

# Castle Meadow, Beaumaris, Ynys Môn

## Archaeological Mitigation



Ymddiriedolaeth Archaeolegol Gwynedd  
Gwynedd Archaeological Trust



# Castle Meadow, Beaumaris, Ynys Môn

## Archaeological Mitigation

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Front cover image: Topsoil strip of western part of easement (archive reference G2572\_072)

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## **CRYNODEB ANNHECHNEGOL**

*Comisiynwyd Ymddiriedolaeth Archeolegol Gwynedd gan Gyngor Sir Ynys Môn i ymgymryd â lliniaru archeolegol cyn cychwyn cynllun lleddfu llifogydd yn Ddolydd Castell Biwmaris, Ynys Môn. Nodwyd y lliniaru archeolegol olion ffynnon wedi'i gapio gerllaw cafn gwartheg, y ddau yn dyddio o ddiwedd y 19eg ganrif. Fel arall, mae'r ardal sydd wedi'i ymchwilio wedi cael ei ddarfu'n fawr gan waith daear sy'n gysylltiedig â chyfnod cynharach o waith lleddfu llifogydd ac adeiladu maes parcio'r castell oddi ar y B5109.*

## **NON-TECHNICAL SUMMARY**

*Gwynedd Archaeological Trust was commissioned by Cyngor Sir Ynys Môn to undertake archaeological mitigation in advance of a flood alleviation scheme at Castle Meadow Beaumaris, Ynys Môn. The archaeological mitigation identified the remains of a probable capped well adjacent to a cattle trough both of which date from the late 19<sup>th</sup> century. Otherwise the area investigated has been heavily disturbed by groundworks associated with an earlier phase of flood alleviation work and the construction of the castle car and coach park off the B5109.*

# 1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) was commissioned by *Cyngor Sir Ynys Môn* to undertake a programme of archaeological mitigation in advance of a flood alleviation scheme at Beaumaris, Ynys Môn (NGR SH60737632; Figure 01). The archaeological mitigation was undertaken in advance of the construction of two 150 mm flood alleviation culverts and associated pipes and infrastructure located between Castle Meadow, north of Beaumaris Castle (NGR SH60697635), and a pumping station 262m to the southeast (NGR SH60937623), as indicated on CEUK Drawing No CES316/09/01T (Figure 02). The archaeological mitigation comprised a controlled strip, which in this instance was defined as the removal of topsoil and subsoil under archaeological direction until archaeology or glacial deposits were encountered, with the archaeological works being completed before the construction phase starts. The area covered by the controlled strip was to the north of Beaumaris Castle and south of allotments in Castle Meadow (centred on NGR SH60747634). The underlying geology consists of Ordovician Rocks, sedimentary rocks that are shallow-marine in origin. The controlled strip measured a maximum width of 20.0m and was undertaken from the 4<sup>th</sup> to 19<sup>th</sup> October 2018.

The controlled strip was the latest phase in a scheme of archaeological works undertaken for the flood alleviation scheme by GAT. The flood alleviation scheme consisted of various solutions to reduce pluvial and coastal flooding in the town. Some of these had been implemented, including raising the height of the existing sea defences along the A545 between Gallows Point and the slipway east of Townsend Bridge.

The project was monitored by the Gwynedd Archaeological Planning Service (GAPS), who also maintained a monitoring role throughout the programme of archaeological works and were kept informed of the project timetable, progress and results. The controlled strip was completed in accordance with an approved project design prepared by GAT ([Appendix I](#)).

All work was planned, managed and undertaken by GAT in accordance with the following standards and guidance:

- *Standard and Guidance for Archaeological Excavation* (Chartered Institute for Archaeologists, 2014);
- *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (Chartered Institute for Archaeologists, 2014);

- *Management of Archaeological Projects* (English Heritage, 1991);
- *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England, 2015);
- *Historic Environment Record (HER) Guidelines for Archaeological Contractors* (Version 1.3; draft) (Gwynedd Archaeological Trust, 2014); and
- *Guidelines for digital archives* (Royal Commission on Ancient and Historic Monuments of Wales, 2015).

The Historic Environment Record Enquiry Reference Number for this project was GATHER991 and the Event Primary Reference Number was 45303.

Gwynedd Archaeological Trust is certified to ISO 9001:2008 and ISO 14001:2004 (Cert. No. 74180/A/0001/UK/En), a Registered Organisation with the Chartered Institute for Archaeologists (CIfA), and a member of the Federation of Archaeological Managers and Employers (FAME).

## 1.1 Aims and Objectives

The key aims and objectives were to:

- identify and record archaeological activity present on site prior to removal by groundworks. The controlled strip area was adjacent to a medieval scheduled monument (Beaumaris Castle) and the objective was to establish the date and nature of archaeological remains within the mitigation area and assess their implications for understanding the historical development of the area, in conjunction with the known archaeological record; and
- if no archaeological activity is identified, establish why this may be the case.

## 1.2 Acknowledgements

GAT would like to acknowledge the cooperation and support provided by *Cyngor Sir Ynys Môn* and *Coastal Engineering UK Ltd.* during the archaeological mitigation. GAT would also like to acknowledge the services and support provided by *R.G. Hire Ltd.* who provided site plant and security and *Caernarfon Commercials Ltd.* who supplied the mobile welfare unit. GAT would also like to acknowledge the support and guidance provided by GAPS

throughout all stages of the project. In addition, GAT would also like to acknowledge the GAT project team: Stuart Reilly, Bethan Jones and Rob Evans.

## 2 ARCHAEOLOGICAL BACKGROUND

Castle Meadow is located on an area of Ordovician Rocks that comprise a mix of interbedded mudstone and sandstone. The sedimentary bedrock was formed approximately 444 to 485 million years ago in the Ordovician Period. These sedimentary rocks are shallow-marine in origin. They are detrital, ranging from coarse- to fine-grained (locally with some carbonate content) forming interbedded sequences.

The flood alleviation scheme was located within in close proximity to Beaumaris Castle. The Castle represents a prime example of 13<sup>th</sup> century defensive engineering and as such is a Scheduled Ancient Monument (AN001), Grade I Listed Building and forms part of *The Castles and Town Walls of Edward I in Gwynedd* World Heritage Site. The town also lies within the boundary of the Isle of Anglesey Area of Outstanding Natural Beauty (AONB) and the Penmon Landscape of Outstanding Historical Interest (Ref: Penmon HLW (GW) 15 33).

GAT had previously prepared an archaeological assessment of the flood alleviation scheme (GAT Report 1149; October 2013) that was submitted to support planning application 12C444B/FR, and subsequently a Historic Impact Assessment (HIA) that was prepared to assess the impact of the scheme on the statutory and non-statutory designations for the Castle and the town (GAT Report 1200; August 2014). This was followed by an archaeological photographic record and an archaeological watching brief, prior to and during groundworks for the sea defence modifications between The Green (NGR SH60787615) and Gallows Point (NGR SH59777531) (GAT Report 1274; November 2015).

GAT undertook a programme of archaeological mitigation in 2010 during the construction of a new 750mm culvert and drainage system that ran from the junction of Henllys Lane/Wexham Street (NGR SH60307620), across the Castle Meadow and a local playground, and terminated at the Green (NGR SH60807610), covering a distance of 725m (GAT Report 869; September 2010). The section starting from Henllys Lane/Wexham Street across the Castle Meadow and to the local playground was completed as a controlled strip. Two gravel filled modern field drains were identified near the access to Henllys Lane/Wexham Street along with a spread of modern gravel leading towards the entrance way next to Tunnel Lodge (GAT Report 869: 10). Further along the route at NGR SH60477632, a set of linear drainage ditches were identified that included feature [003], a shallow 0.6m wide L-shaped straight sided ditch extant for 13m within the culvert route, followed by a second shallow linear ditch, 0.94m wide and extant for 3m, which terminated at

feature [003]. No datable artefacts or ecofacts were recovered (*ibid.*). At NGR SH60677636, north of Beaumaris Castle, a modern field drain was identified to the west of an existing open culvert along with an area of heavily disturbed ground and building rubble containing post-medieval pottery and clay pipe stems (*ibid.*). Two stone built culverts were also identified: culvert A (only observed within the excavation for the pipe trench) was identified at 1.65m below ground level and orientated on a north-south alignment running towards the castle; it was constructed with a schist type stone with flat and square pieces for the sides and for the capping, with smaller broken up pieces to line its base, and internal dimensions of 0.35m deep by 0.50m wide (*ibid.*); culvert B lay on a north-west south-east alignment and was interpreted as possibly associated with the visible open culvert. The construction of culvert B was similar to culvert A, though it was slightly wider, the internal dimensions being approximately 0.50m high by 0.50m wide (*ibid.*). Both culverts were still active and were interpreted as culverting for a stream previously marked on John Speed's 1610 map as well as drainage of the area into the moat (*ibid.*: 11). The eastern end of the Castle Meadow section included alluvial clays dredged from the castle moat by Cadw in the 1990's, which were deposited there (*ibid.*: 10). The excavations through the playground, which was located outside the Castle curtain walls, consisted of a 122m long and 3m wide trench on a north-south alignment. Below the topsoil was a soft grey/grey brown clay alluvium with no significant inclusions. The left hand side of a pig's jaw and two leg bones (considered to be from the same animal) were recovered from alluvium at a depth of 1m, with showed signs of butchery; no archaeological features were identified (*ibid.*). The results confirmed the trench in this area lay close to or along the line of the original moat for the castle, which is no longer visible at this point, with the deposits representing subsequent filling of the moat and the animal bone suggesting butchery rubbish dumped during the silting up of the moat. No glacial horizons were identified within the confines of the trench. The excavation on the Green consisted of a linear pipe trench approximately 3m wide, with a depth range of 2.5 to 3.0m for a distance of approximately 110m on a southeast to northwest alignment. The pipe trench was characterised by mixed sand and gravel deposits, with nineteenth and twentieth century pottery recovered from the upper layers. No archaeological features were identified and the glacial horizon was not reached. The deposits were interpreted as made ground created from imported material, consistent with the development of the former salt marsh which was levelled, drained and consolidated in the 19th century.

GAT subsequently completed an archaeological evaluation within the playground outside the castle walls (GAT 1276: December 2015). The evaluation trench was located across a proposed route for the Castle Meadow culvert to investigate the infilled moat on the east side of the castle, with the aim to identify the former moat location, profile and infill deposits, as



well as any other archaeological activity that may be present. The aim of the evaluation was to inform the planning decision for the proposed culvert. The trench was located 3.10m west of the 750 mm culvert completed in 2010, where GAT had identified silting deposits associated with the moat. The 2010 project did not identify the moat edge, but the edge was suggested as being 16.0m or less from the east curtain wall based on the results of auger sampling completed by the University of Louisiana in 2003, 29.0m to the north 2003 study. That study analysed the preserved microscopic, aquatic crustaceans (ostracods) within the moat infill as environmental indicators and concluded that the bottom moat infill represented the initial wet moat, the middle portion the connection with nearby seawater, and the top layers the loss of the connection with the nearby Menai Strait. The GAT evaluation trench identified the moat and associated fills at 1.1m below the existing ground level, with the moat edge located 20.0m from the curtain wall of the castle. The base of the moat was not identified within the limit of excavation as it exceeded the safe excavation depth of 2.0m. Within the limit of excavation seven deposits were identified in the moat representing natural silting. The infills were subsequently sealed by a 0.90m thick subsoil deposit that in turn was sealed by the topsoil. It was not possible within the scope of the initial evaluation trenching to identify the environmental factors behind the infilling of the moat, but a palaeoenvironmental sampling programme was completed for GAT by the Environmental Archaeology Consultancy. The sampling programme was completed using augering and core samples, with a view to completing a diagrammatic section of the lower moat fills and the basal profile, along with an interpretive consideration of the sediment based upon the field observations and the logs for each borehole. The sampling programme confirmed that the moat had an essentially flat basal profile, between 2.34 and 2.46m below ground level and that the moat would have been tidal if connected to the sea.

Based on the results from the 2010 mitigation and the 2015 evaluation, it was expected that the current mitigation was located away from the infilled portion of the castle moat. It was thought that the proposed culvert route may encounter drainage activity within Castle Meadow, as well as disturbance from the easement for the 750mm pipe around the existing open culvert and across the western portion of the current mitigation easement (cf. Figure 03), as well as deposits associated with the Cadw dredging works near the large car park close to the castle. The eastern portion of the route terminated north of the Green but it was expected that it would still encounter activity associated with the levelling, draining and consolidation of the salt marsh in the 19th century, prior to the construction of the pumping station, as well as a rising main.

### 3 METHOD STATEMENT

The controlled strip targeted the route of the proposed pipeline as defined on CEUK Drawing No CES316/09/01T (Figure 02) and was focused on the area between the SW6/Cattle drinking trough (NGR SH60687636) and the western edge of the castle car park (NGR SH60797632). It included the 1500mm pipeline (dashed blue), the proposed additional 1500mm pipeline (dashed grey) and the new pipe runs highlighted blue between SW6/Cattle drinking trough and the new intake headwall. The controlled strip measured 20.0m in width and was based on a centreline along the route of the pipelines (Figure 03). The mitigation was undertaken from 4<sup>th</sup> until 19<sup>th</sup> October 2018. The controlled strip did not include the route of the pipeline where it crossed a car park, the A545 road and land to the north of Mount Field (cf. Figure 03). The controlled strip was undertaken by GAT using a 13 tonne tracked excavator supplied and operated by *R.G. Hire Ltd*.

