Bangor University Arts and Innovation Centre: Fibre Optic Cable Trench Bangor, Gwynedd



Archaeological Watching Brief

GAT Project No. 2025 Report No. 908 November, 2010

Bangor University Arts and Innovation CentreFibreoptic Duct Trench Watching Brief

Report No. 908

Prepared for

Bowen Dann Knox Architects

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Ву

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G2025 BANGOR UNIVERSITY ARTS AND INNOVATION CENTRE: FIBREOPTIC DUCTS

ARCHAEOLOGICAL WATCHING BRIEF

Project No. G2025

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BANGOR UNIVERSITY ARTS AND INNOVATION CENTRE, BANGOR ARCHAEOLOGICAL WATCHING BRIEF (G2025):

Summary

An archaeological watching brief was carried out during ground works associated with the insertion of fibreoptic ducting within the grounds at Bangor University. No archaeological deposits were encountered despite the proximity of the works to the location of the former medieval Capel Llanfair Garth Brenin, as all deposits were disturbed soils, with the exception of small patches of subsoil. It appears that re- deposited topsoil, probably deposited as part of landscaping associated with the construction of Theatr Gwynedd, overlay colluvial slippage down the north-west south-east slope. Two levels of terracing, created when the tennis courts were constructed in the park in 1924-5 have also truncated the deposits in some parts of the route, and built it up in others. It is possible that the excavations were not dug to a sufficient depth to encounter earlier archaeological deposits.

1.0 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been asked by *Bowen Dann Knox Architects* to carry out an archaeological watching brief during ground works associated with fibreoptic ducting in advance of the proposed UCNW Bangor University Arts and Innovation Centre development located in Bangor, Gwynedd (centred on NGR SH57927216).

The fibreoptic ducting route is located between Penrallt Road and Deiniol Road (as detailed in client drawing 1003 L[99] 13), running northwest from Deiniol Road up the valley slope within UCNW grounds and terminating along a path that runs parallel to the southeast facing elevation of the UCNW Main Arts Building (see Figure 01).

The fibreoptics ground works included:

- excavation of a 300 to 450mm wide trench; depth: 600 to 750mm; total length of fibreoptic duct within watching brief area: c.150.0m. A deeper excavation to a maximum of 1.2m was carried out in the location of the three junction boxes.
- excavation of three ducting chambers at points indicated on client drawing 1003
 L[99] 13 and Figure 01;

A mitigation brief was not prepared for this work by Gwynedd Archaeological Planning Services (GAPS), but GAPS was kept informed of the fibreoptic ducting works, and monitored the project.

This report conforms to the guidelines specified in Standard and Guidance for Archaeological Watching Brief (*Institute for Archaeologists*, 1994, rev. 2001).

2.0 PROJECT BACKGROUND

An archaeological assessment of a proposed development area was completed by GAT in May 2008 (GAT Report **740**). The report encompassed a c.2.5ha plot (including the fibreoptics route), centred on SH57907220, to the north of Deiniol road and east of Glanrafon Hill. The proposed development site encompassed several upstanding University buildings, including the former refectory, Students' Union building as well as Theatr Gwynedd. Also within the site was the North Wales War Heroes memorial arch (listed grade II), whilst immediately adjacent lie the Grade I listed university buildings designed by H T Hare and built 1907-11. The assessment identified 11 sites within the development area of which 3

were of regional importance, 3 of local importance and 4 of low archaeological importance. Mitigation recommendations were given based upon the importance of the site and the proposed impact, ranging from preservation in situ to basic recording.

GAT subsequently completed an archaeological watching brief of eleven ground investigation (GI) trial pits/boreholes excavated within the proposed development area (GAT Report 846). No archaeological activity was identified within the confines of any example. The GI programme did inform the varying geological activity across the site, including the location of shallow bedrock, colluvia and alluvia. Made ground associated with the construction of the main arts university building was encountered in two boreholes.

The fibreoptics route does not directly affect any of the known archaeological sites described in report 740 but is located within the vicinity of **Feature 7** and the general area of **Feature 8** (Fig. 1), and a watching brief was required during the excavation of the fibreoptics ducting route.

3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 Introduction

The following historical and archaeological background is substantially taken from the assessment report 740 (Davidson 2008). Each identified site described here is listed in the Regional Historic Environment Record with a unique Primary Record Number (PRN).

