
10	Bibliography and references	11
Appendix 1:	DAT Report No. 45243. 2002. Petroplus LNG Development, Environmental Impact Assessment. Archaeological Desk-based Assessment	
Appendix 2:	JONES, R. 2007. Semlogistics, Waterston, Milford Haven. Archaeological Impact Assessment. CAP Report	
Appendix 3:	CRANE, P. 2003. Proposed Extension to the Petroplus LNG Development. An Archaeological Assessment. DAT Report	
Appendix 4:	HER Search Data	
Appendix 5:	Figures	
Appendix 6:	Archive Cover Sheet	

List of Figures

Figure 1	Location Map
Figure 2	Turbine Locations
Figure 3	Location of Known Archaeology
Figure 4	1809-34 2 inch OS Surveyors drawings
Figure 5	1849 Llanstadwel Tithe map
Figure 6	1869 1 st Edition 6 Inch OS Map
Figure 7	1895 1 to 25 Inch 1 st Edition OS Map
Figure 8	1908 1 to 25 Inch 2 nd Edition OS Map
Figure 9	1909 2nd Edition 6 Inch OS Map
Figure 10	1948 Provisional Edition OS Map
Figure 11	2008 Edition OS Map

Copyright Notice:

Cambrian Archaeological Projects Ltd. retain copyright of this report under the Copyright, Designs and Patents Act, 1988, and have granted a licence to Haskoning UK Ltd to use and reproduce the material contained within.

The Ordnance Survey has granted Cambrian Archaeological Projects Ltd a Copyright Licence (No. AL 52163A0001) to reproduce map information; Copyright remains otherwise with the Ordnance Survey.

Non Technical Summary

This report results from work undertaken by Cambrian Archaeological Projects Ltd (CAP) for Haskoning UK Ltd of Westminster, London. The work carried out consisted of an appraisal of previously undertaken desk based assessments and a field evaluation on land at Wear Point, Milford Haven, Pembrokeshire. The appraisal reviewed the previously undertaken desk-based assessments including the documentary, photographic and cartographic sources used. A search of the local HER was also carried out in order to establish whether any new sites have since come to light and should therefore be included within the study. Previous work has been carried out in the area by both Cambrian Archaeological Projects Ltd and the Dyfed Archaeological Trust. The site lies adjacent to a large oil refinery on the shore of the Haven. The appraisal was put in place as a planning condition for the construction of four wind turbines on the site.

1 Introduction

1.1 Location and scope of work

- 1.1.1 In October/November 2008 Cambrian Archaeological Projects (CAP) carried out an appraisal of previously undertaken desk based assessments of land to the north west of Wear Point, Pembrokeshire (Fig 1), on behalf of their clients Haskoning UK Ltd.
- 1.1.2 This work was carried out in respect of a proposed wind farm development on the site. The development concerns the construction of 4 wind turbines on the site with associated access tracks centred on NGR SM 193871 204546 (See Fig 2).
- 1.1.3 After consultation with both Richard Kelly of the Countryside Council for Wales and Charles Hill of the Dyfed Archaeological Trust it was agreed that, owing to the presence of the large industrial oil refinery site, an ASIDOHL2 assessment was not required for this particular wind farm application as no further impact to the historic character area was envisaged.
- 1.1.4 Given that various desk based assessments have already been carried out for the area prior to the construction and subsequent expansion of the oil refinery site it was felt that an appraisal of these studies would be sufficient to meet planning conditions.

1.2 Geology and topography

- 1.2.1 The topography of the area of proposed development is gently undulating from, on average, 50 to 80 metres above sea level. The surrounding landscape is completely devoid of woodland and is characterised largely by the urban and industrial sprawl of Milford Haven, Pembroke Dock, Neyland and the surrounding oil refineries. Although the development area is located within a registered historic landscape (the Milford Haven Waterway) its immediate surroundings are heavily industrial and commercial.
- 1.2.2 The underlying solid geology of the Wear Point area is mainly composed of sedimentary formations of Lower Devonian sandstone (British Geological Survey, 1979). This is overlain by Milford, a well drained fine loamy reddish soil (Soil Survey of England & Wales, 1983).

1.3 Archaeological and historical background

- 1.3.1 As part of the Historic Landscape Characterisation Project the Milford Haven area was divided up into several separate areas. The area of proposed development lies within the Historic Landscape of the Gulf Oil Refinery. This section will give details of the Historic Landscape within which the proposed development is located as well as those immediately adjacent. The following are extracts from a report by Ken Murphy and Neil Ludlow (Murphy and Ludlow 2002). They are also included as Appendix 1 in the Dyfed Archaeological Trusts 2002 desk based assessment of the site.
- 1.3.2 Apart from a very narrow strip of land comprising sea cliffs and cliff top, this historic landscape character area is entirely taken up by an oil refinery and a small industrial estate. Prior to construction of the oil refinery this was an agricultural landscape, almost entirely lying within Llanstadwel parish. It occupied the medieval manor of Waterston, which was a 'mesne' lordship of the Lordship of Haverford. On the tithe map of 1849 a very distinct landscape of enclosed strip fields surrounded Waterston village, including the area to the south of the village now occupied by the refinery. These strip fields were clearly the enclosed remnants of the open fields of Waterston manor and township. Later maps show the strip fields, but during the later 19th century and the 20th century some had been merged into larger, squarer enclosures. Elsewhere the pre refinery landscape comprised regularly-shaped fields associated with Newton Farm – labelled Newton Demesne on the tithe map. These fields and farm no longer exist. Construction began on the Gulf refinery in 1966, and the first tanker unloaded crude oil in 1968.
- 1.3.3 This historic landscape area comprises a late 20th century oil refinery. It includes all the installations, including jetties for the unloading of crude oil and a mainline railway. Also included in this area is a small industrial estate. A short section of sea cliff and cliff top between the refinery and the sea is the only component of the landscape not built upon. This is a very distinct area with clear boundaries. It stands in sharp contrast to the surrounding farms and villages.
- 1.3.4 Located immediately to the west of the area of proposed development is the Scoveston – Burton Historic Landscape Characterisation area. The following are extracts from the Dyfed Archaeological Trusts website:
- 1.3.5 A large character area lying the north of the Milford Haven waterway, within the ecclesiastical parishes of Llangwm, Llanstadwel, Rosemarket and Steynton. Much of the area formed part of the medieval Manor of Pill, part of the larger Manor (or Sublordship) of Pill and Roch, which was created under the de Roches between 1100 and 1130. Its relationship with the Lordship of Haverford, of which it was notionally a member, was always a matter of dispute. Pill was a large and important manor with a caput at the head of Castle Pill (pill is a local term for a tidal inlet) at the west end of the area – possibly on the site of an Iron Age hillfort and later a Civil War defence. The southeast end of this area lies within the parish of Burton, which represented a detached portion of the Lordship of Pembroke. Burton parish church was present by 1291. The Manor (and parish) of Llangwm, to the north, was a holding of the de Vales until a Roche kinsman, Gilbert de la Roche, acquired it in the late 13th century. The Roches granted 'six bovates of land in Studdolph, and five acres of land with half a carucate of land in the same township' to the Tironian Pill Priory in its late 12th century foundation charter. Hayston was present in the 14th century. The present settlement pattern appears to be of relatively late origin as only a few of today's farms and landholdings can be identified with medieval manors and townships. Scoveston is not recorded until the mid 15th century, while the remainder – Jordanston, Norton, Milton, Westfield etc – were not recorded until the 16th- and 17th-centuries. Some, such as Oxland, are 18th century

in origin. Nevertheless, these different periods of origin are not reflected in any differing tenurial arrangements, and a homogenous pattern of enclosure has resulted. By the time of the first estate maps in the late 18th century and the tithe survey in the 1840s the landscape of today had been established. There are hints that at least parts of the area had evolved from open field systems. For instance, enclosed strip fields are shown on estate maps on the east side of Castle Pill and close to the very small village of Burton. No traces of these strips now remain. The area has remained primarily agricultural but its military potential has long been apparent. Castle Pill was fortified by Royalist forces in 1643, with an 18 gun fort garrisoned by 300 men. The massive inland Scoveston Fort was the only defensive work to be constructed after the 1860 Royal Commission report on defence proposed a ring of forts around the Milford Haven waterway to prevent it from landward attack. Railways also crossed the area, to Neyland in 1856 and Milford Haven in 1859.

- 1.3.6 This very extensive historic landscape character area extends from the town of Milford Haven in the west, along the northern shore of the waterway past Neyland and up to and past the village of Llangwm. Despite its size it is a remarkably coherent landscape consisting of large farms, dispersed houses and large, regular fields. Although it lies close to Milford Haven waterway, this area only directly borders the sea at a few locations near Burton and Llangwm. Pasture is the dominant land-use, with a little arable land particularly in the western part of the area. There is virtually no rough or waste ground. Apart from deciduous trees on steep valley sides, such as at Castle Pill and Barnwell Pill, in some sheltered hollows, and on the banks of the Milford Haven waterway, this is not a landscape characterised by woodland. Occasional trees are also present in some hedgerows. Earth banks topped with hedges are the main boundary type. Hedges are generally well-maintained, although in the northern part of the area some are becoming overgrown and a few are derelict. Burton Mountain and Williamston Mountain, once one of the few open areas on the Milford Haven waterway is divided into large fields by banks and hedges. Apart from Burton village the settlement pattern is one of dispersed farms and houses. There are several mansions and large farms within this area, including Jordanston Farm, Williamston, East Hook and Studdolph Hall. Some of these houses are of some antiquity, such as East Hook, a 17th century and 18th century house next to the ruins of a 16th century house, and others indicate the minor gentry origins of the larger farms, such as the three storey Georgian house of Jordanston. Some of the larger houses, Castle Hall for example, have been demolished. Attached to most of these large houses are ranges of stone-built, 19th century, and sometimes earlier, outbuildings, often arranged around a courtyard, and sometimes set some distance from the dwelling. The wide range of buildings at Castle Hall Farm are a good example of this type. Gardens and parkland survive at some of these larger houses. Interspersed across the landscape are smaller farms. The houses take a variety of forms, but in the main they date to the 19th century, and are stone-built, rendered, slate-roofed, and broadly in the Georgian tradition. Many have been modernised. Older farmhouses and modern farmhouses are also present, presumably replacements of earlier structures. Old outbuildings are also stone-built, but usually of just one or two ranges. Most farms of this size have large ranges of modern steel and concrete outbuildings. Dispersed modern houses are present in this area, but are not a defining characteristic, apart from west and north of Jordanston. Here mid 20th century semi-detached houses in a fairly dense scatter are a distinct feature of the landscape. At Burton, the only village within this area, the medieval parish church of St Mary together with a cluster of late 18th century and 19th century dwellings is surrounded by late 20th century housing, including a small estate. Other buildings include the massive remains of Scoveston Fort, an element of the mid 19th century military defence of the Milford Haven waterway. Given the large extent of this area it is not surprising that there are a large number and variety of archaeological sites. However, these do not greatly

characterise the landscape. Of interest are: several prehistoric funerary and ritual sites, including standing stones, chambered tombs and round barrows, an iron age fort with the slight remains of a Civil War fort, several prehistoric find spots, medieval mill and windmill sites, and World War 2 defensive features.

- 1.3.7 To the south and east the boundary of this area is very well-defined against the Milford Haven waterway, the town of Milford Haven, the town of Neyland, an Oil Refinery and a large tract of woodland. On other sides this area is very difficult to define, and any boundary should be considered a zone of change rather than hard-edged.
- 1.3.8 Located immediately to the east of the area of proposed development is the Waterston Historic Landscape Characterisation area. The following are extracts from the Dyfed Archaeological Trusts website:
- 1.3.9 This area lies on the north side of the Milford Haven waterway, within Llanstadwell parish. It comprises two main land-holdings: Waterston and Honeyborough. The medieval manor of Waterston was a mesne lordship of the Lordship of Haverford, now represented by the village of Waterston. The Manor of Honeyborough comprised one knight's fee directly held of the Earls of Pembroke as their share of the Lordship of Haverford, and 2½ carucates held of the Barony of Walwyn's Castle 'by homage'. Its manorial centre was at Great Honeyborough farm, located in a neighbouring landscape character area. In c.1600 this manor was shared between the Perrot, Bowen and Scourfield families, and then by the Batemans and the Taskers. After 1810, farming tenants held it. Part of this area includes the former open fields of Great Honeyborough which are shown in operation on late 18th century estate maps. Enclosed strip fields, evidence of a former open field system, are also shown on tithe maps at Little Honeyborough and at Waterston. It is likely, that as at Great Honeyborough, open fields were in use at these locations up to the 18th century. On the tithe maps, Little Honeyborough is shown as a hamlet and Waterston as a small nucleated village. Since the tithe survey Neyland has expanded across the former open fields of Great Honeyborough incorporating the village into the town. A narrow band of fields to the north of the town is all that is left. In the 20th century the construction of an oil refinery removed all the fields to the south of Waterston village.
- 1.3.10 This small historic landscape character area consists of the remains of enclosed strip fields that survive to the north of Neyland and to the north of a large oil refinery, together with the village of Waterston and the hamlet of Little Honeyborough. Enclosed strip fields (former open fields) characterise the agricultural landscape of this area. These are best preserved to the north and east of Neyland and to the north of Waterston. Boundaries are earth banks topped with hedges. Hedges are generally in a good condition, but a few are derelict and some are becoming overgrown. There are a few trees, but apart from on steeper slopes woodland is not a strong characteristic of this area. Land-use is mainly improved pasture with a little arable. Waterston is a nucleated village with mainly 19th century, two storey, stone built houses and terraces in the vernacular tradition. Modern dwellings are also present. An oil refinery lies immediately against the southern edge of the village, and an industrial estate lies to the west. Little Honeyborough is a very small settlement comprising 19th century two storey houses in the vernacular tradition, single storey 19th century cottages and a chapel. The few farms dispersed across the area and within the village and hamlet are relatively small, with 19th century houses, one or two ranges of 19th century stone-built outbuildings and a collection of modern outbuildings. Archaeological sites are limited and consist of a bronze age standing stone, a bronze age burnt mound and some small post-medieval quarries. There are no listed buildings.

- 1.3.11 To the west, east and south against an oil refinery and the town of Neyland this area has very well defined boundaries. To the north boundary definition is not clear, and there is a gradual merging of this area with it neighbour.
- 1.3.12 Samuel Lewis's Topographic Dictionary of Wales in 1833 describes the parish of Llanstadwell and is laid out below. This is an extract from Jones (2007) Cambrian Archaeological Projects report.
- 1.3.13 LLANSTADWELL (LLAN-STADWELL), a parish in the hundred of RHÔS, county of PEMBROKE, SOUTH WALES, 3 miles (E. by S.) from Milford, containing 733 inhabitants. This parish, which is situated on the northern shore of Milford Haven, comprises a considerable tract of fertile and well-cultivated land, with some portions of hilly ground, which, from its steepness, is but ill adapted to repay the expense and labour of cultivation. At Nayland, which is situated within its limits, it was once in contemplation to construct a dock-yard, for which purpose some lands in the vicinity were purchased, on both sides of the harbour, on which to erect works for its security and defence. Considerable progress had been made in the erection of one of the fortresses on the opposite side of the haven, but upon the death of the late Sir John Phillips, father of the late Lord Milford, who was the principal promoter of the design, the plan was abandoned, after two ships of war only had been built, both of which, the "Prince of Wales," of seventy-four guns, and the "Milford" frigate, were built by contract. The surrounding scenery is finely varied, combining the fine expanse of water in the haven on the south, and the spacious open channel on the west, with extensive tracts of richly cultivated country on the north and east. In the vicinity are several good houses, of which there are within the parish, Jordanston, the property of the Rev. Thomas Wilson; Hayston, the residence of R. Matthias, Esq.; and Newton, a dilapidated old house on a valuable estate belonging to Lewis Child, Esq. The living is a discharged vicarage, in the archdeaconry and diocese of St. David's, rated in the king's books at £7. 17., endowed with £200 royal bounty, and £200 parliamentary grant, and in the patronage of Lewis Child, Esq., to whom two-thirds of the great and small tithes were impropriated, the remaining third belonging to the vicar. Mr. Child has recently disposed of the greater part of his tithes to the respective proprietors of the lands. The church, dedicated to St. Tudwal, is an ancient structure in good repair, pleasantly situated on the margin of the haven, in the southern part of the parish. There is a place of worship for Wesleyan Methodists. Some remains of two ancient British encampments, comprising each an area of about one acre, are visible: one is situated at the north-eastern extremity of the parish, nearly opposite the village of Rhôsmarket and the other at its south-western extremity, on a point on the shore of Milford Haven. The average annual expenditure for the maintenance of the poor is £267. 13. (Samuel Lewis 1833).

2 Aims and Objectives

- 2.1 The main scope and objectives of the archaeological assessment were to reveal by reviewing previous desk based studies, the nature, significance and, where possible, the chronology of the archaeology within the area of the proposed development. The purpose of the desk-based assessment, in accordance with standards and guidance as laid down by the *Institute of Field Archaeologists*, is to gain information about the known or potential archaeological resource within the given area (including presence or absence, character and extent, date, integrity, state of preservation and relative quality of the potential archaeological resource), in order to make an assessment of its merit in context, leading to one or more of the following:

- The formulation of a strategy to ensure the recording, preservation or management of the resource;
- The formulation of a strategy for further investigation, whether or not intrusive, where the character and value of the resource is not sufficiently defined to permit a mitigation strategy or other response to be devised;
- The formulation of a proposal for further archaeological investigation within a programme of research if appropriate.

