

Penbryn School, Tywyn, Gwynedd.

Archaeological Assessment



Ysgol Penbryn, Tywyn, Gwynedd

Archaeological Assessment

Project No. G2256

Report No. 1048

Prepared for : Gwynedd Consultancy

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YSGOL PENBRYN, TYWYN, GWYNEDD

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G2256 YSGOL PENBRYN

ARCHAEOLOGICAL ASSESSMENT

SUMMARY

An archaeological assessment has been carried out at Ysgol Penbryn, Tywyn. It was noted that the school was built in 1860 as the Board School with a Master's House attached, on former agricultural land to the east of the historic town, in an area that was undergoing expansion during the 19th century. The route of the road on which it was located, Ffordd Cadfan was of historic origin and shown on the tithe map of 1838. The original 1860 school building was of sneaked granite, although it has later additions of grey brick. The school expanded in 1900 with the addition of a brick infants department, and has been added to subsequently with additional building to the rear, and significant modernisation of the earlier structures during the 20th century. A basic photographic and descriptive record is recommended in advance of alterations to the 1860 and 1900 buildings, and in advance of the demolition of the existing school canteen.

To the rear of the buildings is an open area in which the school playground and sports field is located, and where a potential new canteen may be built. This appears to have been levelled and landscaped from its former agricultural use as part of the school layout; therefore the potential for the recovery of archaeological information has been reduced. However prehistoric archaeological activity has been noted in the wider area, and the topography of the area would be suitable for similar prehistoric or later activity, so an Intermittent Watching Brief is recommended during groundworks associated with new building work.

1. INTRODUCTION

Gwynedd Archaeological Trust has been asked by Gwynedd Consultancy to carry out an archaeological assessment of Penybryn Primary School, Ffordd Cafnan, Tywyn, Gwynedd (NGR SH 5900 0080) in advance of the proposed extensive refurbishment works. The proposed scheme involves extensive refurbishment works of the existing school buildings as well as the demolition of the existing school canteen and the construction of a new canteen/kitchen/hall on one of two proposed locations within the existing school grounds identified by the feasibility plan (Fig. 1).

1.1 Acknowledgements

The staff of Gwynedd Archives, Dolgellau, and Bangor University Archives are thanked for their help with providing archive material. Ashley Batten and Jenny Emmet of Gwynedd Archaeological Planning Service are thanked for their help and guidance.

2. DESIGN BRIEF AND SPECIFICATION

No mitigation brief has been prepared for this scheme by Gwynedd Archaeological Planning Services (GAPS), however the archaeological assessment conforms to the guidelines specified in Standard and Guidance for Archaeological Desk-based Assessment (Institute for Archaeologists, 1994, rev. 2001, 2008).

A desk-based assessment is defined as 'a programme of assessment of the known or potential archaeological resource within a specified area or site on land, inter-tidal zone or underwater. It consists of a collation of existing written, graphic, photographic and electronic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional, national or international context as appropriate'. (*Standard and Guidance for Archaeological Desk-based Assessment*, IFA 2001, 2).

The aims of the assessment as given in the specification are:

- to identify and record the cultural heritage within the defined study area;
- to evaluate the importance of what has been identified;
- to recommend ways in which impact upon the cultural heritage can be avoided or minimised.

To comply fully with the aims expressed above it can be necessary to undertake a programme of Field Evaluation following the Desktop study and Field Visit. This is because some sites cannot be assessed by

desktop or field visit alone, and additional fieldwork is therefore required. This typically takes the form of geophysical survey or trial excavation, although measured survey is also a possible option. A full programme of assessment and evaluation may therefore consist of:

- Desktop study
- Field walkover
- Initial report
- Field evaluation
- Draft report
- Final report

This phase of the project concerns the first three phases, and recommendations are made concerning further archaeological evaluation or mitigation.

3 METHODS AND TECHNIQUES

3.1 Desk top study

The desktop study comprised the consultation of maps, documents, computer records, written records and reference works, which form part of the Historic Environment Record (HER), located at Gwynedd Archaeological Trust (GAT), Bangor. Information about listed buildings was consulted by means of the CARN (Core Archaeological Index), which is the online index of the Royal Commission on Ancient and Historic Monuments, Wales. The records of the Merionydd Archives, Dolgellau were examined, and relevant aerial photographs from the collection at RCAHM, Wales were examined.

Sites, buildings and find spots listed in the GAT HER were identified (Fig. 2), with GAT HER or PRN referring to the unique Primary Record Number given to each individual site.

3.2 Field Search

The field search was undertaken during May 2012, when the route of the proposed development was examined. Notes were taken, sketches and measurements were taken of sites of potential archaeological interest and a photographic record was made. Weather and ground conditions were good for a site visit.

3.3 Report

The available information was synthesised to give a summary of the archaeological and historic background and of the assessment and recommendations, as set out below. The separate features, their evaluation and recommendations are listed separately, and a summary of the overall assessment of the area is given at the end.

The criteria used for assessing the value of features was based upon those used by the Secretary of State for Wales when considering sites for protection as scheduled ancient monuments, as set out in the Welsh Office circular 60/96. The definitions of categories used for impact, field evaluation and mitigation are set out in Appendix 2.

4 ARCHAEOLOGICAL RESULTS

4.1 Topographic description

Tywyn comprises low-lying marshland that was extensively drained in the 19th century. The drainage is managed by a series of sluices and tidal outfalls along the coast edge, which also has a natural shingle storm bank in places and man-made sea-wall in others. The older, central part of Tywyn town lies upon a low promontory that is raised above the coastal plain but newer parts of the town, including where Penbryn School is located, extend onto the lower-lying land where they are at risk from flooding. The lower land is also crossed by a main railway line that runs over the coastal plain and along the coast edge north of Tywyn before crossing the Afon Dysynni.

Alongside the town of Tywyn itself the coast edge is a massive late 19th century promenade of slate, topped by a brick wall of recent date. To the north of the main promenade, built by the Corbetts in 1889, is a modern concrete sea-wall and promenade, north of which is a line of rubble. To the south of Tywyn the coast edge is fringed by a narrow line of dunes and a shingle bank revetted in places by a loose-laid stone sea-wall, with the area just south of the promenade protected by boulders revetted by sheet piling.

4.2 Archaeological and historical background

4.2.1. Prehistoric and Roman sites

The intertidal area surrounding the Afon Dyffryn Gwyn outfall was notable for the presence of an ancient submerged peat and forest bed. These deposits lay beneath the sands and shingle bank and are hidden at most times, being exposed occasionally after particular tidal and wind conditions, which seem to occur during the winter period (Smith 2004, 4). A peat exposure only 5km south of Tywyn has been the subject of archaeological study. This is at Borth and Ynyslas, Ceredigion, on the south side of the Afon Dyfi. It is so close to Tywyn and in an identical coastal location that it provides a good parallel for the sake of assessment. There, intertidal peats are exposed for some 5km along the shore. They appear as outcrops on the beach from beneath the adjoining Borth raised bog, under which they must extend, and consist of fen, alder carr and forest beds overlying salt marsh clay (*ibid.*). Radiocarbon dates give a date of *c.* 6000 BP for the underlying salt marsh and dates of *c.* 5400 BP to 3900 BP, at its lowest for the forest bed (*ibid.*). A number of casual archaeological finds have been made from these peats including a Mesolithic flint pick, flint flakes, an antler tool and a hearth which produced a date of *c.* 4000 BP from the surrounding peat (*ibid.*) as well as bones of red deer and *bos primigenius*. A series of radiocarbon dates from this site was used to construct a sea-level curve for Cardigan Bay, which was found to be not significantly different to curves from the Bristol Channel, Somerset Levels and English Channel (*ibid.*).

