

PROJECT DESIGN FOR ARCHAEOLOGICAL MONITORING AND RECORDING

Point of Ayr Cable Route Foreshore Works

Town and Country Planning Act 1990

Document Reference Number PF.3.7

Applicant: Liverpool Bay CCS Limited

English Version

REVISION: 03

DATE: August 2025

DOCUMENT OWNER: WSP UK Limited

CONFIDENTIAL

QUALITY CONTROL

Document Reference					
Document Owner					
Revision	Date	Comments	Author	Checker	Approver
v.1	13-6-25	First issue	JH	SMcG	TG
v.2	27-6-25	Revision	AB	HM	MT
v.3	15-7-25	Revision per curator comments	AB	NH	MT

TABLE OF CONTENTS

1. INTRODUCTION	4
1.1. Project Background	4
1.2. Development Description	4
1.3. Previous planning consent	5
1.4. Scope of Work	5
1.5. Legislative and Policy Framework	6
1.6. Guidance and Standards	6
1.7. Aims and Objectives	7
1.8. Consultation	7
1.9. Site Inspection	8
1.10. Project Roles	8
2. HISTORIC ENVIRONMENT BASELINE SUMMARY	10
2.1. Site Location	10
2.2. Topography	10
2.3. Geology	10
2.4. Previous Archaeological Work	10
2.5. Archaeological Potential	11
3. ARCHAEOLOGICAL MONITORING AND RECORDING	13
3.1. Aims	13
3.2. Objectives	13
3.3. Methodology	14
4. REPORTING, DISSEMINATION & ARCHIVING	20
4.1. Reporting	20
4.2. Publication and Dissemination	21
4.3. Archiving	22
4.4. Ownership of Finds	23
5. PROGRAMME, STAFFING AND ATTENDANCES	24
5.1. Initial Timetable and Staffing	24
5.2. Project Team	24
5.3. Progress Reports	25

5.4.	Post-Fieldwork Programming	25
6.	6. HEALTH AND SAFETY	26
6.1.	Introduction	26
6.2.	Risk Assessment and Methodology Statement (RAMS)	26
6.3.	Personal Protective Equipment (PPE)	27
6.4.	Welfare	27
6.5.	Site security	27
6.6.	Access.....	28
6.7.	Non-archaeological constraints.....	28
6.8.	Unexploded ordnance (UXO)	28
6.9.	Contaminated Ground	29
7.	7. MONITORING AND ASSURANCE	30
7.1.	Monitoring Visits.....	30
7.2.	On Site Fieldwork	30
7.3.	Post-excavation deliverables.....	30

ANNEXURES

Annex A – Figures

Annex B - References

1. INTRODUCTION

1.1. PROJECT BACKGROUND

- 1.1.1. WSP has been commissioned by Liverpool Bay CCS Limited to produce a Project Design (PD) for archaeological monitoring and recording for the Point of Ayr (PoA) Foreshore Works, adjacent to the River Dee Estuary and the Welsh Channel in Flintshire. (Fig 1 in **Annex A**). The Proposed Development comprises excavation of a Horizontal Directional Drill (HDD) exit pit as part of the construction of new electricity and telecommunications cables (the Foreshore Cables) across the intertidal.
- 1.1.2. The aim of the investigation is to ensure that any archaeological features or finds identified during the excavation of the HDD Exit Pit within the foreshore, are appropriately managed and recorded during the works. The PD sets out the scope and methodology for the archaeological monitoring, including the fieldwork method, approach to sampling, progress reporting, post-excavation reporting, archiving and dissemination.

1.2. DEVELOPMENT DESCRIPTION

- 1.2.1. The components of the Proposed Development, and associated construction activities are as follows:
- Construction of part of a cable conduit under the Gronant Dunes using a trenchless HDD method of installation. The buried depth of the cables across the foreshore is anticipated to be a minimum of 1.1m, however the depth may be greater for the trenchless crossings to ensure sufficient depth to cross obstructions.
 - An HDD Exit Pit entailing installation, at approximately 3m below beach level, of a temporary steel prefabricated containment stump, approximately 3m x 3m in width and length, to capture any drilling fluid emitted from the drilling process. This will have approximately 10m³ capacity. A cofferdam approximately 20m x 20m will be installed to enable construction of the Exit Pit. Reinstatement of the HDD Exit Pit beach area on completion.
 - The installation of a combined electrical and fibre optic cable within the HDD conduit.

- The simultaneous lay and burial of the cable across Talacre Beach from the HDD Exit Pit to the MLWS line.

1.3. PREVIOUS PLANNING CONSENT

- 1.3.1. Planning permission FUL/000246/23 was granted in May 2024, to build new infrastructure and to modify existing facilities at the PoA Terminal in Flintshire to operate with carbon dioxide (the 'Consented Development'). The Consented Development and Proposed Development will form part of the wider HyNet Carbon Dioxide Pipeline ('the Project') that will transport carbon dioxide captured from existing industry in North Wales and Northwest England, as well as from new hydrogen production facilities that are proposed as part of the Project. The captured carbon dioxide will be stored in depleted offshore gas reservoirs.

1.4. SCOPE OF WORK

- 1.4.1. This PD is for the archaeological monitoring and recording of any archaeological features or finds identified during the excavation of the HDD Exit Pits.
- 1.4.2. The requirement for further archaeological work is assumed as an archaeological planning condition (ref FUL/000246/23, dated 06 April 2023) was attached to the planning permission for the Consented Development. This condition, Condition 11 is reproduced below:

Condition 11

No development within the Construction phase shall take place until a programme of archaeological work has been implemented in accordance with a written scheme of investigation, which has been submitted to and approved in writing by the Local Planning Authority. The archaeological programme of work will be undertaken and completed in accordance with the relevant Standards and Guidance provided by the Chartered Institute for Archaeologists.

REASON: In the interests of the protection of historic assets. To comply with Policy EN and SPG28 of the Flintshire Local Development Plan.

- 1.4.3. As Condition 11 of the Consented Development was applicable to the works within the inter-tidal area, the condition's wording has been used to inform the PD scope.

- 1.4.4. Section 2 of this PD provides a summary of the archaeological and historical background. Sections 3–5 deal with the archaeological watching brief, and outline the aims, objectives, and methodology. References are provided in **Annex B**.

1.5. LEGISLATIVE AND POLICY FRAMEWORK

- 1.5.1. The following legislation was considered when preparing this PD:

HISTORIC ENVIRONMENT (WALES) ACT 2023

- 1.5.2. An Act to consolidate and amend the laws relating to designated historic assets including scheduled monuments, listed buildings, conservation areas and registered parks and gardens. The act sets out the procedures to control the register of scheduled monuments, listed buildings, conservation areas and registered parks and gardens; gives protection to the designated assets; and requires any works within the boundaries of the scheduled monuments to be taken under Scheduled Monument Consent granted by the Welsh Ministers. Works on and within the environs of listed buildings are required to be undertaken under Listed Building Consent granted by the Local Planning Authority in which the asset is located and/or the Welsh Ministers.

PROTECTION OF MILITARY REMAINS ACT 1986

- 1.5.3. An Act to secure the protection from unauthorised interference of the remains of military aircraft and vessels that have crashed, sunk or been stranded and of associated human remains; and for connected purposes, including a general prohibition on any disturbance or removal of such remains without a licence granted by the Secretary of State.

1.6. GUIDANCE AND STANDARDS

- 1.6.1. The following guidance and standards were consulted in preparation of this PD:

- Conservation Principles for the Sustainable Management of the Historic Environment in Wales (Cadw 2011);
- Heritage Impact Assessment in Wales (Cadw 2017a);
- Setting of Historic Assets in Wales (Cadw 2017b);
- Standard and guidance for archaeological monitoring and recording (ClfA 2023a);

- Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment (ClfA 2020b);
- Standard and guidance for nautical archaeological recording and reconstruction, Chartered Institute for Archaeologists (ClfA 2020d);
- Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (ClfA 2020a);
- Standard and guidance for the collection, documentation, conservation and research of archaeological materials (ClfA 2020c);
- Technical Advice Note (TAN) 24: The Historic Environment (Welsh Government 2017); and
- Managing the Marine Historic Environment of Wales (Cadw 2020).

