9 Landscape

This chapter presents the landscape assessment of the A9/A96 Inshes to Smithton scheme (the proposed scheme) and is linked to the assessment of visual impacts which are set out in Chapter 10 (Visual). The assessment has been undertaken following Design Manual for Roads and Bridges (DMRB) guidance and the Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3), taking account of the results of scoping and consultation.

A study area of up to 3km from the proposed scheme was defined following an appraisal of the theoretical visibility. The baseline conditions were established through desk-based assessment, mapping of Zone of Theoretical Visibility (ZTV), site surveys and consultation. The existing landscape is described and classified into eight Local Landscape Character Areas (LLCAs). These are areas of distinctive character which assist in the evaluation of the sensitivity of the landscape and the development of mitigation proposals, the proposed scheme principally falling within the Enclosed Farmed Landscapes LLCA.

Potential impacts of the proposed scheme on landscape receptors would arise from construction activities such as the removal of vegetation, and changes to the landform in addition to the construction of structures and earthworks (for example the Cradlehall Railway Bridge). Potential impacts on the character of the landscape would also arise from the operation of the proposed scheme.

To mitigate potential impacts on the landscape resource mitigation measures have been developed through an iterative design process. These measures include the careful alignment of the proposed scheme to avoid or reduce potential impacts on landscape elements and features and achieve a good landscape 'fit'. They also include woodland, tree line / avenue and hedgerow planting to integrate the proposed scheme into the landscape. While these measures are designed to reduce the impacts on the landscape resulting from the proposed scheme, they are also intended to accord with the aspirations set out in the Inverness East Development Brief in anticipation that the character of the landscape either side of road corridor is likely to become more urban in nature as the aspirations of the Development Brief are fulfilled.

The assessment of impacts on landscape receptors took into account the proposed mitigation, considering the proposed scheme in the winter of the year of opening (when planting has been implemented but has not established) and in the summer, 15 years after opening (when the proposed planting would be reasonably established). Impacts from the construction and operation of the proposed scheme are predicted to occur on the Enclosed Farmland Landscapes LLCA, the Inverness Campus (Mixed-Use) LLCA, Inverness Urban Fringe and Culloden LLCA and the Inverness - Nairn Transport Corridor LLCA.

In the winter of the year of opening it is predicted that significant direct impacts would occur on the Enclosed Farmed landscapes (Moderate/Substantial) and Inverness Campus (Mixed-Use) LLCA (Moderate). These impacts would be due largely to the introduction of the road, the formation of earthworks, and the introduction of associated structures and other infrastructure, including new junctions / roundabouts. These would result in changes to the landcover, the loss of natural topographic features, the loss of mature and established woodland and the loss of farmland.

As planting establishes and the proposed scheme becomes more integrated into the landscape it is predicted that residual impacts would reduce. As such, for the Enclosed Farmed Landscapes LLCA, the residual impact is predicted to reduce to Moderate in summer after 15 years and impacts on the Inverness Campus (Mixed-Use) LLCA would reduce to Slight.

9.1 Introduction

9.1.1 This chapter presents the Design Manual for Roads and Bridges (DMRB) Stage 3 Environmental Impact Assessment (EIA) for the A9/96 Inshes to Smithton scheme (hereafter referred to as the proposed scheme) in relation to impacts on the landscape resource.

9.1.2 The chapter is supported by the following figures:

- Figure 9.1: Local Landscape Character and Landscape Designation Plan;
- Figure 9.2: Proposed Scheme on Aerial Photography;
- Figure 9.3: Landscape Features in Vicinity of the Proposed Scheme;
- Figure 9.4a: Local Landscape Character Areas with Zone of Theoretical Visibility (bare-earth model);

- Figure 9.4b: Local Landscape Character Areas with Zone of Theoretical Visibility (including heights of buildings and vegetation);
- Figure 9.5: Landscape and Ecological Mitigation;
- Figure 9.6: Cross-sections; and
- Figure 10.5 to 10.11: Visualisations.

9.1.3 The chapter is also supported by the following appendices:

- Appendix A9.1 (Local Landscape Character Areas);
- Appendix A9.2 (Landscape Design Objectives); and
- Appendix A9.3 (SuDS Design Principles).

9.1.4 The assessment of impacts on the landscape resource is primarily concerned with changes to:

- specific landscape features and elements;
- the overall pattern of the elements, which together define the landscape character and local regional distinctiveness;
- areas of particular interest and/or value, such as designated landscapes, conservation sites and cultural associations; and
- perceived characteristics of the landscape, such as tranquillity and remoteness.

9.1.5 Impacts are assessed for both the winter year of opening (when all the 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 the landscape).

9.1.6 Further considerations that specifically inter-relate with this landscape assessment are addressed separately as follows:

- Chapter 10 (Visual): assessment of impacts on the visual amenity and views experienced by people from publicly accessible outdoor locations and nearby buildings, including residential properties.
- 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.
- Chapter 16 (People and Communities: All Travellers): assessment of the views from the proposed scheme, as they would be experienced by vehicle travellers.

9.1.7 The assessments reported in Chapters 11 (Ecology and Nature Conservation) and 14 (Cultural Heritage) also inform this chapter; the design of Sustainable Drainage Systems (hereafter referred to as SuDS) and associated planting is influenced by ecological considerations and cultural designations such as Scheduled Monuments and Listed Buildings contribute to the assessment landscape character.

Legislative and Policy Background

9.1.8 Appendix A18.1 (Planning Policy Context for Environmental Assessment) describes the planning policies and guidance from national to local level which are relevant to landscape. 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).

9.2 Methodology

General

9.2.1 The landscape assessment was undertaken based on the guidance provided by DMRB Interim Advice Note (IAN) 135/10 IAN Landscape and Visual Effects Assessment (Highways Agency, Transport Scotland, Welsh Assembly Government and the Department for Regional Development Northern Ireland 2010) (hereafter referred to as IAN 135/10) 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).

9.2.2 GLVIA 3 is a more recently published guidance document than IAN 135/10 and provides greater clarity with regard to:

- 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 impact.

9.2.3 The approach to the assessment has also been informed by Fitting Landscapes: Securing more Sustainable Landscapes (Transport Scotland 2014) and Planning Advice Note (PAN) 1/2013: Environmental Impact Assessment Revision 1.0 (Scottish Government 2017).

9.2.4 The assessment has been undertaken based on the existing land use / character up until the 5 April 2019 and this date is inferred in the statement ‘at the time of writing’. This date was selected in order to allow for the preparation of the assessment, including the development and incorporation of the landscape mitigation proposals prior to submission. Further details on the existing land use within the study area are provided in Chapter 5 (Overview of Assessment).

9.2.5 A staged approach to the assessment has been adopted comprising:

- scoping and consultation, including agreement of the approach to the assessment as noted above;
- baseline assessment - a description of the landscape resource within the study area following desk-based study and site surveys;
- assessment of the value, susceptibility and sensitivity of the landscape resource;
- assessment and description of potential impacts arising from the proposed scheme, and their likely impacts upon the landscape resource;
- 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 the winter of the year of opening and the summer 15 years from opening, once the mitigation planting will have become established).

9.2.6 In accordance with IAN 135/10 separate assessments were undertaken for the following scenarios:

- in the winter of the proposed year of opening, 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, which represents a maximum-impact situation (in comparison to a 'do-nothing scenario'), before any planted mitigation can take effect; and
- in the summer 15 years after the proposed year of opening, taking account of the completed project (including embedded mitigation) in addition to the traffic using it, which represents a reduced-impact scenario, where any planted mitigation measures can be expected to be effective.

9.2.7 It should be noted that a detailed pre-mitigation landscape impact assessment has not been undertaken, since the landscape mitigation is largely an intrinsic part of the proposed scheme design. Residual

impacts that take mitigation into account are described in relation to the winter of the year of opening and summer after 15 years scenarios. These are reported in Section 9.6 (Residual Impacts), along with an indication of the degree to which mitigation planting has reduced impacts between the two scenarios.

Scoping and Consultation

9.2.8 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. The scoping report was submitted in June 2018.

9.2.9 Consultation has been undertaken throughout the DMRB Stage 3 assessment process, including consultation with The Highland Council, Scottish Natural Heritage (SNH), Highlands and Islands Enterprise (HIE) and Historic Environment Scotland (HES).

9.2.10 Further information on the scoping and consultation for the landscape assessment is provided in Chapter 6 (Consultation and Scoping).

