

## Chapter 11: Cultural Heritage

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## **11 Cultural Heritage**

### **11.1 Introduction**

11.1.1 This chapter presents an assessment of the effects of the proposed B9075 Sandwater Road Realignment (the Proposed Development) on the historic environment. The review and update were undertaken by Tom Janes of Headland Archaeology (UK) Ltd.

11.1.2 The objectives of this updated assessment are to:

- Describe the location, nature and extent of any known heritage assets or areas of archaeological potential which may be affected by the Proposed Development;
- Provide an assessment of the importance of these assets;
- Assess the likely scale of any impacts on the historic environment posed by the development;
- Outline suitable mitigation measures to avoid, reduce or offset significant adverse effects; and
- Provide an assessment of any residual effects remaining after mitigation.

11.1.3 A heritage asset (or historic asset) is any element of the historic environment which has cultural significance. Both discrete features, and extensive landscapes defined by a specific historic event, process or theme, can be defined as heritage assets; and assets may overlap or be nested within one another.

11.1.4 Designated assets include Scheduled Monuments, Listed Buildings, World Heritage Sites, Conservation Areas, Inventory Gardens and Designed Landscapes, Inventory Historic Battlefields and Historic Marine Protected Areas. Other assets may also be locally designated through policies in the Local Plan.

11.1.5 The majority of heritage assets are not designated. Some undesignated assets are recorded in Historic Environment Records or Sites and Monuments Records (HERs/SMRs) maintained by local authorities and other agencies. However, many heritage assets are currently unrecorded, and the information contained in HERs and SMRs is not definitive, since they may include features which, for instance, have been entirely removed, or are of uncertain location, dubious identification, or negligible importance. The identification of undesignated heritage assets is therefore to some extent a matter of professional judgement.

11.1.6 Some heritage assets may coincide with visual receptors or landscape character areas, which are assessed in Chapter 7 (Landscape and Visual Impact Assessment), and in such cases it is important to recognise the difference in approach between these two topics. Cultural heritage assessment addresses effects on the cultural heritage significance of heritage assets, which may result from, but are not equivalent to, visual impacts. Similarly, an effect on a landscape character area does not equate to an effect on the cultural heritage significance of heritage assets within it.

## **Background**

- 11.1.7 In May 2016, AOC Archaeology Group was commissioned to undertake an archaeological assessment of the proposed realignment and upgrade of the B9075 Sandwater Road.
- 11.1.8 This assessment considered the baseline condition of heritage assets within and immediately surrounding the site and identified designated heritage assets within 1km of the site. It considered potential effects upon heritage assets, both direct effects on assets within the site, and indirect impacts on the setting of designated heritage assets beyond the site boundary.
- 11.1.9 Since the 2016 ES Chapter was written, the proposed development has been redesigned – altering the course of the proposed realignment and amending the junction with the Kergord Road. Certain policy, guidance and legislation relating to Cultural Heritage and Archaeology has also changed since May 2016.

## **11.2 Policy and Guidance**

- 11.2.1 The assessment has been undertaken with reference to relevant legislation, policy and guidance relating to Cultural Heritage.

### **Legislation**

- 11.2.2 Scheduled Monuments and Listed Buildings are protected by statute.
- 11.2.3 Legislation regarding Scheduled Monuments is contained within The Ancient Monuments and Archaeological Areas Act 1979. Legislation regarding Listed Buildings is contained in The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997.
- 11.2.4 The 1979 Act makes no reference to the settings of Scheduled Monuments. The 1997 Act does, however, place a duty on the planning authority with respect to Listed Buildings and Conservation Areas, and their settings. Section 59 of the 1997 Act states (in part):

*“In considering whether to grant planning permission for development which affects a listed building or its setting, a planning authority or the Secretary of State, as the case may be, shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.”*

- 11.2.5 Section 64 states:

*“In the exercise, with respect to any buildings or other land in a conservation area, of any powers under any of the provisions in subsection (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.”*

- 11.2.6 The Historic Environment Scotland Act 2014 defines the role of the new public body, Historic Environment Scotland (HES), and the processes for the designation of heritage assets, consents and rights of appeal.

### **National Planning Policy**

- 11.2.7 The Scottish Government’s planning policies in relation to the historic environment are set out in paragraphs 135-151 of Scottish Planning Policy (SPP) (The Scottish Government, June

2014). The historic environment is defined as *“the physical evidence for human activity that connects people with place, linked with the associations we can see, feel and understand”* and includes *“individual assets, related settings and the wider cultural landscape”*. The policy principles are stated in paragraph 137:

*“The planning system should:*

- promote the care and protection of the designated and non-designated historic environment (including individual assets, related settings and the wider cultural landscape) and its contribution to sense of place, cultural identity, social well-being, economic growth, civic participation and lifelong learning; and*
- enable positive change in the historic environment which is informed by a clear understanding of the importance of the heritage assets affected and ensure their future use. Change should be sensitively managed to avoid or minimise adverse impacts on the fabric and setting of the asset, and ensure that its special characteristics are protected, conserved or enhanced.”*

