

CoasterKart Development at Tower Colliery, Rhondda Cynon Taff Historic Environment Desk-Based Assessment



Report by: Trysor

For: Zip World

**September 2020
Revised October 2020**



CoasterKart Development at Tower Colliery, Rhondda Cynon Taff Historic Environment Desk-Based Assessment

By

Jenny Hall, MCIfA & Paul Sambrook, MCIfA
Trysor

Trysor Project No. 2020/738
GGAT HER Event PRN E006567

For: Zip World

September 2020
Revised October 2020

38, New Road
Gwaun-cae-Gurwen
Ammanford
Carmarthenshire
SA18 1UN
www.trysor.net
enquiries@trysor.net



Cover photograph: Looking northwest at the former lamproom which would be utilised under the proposed development.

CoasterKart Development at Tower Colliery, Rhondda Cynon Taff Historic Environment Desk-Based Assessment

RHIF YR ADRODDIAD - REPORT NUMBER: Trysor 2020/738
GGAT HER Event PRN - E006567

DYDDIAD 8^{fed} Mis Medi 2020
7^{fed} Mis Hydref 2020

DATE 8th September 2020
7th October 2020

Paratowyd yr adroddiad hwn gan bartneriad Trysor. Mae wedi ei gael yn gywir ac yn derbyn ein sêl bendith.

This report was prepared by the Trysor partners. It has been checked and received our approval.

JENNY HALL MCIFA

Jenny Hall

PAUL SAMBROOK MCIFA

Paul Sambrook

Croesawn unrhyw sylwadau ar gynnwys neu strwythur yr adroddiad hwn.

We welcome any comments on the content or structure of this report.

*38, New Road,
Gwaun-cae-Gurwen
Ammanford
Carmarthenshire
SA18 1UN
01269 826397*

*82, Henfaes Road
Tonna
Neath
SA11 3EX
01639 412708*

www.trysor.net

enquiries@trysor.net

Trysor is a Registered Organisation with the Chartered Institute for Archaeologists and both partners are Members of the Chartered Institute for Archaeologists, www.archaeologists.net

Jenny Hall (BSc Joint Hons., Geology and Archaeology, MCIfA) had 12 years excavation experience, which included undertaking watching briefs prior to becoming the Sites and Monuments Record Manager for a Welsh Archaeological Trust for 10 years. She has been an independent archaeologist since 2004 undertaking a variety of work that includes upland survey, desk-based appraisals and assessments, and watching briefs.

Paul Sambrook (BA Joint Hons., Archaeology and Welsh, MCIfA, PGCE) has extensive experience as a fieldworker in Wales. He was involved with Cadw's pan-Wales Deserted Rural Settlements Project for 7 years. He has been an independent archaeologist since 2004 undertaking a variety of work including upland survey, desk-based appraisals and assessments, and watching briefs.

Event Record PRN – GGAT HER

PRN	GGAT E006567
Name	CoasterKart Development at Tower Colliery, Rhondda Cynon Taf Historic Environment Desk-Based Assessment
Type	Historic Environment Desk-Based Assessment
NGR	SN9265004220
Easting	292650
Northing	204220
Summary (English)	In August 2020 Trysor undertook a desk-based assessment on behalf of Cadnant Planning for a Zip World development at Tower Colliery, Rhondda Cynon Tâf. The assessment considered historic assets within a 500 metre radius of SN9265004220. © Trysor 2020
Summary (Cymraeg)	Yn ystod Mis Mai 2018 fe gariwyd allan asesiad pen fwrdd ar gyfer Cadnant Planning mewn perthynas â datblygiad Zip World ar safle Glofa'r Twr, Rhondda Cynon Tâf. Roedd yr asesiad wedi edrych ar asedau hanesyddol o fewn 500 metr oddi amgylch SN9265004220. © Trysor 2020
Description	In August 2020 Trysor undertook a desk-based assessment on behalf of Cadnant Planning for a Zip World development at Tower Colliery, Rhondda Cynon Tâf. The assessment considered historic assets within a 500 metre radius of SN9265004220. © Trysor 2020
Sources	Trysor, 2020, CoasterKart Development at Tower Colliery, Rhondda Cynon Tâf Historic Environment Desk-Based Assessment
Copyright	© Trysor 2020

Historic Asset Record PRN – GGAT HER

PRN	GGAT08786m
Name	TOWER COLLIERY
Type	LAMPROOM
NGR	SN9265904319
Easting	292659
Northing	204319
Summary (English)	This building served as the original lamproom and office block, including the pay office, for the Tower No.4 colliery when it was opened in the 1940s. It was later used only as a mine office later in the history of the mine, when the lamproom was moved to the pithead baths building. © Trysor 2020
Summary (Cymraeg)	Yr adeilad yma oedd yn cynnwys lamprwm, swyddfa cyflogau a swyddfeydd rheolwyr Glofa'r Twr pan agorwyd y gwaith yn ystod y 1940au. Yn ddiweddarach, symudwyd y lamprwm i'r baddondy pen pwll a defnyddid yr adeilad ar gyfer swyddfeydd yn unig. © Trysor 2020
Description	<p>The original lamproom and office block of the Tower No.4 Colliery still stands in relatively good condition in 2020. This was a purpose-built complex. The rectangular building is of brick construction and stands on a northeast to southwest alignment, being 32 metres long by c.10 metres wide. The roof overhangs the lateral walls either side by c. 2 metres, making the roof c. 14 metres wide. This overhang is an important part of the building's design.</p> <p>At the beginning of each shift, the colliers would walk past the lamproom from the pithead baths towards the pithead. Every 13th man was responsible for collecting a safety lamp to take underground to help detect any build up of gas at the coalface. Those collecting the safety lamps would queue beneath the overhanging roof outside the lamproom on its northwest facing side. The lamps were passed through three small hatches in the wall of the lamproom to the men as they passed. These hatches were bricked up when the lamproom was moved to the pithead baths building later in the history of the colliery, but their outline can still be seen.</p> <p>At the end of a shift, the same men would return from the pithead, passing the lamproom along its southeast-facing</p>

	<p>side, where three similar hatches were opened for them to pass their lamps back into the lamproom. The overhanging roof again gave them shelter as they queued to hand back their lamps.</p> <p>It is believed that this building is unique and one of the most important surviving buildings in the Tower Colliery complex.</p> <p>The building was divided into two parts by a brick-arched corridor which ran across the centre of the building. The corridor was originally open at either end, though the ends were bricked up and doors installed at some stage in its history. To the northeast of this corridor was the office block, where the mine manager and other senior staff were based. The pay office was also located here and the hatch where colliers collected their pay packets is still visible in the northeast gable end of the building. To the southwest of the corridor was the lamproom. A long skylight in the roof above the lamproom ensured that daylight illuminated the working area below, as visibility was important to allow those preparing the lamps to undertake their work.</p> <p>A small extension was added to the southwest end of the building during the 1980s. © Trysor 2020</p>
Sources	Trysor, 2020, CoasterKart Development at Tower Colliery, Rhondda Cynon Tâf Historic Environment Desk-Based Assessment
Copyright	© Trysor 2020

Historic Asset Record PRN – GGAT HER

PRN	GGAT08787m
Name	TOWER COLLIERY
Type	DRIFT
NGR	SN9266604245
Easting	292666
Northing	204245
Summary (English)	This drift was working during the period from the 1940s to the 1960s, in association with the Tower Colliery, with an L-shaped building shown at the site on Ordnance Survey maps of the period. The rubble of the building was visible on the ground in 2020, but the drift is said to have collapsed and is therefore now sealed at its entrance. The drift was reportedly known as the Gorllwyn Drift, referencing the Gorllwyn seam, which was worked from the drift. © Trysor 2020
Summary (Cymraeg)	Roedd y gloddfa drifft yma'n gweithio yn ystod y 1940au hyd y 1960au, mewn cysylltiad â Glofa'r Twr, gydag adeilad siâp L yn cael ei ddangos ar y safle ar fapiau Arolwg Ordnans y cyfnod. Nodwyd fod rwbl o'r adeilad hwnnw i'w gweld ar y safle yn 2020, ond dywedir fod y drifft ei hunan wedi cwmpo ac wedi cael ei gau. Dywedir hefyd mai Drifft y Gorllwyn oedd hwn, am fod glo o wythien y Gorllwyn yn cael ei weithio yma. © Trysor 2020
Description	This drift was working during the 1960s and an L-shaped building is shown on Ordnance Survey maps of the period. The rubble of the building was visible on the ground in 2020, but the drift is said to have collapsed and is therefore now sealed at its entrance. The drift was reportedly known as the Gorllwyn Drift, referencing the Gorllwyn seam, which was worked from the drift. © Trysor 2020
Sources	Trysor, 2020, CoasterKart Development at Tower Colliery, Rhondda Cynon Tâf Historic Environment Desk-Based Assessment
Copyright	© Trysor 2020

Contents

1. Summary	1
2. Copyright	4
3. Introduction	4
4. The Development	6
5. Methodology	6
6. The Development Site	8
7. Archaeological Overview	9
8. Historical Overview	11
9. Data Collation	16
10. Assessment of Significance	17
11. Assessment of Impact	19
12. Conclusion	29
13. Reporting	30
14. References	30
15. Reliability and limitations of sources	31
Appendix A: Gazetteer of historic assets within 500 metres	33
Appendix B: Photographs	49
Appendix C: Specification for historic environment assessment	78

1. Summary

- 1.1 This historic environment assessment has been undertaken by Trysor to examine the impacts on the historic environment from a proposed CoasterKart development on land at the former Tower Colliery No. 4 site, see Figure 1.
- 1.2 A site visit was undertaken by Trysor in August 2020 to examine the location of the CoasterKart development and record any unrecorded historic assets within the development area. Information was also gathered on the indirect, visual impacts on historic assets within the wider landscape, and their setting.
- 1.3 The assessment studied the direct and indirect impacts on all recorded historic assets within an area measuring 500 metres in radius, focused on SN9265004220, the centre of the development. The Glamorgan Gwent Archaeological Trust Historic Environment Record and data from RCAHMW and Cadw was consulted. Historical mapping was also consulted as well as aerial photographs and LiDAR.
- 1.4 There are no Scheduled Monuments within a 500-metre radius of the centre of the development.
- 1.5 There are 2 Listed Buildings, the engine house and headframe at Tower Colliery, No. 4 shaft within a 500-metre radius of centre of the development (ID numbers 3, 4 & 5, listed buildings 10901 & 10902).
 - 1.5.1 The proposed development would not cause a direct, physical impact to the headframe or engine house (ID Numbers 4, 5 and 3), see Plates 23, 24, 25, 31, 32 & 37. The impacts the listed buildings are being assessed in a separate report by Cadnant Planning Ltd.
- 1.6 There are three further important colliery buildings which survive, but are not listed. These are the original lamp room and office building (ID Number 13), the pithead baths (ID Number 12) and mine magazine (ID Number 11). The latter two buildings were added to the complex during the 1950s.
 - 1.6.1 There would be no direct, physical impact on the pithead baths or the mine magazine from the current proposals.
 - 1.6.2 The current proposals would see the lamp room and office building (ID number 13) reused as the starting point for the CoasterKart ride. The proposal would see new openings made in the northeast and southwest ends of the building to allow the track to exit and enter the building. Internally, the internal partition walls would be removed to create a single open space, although a small section would be subdivided in the east corner of the building. The 1980s office block added to the southwestern end of the lamp room will be removed completely.

1.6.3 Research undertaken for this assessment shows the lamp room and office building to be an original colliery building of historic importance. The proposed development offers an opportunity to enhance and restore key aspects of the building and a sympathetic approach has been taken towards the conversion of the building.

1.6.4 Assessing the impact of the proposed changes to the building is complex. The negative impacts include;

- the removal of all internal partitions, including some of which are original brick walls dating to the 1940s although most are thinner partition walls dating to a later period, Moderate Negative Direct impact
- the gable ends of the original building will have new central openings created to allow exit and entry for the CoasterKart ride. In the northeast gable wall, this will result in the removal of original doorway and two adjacent windows. It is not currently known if original openings will be lost in the southwest gable as it is obscured by the later 1980s building. Moderate Negative Direct impact

There are positive impacts from the proposed changes. These are;

- the reuse and maintenance of an historic building, which is currently derelict, deteriorating and exposed to vandalism through disuse. Moderate Positive Direct impact
- the retention and restoration of important historic features, such as reopening the boarded up windows through the lateral walls of the lamp room, the restoration of the entrances through the archways either side of the building, and the refurbishment of the skylight above the lamp room. Moderate Positive Direct impact
- offers an opportunity to interpret the story of the building and improve understanding of the history of the mine. Potential Moderate Positive Direct impact
- 1.6.5 The overall benefit of the retention of the building and the resultant opportunity to interpret its history and role in the workings of the colliery, especially in view of the rarity of surviving examples of buildings of this type, mean that there is a positive impact from the proposed development overall.

1.7 The CoasterKart ride would introduce a new element into the landscape between the unlisted lamp room, pithead baths and magazine, but the nature of the development would not require permanent, significant

landscape changes and the CoasterKart framework would not dominate or compete with the mass of the existing colliery buildings. The reuse of the site can bring a positive impact to the future management and use of these buildings.

- 1.8 It is considered that there would be a Low to Moderate Negative impact on the setting of the colliery. However, the development will not reduce the significance of the listed buildings and unlisted buildings within the colliery complex. In addition there will be an additional Low Positive impact on setting arising from bringing the colliery site back into use for a new purpose, managing the buildings and their surroundings and allowing the public to safely access the colliery site to appreciate and understand the surviving colliery buildings.
- 1.9 There are no Registered Parks & Gardens within the 500-metre radius assessment area.
- 1.10 The development site does not lie within a Registered Historic Landscape.
- 1.11 There are no physical impacts or impacts on setting on other recorded historic assets within the 500-metre radius assessment area.
- 1.12 There is no cartographic or aerial photographic evidence to suggest that the development site has potential for further buried non-industrial archaeology. However, the foundations of a building associated with a now collapsed mid-20th century drift, worked in association with the development of the Tower No.4 shaft until at least the 1960s, lies on the line of the proposed course of the CoasterKart ride and needs to be taken into consideration.
 - 1.12.1 A watching brief may be considered an appropriate response on any ground disturbance in this area in particular, or at any point where excavations or ground-levelling works are required.
- 1.13 A Level 2 building recording should be made in advance of any changes to the lamp room and office building to record it in its present condition including any blocked openings.

2. Copyright

- 2.1 Trysor holds the copyright of this report. Further copies may be made of this report without gaining permission to reproduce for non-commercial purposes.

3. Introduction

- 3.1 Cadnant Planning Ltd of 1 Connaught House, Riverside Business Park Benarth Road, Conwy, LL32 8UB commissioned Trysor on behalf of their clients to undertake an historic environment desk-based assessment with a walkover survey for a proposed CoasterKart development at Tower Colliery, Rhondda Cynon Taff, centred on SN9265004220, see Figure 1.
- 3.2 It is proposed that a CoasterKart ride is developed at the site of the former Tower Colliery, to the west of the A4061 between Hirwaun and Blaenrhondda, as part of the Zip World offer.
- 3.3 The Chartered Institute for Archaeologists' Standard and Guidance for Historic Environment Desk-based Assessment (CIfA, 2017) and Cadw's Setting of Historic Assets (Cadw, 2017) were used to prepare a Written Scheme of Investigation, see Appendix C. This WSI was approved by the Planning Officer at Glamorgan Gwent Archaeological Trust who advise the Local Authority on historic environment issues.

