

FLOOD RISK DEFENCES, AMMANFORD, CARMARTHENSHIRE: HISTORIC ENVIRONMENT DESK-BASED ASSESSMENT



Afon Loughor, Ammanford.



Prepared by DAT Archaeological Services
for JBA Consulting.



DYFED ARCHAEOLOGICAL TRUST

RHIF YR ADRODDIAD / REPORT NO. 2018-56
RHIF Y DIGWYDDIAD/ EVENT RECORD NO. 115076

Rhagfyr 2018
December 2018

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Gan / By
Charles Enright



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Ymddiriedolaeth Archaeolegol Dyfed Cyf
Corner House, 6 Stryd Caerfyrddin, Llandeilo, Sir
Gaerfyrddin SA19 6AE
Ffon: Ymholiadau Cyffredinol 01558 823121
Adran Rheoli Treftadaeth 01558 823131
Epost: info@dyfedarchaeology.org.uk
Gwefan: www.archaeolegdyfed.org.uk

Dyfed Archaeological Trust Limited
Corner House, 6 Carmarthen Street, Llandeilo,
Carmarthenshire SA19 6E
Tel: General Enquiries 01558 823121
Heritage Management Section 01558 823131
Email: info@dyfedarchaeology.org.uk
Website: www.dyfedarchaeology.org.uk

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SUMMARY

DAT Archaeological Services were commissioned by JBA Consulting to prepare a Historic Environment Desk-Based Assessment for a scheme of proposed flood risk defences in Ammanford, Carmarthenshire (roughly centred on NGR ST 2974 9323). At the time of writing this report two options for the flood risk defences were being considered; a Full Containment option and a Partial Containment option. Both options have been taken into consideration for the purpose of this report to assess their impact on the historic environment. A 1km radius search area was used to evaluate impacts on Scheduled Monuments, Registered Historic Landscapes, Registered Parks and Gardens Listed Buildings, and 500m for non-designated assets

Much of the proposed flood risk defences lie within urban areas of the town of Ammanford, a medium sized former coal mining settlement. A mid-section of the proposed defences passes through an area of medium sized irregular enclosed fields.

There is only one Scheduled Monument; namely Tir-y-Dail motte and bailey castle, within 1km of the proposed development. There are no Grade I or II Listed Buildings within 1km but there are 12 Grade II Listed Buildings within 1km of the proposed development.*

Tir-y-Dail Motte is situated within 20m of the proposed flood risk defences. The remains of the castle lie on the western edge of the main built up area of Ammanford and have been previously truncated by the 'Heart of Wales' railway line. The Listed Buildings are located within urban areas of Ammanford some distance from the scheme proposals, and due to intervening topography and the built environment it is considered that the proposals will not impact upon these historic assets.

The proposed Full Containment Option for the flood defences is bisected by the current A483. It has been suggested that this road follows the route of a former Roman road. The potential for road side activity of Roman date should not be discounted, but the potential is considered low.

Where the flood risk defences pass through undeveloped land the potential for encountering previously unknown archaeological remains is considered low to moderate.

During the walkover survey a possible former ford crossing over the Afon Loughor was identified, which could be considered of significant local archaeological importance and the setting of which would be compromised by the flood defences in this area.

Based on the findings of this Historic Environment Desk Based Assessment it is considered that both the Full Containment and the Partial Containment Options would have a similar low/negligible adverse impact on the historic environment.

1 INTRODUCTION

1.1 Project Proposals and Commission

- 1.1.1 DAT Archaeological Services were commissioned by JBA Consulting to prepare a Historic Environment Desk-Based Assessment for the proposed Natural Resources Wales (NRW) Flood Risk Defence scheme at Ammanford, Carmarthenshire (roughly centred on SN 6248 1338; Figures 1 and 2).
- 1.1.2 The assessment will form a technical appendix to the option appraisal report for the proposed flood risk defences in Ammanford, Carmarthenshire, to be used to support a forthcoming planning application for the development.
- 1.1.3 An initial Written Scheme of Investigation (WSI) has been prepared for the works by JBA consulting for the Historic Environment Desk-Based Assessment, which states that the '*Proposed works are anticipated to comprise the construction of new flood defence embankments or walls across the town*'.
Proposed works are anticipated to comprise the construction of new flood defence embankments or walls across the town'.
- 1.1.4 At the time of writing this report, two options for the flood risk defences were being considered; a Full Containment option and a Partial Containment option (Figure 2).

1.2 Scope of the Project and Methodology

- 1.2.1 The scope of the assessment follows the WSI prepared by JBA Consulting and the Standard and Guidance For Historic Environment Desk-Based Assessment as laid down by the Chartered Institute for Archaeologists (CIfA 2017). The standard is stated as:

Desk-based assessment will determine, as far as is reasonably possible from existing records, the nature, extent and significance of the historic environment within a specified area. Desk-based assessment will be undertaken using appropriate methods and practices which satisfy the stated aims of the project, and which comply with the Code of conduct and other relevant regulations of CIfA. In a development context desk-based assessment will establish the impact of the proposed development on the significance of the historic environment (or will identify the need for further evaluation to do so), and will enable reasoned proposals and decisions to be made whether to mitigate, offset or accept without further intervention that impact.

- 1.2.2 A desk-based assessment is defined by CIfA as:

a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage assets and, in England, the nature, extent and quality of the known or potential archaeological, historic, architectural and artistic interest. Significance is to be judged in a local, regional, national or international context as appropriate.

- 1.2.3 The desk-based assessment will involve the preparation of a stand-alone report. The report will be prepared using relevant information from a number of sources, and will comprise the following elements:

- Dyfed Archaeological Trust Historic Environment Record data and other relevant information;
 - National Monuments Record of Wales information as held by the Royal Commission on the Ancient and Historic Monuments of Wales in Aberystwyth (RCAHMW offices in Aberystwyth);
 - Bibliographic, cartographic and photographic information held at the National Library of Wales and potentially information held at the Local Studies Library;
 - Identification of any Scheduled Monuments, Listed Buildings, Parks and Gardens, Historic Landscape Character Areas or Conservation Areas within or in the vicinity of the site area (Cadw, DAT, NRW);
 - Relevant web-based information;
 - Site visit and walkover survey;
 - Assessment of the archaeological potential of the area;
 - Assessment of likely impacts on any identified remains (or potential remains) and likely requirements, if any, for further stages of archaeological work.
 - National Museum of Wales (NMW) for sites and finds.
 - Portable antiquity Scheme (PAS) for information on small finds.
 - Central Register of Aerial Photographs for Wales (CRAPW)
 - Secondary sources including national, regional and local journals, published books, etc.
- 1.2.4 A 1km buffer zone around the lines of the proposed Flood Risk Defences areas was used to evaluate impacts on designated historic assets (Scheduled Monuments, Registered Historic Landscapes, Registered Parks and Gardens and Listed Buildings) and a 500m buffer zone was used to evaluate impacts on undesignated recorded archaeological sites, in order to provide sufficient overview of the nature of the areas heritage and ascertain archaeological potential of the site area.
- 1.2.5 For the purposes of planning policy in Wales, the historic environment is defined as:
- All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and deliberately planted or managed (Welsh Government 2017).*
- A historic asset is:
- An identifiable component of the historic environment. It may consist or be a combination of an archaeological site, a historic building or area, historic park and garden or a parcel of historic landscape. Nationally important historic assets will normally be designated (ibid).*
- 1.2.6 This report contains information about the historic environment and historic assets in the vicinity of the proposed development site, which will assist the archaeological advisors to the planning authority in their decision about what, if any, archaeological mitigation will be required. Further guidance on how the planning system considers the historic environment and historic assets during development plan preparation and decision making on planning and Listed Building (LBC) applications can be found in *Planning Policy Wales: Technical Advice Note 24: The Historic Environment* (Welsh Government 2017; available online).

1.3 Abbreviations

- 1.3.1 All sites recorded on the regional Historic Environment Record (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Sites recorded on the National Monument Record (NMR) held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) are identified by their National Primary Record Number (NPRN). Scheduled Monument (SM). Altitude is expressed to Ordnance Datum (OD). References to cartographic and documentary evidence and published sources will be given in brackets throughout the text, with full details listed in the sources section at the rear of the report.

1.4 Illustrations

- 1.4.1 Printed map extracts are not necessarily reproduced to their original scale. North is towards the top of the page unless otherwise indicated.

