

**CADNANT SCHOOL, CONWY:  
DEMOLITION AND LANDSCAPING**

**ARCHAEOLOGICAL WATCHING BRIEF  
(G1740)**

**Report No. 448**

**Prepared for Conwy Council  
March 2002**



Conwy (Porth Uchaf) from Bangor Turnpike, by M. Griffith, 1806

**Ymddiriedolaeth Archaeolegol Gwynedd  
Gwynedd Archaeological Trust**

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# **Cadnant School, Conwy: Demolition and landscaping**

## **Archaeological watching brief (G1740)**

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## **1. Summary**

Demolition of the disused Cadnant School (Fig. 1) and landscaping of the ground to form a public open space was designed to improve the visual aspect and amenity value of Conwy medieval town walls and the Upper Gate. The area of the work had the potential to affect or expose several archaeological features: the medieval town walls (part of a Scheduled Ancient Monument) and the former moat, leading under the drawbridge to Porth Uchaf (the Upper Gate) as well as terraces, gardens, walls and a track from the 18<sup>th</sup> century or earlier, known from cartographic evidence. The watching brief showed that the upper part of the site, where the main school buildings were, had deep foundations and in other parts had a deep cover of made ground so that no pre-20<sup>th</sup> century features were uncovered although the bedrock was uncovered in two places. In the lower part of the site traces of the former moat were identified, an area of re-facing of the town wall and several late 19<sup>th</sup> century garden features were recorded.

## **2. Introduction**

The area involved adjoins the medieval town walls at the east of the town and immediately south of the road leading to Porth Uchaf one of the two main gates into the medieval town. The watching brief was required as part of the conditions for planning consent and as part of Scheduled Monument consent. It was designed to observe and record any features that might be uncovered during extraction of the school building walls, floors, foundations and external yard surfaces and other external features such as retaining walls.

## **3. Specification and Project design**

The work was based on a brief provided by Gwynedd Archaeological Planning Service (Appendix 1) and followed a project design prepared by Gwynedd Archaeological Trust, Contracts section (Appendix 2) which also included a Health and Safety Risk Assessment.

## **4. Methods and techniques**

The watching brief took place intermittently over several days between 6<sup>th</sup> February and 27<sup>th</sup> February 2002. This aimed to be present during any period when demolition or earth-moving was taking place within the scheduled area, close to the town walls, and while there was any chance of exposure of deeper levels, below modern surfaces. It was made complicated by the confined nature of the site and the necessity to temporarily separately stockpile heaps of topsoil and rubble as well as to intermittently stop to load a fleet of wagons to take rubble off site. The work was achieved thanks to the co-operation of the contractor, Mr J. Owen and the machine driver. The excavation was carried out using a large 360-degree excavator with a toothed bucket. This was not ideal for archaeological work because the teeth disturbed any exposed ground surface, but was necessary because of the concrete and masonry breaking required. The machine driver was very experienced and sympathetic to the work as he had carried out earthmoving on archaeological sites in Clwyd.

The machining was observed while in progress, as any exposures would be very brief because areas were levelled over with topsoil-rich material as soon as structures had been removed. No machining was carried out expressly for archaeological purposes. In addition to the machine watching, the town wall was recorded by a series of perpendicular photographs, from the north edge of the site boundary to the inner angle of the town wall tower at the south-west corner of the town. This was carried out after removal of the demolition layers. The Scheduled Monument Consent requested that any new areas of wall face exposed should be recorded in case consolidation was required. Also, a series of terrace walls in the southern part of the site were photographically recorded in a similar fashion, described and where necessary added to site plans, prior to their burial during restitution of the natural slope.

The recorded features were numbered using the GAT context system and related to the photographic record, on three colour print and three corresponding colour transparency films.

## 5. Topography and Geology

The walled town of Conwy occupied a promontory bounded on the east by the Conwy river estuary and on the south by the tidal creek of the Gyffin stream. Most of the bedrock is shale but at the south there is an outcropping ridge of grit. A prominence of this at the west provided the site for the west angle tower, the most prominent point in the town, while another prominence, at the east, near the Conwy, provided the site for the castle itself. The town wall at the west follows the line of this ridge and is built on its edge, with rock exposed in the area at the south close to Llywelyn's tower.

The area of the work (SH 7790 7744) lies on a considerable slope, dropping down to the flood plain of the Gyffin stream. The school was built on this slope and this meant that the buildings themselves had to be terraced into the slope, while the external yard was terraced up on the slope. This meant that much of the ground was raised by importing of materials, particularly at the south and west edges of the upper part of the site, to provide an adequately level school yard. Both these borders had been revetted by high walls. It seems an unlikely place for such a building but had its origin in historical reasons because the site had belonged to the Church from the 19th century and had been used for successive educational establishments.

## 6. Archaeological and Historical background

Only readily available records were used for the background research. The history of the walls, main secular buildings, church and castle are quite well covered but the detailed history of ownership of individual plots of land and their buildings, including that of the Cadnant School, are not. There is much more to be discovered by search of tithe apportionments and estate records but this is beyond the scope of the present report. The photographs used were kindly loaned from her collection by Mrs Betty Pattinson.

The most important feature of the site is its relation to the medieval town walls, the wall perimeter towers and the adjoining twin towers of Porth Uchaf, with its outlying barbican. The walls were built, along with the castle itself, between 1283 and 1288 (Toy 1936). The walls are built of the grit on which they stand, in roughly-coursed masonry with shelly lime mortar. The town wall on the north side is flanked by a massive broad ditch or moat some 25m wide and a similar ditch is presumed to have existed at the west side, where the present site lies, although nothing of such a ditch is visible there (Fig. 2). A ditch must have existed because the upper gate was approached at a high level, via a drawbridge from the barbican, of which one wall survives. Today the gate is approached at ground level over ground that must have been raised up.

Prior to the construction of the walled town this area would probably have been open fields, well beyond the early settlement, which would have clustered around the abbey, where the present parish church of St. Mary's stands. However, the old road to Bangor would have been close by, following the same route as that continued from Porth Uchaf after construction of the town walls.

Excavation of the town ditch would have created huge amounts of spoil, but most of this would have been used in the construction of the town walls. The ditch seems to have been broad with sloping sides, providing greater height to the walls rather than a steep-sided 'moat'. Traces of a broad ditch can be seen on an engraving of the town in the 17<sup>th</sup> century (Fig. 3), reproduced by Hemp (1941, plate 1). This also seems to show that, at that time at least, there were slight terraces across the line of the moat, perhaps an original feature to stabilise the slope. To judge by this engraving this whole area outside the town walls was, in the 17<sup>th</sup> century, open grassland. At this time the castle itself had fallen into disuse but was repaired and re-occupied during the Civil War after which, in 1665, all the remaining timber, iron and lead were stripped from the castle and perhaps from the towers as well. The engraving shows the castle and town walls in good order, so presumably before this final dismemberment.

The next available record of the area is that shown on a Holland Estate map of 1776 (UCNW Bangor, Gen. Ms No. 2383) shown in Fig. 4. This shows that the area later occupied by Cadnant School was then in several small parcels including four plots divided by a track connecting the road outside Porth Uchaf down to the Gyffin stream and Morfa Bach. The four plots were part of the estate and are marked U and V, belonging to two properties within the town walls on Burial Street (now Chapel Street. The Rental shows these two properties as: 'U House and 2 Gardens thro ye High Gate' (i.e.

outside Porth Uchaf); 'V House in two Dwellings and 3 gardens'. The two western plots are shown as gardens, lying at the south part of the area, where it was more level.