11.2.8 The SPP applies these principles to all designated assets (paragraphs 141-149). In particular, it states that:

- Regarding developments affecting Listed Buildings, “special regard must be given to the importance of preserving and enhancing the building, its setting and any features of special architectural or historic interest”;*
- Proposals “which will impact on its appearance, character or setting [of a Conservation Area], should preserve or enhance the character and appearance of the conservation area”;*
- “Where there is potential for a proposed development to have an adverse effect on a scheduled monument or on the integrity of its setting, permission should only be granted where there are exceptional circumstances”;*
- “Where a development proposal has the potential to affect a World Heritage Site, or its setting, the planning authority must protect and preserve its Outstanding Universal Value”;*
- “Planning authorities should protect and, where appropriate, seek to enhance gardens and designed landscapes included in the Inventory of Gardens and Designed Landscapes and designed landscapes of regional and local importance”;* and
- “Planning authorities should seek to protect, conserve and, where appropriate, enhance the key landscape characteristics and special qualities of sites in the Inventory of Historic Battlefields”.*

11.2.9 The SPP also requires planning authorities to protect archaeological sites and monuments, preserving them in situ where possible, or otherwise ensure “appropriate excavation, recording, analysis, publication and archiving before and/or during development” (paragraph 150). “Non-designated historic assets and areas of historical interest, including historic landscapes, other gardens and designed landscapes, woodlands and routes such as drove roads” should also be preserved in situ wherever feasible (paragraph 151).

11.2.10 ‘Our Place in Time: the Historic Environment Strategy for Scotland’ (2014) presents the Scottish Government’s strategy for the protection and promotion of the historic environment. The Historic Environment Scotland Policy Statement 2016 (HESPS) and the

Historic Environment Circular 1 (2016) complement the SPP and provide further policy direction. In particular, HESPS provides more detailed policy on historic environment designations and consents.

### Local Planning Policy

11.2.11 The Shetland Local Development Plan (LDP) 2014 was adopted by the Shetland Isles Council (SIC) in September 2014 and is the established planning policy for Shetland. It sets out SIC's land use strategy which recognises existing developments, promotes sustainable economic growth and conserves Shetland's natural and built environment.

11.2.12 Although a revised LDP is currently in preparation, the 2014 LDP will remain valid until late 2019, and all policies relevant to the Proposed Development, and summarised below, still apply:

- **HE1 Historic Environment:** The Council should presume in favour of the protection, conservation and enhancement of all elements of Shetland's historic environment, which includes buildings, monuments, landscapes and areas.
- **HE2 Listed Buildings:** Development affecting a listed building, or its setting, should preserve the building, its setting, and any features of special architectural or historic interest that it possesses. The layout, design, materials, scale, siting and use of any development should be appropriate to the character and appearance of the listed building and its setting. Proposals for the total or substantial demolition of a listed building should only be supported where it can clearly be demonstrated that every effort has been made to retain it.
- **HE4 Archaeology:** Scheduled monuments, designated wrecks and other identified nationally important archaeological resources should be preserved in situ, and within an appropriate setting. Developments that have an adverse effect on scheduled monuments and designated wrecks or the integrity of their settings should not be permitted unless there are exceptional circumstances. All other significant archaeological resources should be preserved in situ wherever feasible. Where preservation in situ is not possible the planning authority should ensure that developers undertake appropriate archaeological excavation, recording, analysis, publication and archiving in advance of and/or during development.

### Guidance

11.2.13 Planning Advice Note 2/2011: Planning and Archaeology provides technical advice to planning authorities and developers on dealing with archaeological remains. Among other issues it covers the balance in planning decisions between the preservation of archaeological remains and the benefits of development; the circumstances under which developers can be required to provide further information, in the form of a field evaluation, to allow planning authorities to reach a decision; and measures that can be taken to mitigate adverse impacts.

11.2.14 HES provides guidance on how to apply the policies set out in the SPP in a series of documents entitled 'Managing Change in the Historic Environment', of which the guidance note on 'Setting' (Historic Scotland 2016) is particularly relevant.

- 11.2.15 Standards and Guidance published by the Chartered Institute for Archaeologists (CifA) have been followed in preparing this assessment, in particular the 'Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment' (2014) and the 'Standard and guidance for historic environment desk-based assessment' (2014).
- 11.2.16 SIC have also published an Advice Note offering information on the planning process as it relates to Listed Buildings and Conservation Areas (Advice Note 2). Draft Supplementary Planning Guidance (SPG) (Shetland Island Council 2012) on Historic Environment Strategy was drafted by SIC in 2012 and awaits formal adoption by Shetland Islands Council. This supplementary guidance is intended to complement Policies HE1-4 of the adopted Shetland LDP. The following additional policy within the SPG is of relevance to the Proposed Development:
- **Policy SGHE 3 Archaeological assessment:** Where archaeological remains are known or thought likely to exist the developer may be requested to supply a report of an archaeological evaluation prior to determination of a planning or listed building consent application.

### 11.3 Scope and Consultation

#### Pre-Application Briefing Note

- 11.3.1 A Pre-Application Briefing Note was prepared by VEWF and issued to SIC, SNH and SEPA. This is included in Appendix 6.1 of this EIA Report. The briefing note outlined the proposed scope of the EIA Report for the Proposed Development. Specifically, in relation to cultural heritage, the briefing note confirmed:

*No further assessment on cultural heritage is proposed as it is anticipated that with the implementation of mitigation measures, residual effects would not be significant.*

*Instead, a Cultural Heritage Management Plan (CHMP) is proposed to be completed, which would then form part of the CEMP. The CHMP would comprise a desk-based study to identify known cultural heritage assets within close proximity to the Proposed Development. Assets would be identified on plan, and recommendations provided in the form of a tabulated assessment for asset specific mitigation measures, where appropriate.*

#### Response to Pre-Application Briefing Note

- 11.3.2 Consultation with consultees confirmed that, in relation to cultural heritage, the scope of works proposed in the Pre-Application Briefing Note was considered appropriate.

