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Engineering Archaeological Services Ltd.

Canolfan y Gwystil, Y Ffôr

Archaeological Watching Brief

I.P. Brooks

EAS Client report 2020/01

**Canolfan y Gwystil, Y Ffôr
Archaeological Watching Brief**

Survey Commissioned

by

YGC Swyddfa'r Cyngor

Fieldwork

by

I.P. Brooks

Engineering Archaeological Services Ltd.

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registered in England

No 2869678

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Introduction

NGR: Centred on SH 40013 38998

Status:

Adjacent to the Four Crosses Standing Stone

Ancient Monuments Reference Number: CN105

PRN: GAT1333

NPRN: 302353

Location and Topography:

Gwynedd County Council are in the process of extending the carpark associated with the Canolfan y Gwystil, on the southern end of the Cromlech Industrial Estate, Y Ffôr (SH 4001 3899) (Figure 1). The development consists of extending the existing car park to the north of the building (NCPA1), the creation of new car parking places to the east of the access road (NCPA2) and a drainage ditch along the northern boundary of the property (Figure 2).

The industrial estate, as a whole, consists of a series of terraces of platforms on which the various units have been constructed. These appear to have been cut into the hillside making the assessment of the original ground level difficult. That being said, the presence of the Four Crosses Standing Stone would suggest at least part of the development area is approximately at the original ground surface.

The fieldwork took place on 19/01/2020, 25/01/2020 and 7/03/2020.

Background

Standing within a lawn to the north of the buildings of Canolfan y Gwystil is the Four Crosses Standing Stone, an erect monolith, 1.47m x 0.43m in plan and standing 1.68m high (CN105). This appears to be one of a group of standing stones with a second stone having been recorded approximately 150 mm to the SSE. Unfortunately, this had already been destroyed in 1972 (<https://coflein.gov.uk/en/site/308128/details/four-crosses-standing-stone-destroyed>), but was recorded as having been 5ft 6 inch (1.68 m) tall with a base 3 ft (0.91 m) by 2 ft (0.61 m) in 1964 (The Royal Commission on the Ancient and Historical Monuments in Wales and Monmouthshire 1964, 16)

Also within the immediate area of the standing stone a Bronze Age polished stone “Battle Axe” was found and an Hawker Audax aircraft is thought to have crashed in the general area of the site on 29 November 1937, although the exact location of the crash is unknown (<https://coflein.gov.uk/en/site/515272/details/hawker-audax-k7392>).

Aims of the Project

To record any archaeological deposits or remains disturbed by the works.

SUMMARY

An archaeological watching brief was carried out on the creation of two new car parking areas to the north of Canolfan y Gwystil, Y Ffôr, Gwynedd. Very few archaeological contexts were recorded, all of which are thought to be of relatively modern date and are probably associated with the construction Canolfan y Gwystil. The one exception was a large, broken boulder which has some wear suggesting it might have been a standing stone. Unfortunately, it has clearly been dumped on the site at a later date.

Gwyliwyd y gwaith o greu dwy ardal barcio newydd i'r gogledd o Ganolfan y Gwystil, Y Ffôr, Gwynedd, a hynny yn unol ag amod cynllunio. Dim ond ychydig iawn o gyd-destunau archeolegol a gofnodwyd, a chredir bod pob un ohonynt yn gymharol fodern ac mae'n debyg eu bod yn gysylltiedig â'r gwaith i adeiladu Canolfan y Gwystil. Yr unig eithriad oedd clogfaen mawr, a dorrwyd, sy'n dangos rhywfaint o draul sy'n awgrymu y gallai fod yn faen hir. Yn anffodus, mae'n amlwg ei fod wedi'i adael ar y safle yn ddiweddarach..

Methodology

The area of the car parks was stripped using a mechanical excavator with smooth faced ditching bucket under archaeological observation. The ditch, however, was dug using a specialised bucket with a tapered profile. Although base of the bucket had teeth, the side had smooth faced cutting blades which left relatively clean edges to the side of the ditch. This process was also under archaeological observation.