3 Methodology

3.1 For the purposes of the archaeological appraisal the following repositories were visited/consulted for new sources;

- Regional Historic Environment Record
- Portable Antiquities Scheme (Pembrokeshire)
- Royal Commission for Ancient and Historic Monuments (Wales)
- National Library, Aberystwyth

3.2 At these repositories the following sources were consulted:

- All Ordnance Survey Maps
- Tithe Enclosure Award and Parish Maps
- Estate Maps
- Historical documents pertaining to the site
- Archaeological books and journals
- Unpublished reports
- Aerial photographs

3.3 At the Pembrokeshire Historic Environment Record a 500m search around the edge of the development area for sites added to the HER since 2002 was undertaken. This was then supplemented with a similar search of data held by the Archaeology Data Service.

3.5 The assessment methods used followed that detailed in the DMRB (Design Manual for Roads and Bridges), Volume 11, Section 3, part 2. All sites identified have been categorised following guidelines set out in the DMRB. The allocation of a set value to a site defines the sites archaeological significance. However, as the HER search revealed 16 known sites yet no new sites added to the HER since previous work was undertaken no values were allotted and no new impact table drawn up.

4 The Desk-Based Assessment – Search Data

4.1.1 All 16 sites and buildings, as well as their locations, recorded within the study area are shown on Fig 3. As none of these sites were previously unknown and have been covered by previous reports they are not presented within this text. A more detailed description of each of the sites is included in Appendix 4. A brief list of the site types is shown below:

- 4.1.2 ID1 – PRN4507 – Round Barrow/Motte
- 4.1.3 ID2 – PRN12904 – Newton (settlement)
- 4.1.4 ID3 – PRN34964 – Mine Watchers Post
- 4.1.5 ID4 – PRN43580 - Well
- 4.1.6 ID5 – PRN45246 - Cottages
- 4.1.7 ID6 – PRN35086 – Searchlight Battery
- 4.1.8 ID7 – PRN34846 - Pipeline
- 4.1.9 ID8 – PRN34844 - Cottage
- 4.1.10 ID9 – PRN34848 – Mine watchers Post
- 4.1.11 ID10 – PRN34847 – Navigation Aid
- 4.1.12 ID11 – PRN34845 – Sea Defences
- 4.1.13 ID12 – PRN34526 - Cottage
- 4.1.14 ID13 – PRN34527 - Cottage
- 4.1.15 ID14 – PRN34528 – Boat House
- 4.1.16 ID15 – PRN34529 - Cottage
- 4.1.17 ID16 - PRN34843 – Deserted Rural Settlement

5 Historic Map Regression

- 5.1.1 Although the assessment area has previously been subject to various studies no detailed map regression analysis has been produced. The map regression below has been produced using both Ordnance Survey and Tithe maps.
- 5.1.2 The 1809-34 2 inch OS Surveyors drawings show the development area although not in any great detail. The farm of Newton Demesne is depicted as is Wear Point itself. Owing to the scale at which the map has been produced no further details or information can be gleaned.
- 5.1.3 The main feature of the area as shown on the 1849 Llanstadwel Tithe map is the farm of Newton Demesne. The farm is clearly shown to be made up of several buildings and is located at the meeting point of two, possibly three, trackways. A track way from Newton Demesne to the south east leads to the shores of the Haven waterway and a Weir is marked. Located immediately to the south of Newton Demesne is a field shown to contain two cottages and associated gardens. No other features of significance were noted.
- 5.1.4 The 1869 1st Edition 6 Inch OS Map shows the development area in highly clear detail. The farmstead of Newton Demesne is still visible with a well marked to the west. The two cottages to the south are still clearly depicted, also with an adjacent well. Where, on the tithe map, a weir was depicted the names Wear Point and Newton Wear are now marked. A Boathouse is also marked by the location of the weir. Various natural features are named on the 1st Edition OS map. Topographical features along the

coastline are given names such as 'The Bolster' and 'The Horseshoe'. A large pier and a structure named 'Newton Noyes' are located on the coastline to the west of the development area. A spring is also marked in fields to the north of Newton Demesne.

- 5.1.5 The 1895 1 to 25 Inch 1st Edition OS Map shows the area in large scale detail. Newton Demesne can be seen to be made up of around 18 structures forming a large farming complex. The two cottages and gardens marked on the 1849 Tithe map are shown in great detail as is a single structure and associated gardens on the cliff top to the south of the cottages. Various structures are depicted in the area of the boathouse. One is shown as a Limekiln; another is noted as being ruins. No other significant changes or features were noted.
- 5.1.6 The 1908 1 to 25 Inch 2nd Edition OS Map shows largely the same detail as that seen on the 1 to 25 inch first edition with very few significant changes within the proposed area of development. Many less trees are marked as being present around Newton Demesne and the development area in general. No other significant changes or features were noted.
- 5.1.7 The 1909 2nd Edition 6 Inch OS Map shows largely the same detail as that seen on the 6 inch first edition with very few significant changes within the proposed area of development. Three 'Old Quarries' are now shown on the map, two to the east and one to the west of Newton Demesne. Where the boathouse was located on the 1st Edition map two structures now stand. A further spring is located to the east of Newton Demesne. No other significant changes or features were noted.
- 5.1.8 The 1948 Provisional Edition Ordnance Survey map again shows a largely unchanged landscape in the area of proposed development. Newton Demesne, now simply called Newton, is still depicted as are the cottages to the south. Structures are still marked at Wear Point also. Triangulation Points are now depicted top the south and south and south east of Newton. No other significant changes or features were noted.
- 5.1.9 The 2008 Ordnance Survey map shows the landscape of the assessment area as it appears today. The area of Newton Demesne has now largely disappeared beneath the industrial oil refinery site. Structures are no longer evident at Newton Demesne, the cottages to the south have also disappeared as have the structures at Wear Point itself.

5.2 Aerial Photographs

- 5.2.1 The area is extremely well covered by aerial photography and various photographs, both vertical and oblique, were consulted during the course of the desk top assessment. Whilst aerial photographs of the site have been consulted for previous phases of work a descriptive text section has not previously been produced. The aerial photographs, whilst of a good quality for study, were not of a sufficient quality when copied to be included within this report. The aerial photographs to which this report refers are available in the site archive.
- 5.2.2 3G/TUD/93 - March 1946. These vertical shots are taken through thin cloud cover and show the development area in reasonable detail. Newton Demesne farm is clearly visible. Cropmarks are visible at the eastern end of the development. These would appear to be removed field boundaries.
- 5.2.3 106G/UK/625 - July 1946. These vertical shots are taken only four months after sortie 3G/TUD/93 and thus show similar details. The picture quality is however much clearer and cropmarks, again in the form of removed field boundaries, are more visible across the development area.

- 5.2.4 540/396 - August 1950. These oblique shots show the development area in slight relief. Newton Demesne is visible, albeit not too clearly, and is shown as being surrounded by trees. It is not possible to say whether or not it is still in use at this point. No further features were noted owing to the slight blur of the photographs.
- 5.2.5 April 1955. These vertical shots show the development area in great detail. Newton Demesne is shown as still being in use and all the buildings being in apparent good order. The cottages to the south of Newton are also shown to still be standing at this point. No structures can be seen at Weir point. No cropmarks are visible which is somewhat surprising given the clarity of the photographs.
- 5.2.6 OS.64.192 - September 1964. This single vertical shot shows the majority of the area of proposed development in a reasonable amount of detail. The farm of Newton Demesne is clearly depicted and appears to still be in use at this point. The site of the two cottages to the south of Newton Demesne is shown although not in sufficient detail for further interpretation. No other significant features are shown. Whilst cropmarks may be visible in certain fields these would appear to be mainly defunct field boundaries and possible track ways.
- 5.2.7 OS.65.23.502 - March 1965. This single vertical shot covers the majority of the area of proposed development in a good amount of detail. Whilst only a black and white copy was accessible the original appears to have been an infra red shot as detail of cropmarks appears enhanced. The cropmarks do, however, still appear to mainly represent defunct field boundaries and track ways. As on the previous aerial photograph (1964) Newton Demesne is still depicted. The two cottages to the south of Newton are also depicted. No other sites of potential significance were noted.
- 5.2.8 OS.77.14 - May 1977. This series of vertical shots show a massive change in the landscape of the proposed development area. Between 1965 and 1977 the large oil refinery/storage depot at Milford Haven (adjacent to Wear Point) has been constructed. The site boundary is adjacent to the edge of Newton Demesne farm which, while still visible, is clearly disused. The cottages to the south are no longer visible. Waterfront access roads and piers associated with the depot now appear within the area of proposed development.
- 5.2.9 Fairey Surveys Ltd 11th June 1978. This series of vertical shots, originally taken in infra red, shows the area of proposed development in clear detail. Aside from a slight size increase in the access road from depot to waterfront no other changes or features are noted.
- 5.2.10 Wild 328 – 20th April 1986. This single vertical shot covers only the eastern end of the assessment area. What has previously been farmland appears now to be composed mainly of rough scrub/bush. Within this no features of significance can be identified.
- 5.2.11 Zeiss 630 304.80 - May 1993. This series of vertical shots covers the area of proposed development in reasonable detail. The site of Newton Demesne is clearly overgrown by now. The site of the two cottages and associated gardens to the south has been removed and is now located beneath pier and access track on the waterfront. More access tracks appear to have been developed within the eastern half of the development area. No cropmarks of archaeological significance are visible.
- 5.2.12 95 CS 1059 - April 1995. This oblique shot is taken from an original colour slide. It shows a view over the oil refinery/depot looking across the development area. Whilst no particular detail can be observed within the development area it is worth noting the scale of impact the depot has already had on the surrounding landscape.

- 5.2.13 Zeiss 630 304.797 - May 1995. This series of vertical shots is similar in detail to the previous set of vertical aerial photographs of 1993. No new changes are noted.
- 5.2.14 2000. The image from 2000 is a digital image taken from Getmapping.com. It shows the area of proposed development in very clear detail. It shows that the area of proposed development can be divided in to two halves by this point. The eastern half appears as mainly waste ground seemingly covered by rough scrub/bush. The western half of the area is still being used as agricultural land. Newton Demesne is fully overgrown by this point. Cropmarks are visible but again appear to represent defunct tracks and field boundaries.
- 5.2.15 2006. The image from 2006 is a further digital satellite image. Again the area of proposed development is shown in very clear detail. Expansion of the depot to the south between 2000 and 2006 is evident as the site of Newton Demesne has now been removed altogether. A further access track has also been constructed between this southern expansion and the waterfront. The eastern half of the area of proposed development does not now appear to be rough/waste ground but may be agricultural by this point. No further changes of significance were noted.
- 5.2.16 2008. The image of the site as it currently appears is taken from Google Earth. No changes of any significance between 2006 and 2008 are apparent.

6 Discussion and Interpretation

- 6.1.1 A search of the Pembrokeshire HER revealed **NO** new sites recorded since the 2002 desk based study was undertaken.
- 6.1.2 A search of the Pembrokeshire Portable Antiquities Scheme database revealed no finds having come from within the assessment area.

6.2 Overall Interpretation

- 6.2.1 The desk based study undertaken by both Dyfed Archaeological Trust in 2002 (Project Number 45253) and added to in 2007 by Cambrian Archaeological Projects Ltd (Jones, 2007) have sufficiently covered the area of proposed wind turbine development. No new sites of archaeological interest within this area have since been added to the HER.
- 6.2.2 Dyfed Archaeological Trusts 2002 desk based assessment report is included as Appendix 1. Cambrian Archaeological Projects Ltd 2007 desk based study is included as Appendix 2.
- 6.2.3 Geophysical survey, field evaluation, walkover survey and large area excavation by Dyfed Archaeological Trust (Crane, 2003) on the site revealed a variety of features including a Bronze Age roundhouse, a substantial late medieval/post medieval stone structure and a late medieval/post medieval Dovecote. Evaluation trenches were also excavated on the site of Newton Demesne. Cranes 2003 assessment report for Dyfed Archaeological Trust is included as Appendix 3.
- 6.2.4 The overall interpretation of the appraisal, given that the area of proposed development is likely to be reasonably disturbed owing to the large scale development already on the site, is that there is only a small chance of unrecorded archaeological features being located within the proposed development area.

7 Predicted impacts

- 7.1.1 The proposed positions of the four wind turbines at Wear Point do not appear, according to the cartographic and photographic sources consulted, to be located close to any visible features of significant archaeological interest (Fig 3).
- 7.1.2 The previously undertaken desk based assessments also highlight no potential sites of archaeological interest within the proposed turbine locations.

8 Proposals

- 8.1.1 Given Dyfed Archaeological Trusts 2003 below ground findings there remains a small chance of previously unrecorded archaeology being encountered during development. As this is the case the following mitigation strategies are proposed:
- 8.1.2 As the geophysical survey mentioned in Cranes 2003 report encountered mixed geology which can mask potential features and evaluation trenches are only able to focus on a relatively small area, it is thought best to perhaps recommend a watching brief during construction.
- 8.1.3 Depending on the construction methods employed on the creation of new access tracks/compounds/hardstandings etc a watching brief may also be applicable to these. Should these ancillary structures be largely surface mounted with only a shallow excavated footprint this may negate the need for a watching brief during their construction.

9 Acknowledgements

- 9.1.1 Thanks are due; to Bridget Savage of Royal Haskoning for being extremely helpful throughout the production of this report, to Charles Hill of Dyfed Archaeological Trust, Richard Kelly of Countryside Council for Wales and Judith Alfrey of Cadw for their consultation and help regarding the ASIDOHL2.

10 Bibliography and references

British Geological Survey, 1979. Geological Survey Ten Mile Map.

Design Manual for Roads & Bridges, 2007. Volume 11 Environmental Assessments, Section 3 Environmental Topics, Part 2 Cultural Heritage.

DAT Report No. 45243. 2002. Petroplus LNG Development, Environmental Impact Assessment. Archaeological Desk-based Assessment

CRANE, P. 2003. Proposed Extension to the Petroplus LNG Development. An Archaeological Assessment. DAT Report

JONES, R. 2007. Semlogistics, Waterston, Milford Haven. Archaeological Impact Assessment. CAP Report

Other sources consulted

Pembrokeshire Historic Environment Record:

Full search of all HER data within a 500m radius of the edge of the proposed development area

Archaeology Data Service sites index:

Full search of sites listed within a 500m radius of the edge of the proposed development area

National Library, Aberystwyth:

1809-34 2 inch OS Surveyors drawings
1849 Llanstadwel Tithe map
1869 1st Edition 6 Inch OS Map
1895 1 to 25 Inch 1st Edition OS Map
1908 1 to 25 Inch 2nd Edition OS Map
1909 2nd Edition 6 Inch OS Map
1948 Provisional Edition OS Map
2008 Edition OS Map

Portable Antiquities Recording Scheme (Nottinghamshire):

Richard Jones (DAT) – Portable Antiquities Scheme recording officer (Pembrokeshire)

Portable Antiquities Scheme finds database –
<http://www.findsdatabase.org.uk/> – accessed 10/11/2008

List of Air Photographs from RCAHMW, Aberystwyth

3G/TUD/93 - March 1946
106G/UK/625 - July 1946
540/396 - August 1950
April 1955
OS.64.192 - September 1964
OS.65.23.502 - March 1965
OS.77.14 - May 1977
Fairey Surveys Ltd 11th June 1978
Wild 328 – 20th April 1986
Zeiss 630 304.80 - May 1993
95 CS 1059 - April 1995
Zeiss 630 304.797 - May 1995
Getmapping.com 2000 – Digital Satellite Image
Local live.com 2006 – Digital Satellite Image
Google Earth 2008 - Digital Satellite Image



CAMBRIAN
ARCHAEOLOGICAL
PROJECTS

APPENDIX I:

DAT Report 2002

**Petroplus LNG Development, Environmental Impact Assessment
Archaeological Desk-based Assessment**

Project Record Number 45243

CONTENTS	PAGE
Summary	1
1. Introduction	2
2. The study area	3
3. Summary of the archaeological resource	5
4. Impact of proposed scheme on archaeological resource	8
5. Recommendations	9
Appendix One: History of the study area	11
Appendix Two: Primary cartographic and documentary sources	14
Appendix Three: Aerial photographic sources	15
Appendix Four: Catalogue of research archive	16
Bibliography	17
Photograph 1: Newton Farmstead. 1955.	18
Figure 1: Location	
Figure 2: Archaeological features	
Figure 3: Llanstadwell Tithe Map (part)	

SUMMARY

This archaeological report has been prepared as part of the environmental impact assessment on the proposed Petroplus Liquid Natural Gas storage terminal at Waterston, Milford Haven. At least four significant or potentially significant archaeological sites were identified within the area of the proposed development. These include the site of the medieval settlement of Newton, the site of the possible medieval mansion of Newton, the site of a post-medieval 'model' farmstead and the possible site of a Bronze Age barrow or medieval castle mound. The later site is suggested by the field name of 'Mount Meadow' and aerial photographs appear to indicate the presence of a large circular feature at the eastern end of this field. Other identified sites included a circular building of post-medieval date and a mine watcher's post dating to the Second World War. In addition there are the sites of two possible wells along with field boundaries and a trackway. All of these features are of post-medieval date, although some could have earlier origins. A suggested programme of further archaeological is proposed.

1. INTRODUCTION

1.1 Project proposals and commission

As part of the Environmental Impact on the proposed Petroplus Liquid Natural Gas storage terminal at Waterston, Milford Haven, Cambria Archaeology were commissioned by Posford Haskoning Limited, to undertake a desk-based archaeological assessment. The assessment was undertaken in July 2002.

