

10 Visual

This chapter presents the visual assessment of the proposed scheme and is linked with the assessment of landscape impacts which is set out in Chapter 9 (Landscape). This chapter assesses the degree of anticipated change the proposed scheme would have upon the visual amenity and views experienced by people from buildings, outdoor public areas, local roads, railways and routes used by pedestrians, cyclists and equestrians, which are collectively described as 'built and outdoor receptors'.

A study area of up to 3km from the proposed scheme was defined following an appraisal of the potential visibility of the proposed scheme. The baseline conditions were established through desk-based assessment, mapping of theoretical visibility (ZTV), site surveys and consultation.

Within the study area, at the time of writing, 674 individual properties (forming 71 built receptor groups), and 18 outdoor receptors have been identified. Impacts on each receptor group are assessed for both winter year of opening (when all mitigation elements would be in place, but the mitigation planting is not fully effective) and during the summer 15 years after opening (when mitigation planting has become established and contributes to screening).

The mitigation proposals include retention of existing trees and vegetation where possible, new planting of mixed and riparian woodland and scrub as well as heavy standard and feathered trees, hedgerow planting and seeding adjacent to the proposed scheme. They have been developed in order to replace trees lost during construction, provide screening where appropriate, enhance biodiversity and reflect and enhance local landscape character.

The mitigation proposals are shown on Figure 9.5 (accompanies Chapter 9: Landscape), with appendices A10.1 (Built Receptor Assessment) and A10.2 (Outdoor Receptor Assessment) providing detailed information on the application of the specific mitigation measures for individual receptors. Cross-sections indicating the relationship between the proposed scheme and various visual receptors, together with mitigation proposals, are shown on Figure 9.6 (accompanies Chapter 9: Landscape).

In the winter year of the proposed scheme opening, 82 (approximately 12%) individual built receptors and 6 (33%) outdoor receptors would be affected by significant (Moderate or greater) adverse impacts. By the summer, 15 years after the proposed scheme opening, mitigation would reduce the total number of individual built receptors affected by significant adverse impacts to 38 (approximately 6%), and for the outdoor receptors, the total would have reduced to 2 (11%). Table 10.7 summarises the total number of receptors affected to different degrees in the winter year of opening and residual impacts by summer 15 years after opening.

10.1 Introduction

- 10.1.1 This chapter presents the Design Manual for Roads and Bridges (DMRB) Stage 3 Environmental Impact Assessment (EIA) for the A9/A96 Inshes to Smithton scheme (hereafter referred to as the proposed scheme) in relation to impacts on the visual amenity and character of views experienced by people from buildings, viewpoints, roads and footpaths (collectively referred to as visual receptors).
- The assessment methodology is explained below, followed by the baseline description of the visual receptors likely to be impacted by the proposed scheme and their existing views and visual amenity. A summary of the potential impacts that could occur in absence of mitigation measures is then included. This is followed by a description of landscape and visual mitigation measures leading to an assessment of the residual impacts on the visual receptors, taking account of incorporated mitigation. This includes an assessment of the changes in the content and character of views and visual amenity experienced by the built and outdoor receptors resulting from the alteration or loss of existing elements in the landscape and / or introduction of new elements. Finally, the statement of significance provides a summary of the significant visual impacts (Moderate or greater) in the context of the Town and Country Planning (Environmental Impact Assessment) Scotland Regulations 2017 during the winter of the year of opening and the summer 15 years after opening of the proposed scheme.
- 10.1.3 This chapter is supported by the following figures:
 - Figure 10.1a: Zone of Theoretical Visibility (bare-earth model) Proposed Scheme;



- Figure 10.1b: Zone of Theoretical Visibility (including heights of buildings and vegetation) Proposed Scheme:
- Figure 10.2: Visual Impact on Built Receptors;
- Figure 10.3: Visual Impact on Outdoor Receptors;
- Figure 10.4: Viewpoint Locations; and
- Figures 10.5 to 10.11: Visualisations.
- 10.1.4 The following figures that accompany Chapter 9 (Landscape), Chapter 15 (People and Communities: Community and Private Assets) and Chapter 16 (People and Communities All Travellers) are also of relevance to this chapter:
 - Figure 9.5: Landscape and Ecological Mitigation;
 - Figure 9.6: Cross-sections;
 - Figure 15.4: Planning Applications and Development Land Allocations;
 - · Figure 16.1: Baseline Conditions; and
 - Figure 16.2: Potential Impacts on NMU Routes and Proposed Mitigation.
- 10.1.5 The chapter is also supported by the following appendices:
 - Appendix A10.1: Built Receptor Assessment; and
 - Appendix A10.2: Outdoor Receptor Assessment.
- The term 'visual receptors' refers collectively to people in buildings, outdoor public areas, local roads, railways and routes used by pedestrians, cyclists and equestrians. For practical reasons visual receptors of similar sensitivity in properties located close together, and experiencing similar impacts, were assessed together as built receptor groups. Appendix A10.1 (Built Receptor Assessment) includes the name of each receptor group and the location of each group is shown on Figure 10.2 (Visual Impact on Built Receptors). The extent of the outdoor receptor routes is shown on Figure 10.3 (Visual Impact on Outdoor Receptors).
- 10.1.7 Further considerations related to the visual assessment are addressed separately within the following chapters:
 - Chapter 9 (Landscape) in relation to the impacts on the character, quality, physical fabric of the landscape and mitigation proposals;
 - Chapter 14 (Cultural Heritage) in relation to impacts on the setting of historic buildings and heritage sites:
 - Chapter 15 (People and Communities Community and Private Assets) in relation to the land-take assessment where land is allocated within the local development plan or where land has an extant planning permission or is pending a decision of a planning application, but is not yet under construction; and
 - Chapter 16 (People and Communities All Travellers) in relation to the inter-related assessment of
 the effects of the proposed scheme upon the views experienced by travellers on nearby routes or
 affected by the proposed scheme).

Legislative and Policy Background

10.1.8 Chapter 18 (Policies and Plans), Appendix A18.1 (Planning Policy Context for Environmental Assessment) describes the planning policies and guidance from national to local level which are relevant to the visual assessment. An assessment of the compliance of the proposed scheme against all development plan policies relevant to this environmental topic is reported in Appendix A18.2



(Assessment of Development Plan Policy Compliance) with a summary overview provided in Section 18.4 (Assessment of Compliance) of Chapter 18 (Policies and Plans).

10.2 Methodology

General

- The visual assessment was undertaken based on the guidance provided by DMRB Interim Advice Note (IAN) 135/10 Landscape and Visual Assessment (Highways Agency Transport Scotland, Welsh Assembly Government and the Department for Regional Development Northern Ireland 2010) (hereafter referred to as IAN135/10) updated to incorporate current best practice methodology included in Guidelines for Landscape and Visual Impact Assessment 3rd Edition (hereafter referred to as GLVIA3) (Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) 2013).
- 10.2.2 GLVIA 3 is a more recently published guidance document than IAN 135/10 and provides greater clarity on:
 - the interrelationship between susceptibility and value in determining sensitivity to the proposed scheme: and
 - the interrelationship between size or scale, geographical extent of influence, duration and reversibility in determining magnitude of change.
- The approach to the assessment and design of the landscape and visual mitigation proposals has also been informed by Fitting Landscapes: Securing more Sustainable Landscapes (Transport Scotland 2014).
- 10.2.4 A staged approach to the assessment was adopted comprising:
 - scoping and consultation, including agreement of the approach to the assessment;
 - baseline assessment a description of the visual receptors within the study area following desk-based study and site surveys;
 - assessment of the value, susceptibility and sensitivity of the visual receptors;
 - identification of potential impacts;
 - development of the proposed mitigation measures;
 - assessment and description of temporary residual impacts (i.e. those that would remain after mitigation) and their significance during the construction phase; and
 - detailed assessment of residual impacts and their significance during the operational phase (both during winter of the year of opening and the summer 15 years from opening once the mitigation planting would have become established).
- The assessment identifies and evaluates the impacts brought about by the proposed scheme on specific views and on the general visual amenity experienced by people. In accordance with IAN 135/10, separate assessments were undertaken for the following scenarios:
 - during the construction period, assuming a maximum visibility or maximum perceived change situation (i.e. when construction activity is at its peak for any given view);
 - the winter of the proposed year of opening, which represents a maximum impacts scenario (in comparison to a 'do-nothing scenario') before all planted mitigation has taken full effect, taking account of the completed project (including embedded mitigation measures such as the route alignment and formation of earthworks), in addition to the traffic using it; and
 - the summer of the 15th year after the proposed year of opening, which represents a reduced impacts scenario where any planted mitigation measures can be expected to be effective, taking account of the completed scheme (including embedded mitigation measures), in addition to the traffic using it.



- 10.2.6 The approach to the development of mitigation proposals has been informed by professional judgement and experience, in addition to liaison with other relevant disciplines.
- 10.2.7 It should be noted that a detailed pre-mitigation visual impact assessment has not been undertaken, since the visual mitigation is largely an intrinsic part of the proposed scheme design, and therefore not separable from it. Residual impacts, which take this mitigation into account, are described in relation to the winter of the year of opening and summer after 15 years' scenarios. These are reported as such in Section 10.6 (Residual Impacts), along with an indication on the degree to which mitigation planting has reduced impacts between these two scenarios.

Scoping and Consultation

- The principal aim of the scoping and consultation was to enable agreement of the approach to the assessment of the key issues to be addressed by the DMRB Stage 3 assessment and on the developing landscape and visual mitigation measures.
- A scoping report was submitted in June 2018, and consultation has also been undertaken throughout the DMRB Stage 3 assessment process, including with The Highland Council, Scottish Natural Heritage (SNH), Highlands and Islands Enterprise (HIE) and Historic Environment Scotland (HES).
- 10.2.10 Further information on the scoping and consultation for the visual assessment is provided in Chapter 6 (Consultation and Scoping).

Study Area

Zone of Theoretical Visibility (ZTV) mapping was initially prepared extending to a 5km radius from the proposed scheme. Following an appraisal of the theoretical visibility displayed by the ZTV and the observations made during the site surveys the visual assessment has focused on the potential visual impacts along the alignment of the proposed scheme and a study area up to 3km in distance from it. Based on professional judgement it was assessed that whilst it is possible that there may be some impacts on visual receptors beyond 3km, these are likely to be not significant due to distance and intervening localised topography, built form and/or vegetation.

Zone of Theoretical Visibility Mapping

- To aid the assessment, two ZTVs (provided in Figures 10.1a and 10.1b) have been prepared for the proposed scheme both extending to cover the 3km study area to illustrate the extent of the area from which the proposed scheme (including vehicles) may be visible. Target points located every 50m along the proposed scheme (using the centre line of the scheme and including side roads) were used to establish visibility. The ZTVs assume an eye level height of 1.75m and add 4.5m to the proposed scheme, to take account of the movement of traffic, including heavy goods vehicles.
- The first ZTV (Figure 10.1a) was produced using a bare-earth Digital Terrain Model (DTM) that does not take account of screening or filtering of visibility by local landform, built features or vegetation. As such, it illustrates the maximum extent of the area from which the proposed scheme (including vehicles) would theoretically be visible.
- The second ZTV (Figure 10.1b) has been prepared using a Digital Surface Model (i.e. the Environment Agency's Light Detection and Ranging (LIDAR) data available under Open Government Licence from data.gov.uk) which takes account of heights of objects, such as vehicles, buildings and vegetation, as well as the terrain surface and as such illustrates a more accurate indication of the predicted visibility of the proposed scheme.
- 10.2.15 It should be noted, as indicated in Figure 10.1b, that the latest LIDAR dataset (as of January 2019) does not extend to cover the whole of the study area and that there is no data for an area within the Moray Firth to the north of the proposed scheme, and land to the south-east of Inshes and Smithton (the majority of which is afforested). In this regard site surveys have confirmed the likely nature of visibility from these locations and informed the assessment.