The next record is that of a Bodlondeb Estate map of 1865 (Fig. 5) with various parts marked up for auction. This includes the Cadnant School area (Lot 132). Interestingly, this lot also includes a small parcel adjoining but on the inside of the town wall, that which was part of the recent school and still has a building used for education. At the northern edge of the Cadnant School plot is a long rectangular building. This is the Old College, seen on photographs of c. 1900 (Fig. 6) and c. 1920 (Fig. 7), an unusual building with a four-storey tower with a mock-medieval half-timbered, pinnacled top, complete with 'arrow slits' and rivalling the north-west town wall tower for the most prominent viewpoint of the town. A local historian, Mrs Pattinson, does not know to what institution the Old College belonged but says the Cadnant School land belonged to the Chapel, not the Church. On the Bodlondeb map the adjoining lots, 133, 134 and 135 are those belonging to the Roman Catholic church at present and possibly the Old College was also. It was probably built around the middle of the 19<sup>th</sup> century. Its main entrance was via the same gateway as that surviving today, into the base of the tower, which appears to have contained a very grand staircase. It is odd that such a large building is not better known and was still standing c. 1920, probably in poor repair (Fig. 7) but was forgotten when it was demolished to be replaced by the school, c. 1932.

The Cadnant Secondary School was originally the Central School, which educated poor children, and the gardens in the lower part of the site were used in occupational training. Although all the area of the present work was shown as one lot on the Bodlondeb estate map, the southern half at some point belonged to a family called Housegrove and the name occurs in early rentals (Pattinson, pers com). Recent maps show that the area south of the school yard was kitchen gardens with several revetting walls and three glass-houses. However, A photograph of c. 1904 (Fig. 8) shows that there were previously two other ranges of large and high glass-houses, one against the west town wall and one against a revetment wall running east-west across the site, that formed the southern boundary of the school yard. Traces of the former were found and recorded as part of the watching brief.

## **7. Results of the watching brief**

### ***7.1 The Upper Area: the school buildings, yards and retaining walls***

The demolition of the school buildings and landscaping of the remaining surface (Fig. 9) were designed to provide a gently contoured surface close to the overall site ground profile, not to restore it to what it might have been like during the 13<sup>th</sup> century for instance, or prior to the construction of the Old College, when the town ditch may have still been visible. The landscaping was therefore carried out with the minimum of ground movement, apart from extraction of the main walls and foundations. Areas terraced into the slope, that is the main school building, were infilled with rubble and topped with soil.

The raised terrace of the lower school yard was truncated back to a uniform slope. This proved to have had a stone-built revetment wall some 2 metres high and had been terraced up with a variety of materials, at different stages in its life, including rubble, soil and sand. The west edge of the school yard had been similarly made up and a newer, reinforced concrete wall had been built there to retain it. This was presumably to replace the wall that is said to have fallen down (Pattinson pers. comm.). This was to be lowered, along with the adjoining soil levels as part of the landscaping work.

At the top of the slope the outside ground surface of the road was much higher than that inside, where there was a toilet block terraced into the slope. The ground here was made up with rubble to match the ground level outside as part of the landscaping but note that it was the road that had been terraced up originally. The inside ground level would naturally have been lower.

At the east of the school buildings were more yards, tarmac covered, running up to the town wall. These were stripped to reveal underlying mass concrete floors, which were also stripped, revealing mixed soil and rubble, just recent made-ground.

At the east side of the lower yard retaining wall was a flight of external steps leading around the outside of the tower. These were of mass concrete not bonded to the tower and were removed. The

retaining wall was brought down to below the level of the required new surface and the area below infilled with rubble.

Natural shale bedrock was reached in two places, at the east end of the toilet block at the north, uphill end of the site, and below the southern, downhill edge of the school foundation platform (Fig. 11, A and B). The remainder areas exposed only made ground or were terraced cuts that were simply backfilled.

Only some 200mm of the town wall was exposed by removal of recent yard surfaces and this wall appeared to be in good condition with renewed pointing similar to that of the wall above. The wall facing of the tower around the stair well at the south-east of the yard was in similar good repair. About 1 metre of this, at its deepest, was buried when the steps were removed and the stair well filled in to the general ground level.

## ***7.2 The Lower Area: the gardens and associated features***

This area was heavily overgrown and difficult of access. It included an area of trees, including orchard trees, the remains of three glass-houses, a concrete slab laid path and several low terrace walls (Fig 10). The area of the Scheduled Ancient Monument, up to approximately 5m from the town walls had been stripped of vegetation, along with the ivy on the walls themselves. This was done for Cadw, prior to renovation of the walls and allowed the walls and adjoining features to be seen. The remainder of the area however was too overgrown to see much of the ground surface.

The foundations of the three glass-houses marked on recent OS maps (Fig. 11) were easily identifiable. The two southern ones were the most recent, with poured concrete foundations within low machine brick retaining walls. The northern was probably older, built against a stone terrace wall that revetted the slope.

At the east side, clearance of the vegetation by Cadw revealed two levelled areas in front of the town wall, about 4.4m wide. These were identified as the platforms for a range of earlier glass-houses, visible as lean-tos against the town wall on the photograph of c. 1904 (Fig. 8). Traces of the mortar keying for the leading of apex of the glass-house roofs can be seen high up on the town wall, as well as some projecting iron bars for the rafters. These features will probably disappear during the next phase of Cadw re-pointing work. In two places there were also remnants of the stub walls for the glass-house frames and at the south-east end of the longer house was a brick offset, probably where there had been some access steps up to the glasshouse entrance. There may have been other features hidden by vegetation. It was agreed with the Cadw architect that these platforms would be left alone, not graded in, as they would provide good standing for the masons' scaffolding during the re-pointing work.

The area of town wall where this range of glass-house abutted was seen to be slightly different in character to that elsewhere. It was laid with similar gritstone slabs but in a slightly more random style, with no attempt at coursing. It was also laid using a brown sandy mortar, while the town walls used a shelly lime mortar. It appears that the town wall at this point was built on an exposed rock outcrop. This exposed rocky area was faced up with masonry to provide a reasonable back wall for the range of glass-houses. However, it was only a 'skin' of masonry, not keyed in, and had subsequently bowed out and subsided slightly, leaving a ragged masonry fault line above (Fig. 12). This area of stonework will be left in during the next phase of renovation by Cadw, but will have to be stabilised. The facing must have been built about the middle of the 19<sup>th</sup> century. Its association with the glass-houses is clear, because it incorporates the remains of a perpendicular offset wall that was a dividing wall of the range of glass-houses.

The terrace walls were low, the highest 1.2m high, their purpose mainly to provide more level beds for garden cultivation. The highest was that at the south, which seemed to mark the end of the kitchen garden cultivation area, the rest of the garden below was probably just orchards. The terrace walls were built in the same style as that of the wall re-facing described above and therefore part of the same phase of garden construction and not related to the possible terraces seen on the seventeenth century engraving (Fig. 3). They consisted of four lengths perpendicular to the town wall and three lengths that angles off to the south, becoming lower as they graded into a slight rise in slope, so that they ended by the time they reached the line of the footpath. The terrace walls were cleaned of vegetation, described and recorded by perpendicular photographs before being graded into the slope by machine.

