

Erection of Bridge Over the M4 Motorway, Newport, PL/AP 17/1190 Archaeological Watching Brief



Prepared
For

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Front cover: Area A, view to the east during excavation.

Summary

Comisiynwyd Archeoleg Mynydd Du Cyf gan y Ganolfan Gonfensiwn Rhyngwladol Cymru, Coedydd Coldra, Casnewydd, NP18 1HQ, i gwblhau briff gwyllo yn ystod codi ail bont dros Draffordd yr M4, Casnewydd, PL/AP 17/1190. Roedd y datblygiad arfaethedig yn cynnwys adeiladu pont gerbydau newydd yn union i'r dwyrain o'r bont draffordd bresennol, cysylltiad â'r rhwydwaith ffyrdd presennol a thirlunio.

Nodwyd y cynghorwyr archeolegol i'r LPA (GGAT) y potensial i ddod ar draws dyddodion archeolegol Rhufeinig, canoloesol ac ôl-ganoloesol yn yr ardal ddatblygiad arfaethedig ac roedd angen rhaglen waith ar ffurf briff gwyllo archeolegol yn unol â Chynllun Ysgrifenedig o Liniaru'r Amgylchedd Hanesyddol (CYLAH).

Nid oedd nodweddion archeolegol, dyddodion ac arteffactau yn yr ardaloedd a gloddiwyd.

Mae'r adroddiad presennol yn nodi canlyniadau'r briff gwyllo archeolegol yn unol â Safon a Chanllawiau ar gyfer Briff Gwyllo Archeolegol gan y Sefydliad Siartredig ar gyfer Archeolegwyr, a gyhoeddwyd yn 2014.

Black Mountains Archaeology Ltd/Archeoleg Mynydd Du Cyf were commissioned by the International Convention Centre Wales Ltd, Coldra Woods, Newport, NP18 1HQ, to carry out an archaeological watching brief during the erection of a second bridge over the M4 Motorway, Newport, PL/AP 17/1190. The proposed development comprised the construction of a new vehicular bridge immediately east of the existing motorway bridge, connection to the existing road network and landscaping.

The archaeological advisors to the LPA (GGAT) have indicated the potential to encounter Roman, medieval and post-medieval archaeological deposits within the proposed development area and required a programme of work in the form of an archaeological watching brief in accordance with a Written Scheme of Historic Environment Mitigation (WSHEM).

The excavated areas were devoid of archaeological features, deposits and artefacts.

The present report sets out the results of the archaeological watching brief in accordance with the Chartered Institute for Archaeologists' Standard and Guidance for an Archaeological Watching Brief, published 2014.

Acknowledgement and Copyright

The project was managed by Richard Lewis BA MCIfA. The fieldwork was undertaken by Richard Lewis and Iulia Rusu MA. The report was prepared by Rhys Morgan MPhil and Iulia Rusu and was edited by and Richard Lewis. The Welsh translations were provided by Rhys Morgan. The copyright of this report is held by Black Mountains Archaeology Ltd, who have granted an exclusive licence to The International Convention Centre Wales Ltd, and their agents, enabling them to use and reproduce the material it contains. Ordnance Survey maps where published are reproduced under licence 100058761. Black Mountains Archaeology Ltd retain copyright of any annotations. The authors are grateful to Russell Phillips (Celtic Manor) and Adrian Lewis (Lewis and Lewis) for help and support during the project.

1 Introduction

1.1 Project Background and Proposals

- 1.1.1 Black Mountains Archaeology Ltd/Archaeoleg Mynydd Du Cyf were commissioned by the International Convention Centre Wales Ltd, to carry out an archaeological watching brief during the erection of a second vehicular bridge immediately east of the existing bridge over the M4 Motorway, Newport (PL/AP 17/1190). This new bridge will span approximately 50m and will provide egress from the Celtic Manor Resort to the Coldra Road B4237.
- 1.1.2 The archaeological advisors to the LPA (GGAT – NEW1406/JBHD) have indicated the potential to encounter farmland and landscape grounds associated with the Coldra House/Lydia Beynon Hospital (NPRN36702/PRN02367g). They also noted that previous archaeological investigations in the locality have identified archaeological remains from the Roman, medieval and post-medieval periods and suggest the possibility of encountering such remains within the proposed development area. They therefore required a programme of work in the form of an archaeological watching brief in accordance with a Written Scheme of Historic Environment Mitigation (WSHEM) (Lewis 2018).
- 1.1.3 The present report sets out the results for the archaeological watching brief in accordance with the WSHEM and the *Chartered Institute for Archaeologists' Standard and Guidance for an Archaeological Watching Brief*, published 2014.