Features and deposits of archaeological interest were recorded with a written description, drawn record and photographed. The photographs were taken with a Nikon D5300 Digital SLR Camera at a resolution of 24.2 MP with the photographs being taken in RAW (NEF) format. These photographs were converted into JPEG format for use as illustration in this report and TIFF for archiving. A series of photographs were also taken with a Panasonic Lumix DMC-TZ80, at a resolution of 18 MP which were further processed with Agisoft Metashape Standard v. 1.6.2 to produce a composite photograph of the boulder from NCPA 1 and to produce plans for NCPA 1 and NCPA 2.

NCPA 1

The western carpark (NCPA 1) consisted of an area 26.25 x 11 m in size to the west of the standing stone (Figure 2). Prior to the excavation, there was two beds for shrubs or small trees which were, at least partly, surrounded by boulders (Plates 1 and 2) and the remains of a mature hedge or line of trees along the northern boundary of the plot. The eastern tree/shrub had a large boulder, to the north (Plate 2), which on excavation proved to be 2.5 x 0.8 x 1.5 m in size (Plates 3 and 4). One end and one side had an unworn, broken, appearance (Plate 5), whilst the other was worn with the occasional glacial scoring. Near to one end, however, was a slight notch, 0.7 m from one end, (Plate 6) which is possibly signs of differential wear. If so, this boulder may have been part of a standing stone. There was no sign of a pit for the boulder, indeed the presence of fragments of machine-made bricks below the boulder would suggest it had been moved to its position in the relatively recent past.

Below the topsoil (Context 1) was a spread of pale yellowish-brown mortar rich gravel with the occasional concrete fragment (Context 2) on the southern side of NCPA 1 (Figure 3, Plate 7). This appears to be the remains of a sub-base layer, possibly for a hard standing. Context 2

was very thin (typically 20 mm thick and it sat on a yellowish-brown silty loam (Context 3) which had the occasional fragment of machine-made brick and tiles and concrete fragments impressed into its surface and is therefore relatively modern.

NCPA 2

NCPA 2 was located on the eastern side of the gate into the property (Figure 2). Before excavation it was a lawn with a single small tree planted centrally in the space (Plate 8). The development area was approximately 5.8 x 9.6 m in size with a curved southern edge following the line of the existing kerbs on the edge of the access road.

Below the topsoil (Context 4) a limited number of contexts were defined (Figure 3). Along the southern side of NCPA 2 was a zone of modern disturbance, up to 1.2 m wide (Context 5) which appears to be associated with the kerb stone defining the edge of lawn in this area. This cut a zone of yellowish-brown clayey silt (Context 6) which was overlain by Context 7. This is the base of the topsoil (Context 4) in this part of the site. Along the eastern side of NCPA 2 was a sharp cut feature for the construction of the boundary wall between different areas of the industrial estate (Context 8). This was filled with a modern fill including plastic bottles and concrete fragments (Context 9).

Ditch

The ditch runs for approximately 57.5 m along the northern side of the development area (Figure 3, Plate 11). At its western end it ran along the line of a hedge which previously was the northern boundary and then roughly parallel with the buildings and concrete block wall which marks the northern boundary of the plot. The ditch was 1.1 m wide at its top with sloping sides down to a flat base 0.4 m wide. At the western end it was dug to a depth of 0.75 m below the topsoil level. The local topography of the plot means that the relative depth of the ditch was only 0.25 m at its eastern end, barely reaching the bottom of the topsoil.

Below the topsoil (Context 1) the same deposit (Context 3) was exposed as in NCPA 1. This proved to be 0.45 m thick at the western end of the ditch, thinning to 0.3 m at the point in line with eastern edge of NCPA 1. This proved to be within a deliberate cut (Context 10, Plate 12) forming a roughly level platform in the western part of the site.