All attendances were recorded using GAT watching brief pro-formas. Photographic images were taken using a digital SLR (Nikon D3000) camera set to maximum resolution in RAW format (3,872 × 2,592; 10.2 effective megapixels), with a photographic record maintained on site using GAT pro-formas and digitised in *Microsoft Access* as part of the fieldwork archive and dissemination process. The archive was prepared in accordance with the Royal Commission on Ancient and Historic Monuments of Wales *Guidelines for digital archives* (2015) and the Gwynedd Archaeological Trust Historic Environment Record *Historic Environment Record (HER) Guidelines for Archaeological Contractors* (Version 1.3; draft). The photographic images were archived in TIFF format using Adobe Photoshop and archive numbering system G2572\_001 to G2572\_097 (cf. [Appendix II](#)).

## 4 RESULTS

### 4.1 Introduction

*Each individual context was given a unique identifying number. Context numbers within square brackets (e.g. [05]) represent cut features, such as the pits and ditches; context numbers within round brackets (e.g. (08)) represent layers, deposits and fills. These are listed in full in Appendix III. Recovered ecofacts and artefacts were given individual identity numbers, and related to the contexts in which they were found; these are listed in full to Appendices V and VI. A stratigraphic matrix detailing the relationships between the contexts is reproduced in Appendix VII. The features are discussed in chronological and numerical sequence.*

### 4.2 Setting

The controlled strip was located within a gently undulating landscape of the Baron Hill estate, in an area of ground that is known as Castle Meadow, between Beaumaris Castle to the south and allotments to the north (Plate 1 & Figure 04). The ground immediately adjacent to the car park and allotments was comparatively level, before gradually sloping south toward the castle moat to form a hollow. The ground to the immediate west of the allotments also gradually sloped to form a hollow around the cattle drinking trough which denoted the western edge of the controlled strip. Access to the field was via an aluminium gate at the southwest corner of the car park.

### 4.3 Results of the controlled strip

The underlying natural (103 & 108) consisted of a firm, cohesive mid orangey brown clay mixed with the occasional angular and sub-rounded stone. The natural was uncovered intermittently across the area of the controlled strip, being noted along the eastern edge adjacent to the car park (Plate 2) and in pockets along the northern edge next to the allotments.

The natural was covered by alluvial deposits (112) located within the hollow adjacent to the castle moat along the southern edge (Plate 3) and (133) the hollow in which the cattle trough was set at the western edge of the controlled strip (Plate 4). The deposit along the southern edge (112) was identified during the excavation of an investigative trench; the details of which are outlined below. The deposit at the western edge of the strip (133) consisted of a fine, compact mid greyish brown silty clay with no inclusions (Figure 04). It had a maximum

visible length north - south of 30.0m, approximate width east - west of 10.0m and depth of 0.50m within the limits of excavation.

Set within the alluvial deposit (133) at the western limit of the controlled strip there was the remnants of a rectangular brick and mortar structure (125) built on top of a stone footing (124) (Plate 5 & Figure 04). The footing (124) was concentrated around the outer edge of (125) (Plates 6 & 7), with a visible length of 5.3m, width of 2.0m and exposed height of 0.3m. The deposit consisted of mid grey small to medium sized locally sourced angular and sub-angular stones of schist and shale set within (133). The stones were used as a solid footing on which to build the brick and mortar structure (125) (Plate 8). The structure was rectangular in plan, with a length of 4.05m, width of 1.30m and maximum depth of 0.18m, being orientated north northwest – south southeast. It consisted of a single course width of brick bonded by a soft, cream coloured lime mortar. The structure was best preserved at the western and southern edges, being disturbed along the northern edge and largely absent along the eastern edge. The individual bricks that made up the structure were on average 0.24m long, 0.08m wide and 0.09m high. The interior of (125) was filled by (126) a compact, coarse deposit of light-mid grey lime mortar mixed with fine slate and pebble gravel; the latter being concentrated at the northern end of (125). It is likely that (124/125) is the remnants of a filled in well as where it is positioned on Castle Meadow coincides with the location of a well that is marked on the current (2013) Ordnance Survey Map.

To the immediate south of (124/125) were the remnants of a field drain comprised of re-used red brick fragments and medium sized angular stones (Plate 9). The drain was set within (133) and had a surviving length of 1.95m, width of 0.4m and height of 0.12m.

Both (124/125) and (127) might relate to the cattle trough located to the immediate west (Plate 10 & Figure 04). The trough is lined by a metre high, roughly coursed partially dilapidated stone wall, which includes Penmon stone in its construction. The bonding, aside from concrete around the pipes evident on the west face, was not clear and may have been eroded with time.

Further to the removal of the topsoil and cut within the underlying clay natural (103) a series of linear features [104], [113], [115], [118], [120] and [122] were identified concentrated along the northern edge of the controlled strip, adjacent to the allotments (Figure 04). The linear [104] had a length of 6.43m, width of 0.58m and depth of 0.12m. The feature was linear in plan with rounded terminals (Plate 11), with the cut having an abrupt break of slope at the top with steep sides and sharp break of slope at the base, which was flat (Plate 12 & Figure 05). It was orientated east – west and was filled by (105) a loose mid-brown sandy silt mixed

with small sub-angular stones and pebbles with the occasional fleck of charcoal. The fill produced fragments of late 19<sup>th</sup> century glazed earthenware and glass, as well as small fragments of animal bone.

To the immediate north and west of [104] was the linear [113] which had an exposed length of 6.70m, width of 0.68m and depth of 0.12m. The feature continued east beyond the limit of excavation. It was linear in plan with a rounded western terminal (Plate 13), the cut having a gradual break of slope at the top with gently sloping sides that merged with the uneven base (Plate 14 & Figure 05). The feature had an east – west axis and was filled by (114) a loose mid-brown sandy silt mixed with small to medium sized angular stones and infrequent flecks of charcoal. Fragments of green and brown glass, animal bone and a decorated clay pipe stem were recovered from (114).

To the west of features [104] and [113] there were a group of three parallel linear features [118], [120] and [122] (Plate 15). The oblong in plan linear [118] had a length of 17.36m, width of 0.77m and depth of 0.13m. The cut had a gradual break of slope at the top, with relatively steep sides and a concave break of slope at the base, which was flat (Plate 16 & Figure 06). It was orientated east – west and was filled by (119) a loose mid-brown sandy silt mixed with small to medium sized sub-angular stones and infrequent flecks of charcoal. The fill produced a small quantity of late 19<sup>th</sup> century sherds of glazed earthenware and small fragments of coke.

To the immediate south of [118] was the east – west orientated linear [120] that had a surviving length of 8.50m, width of 0.51m and depth of 0.08m. The cut was a shallow impression on the ground with a negligible break of slope at the top and gently sloping sides that merged with a flat base (Plate 17 & Figure 06). It was filled by (121) a very loose mid-brown sandy silt mixed with small sub-angular stones, which produced a single small fragment of a clay pipe stem.

To the south of and parallel with [120] was the linear feature [122] with an east – west axis. It had a length of 11.5m, width of 0.51m and depth of 0.13m. The cut had a sharp break of slope at the top with vertical sides and an abrupt break of slope at the base which was flat (Plate 18 & Figure 06). It was filled by (123) a loose, mid-brown sandy silt mixed with occasional small sub-angular stones, from which small sherds of earthenware pottery and a small clay pipe stem were recovered.

During the removal of topsoil it became evident that there was modern disturbance within the area of the controlled strip. To determine the level of disturbance an 18m long by 2.0m wide

trench was machine excavated using a 360° excavator fitted with a toothless bucket under archaeological direction across the width of the controlled strip (Figure 04 & Plate 19). The trench was excavated to a maximum depth of 1.2m, on health and safety grounds it was deemed unsafe to excavate deeper due to the make-up of the ground and possibility of collapse without adequate shoring. This was sufficient depth though to determine the presence of a soakaway [109] and possible stone field drain [11] cut through the underlying clay natural (108) along with an alluvial deposit (112) and two layers of re-deposited natural (106) and (107) (Plates 20-23).

The underlying natural (108) exposed within the investigative trench consisted of a compact, cohesive, wet, fine orange clay mixed with infrequent small stone inclusions and was evident along the majority of the base of the trench. It was partially overlaid by (112) which was concentrated at the southern end of the trench and extended for a visible distance of 6.5m. This deposit consisted of a soft, fine dark grey clayey silt mixed with the occasional small rounded stone. When (112) was initially exposed it gave off a slight smell of ammonia that combined with the colouration and consistency of the deposit would suggest that it is organic rich and may be an alluvial deposit or given its close proximity to the moat of Beaumaris Castle it may be the remnants of the material dredged from the moat in the 1990s. The deposit was sealed beneath (107) a cohesive, fine mid to dark greyish brown silty clay mixed with frequent inclusions of fine gravel, moderate small to medium sized rounded and sub-angular stones. It also had moderate inclusions of fragments of tarmac, lumps of concrete and fragments of red brick. Given its distinctive colouration (107) was clearly visible within the area of the controlled strip once topsoil had been removed. It was concentrated along the southern edge of the eastern half of the controlled strip, with a visible length of 51.5m east - west and width of 15.4m north – south (Figure 04) with an excavated depth of 0.75m in the investigative trench. The deposit was partially overlaid by (106) along its northern edge.

Located at the centre of the trench was [109] a soakaway which cut through (108). It was orientated east – west with an exposed length of 2.0m and width of 2.8m. The soakaway was filled by (110) a loose mid grey pebble gravel underlined by sheets of terram. To the immediate south of [109] there was the remnants of a stone field drain (111) that had an exposed length of 2.0m, width of 0.4m and depth of 0.25m. The drain consisted of loose mid grey large angular stones interspersed with small gravel pebbles. It was orientated east to southeast by west northwest and cut through the upper surface of (108).

The soakaway [109] and drain (111) were sealed beneath (106) a compact, cohesive mid brownish orange clay mixed with moderate small to medium sized sub-angular and rounded

stones. It also included moderate inclusions of fragments of concrete paving slabs, fragments of red brick, strips of terram, along with infrequent inclusions of timber posts and pieces of plastic.

In addition, at the western limit of the controlled strip there was clear evidence for cuts for pipe trenches [128] and [130] (Plates 24 & 25 and Figure 04). The cut [128] was orientated northwest – southeast with an exposed length of 15.6m and width of 1.20m. It extended southeast from the cattle trough to the immediate south of (124/125) and cut through (133) a fine, compact mid greyish brown silty clay alluvial deposit and the upper surface of (108). The pipe cut was backfilled by (129) a loose, coarse mid grey pebble gravel that surrounded a concrete pipe.

To the immediate north of [128] by a distance of 4.0m was the cut [130] which had a visible length of 15.1m and maximum visible width of 4.0m. It had a northwest – southeast axis and cut through (108). The cut was backfilled by (131) a compact, cohesive mottled (mixture of dark brown, mid grey and yellow) silty clay mixed with moderate medium sized angular stones. The upper surface of (131) was cut into by an 'L'-shaped stone drain (132) that had an exposed length of 9.4m and width of 0.70m. It was composed of loose light grey/purple slate waste. The clay to the immediate north and east of [130] was heavily disturbed being mixed with moderate inclusions of terram, plastic and pieces of tarmac; it was identical in make-up to (106), the re-deposited clay identified further east within the controlled strip. Cut [130] and the associated drain (132) are most likely associated with the flood alleviation work undertaken in Castle Meadow in 2010.

The southwestern edge of the controlled strip also incorporated a recently constructed earthen bund that had a northeast – southwest orientation, with a length of 56.0m, width of 7.0m and approximate height of 2.0m (Plate 26). It crosses the hollow located at the western edge of the controlled strip and is intended to prevent excess rain water reaching the castle moat and cause flooding in the town centre of Beaumaris. Due to the purpose of the bund and how it covered a comparatively small area within the controlled strip, after consultation with Cyngor Sir Ynys Môn and GAPS it was decided to leave it in-situ.

There was also evidence for modern disturbance at the eastern edge of the controlled strip. Along the hedge boundary that separated the controlled strip from the adjacent car park, once the topsoil (101) was removed layer (102) was exposed. Layer (102) consisted of a loose mid purple grey crushed slate chippings and gravel mixed with building waste such as fragments of concrete and tarmac (Plate 26). It was exposed across the width of the controlled strip for 20m and extended west for a distance of 8.6m, with a maximum depth of



0.4m. This dump of material is most likely associated with the creation of the castle car park and may have been the temporary compound for these works.

To the immediate west of (102) there was (117) a deposit of loose, fine purple slate waste and gravel (Plate 27). Deposit (117) had an exposed length of 13.5m north – south by 8.5m east – west. Given its location along the eastern edge of (107) this is most likely material deposited to assist drainage further to groundworks associated with either the car park or the flood alleviation work from 2010.