3.2 Prehistoric/Roman

The evidence for prehistoric occupation within the valley is slight, and is derived from casual finds. No structural evidence of settlements of prehistoric or Roman date has been found to date. To the south of Bangor mountain, however, on the relatively level and free-draining lands between the Cegin and Ogwen rivers, settlements and ritual monuments of Neolithic to Roman date have been excavated (Lynch and Musson 2004; Kenney forthcoming), and more are coming to light through aerial photography (Driver 2005).

3.3 Early Medieval

It is within the Early Medieval period that evidence for settlement becomes more certain. This is associated with the establishment of the religious settlement that was to become an important monastic centre, and later the Cathedral church for the diocese of Bangor.

Bangor is a word used to describe the horizontal plaited rods at the top of a wattle fence, and was still in use in the 19th century, when it could be defined as 'wattling rods thicker than the rest of the dead boughs, which are used on top to fasten the sett in making a thorn hedge', *Geiriadur Prifysgol Cymru, Cyfrol 1, A-ffysur*, 254; Lewis 1815, 28). It is thought that the term was applied to the enclosure around the monastery (the *vallum*), and later came to signify the church itself. There were at least two other monasteries called Bangor, namely Bangor on Dee and Bangor in Northern Ireland. When the death of the patron saint, Deiniol, was recorded in the *Annales Cambriae* in the year 584 it was described as the 'burial of the Daniel of the Bangors' (Morris 1980, 45). His fame must certainly have spread to Ireland, for he is included within a list of saints from Ireland, the *Martyrology of Tallaght*, compiled about 830, which gives the feast day of Deiniol on the 11 September (Best and Lawlor 1931, 70). A late copy of the life of Deiniol has survived, and his name appears in other Saints lives, but little about his life is known with any certainty (see Baring-Gould and Fisher 1907-13, Vol II 325-31 and Vol IV 387-93; also Roberts 1994 and Bartrum 1993, 191-2).

The monastery suffered in 632, when, according to the *Annals of Ulster 'Bennochor moer in Britannia'* (Bangor the great in Britain) was burnt (Mac Airt and Mac Niocaill 1983, 116-17). Though the site of the original monastery cannot be known with certainty, it is reasonable to assume that it was located within the enclosure which is clearly shown on Speeds map of 1610, and which is still preserved today in the present street pattern. This hypothesis can be partly confirmed by archaeological evidence. A curving ditch, located on the east side of the cathedral cemetery, contained fills within the date range AD 540 – 769 (Longley 1995, 56). A cemetery to the east of this was in use earlier than a ditch which contained fills within the date range AD 781 – 1019. The full extent of the cemetery is not known, but the excavations identified seventy six graves, all simple dug graves, though they were severely truncated and the surface from which they had been dug did not survive. The acid soils had removed nearly all the skeletal remains (*ibid*, 61-5).

A range of historical and archaeological evidence (Edwards 2006; Davidson 2007, 6-7) confirms the continued existence of a monastery at Bangor prior to the 12th when a new cathedral was built.

3.4 Medieval Bangor

The rise to power of Gruffudd ap Cynan was followed by a period of relative political stability. Bishop David was appointed to Bangor in 1120, and the construction of the first cathedral is usually attributed to his episcopacy. The burial of Gruffudd ap Cynan in the cathedral in 1137 indicates that, if not finished, the east end at least must have been completed by then.

John Speed's map of 1610 indicates the areas that were built up by then, and identifies the principal features that made up the town by the end of the medieval period. Dominating was the cathedral church within its enclosure. The High Street curved around the south side, as it still does, and west up the hill along one of the principal roads. The market place is shown on the corner of Glanrafon, outside the cathedral gates. To the east, the town ended where the clock now stands. Between the town and the sea lay the Friary, and beyond again the harbours of Porth Cegin and Porth Ogwen. The Bishops palace lay north of the R. Adda, across from the cathedral. The other principal church members all owned houses in Bangor, and 17th century evidence suggests that the house of the archdeacon of Bangor lay where Penrhyn Hall now stands, and alongside Capel Gorfyw. The house of the archdeacon of Anglesey was on the site of the present post office, and that of the archdeacon of Meirionydd on the site of St Paul's School in Sackville Road (Carr 1994; Willis 1721, 283-8). Two other churches, Capel Gorfyw and Llanfair Garth Branan were established within or close to the town, though Speed does not specifically show these.