Conclusions

The majority of the archaeology recorded during the archaeological watching brief at Canolfan y Gwystil is of relatively modern date and would appear to be related to the construction of the industrial estate and the buildings associated with Canolfan y Gwystil itself. Particularly within NCPA 1 there would appear to have been a flat platform, to the west of the standing stone which now contains deposits of modern origins. One possible interpretation of this area is that it was used as part of the construction compound during the construction of Canolfan y Gwystil.

Much of the disturbance within NCPA 2 can be related to the modern layout of the site with a disturbed area associated with the kerb stones defining the edge of access road and the infill behind the retaining wall between Canolfan y Gwystil and the adjacent property. The differentiation between the layers of in this area is a function of the slight slope in the plot with the base of the topsoil (Context 7) being exposed in the northern part of the area.

The only possible exception to the generally modern nature of the archaeology recorded is the large boulder which was originally used as an edge to the eastern tree/bush in NCPA 1. Even so it is clear that it was deposited relatively recently, probably having been moved from elsewhere. Its size is similar to the Four Crosses Standing Stone, although one face, and probably one end, has been broken with a series of fresh breaks evident. However, on the naturally smoothed face there is a slight notch which suggest a different level of wear. One speculative interpretation is that this may have been a standing stone at some point in its history. There is an outside possibility that this is part of the standing stone recorded as having been lost by 1972, by the Royal Commission on the Ancient and Historic Monuments of Wales (<https://coflein.gov.uk/en/site/308128/details/four-crosses-standing-stone-destroyed>). It is likely to have been moved to its position on the lawn to the north of Canolfan y Gwystil during the construction of that building.

Acknowledgements

The project was commissioned by Tomos Alan Macaulay, YGC, Gwynedd County Council. The work was carried out by TIR Construction Ltd and the help of Gerallt Davies and his team is acknowledged. The project was monitored by Tom Fildes for the Gwynedd Archaeological Planning Service.

References

The Royal Commission on the Ancient and Historical Monuments in Wales and Monmouthshire 1964. *A survey and inventory by The Royal Commission on the Ancient and Historical Monuments in Wales and Monmouthshire. Caernarvonshire. Volume III. West. The Cantref of Llyn*. HMSO, London.



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Figure 1: Location
Scale 1:500