1.2 Project aims and methodology

The aim of the project was to provide information about the likely impact of the proposed scheme on the archaeological resource. Cambria was initially provided with a detailed plan of the proposed development, together with the information that spoil from the excavations would be spread in the surrounding fields. In order to put the site in context, the study area included a 0.5km radius surrounding the proposed area of works. A search was made of documentary and cartographic records held at the County Sites and Monuments Record, the National Monuments Record and Milford Haven Museum for information on known sites. Field visits were made on 5th and 11th July to review known sites, identify any new sites, carry out rapid recording and assess the vulnerability of archaeological material that could be affected by the development.

1.3 Report outline

This report outlines the physical environment of the study area (Section 2) before summarising the archaeological resource (Section 3) and the likely impact of the proposed scheme on that resource (Section 4). Recommendations based on the results of Sections 3 and 4 are given in Section 5. Detailed supporting data are presented in a series of appendices.

1.4 Abbreviations used in this report

All sites recorded on the county Sites and Monuments Record are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Any new sites were assigned a PRN and located by their NGR. References to primary cartographic and documentary evidence and published sources are given in brackets, full details are found in the bibliography.

2. THE STUDY AREA

The area of the proposed development lay between the southern edge of the Petroplus Storage facility (formerly the Gulf Refinery) and the north shore of Milford Haven (Figs 1 and 2). The Ordnance Survey grid reference is SM 930049. The location is just outside the Pembrokeshire Coast National Park but lies within the Cadw/ICOMOS 'Register of Historic Landscapes' Milford Haven Waterway (Cadw 1998).

The solid geology is Devonian Red Marl, overlain by Ridgeway Conglomerates south of the stream that crosses the study area. The drift geology reflects this underlying solid geology. The current land use is pasture, or rough pasture, with some areas of scrub and mature trees. There are two trackways that meet within the study area, one of which forms part of the Pembrokeshire Coast Path and continues as a footpath to the east. The land is agricultural quality grade 3 (OS 1977 map) and is of typical brown earths-Milford (OS 1983 map). Climatically the classification for the area is slightly cool and slightly moist, exposed and generally milder winters and cooler summers with longer, less intense growing seasons (OS 1978 map).

To the north the area is dominated by the storage facility that consists of oil and gas tanks surrounded by an earth bank and a tall fence topped with barbed wire. Adjacent to this fence, to the west of the area, there is a modern metalled trackway that curves to the southeast. This trackway is used as part of the Pembrokeshire Coast Path route that continues along the boundary of the storage facility to the east. On either side of the trackway there are mature or maturing trees surrounded by scrub. Within the undergrowth there is a considerable infestation of Japanese Knotweed.

The field to the south of this trackway is marked as Pigeon Meadow on the tithe map and schedule of c.1849 (Fig. 3). The northern part of this field has some scrub and slopes down to an overgrown stream (although presently not infested with knotweed). At the eastern end of this slope there is a platform and part of a dry-stone wall of a probable building (see archaeological site PRN 45244 below). Near the eastern boundary, and just to the south of the point where the stream enters the proposed development area, there is a concrete structure, possibly a cattle trough of roughly Second World War date. Also to the south of the stream there is no scrub except in a few places on the stream bank. The ground then rises to a tree- and hedge-lined trackway (see archaeological site PRN 45245 below). The field shows some undulations, several of which may be the remains of former north-south drains or field boundaries.

To the southwest, part of a field known as The West Field straddles the eastern end of a broad ridge. It is under pasture and contained no obvious artificial features. To the west of the proposed development area is the large World War II mine depot complex of RNAD Blackbridge (PRN 28801), Milford Haven. This was not investigated.

South of the trackway, two fields, White Field and Richard John's Park (field), are of somewhat rough pasture. Both fields slope slightly and have small natural looking undulations. The southern part of White Field drops steeply down towards the estuary where it was formerly known as Hill field or fields. No access was gained to the jetty

compound that contains the location of a mine watcher's post (see archaeological site PRN 34964 below). This was identified from aerial photographs but not visited during the 1997 fieldwork for the Cadw-funded coastal survey (Murphy and Allen 1998). A post-medieval well (PRN 45379) is also located within the compound.

To the east of Richard John's Park is Mount Meadow (see archaeological site PRN 4507 and also cropmark PRN 452457). This field straddles a low broad ridge running east-west. The higher part of the ridge is at the eastern end of the field. This field again is of slightly rough pasture and there are a number of small undulations across the field, all of which could be natural.

To the north of Mount Meadow and on the other side of the footpath are the sites of the former farmstead or mansion of Newton and a later farmstead (see archaeological sites PRN 19990 and 45248 below). This area is extremely overgrown with mature trees, scrub, nettles and probably some Japanese Knotweed. A high wire fence topped with barbed wire surrounds the area. Although access into this compound was not possible, a number of large undulations were just visible and they appeared to be artificial.

To the east of Newton Farmstead and Mount Meadow is a field, simply named as 'Field' on the tithe schedule. It is relatively level with a drop down towards its southern edge. The current field use is pasture. South of this field there is an area of scrub in the vicinity of a former cottage (see archaeological site PRN 45246 below). The scrub was too dense for access or to see any features. To the west of the field is the site of a former searchlight battery (see archaeological site PRN 35086 below). This was identified from aerial photographs but was not visited during coastal survey (Murphy and Allen 1998) or seen on this field visit.

The field boundaries are all Pembrokeshire hedge banks, some with stone facing. The hedges on top of these banks have either had little or no maintenance recently and are overgrown, containing a wide variety of plants

3. SUMMARY OF THE ARCHAEOLOGICAL RESOURCE

The study area lies within two of the historic character areas defined as part of the Historic Landscape Characterisation exercise undertaken by Cambria in 2001-02 (Murphy and Ludlow 2002). These two relevant extracts are included in Appendix 1 and they provide a useful general historic background.

Prior to this project there were three known sites within the area of proposed groundworks and a further two sites just outside. Several further sites have now been added. The full list of sites is as follows:

Sites within the proposed groundwork area

PRN 4507 (SM93050480) - The field place name, Mount Meadow (from c.1849 Llanstadwell Tithe Map) suggests the former presence of a round barrow (Bronze Age) or Motte (medieval castle mound). Aerial photographs suggest a possible site in the eastern area of the field (see also PRN 45247 below). However, there are a number of undulations and the potential site could be elsewhere within the field.

PRN 12904 (SM930048 - approximate location only – the site could cover a significant area) - The medieval settlement of Newton recorded on documents. The earliest dated document is 1407 (Charles 1992) from a catalogue of Ancient Deeds (Public Record Office, London). It is also shown on Saxton's Map of 1578 and Charles Owen's Map, first published in 1607. It was not a large settlement and was probably focused on the spring and the site of the later farmstead of Newton. By the time of the tithe map c. 1849 there were only three cottages left together with the farmhouse. The field system on the tithe map and earlier large-scale OS maps appears to indicate the remains of a medieval strip field system around Newton. There appears to be further indications of this on aerial photographs (particularly 3G/TUG/UK/93 frame 6028), although it is possible that these could be modern cultivation marks.

PRN 19990 (SM931049 - exact location unknown) - A possible medieval or post-medieval mansion recorded from documents. 'Newton was once the residence of the princely family of Craddock, lineally descended from Howel Dda, lords of this place, whose descendent Sir Richard dropped Craddock took the name of Newton', (Fenton 1811 p152). Sir Richard gave up both his Welsh name and holdings and died in 1444 and was buried in Bristol. One of his descendents was Sir Isaac Newton (Jones 1996)). There is a suggestion that there was a residence of some status in the medieval period. Fenton (1811 p152) states that there was no evidence for an ancient house but the owner Lewis Child had a comfortable house and good land. For the later farmstead see PRN 45248 below.

PRN 34964 (SM3908604553) - Mine watchers post, Second World War (located within the proposed pipeline corridor). This was identified by Roger Thomas (Thomas 1994, RT 159), but it was not visited/seen during 1997 coastal survey fieldwork (Murphy and Allen 1998). It was seen during this project, but no access was possible as it is within the fenced-off areas of the jetties. It is very overgrown with ivy. Only the western end with a doorway is visible. It still stands to its full height of c. 1.7m and 2m wide. Its length could not be determined. The walls are of

brick and mortar and the flat roof is of concrete. It is located about 40m west of field boundary junction to east and 1m south of wire fence of jetty compound. The grid reference has been revised.

PRN 45244 (SM92880500 - approximate location) - A possible building or building platform that includes part of north-south wall of dry-stone construction was identified during the field visit. The site is in approximately the same location as a circular building marked on OS 25 inch first edition (OS 1887) and second edition (OS 1908). This potentially increases its archaeological value. The platform would appear to be partly artificial and may relate to a wooded enclosure marked 252 on tithe map.

PRN 45245 (SM92350505-SM92950487) - Medieval or post-medieval trackway. This appears to form part of a post-medieval route along the north side of estuary that passed through Newton. First recorded on OS original drawings 1809-10. However, the route is likely to originate in the medieval period.

PRN 45247 (SM930477 - approximate centre) - Large circular cropmark in eastern area of Mount Field (PRN 4507). It appears as an almost complete circular scorch mark, c 50m diameter, on aerial photographs 1945 RAF 106/G/3366 and as an arc on Meridian 1995//190-200 17901-2(Photo 1). This location is on the highest part of the ridge before it levels out to the east. This is a prominent location with views down the Haven to the west. This maybe related to the place name evidence (PRN 4507). This suggests a possible archaeological site, but this is not certain.

PRN 45248 (SM 93090488) – Post-medieval farmstead identified from documentary sources. This appears to be on the site of the former possible mansion (see PRN 19990 above). Lewis Child owned this farm in the early 1800s (Fenton 1811, p152). He was among the leading agricultural improvers in the late 1700s and early 1800s (Howell 1987, p314). From the slightly later tithe map (c. 1849) it can be seen that there were a number of buildings around the farmhouse, which probably reflect the farming improvements made, by Lewis Child. The Newton estate remained in the Child family until 1871. The farmhouse and buildings appear to have survived relatively intact (Photo 1) until it went out of use when the adjacent oil refinery was built in the 1960s. The historical context of the farm perhaps gives it a greater significance than most other farms of the post-medieval and modern period

PRN 45379 (SM92930496) – Post-medieval well identified from map evidence. It is indicated on first and second edition OS maps (OS 1867 and 1908). Its location is now in an overgrown area and it was not seen during the field visit.

In addition to these known or possible sites, the current field boundaries have mature hedges, and or vegetation. These boundaries are nearly all shown on the tithe map and they are therefore of historical importance.

The site of the spring (SM92950497 approx.) at Newton (see tithe map, Fig. 3) is a potential location for prehistoric activity, such as a Bronze Age burnt mound or a prehistoric settlement, especially given the commanding view down the haven.

However, any such site or sites could have been damaged or destroyed by later activity. The location is now very overgrown.

Sites just outside the proposed groundwork area

PRN 35086 (SM93220460) – World War II Searchlight Battery identified by Roger Thomas (Thomas 1994, RT 160). It was not visited/seen during the coastal survey fieldwork in 1997 (Murphy and Allen 1998). Nothing but vegetation was seen at the given location during the field. However, no access was possible as it was behind the security fence.

PRN 45246 (SM93180459) – Post-medieval cottage site. Described as two cottages and gardens in the tithe schedule and the buildings were still shown on OS 1964 map. The area is now overgrown.

PRN 45380 (SM93120453) – Post-medieval well recorded from map evidence. It is indicated on first edition OS but it is located within the oil complex and the site was not visited. It probably served a cottage to the southeast (indicated on the OS first and second editions but not on tithe map), rather than the two cottages (PRN 45246) to the north.

Sites further outside of the groundworks area

Nearly one kilometre to the east of the centre of the proposed development site are nine probable post-medieval sites and one Second World War site at Newton Wear. A similar distance to the west is the large mine depot at RNAD Blackbridge Milford Haven PRN 28801 (Murphy and Allan 1998) – this site contains over 100 individual elements. However, neither of these areas are directly relevant to this proposed development.

4. IMPACT OF PROPOSED SCHEME ON THE ARCHAEOLOGICAL RESOURCE

All of the known or potential archaeological sites within the proposed groundworks area are likely to be destroyed or their archaeological integrity significantly compromised. The exact location, extent and survival of many of these sites are unknown. Therefore it is impossible to place an archaeological value on them without further field evaluation.

The area is already dominated by the oil and gas storage tanks, and the proposed new tanks and pipelines will not noticeably increase the visual impact on the remaining historic landscape. However, it is important that any soil dump areas do not impinge on the adjacent sites, including the field boundaries, without appropriate action.

5. RECOMMENDATIONS

Introduction

There are a number of significant archaeological interest or at least sites of potential archaeological significance within the study area. Of particular interest is the site of the medieval mansion or dwelling of Newton with its historical association with the Craddock family and the subsequent establishment of the farmstead belonging to Lewis Child. As well as the direct archaeological interest of the sites themselves and the likely survival of below ground remains, both sites also have important historical associations. As indicated above, a direct descendent of the Craddock family was Sir Isaac Newton, while Lewis Child was an important agricultural reformer of his day. These historical associations give the site a wider historical value and any potential archaeological work in advance of the proposed development could perhaps be used as an opportunity for promotional material.

Although the archaeological preference is always to leave sites undisturbed if possible, it is unlikely that this scheme could proceed without causing archaeological disturbance. Consequently, it is likely that archaeological constraints will be imposed on this development. The following recommendations outline a suggested programme of works considered necessary to address the known or potential archaeological sites. However, as part of the planning process, the archaeological advisor to the local Authority will make the final recommendations regarding the scope and extent of any future archaeological works.

Suggested further archaeological works

PRN 45248/PRN 19990, post medieval farmstead and possible site of medieval mansion – Prior to the development it is recommended that the site of the farmstead (PRN 45248) and the probable the site of the medieval mansion (PRN 19990) should be carefully cleared of vegetation and a full topographic survey of any visible standing remains should be made. This should be accompanied by detailed, background historical research. If possible, it is highly recommended that the site should then be avoided during the preparation of the development proposal (preservation *in situ*). If this is not possible, it is likely that there will be a requirement for full excavation (preservation by record) of any part of this complex that will be directly affected by the development.

PRN 4507/PRN 45247, possible barrow or Motte. – It is recommended that further field evaluation needs to be undertaken in the area of the cropmarked feature and possibly elsewhere within 'Mount Meadow'. This should take the form of geophysical survey followed by trial excavation trenches. Depending on the results of this field evaluation, there maybe a further requirement for a general archaeological watching brief during the initial groundworks within 'Mount Meadow', the full excavation of specific features or even preservation *in situ*.

PRN 12904, the medieval settlement of Newton – The precise location and extent of the settlement is at present unknown. The initial stage of any further archaeological works should include the plotting of all possible earlier field systems and other

features identified from aerial photographs. There may also be a requirement for further field evaluation before a final decision can be made on the scope of any further archaeological works. At the very least any further archaeological works is likely to include an archaeological watching brief during groundworks associated with the initial stages of the development and a contingency for salvage excavation.

PRN 34964 Mine watchers' post, Second World War - It is recommended that this structure is cleared and that a rapid record is made prior to the commencement of the development.

PRN 45244 Building? Building platform? – It is recommended that further field evaluation is undertaken, involving trial trenches, should be undertaken before a final decision can be made on the scope of any further archaeological works

PRN 45245 Medieval or post medieval trackway – A rapid survey and photographic record should be undertaken prior to the commencement of the groundworks. Care should be taken not to disturb any elements of this feature that will not be affected by the development.

PRN 45379 possible post medieval well – the vegetation should be cleared to see if site can be located and rapidly recorded.

Current field boundaries and mature hedges – rapid record should be made of all sections to be affected by the proposed groundworks.

The site of the spring (SM92950497 approx.). – Particular attention should be paid to this area as part of the archaeological watching brief during the groundworks.

Should the Pembrokeshire Coast Footpath be re-routed near to the mine depot at RNAD Blackbridge Milford Haven PRN 28801 then perhaps a display board should be commissioned to explain its significance along with the other military works in the immediate area.

During the initial groundworks it is essential that any mechanical excavators are fitted with toothless ditching buckets to facilitate the identification of archaeological features. This should be incorporated into the method statement for the programme of works.

Although this is not directly an archaeological issue, it was noted that there was a considerable amount of Japanese knotweed on the site. The growth of this vegetation can adversely affect the historic landscape and as it is illegal to cause this weed to spread. Its disposal can also add to the cost of any archaeological work. It is recommended that further advice be sought from Pembrokeshire County Council's Countryside Officer (Sean Tilling, County Hall, Haverfordwest, Pembrokeshire SA61 1TP. 01437 775362).

Deleted: ¶

APPENDIX ONE: HISTORY OF THE SITE

Extracts from report by Ken Murphy and Neil Ludlow (Murphy and Ludlow 2002)

HISTORIC LANDSCAPE CHARACTER AREA: 310 GULF OIL REFINERY

GRID REFERENCE: SM 933052

AREA IN HECTARES: 199

Historic Background

Apart from a very narrow strip of land comprising sea cliffs and cliff top, this historic landscape character area is entirely taken up by an oil refinery and a small industrial estate. Prior to construction of the oil refinery this was an agricultural landscape, almost entirely lying within Llanstadwell parish. It occupied the medieval manor of Waterston, which was a '*mesne*' lordship of the Lordship of Haverford. On the tithe map of 1849 a very distinct landscape of enclosed strip fields surrounded Waterston village, including the area to the south of the village now occupied by the refinery. These strip fields were clearly the enclosed remnants of the open fields of Waterston manor and township. Later maps show the strip fields, but during the later 19th century and the 20th century some had been merged into larger, squarer enclosures. Elsewhere the pre refinery landscape comprised regularly-shaped fields associated with Newton Farm – labelled Newton Demesne on the tithe map. These fields and farm no longer exist. Construction began on the Gulf refinery in 1966, and the first tanker unloaded crude oil in 1968.

