



COAL MINING RISK ASSESSMENT

PLANNING APP. P18/0245

TWO DETACHED RESIDENCES

LAND ADJACENT TO 48 HIGH ST.

TRELEWIS

MERTHYR TYDFIL C.B.C.

CF46 6AB

28/09/2018

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COAL MINING RISK ASSESSMENT

1. INTRODUCTION

This Coal Mining Risk Assessment (henceforth C.M.R.A.) has been produced for Mr. Russell Hardwicke in support of planning application P/18/0245 to Merthyr Tydfil C.B.C. L.P.A. (henceforth M.T.C.B.C.). The application is for two detached bungalows with integral parking. The full plans can be viewed on M.T.C.B.C.'s planning portal. Some representative drawings are included in Appendix 1 of this report. The site is classed as being within a Development High Risk Area. This fact has been communicated to the applicants recently by M.T.C.B.C. in consultation with the Coal Authority. The reason for this classification will be discussed later in this report. With such a classification the C.A. become statutory consultees for the application and a C.M.R.A. needs to be produced to validate the planning application.

Richard Davies BSc.(Hons),MSc., F.G.S. of Rhondda Geotechnical Services has been commissioned as the competent person to prepare a C.M.R.A. of the proposed development site. The purpose of this is to provide the L.P.A. with information on possible coal mining and an assessment of its impact on the ground stability of the site. The purpose of this C.M.R.A. is to gather all the available information and use it to identify any coal mining risks and then to quantify them. It will then suggest, if necessary, any mitigation measures to satisfy the L.P.A. that the site is, or can be made safe and stable in line with national guidelines. This will be done in line with the template and recommendations of the C.A. document Guidance for Welsh L.P.A.s (version 4, 2017).

The site is centred on grid reference 310326, 197461 and is at an elevation of approximately 152m A.O.D. The plot is roughly rectangular in shape and covers an area of approximately 25m x 20m (0.05 Hectare). The site is adjacent to, and level with High Street to the east, but the proposed access is via the lane to the west. North of the site is a carpark whilst the southern boundary is 48 High Street, a terraced property. The site is level and there are no surface watercourses. The site location and site boundary can be seen overleaf in Figures 1 and 2.

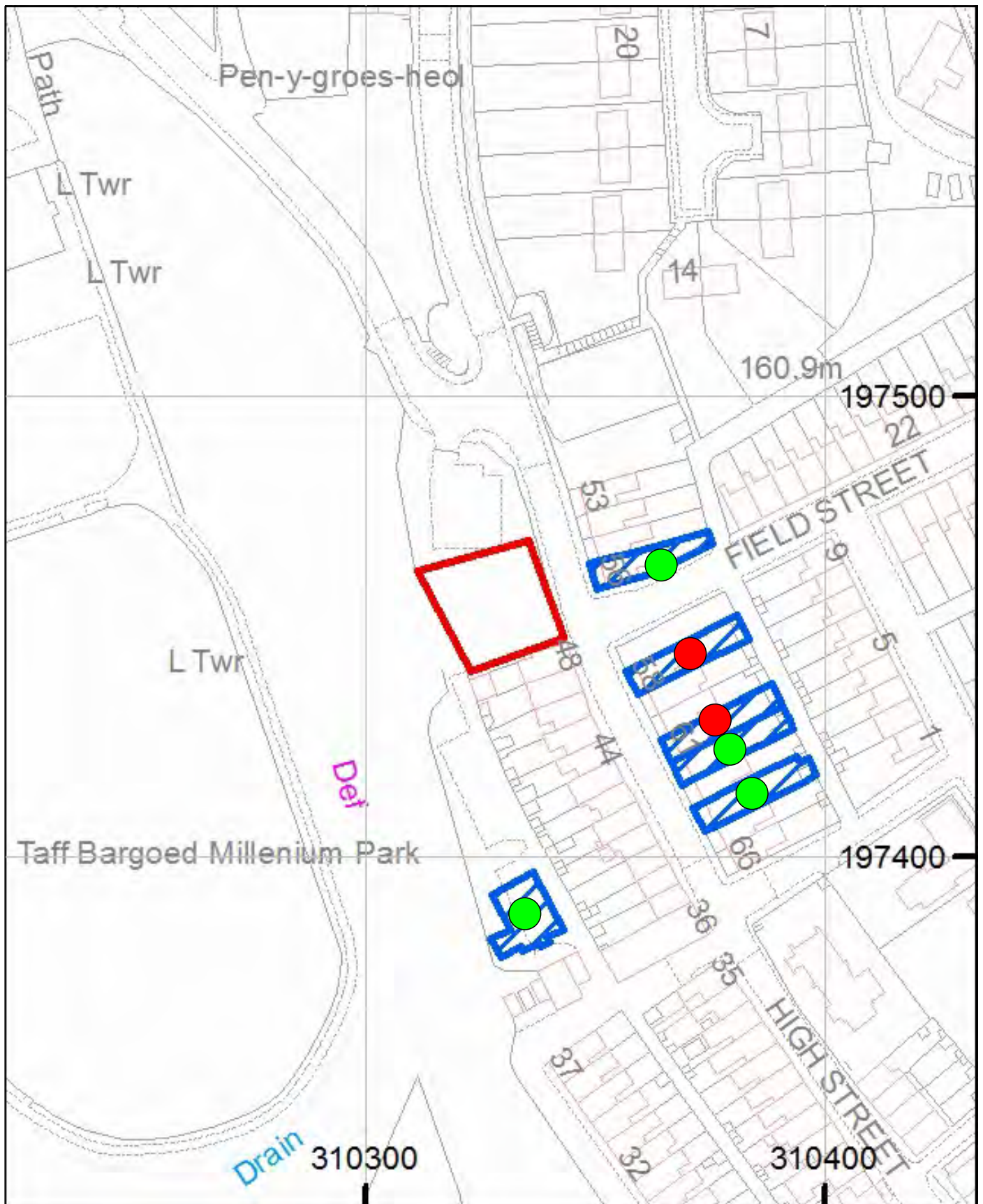


FIGURE 2

SITE BOUNDARY SHOWN IN RED ON PLAN FROM C.A. CON29 REPORT. BLUE SHADING SHOWS SUBSIDENCE CLAIMS. UNSUCCESSFUL CLAIMS ARE MARKED WITH A GREEN CIRCLE, SUCCESSFUL CLAIMS ARE MARKED WITH A RED CIRCLE

2. SOURCES OF INFORMATION

- a) Coal authority CON29 Report ref MR-51001924107001 and Subsidence Buffer Zone Report MR-51001942780001.
- b) The Coal Authority interactive map viewer.
- c) The six inch to the mile Geological Survey sheet ST19NW (1963 revision).
- d) The Memoirs of the Geological Survey of The South Wales Coalfield, part IV Pontypridd and Maesteg (first edition 1903 and third edition, 1963) and other mining archive sources.
- e) Historical Ordnance Survey maps, Old County Editions for Glamorgan, Sheet 19, 1877 edition with 1900, 1920 and 1957 revisions. Maps were viewed at 1:2500 scale.
- f) A walkover survey of the site.

2a) The Coal Mining Report states that the development is in an area that could be affected past underground mining in four seams of coal at 600m-690m depth, and last worked in 1974. Any ground movement due to coal mining activity should have stopped. In the comments section it goes on to say a prudent developer would seek appropriate technical advice. The report states there are no present underground workings, or plans for any. There are no mine entries within 20m of the site boundary. *The C.A. is not aware of any geological faults or other weaknesses that have been affected by coal mining* (this statement will be commented on later). The report states the site is not within 800m of an opencast. There have been no records of mine gas emissions requiring action. All these facts will be fed into the later quantitative risk assessment.

The C.A. have received six damage notices for properties within 50m since October 1994 (i.e. since the formation of the C.A. to take liability for legacy mining issues). This obviously is of significance to this risk assessment. Because of this it was decided to purchase a Subsidence Buffer Report from the C.A. This is much overpriced for the scanty detail it contains. The only additional information that was not contained in the CON29 is the dates of the claims (July 1995-March 2001) and whether they led to compensation (two cases) or were rejected (four cases). No details of possible causes or types of damage are recorded. The reports are attached as Appendix 2.

b) The C.A. interactive viewer contains a vast amount of information from various sources particularly on the mining data window. An extract from the planning window can be seen in Figure 3. It can be seen that a very thin strip of development High Risk strikes off in a northwest direction from a large block of High Risk, and appears to stop just short of the site. An extract from the Mining Data Window is reproduced as Figure 4 overleaf. This window is far superior to the planning window as it is at a larger scale. There are multiple datasets which can be turned on and off. For clarity only three sets are turned on in Figure 4. The brown dashed line east of the site is a coal seam outcrop. Specifically it is the Mynyddislwyn, a seam heavily mined from outcrop in northeast Glamorgan and Gwent. Multiple mine entries (red crosses) can be seen, and it is clearly the reason for the large area of High Development Risk seen on the previous window. Two mine entries can be seen west of the site. These are the shafts of Deep Navigation Colliery from where the deep mining mentioned in the Mining Report has been carried out. The long linear feature is labelled as a breakline. Again, at the larger scale it does not appear to be actually on the site, but is very close. The letter from the C.A. Planning Liaison Manager to M.T.C.B.C. makes it clear that this feature is the reason for their concern. It is hard to square this fact with the information from the Mining Report highlighted in the previous section. This states quite clearly *the C.A. are unaware of any geological faults or weaknesses that have been affected by coal mining*. If this is the case either the planning Liaison Officer and interactive viewer or the Mining Report are incorrect. This must have a bearing on the risk assessment.

The interactive viewer also has a dataset showing areas of underground workings. In many areas of South Wales this is so congested with irregular workings in multiple seams that it is totally useless. The area surrounding the site is not quite so bad. With difficulty, the shallow workings in the Mynyddislwyn can be distinguished from very large regular panels of longwall mining. The viewer reveals that these panels are in the Gellideg, Seven Foot, Lower Nine Foot and Six Foot seams. These are basal seams in the Lower and Middle Coal Measures at considerable depth under the site. A section of this dataset is reproduced as Figure 5. It is informative that there are panels very close to the breakline feature. Furthermore, it can be seen that the panels run northwest-southeast, parallel to the breakline.