## 5 CONCLUSION

Gwynedd Archaeological Trust (GAT) was commissioned by *Cyngor Sir Ynys Môn* to undertake a programme of archaeological mitigation in advance of a flood alleviation scheme at Beaumaris, Ynys Môn. The archaeological mitigation comprised a controlled strip, which in this instance was defined as the removal of topsoil and subsoil under archaeological direction until archaeology or glacial deposits were encountered, with the archaeological works being completed before the commencement of the construction phase of the scheme.

The archaeological mitigation uncovered limited archaeological features in the form of shallow linears ([113], [118], [120] and [122]) adjacent to the allotments and a probable capped well (124/125) located at the western edge of the controlled strip. Some of the linear features like [112] may represent the remnants of a hedgerow, given the composition of the fill with fine plant roots. While others such as [120] and [122] given their shallow depths and being of an equidistant, gradual curvilinear nature would strongly suggest that they are the remnants of rutting caused by the tracks of excavators or other forms of plant that crossed Castle Meadow during the 2010 flood alleviation works. In addition, given the level of modern disturbance noted within the boundary of the controlled strip and the fact that all of the linear features were cut within (106), a redeposited layer of natural, it is highly likely that none of these features are archaeological in nature and it is coincidental that some of the fills produced sherds of earthenware and pieces of glass.

The stone and brick feature (124/125) is likely to be a capped well, in part as the location of this feature coincides with a well that is marked on the 2013 Ordnance Survey Map (see Figure 03). The structure was first identified on the ground during the strip and map exercise undertaken by GAT in 2010 as part of the archaeological mitigation for a new culvert and drainage system at Beaumaris. During this phase of archaeological investigation it was described as an '*area of heavily disturbed ground and building rubble was identified west of the open culvert*' i.e. the cattle trough (M. Jones & A. Davidson, 2010, 10). Given the location and composition of the rubble seen in Plate 11 of GAT Report 869, this is clearly the upper surface of (124/125). The composition of the brick and lime mortar (124/125) that make-up the walls are of late 19<sup>th</sup> or early 20<sup>th</sup> century date and it is not coincidence that it is in close proximity to the cattle trough which, aside from later disturbance from [128], may be of a roughly comparable date. This interpretation is supported by map evidence as both features are first noted on the Second Edition Ordnance Survey Map of 1900 (Figure 07). Given that they do not appear on the First Edition Ordnance Survey Map of 1889 (Figure 08) it can be

construed that the well and trough were constructed during the last decade of the 19<sup>th</sup> century.

The controlled strip confirms that this section of Castle Meadow has been extensively disturbed in recent times for the 2010 flood alleviation ground works and the subsequent reinstatement of the ground. Based on this observation, there are limited archaeological remains within the controlled strip area and as such there should be no requirement for further archaeological involvement in the controlled strip area during the construction work of the scheme. The remainder of the scheme route may be subject to an archaeological watching brief during the construction phase of the groundworks.

## 6 SOURCES CONSULTED

1. Chartered Institute for Archaeologists, 2014, Standard and Guidance for Archaeological Excavation;
2. Chartered Institute for Archaeologists, 2014, Standard and guidance for the collection, documentation, conservation and research of archaeological materials;
3. Coastal Engineering UK Ltd, Drawing No. CES316/09/01T;
4. English Heritage, 1991, Management of Archaeological Projects (MAP2);
5. English Heritage, 2011, Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation;
6. Evans, R. 2013. Proposed Flood Alleviation Scheme, Beaumaris: Archaeological Assessment Gwynedd Archaeological Trust Report 1149;
7. Gwynedd Archaeological Trust, 2014, Historic Environment Record (HER) Guidelines for Archaeological Contractors (Version 1.3; draft);
8. Historic England, 2015, Management of Research Projects in the Historic Environment (MoRPHE);
9. Jones, M and Davidson, A. Rev. 2010. Beaumaris Drainage Work, Beaumaris, Anglesey: Archaeological Mitigation. Gwynedd Archaeological Trust Report 869;
10. Parry, I. 2014. Proposed Flood Alleviation Scheme, Beaumaris: Heritage Impact Assessment Gwynedd Archaeological Trust Report 1200;
11. Royal Commission on Ancient and Historic Monuments of Wales, 2015, Guidelines for digital archives;
12. Smith, S.G., Davidson, J., Evans, R., Oates, A.M.O., Owen, K., Parry, L.W. 2015. Proposed Flood Alleviation Scheme, Beaumaris: Area 3, Area 4 and Area 5 : Archaeological Photographic Record and Archaeological Watching Brief. Gwynedd Archaeological Trust Report 1274.

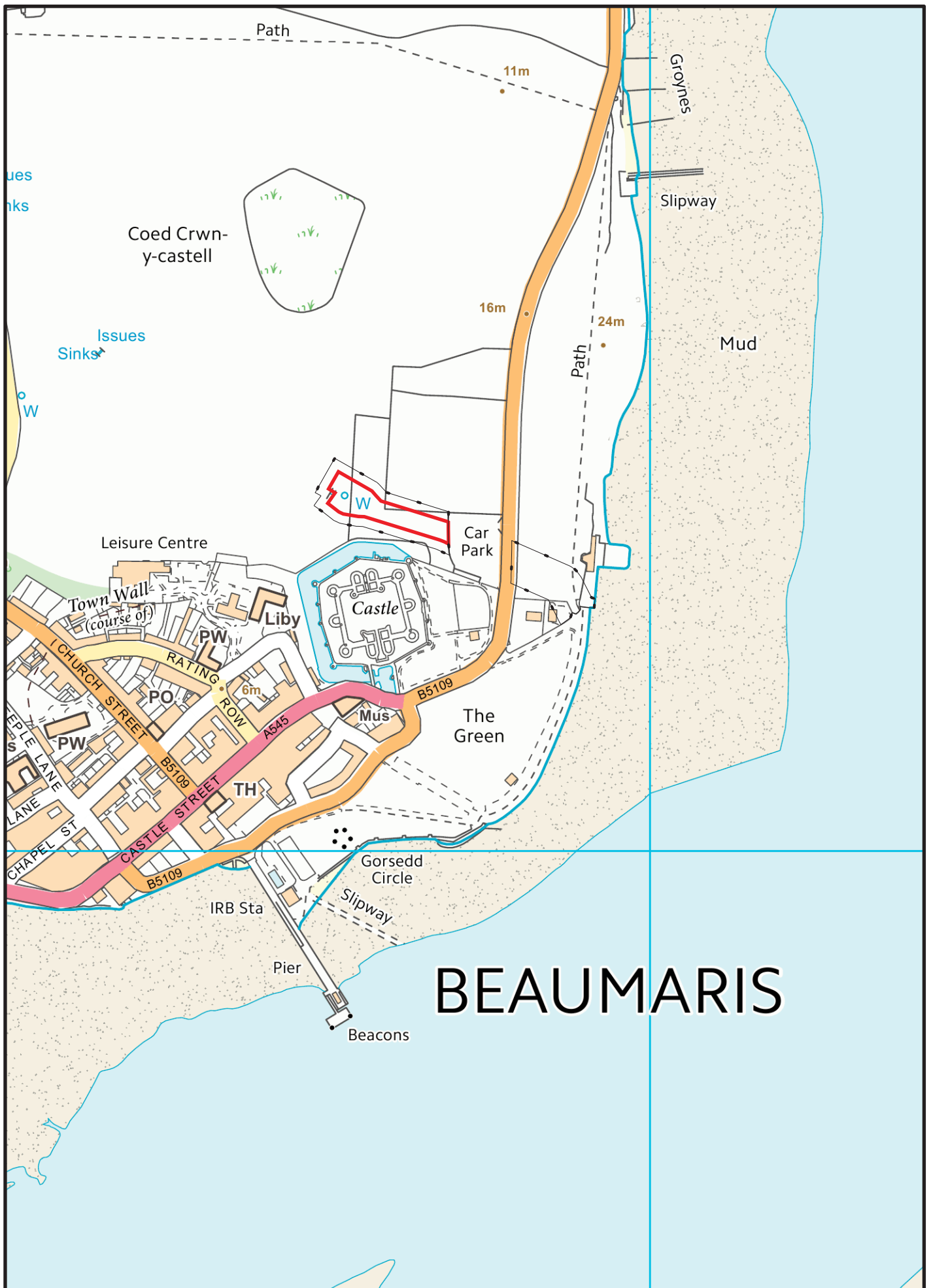
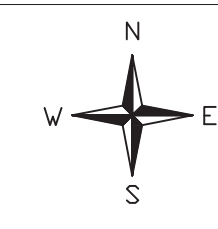


FIGURE 01: Location Map. The controlled strip zone highlighted in red. Based on Ordnance Survey 1:10000 County Series Map Sheets SH67. Scale 1:5000 @ A4.  
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Scale: 1:500 @A1



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Notes

1. This drawing shall be read in conjunction with all related drawings and specifications. All discrepancies shall be referred to the Project Manager for decision before proceeding.
2. Do not scale from this drawing.
3. All dimensions in metres unless otherwise stated.
4. All levels are provided in metres to ordnance datum (OD).
5. All levels relate to "existing" ground levels.
6. All drainage to be laid in accordance with sewers for adoption 7th edition and the civil engineering specification for the water industry 7th edition.
7. Alignment of new pipe and location of manholes approximate - to be confirmed during detailed design.
8. Exact pipe sizes and intake and outfall arrangements to be confirmed.
9. Proposed access routes to be reinforced with livestock friendly grass reinforcement system (Specification to be confirmed/agreed with landowner).

Key

Project

Beaumaris Flood Alleviation Works

Title

Castle Meadow Flood Relief Culvert GA

Drawn by: Sean Roberts

Checked by:

Scale: As Shown (@ A1)

Date: 7th August 2018

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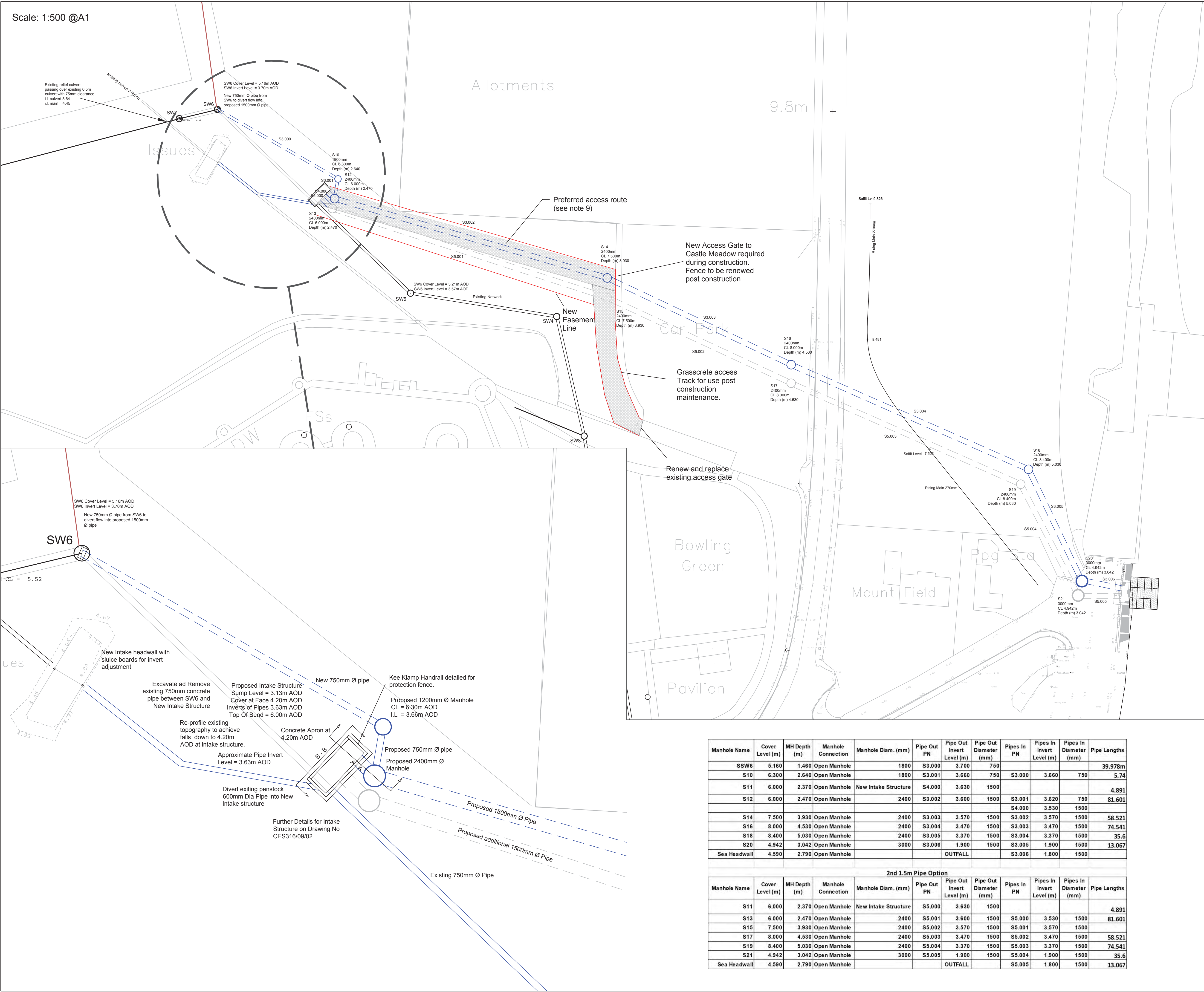
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Client

