

XLINKS' MOROCCO-UK POWER PROJECT

Outline Onshore Written Scheme of Investigation

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XLINKS' MOROCCO – UK POWER PROJECT

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Glossary

| Term | Meaning |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alverdiscott Substation | The existing National Grid Electricity Transmission substation at Alverdiscott, Devon, which comprises 400 kV and 132 kV electrical substation equipment. |
| Bronze Age Period | The time period 2000 to 700 BCE. |
| Converter Site | The Converter Site is proposed to be located to the immediate west of the existing Alverdiscott Substation Site in north Devon. The Converter Site would contain two converter stations (known as Bipole 1 and Bipole 2) and associated infrastructure, buildings and landscaping. |
| Converter station | Part of an electrical transmission and distribution system. Converter stations convert electricity from Direct Current to Alternating Current, or vice versa. |
| Development Consent Order | An order made under the Planning Act 2008, as amended, granting development consent. |
| Environmental Impact Assessment | The process of identifying and assessing the significant effects likely to arise from a project. This requires consideration of the likely changes to the environment, where these arise as a consequence of a project, through comparison with the existing and projected future baseline conditions. |
| Environmental Statement | The document presenting the results of the Environmental Impact Assessment process. |
| Historic environment | All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora. |
| HVAC Cables | The High Voltage Alternating Current cables which would bring electricity from the converter stations to the new Alverdiscott Substation Connection Development. |
| HVAC Cable Corridors | The proposed corridors (for each Bipole) within which the onshore High Voltage Alternating Current cables would be routed between the Converter Site and the Alverdiscott Substation Site. |
| HVDC Cables | The High Voltage Direct Current cables which would bring electricity to the UK converter stations from the Moroccan converter stations. |
| Iron Age Period | The time period 700 BCE to AD 43. |
| Landfall | The proposed area in which the offshore cables make landfall in the United Kingdom (come on shore) and the transitional area between the offshore cabling and the onshore cabling. This term applies to the entire landfall area at Cornborough Range, Devon, between Mean Low Water Springs and the transition joint bays inclusive of all construction works, including the offshore and onshore cable routes, and landfall compound(s). |
| Medieval Period | The time period AD 410 to AD 1540. |
| Mesolithic Period | The time period 8500 to 3500 BCE. |
| Modern Period | The time period 1901 onwards. |
| National Grid Electricity Transmission | National Grid Electricity Transmission owns and maintains the electricity transmission network in England and Wales. |
| Neolithic Period | The time period 4000 – 1800 BC. |
| Onshore HVDC Cable Corridor | The proposed corridor within which the onshore High Voltage Direct Current cables would be located. |
| Onshore Infrastructure Area | The proposed infrastructure area within the Order Limits landward of Mean High Water Springs. The Onshore Infrastructure Area comprises the transition joint bays, onshore HVDC Cables, converter stations, HVAC Cables, highways improvements, utility diversions and associated temporary and permanent infrastructure including temporary compound areas and permanent accesses. |

| Term | Meaning |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Order Limits | The area within which all offshore and onshore components of the Proposed Development are proposed to be located, including areas required on a temporary basis during construction (such as construction compounds). |
| Post-medieval Period | The time period AD 1540 to 1901. |
| Prehistoric Period | The general term used for the time period before the Roman invasion of AD 43. |
| Proposed Development | The element of Xlinks' Morocco-UK Power Project within the UK. The Proposed Development covers all works required to construct and operate the offshore cables (from the UK Exclusive Economic Zone to Landfall), Landfall, onshore Direct Current and Alternating Current cables, converter stations, and highways improvements. |
| Roman Period | The time period AD 43 to AD 410. |

Acronyms

| Acronym | Meaning |
|----------------|----------------------------------------------------|
| AD | Anno Domini |
| ADS | Archaeology Data Service |
| AIL | Abnormal Indivisible Loads |
| BCE | Before the Christian Era |
| CAT | Cable Avoidance Tool |
| On-CEMP | Onshore Construction Environmental Management Plan |
| CIfA | Chartered Institute for Archaeologists |
| DCO | Development Consent Order |
| ES | Environmental Statement |
| GNSS | Global Navigation Satellite System |
| HER | Historic Environment Record |
| HET | Historic Environment Team (Devon County Council) |
| HVAC | High Voltage Alternating Current |
| HVDC | High Voltage Direct Current |
| IFA | Institute of Field Archaeologists |
| MGC | Museums and Galleries Commission |
| OS | Ordnance Survey |
| RTK | Real-Time Kinematic |
| SMA | Society of Museum Archaeologists |
| UK | United Kingdom |
| WSI | Written Scheme of Investigation |