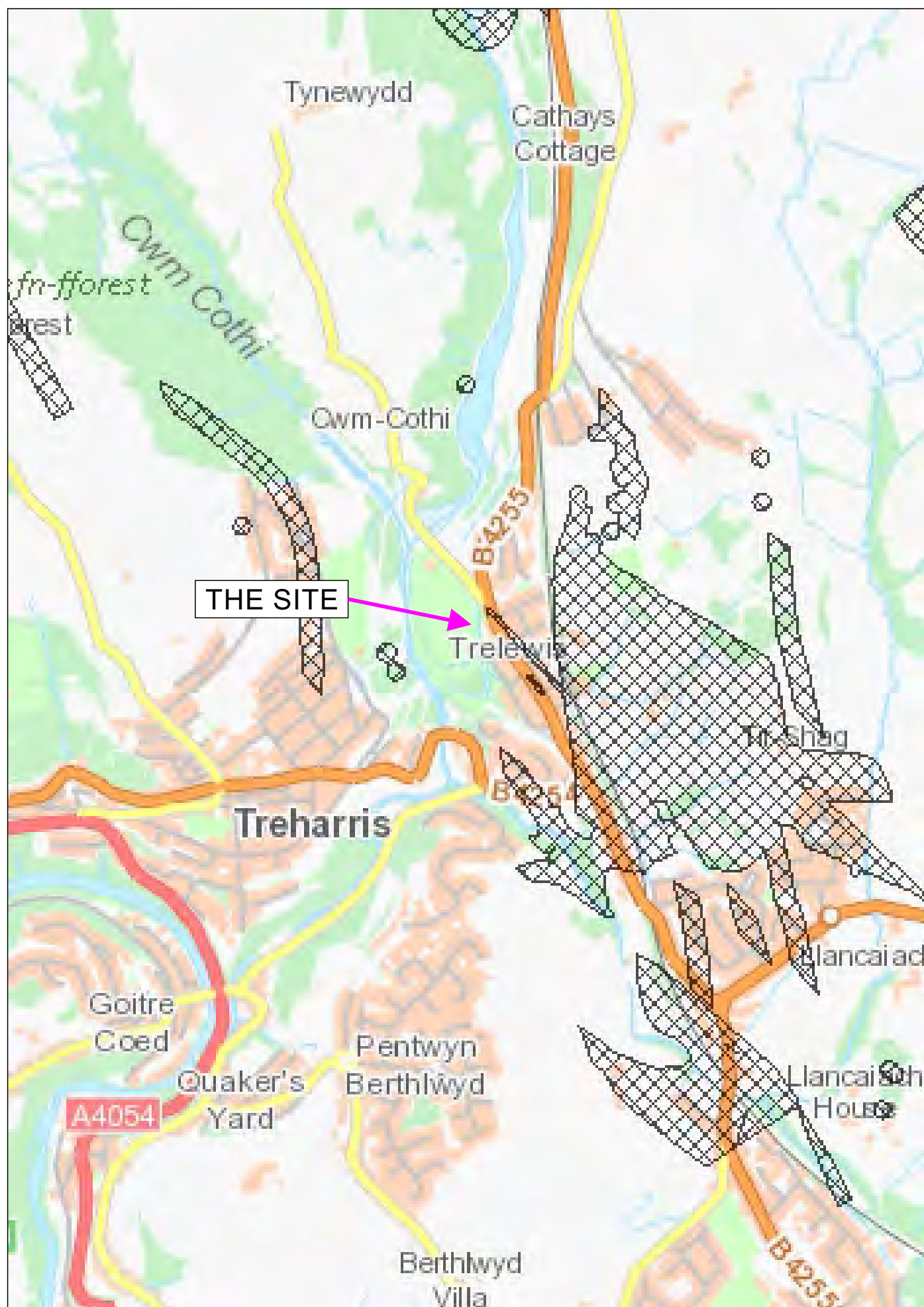


FIGURE 3
EXTRACT OF C.A. INTERACTIVE VIEWER SHOWING
DEVELOPMENT HIGH RISK AREA

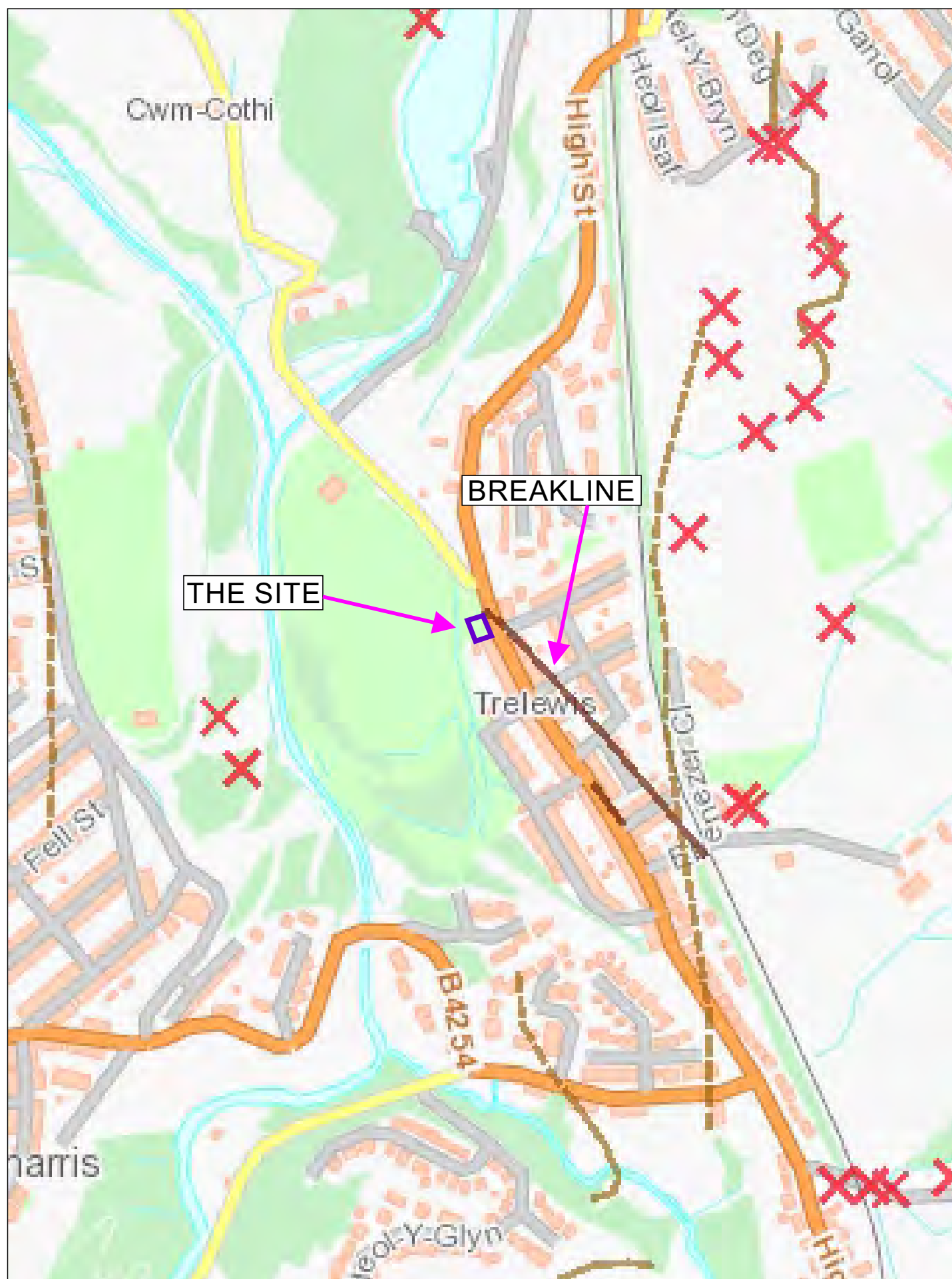


FIGURE 4

EXTRACT OF C.A. VIEWER, MINING DATA WINDOW. OUTCROPS, MINE ENTRIES AND DISTURBANCES ONLY SHOWN FOR CLARITY

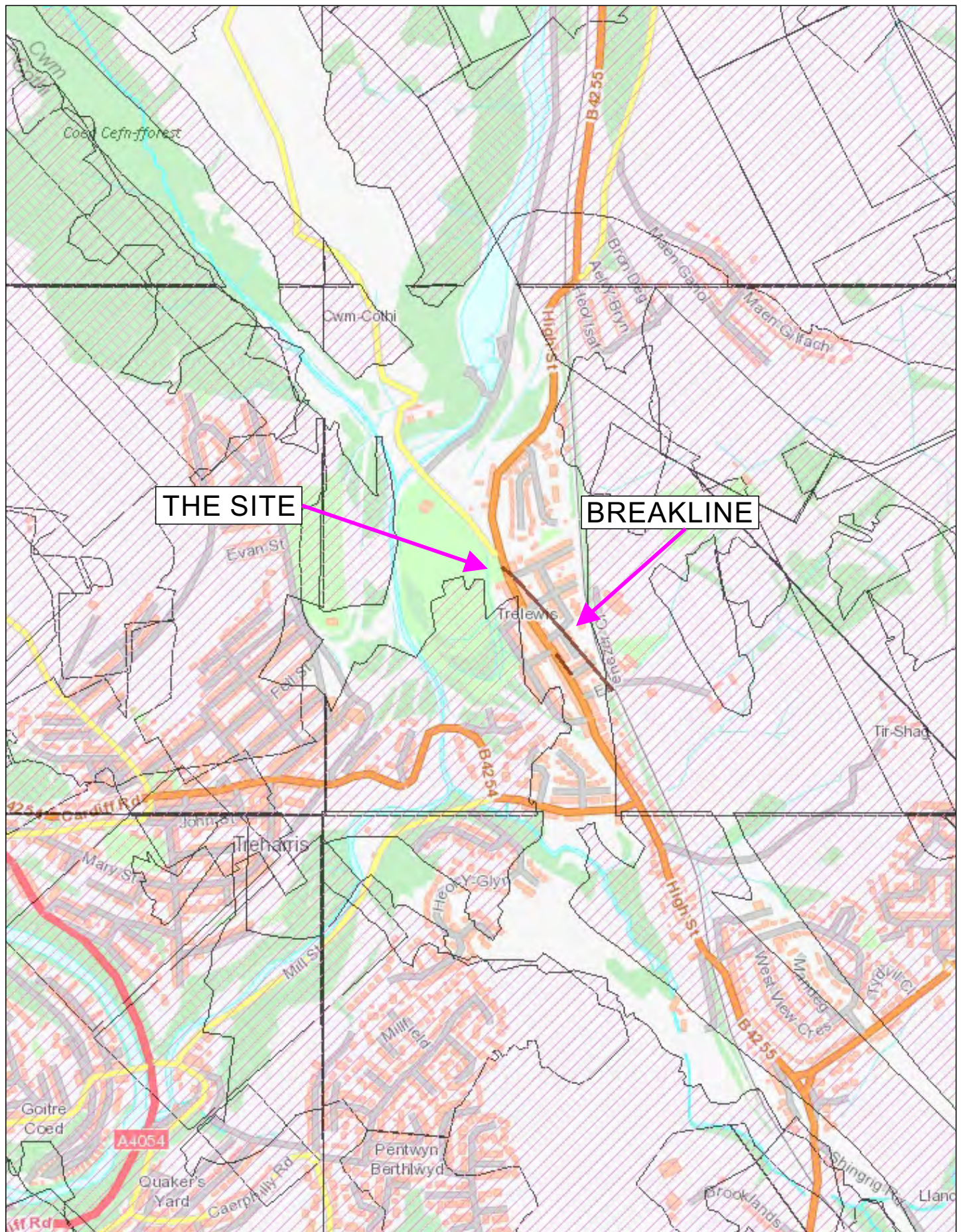


FIGURE 5

EXTRACT OF C.A. VIEWER SHOWING UNDERGROUND WORKINGS
AND GEOLOGICAL DISTURBANCES ONLY

2c and d) The six inch to the mile Geological Survey sheet ST19NW covers the area around the site. An extract of the map has been reproduced as Figure 6 overleaf. A section of the stratigraphic column from the map is shown in Figure 7 with the site level marked. It is always very useful to study the survey sheets in conjunction with the Memoirs. Used together, the six inch survey sheets and the Memoirs are an invaluable source of much detailed geological information on the area. Much of this has been obtained from mining records. Due to the very high economic importance of the area, extensive government funded geological surveys have been carried out in the past. These were completed in 1845, 1899 and 1954 respectively. Very little information on historical coal mining in the area is missing. The memoirs state that the bedrock beneath the site is of Upper Carboniferous (Coal Measure) age. More specifically it is underlain by the Hughes Beds with the Brithdir Beds deeper underground. There is an unconformity between the Hughes Beds and the overlying Grovesend Beds which outcrop on the hillside rising up east of the site. It is widely believed that this is due to contemporaneous erosion of the Swansea Beds as the area was being uplifted. The intensively mined Mynyddislwyn seam is the basal marker of the Grovesend beds. It is impossible to say which side of the unconformity the site lays on, but it is irrelevant to this risk assessment. The Mynyddislwyn outcrops above the site. The Cefn Glas, which is worked in many areas of the coalfield, lies approximately 100m below the site. Shallow coal working is not an issue on this site, neither are mine entries.

What the Geological Survey does show is faulting encountered deep underground. This has been highlighted in red in Figure 6. Three faults *en echelon* can be seen in very close proximity beneath the site. The faults are recorded at between 1575'-1590' below sea level. This is approximately 690m below ground level at the site. This ties in with the information in the C.A. Mining Report. Two are important regionally and are identified as the Llanfabon Fault (the most westerly) and the Gelligaer Fault (most easterly) with another intermediate fault between them. The information on the underground position of these faults evidently comes from the driving of a deep roadway seen on the map. This goes from Pit Bottom, through the three faults to huge coal reserves in the Six Foot Seam northeast of the village. The roadway passes directly beneath the site. The surface expressions (outcrops) of these faults are also shown on the map and are highlighted in green. It should be noted that none of the surface expressions of the faults are anywhere near the site. In addition the positions of the faults as they were encountered in the shallow workings in the

Mynyddislwyn seam are also shown on the map as solid black lines. The downthrow sides of the faults are indicated in the conventional manner on the survey sheet. By combining this information it can be deduced that all the faults are normal and that they delineate a graben (a large downthrown block of strata). A simplified southwest-northeast section along the roadway is shown in Figure 8. The significance of this will be expanded on later in the site specific risk assessment. It is worth noting that the faults all follow the strong southeast-northwest regional trend which can be seen throughout the eastern half of the South Wales Coalfield.

