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43 Cultural Heritage

This chapter identifies the potential direct and indirect impacts of the Fastlink section of the proposed scheme on known and potential sites of cultural heritage importance. The chapter also addresses effects on the wider historic landscape and historic landscape character. The chapter assesses the significance of the impacts and outlines measures for avoiding or mitigating these impacts, where possible.

An archaeological desk based assessment and walkover survey identified 49 sites of cultural heritage importance. These range in date from the prehistoric period to the recent past. The individual importance of each site has been assessed on a scale of 'Less than Local' to 'International' importance. Potential direct impacts on 15 sites were identified, of which 7 are of local and 4 of less than local importance. There are no significant residual direct impacts for these sites, while seven sites are assessed as having adverse visual impacts on their setting which range from substantial to slight.

Overall, the historic landscape is characterised by small rectangular fields bounded by stone walls with isolated farmsteads. There is also potential for the presence of unknown archaeological remains within the scheme's land take.

Recommendations to evaluate and mitigate potential direct and indirect impacts are provided along with recommendations to identify unknown sites.

43.1 Introduction

- 43.1.1 The key objectives of the assessment were to:
 - identify known and potential features of cultural heritage interest and assess their importance;
 - characterise the wider historic landscape;
 - identify and assess the magnitude and significance of the impact of the proposed development on each site;
 - assess the potential for impacts on unforeseen features of cultural heritage importance, especially archaeological remains; and
 - propose measures for avoiding, reducing or mitigating potential impacts.

43.2 Approach and Methods

- 43.2.1 Baseline conditions were initially identified through a DMRB Stage 1 Assessment (Jacobs, 2006), carried out in accordance with the principles set out in DMRB Volume 11, Section 3, Part 2 (Archaeological Assessment Stage 1). For this Stage 3 Assessment, baseline information contained in the earlier Stage 1 survey was updated by means of the following:
 - a review of existing archaeological information;
 - a walkover survey of a study area 500m wide, centred on the proposed scheme, undertaken in August 2006;
 - consultation of any additional relevant information;
 - additional consultation with statutory and non-statutory consultees, including Historic Scotland, Aberdeenshire Council and the Aberdeen City Council; and
 - preparation of a cultural heritage baseline report (Appendix A28.1).
- 43.2.2 The study area used for this study extended to approximately 250m either side of the centreline of the road alignment. Additional information was gathered from a wider surrounding area to place this baseline information in its regional context, and to allow the identification of individual sites at a greater distance that may be vulnerable to visual impacts.

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- 43.2.3 In addition to the DMRB, other policy documents and published guidelines taken into account in the preparation of this chapter included:
 - National Planning Policy Guideline (NPPG) 5: Archaeology and Planning (Scottish Office 1994a);
 - Policy Advice Note (PAN) 42: Archaeology The Planning Process and Scheduled Monuments Procedures (Scottish Office 1994b);
 - Standard and Guidance on Archaeological Desk-Based Assessments (The Institute of Field Archaeologists 1994);
 - Memorandum of Guidance on Listed Buildings and Conservation Areas (Historic Scotland 1998);
 - NPPG 18: Planning and the Historic Environment (Scottish Office 1999); and
 - Scottish Historic Environment Policy 2: Scheduling: protecting Scotland's nationally important monuments (Historic Scotland 2006).
- 43.2.4 The information contained in this chapter presents the results of the DMRB Stage 3 Assessment. Further detail of the methodologies and information sources used in this chapter is given in the Cultural Heritage Baseline Report (A28.1).

Impact Assessment

43.2.5 As described in Chapter 5 (Overview of Assessment Process), impact significance was determined by reference to the sensitivity of the receptor (cultural heritage site) and the magnitude of potential impact. As described in detail below, this assessment was undertaken separately for direct impacts (e.g. damage or severance), and indirect impacts (i.e. changes to setting due to visual intrusion).

<u>Sensitivity</u>

Site Importance

43.2.6 It is common practice in cultural heritage studies to define the sensitivity of individual cultural heritage receptors through assessing their individual 'importance'. Sites were assigned a level of importance on a scale of 'Less than Local' to 'International' as shown in Table 43.1, based on statutory designation and/or assessed cultural heritage importance as explained below.

Importance	Site Type		
International	World Heritage Sites.		
National	Scheduled Ancient Monuments (SAMs).		
	Category A Listed Buildings.		
	Gardens and Designed Landscapes recorded on the Inventory of Gardens and Designed Landscapes.		
	Some undesignated sites assessed as being of National importance using the methodology given in Paragraph 43.2.9		
Regional	Category B Listed Buildings.		
	Some undesignated sites assessed as being of Regional importance using the methodology given in Paragraph 43.2.9		
Local	Category C(s) Listed Buildings.		
	Some undesignated sites assessed as being of Local importance using the methodology given in Paragraph 43.2.9		
Less than Local	Sites either already badly damaged destroyed or whose cultural heritage value is too slight for inclusion in a higher class.		

Table 43.1 – Site Importance

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- 43.2.7 World Heritage Sites are afforded international protection under the UNESCO World Heritage Convention, with Scheduled Ancient Monuments (SAMs) nationally protected under the 'Ancient Monuments and Archaeological Areas Act 1979'. The 'Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997' provides for the designation of Category, A, B and C(s) Listed Buildings which are considered to be of National, Regional and Local importance respectively.
- 43.2.8 Conservation Areas and Designed Landscapes were assessed as being of Regional importance.
- 43.2.9 Many sites of cultural heritage importance are not currently afforded any statutory protection through designation. For the purposes of assessment, these undesignated sites were assigned a level of importance using professional judgement supported by review of the following guidance:
 - criteria used in Scottish Historic Environment Policy 2 for the designation of SAMs; and
 - non-statutory criteria used in the designation of Listed Building categories (Memorandum of Guidance on Listed Buildings and Conservation Areas, Historic Scotland, 1998).
- 43.2.10 In some cases there is insufficient information to wholly assess the Importance of a site. In such cases the importance of such sites has been assessed as Unknown.