The valley of the Afon Dysynni may have been attractive for prehistoric settlement and the river would have provided access for boats. There is a concentration of finds of Neolithic stone axes around the Dysynni as there is also around the Afon Mawddach (*ibid.*).

4.2.2 Medieval

The medieval settlement of Tywyn was focussed on the slightly higher ground, about 1km from the sea. The origins of the settlement lie in the establishment of a monastic community, Bryn yr Eglwys, in about 516 by Cadfan, a Breton monk. The location of the earliest monastic settlement is not known, but it would almost certainly have been centered around the church. The community thrived, having its own Abbot by 1147, and becoming a centre of pilgrimage, with a magnificent shrine to St. Cadfan. Parts of the church date from the 12th century, having become the mother church for much of Meirionnydd (Price 2001). The parish was very large, extending as far as Aberdyfi and was recorded as having 209 taxpayers in the Merioneth Lay Subsidy Roll of 1292, while the town itself had 9, suggesting a fairly prosperous region. Little is known about the layout of medieval Tywyn but a farm just south of the town is called Faenol (maenol or manor) and this may have been the site of the main ecclesiastical residence. The marshes around Tywyn had not been drained in the medieval period and there was a large lake south of Faenol called Llyn y Borth or Penllyn Pool, which may have been valuable for its fish.

4.2.3 Post-Medieval

The historic core of the town and the undeveloped area between the town and the sea are shown on a Nannau estate map of 1794, an estate centered close to Dolgellau which owned some property within the area (Gwynedd Archives ZM 3667, Fig. 3). The land on which Tywyn School was built was agricultural land until the late 19th century, of which the details are given below, taken from the Apportionment of the Tithe Schedule of the parish of Tywyn of 1838; the plan numbers correspond with the numbers on the tithe map (Fig. 4). The current Ffordd Cadfan is shown as a lane on the tithe map.

Landowner	Occupier	Plan Nos.	Name and Description of Land and Premises	Quantities in Statute Measure		
				A	R	P
Jones, Griffith	Himself	1398	Cae Ucha	2	-	23

		1399	Cae Canol	2	-	35
		1400	Cae pant y Llyn	2	-	1

The National Gazetteer of Great Britain and Ireland (1868) describes Tywyn as... “much resorted to for bathing. In the parish is a small harbour easy of access. The herring fishery is carried on to some extent, and lead, copper, and slate are productive. The soil is rocky. Much of the marshes have been reclaimed, and are now rich meadow and pasture. The ruins of Trebeni Castle are seen on the hill”. The Aberystwyth and Welch Coast railway was opened on 24th October 1864 and this encouraged the development of the town.

Ysgol Penbryn, known originally as Tywyn Board School was built in 1860 at a cost of £1000 at the expense of Mr Rolly Price of Dolauwyn to cater for children of Primary School age amongst the expanding population of the town. The original school building is now the northern block of the school, and was associated with a Master’s House Building to the north of it (Fig. 6, Plates 1,7). In 1870 the school’s name was changed to the British School and later still changed to the Primary School (Whatley 1995, 55). In 1900 it was extended to cater for infants and primary school pupils, and the separate infants department was run by Miss Lizze Roberts (Plate 8). The late 19th century minutes of the school note rebuilding work due to storm damage, and absent children due to late harvests (Merionydd Archives ZA/12/14). The school is shown on the 1st Edition 25 inch Ordnance Survey map of 1890 in its original form (Fig. 5), and the infants school building is shown on the 3rd edition map of 1918.

In 1900 there were 92 children on the roll, and the new infants department to the south of the original school was indicated with a bold terracotta plaque (Plate 8). There have been many additions to the school in the later part of the 20th century, mainly to the rear of the two main school blocks, in addition to modifications to the Victorian buildings. These include a central staff block, a canteen block and a modern nursery building to the east. The school playground and sports field lies to the east (Plates 2-3).

The canteen building consists of a concrete truss construction of 1970s date, with pebble dashed panels and internal plasterboard, of 23m by 5.1m with an extension to the north (Plates 4-6). The building is of twelve bays, gable ended with a corrugated aluminium replacement roof. The windows are uPVC and are replacements of the originals.

In the 20th century the main changes to Tywyn were a result of the Second World War. An airfield was created on Morfa Tywyn with accompanying camp buildings. The RAF base was an army co-operation unit that towed targets for artillery practice. The base was operational between 1941 and 1945 when it was taken over by the army (*ibid*: 4). The runways have disappeared from view but the buildings are still extant. There seem to have been no local defensive works on the coast edge alongside the airfield but there was a line of concrete pillboxes along the front of the beach south of Tywyn. There are six pillboxes set about every 500m from south of the outfall of the Afon Dyffryn Gwyn to the entrance to the Afon Dyfi. It would seem possible that the line of defence would originally have continued to the north along the Tywyn sea-front in front of Morfa Tywyn RAF base and on the other side of the Dysynni in front of the Tonfannau army base although no evidence has been found for further pillboxes (*ibid*). There is slight aerial photographic and map evidence for the presence of additional defenses to the south of Tywyn. The evidence can be found in an aerial photograph of 1946 and a plan of the site, both duplicated in a book by Ivor Jones (*Airfields and landing grounds of Wales: North*, 2008, 10-19).

4.3 Statutory and non-statutory designations

There are two listed buildings within 250m of the school; the war memorial (LB No: 84543; SH 59010051) and the Tywyn District War Memorial Hospital (LB No: 18724; SH 59100051). A number of other listed buildings lie within Tywyn itself, about 300m to the north, and these are listed in Appendix 1, along with sites on the Gwynedd HER. There are no Scheduled Ancient Monuments within 500m of the site.

4.4 The Archaeological Survey (Fig. 1)

A ‘C’ after the grid reference indicates the centre of a feature or area of some size, and an ‘A’ indicates the approximate position of a feature.

SITE 1	SH 58980062 C	PENBRYN SCHOOL			
Assessment of Importance	C	Impact: Considerable	Site Status		

			Reference	
<p>A former board school building built in 1860 with the Master's House to the north, built of snecked granite blocks, with bold eaves and bargeboards, with gabled slated roof (Figs.1 and 6). An addition to the south of this building is built with grey brick and stone window and door surrounds. An infants' block was added to the south in 1900, built with brick quoins and window surrounds and with a terracotta date stone. Further buildings were added through the 20th century to the rear of these two blocks including a canteen, modern nursery and main entrance and staff block. The canteen building consists of a concrete truss construction of 1970s date, with pebble dashed panels and internal plasterboard, of 23m by 5.1m with an extension to the north. The building is of twelve bays, gable ended with a corrugated aluminium replacement roof. The windows are uPVC and are replacements of the originals.</p>				
<p>Recommendation for Further Evaluation: None</p>				
<p>Mitigation Recommendations: Basic Recording and Intermittent Watching Brief</p>				

5. SUMMARY OF ARCHAEOLOGICAL POTENTIAL

5.1 Location Summary

Ysgol Penbryn is located on Cafnan Road, Tywyn, on the south-eastern edge of Tywyn (NGR SH 5900 0080) in an area of later 19th century and 20th century suburban expansion on the edge of the town, which up until that time was agricultural land.

5.2 Environmental Remains and Soil Morphology

The potential for the survival of palaeo-environmental remains is unknown, but is considered to be fairly low, since levelling and landscaping of the school grounds is likely to have taken place from the 19th century onwards.