1.7. AIMS AND OBJECTIVES

1.7.1. The Aims and Objectives of the PD are as follows:

- To propose measures for mitigating effects upon any archaeological material that may be encountered during the works associated with the development;
- To establish the reporting, publication, conservation, and archiving requirements for any archaeological works undertaken as part of the development.

1.8. CONSULTATION

1.8.1. Liverpool Bay CCS Limited contacted the Joint Casualty and Compassionate Centre (JCCC) of the Ministry of Defence to discuss the two Second World War aircraft crash sites within the red line boundary of the development on the 29th and 30th of April 2025 and the potential requirement for a licence. The JCCC representative confirmed that the wreck sites were far enough away to not require a licence at the offset of the excavation but if any remains relating to the crashes were observed with the excavation site, their disturbance or removal would need to be undertaken under licence.

1.8.2. The LPA Archaeological Advisor (Heneb: Clywd Powys Archaeology) and the advisor at the Royal Commission on the Ancient and Historical Monuments of Wales has not been consulted to date

regarding this PD but will be consulted and provided with a copy of the PD for comment and approval prior to the onset of any works being undertaken within the site.

1.9. SITE INSPECTION

- 1.9.1. There has been no site inspection carried out for the PD, but a site inspection was carried out for the Baseline Validation Survey in support of the Point of Ayr Cable Route Foreshore Works Town and Country Planning Act (TCPA) application on the 1st of April 2025.

1.10. PROJECT ROLES

- 1.10.1. *'The Client'* is Liverpool Bay CCS Limited. The Client will be responsible for confirming land ownership and site access arrangements prior to the commencement of work.
- 1.10.2. The *'Archaeological Consultant'* has not been appointed as of writing, but will be suitably qualified and competent archaeologist, with experience operating in the marine and intertidal zones. They are responsible for contracting the *Archaeological Fieldwork Contractor* on behalf of *the Client* and for the design and technical assurance of all archaeological works. The *Archaeological Consultant* will liaise directly with the *Local Planning Authority (LPA) Archaeological Advisor*.
- 1.10.3. The *'LPA Archaeological Advisor'* is Heneb: Clywd Powys Archaeology (H: CPA) who provides the development control and planning advice to the LPA and has the final decision on the scope of work and signs off the fieldwork when it is complete, in consultation with the *Archaeological Consultant*. The *LPA Archaeological Advisor's* remit includes the intertidal area.
- 1.10.4. The Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) is the Archaeological Curator responsible for heritage matters in the marine environment up to MHWS in Wales and will be consulted in conjunction with the *LPA Archaeological Advisor* regarding activities undertaken as part of this PD.
- 1.10.5. The *'Archaeological Fieldwork Contractor'* has not been appointed but will be competent and qualified to carry out the work, they will be responsible for carrying out the fieldwork, post-excavation reporting, deposition of the archive and dissemination. All reporting by the *Archaeological Fieldwork Contractor* will be submitted via the *Archaeological Consultant*.

- 1.10.6. The 'Principal Contractor' is the contractor appointed by *the Client* to control the construction phase of a project involving more than one contractor. For this project the *Principal Contractor* is currently undetermined and will be appointed prior to any works being undertaken. The *Principal Contractor* is responsible for planning, managing, coordinating and monitoring all construction activities so that they follow Health and Safety legislation, guidance and procedure. The *Principal Contractor* will organise cooperation between contractors, is responsible for site security and welfare and may provide plant. The *Principal Contractor* will prepare a Construction Phase Plan and operate under CDM Regulations 2015.

2. HISTORIC ENVIRONMENT BASELINE SUMMARY

2.1. SITE LOCATION

- 2.1.1. The Proposed Development is located on Talacre Beach (see **Figure 1**), to the north of Talacre in the historic parish of Llanasa, in the county of Flintshire, north-east Wales. The Proposed Development is adjacent to the Welsh Channel area of the Irish Sea (north and west).
- 2.1.2. The landscape of the Proposed Development is a flat sand foreshore and beach area.

2.2. TOPOGRAPHY

- 2.2.1. Topography can provide an indication of suitability for settlement, and ground levels can indicate whether the ground has been built up or truncated, which can have implications for archaeological survival.
- 2.2.2. The Proposed Development is in a flat coastal landscape approximately 6m above sea level.

2.3. GEOLOGY

- 2.3.1. Geology can provide an indication of suitability for early settlement, and potential depth of remains.
- 2.3.2. The British Geological Survey (BGS) records the geology within the Site Boundary as comprised of the following:
- Superficial Deposits – Largely comprise Tidal Flat Deposits, and localised areas of Tidal River or Creek Deposits, Saltmarsh Deposits and Blown Sand.
 - Bedrock - Comprises the Lower and Middle Pennine Coal Measures, described as mudstone, siltstone and sandstone. Units of the Lower and Middle Measures.

2.4. PREVIOUS ARCHAEOLOGICAL WORK

- 2.4.1. There have been no known past archaeological investigations within the Site Boundary other than a site walkover inspection. Current understanding of the extent of past human activity is limited, in particular for the prehistoric, Roman and the early Saxon period, for which there is no documentary record.

2.5. ARCHAEOLOGICAL POTENTIAL

- 2.5.1. The TCPA Proposed Development has moderate potential to contain prehistoric remains. The foreshore and intertidal areas of the TCPA Proposed Development were likely to have been either underwater or within a marginal environment during this period which will have been utilised for easy access to natural resources. Although the presence of trackways or small boats cannot be discounted, it is considered more likely that the remains are limited to smaller evidence of resource extraction including traps and isolated remains. Outside of areas of later development, survival of early remains is likely within alluvial and aeolian deposits where they will have been deposited or buried.
- 2.5.2. The TCPA Proposed Development has low potential to contain Roman remains. The placement of the coastline and any associated marginal environment is unclear as result of a lack of historic archaeological investigation within the Study Area (**Figure 2**) and the scarce evidence of Roman activity would suggest that the finds are likely to be limited to isolated remains. It is possible that the foreshore and intertidal areas of the TCPA Proposed Development were underwater or within a marginal environment during this period. It is clear that the River Dee was used by the Romans and known Roman settlements are present along the Dee and the coastline.
- 2.5.3. The TCPA Proposed Development has low potential to contain early medieval remains within alluvial and aeolian deposits. The foreshore and intertidal areas of the TCPA Proposed Development were likely to have been within a marginal environment which would have been utilised for its easy access to the estuary and the Irish Sea and its natural resources. The placement of the coastline and any associated marginal environment is unclear as result of a lack of archaeological investigation within the Study Area. It is possible, however, for isolated remains to be present within the alluvial deposits given the extensive traffic within the Dee Estuary during this period.
- 2.5.4. The Site Boundary has moderate potential to contain later medieval remains. It is possible that the foreshore and intertidal areas of the TCPA Proposed Development were still within a marginal environment which would have been utilised for its easy access to the estuary and the Irish Sea and its natural resources. The placement of the coastline and any associated marginal

environment is unclear as result of a lack of historic archaeological investigation within the TCPA Proposed Development or Study Area. It is possible, however, for remains to be present within the alluvial deposits given the extensive traffic within the Dee Estuary during this period.

- 2.5.5. The Site Boundary has moderate potential to contain post-medieval and modern remains. Four post-medieval shipwreck sites are noted within the foreshore and intertidal around the red line boundary which suggests the potential for remains as the locations of the wrecks are approximate. The foreshore was used during the Second World War for target practice by the Royal Air Force and defensive structures from the war survive within the wider foreshore. Two Second World War aircraft crash sites are noted within the red line boundary with dispersed remains from these incidents possible around the wreck sites.

3. ARCHAEOLOGICAL MONITORING AND RECORDING

3.1. AIMS

- 3.1.1. The aims of the archaeological monitoring and recording are:
- To record, as far as reasonably possible, the location, extent, condition, significance and quality of any survival archaeological remains;
 - To provide a photographic and written record of the surviving remains; and
 - To report the results of the archaeological monitoring and recording and to provide recommendations for post-excavation analysis, if appropriate, in a report to the Client and LPA Archaeological Advisor.

