

7. ARCHAEOLOGY AND CULTURAL HERITAGE

7.1 Introduction

This Chapter provides an appraisal of the potential effects of the Project on archaeology and cultural heritage receptors. The full baseline including site gazetteer is provided in **Annex R**. Cultural heritage receptors are illustrated on Figure 7.1.

7.2 Appraisal Methodology

The Study Areas proposed below are considered appropriate for this appraisal due to the need to understand the archaeological and landscape context and potential for an area with previous transmission infrastructure in-place.

This desk study was supported by previous experience of similar projects, fieldwork and the production of a zone of theoretical visibility (ZTV) and utilises the standard SSEN Transmission impact assessment methodology as outlined in Chapter 1.

7.2.1 The Proposed Development

For the cultural heritage assessment of the Proposed Development as set out in **Chapter 2: Project Description**, a 2 km radius Study Area for designated cultural heritage assets and a 250 m radius Study Area for the non-designated cultural heritage assets was established from the Project site boundary for the Town and Country Planning Application, within which the Proposed Development is to be located. Additionally, a 50 m radius area of investigation (AoI) around the two permanent access tracks inside the red line boundary was considered appropriate for the appraisal. Finally, a 50 m radius AoI of an existing access track was utilised.

7.2.2 The Associated Development

For the Associated Development as set out in **Chapter 2: Project Description**, a 2 km radius Study Area for designated cultural heritage assets and 250 m radius for non-designated cultural heritage assets surrounding the two temporary towers and Temporary Overhead line (OHL) Diversion were created for this appraisal. Similarly, a 50 m radius AoI was created for the two temporary and existing works access tracks.

7.3 Baseline

7.3.1 Designated Assets

The Proposed Development

There are no designated assets within the Proposed Development area.

There are no World Heritage Sites, Inventoried Historic Battlefields, Inventoried Gardens and Designed Landscapes, or Conservation Areas located within 2 km of the Proposed Development.

There is one Category C Listed Building just outside 2 km of the Proposed Development area:

• Firgrove Lodge, Argyle And Bute Hospital, Hospital Road, Lochgilphead - LB48640 c. 2.1 km from the Proposed Development (CM_002)

There are five Scheduled Monuments within or immediately adjacent to 2km of the Proposed Development area:

- Auchoish, long cairn 900m NE SM173 c. 0.35 km from the Proposed Development (CM 001)
- Achnabreck, prehistoric rock carvings 370m NNE SM90006 c. 1.9 km from the Proposed Development (CM_003)
- Achnabreck, prehistoric rock carvings 485m NNE SM12957 c. 1.85 km from the Proposed Development (CM_004)



TRANSMISSION

- Standing stone 275 m SSW of Achnabreck SM168 2.00 km from the Proposed Development (CM 014)
- Stane Alane, standing stone 190m S of Corbiere SM213 c. 2.08 km from the Proposed Development (CM_005)

An initial assessment of setting as a potential indirect impact was carried out, supported by field investigation for:

- Auchoish, long cairn 900m NE SM173 (CM 001)
- Achnabreck, prehistoric rock carvings 370m NNE SM90006 (CM 003)
- Achnabreck, prehistoric rock carvings 485m NNE SM12957 (CM 004)
- Stane Alane, standing stone 190m S of Corbiere SM213 (CM_005)

The Associated Development

There are no designated assets within the Associated Development.

There are no World Heritage Sites, Inventoried Historic Battlefields, Inventoried Gardens and Designed Landscapes, Listed Buildings or Conservation Areas located within 2 km of the Associated Development.

There are three Scheduled Monuments within the 2 km of the Associated Development area:

- Auchoish, long cairn 900 m NE SM173 c. 0.7 km from the Associated Development (CM 001)
- Achnabreck, prehistoric rock carvings 1.9 km NNE SM90006 c. 1.8 km from the Associated Development (CM_003)
- Achnabreck, prehistoric rock carvings 1.9 km NNE SM12957 c.1.9 km from the Associated Development (CM 004)

An initial assessment of setting as a potential indirect impact was carried out and field investigation recommended for the Auchoish, long cairn 900 m Scheduled Monument.

