
Southeast Wales Industrial Ironworks Landscapes

Year 2: transport networks

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A report for Cadw
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Robertstown Tramroad Bridge, view to northwest (LB 10894:II, SAM GM347)

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1. Introduction and Acknowledgements

1.1 Introduction

The landscapes of the ironmaking industry of South East Wales represent an increasingly rare and important historic landscape and archaeological resource, which remains under considerable threat from a variety of developments from reclamation and landscape renewal to residential and industrial development. For this reason the current project has been instigated, to assess the current state of survival/preservation of the ironworks landscapes of the northern coalfield rim, and inform conservation, protection and management requirements through providing recommendations for the proactive and long-term management the ironwork areas.

In essence the work will help to ensure that any necessary change to industrial ironworks landscape is accommodated without sacrificing the essential integrity and coherence of the historic environment.

The latter half of the twentieth century saw the wholesale clearance, reclamation and development of many industrial sites in the South East Wales region. Ironworks, in particular have been vulnerable to landscape reclamation and renewal schemes, to such an extent that the vast majority of ironworks have at least in part been affected, and the process is ongoing. Therefore, it is both opportune and welcome that this project has been instigated, commissioned and funded by Cadw as part of an on-going initiative. It is hoped that this report will provide the catalyst for the urgent consideration of the future conservation of ironworks and their associated landscapes.

The current report sets out the results of the project, with a section defining the aims, and methodology. It also summarises the known and potential threats and provides general recommendations and establishes management/conservation priorities.

The main body of the report, Section 8, identifies and describes the 25 identified transport networks (43 sub-sections). These routes are mapped in the current landscape using a MapInfo Geographical Information System, and figures have been produced to illustrate a selection of the best surviving areas/features.

1.2 Acknowledgements

The project was commissioned by Cadw and undertaken by the Glamorgan-Gwent Archaeological Trust in their remit as the regional archaeological body responsible for the understanding and preservation of much of the archaeological resource in southeast Wales.

The Trust would like to thank the staff of the Glamorgan Record Offices, Cardiff and Swansea, Gwent Record Office and the National Library of Wales for their assistance, The National Assembly for Wales for their helpful assistance and the staff at the National Monuments Record (NMR), RCAHMW, Aberystwyth. The Trust would also like to thank Judith Alfrey of Cadw for providing comments and advice during the project.

The report has been prepared by Richard Roberts and Charina Jones, with the assistance of other staff of the Glamorgan-Gwent Archaeological Trust, notably Gail Higginbottom, Caroline Thomas, and Neil Maylan. The fieldwork was undertaken by Richard Roberts and Charina Jones. Digital mapping has been prepared by Charina Jones.

2. The Study Area

The project entailed work on the ironworks and related features within the northern coal rim area. These are located within the respective Unitary Authorities: Blaenau-Gwent, Caerphilly, Merthyr Tydfil, Monmouthshire, Neath Port-Talbot, Rhondda Cynon Taff, and Torfaen.

The study was initially limited to the northern coalfield rim, specifically those sites described in L Ince 1993 *The South Wales Iron Industry 1750-1885*, Merton Press. The northern coalfield rim of South East Wales supplied over 30 major blast furnace iron-producing sites.

Whilst Blaenavon and Merthyr Tydfil have undergone intensive study much of the rest of the northern coalfield rim remains are little recorded. The RCAHMW through their upland survey and aerial mapping have studied this area as a priority and a lot of data is and will become available from them. There are many other local historians/archaeologists who have published on different parts of this area and the first edition OS map contains an extraordinary picture of this landscape at the end of its productive life.

Between the 1790s and 1840s the Heads of the Valleys in particular was the largest producer of iron in Britain, if not the world. A major system of tramroads and railroads was developed to furnish the ironworks with raw materials; this system, with the possible exception of the North Eastern Coalfield of England, was 'by far the most extensive in Britain and therefore the World' (van Laun 2001). The transport networks of South Wales were notable for a number of important technological advancements, such as the first use of the all-iron edge rail, and here the tramroad was developed to its highest form, with implications for the later development of public railways.

Three major components of the ironworks related transport system have been identified:

- the supply lines which extended from the limestone quarries of the northern outcrop to the furnaces (c.100km overall length)
- the supply lines which conveyed coal from the coal and iron ore mines, which generally lay closer to the ironworks than the quarries (comprising a vast network of underground track)
- the exit lines from the ironworks to the ports and canals and nearby markets (originally c. 190km)

The best surviving of these routes were the feeder routes from the limestone quarries, these were considered by van Laun to be the most productive for further archaeological research; the routes to the coal and iron ore mines being largely underground or inaccessible, having been tipped over by continued workings or removed by land reclamation, whilst the exit routes have by and large been obscured by later railways, and road development with the notable exception of the Merthyr Tramroad, which has been excluded from the current study. Any meaningful examination of the routes to the various coal and iron ore extraction sites would require a substantial amount of desk-top study and original research, beyond the remit of the current project. It was therefore considered that the most productive approach would to limit the current study, almost exclusively to investigating the lines between the limestone quarries, the best surviving element of the network.

3. Purpose of Report – aims and applications

A number of Industrial Ironworking landscapes are well known and well protected. Notably the World Heritage Designation at Blaenavon, but protection is also afforded through Historic Landscape registration at for example Merthyr Tydfil. In other areas only those elements that are Scheduled or Listed are protected and consequently other elements of the landscape relating to the monument are more exposed to removal or impairment through re-development. Industrial landscape reclamation and opencast is considered to be the main threat to these endangered and rapidly disappearing landscapes and their component elements.

Monuments that are isolated from their context or that are only partially protected (i.e. where for example the Engine House is Listed, but the coke ovens, casting structure remains are not) are less easily interpreted and understood. More particularly monuments should be understood within their wider context. Ironworks, which have distinctive different monument structures and supply/distribution infrastructure and sourcing points, which often survive in the adjacent landscape, are particularly suitable for such appreciation.

However, whilst additional designation may extend protection this can only be applied where it is merited against defined criteria. Proactive management is needed not only of individual monuments but the surviving elements in the landscape that relate to their use. This can be achieved through local conservation initiatives; the industrial monuments tied in with ecological protection in amenity development.

It was proposed that the study be initially limited to the northern coalfield rim, specifically those sites described in L Ince 1993 *The South Wales Iron Industry 1750-1885*, Merton Press. The northern coalfield rim supplied 30 major blast furnace iron-producing sites. A simple but valuable exercise comprised comparing evidence from depictions of the core ironwork areas on the 1st edition OS map with modern maps and aerial photographic material, with the intention of identifying what survives and is visible, what survives and is buried, and what has been destroyed. The boundaries of the initial study were taken as the limits of the core ironworks areas and did not extend to wider transport links, waterworks and associated extraction sites, which it is intended to cover in the future. Validation was through site visits, consultation with local land reclamation departments and talking to local experts. Each ironworks core area was categorised as archaeologically sensitive areas, areas of archaeological potential or sterile areas. As a separate document a review of the scheduling of these sites could then be undertaken.

Whilst there is this wealth of information Cadw are endeavouring to improve the protection and management of what is perhaps the most important aspect of Wales' history. Cadw would like to see this project attempt at building a consensus and partnership over how to tackle the protection and management issues and assimilate the information gathered into these processes. This may in effect act as a scoping for a larger project to be taken forward in future years.

The study should ultimately provide the information necessary to:

- assess the current state of survival/preservation, conservation and the recording requirements (of the ironworks landscapes of the northern coal rim)
- inform future protection and management issues, including future scheduling proposals (regarding the ironworks landscapes of the northern coal rim)

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- inform the relevant Unitary Authority on industrial ironworks landscape issues in the planning process, including forward planning
- assist in assessing the wider impact of future proposed development on industrial ironworks landscape.
- assist in the evaluation of the aesthetic or amenity value of the industrial ironworks landscape
- assist in measuring the effect of individual development proposals on the overall historic integrity and coherence of industrial ironworks landscapes, with particular reference to the issues of outright removal, severance, fragmentation or dislocation of the historic elements.
- assess the cumulative effects of secondary or piecemeal changes over time.

In essence the work will help to ensure that any necessary change to industrial ironworks landscape is accommodated without sacrificing the essential integrity and coherence of the historic environment.

The report has been presented in such a way that upgrading of information can be considered through the medium of a GIS system, allowing data storage, manipulation, analysis, interrogation, presentation and future update of information. The Information Technology component of this project will therefore be high and will see the creation of a dynamic and multi-layered digital model for the study area.

The project was designed to identify industrial ironworks landscapes, individual monuments within them that would merit further protection, and liaise with conservation and other planning officers in respect of long-term protection and enhancement. In the first year it was intended to identify all potential candidates and examine in detail a representative sample of sites.

4. Methodology

4.1 General

In year two of the project it is proposed to extend the study outwards from the core of manufacturing and processing sites to the routes of supply, and in particular the limestone railways and other early transport infrastructure.

The history of these is well studied but this has been largely document-led and there has been little in the way of fieldwork to establish what survives on the ground. There has been comprehensive coverage of several of the ironwork related transport systems in the Southeast Wales area: the Merthyr Tramroad (Archaeological Investigations), the tramroad network around Blaenavon (Torfaen CBC and RCAHMW), and the Brecon Forest Tramroad (Dr. Stephen Hughes, RCAHMW), while the Hereian project and Richard Phipps at Groundwork Merthyr RCT are looking to develop a network of industrial trails, many of which will use tramroads as part of the routes. Of particular relevance to this project is John van Laun's *Early Limestone Railways* (2001), which provides a detailed account of the best-preserved element of the railway transport system, the lines which carried the fluxing limestone from quarry to furnace.

It was decided that this assessment project would be field visit/survey driven rather than desk-based led. Certain historic map data especially advance drawings for the Ordnance Survey and Board of Health Plans were considered to be of particular use but application of the standard iterative desk-top study methodology to establish and enhance a project database was considered not to be a productive approach. It was also decided to exclude the well-covered Merthyr Tramroad, routes associated with Cyfarthfa and the area of Blaenavon from the current project.

At an early stage in the project it became increasingly obvious that the number of transport networks relating to ironworks was extensive. The networks linked the core ironwork areas to both the sources of supply, i.e. mineral fields and extractive areas, but also to their markets, and varied over time and ranged from haulage roads, canals to tramroads, railroads and railways. A study of the whole system at an appropriate level would have been rendered unrealistic by time constraints on the project, therefore a more achievable and productive approach was adopted. It was decided to largely limit the study to the best surviving transport network elements directly relating to the core ironwork sites as identified during Year one of the project¹; these were predominantly Tramroads, and mostly related to the ironwork's extraction sites.

Based on John van Laun's *Early Limestone Railways* and information on the ironwork centres and early map sources collated during Year one of the project, a representative proportion of the resource was selected for field survey, and consideration for protection proposals. These include, among others the Abersychan Railway; the Llam-march Railroad; the Llam-march Tramroad; the Clydach Railroad; Clydach incline; Disgwylyfa Tramroad; the Trevil Railroad, Rassau Railroad; Hall's Trevil Tramroad; the Rhymney Tramroad; Twynau Gwynion Tramroads (2 lines); Morlais (east) Tramroad and Railway; Morlais (west) Tramroad; Tappenden's Tramroad; and Mr Glover's Railroad. These were chosen on the basis of association with various ironworking centres, where the surviving remains are considered to be of high quality, and on landscape interconnectivity, in addition to typological and historical considerations. This,

¹ See Appendix I for details.

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it was felt would allow greater scope for landscape interpretation and understanding of the industrial archaeological resource and the processes involved.

The project involved some interrogation of the computerised Regional Sites and Monuments Record, the ENDEX data of the National Monuments Record with reference to information on the Coflein, supplemented by other readily available primary and secondary data. It was found that SMR/NMR enquiry allowed data recovered by other means to be correlated. More general works and articles and other readily available sources were also be consulted and expertise drawn from historians and archaeologists working in the area. Original research, beyond map regression to check various details, was not carried out as part of the current project. While it was not the intention to undertake original research, where this was considered to be a relevant and beneficial approach at some future date this has been identified.

Rapid map regression undertaken during the previous year, based chiefly on available cartographic material (early OS, Tithe and Estate maps), was used, in conjunction with essential secondary sources, during the current year's project to understand and determine the development/phasing and integrity of the industrial landscapes. In this way a comparison between the historic, and cartographic evidence and the modern landscape was made. This also allowed the routes of transport infrastructure to be checked and charted and provided evidence of the potential extent of and current survival of identified transport networks and key identified elements, prior to confirmation through survey in the field (see section 6, below). As a separate document, a review of the level statutory protection afforded these transport sites could then be undertaken.

The current report has been presented in such a way that upgrading of information can be considered through the medium of a GIS system. This allowed data storage, manipulation, analysis, interrogation, and presentation. Future updating of information, as necessary, will be facilitated by this approach. The Information Technology component of this project has been significant and included the creation of a dynamic and multi-layered digital model for the study area.

4.2 *Final Task Breakdown*

1. Review and compile baseline documentation

- Rapid review and compilation of documentation
- Review copies of 1st edition 1:2500 OS maps, etc, for each transport site
- Compile source list and bibliography for project
- Collate information on recent and current archaeological survey and investigation of transport sites
- Revise existing GGAT lists and produce distribution maps

2. Review current state of protection and threats

- Establish current and proposed extent of scheduling / listing
- Investigate details of current UA plans/WDA programmes

3. Undertake selective field investigation

- Visit selected transport sites (i.e. field validation)
- Ascertain extent of surviving remains
- Ascertain quality of surviving remains

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- Undertake rapid mapping (annotated enlarged 1:2500 base), description and photographic recording sufficient to illustrate extent and quality of surviving remains)

4. Review the assembled data

- Consider and determine the needs and priorities for future recording
- Consider proposals for protection
- Discuss conclusions with Cadw

5. Compile and disseminate report

- Compile text
 - Briefly review background history of the transport system associated with the ironworks of the northern coal rim, historiography, recent research, and significance and importance of individual transport sites
 - Review relative historical significance and importance of individual linear sites
 - Provide summary description of surviving remains and review significance
 - Review threats and current management proposals, and assess likely impacts
 - Review and discuss priorities in terms of detailed field recording
- Make any additional recommendations (i.e. proposals for protection), as necessary
- Format schedules for individual sites, determine and produce appendices and tables, and produce indexes to documentation and field indexes
- Prepare illustrations for report
- Produce report using DTP facilities
- Submit report to Cadw
- Provide copies to interested parties (SMR, NMR, and Local Planning Authorities)
- Bibliography, key references and other sources

6. Additional presentation (future programme to be agreed)

- Presentation of mapping in GIS format
- Recommendations for further study, where appropriate
- Assimilation and dissemination of the data to relevant bodies, via the Website
- Bilingualism to be incorporated in the final report, subject to separate funding

4.3 General Criteria Used for Categorising Individual Interests

The following criteria in addition to those detailed in 7.1 were also used to assess the archaeological value of surviving sections.

The condition of individual sites and the general overall condition of surviving remains has bearing on the value of the sites themselves and on the value that they impart within a wider landscape context. The condition of individual sites have been recorded following the system used by the GGAT SMR, using the following criteria:

- Intact: the site is intact
- Near intact: the site is nearly intact
- Damaged: the site has been moderately damaged
- Near destroyed: the site has nearly been destroyed
- Destroyed: the site has been destroyed
- Restored: the site has been restored
- Moved: the site has been moved (usually finds)
- Not known: the condition of the site is not known

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For the purposes of this report, rarity is assessed at regional level only. The following criteria are used:

- High: very few sites of this type are known
- Medium: the site is not unusual, but cannot be considered common
- Low: the site is quite common

Group association is where a connection between sites within the landscape can be demonstrated. These will usually be of the same period, but may include groups where the presence of an earlier site or sites has led to the formation of a later complex, or where an earlier site or sites can be shown to have acquired importance as part of a later complex. The criteria are as follows:

- High: the site forms part of an interconnected complex occupying a clearly definable landscape where little or no fragmentation has occurred
- Medium: the site is part of an interconnected complex which is either limited in scope or badly fragmented
- Low: there are few or no other sites which are associated

Historical association is where there is a link between the site and known historical or cultural persons or events. Only sites with certain or possible association can be assessed for importance, and historical association can only increase the importance of a site; the absence of it will never decrease its importance.

Historical association- identification

- Certain
- Possible
- Unknown

Historical association- importance

- High
- Medium
- Low

The assignment of values to identified interests requires consideration of the reliability and accuracy of the source data, ranging from fully-recorded features seen in open excavation to antiquarian comments on finds of note from a poorly-defined location. The confidence with which the values have been assigned is noted, using the following criteria:

- Very high: existing information is derived from excavation to modern standards with full supporting detail
- High: existing information is reliable and detailed
- Medium: existing information is apparently reliable but limited in detail
- Low: existing information is too limited to allow its reliability to be assessed

5. Background

Main features relating to tramroads and railroads

There are a number of physical features that make up the surviving tramroad routes, these are listed below. The survival of tramroad related features varies according to the location, subsequent use and development of the routes and good survival unsurprisingly has a marked geographic bias towards the 'less developed' upland areas beyond the industrial urban valley centres, though there are a few exceptions: for example IWT014 Mr Glover's Railroad at Hirwaun with its scheduled causeway (SAM BR157) and the surviving sections IWT013(ii), (iii), (ix), Tappendens' Tramroad, at Aberdare between Abernant and Gadlys. Where particularly good examples of these features survive, usually found in combination, though occasionally in isolation, these have been used as indicators of good condition/survival.

The main tramroad features can be summarised as follows:

- Formations, including track bed
- Cuttings
- Embankments/revetments
- Causeways
- Junctions/turnouts
- Tunnels
- Bridges/culverts
- Bridge abutments
- Inclined planes (inclines)
- Winding houses/gear for inclined planes
- Staithes
- Stone blocks
- Sleepers
- Plates, rails, chairs or sills

Typically, tramroad formations consist of a slightly raised trackbed usually constructed of earth and stone, sometimes revetted with low stone walls. The upper surface is usually of stone chippings or gravel. Along this formation are laid either sleepers (usually wooden but iron has also been used) or large stone blocks to support tramroad plates and rails. Tramroad routes often made use of the natural contour along hillsides. Where the formation required to be raised upon a higher embankment for example to accommodate a shallow drop in ground level, revetment usually of stone was used to retain the embankment and strengthen the formation and prevent erosion. Embankments constructed of earth were also used to cross undulating ground to maintain the level of the tramroad, these filled dips/gaps of varying size and were sometimes revetted with stone to prevent erosion. Where these crossed small streams a culvert might be incorporated, as can be seen frequently along the Trevil Tramroad, for example. Similarly causeways were constructed, usually on a larger scale and comprising of pairs of stepped stone retaining walls containing an earth or rubble core and incorporating culverts or arches (Hughes 1990, 317) such as that surviving at Hirwaun Ironworks. Alternatively bridges were built, early ones were usually constructed of wood, however these timber bridges no longer survive and are only evidenced by surviving bridge abutments or very occasionally by timber supports remaining *in situ* (Hughes 1990, 326). Wooden bridges were largely replaced by stone bridges such as that

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at Gelli-isaf. Iron bridges were also built although are less common than stone, for example, that at Robertstown, Aberdare.

To avoid steep changes in incline and minimise use of inclined planes, cuttings were often made through the landform to maintain the gradient of the tramroad. Cuttings are recognisable by a substantial bank either side of the tramroad, occasionally revetted for stability, an example of a large section of cutting can be found along the Rhymney Limestone Railway as it approaches Twynau Gwynion quarry. Where terrain was too unaccommodating tunnels were sometimes created below the ground surface, for example, Harford's tunnel at Ebbw Vale.

Inclines or inclined planes designed to allow rapid decent or change in level of a tramroad system were primarily used within the quarry areas themselves; however, examples can be found elsewhere such as Tappendens' Tramroad incline. This example was steam powered whereas early inclines were worked by chains then later by ropes as at Llam-march. The precise methods of construction of the various components in this study area have by and large not been investigated and may therefore warrant further study.

Most of the tramroads/railroads surveyed featured stone blocks at some point in their construction, this is known as a permanent way as stone blocks are less movable than iron chairs or sills, and having no scrap value, are most often left *in situ*. These were cheaper than wooden sleepers and 'became almost universal for four decades, appearing to be another innovation of South Wales' (van Laun 2001, 202). John van Laun discusses the importance of these as an archaeological resource for investigating the particulars of the tramroad/railroad itself. For example the length of rail can be gleaned from the longitudinal spacing of the stone blocks. The width of surviving blocks of both sides of the tracks can give a good estimation of the gauge of track, a number of wear mark and cuts can help in identifying the type and measurements of rail used, whether chairs were used and how they were fixed. During the field study stone blocks were often found with holes or spikes *in situ* indicating the use of Outram type notched plates, whereas absence of spike holes indicates the use of sills to hold the rail in place (van Laun 2001, 28).

John van Laun's work is crucial to the understanding of the typology of the transport networks surveyed in this study as it remains a rare investigation along with Stephen Hughes' *The Archaeology of an Early Railway System: the Brecon Forest Tramroads* (1990) into the type and construction of tramroads in the South East Wales area. These studies examine a number of elements such as chairs, rails wear marks and gauges, these are beyond the scope of the study undertaken by GGAT which concentrated on the overall survival of identified networks. As such it must be remembered that the table in Appendix IV provides an overview of the type and components of these networks largely based on above ground survey and from few finds. Documentary evidence has allowed further conclusions about measurements and weights and gauges of tramroads to be drawn (see van Laun 2001). However, the table in Appendix IV only provides an indication of what survives and cannot be taken as definitive as further exploratory investigation may reveal new evidence. Also given that many tramroads were altered and re-laid throughout their working lives and following disuse, there is some potential for remains to survive in a buried state. In this way features not currently recorded as associated with a particular system may in fact remain to be discovered. Where the history of the route is known, dates along with their corresponding phases have been noted.

Overview of Typology (after van Laun 2001)

The earliest form of transportation used for moving raw materials to the ironworks was by packhorse or mule, along trackways and lanes (van Laun 2001, 11). Horse traction continued to be employed with the development of the tramroads/railroads, which largely occurred from the mid-18th century.

The main difference between railroad/wagonway, and tramroad (or tramway) is that the former has flanged wheels running on edge rails, whilst the latter had 'the flange on the L-section plate and the wheel was plain' (van Laun 2001, 14).

Wooden

The initial developments in railroads were wooden wagonways. These developed around Newcastle and Shropshire and were first credited to Huntingdon Beaumont with the two-mile line built in 1603-4 at Wollaton (van Laun 2001, 15). Wheels of both these systems were flanged, with rails of square wood fixed to transverse wooden sleepers. In Shropshire the use of smaller wagons and a narrower gauge allowed the lines to run right to the coal face: this type spread and dominated in South Wales until 1800. 'In 1697 Sir Humphrey Mackworth built a railwayin this manner... from the coalface down to the River Neath (van Laun 2001, 16). An example of this is the early Mr Glover's Railroad (JWT014) dating to c. 1786.

Cast-iron

Cast-iron plates were not introduced until 1767, when they were employed at Coalbrookdale, Shropshire. These early plates comprised 'flat cast-iron plates laid on top of wooden under-rails and held by nails through projecting lugs'. "It is to this phase of development that we may date the introduction of railways to the Heads of the Valleys, most likely under John Guest and Francis Homfray who had ironworks at Broseley; both were influential ironmasters in Merthyr Tydfil by 1782" (van Laun 2001, 16). The above represents an intermediate phase between all wood and all iron rails.

It is widely accepted that the first all cast-iron rails (bar rails) were produced at Dowlais in 1791, however Plymouth accounts indicate that all iron rails were being produced as early as 1787 (van Laun 2001, 203-204). The Dowlais rails have been described as being "6 feet long, 3 pin holes in them, mitred at the ends, 3 inches broad at bottom, 2 ½ in. top & near 2in. thick" (van Laun 2001, 16), the type of male and female joints used are thought to reflect Thomas Dadford's familiarity with those used on the Caldon Low Railway. Both the Monmouthshire and Brecknock and Abergavenny Canal Companies used this type of rail for their railroads from the 1790s; it became the standard along the Heads of the Valleys but appears to have been rarely used elsewhere (van Laun 2001, 17). These rails were placed on transverse sleepers of timber (found at Penydarren (van Laun 2001, 201)) or iron, before stone blocks became more common. The use of stone blocks was first recorded in 1792 in relation to proposals of the Monmouthshire Canal Company.

For tramroads, John Curr pioneered the conversion from wooden flanged rails to iron tramplates, first using them underground at Sheffield in 1787 (van Laun 2001, 18). The Curr type was first used above ground in Derbyshire in 1788 with a small gauge, also seen in South Wales in the same year when Plymouth cast 176 for James Cockshutt. These may have been used for Dowlais' Twynau Gwynion line, either nailed to wooden dovetailed sleepers or morticed

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together with a small spike or pin (van Laun 2001, 19). Plates cast at the Plymouth ironworks from 1794 (4ft eared plates c. 44lb) following Curr's mortice design, for a time set the standard (van Laun 2001, 206).

After 1788 tramroad development in South Wales adopted Curr's practice, experimenting with holding the plate to the sleeper, in his fashion either by nails at the rail ends, dovetailed sleeper, or morticed joint. The idea of dovetailed sills originated on railroads and first appeared in 1792 on the lines of the Monmouthshire Canal Company. Dovetailed sills were hard to cast, and as a result adoption of the method was slow, however they became widespread at turn of nineteenth century and were used at both Twynau Gwynion and Rhymney. A further tramroad variation was favoured by Outram, having a much wider gauge of 3ft 4in or 4ft 2in compared to Curr's 2ft gauge, this became popular from 1799. A later development was chairs, which were in use from the 1850s, replacing sills.

'Benjamin Outram (1764-1805) is generally considered the prime mover in the development of the surface plateway in South Wales. John Hodgekinson (1779-1861), Outram's relative and assistant, long continued his practice of fixing plates directly to stone blocks' (van Laun 2001, 19). Outram's type of cast-iron plate rails were heavier than Curr's and designed for a larger gauge, primarily for surface lines. These plate rails are generally 3ft long and identifiable by the tapered notch for the spike at each end of the plate and the lugs on the inner side of the rail. Outram increased his reputation by setting high standards of track preparation and laying; guaranteeing his plates for a period if he cast and laid them himself. Outram's sale pitch resulted in the MCC and B & A canal companies converting to his type from 1799 onwards. This type dominated tramroad construction in South Wales until the 1830s. Another trademark of Outram is the stone block (van Laun 2001, 21). Despite their popularity plate rails were, however, more defective than edge rails. Dirt collected on the plate, increasing friction with the wheels. In response to this wheels were made narrower with the idea of cutting through the dirt, however, they also cut through the plate. In addition repairs cost less for edge rails and they also allowed more weight to be carried along them (van Laun 2001, 22). In 1800 the Plymouth Ironworks was making 'Outram pattern' plates known to be used on the Morlais (ITW011 and IWT012) and Penydarren tramroads (van Laun 2001, 208).

Regarding the development of cast-iron rails, the fish-bellied or T-shaped rail was adopted due to its better strength qualities: William Jessop added a bottom flange, and its final form was achieved by Stephenson and Losh in their patent design of 1816 (van Laun 2001, 17).

Sills or chairs were also used. Constructed of iron, sills were predominantly used to hold cast-iron plates in position, usually stabilised by a tie bar and useful for retaining the gauge. These were variously pinned to wooden sleepers (van Laun 2001, 22-23) or placed on stone blocks by iron stakes driven through one or more holes. These holes were found in many of the recorded stone blocks and occasionally iron stakes were recorded *in situ* during the fieldwork component of this study. The earliest known tramroad sill was cast at Ebbw Vale 1794 for Nantyglo, an improved version has been found in number on the Bloreng, formerly part of the Blaenavon Tramroad. Also used on Tredegar's Trevil Tramroad (IWT007) of 1804, was a horned variety resting on small stone blocks. Examples of dovetailed sills, possibly inspired by Curr's dovetailed sleeper (van Laun 2001, 209) can be found on line 4 of the Twynau Gwynion used by Rhymney before 1807 (van Laun 2001, 208). The Rhymney type of dovetailed sill, first seen at Hill's tramroad about 1817 and later used at Disgwylfa (IWT006) and Llangattock (IWT005),

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became the most frequently used found (van Laun 2001, 209). The use of iron keys with cast iron plates is thought to be unique to Llangattock (van Laun 2001, 210).

The use of chairs appears to be less common than sills, however this use is more common in South Wales than in England and Scotland, and increased after the arrival of wrought-iron plates. These were used for holding plates and also rails in position by pinning to the underlying sleeper or stone block. Chairs were usually more substantial/heavier than sills, the latter being easy to move and reuse. Relatively light and simple dovetailed designs are found on Tredegar line after 1852 in comparison to the larger design reminiscent of main line railway chairs adopted from the 1850s for the Rhymney Limestone Railway (van Laun 2001, 212). The ribbed wrought-iron plates needed a different pattern leading to the demise of the dovetail type, by this date the chair was usually fixed to a wooden sleeper. Large chairs are still used on modern railway lines.

Wrought-iron

The change to wrought-iron allowed edge rails to 'leap forward' over plate rails (van Laun 2001, 211). This material was inherently stronger than cast-iron, which was notably brittle and could be produced in longer lengths (up to 15ft in length) with fewer joints; for this reason wrought-iron rapidly became the standard. The earliest non-bellied Birkenhead rails were laid in 1820-1, whilst the earliest fish-bellied were rolled for the Stockton and Darlington in 1822. From the 1830s a variety of slightly different types generically known as T-rails, generally spiked directly to sleepers, was widely adopted. South Wales was, however, slow in the uptake of this type more usually associated with locomotives (van Laun 2001, 211). By 1840 the double-headed rail was common, eventually to be replaced by the 'long-lived bullhead rail'. Brunel's bridge rail 'was widely adopted on industrial lines from the 1850s. Both these types were usually spiked straight to sleepers, others were held in chairs fixed by cross pins and then by iron or wooden keys (van Laun 2001, 18). In South Wales the adoption of the simple L-shaped type occurred from the 1850s, often attested to by chairs; lines known to have used L-shaped rail include Morlais West (IWT012), the Rhymney Limestone Railway (IWT016) and Penderyn (IWT013), as well as the later locomotive lines of Brinore (IWT017) and Tredegar Tramroad (IWT018) (van Laun 2001, 211).

Railways

The main attributes of a railway distinguishing it from a railroad or tramroad are as follows. The gauge of the railway i.e. the distance between the two parallel rails upon which the wheels run is wider. For railways this measurement is 4 ft 8 ½ in, which became known as 'standard gauge'. Additionally, the rails are usually heavier and stronger, made of iron and later of steel, and set in substantial chairs fixed to wooden or concrete sleepers. Stone blocks or sills are not used. Later railways also have a firmer trackbed formation of compressed earth, stone and gravel to prevent movement of the railway. The wider gauge along with substantial rails and track bed formation allow heavier loads to be carried and most importantly allow locomotive transportation. Five mineral railways existed in the general area before 20th century, four of which lie within the study area defined for the current project. The earliest is the Abersychan Limestone Railway (IWT001) c. 1830, which unique to South Wales had wrought-iron fish-belly rails. As early as 1838 Dowlais had reconstructed the tramroad to Morlais east (IWT011) as a standard gauge railway, later partly replaced by the Dowlais Branch of the Brecon & Merthyr Railway. The Rhymney Limestone Railway (IWT016), also originally a tramroad, was converted to standard gauge by 1870. The Trevil Railroad (IWT007) was reconstructed from the 1850s with wrought-iron rails, retaining its earlier 3ft 8in. gauge and only being worked by locomotive after 1900.

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Railway track employed in Southeast Wales generally comprised replacement T-rails in chairs from about 1840, later 19th century/early 20th century lines comprised flat-bottomed rails atypically held in chairs (with the usual wooden keys) usually double-headed rail, or as evidenced at Twynau Gwynion and Trefil, bullhead rail (van Laun 2001, 216- 217).

6. Fieldwork

Fieldwork formed a dominant element of the current project: a cross-section of ironworks related transport networks within the study area with the exclusion of the Blaenafon area, which had been extensively covered by recent Historic Landscape Characterisation work, were selected for survey. Emphasis was put on those routes, which related to the best surviving examples of the core ironworks landscapes identified in Year one of the project.² A selection of transport routes relating to less-well preserved core areas was also included in the survey.

The transport networks selected for rapid survey were based on the results of Year one of the project relating to the ironwork areas identified from Ince 1993, and other secondary sources, primarily John van Laun's *Early Limestone Railways* (2001), but also Stephen Hughes' study, *The Brecon Forest Tramroads* (1990) and John Mear's *Aberdare The Railways and Tramroads* (1999). To this end a walkover survey was undertaken between the 18th May and 15th July 2005, along the routes of twenty-five identified ironworks related transport networks. These were further subdivided into branch sections for ease of survey; the result was that some forty-four tramroad/railroad sections were identified in all. The visited ironworks related transport networks are given in Table 1.

The site visits in conjunction with documentary and cartographic sources were undertaken to validate the current state of ironwork transport features previously identified from searches of data collections of the NMR and SMR, and to establish the current condition/survival, or potential for survival of the archaeological resource along the identified transport routes. A total of 45 SMR interests and 22 NMR interests (see Appendix III) were identified prior to fieldwork taking place. Fieldwork, in the form of rapid survey, resulted in the identification of an additional 213 individual interests (detailed in Appendix II). Where possible the additional interests have been cross-referenced to those noted by John van Laun.

The fieldwork entailed the walking of the selected transport network routes. The condition and extent of surviving sections of the transport networks was noted during the fieldwork, and general management priorities identified. The location of sections was accurately determined using a handheld GPS. The field visit also allowed an initial identification of those sections where consideration of protection through scheduling might be further investigated.

Where previously known sites were visited during fieldwork, their current condition was noted and any management priorities identified. Where new features were identified, other details were recorded in addition including location (where possible NGRs were established by GPS), type and brief description. It should be noted that this survey is not exhaustive due to time constraints and the sheer quantity of surviving remains encountered along some of the routes; for example extensive numbers of stone blocks within IWT006 were not recorded as individual finds but constitute part of the section description as they characterised the entire section. Detailed follow-on surveys are recommended where it is felt it would be beneficial to supplement the level of information generated by this rapid survey. A photographic record of both individual features and sections was made using digital photography. A full digital photographic record forms part of the main project archive.

² Roberts, R, 2005, Southeast Wales Industrial Ironworks Landscapes Year 1: the core ironworks areas

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Table 1: Transport networks visited during project

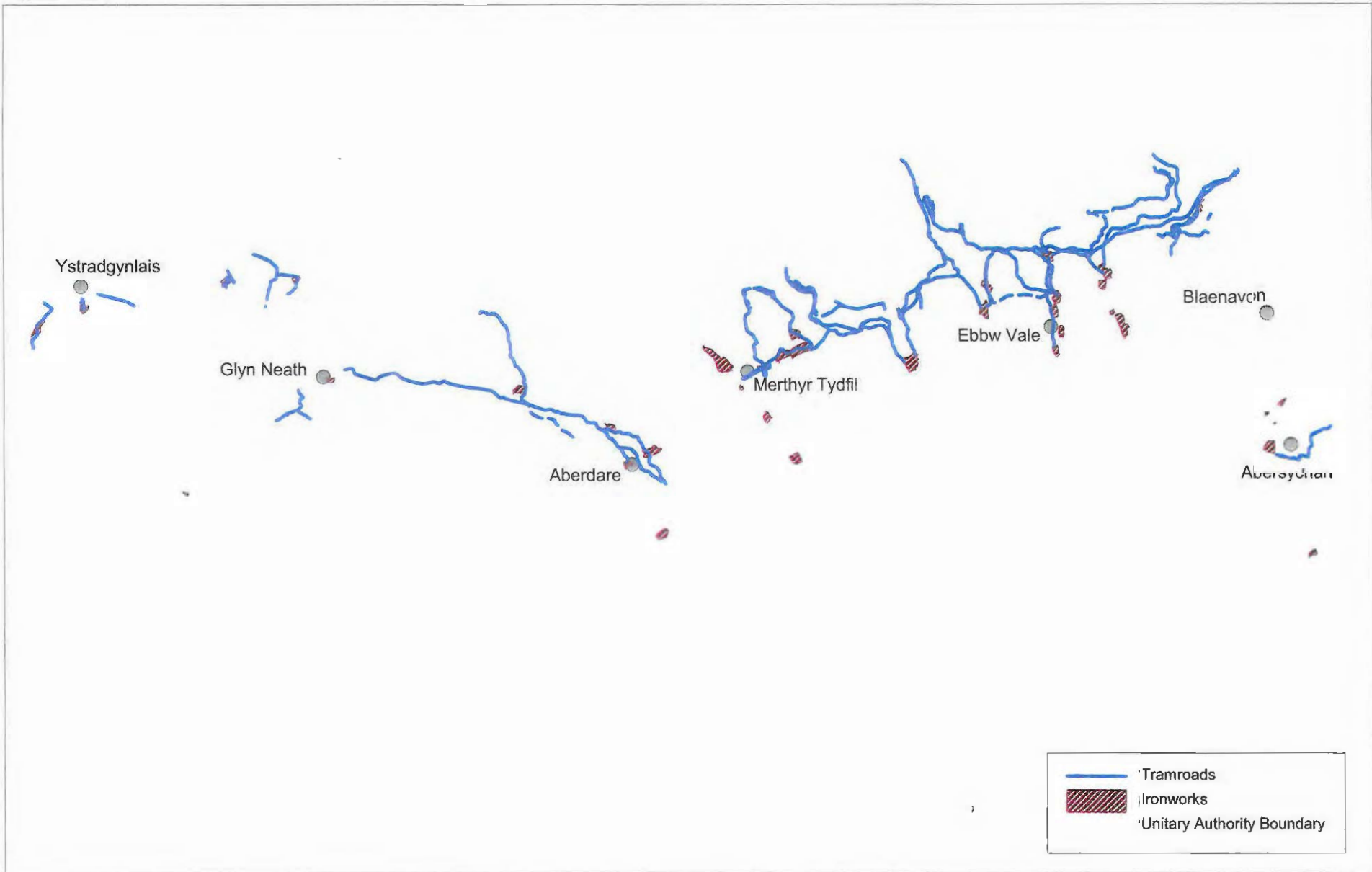
Ironworks Transport Number ³	Name	NGR1	NGR2
IWT001	Abersychan Limestone Railway	SO 28199 04626	SO 26061 03469
IWT002	Llam-march Railroad	SO 22930 13305	SO 21293 12123
IWT002a	Llam-march Railroad (Waunllapria)	SO 21918 12096	SO 21800 11301
IWT003	Llam-march Tramroad	SO 24383 14541	SO 21857 12204
IWT003a	Llam-march Tramroad Pen-Ffyddlwn	SO 22056 12337	SO 21857 12204
IWT004	Clydach Railroad	SO 24361 14610	SO 16476 11539
IWT005	Bailey's Llangattock Tramroad	SO 21119 15287	SO 19097 10916
IWT006	Disgwylfa Main Tramroad	SO 21890 14314	SO 19947 13179
IWT006a	Disgwylfa Pant Draenog	SO 21711 14082	SO 21691 13683
IWT006b	Disgwylfa East	SO 21916 14255	SO 21693 13678
IWT006c	Disgwylfa West	SO 21171 14782	SO 21819 14279
IWT006d	Disgwylfa Main (conjectured)	SO 19939 13179	SO 19152 12794
IWT006e	Disgwylfa Main (south)	SO 19155 12784	SO 19079 10592
IWT007	Trevil Railroad Main Line	SO 11938 13594	SO 14668 11511
IWT007a	Trevil Railroad Beaufort Line	SO 17320 12387	SO 16204 11536
IWT007b	Trevil Railroad Ebbw Vale Line	SO 16893 10961	SO 17218 09703
IWT007c	Trevil Railroad Sirhowy Line	SO 14464 11149	SO 14376 10390
IWT007d	Trevil line to Victoria	SO 17051 09926	SO 17059 07670
IWT008	Rassau Railroad	SO 16891 10968	SO 14362 10172
IWT009	Hall's Trevil Tramroad	SO 11631 13981	SO 11520 07342
IWT010	Rhymney Tramroad Branch	SO 13228 10492	SO 10844 09160
IWT011	Morlais East Tramroad and Railway	SO 05093 09982	SO 07235 07676
IWT012	Morlais West Tramroad	SO 04929 09972	SO 05600 07013
IWT013	Tappendens' Tramroad	SN 96164 05313	SO 01512 02181
IWT013a	Tappendens' Tramroad West	SN 88712 06736	SN 96026 05356
IWT014	Mr Glover's Railroad	SN 94123 08950	SN 96151 05323
IWT014a	Mr Glovers Railroad Bryngwyn Extension	SN 96054 05351	SN 97811 04063
IWT015	Twynau Gwynion Tramroad Line 1	SO 07533 09772	SO 07476 09373
IWT015a	Twynau Gwynion Tramroad line 2	SO 06983 10046	SO 10324 09163
IWT015b	Twynau Gwynion Tramroad line 3	SO 06481 10420	SO 07472 09369
IWT015c	Twynau Gwynion Tramroad Line 4	SO 06470 10340	SO 07755 08588
IWT016	Rhymney Limestone Railway	SO 06378 10782	SO 11083 07066
IWT017	Bryn Oer Tramroad	SO 11739 10056	SO 11777 09203
IWT018	Tredeggar Tramroad	SO 12042 12695	SO 14155 09189
IWT019	Ebbw Vale Private Line	SO 14365 10187	SO 17158 09745
IWT019a	Ebbw Vale Private line addition	SO 14357 10090	SO 14392 09282
IWT020	Bute Tramroad	SO 08041 08319	SO 10593 07923
IWT021	Beaufort Tramroad	SO 16887 11204	SO 16969 09797
IWT022	Protheroe's Tramroad	SN 87327 04800	SN 85973 04714
IWT022a	Venallt Tramroad	SN 86862 05928	SN 86814 05131
IWT023	Banwen Quarries Tramroad	SN 86447 09726	SN 85739 10015
IWT023a	Banwen Coelbren Junction	SN 85090 11317	SN 86041 10476

³ Numbers prefixed by IWT in main text

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IWT024	Ystalyfera	SN 76755 09387	SN 76334 07597
IWT025	Nant y glo - Beaufort	SO 19080 11674	SO 17060 11328

Figure 1: Location of Tramroads Subject to the Present Study



7. Results

7.1. Condition and Archaeological Significance

As part of the field work the presence/absence of surviving remains along the various transport routes (i.e. of the main routes and branches) was noted. Each transport network was then subdivided along its surviving route(s) according to condition; this is summarized within Table 2, below. The following condition ratings were devised and used in relation to the overall condition of each section:

A – Intact: well-preserved formation with abundant associated features visible *in situ*.

B – Moderately Intact: formation in good condition, occasionally with associated features visible *in situ*, and high potential for buried remains.

C – Damaged: formation and or features survive in disturbed condition, or out of *situ*.

D – Substantially Damaged: formation and or features survive in a heavily disturbed condition with form and function no longer obvious.

E – Altered: formation (of tramroads/railways) survives with upper surface in altered state, some potential for buried remains

U – Unknown: unknown surviving potential (e.g. sites inaccessible for survey, i.e. those on private land, or hidden by vegetation).

The overall archaeological significance or potential of the resource on a network-by-network basis was arrived at through considering the following factors (see also section 4.3 above):

- **Rarity** – in terms of period, type, etc
- **Representativeness** – representative range of elements
- **Survival** – percentage survival
- **Condition** – overall condition of surviving elements
- **Group Value** – structural/functional coherence of surviving features, but also wider ironwork group value
- **Coherence** – retention of historic meaning and significance
- **Integrity** – survival of original character or form
- **Potential** – potential for future study or analysis
- **Amenity** – potential for development for public educational recreational amenity
- **Association** – to events, figures, technological advancement, or availability of documentary evidence
- **Status** – statutory protection

The archaeological significance arrived at was allocated one of the following values:

- High
- Medium
- Low
- Unknown

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The condition rating, overall percentage survival and overall archaeological significance of the transport networks is presented within Table 2, below.

Of the forty-three transport networks and branches ten, that is only 4.3%, were found to have routes surviving to 50% or more of their original length. In terms of overall archaeological significance twelve networks and branches were considered to be of high overall archaeological significance, six of high-medium significance, whilst the remainder were considered to be of medium, medium-low, low, or unknown significance, on the criteria given above. Those transport networks and branches with a high or high-medium overall significance rating were further assessed for possible consideration for future protection (i.e. scheduling).

Table 2: Current condition, percentage survival and archaeological significance

Transport Network Number	Name	Condition Rating	% Overall Survival	Overall Archaeological Significance
IWT001	Abersychan Limestone Railway	IWT001(i): D IWT001(ii): A	55%	High
IWT002	Llam-march Railroad	IWT002(i): B IWT002(ii): D	11%	High-Medium
IWT002a	Llam-march Railroad (Waunllapria)	IWT002a(i): B	4%	Medium-Low
IWT003	Llam-march Tramroad	IWT003(i): B IWT003(ii): D IWT003(iii): A IWT003(iv): B IWT003(v): A	35%	High
IWT003a	Llam-march Tramroad Pen-Ffyddlwn	IWT003a: D	0%	Low
IWT004	Clydach Railroad	IWT004(i): B IWT004(ii): C IWT004(iii): B IWT004(iv): E IWT004(v): E IWT004(vi): C	20%	High-Medium (includes: listed tramroad bridge 23837)
IWT005	Bailey's Llangattock Tramroad	IWT005: D	<1%	Low
IWT006	Disgwylfa Main Tramroad	IWT006(i): D IWT006(ii): B IWT006(iii): D IWT006(iv): B IWT006(v): C IWT006(vi): B IWT006(vii): C	100%	High

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		IWT006(viii): B		
		IWT006(ix): A		
		IWT006(x): B		
IWT006a	Disgwylfa Pant Draenog	IWT006a(i): B	100%	High
IWT006b	Disgwylfa East	IWT006b(i): B	100%	High
IWT006c	Disgwylfa West	IWT006c(i): B	94%	High
		IWT006c(ii): A		
		IWT006c(iii): A		
		IWT006c(iv): A		
IWT006d	Disgwylfa Main (conjectured)	IWT006d: D	0%	Low
IWT006e	Disgwylfa Main (south)	IWT006e(i): A	9%	High-Medium
		IWT006e(ii): B		
		IWT006e(iii): B		
IWT007	Trevil Railroad Main Line	IWT007(i): A	61%	High
		IWT007(ii): E		
		IWT007(iii): A		
		IWT007(iv): E		
		IWT007(v): B		
		IWT007(vi): B		
IWT007a	Trevil Railroad Beaufort Line	IWT007a: D	<1%	Low
IWT007b	Trevil Railroad Ebbw Vale Line	IWT007b: D	<1%?	Low
IWT007c	Trevil Railroad Sirhowy Line	IWT007c: D	0%	Low
IWT007d	Trevil line to Victoria	IWT007d: D	0%	Low
IWT008	Rassau Railroad	IWT008(i): E	14%	Low-Medium
		IWT008(ii): E		
IWT009	Hall's Trevil Tramroad	IWT009(i): B	7%	Medium-Low
		IWT009(ii): C		
IWT010	Rhymney Tramroad Branch	IWT010(i): U	3%	Unknown
IWT011	Morlais East Tramroad and Railway	IWT011(i): B	39%	High-Medium
		IWT011(ii): D		
		IWT011(iii): E		
IWT012	Morlais West Tramroad	IWT012(i): C	34%	High
		IWT012(ii): A		
		IWT012(iii): E		
IWT013	Tappendens' Tramroad	IWT013(i): A	29%	High
		IWT013(ii): B		
		IWT013(iii): B		
		IWT013(iv): C		

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		IWT013(v): U IWT013(vi): E IWT013(vii): E IWT013(viii): C IWT013(ix): A		
IWT013a	Tappendens' Tramroad West	IWT013a(i): C IWT013a(ii): C IWT013a(iii): C IWT013a(iv): U IWT013a(v): B	16%	Medium
IWT014	Mr Glover's Railroad	IWT014(i): A IWT014(ii): E IWT014(iii): B	65%	High
IWT014a	Mr Glover's Railroad Bryngwyn Extension	IWT014a(i): B	6%	Medium-Low
IWT015	Twynau Gwynion Tramroad Line 1	IWT015(i): C IWT015(ii): B	25%	High-Medium
IWT015a	Twynau Gwynion Tramroad line 2	IWT015a(i): D IWT015a(ii): C IWT015a(iii): C IWT015a(iv): D IWT015a(v): C IWT015a(vi): C IWT015a(vii): B	50%	High-Medium
IWT015b	Twynau Gwynion Tramroad line 3	IWT015b(i): C	87%	Medium
IWT015c	Twynau Gwynion Tramroad Line 4	IWT015c(i): B IWT015c(ii): U	19%	Medium
IWT016	Rhymney Limestone Railway	IWT016(i): E IWT016(ii): B	29%	Medium
IWT017	Bryn Oer Tramroad	IWT017: D	0% (within Glamorgan – Gwent)	Low
IWT018	Tredegar Tramroad	IWT018(i): B	4%	Low
IWT019	Ebbw Vale Private Line	IWT019(i): B	2%	High (includes listed causeway and tunnels 22532).
IWT019a	Ebbw Vale Private line addition	IWT019a: D Only a tunnel (IWT019a/001) under Beaufort road survives.	<1%	Low
IWT020	Bute Tramroad	IWT020: D	0%	Low
IWT021	Beaufort Tramroad	IWT021: D	0%	Low

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IWT022	Protheroe's Tramroad	IWT022(i): B IWT022(ii): U	26%?	High (IWT022(i) is protected within Scheduled Ironworks Area GM423).
IWT022a	Venallt Tramroad	IWT022a: D	0%	Low
IWT023	Banwen Quarries Tramroad	IWT023(i): U IWT023(ii): D	33%	Unknown (On private land)
IWT023a	Banwen Coelbren Junction	IWT023a(i): B IWT023a(ii): B	87%	High-Medium
IWT024	Ystalyfera	IWT024: D	0%	Low
IWT025	Nant-y-glo - Beaufort	IWT025: D	0%	Low

7.2 *The Resource and Current Protection*

The archaeological resource (i.e. condition, archaeological value, presence of visible remains and buried potential) in relation to the level of current statutory protection (i.e. Scheduled Ancient Monuments and Listed Buildings) has been assessed for each ironwork transport network (summarised below in tables 3 and 4). It was found that of the 25 ironworks associated transport networks (i.e. or a maximum 44 branches) examined during the course of fieldwork, 20 (or 33 branches) retained visible remains, of these, 14 (18 branches) were considered to contain sections of high or high-medium archaeological significance.

Nine Scheduled Ancient Monument areas were found to be directly relevant to the study (see Table 3), while a further 12 listed interests, two of which were Grade II* listed (see Table 4), were also visited during the course of the fieldwork. The overriding majority of features currently scheduled or listed along the length of the transport networks surveyed were found with few exceptions to be tramroad bridges or features in association with bridges. The incidence of statutory protected (scheduled/listed) monuments along the routes of the ironwork associated transport networks surveyed is given in Tables 3 and 4, below.

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Table 3: Incidence of Scheduled Ancient Monuments in relation to surveyed transport networks

SAM Reference	Name	Easting	Northing	Type	IWT Section Number ⁴
BR157	Hirwaun Ironworks: Tramroad Causeway and Bridge	295756	205824	Tramroad Causeway & Bridge	IWT014(i)
BR161	Clydach Ironworks (remains) and Smart's Bridge	329900	213200	Ironworks	IWT002(i)/IWT003(iv)
GM347	Iron Tram Bridge, Robertstown, Trecynon	299711	203631	Bridge	IWT013(ix)
GM411	Gelli-Isaf Tramroad Bridge, Abernant Tramroad	299005	204354	Bridge	IWT013(i)
GM423	Venallt Ironworks	286400	205000	Ironworks	IWT022(i)
GM533	Remains of Gamlyn Railway Viaduct	298183	204910	Bridge	IWT013
MM251	Gilwern Embankment	324400	214400	Embankment & Aqueduct	IWT003/IWT004
MM263	Clydach Railroad Section Near Brynmawr	320220	212263	Tramroad	IWT004(iv) -
MM264	Clydach Coal Level	320039	212171	Tramroad	IWT004

Table 4: Incidence of Listed Buildings in relation to surveyed transport networks

Listed Building Record Number	Name	Easting	Northing	Grade	IWT Section Number
10872	Llwydcoed Tramroad Bridge, Gelli-Isaf	299000	204300	II	IWT013(i)
10894	Tramroad Bridge, Robertstown, Trecynon	299700	203600	II	IWT013(ix)
22532	Newtown Bridge, Ebbw Vale	316930	209890	II	IWT019(i)
23812	Pantglas Bridge, Clydach	322920	213300	II	IWT004
23813	Smart's Bridge, Clydach	322880	213260	II*	IWT004
23814	Tramroad Bridge over Sychnant River, Clydach	322510	212660	II	IWT003(iii)
23818	Tramroad Bridge near junction of A465 and Station Road	323300	213700	II	IWT003
23824	Gellifelen Tramroad Bridge	321900	211900	II	IWT002
23837	Railroad Bridge at Maesygartha	323030	213770	II	IWT004(v)
23840	Tramroad Bridge near Forge House	323530	213960	II	IWT003
26827	Tramroad causeway and bridge at Hirwaun Ironworks	295850	205730	II	IWT014(i)
23826	Embankment and Aqueduct of Brecknock & Abergavenny Canal	324400	214430	II*	IWT003/IWT004

Seven of the transport networks surveyed (10 sections by condition) were found to have some degree of current statutory protection (i.e. Scheduled Ancient Monuments or Listed buildings); these are summarised in Table 5, below. The actual quantification of the area already protected as a percentage of the available resource in the network sample has not been attempted, as the result would be misleading. The extent of the scheduled resource, however, is clearly under representative in terms of quantity and variety of transport monument type. Previous scheduling had concentrated on individual features, rather than viewing the networks as a series of interconnected features, and the protected resource had been restricted largely to one particular

⁴ Full section number if relevant, or route number if not.

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type of monument (tramroad bridges) almost to the complete omission of others (e.g. tramroad cuttings, revetment, groups of blocks, etc).

Table 5: Transport network sections surveyed which currently benefit from some level of statutory protection (SAMs & Listed Buildings)

Transport Network Name	Section Number	Condition	SAM Number	LB Number
Llam-march Railroad	IWT002(i)	B	BR161	
Llam-march Tramroad	IWT003(iii)	A		23814
Llam-march Tramroad	IWT003(iv)	B	BR161	
Clydach Railroad	IWT004(iv)	E	MM263	
Clydach Railroad	IWT004(v)	E	MM263	23837
Tappendens' Tramroad	IWT013(i)	A	GM411	10872
Tappendens' Tramroad	IWT013(ix)	A	GM347	10894
Mr Glover's Railroad	IWT014(i)	A	BR157	26827
Ebbw Vale Private Line	IWT019(i)	B		22532
Protheroe's Tramroad	IWT022(i)	B	GM423	

7.3 The Resource and Proposed Protection

The overall archaeological significance of the surviving resource has been used to identify the transport networks and branches, which should be further considered for protection. The linear nature of the resource, and inherently lower value of individual elements, required a different approach to the traditional 'site' based approach when identifying elements of the resource for the purpose of protection. It was felt that a broader landscape approach was necessary to prevent further under representation of some of the less impressive site types, emphasizing the connectivity of the resource through group value, coherence and integrity in particular. The surviving resource had been previously subdivided into sections based on general condition, and group value, among others (see 7.1, page 17); these sections were used as the basis for recommending consideration for protection, rather than individual elements.

Ten ironworks transport networks and their branches, some 16 sections, were identified as satisfying the criteria sufficiently to be considered for future protection. These are listed in Table 6, below.

Table 6: Transport network sections surveyed detailing incidence of current scheduled protection and proposed recommendations for consideration for future protection

Surviving Section Number	Name	NGR1	NGR2	Currently Scheduled	Consider future Scheduling
IWT001(ii)	Abersychan Limestone Railway	SO 28199 04626	SO 27307 03390	No	Yes
IWT002(i)	Llam-march Railroad	SO 22868 13213	SO 22898 13064	Yes	Yes
IWT003(iii)	Llam-march Tramroad	SO 22572 12721	SO 22302 12511	No	Yes
IWT003(iv)	Llam-march Tramroad	SO 22868 13213	SO 22895 13075	Yes	Yes
IWT004(iv)	Clydach Railroad	SO 20430 12338	SO 20067 12220	Yes	No

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IWT002a	Llam-march Railroad (Waunllapria)	None	No threats were identified from the UDP.	Maintain as current.	No
IWT003	Llam-march Tramroad	Part of the incline within section IWT003(iv) falls within scheduled area (SAM BR161); The stone bridge in section IWT003(iii) is a listed building (23814).	No threats to surviving sections identified apart from ongoing erosion of IWT003(ii). No threats identified from the UDP.	Consideration could be given for scheduling of parts of sections IWT003(iii) and IWT003(v) as they retain well-preserved remains. Extending scheduled area (SAM BR161) to include the whole of the incline IWT003(iv) could be considered.	No
IWT003a	Llam-march Tramroad Pen-Ffyddlwn	None	N/A	N/A	No
IWT004	Clydach Railroad	A small section of IWT004(iv) is scheduled (SAM MM263). Smart's Bridge is listed (23813) and scheduled as part of Clydach Ironworks (SAM BR161). A railroad bridge under the modern road is listed (23837).	Vehicular activity has already caused some damage to the track bed along IWT004(i) and IWT004(ii). No threats identified from the UDP.	An appropriate barrier needs to be put in place to prevent vehicles from accessing the path along sections IWT004(i) and (ii). The Machine House (IWT004/005, 34645, 34374) might be considered for listing. Now used as a domestic residence, it remains in good repair.	No
IWT005	Bailey's Llangattock Tramroad	None	N/A	N/A	No
IWT006	Disgwylfa Main Tramroad	None	A major problem is increasing bog encroachment. Off-road vehicular activities pose a minor threat. No threats identified from the UDP.	Detailed survey (possibly to include trial excavation) of the tramroad and surrounding quarry/construction features. Scheduling could be considered for the best-preserved sections, in particular IWT006(ix).	Yes
IWT006a	Disgwylfa Pant Draenog	None	The tramroad is becoming obscured by vegetation. No threats identified from the UDP.	Detailed survey/investigation is recommended; to be carried out when vegetation growth is less advanced. The causeways require conservation measures. The quarry area and tramroad sections within the quarries require further detailed survey.	Yes

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IWT006b	Disgwylfa East	None.	The tramroad is becoming obscured by vegetation. No threats identified from the UDP.	Detailed survey/investigation is recommended; to be carried out when vegetation growth is less advanced. The causeways require conservation measures. The quarry area and tramroad sections within the quarries require further detailed survey.	Yes
IWT006c	Disgwylfa West	None	No threats identified from the UDP.	Detailed survey is highly recommended for all sections particularly IWT006c(ii) and (iii) due to the high frequency of surviving surface features. Additional buried features may survive. Scheduling could be considered for part of this tramroad.	Yes
IWT006d	Disgwylfa Main (conjectured)	None	N/A	N/A	No
IWT006e	Disgwylfa Main (south)	None	No threats identified from the UDP.	Detailed survey of the later tramroad (depicted on 1st Edition OS) and the quarries and workings along the terraces above the river is recommended.	Yes
IWT007	Trevil Railroad Main Line	None	Erosion from off road vehicles (IWT007(ii) and water damage especially to IWT007(iii) identified. No threats identified from the UDP.	It is recommended that section IWT007(iii) is considered for scheduling due to the abundance of surviving features and very good condition, e.g. IWT007/012, 013 and 024. Conservation of the revetment and north of the bridge abutments/causeways is recommended. Prevent further erosion of surviving sections from off road vehicles. Detailed survey (with possible excavation) is recommended, particularly for IWT007(iii). A number of features related to quarrying were also noted in the area.	Yes
IWT007a	Trevil Railroad Beaufort Line	None	N/A	N/A	No
IWT007b	Trevil Railroad Ebbw Vale Line	None	N/A	N/A	No
IWT007c	Trevil Railroad Sirhowy Line	None	N/A	N/A	No

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IWT007d	Trevil line to Victoria	None	N/A	N/A	No
IWT008	Rassau Railroad	None	No threats identified from the UDP.	The tramroad is almost completely lost to road development. Ensure surviving route link is maintained within future development plans as far as practicable. Clearance of undergrowth around IWT008(i) would enable detailed survey of the surviving bridge structure.	No
IWT009	Hall's Trevil Tramroad	None	Ongoing quarrying threatens the survival of any remains that have not already been destroyed.	Maintain as current as far as practicable.	No
IWT010	Rhymney Tramroad Branch	None	No threats identified from the UDP.	Maintain as current as far as practicable.	Yes
IWT011	Morlais East Tramroad and Railway	None	Dereliction and drainage are the most prominent threats at present. There is some minor erosion from off road vehicles. Area forms part of Heritage Trail; information panels have been vandalized, though some wayside sign posting remains. The area in a generally neglected state. The area is highlighted as derelict land and an informal recreation area in the UDP. Limited and sensitive reclamation works are proposed for the quarry area.	Conservation of the tramroad and surrounding quarry areas is recommended. A well preserved landscape which should be preserved. Statutory protection should be considered. Detailed survey (possibly to include trial excavation) to determine the phasing and construction of the tramroad and it branches.	Yes
IWT012	Morlais West Tramroad	None	There is some minor erosion from off-road vehicles. The area is used for outdoor pursuits, i.e. climbing, this may contribute some minor damage to quarry features. The area is highlighted as derelict land and	The quarries and their attendant tramroads constitute a well-preserved landscape and consideration should be given to their preservation and protection. Detailed survey (possibly to include trial excavation) to determine the phasing and construction of the tramroad and	Yes

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			informal recreation area in the UDP. Limited and sensitive reclamation works are proposed for the quarry area. Area forms part of Heritage Trail; information panels have been vandalized, though some wayside sign posting remains.	it branches.	
IWT013	Tappendens' Tramroad	Gelli Isaf tramroad bridge within section IWT013(i) is scheduled (SAM GM411) and a listed building (10872). Robertstown iron bridge is scheduled (SAM GM347) and also listed (10894).	Erection of fencing along the edge of the tramroad may cause further damage. There is a threat of damage to the tramroad section IWT013(iii) from the demolition of Llwyrddoed ironworks. No other threats identified from the UDP.	The visual and physical link between Robertstown iron bridge and the surviving tramroad to the east has been interrupted by the A4059. The section of footpath under the bridge could be improved for safe public access. IWT013(ix) could benefit from scheduling. Conservation/vegetation clearance is recommended, including remedial work to the scheduled features. Any future path restoration/maintenance should take heritage into consideration and be carried out under archaeological supervision. All surviving features (e.g. stone blocks) should be retained <i>in situ</i> .	Yes
IWT013a	Tappendens' Tramroad West	None	No threats identified from the UDP.	Vegetation clearance under archaeological supervision followed by additional survey is recommended. Any exposed features, such as the site of the important Glynneath incline engine house could be re-assessed, at this stage.	Yes
IWT014	Mr Glover's Railroad	(IWT014(i) within scheduled area Hirwaun Ironworks (SAM BR157 includes tramroad causeway and bridge at Hirwaun).	Erosion from off road vehicles. General dereliction and dumping of waste. IWT014(i) and the whole ironworks area are highlighted in the UDP for Land Reclamation.	Improve access to and along IWT014(i). The scheduled area is currently suffering from neglect and continuing dereliction; recommendations of phase 1 of this project should be prioritized. Information panels and safe/suitable access should be provided. Extensive detailed survey is recommended of the quarry workings, features and quarry face branch routes to the west of	Yes

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				SN 94157 09024. Some features have already been recorded from IWT014/011 onwards.	
IWT014a	Mr Glover's Railroad Bryngwyn Extension	None	No threats identified from the UDP.	Maintain as current.	No
IWT015	Twynau Gwynion Tramroad Line 1	None	Continuing erosion from livestock.	Detailed survey (possibly to include trial excavation) is recommended as a significant amount of the route survives.	Yes
IWT015a	Twynau Gwynion Tramroad line 2	None	Continuing erosion from livestock. Bog encroachment and poor drainage of land threatens some parts of the tramroad.	Detailed survey (possibly to include trial excavation) is recommended as a significant amount of the route survives and buried features are a possibility.	Yes
IWT015b	Twynau Gwynion Tramroad line 3	None	Continuing erosion from livestock.	Maintain as current.	No
IWT015c	Twynau Gwynion Tramroad Line 4	None	Continuing erosion from livestock.	Maintain as current.	Yes
IWT016	Rhymney Limestone Railway	None	The surviving section IWT013(ii) is under threat from off road vehicular activities. No threats identified from the UDP.	Maintain as current.	No
IWT017	Bryn Oer Tramroad	None	N/A	N/A	No
IWT018	Tredegar Tramroad	None	No threats identified from the UDP.	The tramroad is almost completely lost to road development. Ensure surviving route link is maintained within future development plans as far as practicable.	No
IWT019	Ebbw Vale Private Line	The causeway and tunnels are a listed building (22532).	No threats identified from the UDP.	Maintain as current.	No
IWT019a	Ebbw Vale Private line addition	None	N/A	N/A	No
IWT020	Bute Tramroad		N/A	N/A	No
IWT021	Beaufort Tramroad		N/A	N/A	No

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IWT022	Protheroe's Tramroad	IWT022(i) is protected within the scheduled ironworks area GM423.	No threats identified from the UDP.		Yes
IWT022a	Venallt Tramroad		N/A	N/A	No
IWT023	Banwen Quarries Tramroad	None	The scheduled area of the ironworks is in an overgrown condition; tree growth is actively threatening the integrity of the standing structures. As a result the monuments are becoming unstable and unsafe. The ironworks structures are seriously threatened by dereliction. No threats identified from the UDP.	The scheduled area requires urgent remedial conservation work; tree clearance/building consolidation work is urgently needed, to include clearance of vegetation from the associated tramroad followed by detailed survey.	Yes
IWT023a	Banwen Coelbren Junction	None	Slight bog encroachment on route. No threats identified from the UDP.	Maintain as current	No
IWT024	Ystalyfera	None	Development is planned for the former ironworks area, this has been subjected to a desk-based assessment and appropriate mitigation strategies have been devised.	N/A	No
IWT025	Nant-y-glo - Beaufort	None	N/A.	N/A	No

8. Industrial Ironworks Transport Networks

IWT Number 001: Abersychan Limestone Railway (07226g)

NGR: SO 28199 04626 to SO 26061 03469

Date Range: c. 1830 - 1876

Approximate length of tramroad = 3.3 Km

Overall survival = 55%

Historical Background

The Abersychan Limestone Railway was constructed c1830 to carry limestone westwards from Cwm Lascarn quarry to the British Ironworks (IW004). This replaced a tramroad branch off the Blaenavon railroad. This railway is of special historic interest given its unique status in South Wales as it was constructed of wrought-iron fish-belly rails as opposed to the usual plate rails or cast-iron bars. It is thought that the railway was abandoned by 1876 (van Laun 2001: pp 40-45).

General Description

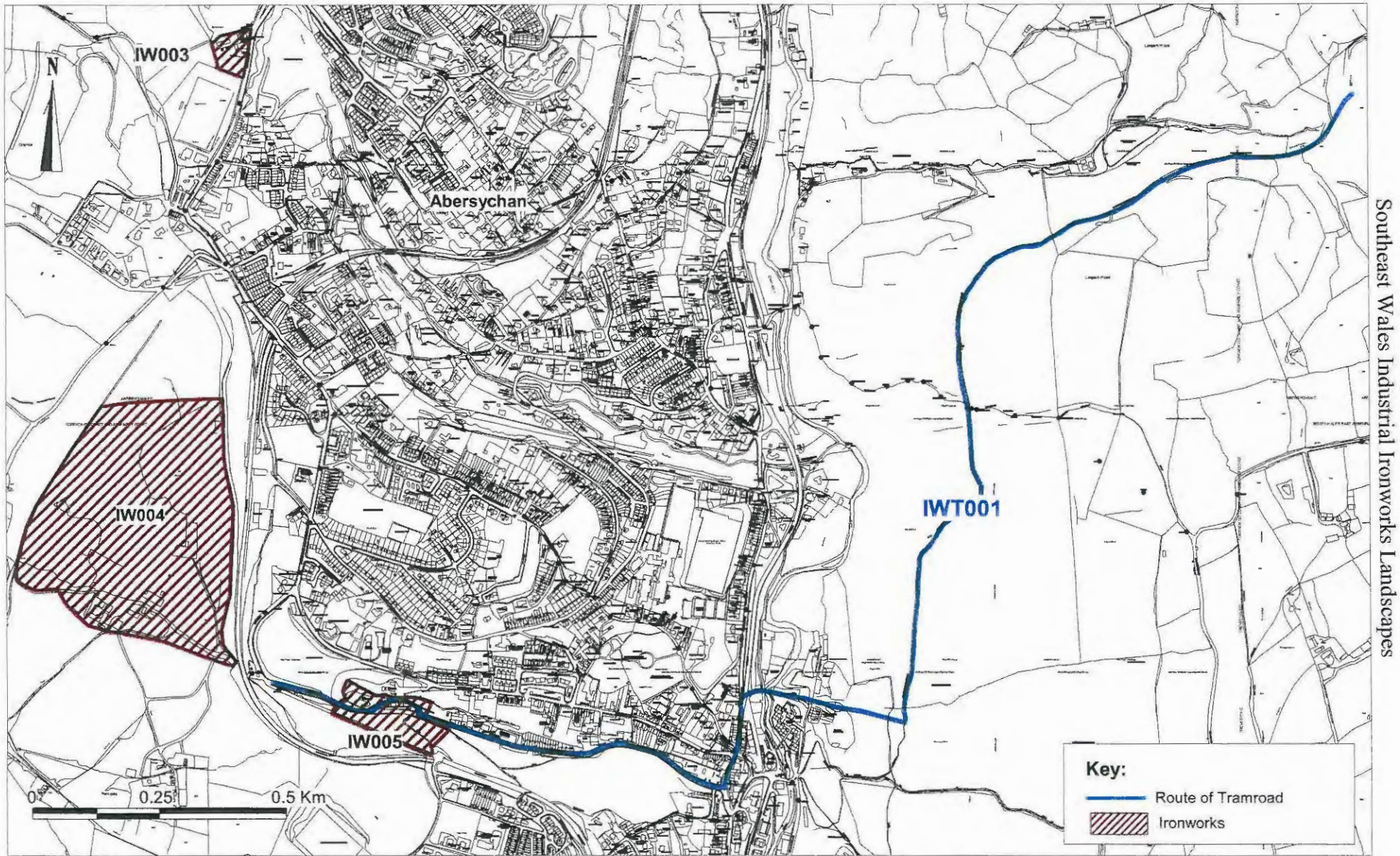
This tramroad has been surveyed as a single continuous route:

Table 8: Routes of Tramroad IWT001

Route Number	Name	Location	Figure Reference Number
IWT001	Abersychan Limestone Railway	SO 28199 04626 to SO 26061 03469	2, 3

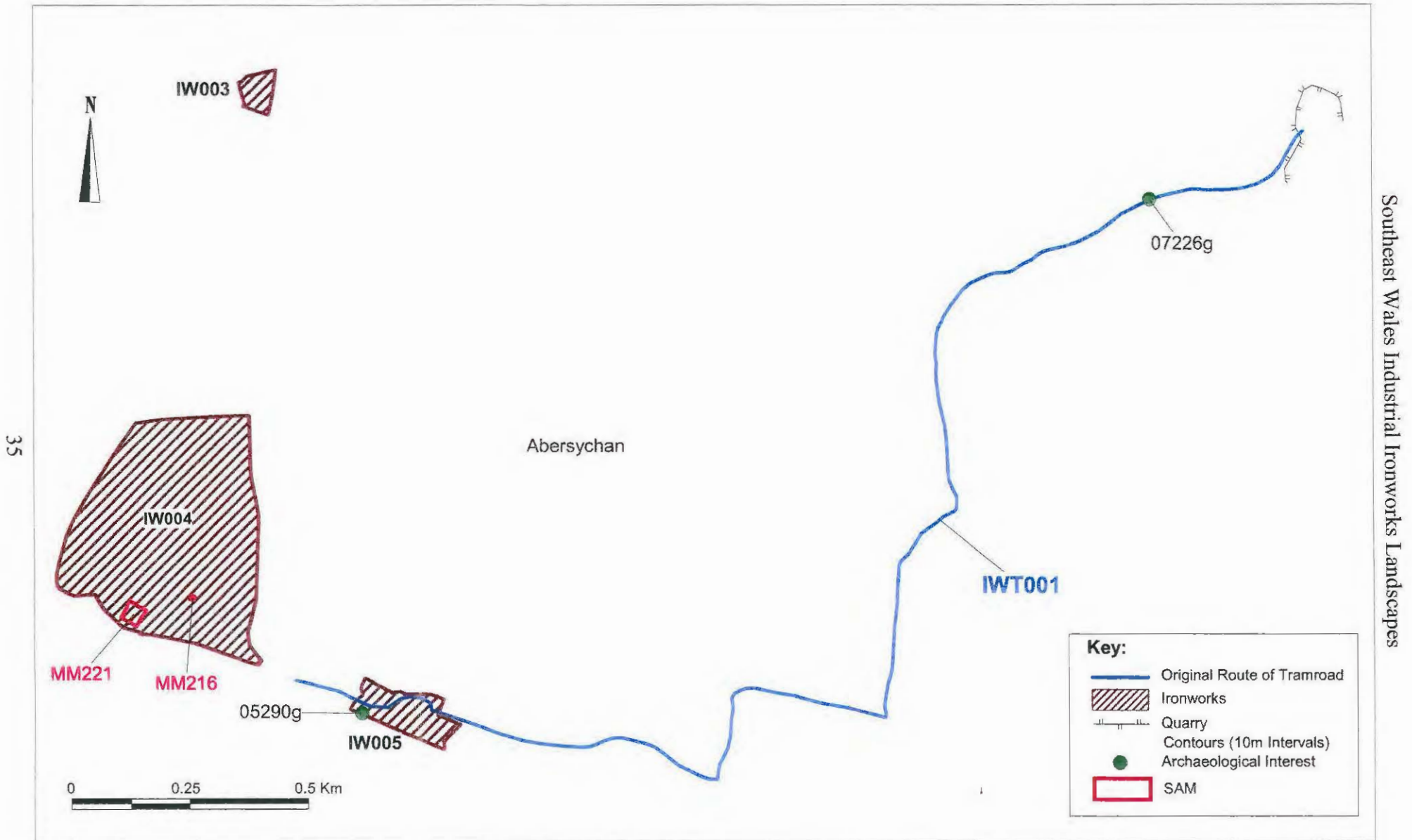
The route of the tramroad from the British Ironworks can today be followed along Lodge Road, Foundry Road, Union Street, Broad Street and Station Street to Ffrwd Road. The section between Ffrwd Road and Coronation Terrace has been destroyed apart from a stone abutment for the bridge (IWT001/016) that took the tramroad across the Afon Llwyd river (this corresponds to the section noted as A3 by John Van Laun). To the east of the Afon Llwyd a steep incline (A2 JVL) took the tramroad up to Company's Wood. From here its route can be followed north then northeast along a footpath through the woods to Cwm Lascarn Quarry.

Figure 2: Route of Tramroad IWT001 Abersychan Limestone Railway



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Figure 3: Tramroad IWT001 Showing Archaeological Interests (Pre-survey)



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Condition of IWT001

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are two distinct surviving sections of IWT001:

Table 9: Surviving Sections of IWT001

Section Number	Location	Condition Rating	Figure Reference Number
IWT001(i)	SO 27295 03393 to SO 27307 03390	D	4, 5
IWT001(ii)	SO 28199 04626 to SO 27307 03390	A	4, 5

IWT001(i) (CONDITION D) is a small surviving section of the incline noted as A2 by John Van Laun. It is in poor condition and severely overgrown.

IWT001(ii) (CONDITION A) this is an extremely well preserved section of tramroad, complete with many features in good condition. Stone blocks in situ are exposed all along this section; the best surviving examples have been recorded (see table 10). This section is in use as a footpath through thick woodland. It seems likely that given the good survival of features along the route, many more are likely to be buried beneath the heavy leaf litter created by the surrounding trees.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 3; details of these interests are given in Appendix III.

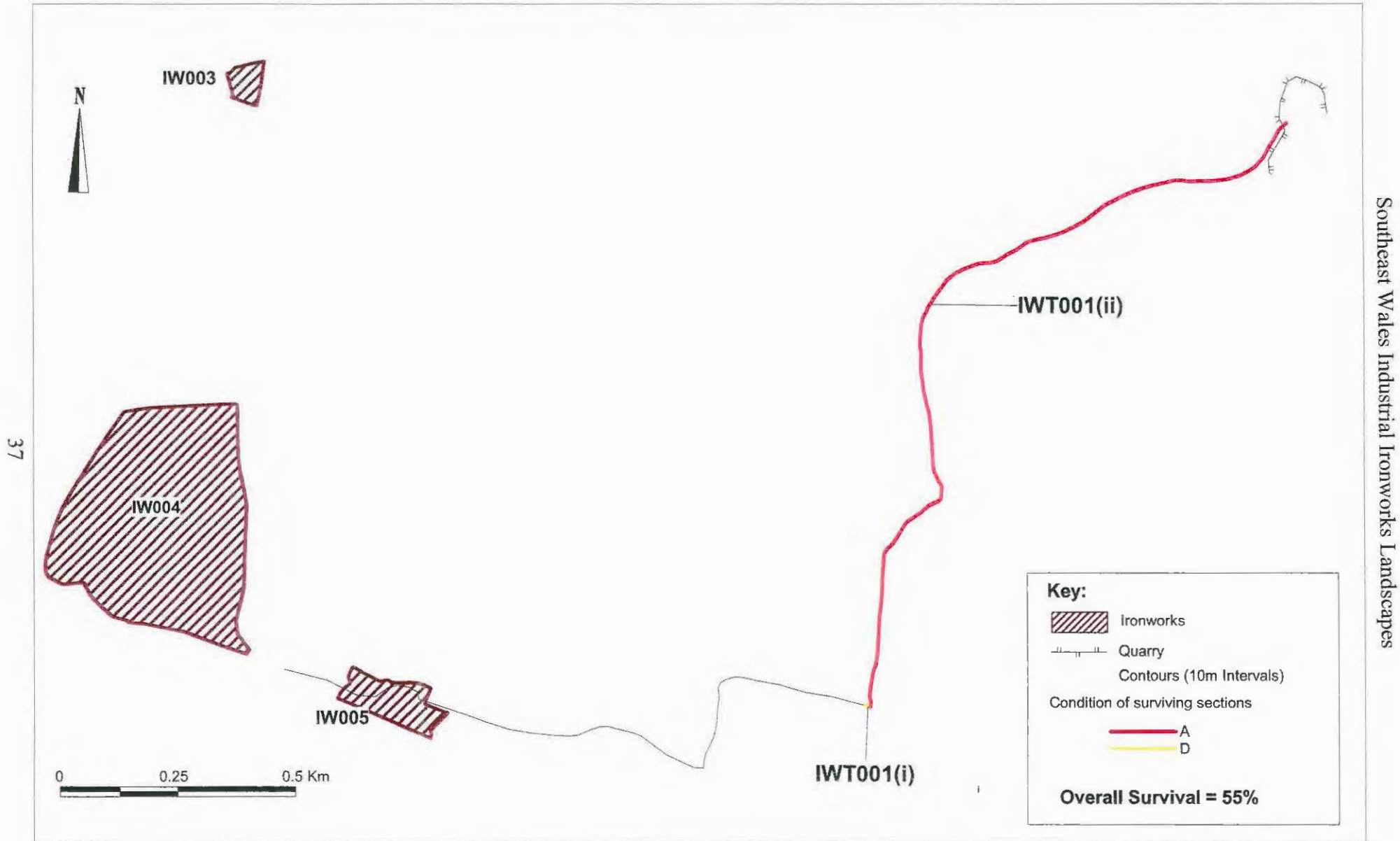
Table 10: Features Associated with IWT001(ii) (see Figure 5)

Feature Number	NGR	Type
IWT001/001	SO 27313 03460	Stone block
IWT001/002	SO 27325 03547	Stone block
IWT001/003	SO 27326 03556	Stone block
IWT001/004	SO 27321 03492	Stone block
IWT001/005	SO 2743 0381	Revetment
IWT001/006	SO 2745 0382	Tramroad cutting
IWT001/007	SO 27430 04220	Stone block
IWT001/008	SO 2746 0385	Stone block
IWT001/009	SO 2746 0390	Stone block
IWT001/010	SO 2742 0412	Stone block
IWT001/011	SO 2744 0414	Stone block
IWT001/012	SO 27530 04320	Stone block
IWT001/013	SO 2764 0438	Stone block
IWT001/014	SO 27440 04250	Stone block
IWT001/015	SO 2816 0456	Tramroad junction

Table 11: Features Associated with IWT001 Other (see Figure 5)

Feature Number	NGR	Type
IWT001/016	SO 27040 03450	Tramroad bridge

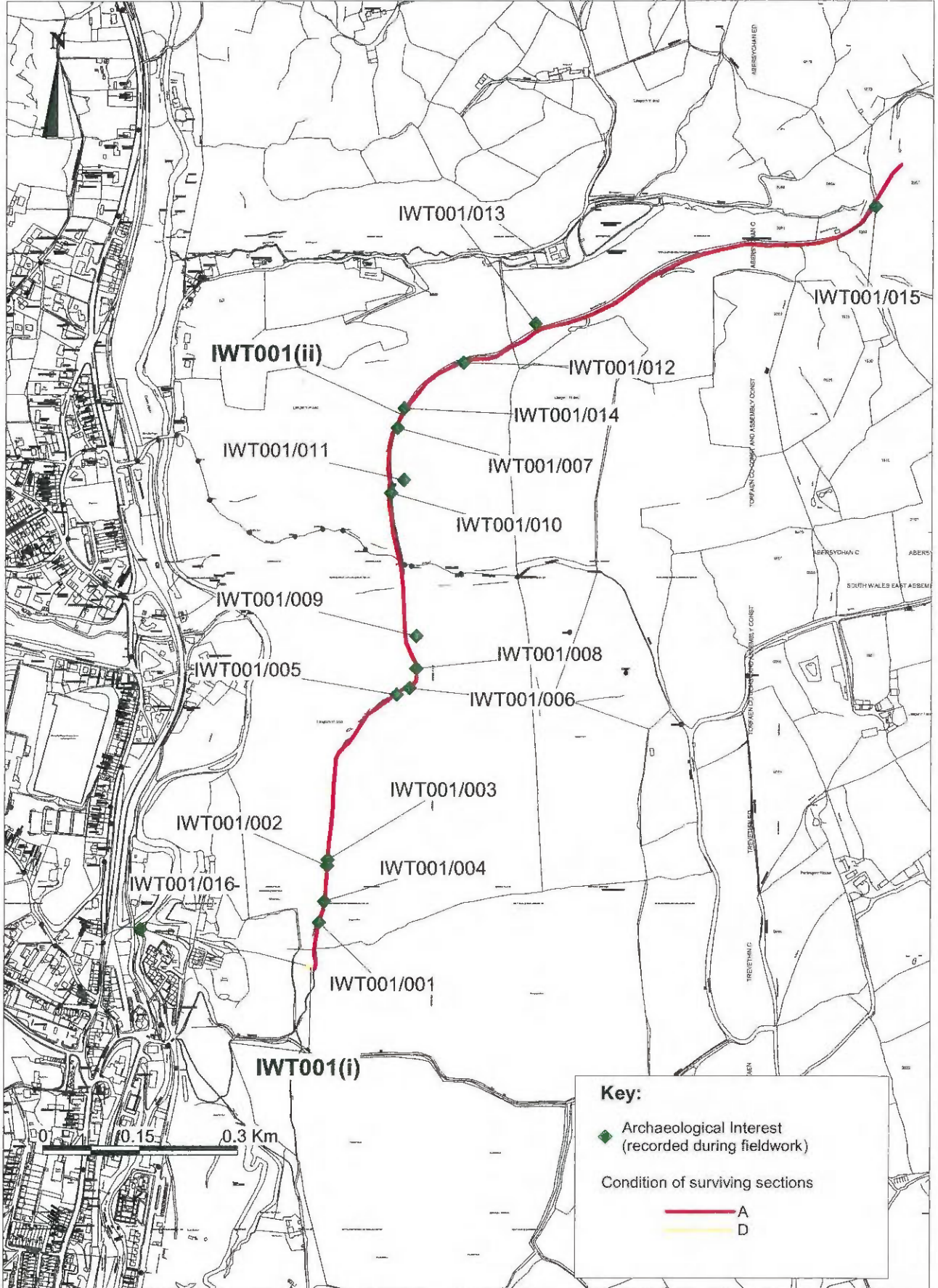
Figure 4: Surviving Tramroad Sections IWT001(i)-IWT001(ii)



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Figure 5: Surviving Tramroad Sections and Identified Interests



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Current Protection/Status

There is currently no protection afforded to any part of this tramroad. However, the surviving sections are within a special landscape area - Lasgarn wood is ancient woodland and is protected by CCW.

Identified Threats

No immediate threats were identified from the UDP; however, there is a potential threat from forestry operations such as thinning or felling. Potential use of the footpath for forestry vehicular access should be avoided.

Conservation and Management Recommendations

It is highly recommended that a full detailed survey/plan of this tramroad and perhaps trial excavation be undertaken of the surviving sections to ascertain the completeness and extent of remains. It is suggested that following this, scheduling of all or part of the surviving remains is considered, given its excellent survival and unique status in South Wales.



Plate 1: Part of Section IWT001(ii) Depicting a Surviving Stretch of Stone Blocks, View to Northeast

IWT Number 002: Llam-march Railroad (05985.0g)

NGR: SO 22930 13305 to SO 21293 12123

Date Range: 1795 - 1811

Approximate length of tramroad = 4.5 Km

Overall survival = 9%

Historical Background

The Llam-march Railroad was constructed following a request made by the Clydach Ironworks Company by the Brecknock and Abergavenny Canal Company and was opened by 1795. Llanelly quarry provided the limestone to the ironworks at this time. Minor changes were made to the tramroad by 1804, most notably the steep incline, which ran through what is now Danycoed, was converted into four inclines. These were balanced inclines that used ropes rather than chains. The branch to Llam-march iron mines via Waunllapria (IWT002a) was added sometime after 1797, this was later extended eastwards with a branch to Blaenavon (this branch was not surveyed as features relating directly to Blaenavon have been excluded from the project). Most of the route of IWT002 went out of use by 1811 when further changes were made. These changes resulted in the route shown in figure 9, IWT003 Llam-march Tramroad (van Laun 2001: pp 65-68).

General Description

This tramroad was allocated two route numbers for the purpose of the survey:

Table 12: Routes of Tramroad IWT002

Route Number	Name	Location	Figure Reference Number
IWT002	Llam-march Railroad	SO 22930 13305 to SO 21293 12123	6, 7
IWT002a	Llam-march Railroad (Waunllapria)	SO 21918 12096 to SO 21800 11301	6, 7

IWT002

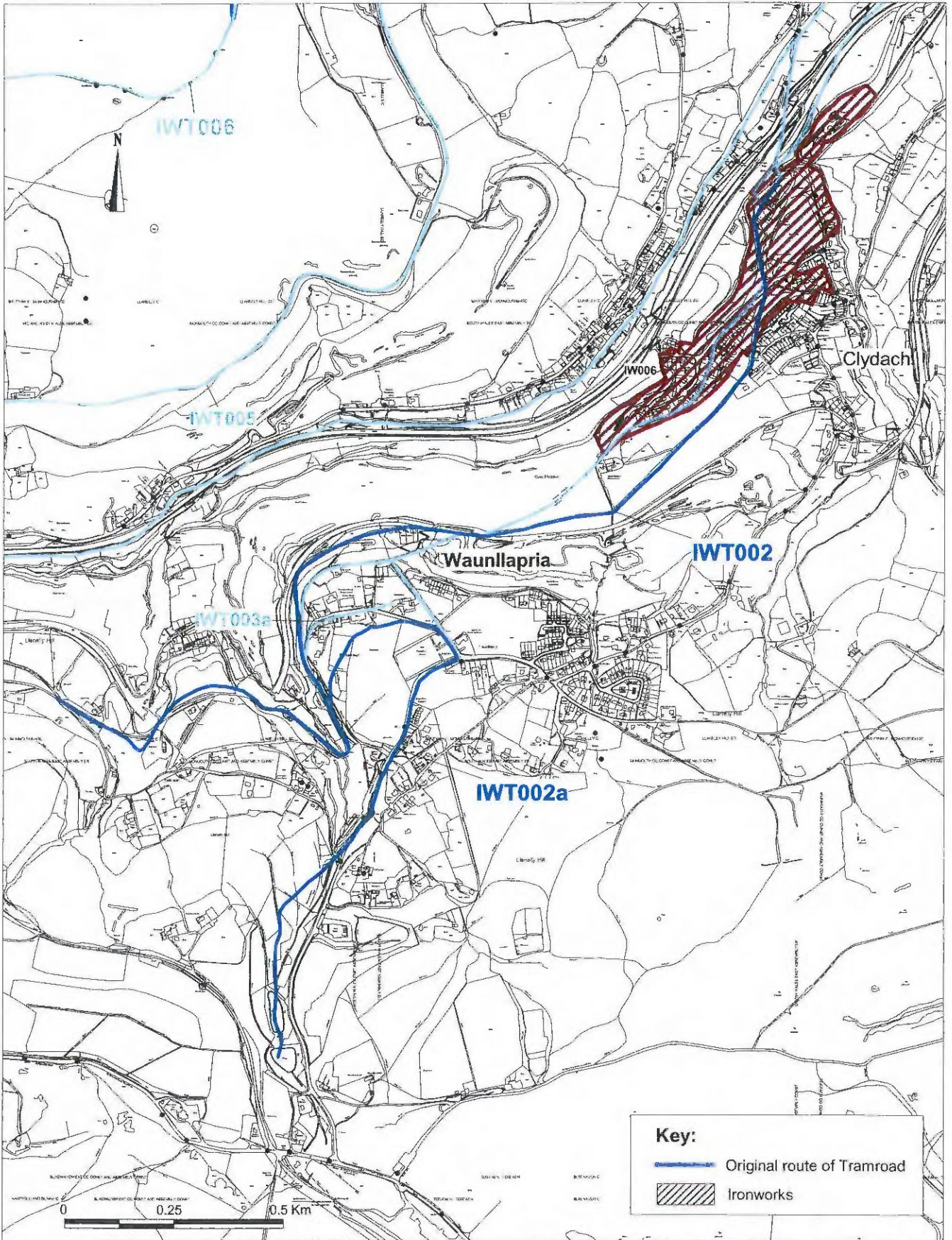
From the ironworks the tramroad ran via a small incline southwards then a second, steep incline southwest towards Waunllapria, past Llanelly quarry. Its route can be followed here along a minor road through Danycoed and along the edge of the escarpment to Daren-felen. Here it levels out and roughly follows the minor road above the former route of the Merthyr, Tredegar and Abergavenny Railway to Gellifelen, ending at the coal and ore works.