3.2. OBJECTIVES

- 3.2.1. Archaeological monitoring and recording, as defined by the Chartered Institute for Archaeologists (CIfA), is 'a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons' (CIfA 2023a). The objective is 'is to establish and make available information about the archaeological resource existing on a site' (CIfA 2023a).
- 3.2.2. The guidelines further state that the purpose of archaeological monitoring and recording is 'to allow... ..the preservation by record of archaeological deposits, the presence and nature of which could not be established... ..in advance of development or other potentially disruptive works' and 'to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard'.
- 3.2.3. The specific archaeological research objectives, as outlined by the North East Wales Regional Research Framework (A Research Framework for the Archaeology of Wales, 2025) and based on the archaeological potential, are as follows:
- What evidence is there for Roman or Early Medieval activity? If present what is its nature, extent and significance?

- How were ancient coastal and marsh inter-tidal areas exploited in the prehistoric period?
- How has the area's usage as a firing range during WWII impacted archaeological survival?
- What are the nature and levels of natural deposits, and has there been any modern disturbance?

3.3. METHODOLOGY

INTRODUCTION

- 3.3.1. The fieldwork methodology will conform to best professional practice as summarised in Chartered Institute for Archaeologist's *Standard for archaeological monitoring and recording* (CIfA 2023a) and *Universal guidance for archaeological monitoring and recording* (CIfA 2023b).
- 3.3.2. The relevant finds archive repository for the finds recovered will be identified by the Archaeological Fieldwork Contractor and a unique project number - a 'site code' obtained from Henneb prior to the start of the project. The local finds repository is expected to be the Flintshire Museum system. The digital archive needs to be deposited as described in section 4.
- 3.3.3. The area of potential archaeological impact will be within the footprint of the HDD exit pit at the MHWS and its temporary access. Shallow archaeological remains may be affected by movement of vehicles and plant involved in construction activities, for example through rutting and compaction. Due to the method through which the trench between the exit pit and the MLWS will be excavated and filled in, these works are excluded from this PD and will be monitored through the implementation of the Protocol for Archaeological Discoveries submitted with the Marine Licence Application (Licence number: CML2365) for the marine elements of the works (Environmental Statement Report Volume 4, Appendix U).

MECHANICAL EXCAVATION

- 3.3.4. Groundworks will be opened initially by a mechanical excavator equipped with a toothless grading bucket, under the constant supervision of a qualified and experienced archaeologist provided by the Archaeological Fieldwork Contractor. The removal of overburden and other deposited waste shall be monitored. All such mechanical excavation shall be conducted with a minimum of one

experienced archaeologist per mechanical excavator. The attending archaeologist will indicate to the Plant Attendance Contractor that archaeological remains have been identified, and that mechanical excavation should cease until they have been recorded.

HAND CLEANING AND EXCAVATION

- 3.3.5. Following initial exposure of archaeological horizons, investigation by the Archaeological Fieldwork Contractor will be by hand to fulfil the objectives of the archaeological monitoring and recording. All walls and floor surfaces will be cleaned to allow for appropriately detailed photography and instrument survey of architectural details and floor surfaces, where necessary. Where sub-surface archaeological features are discovered during the watching brief, these will be excavated according to the following general principles:
- All pits will have 50% excavated through half sections or two quarter sections, depending on their size, prior to full excavation; and
 - At least 10% of linear features will be excavated that relate to drainage or agricultural activities, with no individual section being less than 1m wide.
- 3.3.6. It may be appropriate to resort to supervised machine excavation, a technique that is only appropriate for the removal of homogeneous and 'low-grade' layers where it can reasonably be argued that more detailed attention would not produce information of value, and where their removal may give a 'window' onto underlying levels.
- 3.3.7. In addition to the recording of archaeological (i.e. man-made) deposits, in accordance with an identified research objective, an assessment of natural deposits may be necessary, especially when these are organically preserved and laid down within archaeological timescales; for example, alluvial or peat deposits, which can hold palaeoenvironmental potential.
- 3.3.8. In the unlikely event that remains of very high significance are identified, the Archaeological Fieldwork Contractor will inform the Archaeological Consultant immediately, who will then consult with the LPA Archaeological Advisor. The identification of such remains may require further fieldwork, such as targeted excavation, with the deployment of additional archaeological staff. Appropriate measures will be taken to protect such remains from any damage or deterioration. This might involve for instance protective boxing,

wrapping deposits or features in a geo-textile such as terram, sealing with sand or other suitable soft materials, or other means as deemed suitable/appropriate in consultation with the LPA Archaeological Advisor and relevant specialists, where required.

- 3.3.9. Alternatively, if it is apparent from initial monitoring that no archaeological remains are present, the need for subsequent monitoring could be reduced in scope, following consultation between the Archaeological Consultant, acting on behalf of the Client, and the LPA Archaeological Advisor.
- 3.3.10. The Site Boundary is adjacent to the intertidal zone, and portions of the site may be affected by this. A constant cycle of wetting and drying can affect the survivability of archaeological remains. *Managing the Marine Historic Environment of Wales* by Cadw has further guidance if any areas in the Site Boundary are affected by intertidal effects and processes.

ARCHAEOLOGICAL RECORDING

- 3.3.11. Any archaeological remains which are identified shall be fully recorded according to the ClfA standards (ClfA 2023a) and universal guidance (ClfA 2023b) for archaeological monitoring and recording. Machine excavation shall cease, and sufficient time will be given for the recording process. All written records will be created on pro forma record sheets giving details of location, composition, shape, dimensions, relationships, finds, samples, cross-references to other elements of the record and other relevant contexts, etc.
- 3.3.12. The archaeological remains shall be hand cleaned to allow the structure to be fully recorded through instrument survey using a Global Navigation Satellite System (GNSS) or EDM, tied into the Ordnance Survey National Grid. A measured drawing consisting of at least one plan, at 1:20 scale may be required to demonstrate the scale, if the survey does not provide enough detail. Sections shall be drawn at 1:10 scale.
- 3.3.13. The feature shall be recorded digitally, using a high-resolution digital camera with a minimum resolution of 24 megapixels. Photographs taken for recording purposes are to include a scale and, where appropriate, an information board recording the relevant context number(s) and a north arrow.

ARCHAEOLOGICAL FINDS

- 3.3.14. All recovery, retention and treatment of finds and samples will be carried out mindful of the overall purpose of the exercise, i.e. to evaluate for further decision making, as expressed in ClfA (2023b). To this end, all artefactual and ecofactual material will be reviewed on site for its capability to inform the watching brief report.
- 3.3.15. Identified archaeological finds and artefacts will be carefully recovered by hand and bagged or boxed according to the type of artefact (i.e. pottery, ceramic building material/CBM, bone, worked flint, metal) archaeological context from which they came, with a label indicating the site code, find type and context reference number). Particularly notable artefacts will be recorded as a 'registered' find and recorded three dimensionally with Ordnance Datum levels. This will include *in situ* prehistoric worked flint.
- 3.3.16. Initial conservation and storage will be in a proper manner and to standards set out follow *First Aid for Finds* (Leigh *et al.* 1998) and the ClfA 'Standard and Guidance for the collection, documentation, conservation and research of archaeological materials' (ClfA 2020c). If necessary, an appropriately qualified and experienced archaeological conservator will be appointed to advise and assist in the lifting of fragile finds of significance and or value and to arrange for the X-raying and investigative conservation of objects as may be necessary.
- 3.3.17. Certain classes of bulk material, i.e. post-medieval pottery and building material may be discarded if there is a considerable quantity (more than a single standard archive box of c. 0.016m²), after recording with a representative sample.
- 3.3.18. All pottery, bone and worked flint will be washed and then marked in accordance with the project archive repository guidelines. Most building material and burnt flint (not including significant diagnostic material) will be identified, counted, weighed and discarded. Samples will be retained as appropriate. The finds identification and specialist work will be undertaken by the relevant finds specialists agreed with the LPA Archaeological Advisor to assess the date range of the assemblage with particular reference to pottery use relevant county or region-specific type series for identification and dating, where available. This evidence will be used to characterise the site, and to establish the potential for all categories of finds should further archaeological work be necessary. Records of artefact assemblages will clearly state how they were

recovered, sub-sampled and processed. Consideration will be given for donation of appropriate artefacts to type series reference collections.

- 3.3.19. All finds of gold and silver, or other objects definable as 'treasure' under the *Treasure Act 1996*, will be removed to a safe place and reported to the local Coroner according to the procedures of the *Treasure Act 1996*, the *Treasure (Designation) Order 2002* and the *Treasure (Designation) (Amendment) Order 2023*. Where removal cannot be effected on the same working day as the discovery suitable security measures will be taken to protect the finds from theft.