7.3.2 Non-Designated Assets

The Proposed Development

There are no non-designated assets within the Proposed Development.

Within 250m of the Proposed Development there are five known non-designated assets:

- Craig Murrail: Farmstead c. 243 m from the Proposed Development (CM_008)
- Craig Murrail: Sheepfold c. 230 m from the Proposed Development (CM 009)
- Craig Murrail: Croft; Settlement c. 148 m from the Proposed Development (CM 010)
- Craig Murrail: Sheepfold c. 230 m from the Proposed Development (CM_011)
- Craig Murrail: Farmstead; Head Dyke c. 172 km from the Proposed Development (CM_012)

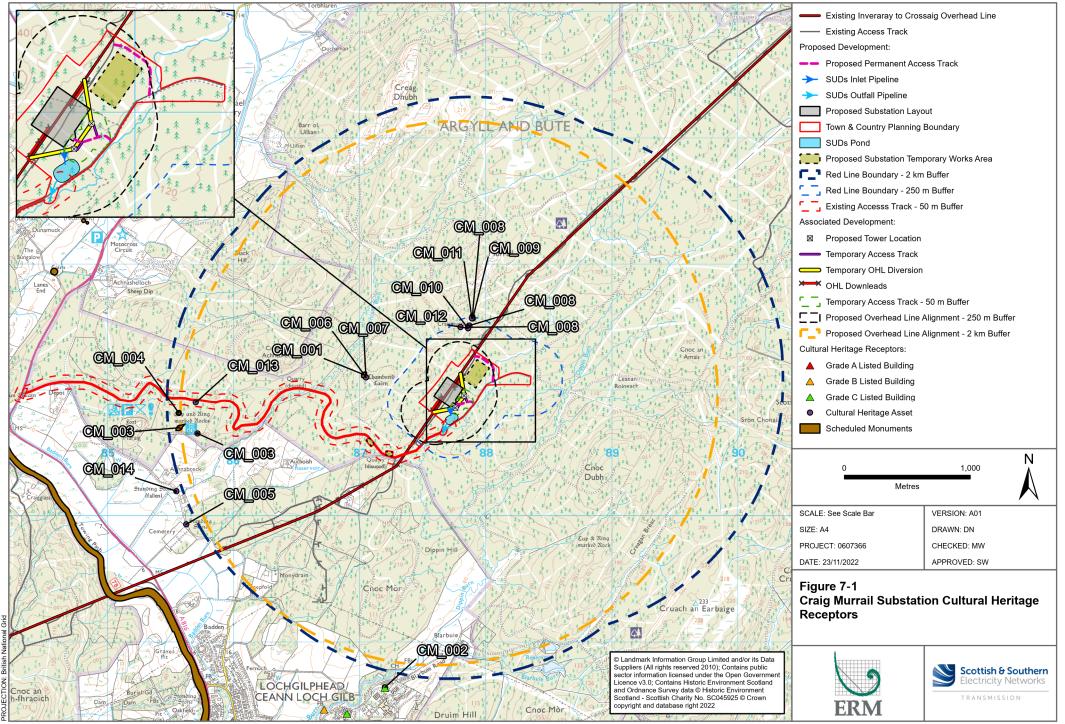
Within 50 m of the existing Works Access Track there is one known non-designated asset:

Achnabrech: Cup and Ring marked rock c. 20 m from the Proposed Development (CM_013)

The Associated Development

There are no non-designated assets inside or within 50 m of the Associated Development.

No previously unknown archaeological features were identified as a result of the archaeological walkover.





7.4 Appraisal – Direct Effects

There remains the potential for unknown buried archaeology, however the general ground conditions of the area have low potential for the survival of buried archaeological remains due to the presence of forestry plantation and felling.

7.4.1 The Proposed Development

There is potential for temporary minor direct impacts to cup marked stone (CM_013), which lies alongside the access track, during access track improvements. With the implementation of avoidance mitigations listed in section 7.5, the significance of effect to this asset will be minor.

7.4.2 The Associated Development

There will not be any direct impact to known heritage assets as a result of the Associated Development.