1.2 Objectives

- 1.2.1 The *definition* of an archaeological Watching Brief as set out by the *Chartered Institute for Archaeologists* (CIfA) is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.
- 1.2.2 The *purpose* of an archaeological watching brief (as defined CIfA 2014) is:
- To allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works.
 - To provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.
 - A watching brief is not intended to reduce the requirement for excavation or preservation of known or inferred deposits, and it is intended to guide, not replace, any requirement for contingent excavation or preservation of possible deposits.
 - The objective of a watching brief is to establish and make available information about the archaeological resource existing on a site.
 - (*Chartered Institute for Archaeologists' Standard and Guidance for an Archaeological Watching Brief*, published 2014).

1.3 Legislative Framework

- 1.3.1 Planning legislation is set out in the *Town and Country Planning Act 1990*. Planning Policy Wales (PPW 10th Edition) sets out the land use planning policies of the Welsh Government. Chapter 6 sets out the Welsh Government's policy towards the historic environment. It states "*The planning system must take into account the Welsh Government's objectives to protect, conserve, promote and enhance the historic environment as a resource for the general well-being of present and future generations. The historic environment is a finite, non-renewable and shared resource and a vital and integral part of the historical and cultural identity of Wales. It contributes to economic vitality and culture, civic pride, local distinctiveness and the quality of Welsh life. The historic environment can only be maintained as a resource for future generations if the individual historic assets are protected and conserved. Cadw's published Conservation Principles highlights the need to base decisions on an understanding of the impact a proposal may have on the significance of an historic asset. It is the responsibility of all...planning authorities, applicants, developers and communities...to appropriately care for the historic environment in their area. The protection, conservation and enhancement of historic assets is most effective when it is considered at the earliest stage of plan preparation or when designing new proposals.*" (PPW 2018, 124).
- 1.3.2 Underpinning PPW are a series of legislative powers and TANs. *The Planning (Wales) Act 2015* sets out a series of legislative changes to deliver reform of the planning system in Wales, to ensure that it is fair, resilient and enables development. The 2015 Act also introduces a mandatory requirement to undertake pre-application consultation for certain types of development. *The Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016* defines in Schedule 4(l) the parameters and definitions for the requirement of pre-application consultation by Welsh Ministers, particularly in response to the effect of statutory designated monuments, buildings, and parks and gardens.
- 1.3.3 Following *The Historic Environment (Wales) Act 2016* and later the adoption of the *TAN 24 Historic Environment* on 31st May 2017, *Welsh Office Circulars 60/96 Planning and the Historic Environment: Archaeology*; *61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas*; and *1/98 Planning and the Historic Environment* have been cancelled.
- 1.3.4 Any works affecting an ancient monument and its setting are protected through implementation of the *Ancient Monument and Archaeological Areas Act 1979*. In Wales the 1979 Act has been strengthened by *The Historic Environment (Wales) Act 2016*. The 2016 Act makes important improvements for the protection and management of the Welsh historic environment. It also stands at the centre of an integrated package of secondary legislation (Annexes 1-6), new and updated planning policy and advice, and best-practice guidance on a wide range of topics (*TAN 24 Historic Environment*). Taken together, these support and promote the careful management of change in the historic environment in accordance with current conservation philosophy and practice.

1.3.5 The *Ancient Monument and Archaeological Areas Act 1979* and *The Historic Environment (Wales) Act 2016* sets out a presumption in favour of preservation *in-situ* concerning sites and monuments of national importance (scheduled/listed), and there exists in the current *Planning Policy Wales* (Chapter 6) a presumption in favour of preservation *in-situ* of all types of heritage assets.

1.4 Location, Topography and Geology

1.4.1 The proposed development is located in Coldra, on the northeastern outskirts of the city of Newport and is centred on NGR (ST) 335592, 189547. It is situated c0.37km west of the M4's Junction 24, c0.17km south of the Celtic Manor Resort and c0.11km north of Chepstow Road (B4237). The development is also flanked immediately to the north and south by small stretches of woodland. The nearest church to the development area is the Holy Trinity Church in Wales in the village of Christchurch, located c1km to the west. Both Coldra and the city of Newport are situated near the mouth of the River Usk on the periphery of the Gwent Levels.

1.4.2 The general geology comprises superficial deposits of Quaternary sands, gravels and alluvium derived from river terrace and flood deposits overlying sandstone bedrock (Mercia Mudstone Group Formation) formed approximately 201–252 million years ago in the Triassic Period (British Geological Viewer 2021).

1.5 Archaeology and History

1.5.1 The prehistoric remains within the local area are relatively sparse, but some important landmarks do exist. Gray Hill, located to north of the development area and slightly east of Wentwood Reservoir, contains several Bronze Age features, including a stone row, a stone circle, a cairn field, field boundaries and enclosures as well as an additional D-shaped enclosure of either Bronze Age or Neolithic date. Priors Wood Camp is located c560m to the northeast of the development area, which is of potential later prehistoric date. The site comprises the faint remains of a roughly square earthwork enclosing a smaller earthwork of the same form. A Bronze Age cremation urn was also uncovered during the construction of Phase 2 of the Celtic Manor golf courses (not accurately located), while the remains of a potential Bronze Age cairn have been recorded in Langstone (Bradney 1932, 206).