ENVIRONMENTAL SAMPLING

- 3.3.20. Environmental sampling is a crucial component of archaeological fieldwork, aimed at recovering data necessary for understanding past environments, human activity, and site formation. It supports research on reconstructing past climates, vegetation, and human interactions, as well as understanding site development and supporting archaeobotanical and zooarchaeological studies. Various types of samples, including bulk, soil, and waterlogged materials, are collected using methods such as flotation, sieving, and soil micromorphology to recover plant and animal remains, analyse soil properties, and understand deposition processes. Proper documentation and archiving of these samples are essential to ensure their context is preserved, with details such as sample identification, location, and method recorded. After collection, samples are analysed in laboratories, and the results are incorporated into site reports. Following best practices in line with the ClfA guidelines ensures that environmental sampling is conducted ethically, complies with legal requirements, and contributes to long-term preservation and future research.

HUMAN REMAINS

- 3.3.21. In the event of human remains being discovered, their presence will be reported to the Archaeological Consultant, who in turn shall contact the Client and the LPA Archaeological Advisor. The Archaeological Fieldwork Contractor will then inform the local police on the discovery and arrange for any necessary site visits to be made. After confirmation from the Coroner that they are satisfied the remains are historic in origin, they shall be covered and protected before being backfilled. If deemed necessary by the LPA

Archaeological Advisor, the remains may be excavated in accordance with guidance provided by ClfA Updated Guidelines to the Standards for Recording Human Remains (ClfA 2017). Human remains can only be excavated and removed with a Burial Licence as issued by the Ministry of Justice (Coroner's Division). It will be necessary to ensure that adequate security is provided.

AIRCRAFT CRASH SITES

- 3.3.22. There are the remains of two Second World War aircraft crash sites in the vicinity of the proposed development. There are two Spitfire wrecks that are recorded as being in close proximity to the Proposed Development. The Joint Casualty and Compassionate Centre of the Ministry of Defence confirmed that the aircraft crash locations are approximate, and that any aircraft remains would need to be excavated under licence and should be recorded and handled in line with legislation and all professional guidance.
- 3.3.23. A further license is not required from Flintshire Council for aircraft crash site excavation.

4. REPORTING, DISSEMINATION & ARCHIVING

4.1. REPORTING

- 4.1.1. A fully illustrated archaeological evaluation report will be made available to the Archaeological Consultant within eight weeks of the completion of fieldwork. The Archaeological Consultant will disseminate the report to the Client and LPA Archaeological Advisor.
- 4.1.2. In accordance with ClfA standards and guidance (ClfA 2023 and good practice, this will include, as a minimum, the following:
- *Non-technical summary.* One-page summary outlining project background and circumstance, the principal reason for the work and when it was undertaken and by whom, its objectives, main results, and where appropriate, recommendations. *As per the Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)*, a bilingual non-technical summary, will be provided.;
 - *The project design or appropriate reference to it;*
 - *Introduction, aims and objectives.* This will set out the circumstances of the project such as planning background and the reason for the work and will include the aims and specific research objectives reflected or reiterated in this PD;
 - *Fieldwork methodology.* The methods used. This will include the detail of any variation to the agreed PD and the reasons for such;
 - *Archaeological and historical background.* A brief summary with the site description (including size, geology and topography, location) and background. In most cases this will be derived from the HEDBA report;
 - *Results.* This will present a series of summary objective statements, organised clearly in relation to the methods used, and describing both structural data and associated finds and/or environmental data recovered. Descriptive material will be clearly separated from interpretative statements. Technical terminology (including dating or period references) will be explained;
 - *Conclusions.* Summary and interpretation the results and their likely significance. Other elements might include a confidence rating on the results and limitations (e.g. weather or problems of

access). Recommendations on further work may also be included;

- *References and bibliography.* A list of all sources used. The final destination of the archive (records and finds) will be noted in the report along with the site code assigned by the relevant project archive repository;
- *Appendices.* Essential technical and supporting detail, including for example lists of artefacts and contexts or details of measurements, gazetteers, Data Management Plan, Archive Selection Strategy, etc. Pottery reports will be expected to refer to the appropriate type series for Roman, medieval and post-medieval pottery; and
- *Illustrations.* Location plan, plans and sections at appropriate scales showing location and position of trenches dug and features located and selective photography. Section drawing will include heights Ordnance Datum (OD); plans should include OD spot heights for all principal strata and features.
- *Copyright.*

- 4.1.3. In accordance with the Welsh Language Standards (No. 1) Regulations 2015, 4 and associated compliance relevant to HER service delivery, all new records created in the HER from 1st April 2016 must have a summary description in both Welsh and English.

4.2. PUBLICATION AND DISSEMINATION

- 4.2.1. The results of the investigation will need to be published and disseminated at a level that is appropriate to the significance of the remains recorded.
- 4.2.2. A pdf of the report should be deposited with the Welsh Historic Environment Record (HER) managed by Heneb, on the understanding that it will be made available as a public document after an appropriate period (not exceeding six months from the completion of fieldwork); a further copy will be sent to the client.
- 4.2.3. A summary account of the work should be submitted to the editor of the CBA Journal Archaeology in Wales, in addition to, the relevant local archaeological journal Archaeology Round-ups and period journals (e.g. Medieval Archaeology, Proceedings of the Prehistoric Society) as appropriate no later than March 31st of the year following completion of fieldwork.

- 4.2.4. Further publication may range from a 'grey literature' archaeological report, to a short journal article in local and period-based archaeological journals as appropriate (as above), to a full monograph (in the event that the watching brief resulted in further excavation). The level of dissemination would be determined in consultation with the LPA Archaeological Advisor.
- 4.2.5. Additionally, in all cases a short summary of the results of the work will be submitted to the HER and Archaeological Data Service (ADS).

4.3. ARCHIVING

- 4.3.1. The site archive will contain all the data collected during the fieldwork, including records and finds, and all reports. The archaeological fieldwork subcontractor will ensure that the archive is quantified, ordered, indexed and internally consistent, and adequate resources will be provided to ensure that all records are checked. Archive consolidation will be undertaken immediately following the conclusion of fieldwork. Any finds of archaeological interest should be appropriately conserved and deposited in the Flintshire Museums: any finds which cannot be so deposited should be fully analysed and published.
- 4.3.2. The paper and digital archive produced during works will be deposited with the National Monuments Record held by RCAHMW, including a copy of the final report, upon completion of the archaeological works.
- 4.3.3. Finds and records will be assembled and curated by a single organisation, and be available for public consultation in a project archive repository compatible with other archaeological archives in the county, and adhering to guidelines and standards set out in the following:
- RCAHMW Guidelines for Digital Archives (2015) (RCAHMW, 2015);
 - Archaeological Archive Forum (2011), *Archaeological Archives: a guide to best practice in creation, compilation transfer and curation*;
 - Chartered Institute for Archaeologists, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (CIFA 2020a);

- Museums and Galleries Commission (1992) *Standards in the Museum Care of Archaeological Collections*;
- Society of Museum Archaeologists (1995) *Towards an Accessible Archive. The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland, Scotland and Wales*;
- Welsh Museums Federation National Standard and Guidance on Collecting and Depositing Archaeological Archives in Wales 2019 (Welsh Museums Federation, 2019); and
- United Kingdom Institute for Conservation (1990) *Guidelines for the preparation of excavation archives for long term storage*.

4.3.4. Copyright of the written archive will be vested in the project archive repository, which will be clearly identified in the watching brief report. The site archive will be deposited within six months of issuing the report.

4.4. OWNERSHIP OF FINDS

- 4.4.1. Whereas ownership of any finds on the site lies with the landowner, it is necessary that the landowner gives the necessary approvals, licences and permissions to donate any finds recovered from the site to the project archive repository, to enable that body to carry out its obligations to curate the finds, in perpetuity, as part of the archaeological archive from this site.
- 4.4.2. These approvals, licences and permissions shall be either confirmed in the Agreement and Contract regulating the archaeological works and/or confirmed by the completion of the relevant Deed of Transfer form.
- 4.4.3. The Client (or their agent) will make arrangements for the signing of a Deed of Transfer Form by the client or, if the landowner is different to the client, by the landowner.
- 4.4.4. Notwithstanding the above, subsequent arrangements may be made if required between the landowner, the client and the project archive repository for the conservation, display, provision of access to or loan of selected finds in or near their original location.

