



Figure 10 Archaeological Events 1km of the Site
© Google base photo



Figure 11 Archaeological Monuments 1km of the Site

© Google base photo

3.2 HISTORY OF MINING AT MAES-Y-DROEL²

The boom period of mining in Powys was the 19th-century. By the 1870s steam powered engines were a common feature on many of the mines. Mechanisation of the extractive and processing stages rapidly developed as the century progressed. Invention of new apparatus for processing lead to produce a concentrate was particularly prolific in the second half of the century.

Metal mining declined rapidly after the 1870s due to cheaper foreign imports, and the market never recovered enough to make mining in Powys financially viable. By 1921 the industry had completely collapsed.

As noted above, two records of mining are recorded within the northern part of the Site. The detailed HER record states that:

HER 18083

Lead/Silver (1873-1913) Geology Cefn-y-fedw Sandstone with chert beds. Workings The mine worked the eastern end of the Westminster Vein. The site lies to the east of a small graveyard and plot once occupied by Moriah Chapel. A run of collapsed shafts and waste heaps lie in the fields running north from the Quarry owned by Stoddards Silicon Quarries. Smith (1921) details an engine shaft sunk through strata of sandstone and chert. The 1st edition OS map details this engine house with its shaft to the south at SJ21605675. No apparent structural evidence remains, although the sett was worked by the Llanarmon District Mining Company until 1913. A second shaft lay to the west of engine shaft. Transport No evidence. Power No evidence. Processing No evidence. Other features No evidence.

HER 18109

Lead (Late 19th century) Geology Sandy Limestone running into Cefn-y-fedw Sandstone. Workings The 19th century returns detail the Black Mountain Lead Co working 1888-1892 on the sandy limestone outcrops of Mynydd Du. The two shafts at SJ21605730 may have been trials on the eastern end of the Westminster vein. The site lies to the north of the Llanarmon (PRN 18109) workings at SJ21705680. Transport No evidence. Power No evidence. Processing No evidence. Other features No evidence.

The Ordnance Survey 1st edition surveyed in 1872 shows the mine as active, **Figure 12**, but within 25 years the mine is disused and the majority of the buildings demolished (**Figure 13**).

² Sources: <http://www.cambrianmines.co.uk> ; Henneb (CPAT) HER;