5.3 Artefactual Potential

The potential for the recovery of medieval or prehistoric artefacts is unknown, however Bronze Age Urns have been found close by at Pantyneuadd (PRN 4085), and the area would be suitable for prehistoric and medieval settlement, so there must be some potential. The school site is known to have agricultural fields in post-medieval times up to the time of the building of the school, so stray finds might be encountered, and there is moderate potential for the recovery of modern artefacts relating to the time of the school and development of the surrounding area.

6. SUMMARY OF RECOMMENDATIONS

6.1 Summary of Specific Recommendations

Number	Name	Importance	Impact	Recommendation for further evaluation	Mitigation recommendations
1	Penbryn School	C	Considerable	None	Basic Recording and Intermittent Watching Brief

6.2 General Recommendations

- An **Intermittent Watching Brief** should be carried out on the excavation of the footprint of new canteen building (Plate 3). The potential for the recovery of archaeological remains is thought to be somewhat limited as the area has been landscaped to form the playground of the school, and it lies outside the known extent of the medieval town. However Bronze Age archaeological remains (PRN 4805) have been uncovered 400m to the ESE of the school, and the topography of the school grounds would indicate similar potential for prehistoric and medieval activity.
- A **Basic Photographic Record** should be carried out on the original 1860 and 1900 school buildings both externally and internally before alterations are carried out to them, and of the existing school canteen building prior to demolition.

7. CONCLUSIONS

The archaeological assessment carried out at Penbryn School, Tywyn noted that the school was built in 1860 as the Board School with a Master's House, on former agricultural land to the east of the historic town, in an area that was undergoing expansion during the 19th century. The road on which it was located was of historic origin and shown on the tithe map (Fig. 3). The original building was of sneaked granite, although it has additions of grey brick, with bold eaves and barge boards. The school expanded in 1900 with the addition of a brick infants department, and has been added to subsequently with additional building to the rear, and significant modernisation of the earlier structures. A basic photographic record is recommended in advance of any alterations to the 1860 or 1900 buildings and in advance of the demolition of the existing school canteen.

To the rear of the buildings is an open area in which the school playground and sports field is located, and where a potential new canteen may be built. This appears to have been levelled and landscaped from its former agricultural use as part of the school layout; therefore the potential for the recovery of archaeological information has been reduced. However prehistoric archaeological activity has been noted in the area, and the topography of the area would be suitable for similar prehistoric or later activity, so an Intermittent Watching Brief is recommended during groundworks associated with new building work.

8. ARCHIVE

The archive consists of historic maps, plans and aerial photographs, along with notes and digital images taken on the field visit. The archive is currently held by GAT under project code **G2256**.

One copy of the bound report will be sent to the GAPS archaeologist, and a further copy sent to the HER Archaeologist at the curatorial division of Gwynedd Archaeological Trust, Bangor, for deposition in the Regional HER. A copy of the report will be provided to the National Monument Record, Royal Commission on the Ancient and Historic Monuments of Wales, Aberystwyth.

9. REFERENCES AND OTHER SOURCES CONSULTED

GAT Historic Environment Record

Gwynedd Archives, Dolgellau

Tithe Map of the Parish of Tywyn 1838

ZDAB 329 *Plan of an estate situate in Towyn, Meirionethshire. To be sold at auction Thursday 14th September 1882*

ZA/12/14 *Towyn Board School Log Book and Minutes 1878-1900*

ZM 3667 *A Survey of Estates in the County of Meirioneth belonging to Griffith ap Howell Vaughan Esq. 1794*

Ordnance Survey 1st edition 1:2500 map 1890, Meirionethshire sheet XLVIII.1

9.2 Secondary Sources

Beverly-Smith, J. and Beverley-Smith, L. (eds.) *History of Merioneth Vol. II, The Middle Ages* (Cardiff

Evans, R.T.J. 2010 *Tywyn Coastal Defence Scheme. Archaeological Watching Brief* (Unpublished GAT Report No. 896)

Haslam, R. , Orbach, J. and Voelker, A. 2009 *The Buildings of Wales, Gwynedd* (Pevsner Architectural Guides)

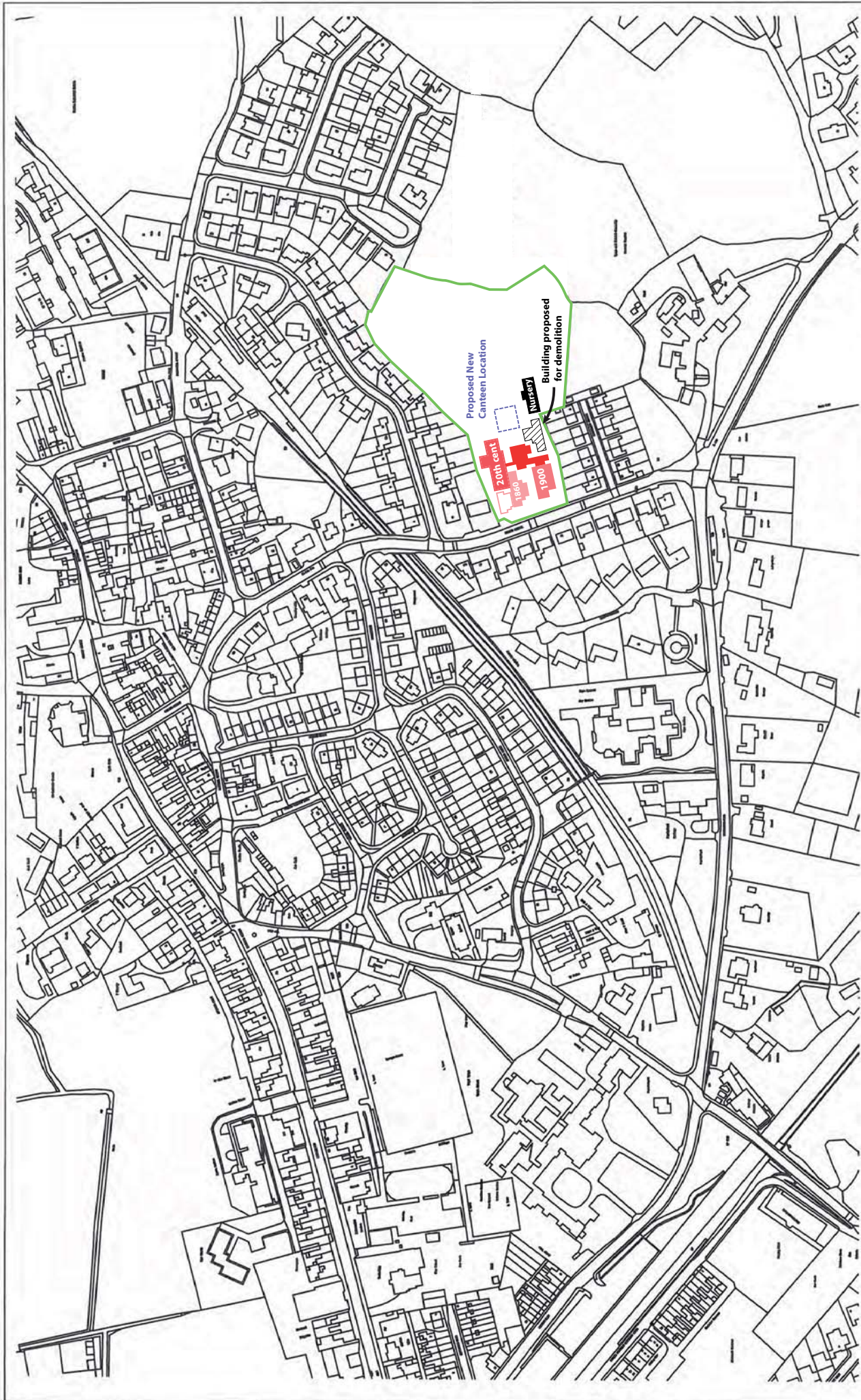
IFA 1994 *Institute of Field Archaeologists Standard and Guidance for an Archaeological Watching Brief* (Revised 2001)

Jones, I. 2008 *Airfields and Landing Grounds of Wales: North*.

