

Clyndu Street, Morriston, Swansea

Archaeological Watching Brief



By Dr Amelia Pannett MIFA

Report No. 635

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Clyndu Street, Morriston, Swansea

Archaeological Evaluation

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CONTENTS

Summary	1
1. Introduction	1
2. Aims and Objectives	2
3. Archaeological and Historical Background	2
4. Archaeological Evaluation	3
5. Discussion and Conclusions	4
6. Acknowledgements	5
7. Bibliography	5

ILLUSTRATIONS AND PLATES

Location of the site
Layout of the site
The site as shown on the OS map of 1876
The site as shown on the OS map of 1899
The site as shown on the OS map of 1917
The site as shown on the OS map of 1947
The site as shown on the OS map of 1966
Plan of Morriston in the 18 th and 19 th centuries showing presumed route of the Clyndu underground canal (after RCAHMW 2000, 199)
Location of evaluation trenches
Trench 1
Trench 2
Trench 3
Trench 4
Trench 5

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Summary

This report presents the findings of a field evaluation on the site of proposed development on land off Clyndu Street in Morriston, Swansea. The proposed development is located on the site of the former Clyn-Du Pit or Level which is known to have been operational as early as the mid-18th century. The associated Clyndu underground canal is also thought to have been located within or close to the proposed development area. The evaluation revealed extensive deposits of coal and mining waste but no structural remains.

1. Introduction

1.1 Location and scope of work

In May 2010, Cambrian Archaeological Projects carried out an intrusive field evaluation on land off Clyndu Street, Morriston, Swansea, in advance of the proposed development of the site for housing.

The proposed development site is located between Clyndu Street, Harris Street, Uplands Terrace and Morfydd Street (NGR: SS 6675 9770; fig. 1) and comprises a roughly rectangular area of land (fig. 2). The proposed development involves the construction of five houses and seven flats with associated gardens and parking spaces. The development proposed has been submitted by Kedrick Davies of CDN Planning Ltd, SA1 Swansea Waterfront, Swansea SA1 8AS acting as agents for Mr Michael Babty of Knight Frank LLP. The local planning authority is City and County of Swansea and the planning application number is 2009/1313. The project archive will be deposited with RCAHMW.

The site is currently overgrown with brambles, seeded trees and large perennial weeds. It occupies a relatively flat area of ground, which slopes away steeply to the south and east. The remains of garages are visible as regularly spaced rectangles of concrete. Japanese knotweed is present on the site. Undulations on the site were noticed, which may be the result of the use of the site for industry in the past, or simply the remains of modern dumping.

The site was considered to be of potential interest as it lies within a former industrial zone, and was the site of a Capstan Shaft and Engine House associated with the Clyndu Level. The Clyndu underground canal is thought to have run through the proposed development site (fig. 8). As a result, Judith Doyle of the Curatorial Section of Glamorgan Gwent Archaeological trust (GGAT) recommended that an intrusive field evaluation be carried out. The purpose of the intrusive field evaluation was to determine the archaeological potential of the site through the excavation of strategically positioned evaluation trenches (fig. 9). The aim of the works was elucidate the presence or absence of archaeological remains, their character, distribution, extent, condition and relative significance. This follows the requirements set out in Planning Policy WALES, March 2002, section 6.5 and Welsh Office circular 60/96.

The work was undertaken by Dr Amelia Pannett (Project Manager) and Hywel Keen (Site Assistant).

1.2 Geology and Topography

The site lies on east-facing ground at 58m m AOD. The underlying solid geology is Upper Coal Measures (British Geological Survey 2001).

2. Aims and Objectives

The aims and objectives of the field evaluation were:

- to establish the presence/absence of archaeological remains within the development area.
- To provide sufficient information to allow mitigation against any adverse effects the proposed development may have on the buried archaeological resource.