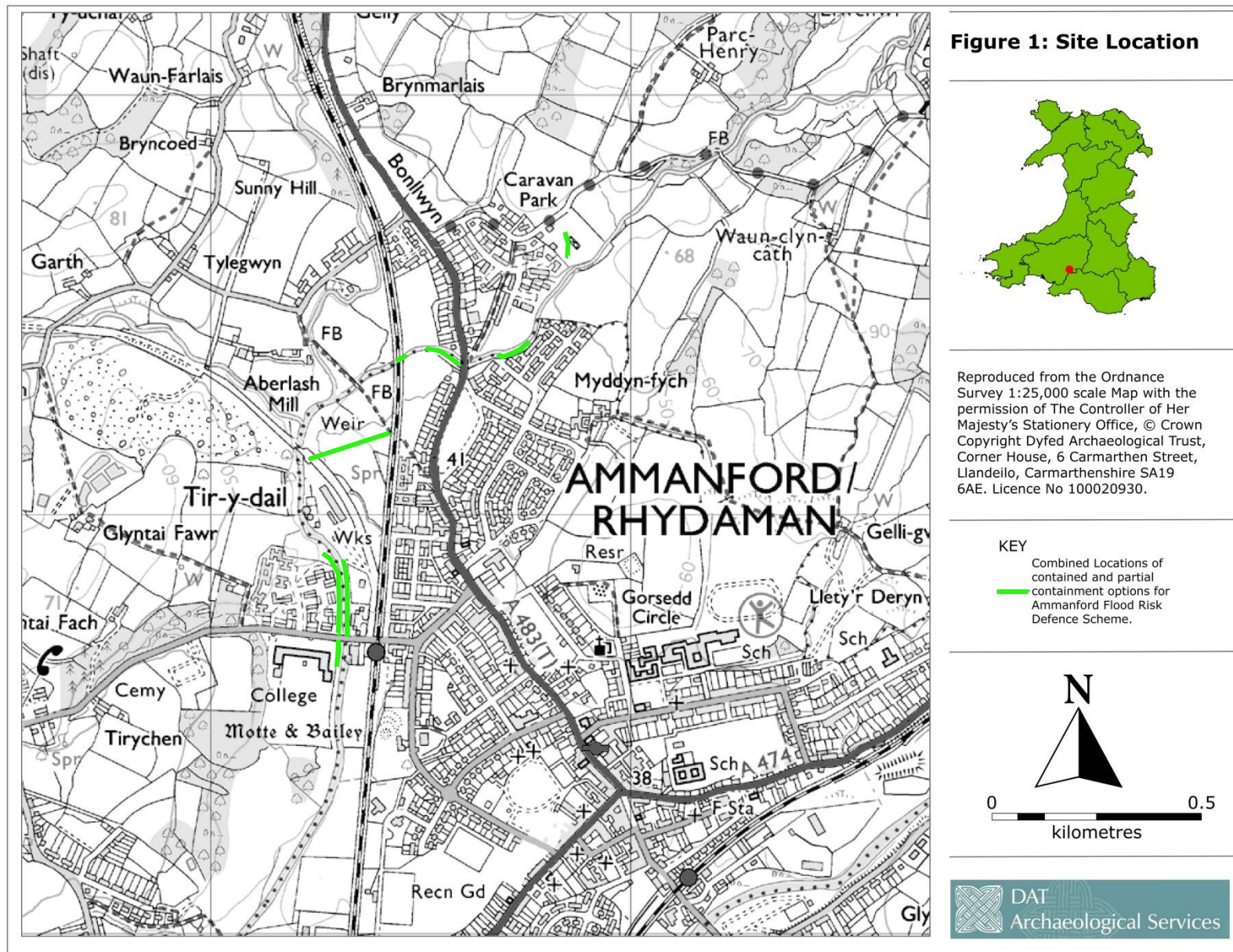
1.5 Timeline

- 1.5.1 The following timeline (Table 1) is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Period	Approximate date	
Palaeolithic –	c.450,000 – 10,000 BC	Prehistoric
Mesolithic –	c. 10,000 – 4400 BC	
Neolithic –	c.4400 – 2300 BC	
Bronze Age –	c.2300 – 700 BC	
Iron Age –	c.700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – c. AD 410	Historic
Post-Roman / Early Medieval Period –	c. AD 410 – AD 1086	
Medieval Period –	1086 – 1536	
Post-Medieval Period ¹ –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20th century onwards	

Table 1: Archaeological and Historical Timeline for Wales

¹ The post-medieval and Industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust



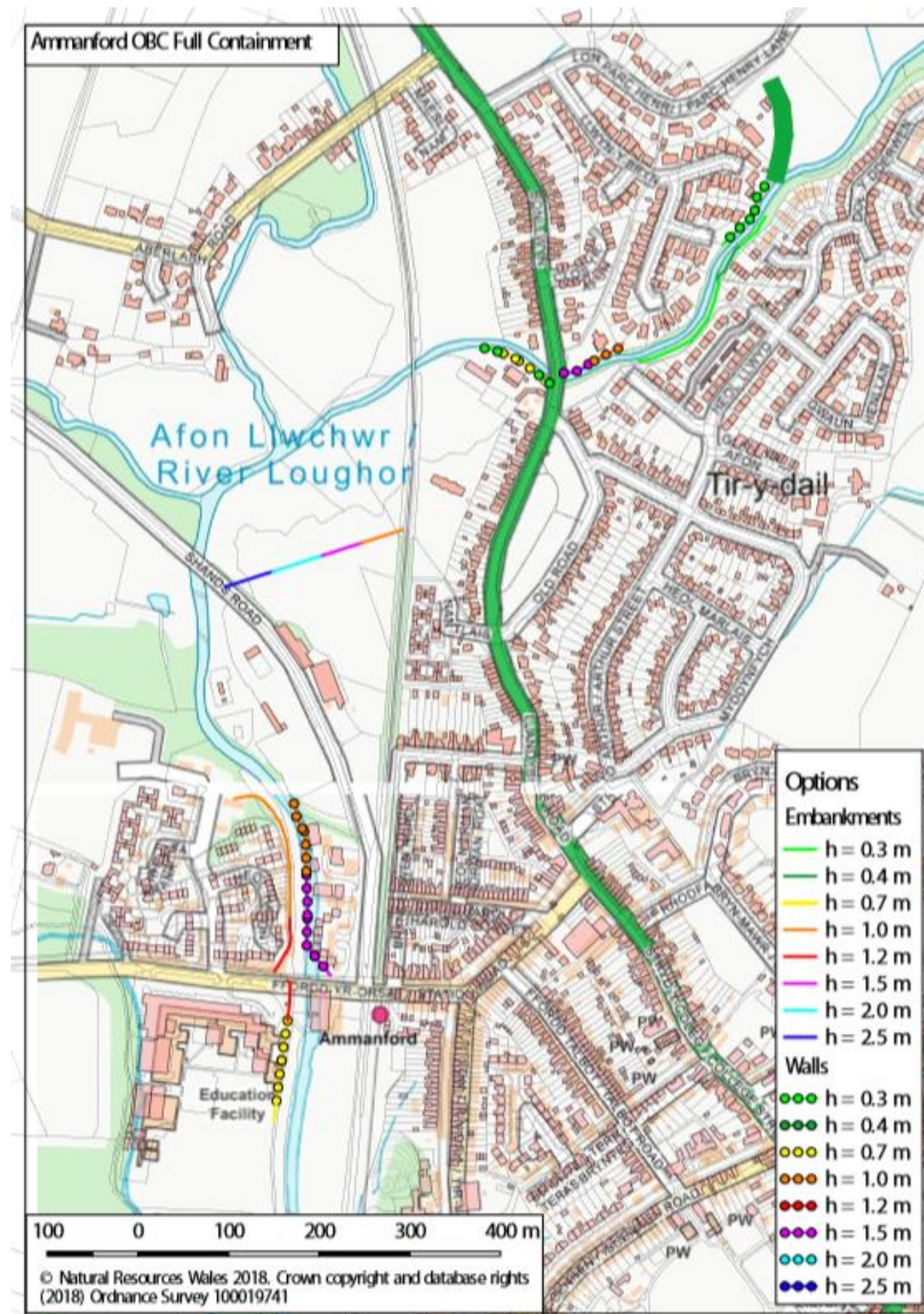
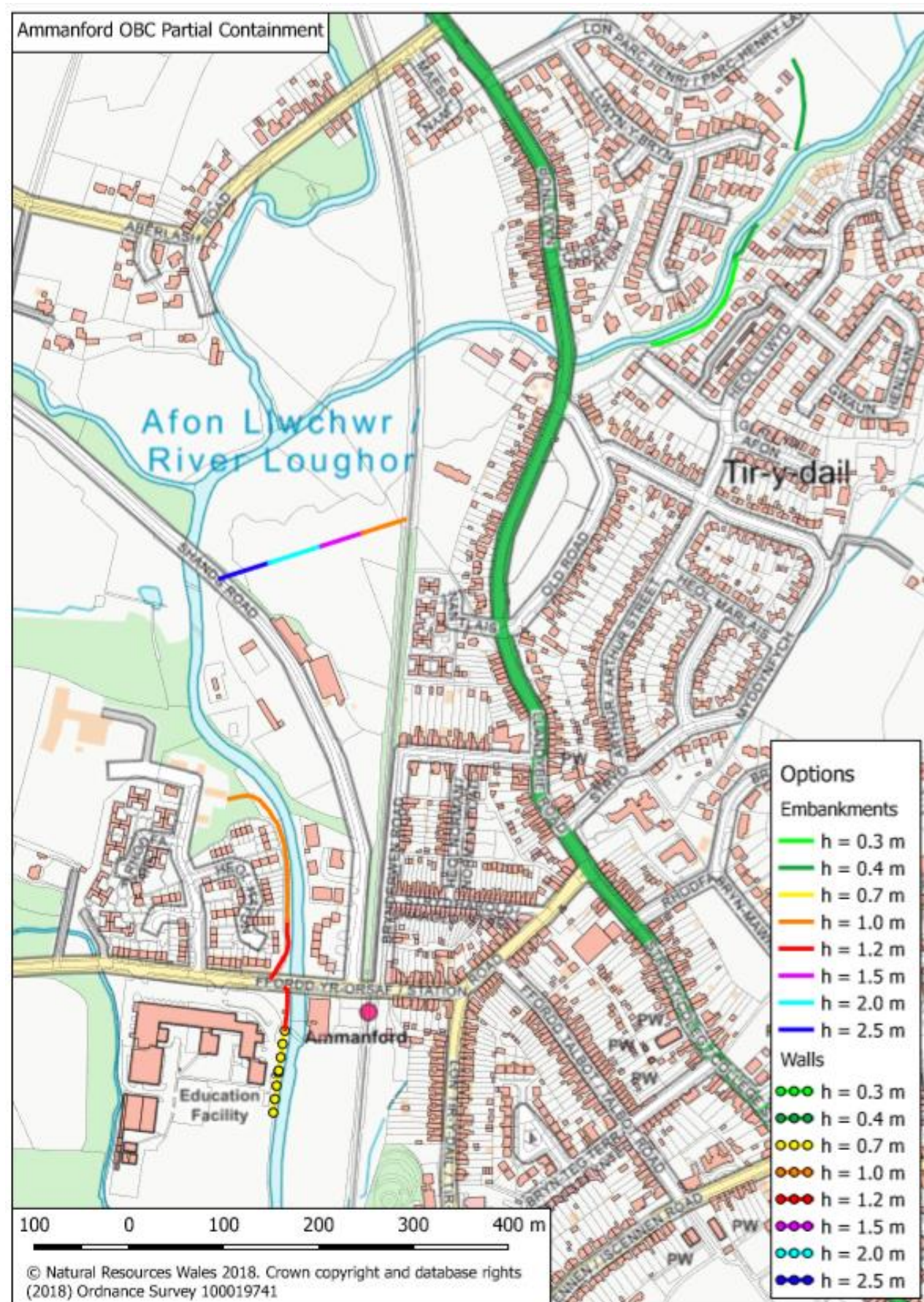


Figure 2: Plans of the Partial and Full Containment Options for the proposed flood risk defences (provided by client).

2 LOCATION, TOPOGRAPHY & GEOLOGY

- 2.1 The town of Ammanford is situated in eastern Carmarthenshire, located approximately 17km north east of Llanelli (Figure 1). The town lies close to several watercourses which are posing significant risks of flooding, namely the Afon Loughor, Afon Amman, the Afon Lash, the Afon Marlas and the Nant-y-Ci. With the exception of the embankments on the Afon Loughor, there are currently no flood defences in Ammanford.
- 2.2 The bedrock geology in the area is mudstone, siltstone and sandstone – sedimentary bedrock formed approximately 318 to 319 million years ago in the carboniferous period, in a local environment previously dominated by swamps, estuaries and deltas. The overlying deposits consist of Alluvium (clay, silt, sand and gravel) formed up to 2 million years ago in the Quaternary Period (British Geological Survey online).