Smith, B. and George, T.N. 1961. *British Regional Geology. North Wales* (London)

Smith, G. 2004 Tywyn Coastal Protection Scheme: Archaeological Assessment (G1860). Unpublished GAT Report 555

Whalley, A. 1995 *Tywyn, a Short History* (unpublished history, Merionydd Archives)




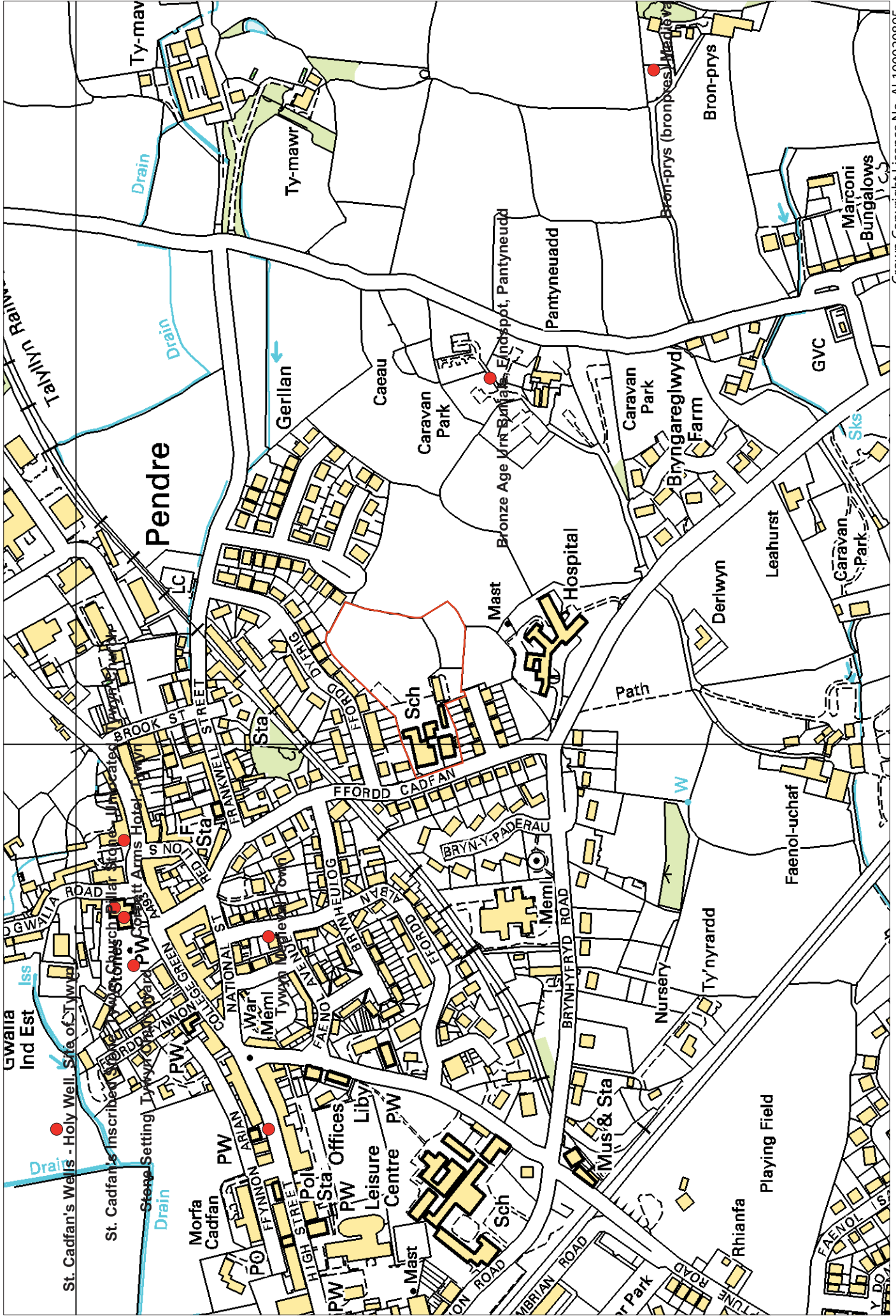
 ymgyngoriaeth gwynedd consultancy <small>gwynedd.cymru.gov.uk</small>	CYLLUN / SCHEME: ESTYNIAD AC ADDASIADAU, YSGOL PENYBRYN, TYWYN EXTENSION AND ALTERATION, PENYBRYN SCHOOL, TYWYN		DYDDIAD DARLUNWYD: Jan 2012 DATE DRAWN:
	TEITL LLUNIAID / DRAWING TITLE: LOCATION PLAN		DYDDIAD GWIRBYD: Map Gwynedd DATE CHECKED:
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Fig. 1 Site Location, showing proposed building demolition (Hatched) and proposed location of new canteen (Blue). Current buildings phased in red. Gwynedd Consultancy Drawing 3554 AL(0-100)



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Fig. 2 Location of Penbryn School (outlined in red), and sites on the Gwynedd HER (red dots). Base map Ordnance Survey 1:10 000 series sheet SH 50 SE. Scale 1:5000