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Council Offices,  
Llangefni,  
Anglesey,  
LL77 7TW



Project ref: 66/1310 Drawing No: CES316/09/01T Rev: A



Manhole Name	Cover Level (m)	MH Depth (m)	Manhole Connection	Manhole Diam. (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Pipe Lengths
SSW6	5.160	1.460	Open Manhole	1800	S3.000	3.700	750				39.978m
S10	6.300	2.640	Open Manhole	1800	S3.001	3.660	750	S3.000	3.660	750	5.74
S11	6.000	2.370	Open Manhole	New Intake Structure	S4.000	3.630	1500				4.891
S12	6.000	2.470	Open Manhole	2400	S3.002	3.600	1500	S3.001	3.620	750	81.601
								S4.000	3.530	1500	
S14	7.500	3.930	Open Manhole	2400	S3.003	3.570	1500	S3.002	3.570	1500	58.521
S16	8.000	4.530	Open Manhole	2400	S3.004	3.470	1500	S3.003	3.470	1500	74.541
S18	8.400	5.030	Open Manhole	2400	S3.005	3.370	1500	S3.004	3.370	1500	35.6
S20	4.942	3.042	Open Manhole	3000	S3.006	1.900	1500	S3.005	1.900	1500	13.067
Sea Headwall	4.590	2.780	Open Manhole			OUTFALL		S3.006	1.800	1500	
2nd 1.5m Pipe Option											
Manhole Name	Cover Level (m)	MH Depth (m)	Manhole Connection	Manhole Diam. (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Pipe Lengths
S11	6.000	2.370	Open Manhole	New Intake Structure	S5.000	3.630	1500				4.891
S13	6.000	2.470	Open Manhole	2400	S5.001	3.600	1500	S5.000	3.530	1500	81.601
S15	7.500	3.930	Open Manhole	2400	S5.002	3.570	1500	S5.001	3.570	1500	
S17	8.000	4.530	Open Manhole	2400	S5.003	3.470	1500	S5.002	3.470	1500	58.521
S19	8.400	5.030	Open Manhole	2400	S5.004	3.370	1500	S5.003	3.370	1500	74.541
S21	4.942	3.042	Open Manhole	3000	S5.005	1.900	1500	S5.004	1.900	1500	35.6
Sea Headwall	4.590	2.780	Open Manhole			OUTFALL		S5.005	1.800	1500	13.067





FIGURE 04

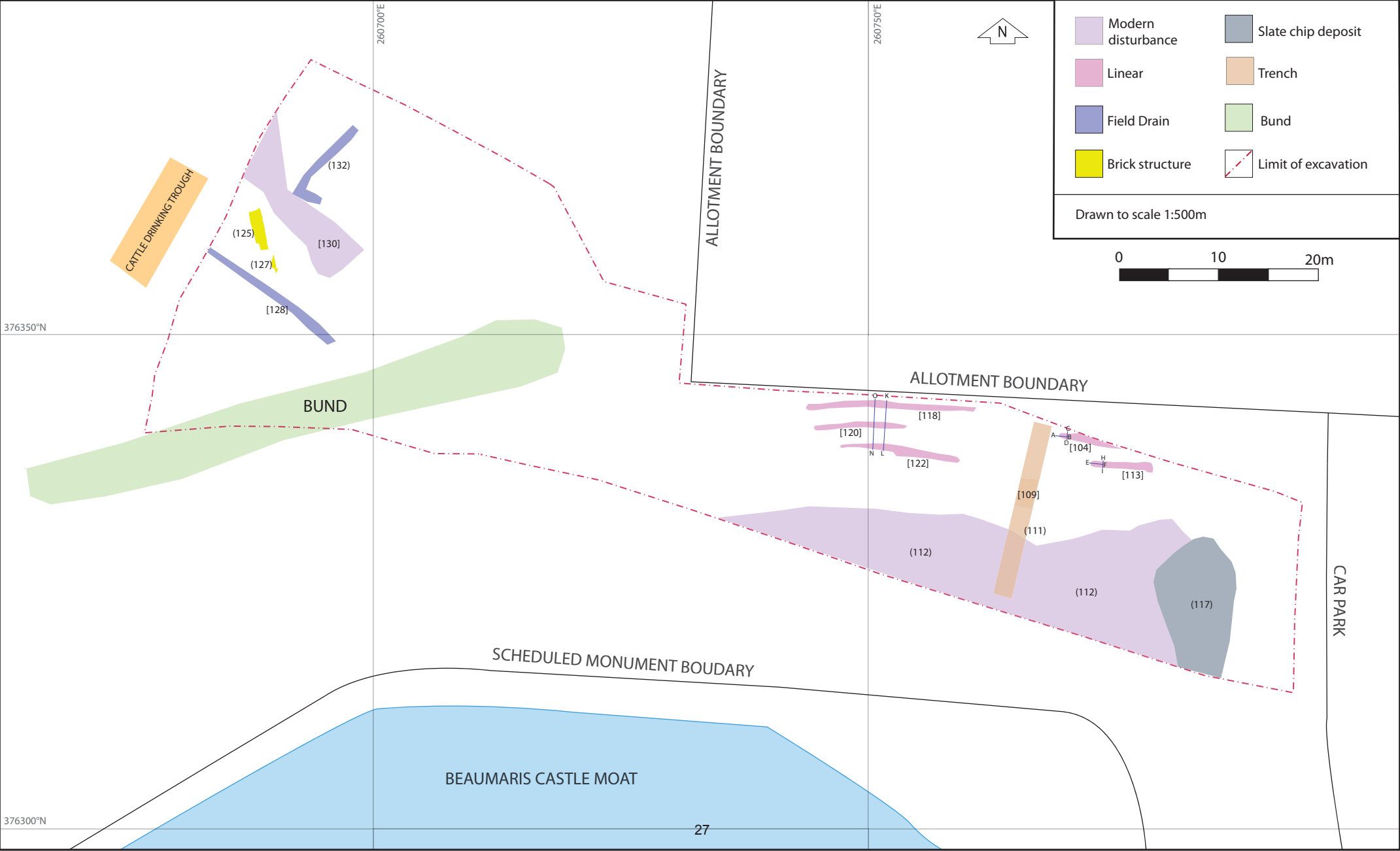
Plan of archaeological features and modern disturbance within the controlled strip of Castle Meadow, Beaumaris.



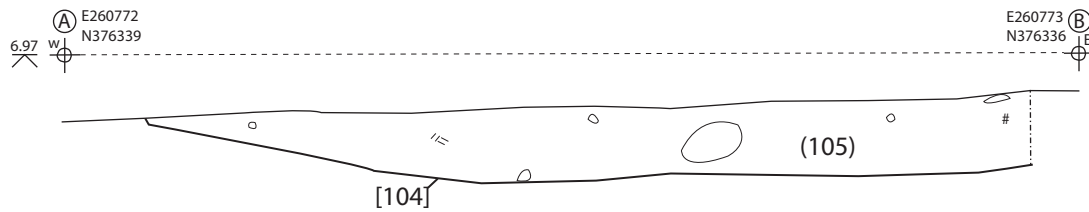
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- |                    |                     |
|--------------------|---------------------|
| Modern disturbance | Slate chip deposit  |
| Linear             | Trench              |
| Field Drain        | Bund                |
| Brick structure    | Limit of excavation |

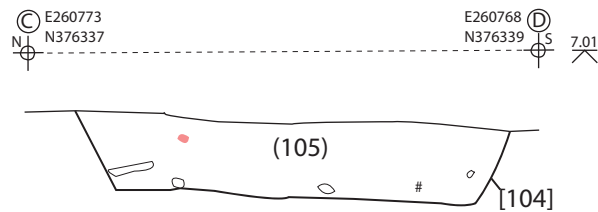
Drawn to scale 1:500m



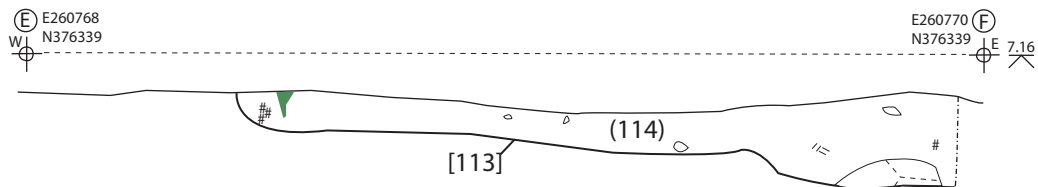
### South facing section through terminus of linear [104]



### West facing section through terminus of linear [104]



### South facing section through terminus slot of linear [113]



### West facing section through terminus slot of linear [113]

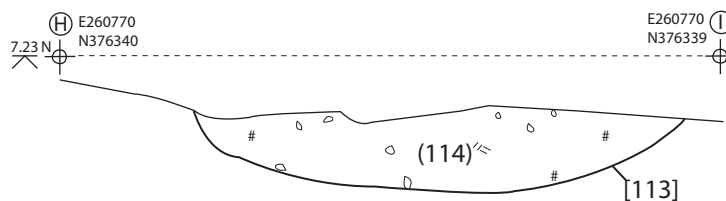


FIGURE 05

Sections through terminus slots for linears [104] and [105].

#### KEY

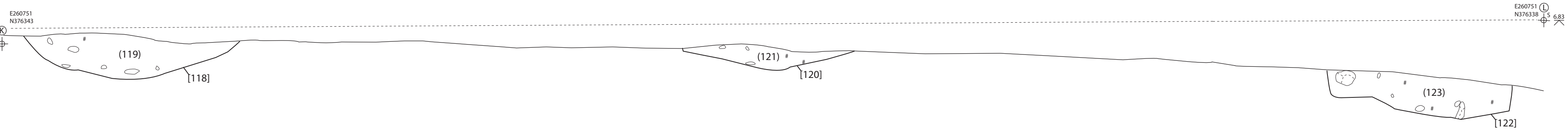
- |             |          |
|-------------|----------|
| Stone       | Glass    |
| CBM         | Charcoal |
| Animal bone | Coal     |



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East facing sections through linears [118], [120] and [122]. Scale 1;10, DWG#03



West facing sections through linears [118], [120] and [122], Scale 1:10, DWG#08.

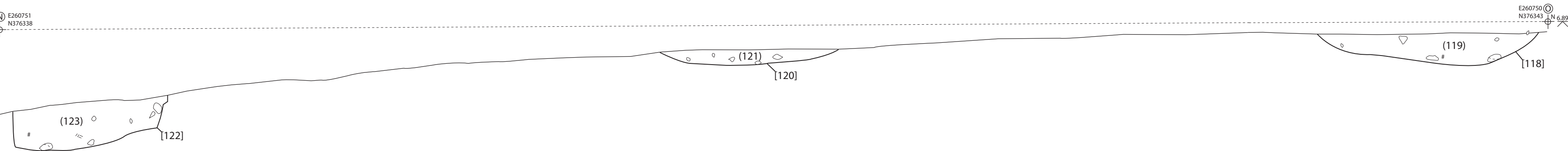


FIGURE 06  
East and West facing sections through linears [118], [120] and [122]