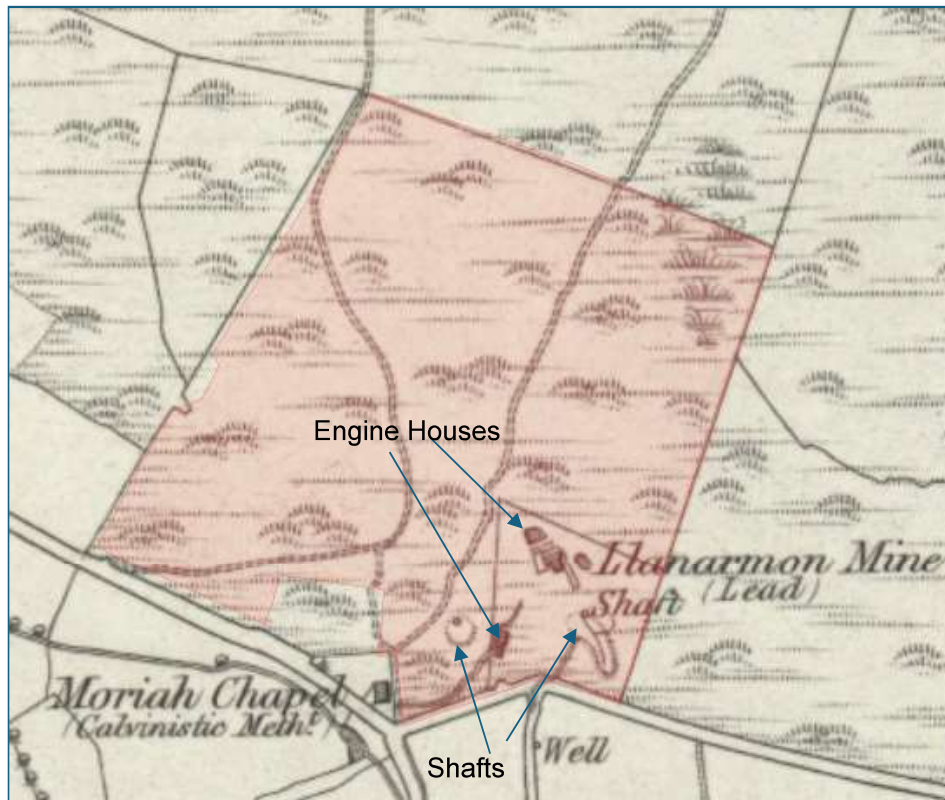


Figure 12 Ordnance Survey 1872-74

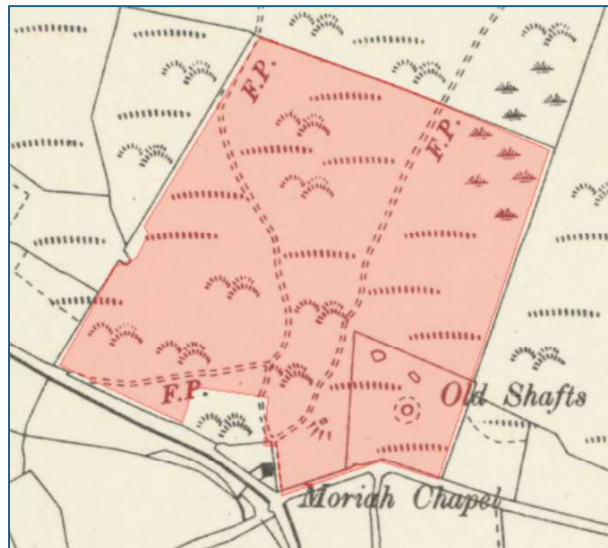


Figure 13 Ordnance Survey 1898

No mining is noted within the Site in the tithe apportionment of 1844 for the Parish of Gelligynnain, Chwelieriog, Alltymbyd, Benhadlen, Gwaenyffynnon, Trevellan, Creigiog Uwchglan, Erryrys and Llanarmon, **Figures 14 and 15.**

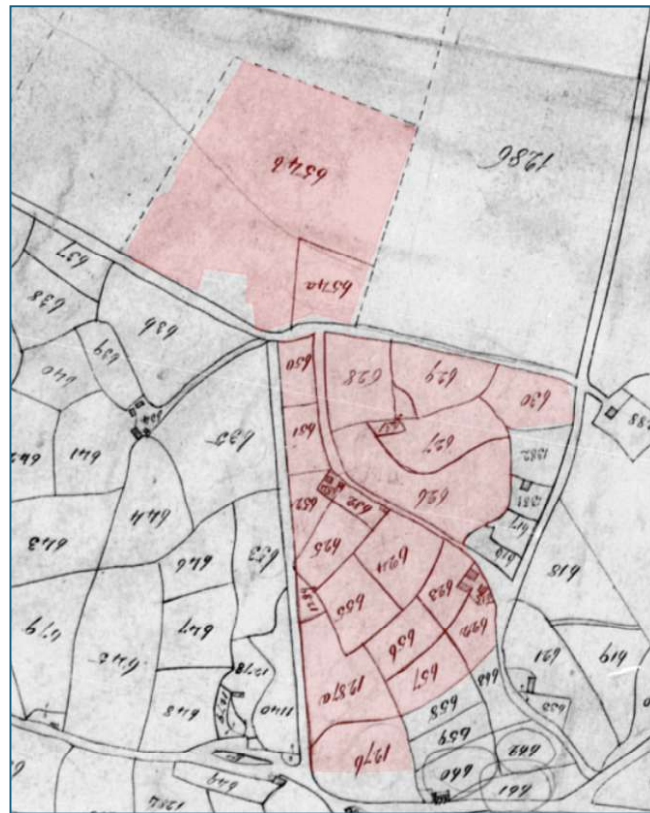


Figure 14 Tithe Map 1844

[illegible]

Figure 15 Extract from Tithe Apportionment 1844 for Maes y Droell

Following the end of mining, sand extraction started, **Figure 16**. This continued for the rest of the century, in particular in the southern area after World War II, **Figures 17 and 18**.