3. Archaeological and Historical Background

Swansea was the world leader in the metallurgical industry in the 18th and 19th centuries, becoming known as 'Copperopolis'. The city's contribution to the development of the industrial world can be appreciated by the fact that until the end of the 19th century the global copper price was set in Swansea (RCAHMW 2000). However, copper was not the only industry in Swansea, other metals including arsenic and zinc were produced, and coal was mined locally to supply the metal producers (GGAT 2010).

The Clyn-Du Level was one of the local pits supplying coal to the metallurgical industry in the city in the eighteenth and nineteenth centuries (RCAHMW 2000), It supplied the Fforest Copperworks, which was located on the western bank of the river Tawe, at the south-eastern end of Clyndu Street (RCHAMW 2000). Clyndu Street, or Duke Street as it was called in the nineteenth century, originated as a coal road linking the two sites (GGAT 2010). The coal road was in use by the late eighteenth century, together with an underground canal which followed a similar route (GGAT 2010; RCHAMW 2000). A map depicting Morriston in the eighteenth and nineteenth centuries shows the route of the canal crossing the proposed development area (RCAHMW 2000, 199; see fig. 8). The canal is known to have been out of use for the transport of coal by 1840, being used instead as a means of draining the mines (GGAT 2010).

The OS County Series Map of 1876 depicts the site as containing two buildings, an Engine House and a Capstan Shaft (fig. 3). The Clyn-Du Level Colliery is marked as disused on the map, indicating that the shaft and engine house were no longer functioning by the late 19th century. A linear feature running north-west/south-east across the northern half of the site could be the remains of the underground canal. The OS County Series Map of 1899 shows that the Engine House and one of the other buildings were still standing (fig. 4), with the line of the linear feature also just visible. In both of these early OS maps, the coal road that was to become Clyndu Street is depicted as Duke Street.

The 1917 OS County Series Map labels the site as the disused Clyn-Du Level Colliery (fig. 5). By now all the buildings on the site have been removed, with just the location of the former shaft depicted. The later 20th century OS maps depict changes to the use of the site, with small buildings appearing in the 1940s (fig. 6). The lock-up

garages that are still evident on the site today, surviving as a series of concrete bases, were built between 1950 and 1966 (fig. 7) and remained in use until the late 1990s.

4. Archaeological Evaluation

The initial methodology for evaluation proposed the excavation of four 20m long and 2m wide trenches across the proposed development area. However, an examination of the geotechnical borehole data prior to the commencement of evaluation trenching revealed that there was likely to be up to 4m of made ground overlying the natural surface. As a result, and in consultation with GGAT, it was decided that five 7m by 7m stepped trenches, reaching a maximum depth of 3m, would be excavated in pertinent locations across the proposed development area (fig. 9). Following the excavation of trench 1, and after discussions with Neil Maylan of GGAT, it was considered unnecessary to continue stepping the trenches as they were too unstable to be entered safely. As a result, all recording was carried out outside the trenches and consequently measurements are approximate.

4.1 Trench 1

Trench 1 was located at the northern end of the site, within the footprint of proposed House 1. The trench measured 7m wide by 7m long and was excavated to a depth of approximately 3.2m (plate 1).

The natural surface was exposed in the base of the trench, covered by over 3m of redeposited material. No evidence for an old ground surface was noted.

The redeposited material comprised coal debris, ash, rubble and shattered sandstone. Distinct tip lines were evident in the deposits. A large quantity of modern rubbish was also present in the upper 0.3m of the trench.

4.2 Trench 2

Trench 2 was located at the southern end of the site, within the footprint of House 2. It measured 7m wide by 7m long and was excavated to a depth of approximately 3m (plate 2).

The natural surface was not reached, although at the base of the trench a thick layer of shattered natural sandstone was encountered. Overlying the shattered stone approximately 2.5m of redeposited material was identified. This comprised predominantly coal debris and ash. A thick layer of greasy, possibly oil-contaminated, stony clay soil was identified, together with a layer of large angular stones. These had the remains of lime mortar on their edges, and probably derived from one of the structures associated with the Capstan shaft. Distinct tip lines were evident in the layers of redeposited material, and modern rubbish was abundant in the upper levels of the trench.