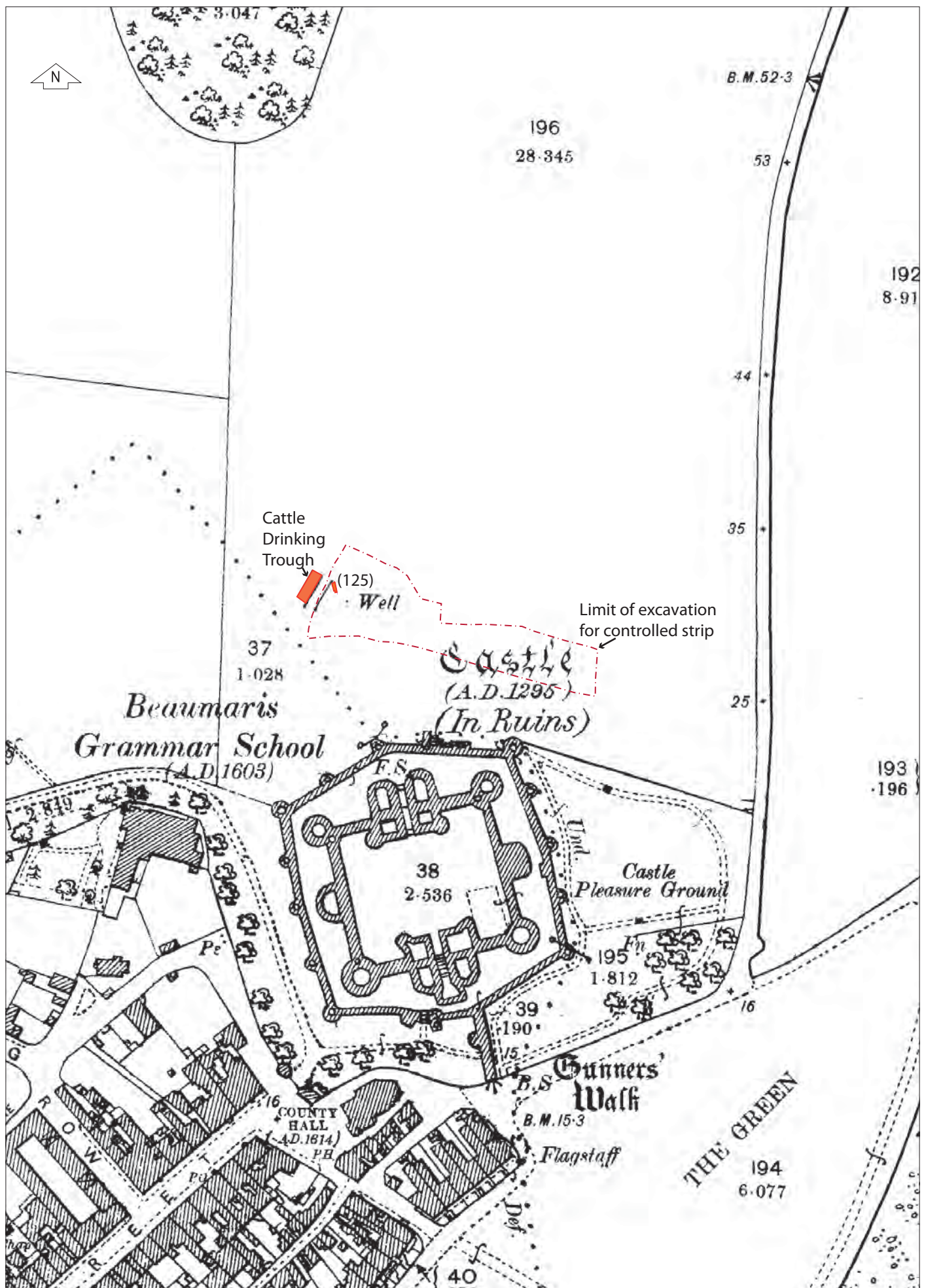


Figure 07 Second Edition Ordnance Survey Map of 1900, Anglesey Sheet XX.13. Scale 1:2000 @A4.



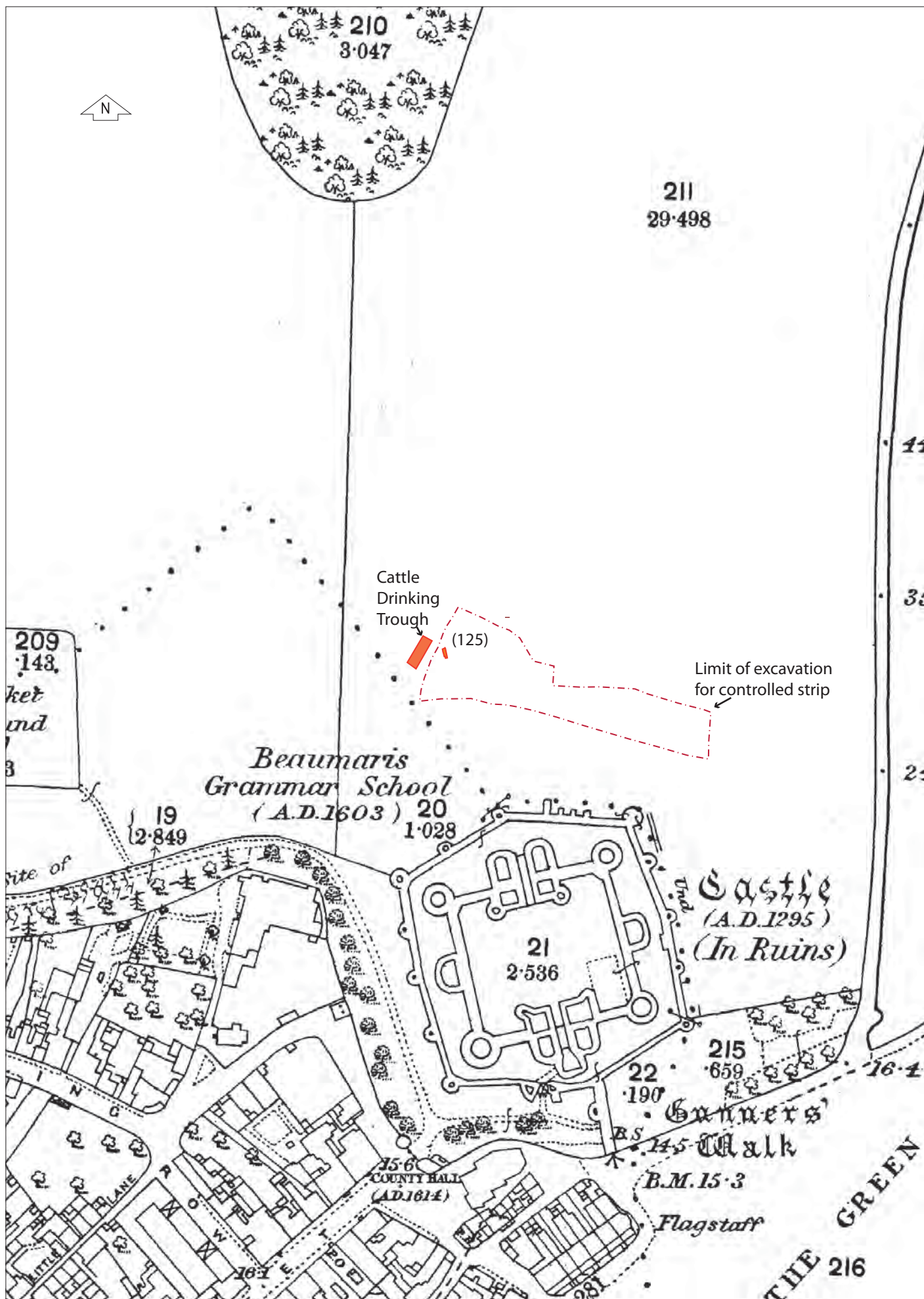


Figure 08 First Edition Ordnance Survey Map of 1889, Anglesey Sheet XX.13. Scale 1:2000 @A4.





**Plate 1: Overhead view of controlled strip area at Castle Meadow, with Beaumaris Castle to the south and allotments to the north; scale: n/a ( Source and Copyright: Anglesey Aerial Photography).**



**Plate 2: General view of strip onto the glacial horizon of the first strip at eastern end of strip area; scale: 1x1m (archive reference: G2572\_027).**





Plate 3: Post-excavation shot of investigative trench; scale: 1x1m; 2x1m  
(archive reference: G2572\_046).



Plate 4: Post-excavation shot of easement from western edge; scale: not used  
(archive reference: G2572\_094).





Plate 5: Location shot of Contexts (124), (125), (126), (127), (128), (129), (130) and (131); scale: 1x1m; 2x1m (archive reference: G2572\_084).



Plate 6: Post-excavation shot of Contexts (124), (125) and (126); scale: 1x1m; 2x1m (archive reference: G2572\_087).





Plate 7: Post-excavation shot of Contexts (124), (125) and (126); scale: 1x1m; 2x1m  
(archive reference: G2572\_088).



Plate 8: Post-excavation shot of Contexts (124) and (125); scale: 1x1m  
(archive reference: G2572\_090).





Plate 9: Post-excavation shot of Context (127); scale: 1x1m (archive reference: G2572\_089).



Plate 10: Overhead view of a rectangular brick and mortar structure (125) built on top of a stone footing (124) alongside the cattle drinking trough; scale: n/am (Source and Copyright: Anglesey Aerial Photography).





Plate 11: View of linear feature [Context 104], pre-excavation; scale: 1x1m (archive reference: G2572\_033).



Plate 12: West-facing section of terminus slot in linear feature [104], close-up; scale: 1x1m (archive reference: G2572\_045).





Plate 13: Pre-excavation plan of linear feature, Context [113]; scale: 1x1m (archive reference: G2572\_056).



Plate 14: View of west facing section of sloth through terminus of linear feature, Context [113]; scale: 1x1m (archive reference: G2572\_069).





Plate 15: Pre-excavation shot of linear features [118] (north) and [122] (south); scale: 2x1m (archive reference: G2572\_071).



Plate 16: West-facing section of linear feature, Context [118]; scale: 1x1m (archive reference: G2572\_073).





Plate 17: East-facing section of linear feature, Context [120]; scale: 1x1m  
(archive reference: G2572\_075).



Plate 18: West-facing section of linear feature, Context [122]; scale: 1x1m  
(archive reference: G2572\_078).





Plate 19: Post-excavation shot of investigative trench; scale: 1x1m; 2x1m  
(archive reference: G2572\_042).

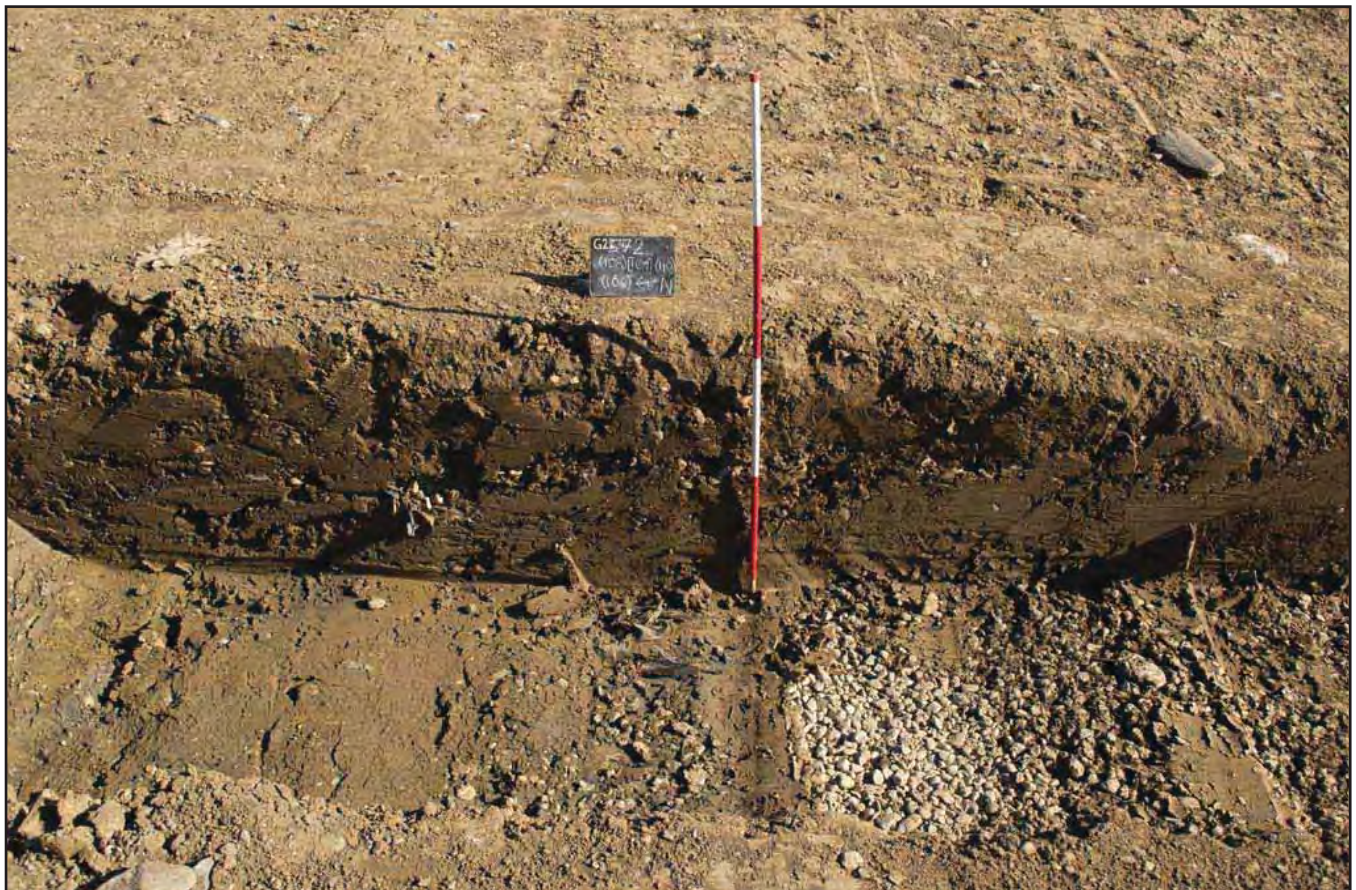


Plate 20: West-facing section of investigative trench: Contexts (106), (108), [109], (110) and (111);  
scale: 1x2m (archive reference: G2572\_051).





Plate 21: West-facing section of investigative trench: Contexts (106), (107) and (112); scale: 1x2m (archive reference: G2572\_053).



Plate 22: Post-excitation shot of soakaway [109] & (110) in investigative trench; scale: 1x1m; 2x1m (archive reference: G2572\_049).





Plate 23: West-facing section of investigative trench: Contexts (106), (108), [109], (110) and (111); scale: 1x2m (archive reference: G2572\_052).