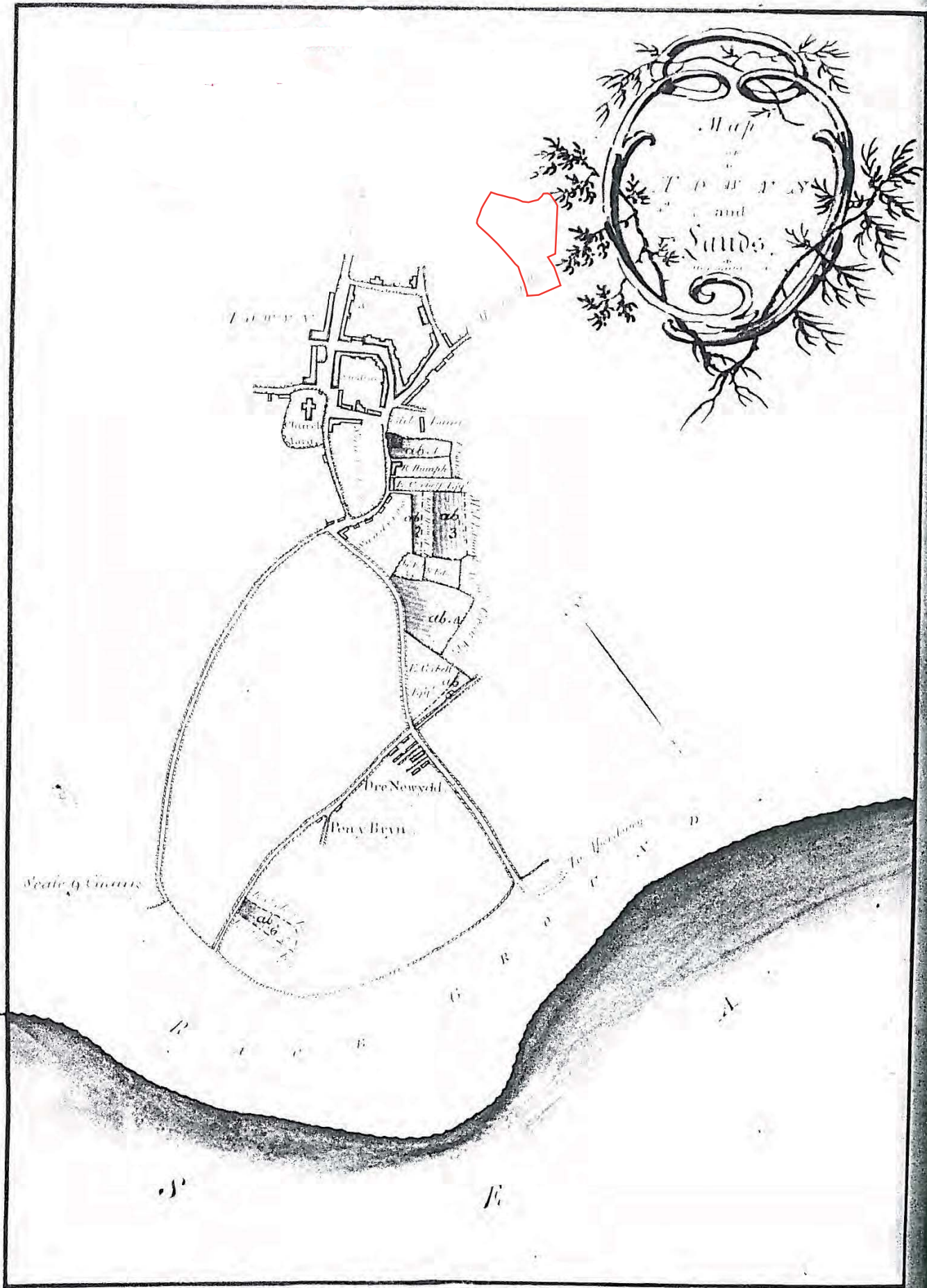


Fig. 3 Map of Towyn and Lands 1794 belonging to the Nannau Estate; location of Penbryn School outlined in red (Gwynedd Archives, Dolgellau ZM 3667)

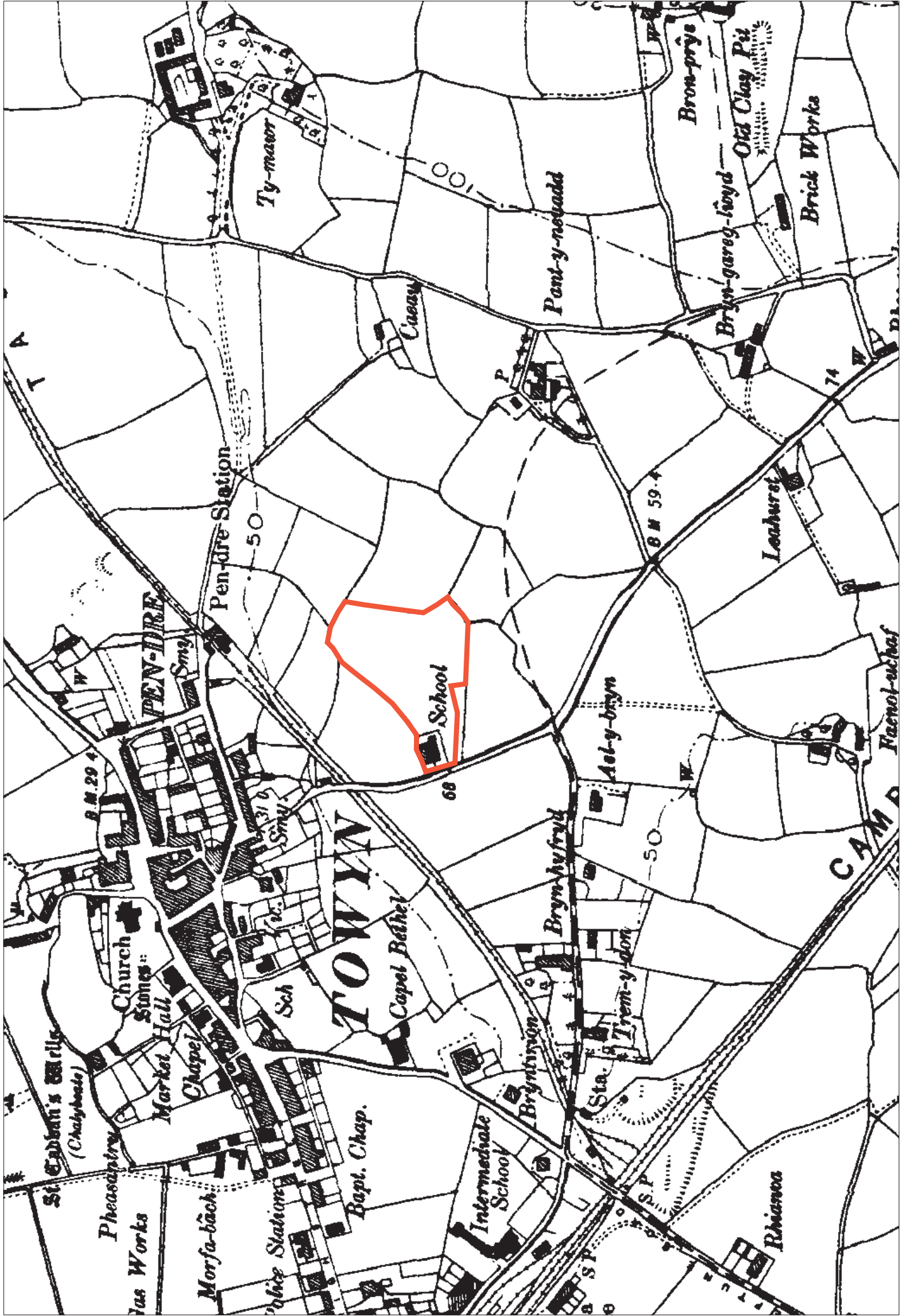


Fig. 5 Ordnance Survey 1st edition 25 inch map of 1890, Meirionethshire sheet XLVIII.1, with the location of Penbryn School noted. Scale 1:5000