3 HISTORIC LANDSCAPE & ARCHAEOLOGICAL BACKGROUND

3.1 Archaeological and Historic Background

- 3.1.1 Evidence of Palaeolithic archaeology is not found *in situ* in this part of Carmarthenshire because the last ice-sheets eroded away all man-made remains in their path. However, it is possible that bones found in a cave at Pantyllyn (PRN 815) provide a rare find and evidence of human activity in this area during the last Ice Age (Norm 2010). Remains from the Mesolithic period are typically difficult to identify in the archaeological record because they were a hunter-gatherer society with no permanent settlements, evidence from this period are usually the flint tools left behind, or scatters of flint flakes (ibid). There are currently no known Mesolithic sites in the area, but there are coastal sites in west Carmarthenshire and on the Gower (Day 2017).
- 3.1.2 The Neolithic period marks the beginning of settled communities, but evidence for this period in this area is still rather absent from the HER. A possible stone circle site is recorded at Llandybie (PRN 640) and a Neolithic flint axe (PRN 844) has been discovered in Ammanford at the school playing fields (Norm 2010). A Neolithic flint scatter (PRN 110,749) site has also been discovered in the Ammanford area.
- 3.1.3 Much of the evidence from the Bronze Age can be seen in the large number of funerary monuments found on high ground, and these make up a large number of prehistoric monuments that are recorded on the HER (ibid). These funerary monuments, or cairns, typically consisted of a central mound of stone or earth constructed over a cremation or burial. Usually located just below the top of a hill they acted as prominent features in the landscape and probably used as way markers too (Norm 2010). On Mynydd y Betws there are several of these cairns (PRN 863 – 864) which represent a surviving record of the Bronze Age communities that once settled in the area. Other Bronze Age features include Burnt Mounds which have been recorded in the area.
- 3.1.4 There are a number of Iron Age sites in the Llandybie area including a hillfort at Pen Y Garn (PRN 641) (Norm 2010). No records of Iron Age activity lie in the immediate area of Ammanford.
- 3.1.5 It has been postulated that the A483 follows the route of a former Roman road and a number of finds indicate Roman influence in the area. Amongst others this includes a Roman coin hoard found in the 18th century at Forge Llandyfan (PRN 811) (ibid).
- 3.1.6 In the medieval period Tir-y-Dail motte and bailey castle was constructed. It is believed to date from the 12th century, although debate regarding the purpose of the castle's construction continues.
- 3.1.7 It is likely the castle was abandoned soon after construction and probably replaced by Tir-y-Dail house, a large and important farmstead and gentry house (Poucher 2010).
- 3.1.8 Until the 19th century Ammanford was considered a small village in the Parish of Llandybie, formerly known as Cross Inn (a name it took from a coaching stop at the cross roads (LANDMAP [online])). The expansion of Ammanford was a result of local expansion in coal mining and the tinplate industry. With the industrial revolution underway Ammanford become a bustling urban centre serving the mining villages located in the area.

3.2 Historic Landscape Areas

- 3.2.1 The proposed development site does not lie within the boundaries of any Historic Landscape Character (HLC) areas recorded in the Register of Landscapes of Outstanding Historic Interest in Wales (Cadw 1998). The nearest HLC area is the Black Mountain, which at its closest lies 3km away to the north.

LANDMAP

- 3.2.2 The proposed flood risk defences lie within landscape areas recorded on the National Resources Wales (NRW) LANDMAP database. LANDMAP is a GIS (Geographical Information System) based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated in a nationally consistent data set.
- 3.2.3 The majority of the proposed flood risk defences lies within the LANDMAP Historic Landscape of Ammanford (Aspect Area Code CRMRTL39594). The straight mid-section of the proposed defences for both options runs through the Melin Aberlash (Aspect Area Code CRMRTL39567) LANDMAP Historic Landscape.
- 3.2.4 The Ammanford Historic Landscape is described as being a medium sized industrial settlement, with the most significant archaeological element being Tir-y-Dail motte and bailey castle.
- 3.2.5 The Melin Aberlash landscape is summarised as an area of medium sized irregular field enclosures with areas of woodland and a settlement pattern of dispersed farmsteads and cottages. The most significant archaeological element of this landscape comprises the material remains of coal mining.

3.3 Historic Parks and Gardens

- 3.3.1 There are no designated Historic Parks or Gardens within a 500m buffer zone of the flood risk defences. The nearest park that is included on the Register of Parks and Gardens of Special Historic Interest in Wales lies 300m outside of the buffer zone to the northeast. This is the Grade II Listed Glynhir Park (Ref no. PGW (Dy) 9(CAM), an early to mid-19th century garden including a fine dovecote, canal, walled garden, ice house and woodland garden with picturesque walks.

3.4 Scheduled Monuments (Table 2; Figure 3)

- 3.4.1 There is one Scheduled Monument within a 500m buffer zone of the combined flood defence scheme proposals, the Medieval Tir-Y-Dail motte and bailey castle (CM067, PRN 831, NPRN 300846). Described by LANDMAP as being the most significant archaeological element of Ammanford it is believed to date from the 12th century. The motte stands at a height of approximately 6m and has a diameter of 35m at its base. There is dispute over whether this represents a Welsh or Norman Castle, but historical opinion strongly favours the Welsh origin (Coflein [online]). The western edge of the defences was truncated during the mid-1800s by construction of what is now the 'Heart of Wales' railway line.
- 3.4.2 No further Scheduled Monuments lie within a greater 1km buffer zone of the proposed flood defence scheme.

3.5 Listed Buildings (Table 3; Figures 4 and 5)

- 3.5.1 There are no Grade I or Grade II* Listed Buildings within a 1km buffer zone of the proposed flood defences.
- 3.5.2 There are three Grade II Listed Buildings within 500m of the proposed development (Figure 4). They include a modern bandstand (LB No. 14810; PRN 60,919) and a set of War Memorial Gates (LB No. 14809; PRN 60,198) both located in Ammanford Park, as well as 'Myddin Fych' (LB No. 14811; PRN 17,401) a 16th to 18th century gentry house that is now a farmhouse.
- 3.5.3 Within a 1km buffer zone (Figure 5) there are a further nine additional Grade II Listed Buildings, all located in the centre of Ammanford and all dating to the post medieval period; associated with the expansion of the town during the industrial period.

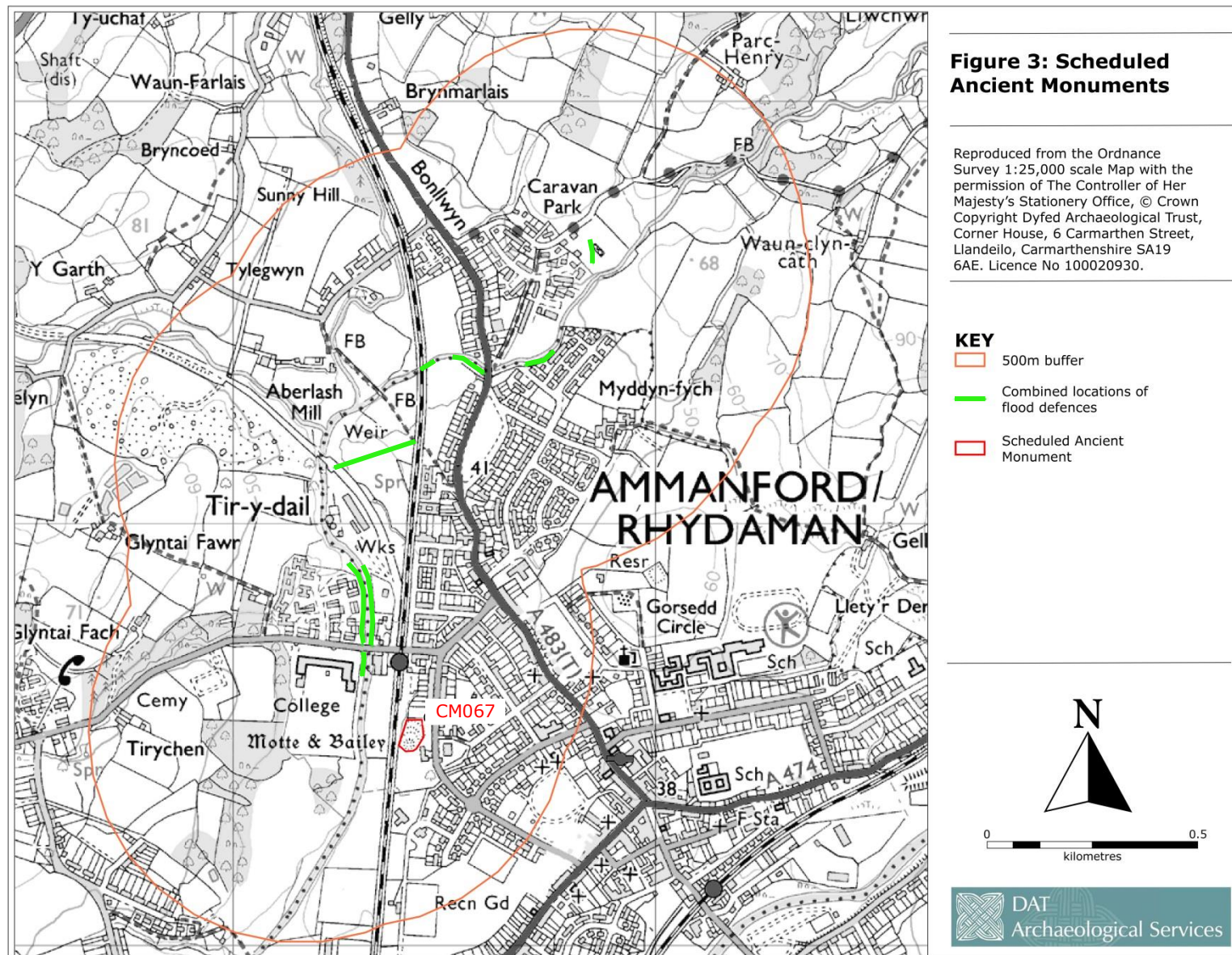
SM No.	PRN	Name	Summary	NGR
CM067	831	Tir y Dail motte and bailey castle	This motte and bailey castle is believed to date from the 12 th century. The surviving defences comprise two concentric ditches to the north of the motte divided by a small 'horn work' to the north. The motte has a maximum height of 6 - 7m and is 35m in diameter at its base. The western edge of the defences was truncated during the mid-1880s by the construction of what is now the 'Heart of Wales' railway line.	SN 6241 1247