Baseline Conditions

- The first stage of the assessment was to establish the baseline visual amenity and views against which subsequent change resulting from the proposed scheme can be identified.
- 10.2.17 Baseline conditions are those that exist at the time of desk and site survey, but also take account of future changes that are assumed certain and have an appropriate amount of design information to allow an assessment to be undertaken (refer to Chapter 5: Overview of Assessment for further details). An example of this is the construction of the A96 Dualling Inverness to Nairn (including Nairn Bypass) scheme (including all associated mitigation measures such as planting which is assumed to be fully established) since the proposed scheme is entirely dependent on the existence of this scheme, in particular the proposed A96 Smithton Junction.
- Furthermore, those developments within the study area which have planning consent and are, at the time of writing (5 April 2019), considered to be under construction are included as built visual receptor locations in Section 10.3 (Baseline Description and Evaluation) given the fact that they are already 'on the ground' and can be visited as part of a site survey to confirm some details of their layout, orientation and existing views. Further details of these planning consents are provided below (see 'Consented Developments under Construction') and within Chapter 15 (People and Communities: Community and Private Assets).
- Baseline conditions for the study area were established through desk-based and site surveys, details of which are presented in Section 10.3 (Baseline Description and Evaluation).

Desk-based Assessment

- Information gathered for the visual assessment reported in Part 3, Chapter 11 (Landscape and Visual) of the A9/A96 Inshes to Smithton DMRB Stage 2 Scheme Assessment Report (Jacobs 2017) was reviewed. In addition, the following information sources were reviewed:
 - 1:5,000, 1:10,000, 1:25,000 and 1:50,000 Ordnance Survey mapping;
 - Google Earth and Google Street View web-based imagery;
 - HES Inventory of Gardens and Designed Landscapes;
 - aerial photography provided by Transport Scotland (Getmapping, 2017);
 - Jacobs' GIS environmental constraints datasets (obtained through stakeholder consultation);
 - Scottish Natural Heritage: No 114 Inverness District Landscape Character Assessment (Richards 1999);
 - Scottish Natural Heritage: No 90 Inner Moray Firth Landscape Character Assessment (Fletcher 1998);
 - the Highland-wide Local Development Plan (HwLDP) (The Highland Council 2012);
 - the Inner Moray Firth Local Development Plan (IMFLDP) (The Highland Council 2015);
 - Inverness Core Paths Plan (The Highland Council 2008);
 - Inverness East Development Brief (IEDB) (The Highland Council 2018);
 - Inshes and Raigmore Development Brief (The Highland Council 2015); and
 - A96 Dualling Inverness to Nairn (including Nairn Bypass) DMRB Stage 3 Scheme Assessment Report (Jacobs 2016).

Site Surveys

10.2.21 Site surveys were conducted to verify the nature of existing views and visual amenity as well as to gain a full appreciation of the relationship between the proposed scheme and the affected visual receptors.



The field surveys, undertaken in January and February 2018 to ensure winter maximum visibility, were carried out from publicly accessible locations and from private land where approved by the landowner. All surveys were undertaken by a team of landscape architects on foot and by car. Photographs were also taken from various publicly accessible locations within the study area, from which views of the proposed scheme would be likely. Additional site visits were undertaken in January, March and April 2019 to confirm the progress of Stratton Phase 1A, the Culloden House Care Home and a number of other developments consented and under construction with in the study area.

Consented Development under Construction

- The proposed scheme is within the Inverness East Development Area where large-scale urban development is planned, as identified in the local development plan and supplementary guidance. This includes land at Stratton which is allocated for development as part of a new town within the Highland-wide Local Development Plan (The Highland Council 2012). Planning permission in principle has been granted for all phases of the development, with detailed planning permission (Ref: 16/05533/MSC) granted for the initial phase of the development (Phase 1A) and for infrastructure related to Phase 1, planning permission (Ref: 16/05669/MSC). The phases of the Stratton development are shown on Figure 5.1 (Stratton: Phases of Development) which accompanies Chapter 5 (Overview of Assessment).
- Applications to amend the approved layout and house types / blocks of flats of Phase 1A of the Stratton development were submitted between September and November 2018 (Ref: 18/03649/MSC, 18/03810/MSC and 18/05111/MSC). All were approved by April 2019 and have been included in the baseline and taken into account in the qualitative assessment in Section 10.6 (Residual Impacts), given that they reflect parts of 'on-the-ground' development under construction more closely than the original consented application (Ref: 16/05533/MSC).
- A further planning application from October 2018 is pending decision by The Highland Council (as of 05 April 2019) (Ref: 18/04550/MSC) for the detailed layout for Phase 2A of the Stratton development. This has not been included in the baseline or the high-level assessment due to a higher degree of uncertainty and lack of opportunity to confirm desktop study findings on site.
- 10.2.26 A planning application for a new public park associated with the development at Stratton was also submitted in January 2019 (Ref: 18/05949/MSC), however as it is still pending consideration and the construction has not commenced, it has not been included in the baseline or the high-level assessment for reasons stated above in paragraph 10.2.25.
- 10.2.27 In addition to above, construction is underway on the following, which have been included within the baseline for the visual assessment:
 - Culloden House Care Home (Ref: 16/00684/FUL);
 - a two storey life sciences building (Solasta House) at Inverness Campus (Ref: 17/00753/MSC);
 - a public transport, cyclist and pedestrian bridge at Inverness Campus (Ref: 16/01725/MSC);
 - a residential dwelling and garage in Resaurie (Ref: 18/00565/FUL); and
 - the demolition of steading and erection of dwelling at Dell of Inshes (Ref: 16/03864/FUL).

Impact Assessment

- 10.2.28 The assessment of visual impacts was undertaken using the approach outlined below, where the level of significance is assessed based on the sensitivity to change of the existing views and the magnitude of change that would be experienced.
- The assessment considers existing both built and outdoor receptors utilising the observations made during the site survey and the use of the ZTV mapping and web-based photography. Built receptors are identified as dwellings, workplaces, commercial and recreational buildings. Outdoor receptors are identified as major and well-used minor roads, railways, outdoor recreational spaces, footpaths and core paths identified by The Highland Council, and cycleways.



Sensitivity to Change

10.2.30 In accordance with GLVIA3, the assessment of sensitivity combines judgements on the susceptibility of the visual receptor to the specific type of development proposed, and the value attributed to that receptor.

Susceptibility of Visual Receptors to Change

- 10.2.31 Susceptibility of a visual receptor to changes in views and visual amenity is set out in Chapter 6 (Assessment of visual impacts) of the GLVIA3 as being 'a function of the occupation or activity of people experiencing the view at particular locations; and the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations' (paragraph 6.32, page 113).
- 10.2.32 The criteria in Table 10.1 (based on GLVIA3) were applied, along with professional judgement, to evaluate the susceptibility of different types of receptors.

Table 10.1: Visual Receptor - Susceptibility to Change

Susceptibility	Receptor Type			
	Residents. People engaged in outdoor recreation, including users of public rights of way, whose attention is likely to be focused on the landscape and on particular views.			
High	Visitors to heritage assets or other attractions where views of the surroundings are an important part of the experience.			
	Communities where views contribute to the landscape setting and are enjoyed by residents. Travellers on scenic routes where awareness of views is likely to be high.			
Medium	Travellers on road, rail or other transport routes (where some awareness of views is likely to occur).			
	Schools and other institutional buildings and their outdoor areas.			
Low	People engaged in outdoor sport or recreation, which does not involve appreciation of views. People at their place of work, whose attention may be focused on their work and where the setting is not important to the quality of working life.			

Value of Views

- In determination of the sensitivity to change of a visual receptor, this assessment also considered the value likely to be attached to the view experienced. As indicated in GLVIA3, this may relate to recognition of views in relation to heritage assets or through planning designations, or indicators of value attached to views by visitors such as publications, signage and the provision of facilities such as parking places.
- 10.2.34 The criteria in Table 10.2 were used, along with professional judgement, to help determine the value of the views experienced by each visual receptor.

Table 10.2: Value of Views

Value	Views
High	Viewpoints/locations within landscapes of national importance, or highly popular visitor attractions where the view forms an important part of the experience or has important cultural associations.
Medium	Viewpoints/locations within landscapes of regional/district importance or moderately popular visitor attractions where the view forms part of the experience or has local cultural associations.
Low	Viewpoints/locations within landscapes of no designations, not particularly popular/important as a viewpoint and with minimal or no cultural associations.

Evaluation of Sensitivity of Visual Receptors

10.2.35 The sensitivity of visual receptors to changes in their views was evaluated in accordance with the criteria provided in Table 10.3, based on the susceptibility to change of the receptor and the value of views. All



residential receptors were assessed to be of high sensitivity as they are considered to be particularly susceptible to changes in their visual amenity, residents at home being more likely to experience views for longer periods of time than people briefly passing through an area.

Table 10.3: Visual Receptor - Sensitivity to Change

Sensitivity	Criteria
High	Receptors where the existing view is of high value and/or where the receptor would experience an appreciable change to visual amenity by reason of the nature of activity and their expectations (receptors where the view is important to users will be considered to be of high sensitivity).
Medium	Receptors where the existing view is valued, but not critical to amenity and/or the nature of the view is valued, but not a primary consideration of the users (receptors where users are likely to spend time outside of participation in their activity looking at the view and users of workplaces with windows that take advantage of views will be considered to be of medium sensitivity).
Low	Receptors where the existing view is unimportant and/or users are not sensitive to change (receptors where users are unlikely to consider the views an important element of their activity will generally be assessed to be of low sensitivity).

Magnitude of Visual Impact

10.2.36 As noted in GLVIA3 the magnitude of change that would be experienced by the identified visual receptors relates to the size or scale of change, its geographical extent, and the duration and reversibility of change.

Size or Scale

- 10.2.37 GLVIA3 recommends that the magnitude of visual impacts identified should take account of:
 - the scale of the change in view with respect to loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the proposed scheme;
 - the degree of contrast or integration of any new features or change in the landscape with the existing or remaining landscape elements and characteristics; and
 - the nature of the view of the proposed scheme, in terms of the relative amount of time over which it
 would be experienced and whether views would be full, partial or glimpses.

Geographical Extent

- 10.2.38 GLVIA3 notes that the geographical extent of a visual effect will vary with different viewpoints, and will reflect:
 - · the angle of view in relation to the main activity of the receptor;
 - the distance of the viewpoint from the proposed scheme; and
 - the extent of area over which the changes would be visible.

Duration and Reversibility

- The magnitude of visual impact also takes into consideration the duration and reversibility of the effect. Short-term, reversible visual impacts from temporary construction operations are generally considered to be of lower magnitude than long-term or irreversible impact.
- Magnitude of visual impact was assessed on a scale of high, medium or low, using the criteria, provided in Table 10.4 along with professional judgement, giving consideration to the duration and reversibility of the impact.



Table 10.4: Magnitude of Visual Impact

Magnitude	Criteria					
High Where the proposed scheme or elements of the proposed scheme would dominate the vand fundamentally change its character and components over a large geographic area.						
Medium	Where the proposed scheme or elements of the proposed scheme would be noticeable in the view, affecting its character and altering some of its components and features over a notable geographic area.					
Low	Where the proposed scheme or elements of the proposed scheme would be only a minor element of the overall view, over a small geographic area that are likely to be missed by the casual observer and/or scarcely appreciated.					

Significance of Impacts

10.2.41 The degree of significance of impacts on visual amenity has been determined through consideration of both the sensitivity of the visual receptors to changes in their views and the predicted magnitude of impacts as a result of the proposed scheme. The criteria in Table 10.5 were applied, along with professional judgement, with significance defined as Negligible, Slight, Moderate or Substantial, in addition to being either adverse or beneficial.