IWT002a

This branch joins IWT002 at Daren-felen and runs east to a junction at the Jolly Collier's at Waunllapria. From Waunllapria the tramroad route can be followed along a minor road until Sunny Bank, Llam-march. South of here it has been destroyed by opencasting and the area has been landscaped.

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Figure 6: Route of Tramroad IWT002 Llam-march Railroad

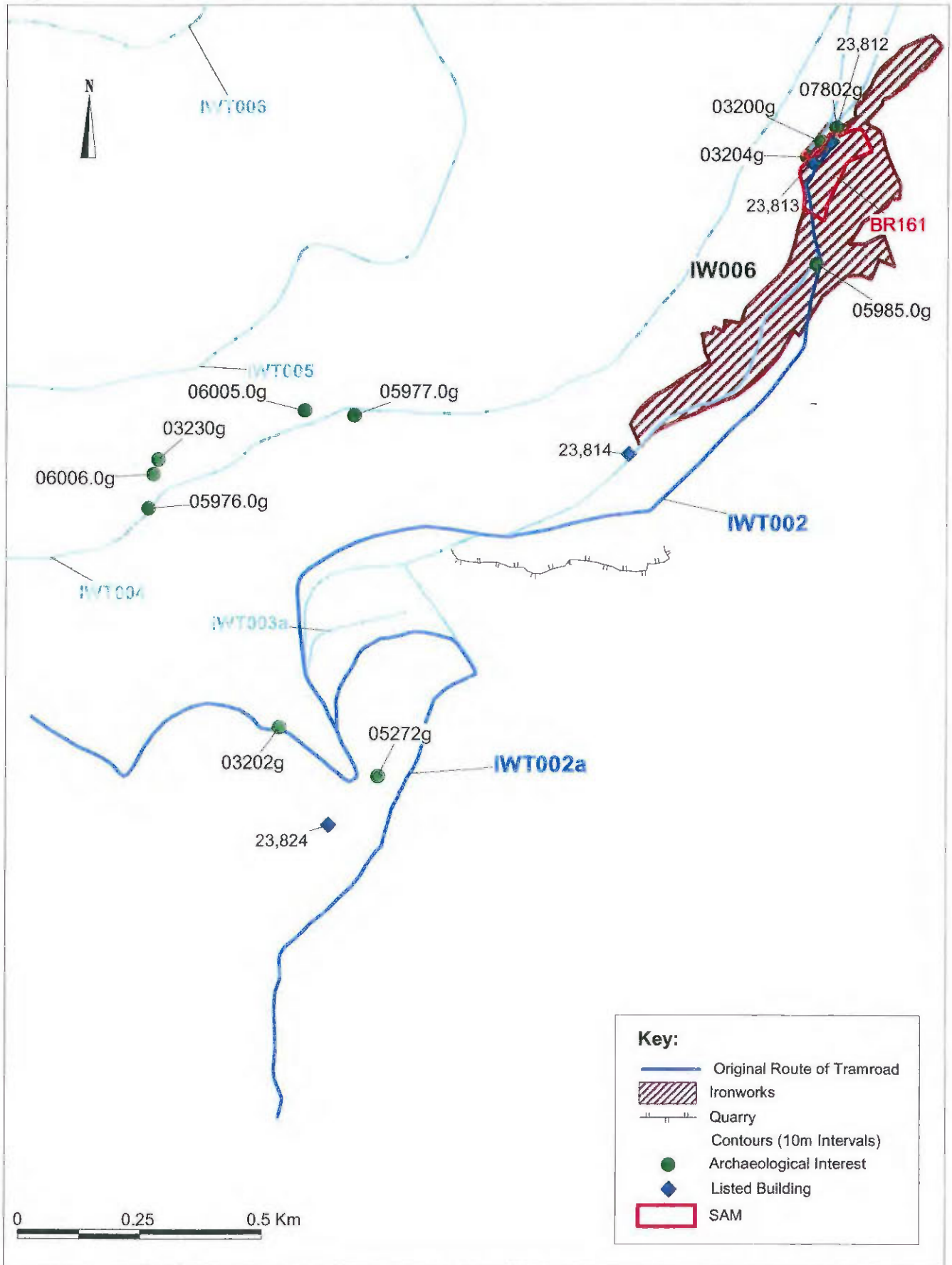


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Figure 7: Tramroad IWT002 Showing Archaeological Interests (Pre-survey)



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Condition of IWT002

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are two distinct surviving sections of IWT002:

Table 13: Surviving Sections of IWT002

Section Number	Location	Condition Rating	Figure Reference Number
IWT002(i)	SO 22868 13213 to SO 22895 13075	B	8
IWT002(ii)	SO 21694 12144 to SO 21538 12082	D	8

IWT002(i) (CONDITION B) is the tramroad incline descending south-north to the Clydach ironworks, now used as a footpath. This incline continued in use when the railroad route was altered in 1811 and as such also forms part of IWT003. The stone track bed survives and is well preserved but slightly overgrown. The section between SO 22881 13152 and SO 22868 13213 falls within the SAM area of Clydach Ironworks (BR161).

IWT002(ii) (CONDITION D) is covered with grass and gravel just north of the road near Gellifelen. The route of the tramroad is very difficult to determine in this area, however, a slight cutting is visible. No surface features were visible through the long grass.

Features Recorded During Survey

No individual features were recorded during the survey of this tramroad.

Archaeological interests identified prior to the current survey are shown on figure 7; details of these interests are given in Appendix III.

Current Protection/Status

Part of section IWT002(i) falls within SAM BR161. The surviving sections lie within the Brecon Beacons National Park.

Identified Threats

No threats were identified from the UDP.

Conservation and Management Recommendations

Extending the scheduled area to include the whole of the incline IWT002(i) could be considered.

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Plate 2: Incline on Section IWT002(i) (also IWT003(iv)), View to South

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Condition of IWT002a

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There is one surviving section of IWT002a:

Table 14: Surviving Sections of IWT002a

Section Number	Location	Condition Rating	Figure Reference Number
IWT002a(i)	SO 22075 12296 to SO 22022 12283	B	8

A very small section IWT002a(i) (CONDITION B) survives as a grassed over escarpment along the break of slope to the south of the road near Darenfelen school. This section is on private land.

Features Recorded During Survey

No individual features were recorded during the survey of this tramroad.

Archaeological interests identified prior to the current survey are shown on figure 7; details of these interests are given in Appendix III.

Current Protection/Status

There is currently no protection afforded to any part of this tramroad. The surviving section lies within the Brecon Beacons National Park.

Identified Threats

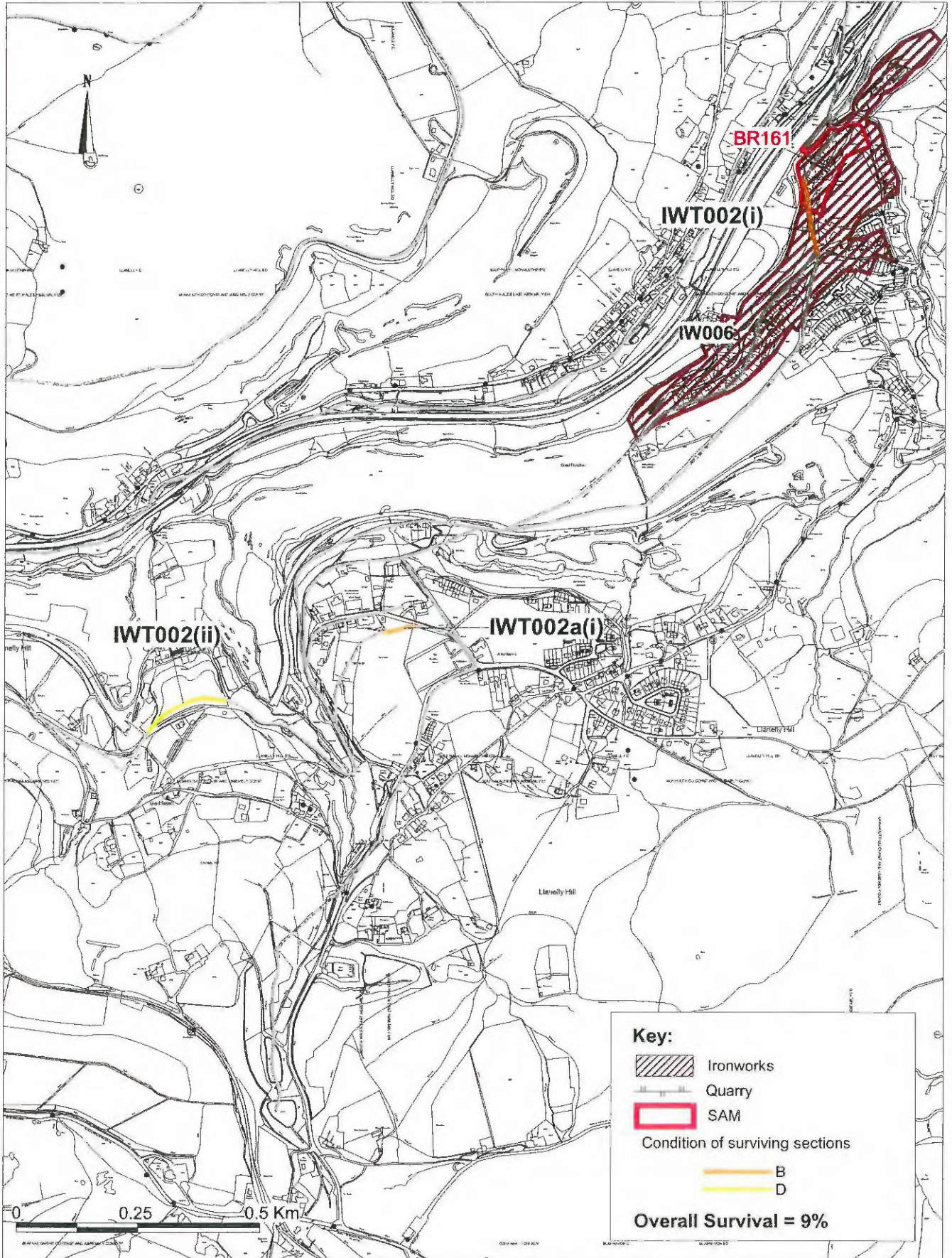
No immediate threats were identified.

Conservation and Management Recommendations

Maintain as current.

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Figure 8: Surviving Tramroad Sections IWT002(i), IWT002(ii) and IWT002a(i)



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IWT Number 003: Llam-march Tramroad (05985.0g/05274.0g)

NGR: SO 24383 14541 to SO 21857 12204

Date Range: c. 1811 - 1870s

Approximate length of tramroad = 5 Km

Overall survival = 35%

Historical Background

By 1811 most of the original route of the Llam-march Railroad serving the Clydach Ironworks had been replaced by the new Llam-march Tramroad at the expense of the Clydach Ironworks Company. This route incorporated three new inclines to carry limestone from Llanelly quarry to the ironworks, these were chain worked in contrast to the previous rope-worked inclines. A section extended northeast from the ironworks to the canal at Gilwern and a small branch (IWT003a) ran through Daren-felen to Pen Ffyddlwn farm. The section of IWT002a to Waunllapria was also replaced with a new incline at this time. By the late 1860's the ironworks had changed hands and was owned by John Jayne, he was responsible for incorporating standard gauge track to allow the inclines to serve the Merthyr, Tredegar and Abergavenny Railway as well as the ironworks tramroad. However, only coal and limestone was being transported and this was for use elsewhere as the Clydach ironworks was out of operation by this date (van Laun 2001: pp 68-71).

General Description

This tramroad was allocated two route numbers for the purpose of the survey:

Table 15: Routes of Tramroad IWT003

Route Number	Name	Location	Figure Reference Number
IWT003	Llam-march Tramroad	SO 24383 14541 to SO 21857 12204	9, 10
IWT003a	Llam-march Tramroad (Pen-Ffyddlwn)	SO 22056 12337 to SO 21857 12204	9, 10

IWT003

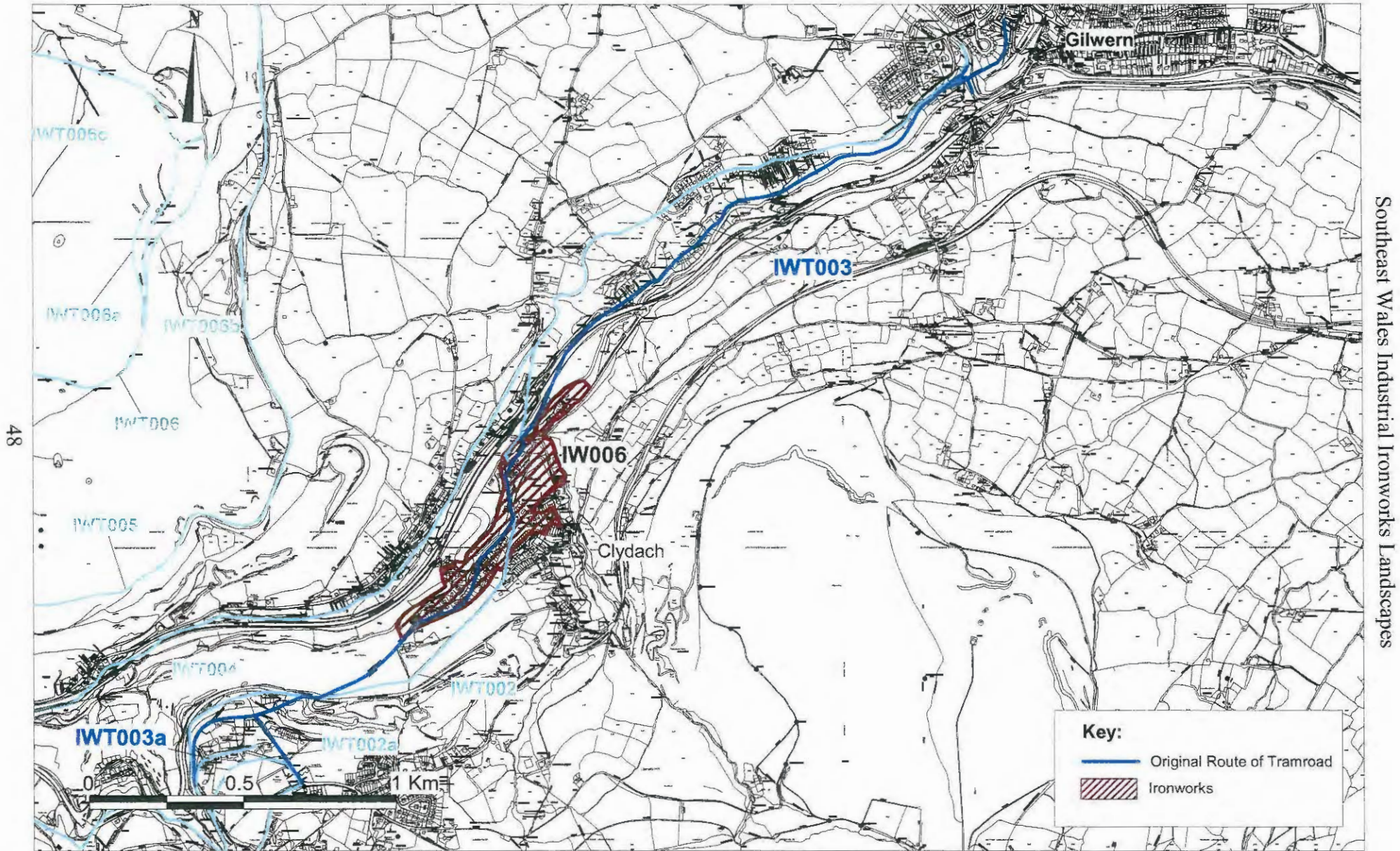
North of the ironworks, the tramroad ran over Pant Glas Bridge (LB 23812, 07802g), from here until north of the A465 the route has been destroyed by land reclamation and road construction. Its route survives along a minor road past Forge Row to St Maelog, then northeast along a footpath to Gilwern canal where it deviates north and runs under then alongside the scheduled Gilwern embankment (SAM MM251).

South of the ironworks the tramroad ran along the same incline as IWT002, before deviating southwest rising up a series of inclines past Llanelly quarry. The tramroad route can be followed along a footpath to Daren-felen above the minor road that was the route of IWT002. A junction off this route took the tramroad south up an incline to the Jolly collier's at Waunllapria.

IWT003a

This route branches off IWT003 at Daren-felen and follows a minor road a short distance to the former site of Pen-Ffyddlwn Farm.

Figure 9: Route of Tramroad IWT003 Llam-march Tramroad



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Condition of IWT003

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are five surviving sections of IWT003:

Table 16: Surviving Sections of IWT003

Section Number	Location	Condition Rating	Figure Reference Number
IWT003(i)	SO 22204 12494 to SO 22018 12430	B	11, 12
IWT003(ii)	SO 22051 12435 to SO 22155 12291	D	11, 12
IWT003(iii)	SO 22572 12721 to SO 22302 12511	A	11, 12
IWT003(iv)	SO 22868 13213 to SO 22895 13075	B	11, 12
IWT003(v)	SO 24308 14471 to SO 23618 14093	A	11, 13

IWT003(i) (CONDITION B) includes the junction (IWT003/004) of sections E8, E9 and E13 and most of incline E9 (as identified by John van Laun (2001)). The formation of this survives as a grassed over footpath with no visible surface features.

IWT003(ii) (CONDITION D) this section includes part of the incline recorded as E13 by John van Laun (2001). Part of this section runs through private land where it is strewn with rubble from nearby construction work. The tramroad, now very overgrown, has been badly damaged by the excavation of a drainage gully.

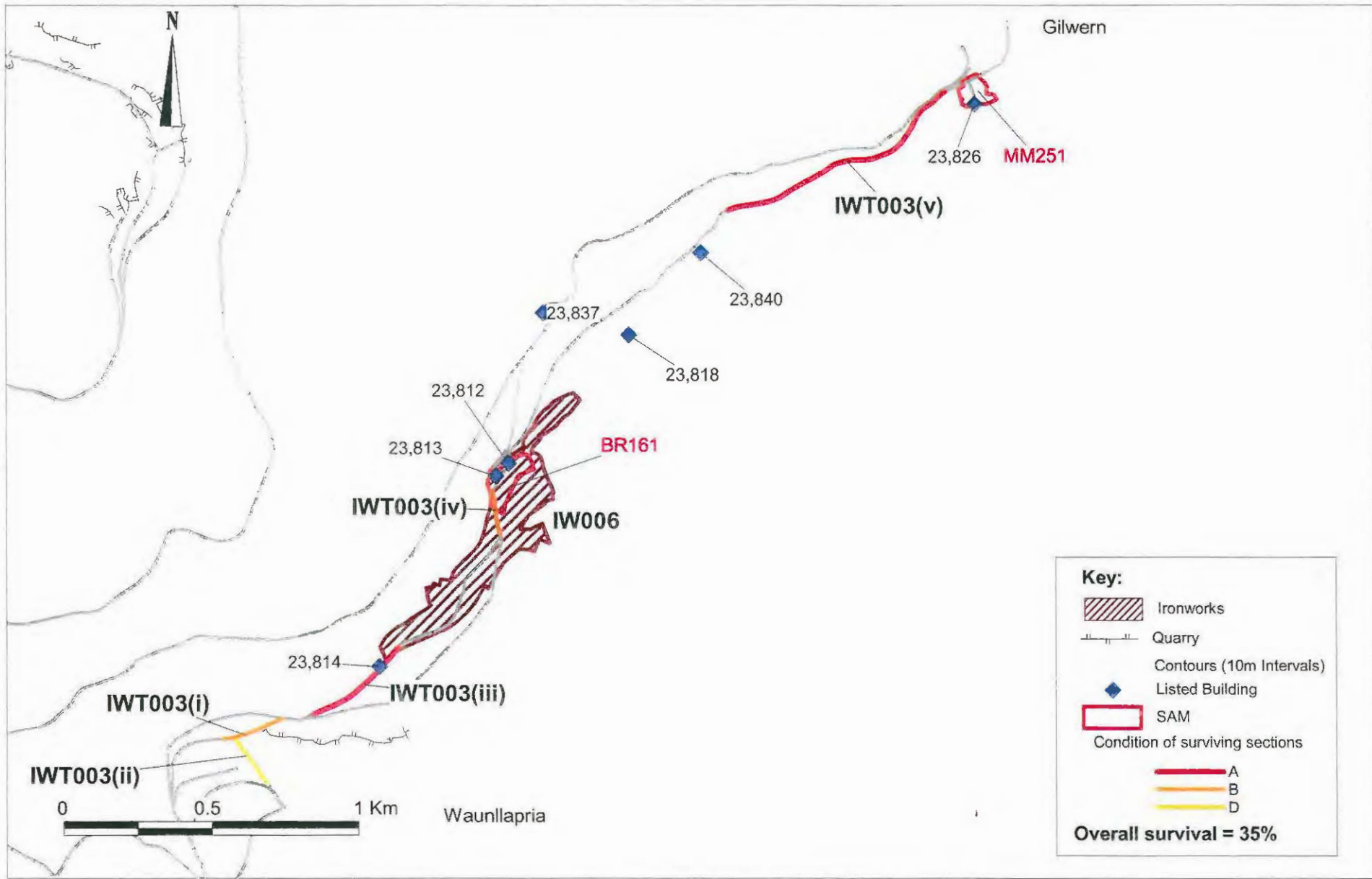
IWT003(iii) (CONDITION A) relates to inclines E10 and E11 and a small part of E12 depicted by John van Laun (2001) now in use as a footpath. The inclines are in good condition with some exposed stone track bed, although they are slightly overgrown. A stone bridge (IWT003/001, LB 23814) survives between E11 and E12 with two exposed stone blocks in situ (IWT003/002). The watercourse passing under the bridge has been diverted from its original route.

The site of the former rolling mills and tramroad route between IWT003(iii) and (iv) has been developed for housing.

IWT003(iv) (CONDITION B) is a tramroad incline now used as a footpath. This incline is the same as that used by the earlier Llam-march railroad (IWT002: surviving section IWT002(i)). The stone track bed survives and is well preserved but slightly overgrown. The section between SO 22881 13152 and SO 22868 13213 falls within the scheduled area of Clydach Ironworks (SAM BR161).

IWT003(v) (CONDITION A) survives along what is now a footpath to Gilwern canal. This section is well preserved; stone track bed is intact in places and some stone blocks remain in situ. However, damage has been caused by the insertion of drainage channels with the removal of stone blocks. It is possible that more remains survive buried beneath the leaf litter. A small section of the route above Pwll Rhys has been tarmaced over.

Figure 11: Surviving Tramroad Sections IWT003(i)-IWT003(v)



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Southeast Wales Industrial Ironworks Landscapes

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 10; details of these interests are given in Appendix III.

Table 17: Features Associated with IWT003(i) (see Figure 12)

Feature Number	NGR	Type
IWT003/004	SO 22052 12434	Tramroad junction

Table 18: Features Associated with IWT003(iii) (see Figure 12)

Feature Number	NGR	Type
IWT003/001	SO 22535 12681	Tramroad bridge
IWT003/002	SO 22535 12681	Stone block
IWT003/003	SO 22558 12705	Tramroad cutting

Table 19: Features Associated with IWT003(v) (see Figure 13)

Feature Number	NGR	Type
IWT003/005	SO 23574 14034	Revetment
IWT003/006	SO 23618 14093	Post hole
IWT003/007	SO 23768 14127	Stone block
IWT003/008	SO 24144 14286	Drain Pipe
IWT003/009	SO 24149 14286	Stone block
IWT003/010	SO 24189 14286	Stone block
IWT003/011	SO 24209 14286	Stone block
IWT003/012	SO 24245 14421	Stone block
IWT003/013	SO 24258 14420	Building

Current Protection/Status

Part of section IWT003(iv) falls within SAM BR161.

The stone bridge in section IWT003(iii) is a listed building (23814).

Part of IWT003(i) is within the Brecon Beacons National Park and lies within Cwm Clydach SSSI.

Part of IWT003(iii) is within the Brecon Beacons National Park and lies within the following protected areas; Cwm Clydach Woodlands SAC and PSAC, Cwm Clydach ancient woodland, Cwm Clydach NNR and SSSI.

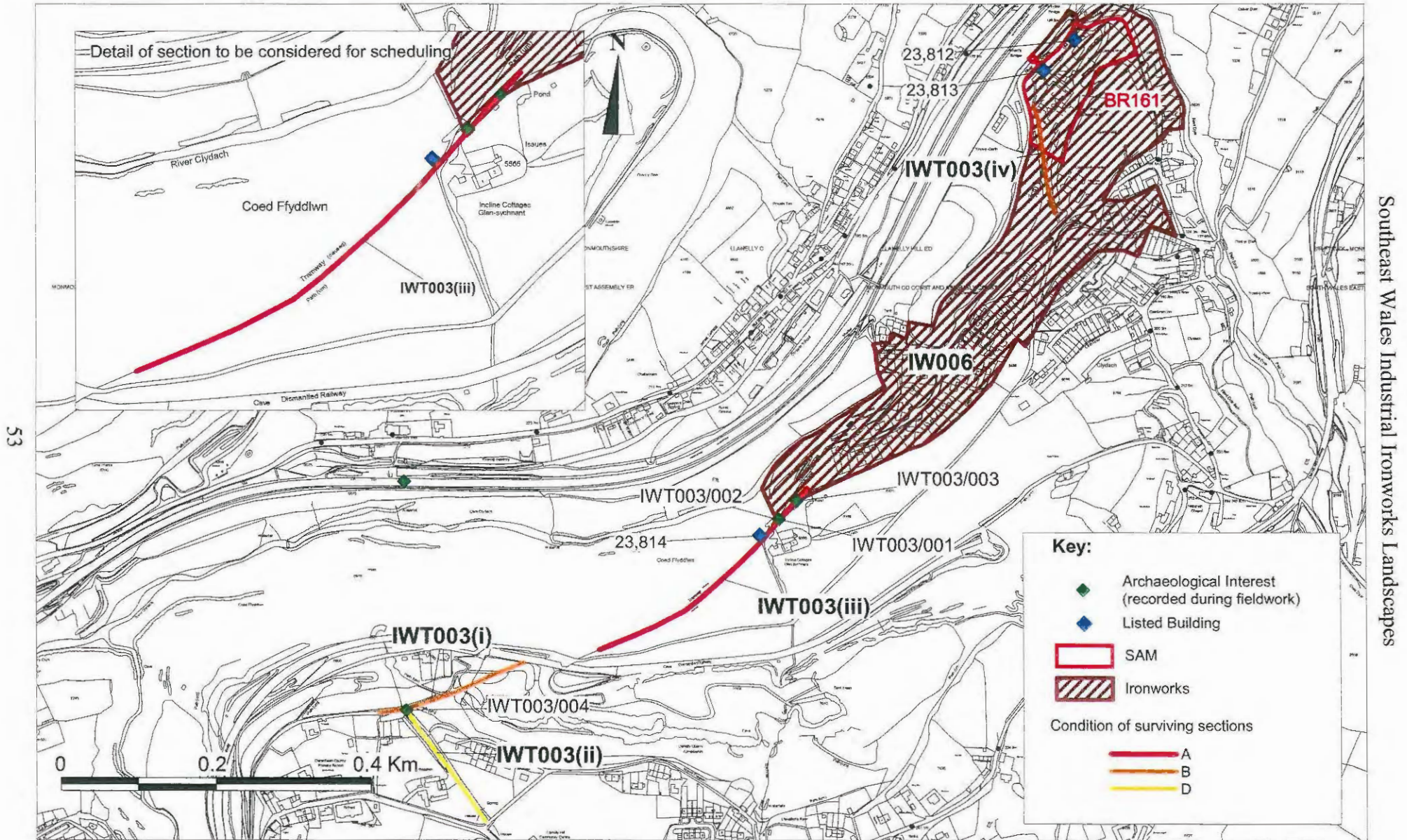
Identified Threats

No current threats to surviving sections apart from ongoing erosion of IWT003(ii).

Conservation and Management Recommendations

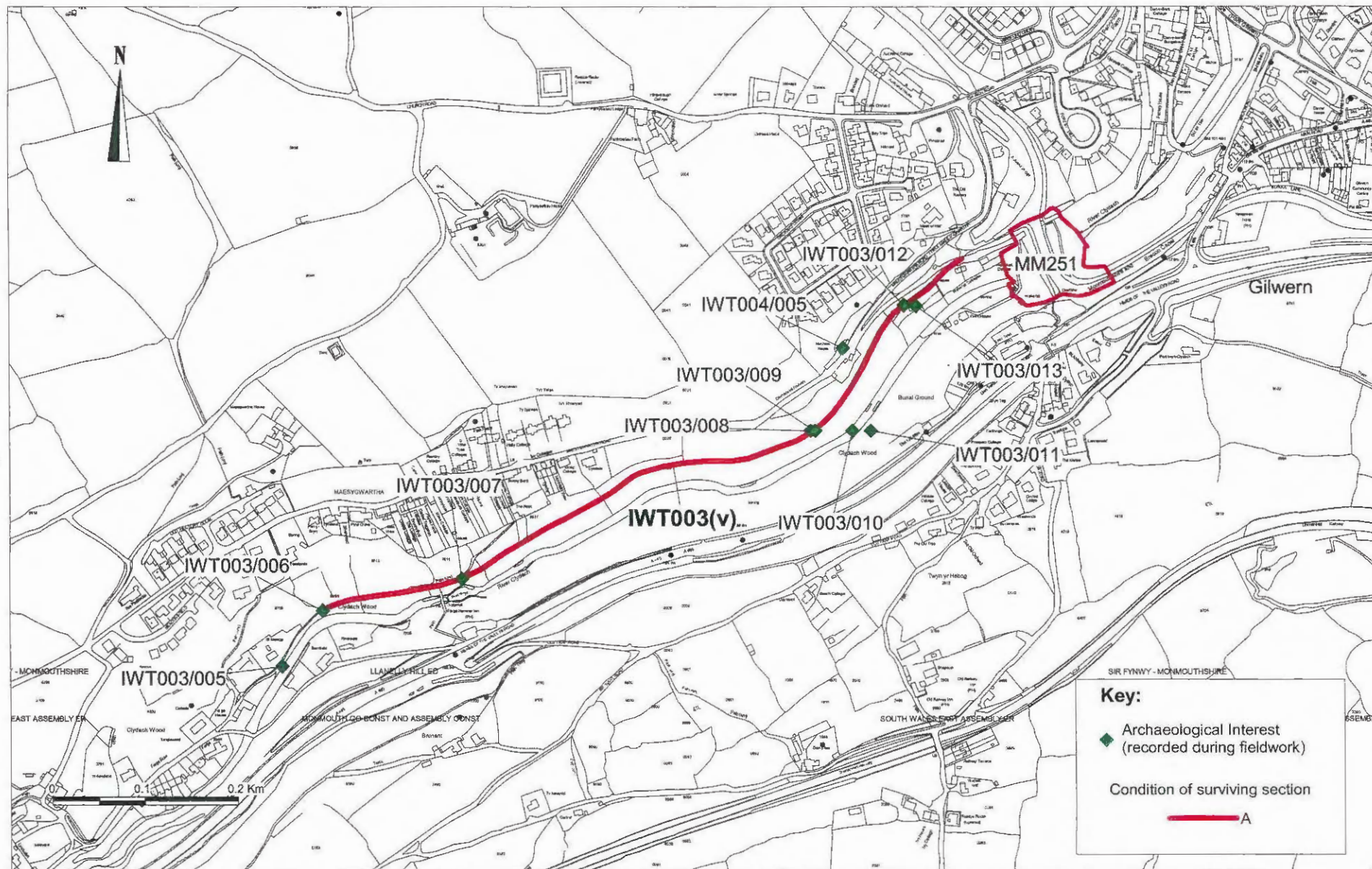
Extending the scheduled area to include the whole of the incline IWT003(iv) could be considered. Consideration could also be given for the scheduling of the lower section of IWT003(iii) as it is well preserved and provides a good example of a change from rope worked inclines to chain in this area. The eastern section of IWT003(v) could also be considered for scheduling as it has high group value with the Gilwern Embankment (SAM MM251)

Figure 12: Surviving Tramroad Sections IWT003(i)-(iv) and Identified Interests



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Figure 13: Surviving Tramroad Section IWT003(v) and Identified Interests



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Plate 3: Listed Bridge (23814) Within Section IWT003(iii), View to Southeast



Plate 4: Stone Blocks along Part of Section IWT003(v), View to East

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Plate 5: Gilwern Embankment (SAM MM251)

Southeast Wales Industrial Ironworks Landscapes

Condition IWT003a

There are no surviving sections of this tramroad. The route of this section is now that of a minor road.

**IWT Number 004: Clydach Railroad
(05269.0g/05976.0g/05977.0g/06009.0g/06010.0g/276001)**

NGR: SO 24361 14610 to SO 16476 11539

Date Range: c. 1794 - ?

Approximate length of tramroad = 10 Km

Overall survival = 20%

Historical Background

Construction of the Clydach Railroad came in response to the need of the Brecknock and Abergavenny Canal Company to transport coal from the Clydach Valley. John Dadford was commissioned to design the railroad in 1794 to run from Gelli-felen coal pits to the canal at Glangrwyney on the Usk (the section east of Gilwern has not been surveyed). By 1805 the railroad had been extended westwards to Nant y glo and then joined the Rassau Railroad at Beaufort (van Laun 2001; Rattenbury 1980).

General Description

This tramroad has been surveyed as a single continuous route:

Table 20: Routes of Tramroad IWT004

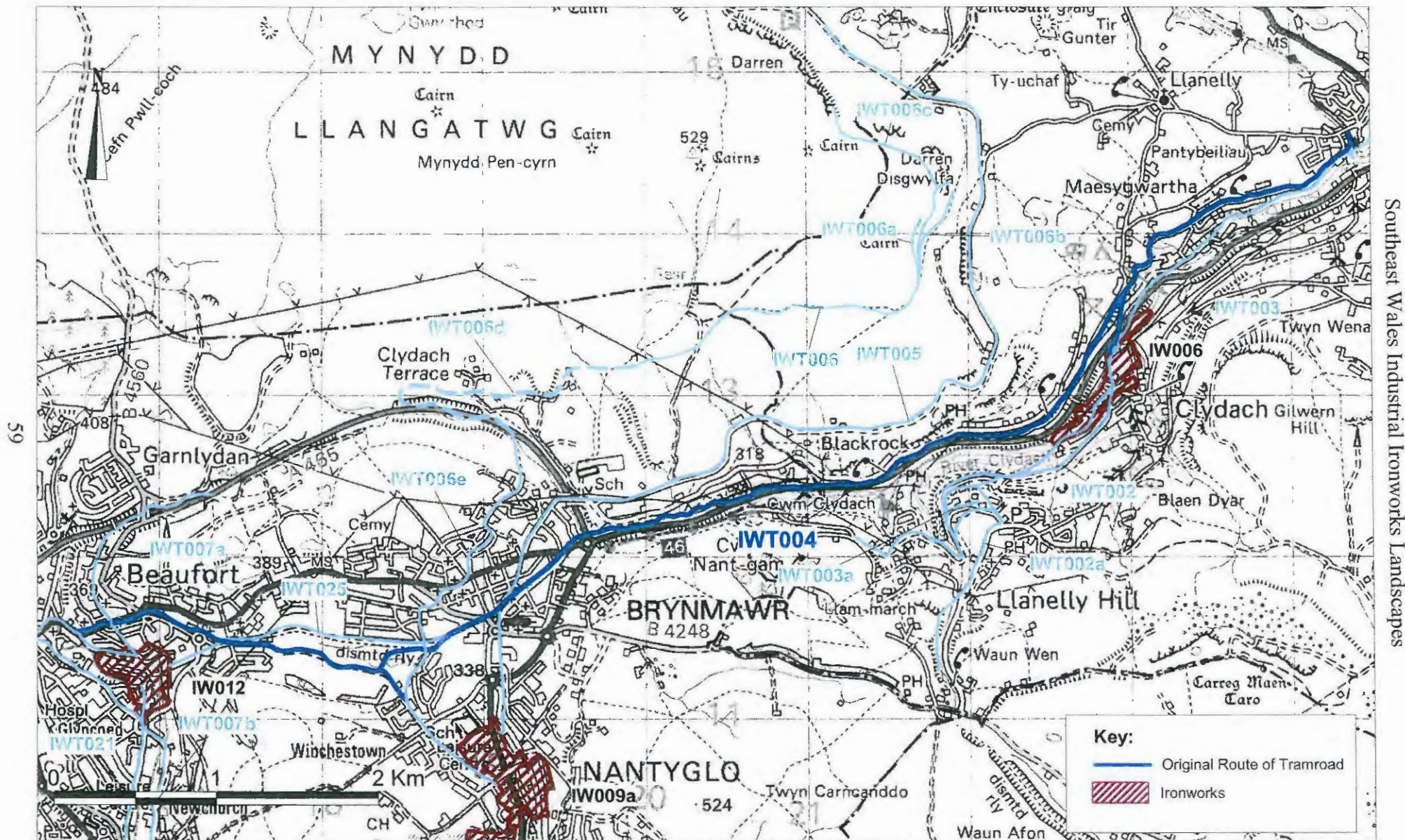
Route Number	Name	Location	Figure Reference Number
IWT004	Clydach Railroad	SO 24361 14610 to SO 16476 11539	14, 15

Much of the railroad has been tarmaced over and the route is now largely that of minor roads. Eastwards from the junction with the Rassau and Trevil Tramroads at Rhyd-y-blew, its route can be traced along Beaufort Rise, Radford Terrace, Frost Road and Bangor Road. The section around Beaufort Hill has been destroyed by housing development until south of Maeshalog House. The tramroad continued eastwards along what is now a footpath to a junction at the reservoir north of Winchestown. Here a branch would have run southeast to join with the Disgwylfa Tramroad to Nant y glo.

From the reservoir the tramroad continued northeast and its route can now be followed along Alma Street, Brynmawr. A small section of the tramroad has been destroyed by Brynmawr roundabout, however, its route can be traced north of the A465 towards Maesygartha where it ran along the north side of the river below Blackrock, passing Daren Ddu quarries. The tramroad continued northeast through Cheltenham and Maesygartha to the canal head at Gilwern.

A connection from the railroad into the ironworks is thought most likely to have been along a stone road across Smart's Bridge (LB 23813, 03204g) depicted on 1st Edition OS. John van Laun (2001) mentions that the gauge of the bridge is unlikely to be for a tramroad as well as the fact that there are no wear marks or means of fixing plates.

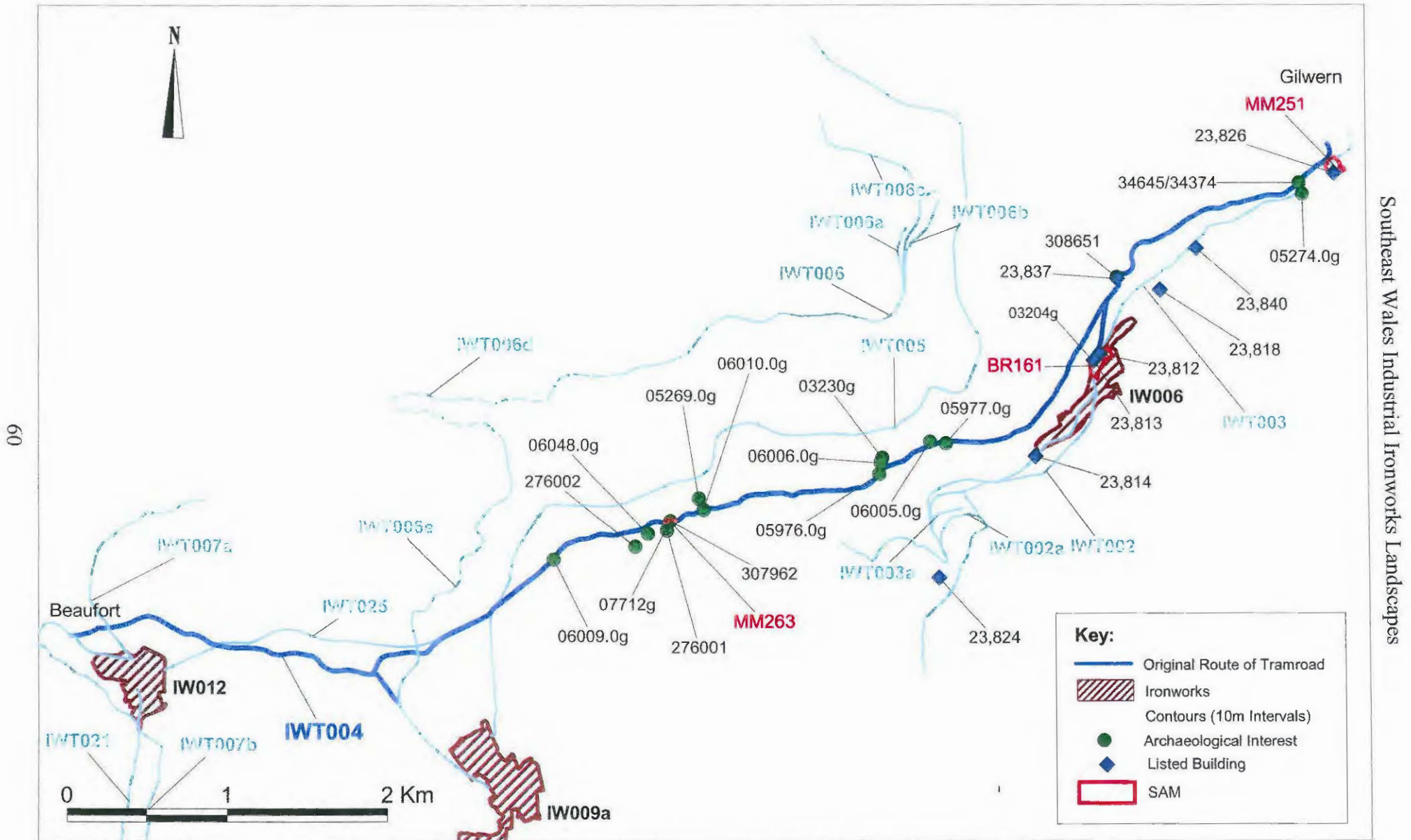
Figure 14: Route of Tramroad IWT004 Clydach Railroad



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Figure 15: Tramroad IWT004 Showing Archaeological Interests (Pre-survey)



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Condition of IWT004

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are six surviving sections of IWT004:

Table 21: Surviving Sections of IWT004

Section Number	Location	Condition Rating	Figure Reference Number
IWT004(i)	SO 18379 11298 to SO 17622 11462	B	16, 17
IWT004(ii)	SO 18379 11298 to SO 18490 11150	C	16, 17
IWT004(iii)	SO 18614 11434 to SO 18354 11299	B	16, 17
IWT004(iv)	SO 20430 12338 to SO 20067 12220	E	16, 17
IWT004(v)	SO 22230 12750 to SO 22004 12749	E	16, 18 -
IWT004(vi)	SO 24361 14610 to SO 24367 14526	C	16, 18

IWT004(i) (CONDITION B) is in use as a footpath between Maesyhaelog House and the former Nant y glo Ironworks reservoir north of Winchestown. The trackbed survives and is approximately 1.5m wide with drainage ditches and parallel dry stone walls of mixed boulder and cut masonry to either side. Between SO 18025 11373 and SO 18196 11326 the tramroad deviates into private land, covered by heavy vegetation. A number of stone blocks were recorded with good wear detail; however, the section is eroded in this area.

IWT004(ii) (CONDITION C) follows a footpath to Waunheulog housing estate. It would have originally joined the Disgwlyfa tramroad at this point. This section is heavily eroded and littered. No surface remains were recorded.

IWT004(iii) (CONDITION B) is a continuation of the Clydach railroad over the dam on the east side of the former Nant y glo Ironworks reservoir. This section survives as a grassed over bank, no surface features were visible.

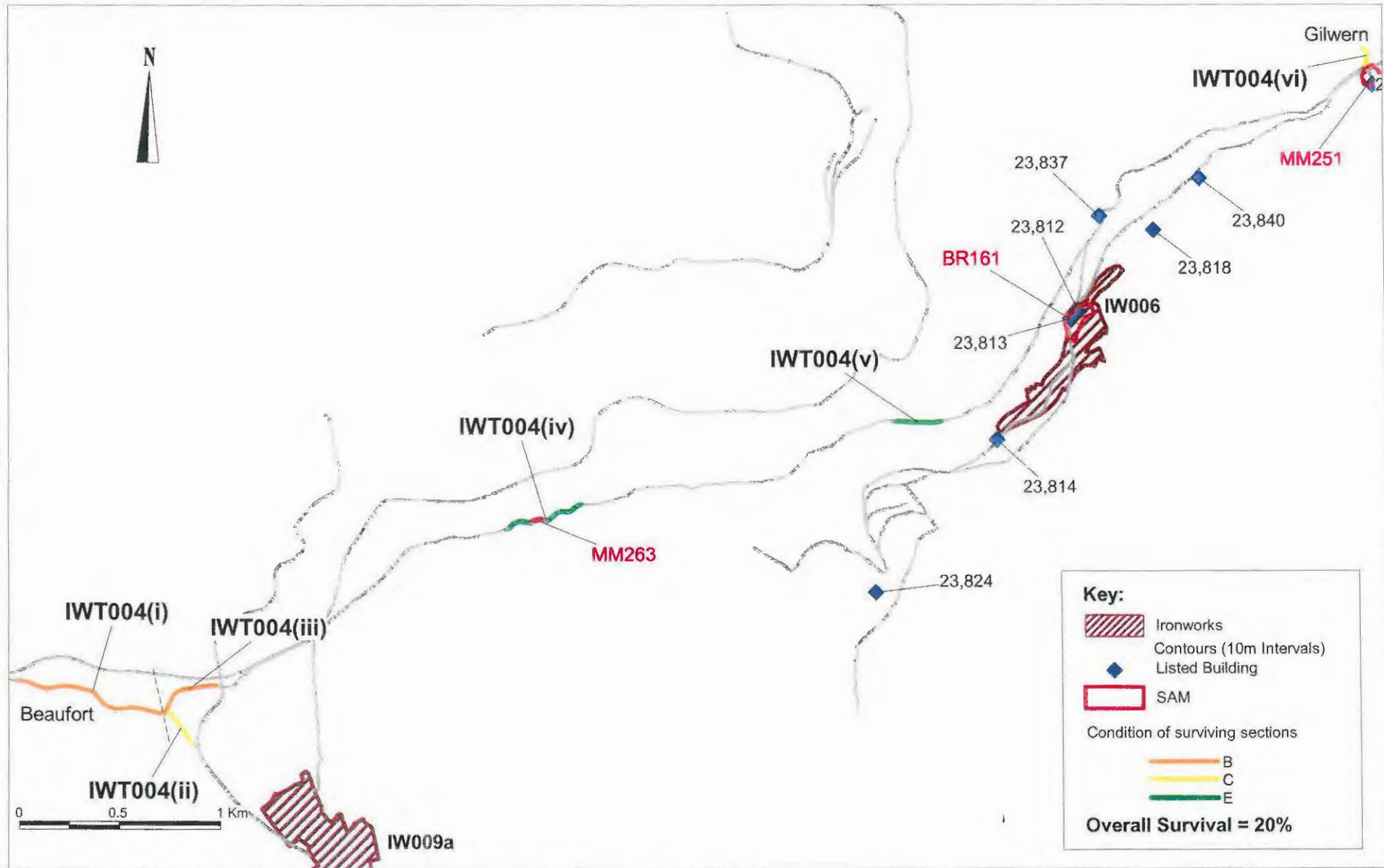
IWT004(iv) (CONDITION E) The tramroad formation survives but is tarmaced over for use as a footpath, however, buried remains are possible. This section is important as the main surviving feature is a scheduled stone-revetted earth causeway with stone archway over Nant Melyn stream (SAM MM263, 307962, 276001). From the end of IWT004(iv) to the Rock and Fountain Inn, Cheltenham the tramroad has been destroyed, though, its route can roughly be traced along the A465.

IWT004(v) (CONDITION E) the formation survives, including a culvert IWT004/004 but it has been tarmaced across the top and used as a footpath. This section in fact forms part of the Clydach Gorge Heritage Trail.

The remainder of the tramroad can be traced along a minor road through Cheltenham over at least two bridges, IWT004/006 and one which is listed (23837) to Maesygartha past Machine House (IWT004/005, 34645, 34374) to the canal head at Gilwern. Here a small section survives running alongside the canal.

IWT004(vi) (CONDITION C) is a partly grassed over, partly gravelled section that has been damaged by the creation of a track. No surface features were visible.

Figure 16: Surviving Tramroad Sections IWT004(i)-IWT004(vi)



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Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 15; details of these interests are given in Appendix III.

Table 22: Features Associated with IWT004(i) (see Figure 17)

Feature Number	NGR	Type
IWT004/001	SO 1801 1139	Stone block
IWT004/002	SO 1834 1129	Stone block

Table 23: Features Associated with IWT004(iv) (see Figure 17)

Feature Number	NGR	Type
IWT004/003	SO 2029 1235	Stone block

Table 24: Features Associated with IWT004(v) (see Figure 18)

Feature Number	NGR	Type
IWT004/004	SO 2205 1273	Culvert

Table 25: Features Associated with IWT004 Other (see Figure 18)

Feature Number	NGR	Type
IWT004/005	SO 24179 14375	Building
IWT003/001	SO 22535 12681	Tramroad Bridge

Current Protection/Status

A small section of IWT004(iv) is scheduled (SAM MM263).

Smart's Bridge is listed (23813) and scheduled under the area of Clydach Ironworks (SAM BR161).

A railroad bridge under the modern road is listed (23837).

IWT004(iv), (v) and (vi) are within the Brecon Beacons National Park and lie within the protected areas of Usk Bat Sites SAC and PSAC as well as Mynydd Llangatwg SSSI.

Identified Threats

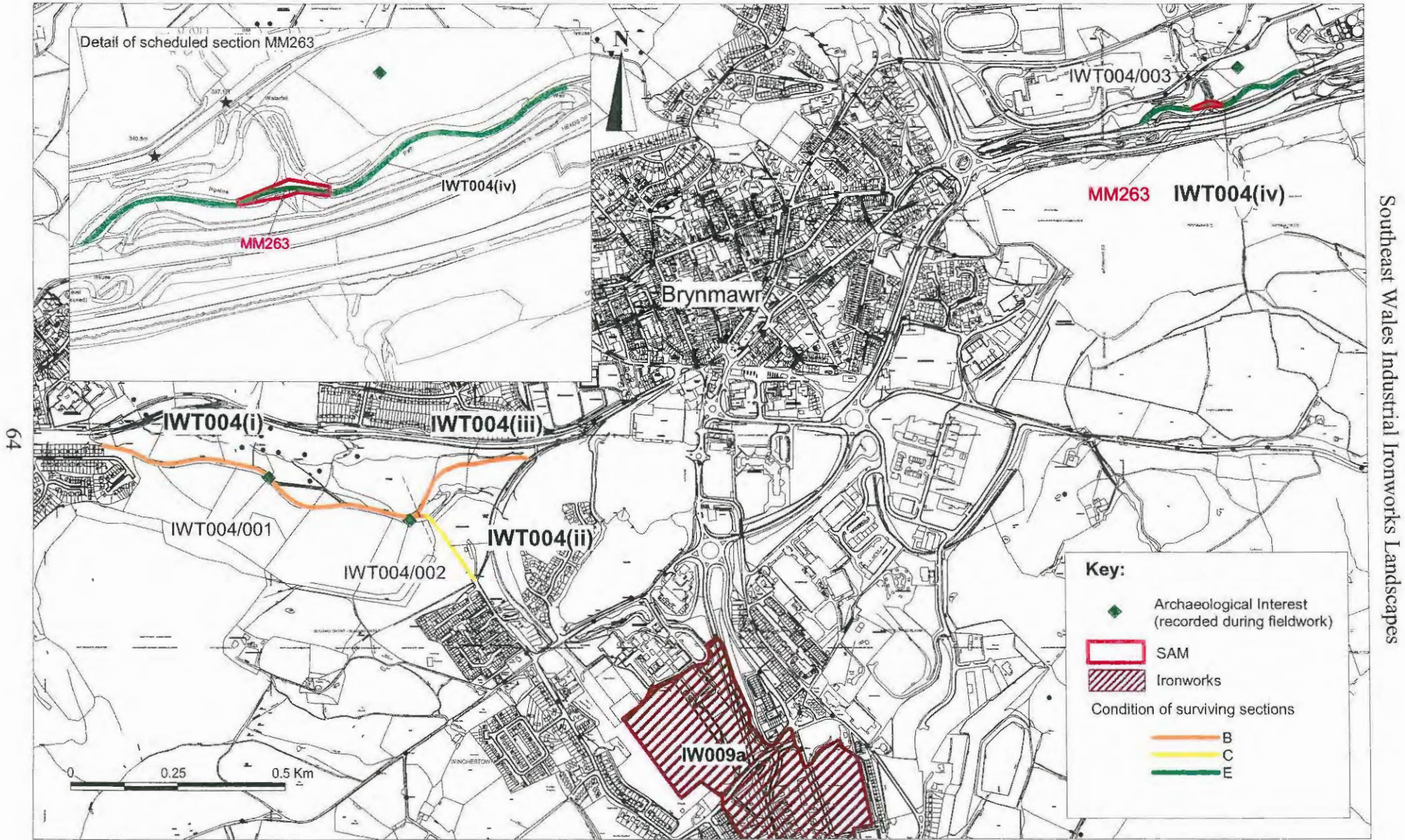
No threats were identified from the UDP. Vehicular activity has already caused some damage to the track bed along IWT004(i) and IWT004(ii).

Conservation and Management Recommendations

An appropriate barrier needs to be put in place to prevent vehicles from accessing the path along sections IWT004(i) and (ii).

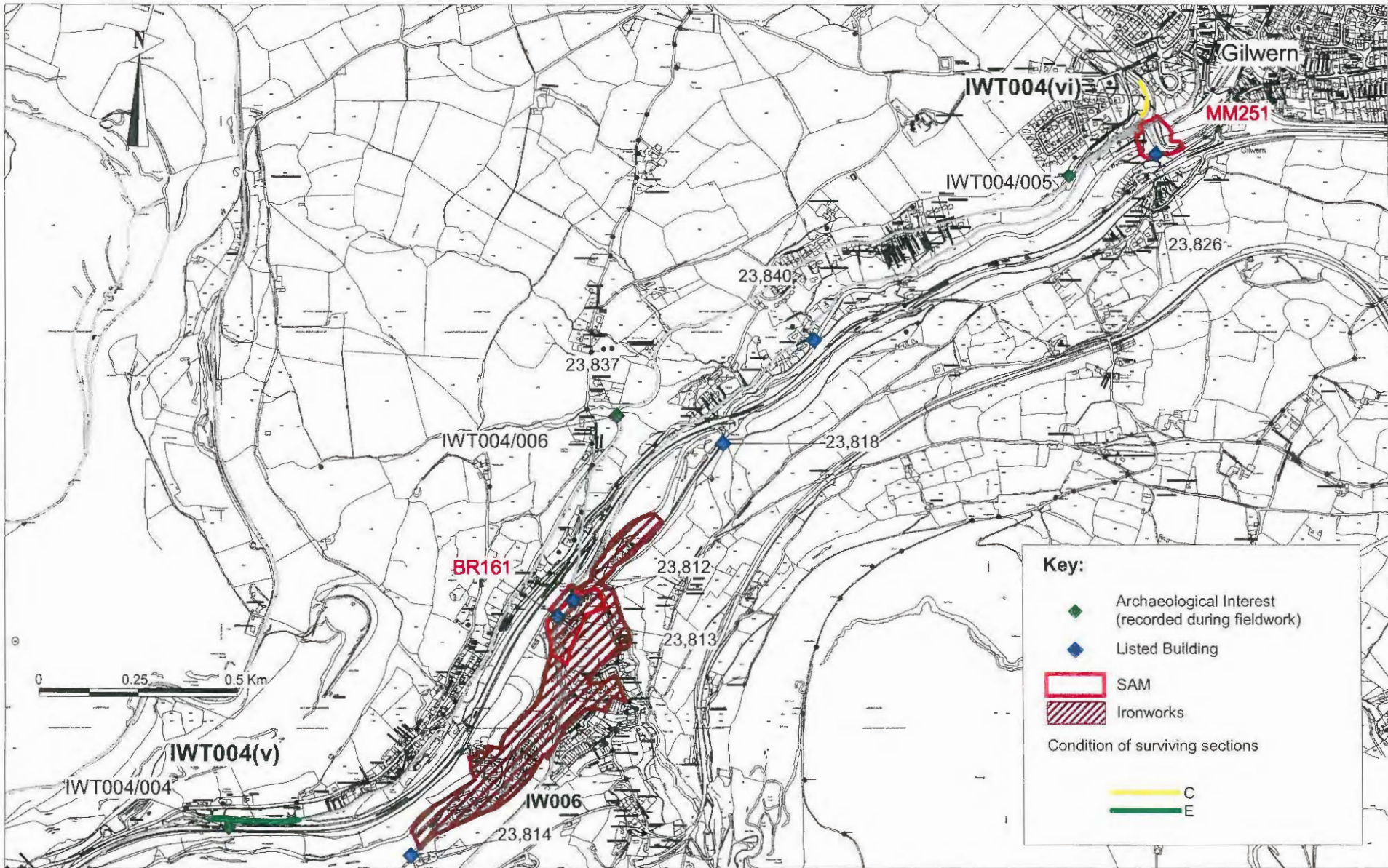
The Machine house might be considered for listing. It is in good repair and now used as a domestic residence.

Figure 17: Surviving Tramroad Sections IWT004(i)-(iv) and Identified Interests



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Figure 18: Surviving Tramroad Sections IWT004(v)-(vi) and Identified Features



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 Mae atgynhyrchu heb ganiatâd yn torri Hawlfraint y Goron a gall hyn arwain at erlyniad neu achos sifil. Glamorgan-Gwent Archaeological Trust Ltd 100017916 (2006).

**IWT Number 005: Bailey's Llangattock Tramroad
(03213g/05271.0g/05980.0g)**

NGR: SO 21119 15287 to SO 19097 10916

Date Range: c. 1830 - 1876

Approximate length of tramroad = 7.5 Km (within GGAT area)

Overall survival = less than 1% within area surveyed

Historical Background

In 1828 the Brecknock and Abergavenny Canal Company authorised the Bailey family to build a tramroad from Nant y glo ironworks to Llangattock quarries (the section north of Waun Watcyn was not surveyed during this survey as this lies beyond the boundary of Glamorgan-Gwent). The tramroad was fully completed within 18 months and proved to be a saving for the Bailey's as it was cheaper to transport limestone from their own quarries to Nant y glo ironworks than from Trevil quarries as they had done previously. The limestone from Llangattock was also said to be of better quality than that of Trevil. This tramroad joined a connection to the Brecknock and Abergavenny Canal at Llangattock

It has been suggested that locomotives were used along this tramroad due to the size, thickness and weight of blocks and chairs, along with other documentary evidence (van Laun 2001: pp107-113).

General Description

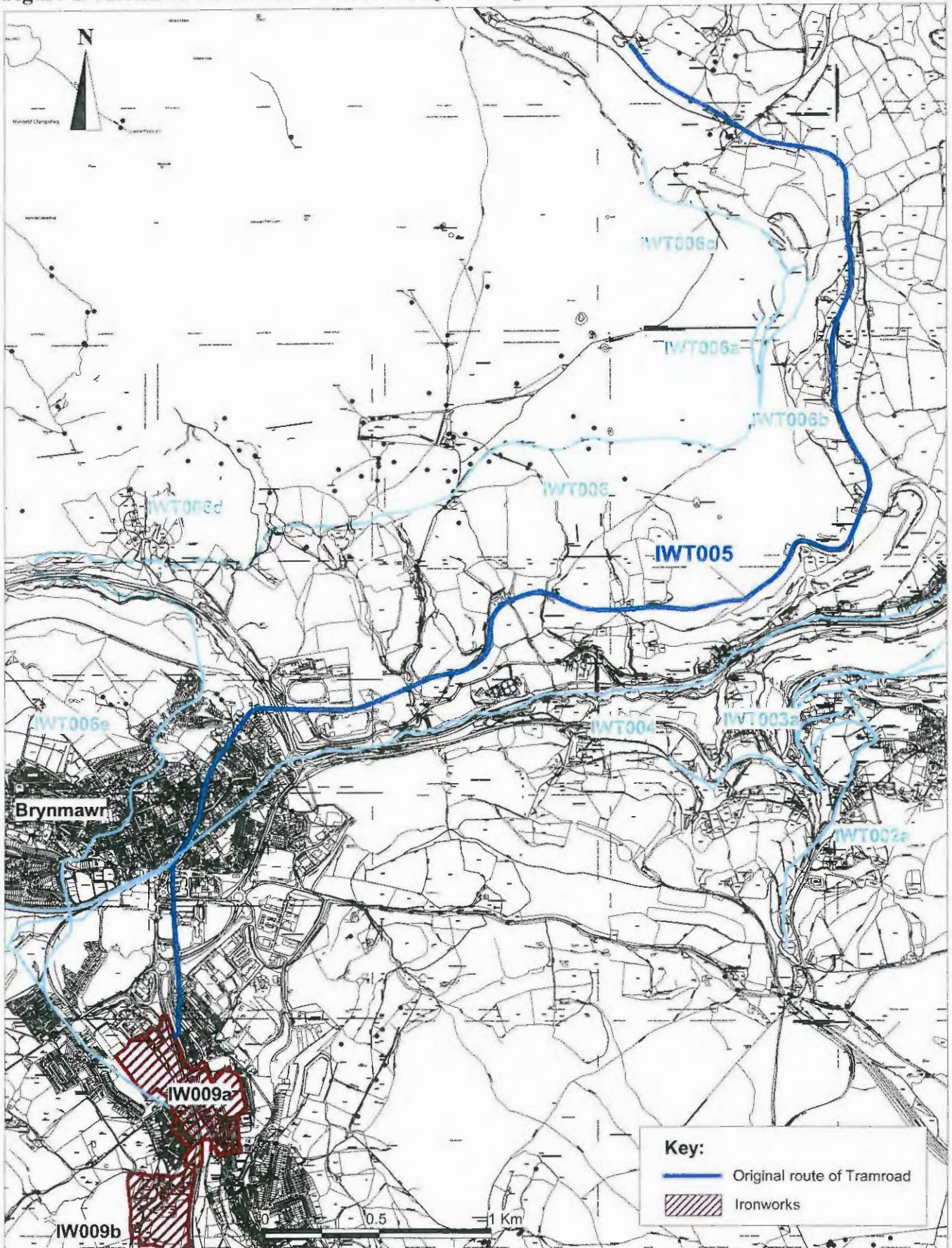
This tramroad has been surveyed as a single continuous route:

Table 26: Routes of Tramroad IWT005

Route Number	Name	Location	Figure Reference Number
IWT005	Bailey's Llangattock Tramroad	SO 21119 15287 to SO 19097 10916	19, 20

The route of this tramroad can be followed by a minor road leading around Llangattock Mountain south from Waun Watcyn, then west above Blackrock to Brynmawr where it continues along Intermediate Road and Lower Bailey Street. From here it ran due south to Nant y glo Ironworks, however, this section has been destroyed by housing and industrial development.

Figure 19: Route of Tramroad IWT005 Bailey's Llangattock Tramroad

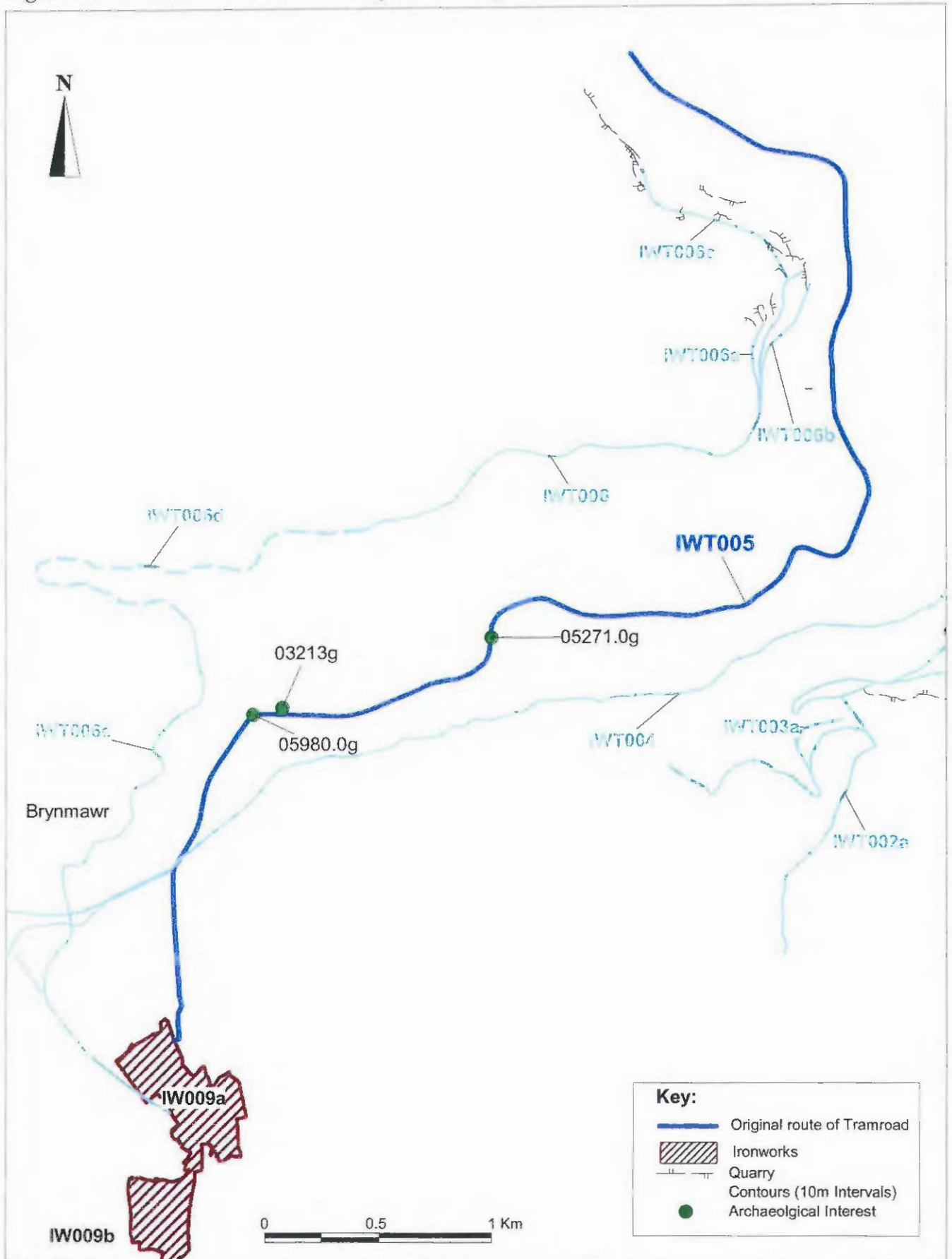


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Figure 20: Tramroad IWT005 Showing Archaeological Interests (Pre-survey)



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Condition of IWT005

Although no surface features survive, causeways remain beneath the road at Hafod and at the base of the former incline at Wern Watcyn (see table 27).

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 20; details of these interests are given in Appendix III.

Table 27: Features Associated with IWT005 (see Figure 21)

Feature Number	NGR	Type
IWT005/001	SO 20661 12864	Tramroad causeway
IWT005/002	SO 21880 14830	Tramroad causeway

Current Protection/Status

No current protection/status given to surviving features.

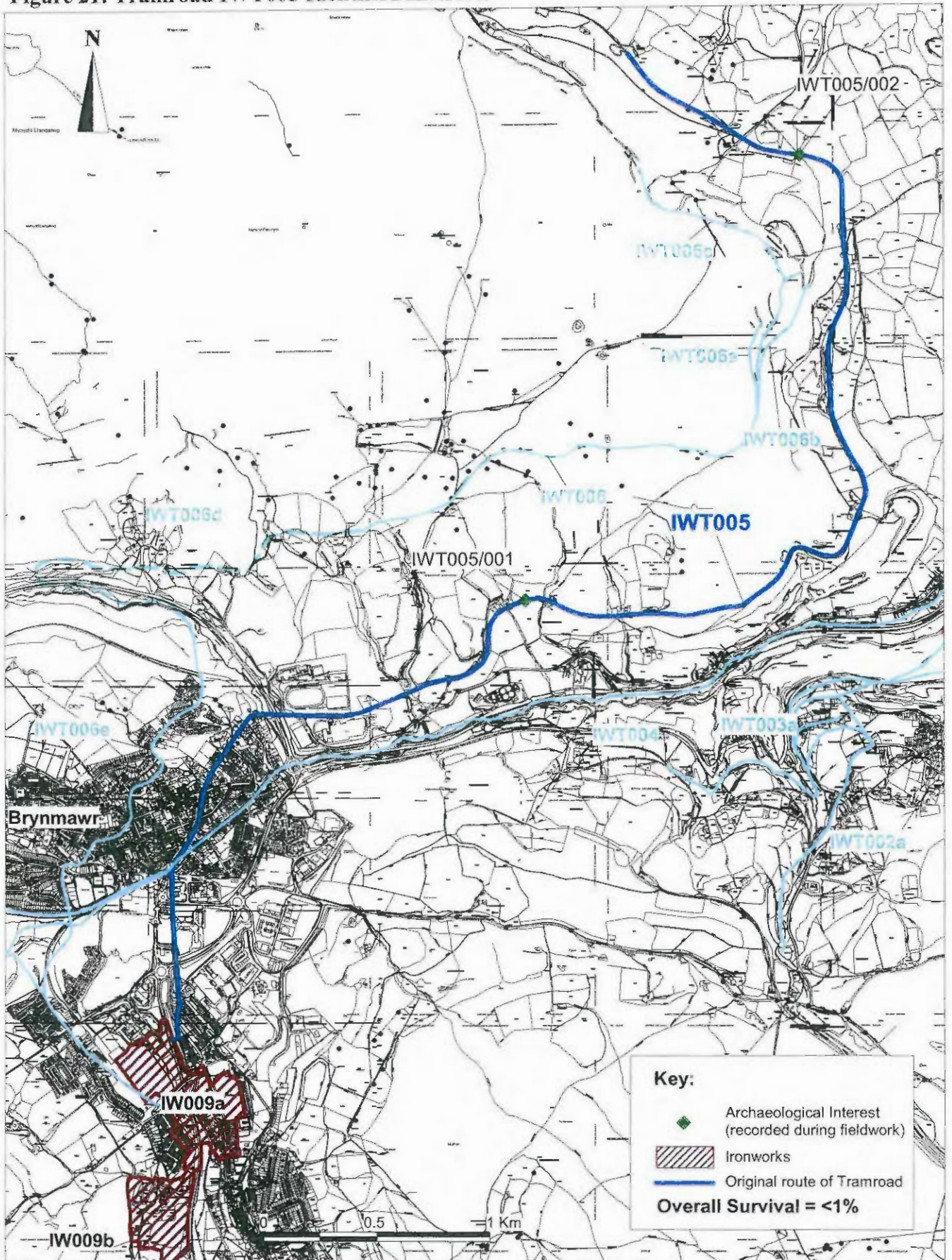
Identified Threats

No threats were identified from the UDP. Potential threat from future road schemes/maintenance.

Conservation and Management Recommendations

Maintain as current. The identified features were inaccessible at the time of survey, any works having an effect on these features should allow for archaeological recording.

Figure 21: Tramroad IWT005 Identified Interests



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IWT Number 006: Disgwylfa

NGR: SO 21171 14782 to SO 19079 10592

Date Range: c. 1818 - 1833

Approximate length of tramroad = 9.8 Km

Overall survival = 49%

Historical Background

Disgwylfa quarries were worked by Nant y glo Ironworks from c.1818 although little documentary evidence exists concerning the construction of the tramroad, it is thought to have existed by this time (Rattenbury 1980). Tramroad branches served a number of quarries in the area and were in use up until 1833 at the latest, most falling out of use by 1829 when the Bailey's opened their new tramroad to Llangattock quarries (IWT005).

General Description

This tramroad was allocated six route numbers for the purpose of the survey:

Table 28: Routes of Tramroad IWT006

Route Number	Name	Location	Figure Reference Number
IWT006	Disgwylfa Main Tramroad	SO 21890 14314 to SO 19947 13179	22, 23
IWT006a	Disgwylfa Pant Draenog	SO 21711 14082 to SO 21691 13683	22, 23
IWT006b	Disgwylfa East	SO 21916 14255 to SO 21693 13678	22, 23
IWT006c	Disgwylfa West	SO 21171 14782 to SO 21819 14279	22, 23
IWT006d	Disgwylfa Main (conjectured)	SO 19939 13179 to SO 19152 12794	22, 23
IWT006e	Disgwylfa Main (south)	SO 19155 12784 to SO 19155 12784	22, 23

IWT006

This route equates to the section of Disgwylfa tramroad running from the southern entrance to the quarry of the Lonely Shepherd along the route of the present day footpath across Llangattock Mountain and Nant yr Hafod to the edge of the field boundaries of Hafod Farm. This was separated from IWT006d as the exact route in this area is unknown. The route of this tramroad originally extended further north into the quarries of the Lonely Shepherd, however, this was destroyed by the later construction of IWT006b.

IWT006a

This tramroad is a branch off the main line IWT006 running north along a footpath to Pant Draenog Quarries.

IWT006b

This tramroad is a branch off the main line IWT006 running northeast along a footpath to the southern extent of the quarries of the Lonely Shepherd.

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IWT006c

This route branches off IWT006 northwest through the Quarries of the Lonely Shepherd and can be followed along a footpath to Daren quarry where it terminates.

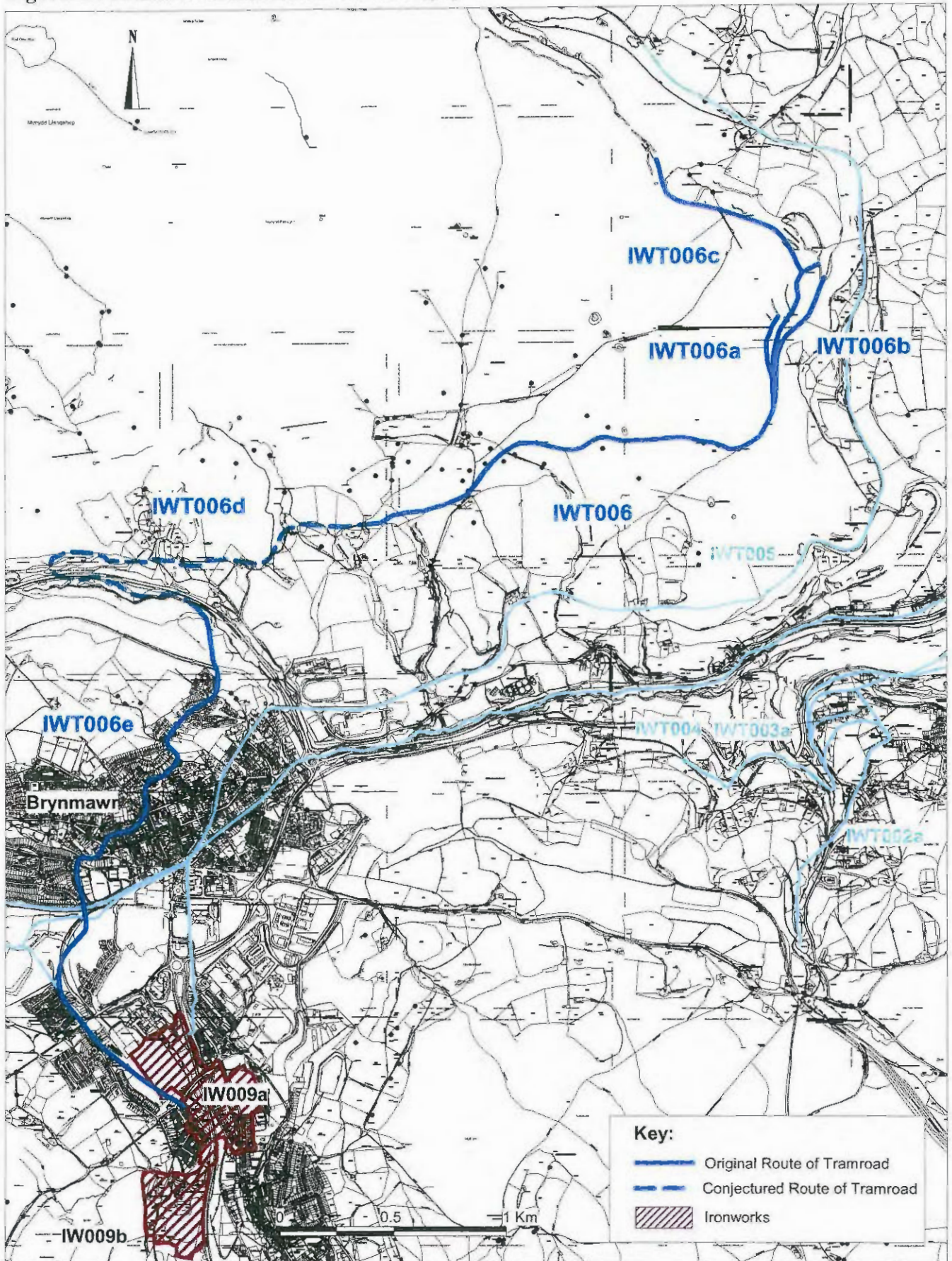
IWT006d

This section of the main line has been completely destroyed and as such a conjectured route taken from van Laun (2001) is depicted. The tramroad routes in this area had also changed substantially by the first edition map, however, it is shown on a plan from 1821 (Rattenbury 1980).

IWT006e (06008.0g/06013.0g)

This route is a continuation of the main line to Nant y glo Ironworks. The route of this section can be traced southwards along a footpath on an escarpment from Clydach Dingle to Clydach Street, Brynmawr, then along Well Street and Park Crescent. The tramroad originally crossed the main Clydach Railroad then connected to it via a small branch before continuing to the ironworks. This southern most section has been destroyed by residential and industrial development.

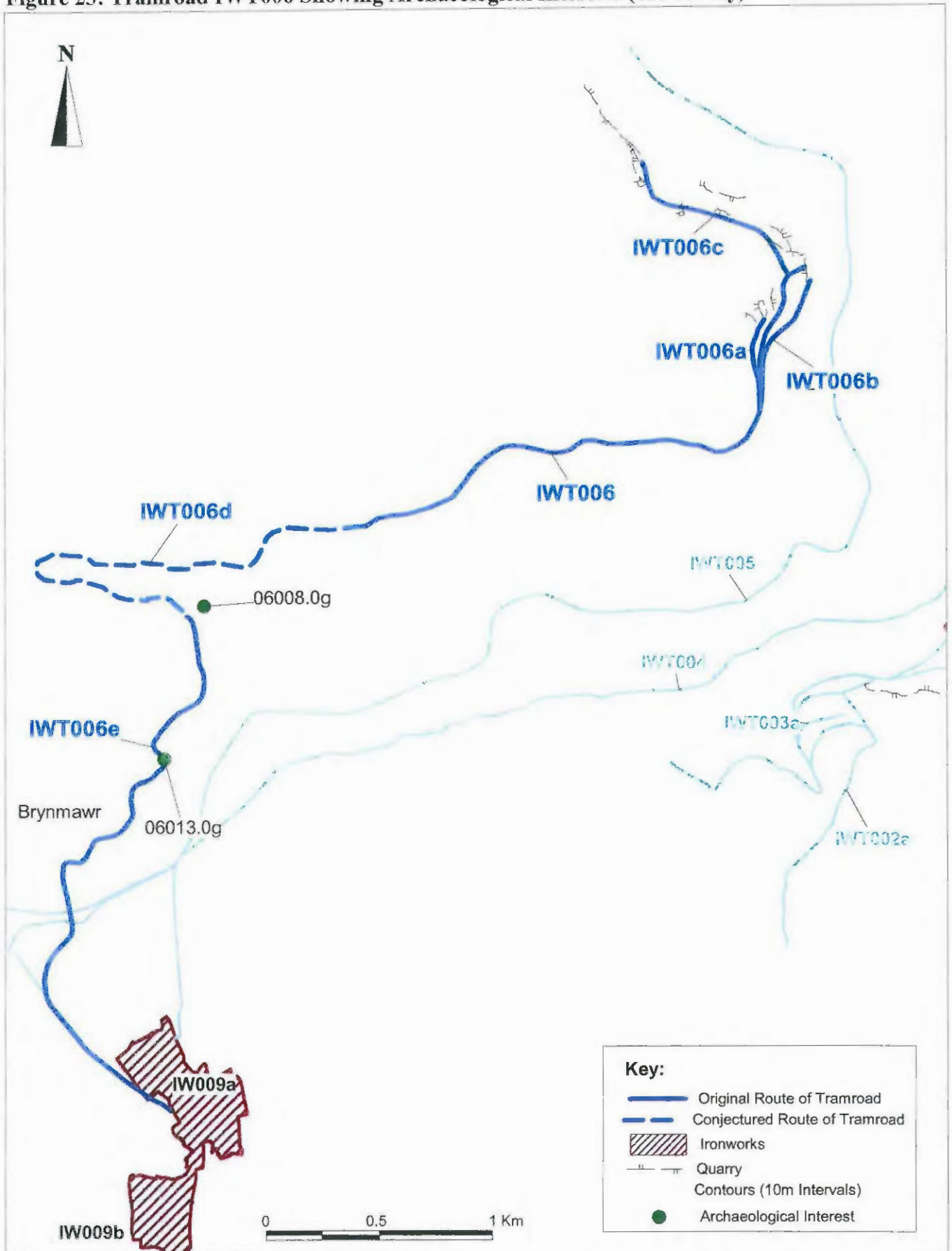
Figure 22: Route of Tramroad IWT006 Disgwydfa



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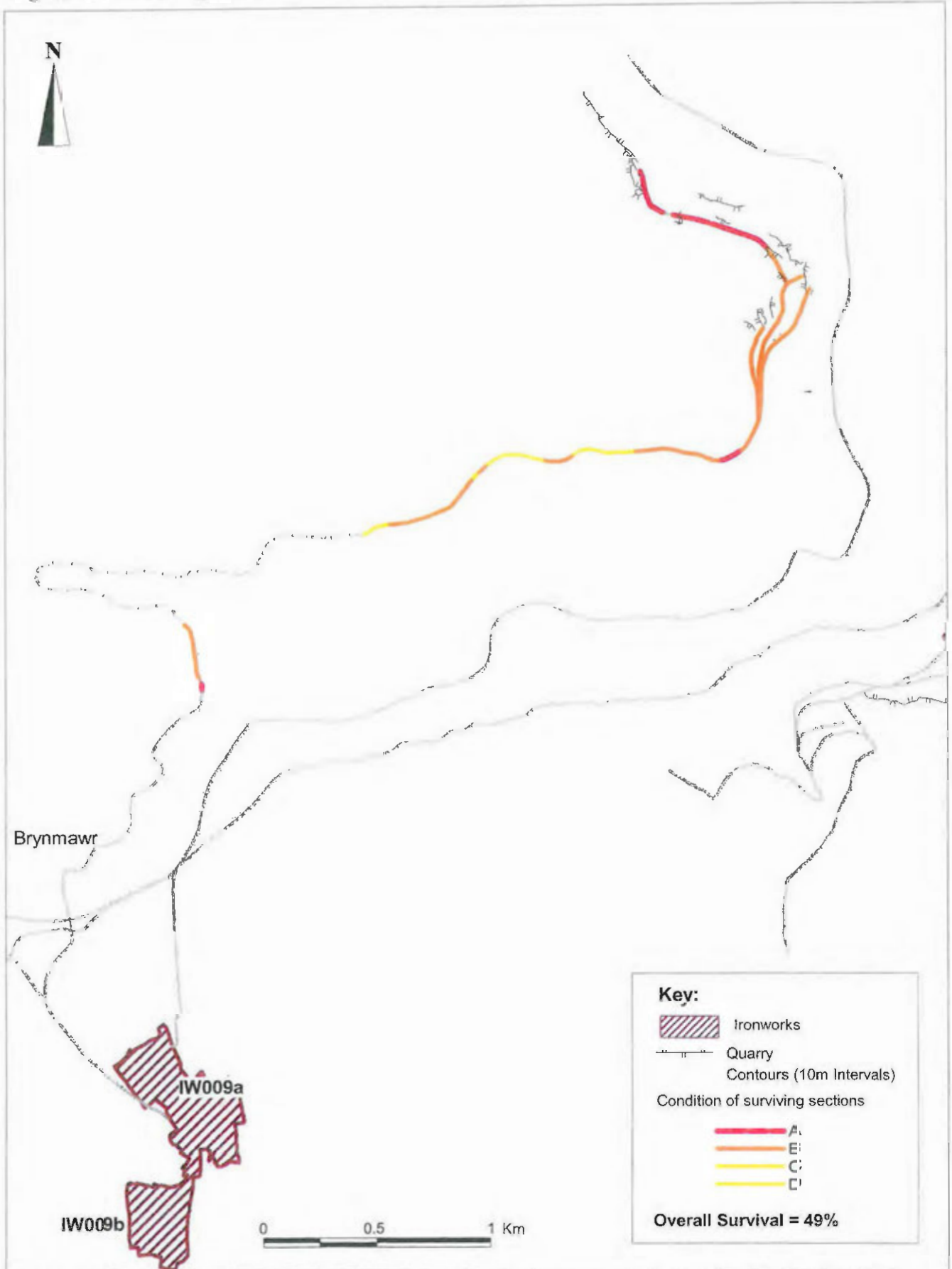
Figure 23: Tramroad IWT006 Showing Archaeological Interests (Pre-survey)



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Figure 24: Surviving Tramroad Sections IWT006 (all)



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Condition of IWT006

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

Although most of this section of tramroad is traceable on the ground, its condition varies; therefore, it has been divided into ten sections detailed below:

Table 29: Surviving Sections of IWT006

Section Number	Location	Condition Rating	Figure Reference Number
IWT006(i)	SO 20046 13223 to SO 19947 13180	D	25, 26
IWT006(ii)	SO 20422 13421 to SO 20046 13223	B	25, 26
IWT006(iii)	SO 20452 13454 to SO 20422 13421	D	25, 26
IWT006(iv)	SO 20497 13493 to SO 20452 13454	B	25, 26
IWT006(v)	SO 20732 13508 to SO 20497 13493	C	25, 26
IWT006(vi)	SO 20866 13524 to SO 20732 13508	B	25, 26
IWT006(vii)	SO 21154 13542 to SO 20866 13524	C	25, 26
IWT006(viii)	SO 21528 13499 to SO 21154 13542	B	25, 26
IWT006(ix)	SO 21617 13545 to SO 21528 13499	A	25, 26
IWT006(x)	SO 21890 14314 to SO 21617 13545	B	25, 26

IWT006(i) (CONDITION D) is badly eroded and covered by dense reed growth and bog formation. The tramroad in this area is not easily identified.

IWT006(ii) (CONDITION B) survives as a slightly raised embankment, which runs through a number a cuttings. This section is grassed over and no features were visible on the surface. Part of this section has been damaged by a track.

IWT006(iii) (CONDITION D) bog encroachment has covered the tramroad, therefore it was impossible determine its course or see in any detail.

IWT006(iv) (CONDITION B) represents a well-preserved feature: IWT006/005. A grassed over, raised causeway with possible bridge abutments at the northeast end. There is some slight erosion to the abutments.

IWT006(v) (CONDITION C) this section has good surviving features in situ, such as stone blocks, trackbed and revetment. However, there is heavy erosion along the track and disturbance in some places caused by the creation of a gas pipeline corridor.

IWT006(vi) (CONDITION B) survives in good condition as a grassed over embankment approximately 1.8m wide and 0.4m high with occasional sections of exposed stone revetment, especially visible along causeway IWT006/010.

IWT006(vii) (CONDITION C) once again bog has encroached over the tramroad. Causeway IWT006/010 continues through this area, however, because of dense reed coverage it is hard to identify the exact course of the tramroad in some areas.