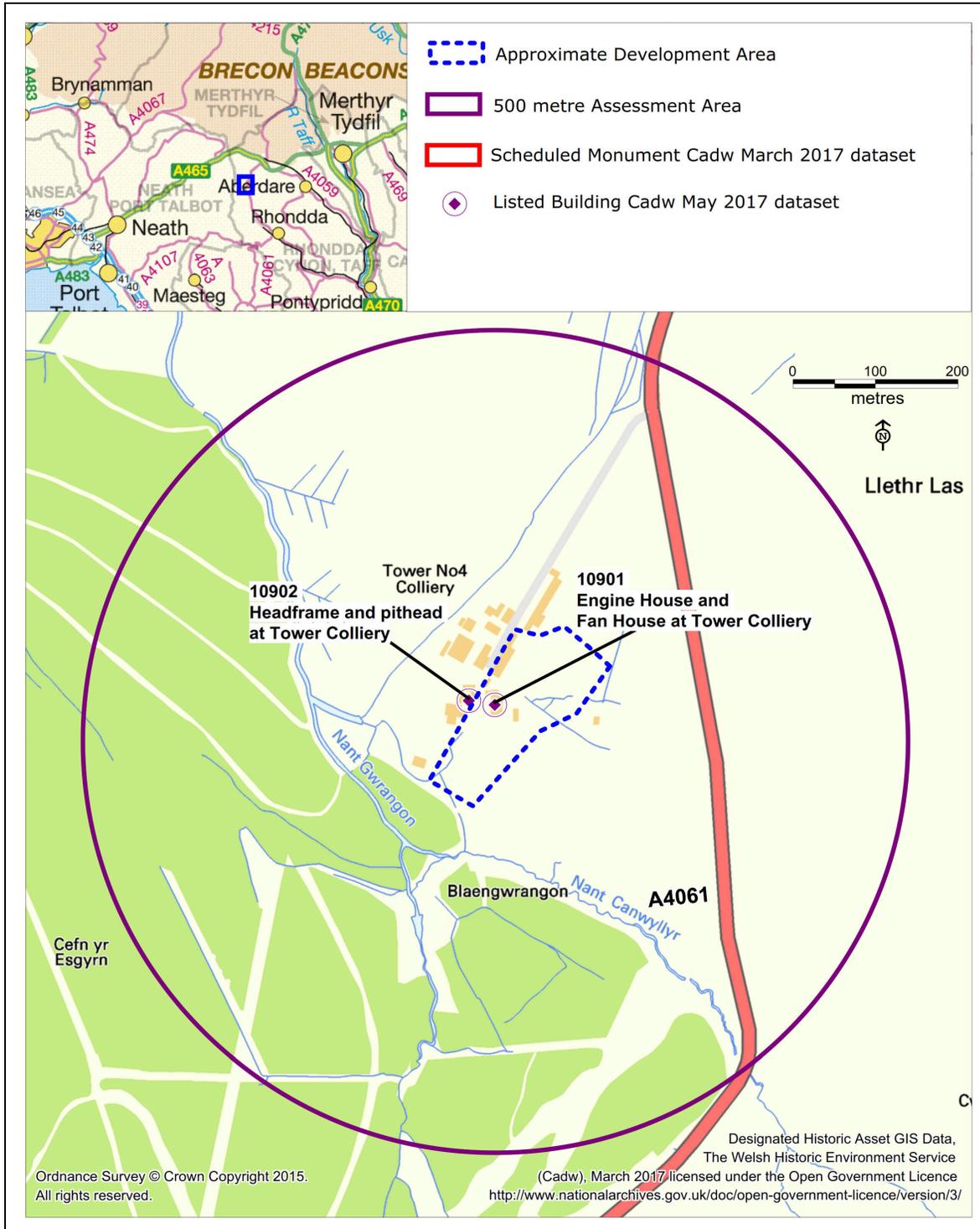


Figure 1: Location of the development, showing the 500 metre radius assessment area.

4. The development

- 4.1 The CoasterKart ride consists of individual karts on a electric driven ride along raised tracks. The track is raised between 1 to 5 metres from the ground. It is supported by substructures which are fixed to the ground with support plates. The substructure itself consists of two supports, a cross member and corresponding struts along and across the direction of travel. At the end of each support is a support plate which is secured to the ground with three ground nails which are 20mm diameter and 800mm long. It will utilise the former lamproom building at Tower Colliery as a covered area for the start of the ride.

5. Methodology

- 5.1 The desk-based assessment considered known historic assets within a 500-metre radius circle centred on SN9265004220, the centre of the development (see Figure 1). This enabled an understanding of the archaeology and landscape of the surrounding area to be developed as well as to assess any direct or indirect impacts, including impact on setting. Historic assets have been given an ID number for the purposes of this report, other reference numbers, such as regional HER PRNs are cross referenced in Appendix A.
- 5.2 Data from the regional Historic Environment Record held by Glamorgan Gwent Archaeological Trust was acquired for the 500-metre radius assessment area. Data on designated historic assets was obtained from Cadw.
- 5.2.1 The Historic Environment Data was checked against that supplied for a desk-based assessment for a wider area in 2019 (Trysor, 2019). No updating had been made to the relevant records so the database used for the previous desk-based assessment was used as the baseline data.
- 5.3 Historic mapping was consulted. The maps used included the early 19th century Ordnance Survey Original Surveyors Drawings, as well as late 19th and 20th century 1:2500 scale Ordnance Survey mapping and the parish tithe map.
- 5.4 A site visit was made by Trysor to the development site on 25th August 2020, in the company of Anthony Shott, one of the directors of Tower Colliery who had worked there for many years. He was able to add understating to some of the features seen.
- 5.4.1 Visible archaeological features within the area that would be directly affected by the development were searched for and any information which might indicate that there would be a direct impact on the historic environment through the development. The wider landscape was studied taking note of topography, vegetation and structures, and the impact on the setting and whether the significance of historic assets would be affected (Cadw, 2017).

- 5.5 Aerial photographs on Google Earth, dating to 2001, 2006, 2010, 2013, 2016 and 2018 were used to inform the assessment as well as aerial photographs from 1945 and 1969 available from the Welsh Government Aerial Photography Unit online. Other aerial photographs from 1958, 1967, 1983 and 1985 were obtained directly from the Welsh Aerial Photography Unit. LiDAR data was not available for the assessment area.
- 5.6 Modern mapping was used to assess current public access.
- 5.7 All information gathered during the desktop assessment and site visit was entered into a bespoke database created in Access 2003 to form an assessment dataset, see section 9.
- 5.8 The final dataset was the source of the material output in this report, including the GIS mapping which illustrates the location of historic assets in the area, and the tables and appendices which provide detailed information on the historic assets within the study area
- 5.9 Each of the records in the final assessment 500 metre dataset was assessed for Period, Rarity, Documentation, Group Value¹, as well as Evidential Value, Historical Value, Aesthetic Value, Communal Value² and Setting³. Once these had been considered the significance of each historic asset was determined and scored in accordance with the categories adopted by the Welsh Archaeological Trusts i.e. Nationally Important, Regionally Important, Locally Important, Minor and Features Needing Further Investigation (Unknown), see section 10.
- 5.10 The Direct and Indirect impact on each historic asset was assessed taking into account both physical and non-physical impacts. Each impact was assessed as to whether it was Positive, Negative or Neutral, and the level of impact within the scale Very Low, Low, Moderate, High and Very High, taken into account the significance of the historic asset and the nature of the impact. Where there was an impact to was then assessed if there was any impact on the significance of the historic asset, see section 11.

¹ Period, Rarity, Documentation and Group Value are criteria defined in the Welsh Office Circular 60/96, 1996.

² Evidential Value, Historical Value, Aesthetic Value and Communal Value are criteria defined in Cadw's Conservation Principles publication, 2011.

³ Setting as defined in Cadw's Setting of Historic Assets in Wales, 2017

6. The Development Site

- 6.1 The development site lies on the north side of Rhigos Mountain, approximately 1.25 kilometres south of the village of Rhigos, Rhondda Cynon Taff.
- 6.1.1 The geology in the area comprises sedimentary rocks of the Carboniferous Period dating to between 308 million and 315 million years ago. These include formations of the Middle and Upper Coal Measures including mudstones, siltstones and sandstones. Where recorded the bedrock is overlain by glacial till deposited by ice and meltwater during the last Ice Age.
- 6.1.2 The proposed development would be located to the east and south of the now disused Tower Colliery site, on land which is mostly grassland and scrub outside the colliery perimeter. The development would utilise one colliery building, the former lamp room and office building, and would also cross an area where the entrance to a drift mine associated with the colliery was situated during the 1960s, hence the development area incorporates some features associated with the development of the colliery.

7. Archaeological Overview

7.1 The assessment area lies within an area of marginal land and coniferous forestry, below the Craig y Llyn escarpment. It includes the site of the 20th century Tower No.4 Colliery (NPRN 91586), which closed in 2007 and is now a disused industrial complex.

7.1.1 Much of the assessment area has been heavily modified by forestry plantations and coal mining including opencast mining during the 20th century. However, the landscape still contains fragmentary evidence of human activity ranging from post-medieval farming back to early prehistoric hunting.

7.1.2 Amongst the most striking aspect of the archaeological record in this disturbed and archaeologically unpromising landscape is the survival of artefactual evidence of prehistoric activity. Extensive ploughing in advance of forest planting in the wider district disturbed the ground surface and brought an array of flint and stone tools to light, including Mesolithic and Neolithic stone artefacts and metal artefacts of Bronze Age and Iron Age date.

7.2 Palaeolithic and Mesolithic (250,000BC – 4,000BC)

7.2.1 There are no records of artefacts or sites associated with the Palaeolithic period recorded within a 500-metre radius of the proposed development site.

7.2.2 A significant number of records exist for discoveries of flint scatters dating to the Mesolithic period (10,000BC – 4,000BC) are recorded in the regional Historic Environment Record across the wider upland landscape. Many of these discovery sites date to the 1960s and are imprecisely recorded, relating to the discovery of flints during forestry ploughing operations. The findspots include small scatters of flints and much more considerable concentrations, such as that partially excavated by Lacaille in 1962 on Craig y Llyn (PRN 00468m). They represent sites frequented by Mesolithic hunter gatherers who are likely to have come into this upland bloc for seasonal hunting. There are no known discovery sites of this period within a 500-metre radius of the proposed development.

7.3 Neolithic and Earlier Bronze Age (4,000BC – 1,500BC)

7.3.1 There is evidence of Neolithic and Early Bronze Age activity within wider landscape. Neolithic times saw the introduction of agriculture into the environment and a well-established agricultural community must have been present in the district during this period and into the following Bronze Age period. Excavations on Mynydd Beili Glas in 1973 dated the rare remains of a stone hut (PRN01764m) to 2160BC, during the Neolithic period, which shows that early farming communities must have been established within the wider district. There are also a smaller number of finds of Neolithic and Bronze Age artefacts recorded in the

wider area, including single finds of flint arrowheads of Neolithic and Bronze Age type found to the south of the escarpment (PRN 01653m and PRN 01586m). A Neolithic stone axe has also been recorded on Mynydd Beili Glas (PRN 01839m). These discoveries are all found outside the 500-metre radius assessment area relating to the current proposed development however.

7.4 Later Bronze Age and Iron Age (1500 BC – AD43)

7.4.1 There is important evidence of Later Bronze Age and Iron Age activity within the wider landscape, though no sites dating to these periods are recorded within a 500-metre radius of the proposed development. Late Bronze Age activity is represented by the highly significant Llyn Fawr Hoard (PRN 0023m), discovered in 1911 in peat exposed when the lake at Llyn Fawr was drained. This hoard includes early examples of iron artefacts, showing that items were being deposited in the lake in the early Iron Age, c.600BC. The items recovered included cauldrons of probable Irish origin, weapons including an iron sword of apparent continental origin and other examples of metalwork such as a harness, which also appears to have originated on the continent. It is thought that they must have been deposited in the lake as ritual offerings.

7.4.2 The Iron Age was a period during which tribal conflicts appear to have been common. Settlements and farmsteads were often defended by earthworks topped with timber palisade fences hence due to the need to protect settlements from attack. It was also a period during which an increasing area of the landscape was farmed, expanding the agricultural traditions of previous periods. It is likely that much of the area around Rhigos would have been farmed during this period with the uplands used for grazing.

7.5 Roman (AD43 – AD410) & Early Medieval (AD410 – AD1100)

7.5.1 There is some evidence of possible activity dating to the Roman period within a 500-metre radius of the proposed development.

7.5.2 The surviving cairns in two cairnfields (ID numbers 1 & 2), PRNs 00017m & 00018m), which were largely destroyed by forestry activity in the mid-20th century, were excavated in 1992. This showed that they were clearance cairns, and pollen analysis of the peat at each site shows that they were likely to date to the Roman or Early Medieval period. They are likely to have been created during a phase of woodland clearance when the land was turned over to pastoral farming.

7.6 Medieval (AD1100 – AD1539)

7.6.1 There are some examples of Medieval or Later settlement sites, such as a platform at Llethr Las (PRN 02149m) but these lie outside a 500-metre radius around the proposed development. Settlements of this type may relate to pastoral farming on the uplands during medieval and early post medieval times. Platforms would have been the locations of timber-framed huts or houses which have long disappeared.

7.7 Post Medieval & Industrial (AD1539 – present day)

7.7.1 There are now no inhabited dwellings within the assessment area, but the site of one upland farm, Blaengwrangon (ID Number 6, PRN 04266m) lies close to Tower Colliery and within a 500-metre radius of the proposed development. This farm was abandoned by the late 19th century and now little survives of it.

7.7.2 The industrial period is represented by Tower Colliery (NPRN 91586), which was founded by the Marquis of Bute c.1870 and remained in use until 2007, when it was the last deep mine to be worked in Wales. The site of the colliery is an important relic of this once dominant industry and still retains its headgear, pithead baths building, the original lamp room and office building as several associated buildings.

8. Historical overview

8.1 The proposed development site is located in an upland area which has seen tremendous changes during the 20th century, including the expansion of the natural glacial lake at Llyn Fawr to create a reservoir in 1911. This was followed by the widespread planting of coniferous forests and the introduction of the Tower Colliery No.4 shaft complex (NPRN 91586) in the mid-20th century. Coal mining also included the introduction of opencast mining to the west and southwest of Tower Colliery later in the century. These changes, which swept away a post-medieval pastoral farming landscape and areas of open upland pastures, can be tracked through historic mapping.

8.2 The earliest map showing the property is the Ordnance Survey's Original Surveyors Drawings, Aberdare sheet, surveyed in 1814. The Original Surveyors Drawings represent the first detailed map series of the whole country. They do not generally map field boundaries in detail and the details of the field system which are shown on the map cannot be interpreted as accurate representations of the fieldscape at the time of the survey. The map shows clearly that the area of the proposed development, northeast of Blaengwrangon Farm (ID number 6), was open moorland in the mid-19th century, outside the enclosed field system of the farm.



Figure 2; An excerpt from the Ordnance Survey Original Surveyors Drawings Aberdare Sheet of 1814.

8.3 The 1814 Ordnance Survey map was the basis for the 1 inch to 1 mile scale First Series map of 1832. This map again shows the area to the northeast of Blaengwrangon Farm (ID number 6) to be open moorland.



Figure 3; An excerpt from the Ordnance Survey First Series map (Sheet 42) of 1832.

8.4 The Ystradyfodwg parish tithe map of 1847 provides a much more detailed depiction of the landscape, including the field systems of the day, see Figure 4. It records that the proposed development area still lay outside the field system and on mountain moorland.

8.4.1 This map captures the landscape before it felt the impact of forestry or industry. The fields of the farms of Blaengwrangon (ID number 6) and Gwrangon Ganol Fach (ID number 7) lay within the assessment area.



Figure 4; An excerpt from the Ystradyfodwg Parish Tithe Map of 1847.

8.5 The 1:10560 Ordnance Survey maps of 1884 and 1921 (Figures 5 & 6 below) show the landscape prior to the development of Tower Colliery and the afforestation of the wider area, which occurred during the 1960s. These maps also show the area before the construction of the A4601 road connecting the Rhondda Fawr and Hirwaun in the 1920s. The Tower Colliery No.4 shaft would not be developed near Blaengwrangon Farm for another two decades after the construction of the road. The area of the proposed development site is shown as unenclosed moorland on both maps.

