

## 8 Cultural Heritage

### 8.1 Scope of the Assessment

- 8.1.1 This chapter provides an assessment of the potential impacts on both known and potential cultural heritage assets. The objective of this assessment has been to investigate, as far as is reasonable and practical, the nature and extent of any known or potential archaeological and historical resource within the Proposed Scheme and wider study area. Consideration has been given to the extent to which past and present land uses may have diminished or enhanced the site's archaeological potential. Where impacts on known or potential interests have been identified, relevant archaeological mitigation strategies have been proposed.
- 8.1.2 Cultural heritage assets include archaeological assets, built heritage assets and historic landscapes. An archaeological asset can be buried remains, identified through previous investigations or survey including aerial photographic survey, or upstanding remains visible as earthworks or cropmarks. Built heritage assets are upstanding structures including buildings, monuments and ruins with historical, functional or architectural value. Historic landscapes are areas where social and economic activity has served to shape landscapes in which there is a discernable awareness of their evolution.

#### Study Area

- 8.1.3 The assessment covers all assets within the footprint of the Proposed Scheme and within 250m of it, as shown in Figure 8.1. An assessment of designated assets (i.e. scheduled monuments, listed buildings, conservation areas and designed gardens and landscapes) within the wider context of the Proposed Scheme has also been undertaken in order to assess the impact on the setting of these assets. An assessment of visual impact on designated assets has been undertaken as part of the landscape and visual impact assessment reported in Chapter 9 Landscape Effects.

### 8.2 Legislative, Regulatory and Planning Context

#### *Ancient Monuments and Archaeological Areas Act (1979)*

- 8.2.1 Under this Act monuments which are considered to be of national importance can be protected through scheduling. Once a monument receives scheduled status it is an offence to demolish, destroy, alter or repair it and any intrusive work (including flooding and tipping) must apply for scheduled monument consent from Historic Scotland. The Ancient Monuments Act was amended with the Historic Environment (Amendment) (Scotland) Act 2011.

#### *Planning (Listed Buildings and Conservation Areas) (Scotland) Act (1997)*

- 8.2.2 The purpose of this piece of legislation is to protect all listed buildings and conservation areas. Once a building is listed and a conservation area is designated, any alterations that would affect the historic and architectural character of a building or its setting would require listed building or conservation area consent. The Listed Buildings and Conservation Areas Act was amended with the Historic Environment (Amendment) (Scotland) Act 2011.

*Treasure Trove under Scots Law, Bona Vacantia*

- 8.2.3 Under the wider legal concept of bona vacantia which states ‘that which belongs to nobody becomes our Lord King/ Queen’s’, all property which is abandoned and has no identifiable owner is owned by the Crown.

*Treatment of Human Remains under Scots Law, Right to Sepulchre*

- 8.2.4 The treatment of human remains is advised on by Historic Scotland who has provided an Operational Policy guidance document on the treatment of human remains. The treatment of human remains is protected in Scots Law by the Right to Sepulchre.

**Planning Policy**

*Scottish Planning Policy (2010)*

- 8.2.5 SPP (Scottish Government, 2010) is a document which sets out Government policy on development in Scotland. Policies 110 to 124 provide guidance on heritage assets and planning issues to local authorities and others on the operation of the planning system, with particular reference to the identification, protection, conservation and enhancement of archaeological remains, upstanding remains, sites and landscapes as well as designated sites such as listed buildings, conservation areas, scheduled monuments, wrecks, gardens and designed landscapes and world heritage sites.

*Scottish Historic Environment Policy (Revised 2011)*

- 8.2.6 The Scottish Historic Environment Policy (SHEP) sets out the Ministers’ policies for the historic environment in Scotland. It complements and has the same authority as Scottish Planning Policy and sets out the Scottish Ministers’ Policies for planning matters relating to the historic environment as well as providing direction to Historic Scotland and other bodies on heritage issues.

*Planning Advice Note 2-2011 Planning and Archaeology (2011)*

- 8.2.7 This Planning Advice Note (PAN) works alongside SPP and SHEP and advises heritage professionals in the assessment and decision making processes relating to the management of heritage assets.