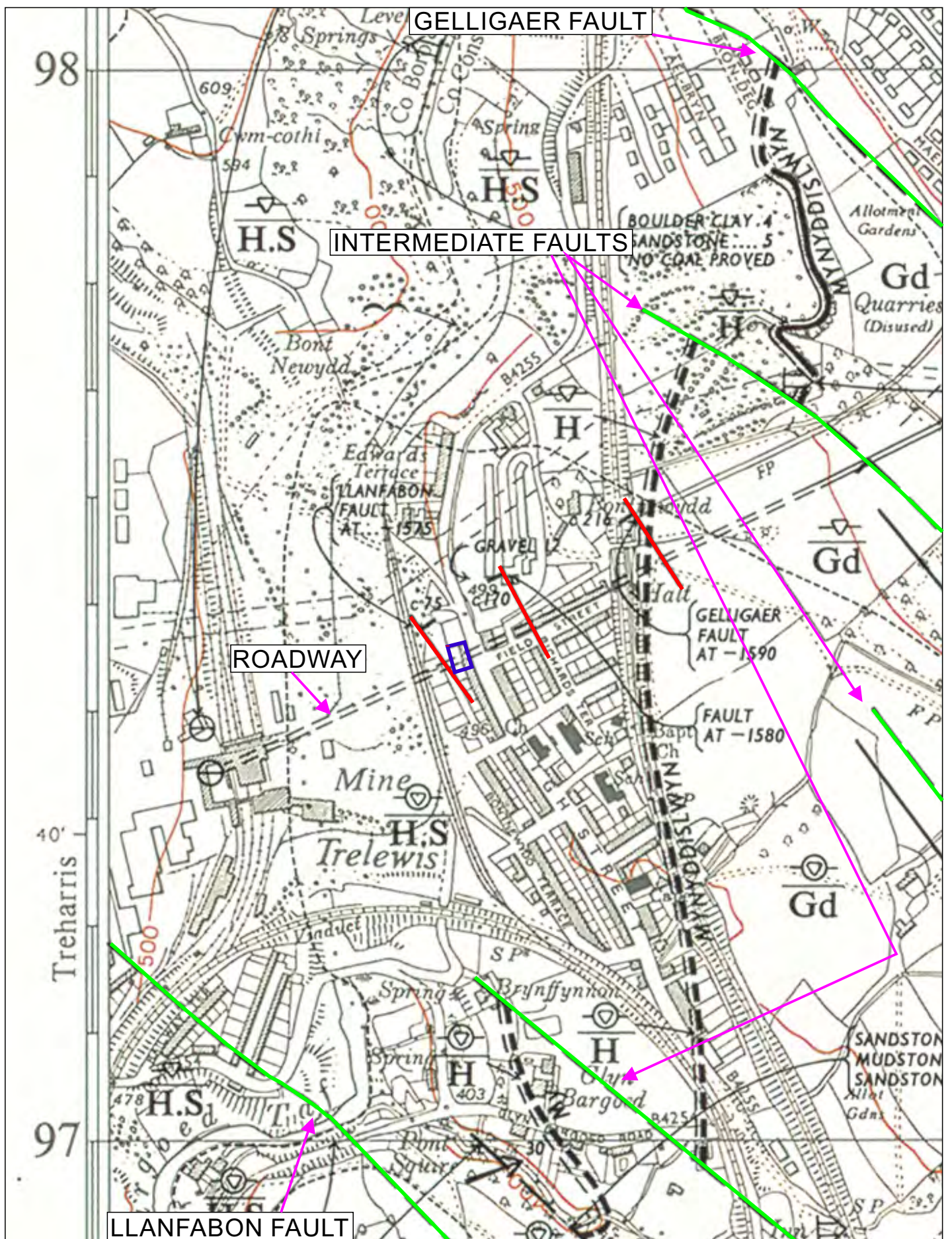


FIGURE 6

EXTRACT OF GEOLOGICAL SURVEY SHEET ST19NW.
 FAULTS RECORDED UNDERGROUND HIGHLIGHTED
 IN RED, SURFACE FAULTS IN GREEN, SITE IN BLUE

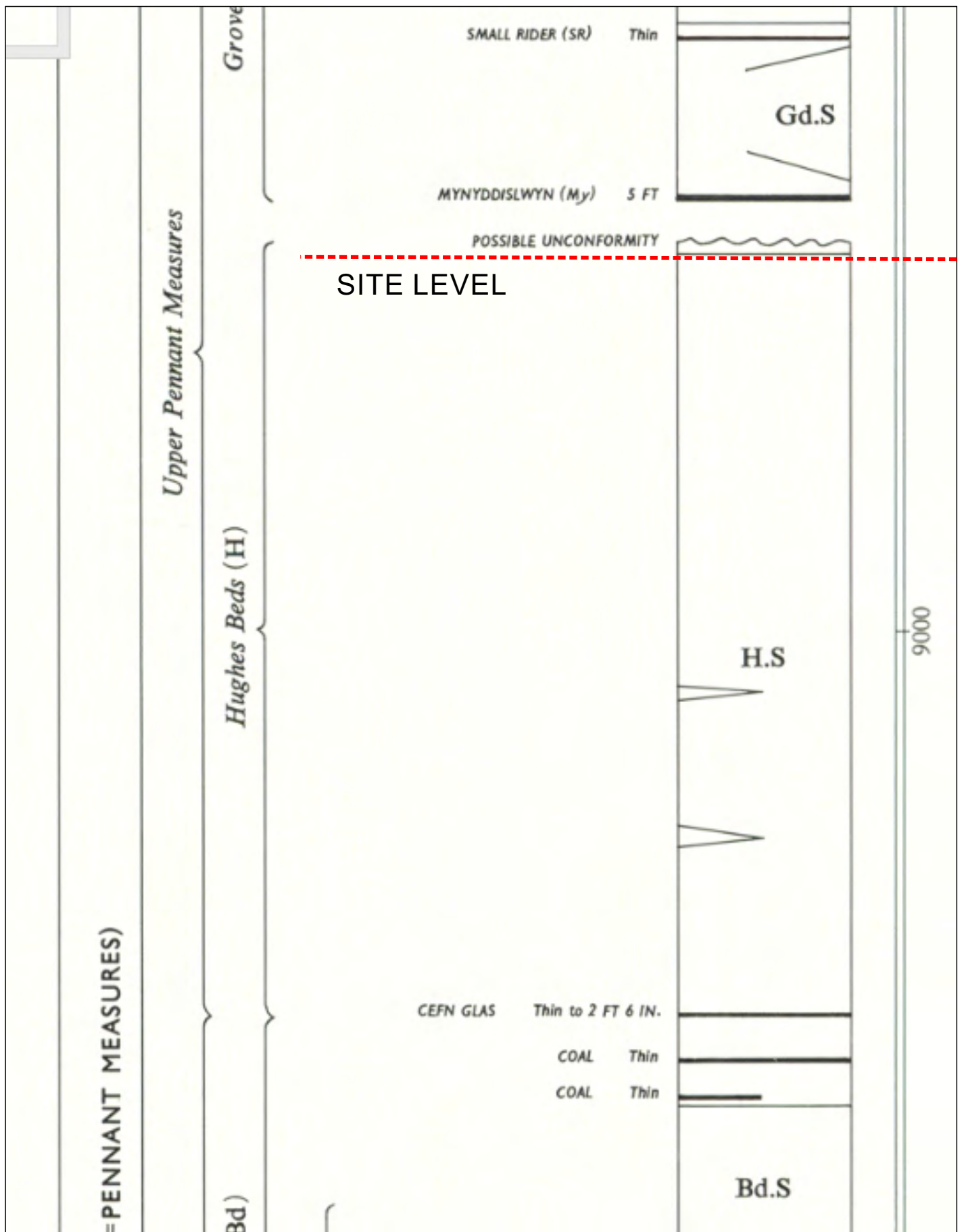


FIGURE 7
SECTION OF STRATIGRAPHIC COLUMN FROM ST19NW
APPROXIMATE LEVEL OF SITE SHOWN

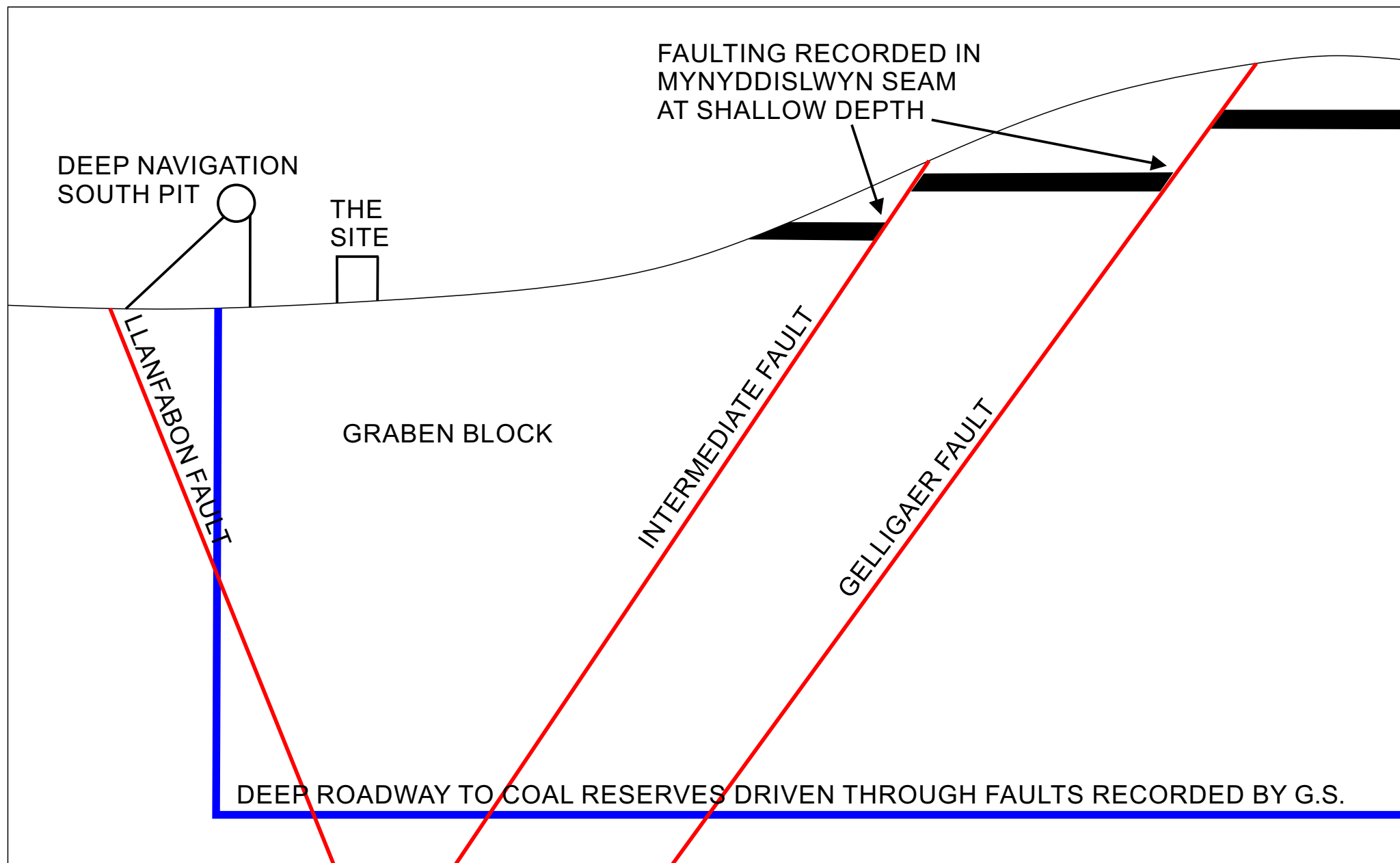


FIGURE 8

CONCEPTUAL SECTION OF FAULTING BENEATH THE SITE. NO HORIZONTAL OR VERTICAL SCALE

2e) Historical Ordnance Survey maps can prove invaluable in looking for evidence of coal mining activity. Since the first County Series maps were produced in the 1870's nearly all mining features have been recorded, even if they were considered "old" at that time. This is particularly true of the 1:1250 and 1:2500 scale maps. They can also be an aid to looking at past topography and geomorphology before a site has been developed. For this risk assessment the entire range of large scale maps of the area produced since 1874 have been studied. Extracts from four of them are reproduced on the following pages. Shallow coal mining and associated mine entrances are not an issue in this risk assessment. This renders the O.S. maps somewhat less useful than normal. The historical maps were studied for signs of any damage attributable to coal mining but none was found. The site is undeveloped on the 1877 map (Figure 9). There are several small coal mines on the hillside to the east, and Deep Navigation Colliery has been sunk just west of the site. In Figure 10, the 1900 revision, four terraced houses occupy the site. The surface buildings of Deep Navigation have massively expanded and spoil tipping has begun to fill the lower ground near the river. By 1920 (Figure 11), tipping volumes are huge, the river has been culverted under the tip and the spoil is encroaching close to the site. The last map available at large scale is from 1957 (Figure 12). The spoil tipping has increased still further and covers the site of the present day car park which adjoins the site to the north. The four houses are still on the site. The site is vacant today with the houses being demolished in 2002. This was due to general dilapidation due to years of neglect by absentee landlords. This was formerly a very common situation in the South Wales Valleys. Their demolition is nothing to do with the damage incidents reported to the C.A. on other properties.