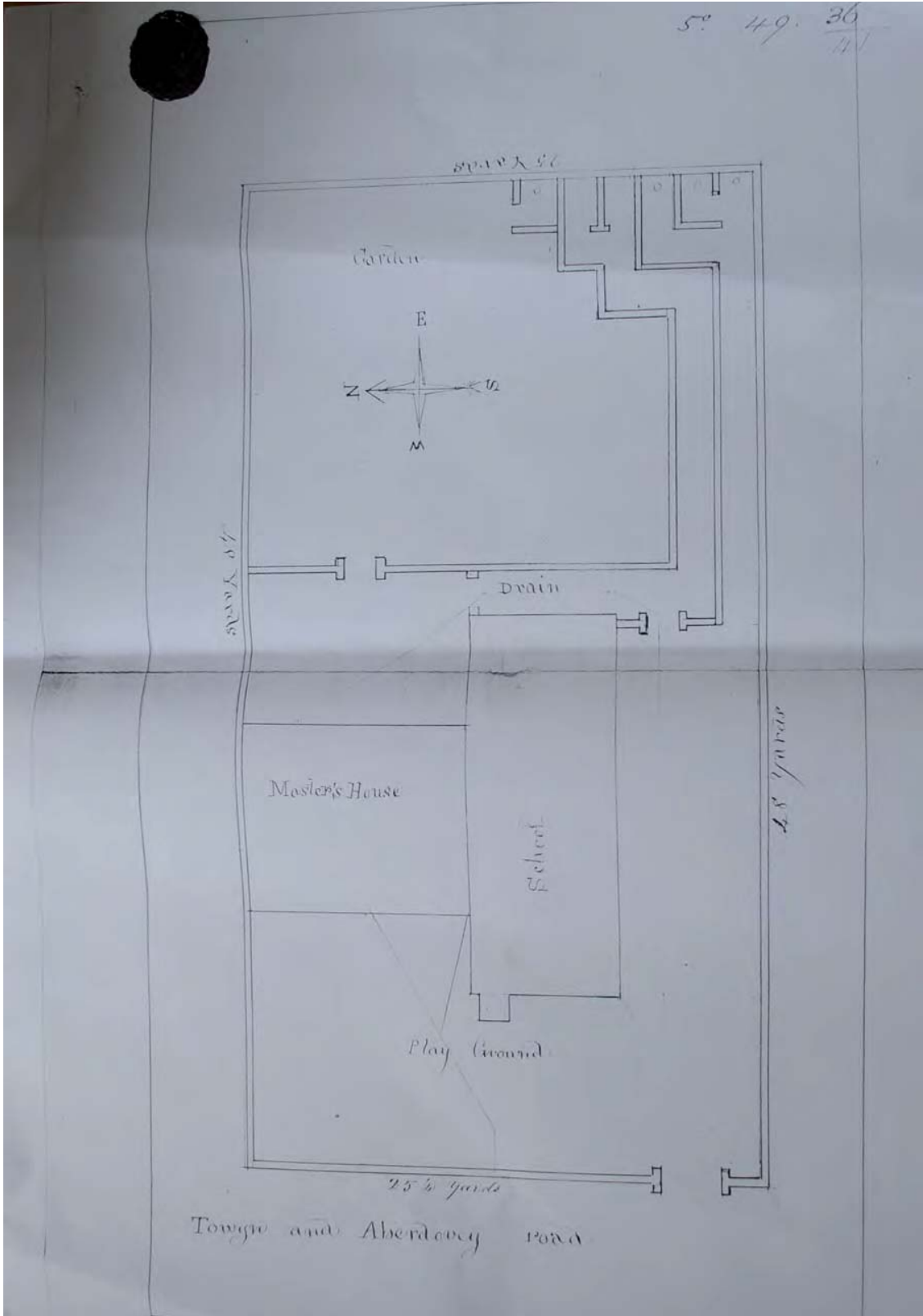


Fig. 6 Ground Plan of original 1860 School Building (Merionydd Archives)



Plate 01: General View of Penbryn School from the South-West



Plate 02: View of School and Ground from the ENE



Plate 03: View of the School Playground (proposed new canteen site) from the west



Plate 04: The School Canteen from the South-West



Plate 05: The School Canteen from the North



Plate 06: The School Canteen from the North-West



Plate 07: The Old School Building from the East



Plate 08: 1900 Terracotta Plaque on Former Infants School Building

APPENDIX 1

TABLE 1 SITES ON THE GWYNEDD HER WITHIN 500m OF PENBRYN SCHOOL				
PRN	NAME	FORM	NGR	PERIOD
29575	Corbett Arms Hotel, Tywyn	Building - Roofed	SH58900095	Post-Medieval
3197	Tywyn Medieval Town	Buried Feature	SH58800080	Medieval
4798	St. Cadfan's Inscribed Stone, Tywyn Church	Other Structure	SH58820095	Early Medieval
4799	Pillar Stone - Unlocated, Tywyn Church	Document	SH58820095	Early Medieval
4800	Stone Setting, Tywyn Churchyard	Other Structure	SH58770094	Unknown
4804	St. Cadfan's Chapel, Site of, Tywyn Churchyard	Building - Ruined	SH58830096	Unknown
4805	Bronze Age Urn Burials, Findspot, Pantyneudd	Find Only	SH59380057	Bronze Age
7078	Tywyn Parish Church	Building - Roofed	SH58820095	Medieval
9962	Maenol Gadfan Medieval Township	Document	SH58600080	Medieval

LISTED BUILDINGS WITHIN 500m OF PENBRYN SCHOOL			
NUMBER	NAME	HOUSE NUMBER	LOCATION
84531		5	Fronting the street opposite the parish church.
4644		5	In a terrace of houses fronting the street.
4645		6	In a terrace of houses fronting the street.
4646		7	In a terrace of houses fronting the street.
4649		6	Fronting the street opposite a sharp bend in the road.
84528		18	In a terrace of houses fronting the street.
84530		34	In a block of buildings opposite Bethesda Chapel.
84529		24	Fronting the street in a block of buildings W of Cambrian Square.
84533	Boer War Memorial		On the S side of Cambrian Square in the centre of its junction with Neptune Road.
84534	Brynhyfryd, including Brynhyfryd Cottage and attached stable and coach house		In its own small grounds 300m W of the war memorial hospital.
84535	Carlton, including forecourt railings and gate	30	In a terrace of 4 houses opposite Bethesda Chapel.
84536	Cefn-y-wern, including forecourt railings and gate	31	In a terrace of 4 houses opposite Bethesda Chapel.

LISTED BUILDINGS WITHIN 500m OF PENBRYN SCHOOL

NUMBER	NAME	HOUSE NUMBER	LOCATION
84537	Ceinfan, including forecourt railings and gate	33	In a terrace of 4 houses opposite Bethesda Chapel.
4642	Church of St Cadfan		Near the E end of the modern town, in a walled churchyard on the W side of Corbet Square.
4643	Corbett Arms Hotel		A prominent building occupying the whole of the E side of Corbet Square opposite the church.
84541	House, including forecourt railings and gate	32	In a terrace of 4 houses opposite Bethesda Chapel.
84542	Lych gate at church of St Cadfan		On the S side of the church, attached to the churchyard wall.
84543	Memorial at entrance to War Memorial Cottage Hospital		At the entrance to the hospital just E of the junction with Ffordd Cadfan.
84546	Outbuilding at rear of The Vicarage		Behind, on the S side of the house.
84547	Somerset House and house adjoining to its L		Fronting the street on the corner of Maengwyn Street and Red Lion Street.
4648	Stanley House	5	Fronting the street opposite a sharp bend in the road.
21515	The Vicarage		In walled garden, opposite S end of Church Street.
18724	Tywyn & District War Memorial Hospital		In its own grounds E of the junction with Ffordd Cadfan.
84548	White Hall Hotel		On the corner of Corbet Square and Red Lion Street.

APPENDIX 2

Categories of importance

The following categories were used to define the importance of the archaeological resource.

Category A - Sites of National Importance.

Scheduled Ancient Monuments, Listed Buildings of grade II* and above, as well as those that would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both.

Sites that are scheduled or listed have legal protection, and it is recommended that all Category A sites remain preserved and protected *in situ*.

Category B - Sites of regional or county importance.

Grade II listed buildings and sites which would not fulfil the criteria for scheduling or listing, but which are nevertheless of particular importance within the region.

Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative.

Category C - Sites of district or local importance.

Sites which are not of sufficient importance to justify a recommendation for preservation if threatened.

Category C sites nevertheless merit adequate recording in advance of damage or destruction.

Category D - Minor and damaged sites.

Sites that are of minor importance or are so badly damaged that too little remains to justify their inclusion in a higher category.

For Category D sites, rapid recording, either in advance of or during destruction, should be sufficient.

Category E - Sites needing further investigation.