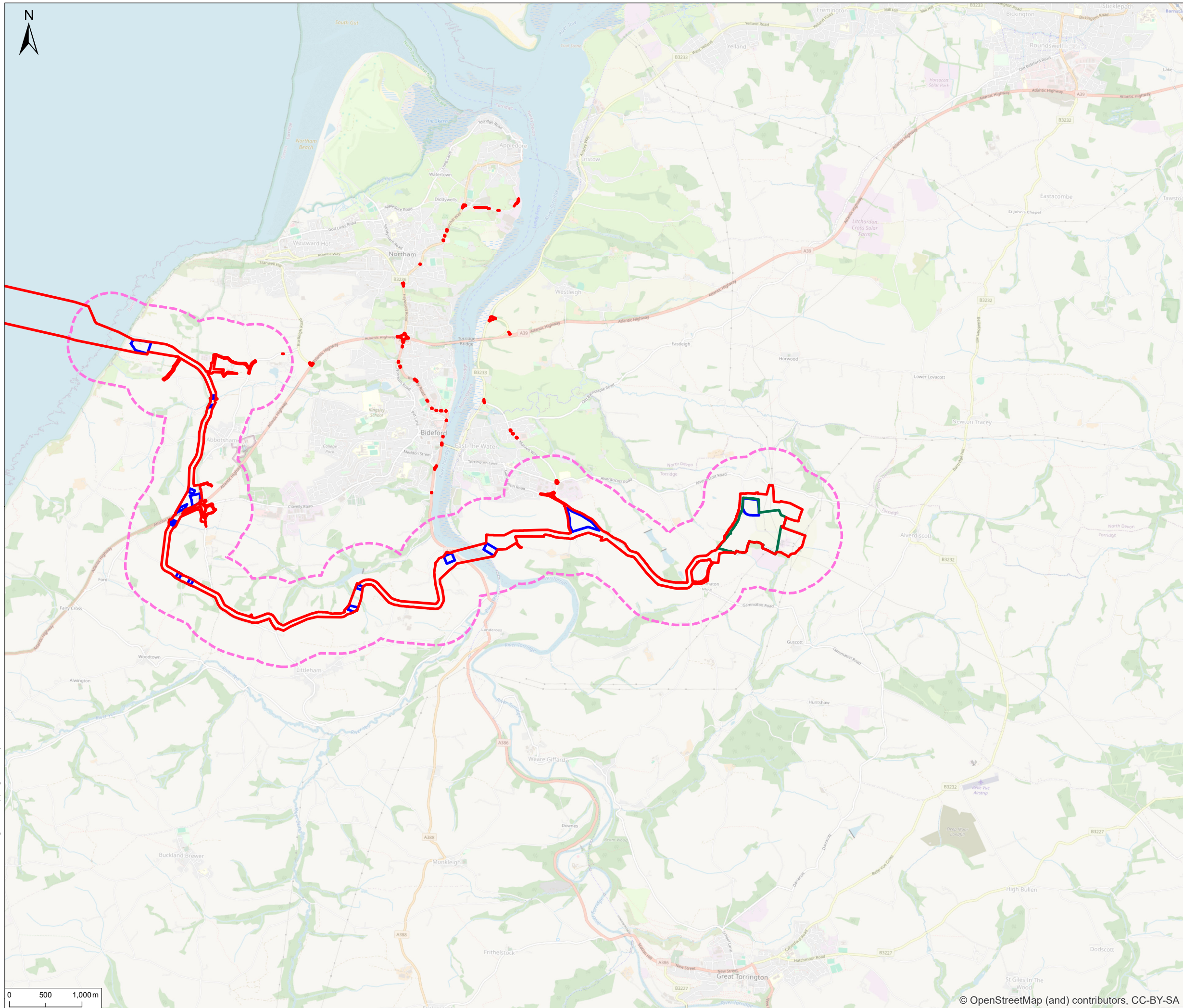
Units

| Units | Meaning |
|-------|-------------|
| km | Kilometres |
| m | Metres |
| ml | Millilitres |
| mm | Millimetres |





1 OUTLINE ONSHORE WRITTEN SCHEME OF INVESTIGATION

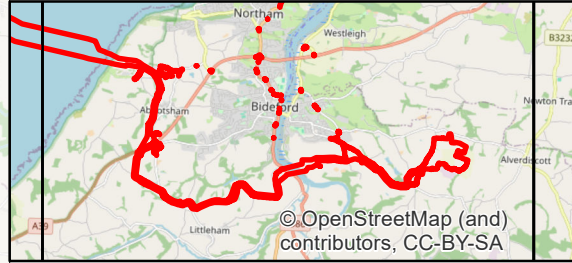
1.1 Introduction

- 1.1.1 This document forms the Outline Onshore Written Scheme of Investigation (WSI), which has been prepared for the United Kingdom (UK) elements of the Xlinks' Morocco-UK Power Project (the 'Project'). For ease of reference, the UK elements of the Project are referred to as the 'Proposed Development'.
- 1.1.2 This document provides provisional information on the programme of post-consent archaeological investigation required with regards to the onshore elements of the Proposed Development, landward of Mean High Water Springs. These onshore elements are located in north Devon (**Figure 1.1**) and comprise of the following.
- Converter stations: two independent converter stations, known as Bipole 1 and Bipole 2, to convert electricity from Direct Current (DC) to Alternating Current (AC) before transmission to the national grid.
 - Onshore High Voltage Alternating Current (HVAC) Cables: these cables would connect the converter stations to the national grid.
 - Onshore High Voltage Direct Current (HVDC) Cables: these cables would link the converter stations to the Landfall.
 - Highways improvements: improvements to the existing road network to facilitate access during construction, operation and maintenance, and decommissioning, including road widening, and new or improved junctions.
 - Temporary and permanent utility connections: temporary and permanent utility connections to the construction compounds and the Converter Site.
 - Permanent utility diversions: permanent diversion of existing utility services within the Onshore Infrastructure Area.
 - Landfall: the site at Cornborough Range where the offshore cables are joined to the onshore cables. This term applies to the entire area between Mean Low Water Springs (MLWS) and the transition joint bays, within the Order Limits. This includes all construction works, including the offshore and onshore cable routes, and compound(s) at Landfall.
- 1.1.3 These elements are included in the Onshore Infrastructure Area together with the construction compounds, accesses, haul roads and other land that will be temporarily or permanently occupied during the construction, operation and maintenance and decommissioning of the Proposed Development.
- 1.1.4 The Abnormal Indivisible Load (AIL) route works incorporated within the Order Limits for the Proposed Development are not included within the scope of this Outline Onshore WSI. This is due to construction proposals associated with the AIL routes being limited to minor works to the existing carriageway and, as such, will not generate any impacts to any known or potential archaeological sites or features.



Notes
1. This plan is scaled at paper size A3. If received electronically it is the recipients responsibility to print to the correct scale. Only written dimensions should be used.

- Legend**
-  Order Limits
 -  Converter Site
 -  Construction Compound
 -  500m historic environment study area



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| Rev | Description | By | NB | 03.10.24 |

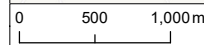


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 Project Xlinks' Morocco-UK Power Project
 Title Site Location

Status FINAL Scale @ A3 1:50,000 Date Created Nov 2024
 Figure Number 1.1 Rev P01