Figure 2: Location of the Excavation Areas
Scale 1:250

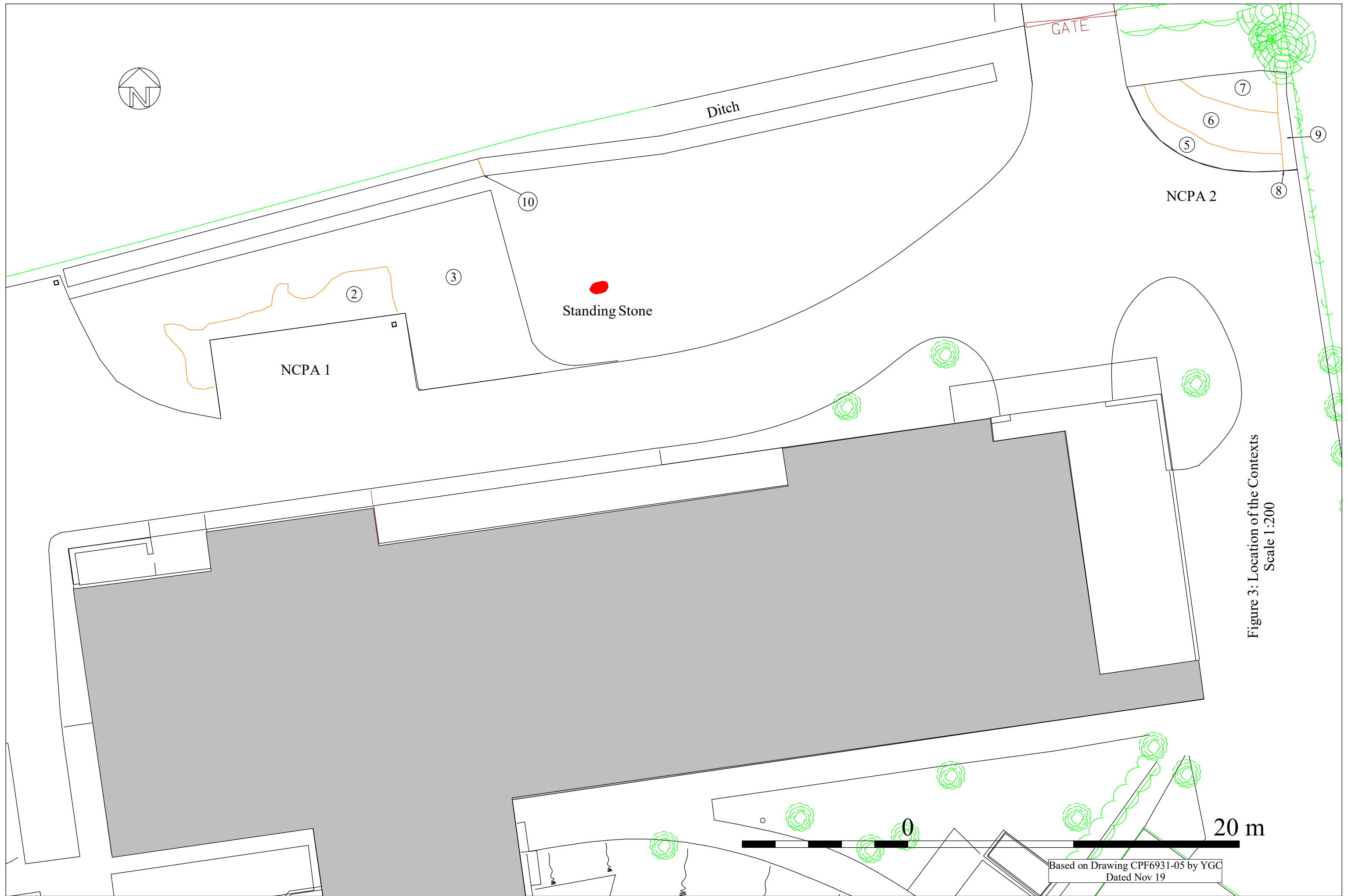


Figure 3: Location of the Contexts
Scale 1:200

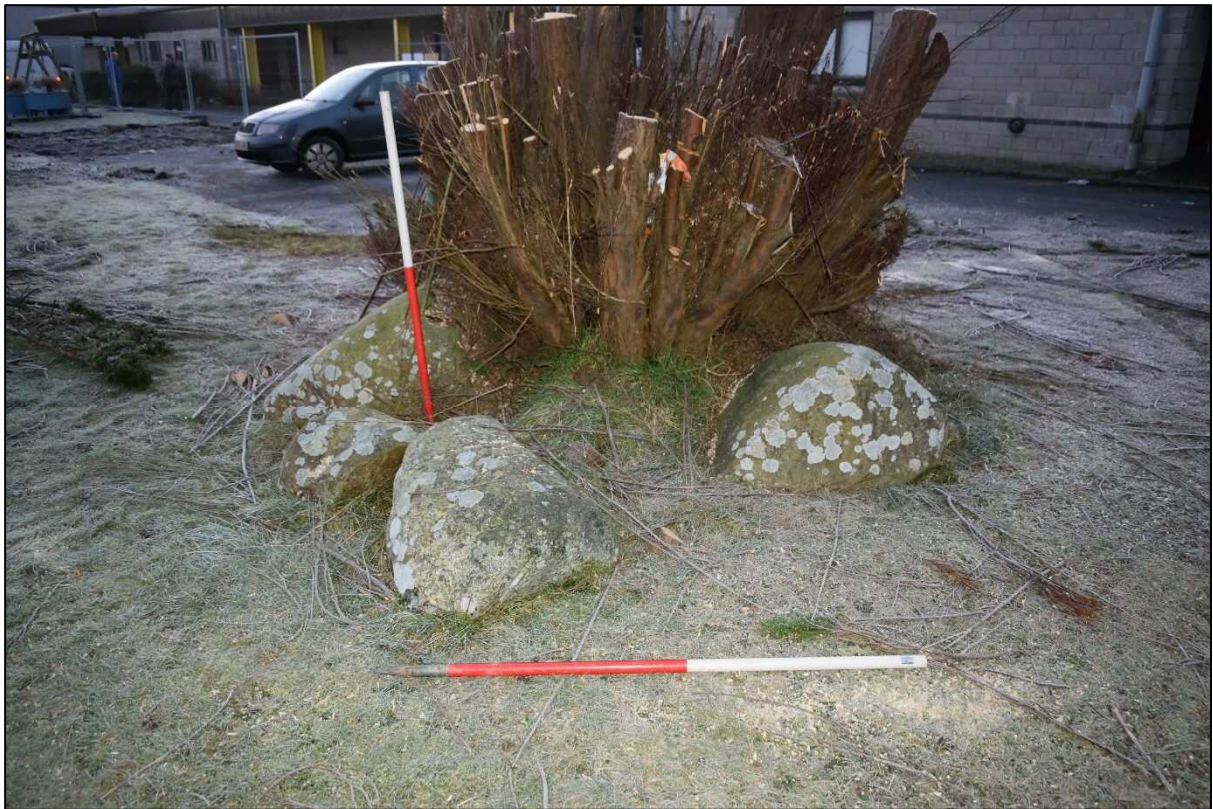


Plate 1: The western group of boulders around a small tree/bush in NCPA 1.



Plate 2: Large boulder adjacent to the eastern tree/bush in NCPA 1.



Plate 3: Boulder from NCPA 1



Plate 4: Boulder from NCPA 1