*Local Plan for North Ayrshire*

- 8.2.8 The local plan for North Ayrshire sets out guidance for planning applications and proposed development. Policies BE1 to BE14 are concerned with the historic environment. The following policies are directly concerned with the historic environment and are relevant to the proposals for the A737 Dalry Bypass:

- Policy BE 5 Listed Buildings: Proposals for a development of a Listed Building or in its setting, which would have an adverse impact on a Listed Building or its setting or on any features of special architectural or historic interest which it possesses shall not accord with the Local Plan.
- Policy BE 10 Archaeological Sites: Proposals for development which may significantly affect sites of archaeological significance, including industrial archaeological locations, shall not accord with the Plan. Where the primary aim of the preservation cannot be achieved, excavation and recording of the site shall be undertaken. Development should not proceed until suitable excavation and recording has taken place. The Council will accordingly encourage developers to support the associated costs.

- Policy BE 11 Designed Landscapes And Historic Gardens
- Policy BE 12 Local Landscapes Of Historic Interest: The Council shall take account of landscapes identified by the Garden History Society as of local historic interest and of value to the heritage of the area when assessing development proposals in these areas.

### **8.3 Methods of Assessment**

- 8.3.1 The heritage assessment has been undertaken in accordance with the standards and guidance for desk based assessments set out within the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3 Part 2 HA 208/07 and guidance set by the Institute for Archaeologists (IfA, 2011). It forms a simple assessment, as outlined in the DMRB guidance, which gathers the appropriate desk based information in order to determine the impacts of the Proposed Scheme and further mitigation where necessary.
- 8.3.2 The assessment is undertaken using appropriate methods and practices that comply with the Code of Conduct, and other relevant by-laws of the IfA. The consultants who prepared this assessment have professional qualifications in archaeology and are full members (MIfA) of the IfA.
- 8.3.3 The assessment of cultural heritage assets has involved:
- establishment of the baseline environment in terms of the presence of specific features, sites and areas of cultural heritage interest within the defined study area;
  - evaluation of the potential impacts on cultural heritage assets;
  - identification of appropriate mitigation measures for likely significant adverse effects; and
  - description of conclusions and effects, following mitigation.

#### **Baseline Environment Assessment**

- 8.3.4 The baseline environment has been established through a desk-based assessment, site survey and consultation.
- 8.3.5 As part of the desk-based review, data has been obtained from the following resources:
- West of Scotland Archaeology Service (WOSAS) Historic Environment Record.
  - National Monuments Record for Scotland (NMRS).
  - National Map Library (Scotland).
  - North Ayrshire Heritage Centre (for historic maps, photographs and other documents).
- 8.3.6 A site visit was undertaken on 18th July 2012 by a qualified heritage consultant.
- 8.3.7 Data and views concerning the Proposed Scheme have also been sought from the following authorities, organisations and groups:
- West of Scotland Archaeology Service Planning Archaeologist.

- Historic Scotland.

## Predicted Impact Assessment

### Value

- 8.3.8 Assessment of value has involved consideration of how far the asset(s) contribute to an understanding of the past, through their individual or group qualities, either directly or potentially. These are professional judgements, but they are also guided by legislation, national policies, acknowledged standards, designations, criteria and priorities.
- 8.3.9 The assessment has involved reference to Annexes 5, 6 and 7 of the DMRB, HA208/07 (Cultural Heritage) which recommends the adoption of six ratings for value in relation to archaeology and built heritage: very high, high, medium, low, negligible and unknown. Definitions for each rating are outlined in Tables 8.1, 8.2 and 8.3.