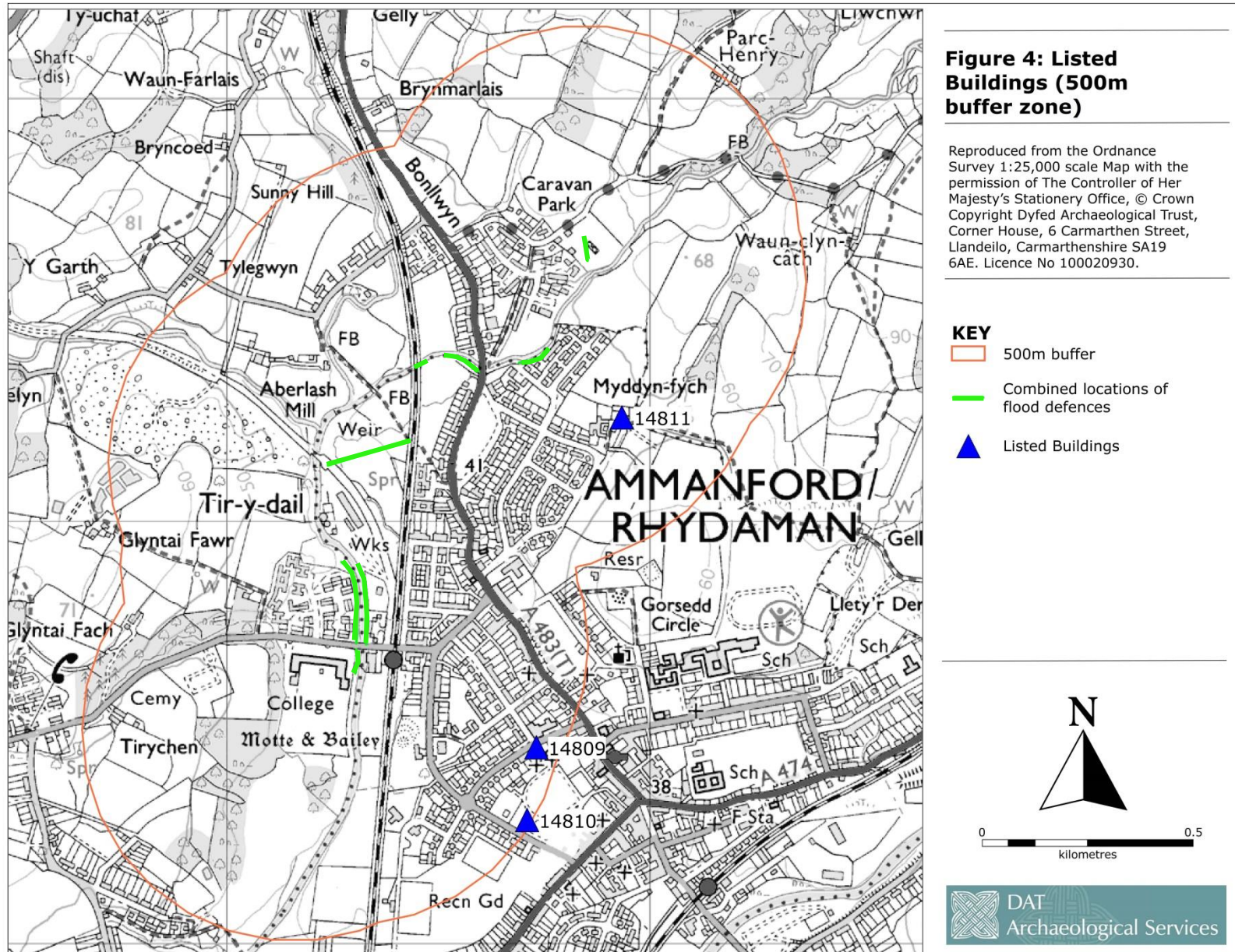
Table 2: Scheduled Monuments within 500m of the flood defences (Figure 3).

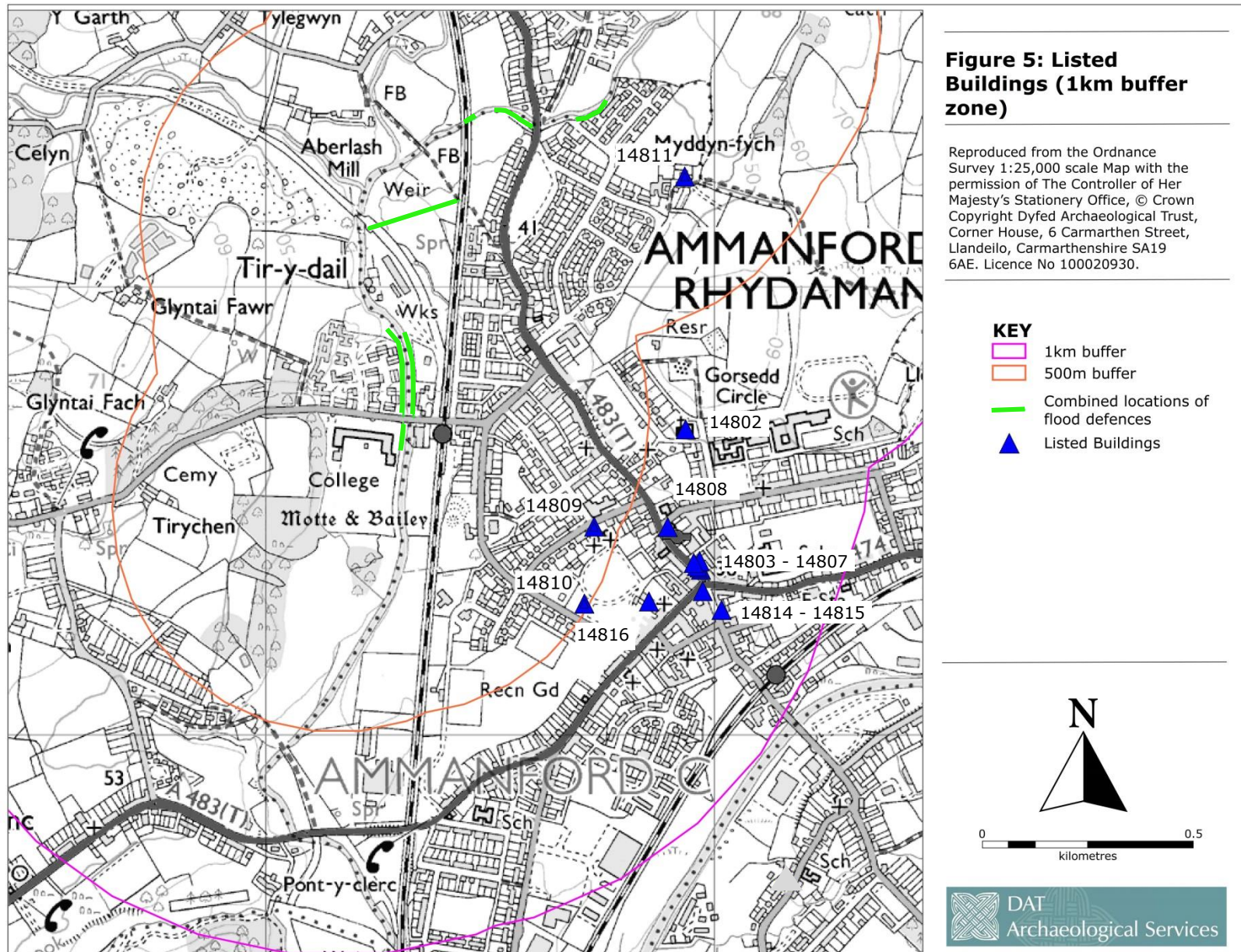
LB No.	PRNs	Grade	Name	Summary	NGR
14802	4867	II	All Saints Parish Church	Anglican parish church built 1911-15 with the tower completed 1924-6	SN6293712682
14803	60,912	II	No 9, The Arcade, College Street (E Side)	Nos 9 to 15 (odd): 1899 block of shops and offices with arcade running through to rear, by Henry Herbert of Ammanford	SN6297112369
14804	60,913	II	No 11, The Arcade, College Street (E Side)	Nos 9 to 15 (odd): 1899 block of shops and offices with arcade running through to rear, by Henry Herbert of Ammanford	SN6296812374
14805	60,914	II	No 13, The Arcade, College Street (E Side)	Nos 9 to 15 (odd): 1899 block of shops and offices with arcade running through to rear, by Henry Herbert of Ammanford	SN6296212377
14806	60,915	II	No 15, The Arcade, College Street (E Side)	Nos 9 to 15 (odd): 1899 block of shops and offices with arcade running through to rear, by Henry Herbert of Ammanford	SN6295512384
14807	60,916	II	Nos 1 To 12 (Consec) The Arcade, College Street (E Side)	Nos 9 to 15 (odd): 1899 block of shops and offices with arcade running through to rear, by Henry Herbert of Ammanford.	SN6296812388
14808	60,917	II	No 33, College Street (E Side)	Built in 1906 by David Jenkins of Llandeilo. Former Ammanford Co-operative Society premises, now council offices.	SN6289712464
14809	60,918	II	Ammanford Park War Memorial Gates	Four stuccoed pillars with iron railings set on a low stuccoed wall and iron gates with the name 'Memorial Avenue' set high across both gates. A plaque on the right gate pier says 'erected by Ammanford Branch of the British Legion July 2937' reconstructed in c.1982.	SN6273312465
14810	60,919	II	Bandstand in Ammanford Park	1936 bandstand in painted cast-iron on brick base with red tile roof.	SN6271112293
14811	17401	II	Myddin Fych	A 16 th to 18 th century gentry house, now a farmhouse. It has been listed as a good example of a multi-period vernacular gentry house, a type scarce in this locality.	SN62901325
14814	43,445	II	The Post Office, Quay Street (E Side)	1925 Post Office, probably designed by the Office of Works, London. Neo-Georgian style typical of Post Office buildings between the wars.	SN6301712279

14815	60,922	II	Lloyds Bank Building, Quay Street (W Side)	Bank and offices built in 1908-9 – a good example of Edwardian bank architecture.	SN6297512321
14816	60,923	II	Miners Welfare Hall	Circa 1935 cinema by J Owen Parry of Ammanford, built for the Miners Welfare Club.	SN6285512298

Table 3: Listed Buildings within 1km of the flood defences (Figure 4 and 5).