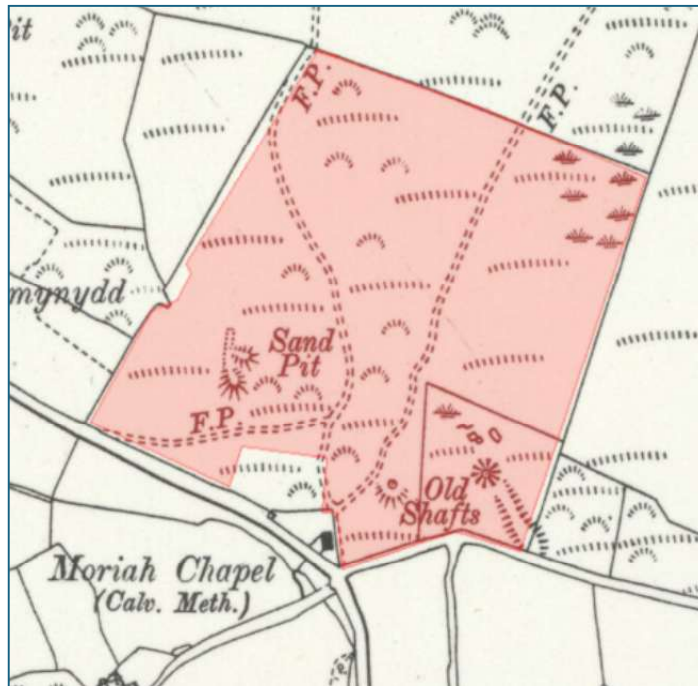


Figure 16 Ordnance Survey 1910

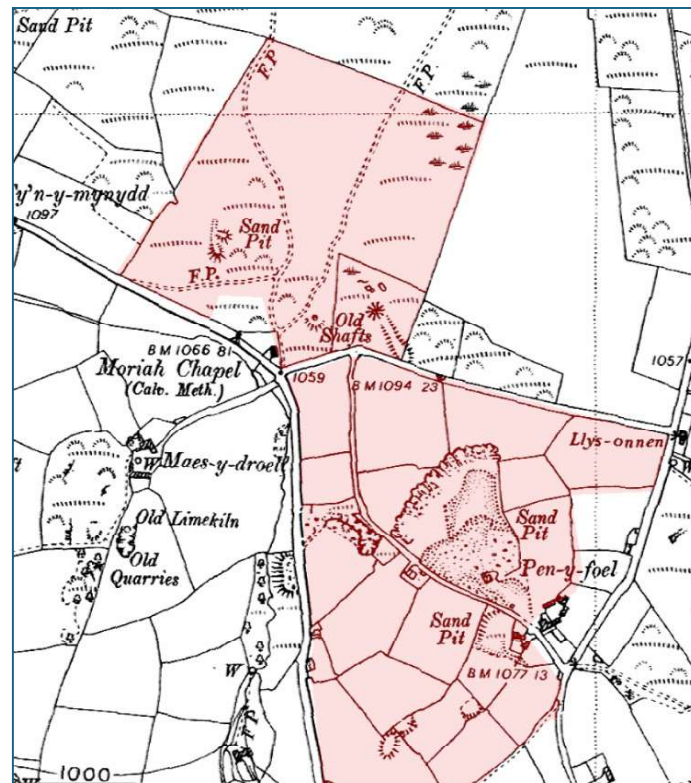


Figure 17 Ordnance Survey 1954

andrew josephs associates

Archaeological and Cultural Heritage Consultancy

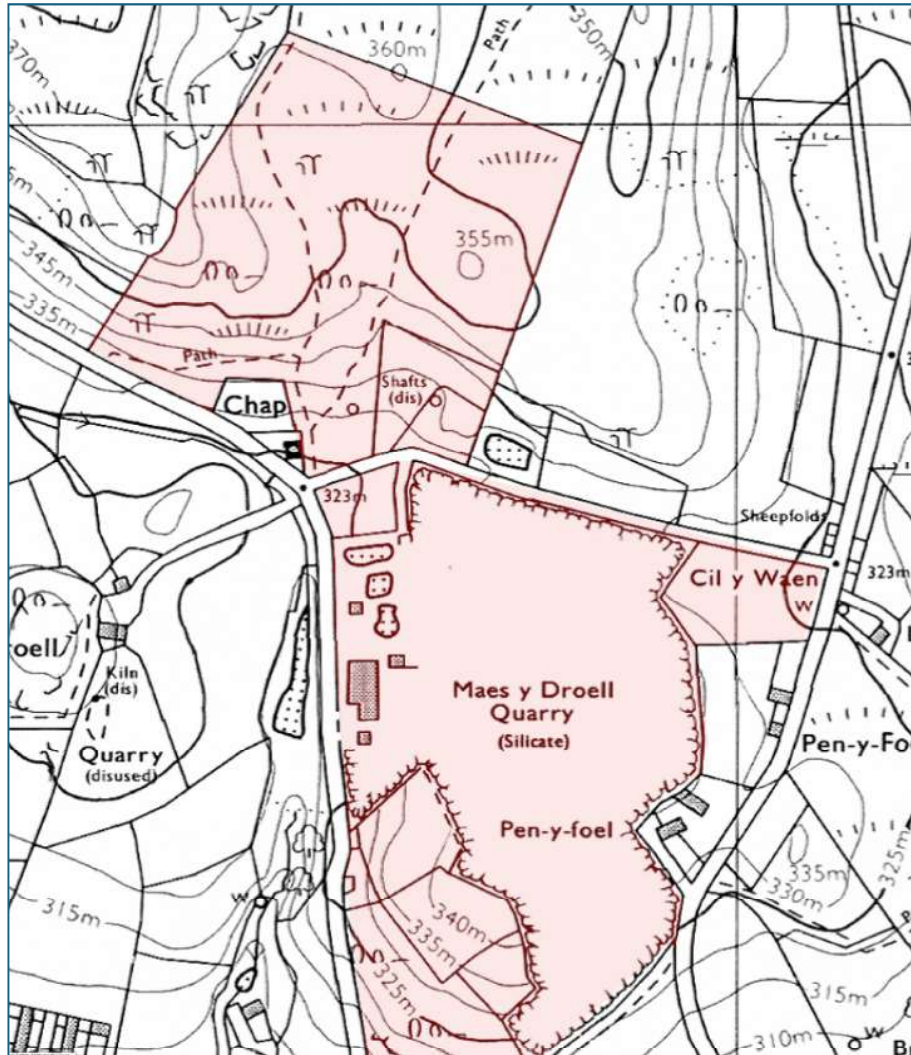


Figure 18 Ordnance Survey 1974

The maximum extent of the quarry in the southern area can be seen on a Google Earth image of 2009, **Figure 19**.



Figure 19 The Site in 2009

© Google base photo

4. Site Walkover

A site walkover was carried out in October 2025.

4.1 NORTHERN AREA

Locations of photographs are shown on **Figure 20**.



Figure 20 Location of photographs, northern area

© Google base photo

The location of the metal mine recorded on the HER was visited; the area was extremely overgrown with heavy thicket of trees, bracken, broom and bramble. For Health and Safety reasons the precise location could not be directly accessed but from a close distance, of about 5m, no buildings or foundations could be observed. **Photographs 1-2.**



Photographs 1 and 2 Site of former mine

The remainder of the northern area was traversed mainly by paths. The area is very overgrown with bracken, heather and broom, except towards its southern boundary where there are some fields of rough pasture **Photographs 3-6.**



Photograph 3



Photograph 4



Photograph 5



Photograph 6

4.2 SOUTHERN AREA

Locations of photographs are shown on **Figure 21**.

The southern area comprises extensive former quarry workings with substantial and high spoil tips in the centre of the area. The upper slopes are covered with mature vegetation and trees.

The area is under pasture with a heavily wooded area visible at the western edge where it meets the quarry, and the topography sloping down towards the road at its eastern boundary.

