A55 NORTH WALES EXPRESSWAY ABER IMPROVEMENTS (GAT 1073)

ARCHAEOLOGICAL ASSESSMENT

INTERIM REPORT NO. 88

Ymddiriedolaeth Archaeolegol Gwynedd Gwynedd Archaeological Trust

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ARCHAEOLOGICAL ASSESSMENT

prepared for Welsh Office Highways Directorate 2nd March 1994

Gwynedd Archaeological Trust Report No. 88

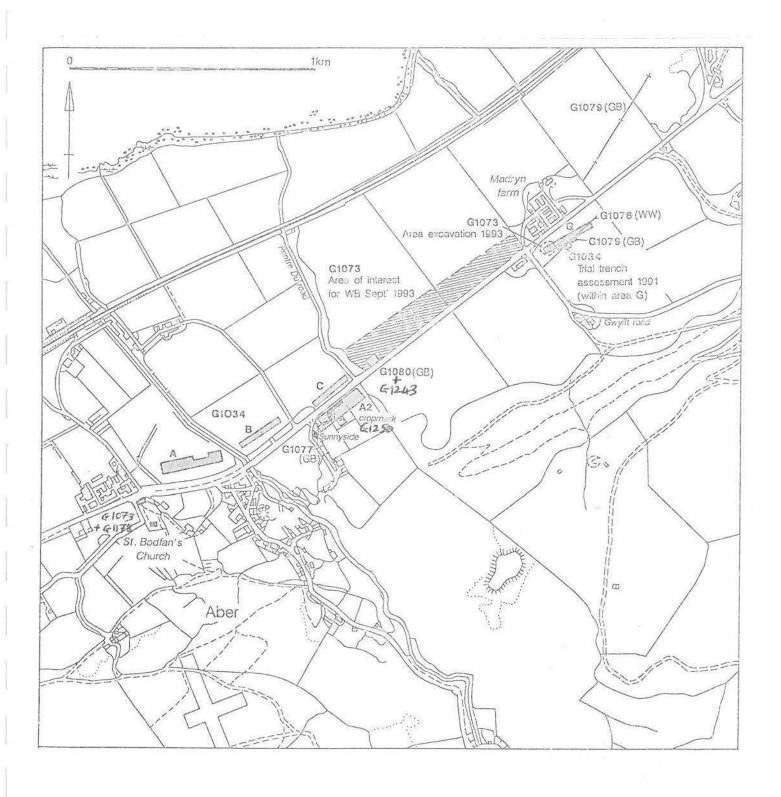


Fig. 1 Location map.

A55 NORTH WALES EXPRESSWAY - ABER IMPROVEMENTS

INTERIM REPORT

1. Background

The Welsh Office Highways Directorate had proposed an improvement of the A55 North Wales Expressway at Aber, linking the existing dual carriageway at College Farm with the Llanfairfechan By-pass at Madryn Farm. Gwynedd Archaeological Trust (GAT) were commissioned to undertake an archaeological assessment of the route on behalf of Welsh Office Highways Directorate.

2. Assessment brief

In summary the following works were required:

(1) Appraisal of existing information by desk top and archive search.

(2) Field investigation of the route by walk-over survey

(3) Geophysical survey

(4) Trial excavation to evaluate the potential of information derived from 1, 2 and 3 above.

The assessment was undertaken during March 1991.

3. Results of the assessment

Historical documentation confirmed Aber as an area of high archaeological significance although no surface evidence of archaeological features or earthworks were recovered from the line of the proposed improvements. Geophysical survey was commissioned in four sample areas and the results of earlier geophysical surveys were assessed. Trial excavations were undertaken to examine anomalies in the geophysical data. The majority of the geophysical anomalies proved to be of geological or recent origin and of no archaeological significance. In one instance, however, trial excavation identified a spread of burnt stone coinciding with a geophysical anomaly on a narrow shelf or cultivation terrace to the south of Madryn farm. These results indicated the presence of a possible 'burnt mound' or cooking place of potentially Bronze Age date and conceivably associated with contemporary settlement in the immediate vicinity.

4. Recommendations

- 1. It was recommended that provision be made for archaeological recording of the burnt stone spread identified in the vicinity of Madryn Farm if preservation *in situ* was not possible.
- 2. It was further recommended that provision for archaeological recording be afforded in the immediate vicinity of the feature noted above.
- 3. It was recommended that the topsoil strip along the proposed route between Madryn farm and Pentre Du be monitored with provision for archaeological recording as appropriate. Access for archaeological assessment had hitherto been denied along this stretch of the route.