7.4.3 Cumulative Assessment

The Proposed Development and the Associated Development

There are no anticipated cumulative impacts to assets from the Proposed and Associated Developments

Other Projects

No other projects with the potential for cumulative effects have been identified within the Study Area

7.5 Mitigation

National planning policies and planning guidance, SPP (Scottish Government 2014) and PAN2/2011 (Scottish Government 2011) apply. These require a mitigation response that takes account of the potential for archaeological remains within the site to be impacted upon, enabling the preservation or recording of any significant remains which may be present.

Although the potential for buried archaeological remains to be present is considered to be low it cannot be discounted and consequently a programme to mitigate the effects of any direct impacts is recommended in accordance with national and local planning policies on heritage.

An archaeological watching brief is required for all ground-breaking works.

It is also recommended that archaeological exclusion zones are established 15 m each side of watercourses, where the ground has been less disturbed by forestry planting and felling.

7.5.1 The Proposed Development

An archaeological watching brief is required for all ground-breaking works associated with the substation platform, TWA, and permanent access track locations.

For the cup marked stone (CM_013), it is recommended, that a demarcation of 20 m from works activity is maintained and a watching brief will be maintained during ground-breaking activity.

Finally, any mitigation strategy developed should involve consultation with the West of Scotland Archaeological Service (WoSAS) as the regulatory authority, while concerns for designated assets necessitates consultation with Historic Environment Scotland (HES).

7.5.2 The Associated Development

It is recommended that a watching brief be maintained during ground-breaking activity related with the Associated Development.



7.6 Appraisal – Indirect Effects

In cultural heritage terms, an indirect impact refers to any change in the baseline condition of a heritage asset resulting from a development beyond the boundaries of the asset. Indirect impacts can have a variety of forms for instance if a development affects the water table, it could potentially damage the preservation of organic remains within buried archaeological contexts beyond its boundaries. However, most indirect impacts result from changes to the setting of heritage assets, as a consequence of new development.

7.6.1 The Proposed Development

Auchoish, long cairn 900m NE - SM173 (CM 001)

This Scheduled Monument lies c.500 m from the Proposed Development. Due to the prominent landscape position and importance of relationships between other monuments, the importance of setting to Auchoish Long Cairn is deemed high, however, views to the east (in the direction of the substation) were likely of less importance than views along the Auchoish Burn, given the lack of connective monuments or natural feature association.

The monument is of national importance both due to its well-preserved condition and potential for buried deposits to survive, but also because of its relationship to other significant prehistoric assets in the area.

The proposed substation has a low potential to impact the setting of the monument due to the limited visibility to the substation and the presence of an existing OHL in that direction.

An LVIA photomontage has been prepared (**Annex E, Figures E.9 a, b and c**) and has been assessed (see **Annex R**). This concludes that the Auchoish long cairn has entirely limited views in all directions as a result of forestry, but also lies on the far side of a ridge further blocking potential views east towards the Proposed Development confirming that there would be no inter-visibility, even in the event of tree felling, due to the position of the substation below the horizon.

Although, the importance of setting to the cairn is deemed high, the proposed development will not impact the setting of the cairn.

Achnabreck, prehistoric rock carvings 370 m NNE - SM90006 (CM_003)

This Scheduled Monument lies *c*.1.75 km to the south west of the Proposed Development and within 300m of the access track. Along with SM12957 (200 m south), they comprise possibly the most extensive and elaborate concentration of prehistoric rock carvings in Scotland, with major groupings of cup-and-ring marks and other grooves. The function of the carvings is not known but is thought to have ritual or spiritual importance with high significance placed on their landscape position. Although now within forestry plantation, they would have had views along the valley south to Lochgilphead and west to Cairn Baan, where another set of rock carvings are present (SM13211). The carvings lie within the much wider ritual landscape of Kilmartin Glen, which contains a significant amount of Neolithic and Bronze Age burial monuments.

Views to the Proposed Development are currently masked by extensive forestry plantation, but it is possible that prior to forestry, views would have been limited by the rising ground and small hills and knolls. The position of the rock carvings near the valley base suggests that the areas of settlement and other monuments along the valley were of higher importance to the setting than the higher ground. On this basis and given the reasonable distance between the rock carvings and the Proposed Development, there is low potential to impact upon the setting of the monument. Although the access track is in much closer proximity, it is also thought to have low potential to impact due to the presence of an existing track which will undergo no or minor improvements.