#### Scope

- 11.3.3 A CHMP has been prepared in line with the Pre-Application Briefing Note to confirm known cultural heritage assets and recommend mitigation measures. This is complimented by an assessment of the Proposed Development against cultural heritage assets.

## 11.4 Methodology

### The Assessment Process

11.4.1 The cultural heritage assessment has been carried out in the following stages:

- Desk-based review of the existing baseline leading to the identification of heritage assets potentially affected by the development;
- Revision and updating of baseline conditions, based on results of the desk-based study;
- Re-assessment of the importance of heritage assets potentially affected by the development;
- Identification of potential impacts on heritage assets, informed by baseline information and a site walkover;
- Proposal of mitigation measures, to eliminate, reduce or offset adverse effects;
- Assessment of the magnitude of residual effects;
- Assessment of the significance of residual effects, broadly a product of the asset's importance and the magnitude of the impact; and
- Assessment of cumulative effects.

### Study Areas

11.4.2 Two study areas have been used for this assessment:

11.4.3 The Inner Study Area (ISA) corresponds to the Site boundary (Figure 11.1) Within this area, all heritage assets are assessed for construction and operational effects.

11.4.4 The Outer Study Area (OSA) extends to 1km from the Site boundary, which is taken as the maximum extent of potentially significant effects on the settings of heritage assets (Figure 11.2).

11.4.5 These updated study areas have resulted in a certain number of heritage assets considered in the 2016 ES being scoped out of this assessment (Appendix 11.2).

### Data sources

11.4.6 The baseline for the OSA comprises that used in the 2016 Assessment, which was informed by a comprehensive desk-based study, based on all readily available documentary sources, following the Chartered Institute for Archaeologists' (CIfA) 'Standard and Guidance for historic environment desk-based assessment'.

11.4.7 The following sources of information were referred to:

- Historic Environment Scotland (Longmore House, Salisbury Place, Edinburgh & John Sinclair House, 16 Bernard Terrace, Edinburgh): for Scheduled Monument data, listed building data, and Inventory Garden and Designed Landscape data; NMRS data; the Aerial Photographic Collection; the Ordnance Survey Name Book; and various other relevant publications;
- The Shetland Amenity Trust: for local Sites and Monuments Record (SMR) data;

- The National Map Library: for early Ordnance Survey maps; early cartographic records of the area;
- National Archives of Scotland; and
- Shetland Archives, Lerwick

11.4.8 The 2016 baseline has been reviewed and updated. This review was informed by the results of a walkover undertaken in 2018 in advance of GI works (Dalland, 2018) and by a desktop study. As well as the 2016 Baseline data, this assessment used the following data sources;

- Designation data downloaded from the Historic Environment Scotland website on 7th January 2019];
- The National Record of the Historic Environment (NRHE), including the Canmore database and associated photographs, prints/drawings and manuscripts held by HES;
- The Shetland SMR curated by the Shetland Amenity Trust (digital data extract received 12th January 2019).

11.4.9 A walkover survey was undertaken by a qualified archaeologist in their capacity as Archaeological Clerk of Works (ACoW) during ground investigations along the line of the Kergord Access track and the new Sandwater Road between its junction with the A970 to the east and the Kergord Road to the west (Planning Ref. 2016/226/PPF). These works took place between the 15th and 19th October 2018.

11.4.10 This survey was able to determine the nature, extent and condition of certain heritage assets identified by the 2016 assessment, as well as identifying several previously unknown heritage assets.

#### **Definition of baseline conditions**

11.4.11 Designated assets within both the ISA and OSA which have been previously recorded on the NRHE are labelled with the reference number assigned to them by HES (prefixed 'LB' for Listed Buildings); undesignated assets are labelled with the reference number in the SMR (and prefixed 'SMR').

#### Known heritage assets within the Inner Study Area

11.4.12 Previously unrecorded heritage assets within the ISA have been assigned an Asset number (prefixed 'HA' for Heritage Assets identified in 2019, and 'Site' for those identified in the 2016 chapter). A single asset number can refer to a group of related features, which may be recorded separately in the HER and other data sources.

11.4.13 Assets within the ISA are shown in Figure 11.1, with detailed descriptions and cross-references to any 2016 reference numbers compiled in a gazetteer (Appendix 11.1).

#### Potential for unknown heritage assets within the Inner Study Area

11.4.14 The likelihood that undiscovered heritage assets may be present within the ISA is referred to as archaeological potential. Overall levels of potential can be assigned to different landscape zones, following the criteria in Table 11.2, while recognising that the



archaeological potential of any zone will relate to particular historical periods and types of evidence. The following factors are considered in assessing archaeological potential:

- The distribution and character of known archaeological remains in the vicinity, based principally on an appraisal of data in the SMR;
- The history of archaeological fieldwork and research in the surrounding area, which may give an indication of the reliability and completeness of existing records;
- Environmental factors such as geology, topography and soil quality, which would have influenced land-use in the past and can therefore be used to predict the distribution of archaeological remains;
- Land-use factors affecting the survival of archaeological remains, such as ploughing or commercial forestry planting; and
- Factors affecting the visibility of archaeological remains, which may relate to both environment and land-use, such as soils and geology (which may be more or less conducive to formation of cropmarks), arable cultivation (which has potential to show cropmarks and create surface artefact scatters), vegetation, which can conceal upstanding features, and superficial deposits such as peat and alluvium which can mask archaeological features.