Table 10.5: Significance of Visual Impacts

Level of Effect	Criteria
Substantial	Adverse: The proposed scheme would cause major deterioration to a view or loss of a view from a highly sensitive receptor and would constitute a major discordant element in the view. Beneficial: The proposed scheme would lead to a major improvement in a view from a highly sensitive receptor.
Moderate	Adverse: The proposed scheme would cause obvious deterioration to a view from a moderately sensitive receptor, perceptible damage to a view from a more sensitive receptor. Beneficial: The proposed scheme would cause obvious improvement to a view from a moderately sensitive receptor, or perceptible improvement to a view from a more sensitive receptor.
Slight	Adverse: The proposed scheme would cause limited deterioration to a view from a receptor of medium sensitivity or cause greater deterioration to a view from a receptor of low sensitivity. Beneficial: The proposed scheme would cause limited improvement to a view from a receptor of medium sensitivity or would cause greater improvement to a view from a receptor of low sensitivity.
Negligible	No perceptible change in the view.

- 10.2.42 It should be noted, however, that these criteria represent thresholds on a continuum and where appropriate the intermediate categories of Moderate/Substantial, Slight/Moderate and Negligible/Slight were also used in the assessment.
- 10.2.43 For the purposes of this assessment impacts are considered to be adverse unless otherwise stated. Where a long-term effect of Moderate significance is identified, this is considered to be a significant effect in the context of this assessment. As detailed in the criteria above, a Moderate significance is where the level of effect becomes obvious to the viewer therefore triggering the need for mitigation measures.

Limitations to Assessment

At the time of assessment details of methods of construction and information on the timescale and phasing of works, locations of haulage routes and construction compounds were largely unknown. There is an acknowledgement that construction activities associated with road schemes are short-term and cause generally temporary adverse visual impacts. The assessment is based on assumptions on where the most likely significant, although short-term, impact from construction activities may result. Those identified include the construction of junctions, new bridge structures and large-scale earthworks. The location of these activities tends to correlate with the areas where the magnitude of operational impacts would be highest, hence the greatest construction phase impacts are generally expected to occur in similar locations to those of the greatest operational impacts, as identified for the winter year of the



proposed scheme opening before mitigation planting has established. Given the above, together with the relatively short duration of construction activities, it is considered unlikely that construction visual impacts would be of greater significance than those assessed for the winter year of the proposed scheme opening.

- Where land is allocated within the local development plan or where land has an extant planning permission or is pending a decision of a planning application but is not yet under construction (as of 5 April 2019), the land-take and potential impacts on visual amenity has been assessed in Chapter 15 (People and Communities: Community and Private Assets).
- While the Inverness East Development Brief provides an indication of the nature of development 10.2.46 comprising the mixed-use city expansion, given the limited information currently available and information regarding the likely timescales, it has not been possible to assess the potential visual impacts of the proposed scheme on them with any degree of certainty, so these allocations have not been considered in detail within this chapter. It is, however, likely that impacts resulting from the proposed scheme on visual amenity would be experienced from properties, routes and public spaces within these developments. These impacts are likely to be of a greater magnitude (and subsequently significance) from receptor locations close to the proposed scheme, and/or receptor locations with open views towards it. The impacts, however, are likely to be influenced (potentially reduced) by any structured planting implemented within the development land allocations, potentially reducing impacts on the visual amenity of receptors within the expansion. A high-level, qualitative visual assessment has been provided in Section 10.6 (Residual Impacts) for consented developments under construction within the study area as of 5 April 2019. These developments were included as a reflection of the higher level of certainty with regards to their layout and detailed design (and therefore potential visual impacts) in comparison to those development proposals which are only indicative, included in the IEDB or under consideration by The Highland Council. As these developments are not yet 'on the ground' and/or there is less certainty of their design they cannot be visited on site to confirm the extent and quality of the existing views and subsequently any potential impacts on receptors within them.
- In the absence of detailed information regarding how the IEDB allocations would be 'built-out' it has not been possible to predict how the views from receptors identified in this assessment would be affected by them. While it is likely that views of the proposed scheme would become impeded by elements such as the new housing and tree planting it is not possible to accurately predict the actual extent of the change. It is, however, likely that impacts on receptors identified within this assessment would be less than reported due to screening by new buildings and planting proposals.

10.3 Baseline Description and Evaluation

General

- As noted in IAN 135/10 the assessment of landscape and visual impacts are separate but linked procedures. The visual context and baseline description of the study area is therefore incorporated to a considerable extent in Chapter 9 (Landscape) and the supporting Appendix A9.1 (Local Landscape Character Areas (LLCAs)).
- Visual receptors comprise mostly walkers on the network of paths and residents located on the outer edges of the nearby settlements (e.g. Inverness, Inshes, Cradlehall and Smithton) in addition to road users, railway passengers, cyclists and visual receptors in commercial, healthcare and educational facilities within the study area. Baseline visual conditions around the area are summarised below. Sensitivity is described generally in this section to provide an overview of baseline visual sensitivity.
- 10.3.3 The study area is largely contained by the Moray Firth and the Aberdeen to Inverness Railway Line to the north, the settlement of Culloden to the north-east, Culloden Moor to the east, the city of Inverness to the west and Drumossie Moor to the south. The topography generally limits views from the south-east beyond Westhill, from the south beyond Milton of Leys and from the Moray Firth coast immediately north of the Aberdeen to Inverness Railway Line. Views of the proposed scheme from most of Inverness are generally screened by built features, vegetation and landform.



There are some open views towards the location of the proposed scheme from the western outskirts of Inverness and the Great Glen Way around Leachkin (Photograph 10.1), where the landform begins to rise to the west; however, these are in excess of 3km away and are not likely to be significantly affected.



Photograph 10.1: View from the Great Glen Way Near Leachkin Looking East Towards the Proposed Scheme

- As the topography slightly rises to the south-east, parts of the landscape gain a view over the coastline of the Moray Firth and the Northern Highland mountain range beyond. However, few of the receptors that may be affected gain such clear views of the surrounding landscape. Often views are screened by neighbouring built features, hedgerow or garden vegetation, woodland and shelterbelts. However, some of the views from agricultural areas and from within Inverness Campus are open and expansive, with little in the way of topography and/or vegetation interrupting them.
- The desk-based assessment identified potential visual receptors within the study area followed by site surveys from publicly accessible locations and from private land where approved by the landowner. The site surveys were conducted throughout the assessment process in order to identify the baseline conditions and verify the nature of existing views and visual amenity as well as gain a full appreciation of the relationship between the proposed scheme and the affected visual receptors. As a result, 71 built receptor groups and 18 outdoor receptor locations and routes with potential to experience significant impacts were identified within the study area. The built receptor locations are shown on Figure 10.2 and listed in Appendix A10.1. Outdoor receptor locations and existing routes are shown on Figure 10.3 and listed in Appendix A10.2. Where they are required to be re-routed as a result of the proposed scheme, the alignments of re-routed roads, cycle paths and footpaths are shown on Figure 16.2.

Built Receptors

- The study area encompasses a wide range of built receptor locations, concentrated mostly within settlements. The main settlement found within the study area is the city of Inverness and the suburbs / hamlets on its fringe, such as Inshes, Cradlehall, Smithton, Westhill and Culloden as well as smaller areas such as Resaurie, Castlehill and Dell of Inshes. Several farms and individual properties are also dispersed throughout the study area.
- Built receptor locations are those residential dwellings, offices and industrial, educational, healthcare or commercial properties within the study area, which have been identified through desk top assessment and verified during site surveys as being likely to experience notable change in their views as a result of the proposed scheme. Properties which would be unlikely to gain views of the proposed scheme are not recorded within the visual assessment. Some areas including residential suburbs in elevated locations could potentially have partial visibility of the proposed scheme, but where the visual impacts would be very limited due to factors such as the extended viewing distance and the presence of intervening buildings, vegetation and localised topography, it was judged that any visual impacts from the proposed scheme at these properties would not be significant and they were therefore not included within the detailed visual assessment.
- At the time of writing, the visual assessment identified a total of 71 built receptor groups consisting of approximately 674 individual receptors (predominantly residential dwellings with a small number of



commercial and other non-residential units) within the study area. A general description of built receptors in the main settlements within the study area is provided below. The locations of built receptors are shown on Figure 10.2.

Cradlehall, Smithton and Westhill

- 10.3.10 Cradlehall, Smithton and Westhill (incorporating Castlehill and Resaurie) are predominantly residential areas located on the outskirts of Inverness to the east of the A9 Perth Inverness Trunk Road (hereafter referred to as the A9) and in the east and south-east of the study area.
- 10.3.11 Cradlehall is a residential area to the east of Inverness, with open fields abutting the properties on the northern and north-western edge as illustrated in Photograph 10.2 below. The nearest residential receptors on the northern edge of Cradlehall Meadows are located approximately 100m from the nearest section of the proposed scheme. Although existing vegetation and neighbouring properties provide some screening of views available to receptors located further to the south-east, views of the proposed scheme, including the new Cradlehall Railway Bridge (PS03) and the traffic on it, are likely to be available. Residential receptors at this location are considered to be of high sensitivity.



Photograph 10.2: Cradlehall Meadows (left) and Cradlehall Business Park From U1058 Caulfield Road North / NCN Route 1

10.3.12 Cradlehall Business Park (illustrated in Photograph 10.3 below) is located approximately 100m from the proposed Cradlehall Roundabout. The commercial receptors within the business park are considered to be of low sensitivity.



Photograph 10.3: Cradlehall Business Park Viewed from Inverness Campus



10.3.13 Smithton (illustrated in Photograph 10.4 below) is located on the eastern outskirts of Inverness and lies adjacent to Culloden, approximately 0.5km to the east of the proposed scheme. The topography gently slopes down from the south towards the proposed scheme, with open fields abutting the northern edges of the settlement allowing for views north towards the Moray Firth as illustrated in Photograph 10.5. The built receptors here are generally considered to be of high sensitivity.



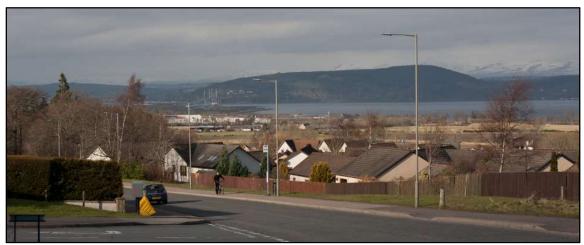
Photograph 10.4: View of Smithton and Westhill From Farmland to the North



Photograph 10.5: View from Smithton Towards the Moray Firth and the Black Isle Overlooking Stratton

10.3.14 Westhill is a suburb on the eastern edge of the city of Inverness, located between Cradlehall and Culloden. Views from within it are generally limited by intervening built features and vegetation; however, some properties may experience views of the proposed scheme, especially from the upper floors, with the Moray Firth and Black Isle visible in the distance as indicated in Photograph 10.6 below.





Photograph 10.6: View from U1124 Caulfield Road in Westhill looking north-west towards the proposed scheme and Kessock Bridge and Black Isle

Inverness Campus

10.3.15 Inverness Campus (illustrated in Photograph 10.7 below) is located to the east of Inverness between the A9 and the Highland Main Line Railway, in the centre of the study area. Views from the buildings on campus are generally open towards the sections of the proposed scheme to the south with vegetation providing some screening to the east. The built receptors within the campus are considered to be of medium sensitivity.



Photograph 10.7: View From U1058 Caulfield Road North Towards Inverness Campus Buildings to the North

Inverness Retail and Business Park

10.3.16 Inverness Retail and Business Park to the east of Inverness and the A9 (illustrated in Photograph 10.8 below) is located between the A96 Aberdeen – Inverness Trunk Road (hereafter referred to as the A96) and the Highland Main Line Railway, in the northern part of the study area and is immediately adjacent to the proposed scheme. There are few windows facing south and where views towards the proposed scheme are available they are often screened by nearby built features and existing vegetation. However, views may be available from the upper storeys of some properties. The receptors within the retail and business park are considered to be of low sensitivity.