1.5.2 The proposed development area is situated within a significant landscape of historic value, (Newport LandMap NWPRTL015, NWPRTL024 and NWPRTL025), characterised primarily for the outstanding and well-preserved Roman remains within its confines. These remains relate mainly to settlement and industrial activity associated with the Roman legionary fortress of Caerleon (*Isca Augusta*), founded in c75 AD as the headquarters of the Augustan Second Legion (*Legio II Augusta*). Occupation of the fortress lasted until the 4th century AD (Boon 1972). The development area formed part of the wider *territorium* of the fortress and is only c1.7km outside the fortress itself. The fortress was also surrounded by a large civilian settlement or *canabae* which, although extensive in area, failed to develop into a full township or *colonia* (Brewer 2002, 7). A series of smaller military earthworks are also present in the surrounding area, including marching camps and smaller garrison forts. A Roman roadside settlement is also known at Great Bulmore nearby, which was constructed along an irregular axial street. This settlement is surrounded by a sizeable collection of cemeteries, particularly along the stretch of road leading to Caerleon. These cemeteries formed part of a far wider cluster, all built along a small NE/SW

aligned ridge on top of which the village of Christchurch lies. These cemeteries include the Chepstow Hill cremation cemetery, established before 250 AD; the cremation cemetery at Ultra Pontem, comprising several cremation urns; and the Caerleon Usk cemetery, comprising six or seven stone sarcophagi (Pannett 2014).

- 1.5.3 A fairly dense quantity of medieval activity characterises the local area. Newport Castle, constructed sometime during the 14th century (Pettifer 2000, 134), is situated nearby, which presently survives as the partial remains of a rectangular bailey. Caerleon Castle is also an important landmark. This castle was built prior to 1086 and began as a motte-and-bailey before a shell keep was added (Phillips 2004). The Newport Medieval Ship, discovered in 2002 in Newport's city centre on the west bank of the River Usk, is of major historical significance, mainly due to its exceptional preservation. Dendrochronology of the ship's timbers provided a *terminus post quem* of 1449 for its construction (Nayling and Jones 2018). Several important medieval churches are situated within the local vicinity, including the 12th century St Mary's Church in Malpas and the 14th century St David's Church in Bettws, both of which have pre-Norman foundations (Brook 1988). The area is also characterized by small-scale medieval industry. The site of a rudimentary forge comprising a charcoal filled pit and associated duct have been discovered within Caerleon, dating between the 7th–10th centuries AD (Tuck 2001). Several medieval mills are also located within the immediate vicinity. These include a corn mill in Caerleon, first mentioned in 1314 (Mayland 1991), and a water mill (known as Milton's Mill) in Llanwern, constructed prior to 1319.
- 1.5.4 The post-medieval archaeology within the vicinity of the development area is plentiful and includes several manor houses. These include Beechwood House, Redwick Country House and Raglan House, all constructed in the 19th century, as well as Tredegar House, built by William Morgan in 1672 and possibly designed by the renowned architect Inigo Jones (Morgan 2020, 110). Many of these manor houses are attached to grand parks and gardens, although public gardens do exist from this period, including Shaftesbury Park, opened at some point prior to 1901. Post-medieval Industrial remains are also known within the area, including the late 18th century Fourteen Locks Canal, associated with the larger Monmouthshire Canal.
- 1.5.5 The development area is also situated on the northern outskirts of the Gwent Levels Landscape of Historic Interest in Wales (HLW(Gt)2), which consists of alluvial wetlands and intertidal mudflats on the northern edge of the Severn Estuary. The entire area encompassed by the Gwent Levels was reclaimed from the sea during the Roman period via the use of artificial watercourses and seawalls (Pickup 2015). The Gwent Levels encompasses significant quantities of archaeological remains, ranging from buried prehistoric and Roman landscapes to moated medieval farmsteads.
- 1.5.6 The 1840 Tithe Map of the local area (Plan of Parish of Christchurch in the County of Monmouth) shows that the development area during that time fell within Land Parcel 229, which is listed in the associated apportionment as being owned by George Jones and being rented to Henry Warder, who was using it as arable land. Shortly after in the 1860s the Powell family, owners of the powerful Powell-Dyffryn industrial (coal and iron) Company, built Coldra House, gardens and parkland (NPRN36702). Thomas Powell gave the house and grounds to his son Thomas Powell Jnr and his wife Julia Jenkins as a wedding gift and possibly renamed to Coldra Hall. In 1869 both Thomas Powell Jnr, his wife Julia and six year old son were murdered whilst on safari in