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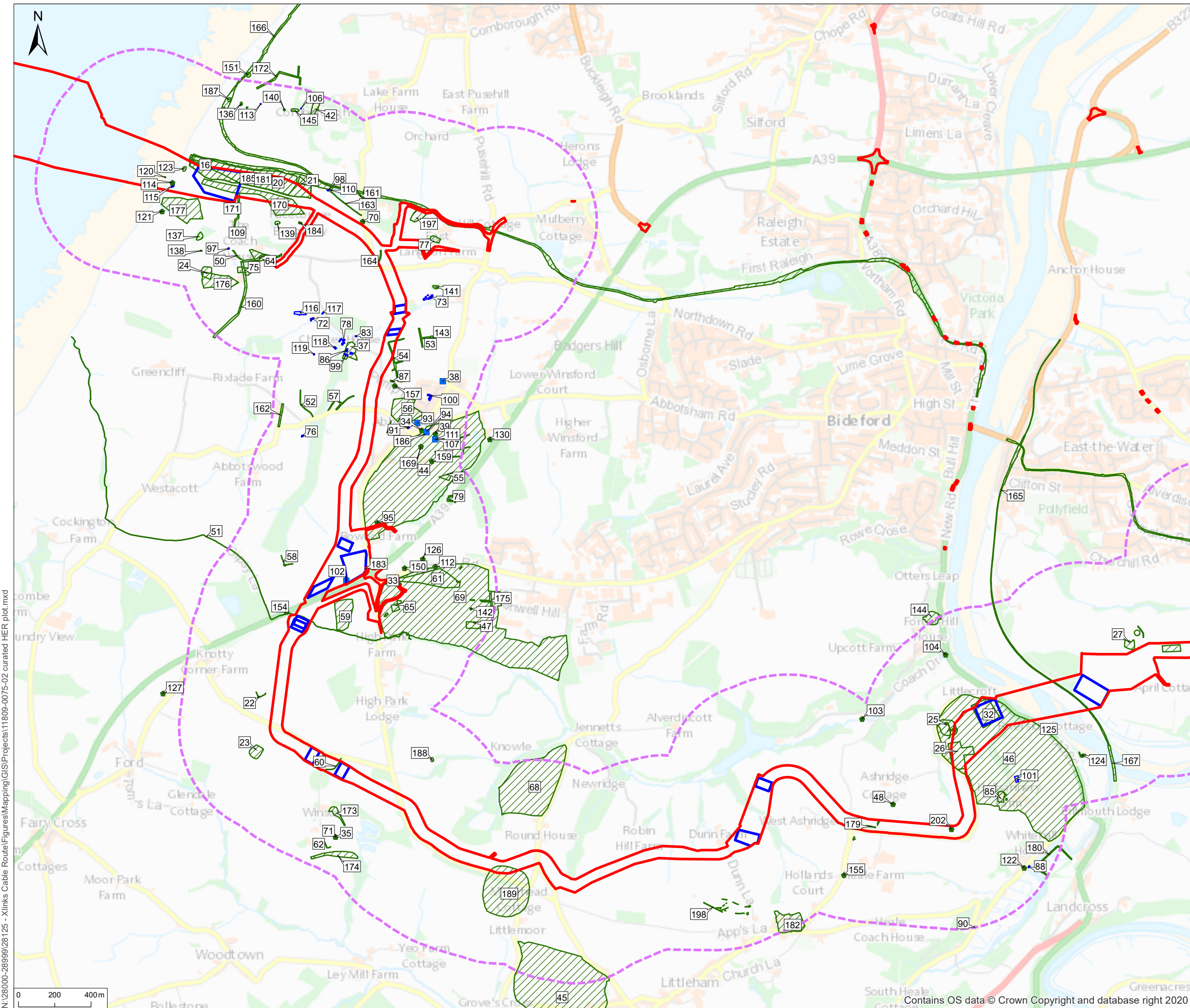
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1.2 Purpose of the Outline Onshore Written Scheme of Investigation

- 1.2.1 Requirement 11 of the draft Development Consent Order (DCO) (document reference 3.1) for the Proposed Development requires the preparation of one or more Onshore WSIs, which must be submitted to, and approved by the relevant planning authority prior to the commencement of onshore works. Any Onshore WSI would need to be in accordance with this Outline Onshore WSI and agreed with the relevant stakeholders.
- 1.2.2 This is an outline document that is based on the design set out in Volume 1, Chapter 3: Project description of the Environmental Statement (ES) (document reference 6.1.3). It describes the procedures that would be used to determine the requirements for further archaeological work that may be undertaken within the Onshore Infrastructure Area, and the methodologies that may be deployed within that programme of further archaeological work. This outline document does not seek to identify specific areas within the Onshore Infrastructure Area where any of these methodologies would be deployed – that would be established within a detailed Onshore WSI(s) following consultation with the relevant stakeholders.
- 1.2.3 The Outline Onshore WSI should be read in conjunction with the Outline Onshore Construction Environmental Management Plan (On-CEMP(s)) (document reference 7.7) and its supporting appendices.
- 1.2.4 Archaeological research and fieldwork undertaken ahead of the submission of the application for a DCO for the Proposed Development is reported in the following documents:
- Volume 2, Appendix 2.1: Historic environment desk-based assessment of the ES (document reference 6.2.2.1) - this provides a detailed review of the known and potential archaeological resources within the Onshore Infrastructure Area and a defined buffer zone around this area (the historic environment study area);
 - Volume 2, Appendix 2.2: Onshore geophysical survey report of the ES (document reference 6.2.2.2) - this describes the results of a programme of purposive archaeological geophysical survey undertaken within a considerable part of the Onshore Infrastructure Area; and
 - Volume 2, Appendix 2.3: Preliminary trial trenching report of the ES (document reference 6.2.2.3) - this describes the interim results of a programme of archaeological trial trenching undertaken within the Onshore Infrastructure Area.
- 1.2.5 The programme of trial trenching referenced in the final bullet point above has been agreed with the relevant stakeholders, specifically the Historic Environment Team (HET) at Devon County Council. These trenches are located in order to examine anomalies of potential archaeological interest identified by the geophysical survey, and also to examine areas that appear to be archaeologically 'blank' or which were not subject to geophysical survey.
- 1.2.6 The interim report regarding the programme of trial trenching (Volume 2, Appendix 2.3: Preliminary trial trenching report of the ES (document reference 6.2.2.3)) describes the findings across a total of 135 trenches which were excavated and recorded during the period June - September 2023.

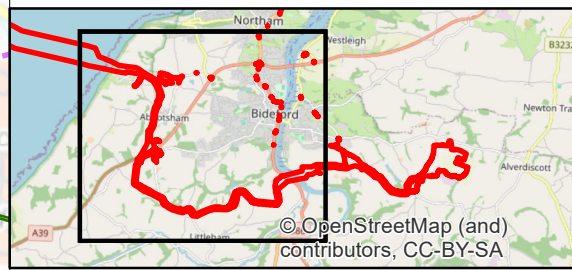
1.3 Archaeological and Historic Background

- 1.3.1 The following information is derived from the appropriate elements of the historic environment desk-based assessment (Volume 2, Appendix 2.1: Historic environment desk-based assessment of the ES (document reference 6.2.2.1)) and the programmes of project-specific fieldwork.
- 1.3.2 The defined study area for the review presented within Volume 2, Appendix 2.1: Historic environment desk-based assessment of the ES (document reference 6.2.2.1) comprised a zone extending for 500 m from the edge of the Onshore Infrastructure Area (excluding the AIL routes).
- 1.3.3 Identified historic environment sites and features within the defined historic environment study area are shown on **Figure 1.2** and **Figure 1.3** as Sites 1-218. Further information on these historic environment sites and features is provided within Annexes A-C of Volume 2, Appendix 2.1: Historic environment desk-based assessment of the ES (document reference 6.2.2.1).