Table 8.1: Factors for Assessing the Value of Archaeological Assets

Value	Status and Definition
<b>Very High</b>	World Heritage Sites (including nominated sites) Assets of acknowledged international importance Assets that can contribute significantly to acknowledged international research objectives
<b>High</b>	Scheduled Monuments (including proposed sites) Undesignated assets of scheduled quality and importance Assets that can contribute significantly to acknowledged national research objectives
<b>Medium</b>	Designated or undesignated assets that contribute to regional research objectives
<b>Low</b>	Designated and undesignated assets of local importance Assets compromised by poor preservation and/or poor survival of contextual associations Assets of limited value, but with potential to contribute to local research objectives
<b>Negligible</b>	Assets with very little or no surviving archaeological interest
<b>Unknown</b>	The importance of the resource has not been ascertained

Table 8.2: Criteria for Establishing the Value of Built Heritage Assets

Value	Status and Definition
<b>Very High</b>	International importance i.e. World Heritage Sites.
<b>High</b>	National importance i.e. listed buildings at category A or B, Scheduled Ancient Monuments with standing remains, conservation areas containing very important buildings and undesignated structures of clear national importance.
<b>Medium</b>	Regional importance i.e. listed buildings at category B, conservation areas containing buildings that contribute significantly to its historic character, historic townscape with important integrity in their buildings, or built settings and undesignated structures of clear regional importance.
<b>Low</b>	Local importance i.e. listed buildings at category C or C(S), undesignated assets of modest quality in their fabric or historical association and historic townscape of limited historic integrity (including buildings and structures included in local list prepared by local authority).

Value	Status and Definition
<b>Negligible</b>	Assets of no architectural or historical note
<b>Unknown</b>	Assets with some hidden (i.e. inaccessible) potential for historic or architectural significance.

Table 8.3: Criteria for Establishing the Value of Historic Landscapes

Value	Status and Definition
<b>Very High</b>	International importance i.e. World Heritage Sites. Undesignated landscapes of international quality. Exceptional landscapes which are well preserved and have qualities to show time depth, coherence etc.
<b>High</b>	National importance Designated or undesignated landscapes of national importance, i.e. national value, time depth and coherence.
<b>Medium</b>	Regional importance Designated or undesignated landscapes of special regional importance, i.e. national value, time depth and coherence.
<b>Low</b>	Local importance Undesignated historic landscapes of local significance, i.e. to local interest groups. These sites tend to have been poorly preserved or have a poor contextual associations.
<b>Negligible</b>	Assets of no historical or archaeological interest
<b>Unknown</b>	The importance of the resource has not been ascertained

### *Magnitude of Impact*

- 8.3.10 The determination of magnitude of impact has been based on the vulnerability of the study area, its current state of survival/condition and the nature of the impact upon it. The survival and extent of the archaeological deposits is often uncertain and consequently, the magnitude of change can be difficult to predict with any certainty.
- 8.3.11 The assessment has involved reference to Annexes 5, 6 and 7 of DMRB guidance HA208/07 (Cultural Heritage) which recommends the adoption of six ratings for value in relation to archaeology and built heritage: very high, high, medium, low, negligible and unknown. Definitions for each rating are outlined in Tables 8.4, 8.5 and 8.6 below.

Table 8.4: Factors for Assessing the Magnitude of Impact for Archaeological Assets

Magnitude of Impact	Factors in the assessment of the magnitude of impacts
<b>Major</b>	Change to most or all key archaeological materials, such that the resource is totally altered Comprehensive changes to setting
<b>Moderate</b>	Changes to many key archaeological materials, such that the resource is clearly modified Considerable changes to setting that affect the character of the asset
<b>Minor</b>	Changes to key archaeological materials, such that the asset is slightly altered Slight change to setting
<b>Negligible</b>	Very minor changes to archaeological materials, or setting
<b>No Change</b>	No change

Table 8.5: Criteria for the Assessment of the Magnitude of Impact for Built Heritage Assets

Magnitude	Factors in the assessment of the magnitude of impacts
<b>Major</b>	Change to key elements of the built heritage asset(s), such that the resource is totally altered Comprehensive changes to the setting
<b>Moderate</b>	Change to many key elements of the built heritage asset(s), such that the resource is significantly modified Changes to the setting of a built heritage asset, such that it is significantly modified
<b>Minor</b>	Change to key elements of the built heritage asset(s), such that the asset is slightly different. Change to setting of a built heritage asset, such that it is noticeably changed.
<b>Negligible</b>	Slight changes to elements of the built heritage asset(s) or setting that hardly affect it
<b>No Change</b>	No change to the fabric or setting of the asset.