Sites, the importance of which is as yet undetermined and which will require further work before they can be allocated to categories A - D are temporarily placed in this category, with specific recommendations for further evaluation. By the end of the assessment there should usually be no sites remaining in this category. In this case several areas of unknown potential have been allocated to this category.

Definition of Impact

The impact of the proposed development on each feature was estimated. The impact is defined as *none, slight, unlikely, likely, significant, considerable or unknown* as follows:

None:

There is no construction impact on this particular site.

Slight:

This has generally been used where the impact is marginal and would not by the nature of the site cause irreversible damage to the remainder of the feature, e.g. part of a trackway or field bank.

Unlikely:

This category indicates sites that fall within the band of interest but are unlikely to be directly affected. This includes sites such as standing and occupied buildings at the margins of the band of interest.

Likely:

Sites towards the edges of the study area, which may not be directly affected, but are likely to be damaged in some way by the construction activity.

Significant:

The partial removal of a site affecting its overall integrity. Sites falling into this category may be linear features such as roads or tramways where the removal of part of the feature could make overall interpretation problematic.

Considerable:

The total removal of a feature or its partial removal which would effectively destroy the remainder of the site.

Unknown:

This is used when the location of the site is unknown, but thought to be in the vicinity of the proposed works.

Definition of field evaluation techniques

Field evaluation is necessary to fully understand and assess most class E sites and to allow the evaluation of areas of land where there are no visible features but for which there is potential for sites to exist. Two principal techniques can be used for carrying out the evaluation: geophysical survey and trial trenching. Topographic survey may also be employed where sites are thought to survive as earthworks.

Geophysical survey most often involves the use of a magnetometer, which allows detection of some underground features, depending on their composition and the nature of the subsoil. Other forms of geophysical survey, including resistivity survey and ground penetrating radar might also be of use.

Trial trenching allows a representative sample of the development area to be investigated at depth. Trenches of appropriate size can also be excavated to evaluate category E sites. Trenching is typically carried out with trenches of between 20 to 30m length and 2m width. The topsoil is removed by machine and the resulting surface is cleaned by hand, recording features. Depending on the stratigraphy encountered the machine may be used to remove stratigraphy to deeper levels.

Definition of Mitigatory Recommendations

Below are the measures that may be recommended to mitigate the impact of the development on the archaeology.

None:

No impact so no requirement for mitigatory measures.

Detailed recording:

This requires a full photographic record and measured survey prior to commencement of works.

Archaeological excavation may also be required depending on the particular feature and the extent and effect of the impact.

Basic recording:

Requiring a photographic record and full description prior to commencement of works.

Strip, Map and Sample:

The technique of Strip, Map and Sample involves the examination of machine-stripped surfaces to identify archaeological remains. The stripping is undertaken under the supervision of an archaeologist. Stripping and removal of the overburden is undertaken in such a manner as to ensure damage does not take place to surfaces that have already been stripped, nor to archaeological surfaces that have not yet been revealed.

Stripping is undertaken in as careful a manner as possible, to allow for good identification of archaeological features. A small team of archaeologists will be responsible for subsequently further cleaning defined areas where necessary. Complex sites which cannot be avoided will need to be fully excavated.

Watching brief:

This is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

Avoidance:

Features, which may be affected directly by the scheme, or during the construction, should be avoided. Occasionally a minor change to the proposed plan is recommended, but more usually it refers to the need for care to be taken during construction to avoid accidental damage to a feature. This is often best achieved by clearly marking features prior to the start of work.

Reinstatement:

The feature should be re-instated with archaeological advice and supervision.

APPENDIX 3

PROPOSED REFURBISHMENT OF PENYBRYN
PRIMARY SCHOOL, TYWYN

PROJECT DESIGN FOR
ARCHAEOLOGICAL ASSESSMENT

Prepared for

Gwynedd Consultancy

March 2012

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

PROPOSED RERURBISHMENT WORKS AT PENYBRYN PRIMARY SCHOOL, TYWYN
PROJECT DESIGN FOR ARCHAEOLOGICAL ASSESSMENT (G2256)

Prepared for *Gwynedd Consultancy*, March 2012

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PROPOSED RERURBISHMENT WORKS AT PENYBRYN PRIMARY SCHOOL, TYWYN

PROJECT DESIGN FOR ARCHAEOLOGICAL ASSESSMENT (G2256)

Prepared for *Gwynedd Consultancy*, March 2012

1. INTRODUCTION

Gwynedd Archaeological Trust has been asked by Gwynedd Consultancy to provide a cost and project design for completing an archaeological assessment of Penybryn Primary School, Llewelyn Road, Tywyn, Gwynedd (NGR SH 5900 0080) in advance of the proposed extensive refurbishment works. The proposed scheme involves extensive refurbishment works of the existing school buildings as well as the demolition of the existing school canteen and the construction of a new canteen/kitchen/hall on one of two proposed locations within the existing school grounds identified by the feasibility plan.

No mitigation brief has been prepared for this scheme by Gwynedd Archaeological Planning Services (GAPS).

This design will also conform to the guidelines specified in *Standard and Guidance for Archaeological Desk-based Assessment* (Institute of Field Archaeologists, 1994, rev. 2001, 2008).

2. ARCHAEOLOGICAL AIMS

A desk-based assessment is defined as “a programme of assessment of the known or potential archaeological resource within a specified area or site on land, inter-tidal zone or underwater. It consists of a collation of existing written, graphic, photographic and electronic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional, national or international context as appropriate” (IFA 2008, 2)

The aims of the assessment are:

- to identify and record the cultural heritage within the defined study area;
- to evaluate the importance of what has been identified;
- to recommend ways in which impact upon the cultural heritage can be avoided or minimised.

To comply fully with the aims expressed above it can be necessary to undertake a programme of Field Evaluation following the Desktop study and Field Visit. This is because some sites cannot be assessed by desktop or field visit alone, and additional fieldwork is therefore required. This typically takes the form of geophysical survey or trial excavation, although measured survey is also a possible option. A full programme of assessment and evaluation may therefore consist of:

- Desktop study
- Field walkover
- Initial report
- Field evaluation
- Draft report
- Final report

This design is for the first **three** phases only, and recommendations will be made for any field evaluation required.

3. ARCHAEOLOGICAL BACKGROUND

Penybryn School is located on the fringe of Tywyn, which a settlement on known medieval origin (Gwynedd HER PRN 3197). Although the school is beyond the historic medieval and post medieval settlement core of the village it possible that settlement activity is present within the proposed development area. To the south east of the school Bronze Age burials have been recorded at Pantyneudd (PRN 4805). The church of St Cadfan in Tywyn houses St Cadfan's Stone, an inscribed stone dating from the 8th or 9th centuries, the oldest known written Welsh text. *The National Gazetteer of Great Britain and Ireland* (1868) describes Tywyn as... "much resorted to for bathing. In the parish is a small harbour easy of access. The herring fishery is carried on to some extent, and lead, copper, and slate are productive. The soil is rocky. Much of the marshes have been reclaimed, and are now rich meadow and pasture. The ruins of Trebeni Castle are seen on the hill".

As far as is known no previous archaeological work has been carried out within the proposed development area. To the west of the proposed development area underwent an archaeological assessment in advance of the proposed Tywyn Coastal Protection Scheme (G1860). A further archaeological watching brief was carried out on during the construction of the coastal protection scheme which uncovered fragments of the World War II coastal defences (G2112).

4. PROGRAMME OF WORK

4.1 Introduction

The project will develop an archaeological deposit model, which will take into account:

- The history of the site
- The potential impact of development on archaeological remains
- The potential impact of development on the setting of sites of archaeological importance
- The requirements for further assessment in the form of non-intrusive and intrusive field evaluation.