5. Further investigation

A work programme was identified to provide for further investigations arising out of the initial assessment. This was to involve

1. Excavation and recording of archaeological features in the vicinity of Madryn farm.

 Watching brief during the topsoil strip of sensitive parts of the route and the recording of archaeological features revealed.

6. Interim report

The following report represents an interim statement on the results of the further investigations identified as necessary and presents a post-excavation research design to bring those results to an acceptable level of report and archive.

7. Additional works outside the Welsh Office Highways Directorate (WOHD) contract

Between the completion of the assessment report in 1991 and the completion of works on the WOHD contract additional recording was undertaken on ancillary activities as follows:

1. G1077 Watching brief during gas pipework at Pen Y Bryn, June 1992

2. G1076 Watching brief on Welsh Water pipeline in vicinity of burnt mound, July 1992

3. G1080 Watching brief during refurbishment of Shell Oil pipeline, September 1992

4. G1079 Watching brief on gas pipe deviations at Madryn Farm, September 1992.

The results of this work will be incorporated in any final report on the archaeological implications of the development as a whole. In particular, the unscheduled disturbance of the burnt mound and its vicinity by deviation of gas pipes in advance of road construction necessitated emergency watching briefs. Information derived from these will influence the results of the main contract work.

8. Archaeological investigations at Madryn farm, February/March 1993

8.1 WORK PROGRAMME AND METHODS

Excavation, monitoring and recording took place in the vicinity of Madryn farm and between Madryn farm and Pentre Du road between February and September 1993. This response was carried out in accordance with a work programme agreed by WOHD as summarised under 5. The timing of the work was determined by the schedules of the main contractor.

- 8.1.1 A watching brief was conducted on topsoil stripping on farmland to the SE of Madryn farm buildings (see fig. 1) on the 10th February 1993 by a two-man team from GAT. During the work, carried out by Hymac with 2.0m wide scraper bucket, the area was closely observed to locate any possible archaeological features. Details of features and stratigraphy were recorded by sketch and written descriptions. A photographic record was also made on selected areas.
- 8.1.2 Between February and March 1993 Stage 1 of the work programme was carried out by a team of GAT personnel to investigate an area to the NW of the burnt mound site (see fig. 1, area A). A total of 180sq.m was cleaned by hand after removal of topsoil and plough soil deposits by machine. A smaller area of c.105 sq.m (see fig. 1, area B) was also investigated to the north of area A.

Following establishment of a site grid, contexts and features were recorded by written

descriptions on standard GAT site forms, scaled plan and section drawings, both black and white and colour transparency film, and sketches and discussion in the site notebook. Location and site plans were produced with Electronic Distance Measuring (EDM) equipment. Samples were recovered from relevant contexts for the purposes of environmental and dating analysis.

All finds were recovered and context located, on-site interpretation and description being made on standard GAT object record forms. The full site record is at present held in archive at GAT headquarters, Bangor.

8.1.3 The conclusion of Stage 2 of the work programme was carried out by a two-man team from GAT in the final week of August 1993. Topsoil stripping of land between Madryn farm and the Pentre Du road on the north side of the present A55 was undertaken by the main contractor by Komatsu earth over with 3.0m wide toothed blade. The area of disturbance was closely monitored to identify and record any archaeological features revealed during the work. Archaeological features were recorded by a combination of written, drawn and photographic record.

8.2. RESULTS OF EXCAVATION AND MONITORING

8.2.1 Watching brief at Gwyllt Road

As part of Stage 2 of the work programme a watching brief was carried out during top-soil stripping of the route of the Gwyllt Road slipway, concentrating intensively on the area designated as 'sensitive' to the NW of the burnt mound site. An average of 0.25m of top-soil was removed over the entire area. A substantial land-drain, running diagonally across the north facing slope in a SE/NW direction, was revealed. This was of a similar nature to those located during the initial assessment of the area. No other features were observed.

Two small trial pits, 2.5m square and up to 1.0m deep, were excavated by machine at either end of the archaeologically sensitive area, to identify the stratigraphic sequence (fig. 1). Both pits revealed a similar sequence of deposits with local variations. The natural subsoil was encountered at between 0.85 and 1.0m depth and was overlain by a stony layer of grey clay containing charcoal flecks. At the south-east end this deposit was recorded as 0.5m thick. Above this charcoal flecked horizon occurred a sequence of plough soil deposits.

Following the contractor's top soil strip, and the archaeological excavation of the two trial pits described above, it was agreed on site that an area 30 x 6m would be cleared by machine to facilitate full excavation.

8.2.2 Excavation

The underlying geology of the area is red northern drift overlying Ordovician rock sediments. The nature of the subsoil varied on the site from a mottled grey boulder clay to stony yellowish brown boulder clay. The natural horizon at this point is at the foot of a gentle slope on the edge of the wide fertile coastal plain.