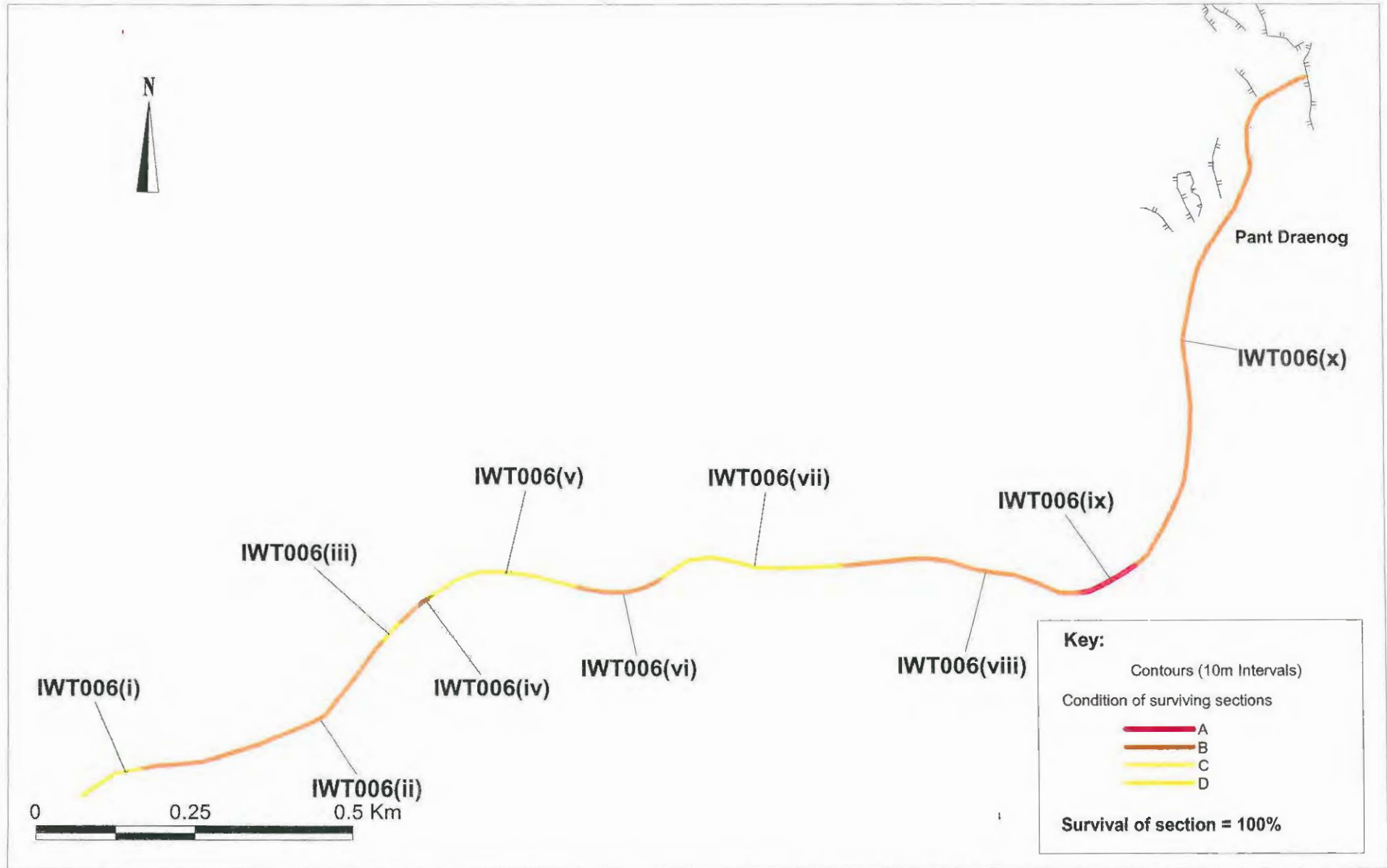
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IWT006(viii) (CONDITION B) is a well-preserved formation scarped into the hillside with occasional sections of exposed stone revetment similar to IWT006(vi). Sinkholes and areas of scree, for example IWT006/014 surround this section.

IWT006(ix) (CONDITION A) this represents an extremely well preserved, stone revetted causeway with both sides of the tramroad exposed along the top as two parallel lines of stone blocks (IWT006/015).

IWT006(x) (CONDITION B) this section is similar to sections IWT006(vi) and (viii), a well preserved grassed over embankment contouring the hillside then heading towards the quarries of the Lonely Shepherd through a series of cuttings.

Figure 25: Surviving Tramroad Sections IWT006(i)-(x)



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Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 23; details of these interests are given in Appendix III.

Table 30: Features Associated with IWT006(ii) (see Figure 26)

Feature Number	NGR	Type
IWT006/001	SO 20312 13303	Tramroad cutting
IWT006/002	SO 20210 13264	Tramroad cutting
IWT006/003	SO 20135 13242	Quarry
IWT006/004	SO 20351 13384	Tramroad cutting

Table 31: Features Associated with IWT006(iv) (see Figure 26)

Feature Number	NGR	Type
IWT006/005	SO 20433 13469	Tramroad causeway

Table 32: Features Associated with IWT006(v) (see Figure 26)

Feature Number	NGR	Type
IWT006/006	SO 20607 13540	Stone blocks
IWT006/007	SO 20666 13538	Quarry
IWT006/008	SO 20686 13524	Stone block

Table 33: Features Associated with IWT006(vi) (see Figure 26)

Feature Number	NGR	Type
IWT006/009	SO 20812 13507	Tramroad cutting
IWT006/010	SO 20855 13521	Tramroad causeway

Table 34: Features Associated with IWT006(vii) (see Figure 26)

Feature Number	NGR	Type
IWT006/010	SO 20855 13521	Tramroad causeway
IWT006/011	SO 21031 13542	Tramroad cutting

Table 35: Features Associated with IWT006(viii) (see Figure 26)

Feature Number	NGR	Type
IWT006/012	SO 21185 13548	Tramroad cutting
IWT006/013	SO 21217 13550	Culvert
IWT006/014	SO 21319 13548	Quarry

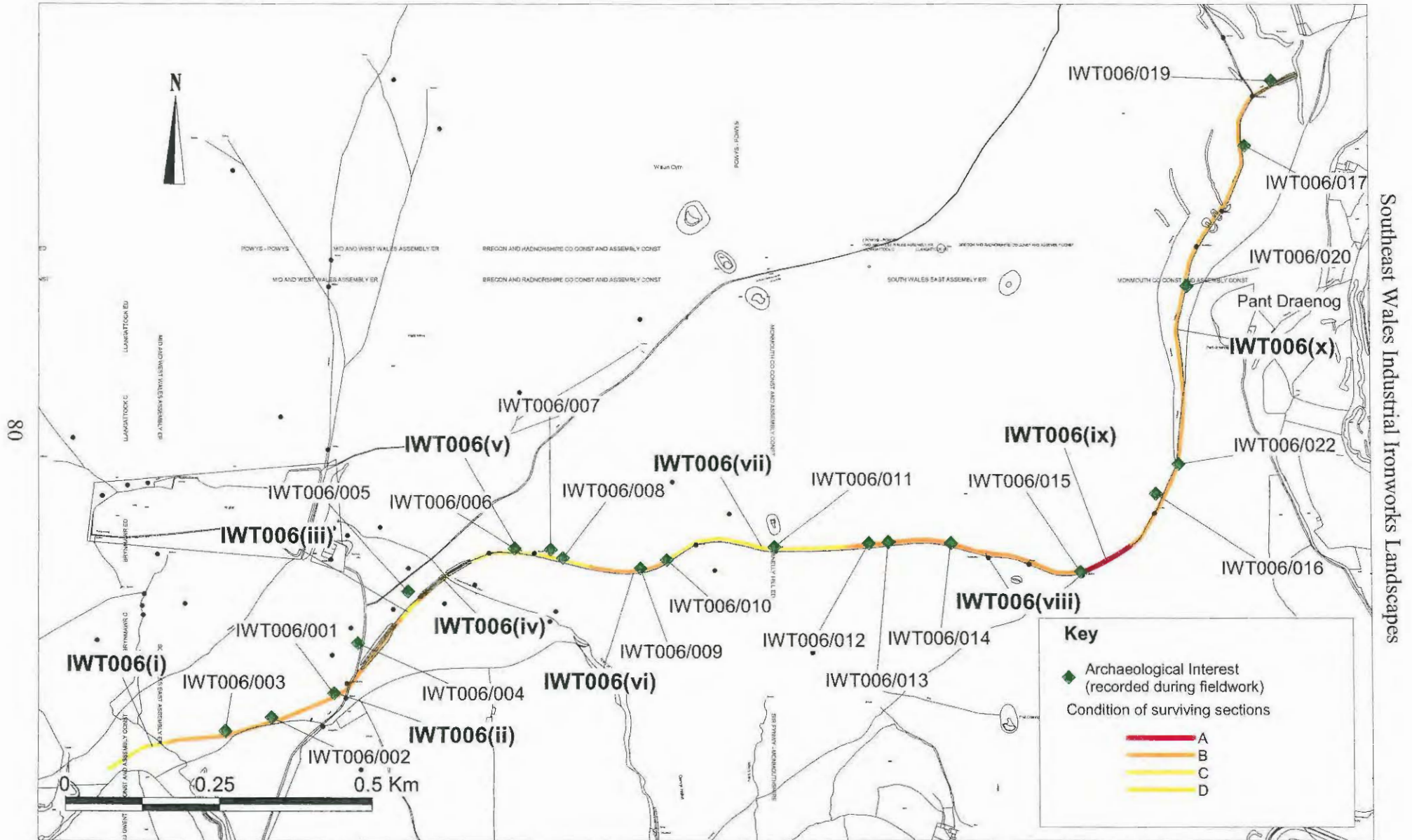
Table 36: Features Associated with IWT006(ix) (see Figure 26)

Feature Number	NGR	Type
IWT006/015	SO 21531 13501	Tramroad Causeway

Table 37: Features Associated with IWT006(x) (see Figure 26)

Feature Number	NGR	Type
IWT006/016	SO 21655 13629	Tramroad cutting
IWT006/017	SO 21804 14197	Quarry
IWT006/018	SO 21824 14281	Tramroad junction
IWT006/019	SO 21848 14305	Tramroad cutting
IWT006/020	SO 21707 13968	Tramroad cutting
IWT006/021	SO 21708 13807	Tramroad junction
IWT006/022	SO 21692 13678	Tramway

Figure 26: Surviving Tramroad Sections IWT006(i)-(x) and Identified Interests



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Current Protection/Status

No current protection or status is given to the tramroad. However, all surviving sections lie within the protected areas of Usk Bat Sites SAC and PSAC as well as Mynydd Llangatwg SSSI.

Identified Threats

No threats were identified from the UDP. However, a major problem is seen in increasing bog encroachment. Off road vehicular activities could be seen as a potential threat.

Conservation and Management Recommendations

The overall condition of the tramroad is given as good (value B), however, survival may be better than is thought, with features surviving in a buried state. This area could benefit from a detailed survey and possibly trial excavation to ascertain the true extent of survival. Scheduling could be considered for the best preserved sections, in particular the stone revetted causeway IWT006(ix) but also IWT006(ii), IWT006(iv), IWT006(viii) and IWT006(x).



Plate 6: Revetted Causeway (IWT006/015) along Section IWT006(ix), View to North

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Condition of IWT006a

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

100% of this route survives as one section:

Table 38: Surviving Sections of IWT006a

Section Number	Location	Condition Rating	Figure Reference Number
IWT006a(i)	SO 21711 14082 to SO 21691 13683	B	27, 28

This tramroad branch survives in its entirety, though in a more overgrown state than the main route (IWT006).

IWT006a(i) (CONDITION B) survives as a grassed over embankment with exposed sections of stone revetment and heavily revetted causeways visible.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 23; details of these interests are given in Appendix III.

Table 39: Features Associated with IWT006a(i) (see Figure 28)

Feature Number	NGR	Type
IWT006a/001	SO 21690 13772	Tramroad causeway
IWT006a/002	SO 21687 13815	Tramroad causeway
IWT006a/003	SO 21676 14025	Hollow way
IWT006a/004	SO 21691 13683	Tramroad junction

Current Protection/Status

No current protection or status is given to the tramroad. However, all surviving sections lie within the protected areas of Usk Bat Sites SAC and PSAC as well as Mynydd Llangatwg SSSI.

Identified Threats

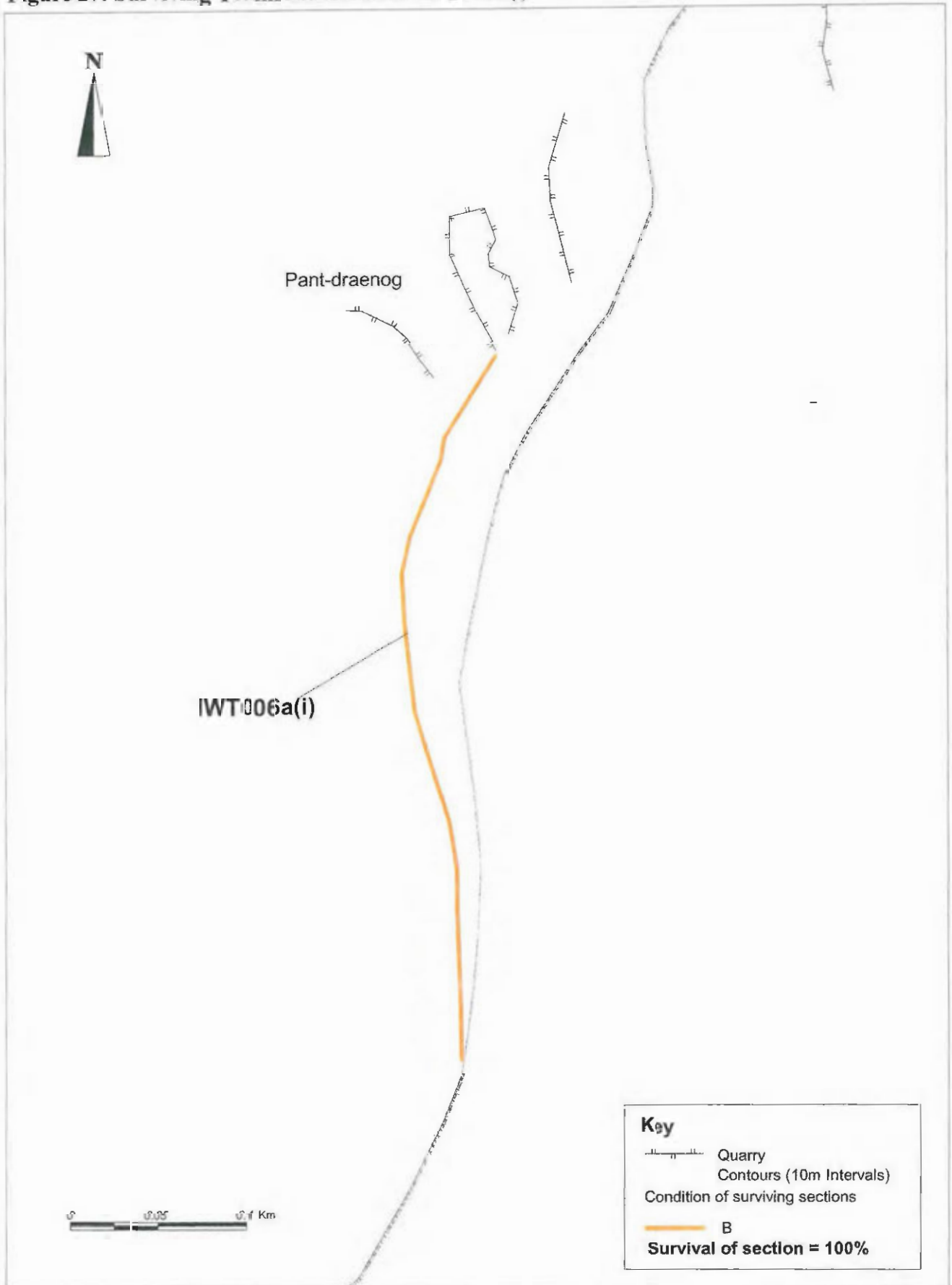
The tramroad is becoming heavily overgrown. No further threats were identified from the UDP.

Conservation and Management Recommendations

More detailed survey/investigation is recommended, to be carried out at a time when vegetation growth is less advanced. As the tramroad appears to be in good condition, it is considered that additional features may be buried beneath the undergrowth. The causeways may require some conservation work to prevent collapse. This section could be considered for scheduling.

The quarry area and minor tramroad sections to the quarry faces require further detailed survey.

Figure 27: Surviving Tramroad Sections IWT006a(i)

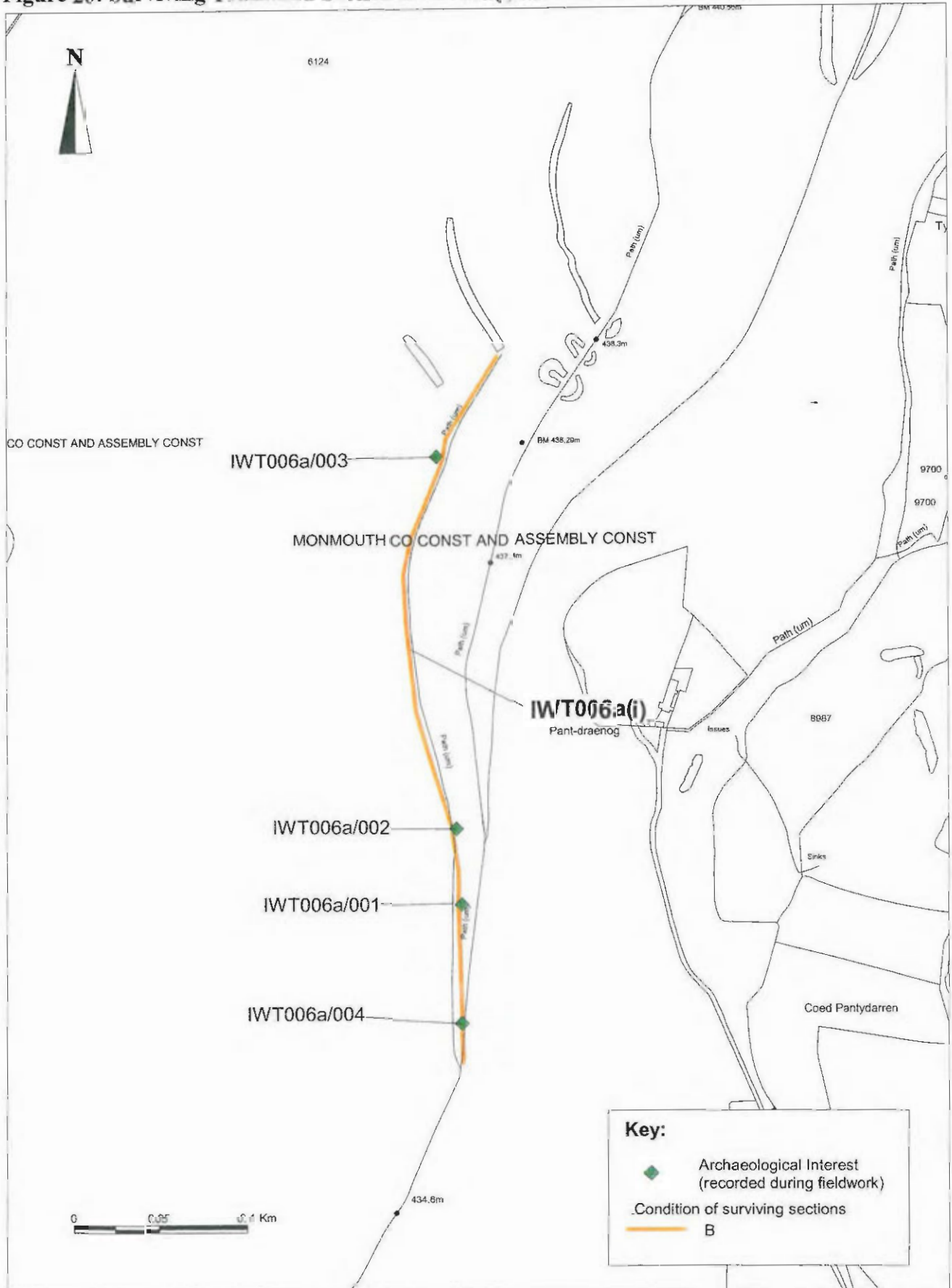


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Figure 28: Surviving Tramroad Section IWT006a(i) and Identified Interests



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Plate 7: Tramroad Section IWT006a(i), View to North

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Condition of IWT006b

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

100% of this route survives as one section:

Table 40: Surviving Sections of IWT006b

Section Number	Location	Condition Rating	Figure Reference Number
IWT006b(i)	SO 21916 14255 to SO 21693 13678	B	29, 30

This entire tramroad branch survives, however, in a more overgrown state than the main route.

IWT006b(i) (CONDITION B) survives as a grassed over embankment with some exposed revetment and occasional stone blocks visible; it is unclear if these are surface tramroad blocks or stone for revetment as too little was exposed to determine their exact nature

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 23; details of these interests are given in Appendix III.

Table 41: Features Associated with IWT006b(i) (see Figure 30)

Feature Number	NGR	Type
IWT006b/001	SO 21709 13808	Revetment
IWT006b/002	SO 21709 13908	Stone block
IWT006b/003	SO 21760 14019	Rock cannon?
IWT006b/004	SO 21773 14029	Tramroad cutting
IWT006b/005	SO 21833 14083	Tramroad cutting
IWT006b/006	SO 21853 14083	Quarry

Current Protection/Status

No current protection or status is given to the tramroad. However, all surviving sections lie within the protected areas of Usk Bat Sites SAC and PSAC as well as Mynydd Llangatwg SSSI.

Identified Threats

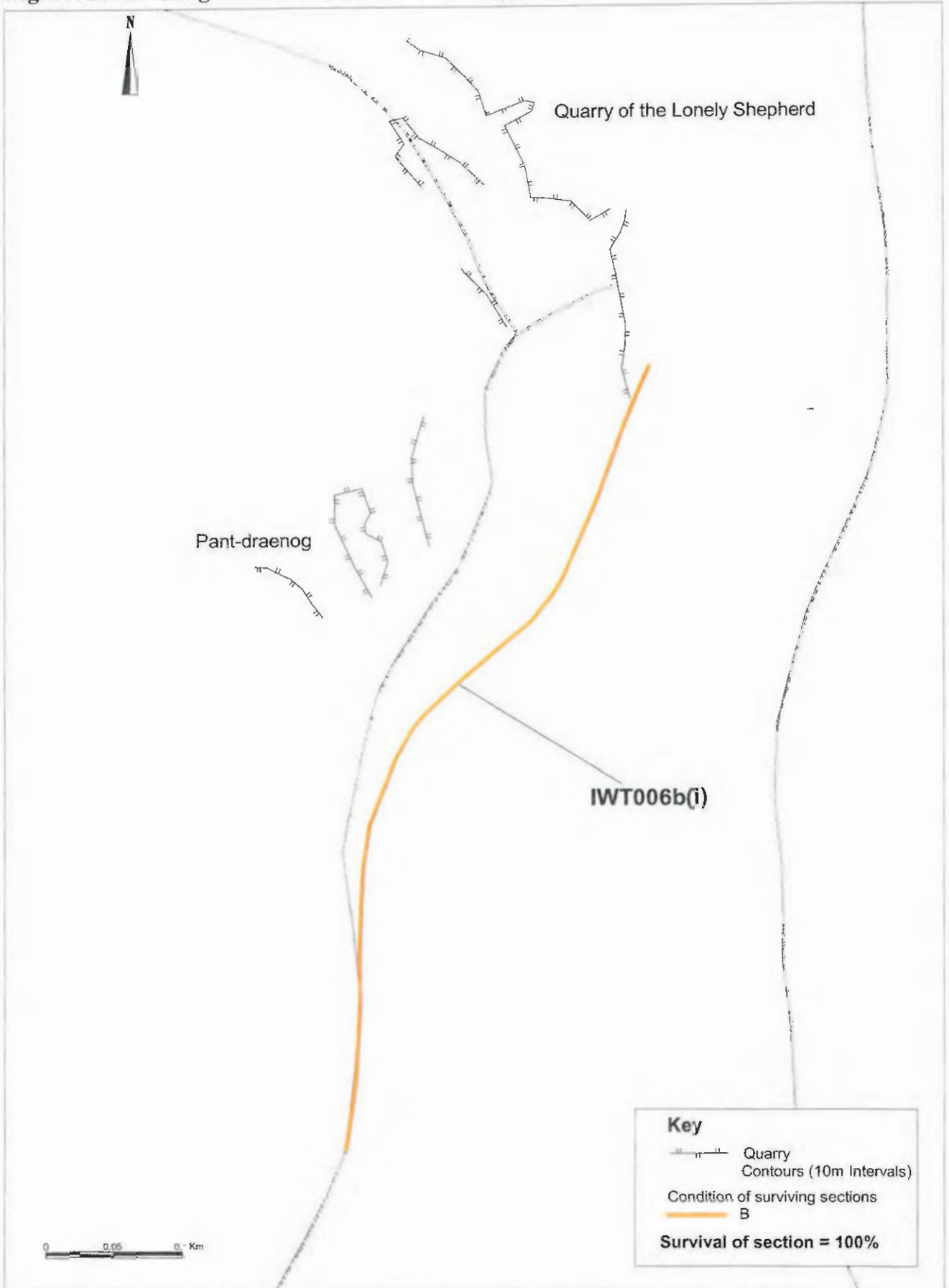
The tramroad is becoming heavily overgrown. No further threats were identified on the UDP.

Conservation and Management Recommendations

More detailed survey/investigation is recommended, to be carried out at a time when vegetation growth is less advanced. As the tramroad appears to be in good condition, it is considered that additional features may be buried beneath the undergrowth. The causeways may require some conservation work to prevent collapse. This section could be considered for scheduling.

The quarry area and minor tramroad sections to the quarry faces require further detailed survey.

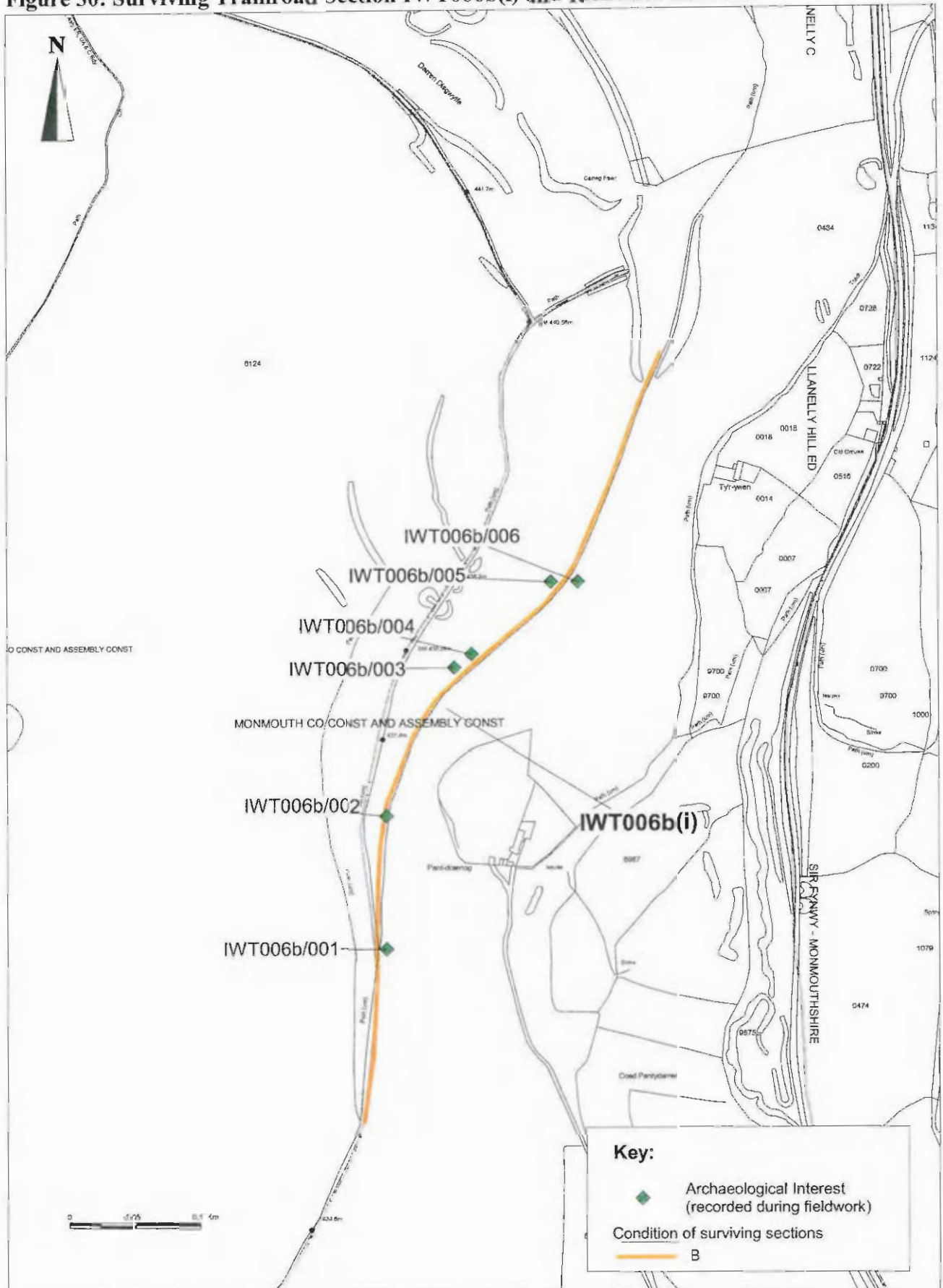
Figure 29: Surviving Tramroad Section IWT006b(i)



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Figure 30: Surviving Tramroad Section IWT006b(i) and Identified Interests



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Plate 8: Tramroad Section IWT006b(i), View to North

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Condition of IWT006c

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are four surviving sections of IWT006c equating to 94%:

Table 42: Surviving Sections of IWT006c

Section Number	Location	Condition Rating	Figure Reference Number
IWT006c(i)	SO 21725 14442 to SO 21824 14281	B	31, 32
IWT006c(ii)	SO 21318 14585 to SO 21725 14442	A	31, 32
IWT006c(iii)	SO 21199 14686 to SO 21270 14598	A	31, 32
IWT006c(iv)	SO 21171 14782 to SO 21199 14686	A	31, 32

Nearly the entire tramroad branch survives in very good condition.

IWT006c(i) (CONDITION B) represents feature IWT006c/001, a substantial cutting leading through a number of quarries. The cutting and quarry areas are well preserved although grass covered and strewn with boulders.

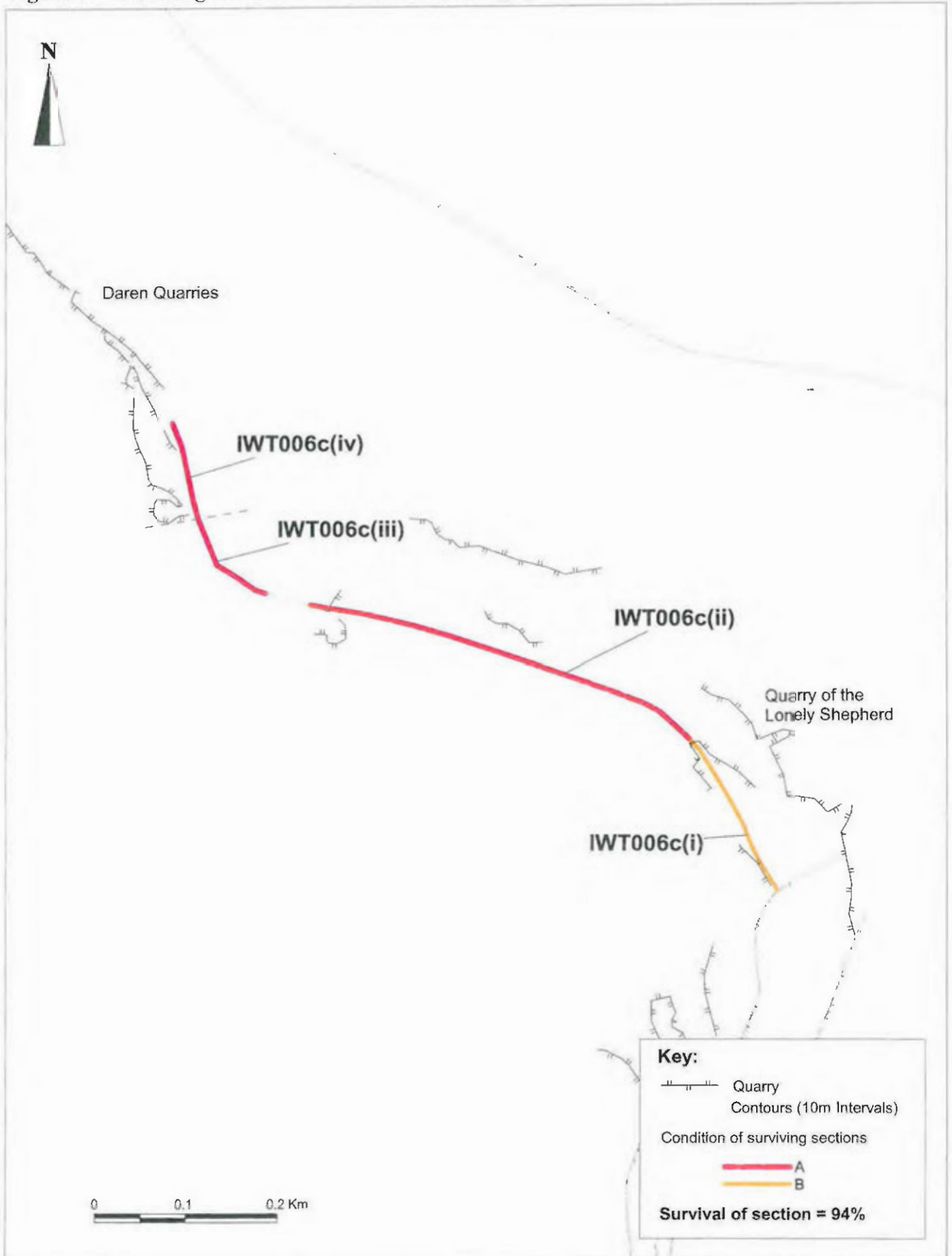
IWT006c(ii) (CONDITION A) is extremely well preserved. It generally survives as a grassed over embankment with frequently exposed sections of stone blocks, stone trackbed and ballasted revetment, the best examples of which have been recorded as IWT006c/003 and 005.

The section between IWT006c(ii) and (iii) has been destroyed by the laying of a gas pipeline.

IWT006c(iii) (CONDITION A) is again very well preserved like IWT006c(ii). Of note is feature IWT006c/007 a ballasted causeway with exposed stone blocks on its surface.

IWT006c(iv) (CONDITION A) remains in good condition with numerous, though widely spaced, groups of stone blocks surviving *in situ*.

Figure 31: Surviving Tramroad Sections IWT006c(i)-(iv)



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Southwest Wales Industrial Ironworks Landscapes

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 23; details of these interests are given in Appendix III.

Table 43: Features Associated with IWT006c(i) (see Figure 32)

Feature Number	NGR	Type
IWT006c/001	SO 21824 14281	Tramroad cutting

Table 44: Features Associated with IWT006c(ii) (see Figure 32)

Feature Number	NGR	Type
IWT006c/002	SO 21371 14576	Tramroad cutting
IWT006c/003	SO 21670 14494	Revetment
IWT006c/004	SO 21665 14510	Tramroad junction
IWT006c/005	SO 21428 14574	Stone block

Table 45: Features Associated with IWT006c(iii) (see Figure 32)

Feature Number	NGR	Type
IWT006c/006	SO 21200 14677	Tramroad cutting
IWT006c/007	SO 21269 14606	Tramroad causeway

Current Protection/Status

No current protection or status is given to the tramroad. However, all surviving sections lie within the protected areas of Usk Bat Sites SAC and PSAC as well as Mynydd Llangatwg SSSI.

Identified Threats

No threats were identified from the UDP.

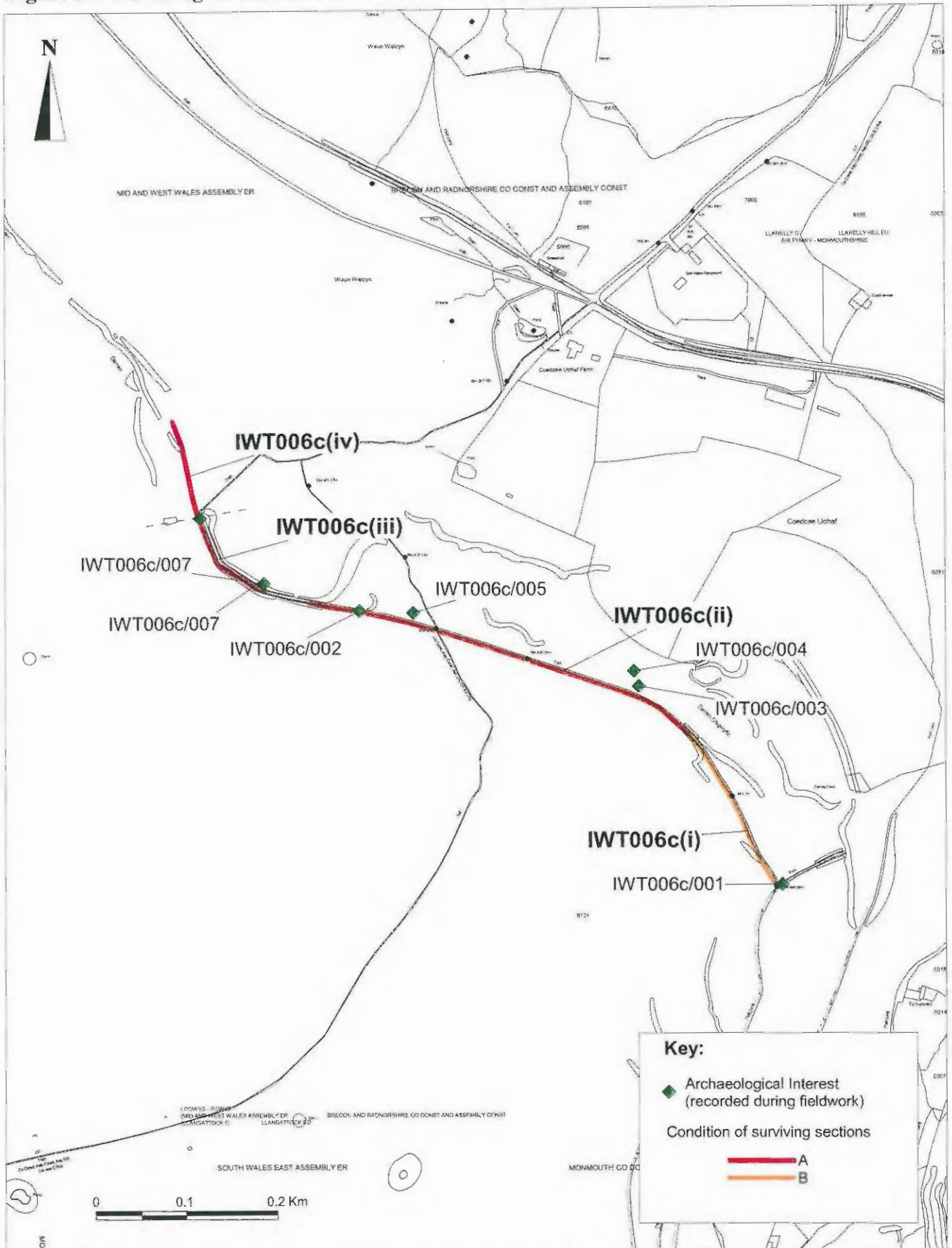
Conservation and Management Recommendations

Further detailed survey is highly recommended for all sections particularly IWT006c(ii), (iii) and (iv) due to the high frequency of surviving surface features. As the tramroad is in very good condition, additional features may be buried *in situ* beneath the surface. Scheduling could be considered for the best surviving sections of this tramroad.

Short spurs to the north of this section represent tramroads leading to trial quarries. More detailed survey is recommended for the associated quarry areas and any tramroad spurs leading to these.

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Figure 32: Surviving Tramroad Sections IWT006c(i)-(iv) and Identified Interests



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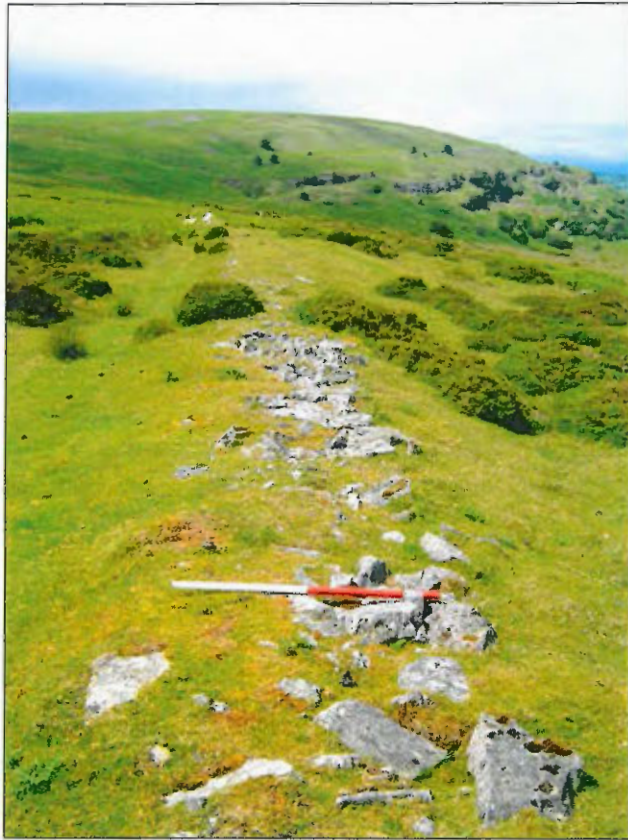


Plate 9: View Northwest Along Section IWT006c(ii)

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Condition of IWT006d

There are no surviving sections of this part of the tramroad.

It appears that most of the route in this area was removed or tipped by the survey of 1st edition OS; though Clydach Dingle, Bryn-y-gaer and Coed-cae mawr have remained largely unchanged since then, subsequent opencasting, road construction and reclamation have led to a major effect on the landscape here. There are traces of later tramroads (depicted on 1st Edition OS) to the south of the River Clydach, however, it appears that no part of IWT006d now survives.

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Condition of IWT006e

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are three surviving sections of IWT006e equating to 9%:

Table 46: Surviving Sections of IWT006e

Section Number	Location	Condition Rating	Figure Reference Number
IWT006e(i)	SO 19228 12525 to SO 19230 12499	A	33, 34
IWT006e(ii)	SO 19195 12681 to SO 19217 12553	B	33, 34
IWT006e(iii)	SO 19155 12784 to SO 19195 12681	B	33, 34

All surviving sections can be found along a footpath running north at the end of Clydach Street.

IWT006e(i) (CONDITION A) is a short section demarcated by trees to either side of the track. Formation survives as a muddy path with exposed stone blocks (IWT006e/001). More features are possibly buried beneath the leaf litter.

IWT006e(ii) (CONDITION B) is very overgrown. Again the section is demarcated with trees to either side and a Hawthorn hedgerow to the west. The edge of an open-cast area is located to the west. Remains of revetting (IWT006e/002) are very overgrown and it is probable that other remains exist beneath the undergrowth.

The section between IWT006e(i) and (ii) has been destroyed by the construction of a modern track.

IWT006e(iii) (CONDITION B) this section survives as a grassed over formation contouring the hillside through a cutting (IWT006e/003). Buried remains are possible.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 23; details of these interests are given in Appendix III.

Table 47: Features Associated with IWT006e(i) (see Figure 34)

Feature Number	NGR	Type
IWT006e/001	SO 19233 12521	Stone block

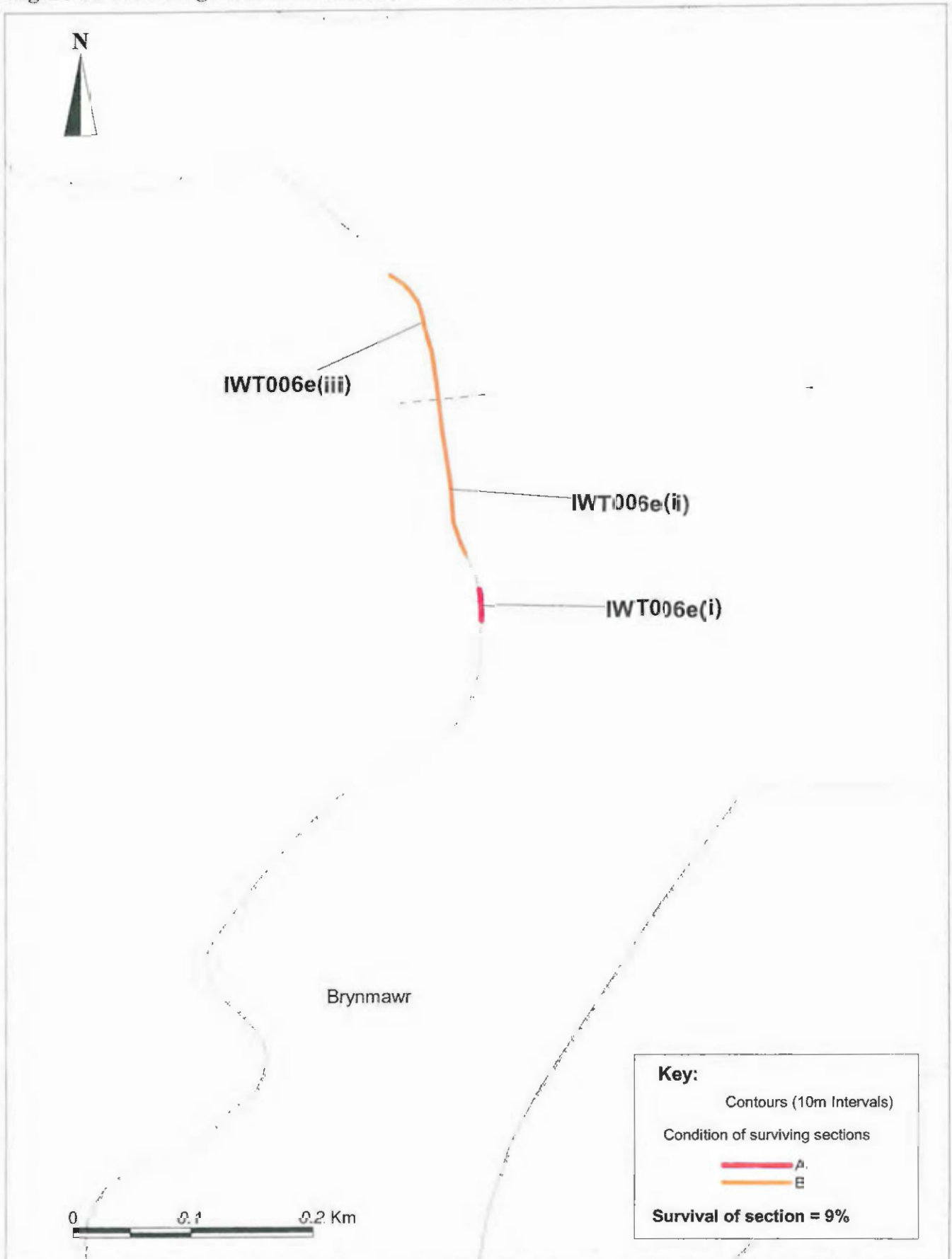
Table 48: Features Associated with IWT006e(ii) (see Figure 34)

Feature Number	NGR	Type
IWT006e/002	SO 19203 12618	Revetment

Table 49: Features Associated with IWT006e(iii) (see Figure 34)

Feature Number	NGR	Type
IWT006e/003	SO 19196 12721	Tramroad cutting

Figure 33: Surviving Tramroad Sections IWT006e(i)-(iii)

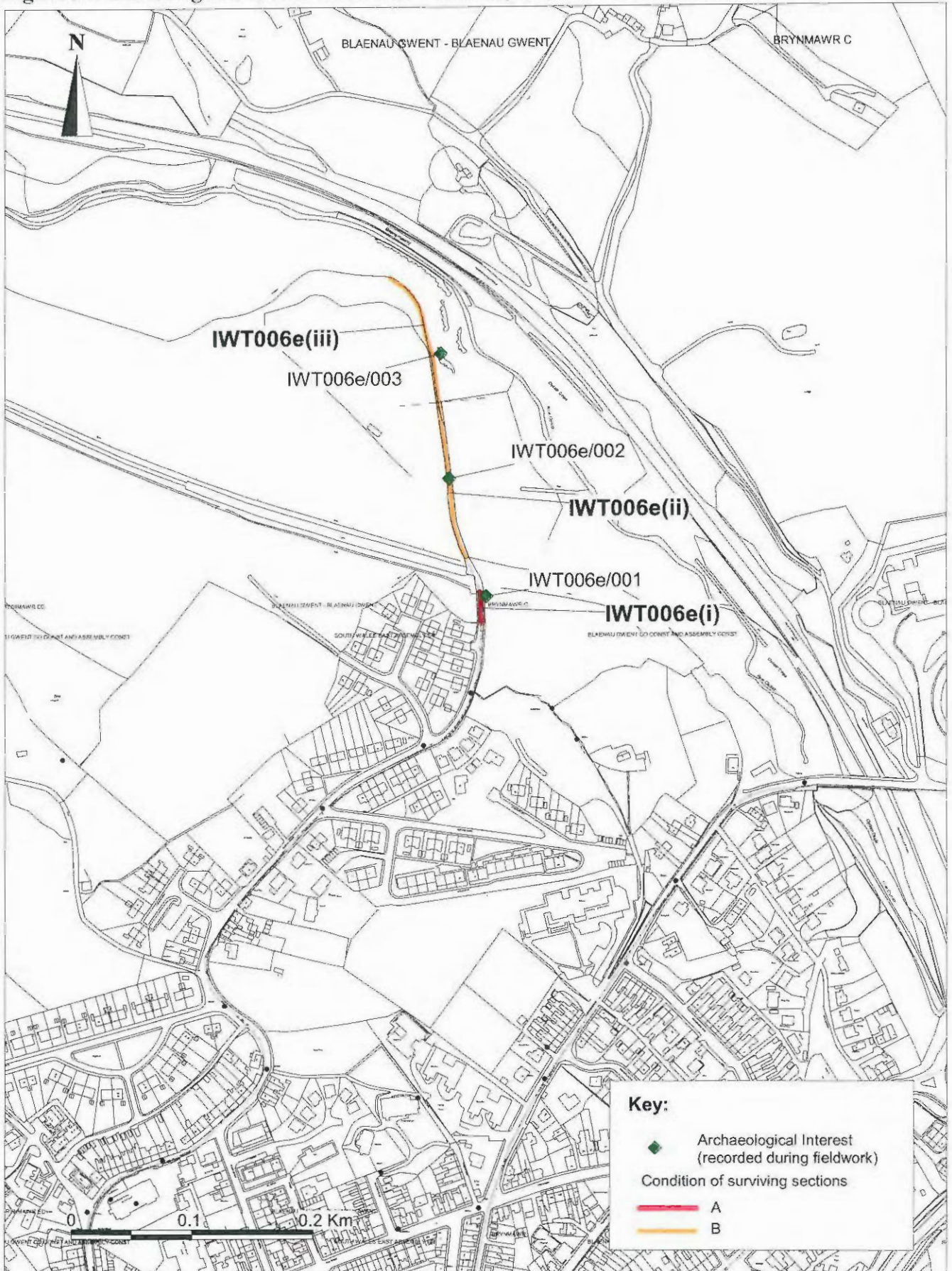


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Figure 34: Surviving Tramroad Sections IWT006e(i)-(iii) and Identified Interests



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Current Protection/Status

No current protection or status is given to the tramroad.

Identified Threats

No threats were identified on the UDP.

Conservation and Management Recommendations

Maintain as current.

IWT Number 007: Trevil Railroad

NGR: SO 11938 13594 to SO 17059 07670

Date Range: 1796 - 1964

Approximate length of tramroad = 13.3 Km

Overall survival = 61%

Historical Background

The Trevil Railroad Company was formed by the ironmasters of Beaufort, Sirhowy and Ebbw Vale ironworks in 1793 in response to the refusal of the Monmouthshire Canal Company to undertake any further tramroad extensions until the completion of those proposed under the Monmouthshire Canal Act eight-mile clause. Engineered by Thomas Dadford and completed by 1796 the railroad brought limestone from Trevil quarries to the ironworks. In 1874 the track was re-laid, bar rails being replaced with double-headed rails, implying locomotive traction. At this date the company's name was changed to the Trevil Railway Company. However, locomotives would have been unable to travel along Trevil at this time as the Rassau Railroad (IWT008) was not converted; Trevil depended upon Rassau for its connections to the ironworks. Following the departure of Beaufort to Llangattock in the 1830s and the closure of Sirhowy Ironworks in 1882 limestone was transported only to Ebbw Vale and Victoria Ironworks. The main line was converted to standard gauge and re-engineered in 1919 with a connection to the Ebbw Vale Private line after Trevil Machine was dispensed with. Further modifications were made in 1938, the tramroad remained in use until 1964 when final closure came (van Laun 2001: 121-127).

General Description

This tramroad was allocated five route numbers for the purpose of the survey:

Table 50: Routes of Tramroad IWT007

Route Number	Name	Location	Figure Reference Number
IWT007	Trevil Railroad Main Line	SO 11938 13594 to SO 14668 11511	35, 36
IWT007a	Trevil Railroad Beaufort Line	SO 17320 12387 to SO 16204 11536	35, 36
IWT007b	Trevil Railroad Ebbw Vale Line	SO 16893 10961 to SO 17218 09703	35, 36
IWT007c	Trevil Railroad Sirhowy Line	SO 14464 11149 to SO 14376 10390	35, 36
IWT007d	Trevil Line to Victoria	SO 17051 09926 to SO 17059 07670	35, 36

IWT007, IWT007a, IWT007b and IWT007c were all linked to the Rassau Railroad (IWT008), which acted as an intermediary line allowing the transportation of limestone between Trevil machine and the Beaufort, Ebbw Vale and Sirhowy Ironworks. IWT007d linked to IWT007b and served Victoria Ironworks.

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IWT007 (05222.0g/05223.0g/05224.0g/05269.3g/05269.2g/05269.3g)

This comprises the main route running southeast from Trevil quarries across Mynydd Llangyndir to Trevil Machine. Whilst Trevil Machine is now destroyed the route of the tramroad can still be followed along a bridle way to Trevil and the entrance to the quarries. Trevil quarries remain in operation, therefore, the section north of Railway Terrace was not surveyed.

IWT007a (54303)

This route formed a junction with Rassau Railroad at Rhyd y Blew and ran to Beaufort ironworks where for a short time it was possible to connect straight to the Beaufort Railroad (IWT021). Trevil Railroad also joined the Clydach Railroad at Rhyd y Blew. The route can be followed along Church Crescent and Beaufort Rise to the end of Ebbw View. Here it enters private land and therefore was not surveyed. A branch also ran north/northeast to an iron mine at Garnlydan. This route can be traced along Raglan Terrace and north along Primitive Place through Bryn Coch housing estate.

IWT007b

This part of the route met the end of the Rassau Railroad (IWT008) at Beaufort Ironworks near what is now Newchurch Road and ran south to the furnace tops at Ebbw Vale ironworks. Its route can be followed along Newchurch and Pant y Fforest Roads.

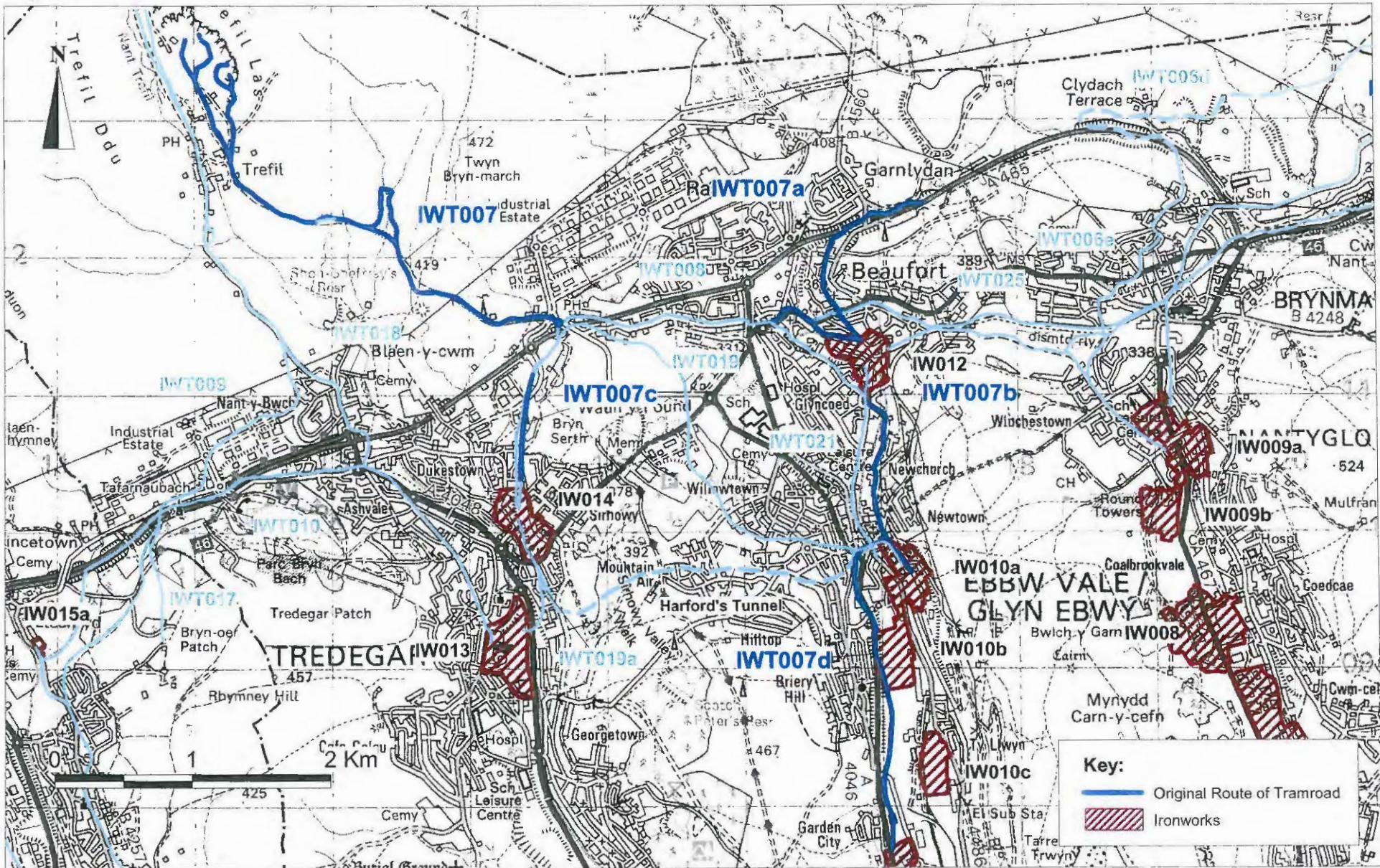
IWT007c

This route served Sirhowy ironworks, branching off the Rassau Railroad (IWT008) at Penmarc and running almost parallel with it to the ironworks.

IWT007d

This line to Victoria Ironworks is the latest of all the Trevil lines and was not completed until after 1843. It ran from Ebbw Vale parallel to the Ebbw Vale Private Line (IWT019) across the now listed causeway and tunnels, then turned south to Victoria.

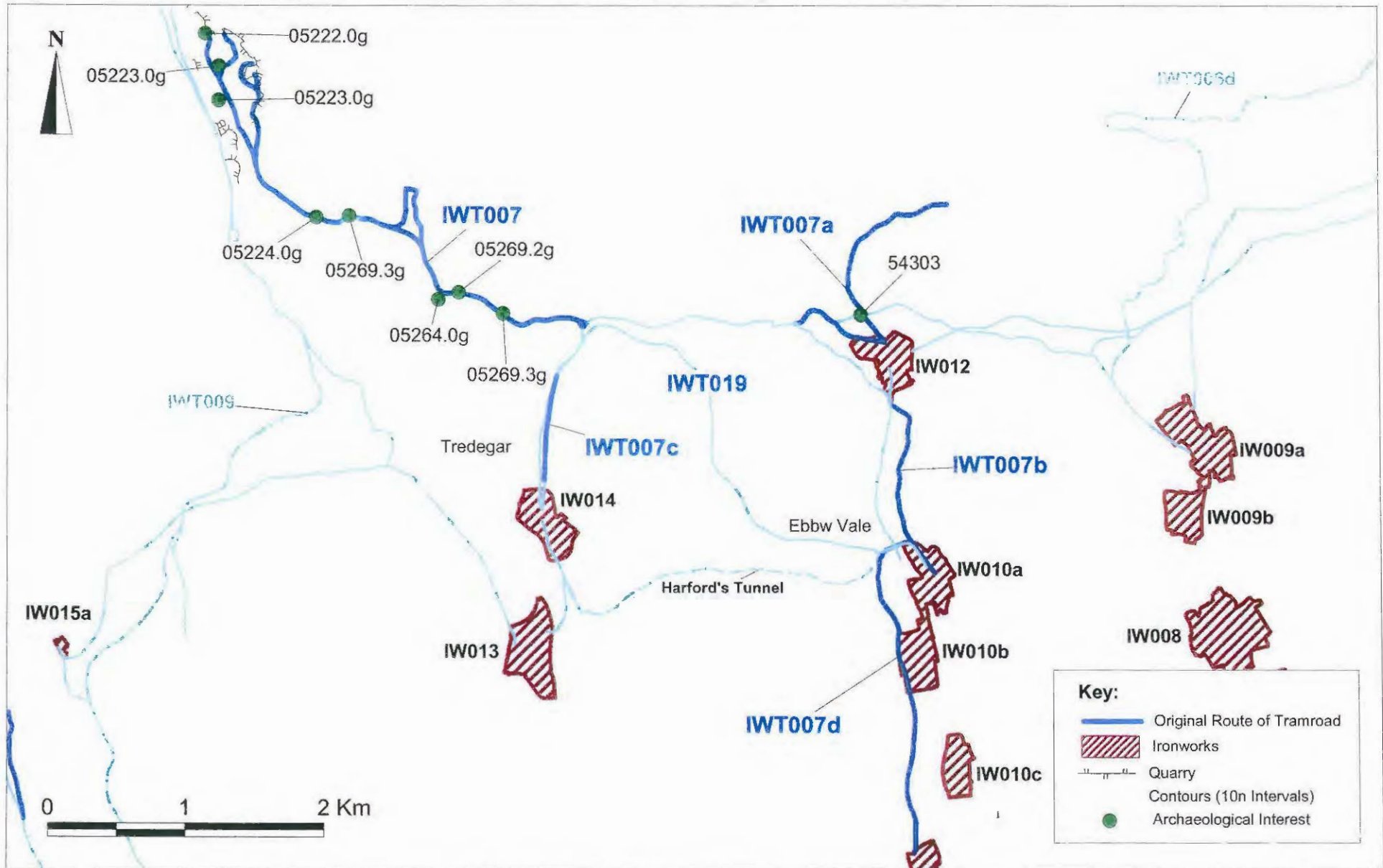
Figure 35: Route of Tramroad IWT007 Trevil Railroad



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Figure 36: Tramroad IWT007 Showing Archaeological Interests (Pre-survey)



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Condition of IWT007

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

A large portion of this tramroad (61%) is very well preserved, including two sections of the original tramroad route and a number of passing loops. The surviving route has been split into six sections to represent different conditions of survival:

Table 51: Surviving Sections of IWT007

Section Number	Location	Condition Rating	Figure Reference Number
IWT007(i)	SO 13771 11744 to SO 14450 11563	A	37, 38
IWT007(ii)	SO 13502 11991 to SO 13771 11744	E	37, 38
IWT007(iii)	SO 13227 12231 to SO 13481 12079	A	37, 38
IWT007(iv)	SO 13227 12231 to SO 13502 11991	E	37, 38
IWT007(v)	SO 12897 12268 to SO 13028 12286	B	37, 38
IWT007(vi)	SO 12250 12772 to SO 13227 12231	B	37, 38

IWT007(i) (CONDITION A) the majority of the tramroad runs to one side of the bridle way. It is well preserved as a grassed over embankment with *in situ* surface features exposed in places; these include stone blocks, stone trackbed, wooden sleepers and stone revetting. A particularly good example is IWT007/002. Trevil machine and a small section to the east of IWT007(i) have been destroyed by road construction.

IWT007(ii) (CONDITION E) survives in formation with some exposed surface features similar to IWT007(i) above but has been gravelled over for use as a bridle way. Areas of erosion and damage probably caused by vehicles were noted.

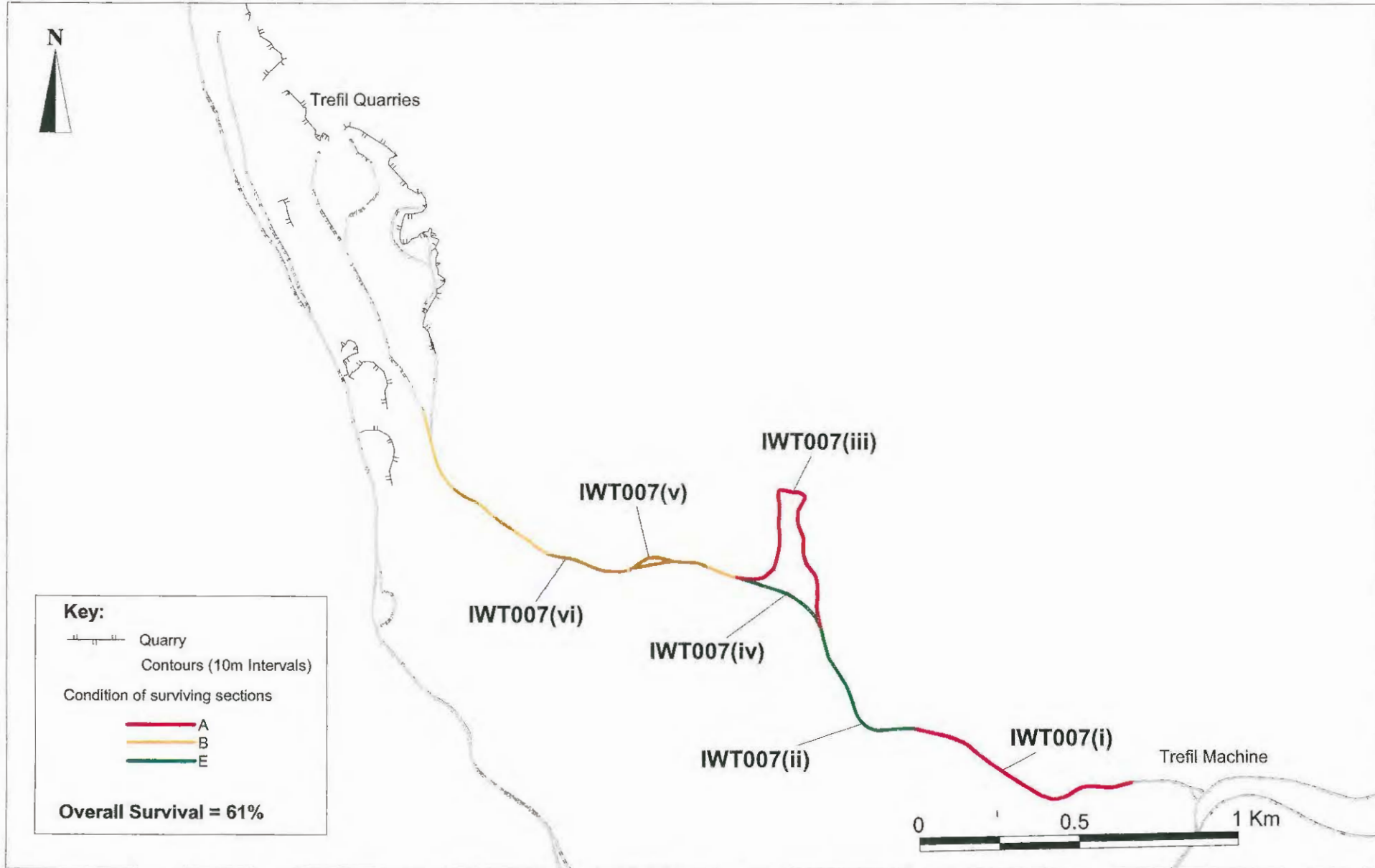
IWT007(iii) (CONDITION A) is an exceptionally well-preserved elevated section of original tramroad (pre-1919 bypass), including a substantially revetted causeway (IWT007/024) with two arched bridges (IWT007/012,013) (see John Van Laun K3, K4, K5). The section is grassed over, however, impressions of later sleepers buried beneath the surface can be seen. Many areas of revetment are exposed through the grass and a number of culverts were recorded. The tramroad runs adjacent to a quarried face partway along the eastern most section of the loop.

IWT007(iv) (CONDITION E) represents the post-1919 causeway (identified as K6 by John Van Laun), that replaced IWT007(iii). This section is heavily gravelled over and in use as a bridle way, however, buried remains are possible.

IWT007(v) (CONDITION B) is another section of the original route (noted as K2 by John Van Laun). It is a well-preserved section; grassed over with sleeper impressions and a square stone culvert (IWT007/020) surviving in good condition.

IWT007(vi) (CONDITION B) the formation of the tramroad is well preserved, surviving as a grassed embankment. Revetment is exposed in places and a number of culverts were recorded. To the north of IWT007(vi), the tramroad lies within an active quarry, therefore, it was not possible to survey this section. It is likely that ongoing quarrying has destroyed much of this section, once it enters the quarry.

Figure 37: Surviving Tramroad Sections IWT007(i)-IWT007(vi)



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Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 36; details of these interests are given in Appendix III.

Table 52: Features Associated with IWT007(i) (see Figure 38)

Feature Number	NGR	Type
IWT007/001	SO 1414 1154	Wooden sleepers
IWT007/002	SO 1387 1172	Stone Block
IWT007/003	SO 1379 1174	Revetment

Table 53: Features Associated with IWT007(ii) (see Figure 38)

Feature Number	NGR	Type
IWT007/004	SO 1372 1175	Culvert
IWT007/005	SO 1369 1174	Revetment
IWT007/006	SO 13653 11742	Passing loop

Table 54: Features Associated with IWT007(iii) (see Figure 38)

Feature Number	NGR	Type
IWT007/007	SO 1347 1211	Stone block
IWT007/008	SO 1347 1214	Quarry
IWT007/009	SO 1347 1221	Revetment
IWT007/010	SO 1344 1228	Culvert
IWT007/011	SO 1342 1236	Drain
IWT007/012	SO 1343 1249	Bridge
IWT007/013	SO 1338 1251	Bridge
IWT007/014	SO 1335 1249	Revetment
IWT007/015	SO 1335 1249	Leat
IWT007/016	SO 1335 1233	Culvert
IWT007/017	SO 1329 1224	Revetment
IWT007/024	SO 1343 1249	Tramroad causeway
IWT007/025	SO 1336 1242	Wooden sleepers
IWT007/026	SO 1336 1241	Revetment

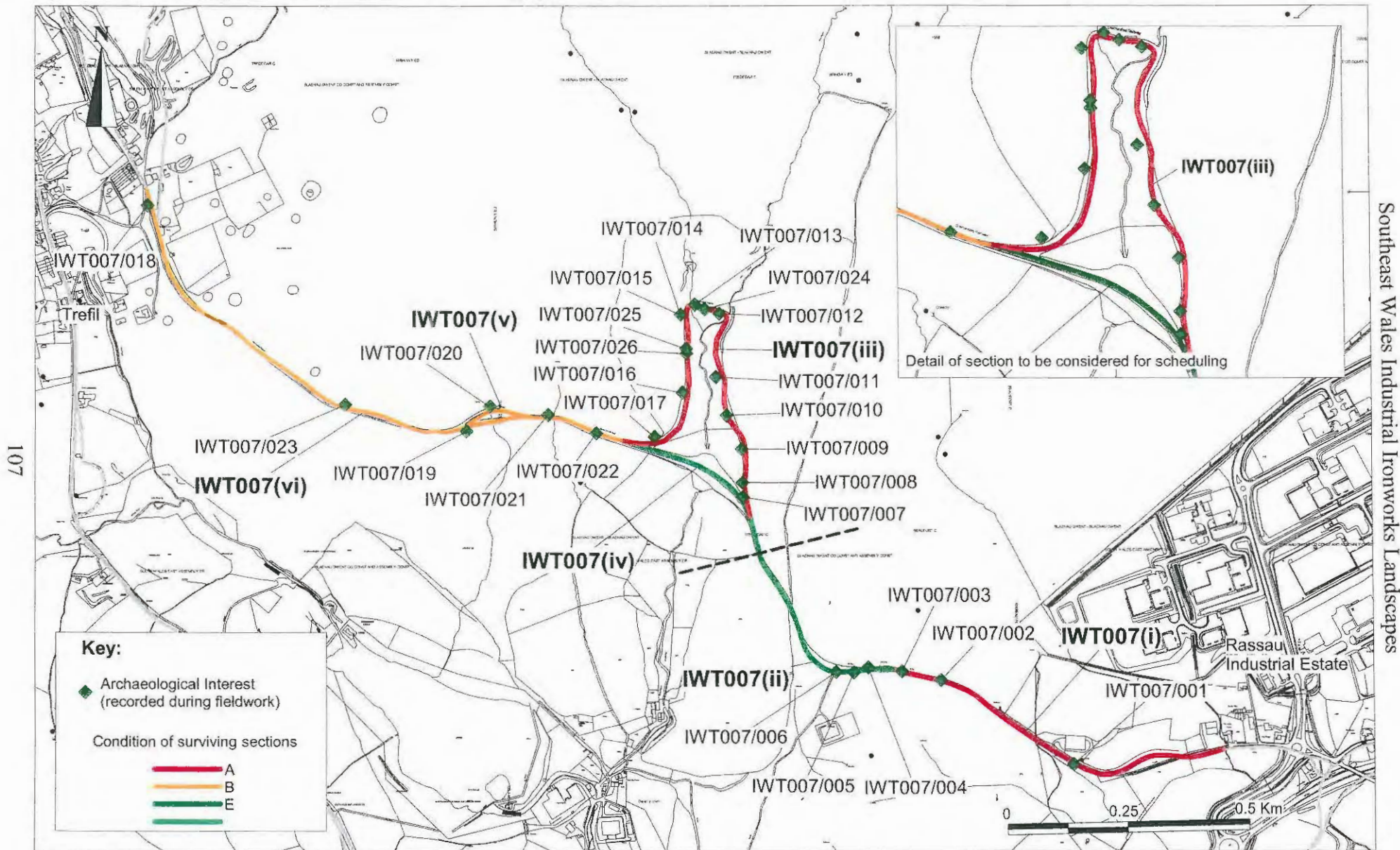
Table 55: Features Associated with IWT007(v) (see Figure 38)

Feature Number	NGR	Type
IWT007/019	SO 1290 1226	Tramway
IWT007/020	SO 1295 1231	Culvert

Table 56: Features Associated with IWT007(vi) (see Figure 38)

Feature Number	NGR	Type
IWT007/018	SO 1225 1274	Culvert
IWT007/021	SO 1307 1229	Culvert
IWT007/022	SO 1317 1225	Culvert
IWT007/023	SO 1265 1232	Passing loop

Figure 38: Surviving Tramroad Sections IWT007(i)-(vi) and Identified Interests



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Current Protection/Status

There is currently no protection or status afforded to this tramroad. The surviving sections lie within an E16 special landscape area on the UDP.

Identified Threats

Ongoing quarrying threatens the survival of any remains of the northern most section. Erosion from off road vehicles is a problem especially along IWT007(ii). On IWT007(iii) water erosion has scoured the track bed. No threats were identified from the UDP.

Conservation and Management Recommendations

It is recommended that section IWT007(iii) at least is scheduled due to the high number of surviving features and good condition, especially IWT007/012, 013 and 024. Some conservation work is required for the revetment along this section and especially the north side of the causeway and bridges.

Prevent further erosion of surviving sections from off road vehicles. This area would repay more detailed survey and possible excavation, particularly for IWT007(iii). A number of features related to quarrying were also noted in the area, which require further survey.



Plate 10: View South of Section IWT007(iii)

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Plate 11: Single Arched Bridge IWT007/012 on Causeway IWT007/024

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Condition of IWT007a

It is possible that a small section of tramroad survives beneath the undergrowth adjacent to the footpath at Bryn Coch housing estate or even under the footpath itself, however, no remains were noted. The rest of the tramroad has been destroyed by the construction of the A465.

Condition of IWT007b

There are no visible surviving remains of this tramroad.

Condition of IWT007c

This entire section of the Trefil tramroad has been destroyed by development of Crown Business Park and modern housing estates.

Condition of IWT007d

The entire section of this tramroad south of Market Square has been destroyed by extensive redevelopment of the area. However part of its route can be traced along the road east of Market Square over Steelworks Road via the causeway and tunnels of the former Ebbw Vale Private Line completed previously in 1813.

IWT Number 008: Rassau Railroad (05998.0g/05265.0g)

NGR: SO 16891 10968 to SO 14362 10172

Date Range: 1796 - 1907

Approximate length of tramroad = 4 Km

Overall survival = 14%

Historical Background

Construction of the Rassau Railroad was authorised by the Monmouthshire Canal Act and was completed in 1796. This formed a connection with the Beaufort Railroad at Beaufort and allowed a link to be maintained between the Sirhowy, Beaufort and Ebbw Vale Ironworks. The Rassau Railroad was also connected to Trevil Railroad (IWT007) at Trevil Machine and three of its branches (IWT007a, IWT007b and IWT007c) which served the aforementioned ironworks with limestone from Trevil quarries. All three of these railroads were engineered by Thomas Dadford and as such shared the same track gauge. The Clydach Railroad was later connected to Rassau at Rhyd y Blew. The link to the Beaufort Railroad was severed c.1805 when it was converted to a plateway. However, the Rassau Railroad continued to link the Trevil sections until 1907; it was then abandoned after Trevil was connected to the Ebbw Vale Private Line (van Laun 2001: 121-129).

General Description

This tramroad has been surveyed as a single continuous route:

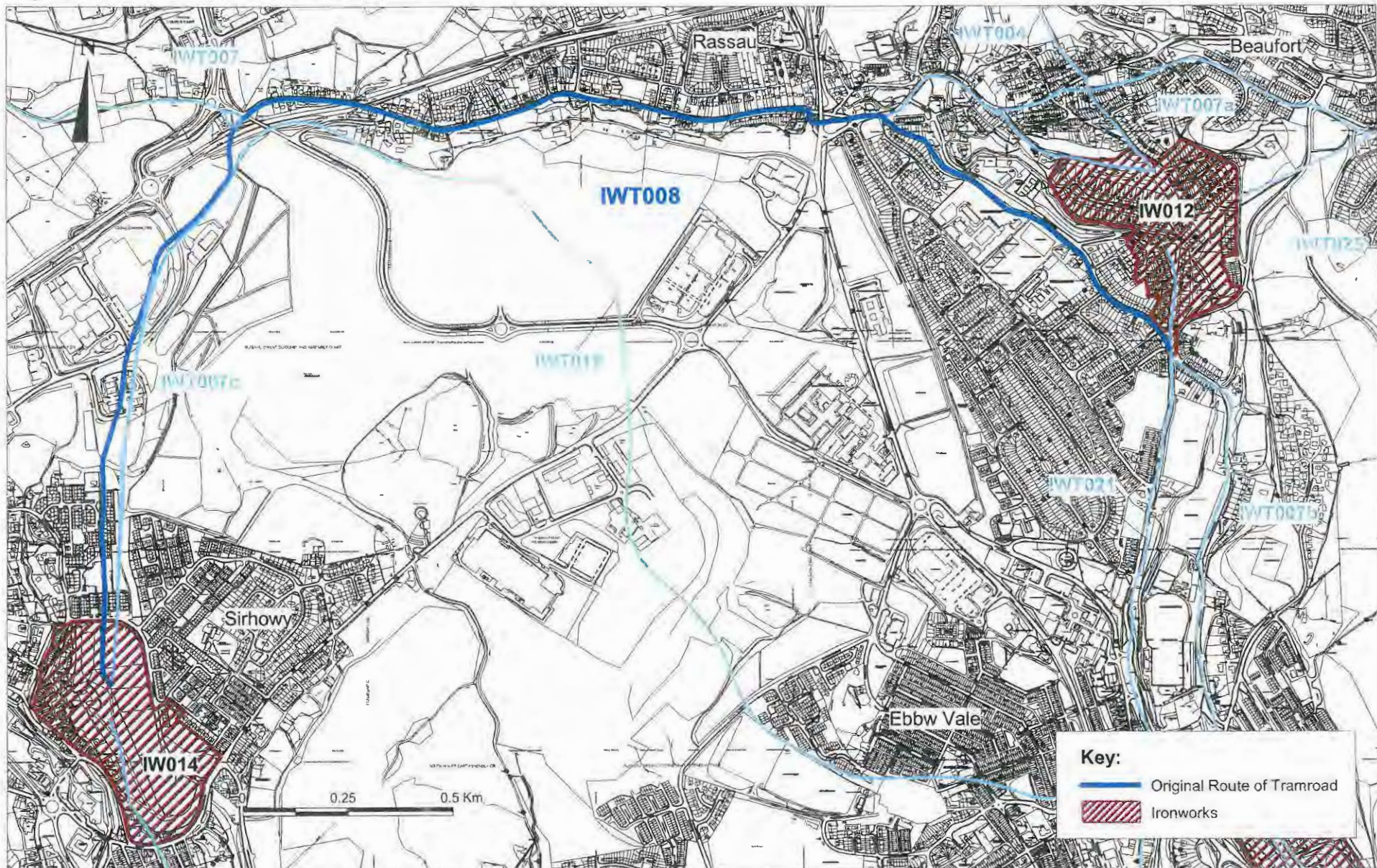
Table 57: Routes of Tramroad IWT008

Route Number	Name	Location	Figure Reference Number
IWT008	Rassau Railroad	SO 16891 10968 to SO 14362 10172	39, 40

From its connection with the Beaufort Railroad near what is now Newchurch Street, Beaufort, the tramroad ran northwest to Rhyd y Blew. Its route can be traced along Cwm Hir Road, then along a footpath running above Allotment Road. From Rhyd y Blew it ran west, crossing a stream to Trevil Machine. This section of the route can be followed along the present day Rassau Road. From Trevil Machine the tramroad ran south to Sirhowy Ironworks.

Its main connections with the Trevil Railroad (IWT007) were at Trevil Machine, which allowed traffic to be direct west to Sirhowy or east to Beaufort and Ebbw Vale; at Penmarc where the Trevil Sirhowy line (IWT007c) ran parallel with it to the ironworks; at Rhyd y Blew where it connected both with a line to the north section of Beaufort Ironworks (IWT007a) and with the Clydach Railroad (IWT004) and at Newchurch Street where the Trevil line (IWT007b) ran to Ebbw Vale furnaces.

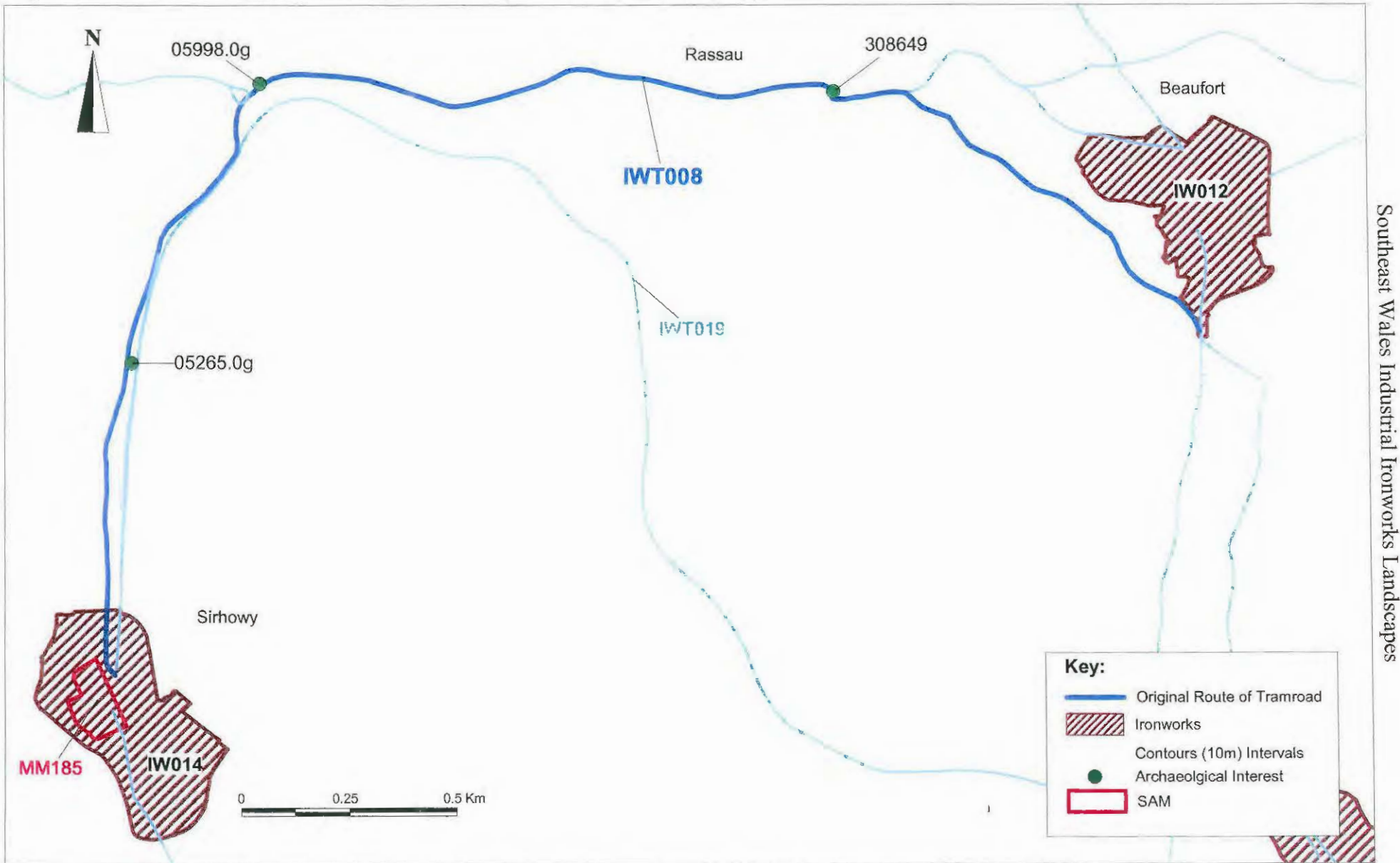
Figure 39: Route of Tramroad IWT008 Rassau Railroad



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Figure 40: Tramroad IWT008 Showing Archaeological Interests (Pre-survey)



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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT008

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are two surviving sections of IWT008:

Table 58: Surviving Sections of IWT008

Section Number	Location	Condition Rating	Figure Reference Number
IWT008(i)	SO 16035 11533 to SO 16036 11517	E	41, 42
IWT008(ii)	SO 16212 11524 to SO 16642 11226	E	41, 42

The western section of the tramroad south of the A465 has been destroyed by development of Crown Business Park and housing estates. From Nant-y-croft the route of the tramroad can be traced along Rassau Road until just before it passes under College Road.

IWT008(i) (CONDITION E) is a small section surviving as a tarmaced footpath over a former stone tramroad bridge (308649). This area is very overgrown; as a result it was not possible to assess the condition of the bridge. The tramroad has been destroyed by later road construction until opposite the car park of Rhyd-y-blew Inn where its route can be rejoined as a footpath.

IWT008(ii) (CONDITION E) now used as a footpath survives in formation as a raised embankment, sloping southeast down to Allotment Road. It has been tarmaced over along the top, however, the sides are grassed and at one location surviving revetment was visible through the grass (IWT008/002). John Van Laun notes this section as K8.