**Table 11.2: Archaeological potential**

Potential	Definition
High	Undiscovered heritage assets of high or medium importance are likely to be present.
Medium	Undiscovered heritage assets of low importance are likely to be present; and it is possible, though unlikely, that assets of high or medium importance may also be present.
Low	The study area may contain undiscovered heritage assets, but these are unlikely to be numerous and are highly unlikely to include assets of high or medium importance.
Negligible	The study area is highly unlikely to contain undiscovered heritage assets of any level of importance.
Nil	There is no possibility of undiscovered heritage assets existing within the study area.

Heritage assets in the outer study area

11.4.15 Assets that meet the initial criteria for assessment are described briefly in paragraphs 11.5.14 to 11.5.15, listed in Tables 11.7 and 11.8, and shown in Figure 11.2.

**Identification of potential impacts**

11.4.16 Effects on the historic environment can arise through direct physical impacts, impacts on setting or indirect impacts:

- Direct physical impacts describe those development activities that directly cause damage to the fabric of a heritage asset. Typically, these activities are related to construction works and will only occur within the application site.
- An impact on the setting of a heritage asset occurs when the presence of a development changes the surroundings of a heritage asset in such a way that it affects (positively or negatively) the cultural significance of that asset. Visual impacts are most commonly encountered but other environmental factors such as noise, light or air quality can be relevant in some cases. Impacts may be encountered at all stages in the life cycle of a development from construction to decommissioning but they are only

likely to lead to significant effects during the prolonged operational life of the development.

- Indirect impacts describe secondary processes, triggered by the development, that lead to the degradation or preservation of heritage assets. For example, changes to hydrology may affect archaeological preservation; or changes to the setting of a building may affect the viability of its current use and thus lead to dereliction.

11.4.17 Potential impacts on unknown heritage assets are discussed in terms of the risk that a significant effect could occur. The level of risk depends on the level of archaeological potential combined with the nature and scale of disturbance associated with construction activities and may vary between high and negligible for different elements or activities associated with a development, or for the development as a whole.

11.4.18 In 2016, potential impacts on the settings of heritage assets were identified from an initial desk-based appraisal of data from HES and the SMR and consideration of maps and aerial images. Where this initial appraisal identified the potential for a significant effect, the asset was visited to define baseline conditions and assess potential impacts.

11.4.19 This assessment is informed by the results of the 2016 field visits, as well as by the 2018 ACoW walkover survey (Dalland, 2018). The levels of importance assigned to heritage assets have been reviewed and a significance of potential effect assigned.

#### **Mitigation measures and identification of residual effects**

11.4.20 Proposed mitigation measures are described in paragraph 11.6.7. The preferred mitigation option is always to avoid or reduce impacts through design, or through precautionary measures such as fencing off heritage assets during construction works. Impacts which cannot be eliminated in these ways will lead to residual effects.

11.4.21 Adverse effects may be mitigated by an appropriate level of survey, excavation, recording, analysis and publication of the results, in accordance with a written scheme of investigation (SPP paragraph 150 and PAN2/2011, sections 25-27). Archaeological investigation can have a beneficial effect of increasing knowledge and understanding of the asset, thereby enhancing its archaeological and historical interest and offsetting adverse effects.

**Table 11.3: Criteria for Assessing the Importance of Heritage Assets**

<b>Importance of the asset</b>	<b>Criteria</b>
Very high	World Heritage Sites and other assets of equal international importance
High	Category A Listed Buildings, Scheduled Monuments, Inventory Gardens and Designed Landscapes, Inventory Historic Battlefields, Historic Marine Protected Areas and undesignated assets of national importance
Medium	Category B Listed Buildings, Conservation Areas, and undesignated assets of regional importance
Low	Category C Listed Buildings and undesignated assets of lesser importance

11.4.22 Cultural significance is assessed in relation to the criteria in HESPS Annexes 1-6, which are intended primarily to inform decisions regarding heritage designations but may also be applied more generally in identifying the 'special characteristics' of a heritage asset, which

contribute to its cultural significance and should be protected, conserved and enhanced according to SPP paragraph 137. Annex 1 is widely applicable in assessing the cultural significance of archaeological sites and monuments, for instance, while the criteria in Annex 2 can be used in defining the architectural or historic interest of buildings, whether listed or not.

- 11.4.23 The special characteristics which contribute to an asset's cultural significance may include elements of its setting. Setting is defined in 'Managing Change in the Historic Environment: Setting' (HES 2016, Section 1) as 'the way the surroundings of a historic asset or place contribute to how it is understood, appreciated and experienced'. The setting of an asset is defined and analysed according to Stage 2 of the three-stage approach promoted in 'MCHE: Setting', with reference to factors listed on pages 9-10. The relevance of these factors to the understanding, appreciation and experience of the asset determines how, and to what extent, an asset's cultural significance derives from its setting. All heritage assets have settings; however, not all assets are equally sensitive to impacts on their settings. In some cases, setting may contribute very little to the asset's cultural significance, or only certain elements of the setting may be relevant.