Sensitivity of Setting

- 43.2.11 While the relative importance of cultural heritage features provides a good basis for the assessment of direct physical impacts, it cannot do so for potential indirect impacts on the visual setting of a site. Some highly important sites may be invisible above ground level, while some sites of lesser intrinsic importance may nevertheless be visually prominent and sensitive to visual impacts on their setting. For this reason, the sensitivity of individual sites to visual impacts on their setting was separately assessed. The baseline surveys were designed to identify such visually sensitive sites even if they lay beyond the main baseline study area (i.e. more than 250m from the centre-line of the proposed scheme). Identification and assessment of such sites was carried out in partnership with Jacob's Landscape Architects who undertook the wider Visual Impact Assessment for this Environmental Impact Assessment.
- 43.2.12 Many archaeological sites are not visible, or barely visible, from ground level. Such sites will usually not be vulnerable to visual impacts. However, some invisible or partially invisible sites may be located in an area where the immediate topography is important to an understanding of the site, and consequently the setting might be considered more significant. A process of selection was therefore undertaken prior to selecting sites for visual impact assessment, using the following criteria:
 - the sites are visible above ground level; and
 - the sites are either directly accessible to the public, or are visually prominent from a publicly accessible point at distance; and
 - the nature of the sites is such that the aesthetic quality of their setting may be considered a contributory factor in assessing the overall site importance; or
 - if invisible, the topographical context and landscape interrelationship of the site is important to our appreciation and understanding; or
 - the site is a SAM, or a Listed Building.
- 43.2.13 The sensitivity of site to visual impacts were assessed according to the criteria set out in Table 43.2.

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Sensitivity	Description			
High	Sites of National importance that are visually prominent and whose visual setting contributes significantly to their importance.			
	Invisible or partially visible sites of National Importance whose location and topographical context aid ou understanding of their form and function.			
Medium	Sites of Regional importance that are visually prominent and whose visual setting contributes significantly to their importance.			
	Invisible or partially visible sites of Regional importance whose location and topographical context aid our understanding of their form and function.			
Low	Sites of Local importance whose landscape setting contributes significantly to their importance.			
Not sensitive	Any site of National, Regional, Local or lesser importance whose landscape setting does not contribute to their importance.			

Table 43.1 – Sensitivity of Cultural Heritage Sites to Impacts on Setting

Impact Magnitude

43.2.14 For the purposes of this assessment, the severity or magnitude of impact was assessed independently of the site value. Impacts were assessed both for individual sites and, where groups of buildings or features were affected, as an overall impact.

Direct Impact Magnitude

43.2.15 The magnitudes of impact were assigned in accordance with the categories shown in Table 43.3.

Magnitude	Impact Description	
Very High	Where there would be complete or nearly complete demolition or loss (of more than approximately 80%) of a site to the development.	
High	Where there would be partial loss (between approximately 50% and 80%) of a site to the development.	
Medium	Where there would be loss of part (between approximately 15% and 50%) of a site	
Low	Where would be a minimal loss of part of a site (up to 15%).	

Table 43.2 – Magnitude of Direct Impacts

- 43.2.16 The percentages and figures provided in the above definitions are guided by professional judgement and are necessarily approximate.
- 43.2.17 In some cases there is insufficient information on the extents of sites and therefore the percentage of the site on which the proposed scheme would have a direct impact. In these cases the magnitude of impact has been assessed as Unknown.

Magnitude of Impacts on Setting

43.2.18 The magnitude of visual impacts on the setting of cultural heritage sites was assessed according to established principles and criteria set out in the 'Memorandum of Guidance on Listed Buildings and Conservation Areas' (Historic Scotland, 1998) and 'Guidelines for Landscape and Visual Impact Assessment' (LI/IEMA, 2002). These criteria were also used in the assessment of overall visual impacts and are described in more detail in Chapter 42 (Visual). The application of the criteria leads to a definition of the magnitude of impact for each viewpoint on a four-point scale of Dominant, Prominent, Present or Negligible.

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Impact Significance

Direct Impacts

43.2.19 The significance of impacts was determined using matrices, with the sensitivity of the receptor on one axis and the magnitude of impact on the other, but the full assessment of significance of impact also relied upon experience and reasoned judgement, supported by substantiated evidence. Four levels of significance were defined which apply equally to beneficial and adverse impacts. The matrix used for direct, physical impacts is reproduced here as Table 43.4, with 'sensitivity' defined in terms of 'importance'.

Table 43.3 – Matrix for the Assessment of Significance of Impact

Importance	Magnitude			
	Very High	High	Medium	Low
International	Very Substantial	Very Substantial	Very Substantial	Very Substantial
National	Very Substantial	Very Substantial	Very Substantial	Substantial
Regional	Substantial	Substantial	Moderate	Moderate
Local	Moderate	Slight	Slight	Slight
Less than Local	Slight	None	None	None

43.2.20 Where either the importance of a site or the magnitude of impact on a site is unknown, the significance of impact has been assessed as Unknown.

Impacts on Setting

43.2.21 The significance of visual impacts on setting was assessed by taking into account the sensitivity of the site and the magnitude of impact, in terms of potential impacts on the most dominant views both to and from the sensitive sites. This matrix is shown on is shown in Table 43.5.

Table 43.4 – Significance of Impacts on Setting

Sensitivity	Magnitude			
	Dominant	Prominent	Present	Negligible
High	Substantial	Substantial	Moderate	Slight
Medium	Substantial	Moderate	Slight	None
Low	Moderate	Slight	Slight	None
Not sensitive	None	None	None	None

43.2.22 All direct and indirect impacts are adverse unless otherwise stated.

Limitations to Assessment

43.2.23 This assessment has been undertaken on the preliminary design of May 2007. With regard to the assessment of cultural heritage impacts in accordance with DMRB, no limitations to this assessment were identified.

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43.3 Baseline Conditions

43.3.1 The section outlines the cultural heritage of the study area in chronological order and describes the sites that were identified by the assessment. A more detailed archaeological and historical background, and details of the individual sites within the study area are provided in a gazetteer (available on request, in CD-Rom format).

The Cultural Heritage of the Study Area

- 43.3.2 A total of 43 cultural heritage sites were identified within the study area. There is the potential for visual impacts on a further six sites (Sites 10, 18, 25, 28, 88 and 95) outwith this study area, which were also assessed. The locations of all sites are shown on Figures 43.1a-f.
- 43.3.3 Using the methodology set out in Section 43.2 (Approach and Methods), the importance of sites and the visual sensitivity of the 49 sites were assessed. Details of the importance of each site are provided in the gazetteer and are summarised in Table 43.6 below:

Importance	Number of Sites
National	4
Regional	8
Local	28
Less than Local	9
Total	49
Sensitivity	Number of Sites
Sensitivity High	Number of Sites 5
-	
High	5
High Medium	5 4

Table 43.5 – Summary of Importance of Sites Assessed

Prehistoric

- 43.3.4 No sites dating to the Mesolithic Period (8000 4000 BC) are known to occur within the study area. However, flint scatters dating to this period have been found along the Rivers Don and Dee, including a scatter found in a field north of the River Dee and close to Maryculter Bridge, therefore it is possible that unknown Mesolithic sites may be discovered within the study area.
- 43.3.5 Cantlayhills Cairn SAM (Site 28; see Figure 43.1b) is a large cairn situated 270m south-southwest of Cantlayhills Farmhouse. It is irregular in shape and measures 21m from east-northeast to west-southwest, by 14m transversely and is at least 2m in height. The Aberdeenshire Sites and Monuments record (SMR) states that this site was partially excavated in 1880. Dating to the Neolithic period (4000 2200BC), cairns were funerary sites where, through time, the bones of many individuals were placed in a chamber covered by a mound of stone or earth.
- 43.3.6 It is possible that the features in the Kempstone Hill Complex (Site 491; see Figure 43.1b) date to the Bronze Age (2200 1000 BC). Sites located within the study area that form part of this complex comprise a field system (Site 16; see Figure 43.1b), two cairns (Sites 17 and 19; see Figure 43.1b) and a standing stone (Site 18; see Figure 43.1b). The National Monuments Record of Scotland (NMRS) refers to the discovery of human remains at the base of Site 19.