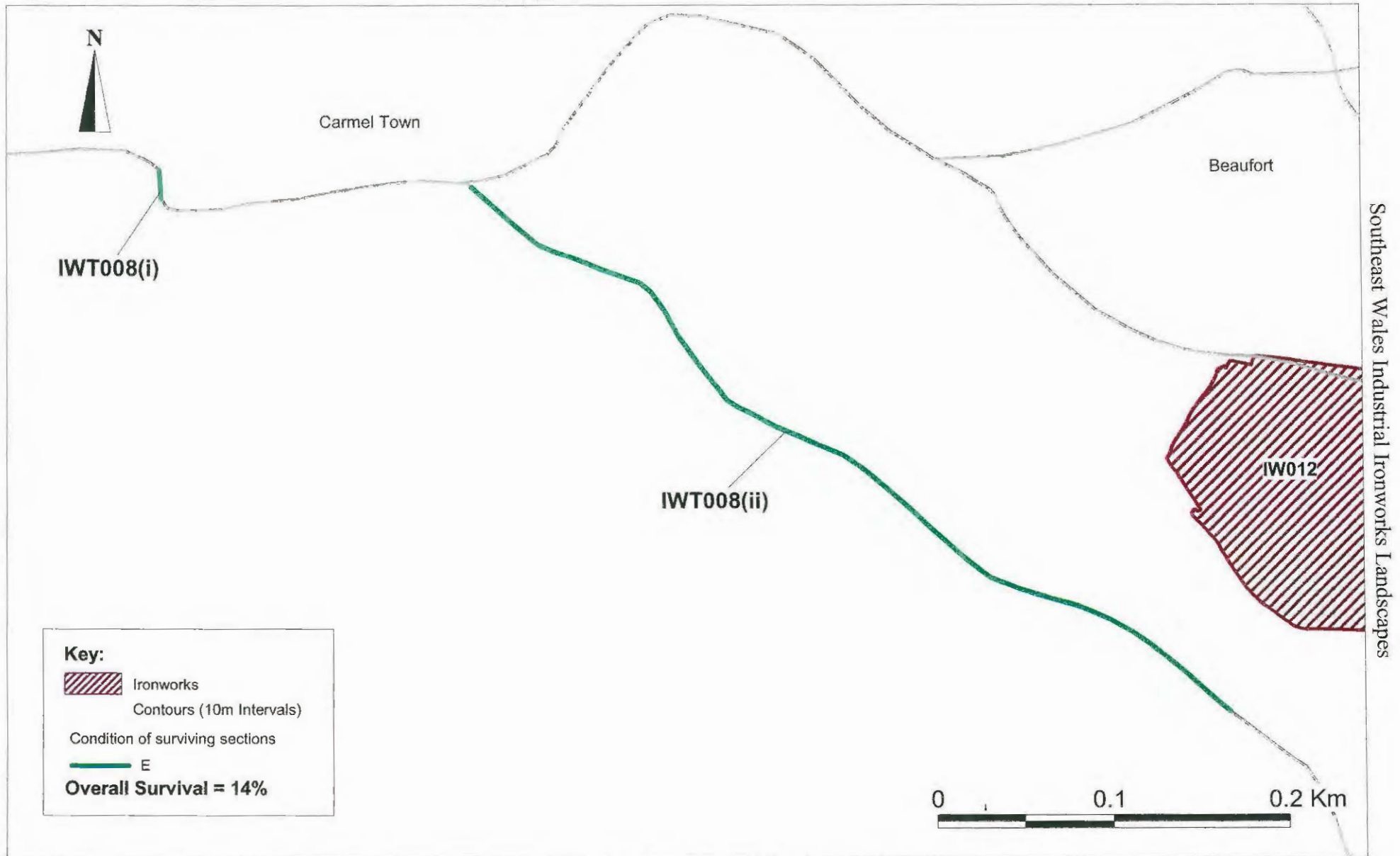
Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 40; details of these interests are given in Appendix III.

Table 59: Features Associated with IWT008(ii) (see Figure 41)

Feature Number	NGR	Type
IWT008/001	SO 1650 1131	Boundary marker
IWT008/002	SO 1650 1131	Revetment

Figure 41: Surviving Tramroad Sections IWT008(i)-(ii)

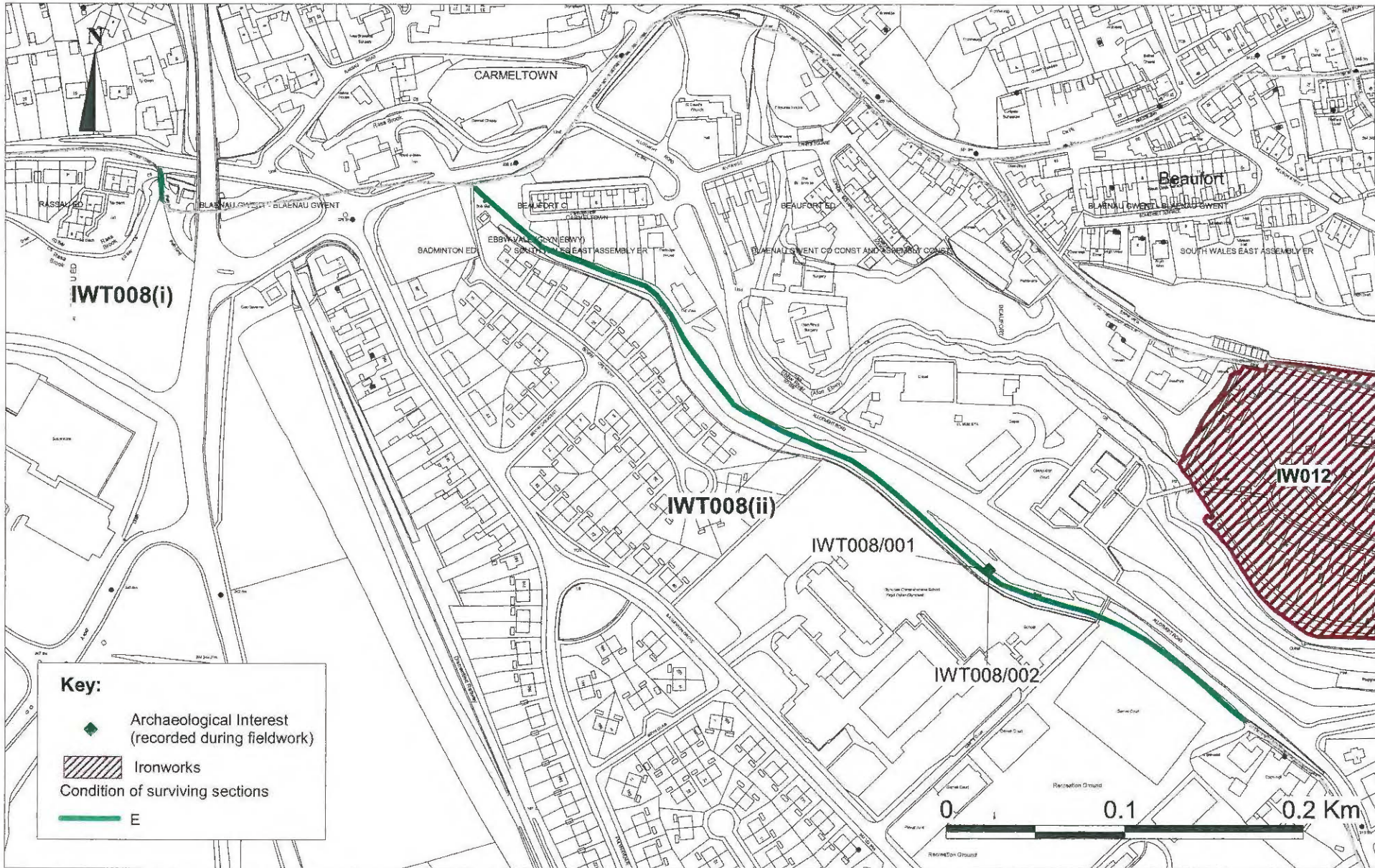


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Figure 42: Surviving Tramroad Sections IWT008(i)-(ii) and Identified Interests



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Southeast Wales Industrial Ironworks Landscapes

Current Protection/Status

There is currently no protection or status afforded to this tramroad.

Identified Threats

No threats were identified from the UDP.

Conservation and Management Recommendations

The tramroad is nearly completely destroyed with any remains buried beneath tarmac.

Clearance of undergrowth around IWT008(i) would enable more detailed survey of the surviving bridge, conservation should then be carried out as needed.

IWT Number 009: Hall's Trevil (06774g)

NGR: SO 11631 13981 to SO 11520 07342

Date Range: 1815 - 1884

Approximate length of tramroad = 8.4 Km

Overall survival = 7%

Historical Background

Benjamin Hall became the owner of both the Lower and Upper Rhymney furnaces in 1810. At this time limestone was transported to these ironworks along the Tredegar Tramroad and the Rhymney Branch. To avoid the payment of excessive tolls and to generate income, Hall set about building a tramroad to serve Rhymney, independent of the others. This was conducted in two stages (both completed by 1815) to get around the eight-mile limitation clause set by the Brecknock and Abergavenny Canal Company. Hall's Trevil Tramroad (IWT009) was built from Rhymney Lower furnace to the Quarryman's Arms near Trevil quarries with a branch to Rhymney Upper Furnace. At the Quarryman's arms the tramroad linked to the Brynoer Tramroad (IWT017) also built by Hall, which allowed passage to the canal at Talybont-on-Usk. A branch from Brynoer Collieries also connected to Hall's Trevil Tramroad. Construction of Hall's Trevil Tramroad had the effect of reducing the distance and cost of transporting limestone and iron ore. In 1852 Rhymney abandoned Trevil quarries in favour of Twynau Gwynion and Hall's Trevil Tramroad was out of use altogether by 1884 (van Laun 2001: 138-142).

General Description

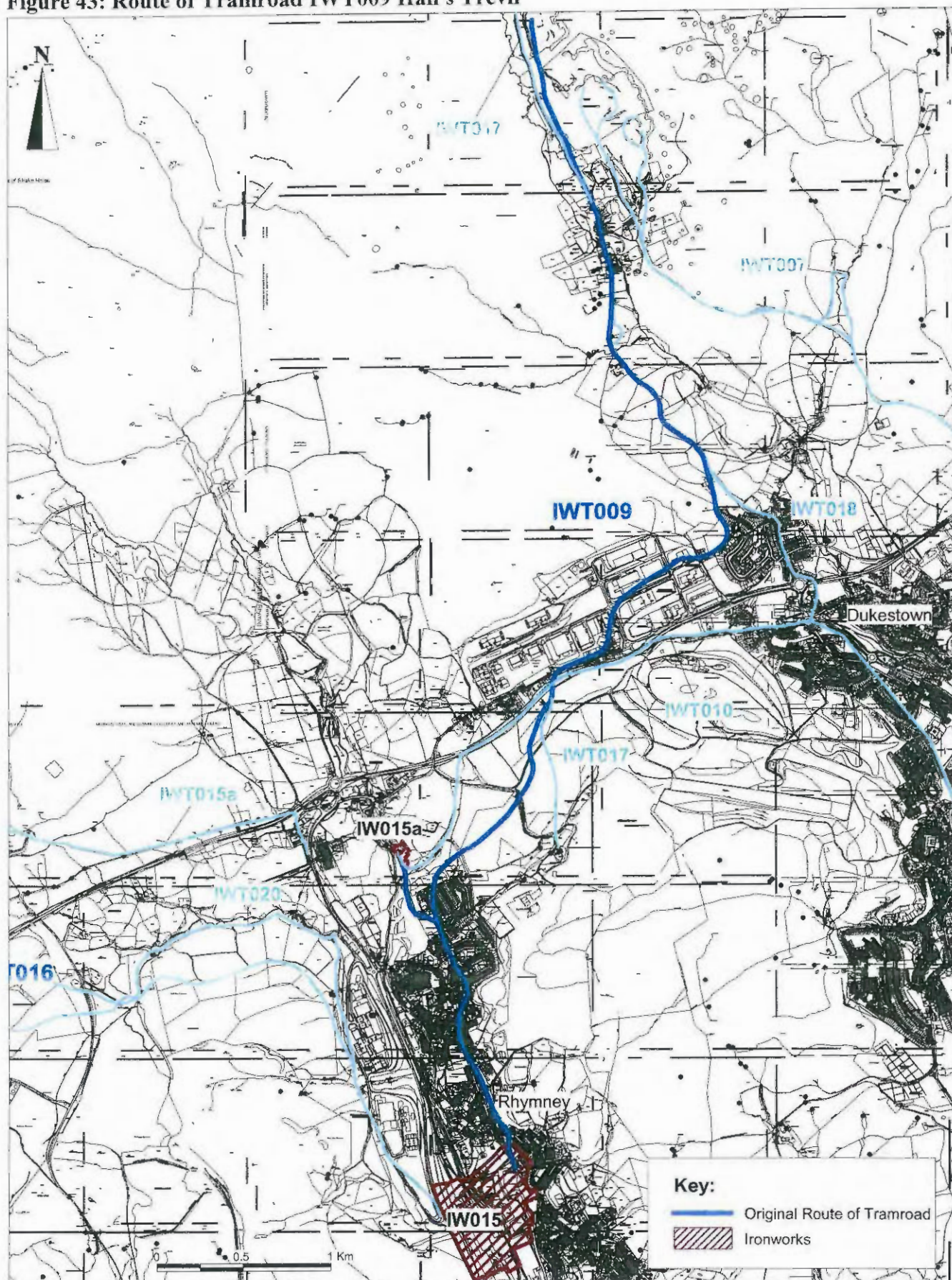
This tramroad has been surveyed as a single continuous route:

Table 60: Routes of Tramroad IWT009

Route Number	Name	Location	Figure Reference Number
IWT009	Hall's Trevil Tramroad	SO 11631 13981 to SO 11520 07342	43, 44

From Rhymney Ironworks (lower) the tramroad ran north to Lechryd, here a small branch continued to Rhymney upper furnace and the main line ran northeast to Waundeg before turning north to Trevil where its route is now that of Trefil Road until just northeast of Tafarn Ty Uchaf, here the tramroad entered Trevil quarries. This tramroad joined with the Brynoer Tramroad near the Quarryman's Arms, Trevil.

Figure 43: Route of Tramroad IWT009 Hall's Trevil

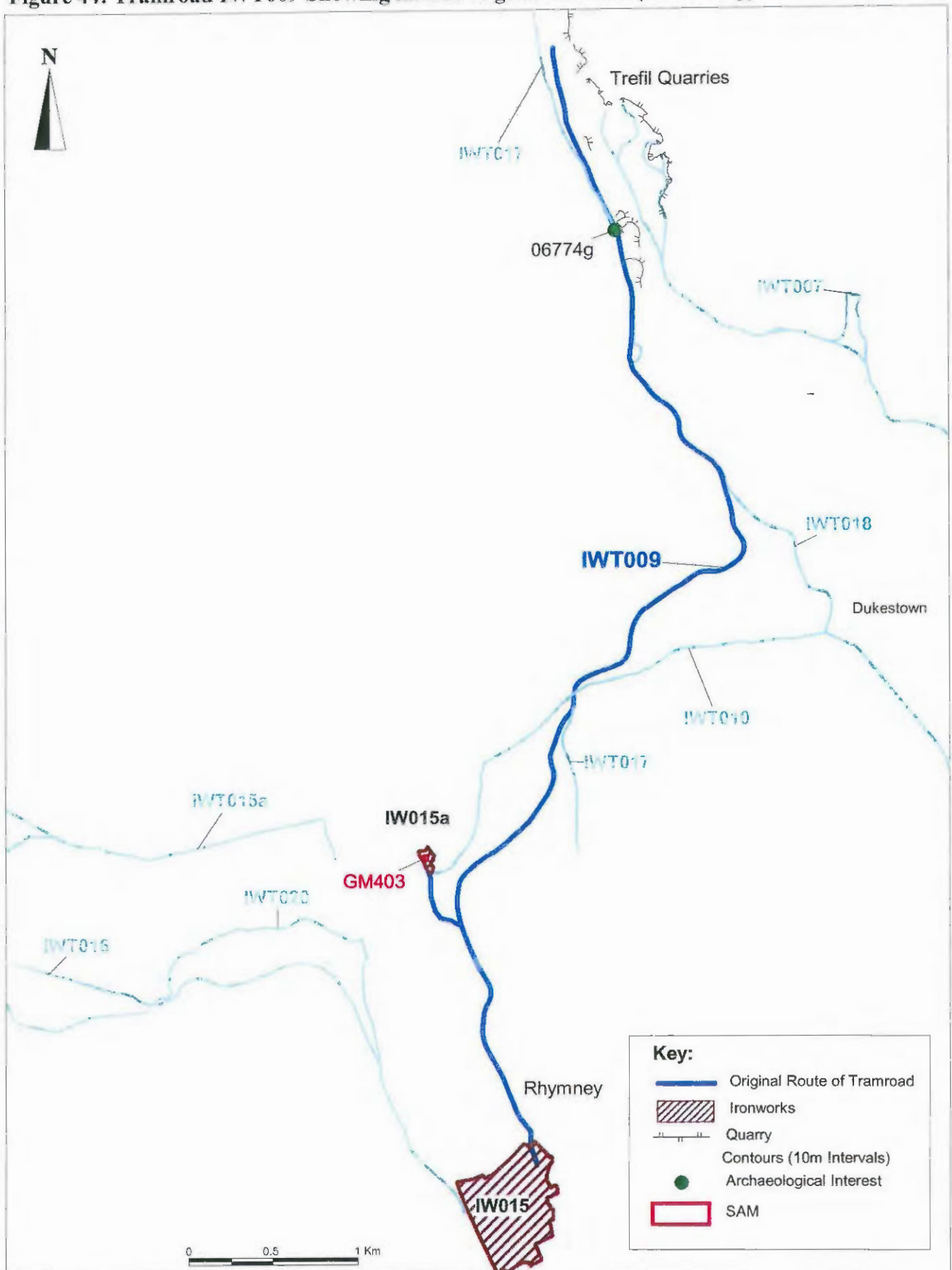


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Figure 44: Tramroad IWT009 Showing Archaeological Interests (Pre-survey)



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Condition of IWT009

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are two surviving sections of IWT009:

Table 61: Surviving Sections of IWT009

Section Number	Location	Condition Rating	Figure Reference Number
IWT009(i)	SO 11847 13229 to SO 11979 12924	B	45, 46
IWT009(ii)	SO 12614 11448 to SO 12685 11165	C	45, 46

The tramroad has been destroyed south of the A465 by housing development and open casting. To the north of the A465 the tramroad has been removed during development of Tafarnaubach Industrial estate as far as Nant y Bwch. North of Nant y Bwch farm the tramroad has been tarmaced over and the route is now that of Trefil Road.

IWT009(i) (CONDITION B) survives in a slight cutting just east of Trevil Road. It is grassed over with no surface remains visible.

IWT009(ii) (CONDITION C) is located partly on private land. The sections either side of Penrhyn farm survive as a grassed over linear embanked formation suffering some erosion.

North of IWT009(i) the tramroad has been disturbed by creation of an access track for heavy machinery to the quarries. This northern most section was not surveyed as the quarries are still in operation.

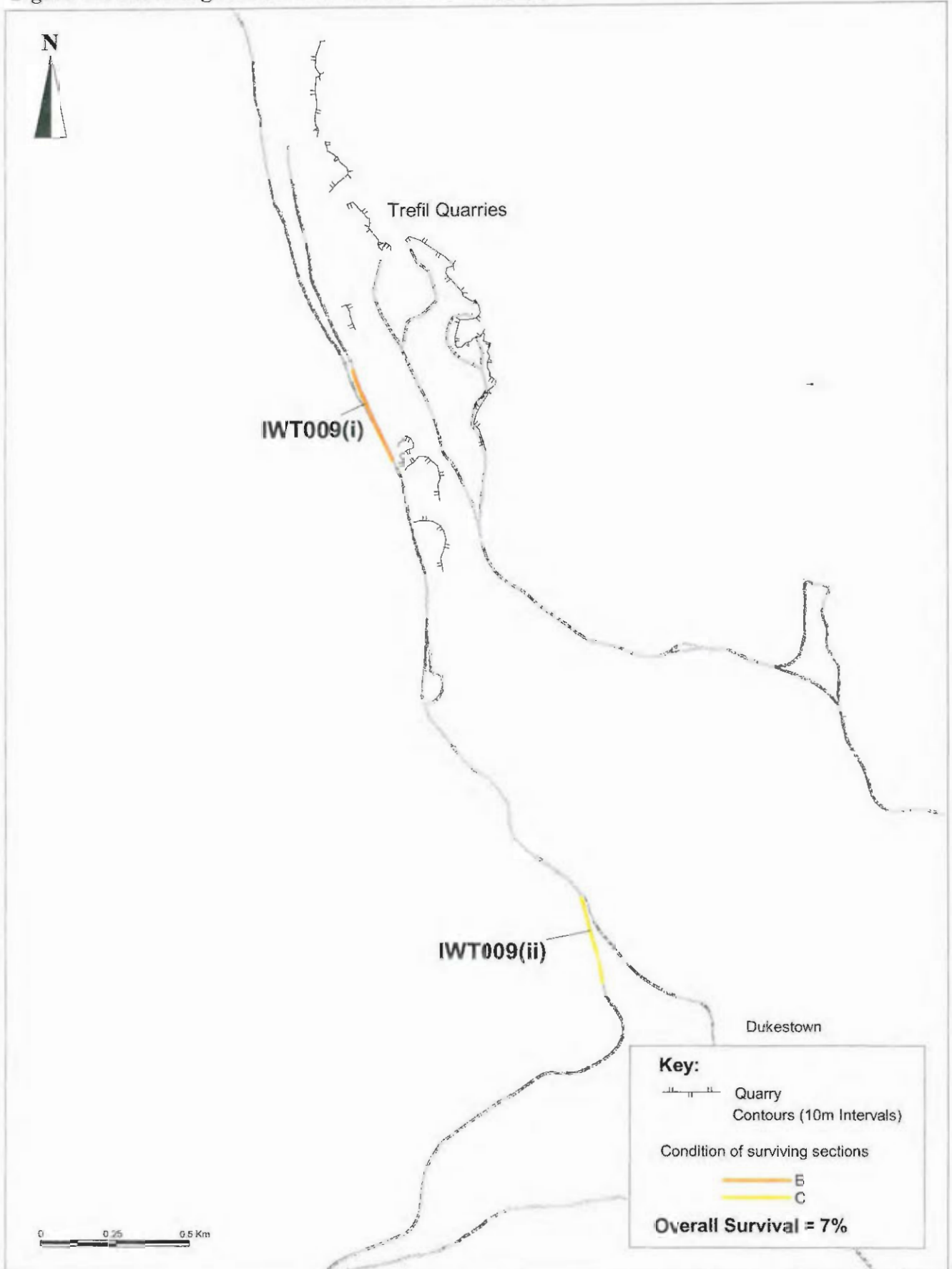
Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 44; details of these interests are given in Appendix III.

Table 62: Features Associated with IWT009(i) (see Figure 46)

Feature Number	NGR	Type
IWT009/001	SO 1170 1354	Tramroad junction
IWT009/002	SO 11939 13006	Tramroad Cutting

Figure 45: Surviving Tramroad Sections IWT009(i)-(ii)

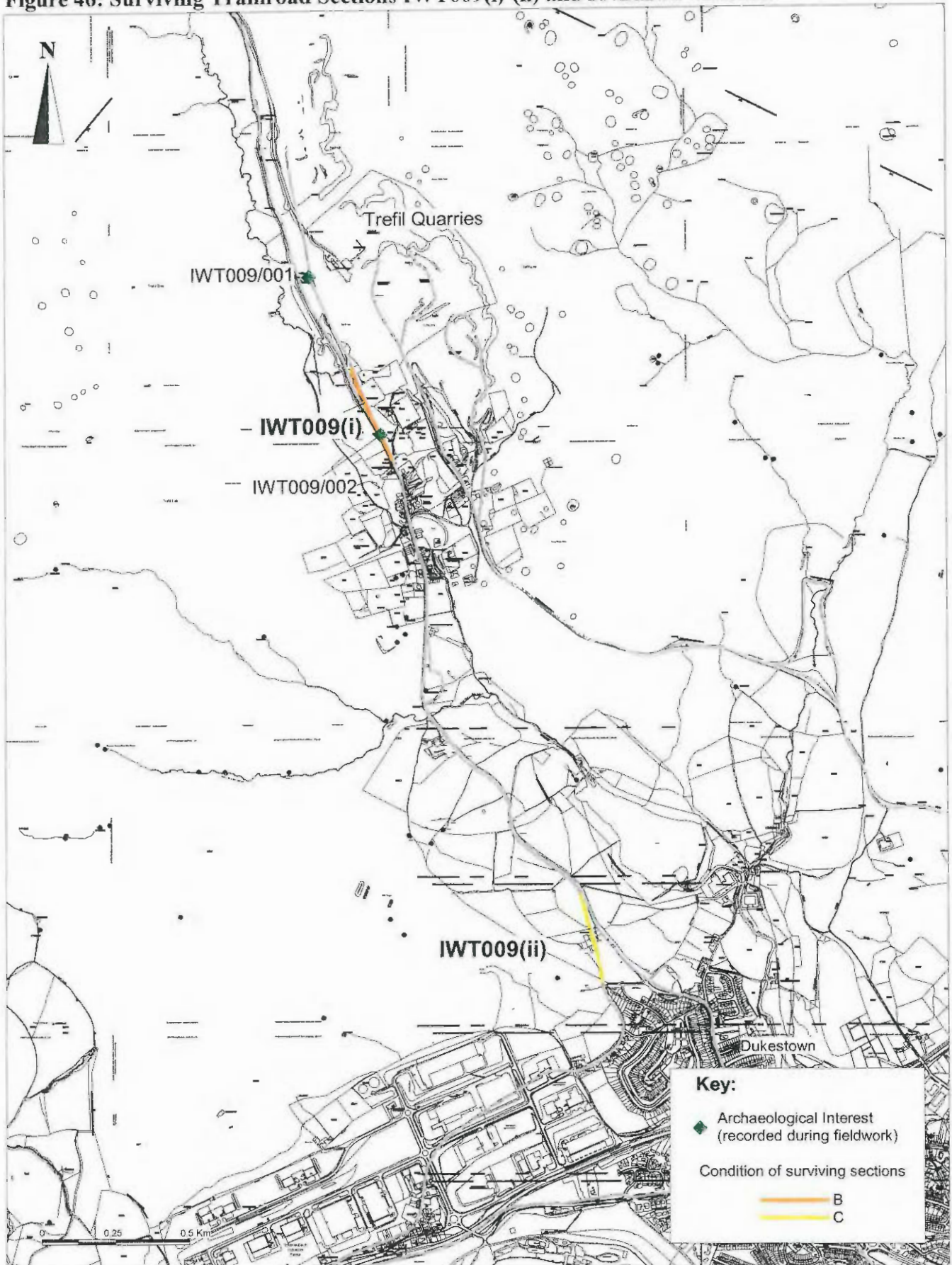


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Figure 46: Surviving Tramroad Sections IWT009(i)-(ii) and Identified Interests



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Current Protection/Status

There is currently no protection or status afforded to this tramroad. The surviving section lies within E16 special landscape area on the UDP.

Identified Threats

Ongoing quarrying threatens the survival of any remains of the northern most section. No threats were identified from the UDP.

Conservation and Management Recommendations

Maintain as current.

IWT Number 010: Rhymney Tramroad Branch

NGR: SO 13228 10492 to SO 10844 09160

Date Range: c. 1806 - 1815

Approximate length of tramroad = 3.1 Km

Overall survival = 3%

Historical Background

The Rhymney Tramroad was constructed c.1806 by Homfray and Co of Tredegar as a branch of the Tredegar Tramroad (IWT018) to transport limestone from Trevil quarries to Rhymney Upper furnace as well as to carry iron out from Rhymney via Tredegar. However, this was short lived as the branch was made redundant by 1815 with the construction of Hall's Trevil (IWT009) and the Brynoer (IWT017) Tramroads (van Laun 2001: 136).

General Description

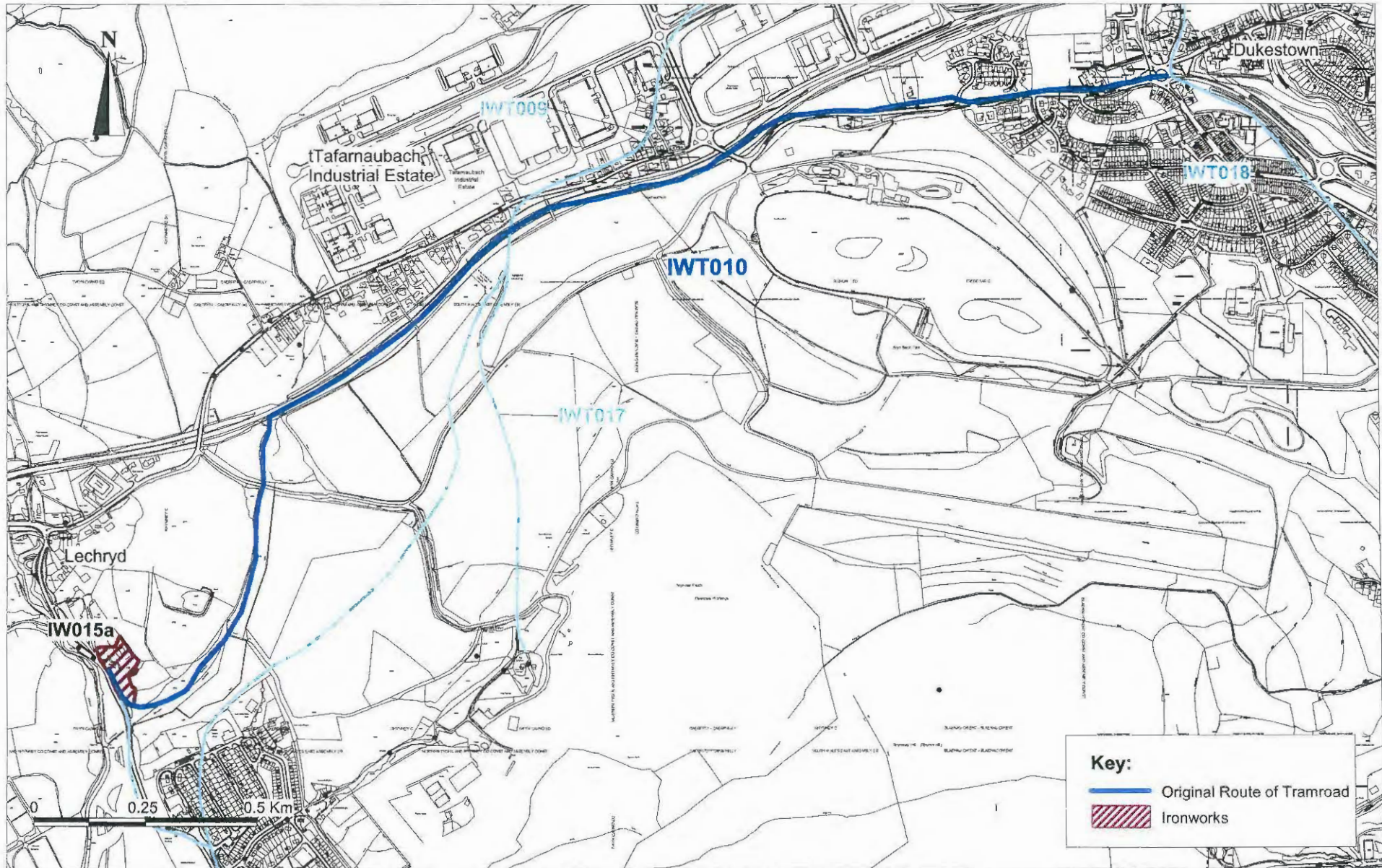
This tramroad has been surveyed as a single continuous route:

Table 63: Routes of Tramroad IWT010

Route Number	Name	Location	Figure Reference Number
IWT010	Rhymney Tramroad Branch	SO 13228 10492 to SO 10844 09160	47, 48

Branching west from a junction with Tredegar Tramroad (IWT018) at Dukestown the tramroad ran to Rhymney Upper Furnace. Part of its route can be followed along Merthyr Road and the A465.

Figure 47: Route of Tramroad IWT010 Rhymney Tramroad Branch



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Figure 48: Tramroad IWT010 showing Archaeological Interests (Pre-survey)



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Condition of IWT010

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

Nearly the whole tramroad route has been destroyed by land reclamation and road construction, only one small section remains:

Table 64: Surviving Sections of IWT010

Section Number	Location	Condition Rating	Figure Reference Number
IWT010(i)	SO 10844 09160 to SO 10890 09083	U	49, 50

IWT010(i) (CONDITION U) is the only surviving section of IWT010. This area is on private land and therefore was inaccessible at the time of survey. The surviving section of tramroad is on raised ground, running down a slight incline to the site of the old furnaces. Some revetment (IWT010/001) was visible. Further survey is recommended to ascertain whether any surface features survive.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 48; details of these interests are given in Appendix III.

Table 65: Features Associated with IWT010(i) (see Figure 50)

Feature Number	NGR	Type
IWT010/001	SO 10842 09157	Revetment

Current Protection/Status

No protection is currently afforded to the surviving section IWT010(i).

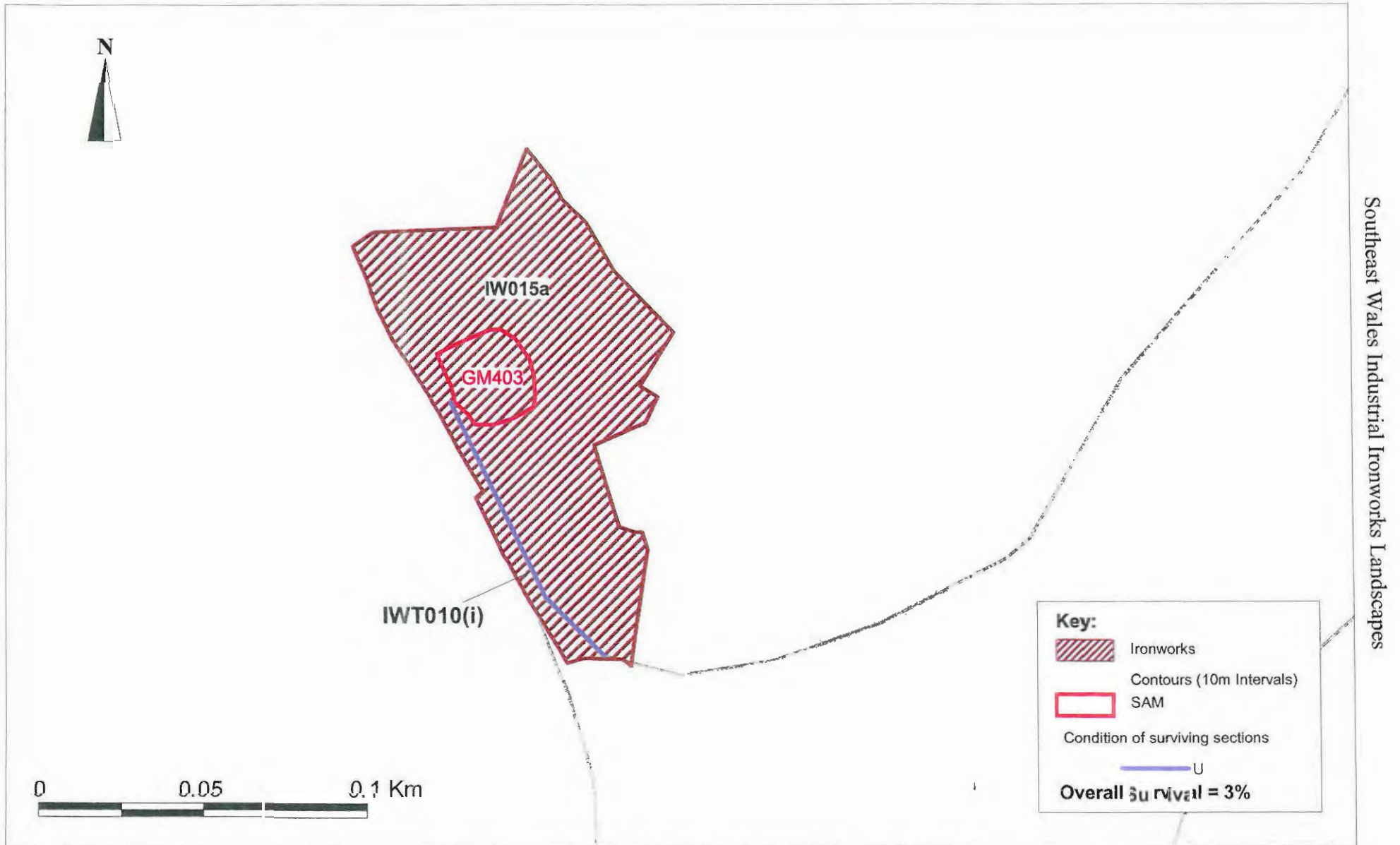
Identified Threats

No threats were identified from the UDP.

Conservation and Management Recommendations

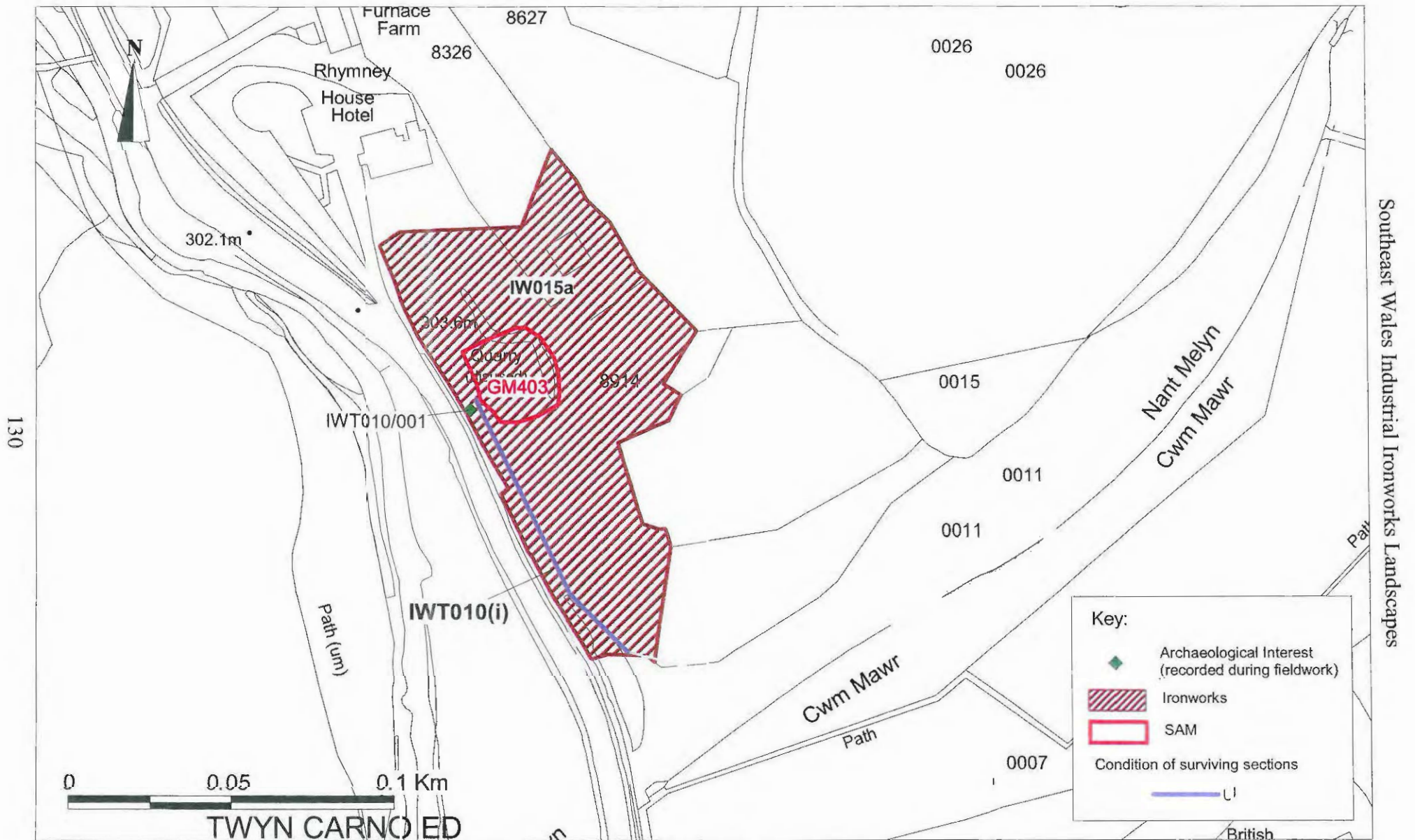
If with further survey works or trial excavation the tramroad section IWT010(i) is found to be well preserved, consideration could be given to extending the already scheduled area of Rhymney Upper furnace (GM403) to incorporate any surviving remains.

Figure 49: Surviving Tramroad Section IWT010(i)



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Figure 50: Surviving Tramroad Section IWT010(i) and Identified Interests



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IWT Number 011: Morlais East

NGR: SO 05093 09982 to SO 07235 07676

Date Range: c. 1825 - ?

Approximate length of tramroad = 5.2 Km

Overall survival = 39%

Historical Background

The Dowlais Iron Company opened a new limestone quarry at Morlais (east) after leaving Twynau Gwynion quarries in 1825. Despite this a tramroad connecting the quarries to the Dowlais and Ivor Ironworks was not opened until the 1830s. The gauge was 4ft 2in, the same as the Penyardren tramroad allowing traffic to transfer between the two. By 1832 it is possible that combined wheel locomotives such as *Yn Barod Etto* could have worked the line to Morlais East as they were able to run on 4ft 2in as well as standard gauge railways. It is suggested that any of Dowlais' standard gauge locomotives could have worked this tramroad following likely conversion of the track after 1838 (van Laun 2001: 169-170).

General Description

This tramroad has been surveyed as a single continuous route:

Table 66: Routes of Tramroad IWT011

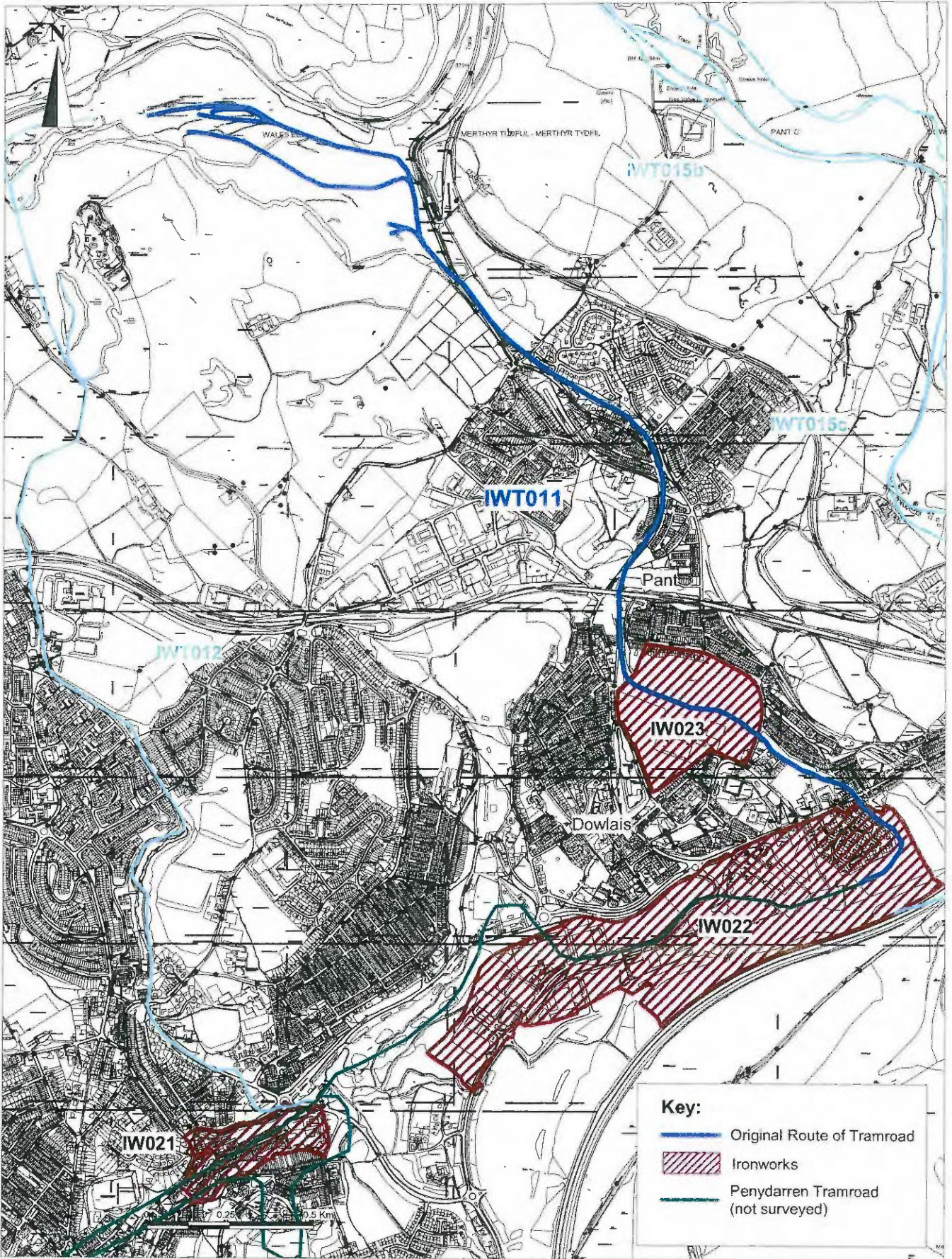
Route Number	Name	Location	Figure Reference Number
IWT011	Morlais East	SO 05093 09982 to SO 07235 07676	51, 52

A large number of tramroad spurs branch off the main tramroad route to access different quarry faces. Only the main branches were surveyed during this project.

The northern section of the tramroad through the quarries is now a designated trail known as Morlais Heritage Trail; set up by Pen-y-Dre high school in conjunction with Merthyr Groundwork Trust. The trail starts opposite the lower car park of the Brecon Mountain Railway alongside Morlais Golf Course. From here the tramroad ran a winding course southwards through Pant to the Ivor Works, its route can be partly followed along Pant Road. The tramroad continued southeast to the eastern extent of Dowlais Ironworks where it joined the Penyardren Tramroad.

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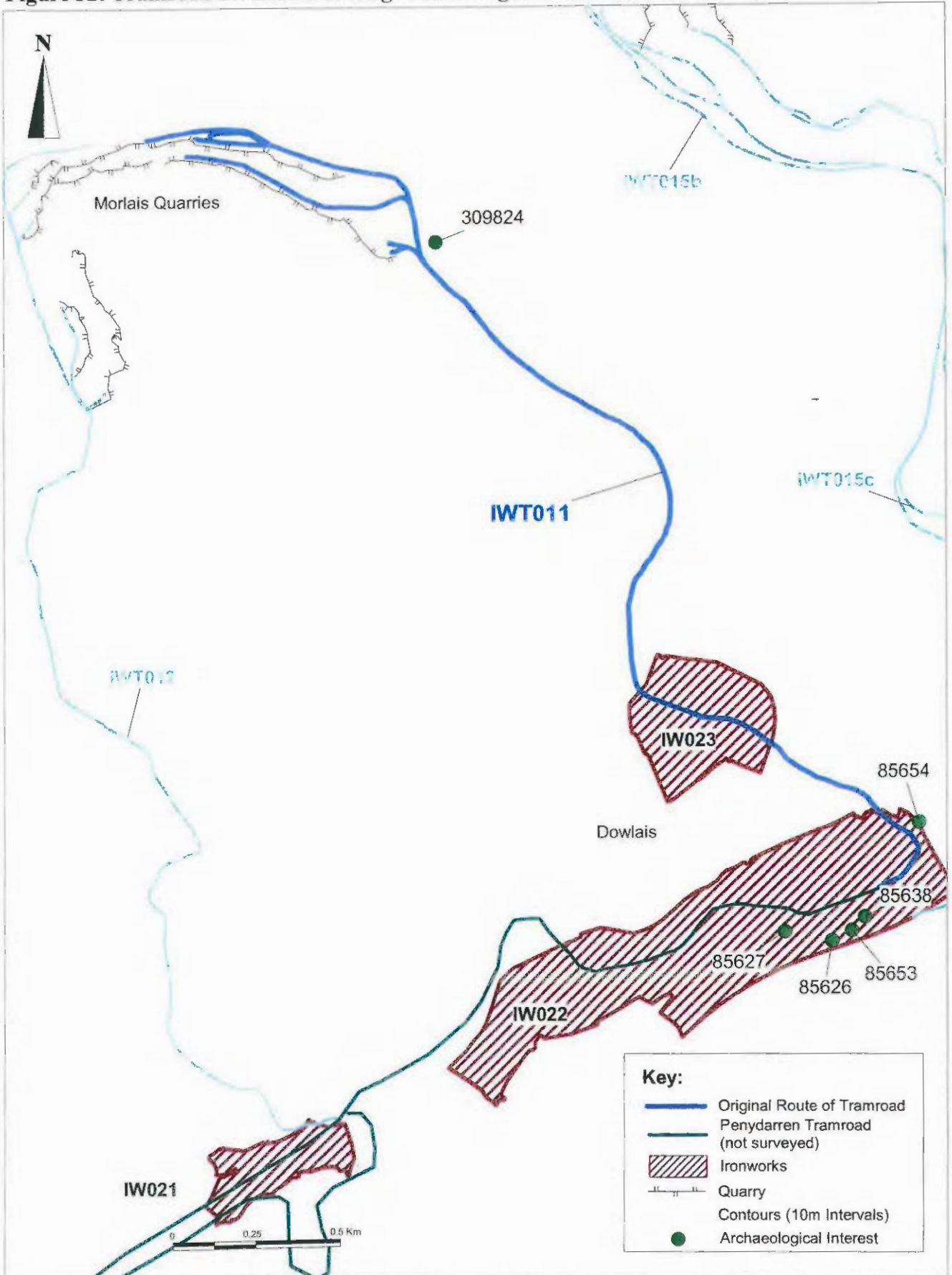
Figure 51: Route of Tramroad IWT011 Morlais East



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Figure 52: Tramroad IWT011 Showing Archaeological Interests (Pre-survey)



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Condition of IWT011

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are three surviving sections of IWT011:

Table 67: Surviving Sections of IWT011

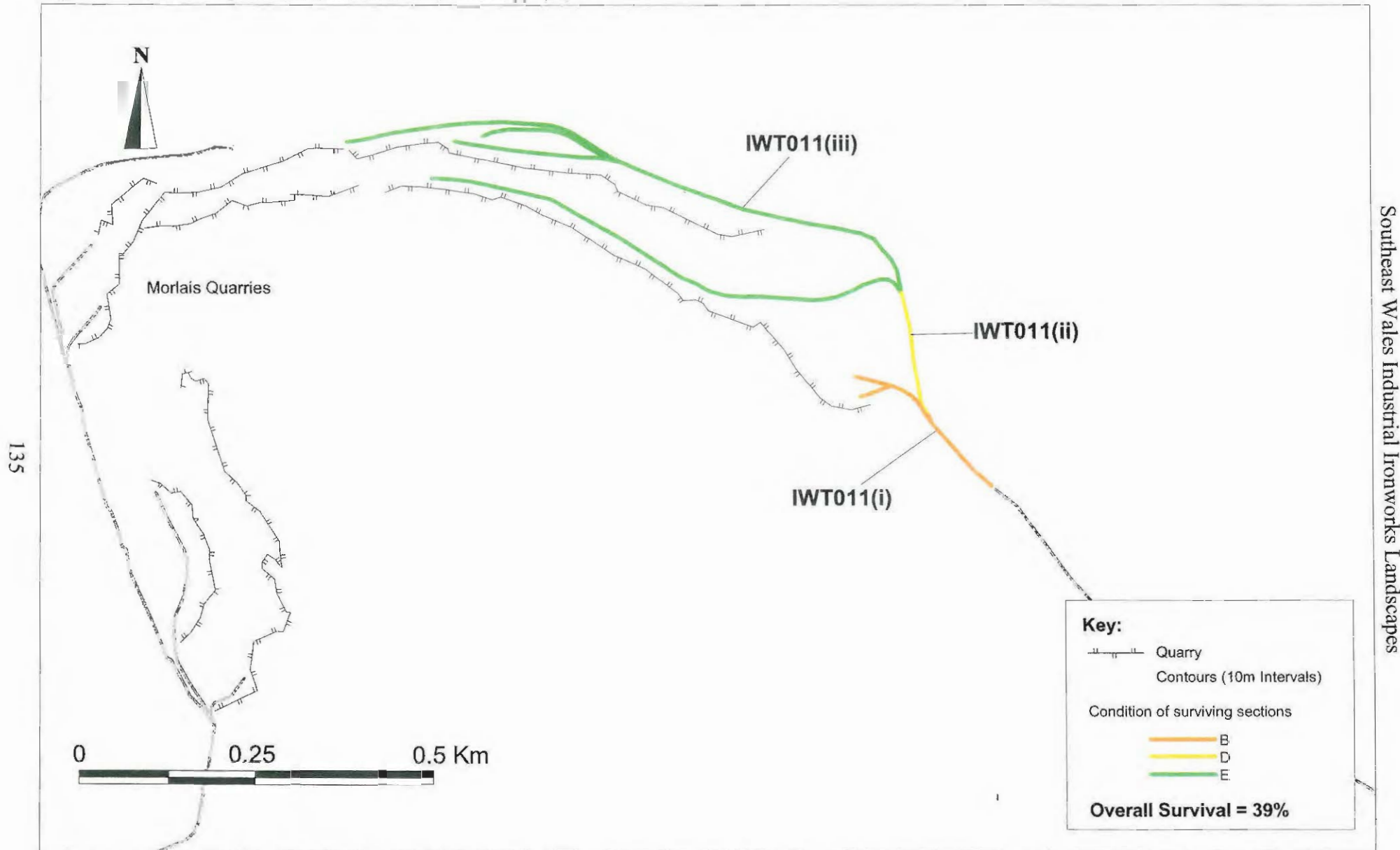
Section Number	Location	Condition Rating	Figure Reference Number
IWT011(i)	SO 05811 09651 to SO 06003 09496	B	53, 54
IWT011(ii)	SO 05876 09768 to SO 05915 09596	D	53, 54
IWT011(iii)	SO 05093 09982 to SO 05876 09768	E	53, 54

IWT011(i) (CONDITION B) survives as formation, grassed over with no obvious above ground features. The western most section appears to retain buried sleepers.

IWT011(ii) (CONDITION D) the route of the tramroad is discernable, however, the track formation itself has been subject to substantial damage from the excavation of a drain. Remains of stone blocks and later wooden sleepers were found to either side of the track and some in situ remains are visible in the drain section. A small siding survives along the revetment IWT011/03.

IWT011(iii) (CONDITION E) most likely represents a later phase of the tramroad. Wooden sleepers survive intact above ground in numerous places and also buried as grassed over bumps along the tramroad alongside the present walking track. Several branches to the quarry face connect to the main line, the junctions of which are clearly visible. Collapsed buildings associated with the quarry are situated nearby. This is possibly an extension or alteration to the earlier stone built tramway, the remains of which may be preserved underneath the wooden sleepers as indicated by the damage to IWT011(ii).

Figure 53: Surviving Tramroad Sections IWT011(i)-(iii)



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Southeast Wales Industrial Ironworks Landscapes

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 52; details of these interests are given in Appendix III.

Table 68: Features Associated with IWT011(i) (see Figure 54)

Feature Number	NGR	Type
IWT011/001	SO 0593 0957	Stone block
IWT011/002	SO 0593 0956	Culvert
IWT011/003	SO 0592 0959	Revetment

Table 69: Features Associated with IWT011(ii) (see Figure 54)

Feature Number	NGR	Type
IWT011/004	SO 0591 0961	Iron Tramroad Chair
IWT011/005	SO 0591 0961	Wooden sleeper
IWT011/006	SO 0591 0961	Stone block
IWT011/007	SO 0590 0966	Stone block
IWT011/008	SO 0590 0966	Limekiln

Table 70: Features Associated with IWT011(iii) (see Figure 54)

Feature Number	NGR	Type
IWT011/009	SO 0557 0992	Wooden sleeper
IWT011/010	SO 05837 09845	Wooden sleeper
IWT011/011	SO 0534 0992	Building
IWT011/012	SO 0530 0994	Quarry building
IWT011/013	SO 05130 09989	Tramroad junction

Current Protection/Status

The surviving section of tramroad currently receives no statutory protection. Morlais Heritage trail may be seen to aid preservation of this area, through drawing attention to the features.

Identified Threats

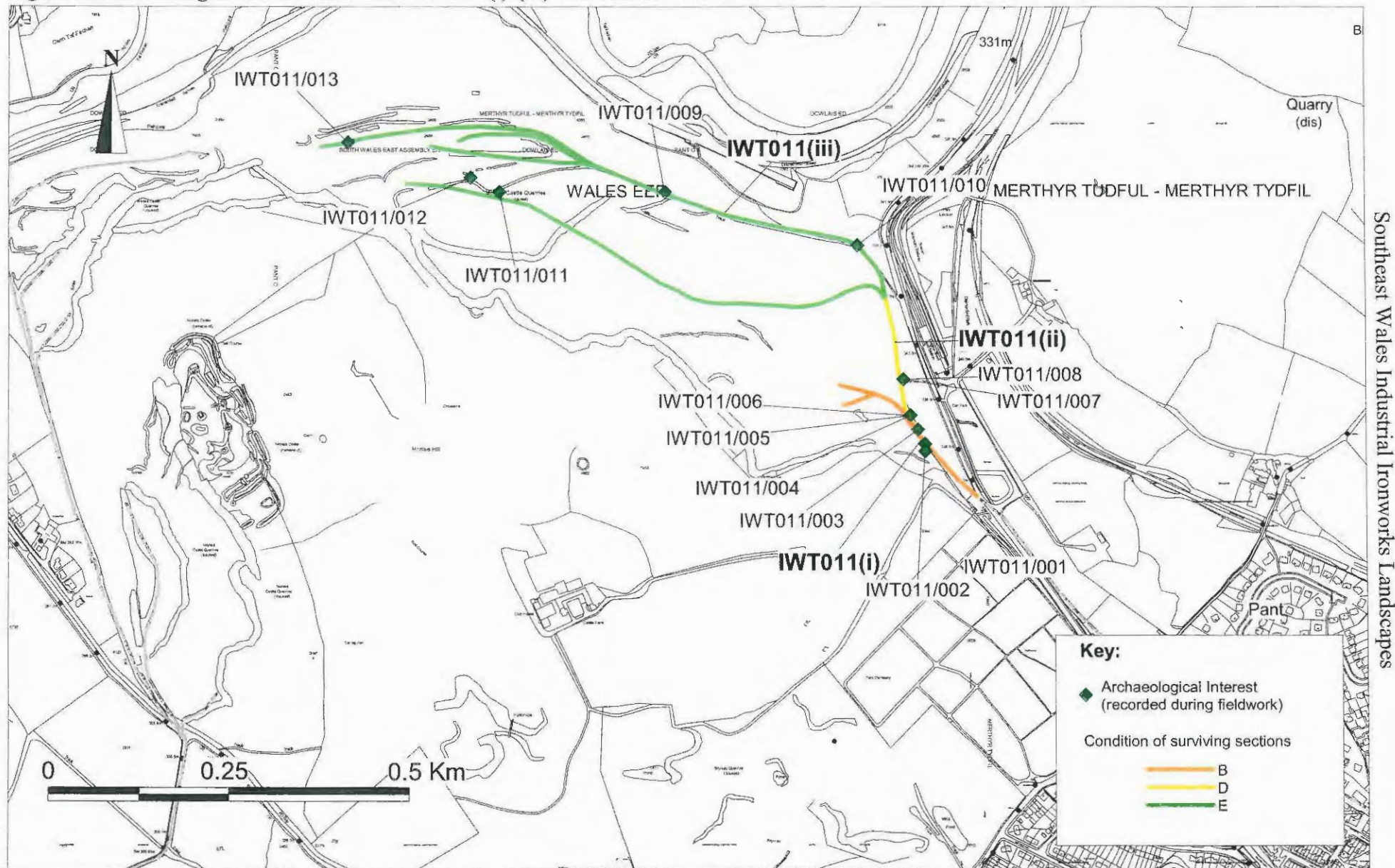
Dereliction and drainage are the most prominent threats at present. There is some minor erosion from off road vehicles.

The area is highlighted as derelict land and as an informal recreation area in the UDP. 'Limited and sensitive' reclamation works are proposed for the quarry area.

Conservation and Management Recommendations

This area is untidy and littered. Information panels have been vandalised although some wayside sign posting remains. Conservation of the tramroad and surrounding quarry areas is needed. This extractive landscape is of some interest and should be preserved and enhanced. Further survey of the tramroad and quarries is required. Excavation might be undertaken to investigate the phasing and construction of the tramroad and its branches.

Figure 54: Surviving Tramroad Sections IWT011(i)-(iii) and Identified Interests



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IWT Number 012: Morlais West (03173.0m)

NGR: SO 04929 09972 to SO 05600 07013

Date Range: c. 1800 - 1870s

Approximate length of tramroad = 4.8 Km

Overall survival = 34%

Historical Background

Evidence suggests that a tramroad was in existence between Morlais West quarries and Penydarren Ironworks by 1800. Penydarren worked the quarries with Plymouth from this period and through running to the Plymouth ironworks via Penydarren tramroad was realised in 1803. Extension of the tramroad further north into the quarries was undertaken by 1830, this section seems to have remained open until the closure of Plymouth Ironworks in the 1870s. The lines to the southern quarries most likely closed along with Penydarren ironworks in 1859 (van Laun 2001: 170-182).

General Description

This tramroad has been surveyed as a single continuous route:

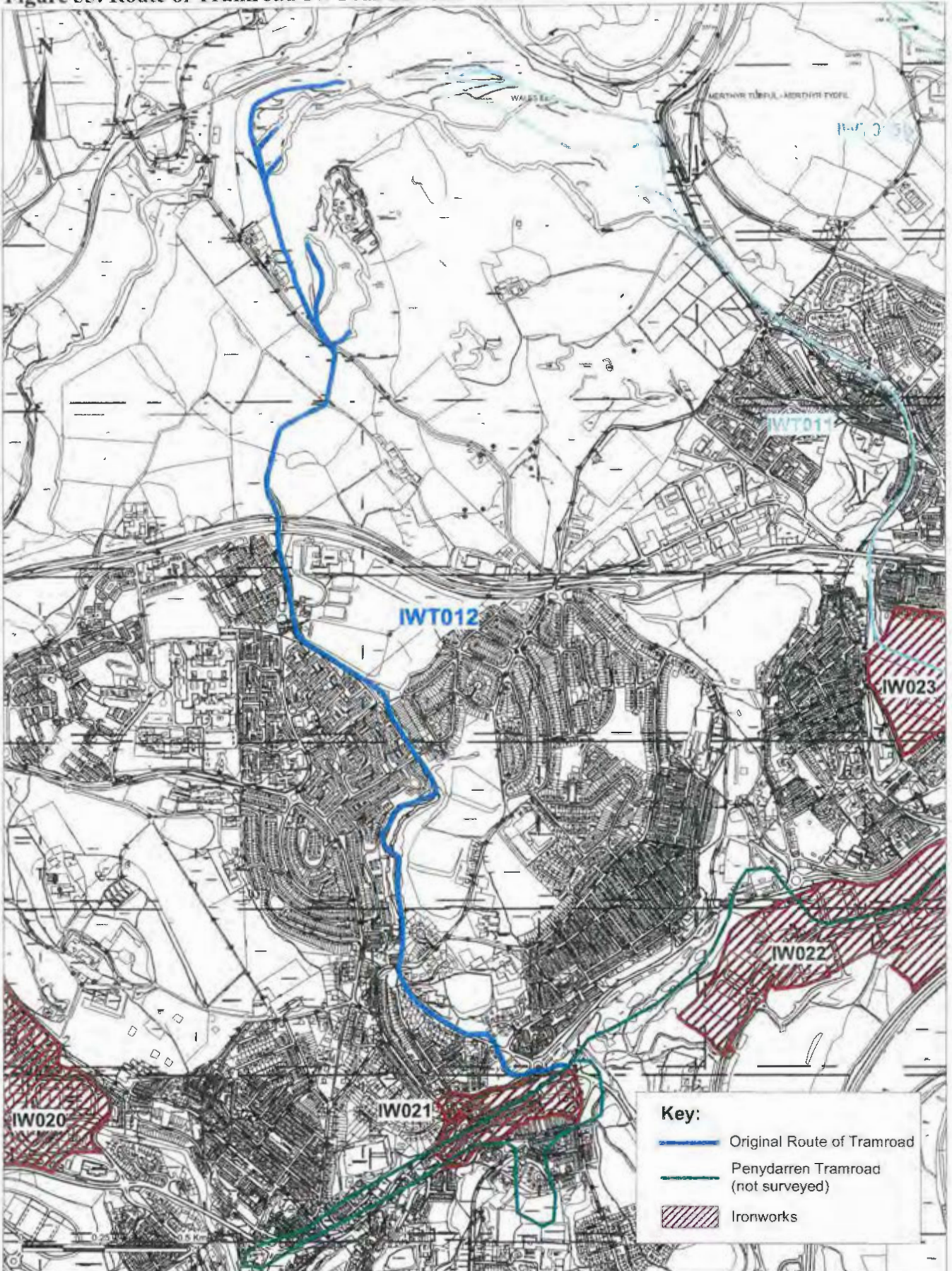
Table 71: Routes of Tramroad IWT012

Route Number	Name	Location	Figure Reference Number
IWT012	Morlais West	SO 04929 09972 to SO 05600 07013	55, 56

Morlais West took a winding route north from its junction with the Penydarren Tramroad at Penydarren Ironworks, past Morlais Castle to the quarries. The section of tramroad from the A4102 to SO 04901 09172 has been substantially destroyed. However, its route can be followed in places along the present route of Tramroad Lane and Goetre Lane through The Gurnos.

The surviving line of tramroad north of SO 04901 09172 is now a designated trail known as Morlais Heritage Trail; set up by Pen-y-Dre high school in conjunction with Merthyr Groundwork Trust. The trail starts opposite the lower car park of the Brecon Mountain Railway alongside Morlais Golf Course.

Figure 55: Route of Tramroad IWT012 Morlais West

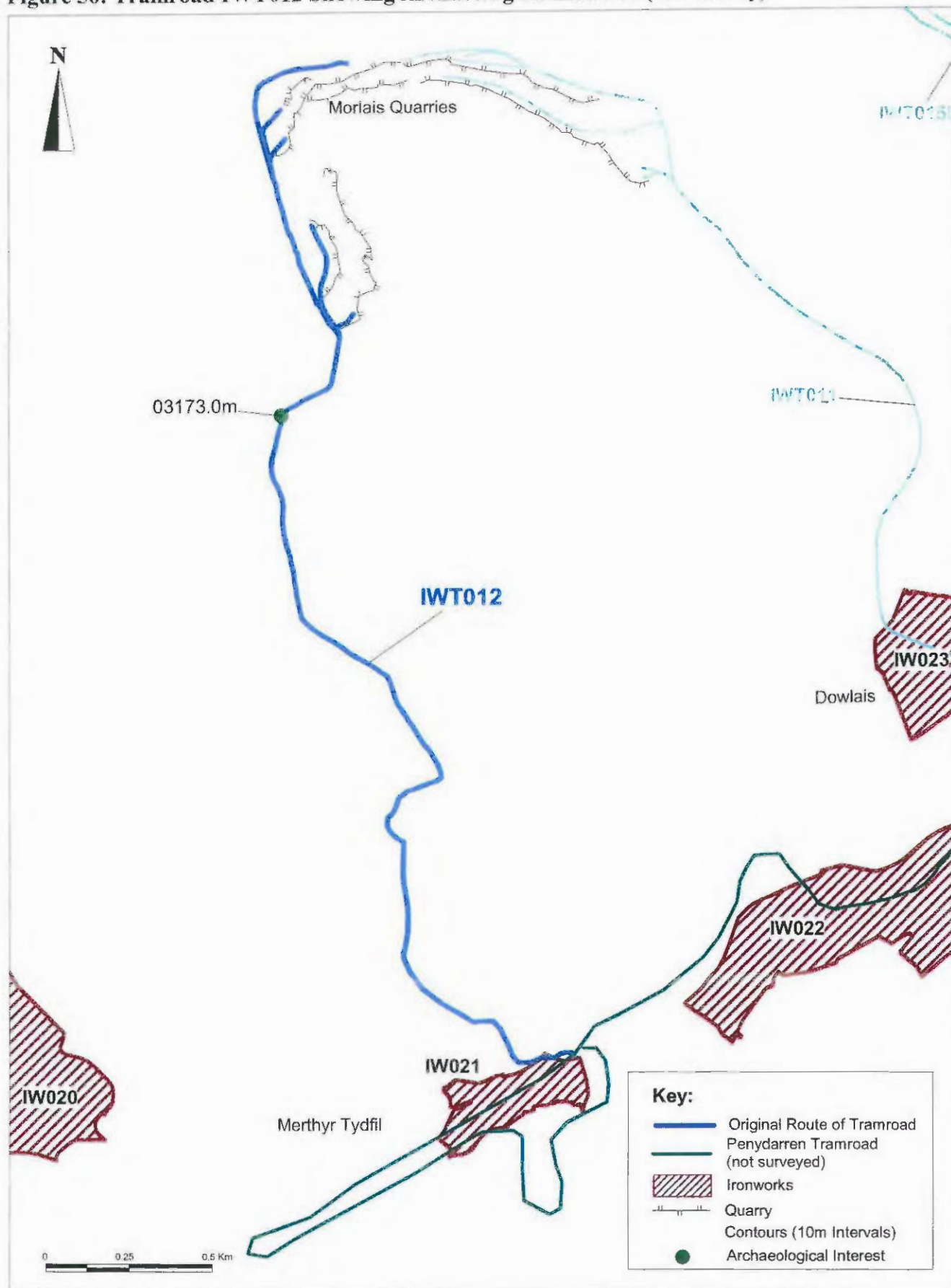


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Figure 56: Tramroad IWT012 Showing Archaeological Interests (Pre-survey)



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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT012

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are three surviving sections of IWT012:

Table 72: Surviving Sections of IWT012

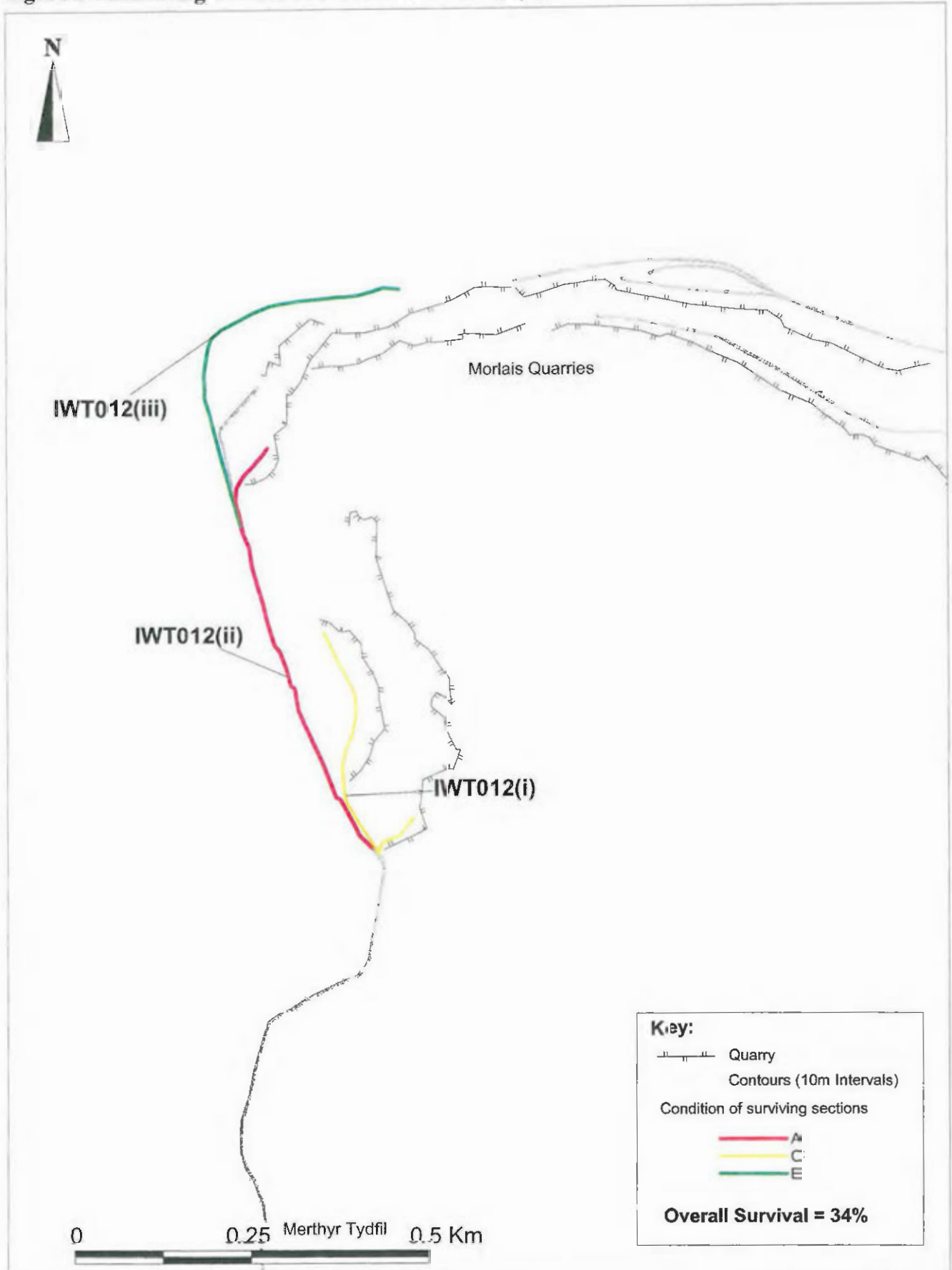
Section Number	Location	Condition Rating	Figure Reference Number
IWT012(i)	SO 04823 09487 to SO 04901 09172	C	57, 58
IWT012(ii)	SO 04744 09749 to SO 04889 09180	A	57, 58
IWT012(iii)	SO 04929 09972 to SO 04706 09637	E	57, 58

IWT012(i) (CONDITION C) is traceable on the ground although remains are generally ephemeral. The most visible part of the formation lies between SO 0484 0930 and SO 0485 0943.

IWT012(ii) (CONDITION A) a well preserved section of tramroad with stone blocks. Blocks have fixing holes and wear marks. In some places both the left and right side of the track are visible i.e. IWT012/003 and 006 and junctions are clearly visible.

IWT012(iii) (CONDITION E) this section of track is later than IWT012(i) and (ii) and represents an extension to quarries north of Morlais castle. Partly shown on a map of 1830, these had been extended by 1875. This section was constructed with wooden sleepers. Surface imprints are visible where sleepers have been removed (IWT012/010) and parts of sleepers below these exposed suggesting replacement or renewal of track at a later stage.

Figure 57: Surviving Tramroad Sections IWT012(i)-(iii)



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Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 56; details of these interests are given in Appendix III.

Table 73: Features Associated with IWT012(i) (see Figure 58)

Feature Number	NGR	Type
IWT012/012	SO 0484 0930	Tramroad embankment

Table 74: Features Associated with IWT012(ii) (see Figure 58)

Feature Number	NGR	Type
IWT012/001	SO 0487 0922	Stone block
IWT012/002	SO 0483 0926	Revetment
IWT012/003	SO 0479 0936	Stone block
IWT012/004	SO 0477 0944	Quarry
IWT012/005	SO 0475 0952	Stone block
IWT012/006	SO 0472 0959	Quarry
IWT012/007	SO 0470 0968	Stone block
IWT012/008	SO 0469 0969	Tramroad junction

Table 75: Features Associated with IWT012(iii) (see Figure 58)

Feature Number	NGR	Type
IWT012/009	SO 0467 0978	Tramroad junction
IWT012/010	SO 0466 0986	Wooden sleeper
IWT012/011	SO 0486 0996	Building

Current Protection/Status

The surviving section of tramroad currently receives no statutory protection. Morlais Heritage trail may be seen to aid preservation of this area, through drawing attention to the feature.

Identified Threats

There is some minor erosion from off road vehicles. The area is used for outdoor pursuits, i.e. climbing, this could contribute minor damage to quarry features, though an appropriate level of information could easily prevent this.

The area is highlighted as derelict land and informal recreation area in the UDP. 'Limited and sensitive' reclamation works are proposed for the quarry area.

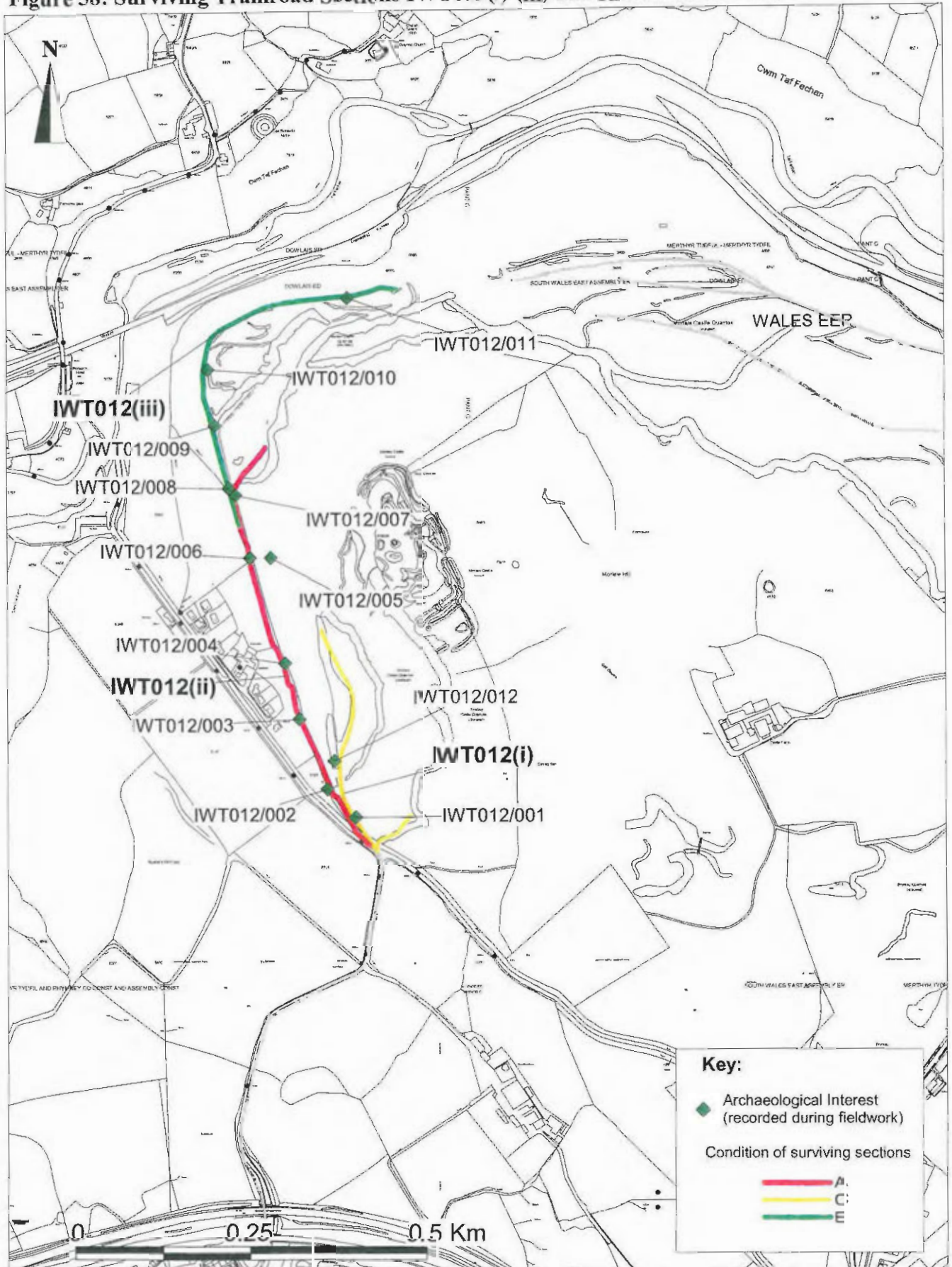
Conservation and Management Recommendations

This end of the Morlais Heritage Trail is better maintained than the east; whilst some wayside sign posting remains, the existing information panels have been vandalised. Conservation of the tramroad and surrounding quarry areas is needed. This is an important and generally well preserved landscape, as a result consideration should be given to its preservation and protection.

Further survey of the tramroad and quarries is recommended. Excavation might help to determine the phasing and construction of the tramroad and its branches.

Southeast Wales Industrial Ironworks Landscapes

Figure 58: Surviving Tramroad Sections IWT012(i)-(iii) and Identified Interests



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Plate 12: Tramroad Section IWT012(ii), View to South

IWT Number 013: Tappendens' Tramroad (03225.0m)

NGR: SN 88712 06736 to SO 01512 02181

Date Range: 1802 - ?

Approximate length of tramroad = 19.3 Km

Overall survival = 20%

Historical Background

It took long deliberation before the construction of a tramroad connecting the ironworks at Llwydcoed and Abernant with the Neath Canal was finally begun. The tramroad was eventually built in two sections; the first by the Neath Canal Company commenced in 1802 from the canal head at Glyn Neath to Wyfra bridge, the second by Homfray, Birch and the Tappendens eastwards from the bridge to the ironworks (Mear 1999). The whole tramroad was eventually opened in 1805. The section east of Hirwaun (IWT013), also known as the Abernant Tramroad, carried limestone brought from Penderyn along the pre-existing Mr Glover's tramroad (see IWT014) to Aberdare and Abernant furnaces. Following the eventual commencement of the Aberdare Canal in 1809 a new tramroad branch was built from the proposed canal head to Gelli Isaf bridge. Later in 1819 Abernant ironworks constructed a direct line to the canal, making the route westwards (IWT013a) redundant. In 1827 Gadlys ironworks was linked via a small branch to Robertstown bridge. (van Laun 2001: 188-196). The growth of Abernant ironworks resulted in increased traffic and acted as a catalyst for the conversion of the eastern section of tramroad to Aberdare canal firstly to a steam-hauled line and then to a railway in 1852.

General Description

This tramroad was allocated two route numbers for the purpose of the survey:

Table 76: Routes of Tramroad IWT013

Route Number	Name	Location	Figure Reference Number
IWT013	Tappendens' Tramroad	SN 96164 05313 to SO 01512 02181	59, 60
IWT013a	Tappendens' Tramroad West	SN 88712 06736 to SN 96164 05313	59, 60

IWT013

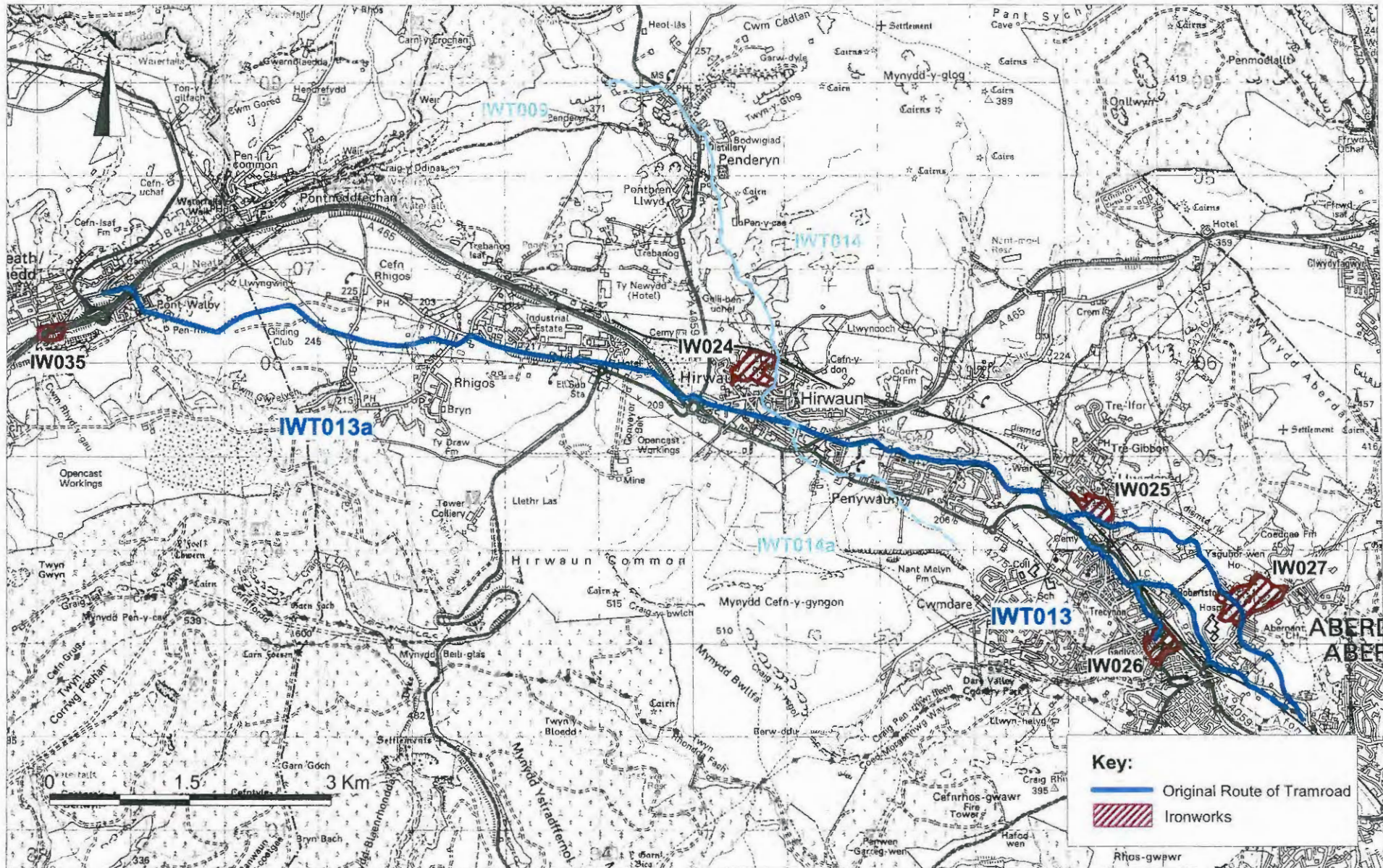
This route represents the most long-lived section of Tappendens' Tramroad east of Hirwaun, which thrived after the construction of the Aberdare Canal. This includes the original route running between Abernant and Llwydcoed to Hirwaun; later branches built to the new canal head from Gelli-Isaf bridge and Abernant ironworks as well as the 1827 branch linking Gadlys ironworks (34884) to the whole system. From Hirwaun the route can be followed along a tarmaced track and footpath just south of the River Cynon above Penywaun to Gelli-isaf bridge near Llwydcoed. Through the site of Llwydcoed ironworks the route can be followed along a footpath then minor road to Abernant, where the later route to the canal can be traced as a footpath to the canal. The branch running from a junction at Gelli-isaf bridge (01084m, 34815) to the canal can now be traced along a tarmaced footpath to the canal.

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IWT013a (03225.0m)

This route runs west from Hirwaun to the Neath canal head at Glyn-Neath (noted as U3 and U4 by van Laun). This section was more or less abandoned after the opening of the Aberdare canal and extension of the eastern section. Most of the tramroad route now comprises minor roads and tracks. From Hirwaun this route can be followed along Manchester Place and Meadow Lane; from this point the tramroad route has been interrupted by road construction and land redevelopment. Its route can be picked up again along Rigos Road. It heads south west through private land and then along a footpath as far as Wyfra Ucha. West of Wyfra Uchaf farm to the Vale of Neath Gliding Club, the route can be traced along a gravelled and tarmaced track. From here the route of the footpath depicted on the map has been diverted and the tramroad lost to land reclamation. West of Graig-y-nos farm the route can be followed along a tarmaced road, down an incline then along Merthyr and Aberdare Roads.