The only remaining observation was at the upper part of the lower area where there was a 'negative' terrace into the slope where there had been a garden bed, which would have to be filled in to achieve an even slope. Here a great depth of soil had accumulated and this was machined out to be re-used for topsoiling during subsequent landscaping. In so doing the machine reached subsoil over an area of a few metres, which here was a buff coloured silty clay, probably decayed glacial till.

## 8. Summary and Conclusions

The watching brief recorded a number of features, which were shown to be of mid 19<sup>th</sup> century date. They formed part of a substantial garden of some status, including kitchen beds, orchard and notably a range of large glass-houses. The height of these shows that they were for the production of fruit, a facility that would be an option for someone of wealth and would be of some status value. As the area was part of one property in the 1865 Bodlondeb Estate map, then it must be presumed that the gardens belonged to the college that formerly occupied the site, before construction of the original school, c. 1932. The main stone dividing wall across the centre of the site, and the surrounding perimeter walls also dated from this period. Previously, as shown on the estate map of 1776, the boundaries were just hedges.

The observation of garden features and the exposure of bedrock, combined with the historic map record allow some interpretation of the original form of this part of the medieval town. No town ditch had previously been recognised here, although its existence had been assumed. After clearance of vegetation it could be seen that the 19<sup>th</sup> century garden terraces were set within a slight depression in front of the town wall. This was why each of the terraces changed angle to follow the contour as they ran out to the west. This depression must be the last remnant of the infilled town ditch.

In the northern part of the area, where the school buildings were, there is no trace of any depression for the ditch although it must have been of some depth as it ran beneath the drawbridge of Porth Uchaf. There must have been much infilling here, and it can be seen that the top of the town wall is much nearer ground level than south of the next tower, down the slope. The existence of this made ground and of a buried ditch is demonstrated also by the engineering ground survey boreholes (Appendix 3, Cross section B-B and Section LS 4-4), which indicate that the base of the ditch was at least 2.9m below the present ground surface. The cross section B-B suggests that the subsoil sloped evenly from the west side of the site, toward the town walls, but observation of some exposed shale during machining and archaeological interpretation indicates that there was a ditch so the subsoil would have run more level from the west and then dipped suddenly to meet the lower level encountered in the ditch. Bedrock was exposed just to the east of the school toilet block showing that the ditch had not begun to dip at that point. This position can be related to the 1776 estate map (Fig. 11, A) to show that the track seen there must have followed along the outer edge of the town ditch, the two narrow pieces of land against the town wall were the ditch itself. The track in fact lay very close to the line of the pathway, still in existence prior to recent work. Its continuation from the 18<sup>th</sup> century was probably predisposed because it was retained within the 19<sup>th</sup> century gardens and fixed by relation to a flight of steps in the main terrace wall separating the gardens from the Old College buildings.

The town ditch was some 3m deep or more, as it approached Porth Uchaf. The barbican may then have been on a raised causeway and its appearance (Fig. 13) would have been quite similar to that seen at the East Gate, Caernarfon (Fig. 14), although a road now runs along the base of the ditch there. The 1776 estate map also indicates a more pronounced slope immediately in front of the town walls. It seems quite likely that the town wall, if exposed, might prove to be built on a 'raised' ridge of bedrock, as seen around Llywelyn's Tower. Originally, this may well have had clay 'glacis slope' and it may not have been intended that the rock should be exposed. It may simply have become exposed as a result of weathering. This may explain why, visually, the wall sits uncomfortably close to, or even overhangs the edge of the rock outcrop, north of Llywelyn's Tower. Although the rock outcrop is impressive it might be more historically accurate to provide a grassed slope, as has been created around the north side of Conwy and the east side of Caernarfon.

As was suggested by A.J. Taylor in his Presidential address to the Cambrian Archaeological Association in 1970 - 'There is no reason why, in the not too long term, the essential spaciousness that set off the deeply sloping western facade of the walls on either side of Upper Gate in Mose's Griffith's

day (Frontispiece) should not be recovered and re-created, and no effort to achieve this could be too great' (Taylor 1970, 7). In future a much-enhanced setting could be restored to Porth Uchaf by excavating the surrounding ditch (all within the protected area of the Scheduled Ancient Monument), to match that along the north town wall and providing a bridge, where the drawbridge would have been.

## 9. References

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- Taylor, A.J. 1970. The walls of Conwy, *Arch. Camb.* CXIX, 1-9.
- Toy, S. 1936. The town and castle of Conwy, *Archaeologia* LXXXVI, 163-93.

## APPENDIX 1

### Project Brief

## DESIGN BRIEF FOR AN ARCHAEOLOGICAL WATCHING BRIEF

### Gwynedd Archaeological Planning Service

**Site:** Cadnant Primary School, St. Agnes Road, Conwy, LL32 8RY

**Applicant/Company:** Conwy County Borough Council

**Date:** 21 December 2001

**National Grid Reference:** SH 277932 377414

**Planning reference:** 0/25474

***This design brief is only valid for six months after the above date. After this period Gwynedd Archaeological Planning Service should be contacted.***

*It is recommended that the contractor appointed to carry out the archaeological assessment visits the site of the proposed development and consults the Regional Sites and Monuments Record (SMR) for north-west Wales before completing their specification. Gwynedd Archaeological Planning Service cannot guarantee the inclusion of all relevant information in the design brief.*

#### 1.0 Site Location and Description

- 1.1. For the purposes of this brief the site comprises the Cadnant VC School and associated land (NGR SH 277932 377414), as shown on the location plan (drawing 20/20) submitted with the planning application (0/25474). This plot of land lies immediately adjacent to the south-western stretch of the medieval town walls of Conwy (Scheduled Ancient Monument C014).

#### 2.0 Archaeological Background

- 2.1 An early estate map, dated to 1776, depicts two gardens in this area immediately adjacent to the wall, marked on the map as 'Sir Tho<sup>s</sup> Wynn's Gardens'. A path separates the gardens from what appear to be two garden and orchard areas belonging to Lord Bulkeley. This pattern of land-use may well have pre-dated the eighteenth century and is likely to have continued in use into the nineteenth and possibly twentieth centuries. Stepped terracing survives below the school buildings, most clearly visible against the town walls. The construction of the school in the first half of the twentieth century may have utilised similar terraces further upslope. The survival of the old orchard trees also suggests continuity with earlier cultivation.
- 2.2 The historic map evidence and clues on the ground raise intriguing questions about this plot of land. For example, was the terracing associated with early modern gardens and orchards in this area? If so, did this pattern of land-use originate in the medieval period? How do the town walls relate to the original ground level? Answers to these questions may, in turn, elucidate more about life in the medieval and early modern town. The proposed works may reveal new evidence that helps answer such questions.
- 2.3 Dear Sir or Madam:

Documentation:

- University of Wales, Bangor. U.C.N.W., Bangor. General MS. No. 2383, Holland Estate, Map of Conway, 1776
- Hughes, H.H. 1938. The Edwardian Castle and Town Defences at Conwy. *Archaeologia Cambrensis: The Journal of the Cambrian Archaeological Association* 793 (1): 75-92
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- Taylor, A.J. 1970. The Walls of Conwy. *Archaeologia Cambrensis: The Journal of the Cambrian Archaeological Association* 109: 1-10