Plate 5: Composite picture of the worn face of the boulder from NCPA 1



Plate 6: Possible wear on the boulder from NCPA 1



Plate 7: Context 2 in NCPA 1



Plate 8: NCPA 2 before excavation



Plate 9: NCPA 2, looking north



Plate 10: Disturbance along the eastern side of NCPA 2

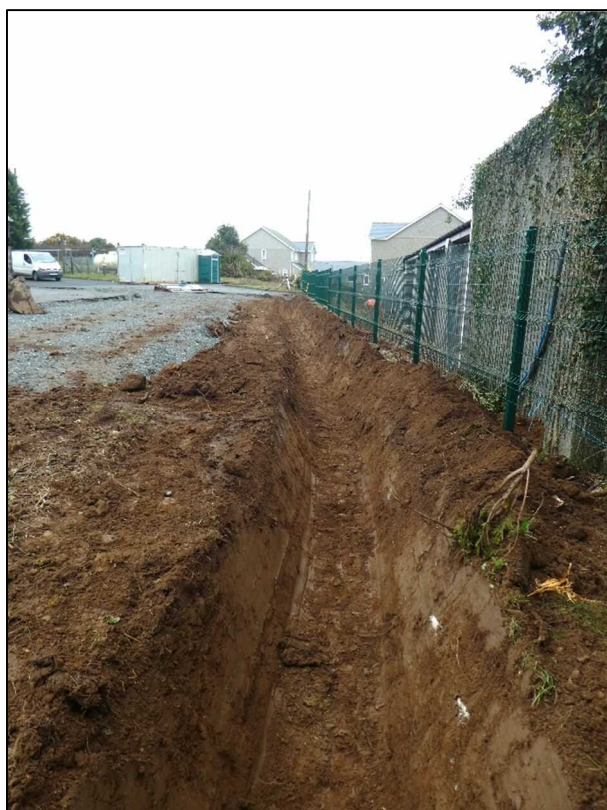


Plate 11: The ditch looking west



Plate 12: Cut (Context 10) in the southern side of the ditch.