Figure 59: Route of Tramroad IWT013 Tappendens' Tramroad

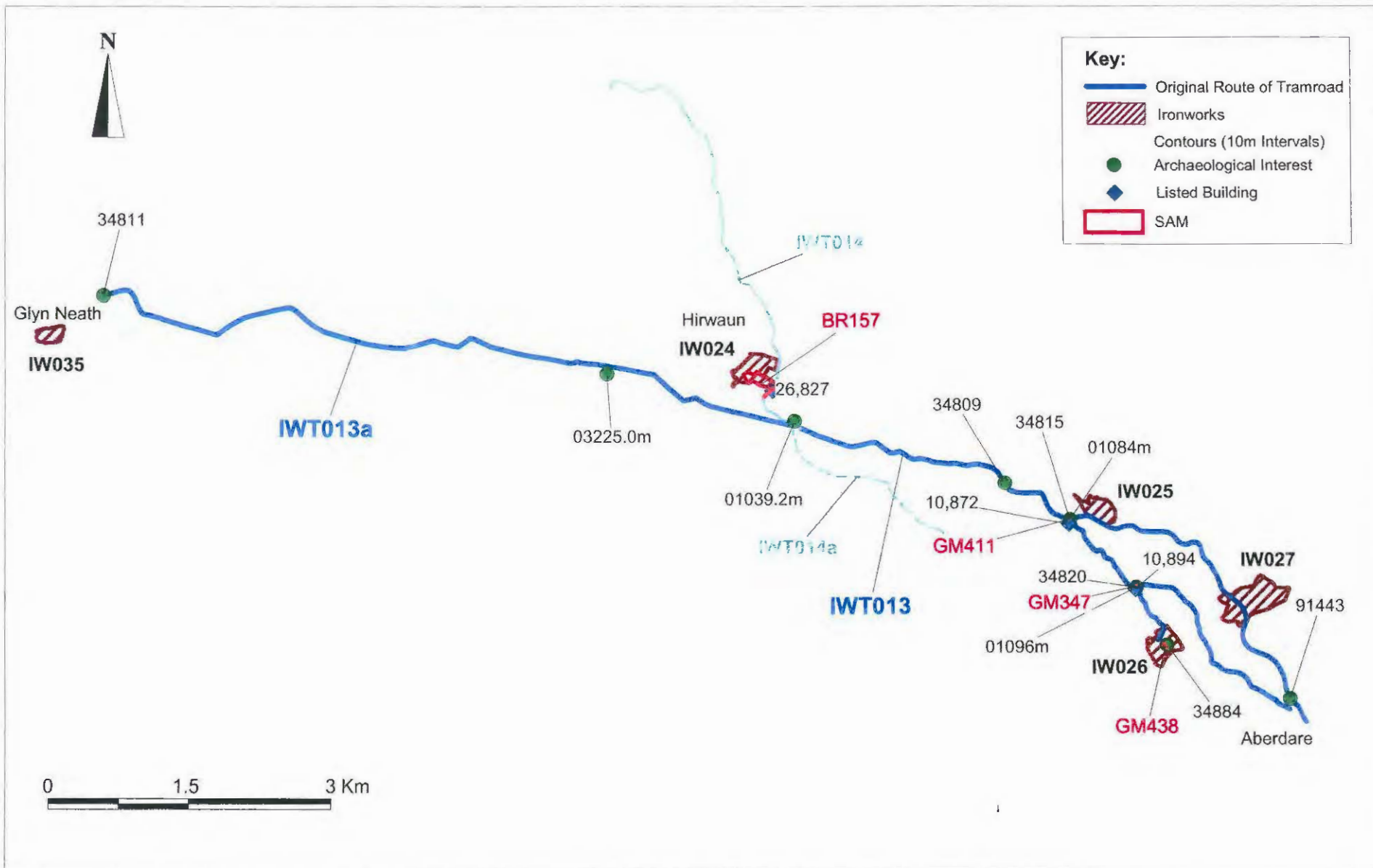


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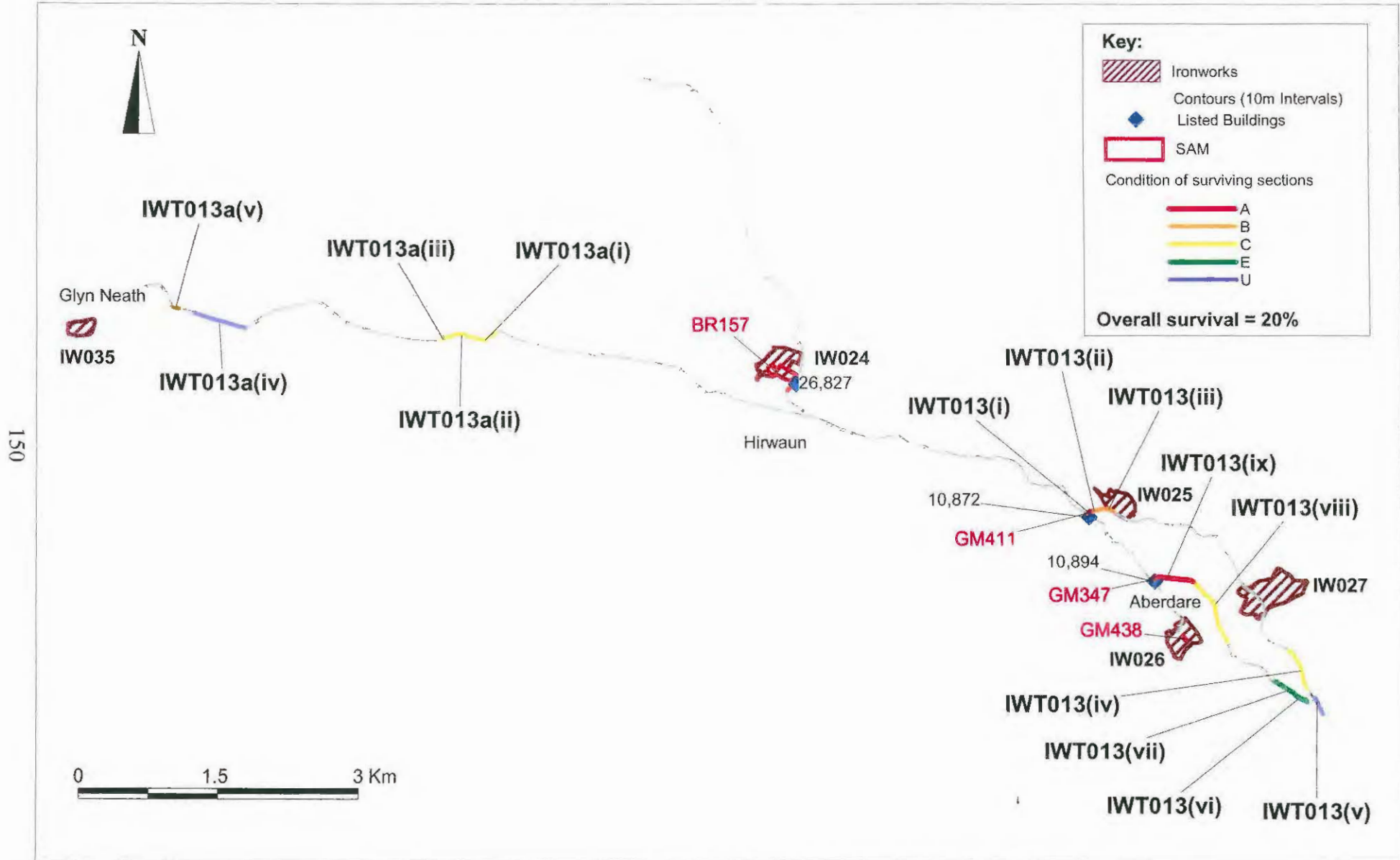
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Figure 60: Tramroad IWT013 Showing Archaeological Interests (Pre-survey)



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Figure 61: Surviving Tramroad Sections IWT013(i)-(ix) and IWT013a(i)-(v)



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Condition of IWT013

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are nine surviving sections of IWT013 equating to 29%:

Table 77: Surviving Sections of IWT013

Section Number	Location	Condition Rating	Figure Reference Number
IWT013(i)	SN 96164 05313 to SN 01512 02181	A	61, 62, 63
IWT013(ii)	SN 99119 04370 to SN 99012 04350	B	61, 62, 63
IWT013(iii)	SN 99267 04350 to SN 99119 04370	B	61, 62, 63
IWT013(iv)	SO 01139 02850 to SO 01332 02447	C	61, 62, 64
IWT013(v)	SO 01428 02349 to SO 01463 02277	U	61, 62, 64 -
IWT013(vi)	SO 01199 02398 to SO 01339 02313	E	61, 62, 64
IWT013(vii)	SO 01199 02398 to SO 01339 02313	E	61, 62, 64
IWT013(viii)	SO 00120 03599 to SO 00489 02945	C	61, 62, 65
IWT013(ix)	SN 99701 03611 to SO 00120 03599	A	61, 62, 65

The surviving tramroad to Llwydcoed Ironworks has been divided into 3 sections:

IWT013(i) (CONDITION A) now forms a footpath crossing Gelli-Isaf tramroad bridge and is reasonably well preserved with exposed stone blocks in situ. The bridge itself is a Scheduled Ancient Monument (SAM GM411).

IWT013(ii) (CONDITION B) exists in formation as a muddy footpath continuing east from Gelli-Isaf bridge with no surface finds, however, buried remains are possible.

IWT013(iii) (CONDITION B) continues along the footpath from IWT013(ii) in slightly better condition, through a hollow under a bridge for the mineral railway. No surface features were visible, however, buried remains are possible.

Four sections surviving at the canal end of the tramroad are:

IWT013(iv) (CONDITION C) is a badly damaged section. Even though this is a public footpath, a drain has been excavated through the middle of the track, destroying the tramroad formation. A couple of finds were made and more may be buried under the dense leaf litter. (This section corresponds to part of U8 noted by John Van Laun).

IWT013(v) (CONDITION U) survives as a slight grassed over bank, running into a wood. This is on private property and therefore was not surveyed. (This section corresponds to part of U8 noted by John Van Laun).

IWT013(vi) (CONDITION E) is wider than the other sections, the track bed survives and is built up for use as a footpath, buried remains are possible. (This section corresponds to part of U6 noted by John Van Laun).

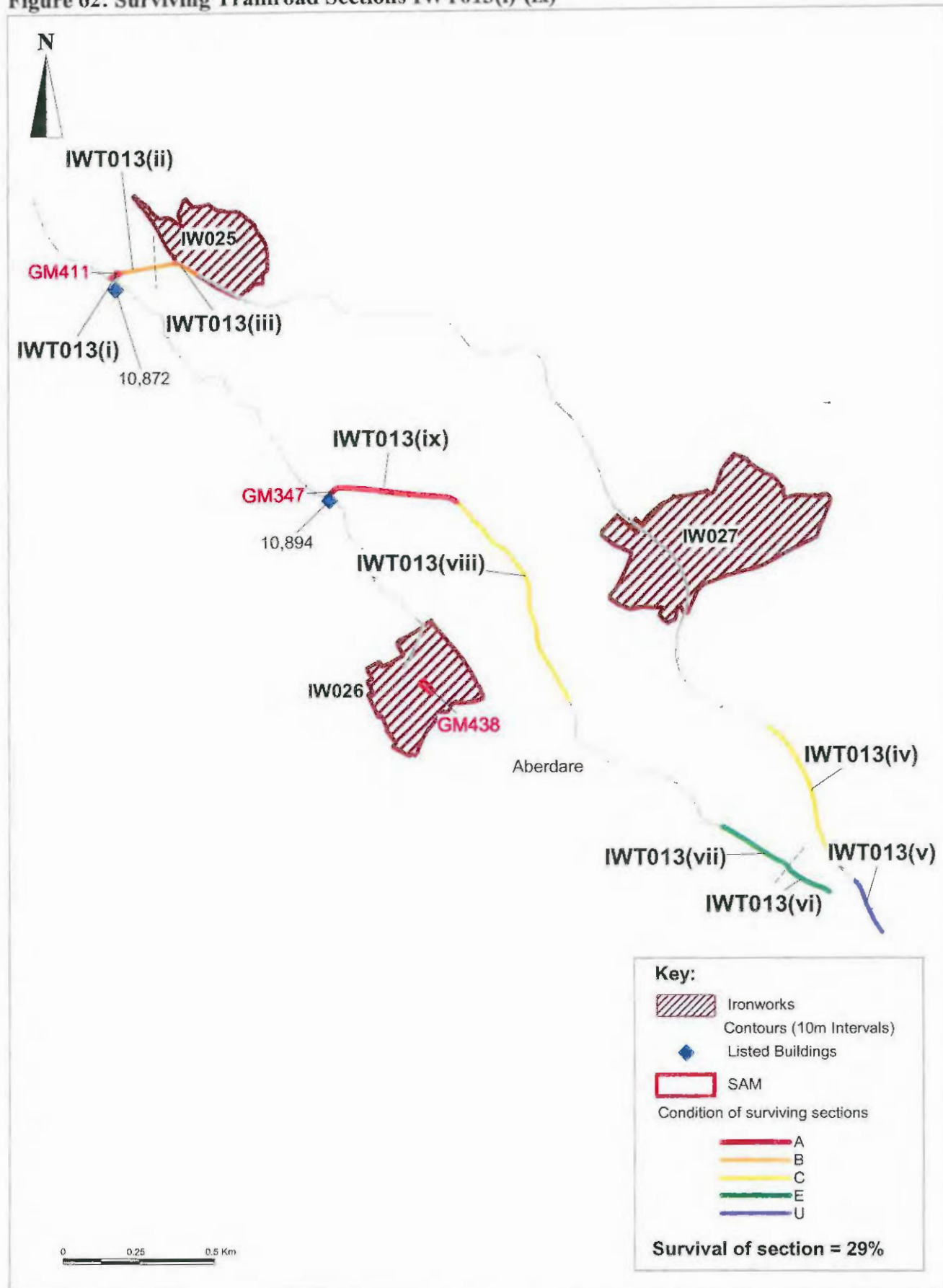
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IWT013(vii) (CONDITION E) the track bed formation survives under built up footpath similar to IWT013(vi). Buried remains are possible. (This section corresponds to part of U6 noted by John Van Laun).

IWT013(viii) (CONDITION C) is currently a muddy footpath. The tramroad formation survives in generally good condition with a number of exposed stone blocks a good example is found in IWT013/013, which extends over the bridge abutment IWT013/014. This section has suffered from erosion and disturbance and requires conservation work. A number of stone blocks have been displaced and the south end of the section is untidy, rubbish has been dumped here and building works are ongoing nearby. A fence has been constructed along the west side of the tramroad in this area, this may have destroyed some of the tramroad formation. Despite its poor condition this section has high group value with IWT013(ix).

IWT013(ix) (CONDITION A) is an exceptionally well-preserved section, including an arched stone bridge (IWT013/021); the Gelli-isaf bridge built between 1803 and 1805 to the designs of Evan Hopkin, the noted Swansea Valley Engineer. Part of which has previously been considered for scheduling as GM 527. Many exposed stone blocks survive in situ. Although part of the tramway has been destroyed by the A4509, this section has been extended for the purpose of this study to include the scheduled Robertstown Bridge (SAM GM347, 01096m, 34820, LB 10894).

Figure 62: Surviving Tramroad Sections IWT013(i)-(ix)



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Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 60; details of these interests are given in Appendix III.

Table 78: Features Associated with IWT013(i) (see Figure 63)

Feature Number	NGR	Type
IWT013/001	SN 9902 0435	Stone block

Table 79: Features Associated with IWT013(iv) (see Figure 64)

Feature Number	NGR	Type
IWT013/002	SO 0125 0271	Drain
IWT013/003	SO 0125 0274	Stone block
IWT013/004	SO 01215 02779	Wooden sleeper

Table 80: Features Associated with IWT013(vi) (see Figure 64)

Feature Number	NGR	Type
IWT013/005	SO 0129 0238	Crane pivot unassigned

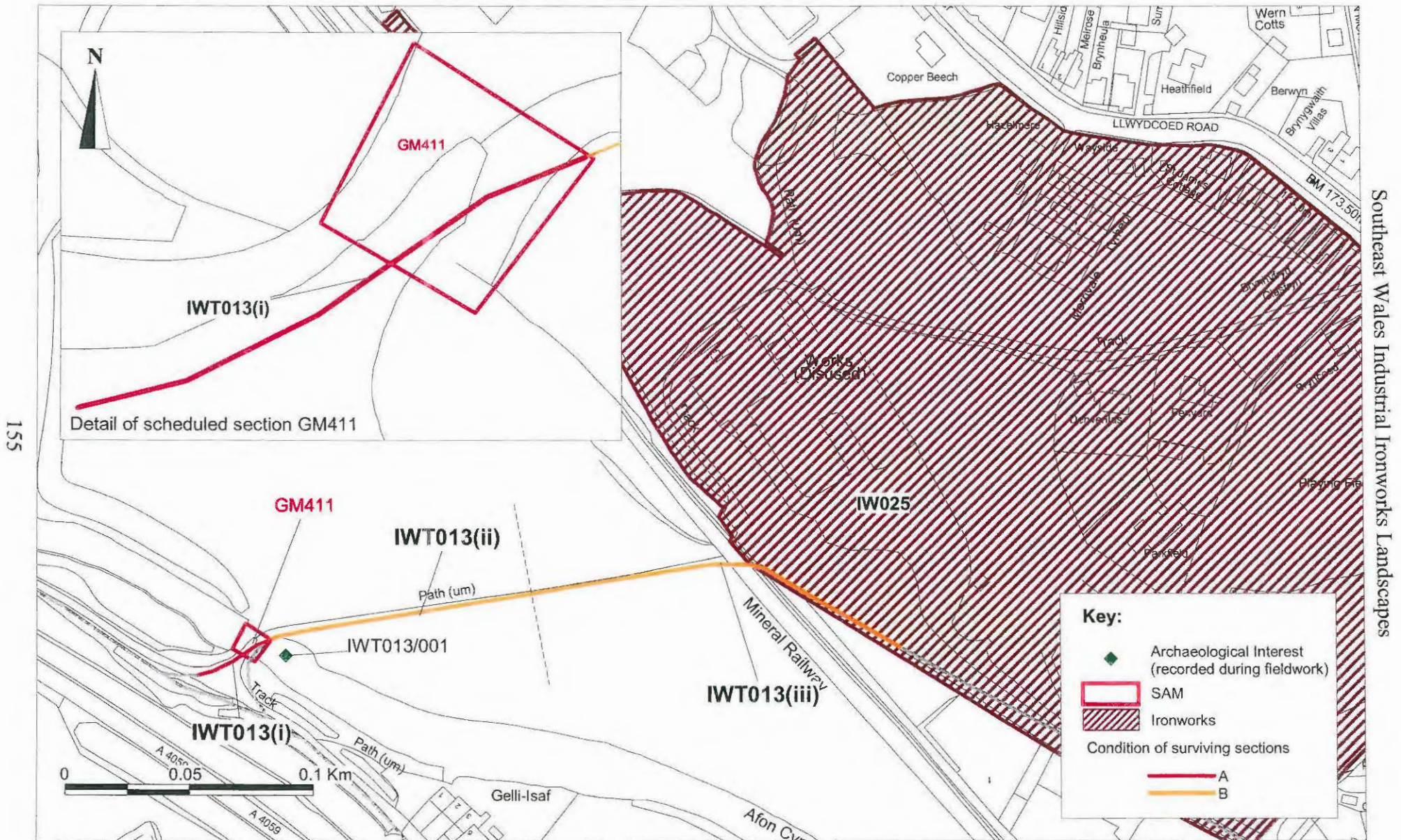
Table 81: Features Associated with IWT013(viii) (see Figure 65)

Feature Number	NGR	Type
IWT013/006	SO 0042 0304	Stone block
IWT013/007	SO 0039 0309	Stone block
IWT013/008	SO 0034 0325	Stone block
IWT013/009	SO 0037 0330	Stone block
IWT013/010	SO 0030 0341	Stone block
IWT013/011	SO 0024 0345	Stone block
IWT013/012	SO 00156 03556	Stone block
IWT013/013	SO 00203 03500	Stone block
IWT013/014	SO 00203 03500	Revetment
IWT013/015	SO 0017 0353	Stone block
IWT013/016	SO 0015 0357	Stone block
IWT013/017	SO 00354 03361	Wall
IWT013/018	SO 00135 03577	Tramroad culvert

Table 82: Features Associated with IWT013(ix) (see Figure 65)

Feature Number	NGR1	Type
IWT013/019	SO 0011 0359	Stone block
IWT013/020	SN 9993 0362	Stone block
IWT013/021	SO 0010 0362	Tramway bridge
IWT013/022	SN 9981 0364	Stone block

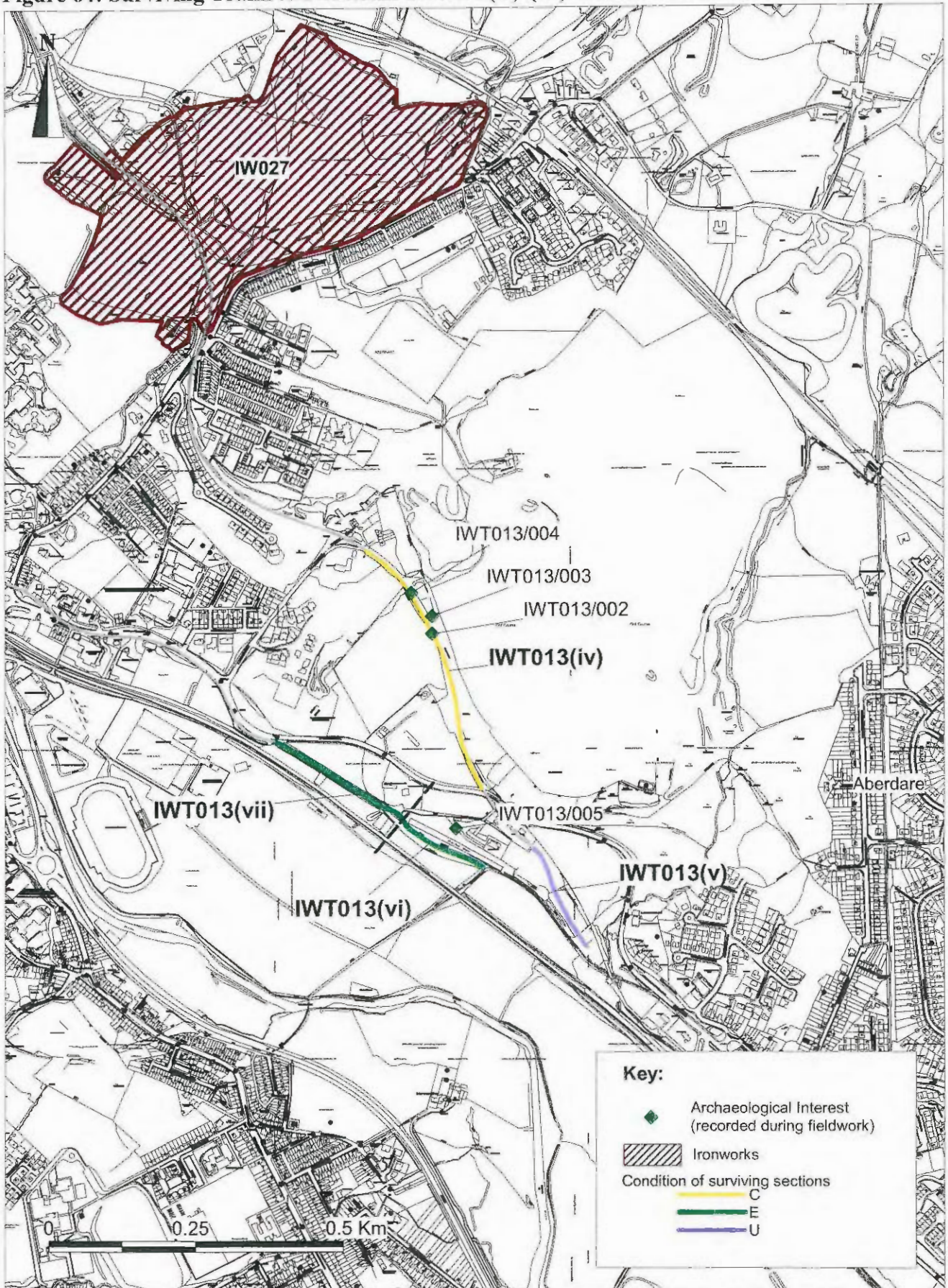
Figure 63: Surviving Tramroad Sections IWT013(i)-(iii) and Identified Interests



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Figure 64: Surviving Tramroad Sections IWT013(iv)-(vii) and Identified Interests



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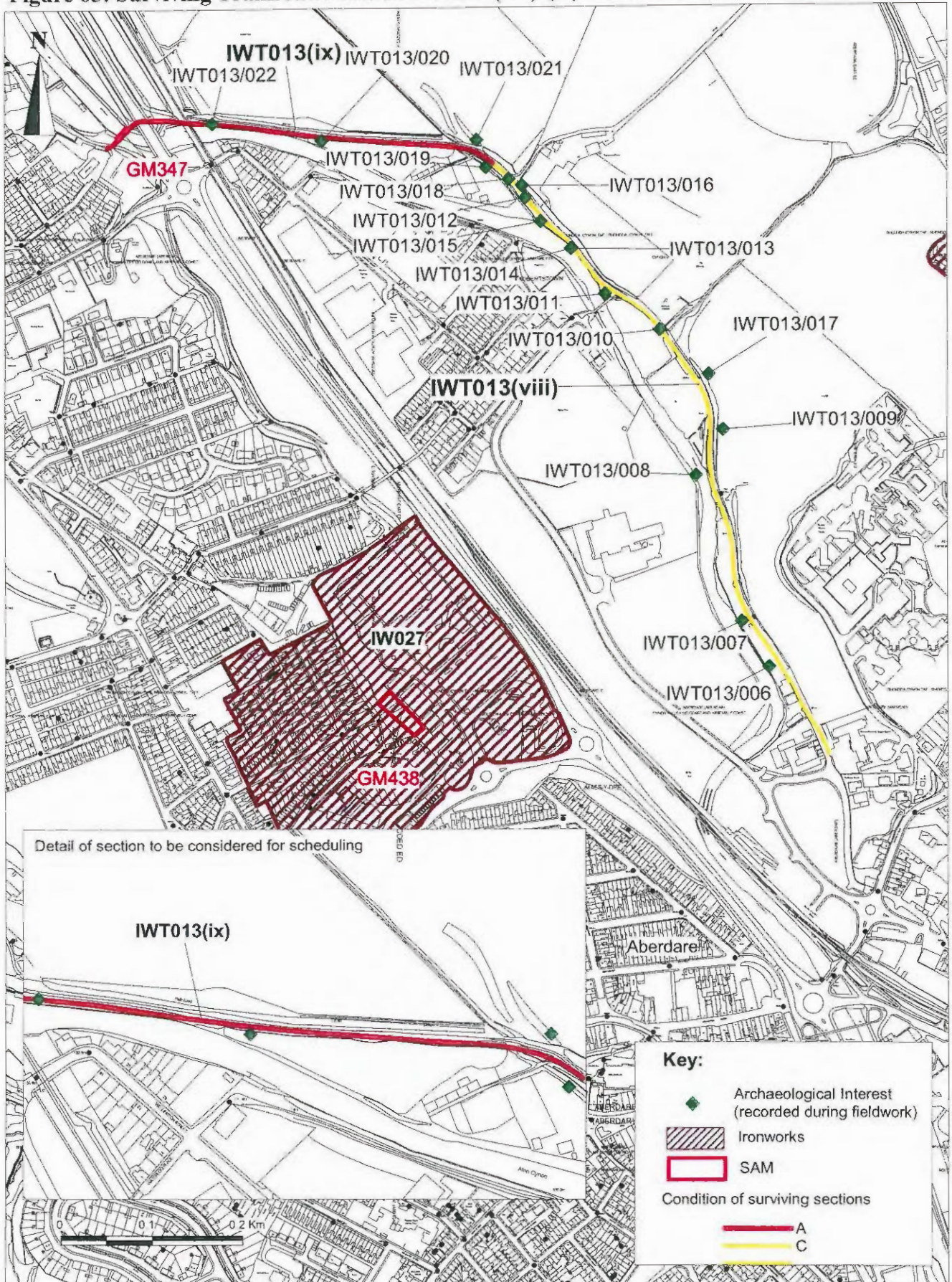
Glamorgan-Gwent Archaeological Trust Ltd 100017916 (2006).

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Figure 65: Surviving Tramroad Sections IWT013(viii)-(ix) and Identified Interests



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Current Protection/Status

Gelli Isaf tramroad bridge along section IWT013(i) is a scheduled ancient monument (SAM GM411) and a listed building (10872).

Robertstown iron bridge is scheduled (GM347) and is a listed building (10894).

IWT013 (viii) and (ix) lie within the Cynon Valley River Park. "The environment of the River Cynon within the plan area will be protected and enhanced through the designation of the 'Cynon River Park'."

IWT013(iv), (v), (vi) and (vii) are within Green Space F. "Development will not be permitted within areas designated as green spaces...."

IWT013(i), (ii) and (iii) lie within Cynon Valley River Park and a Special landscape area.

Identified Threats

Re-alignment/replacement of fencing along the edge of the tramroad may cause further damage. There is a threat of damage to the tramroad section IWT013(iii) from the clearance of Llwydcoed Ironworks site.

No other threats were identified from the UDP.

Conservation and Management Recommendations

The visual and physical link between Robertstown iron bridge and the surviving tramroad to the east has been interrupted by the A4059. The section of footpath under the bridge could be improved.

IWT013(ix) would benefit from scheduling. It is likely that in the areas where no remains are visible on the surface they are buried. More remains may be revealed by conservation work, the north side of the footpath in particular is quite overgrown.

Future path restoration/maintenance should take the heritage features along the route, such as stone blocks into consideration. These features are of historic interest and should be retained *in situ*. Any works having a potential effect on the tramroad and its features should be subject to an impact assessment and carried out under appropriate archaeological supervision.

Conservation of current scheduled features should be carried out and clearance of undergrowth is recommended.

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Plate 13: Single Arched Stone Bridge (IWT013/021) on Section IWT013(ix), View to Northwest

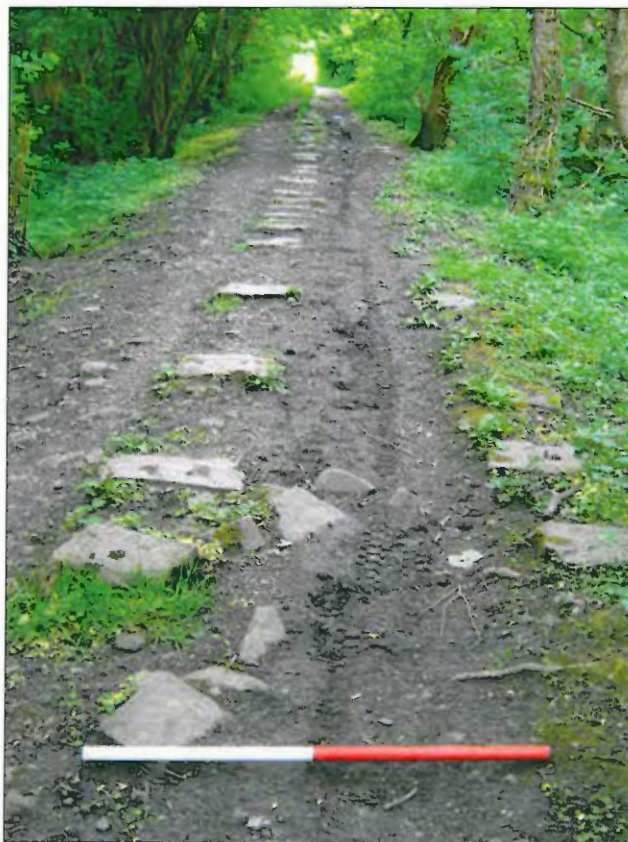


Plate 14: Stone blocks along part of Section IWT013(ix)

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Condition of IWT013a

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are five surviving sections of IWT013a equating to 16%:

Table 83: Surviving Sections of IWT013a

Section Number	Location	Condition Rating	Figure Reference Number
IWT013a(i)	SN 92622 06281 to SN 92446 06203	C	61, 66, 67
IWT013a(ii)	SN 92444 06203 to SN 92102 06225	C	61, 66, 67
IWT013a(iii)	SN 92102 06225 to SN 92019 06199	C	61, 66, 67
IWT013a(iv)	SN 89386 06477 to SN 89922 06322	U	61, 66, 68
IWT013a(v)	SN 89142 06545 to SN 89217 06528	B	61, 66, 68

IWT013a(i) (CONDITION C) survives as a grassed over formation through private land. Horses and erection of temporary stabling have caused some erosion and damage. A stone bridge survives (IWT013a/002) in an overgrown state.

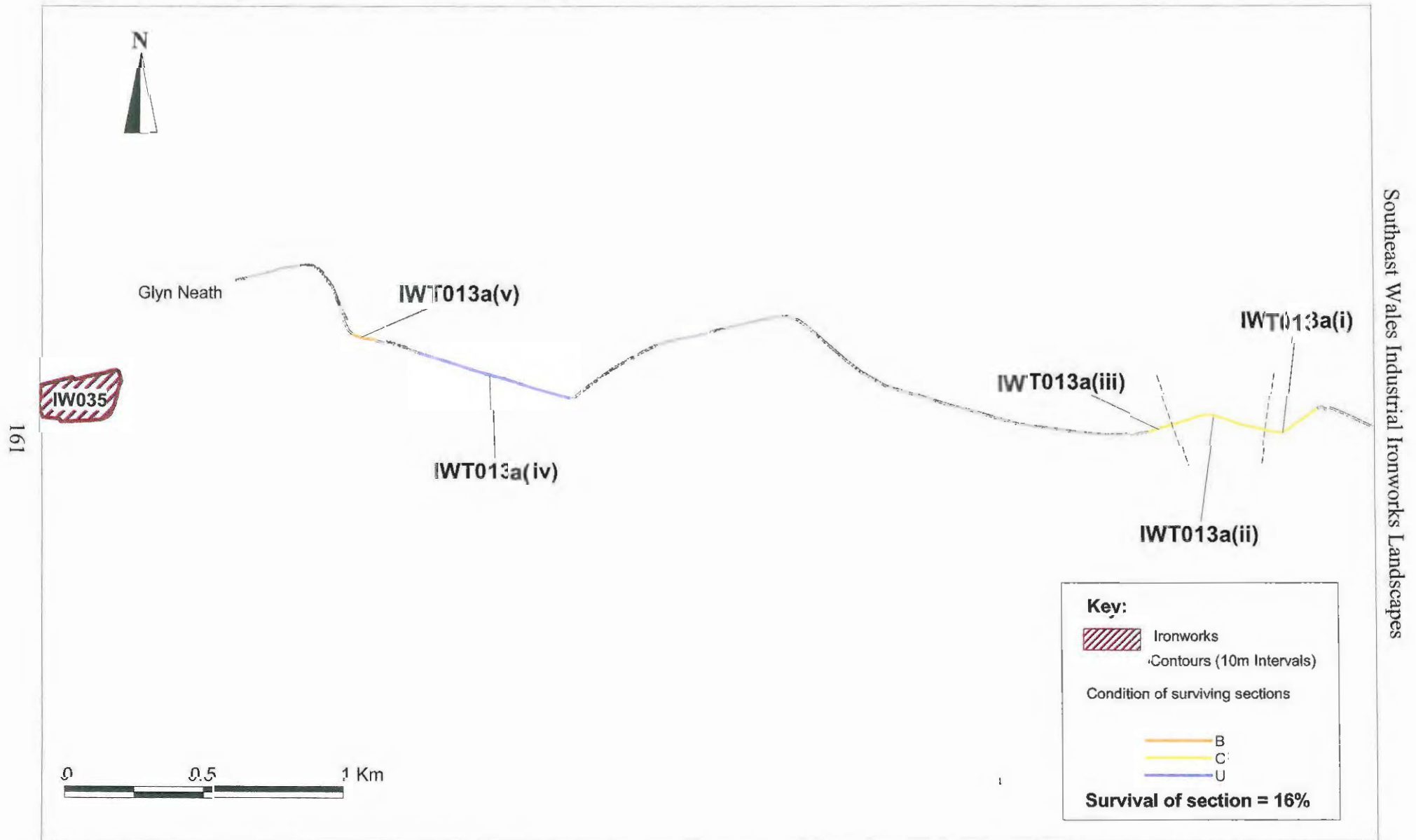
IWT013a(ii) (CONDITION C) survives in a cutting with stone and earth field-banks to either side. This section is very overgrown with reeds. Drainage of the area is poor and therefore it is difficult to clearly see the tramroad surface and formation.

IWT013a(iii) (CONDITION C) this section survives as a raised causeway and possible culvert IWT013a/003. However, the sides of the embankment are badly eroded and the section that crosses Nant Gwranon is covered in thick vegetation.

IWT013a(iv) (CONDITION U) a section may survive here but the condition is unknown as this lies within private land and was unavailable for survey.

IWT013a(v) (CONDITION B) this is a section of incline surviving in good condition through a wooded area as a rough cobbled stone surface. However, in some parts the section is overgrown and littered with fallen trees.

Figure 66: Surviving Tramroad Sections IWT013a(i)-(v)



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Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 60; details of these interests are given in Appendix III.

Table 84: Features Associated with IWT013a(i) (see Figure 67)

Feature Number	NGR	Type
IWT013a/002	SN 92460 06199	Tramroad bridge

Table 85: Features Associated with IWT013a(iii) (see Figure 67)

Feature Number	NGR	Type
IWT013a/003	SN 92077 06221	Tramroad causeway

Table 86: Features Associated with IWT013a(v) (see Figure 68)

Feature Number	NGR	Type
IWT013a/001	SN 89142 06545	Tramway Inclined Plane

Current Protection/Status

There is currently no protection or status given to any part of this tramroad.

Identified Threats

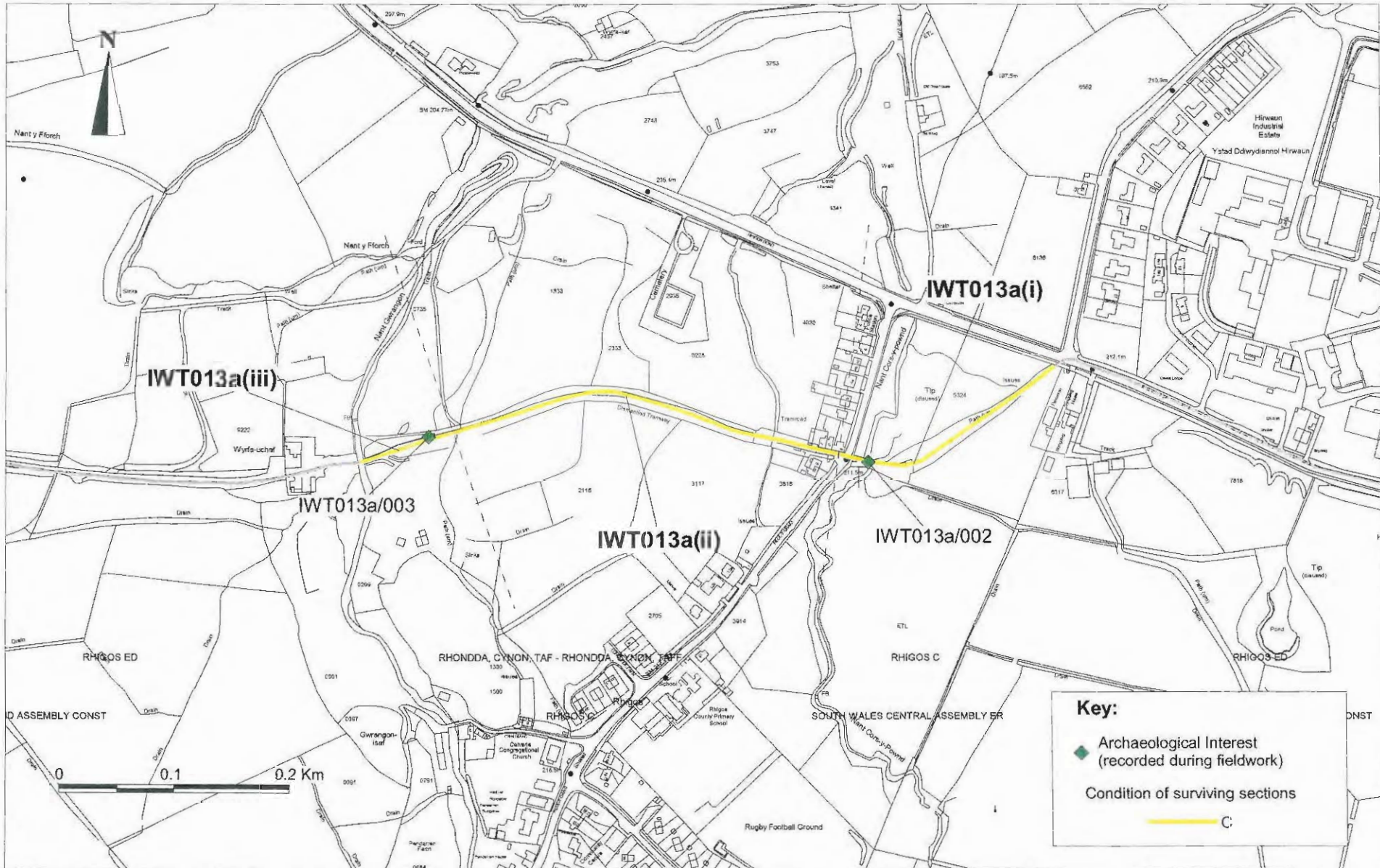
No threats were identified from the UDP.

Conservation and Management Recommendations

Clearance of undergrowth under archaeological supervision is recommended for all surviving sections; any exposed features, such as the Glynneath incline engine house (see below) could be re-assessed, at this stage.

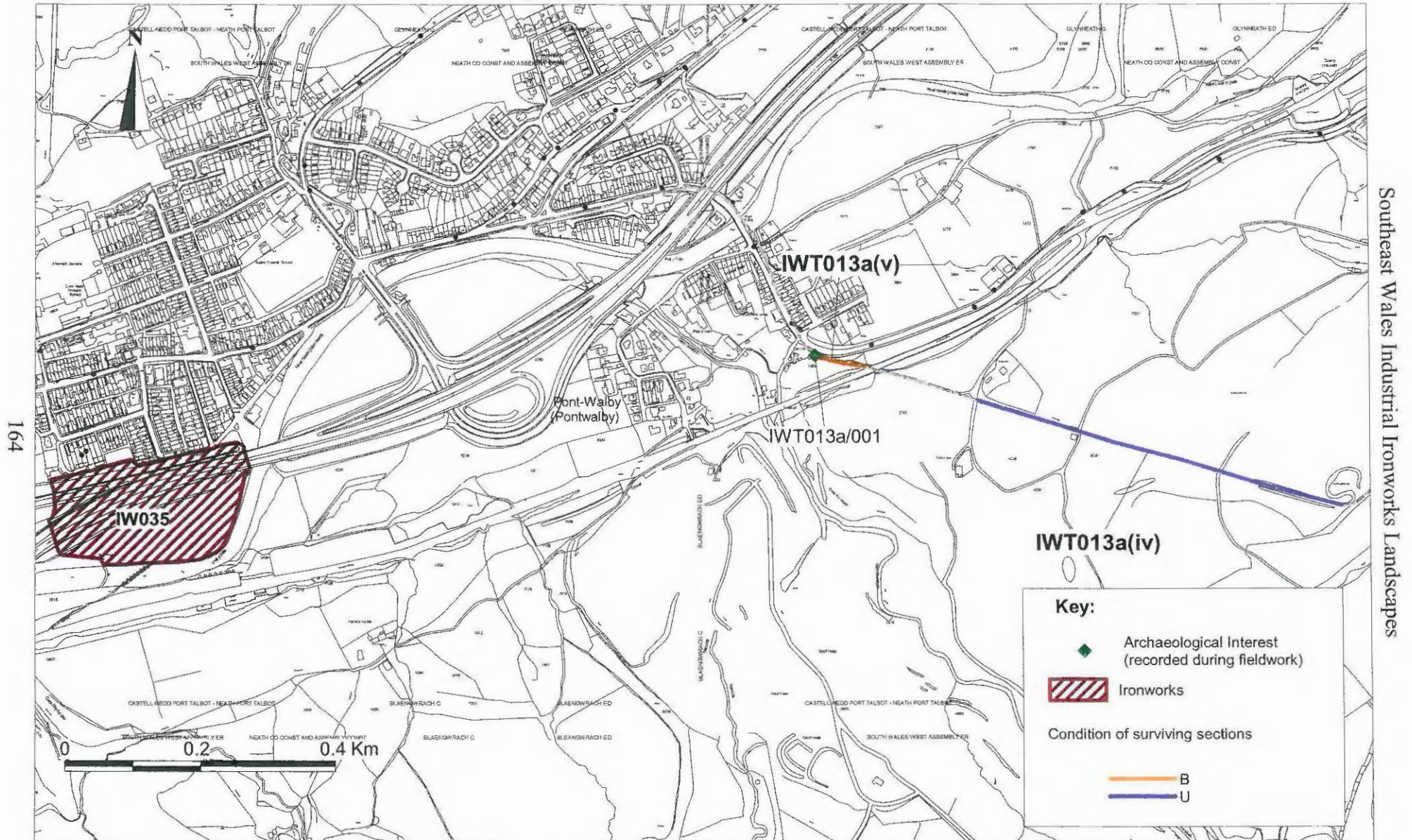
The Glynneath incline (IWT013a/001) was visited though the engine-house site was not recorded as part of the project. This site was assessed by RCAHMW in 1990 (Hughes 1990, pp. 316) as being of international importance; this would appear to largely reflect its association with Evan Hopkin, the noted Swansea Valley Engineer, and the fact that it was worked by a Trevithick high-pressure steam engine. The condition and protection requirements of this site, if not previously considered by Cadw, could be further investigated in the future.

Figure 67: Surviving Tramroad Sections IWT013a(i)-(iii) and Identified Interests



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Figure 68: Surviving Tramroad Sections IWT013a(iv)-(v) and Identified Interests



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IWT Number 014: Mr Glover's Railroad (88073/34649)

NGR: SN 94123 08950 to SN 97811 04063

Date Range: c. 1786 - 1980s

Approximate length of tramroad = 7.4 Km

Overall survival = 46%

Historical Background

The first phase in the development of the Hirwaun to Penderyn route began with the construction of a tramroad from Hirwaun ironworks to Penderyn quarries c. 1786 by Samuel Glover; this became known as Mr Glover's Railroad. Building of the Aberdare canal was postponed and the canal company opened limekilns close to Hirwaun Ironworks to make money from lime burning. A new tramroad was built in 1794 from Hirwaun Common to Bryngwyn Patches (IWT014a) to supply the kilns with coal. In 1795 the tramroad to Penderyn quarries was re-laid, incorporating much of the original route of Mr Glover's Railroad. The railroad was converted to plateway by 1808 to allow transfer between the Tappendens' Tramroad (IWT013); the causeway at Hirwaun ironworks was constructed at this time. The tramroad was rebuilt again and converted to standard gauge for locomotive use along the Bryngwyn extension by 1863 but the Penderyn route was not converted until 1904. The route later known as Penderyn railway, survived until the 1980s (van Laun 2001: 188-196).

General Description

This tramroad was allocated two route numbers for the purpose of this survey:

Table 87: Routes of Tramroad IWT014

Route Number	Name	Location	Figure Reference Number
IWT014	Mr Glover's Railroad	SN 94123 08950 to SN 96151 05323	69, 70
IWT014a	Mr Glover's Railroad Bryngwyn Extension	SN 96054 05351 to SN 97811 04063	69, 70

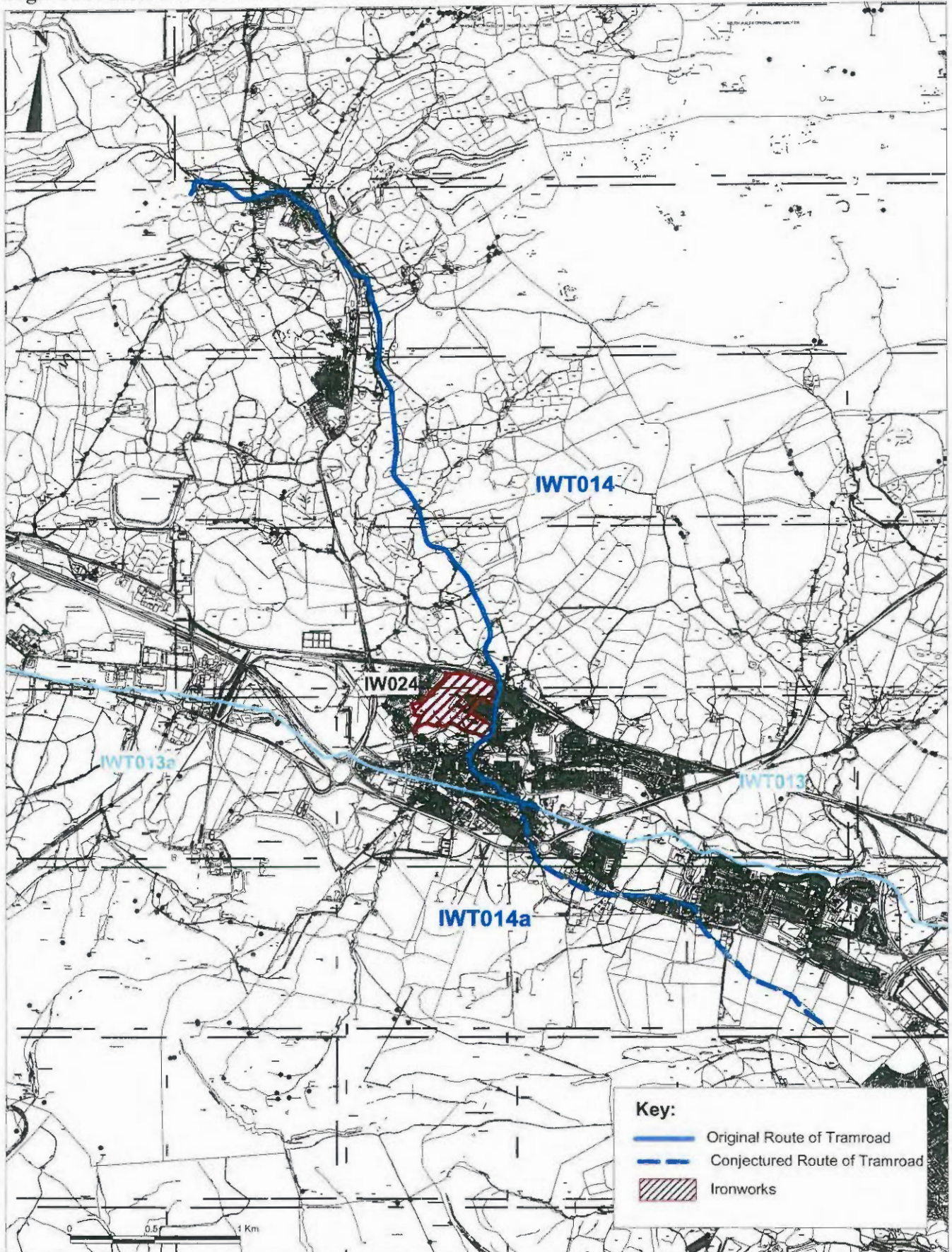
IWT014

From the quarries at Penderyn the tramroad ran south to Hirwaun ironworks. Its route can be followed along what is now the Penderyn Quarry Trail, Broniestyn Terrace, Penyard Road, across the scheduled causeway (SAM BR157), along High Street, Heol Uchaf to where it once joined with Tappendens' Tramroad (IWT013).

IWT014a

From a junction with IWT014 at Heol Uchaf, The tramroad ran southeast to Bryngwyn Patches. The exact route of the 1794 tramroad to Bryngwyn Patches is unknown, however, a route has been postulated (dashed line on figure 69) and this follows that depicted on 1st Ed OS, which at this date had apparently become a branch line to the Hirwaun Common Railway.

Figure 69: Route of Tramroad IWT014 Mr Glover's Railroad

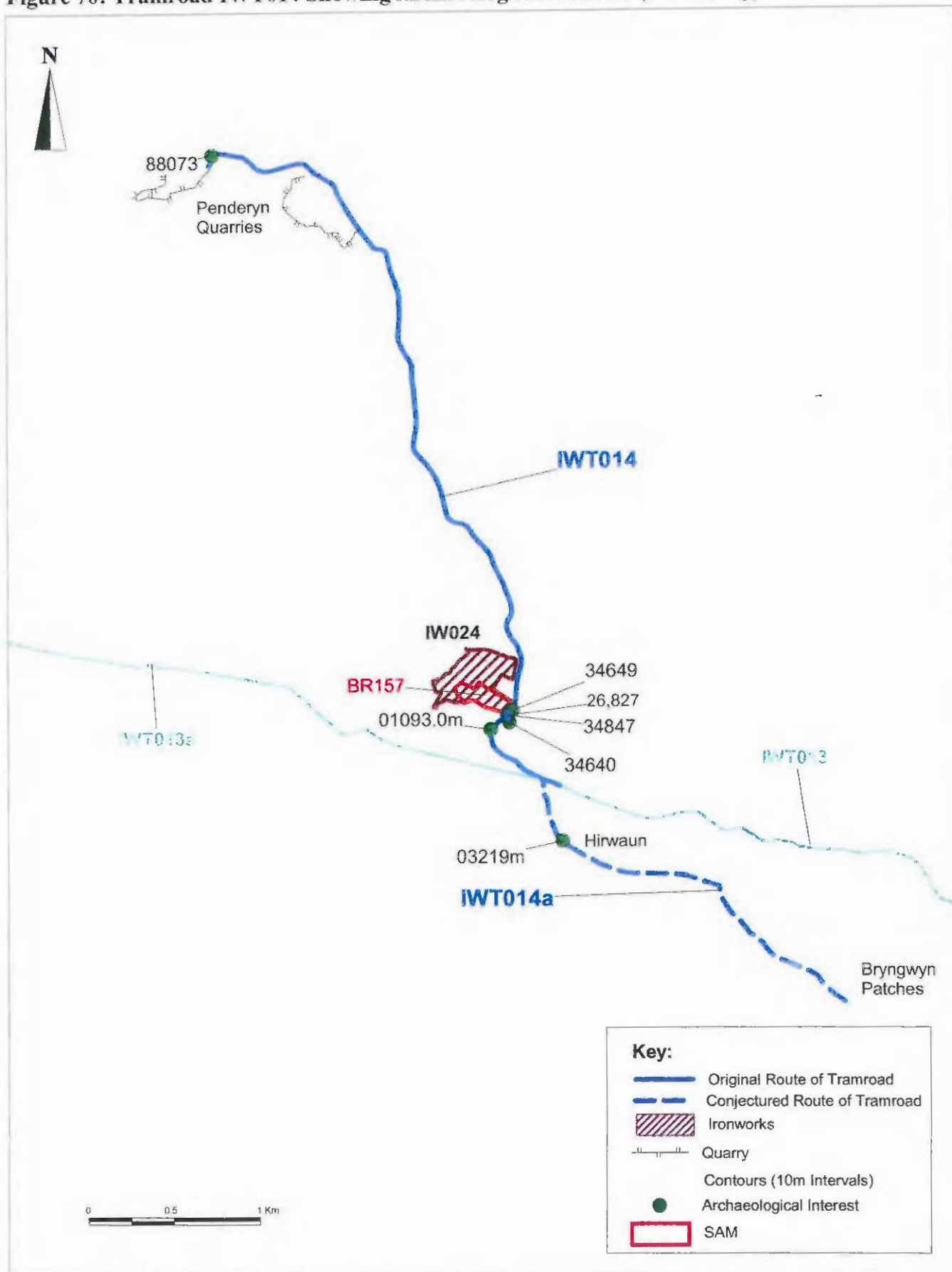


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Figure 70: Tramroad IWT014 Showing Archaeological Interests (Pre-survey)

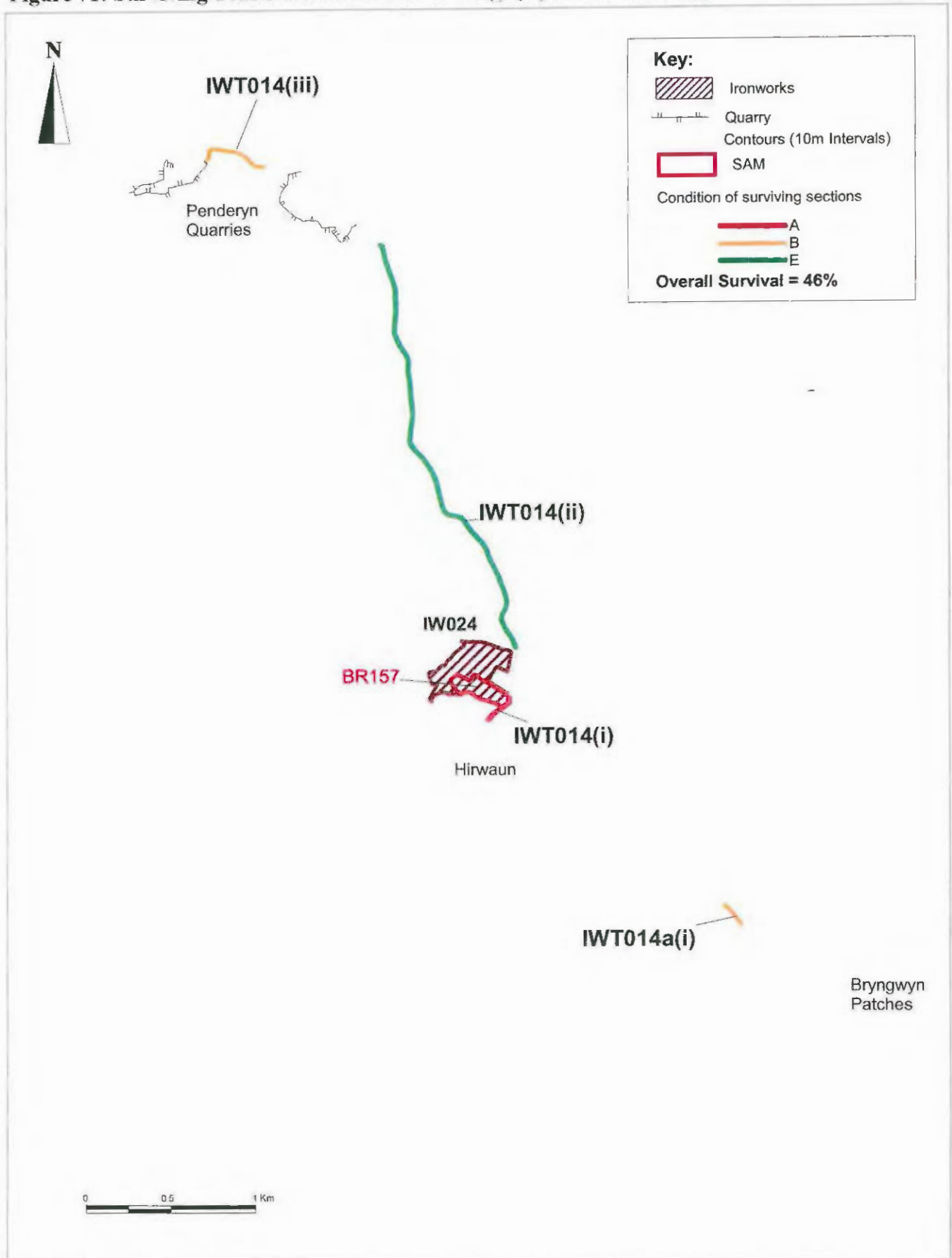


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Figure 71: Surviving Tramroad Sections IWT014(i)-(iii) and IWT014a(i)



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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT014

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are three surviving sections of IWT014 equating to 65%:

Table 88: Surviving Sections of IWT014

Section Number	Location	Condition Rating	Figure Reference Number
IWT014(i)	SN 95892 05793 to SN 95771 05659	A	71, 72, 73
IWT014(ii)	SN 95143 08447 to SN 95930 06081	E	71, 72, 73
IWT014(iii)	SN 94466 08916 to SN 94123 08950	B	71, 72, 73

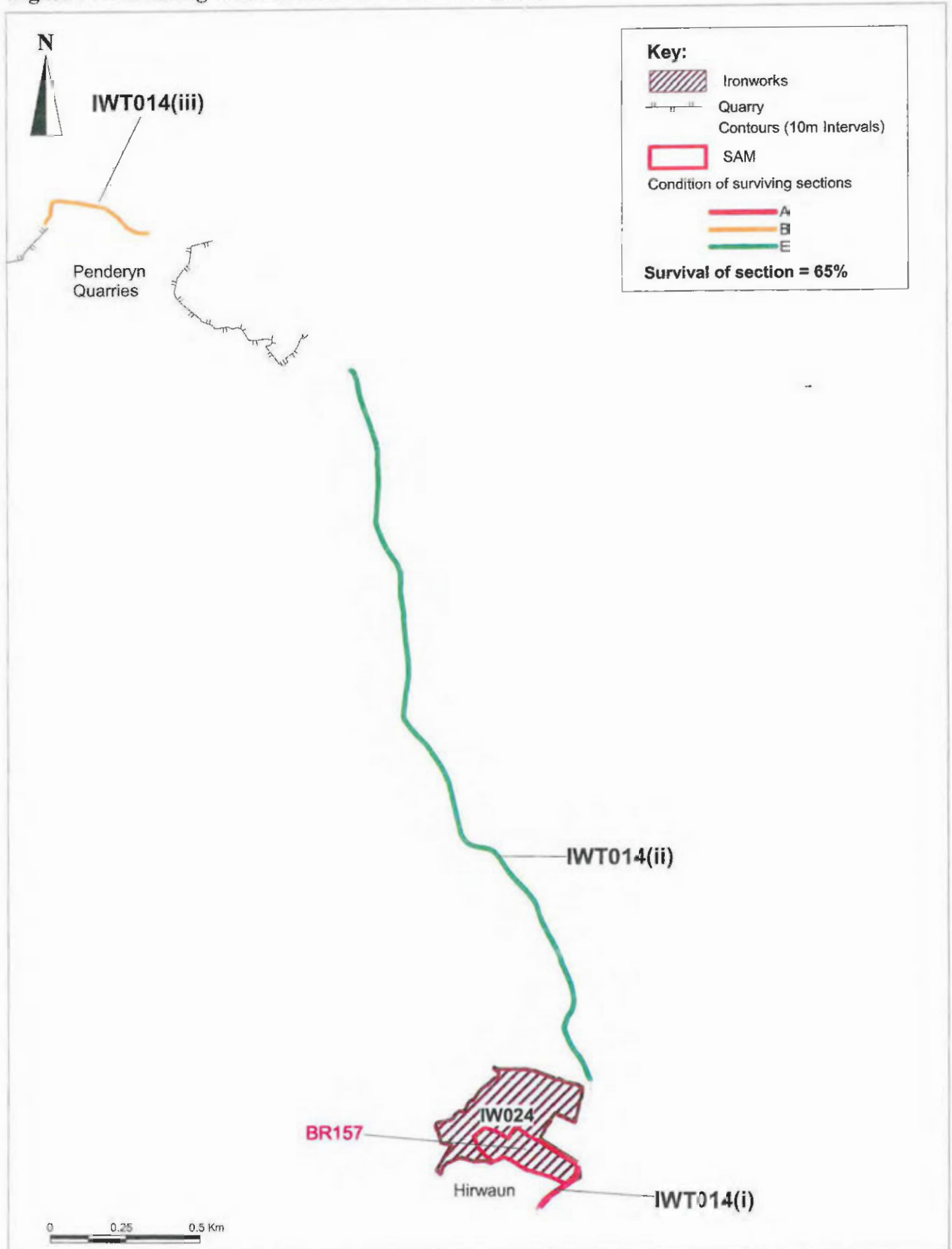
Much of the route survives in moderate condition, and has been divided into three sections. Penyard Road follows the original route of the section between IWT014(i) and IWT014(ii). South of SN 95771 05659 the old tramroad route can be followed along High Street. Similarly, the destroyed section between IWT014(ii) and IWT014(iii) has been replaced by the A4059 along Chapel Road into Penderyn. (This is part of section U5 noted by John Van Laun).

IWT014(i) (CONDITION A) follows a route parallel to station road and continues across a revetted causeway (01093.0m/34847/34640) over the Afon Cynon until Tudor Avenue. Despite its status (SAM BR157), the whole section is severely overgrown and in a neglected state as is the rest of the scheduled ironworks area. The 'entrance' to the footpath is through an unmarked gap in a fence. Nevertheless, the formation of the tramroad is essentially well preserved as a series of part exposed stone blocks with wear marks and even some spikes in situ on blocks visible along the left side of the track. The well-preserved nature of the exposed remains would suggest considerable potential for other buried remains.

IWT014(ii) (CONDITION E) is a currently Penderyn quarry Trail, as a well-maintained footpath with information boards IWT014/003 and picnic tables. (This section is recorded as U1 by John van Laun). The survival of original features here is largely unknown. The track bed has been built up, nearby finds (e.g. IWT014/004,006) indicate that the route continued in use until mid-20th century; appearing as the Penderyn Railway on 3rd Ed OS map of 1919. The area retains a number of features including a couple of early stone blocks (IWT014/009,010) found out of *situ*. There is potential, however, for buried remains.

IWT014(iii) (CONDITION B) is a moderate to well-preserved section of tramroad formation now used as a footpath. West of SN 94157 09024 there are numerous features relating to both the tramroad and surrounding quarries. This area would benefit from a detailed survey.

Figure 72: Surviving Tramroad Sections IWT014(i)-(iii)



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Features Identified During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 70; details of these interests are given in Appendix III.

Table 89: Features Associated with IWT014(i) (see Figure 73)

Feature Number	NGR	Type
IWT014/001	SN 95882 05751	Stone block
IWT014/002	SN 9587 0585	Stone block

Table 90: Features Associated with IWT014(ii) (see Figure 73)

Feature Number	NGR	Type
IWT014/003	SN 95930 06081	Heritage trail
IWT014/004	SN 9528 0724	Railway sleeper
IWT014/005	SN 95321 07575	Railway sleeper
IWT014/006	SN 95318 07575	Wooden sleeper
IWT014/007	SN 9526 0781	Culvert
IWT014/008	SN 9526 0781	Wooden sleeper
IWT014/009	SN 9521 0792	Stone block
IWT014/010	SN 9520 0798	Stone block

Table 91: Features Associated with IWT014(iii) and west of SN 94157 09024 (see Figure 73)

Feature Number	NGR	Type
IWT014/011	SN 9411 0907	Railway rail
IWT014/012	SN 9406 0916	Tramroad junction
IWT014/013	SN 9398 0913	Wooden sleepers
IWT014/014	SN 94151 09020	Tramroad junction
IWT014/015	SN 9392 0922	Tipping bay
IWT014/016	SN 9391 0924	Tramroad plate
IWT014/017	SN 9389 0925	Wheel
IWT014/018	SN 9389 0925	Revetment
IWT014/019	SN 9389 0923	Tramroad incline
IWT014/020	SN 9389 0923	Structure
IWT014/021	SN 9391 0921	Structure

Current Protection/Status

IWT014(i) is scheduled as SAM BR157 (Hirwaun Ironworks). IWT014(i) is also within the Cynon Valley River Park. "The environment of the River Cynon within the plan area will be protected and enhanced through the designation of the 'Cynon River Park'."

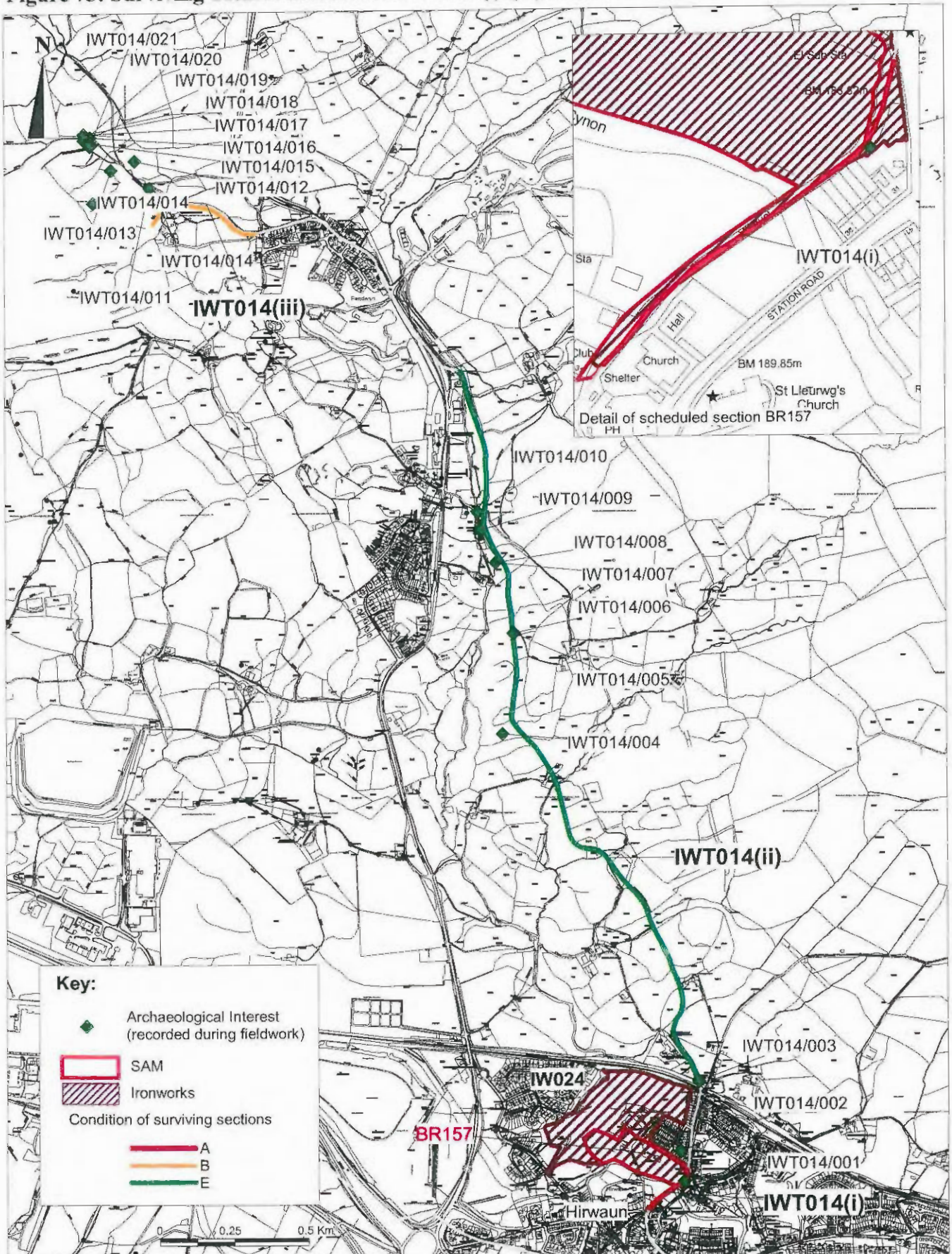
The sections IWT014(ii) and (iii) lie within and are maintained by the Brecon Beacons National Park. IWT014(ii) is currently now the Penderyn Quarry Line walking track jointly operated/constructed by a number of Welsh bodies.

Identified Threats

Erosion from off road vehicles, dereliction and dumping of waste is a major problem around the ironworks area. IWT014(i) and the whole ironworks area is highlighted in the UDP for Land Reclamation.

Southeast Wales Industrial Ironworks Landscapes

Figure 73: Surviving Tramroad Sections IWT014(i)-(iii) and Identified Interests



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Conservation and Management Recommendations

Access to and along IWT014(j) should be improved and safety reviewed. The whole scheduled area is in a poor state and efforts should be made to carry out recommendations put forward in phase 1 of this project. Information panels and a suitable sign posted entrance should be provided. The route along the causeway is precipitous and currently dangerous state as there are no suitable barriers. Vegetation covering the route should be appropriately managed and remedial conservation work should be carried out to the masonry structures. This could be carried out as part of a SAM management agreement.

Extensive survey of quarry workings, features and tramroads is needed to the west of SN 94157 09024. Some features in this area have already been recorded during the course of this project as IWT014/011 to IWT014/021.

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Condition of IWT014a

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There is one surviving section of IWT014a equating to 6%:

Table 92: Surviving Sections of IWT014a

Section Number	Location	Condition Rating	Figure Reference Number
IWT014a(i)	SN 97155 04569 to SN 97257 04456	B	71, 74, 75

Nearly the whole route of this tramroad has been destroyed by urban development and landscape remodelling.

A small section IWT014a(i) (CONDITION B) is possibly the original bank of the tramroad; a raised, grassed over formation following the designated footpath south of Penywaun to a stile to the east. Make up of the embankment includes substantial blocks of slag and stone. Bank is approx. 1.5m wide and 0.6m high, a stream runs along the south side of formation. (This section corresponds to part of U2 noted by John Van Laun). East of SN 97257 04456 the land has been remodelled, some linear features are present in this area but it was not possible to ascertain their use.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 70; details of these interests are given in Appendix III.

Table 93: Features Associated with IWT014a(i) (see Figure 75)

Feature Number	NGR	Type
IWT014a/001	SN 9710 0458	Stone block
IWT014a/002	SN 9720 0453	Slag

Current Protection/Status

No protection is currently afforded to the tramroad. However, IWT014a(i) lies within a Green Space identified in the UDP; "Development will not be permitted within areas designated as green spaces....".

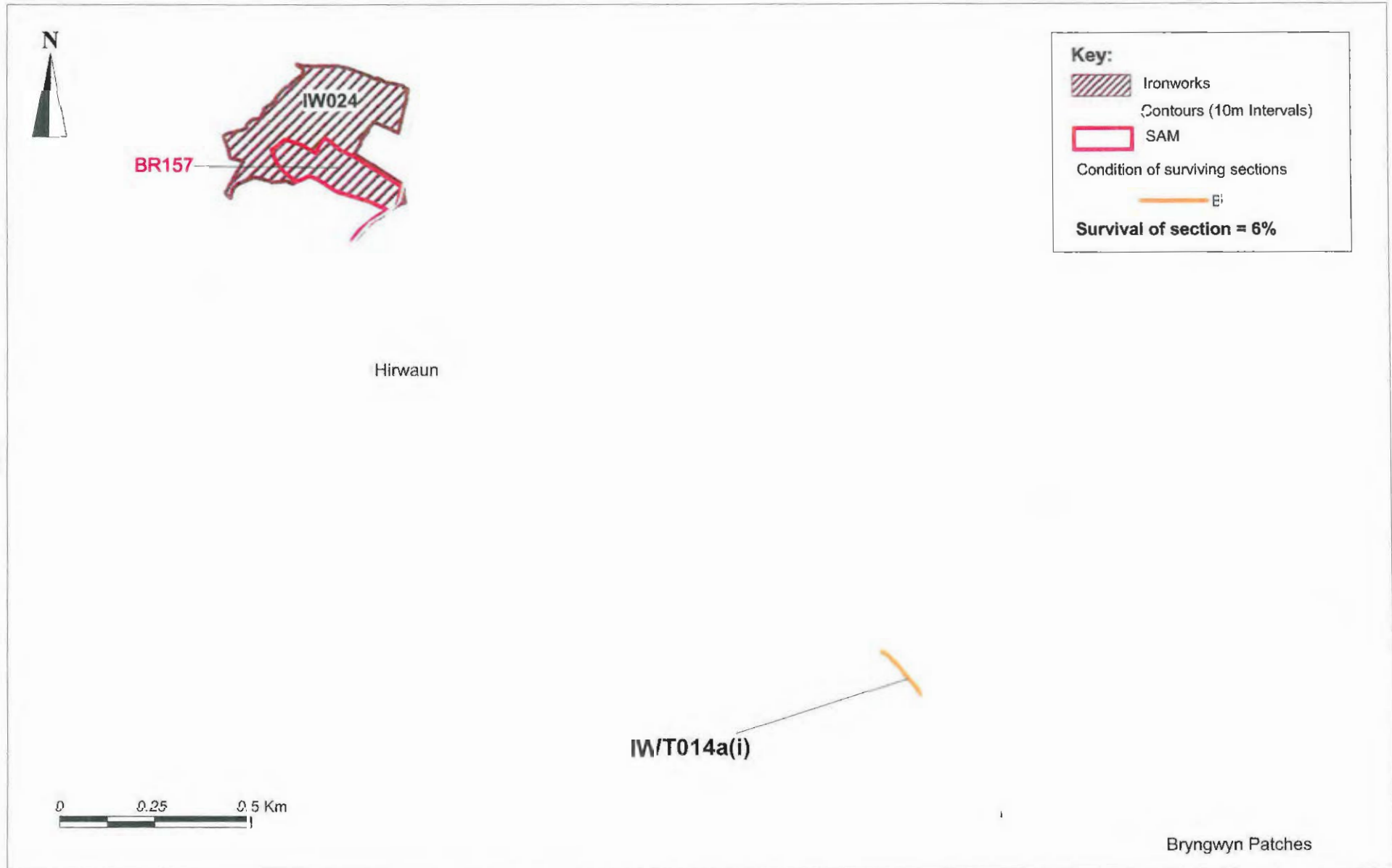
Identified Threats

No threats were identified on the UDP.

Conservation and Management Recommendations

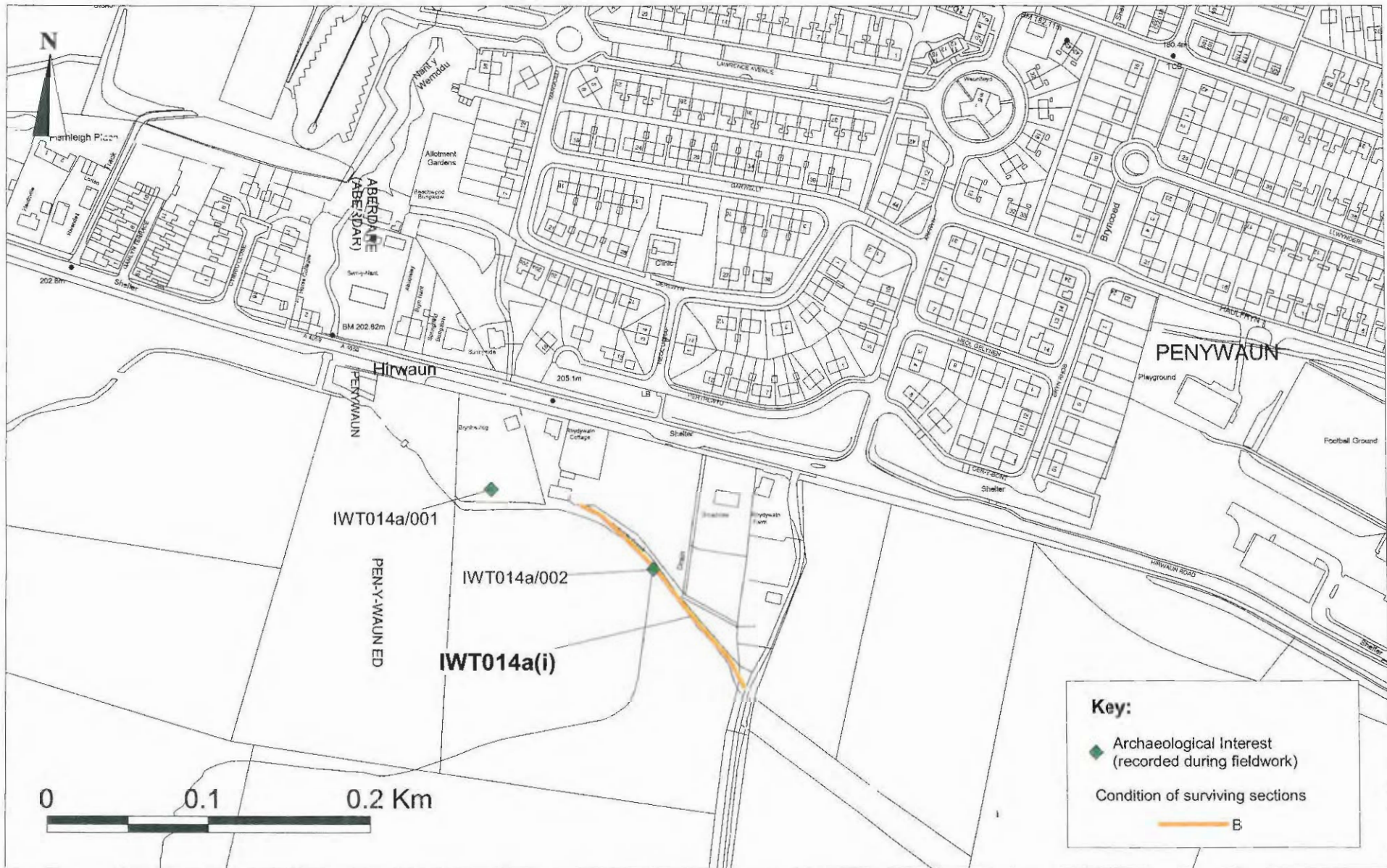
Maintain as current.

Figure 74: Surviving Tramroad Section [WT014a(i)]



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Figure 75: Surviving Tramroad Section IWT014a(i) and Identified Interests



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IWT Number 015: Twynau Gwynion

NGR: SO 07339 07588 to SO 06482 10419

Date Range: c. 1800 - 1825

Approximate length of tramroad = 13.5 Km

Overall survival = 38%

Historical Background

Dowlais ironworks worked Twynau Gwynion quarries from the late eighteenth century and it seems that a tramroad was in place by 1800. Around this time Rhymney also worked the quarries here and by 1815 a tramroad from Bute town (IWT015a), near Rhymney Upper furnace to the Twynau Gwynion quarries had been constructed (van Laun 2001: 188-196). Successive alterations and replacement of the routes were made over the years and the tramroads from Dowlais ironworks ran until 1825 when they transferred quarrying operations to Morlais. The Rhymney tramroad branch (IWT015a) remained in use until its replacement firstly by the Bute tramroad (IWT020) in 1825 and then by the Rhymney Limestone Railway (IWT016) in the mid nineteenth century.

General Description

This tramroad was allocated four route numbers for the purpose of this survey:

Table 94: Routes of Tramroad IWT015

Route Number	Name	Location	Figure Reference Number
IWT015	Twynau Gwynion Tramroad Line 1	SO 07339 07588 to SO 06740 10268	76, 77
IWT015a	Twynau Gwynion Tramroad Line 2	SO 06983 10046 to SO 10324 09163	76, 77
IWT015b	Twynau Gwynion Tramroad Line 3	SO 06481 10420 to SO 07472 09369	76, 77
IWT015c	Twynau Gwynion Tramroad Line 4	SO 06470 10340 to SO 07755 08588	76, 77

IWT015 (04888m)

This tramroad route represents that described as line 1 by John van Laun (2001: 151). From the ironworks the tramroad passed through Pengarnddu and Blaen Morlais farm to a point just south of Nant Morlais. The lower half of this section has been destroyed, however, the route of the tramroad can be followed north of Pengarnddu to Blaen Morlais along a rough track, the same alignment as the later Rhymney Limestone Railway (see IWT016(i)), until it deviates to the East of the present track. The tramroad crossed Nant Morlais on a large embankment, the abutments of which still survive (04887m). The tramroad then deviated west towards Twynau Gwynion quarries with a number of spurs branching off to serve smaller quarry faces along the route.

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IWT015a

This tramroad route represents that described as line 2 by John van Laun (2001: 160-161). From its eastern end at Bute Town the tramroad route can be traced along a lane, under the A465 then along a minor road north of and roughly parallel with the A465. The tramway then turns northwest from this road across the common to Jepson's Pond. A small branch to the northwest led to a quarry face. From Jepson's Pond the tramroad originally continued westwards contouring the hillside, however, its exact route is no longer clear; this section has been destroyed. Near Blaen Morlais farm the route deviated north parallel to that of line 1 before joining with it for a short while to cross Nant Morlais. From here the route followed that of line 1 closely at times merging with it with spurs branching off to small quarry faces.

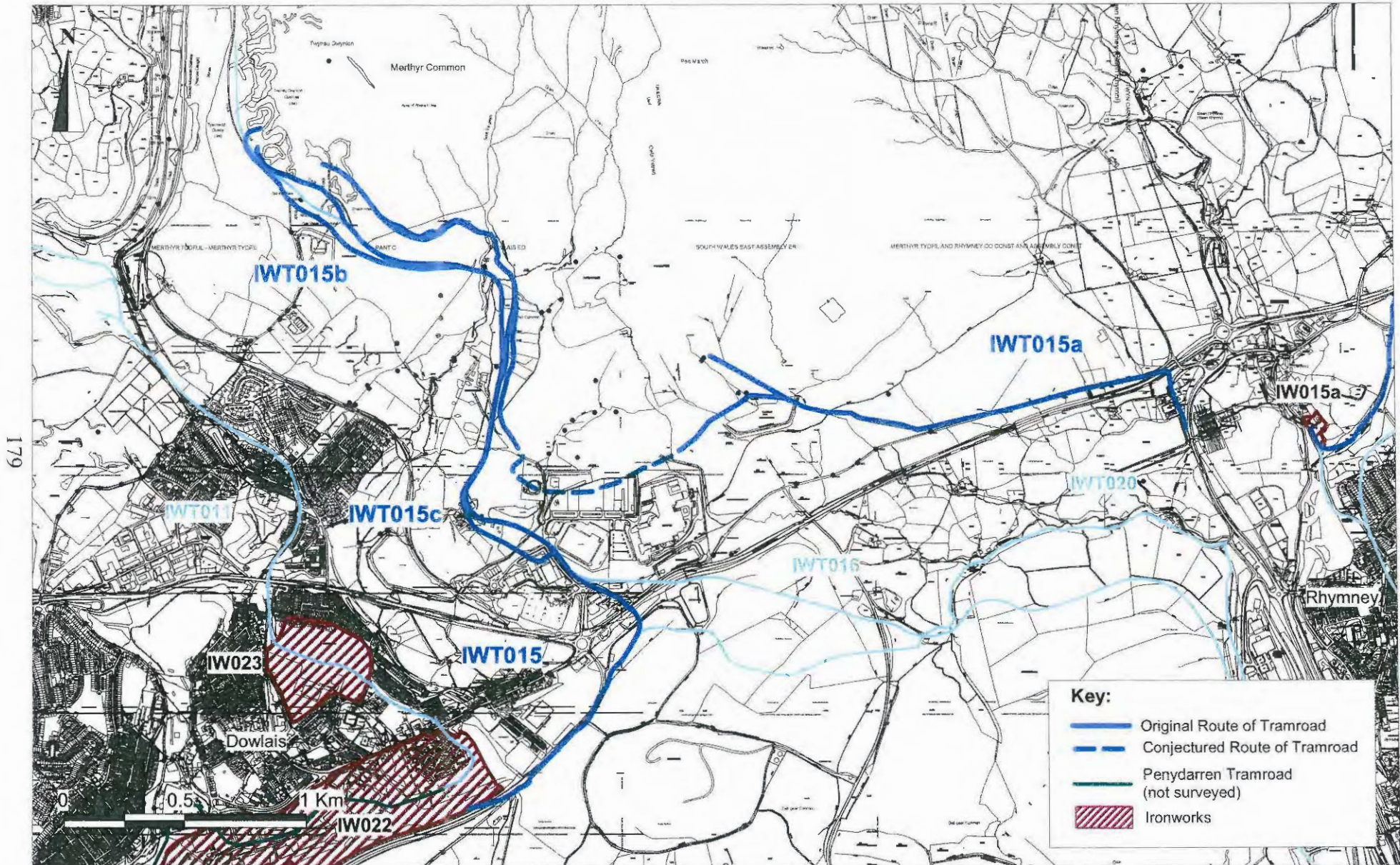
IWT015b

Line 3 (van Laun 2001: 155) followed the route of line 1 from the ironworks until SO 07472 09369 where it deviated north then west across an embankment (02725m) towards the quarries at a lower level. In fact line 1 may have been rebuilt and replaced by line 3. Part of this route can be followed along a rough track, also the route of the later Rhymney Limestone Railway (IWT016), before turning to the south and running roughly parallel to the Rhymney Limestone Railway.

IWT015c

This tramroad route represents that described as line 4 by John van Laun (2001: 156-157) constructed around 1800. Part of this route followed that of line 1 and line 3 from the ironworks across the embankment (02725m) over Nant Morlais before deviating slightly north of line 3 to the western most quarries. Much of this route was later replaced by the Rhymney Limestone Railway (IWT016).

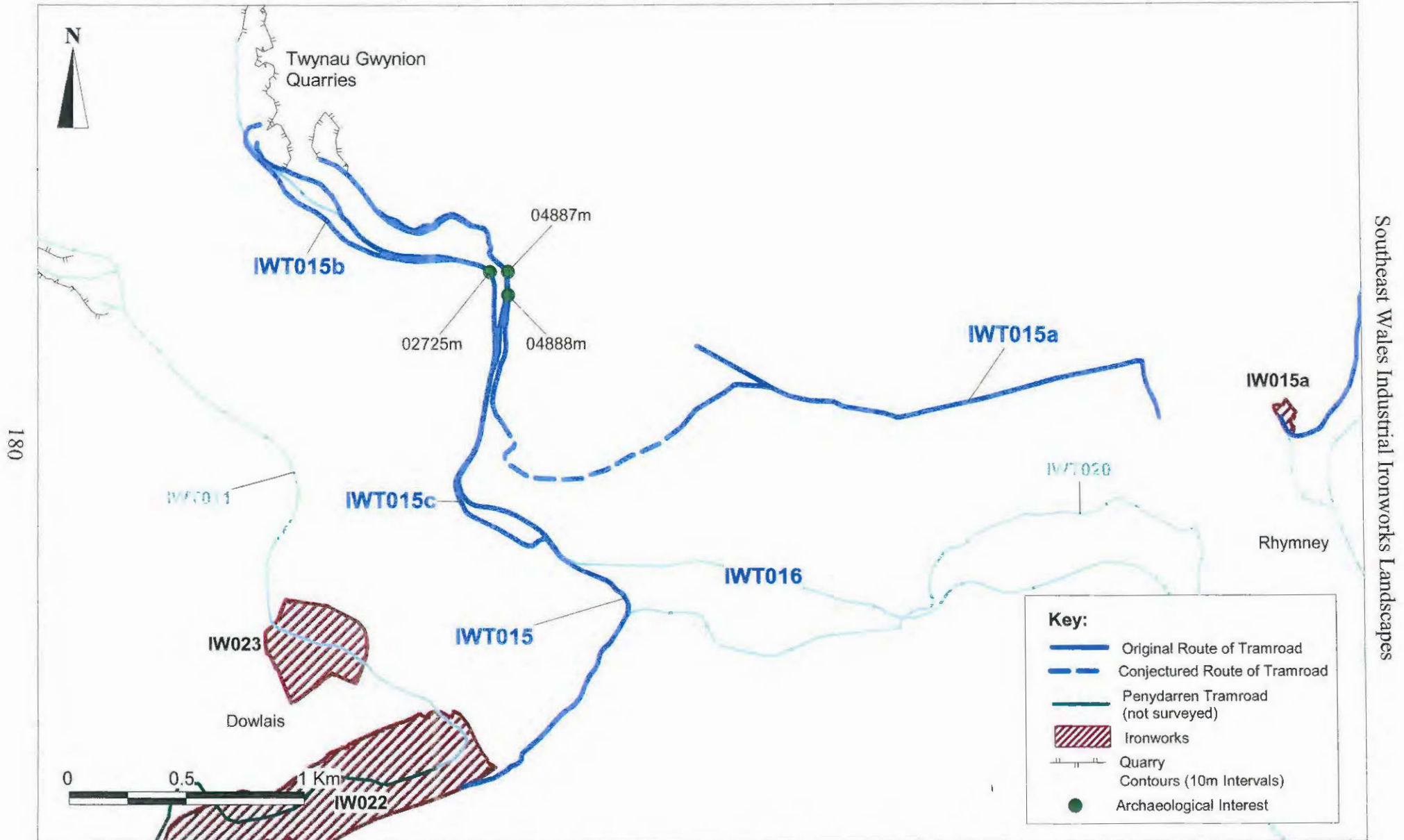
Figure 76: Route of Tramroad IWT015 Twynau Gwynion



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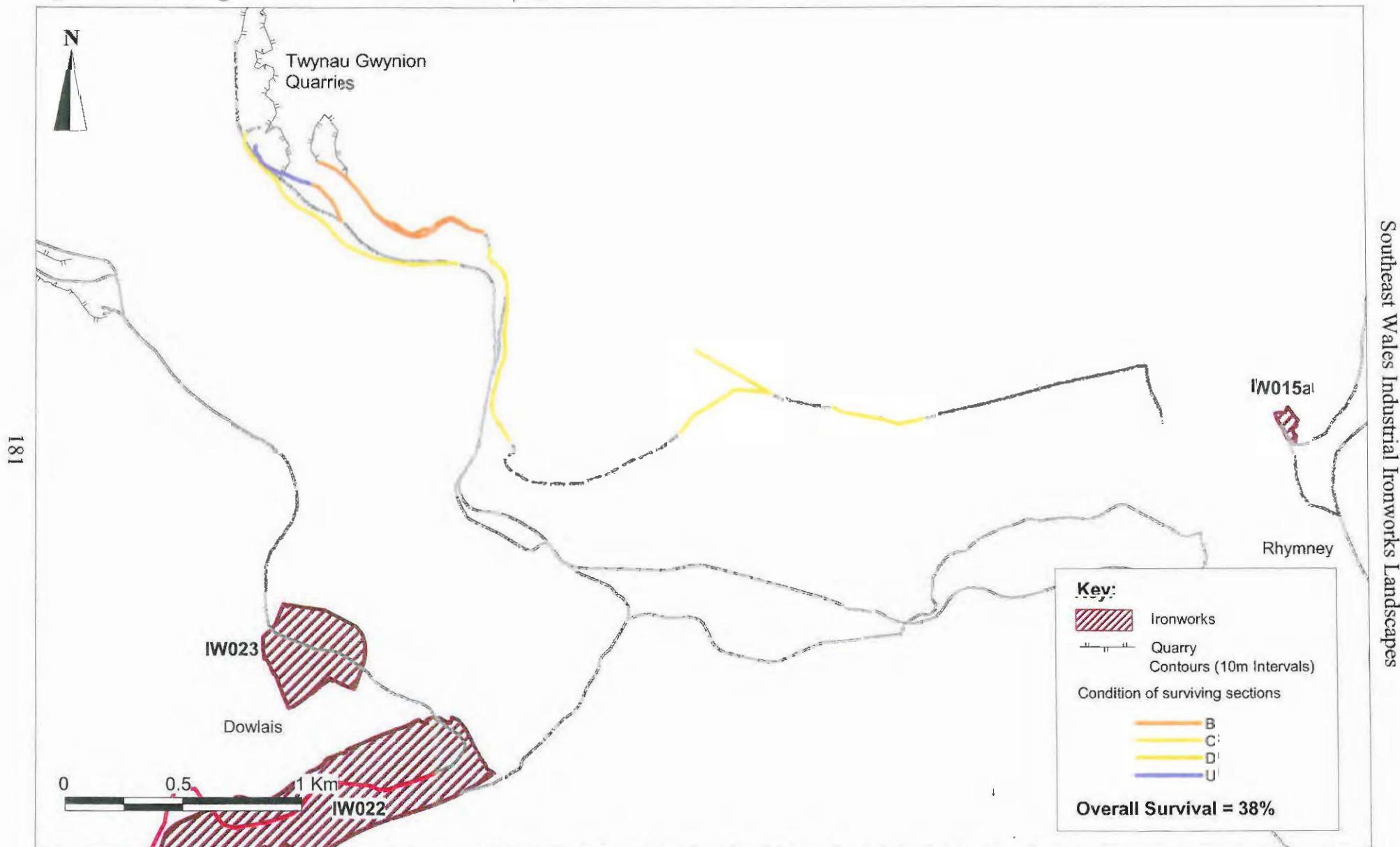
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Figure 77: Tramroad IWT015 Showing Archaeological Interests (Pre-survey)



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Figure 78: Surviving Tramroad Sections IWT015 (all)



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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT015

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are two surviving sections of IWT015 equating to 25%:

Table 95: Surviving Sections of IWT015

Section Number	Location	Condition Rating	Figure Reference Number
IWT015(i)	SO 07465 09902 to SO 07533 09772	C	78, 79, 80
IWT015(ii)	SO 06740 10268 to SO 07437 09974	B	78, 79, 80

IWT015(i) (CONDITION C) is located just south of Nant Morlais running north northwest to an extensively quarried area. This section survives as a raised grassed over bank and most notably two well-preserved bridge abutments (04887m/IWT015/006) either side of Nant Morlais. This section is damaged by erosion and a track running across its northern most end.