#### Assessment of the magnitude of impacts on cultural significance

- 11.4.24 The magnitude of an impact is a measure of the degree to which the cultural significance of a heritage asset will be changed by the Proposed Development. This definition of magnitude applies to impacts on the setting, as well as impacts on the physical fabric, of an asset. Impacts on the settings of heritage assets are assessed with reference to the factors listed in 'MCHE: Setting' Stage 3 (evaluate the potential impact of the proposed changes, pages 10-11). It is important to note that the magnitude of an impact resulting from an impact on setting is not a direct measure of the visual prominence, scale, proximity or other attributes of the development itself, or of the extent to which the setting itself is changed; therefore, Landscape and Visual Impact Assessment criteria for scale/magnitude cannot be applied directly in determining the magnitude of impact on the setting of a heritage asset. It is also necessary to consider whether, and to what extent, the characteristics of the setting which would be changed contribute to the asset's cultural significance.
- 11.4.25 Magnitude is assessed as high/medium/low, and adverse/beneficial, or negligible, using the criteria in Table 11.4 as a guide. In assessing the effects of a development, it is often necessary to take into account various impacts which affect an asset's significance in different ways, and balance adverse impacts against beneficial impacts. For instance, there may be adverse impacts on an asset's fabric *and* on its setting, offset by a beneficial impact resulting from archaeological investigation. The residual effect, given in paragraphs 11.6.12 to 11.6.15 and Table 11.9, is an overall measure of how the asset's significance is reduced or enhanced.

**Table 11.4: Criteria for Assessing the Magnitude of Impacts on Heritage Assets**

Magnitude of impact	Guideline Criteria
High beneficial	Elements of the asset’s physical fabric which would otherwise be lost, severely compromising its cultural significance, are preserved in situ; or Elements of the asset’s setting, which were previously lost or unintelligible, are restored, greatly enhancing its cultural significance.
Medium beneficial	Elements of the asset’s physical fabric which would otherwise be lost, leading to an appreciable but partial loss of cultural significance, are preserved in situ; or Elements of the asset’s setting are considerably improved, appreciably enhancing its cultural significance; or Research and recording leads to a considerable enhancement to the archaeological or historical interest of the asset.
Low beneficial	Elements of the asset’s physical fabric which would otherwise be lost, leading to a slight loss of cultural significance, are preserved in situ; or Elements of the asset’s setting are improved, slightly enhancing its cultural significance; or Research and recording leads to a slight enhancement to the archaeological or historical interest of the asset.
Negligible	The asset’s fabric and/or setting is changed in ways which do not beneficially or adversely affect its cultural significance.
Low adverse	Elements of the asset’s fabric and/or setting which are of very limited relevance to its significance are lost or changed, resulting in a very slight loss of cultural significance; or Elements of the asset’s fabric and/or setting which contribute to its cultural significance are minimally affected, resulting in a very slight loss of cultural significance.
Medium adverse	Elements of the asset’s fabric and/or setting which contribute to its significance are affected, but to a limited extent, resulting in an appreciable but partial loss of the asset’s cultural significance.
High adverse	Key elements of the asset’s fabric and/or setting are lost or fundamentally altered, such that the asset’s cultural significance is lost or severely compromised.

Assessment of the significance of effects

11.4.26 The significance of an effect (EIA ‘significance’) on the cultural significance of a heritage asset, resulting from a direct or indirect physical impact, or an impact on its setting, is assessed by combining the magnitude of the impact and the importance of the heritage asset. The matrix in Table 11.5 provides a guide to decision-making but is not a substitute for professional judgement and interpretation, particularly where the asset importance or impact magnitude levels are not clear or are borderline between categories. EIA significance may be described on a continuous scale from negligible to major; it is also common practice to identify effects as significant or not significant, and in this sense major and moderate effects are regarded as significant in EIA terms, while minor effects are ‘not significant’.

**Table 11.5: Criteria for Assessing the Significance of Effects on Heritage Assets**

Asset importance	Magnitude of Impact			
	High	Medium	Low	Negligible
Very high	Major	Major	Major to moderate	Negligible
High	Major	Major to moderate	Moderate to minor	Negligible
Medium	Major to moderate	Moderate to minor	Minor	Negligible
Low	Moderate to minor	Minor	Negligible	Negligible

## 11.5 Baseline Conditions

### Archaeological and historical overview

#### Previous investigations

- 11.5.1 Four previous archaeological investigations were undertaken prior to 2016 within the Study Areas. These comprised walkover surveys in advance of the Tumblin/Quarsdale Hydro Electric Refurbishment scheme (1998) around the Burn of Weisdale; the sites of wind measurement masts (2005), and the Viking Wind Farm (2005). In 2010, SAT undertook a measured survey of a cairn in Whaa Field, north of the Study Areas.
- 11.5.2 Since the production of the 2016 ES chapter, a programme of survey and site visits was undertaken as part of ACoW works in October 2018 (Dalland, 2018).

#### **Geology and geomorphology**

- 11.5.3 Solid geology within the ISA comprises north/south aligned bands of limestone crossing the western and eastern ends of the ISA, with a deposit of metamorphic bedrock in the centre – between the Burn of Weisdale and Sand Water.
- 11.5.4 Overlying the bedrock throughout most of the ISA are deposits of peat, giving way to deposits of alluvial silts and glacial till along the Burn of Weisdale.

#### **Historical Context**

##### Prehistoric (10000-500 BC)

- 11.5.5 No known Mesolithic sites are recorded within the study area.
- 11.5.6 The most characteristic tool-type of the Neolithic is the polished stone axe. A Stone Axehead is reported to have been found at Kegord (outside the Study Areas and not illustrated) south-west of the site. Although little information regarding it is available, it is possible that it is of Neolithic date; a Neolithic axe factory is known to be located at North Roe (Turner, 1998).
- 11.5.7 The existence of large-scale early field boundaries in Shetland suggests that there was a substantial population in Shetland during the Neolithic/Bronze Age and that they were using the land in a very systematic and organised fashion (Fojut 1993). The agricultural use of the study area is indicated by a number of late prehistoric stone ard shares that have been recovered from the farmland west of the study area (Fowler, 1981, 215-6).