Occupation evidence was limited to the identification of a small linear slot 4.0 x 0.35m located at the SW corner of the excavation. Apparently much truncated, only a shallow depression in the natural subsoil of 0.3m maximum depth remained. At its western extent the feature appeared to have been cut by Test pit A (excavated during the watching brief to ascertain stratigraphy) and to have been widening. The fills of the slot contained two fragments of pottery and inclusions of charcoal which await analysis.

Immediately to the north of the slot were two shallow scoops each containing frequent charcoal inclusions. Samples for dating purposes were obtained in each case.

An extensive stone spread was identified in the area between the two trial pits. Stratigraphically, this was overlain by a deposit of grey clay-silt. Investigation of the stone spread, including the use of box sections, has led to the interpretation that this feature is probably of natural origin.

The uniform grey clay-silt, decreasing in thickness to the north and west appears to be the 'buried ground surface' identified during assessment and considered to be contemporary with the burnt mound to the SE of the excavated area. Several finds of probable pre-historic date were associated with the surface, including a struck flint, possible hammer stone and fragments of, as yet unidentified, slag and pottery.

Observations carried out during the watching brief on topsoil stripping identified an area requiring further investigation in the NW area of the site. A spread of large stones was revealed upon removal of the topsoil by machine. The group of stones had been thoroughly disturbed during this operation and generally displaced. An approaching drainage trench associated with construction work was to pass through the area of interest. After consultation with the contractors on site it was agreed, having regard to time constraints, that a trench be excavated across the feature by machine. The exercise showed the stone spread to be a disturbance most likely associated with the continuation of land drain 008 in the SE region of the site. The profile recorded in the trench correlated closely to the sequence observed over the rest of the site and included the truncated remains of the land drain cut in line with 008. Two finds were recovered from the grey buried soil layer; a single sherd of pottery (to be identified) and a burnt stone.

8.2.3 Watching brief Madryn farm - Pentre Du road

Observations carried out during topsoil stripping between Madryn farm and Pentre Du road on the north side of the present A55 revealed no archaeological features. Construction work 100m to the SW of Madryn farm involved the stripping of topsoil over a semi-circular area c.80m in length by up to 30m wide (see fig. 1)

Yellowish boulder clay containing occasional spreads of large and medium sized rounded stones underlay 0.30-0.40m of modern ploughsoil. A small flint fragment possibly from a worked stone was recovered from the surface of the natural subsoil (retained for analysis). Other finds were of late post-medieval and modern date. No features were observed during the work.

A thin strip c.100m in length and 4m wide was stripped of topsoil to the NE of the Pentre Du junction adjacent to the present A55 road (see fig. 1). Observations made during the work proved the area to be heavily disturbed by ploughing and possibly during construction of the original A55 road surface. A depth of 0.4m of mixed deposits containing much modern rubbish throughout its depth overlay orange boulder clay, itself containing modern debris (for example, modern sewage pipe fragments) pressed into the surface. The area was stripped to this surface. No features of archaeological significance were identified.

9. Watching brief. Madryn farm - west of Aber church

A watching brief has been maintained on road construction and ancillary works between Madryn farm and the junction with the dual carriageway west of Aber church.

10. St. Bodfan's Church, Aber (Also 4 1178)

Excavations by machine, followed by hand cleaning and recording, were carried out in January 1994 in advance of re-routing the access to Henfordd Road at Aber. Documentary search had identified an earlier, curvilinear, boundary to the churchyard on its northern side with an access to the east of the present access. These elements were still extant in the late 18th century but had been superseded by the early 19th century. The line of the early curvilinear boundary could be traced on the ground, in part as a revetment wall and elsewhere as a turf covered bank. Curvilinear boundaries are typically early elements of churchyard development. The dedication is an early form and the present church at Aber is a replacement of 1878. The proposed re-routing was to impinge on the early boundary and two excavation trenches were cut by machine to record the sequence.

Part of the original access track was identified and recorded. Elements in the make-up of the curvilinear bank were identified which included a rubble and earth base supporting a mortared stone wall. Structural debris, possibly to be associated with the demolition of the earlier church was observed overlying the tail of the bank.

11. Conclusion

Anomalies identified during geophysical survey in the vicinity of Madryn farm have been interpreted during trial excavation as indicating the presence of a possible Bronze Age 'burnt mound' or cooking place. Excavations immediately to the north of this feature recorded an early ground surface, flecked with charcoal, and possibly contemporary with the burnt mound. Other features identified could be shown to be of geological or modern origin.

Top soil stripping between Madryn farm and Pentre Du was monitored and no significant archaeological features were identified.