3.6 Non-designated Archaeological Sites (Table 4; Figure 6)

- 3.6.1 The Dyfed Historic Environment Record (HER) records 33 historic assets within a 500m buffer zone around the flood risk defences, eight of which are also included on the National Monuments Record (NMR). A further nine historic assets are recorded only on the NMR.
- 3.6.2 The Listed Buildings previously discussed account for three asset records (PRNs 17,401, 60,198 and 60,919), and the medieval Tir-Y-Dail motte and bailey castle (PRN 831) is a Scheduled Monument (CM067). As they have previously been discussed they have been omitted from this list.
- 3.6.3 No historic assets of Palaeolithic, Mesolithic or Neolithic date are recorded within a 500m buffer zone around the proposed flood defence scheme. A Neolithic flint scatter (PRN 110,479) site lies 400m outside of the 500m buffer zone to the west. This indicates Neolithic activity is present in the wider area and may extend within the 500m buffer zone.
- 3.6.4 A single burnt mound (PRN 9740) is recorded on the HER within the 500m buffer zone. Burnt mounds are typically represented by mounds of discarded heated affected stone contained within a matrix of blackened, charcoal rich soil. Previous excavations on various burnt mounds indicate that they were generally used throughout the Bronze Age period (Meek *et al* 2015). Where they survive as extant landscape features they are usually low in height in relation to their diameter, varying in size from a few meters to over 30m. They are often found in association with troughs, usually oval features which would have held water (ibid). Few artefacts are ever found in association with burnt mounds, but occasional other features such as hearths, pits, post-holes or far more rarely leats or channels are recorded (ibid). The function that burnt mounds served remains unknown but the most widely accepted theories suggest they were used for ritual feasting or other periodic events. Other suggestions include metal ore processing, sweat lodges or saunas, fulling, felt making, brewing, or producing steam to bend wood etc (ibid).
- 3.6.5 Burnt mounds are almost all found alongside water courses and it is common to find a network of multiple burnt mounds along a section of flowing water (Meek *et al* 2015). A further two burnt mounds (PRNs 838 and 839) lie just outside of the buffer zone but within just 300m of PRN 9740 to the north. The potential for further burnt mounds to exist within the immediate vicinity of the proposed flood defences should be considered high.
- 3.6.6 Other activity during the Bronze Age is evidenced by two round barrows (PRN 814 and 830) identified by the RCAHMS in 1917 in the vicinity of the flood risk defences. Round barrows are the most common form of burial across Britain. The vast majority in Wales date from between 3400 and 1500BC (Darvill and Wainwright 2016); although discoveries of much earlier sites dating from the Neolithic period have also been found in Wales (Meek and Enright 2018). The presence of round barrows could suggest a potential for sedentary communities of the same period to exist within the vicinity.
- 3.6.7 There are currently no known Iron Age historic assets within a 500m buffer zone of the flood risk defences; although Iron Age assets are recorded further north towards the village of Llandybie. Likewise, no known Roman sites are recorded within 500m of the proposed defences. However, the proposed Full Containment Option for the flood defences is bisected by the current A483 at grid reference SN 62600 13377; a road that has been suggested follows the route of a former Roman road.

- 3.6.8 A single medieval historic asset (PRN 831) is represented by the Scheduled Monument (CM067) of Tir-y-Dail motte and bailey castle.
- 3.6.9 The remaining historic assets recorded in the HER and NMR all date from the post medieval to modern period. These sites are predominantly ecclesiastical, schools or industry related and represent the expansion of the town during the industrial period.

3.7 Other Archaeological Finds

- 3.7.1 A single-looped, narrowly-bladed and slender palstave axe of cast bronze, dating from the Bronze Age period has been reported to the Portable Antiquities Scheme (PAS) within a 500m buffer zone of the flood risk defences (NGR SN 6290 1383). No other finds have been recorded by PAS.

HER Records (PRN)	NMR Records (NPRN)	Name	Type	Summary	Period	NGR
814		Gelli Sifor; Bryn Marlais	Round Barrow	Recorded by the RCAHMS in 1917 as: 'On the slightly elevated ground between the rivers Llychwr and Marlais are three mounds, the first two on the farm of Gelli Sifor; the last on that of Bryn Marlais. The first does not appear to have been disturbed, the second has been opened, and the third has practically disappeared all but the foundations' — visited 2nd July, 1913.	Bronze Age	SN62911382
830		Gelli Sifor; Bryn Marlais	Round Barrow	Recorded by the RCAHMS in 1917 as: 'On the slightly elevated ground between the rivers Llychwr and Marlais are three mounds, the first two on the farm of Gelli Sifor; the last on that of Bryn Marlais. The first does not appear to have been disturbed, the second has been opened, and the third has practically disappeared all but the foundations' — visited 2nd July, 1913.	Bronze Age	SN62911382
840		Gelli Sifor; Parc Henri	Natural Feature	The feature indicated by Cantrill's text is a natural feature. Cantrill's map and the OS siting give a location for the mound on top of a ridge but no trace of a mound or burnt debris can be seen in this area.	Not Applicable	SN62781399
4875	33,426	Tir-Y-Dail Colliery	Coal Mine	Colliery officially opened in 1890 although Morgan (Morgan 1958) shows pre-1830 coal workings at Tir-y-Dail and it closed down in 1927.	Post-medieval	SN6207813205
9740		Gelli Sifor; Parc Henri	Burnt Mound	A crescentic mound, near a stream, measuring 14m x 9m x up to 1m. Augering revealed burnt debris. Earth fast stones may indicate the presence of outer and inner kerbs.	Prehistoric	SN62601391
18378		Aberlash Mill	Mill, Flour Mill	Flour mill recorded on the 1878 1st edition and 1906 2nd edition Ordnance Survey maps, powered by long mill-race (PRN 43436) diverted from river to the north by weir (PRN 44017) The building is still shown on modern mapping and recent aerial photographs indicate it to be intact, possibly converted.	Post-medieval	SN62121335
18379	12,738	Zion Welsh Baptist Chapel	Chapel	Zion Baptist Chapel was a branch of Ebenezer Welsh Baptist in Ammanford, and was known locally as the iron chapel, or as "Zion zinc". By 1997 this chapel had been demolished.	Post-medieval	SN62581303

18380			School	Tirydail Methodist Chapel was built in 1892 as a branch of Waunllan Wesleyan Methodist Church, Llandybie (NPRN: 6385). The chapel was rebuilt in 1905 and demolished in 1997.	Post-medieval	SN62591302
18381	6651	Capel Wesleyan	Chapel	No description.	Post-medieval	SN62641285
18382		Dyffryn Bridge	Bridge	No description.	Post-medieval	SN62321272
18384	6639	Gwynfryn Independent Chapel	Chapel	Gwynfryn was founded in 1903 by 135 members of Gellimanwydd Welsh Independent Chapel on Hall Street (Christian Temple) on a plot of land acquired from the Dinefwr Estate. The chapel was designed in the Gothic style by Henry Herbert, an engineer and surveyor who had also been closely involved with the opening of two anthracite coal mines in the Amman Valley and employed as the architect for the English Congregational Church. Herbert, as one of the founding members, served as deacon and treasurer of the chapel. William Evans of Ammanford was responsible for its construction, which completed in July 1903. The total cost of building the chapel, complete with its interior and organ, totalled £2,800. The chapel was able to accommodate 550 and held its first sermon in August 1903. The first sermon was preached by Watcyn Wyn, with a memorial plaque on the wall referring to him as 'Athro, Bardd a Phregethwr' (Teacher, Poet and Preacher). The facade is constructed of stone fronted with ashlar, with large gothic stone windows with stone quoins and tracery.	Post-medieval	SN62711265
18385			School	No description.	Post-medieval	SN62731252
18386	12,744	Apostolic Church	Church	Ammanford Apostolic Chapel was probably built c.1913 and is built in the Simple Gothic style with a gable entry plan, rendered walls and small pane windows.	Post-medieval	SN62711244
20923	17,308	Dyffryn	Mansion, Depot, Country House	Home of Powell family enlarged late C18th probably for Arthur Price, lucratively employed as agent to nearby Golden Grove Estate. Modernised late C19th with curious rendering. Sold up 1921 where after tea-rooms for the town of Ammanford encroaching rapidly over the fine grounds. Demolished 1950's;	Post-medieval, Modern	SN62161280

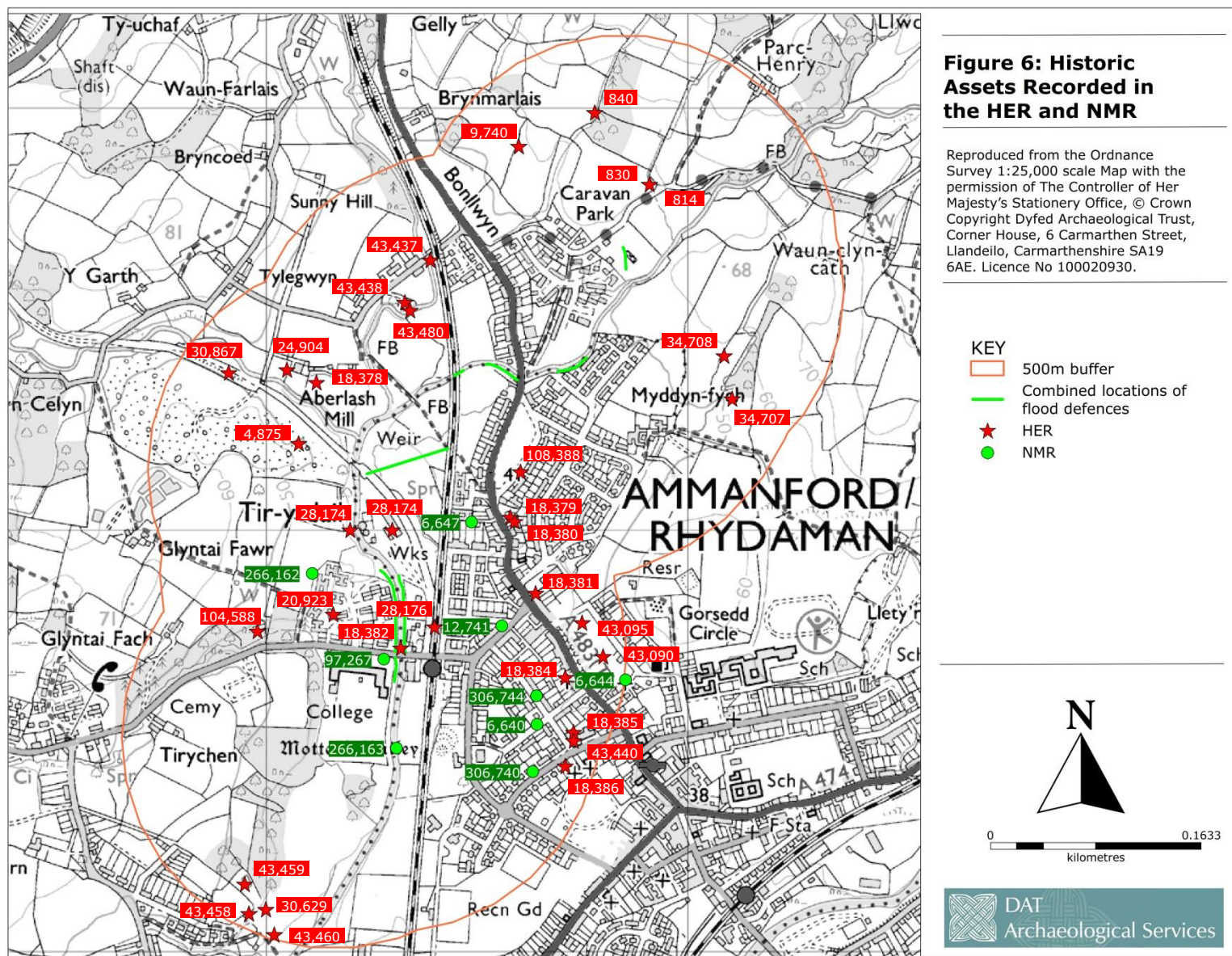
				now a housing estate. This address is recorded as the location of a Red Cross Working Party during the First World War under the name Miss F.M Jones, Dyffryn. These working parties and supply depots made and organised hospital clothing and dressings for wounded soldiers.		
24904		Aberlash	Country House	Family home of Evans first head of in the early 17th Century.	Post-medieval	SN62051338
28174		Aberlash	Gas Works	A former gasworks built between 1906 and 1921. The gasholders are ancillary buildings still sited in the 1970's but have since been removed.	Post-medieval	SN622130
28175	309,217	Aberlash	Tinplate Works	Tinplate works with 3 mills. The works began in 1889. Most of the rolling mill still stands and is of rubble construction with yellow brick detail.	Post-medieval	SN623130
28176		Pontardulais-Tirydail Line	Railway	No description.	Post-medieval	SN62401277
30629		Park Colliery	Coal Mine	Linked to Llanelli Railway via Park Siding. Working in 1891. Relationship with nearby Park & Blaina Colliery unknown.	Post-medieval	SN620121
30867		Llanelli Railway (Mountain Branch)	Railway	Branch of Llanelli railway which opened between Ammanford and Crosshands during 1841, leading to improved access to the coal and iron mines of the Gorslas area.	Post-medieval	SN6191213373
34707		Myddynfych	Pond	Pond: A fairly large pond has been created in the centre of the farm. It does not appear on any map and may well be a recent feature.	Post-medieval, Modern	SN6310613311
34708		Myddynfych	Building	Building: The ruins of a small red brick building of unknown purpose. It does not appear on the 1st edition 1:2500 OS map.	Post-medieval, Modern	SN6308713413
43095		Leat	Leat	Leat shown on 1st ed OS map. Original water intake from Lluchwr near SN6282413525. Water transported to Myddenfych Farm (PRN17401) then south toward Tirydail Ammanford. Section still visible at SN6275412786. Supply then travelled to the SSE direction and then veered ssw to SN6252512450 Tirydail Farm. Shown on 1st ed. Sections of this leat still exist, once used to power elect generator at Myddenfych farm. Leat then carries water to Tir-Y-Dail model farm now destroyed. Section at	Post-medieval	SN6275012780