Browne Willis described the town in 1721 consisting 'of one long street and two small ones, and has sixty eight houses besides the Bishop's Palace and Deanery, most of which are slated' (Willis 1721, 40). The two small streets were Glanrafon and Lon Popty. Glanrafon is shown on Speed's map as being developed, whilst both are depicted with houses on Leigh's map of 1768 (UWB Penrhyn Maps 75). A small market was held every Friday, and three annual fairs (Willis 1721, 49). Many of the buildings on the High Street were rebuilt in the 19th century, though two which retain 18th century features are the former Vaynol Arms at 137 High Street, and the former Goat public house at 120 High Street (RCAHMW 1960, 15-16). Another 18th century house is Tan yr Allt built in 1755 for John Ellis, Archdeacon of Merioneth. Eighteenth century maps show it alongside the road that led up Glanrafon Hill, with formal gardens on the sloping ground down towards the river on the south side, under the present Thoday building. It is built in classical Georgian style, with 2 storeys and basement, and has a hipped roof and central door reached by a double flight of stone steps, with symmetrical flanking windows. It

was at one time the student union, but is no longer used because of its poor structural condition, and the windows are boarded up. (RCAHMW 1960, 15; Cadw 1988, 38).

The description of Bangor by Willis, and the depiction of the town in 18th century illustrations, reveals a relatively small settlement with between 100 and 200 houses and a population of 500 to 1000. During the 18th century, however, changes occured that were to transform Bangor. The first of these was the appointment of a sub-postmaster at Bangor in 1718. Whilst it is very probable the mails had regularly passed through Bangor prior to this, the official route was across the Lavan Sands to Beaumaris, which avoided the need to pass over Penmaenmawr, a dangerous part of the route. The adoption of the Porthaethwy ferry as the official postal route, and the establishment of a sub-postmaster in Bangor now ensured the town lay on the principal route between London and Dublin (Pritchard 1956; 1963). This would have considerably raised the number of travelers passing through, with the subsequent need for inns and other services. The Castle inn, sited in the centre of town, had 17th century origins and Willis in 1721 states that 'Bangor is well accommodated with inns' (Willis 1721, 50). The improvement of roads by turnpike trusts during the second half of the 18th century ensured a steady increase in numbers passing through. The importance of the road is highlighted by a number of contemporary writers, including John Evans, who, writing before the construction of Telford's new road, cites the 'great road between Dublin and London' running through Bangor as an incentive to live there (Evans 1812, 446).

3.5 Late 18th century development to 1900

Though a significant development, the presence of the London to Holyhead road through Bangor would not have been a sufficient catalyst for the subsequent dramatic growth of the town. It was instead the development of the slate quarries by Richard Pennant that was to be the greater force for change, and the associated need to transport the slates. These were sent by ship to market, and the subsequent development of the port at Abercegin provided much of the demand for labour and the incentive to invest in new housing and industry. The harbour was developed from 1780, and was served by a tramway opened c. 1800 (Boyd 1985). In addition to the quarries, Pennant also developed subsidiary industries including a flint grinding mill and a factory for the production of writing slates.

The growth of the port and quarries created the demand for a myriad of service industries, including shipbuilding, sail making, iron founding, smithing and timber yards, as well as slate yards for the processing of slate products. This all resulted in an increased demand for labour and new housing, and the areas of Hirael and Dean Street were developed.

In tandem with the growth of new industry was the growth of Bangor as a resort. The new Holyhead road made travel there easier, whilst still an adventure, but an even easier mode of travel were the steamers from Liverpool. These started operating from 1822, and proved immensely popular. Hotels and lodging houses increased in number, and bathing places were constructed. Lord Penrhyn built his own bath house c. 1808, reached by a short pier, with hot and cold baths, and the Penrhyn Arms advertised its own bathing machines in 1817. John Roberts built a bathing house in Garth sometime after 1805, though this seems to have closed by about 1840, possibly when new baths were built at Silliwen in 1835 (Jones 1975).