Plate 24: Post-excavation shot of Contexts [130], (131) and (132); scale: 1x1m; 2x1m (archive reference: G2572\_091).





Plate 25: Location shot of Contexts (124), (125), (126) and (127); scale: 1x1m; 2x1m (archive reference: G2572\_082).



Plate 26: Pre-excavation shot of the bund; scale 1x1m (archive reference: G2572\_061).





Plate 27: General view of possible former area of hard standing at the eastern end of the strip; scale: 2x1m (archive reference: G2572\_024).



Plate 28: Post topsoil strip view of fine gravel deposit for drainage (117); scale 1x1m; 2x1m (archive reference: G2572\_066).

## **APPENDIX I**

**Reproduction of approved project design prepared by the Gwynedd Archaeological Trust, September 2018.**

**CASTLE MEADOW,  
BEAUMARIS, YNYS MÔN**

**WRITTEN SCHEME OF INVESTIGATION FOR  
ARCHAEOLOGICAL MITIGATION**

**Prepared for**




*Cyngor Sir Ynys Môn*

**September 2018**



Ymddiriedolaeth Archaeolegol Gwynedd  
Gwynedd Archaeological Trust



Approvals Table				
	Role	Printed Name	Signature	Date
Originated by	Document Author	JOHN ROBERTS		19/09/18
Reviewed by	Document Reviewer	STUART REILLY		19/09/18
Approved by	Principal Archaeologist	JOHN ROBERTS		19/09/18

Revision History			
Rev No.	Summary of Changes	Ref Section	Purpose of Issue

All GAT staff should sign their copy to confirm the project specification is read and understood and retain a copy of the specification for the duration of their involvement with the project. On completion, the specification should be retained with the project archive:

Name

Signature

Date

**CASTLE MEADOW,  
BEAUMARIS, YNYS MÔN**

**WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL  
MITIGATION**

Prepared for *Cyngor Sir Ynys Môn*, September 2018

Historic Environment Record Event Primary Reference Number 45303

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# 1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been asked by *Cyngor Sir Ynys Môn* to undertake a programme of archaeological mitigation in advance of a flood alleviation scheme at Beaumaris, Ynys Môn (NGR SH60737632). The scheme includes the construction of two 150mm flood alleviation culverts and associated pipes and infrastructure located between Castle Meadow, north of Beaumaris Castle (NGR SH60697635), and a pumping station 262m to the southeast (NGR SH60937623), as indicated on CEUK Drawing No CES316/09/01T (Figure 02). The archaeological mitigation will comprise a controlled strip, which in this instance is defined as the removal of topsoil and subsoil under archaeological direction until archaeology or glacial deposits are encountered, with the archaeological works being completed before the construction phase starts. The controlled strip will measure 20.0m in width and will be undertaken from the 1<sup>st</sup> October 2018, for an expected duration of 3 weeks.

The controlled strip is the latest phase in a scheme of archaeological works undertaken for the flood alleviation scheme by GAT. The flood alleviation scheme consists of a suite of measures which act to reduce pluvial and coastal flooding in the town. Some measures have already been implemented, including raising the height of the existing sea defences along the A545 between Gallows Point and the slipway east of Townsend Bridge.

The project will be monitored by the Gwynedd Archaeological Planning Service (GAPS). *The content of this WSI and all subsequent reporting by GAT must be approved by GAPS prior to final issue.* GAPS will maintain a monitoring role throughout the programme of archaeological works and will be kept informed of the project timetable, progress and results. The role of GAPS in this project will be acknowledged in all subsequent reporting.

All work will be planned, managed and undertaken by Gwynedd Archaeological Trust in accordance with the following standards and guidance:

- *Standard and Guidance for Archaeological Excavation* (Chartered Institute for Archaeologists, 2014);
- *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (Chartered Institute for Archaeologists, 2014);
- *Management of Archaeological Projects* (English Heritage, 1991);



- *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England, 2015);
- *Historic Environment Record (HER) Guidelines for Archaeological Contractors* (Version 1.3; draft) (Gwynedd Archaeological Trust, 2014); and
- *Guidelines for digital archives* (Royal Commission on Ancient and Historic Monuments of Wales, 2015).

The Historic Environment Record Event Primary Reference Number for this project is 45303.

Gwynedd Archaeological Trust is certified to ISO 9001:2008 and ISO 14001:2004 (Cert. No. 74180/A/0001/UK/En), a Registered Organisation with the Chartered Institute for Archaeologists (CIfA), and a member of the Federation of Archaeological Managers and Employers (FAME).

## **1.1 Aims and Objectives**

The key aims and objectives are to:

- identify and record archaeological activity present on site prior to removal by groundworks. The controlled strip area is adjacent to a medieval scheduled monument (Beaumaris Castle) and the objective would be to establish the date and nature of archaeological remains within the mitigation area and assess their implications for understanding the historical development of the area, in conjunction with the known archaeological record; and
- if no archaeological activity is identified, establish why this may be the case.

## 2 ARCHAEOLOGICAL BACKGROUND

The flood alleviation scheme is located within in close proximity to Beaumaris Castle. The Castle represents a prime example of 13th century defensive engineering and as such is a Scheduled Ancient Monument (AN001), Grade I Listed Building and forms part of *The Castles and Town Walls of Edward I in Gwynedd* World Heritage Site. The town also lies within the boundary of the Isle of Anglesey Area of Outstanding Natural Beauty (AONB) and the Penmon Landscape of Outstanding Historical Interest (Ref: Penmon HLW (GW) 15 33).

GAT has previously prepared an archaeological assessment of the flood alleviation scheme (GAT Report 1149; October 2013) that was submitted to support planning application 12C444B/FR, and subsequently a Historic Impact Assessment (HIA) that was prepared to assess the impact of the scheme on the statutory and non-statutory designations for the Castle and the town (GAT Report 1200; August 2014). This was followed by an archaeological photographic record and an archaeological watching brief, prior to and during groundworks for the sea defence modifications between The Green (NGR SH60787615) and Gallows Point (NGR SH59777531) (GAT Report 1274; November 2015).

GAT undertook a programme of archaeological mitigation in 2010 during the construction of a new 750mm culvert and drainage system that ran from the junction of Henllys Lane/Wexham Street (NGR SH60307620), across the Castle Meadow and a local playground, and terminated at the Green (NGR SH60807610), covering a distance of 725m (GAT Report 869; September 2010). The section starting from Henllys Lane/Wexham Street across the Castle Meadow and to the local playground was completed as a controlled strip. Two gravel filled modern field drains were identified near the access to Henllys Lane/Wexham Street along with a spread of modern gravel leading towards the entrance way next to Tunnel Lodge (GAT Report 869: 10). Further along the route at NGR SH60477632, a set of linear drainage ditches were identified that included feature [003], a shallow 0.6m wide L-shaped straight sided ditch extant for 13m within the culvert route, followed by a second shallow linear ditch, 0.94m wide and extant for 3m, which terminated at feature [003]. No datable artefacts or ecofacts were recovered (*ibid.*). At NGR SH60677636, north of Beaumaris Castle, a modern field drain was identified to the west of an existing open culvert along with an area of heavily disturbed ground and building rubble containing post-medieval pottery and clay pipe stems (*ibid.*). Two stone built culverts were also identified: culvert A (only observed within the excavation for the pipe trench) was identified at 1.65m below ground level and orientated on a north-south alignment running towards the

castle; it was constructed with a schist type stone with flat and square pieces for the sides and for the capping, with smaller broken up pieces to line its base, and internal dimensions of 0.35m deep by 0.50m wide (*ibid.*); culvert B lay on a north-west south-east alignment and was interpreted as possibly associated with the visible open culvert. The construction of culvert B was similar to culvert A, though it was slightly wider, the internal dimensions being approximately 0.50m high by 0.50m wide (*ibid.*). Both culverts were still active and were interpreted as culverting for a stream previously marked on John Speed's 1610 map as well as drainage of the area into the moat (*ibid.*: 11). The eastern end of the Castle Meadow section included alluvial clays dredged from the castle moat by Cadw in the 1990's, which were deposited there (*ibid.*: 10). The excavations through the playground, which was located outside the Castle curtain walls, consisted of a 122m long and 3m wide trench on a north-south alignment. Below the topsoil was a soft grey/grey brown clay alluvium with no significant inclusions. The left hand side of a pig's jaw and two leg bones (considered to be from the same animal) were recovered from alluvium at a depth of 1m, with showed signs of butchery; no archaeological features were identified (*ibid.*). The results confirmed the trench in this area lay close to or along the line of the original moat for the castle, which is no longer visible at this point, with the deposits representing subsequent filling of the moat and the animal bone suggesting butchery rubbish dumped during the silting up of the moat. No glacial horizons were identified within the confines of the trench. The excavation on the Green consisted of a linear pipe trench approximately 3m wide, with a depth range of 2.5 to 3.0m for a distance of approximately 110m on a southeast to northwest alignment. The pipe trench was characterised by mixed sand and gravel deposits, with nineteenth and twentieth century pottery recovered from the upper layers. No archaeological features were identified and the glacial horizon was not reached. The deposits were interpreted as made ground created from imported material, consistent with the development of the former salt marsh which was levelled, drained and consolidated in the 19th century.

GAT subsequently completed an archaeological evaluation within the playground outside the castle walls (GAT 1276: December 2015). The evaluation trench was located across a proposed route for the Castle Meadow culvert to investigate the infilled moat on the east side of the castle, with the aim to identify the former moat location, profile and infill deposits, as well as any other archaeological activity that may be present. The aim of the evaluation was to inform the planning decision for the proposed culvert. The trench was located 3.10m west of the 750mm culvert completed in 2010, where GAT had identified silting deposits associated with the moat. The 2010 project did not identify the moat edge, but the edge was suggested as being 16.0m or less from the east curtain wall based on the results of auger sampling completed by the University of Louisiana in 2003, 29.0m to the north 2003 study.

That study analysed the preserved microscopic, aquatic crustaceans (ostracods) within the moat infill as environmental indicators and concluded that the bottom moat infill represented the initial wet moat, the middle portion the connection with nearby seawater, and the top layers the loss of the connection with the nearby Menai Strait. The GAT evaluation trench identified the moat and associated fills at 1.1m below the existing ground level, with the moat edge located 20.0m from the curtain wall of the castle. The base of the moat was not identified within the limit of excavation as it exceeded the safe excavation depth of 2.0m. Within the limit of excavation seven deposits were identified in the moat representing natural silting. The infills were subsequently sealed by a 0.90m thick subsoil deposit that in turn was sealed by the topsoil. It was not possible within the scope of the initial evaluation trenching to identify the environmental factors behind the infilling of the moat, but a palaeoenvironmental sampling programme was completed for GAT by the Environmental Archaeology Consultancy. The sampling programme was completed using augering and core samples, with a view to completing a diagrammatic section of the lower moat fills and the basal profile, along with an interpretive consideration of the sediment based upon the field observations and the logs for each borehole. The sampling programme confirmed that the moat had an essentially flat basal profile, between 2.34 and 2.46m below ground level and that the moat would have been tidal if connected to the sea.

Based on the results from the 2010 mitigation and the 2015 evaluation, it is expected that the current mitigation will be located away from the infilled portion of the castle moat. The proposed culvert route is may encounter drainage activity within Castle Meadow, as well as disturbance from the easement for the 750mm pipe around the existing open culvert and across western portion of the current mitigation easement (cf. Figure 03) and deposits associated with the Cadw dredging works near the large car park close to the castle. The eastern portion of the route will terminate north of the Green but may still encounter activity associated with the levelling, draining and consolidation of the salt marsh in the 19th century, prior to the construction of the pumping station, as well as a rising main.

### 3 METHOD STATEMENT

#### 3.1 Introduction

The controlled strip will target the route of the proposed pipeline as defined on CEUK Drawing No CES316/09/01T (Figure 02) and will include the 1500mm pipeline (dashed blue), the proposed additional 1500mm pipeline (dashed grey) and the new pipe runs highlighted blue between SW6/Cattle drinking trough and the new intake headwall. The controlled strip will measure 20.0m in width and will be based on a centreline along the route of the pipelines (Figure 03); the controlled strip will be located within a larger fenced easement that will measure 40.0m in width, 20.0m either side of the centreline (Figure 03). The mitigation will be undertaken from 1<sup>st</sup> October 2018 for a duration of three weeks. The controlled strip does not include the route of the pipeline where it crosses the car park or the A545 road (cf. Figure 03).

The controlled strip will be undertaken by GAT using a 13 tonne tracked excavator supplied and operated by *R.G. Hire Ltd.* Welfare will also be supplied by GAT using *Caernarfon Commercial Ltd.* and will comprise a Groundhog mobile welfare unit suitable for the project size. Fencing will be supplied and installed by *R.G. Hire Ltd.* The client, *Cyngor Sir Ynys Môn*, is responsible for arranging and agreeing land access with the relevant parties. GAT will be responsible for site health and safety; the project is defined as 'pre-construction archaeological investigations' within Construction (Design and Management) Regulations (CDM 2015) and is not classed as 'construction work' within the defined meaning, and is therefore not subject to the CDM regulations when undertaken as a stand-alone element prior to the construction phase of a project. Service plans will be required from relevant utility companies before attending site. If overhead lines are present a GS6 Survey for safe working practices in the vicinity of overhead services may be required and goalposts will be erected and utilised as specified in the GS6 Survey to provide a safe corridor for plant movement under overhead lines. Liaison with *Cyngor Sir Ynys Môn* and *Dŵr Cymru* will also be required to work safely in proximity to the rising main at the eastern end of the site (cf. Figure 03).