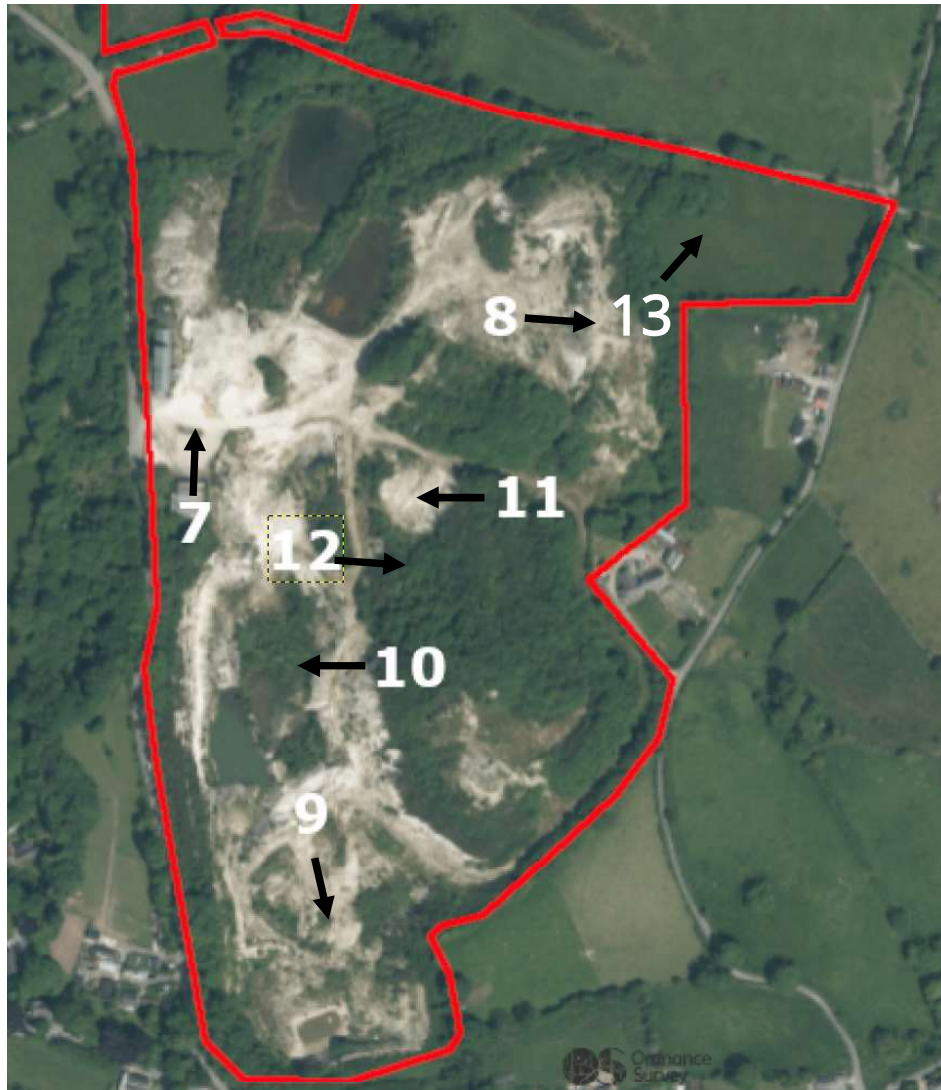


Figure 21 Location of photographs, southern area

© Google base photo



Photograph 7



Photograph 8



Photograph 9



Photograph 10



Photograph 11



Photograph 12



Photograph 13 The Net Benefit for Biodiversity Area

5. Impacts and Mitigation

5.1 DIRECT IMPACTS

The nature of mineral extraction results in the loss of the archaeological resource wherever extraction takes place, and the potential loss or damage in other areas associated with infrastructure and landscaping.

The Southern Area of the Site has been disturbed by previous quarrying during most of the 20th century. Only two small areas have been identified as having not been quarried, **Figure 22**.

The Northern Area has experienced smaller-scale sand extraction, metal-mining as well as the creation of reservoirs. Potentially undisturbed land is shown on Figure 22.



Figure 22 Areas of potentially undisturbed ground shaded green

5.2 MITIGATION OF DIRECT IMPACTS

In accordance with planning policy, loss of archaeology needs to be offset by a programme of mitigation. There is no evidence of archaeology within the Site, although there is potential for archaeology to survive within undisturbed areas shown on **Figure 22** and at the site of the metal mine.

Should planning consent be forthcoming, an archaeological project would run alongside soil stripping in advance of extraction. This could consist of a site walkover after scrub clearance and potentially a Strip Map and Sample under the supervision of an archaeologist. A watching brief may be appropriate during extraction in the vicinity of the metal mine to record buried foundations, shaft and underground remains.

A Written Scheme of Investigation would be agreed with Denbighshire County Council and its implementation would be ensured under a planning condition.

5.3 INDIRECT IMPACTS

A Grade II listed structure, a stone chimney, sits circa 210m west of the northern part of the Site. The 19th century chimney is associated with a former lead-mine. There would be no intervisibility with the site due to topography and vegetation, and no effect upon its setting.

A cluster of three Grade II listed buildings sit to the south of the B4530 at Bryn Ffynnon, about circa 675m west of the Site. There is no intervisibility with the Site due to topography and no effect upon setting due to distance.