Ethiopia. The house was leased by the Powell-Dyffryn company to various tenants until it was sold in 1915 to Sir Thomas Beynon, a shipping magnet and son of a former mayor of Newport. He gave the house to the local authority in the 1930s and in January 1940 it opened as the Lydia Beynon Maternity Hospital, in memory of his mother. The hospital closed in 1977 and in 1982 Celtic Inns opened the site as seventeen bedroom hotel and 18 hole golf course. Sir Terry Matthews, the founder of Celtic Inns and Mitel, was born in the maternity hospital (Celtic Manor 2021; Dunning and Tuck 2014, 9).

2 Methodology

- 2.1.1 The archaeological watching brief observed the topsoil stripping of two areas (A and B) over two separate days (14/09/18, 17/09/18 to 21/09/18, 24/09/18, 26/09/18 and 27/09/18); the machine excavation of two trial pits (1 and 2) and three service trenches (Trenches 1–4); the reduction of an area of sloping bank (Reduced Area 1) in Area A; the excavation of an additional trench (Trench 4) in Area B; and the reduction of a second sloping bank (Reduced Area 2) in Area B. The excavations were undertaken with 360° back-acting excavators.
- 2.1.2 The excavations were devoid of archaeological features, deposits and artefacts. The general stratigraphy across the site matched well with the sandstone bedrock (Mercia Mudstone Group Formation) of sedimentary bedrock formed approximately 201-252 million years ago in the Triassic Period (British Geological Survey 2021). Modern deposits were noted across all excavations and related to the initial construction of the surrounding vehicular infrastructure (M4 Motorway, the Coldra Road B4237 and the bridge leading to the Celtic Manor).
- 2.1.3 The archaeological recording techniques conformed to the best industry standard and all deposits were recorded using a single continuous context numbering system pro forma. All contexts were recorded with the trench number prefix (e.g. context 02 in TP1 = 102) and are summarised in Appendix III. Contexts were schematically drawn in section. All excavations and contexts were photographed in digital using a Fujifilm FinePix S4800 super wide (30x) 24-720mm camera at 16mp and a Digital Lens, 18mp camera. In all excavations, natural deposits were encountered and recorded
- 2.1.4 A search of the regional Historic Environment was conducted (ref. 6022).
- 2.1.5 No classes of finds were identified or retained and no deposits with palaeoenvironmental potential were encountered.
- 2.1.6 The archaeological watching brief was carried out to the standards of the *Chartered Institute for Archaeologists' Standard and guidance for an Archaeological Watching Brief*, published 2014.
- 2.1.7 A digital copy of the report and archive will be supplied to the regional HER, the LPA and the Royal Commission on the Ancient and Historical Monuments of Wales. All data will be submitted to the relevant archives in accordance with the RCAHMW's *Guidelines for Digital Archaeological Archives* (2015) and the regional HER's *Guidance for the Submission of Data to the Welsh Historic Environmental Records (HERs)* (published 2018).

3 Results

3.1 Stratigraphic Evidence

- 3.1.1 Excavations extended across two areas (A and B) (Figure 1). All excavations were carried out by machine and comprised the excavation of two rectangular trial pits (1 and 2), four service trenches (Trenches 1–4) and the reduction of two sloping banks (Reduced Areas 1 and 2) located on opposite sides of the M4 Motorway and adjacent (east) to the existing bridge.
- 3.1.2 The excavation results are detailed below, and contextual information can be found in Appendix III.
- 3.1.3 **Area A** (Figure 1; Plate Front Cover)
- 3.1.4 Area A was located to the SE of the M4 Westbound and existing Celtic Manor bridge. It was delimited to the NE by the M4 Westbound, W and SW by the existing Celtic Manor bridge and S by the road to/from the Celtic Manor. The area initially contained a small green with a footpath running up towards the existing bridge.
- 3.1.5 The watching brief first observed the stripping of the topsoil across the entirety of Area A to a depth of around 0.05m, principally the removal of a mid-brown clay-loam turf layer (AA01). Two trial pits (Trial Pits 1 and 2) were then excavated on opposite sides of the footpath (the N and S sides respectively), measuring 0.8m deep (see below). The footpath was subsequently removed, and stripping extended across the bank just S/SE of the M4. Three 0.3m wide and 0.4m deep service trenches (Trenches 1–3) were excavated at this point.
- 3.1.6 The E half of Area A was reduced another 0.4m across an area measuring c4m². This area was later levelled using modern material in order to provide an access route to vehicles removing spoil from excavated areas. The bank S/SE of the M4 was reduced in two stages. Upon reduction, a ramp was added on the NE side to allow access for machines. The reduced area (Reduced Area 1) was located 3.4m from the NE side of the existing bridge to the Celtic Manor. Superficial geological deposits were identified at an average depth of 3.9m.
- 3.1.7 **Trial Pit 1** (Figure 1; Plate 1)
- 3.1.8 Trial Pit 1 was located N of the pathway leading to the existing bridge to the Celtic Manor, which intersected Area A. It measured 1.3m x 0.7m in plan and had an average depth of 0.85m. Two deposits were encountered, including a topsoil deposit (TP102) and an underlying made-up ground deposit (TP101). The topsoil (TP102), 0.05m deep, comprised thin mid-brown clayey loam. The made-up ground deposit (TP101), >0.8m deep, comprised mid-brown gritty clay with frequent angular stones (<0.05m in size), and included fragments of modern demolition including bitumen, green plastic and wooden stakes, as well as buried vegetation. No archaeological features or associated finds were identified within Trial Pit 1.
- 3.1.9 **Trial Pit 2** (Figure 1; Plate 2)
- 3.1.10 Trial Pit 2 was located SE of the pathway leading to the existing bridge to the Celtic Manor, which intersected Area A. It measured 1.4m by 0.7m in plan and had an average depth of 0.8m. Two deposits were encountered, including a topsoil deposit (TP202) and an underlying made-up ground deposit (TP201). The topsoil (TP202), 0.05m deep, comprised thin mid-brown clayey loam. The made-up ground deposit