John Wood's map of 1834 does not deign to show Upper Bangor or Glanadda – no development had taken place there, and this is confirmed by the Tithe map of 1841. By 1854, however, the position was very different, and rows of terraced houses, including Victoria Street and Albert Street, lay west of the Holyhead Road. Other houses, of higher social standing, were being built on Glanrafon Hill and along what was to become College Road, and Menai View Terrace was built 1850-54. Several larger houses, such as Bryn y Mor, were built overlooking the Menai Straits. There was still little development at West End and Glanadda, though this is where the railway station had been constructed in 1848 which was to be the catalyst for the next

phase of growth. The labour required for the construction of the tunnels through the two ridges, and the bridge across the Straits, would have considerably raised the population, and provided a boost to the local economy, but this was maintained not just by the additional business brought about by the railway, but by the establishment of the maintenance team for the Chester and Holyhead Railway at Bangor. A workforce of some 400 was employed, and new houses were built for them in Upper Bangor, Westend and Glanadda.

A shift in focus occurred with the building of the railway, and new hotels were built to serve passengers arriving at the station. The Penrhyn Arms, left stranded at the east end of the valley, was now supplanted by a new range of hotels, including a complete row opposite the station, and more particularly the British Hotel on the upper end of the High Street, built 1851.

3.6 1900 to the present

The development of Bangor in the twentieth century is dominated by two themes. The first is the growth of colleges of higher education. The genesis of this belongs in the 19th century – the Normal College was founded in 1858, and moved to its new site overlooking the Menai Straits in 1862; St Mary's college moved to its site alongside Lôn Pobty in 1891, though the college had been founded in Caernarfon in 1846. Meanwhile in 1888 a new University, housed in the former Penrhyn Arms hotel, had been founded (see Williams 1985 for details). The sale of the Penrallt estate provided the ideal site for the construction of new University buildings, and these, designed by Henry Hare, completely altered the townscape of Bangor when the new college was constructed on the ridge overlooking the town. The expansion of the Normal College, in arts and crafts style, was also designed by Hare, and construction of both university and college was complete by 1911. In 1899 Friars school was moved to new premises on Ffriddoedd Road, in what was then open countryside, and to a building designed in Elizabethan style by John Douglas. This move freed up land within the valley for the development of Bangor.

The second strand was the development of social housing schemes, often linked with the demolition of 19th century terraced workers housing (this subject is covered in detail in Jones 1985). The Borough Council maintained an ambitious programme of slum clearance and house building between 1905 and the 1960's, the two single largest developments being Maesgeirchen and Coed Mawr. The council's programme of building developed greater significance after 1926, and despite a temporary halt during the Second World War, continued during the 1940's, 1950's and 1960's. During the pre-war period the Dean Street area was completely redeveloped, and after the war attention shifted to Hirael. A number of large new housing estates were established on former farm land, such as those at Maesgeirchen, Maes Tryfan, and Coed Mawr, whilst smaller areas within the existing town were developed, including Maes Isalaw alongside Hirael. The new housing was largely designed by the council's surveyors, John Gill to 1924, T P Francis to 1929, and then most significantly B Price Davies, who oversaw a large part of the re-development programme, and was responsible for 'the sensitive arrangements of houses of differing sizes, height and block lengths on attractively laid out estates' (*ibid*, 189).

Meanwhile the construction of private houses also continued. Whilst this took place throughout all parts of Bangor, the majority lay within Upper Bangor and between there and Garth. New civic buildings were also constructed, including the new library in 1907, designed by Dixon and Potter of Manchester, and in the same year was built the new post office, and the Tabernacle Chapel on Garth Road designed by James Cubitt. In 1896 the new pier was opened to encourage passenger trade and raise Bangor's claim as a desirable resort. Development between the town and the station continued, aided by the construction of Deiniol Road between Love Lane and the station in 1904. The axis for the development of this area was largely centred on Farrar Road, with a mixture of private and council development.

Building alongside the new Deiniol Road, particularly the north side, was dominated by the University, when new Science Buildings were erected in the 1920's. In 1936 a new Secondary School (now the University Science Library) was opened on the south side of the road.

Later developments were influenced by the rise in importance of road transport. As cars, buses and lorries increased in number, so roads were adapted to cater for them. In the 1930's many roads were widened, and Beach Road, Garth Road and Deiniol Road were adopted as the new A5, designed to take traffic from the High Street.

4. ARCHAEOLOGICAL AND HISTORICAL DEVELOPMENT OF THE STUDY AREA

4.1 Introduction

4.1.1 The study area

The study area lies on the north side of the valley, and encompasses part of the valley floor and the sloping hillside of the Aethwy ridge. The area is bounded by Deiniol Road (built 1904) to the south, Glanrafon Hill (a route in use by the medieval period, and probably older) on the west side, Penrallt Isaf on the north side (this followed the northern boundary of the Bishop's park) and a line through the College park on the east side. The western side of the area is currently occupied by the Memorial Arch, Glanrafon refectory and Students Union. The theatre fronts on to Deiniol Road in the centre of the area. The college park continues to the north and east.