**3.0 The nature of the development and archaeological requirements**

- 3.1 The proposed development comprises plans to demolish the existing school building and landscaping to form a public open space. The proposals include the creation of a sloping ground level.
- 3.2 This is a *design brief* for an **archaeological watching brief** to be undertaken following planning consent, according to guidelines set out in Welsh national planning guidance (*Planning Policy Guidance Wales 1996*) and Welsh Office Circular 60/96 (*Planning and the Historic Environment: Archaeology*).
- 3.3 The object of this programme of archaeological works is to create an archive record of any archaeological deposits or structures that may be revealed through on-site construction activity.
- 3.4 This *design brief* should be used by the archaeological contractor as the basis for the preparation of a detailed written archaeological *specification*. The specification must be submitted to the Gwynedd Archaeological Planning Service for approval before the work commences.
- 3.5 The *specification* should contain, as a minimum, the following elements:
- Non-technical summary.
  - Details of the proposed works as precisely as is reasonably possible, indicating clearly on a plan their location and extent.
  - A research design which sets out the site specific objectives of the archaeological works.
  - Reference to the relevant legislation.
  - Health and Safety considerations.
  - Monitoring procedures.
  - Field methodology.
  - Methods of recording, including the collection and disposal strategy for artefacts and ecofacts.

- Arrangement for immediate conservation of artefacts.
- Post-fieldwork methodology.
- The level and grade of all key project staff.
- Details of all specialists.
- A timetable for the proposed works including contingency costs (if appropriate).
- The intended method of publication.
- Archive deposition.

#### **4.0 Watching brief detail**

##### **4.1 The watching brief will consist of the following:**

- Monitoring of site preparation and removal of existing surfaces.
- Examination of the formation level for archaeological information.
- A drawn, written and photographic record of any archaeological structures and deposits that may be revealed.
- Preparation of full archive report.

##### **4.2 The monitoring of level reduction and groundworks is to be undertaken in a manner that allows for the immediate cessation of development for the recording of archaeological evidence. Agreement must be reached between the archaeologist and developer in order that this is achieved.**

##### **4.3 Excavation methodology should be in accordance with Institute of Field Archaeologists guidance (see general requirements below). The use of metal detectors on site to aid the recovery of artefacts is encouraged. Recording will comprise appropriate plans, elevation and photographs.**

##### **4.4 The archaeological contractor will ensure that sufficient resource is made available for a post-excavation programme to result in an archive report.**

##### **4.5 The report should specifically include the following:**

- a) a copy of the design brief and agreed specification,
- b) a location plan,
- c) all located sites plotted on an appropriately scaled plan of the development,
- d) a gazetteer of all located sites, including full dimensional and descriptive detail,
- e) a full bibliography of sources consulted.

#### **5.0 General requirements**

##### **5.1 The archaeological watching brief must be undertaken by an appropriately qualified individual or organisation, fully experienced in work of this character.**

##### **5.2 Details, including the name, qualifications and experience of the project director and all other key project personnel (including specialist staff) should be communicated to the Gwynedd Archaeological Planning Service and all written work attributed to an author(s).**

- 5.3 Contractors and subcontractors are expected to conform to standard professional guidelines. The following are of particular relevance in this instance:-
- English Heritage's 1991 Management of Archaeological Projects (MAP2).
  - The Institute of Field Archaeologists 1985 (revised 1997) Code of Conduct.
  - The Institute of Field Archaeologists 1990 (revised 1997) Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology.
  - The Institute of Field Archaeologists 1994 (revised 1999) Standard and Guidance for Archaeological Watching Briefs.
  - The Institute of Field Archaeologists 1996 (revised 1999) Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures.
  - The Institute of Field Archaeologists 1999 Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.
  - Museum and Galleries Commission 1994 Standards in the Museum Care of Archaeological Collections.
  - United Kingdom Institute for Conservation 1990 Guidelines for the Preparation of Excavation Archives for long-term storage.
- 5.4 Many people in North Wales speak Welsh as their first language, and many of the archive and documentary references are in Welsh. Contractors should therefore give due consideration to their ability to understand and converse in Welsh.
- 5.5 Care must be taken in the siting of offices and other support structures in order to minimise the impact on the environment. Extreme care must also be taken in the structure and maintenance of spoil heaps for the same reasons and to facilitate a high quality reinstatement. This is particularly important in relation to pasture land.
- 5.6 The archaeological contractor must satisfy themselves that all constraints to groundworks have been identified, including the siting of live services, Tree Preservation Orders and public footpaths. Gwynedd Archaeological Planning Service bears no responsibility for the inclusion or exclusion of such information within this brief.
- 5.7 Any changes to the specifications that the archaeological contractor may wish to make after approval by this office should be communicated to Gwynedd Archaeological Planning Service and approved.
- 5.8 Care must be taken in dealing with human remains and the appropriate environmental health regulations followed. Gwynedd Archaeological Planning Service and the local Coroner must be informed immediately human remains are discovered.
- 5.9 Arrangements for the long-term storage and deposition of all artefacts must be agreed with the landowner and Gwynedd Archaeological Planning Service before the commencement of investigation.
- 5.10 The involvement of Gwynedd Archaeological Planning Service should be acknowledged in any report or publication generated by this project.

- 5.11 A full archive including plans, photographs, written material and any other material resulting from the project should be prepared in accordance with standard guidance. All plans, photographs and descriptions should be labelled, cross-referenced and lodged in an appropriate place (to be agreed with Gwynedd Archaeological Planning Service) within six months of the completion of the project.
- 5.12 Two copies of the bound report must be sent to the address below, one copy marked for the attention of the Development Control Archaeologist, the other for attention of the SMR Officer, who will deposit the copy in the SMR.

## **6.0 Curatorial monitoring**

- 6.1 The project will be monitored by the development control archaeologist at Gwynedd Archaeological Planning Service to ensure the fulfilment of the brief and specifications. The development control archaeologist will normally inspect site works and review the progress of excavation reports and archive preparation. The archaeological contractor must inform Gwynedd Archaeological Planning Service in writing of the proposed start dates for the project.

## **7.0 Glossary of terms**

### **7.1 *Archaeological Contractor***

A professionally qualified individual or an organisation containing professionally qualified archaeological staff, able to offer an appropriate and satisfactory treatment of the archaeological resource, retained by the developer to carry out archaeological work either prior to the submission of a planning application or as a requirement of the planning process.

### **7.2 *Archaeological Curator***

A person, or organisation, responsible for the conservation and management of archaeological evidence by virtue of official or statutory duties. In north-west Wales the archaeological advisor to the Local Planning Authorities is the development control archaeologist, who works to the Welsh Archaeological Trust's Curators' Code of Practice.

### **7.3 *Archive***

An ordered collection of all documents and artefacts from an archaeological project, which at the conclusion of the work should be deposited at a public repository, such as the local museum.

### **7.4 *Brief***

The Association of County Archaeological Officers (1993) defines a *brief* as an outline framework of the planning and archaeological situation which has to be addressed, together with an indication of the scope of works that will be required.

### **7.5 *Sites and Monuments Record (SMR)***

A documentary record of known sites in a given area. In north-west Wales the SMR is curated by the curatorial division of the Gwynedd Archaeological Trust.

**7.6    *Specification***

The Association of County Archaeological Officers (1993) defines a *specification* as a schedule of works outlined in sufficient detail to be quantifiable, implemented and monitored.

**7.7    *Watching brief***

A formal programme of observation during non-archaeological excavation works in order to identify, investigate and record any Archaeological Remains which may be present, in accordance with the Archaeological Standards.