A small section of track has been lost to the expansion of the quarry; however, the rest of line 1 survives to the north and west.

IWT015(ii) (CONDITION B) survives as a grassed over formation in good condition. Sections of weathered stone blocks (IWT015/003) were recorded along with stretches of exposed stone revetment (IWT015/001,009,013), further buried remains are possible.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 77; details of these interests are given in Appendix III.

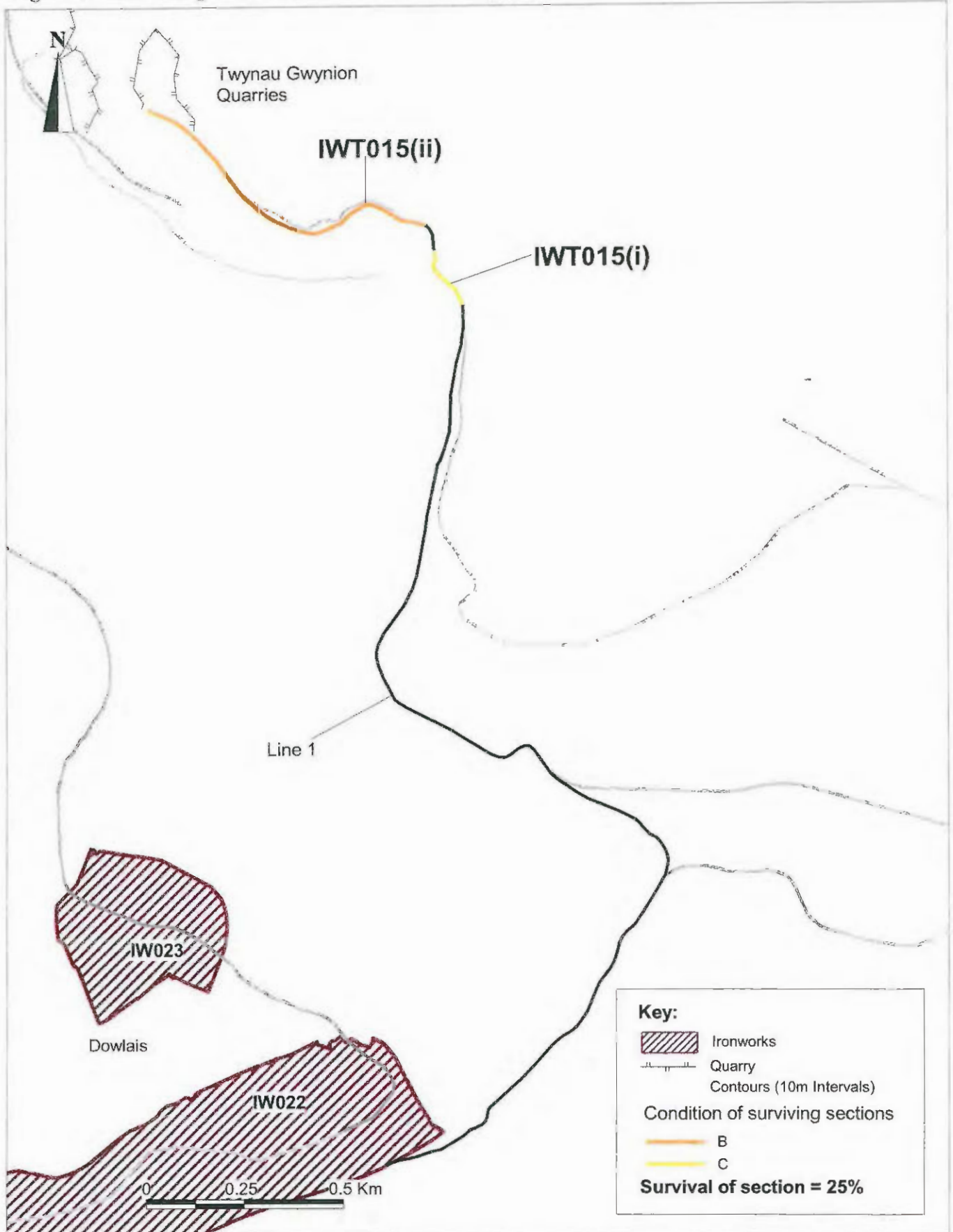
Table 96: Features Associated with IWT015(i) (see Figure 80)

Feature Number	NGR	Type
IWT015/005	SO 07536 09771	Tramroad junction
IWT015/006	SO 07516 09787	Bridge Abutment
IWT015/007	SO 0751 0982	Tramroad junction
IWT015/008	SO 0751 0984	Quarry
IWT015/009	SO 0749 0983	Revetment
IWT015/010	SO 0748 0990	Tramroad junction

Table 97: Features Associated with IWT015(ii) (see Figure 80)

Feature Number	NGR	Type
IWT015/001	SO 0721 0998	Revetment
IWT015/002	SO 0696 1008	Tramroad Junction
IWT015/003	SO 0693 1011	Stone block
IWT015/004	SO 0682 1025	Passing Loop
IWT015/011	SO 07432 09974	Tramway
IWT015/012	SO 0743 0998	Bridge abutment
IWT015/013	SO 0710 0998	Revetment

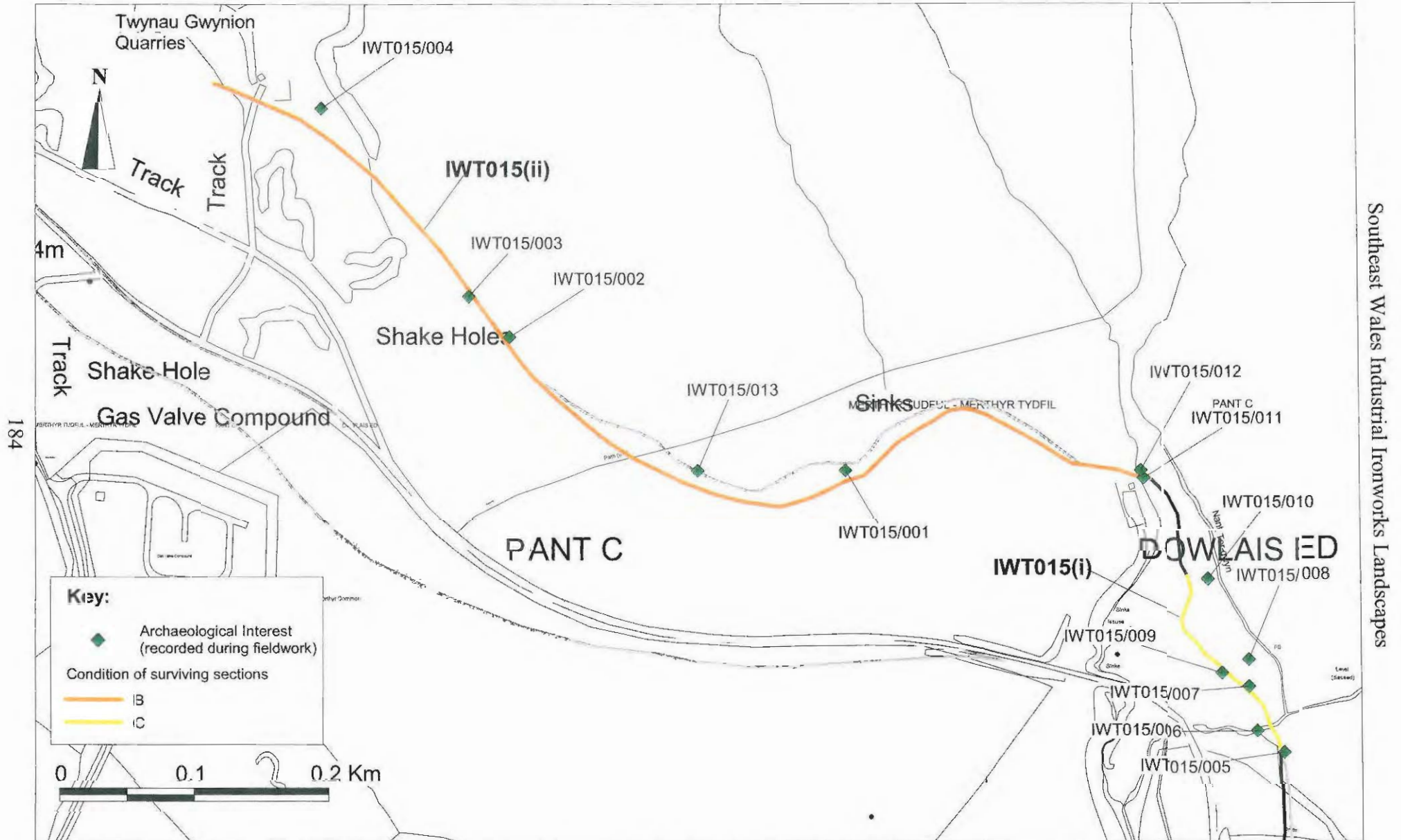
Figure 79: Surviving Tramroad Sections IWT015(i)-(ii)



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Figure 80: Surviving Tramroad Sections IWT015(i)-(ii) and Identified Interests



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Current Protection/Status

No protection or status is currently afforded to this tramroad.

Identified Threats

No threats were identified from the UDP, however, there is continuing minor erosion from livestock

Conservation and Management Recommendations

As much of this route on the common survives, it would benefit from more detailed survey and perhaps excavation to reveal the full extent of potential buried remains. This tramroad section should be considered for scheduling.



Plate 15: Bridge Abutments (IWT015/006) on Section IWT015(i), View to East

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Plate 16: Part of Line 1, Section IWT015(ii), View to East

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Condition of IWT015a

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are seven surviving sections of IWT015a equating to 50%:

Table 98: Surviving Sections of IWT015a

Section Number	Location	Condition Rating	Figure Reference Number
IWT015a(i)	SO 08931 09232 to SO 09311 09185	D	78, 81, 82
IWT015a(ii)	SO 08347 09471 to SO 08668 09293	C	78, 81, 82
IWT015a(iii)	SO 08529 09307 to SO 08668 09293	C	78, 81, 82
IWT015a(iv)	SO 08282 09127 to SO 08529 09307	D	78, 81, 82
IWT015a(v)	SO 07533 09772 to SO 07456 09093	C	78, 81, 82
IWT015a(vi)	SO 07465 09902 to SO 07533 09772	C	78, 81, 82
IWT015a(vii)	SO 06983 10046 to SO 07386 09983	B	78, 81, 82

IWT015a(i) (CONDITION D) is not easily identifiable on the ground. The tramroad survives as a slightly raised bank running alongside a leat through very boggy ground. The surface of the tramroad was not visible beneath the undergrowth and bog encroachment, therefore, no features were identified. Whilst the tramroad is no longer visible between SO 09311 09185 and just north of Jepson's Pond its route approximately equates to a water channel on a similar alignment.

IWT015a(ii) (CONDITION C) this section comprises a branch running northwest of Jepson's Pond, it survives as a raised stone embankment with no surface finds, until near its end. The section is eroded and boggy in places, it continues and becomes harder to define at its northwest end, where it approaches a series of quarry faces along the west facing slope of a minor stream valley on Cefn Ystrad.

The main tramroad route continues west towards Pengarnddu:

IWT015a(iii) (CONDITION C) is visible as a raised embankment with heavy erosion in places.

IWT015a(iv) (CONDITION D) is not easily identified on the ground and suffers from bog encroachment.

Between SO 08282 09127 and SO 07456 09093 the tramroad has been destroyed by the development of Pengarnddu Industrial Park.

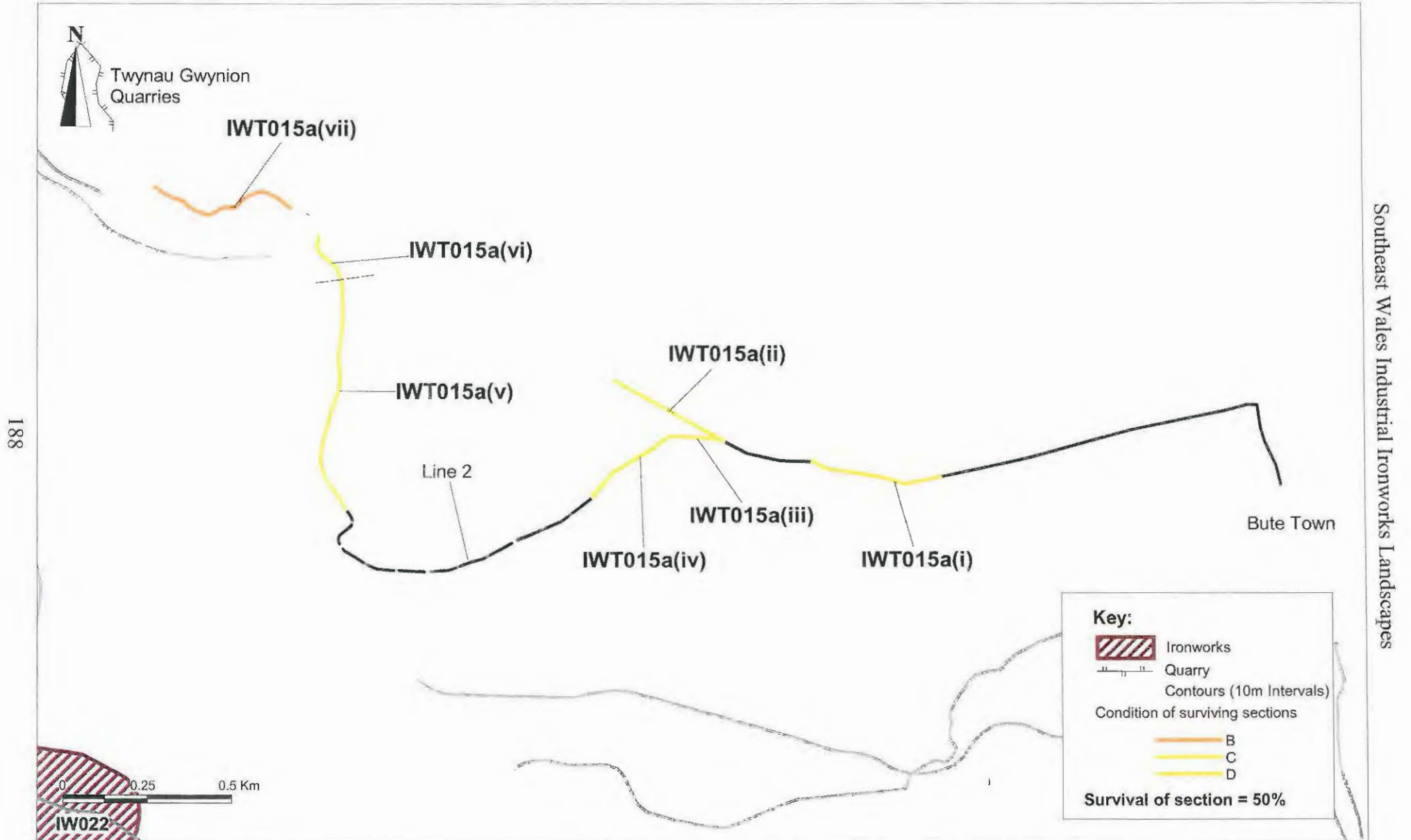
IWT015a(v) (CONDITION C) survives contouring the hillside. Its formation is damaged in places by water erosion; no surface remains were visible.

A section north of here follows the same route as line 1.

IWT015a(vi) (CONDITION C) is the same section as IWT015(i).

Line 2 branches off line 1 at SO 07386 09983. IWT015a(vii) (CONDITION B) survives in good condition as a grassed over embankment with several junctions to quarries (identified by van Laun 2001) clearly visible and some exposed revetment (IWT015a/001).

Figure 81: Surviving Tramroad Sections IWT015a(i)-(vii)



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Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 77; details of these interests are given in Appendix III.

Table 99: Features Associated with IWT015a(ii) (see Figure 82)

Feature Number	NGR	Type
IWT015a/005	SO 08668 09293	Tramroad junction
IWT015a/006	SO 08547 09308	Tramroad causeway

Table 100: Features Associated with quarry west of IWT015a(ii) (see Figure 82)

Feature Number	NGR	Type
IWT015a/007	SO 08316 09495	Tramroad plate
IWT015a/008	SO 08136 09495	Revetment

Table 101: Features Associated with IWT015a(v) (see Figure 82)

Feature Number	NGR	Type
IWT015a/004	SO 07536 09771	Tramroad junction

Table 102: Features Associated with IWT015a(vii) (see Figure 82)

Feature Number	NGR	Type
IWT015a/001	SO 0725 1000	Revetment
IWT015a/002	SO 0707 1001	Tramroad junction
IWT015a/003	SO 0700 1004	Tramroad junction

Current Protection/Status

No protection or status is currently afforded to this tramroad.

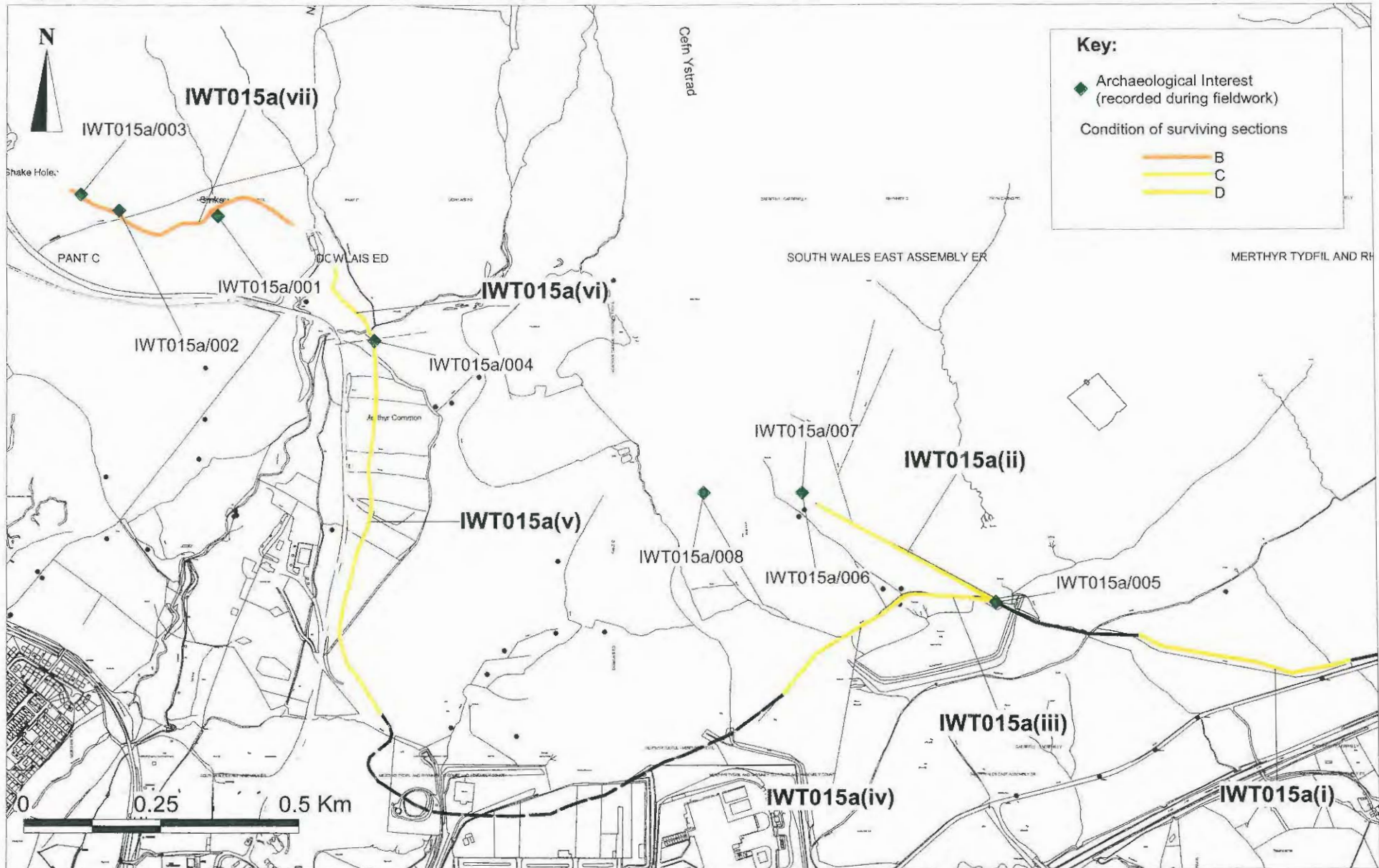
Identified Threats

No threats were identified from the UDP; however, there is continuing erosion from sheep and horses. Also bog encroachment and poor drainage of land threatens some parts of the tramroad.

Conservation and Management Recommendations

As much of this route on the common survives, it would benefit from more detailed survey and perhaps excavation to reveal the full extent of potential buried remains. Tramroad section IWT015a(vii) should be considered for scheduling.

Figure 82: Surviving Tramroad Sections IWT015a(i)-(vii) and Identified Interests



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Plate 17: Part of Tramroad Section IWT015a(vii) Showing Surviving Revetment, View to Northwest

Southeast Wales Industrial Ironworks Landscapes

Condition of IWT015b

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There is one surviving section of IWT015b equating to 87%:

Table 103: Surviving Sections of IWT015a

Section Number	Location	Condition Rating	Figure Reference Number
IWT015b(i)	SO 06424 10389 to SO 07327 09837	C	78, 83, 84

It is likely that sections of line 3 were destroyed during the construction process of the Rhymney Limestone Railway apart from the causeway across Nant Morlais and possibly cutting IWT015b/003, which were retained.

IWT015b(i) (CONDITION C) survives as a very slight grassed over embankment and suffers quite badly from erosion. No surface remains were found.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 77; details of these interests are given in Appendix III.

Table 104: Features Associated with IWT015b (see Figure 84)

Feature Number	NGR	Type
IWT015b/001	SO 06419 10369	Tramroad junction

Table 105: Features Associated with IWT015b(i) (see Figure 84)

Feature Number	NGR	Type
IWT015b/002	SO 0720 0985	Tramway
IWT015b/003	SO 0728 0985	Tramroad Cutting

Current Protection/Status

No protection or status is currently afforded to this tramroad.

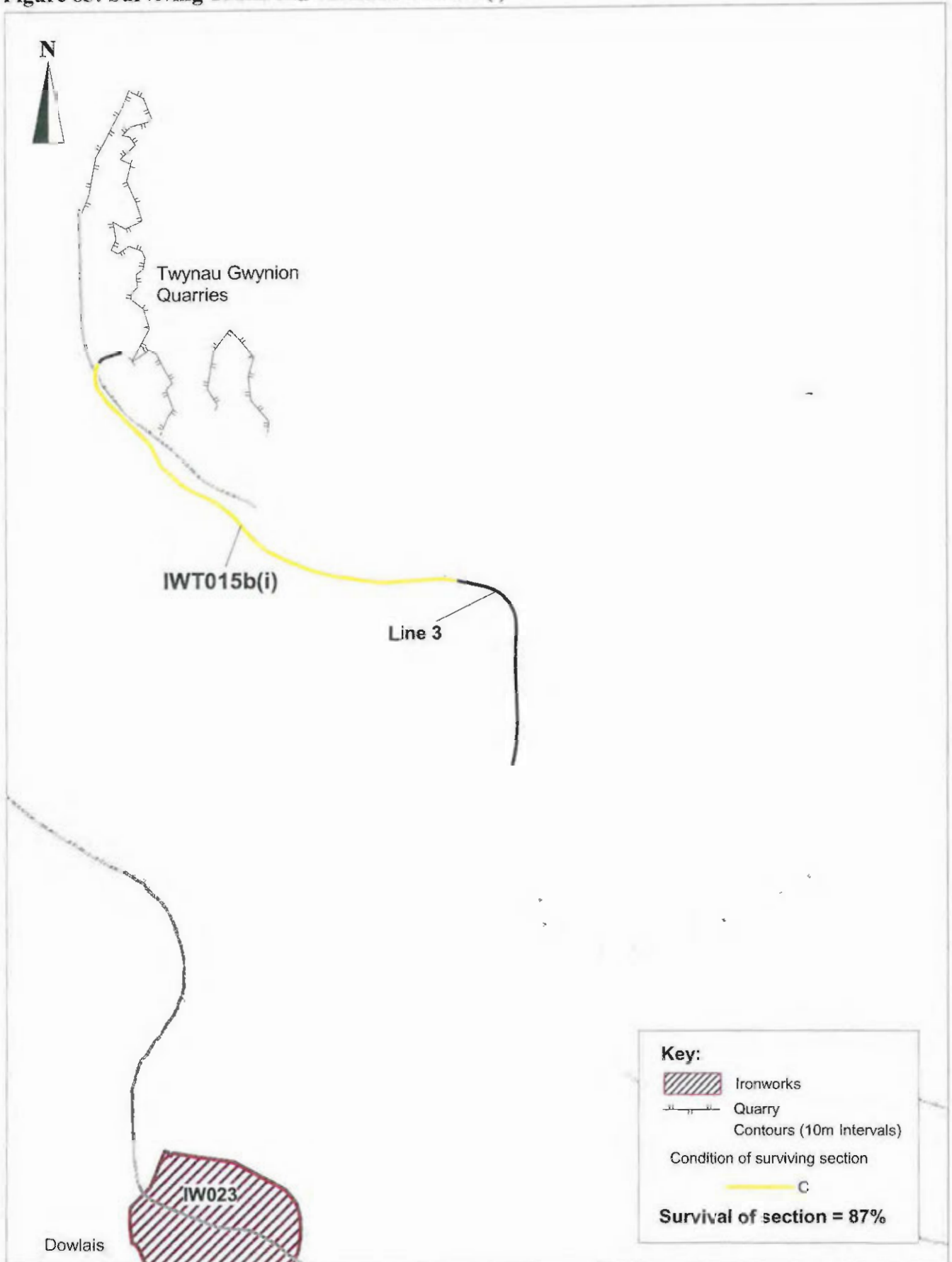
Identified Threats

No threats were identified from the UDP, however, there is continuing minor erosion from livestock

Conservation and Management Recommendations

Maintain as current.

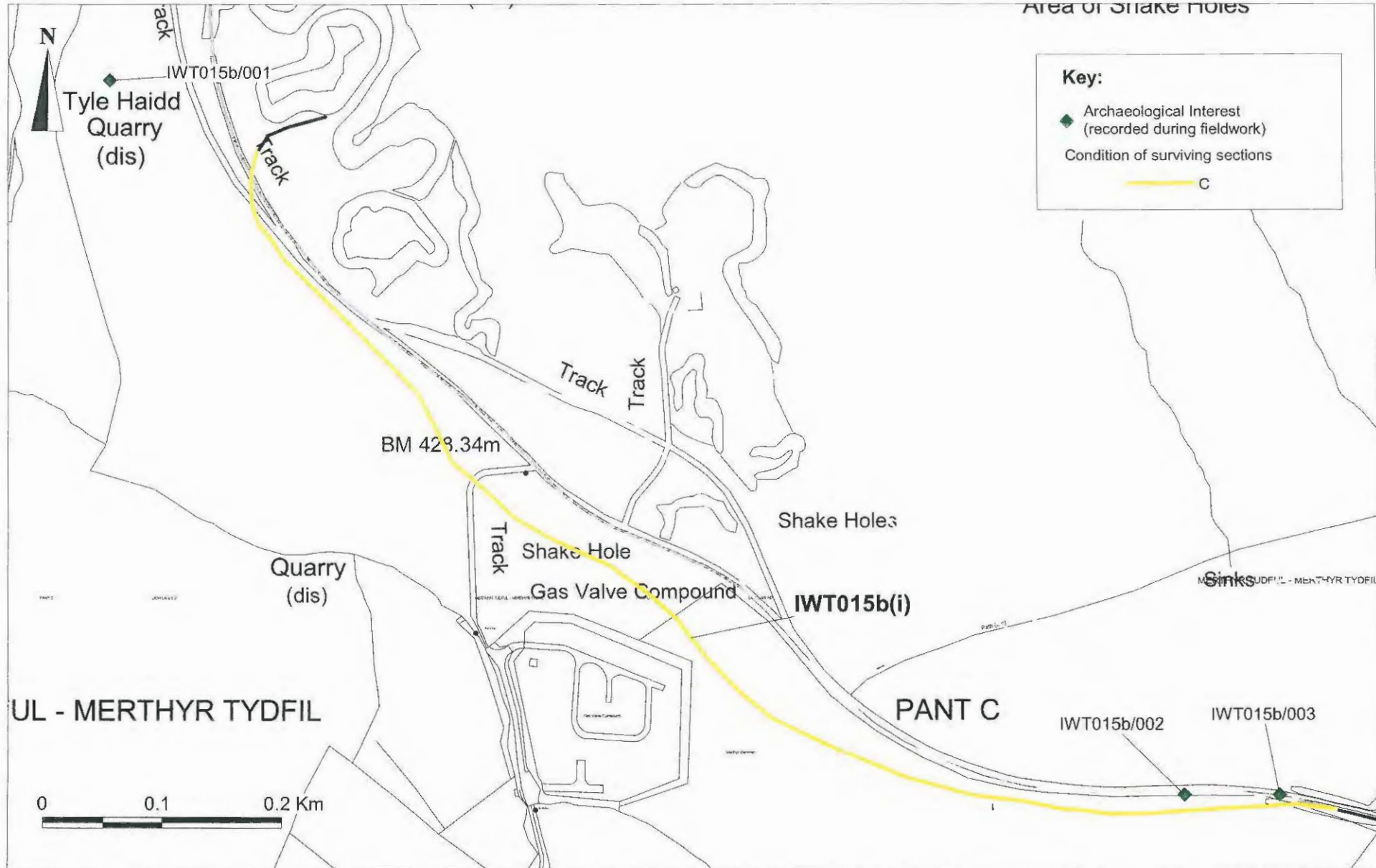
Figure 83: Surviving Tramroad Section IWT015b(i)



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Figure 84: Surviving Tramroad Section IWT015b(i) and Identified Interests



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Condition of IWT015c

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are two surviving sections of IWT015c equating to 19%:

Table 106: Surviving Sections of IWT015c

Section Number	Location	Condition Rating	Figure Reference Number
IWT015c(i)	SO 06698 10179 to SO 06834 10021	B	78, 85, 86
IWT015c(ii)	SO 06470 10340 to SO 06698 10179	U	78, 85, 86

IWT015c(i) (CONDITION B) survives as a slight grassed over embankment running through a substantial cutting, which is in good condition albeit littered.

IWT015c(ii) (CONDITION U) this section represents the route as it enters an extensively quarried. The route bifurcates as it approaches the quarry faces. Additional detailed survey is required of this complex area.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 77; details of these interests are given in Appendix III.

Table 107: Features Associated with IWT015c(i) (see Figure 86)

Feature Number	NGR	Type
IWT015c/001	SO 0677 1015	Tramroad cutting
IWT015c/003	SO 0687 0998	Tramroad junction

Table 108: Features Associated with IWT015c(ii) (see Figure 86)

Feature Number	NGR	Type
IWT015c/002	SO 0669 1018	Tramroad junction

Current Protection/Status

No protection or status is currently afforded to this tramroad.

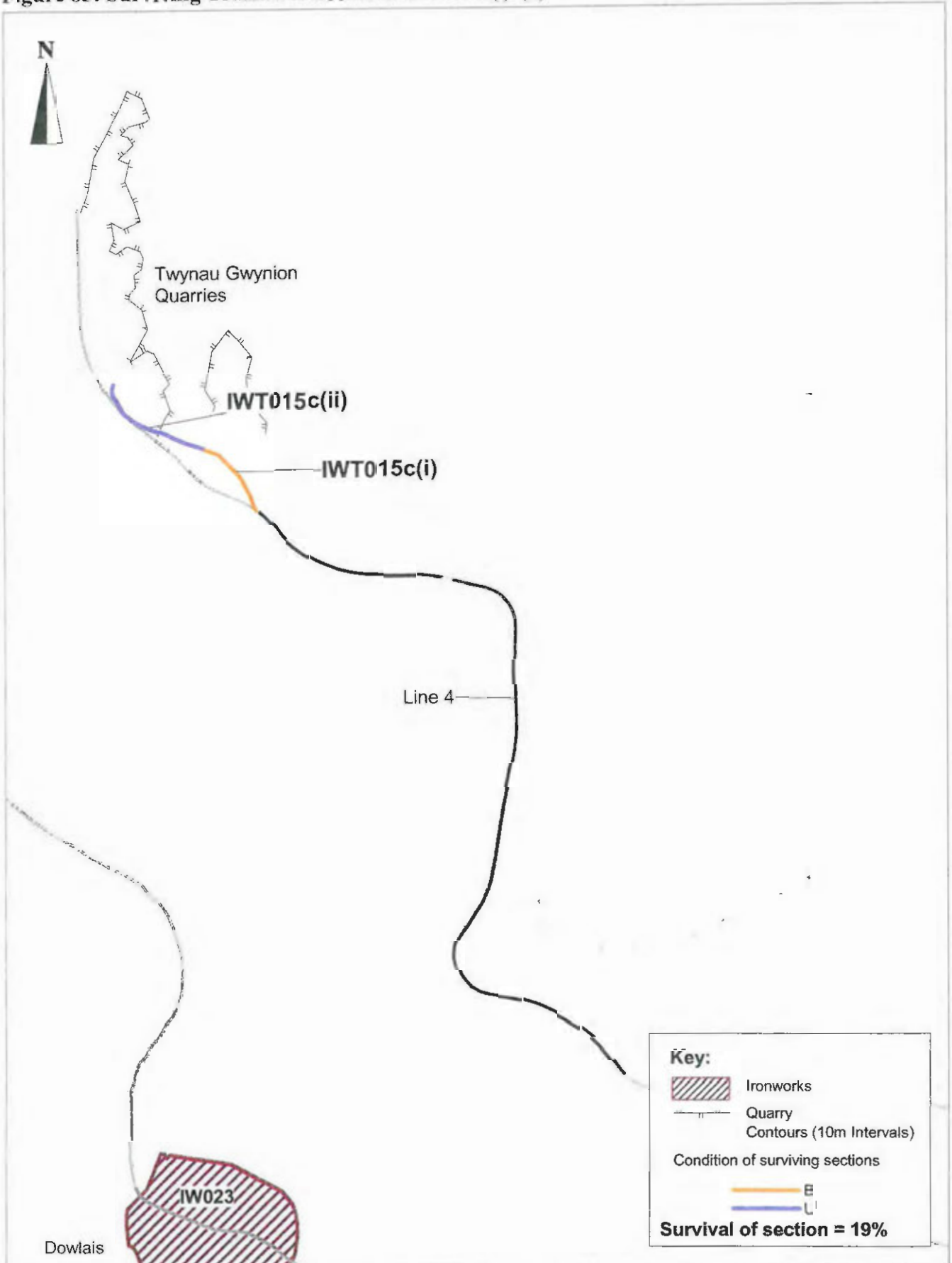
Identified Threats

No threats were identified from the UDP, however, there is continuing erosion from livestock.

Conservation and Management Recommendations

Maintain as current.

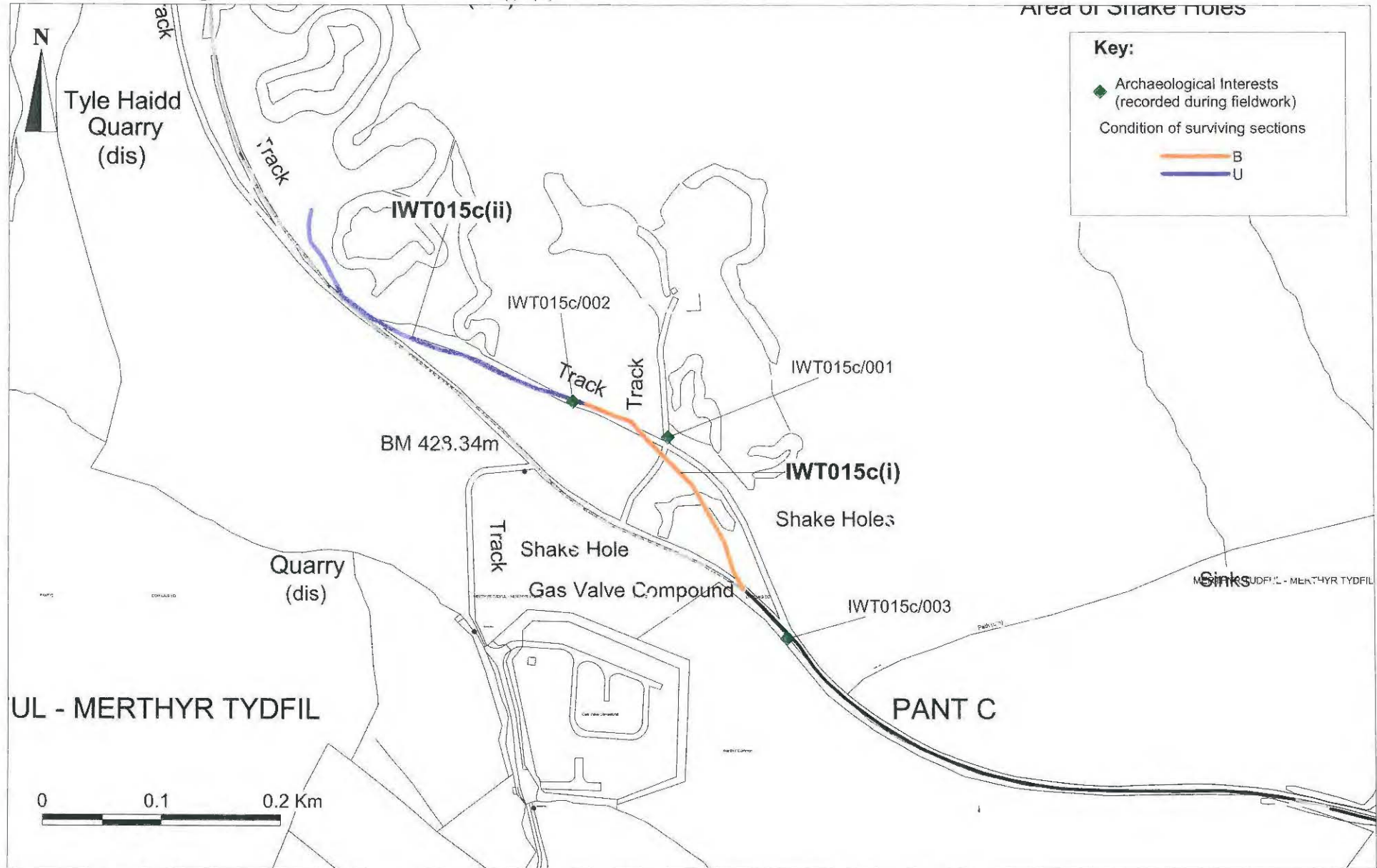
Figure 85: Surviving Tramroad Sections IWT015c(i)-(ii)



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Figure 86: Surviving Tramroad Sections IWT015c(i)-(ii) and Identified Interests



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IWT Number 016: Rhymney Limestone Railway

NGR: SO 06378 10782 to SO 11083 07066

Date Range: c. 1848 - c. 1900

Approximate length of tramroad = 7.5 Km

Overall survival = 29%

Historical Background

A tramroad from Rhymney ironworks (lower furnace) to the quarries at Twynau Gwynion was in existence by 1848; the most likely date given for its upgrading to the Rhymney Limestone Railway (RLR) is 1852 when Rhymney ironworks abandoned quarrying at Trevil. This bypassed the earlier Bute Tramroad (IWT020) and largely replaced Twynau Gwynion line 4. It is thought to have been converted to standard gauge railway in the 1860s. The route operated until at least the end of the nineteenth century when the quarry neared the limits of its lease (van Laun 2001: 162-168).

General Description

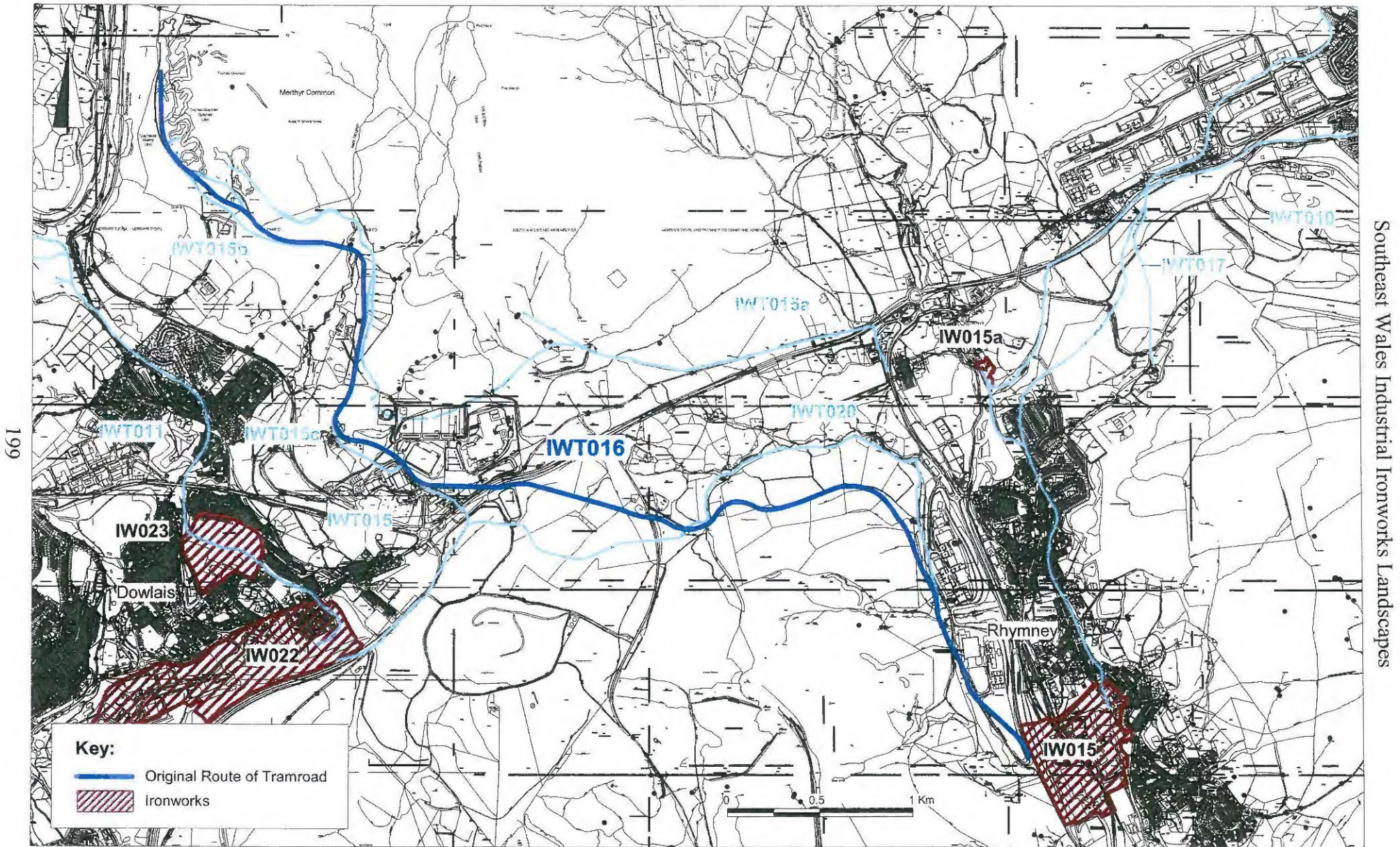
This tramroad has been surveyed as a single continuous route:

Table 109: Routes of Tramroad IWT016

Route Number	Name	Location	Figure Reference Number
IWT016	Rhymney Limestone Railway	SO 06378 10782 to SO 11083 07066	87, 88

From the ironworks the tramroad climbed steeply up the west side of the Rhymney valley and west across Merthyr Common to Pengarnddu. This area has been subjected to open casting and industrial development, as a result no remains survive here. From Pengarnddu the RLR followed the route of Twynau Gwynion line 4 over Nant Morlais then to the quarries, however it deviated slightly and ran further north into the quarry than line 4. The route of this section can be followed along a wide tarmac and gravel track past Blaen Morlais farm, then from a gas valve compound as a narrower less built up footpath across the open common.

Figure 87: Route of Tramroad IWT016 Rhymney Limestone Railway

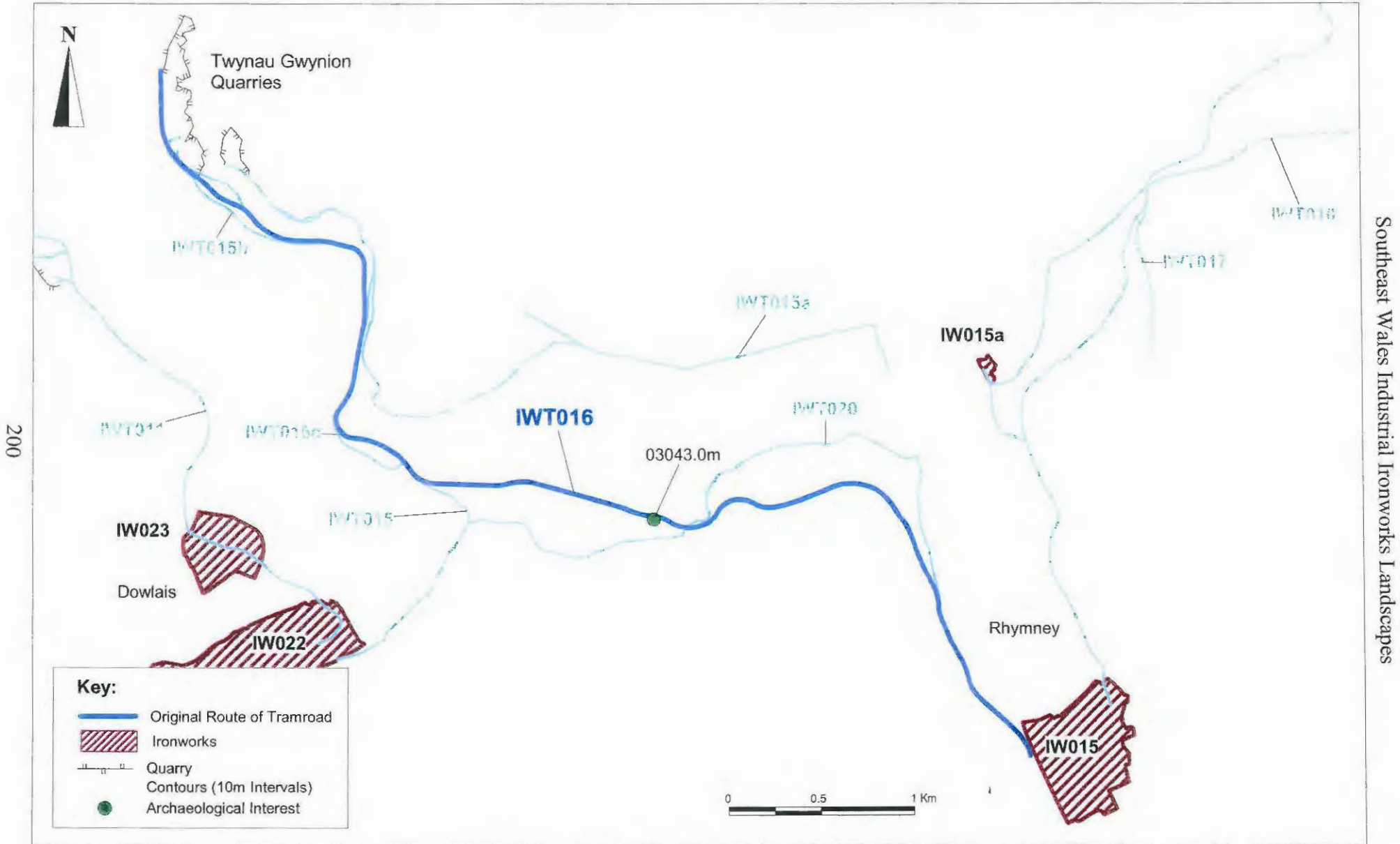


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Figure 88: Tramroad IWT016 Showing Archaeological Interests (Pre-survey)



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Condition of IWT016

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are two surviving sections of IWT016 equating to 29%:

Table 110: Surviving Sections of IWT016

Section Number	Location	Condition Rating	Figure Reference Number
IWT016(i)	SO 06857 09998 to SO 07333 08871	E	89, 90
IWT016(ii)	SO 06434 10336 to SO 06857 09998	B	89, 90

IWT016(i) (CONDITION E) the tramroad route in this area is followed by a rough tarmac and gravel track quite heavily resurfaced with building rubble, buried remains may survive. A substantial cutting relating to this and probably the earlier Twynau Gwynion tramroad was recorded (IWT016/006) as well as several junctions.

IWT016(ii) (CONDITION B) here the tramroad formation survives as a grassed over raised embankment surfaced by a thin layer of gravel. Two sleepers were recorded partly exposed (IWT016/003) and further buried remains are likely to survive. A well-preserved section of revetment (IWT016/005) was recorded as part of this section.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 88; details of these interests are given in Appendix III.

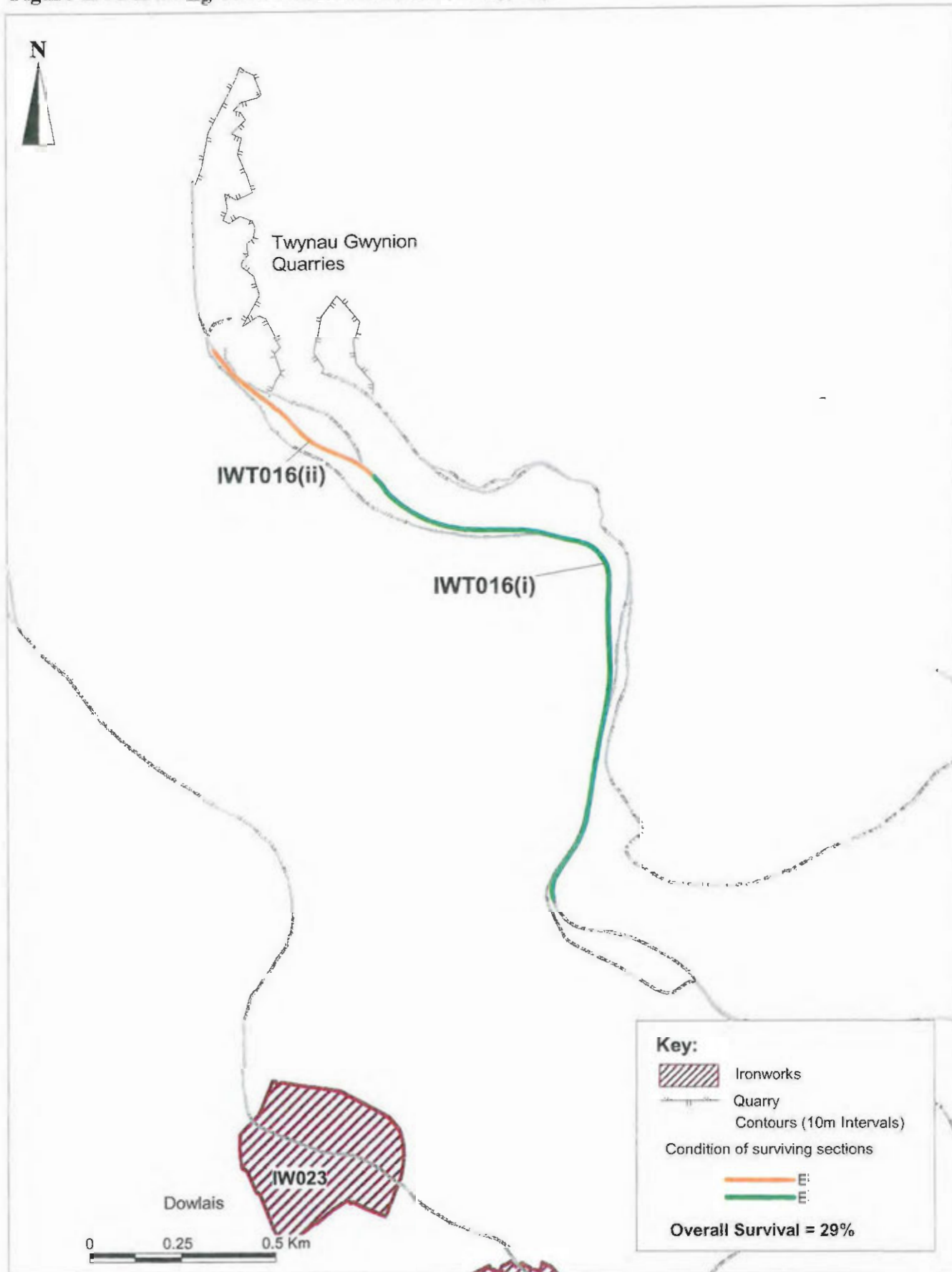
Table 111: Features Associated with IWT016(i) (see Figure 90)

Feature Number	NGR	Type
IWT016/001	SO 0731 0983	Tramroad junction
IWT016/005	SO 0687 0998	Tramroad junction
IWT016/006	SO 0728 0985	Tramroad Cutting

Table 112: Features Associated with IWT016(ii) (see Figure 90)

Feature Number	NGR	Type
IWT016/002	SO 0660 1020	Revetment
IWT016/003	SO 0650 1026	Wooden sleeper
IWT016/004	SO 06795 10041	Revetment
IWT016/005	SO 0687 0998	Tramroad junction

Figure 89: Surviving Tramroad Sections IWT016(i)-(ii)

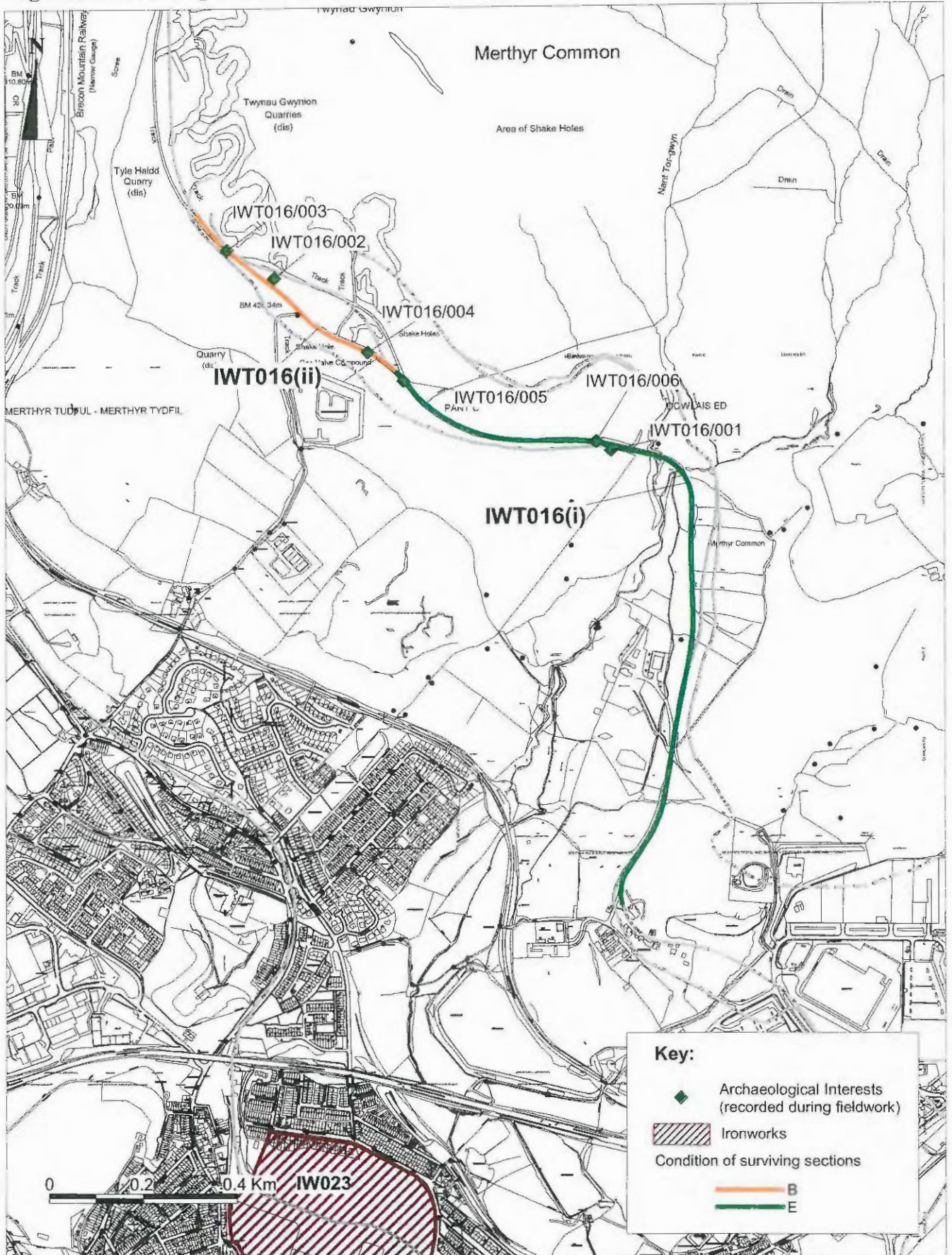


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Figure 90: Surviving Tramroad Sections IWT016(i)-(ii) and Identified Interests



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Southeast Wales Industrial Ironworks Landscapes

Current Protection/Status

No protection or status is currently afforded to this tramroad.

Identified Threats

No threats were identified from the UDP, however, there is continuing erosion from livestock.

Conservation and Management Recommendations

Maintain as current.

IWT Number 017: Bryn Oer Tramroad

NGR: SO 11739 10056 to SO 11777 09203 (surveyed during this project)

Date Range: 1815 - 1870s

Approximate length of tramroad = 2.9 Km (within GGAT area)

Overall survival = 0% (of surveyed section)

Historical Background

Benjamin Hall became the owner of both the Lower and Upper Rhymney furnaces in 1810. At this time limestone was transported to these ironworks along the Tredegar Tramroad and the Rhymney Branch. To avoid the payment of excessive tolls and to generate income, Hall set about building a tramroad to serve Rhymney, independent of the others. This was conducted in two stages (both completed by 1815) to get around the eight-mile limitation clause set by the Brecknock and Abergavenny Canal Company. Hall's Trevil Tramroad (IWT009) was built from Rhymney Lower furnace to the Quarryman's Arms near Trevil quarries with a branch to Rhymney Upper Furnace. At the Quarryman's arms the tramroad linked to the Brynoer Tramroad (IWT017) also built by Hall, which allowed passage to the canal at Talybont-on-Usk. A branch from Brynoer Collieries also connected to Hall's Trevil Tramroad. Construction of Hall's Trevil Tramroad had the effect of reducing the distance and cost of transporting limestone and iron ore. In 1852 Rhymney abandoned Trevil quarries in favour of Twynau Gwynion and by the 1860s the Brynoer tramroad was struggling, its attempts to increase traffic by lowering rates failed and by the 1870s the tramroad had fallen out of use (van Laun 2001: 138-144).

General Description

This tramroad has been surveyed as a single continuous route:

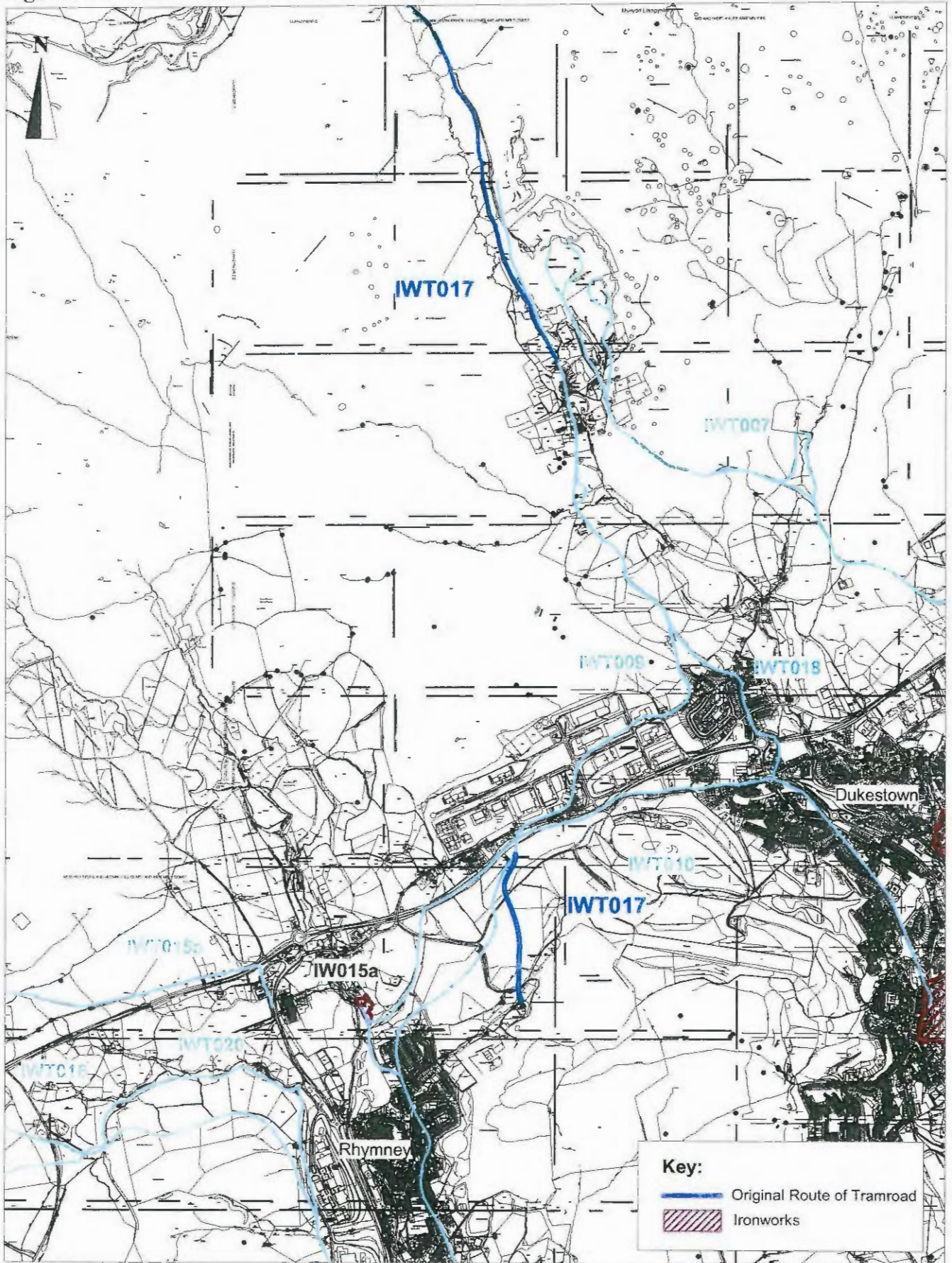
Table 113: Routes of Tramroad IWT017

Route Number	Name	Location	Figure Reference Number
IWT017	Bryn Oer Tramroad	SO 11739 10056 to SO 11777 09203	91

Only the branch of the Bryn Oer Tramroad running from Bryn Oer Colliery to a junction with Hall's Trevil Tramroad (IWT009) was surveyed during this project. It was found that this tramroad section has been completely destroyed by opencast working. The northern part of this tramroad joining Hall's Trevil at the Quarryman's Arms and running to the Brecknock and Abergavenny Canal was not survey as this section largely lies beyond the area covered by GGAT.

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Figure 91: Route of Tramroad IWT017 Bryn Oer Tramroad



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IWT Number 018: Tredegar Tramroad (05995.0g/06774g)

NGR: SO 12042 12695 to SO 14155 09189

Date Range: c. 1804 - 1907

Approximate length of tramroad = 4.5 Km

Overall survival = 4%

Historical Background

Opened c.1804, the Tredegar Tramroad was built to convey limestone from Trevil quarries to the ironworks at Tredegar. A branch west from Dukestown to Rhymney (IWT010) was also constructed although this fell out of use by the 1830s, the main Tredegar route continued in operation and was converted to run locomotives around this time. The tramroad remained in use until the early twentieth century (van Laun 2001: 136-149).

General Description

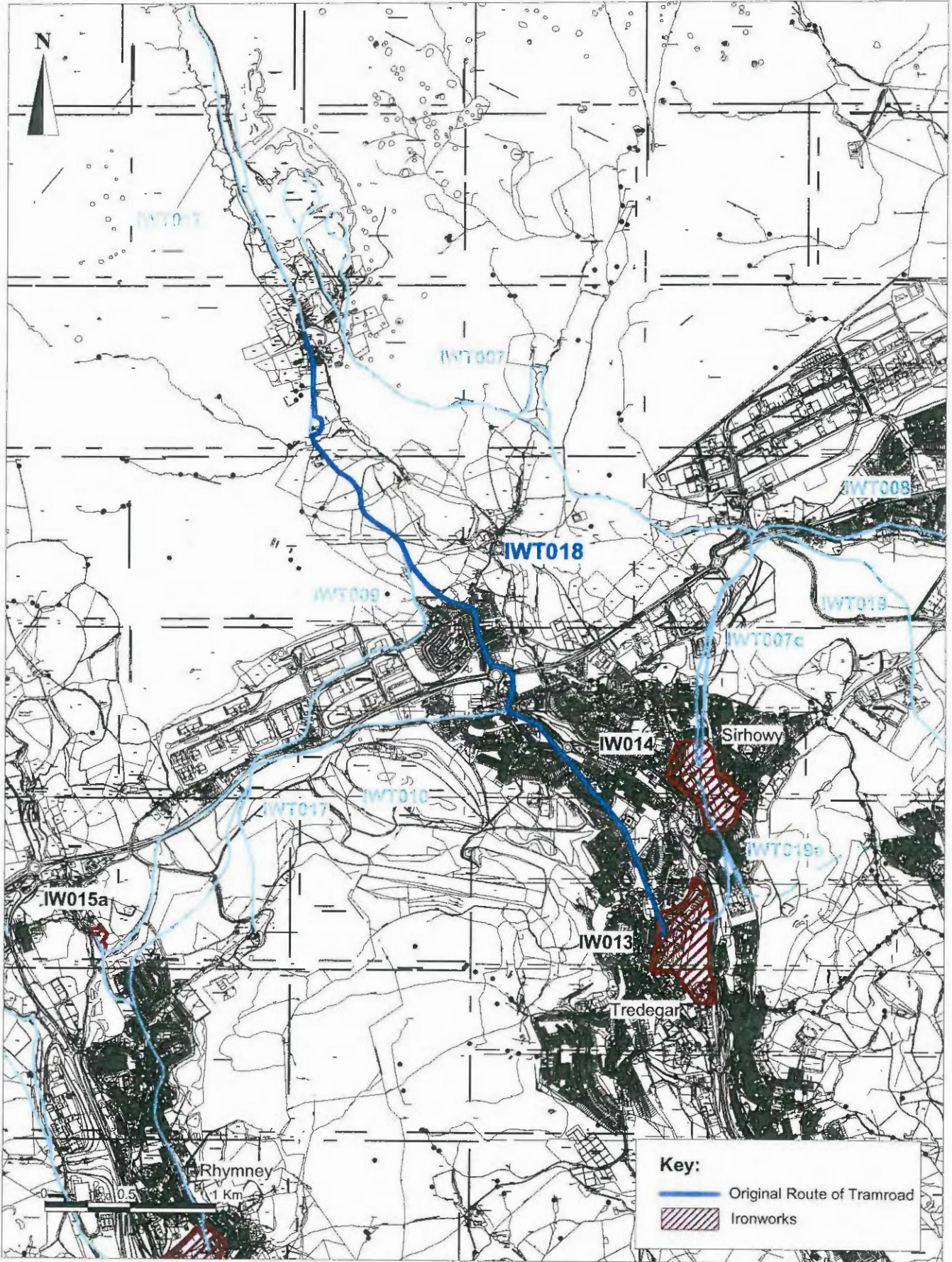
This tramroad has been surveyed as a single continuous route:

Table 114: Routes of Tramroad IWT018

Route Number	Name	Location	Figure Reference Number
IWT018	Tredegar Tramroad	SO 12042 12695 to SO 14155 09189	92

Most of the tramroad route is now under minor roads: from the Quarryman's Arms the tramroad ran south parallel with Hall's Trevil Tramroad just east of the present Trefil Road. Below New House the tramroad is visible contouring the hillside. Its route can then be followed southwards along Trefil Road, past the Mountain Air Inn, Ty Newydd, along Llwyn Helyg under the A465, along Station Road, past the Tredegar roundabout, to the southwest of the A4048, along Sycamore Avenue and Stockton Way. At the former ironworks area of Tredegar the course of the tramroad has been destroyed by development.

Figure 92: Route of Tramroad IWT018 Tredegar

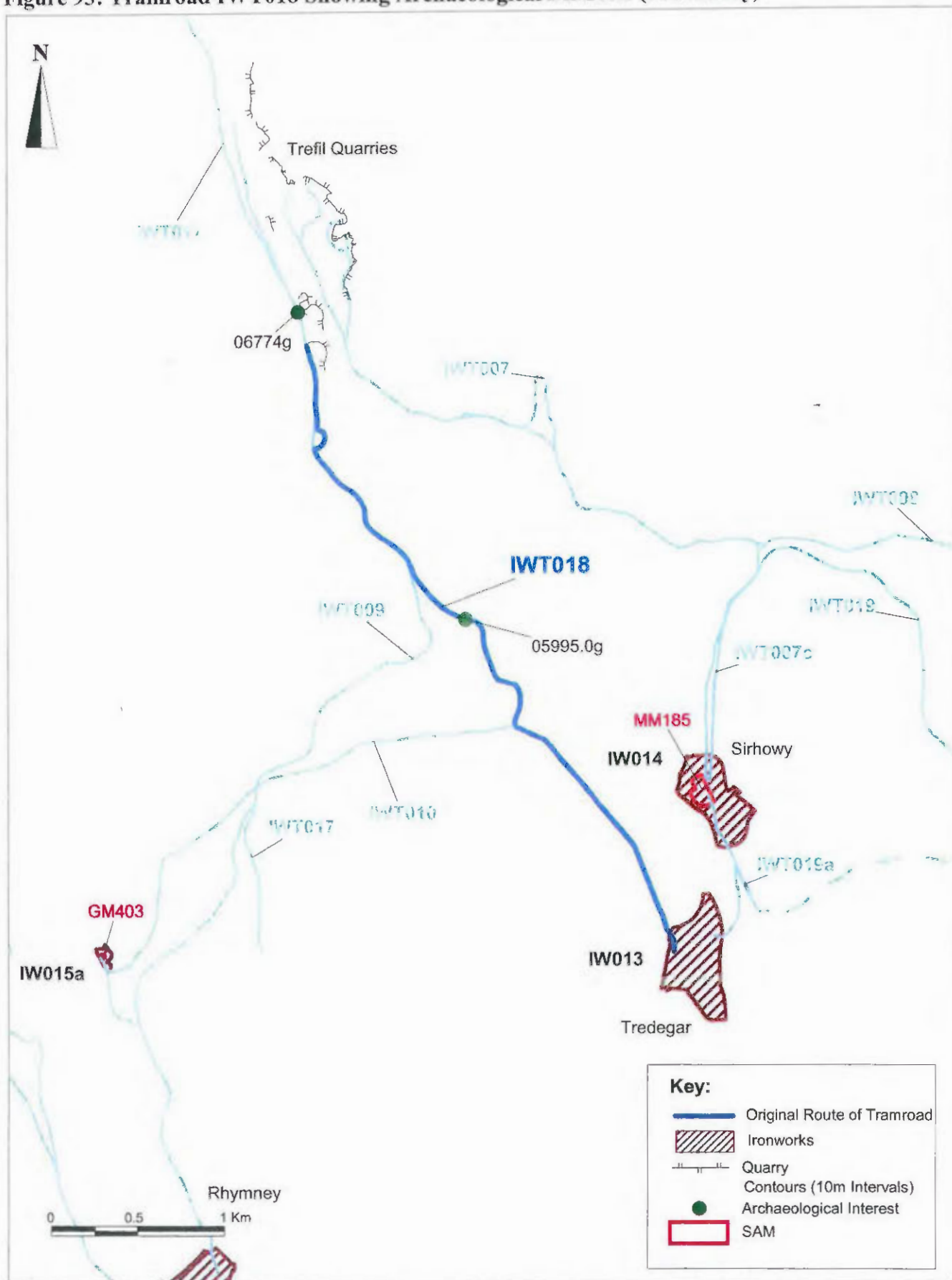


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Figure 93: Tramroad IWT018 Showing Archaeological Interests (Pre-survey)



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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT018

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There is one surviving section of IWT018 equating to 4%:

Table 115: Surviving Sections of IWT018

Section Number	Location	Condition Rating	Figure Reference Number
IWT018(i)	SO 12106 12212 to SO 12086 12100	B	94

IWT018(i) (CONDITION B) is a small surviving section detouring to the east of Trefil Road south of New House, following the contour and rejoining the road by a cattle grid. It survives as a grassed over embankment with stone track bed still in tact. (Part of this section was previously excavated by John van Laun).

Features Recorded During Survey

No individual features were recorded during the survey of this tramroad.

Archaeological interests identified prior to the current survey are shown on figure 93; details of these interests are given in Appendix III.

Current Protection/Status

There is currently no protection or listed status for this tramroad. However, the surviving section lies within E16 special landscape area on the UDP.

Identified Threats

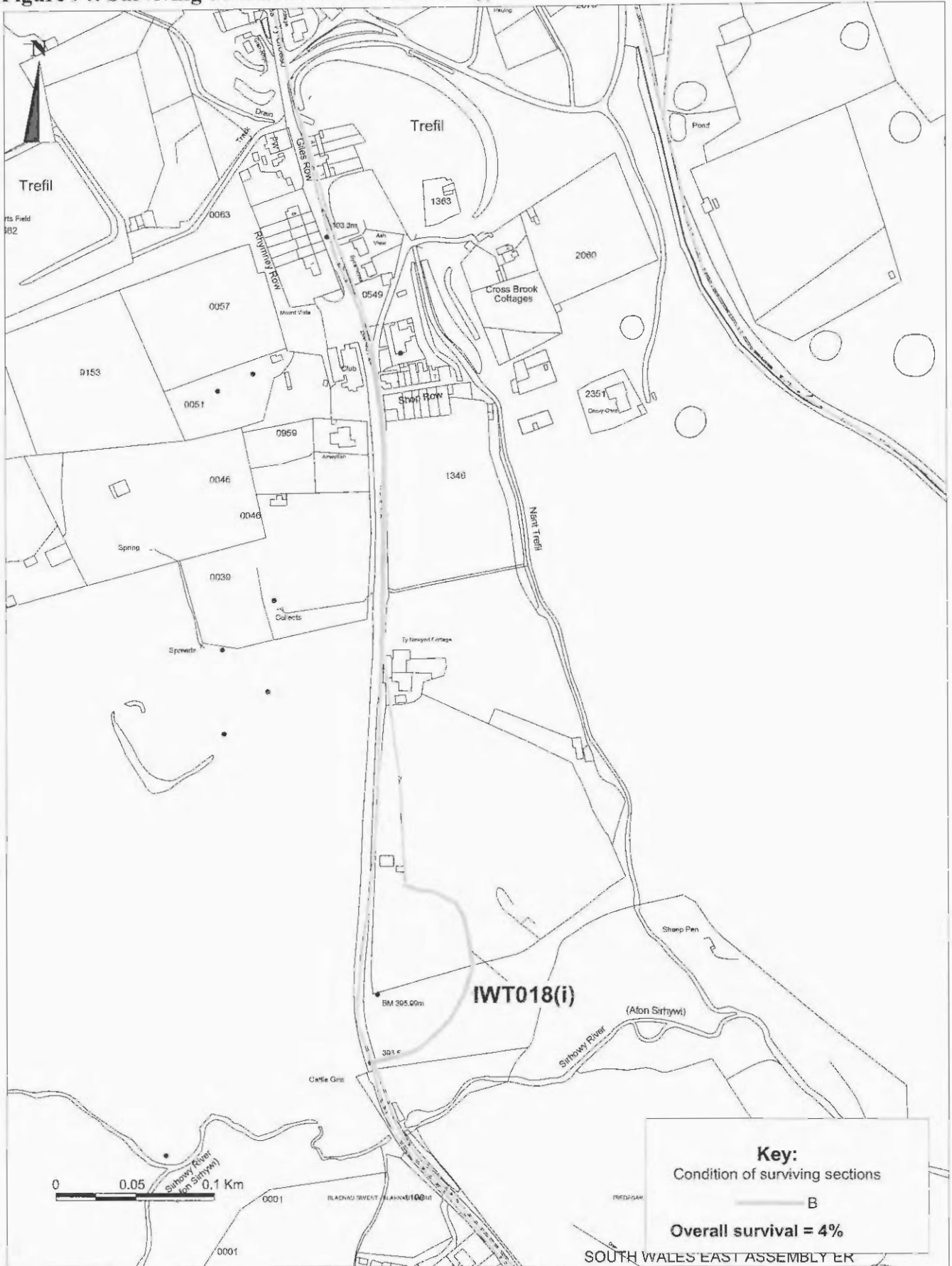
No threats were identified from the UDP.

Conservation and Management Recommendations

The tramroad is nearly completely destroyed. The surviving portion (IWT018(i)) should be preserved *in situ*. For the remainder it is recommended that where the route of the tramroad can still be traced, this transport link is considered during any future development.

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Figure 94: Surviving Tramroad Section IWT018(i)



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IWT Number 019: Ebbw Vale Private Line (06841g/06842g)

NGR: SO 14392 09282 to SO 17158 09745

Date Range: 1813 - ?

Approximate length of tramroad = 6.3 Km

Overall survival = 2%

Historical Background

Ebbw Vale Ironworks Co. leased Sirhowy Ironworks in 1800 and had purchased the works by 1818. The two works were linked by a tramroad, completed by 1813, which bypassed the Trevil Tramroad (IWT007) and Rassau Railroad (IWT008). From 1832 a shorter route was opened through the mountain known as Harford's Tunnel (not surveyed) and by 1857 the only section of the private line in operation was that between Ebbw Vale and Balance Pit no 1 at Waun y Pound. At some point between 1872 and 1885 the private line was reinstated, however, it was slightly realigned to allow transport to Victoria Ironworks. The private line was eventually connected to Trevil quarries tramroad (IWT015) in 1907 when Trevil Machine was abandoned along with Rassau Railroad (van Laun 2001: 136-149).

General Description

This tramroad was allocated two route numbers for the purpose of this survey:

Table 116: Routes of Tramroad IWT019

Route Number	Name	Location	Figure Reference Number
IWT019	Ebbw Vale Private Line	SO 14365 10187 to SO 17158 09745	95, 96
IWT019a	Ebbw Vale Private Line Addition	SO 14357 10090 to SO 14392 09282	95, 96

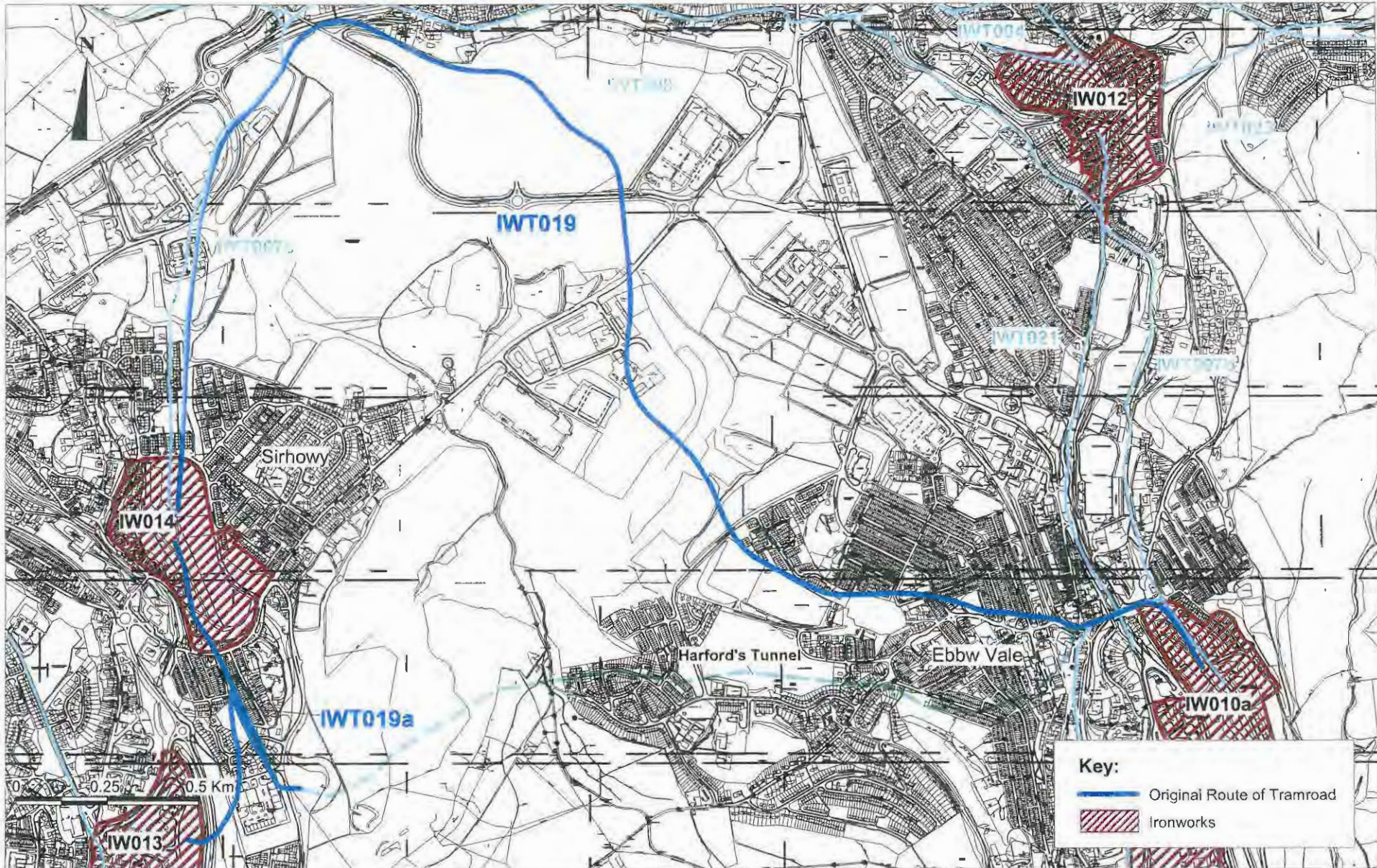
IWT019

From Ebbw Vale ironworks the tramroad route can be traced along a surviving causeway and tunnels (54602/ LB 22532), this is now the route of a minor road. The tramroad originally ran west to Waun y Pound, north, and then west to near Trevil machine then parallel with the Rassau Railroad south to Sirhowy. The majority of the tramroad has been destroyed by industrial and housing development and opencast workings.

IWT019a

This route was constructed at a later stage when Harford's Tunnel between Ebbw Vale and Sirhowy was opened. This branch ran from the western end of Harford's Tunnel to Sirhowy Ironworks with a smaller branch running to Tredegar Ironworks.

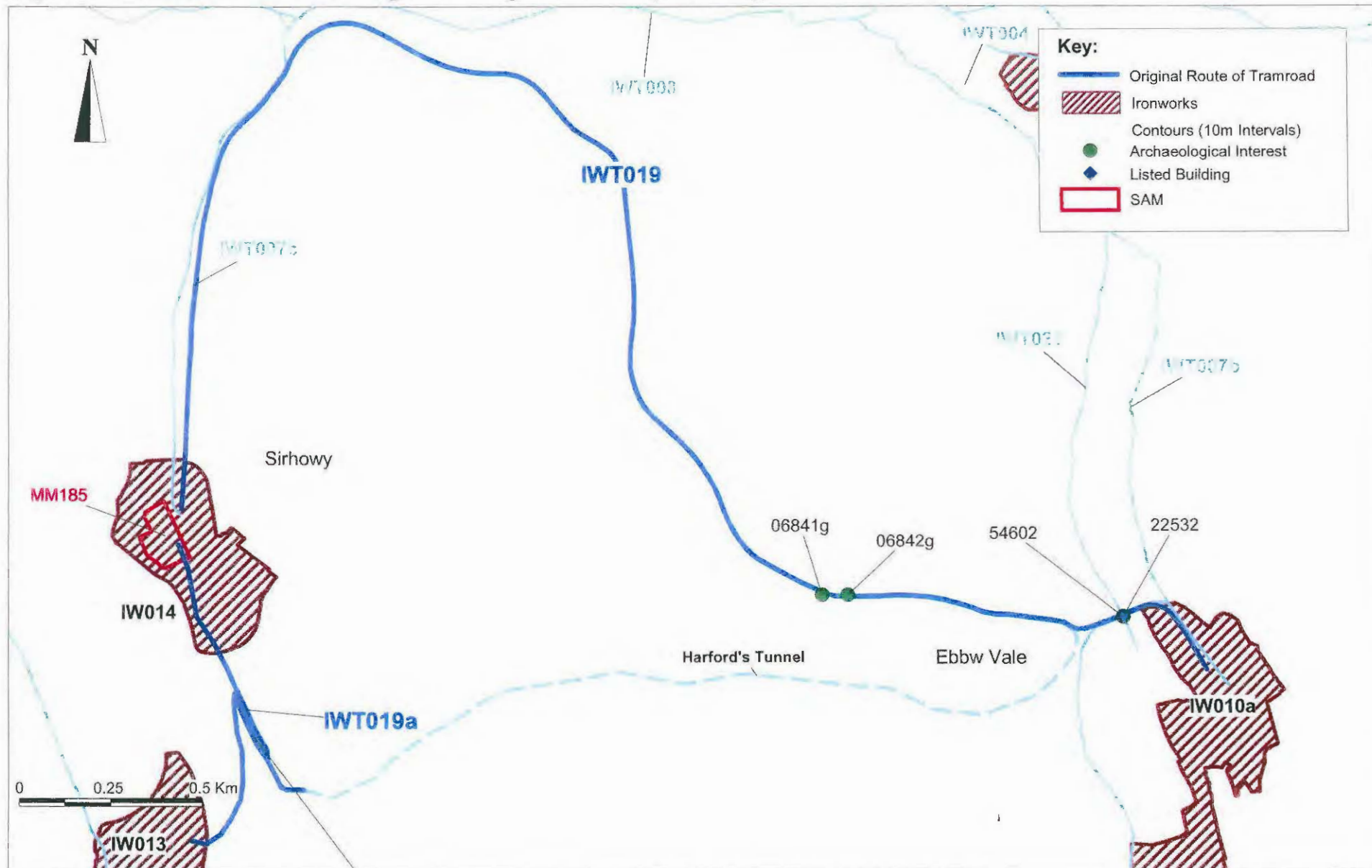
Figure 95: Route of Tramroad IWT019 Ebbw Vale Private Line



Southeast Wales Industrial Ironworks Landscapes

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Figure 96: Tramroad IWT019 Showing Archaeological Interests (Pre-survey)



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South East Wales Industrial Ironworks Landscapes

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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT019

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There is one surviving section of IWT019 equating to 2%:

Table 117: Surviving Sections of IWT019

Section Number	Location	Condition Rating	Figure Reference Number
IWT019(i)	SO 17003 09921 to SO 16901 09882	B	97

IWT019(i) (CONDITION B) (54602, LB 22532) is a section spanning the present day Steel Works Road leading towards the site of the former ironworks. The causeway and tunnels are in good condition and now carry the route of a minor road. This is the only surviving feature of this tramroad route.