(TP201), >0.75m deep, comprised mid-brown gritty clay with frequent angular stones (<0.05m in size), and included fragments of modern demolition including bitumen, green plastic and wooden stakes, as well as buried vegetation. The stratigraphy mirrored that found in Trial Pit 1. No archaeological features or associated finds were identified within Trial Pit 2.

3.1.11 **Trench 1** (Figure 1; Plates 3 and 4)

3.1.12 Trench 1 was located just below the slope of the bank S/SE of the M4 Westbound. Three deposits were encountered within, including a topsoil deposit (T103), a subsoil deposit (T102) and an underlying made-up ground deposit (T101). The topsoil (T103), 0.05m deep, comprised very fibrous dark-brown clayey loam. The subsoil (T102), 0.30m deep, comprised mid-brown clayey loam with similar rooting throughout. The made-up ground deposit (T101), >0.05m deep, comprised mid-brown clayey loam with modern plastic fragments identified within. No archaeological features or associated finds were identified.

3.1.13 **Trench 2** (Figure 1; Plate 5)

3.1.14 Trench 2 was located further down the slope leading to the M4 Westbound. Three deposits were encountered, including a topsoil deposit (T203), a subsoil deposit (T202) and an underlying made-up ground deposit (T201). The topsoil (T203), 0.05m deep, comprised very fibrous dark-brown clayey loam. The subsoil (T202), 0.30m deep, comprised mid-brown clayey loam with similar rooting throughout. The made-up ground deposit (T201), >0.05m deep, comprised mid-brown clayey loam with modern plastic fragments identified within. No archaeological features or associated finds were identified.

3.1.15 **Trench 3** (Figure 1; Plate 6)

3.1.16 Trench 3 was located SE of Trench 1. The deposits and their stratigraphic was the same as that identified in TP1 and TP2. Three deposits were encountered, including a topsoil deposit (T303), a subsoil deposit (T302) and an underlying made-up ground deposit (T201). The topsoil (T303), 0.05m deep, comprised very fibrous dark-brown clay loam. The subsoil (T302), 0.30m deep, comprised mid-brown clayey loam with similar rooting throughout. The made-up ground deposit (T301), >0.05m deep, comprised mid-brown clayey loam, with modern plastic fragments identified within. No archaeological features or associated finds were identified.

3.1.17 **Reduced Area 1** (Figure 1; Plates 7 and 8)

3.1.18 The sloping bank S/SE of the M4 Westbound in Area A was designated Reduced Area 1 and was reduced by c4m in two stages. All three existing sections were recorded and photographed. The general stratigraphy (following the E facing section; Plate 7) comprised six deposits, including a topsoil deposit (A106), a sub-soil deposit (A105) and four successive geological deposits (A104, A103, A102 and A101). The topsoil deposit (A106), 0.15m deep, comprising dark-brown clayey loam with frequent rooting throughout. The sub-soil deposit (A105), 0.3m deep, comprised light brown silty clayey loam with infrequent small stones throughout (c0.05m in size). The uppermost geological deposit (A104), 0.6m deep, comprised light yellowy brown silty loam with frequent small stones throughout (c<0.1m in size). The underlying geological deposit (A103), 2.10m deep, comprised light greyish brown silty loam with frequent stone inclusions throughout covering a range of different sizes. The lowermost geological deposit (A102), 1.8m deep, comprised mid-reddish brown

clayey silt with infrequent small stones throughout ($c < 0.10\text{m}$ in size). The superficial geological deposit (A101), $> 0.15\text{m}$ deep, comprised light yellowy brown clay. All deposits sloped downwards in a northerly direction.