**8.0    *Further information***

8.1    This document outlines best practice expected of an archaeological assessment but cannot fully anticipate the conditions that will be encountered as work progresses. If requirements of the brief cannot be met they should only be excluded or altered after gaining written approval of the Gwynedd Archaeological Planning Service.

8.2    Further details or clarification of any aspects of the brief may be obtained from the Development Control Archaeologist at the address below.

Emily La Trobe-Bateman  
Development Control Archaeologist

**Gwynedd Archaeological Planning Service**  
**Craig Beuno**  
**Ffordd Y Garth**  
**Bangor**  
**Gwynedd LL57 2RT**

**Telephone: 01248 370926**  
**Fax: 01248 351867**

## APPENDIX 2

### Project Design

## **CADNANT PRIMARY SCHOOL, CONWY**

### **PROJECT DESIGN FOR WATCHING BRIEF (G1740)**

Prepared for Conwy County Borough Council, 23/01/02

#### **1. INTRODUCTION**

It is proposed to demolish the existing school buildings at Cadnant Primary School, and to landscape the immediate area to form a public open space. The proposals are made by Conwy County Borough Council, who have appointed contractors to start on the demolition of the standing buildings.

A condition requesting a programme of archaeological works forms part of the planning consent for that part which lies outside the scheduled area, and part of the scheduled monument consent for the that part (approximately a 5m strip) which lies inside. Conwy County Borough Council, acting on behalf of the WDA, have asked Gwynedd Archaeological Trust (Contracts) to produce a project design with costs for identifying and carrying out a suitable programme of works. The design and the programme of work is to be monitored by Gwynedd Archaeological Planning Service on behalf of the Local Planning Authority who have provided a Brief for this project design (ref. D444). Cadw: Welsh Historic Monuments are monitoring the work within the scheduled area.

#### **2. THE ASSESSMENT BRIEF**

A brief has been issued by Gwynedd Archaeological Planning Service (ref D444), and this project design conforms both to the brief and to the conditions which form part of the Scheduled Monument Consent (ref. A-CAM1/2/6214/20). The work will also conform to the IFA guidelines as given in *Standard and Guidance for an archaeological watching brief* (IFA 1994, revised 1999), where a watching brief is defined as a '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'.

The objective of this programme of archaeological works is to create an archive record of any archaeological deposits or structures that may be revealed through on-site construction activity.

#### **3. SITE LOCATION**

The site is situated immediately outside the south-west part of the medieval town walls of Conwy below Porth Uchaf at NGR SH779774, as shown on the location plan (drawing 20/20) submitted with the planning application (0/25474). The medieval town walls are a Scheduled Ancient Monument (SAM C014), and are in the care of the State (Guardianship Ancient Monument) and also form part of a World Heritage Site.

#### **4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

Conwy town walls were constructed between 1283 and 1287. The upper gate (Porth Uchaf) was the principal landward entrance to the town, with roads leading south and west from here. A small length of medieval walling outside the gate marks the site of a former outer barbican. The area occupied by Cadnant school is on ground sloping steeply down to the R. Gyffin, shown on an 18<sup>th</sup> century map as two gardens, partly terraced into the slope. The medieval land use has yet to be established, but it is hoped that the ground surface of that time is preserved beneath the terraces occupied by the school.

## **5. PROJECT METHOD**

### **5.1 Watching brief**

An archaeologist will be present during all significant periods of earth and hardcore moving which have the potential for revealing archaeological remains. The watching brief is to be undertaken in a manner that allows for the immediate cessation of development for the recording of archaeological evidence. This will involve close liaison between the archaeologist and the site agent and machine operators.

All stripped areas will be examined and potential archaeological sites identified; these will then be cleaned by hand trowelling or hoeing. If the features revealed can be understood and recorded with no further work required, then they will be photographed, described and located on OS 1:2500 plans. However if any of the features are too complex to allow this, then recommendations will be made for further work, which would be in addition to the work undertaken for the watching brief. A continuous context numbering system will be used, with each context recorded on standard *pro-forma* sheets. Sections will be drawn if relevant.

### **5.2 Environmental samples**

Relevant archaeological deposits will be sampled by taking bulk samples (a minimum of 10litres and maximum of 30 litres) for flotation of charred plant remains. Bulk samples will be taken from waterlogged deposits for macroscopic plant remains. Other bulk samples, for example from middens, may be taken for small animal bones and small artefacts.

### **5.3 Human remains**

Any finds of human remains will be left *in-situ*, covered and protected, and the coroner informed. If removal is necessary it will take place under appropriate regulations and with due regard for health and safety issues.

### **5.4 Small finds**

The vast majority of finds recovered from archaeological excavations comprise pottery fragments, bone, environmental and charcoal samples, and non-valuable metal items such as nails. Often many of these finds become unstable (ie they begin to disintegrate) when removed from the ground. All finds are the property of the land owner, however, it is Trust policy to recommend that all finds are donated to an appropriate museum where they can receive specialist treatment and study. At the very least the Trust would request access to the finds for a reasonable period to allow for study and publication. All finds would be treated according to advice provided within *First Aid for Finds* (Rescue 1999). Initial identification will be undertaken by Trust staff, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff, ARCUS at Sheffield and BUFAU at Birmingham.

## **6. REPORT**

Following completion of the watching brief as outlined above, a report will be produced incorporating the following:

- Non-technical summary
- Introduction
- Specification and Project Design
- Methods and techniques
- Archaeological Background
- Description of the results of the watching brief
- Summary and conclusions
- Bibliography of sources consulted.

## **7. ARCHIVE**

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled and cross-referenced,

and lodged in an appropriate place (to be decided in consultation with the regional Sites and Monuments Record) within six months of the completion of the project.

## **8. STAFF**

The project will be supervised by one of the Trust's Project Managers, Andrew Davidson, who has worked in various aspects of British archaeology for 18 years, and who has been responsible for managing all contract work at the Trust for the past five years, including archaeological programmes for major road contracts, pipeline construction and new development sites. The work will be carried out by fully trained officers who are experienced in conducting watching briefs and working with contractors and earth moving machinery. (Full cv's are available upon request).

## **9. HEALTH AND SAFETY**

The Trust subscribes to the SCAUM (Standing Conference of Archaeological Unit Managers) Health and Safety Policy as defined in **Health and Safety in Field Archaeology** (1999). A risk assessment will be undertaken prior to, and during, the field work programme.

## **10. INSURANCE**

The Trust holds public liability insurance with an indemnity limit of £2,500,000 through Russell, Scanlon Limited Insurance Brokers, Wellington Circus, Nottingham NG1 5AJ (policy 01 1017386 COM), and Professional Indemnity Insurance for £2,000,000 per claim (policy No. 59A/SA11818791).

## APPENDIX 3

Preliminary Borehole Report W S Atkins

# WS Atkins Consultants Limited

S: Asaph Business Park  
Gleeswood Road  
S: Asaph  
Denbighshire LL17 0LL  
Telephone +44 (0)1745 58535  
Facsimile +44 (0)1745 583323  
Website [www.wsatkins.com](http://www.wsatkins.com)

Your Ref

Our Ref CF1010/010/LR/GB/332.B2366

Date 02 January 2002

By Fax & Post

Conwy County Borough Council  
Property Services  
Victoria Centre  
Mostyn Street  
Llandudno  
LL30 2RP

For the attention of Mr John Podbury

Dear Sirs

## OLD CADNANT SCHOOL, CONWY LANDSCAPING WORKS

Further to your recent instructions we confirm that a borehole and trial pit investigation has now been undertaken at the above site.