5. PROGRAMME, STAFFING AND ATTENDANCES

5.1. INITIAL TIMETABLE AND STAFFING

- 5.1.1. The archaeological monitoring and recording is anticipated to start in February 2026. The duration of on-site attendance will depend on the programme of below-ground works.
- 5.1.2. The Archaeological Fieldwork Contractor will provide a programme for the archaeological monitoring to the Archaeological Consultant, which will include detailing of staffing requirements.
- 5.1.3. The exact details of time, areas and numbers of staff involved would be agreed in discussions between the Archaeological Consultant, the Client, and the LPA Archaeological Advisor.
- 5.1.4. If significant archaeological remains are revealed which cannot be satisfactorily investigated and recording in the period initially defined, there should be sufficient flexibility within the construction programme and resources to enable the remains in question to be investigated to the satisfaction of the Archaeological Consultant in consultation with the LPA Archaeological Advisor.

5.2. PROJECT TEAM

- 5.2.1. The work will be undertaken by an archaeological fieldwork subcontractor that is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA) and approved by the Archaeological Contractor.
- 5.2.2. Details of the Archaeological Fieldwork Contractor staff including post-excavation specialists will be provided once the archaeological fieldwork subcontractor has been appointed.
- 5.2.3. The Archaeological Consultants staff will comprise:
- *Ashley Blair*, BA MA ACIfA Senior Consultant;
 - *Josh Hunter*, BA MA PCIfA, Consultant; and
 - *Toby Gane*, BA MPhil MCIfA, Marine and Coastal Cultural Heritage and Archaeology Lead.
- 5.2.4. CVs of the key members of staff will be made available upon request.

5.3. PROGRESS REPORTS

5.3.1. The Archaeological Consultant will provide the Client and, if appropriate, the LPA Archaeological Advisor, with a weekly summary progress memo (1–2 pages). This will:

- Summarise the work undertaken during the week and the key findings;
- Report on site attendance, where appropriate;
- Confirm that the work will be completed to programme and identify any potential issues to programme; and
- Identify any health and safety issues (including near miss).

5.4. POST-FIELDWORK PROGRAMMING

5.4.1. The time required to complete watching brief report will depend on the volume of records generated during the mitigation work. In light of the nature of the mitigation it is anticipated that no further post-excavation assessment would be likely.

6. HEALTH AND SAFETY

6.1. INTRODUCTION

- 6.1.1. The work will be carried out during construction activities and is therefore subject to Construction (Design and Management) regulations (CDM 2015). The Principal Contractor will take overall responsibility for health and safety on site.
- 6.1.2. Health and Safety will take priority over all other requirements. A conditional aspect of all archaeological work is both safe access to the area of work and a safe working environment. The project will be carried out in accordance with safe working practices.
- 6.1.3. The following sections outline the health and safety aspects of the site work along with known constraints and maybe subject to change following consultation with the client, landowner, and the archaeological fieldwork subcontractor.

6.2. RISK ASSESSMENT AND METHODOLOGY STATEMENT (RAMS)

- 6.2.1. The Archaeological Fieldwork Contractor will produce a site-specific Risk Assessment and Methodology Statement (RAMS) to cover the onsite fieldwork and will supply a copy of the company's Health and Safety Policy. These will be reviewed by the Archaeological Consultant to ensure that the policy and measures are appropriate and compliant with the Principal Contractor RAMS.
- 6.2.2. WSP UK Ltd is one of the largest engineering and environmental consultancies in the UK. Health and Safety is a priority and to this end we will ensure that our archaeological fieldwork subcontractor RAMS are in line with our cross-disciplinary industry standards. This comprises:
- Clear, concise, and site-specific. Bespoke to the site, and without generic text for hazards that do not apply or mitigation that is not applicable;
 - Tabulation of site specific hazards, risk grading and mitigation measures;
 - Site manager contact details provided, along with a deputy; and
 - Emergency action plan, with an address and route map to the closest Accident and Emergency.

- 6.2.3. Archaeological Fieldwork Contractor RAMS will be reviewed by an appropriately qualified and experienced member of staff (e.g. Project Manager).
- 6.2.4. The RAMS will need to be compliant to the Principal Contractor RAMS, which will have primacy over the archaeological fieldwork subcontractor RAMS.
- The Principal Contractor RAMS will take account of the archaeological fieldwork subcontractor working practices, i.e. it does not compromise normal and safe archaeological procedure as set out in this PD and in the archaeological fieldwork contractor RAMS;
 - All RAMS will ensure that there is no significant conflict between archaeological fieldwork subcontractor H&S procedures and those proposed by the Principal Contractor;
 - The archaeological fieldwork subcontractor will be notified by the Principal Contractor of the full hazards present prior to preparing the RAMS and will be made aware of new threats or hazards as they arise during on-site involvement; and
 - The Archaeological Fieldwork Contractor RAMS will be approved by the Principal Contractor prior to commencement.
- 6.2.5. The RAMS will have been read, understood, and signed by all staff attending the site before any fieldwork commences.

6.3. PERSONAL PROTECTIVE EQUIPMENT (PPE)

- 6.3.1. Staff present on site will be required to wear the appropriate Personal Protective Equipment (PPE), as identified in the Principal Contractors RAMS. As a minimum this will be protective shoes, high-visibility long sleeve top, gloves and safety helmet. The requirement for any additional PPE will be identified in the RAMS.

6.4. WELFARE

- 6.4.1. The Principal Contractor will be responsible for providing and positioning suitable welfare facilities on site, including toilet and water for washing.

6.5. SITE SECURITY

- 6.5.1. The Principal Contractor will be responsible for site security and for ensuring that the site is secure with the use of Heras fencing or

such required to secure any areas under archaeological investigation.

6.6. ACCESS

- 6.6.1. Site access from the relevant landowners will be arranged by Client or their representative before site works commence. The Archaeological Consultant and Archaeological Fieldwork Contractor shall be notified if access arrangements change prior to or during the watching brief programme.

6.7. NON-ARCHAEOLOGICAL CONSTRAINTS

- 6.7.1. The Principal Contractor will ensure that all information on services and utilities is provided to the Archaeological Fieldwork Contractor and that provision is made for a UXO Engineer and Ground Contamination specialist to be present should this be necessary.
- 6.7.2. If unforeseen engineering or health and safety issues should arise, or if extensive, significant deposits are found to survive in the area which cannot be satisfactorily excavated and recorded in the period defined by the archaeological fieldwork contractor and the programme of the Principal Contractor, there should be sufficient flexibility within the programme and resources to enable the deposits in question to be excavated and recorded to the satisfaction of the Archaeological Consultant in consultation with the LPA Archaeological Advisor.

6.8. UNEXPLODED ORDNANCE (UXO)

- 6.8.1. There is a potential hazard for UXO within the Proposed Development in the site. This area was in the immediate vicinity of Prestatyn Air Gunnery Range. Aircraft used High Explosive 20mm cannon shells on the range and Small Arms Ammunition. There have been reports of munitions found on site recent years (Zeteca, 2021).
- 6.8.2. It has been recommended that all staff involved with excavation on site are given a formal UXO awareness briefing.
- 6.8.3. Explosive Ordnance Clearance (EOC) Engineer support is required for ground investigation works in the area with potential UXO hazards.

6.9. CONTAMINATED GROUND

6.9.1. Widespread contamination is not anticipated on site.

7. MONITORING AND ASSURANCE

7.1. MONITORING VISITS

- 7.1.1. The Archaeological Consultant will monitor and assure on-site archaeological work on behalf of the Client. The Archaeological Consultant will complete all on-site activity in accordance with accepted Health and Safety protocols and their RAMS.
- 7.1.2. The Archaeological Consultant will complete at least one site visit per week for the duration of the on-site archaeological monitoring to ensure that the archaeological work is being conducted following the method set out in the PD and health and safety requirements.
- 7.1.3. The Archaeological Consultant shall also attend site on the first day of the groundworks to deliver a toolbox talk to all site staff to ensure that the role of the attending Archaeological Fieldwork Contractor is understood and to clarify that they have control of the machining in the targeted archaeological monitoring areas.