3.1.19 **Area B** (Figure 1)

3.1.20 Area B was located NW of the M4 Westbound and E of the existing bridge towards the Celtic Manor. It was delimited to the N by the road leading up to the Celtic Manor, to the W by the existing bridge across the M4 and to the SE by the M4 itself.

3.1.21 The archaeological watching brief observed the stripping of the topsoil in most of Area B, the excavation of Trench 4 (dug in order to identify underground services) and the reduction of a sloping bank (Reduced Area 2).

3.1.22 **Trench 4** (Figure 1; Plate 9)

3.1.23 Trench 4 was a 1m wide trench located 0.4m N of the M4 Westbound, averaging 0.2m in depth. Trench 4 was dug in order to identify underground services. Initially, Trench 4 took the form of a 1m x 0.25m trial pit dug, but was later extended 19.3m to the NE, while maintaining the same width. Only two deposits were encountered, including a topsoil deposit (TP402) and an underlying subsoil deposit (T401). The topsoil deposit (TP402), 0.07m deep, comprised dark brown silty loam with heavy rooting throughout. The subsoil deposit (TP401), $> 0.13\text{m}$ deep, comprised light orangey brown clayey loam with frequent small stones throughout ($c 0.05\text{m}$ in size).

3.1.24 **Reduced Area 2** (Figure 1; Plates 10 and 11)

3.1.25 The opposing bank in Area B was reduced in the same manner as the bank in Area A, with the SE and SW sections being recorded and photographed. The stratigraphic composition of both sections comprised two deposits, including a topsoil deposit (A201) and mudstone bedrock (A202). The topsoil deposit (A201), 0.1m deep, comprised dark brown silt with heavy rooting throughout. The topsoil directly overlay the mudstone bedrock (A202), which had presumably already been reduced for the construction of the original M4 Motorway.

4 Conclusions

- 4.1.1 All excavations observed during the archaeological watching brief were devoid of archaeological features, deposits and artefacts. The proposed development area was found to contain only modern deposits connected to initial works conducted on the surrounding vehicular infrastructure, which directly overlaid superficial geological deposits. The original M4 Motorway construction presumably having removed any original ground surfaces and subsoils in the areas of investigation.

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Celtic Manor 2021. <https://www.celtic-manor.com/about>. Accessed 08/02/2021.