Features Recorded During Survey

No individual features were recorded during the survey of this tramroad.

Archaeological interests identified prior to the current survey are shown on figure 96; details of these interests are given in Appendix III.

Current Protection/Status

The causeway and tunnels are a listed building (LB 22532).

Identified Threats

No threats were identified from the UDP.

Conservation and Management Recommendations

Maintain as current.

Figure 97: Surviving Tramroad Section IWT019(i)



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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT019a

Nearly the entire section of tramroad has been destroyed by housing and industrial development. A surviving tunnel (IWT019a/001) under Beaufort road is the only remains visible above ground.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 96; details of these interests are given in Appendix III.

Table 118: Features Associated with IWT019a (see Figure 98)

Feature Number	NGR	Type
IWT019a/001	SO 14473 09781	Tramway Tunnel

Current Protection/Status

No protection afforded to the surviving feature.

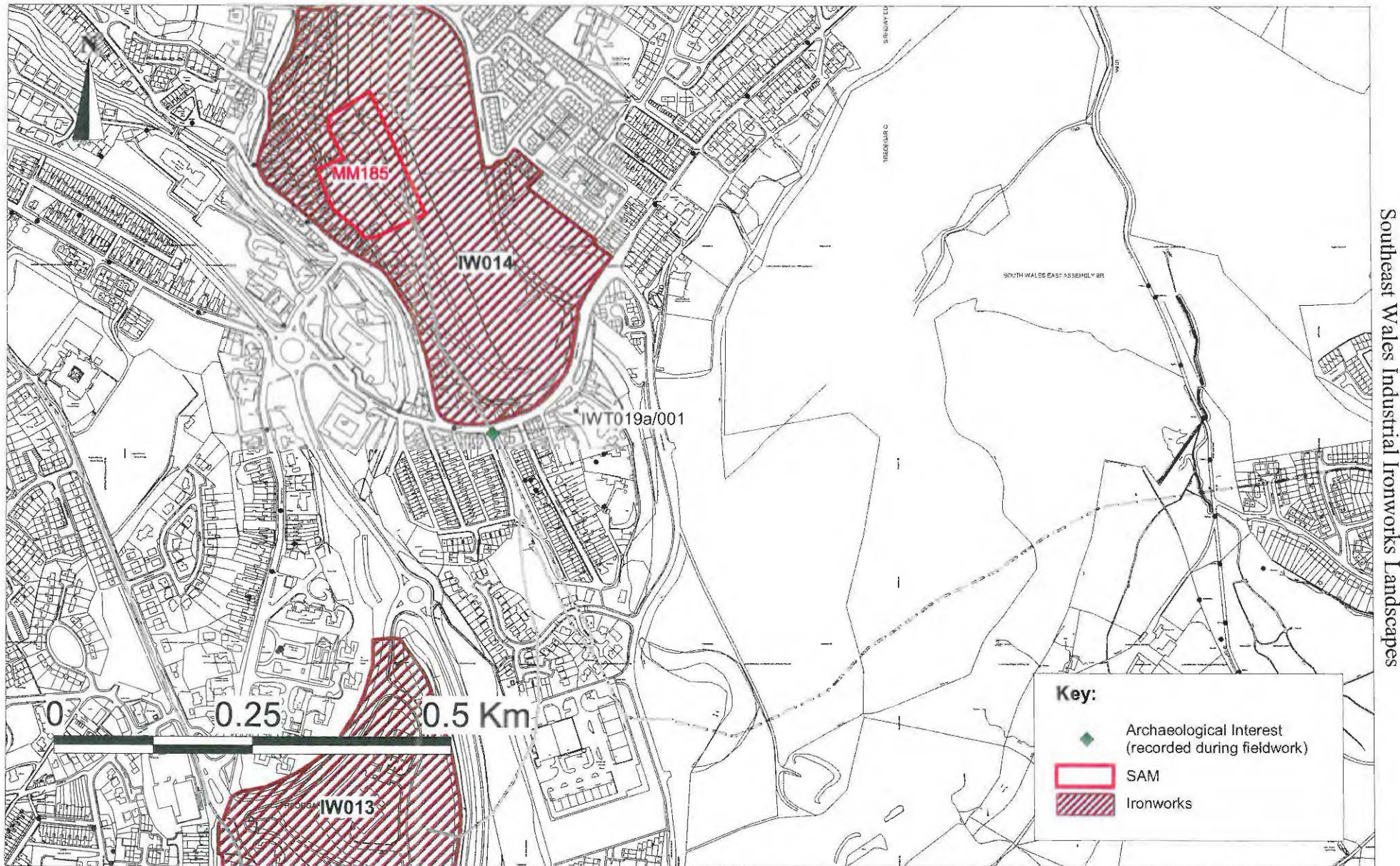
Identified Threats

No threats were identified from the UDP.

Conservation and Management Recommendations

Maintain as current.

Figure 98: Identified Interest IWT019a/001



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IWT Number 020: Bute Tramroad

NGR: SO 08041 08319 to SO 10593 07923

Date Range: 1825 - 1848

Approximate length of tramroad = 3.7 Km

Overall survival = 0%

Historical Background

Bute Ironworks took over the quarries at Twynau Gwynion from Dowlais in 1825 and constructed a tramroad from the west side of the Rhymney valley across Merthyr Common to Pengarnddu where it met Dowlais' Line 4 (IWT015c) to Twynau Gwynion quarries. This tramroad continued in use until the mid-nineteenth century when it was superseded by the Rhymney Limestone Railway (IWT016) (van Laun 2001: 162).

General Description

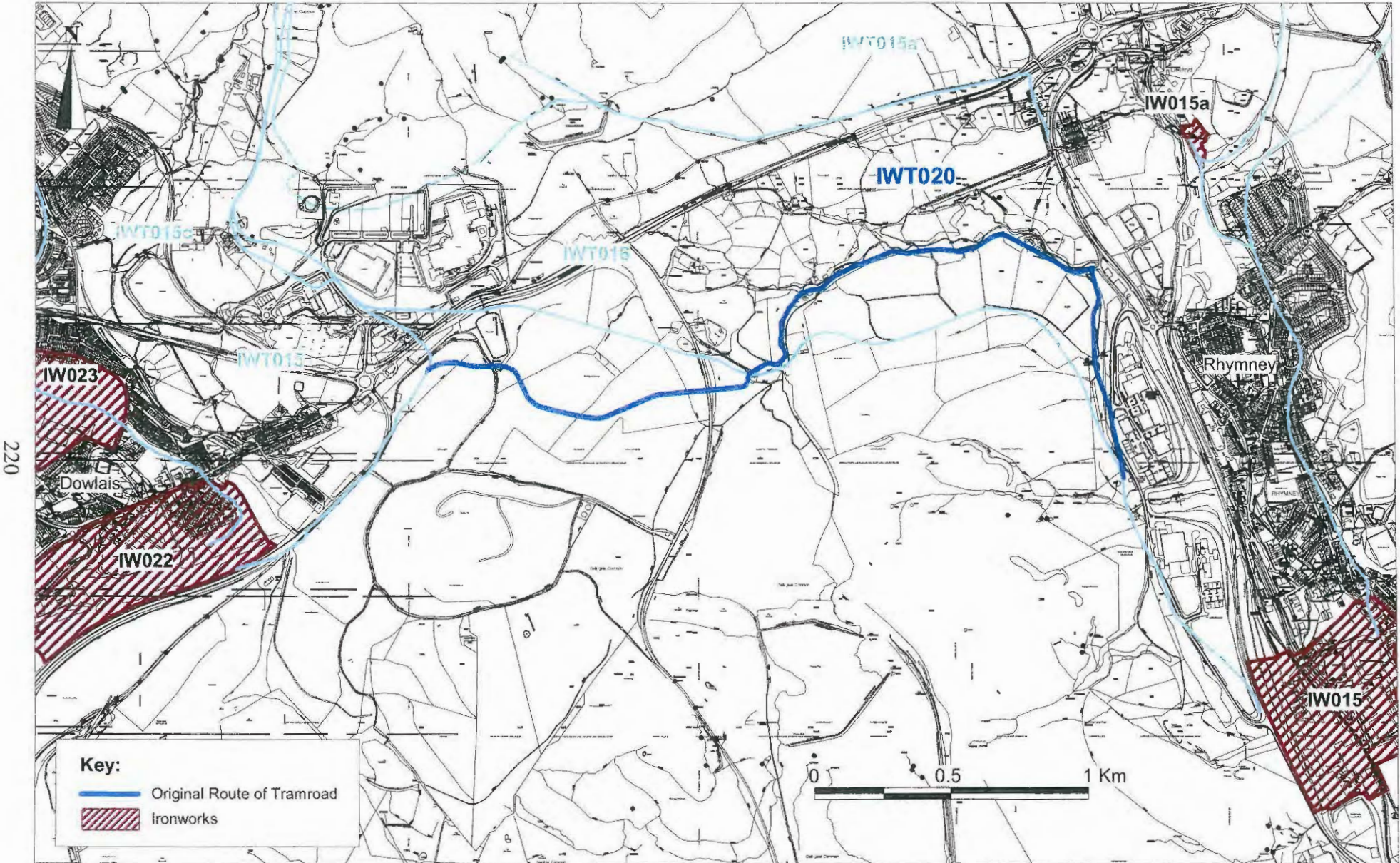
This tramroad has been surveyed as a single continuous route:

Table 119: Routes of Tramroad IWT020

Route Number	Name	Location	Figure Reference Number
IWT020	Bute Tramroad	SO 08041 08319 to SO 10593 07923	99

The tramroad joined a branch line running from the ironworks, continuing north up the west side of the Rhymney Valley before turning west running just south of Nant Carno and to the south of Dowlais Big Pond to Pengarnddu where it joined with Twynau Gwynion Line 4 (IWT015c). This tramroad has been entirely destroyed by opencast working and land reclamation. The route it took to the east of Dowlais Big Pond can be roughly followed along the route of a modern track.

Figure 99: Route of Tramroad IWT020 Bute Tramroad



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 Mae atgynhyrchu heb ganiatâd yn torri Hawlfraint y Goron a gall hyn arwain at erlyniad neu achos sifil. Glamorgan-Gwent Archaeological Trust Ltd 100017916 (2006).

IWT Number 021: Beaufort Railroad

NGR: SO 16887 11204 to SO 16969 09797

Date Range: 1796 - ?

Approximate length of tramroad = 1.5 Km

Overall survival = 0%

Historical Background

Authorised in 1792 under the Monmouthshire Canal Act the Beaufort Railroad was opened in 1796 and probably engineered by Thomas Dadford junior. It ran from the canal head at Crumlin to the ironworks at Ebbw Vale and Beaufort. This provided a link with the Rassau Railroad, also completed in 1796, near Newchurch Road, connecting the three ironworks; Sirhowy, Beaufort and Ebbw Vale. The tramroad was converted to plate rail in 1805 (van Laun 2001: 121-124). Only the section between Beaufort and Ebbw Vale ironworks was surveyed during this project.

General Description

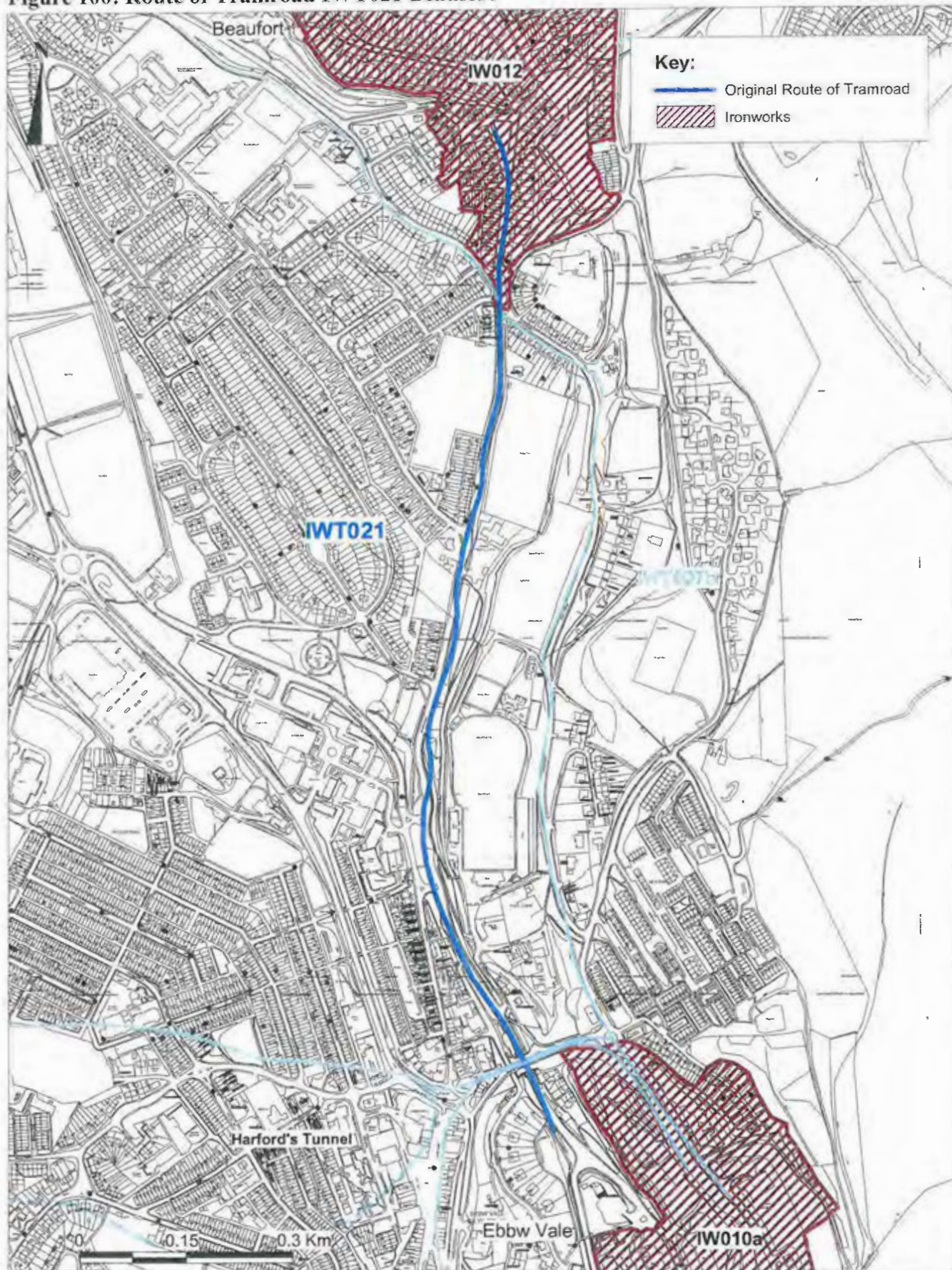
This tramroad has been surveyed as a single continuous route:

Table 120: Routes of Tramroad IWT021

Route Number	Name	Location	Figure Reference Number
IWT021	Beaufort Railroad	SO 16887 11204 to SO 16969 09797	100

No surviving remains of this tramroad survive, though its approximate route can be followed from the site of former ironworks at Beaufort, along Beaufort Terrace, Beaufort road and under the listed causeway and tunnels (LB 22532, 54602), and along Steel Works Road to the former site of the ironworks at Ebbw Vale.

Figure 100: Route of Tramroad IWT021 Beaufort



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IWT Number 022: Protheroe's Tramroad and Venallt

NGR: SN 87327 04800 to SN 85973 04714

Date Range: c. 1817 - ?

Approximate length of tramroad = 2.7 Km

Overall survival = potentially 26%

Historical Background

A tramroad from the Neath Canal to the coal workings at Cwm Gwrach was constructed by Edward Protheroe c 1817. Although Protheroe may have constructed a small ironworks in the area around this time, the anthracite fuelled Venallt Ironworks was not opened until c. 1839. Protheroe's Tramroad ran right past the ironworks site and a small branch was constructed to connect it to the works. Venallt Ironworks also built their own tramroad to the Neath Canal (IWT022a), connecting to Protheroe's route near the present day Star Inn (WGCC 1988).

General Description

This tramroad was allocated two route numbers for the purpose of this survey:

Table 121: Routes of Tramroad IWT022

Route Number	Name	Location	Figure Reference Number
IWT022	Protheroe's Tramroad	SN 87327 04800 to SN 85973 04714	101, 102
IWT022a	Venallt Tramroad	SN 86862 05928 to SN 86814 05131	101, 102

IWT022

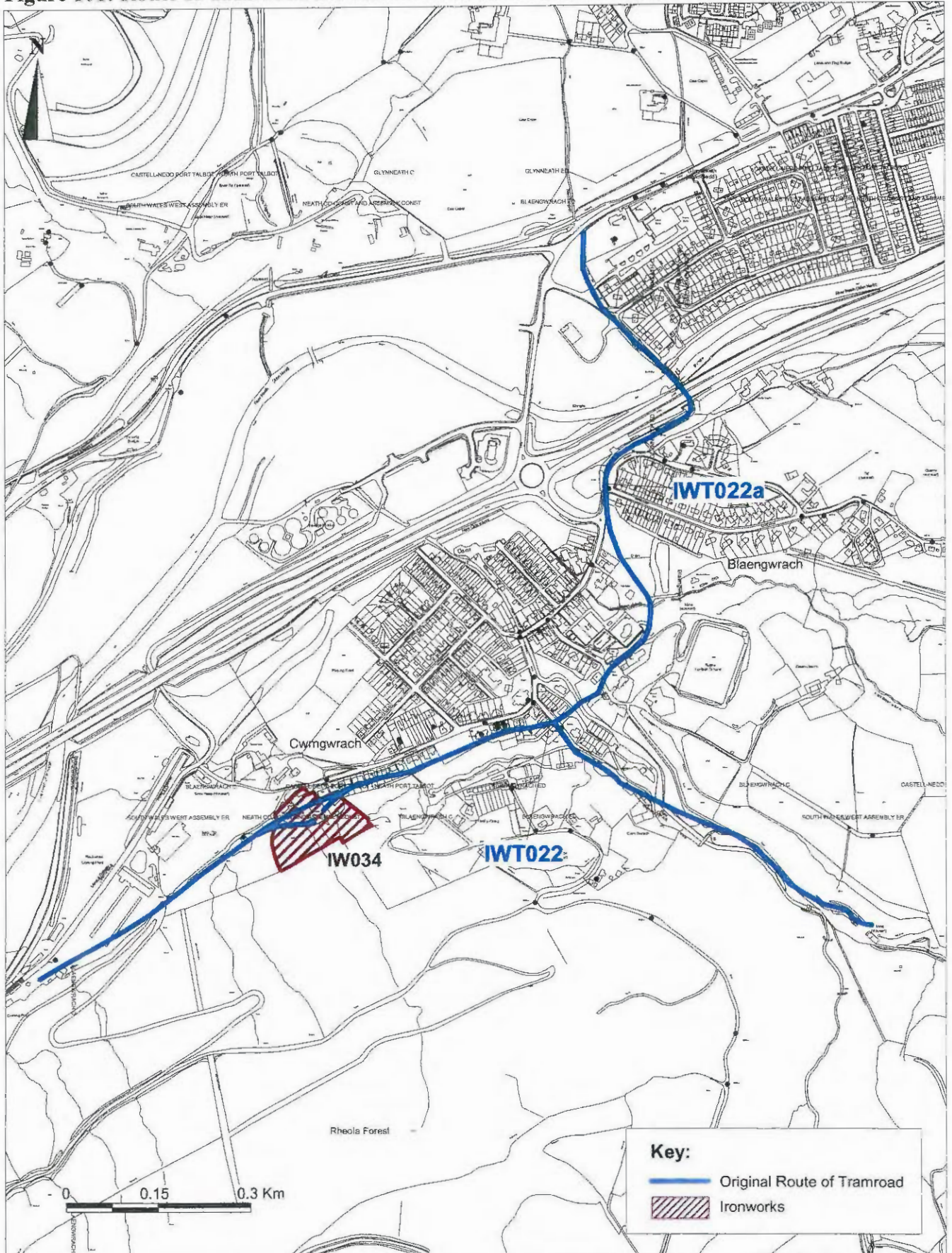
From a junction with the Neath canal the tramroad ran eastwards past the site of Venallt ironworks (GM423) to the coal workings at Cwm Gwrach. Part of its route can be traced along a modern track.

IWT022a

From near the present day Ship Inn this tramroad formed a junction with Protheroe's Tramroad and ran north to the Neath Canal along a winding route, crossing the River Neath. Its route can be traced along Chain Road, past Empire Avenue and along a lane to Plas y Felin.

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Figure 101: Route of Tramroad IWT022 Protheroe's Tramroad and IWT022a Venallt

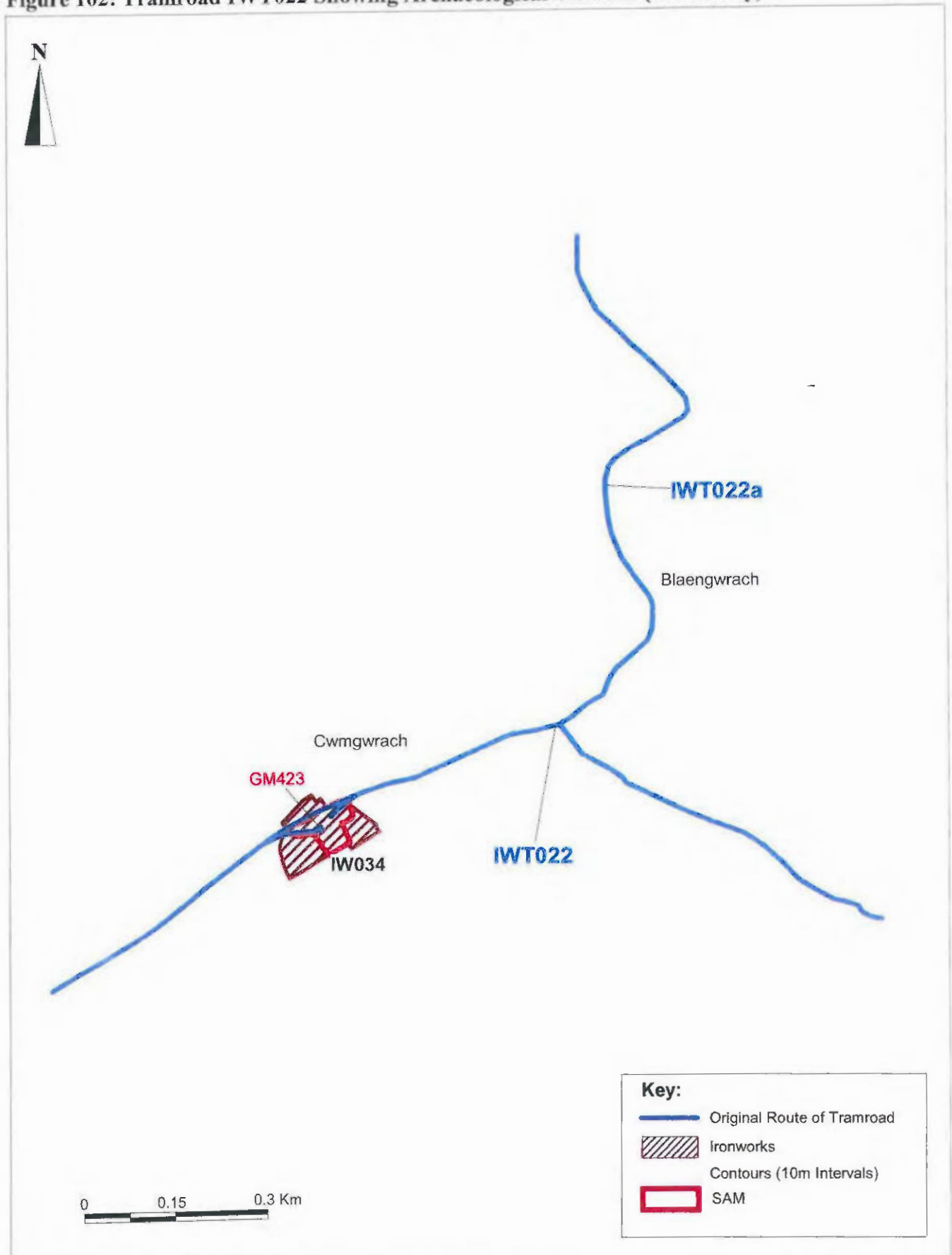


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Glamorgan-Gwent Archaeological Trust Ltd 100017916 (2006).

Figure 102: Tramroad IWT022 Showing Archaeological Interests (Pre-survey)



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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT022

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are two surviving section of IWT022 equating to a potential 26%:

Table 122: Surviving Sections of IWT022

Section Number	Location	Condition Rating	Figure Reference Number
IWT022(i)	SN 86420 04927 to SN 86371 04964	B	103, 104
IWT022(ii)	SN 86983 04999 to SN 87327 04800	U	103, 104

A small section IWT022(i) (CONDITION B) survives as a grassed over formation within the scheduled ironworks area (GM423).

IWT022(ii) (CONDITION U) was not surveyed as this section lies on private land.

Features Recorded During Survey

No individual features were recorded during the survey of this tramroad.

Archaeological interests identified prior to the current survey are shown on figure 102; details of these interests are given in Appendix III.

Current Protection/Status

IWT022(i) is protected within the scheduled ironworks area GM423.

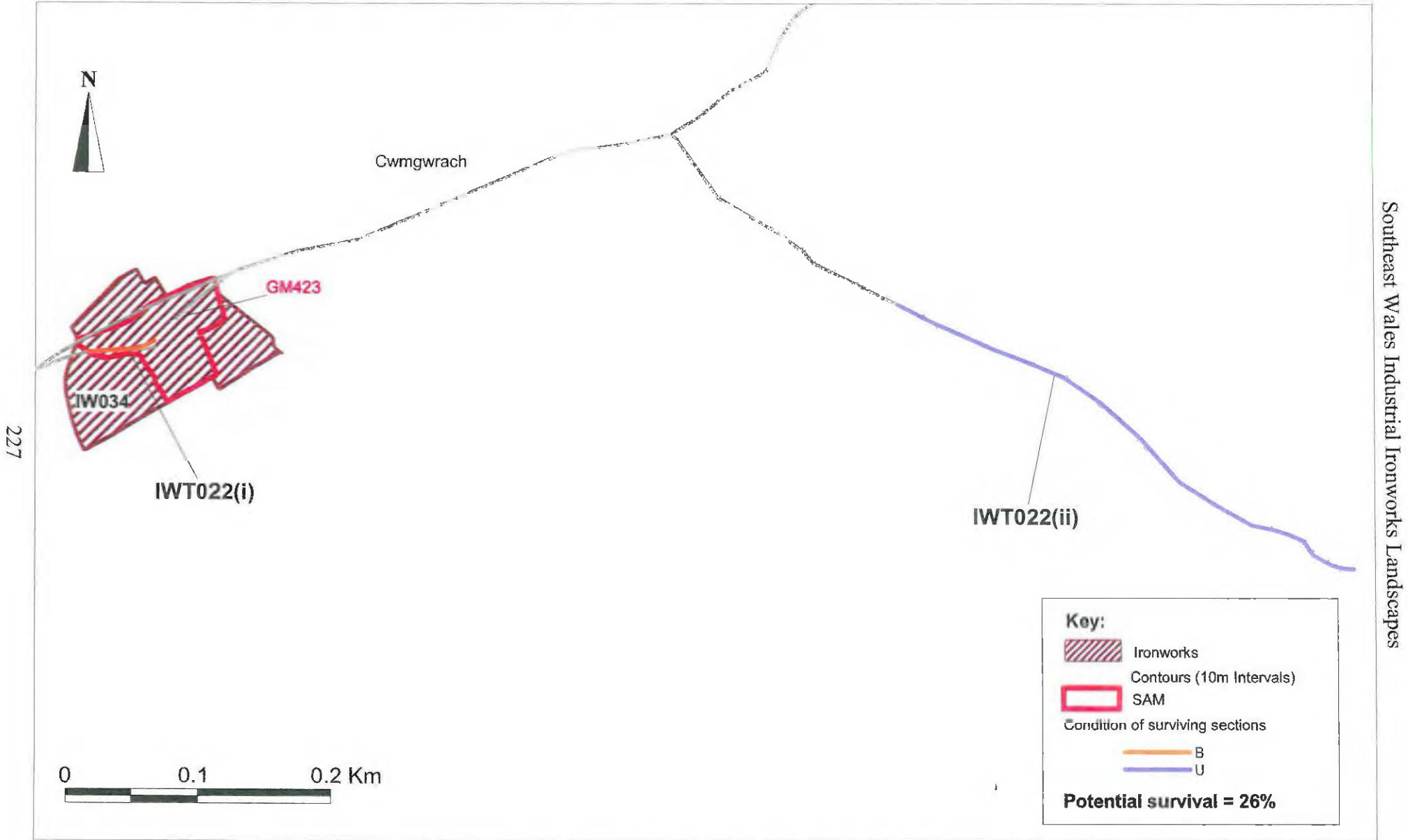
Identified Threats

No threats were identified from the UDP.

Conservation and Management Recommendations

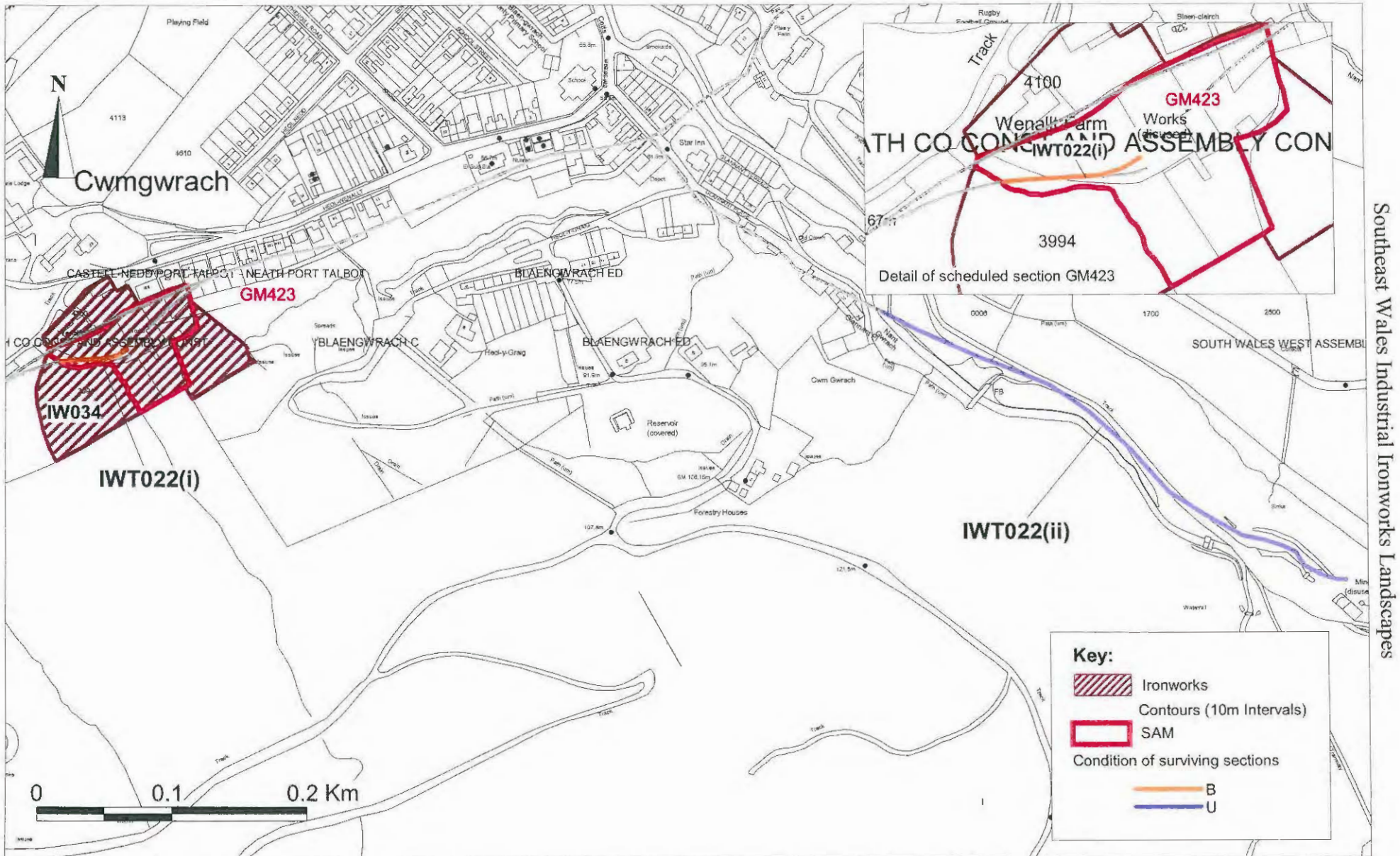
Maintain as current. Further survey is recommended along IWT022(ii) to ascertain the survival of any remains.

Figure 103: Surviving Tramroad Sections IWT022(i)-(ii)



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Figure 104: Surviving Tramroad Sections IWT022(i)-(ii)



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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT022a

There are no surviving remains of this tramroad.

IWT Number 023: Banwen Tramroad

NGR: SN 86447 09726 to SN 85090 11317

Date Range: 1840s – 1860s

Approximate length of tramroad = 3.7 Km

Overall survival = 54%

Historical Background

Known as the Banwen Ironworks Railway (Hughes 1990: 92), the tramroad built in the 1840s transported limestone from the Brecon Forest Tramroad to Banwen ironworks as well as coal and iron ore from locally worked quarries to the south and coal. Pig-iron produced at the ironworks was transported via the Banwen Railway and Brecon Forest Tramroad to nearby ironworks at Onllwyn and Ystalyfera. The use of the tramroads seems to have finally come to an end after the ironworks were disused in the 1860s (Hughes 1990: 92-96).

General Description

This tramroad was allocated two route numbers for the purpose of this survey:

Table 123: Routes of Tramroad IWT023

Route Number	Name	Location	Figure Reference Number
IWT023	Banwen Quarries Tramroad	SN 86447 09726 to SN 85739 10015	105, 106
IWT023a	Banwen Coelbren Junction	SN 85090 11317 to SN 86041 10476	105, 106

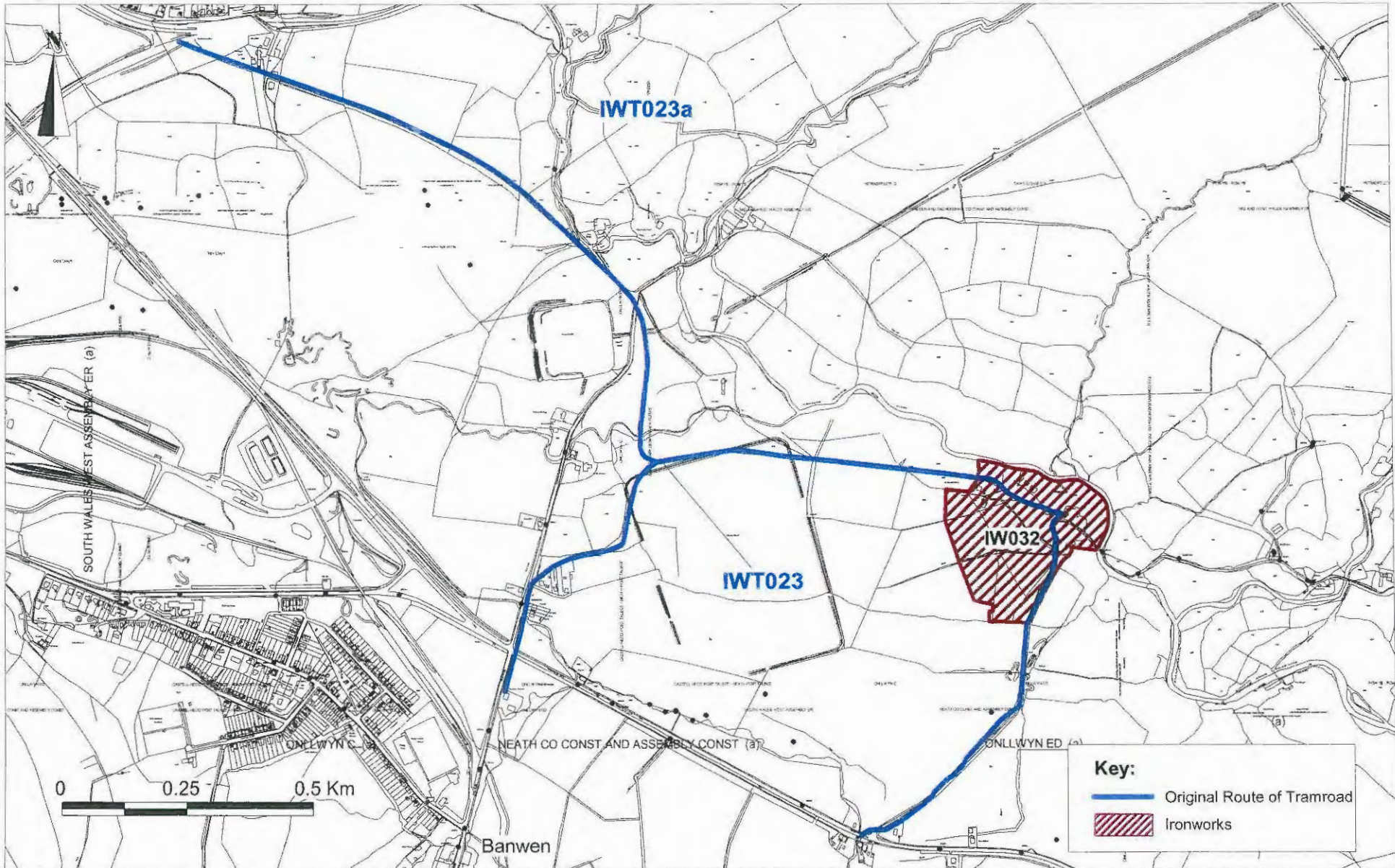
IWT023

This route runs north-east/north from the iron-ore quarries at Banwen Pryddin with a to the Banwen ironworks. The route of this section can be roughly followed along the present day minor road. From the ironworks the tramroad ran west towards Sarn Helen, this can be followed along the route of a footpath. It then turned south skirting around the Roman Camp to an area of former coal workings. The route of the tramroad ran parallel with Sarn Helen Roman Road.

IWT023a

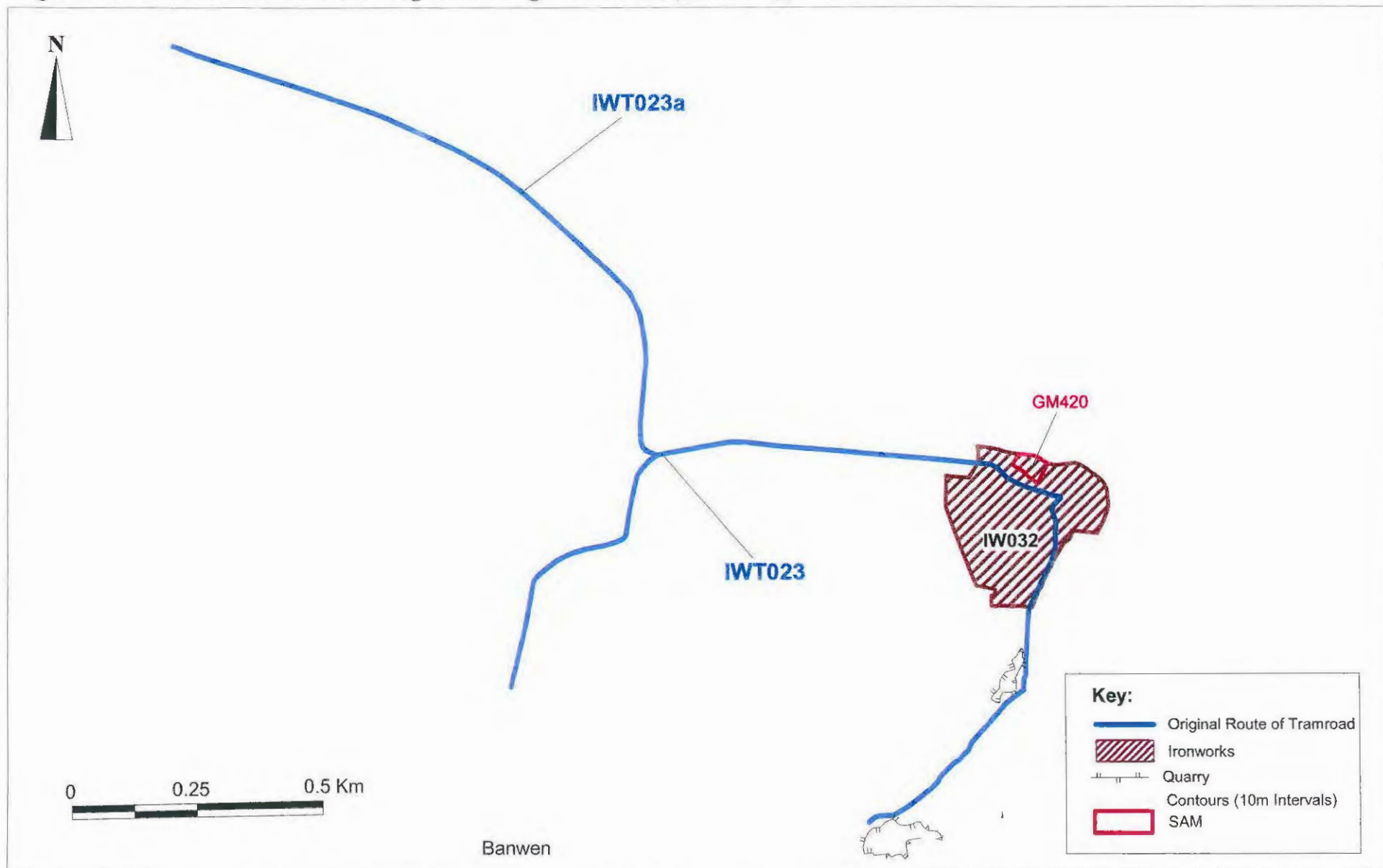
From a junction with IWT023 just northeast of the Roman Camp this route ran north crossing Sarn Helen then curved northwest to Coelbren Junction where it met the Brecon Forest Tramroad later the Neath and Brecon Railway. Most of this route can be followed along a footpath.

Figure 105: Route of Tramroad IWT023 Banwen



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Figure 106: Tramroad IWT023 Showing Archaeological Interests (Pre-survey)



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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT023

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are two surviving section of IWT023 equating to 33%:

Table 124: Surviving Sections of IWT023

Section Number	Location	Condition Rating	Figure Reference Number
IWT023(i)	SN 86849 10370 to SN 86790 10389	U	107, 108
IWT023(ii)	SN 86722 10434 to SN 86043 10475	D	107, 108

To the west a small section survives running to the south of the surviving furnaces. IWT023(i) (CONDITION U) part of the stone track bed remains visible, however, this section is severely overgrown and clearance is needed before further survey can be made of its condition.

Between IWT023(i) and (ii) the tramroad has been replaced by a tarmaced farm track.

IWT023(ii) (CONDITION D) survives in formation as a slightly raised bank now grassed over but badly damaged. The section is heavily rutted from agricultural machinery.

Features Recorded During Survey

No individual features were recorded during the survey of this tramroad.

Archaeological interests identified prior to the current survey are shown on figure 106; details of these interests are given in Appendix III.

Current Protection/Status

There is no current protection or status afforded to the tramroad. The remains of the furnaces at Banwen are scheduled (GM420).

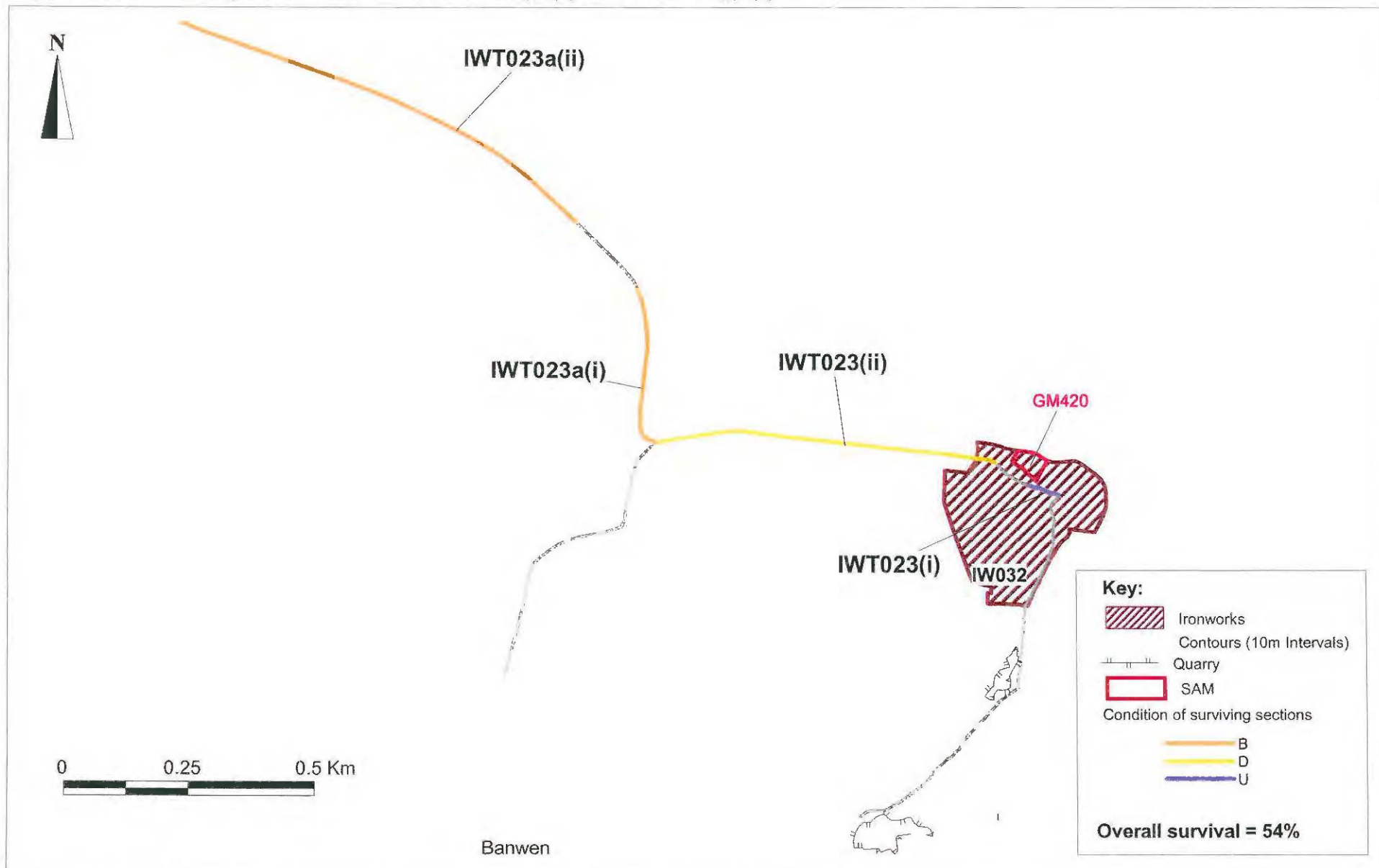
Identified Threats

No threats were identified from the UDP.

Conservation and Management Recommendations

The scheduled area of the ironworks themselves is severely overgrown and structures are becoming unsafe. Many trees growing out of the furnace walls need to be removed and consolidation work needed before the well-preserved standing structures collapse. Further survey of the tramroad following vegetation clearance is required in this area.

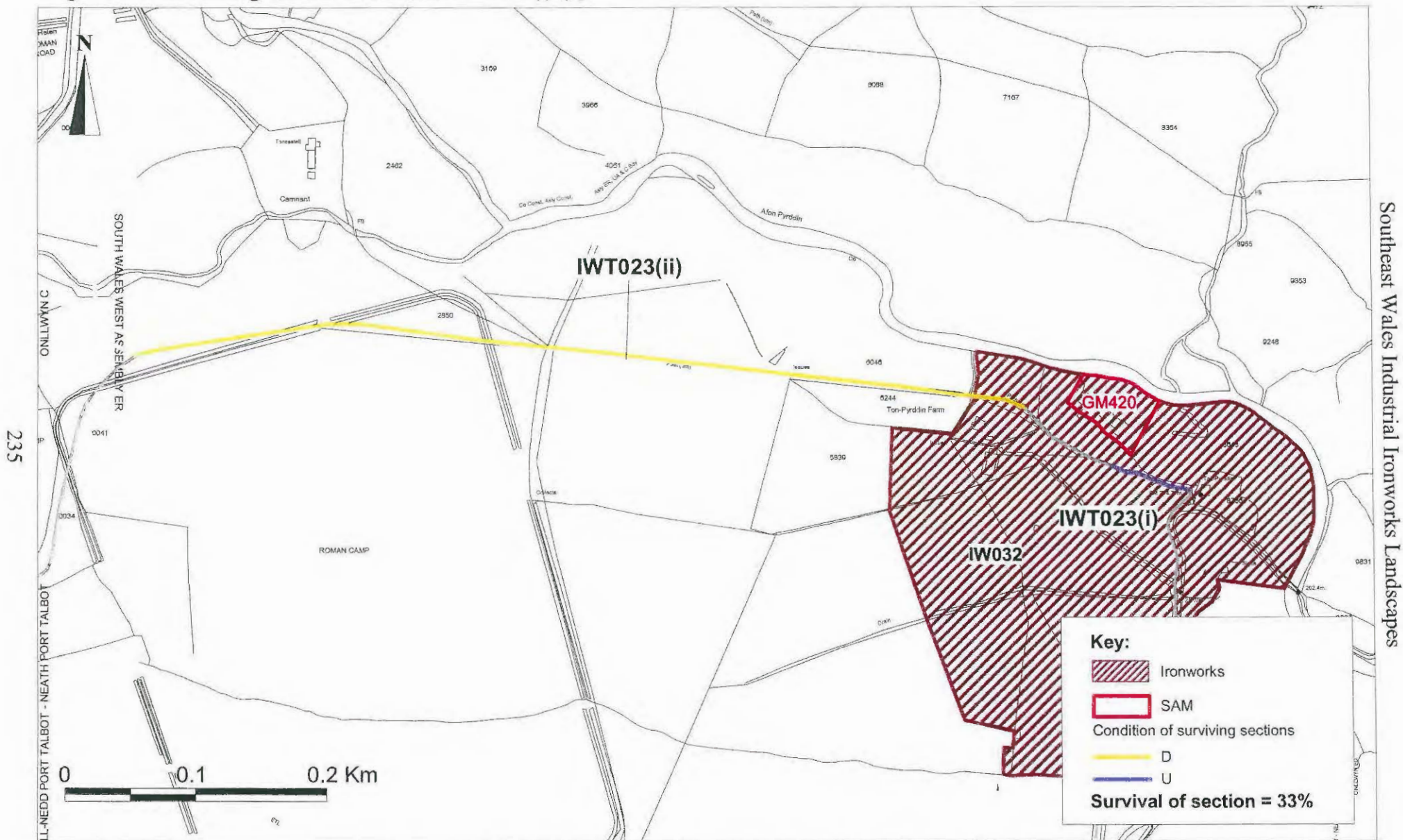
Figure 107: Surviving Tramroad Sections IWT023(i)-(ii) and IWT023a(i)-(ii)



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Figure 108: Surviving Tramroad Sections IWT023(i)-(ii)



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Southeast Wales Industrial Ironworks Landscapes

Condition of IWT023a

The identified tramroad routes have been subdivided and categorised according to their condition/survival (see Section 5.1).

There are two surviving section of IWT023a equating to 87%:

Table 125: Surviving Sections of IWT023

Section Number	Location	Condition Rating	Figure Reference Number
IWT023a(i)	SN 86004 10783 to SN 86401 10476	B	107, 109
IWT023a(ii)	SN 85090 11317 to SN 85881 10918	B	107, 109

IWT023a(i) (CONDITION B) is on private land, therefore it was not walked over. However, its formation could be seen as a grassed over bank running through the field.

Northeast of here the tramroad is no longer visible until a stile opposite Nant y Fedwen Fawr.

IWT023a(ii) (CONDITION B) this survives as a grassed over formation and is in current use as a footpath. In some places concrete slabs have been laid on top, to improve passage through slightly boggy areas. Some exposed revetment was recorded. It is possible that more remains survive in a buried state. There is slight disturbance from the farm track near Corsllwyn-goch farm.

Features Recorded During Survey

A summary of features recorded during survey are presented below, please refer to the gazetteer (Appendix II) for full details. Archaeological interests identified prior to the current survey are shown on figure 106; details of these interests are given in Appendix III.

Table 126: Features Associated with IWT023a (see Figure 109)

Feature Number	NGR	Type
IWT023a/001	SN 85881 10918	Stone block
IWT023a/002	SN 85576 11138	Revetment

Current Protection/Status

There is no current protection or status afforded to the tramroad.

Identified Threats

No threats were identified from the UDP, however, there is a threat from bog encroachment and poor drainage of the surviving areas.

Conservation and Management Recommendations

Maintain as current. Improve drainage under archaeological supervision.

Figure 109: Surviving Tramroad Sections IWT023a(i)-(ii) and Identified Interests



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IWT Number 024: Ystalyfera Tramroad

NGR: SN 76755 09387 to SN 76334 07597

Date Range: c. 1841 - ?

Approximate length of tramroad = 2.2 Km

Overall survival = 0%

Historical Background

The Ystalyfera Ironworks tramroad was constructed c. 1841 it connected to the wharf of the Swansea canal at Gurnos (Hughes 1990:260), whilst a branch also ran northwest to quarries and coal workings at Wern Fawr and south from the ironworks to the River Tawe.

General Description

This tramroad has been surveyed as a single continuous route:

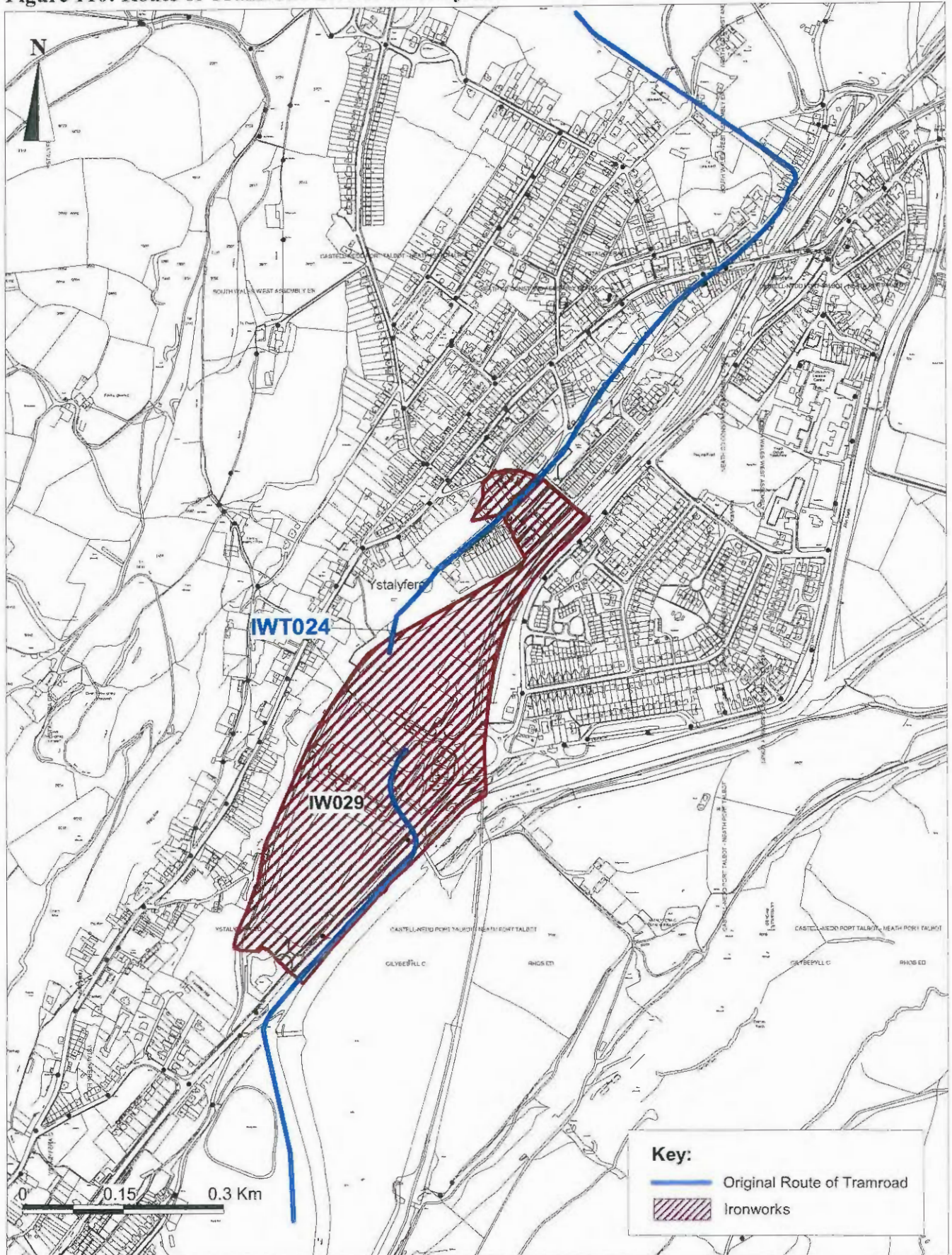
Table 127: Routes of Tramroad IWT024

Route Number	Name	Location	Figure Reference Number
IWT024	Ystalyfera Tramroad	SN 76755 09387 to SN 76334 07597	110

The route of the tramroad depicted in Figure 110 is taken from the 1st Edition OS map which shows a tramroad running from the quarries and coal levels at Wern Fawr with a junction at Gurnos Wharf to Ystalyfera ironworks and from there to a terminus alongside the River Tawe. This tramroad has been partly destroyed by the construction of houses and industrial units, though elsewhere its route can be traced along minor roads or footpaths; along Tirbach Road, Old Wern Road, Woodmans Terrace and partway along a footpath above the former ironworks site. South of the ironworks it can be followed along a tarmaced footpath alongside the river. No visible remains associated with the tramroad were noted.

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Figure 110: Route of Tramroad IWT024 Ystalyfera



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Mae'r map hwn yn seiliedig ar ddeunydd ar Arolwg Ordnans gyda chaniatâd Arolwg Ordnans ar ran Rheolwr Llyfrfa Ei Mawrhydi © Hawlfraint y Goron.

Mae atgynhyrchu heb ganiatâd yn torri Hawlfraint y Goron a gall hyn arwain at erlyniad neu achos sifil.

Glamorgan-Gwent Archaeological Trust Ltd 100017916 (2006).

IWT Number 025: Nant y glo - Beaufort Tramroad

NGR: SO 19080 11674 to SO 17060 11328

Date Range: c. 1833-?

Approximate length of tramroad = 1.6 Km

Overall survival = 0%

Historical Background

Constructed c.1833 this tramroad ran from the Beaufort Ironworks to Bailey's Llangattock Tramroad just north of Nant-y-glo. It is thought that this was initiated by Ebbw Vale's desire to avoid the high cost of the Trevil Railroad (van Laun 2001:108).

General Description

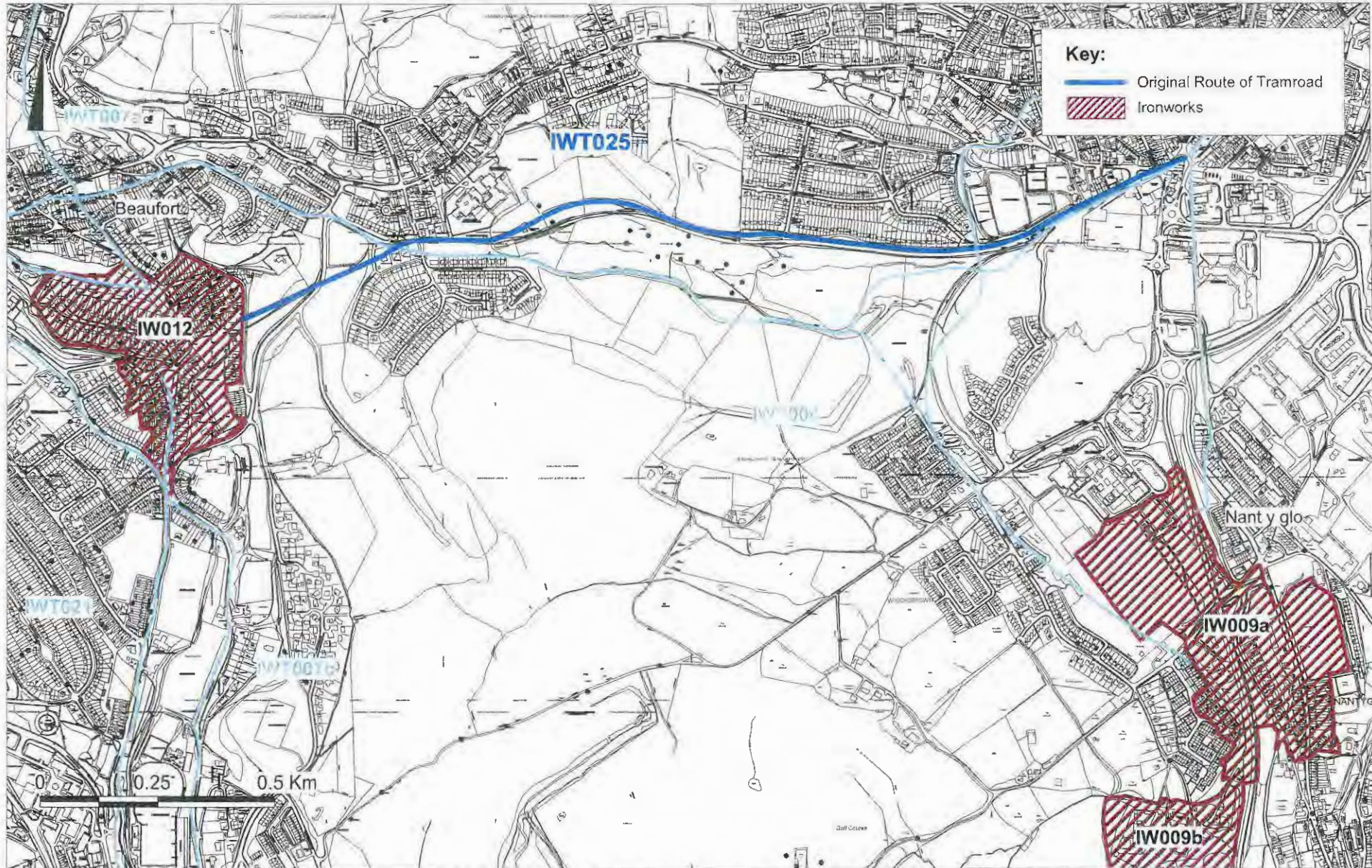
This tramroad has been surveyed as a single continuous route:

Table 128: Routes of Tramroad IWT025

Route Number	Name	Location	Figure Reference Number
IWT025	Nant-y-glo - Beaufort Tramroad	SO 19080 11674 to SO 17060 11328	111

From Beaufort Ironworks the tramroad climbed an incline before running east to join Bailey's Llangattock Tramroad. No above surface remains of this tramroad survive; the former incline is no longer visible, though the tramroad route east of here can be followed from Maeshalog House onto Bangor Road and along a tarmaced footpath to Warwick Road, across Bailey street to Market Square, where it formerly connected with Bailey's Llangattock Tramroad. No visible remains were noted.

Figure 111: Route of Tramroad IWT025 Nant y glo - Beaufort



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9. Bibliography

- Ashton, TS, 1924, *Iron and Steel in the Industrial Revolution*, Manchester: Manchester University Press.
- Atkinson, M, 1983, *Blaenafon Ironworks: A Guide to its History and Technology*.
- Archaeological Investigations Ltd, 2004, *West Merthyr Historic Landscape Merthyr Tydfil* Hereford Archaeology Series **632**.
- Archaeological Investigations Ltd, 2005, *Drainage System at Ebbw Vale/Glyn Ebwy, Blaenau Gwent*. Hereford Archaeology Series **671**.
- Barber, C, 1941, 1985, *Cordell Country / discovering the industrial heritage of an iron making community immortalized by Alexander Cordell's famous novel "Rape of the fair country"*.
- Barber, C, 1985, *Cordell Country*.
- Barber, C, 1996, *Portraits of the Past: the Industrial Heritage of Old Monmouthshire*.
- Barber, C, 1999, *Eastern Valley: the story of Torfaen*.
- Barber, C, 2002, *Exploring Blaenavon Industrial Landscape World Heritage Site*.
- Barrie, DSM, 1969, *The Taff Vale Railway*, The Oakwood Press
- Barrie, DSM, 1980, *A Regional History of the Railways of Great Britain*. Volume **12** South Wales.
- Bick, D, 1989, 'The beam engine house in Wales', *Industrial Archaeology Review* XII (1989) pp. 84-93.
- Birch, A, 1967, *An Economic History of the British Iron and Steel Industry*.
- Blaenavon Partnership, 2000, *Nomination of the Blaenavon industrial landscape for inclusion in the world heritage list*.
- Bradney, Sir J, *A History of Monmouthshire, Vol 5: the Hundred of Newport*, (pub 1993), pp. 157-161.
- Cadw, 1989, *Blaenavon Ironworks Guide Book*.
- Cadw, 1999, *Gwent: register of landscapes, parks and gardens of special historic interest in Wales*. Part 1, Parks and gardens.
- Cadw, ICOMOS UK, Countryside Council for Wales – Joint Initiative, 1998, *Register of Landscapes of Historic Interest in Wales*, Part 2 of the Register of Landscapes, Parks and Gardens of Outstanding Historic Interest in Wales. Part 2.1 Landscapes of Outstanding Historic Interest.
- Cadw, ICOMOS UK, Countryside Council for Wales – Joint Initiative, 2001, *Register of Landscapes of Historic Interest in Wales*, Part 2 of the Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales. Part 2.2 Landscapes of Special Historic Interest.
- Cadw, 2003, *Listed Building Report: Ebbw Vale Furnace Bank*.
- Caswell, B, Gaydon, J, Wanender, M, (Editors), 2002, *Ebbw Vale: 'The Works' 1790-2002*, Gwent: Ebbw Vale Works Museum.
- Clydach Historical Society, 1989, *Photographic souvenir of old Clydach and district*, Clydach Historical Society.
- Colebrook, K, 1983, 'A history of the British Ironworks, Abersychan' in *Gwent Local History* 54 (1983), pp. 6-29.
- Cordell, A, 1998, *Rape of the Fair Country*.
- Coxe, William, 1904, *Historical tour through Monmouthshire*: illustrated with views by Sir RC Hoare and other engravings.
- Davies, AC, 1978, A Welsh Waterway in the Industrial Revolution: The Aberdare Canal 1793-1900. *Journal of Transport History*, February 1978.

Southeast Wales Industrial Ironworks Landscapes

- Davies, B, 1992, 'The Future of Industrial Archaeology in Wales'. ed. by Stephen Briggs. *Welsh Industrial Heritage*, CBA Research Report No 79.
- Davies, J, *The Making of Wales*.
- Evans, C, 1993, and 'The Labyrinth of Flames': *Work and Social Conflict in Early Industrial Merthyr Tydfil*.
- Gale, WKV, 1969, *Iron and Steel*.
- Geological Survey of England and Wales, 1905, six inch scale, 2nd edition 1908.
- George, N, 1970 *South Wales British Regional Geology* (third edition).
- Gray Jones, A, 1925, *Ebbw Vale in the Eighteenth Century*, The Ebbw Vale Works Magazine
- Gray Jones, A, 1992, *The History of Ebbw Vale*, 2nd edition, 1992.
- Gladwin, DD & JM, 1991, *The Canals of the Welsh Valleys and their Tramroads*.
- Great Britain Mines Department, 1930, *Catalogue of plans of abandoned mines Vol IV: Anglesey, Brecknock, Cardigan, Carmarthen, Carnarvon [sic], Denbigh, Flint, Glamorgan, Merioneth, Monmouth, Montgomery, Pembroke*.
- Griffiths, S, 1873. *Griffiths' Guide to the Iron Trade of Great Britain*, rep. 1967, Newton Abbot: David & Charles.
- Hadfield, ECR, 1967, *The Canals of South Wales and the Border*.
- Harris, JR, 1988, *The British Iron Industry 1700-1850*.
- Hoare, R Colt, 1983, *The Journeys of Sir Richard Colt Hoare through Wales and England*.
- Hughes, S and Reynolds, PR, 1988, *Industrial Archaeology of the Swansea Region*.
- Hughes, S, 1990, *The Brecon Forest Tramroads: RCAHMW*.
- Hyde, CK, 1977, *Technological Change and the British Iron Industry*.
- Ince, L, 1989, 'Water power and cylinder blowing in early South Wales coke ironworks' *Journ. Hist. Metal*, 23, 2.
- Ince, L, 1991, *The Knight Family and the British Iron Industry 1695-1902*.
- Ince, L, 1993, *The South Wales Iron Industry 1750-1885*, Birmingham: Ferric Publications.
- Ironbridge Institute and RCAHMW, 1992, *British Ironworks, Abersychan, Gwent: an archaeological report*.
- Ironbridge Institute and RCAHMW, 1994, *British Ironworks, Abersychan, Gwent: an archaeological report*. Ironbridge Institute Research Paper No. 94.
- Ironbridge Gorge Museum Trust Archaeology Unit, 1994, *Hirwaun Ironworks, Mid-Glamorgan: an Archaeological Evaluation for Mid-Glamorgan County Council* Ironbridge Archaeological Series No. 38.
- John, AH, 1950, *The Industrial Development of South Wales 1750-1850*.
- Jones, Edwin, 1981, *Old Brynmawr, Nantyglo & Blaina in photographs*. Edwin Jones and Trevor Rowson; foreword by Peter J. Law. Vol.2
- Knight, JK, 1967, 'Blaenavon Ironworks 1789-1976: a preliminary survey' *Journal of the South East Wales Industrial Archaeology Society*. 11(3), 26-38.
- Knight, JK, 1989, *Blaenavon Ironworks: a bicentennial guide*.
- Lewis, J, & Thomas, M, 1987, *Blaenavon Through the Years in Photographs*, vol. I.
- Lewis, J, & Thomas, M, 1988, *Blaenavon Through the Years in Photographs*, vol. II.
- Lewis, J, & Thomas, M, 1993, *Blaenavon Through the Years in Photographs*, vol. III.
- Lloyd, J, 1906. *The Early History of the Old South Wales Ironworks 1760-1840*.
- Lock, SD, 1970. *Iron Making at Blaenavon: Newport Museum & Art Gallery*.
- Lord, AEM, 1968, *A History of Ebbw Vale 1775-1927*, Unpublished.
- Lord, P, 1998, *The Visual Culture of Wales: Industrial Society* University of Wales, Cardiff.
- Lowe, JB, 1977, *Welsh Industrial Workers' Housing 1775-1875*.

Southeast Wales Industrial Ironworks Landscapes

- Lowe, JB, 1978, 'The First Forge at Blaenavon', *Journal of the South East Wales Industrial Archaeology Society*, III (1), 31-40.
- Lowe, JB, 1982, 'Housing as a Source for Industrial History: A Case Study of Blaenavon'. IA: *Journal of the Society for Industrial Archaeology*, VIII (1), 24-19.
- Lowe, JB, & Anderson, DN, 1972-75, *University of Wales Institute of Science and Technology Iron Industry Housing Papers: I-VIII*, Cardiff: University of Wales Institute of Science and Technology.
- Lowe, J, & Lawler, M, 1980, Landscapes of the Iron Industry at Blaenafon, Gwent, *Landscape History II* 71-82.
- Mear, JF, 1999, *Aberdare the Railways and Tramroads*, Aberdare
- Morris, A, 1927, *Monmouthshire Iron Industry (a retrospect)*, The Ebbw Vale Works Magazine.
- Musson, C, 1995, *Wales from the Air: Patterns of Past and Present*.
- Newman, J, 2000, *The Buildings of Wales: Gwent/Monmouthshire*.
- Osborne, BS, 1976-77, 'Patching, scouring and commoners: the development of an early industrial landscape', *Industrial Archaeology Review*, I(1), 37-42.
- Oxford Archaeological Unit, 1992, *Gadlys Estate, Aberdare, Mid-Glamorgan: An Archaeological Survey*.
- Parry, C, 1870, *The Past and Present History of Ebbw Vale*, Unpublished.
- Parry, TB, 1964-65, 'The Blorenge; a Study of Old Ironworkings on the Blorenge Mountain in Monmouthshire'. *Journal of Industrial Archaeology*, 1, 77-93.
- Philips, J, 1894, *History of the Ebbw Vale Works & Collieries*, Unpublished.
- Rattenbury, Gordon, 1980, *Tramroads of the Brecknock & Abergavenny Canal*.
- RCAHMW, 2003, *The Archaeology of the Welsh Uplands*.
- Rees, DM, 1969, *Mines, Mills and Furnaces*.
- Rees, DM, 1975, *The Industrial Archaeology of Wales*.
- Riden, P, 1994, *Historical, topographical and archaeological assessment of the implications of the British Reclamation Scheme, Abersychan, Gwent*.
- Riden, P and, Owen, JG, 1995, *British Blast Furnace Statistics 1790-1980*, Merton Priory Press, Cardiff.
- Rowson, Trevor, 1980, *Old Brynmawr, Nantyglo & Blaina in photographs*, Trevor Rowson and, Edwin Jones; foreword by Peter J. Law. Vol.1.
- Rowson, Trevor, 1995, *Blaina, Nantyglo and Brynmawr*, compiled by Trevor Rowson and edited by Simon Eckley.
- Schubert, HR, 1957. *A History of the British Iron and Steel Industry from c 450 bc to ad 1775*.
- Scott, M, 2004, *Land at Old 45 Yard, Steelworks Road, Ebbw Vale Geotechnical & Environmental Report*.
- Stevens, RA, 1974, *Towpath guide to the Brecknock & Abergavenny and Monmouthshire Canals*.
- Tann, P, 1996, The Tappenden's Tramroad to Neath Canal 1800-14, *Journal of the Railway and Canal Historical Society*, 164
- Thomas, K, 1979, *Old Ebbw Vale in Photographs*, Barry: Stewart Williams Publishers.
- Thomas, K, 2000, *Heritage: A History of Ebbw Vale Volume 1*, Cwmbran: Kerin Publishers.
- Thomas, M, 1995, *Brynmawr, Beaufort and Blaina in photographs*, foreword by John J. Hopkins.
- Thomas, WG, 1981, *Big Pit, Blaenavon*, Cardiff: National Museum of Wales.
- Thompson, MW, 1983, *The Journeys of Sir Richard Colt Hoare Through Wales and England 1793 - 1810*.
- TICCIH, 1994, *The International Industrial Sites List*.

Southeast Wales Industrial Ironworks Landscapes

- Trinder, B, 1982, *The Making of the Industrial Landscape*.
- Trinder, B, 1996, 'Industry and the World Heritage', *World Heritage Review I*.
- van Laun, J et al, 1978-79, 'Hill Pits. Blaenavon', *Industrial Archaeology Review*, **III (3)**, 258-75.
- Van Laun, J, 1981 *Mineral Extraction at Blaenavon*.
- Van Laun, John, 1989, *Clydach Gorge: industrial archaeology trails in the south-east of the Brecon Beacons National Park*.
- Van Laun, J, 2001, *The Pattern of Past Industry in the National Park* (Brecon Beacons National Park).
- Van Laun, J, 2001, *Early Limestone Railways*, London: The Newcomen Society.
- Wakelin, P, 1996, 'Scouring the Land: Early Iron Ore Extraction at Blaenavon', *Monmouthshire Antiquary XII*, 62-68.
- Wessex Archaeology, 2004, *Land off Steel Works Road, Ebbw Vale, Blaenau Gwent, South Wales: Archaeological Desk-based Assessment*, Report reference: 56380.01. -
- Wilkins, C, 1903, *History of Iron, Steel, Tinsplate and other Trades of Wales*.
- Williams, M, 1975, *The Making of the South Wales Landscape*.
- Wilson, Anne, 1988, *Excavation of Clydach ironworks (Clydach Gorge), Clydach South, Gwent, September 1986 - March 1988*.

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Cartographic and Documentary Sources

The following paper format maps were consulted:

The Tithe maps and apportionments (National Library of Wales and Gwent Record Offices):
OS 6-inch maps (National Library of Wales): all four editions.
Geological Survey of Great Britain 3rd Impression 1972.

The following digital maps were consulted:

OS 6 and 25-inch maps Landmark Historic Mapping 1st (1880), 2nd (1901) and 3rd (1920) editions.
OS Landline Data.
OS 1:50,000 (Raster).
CCW Environmental data

Other Maps Including Estate Maps and Sales Catalogues

Estate maps, sales catalogues and papers held at the National Library of Wales, Aberystwyth, the Glamorgan Record Office, Cardiff, the West Glamorgan Record Office, Swansea and the Gwent Record Office, Cwmbran were consulted. In particular the collections of the Dowlais and Rhymney iron companies and the Ynyscedwyn and Abergavenny estates. Other sources consulted included the OS Surveyor's Drawings (British Library 1830s), the OS 1-inch to the mile map (David and Charles Edition) c. 1838.

A selection of the cartographic sources consulted include:

1842: 'Plan of property at Ebbw Vale & Sirhowy Iron Works in the County of Monmouth Belonging to Messrs Harford, Davies & Co. Copied from a plan made by Wm. Adams, Mine Agent, Ebbw Vale, by M Scott of Newcastle on Tyne' (Ebbw Vale Works Museum)
1844: Plan in 'Sale Catalogue of Estates known as Ebbw Vale & Sirhowy Iron Works' (GRO - D43 Newport 6336)
Survey of the Barony of Abergavenny by David Davies 1821 (GRO D1583.188)
Christopher and John Greenwood's: Map of the County of Monmouth 1830
Property of Blaenavon Ironworks 1837 (GRO D591.112.27).
Board of Health Plans c.1850 (Merthyr Tydfil).

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Appendix I

Table of ironworks transport networks showing % overall survival in relation to associated ironworks and the archaeological value of the ironworks core areas

Ironworks Transport Number ⁵	Name	Condition Rating	% Overall Survival	Associated Ironworks: Number(s)/Name(s)	Respective Archaeological Value ⁶ of Ironwork Core Area(s)	Consider Scheduling
IWT001	Abersychan Limestone Railway	IWT001(i): D IWT001(ii): A	55%	IW004 Abersychan (British)	Archaeologically sensitive area	Yes; IWT001(ii): entire length
IWT002	Llam-march Railroad	IWT002(i): B IWT002(ii): D	11%	IW006 Clydach	Archaeologically sensitive area	Yes; IWT002(i): extend SAM BR161 to include remainder of incline
IWT002a	Llam-march Railroad (Waunllapria)	IWT002a(i): B	4%	IW006 Clydach	Archaeologically sensitive area	No
IWT003	Llam-march Tramroad	IWT003(i): B IWT003(ii): D IWT003(iii): A IWT003(iv): B IWT003(v): A	35%	IW006 Clydach	Archaeologically sensitive area	Yes; extend SAM BR161 to include remainder of incline IWT003(iv); parts of IWT003(iii) and IWT003(v)
IWT003a	Llam-march Tramroad Pen-Ffyddlwn	IWT003a: D	0%	IW006 Clydach	Archaeologically sensitive area	No
IWT004	Clydach Railroad	IWT004(i): B IWT004(ii): C IWT004(iii): B IWT004(iv): E IWT004(v): E IWT004(vi): C	20%	IW006 Clydach, IW012 Beaufort	Archaeologically sensitive area, Low-moderate potential	No
IWT005	Bailey's Llangattock Tramroad	IWT005: D	<1%	IW009 Nant-y-glo, IW012 Beaufort: 2nd Llangattock Tramroad	Archaeologically sensitive area/moderate-high potential, Low-moderate potential	No
IWT006	Disgwylfa Main Tramroad	IWT006(i): D IWT006(ii): B IWT006(iii): D IWT006(iv): B IWT006(v): C	100%	IW009 Nant-y-glo, IW007 Blaina	Archaeologically sensitive area/moderate-high potential, Low-moderate	Yes; in particular IWT006(ix) but also: IWT006(iv)

⁵ Numbers prefixed by IWT in main text.

⁶ Archaeological significance values as established in Year one report.

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		IWT006(vi): B IWT006(vii): C IWT006(viii): B IWT006(ix): A IWT006(x): B			potential	IWT006(vi) IWT006(viii) IWT006(x)
IWT006a	Disgwylfa Pant Draenog	IWT006a(i): B	100%	IW009 Nant-y-glo, IW007 Blaina	Archaeologically sensitive area/moderate-high potential, Low-moderate potential	Yes; IWT006a(i)
IWT006b	Disgwylfa East	IWT006b(i): B	100%	IW009 Nant-y-glo, IW007 Blaina	Archaeologically sensitive area/moderate-high potential, Low-moderate potential	Yes; IWT006b(i)
IWT006c	Disgwylfa West	IWT006c(i): B IWT006c(ii): A IWT006c(iii): A IWT006c(iv): A	94%	IW009 Nant-y-glo, IW007 Blaina	Archaeologically sensitive area/moderate-high potential, Low-moderate potential	Yes; IWT006c(i) IWT006c(ii) IWT006c(iii) IWT006c(iv)
IWT006d	Disgwylfa Main (conjectured)	IWT006d: D	0%	IW009 Nant-y-glo, IW007 Blaina	Archaeologically sensitive area/moderate-high potential, Low-moderate potential	No
IWT006e	Disgwylfa Main (south)	IWT006e(i): A IWT006e(ii): B IWT006e(iii):B	9%	IW009 Nant-y-glo, IW007 Blaina	Archaeologically sensitive area/moderate-high potential, Low-moderate potential	No
IWT007	Trevil Railroad Main Line	IWT007(i): A IWT007(ii): E IWT007(iii): A IWT007(iv): E IWT007(v): B IWT007(vi): B	61%	IW014 Sirhowy, IW012 Beaufort, IW010 Ebbw Vale with Victoria Ironworks: Rassau Railroad	Archaeologically sensitive area/high potential, Low-moderate potential, Archaeologically sensitive area/low potential	Yes; especially IWT007(iii)
IWT007a	Trevil Railroad Beaufort Line	IWT007a: D	<1%	IW012 Beaufort: Rassau Railroad	Low-moderate potential	No
IWT007b	Trevil Railroad Ebbw Vale Line	IWT007b: D	<1%?	IW012 Beaufort, IW010 Ebbw Vale: Rassau Railroad	Low-moderate potential, Archaeologically sensitive area/low potential	No
IWT007c	Trevil Railroad Sirhowy Line	IWT007c: D	0%	IW014 Sirhowy: Rassau Railroad	Archaeologically sensitive area/high potential	No

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	Sirhowy Line				potential	
IWT007d	Trevil line to Victoria	IWT007d: D	0%	IW010 Ebbw Vale, IW011 Victoria: Beaufort Tramroad	Archaeologically sensitive area/low potential. Low-moderate potential	No
IWT008	Rassau Railroad	IWT008(i): E IWT008(ii): E	14%	IW012 Beaufort, IW014 Sirhowy, IW010 Ebbw Vale	Low-moderate potential, Archaeologically sensitive area/high potential, Archaeologically sensitive area/low potential	No
IWT009	Hall's Trevil Tramroad	IWT009(i): B IWT009(ii): C	7%	IW015a Rhymney Upper Furnace: Rhymney Branch Tramroad; Bryn Oer Tramroad	Archaeologically sensitive area	No
IWT010	Rhymney Tramroad Branch	IWT010(i): U	3%	IW015a Rhymney Upper Furnace	Archaeologically sensitive area	No
IWT011	Morlais East Tramroad and Railway	IWT011(i): B IWT011(ii): D IWT011(iii): E	39%	IW023 Ivor works and IW022 Dowlais Ironworks.	Archaeologically sensitive area/moderate potential, Archaeologically sensitive area/moderate-high potential	No
IWT012	Morlais West Tramroad	IWT012(i): C IWT012(ii): A IWT012(iii): E	34%	IW021 Penyardren Ironworks and tramroad, IW018 Plymouth Ironworks	Moderate-high potential, Archaeologically sensitive area/low-moderate potential	Yes; especially IWT012(ii)
IWT013	Tappendens' Tramroad	IWT013(i): A IWT013(ii): B IWT013(iii): B IWT013(iv): C IWT013(v): U IWT013(vi): E IWT013(vii): E IWT013(viii): C IWT013(ix): A	29%	IW024 Hirwaun, IW025 Llwydcoed, IW027 Abernant, IW026 Gadlys	Archaeologically sensitive area/high potential, Archaeologically sensitive area/high potential. Low-moderate potential, Archaeologically sensitive area/moderate-high potential	Yes; especially IWT013(ix)
IWT013a	Tappendens' Tramroad West	IWT013a(i): C IWT013a(ii): C IWT013a(iii): C IWT013a(iv): U	16%	IW024 Hirwaun, IW025 Llwydcoed, IW027 Abernant, IW026 Gadlys	Archaeologically sensitive area/high potential, Archaeologically sensitive area/high potential	No

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		IWT013a(v): B			potential, Low-moderate potential, Archaeologically sensitive area/moderate-high potential	
IWT014	Mr Glover's Railroad	IWT014(i): A IWT014(ii): E IWT014(iii): B	65%	IW024 Hirwaun (later connection to IW025 Llwydcoed, IW027 Abernant, IW026 Gadlys Ironworks via 'Tappendens' Tramroad)	Archaeologically sensitive area/high potential, Archaeologically sensitive area/high potential, Low-moderate potential, Archaeologically sensitive area/moderate-high potential	No; but possibly re-consider as part of adjacent quarry landscape at a later stage.
IWT014a	Mr Glovers Railroad Bryngwyn Extension	IWT014a(i): B	6%	IW024 Hirwaun (later connection to JW025 Llwydcoed, IW027 Abernant, IW026 Gadlys Ironworks via 'Tappendens' Tramroad)	Archaeologically sensitive area/high potential, Archaeologically sensitive area/high potential, Low-moderate potential, Archaeologically sensitive area/moderate-high potential	No
IWT015	Twynau Gwynion Tramroad Line 1	IWT015(i): C IWT015(ii): B	25%	IW022 Dowlais	Archaeologically sensitive area/moderate-high potential	Yes; IWT015(ii) and possibly IWT015(i) due to substantial bridge abutments
IWT015a	Twynau Gwynion Tramroad line 2	IWT015a(i): D IWT015a(ii): C IWT015a(iii): C IWT015a(iv): D IWT015a(v): C IWT015a(vi): C IWT015a(vii): B	50%	IW015a Rhymney Upper Furnace	Archaeologically sensitive area	Yes; IWT015a(vii)
IWT015b	Twynau Gwynion Tramroad line 3	IWT015b(i): C	87%	IW022 Dowlais (partly under later Rhymney Limestone Railway)	Archaeologically sensitive area/moderate-high potential	No
IWT015c	Twynau Gwynion Tramroad Line	IWT015c(i): B IWT015c(ii): U	19%	IW022 Dowlais (partly under route of Rhymney Limestone	Archaeologically sensitive area/moderate-	No

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	4			Railway)	high potential	
IWT016	Rhymney Limestone Railway	IWT016(i): E IWT016(ii): B	29%	IW015 Rhymney Lower Furnace	Sterile-low potential	No
IWT017	Bryn Oer Tramroad	IWT017: D	0% (within Glamorgan and Gwent)	IW015/015a Rhymney (via Hall's Trevil Tramroad)	Archaeologically sensitive area/sterile-low potential	No
IWT018	Tredegar Tramroad	IWT018(i): B	4%	IW013 Tredegar Ironworks	Moderate potential	No
IWT019	Ebbw Vale Private Line	IWT019(i): B	2%	IW010 Ebbw Vale and IW014 Sirhowy Ironworks	Archaeologically sensitive area/low potential, Archaeologically sensitive area/high potential	No (surviving features still in use)
IWT019a	Ebbw Vale Private line addition	IWT019a: D Only a tunnel (IWT019a/001) under Beaufort road survives.	<1%	IW010 Ebbw Vale and IW014 Sirhowy Ironworks (via Harford's Tunnel)	Archaeologically sensitive area/low potential, Archaeologically sensitive area/high potential	No
IWT020	Bute Tramroad	IWT020: D	0%	IW015 Rhymney Lower Furnace (via Dowlais' Twynau Gwynion line 4)	Sterile-low potential	No
IWT021	Beaufort Tramroad	IWT021: D	0%	IW012 Beaufort and IW010 Ebbw Vale	Low-moderate potential, Archaeologically sensitive area/low potential	No
IWT022	Protheroe's Tramroad	IWT022(i): B IWT022(ii): U	26%?	IW034 Venallt	Archaeologically sensitive area/high potential	No
IWT022a	Venallt Tramroad	IWT022a: D	0%	IW034 Venallt	Archaeologically sensitive area/high potential	No
IWT023	Banwen Quarries Tramroad	IWT023(i): U IWT023(ii): D	33%	IW032 Banwen	Archaeologically sensitive area/high potential	Consider scheduling area of weighbridge and adjacent tramroad formation within core ironworks area.
IWT023a	Banwen Coelbren Junction	IWT023a(i): B IWT023a(ii): B	87%	IW032 Banwen	Archaeologically sensitive area/high potential	No
IWT024	Ystalyfera	IWT024: D	0%	IW029 Ystalyfera	Archaeologically sensitive area/low potential	No

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					sensitive area/moderate-high potential	
IWT025	Nant-y-glo - Beaufort	IWT025: D	0%	IW012 Beaufort (also IW009 Nant-y-glo via Bailey's Llangattock Tramroad)	Low-moderate potential, Archaeologically sensitive area/moderate-high potential	No

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Appendix II

Feature Number IWT001/001	Name Abersychan Limestone Railway Stone Block		
NGR SO 27313 03460		Type Stone block	Site Status None
Summary Exposed stone block <i>in situ</i> with 2 drilled holes, approx. dimensions 0.43m x 0.21m, holes 0.11m apart.			