CoasterKart Development at Tower Colliery,
Rhondda Cynon Taff
Historic Environment Desk-Based Assessment

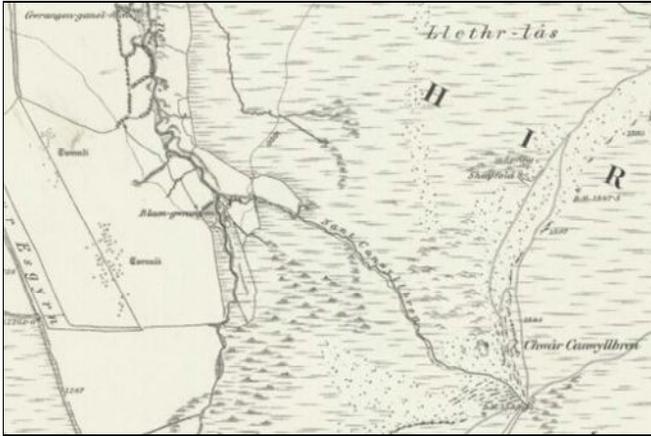


Figure 5; The Ordnance Survey
1:10560 map of 1884. Sheet X.SE

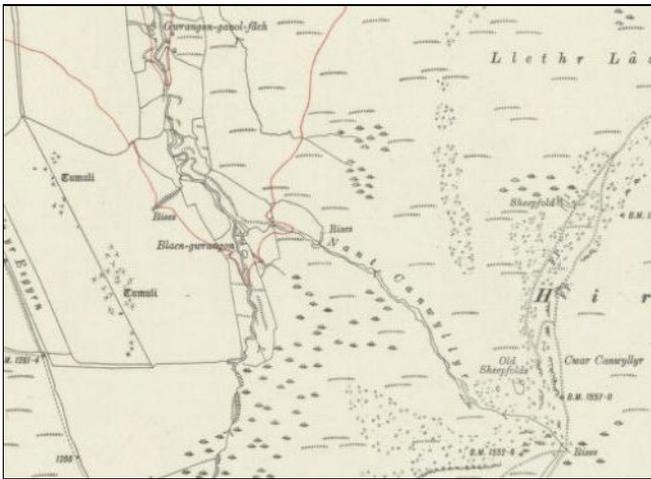


Figure 6; The Ordnance Survey
1:10560 map of 1921. Sheet X.SE

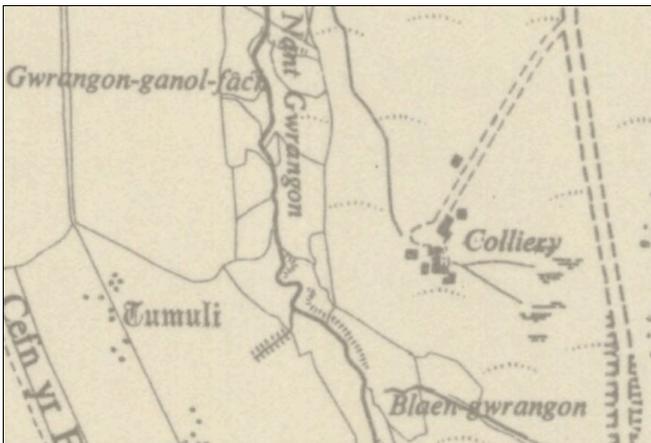


Figure 7; The Ordnance Survey
1:25000 map of 1954 (Sheet
SN90 - B) is the first to show the
No.4 shaft of Tower Colliery. The
survey was undertaken before
1950 when the mine was
relatively new and shows the
complex to include the pithead
building, engine house and lamp
room and office building. The
pithead baths building had not yet
been added.

8.6 The 1954 1:25000 scale Ordnance Survey map (not shown) is the first to show the Tower Colliery in place. The development of the Tower Colliery complex can to some extent be followed on historic Ordnance Survey mapping.

8.6.1 The 1954 1:25000 scale map shows the original layout of the complex, with the pithead building (ID number 5), headframe (ID number 4), engine house (ID number 3) and lamp room and office building (ID number 13) all present. The site visit undertaken by Trysor in August 2020, accompanied by one of the directors, enabled Trysor to document new information about the history and use of the lamp room and office building, which date to the foundation of the colliery in the early 1940s. This points to the lamp room and office building to be of particular historical value.

8.6.2 An L-shaped building at the southeastern corner of the complex appears to stand at the entrance of the Gorllwyn Drift (ID number 14). This drift seems to have been worked in the mid-20th century and to have ceased operation by the 1970s, though its exact dates are not documented. The working is recorded on the Coal Authority map of mining data hosted on the British Geological Survey website (<https://mapapps2.bgs.ac.uk/coalauthority/home.html?fbclid=IwAR20L68lysskomz7NLp1t7wgtDnhhEiIF4EMAkRk01GgHw3GvyLRrN9L9w4>).

8.6.3 After Nationalisation in 1947, facilities at collieries managed by the National Coal Board were generally improved and the addition of the large pithead baths building at Tower Colliery appears to reflect this investment in the welfare of those working in the industry. The pithead baths (ID number 12) first appear on the 1964 1:10000 scale Ordnance Survey map, which was revised in 1959-1963, but it was evidently built in the years following the 1947 nationalisation programme. The present magazine building (ID number 11) to the east of the colliery site also belongs to the post-1940s period of development at the mine.

9. Data Collation

- 9.1 A GGAT HER enquiry was made for a previous planning application, 19/1192/10 (RCT), in April 2019, HER Enquiry Reference Number 6025. This enquiry covered the current 500 metre radius assessment area. However according to the Historic Environment Record policy if the HER data is over 12 months old a new enquiry should be made. A new HER enquiry was made in August 2020 which returned 11 records, HER Enquiry Reference Number 6362. It included two records, PRNs 02149m and 04222m, which lay outside 500 metres so these were removed. The remaining records were checked against the 2019 enquiry and no updates had been made to the records so the enhanced dataset that Trysor had created in 2019 was used as a baseline. This included the three new records created by Trysor in 2019 for the bathhouse, the circular water tank and the magazine building taking the total number of records in the initial dataset to 12.
- 9.2 As part of the current project another two records were created, one for the former lamp room (ID number 13) and one for a former drift (ID number 14).
- 9.3 After the site visit, the historic map search, the evaluation and the rapid assessment of the readily available data the final dataset for the 500-metre radius assessment area contained 14 records for historic assets.

10. Assessment of Significance

10.1 The significance of each historic asset was determined and scored in accordance with the categories adopted by the Welsh Archaeological Trusts i.e. Nationally Important, Regionally Important, Locally Important, Minor and Features Needing Further Investigation (Unknown), see Figure 8. Full details of the results of this exercise are given in Appendix A and outlined in Table 1.

10.2 Within the 14 records there were no Scheduled Monuments and two Listed Buildings.

Table 1: Significance of assessed historic assets

Project ID Number	HER PRN	Historic Asset Name	Significance	Historic Asset Status
3	GGAT02382m	TOWER COLLIERY ENGINE HOUSE AND FAN HOUSE	Nationally Important	Listed Building
4	GGAT02383m	TOWER COLLIERY HEADFRAME	Nationally Important	Listed Building
5	GGAT02384m	TOWER COLLIERY PITHEAD	Nationally Important	Listed Building
11	GGAT08524m	TOWER COLLIERY, NO.4 SHAFT	Nationally Important	
12	GGAT08525m	TOWER COLLIERY, NO.4 SHAFT	Nationally Important	
13	GGAT08786m	TOWER COLLIERY, LAMPROOM	Nationally Important	
2	GGAT00018m	CEFN YR ESGYRN SOUTH CAIRNFIELD	Regionally Important	-
6	GGAT04266m	BLAENWRANGON FARM	Locally Important	-
14	GGAT08787m	TOWER COLLIERY	Locally Important	
1	GGAT00017m	CEFN YR ESGYRN NORTH CAIRNFIELD	Minor Importance	-
7	GGAT04267m	GWRANGON GANOL FARM	Minor Importance	-
8	GGAT04268m	RHONDDA EARTHWORK	Minor Importance	-
9	GGAT04269m	EARTHWORK FEATURES, FFYNDAFF	Minor Importance	-
10	GGAT08523m	TOWER COLLIERY, NO.4 SHAFT	Minor Importance	

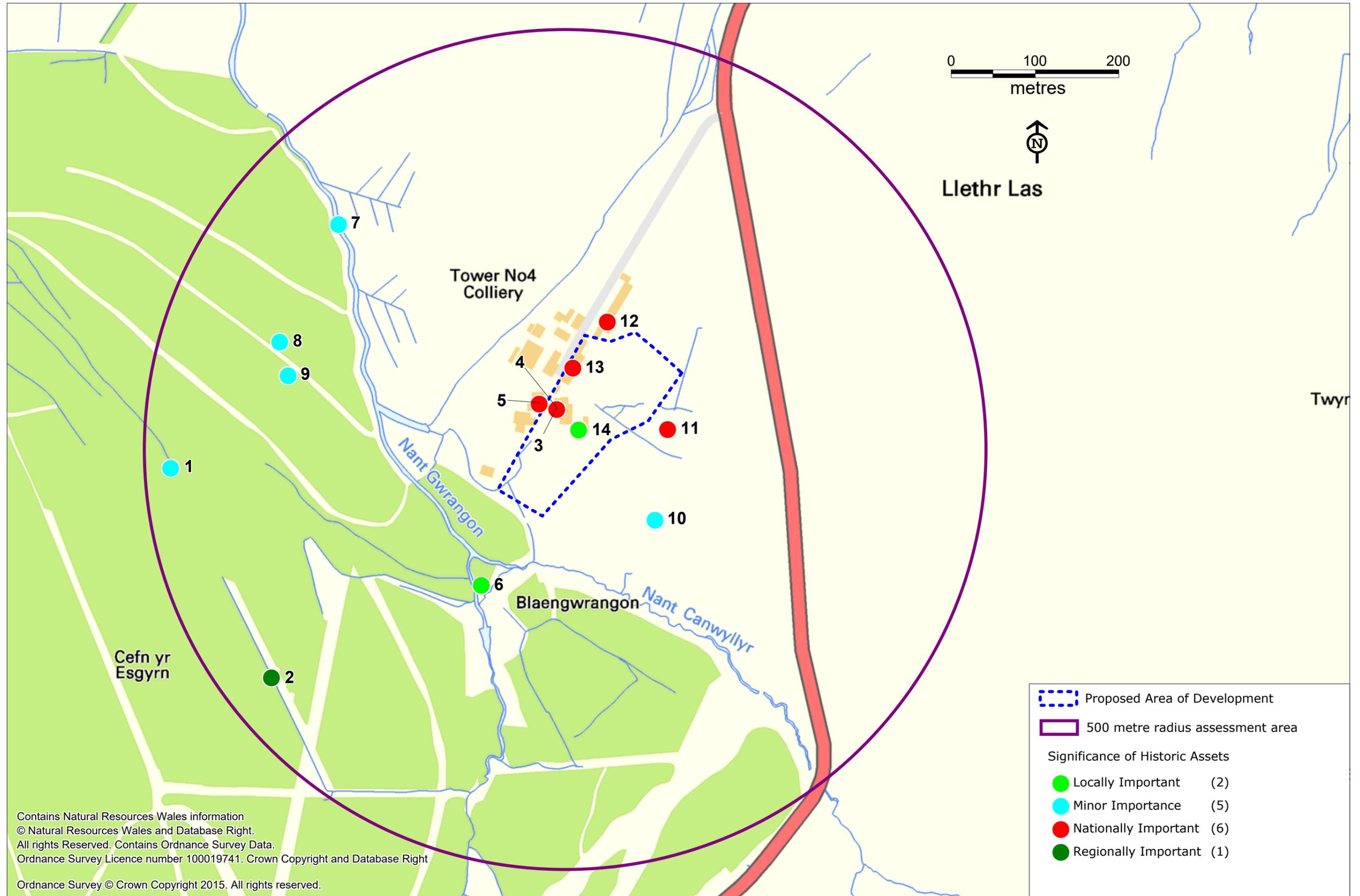


Figure 8: The 500 metre assessment area showing significance of historic assets, labelled with project ID number

11. Assessment of Impact

11.1 The Direct and Indirect impact on each historic asset was assessed taking into account both physical and non-physical impacts, and whether the impact was Positive, Negative or Neutral. Each impact was assessed within the scale Very Low, Low, Moderate, High and Very High, taking into account the significance of the historic asset and the nature of the impact. A full table is found in Appendix A but a summary is tabulated in Table 2 below and illustrated in Figures 9 and 10.

Table 2: Impact on assessed historic assets within the 500 metre radius assessment area

HER PRN	Historic Asset Name	Historic Asset Type	Level of Direct Impact	Level of Indirect Impact	Level of Impact on Setting	Level of Impact on Significance
13	TOWER COLLIERY	LAMP ROOM	Moderate Negative Moderate Positive	None	Low to Moderate Negative	None
14	TOWER COLLIERY	DRIFT	Low	Low	Moderate Negative	None
12	TOWER COLLIERY, NO.4 SHAFT	PITHEAD BATHS	None	Low Negative	Low to Moderate Negative	None
11	TOWER COLLIERY, NO.4 SHAFT	MAGAZINE	None	Low Negative	Low Negative	None
3	TOWER COLLIERY ENGINE HOUSE AND FAN HOUSE	ENGINE HOUSE	None	Unknown	Unknown	None
4	TOWER COLLIERY HEADFRAME	HEADFRAME	None	Unknown	Unknown	None
5	TOWER COLLIERY PITHEAD	BUILDING	None	Unknown	Unknown	None
1	CEFN YR ESGYRN NORTH CAIRNFIELD	CAIRNFIELD	None	None	None	None
2	CEFN YR ESGYRN SOUTH CAIRNFIELD	CAIRNFIELD	None	None	None	None
6	BLAENWRANGON FARM	FARMSTEAD	None	None	None	None
7	GWRANGON GANOL FARM	FARMSTEAD	None	None	None	None
8	RHONDDA EARTHWORK	ENCLOSURE	None	None	None	None
9	EARTHWORK FEATURES, FFYNDAFF	ENCLOSURE	None	None	None	None
10	TOWER COLLIERY, NO.4 SHAFT	WATER TANK	None	None	None	None

11.2 Table 2 shows that two recorded historic assets within the 500-metre radius assessment area would be exposed to a direct impact from the

development, the lamp room and office building (ID number 13) and the former drift (ID Number 14).

11.3 There are no Scheduled Monuments within the 500-metre assessment area.

11.4 There are two Listed Buildings within the 500-metre assessment area, the headframe (listed building 10902, ID Number 4 & 5) and engine house (listed building 10901, ID Number 3) at the Tower Colliery No 4 shaft. The proposed development would not have a direct, physical impact on these colliery buildings.

11.4.1 The CoasterKart ride, and the already approved Zip Lines attraction nearby, will result in more activity and noise around the disused structures of the colliery than at present but when Tower Colliery was a working mine the site would have been a busy, noisy place, albeit of a different character.

11.4.2 It is considered that there would be a Low to Moderate Negative impact on the setting of the colliery taking all aspects into consideration. However, the development will not reduce the significance of the listed or unlisted buildings within the colliery complex. In addition there will be an additional Low to Moderate Positive impact by allowing the public to safely access the colliery site and appreciate and understand the colliery site and its history.