- 11.5.8 No Iron Age heritage assets are recorded within the study area.

##### Early Historic/Medieval (AD 400-1600)

- 11.5.9 There is no evidence for heritage assets within the study area dating to the Early Historic and Medieval periods.

Post-medieval (AD 1600-1900)

- 11.5.10 The earliest maps available of the study area date from the 1600s and are too small in scale to reveal anything but a general impression of the area during this time.
- 11.5.11 An 1856 map of Weisdale (not included) depicts land ownership and field division in the area. It is relatively detailed though not as accurate in scale as the later Ordnance Survey maps, leading to some uncertainty in interpretation. A group of three structures (HER 8046, Figure 11.2) is depicted on the west bank of the Burn of Weisdale within or near the south-western corner of the site. It is possible that this is the same as a group of buildings visible on the First Edition mapping. The map also depicts roads crossing the study area east/west from north of Setter to Sand Water and from north-east to south-west at Lamba Scord. Both roads apparently lay, in part, within the site; the roads are depicted as extremely straight, and it may be that sections of these roads are reflected in the alignment of the existing B9075 near Sand Water Loch. While the majority of the study area is marked by large open fields, a system of much smaller fields is present to the west, around the Burn of Weisdale and Setter.
- 11.5.12 The First Edition OS mapping of 1880 provides evidence for late post-medieval occupation within the study area. To the north-west of the existing B9075 an unroofed building appears adjacent to Burn of Swirtars (HER 8045, Figure 11.1); given its location, this may be a mill. The unroofed enclosure or building is also visible on the Second Edition map of 1902.
- 11.5.13 The First Edition depicts two unroofed buildings at Burn of Weisdale (HER 8046, Figure 11.2), with an unroofed structure of two compartments further south (HER 8047, Figure 11.2). It also shows an apparently unroofed building in the south-east of the study area on the banks of Sand Water Loch (HER 8044, Figure 11.2), while an unroofed building of two compartments appears nearby at Whiteness (HER 8043, Figure 11.2). To the west, an unroofed building is depicted at Black Burn (HER 8050, Figure 11.2), while to the south-west an unroofed building is marked at Greenlea Plantation (HER 8049, Figure 11.2). Nearby a farmstead comprising four unroofed buildings, one partially roofed building, two unroofed structures and one enclosure is also depicted at Leegarh Plantation (HER 8048, Figure 11.2).
- 11.5.14 Two Category C listed buildings in the south-west of the study area, Weisdale, South Setter House (LB18563, Figure 11.2) and Weisdale, Kergord House (LB47310, Figure 11.2), date to the late eighteenth and mid nineteenth centuries respectively.

Modern (post AD 1900)

- 11.5.15 The OS Second Edition map of 1902 shows the track or road across Lamba Scord broadly corresponding to the existing B9075. Three buildings are shown in the vicinity of the former Sandwater Inn (now Sandwater House) on the OS 1 inch to the mile map of 1961 (not illustrated) and two on 1973 mapping (not illustrated).
- 11.5.16 In the south-west of the study area, Kergord House (LB47310, Figure 11.2) served Shetland during the Second World War as the headquarters for the 'Shetland Bus', an operation that rescued war refugees and ferried supplies to the Norwegian underground across the North Sea. In addition to heritage assets discussed in 2016, seven previously unrecorded features were identified during the 2018 ACoW walkover. These comprise a number of earthen-

banked enclosures, field boundaries and a track (HA1) within the ISA (HA1, Figure 11.1). None of the features have been dated, but they closely resemble nearby features that represent activity relating to post-medieval and/or early modern livestock management.

#### Known heritage assets within the Inner Study Area

- 11.5.17 The 2016 ES identified 22 heritage assets within the ISA, including two previously recorded on the SMR. As part of the review of baseline data informing this assessment, fifteen of these have been re-categorised as being of no heritage significance, and consequently are no longer considered as heritage assets. The re-categorised features are listed in Appendix 11.2.
- 11.5.18 The features identified in the 2016 ES as Site 49 and Site 50 were located during the ACoW walkover. Both represent features associated with peat extraction and are considered to be heritage assets of low importance. They have been relabelled as AOC 49 and AOC 50 (Figure 11.1).
- 11.5.19 The three features identified in the 2016 ES as Site 52, Site 54 and Site 57, and the HER Entry SMR 5494 were identified during the 2018 ACoW walkover and were shown to be part of a complex of earthen banks and enclosures. The 2018 ACoW survey identified seven further unrecorded banks and enclosures in the vicinity of these features. As similar and related features this group of known and previously unrecorded features is considered to comprise a single heritage asset and is labelled as HA1 (Figure 11.1).
- 11.5.20 Therefore, there is a total of four undesigned heritage assets within the ISA.