Study Area

9.2.11 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 survey a study area extending to 3km from the proposed scheme has been adopted for the landscape assessment as shown in Figure 9.1. The size of the study area was based on professional experience and judgement and encompasses the area within which significant impacts on landscape receptors could potentially arise. Whilst it is possible that there may be some impacts on perceptual qualities of the landscape 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

9.2.12 To aid the assessment of impacts within the study area, two ZTVs have been prepared for the proposed scheme 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 centre line (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, in order to take into account the movement of traffic, including heavy goods vehicles.

9.2.13 The first ZTV (Figure 9.4a) has been produced using a 'bare-earth' digital terrain model (DTM) and does not take into account screening or filtering of visibility by existing built features or vegetation; these were identified during subsequent site survey work and are considered in the assessment. 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 9.4b) has been prepared using a Digital Surface Model (the Environment Agency's Light Detection and Ranging (LIDAR) data available under Open Government Licence from data.gov.uk) which takes into account 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.

9.2.14 It should be noted, as indicated in Figure 9.4b, 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). However, site surveys have confirmed the likely nature of visibility from these locations and informed the assessment.

Baseline Conditions

9.2.15 The first stage of the assessment was to establish the baseline landscape resource against which subsequent change as a result of the proposed scheme can be identified. Baseline conditions for the study area have been established through desk-based and site surveys, details of which are presented in Section 9.3 (Baseline Description and Evaluation).

9.2.16 Baseline landscape conditions are those that exist at the time of desk and site surveys, but also take into account 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 the associated mitigation measures such as planting which are assumed to be reasonably established), since the proposed scheme is entirely dependent on the existence of this scheme, in particular the presence of the proposed A96 Smithton Junction. The potential changes to the landscape resulting from proposed residential, mixed-use or transport developments for which planning consent has been granted and construction has commenced are also taken into account in the assessment. These primarily relate to the Phase 1A of the Stratton development at the northern end of the proposed scheme, the Culloden House Care Home at Cradlehall, the Solasta House life science building in Inverness Campus and the public transport, cyclist and pedestrian bridge linking the northern end of Inverness Campus with Inverness Retail and Business Park. Further details of the planning consents / developments that are under construction are provided below under 'Consented Development under Construction'.

Desk-based Assessment

9.2.17 Information gathered for the landscape assessment reported in Part 3, Chapter 11 (Landscape and Visual) of the A9/A96 Inshes to Smithton DMRB Stage 2 Assessment Report (Jacobs 2017) was reviewed in addition to the following information sources:

- 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;
- Historic Environment Scotland (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 East Development Brief (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

9.2.18 The surveys were carried out by a team of landscape architects on foot and by car. Data was collected on landscape elements and characteristics, as well as photographs of key landscape features likely to be physically affected and photographs to/from key viewpoints within landscapes from which views of the proposed scheme would be likely.

9.2.19 The field surveys, undertaken between January and February 2018 and in January, March and April 2019, were carried out from publicly accessible locations and from private land where approved by the landowner. All surveys were undertaken by a minimum of two landscape architects.

Consented Development under Construction

9.2.20 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 (Phases of Stratton Development) which accompanies Chapter 5 (Overview of Assessment).

9.2.21 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 9.6 (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).

9.2.22 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.

9.2.23 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 9.2.22.

9.2.24 In addition to above, construction is underway on the following, which have been included within the baseline for the landscape 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

9.2.25 As detailed below, significance of impact has been assessed based on the sensitivity to change of the landscape resource including elements and character, and the magnitude of change that would result from the construction and operation of the proposed scheme.

Sensitivity to Change

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

Landscape Susceptibility

9.2.27 Susceptibility is defined in GLVIA3 as 'the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies' (paragraph 5.40, page 88). The susceptibility of landscape receptors to change was assessed using the criteria detailed in Table 9.1, along with professional judgement (where applicable, intermediate levels of medium-to- high or low-to-medium may be used).

Table 9.1: Landscape Susceptibility Criteria

Susceptibility	Criteria
High	The landscape is unlikely to accommodate the proposed change without undue consequences.
Medium	The landscape is likely to be able to accommodate the proposed change albeit with some consequences.
Low	The landscape will be able to accommodate the proposed change with little or no consequences.

Landscape Value

9.2.28 GLVIA3 defines landscape value as *'the relative value that is attached to different landscapes by society…'* (Glossary, page 157). *'Value can apply to areas of landscape as a whole, or to the individual elements, features and aesthetic or perceptual dimensions which contribute to the character of the landscape*' (paragraph 5.19, page 80). A review of existing designations (e.g. National Scenic Area (NSA), Special Landscape Area (SLA) etc.) is usually the starting point in understanding value, although it should be noted that value and / or associated susceptibility may not necessarily be uniform across a designated area. Other designations such as those aimed at aspects of the historic environment (Conservation Areas, Listed Building/ Structures) and non-statutory recognition of particular types of environment (such as Gardens and Designed Landscapes) may also influence landscape value. There may also be situations where an undesignated landscape is of value and/or has susceptibility in local terms. Table 9.2 sets out the relative importance of generic landscape designations and descriptions.

Table 9.2: Criteria for Assessing Value of Designated Landscapes

Designation	Description	Value
World Heritage Sites	Unique sites, features or areas identified as being of international importance according to UNESCO criteria. Consideration should be given to their settings, especially where these contribute to the special qualities for which the landscape is valued.	Inter-national/ national
National Parks, National Scenic Areas	Areas of landscape identified as being of national importance for their Natural Beauty (and in the case of National Parks the opportunities they offer for outdoor recreation).	
Historic Environment Scotland (HES) Inventory of Gardens and Designed Landscapes	Gardens and designed landscapes included in the Inventory.	
Local Landscape Designations identified in local planning documents (such as Special or Local Landscape Areas, Areas of Great Landscape Value and similar), Conservation Areas.	Areas of landscape identified as having importance at the local authority level.	Local

9.2.29 Establishing the value of undesignated areas requires examination of individual elements of the landscape. A number of criteria were considered to help determine value as detailed in Table 9.3 and an overall assessment was made for each receptor in terms of high, medium and low value.

Table 9.3: Criteria for Assessing Value of Non-Designated Landscapes

Attribute	Description
Landscape Quality (Condition)	A measure of the physical state of the landscape; its intactness and the condition of individual elements.
Scenic Quality	General appeal of the landscape to the senses.
Rarity	The presence of rare elements, features or landscape types.
Representativeness	Characteristic/feature/element considered a particularly important example.
Conservation/ Cultural Interest	The presence of wildlife, earth science or cultural heritage interest which contributes positively to the landscape.
Recreation Value	Evidence that the landscape is valued for recreational activities where experience of the landscape is important.
Perceptual Aspects	Evidence that a landscape is valued for its wildness/tranquillity.
Associations	Relevant associations with notable figures, such as writers or artists, or events in history that contribute to landscape value.

Source: Landscape Institute and the Institute for Environmental Management and Assessment (2013).

Evaluation of Landscape Sensitivity

9.2.30 The sensitivity to change of the landscape was assessed on a scale of high, medium or low (or, where applicable, intermediate levels of medium-to-high or low-to-medium sensitivity). Table 9.4 presents the criteria used together with professional judgement in the evaluation of landscape sensitivity, based on consideration of both susceptibility and value.

Table 9.4: Landscape Sensitivity Criteria

Sensitivity	Criteria
High	Landscape elements of particularly distinctive character, which are highly valued and considered susceptible to relatively small changes. Landscapes which by nature of their character and value would have very limited capacity to accommodate change of the type proposed.
Medium	Landscape of moderately valued characteristics considered reasonably tolerant of change. Some ability to accommodate the proposed change without undue detriment. Landscapes which by nature of their character and value would be able to partly accommodate change of the type proposed.
Low	Landscape of generally low-valued characteristics considered potentially tolerant of substantial change. Landscapes which by nature of their character and value would be able to accommodate change of the type proposed.

Magnitude

9.2.31 As noted in GLVIA3, the magnitude of landscape impacts was considered in terms of size or scale, the geographical extent of the area influenced, duration and reversibility.

Size or Scale

9.2.32 The size and / or scale of change in the landscape takes into consideration the following factors:

- the extent / proportion of landscape elements lost or added;
- the contribution of that element to landscape character and the degree to which aesthetic/ perceptual aspects are altered; and
- whether the change is likely to alter the key characteristics of the landscape, which are critical to its distinctive character.