One borehole and 5 trial pits were excavated. They showed that the ground conditions generally comprise made ground between 1.1 and 3.7m below the ground surface. This material consisted of gravels and gravelly clays, which was found to be soft in places. Beneath this was firm to stiff gravelly yellow clay (gravel consisted of mudstone) which was also soft in places. Below this grey mudstone was encountered at a depth of 2.9m.

The information obtained from the site investigation was added to the cross sections that you provided and are enclosed. The proposed slopes will mainly be in the made ground but natural material and even bedrock may be encountered towards the base of the slope. Preliminary slope stability analyses have been carried out and show that any slope in excess of 1 in 3 could give rise to slope instability. Therefore it is recommended that all regrading is limited to 1 in 3 slopes.

We trust the above will be satisfactory for the time being. We will forward our detailed summary of the investigations in due course.

Yours faithfully  
for and on behalf of  
WS Atkins Consultants Ltd



Lloyd Roberts

Encs

Directors: PE Archer TW Broyd PL Busby DR Clements R Collins JA Cuning RM Gullbert R/V Deacon RS Dault JL Doyle  
AC French MM Grieve CW Griffin TSC Gross DRS Harris BC Hunt DS James RD Jones MME Jeffries JD McCollum OG Morgan  
PH Nelson AWC Pryke JR Pugh MNP Roberts HR Schunter D Senior RJ Shreeve HC Symonds

Registered office: Woodcote Grove, Ashley Road, Epsom, Surrey KT15 1JN  
Registered in England No. 756813

A member of the WS Atkins group of companies

**WS Atkins**

(like no change encountered in exploratory holes)



Existing school building to be demolished

Proposed ground profile  
Existing surface profile

Readiness

4



CADNANT SCHOOL SITE  
CROSS SECTIONS  
Dwg No. R/8/23/5 Scale 1:200



## APPENDIX 4

### Scheduled Monument Consent



**CADW**

**WELSH HISTORIC MONUMENTS**

Receivd	23 JAN 2002
File	
Date	
To	
By	
File	

Director of Finance & Property Services  
Property Services  
Library Building  
Mostyn Street  
LLANDUDNO  
LL30 2RP

Eich Cyfeirnod  
Your Reference

Elin Cyfeirnod  
Our Reference A-CAM1/2/6214/20

Dyddiad  
Date 18 January 2002

Llinell Uniongyrchol 029 2082  
Direct Line 029 2082 5321

Dear Sir

**ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979  
SECTION 2 AND SCHEDULE 1  
APPLICATION FOR SCHEDULED MONUMENT CONSENT  
PROPOSED WORKS AT: CONWY TOWN WALL, CONWY**

I refer to your application dated 8 November 2001, for scheduled monument consent to demolish Cadnant School and landscape the area at the site of the above named scheduled ancient monument.

You declined the opportunity of appearing before, and being heard by, a person appointed for that purpose, afforded to you by Cadw, on behalf of the National Assembly for Wales in the letter of 7 January 2002, a copy of which is annexed. Nor have you submitted any further representations in support of your case.

The proposed works can be carried out without detriment to the historic or archaeological integrity of the monument. Accordingly, the National Assembly for Wales hereby grants scheduled monument consent for the works described at paragraph 4 of the application dated 8 November 2001, subject to the following conditions:

1. that Cadw, on behalf of the Assembly, shall be given at least 2 weeks notice, in writing, of the date of the commencement of the work or of any subsequent adjustment to this date, to allow Cadw's representatives to monitor on site activity;
2. that access to the site shall be afforded to representatives of Cadw;
3. that before work begins a timetable of the work shall be submitted to Cadw along with more detailed drawings;

Parc Cathays, Caerdydd CF10 3NQ. Cathays Park, Cardiff CF10 3NQ  
Ffôn/Telephone: 029 20500200 Ffacs/Fax: 029 20826375

Asiantaeth Weithredol o fewn y Cynulliad Cenedlaethol Cymru yw Cadw. Welsh Historic Monuments  
Cadw, Welsh Historic Monuments is an Executive Agency within the National Assembly for Wales

4. that before the work begins a suitably qualified archaeologist shall be appointed and approved in writing by Cadw, to supervise the landscaping work and the removal of building foundations and hard surfaces;
5. that provision shall be made for the recording of any archaeological features which might be identified during the course of the work;
6. that the foundations of the Town Walls shall be kept well covered with soil at all times, including after completion of the landscaping. Any masonry associated with the Town Wall exposed during the course of the work shall be notified to Cadw, who shall be afforded the opportunity to inspect it and, if necessary, carry out any conservation work which may be found necessary; and
7. that Cadw, shall be informed immediately in writing of the date of the completion of the works and within six month of this date a photographic record of the area taken before during and after work is completed, together with a formal account of any features of archaeological interest identified, shall be submitted to Cadw, to the local Sites and Monuments Record held by Gwynedd Archaeological Trust, Garth Road, Bangor, LL57 2RT and to the National Monuments Record held by the Royal Commission on the Ancient and Historical Monuments of Wales, Crown Building, Plas Crug, Aberystwyth, SY23 1NJ.

Section 2(6) of the 1979 Act provides that non-compliance with a condition attached to a grant of scheduled monument consent shall be an offence.

By virtue of Section 4 of the 1979 Act if no works to which this consent relates are executed or started within 5 years from the date of this letter, the consent shall cease to have effect at the end of that period (unless it is revoked in the meantime).

This letter does not convey any approval or consent required under any enactment, bylaw, order or regulation other than Section 2 of the Ancient Monuments and Archaeological Areas Act 1979.

Your attention is drawn to the enclosed note which sets out your right to challenge the above decision.