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- 43.3.7 Few sites of Later Prehistoric (Late Bronze Age and Iron Age (1000 BC to AD 43)) date occur within the area. A leaf shaped sword (Site 23; see Figure 43.1b) was found during drainage work in the Moss Of Cowie, located towards the southern end of the scheme. It is possible that the sword was a votive, or religious offering as objects of metalwork were often deposited in wet places such as bogs, rivers and lakes during the Bronze Age.
- 43.3.8 Two complexes of hut circles and a number of field systems, presumably of prehistoric date, are located within the study area. A small field system containing two hut-circles extends over an area of about 6ha on the northern and western flanks of White Hill SAM (Site 25; see Figure 43.1b). East Crossley Hut Circle and Field System SAM (Site 91; see Figure 43.1e) is a singe hut circle in a complex of cairns and banks. A field system had also identified on northwest flank of the Hill of Megray (Site 8; see Figure 43.1b). The record of previous site inspections undertaken by the Royal Commission on the Ancient and Historical Monuments of Scotland state that most of the area is obscured by dense gorse thickets, but at least two low banks and a small cairn were visible and that this field system is traversed from northwest to southeast by a later earthwork comprising double ditches with a medial bank 3m thick and 0.6m high. The walkover survey found no trace of this site; the area was under crop.
- 43.3.9 The majority of the cairns on Stranog Hill (Sites 88 and 89; see Figure 43.1e), located 500m east of Site 91, are clearance cairns of modern date. It is possible that other larger, more circular cairns, some of which have a stone kerb visible, are prehistoric in date.
- 43.3.10 Site 24 (see Figure 43.1b) consists of a number of graves and urns recorded in the Aberdeenshire Sites and Monuments Records. There is no further information on this site. A prehistoric date is suggested by the present study.

<u>Medieval</u>

- 43.3.11 Sites dating to the Medieval period (500-1603 AD) are also poorly represented in this study area. It is thought that the Medieval settlement pattern was dispersed and that the population lived in a network of much smaller, scattered settlements known as 'fermtouns', of which there may be several in any given parish. Tenant families would have farmed in a traditional system known as 'runrig', under which the land immediately around the settlement was cultivated in open fields divided into long, narrow ridged strips. Any amenities which may be present in a parish, such as castles, churches or mills, could stand isolated or at one of the fermtouns which then became known as 'castletoun', 'kirktoun' or 'milltoun' and survive in the placename record. For much of the Medieval period, the land in the study area probably formed part of such a system.
- 43.3.12 The original village of Cowie (Site 490; see Figure 43.1a), which was located on Megray Hill above the present Cowie House, was destroyed by the Marquis of Montrose in 1645 and rebuilt on a coastal site at the mouth of the Cowie Water. This site is likely to have had its origins in the Medieval period.

Post Medieval and Modern

- 43.3.13 The agricultural and economic improvements of the 18th and 19th centuries have their origins in the 17th century. Improving leases were granted to selected tenants. Under these leases the runrig system of cultivation was dismantled and replaced with longer, more varied crop rotations in large, enclosed fields. Activities such as the enclosure of the land, the quarrying and burning of lime for use as a fertiliser and the planting of trees all resulted in lasting changes to the landscape.
- 43.3.14 The majority of sites of Post Medieval (1603 1901) and Modern (1901 to present) date are related to agriculture. These include farmsteads, clearance cairns, consumption dykes and field systems. Farmsteads usually comprise a farmhouse and ancillary buildings, such as barns and byres. Seven such sites have been identified within the study area Sites 32 (see Figure 43.1b), 42, 45, 47 (see Figure 43.1c), 87 (see Figure 43.1e), and 94 and 97 (see Figure 43.1f). A total of three consumption dykes have also been identified (Site 505; see Figure 43.1f, 508; see Figure 43.1e and 510; see Figure 43.1d). Consumption dykes are closely associated with the age of

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agricultural improvement and are the result of the removal of large amounts of stone from agricultural land, gathered together to form thick stone walls. The construction of these features continued throughout the eighteenth and nineteenth centuries (Croly, 2004). Although not a feature unique to the North East of Scotland, they are a landscape feature which is uncommon elsewhere and are highly characteristic of this region.