Geographical Extent

9.2.33 The geographical area that may experience landscape impacts can generally be considered at the following scales:

- proposed scheme level;
- the immediate setting of the proposed scheme;
- the landscape character area that the proposed scheme would lie within; or
- across several landscape character areas where influences occur on a larger scale.

Duration and Reversibility

9.2.34 In accordance with GLVIA3, consideration is also given to the duration and reversibility of landscape impacts in the evaluation of magnitude. The duration of impacts is assessed on the following scale:

- short-term: under 1 year;
- medium-term: 1 to 15 years; and
- long-term: over 15 years.

Evaluation of Magnitude

9.2.35 Magnitude of change was assessed on a scale of high, medium or low, (or where applicable, intermediate levels of Medium / High or Low / Medium magnitude), taking account of the degree of landscape change that would occur as a result of the proposed scheme, as described in Table 9.5.

Table 9.5: Landscape Impact Magnitude

Magnitude	Criteria
High	Notable change in landscape characteristics over an extensive area ranging to very intensive change over a more limited area of long-term duration and largely irreversible.
Medium	Minor changes in landscape characteristics over a wide area ranging to notable changes in a more limited area.
Low	Minor or virtually imperceptible change in any area or to any components of the landscape.
None	No perceptible change to the landscape resource.

9.2.36 The permanent impacts of the proposed scheme are considered to be of long-term duration and largely irreversible, thus increasing magnitude. However, temporary construction phase impacts, for example those arising from haul roads, are often short-term and reversible and thus likely to have a lower magnitude of change.

Impact Significance

9.2.37 The degree of significance of landscape impact has been determined through professional judgement including consideration of both the sensitivity of the landscape receptors and the predicted magnitude of change as a result of the proposed scheme. These are defined as being Negligible, Slight, Moderate or Substantial as shown in Table 9.6 below.

9.2.38 Impacts assessed as being of Moderate significance or greater are considered to constitute significant changes to the fabric, character and / or quality of the landscape, and mitigation would generally be required to reduce these where practicable. Impacts of Moderate significance or greater are also considered as being significant in the context of the EIA regulations.

Table 9.6: Significance of Landscape Impacts

Level of Impact	Criteria
Substantial	Adverse: The proposed scheme would be at considerable variance with the character (including quality and value) of the landscape, degrade or diminish the integrity of a range of characteristic features or elements or damage a sense of place. Beneficial: The proposed scheme would enhance the character (including quality and value) of the landscape, create an iconic high-quality feature and/or series of elements, or enable a sense of place to be created or enhanced.
Moderate	Adverse: The proposed scheme would conflict with character (including quality and value) of the landscape, have an adverse impact on characteristic features or elements or diminish a sense of place. Beneficial: The proposed scheme would improve the character (including quality and value) of the landscape, enable the restoration or characteristic features and elements partially lost or diminished by inappropriate management or development or enable retention/creation of some sense of place.
Slight	Adverse: The proposed scheme would not quite fit the character (including quality and value) of the landscape, be at variance with characteristic features and elements, or detract from a sense of place. Beneficial: The proposed scheme would complement the character (including quality and value) of the landscape, maintain or enhance characteristic features and elements, and enable some sense of place to be restored.
Negligible	The proposed scheme would maintain the character of the landscape, blend in with characteristic features and elements, and enable a sense of place to be retained.

Direct and Indirect Impacts

9.2.39 Direct and indirect landscape impacts are defined in GLVIA3. Direct impacts result directly from the development itself (i.e. the proposed scheme) whilst indirect impacts are a secondary impact that is a consequential / perceptual change resulting from the development.

Limitations to Assessment

9.2.40 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, though the latter are likely to be the subject of separate planning applications. There is an acknowledgement that construction activities associated with road schemes are short-term and generally result in temporary adverse landscape impacts. The assessment is based on assumptions on where the most likely significant, although short-term, impacts from construction activities may result. Those identified include the construction of junctions, new bridge structures, the demolition of existing 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 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 landscape impacts would be of greater significance than those assessed for the winter year of proposed scheme opening.

9.2.41 The evaluation of Landscape Character Areas within the study area has been undertaken based on existing land use / character up until 5 April 2019. 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 has been assessed in Chapter 15 (People and Communities: Community and Private Assets).

9.3 Baseline Description and Evaluation

General

9.3.1 This section identifies the landscape receptors of the study area, taking account of the geological, cultural and historical influences and identifies any designated or protected areas. The baseline assessment focuses on the following receptors:

- landscape and other designations;
- landscape character;
- landscape elements and features; and
- settlement and built elements.

9.3.2 Landscape receptors identified within the study area are shown on Figures 9.1 to 9.3 and a general overview of the existing landscape is provided below in Photographs 9.1 to 9.7. The baseline reflects the conditions identified within the study area up to 5 April 2019.

Regional Context

9.3.3 The initial study area is largely contained by the Aberdeen to Inverness Railway Line to the north, C1032 Barn Church Road to the north-east, Culloden Moor to the east, the city of Inverness to the west and Drumossie Moor to the south. The study area contains the newly constructed designed landscape of Inverness Campus as well as high quality farmland, retail and educational facilities and substantial, largely residential, development to the south and west.

Designations

National Landscape Designations

Inventory Gardens and Designed Landscapes

9.3.4 Gardens and Designed Landscapes (GDL) are listed within the Inventory of Gardens and Designed Landscapes and are designated by HES. Two sites that contribute to the character of the landscape, are located within the study area, namely; Culloden House and Leys Castle.

9.3.5 Culloden House GDL is located approximately 1km to the east of the eastern end of the proposed scheme. It is enclosed by the village of Culloden and only the core of the designed landscape remains intact, the wider grounds having given way to urban development during the 20th century. Nevertheless, the integrity of the core area, including its mature trees, makes an important contribution to the character of the surrounding suburban landscape.

9.3.6 The intervening built form surrounding the designation and vegetation east of U1124 Caulfield Road as well as Culloden Wood would screen all views towards the proposed scheme from within this designated landscape and prevent any indirect impact on the designation's landscape features. Therefore, Culloden House GDL has not been considered further in this assessment.

9.3.7 Leys Castle GDL is located approximately 2km to the south-west of the western end of the proposed scheme. The policy woodlands and shelterbelts of the GDL make an outstanding contribution to the character of the landscape to the south of Inverness and the GDL forms part of the city's backdrop. The intervening built form of Inshes and vegetation to the north-east of the designation would screen all views towards the proposed scheme. Therefore, the Leys Castle GDL has not been considered further in this assessment.

Other National Designations

Ancient Woodland

9.3.8 Areas of woodland identified on the Ancient Woodland Inventory (AWI) fall within the study area. None of them would be affected by felling associated with the proposed scheme.

Biodiversity and Geology

9.3.9 The Moray Firth Special Area of Conservation (SAC) overlaps the study area, at closest 680m to the north of the proposed scheme. SACs are designated to protect internationally important threatened habitats and species. There is one Site of Special Scientific Interest (SSSI) protected for its biological characteristics located within the study area (Longman and Castle Stuart Bays SSSI). The Inner Moray Firth Ramsar sites, designated for protection of wetlands and birds, also falls within the study area boundary, and this is also designated as a Special Protection Area (SPA). Further detail on these sites is provided in Chapter 11 (Ecology and Nature Conservation).

Scheduled Monuments

9.3.10 Several Scheduled Monuments are located within the study area. Where these monuments have a particular influence upon the character of the landscape they have been referenced within this chapter where appropriate. Further details of Scheduled Monuments are provided in Chapter 14 (Cultural Heritage).

Historic Battlefields

9.3.11 Nationally important battlefields are listed within the Inventory of Historic Battlefields and designated by HES. Culloden Battlefield lies within the 3km radius study area. Further information on this is provided in Chapter 14 (Cultural Heritage). In respect of landscape impacts there would be no direct impacts on landscape elements and features within the Battlefield. Furthermore, it is predicted that owing to the separation of the proposed scheme from the Battlefield and presence of intervening vegetation and settlement, indirect impacts are unlikely to be significant. In this regard the Battlefield has not been assessed further.

Local Designations

Tree Preservation Orders

9.3.12 Trees covered by Tree Preservation Orders (TPOs) are key elements within the landscape and although not individually referred to, they have been taken into account in the assessment. The locations of TPOs within the study area are shown on Figure 9.3. No direct, physical alterations to any TPOs are anticipated

due to the proposed scheme; however, their contribution to the character and value of the landscape has been considered.