Archaeological excavation and recording took place in advance of the re-routing of the access to Henfordd road at St. Bodfan's church, Aber. Elements of the early curvilinear churchyard wall and access were identified.

Aber is an area of considerable historical significance. However, the A55 expressway improvements appear not to have had a significant detrimental impact on the archaeological resource.

A55 NORTH WALES EXPRESSWAY ABER IMPROVEMENTS.

Breakdown of time expended on A55 expressway improvements under the headings.

1. Clean and record archaeological features south of Madryn farm

Man days

50 (allocation 45)

2. Watching brief during topsoil strip and recording as appropriate

The following areas were observed and recorded.

General observation of route	man days	2
Gwyllt Road	man days	10
Madryn farm to Pendre Du	man days	4
'Sunnyside' - north of Pen y Bryn	man days	6
St. Bodfan's church (Henfordd access)	man days	8
Total man days 30 (15 team days) - (allow	cation 15 team	days)

A further 2 team days will be required to complete observation of pipe trenches near Sunnyside. New cropmark information in the adjacent field indicates the need for a response here.

3. Preparation of interim report and post-excavation research design. Total man days 8.5 (allocation 10 days)

A55 NORTH WALES EXPRESSWAY - ABER IMPROVEMENTS.

POST EXCAVATION RESEARCH DESIGN

Summary

Anomalies identified during geophysical survey in the vicinity of Madryn farm have been interpreted during trial excavation as indicating the presence of a possible Bronze Age 'burnt mound' or cooking place. Excavations immediately to the north of this feature recorded an early ground surface, flecked with charcoal, and possibly contemporary with the burnt mound. Other features identified could be shown to be of geological or modern origin.

Top soil stripping between Madryn farm and Pentre Du was monitored and no significant archaeological features were identified.

Archaeological excavation and recording took place in advance of the re-routing of the access to Henfordd road at St. Bodfan's church, Aber. Elements of the early curvilinear churchyard wall and access were identified.

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Project records

The project records comprise:

Contexts	50
Plans	15
Sections	15
Photographs B + W	200
Photographs Colour Slide	100
EDM site plans	2
Site notebook, levels notebook	
Geophysical survey data	5 areas
Documentary archive plans	
Estate, tithe, glebe land surveys	
Documention recording previous and	
continuing work in the Aber area	
Finds	21

Pottery: 8 pottery sherds were recovered including 1 medieval green glaze ware, several sherds of course red ware as yet unidentified. Cross-site distribution and context analysis will be undertaken. A catalogue will be prepared and selected items will be illustrated.

Metal Objects: 5 metal objects were recovered including 1 coin dated 1578

Flint: 1 worked flint fragment, and 1 flint/chert core

Stone: Several burnt stones and 1 probable hammer stone

Samples (including C14) 5

A selection of samples were taken comprising 4 bulk samples for possible environmental information and 1 sample of carbonised timber for Carbon 14 dating purposes.

Task breakdown

Anabiga and Data managetica	Ma	an days
Archive and Data preparation Production of catalogue and index of site archive Production B+W photographs) Catalogue Colour Slides) Context formatting and cross reference Preparation and Dispatch of samples Analysis of context relationships, finds distribution Drafting (including finds)	2 1 1 1 2 4	
Evaluation and integration of specialists' reports. Finds: Worked stone and Pottery	1	
Evaluation of site dating Calibration of C14 dates) Assessment of C14) Integration of site dating into the site sequence)	1	
Production of archive report (a) Production of archive report Writing up descriptions, discussion and synthesis Fig. production Photo. production Word processing, text	3 2 1	
production and collation) Draft appraisal and consultation) (b) Editing, draft circulation comment appraisal, corrections final report production) (c) Proof reading)	2	e e
Production of a summary report for publication To include typing, dispatch, etc. Archive record	2 2	

Report summary of headings

At this stage it is only possible to outline the headings which the report is likely to follow. The title, detailed synopsis, length of text and date of publication will be agreed at a later date.

- Background to the project, circumstances of work
- 1.1 The brief
- 2 Archaeological and historical context
- 3 Archaeological assessment
- 3.1 Methodology
- 3.2 Results
- 4 Archaeological excavation and recording
- 4.1 Methodology
- 4.2 Results
- 4.2.1 Madryn farm excavation
- 4.2.2 Madryn farm Pentre Du soil strip

4.2.3 Madryn farm - College farm watching brief
4.2.4 St. Bodfan's church
5 Specialist contribution
6 Conclusions
7 Acknowledgements and references
Appendix. Location and contents of archive

Estimate: 3000 words, 6 figs. 5 plates.

Mandays	25	£3125.00
Specialist report Radio carbon determination		£300.00
Total		£3425.00