- 43.3.15 Other small features associated with agriculture include piles of stone cleared from the fields before cultivation. These are known as clearance cairns. Four groups of clearance cairns have been identified within the study area (Site 121; see Figure 43.1f, 506 and 507; see Figure 43.1e and 524; see Figure 43.1b).
- 43.3.16 Allochie Cairns and Banks (Site 46; see Figures 43.1c) is located 400m east-northeast of Allochie farmhouse. This area has been heavily ploughed in the recent past and few traces of this field system now exists. It had previously been described in the National Monuments Record as a scatter of earlier cairns and short stony banks, series of hollowed trackways, and traces of rig-and-furrow cultivation. The purpose of Redmoss Relict Field Boundary (Site 509; see Figures 43.1d) was probably to mark the edge of the moss.
- 43.3.17 Ury House Estate (Site 1 see Figure 43.1a) is the estate surrounding Ury House, a Category B Listed Building located outside the study area. Ury House was built by Alexander Baird in 1885 and incorporates a tower house dating to the 16th and 17th centuries. Elements of this landscape may date to the 17th century. Ury House North Lodge (Site 10; see Figure 43.1b) is associated with the Ury House and Estate. This site is a Category B Listed Building.
- 43.3.18 Cookney Parish Church (Site 58; see Figures 43.1d) dates to the late 19th century and is a Category C(s) Listed Building. The Cookney War Memorial (Site 56; see Figure 43.1d) commemorates those who died in the First World War and was designed by George Bennett Mitchell. Construction on the memorial was started in 1919.
- 43.3.19 Crynoch Mill (Site 95; see Figure 43.1f) is the remains of mill built in 1824 and comprises a one storey and attic rubble structure, with a kiln at one end. An axle and one side of an eight-spoke wood and iron overshot wheel remains. On the first edition of the Ordnance Survey 6-inch map (Kincardineshire 1868, sheet vii), Site 95 is marked as Crynoch Mill (Corn), and one unroofed building and four roofed buildings, one of which is a long building, and two enclosures are depicted. This site is a Category C(s) Listed Building.
- 43.3.20 Two further buildings of Post-Medieval date have been identified within the study area. Megray Hydraulic Ram (Site 4; see Figure 43.1a) is marked on the second edition of the Ordnance Survey 6-inch map. This site currently consists of a concrete platform. Megray Building (Site 523; see Figure 43.1b) is a building identified by the walkover survey.
- 43.3.21 Although marked on the first and second edition of the Ordnance Survey 6-inch map, Blackhill Boundary Stone (Site 21; see Figure 43.1b) has been destroyed. Coneyhatch Boundary Stone (Site 513; see Figure 43.1b) is the current location of a boundary stone. The stone is inscribed with a "P" on one face and a "U" on the reverse. Lying on its side close a modern farm building, this boundary stone is not in its original location.
- 43.3.22 The Scottish North Eastern Railway (Site 257; see Figure 43.1a) was formed in 1856 by the merger of Aberdeen Railway with the Scottish Midland Junction Railway. The Aberdeen Railway which linked Aberdeen Guild Street with Arbroath, was opened in 1840. A railway carriage (Site 65; see Figure 43.1d) that ran on the Great North of Scotland Railway and dates to around 1896, is now located at Stoneyhill Farm.
- 43.3.23 Hill of Muchalls Battlefield (Site 411; see Figure 43.1b) was the site of a skirmish between the Covenanting and Royalist armies in June 1639 during the Civil War. After occupying Aberdeen, the Royalist army marched on Stonehaven and camped on Muchalls. They were defeated by an army led by Earls Marischal and Montrose and driven back to Aberdeen. The approximate area of this battlefield is shown on Roy's Military Survey of Scotland 1747 1755. There are historical

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records of ditches and embankments that extended over the Hill of Muchalls before it was enclosed and cultivated, probably in the early 19th century, (Site 38; see Figure 43.1c). No trace of these features was identified during the walkover survey undertaken for this ES. The date of Site 38 is unknown.

Areas of Potential for Unknown Archaeological Remains

- 43.3.24 The number of known archaeological sites of earlier date is unusually low for such a relatively large study area. However, despite the relative lack of previous archaeological prospection, there is sufficient archaeological evidence to show that the surrounding area was occupied from at least the early Neolithic period onwards. It is therefore highly likely that there has been human activity in the study area since earliest times. It is considered likely that additional archaeological remains relating to the prehistoric and Medieval periods that that could not be identified by the desk-top and walkover surveys are present in the study area.
- 43.3.25 Red Moss Wetland (Site 67; see Figure 43.1c) and Backburn Moss Wetland (Site 119; see Figure 43.1b) have been assessed as areas of potential for the presence of remains of palaeoenvironmental importance.
- 43.3.26 There is a high potential for archaeological deposits to survive in the area immediately surrounding East Crossley Hut Circle and Field System SAM (Site 91), although the defined monument itself is outwith the immediate footprint of the proposed scheme.

Historic Landscape Character

- 43.3.27 While small areas of 17th to 19th century designed parkland survive, the historic landscape of the study area was created in the 18th and 19th centuries and is characterised by small rectilinear pasture fields bounded by stone walls or consumption dykes with isolated farmsteads and croft holdings and allotments also present, along with open areas of upland grazing. This landscape was modified in the late 19th and 20th centuries with the improvement of the communications (road and rail) networks, the creation or expansion of nucleated settlement, and later the creation of larger fields for pasture, improvement of upland pasture through drainage and enclosure and forestry plantations.
- 43.3.28 While individual components of the landscape are of National or Regional importance, the importance of the wider historic landscape has been assessed as Local.

43.4 Potential Impacts

43.4.1 Sites for which both potential impact and no impact have been identified are discussed further. Potential direct impacts are assessed in the first instance, followed by an assessment of potential indirect impacts.

Direct Impacts

43.4.2 Potential for direct impacts would occur during the construction phase of the proposed scheme. Of the 49 cultural heritage sites identified within the study area, potential direct impacts on 15 sites were identified, ranging from Slight to Substantial significance. The locations of these sites are shown on Figures 43.1a-f and summarised in Table 43.7 below. For ease of use together with scheme design drawings, locations are described by reference to chainage as shown on those drawings. National Grid References for every site are given in a gazetteer (available on request, in CD-Rom format).

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Site No.	Site Name	Chainage	Description of Impact	Site Importance	Magnitude	Impact Significance
8	Hill Of Megray, Earthwork	1120 – 1390	The scheme as proposed would bisect this feature.	Regional	High	Substantial
23	Moss Of Cowie Bronze Sword Findspot	2700	While the sword has been removed there is potential physical impact on any remains associated with this findspot.	Local	Very High	Moderate
24	Hillocks, Graves	2700	The proposed scheme would have a direct physical impact on any remains associated with this findspot.	Local	Very High	Moderate
32	Howieshill Farmstead	3400	Planting Mitigation proposals would have a direct physical impact on this site	Local	Very High	Moderate
67	Red Moss Wetland	170 – 280	The proposed scheme would not have a direct impact on this former area of wetland.	Unknown	Low	Unknown
91	East Crossley Hut Circle and Field System SAM	9700 – 9800	While the scheme would pass within 3m of the western edge of the Scheduled area, there would be no direct physical impact on the SAM.	National	None	None
94	Wetshaw Croft (1)	10290 – 10360	While there is no visible trace of this site, any subsurface remains associated with this site may be removed by the proposed scheme.	Less than Local	Medium	None
97	Wetshaw Croft (2)	10390 - 10440	While there is no visible trace of this site, any subsurface remains associated with the western part of this site may be removed by the proposed scheme.	Less than Local	Very High	Slight
119	Backburn Moss Wetland	2460 - 4100	The proposed scheme would have a direct impact on this former area of wetland.	Unknown	Low	Unknown
121	Blaikiewell, Cairns (1)	11470 – 11500	The proposed scheme would have a direct impact on the southern part of this area of clearance cairns.	Local	Low	Slight
257	Scottish North Eastern Railway	00010 - 00040	The cutting associated with the proposed underpass would have an impact on the northern edge of this site.	Local	Low	Slight