9.3.13 In addition to trees covered by TPOs there are several lines of mature deciduous trees within the study area which are also of high landscape value and of amenity value to the local community, for example the line of mature deciduous trees (mainly oak with some beech and ash) on U1058 Caulfield Road North adjacent to Cradlehall Business Park and the avenue of mature beech trees leading to Castlehill House. These trees contribute to the character of the landscape and influence its value and sensitivity to change.

Conservation Areas

9.3.14 Conservation Areas are listed within The Highland-wide Local Development Plan (HwLDP) (The Highland Council 2012). Four Conservation Areas are located within the 3km study area; Inverness Riverside, Inverness Crown, Culloden House Policies and Culloden Muir. Each of these conservation areas contribute to the character of the landscape within the study area, however, as they would not be directly affected by the proposed scheme. It is also unlikely that there would be any significant indirect impacts due to their limited inter-visibility with the proposed scheme and they have not been considered further in this assessment.

Geology, Landform and Drainage

9.3.15 The study area lies to the south of the Moray Firth and encompasses a range of landscapes with a common south-west to north-east topographical grain. The Moray Firth coastline primarily consists of depositional landforms such as long sand and shingle beaches backed by low raised shorelines and sand dune systems.

9.3.16 The wide coastal plain is formed from Old Red Sandstone and is underlain with thick glacial deposits which provide an undulating landform of rich arable farmland and areas of free draining gravels which tend to be forested.

9.3.17 To the south of the coastal plain, the land rises and Highland schists and granite form the northern foothills of the Cairngorms, comprising smooth rolling hills covered by extensive moorlands and forestry.

9.3.18 The largest river within the study area is the River Ness, which runs through Inverness City Centre along the western edge of the study area. Other notable waterbodies include Cairnlaw Burn and Scretan Burn, and the Inverness Campus central SuDS / water features including Lochan Gorm and Lochan an Eilean.

Historic and Cultural Associations

9.3.19 Much of the landscape that is visible today has evolved as a result of long-term human influence and settlement. The first recorded inhabitants of the area were neolithic people who originally settled in the area because of fertile flood plains and light, free-draining soils. The population further increased with an influx of Celtic Iron Age settlers, who introduced tools to clear woodland and increase settlement; the remains of hill forts from this period are evident, as well as the remains of agricultural crofting systems. A network of military roads created in the early 18th century helped bring the region in touch with the rest of the country. By the end of the 19th century, the familiar agricultural landscape of the area had largely formed. The introduction of the Caledonian Canal, a railway system, and extensive improvements to roads greatly increased the number of visitors in the area.

9.3.20 During the 20th century there were new developments in forestry, urban expansion, housing, and industry. The most significant change during the 20th century was the growth in tourism, particularly in the summer months. The study area contains major rail and road networks for access to the wider region and these are critical to the continued growth of tourism.

9.3.21 There are numerous cultural associations with places in the 3km study area. The city of Inverness to the west of the proposed scheme is known as a gateway to world-famous Loch Ness with its legendary monster, Nessie. Culloden Moor is the site of Culloden Battlefield (16th April 1746) between Jacobite and Hanoverian forces, the last land battle in Britain. The recent adaptation of Diana Gabaldon's novels, the Outlander television series, which follows the Jacobite Rising of 1745, has become a global

phenomenon, with National Trust for Scotland and other organisations offering tours of the battlefield and Outlander filming locations.

Vegetation

9.3.22 Vegetation cover within the study area varies to reflect the natural influences of local geology, landform, microclimate, drainage, soil, colonisation and biodiversity and the influence of humans on land use and management. The predominant type of vegetation cover comprises improved grassland, arable land and small amounts of native deciduous trees and woodland. Deciduous woodland is established in patches along watercourses demarcating field boundaries. Extensive areas of heathland and gorse are located along the coastal edge. Distinctive tree lines along field boundaries are also present within the study area including the mature beech avenue that runs along the southern boundary of Stratton Lodge Road.

9.3.23 Improved grassland and arable land are predominantly positioned within the open, flat, Enclosed Farmed Landscapes Local Landscape Character Area (LLCA). The Inverness Campus Designed Landscape LLCA comprises a mix of extensive grassland, water features and deciduous trees and hedges.

9.3.24 The Coastal Lowlands Forest Edge Farming LLCA is characterised by gently undulating land, improved grassland, coniferous woodland and rectilinear field patterns.

Settlement and Land Use

9.3.25 To the north-west of the study area lies the eastern periphery of Inverness which is dominated by industrial and commercial developments including the Inverness Retail and Business Park, with individual residential properties scattered between the larger scale developments.

9.3.26 To the east of Inverness, the satellite villages of Smithton, Culloden and Balloch lie to the south of the A96 Aberdeen – Inverness Trunk Road (hereafter referred to as the A96), slightly elevated on slopes facing the Moray Firth and backed by Culloden Forest.

9.3.27 The new Inverness Campus located immediately to the west of the proposed scheme opened to the public in May 2015. It is a nationally and internationally significant location for business, research and education. In addition to providing a home for research and education departments for Scotland's newest university, the University of the Highlands and Islands (UHI), it is a high-quality environment for learning, innovation, collaboration and commerce. The Scottish Government considers Inverness Campus to be one of Scotland's key development opportunities and the Campus enjoys the Enterprise Area status for Life Sciences. With over 30 acres of parkland featuring distinctive and inspiring design, Inverness Campus provides access for the local community and the general public to a high quality public amenity. The new 'Golden Bridge' landmark provides a pedestrian and cycle link from Inverness Campus to the city of Inverness over the A9 Perth – Inverness Trunk Road (hereafter referred to as the A9).

9.3.28 Changes to settlement patterns and land use are predicted to occur within the study area with the implementation of the Inverness East Development Brief. These changes are primarily concerned with the expansion of existing residential areas, such as Smithton and Culloden, north, into the neighbouring farmland landscapes. In 2011 planning permission in principle was granted for a mixed-use Stratton New Town development to be located to the north-east of the study area, with construction of Phase 1A of the Stratton development currently in progress. Infrastructure related to Phase 1 of development, approved in May 2017, included the widening of a section of the C1032 Barn Church Road; this was viewed as complete during the April 2019 site visit.

Landscape Character Assessments

9.3.29 The 3km study area is covered by five Landscape Character Types (LCTs) defined by Scottish Natural Heritage (SNH) in the Inner Moray Firth Landscape Character Assessment (Fletcher 1998). At the time of writing these LCTs include:

- Enclosed Farmed Landscapes LCT;

- Intensive Farming LCT;
- Forest Edge Farming LCT;
- Enclosed Firth LCT; and
- Larger Urban Settlements.

9.3.30 The SNH Inverness District Landscape Assessment (Richards 1999) identified two LCTs within the 3km study area as follows:

- Rolling Farmland and Woodland LCT; and
- Urban - Inverness.

9.3.31 The majority of the proposed scheme passes through the Enclosed Farmed Landscapes LCT.

Enclosed Farmed Landscapes LCT

9.3.32 The key characteristics of the Enclosed Farmed Landscapes LCT are described in in the Inner Moray Firth Landscape Character Assessment (Fletcher 1998) as follows:

- *'Flat to gently undulating lowlands, of firths and river flood plains.*
- *Strong linear pattern of trees, draws the eye, giving an indication of scale and distance, due to the low angle views over the flat land.*
- *A simple landscape composition of geometric fields enclosed by mature deciduous tree lines, creating a series of rooms.*
- *The towering trees, glimpses of prominent buildings and the formal effect of regularly spaced trees, give a sense of grandeur and wealth.*
- *The deciduous trees give a range of colours and texture, increasing landscape diversity locally and providing seasonal variation.*
- *The presence of different tree species (e.g. Foulis beech trees, the Lovat oaks) associated with the estates helps to give a strong sense of place.*
- *The typical rural settlement as farms placed well off the main road, enclosed within irregular groups of mature deciduous trees that link into the avenue structure.*
- *Farm settlements consist of a variety of buildings, the vernacular usually being low and long in an 'L' or 'E' shape, around which are placed more recent barns.*
- *A dominant feature readily associated with this landscape type is the large house or castle. The scale and grandeur of the building is heightened by its prominent position in the landscape, with the tops of the building often rising above the mature tree canopy, and ornamental gates marking its existence at the roadside.*
- *The remnants of the designed landscape associated with these buildings can still be recognised; dense policy woods create a dark backdrop behind the house, whilst in front formal gardens and parkland allow views to be gained from the house.*
- *On the flatter land, developments encroach upon the smooth, rectangular fields and tree lines, replacing them with urban forms of wide open, curved streets and shapes and scales of buildings which contrast with the existing farm and estate architecture.'*

Local Landscape Character Assessments

9.3.33 In addition to the LCTs defined by SNH, a further landscape character assessment had been undertaken for part of the proposed scheme study area, namely the A96 Corridor Landscape Assessment (Entec UK Limited 2004).