Yours sincerely



**R W KEVERN**  
Ancient Monuments Administration



Fig. 1 Aerial photograph of Cadnant School c. 1970

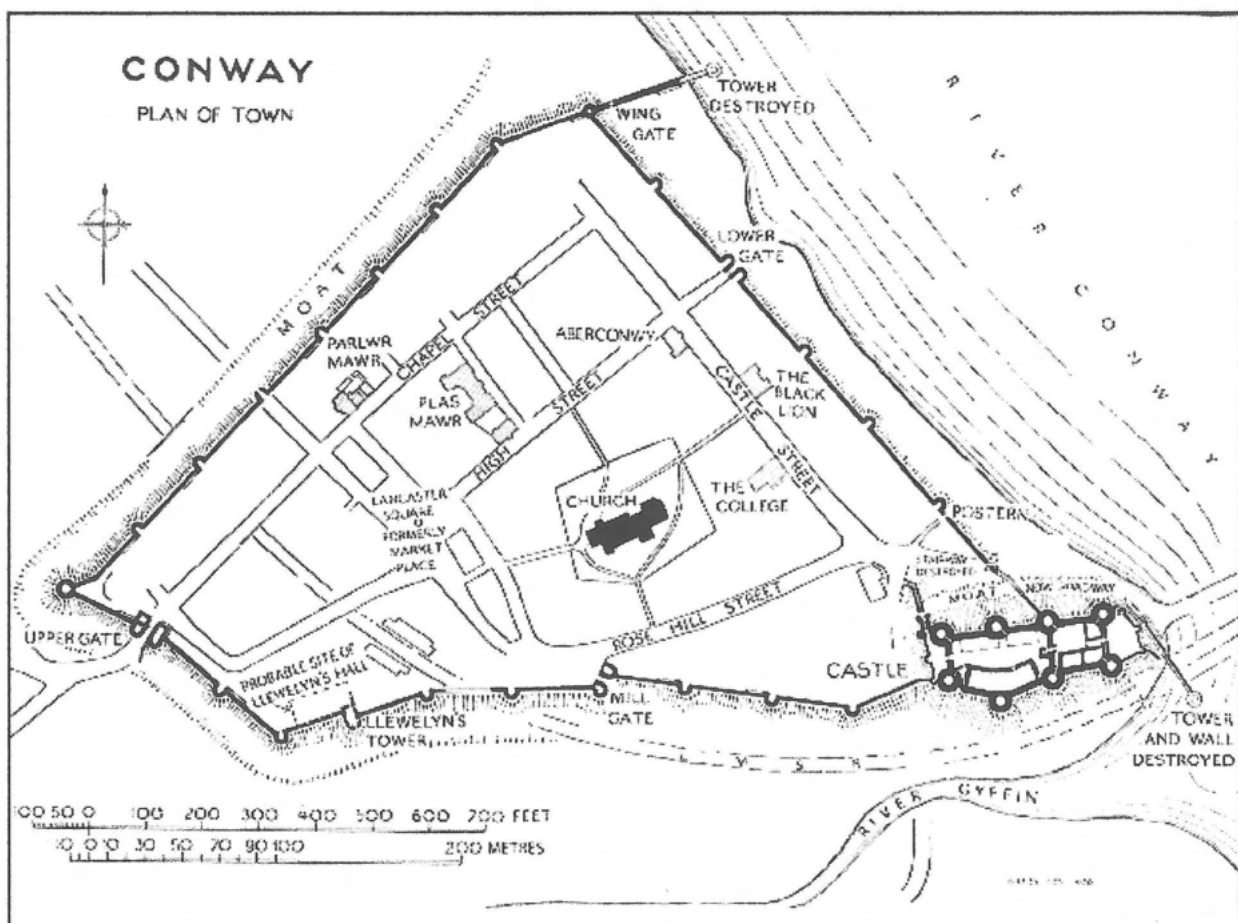


Fig. 2 Map of Conwy by Toy (1936) showing presumed town wall ditch around Porth Uchaf

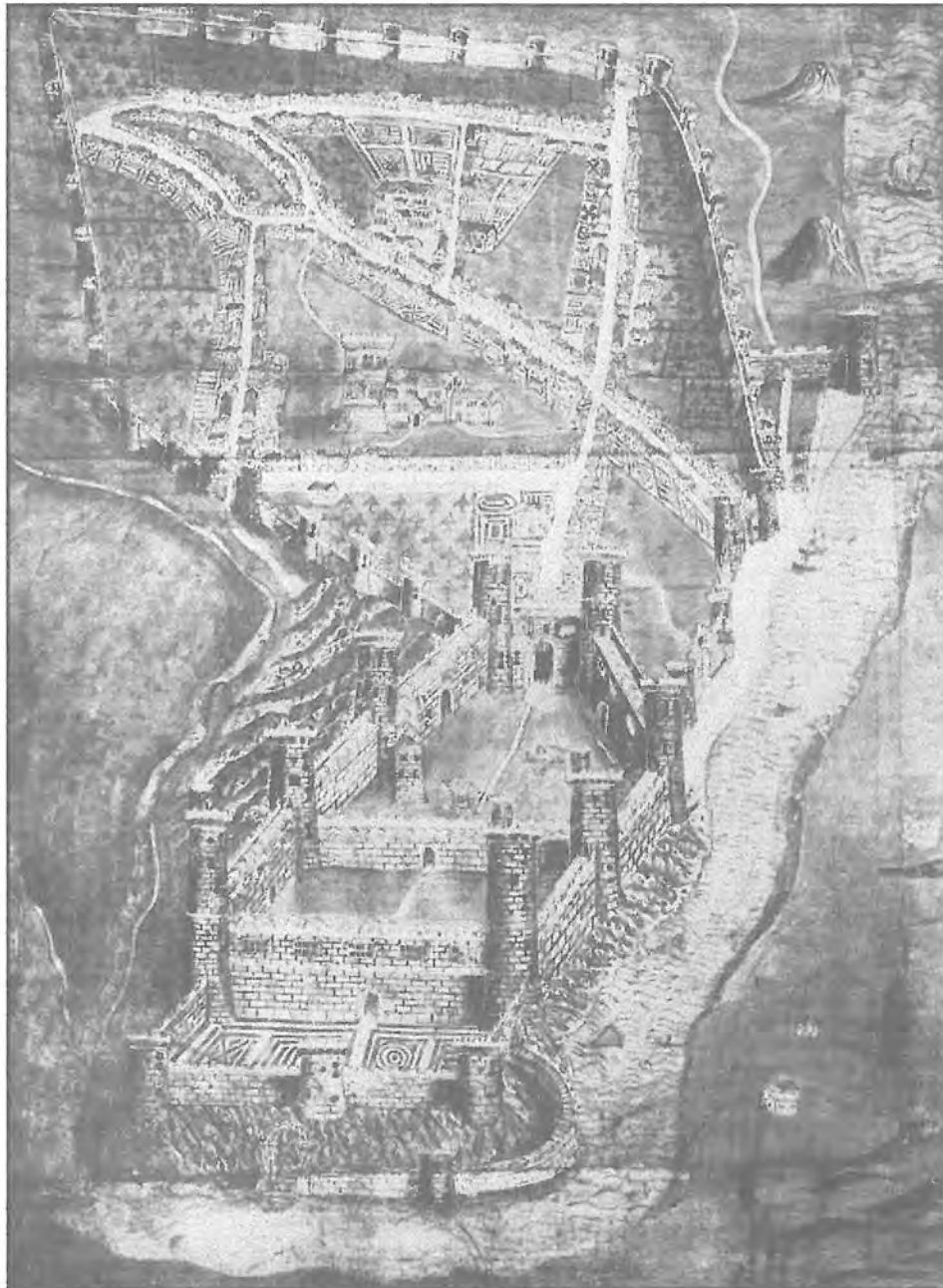


Fig. 3 17th century engraving of Conwy, showing the town wall ditch, south of Porth Uchaf (top left)