Table 43.6 – Potential Direct Impacts

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Site No.	Site Name	Chainage	Description of Impact	Site Importance	Magnitude	Impact Significance
411	Hill of Muchalls Battlefield	3310 - 4230	The proposed scheme would have a direct impact on the western part of the battle field as shown on Roy's map.	Local	Medium	Slight
490	Cowie Village (Site of?)	0100 - 04000	The exact location and extent of this site are unknown.	Local	Unknown	Unknown
505	Blaikiewell Dyke	10920	The northern end of consumption dyke would be bisected by the scheme.	Less than Local	High	None
506	Crossley Clearance Cairn	9570	This area of clearance cairns would be removed by the scheme.	Less than Local	Very High	Slight

- 43.4.3 One high magnitude direct impact on a Regionally important site was identified. The Hill of Megray (Site 8) is a possible prehistoric field system of Regional importance. The area of this site as defined by the National Monuments Record of Scotland would be severed by the proposed scheme. While the site is located in an area currently used for arable farming and above ground traces have been removed, the significance of this impact has been assessed as being Substantial.
- 43.4.4 Sites 23 and 24 are the findspots of a prehistoric sword and graves and cremations. The proposed scheme would have a direct impact on any deposits that may be associated with these findspots. The significance of these impact has been assessed as Moderate. The significance of the impact on Howieshill Farmstead has also been assessed as Moderate.
- 43.4.5 All other impacts are of Slight or Lower significance, with the exception of Unknown impact significance for sites where the importance and/or magnitude of impact cannot be confirmed. The importance of Sites 67 and 119 are unknown. The significance of the impact of the proposed scheme on these sites is therefore also unknown. The original village of Cowie was described as being located on Megray Hill above the present Cowie House. The full extent of Site 490 is unknown and therefore the magnitude and significance of impact are also Unknown.
- 43.4.6 The identified impacts are summarised in Table 43.8.

Significance of Impact	Site Numbers	Total
Very Substantial	None	0
Substantial	Site 8	1
Moderate	Sites 23, 24, 32	3
Slight	Sites 97,121, 257, 411, 506	5
None	Site 94,91,505	3
Unknown	Sites 67,119,490	3

 Table 43.7 – Summary of Identified Direct Impacts

Indirect Impacts

43.4.7 Of the 49 cultural heritage sites identified (those within the study area plus the six additional sites beyond this), potential indirect impacts on the setting of ten sites were identified. Using the methodology outlined in paragraph 43.2.18, these were assessed as ranging from None to Substantial significance. The locations of these sites are shown on Figures 43.1a-f and summarised in Table 43.9 below.

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Site No.	Site Name	Sensitivity	Impact Magnitude	Significance of Impact
10	Ury House, North Lodge	Medium	None	None
	Listed Building, Category B			
18	Kempstone Hill Standing Stones	Medium	Prominent	Moderate
25	White Hill Hut Circles	High	Dominant	Substantial
	Scheduled Ancient Monument			
28	Cantlayhills Cairn	High	Present	Moderate
	Scheduled Ancient Monument			
56	Cookney War Memorial	Low	None	None
	No designation			
58	Cookney Parish Church, Cookney	Low	None	None
	Listed Building, Category C(S)			
88	Stranog Hill, Cairns	Medium	Dominant	Substantial
91	East Crossley Hut Circle and Field System	High	Dominant	Substantial
	Scheduled Ancient Monument			
95	Mill of Crynoch, Watermill	Low	Prominent	Slight
	Listed Building, Category C(S)			
491	Kempstone Hill, Archaeological Complex	Medium	Prominent	Moderate

Table 43.8 – Potential Indirect Impacts (On Setting)

43.4.8 The identified impacts on setting are summarised in Table 43.10 below.

Table 43.9 – Summary of Identified Impacts on Setting

Significance of Impact	Site Numbers	Total
Substantial	Sites 25, 88 and 91	3
Moderate	Sites 18, 28, 491	3
Slight	Site 95	1
None	Sites 10, 56, 58	3

- 43.4.9 The impacts on Sites 10, 56 and 58 have been assessed as None.
- 43.4.10 The potential for visual impacts on these sites is described below. The existing situation is described, followed by a description of the nature of the impact on views from the site and views to the site. The significance of impact within the first year of opening is then assessed.
- 43.4.11 Kempstone Hill Standing Stones (Site 18) consists of a pair of standing stones situated near the summit of Kempstone Hill. The stones are isolated and are not very prominent features within the landscape. Much of the upper hillside is covered in scrub and gorse with occasional trees, with small to medium-sized fields on the lower slopes of the hill. The two stones are less than 2m in height and so they are not visible on the hillside in views from the surrounding area, and are completely hidden from view by vegetation during the summer. During the winter, there would be some views from the hillside to the west and south. There would be a significant visual impact due to the proximity of the proposed scheme. While much of the proposed scheme would be in cutting. A bridge would be required to cross Limpet Burn, which would mark a significant change to the existing views. However, it is expected that the density of the scrub and gorse on the hillside would

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contain most of the views and minimise any impact. Overall, the significance of visual impacts on the setting of this site has been assessed as Moderate.