9.3.34 All of the existing landscape character assessments have been reviewed and supplemented by data collected through both desk-based and field assessment to enable the LCTs to be refined by Jacobs at a more local scale as Local Landscape Character Areas (LLCAs).

9.3.35 These LLCAs are smaller scale units which better reflect local variations in character, take account of the recent changes in the landscape (such as new-built development and road corridors) and provide a level of detail appropriate to the scale of the proposed scheme in terms of evaluating sensitivity and assessing landscape impact.

9.3.36 The location and extent of the LLCAs are shown on Figure 9.1 and listed in Table 9.7, with summary descriptions provided in the following paragraphs. Detailed descriptions of the LLCAs together with an assessment of their value, susceptibility and sensitivity are contained in Appendix A9.1 (Local Landscape Character Areas). Figure 9.3 shows landscape features which illustrate built, topographical and natural elements together with key landmarks and views within the study area. Urban areas are identified but not classified within the SNH landscape character assessments. In refining LCTs to a more local scale within the study area, urban areas have been identified as LLCAs; however the extent of visibility of the proposed scheme from these urban LLCAs is limited except for their outer edges.

Table 9.7: SNH Landscape Character Types and Local Landscape Character Areas

SNH Classification / LCT (Fletcher 1998)	SNH Classification / LCT (Richards 1999)	LLCA	Sensitivity
Larger Urban Settlements and Forest Edge Farming	Urban - Inverness	Inverness Urban Fringe and Culloden	Low
Larger Urban Settlements	Urban - Inverness	Inverness City Centre	High
Enclosed Farmed Landscapes	Urban - Inverness	Inverness Campus (Mixed-Use)	Medium
Enclosed Farmed Landscapes	Enclosed Farmed Landscapes	Enclosed Farmed Landscapes	Low to Medium
Enclosed Farmed Landscapes	Enclosed Farmed Landscapes	Inverness-Nairn Transport Corridor	Low
Coastal Lowlands Intensive Farming	Coastal Lowlands Intensive Farming	Coastal Lowlands Intensive Farming	Low to Medium
Coastal Lowlands Forest Edge Farming	Coastal Lowlands Forest Edge Farming	Coastal Lowlands Forest Edge Farming	Low to Medium
Enclosed Firth	Enclosed Firth	Enclosed Firth	Medium

9.3.37 There would be no direct impacts on the Inverness City Centre, Enclosed Firth, Coastal Lowlands Forest Edge Farming and Coastal Lowlands Intensive Farming LLCAs, owing to the presence of intervening features and the limited influence the proposed scheme would exert on the defining characteristics and features of these LLCAs. As such, it is unlikely that there would be any significant indirect impacts on the LLCAs from the proposed scheme and therefore they have not been considered further in this assessment.

9.3.38 The remaining four LLCAs within the 3km study area are described below.

Enclosed Farmed Landscapes LLCA

9.3.39 This LLCA comprises mostly flat large scale agricultural fields within a remnant estate landscape. Mature trees and blocks of woodland limit views to the Moray Firth. The A96 is intrusive in places.

9.3.40 The key features of the LLCA can be summarised as being:

- flat to gently undulating lowlands;
- simple landscape composition of geometric fields enclosed by mature deciduous tree lines;
- deciduous trees give a range of colours and textures that change with the seasons;
- farm settlements enclosed by mature trees are dispersed throughout the landscape;
- on flatter land, developments encroach on the field network; and
- the urban architecture forms a contrast to the existing farm and estate buildings.

9.3.41 An illustrative view of the Enclosed Farmed Landscapes LLCA is provided below in Photograph 9.1.

Photograph 9.1: View from southern end of Core Path IN08.10 looking north-west towards the Moray Firth and the Black Isle

9.3.42 While the LLCA is well defined at the time of this assessment, changes to the LLCA are predicted to occur as a result of the expansion of Inverness as described and set out in the Inverness East Development Brief. If fully realised, this would result in the loss of farmland and conversion of the agricultural landscapes to suburban development. This change to the LLCA is beginning to occur, with construction begun on the Stratton Phase 1A mixed use development and the Culloden House Care Home at Cradlehall. As indicated in Figure 9.1, both of these developments will essentially extend the extent of the Inverness Urban Fringe and Culloden LLCA north towards the Moray Firth, reducing the prevalence of the Enclosed Farmed Landscapes LLCA within the study area.

Inverness Campus (Mixed-Use) LLCA

9.3.43 The defining features of the LLCA can be summarised as:

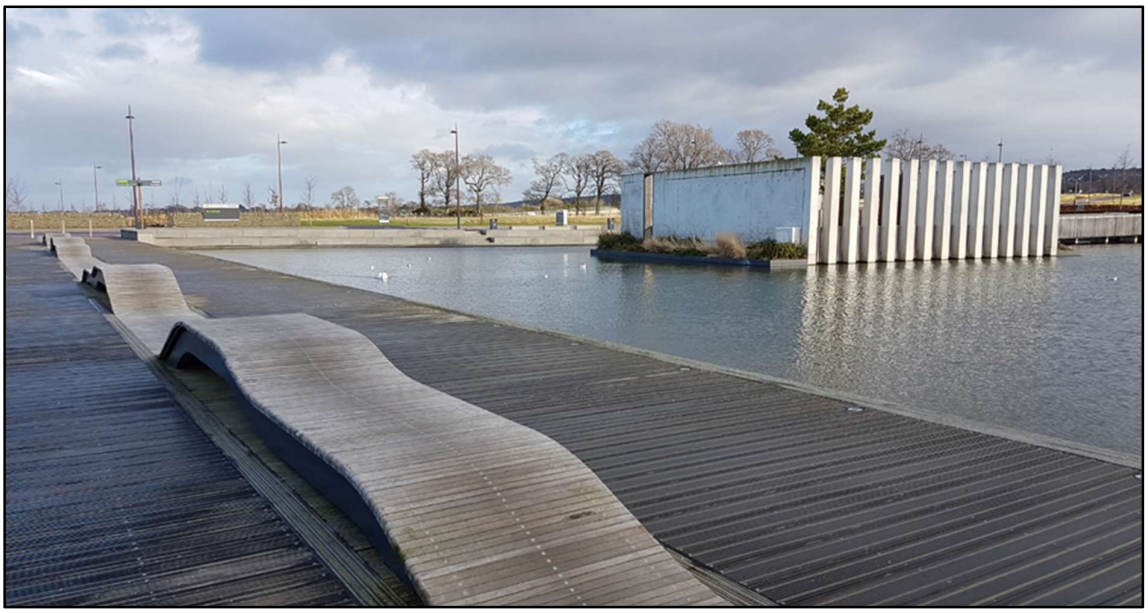
- purpose-built campus buildings and extensive parkland landscape and associated roads, paths, car parking facilities sited in flat to gently undulating lowlands;
- designed parkland landscape features a network of repeated elements including dry stone walls, hedgerows, trees, pedestrian/cycle paths and An T-Eilean open air event space and meeting place;
- SuDS featuring connected lochans;
- strong geometry within the landscape due to linear field pattern and strong boundaries in the form of dry stone walls and hedgerows;
- contemporary design utilising a distinct pallet of hard materials, finishes, street furniture, signage, lighting earthworks and planting resulting in a high quality built environment, landscape setting and sense of place; and
- the ‘golden bridge’ pedestrian cycle link between the campus and the city over the A9.

9.3.44 The consented public transport, cyclist and pedestrian bridge linking the northern end of Inverness Campus with Inverness Retail and Business Park is currently at an early stage of its construction and will eventually become another element of the LLCA. The bridge, when complete, will also sit within the Inverness Urban Fringe and Culloden LLCA although it is not likely to appear as a defining feature in either LLCA, due to its position over the railway line, set behind buildings and surrounded by existing vegetation (see Figure 9.1 and Photograph 9.4). Therefore, given the urban nature of this development, it would not result in a change to the extents or sensitivity of either LLCA as assessed.