Appendix 1: Context Summary

Context	Location	Relationships	Description
1	NCPA 1	Above 2 and 3 Equivalent to 4	Topsoil mid to dark yellowish-brown silty loam. Disturbed in places by many tree roots. Up to 0.3 m thick
2	NCPA 1	Below 1 Above 3	Spread of pale yellowish-brown mortar rich gravel with the occasional concrete fragment. Typically, 0.02 m thick
3	NCPA 1	Below 1 Within 10	Yellowish brown clayey soil with the occasional fragment of man-made brick and tile and rare fragment of concrete.
4	NCPA 2	Above 5, 6, 7, 8, 9	Topsoil mid to dark yellowish-brown silty loam
5	NCPA 2	Below 4 Cuts 6	Area of disturbance associated with the kerb stones around this area.
6	NCPA 2	Below 4 and 7 Cut by 5 and 8	Pale yellowish-brown clayey loam with the rare small (up to 50 mm) sub-angular and rounded stone.
7	NCPA 2	Below 4 Above 6 Cut by 8	Mid to dark yellowish-brown silty loam, disturbed in places with tree roots. This layer appear to be the lower portion of the topsoil in this part of the site.
8	NCPA 2	Below 4 Cuts 5, 6 and 7	Cut for the construction of the retaining wall to the adjacent property
9	NCPA 2	Below 4 Within 8	Modern infill including plastic bottles, and concrete fragments
10	Ditch	Below 1 Contains 3 Cuts natural	Cut with steeply sloping side and a flat base forming a platform at least 26 m wide. Possibly the position of the construction compound for the buildings.

Appendix 2: List of Photographs in the Archive

File	Location	Scale	Looking	Subject
CYG 1	NCPA 1	1 m	S	Eastern set of boulders around tree/shrubs
CYG 2	NCPA 1	1 m	SE	Eastern set of boulders around tree/shrubs
CYG 3	NCPA 1	1 m	W	Western boulder
CYG 4		1 m	S	Four Crosses Standing Stone
CYG 5		1 m	SW	Four Crosses Standing Stone
CYG_6	NCPA 1	1 m	W	Large boulder just after it had been lifted from the surface
CYG_7	NCPA 1	none	N	Large boulder just after it had been lifted from the surface
CYG 8	NCPA 1	none	N	Moving the boulder
CYG 9	NCPA 1	1 m		Boulder after it had been moved
CYG 10	NCPA 1	1 m	W	Context 2
CYG 11	NCPA 1	1 m	W	Context 2
CYG 12	NCPA 1	1 m	W	Context 2
CYG 13	NCPA 2	none	NNE	Pre-excavation shot
CYG 14	NCPA 2	1 m	S	Contexts 8 and 9
CYG 15	NCPA 2	1 m	W	Contexts 6 and 7

File	Location	Scale	Looking	Subject
CYG 16	NCPA 2	1 m	E	Context 6 and 7
CYG 17	NCPA 2	1 m	S	Contexts 8 and 9
CYG 18	NCPA 2	2 m	E	NCPA 2 after the removal of the topsoil
CYG 19	NCPA 2	2 m	E	NCPA 2 after the removal of the topsoil
CYG 20	NCPA 2	2 m	NW	NCPA 2 after the removal of the topsoil
CYG 21	Ditch	none	E	Machine and bucket used for the ditch
CYG 22	Ditch	none	NE	Typical section before cleaning
CYG 23	Ditch	none	NE	Typical section before cleaning
CYG 24	Ditch	1 m	N	Typical section
CYG 25	Ditch	1 m	SE	Cut, Context 10
CYG 26	Ditch	1 m	S	Cut, Context 10
CYG 27	Ditch	none	W	General view of the ditch
CYG 28	Ditch	none	E	General view of the ditch
CYG 29	Ditch	none	E	General view of the ditch
CYG 30		0.5 m		Notch in the side of the boulder
CYG 31		0.5 m		Notch in the side of the boulder

Appendix 3: Specification

Specification for the Archaeological Watching Brief at Canolfan y Gwystil, Y Ffor, Gwynedd , LL53 6UW

Specification compiled by I.P. Brooks. 06 January 2020

1. Non-Technical Summary

- 1.1. Gwynedd County Council intend to extend the carpark behind Canolfan y Gwystil, Y Ffor. This will include works within 4 m of a scheduled ancient monument in the form of a standing stone (CN105). As part of the planning permission (C19/0769/40/LL) for this works archaeological conditions have been imposed on the works. Gwynedd County Council have therefore commissioned Engineering Archaeological Services Ltd to carry out this work.