**Table 11.6: Heritage assets within the Inner Study Area**

Ref	2016 Ref	Name	Description	Importance
HA1	n/a	Burn of Droswall & Burn of Weisdale	An area of earthen banks defining several enclosures of varying sizes alongside two streams and either side of the B9075. Likely to represent post-medieval and early modern livestock management, agriculture and peat extraction. Includes HER 5494, recorded in the HER as the remains of a curved earthen bank truncated by drains at various sections.	Low
HER 8045	Site 03	Burn of Swirtars	Possible mill located immediately to the north of the Burn of Swirtars. It comprises a rectangular structure defined by earth and stone banks with a possible entrance at the north-west corner. A second rectangular structure lies immediately to the west defined to the south and west by an L-shaped turf and stone bank. There are no traces of any wall to the north and the east side is defined by a straight break of slope. A trough runs inside the west end of the structure. It is defined to the east by a vertical stone-built edge. Two gullies run downslope to the east of the complex.	Low
AOC 49	Site 49	Lamba Scord	A track is shown on modern Ordnance Survey mapping running north from the B9075. This was found to be a rough gravel-covered track during a walkover survey in July 2013. Its presence and extent were confirmed in 2018.	Low
AOC 50	Site 50	Lamba Scord	A possible gravel track was visible running north from the B9075 during a walkover survey in July 2013. Its presence and extent were confirmed in 2018.	Low

### Potential for undiscovered heritage assets within the Inner Study Area

11.5.21 The 2016 ES (Section 11.7.2) judged that;

*“The abundance of remains in the study area points to the possibility of encountering similar hitherto unknown remains during ground breaking works. There is, for example, evidence for post-medieval occupation, in particular within the low-lying areas around Burn of Weisdale and Burn of Swirtars. The presence of a structure of potentially early (perhaps prehistoric) date at Burn of Weisdale (Site 42/42.1) indicates potential for earlier, archaeologically significant, sub-surface features to survive in the area.”*

11.5.22 The 2018 ACoW walkover identified a further group of previously unidentified features but none of them are considered to be of greater than Low importance. It could be the case that unknown archaeological deposits survive as buried remains. According to the methodology employed in this ES, and the criteria outlined in Table 11.2, the ISA is considered to be of Low potential, meaning that the ISA may contain undiscovered heritage assets, but these are unlikely to be numerous and are highly unlikely to include assets of high or medium importance.

### Heritage assets in the outer study area

#### Listed Buildings

11.5.23 As recorded in the 2016 ES (Section 11.5.2), there are two Listed Buildings in the OSA. Both are Category C and date to the late eighteenth or early nineteenth century. As Category C Listed Buildings, both are considered to be of Low importance.

**Table 11.7: Listed Buildings included in the assessment**

Ref.	Name & Description	Category	Importance
LB18563	South Setter House, Weisdale	C	Low
LB47310	Kergord House, Weisdale	C	Low

#### Other Designated Heritage Assets

11.5.24 There are no World Heritage Sites, Inventory Gardens and Designed Landscapes, Inventory Historic Battlefields, Scheduled Monuments or Conservation Areas within the OSA.

#### Undesignated heritage assets

11.5.25 The HER records 12 undesignated heritage assets within the OSA. All 12 comprise examples of locally common features relating to crofting, agriculture and livestock management, and are considered to be of Low importance. Wider views and setting make a limited contribution to the cultural significance of these assets, and no setting impacts are anticipated upon them. All 12 HER entries are therefore excluded from further assessment.



**Table 11.8: Undesignated heritage assets included in the assessment**

HER Ref.	Name	Description	Importance
5493	Setter, Weisdale	Various partly-turfed crofting remains depicted on the 1st edition of the OS 6-inch map.	Low
5495	Burn of Weisdale	Substantial turf bank with steep sides. Possible continuation of SMR5494	Low
5496	Burn of Weisdale	A small circular structure, 4m in diameter, defined by a bank 1m high with an entrance on the burn side. Some stone visible on the inside of the bank	Low
5497	Burn of Weisdale	Steep bank located at the roadside near Dros Field. Appears to be upcast of modern excavation to create short track and animal feeding area	Low
8043	Whiteness	1 unroofed building of 2 compartments is depicted on the 1st edition OS map, but it is not shown on the current edition	Low
8044	Sand Water	1 unroofed building is depicted on the 1st edition OS map, but it is not shown on the current edition	Low
8046	Burn of Weisdale	2 unroofed buildings are depicted on the 1st edition OS map. One unroofed building is shown on the current edition	Low
8047	Burn of Weisdale	1 unroofed structure is depicted on the 1st edition OS map, but it is not shown on the current edition.	Low
8048	Leegarh Plantation	A farmstead comprising 4 unroofed buildings, 1 partially roofed long building, 2 unroofed structures and 1 enclosure is depicted on the 1st edition OS 6-inch map. Two unroofed buildings are shown on the current edition.	Low
8049	Greenlea Plantation	1 unroofed building is depicted on the 1st edition OS map, but it is not shown on the current edition.	Low
8050	Black Burn	What may be 1 unroofed building with only 3 walls marked is depicted on the 1st edition OS map, but it is not shown on the current edition	Low
8149	Whaa Field	Site of cairn of hagmark, comprised of loose stone and stands 3m wide by 1m tall.	Low

### **‘Do Nothing’ Scenario**

11.5.26 The 2016 ES (Section 11.5.5) noted that;

*“Peat cutting, on a relatively large scale, is ongoing over much of the site, and this activity, along with the erosion of areas of peat by natural processes, has the potential to damage any potential subsurface remains. Additionally, it is likely that the meandering routes of watercourses (and in particular the Burn of Weisdale) also have the potential to remove deposits.”*

11.5.27 It remains the case that conditions affecting the survival of archaeological remains within the site boundary are likely to remain unchanged in the absence of the Proposed Development.