7.2. ON SITE FIELDWORK

- 7.2.1. The Archaeological Fieldwork Contractor will ensure that the work is carried out in accordance with this Project Design, professional standards, and the requirements of the LPA Archaeological Advisor. Any unavoidable variance in the scope of work shall be made known to the Archaeological Consultant who will then consult with the LPA Archaeological Advisor.
- 7.2.2. If the Archaeological Fieldwork Contractor proposes a change to excavation strategy or work scope this change shall be communicated by to the Archaeological Consultant who will then contact the Client and LPA Archaeological Advisor.
- 7.2.3. Should they be required, visits by the LPA Archaeological Advisor will be arranged.

7.3. POST-EXCAVATION DELIVERABLES

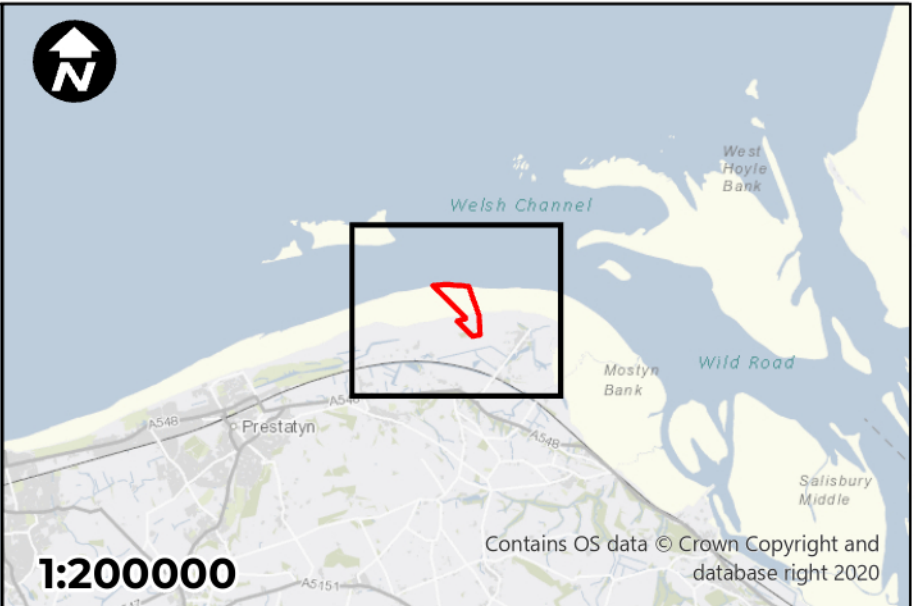
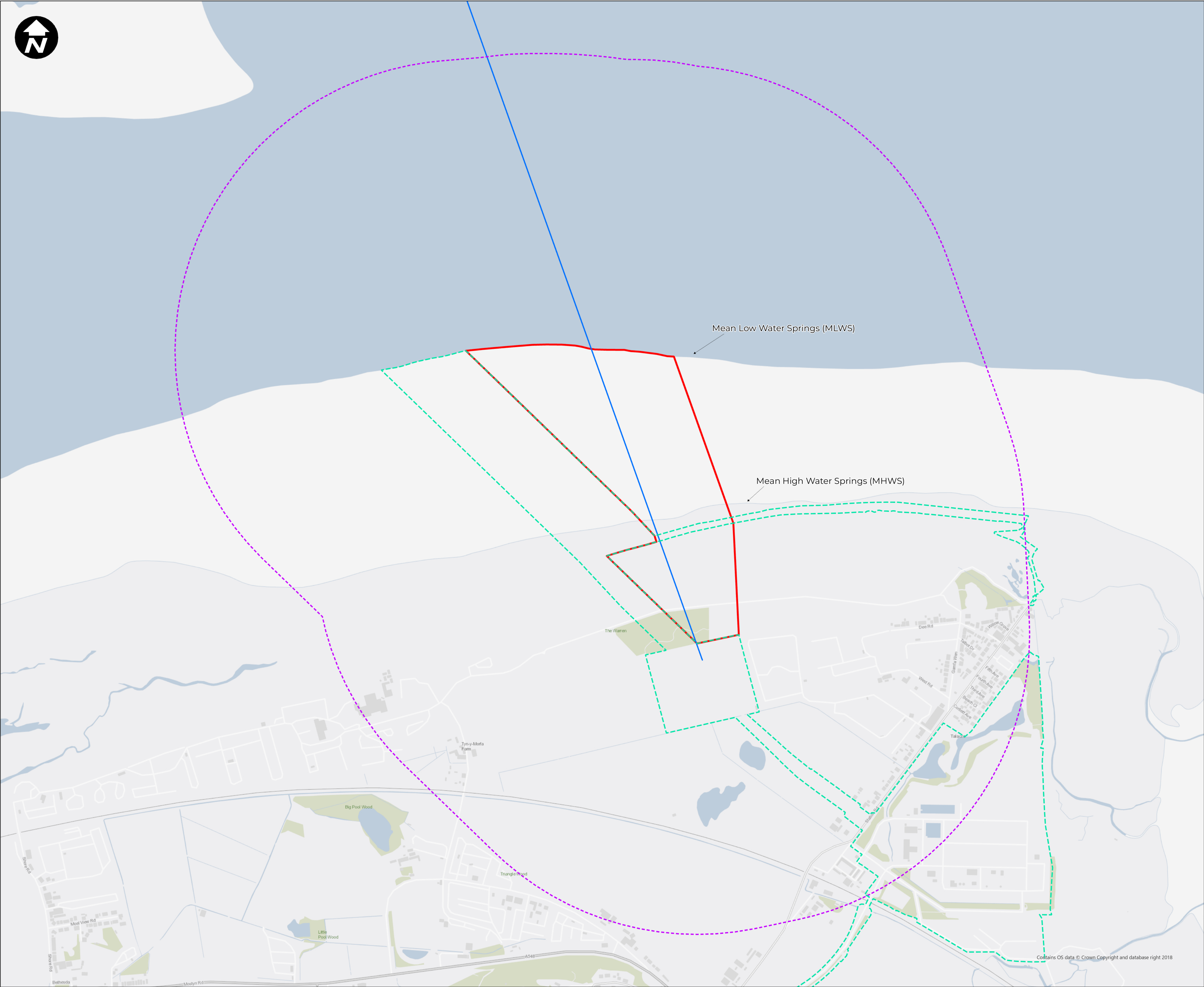
- 7.3.1. The Archaeological Consultant will technically assure the deliverables conform to the format and scope agreed with the LPA Archaeological Advisor, and that the reporting is accurate and clear and with sound conclusions, and that it has been produced to professional standards and the requirements of the LPA

Archaeological Advisor. This will be the case whether the agreed deliverables take the form of an archaeological report for the HER, journal article or monograph.

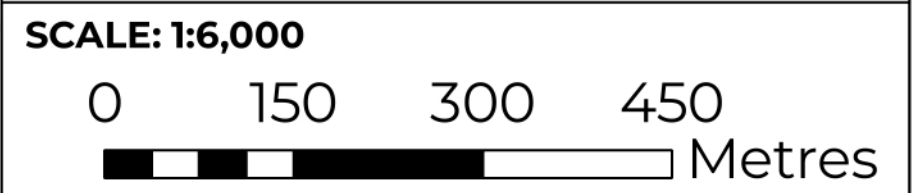
- 7.3.2. The Archaeological Consultant will liaise with the archaeological fieldwork subcontractor to ensure that the work is carried out to an agreed delivery programme.

Annex A

FIGURES



- Key :**
- Proposed Development Red Line Boundary
 - Foreshore Area Cable Alignment
 - Consented Development Red Line Boundary
 - 1km Buffer



Mapping reproduced by permission of Ordnance Survey on behalf of HMSO.
Contains OS data © Crown Copyright and database right 2023 Ordnance Survey
License Number: 0100031673.
Contains public sector information licensed under the Open Government Licence
v3.0.