Notes
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- Legend**
- Order Limits
 - 500m historic environment study area
 - Construction Compound
- HER Records Points**
- Monuments
 - Buildings
- HER Records Polygons**
- Monuments
 - Buildings



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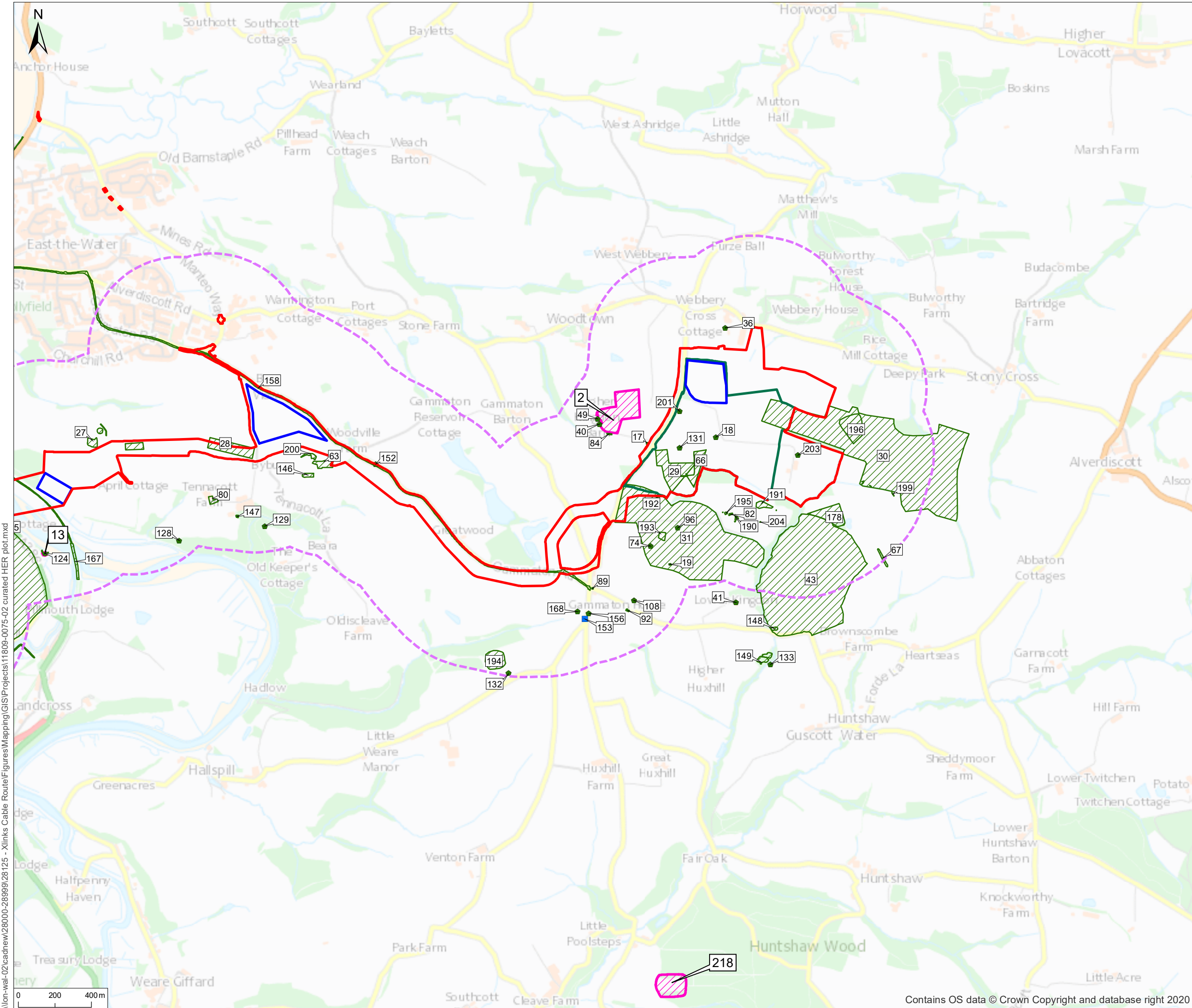
Title Known and potential archaeological and historical sites (sheet 1)

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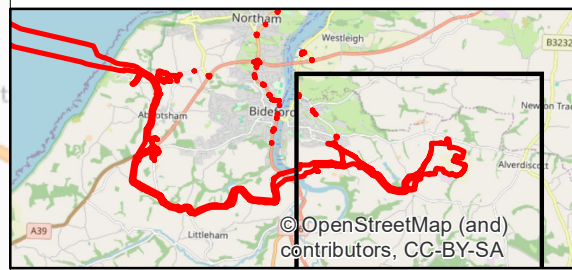
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Notes
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- Legend**
- Order Limits
 - 500m historic environment study area
 - Converter Site
 - Construction Compound
 - Scheduled Monuments
- HER Records Points**
- Monuments
 - + Findspots
 - Buildings
- HER Records Polygons**
- Monuments
 - Buildings
 - Findspots



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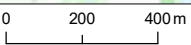


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Title Known and potential archaeological and historical sites (sheet 2)

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Prehistoric and Roman

- 1.3.4 The earliest known archaeological evidence for human activity in the general area is mainly confined to findspots of lithic material (worked stone tools), the majority of which are associated with fluvial deposits such as river gravels. Sites with evidence of activity and occupation are mostly cave sites, predominantly now in coastal locations on the south coast of Devon. Evidence for Mesolithic activity is dominated by surface scatters which incorporate later material including some distinctive Neolithic types. However, this latter period also saw the development of settlement and agriculture along with the construction of monuments such as stone and timber circles. Visible remains of Bronze Age activity are mostly in the form of burial monuments (such as round barrows) or ceremonial sites such as stone circles and stone rows.
- 1.3.5 Within the defined study area, the earliest evidence for human activity derives from an extensive scatter of Prehistoric worked flints (Site 16) located within the western part of the Onshore HVDC Cable Corridor at the Cornborough Sewage Treatment Works. The majority of the 1,785 artefacts recovered were dated to the Mesolithic period with tools including geometric microliths and microdenticulates, although some Neolithic material was also thought to be present (Reed, 1995).
- 1.3.6 Aerial photographic analysis has identified a possible Bronze Age ring ditch (Site 17), approximately 7 m in diameter, close to the western boundary of the Converter Site.
- 1.3.7 A Scheduled Monument comprising an Iron Age defended settlement and Roman military camp near Higher Kingdon Barn (Site 2) is located approximately 150 m from the Converter Site. Both the prehistoric settlement and the adjacent Roman camp survive as features visible on aerial photographs but with no visible surface expression. The Iron Age settlement lies on a south-facing slope and is defined by three ditches. The Roman marching camp survives as a rectangular enclosure immediately north east of (and possibly attached to) the enclosure and is defined by a single ditch up to 1.3 m wide, enclosing an area measuring approximately 140 m long by 115 m wide. The camp extends across a natural knoll and then down the south-facing slope. The attribution of an Iron Age date for the enclosure and a Roman date for the adjacent camp is made on the basis of analogy with similar sites elsewhere in the country.
- 1.3.8 In relation to potential Iron Age activity, an assessment of former field boundaries suggests the presence of an elliptical Iron Age enclosure (Site 18) within the Converter Site. A geophysical survey for the proposed Atlantic Array project also identified anomalies here consistent with a 10 m square enclosure (Site 19) which could be Iron Age, or potentially Roman, in date.
- 1.3.9 Fieldwalking undertaken in 1983 (Site 20) within the western part of the Onshore HVDC Cable Corridor and to the north of Abbotsham Court found approximately two hundred worked flint artefacts dated to the Prehistoric period in general. The artefacts primarily comprised flint knapping waste, although ten scrapers and six rough chisels were identified.
- 1.3.10 Multiple cropmarks have been recorded within the study area during the second half of the 20th century; the Devon Historic Environment Record (HER) records three of these cropmark sites as being possible Prehistoric enclosures. The enclosure near Abbotsham Court (Site 21) is located within the western part of the Onshore HVDC Cable Corridor, while the remaining two enclosures (Sites 22 and

23) are located close together near Knotty Corner, within 100 m of the Onshore HVDC Cable Corridor and just south of the A39 road.