Table 8.6: Criteria for the Assessment of the Magnitude of Impact for Historic Landscapes

Magnitude	Factors in the assessment of the magnitude of impacts
<b>Major</b>	Change to the majority of historic landscape features, extreme visual effects, extreme noise change, changes to use or access resulting in fundamental changes to historic character.
<b>Moderate</b>	Change to many of the historic landscape features, visual effects, noise/sound change/ quality, changes to use or access resulting in moderate changes to historic character.
<b>Minor</b>	Change to few of the historic landscape features, visual effects, noise/sound change/ quality, changes to use or access resulting in limited changes to historic character.
<b>Negligible</b>	Very minor change to historic landscape features, largely unchanged visual effects, noise/sound change/ quality, minor changes to use or access resulting in very small changes to historic character.
<b>No Change</b>	No change to the key components of the landscape, no audible or visual effects..

### Effects

- 8.3.12 Table 8.7 illustrates how information on the value of the asset and the magnitude of the impact on asset has been combined to arrive at an assessment of the significance of effect.
- 8.3.13 The matrix is not intended to override professional judgement of the significance of effect but act as a check to ensure that judgements regarding value, magnitude of impact and significance of effect are reasonable and balanced. There are occasions when insufficient information is known to make informed judgements. In such cases an assessment of risk has been undertaken.

Table 8.7: Impact Ratings

	Magnitude of Impact					
		No Change	Negligible	Minor	Moderate	Major
Value/Sensitivity	Very High	Neutral	Slight	Moderate/ Large	Large or Very Large	Very Large
	High	Neutral	Slight	Moderate/ Slight	Moderate/ Large	Large/ Very Large
	Medium	Neutral	Neutral/ Slight	Slight	Moderate	Moderate/ Large
	Low	Neutral	Neutral/ Slight	Neutral/ Slight	Slight	Slight/ Moderate
	Negligible	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight

### Mitigation

- 8.3.14 Where the assessment has identified higher order impacts, suitable mitigation measures have been identified and detailed. This may involve protecting a particular asset(s) or a requirement for further investigation or recording.

## 8.4 Baseline Conditions

### Geological Context

- 8.4.1 Detailed assessment of the geology and soils can be found in Chapter 11. The geological context is summarised here since it is relevant to the potential and survival of buried remains.
- 8.4.2 The ground surface along the proposed bypass corridor falls towards the south-west from a maximum level of around 75m AOD at the north-eastern end of the corridor to a minimum level of less than 20m AOD at the River Garnock crossing point. The ground rises again, south-west of the river, to a maximum level of around 45m AOD where it meets the existing A737.
- 8.4.3 British Geological Survey published information indicates that the drift geology of the study area is mainly Glacial Till containing varying quantities of sand and gravel. Surface deposits of alluvium are indicated to be present primarily across the floodplain



of the River Garnock. Isolated areas of made ground are also anticipated associated with areas of spoil and other historical land uses.

- 8.4.4 Soil quality maps obtained from the Macaulay Institute indicate that the principal sub soils throughout the corridor are tills derived from shale and sandstone and classified as poorly, or very poorly drained non-calcareous Gleys, which was confirmed by the preliminary ground investigation in 2008.
- 8.4.5 The research information available during the production of this report indicates that the solid strata beneath the site are of Carboniferous age and typically comprise sandstones, siltstones, mudstones with economic seams of ironstone, limestone and coal. (See Chapter 11 for further details).

### **Archaeological Assets**

- 8.4.6 The location of the sites identified from the West of Scotland Archaeology Service (WOSAS) Historic Environment Record (HER) and the National Monuments Record for Scotland (NMRS) which lie within the study area are shown on Figure 8.1 and are tabulated in the gazetteer in Appendix 8.2. The numbers referenced on the plan and in brackets in the text (e.g. Reference 1) have been added for the purposes of this report only. HER and NMRS references relating to each site where applicable are listed within Appendix 8.2. Some of these entries are included in both the HER and the NMRS and therefore include two numbers.
- 8.4.7 In addition to the HER and NMRS sites, 28 sites (both archaeology and built heritage) were identified through historical research and site walkover.
- 8.4.8 There are no known prehistoric (250,000 BC to AD 43, roman (43 to AD 410) or early medieval (AD 410 to AD 1066) features or findspots within the study area. There is a circular enclosure at Caaf Bridge but this currently remains undated (Reference 8). There is the site of a pre-Reformation chapel and associated graveyard close to the south end of the Proposed Scheme (Reference 9). Heritage assets dated after this period tend to be upstanding remains or historic buildings and are described separately in the built heritage section below.