PROJECT TITLE

**Point of Ayr Cable Route
Foreshore Works**

DRAWING TITLE

Figure: A.1
Planning Application Boundary
for the Proposed Development

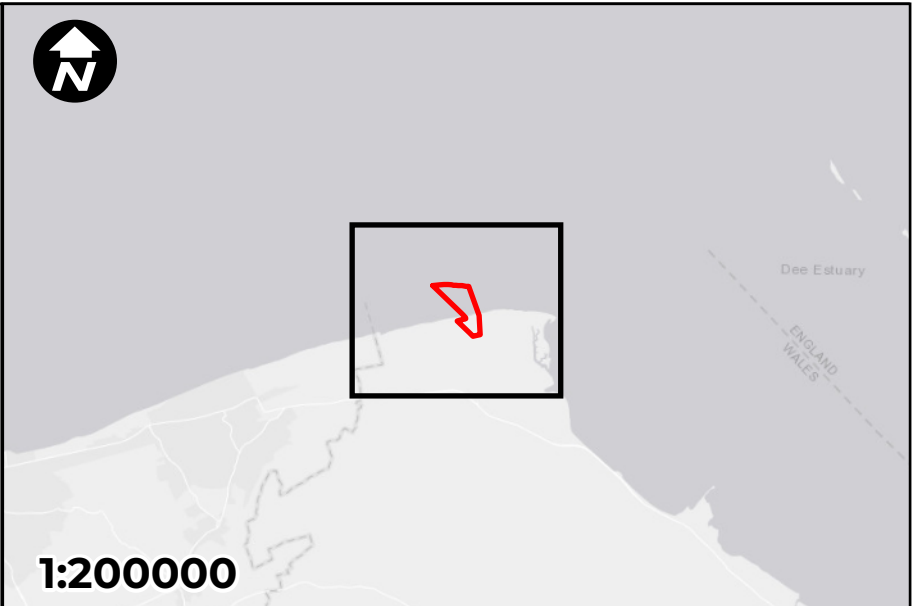
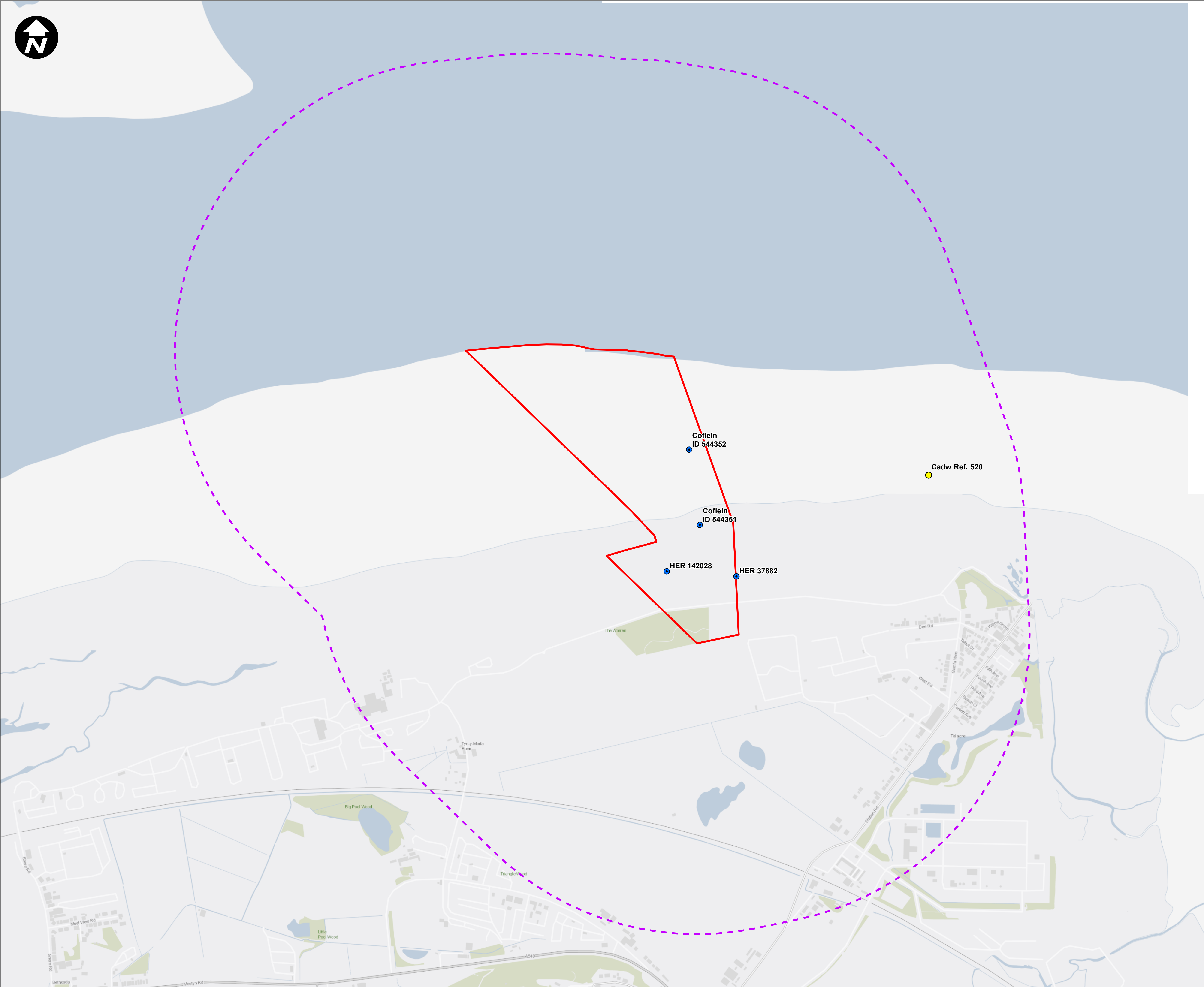
DRAWING STATUS

FOR REVIEW AND COMMENT

DRAWN	CHECKED	APPROVED	AUTHORISED
PB	AA	NH	MT
SCALE @ A1 SIZE		DATE	REVISION
1:6,000		15/08/2025	B

DRAWING NUMBER

UK0029984.4176- PF.3.7.1-ES- Sheet1



Key:

- Proposed Development Red Line Boundary
- 1km Buffer

Statutory Historic Designations

- Grade II Listed Building

Non-Statutory Historic Designations

- Non-Designated Historic Asset

SCALE: 1:6,000

0 150 300 450 Metres

Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. Contains OS data © Crown Copyright and database right 2023 Ordnance Survey License Number: 0100031673. Contains public sector information licensed under the Open Government Licence v3.0.

 **liverpool bay ccs**

PROJECT TITLE

**Point of Ayr Cable Route
Foreshore Works**

DRAWING TITLE

Figure: A.2
Heritage Constraints Map

DRAWING STATUS

FOR REVIEW AND COMMENT

DRAWN	CHECKED	APPROVED	AUTHORISED
PB	AB	NH	MT

SCALE @ A1 SIZE	DATE	REVISION
1:6,000	11/07/2025	A

DRAWING NUMBER

UK0029984.4176- PF.3.7.2-REP- Sheet1

Annex B

REFERENCES

ANNEX B: REFERENCES

A Research Framework for the Archaeology of Wales, 2025 *North East Wales, Research Framework for the Archaeology of Wales - Fframwaith Ymchwil i Archaeoleg Cymru*

Archaeological Archive Forum, 2011, *Archaeological Archives: a guide to best practice in creation, compilation transfer and curation*

ADS [Archaeological Data Service], 2018, *Guidance for the selection of material for deposit and archive*. Available at <https://archaeologydataservice.ac.uk/advice/selectionGuidance.xhtml>.

ADS [Archaeological Data Service], 2021, *Guidelines for Depositors*. Available at <http://archaeologydataservice.ac.uk/advice/guidelinesForDepositors>.

British Geological Survey, 2025, *Geology Viewer*, [BGs Geology Viewer \(BETA\)](#)

Cadw, 2011, *Conservation Principles for the Sustainable Management of the Heritage Environment in Wales*. Cardiff: Welsh Government

Cadw, 2017a, *Heritage Impact Assessment in Wales*. Cardiff: Welsh Government

Cadw, 2017b, *Setting of Historic Assets in Wales*. Cardiff: Welsh Government

Cadw, 2020, *Managing the Marine Historic Environment of Wales*. Cardiff: Welsh Government

CIfA [Chartered Institute for Archaeologists], 2017, *Updated Guidelines to the Standards for Recording Human Remains*, Reading

CIfA [Chartered Institute for Archaeologists], 2019, *Selection Toolkit for Archaeological Archives*. Available at <https://www.archaeologists.net/selection-toolkit>.

CIfA [Chartered Institute for Archaeologists], 2020a, *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*, Reading

CIfA [Chartered Institute for Archaeologists], 2020b, *Standards and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment*, Reading.