4.1.2 Previous archaeological work

In 1924 the construction of tennis courts alongside Deiniol Road within the college park revealed the presence of burials and building remains. These were identified as the probable remains of the site of the medieval church of Llanfair Garth Branan (see 5.2.1 below and Hughes 1924; 1925), also perhaps called Llanfair Nant Erw (RCAHMW 1960, 12). Subsequently it was suggested that the earliest monastery lay on the north side of the valley, close by and including the structural remains, which were interpreted as monastic cells (ibid). Further archaeological works were undertaken in 1964 during the construction of the Students Union building and again in 1972 when the theatre was built (Alcock 1964; White 1973). Nothing of note was found during these excavations, and it is now thought the early monastery lay on the opposite side of the valley under and east of the cathedral. The site of the well known as 'St John's Well' was examined by Alcock (feature 2 below) which had formed part of the Bishop's park. It was found to be a brick chamber with drains connected to it, and it has been suggested that the chamber and drains date from works undertaken during the construction of the college in 1907-11, when the enclosure and well chamber indicated on the 19th century maps would have been demolished (Alcock 1964; White 1973). Alcock also examined two hollows in the steep slope of the park north-east of the church site. One was interpreted as a quarry, whilst no archaeological features were found associated with the other (Alcock 1964).

4.2 Medieval development and up to 1900

4.2.1 Church of Llanfair Garth Branan

Browne Willis informs us that 'besides the cathedral church ... here was formerly a parish church of St Mary, which stood on the back-side of the Bishop's Palace, about 400 yards distant from the Cathedral; the ground on which it stood, together with the church yard, belongs to the

Vicars Choral, who let it out and receive the rent of it, which is 5s 6d. ... When St Mary's church was demolished there is no tradition, and very foundations of it ... are so perished that they cannot be traced out with any certainty. ... There have been often human bones dug up on the site of St Mary's church and churchyard' (Willis 1721, 46).

In 1291 it is recorded in the Pontifical at Bangor that Anian held a synod of the clergy of the diocese in the church, and the church is again referred to in 1486-7 (see Clarke 1969, 101-2 and references).

Burials were found on the lower slopes of the University grounds in 1924 during the construction of tennis courts. A total of some 14 burials were found, all aligned approximately east-west and fully extended in dug graves. Some inter-cutting of graves was noticed. Three (the excavator says two or three) of the burials had partial stone cists around the upper body, and two graves had oak blocks standing 14" in height at their head. The burials are considered to be medieval in date (12th to 15th century). Part of a grinding or polishing stone and some large iron nails were found amongst the graves (not within them) and though these are not particularly diagnostic they may originate from a settlement pre-dating the cemetery (Hughes 1924).

In the following year further work revealed remains of a rectangular stone building aligned approximately east-west, lying some 40 ft to the north of the burials. Two more burials were found north of the structure, and 'numerous remains of bones' to the north-west. Remains of upright slabs were interpreted as a possible cist burial pre-dating the structure (Hughes 1925).

The structural remains are of more than one phase, and consist of a long north wall aligned approximately east-west 8.3m long. Return walls at either end are not at right-angles, but form an obtuse angle at the west end and an acute angle at the east. Another north-south wall (a later insertion) lies some 5ft (1.52m) from the east end. The south ends of the three cross-walls appears to have been destroyed, as they fail to reach the remains of a longitudinal south wall which lies 11ft (3.35m) from the north wall. A thick layer of burnt material lay under the southeast part of the structure.

Finds included numerous white pebbles, fragments of three medieval pottery vessels, a spindle whorl, and broken fragments of a quernstone. The current location of the finds is not known, so it is not possible to confirm their date, but they could all be of medieval date, though the quern fragments and spindle whorl could also be earlier, and perhaps contemporary with the grinding stone found with the burials.