### **Archaeological Potential**

- 8.4.9 The area of the Proposed Scheme has been heavily mined during the 19<sup>th</sup> and 20<sup>th</sup> centuries, particularly to the middle and north of the Scheme. This activity is likely to have removed archaeological assets pre-dating the 19<sup>th</sup> century. Infrastructure relating to the 19<sup>th</sup> century mining is, nevertheless, considered archaeological evidence and remains of the mine shafts, kilns and other associated buildings may have not yet been identified.
- 8.4.10 There are no recorded intrusive archaeological investigations within the study area which makes the archaeological potential difficult to assess. The alluvium surface deposits within the floodplain of the River Garnock suggest there is a strong possibility of discovering well preserved remains and paleo-environmental evidence. The church and associated graveyard of Dalry parish church is located within this area.

### **Built Heritage**

- 8.4.11 All the built heritage assets within the study area date to the 18<sup>th</sup> or 19<sup>th</sup> centuries. These include six listed buildings which comprises a row of mid 19<sup>th</sup> century cottages at Hillside (Reference 3 to 7) and the North Lodge to the Blair Estate (Reference 2).



The cottages are two storey buildings constructed of local stone with rendered walls and slate roofs. North Lodge is a single storey building and is constructed of dressed stone with a pitched slate roof. The windows and doors have dressed stone surrounds.

- 8.4.12 Within the wider study area (1km radius from the Proposed Scheme) there are an additional 13 listed buildings. These include Blair House (Reference 44) and associated stables (Reference 43), garden walls (Reference 45), Forester's Cottage (Reference 46) and North Bridge (Reference 47) within the Blair Estate to the east of the Proposed Scheme. The house itself is believed to have medieval origins but the majority of the fabric dates between the 16<sup>th</sup> and 19<sup>th</sup> centuries. The associated buildings date to the 18<sup>th</sup> and 19<sup>th</sup> centuries. All the structures are built of local stone with slate roofs.
- 8.4.13 To the north-west of the Proposed Scheme there are two listed bridges (Reference 50 and 52) and 19<sup>th</sup> century houses (Reference 48 and 49). Bridgend Mills (Reference 51) also stands within 1km of the Proposed Scheme and unlike the other listed buildings is constructed of yellow brick. Kersland Farm (Reference 53) stands to the north-west of the Proposed Scheme and is again built of local stone dating from the 17<sup>th</sup> century with 19<sup>th</sup> century additions. Brownhill House (Reference 54) was built in the 18<sup>th</sup> century and is again constructed of stone with slate roof. To the south of the Proposed Scheme is Monk Castle (Reference 55) which is a ruined stone building probably built in the early 17<sup>th</sup> century as a small laird's house.
- 8.4.14 The area was extensively mined throughout the 18<sup>th</sup> and 19<sup>th</sup> centuries with open quarries for ironstone, sandstone and limestone to the north of the study area (Reference 35 to 38) and shaft coal mining in the centre of the study area with numerous coal pits (22, 24, 26, 31 and 32). The historic maps show the location of these mines and associated buildings such as engine houses and kilns (Reference 17, 25 and 30). Some of the limekilns survive and mounds on the ground (17 and 13) and there are numerous 'bings' or spoil heaps (Reference 21 and 23). Stoopshill Pit (Reference 22) in the centre of the study area was connected to the mineral railway which ran on to the east towards the Blair estate and south to the main railway line. The mineral railway can still be identified as an earthwork (Reference 19).
- 8.4.15 The Glasgow to Ayr railway was established by 1840 and this led to a population increase as more workers were attracted to the area. The signal hut located to the north side of the railway (Reference 11) was probably built shortly after this date along with the gas house (Reference 14), wall (Reference 15) and underpass (Reference 41). Both were established by the publication of the 1858 Ordnance Survey map.
- 8.4.16 Amongst the industrial works of the study area are a number of farmsteads including Hillend (Reference 10); Blairland (Reference 16); Stoopshill (Reference 18); Coalheughglen (Reference 27); Highfield (Reference 32) and Hairshaw (Reference 34). All of these farmsteads had been established by 1858. The majority of the buildings are built of local stone which would have been quarried from the immediate vicinity. The walls are rendered and the buildings have slate roofs. At this time, the land would have been pasture as it is used today but some farmers exploited the land for mineral extractions and some had kilns to create lime which could be used as a fertiliser or building mortar.
- 8.4.17 Towards the end of the 19<sup>th</sup> century many of the mines had been exploited and many of the pits and kilns on the later 19<sup>th</sup> century historic maps are marked as disused or 'old'. The building marked as 'Kilcush' (Reference 13) is first shown on the 1858

