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DESIGN AND ACCESS STATEMENT INCLUDING A HERITAGE IMPACT ASSESSMENT

**Proposed erection of livestock building in retrospect at Pen-Rhos Farm,
Brymbo Road, Brymbo, LL11 5LU**



Client: Mr James Rogers
Design team: HDS Architectural services LTD

1. Introduction

This statement accompanies a retrospective planning application and listed building consent application for the livestock building that has been erected at Pen-Rhos Farm

To be read in conjunction with drawing No's and details;

- 10645.01.dsj Location Plan
- 10645.02.dsj Proposed Site Layout Plan
- 10645.03.dsj Proposed Floor Plan & External Elevations

This Heritage Impact Assessment (HIA) examines the potential effects of the building on the historical and architectural significance of Pen-Rhos Engine House. The Engine house is a Grade II* listed building, recognized as scheduled Ancient Monument and listed for its architectural and cultural importance

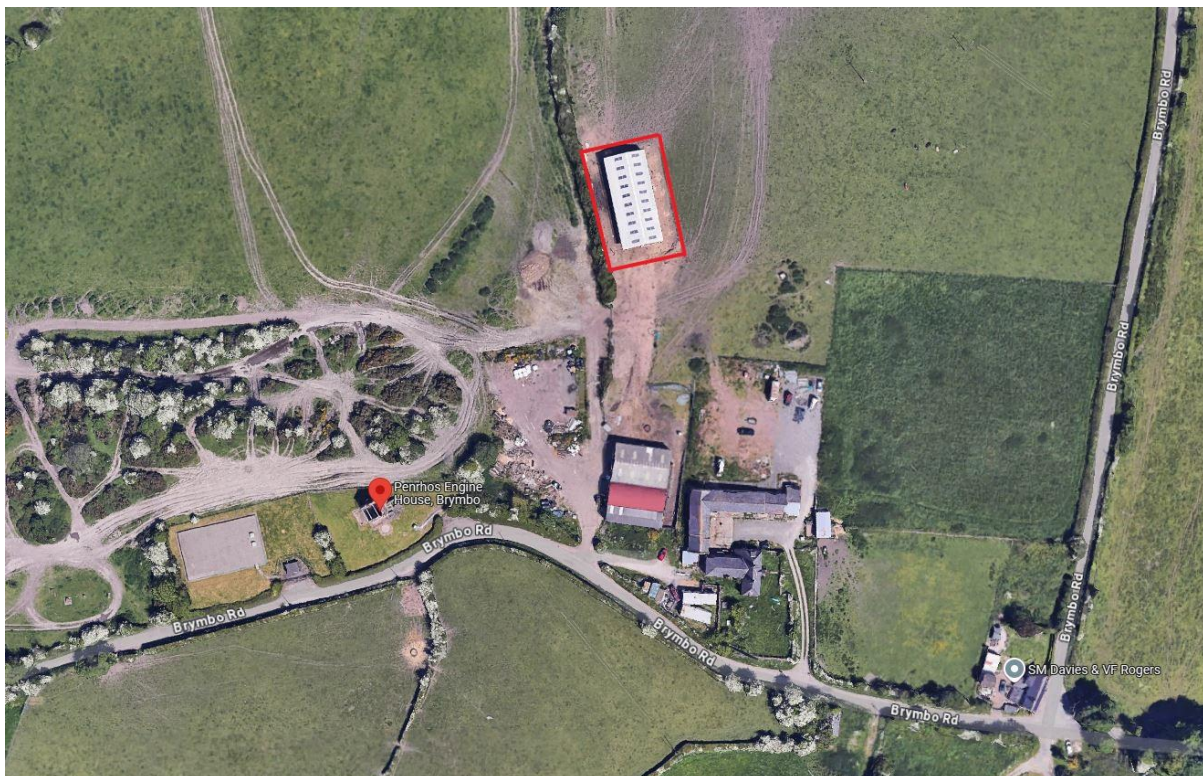


Fig. 1 – Location of Existing Site

2. Proposed development

The applicant has erected a 5 bay livestock building, adjacent to the existing barn buildings on the farm. The building is used for storage and to provide shelter and a feeding area for the client's cows. The building is needed so that the client may continue to run his farming business successfully and so that they can provide the required level of care for their animals. The building is approximately 30.5m L x 13.5m W x 6.4m H

3. Site assessment

The new building is situated to the North of the existing farm buildings. This part of the site is one of the lower areas of the farm, with hills flanking the new barn to the East and West. The topography of the hills helps to offset the impact of the building by minimizing its perceived height against the surrounding fields and views.