				SN6275012788 still in existence now under threat from development.		
43437			Trackway	Old route of trackway to Aberlash Mill? PRN 18378	Post-medieval, Medieval	SN6239013640
43438		Bonllwyn Slaughterhouse	Abattoir	Former slaughterhouse, building is now in a ruinous state.	Post-medieval	SN6233013540
43440	306,742	Ammanford YMCA	Christian Association Hostel	An impressive two storey early 20th century building, built c1905. Constructed with Red engineering brick with moulded brick detailing.	Post-medieval	SN6273012500
43458		Park Colliery Smithy	Blacksmiths Workshop	Identified from OS 1st ed	Post-medieval	SN6196012090
43459		Park Colliery Reservoir	Reservoir	Identified from OS 1st ed	Post-medieval	SN6195012160
43460		Park and Blaina Colliery Tramway	Tramway	Identified from OS 2nd ed, line of tramway can be seen at SN6179012250	Post-medieval	SN6202012040
43480			Ford	Identified from OS 1st ed	Post-medieval, Medieval	SN6234213521
43490			Bowling Green	Platform still visible showing position of bowling green	Post-medieval	SN6280012700
104588			Reservoir	A reservoir recorded on the Ordnance Survey 1st edition mapping (Carms Sheet 48.07, 1878). Still identified on the recent Ordnance Survey mapping.	Post-medieval	SN61981276
108388			Milestone	A milestone on the Llandeilo to Neath turnpike road. Appears on the Ordnance Survey 1st edition 1878 labelled "Llandilo-Fawr 7" and "Neath 17". Also on Ordnance Survey 2nd edition 1906 labelled "Llandilo 7" and "Neath 17".	Post-medieval	SN6260413138
	6640	English congregational church, Iscennen Rd. and Talbot Rd., Ammanford; Mission Hall	Chapel	As a result of the expansion of the anthracite coal mining industry in the Amman valley and the increase in employment opportunities, it attracted a number of English-speakers, who brought with them different denominational backgrounds. Part of this new influx included English speakers of a Congregational background, largely from Pembrokeshire. Initially the services were held in the Ammanford Council Primary School in College Street, with weekly prayer meetings and bible classes	20th Century	SN6276312445

				<p>convening in Gwynfryn Chapel vestry. In 1911, with encouragement from other local chapels and a loan, the congregation commissioned a design by architect Henry Herbert. On 4th September 1913, the English Congregational Church was officially opened by Mrs. W. N. Jones of Dyffryn House, the wife of William Nathaniel Jones who owned a local coal mine, tinsplate works and a gas works in Tir-Y-Dail. By 1920 the debt that had been incurred to build the chapel had been cleared and in 1927 a vestry/schoolroom was built through the efforts of volunteer members.</p> <p>The Congregational Church is constructed of red brick in a Gothic gable entry style, using yellow brickwork for the window and door openings. A stone carved name stone is located high on the facade, with an ocular window sitting in the apex. The schoolroom/vestry is a small rendered building, possibly built of stone.</p>		
	6644	English Baptist Church; Ysgol-Y-Gwynfryn, Brynmawr Avenue, Ammanford	Chapel	<p>Ammanford English Baptist Church began with the revival of 1904-5 and the expansion of the anthracite coal-mining industry; this attracted an increasing number of English-speakers to the area, which created the need to establish an English-language Baptist church. At this time Non-Welsh speakers from Monmouthshire were attending services at Ebenezer, with 20 members being released in 1905 to form the new English Baptist Church. In 1905 services were being held on Brynmawr Lane in a building of Ysgol y Gwynfryn, which had been founded in 1880 and occupied a former barn. In the early years of the church's formation the congregation paid rent to the academy, but by 1910 the church had acquired the building and remodelled it in the Arts and Crafts Style; it was at this point that the academy started paying rent to the church for the use of its building. During the early years the church maintained a close connection with Ebenezer, with baptisms and special services being held at Ebenezer. In 1937 the church underwent a substantial programme of renovation, which probably saw the addition of the vestry. In</p>	Post Medieval	SN6285312644

				recent years the congregation had been shrinking, but is currently experienced a minor resurgence in numbers.		
	6647	Elim Welsh Calvinistic Methodist Chapel, Llandybie Road, Tirydail, Ammanford	Chapel	Elim Methodist Chapel was built in 1906 in the Simple Round-Headed style of the gable entry type.	Post Medieval	SN6260812925
	12741	Methodist Church (Wesleyan), Harold Street; Station Road; Dyffryn Road, Tir-Y-Dail, Ammanford	Chapel	Tir-y-Dail Methodist Chapel was built during the early twentieth century, in the Vernacular style, with a gable entry plan, rendered walls and large pane segmental head windows.	Post Medieval	SN6256012772
	97267	Sunday School, Station Road, Tir-Y-Dail, Ammanford	Sunday School	This appears to have been built as a Sunday School ca. 1900 though the architectural style suggests a late 20th century rebuild. Status (1994): other (Moose Lodge).	Post Medieval	SN624126
	266162	Dyffryn, Garden, Ammanford	Country House Garden	This garden is depicted on the Second Edition Ordnance Survey 25-inch map of Carmarthenshire XLVIII, sheet 7 (1906). Its main elements on that map include kitchen garden, terrace and walled garden (destroyed).	Post Medieval	SN6223012803
	266163	Tir-Y-Dail, Garden, Ammanford	Garden	This garden is depicted on the Second Edition Ordnance Survey 25-inch map of Carmarthenshire XLVIII, sheet 7 (1906). Its main elements on that map include orchard, kitchen garden, pond (ornamental), antiquity (contrived) and greenhouses.	Post Medieval	SN6243012389
	306740	Ammanford Park	Public Park	Laid out 1935 by J.O. Parry.	20th Century	SN6275312333
	306744	Town Hall, Ammanford	Town Hall	1964 by W.T.H. Lock-Smith.	Post Medieval	SN6276212513

Table 4: Undesignated historic assets within a 500m buffer zone around the proposed flood defence scheme (Figure 6)



3.8 Aerial Photography and LiDAR

- 3.8.1 An aerial photographic search was undertaken at the RCAHMW and the Central Register of Aerial Photographs for Wales (CRAPW) for the site area. Photographs included RAF and Ordnance Survey photographs (Table 5 lists the photographs consulted).

	Sortie Number	Frame Number	Date
RAF	106G/UK/1400	3205 – 3206	April 1946
	58/671	3118 – 3120 & 4160-4162	May 1951
	540/545	4137, 3174 – 3175	July 1951
Ordnance Survey	72-120	020	May 1972
	75-315	074-075	July 1975
	95-194	188 – 189	June 1995
CRAPW	541/41	3189	May 1948
	540/545	4138	July 1951

Table 5: List of photographs consulted.

- 3.8.2 These photographs show that the flood risk defences predominantly lie within undeveloped agricultural land and urban areas, and largely support what has been learnt from cartographic sources. None of the photographs inspected indicated the presence of hitherto unrecorded archaeological features/historic assets within the proposed flood defence areas.
- 3.8.3 Modern aerial photography (Google Earth and Bing maps) were referred to but again no features suggesting hitherto unrecorded historic assets were observed.
- 3.8.4 LiDAR imagery at a resolution of 1m was also examined but no notable features were observed within the study area.

3.9 Historic Mapping

- 3.9.1 The Llandybie Parish Tithe map produced in 1842 (Figure 7) is the earliest available map of the area. It shows the town of Ammanford as a small rural community with the main settlement well contained and located on the converging crossroads. The north-south road that runs from Llandeilo and through Llandybie continues to Betws and the Swansea Valley, the east-west road runs from the Amman Valley to Llanelli and Swansea. The roads converged on what is now Ammanford Square (Norm 2010). The tithe map shows that within the immediate vicinity of the proposed flood risk defences are enclosed fields. These fields are described as being meadow or pasture. The recorded field names on the accompanying Apportionment give no indication of buried archaeology. The railway line is newly constructed and can be seen running north to south across the map corresponding with its existing alignment.
- 3.9.2 Tir-y-Dail farmstead and gentry house can be seen on the site of the motte and bailey castle. The farmstead occupies most of modern Ammanford – which was then entirely rural (Poucher 2010). Nearby a large building complex, presumed to be Dyffryn Mansion pleasure ground, garden and

yards is visible on the tithe map (presumably associated with PRN 20,923 and NPRNs 17308 and 266,162) in the immediate vicinity of the proposed flood risk defences.