2f) The C.A. template calls for the risk assessment to be desk based, but it is the author's opinion that a walkover survey of the site and surrounding area can often provide valuable additional information that simply cannot be picked up off maps and archive material. This is not particularly true of this site however where the risk is supposedly from a breakline. These can be very visible on the upland areas of the coalfield, but it would not be expected to be able to see anything in an urban valley bottom with thick superficial deposits. It was necessary for the author to meet the client and to examine founding conditions at the site anyway. A general view of the site is overleaf as Figure 13.

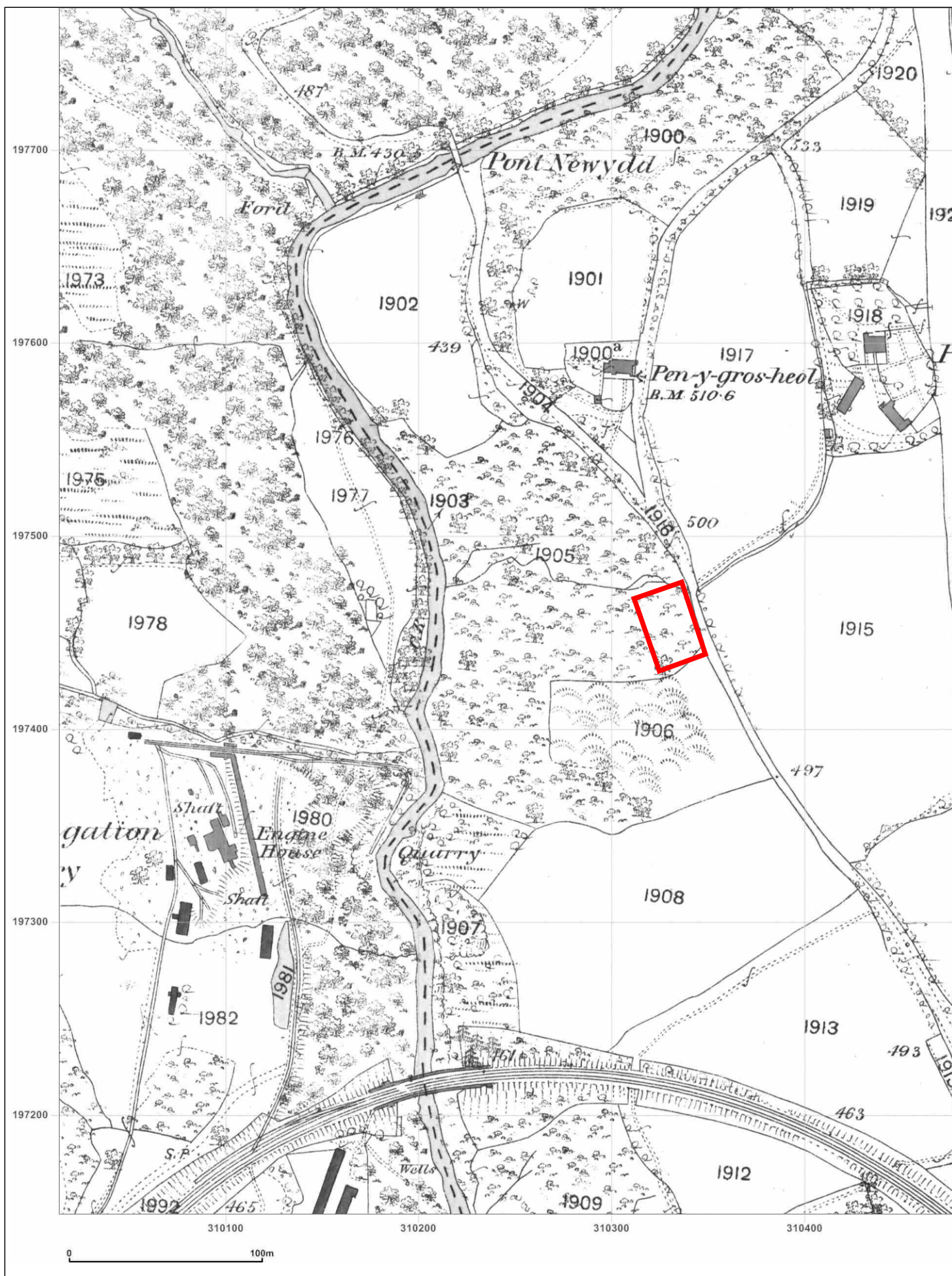


FIGURE 9
THE SITE (HIGHLIGHTED IN RED) IN 1877

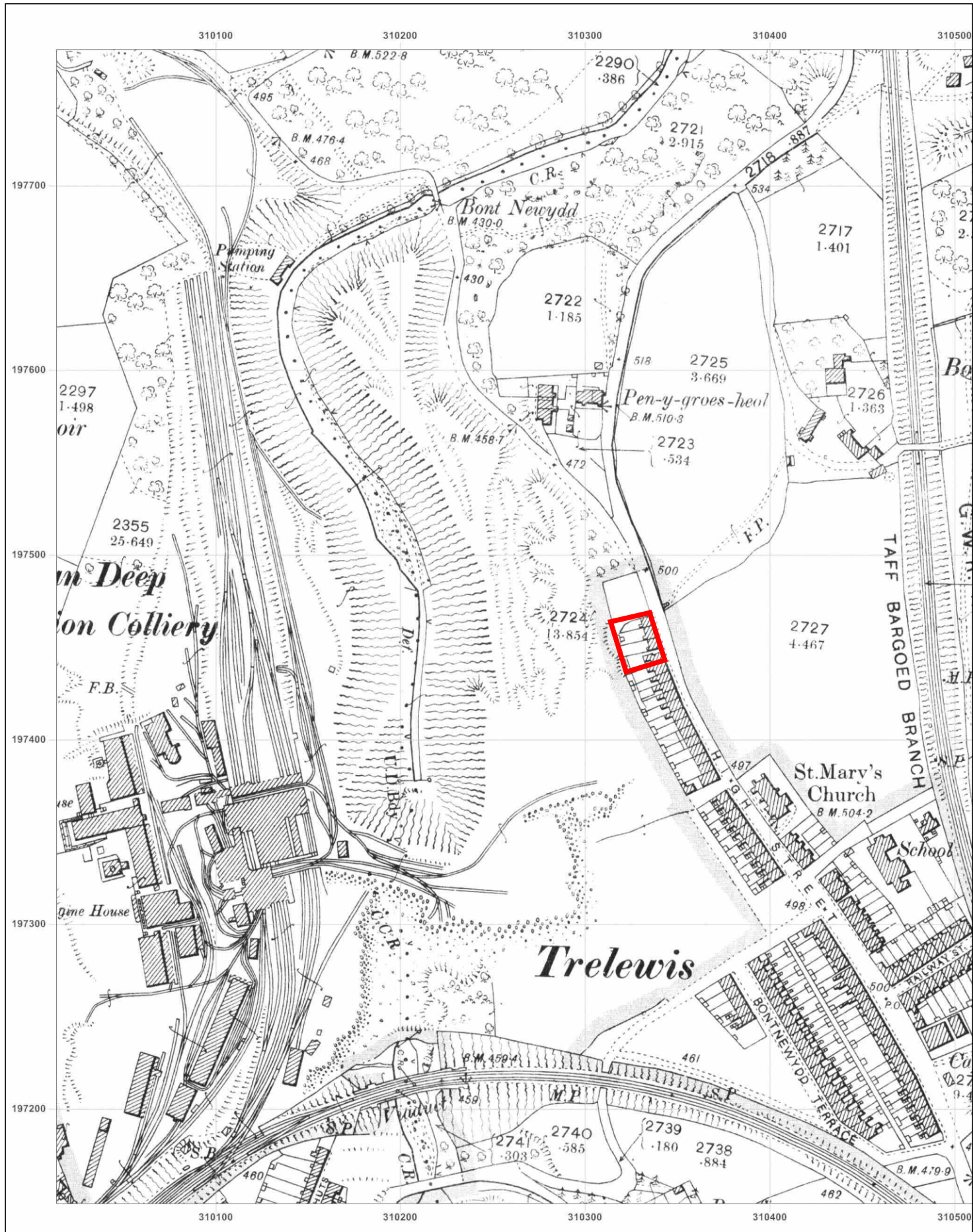


FIGURE 10

THE SITE IN 1900

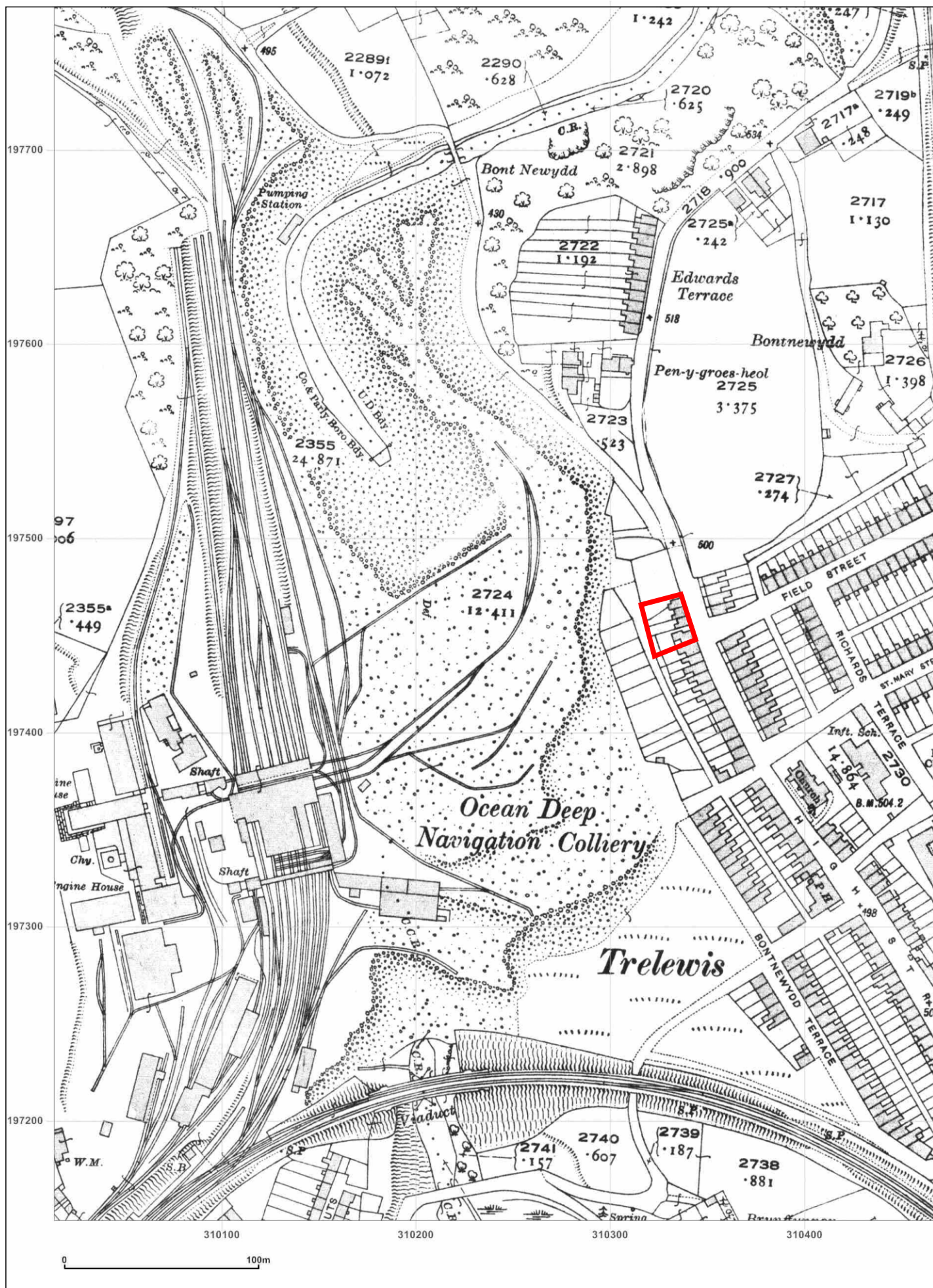


FIGURE 11
THE SITE IN 1920

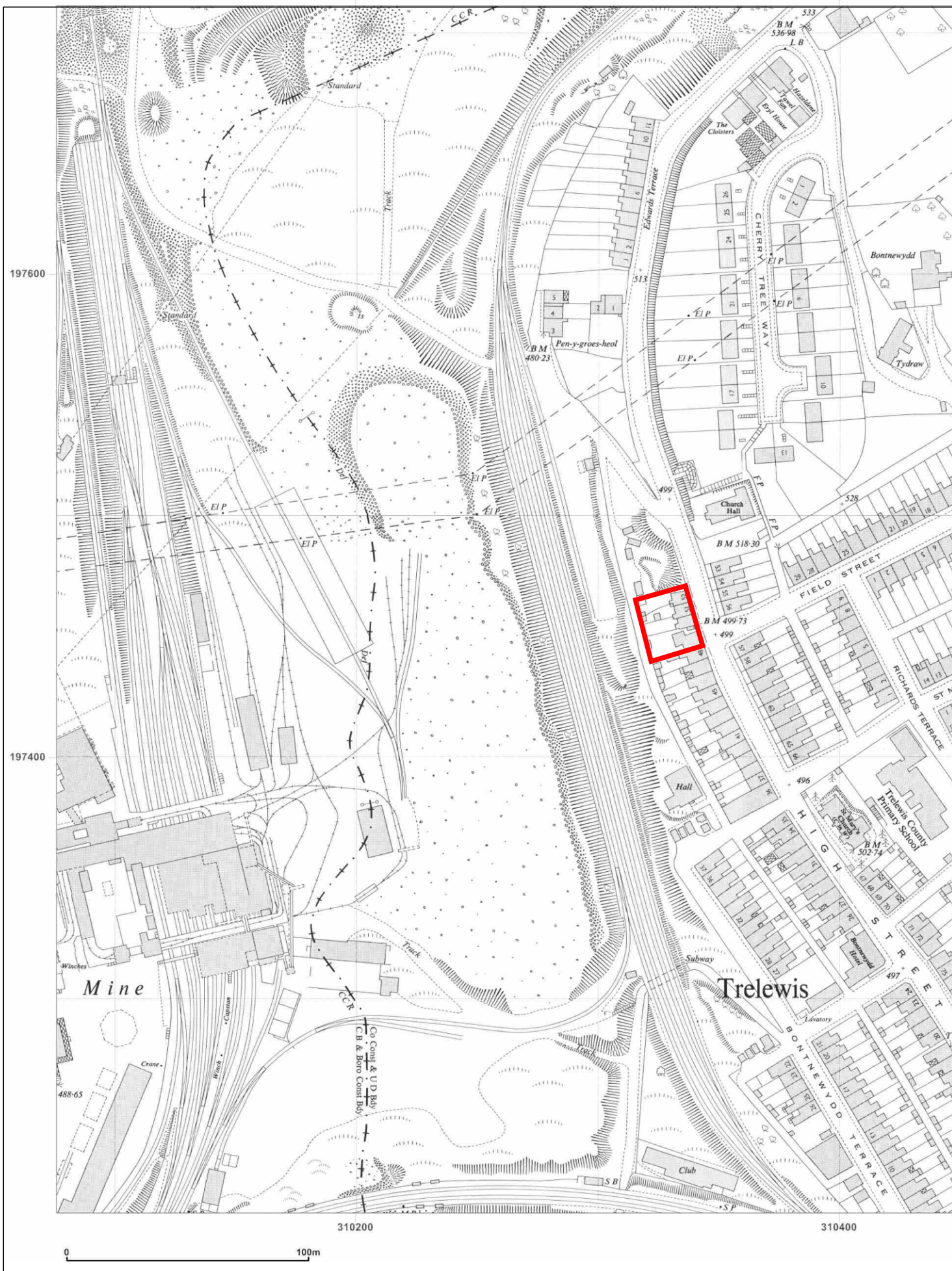


FIGURE 12
THE SITE IN 1957



FIGURE 13
GENERAL VIEW OF SITE LOOKING NORTHWEST TOWARDS HIGH STREET

COAL MINING ISSUE		YES	NO	R.A?
SHALLOW RECORDED WORKINGS			X	
SHALLOW UNRECORDED WORKINGS			X	
MINE ENTRIES			X	
BREAKLINES		X		X
GAS EMISSIONS			X	
SURFACE HAZARDS			X	
SURFACE MINING			X	
FUTURE MINING LICENSE			X	

3. SITE SPECIFIC COAL MINING RISKS

From the table above it can be seen that only one issue requires a risk assessment for this site. That is the danger of a breakline affecting site stability.

To first briefly deal with the issues marked NO on the table:-

- a) There are no recorded shallow workings under the site. All available mining data has been studied. The shallowest recorded workings are in the Six Foot Seam over 600m below the site.
- b) All sources agree that the Mynyddislwyn Seam is higher than the site both stratigraphically and topographically. The next seam down below the site is the Cefn Glas at approximately 100m. Therefore there can be no unrecorded shallow workings beneath the site.
- c) Coal Authority records show multiple mine entries in the area surrounding the site, but none are within influencing distance as regards ground stability.
- d) *The C.A. report states there are no fissures, surface hazards or lines of geological weakness affected by underground mining under the site.*
- e) The C.A. report states there have been no recorded gas emissions within the area surrounding the site.
- f) There has never been any surface (opencast) mining on, or near the site.
- g) There are no licenses for future mining in existence.

The statement in d) above is clearly wrong. The C.A. Planning Liaison Officer contradicts the findings of the CON29 Mining Report in her letter to M.T.C.B.C. The Subsidence Buffer Zone Report states that two properties had repairs and compensation paid on them. There is no cause given, but it is obvious that it

must be connected to the breakline feature shown on the interactive viewer. Some explanation needs to be given for the term breakline. In normal coal mining terms this is the line along which the roof of a coalmine is expected to break. When underground this usually follows the edge of large pillars, or more particularly along the edge of mechanised longwall panels. When the coal cutter is moved on, temporary roof supports are also moved forward. The roof is then unsupported and subsides into the goaf along two breaklines parallel to the permanent roadways. This inevitably causes subsidence of the ground above. On the surface a breakline is defined as “a linear line of structural damage through a built up area” by L.J. Donnelly in 2006. The effects usually occur over a period of months after the coalface has advanced past any given point. Subsidence effects are further complicated when mining approaches pre-existing tectonic faults. In many cases they have been observed to have been reactivated. It is these structures that produce linear breaklines, rather than general subsidence. In particular this behaviour has been noted when coal workings pass beneath the hade of a fault. The hade is the angle a fault makes with the vertical plane through its surface expression. It would appear from Figure 5 that longwall panels from Deep Navigation do indeed exist in the area between the location of the Gelligaer Fault recorded at 1590' below sea level and its surface outcrop i.e. beneath the hade. The size of this area can be seen to be extensive in Figure 