Description and essential historic landscape components

This historic landscape area comprises a late 20th century oil refinery. It includes all the installations, including jetties for the unloading of crude oil and a mainline railway. Also included in this area is a small industrial estate. A short section of sea cliff and cliff top between the refinery and the sea is the only component of the landscape not built upon.

This is a very distinct area with clear boundaries. It stands in sharp contrast to the surrounding farms and villages.

Conservation priorities

Some consideration will need to be given to the nature of land restoration following decommissioning of the refinery. It may also be appropriate to record the refinery prior to decommissioning and its removal.

Sources: McKay 1993; Llanstadwell Parish Tithe Map, 1849; Ordnance Survey 6" to 1 mile 1st Ed. XXXIII, XXXIX, 1874; Richards 1969

HISTORIC LANDSCAPE CHARACTER AREA: 322 SCOVESTON - BURTON

GRID REFERENCE: SM 926082

AREA IN HECTARES: 2550

Historic Background

A large character area lying the north of the Milford Haven waterway, within the ecclesiastical parishes of Llangwm, Llanstadwell, Rosemarket and Steynton. Much of the area formed part of the medieval Manor of Pill, part of the larger Manor (or Sublordship) of Pill and Roch, which was created under the de Roches between 1100 and 1130. Its relationship with the Lordship of Haverford, of which

it was notionally a member, was always a matter of dispute. Pill was a large and important manor with a *caput* at the head of Castle Pill (pill is a local term for a tidal inlet) at the west end of the area – possibly on the site of an iron age hillfort and later a Civil War defence. The southeast end of this area lies within the parish of Burton, which represented a detached portion of the Lordship of Pembroke. Burton parish church was present by 1291. The Manor (and parish) of Llangwm, to the north, was a holding of the de Vales until a Roche kinsman, Gilbert de la Roche, acquired it in the late 13th century. The Roches granted ‘six bovates of land in Studdolph, and five acres of land with half a carucate of land in the same township’ to the Tironian Pill Priory in its late 12th century foundation charter. Hayston was present in the 14th century. The present settlement pattern appears to be of relatively late origin as only a few of today’s farms and landholdings can be identified with medieval manors and townships. Scoveston is not recorded until the mid 15th century, while the remainder – Jordanston, Norton, Milton, Westfield etc – were not recorded until the 16th- and 17th-centuries. Some, such as Oxland, are 18th century in origin. Nevertheless, these different periods of origin are not reflected in any differing tenurial arrangements, and a homogenous pattern of enclosure has resulted. By the time of the first estate maps in the late 18th century and the tithe survey in the 1840s the landscape of today had been established. There are hints that at least parts of the area had evolved from open field systems. For instance, enclosed strip fields are shown on estate maps on the east side of Castle Pill and close to the very small village of Burton. No traces of these strips now remain. The area has remained primarily agricultural but its military potential has long been apparent. Castle Pill was fortified by Royalist forces in 1643, with an 18 gun fort garrisoned by 300 men. The massive inland Scoveston Fort was the only defensive work to be constructed after the 1860 Royal Commission report on defence proposed a ring of forts around the Milford Haven waterway to prevent it from landward attack. Railways also crossed the area, to Neyland in 1856 and Milford Haven in 1859.

Description and essential historic landscape components

This very extensive historic landscape character area extends from the town of Milford Haven in the west, along the northern shore of the waterway past Neyland and up to and past the village of Llangwm. Despite its size it is a remarkably coherent landscape consisting of large farms, dispersed houses and large, regular fields. Although it lies close to Milford Haven waterway, this area only directly borders the sea at a few locations near Burton and Llangwm. Pasture is the dominant land-use, with a little arable land particularly in the western part of the area. There is virtually no rough or waste ground. Apart from deciduous trees on steep valley sides, such as at Castle Pill and Barnwell Pill, in some sheltered hollows, and on the banks of the Milford Haven waterway, this is not a landscape characterised by woodland. Occasional trees are also present in some hedgerows. Earth banks topped with hedges are the main boundary type. Hedges are generally well-maintained, although in the northern part of the area some are becoming overgrown and a few are derelict. Burton Mountain and Williamston Mountain, once one of the few open areas on the Milford Haven waterway is divided into large fields by banks and hedges. Apart from Burton village the settlement pattern is one of dispersed farms and houses. There are several mansions and large farms within this area, including Jordanston Farm, Williamston, East Hook and Studdolph Hall. Some of these houses are of some antiquity, such as East Hook, a 17th century and 18th century house next to the ruins of a 16th century house, and others indicate the minor gentry origins of the larger farms, such as the three storey Georgian house of Jordanston. Some of the larger houses, Castle Hall for example, have been demolished. Attached to most of these large houses are ranges of stone-built, 19th century, and sometimes earlier, outbuildings, often arranged around a courtyard, and sometimes set some distance from the dwelling. The wide range of buildings at Castle Hall Farm are a good example of this type. Gardens and parkland survive at some of these larger houses. Interspersed across the landscape are smaller farms. The houses take a variety of forms, but in the main they date to the 19th century, and are stone-built, rendered, slate-roofed, and broadly in the Georgian tradition. Many have been modernised. Older farmhouses and modern farmhouses are also present, presumably replacements of earlier structures. Old outbuildings are also stone-built, but usually of just one or two ranges. Most farms of this size have large ranges of modern steel and concrete outbuildings. Dispersed modern houses are present in this area, but are not a defining characteristic, apart from west and north of Jordanston. Here mid 20th century semi-detached houses in a fairly dense scatter are a distinct feature of the landscape. At Burton, the only village within this area, the medieval parish church of St Mary together with a cluster of late 18th century and 19th century dwellings is surrounded by late 20th century housing, including a small estate. Other buildings include the massive remains of Scoveston Fort, an element of the mid 19th century military defence of the Milford Haven waterway. Given the large extent of this area it is not surprising that there are a large number and variety of archaeological sites. However, these do not greatly characterise

the landscape. Of interest are: several prehistoric funerary and ritual sites, including standing stones, chambered tombs and round barrows, an iron age fort with the slight remains of a Civil War fort, several prehistoric find spots, medieval mill and windmill sites, and World War 2 defensive features.

To the south and east the boundary of this area is very well-defined against the Milford Haven waterway, the town of Milford Haven, the town of Neyland, an Oil Refinery and a large tract of woodland. On other sides this area is very difficult to define, and any boundary should be considered a zone of change rather than hard-edged.

Conservation priorities

The majority of the historic landscape components in this area are well managed and in good condition. However, the condition of field boundaries should be monitored to ensure no deterioration takes place. Currently the boundary between this area and the neighbouring urban areas is precise. Careful management of this urban fringe should continue to maintain the present distinction. Some consideration should be given to the possible re-used of those historic farm buildings that may be coming to the end of their agricultural life.

Sources: Burton Parish tithe map 1840; Charles 1992; Jones 1996; Llangwm Parish tithe map 1841; Llanstadwell Parish tithe map 1849, Llanstadwell Third Part tithe map 1830; Ludlow 2002; NLW PICTON CASTLE VOL 1; NLW R .K. LUCAS NO. 17, 19 & 25; Page 2001; Price 1986; Pritchard 1907; PRO D/RKL/1194/4; PRO RKL/841; Rees 1975; Rosemarket Parish tithe map 1843; Saunders 1964; Stainton Parish tithe map 1843

APPENDIX TWO: PRIMARY CARTOGRAPHIC AND DOCUMENTARY SOURCES

Anonymous, Mid 18th Century map of Pembrokeshire and Carmarthenshire in Milford Haven Museum

Kip W, 1607, Map of Pembrokeshire based on George Owen's survey
Lewis Morris, 1801, A Plan of Milford Haven in the County of Pembroke

Ordnance Survey 1809-10 Original survey drawings 2 inch to mile sheets 181-2

Ordnance Survey 1887 First Edition 6 inch Pemb XXXIII SW

Ordnance Survey 1887 First Edition 6 inch Pemb XXXIII SE

Ordnance Survey 1887 First Edition 6 inch Pemb XXXIX NE

Ordnance Survey 1887 First Edition 25 inch Pemb XXXIX, 2

Ordnance Survey 1887 Second Edition 6 inch Pemb XXXIX NE

Ordnance Survey 1908 Second Edition 25 inch Pemb XXXIX, 2

Ordnance Survey 1976 Geological Map Haverfordwest Sheet 228 Drift

Ordnance Survey 1976 Geological Map Haverfordwest Sheet 228 Solid

Ordnance Survey 1977 Agricultural Land Classification 1:250000

Ordnance Survey 1978 Soil Survey of England and Wales Bioclimatic Classification

Ordnance Survey 1980 1:25000 SM 80/90

Ordnance Survey 1983 Soil Survey of England and Wales 1:250000

Ordnance Survey card index for PRN 4507 No trace of antiquity

Saxton C 1578 Map of Pembrokeshire

Speed John Map Pembrokeshire (Newton indicated)

Tithe Map (c. 1849) and schedule Llanstadwell Parish

APPENDIX THREE: AERIAL PHOTOGRAPHIC SOURCES

Held at Cambria Archaeology Sites and Monuments Record

Meridian

1995//190-200 17901-2

Held at RCAHM Wales Aberystwyth

RAF verticals

Library No	Sortie No	Frame No
417	106G/UK/1625	6354-6
411	106G/UK/1629	3133-4
1910	58/2985	245-6
337	106G/UK/1425	3366-68
	106G/UK/1399	4208
270	3G/TUG/UK/93	6028

RAF obliques 1950 540/396 UK 3678 no 0059 Newton farm surrounded by trees and cottage to NW still standing

On loan from Air Photographs Library of Wales, Cardiff. Large scale and recent

Library No	Sortie No	Frame No
7804		184-186, 162-164
8301		5083: 169-171
7741		34-36
9313		221-222
8514		73
	OS 93-128	42-56
	OS 95-120	186-191

APPENDIX FOUR: CATALOGUE OF RESEARCH ARCHIVE

The project archive has been indexed and catalogued according to National Monument Record (NMR) categories and contains the following:

- A. Copy of the report.
- B. Notes from site visits.
- D. Site photographs - catalogue, colour slides.
- G. Documentary data, including primary and published sources.
- I. Draft copies of report.
- J. Publication drawings.
- M. Miscellaneous correspondence

There is no material for classes C, E, F, H, K, L and N.

The project archive is currently held by Cambria Archaeology Field Operations, Llandeilo, as project number 45243.

BIBLIOGRAPHY

Barnwell E L 1865 Family Name of Craddock before change to Newton- mention.
Arch Camb 3rd series Vol 11 p25

Cadw 1998 *Landscapes of Historic Interest in Wales*: Cadw, Cardiff

Charles D G 1992 *The Place Names of Pembrokeshire*: Aberystwyth, National Library of Wales (p 608)

Howell D 1987 'The Economy 1660-1793', in Howells B ed *Pembrokeshire County History. Vol. III – Early Modern History*: Haverfordwest, Pembrokeshire Historical Society

Murphy K and Allen B 1998 *Coastal Survey 1997-8: Lower Milford Haven Pembrokeshire*. Unpublished report for Cadw. Copy held in Cambria Archaeology SMR

Fenton R A *Historic Tour Through Pembrokeshire*: Haverfordwest, Dyfed County Council

Howell D W 1993 *Pembrokeshire County History. Vol. II – Modern Pembrokeshire 1815-1974*: Haverfordwest, Pembrokeshire Historical Society

Jones Francis Major 1996 *Historic Houses of Pembrokeshire and their families*: Newport, Brawdy Books

Lewis S 1833 *Topographic District of Wales Llanstadwell* (Part photocopy held in cambria Archaeology SMR)

Murphy K and Ludlow N 2002 *Historic Landscape Characterisation of the Milford Haven Waterway*. Unpublished report for Cadw. Copy held in Cambria Archaeology SMR

RCAHM 1925 *Ancient Monuments in Wales and Monmouthshire County of Pembrokeshire*: London, H M Stationery Office, p179

Thomas Roger J C 1994 *Survey of 19th and 20th Century Military Buildings of Pembrokeshire*. Unpublished report on behalf of the Pembrokeshire Coast National Park, the Welsh Development Agency and Cadw. Copy held in Cambria Archaeology SMR

Walker R F (ed) 2002 *Pembrokeshire County History. Vo. II - Medieval Pembrokeshire*: Haverfordwest, Pembrokeshire Historical Society
No mention of Newton



Photo 1: Newton Farmstead. 1955. View South (Meridian1995//190-200 17901)



CAMBRIAN
ARCHAEOLOGICAL
PROJECTS

APPENDIX II:

CAP Report 2007

ARCHAEOLOGY

Summary

The following report is the result of archaeological work undertaken by Cambrian Archaeological Projects Ltd for an Environmental Impact Assessment in relation to the proposed terminal refurbishment project at SemLogistics, Waterston, Milford Haven, Pembrokeshire. SemLogistics propose to refurbish the existing terminal and create a “world class” oil storage facility. Part of this refurbishment involves rationalising the existing tankage and infrastructure. This will involve the demolition of old small tanks of limited commercial use and the construction of new larger tanks.

The only archaeological element required for the impact assessment was a brief desk based study. This was undertaken so as to assess the historical and archaeological resource within the bounds of the proposed development, and to make sure that no sites were impacted on during both the construction phase and the final development.

The desk based assessment found that an earlier desk based assessment covering much of the study area had already been undertaken in 2002 by Cambria Archaeology. As the present proposals are located within the refinery itself a further desk based assessment was considered unnecessary

The results of the assessment conclude that no known archaeological sites of significance will be directly impacted upon by the proposed scheme.

Introduction

The following report is the result of archaeological work undertaken by Cambrian Archaeological Projects Ltd. The work is the archaeological element of an Environmental Impact Assessment undertaken in relation to the proposed terminal refurbishment project at SemLogistics, Waterston, Milford Haven, Pembrokeshire (centered on NGR: SM 94500550), formerly Petroplus. SemLogistics propose to refurbish the existing terminal and create a “world class” oil storage facility. Part of this refurbishment involves rationalising the existing tankage and infrastructure. This will involve the demolition of old small tanks of limited commercial use and the construction of new larger tanks.

The desk-based assessment took place in August 2007.

Development Rationale

SemEuro Limited purchased the Petroplus Tankstorage Milford Haven Limited in February 2006 to establish SemLogistics Milford Haven Limited. In order to improve the efficiency and productivity of the site, SemLogistics wish to maximise the site's overall storage capabilities and allow for greater product transfer flexibility between tanks and higher import/export flow rates. SemLogistics wish to refurbish the existing terminal and create a “world class” oil storage facility. Part of this refurbishment involves rationalising the existing tankage and infrastructure. This will involve the demolition of old small tanks of limited commercial use and the construction of new larger tanks.

Description of Development

The key components of the proposal are as follows:-

- The demolition of 26 existing tanks and construction of 12 new tanks.

Site Location and Description

The SemLogistic tank farm storage terminal is located adjacent to the village of Waterston on the northern shoreline of the Milford Haven waterway (*centered on NGR: SM 94500550.*). The basic activities that are currently carried out at the site relate to the storage and shipping of bulk liquids, mainly related to the oil industry.

The SemLogistics tank farm storage facility occupies 105 hectares of the former 265 hectare Petroplus Tankstorage Terminal.

The area around the site consists mainly of farmland and open countryside, with the exception of the Dragon LNG terminal, currently under construction. There are no public rights of way running through the site, however, the coastal path is located to the south of the site.

Geology, Topography

The geology of the area is of the Devonian period and consists of an undivided sedimentary rock of Lower Old Red Sandstone facies.

Aims and Objectives

The main scope and objectives of the archaeological assessment were to reveal by desk-based study, the nature, date and significance of the archaeology within the area of the proposed development. The purpose of the desk-based assessment, in accordance with standards and guidance as laid down by the *Institute of Field Archaeology*, is to gain information about the known or potential archaeological resource within the given area (including presence or absence, character and extent, date, integrity, state of preservation and relative quality of the potential archaeological resource), in order to make an assessment of its merit in context, leading to one or more of the following:

- The formulation of a strategy to ensure the recording, preservation or management of the resource, the formulation of a strategy for further investigation, whether or not intrusive,
- where the character and value of the resource is not sufficiently defined to permit a mitigation strategy or other response to be devised,
- the formulation of a proposal for further archaeological investigation within a programme of research.

As the site has been heavily disturbed due to its heavy industrial use and extensive archaeological studies had been undertaken on adjacent plots it was agreed with the Heritage Management Section at Cambria Archaeology in Llandeilo, that no field study will be required and only a visit to Sites and Monuments Record was necessary to review earlier reports.

All gathered material from the desk-based study was assessed in order to identify areas where the proposed development may impact on the recognised archaeology or elements of the historic landscape, and depending on the results of the study, any potential mitigating circumstances that may arise.

Potential physical impacts

The desk-based assessment will establish the following:

- Location of known archaeological sites and landscapes within proposed development area
- Potential for palaeo-environmental samples within the proposed development area.
- The density of archaeological sites in the surrounding area to a radius of 250 meters from the center of the site and the potential that comparable sites may continue into the site.
- Previous disturbance or truncation on the site, which may have affected archaeological remains

- Where information is available, the physical impact of the proposed development including the full extent of ground-works.

With the above in minds the assessment will look at the following study areas:

- A detailed assessment of the proposed development area.
- An assessment of the known archaeological sites in a 250 meter radius of the center of the site in order to get an understanding on the wider range of archaeological sites in the surrounding area with reference to the HER held at Cambrian Archaeology. The assessment will consider the potential for comparable sites within the development area.
- Produce mitigation proposals for the preservation of sites *in situ*, or for the investigation, recording and recovery of remains and the publication of results.