Photograph 10.8: View of Inverness Retail and Business Park From the New Path Within Inverness Campus

Inshes

10.3.17 Inshes (illustrated in Photograph 10.9 below) is a mixed-use (residential, commercial and agricultural) area located on the south-eastern outskirts of Inverness. It straddles the A9 in the south-west of the study area, with some properties near Dell of Inshes and Inshes Smallholdings located a short distance from the proposed Inshes Overbridge (PS02) and the alignment from B9006 Culloden Road to the Cradlehall Roundabout (referred to as Link 1 – see Section 10.4: Potential Impacts below). Views from many properties are at least partially screened by the neighbouring buildings and vegetation, although several properties, in particular the multi-storey ones on higher ground and with open outlook to the north may gain some distant views of the proposed scheme. The residential receptors here are considered to be of high sensitivity, while commercial receptors are considered to be of lower sensitivity (medium or low).



Photograph 10.9: View From Inshes Holdings Looking South Towards Craggan Valley and Inshes House

Raigmore Hospital and Beechwood Business Park

10.3.18 Raigmore residential and healthcare area with its landmark hospital building (illustrated in Photograph 10.10 below), as well as Beechwood Business Park and Beechwood Business Park North, are in the eastern part of Inverness, immediately to the west of the A9 and to the north of the existing Inshes overbridge. The commercial and other non-residential receptors on the eastern and southern edges of this area, as well as multi-storey buildings, such as Raigmore Hospital, are likely to experience views of the proposed scheme from upper floors, with views from lower floors screened by the intervening vegetation and road embankments. Non-residential receptors in this area are considered to be of medium sensitivity.





Photograph 10.10: View of Raigmore Hospital and the City of Inverness from Castlehill

<u>Inverness</u>

The city of Inverness lies at the western edge of the study area, situated on the edge of the Great Glen Fault at the confluence of the Moray and Beauly Firths on the banks of the River Ness. The study area encompasses the eastern part of the city. Built receptors in the central part of Inverness city are not likely to be significantly affected by the proposed scheme, with views to the east screened by the intervening built features, vegetation and topography.

Culloden

Culloden is a residential area located to the east of the city of Inverness, between Smithton and Balloch, at approximately 0.8km distance from the nearest section of the proposed scheme. A small number of properties on the northern and western edges of the settlement are likely to gain distant views of the proposed scheme where it ties in to the A96 and C1032 Barn Church Road due to the open character of the fields to the north-west as illustrated in Photograph 10.11 below. The residential receptors here are considered to be of high sensitivity.



Photograph 10.11: View from the Northern Edge of Culloden Towards C1032 Barn Church Road

Scattered Properties

There are additional scattered groups of built receptors in the study area from which views to the proposed scheme would be experienced. These are presented in Table 10.6.



Table 10.6: Scattered Properties

Location	Property Name	Approximate Distance and Direction from the proposed scheme				
Cairnlaw	Roseacre The Brambles Firthview	230m north of Link 4				
Seafield	Seafield of Raigmore	430m north-west of Link 4				
Ashton Farm	Ashton Farm Cottages Ashton Farm Farmhouse	50m west of Link 4 130m west of Link 4				
Inverness Campus	Scottish Vet Referrals	120m north-west of Link 2				

^{*}For reference to the Link please refer to paragraph 10.4.2 below.

Consented Development Under Construction

- 10.3.22 The following consented developments are under construction within the study area (as of 5th April 2019) have been included in the baseline:
 - Culloden House Care Home;
 - Phase 1A of the Stratton development;
 - · Solasta House Life Sciences building in Inverness Campus;
 - · dwelling in Dell of Inshes; and
 - · residential property and garage at Resaurie.
- The Culloden House Care Home under construction in Cradlehall (see Photograph 10.12 below) is a two and three-storey building located on elevated ground in relation to the proposed scheme at a distance of approximately 50m from the nearest section of the proposed scheme. The existing views to the north-west, towards the proposed scheme, include scenic views towards rolling farmland, mature trees and Inner Moray Firth. A high-level, qualitative assessment of potential visual impacts from this group of visual receptors has been provided in Section 10.6 (Residual Impacts).



Photograph 10.12: Culloden House Care Home Under Construction Viewed from U1058 Caulfield Road North

10.3.24 Phase 1A of the Stratton development (illustrated in Photograph 10.13 below) is currently under construction in the north-eastern part of the study area is located at a distance of approximately 350m from the nearest section of the proposed scheme and constitutes an initial phase of the new town development included in the Inverness East Development Area. It includes approximately 400 two- and three-storey dwellings. The construction appears to be progressing from C1032 Barn Church Road in the east to the west, i.e. from furthest away from the proposed scheme towards the proposed scheme. As a result, the residential units which will form the south-western edge of the development and which are most likely to experience views of the proposed scheme are not yet on the ground and cannot be assessed on site yet; however, based on the detailed layout and landscape plans included in the



planning applications (refer to paragraphs 10.2.24) for Phase 1A a high-level assessment of potential visual impacts has been provided in Section 10.6 (Residual Impacts).

10.3.25 The visual receptors at both of these locations would be of high sensitivity.



Photograph 10.13: View of Phase 1A of the Stratton Development currently under construction viewed from C1032 Barn Church Road

The Life Sciences building known as Solasta House is located in Plot 8 on the north-east perimeter of Inverness Campus, adjacent to the railway line (see photograph 10.14 below). The building, for which construction is almost compete, is positioned to the south of the student accommodation alongside the recently completed Aurora life science building. Like the Aurora, the building views of the proposed scheme from Solasta House would be approximately 250m to the west and the visual receptors at this location would be of medium sensitivity.



Photograph 10.14: View of Solasta House Under Construction

- The new dwelling under construction within the Dell of Inshes is located between existing residential properties to the south-east of the proposed scheme at a distance of approximately 340m. Due its east-west orientation, position between existing properties and the existing vegetation screening views to the north, views of the proposed scheme to the north and east would be limited from this property. The visual receptors at this location would be of high sensitivity.
- The single dwelling and garage development at Resaurie is located within a group of existing similarly designed residential properties to the south-east of the proposed scheme at a distance of approximately 400m. The property construction is at quite an advanced stage with the roof in place and windows visible (see photograph 10.15 below). Due its position behind an existing property, views of the proposed



scheme to the north-west would be limited. The visual receptors at this location would be of high sensitivity.



Photograph 10.15: View of the residential dwelling and garage under construction in Resaurie.

10.3.29 A high-level, qualitative assessment of potential visual impacts on these visual receptors has been provided in Section 10.6 (Residual Impacts).

Outdoor Receptors

Outdoor Receptors include outdoor public areas, local roads, railways and routes used by pedestrians, cyclists and equestrians within the study area, which have been identified through desk top assessment and verified during site surveys as being likely to experience notable change in their views as a result of the proposed scheme. The locations of these receptors are indicated on Figure 10.3. Outdoor receptors which would be unlikely to gain views of the proposed scheme are not recorded within the visual assessment. Additional information on the impacts of the proposed scheme on users of paths within the study area is provided in Chapter 16 (People and Communities – All Travellers).

Roads

- 10.3.31 There are two A-class roads within the study area which are overlapped by the ZTV; the A9 and the
- The A96 runs from the Raigmore Interchange with the A9 to the east of Inverness. The route follows the southern coastline of the Moray Firth, east to Nairn and beyond to Forres. The route passes through a generally flat coastal plain which is made up of a mixture of arable and pasture fields interspersed with blocks of coniferous woodland. Some filtered views to the study area are currently available in some areas and open in others due to roadside vegetation and the flat condition of the road. Road users travelling on this route are considered to be of low sensitivity.
- 10.3.33 Within the study area, the A9 runs in a north to south direction along the east of Inverness continuing south beyond Daviot. The route passes through a generally enclosed, embanked section with scrub woodland and tree planting established on the earthworks. Due to the presence of the existing vegetation and neighbouring built development, views of the surrounding landscape are predominantly screened. The exceptions are short-distance views obtained by northbound travellers and views for southbound travellers and its approaching embankments to Cradlehall and Inshes. Road users travelling on this route are considered to be of medium sensitivity.





Photograph 10.16: View from the A9 at Inshes looking north towards Inverness

- 10.3.34 Other existing local roads overlapped by the ZTV within the study area include:
 - B9006 Culloden Road;
 - U1058 Caulfield Road North;
 - C1032 Barn Church Road; and
 - U5096 Castlehill Distributor Road.
- The B9006 Culloden Road runs in a broadly east to west direction along Inshes bordering Castlehill, Cradlehall and Westhill to the south of the study area. The B9006 Culloden Road is located where the topography rises to give clear views of the Moray Firth and Ben Wyvis with occasional distant views to the agricultural fields to the north. Views to the Inverness Campus are available through housing developments and trees, while the south views are of built up residential areas and the agricultural/rural setting to the south and east of Westhill. Road users travelling on this route are considered to be of medium sensitivity.
- The U1058 Caulfield Road North runs from the B9006 Culloden road at Inshes through Cradlehall and Resaurie to Smithton Road in an east to west direction, running under the Highland Main Line Railway. The road is located at low topography in Inshes where clear open views are available of the rural agricultural fields, Inverness Campus and Inverness Retail and Business Park. As the road works as a boundary between the agricultural setting and built developed area, views to the north are limited due to properties, trees and fencing. Views to the south are mostly built up residential areas with woodland and tree screening. Road users travelling on this route are considered to be of low sensitivity.
- The C1032 Barn Church Road runs from the A96 north of Balloch through Culloden and Smithton to the A96 north of Stratton. The C1032 Barn Church Road users experience mainly open, clear rural views to the north with distant views of the Moray Firth and Ben Wyvis, with woodland and tree planting screening through Culloden, while views to the south are built up residential areas with woodland and tree screening. Road users travelling on this route are considered to be of medium sensitivity.
- The U5096 Castlehill Road runs in a north to south direction linking U1124 Caulfield Road with U1058 Caulfield Road North between Castlehill and Cradlehall. Views looking east from the U5096 Castlehill Road are of the residential development and Cradlehall Business Park, while views looking west towards Inverness are mostly screened by intervening trees and vegetation. Views looking north through trees along U1058 Caulfield Road North are towards Inverness Campus. From the southern stretch of the road where the topography elevates, views of the Moray Firth are available. Road users travelling on this route are considered to be of low sensitivity.



Rail Users

The Highland Main Line Railway runs from north-west to the south-east through the study area on the rural setting, passing from Inverness under the A96 along the Inverness Campus and the Inverness Retail and Business Park through to Cradlehall, Resaurie and Smithton, continuing an eastern route to Balloch before meandering to the south. The Highland Main Line Railway runs through a generally flat landscape along the study area on embankment with associated trackside vegetation which consists of trees and scrub woodland planting that provide screened views with occasional open sections across the flat landscape along the study area. Rail users travelling on this route are considered to be of medium sensitivity.

Cyclists on Designated Routes

- 10.3.40 One National Cycle Network Route (NCR) runs through the study area, namely NCR1. Cyclists travelling on this route are considered to be of high sensitivity.
- 10.3.41 The NCR1 follows the route of U1058 Caulfield Road North running in an east to west direction, through the settlements of Inshes, Cradlehall, Resaurie and Smithton before continuing to Culloden and Balloch.
- The views experienced by cyclists on NCR1 are similar in nature to the views experienced by motorists on the corresponding sections of B9006 Culloden Road and U1058 Caulfield Road North. Additional information on NCR1 is provided in Chapter 16 (People and Communities All Travellers).