- 1.3.11 The programme of geophysical survey undertaken for the Proposed Development identified several possible prehistoric ring ditches just to the west of Abbotsham along with a group of small enclosures just to the west of Bowood, a possible square enclosure south west of Lower Dunn, a group of possible small enclosures immediately west of Gammaton Lane (south east of Woodville Farm) and a possible subcircular enclosure in the north western part of the Converter Site.
- 1.3.12 Some of these features have been examined through the programme of trial trenching undertaken for the Proposed Development. The linear features which represent the potential enclosures were generally confirmed; little or no dating evidence was recovered, although further processing of environmental samples may result in the recovery of material suitable for radiocarbon dating. However, the trial trenching did identify a cluster of pits and postholes of early Neolithic date west of Gammaton Lane (north west of Woodville Farm) and also a second cluster of features of possible early Neolithic date to the north of the crossroads at Gammaton Moor. These features had not been identified as anomalies by the geophysical survey.
- 1.3.13 Due to a lack of intrusive investigation or the presence of substantive dating evidence, numerous features recorded on the HER identified by means of aerial survey, geophysical survey or, more rarely, intrusive archaeological fieldwork, have been broadly dated to the Prehistoric and Roman period in general. Such features comprise: an irregular subcircular enclosure (Site 24) located approximately 400 m to the south of the Onshore HVDC Cable Corridor at Abbotsham Court; a second subcircular enclosure and possible field system (Site 25) partially extending into the central section of the Onshore HVDC Cable Corridor near Hallsannery House; possible field system ditches (Site 26) found nearby during archaeological trenching for the proposed Atlantic Array project (Oxford Archaeology 2012); a double ditched cropmark enclosure (Site 27) to the north of the central section of the Onshore HVDC Cable Corridor just east of the crossing of the River Torridge; further field system ditches (Site 28) found during archaeological trenching within the Onshore HVDC Cable Corridor to the west of Woodville Farm (Oxford Archaeology, 2012); an oval enclosure (Site 29) measuring approximately 50 m by 35 m located within the Converter Site; and multiple geophysical survey anomalies (Site 30), indicative of a field system, extending into the eastern edge of the Converter Site.
- 1.3.14 The enclosure near to Hallsannery House (Site 25) was confirmed by the geophysical survey undertaken for the Proposed Development. The enclosure is oval in plan, with an entrance on the southern side and several smaller internal enclosures. Two possible square enclosures and other features were identified to the south of the oval enclosure. The Order Limits were adjusted in this area to ensure that there would be no physical impact on the enclosure. Trial trenching within the Onshore HVDC Cable Corridor to the east of the enclosure identified a potential terraced platform for a late prehistoric roundhouse. Three possible cremation burials were found within the backfill of this platform, one of which contained a single sherd of Roman pottery.
- 1.3.15 The foundations of a possible Roman tower, or a potentially a post-medieval windmill (Site 33), are recorded approximately 20 m to the east of the Onshore HVDC Cable Corridor, and east of the crossing of the A39 road.
- 1.3.16 The geophysical survey undertaken for the Proposed Development identified the presence of a small sub-square enclosure and a possible prehistoric ring ditch to

the north of Winscott Barton. The Order Limits were adjusted in this area to ensure that there would be no physical impact on the possible prehistoric ring ditch. The small sub-square enclosure was examined through trial trenching and was found to be of Roman date, 2nd century AD at the earliest. The enclosure ditch was substantial, up to 2.3 m deep with a steep V-shaped profile, and several potential internal features were also identified. A similar enclosure has recently been examined at a site near to Clovelly Road, Bideford, approximately 350 m east of the Onshore HVDC Cable Corridor. Here the enclosure ditch was 2.2 m deep, and the feature was also of 2nd century AD date.

Early Medieval and Medieval

- 1.3.17 No sites or material of definite Early Medieval date (AD 410 - 1066) are recorded within the 500 m historic environment study area.
- 1.3.18 The modern settlement of Abbotsham, located approximately 100 m to the east of the Onshore HVDC Cable Corridor, was called 'Hama' in the Domesday survey (Site 34). It was one of the foundation estates of Tavistock Abbey in the 13th century, taking its current name from the fact that it belonged to the abbots of Tavistock.
- 1.3.19 Several other Medieval settlements are recorded on the HER within the 500 m historic environment study area. The settlement of Winscott (Site 35) is located approximately 300 m south of the Onshore HVDC Cable Corridor, the settlement of Webbery (Site 36) is located approximately 100 m north of the Converter Site, and the hamlet of Shamland (Site 37) is located approximately 100 m west of the Onshore HVDC Cable Corridor and to the north west of Abbotsham.
- 1.3.20 Five Medieval farms or farmsteads are recorded on the HER within the 500 m historic environment study area. Two of these farmsteads are recorded as located between 250 m and 300 m to the east of the Onshore HVDC Cable Corridor at Abbotsham (Sites 38 and 39); one approximately 400 m to the north of the Onshore HVDC Cable Corridor (Cornborough Farmstead, Site 42); and two at least 300 m from the Converter Site (Higher Kingdon, Site 40 and Lower Kingdon, Site 41).
- 1.3.21 Landscape analysis using the historical sequence of OS maps has identified several possible Medieval enclosures based on former field boundary patterns; all are of extensive size. One of these (Site 43) is located immediately adjacent to the Onshore HVDC Cable Corridor near Lower Kingdon, another (Site 44) is located to the south of Abbotsham and east of the Onshore HVDC Cable Corridor, with the third one (Site 45) located to the west of Littleham and south of the Onshore HVDC Cable Corridor. A fourth enclosure identified in the same manner (Site 46) includes a section of the Onshore HVDC Cable Corridor on the western side of the River Torridge crossing. Geophysical survey has identified a possible smaller Medieval enclosure approximately 500 m to the east of the Onshore HVDC Cable Corridor and south west of Bideford (Site 47).
- 1.3.22 A series of earthworks (Site 48) located approximately 100 m to the north of the Onshore HVDC Cable Corridor at Ashridge may be related to Medieval occupation activity, while evidence for a possible Medieval field system (Site 49) is recorded at Higher Kingdon, approximately 350 m to the west of the Converter Site.
- 1.3.23 The route of a former road south of Abbotsham Court (Site 50), a short distance south of the Onshore HVDC Cable Corridor, could be Medieval in origin. The

route of another former road (Site 64), in use during the Medieval and Post-medieval periods, is located close by.