9.3.45 Construction is also almost complete on the Solasta House life science building south of the student accommodation within Inverness Campus shown in Figure 9.1. As with the existing buildings on the Campus it is purpose-built and is in keeping with the overall aesthetics of the Campus therefore will not result in a change to the LLCA as described.

9.3.46 Illustrative views of the Inverness Campus (Mixed-Use) LLCA are provided below in Photographs 9.2, 9.3 and 9.4.

Photograph 9.2: Inverness College UHI with Raigmore Hospital in the background (left)



Photograph 9.3: An T-Eilean open air gallery and performance space within Inverness Campus

Photograph 9.4: Consented public transport, pedestrian and cycle bridge under construction (April 2019)

Inverness Urban Fringe and Culloden LLCA

9.3.47 Located to the north and east of Inverness City Centre, there are a variety of neighbourhoods, which include older stone-built mansions, more modern suburbs of semi-detached houses and terraced housing estates. The defining features of the LLCA can be summarised as:

- a suburban landscape made of up of a variety of land uses including residential, commercial and public amenity space;
- often an abrupt break with the agricultural lands which surround the town; and
- industrial estates and retail and business park developments are located along this urban edge.

9.3.48 Illustrative views of the Inverness Urban Fringe and Culloden LLCA are provided below in Photograph 9.5, 9.6 and 9.7.

Photograph 9.5: U1058 Caulfield Road North by Cradlehall Business Park

Photograph 9.6: View from Westhill towards Moray Firth

Photograph 9.7 View from Westhill towards Moray Firth

9.3.49 Proposed and consented developments are beginning to modify this LLCA, extending its boundary north into the agricultural landscapes of the Enclosed Farmed Landscapes LLCA. This is evident following the ground cover clearance and initial construction of the Stratton Phase 1A development in addition to construction of the Culloden House Care Home at Cradlehall. The extents of both developments, and an indication of how the Inverness Fringe and Culloden LLCA will expand, are provided in Figure 9.1.

9.3.50 Along with the consented public transport, pedestrian and cycle bridge construction (see paragraph 9.3.44), there is also a dwelling and garage development under construction in Resaurie and a dwelling construction at Dell of Inshes within this LLCA. However, considering the minor scale of the construction and the fact that they are surrounded by existing properties there will be no change to the sensitivity or extent of the LLCA as assessed.

Inverness-Nairn Transport Corridor LLCA

9.3.51 The Inverness-Nairn Transport Corridor LLCA comprises the A96 Dualling Inverness to Nairn (including Nairn Bypass) scheme which would run roughly parallel to the Moray Firth coast and would be enclosed by woodland planting.

Inverness East Development Area

9.3.52 The Inverness East Development Area is anticipated by The Highland Council as providing the land necessary to accommodate the growth of Inverness and to deliver a high-quality place for living, working and leisure. This vision for the area is set out in the Inverness East Development Brief, which identifies the detailed land use requirements for the eastern expansion of the city, based on the allocations and policies set out in the HwLDP and the IMFLDP. The proposed scheme (identified as the 'East Link' within the Inverness East Development Brief) is an integral part of the vision for East Inverness and integral to the envisaged pattern of land use within the 'heart' of the development area, particularly the later phases of development.

9.3.53 The form and layout to the expansion of the Inverness East Development Area is set out within the Development Brief and is illustrated with an indicative masterplan. While the masterplan provides a framework for development blocks, movement routes and open space, it is not necessarily definitive in terms of street layout and design. Furthermore, while the early phases of the proposed expansion (such as Stratton Phase 1A) are independent of the proposed scheme, there is no definitive timescale for implementation, with the later phases relying on the implementation of the proposed scheme to allow development.

9.3.54 On completion of all phases of the expected future development the landscape character within the development boundary is expected to undergo substantial change, the existing farmland giving way to suburban development. As this is realised and housing implemented it is considered unlikely that the

sensitivity of the local landscape to the proposed scheme would become any greater than that of the existing rural landscape. This is due to the urbanising effect of the future development, the proposed scheme being an integral part of the expansion and in keeping with the character of the development.

9.3.55 In the absence of detailed information, the mitigation design for the proposed scheme has taken into consideration the indicative masterplan contained within the Inverness East Development Brief to ensure the proposed scheme would fit well with, or be adaptable to, potential future change.

9.4 Potential Impacts

9.4.1 The potential impacts reported in this section are assessed in line with the approach set out in Section 9.2 (Methodology), with the landscape receptors identified as outlined in Section 9.3 Baseline Evaluation and Description.

9.4.2 It is acknowledged 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 expected that the potential impacts reported in this section would be likely to be less than predicted.

9.4.3 The potential cumulative impacts of the proposed scheme in-combination with other committed/ reasonably foreseeable developments are assessed in Chapter 19 (Assessment of Cumulative Effects).

9.4.4 The potential impacts on landscape receptors would arise from construction and operation of the proposed scheme (as described in Chapter 4: The Proposed Scheme and shown on Figure 4.1) which comprises the following elements:

- 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.

9.4.5 Impacts would also arise from the tie-ins and/or improvements to U1058 Caulfield Road North, Ashton Farm core path, and Ashton Farm Access Road.

Construction

9.4.6 Construction activities associated with road schemes generally result in temporary adverse landscape impacts. The proposed scheme is likely to result in impacts on the landscape resource during construction as a result of:

- removal of woodland 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 watercourse realignment 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 the proposed scheme with the existing road;
- change to local landscape character during construction period due to changes in landform; and
- temporary works associated with bridge construction operations.

9.4.7 These elements would also affect perceptual qualities of the LLCAs such as scenic beauty, tranquillity and remoteness and have an urbanising effect. In general, the most significant adverse landscape impacts during the construction period are likely to occur where major structures are erected and earthworks are carried out. 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);
- Eastfield Way Roundabout;
- SuDS features locations; and
- haulage routes and construction compounds locations.

9.4.8 As explained in Chapter 4 (The Proposed Scheme), details on the phasing of the works, haulage routes, and the exact location of construction compounds are not fully known at this stage. These would be determined by the appointed contractor depending on phasing and execution of the works.

Operation

9.4.9 The proposed scheme is described in Chapter 4 (The Proposed Scheme) and Figure 9.2 comprises aerial photographs overlain by the proposed scheme to enable a better understanding of the proposal in the existing landscape context. Lighting and road signage would be introduced along the entire scheme. Additional landscape impacts from these elements are incorporated into the assessment. Potential landscape impacts may include the following:

- alteration of the local character of the landscape due to the loss of existing landscape elements or features and the existing landscape patterns they create. These include the loss of existing hedgerows and hedgerow trees, and partial loss of woodland along the proposed scheme corridor;
- introduction of infrastructure elements including the road, moving traffic, new structures, SuDS ponds and associated earthworks and the introduction of signage and lighting into existing rural and relatively tranquil locations; and
- alteration of the landform due to the construction of embankments and cuttings.

9.5 Mitigation

Introduction

9.5.1 The proposed scheme including landscape mitigation measures has been developed through an iterative design process involving engineering, environmental and landscape specialists, in order to minimise landscape and visual impacts, integrate the road with the surrounding landscape, provide a pleasant experience for travellers, and where possible provide enhancements to the existing landscape.

9.5.2 Landscape mitigation proposals have been designed in accordance with the Scottish Government's policy document: Fitting Landscapes: Securing More Sustainable Landscapes (Transport Scotland

2014), DMRB Volume 10 Environmental Design and Management (Highways Agency, Scottish Executive Development Department, The National Assembly for Wales and The Department of Regional Development Northern Ireland 2001) and Planning Advice Note (PAN) 1/2013: Environmental Impact Assessment, Revision 1.0 (Scottish Government 2017).

9.5.3 In accordance with Fitting Landscapes (Transport Scotland 2014) 'Landscape Objectives', detailed in Appendix A9.2 (Landscape Design Objectives) have been developed to focus the preparation of the design proposals, to help meet the overall proposed scheme objectives and to mitigate the landscape impacts of the proposed scheme.

9.5.4 The strategy adopted for the landscape mitigation design has been to provide visual interest through planting and SuDS design along the route while screening views of the road from nearby visual receptors and the wider landscape.

9.5.5 Landscape mitigation is concerned primarily with mitigation of adverse impacts and impacts 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 these impacts, where practicable.