Users of Designated Non-Motorised Users (NMU) Routes

- The Great Glen Way is a long-distance route which passes through the Great Glen along the banks of Lochs Lochy, Oich and Ness, and connects Inverness to Fort William. Due to a combination of intervening buildings and landform walkers on the route are unlikely to experience views of the proposed scheme.
- 10.3.44 The study area includes two core paths identified by The Highland Council which would gain views to the proposed scheme, namely:
 - Core path IN08.10 (A96 Aberdeen Inverness Trunk Road to Caulfield Road North by Ashton Farm);
 and
 - Core path IN08.30 (A96 Aberdeen Inverness Trunk Road to existing A96 by Seafield).
- 10.3.45 Core path IN08.10 by Ashton Farm runs in a north to south direction through the rural agricultural fields, connecting the A96 with U1058 Caulfield Road North passing Ashton Farm Farmhouse and Ashton Farm Cottages. Users on this path would be likely to experience varying views to the proposed scheme as they approach and cross the route. Users of this route are considered to be of medium sensitivity. An illustrative view from the core path is provided below in Photograph 10.17.





Photograph 10.17: View from Core Path IN08.10 at Ashton Farm looking south towards the Proposed Scheme and Cradlehall

10.3.46 Core path IN08.30 runs from the Aberdeen to Inverness Railway Line by Seafield to the A96 in a north to south direction. Path users experience views south towards Ashton Farm and the proposed scheme. Users of this route are considered to be of medium sensitivity.

Users of Local, Non-designated NMU Paths

- 10.3.47 A large number of local paths are present in the study area as indicated on Figure 10.3.
- The local path within Inverness Campus runs between Inverness College UHI, An Innis, Pairc a Tuath, student residences and An t-Eilean. Users of this path experience mainly the views of the surrounding buildings and the designed landscape and may experience partial distant views of the proposed scheme. Users of this path are considered to be of high sensitivity.
- 10.3.49 Inverness Campus perimeter path runs in a north to south direction from the Golden Bridge access path along the A9, and then through the Inverness Campus car park entrance to B9006 Culloden Road. The users on this path may experience close views to the A9 southbound lane gain/drop southbound embankment and the proposed Inshes Overbridge (PS02). Users of this route are considered to be of medium sensitivity.
- The local path from Inverness Campus to Inverness Retail Park passes over the Drumrosach railway footbridge over the Highland Main Line Railway. Users would be likely to experience close-range views of the proposed scheme and the proposed Cradlehall Railway Bridge (PS03). Users of this route are considered to be of medium sensitivity.
- The users on the local path from Inverness Campus access road and roundabout to Drumrosach railway footbridge would be likely to experience near views for the proposed scheme and the proposed Cradlehall Railway Bridge (PS03). User of this route are considered to be of medium sensitivity.
- 10.3.52 Views of the proposed Cradlehall Railway Bridge (PS03) would be experienced by users on the local path within Cradlehall. Users of this route are considered to be of medium sensitivity.
- 10.3.53 The users of the local path in Smithton between Sinclair Park and Cranmore Drive would be likely to experience views of the proposed scheme to the north-west. Users of this route are considered to be of medium sensitivity.
- 10.3.54 Additional information on paths within the study area is provided in Chapter 16 (People and Communities All Travellers).



Other Outdoor Receptors Locations

- 10.3.55 The study area includes few visitor attractions where the setting and visual amenity experienced are an aspect of the visit. Key visitor attractions with potential views of the proposed scheme include:
 - The new Golden Bridge over the A9 that connects the community centre local path near Raigmore Hospital with the Inverness Campus perimeter local path;
 - Inverness Campus, including An T-Eilean open air gallery and performance space (illustrated in Photograph 10.18 below); and
 - Culloden Battlefield National Trust for Scotland (NTS) site.
- The Golden Bridge users experience views of Inverness to the west; the A9 to the south; Moray Firth, A9 and Ben Wyvis to the north; Inverness Retail and Business Park to the east and Inverness Campus and, with the rural agricultural background with distant screened views of Cradlehall, Castlehill and Westhill to the south-east. Users of this route are considered to be of high sensitivity.
- 10.3.57 Visitors to Inverness Campus and An T-Eilean open air gallery and performance space have been included as users of the local paths within Inverness Campus, as described above.



Photograph 10.18: An T-Eilean Open Air Gallery and Performance Space within Inverness Campus

10.3.58 Visitors to Culloden Battlefield NTS site and visitor centre currently experience views of Drumossie Moor and are unlikely to experience any views of the proposed scheme based on the analysis of the ZTV data as well as site survey, which confirmed existing screening by built form and vegetation. As such, receptors at this location have been excluded from further assessment.

Consented Development Under Construction

- 10.3.59 A public transport, cyclist and pedestrian bridge is under construction within the study area (as of 5 April 2019) and has been included in the baseline.
- 10.3.60 Construction of the public transport, cyclist and pedestrian bridge stretches from the northern boundary of Inverness Campus, adjacent to the student accommodation, over the railway line and towards the Inverness Retail and Business Park (see photograph 10.19 below). When viewed on site in April 2019 the construction was at an early stage and the bridge structure was not in place. Views of the proposed scheme would likely be limited to the users travelling over the bridge in a westerly direction. The outdoor visual receptors at this location would be of medium sensitivity.





Photograph 10.19: View of the Public Transport, Cyclist and Pedestrian Bridge under construction from Inverness Campus

10.3.61 A high-level, qualitative assessment of potential visual impacts from this visual outdoor receptor has been provided in Section 10.6 (Residual Impacts).

10.4 Potential Impacts

- 10.4.1 This section provides a summary of the potential impacts that could occur during construction and operation of the proposed scheme.
- Potential impacts on visual receptors would arise from construction and operation of the proposed scheme, with the component elements comprising (refer to Chapter 4: The Proposed Scheme and Figure 4.1 for further details of the relevant proposed scheme components):
 - Culloden Road to Cradlehall Roundabout, ch0 to ch306 (hereafter referred to as Link 1);
 - Cradlehall Roundabout to Eastfield Way Roundabout, ch0 to ch644 (hereafter referred to as Link 2);
 - Eastfield Way Roundabout to Inverness Retail and Business Park, ch0 to ch693 (hereafter referred to as Link 3);
 - Eastfield Way Roundabout to proposed A96 Smithton Junction, ch0 to ch1113 (hereafter referred to as Link 4);
 - Cradlehall Roundabout to Inverness Campus, ch0 to ch289 (hereafter referred to as Link 5);
 - Castlehill Road Tie-In, ch0 to ch208 (hereafter referred to as Link 6);
 - the proposed Inshes Overbridge (PS02);
 - · Cradlehall Railway Bridge (PS03) (forms part of Link 2); and
 - the A9 southbound lane gain/lane drop.
- Mitigation of visual impacts is achieved predominantly through refinement of the horizontal and vertical alignment and landscape mitigation design to provide visual interest through planting and Sustainable Drainage System (SuDS) design along the route while screening views of the road from nearby visual receptors and the wider landscape. These mitigation measures are incorporated into the design as described in Chapter 4 (The Proposed Scheme) and as shown on Figure 9.5 (accompanies Chapter 9: Landscape), and as such mitigation measures are embedded into design. It is therefore not practicable to undertake an assessment of the potential visual impacts of construction and the operational scheme in the absence of mitigation.



10.4.4 Visual impacts on built and outdoor receptors are detailed in Appendix A10.1 (Built Receptor Assessment) and Appendix A10.2 (Outdoor Receptor Assessment). Mitigation is outlined in Section 10.5 (Mitigation), with the visual impact assessment taking this mitigation into account set out in Section 10.6 (Residual Impacts) and summarised in Table 10.7.

Construction

- 10.4.5 Construction activities associated with road schemes generally result in temporary adverse landscape impacts. The proposed scheme is likely to result in impacts on visual amenity during construction as a result of:
 - · removal of shelterbelt, hedgerow and scrub vegetation;
 - · vehicles moving machinery and materials to and from the site;
 - machinery potentially including heavy excavators, earth moving plant, concrete batching plant, pile drivers, cranes, etc;
 - exposed bare earth over the extent of the proposed works;
 - structures, earthworks, road surfacing and ancillary works during construction including culvert construction and excavation of SuDS;
 - temporary site compound areas including site accommodation and parking;
 - temporary soil storage heaps and construction materials stockpiles;
 - lighting associated with night-time working and site accommodation;
 - traffic congestion and queuing during work to tie proposed scheme with the existing roads; and
 - temporary works associated with bridge construction operations.
- The significance of impacts depends on the scale and duration of the construction activities and their location in relation to sensitive receptors. In general, the most significant impacts would therefore be likely to occur where major earthworks or structural works are being carried out. Visual intrusion from construction activities can affect views and reduce the enjoyment of the landscape. The locations where these impacts are likely to occur are as follows (from west to east):
 - proposed Inshes Overbridge (PS02) (construction of new lanes and associated earthworks);
 - Cradlehall Roundabout;
 - · Cradlehall Railway Bridge (PS03); and
 - Eastfield Way Roundabout.
- Temporary visual impacts can also occur due to temporary construction compounds. As explained in Chapter 4 (The Proposed Scheme), final details of the phasing of the works, haulage routes and the location of construction compounds are not known at this stage, as these would be determined by the appointed contractor depending on phasing and execution of the works.
- Drainage (SuDS) features would also be required to provide a level of treatment for any surface water runoff during the construction of the proposed scheme. It is anticipated that construction SuDS features would be in similar locations to those associated with the operation of the proposed scheme, as shown on Figure 9.5.

Operation

10.4.9 Potential visual impacts arising from the elements of the proposed scheme and the changes that may affect the views and visual amenity of receptors within the study area, from winter year of opening onwards, are identified as follows:



- alteration of views and visual distraction from the landmarks of the area due to the introduction of new elements including road surface, SuDS, structures, signage, Advance Directional Signs (ADS), and the increased presence and movement of vehicles into an essentially rural landscape;
- increased presence of artificial lighting during the hours of darkness on the proposed scheme with permanent street lighting and lit signage, with additional impact from vehicle headlights on unlit sections of the proposed scheme across open countryside and from temporary lighting during maintenance works;
- · changed appearance of landform due to new soft cuttings, embankments and bridges; and
- alteration to vegetation patterns and field patterns by tree loss and stripping of groundcover vegetation and topsoil, followed by reinstatement and new planting.

10.5 Mitigation

General

- 10.5.1 As mitigation of adverse landscape and visual impacts are closely related and inter-dependent, mitigation of visual impacts would be incorporated in the specific landscape mitigation measures which have been developed in consultation with other disciplines as part of the iterative approach to the DMRB Stage 3 design of the proposed scheme.
- The proposed landscape mitigation measures are described in Section 9.5 (Mitigation) of Chapter 9 (Landscape) (Mitigation Items LV-01 to LV-28) and in paragraphs 10.5.8 to 10.5.11 below (Mitigation Item LV-28), with landscape planning proposals shown on Figure 9.5.
- Landscape mitigation is concerned primarily with mitigation of adverse impacts. Those assessed as being of Moderate or greater significance were considered to represent key landscape changes where mitigation would generally be required to avoid or reduce impacts, where practicable.
- 10.5.4 Landscape mitigation proposals that assist in reducing visual impacts include the retention and management of existing vegetation where possible and planting of new vegetation to screen views and reflect and reinforce existing landscape character, including individual trees, woodland areas, scrub and hedgerows.
- 10.5.5 The application of the above as specific mitigation measures for individual receptors is provided in Appendix A10.1 (Built Receptor Assessment) and A10.2 (Outdoor Receptor Assessment).
- 10.5.6 Cross-sections indicating the relationship between the proposed scheme and various visual receptors, together with mitigation proposals, are shown on Figure 9.6.
- 10.5.7 Mitigation measures are taken into account for winter year of opening, when integrated landscape earthworks and other built screening elements are in place but before new planting has become established. The impacts of the proposed scheme are also assessed for the summer 15 years after opening when mitigation planting would be established. The former is intended to represent the 'maximum effect' scenario and the latter the 'least effect' scenario for permanent impacts.