- 43.4.12 White Hill Hut Circles SAM (Site 25) is located approximately three kilometres to the north of Stonehaven. The majority of the hill is covered by heather and gorse, although part of the southern slope outside the scheduled area has been laid out with medium-sized fields which are used for rough grazing. These fields are marked out with drystone walls. While there are no significant visible elements of the site remaining that would be affected, as the site is a SAM it has been assessed as being highly sensitive. The proposed scheme would be highly visible in all eastern views from the hilltop. The proposed scheme would be seen across the top of the Hill of Megray to the southeast, cutting through Kempstone Hill and then running across the relatively flat ground around the Hill of Muchalls, before cutting through the prominent hill of the settlement at Cookney. The proposed scheme would occasionally be hidden from view by topography and by existing vegetation during the summer. Overall, the significance of visual impacts on the setting of this site has been assessed as Substantial.
- 43.4.13 Cantlayhills Cairn SAM (Site 28) comprises the remains of a large cairn situated on the northern side of Kempstone Hill, in a small, irregular shaped field near Cantlayhills Farm. This prehistoric site is in a poor condition, but is still visible from the nearby road. Views towards the cairn are limited due to a number of the smaller hills around Kempstone Hill, with the majority of views only available from the north of the site. A short stretch of the proposed scheme would be visible on the northern side along the shallow valley between Kempstone Hill and a number of small hillocks. The proposed scheme would be on embankment as it crosses the mossy ground to the west. It is anticipated that the proposed scheme would not have a significant visual impact on the site, as the rolling topography of the hillside and the density of the existing scrub and gorse on the hill would help to screen the majority of views. The proposed scheme would not appear in any views towards the cairn itself and so would not have any discernible impact. Overall, the significance of visual impacts on the setting of this site has been assessed as Moderate.
- 43.4.14 Stranog Hill forms part of a ridge above the relatively flat farmland around Blaikiewell Farm and the settlement at Burnhead. The poor condition of Stranog Hill Cairns (Site 88) means that there are no significant visible elements that have any prominence in views towards the hill. The site is located at the top of one of the high points along the proposed scheme and there would be a significant impact on views from this site. The proposed scheme would be visible as it cuts through the ridgeline and crosses the relatively flat farmland around Blaikiewell Farm towards the roundabout at Cleanhill Junction. The Southern Leg approach to the junction from Charleston would also be visible. However, as there are no visible elements remaining that act as distinctive features within the landscape, there are no specific views to the monument that would be affected by the proposed scheme. Overall, the significance of visual impacts on the setting of this site has been assessed as Substantial.
- 43.4.15 East Crossley Hut Circle and Field System (Site 91) is a Scheduled Ancient Monument. Visible elements can only be identified when in close proximity to the site. The current view looks to the north across the relatively flat farmland around Blaikiewell Farm and the small settlement at Burnhead, towards the mature woodland of Oldman Wood and Cleanhill Wood. The position on the ridgeline provides the settlement with clear views across the open plain below and towards the River Dee valley. It can be assumed that the location is an important element in its siting. As the site is not highly distinctive within the landscape, there are no specific views that would be affected by the proposed scheme. The proposed scheme would be visible as it cuts through the ridgeline and crosses the relatively flat farmland around Blaikiewell Farm towards the roundabout at the Cleanhill Junction. The Southern Leg approach to the junction from Charleston would also be visible. Overall, the significance of visual impacts on the setting of this site has been assessed as Substantial.
- 43.4.16 Crynoch Mill (Site 95) is a former watermill situated on the Crynoch Burn as it crosses the relatively flat plain below the ridgeline that runs east from Stranog Hill. The building has been converted to housing, although it retains the waterwheel on the side of the house. It forms part of a small settlement around Invercrynoch. The settlement is partially sheltered by some mature riparian

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trees and an artificial embankment along part of the burn, but is still visible across the surrounding farmland. While the mill is visible on the plain, it is not a prominent feature within the landscape. Views are obtained towards the mill from the small local road running down from the properties on Wedderhill (part of the ridgeline to the south) and from the road that runs from Burnhead in the east towards Lairhillock. The potential for minor impacts upon views from Site 95 have been identified. The proposed scheme would be at approximately the same level as the mill and the main impact would be caused by the introduction of vehicle movement. The proposed scheme would be on embankment as it crosses farmland and views towards the mill from the east would be obstructed. The proposed scheme would be prominent in views from the hillside. Overall, the significance of visual impacts on the setting of this site has been assessed as Slight.

43.4.17 Much of the hillside on which the Kempstone Hill Archaeological Complex (Site 491) is located is covered in dense scrub and gorse, with a number of small-to-medium sized, regular shaped fields on the lower slopes of the hill surrounding the complex. The cairns of this currently undesignated site are spread across the top of the hill, with open views available from numerous locations. No significant visible elements of the cairnfield are visible within any current views and any impacts would be upon general views rather than specific archaeological sites. The proposed scheme would have an impact on views to the west and southwest during the winter year of opening. The proposed scheme would have an adverse impact on a number of views towards Kempstone Hill from the north. The introduction of a new bridge to cross the Limpet Burn would result in a significant change to the views. However, during the summer months, the density of the vegetation across the hillside would contain the majority of views. Overall, the significance of visual impacts on the setting of this site has been assessed as Moderate.

Impacts on the Wider Historic Landscape

43.4.18 The importance of the wider historic landscape has been assessed as Local. The proposed scheme would have direct impact on this landscape through removal and severance of elements of the existing rectilinear fieldscape and realignment of the field patterns in a small number of cases. The curving nature of the proposed scheme is incongruous with the historic landscape. The significance of impact has been assessed as Slight.

43.5 Mitigation

43.5.1 The mitigation proposals outlined below have been developed in consultation with Historic Scotland, the Aberdeenshire Council Archaeologist, the City of Aberdeen Council Archaeologist, and specialists from the Jacobs design team.

Pre-Construction Archaeological Evaluation

- 43.5.2 As described in Section 43.3 (Baseline Conditions), the area around Aberdeen is known to have been occupied since early prehistoric times, and on this basis it is considered likely that additional archaeological remains are present in the study area. It is therefore recommended that a staged programme of archaeological evaluation is implemented prior to confirmation of the full scope of mitigation works required for the scheme.
- 43.5.3 This staged programme of archaeological evaluation would be required sufficiently far in advance of construction to permit the design and implementation of pre-construction mitigation works, if required. The aims of the evaluation works would be to:
 - identify any unknown archaeological remains that may be affected by the scheme;
 - enable a more confident assessment of the impact of construction of the scheme on archaeological remains;
 - enable the identification and design of any measures that may be necessary to mitigate the impact of the scheme on newly-identified archaeological remains and

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- enhance available information about known archaeological remains, where existing information is insufficient to enable a full assessment of impact or the design of mitigation measures.
- 43.5.4 To address these aims, it would be necessary to undertake evaluation works both in relation to known archaeological sites and in areas of archaeological potential. The pre-construction programme of works is likely to involve non-intrusive surveys applied to relatively large areas, followed by intrusive techniques targeted on specific areas. Some level of evaluation would be required within all areas in which ground disturbance would take place (such as drainage, service re-routing, and areas of ecological or landscape planting).
- 43.5.5 Suitable methods could include a combination of any of the following:
 - palaeoenvironmental assessment of present/previous areas of bog;
 - field walking (i.e. the systematic search for artefacts on the surface of ploughed fields);
 - magnetometer survey or magnetometer scanning followed by survey in selected areas;
 - magnetic susceptibility survey;
 - resistivity survey;
 - watching brief during any planned geotechnical ground investigation; and
 - intrusive trial trenching, trial pitting and/or borehole/auger surveys. This could be targeted at sites and features identified by the methods outlined above or in blank areas where no sites have been identified.
- 43.5.6 Historic Scotland have indicated that they would design any evaluation programme and commission a suitably qualified archaeological contractor to undertake it on behalf of the Scottish Executive. The following evaluation works have been recommended:
 - Hill of Megray, Earthwork (Site 8): geophysical survey followed by trial trenching;
 - Moss of Cowie Bronze Sword Findspot (Sites 23): geophysical survey followed by trial trenching to identify any archaeological remains associated with this site;
 - Hillock Graves (Site 24): geophysical survey followed by trial trenching to identify any archaeological remains associated with this site;
 - Howieshill Farmstead (Site 32): geophysical survey followed by trial trenching to identify any archaeological remains associated with this site;
 - Red Moss Wetland (Site 67): inspection/assessment by a palaeoenvironmental specialist, followed (if necessary) by coring/palaeoenvironmental sampling, analysis and dating;
 - Roadtake adjacent of East Crossley Hut Circle and Field System SAM (Site 91): land cover unsuitable to geophysical survey, therefore trial trenching is proposed;
 - Blackburn Moss Wetland (Site 119): inspection/assessment by a palaeoenvironmental specialist, followed (if necessary) by coring/palaeoenvironmental sampling, analysis and dating;
 - Blaikiewell Cairns 1 (Site 121): re-assessment followed by topographic survey and trial trenching;
 - Hill of Muchalls Battlefield (Site 411) fieldwalking, metal detecting survey followed by trial trenching of the roadtake; and
 - Cowie Village, Site of, (Site 490); geophysical survey followed by trial trenching.