- 1.3.24 To the west of Woodville Farm and directly adjacent to the Onshore HVDC Cable Corridor is the location of a possible Medieval settlement known as Bryberry (Site 63) that was deserted by the late 19th century.
- 1.3.25 A group of small rectilinear enclosures recorded approximately 100 m to the east of the Onshore HVDC Cable Corridor and south west of Bideford (Site 65) may have been utilised for domestic or industrial purposes during the Medieval or Post-medieval periods.

Post-medieval and Modern

- 1.3.26 Archaeological excavations at Cornborough (Site 70), immediately to the north of the western Onshore HVDC Cable Corridor, identified that the Post-medieval settlement at this location was more extensive than the small number of contemporary buildings would imply.
- 1.3.27 A number of Post-medieval and Modern sites lie within the Onshore Infrastructure Area, including a windmill (Site 102), a coastal swimming pool (Site 120), a limekiln (Site 123), a quarry (Site 131), a milestone (Site 152), the course of a turnpike road and footpath (Sites 158 and 164), railways (Sites 165 – 167), multiple boundaries and linear earthworks (Sites 170, 171, 179, and 181), excavated wall and pit features (Site 183), the former Shebberton Racecourse (Site 184) and the former Abbotsham Rifle Range (Site 185).

1.4 Further Archaeological Work

Introduction

- 1.4.1 The programme of post-consent archaeological work will generally comprise the detailed archaeological investigation of land within the Onshore Infrastructure Area where the results of the historic environment desk-based assessment, the archaeological geophysical survey and the programme of trial trenching indicate the presence of significant archaeological sites or features. These investigations will comprise area excavations and will be undertaken ahead of the commencement of construction in those areas where the further archaeological work is required. Consultation will be undertaken with the HET at Devon County Council to determine the number, locations and extents of the area excavations.
- 1.4.2 Another key part of the programme of post-consent archaeological work comprises the further processing of environmental samples recovered during the programme of trial trenching reported on in Volume 2, Appendix 2.3: Preliminary trial trenching report of the ES (document reference 6.2.2.3) and the subsequent radiocarbon dating of appropriate material from such samples, followed by the completion of the agreed programme of archaeological trial trenching.
- 1.4.3 Thus a staged approach may be required in which the number, locations and extents of area excavations in those parts of the Onshore Infrastructure Area where trial trenching has already been completed can be established following sample processing and radiocarbon dating, whereas in other parts of the Onshore Infrastructure Area the number, locations and extents of area

excavations cannot be established until the agreed programme of archaeological trial trenching has been completed.

- 1.4.4 Prior to the commencement of any post-consent archaeological area excavations, one or more detailed Onshore WSI(s) will be submitted to, and agreed by, the HET at Devon County Council. Any WSI will clearly identify the areas to be excavated and will set out the justification in terms of the known and potential archaeology at each location. Site-specific aims and objectives will be identified, with appropriate references to the South West England Archaeological Research Framework (<https://researchframeworks.org/swarf/>).
- 1.4.5 No generic archaeological monitoring and recording during construction is proposed, other than at locations where the construction requires the (partial) removal of field boundaries in the form of walls, hedgerows or hedgebanks. Removal of any such features will require archaeological monitoring
- 1.4.6 No areas are currently proposed within which archaeological remains will be preserved in-situ. However, within each excavation area, consideration will be given regarding the potential for the in-situ preservation of significant archaeological remains should any such remains be identified. The outcome of the consideration will depend on the nature of construction activities at that location and on the physical characteristics of the archaeological remains. It is also acknowledged that the completion of the agreed programme of trial trenching may lead to the identification of locations where the in-situ preservation of significant archaeological remains would need to be considered.

General

- 1.4.7 The programme of post-consent archaeological work will be undertaken by one or more specialist archaeological contractors who will be Registered Organisations with the Chartered Institute for Archaeologists (CIfA). Procurement of the archaeological contractor(s) will be in accordance with the relevant CIfA standard and guidance (CIfA 2020a).
- 1.4.8 The fieldwork, post-excavation, reporting and archiving will be managed by Members or Associated members of CIfA, and the CIfA Code of Conduct (CIfA 2022) will be adhered to at all times.
- 1.4.9 The Museum of Barnstaple and North Devon will be contacted to obtain one or more accession numbers for the agreed programme of archaeological work. The museum accession number will be cited in the detailed Onshore WSI(s) for that part of the programme of archaeological work. The detailed Onshore WSI(s) for that part of the programme of archaeological work will also identify the Online Access to the Index of Investigations reference number for that programme of archaeological work.
- 1.4.10 The HET at Devon County Council will be given reasonable prior notice of any archaeological work within the Onshore Infrastructure Area. A programme of monitoring of the archaeological investigations in the field shall be agreed in advance between the archaeological contractor(s), the applicant's appointed representative(s) and the HET at Devon County Council. The timing and frequency of each monitoring visit will be agreed in advance with all parties.

Fieldwork

- 1.4.11 The fieldwork will be undertaken in accordance with the relevant ClfA standard and guidance documents (ClfA 2020b; ClfA 2023a; ClfA 2023b; ClfA 2023c; ClfA 2023d) and the relevant Devon County Council Specification for the type of work being undertaken – see:
<https://www.devon.gov.uk/historicenvironment/development-management/specifications/>.

Area Excavations

- 1.4.12 The areas of detailed archaeological excavation will be set out using a real-time kinematic (RTK) global navigation satellite system (GNSS), accurate to 0.02 m, based upon the agreed area plan. Each area will then be scanned using an appropriate proprietary Cable Avoidance Tool (CAT), operated by a suitably qualified and experienced person. The position of any potential services will be marked out and demarcated, with the areas of potential services being avoided. Once the area has been deemed clear, mechanical excavation will commence.
- 1.4.13 The modern topsoil and subsoil will be removed by mechanical excavator using a toothless ditching bucket, under direct supervision of a suitably qualified and experienced archaeologist, in stratigraphic order to natural geology, stopping at the first significant archaeological remains. Machine excavation will proceed in level spits of approximately 50 to 200 mm until either the archaeological horizon or the natural geology is reached. The excavated material will be banded in a designated location. The plant movements will be restricted to running on the topsoil until signed off (to be confirmed by email by the HET at Devon County Council; there is to be no running of plant or vehicles on the stripped surface until this sign-off has occurred).
- 1.4.14 Once the mechanical excavation of the area has been completed, the archaeologists will inspect and survey the stripped surface, cleaning where necessary, to map all the visible potentially significant archaeological remains. Any remains will be assessed for further cleaning and hand excavation. The mapping of the archaeological remains will be undertaken by RTK GNSS tied into the Ordnance Survey (OS) grid and Ordnance Datum.
- 1.4.15 The appropriate levels of sampling of archaeological features will be in accordance with the Specification for Archaeological Excavation published by Devon County Council (<https://www.devon.gov.uk/historicenvironment/development-management/specifications/archaeological-excavation/>) and will be set out in the detailed Onshore WSI(s).
- 1.4.16 The presumption is that all excavation works detailed above will be undertaken by hand. However, in limited circumstances excavation plant may be used to assist the excavation methodology, where:
- deep archaeological strata can only be safely investigated by stepping or battering a localised sondage;
 - a large number of slots are proposed to meet percentage requirements across extensive features, particularly where the aim is to recover dating evidence beyond feature characterisation; or