Lighting

- The introduction of artificial lighting from road lighting and other fixtures may create or contribute to light pollution in the form of sky glow, glare and / or light trespass / spill. It is therefore beneficial to minimise these potential adverse impacts on landscape character and protect views of dark skies in rural areas.
- 10.5.9 Where lighting is essential, it has been incorporated as part of the DMRB Stage 3 design of the proposed scheme such that the impacts on the night sky are minimised. The design seeks to reduce or avoid excessive, unnecessary and obtrusive lighting by appropriate selection, location and arrangement of lighting elements to achieve the necessary safety standards of useful light, while minimising intrusiveness in the form of spillage, glare and reflection.



- To limit light pollution from the proposed street lights, Light Emitting Diodes (LEDs) or similar which can be dynamically controlled according to traffic flows will be utilised on the proposed scheme. This form of lighting, known as 'Full Cut Off' lighting, directs light of appropriate strength where it is needed and controls the unwanted dispersion of obtrusive artificial light by eliminating the emission of light upwards. This choice of luminaire also enables maximum spacing between lighting columns and ensures that the minimum amount of lighting is used, without compromising safety.
- 10.5.11 Special attention will be given to minimising the landscape and visual impacts of the lighting columns and fixings and to prevent unnecessary glare or light spill. LEDs or similar providing a directional light source with minimal light spillage will be used and consideration will be given to use of low height flat beam lighting fixtures (**Mitigation Item LV-28**).

10.6 Residual Impacts

- The potential impacts reported in this section are assessed in the context of the existing receptors identified through the baseline assessment provided in Section 10.3 (Baseline Description and Evaluation). A high-level, qualitative impact assessment has been provided for 'emerging' receptor locations (i.e. sites under construction) in this Section as a detailed quantitative assessment was not possible because of their incomplete state. For details of numerical references for built receptors, refer to Figure 10.2 and Appendix A10.1 (Built Receptor Assessment). For outdoor receptors, refer to Figure 10.3 and Appendix 10.2 (Outdoor Receptor Assessment).
- It is recognised that the proposed scheme is within an area where large-scale development is planned, as identified in the local development plan and supplementary guidance. In the future the proposed scheme is anticipated to be located within a landscape which has undergone substantial change; the existing (mainly agricultural) land becoming urbanised as an eastern expansion of the City of Inverness. In this situation, it is likely that impacts resulting from the proposed scheme on visual amenity would be experienced from properties, routes and public spaces within these developments. These impacts are likely to be of a greater magnitude (and subsequently significance) for receptor locations in proximity to the proposed scheme, and/or receptor locations with open views towards the proposed scheme. The impacts, however, are likely to be influenced (potentially reduced) by any structured planting implemented within the development land allocations, potentially reducing impacts on the visual amenity of receptors within the expansion. The potential cumulative impacts of the proposed scheme incombination with other committed/reasonably foreseeable developments are assessed in Chapter 19 (Assessment of Cumulative Effects).
- 10.6.3 As noted in Section 10.2 (Methodology), visual impacts reported in this chapter are considered adverse unless otherwise stated.
- The visual impact assessment for built receptors and outdoor receptors is presented together with details of proposed mitigation measures in Appendix A10.1 (Built Receptor Assessment) and Appendix A10.2 (Outdoor Receptor Assessment). This information is summarised in Table 10.7 to show the total number of receptors affected to different degrees in the winter year of opening and residual impacts by summer 15 years after opening.
- The results of the visual impacts assessment are summarised below and illustrated on Figure 10.2 for built receptors and Figure 10.3 for outdoor receptors. The summaries include reference to landscape types/areas shown on Figure 9.1, where they are appropriate to the context of the visual impact assessment.
- 10.6.6 Visualisations are provided in Figures 10.5 to 10.11, alongside photographs showing the existing views. They are a combination of photomontages produced for illustrative purposes only; they have not been used to inform the visual assessment. They illustrate the proposed change to the landform in views of the proposed scheme and provide indicative views of the proposed scheme once mitigation planting and seeding has become established. The locations of the viewpoints are shown on Figure 10.4.



General

- 10.6.7 While the gently rolling topography and vegetation line patterns within the proposed scheme area would slightly limit ground level visual impacts, the topography rise to the south-east would allow receptors at a distance to be affected. These impacts would be often limited due to views being screened by neighbouring built and vegetation features.
- The large-scale earthworks would affect the visual amenity in the more immediate rural areas, the most significant impact would occur to properties at Ashton Farm and properties across Inshes, Cradlehall and Resaurie as a result of the introduction of the proposed scheme in close proximity to these areas into the largely undeveloped rolling farmland.
- 10.6.9 When assessing magnitude and sensitivity, the impacts of road lighting and headlights have been taken into account.

Operation

Built Receptors

General

The following section provides a summary of the detailed visual impact assessment presented in Appendix A10.1 (Built Receptor Assessment) for built receptors and highlights those locations which are likely to experience significant residual impacts.

Cradlehall. Smithton and Westhill

- Visual impacts on receptors located around Cradlehall, Smithton and Westhill (including Castlehill and Resaurie) range from Moderate/Substantial to Negligible, depending on their location and the screening by existing landscape features and/or built elements.
- 10.6.12 Residents at Castlehill House and Castlehill Gardens (receptors 20 and 21) would experience Moderate impacts in the winter of the year of opening as a result of the introduction of Link 1, 5 and 2 in addition to the introduction of the Cradlehall Roundabout in close proximity. These would reduce to Slight in the summer 15 years after opening after the mixed and riparian woodland and heavy standard tree mitigation planting has been established.
- 10.6.13 People at Cradlehall Business Park South (receptor 25) would experience Slight/Moderate impacts in the winter of the year of opening while Cradlehall Business Park West (receptor 23) would experience Moderate impacts due to the partially screened views of Link 1, 2 and 5, the proposed SuDS feature, mammal fencing and the introduction of Cradlehall Roundabout and associated lighting and signage. These impacts would reduce to Slight and Slight/Moderate respectively in the summer 15 years from opening after the heavy standard tree planting and mixed woodland and scrub mitigation planting has established.
- Moderate impacts would be experienced during the winter of the year of opening at Cradlehall Business Park East (receptor 24) as a result of the introduction of the proposed Link 2 and 5, the proposed Cradlehall Roundabout and associated lighting to the immediate north-west of this location and the proposed SuDS feature and mammal fencing. The establishment of heavy standard, avenue tree planting as well as mixed and riparian woodland and scrub planting and SuDS designed to integrate with surrounding landform would reduce the impacts to Slight in the summer after 15 years.
- 10.6.15 Residents in the Castlehill area likely to experience impacts include receptors 26, 27, 28, 29 and 30 (numbers 13, 17 to 29 and 2 to 20 Castlehill Drive, 6 to 18 Castlehill Court and 16 to 30 Castlehill Park). All of these receptors would experience Slight/Moderate impacts during winter of the year of opening as a result of screened views of Link 1, 2, 5 and associated earthworks as well as the introduction of Cradlehall Roundabout, SuDS feature and mammal fencing. These impacts are likely to reduce to Slight



in the summer 15 years after opening following the establishment of mixed and riparian woodland, scrub and individual heavy standard trees as mitigation planting.

- 10.6.16 Impacts on Cradlehall Farmhouse (receptor 31) would be Slight during winter of the year of opening due to the partial distant views of Link 2 and associated embankments and Cradlehall Railway Bridge (PS03). These impacts are likely to be reduced to Negligible in the summer 15 years after opening following the establishment of mixed woodland, scrub and individual heavy standard tree planting.
- Residents in 1 to 16 Cradlehall Meadows (receptors 32, 33, 34 and 35) are likely to experience Moderate/Substantial impacts during winter of the year of opening due to their close proximity to the proposed Cradlehall Railway Bridge (PS03), Link 2 and associated embankment, SuDS and mammal fencing with the properties along the southwest edge of this group (receptor 33) also gaining partial views of Link 1 and 5, Cradlehall Roundabout and Link 6. The significance of these impacts would reduce to Moderate in the summer 15 years after opening following the establishment of mixed and riparian woodland, scrub and individual heavy standard tree mitigation planting.
- Moderate/Substantial impacts would also be experienced by residents in Cradlehall Farm Drive (receptor 36) due to the slightly elevated location of the properties and their proximity to Link 2 and Cradlehall Railway Bridge (PS03) and associated embankments, although views would be partially screened by the properties in Cradlehall Meadows. These impacts would reduce to Moderate in the summer 15 years from opening after the establishment of mixed and riparian woodland, scrub and individual heavy standard tree mitigation planting.
- People at a group of properties in Cradlehall off U1058 Caulfield Road North (receptors 37, 38 and 39) would experience Moderate impacts during the winter of the year of opening as a result of Cradlehall Railway Bridge (PS03), Link Roads 2, 3 and 4, Eastfield Way Roundabout and associated embankments and mammal fencing. These impacts would reduce to Slight/Moderate for receptor 37 and Slight for receptors 38 and 39 in the summer 15 years from opening following the establishment of mixed woodland, scrub and individual heavy standard tree mitigation planting.
- 10.6.20 Residents at Bridgehouse and Tigh-nan-Eisdeoran in Resaurie (receptor 45) would experience Moderate impacts during the winter of the year of opening due to the introduction of the proposed Link 2 and 4, associated embankments, lighting and mammal fencing and the introduction of the Cradlehall Railway Bridge (PS03). These impacts would reduce to Slight/Moderate in the summer after 15 years following the establishment of mixed woodland and heavy standard tree planting.
- 10.6.21 Residents at three groups of properties to the north of U1058 Caulfield Road North in Resaurie (receptors 46, 47 and 48) would experience Moderate/Substantial impacts as a result of gaining mostly open views of Link 2, 3 and 4, Cradlehall Railway Bridge (PS03), Eastfield Way Roundabout and the associated embankments, traffic, signage and lighting. The impacts are likely to reduce to Moderate in the summer 15 years after opening following the establishment of mixed and riparian woodland, heavy standard tree and hedgerow planting.
- 10.6.22 Residents in Resaurie at no.12 Resaurie, Manse and Spillwood (receptor 49) would experience Moderate impacts in the winter of the year of opening due to the introduction of Link 2, 3 and 4, Cradlehall Railway Bridge (PS03), Eastfield Way Roundabout and the associated embankments. These impacts are likely to be reduced to Slight in the summer after 15 years once the mixed woodland and heavy standard tree planting has been established.
- 10.6.23 Residents at a group of properties in Towerhill Drive (receptor 50), Kenneth Place (receptor 52), Towerhill Crescent (receptor 54), Woodlands Crescent and properties along the northern end of Woodlands Walk (receptor 62), Woodside Drive (receptor 63), Woodlands Park (receptor 64) and Westfield Walk and Woodside Village (receptor 65) would all experience Slight impacts in the winter of the year of opening due to the distant partial views of Link 2, 3 and 4, the associated lighting and the introduction of the Cradlehall Railway Bridge (PS03) and Eastfield Way Roundabout. These impacts would be reduced to Negligible in the summer 15 years after opening following the establishment of mixed and riparian woodland and individual heavy standard trees.