The walls as exposed are difficult to interpret, but seem to indicate a small building set into the sloping hill side, though the relative small size of the building and lack of right-angles at the corners is problematic. The remains lie 260 yards from the cathedral, much closer than the 400 yards stated by Willis, and it is unfortunate he is not clearer about the site where human bones had been found. Nonetheless, the presence of a cemetery here would make it the most likely spot for the church of St Mary's, though it is not possible from the evidence available to conclude the walls are those of the church. The cut-and-fill method of constructing the terraces for the tennis courts mean there is good potential for the survival of parts of the cemetery and any related structures under those parts of the terraces which were not excavated but filled.

4.2.2 Later development

The map of John Speed (1610) clearly shows the Bishop's Palace with adjoining gardens and orchard. A road which is on the approximate alignment as the present Glanrafon Hill is shown, and on the east side of Glanrafon (our study area) the area is shown as undeveloped. No church is indicated in this area.

By the time of Wood's town map of 1834 the area is clearly marked as being owned by the Bishop, and now formed the Bishop's park. In 1802 Bishop Cleaver exchanged land in Port Penrhyn with Lord Penrhyn for land within the Bishop's Park, suggesting that the park was largely a late 18th and early 19th century creation, undertaken in conjunction with the many improvements to the palace by respective bishops (UWB Penrhyn 811; for improvements to the palace see RCAHMW 1960, 9-10). Nineteenth century maps show the park with a perimeter path, but otherwise empty other than trees and a well. The well lay 30 ft west of the palace in a grouping of trees. It is unlikely it was the sole water supply for the palace, and may have been more of a park feature than a functional well. The perimeter path with railings still exists for part of the circuit.

The land north of the park was the Penrallt estate, an area of some 200 acres which occupied much of the Aethwy ridge from Garth Point to what was to become Upper Bangor. In the 15th and 16th centuries the land was part of the Penrhyn estate, but it passed into the hands of an illegitimate member of the family, and through marriage to the Williams of Glanrafon (Caernarfon). William Williams (1705-1769) was Attorney General for North Wales. His second wife, Hephzibah, died in 1832, after which the estate was sold. Much of it was bought by the Penrhyn estate, including the central ridge above the Bishop's park.

4.3 Modern development

The Bishop's Park and Palace were sold by the Ecclesiastical Commissioners in 1900 to Colonel Platt. A large portion of the lands and the palace were subsequently bought by the Council, who also purchased part of the Penrallt estate from Lord Penrhyn. In 1902 the Council offered their part of the Penrallt estate with six acres of the Bishop's park estate to the University College of North Wales for the construction of new University buildings. The College had opened in 1884 and initially used the Penrhyn Arms Hotel for its base, which was converted and expanded to suit its new educational purpose. The College made it clear a more permanent site was required, and the Council's offer in 1902 was their response to ensure the College remained in Bangor. Subsequently H T Hare was contracted to design the new College buildings which were opened in 1911. In the meantime the Council had built Deiniol Road through the former park which linked the station with Garth Road, and had converted the former palace into offices.

The area of park between Deiniol Road, Glanrafon Hill and the new College buildings became the College park. A memorial to the men of North Wales who were killed in the First World War was designed by D Wynne Thomas as an arch that formed an entrance into the park at the corner of Deiniol Road and Glanrafon Hill. It was opened in 1923, and is a two-storey gateway in Tudor style, designed to compliment the College buildings above.

In 1924-5 the lower slopes in the park alongside Deiniol Road were levelled to create tennis courts. The levelled terraces are still visible, though the courts were closed in the 1970's. During the construction of these courts the remains of burials and building foundations were found (see section on Llanfair Garth Branan above).

Plans for a students' union were proposed in 1949, to be built in a style similar to the gatehouse. These were subsequently abandoned. In 1957 a refectory with adjacent curved lounge was built north of the gatehouse to designs by Sir Percy Thomas and Sons. This was completed in 1963, and the construction of the Student Union building followed. The final development on the site was the Theatre built east of the Union in 1973.

In 1974 the college grounds on the slopes below the college were partially replanted, though incorporating many of the extant older trees, to a design by Dame Sylvia Crowe.

5.0 RESULTS OF THE WATCHING BRIEF

5.1 Description

The watching brief for the fibre optic cable was maintained between 2nd and 14th June 2010. The cable followed the route shown on Fig. 1. The depth of the trench varied between about 500mm to 600m along the cable route. At the base of the lower slopes of the cable route 2.5m from the boundary with Deiniol Road two cable junction boxes, 8.5m apart, were excavated to a depth of 1.2m. The soils consisted of between 0.25m and 0.45m of topsoil (101) overlying a mid yellowish brown silty clay and sand mixed and disturbed subsoil (102) containing small to medium rounded and sub angular stones, which extended for the full depth of the trench at its deepest points. The soils contained a bioturbated soil with a significant quantity of organic matter, including tree roots, resulting in a requirement for hand digging of much of the trench.