11.5 There are no Registered Historic Parks and Gardens within the 500-metre assessment area.

11.6 There are no World Heritage sites within the 500-metre assessment area.

11.7 The development site does not lie within a registered Historic Landscape.

11.8 The development lies within the LANDMAP Historic Landscape Aspect Area: Tower Colliery Cynon HL183, see Figure 11, which is described as:

This aspect represents the extent of opencast industrial activity to the west of Hirwaun common (CynonHL903), north of the Rhondda Uplands (CynonHL687), and south of the Hirwaun transport corridor (CynonHL117). This radically altered landscape is the result of recent opencast exploitation of the mineral resource. The landscape, once open moorland, has been irrevocably altered by this industry and recently altered once more by the complete reclamation and drainage of this area converting coal faces and tips into open improved pasture. The industrial activity within this landscape seems to have obliterated all evidence of past human activity; however not without record.

During the Bronze Age this aspect was predominantly open moorland; within this landscape funerary activities have been suggested to have taken place with the construction of stone cairns. Partly excavated before destruction by opencast mining in 1992, none of the excavated cairns gave any evidence for burials, or any structure other than the piling of smaller stones around naturally occurring slabs or boulders. Aerial photography by the RAF has suggested a possible oval earthwork feature c.20m in width immediately south of the aforementioned cairns (Ref: RAF 58/1452 0091-009), which could well have been a cairn or barrow. During opencast working a bronze spearhead was recovered in the Hugh Patches Colliery site. The implement was in a badly corroded condition; however this find does indicate that, whether casually discarded as an isolated incident or lost by the occupants of a busy landscape, such as CynonHL176 and CynonHL580 a little farther north, some sort of occupation activity did exist here in the Bronze Age.

Roman influence within the area is represented by a Follis (coin) of Constantius I ("Chlorus") recovered from the extreme east of this aspect, another coin is said to have been found on the same coal site; however this is remains unsubstantiated.

At this point the current version online is truncated (NRW, accessed 02/06/2019) but a saved version from 2014 continues....

An inscribed stone was reported in 1827 to be on Hirwaun Common, close to the coin recovery site (RCAHMW 1976, 39). The Inscription illustrated in the original publication read;

"ERECOR/MAGLORI/CVNIIAC/FICIT" possibly relating to an Irish non-personal name "ERECOBII" in conjunction with the more common name "MAGLORI CVNIIAC," "FICIT" most likely indicates that 'ERECOBII MAGLORI CVNIIAC' made this inscription (FICIT). All are in Roman capitals except for cursive forms of G and L, implying an Early Christian inscription of late C5th (RCAHMW 1976, 39).

Two farms located within an enclosed landscape represent the post-medieval activity within the aspect. Either side of the A465 lay the remnants of a turf-stone walled landscape, which probably predates industrial activity in the area and may represent the pre-industrial boundary form. Blaengrwangon farm, a farmstead with un-mortared rubble walls in longhouse form, was derelict by 1875 although was occupied in 1824. Gwrangan Ganol Farm, now entirely removed, was in use in 1824, but derelict by 1875.

Industrial monuments such as the Tower and Hugh Patches Collieries are responsible for the impressive transformation of this landscape over

the previous several centuries. Tower Colliery was established by the Marquis of Bute in about 1870. The Engine House and Fan House date from the Powell Duffryn period of expansion, and contain the winding engine, compressor engines, switchgear, and fan. The headframe dates from the 1930s and is of the steel lattice girder type, which currently survives at only 2 other sites in South Wales. The Tower Colliery Pit Head still survives; the pit top is enclosed by an irregular single-storey brick building between the legs of the frame. The Tower road now replaces the former tramroad from the dismantle Bute Colliery to Hirwaun. South of the A465, and close to the second roundabout west of Hirwaun, are extensive coal-tippings that date from the nineteenth/twentieth centuries. Standing around 25m high and running for 300m the tips originate from nearby collieries to the south. The area is dominated by reclaimed land around the Tower colliery, which is the last remaining working deep-mine in Wales.

11.8.1 The overall evaluation of this aspect area is Moderate and the justification is given as:

The value of this aspect area has declined due to the expansion of opencast mine workings within the area. Its importance is chiefly due to the survival of substantial and historically important remains of 19th - 20th century activity at the former Tower No.4 Colliery); extensive modern opencast mining and forestry plantation has largely obliterated earlier patterns of settlement and consequently the archaeological record for this area prior to the 19th century is very limited.

11.8.2 The development of the CoasterKart ride as well as the Zip World attraction will introduce leisure into the aspect area and ultimately require a change in the LANDMAP description, but in view of the size of the aspect area the developments are of small scale and will not significantly alter the character of the area or reduce its Moderate overall evaluation.

11.9 There are two LANDMAP Cultural Landscape aspect areas within the 500-metre assessment area, see Figure 12.

- The Rhigos – CynonCL041
- Tower Colliery – CynonCL043

11.9.1 The main part of the development is in The Rhigos (CynonHL041) Cultural Landscape aspect area. It is described as:

The name "The Rhigos" is not so much one place as an idea. It exists physically, but its value is in what can be seen. The Aspect Area is based on a small informal viewpoint in a pull-off from the mountain road above the Rhondda Valleys. From here can be seen a microcosm of the cultural influences of the Study Area - man-made reservoirs,

roads, prehistoric remains, colliery workings, relict quarries and small industrial workings, forestry.

11.9.2 The overall evaluation of this aspect area is High and the justification is given as *"High because there is a palpable sense of history and of place, leading to an idea of small-scale exploitation and use over millennia"*

11.9.3 The start of the CoasterKart ride will be from within the former lamp room which lies within Tower Colliery (CynonCL043) Cultural Landscape aspect area. This is a small area is focused on the former colliery buildings. The area is described as:

Tower Colliery is a success story. Tyrone O'Sullivan's charismatic leadership in organising a miners' buyout of this, the last deep mine in Wales, resulted in one of the most widely reported success stories of the late 20th century. His exploits in establishing a co-operative not only caught the attention of the news media, but the story has also inspired other cultural activity - such as the opera by Professor Alun Hoddinot, the leading musical composer in Wales in the 20th century.

11.9.4 The overall evaluation of this aspect area is Outstanding and the justification is given as:

The Tower Colliery story has captured the attention of international media and creative artists, resulting in dissemination of it throughout the world.

11.9.5 The use of part of the Tower Colliery site is viewed as a potentially positive development. Since the description of the aspect area was written the colliery has closed and many buildings have been cleared away, with the remaining structures now falling into dereliction. Bringing new activity into the site may see a renewed interest and ultimately create opportunities to reuse and save the standing buildings here. The new element to be introduced by this proposal is a CoasterKart ride which will expand the Zip World attraction already approved for part of the site. It would see a further expansion of leisure at a site formerly described purely as an industrial setting, but in character would not be incongruous, and could also be easily removed if the activity ceases. The proposed amendments to the colliery lamp room building, if made sympathetically, could enhance an important part of the colliery complex and save it from dereliction.

11.10 There are no conservation areas within the 500-metre assessment area.

11.11 No evidence of non-industrial archaeology was noting during the field visit. A record was, however, made of the collapsed drift (ID number

14) close to the colliery engine house. This feature had not been previously recorded in the archaeological record. The rubble of an associated building was noted across the site of the drift entrance.

- 11.11.1 Overall the buried archaeological potential is assessed as Low, although flints may be present and the foundations of a building connected to the former drift (ID Number 14).
- 11.12 The exposed soils seen during the site visit are relatively thin, with no developed peats. Palaeo-environmental potential is considered to be very low.
- 11.13 There are no place-names of significance within the development area identified on the list of Historic Place Names which are not already accounted for by recorded historic assets (RCAHMW, 2018).

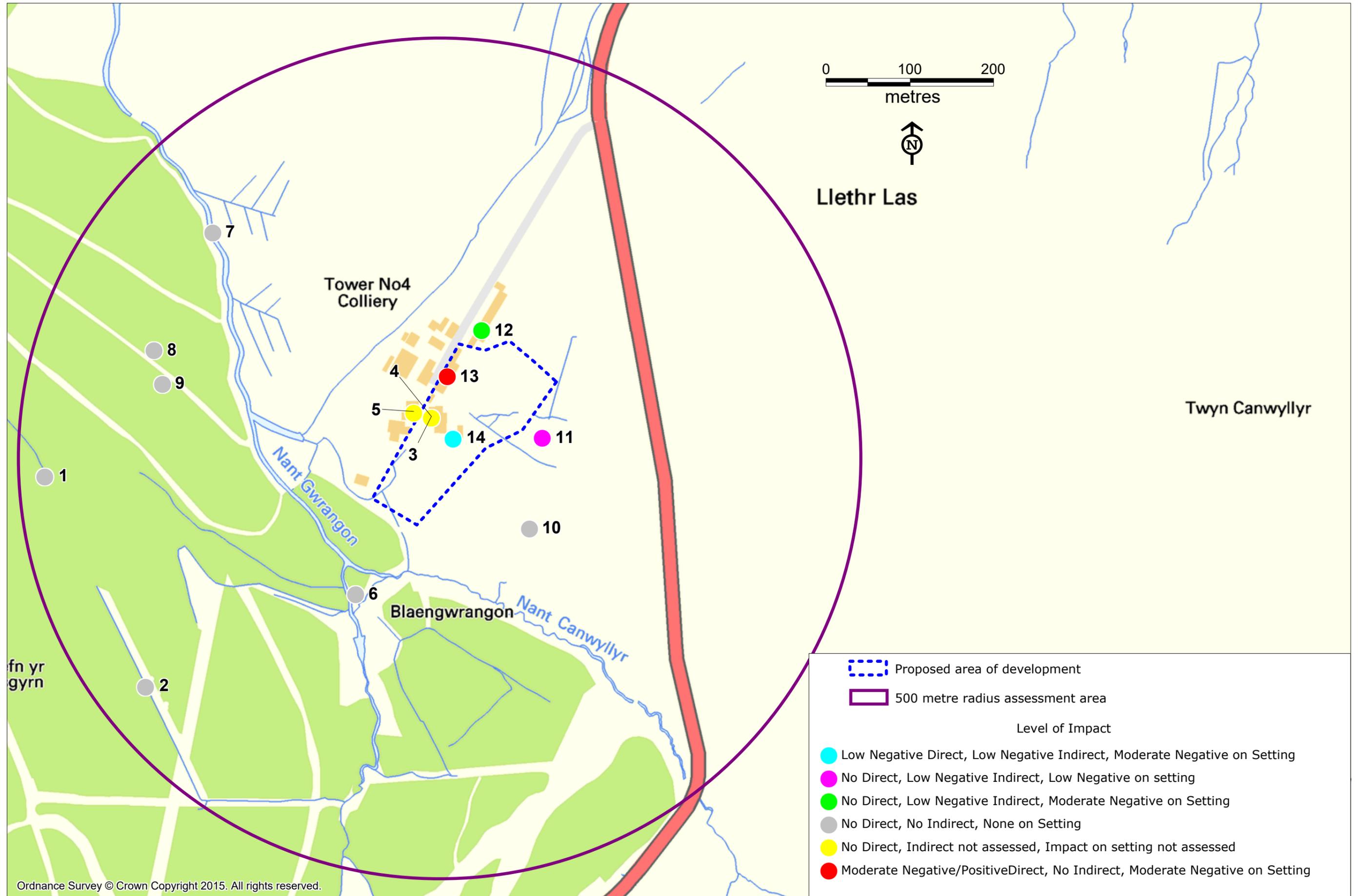


Figure 9: The 500 metre assessment area showing the impact on the recorded historic assets, labelled with project ID number