9.5.6 Mitigation of adverse impacts falls into three categories:

- prevention - avoidance of the loss of significant landscape elements through design of the proposed scheme to achieve sensitive horizontal and vertical alignment;
- reduction - lessening of those adverse impacts that cannot be eliminated by prevention (e.g. roadside mounding and planting to integrate with surrounding landform and landscape); and
- offsetting - provision of alternative or compensatory measures where appropriate and feasible (e.g. replacing woodland where appropriate).

9.5.7 The proposed scheme and its mitigation measures have been designed to respond to the landscape qualities and key characteristics along the route, including tying in with and reflecting existing vegetation patterns and landform and using native species typical of the area. The landscape design as part of the proposed scheme has been developed to require minimal maintenance and to provide 'flexibility' to accommodate future changes in circumstances in line with the aspirations set out in the Inverness East Development Brief for the ‘East Link’ (the brief’s term for the proposed scheme).

9.5.8 Although the landscape assessment addresses predicted impacts in summer after 15 years in line with DMRB guidance, the landscape mitigation has been designed for the longer term, with species selected to continue to mature and provide mitigation. The planting mixes are designed to include a range of understorey and edge species to ensure a balanced woodland structure, providing lower level screening once canopy species have matured. They include long lived and native species which are expected to naturally regenerate, hence ensuring longevity of tree avenues, woodland, hedgerows and scrub planting.

9.5.9 Detailed development of the landscape mitigation proposals will continue and be incorporated within the contract documents of which this assessment will form a part, along with employer's requirements and specification. This will include a requirement that the detailed design meets the objectives of the mitigation and overarching Landscape Objectives.

9.5.10 In relation to the design development of landscape mitigation planting to the west of the proposed Inshes Overbridge (PS02), it is recognised the proposed scheme is interdependent on The Highland Council’s Inshes Junction Improvements – Phase 2 being progressed. Therefore, it is anticipated that the detailed design of landscape mitigation proposals at this location with be developed in consultation with The Highland Council on the proposals for Inshes Junction Improvements – Phase 2.

Application of Mitigation Principles

9.5.11 Prevention, reduction and offsetting approaches were applied during the design of the proposed landscape planting mitigation and are described below.

9.5.12 Figure 9.5 shows the proposed landscape and ecological mitigation in plan form and Figure 9.6 presents it in cross section at a range of locations across the proposed scheme. The proposed landscape and ecological mitigation has evolved from an iterative process between the environment, landscape, and design teams, with consideration given to aesthetics throughout the process.

9.5.13 Prevention measures include alignment to achieve 'best fit' with existing landform within the land available, avoidance of the loss or damage to landscape elements such as water features or field systems and avoidance of the loss or damage to sites of ecological or archaeological interest (i.e. embedded mitigation), as identified in Chapter 11 (Ecology and Nature Conservation) and Chapter 14 (Cultural Heritage). Measures designed to reduce and offset adverse impacts, are summarised below, with location specific measures described in Table 9.8.

Mitigation Measures

Construction Phase

9.5.14 The following mitigation measures will be implemented by the proposed contractor to avoid or reduce landscape impacts during construction. This is particularly important close to residential receptors and in areas where the landscape is very open.

- The construction programme will be kept to the minimum practicable time to reduce the duration of any landscape and visual impacts and areas will be cleared for construction as close as possible to works commencing and top soiling, reseeding and planting will be undertaken as soon as practicable after sections of work are complete. (**Mitigation Item LV-01**).
- As far as practicable, construction plant and materials storage areas will be appropriately sited to minimise their landscape and visual impact (**Mitigation Item LV-02**).
- In relation to the sensitive location of site compounds, where possible, existing features such as trees should be used to screen from the wider landscape. Where this is not possible, screening can be achieved using bunds or embankments which may become part of the permanent works. Alternatively, temporary screens can be erected, designed and painted to be as inconspicuous in their surroundings as possible (**Mitigation Item LV-03**).
- Construction sites to be kept tidy (e.g. free of litter and debris) (**Mitigation Item LV-04**).
- Work during hours of darkness will be avoided as far as practicable, and where necessary, directed lighting will be used to minimise light pollution/glare. Lighting levels will be kept to the minimum necessary for security and safety (**Mitigation Item LV-05**).
- Vegetation to be retained to be fenced off in advance of works beginning on site to ensure protection (**Mitigation Item LV-06**).

9.5.15 Further to the above, to protect soil quality for the purposes of landscape planting, the following measures will be implemented (**Mitigation Item LV-07**):

- uncontaminated topsoil for re-use shall be stored in un-compacted mounds no more than 2m in height and stored separately from subsoil material;
- stripped topsoil shall be used in areas of the same proposed vegetation type to utilise the existing natural seed bank;
- subsoil in planting areas shall be replaced after construction and ripped to a minimum of 450mm prior to topsoiling and planting; and
- proposed planting areas in existing arable and pasture land, not subject to construction activity, shall be ripped to 600mm to alleviate compaction.

9.5.16 The above measures would help to reduce the landscape impacts during construction. However, due to the extensive construction works necessary, these cannot be completely mitigated.

Earthworks

9.5.17 Earthworks design by the contractor will aim to minimise the impact of cuttings and embankment slopes and allow integration of the road with surrounding land, within the available land constraints (**Mitigation Item LV-08**), through:

- rounding off top and bottom of cuttings and embankments; and
- modification of the SuDS earthworks to improve integration with surrounding landform.

SuDS Basins and Ponds

9.5.18 The initial design of the SuDS has been developed by drainage engineers in collaboration with landscape architects, ecologists, and hydrologists in order to take advantage of opportunities for improved amenity and biodiversity in addition to meeting the requirements for attenuation and treatment of runoff. The design of the SuDS will be refined further in order to integrate them into the landscape and maximise their amenity and biodiversity value at each specific location.

9.5.19 The design of SuDS should comply with the requirements of Appendix A9.3 (SuDS Design Principles) and include the following (**Mitigation Item LV-09**):

- where practicable SuDS will be sited within naturally low areas and their design developed further to look as natural as possible;
- surrounding earthworks will be designed with smooth flowing contours to integrate naturalistically with the surrounding landform. Abrupt changes in slope, sharp angles and steep side slopes will be avoided;
- boundary fencing, where required, will be designed to be as unobtrusive as possible, with the fence type and alignment designed to minimise visual impact;
- planting of native scrub species will be undertaken to help screen proposed fencing, outfall and inlet structures, enhance wildlife habitat and provide visual interest; and
- open ground in the areas around the SuDS will be seeded with native grasses and wildflowers to provide added wildlife habitat and visual interest.

Structures

9.5.20 The design of structures, such as bridges and retaining walls along the length of the proposed scheme and aspects of the landscape design, will be informed by specialist aesthetic advice in order to reduce impacts on both landscape and visual receptors (**Mitigation Item LV-10**).

Planting

9.5.21 Planting will assist integration with the local landscape character by using species mixes and planting patterns typical of the local landscape. National Vegetation Classification (NVC), which is used to describe and categorise the vegetation covering land in Great Britain, would inform the selection of plant species. Proposed planting mixes will be predominantly based on native species, proven by established presence within the area and adapted to local conditions. However, non-native species may also be used where they are an established and distinctive feature of the current landscape setting or in areas of more formal planting where they would help to create a sense of place or enhance visual interest. Young stock is generally easier to establish and would therefore be predominant in mixes, although larger plants will be used for initial impact in specific locations, for example where screening is required.

9.5.22 The general principles relating to existing and new planting mitigation proposals comprise the following:

- retention of existing trees and vegetation where possible and incorporation with new planting proposals (**Mitigation Item LV-11**);
- planting to replace trees lost during the proposed scheme construction (**Mitigation Item LV-12**);
- enhancement of biodiversity through use of predominantly native species, providing new wildlife habitats and complementing existing adjacent habitats (**Mitigation Item LV-13**);

- planting designed in association with the landform design to provide integration with the local landscape setting (**Mitigation Item LV-14**);
- planting mixes will be designed to reflect locally prevalent assemblages of species and will be set out in irregular patterns and spacing to replicate naturally occurring vegetation areas (**Mitigation Item LV-15**);
- planting at junctions and bridges to help assimilate proposed earthworks and structures into the surrounding landscape (**Mitigation Item LV-16**);
- planting to provide screening to reduce visual impacts of the proposed scheme, earthworks, structures and lighting (**Mitigation Item LV-17**);
- use of severed field corners and landlocked areas as appropriate (**Mitigation Item LV-18**);
- the introduction of more formal planting such as on approach to Inverness/Inshes to create a 'sense of place' and provide visual interest (**Mitigation Item LV-19**);
- creation of views to enhance the experience of travelling along the proposed scheme, taking into account aspects such as natural woodland characteristics typical in the locality, landscape features, or other requirements such as avoiding creation of tree canopies close to the road (**Mitigation Item LV-20**); and
- planting would be monitored for a minimum of five years after construction with annual replacement of any failed planting with stock of a suitable age so as to achieve full establishment and the required level of mitigation / impact reduction by summer 15 years after opening (**Mitigation Item LV-21**).