Approach to Mitigation

43.5.7 The results of the evaluation programme described above would enable Historic Scotland to determine the nature, scope and scale of mitigation works required in advance of, or during, construction. The preferred mitigation option for any sites or archaeological deposits affected by

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the proposed scheme would be to preserve the remains *in situ*. However, where preservation *in situ* is not feasible, then preservation by record would be the appropriate alternative mitigation strategy. This may be achieved by a combination of the following techniques:

- No further action: in some cases, the results of any evaluations may provide sufficient information to mitigate any impact.
- Detailed archaeological excavation: where particularly significant, complex or denselyconcentrated archaeological remains are expected to be present, then a detailed archaeological excavation in advance of construction would be undertaken.
- Strip and record: where archaeological remains of relatively low significance and/or complexity are expected to be present, and particularly where they are expected to be spread over a large area at low density, then strip and record works may be appropriate. Topsoil/overburden would be stripped under archaeological supervision over relatively large, defined areas using methods designed to maximize archaeological visibility, followed by inspection to define the scope of any archaeological recording works that might be required.
- Archaeological watching brief: Where there is some potential for archaeological remains to be
 present, but the risk is considered to be low, then archaeological monitoring of the main
 topsoil/overburden stripping operations, and other excavation works as appropriate, would be
 applied, followed by appropriate archaeological investigation and recording of any remains that
 are identified.
- Building recording: Where Listed Buildings or other buildings of historic interest would be demolished, damaged or altered as a result of construction, then recording works in advance of construction would be required. The appropriate level of detail in which recording would be undertaken may vary from site to site and would be determined by, or in consultation with, Historic Scotland. Guidance on appropriate levels of recording is available in an English Heritage publication (RCHME 1999 Recording Historic Buildings: A Descriptive Specification. Third Edition, HMSO). Historic Scotland's Memorandum of Guidance on listed buildings and conservation areas (1998) would also be taken into account.
- 43.5.8 Sites of cultural heritage importance close to the lands subject to construction activities should be adequately signed and protected by fencing for the duration of the works.
- 43.5.9 As with the archaeological evaluation programme, any necessary mitigation works would be undertaken by a suitably qualified Archaeological Contractor appointed and managed by Historic Scotland on behalf of Scottish Executive. Any archaeological works at either evaluation or mitigation stage would include post-excavation/fieldwork analysis and report-writing. This could include a requirement for the publication of a report in an academic journal.
- 43.5.10 'Special Requirements', which are likely to be provided by Historic Scotland, will be incorporated into the Contract Documents and implemented during construction. These provide a mechanism by which works can be monitored by Historic Scotland. Details of the procedure to be followed if any unexpected remains are encountered would also be provided by Historic Scotland.

Mitigation of Direct Impacts on Known Sites

- 43.5.11 The extent of the scheduled area defined around East Crossley Hut Circle and Field System SAM (Site 91) that lies within the road take should be should be adequately signed and protected by fencing for the duration of the works.
- 43.5.12 Strip and record on the site of Wetshaw Croft 2 (Site 97) is recommended to mitigate the slight impact on this site.
- 43.5.13 Topographic survey, including the preparation of a written and photographic record, is recommended to mitigate the slight impact on the embankment of the Scottish North Eastern Railway (Site 257).

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- 43.5.14 Recording work in advance of construction are recommended for Site 506. Such recording works would take the form of:
 - topographic survey of the entire site, including completion of a written, drawn and photographic record; and
 - sample excavation and further recording of the affected sections of the site.
- 43.5.15 Table 43.11 summarises the proposed evaluation and mitigation measures.

Table 43.10 – Summary of Proposed Evaluation and Mitigation Works					
Sito					

Site No.	Site Name	Impact Significance	Proposed Evaluation and or Mitigation	
	Hill Of Megray,		Geophysical survey	
8	Earthwork	Substantial	Trial trenching	
	Moss Of Cowie Bronze Sword		Geophysical survey	
23	Findspot	Moderate	Trial trenching	
			Geophysical survey	
24	Hillocks, Graves	Moderate	Trial trenching	
			Geophysical survey	
23	Howieshill Farmstead	Moderate	Trial trenching	
			Palaeoenvironmental assessment.	
67	Red Moss Wetland	Unknown	Palaeoenvironmental coring, analysis and reporting as required	
	East Crossley Hut Circle and Field		Trial trenching of area of roadtake adjacent to this monument	
91	System SAM	None	Adequate signage and fencing for the duration of the project	
94	Wetshaw Croft (1)	None	None	
97	Wetshaw Croft (2)	Slight	Strip and Record in advance of construction	
	Backburn Moss		Palaeoenvironmental assessment.	
119	Wetland	Unknown	Palaeoenvironmental coring, analysis and reporting as required	
			Reassessment	
			Topographic survey	
121	Blaikiewell, Cairns (1)	Slight	Trial trenching	
257	Scottish North Eastern Railway	Slight	Topographic survey	
			Fieldwalking	
	Hill of Muchalls		Metal detecting	
411	Battlefield	Slight	Trial trenching	
	Cowie Village (Site		Geophysical survey	
490	of?)	Unknown	Trial trenching	
505	Blaikiewell Dyke	None	None	
506	Crossley Clearance Cairn	Slight	Topographic Survey and Sample Excavation	

Mitigation of Indirect Impacts on Setting

43.5.16 Mitigation proposals for the mitigation of indirect impacts on the setting of visually sensitive cultural heritage sites are outlined in Chapter 41(Landscape) and Chapter 42 (Visual). The mitigating effects of the propose works is assessed at maturity of proposed planting, in the summer of the 15th year after opening. Table 43.12 summarises the proposed mitigation measures for indirect impacts on setting.