Fig. 4 Holland Estate map, 1776



Fig. 5 Bodlondeb Estate map, 1865



Fig. 6 The Old College, Porth Uchaf, Conwy, c. 1900

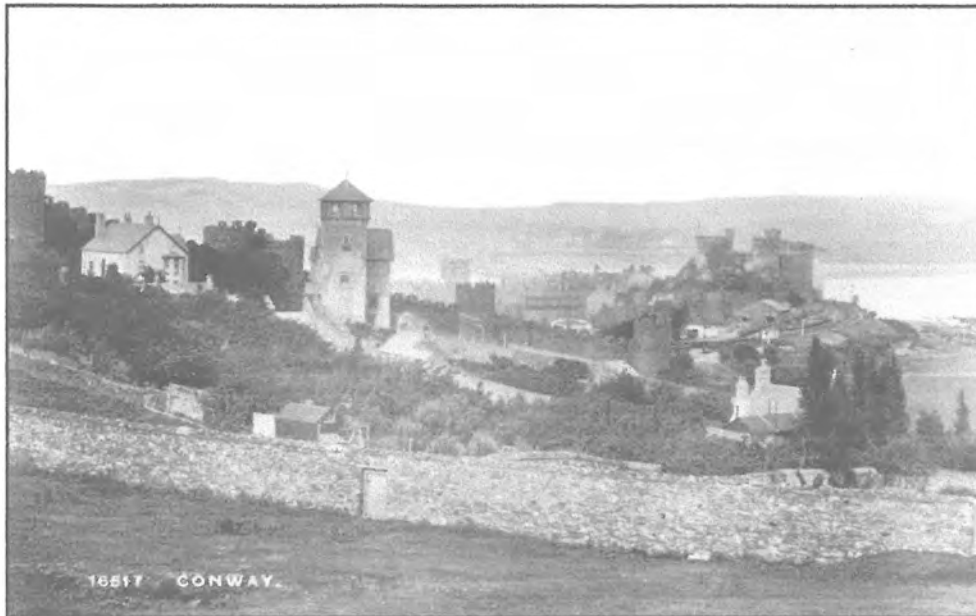


Fig. 7 Porth Uchaf, Conwy, c. 1920

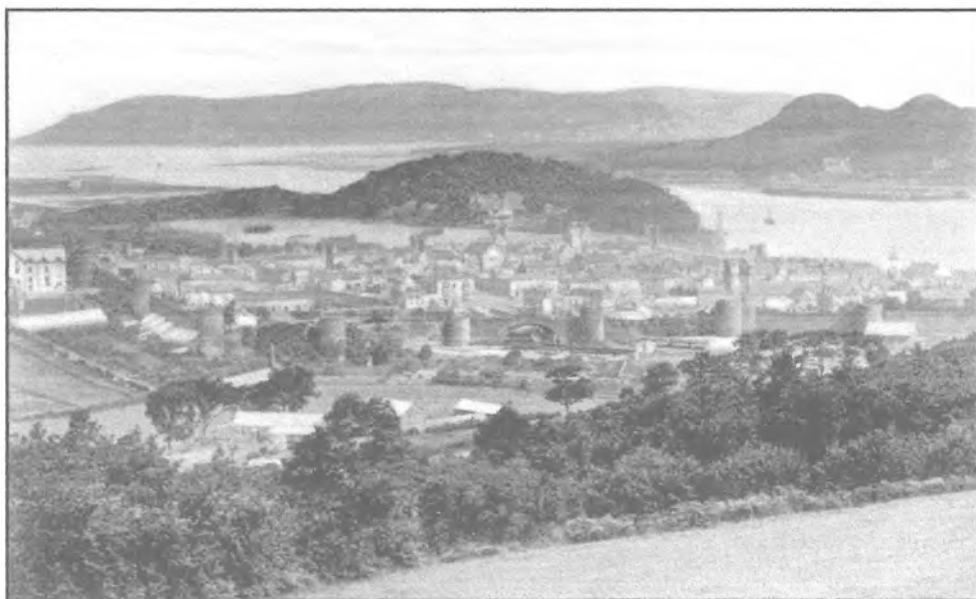


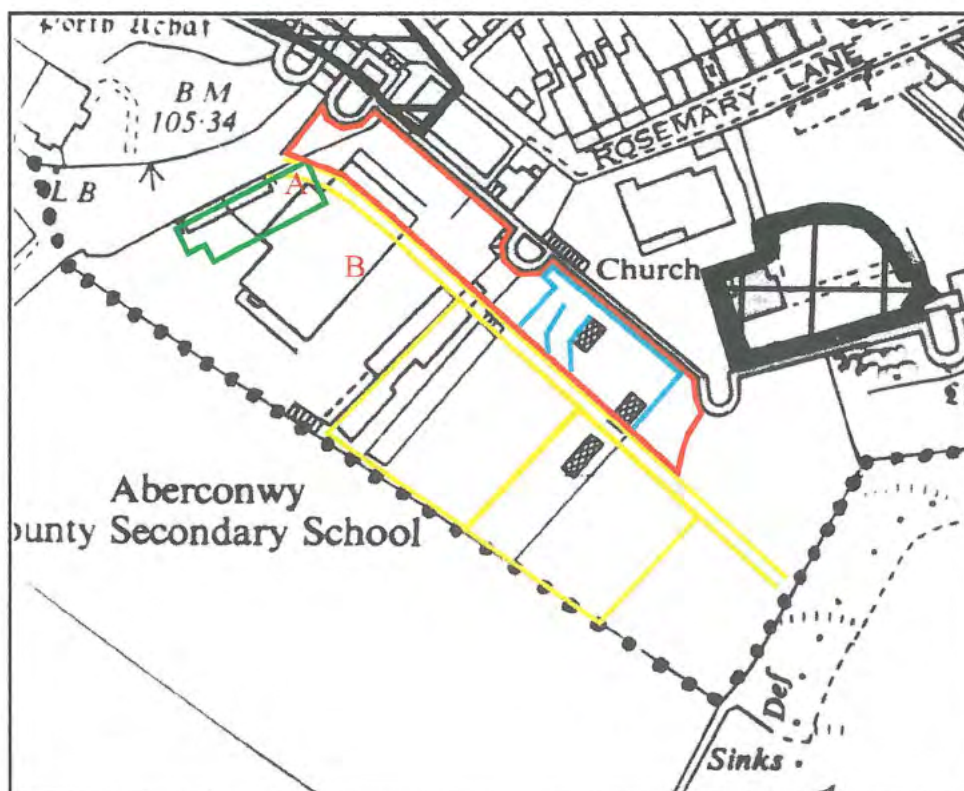
Fig. 8 Conwy, c. 1904



Fig. 9 Cadnant School during demolition and landscaping, Feb. 2002



Fig. 10 19th century terrace walls, Feb. 2002



- Old College
- 18th century gardens and track
- Town ditch
- 19th century terraces etc

Fig. 11 Historic features related to modern plan



Fig. 12 Conwy town wall, showing 19th century re-facing and bonding for glass-house wall (1m scales 5m apart)

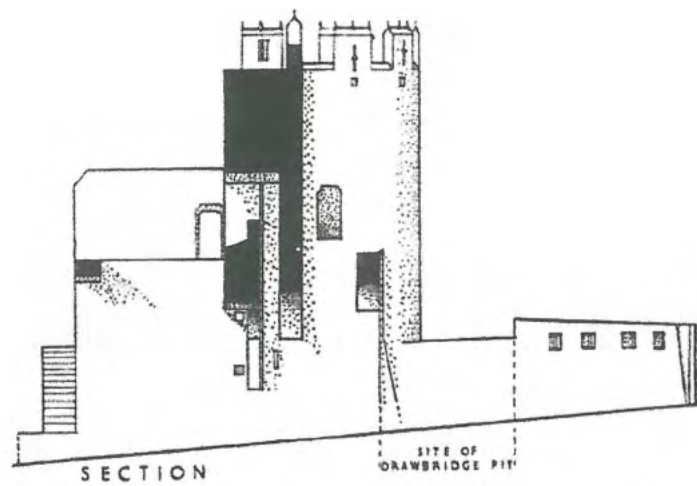


Fig. 13 Porth Uchaf, Conwy, Cross Section showing possible extent of drawbridge pit (RCAHMW 1956)



Fig. 14 The East Gate, Caernarfon town walls