Feature Number IWT001/002	Name Abersychan Limestone Railway Stone Blocks		
NGR SO 27325 03547		Type Stone block	Site Status None
Summary 3 partly exposed stone blocks <i>in situ</i> , average dimensions 0.4m x 0.31, holes 0.10-0.11m apart.			

Feature Number IWT001/003	Name Abersychan Limestone Railway Stone Block		
NGR SO 27326 03556		Type Stone block	Site Status None
Summary Stone block <i>in situ</i> with 2 drilled holes, approx. 0.1m apart, one with remains of metal spike <i>in situ</i> and wear from rails.			

Feature Number IWT001/004	Name Abersychan Limestone Railway Stone Blocks		
NGR SO 27321 03492		Type Stone block	Site Status None
Summary 3 partly exposed stone blocks <i>in situ</i> approx. 1m apart with drilled holes. Another 5 partly exposed stone blocks to the N of these.			

Feature Number IWT001/005	Name Abersychan Limestone Railway Revetment		
NGR SO 2743 0381		Type Revetment	Site Status None
Summary Exposed dry stone revetment, random construction near substantial quarry approx. 15m in length.			

Feature Number IWT001/006	Name Abersychan Limestone Railway Cutting		
NGR1 SO 2745 0382	NGR2 SO 2745 0386	Type Tramroad cutting	Site Status None
Summary Slight cutting for tramroad, running parallel is another cutting, this could mean that the track could possibly have been moved during expansion of a nearby quarry.			

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Feature Number IWT001/007	Name Abersychan Limestone Railway Stone Blocks		
NGR SO 27430 04220		Type Stone block	Site Status None
Summary Line of exposed flat stone blocks <i>in situ</i> , (one with a single drilled hole) along top of revetment approx. 10m in length 0.75m high.			

Feature Number IWT001/008	Name Abersychan Limestone Railway Stone Blocks		
NGR SO 2746 0385		Type Stone block	Site Status None
Summary 3 exposed stone blocks <i>in situ</i> each with 2 drilled holes along grass covered formation. Approx. 0.5m x 0.3m, holes 0.1m apart.			

Feature Number IWT001/009	Name Abersychan Limestone Railway Stone Blocks		
NGR SO 2746 0390		Type Stone block	Site Status None
Summary 4 exposed stone blocks <i>in situ</i> with 2 drilled holes and wear marks, 1 exposed block with wear from rail approx 17m to the South.			

Feature Number IWT001/010	Name Abersychan Limestone Railway Stone Blocks		
NGR SO 2742 0412 - SO 2741 0409		Type Stone block	Site Status None
Summary Line of stone blocks <i>in situ</i> with 2 drilled holes approx. 30m long. Double line representing both sides of the track in some places, gauge of track measured to be approx. 3ft 8in. A couple of blocks have wear marks from rail.			

Feature Number IWT001/011	Name Abersychan Limestone Railway Stone Blocks		
NGR SO 2744 0414 - SO 2751 0432		Type Stone block	Site Status None
Summary Line of stone blocks, 2 drilled holes approx. 0.1m apart and some with wear marks found <i>in situ</i> , slightly disturbed.			

Feature Number IWT001/012	Name Abersychan Limestone Railway Stone Block		
NGR SO 27530 04320		Type Stone block	Site Status None
Summary Stone block out of <i>situ</i> with oblong wear mark.			

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Feature Number IWT001/013	Name Abersychan Limestone Railway Stone Blocks		
NGR SO 2764 0438		Type Stone block	Site Status None

Summary

Line of approx. 32 partly exposed stone blocks *in situ* with 2 drilled holes and some with rectangular wear marks.

Feature Number IWT001/014	Name Abersychan Limestone Railway Stone Blocks		
NGR SO 27440 04250		Type Stone block	Site Status None

Summary

Line of partly exposed stone blocks *in situ* with 2 drilled holes running sporadically for approx. 70m. More are possibly buried under leaf litter. Some have good examples of oblong wear marks.

Feature Number IWT001/015	Name Abersychan Limestone Railway Junction		
NGR SO 2816 0456		Type Tramroad junction	Site Status None

Summary

Junction of tramroad entering quarry.

Feature Number IWT001/016	Name Abersychan Limestone Railway Bridge Abutment		
NGR SO 27040 03450		Type Tramroad bridge	Site Status None

Summary

Stone bridge abutment surviving at base of incline noted as A2 by John Van Laun. Constructed of dry stone squared off blocks 8+ courses high, curving around to north on east side of river. On west side of river stands a stone wall with revetted bank to either side.

Feature Number IWT003/001	Name Llam-march Tramroad Bridge		
NGR SO 22535 12681		Type Tramroad Bridge	Site Status LB 23814

Summary

Stone built single arched bridge. Arch sprung from rock face. Shown on 1st Edition OS, located between incline E11 and E12 depicted by John Van Laun.

Feature Number IWT003/002	Name Llam-march Tramroad Stone Blocks		
NGR SO 22535 12681		Type Stone Block	Site Status None

Summary

2 partly exposed stone blocks *in situ* with single drilled hole along IWT003/001. Approx dimension 0.4m x 0.2m.

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Feature Number	Name		
IWT003/003	Llam-march Tramroad Junction		
NGR		Type	Site Status
SO 22558 12705		Tramroad cutting	None
Summary			
Junction of tramroad spur in slight cutting depicted on 1st Edition OS, parallel with main track to Northeast of bridge.			

Feature Number	Name		
IWT003/004	Llam-march Tramroad Junction		
NGR		Type	Site Status
SO 22052 12434		Tramroad junction	None
Summary			
Junction of tramroad with incline noted by John Van Laun as E13.			

Feature Number	Name		
IWT003/005	Llam-march Tramroad Bridge Abutment		
NGR		Type	Site Status
SO 23574 14034		Revetment	None
Summary			
Possible bridge abutment and stone revetment.			

Feature Number	Name		
IWT003/006	Llam-march Tramroad Post Hole		
NGR		Type	Site Status
SO 23618 14093		Post hole	None
Summary			
Rectangular post setting approx 0.6m x 0.5m and 0.1m deep.			

Feature Number	Name		
IWT003/007	Llam-march Tramroad Stone Block		
NGR		Type	Site Status
SO 23768 14127		Stone block	None
Summary			
Stone block <i>in situ</i> with small drilled hole and wear mark.			

Feature Number	Name		
IWT003/008	Llam-march Tramroad Drain		
NGR		Type	Site Status
SO 24144 14286		Drain Pipe	None
Summary			
Exposed iron drainage pipe running through track bed.			

Feature Number	Name		
IWT003/009	Llam-march Tramroad Stone Block		
NGR		Type	Site Status
SO 24149 14286		Stone block	None
Summary			
Stone block with rail groove, out of <i>situ</i> , used in construction of stone lined water channel.			

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Feature Number IWT003/010	Name Llam-march Tramroad Stone Blocks		
NGR SO 24189 14286		Type Stone block	Site Status None
Summary Series of 5 exposed stone blocks <i>in situ</i> with drilled holes and wear marks.			

Feature Number IWT003/011	Name Llam-march Tramroad Stone Block		
NGR SO 24209 14286		Type Stone block	Site Status None
Summary Stone block with 1 drilled hole, <i>in situ</i> .			

Feature Number IWT003/012	Name Llam-march Tramroad Stone Block		
NGR SO 24245 14421		Type Stone block	Site Status None
Summary Stone block with 1 drilled hole, out of <i>situ</i> , used in construction of stone lined drainage channel. Other similar channels in close proximity.			

Feature Number IWT003/013	Name Structure Llam-march Tramroad		
NGR SO 24258 14420		Type Building	Site Status None
Summary Stone built structure to south of tramroad shown on 1st edition OS.			

Feature Number IWT004/001	Name Clydach Railroad Stone block		
NGR SO 1801 1139		Type Stone block	Site Status None
Summary Exposed stone block with wear mark from bar rail.			

Feature Number IWT004/002	Name Clydach Railroad Stone blocks		
NGR SO 1834 1129 - SO 1834 1130		Type Stone block	Site Status None
Summary Series of 9 partly exposed stone blocks with rectangular wear marks and some with single drilled hole.			

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Feature Number IWT004/003	Name Clydach Railroad Stone block		
NGR SO 2029 1235		Type Stone block	Site Status None
Summary Stone block with 2 drilled holes found out of <i>situ</i> .			

Feature Number IWT004/004	Name Clydach Railroad Culvert		
NGR SO 2205 1273		Type Culvert	Site Status None
Summary Single arched culvert, concrete replacement. Original dry stone revetment surviving to either side of opening.			

Feature Number IWT004/005	Name Clydach Railroad Machine house		
NGR SO 24179 14375		Type Building	Site Status None
Summary Machine House, constructed by 1798 and used for weighing by Clydach Railroad.			

Feature Number IWT004/006	Name Clydach Railroad Bridge		
NGR SO 23030 13770		Type Tramroad bridge	Site Status None
Summary Tramroad bridge under modern road near Bethlehem Chapel, Maesygartha			

Feature Number IWT005/001	Name Bailey's Llangattock Tramroad Causeway		
NGR SO 20661 12864		Type Tramroad causeway	Site Status None
Summary Causeway at Nant y Hafod			

Feature Number IWT005/002	Name Bailey's Llangattock Tramroad Causeway		
NGR SO 21880 14830		Type Tramroad causeway	Site Status None
Summary Tramroad causeway at Wern Watcyn.			

Feature Number IWT006/001	Name Disgwyllfa Main Tramroad Cutting		
NGR1 SO 20312 13303	NGR2	Type Tramroad cutting	Site Status None
Summary Slight cutting each side of track.			

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Feature Number IWT006/002 **Name** Disgwylfa Main Tramroad Cutting

NGR SO 20210 13264 - SO 20135 13242 **Type** Tramroad cutting **Site Status** None

Summary

Cutting approx 2m high and 2m wide at base, no surface features visible.

Feature Number IWT006/003 **Name** Quarry Adjacent to Disgwylfa Main Tramroad

NGR SO 20135 13242 **Type** Quarry **Site Status** None

Summary

Quarry scoop and debris on lower and upper slope of tramroad embankment.

Feature Number IWT006/004 **Name** Disgwylfa Main Tramroad Cutting

NGR SO 20351 13384 **Type** Tramroad cutting **Site Status** None

Summary

Cutting approx. 1m high.

Feature Number IWT006/005 **Name** Disgwylfa Main Tramroad Causeway

NGR SO 20433 13469 - SO 20487 13498 **Type** Tramroad causeway **Site Status** None

Summary

Raised causeway with bridge abutment, grassed over. Approx. 0.8m high, width of track across top 0.75m, total width of feature 5m.

Feature Number IWT006/006 **Name** Disgwylfa Main Tramroad Stone Blocks

NGR SO 20607 13540 - SO 20623 13540 **Type** Stone blocks **Site Status** None

Summary

Exposed stone blocks *in situ* with intact stone track bed. No holes or wear marks visible on blocks. Running approx. 16m

Feature Number IWT006/007 **Name** Quarry Adjacent to Disgwylfa Main Tramroad

NGR SO 20666 13538 **Type** Quarry **Site Status** None

Summary

Small quarry scoop alongside track approx. 8m long, nearly completely grassed over.

Feature Number IWT006/008 **Name** Disgwylfa Main Tramroad Stone Blocks

NGR SO 20686 13524 **Type** Stone block **Site Status** None

Summary

Series of approx 17 partly exposed stone blocks average 1m apart 0.25m x 0.4m, no holes visible possibly slight wear.

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Feature Number	Name		
IWT006/009	Disgwylfa Main Tramroad Cutting		
NGR		Type	Site Status
SO 20812 13507 - SO 20855 13521		Tramroad cutting	None
Summary			
Cutting, grassed over 1.5m high on North side of track, 0.7m high on South side. Width at base approx. 2.4m			

Feature Number	Name		
IWT006/010	Disgwylfa Main Tramroad Causeway		
NGR		Type	Site Status
SO 20855 13521 - SO 20916 13554		Tramroad causeway	None
Summary			
Embanked causeway leading across bog approx. 1.5m wide, some partly exposed stone blocks and revetment. No visible sign of culvert. Downslope side is approx 1.5m high. Bog has broken through and is covering embankment at East end.			

Feature Number	Name		
IWT006/011	Disgwylfa Main Tramroad Cutting		
NGR		Type	Site Status
SO 21031 13542		Tramroad cutting	None
Summary			
Minor cutting approx. 0.4m high.			

Feature Number	Name		
IWT006/012	Disgwylfa Main Tramroad Cutting		
NGR		Type	Site Status
SO 21185 13548		Tramroad cutting	None
Summary			
Slight cutting approx 1m high on North side of track, 0.5m high on South side. Width at base approx 2.5m. Grassed over			

Feature Number	Name		
IWT006/013	Disgwylfa Main Tramroad Culvert		
NGR		Type	Site Status
SO 21217 13550		Culvert	None
Summary			
Collapsed stone culvert with exposed stone revetment, 1 course high.			

Feature Number	Name		
IWT006/014	Disgwylfa Main Tramroad Revetment		
NGR		Type	Site Status
SO 21319 13548 - SO 21436 13520		Quarry	None
Summary			
Section of exposed dry stone revetment approx 6 courses high. Nearby is a quarry and area of scree.			

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Feature Number IWT006/015	Name Disgwylfa Main Tramroad Causeway		
NGR SO 21531 13501 - SO 21614 13548		Type Tramroad Causeway	Site Status None
Summary Substantial stone revetted causeway approx 7 courses high (1.5m) with 2 parallel lines of exposed stone blocks. Gauge of track estimated to be approx 3ft			

Feature Number IWT006/016	Name Disgwylfa Main Tramroad Cutting		
NGR SO 21655 13629 - SO 21689 13681		Type Tramroad cutting	Site Status None
Summary Cutting approx 2m wide at base and max height approx 1m.			

Feature Number IWT006/017	Name Quarry Adjacent to Disgwylfa Main Tramroad		
NGR SO 21804 14197		Type Quarry	Site Status None
Summary Semi-circular quarry scoop, upslope to West side of track and spoil tip, downslope to East side of track.			

Feature Number IWT006/018	Name Disgwylfa Main Tramroad Junction		
NGR SO 21824 14281		Type Tramroad junction	Site Status None
Summary Junction with IWT006c.			

Feature Number IWT006/019	Name Disgwylfa Main Tramroad Cutting		
NGR SO 21848 14305		Type Tramroad cutting	Site Status None
Summary Narrow cutting approx 1.5m high and 1.1m wide at base.			

Feature Number IWT006/020	Name Disgwylfa Main Tramroad Cutting		
NGR SO 21707 13968		Type Tramroad cutting	Site Status None
Summary Slight cutting approx. 0.75m high, 2m wide at base and 20m long.			

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Feature Number IWT006/021	Name Disgwylfa Main Tramroad Junction		
NGR SO 21708 13807		Type Tramroad junction	Site Status None

Summary
Junction with IWT006b, noted as Disgwylfa East by John Van Laun

Feature Number IWT006/022	Name Disgwylfa Main Tramroad Stone Blocks		
NGR SO 21692 13678 - SO 21708 13807		Type Tramway	Site Status None

Summary
Double width track with some partly exposed stone blocks no wear marks or holes visible. Suggested by JVL to be a siding for storing trams.

Feature Number IWT006a/001	Name Disgwylfa Pant Draenog Tramroad Causeway		
NGR SO 21690 13772		Type Tramroad causeway	Site Status None

Summary
Causeway approx 1m high constructed of rough stone boulders approx 3 courses high.

Feature Number IWT006a/002	Name Disgwylfa Pant Draenog Tramroad Causeway		
NGR SO 21687 13815		Type Tramroad causeway	Site Status None

Summary
Minor causeway across shallow gully, roughly constructed similar to IWT006a/001.

Feature Number IWT006a/003	Name Quarry Adjacent to Disgwylfa Pant Draenog Tramroad		
NGR SO 21676 14025		Type Hollow way	Site Status None

Summary
Linear hollow adjoining East side of tramroad.

Feature Number IWT006a/004	Name Disgwylfa Pant Draenog Tramroad Junction		
NGR SO 21691 13683		Type Tramroad junction	Site Status None

Summary
Junction with main line IWT006.

Feature Number IWT006b/001	Name Disgwylfa East Tramroad Revetment		
NGR SO 21709 13808 - SO 21708 13847		Type Revetment	Site Status None

Summary
Rough stone boulder revetment approx. 3 courses high (0.6m)

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Feature Number	Name		
IWT006b/002	Disgwylfa East Tramroad Stone Block		
NGR		Type	Site Status
SO 21709 13908		Stone block	None

Summary

Stone block with single hole found to East of track. Approx. 0.47m x 0.31m. Nearby is a partly exposed stone block 0.31m x 0.17m, no visible hole or wear.

Feature Number	Name		
IWT006b/003	Disgwylfa East Tramroad Stone Block		
NGR		Type	Site Status
SO 21760 14019		Rock cannon	None

Summary

Large stone block found to East side of tramroad. Approx. 0.67m x 0.54m. 4 holes approx 0.05m in diameter in rectangular shape with 1 smaller hole in the middle. Another large boulder to South about the same size, no holes on exposed surface. Possible rock cannon

Feature Number	Name		
IWT006b/004	Disgwylfa East Tramroad Cutting		
NGR		Type	Site Status
SO 21773 14029		Tramroad cutting	None

Summary

Cutting approx 0.5m high on East side. 1.2m high on West.

Feature Number	Name		
IWT006b/005	Disgwylfa East Tramroad Cutting		
NGR		Type	Site Status
SO 21833 14083		Tramroad cutting	None

Summary

Slight, short cutting approx 21m in length.

Feature Number	Name		
IWT006b/006	Quarry Adjacent to Disgwylfa East Tramroad		
NGR		Type	Site Status
SO 21853 14083		Quarry	None

Summary

Small quarry scoop to West of track.

Feature Number	Name		
IWT006e/001	Disgwylfa West Tramroad Cutting		
NGR		Type	Site Status
SO 21824 14281 - SO 21725 14442		Tramroad cutting	None

Summary

Substantial cutting running Northwest at junction with main line leading through a number of quarries. Approx 0.8m wide and over 4m high. Depicted on 1st Edition OS.

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Feature Number IWT006c/002	Name Disgwylfa West Tramroad Cutting		
NGR SO 21371 14576 - SO 21286 14593		Type Tramroad cutting	Site Status None
Summary Cutting to West of 'old' quarries depicted on 1st Edition OS.			

Feature Number IWT006c/003	Name Disgwylfa West Tramroad Revetment		
NGR SO 21670 14494 - SO 21532 14541		Type Revetment	Site Status None
Summary Exposed ballasted revetment along tramroad embankment.			

Feature Number IWT006c/004	Name Disgwylfa West Tramroad Junction		
NGR SO 21665 14510		Type Tramroad junction	Site Status None
Summary Tramroad junction for branch to Disgwylfa North, noted as G12 by John Van Laun.			

Feature Number IWT006c/005	Name Disgwylfa West Tramroad Stone Blocks		
NGR SO 21428 14574 - SO 21344 14589		Type Stone block	Site Status None
Summary 2 parallel lines of exposed stone blocks with stone track bed intact heading towards small track side quarry. No holes or wear marks.			

Feature Number IWT006c/006	Name Disgwylfa West Tramroad Cutting		
NGR SO 21200 14677		Type Tramroad cutting	Site Status None
Summary Slight cutting			

Feature Number IWT006c/007	Name Disgwylfa West Tramroad Causeway		
NGR SO 21269 14606 - SO 21217 14643		Type Tramroad causeway	Site Status None
Summary High ballasted causeway across boggy area, stone blocks visible on surface, no drilled holes or wear visible. Approx 1.8m high.			

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Feature Number IWT006e/001	Name Disgwylfa Main (south) Tramroad Stone Blocks		
NGR SO 19233 12521		Type Stone block	Site Status None

Summary
Series of partly exposed stone blocks leading to stile, no drilled holes or wear marks visible.

Feature Number IWT006e/002	Name Disgwylfa Main (south) Tramroad Revetment		
NGR SO 19203 12618		Type Revetment	Site Status None

Summary
Stone revetment constructed of squared off angular blocks approx 3 courses high (0.5m).

Feature Number IWT006e/003	Name Disgwylfa Main (south) Tramroad Cutting		
NGR SO 19196 12721		Type Tramroad cutting	Site Status None

Summary
Cutting on West side of track approx 1.75m high. 2 spoil tips to East of track approx. 2m high.

Feature Number IWT007/001	Name Trevil Railroad Main Line Sleepers		
NGR SO 1414 1154		Type Wooden sleepers	Site Status None

Summary
Several sleepers found in vicinity with cut grooves for chair and spike holes, out of *situ*. Approx dimensions 2.59m in length, 0.26m wide. Groove for chair 0.71m wide, 2 holes 0.28m apart. Gauge 1.53m (5ft)

Feature Number IWT007/002	Name Trevil Railroad Main Line Stone Blocks		
NGR SO 1387 1172		Type Stone Block	Site Status None

Summary
Series of exposed stone blocks *in situ* running for approx 7.5m. With good example of rectangular wear marks from chair approx 0.28m x 0.12m, 0.005m deep and 2 drilled holes approx 0.22m apart. A wooden sleeper is located between 1st and 2nd stone from the east. Stone track bed still intact.

Feature Number IWT007/003	Name Trevil Railroad Main Line Revetment		
NGR SO 1379 1174		Type Revetment	Site Status None

Summary
Exposed dry stone revetment approx 4m in length to South side of track. 1 course approx 0.13m high exposed through grass, total height of grassed over bank approx 1m. Average block size 0.61m x 0.34m.

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Feature Number IWT007/004	Name Trevil Railroad Main Line Culvert		
NGR SO 1372 1175		Type Culvert	Site Status None

Summary

Broken culvert and adjacent revetting approx. 2 courses high. Culvert blocked by masonry.

Feature Number IWT007/005	Name Trevil Railroad Main Line Embankment		
NGR SO 1369 1174		Type Revetment	Site Status None

Summary

Embankment cut away to reveal 2 courses of dry stone revetting on South side of track, embankment approx 0.75m high.

Feature Number IWT007/006	Name Trevil Railroad Main Line Passing Loop		
NGR SO 13653 11742		Type Passing loop	Site Status None

Summary

Junction of passing loop as shown on 1st Edition OS.

Feature Number IWT007/007	Name Trevil Railroad Main Line Stone Block		
NGR SO 1347 1211		Type Stone block	Site Status None

Summary

Stone block with very deep wear mark from rail and chair. Very good example.

Feature Number IWT007/008	Name Quarry scoop Adjacent to Trevil Railroad Main Line		
NGR SO 1347 1214		Type Quarry	Site Status None

Summary

Hollow/scoop and linear platform, downslope to West of original loop of tramroad. Quarry scoop also present upslope on East side.

Feature Number IWT007/009	Name Trevil Railroad Main Line Sleepers		
NGR SO 1347 1221		Type Revetment	Site Status None

Summary

Series of sleeper impressions along exposed section of stone revetment. Revetment approx. 3-4 courses high constructed of rough stone blocks.

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Feature Number IWT007/010	Name Trevil Railroad Main Line Culvert		
NGR SO 1344 1228	Type Culvert	Site Status None	

Summary

Dry stone built culvert approx. 3 courses high with rectangular lintel. Dimensions of opening approx. 0.25m high, 0.45m wide. Total height approx 0.53m, total width 1.7m. Some collapsed masonry.

Feature Number IWT007/011	Name Trevil Railroad Main Line Drain		
NGR SO 1342 1236	Type Drain	Site Status None	

Summary

Iron drain pipe protruding from track to west, draining water into gorge.

Feature Number IWT007/012	Name Trevil Railroad Main Line Bridge		
NGR SO 1343 1249	Type Bridge	Site Status None	

Summary

Single arched bridge carrying tramroad over Nant Milgatw, one of two in this section of tramroad. Constructed of rough stone blocks brought to course, revetment and abutments partially collapsed. To North side condition is worse and archway is blocked with rubble. Identified as K4 by John Van Laun.

Feature Number IWT007/013	Name Trevil Railroad Main Line Bridge		
NGR SO 1338 1251	Type Bridge	Site Status None	

Summary

Single arched bridge carrying tramroad over Nant Milgatw, one of two in this section of tramroad. Constructed of rough stone blocks built in stepped courses, slightly damaged revetting above, North side collapsed littered with dead trees. Circumference approx. 0.95m. Identified as K4 by John Van Laun.

Feature Number IWT007/014	Name Trevil Railroad Main Line Revetment		
NGR SO 1335 1249 - SO 1336 1242	Type Revetment	Site Status None	

Summary

Exposed stone revetment on West side of track, approx 0.4m high. May relate to passing loop depicted on 1st Edition OS. Continues sporadically along the track.

Feature Number IWT007/015	Name Scouring alongside Trevil Railroad Main Line		
NGR SO 1335 1249	Type Leat	Site Status None	

Summary

Linear scours alongside East of track. Similar features are found across the gorge on East side of tramroad loop.

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Feature Number IWT007/016	Name Trevil Railroad Main Line Culvert	Type Culvert	Site Status None
NGR SO 1335 1233			
Summary Roughly circular arched culvert, blocked inside and adjacent revetting. Constructed of squared off blocks of stone, roughly coursed. Opening is approx. 0.75m high, 0.95m wide.			

Feature Number IWT007/017	Name Trevil Railroad Main Line Revetment	Type Revetment	Site Status None
NGR SO 1329 1224			
Summary Exposed revetment to either side of track, 2-3 courses high constructed of roughly squared off stone blocks.			

Feature Number IWT007/018	Name Trevil Railroad Main Line Culvert	Type Culvert	Site Status None
NGR SO 1225 1274			
Summary Partly exposed, blocked stone culvert with flat lintel.			

Feature Number IWT007/019	Name Trevil Railroad Main Line Tramroad Formation	Type None	Site Status None
NGR SO 1290 1226 - SO 1302 1229 Tramway			
Summary Surviving section of original tramroad, identified as K2 by John Van Laun. Grassed over sleeper imprints are visible.			

Feature Number IWT007/020	Name Trevil Railroad Main Line Culvert	Type Culvert	Site Status None
NGR SO 1295 1231			
Summary Square dry stone culvert below IWT007/019 depicted in Fig 93 in John Van Laun. Revetment is bowed on S side of track and on N side of track the revetment forms a semicircle on either side of culvert.			

Feature Number IWT007/021	Name Trevil Railroad Main Line Culvert	Type Culvert	Site Status None
NGR SO 1307 1229			
Summary Stone culvert, extended to South end with replaced wooden lintel. North end is bowed similar to that of IWT007/20.			

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Feature Number IWT007/022	Name Trevil Railroad Main Line Culvert		
NGR SO 1317 1225		Type Culvert	Site Status None

Summary

Stone culvert, partially collapsed with flat stone lintel. Only South opening is visible approx 0.35m x 0.25m. Lintel approx 0.1m tall.

Feature Number IWT007/023	Name Trevil Railroad Main Line Passing Loop		
NGR SO 1265 1232 - SO 1270 1231		Type Passing loop	Site Status None

Summary

Junction of passing loop depicted on 1st Edition OS with sleeper imprints, one sleeper is partly exposed.

Feature Number IWT007/024	Name Trevil Railroad Main Line Causeway		
NGR SO 1343 1249 - SO 1338 1251		Type Tramroad causeway	Site Status None

Summary

Tramroad causeway, bank and stone revetment including 2 bridges (IWT007/012 and IWT007/013). See John Van Laun K3, K4, K5.

Feature Number IWT007/025	Name Trevil Railroad Main Line Sleepers		
NGR SO 1336 1242		Type Wooden sleepers	Site Status None

Summary

Sleeper imprints along West side of original tramroad loop.

Feature Number IWT007/026	Name Trevil Railroad Main Line Revetment		
NGR SO 1336 1241		Type Revetment	Site Status None

Summary

Exposed revetment downslope on East side of tramroad, partially collapsed. Exposed section is approx 15m in length.

Feature Number IWT008/001	Name Rassau Railroad Boundary Marker		
NGR SO 1650 1131		Type Boundary marker	Site Status None

Summary

Boundary marker with the inscription "GW Railway and COs Boundary 1900"

Feature Number IWT008/002	Name Rassau Railroad Revetment		
NGR SO 1650 1131		Type Revetment	Site Status None

Summary

Single course of revetment approx 0.15m high exposed through long grass.

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Feature Number IWT009/001	Name Hall's Trevil Tramroad Junction		
NGR SO 1170 1354		Type Tramroad junction	Site Status None
Summary Junction of tramroad branch leading to quarry from main track, shown on 1st Edition OS.			
Feature Number IWT009/002	Name Hall's Trevil Tramroad Cutting		
NGR SO 11939 13006		Type Tramroad Cutting	Site Status None
Summary Cutting approx 1m high, 3.5m wide. Grassed over, no surface remains visible on track bed.			
Feature Number IWT010/001	Name Rhydney tramroad Branch Revetment		
NGR SO 10842 09157		Type Revetment	Site Status None
Summary Stone revetment along road side of slight tramroad incline IWT010(i). 2-3 courses high at this point of roughly squared off blocks of sandstone with some blocks of slag along the top.			
Feature Number IWT011/001	Name Morlais East Tramroad Stone Block		
NGR SO 0593 0957		Type Stone block	Site Status None
Summary Complete stone block for chair with 2 drilled holes for bar rail, no visible wear. Not <i>in situ</i> .			
Feature Number IWT011/002	Name Morlais East Tramroad Culvert		
NGR SO 0593 0956		Type Culvert	Site Status None
Summary Stone lintel for drain			
Feature Number IWT011/003	Name Morlais East Tramroad Revetment		
NGR SO 0592 0959 - SO 0589 0966	Revetment	Type None	Site Status
Summary Lower brick revetment wall running along east side of main track. Ranging from 0.3m in height at the southern end to over 1.5m at its northern end. Possible siding associated with nearby red brick building.			
Feature Number IWT011/004	Name Morlais East Tramroad Iron Tramroad Chair		
NGR SO 0591 0961		Type Iron Tramroad Chair	Site Status None
Summary 2 iron chairs not <i>in situ</i> approx 3m apart			

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Feature Number IWT011/005	Name Morlais East Tramroad Wooden Sleepers	Type Wooden sleeper	Site Status None
NGR SO 0591 0961			

Summary

Exposed end of wooden sleeper in a series of grassed "bumps" i.e. buried sleepers running north along IWT011/003. This area is also strewn with stone blocks with 2 drilled holes such as IWT011/06 and 07

Feature Number IWT011/006	Name Morlais East Tramroad Stone Block	Type Stone block	Site Status None
NGR SO 0591 0961			

Summary

Complete stone block with 2 drilled holes, no wear marks. *Not in situ*, found on IWT011/003.

Feature Number IWT011/007	Name Morlais East Tramroad Stone Block	Type Stone block	Site Status None
NGR SO 0590 0966			

Summary

Complete stone block with 2 drilled holes, no wear marks. *Not in situ*, found on IWT011/003.

Feature Number IWT011/008	Name Limekiln adjacent to Morlais East Tramroad	Type Limekiln	Site Status None
NGR SO 0590 0966			

Summary

Probable limekiln alongside east of track

Feature Number IWT011/009	Name Morlais East Tramroad Wooden Sleepers	Type Wooden sleeper	Site Status None
NGR SO 0557 0992			

Summary

3 exposed wooden sleepers running eastwest to N side of present day walking track

Feature Number IWT011/010	Name Morlais East Tramroad Wooden Sleepers	Type Wooden sleeper	Site Status None
NGR SO 05837 09845			

Summary

Series of exposed wooden sleepers running to North side of present walking track. The tramroad track continues below surface and are visible as a series of low grassed bumps.

Feature Number IWT011/011	Name Structure Morlais East Tramroad	Type Building	Site Status None
NGR SO 0534 0992			

Summary

Ruinous yellow brick building

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Feature Number IWT011/012	Name Structure Morlais East Tramroad	Type Quarry building	Site Status None
NGR SO 0530 0994			

Summary
Remains of quarry hut? Small rectangular brick and stone built building. Built into rock outcrop approx 2m x 3m. Maybe others in poorer condition nearby.

Feature Number IWT011/013	Name Tramroad Junction Morlais East Tramroad	Type Tramroad junction	Site Status None
NGR SO 05130 09989			

Summary
Junction of spur from main line? to quarry face with sleepers exposed.

Feature Number IWT012/001	Name Morlais West Tramroad Stone Blocks	Type None	Site Status
NGR SO 0487 0922 - SO 0477 0943	Stone block		

Summary
Series of stone blocks *in situ* pre1830 with bar rail holes and wear marks.

Feature Number IWT012/002	Name Morlais West Tramroad Revetment	Type Revetment	Site Status None
NGR SO 0483 0926			

Summary
Stone revetment several courses high on upper slope to east of tramroad. Partially masked, approx 12m in length, 0.5m high.

Feature Number IWT012/003	Name Morlais West Tramroad Stone Blocks	Type Stone block	Site Status None
NGR SO 0479 0936			

Summary
Continuation of track, 2 parallel lines of stone blocks with wear marks and holes.

Feature Number IWT012/004	Name Quarry adjacent to Morlais West Tramroad	Type Quarry	Site Status None
NGR SO 0477 0944			

Summary
Quarry scoop east side of track cut into embankment

Feature Number	Name
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IWT012/005	Morlais West Tramroad Stone Blocks		
NGR1 SO 0475 0952	NGR2 SO 0474 0955	Type Stone block	Site Status None

Summary
2 parallel lines of stone blocks with wear marks and holes *in situ*

Feature Number IWT012/006	Name Quarry adjacent to Morlais West Tramroad		
NGR SO 0472 0959		Type Quarry	Site Status None

Summary
2 quarry scoops cut into east embankment approx 20m apart

Feature Number IWT012/007	Name Morlais West Tramroad Stone Blocks		
NGR SO 0470 0968		Type Stone block	Site Status None

Summary
Start of 4 parallel lines of stone blocks, a lower line post1830 (with later spurs of wooden sleepers) and an upper line pre1830 leading to the quarry face. Nearby is a ruinous building of faced stone possible quarry hut.

Feature Number IWT012/008	Name Tramroad Junction Morlais West Tramroad		
NGR SO 0469 0969		Type Tramroad junction	Site Status None

Summary
Junction between two pairs of lines (IWT012/007)

Feature Number IWT012/009	Name Tramroad Junction Morlais West Tramroad		
NGR SO 0467 0978		Type Tramroad junction	Site Status None

Summary
Junction for spur off line to quarry face (IWT012/007), the spur has been lost to later quarrying

Feature Number IWT012/010	Name Morlais West Tramroad Sleepers		
NGR SO 0466 0986		Type Wooden sleeper	Site Status None

Summary
Sleeper imprints on post1830 lower line (IWT012/007) near Pontsarn bridge

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Feature Number IWT012/011	Name Structure Morlais West Tramroad		
NGR SO 0486 0996		Type Building	Site Status None
Summary Ruinous rectangular building 3x2.5m			

Feature Number IWT012/012	Name Tramroad Formation Morlais West		
NGR SO 0484 0930 - SO 0485 0943		Type Tramroad embankment	Site Status None
Summary Tack formation relating to T3 in John Van Laun, no visible surface remains			

Feature Number IWT013/001	Name Tappendens' Tramroad Stone Blocks		
NGR SN 9902 0435 - SN 9902 0439		Type Stone block	Site Status SAM GM411
Summary Turnout and series of large stone blocks with rail wear marks and 2 drilled holes running over Gelli-Isaf bridge (SAM GM411). The blocks average 0.49m x 0.39m with the distance between the centres of the holes being 0.13m. A further 3 blocks are found <i>in situ</i> along the track to the east at SN 9907 0442, again with rail wear but have been slightly disturbed by erosion.			

Feature Number IWT013/002	Name Tappendens' Tramroad Drain		
NGR SO 0125 0271		Type Drain	Site Status None
Summary Iron pipe for drain and possible adit to west of track.			

Feature Number IWT013/003	Name Tappendens' Tramroad Stone Block		
NGR SO 0125 0274		Type Stone block	Site Status None
Summary Stone block for tramroad with some wear, <i>in situ</i> .			

Feature Number IWT013/004	Name Tappendens' Tramroad Sleeper		
NGR SO 01215 02779		Type Wooden sleeper	Site Status None
Summary Partly exposed wooden sleeper possibly <i>in situ</i> , approx 7m to North of IWT013/003.			

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Feature Number IWT013/005	Name Tappendens' Tramroad Crane Pivot		
NGR SO 0129 0238		Type Crane pivot	Site Status None
Summary Iron canal side object. Cast iron crane pivot as described by Mear 1999.			

Feature Number IWT013/006	Name Tappendens' Tramroad Stone Blocks		
NGR SO 0042 0304		Type Stone block	Site Status None
Summary 2 partly exposed stone blocks <i>in situ</i> with 2 drilled holes and slight wear from bar rail			

Feature Number IWT013/007	Name Tappendens' Tramroad Stone Block		
NGR SO 0039 0309		Type Stone block	Site Status None
Summary Complete stone block found out of <i>situ</i> , 2 drilled holes but no obvious wear marks.			

Feature Number IWT013/008	Name Tappendens' Tramroad Stone Block		
NGR SO 0034 0325		Type Stone block	Site Status None
Summary 2 stone blocks out of <i>situ</i> approx 20m apart. One has 3 drilled holes and wear marks from chair. The other has a worn linear groove from rail. Found to west of track.			

Feature Number IWT013/009	Name Tappendens' Tramroad Stone Block		
NGR SO 0037 0330		Type Stone block	Site Status None
Summary Part exposed stone block <i>in situ</i> , 1 drilled hole visible. Wear marks possibly from plate rail.			

Feature Number IWT013/010	Name Tappendens' Tramroad Stone Block		
NGR SO 0030 0341		Type Stone block	Site Status None
Summary Complete stone block, not <i>in situ</i> . 1 drilled hole and wear marks from plate. Found on east side of track.			

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Feature Number IWT013/011	Name Tappendens' Tramroad Stone Block		
NGR SO 0024 0345		Type Stone block	Site Status None

Summary

Stone block with wear marks *in situ*. Approx 4m to Northwest a number of displaced stone blocks now lie in a stream gully flowing into the River Cynon. Some have drilled holes and wear marks.

Feature Number IWT013/012	Name Tappendens' Tramroad Stone Block		
NGR SO 00156 03556		Type Stone block	Site Status None

Summary

Exposed stone block with a drilled hole and chair wear mark *in situ*. Approx dimensions 0.46m x 0.38m, linear wear mark 0.11m x 0.31m, semicircular wear mark 0.04m radius. One similar to this lies approx 7m to the Northwest.

Feature Number IWT013/013	Name Tappendens' Tramroad Stone Blocks		
NGR SO 00203 03500 - SO 00190 03515		Type Stone block	Site Status None

Summary

Series of 6 exposed stone blocks *in situ* with varying number of drilled holes i.e., 0,1,2 or 3 average dimension 0.4m x 0.35m. Running near edge of river bank along South edge of track to join with middle of track. Possible passing loop or turnout junction. Track bed make up of small stones visible on surface.

Feature Number IWT013/014	Name Tappendens' Tramroad Revetment		
NGR SO 00203 03500		Type Revetment	Site Status None

Summary

Stone revetment under IWT013/013 and continuing North on river side of track. Approx total length 38m, including abutment for possible bridge 6m long, jutting out approx 1m. Constructed of squared off stone blocks approx 1.8m high.

Feature Number IWT013/015	Name Tappendens' Tramroad Stone Blocks		
NGR SO 0017 0353		Type Stone block	Site Status None

Summary

3 exposed stone block *in situ*, each with 2 drilled holes approx 1.25m apart. Track bed of small stones still intact in places.

Feature Number IWT013/016	Name Tappendens' Tramroad Stone Blocks		
NGR SO 0015 0357		Type Stone block	Site Status None

Summary

2 Partly exposed stone blocks *in situ*. Nearby tramroad blocks are strewn down the banking on river side of tramroad, one has noticeable wear.

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Feature Number IWT013/017	Name Boundary wall for Aberdare House, adjacent to Tappendens' Tramroad
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NGR SO 00354 03361 - SO 00479 02969	Type Wall	Site Status None
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Summary

Boundary wall for Aberdare House, ironmasters residence. Running along East side of track, approx 2.4m high, constructed of squared off stone blocks.

Feature Number IWT013/018	Name 'Tappendens' Tramroad Culvert
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NGR SO 00135 03577	Type Tramroad culvert	Site Status None
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Summary

Culvert created from dry stone blocks from tramroad. Nearby on the track are 2 stone blocks *in situ* with 2 drilled holes.

Feature Number IWT013/019	Name 'Tappendens' Tramroad Stone Blocks
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NGR SO 0011 0359 - SO 0017 0362	Type Stone block	Site Status None
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Summary

23 exposed stone blocks *in situ* with drilled holes and wear marks running at slight angle to footpath and curving around to Northwest. Downhill is a small track and bridge.

Feature Number IWT013/020	Name 'Tappendens' Tramroad Stone Blocks
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NGR SN 9993 0362 - SO 0010 0362	Type Stone block	Site Status None
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Summary

Well preserved series of large exposed stone blocks *in situ* running sporadically for approximately 170m and crossing stone bridge IWT013/021. Other blocks are probably buried along this line. Around SO 0006 0361 both sides of the tramroad are exposed as 2 parallel lines of stones blocks. Blocks vary in number of drilled holes from 2, 1 or 0, some have iron spikes still *in situ* and good examples of wear marks for both chair and rail.

Feature Number IWT013/021	Name Bridge Tappendens' Tramroad
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NGR1 SO 0010 0362	Type Tramway bridge	Site Status None
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Summary

Single arched stone bridge over small stream a couple of partly exposed stone blocks on top belonging to IWT013/020. Constructed of squared off masonry blocks, random placement roughly brought to course and lime mortar. 4m wide across the top with no surviving parapet. Metal work is discarded under bridge and to the North part of a wall remains.

Feature Number IWT013/022	Name 'Tappendens' Tramroad Stone Blocks
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NGR SN 9981 0364 - SN 9990 0362	Type Stone block	Site Status None
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Summary

2 parallel lines of exposed stone blocks *in situ* with drilled holes and wear marks, slight revetment to North side of track. There is a slight break in the line but remains are possibly buried.

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Feature Number	Name		
IWT013a/001	Incline on Tappendens' Tramroad West		
NGR		Type	Site Status
SN 89142 06545 - SN 89217 06528		Tramway inclined Plane	None

Summary

Incline of Tappendens' tramroad near Pont-Walby. Stone track bed in good condition, approx 1.95m wide. Rough cobbled stone surface with ridge running down centre, possibly for chain or brake groove. Area North of railway viaduct has been tarmaced over.

Feature Number	Name		
IWT013a/002	Tappendens' Tramroad West Bridge		
NGR		Type	Site Status
SN 92460 06199		Tramroad bridge	None

Summary

Arched stone tramroad bridge, squared off at one end.

Feature Number	Name		
IWT013a/003	Tappendens' Tramroad West Causeway		
NGR		Type	Site Status
SN 92077 06221		Tramroad causeway	None

Summary

Tramroad causeway and possible bridge/culvert.

Feature Number	Name		
IWT014/001	Mr Glover's Railroad Stone Blocks		
NGR		Type	Site Status
SN 95882 05751 - SN 9561 0556		Stone block	SAM BR157

Summary

Series of exposed stone blocks near clock tower. Track continues over stone built causeway

Feature Number	Name		
IWT014/002	Mr Glover's Railroad Stone Blocks and Causeway		
NGR		Type	Site Status
SN 9587 0585		Stone block	SAM BR157

Summary

About 6 exposed stone blocks with chair wear marks along the scheduled causeway; one has a spike *in situ*

Feature Number	Name		
IWT014/003	Mr Glover's Railroad Heritage Trail		
NGR		Type	Site Status
SN 95930 06081 - SN 95143 08447		Heritage trail	None

Summary

Penderyn quarry trail IWT014(ii)

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Feature Number IWT014/004	Name Mr Glover's Railroad Sleepers		
NGR SN 9528 0724		Type Railway sleeper	Site Status None

Summary

Concrete sleeper with 2 chairs found along East side of walking track. Has the inscription AS1 TBS along one side of the chair and 1943 LMS on the other.

Feature Number IWT014/005	Name Mr Glover's Railroad Sleepers		
NGR SN 95321 07575		Type Railway sleeper	Site Status None

Summary

Concrete sleeper with 2 chairs found along East side of walking track. Has the inscription AS1 TBS along one side of the chair and 1943 LMS on the other.

Feature Number IWT014/006	Name Mr Glover's Railroad Sleepers		
NGR SN 95318 07575		Type Wooden sleeper	Site Status None

Summary

Twentieth century wooden sleepers used as gate posts, other sleepers strewn to the side of the track.

Feature Number IWT014/007	Name Mr Glover's Railroad Culvert		
NGR SN 9526 0781		Type Culvert	Site Status None

Summary

Stone revetted culvert, arched and circular in shape

Feature Number IWT014/008	Name Mr Glover's Railroad Sleepers		
NGR SN 9526 0781		Type Wooden sleeper	Site Status None

Summary

Series of exposed wooden sleepers on track above culvert with metal spikes *in situ*, 55cm apart and 27cm wide. Wear from chairs 40x22 cm, spikes are 28cm apart

Feature Number IWT014/009	Name Mr Glover's Railroad Stone Block		
NGR SN 9521 0792		Type Stone block	Site Status None

Summary

Part of stone block with chair wear marks and drilled hole. Possibly *in situ*? Approx 16 x 32cm

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Feature Number IWT014/010	Name Mr Glover's Railroad Stone Block		
NGR SN 9520 0798		Type Stone block	Site Status None

Summary
Part of stone block not *in situ* with spike hole

Feature Number IWT014/011	Name Mr Glover's Railroad Iron Rail		
NGR SN 9411 0907		Type Railway rail	Site Status None

Summary
Length of iron rail

Feature Number IWT014/012	Name Mr Glover's Railroad Junction		
NGR1 SN 9406 0916	NGR2	Type Tramroad junction	Site Status None

Summary
Spur joining main route opposite quarry, possibly modern track, lies within private land

Feature Number IWT014/013	Name Mr Glover's Railroad Sleepers		
NGR SN 9398 0913		Type Wooden sleepers	Site Status None

Summary
Approx 6 exposed wooden sleepers *in situ* near junction of possible minor spur from main tramroad not 1st Ed OS

Feature Number IWT014/014	Name Mr Glover's Railroad Junction		
NGR SN 94151 09020		Type Tramroad junction	Site Status None

Summary
Spur off main track possibly identified on 1st Ed OS at SN 94151 09020

Feature Number IWT014/015	Name Quarry bay adjacent to Mr Glover's Railroad		
NGR SN 9392 0922		Type Tipping bay	Site Status None

Summary
Possible tipping bay, rectangular level platform on stone revetment approx. 9x20m. Slopes uphill away from track, lots of stone rubble dumped around it.

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Feature Number IWT014/016	Name Mr Glover's Railroad Plate		
NGR SN 9391 0924		Type Tramroad plate	Site Status None

Summary
Partly exposed metal plate with lozenge shaped hole

Feature Number IWT014/017	Name Quarry Features adjacent to Mr Glover's Railroad		
NGR SN 9389 0925		Type Wheel	Site Status None

Summary
Area downslope east of main track revetment IWT014/018, contains 19th century wheel and various other features that need surveying. Wheel is of cross spoked design with diameter of 149cm(58 1/2in) and inscription S976 R White and Sons Whidnes Lancs.

Feature Number IWT014/018	Name Mr Glover's Railroad Revetment		
NGR SN 9389 0925		Type Revetment	Site Status None

Summary
Stone revetment approx 1.65m high

Feature Number IWT014/019	Name Incline on Mr Glover's Railroad		
NGR SN 9389 0923		Type Tramroad incline	Site Status None

Summary
Revetted incline of random stone blocks identifiable on 1st Ed OS, 0.95m high, approx 2m wide with metal spike *in situ*.

Feature Number IWT014/020	Name Structure adjacent to Mr Glover's Railroad		
NGR SN 9389 0923		Type Structure	Site Status None

Summary
Rectangular structure possible quarry hut to Southwest of IWT014/019

Feature Number IWT014/021	Name Mr Glover's Railroad Platform		
NGR SN 9391 0921		Type Structure	Site Status None

Summary
Rectangular platform and discarded rail

Feature Number IWT014a/001	Name Mr Glover's Railroad Bryngwyn Extension Stone Block		
NGR SN 9710 0458		Type Stone block	Site Status None

Summary
Stone block with single drilled hole and slight wear mark. Not *in situ*.

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Feature Number IWT014a/002	Name Mr Glover's Railroad Bryngwyn Extension Tramroad Formation		
NGR SN 9720 0453		Type Slag	Site Status None
Summary Large block of glass slag exposed from erosion of grassed embankment IWT014a(i), approx dimensions 0.75m x 0.4m			

Feature Number IWT015/001	Name Twynau Gwynion Line 1 Revetment		
NGR SO 0721 0998		Type Revetment	Site Status None
Summary Stoned revetment and 3 stone blocks. Revetment 2 courses approx 0.5m high. Track bed built up quite high on revetment, width of track at this point approx 2.5m.			

Feature Number IWT015/002	Name Junction of lines 1 and 2 Twynau Gwynion Tramroad		
NGR SO 0696 1008		Type Tramroad Junction	Site Status None
Summary Junction of lines 1 and 2. Line 2 not as clearly visible as line 1. Located just past quarry 20G noted by John Van Laun.			

Feature Number IWT015/003	Name Twynau Gwynion Tramroad Line 1 Stone Blocks		
NGR SO 0693 1011		Type Stone block	Site Status None
Summary Partly exposed stone blocks <i>in situ</i> . 1 drilled hole at Southeast end of passing loop Northwest of IWT015/002.			

Feature Number IWT015/004	Name Twynau Gwynion Tramroad Line 1 Passing Loop		
NGR SO 0682 1025 - SO 0693 1011		Type Passing Loop	Site Status None
Summary Passing loop identified near quarry 21G by John Van Laun.			

Feature Number IWT015/005	Name Junction of lines 1 and 2 Twynau Gwynion Tramroad		
NGR SO 07536 09771		Type Tramroad junction	Site Status None
Summary Junction of lines 1 and 2 Southeast of Nant Tor-gwyn. Line 1 fragmentary to SE of this point as lost to bog encroachment.			

Feature Number IWT015/006	Name Twynau Gwynion Tramroad Line 1 Bridge Abutments		
NGR SO 07516 09787		Type Bridge Abutment	Site Status None
Summary Bridge abutments either side of stream (Nant Morlais) grassed over, no remains of bridge visible. Section of tramroad used by lines 1 and 2.			

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Feature Number IWT015/007	Name Twynau Gwynion Tramroad Line 1 Passing Loop		
NGR SO 0751 0982		Type Tramroad junction	Site Status None

Summary
Junction of passing loop/siding from line 1/2.

Feature Number IWT015/008	Name Quarries adjacent to Twynau Gwynion Tramroad Line 1		
NGR SO 0751 0984		Type Quarry	Site Status None

Summary
3 quarry scoops to east of line 1/2 near junction IWT015/007. Probable construction quarries for abutments IWT015/006.

Feature Number IWT015/009	Name Twynau Gwynion Tramroad Line 1 Revetment		
NGR SO 0749 0983		Type Revetment	Site Status None

Summary
Exposed stone revetment, roughly squared off blocks and boulders. 2-3 courses high approx 0.75m high and 5m in length.

Feature Number IWT015/010	Name Twynau Gwynion Tramroad Line 1 Junction		
NGR SO 0748 0990		Type Tramroad junction	Site Status None

Summary
Later tramroad spur running above quarry, junction with lines 1 and 2.

Feature Number IWT015/011	Name Twynau Gwynion Tramroad Line 1 Tramroad Formation		
NGR SO 07432 09974		Type Tramway	Site Status None

Summary
Just South of this point the tramroad (Twynau Gwynion lines 1 and 2) have been damaged by expansion of the quarry. From this point the formation is still visible as a low bank.

Feature Number IWT015/012	Name Twynau Gwynion Tramroad Line 1 Bridge Abutments		
NGR SO 0743 0998		Type Bridge abutment	Site Status None

Summary
Bridge abutments either side of leat near to quarries noted by John Van Laun as 45G. No remains of the bridge are visible.

Feature Number IWT015/013	Name Twynau Gwynion Tramroad Line 1 Revetment		
NGR SO 0710 0998		Type Revetment	Site Status None

Summary
Exposed revetment 3-4 courses high of random stone rubble. Over 30m long and 0.75m high near junction of lines 1 and 2. Good formation definition.

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Feature Number IWT015a/001	Name Twynau Gwynion Tramroad Line 2 Revetment		
NGR SO 0725 1000		Type Revetment	Site Status None
Summary Exposed stone revetment and good surviving track formation. Raised embankment approx. 1m wide. Track 3m wide in total.			
Feature Number IWT015a/002	Name Twynau Gwynion Tramroad Line 2 Junction		
NGR SO 0707 1001		Type Tramroad junction	Site Status None
Summary Eastern junction of line 2 with quarry identified by John Van Laun as 20G.			
Feature Number IWT015a/003	Name Twynau Gwynion Tramroad Line 2 Junction		
NGR SO 0700 1004		Type Tramroad junction	Site Status None
Summary Western junction of line 2 with quarry identified by John Van Laun as 20G. Tramroad survives as grassed over raised bank with some stone blocks on surface.			
Feature Number IWT015a/004	Name Twynau Gwynion Tramroad Line 2 Junction		
NGR SO 07536 09771		Type Tramroad junction	Site Status None
Summary Junction of lines 1 and 2 SE of Nant Tor-gwyn. Line 2 in good condition contouring hillside.			
Feature Number IWT015a/005	Name Twynau Gwynion Tramroad Line 2 Junction		
NGR SO 08668 09293		Type Tramroad junction	Site Status None
Summary Junction of tramroad above Jepson's Pond, identified as P2a by John Van Laun.			
Feature Number IWT015a/006	Name Twynau Gwynion Tramroad Line 2 Embankment		
NGR SO 08547 09308		Type Tramroad causeway	Site Status None
Summary Linear stone bank near boulder strewn stream.			
Feature Number IWT015a/007	Name Twynau Gwynion Tramroad Line 2 Plate		
NGR SO 08316 09495		Type Tramroad plate	Site Status None
Summary 2 broken sections of dual-purpose vandyked plate, not <i>in situ</i> . Approx dimension 0.3m x 0.1m x 0.08m See Fig 125 by John Van Laun.			

Southeast Wales Industrial Ironworks Landscapes

Feature Number	Name		
IWT015a/008	Twynau Gwynion Tramroad Line 2 Tramroad Formation		
NGR		Type	Site Status
SO 08136 09495		Revetment	None

Summary

Raised track bed emerging from reeds, roughly ballasted, scarps around slope to quarry. 1m wide across the top.

Feature Number	Name		
IWT015b/001	Twynau Gwynion Tramroad Line 3 Junction		
NGR		Type	Site Status
SO 06419 10369		Tramroad junction	None

Summary

Junction of line 3 with Rhymney Limestone Railway, line 3 continues North to quarries.

Feature Number	Name		
IWT015b/002	Twynau Gwynion Tramroad Line 3 Junction		
NGR		Type	Site Status
SO 0720 0985		Tramway	None

Summary

Point where line 3 was built over by line 4 and then subsequently the Rhymney Limestone Railway.

Feature Number	Name		
IWT015b/003	Twynau Gwynion Tramroad Line 3 Cutting		
NGR		Type	Site Status
SO 0728 0985		Tramroad Cutting	None

Summary

Deep cutting for tramroad, possibly originally for line 3 but may have been widened for Rhymney Limestone Railway.

Feature Number	Name		
IWT015c/001	Twynau Gwynion Tramroad Line 4 Cutting		
NGR		Type	Site Status
SO 0677 1015		Tramroad cutting	None

Summary

Cutting for line 4 leading into quarries, identified as R4c by John Van Laun. Approx 2m wide and average 2m high. NGR is for midpoint of cutting.

Feature Number	Name		
IWT015c/002	Twynau Gwynion Tramroad Line 4 Junction		
NGR		Type	Site Status
SO 0669 1018		Tramroad junction	None

Summary

Junction of line 4 with a number of quarries illustrated in Map R by John Van Laun.

Feature Number	Name		
IWT015c/003	Twynau Gwynion Tramroad Line 4 Junction		
NGR		Type	Site Status
SO 0687 0998		Tramroad junction	None

Summary

Junction with Rhymney Limestone Railway. Sleeper impression are visible along the section identified as R4b by John Van Laun. Part of the Rhymney Limestone Railway was built along part of the route of line 4.

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Feature Number IWT016/001	Name Rhymney Limestone Railway Junction	Type Tramroad junction	Site Status None
NGR SO 0731 0983			

Summary
Staith of tramroad branch leading to quarries identified as 10G and 66G on Map Q by John Van Laun.

Feature Number IWT016/002	Name Rhymney Limestone Railway Revetment	Type Revetment	Site Status None
NGR SO 0660 1020			

Summary
Exposed dry stone revetting approx. 5 courses high.

Feature Number IWT016/003	Name Rhymney Limestone Railway Sleepers	Type Wooden sleeper	Site Status None
NGR SO 0650 1026			

Summary
2 partly exposed wooden sleepers

Feature Number IWT016/004	Name Rhymney Limestone Railway Revetment	Type Revetment	Site Status None
NGR SO 06795 10041 - SO 06833 10019			

Summary
Exposed dry stone revetment in good condition approx 5 courses high of random blocks. From about the same location the track is wider and has been built up to form modern track.

Feature Number IWT016/005	Name Rhymney Limestone Railway Junction	Type Tramroad junction	Site Status None
NGR SO 0687 0998			

Summary
Junction of Twynau Gwynion line 4 identified as R4b by John Van Laun. Part of the Rhymney Limestone Railway was built along part of the route of line 4.

Feature Number IWT016/006	Name Rhymney Limestone Railway Cutting	Type Tramroad Cutting	Site Status None
NGR SO 0728 0985			

Summary
Deep cutting for tramroad, possibly originally for line 3 but may have been widen for Rhymney Limestone Railway.

Southeast Wales Industrial Ironworks Landscapes

Feature Number IWT019a/001	Name Ebbw Vale Private Line Addition Tunnel		
NGR SO 14473 09781		Type Tramway Tunnel	Site Status None

Summary

Tramway tunnel beneath Beaufort Road. Roughly coursed, arched stone tunnel now blocked up and only partly exposed above modern ground level. Stone wall survives to East side and filled in cutting to North and South. Raised parapet for the road, approx 1.1m high.

Feature Number IWT023a/001	Name Banwen Coelbren Junction Stone Block		
NGR SN 85881 10918		Type Stone block	Site Status None

Summary

Exposed stone block with groove mark for rail and wear marks.

Feature Number IWT023a/002	Name Banwen Coelbren Junction Revetment		
NGR SN 85576 11138		Type Revetment	Site Status None

Summary

Exposed stone revetment to Northeast side of track.

Southeast Wales Industrial Ironworks Landscapes

Appendix III

Reference Number	Name	
01039.2m	MANCHESTER PLACE TRAMWAY	
NGR	Type	Site Status
SN96080540	TRAMWAY	None

Summary

FORMER B48C: Tramway junction, between Glynneath, Aberdare and Penderyn

Reference Number	Name	
01084m	GELLI ISAF TRAMROAD BRIDGE (ABERNANT TRAMROAD)	
NGR	Type	Site Status
SN99010435	BRIDGE	SAM;LBII

Summary

A stone bridge built 1803-5, to carry the Hirwaun to Abernant Ironwork's tramroad across to Afon Cynon.

Reference Number	Name	
01093.0m	HIRWAUN CAUSEWAY, PENDERYN RAILWAY, ABERDARE CANAL	
NGR	Type	Site Status
SN95750565	TRAMWAY TRANSPORT SITE	None

Summary

Tramway causeway. An early C19th stone-built viaduct carried a single-track tramway across the Afon Cynon. It remains virtually intact, and in use as a footpath.

Reference Number	Name	
01096m	IRON TRAMBRIDGE, ROBERTSTOWN	
NGR	Type	Site Status
SN99710362	BRIDGE	SAM

Summary

A cast iron tramroad bridge dated 1811, probably the oldest of its type in the world. It carried the Llwydcoed tramway across the Afon Cynon.

Reference Number	Name	
02725m	TWINAU GWYNION TRAMWAY BRIDGE, MERTHYR TYDFIL	
NGR	Type	Site Status
SO0746309789	TRAMWAY BRIDGE	None

Summary

Tramway bridge 18ft in length, which was design to carry the Twynau Gwynion Tramroad over the Morlais brook at Blaen Morlais, which was later used to the same effect by the Rhymney Mineral (Limestone) Railway.

Reference Number	Name	
03043.0m	NL137 RHYMNEY LIMESTONE RAILWAY	
NGR	Type	Site Status
SO09050835	Mineral railway	None

Summary

GGAT Assessment Nant Llesg Opencast A376 Rhymney Limestone Railway between Dowlais and the Rhymney (Bute) Ironworks, where it supplied the furnaces, named on 1st Edition (1875) OS map, disused on 3rd Edition (1919) OS map.

Southeast Wales Industrial Ironworks Landscapes

Reference Number	Name	
03173.0m	200 CASTLE MORLAIS QUARRIES TRAMROAD	
NGR	Type	Site Status
SO04730892	TRAMWAY	None

Summary

The course of the tramroad, which was built in 1803 crosses the A465 at this point. It brought lime and limestone from Castle Morlais quarries down to the Dowlais Ironworks. The line was constructed of a plateway with mixed 2ft. 9in. and 4ft. 2in. gauge.

Reference Number	Name	
03200g	SITE NAME NOT KNOWN	
NGR	Type	Site Status
SO229133	BRIDGE	None

Summary

No further information available.

Reference Number	Name	
03202g	SITE NAME NOT KNOWN	
NGR	Type	Site Status
SO218121	BRIDGE	None

Summary

Tramway bridge carrying the Bailey's Tramroad crossing a precipitous stream above Clydach. (Probably built around 1822.)

Reference Number	Name	
03204g	SMART'S BRIDGE	
NGR	Type	Site Status
SO22871327	BRIDGE	None

Summary

This bridge inscribed with a date of 1824 is constructed of cast-iron members spanning the river Clydach. Either side of the bridge Rattenbury suggests there is evidence of a cobbled stone road which formed a branch to the ironworks.

Reference Number	Name	
03213g	BAILEY'S TRAMROAD	
NGR	Type	Site Status
SO19581239	TRAMWAY	None

Summary

FORMER B29: Dismantled tramroad serving the Llangatwg Quarries and other industrial works in its vicinity. Is now shown on maps as a continuous pathway.

Reference Number	Name	
03219m	277 HIRWAUN COMMON RAILWAY (BRANCH LINE)	
NGR	Type	Site Status
SN96170500	RAILWAY	None

Summary

At the point where the Hirwaun Common Mineral Railway crosses the A465, a branch line diverges to the south and currently survives as a footpath. This branch line is marked on the 1880 OS (but not on the title map).

Southeast Wales Industrial Ironworks Landscapes

Reference Number **Name**
03225.0m 259 BRANCH OF THE HIRWAUN-ABERDARE TRAMROAD

NGR **Type** **Site Status**
SN94080591 TRAMWAY None

Summary

A branch of the Hirwaun-Aberdare Tramroad exists to the west of Hirwaun and follows the present route of the Rhigos Road (A 4059). Orientated roughly east/west, the route approaches Hirwaun from the south-west, and then heads north-east through the town.

Reference Number **Name**
03230g LLANELLY INCLINE TRAMWAY

NGR **Type** **Site Status**
SO21551265 TRAMWAY None

Summary

FORMER B30: Incline tramway serving Blackrock Lime Works at Darren Ddu, Brynmawr, possibly surviving as a trackway.

Reference Number **Name**
04887m NANT MORLAIS TRAMWAY BRIDGE ABUTMENT

NGR **Type** **Site Status**
SO0753909790 BRIDGE None

Summary

Large earthen banks, which are triangular in section, on either bank of the Nant Morlais probably representing bridge abutments for an early tramway, probably the Twynau Gwynion Tramway of c. 1805.

Reference Number **Name**
04888m MERTHYR COMMON TRAMWAY

NGR **Type** **Site Status**
SO0753909690 TRAMWAY None

Summary

Line of an early tramway running east - west across Merthyr Common paralleling the course of the later Rhymney Mineral (Limestone) Railway.

Reference Number **Name**
05222.0g TQ 7

NGR **Type** **Site Status**
SO11901364 RAILWAY None

Summary

The track serving the north parts of the quarry is post-1901. No related structures or tracks survived.

Reference Number **Name**
05223.0g TQ 8

NGR **Type** **Site Status**
SO12001315 RAILWAY None

Summary

The main line running north from Pen-y-lan (a tramway in 1901 and a mineral railway on the recent OS map) has now been lifted, and is used as a roadway.

Southeast Wales Industrial Ironworks Landscapes

Reference Number	Name	
05224.0g	TQ 9	
NGR	Type	Site Status
SO12001340	RAILWAY	None

Summary

This line is similar in layout to that shown in 1901, although all tracks have been lifted.

Reference Number	Name	
05264.0g	A185 DESK-BASED ASSESSMENT L14	
NGR	Type	Site Status
SO13601170	TRAMWAY	None

Summary

A185 DESK-BASED ASSESSMENT A465 ABERGAVENNY TO HIRWAUN DUALLING. Trevil Tramroad, Beaufort 1 Tramroad and Tredegar. The next two lines are part of the Trevil Tramroad.. The first ran from the Trevil Quarries to a junction with Rassau Road at Trevil Machine. It was just under 3miles in length, built by T Dadford jnr and operated between 1797and 1860. The line of this track can be followed within the development area Llwyn Helyg road. The second line ran from the quarry to Beaufort where it connected with the Rassau Tramroad.

Reference Number	Name	
05269.0g	A185 DESK-BASED ASSESSMENT L7	
NGR	Type	Site Status
SO20401240	RAILWAY	none

Summary

A185 DESK-BASED ASSESSMENT A465 ABERGAVENNY TO HIRWAUN DUALLING Course of the Clydach Railway. North of the London and North Western Railway at Brynmawr is the line of the Clydach Railroad built in 1794, that ran along the north side of the current Heads of the Valleys road(A465) between Brynmawr and Abergavenny. No remains exist in this area as the line has since been utilised as a road.

Reference Number	Name	
05269.2g	WAIO	
NGR	Type	Site Status
SO12711230	TRAMWAY	None

Summary

Wessex Assessment 1998 This site comprises a small group of precast concrete rail/tramway sleepers (OS NGR SO 1271 1230: 421 m OD), two discarded to either side of the former track and a further two apparently laid end-on as kerbs on the northern side of the track. The sleepers were 2 m long, c. 0.3 m wide and c. 0.2 m high, and would probably have held a track whose rails were c. m apart. It is anticipated that the haul route will impact on these remains, which are considered to be the most recent sleepers used for the tramway.

Reference Number	Name	
05269.3g	SITE NAME NOT KNOWN	
NGR	Type	Site Status
SO12951231	TRAMWAY	None

Summary

Wessex Assessment 1998 This site is a c. 150 m long former section of the tramway (OS NGR SO 1295 1231: 419 m OD) that deviates to the north to follow a shallow cleft in the original hillside associated with a natural spring that now feeds into Shon-Sheffrey's Reservoir. The section of former route that passes over the spring was dry stone wall revetted, with a small square tunnel created to allow the spring to flow through (Plate 2128). This former route was in use until after 1922, when the line was realigned and straightened to pass over a man-made embankment. It is anticipated that the haul route will follow the existing embankment. and therefore not impact on the former alignment at this point.

Southeast Wales Industrial Ironworks Landscapes

Reference Number	Name	
05271.0g	A185 DESK-BASED ASSESSMENT L6	
NGR	Type	Site Status
SO20501270	RAILWAY	None

Summary

A185 DESK-BASED ASSESSMENT A465 ABERGAVENNY TO HIRWAUN DUALLING Course of the Llangattock to Brynmawr Tramway The course of a tramway is also visible east of Brynmawr, and north of the Clydach Railway, but its route is now marked by a road. This is Bailey's Tramroad, constructed c.1830, and it ran between Llangattock and Brynmawr and later to Nant-y-Glo.

Reference Number	Name	
05272g	A185 DESK-BASED ASSESSMENT S8	
NGR	Type	Site Status
SO22001200	BRIDGE	None

Summary

A185 DESK-BASED ASSESSMENT A465 ABERGAVENNY TO HIRWAUN DUALLING Devils Bridge.

Reference Number	Name	
05274.0g	A185 DESK-BASED ASSESSMENT L9	
NGR	Type	Site Status
SO24201430	TRAMWAY	None

Summary

A185 DESK-BASED ASSESSMENT A465 ABERGAVENNY TO HIRWAUN DUALLING Llamarch Tramroad/Railroad.

Reference Number	Name	
05290g	A185 TRAMROAD	
NGR	Type	Site Status
SO26200340	TRAMWAY	None

Summary

Tramroad 1826, from the British Ironworks to the Monmouthshire Railway (1854). Iron was carried from the British via a 1.25 mile tramroad running down the valley to join the main Pontypool-Blaenavon railway near Abersychan Farm; much of its route is now represented by Union Street. This line closed down in 1860, and was superseded by a longer tramroad which left the works near the Abersychan and Talywain station and ran downhill in a wide loop to cross Nant Ffrwdand continued north to make a north-facing junction with the Monmouthshire Canal Company's main line. This line can still be followed for most of its route as Manor Road and Victoria Road (Riden 1994, 31).

Reference Number	Name	
05976.0g	91 CLYDACH RAIL ROAD BETWEEN BLACKROCK & CHELTENHAM	
NGR	Type	Site Status
SO21531255	TRAMWAY	None

Summary

Built by the Brecknock and Abergavenny Canal Company after it was incorporated in 1793 the Clydach Rail Road ran from the collieries at Brynmawr, at the head of the Clydach Gorge to the long established iron-forge at Glangrwyne.

Reference Number	Name	
05977.0g	78 CLYDACH RAIL ROAD, CHELTENHAM	
NGR	Type	Site Status
SO21951274	TRAMWAY	None

Summary

Built by the Brecknock and Abergavenny Canal Company after it was incorporated in 1793 the Clydach Rail Road (see also Site No.44) ran from the collieries at Brynmawr, at the head of the Clydach Gorge to the long established iron-forge at Glangrwyne.

Southeast Wales Industrial Ironworks Landscapes

Reference Number **Name**
05980.0g 111 LLANGATTOCK-BRYNMAWR TRAMROAD, BRYNMAWR

NGR **Type** **Site Status**
SO19451236 TRAMWAY None

Summary

At the top of the Clydach gorge, adjacent to the Brynmawr roundabout, the A465 severs the line of the Llangattock tramroad at SO 1955 1237. The tramroad was built in the early 1830's by J. & C. Bailey to link their ironworks at Nantyglo and Beaufort.

Reference Number **Name**
05985.0g 95 BRANCH OF LLAM-MARCH TRAMROAD, CLYDACH IRONWORKS

NGR **Type** **Site Status**
SO22891305 TRAMWAY None

Summary

This line originated when the proprietors of the Clydach Ironworks requested that the B & A Canal Company build a tramroad to transport raw materials from the collieries and ironstone mines on the hillsides south of the gorge to the Clydach Ironworks.

Reference Number **Name**
05995.0g 146 TREFIL TRAMROAD, NANT Y BWCH

NGR **Type** **Site Status**
SO12951111 TRAMWAY None

Summary

The Trefil tramroad, Tredegar Branch was built to carry limestone from the extensive quarries at Trefil on the eastern bank of the Sirhowy River to a junction with the Rassau Road at Trefil Machine. It was approximately 4.2 km and built by T. Dadford Jr.

Reference Number **Name**
05998.0g 138 RASSAU TRAMROAD, NANT Y CROFT

NGR **Type** **Site Status**
SO14701155 TRAMWAY None

Summary

A section of the Rassau Tramroad is located south of the settlement of Nant y Croft and may link up with the Trefil Tramroad and Mineral Line. The Ordnance Survey suggests that the route is a dismantled railway.

Reference Number **Name**
06005.0g 89 (. TRAMROAD DARREN DDU LIMESTONE QUARRY TO LIMEKILNS, BL

NGR **Type** **Site Status**
SO21851275 TRAMWAY None

Summary

Starts at the south-eastern end of the Blackrock limekilns and runs due east for c.320m up a sharp incline. This tramroad would have supplied limestone to the kilns and is believed to have had a self-acting incline mechanism (Van Laun 1979).

Reference Number **Name**
06006.0g 89 (. TRAMROAD, DARREN DDU LIMESTONE QUARRY TO BLACKROCK

NGR **Type** **Site Status**
SO21541262 TRAMWAY None

Summary

Two tramroads have been located running approximately northeast to southwest, between Blackrock limekilns and Darren Ddu quarries.

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Reference Number **Name**
06008.0g 265 BRANCH OF DISGWYLFA TRAMROAD, CLYDACH DINGLE

NGR **Type** **Site Status**
SO19231283 TRAMWAY None

Summary

To south of the 'squatter's settlement, and next to quarrying within Clydach Dingle is a shallow incline which is a well persevered section of the Disgwylfa Tramroad. The area had a high concentration of quarrying (to the north) and coal extraction features.

Reference Number **Name**
06009.0g 264 WESTERN SECTION OF CLYDACH RAILROAD

NGR **Type** **Site Status**
SO19491202 TRAMWAY None

Summary

To the north of the A465, the tramway follows the northern banks of the Afon Clydach to the roundabout, east of Brynmawr. The route survives as a footpath to the Brynmawr roundabout, before running parallel (south) to the Clydach Bridge.

Reference Number **Name**
06010.0g 263 SOUTHERN SECTION OF CLYDACH RAILROAD, PONT HARRI ISSAC

NGR **Type** **Site Status**
SO20431233 TRAMWAY None

Summary

To the south of the A465 is a small section of the Clydach Tramroad, in existence by 1798, which ran south-east over the River Clydach (Rattenbury 1980). The branch line to the collieries at Gelli Felen left the main line at Pont Harri Issac.

Reference Number **Name**
06013.0g 122 BAILEY'S DARREN DISGWYLFA TRAMROAD, CLYDACH DINGLE

NGR **Type** **Site Status**
SO19051215 TRAMWAY None

Summary

Above the open-cast workings and terraces and within the 50m corridor is a section of the Bailey's Disgwylfa Tramroad preserved on the hillside above the A465. In use by 1818, it brought limestone from the quarries at Darren Disgwylfa.

Reference Number **Name**
06048.0g 113 BRANCH LINE OF THE CLYDACH RAIL ROAD & COLLIERY LEVEL

NGR **Type** **Site Status**
SO20081218 TRAMWAY None

Summary

Masonry revetments & 2 coal adits (E and W) survive in face of cliff above coal measures covered by stone arch of apparent railway date (1862). Workings served by early branch line tramroad related to Clydach Railway.

Reference Number **Name**
06774g SITE NAME NOT KNOWN

NGR **Type** **Site Status**
SO11991289 TRAMWAY None

Summary

Tramroad from Trefil Quarry to LNWR Merthyr, Tredegar and Abergavenny Branch. Route now fossilised by Trefil Road and Llwyn Helyg.

Southeast Wales Industrial Ironworks Landscapes

Reference Number	Name	
06841g	SITE NAME NOT KNOWN	
NGR	Type	Site Status
SO16110995	TRAMWAY	None

Summary
Tramway, leading out of area.

Reference Number	Name	
06842g	SITE NAME NOT KNOWN	
NGR	Type	Site Status
SO16180995	TRAMWAY	None

Summary
Tramway, splits from BG476 at heads north out of survey area.

Reference Number	Name	
07226g	SITE NAME NOT KNOWN	
NGR	Type	Site Status
SO2787204482	TRACKWAY	None

Summary
Trackway, presumably in use as a tramway for horse drawn vehicles in 19thC. Meets course of FE road, S through Lasgarn Woods.

Reference Number	Name	
07802g	97 PANT-GLAS BRIDGE, CLYDACH	
NGR	Type	Site Status
SO22931333	BRIDGE	None

Summary
A sandstone masonry bridge of roughly coursed stone with a double row of voussoirs over a low flat arch. The bridge was widened at some stage for additional tramroad traffic.

Reference Number	Name	
276001	CLYDACH RAILROAD SECTION NEAR BRYNMAWR	
NGR	Type	Site Status
SO202122	TRAMWAY	SAM

Summary
No further information available.

Reference Number	Name	
276002	CLYDACH COAL LEVEL	
NGR	Type	Site Status
SO200121	TRAMWAY	SAM

Summary
No further information available.

Reference Number	Name	
307962	CLYDACH RAIL ROAD BRIDGE; HAFOD ARCH	
NGR	Type	Site Status
SO20221226	BRIDGE	SAM

Summary
No further information available.

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Reference Number 308649	Name RASSA RAILROAD BRIDGE. BEAUFORT	
NGR SO16041153	Type BRIDGE	Site Status None

Summary
No further information available.

Reference Number 308651	Name CLYDACH RAILROAD BRIDGE, MAESGWARTHA, CLYDACH	
NGR SO23031378	Type TRAMWAY BRIDGE	Site Status None

Summary
No further information available.

Reference Number 308651	Name CLYDACH RAILROAD BRIDGE, MAESGWARTHA, CLYDACH	
NGR SO23031378	Type TRAMWAY BRIDGE	Site Status LB II

Summary
No further information available.

Reference Number 309824	Name BRECON MOUNTAIN RAILWAY	
NGR SO05950965	Type RAILWAY	Site Status None

Summary
No further information available.

Reference Number 34374/34645	Name MACHINE HOUSE WEIGH HOUSE SITE	
NGR SO24181437	Type WEIGH HOUSE	Site Status None

Summary
No further information available.

Reference Number 34631	Name CLYDACH TRAMROAD INCLINE	
NGR SO22551269	Type INCLINED PLANE	Site Status None

Summary
No further information available.

Reference Number 34633	Name SMART'S BRIDGE; CLYDACH IRONWORKS TRAMROAD BRIDGE, CLYDACH	
NGR SO22871327	Type BRIDGE	Site Status LB SAM

Summary
No further information available.

Southeast Wales Industrial Ironworks Landscapes

Reference Number **Name**
34637 LLAN-MARCH TRAMROAD CULVERT, GLAN-SYCHNANT, CLYDACH

NGR	Type	Site Status
SO22521266	CULVERT	None

Summary
No further information available.

Reference Number **Name**
34809 GAMLYN COLLIERY TRAMROAD

NGR	Type	Site Status
SN98320474	BRIDGE	None

Summary
No further information available.

Reference Number **Name**
34815 HIRWAUN-ABERNANT TRAMROAD BRIDGE

NGR	Type	Site Status
SN99010435	BRIDGE	SAM

Summary
No further information available.

Reference Number **Name**
34820 LLWYDCOED TRAMROAD: AFON CYNON IRON BRIDGE, ABERDARE

NGR	Type	Site Status
SN99710362	BRIDGE	LB2:SAM

Summary
No further information available.

Reference Number **Name**
34847/34640 HIRWAUN IRONWORKS: TRAMROAD CAUSEWAY

NGR	Type	Site Status
SN95850573	EARLY RAILWAY	SAM

Summary
No further information available.

Reference Number **Name**
34884 TRAMWAY BUILDING+COUNCIL STORE

NGR	Type	Site Status
SO00030300	BUILDING	None

Summary
No further information available.

Reference Number **Name**
43067 CLYDACH IRONWORKS SERVICE BDGE

NGR	Type	Site Status
SO226128	BRIDGE	None

Summary
No further information available.

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Reference Number 54303	Name BEAUFORT TRAMROAD, BEAUFORT	
NGR SO16681159	Type RAILWAY	Site Status None

Summary
No further information available.

Reference Number 54602	Name EBBW VALE IRONWORKS TRAMWAY: CAUSEWAY, EBBW VALE	
NGR SO16930989	Type RAILWAY EMBANKMENT	Site Status None

Summary
No further information available.

Reference Number 85654/85638/85653/85626	Name DOWLAIS IRON CO RLY.	
NGR SO07360787	Type RAILWAY	Site Status None

Summary
No further information available.

Reference Number 88073/34649	Name PENDERYN TRAMROAD	
NGR SN94140901	Type TRAMWAY	Site Status None

Summary
No further information available.

Reference Number 91443	Name HIRWAUN TRAMROAD CROSSING, ABERDARE	
NGR SO01340243	Type RAILWAY	Site Status None

Summary
No further information available.

Appendix IV

	Type of network and features								
Transport Network ID	Name	Date	Type	Stone Blocks	Sleepers	Chairs/Sills	Type of Rail/Plate	Length of rail/plate	Gauge
IWT001	Abersychan Limestone Railway	c. 1830	Railway	Yes	No	Chairs secured with pins	Wrought-iron fish-belly rail	c.13 ft 6in?	3ft 8in
		1840	Railway	Yes	No	Chair with keys	T-rails	unknown	3ft 8in
IWT002	Llam-march Railroad	1795	Railroad	Yes	unknown	unknown	Bar rail	4 ft	3ft 8in
IWT003	Llam-march Tramroad	c. 1811	Tramroad	Yes (uncertain phase)	Unknown	Unknown	Outram type plate	2ft 8in	4ft 4in
		By 1863	Tramroad		Unknown	Unknown	Combined edge and plate rail and some parts standard gauge	unknown	4ft 5 1/2in
IWT004	Clydach Railroad	c. 1794	Railroad	Yes with iron sleepers	Iron of Homfray style across blocks/ Wooden sleepers used in parts	Cast -iron sills at rail centre	Cast-iron bar rails with wooden plugs	4ft	3ft 8in
		1837	Railroad	Stone blocks used throughout	No	Unknown	Prob cast-iron bar rails with wooden plugs	4ft	3ft 8in
IWT005	Bailey's Llangattock Tramroad	c. 1830	Tramroad/ Railway?	Yes	No	Sills	Plates	? same as BBCos?	3ft 4in
		By 1834?	Railway	yes	no	Chairs with iron key	Wrought-iron plate	unknown	3ft 4in
IWT006	Disgwylfa	c. 1818	Tramroad	yes	no	sills	Early Bailey pattern Hogged plates, ribbed underside	4ft	2ft 9in

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IWT007	Trevil Railroad	1796	Railroad	Yes	No	Unknown	Cast-iron bar rails	4ft	3ft 8in
		By 1847	Railroad	Yes	No	Chairs and sills	Some replacement with wrought-iron rails (probably T-rails)	Unknown	3ft 8in
		1874	Railroad	Unknown	Unknown	Chairs	Some replacement with double-headed rails	Unknown	3ft 9in?
		1919	Railway	No	Wooden	Chairs with wooden keys	Bullhead, flat bottomed and bridge rails	Unknown	Standard gague 4ft 8 1/2 in
IWT008	Rassau Railroad	1796	Railroad	yes	no	unknown	Cast-iron bar rails	4ft	3ft 8in
IWT009	Hall's Trevil	1815	Tramroad	yes	Iron sleepers?	Sills	Ourtram type plates	4ft	3ft 4in
IWT010	Rhymney Tramroad Branch	c. 1806	Tramroad	yes	unknown	sills	Dovetailed plates	4ft 6in	2ft 9 1/2in
IWT011	Morlais East	c. 1825	Tramroad			Unknown	Plates	Unknown	4ft 2in
		1830s	Railway	Yes (uncertain phase)	Wooden (uncertain phase)	Chair	Wrought-iron edge rails	unknown	Standard gauge 4ft 8 1/2in
IWT012	Morlais West	c. 1800	Tramroad	Yes	Iron	Non-dovetailed sills	Ourtram style plates	3ft	2ft 4in
		?	Tramroad	Yes	Wooden	Non-dovetailed sills	Unknown	unknown	unknown
		c. 1830	Tramroad	no	wooden	Chairs	Ourtram style plates	4ft/3ft	4ft 2in
		c. 1870	Tramroad	unknown	wooden	Chairs	Miscellaneous types including bullhead	unknown	4ft 6in

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							rails laid sideways to accommodate plateway wheels		
IWT013	Tappendens' Tramroad	c. 1802	Tramroad	Yes		unknown	Outtram type plates	3ft	4ft 2in
		1840s	Tramroad	yes	Wooden (uncertain phase)	Dumb-bell chairs, later years miscellaneous types	Wrought-iron plates, later years miscellaneous types	unknown	4ft 4in
IWT014	Mr Glover's Railroad	c. 1786	Railroad	no	wooden	No	Wooden rails	Unknown	unknown
		1794	Railroad	Yes at rail ends	Wooden for mid rail	Unknown	Cast-iron rails	Unknown	3ft 2in
		By 1808	Railroad	Yes	Unknown	Unknown	Outtram type plates	3ft	4ft 2in
		1840s	Railroad	yes	unknown	Dumb-bell chairs	Wrought-iron plates	unknown	4ft 4in
		1904	Railway	no	wooden	chairs	unknown	unknown	Standard gauge 4ft 8 1/2in
IWT015	Twynau Gwynion	c.1790s	Tramroad	Unknown	Wooden	Non-dovetailed sills?	Coned plates derived from Curr type	3ft 6in	2ft 6in
		1807-1813?	Tramroad	Unknown	unknown	Dovetailed sills	Vandyked plate amongst others miscellaneous types	Unknown	2ft 9 1/2 in
		1825	Tramroad	yes	Unknown	sills	Outtram type plates	3ft 7in-3ft 11in	2ft 6in
IWT016	Rhymney Limestone Railway	c. 1848	Tramroad	Unknown	Unknown	sills	plates	Unknown	2ft 9 1/2in ?
		1852	Railway	Yes for support	Wooden	chairs	Wrought-iron plates	Unknown	Unknown

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		1860s	Railway	between sleepers unknown	Wooden	Chairs	Flat bottomed rails	Unknown	Standard gauge 4ft 8 1/2in
		1870s	railway	no	wooden	chairs	Double-head rails	unknown	Standard gauge 4ft 8 1/2in
IWT017	Bryn Oer Tramroad	1815	Tramroad	yes	Iron dovetailed	Dovetailed sills	Outram style plates	3ft 11in	3ft 4in
IWT018	Tredegar Tramroad	c.1804	Tramroad	Yes	Unknown	Horned sills	Plates	4ft 6in	2ft 9 1/2in
		post – 1852	Tramroad with locomotives	Unknown	Unknown	Dovetailed chairs	L-section wrought-iron plates	unknown	2ft 9 1/2in
		1877	Tramroad with locomotives	unknown	Wooden	chairs	Wrought-iron plates with ribbed underbelly and keys with wrought iron ties	unknown	2ft 9in
IWT019	Ebbw Vale Private Line	1813	Tramroad	Unknown	Unknown	Unknown	Unknown	Unknown	unknown
		1907	Railway						
IWT020	Bute Tramroad	1825	Tramroad	Yes	no	sills	plates	4ft	2ft 9 1/2in
IWT021	Beaufort Railroad	1796	Railroad	Yes	Unknown	Unknown	Cast-iron bar rails	4ft	3ft 8in
		c.1805	Railroad	yes	unknown	unknown	plates	unknown	unknown
IWT022	Protheroe's Tramroad and Venallt	c. 1817	Tramroad	unknown	unknown	unknown	unknown	unknown	unknown
IWT023	Banwen Tramroad (Banwen)	1840s	Tramroad or Railroad ?	yes	Iron tie bars on wooden sleepers	Cast-iron chairs	Wrought-iron edge rails, various types including flat bottomed	14ft – 16ft	2ft 3in ? see page 157

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	Ironworks Railway)								
IWT024	Ystalyfera Tramroad	c. 1841	Tramroad	yes	Unknown	unknown	Cast-iron plates	unknown	2ft 3in prob
IWT025	Nant-y-glo – Beaufort Tramroad	c. 1833	Tramroad	yes	unknown	Sills	plates	unknown	3ft 4in?

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



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