5.4 PUBLIC BENEFIT

An interpretation panel could be placed by a footpath created after restoration to describe the history of metal mining in the local area.

6. Assessment of Effects (EIA)

In accordance with the EIA Regulations the significance of an effect should be identified. This is achieved using guidance and methodology set out in **Section 1.4**, above. The sensitivity and magnitude of these impacts is quantified based upon the criteria set out in **Section 1.5** and combined to predict residual effects.

The results of the evaluation of significance are drawn together in **Table 4**, below, together with the rationale behind the evaluation.

Table 4 Assessment of residual effects (EIA)

	Type of Effect	Probability of Effect Occurring	Sensitivity	Magnitude of Effect	Significance	Rationale
Direct effects upon statutorily designated assets of the historic environment	None	No effect	N/A	None	Neutral	There will be no adverse direct effects upon statutorily designated heritage assets.
Effects upon buried archaeology within PDA	Adverse if present	Uncertain	Medium	Not known	Not known	The southern area of the Site has been disturbed by quarrying, other than two small fields. The northern area has been less disturbed. Aside from the site of a 19 th century metal mine, there is no known archaeology within the Site.
Effects upon setting of statutorily designated assets of the historic environment	None	No effect	Medium	None	Neutral	There will be no adverse effects upon the setting of statutorily designated heritage assets due to topography, vegetation and distance.
Public benefit	Positive Permanent	Certain	Medium	Moderate	Not Significant	An interpretation panel could be placed by a footpath created after restoration to describe the history of metal mining in the local area.
Cumulative and Combined Effects	Neutral Permanent	Certain	High/Medium	Neutral	Neutral	There are no other planned developments within the vicinity of the Site that would have an impact upon the setting of designated assets.

7. Summary and Conclusions

7.1 DIRECT EFFECTS AND MITIGATION

There will be no direct effects upon statutorily designated heritage assets.

The Southern Area of the Site has been disturbed by previous quarrying during most of the 20th century. Only two small areas have been identified as having not been quarried. The Northern Area has experienced smaller-scale sand extraction, metal-mining as well as the creation of reservoirs.

In accordance with planning policy, loss of archaeology needs to be offset by a programme of mitigation. There is no evidence of archaeology within the Site, although there is potential for archaeology to survive within undisturbed areas.

Should planning consent be forthcoming, an archaeological project would run alongside soil stripping in advance of extraction. This could consist of a site walkover after scrub clearance and potentially a Strip Map and Sample under the supervision of an archaeologist. A watching brief may be appropriate during extraction in the vicinity of the metal mine to record buried foundations, shaft and underground remains.

A Written Scheme of Investigation would be agreed with Denbighshire County Council and its implementation would be ensured under a planning condition.

7.2 INDIRECT EFFECTS AND MITIGATION

Indirect effects are those that do not physically impact upon a cultural heritage asset or landscape, but that alter the context or setting. This assessment has considered both visual and contextual effects, and potential effects upon the significance of the asset and our ability to appreciate that significance.

A Grade II listed structure - *Mine Chimney at Castell* - sits circa 210m west of the northern part of the Site. The 19th century chimney is associated with a former lead-mine. A cluster of three Grade II listed buildings sit to the south of the B4530 at Bryn Ffynnon, about circa 675m west of the Site. There would be no intervisibility with the site due to topography, vegetation and distance, and no effect upon its setting.

No mitigation is required.

7.3 CUMULATIVE and COMBINED IMPACTS

There are no other planned developments within the vicinity of the Site that would have an impact upon designated heritage assets.

7.4 PUBLIC BENEFIT

An interpretation panel could be placed by a footpath created after restoration to describe the history of metal mining in the local area.

7.5 CONCLUSION

This assessment has concluded that there would be no effect upon the setting of designated heritage assets.

There is no evidence of archaeology within the Site, although there is potential for archaeology to survive within undisturbed areas.

Should planning consent be forthcoming, a Written Scheme of Investigation that sets out a scheme of mitigation would be agreed with Denbighshire County Council and its implementation would be ensured under a planning condition.

Any harm would be offset by contribution to knowledge, and an interpretation panel could be placed on a footpath describing the history of metal mining in the local area.

The proposals therefore fully accord with national and local planning policy.



consultancy | project management | expert witness

Specialists in Archaeology and Cultural Heritage ~ Telephone 07990 571908 - Visit our website at
www.andyjosephs.co.uk