- 3.9.3 The first edition OS map published in 1876 (Figure 8) shows the buildings depicted on the 1840 tithe map at Tir-y-Dail have now gone, replaced by larger developments. Expansion of the town of Ammanford is evident, although still predominantly focused on the converging cross roads it is beginning to extend outwards away from the small number of shops and taverns that used to front the High Street. Dyffryn Mansion remains as seen previously. The area in the immediate vicinity of the flood risk defences is still made up of enclosed field systems.
- 3.9.4 As the demand for coal increased Ammanford rapidly transformed from a small settlement to a thriving town. The coal rich landscape attracted investment into Ammanford and the necessity for man power to mine the coal resulted in an influx of migrant workers. This population explosion is evident in the 2nd edition OS map (published in 1906; Figure 9) that shows a visible increase in new housing. Tir-y-Dail remains the same as previously seen but is beginning to be encroached upon by the expansion of Ammanford. The area to the west of the Afon Loughor remains the same, including Dyffryn Mansion and the enclosed field systems.
- 3.9.5 Mid-20th century Ammanford continues to expand. Tir-Y-Dail has now been completely engulfed by Ammanford and towards the end of the 20th century the grounds of Dyffryn Mansion has been developed upon. Over time the area north of Dyffryn Mansion along the river banks and as it bows eastwards has shown no development.

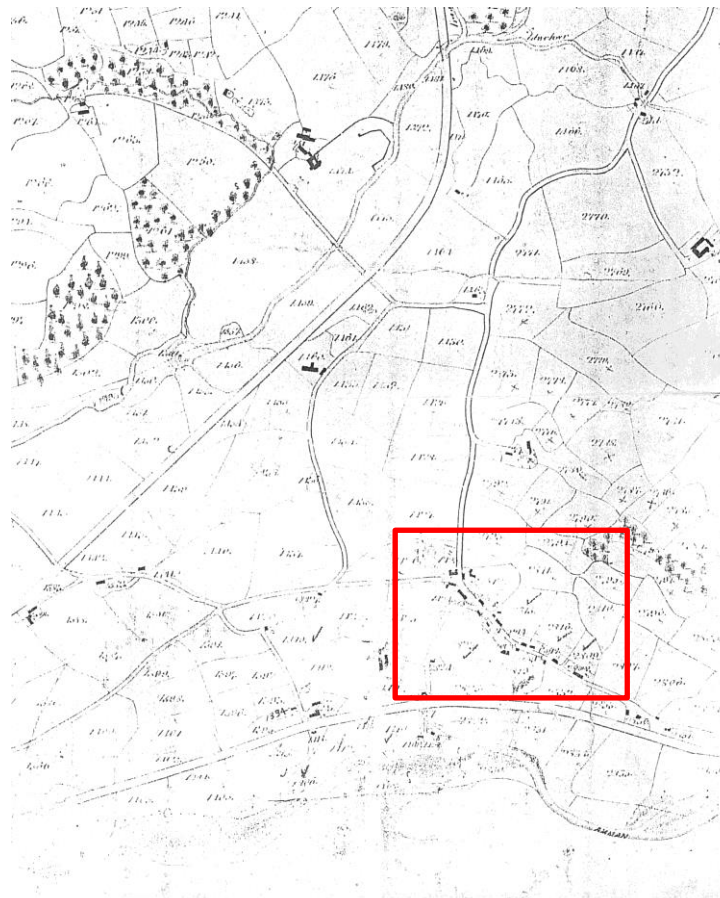


Figure 7: Extract of the 1842 Llandybie Tithe Map. The area of Ammanford lies within the red square.

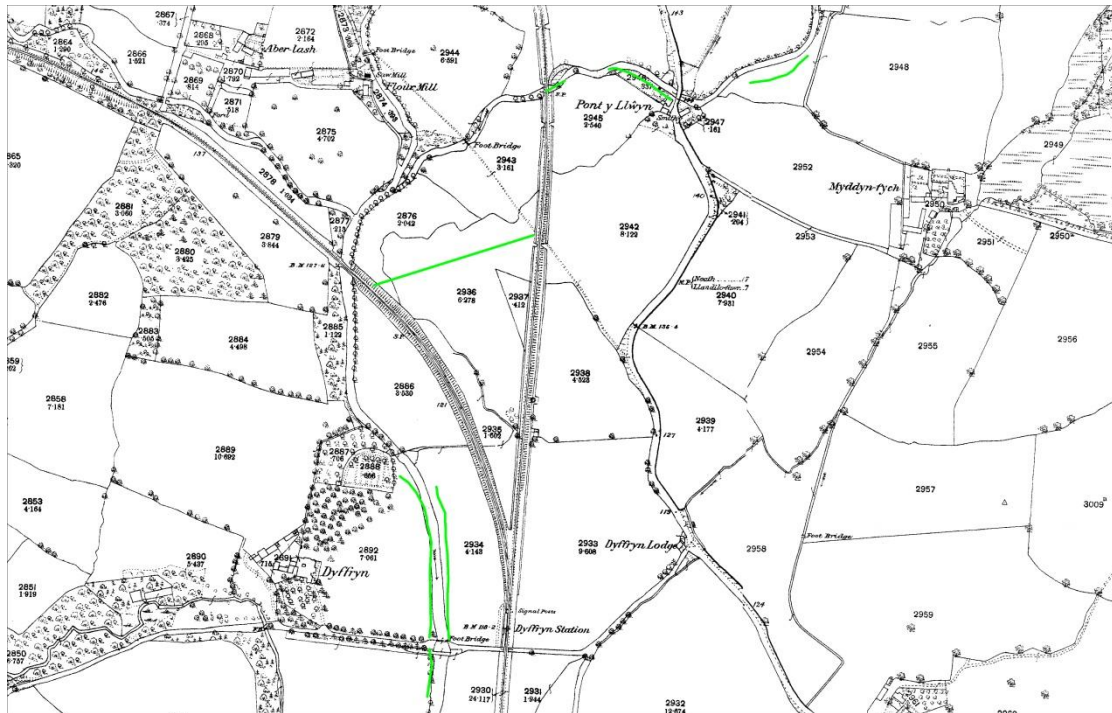


Figure 8: 1st edition OS map (1876), combined locations of flood defences indicated in green.

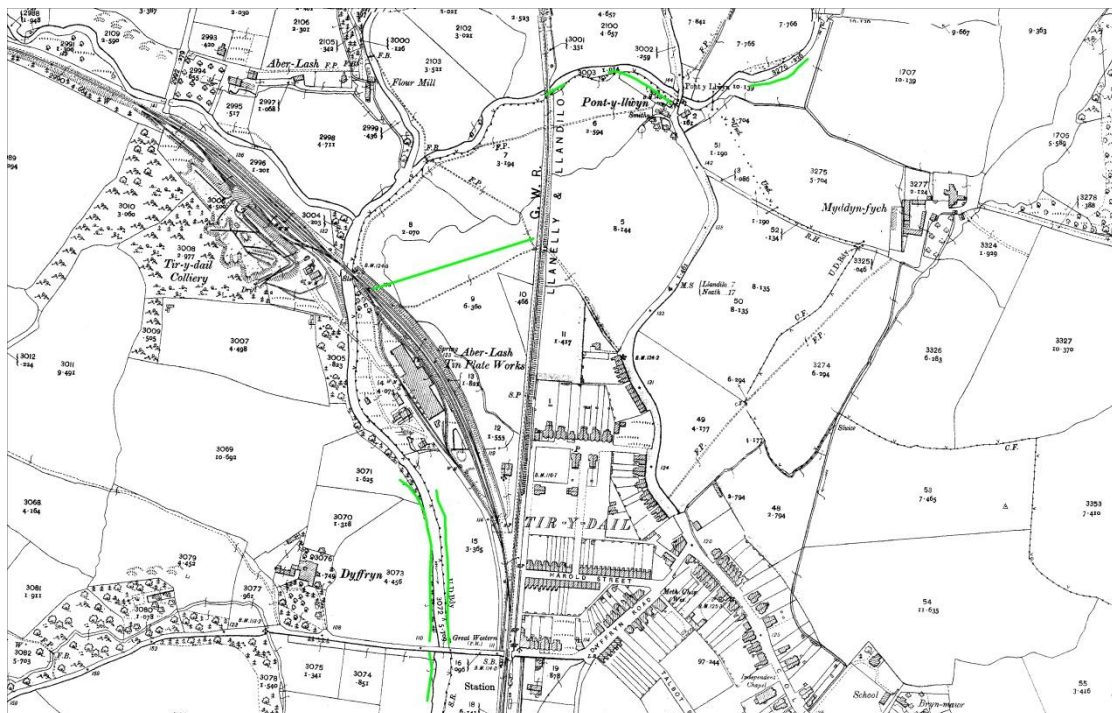


Figure 9: 2nd edition OS map (1906), combined locations of flood defences indicated in green.

3.10 Site Walkover Survey

3.10.1 A site visit was undertaken on the 14th of December 2018. The visit comprised a walkover survey of the proposed flood risk defence areas. Figure 10 shows the location and directions of photographs used in this report.

3.10.2 The southern part of the proposed defences lies close to Tir-y-Dail motte and bailey castle (CM067) and Ammanford College. Tir-y-Dail motte is now located within private property so full access was not possible but it was apparent that the proposed flood defences would have no direct impact on the Scheduled Monument. From ground level it is unlikely there would be any major intervisibility between the scheduled monument and proposed flood defences (Photo 1), although this may increase if viewed from the top of the motte. Due to topography and urbanisation the effect of the proposals on the setting of the scheduled monument is considered to be low to negligible. The west side of the motte has already been significantly truncated during construction of a railway line in 1840. Ammanford College also lies in an urbanised area and the campus is heavily built upon with buildings and associated car parking through which the proposed defences will run.



Photo 1: View across Tir-y-Dail motte and bailey castle (CM067) towards the flood defence scheme and Ammanford College.

3.10.3 To the north of Tir-y-Dail motte and the college, the defences are situated within a modern residential area known as Gwyn Fryn Estate, formerly Dyffryn mansion and pleasure garden. On the opposite side of the river lies an industrial estate. Due to the modern development already in this area there will be no impact upon any known historic assets or their settings.



Photo 2: Area of the flood risk defences in the residential area Gwyn Fryn Estate on the east side of the river.

- 3.10.4 Photo 3 shows where the flood defences cross an area of undeveloped land currently used as an open public space. An existing hedge row divides the area but no apparent historic assets are present that will be directly impacted upon by the proposals. However, a possible former ford was noted crossing the Afon Loughor to the west of the proposals, identified by trackways on both sides of the river leading from the field down towards the river (NGR SN 62248 13258; Photo 4). This could simply be access for livestock to the river but it appears more substantial than this and potentially more significant. No evidence of a ford in this location is evident on available map sources. This could be considered of local significance and although it will not directly be impacted upon, its setting could potentially be compromised by the proposed flood defences.
- 3.10.5 Photo 5 shows the area of the proposed flood defences on the opposite side of the railway tracks seen in Photo 3. Again this area is undeveloped but no historic assets were noted during this Desk Based Assessment, nor were any obvious features observed during the walkover survey.