## 3.2 Fieldwork Methodology

- A pre-start condition survey will be completed by GAT comprising a written description of existing site access and ground conditions. A photographic record will be completed as part of the condition survey;
- The demarcated easement route and pipeline route centreline will be surveyed in advance by GAT staff using a Trimble R8 GNSS/R6/5800 GPS receiver (<10cm accuracy). The completed controlled strip route will subsequently be surveyed using the Trimble R8.
- The mitigation area will be scanned with a cable avoidance tool by a suitably qualified operative prior to opening to determine the presence or absence of any services. In support of this, existing service drawings will also be consulted;
- The excavation areas will be opened using a 13 tonne excavator fitted with a toothless bucket and excavated in controlled layers. Turf/topsoil, subsoil and subsequent layers / deposits will be stored in separate bunds within the easement;
- Excavation by machine will continue until the first significant archaeological horizon, or the glacial horizon, whichever is encountered first;
- No reinstatement is required;
- All attendances, subsurface activity, contexts records, registers of artefacts and ecofacts will be recorded using GAT pro-formas (Appendix I; Appendix II);
- A record will be made on GAT pro-formas of the topsoil and subsoil depths, as well as the composition of the glacial horizon. All encountered subsurface features will be recorded on GAT pro-formas with detailed notations and will be recorded photographically with an appropriate scale, located via GPS and a measured survey completed, either hand drawn or using a Trimble R8 GPS unit;
- Photographic images will be taken using a digital SLR (Nikon D40) camera set to maximum resolution (3008 × 2000 6.1 effective megapixels) in RAW format and will be converted to TIFF and JPEG format for archiving using Adobe Photoshop; a photographic record will maintained on site using GAT pro-formas ([Appendix I](#)) and digitised in Microsoft Access as part of the fieldwork archive and dissemination process. The archive numbering system will start from G2572\_001. Photographic ID

boards will be used where practical and include information on project code, context number or numbers and orientation of image;

- All archaeological features/deposits/structures encountered will be manually cleaned and examined to determine extent, function, date and relationship to adjacent features. Features, including pits and postholes, will be subject to an initial 50% sample by volume and 100% for any deposits directly relating to funerary and domestic activity (e.g. burials, walls, hearths, occupation layers). A minimum of 10% of linear features will be excavated to provide stratigraphic relationships, to characterise feature morphology and to recover artefactual and ecofactual material. If discrete features are identified, these will be 100% excavated. Any features that comprise a spread of material rather than a cut feature, will be completed in quadrants (if fully extant within controlled strip area) or 100% excavated if present as a discrete spread. Specific feature strategies may also be confirmed with GAPS during the mitigation. *In the event of the identification of extensive/complex remains (for example burials, structures or preserved wooden or organic artefacts), additional time, resourcing and costs may be required for GAT to complete an appropriate programme of works;*
- All sections and plans to be drawn at a minimum 1:10 scale using GAT A4 or A2 proforma permatrace;
- Should dateable artefacts, human remains or ecofacts be recovered, an **interim report** will be submitted summarising the results of the programme of targeted excavation, along with recommendations for any subsequent post-excavation assessment in line with the MAP2 process. *Additional time, resourcing and costs will be required to undertake any post-excavation programme of works.*



### **3.3 Ecofacts**

Should any deposits deemed suitable for dating be identified, they will be taken from sealed contexts, with not less than 40 litres for bulk samples (or 100% if the feature is smaller). The sampling strategy will be undertaken in accordance with the principles set out in *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage, 2011). Recourse will be made to relevant specialists for palaeoenvironmental analysis and dating. Any required specialists will be consulted during the watching brief to advise GAT on a sampling strategy. For any ecofact samples taken from human burials, this will be completed in accordance with an appointed osteologist's guidance.

### 3.4 Human Remains

If any human remains identified are to be excavated, and cannot be preserved in situ this will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a Ministry of Justice licence is required under Section 25 of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. In accordance with the Ministry of Justice licence, recovered remains will be reburied once the investigation and/or assessment/analysis are complete.

Non-fragmented skeletal remains will be excavated using wooden tools and collected and stored in polyethylene bags (with appropriate references for context, grave number, et al) and placed in a lidded cardboard archive box (note: separate boxes for each grave) and stored in a suitable manner within GAT premises. If significant quantities of human remains are encountered, a human osteologist should be contacted and appointed to advise the team during the fieldwork. The osteologist will be an external appointment: Dr. Genevieve Tellier | Tel: 01286 238827 | email: [northwalesosteology@outlook.com](mailto:northwalesosteology@outlook.com) who will assist in devising the excavation, recording and sampling strategy for features containing human remains. The osteologist should also help to ensure that adequate post-excavation processing of human remains is carried out so that the material is in a fit state for assessment during the post-excavation stage. For inhumations, this will involve washing, drying, marking and packing.

If human remains are recovered that are deemed suitable for further assessment/analysis, this will be completed in accordance with the osteologist's requirements and with *Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports* (Chartered Institute for Archaeologists, 2017).

### 3.5 Artefacts

Diagnostic artefacts will be retained for further examination and identification. Pottery sherds of 19<sup>th</sup> and 20<sup>th</sup> century date will be examined on site and the context from which they were retrieved noted but the sherds will not be retained. The artefacts will be treated according to guidelines issued by the UK Institute of Conservation, in particular the advice provided within *First Aid for Finds* (Watkinson and Neal, 2001).

Any waterlogged artefacts (e.g. wood or leather) that are to be recovered for post-excavation assessment and analysis will be processed in accordance with *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage, 2011) and specifically in accordance with Brunning and Watson (2010) for waterlogged wood and English Heritage (2012) for waterlogged leather. In such cases an external specialist will be contacted to agree an appropriate sampling and recovery strategy: Lucy Whittingham | AOC Archaeology| Tel: 0208 843 7380 | email: [lucy.whittingham@aocarchaeology.com](mailto:lucy.whittingham@aocarchaeology.com)

All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Oriel Ynys Môn, Rhosmeirch, Llangefni, LL77 7TQ) where they can receive specialist treatment and study. Access to finds must be granted to the Trust for a reasonable period to allow for analysis and for study and publication as necessary. Trust staff will undertake initial identification, 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.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown, on whose behalf the National Museums and Galleries of Wales acts as advisor on technical matters, and may be the recipient body for the objects.

The National Museums and Galleries of Wales will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

GAT will contact the landowner (via *Cyngor Sir Ynys Môn*) for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Oriel Ynys Môn, Rhosmeirch, Llangefni, LL77 7TQ). A GAT produced pro-forma will be issued to the

landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. If artefacts are transferred to Oriel Ynys Mon, this must be in accordance with the Oriel Ynys Mon – *Guidelines for the preparation and deposition of archaeological archive* (2012).

### 3.6 Fieldwork Archiving

Following the completion of the fieldwork, a programme of fieldwork archiving will be completed based on following task list;

1. Pro-formas: all cross referenced and complete;
2. Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;
3. Sections: all cross referenced and complete;
4. Survey data: downloaded using a Computer Aided Design package;
5. Plans: all cross referenced and complete;
6. Artefacts (if relevant): quantified and identified; register completed;
7. Ecofacts (if relevant): quantified and register completed;
8. Context register (if relevant): quantified and register completed;

All data will be processed, final illustrations will be compiled and a report will be produced which will detail and synthesise the results.

### 3.7 Monitoring Arrangements

The GAPS Archaeologist will need to be informed of the project timetable and of the subsequent progress and findings. This will allow the GAPS Archaeologist time to arrange monitoring visits and attend site meetings (if required) and enable discussion about the need or otherwise for FAWDs (if required) as features of potential archaeological significance are encountered. The curator contact details are:

- Jenny Emmett [jenny.emmett@heneb.co.uk](mailto:jenny.emmett@heneb.co.uk) | 01248 370926; and
- Ashley Batten [ashley.batten@heneb.co.uk](mailto:ashley.batten@heneb.co.uk) | 01248 370926



### 3.8 PROCESSING DATA, ILLUSTRATION, REPORT AND ARCHIVING

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

1. Non-technical summary
2. Introduction
3. Background
4. Methodology
5. Results
6. Conclusions and further recommendations
7. List of sources consulted.
8. Appendix I – approved GAT project specification
9. Appendix II – photographic metadata
10. Appendix III – context register
11. Appendix IV – ecofact register
12. Appendix V – artefact register

Should dateable artefacts and ecofacts be recovered, an **interim report** will be submitted summarising the results, along with an assessment of potential for analysis project design (in line with the MAP2 process).

Illustrations will include plans of the location, site plans and elevations. Historical maps, when appropriate and if copyright permissions allow, will be included. A draft copy of the report will be sent to the regional curatorial archaeologist (GAPS) and to the client prior to production of the final report.

## 4 DISSEMINATION AND ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. The programme of targeted excavation outlined in this project specification will commence in October 2018. A draft report (or interim report) will be submitted within one month of fieldwork completion (November 2018); a final report will be submitted to the regional Historic Environment Record within six months of project completion (May 2019).

The following dissemination will apply:

- A paper report(s) plus digital report(s) will be provided to the client/consultant and GAPS (draft report then final report);
- A paper report plus a digital report will be provided to the regional Historic Environment Record, Gwynedd Archaeological Trust; this will be submitted within six months of project completion (final report only), along with any relevant, digital information such as the project database, GIS table(s) and photographs. All digital datasets submitted will conform to the required standards set out in Gwynedd Archaeological Trust's *Historic Environment Record (HER) Guidelines for Archaeological Contractors* (Version 1.3; draft);
- A digital report and archive (including photographic and drawn) data will be provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. Digital information will include the photographic archive and associated metadata;

Dependent on the results, a summary note or a specific article will be included in the Council for British Archaeology Wales publication *Archaeology in Wales*. This shall be agreed with GAPS, and client in advance of publication along with all publication content. GAPS' involvement in the project will be acknowledged therein.

## **5 HISTORIC ENVIRONMENT RECORD**

In line with the regional Historic Environment Record (HER) requirements, the HER has been contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and a HER Enquiry Form has been completed and submitted. The HER Enquiry Reference Number for this project is GATHER991 and the Event Primary Reference Number is 45303.

## **6 PERSONNEL**

The project will be managed by John Roberts, Principal Archaeologist GAT Contracts Section with attendances on-site undertaken by a GAT Senior Archaeologist and GAT Project Archaeologists. The Senior Archaeologist and Project Archaeologists will be responsible for the targeted excavation programme, including all field management duties, e.g., GAPS liaison, main contractor liaison, osteologist or palaeo-environmentalist liaison (if relevant). The Senior Archaeologist and Project Archaeologists will be responsible for completing all on site pro-formas and the fieldwork archive itemised in Sec. 4.7. A Senior Archaeologist and a Project Archaeologist will also be responsible for submitting a draft final report (or interim report) for project manager review and approval. The report will then be submitted as per the arrangements defined in Sec. 5.



## **7 HEALTH AND SAFETY**

The GAT Project Archaeologist(s) will be CSCS certified. Copies of the site specific risk assessment will be supplied to the client and sub-contractor prior to the start of fieldwork. Any risks and hazards will be indicated prior to the start of work via a submitted risk assessment. All GAT staff will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and hard hat.

## **8 SOCIAL MEDIA**

One of the key aims in the GAT mission statement is to improve the understanding, conservation and promotion of the historic environment in our area and inform and educate the wider public. To help achieve this, GAT maintains an active social media presence and seeks all opportunities to promote our projects and results. With permission, GAT would like the opportunity to promote our work on this scheme through our social media platforms. This could include social media postings during our attendance on site as well as any postings to highlight results. In all instances, approval will be sought from client prior to any postings.

## **9 INSURANCE**

### **9.1 Public/Products Liability**

Limit of Indemnity- £5,000,000 any one event in respect of Public Liability

INSURER Aviva Insurance Limited

POLICY TYPE Public Liability

POLICY NUMBER 24765101CHC/UN/000375

EXPIRY DATE 21/06/2019

### **9.2 Employers Liability**

Limit of Indemnity- £10,000,000 any one occurrence.

The cover has been issued on the insurers standard policy form and is subject to their usual terms and conditions. A copy of the policy wording is available on request.