6. The dates of the workings in this area are unknown but the colliery closed in 1991. Much work studying this ground behaviour has been done in Britain in the past with many scientific papers published by well-known structural geologists and mining engineers including Fred G. Bell, Martin Culshaw and in particular L.J. Donnelly who is a world authority on it. He actually published a paper in 1994 specifically about longwall mining in the Seven Foot seam reactivating the Gelligaer Fault and affecting the very high pressure Dowlais-Nelson gas pipeline. The 1994 Subsidence Act limits claims for subsidence to within seven years of mining taken place. Both the settled claims in the Subsidence Buffer Report are within seven years of the *closure* of Deep Navigation, but it is unclear if they were within seven years of any mining directly beneath the site. The dates are 1995 and 1997 but it is probable these were the settlement dates rather than the dates the claims were made. Again the C.A. report does not state which is which. Because of this uncertainty about the dates it is not possible to rule out another phenomenon which has been well studied in many places in Britain. That is fault reactivation after water table rebound. All deep mines in Britain depended on continuous pumping during production or

they would flood. The figure at Deep Navigation was 1000 gallons a minute. On the closure of the mine the water table would rebound over a period of several years. This that has been observed in many places on British coalfields. In his review of fault reactivation published in the Journal of Engineering Geology and Hydrogeology in 2006. L.J. Donnelly makes specific reference to the incident in High Street Trelewis. He states that the damage to the houses was accompanied by a 0.5m high scarp feature crossing the road with associated damage to services, drainage etc. It would appear from his summary that the incident was possibly as early as 1987. This would indicate it was caused directly by mining, rather than by water table rebound. He also comes to the conclusion that fault reactivation caused by groundwater rebound is limited to approximately ten years after the end of pumping. This is longer than the period associated with fault reactivation by mining alone. So to summarise:-

- i) An incident of linear structural damage was recorded in High Street, Trelewis. This was close to, but not on the site. The closest property the C.A. paid out on was fifteen metres away.
- ii) This is the breakline recorded on the interactive viewer, and is the *only* reason for the proposed development being classed as development high risk.
- iii) Although property prices are low in Trelewis, the sums paid out (£12,832 and £5741) would indicate damage was cosmetic rather than catastrophic.
- iv) Whether the fault reactivation which caused the damage was a direct consequence of mining beneath the site, or water rebound after the cessation of mining is unclear. This is because of uncertainty about the date. If it was prior to 1991 it is likely to be the former. If it was after 1991 it is likely to be the latter. Either way, it would be reasonable to treat it as a one-off incident. Even if it were caused by groundwater rebound, all research indicates that this will have now ended. The cut-off date being 2001, ten years after pumping ended, and now sixteen years ago.

4. MITIGATION STRATEGY

It would be virtually impossible to have an engineering solution to mitigate against occurrences such as the incident which caused the damage to the two houses close to the development site. However it must be taken into account that this incident was nearly thirty years ago when active coal mining was still going on underground in the vicinity of the site. All research, of which there has been a vast amount beyond the remit of this risk assessment, suggests that there will be no repeat of these strain adjustments on reactivated faults. The ground

beneath the site has had ample time to reach equilibrium since the end of mining and the recovery of the water table. Therefore no mitigation measures are necessary. The breakline is an artificial construct linking two points of structural damage. It bears no relation to the area of land that sits above the fault plane. This covers the entire village and beyond. The actual surface outcrop of the fault plane is several hundred metres to the northeast of the site.