## **11.6 Impact Assessment**

### **Construction Impacts**

11.6.1 Likely construction effects could result from topsoil stripping and excavation associated with road cutting, embankment, drainage and other infrastructure within the construction

footprint. There is also a risk of accidental damage to heritage assets outside the construction footprint from uncontrolled plant movement.

#### Predicted Construction Impacts

- 11.6.2 There are four heritage assets within the ISA (summarised in Table 11.6), and all four will be subject to direct construction impacts.
- 11.6.3 HA1 may be subject to a direct impact from the construction of approximately 240m of road at the western end of the Proposed Development. HA1 encompasses an area of 7.3 Ha around the Burn of Weisdale, within which are traces of earthen field banks and enclosures. There may be ground disturbance within approximately 0.15 Ha of HA1. In the absence of mitigation, this disturbance, relative to the extent of HA1, would result in a direct impact of Low magnitude.
- 11.6.4 The probable mill at the Burn of Swirtars (HER8045) lies partially within the construction footprint of the Proposed Development. The known extent of the remains is approximately 330m<sup>2</sup> and around 20m<sup>2</sup> of the upstanding remains of the asset will be subject to a direct construction impact. In the absence of mitigation, this disturbance, relative to the extent of HER8045, would result in a direct impact of Low magnitude.
- 11.6.5 The peat cutting tracks represented by AOC 49 and AOC 50 are both within the construction footprint. Approximately 4m of AOC 49's total 65m length is within the construction footprint, comprising the northern terminus of the track. AOC 50 is at least 190m long and continues north and south of the re-alignment. Approximately 6.5m of the track's total length is within the construction footprint. There may be ground disturbance within approximately 0.15 Ha of HA1. In the absence of mitigation, this disturbance, relative to the extent of both assets, would result in a direct impact of Negligible magnitude.
- 11.6.6 The construction footprint is of low archaeological potential. According to the criteria outlined in Table 11.2, there is a risk of direct construction impact on unknown heritage assets, but these assets are unlikely to be of greater than low importance.

#### Proposed Mitigation

- 11.6.7 The risk of impacts on unknown archaeological remains will be reduced by a programme of archaeological evaluation. The proposed stages of this work are outlined in a Cultural Heritage Management Plan (CHMP) (Bailey 2019), included as Appendix 11.3. The scope of these evaluation works will be detailed in a Written Scheme of Investigation (WSI), which will be agreed with Shetland Amenity Trust.

#### **Setting Impacts**

- 11.6.8 Potential setting impacts could occur because of changes to views towards and from heritage assets.

#### Predicted Setting Impacts

- 11.6.9 There are two Listed Buildings in the OSA. Both are Category C and date to the late eighteenth or early nineteenth century. LB18563 is a former laird's house, recently

renovated and still in use as a private residence, and LB47310 is a mid-nineteenth century farmhouse. As Category C Listed Buildings, both are considered to be of Low importance.

- 11.6.10 The Proposed Development would result in the existing road, visible from both LBs, moving slightly to the north. The change to views from the buildings would be negligible. Furthermore, the content of wider views is of limited relevance to the cultural significance of either LB. There would be no setting impacts upon the Listed Buildings within the OSA.

Proposed Mitigation

- 11.6.11 There would be no setting impacts upon the Listed Buildings within the OSA and no mitigation is proposed in respect of them.

**Residual effects**

Summary of residual effects

- 11.6.12 All residual effects of more than negligible significance are summarised in Table 11.9.
- 11.6.13 Mitigation of direct impacts, either in the form of avoidance or full archaeological survey of the affected parts of HA1 and HER8045, resulting in their preservation by record, would reduce construction impacts to a negligible magnitude, resulting in a residual effect of **negligible significance**.
- 11.6.14 Impacts on currently undiscovered archaeological remains may also occur during the construction phase. The programme of archaeological evaluation outlined above, and in the CHMP will identify any significant undiscovered remains and allow for effects upon them to be mitigated by avoidance and preservation *in situ* where possible, or otherwise by excavation and recording. Any adverse effect on an asset's archaeological interest, due to the loss of *in situ* archaeological remains, would be offset to some extent by the beneficial effect on its archaeological interest due to the increase in understanding resulting from archaeological investigation.
- 11.6.15 The risk of significant impacts on unknown archaeological remains is judged to be unlikely; and the overall effect, taking into account mitigation, is highly unlikely to be of more than minor significance.

**Table 11.9: Summary table of residual effects**

Heritage asset	Potential Impact	Proposed mitigation	Residual effect
HA1	Direct impact resulting from construction of road and associated works	Avoidance of HA1 or preservation by record	Low magnitude adverse, permanent effect: negligible significance
HER8045	Direct impact resulting from construction of road and associated works	Avoidance of HER8045 or preservation by record	Low magnitude adverse, permanent effect: negligible significance

## 11.7 References

Fojut, N. 1993, A Guide to Prehistoric and Viking Shetland

Bailey, E. 2019, B9075 Sandwater Road Preliminary Cultural Heritage Management Plan for Viking Energy, unpublished client report

Dalland, M. 2018, Viking Wind Farm: Sandwater/Kergord Road Widening and Realignment Archaeological Clerk of Works attendance during GI works, unpublished client report for Headland Archaeology on behalf of Viking Energy

Fowler, P. J. 1981, 'Later Prehistory'. In Thirsk, J. (ed.) The Agrarian History of England and Wales.

Jacobs (on behalf of Viking Energy), 2016 B9075 Sandwater Road: Environmental Statement