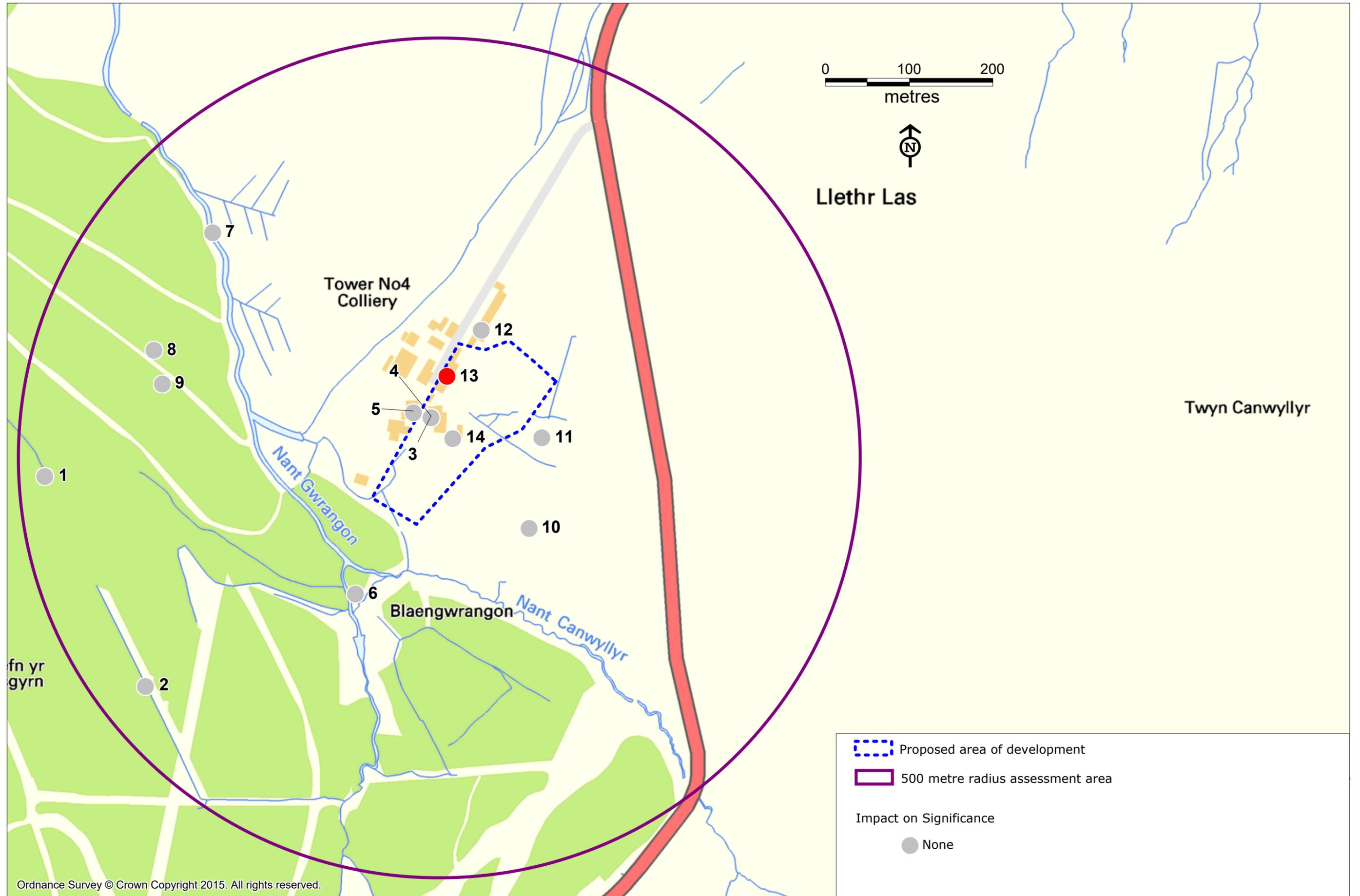
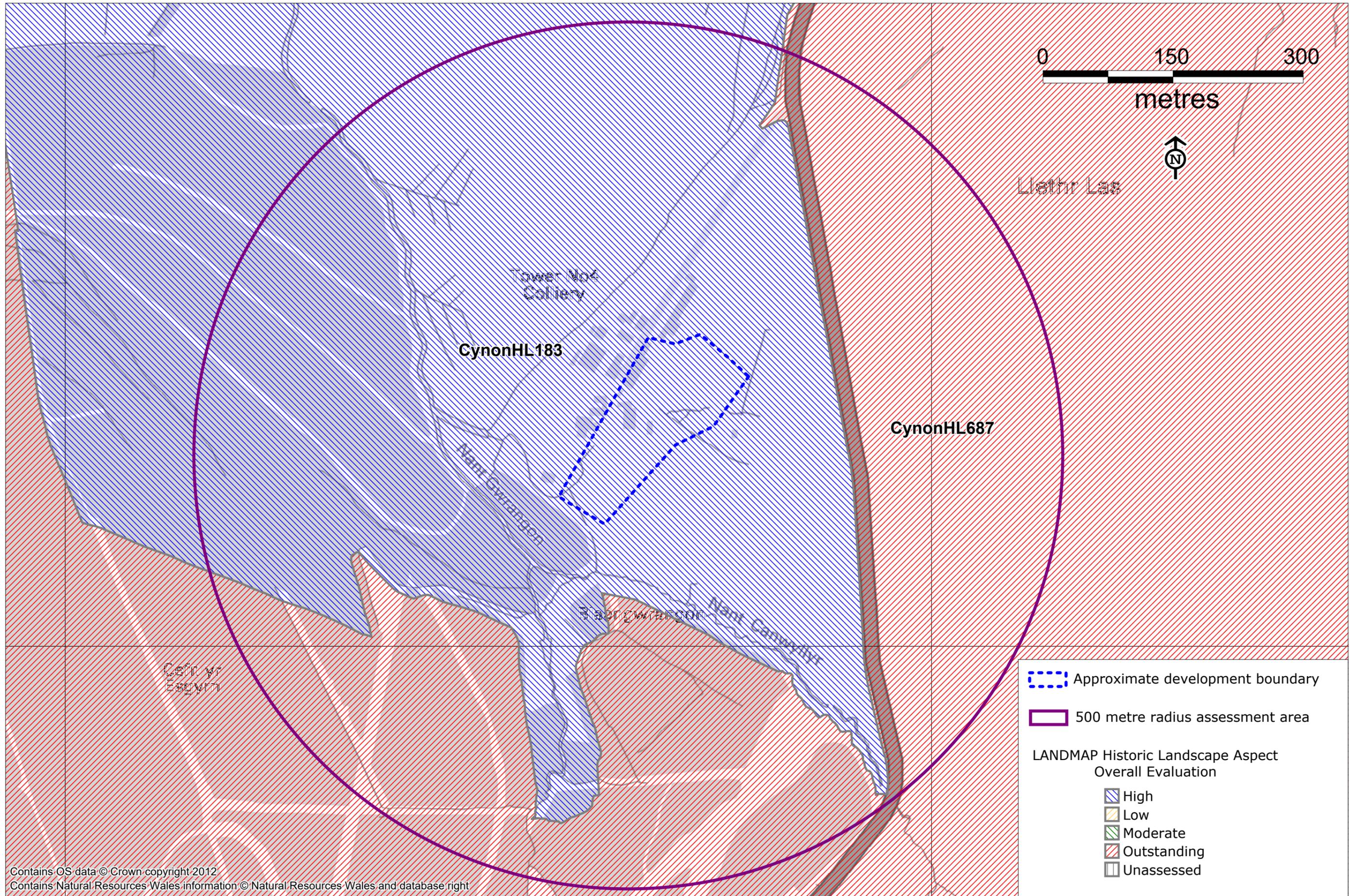
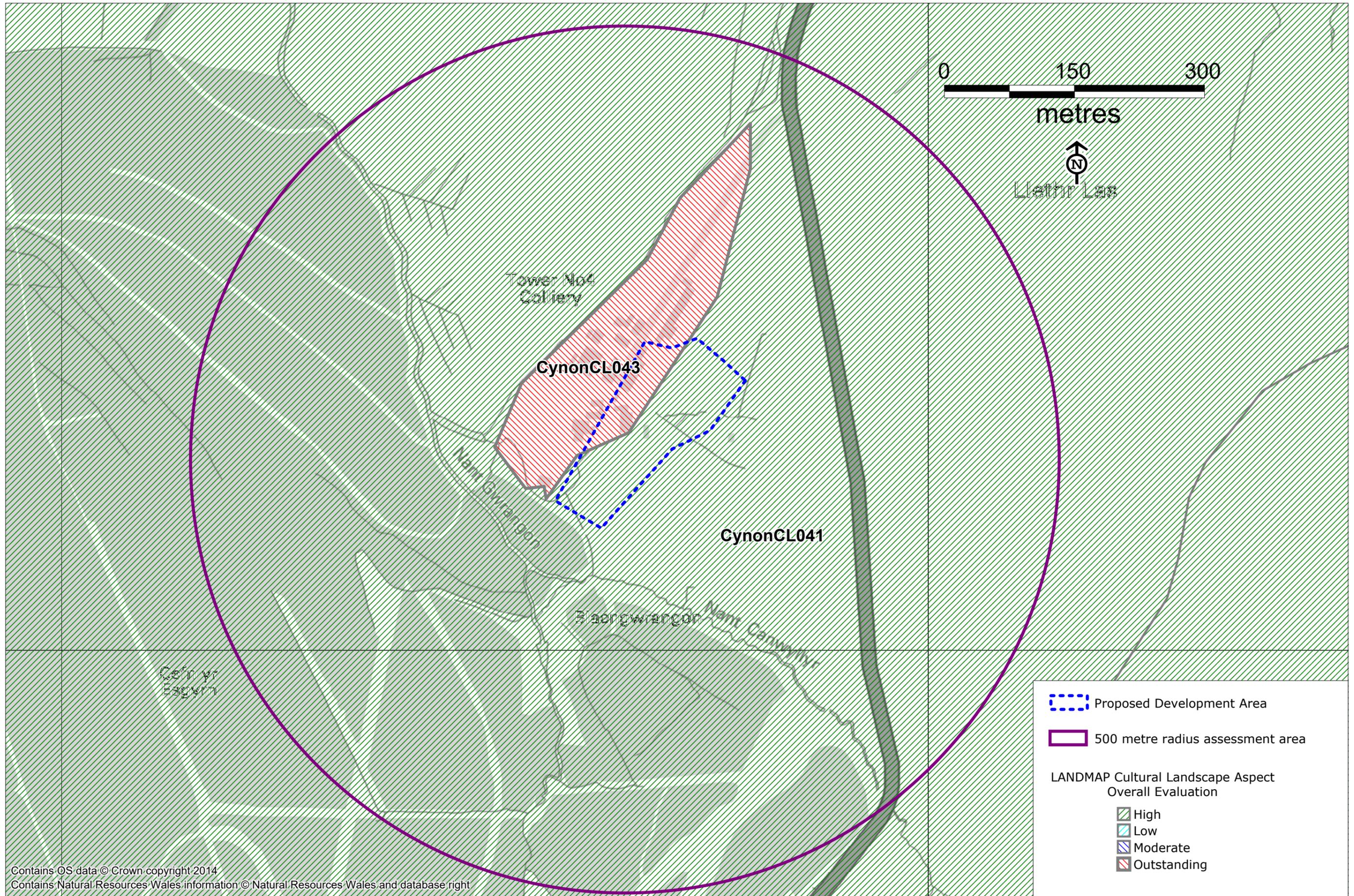


Figure 10: The 500 metre assessment area showing the impact on significance of the recorded historic assets, labelled with project ID number



Contains OS data © Crown copyright 2012
 Contains Natural Resources Wales information © Natural Resources Wales and database right

Figure 11: The 500 metre assessment area showing the LANDMAP Historic Landscape aspect, labelled with LANDMAP Aspect Area Numbers



Contains OS data © Crown copyright 2014
Contains Natural Resources Wales information © Natural Resources Wales and database right

Figure 12: The 500 metre assessment area showing the LANDMAP Cultural Landscape aspect, labelled with LANDMAP Aspect Area Number

12. Conclusion

- 12.1 The proposed CoasterKart ride would be located in an area largely outside the colliery complex, where the archaeological potential is thought to be low.
- 12.2 The proposed development of the CoasterKart ride, in association with the Zip World attraction, would have some positive impact on the Tower Colliery complex in terms of reusing a site which faces dereliction through disuse.
- 12.3 Two issues arise from the proposal;
- 12.3.1 The proposed line of the CoasterKart track would pass west of the collapsed entrance and building remains of a mid-20th century drift mine (ID number 14). The suitability of the ground for this type of development at that particular location should be investigated and the track may need to be diverted to avoid the site.
- 12.3.2 The start of the CoasterKart ride would be housed within the original lamp room and office building of the colliery. This building dates to the early 1940s and may be a unique survival of its kind, retaining many original features which elevate its historical importance. The reuse of the lamp room building would save it from dereliction and ruin, and the sympathetic conversion proposed is recommended to avoid losing the distinctive architectural features which make this one of the most important surviving buildings at Tower Colliery. In particular the external walls to the northwest and southeast contain detail that directly relates to the former use of the building. The skylight in the southwestern end of the building was essential to give daylight into the lamp room.
- 12.3.3 A Level 2 building record should be considered to be required to ensure the building is recorded in sufficient detail in advance of any conversion work.

13. Reporting

13.1 Copies of this report will be provided to the client, National Monument Record and the Regional Historic Environment Record.

14. References

14.1 Map sources

Ordnance Survey, 1814, 2" to 1 mile Original Surveyors drawing, Aberdare Sheet
Ordnance Survey, 1832, 1 inch to 1 mile First Edition Series,
Ordnance Survey, 1884, 1st edition 1:10560
Ordnance Survey, 1921, 2nd edition 1:10560
Ordnance Survey, 1954, 1:25000 map (Sheet SN90 – B)
Ordnance Survey, 1962, 1:2500
Ystradyfodwg Parish, Tithe Map, 1847 and apportionment

14.2 Web-based materials

British Museum, 2016, *Online Gallery: Ordnance Survey Drawings*

<http://www.bl.uk/onlinegallery/onlineex/ordsurvdraw/index.html>

accessed 24/08/2020

Coal Authority map of mining data

<https://mapapps2.bgs.ac.uk/coalauthority/home.html?fbclid=IwAR20L68lysskomz7NLp1t7wgtdnhhEilF4EMAKRk01GgHw3GvyLRrN9L9w4>

Accessed 28/08/2020

Cynefin, 2018, *Tithe Maps of Wales*

<http://cynefin.archiveswales.org.uk/en/tithe-maps/>

accessed on 24/08/2020

RCAHMW, 2018, List of Historic Placenames,

<https://historicplacenames.rcahmw.gov.uk/placenames/map>

accessed on 24/08/2020

14.3 Published sources

Cadw, 2010, *Conservation Principles for the Sustainable Management of the Historic Environment in Wales*

Cadw, 2017, *Setting of Historic Assets in Wales*

14.4 Unpublished Sources

Trysor, 2020, *Specification for an Historic Environment Desk-Based Assessment including Walkover Survey for a Zip World "Coaster Kart Ride" at Tower Colliery, Rhondda Cynon Taff*

14.5 Data Sources

Glamorgan Gwent Archaeological Trust, Historic Environment Record, data received 23/04/2019 – Enquiry Number 6025, 1.5 kilometre area centred on SN9197003590

Glamorgan Gwent Archaeological Trust, Historic Environment Record, data received 28/08/2020 – Enquiry Number 6362, 500 metre area centred on SN9265004220

Cadw, Listed Building all-Wales dataset, downloaded March 2017

Cadw, Parks and Gardens all-Wales dataset, downloaded August 2015

Cadw, Scheduled Ancient Monument all-Wales dataset, downloaded March 2017

Cadw, Registered Historic Landscapes dataset, supplied June 2014

15. Reliability & Limitations of Sources

15.1 In line with the requirements of the CIfA Standards & Guidance notes for Desk-based Assessments (Point 3.3.6), the following observations on the usefulness and reliability of the sources used have been made.

15.2 The cartographic sources used include a range of Ordnance Survey maps produced during the 19th and 20th centuries, all of which provided sufficiently clear and accurate representations of the evolving landscape of the assessment area.

15.2.1 The earliest map source was the 1814 Ordnance Surveyors Original Surveyors Drawings, of which clear digital copies are available through the British Museum website.

15.2.2 The parish tithe map and apportionment of 1847 are available for inspection at the National Library of Wales and on the Welsh Tithe Maps – Places of Wales website. The tithe map and apportionment are both clear and informative sources.

15.3 The main source of data for the assessment was the Glamorgan Gwent Archaeological Trust HER. The HER data supplied by the Glamorgan Gwent HER was unchanged from that provided for the desk-based assessment undertaken by Trysor in 2019 in association with the Zip World proposal and therefore no comment is passed on its quality in this report.

15.4 Data from the National Monuments Record was generally accurate but limited in the number of records.

15.5 Data from Cadw on Listed Buildings was informative.

15.6 Google Earth aerial images of the assessment area were also used online and provide good coverage for the whole assessment area.

- 15.7 Historic aerial photographs supplied by the Welsh Aerial Photography Unit dating to 1958, 1967, 1983 and 1985 were of use to the assessment.
- 15.8 LiDAR imagery available from Natural Resources Wales was of limited coverage for this area so was of little assistance in this upland area.
- 15.9 RCAHMWs' List of Historic Placenames in Wales website was consulted but held no information of relevance to this assessment. More detail could be gained from historic maps which were consulted in the course of the assessment. The locational information on the place-names website is poor, and the names often do not relate accurately to the location shown.

Jenny Hall & Paul Sambrook
Trysor,
September, 2020

Appendix A: Site Gazetteer

ID Number: 1

HER PRN: GGAT00017m **NMR NPRN:**

CEFN YR ESGYRN NORTH CAIRNFIELD

CAIRNFIELD

NGR: SN92180420 Group or Complex Centred

Period: Roman; Early Medieval **Broadclass:** Agriculture and Subsistence

Form: Excavated Feature **Condition:** Destroyed **Survival:** Destroyed

Site Status: -

	SAM number:	LB number:	grade:
Trysor Description:	A cluster of small stone cairns were shown here on 19th century Ordnance Survey maps, one of two adjacent cairnfields which consisted of some 69 cairns. This was the northern cairnfield and it was destroyed by opencast mining in the late 20th century. Limited excavation was undertaken in this cairnfield before destruction. This demonstrated that the cairns were probably clearance cairns, as no evidence of structure or funerary activity was found. The stones seem to have been randomly piled on top of natural boulders. Pollen evidence indicated that they may date to the late Roman or Early Medieval period and be associated with land clearance for agricultural purposes.		

Rarity: Rare

Distance from development: 400 metres to the west

Group Value: One of two neighbouring cairnfields

Evidential Value: Historic mapping; Excavation evidence

Historical Value: Described in archaeological sources

Aesthetic Value: None

Communal Value: None

Setting: This cairnfield was situated at about 340 metres above sea level, on a narrow ridge between two mountain stream valleys, overlooking lower ground to the north. A second cairnfield lay to the south. In post-medieval times the area was enclosed and farmed. During the late 20th century the land here was removed by opencast mining and, after the land was reinstated, a coniferous plantation was planted across the area.

Significance: Minor Importance

Any Direct Impact?: No
None

Any Indirect Impact?: No
None

Level of Impact on Setting: None

Comment on Impact: The feature no longer survives

ID Number: 2

HER PRN: GGAT00018m **NMR NPRN:**

CEFN YR ESGYRN SOUTH CAIRNFIELD

CAIRNFIELD

NGR: SN92300395 Group or Complex Centred
Period: Roman; Early Medieval **Broadclass:** Agriculture and Subsistence
Form: Documentary Evidence **Condition:** Very Poor **Survival:** Near Destroyed
Site Status: -

	SAM number:	LB number:	grade:
Trysor Description:	A cluster of small stone cairns were shown here on 19th century Ordnance Survey maps, one of two adjacent cairnfields which consisted of some 69 cairns. This was the southern cairnfield and it has been badly damaged by 20th century forestry activity. Limited excavation was undertaken in an adjacent cairnfield before it was destroyed by opencast mining. destruction. The excavation demonstrated that the cairns were probably clearance cairns, as no evidence of structure or funerary activity was found. The stones seem to have been randomly piled on top of natural boulders. Pollen evidence indicated that they may date to the late Roman or Early Medieval period and be associated with land clearance for agricultural purposes. Some of the cairns may survive in what is now an afforested area.		