Methodology

For the purposes of the archaeological desk based study the following repositories were consulted:

- Sites and Monuments Record (SMR), Cambria Archaeology, Llandeilo.

As the area had been very heavily disturbed in the past and extensive archaeological studies had already been undertaken within the area in 2002 it was considered unnecessary to look further at any early cartographic sources other than those already examined.

The assessment methods used follow those detailed in the *Design Manual for Roads and Bridges* (DMRB, Volume 11, Section 3, part 2) and the CADW *Guidelines and Methodology for assessing significance of impacts of development on historic landscape areas on the register of landscapes of historical interest in Wales (Second draft 15-09-2000)*

All sites identified have been categorised following guidelines set out in the DMRB. The allocation of a site to a category defines the archaeological significance and class of that site or monument. The categories are described as follows:

- *Category A* - Sites of National Importance. Scheduled Ancient Monuments, Listed Buildings and sites which meet the criteria for scheduling or listing. Recommended sites will be preserved *in situ*.
- *Category B* - Sites of regional or county importance. Sites which do not quite meet the criteria for scheduling or listing, but which are of particular importance to the region. Preservation *in situ* shall be preferred, but where damage or destruction is unavoidable, appropriate action will be undertaken.
- *Category C* - Sites of district or local importance. Sites which are not of sufficient importance to justify preservation if threatened, but merit adequate recording prior to damage or destruction.
- *Category D* - Minor or damaged sites. Sites of minor importance or so badly damaged that too little remains to justify inclusion within a higher category. Rapid recording, either in advance of or during construction, should be sufficient.
- *Category E* - Sites needing further investigation. Sites whose importance cannot be determined without further investigation in order to assign them to categories A-D. These sites will be subject to field evaluation.

The following provides an indication as to the predicted impact the proposed development will have on individual archaeological features. The scale of the impact needs to be viewed in conjunction with the class of the monument, in order to appreciate the overall significance the development will have on a given archaeological feature.

There are five levels of Impact *severity* (Cadw 2000).

Unknown: An unknown effect covers those sites where it has not been possible to gauge the impact the development will have on an archaeological feature.

None: This is where the proposed development will have no effect on the archaeological or cultural heritage of the site.

Low: A low impact would result in minimal damage to the integrity of the archaeological record, with less than a tenth (10%) permanently lost or removed.

Fairly Severe: A fairly severe impact would result in between 10-24% loss of the archaeological record.

Moderately Severe: A moderately severe impact would result in a substantial loss of between 25-49% of the archaeological record.

Very Severe: A very severe impact would result in a loss or removal of more than a half of the *in situ* archaeological record.

Historical and Archaeological Background

The site of Semlogistics is just outside the Pembrokeshire Coast National Park but lies within the Cadw/ICOMOS 'Register of Historic Landscapes' Milford Haven Waterway (Cadw 1998).

Milford Haven (Welsh: *Aberdaugleddau*, meaning "mouth of the two Rivers Cleddau") is the largest town in Pembrokeshire. It was founded as a whaling centre in the eighteenth century and grew into a major port. The current name form is an anglicization, with Scandinavian origins. From the Old Norse, *Melr*, meaning sand hill or sandbank, and *Fjodr*, meaning fiord or inlet, combined to create Milford. As the meaning of Fiord gradually became less clear over time, Haven was added to clarify its status as a town on the Haven. From the 1790's until the Norman Invasion in 1066, the waterway was used occasionally by Vikings looking for shelter. During one visit in 854AD, the Viking Chieftain Hubba wintered in the Haven with 23 ships, eventually lending his name to the district of Hubberstone. In his play *Cymbeline*, Shakespeare references Milford in the lines: "...how far it is to this same blessed Milford: and by the way tell me how Wales was made so happy as to inherit such a haven..."

In 1782 Sir William Hamilton inherited land in the Hubberstone and Pill area, and decided to develop it into a harbour and town. Hon. Charles Francis Greville, his nephew, was given responsibility for managing the project, and in 1790 an Act of Parliament was granted which made it possible to continue. The town's population was boosted by Quaker whalers from Nantucket, and in 1879 the Navy Board established a dockyard which produced warships. Progress was rapid, and by 1804, Admiral Nelson had described the area as one of the finest harbours ever seen.

In 1814 the Royal Dockyard was transferred to Pembroke Dock, which quickly reduced the fortunes of the new town. John Bartholomew commented in 1887 that Milford was in a languishing state, although he noted that the commercial docks, at that time under construction, "will probably become a great seat of trade with America".

The area under investigation for this study lies on the north shore of the Milford Haven waterway and mainly comprises the small town of Neyland. The area is divided between the ecclesiastical parishes of Burton, and Llanstadwell whose parish church, mentioned in the 12th century and possibly of an earlier foundation, lies at the western edge of the area on the shore of the waterway. There is no recorded historic settlement around the church at Llanstadwell. However, a small settlement probably developed at Burton Ferry, at the eastern edge of this area, in the late medieval period to serve the ferry crossing to the south of the waterway. A bridge did not replace this ferry across the Haven until 1975. Burton Ferry occupied a detached portion of the Lordship of Pembroke. However, the majority of this character lay within the medieval Manor of Honeyborough. This comprised one knight's fee directly held of the Earls of Pembroke as their share of the Lordship of Haverford, and 2½ carucates held of the Barony of Walwyn's Castle 'by homage'. Great Honeyborough farm represents the manorial centre. In c.1600 the manor was shared between the Perrot, Bowen and Scourfield families, who were succeeded by the Batemans and the Taskers. After 1810 it was held by farming tenants. Neyland itself is of no antiquity. George Owen included 'Nailand' in his list of creeks in 1596, but there was no contemporary settlement. The present town lies across what were the village and fields of Great Honeyborough ('Townred of Honeyboro' on 18th century maps). This was an entirely agricultural community with an open-field or strip field system still in operation in the 18th century, although estate maps of 1759 and 1773 show that some of the strips were beginning to be enclosed by hedges.

Between 1751 and 1782 Neyland had become one of the largest herring ports in Wales, and in c. 1760 the Admiralty chose the site for the construction of their ships. Two ships were built in privately owned yards: the Prince of Wales in 1760 and the Triumph in 1784. Two forts were originally planned to defend these yards, but only a small water-line gun fort was constructed, and after spending £20,000 on the project the government withdrew their support. The dockyards continued in use building civilian ships, and further yards were opened later in the 18th century and in the 19th century. In the 19th century an average of two ships a decade were built at Neyland. Modest port facilities were also located here; a salt refining works was in operation in 1797 and imports of sugar and wool are reported in 1811. Estate maps of the late 18th century show that development was still small-scale, with just a handful of houses and other buildings on the east and west banks of Barnwell Pill. The opening of GWR's terminus at Neyland in 1856 marked the real beginning of the town. Old facilities were swept away and the population rapidly increased. A fixed pier constructed for an Irish ferry service was extended in 1857 when a second boat was added. Cattle stages, gasworks and a hotel were also constructed. Development of the port was constrained by objections from the Admiralty who feared that further piers and other installations would interfere with ships launched from Pembroke Dock. Transference of the Irish ferry service to Fishguard in 1906 led to Neyland reinventing itself as a fishing port: an ice factory and fish market were opened in 1908. By the 1920s this industry had gone into decline and Neyland was becoming a backwater; a process hastened by the closure of the railway in 1964 and of the ferry service to Hobbs Point in 1975, although the opening of a marina in Barnwell Pill and an industrial estate on the northern fringe of the town have provided employment. The town of Neyland spread in conjunction with the growth of industry, first with housing development close to the shore line on both sides of Barnwell Pill, and in the 20th century with schools, dwellings and other developments on the gentle slopes to the north of the Milford Haven waterway.

Neyland is an urban historic landscape area. The oldest parts of this area comprise Great Honeyborough and settlements along the bank of the Milford Haven waterway at Hazelbeach, Llanstadwell, Neyland and Burton Ferry. Included is the medieval church of St Tudwal at Llanstadwell and the neighbouring Georgian house. The settlement along the shore is linear in character and consists mainly of mid 19th century and late 20th century houses. The main element of this area is Neyland itself. Its focus is the old railway terminus and the docks. Both of these have closed and little survives to indicate the former location of the terminus as a small industrial estate has been constructed over it. Barnwell Pill has been converted to a marina and is overlooked by modern housing constructed on the course of the old railway. Sections of the old quays and the remains of an 18th century waterline gun fort survive. Buildings close to quay and waterway date to the mid 19th century. Uphill of the quay and waterway, Neyland has developed organically, with no obvious traces of planning. Terraced, two storey houses comprise the main, 19th century housing type. These are generally cement rendered, probably stone-built, with slate roofs. Late 20th century housing in a variety of styles and materials fringes Neyland. Indeed modern development has encircled the former agricultural village of Great Honeyborough joining it in one settlement with Neyland. However, the village morphology at Great Honeyborough is preserved and buildings, including 19th century vernacular cottages and houses and an 18th century house with massive chimney, survive. Modern housing developments fringe the settlements along the waterway. Modern light industrial and commercial properties have been established on the edge of Neyland, in particular on or close to the main, modern road to the Cleddau Bridge. Archaeology is not a strong component of this area.

Neyland is a distinctive historic landscape area and contrasts with the neighbouring areas of dispersed farms and fields.

Samuel Lewis's Topographic Dictionary of Wales in 1833 describes the parish of Llanstadwell thus;

LLANSTADWELL (LLAN-STADWELL), a parish in the hundred of RHÔS, county of PEMBROKE, SOUTH WALES, 3 miles (E. by S.) from Milford, containing 733 inhabitants. This parish, which is situated on the northern shore of Milford Haven, comprises a considerable tract of fertile and well-cultivated land, with some portions of hilly ground, which, from its steepness, is but ill adapted to repay the expense and labour of cultivation. At Nayland, which is situated within its limits, it was once in contemplation to construct a dock-yard, for which purpose some lands in the vicinity were purchased, on both sides of the harbour, on which to erect works for its security and defence. Considerable progress had been made in the erection of one of the fortresses on the opposite side of the haven, but upon the death of the late Sir John Philipps, father of the late Lord Milford, who was the principal promoter of the design, the plan was abandoned, after two ships of war only had been built, both of which, the "Prince of Wales," of seventy-four guns, and the "Milford"

frigate, were built by contract. The surrounding scenery is finely varied, combining the fine expanse of water in the haven on the south, and the spacious open channel on the west, with extensive tracts of richly cultivated country on the north and east. In the vicinity are several good houses, of which there are within the parish, Jordanston, the property of the Rev. Thomas Wilson; Hayston, the residence of R. Matthias, Esq.; and Newton, a dilapidated old house on a valuable estate belonging to Lewis Child, Esq. The living is a discharged vicarage, in the archdeaconry and diocese of St. David's, rated in the king's books at £7. 17., endowed with £200 royal bounty, and £200 parliamentary grant, and in the patronage of Lewis Child, Esq., to whom two-thirds of the great and small tithes were impropriated, the remaining third belonging to the vicar. Mr. Child has recently disposed of the greater part of his tithes to the respective proprietors of the lands. The church, dedicated to St. Tudwal, is an ancient structure in good repair, pleasantly situated on the margin of the haven, in the southern part of the parish. There is a place of worship for Wesleyan Methodists. Some remains of two ancient British encampments, comprising each an area of about one acre, are visible: one is situated at the north-eastern extremity of the parish, nearly opposite the village of Rhôsmarket and the other at its south-western extremity, on a point on the shore of Milford Haven. The average annual expenditure for the maintenance of the poor is £267. 13. (Samuel Lewis 1833).

Just to the north of the area under investigation is another historic landscape area, that of Scoveston. This is a large character area lying to the north of the Milford Haven waterway, within the ecclesiastical parishes of Llangwm, Llanstadwell, Rosemarket and Steynton. Much of the area formed part of the medieval Manor of Pill, part of the larger Manor (or Sublordship) of Pill and Roch, which was created under the de Roches between 1100 and 1130. Its relationship with the Lordship of Haverford, of which it was notionally a member, was always a matter of dispute. Pill was a large and important manor with a caput at the head of Castle Pill (pill is a local term for a tidal inlet) at the west end of the area – possibly on the site of an iron age hillfort and later a Civil War defence. The southeast end of this area lies within the parish of Burton, which represented a detached portion of the Lordship of Pembroke. Burton parish church was present by 1291. The Manor (and parish) of Llangwm, to the north, was a holding of the de Vales until a Roche kinsman, Gilbert de la Roche, acquired it in the late 13th century. The Roches granted 'six bovates of land in Studdolph, and five acres of land with half a carucate of land in the same township' to the Tironian Pill Priory in its late 12th century foundation charter. Hayston was present in the 14th century. The present settlement pattern appears to be of relatively late origin as only a few of today's farms and landholdings can be identified with medieval manors and townships. Scoveston is not recorded until the mid 15th century, while the remainder – Jordanston, Norton, Milton, Westfield etc – were not recorded until the 16th- and 17th-centuries. Some, such as Oxland, are 18th century in origin. Nevertheless, these different periods of origin are not reflected in any differing tenurial arrangements, and a homogenous pattern of enclosure has resulted. By the time of the first estate maps in the late 18th century and the tithe survey in the 1840s the landscape of today had been established. There are hints that at least parts of the area had evolved from open field systems. For instance, enclosed strip fields are shown on estate maps on the east side of Castle Pill and close to the very small village of Burton. No traces of these strips now remain. The area has remained primarily agricultural but its military potential has long been apparent. Castle Pill was fortified by Royalist forces in 1643, with an 18 gun fort garrisoned by 300 men. The massive inland Scoveston Fort was the only defensive work to be constructed after the 1860 Royal Commission report on defence proposed a ring of forts around the Milford Haven waterway to prevent it from landward attack. Railways also crossed the area, to Neyland in 1856 and Milford Haven in 1859.

Results of Desk Based Assessment (DBA)

The desk based assessment of the area under study visited the Sites and Monuments Record offices at Llandeilo. After consultation with the Heritage Management section at Llandeilo it was concluded that no further desk based assessment need be undertaken as an earlier desk based study of the development area had already been undertaken in 2002 (CAP Report No:2002/62). This earlier report was undertaken for Petroplus LNG Development as part of a larger Environmental Impact Assessment for an extension to the Gas Storage terminal facility. The DBA examined all of the available cartographic sources for the area immediately surrounding of the bounds of the Petro Facility at the time and recorded at least four significant or potentially significant archaeological sites in the area. These included the medieval settlement of Newton (PRN: 12904), the site of a post medieval 'model' farmstead (PRN: 45248) and the possible site of a Bronze Age barrow or medieval mound (PRN: 45247).

As the area of the development is within the already existing petro facility then no new sites were discovered and any potentially undiscovered sites that were potentially there will most likely already have been destroyed.

Prehistory

No prehistoric sites were found to exist within the proposed development area

Romano-British Period

No Roman or Roman-British sites were found to exist within the proposed development area.

Medieval Period

No new sites were found to exist within the proposed development area.

Post Medieval Period

No new post-medieval sites were found to exist within the proposed development area.

Cartographic Sources

All OS maps investigated in the earlier report spanned the years 1809 – 1983. These included the Tithe Award map of Llanstadwell 1839/40 and all early Ordnance Survey 1:2500 maps. Aerial photos investigated spanned the years 1946 – 2006.

Impact Assessment

Archaeological Sites and their Significance

The desk-top assessment identified no *Category A* sites within the bounds of the proposed development, nor did it identify any Category B, C, D or E sites within the bounds of the proposed development.

Predicted Impacts of the Proposal on known Archaeology

As no new sites were identified within the bounds of the proposed development there are no predicted impacts.

Proposed Avoidance or Mitigation Measures

The desk based assessment of the survey area found no avoidance or mitigation measures need be implemented.

Summary and Recommendations

The Impact Assessment of the area proposed for the demolition and relocation of gas terminals at the Semlogistics plant found that there were no new sites within the bounds of the proposed development area other than the sites already recorded in an earlier desk based assessment undertaken by Cambria Archaeology in 2002. As such it is predicted that there will be no impact on any sites within the area.

Acknowledgements

Many thanks to Kevin Blockley for his advice and consultation with this work and also many thanks to all those from the institutions and repositories visited for research purposes.

Bibliography

CRANE, P. 2002. Cambria Archaeology Report No: 2002/62. EIA .

Other Sources Consulted

Design Manual for Roads and Bridges (DMRB) – (DMRB, Volume 11, Section 3, part 2).

CADW 2000 - Guidelines and Methodology for assessing significance of impacts of development on historic landscape areas on the register of landscapes of historical interest in Wales (Second draft 15-09-2000).