For much of its length the cable trench heading to the north-west up the hill cut only through the topsoil, but a change was noted on the level of the first terrace, 12m upslope. Small patches of disturbed subsoil were observed, suggesting recent activity. Further up the steep slope to the north west, and beyond the third junction box 60m upslope, no appreciable change in the stratigraphy was noted.

No undisturbed soils were encountered, nor were any archaeological deposits seen.

5.2 Interpretation

No archaeological deposits were encountered, as all deposits were disturbed soils, including the small patches of subsoil. It appears that re- deposited topsoil, probably deposited as part of landscaping associated with the construction of Theatr Gwynedd to the south-west of the cable trench, overlay colluvial slippage down the north-west south-east slope (Plates 1-2). Two levels of terracing, created when the tennis courts were constructed in the park in 1924-5 and the 1970s landscaping, have also affected the deposits in this area, as well as resulting in the deposition of further overburden (Plate 4). The cut and fill technique used to construct the tennis courts was clearly evidenced during the watching brief.

Evidence of landscaping and tree planting schemes carried out in the 1970s was shown by the deposition of rich organic bioturbated soils, and a significant quantity of tree roots.

6.0 CONCLUSION

The cable duct trench did not disturb any identifiable archaeological deposits. This is due to the fact that the excavation was not carried out to a significant depth to encounter them over most of the trench route. At the south eastern end adjacent to Garth Road, where excavations at the site of two junction boxes were dug to the greater depth of 1.2m, natural deposits were not encountered due to the significant depths of colluvial slippage down the hill towards Garth Road.

The pipe trench passed only 35m to the south west of the known archaeological remains and burials at Llanfair Garth Brenin (Fig. 1; Site 1a and 1b), therefore archaeological deposits may be present at a greater depth than those excavated for the cable trench (500mm) which were not identified during the watching brief.

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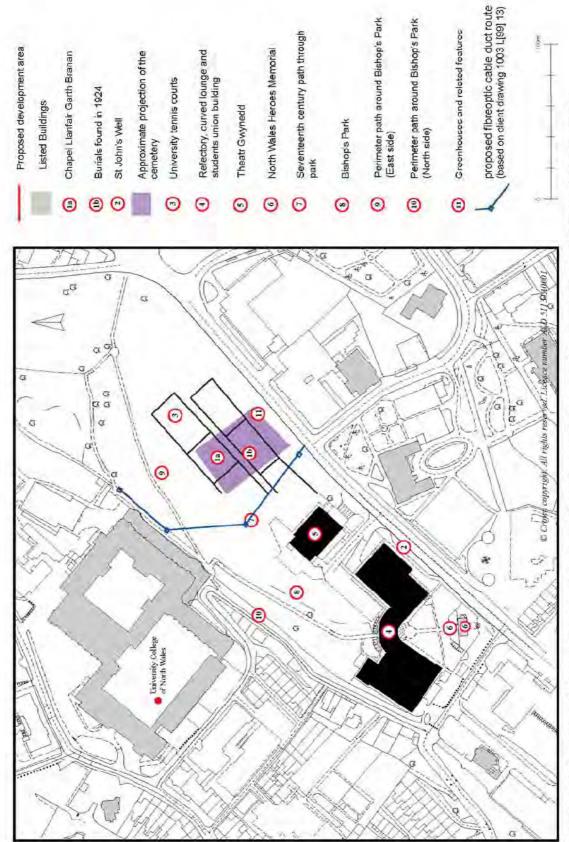


Figure 01, Location of proposed fibreoptic cable duct within UCNW estate boundaries and known archaeological sites within the proposed development site (Location of archaeological sites reproduced from GAT Report 740)



Plate 1 The cable duct trench from the north-east. Scale 2m with 50cm divisions



Plate 2 South-west facing section of southern part of cable trench. Scale 1m



Plate 3 Cable trench from the north during hand excavation



Plate 4 Cable trench near Llanfair Garth Brenin



Plate 5 Section showing topsoil (101) and subsoil (102)



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