5. CONCLUSION

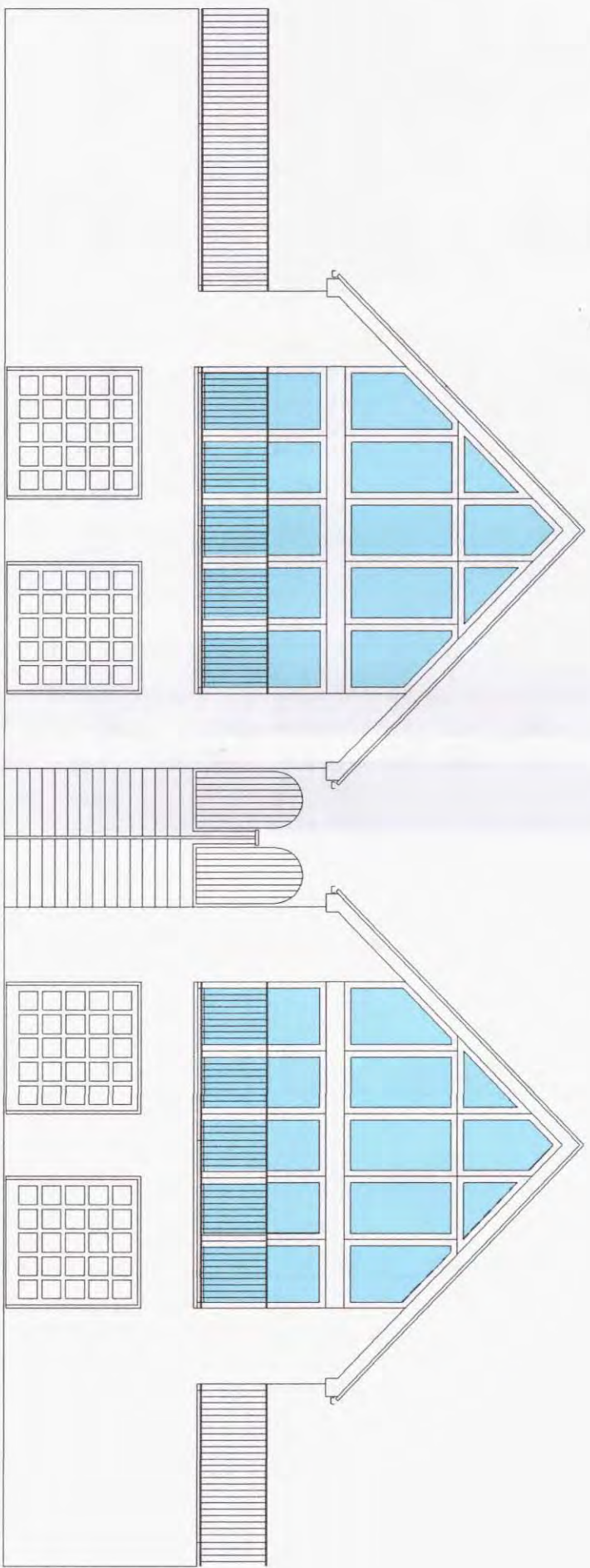
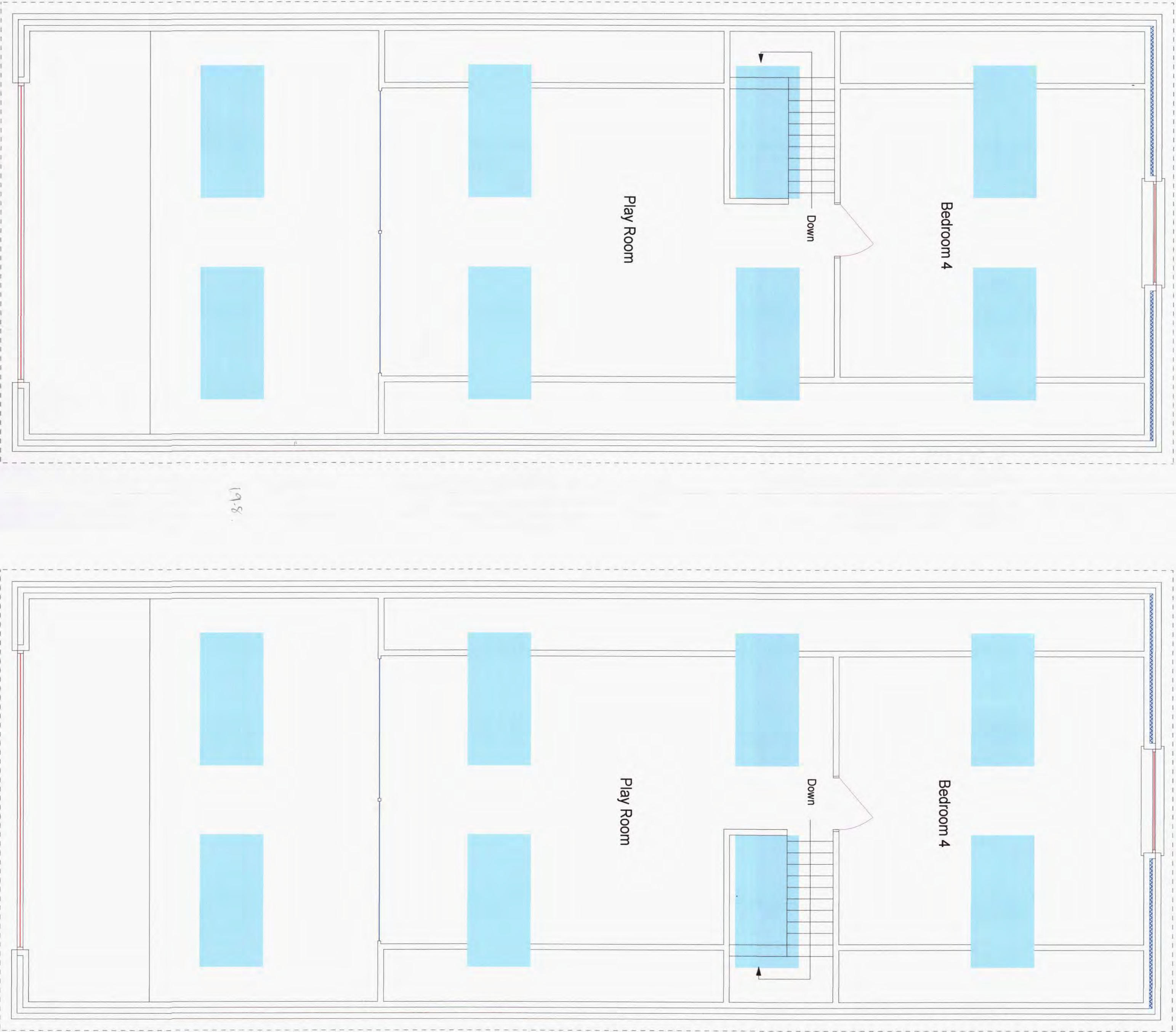
This risk assessment has presented abundant evidence from comprehensive research that there is no further risk to ground stability posed by coal mining legacy issues, in particular fault reactivation, at the site. Unlike subsidence of shallow coal workings or shaft collapse, fault reactivation has a finite time limit. This time limit has now long passed for the mining at Deep Navigation to affect the Gelligaer Fault. Therefore there is no need for the site to be classified as Development High Risk, and no reason for the Coal Authority to object to planning permission being granted for the proposed development.

Richard Davies BSc. (Hons), MSc., F.G.S.

2/10/2018

APPENDIX 1

SITE PLANS



Street Scene



Upper Floor Plan, Elevations & Street Scene

Scales 1:50 1:100

Drawing No	MH0718C
Client	Mr Stacy Richardson
Address	Land Adjacent to 48 High Street Trelewis
Drawn By	Michael Howard
Date	July 2018

External Finishes
Walls to be White Smooth Render
Windows to be Graphite Grey Pvc
Fascias, Soffits Rain Water Goods Graphite Grey
Roof Finishes to be Grey concrete tiles
Existing Stone Wall to Front to Remain other Elevations
Walnut Stained Close Boarded Timber Fence @ 1800mm High

Velux GGL SK10207021U Roof Lights



Ground Floor, Basement Plan & Site Layout

APPENDIX 2

COAL AUTHORITY MINING REPORT



The Coal
Authority

Resolving the **impacts** of mining

CON29M Residential Mining Report

46 HIGH STREET
TRELEWIS
TREHARRIS
MERTHYR TYDFIL UA
CF46 6AB

Date of enquiry: 07 September 2018
Date enquiry received: 07 September 2018
Issue date: 10 September 2018

Our reference: 51001924107001
Your reference:



CON29M Residential Mining Report

This report is based on, and limited to, the records held by the Coal Authority, at the time we answer the search.

Client name

Richard Davies

Enquiry address

46 HIGH STREET, TRELEWIS, TREHARRIS, MERTHYR
TYDFIL UA, CF46 6AB

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

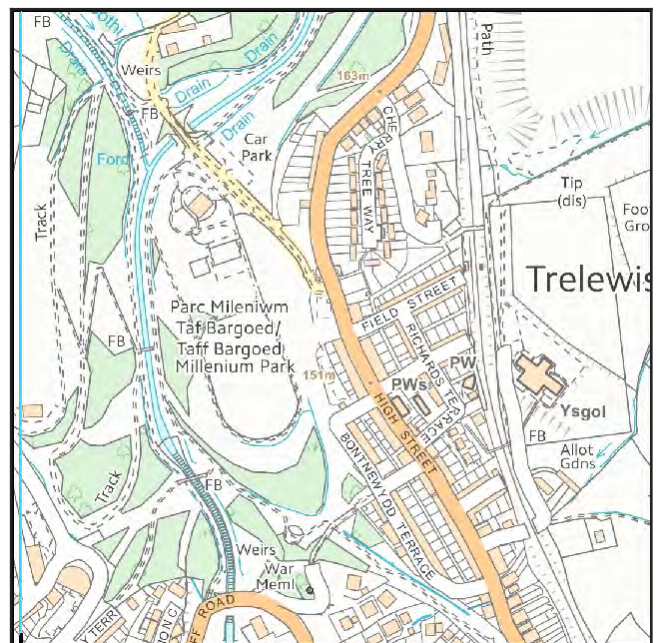
200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

 /company/the-coal-authority

 /thecoalauthority

 /coalauthority



Approximate position of property



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Summary

Has the search report highlighted evidence or potential of		
1	Past underground coal mining	Yes
2	Present underground coal mining	No
3	Future underground coal mining	Yes
4	Mine entries	No
5	Coal mining geology	No
6	Past opencast coal mining	No
7	Present opencast coal mining	No
8	Future opencast coal mining	No
9	Coal mining subsidence	Yes
10	Mine gas	No
11	Hazards related to coal mining	No

Further recommended reports
Coal mining subsidence claims 50m buffer report
Coal mining subsidence claims history

For detailed findings, please go to page 4.

Detailed findings

1. Past underground coal mining

The property is in a surface area that could be affected by underground mining in 4 seams of coal at 600m to 690m depth, and last worked in 1974.

Any movement in the ground due to coal mining activity should have stopped.

2. Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3. Future underground coal mining

The property is not in an area where the Coal Authority has plans to grant a licence to remove coal using underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

4. Mine entries

There are no known coal mine entries within, or within 20 metres of, the boundary of the property.

5. Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6. Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

7. Present opencast coal mining

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

8. Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9. Coal mining subsidence

There are 6 claim(s) within 50 metres of the property boundary that do not match the property address. These are shown on the enquiry boundary plot.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

If further subsidence damage claims information is required, please visit www.groundstability.com.

10. Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11. Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Authority, under its Emergency Surface Hazard Call Out procedures.

Additional remarks

Information provided by the Coal Authority in this report is compiled in response to the Law Society's Con29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL. This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.

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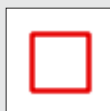
Alternative formats

If you would like this report in an alternative format, please contact our communications team.

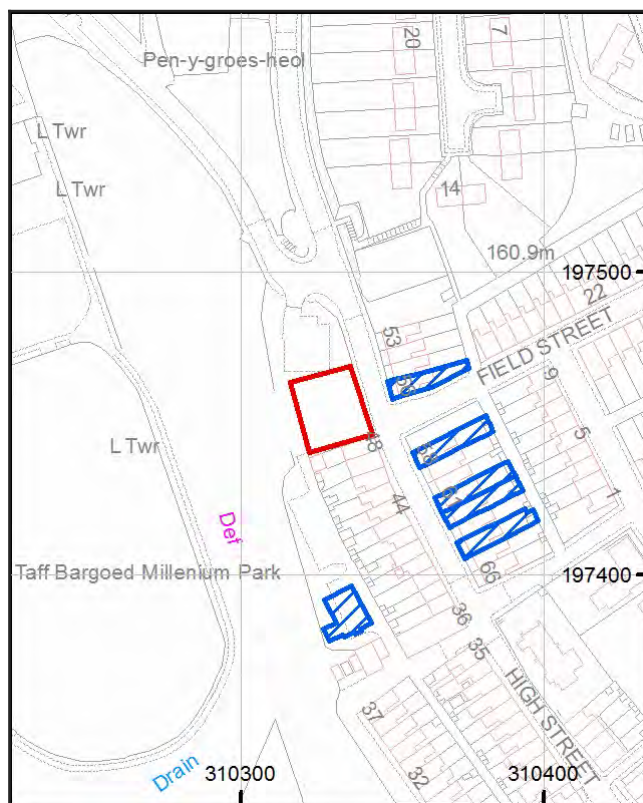
Enquiry boundary

Key

Approximate position of enquiry boundary shown



Coal claims



How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

 /company/the-coal-authority

 /thecoalauthority

 /coalauthority



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Key facts document

General summary

This is a summary of the policy and does not contain the full terms and conditions of the cover which can be found in the policy document. It is important that you read the policy document carefully when you receive it. If you are a solicitor you should also disclose this document to your client, their lender and/or the purchaser's solicitors for the benefit of their client.

Name of insurer

The insurer is Liberty Legal Indemnities, part of Liberty Mutual Insurance Europe Limited. The underwriting agency is Legal and Insurance Services Limited, PO Box 234, Tunbridge Wells, Kent TN3 0LX.