INSURER Aviva Insurance Limited

POLICY TYPE Employers Liability

POLICY NUMBER 24765101 CHC / UN/000375

EXPIRY DATE 21/06/2019

### **9.3 Professional Indemnity**

Limit of Indemnity- £5,000,000 in respect of each and every claim

INSURER Hiscox Insurance Company Limited

POLICY TYPE Professional Indemnity

POLICY NUMBER 9446015

EXPIRY DATE 22/07/2019

## 10 SOURCES CONSULTED

1. Brunning, R and Watson, J 2010, Waterlogged Wood: Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood (3<sup>rd</sup> edition)
2. Chartered Institute for Archaeologists, 2014, Standard and Guidance for Archaeological Excavation
3. Chartered Institute for Archaeologists, 2014, Standard and guidance for the collection, documentation, conservation and research of archaeological materials
4. Coastal Engineering UK Ltd, Drawing No. CES316/09/01T
5. English Heritage, 1991, Management of Archaeological Projects (MAP2)
6. English Heritage, 2011, Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation
7. English Heritage, 2012, Waterlogged Organic Artefacts, Guidelines on their Recovery, Analysis and Conservation
8. Evans, R. 2013. Proposed Flood Alleviation Scheme, Beaumaris: Archaeological Assessment Gwynedd Archaeological Trust Report 1149
9. Gwynedd Archaeological Trust, 2014, Historic Environment Record (HER) Guidelines for Archaeological Contractors (Version 1.3; draft)
10. Historic England, 2004, Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports
11. Historic England, 2015, Management of Research Projects in the Historic Environment (MoRPHE)
12. Jones, M and Davidson, A. Rev. 2010. Beaumaris Drainage Work, Beaumaris, Anglesey: Archaeological Mitigation. Gwynedd Archaeological Trust Report 869
13. Oriel Ynys Mon, 2012, Guidelines for the preparation and deposition of archaeological archives
14. Parry, I. 2014. Proposed Flood Alleviation Scheme, Beaumaris: Heritage Impact Assessment Gwynedd Archaeological Trust Report 1200
15. Royal Commission on Ancient and Historic Monuments of Wales, 2015, Guidelines for digital archives
16. Smith, S.G., Davidson, J., Evans, R., Oates, A.M.O., Owen, K., Parry, L.W. 2015. Proposed Flood Alleviation Scheme, Beaumaris: Area 3, Area 4 and Area 5: Archaeological Photographic Record and Archaeological Watching Brief. Gwynedd Archaeological Trust Report 1274.
17. Watkinson, D and Neal, V, 2001, First aid for finds (3rd edition).



## **FIGURE 01**

**Location Map. Proposed controlled strip zone highlighted red.**

**Based on Ordnance Survey 1:10000 County Series Map Sheets SH67.**

**Scale 1:5000 @ A4. © Crown Copyright. All Right Reserved; licence number AI100020895.**

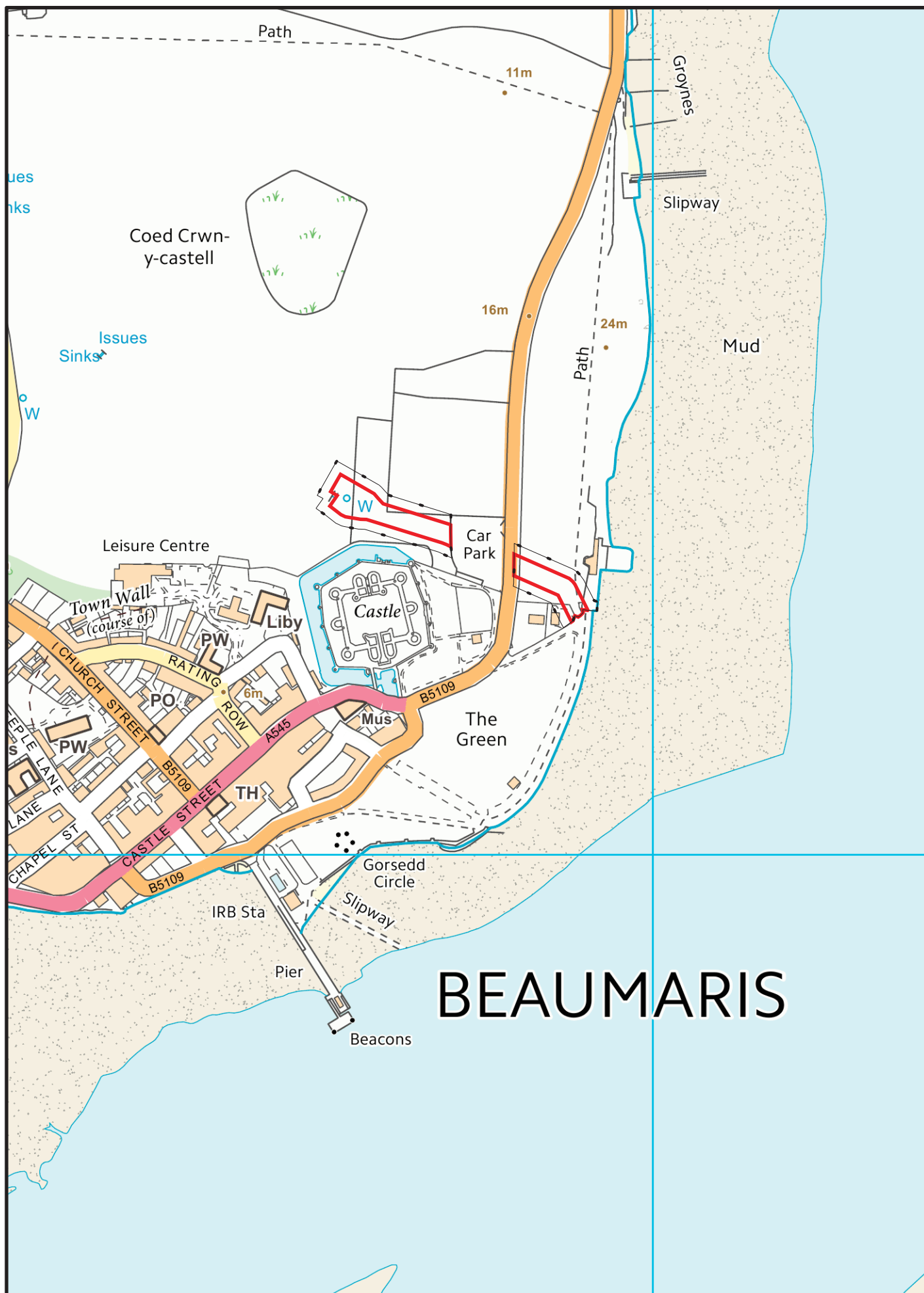


FIGURE 01: Location Map. Proposed controlled strip zone highlighted red. Based on Ordnance Survey 1:10000 County Series Map Sheets SH67. Scale 1:5000 @ A4.

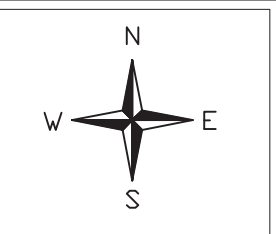
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## **FIGURE 02**

**Reproduction of CEUK Drawing No CES316/09/01T**



Scale: 1:500 @A1



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Arolwg Ordans 100023412  
© Crown copyright and database rights 2013  
Ordnance Survey 100023412  
Ni chaniateir i chi gopio, io-dryddedu, rhannu neu  
werthu unrhyw ran o'r data yma i drydydd parti mewn  
unrhyw ffurf.  
You are not permitted to copy, sub-licence, distribute  
or sell any of this data to third parties in any form

#### Notes

1. This drawing shall be read in conjunction with all related drawings and specifications. All discrepancies shall be referred to the Project Manager for decision before proceeding.
2. Do not scale from this drawing.
3. All dimensions in metres unless otherwise stated.
4. All levels are provided in metres to ordnance datum (OD).
5. All levels relate to "existing" ground levels.
6. All drainage to be laid in accordance with sewers for adoption 7th edition and the civil engineering specification for the water industry 7th edition.
7. Alignment of new pipe and location of manholes approximate - to be confirmed during detailed design.
8. Exact pipe sizes and intake and outfall arrangements to be confirmed.
9. Proposed access routes to be reinforced with livestock friendly grass reinforcement system (Specification to be confirmed/agreed with landowner).

#### Key

#### Project

### Beaumaris Flood Alleviation Works

#### Title

### Castle Meadow Flood Relief Culvert GA

Drawn by: Sean Roberts

Checked by:

Scale: As Shown (@ A1)

Date: 7th August 2018

#### Consultant/Designers

Coastal Engineering UK Ltd,  
26 Rhodesway,  
Wirral CH60 2UB



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Tel: 0151 558 1956

Civil Engineering Solutions,  
Bryn Meurig, Lombard Street,  
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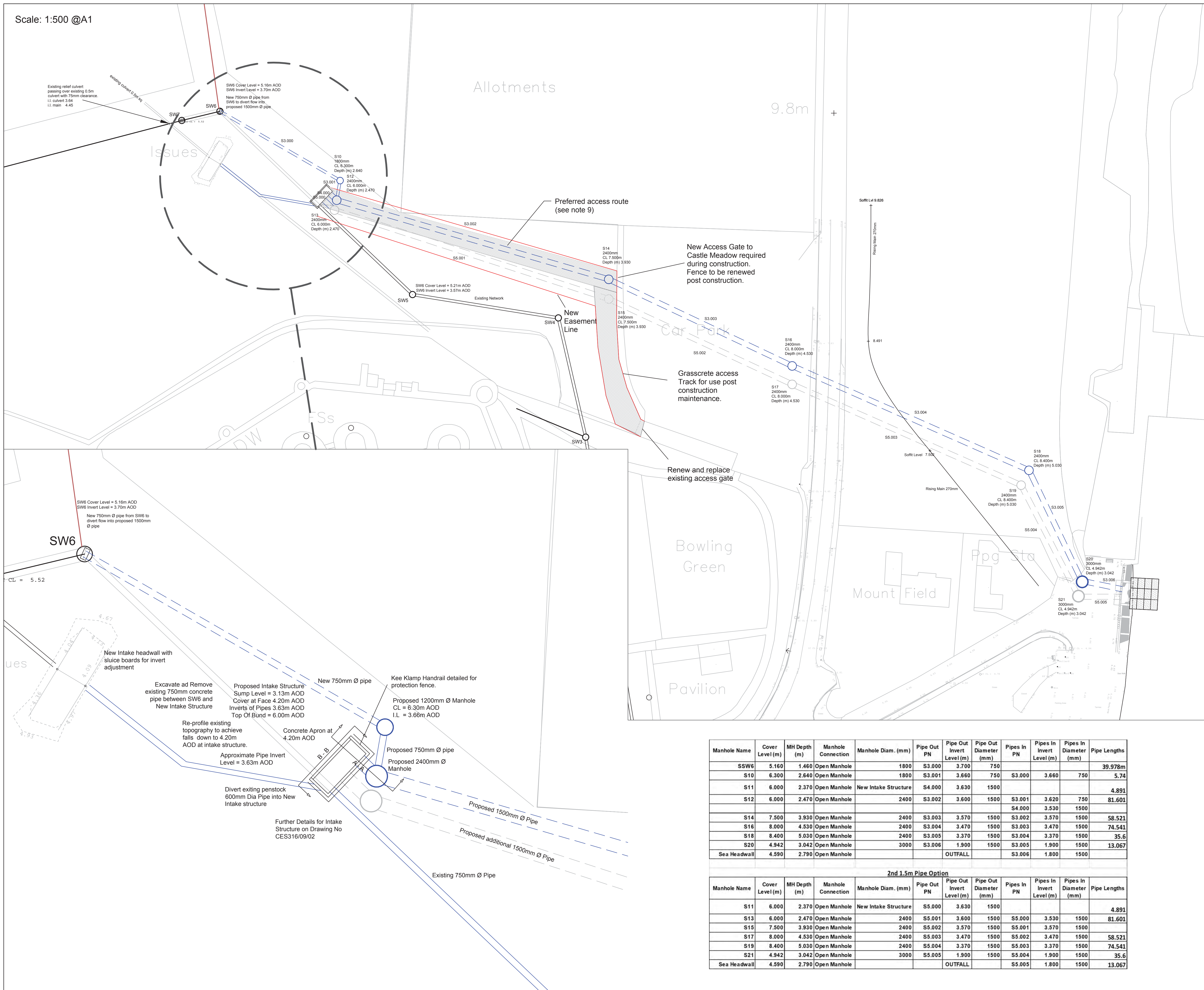
Email: mark@ces.eu.com  
Tel: 01341 421 911

#### Client

Isle of Anglesey County Council,  
Council Offices,  
Llangefni,  
Anglesey,  
LL77 7TW



Project ref: 66/1310 Drawing No: CES316/09/01T Rev: A







## **FIGURE 03**


**G2572 Castle Meadow Beaumaris: Proposed Controlled Strip Area**





 Gwynedd Archaeological Trust


**Figure 03: G2572 Castle Meadow  
Beaumaris: Proposed Controlled  
Strip Area**


  
N

 New flood relief culverts

 Existing rising main

 Extent of proposed controlled strip area

 Temporary security fencing

 Extent of 2010 archaeological works

Date: 19/09/2018

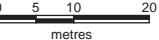
Author: NMC

Office:

Drawing: G2572/  
CS.R01

Scale: 1:1000 @ A3

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0 5 10 20  
metres

## **APPENDIX I**

### **Gwynedd Archaeological Trust photographic metadata pro-forma**



## Digital Photographic Record

Include main context numbers for each shot, drawing numbers for sections and any other relevant numbers for cross referencing.  
Delete any unwanted photos **immediately** from the camera. Regularly upload photographs to computer.

[illegible]