Ordnance Survey map but is ruinous by the 1967 publication. Remains of this stone building can be seen as ruined walls. Some of the stone quarries in the north of the study area were built on disused quarry sites in the later 19<sup>th</sup> and early 20<sup>th</sup> centuries including Easter Highfield (Reference 39) and a second Highfield Cottage (Reference 40).

### **Historic Landscapes**

- 8.4.18 The designated Garden and Designed Landscape of the Blair estate (Reference 1) is located to the south east of the proposed scheme. The estate comprises a 19<sup>th</sup> century landscaped park surrounding Blair House. The house itself is a listed building at category A and dates to c.1200 with later 18<sup>th</sup> and 19<sup>th</sup> century additions. The park includes a formal garden laid out in the 1920s replacing an earlier 18<sup>th</sup> century garden, woodland, watercourses, bridges, gates and garden architecture.
- 8.4.19 The landscape of the study area was once a major mining area with numerous open cast and shaft mines for quarrying stone and coal. Features of this former landscape survive in the form of spoil heaps or 'bings' and earthworks relating to former buildings, kilns and railway. Today the landscape is predominantly pasture with hedgerows to mark historic field boundaries. The only wall within the study area is associated with the railway which cuts across the south portion of the Proposed Scheme. Woodland is limited to small managed areas and tends to be located to the south-east of the study area, within the Blair estate.

## **8.5 Predicted Impacts**

- 8.5.1 The direct unmitigated impacts on known heritage assets from the Proposed Scheme have been listed in the impacts table in Appendix 8.2. The impacts are summarised in the following section.

### **Construction Stage**

#### *Archaeology*

- 8.5.2 The construction of the Proposed Scheme (including the road and associated features and landscaping) would directly affect known archaeological features of low value causing disturbance and ultimately destruction of these features. These features include a spoil heap or possible limekiln (Reference 21) and the mineral railway (Reference 19) and the site of a former stables (Reference 20). These features would be disturbed and destroyed meaning there would be a permanent impact of major adverse magnitude on archaeological features directly affected by the construction works.
- 8.5.3 There is also a potential for the proposed construction works to affect other features given the close proximity of these features to the Proposed Scheme and the working areas. These features include limekilns (Reference 30) and the location of the former Kersland Colliery (Reference 31). There is a potential for the disturbance and/or destruction of these features through the construction of the Proposed Scheme. These impacts would be permanent moderate adverse.
- 8.5.4 The potential for unknown buried remains is largely uncertain given the lack of previous archaeological investigations in the study area. It is likely, however, that the area of the Proposed Scheme to the north of Blair Road has been heavily mined during the 18<sup>th</sup> and 19<sup>th</sup> centuries thereby destroying evidence of buried remains predating this period. The site of infrastructure (i.e. engine houses, stables, shafts etc) relating to the mining,

however, is also of archaeological interest. Within the southern section of the Proposed Scheme alignment (between the railway and the existing A737) there is a potential for discovering remains associated with the former parish church and graveyard particularly since this feature is located on the floodplain. Paleoenvironmental evidence within this area is also likely to be present. The likely impact on unknown or potential buried remains cannot be determined without further investigation.