- sterile/natural layers are encountered that mask or potentially mask archaeologically significant strata.
- 1.4.17 The use of excavation plant within the area of investigation after the initial stripping phase will be confirmed and agreed with the HET at Devon County Council prior to any such use.
- 1.4.18 A context-based recording system acceptable to the HET at Devon County Council will be used to record all archaeological deposits, features etc. Pro-forma sheets will be used to record all relevant information.
- 1.4.19 A digital photographic record of the archaeological works will be compiled in accordance with the relevant guidance document (Historic England 2015a). Photographs will illustrate both the detail and context of the principal archaeological features discovered. A selection of representative feature group/area shots will also be taken, if appropriate. All photographic records will include information detailing: site name and number/code, date, context, scale and orientation. All photographs will be cross-referenced onto the context records.
- 1.4.20 In the event of the discovery of human remains, these will be left in situ and not further examined until an appropriate strategy for their recording has been agreed. The applicant's appointed representative(s) will be informed immediately along with the Coroner, the police and the HET at Devon County Council. A recognised specialist should visit the site to provide further advice. The detailed Onshore WSI(s) for any part of the programme of archaeological work will include identification of the recognised specialist for examination of human remains.
- 1.4.21 If removal of human remains is necessary, a license will be obtained from the appropriate authorities (currently the Ministry of Justice) by the archaeological contractor(s) and all conditions attached to that license will be complied with. All excavation and post-excavation work regarding human remains, including cremated remains, will be undertaken in line with the standards set out in the Institute of Field Archaeologists (IFA) Technical Paper No. 13 (McKinley and Roberts 1993) and the subsequent ClfA guidance document (ClfA 2017). The draft Development Consent Order (document reference 3.1) sets out the process that will be followed in relation to human remains interred less than 100 years ago.
- 1.4.22 If any human remains are to be left unexcavated, these will be recorded in situ by a human osteologist or an archaeologist with human osteological experience, in accordance with the relevant guidance (Historic England 2018). A reburial strategy will be prepared by the archaeological contractor and agreed with the HET at Devon County Council. The reburial strategy will be in accordance with the guidance set out in the document Preserving Archaeological Remains: Decision-taking for Sites under Development (Historic England 2016, Appendix 5: Materials for Use in the Reburial of Sites).
- 1.4.23 The detailed Onshore WSI(s) for any part of the programme of archaeological work will use the results of the previous fieldwork (specifically the trial trenching) to inform a location-specific environmental sampling strategy which relates directly to the identified research aims and objectives. Environmental sampling will be targeted upon potentially significant archaeological deposits or features and will predominantly examine sealed and well-dated contexts. Sample size will take into account the frequency with which material appropriate for sampling will occur, but bulk samples will normally be a minimum of 40 - 60 litres. Sampling strategies (on- and off-site) will principally derive from the appropriate guidance document (English Heritage 2011). Specialist input into the environmental sampling strategy

may be sought from the Science Advisory team at Historic England or other appropriate specialists.

- 1.4.24 If archaeological deposits are found to have significant potential for the presence of palaeoenvironmental material, advice will also be taken from the HET at Devon County Council on the need to extract, process and further examine environmental samples. Additional advice may be sought from the Science Advisory team at Historic England.
- 1.4.25 Bulk sampling may also be used to collect charcoal or other materials suitable for radiocarbon dating where appropriate. The sampling strategy will consider the relevant guidance published by Historic England (Historic England 2022).
- 1.4.26 The potential for other scientific dating techniques to be deployed will be considered throughout the programme of detailed excavation. Such techniques could include archaeomagnetic and luminescence dating.
- 1.4.27 All artefacts and animal bones will be recorded, collected and labelled according to their individual stratigraphical context. Finds from each archaeological context will be allocated an individual finds tray/bag and waterproof labels will be used for each tray/bag to identify unique individual contexts.
- 1.4.28 Retrieval of animal bone will be in accordance with relevant guidance (Historic England 2019). The detailed Onshore WSI(s) for any part of the programme of archaeological work will include identification of the recognised specialist for examination of animal bone.
- 1.4.29 Artefacts of clearly modern date will be recorded but not retained for off-site assessment. The Museum of Barnstaple and North Devon will be contacted regarding their collection policy.
- 1.4.30 On-site conservation advice may be necessary prior to lifting of and initial treatment of fragile objects. All finds and samples will be exposed, lifted, cleaned, conserved, marked, bagged and boxed according to guidelines produced by the United Kingdom Institute for Conservation and other bodies (IFA 1992; UKIC 1983; Watkinson and Neal 2001). Iron finds may require X-rays prior to conservation and similarly residues on pottery may require study ahead of any conservation, which may be appropriate.
- 1.4.31 In the event of the discovery of waterlogged wood and other organic material, this material will be dealt with in accordance with the relevant guidance documents (English Heritage 2010, Historic England 2018b).
- 1.4.32 Where there is evidence for industrial activity, macroscopic technical residues (or a sample of them) will be collected by hand. Separate samples (c. 10 ml) will be collected for micro-slags (hammerscale and spherical droplets). Collection and treatment will be in accordance with the relevant guidance document (Historic England 2015b). X-radiography of a sample of industrial debris will be carried out during the post-fieldwork stage of the work.
- 1.4.33 In the event of the discovery of an artefact that may fall within the remit of the Treasure Act 1996 and the Treasure (Designation) (Amendment) Order 2006, the Applicant's appointed representative(s), the Coroner and the HET at Devon County Council will be informed within 14 days. All finds of potential treasure will be removed to a safe place. The definition of treasure is provided in the 2003 Code of Practice of the above act and primarily refers to items of gold or silver.

Archaeological monitoring and recording

- 1.4.34 Archaeological monitoring and recording will be undertaken at locations to be agreed in advance with the HET at Devon County Council. Specifically, this would comprise locations where the construction requires the (partial) removal of field boundaries in the form of walls, hedgerows or hedgebanks. Locations where archaeological monitoring and recording is required will be identified within the detailed Onshore WSI(s) for that part of the programme of archaeological work.
- 1.4.35 The monitoring and recording will be undertaken in accordance with the Specification for Archaeological Monitoring and Recording published by Devon County Council (<https://www.devon.gov.uk/historicenvironment/development-management/specifications/archaeological-monitoring-and-recording/>) and the relevant ClfA standard and guidance documents (ClfA 2023c; ClfA 2023d).
- 1.4.36 If archaeological features and/or sites are identified during the course of the archaeological monitoring and recording at any location, construction work will cease and the monitoring archaeological will establish an area around such features and/or sites within which no further construction will be allowed until the archaeological features/ands or sites have been examined and recorded to the satisfaction of the HET at Devon County Council.
- 1.4.37 In the event that detailed archaeological excavation is necessary at any location subject to archaeological monitoring and recording, the extent of any such excavation will be agreed in writing with the HET at Devon County Council and the work will be undertaken in accordance with the procedures set out above.