Photo 3: View south west across an undeveloped section of the flood risk defences currently used as open public space.



Photo 4: Possible former ford crossing at the river identified by the trackway leading down to the river.



Photo 5: View east across undeveloped land in the vicinity of the proposed flood defence scheme.

- 3.10.6 As the proposed flood risk defences meet with the A483 they enter into urbanised areas of Ammanford again. Here residential properties sit adjacent to the river banks often with private garden plots butting right up to the river. In this area attempts to control flooding have already been partly undertaken with gabion walls and the construction of walls using large stone blocks.
- 3.10.7 The most northerly part of the flood risk defences lies on the outskirts of Ammanford in an area of undeveloped enclosed field systems beyond the urban edges of the town (Photo 7).



Photo 6: Residential properties and gardens adjacent to the river in the area of the proposed flood defences. Gabion walls can be seen on the north side of the river banks.



Photo 7: View southwest across the most northerly part of the proposed flood defence scheme on the outskirts of Ammanford.



Figure 10: Locations and directions of photos.

4. POTENTIAL IMPACTS OF THE PROPOSED DEVELOPMENT ON THE HISTORIC ENVIRONMENT

4.1 Previous Impacts to Development Area

- 4.1.1 Much of the proposed flood defence scheme lies within urbanised areas, dating from the mid-1800s onwards. This urbanisation has already directly impacted upon the landscape with the construction of buildings, car parks, services, landscaped gardens and even existing river defences. All of these previous developments could potentially have destroyed or damaged any surviving historical assets, and has seriously changed the rural nature of the landscape that once existed.
- 4.1.2 The areas that are not currently built upon are likely to have been used over the years as nothing more than meadowland and pasture. They have probably always been prone to flooding and although some ground improvements and ploughing may have occurred, they are likely to have remained relatively undisturbed due to this flood risk. These areas are where there is the greatest potential for encountering remains of burnt mounds.

4.2 Potential Direct Impacts from the Proposed Development

- 4.2.1 Details of the construction techniques are not known at this stage. Any of the following activities that might be associated with the proposed development of the site area could expose, damage or destroy any below ground archaeological remains that may be present at the site:
- Enabling works, such as installation of contractor's compound, construction of access roads, parking areas, storage areas, and associated services;
 - Landscaping and terracing works;
 - Topsoil stripping or initial ground preparation works; and
 - Earth moving for creation of embankments and excavation of foundations for flood defence walls.

4.3 Impacts to the Settings of Surrounding Designated Features

- 4.3.1 The negative impact of the proposed development upon the setting of Tir-y-Dail motte and bailey castle (CM067) is considered low to negligible. The scheme will be visible from the monument, but potentially earth banks may not be particularly out of place in terms of views. Flood walls however may have more impact visually. This could be moderated through the choice of materials used and encouraging vegetation growth to conceal them may mitigate against any visual impact. It should be noted that the setting of the motte and bailey is already compromised. It lies within an area of urbanisation that heavily restricts views from and into the monument and its western edge has previously been directly impacted upon by the construction of a railway line that separates the monument from the proposed flood risk defences.
- 4.3.2 All of the Listed Buildings identified within 1km of the proposed flood defence scheme are situated within the urban area of Ammanford. Due to intervening topography and the surrounding built environment there is no intervisibility between the listed buildings and the proposed flood risk defences. Therefore the proposals do not negatively impact upon the setting of these buildings.

- 4.3.3 The closest non designated asset identified in the walkover is what are believed to be the remains of Aberlash Mill (PRN 18,378), which will have views of the proposed flood defences and therefore its setting could be considered to be negatively impacted upon to some extent. The historic asset is not designated and its original setting has already been compromised by post-medieval and modern development and so the negative impact is considered low.
- 4.3.4 Unrecorded assets include the possible ford crossing the Afon Loughor in the vicinity of the proposed flood defences. Although it will not be directly impacted upon its setting is likely to be compromised to some extent. Again this historic asset is not designated and the negative impact is considered to be low.

5. ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL AND IMPORTANCE

- 5.1 An assessment of the potential for buried archaeology within the vicinity of the proposed flood defences is discussed below. The scale of potential is defined in Table 6. It should be noted that this only provides an indication of the potential and does not entirely preclude the presence of significant archaeological remains of any period existing within the proposed area. Archaeological and historical importance is ascribed to the sites according to criteria listed in Table 7.

Archaeological Potential	Definition
High	Known archaeological remains of the period within the site area, or an abundance of remains of the period within the near vicinity
Medium	A number of archaeological remains of the period are present in the vicinity or wider area, and/or the topography or location of the site would be typical for remains of that period
Low	Few sites of a specific period are known in the wider area, or where the topography of the site is unlikely to contain remains of that period. Or where no archaeological records of a certain period are present, but the location of the site is one that would be considered suitable or typical for remains of that period to exist
Negligible	Where there is no evidence for archaeological remains of a certain period to be present and the location/topography is most unlikely to contain remains of that period, or where a site area has already been totally disturbed

Table 6: Site potential definitions

Site Importance (SI)	Definition of Site Category
High	Features of national importance - Scheduled Monuments, Listed buildings Grade I and II*, well preserved historic landscapes, registered parks and gardens and historic battlefields
Medium	Non-scheduled sites of regional or county importance. Listed Buildings Grade II, reasonably preserved historic landscapes
Medium / Low	Features of district or local importance but generally common features at a national or regional level
Low	Minor sites or sites so badly damaged that too little now remains to justify their inclusion in a higher grade
Uncertain	Features about which insufficient is known to attribute them to a higher rank, or which cannot be sufficiently accurately located to justify their consideration
Negligible	Where a site area has already been totally disturbed by previous development or natural processes

Table 7: Site importance (significance) definitions

- 5.2 The potential for remains of Palaeolithic date is negligible because other than very rare stray finds there would be no chance of recovering stratified remains in this area from this period.
- 5.3 The potential for remains of Mesolithic, Neolithic, Iron Age and Roman date is considered low, based on the fact there are no known sites within the search area apart from the possible line of a Roman road, but sites are known in the wider area. Should any such sites be found within the proposed flood defence scheme area they would be of high importance.
- 5.4 The potential for Bronze Age remains is moderate because of the burnt mounds and round barrows previously recorded in the area. It is common to find a network of burnt mounds along a river course, and the possibility for more to be identified during development cannot be discounted. If any such remains were to be found they would be of moderate to high importance.
- 5.5 The chance of finding remains from the Early Medieval and medieval periods is thought to be low, due to the fact that aside from Tir-y-Dail motte much of the activity around this time was centred on the old cross roads of Ammanford. The fields around the proposed flood defences are low lying flood plain, and for this reason likely to have been largely used for agricultural purposes; meadowland and pasture. If any archaeology from this period was to be found in the area, it would be of low to medium importance depending upon the rarity of the site type.
- 5.6 The potential for remains from the post-medieval and modern periods is also thought to be low, for the same reasons as given above; the surrounding fields are low lying and prone to flooding. The importance of any finds of this period would be of low archaeological importance.

6. DISCUSSION

6.1 General Conclusions

- 6.1.1 At the time of writing this report there are two options for the proposed flood risk defences; a Full Containment option and Partial Containment option. This report used a combined plan of these options to conduct the desk based assessment and walkover survey. In terms of impacts on the historic environment the difference between the two options is considered to be negligible.
- 6.1.2 The proposed flood risk defences lie within the town of Ammanford, and the nearest designated historical asset is the Scheduled Monument Tir-y-Dail motte and bailey castle. Although the proposed flood defences will have a negative indirect impact upon the setting of this monument, it is assessed as negligible, as the setting of the monument has already been compromised by its location within a built up area with restricted views, as well as the direct impact of the railway line to the earthwork structure. The proposed flood risk defences will have no direct or indirect negative impacts upon any Listed Buildings.
- 6.1.3 Most of the proposed defences will pass through already built up areas where there is no foreseen impact on the historic environment.
- 6.1.4 Where the defences pass through non developed areas there are no known historic assets that will be directly impacted upon. These areas are likely to have been used for agricultural purposes, meadows or pastureland, due to their location on low lying ground near the river.
- 6.1.5 During the walkover survey a possible former ford was identified, although it will not be directly impact upon by the development, its visual setting may be adversely affected, but this would be considered negligible.
- 6.1.6 The potential for Palaeolithic Mesolithic, Neolithic and Iron Age archaeological remains within the development area is considered low, but if such remains were found their archaeological importance would be high.
- 6.1.7 The proposed Full Containment Option for the flood defences is bisected by the current A483. It has been suggested that this road follows the route of a former Roman road. The potential for road side activity of Roman date should not be discounted, but the potential is considered low. In the urban areas of Ammanford any Roman remains are likely to have already been truncated by development. In the rural flood plains of the proposed risk defences the potential for Roman remains is considered low. If such remains were found their archaeological importance would be high.
- 6.1.8 The potential for Bronze Age remains within the development area is considered moderate, given the close proximity of known burnt mounds and round barrows. Further sites identified from this period during the development would be considered of high archaeological importance.
- 6.1.9 The potential of finding significant (and non-agricultural) remains in the development area from the Early Medieval, post-medieval or modern periods is considered to be low. Any buried remains encountered during the development from these periods would be of low to medium importance depending on the rarity of the site type.

6.2 Archaeological Mitigation

- 6.2.1 A geophysical survey prior to development within open land areas could be useful for identifying possible buried archaeological features, particularly burnt mounds which may exhibit a strong thermoremanent magnetisation, detectable to a magnetic survey.
- 6.2.2 The information gained from a geophysical survey could be used to inform any decision on further archaeological mitigation.
- 6.2.3 The final decision upon the requirement for archaeological mitigation lies with the archaeological advisors to the Local Planning Authority.

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FLOOD RISK DEFENCES, AMMANFORD, CARMARTHENSHIRE: HISTORIC ENVIRONMENT DESK- BASED ASSESSMENT

RHIF YR ADRODDIAD / REPORT NO. 2018-56
RHIF Y DIGWYDDIAD/ EVENT RECORD NO. 115076

Rhagfyr 2018
December 2018

Paratowyd yr adroddiad hwn gan / This report has been prepared by

Charlie Enright

Swydd / Position: **Archaeologist**

Llofnod / Signature  Dyddiad / Date 17 Dec 2018

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by

James Meek

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf.
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: **Head of DAT Archaeological Services**

Llofnod / Signature  Dyddiad / Date 17 Dec 2018

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau
sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any
comments you may have on the content or presentation of this report