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	-			
		Potential		
Site No.	Site Name	Impact Significance	Proposed Mitigation	
18	Kempstone Hill Standing Stones	Moderate	Mixed woodland to screen views of main carriageway and access roads.	
	White Hill Hut Circles		Scrub and mixed woodland to soften views and reflect existing	
25	Scheduled Ancient Monument	Substantial	character. Embankments eased to integrate with surroundin landform.	
	Cantlayhills Cairn		Mixed woodland to provide screening. Broadleaved woodland scrub woodland and drystone walling to reflect existin landscape.	
28	Scheduled Ancient Monument	Moderate		
88	Stranog Hill, Cairns	Substantial	Embankments eased out to integrate with existing landform and possible return to agriculture.	
	Mill of Crynoch, Watermill		Drystone walling to tie into existing landscape pattern.	
95	Listed Building, Category C(S)	Slight	Embankments eased out to integrate with surrounding landform and allow potential return to agriculture.	
491	Kempstone Hill, Archaeological Complex	Moderate	Mixed woodland to provide screening of carriageway and access roads. Broadleaved woodland, scrub woodland and drystone walling to reflect existing landscape.	

- 43.5.17 No measures are proposed to mitigate the impact on East Crossley Hut Circle and Field System SAM (Site 91).
- 43.5.18 The impacts on Sites 10, 56 and 58 have been assessed as None. No mititation works are therefore proposed.

43.6 Residual Impacts

Direct Impacts

43.6.1 The proposed scheme would have a potential impact during construction on 15 known sites, or groups of sites, of cultural heritage importance. It is considered that the significance of impact of all direct impacts can be reduced by the archaeological recording works proposed in the mitigation section above. In the case of Hill Of Megray, Earthwork (Site 8) severance of possible elements of this site would result in a Slight residual impact. Residual impacts taking into account proposed mitigation are summarised in Table 43.12.

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Site No.	Site Name	Potential Impact Significance	Residual Impact Significance
8	Hill Of Megray, Earthwork	Substantial	Slight
23	Moss Of Cowie Bronze Sword Findspot	Moderate	None
24	Hillocks, Graves	Moderate	None
32	Howieshill Farmstead	Moderate	None
67	Red Moss Wetland	Unknown	Unknown
91	East Crossley Hut Circle and Field System SAM	None	None
94	Wetshaw Croft (1)	None	None
97	Wetshaw Croft (2)	Slight	None
119	Backburn Moss Wetland	Unknown	Unknown
121	Blaikiewell, Cairns (1)	Slight	None
257	Scottish North Eastern Railway	Slight	None
411	Hill of Muchalls Battlefield	Slight	None
490	Cowie Village (Site of?)	Unknown	Unknown
505	Blaikiewell Dyke	None	None
506	Crossley Clearance Cairn	Slight	None

Table 43.13 – Residual Impacts (Direct)

43.6.2 Table 43.14 compares the potential direct impacts with the anticipated residual direct impacts:

Table 43.14 – Comparison of Potential Impacts (Direct) and Residual Impacts

Potential Impact	Totals	Residual Impact	Totals
Very Substantial	0	Very Substantial	0
Substantial	1	Substantial	0
Moderate	3	Moderate	0
Slight	5	Slight	1
None	3	None	11
Unknown	3	Unknown	3
Total	15	Total	15

Indirect Impacts

43.6.3 The proposed scheme would result in a permanent change to the setting of and views from and to ten sites of cultural heritage importance. The significance of the potential impacts ranges from None to Substantial. Specific mitigation measures have been designed as shown on Figures 41.5a-k and the reduction in the residual impact of the proposed scheme on sites where an indirect impact has been identified is detailed in the following table on a site by site basis.

Site No.	Site Name	Potential Impact Significance	Residual Impact Significance
18	Kempstone Hill Standing Stones	Moderate	Slight
25	White Hill Hut Circles	Substantial	Substantial
Scheduled Ancient Monument			
28	Cantlayhills Cairn	Moderate	Slight
20	Scheduled Ancient Monument	Moderate	

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Site No.	Site Name	Potential Impact Significance	Residual Impact Significance
88	Stranog Hill, Cairns	Substantial	Moderate
91	East Crossley Hut Circle and Field System Scheduled Ancient Monument	Substantial	Substantial
95	Mill of Crynoch, Watermill Listed Building, Category C(S)	Slight	Slight
491	Kempstone Hill, Archaeological Complex	Moderate	Slight

- 43.6.4 The impact on views of Kempstone Hill Standing Stones (Site 18) from the south is likely to be reduced by mixed woodland planting, proposed to screen views of main carriageway and access roads. The residual significance of impact has therefore been assessed as Slight.
- 43.6.5 Scrub and mixed woodland to soften views and reflect the existing landscape character east of White Hill Hut Circle (Site 25) is proposed to reduce the visual impact of the AWPR carriageway. While the easing out of embankments at several points to integrate with surrounding landform is likely to reduce the mangitude of impact from Dominant to Prominent, the overall significance of impact on this site remains Substantial.
- 43.6.6 Mixed woodland planting is proposed to screen the main AWPR carriageway and access roads in views from Cantlayhills Cairn (Site 28), while additional broadleaved woodland, scrub woodland and drystone walling may serve to integrate the proposed works into the existing landscape. The significance of residual impact on this site has therefore been assessed as Slight.
- 43.6.7 The easing of road embankments in the vicinity of Stranog Hill Cairns (Site 88) is proposed to allow a return to agriculture. This is likely to reduce the impact on views to the road from the site. The significance of the mitigated potential impact is therefore asessed as Moderate.
- 43.6.8 No measures are proposed to mitigate the impact on East Crossley Hut Circle and Field System SAM (Site 91). The residual impact on this site remains Substantial.
- 43.6.9 While the proposed drystone walling and easing of embankments at Mill of Crynoch Watermill (Site 95) is considered to lower the magnitude of impact on this site from Prominent to Present, this is not considered to lower the overall potential significance of residual impact. The residual significance remains Slight.
- 43.6.10 In the vicinity of Kempstone Hill Archaeological Complex (Site 491), a mix of broadleaved woodland, scrub woodland and drystone walling to reflect existing landscape is proposed to mitigate potential visual imapcts on this site. After mitigation, the residual impact on this site has been assessed as Slight.
- 43.6.11 Table 43.16 compares the potential indirect impacts with the anticipated residual indirect impacts.

Potential Impact	Totals	Residual Impact	Totals
Very Substantial	0	Very Substantial	0
Substantial	3	Substantial	2
Moderate	3	Moderate	1
Slight	1	Slight	4
None	3	None	3
Unknown	0	Unknown	0
Total	10	Total	10

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43.7 References

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