Rarity: Rare

Distance from development: 345 metres to the southwest

Group Value: One of two neighbouring cairnfields

Evidential Value: Historic mapping; Excavation evidence

Historical Value: Described in archaeological sources

Aesthetic Value: None

Communal Value: None

Setting: This cairnfield was situated at about 350 metres above sea level, on a narrow ridge between two mountain stream valleys, overlooking lower ground to the north. A second cairnfield lay to the north. In post-medieval times the area was enclosed and farmed. During the late 20th century a coniferous plantation was planted across the area.

Significance: Regionally Important

Any Direct Impact?: No
None

Any Indirect Impact?: No
None

Level of Impact on Setting: None

Comment on Impact:

ID Number: 3

HER PRN: GGAT02382m **NMR NPRN:** 33721

TOWER COLLIERY ENGINE HOUSE AND FAN HOUSE
ENGINE HOUSE

NGR: SN92640427 **Feature Centred**
Period: Modern **Broadclass:** Industrial
Form: Structure **Condition:** Good **Survival:** Intact
Site Status: Listed Building

SAM number: **LB number:** 10901 **grade:** II

Trysor Description: The Engine House and Fan House at Tower Colliery are shown in place on the 1947 1:25000 Ordnance Survey map. They date initially to 1941 when the Tower No.4 shaft was sunk as a ventilation shaft for the larger Tower Colliery which was located further to the northeast at Hirwaun. It continued in use until 2008 and is remembered as the last deep mine in the South Wales coalfield. The Engine House and Fan House still stand in 2019 but are now disused.

Rarity: Rare

Distance from development: 15 metres to the west

Group Value: Part of the former Tower Colliery complex

Evidential Value: Standing building, disused

Historical Value: Described in historical sources; Cadw listing description

Aesthetic Value: A rare surviving example of a 1940s colliery building

Communal Value: None

Setting: This structure forms part of the Tower Colliery complex, for which it was erected in 1941. It can be seen from within the complex and from the immediate surrounding landscape although topography and trees and scrub limit views. Once a very busy industrial site, it is now a quiet neglected place.

Significance: Nationally Important

Any Direct Impact?: No
None

Any Indirect Impact?: Yes
Unknown
To be assessed in a separate report being prepared by Cadnant Planning.

Level of Impact on Setting: Unknown

Comment on Impact: To be assessed in a separate report being prepared by Cadnant Planning.

ID Number: 4

HER PRN: GGAT02383m **NMR NPRN:** 33536

TOWER COLLIERY HEADFRAME
HEADFRAME

NGR: SN92640427 **Feature Centred**
Period: Modern **Broadclass:** Industrial
Form: Structure **Condition:** Good **Survival:** Intact
Site Status: Listed Building

SAM number: **LB number:** 10902 **grade:** II

Trysor Description: The headframe at the former Tower Colliery is shown in place on the 1947 1:25000 Ordnance Survey map. It was erected at this site in 1941 when the Tower No.4 shaft was sunk as a ventilation shaft for the larger Tower Colliery which was located further to the northeast at Hirwaun. This particular headframe had originally stood at the Bwllfa Colliery, Aberdare during the 1930s and was reused at the Tower No.4 shaft. It continued in use until 2008 when the reborn Tower Colliery operated at the former No.4 and No.3 shafts of the earlier colliery. Tower is remembered as the last deep mine in the South Wales coalfield. The headframe still stands in 2019 but is now disused.

Rarity: Rare

Distance from development: 35 metres to the south at nearest point

Group Value: Part of the former Tower Colliery complex

Evidential Value: Standing structure, disused

Historical Value: Described in historical sources; Cadw listing description

Aesthetic Value: A rare surviving example of a 1940s colliery headframe

Communal Value: None

Setting: This structure forms part of the Tower Colliery complex, for which it was erected in 1941. It can be seen from within the complex, and from the immediate surrounding landscape although topography, and trees and scrub limit views. It gives meaning to the group of remaining buildings at colliery, making the group readily understandable. Once a very busy industrial site, it is now a quiet neglected place.

Significance: Nationally Important

Any Direct Impact?: No
None

Any Indirect Impact?: Yes
Unknown
To be assessed in a separate report being prepared by Cadnant Planning.

Level of Impact on Setting: Unknown

Comment on Impact: To be assessed in a separate report being prepared by Cadnant Planning.

ID Number: 5

HER PRN: GGAT02384m **NMR NPRN:** 33536

TOWER COLLIERY PITHEAD
BUILDING

NGR: SN9261904276 **Feature Centred**
Period: Modern **Broadclass:** Industrial
Form: Building **Condition:** Good **Survival:** Intact
Site Status: Listed Building

SAM number: **LB number:** 10902 **grade:** II

Trysor Description: The pithead building stands at the base of the headframe at the former Tower Colliery is shown in place on the 1947 1:25000 Ordnance Survey map. The building was erected at this site in 1941 when the Tower No.4 shaft was sunk as a ventilation shaft for the larger Tower Colliery which was located further to the northeast at Hirwaun. This particular headframe had originally stood at the Bwllfa Colliery, Aberdare during the 1930s and was reused at the Tower No.4 shaft. It continued in use until 2008 when the reborn Tower Colliery operated at the former No.4 and No.3 shafts of the earlier colliery. Tower is remembered as the last deep mine in the South Wales coalfield. The headframe and pithead building still stand in 2019 but is now disused.

Rarity: Rare
Distance from development: 35 metres to the south at nearest point
Group Value: Part of the former Tower Colliery complex

Evidential Value: Standing building, disused

Historical Value: Described in historical sources; Cadw listing description

Aesthetic Value: A rare surviving example of a 1940s colliery building

Communal Value: None

Setting: This structure forms part of the Tower Colliery complex, for which it was erected in 1941. It can be seen from within the complex and from the immediate surrounding landscape although topography and trees and scrub limit views. It gives meaning to the group of remaining buildings at colliery, making the group readily understandable. Once a very busy industrial site, it is now a quiet neglected place.

Significance: Nationally Important

Any Direct Impact?: No
None

Any Indirect Impact?: Yes
Unknown
To be assessed in a separate report being prepared by Cadnant Planning.

Level of Impact on Setting: Unknown

Comment on Impact: To be assessed in a separate report being prepared by Cadnant Planning

ID Number: 6

HER PRN: GGAT04266m **NMR NPRN:**

BLAENWRANGON FARM
FARMSTEAD

NGR: SN92550406 **Feature Centred**
Period: Post Medieval **Broadclass:** Agriculture and Subsistence
Form: Ruined Building **Condition:** Very Poor **Survival:** Near Destroyed
Site Status: -

	SAM number:	LB number:	grade:
Trysor Description:	A small upland farm is shown here on 19th century maps, although the map evidence shows that the settlement had been abandoned by the end of the 19th century. The site of the very ruinous farmstead is now hidden in a forestry plantation. Some of the buildings were still visible in 1992 when it was assessed by GGAT.		

Rarity: Common

Distance from development: 100 metres to the south-southwest

Group Value: None

Evidential Value: Historic mapping; Ruins

Historical Value: None

Aesthetic Value: None

Communal Value: None

Setting: This upland farmstead was located just above the confluence of two mountain streams. It would have had direct access to the mountain pastures to the south and was evidently dependent on pastoral farming. It was abandoned by the late 19th century and coniferous forestry plantations have been planted over its location.

Significance: Locally Important

Any Direct Impact?: No
None

Any Indirect Impact?: No
None

Level of Impact on Setting: None

Comment on Impact: The farmstead site lies in a sheltered valley in an afforested area and would not be intervisible with, or physically affected by, the proposed development

ID Number: 7

HER PRN: GGAT04267m **NMR NPRN:**

GWRANGON GANOL FARM
FARMSTEAD

NGR: SN92380449 **Feature Centred**
Period: Post Medieval **Broadclass:** Agriculture and Subsistence
Form: Documentary Evidence **Condition:** Destroyed **Survival:** Destroyed
Site Status: -

	SAM number:	LB number:	grade:
Trysor Description:	Gwrrangon Ganol Farm was abandoned by the late 19th century and the area removed by opencast mining in the late 20th century. No trace survives of the farm.		

Rarity: Common

Distance from development: 325 metres to the northwest

Group Value: None

Evidential Value: Historic mapping

Historical Value: None

Aesthetic Value: None

Communal Value: None

Setting: Former farmstead, now destroyed by opencast coal mining

Significance: Minor Importance

Any Direct Impact?: No
None

Any Indirect Impact?: No
None

Level of Impact on Setting: None

Comment on Impact: The farmstead no longer survives

ID Number: 8

HER PRN: GGAT04268m **NMR NPRN:**

RHONDDA EARTHWORK

ENCLOSURE

NGR: SN92310435 **Feature Centred**
Period: Unknown **Broadclass:** Unassigned
Form: Documentary Evidence **Condition:** Destroyed **Survival:** Destroyed
Site Status: -

SAM number: **LB number:** **grade:**
Trysor One of two possible earthworks seen here on early aerial photographs
Description: have been removed by opencast mining in the late 20th century.

Rarity: Unknown

Distance from development: 320 metres to the west-northwest

Group Value: Unknown

Evidential Value: Historic aerial photograph

Historical Value: None

Aesthetic Value: None

Communal Value: None

Setting: A possible enclosure seen on historic aerial photographs

Significance: Minor Importance

Any Direct Impact?: No
None

Any Indirect Impact?: No
None

Level of Impact on Setting: None

Comment on Impact: The feature no longer survives

ID Number: 9

HER PRN: GGAT04269m **NMR NPRN:**

EARTHWORK FEATURES, FFYNDAFF
ENCLOSURE

NGR: SN92320431 **Feature Centred**
Period: Unknown **Broadclass:** Unassigned
Form: Documentary Evidence **Condition:** Destroyed **Survival:** Destroyed
Site Status: -

	SAM number:	LB number:	grade:
Trysor Description:	One of two possible earthworks seen here on early aerial photographs have been removed by opencast mining in the late 20th century.		

Rarity: Unknown

Distance from development: 300 metres to the west-northwest

Group Value: Unknown

Evidential Value: Historic aerial photograph

Historical Value: None

Aesthetic Value: None

Communal Value: None

Setting: A possible enclosure seen on historic aerial photographs

Significance: Minor Importance

Any Direct Impact?: No
None

Any Indirect Impact?: No
None

Level of Impact on Setting: None

Comment on Impact: The feature no longer survives

ID Number: 10

HER PRN: GGAT08523m **NMR NPRN:**

TOWER COLLIERY, NO.4 SHAFT
WATER TANK

NGR: SN9275704138 **Feature Centred**
Period: Modern **Broadclass:** Water Supply and Drainage
Form: Structure **Condition:** Good **Survival:** Near Intact
Site Status:

Trysor	SAM number:	LB number:	grade:
Description:	This circular, concrete water tank is located in an area of unimproved land some 200 metres to the southeast of the pithead at Tower Colliery No.4 shaft, which opened in 1941. The water tank is likely to date to a later period as it is not shown on the 1953 1:10560 Ordnance Survey map (Glamorgan Sheet X.SE) which was surveyed in 1948. The water tank is shown on the 1962 Ordnance Survey 1:2500 map, however. Water was obtained via a pipe which runs almost 350 metres further to the southeast to the Nant Canwyllyr stream. The water was used for the colliery and was probably in use until 2008, when the colliery closed.		

Rarity: Common

Distance from development: 100 metres southeast

Group Value: Part of Tower Colliery No.4 complex

Evidential Value: Tank remains intact but is no longer in use

Historical Value: None

Aesthetic Value: None

Communal Value: None

Setting: This water tank stands on a grassy slope to the east of the colliery complex. It is fed via a cast pipe which brought water from a stream to the southeast. It is no longer in use.

Significance: Minor Importance

Any Direct Impact?: No
None

Any Indirect Impact?: Yes
None

Level of Impact on Setting: None

Comment on Impact: This minor feature would not be directly affected by the development, although the CoasterKart ride would divorce the tank from the colliery site. As the tank is of minor importance, however, this impact is not considered to be more than of Very Low level

ID Number: 11

HER PRN: GGAT08524m **NMR NPRN:**

TOWER COLLIERY, NO.4 SHAFT
MAGAZINE

NGR: SN9277204246 **Feature Centred**
Period: Modern **Broadclass:** Industrial
Form: Building **Condition:** Good **Survival:** Intact
Site Status:

	SAM number:	LB number:	grade:
Trysor Description:	This small redbrick building was the magazine for the Tower Colliery No.4 shaft, which opened in 1941. It stands some 140 metres to the southeast of the pithead baths building and is connected to the main colliery area by a purpose built trackway. The magazine is likely to date to a later period as it is not shown on the 1953 1:10560 Ordnance Survey map (Glamorgan Sheet X.SE) which was surveyed in 1948. The magazine is shown on the 1962 Ordnance Survey 1:2500 map, however. It was in use until 2008, when the colliery closed.		

Rarity: Rare
Distance from development: 25 metres to the southeast
Group Value: Part of Tower Colliery No.4 complex

Evidential Value: Standing building, disused

Historical Value: RCAHMW photographic survey

Aesthetic Value: None

Communal Value: None

Setting: This building was constructed to the eastern side of the buildings in the Tower Colliery No.4 shaft complex during the 1950s, deliberately set apart as it was an explosives store. It has been disused since at least 2008 but remains intact.

Significance: Nationally Important

Any Direct Impact?: No
None

Any Indirect Impact?: Yes
Low Negative
Increased footfall on surrounding site.

Level of Impact on Setting: Low Negative

Comment on Impact: The building would not be included in the development area but the CoasterKart ride will be installed between the magazine and the colliery complex and appears likely to block the trackway connecting the two locations. This would change the use of the surrounding landscape but as the building itself would not be damaged, the impact is not thought to be significant and would not reduce the significance of the building. There could be positive impacts with any environmental improvements in what is currently a derelict industrial site.

ID Number: 12

HER PRN: GGAT08525m **NMR NPRN:**

TOWER COLLIERY, NO.4 SHAFT

PITHEAD BATHS

NGR: SN9270004374 **Feature Centred**
Period: Modern **Broadclass:** Industrial
Form: Building **Condition:** Good **Survival:** Intact
Site Status:

Trysor Description: **SAM number:** **LB number:** **grade:**
This large redbrick building stands at the northern end of the former Tower Colliery No.4 Shaft and dates to 1941, when the new shaft was sunk as part of the much larger Tower Colliery complex. Tower No.4 Shaft later became the private Tower Colliery, which continued to work until 2008 and is celebrated as the last deep mine in the South Wales coalfield. The building included the pithead baths and colliery offices. Coal was not brought to the surface at the No.4 shaft, but it was used for colliers entering and leaving the mine, hence the pithead baths were located at this shaft. The building has been disused since 2008.

Rarity: Rare

Distance from development: 30 metres to the west

Group Value: Part of Tower Colliery No.4 complex

Evidential Value: Standing building, disused

Historical Value: RCAHMW photographic survey

Aesthetic Value: Good example of a mid-20th century colliery building

Communal Value: None

Setting: This building dates to the early 1940s and was built as an integral part of the development of the No.4 shaft in the Tower colliery complex. It stands at the northern end of the buildings at the heapstead but has been out of use since 2008.

Significance: Nationally Important

Any Direct Impact?: No
None

Any Indirect Impact?: Yes
Low Negative
Increased footfall on surrounding site. Possible reuse in long term

Level of Impact on Setting: Moderate Negative

Comment on Impact: The building would not be included in the development area but the CoasterKart would pass 25 metres to the east of the building and lead to a change the use of the surrounding landscape. There could be positive impacts with any environmental improvements in what is currently a derelict industrial site.