Cartographic sources

- Anonymous, Mid 18th Century map of Pembrokeshire and Carmarthenshire in Milford Haven Museum
- Kip W, 1607, Map of Pembrokeshire based on George Owen's survey
- Lewis Morris, 1801, A Plan of Milford Haven in the County of Pembroke
- Ordnance Survey 1809-10 Original survey drawings 2 inch to mile sheets 181-2
- Ordnance Survey 1887 First Edition 6 inch Pemb XXXIII SW
- Ordnance Survey 1887 First Edition 6 inch Pemb XXXIII SE
- Ordnance Survey 1887 First Edition 6 inch Pemb XXXIX NE
- Ordnance Survey 1887 First Edition 25 inch Pemb XXXIX, 2
- Ordnance Survey 1887 Second Edition 6 inch Pemb XXXIX NE
- Ordnance Survey 1908 Second Edition 25 inch Pemb XXXIX, 2
- Ordnance Survey 1976 Geological Map Haverfordwest Sheet 228 Drift
- Ordnance Survey 1976 Geological Map Haverfordwest Sheet 228 Solid
- Ordnance Survey 1977 Agricultural Land Classification 1:250000
- Ordnance Survey 1978 Soil Survey of England and Wales Bioclimatic Classification
- Ordnance Survey 1980 1:25000 SM 80/90
- Ordnance Survey 1983 Soil Survey of England and Wales 1:250000
- Ordnance Survey card index for PRN 4507 No trace of antiquity
- Saxton C 1578 Map of Pembrokeshire
- Speed John Map Pembrokeshire (Newton indicated)
- Tithe Map (c. 1849) and schedule Llanstadwell Parish

Aerial Photographs

Sortie No:	Date flown:	Scale:	Air Survey Org:	Photo type:	Frame No:
106G/UK/1625	03/11/1950	1:20000	RAF	BW	6354-6
106G/UK/1625	03/11/1950	1:20000	RAF	BW	3133-4



CAMBRIAN
ARCHAEOLOGICAL
PROJECTS

APPENDIX III:

DAT Report 2003

Proposed Extension to the Petroplus LNG Development

Archaeological Assessment

By Pete Crane BA Hons MIFA

29th April 2003

This assessment is limited in nature due to time constraints as Cambria Archaeology are currently working on this development (see Section Original Area below). The original proposed development area is covered by the earlier assessment Cambria Report No 2002/62 (45243), prepared for Posford Haskoning Limited. This report should be consulted for general archaeological implications and history.

EXTENDED AREA

No detailed review of cartographic or historical sources has been made other than that done for the original proposed development area. However, adjacent areas are always considered and nothing of significance was noted in this proposed extension.. The SMR records indicate no previously noted archaeological sites within the proposed extension area.

The extended area was walked over with Mr Tony Stones of Posford Haskoning on 3rd April 2003 and subsequently on 7th April with Louise Austin, Principal Archaeologist of Cambria Archaeology's Heritage Management section, when the implications of the extension to the scheme were discussed.

RESULTS

There is a linear mound (PRN 47946) located in the western half of Pigeon Meadow adjacent to the south side of a stream, with its centre 74m east of the western field boundary (see attached plan for approximate position). The mound is flat topped, c. 13m long by 2.75m wide and stands c. 0.25 to 0.5m proud. Its sides are steeply sloped at about 45 degrees. A geotechnical pit has been excavated and backfilled on its eastern end without archaeological observation. The mound was screened with a metal detector with negative results. Additionally, a 2m wide test trench was machine cut across a section of the eastern part of the mound. The mound appears to consist of a lower deposit of fine silt, with very few intrusions except for abundant manganese flecks. The layer above this and below the thin topsoil with turf is of silty gravel with abundant small stones. These layers suggest that the mound is made up of an old stream bed or redeposited stream bed material. No structural elements were observed, but the form of the mound suggests it is artificial.

There are a number of other slight undulations in the western part of Pigeon Meadow. Some of these are probably natural but there is an indication of a trackway along the south edge of the linear mound that extends along the south side of the stream to the western boundary. Another route leads through the present gate in the western boundary and this is not considered significant. There appear to be at least two north-south linear undulations, possibly former field boundaries which were destroyed before the tithe map of c. 1849 was drawn.

The medieval or post-medieval trackway (PRN 45245) west of Newton has been almost almost completely destroyed. However, this has been photo-recorded and an observation of a geotechnical trench across it suggests that its metalling is limited to one base layer with a thin upper deposit. The two fields named as West Field on the tithe map, and located on either side of the trackway at the western end of the proposed development extension, show no indications of any artificial features.

There will now be some visual impact on the landscape adjacent to the Mine Depot to the south-west, but this is mostly obscured by trees on its north-east side and final results will be dependent on the height and location of the bund.

RECOMMENDATIONS

As the probable development method may not be able to incorporate a conventional archaeological watching brief, it is recommended that the linear mound (PRN 47946) and an area around it should be machine stripped under archaeological supervision, and time allowed to undertake excavation and/or recording if this should be necessary. At the same time, test-trenches should be cut across some of the undulations, in particular the possible trackway on the south side of the linear mound and stream.

ORIGINAL AREA

INTERIM RESULTS ON EVALUATION AND EXCAVATION

Archaeological evaluation and excavation has almost been completed on the original proposed development by Petroplus LNG on the settlement of Newton, Waterston, Milford Haven. This work is being undertaken by Cambria Archaeology with assistance from the Pembrokeshire Prospectors' Society.

Historically, the site of Newton is associated with the princely family of Caraddock, related to Howell Dda. In the 1400s Sir Richard Caraddock sold off his Welsh holdings and changed his name to Newton: one of his descendants was Sir Isaac Newton.

A field named Mount Meadow, perhaps indicating a former mound, also contained an indistinct cropmark, identified from aerial photographs. Topographically this location would be a suitable site for prehistoric burial mounds or a later defensive site. This has been subjected to a large geophysical survey and 350 metres of trial trenches. Although nothing of significance was found, the underlying geology is, however, quite mixed. Therefore a 12.5m wide and 125m long topsoil strip was implemented down the hill ridge. This revealed an arc of post holes and subsequent expansion of the trench at this location indicated a potential roundhouse with pottery fragments suggesting a Bronze Age date.

The later farmstead (PRN 45248) was demolished in the 1960s as part of the Gulf Oil Refinery development, but was not then built over. This farm had been rebuilt c.1800 by Lewis Child who was part of the Pembrokeshire agricultural reform movement. The farmhouse was recorded then as being fine but with nothing of antiquity about the place except for a few ruinous arches. Trial trenches have uncovered some of the

farmhouse and outbuildings. Unfortunately it appears that during the 1960s demolition the remains were very heavily bulldozed and no further archaeological work was viable.

Just to the west of the farmstead, around a spring (PRN 45379), the remains of a substantial late medieval, or post medieval, building were found. Finds indicate that this site was of some status and appear to mainly date from the 1600s to 1700s. Subsequently the building was used as a barn but demolished before the tithe map of c. 1849 was drawn.

Fifty metres to the west of the spring and post-medieval building the vestiges of a circular structure (PRN 45244) have been fully excavated. This is most likely the remains of an early post medieval dovecot as it is the corner of "Pigeon Meadow" and is now the eleventh recorded in Pembrokeshire. This building was in use up to modern times but has an earlier floor. Provisional documentary research indicates its existence by 1611 and pottery within an original central post hole, soon disused, indicates a date in the mid 1500s.

Post excavation work will start in May. There will be some necessity for specialist analysis of environmental deposits, radiocarbon samples, pottery and artifacts. A full report will be produced when all the fieldwork is completed and these specialist reports received. A concise report is anticipated in appropriate archaeological journal(s).



APPENDIX IV:

HER Data

HISTORIC ENVIRONMENT RECORD

**all records are subject to copyright*

PRN 4507
SITE NAME MOUNT MEADOW
NGR SM93050480
SITE TYPE ROUND BARROW?;MOTTE?
PERIOD Bronze Age;Medieval
SITE STAT
SOURCES Pm List//RCAHM/1925/Pemb/No.536,p.179;Mm List/RCAHM/RCAHM/1976//9b,PE;Mm List/Ordnance Survey/Ordnance Survey///SM90 SW(M12);Mm AP Vertical/PCM/Meridian Airmaps/1955//190-200 17901-2;Mm List/PCM/PCM/1980/Card Index/Pr C22;Mm List/DAT/DAT/Cook,N/2004/Prehistoric Funerary and Ritual Sites Project - Pembrokeshire 2003-2004

B DESC A "Mount" place-name on the parish tithe map that may have indicated a round barrow or cairn existed here. The site excavated at the time of the developments by PetroPlus. No evidence for a round barrow was uncovered although in an adjacent field there were some sherds of Bronze Age pottery and a Bronze Age roundhouse was discovered, but nothing which was considered to represent a funerary/ritual site. RPS Trysor, August 2004

LONG DESC

PRN 12904
SITE NAME NEWTON
NGR SM930048
SITE TYPE SETTLEMENT
PERIOD Medieval
SITE STAT
SOURCES Ph Mention//Fenton,R/1811/Hist.Tour Through Pemb/1903 Edition,p.152

B DESC**LONG DESC**

PRN 34526
SITE NAME NEWTON WEAR
NGR SM93920433
SITE TYPE COTTAGE?
PERIOD Post-Medieval?
SITE STAT
SOURCES Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library;Ph
Map/DAT/OS//Pembrokeshire 1st Edition 6" XXXIX NE

B DESC Building identified from 1st Edition OS. Walls survive up to 1.5m high, remains of stone built
cottage? Length approximately 16m, width 5m. Built on a terrace, now very overgrown
surrounded by a series of paddocks and enclosures. BA & KM 1997.

LONG DESC

PRN 34527
SITE NAME NEWTON WEAR
NGR SM93920437
SITE TYPE COTTAGE?;BUILDING
PERIOD Post-Medieval
SITE STAT
SOURCES Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library;Ph
Map/DAT/OS//Pembrokeshire 1st Edition 6" XXXIX NE

B DESC Building identified from 1st Edition OS. Not seen, very overgrown and possibly within/under
security fence of oil refinery. Site possibly destroyed by modern oil installation. BA & KM 1997.

LONG DESC

PRN 34528
SITE NAME NEWTON WEAR
NGR SM93940435
SITE TYPE BOAT HOUSE
PERIOD Post-Medieval
SITE STAT
SOURCES Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library;Ph
Map/DAT/OS//Pembrokeshire 1st Edition 6" XXXIX NE

B DESC Boat house identified from 1st Edition OS. Site destroyed by works associated with the oil
refinery. BA & KM 1997.

LONG DESC

PRN 34529
SITE NAME NEWTON WEAR
NGR SM93980436
SITE TYPE COTTAGE?
PERIOD Post-Medieval?
SITE STAT
SOURCES Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library;Ph
Map/DAT/OS//Pembrokeshire 1st Edition 6" XXXIX NE

B DESC Building identified from 1st Edition OS. All that appears to remain is a length of wall built on
top of the bedrock, approximately 8m long and 5m high. Area behind the wall very overgrown,
therefore remains and plan of building unknown. BA & KM 1997.

LONG DESC

PRN 34843
SITE NAME NEWTON WEAR
NGR SM9406304395
SITE TYPE DESERTED RURAL SETTLEMENT
PERIOD Post-Medieval
SITE STAT
SOURCES Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library;Ph Map/DAT/Ordnance Survey//Pembrokeshire 1st Edition 6" XXXIX NE;Mm Desc Text/DAT/Sambrook,RP/2003/Deserted Rural Settlements in Southwest Wales 2002-3 Project/ACA reports

B DESC Rectangular foundations of a building, approximately 15m by 5m, two celled, long axis along contours. Further foundations of smaller buildings immediately upslope. All are set in a complex of small paddocks/enclosures in dense woodland. BA & KM 1997.; As above. Terracing of slope and mortared stone revetments etc. Dense scrub and deciduous woodland cover prevents full assessment. Building is of mortared stone and stands up to 2m high at the NW end. No ancillary buildings were noted but vegetation cover obviously hides them. A good site which would benefit from clearance of vegetation in order to assess fully. NGR amended from 94060439. Period amended from Post Med?. R.R November 2002

LONG DESC

PRN 34844
SITE NAME NEWTON WEAR
NGR SM94000439
SITE TYPE COTTAGE
PERIOD Post-Medieval?
SITE STAT
SOURCES Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library;Ph Map/DAT/OS//Pembrokeshire 1st Edition 6" XXXIX NE

B DESC A terrace cut on a steep slope-dense woodland contains earthwork and rubble and stone walls. This seems to be the site of a cottage. It is set within a system of paddocks and enclosures. BA & KM 1997.

LONG DESC

<u>PRN</u>	34845
<u>SITE NAME</u>	NEWTON WEAR
<u>NGR</u>	SM94000434
<u>SITE TYPE</u>	SEA DEFENCES
<u>PERIOD</u>	Post-Medieval?
<u>SITE STAT</u>	
<u>SOURCES</u>	Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library

<u>B DESC</u>	A length of stone built sea wall, approximately 20m long and 4m high. It is uncertain what this wall once protected, possibly building PRN 34529. BA & KM 1997.
----------------------	---

LONG DESC

<u>PRN</u>	34846
<u>SITE NAME</u>	NEWTON WEAR
<u>NGR</u>	SM94050434;SM94080422
<u>SITE TYPE</u>	PIPELINE
<u>PERIOD</u>	Post-Medieval?
<u>SITE STAT</u>	
<u>SOURCES</u>	Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library

<u>B DESC</u>	Pipeline cut through bedrock, approximately 2m wide, infilled with shattered rock. Concrete wall with sign on shoreline warning of pipeline. BA & KM 1997.
----------------------	--

LONG DESC

<u>PRN</u>	34847
<u>SITE NAME</u>	NEWTON WEAR
<u>NGR</u>	SM93850428
<u>SITE TYPE</u>	NAVIGATION AID
<u>PERIOD</u>	Post-Medieval?
<u>SITE STAT</u>	
<u>SOURCES</u>	Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library;Ph Map/DAT/OS//Pembrokeshire 1st Edition 6" XXXIX NE;Mm GP/DAT/Murphy,K/1997/DAT97-20-4, DAT97-20-5
<u>B_DESC</u>	Post Med stone-built cylindrical base, topped with a course of bricks on which is built a stone built core, plastered and originally whitewashed. Total height of structure approximately 5.6m. BA & KM 1997.

LONG_DESC

<u>PRN</u>	34848
<u>SITE NAME</u>	NEWTON WEAR
<u>NGR</u>	SM93820430
<u>SITE TYPE</u>	MINEWATCHERS POST
<u>PERIOD</u>	Modern
<u>SITE STAT</u>	
<u>SOURCES</u>	Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library;Mm Desc Text/DAT/Thomas,RJC/1994/Survey of 20th and Century Military Building of Pembrokeshire/Site No 161-000
<u>B_DESC</u>	Mine watchers post identified by Roger Thomas, RT161. Brick and concrete structure, approximately 3m by 2m and 2m high. BA & KM 1997.

LONG_DESC

PRN 34964
SITE NAME NEWTON WEAR
NGR SM93070456
SITE TYPE MINEWATCHERS POST
PERIOD Modern
SITE STAT
SOURCES Mm Desc Text/DAT/Allen,B & Murphy,K/1997/Milford Haven Survey/SMR Library;Mm Desc Text/DAT/Thomas,RJC/1994/Survey of 20th and Century Military Building of Pembrokeshire/Site No 159-000;Mm Desc Text/DAT/Schlee,D/2004/A Mine Watching Post, near Waterston Archaeological Building Recording Event PRN 52841/ACA Report No 2004-114

B DESC Mine watchers post identified by Roger Thomas, RT159. Not visited /seen during fieldwork. BA & KM 1997.

LONG DESC

PRN 35086
SITE NAME
NGR SM93220460
SITE TYPE SEARCHLIGHT BATTERY
PERIOD Modern
SITE STAT
SOURCES Mm Mention/DAT/Murphy,K & Allen,B/1998/Coastal Survey 1997-8 Lower Milford Haven Pembrokeshire/ACA Reports;Mm Desc Text/DAT/Crane,P/2002/Petroplus LNG Development Environmental Impact Assessment/ACA reports;Mm Database/DAT/Thomas,R//Rt.dbf/FPW26 table

B DESC A World War II Searchlight Battery identified by Roger Thomas (Thomas 1994, RT 160). Nothing but vegetation was seen at the given location during the fieldwork. However, no access was possible as it was behind the security fence. PR 2002 based on Crane,P, 2002.

LONG DESC The Battery was not visited/seen during the coastal survey fieldwork in 1997 (Murphy and Allen 1998).

PRN 45246
SITE NAME
NGR SM93180459
SITE TYPE COTTAGES
PERIOD Post-Medieval
SITE STAT
SOURCES Mm Desc Text//Crane,P/2002/Petroplus LNG Development Environmental Impact Assessment/SMR Library

B DESC Post-medieval cottage site. Described as two cottages and gardens in the tithe schedule and the buildings were still shown Ordnance Survey 1964 map. The area is now overgrown. PR 2002 based on Crane,P,2002.

LONG DESC

PRN 45380
SITE NAME
NGR SM93120453
SITE TYPE WELL
PERIOD Post-Medieval
SITE STAT
SOURCES Mm Desc Text/DAT/Crane,P/2002/Petroplus LNG Development Environmental Impact Assessment/SMR Library.

B DESC Post-medieval well. PR 2002 based on Crane,P, 2002.

LONG DESC The well is indicated on first edition Ordnance Survey map but it is located within the oil complex and the site was not visited. It probably served a cottage to the southeast (indicated on the Ordnance Survey first and second editions but not on the tithe map), rather than the two cottages (PRN 45246) to the north. PR 2002 based on Crane,P,2002.