- 10.6.24 Residents at group of properties in Towerhill Place (receptor 51) would experience Negligible/Slight impacts in the winter of the year of opening due to the distant partial views of Link 2, 3 and 4, Cradlehall Railway Bridge (PS03), Eastfield Way Roundabout and the associated traffic, lighting and signage. These impacts would be reduced to Negligible in the summer 15 years after opening following the establishment of mixed and riparian woodland and individual heavy standard trees.
- The proposed scheme would be visible from dwellings in Rowan Grove and Rowan Court in Resaurie (receptor 55) and from Clonberg, Brookside and Lylowen in Smithton (receptor 56), where receptors would experience Slight/Moderate impacts during the winter of the year of opening due to the introduction of Link 2, 3 and 4, Cradlehall Railway Bridge (PS03), Eastfield Way Roundabout and associated traffic, embankments, lighting and signage. The impacts on these receptors would reduce to Slight in the summer after 15 years once the mixed and riparian woodland, individual heavy standard tree and hedgerow planting has become established.
- Slight impacts would be experienced from a group of properties (no. 17 to 39) along Cranmore Drive in Smithton (receptor 57), while residents of other properties in the same street (receptors 58 and 59) would experience Slight/Moderate impacts during the winter of the year of opening as a result of the distant views of Link 4, Eastfield Way Roundabout and Cradlehall Railway Bridge (PS03). These impacts would be reduced to Negligible/Slight for receptor 57 and to Slight for receptors 58 and 59 during the summer 15 years from opening after the mixed and riparian woodland, individual heavy standard tree and hedgerow planting has been established.
- People at a group of properties in Sinclair Park in Smithton (receptors 60 and 61) would experience Slight impacts during the winter of the year of opening as a result of distant views of Link 4. These impacts are likely to reduce to Negligible for receptor 60 and Negligible/Slight for receptor 61 during the summer 15 years after opening after the individual heavy standard tree and hedgerow mitigation planting has become established.
- 10.6.28 People at properties in Leanach Gardens and Trentham Drive and Court in Westhill (receptor 53) would experience Negligible/Slight impacts during the winter year of opening as a result of distant partially screened views of the proposed scheme. These impacts are likely to reduce to Negligible during the summer 15 years after opening after mixed and riparian woodland, scrub and individual heavy standard tree planting has become established.

Inverness Campus

- To the north-west of the study area people in Inverness Student Residences and Life Science buildings (receptors 8 and 9) would experience Slight impacts in the winter year of opening due to the potential woodland loss associated with the A9 southbound lane gain/lane drop. Impacts would reduce to Negligible in the summer after 15 years after the establishment of the mixed woodland mitigation planting.
- 10.6.30 People at Inverness Campus Enterprise and Research Centre and Inverness College UHI building (receptors 10 and 11) would experience Moderate impacts due to the potential woodland loss associated with the A9 southbound lane gain/lane drop, the Proposed Inshes Overbridge (PS02), Link 5, and 3 and distant views of Cradlehall Railway Bridge (PS03) and Cradlehall Roundabout. These would reduce to Slight/Moderate in the summer 15 years after opening following the establishment of mixed woodland, individual tree and hedgerow mitigation planting.

Inverness Retail and Business Park

Link 3 and 2 and Cradlehall Railway Bridge (PS03) would be visible from Stoneyfield House Business Park, 1 Highlander Way and Inverness Retail and Business Park (receptors 12, 13 and 14) resulting in Slight impacts in the winter of the year of opening. In the summer 15 years from opening, after the mixed and riparian woodland, hedgerow and heavy standard tree planting have become established, these impacts would be reduced to Negligible/Slight for receptors 12 and 13 and to Negligible for receptor 14.



Inshes

- 10.6.32 People at Inshes Retail Park (receptor 4) would experience Negligible/Slight impacts in the winter of the year of opening due to limited views of the proposed Inshes Overbridge (PS02). This would reduce to Negligible in the summer 15 years after opening following the establishment of scrub and individual tree mitigation planting.
- 10.6.33 Residents of Fernbank and Corriemhor (7a Inshes Holdings) (receptor 5) and 7 Inshes Holdings and Bernera (receptor 6) would experience Negligible/Slight and Moderate impacts respectively in the winter of the year of opening resulting from partially screened views of the proposed Inshes Overbridge (PS02). Impacts would reduce to Negligible and Slight/Moderate respectively in the summer 15 years after opening following the establishment of scrub and individual tree planting.
- 10.6.34 People at 6a Inshes Holdings (receptor 15) would experience Moderate impacts in the winter of the year of opening due to the proximity to the proposed Inshes Overbridge (PS02) and associated embankment. These impacts are likely to reduce to Slight/Moderate in the summer 15 years from opening following the establishment of individual trees and scrub planting.
- 10.6.35 People at 6 Inshes Holdings (receptor 16) and 5a Inshes Holdings (receptor 17) at the edge of Inshes would be likely to experience Slight/Moderate and Slight impacts respectively during the winter of the year of opening due to the proposed Inshes Overbridge (PS02) and associated embankment. Impacts would be reduced to Slight and Negligible respectively in the summer 15 years after opening once scrub and tree planting matures.
- 10.6.36 People at Dell of Inshes and Ardachy (receptor 7) would have partially screened views of the proposed Inshes Overbridge (PS02) and associated embankment, which would cause Slight/Moderate impacts during the winter year of opening. By the summer after 15 years following the establishment of scrub and tree planting, impacts would reduce to Slight.
- People at Craggan Valley (receptor 71) would experience open views of proposed Inshes Overbridge (PS02), Link 1 and 5 and associated embankments and filtered views of Cradlehall Roundabout and Link 2, which would result in Moderate impacts during the winter year of opening. These would reduce to Slight by the summer after 15 years following the establishment of mixed and riparian woodland, scrub, hedgerows and individual tree planting.
- Negligible impacts would be experienced by Inshes House (receptor 19) and Simpsons Garden Centre (receptor 18) during the winter of the year of opening as result of the Proposed Inshes Overbridge (PS02) and associated embankment in the distance. The residual impacts during the summer 15 years after opening would remain Negligible due to the properties elevated position and the distance from the proposed scheme.
- Slight/Moderate impacts would be experienced by people at the Scottish SPCA Animal Rescue and Rehoming Centre and Inshes Veterinary Centre (receptor 67) during the winter of the year of opening due to the introduction of Link 1, 5, 6 and Cradlehall Roundabout. The residual impacts during the summer after 15 years would reduce to Slight as proposed heavy standard tree planting becomes established.
- Slight impacts would be experienced by people at 4a and 4b Inshes Holdings (receptors 68 and 69) and Slight/Moderate impacts would be experienced at Tor Beag, 5 Inshes Holdings (receptor 70) due to the introduction of Link 1 and 5. The residual impacts would reduce to Negligible/Slight and Slight respectively during the summer 15 years after opening once the mixed woodland and heavy standard tree planting becomes established.

Raigmore and Beechwood Business Park

10.6.41 People at Raigmore Hospital (receptor 1) and Beechwood Business Park and Beechwood Business Park North (receptors 2 and 3) would experience Slight impacts during winter year of opening due to the A9 southbound lane gain/lane drop and the introduction of the Cradlehall Roundabout, Links 1, 2,



3, 4 and 5, earthworks, traffic, signage and lighting into their views to the east. By the summer after 15 years the establishment of the mixed woodland and individual tree planting would reduce the impacts to Negligible/Slight.

Culloden

At the eastern edge of the study area, residents at dwellings 6 to 21 MacLean Court (receptor 66) would obtain distant views of Eastfield Way Roundabout and limited views of Link 4 due to the screening provided by the existing woodland along Cairnlaw Burn and would experience Negligible/Slight impacts during the winter year of opening as a result. By the summer after 15 years the establishment of individual heavy standard tree and hedgerow mitigation planting would reduce impacts to Negligible.

Scattered Properties

- People at The Scottish Vet Referrals (receptor 22) would gain open views of the proposed Link 1, 2, 3 and 5, the proposed Cradlehall Roundabout, Cradlehall Railway Bridge (PS03) and the associated embankments and mammal fencing, resulting in Moderate impacts during the winter of the year opening. These impacts would reduce to Slight/Moderate in the summer after 15 years following the establishment of the mixed woodland and riparian woodland and heavy standard tree and hedgerow planting.
- The properties at Ashton Farm Cottages and Ashton Farm Farmhouse (receptors 40 and 41) would experience Substantial impacts during the winter of the year of opening. This is due to the open views and the close proximity of Link 3 and 4, the introduction of Eastfield Way Roundabout and associated earthworks, lighting, signage, traffic, SuDS features and mammal fencing. These impacts are likely to reduce to Moderate in the summer 15 years after opening following the establishment of mixed and riparian woodland planting, individual heavy standard tree and hedgerow planting.
- 10.6.45 Residents at properties at Seafield (receptor 42) would experience Slight impacts in the winter of the year of opening due to the distant views to Link 2, 3 and 4. These would likely reduce to Negligible in the summer after 15 years once the mixed and riparian woodland, individual heavy standard tree and hedgerow planting has been established.
- Residents at Roseacre, The Brambles and Firth View (receptor 43) would experience Negligible impacts in the winter of the year of opening as a result of distant views of Link 2, 3 and 4 and Cradlehall Railway Bridge (PS03). These impacts would remain Negligible in the summer 15 years after opening.
- Negligible impacts would also be experienced by residents at Stratton Farm Cottage (receptor 44) both in the winter of the year of opening and in the summer 15 years from opening given the views of the proposed scheme are screened by the intervening existing woodland along Cairnlaw Burn.

Consented Development under Construction

- The potential visual impacts reported in this section are qualitative only and are deemed appropriate solely for those developments which are consented and under construction within the study area as of 5 April 2019, in line with approach set out in Section 10.2 (Methodology), with the visual receptors identified as outlined in Section 10.3 (Baseline Description and Evaluation) i.e. the Culloden House Care Home, Phase 1A of the Stratton development, life sciences building in Inverness Campus and residential property and garage at Resaurie.
- The potential impacts on visual receptors on the Culloden House Care Home are likely to be significant due to the open and elevated nature of the views towards the proposed scheme and the close proximity of the nearest sections of the proposed scheme including Cradlehall Roundabout and Link 1, Link 2 and Link 5. The proposed planting scheme associated with the Culloden House Care Home development as detailed in the planning application is not yet on the ground but is unlikely to screen views towards the proposed scheme from the first and second floor, though it may provide partial screening of views from the ground floor. In addition, the landscape mitigation measures associated with the proposed scheme would provide additional screening of the earthworks and traffic helping to reduce the potential



impacts on visual receptors in this location. It is predicted that by summer 15 years from opening once the mixed and riparian woodland, scrub and heavy standard tree mitigation planting has become established impacts on visual amenity would reduce to below significant.

- 10.6.50 The potential impacts on visual receptors within the Stratton Phase 1A development are unlikely to be significant due to the intervening distance from the proposed scheme, the partial screening provided by existing vegetation and the landscape proposals included as part of the Stratton Phase 1A application as well as the landscape mitigation measures associated with the proposed scheme.
- As the Life sciences building at Inverness Campus, Solasta House, is located adjacent to receptors 8 and 9 it would likely experience the same Slight impact in winter year of opening due to the potential loss of woodland associated with the A9 southbound lane gain/lane drop. By summer after 15 years impacts would reduce further as mitigation woodland establishes.
- The dwelling under construction in Dell of Inshes is located within a group of existing properties (receptor 7) and is likely to experience similar visual impacts to them. These are assessed as Slight/Moderate in the winter of the year of opening. Reducing to Slight by the summer 15 years from opening, once the mitigation tree and scrub planting has become established.
- The residential property and garage at Resaurie is located within a group of five existing dwellings identified as receptor 46. It is anticipated that on completion the property would experience similar visual impacts to the existing properties in this location. These are assessed as Moderate/Substantial in the winter of the year of opening due to open views of the proposed scheme, reducing to Moderate but remaining significant by summer 15 years after opening when mitigation woodland and heavy standard trees will have become established and mature.