6 Appendices

6.1 Appendix I: Figures

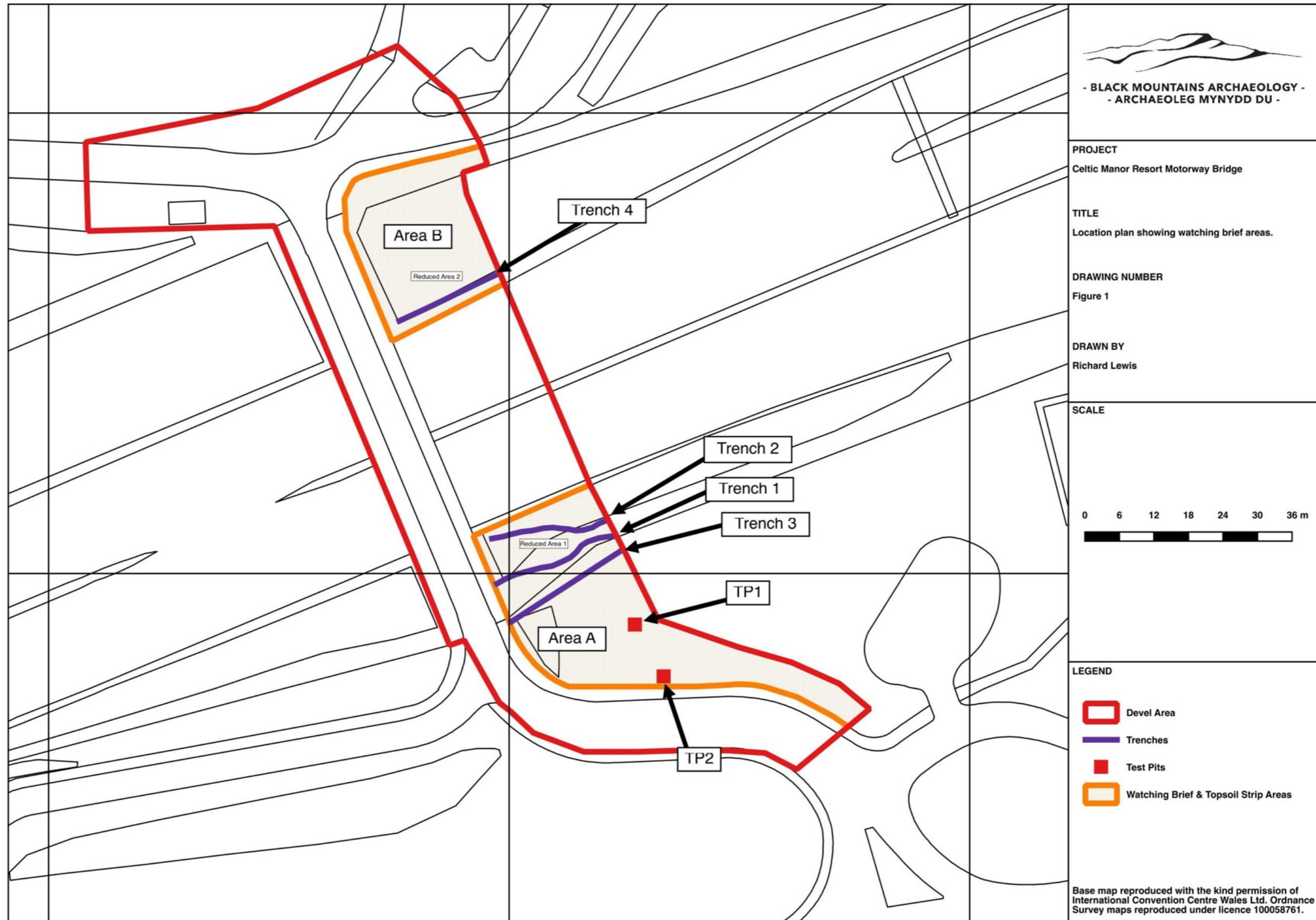


Figure 1. Plan showing location of Areas A and B, Trial Pits 1 and 2 and Trenches 1-4 within the development area

6.2 Appendix II: Plates



Plate 1. S facing section of Trial Pit 1 in Area A (view N).



Plate 2. E facing section of Trial Pit 2 in Area A (view W).



Plate 3. General view of Trench 1 in Area A (view W).



Plate 4. N facing section of Trench 1 in Area 1 (view S).



Plate 5. General view of Trench 2 in Area A (view N).



Plate 6. NW facing section of Trench 3 in Area A with service running through middle (view SE).



Plate 7. E facing section of Reduced Area 1 in Area A (view W).



Plate 8. W facing section of Reduced Area 1 in Area A (view E).



Plate 9. Initial general view of Trench 4 in Area B (view N).



Plate 10. S facing section of Reduced Area 2 in Area B (view N).



Plate 11. W facing section of Reduced Area 2 in Area B (view E).

6.3 Appendix III: Context Inventory

Area A (Figure 1)

Area A topsoil strip

Area A was located to the SE of the M4 Westbound and existing Celtic Manor bridge (Figure 1). No archaeological deposits or features were identified. No finds were recovered. The general stratigraphy was recorded as follows:

Context	Type	Depth	Description	Period
AA01	Deposit	0–0.05m	Topsoil. Mid-brown clayey loam.	Modern

Trial Pit 1

Trial pit was located N of the pathway running across Area A towards the bridge leading to the Celtic Manor. It measured 1.3 m in length, 0.7 m width and averaged 0.85 m in depth. No archaeological deposits or features were identified. No finds were recovered. The general stratigraphy was recorded as follows:

Context	Type	Depth	Description	Period
TP101	Deposit	0.05–0.85m+	Subsoil. Mid-brown gritty clay with frequent angular stone inclusions (<0.05m in size) modern material (bitumen, green plastic, wooden stakes and buried vegetation). Underlies TP102.	Modern
TP102	Deposit	0–0.05m	Topsoil. Mid-brown clayey loam. Overlies TP101. Equivalent to AA01.	Modern

Trial Pit 2

Trial pit was located S of the pathway running across Area A towards the bridge leading to the Celtic Manor. It measured 1.4 m in length, 0.7 m width and averaged 0.8 m in depth. No archaeological deposits or features were identified. No finds were recovered. The general stratigraphy was recorded as follows:

Context	Type	Depth	Description	Period
TP201	Deposit	0.05–0.85m+	Subsoil. Mid-brown gritty clay with frequent	Modern

			angular stone inclusions (<0.05m in size) modern material (bitumen, green plastic, wooden stakes and buried vegetation). Underlies TP202.	
TP202	Deposit	0–0.05m	Topsoil. Mid-brown clayey loam. Overlies TP201. Equivalent to AA01.	