ID Number: 13

HER PRN: GGAT08786m **NMR NPRN:** 0

TOWER COLLIERY
LAMP ROOM

NGR: SN9265904319 **Feature Centred**
Period: Modern **Broadclass:** Industrial
Form: Building **Condition:** Fair **Survival:** Near Intact
Site Status:

SAM number: **LB number:** 0 **grade:**
Trysor
Description: The original lamproom and office block of the Tower No.4 Colliery still stands in relatively good condition in 2020. This was a purpose-built complex. The rectangular building is of brick construction and stands on a northeast to southwest alignment, being 32 metres long by c.10 metres wide. The roof overhangs the lateral walls either side by c. 2 metres, making the roof c. 14 metres wide. This overhang is an important part of the building's design.

At the beginning of each shift, the colliers would walk past the lamproom from the pithead baths towards the pithead. Every 13th man was responsible for collecting a safety lamp to take underground to help detect any build up of gas at the coalface. Those collecting the safety lamps would queue beneath the overhanging roof outside the lamproom on its northwest facing side. The lamps were passed through three small hatches in the wall of the lamproom to the men as they passed. These hatches were bricked up when the lamproom was moved to the pithead baths building later in the history of the colliery, but their outline can still be seen.

At the end of a shift, the same men would return from the pithead, passing the lamproom along its southeast-facing side, where three similar hatches were opened for them to pass their lamps back into the lamproom. The overhanging roof again gave them shelter as they queued to hand back their lamps.

It is believed that this building is unique and one of the most important surviving buildings in the Tower Colliery complex.

The building was divided into two parts by a brick-arched corridor which ran across the centre of the building. The corridor was originally open at either end, though the ends were bricked up and doors installed at some stage in its history. To the northeast of this corridor was the office block, where the mine manager and other senior staff were based. The pay office was also located here and the hatch where colliers collected their pay packets is still visible in the northeast gable end of the building. To the southwest of the corridor was the lamproom. A long skylight in the roof above the lamproom ensured that daylight illuminated the working area below, as visibility was important to allow those preparing the lamps to undertake their work.

A small extension was added to the southwest end of the building during the 1980s.

Rarity: Rare

Distance from development: Within the development area

*CoasterKart Development at Tower Colliery,
Rhondda Cynon Taff
Historic Environment Desk-Based Assessment*

Group Value:	Part of the original Tower No.4 Colliery complex
Evidential Value:	Standing building, disused
Historical Value:	High as a rare example of a 1940s purpose built lamproom
Aesthetic Value:	High as a 1940s colliery building
Communal Value:	None
Setting:	This building was purposely positioned between the pithead baths and pithead for ease of access for the miners walking to and from the pit. It also positioned the senior managers offices close to the pithead.
Significance:	Nationally Important
Any Direct Impact?:	Yes Moderate Negative, Moderate Positive It is proposed that the ride would start and end within this building, which would require openings to be made in the northeastern and southwestern gable walls. The layout of the ride has been amended to keep features important to the history and function of the building.
Any Indirect Impact?:	No None
Level of Impact on Setting:	Low to Moderate Negative
Comment on Impact:	The setting of the building would change from a derelict industrial building into part of a leisure attraction, namely to CoasterKart ride.

ID Number: 14

HER PRN: GGAT08787m **NMR NPRN:** 0

TOWER COLLIERY

DRIFT

NGR: SN9266604245 **Feature Centred**
Period: Modern **Broadclass:** Industrial
Form: Oral Evidence **Condition:** Very Poor **Survival:** Near Destroyed

Site Status:

SAM number: **LB number:** 0 **grade:**

Trysor Description: This drift was working during the 1960s and an L-shaped building is shown on Ordnance Survey maps of the period. The rubble of the building was visible on the ground in 2020, but the drift is said to have collapsed and is therefore now sealed at its entrance. The drift was reportedly known as the Gorllwyn Drift, referencing the Gorllwyn seam, which was worked from the drift.

Rarity: Common in this area

Distance from development: Within development area

Group Value: Part of the Tower Colliery complex in the mid-20th century

Evidential Value: Oral evidence and field observation

Historical Value: Part of the history of Tower Colliery

Aesthetic Value: None

Communal Value: None

Setting: This former drift is now excluded from the fenced compound surrounding the engine house at Tower Colliery in an area reverting to scrubland. It is not an obvious landscape feature and was very overgrown when seen in August 2020.

Significance: Locally Important

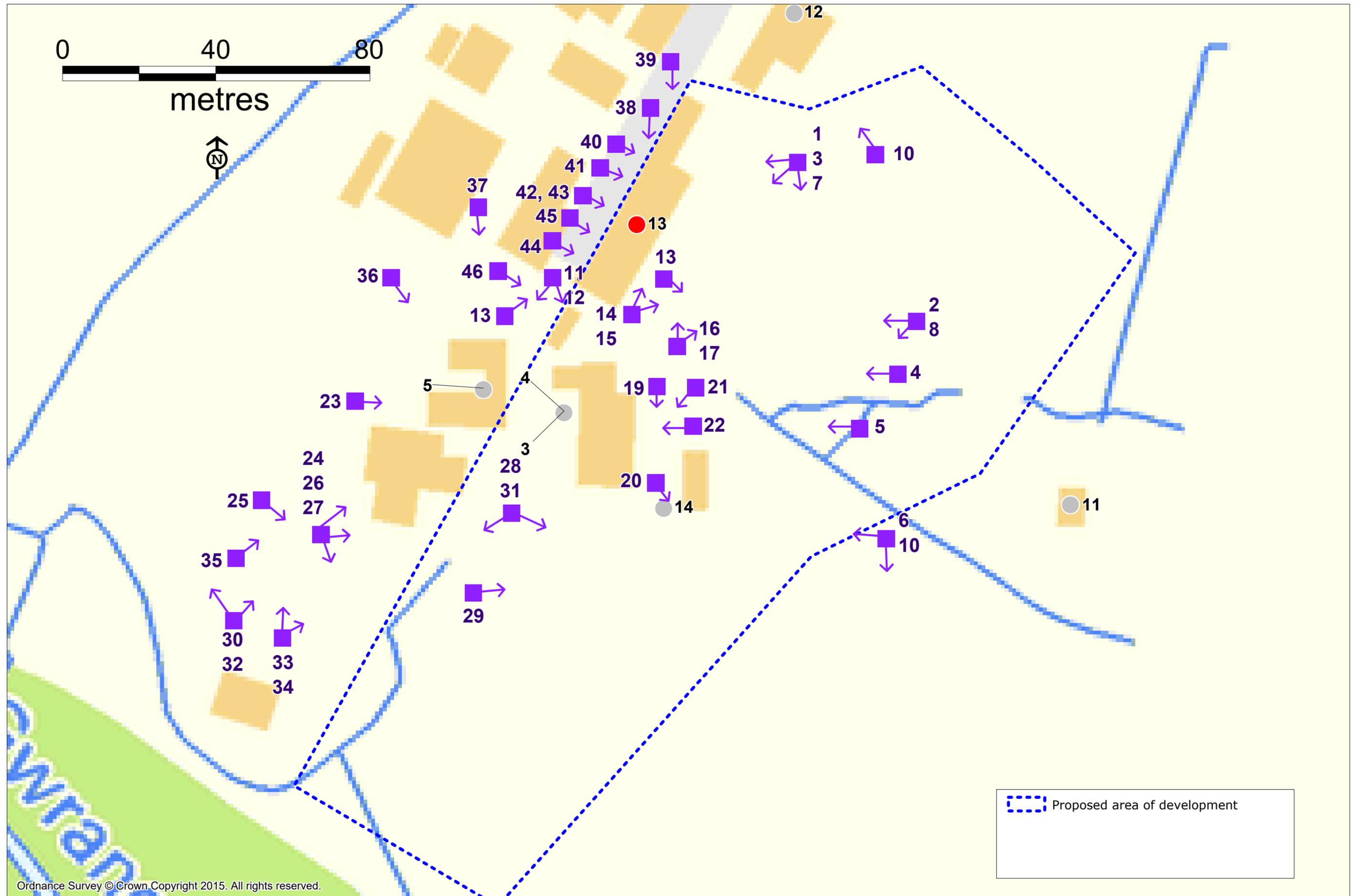
Any Direct Impact?: Yes
Low
The CoasterKart ride as planned would pass close to the site of the drift.

Any Indirect Impact?: Yes
Low
The character of the site would change from a marginal, derelict industrial site to become part of a tourist attraction.

Level of Impact on Setting: Low to Moderate Negative

Comment on Impact: The poor condition of the drift and its associated building and their relative anonymity in the landscape at present mean that the impacts on the remains and their setting would be relatively low. These are not features of high heritage value.

Appendix B: Photographs



Ordnance Survey © Crown Copyright 2015. All rights reserved.

Figure 13: Location of Photographs



Plate 1: A view of the Tower Colliery lamp room and office building, with the Tower Colliery No.4 shaft headframe to the left. Looking west.



Plate 2: A general view of the Tower Colliery complex, with the engine house and pithead headframe to the left and the lamp room and office building to the right of centre. Part of the CoasterKart ride would pass through the area in the foreground and cross the trackway bottom right which leads to the colliery Magazine building. Looking west.



Plate 3: A view of the Tower Colliery engine house. The site of the collapsed Gorllwyn Drift entrance lies behind the white building at the centre of the view. The CoasterKart ride would be located in the area to the left of the buildings. The trackway which leads to the colliery Magazine building is visible in the foreground. Looking southwest.



Plate 4: A general view of the Tower Colliery engine house and headframe. The CoasterKart ride would pass through the area in the foreground. Looking west.



Plate 5: A view of the Tower Colliery engine house and headframe. The CoasterKart ride would pass through the area in the foreground. Looking west.



Plate 6: A view of the Tower Colliery engine house and headframe. The CoasterKart ride would pass through the area in the foreground. Looking west.



Plate 7: A view of the area where much of the CoasterKart ride would be located, to the east and southeast of the colliery complex. Looking south.



Plate 8: A view of the area where much of the CoasterKart ride would be located, to the east and southeast of the colliery complex. Looking southwest.



Plate 9: A view of the area to the east and southeast of the colliery complex with water tank (ID number 10). Looking south.



Plate 10: A view of the rear of the Tower Colliery pithead baths building (ID Number 12). The CoasterKart ride would pass to the right of the electricity pylons shown here and would not impact on this view of the pithead baths. Looking northwest.



Plate 11: A view of headframe and pithead building at Tower Colliery (ID Numbers 4 and 5). The CoasterKart ride would not impact on key views of these structures. Looking south-southwest.



Plate 12: A view of the engine house at Tower Colliery (ID Number 3). The CoasterKart ride would pass across the grassy area visible between the building and the left edge of the photograph and would have some impact on the setting of this listed building. Looking south-southeast.



Plate 13: A view of the original lamp room and office building (ID Number 13) at Tower Colliery with the pithead baths beyond. The CoasterKart ride would begin and end within this building but the proposed changes would not affect the elevations of the lamp room shown here. Looking northeast.



Plate 14: A view of a levelled area between the lamp room building and the electricity substation to its southeastern side. The CoasterKart ride would pass through this area. Looking east.



Plate 15: A view of a thin dark peaty soil overlaying boulder clay exposed to the southeast of the lamp room building. Looking southeast.



Plate 16: A view of the southeast elevation of the lamp room building (ID Number 13). The three blocked up hatches visible in the wall were the hatches through which the miners returned their safety lamps at the end of a shift, protected by the broad overhang of the roof. The large windows, now shuttered, gave good light inside the building. Looking north.



Plate 17: A view along the southeast elevation of the lamp room showing the bricked-up hatches and the broad overhang of the steel-framed roof. Looking north-northeast.



Plate 18: A view of the electricity substation at Tower Colliery. The CoasterKart ride would pass through this site. Looking northeast.



Plate 19: A view of the area to the east of the Tower Colliery engine house. The building left of centre stands in front of the collapsed and infilled Gorllwyn Drift mine entrance. The CoasterKart ride would pass along the bank to the left of this view, through the site of the white building and across the drift entrance. Looking south.



Plate 20: A view of the area of the infilled Gorllwyn drift entrance (ID Number 14), where rubble from an earlier building is scattered around. Looking southeast.



Plate 21: A view of the rear of the Tower Colliery engine house (ID Number 3). The CoasterKart ride would not impede this key view. Looking southwest.



Plate 22: A view of the rear of the Tower Colliery engine house (ID Number 3). The CoasterKart ride would not impede this key view. Looking west.



Plate 23: A view of the rear of the Tower Colliery headframe (ID Number 5) with the engine house behind. The CoasterKart ride would be visible in the grassy area to the right of the engine house. Looking east.



Plate 24: A view of the rear of the Tower Colliery headframe with the engine house behind. The CoasterKart ride would not impede this view. Looking northeast.



Plate 25: A view of the open area to the south of the Tower Colliery headframe. . The CoasterKart ride would be visible in the grassy area to the left of centre. The southern end of the engine house is just visible to the left. Looking east-southeast.



Plate 26: A view of the open area to the south of the Tower Colliery headframe. . The CoasterKart ride would be visible in the grassy area to the left of centre. The southern end of the engine house is just visible to the left. Looking east.



Plate 27: A view of the open area to the south of the Tower Colliery headframe. The CoasterKart ride would be visible in the area of scrub and grass seen here. Looking southeast.



Plate 28: A view of the area of scrub and grass to the southeast of the engine house where most of the CoasterKart ride track would be located. Looking east-southeast.



Plate 29: A view of the area of scrub and grass to the southeast of the engine house where most of the CoasterKart ride track would be located. Looking east.



Plate 30: A view of the headframe and engine house Tower Colliery. The CoasterKart ride would not impede this view. Looking northeast.



Plate 31: A view of a modern steel-framed building at the southern end of the colliery complex. The ground here is all built up with deposits of waste dating from the early history of the colliery. The CoasterKart ride would not enter this area. Looking south-southwest.



Plate 32: A view of the open area to the southwest of the headframe and engine house at Tower Colliery. The ground here is all built up with deposits of waste dating from the early history of the colliery. Looking north-northwest.



Plate 33: A view of the open area to the southwest of the headframe and engine house at Tower Colliery. The ground here is all built up with deposits of waste dating from the early history of the colliery. Looking north.



Plate 34: A view of the open area to the southwest of the headframe and engine house at Tower Colliery. The ground here is all built up with deposits of waste dating from the early history of the colliery. Looking northeast.



Plate 35: A view of the open area to the southwest of the headframe and engine house at Tower Colliery. The CoasterKart ride would just be visible to the right of the buildings where the light coloured shed can be seen at present. Looking northeast.



Plate 36: A view of the headframe at Tower Colliery. The CoasterKart ride would be visible to either side of the structures from this direction. Looking east-southeast.



Plate 37: A view of the headframe at Tower Colliery. The CoasterKart ride would not impede this view. Looking south.



Plate 38: A view of the northeastern end of the original lamproom and office building at Tower Colliery. The small opening to the left in the gable wall was the window of the pay office, where miners collected their pay packets. This end of the building housed the offices of the mine manager and senior staff.



Plate 39: A view of the Tower Colliery lamp room and office building, with the No.4 shaft headframe in the distance. The proposed route of the CoasterKart ride would require an opening be made in the centre of the gable wall of the lamp room building. Looking south.



Plate 40: A view of the northern end of the northwest elevation of the lamp room. The large windows of the managers' offices are shuttered. Looking southeast.



Plate 41: A view of the brick archway in the northwest elevation of the lamp room. An open ended passage ran through the building here, dividing the lamp room to its right from the colliery offices to its right. It was blocked up during the later 20th century when the office space was extended. Looking southeast.