Achnabreck, prehistoric rock carvings 485m NNE - SM12957 (CM_004)

This Scheduled Monument lies *c*.1.84 km to the south west of the Proposed Development and within 100m of the access track. Along with SM12957 (20 m north), they comprise possibly the most extensive and elaborate concentration of prehistoric rock carvings in Scotland, with major groupings of cup-and-ring marks and other



grooves. The function of the carvings is not known but is thought to have ritual or spiritual importance with high significance placed on their landscape position. Although now within forestry plantation, they would have had views along the valley south to Lochgilphead and west to Cairn Baan, where another set of rock carvings are present (SM13211). The carvings lie within the much wider ritual landscape of Kilmartin Glen, which contains a significant amount of Neolithic and Bronze Age burial monuments.

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Stane Alane, standing stone 190 m S of Corbiere - SM213 (CM 005)

This Scheduled Monument lies approximately 2.04 km south west of the Proposed Development. The monument comprises a standing stone of up to 2.4 m high, 1m wide and 0.25 m thick, which has been built into a turf and stone dyke running along the side of an overgrown farm track between woodlands on the north east and Achnabreck cemetery on the south west.

It is not known if the stone still stands in its original position, however, it is unlikely to have been moved far. Its reuse in later times suggests that it held importance for people over a long-time span, even though its original function and meaning may have changed.

Standing stones are generally highly visible monuments, usually placed in important landscape positions to mark routeways or boundaries or to reference rituals, other monuments, or astronomical events. As such, the setting of Stane Alane within the Badden Burn valley has high importance. It was likely associated with another standing stone (SM168) at Achnabreck, now fallen, which is positioned along the same road. Wider reference may have also been made to the prehistoric rock carvings and cairns discussed above. The importance of the setting in relation to the Proposed Development is thought to be low because, although woodland currently blocks line of sight, intervisibility between the Proposed Development is likely to be limited by rising ground. The stone's location near the valley base also suggests that it was an important marker along the valley routeway and that it had less significance in relation to the higher ground. There is low potential for the Proposed Development to impact upon the setting of the standing stone.

7.6.2 Associated Development

Auchoish, long cairn 900 m NE - SM173 (CM_001)

This Scheduled Monument lies *c*. 700 m from the Associated Development. Due to the prominent landscape position and importance of relationships between other monuments, the importance of setting to Auchoish Long Cairn is deemed high, however, views to the east (in the direction of the substation) were likely of less importance than views along the Auchoish Burn, given the lack of connective monuments or natural feature association.

The monument is of national importance both due to its well-preserved condition and potential for buried deposits to survive, but also because of its relationship to other significant prehistoric assets in the area.

The proposed substation has a low potential to impact the setting of the monument due to the limited visibility to the substation and the presence of an existing OHL in that direction.

Achnabreck, prehistoric rock carvings 370 m NNE - SM90006 (CM_003)

This Scheduled Monument lies c.1.9 km to the south west of the Associated Development. Along with SM12957 (200 m south), they comprise possibly the most extensive and elaborate concentration of prehistoric rock



carvings in Scotland, with major groupings of cup-and-ring marks and other grooves. The function of the carvings is not known but is thought to have ritual or spiritual importance with high significance placed on their landscape position. Although now within forestry plantation, they would have had views along the valley south to Lochgilphead and west to Cairn Baan, where another set of rock carvings are present (SM13211). The carvings lie within the much wider ritual landscape of Kilmartin Glen, which contains a significant amount of Neolithic and Bronze Age burial monuments.

Views to the Associated Development are currently masked by extensive forestry plantation, but it is possible that prior to forestry, views would have been limited by the rising ground and small hills and knolls. The position of the rock carvings near the valley base suggests that the areas of settlement and other monuments along the valley were of higher importance to the setting than the higher ground. On this basis and given the reasonable distance between the rock carvings and the Associated Development, there is low potential to impact upon the setting of the monument. Although the access track is in much closer proximity, it is also thought to have low potential to impact due to the presence of an existing track which will undergo no or minor improvements.