APPENDIX V:

Figures



Fig 01: Map showing general location of assessment area

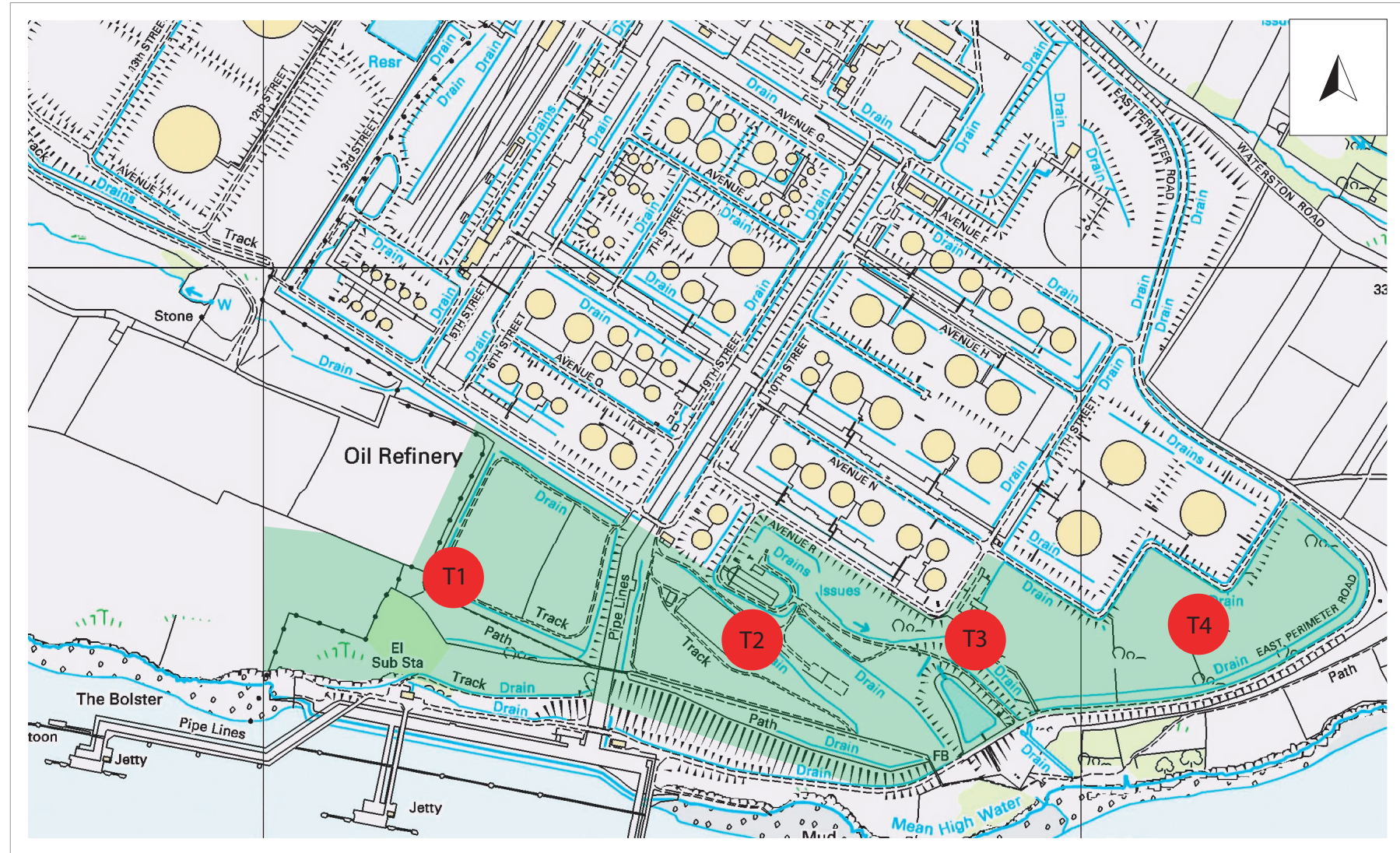


Fig 02: Map showing location of turbines (Red) and boundary of development area (Green)

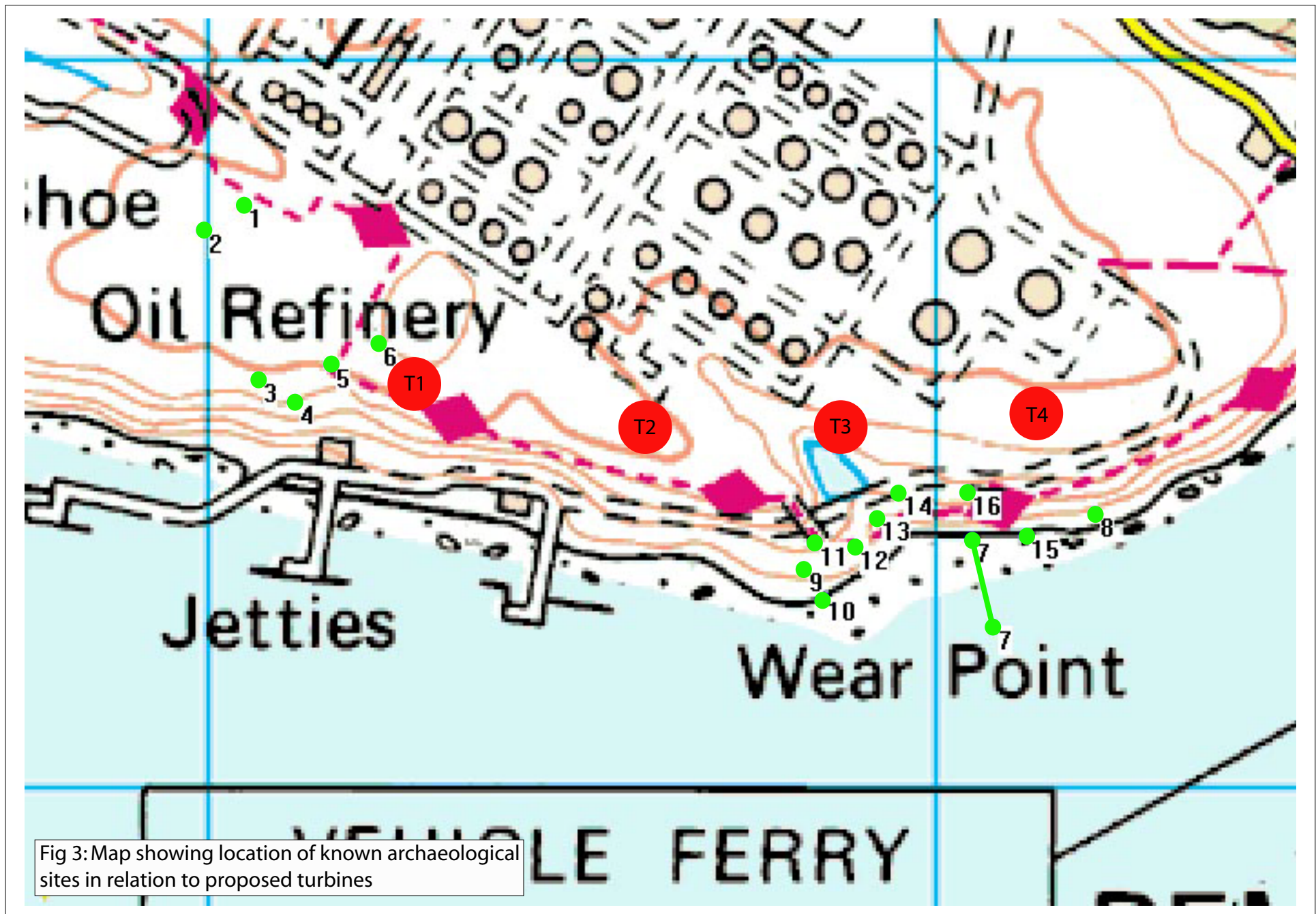




Fig 4: 1890-34 2 Inch OS Surveyors Drawings - Assessment area bounded in red

Llanstadwell Tithe Map c. 1849
with tenants,fieldnames and use

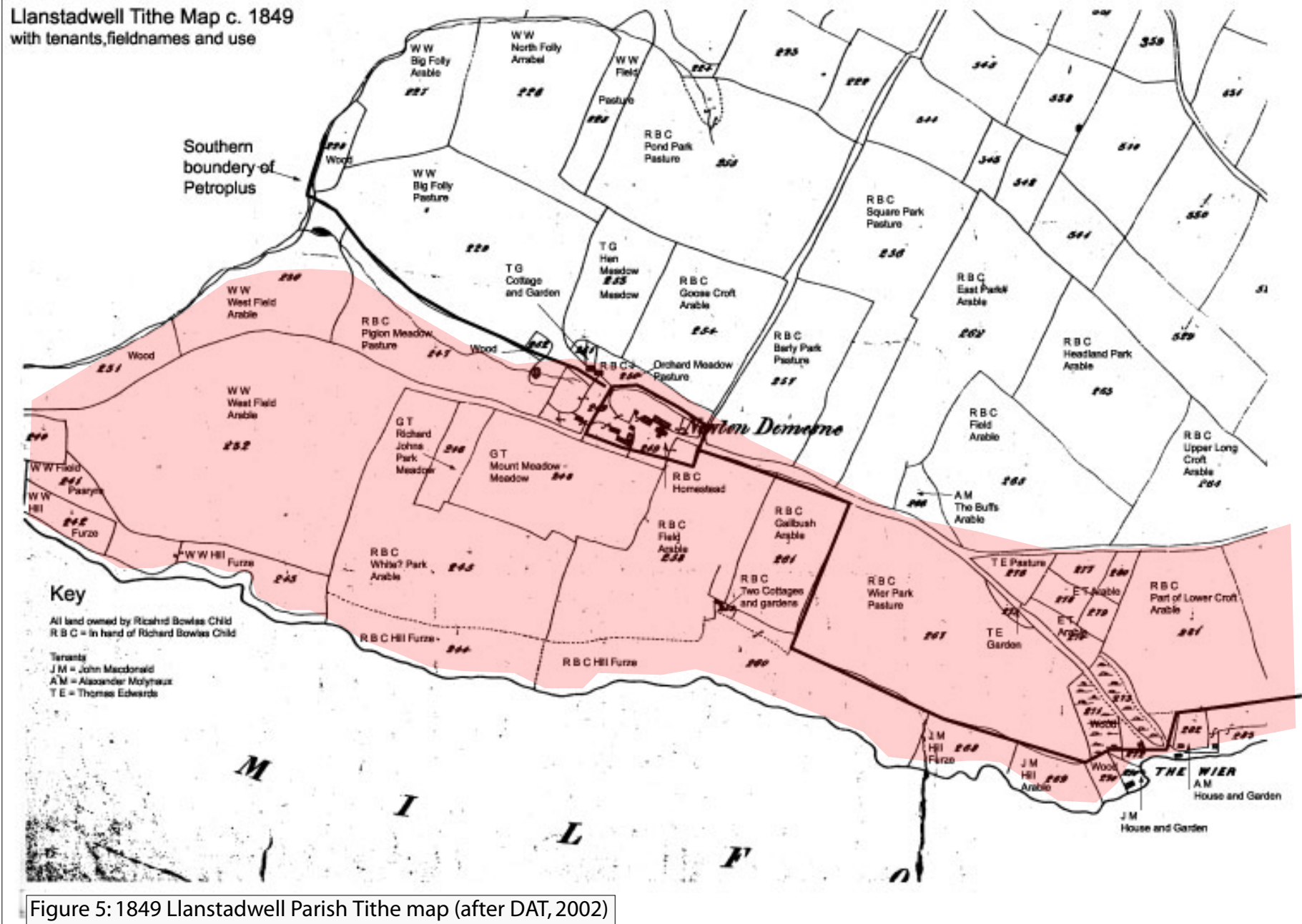


Figure 5: 1849 Llanstadwell Parish Tithe map (after DAT, 2002)