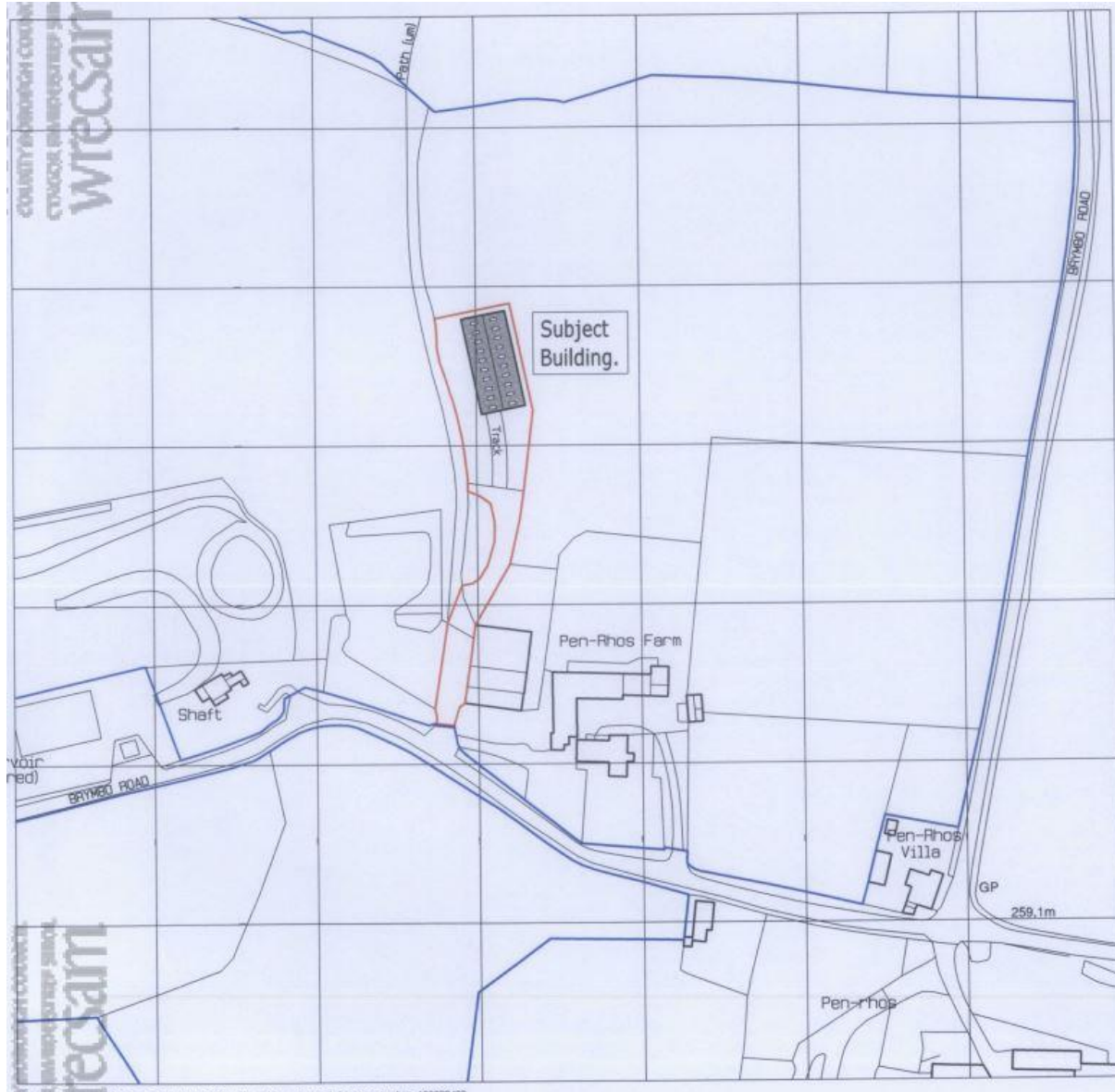


Fig. 2 – Extract from Site Location Plan

To the West of the building there is a well-established hedge that runs adjacent to the public footpath / right of way that crosses through the farm. This provides additional screening to building.

4. Scale

With a ridge height of 6.4m, the building is an appropriate size for its purpose and is in keeping with the existing buildings at the farm.



Fig. 3 – 3D view taken from Google Earth looking North / East

5. Appearance

The barn's materials match the existing agricultural buildings on the farm. The barn is a partially open design with the Western elevation open to allow for the free movement of livestock. It is a steel portal frame shed with precast concrete panels on the lower levels and vertical timber Yorkshire boarding taken up to the eaves. The roof is box section steel sheets with Perspex roof lights.



Fig. 4 & 5 – Comparative views of the new building and the existing farm barns

6. Access

The new barn connects onto the main yard of the farm via a small track. It utilizes the existing gateways and farm accesses and does not require any new roads or hardstanding to be constructed. As mentioned earlier in this statement, the barn flanks a public footpath, the use of the barn does not impede public use or access to the footpath.

7. Heritage impact assessment

History

Pen-Rhos Farm does not contain any listed buildings or buildings of any architectural significance. A Heritage impact assessment has been requested for the retrospective application due to the presence of the Pen-Rhos Engine House approximately 110m meters South West from the application site.