Legal and Insurance Services Limited is regulated by the Financial Conduct Authority (FCA) and authorised to arrange general insurance contracts. Register number: 305910.

The Coal Authority

The Coal Authority, a NDPB (non-departmental public body) sponsored by BEIS (Department for Business, Energy and Industrial Strategy) 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG, is responsible for producing the Coal Search Report, issuing the policy, collecting the premium and declaring the existence of the policy to Liberty Legal Indemnities.

Type of insurance and cover

- a. The policy is evidenced by the policy that is attached to the Coal Search Report provided by the Coal Authority in respect of a search in form CON29M (2006).
- b. Where a Coal Search Report has been obtained in connection with a sale of the property, cover is provided for the benefit of a purchaser and their lender; in the case of a re-mortgage or where the existing owner chooses to obtain a Coal Search Report, cover is provided for the benefit of the owner and their lender.
- c. The policy offers protection against loss sustained by the owner of the property if any new problems or adverse entries are revealed in a subsequent Coal Search Report which were not revealed by the original report to which the policy was attached.

Significant features or benefits under the policy and the term/duration of the policy

- a. Cover is provided for loss that you suffer up to an amount of £50,000.00.
- b. For the purposes of the policy loss includes:
 - (i) any reduction in the market value of the property directly attributable to changes in the information revealed in the Coal Search Report compiled against the property; and
 - (ii) all other costs and expenses incurred which we have agreed, in writing, to cover.
- c. A single premium has been paid in respect of the cover provided under the policy; the policy remains in effect until you sell the property, or if you are the lender, the debt secured by the mortgage has been repaid.
- d. You cannot transfer the benefits of the policy to anyone else. However, if you die whilst you still have the benefit of the cover provided by the policy, the benefit will pass to your estate and beneficiaries.

Significant or unusual Exclusions or Conditions under the policy

- a. Full details can be found in the Cover and Exclusions sections of the policy.
- b. The policy does not cover your costs in relation to the loss of a transaction for the sale or purchase of the property.
- c. The property must be an existing (i.e. it must have been lived in) single residential house, flat or maisonette in the United Kingdom.
- d. The policy does not cover loss relating to structural or other physical damage caused to the property by subsidence, flooding or otherwise.
- e. The policy does not cover you for any loss in relation to any matter revealed in the Coal Search Report to which the policy is attached nor in relation to any matter that you were otherwise aware of on or before the policy was issued.

Cancellation rights

You can cancel your policy within 14 days of the commencement date. Please telephone or email Legal and Insurance Services Limited on 01892 863863 or at enquiries@goodtitle.co.uk quoting your policy number.

How to claim

If you need to make a claim, please write to Legal and Insurance Services Limited, PO Box 234, Tunbridge Wells, Kent TH3 0LX quoting your policy number. You can also telephone 01892 863863 or contact them via email at enquiries@goodtitle.co.uk. Please enclose your policy and the Coal Search Report attached to it together with the subsequent report giving rise to the claim.

If you have a complaint

In the first instance, please contact the Underwriting Manager (Complaints) Legal and Insurance Services Limited, PO Box 234, Tunbridge Wells, Kent TN3 0LX.

Tel: 01892 863863

Fax: 01892 861025

Email: enquiries@goodtitle.co.uk

If you are unable to resolve your complaint with the above please contact:

Liberty Specialty Markets

20 Fenchurch Street

London

EC3M 3AW

Tel: 020 3758 0000

Complaints that cannot be resolved may be referred to the Financial Ombudsman Service (www.financial-ombudsman.org.uk). Further details will be provided at the appropriate stage of the complaints process.

Financial services compensation scheme

Legal and Insurance Services Limited are members of the Financial Services Compensation Scheme (FSCS). You may be entitled to compensation from this scheme if they cannot meet their obligations, depending on the type of insurance and the circumstances of your claim.

Further information about the scheme is available from:

The Financial Services Compensation Scheme, 10th Floor, Beaufort House, 15 St. Botolph Street, London, EC3A 7QU. The FSCS website may be viewed at www.fscs.org.uk



On behalf of the insurer

Coal Search Report Insurance Policy

Schedule

Policy number: **25228740**

The insurer: **Liberty Legal Indemnities – underwritten by Liberty Mutual Insurance Europe Limited**

Binding Authority contract number: **RNMFP1803841**

Property: **46 HIGH STREET, TRELEWIS, TREHARRIS, MERTHYR TYDFIL UA, CF46 6AB**

Report reference number: **51001924107001**

Limit of cover: **£50,000.00**

Dated: **10 September 2018**

This policy and schedule shall be read together and any word or expression to which a specific meaning has been attached in either shall bear such meaning wherever it may appear.

Where a Coal Search Report has been obtained in connection with a sale of the property, cover is provided for the benefit of a purchaser and their lender; in the case of a re-mortgage or where the existing owner chooses to obtain a Coal Search Report, cover is provided for the benefit of the owner and their lender.

The policy offers protection against loss sustained by the owner of the property if any new problems or adverse entries are revealed in a subsequent Coal Search Report which were not revealed by the original report to which the policy was attached.

The insured shall at all times comply with the requirements of the Conditions of this Policy.

Definitions

In this policy unless the context requires otherwise the following words or expressions shall have the following meanings:

Date of the report means the date of the Coal Search Report attached to this policy.

Coal Search Report means the attached Coal Search Report that the Coal Authority has prepared for the property following a Coal Search Report providing information compiled from the Coal Authority's records in relation to past, present and future underground and opencast coal-mining activity, shafts and adits (vertical and horizontal entries to mines) coal-mining geology, coal-mining related hazards, coal-mining subsidence and mine gas.

The Coal Authority is a NDPB (non-departmental public body) sponsored by BEIS (Department for Business, Energy and Industrial Strategy) 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG. The Coal Authority is responsible for producing the Coal Search Report, issuing this policy, collecting the premium and declaring the existence of this policy to the insurer.

Insurer means Liberty Legal Indemnities – part of Liberty Mutual Insurance Europe Limited.

Insured means the person insured by this policy. This may be:

- i. the person who asked for the Coal Search Report in connection with your purchase of the property (and your mortgagee)
- ii. the person who purchased the property (and your mortgagee) if the person selling the property has asked for a Coal Search Report for the benefit of the purchaser as part of a seller's pack or if the property has been purchased by way of auction
- iii. the owner of the property (and your mortgagee) if you are re-mortgaging the property or the owner of the property who has chosen to obtain a Coal Search Report

Knowledge means actual knowledge or notice but not knowledge or notice which may be imputed to the insured by reason of the public records as defined in this policy or any other records which impute notice of matters affecting the property.

Market value means the average of the estimates given by 2 independent valuers (one to be appointed by and paid for by the insurer and the other by the insured) as to the price which could have been obtained for the property on the open market at the date on which the insured first becomes aware of the existence of the defect and under normal sale conditions at the time.

Property means the residential property at each address shown in the Schedule to this Policy and in respect of which the Coal Authority has provided the attached Coal Search Report.

Public records means records established by the Crown or any local or statutory authority at the date of the mortgage pursuant to the Land Registration Acts 1925 and 2002 the Land Charges Act 1972 and the Local Land Charges Act 1975 including any replacement or amending legislation.

Period of insurance means the period from the date of the report until:

- i. the property is sold
- ii. the debt secured by the mortgage is repaid if the insured is a mortgagee

Premium means the total amount paid in consideration of the cover provided by this policy which includes Insurance Premium Tax at the appropriate rate.

Cover

Subject to the terms and conditions of this policy and provided the Coal Authority has collected the premium cover will be provided up to the limit of cover for all claims made during the period of insurance in respect of:

- i. the loss in market value of the property directly attributable to any changes in the information revealed in a subsequent Coal Search Report which was not revealed in the Coal Search Report attached to this policy which was carried out on the date of the report, such loss in market value to be calculated at the date of the subsequent Coal Search Report, and
- ii. any costs and expenses incurred with the consent of the insurer

Exclusions

This policy does not cover any loss:

- 1. if at the date of the claim you are not the legal or beneficial owner of the property
- 2. if the property is not a single private home in the United Kingdom which is used only for residential purposes
- 3. in relation to loss of a transaction for the sale or for the purchase of the property nor for any costs incurred by you in relation to the loss of such transaction
- 4. in respect of structural or other physical damage caused to the property by subsidence, flooding or otherwise
- 5. as a result of any change in information in response to questions 3(a), 3(b), 8(a) or 8(b) of a Coal Search Report (form CON29M (2006))
- 6. for any entry on any subsequent Coal Search Report after the date of the report if this entry also appears on the attached Coal Search Report
- 7. for any problem revealed by the first Coal Search Report after the date of the report if the insured or their legal representative knew about the problem on or before the date of the report
- 8. for any change in the interpretation of data upon which the Coal Search Report was produced provided such data remains unchanged

The insurer will not be responsible for any loss for which the Coal Authority may be required to pay by law.

Conditions

1. On becoming aware of any potential or actual claim against this policy the insured must:
 - a) provide written notice and details to the insurer without unnecessary delay
 - b) provide all information and assistance that the insurer (and/or their agents solicitors or surveyors) require at the insured's own expense
2. Any act or omission by the insured or anyone acting on the insured's behalf which in whole or in part induces a claim under this policy (save as may already have occurred and be recorded in this policy or schedule and save in relation to carrying out the insured use) shall void this policy.
3. If at the time of a claim under this policy there is other insurance (whether incepted by the insured or any other party) under which the insured may be entitled to make a claim either wholly or partly in respect of the same interest or risk covered by this policy the insurer will not be liable to pay or contribute more than their rateable proportion of the claim.
4. The law of England and Wales will apply to this contract unless at the date of the report you are a resident of Scotland or Northern Ireland in which case the law of that country will apply.

Cancellation rights

You can cancel a policy by contacting us within 14 days of the policy commencement date provided all parties that have an interest in the policy (for example mortgage lender) also consent to the cancellation. Please telephone or email us in the first instance on 01892 863863 or at enquiries@goodtitle.co.uk referencing the policy number.

Non-invalidating clause

The interest of any insured under this policy will not be invalidated or affected by any other party breaching the policy terms and conditions, or providing false or misleading information to the insurer, unless:

- a) such party acted on the insured's behalf or with the insured's knowledge and consent
- b) where the insured is a successor in title or mortgagee, chargee or lessee, they had knowledge of a breach of the policy terms or conditions, or that false or misleading information has been provided to the insurer prior to the date of commencement

General

1. Unless otherwise indicated, no term of this insurance contract is intended to limit or affect the statutory rights or obligations of any of the parties to this contract under, and/or the effect of, parts 2, 3, 4 or 5 of the Insurance Act 2015 (the “2015 Act”).
2. Any term of this insurance contract which would, but for this clause, put the insured in a worse position as respects any of the matters provided for in parts 2, 3, 4 or 5 of the 2015 Act than it would be by virtue of the provisions of those parts is, to that extent, of no effect, unless the insurer has complied with the transparency requirements in section 17 of the 2015 Act.
3. The insured should ask the insurer or its broker or solicitor for clarification of any matters which are not clear to it regarding the scope of disclosure required or the provisions of this insurance contract.

The duty of fair presentation

1. Before this insurance contract is entered into, the insured (including anyone acting on behalf of the insured in arranging this insurance contract) must make a fair presentation of the risk to the insurer, in accordance with section 3 of the 2015 Act. In summary, they must:
 - a) disclose to the insurer every material circumstance which the insured knows or ought to know. Failing that, they must give the insurer sufficient information to put a prudent insurer on notice that it needs to make further enquiries in order to reveal material circumstances. A matter is material if it would influence the judgement of a prudent insurer as to whether to accept the risk, or the terms of the insurance (including premium)
 - b) make the disclosure in clause 1 a) above in a reasonably clear and accessible way
 - c) ensure that every material representation of fact is substantially correct, and that every material representation of expectation or belief is made in good faith
2. For the purposes of clause 1 a) above, the insured is expected to know the following:
 - a) if the insured is an individual, what is known to the individual and anybody who is responsible for arranging his or her insurance
 - b) if the insured is not an individual, what is known to anybody who is part of the insured's management; or anybody who is responsible for arranging the insured's insurance
 - c) whether the insured is an individual or not, what should have reasonably been revealed by a reasonable search of information available to the insured. The information may be held within the insured's organisation, or by any third party (including but not limited to the broker, solicitor, subsidiaries, affiliates or any other person who will be covered under the insurance). If the insured is insuring subsidiaries, affiliates or other parties, the insurer expects that the insured will have included them in its enquiries, and that the insured will inform the insurer if it has not done so. The reasonable search may be conducted by making enquiries or by any other means

Breach of warranty: suspensory

If the insured breaches a warranty in this insurance contract, the insurer's liability under the contract shall be suspended from the time of the breach until the time when the breach is remedied (if it is capable of being remedied). The insurer will have no liability to the insured for any loss which occurs, or which is attributable to something happening, during the period when the insurer's liability is suspended.