- 8.5.5 There is likely to be an impact on the setting of archaeological assets, particularly their context. This includes the limekiln (Reference 17) and limekilns (Reference 30). This is particularly relevant to the industrial features of the 18<sup>th</sup> and 19<sup>th</sup> century which collectively form part of a large industrial landscape. The road construction would remove some of the features of this landscape (i.e. the mineral railway, Reference 19) and would truncate others thus severing the relationship between the features and their setting. This impact is permanent and would continue into the operational stage.

#### *Built Heritage*

- 8.5.6 There is the potential for three built heritage assets to be affected by the Proposed Scheme through demolition. These include the railway signal hut (Reference 11); the ruined building of Kilcush (Reference 13) and the wall alongside the railway (Reference 15). All of these assets are considered to be of low value and their demolition would have a permanent major adverse impact.
- 8.5.7 The construction works are expected to cause temporary short term disturbance to the setting of a number of built heritage assets in terms of noise and vibration and visual impact. The assets to be affected include North Lodge (Reference 2); Hillside Cottages (Reference 3 to 7); Hillend (Reference 10); railway signal hut (Reference 11); Kilcush (Reference 13); wall (Reference 15); Blairland (Reference 16); limekiln (Reference 17); Stoopshill (Reference 18); Coalheughglen (Reference 27); Creepies or Littleacres (Reference 28); limekilns (Reference 30); Highfield (Reference 32); Southfield (Reference 33); Easter Highfield (Reference 39); railway underpass (Reference 41) and 7 Beith Road (Reference 42). The majority of these assets are of low value with the exception of Hillside Cottages (Reference 3 to 7) and North Lodge (Reference 2) which are of medium value. The visual or noise impact ranges from minor to moderate for these assets. Further details of the visual impacts are discussed in Chapter 9: Landscape Effects.

#### *Historic Landscape*

- 8.5.8 The construction works would have a moderate short term impact on the historic landscape given the proposals to place the majority of the road within a cut, thereby creating a substantial cutting through the landscape. The construction works are expected to be extensive but would be temporary.

#### **Operation Stage**

##### *Archaeology*

- 8.5.9 Once the Proposed Scheme has been completed and is fully operational, there are expected to be no additional impacts on archaeological assets. There would, however, be some impacts caused by the construction that would become permanent (i.e. loss or damage of archaeological assets and the severance of the relationship between assets).
- 8.5.10 Assets within close proximity of the new road may require some maintenance such as monitoring to check that drainage is sufficient to ensure sites do not become

waterlogged or flooded; fencing to prevent vehicular disturbance and condition surveys to ensure the assets are not deteriorating and to identify any repairs necessary. This includes the mineral railway (Reference 19) and the limekilns (Reference 30).

#### *Built Heritage*

- 8.5.11 Following the completion of the Proposed Scheme the road is expected to have a minor impact on the setting of surrounding built heritage assets of low value including Hillside Cottages (Reference 3 to 7); Hillend (Reference 10); Creepies or Littleacres (Reference 28); Highfield (Reference 32) and Southfield (Reference 33) and Easter Highfield (Reference 39). It would also have a moderate to major impact on the setting of assets of low value including Blairland (Reference 16); Stoopshill (Reference 18) and Coalheughglen (Reference 27) where the Proposed Scheme would run closer to these farmhouses.
- 8.5.12 The majority of the listed buildings (including those within the Blair estate) are well screened from the Proposed Scheme. However, there is likely to be a minor impact on the setting of North Lodge (Reference 2) and Hillside Cottages (Reference 3 to 7) which are of medium value.
- 8.5.13 There would also be increased permanent noise and vibration affecting the setting of all of these assets. The noise and visual impact to the setting of built heritage assets is expected to range from moderate to minor adverse. Further details of the visual impacts are discussed in Chapter 9 Landscape Effects.