Trench 1

Trench 1 was one of two service trenches located on the sloping bank in Area A, south – south-east of the M4 Westbound. It ran across the bank in an EW direction, was 0.3m wide and had an average depth of 0.4m. No archaeological deposits or features were identified. No finds were recovered. The general stratigraphy was recorded as follows:

Context	Type	Depth	Description	Period
T101	Deposit	0.35–0.4m+	Made-up ground deposit. Mid-brown clayey loam with plastic fragments throughout. Underlies T102.	Modern
T102	Deposit	0.05–0.35m	Subsoil. Mid-brown clayey loam. Heavily rooted. Overlies T101. Underlies T103.	Modern
T103	Deposit	0–0.05m	Topsoil. Dark brown clayey loam. Very fibrous. Overlies T102.	Modern

Trench 2

Trench 2 was located N of Trench 1 and S of the M4 Westbound. It ran NW/SE of the sloping bank in Area A, measuring 0.3m in width and averaging 0.4 m in depth. No archaeological deposits or features were identified. No finds were recovered. The general stratigraphy was recorded as follows:

Context	Type	Depth	Description	Period
T201	Deposit	0.3–0.4m+	Made-up ground. Light brown clayey loam with plastic fragments throughout. Underlies T202.	Modern
T202	Deposit	0.05–0.3m	Subsoil. Mid-brown clayey loam. Heavily rooted. Overlies T201. Underlies T203.	Modern
T203	Deposit	0–0.05m	Topsoil. Dark brown clayey loam. Very fibrous. Overlies T202.	Modern

Trench 3

Trench 3 was a service trench located SE of Trench 1 in Area A. No archaeological deposits or features were identified. No finds were recovered. The general stratigraphy was recorded as follows:

Context	Type	Depth	Description	Period
T301	Deposit	0.3–0.4m+	Made-up ground. Light brown clayey loam with plastic fragments throughout. Underlies T302.	Modern
T302	Deposit	0.05–0.3m	Subsoil. Mid-brown clayey loam. Heavily rooted. Overlies T301. Underlies T303.	Modern
T303	Deposit	0–0.05m	Topsoil. Dark brown clayey loam. Very fibrous. Overlies T302.	Modern

Reduced Area 1

Most of the sloping bank located in Area A, SSE of the M4 Westbound, was reduced. The excavated area was located 3.4m from the existing bridge leading to the Celtic Manor and was reduced by 4.1m in depth (Plate 7-8). No archaeological deposits or features were identified. No finds were recovered. The general stratigraphy was recorded as follows:

Context	Type	Depth	Description	Period
A101	Deposit	3.95–4.01m+	Light yellowy brown clay. Underlies A102.	Natural
A102	Deposit	2.15–3.95m	Mid-reddish brown clayey silt with rare small stones throughout (c<0.10m in size). Overlies A101. Underlies A103.	Natural
A103	Deposit	1.05–2.15m	Light greyish brown silty loam with frequent stone inclusions throughout covering a range of different sizes. Overlies A102. Underlies A104.	Natural
A104	Deposit	0.45–1.05m	Light yellowy brown silty loam with frequent small stone inclusions (c<0.10m in size). Overlies A103. Underlies A103.	Natural
A105	Deposit	0.15–0.45m	Light brown silty clayey loam with infrequent small stones throughout (c0.05m in size). Overlies A104. Underlies A106.	Natural
A106	Deposit	0–0.15m	Topsoil. Dark brown clayey	Modern

			loam with frequent rooting throughout. Overlies A105.	
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Area B (Figure 1)

Trench 4

Trench 4 was located NW of the M4 Westbound, SE of the sloping bank. It was initially excavated as a trial pit measuring 1m length x 0.25m width and averaging 0.2m in depth, due to the existence of several underground services. In order to fully identify services prior to reducing the Area B bank, the trial pit was extended to 19.3m along the M4, therefore becoming an elongated trench. The general stratigraphy was recorded as follows:

Context	Type	Depth	Description	Period
TP401	Deposit	0.07–0.2m	Subsoil. Light orangey brown clayey loam with frequent small stone throughout (c<0.05m in size). Underlies TP402.	Modern
TP402	Deposit	0–0.07m	Topsoil. Dark brown silty loam. Heavily rooted. Overlies TP401.	Modern

Reduced Area 2

The bank in Reduced Area 2 was reduced to 2.5m from the existing bridge to the E leading to the Celtic Manor. No archaeological deposits or features were identified. No finds were recovered. The general stratigraphy was recorded as follows:

Context	Type	Depth	Description	Period
A201	Deposit	0-0.1m	Dark brown silt loam topsoil with frequent stone inclusions covering a range of different sizes.	Natural
A202	Deposit	0.1–2.5m	Mudstone bedrock.	Natural



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Yn rhan o'n hawydd i wella ansawdd ein gwasanaeth, rydym yn croesawu unrhyw adborth y gallwch ei ddarparu.

As part of our desire to improve our quality of service we welcome any feedback you are able to provide.

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