Fig. 6 – Pen-Rhos Engine House, Brymbo

Pen-Rhos was built towards the end of the eighteenth century by ironmaster John Wilkinson to pump water from an adjacent coal mine. John had bought the Brymbo Hall Estate, on which Pen-Rhos stands, in about 1793 for £14,000. One of his first acts was to establish a new iron works, which was later to become Brymbo Steel works. The coal from Pen-Rhos presumably supplied the iron works, as well as the nearby 'Brymbo bottle' lead smelters, which were also built by John Wilkinson at this time. The remains of the 'bottle' chimney can still be seen in the North.

Pen-Rhos housed a large steam engine, probably of Boulton & Watt design. Steam for the engine was created in a boiler which stood on the North side of the building, but which no longer survives. The boiler fed a large vertical cylinder within the building itself. The introduction of steam into the cylinder pulled the beam down, lifting the pump rods and the water up the shaft as it did so. The beam connected to the engine through the large arched opening in the South or 'bob' wall.

The engine carried on in use until the mid-nineteenth century, when the building was converted into a cottage. When this happened, the engine was removed and various modifications and additions were carried out to make the building habitable. The stone building to the right of the engine house, for example, appears to have included a pig sty and a bread oven. The house was later abandoned.

Listing

Exterior

Tall beam engine house. Battered walls of rough rubble with dressed stone quoins and dressings; roofless, but with moulded kneelers to gable copings, and brick stacks on the two gable ends, added when the building was converted into a dwelling. Beam arch high in bob-wall to S gable, partially blocked to convert to domestic window; semi-circular with dressed stone voussoirs. Small doorway to lower right in this gable. Remains of what may have been a square stack to the E

Reason for designation

Listed as an exceptionally rare survival of a C18 beam engine house, dating from a period when the design of the steam engine was rapidly evolving. Scheduled Ancient Monument De 203



Fig. 7 – Roadside access and parking for the monument.

Setting

The Engine House is situated on Brymbo Road, at a high elevational height. The area has excellent views in all directions, particularly to the east where Wrexham city and its surrounding suburbs can be seen. The engine house is accessed from off a small stone pathway that leads to an information board that gives visitors information on the monument. There is open access around the site, so visitors are able to get close to the building should they choose.

If a visitor was to stay on the designated pathway and view the building from the information board, then their focal point would be a view out towards the North West. The applicants building is completely out of view from this point if the visitors focus is

on the monument. If the visitor were to turn their view away from the monument North East towards the applicant's site, then the corner of the buildings roof would become visible. This can be seen below in figures 8 & 9.



Fig. 8 & 9 – Views of the monument and applicants' property from the visitor's information board.

If the visitor to the site was able bodied and the weather conditions were suitable, they may wish to leave the path and explore the monument more closely. The land around the monument is uneven and sloped quite steeply. Due to the banks and thick hedges, there are limited views out of the site.

The function for the steam engine was to pump water out of a local coal mine from on the site. It was not built in this location for any reasons relating to the view or surrounding but due to it being functional to have it closer to the mine. The coal pit that it served no longer exists, the monument remains as a reminder of the industrial business use that that land was used for at that time. The surrounding fields and farm lands use remains the same today as it would have been used during that time.

Potential impact of the development

From the Engine House, the only other property that is visible, are the buildings and yard that make up Pen-Rhos Farm. The farm is a long-established livestock farm and is exactly the type of business that you would expect to see in this rural location. The original farm house and some of the earlier barns are constructed from locally mined stone with Welsh slate roofs. There are also steel portal frame livestock buildings that have been built more recently.

Fig.11 shows the view of the farm yard from the boundary of the monument. As a working farm this area houses machinery, feeding racks, plant etc and also houses wrapped silage depending on the time of year. The roof of the new livestock building can only just be seen in the distance past the yard. With the large hedge in front of it and at approximately 110 meters away, in the opposite direction to the views of the monument from the information board / viewing station, the visual impact of the new livestock building on the settings of the monument are low to minimal. The livestock building matches the character of the existing farm buildings and does not dominate the monument or detract from the visitor's ability to enjoy or appreciate the heritage asset.



Fig. 10 – View of Pen-Rhos Farm to the East.



Fig. 11 – View of Pen-Rhos Farm to the North/East.

Actions to mitigate any potential impacts

The established hedge that runs adjacent to the livestock building already provides significant screening of the building. To minimize any potential impacts on the monument from the building, it is recommended that the hedge be allowed to continue to grow vertically with just the spread of the hedge trimmed back so that it does not cause any access issues for building or the footpath/track.

8. Conclusion

Following a thorough assessment of the proposed livestock building and its proximity to the listed monument, it is evident that the development will have minimal impact on the monument's significance. The structure respects the historical setting, ensuring that sightlines, materials, and scale remain sympathetic to the existing heritage context. Additionally, mitigation measures such as appropriate landscaping and setback distances have been incorporated to further safeguard the monument's visual and environmental integrity. Given these considerations, it is assessed that the proposal aligns with conservation principles and does not detract from the heritage value of the site.

In conclusion, the proposals are considered essential to the ongoing feasibility of the applicants farming business. The new building will have no adverse effect on the character or enjoyment of the listed structure.