#### *Historic Landscape*

- 8.5.14 The Designed Landscape of the Blair Estate is well screened from the proposed development by trees but there would be a minor visual impact to the south-eastern portion of the estate where the land is in agricultural use.
- 8.5.15 Although the road would cut through a major 18<sup>th</sup> and 19<sup>th</sup> century industrial and pasture farming landscape, it would still remain possible to view and read this landscape. The mineral railway would be truncated in at least two places but this is currently largely visible as a shallow earthwork and would remain visible beyond the Proposed Scheme following construction. The impact on the historic landscape is therefore expected to be minor and would be permanent.

## **8.6 Mitigation**

### **Archaeology**

- 8.6.1 The Proposed Scheme has the potential to affect both known and potential buried remains, particularly to the south end of the scheme where the Dalry parish church and associated burial ground (Reference 9) are situated and where the scheme is located on the River Garnock floodplain. The Proposed Scheme would also involve a track which passes through the site of former stables (Reference 20). It is recommended that a series of archaeological evaluation trenches are dug in this area prior to the commencement of the construction works to determine the character, extent and survival of potential buried remains. This work would be agreed with Historic Scotland and West of Scotland Archaeology Service (WOSAS) (in order to keep them informed) and would be used to determine further mitigation strategies where necessary.

- 8.6.2 The Proposed Scheme would pass directly through the mineral railway (Reference 19) and a spoil heap (suspected lime kilns) (Reference 21) and close to the limekilns (Reference 30) and Kersland Colliery (Reference 31). Evidence for these features above ground would be recorded through topographic survey and or photographic survey. The spoil heap would be investigated through evaluation trial trenching during this survey to ensure that the feature is indeed a spoil heap and not a limekiln given the location of limekilns nearby and its location beside the mineral railway. An evaluation trench would be dug over the mineral railway to record any buried evidence of this feature prior to the commencement of the construction works.

### **Built Heritage**

- 8.6.3 Given the proximity of the Proposed Scheme to known assets, there is a potential for three features of built heritage interest to be directly affected by the works including the railway hut (Reference 11); wall (Reference 15) and Kilcush (Reference 13). These features would be subject to a Level 2 historic building survey (Historic Scotland, 2004; English Heritage, 2006) in order to record their character, appearance and setting prior to works commencing. Some clearance under archaeological supervision would be required on the Kilcush buildings.
- 8.6.4 Since it is predicted that the setting of several built heritage assets would be affected including Hillside Cottages (Reference 3 to 7); Hillend (Reference 10); Creepies or, Blairland (Reference 16), Stoopshill (Reference 18), Coalheughglen (Reference 27) Littleacres (Reference 28); Highfield (Reference 32), Southfield (Reference 33) and Easter Highfield (Reference 39), it is recommended that a Level 1 photographic survey (Historic Scotland, 2004) of each of the buildings within their setting is undertaken. This would record the current setting and context of the built heritage assets prior to the changes as a result of the Proposed Scheme. The Proposed Scheme has been designed to reduce the visual impact upon the setting of these assets and the wider landscape (see Chapter 9).

### **Historic Landscapes**

- 8.6.5 It is recommended that a series of photographs are taken to demonstrate the character of the historic landscape prior to the works being undertaken. This would provide a record of the landscape prior to the changes taking place.

## **8.7 Residual Effects**

- 8.7.1 Following the implementation of the mitigation above and of the Proposed Scheme, the residual magnitude of impacts would be minor to moderate for archaeological assets with a significance of effects of slight. The majority of the features within the study area would be avoided but there would be some losses through archaeological investigation and construction which would ultimately destroy the buried remains with particular reference to the mineral railway (Reference 19) and limekilns (Reference 30). Preservation by record would go some way to mitigating this impact but the assets would still ultimately be destroyed.
- 8.7.2 Again, the Proposed Scheme would lead to the loss of three built heritage assets of low value. The magnitude of impact following mitigation would be moderate following the demolition or partial demolition of these buildings. The significance of effects would be slight.

- 8.7.3 The impact upon the setting of built heritage and historic landscapes assets is expected to be minor following landscape mitigation and photographic recording (see Chapter 9 for landscape mitigation).