Plate 42: A view of the centre of the northwest elevation of the lamp room. The large windows of the lamp room are shuttered and the small hatches where safety lamps were passed out to miners walking to the pithead at the start of their shift can be seen as bricked-up features between the shuttered windows. Looking southeast.



Plate 43: A view of the southern end of the northwest elevation of the lamp room. The large windows of the lamp room are shuttered and the small hatches where safety lamps were passed out to miners walking to the pithead at the start of their shift can be seen as bricked-up features between the shuttered windows. Looking southeast.



Plate 44: A view of the southern end of the northwest elevation of the lamp room. The large windows of the lamp room are shuttered and the small hatches where safety lamps were passed out to miners walking to the pithead at the start of their shift can be seen as bricked-up features between the shuttered windows. Looking southeast.



Plate 45: A view of shuttered windows and a bricked-up hatch in the northwest elevation of the lamp room. Looking southeast.



Plate 46: A view of a later 20th century office added to the southwest end of the lamp room. This building dates to the later stages of the mines' history. Looking southeast.



Plate 47: A view inside the lamp room showing later 20th century partions added when the lamp room was moved to the pithead baths building, allowing for the whole of the original lamp room to be used as office space. Looking northeast.



Plate 48: A view of the large skylight taken from inside the lamp room. The glass roof increased the light entering the lamp room, where the important work of preparing safety lamps for miners to take on their underground shift was carried out. Looking southwest.



Plate 49: A view of the original lamp room showing a shuttered window and bricked-up hatch from the inside the building. Looking northwest.

Appendix C: Specification

**SPECIFICATION FOR AN HISTORIC ENVIRONMENT
DESK-BASED ASSESSMENT INCLUDING WALKOVER SURVEY FOR A
ZIP WORLD “COASTER KART RIDE” AT
TOWER COLLIERY,
RHONDDA CYNON TAFF**

1. Introduction

1.1 Cadnant Planning of 1 Connaught House, Riverside Business Park Benarth Road, Conwy, LL32 8UB have commissioned Trysor on behalf of their clients to undertake an historic environment desk-based assessment with a walkover survey for a proposed Zip World development at Tower Colliery, Rhondda Cynon Taff, centred on SN9265004220.

2. The proposed development

2.1 It is proposed that a Coasterkart ride is developed at the site of the former Tower Colliery, to the west of the A4061 between Hirwaun and Blaenrhondda, as part of the ZipWorld offer.

2.2 The Coasterkart ride is consists of individual karts on a gravity driven ride along raised tracks.

3. Planning context of the proposed development

3.1 A planning application has not been submitted to the local authority yet.

4. Objective of the Specification

4.1 The objective of this specification is to specify the method to be used for a desk-based assessment including a walk over survey in order to identify and assess impact, both direct and indirect on the historic environment and historic assets, from the proposed development and future management recommendations.

4.2 The Chartered Institute for Archaeologists’ Standard and Guidance for Historic Environment Desk-based Assessment (CIfA, 2017) and Cadw’s Setting of Historic Assets (Cadw, 2017) were used to write this Written Scheme of Investigation.

5. Nature of the Archaeological Resource.

5.1 The development site lies on the north side of Rhigos Mountain, approximately 1.25 kilometres south of the village of Rhigos, Rhondda Cynon Taff.

5.1.1 The geology in the area comprises sedimentary rocks of the Carboniferous Period dating to between 308 million and 315 million years ago. These include formations of the Middle and Upper Coal Measures including mudstones, siltstones and sandstones. Where recorded the bedrock is overlain by glacial till deposited by ice and meltwater during the last Ice Age.

5.1.2 The lower slopes on the north side of the Rhigos Mountain are covered with boulder clay and patches of peat.

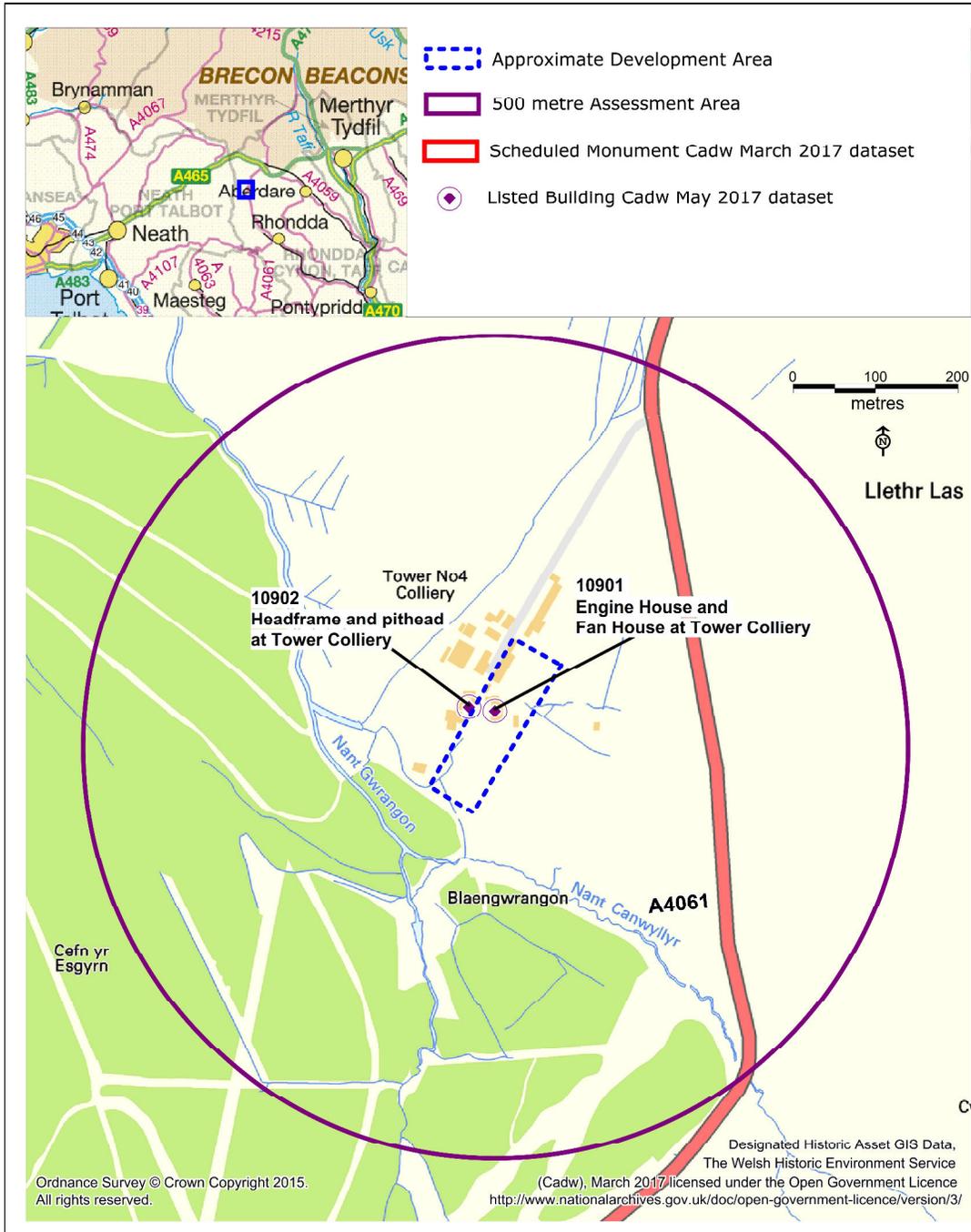


Figure 1: The approximate location of the components of the development and the proposed 500 metre radius assessment area.

6. Scope of Work

6.1 All currently recorded historic assets within a 500-metre radius circle centred on SN9265004220 will be included in the project database, see Figure 1. This will be based on work undertaken by Trysor in 2019 on a larger area.

6.1.1 The impact on the two Listed Buildings at Tower Colliery will not be considered in this report. They are part of a separate study by Cadnant Planning who are undertaking a Heritage Impact Assessment for the Engine House (Listed Building number 10901) and Headframe (Listed Building number 10902).

6.2 A walkover survey of the access routes, departure stages, landing platform and reception area will be undertaken to record any previously unrecorded historic assets, see Figure 1. The walkover survey will be informed by documentary searches, including map regression and consultation of aerial photographs and LiDAR where available.

6.3 The significance of the historic assets recorded in the project database from stages 6.1 and 6.2 will be assessed according to Cadw guidelines (Cadw, 2010 & Cadw 2017).

6.4 The potential impact on the historic assets recorded in the project database will be assessed.

6.5 Utilising the understanding of the historic environment gained during the project the potential for unknown buried features in the development area will be assessed.

7. Methodology

7.1 The following components of the historic environment will be considered, where relevant;

- a. Scheduled Monuments and their settings.
- b. Listed buildings and their settings (The impact on the two Listed Buildings at Tower Colliery will be determined in a separate report undertaken by Cadnant Planning)
- c. Registered Parks and Gardens and their essential settings.
- d. World Heritage Sites
- e. Conservation Areas
- f. Previously recorded non-designated historic assets and their settings,
- g. Buildings identified as of Local Importance where such buildings have been identified
- h. Newly identified historic assets, and their settings
- i. Historic Landscapes, and their characterisation
- j. Hedgerows and field patterns
- k. Ancient woodland
- l. Place-name evidence
- m. Cumulative impacts
- n. Any agri-environmental interests or requirements
- o. Potential for buried archaeological
- p. Potential for palaeoenvironmental evidence

7.2 The following data sources will be consulted as a minimum:

- Rhondda Cynon Taff Historic Environment Record
- Cadw

- RCAHMW
- Historic Ordnance Survey maps
- Other historic maps including parish tithe map
- Aerial photographs
- Documentary sources
- Published journals
- LiDAR if available

7.3 The site visit will be carried out in accordance with Chartered Institute for Archaeologists' *Standard and Guidance for an Historic Environment Desk-based Assessment* (CIfA, 2017). The site visit will consist of a walkover survey to identify and record any previously unrecorded features in the vicinity of the proposed development, including any field boundaries. It will also assess the condition of known historic assets.

7.3.1 A rapid record of all historic assets will be made, including a written description on pro-forma record sheets. A handheld GPS will be used to record locations and to record linear features and the perimeter of extensive historic assets.

7.3.2 Colour digital photographs will be taken, using a 16M pixel camera. A written record will be made on site of the photographs taken, including direction and locations. Appropriate photographic scales will be used.

7.4 All data will be entered into a project database, conforming to MIDAS heritage standards. Once the dataset of existing and new data has been created, the significance of all identified historic assets will be assessed, considering their evidential, historical, aesthetic and communal values (Cadw, 2010) and their setting (Cadw, 2017). This will include current condition and existing impacts.

7.5 An assessment will be made of the potential impact of the development on all historic assets, looking at direct physical, indirect physical, and visual impacts. This will include impact on the setting of the historic assets in line with Cadw guidance and the resulting impact on significance (Cadw, 2017) where appropriate.

7.6 Elevation profiles, in conjunction with photos from the site visit and aerial photos, will be used assess to intervisibility, views and impact on setting where appropriate.

8. Reporting

8.1 A written report will be submitted to the client to inform the current planning application. The report will include;

- a. bilingual event summary for submission to the HER
- b. contents list
- b. a non-technical summary
- c. an introduction
- d. aims and objectives of the assessment
- e. methodology
- f. a site location plan
- g. details of the proposed development
- g. a bibliography
- h. a gazetteer of all historic assets included in the assessment giving significance and impact, with descriptions.
- j. an assessment of the value and significance of each historic asset taking into account their condition and existing impacts
- k. an assessment of the impact of the proposed development on the historic assets of the study area – impacts will be assessed whether negative or positive, direct or indirect and will include the impact on the setting of nationally important historic assets.
- l. statement of the local and regional context of the historic assets identified as have being impacted on by the development.
- m. statement on reliability of resources used during assessment.
- n potential for buried archaeological features within the development plot
- o mitigation statements to minimise or mitigate negative impacts, or to enhance significance.

8.2 The report will be guided by the requirements of Annexe 2 of the Chartered Institute for Archaeologists' *Standard and Guidance for an Historic Environment Desk-based Assessment (CIfA, 2017)*. Copies of the report will be provided to the client and the Local Planning Authority. A copy will be sent to the Regional Historic Environment Record.

9. Health & Safety

9.1 Trysor will undertake a risk assessment in advance of any field visit in accordance with their health and safety policy.

10. Dissemination

10.1 A summary of the work undertaken and its findings will be submitted to *Archaeology in Wales*, if appropriate. A pdf copy of the report will be submitted to the regional Historic Environment Record (HER) in line with current guidance, as well as with the archive to the National Monuments Record (NMR).

11. Archive

11.1 The archive will be deposited with the National Monuments Record, including a copy of the final report in accordance with the CIfA's *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives (CIfA, 2014b)* and *The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales 2017 (NPAAW, 2017)*. This archive will include all

written, drawn and photographic records relating directly to the investigations undertaken. Digital archives will follow the standard required by the RCAHMW (RCAHMW, 2015).

12. Public Benefit and Outreach

12.1 A summary of the work undertaken and its findings will be submitted to *Archaeology in Wales*, the annual review of archaeological work in Wales collated the Council for British Archaeology Wales (CBA Wales), if appropriate.

12.2 The results of the work will be deposited in the NMR making it publicly accessible. The report will also be deposited with the regional Historic Environment Record (HER) making it publicly accessible. This will be in line with recent guidance from The Welsh Archaeological Trusts (The Welsh Archaeological Trusts, 2018).

12.3 The purpose of the work and the history of the site will be discussed with the client and others in order to widen understanding of why the work is important and broaden appreciation for the historic environment.

13. Resources to be used

13.1 Jenny Hall, BSC, MCIfA and Paul Sambrook, BA, PGCE, MCIfA of Trysor will undertake the desk-based assessment and field walking. During the field visit and field walking they will be equipped with standard field equipment, including digital cameras, GPS and first aid kit. Trysor have access to the computer hardware and software required to deliver the completed final report and archive to a professional standard.

14. Qualification of personnel

14.1 Trysor is a Registered Organisation with the Chartered Institute for Archaeologists and both partners are Members of the Chartered Institute for Archaeologists, www.archaeologists.net

14.2 Jenny Hall (BSc Joint Hons., Geology and Archaeology, MCIfA) had 12 years excavation experience, which included undertaking watching briefs prior to becoming the Sites and Monuments Record Manager for a Welsh Archaeological Trust for 10 years. She has been a partner in Trysor since 2004 undertaking a variety of work that includes upland field survey, desk-based appraisals and assessments, watching briefs and evaluations as well heritage interpretation and community-based projects.

14.3 Paul Sambrook (BA Joint Hons., Archaeology and Welsh, MCIfA, PGCE) has extensive experience as a fieldworker in Wales. He was involved with Cadw's pan-Wales Deserted Rural Settlements Project for 7 years. He also undertook Tir Gofal field survey work and watching briefs. He has been a partner in Trysor since 2004 undertaking a variety of work including upland field survey, desk-based appraisals/assessments, watching briefs and evaluations as well as community-based, non-intrusive projects and community heritage interpretation.

15. Insurance & Professional indemnity

15.1 Trysor has Public Liability and Professional Indemnity Insurance.

16. Project identification

16.1 The project has been designated Trysor Project No. 2020/738. An Event Record PRN will be requested.

17. Sources

Cadw, 2010, *Conservation Principles*

Cadw, 2017, *Setting of Historic Assets in Wales*

Chartered Institute for Archaeologists (CIfA), updated January 2017, *Standard and Guidance for an Historic Environment Desk-based Assessment.*

RCAHMW, 2015, *RCAHMW Guidelines for Digital Archives*

The Welsh Archaeological Trusts, 2018, *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)*

<http://www.dyfedarchaeology.org.uk/heritagemanagement/submissionofdatatohers.pdf>

Jenny Hall & Paul Sambrook

Trysor,

August 2020