The project will be undertaken in four stages:

- Desk-based assessment
- Field visit
- Report compilation
- Project archive

4.2 Desk-based assessment

The desk-based assessment will involve a study of the following records

The regional Historic Environment Register (HER, GAT, Craig Beuno, Bangor, Gwynedd LL57 2RT)) will be examined for information concerning the study area. This will include an examination of the core HER, and secondary information held within the record which includes unpublished reports, the 1:2500 County Series Ordnance Survey maps, and the National Archaeological Record index cards.

The National Monuments Record (NMR RCAHMW, National Monuments Record of Wales, Plas Crug, Aberystwyth, SY23 1NJ) will be checked for sites additional to the HER, and if required additional supporting information will be examined at the NMR.

Information about Listed Buildings and Scheduled Ancient Monuments from Cadw will be examined in the regional HER, with supporting information from Cadw if required. The Register of Outstanding and Special Historic Landscapes and the Register of Parks and Gardens will be checked, and also the location of World Heritage Sites.

Secondary sources will be examined, including the Inventories of the Royal Commission on Ancient and Historical Monuments for Wales, and works held within the regional libraries. Indices to relevant journals, including county history and archaeology society journals and national society journals such as *Archaeologia Cambrensis* will be checked. Also at this stage 19th century topographical dictionaries, antiquarian tours and trade directories will be examined where relevant.

Evidence from aerial photographs will be collated. Vertical and oblique collections held by the NMR, CCW and Welsh Assembly Government will be considered for examination. All photographs examined will be listed in the assessment report.

Archive maps, where relevant, will be consulted in the National Library of Wales at Aberystwyth, and at the archives of the University College of Wales, Bangor (Archives Department, College Road, Bangor, LL57 2DG). This will include the relevant estate maps and tithe maps and information from Land Tax Assessments. Where relevant antiquarian prints and photographs from the national and regional archives will be examined.

Results from previous archaeological work within the area will also be reviewed.

4.3 Field survey

4.3.1 Walkover Survey

This part of the assessment will involve a walkover of the study area and assessing the sites identified during the desk-based study. Any additional sites noted will also be assessed. The location of potentially well-preserved environmental deposits will be noted.

The aims of this stage of the work are to:

- verify the results of the desk based assessment
- identify any further archaeological sites which may exist as above ground features
- assess the potential for the preservation of below-ground archaeology
- assess the impact upon the historic landscape
- photograph and record the present condition of all sites noted.

Access onto land is to be arranged by the Clients.

4.4 Field Evaluation/Further Works

Following desk-based assessments field evaluation work may also be required in order to further assess the presence or absence of remains, their extent, nature, quality and character before determining the appropriate mitigation strategy, whether it be preservation *in situ*, archaeological excavation or a combination of the two.

This might include a methodology for non-intrusive survey and or intrusive evaluation to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development.

Field evaluation needs to be carefully targeted in response to proposed impact and archaeological potential. It would usually be undertaken in stages, and might typically include:

- geophysical survey.
- a programme of trenching and/or test pits to investigate the deposit model in more detail.

Recommendations for any field evaluation considered necessary will be contained within the assessment report.

4.5 Data processing and report compilation

Following completion of the stages outlined above, a report will be produced incorporating the following:

Non-technical summary

1. Introduction
2. Aims and purpose
3. Specification
4. Methods and techniques, including details and location of project archive
5. Archaeological Background
6. Results of assessment in the form of a gazetteer
7. Assessment of impacts
8. Proposals for field evaluation and/or mitigation
9. Summary and conclusions
10. List of sources consulted.

Illustrations will include plans of the location of the study area and archaeological sites. Historical maps, when appropriate and if copyright permissions allow, will be included. Photographs of relevant sites and of the study area where appropriate will be included.

A draft copy of the report will be sent to the regional curatorial archaeologist and to the client prior to production of the final report.

4.6 Definition of category of importance

To assess the importance of sites and to allow the appropriate mitigatory action to be proposed for each, a framework of categories will be used with each site allocated to a particular category according to its relative importance:

Category A - Sites of National Importance.

This category includes Scheduled Ancient Monuments and Listed Buildings (Grade I and II*) as well as those sites which would meet the requirements for scheduling (ancient monuments) or listing (grade I and II* and certain grade II) or both.

Sites that are scheduled or listed have legal protection, and it is recommended that all Category A sites remain preserved and protected *in situ*.

Category B - Sites of Regional Importance

These sites are those which would not fulfil the criteria for scheduling, but may include Listed Buildings at grade II. They are sites of particular importance within the region. Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative. Sites that are Listed have legal protection, and it is recommended that all listed buildings are preserved *in situ*.

Category C - Sites of District or Local Importance

These sites are not of sufficient importance to justify a recommendation for preservation if threatened, but nevertheless merit adequate recording in advance of damage or destruction.

Category D - Minor and Damaged Sites

These are sites which are of minor importance or are so badly damaged that too little remains to justify their inclusion in a higher category. For these sites the most appropriate mitigation is often rapid recording either in advance or during destruction.

Category E - Sites needing further investigation

Sites, the importance of which is as yet undetermined and which will require further work before they can be allocated to categories A-D, are temporarily placed in this category, with specific recommendations for further evaluation. This category can also apply to areas as well as to individual sites.

5. DISSEMINATION AND ARCHIVING

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 within six months of the completion of the project. The location is to be agreed with the Curatorial Archaeologist.

Copies of the report will be sent to the regional HER (Gwynedd Archaeological Trust, Craig Beuno, Garth Road, Bangor, Gwynedd LL57 2RT).

6. PERSONNEL

The work will be managed by a Senior Archaeologist within GAT Contracts Section. The work will be undertaken by one of the Trust's Archaeologists experienced in the relevant skills/periods required. Full details of personnel involved, with *curricula vitae*, can be supplied upon request

7. MONITORING AND TIMING

Monitoring visits can be arranged during the course of the project with the clients and with the appropriate Development Control archaeologist.

8. 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** (2006). Risks will be assessed prior to and during the work.

9. INSURANCE

Liability Insurance - Aviva Policy 24765101CHC/00045

- Employers' Liability: Limit of Indemnity £10m in any one occurrence
- Public Liability: Limit of Indemnity £5m in any one occurrence
- Hire-in Plant Insurance: £50,000.00 any one item;
£250,000.00 any one claim

The current period expires 21/06/12

Professional Indemnity Insurance – RSA Insurance Plc P8531NAECE/1028

- Limit of Indemnity £5,000,000 any one claim

The current period expires 22/07/12

10. OTHER

Any queries concerning the above should be directed to John Roberts at the Gwynedd Archaeological Trust Offices, Garth Road, Bangor. Telephone (01248) 352535ext234.

11. SOURCES CONSULTED

<http://www.britishlistedbuildings.co.uk/wa-4682-pont-lliw-llanuwchllyn>

Evans, R. 2010 *TYWYN COASTAL DEFENCE SCHEME ARCHAEOLOGICAL WATCHING BRIEF*. GAT Project No. G2112

Standard and Guidance for Archaeological Desk-based Assessment (Institute of Field Archaeologists, 1994, rev. 2001 & 2008)

Gwynedd Consultancy Drawings.

Gwynedd Historic Environment Record (HER).

Smith, G.A. 2004 *TYWYN COASTAL PROTECTION SCHEME ARCHAEOLOGICAL ASSESSMENT*. GAT Project No. G1860.



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