Terms not relevant to the actual loss

Where: (i) there has been a failure to comply with a term (express or implied) of this insurance contract, other than a term that defines the risk as a whole; and (ii) compliance with such term would tend to reduce the risk of loss of a particular kind and/or loss at a particular location and/or loss at a particular time, the insurer cannot rely on the breach of such term to exclude, limit or discharge its liability if the insured shows that the failure to comply with such term could not have increased the risk of the loss which actually occurred in the circumstances in which it occurred.

Fraudulent claims clause

1. If the insured makes a fraudulent claim under this insurance contract, the insurer:
 - a) is not liable to pay the claim
 - b) may recover from the insured any sums paid by the insurer to the insured or to any third party in respect of the claim
 - c) may by notice to the insured treat the contract as having been terminated with effect from the time of the fraudulent act
2. If the insurer exercises its right under Clause 1 c) above:
 - a) the insurer shall not be liable to the insured in respect of a relevant event occurring after the time of the fraudulent act. A relevant event is whatever gives rise to the insurer's liability under the insurance contract (such as the occurrence of a loss, the making of a claim, or the notification of a potential claim)
 - b) the insurer need not return any of the premiums paid

Fraudulent claims - group insurance

If this insurance contract provides cover for any person or entity who is not a party to the contract (a covered person), and a fraudulent claim is made under the contract by or on behalf of a covered person, the insurer may exercise the rights set out in the preceding clause above as if there were an individual insurance contract between the insurer and the covered person. However the exercise of any of those rights shall not affect the cover provided under the contract for any other person or entity.

Remedies for breach of the duty of fair presentation

1. If, prior to entering into this insurance contract, the duty of fair presentation shall have been breached, the remedies available to the insurer are set out below:
 - a) if the breach of the duty of fair presentation is deliberate or reckless:
 - i) the insurer may avoid the contract, and refuse to pay all claims
 - ii) the insurer need not return any of the premiums paid
 - b) if the breach of the duty of fair presentation is not deliberate or reckless, the insurer's remedy shall depend upon what the insurer would have done if the duty of fair presentation had been complied with:
 - i) if the insurer would not have entered into the contract at all, the insurer may avoid the contract and refuse all claims, but must return the premiums paid
 - ii) if the insurer would have entered into the contract, but on different terms (other than terms relating to the premium), the contract is to be treated as if it had been entered into on those different terms from the outset, if the insurer so requires
 - iii) in addition, if the insurer would have entered into the contract, but would have charged a higher premium, the insurer may reduce proportionately the amount to be paid on a claim (and, if applicable, the amount already paid on prior claims). In those circumstances, the insurer shall pay only X% of what it would otherwise have been required to pay, where $X = (\text{premium actually charged} / \text{higher premium}) \times 100$

2. If, prior to entering into a variation to this insurance contract, the duty of fair presentation shall have been breached, the remedies available to the insurer are set out below:
- a) if the breach of the duty of fair presentation is deliberate or reckless:
 - i) the insurer may by notice to the insured treat the contract as having been terminated from the time when the variation was concluded
 - ii) the insurer need not return any of the premiums paid
 - b) if the breach of the duty of fair presentation is not deliberate or reckless, the insurer's remedy shall depend upon what the insurer would have done if the duty of fair presentation had been complied with:
 - i) if the insurer would not have agreed to the variation at all, the insurer may treat the contract as if the variation was never made, but must in that event return any extra premium paid
 - ii) if the insurer would have agreed to the variation of the contract, but on different terms (other than terms relating to the premium), the variation is to be treated as if it had been entered into on those different terms, if the insurer so requires
 - iii) if the insurer would have increased the premium by more than it did or at all, then the insurer may reduce proportionately the amount to be paid on a claim arising out of events after the variation. In those circumstances, the insurer shall pay only X% of what it would otherwise have been required to pay, where $X = (\text{premium actually charged} / \text{higher premium}) \times 100$
 - iv) if the insurer would not have reduced the premium by more than it did or at all, then the insurer may reduce proportionately the amount to be paid on a claim arising out of events after the variation. In those circumstances, the insurer shall pay only X% of what it would otherwise have been required to pay, where $X = (\text{premium actually charged} / \text{reduced total premium}) \times 100$

Notice to the insured

Any enquiry or complaint should be addressed in the first instance to:

Legal and Insurance Services Limited
PO Box 234
Tunbridge Wells
Kent
TN3 0LX

Tel: 01892 863863

Fax: 01892 861025

Email: enquiries@goodtitle.co.uk

If you are unable to resolve your enquiry or complaint with the above please contact:

Liberty Specialty Markets
20 Fenchurch Street
London
EC3M 3AW

Tel: 020 3758 0000

Complaints that cannot be resolved may be referred to the Financial Ombudsman Service (www.financial-ombudsman.org.uk). Further details will be provided at the appropriate stage of the complaints process.

Notifying a claim

If anything should happen which might give rise to a claim under the policy please forward full details to Legal and Insurance Services Limited at the above address. Please include mention of the Policy Number shown at the top of the Schedule to the policy.

If you do not receive a reply or acknowledgement within 10 working days please forward the details to Liberty Specialty Markets at the above address.

VAT receipt

Issued by	The Coal Authority 200 Lichfield Lane Mansfield Nottinghamshire NG18 4RG
Tax point date	07 September 2018
Issued to	RICHARD DAVIES 56 MEYLER STREET THOMASTOWN TONYREFAIL RHONDDA CYNON TAFF CF39 8EA
Property search for	46 HIGH STREET TRELEWIS TREHARRIS MERTHYR TYDFIL UA CF46 6AB
Reference number	51001924107001
Date of issue	10 September 2018
Cost	£34.33
VAT @ 20%	£6.87
Total received	£41.20
VAT registration	598 5850 68



The Coal
Authority

Resolving the **impacts** of mining

Subsidence Buffer Report



48 HIGH STREET, TRELEWIS, TREHARRIS,
MERTHYR TYDFIL UA, CF46 6AB

Date of enquiry: 10 September 2018
Date enquiry received: 10 September 2018
Issue date: 10 September 2018

Our reference: 51001942780001
Your reference:

Subsidence Buffer Report

This report is based on and limited to the records held by the Coal Authority at the time we answer the search. This report does not contain any details of damage notices or claims that are specific to the enquiry boundary.

Client name

Richard Davies

Enquiry address

48 HIGH STREET, TRELEWIS, TREHARRIS, MERTHYR
TYDFIL UA, CF46 6AB

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

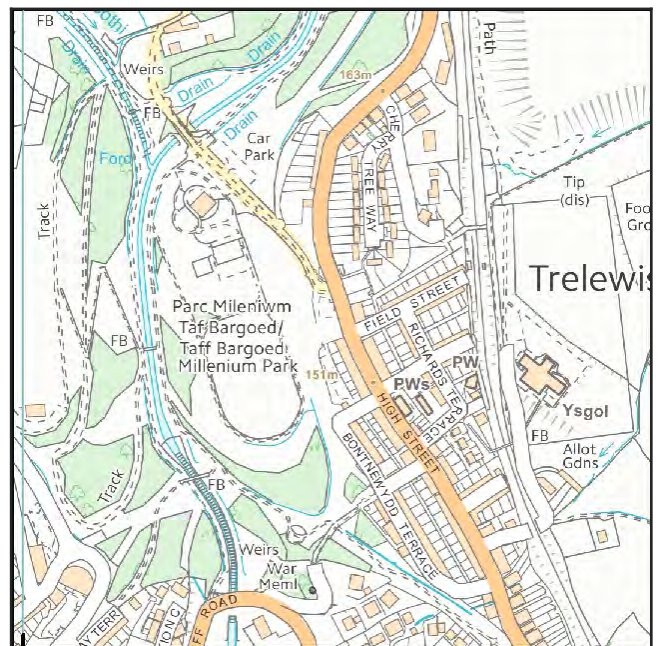
200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

 /company/the-coal-authority

 /thecoalauthority

 /coalauthority



Approximate position of property



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Claim information

There are 6 claims within 50 metres of the enquiry boundary that have been received since 31 October 1994. These are shown on the plan and detailed within this report.

This report does not contain any details of damage notices or claims that are specific to the enquiry boundary.

Claim reference	Claim type	Date claim received	Claim status	Claim value (£)	Address of claim	Distance from subject boundary (m)
S73980-CI	Coal Authority claim	02 March 2001	Rejected - After Inspection		56 HIGH STREET, TRELEWIS, TREHARRIS, MID GLAMORGAN, CF46 6AD	10.3
S49872-CI	Coal Authority claim	10 July 1997	Rejected - After Inspection		64 HIGH STREET, TRELEWIS, MID GLAMORGAN, SOUTH WALES, CF46 6AD	46.5
S47586-CI	Coal Authority claim	04 March 1997	Settled - Repairs and Compensation	12,832.89	61 HIGH STREET, TRELEWIS, TREHARRIS, MID GLAMORGAN, CF46 6AD	30.5
S45272-CI	Coal Authority claim	14 November 1996	Rejected - Mining Reports		62 HIGH STREET, TRELEWIS, TREHARRIS, MID GLAMORGAN, SOUTH WALES, CF46 6AD	35.7
S37314-CI	Coal Authority claim	28 November 1995	Settled - Repairs	5,741.90	58 HIGH STREET, TRELEWIS, TREHARRIS, MID GLAMORGAN, CF46 6AD	15.3
S33735-CI	Coal Authority claim	18 July 1995	Rejected - After Inspection		THE BOXING CLUB REAR OF 40 HIGH STREET, TRELEWIS, TREHARRIS, MID GLAMORGAN, CF46 6AB	46.0

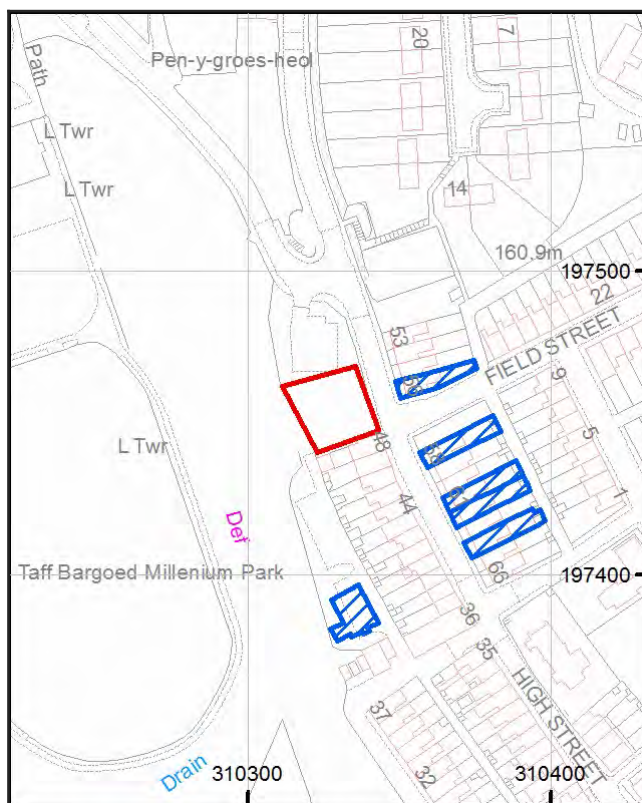
Enquiry boundary

Key

Approximate position of enquiry boundary shown



Coal claims



How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

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 /thecoalauthority

 /coalauthority



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VAT receipt

Issued by	The Coal Authority 200 Lichfield Lane Mansfield Nottinghamshire NG18 4RG
Tax point date	10 September 2018
Issued to	RICHARD DAVIES 56 MEYLER STREET THOMASTOWN TONYREFAIL RHONDDA CYNON TAFF CF39 8EA
Property search for	48 HIGH STREET TRELEWIS TREHARRIS MERTHYR TYDFIL UA CF46 6AB
Reference number	51001942780001
Date of issue	10 September 2018
Cost	£111.00
VAT @ 20%	£22.20
Total received	£133.20
VAT registration	598 5850 68