2. Background

- 2.1. It is intended to extend the car park at the rear of Canolfan y Gwystil, Y Ffor (Figures 1 and 2). The site is towards the eastern edge of Y Ffor, behind a building fronting onto a side street from the B4354. (SH 39907 39014)
- 2.2. Part of this development is within 4 m of the Four Crosses Standing Stone a scheduled ancient monument (CN105)
- 2.3. Within the immediate area the find spot of a Bronze Age “battle axe” (PRN 5672) is recorded. Also, Gwynedd Archaeological Trust carried out an archaeological watching brief on a property known as Dolydd which located six post-holes or small pits in a rough rectangular patter together with a number of other features, none of which had a firm date (PRN 44900). There is also a record of a second standing stone (PRN 2269) in the field to the south of the proposed development which has since been destroyed. The relationship between the two standing stones is unknown, but their presence and the recovery of a Bronze Age “battle axe” would suggest a level of prehistoric activity within the area.
- 2.4. The local geology should be Devensian Glaciofluvial Deposits over Ordovician Allt Fawr Rhyolitic Tuff Formation

2.5. This specification has been prepared after:

2.5.1. An email from Elfyn Jones of Gwynedd County Council

3. Aims

- 3.1. To record any archaeological deposits or features revealed the groundworks.
- 3.2. To mitigate the impact of the development on the standing stone (Scheduled Monument CN105) immediately outside the proposed development by means of an archaeological watching brief.

4. Field work program

- 4.1. The fieldwork program will be dependent on the construction program however, it is expected to include:
 - 4.1.1. An archaeological watching brief on the groundworks
 - 4.1.2. Report and archive preparation
 - 4.1.3. It is expected that the fieldwork will take place in January 2020

5. Methodology

- 5.1. Watching Brief
 - 5.1.1. The Watching Brief will follow the standards laid out in the Institute for Archaeologists. 2014. Standard and guidance for an archaeological watching brief
 - 5.1.2. A suitably qualified archaeologist will be present during excavations associated with the digging of the new foundations and the landscaping of the garden.
 - 5.1.3. All features or archaeologically significant deposits revealed by the ground works will be fully recorded including:
 - 5.1.4. A written description of deposit: type, components etc.
 - 5.1.5. Drawn plans and sections at suitable scales. Typically plans will be drawn at a scale of 1:20 or greater and sections at a scale of 1:10.
 - 5.1.6. Photographs will be taken with Nikon D5300 Digital SLR Camera at a resolution of 24.2 MP
 - 5.1.7. Plan drawing showing extent of deposit.
 - 5.1.8. Section drawing of any feature recorded to record vertical stratigraphy
 - 5.1.9. The Gwynedd Archaeological Planning service will be notified immediately if significant archaeological deposits, features or artefacts are located.
 - 5.1.10. The photographs will include metric scales
 - 5.1.11. All artefacts and ecofacts will be recorded by context.
 - 5.1.12. Each deposit, feature or layer will be identified by a unique context number to which all other records will be related
 - 5.1.13. Where possible, features will be sampled to obtain dating and functional evidence. At least 50% of each of the features exposed by the work will be excavated.
 - 5.1.14. Where possible, elevation drawings of feature half sections to record vertical stratigraphy.

- 5.1.15. Where appropriate, deposits will be sampled for environmental, dating or technological evidence. Samples will be fully recorded and packed appropriately for future analysis.
- 5.1.16. Sampling will be carried out in accordance with the procedures outlined in English Heritage. 2011. Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post-excavation.
- 5.1.17. If human remains are encountered all works will stop until the appropriate permissions have been obtained. A further specification will be submitted to detail the excavation of any human remains and the subsequent specialist reports.