CIfA [Chartered Institute for Archaeologists], 2020c, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*, Reading

CIfA [Chartered Institute for Archaeologists], 2020d, *Standard and guidance for the nautical archaeological recording and reconstruction*, Reading

ClfA [Chartered Institute for Archaeologists], 2023a, *Standard for archaeological monitoring and recording*, Reading

ClfA [Chartered Institute for Archaeologists], 2023b, *Universal guidance for archaeological monitoring and recording*, Reading

Health and Safety Executive (HSE), 2015. Construction (Design and Management) Regulations 2015 (CDM 2015). [online] Available at: <https://www.hse.gov.uk/> [Accessed 3rd June 2025]

HM Government, 1979, *Ancient Monuments and Archaeological Areas Act 1979*

HM Government, 1986, *Protection of Military Remains Act 1986* c.35

LandIS, 2025, *Soilscapes*, [LandIS - Land Information System - Soilscapes soil types viewer](#)

Leigh D, Watkinson and Neal V, 1998, *First Aid for Finds: Practical Guide for Archaeologists*

Museums and Galleries Commission, 1992, *Standards in the Museum Care of Archaeological Collections*.

Niven, 2021, *Project Metadata: Guides to Good Practice*. Available at <https://archaeologydataservice.ac.uk/help-guidance/guides-to-good-practice/the-project-lifecycle/project-metadata/>.

RCAHMW, 2015, *Guidelines for Digital Archive*. Available at <https://rcahmw.gov.uk/wp-content/uploads/2016/09/RCAHMW-Guidelines-for-Digital-Archives.pdf>

Society of Museum Archaeologists, 1995, *Towards an Accessible Archive. The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland, Scotland and Wales*.

Treasure (Designation) (Amendment) Order 2023 <https://www.legislation.gov.uk/uksi/2023/404/made>

Treasure (Designation) Order 2002, London, The Stationary Office <https://www.legislation.gov.uk/uksi/2002/2666/contents/made>

Treasure Act 1996, London, The Stationary Office <https://www.legislation.gov.uk/ukpga/1996/24/contents>

United Kingdom Institute for Conservation, 1990, *Guidance for Archaeological Conservation Practice*

Welsh Government, 2017, *Technical Advice Note (TAN) 24: The Historic Environment*. Cardiff: Welsh Government

Welsh Government, 2023, *Historic Environment (Wales) Act 2023*. Cardiff: Welsh Government

Welsh Museums Federation. (2019). National Standard and Guidance for Collecting and Depositing Archaeological Archives in Wales.

WSP 2023a, *Historic Environment Desk Based Assessment: HYNET Carbon Dioxide Pipeline TCPA* [Internal Report]

WSP, 2023b, *Environmental Statement, Appendix 11.1: Phase 1 Land and Soil (Contaminated Land) Baseline Report* [Internal Report]

Zeteca, 2021, *Point of Ayr Terminal – UXO Desk Study and Risk Assessment*

Annex C

EXAMPLE DATA MANAGEMENT PLAN

1. Project

Site Code: TBA

Site Name: Point of Ayr Cable Route Foreshore Works

Project Type: Watching Brief

Local Authority: Flintshire County Council

Local Authority Archaeological Advisor: Heneb: Clywd Powys Archaeology

Data Repository: National Monuments Record for Wales (Royal Commission for the Ancient and Historical Monuments of Wales)

2. Data Collection and Standards

Methods of collection will conform to appropriate recording practices and standards as outlined in ClfA Standard for archaeological monitoring and recording (ClfA 2023a). Details will be included as part of the method statement by the Archaeological Fieldwork Contractor.

Data collection will adhere to FAIR Principles and will be in line with ClfA Dig Digital Guidance

(https://guides.archaeologydataservice.ac.uk/g2gp/Geophysics_Toc) and RCAHWM (2015) guidance (<https://rcahmw.gov.uk/wp-content/uploads/2016/09/RCAHWM-Guidelines-for-Digital-Archives.pdf>).

The intended repository for digital data is the Archaeology Data Service (ADS) and National Monuments Record for Wales.

The intended repository for physical site records is the National Monuments Record for Wales.

Site Records

Details will be included as part of the method statement by the Archaeological Fieldwork Contractor.

Photographic Record

Details will be included as part of the method statement by the Archaeological Fieldwork Contractor. Details should include type of camera, number of megapixels and photograph format.

Data Standards

Details will be included as part of the method statement by the Archaeological Fieldwork Contractor. Details should include data type and format for storage and archives for the following data types: spreadsheets, text documents, photography, GIS shapefiles and plans.

3. Data Storage and Backup

Details will be included as part of the method statement by the Archaeological Fieldwork Contractor. Details should include data storage methodology and

location for the following data types: site records (physical and digital), text documents, photography, photography backup, GIS shapefiles and plans.

Data intended for digital archive will be structured in the server directory as follows:

- Archives
 - Graphics
 - GIS
 - Photos
 - Spreadsheets
 - Reports

4. Metadata

Metadata tables for each data type will be populated as the project progresses and will use the standard format for each data type as recommended by: ADS Guides to Good Practice (Niven 2021).

<https://archaeologydataservice.ac.uk/help-guidance/guides-to-good-practice/the-project-lifecycle/project-metadata/>

Data documentation will meet the requirement of the Project, Museum Deposition Guidelines, Digital Repository Guidelines and the methodology described in Section 4.3 of the WSI.

5. Ethics and Legal Compliance

Personally Identifiable Information (PII) will be removed from the archaeological project archive and permission to include individual's names in any reporting will be gained prior to use.

Copyright for all data collected by the project team belongs to the Archaeological Fieldwork Contractor (TBA), and formal permission to include data from external specialists and contractors is secured on the engagement of the specialist or contractor.

Where formal permissions and/or license agreements are linked to data sharing, details of these will be included in the project documentation folders and will accompany the project archive.

6. Archive

Digital archive material will be deposited with a trusted digital repository, where data migration and backup procedures are in place, and the integrity of the digital archive is maintained (see Section 1).

Version control will be applied throughout the project in line with standard operating procedures and ADS (2021), ClfA (2019), and HE (2015) guidelines.

Only the final version of 'born digital' documents (reports, databases, images, GIS files) will be selected for inclusion in the Digital Archive. The material de-

selected from inclusion in the preserved archive will be duplicates or reproductions created during the lifespan of the project.

Digital photographs will be assessed during post-excavation and selection based on the principles set out in the ADS (2011) and HE guidelines (2015).

Raw data (all formats) will only be preserved if specifically requested by the Client or specified by local authority requirements, e.g. raw photogrammetric data. Where an archive of raw data with an accepted repository (e.g. ADS) is required, a subsequent costing for storage and archiving will be provided.

Selection will be defined against the research aims, regional and national research frameworks, specialist advice and the significance of the project results. Selection will be carried out based on the following guidelines:

- ADS (2021) Guidelines for Depositors
<http://archaeologydataservice.ac.uk/advice/guidelinesForDepositors>;
- ADS (2018) Guidance for the selection of material for deposit and archive
<https://archaeologydataservice.ac.uk/advice/selectionGuidance.xhtml>;
- CIfA (2019) Selection Toolkit for Archaeological Archives
<https://www.archaeologists.net/selection-toolkit>; and
- RCAHWM (2015) guidance (<https://rcahmw.gov.uk/wp-content/uploads/2016/09/RCAHWM-Guidelines-for-Digital-Archives.pdf>).

7. Data Sharing and Accessibility

Data specific requirements, ethical issues or embargos which are linked to particular data formats will be documented within the relevant metadata tables accompanying the project archive.

A summary of the project will be included within Welsh publicly available Historic Environment Record data.

A final version of the project report will be supplied to the Historic Environment Record and any data which they request can also be provided directly.

The Repository listed in Section 1 will disseminate the digital elements of the Archaeological Archive online per their guidelines.

8. Responsibilities

The Project Manager (TBA) will be responsible for updating and implementing the Data Management Plan, and ensuring it is reviewed and revised at each stage of the project.

Data capture, metadata production and data quality are the responsibility of the Project Team, assured by the Project Manager with support from the Geomatics Manager and Archives Officer.

Storage and backup of data in the field is the responsibility of the field team. Data management on site will be supervised by the site lead (TBA).

Data on the archaeological fieldwork contractor's project server, storage and backup is managed by their IT Support Team.

Data archiving is undertaken by the project team under the guidance of the Archives Officer with the support of the Geomatics Manager.

The Archives Officer is responsible for the transfer of the Archaeological Project Archive to the agreed repository.