Achnabreck, prehistoric rock carvings 1.9 m NNE - SM12957 (CM_004)

This Scheduled Monument lies *c*.1.9 km to the south west of the Associated Development and within 100 m of the access track. Along with SM12957 (20 m north), they comprise possibly the most extensive and elaborate concentration of prehistoric rock carvings in Scotland, with major groupings of cup-and-ring marks and other grooves. The function of the carvings is not known but is thought to have ritual or spiritual importance with high significance placed on their landscape position. Although now within forestry plantation, they would have had views along the valley south to Lochgilphead and west to Cairn Baan, where another set of rock carvings are present (SM13211). The carvings lie within the much wider ritual landscape of Kilmartin Glen, which contains a significant amount of Neolithic and Bronze Age burial monuments.

Views to the Associated Development are currently masked by extensive forestry plantation, but it is possible that prior to forestry, views would have been limited by the rising ground and small hills and knolls. The position of the rock carvings near the valley base suggests that the areas of settlement and other monuments along the valley were of higher importance to the setting than the higher ground. On this basis and given the reasonable distance between the rock carvings and the Associated Development, there is low potential to impact upon the setting of the monument. Although the access track is in much closer proximity, it is also thought to have low potential to impact due to the presence of an existing track which will only undergo no or minor improvements

7.6.3 Cumulative Assessment

Cumulative assessment takes into account successive, incremental, or combined effects of developments in the area. For this section projects that are underway, planned or reasonably anticipated are considered for cumulative assessment. Existing infrastructure was considered as part of the existing landscape and therefore has been considered within the impact assessment for the Proposed and Associated Development.

The Proposed Development and the Associated Development

There are no predicted cumulative indirect effects to cultural heritage assets from the works related to the Proposed Development and the Associated Development.

Other Projects

No other projects with the potential for cumulative effects have been identified within the Study Area

7.7 Summary of Effects

This chapter has assessed the likely effects of the Proposed and Associated Developments on cultural heritage assets. The archaeological character of the area primarily dates to the Prehistoric through the 19th centuries.



TRANSMISSION

With the implementation of the proposed mitigation key direct impacts relating to CM_013 (cup marked stone) will be temporary minor with any effect reduced to no impact after works cease. The significance of effect will be temporary minor because the construction works will avoid the buffered area around the asset, then be reduced to no impact as the construction works end.

The implementation of the proposed 'No Action' mitigation of key indirect impacts on CM_001,3,4,5 (Auchoish long cairn; Achnabreck, prehistoric rock carvings (two assets); Stane Alane, standing stone), is anticipated to result in negligible effects. As a result of the assessment, the Proposed and Associated Developments are not anticipated to have major impacts to known assets.

It is not anticipated that there will be any direct impact to known heritage assets as a result of the Associated Development.

The potential for unknown buried archaeological remains to be present is considered to be low but cannot be discounted. It is considered low potential due to the results of contextual review and field investigation analysis. Thus, a watching brief should be in place for all intrusive ground works.

Table 7-.1 Appraisal of Cultural Heritage

Environmental Feature	Development Interaction	Mitigation Measures	Receptor sensitivity	Magnitude of effect	Significance of effect
Cup marked stone (CM_013)	Direct during construction	A demarcation of 20 m from works activity is maintained and a watching brief	Medium	Low	Minor
		will be maintained during ground breaking activity.			
Potential buried archaeological remains	Direct during construction	A watching brief is required for all intrusive ground works.	Unknown	Unknown	Unknown
Auchoish long cairn SM CM_001	Indirect upon setting during construction and operation	No Action Ensure development does not encroach towards the Auchoish Burn Valley.	High	Negligible	Negligible
Achnabreck, prehistoric rock carvings - SM12957 / SM90006 (CM_003-4)	Indirect upon setting during construction and operation	No Action	High	Negligible	Negligible
Stane Alane, standing stone 190 m S of Corbiere - SM213 (CM_005)	Indirect upon setting during construction and operation	No Action	High	Negligible	Negligible