5.2. Finds

- 5.2.1. Any flint artefacts will be studied by I.P. Brooks for Engineering Archaeological Services Ltd.
- 5.2.2. Any pottery will be studied by an appropriate specialist to be agreed in consultation with the Curatorial Archaeologist
- 5.2.3. Any metal or other special finds will be studied by an appropriate specialist to be agreed in consultation with the Curatorial Archaeologist
- 5.2.4. All ceramic, bone and stone artefacts will be cleaned and processed immediately following the watching brief.
- 5.2.5. Metal artefacts will be stored and managed on site according to the UK Institute of Conservation Guidelines.
- 5.2.6. Any samples taken for environmental analysis will be assessed and studied by an appropriate specialist to be agreed in consultation with the Curatorial Archaeologist
- 5.2.7. All finds will be bagged by context with the exception of closely datable or “special” finds which will be recorded with a 3 D position and will be bagged separately
- 5.2.8. The requirement for specialist archaeological reports will be discussed with the Curatorial Archaeologist. The extent and cost of any such report will be discussed with the client and a suitable level of response formulated in discussion between the Archaeologist, Curatorial Archaeologist and the Client.
- 5.2.9. The initial report will include an assessment of the finds from the work and a recommendation for further study if require.

5.3. Archive Preparation and Report Preparation

- 5.3.1. On completion of fieldwork an archive of the results will be prepared.
- 5.3.2. The digital records will be archived with the Royal Commission on Ancient and Historic Monuments of Wales
- 5.3.3. The digital archive will be prepared in line with Royal Commission on Ancient and Historic Monuments of Wales. 2015. Guidelines for digital archives
- 5.3.4. The deposition of any find with a local museum will be discussed with the owner and the development control archaeologist with a strong recommendation that any finds are deposited in a suitable local museum.

5.4. A summary report on the findings of the investigations will be prepared and completed within four weeks from completion of the project. This will summarise the results of the project including;

- 5.4.1. A site location plan

- 5.4.2. A plan of the site locating any features or archaeological deposits located.
- 5.4.3. An outline methodology
- 5.4.4. The results of the Watching Brief.
- 5.4.5. A full bibliography
- 5.4.6. A copy the agreed specification
- 5.4.7. An assessment of the potential for further archaeological investigation
- 5.4.8. Up to five copies of the report will be provided.
- 5.4.9. A digital copy of the report will also be provided.
- 5.4.10. A digital copy of the report will be supplied to the Gwynedd Historic Environment Record
- 5.4.11. A digital copy of the report will be supplied to Gwynedd Archaeological Planning Service
- 5.5. The preparation of the report will conform to the Welsh Archaeological Trusts 2018 “Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)”
- 5.6. If suitable, a report will be prepared for publication in Archaeology in Wales

6. General

- 6.1. CIfA Code of Conduct
 - 6.1.1. All staff will abide by, and all procedures be carried out in accordance with the Chartered Institute for Archaeologists’ Code of Conduct
- 6.2. Health and Safety
 - 6.2.1. EAS Ltd adopt and adhere to safe working practices at all times. A copy of the company’s general statement of policy is available on request.
- 6.3. Staff
 - 6.3.1. The project will be directed by Dr I.P. Brooks MCIfA FSA
 - 6.3.2. Project Staff will include Dr I.P. Brooks MCIfA FSA.
- 6.4. Curatorial Monitoring
 - 6.4.1. The Gwynedd Archaeological Planning Service will be informed as to the start date and progress of the survey.
- 6.5. Insurance
 - 6.5.1. EAS Ltd carries all necessary Public and Employee Liability Insurances.
 - 6.5.2. EAS Ltd carries Professional Indemnity Insurance

7. Copyright

- 7.1. EAS Ltd shall retain full copyright of any commissioned reports, tender documents or other project documentation, under the Copyrights, Designs and Patents Act 1988 with all rights reserved: excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.

7.2. EAS Ltd is prepared to assign copyright at the request of the client.



Figure 1: Location