4.3 Trench 3

Trench 3 was located on the eastern side of the site, within the proposed parking area. It measured 2m wide by 5m long and was excavated to a depth of approximately 3m (plate 3).

The natural surface was not reached in the trench. The deposits revealed comprised entirely of redeposited materials – these were extremely loose towards the base of the

trench causing significant collapse. The redeposited materials differed from those encountered in trenches 1 and 2, comprising coal dust and ash in the lowest 1.5m with distinct layers of clay, mortar, rubble and a clay silt soil above. Abundant modern rubbish was again found in the uppermost layers.

4.4 Trench 4

Trench 4 was located on the south-western edge of the site, within the footprint of the proposed block of flats. It measured 2m wide by 5m long and was excavated to a depth of 1.8m (plate 4). The trench was located in the approximate position of the former Engine House to test for the survival of structural remains.

The deposits comprised distinct layers of redeposited materials overlying the sandstone natural. At the base of the trench a deposit of shattered sandstone was overlain by a thick layer of coal debris and ash. Above this a deposit of bricks, brick fragments and what appeared to be crushed brick was identified. This was approximately 0.7m thick and was covered by further bands of coal debris and finally topsoil.

No evidence for structure was revealed.

4.5 Trench 5

Trench 5 was located on the north-eastern side of the side, within the footprint of House 3. It measured 2m wide by 5m long and was excavated to a depth of 2.4m (plate 5). The trench was located slightly to the north of the site of the former Engine House.

The natural sandstone was revealed in the base of the trench, overlain by a series of distinct deposits. The basal deposits comprised predominantly coal debris and were extremely unstable, causing the sides of the trench to collapse. Overlying the coal deposits layers of clay, rubble, brick, ash and mortar were identified. No evidence of structure was identified.

5. Discussion and Conclusions

The industrial history of the proposed development site is recorded in the documentary and cartographic sources, which demonstrate that it functioned as part of the Cyn-Du Level colliery in the 18th and 19th centuries. Abundant evidence for such a use was revealed during the evaluation, with extensive deposits of industrial, coal mining, waste found across the site. The presence of coal debris and ash attest to both the mining and sorting of coal on the site, but also the burning of coal to fire the steam engine that would have served the Capstan Shaft. The thick deposits of shattered natural sandstone revealed in trenches 1, 2 and 4 are likely to have derived from the excavation of the shaft and the mining of coal from the subterranean seam. The rubble, bricks and mortar also revealed within the trenches are likely to derive from the demolition of structures on the site.

The lack of evidence for any in situ structural remains is interesting, demonstrating that the Engine House and all associated buildings were completely removed in the early twentieth century.

Despite the recorded function of the site as an important contributor to the local metallurgical industry in the eighteenth and nineteenth centuries, the evaluation has indicated that it is unlikely to yield any significant archaeological remains.

6. Acknowledgements

Thanks to Hywel Keen for his assistance on site and to Peter from Karwyn Plant Hire.

7. Bibliography

Earth Science Partnership, 2007. Cyndu Street, Morriston. Ground Stability Investigation

GGAT, 2010. Land at Clyndu Street, Morriston, Swansea. Brief for Archaeological Evaluation.

Hughes, S. 2000, Copperopolis, Landscapes of the Early Industrial Period in Swansea. Aberystwyth: RCAHMW







Fig. 3 The site as shown on OS Map of 1876





Fig. 4 The site as shown on OS Map of 1899

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Fig. 5 The site as shown on OS Map of 1917

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Fig. 7 The site as shown on OS Map of 1966

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Plate 1 Trench 1 Looking North





Plate 2 Trench 2 Looking South





Plate 3 Trench 3 Looking North





Plate 4 Trench 4 Looking West

Scale = 2m

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Plate 5 Trench 5 Looking West





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