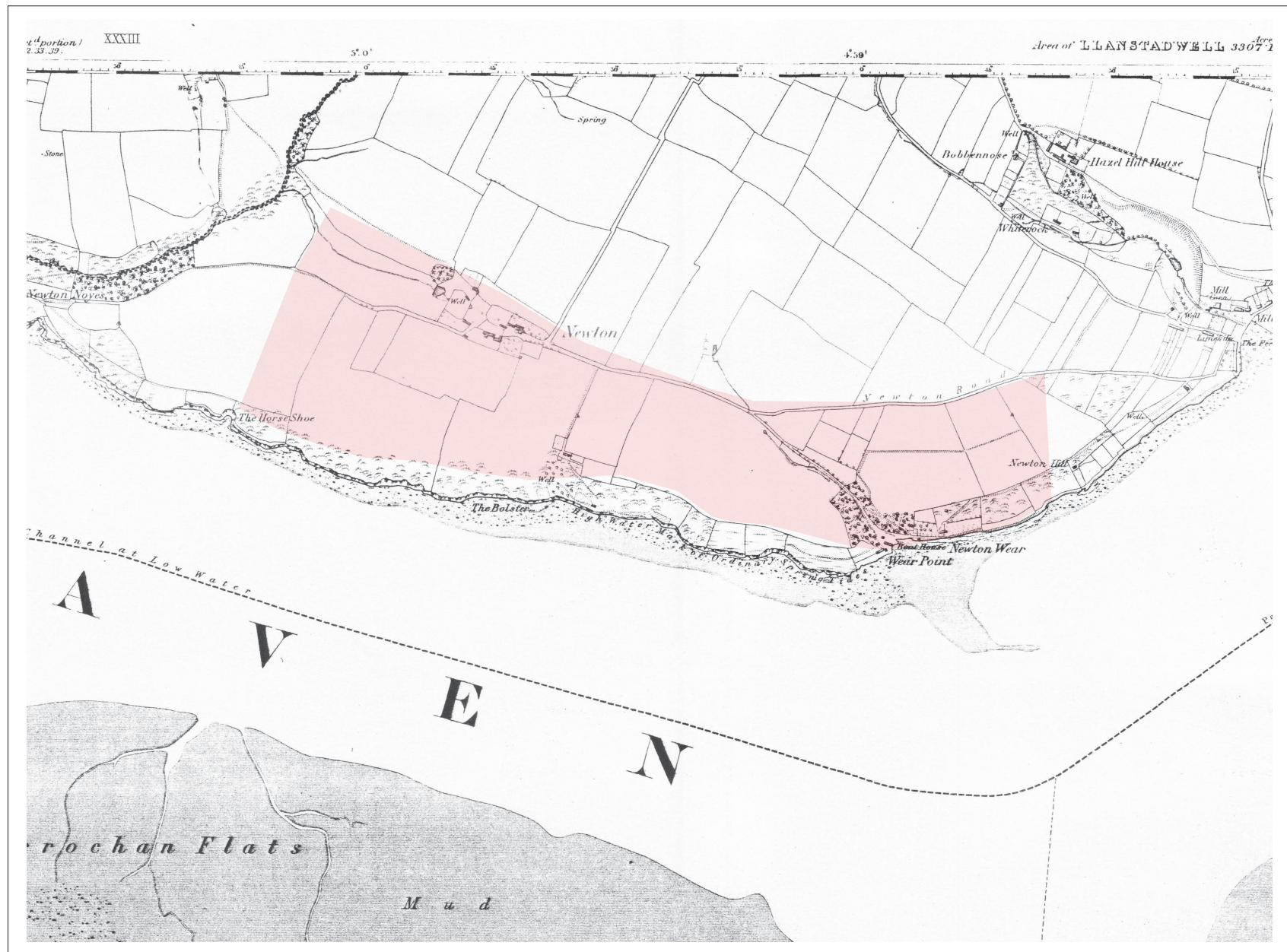


Fig 6: 1869 1st Edition 6 Inch OS Map

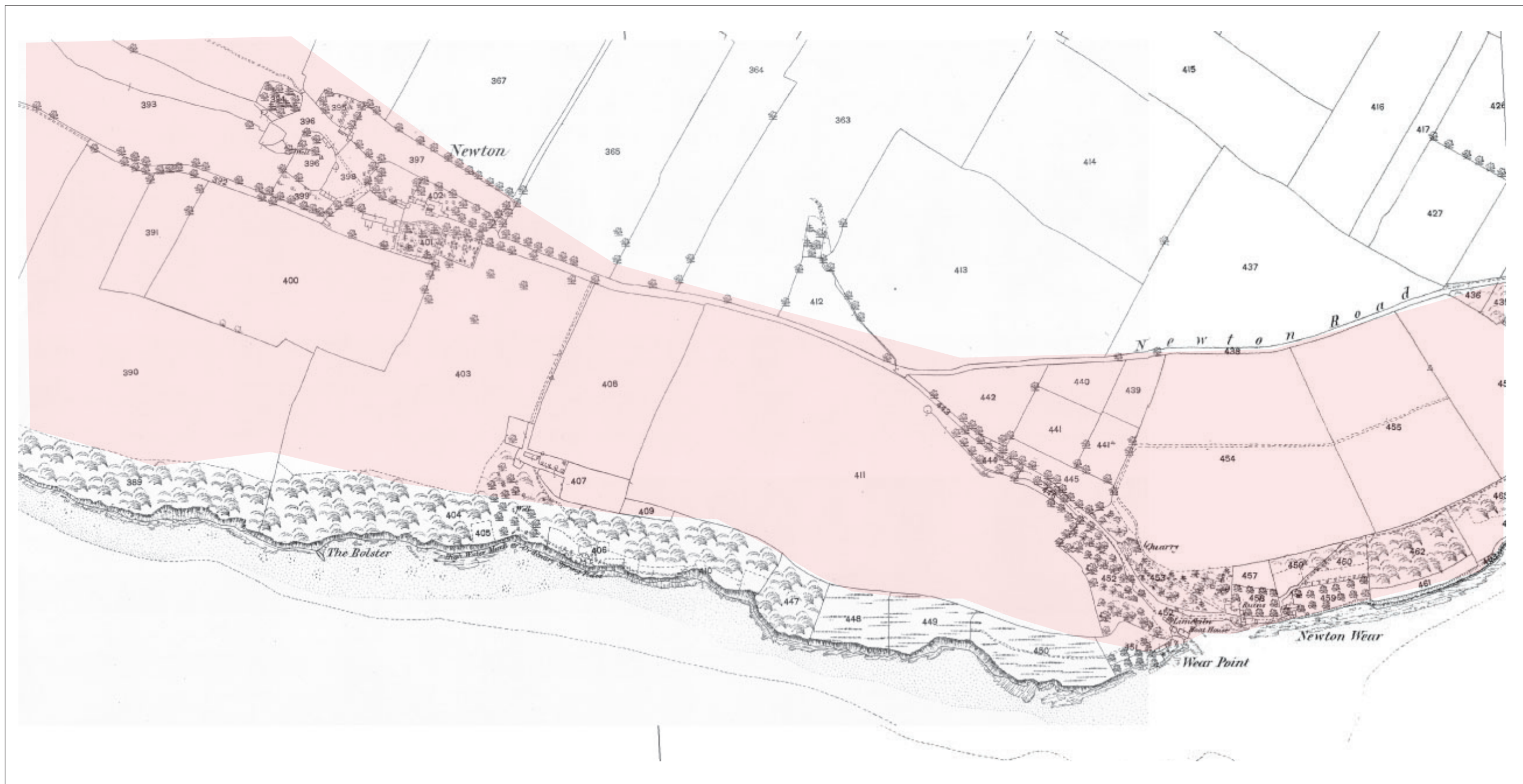


Fig 7: 1895 1st Edition 25 Inch OS Map

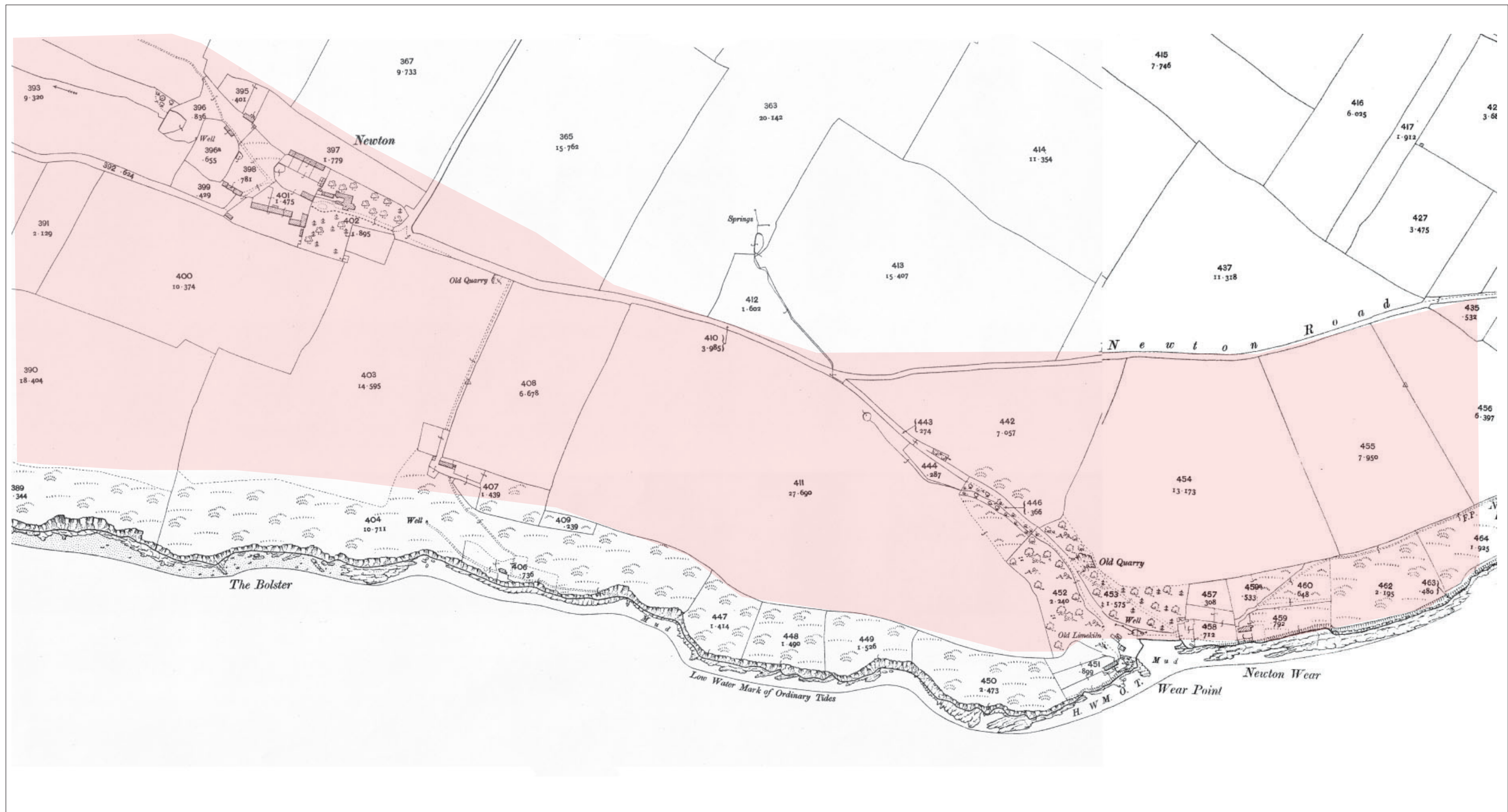


Fig 8: 1908 2nd Edition 25 Inch OS Map

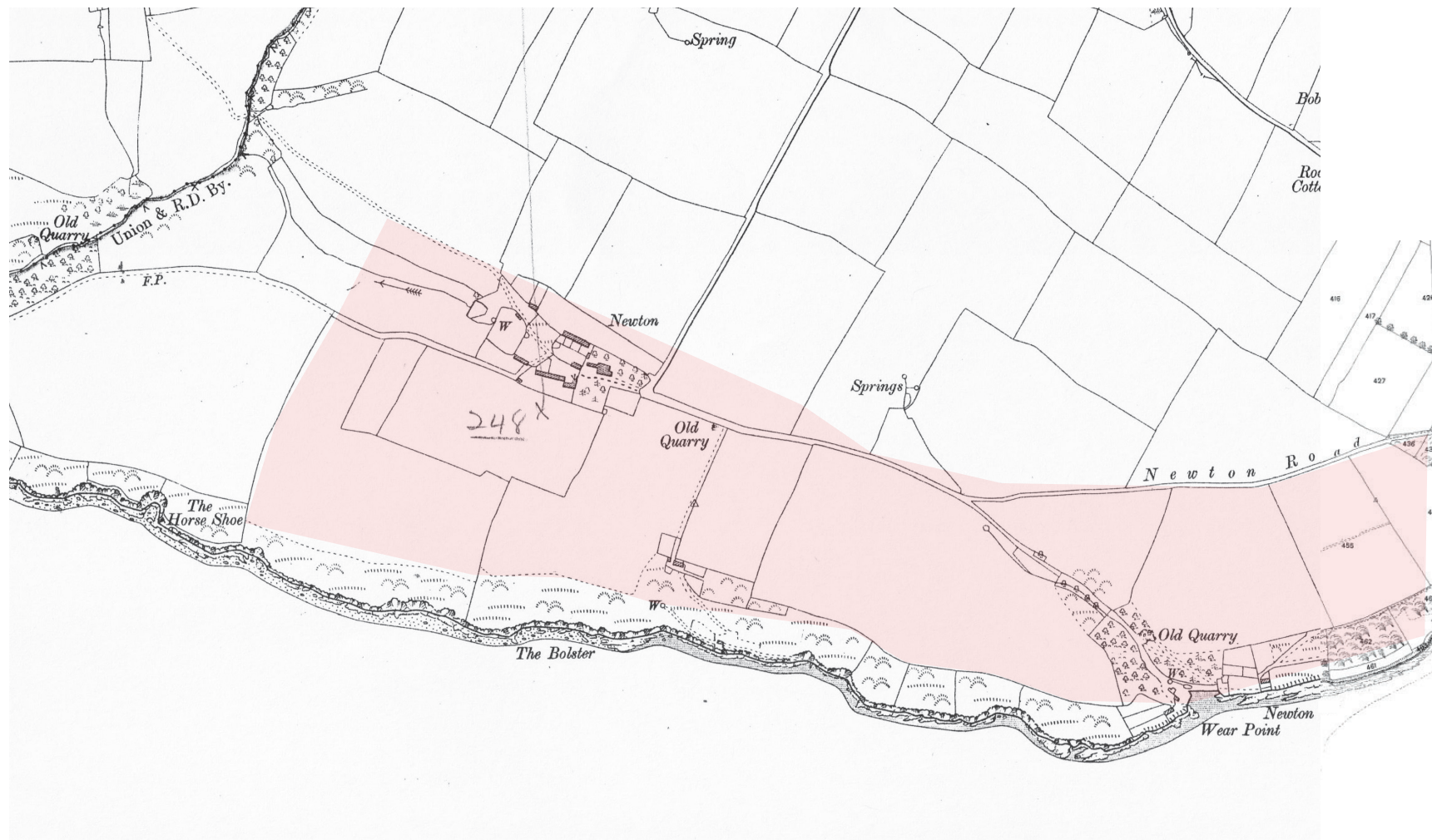


Fig 9: 1909 2nd Edition 6 Inch OS Map

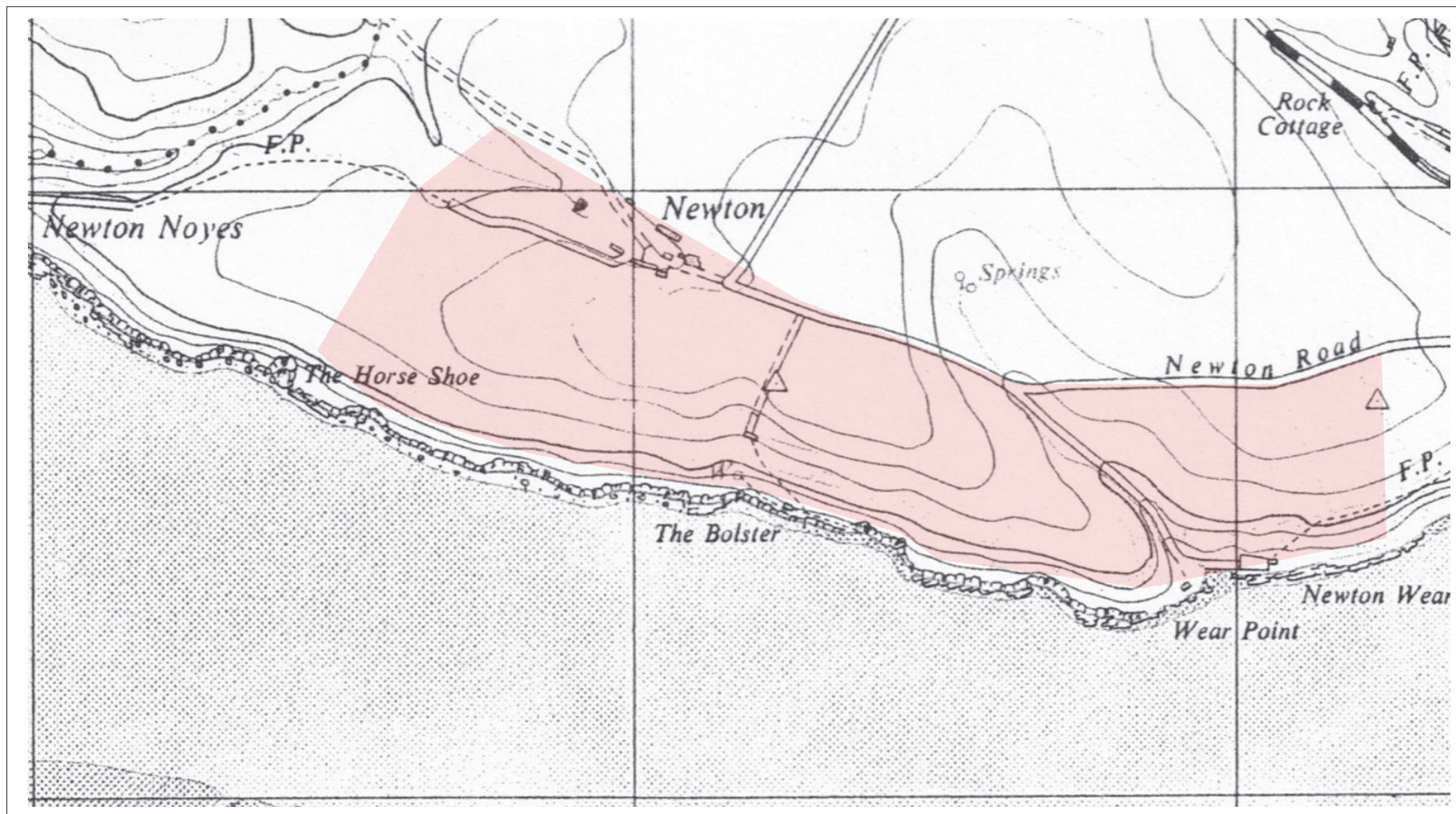


Fig 10: 1948 Provisional Edition OS Map

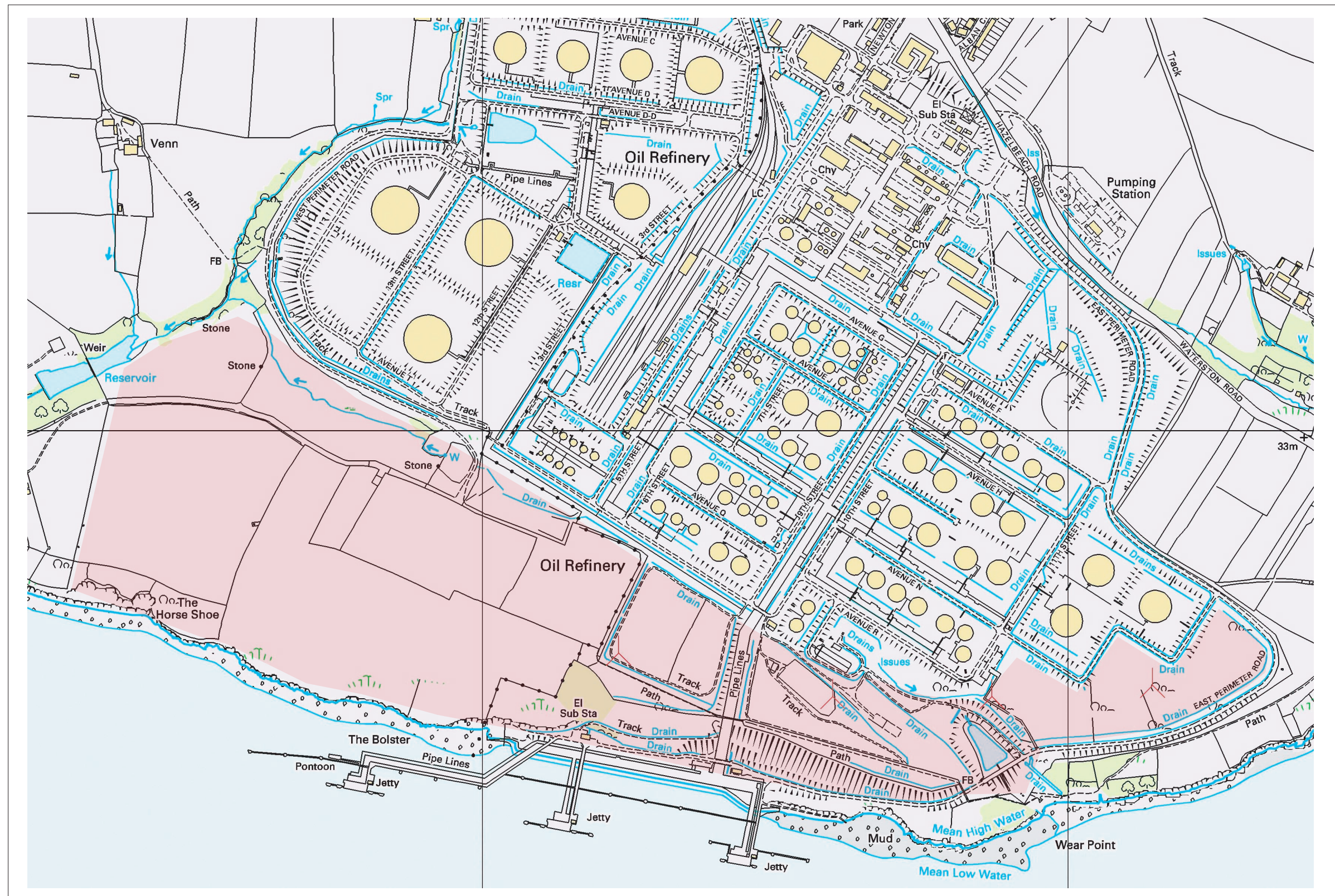


Fig 11: 2008 Edition Map showing Oil refinery and assessment area



CAMBRIAN
ARCHAEOLOGICAL
PROJECTS

APPENDIX VI:

Archive Cover Sheet

ARCHIVE COVER SHEET

Wear Point, Milford Haven, Pembrokeshire

Site Name:	Wear Point
Site Code:	WP/08/DBA
PRN:	-
NPRN:	-
SAM:	-
Other Ref No:	Report No. 544
NGR:	SM 193871 204546
Site Type:	Rural/Agricultural
Project Type:	Desk Based Assessment/Appraisal
Project Officer:	Chris E Smith
Project Dates:	November 2008
Categories Present:	Multi Period
Location of Original Archive:	CAPLtd
Location of duplicate Archives:	-
Number of Finds Boxes:	None
Location of Finds:	-
Museum Reference:	-
Copyright:	CAPLtd
Restrictions to access:	None



CAMBRIAN ARCHAEOLOGICAL PROJECTS

Cambrian Archaeological Projects Ltd
Old Chapel Farm, Llanidloes
Powys SY18 6JR
Telephone: 01686 413857
E-mail: info@cambarch.co.uk