Reporting

- 1.4.38 The involvement of the Applicant and the HET at Devon County Council will be acknowledged in any report or publication generated by the programme of archaeological work. The accession number(s) issued by the Museum of Barnstaple and North Devon will be identified in all reports and publications.
- 1.4.39 Copyright of all reports prepared by the archaeological contractor(s) will be retained by the archaeological contractor(s) under the terms of the Copyright, Designs and Patents Act (1988) with all rights reserved, excepting that the archaeological contractor(s) provides an exclusive licence to the applicant for the use of the reports in all matters relating to the project and to the local planning authorities with regard to the provision of planning advice and public awareness of the historic environment.

Interim Reports

- 1.4.40 A draft interim report will be produced within six weeks of the completion of the archaeological work at each area of investigation. Following agreement of the draft interim report with the applicant, a digital copy (either in pdf or .doc format) will be supplied to the HET at Devon County Council for verification and review. When the report has been agreed a digital final copy will be provided to the HET at Devon County Council. A digital copy in PDF format will be provided to the Devon HER on the understanding that it will become a public document after an appropriate period of time (generally not exceeding six months).

Post-excavation Assessment Report

- 1.4.41 Following completion of the full programme of archaeological work within the Onshore Infrastructure Area, the archaeological contractor(s) will produce a post-excavation assessment report outlining the results of the archaeological investigations. This report will describe the programme of work undertaken including any sampling that was carried out. Samples will be quantified and processed in order to provide information on their potential for further detailed analysis. Some scientific dating may be required in order to inform the post-excavation report. The post-excavation assessment report will include recommendations for further analysis and for any further scientific dating that may be appropriate.
- 1.4.42 The post-excavation assessment report will include, as a minimum:
- a front sheet (setting out the project/site name, National Grid References to minimum eight figures, description of task(s) undertaken, date and duration of the fieldwork, site code/number, museum accession number)
 - a non-technical summary of the work including the results;
 - identity of the organisation(s) and individuals who carried out the work;
 - a general introduction to the project including site description;
 - aims and objectives;
 - methodologies employed to undertake the works;
 - descriptive text presenting the results of the work including finds and environmental data where appropriate;
 - quantifications of the finds recovered, and environmental samples taken;
 - interpretation and discussion of the results;
 - assessment of the significance of any archaeological remains;
 - assessment of the potential of any data for further analysis;
 - proposals for publication of the further analysis in an appropriate format, subject to further discussion with the HET at Devon County Council regarding the appropriate publication vehicle and the nature/extent of the report;
 - an updated Project Design;
 - a synopsis of the envisaged final report for publication;
 - details of the scale, nature and location of the archive and the intended place of deposition;
 - report bibliography; and
 - sufficient illustrations to support the text including figures to show the location of the scheme in a regional and local context, locations of all works undertaken, detailed plans and sections as appropriate.
- 1.4.43 The draft post-excavation assessment report will be produced within four months of the completion of the final fieldwork element. Following agreement of the draft report with the applicant, a copy will be provided to the HET at Devon County Council for comment.

Final Report

- 1.4.44 Following agreement of the post-excavation assessment report, a final report will be prepared for publication in an appropriate format as described within the assessment report. The timetable for the production of the final report will be described within the assessment report but is assumed to be within 12 months of the acceptance of the assessment report.

Archive

- 1.4.45 The project archive consists of the records relating to the programme of archaeological work, including written records, photographs, drawings and artefacts. The archaeological contractor(s) will ensure that the archive is fully catalogued, indexed, cross-referenced and checked for consistency.
- 1.4.46 The archive will be prepared in accordance with procedures outlined in relevant standards and guidance documents (*cf.* ClfA 2020c; MGC 1992; SMA 1995; UKIC 1984) and any procedures adopted by the recipient museum.
- 1.4.47 The retained artefacts remain the property of the landowner except for human remains and any artefacts that fall within the remit of the Treasure Act 1996. Subject to obtaining written consent from the landowner, the artefacts will be deposited with the Museum of Barnstaple and North Devon Museum. The archaeological contractor(s) will ensure that a storage grant is provided in line with the requirements of this museum. Arrangements for the finds to be viewed by the landowner will be made on request.
- 1.4.48 No recovered finds will be discarded without the written consent of the recipient body. Selection and retention policy will be guided by the relevant standards and guidance documents (*cf.* ClfA 2020c, SMA 1993) and any policy/guidance published by the Museum of Barnstaple and North Devon.
- 1.4.49 The written records, photographs and drawings will be fully digitised. The digital archive will be deposited with the Archaeology Data Service (ADS) and will be compiled in accordance with the ADS *Guidelines for Depositors*.

Public Outreach

- 1.4.50 A programme of public outreach relating to the programme of archaeological work will be developed and implemented following commencement to share the findings of the ongoing archaeological investigations. Potential measures for inclusion within this programme include:
- Public access to, and participation in, the archaeological investigations at selected locations.
 - Organised visits from local schools and interest groups to the archaeological investigations.
 - Provision of temporary information displays at suitable locations such as Bideford Library.
 - Presentation of information on appropriate websites.
 - Presentation of information through public lectures and talks.

1.5 References

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- ClfA, (2020a) Standard and guidance for commissioning work or providing consultation advice on archaeology and the historic environment, Chartered Institute for Archaeologists, October 2020.
- ClfA, (2020b) Standard and guidance for the collection, documentation, conservation and research of archaeological materials, Chartered Institute for Archaeologists, October 2020.
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- ClfA, (2022) Code of Conduct; professional ethics in archaeology, Chartered Institute for Archaeologists, October 2022.
- ClfA, (2023a) Standard for archaeological excavation, Chartered Institute for Archaeologists, December 2023.
- ClfA, (2023b) Universal guidance for archaeological excavation, Chartered Institute for Archaeologists, December 2023.
- ClfA, (2023c) Standard for archaeological monitoring and recording, Chartered Institute for Archaeologists, December 2023.
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- English Heritage, (2010) Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood, English Heritage, April 2010.
- English Heritage, (2011) Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation, 2nd Edition, English Heritage, August 2011.
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UKIC, (1984) Conservation Guidelines No.3: Environmental standards for the permanent storage of excavated material from archaeological sites, United Kingdom Institute for Conservation.

Watkinson, DE and Neal, V, (2001) First Aid for Finds, RESCUE/United Kingdom Institute for Conservation.