Outdoor Receptors

General

The following descriptions summarise the results of the visual impact assessment and highlight the predicted significant (Moderate and above) residual impacts on outdoor receptors. For detailed information on the impacts, mitigation and residual significance for all assessed receptors refer to Appendix A10.2 (Outdoor Receptors). In general, the greatest impacts would be experienced by the users of routes that the proposed scheme severs or crosses and those located immediately adjacent to the proposed scheme.

Roads Users

- 10.6.55 Castlehill Road users (receptor O5) would experience Slight/Moderate impacts during the winter of the year of opening as a result of the proposed Link 1, 2, 5, and 6 and the introduction of the Cradlehall Roundabout and associated SuDS feature. These impacts would reduce to Slight by the summer 15 years after opening following the establishment of the mixed and riparian woodland and individual heavy standard tree planting and seeding.
- The A9 users (receptor O2) would experience Slight impacts during winter of the year opening after the introduction of the Proposed Inshes Overbridge (PS02) and the A9 southbound lane gain/lane drop and associated SuDS features. These impacts are likely to reduce to Negligible/Slight in the summer 15 years after opening following the establishment of replacement roadside mixed woodland planting.
- 10.6.57 C1032 Barn Church Road users (receptor O10) would experience Slight impact in the winter of the year opening. The impacts would reduce to Negligible by the summer 15 years after opening following the establishment of individual heavy standard tree planting.
- Slight/Moderate impacts would be experienced by users of the B9006 Culloden Road (receptor O3) and U1058 Caulfield Road North (receptor O4) (partially re-routed as a result of the proposed scheme, refer to Figure 16.2) in the winter of the year of opening as a result of Link 1, 2, 3 and 5, proposed Inshes Overbridge (PS02), Cradlehall Roundabout and Cradlehall Railway Bridge (PS03) and the associated



embankments, SuDS features, mammal fencing, traffic, signage and lighting. These impacts would be reduced to Slight in the summer 15 years after opening following the establishment of mixed and riparian woodland, scrub and individual heavy standard and feathered tree planting and seeding.

Users of the A96 (receptor O8) would experience Slight impacts during the winter of the year of opening as a result of the filtered glimpses of Link 4 and 3 and Eastfield Way Roundabout. These impacts would reduce to Negligible/Slight by the summer 15 years after opening following the establishment of individual heavy standard trees, mixed and riparian woodland and hedgerow planting.

Rail Users

Travellers on the Highland Main Line Railway (receptor O6) would experience Moderate impacts during the winter of the year opening as a result of open views of the proposed scheme. The impacts would reduce to Slight by the summer 15 years after opening following the establishment of mixed woodland, individual heavy standard trees, hedgerows and seeding.

Cyclists on Designated Routes

10.6.61 Cyclists on National Cycle Route 1 (receptor O1) (partially re-routed as a result of the proposed scheme, refer to Figure 16.2) would experience Moderate impacts during the winter of the year of opening as a result of the introduction of the Link 1, 2, 3 and 5, proposed Inshes Overbridge (PS02), Cradlehall Roundabout and Cradlehall Railway Bridge (PS03). These impacts would reduce to Slight by the summer 15 years after opening following the establishment of hedgerows, mixed and riparian woodland, scrub, individual feathered and heavy standard tree planting and seeding.

Users of Designated NMU Routes

- The proposed scheme would have varying visibility from core path IN08.10 (receptor O7). Users of this core path would experience Moderate/Substantial impacts during winter of the year of opening as a result of the introduction of the proposed Link 3, 4 and 2 and the introduction of Eastfield Way Roundabout and Cradlehall Railway Bridge (PS03). These impacts would reduce to Moderate by the summer 15 years after opening, following the establishment of hedgerows, mixed woodland, individual heavy standard tree planting and seeding.
- The impacts are predicted to be Negligible/Slight during the winter of the year of opening for users of core path IN08.30 (receptor O9) as a result of the proposed Link 4 and 3. Impacts would be reduced to Negligible in the summer 15 years after opening following the establishment of individual heavy standard trees, riparian woodland and seeding.

Users of Local, Non-designated NMU Paths

- Users of the local path from Inverness Campus access road and roundabout to Drumrosach Footbridge (receptor O17) (partially re-routed as a result of the proposed scheme, refer to Figure 16.2) would experience Moderate/Substantial impacts during the winter of the year of opening due to the close proximity of the proposed Link 1, 2 and 5 and associated earthworks in addition to the Cradlehall Railway Bridge (PS03). These impacts would reduce to Moderate by the summer 15 years after opening, following the establishment of mixed and riparian woodland, hedgerow and individual heavy standard tree planting and seeding.
- Moderate impacts would be experienced by users of the local path from Inverness Campus to Inverness Retail and Business Park (receptor O12) due to the introduction of Link 1, 2, 3 and 5, Cradlehall Roundabout, Cradlehall Railway Bridge (PS03) and associated embankments, traffic, signage and lighting. The impacts would reduce to Slight by the summer 15 years after opening following the establishment of hedgerow, mixed and riparian woodland individual heavy standard tree planting.
- 10.6.66 Users of the local path from Inverness Retail and Business Park to Smithton Junction Southern Roundabout (receptor O18) (partially re-routed as a result of the proposed scheme, refer to Figure 16.2) would experience Moderate impacts during the winter of the year of opening due to the introduction of



- Link 4. These impacts would reduce to Slight/Moderate by the summer 15 years after opening following the establishment of mixed woodland mitigation planting.
- 10.6.67 Users of the Inverness Campus perimeter path (receptor O11) would experience Slight impacts as a result of A9 southbound lane gain/lane drop. These impacts would reduce to Negligible by the summer 15 years after opening following the establishment of mixed woodland planting and seeding.
- 10.6.68 Users of the Local path within Inverness Campus (receptor O13) would experience Slight impacts as a result of A9 southbound lane gain/lane drop, Cradlehall Railway Bridge (PS03), Cradlehall Roundabout, Links 1, 2 and 5 and associated embankments, traffic, signage and lighting. These impacts would reduce to Negligible by the summer 15 years after opening following the establishment of mixed woodland, scrub, hedgerows and individual heavy standard tree planting and seeding.
- 10.6.69 Users of Local path in Cradlehall (receptor O15) would also experience Slight impacts due to Link 2 and Cradlehall Railway Bridge (PS03). These impacts would be reduced to Negligible by the summer 15 years after opening after individual tree and mixed woodland planting has been established.
- 10.6.70 Users of Local path in Smithton between Sinclair Park and Cranmore Drive (receptor O16) would experience Negligible/Slight impacts as a result of distant views of Link 4. These impacts would be reduced to Negligible by the summer 15 years after opening once the individual heavy standard tree planting and seeding have been established.
- 10.6.71 Impacts experienced by users at the Golden Bridge (receptor O14) would be Slight/Moderate as a result of the views gained towards the A9 southbound lane gain/lane drop and associated signage, lighting and potential loss of vegetation to the immediate south combined with more distant views to the rest of the proposed scheme. The impacts would be reduced to Slight after the individual heavy standard trees and mixed woodland mitigation planting have been established.

Consented Development under Construction

Users of the public transport, cyclist and pedestrian bridge are unlikely to experience significant visual impacts as potential views of the proposed scheme would be restricted by surrounding vegetation and buildings. It is anticipated that on completion of the bridge only users travelling in a westerly direction are likely to gain partial views of vehicles travelling along the A9. This would occur due the potential loss of existing vegetation adjacent to the A9 southbound lane gain/land drop. It is expected that any initial insignificant visual impacts would reduce further over time as replacement woodland planting establishes and matures.

10.7 Statement of Significance

- This section provides a summary of the DMRB Stage 3 visual assessment of impacts for both built and outdoor receptors during the winter of the year of opening and the summer 15 years after opening the proposed scheme taking into account the proposed mitigation measures incorporated in the design (e.g. alignment, design elements), in addition to the mitigation measures described in Section 9.5 of Chapter 9 (Landscape). It should be noted that at the time of writing the total number of built receptors, as individual properties, is 674, and for the purposes of the assessment these were grouped into receptor groups (71 separate receptor groups).
- The DMRB Stage 3 visual assessment has identified a number of likely impacts on built and outdoor receptors associated with the proposed scheme, as shown in Table 1 in Appendices A10.1 and A10.2 respectively. A summary of all the assessed impacts of visual receptors is provided in Table 10.7 below.



Table 10.7: Summary of Residual Impacts During Operation

Receptor Type	Total No. of Receptors (as individual properties) and % of	Operational Impacts Significance								Total Significant Impacts (Moderate o above)							
	Total (674)	Subst	tantial	Mode Subst	erate/ tantial	Mod	erate		ght/ erate	Sli	ght	_	gible/ ght	Negli	gible	WYO	S15 YO
		Winter of the Year of Opening	Summer 15 Years after Opening	Winter of the Year of Opening	Summer 15 Years after Opening	Winter of the Year of Opening	Summer 15 Years after Opening	Winter of the Year of Opening	Summer 15 Years after Opening								
Built	674	3	0	35	0	44	38	123	22	205	145	259	39	5	430	82	38
Built	100%	0.4%	0%	5.2%	0%	6.5%	5.6%	18.2%	3.3%	30.4%	21.5%	38.4%	5.8%	0.7%	63.8%	12.2 %	5.6%
Outdoor	18	0	0	2	0	4	2	4	1	6	7	2	2	0	6	6	2
Outdoor	100%	0%	0%	11%	0%	22%	11%	22%	6%	33%	39%	11%	11%	0%	33%	33%	11%



- Views from 82 individual properties (built receptors) (approximately 12%) and at six outdoor receptor locations (33%) would be significantly affected (Moderate impact or greater) during the winter of the year of opening of the proposed scheme.
- By the summer 15 years after the proposed scheme opening, the establishment of landscape mitigation, mostly in the form of new mixed and riparian woodland, scrub and individual heavy standard and feathered tree planting, would reduce the total number of significant impacts on views from individual built receptors to 38 (5.6%) as indicated in Table 10.8.

Table 10.8: Summary of Significant Impacts on Built Receptors in Summer 15 Years after Opening (Moderate and above)

Built Receptor No.	Receptor Name	No. and Type (dw=dwelling/s, c=commercial)	Impacts in Summer 15 Years after Opening
32	5 to 7, 9 to 11 Cradlehall Meadows	6no. dw	Moderate
33	1 to 4 Cradlehall Meadows	4no. dw	Moderate
34	8 Cradlehall Meadows	1no. dw	Moderate
35	12 to 16 Cradlehall Meadows	5no. dw	Moderate
36	2 to 10 Cradlehall Farm Drive	5no. dw	Moderate
40	Ashton Farm Cottages	2no. dw	Moderate
41	Ashton Farm Farmhouse	1no. dw	Moderate
46	Annfield, Goodwood, The Stables (1 and 2) and Galloway Lodge (Group of properties in Resaurie)	5no. dw	Moderate
47	Rockyle, The Birches and an Unnamed property (Group of properties in Resaurie)	2no. dw	Moderate
48	Aira, No. 3, 3a, 4 and 5 Caulfield Road North, Ashville and Cornriggs (Group of properties in Resaurie)	7no. dw	Moderate

10.7.5 For outdoor receptor locations, the total number of significant impacts would reduce to two (11%) by the summer 15 years after opening, as indicated in Table 10.9.

Table 10.9: Summary of Significant Impacts on Outdoor Receptors in Summer 15 Years after Opening (Moderate and above)

Outdoor Receptor No.	Receptor Name	Type (f=footpath, c=cycleway, r=road)	Impacts in Summer 15 Years after Opening
07	Core path IN08.10 (A96 Aberdeen - Inverness Trunk Road to Caulfield Road North by Ashton Farm)	f	Moderate
017	Local path from Inverness Campus access road and roundabout to Drumrosach Footbridge	f	Moderate

10.8 References

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