9.5.23 As noted in paragraph 9.5.21 the NVC describes and categorises the vegetation covering land in Great Britain and this will be used to inform the selection of plant species for the various types of landscape planting. Specific requirements for each type of planting type are detailed below.

*Mixed Woodland (**Mitigation Item LV-22**)*

9.5.24 Mixed Woodland will require both broad-leaved and coniferous species for visual screening purposes, will comprise plants which range in size from feathered trees to whips and transplants. The species selection will reflect NVC W11 Quercus petraea – Betula pubescens – Oxalis acetosella woodland with modifications (for improved amenity and bio-diversity) and aim to create multi-layered woodland with a balanced mix of deciduous and coniferous trees, including an understorey. The balance between deciduous and evergreen species will reflect locally common species and be varied to achieve year-round screening and reflect existing woodland local to the various sections of the road. In some instances, the species mix will comprise a 'like for like' replacement, for example to make good affected areas of planting along the western boundary of the Inverness Campus. Tree species to be used for mixed woodland (NVC W11) could include:

- Scots pine - *Pinus sylvestris*;
- Oak - *Quercus robur / Quercus petraea;*
- Alder - *Alnus glutinosa*;
- Holly - *Ilex aquifolium;*
- Silver birch - *Betula pendula*;
- Rowan - *Sorbus aucuparia;*
- Wild cherry – *Prunus avium*;
- Beech – *Fagus sylvatica;*
- Hazel – *Corylus avellana*; and
- Yew – *Taxus baccata*.

*Riparian Woodland Planting (**Mitigation Item LV-23**)*

9.5.25 Riparian woodland will be planted adjacent to watercourses and ponds and in other areas along floodplains. It will be a modification of NVC W11 and utilise other species which are suited to wetter ground conditions such as willow, birch and alder which would be indicative of NVC W6 and NVC W7. It will comprise a mix of sizes of plants such as feathered trees, whips and transplants. Native shrub species will also be included to provide understorey and edge planting. A typical tree species mix to be used for riparian woodland planting is:

- Goat willow - *Salix caprea*;
- White willow - *Salix alba*;
- Silver birch - *Betula pendula*;
- Alder - *Alnus glutinosa*;
- Aspen - *Populus tremula*;
- Downy birch - *Betula pubescens*;
- Hazel - *Corylus avellana*; and
- Scots pine - *Pinus sylvestris*.

*Dry Scrub (**Mitigation Item LV-24**)*

9.5.26 Proposed dry scrub planting will comprise native species of local provenance creating a dense medium height canopy. This mix will be used in areas where a lower height plant cover is more appropriate than the taller woodland mixes. Single species scrub planting will be used in areas such as junctions for local impact creating a more formal design. A typical species mix to be used for dry scrub is:

- Hawthorn - *Crataegus monogyna*;
- Blackthorn - *Prunus spinosa*;
- Juniper - *Juniperus communis*;
- Dog Rose - *Rosa canina*; and
- Guelder rose – *Viburnum opulus*.

*Hedgerows (**Mitigation Item LV-25**)*

9.5.27 Hedgerows will be planted to tie revised boundaries into existing field boundaries but also to reintroduce a lost or degraded element back into the landscape to enhance the landscape character, increase biodiversity and provide screening where required. The hedge species mix aims to reflect species currently used within hedgerows in the region. The inclusion of holly adds a native evergreen element. A typical species mix to be used for hedgerows is:

- Hawthorn - *Crataegus monogyna*;
- Blackthorn - *Prunus spinosa*;
- Beech - *Fagus sylvatica*; and
- Holly - *Ilex aquifolium*.

9.5.28 Typical hedgerow trees would include:

- Oak - *Quercus robur;*
- Rowan - *Sorbus aucuparia*; and
- Wild cherry - *Prunus avium.*

*Individual Heavy Standard Trees and Feathered Trees (**Mitigation Item LV-26**)*

9.5.29 Groups of individual trees and tree lines will comprise standard trees in informal or formal groupings and positioned to strengthen the landscape pattern, create distinctive planting and a sense of place at transition points along the proposed scheme i.e. on approach to Inverness/Inshes and provide screening or filtration of views. Feathered tree groups will be planted to reflect the existing landscape character and provide impact at an early stage. Typical native species to be used include:

- Beech - *Fagus sylvatica*;
- Oak - *Quercus robur*;
- Scots pine - *Pinus sylvestris*;
- Silver birch - *Betula pendula*;
- Aspen - *Populus tremula*;
- Rowan - *Sorbus aucuparia*; and
- Alder - *Alnus glutinosa*.

*Grass Seeding (**Mitigation Item LV-27**)*

9.5.30 For all disturbed soft areas and road verges, different seed mixes will be used, dependent on location and use:

- roadside verge (visibility splay) mix: suited to the roadside location being low maintenance, fast establishing and tolerant of traffic and salt spray;
- species-rich grassland mixes: suited for use in all other areas disturbed by construction works, consisting of a mixture of native, non-invasive grasses and wildflower species to reflect locally occurring semi-natural flora. As well as enhancing biodiversity by providing foraging resources for birds and pollinators, and visual interest along the proposed scheme, these types of grasslands would require minimal maintenance; and
- wetland grassland mix: suited for use in the SuDS, low lying poorly drained areas and areas around culverts that are likely to experience wet conditions.

*Lighting (**Mitigation Item LV-28**).*

9.5.31 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.

9.5.32 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. Refer to Chapter 10 (Visual) for details of mitigation measures to reduce potential landscape and visual impacts of the proposed lighting.

Proposed Habitat Creation for Ecological Mitigation

9.5.33 In addition to following the general objective of enhancing biodiversity through the landscape mitigation, more detailed habitat creation proposals are provided in Chapter 11 (Ecology and Nature Conservation) and included on Figure 9.5. These include:

- development of woodland mixes to provide habitat for protected species;
- planting of woodland and vegetation or seeding of species rich grassland to provide connectivity between existing or potential habitat locations; and

- replacement of woodland lost by the proposed scheme.

9.6 Residual Impacts

Introduction

9.6.1 The residual impacts of the proposed scheme have been assessed taking into account the proposed landscape mitigation shown on Figure 9.5. Details of the landscape mitigation for each LLCA are listed in Table 9.8 including reference to locations where a specific mitigation measure will be required. Direct impacts on LLCAs are described below and summarised in Table 9.8. Impacts reported in this assessment are considered adverse unless otherwise stated.

9.6.2 Visualisations in the form of photomontages of the proposed scheme are provided alongside photographs showing the existing views in Figures 10.5 to 10.11 which accompany Chapter 10 (Visual). These are intended to be illustrative of the nature of the changes to the landscape resulting from the proposed scheme; they have not been used to define impact significance, nor are they intended to focus only on significant impacts. The visualisations 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.

Enclosed Farmed Landscapes LLCA

9.6.3 The Enclosed Farmed Landscapes LLCA comprises a remnant estate landscape with a well-established structure encompassing mature trees and blocks of deciduous woodland which generally limit long distance views. The proposed scheme is to the south of the A96, crossing a flat agricultural landscape of geometric fields; the main components that impact the LLCA include Link 2, Link 3, Link 4, and Link 5, which further to the carriageway include the Cradlehall Roundabout, the Cradlehall Railway Bridge (PS03) and the Eastfield Way Roundabout.

9.6.4 The landscape impacts would result primarily from the introduction of new road and associated earthworks, roundabouts and the Cradlehall Railway Bridge (PS03) through a previously relatively undisturbed agricultural landscape as well as from removal of vegetation and trees. Views to the proposed scheme would be obtained from numerous locations within the LLCA and the remnant estate qualities and landscape structure of the LLCA would be significantly affected. The open landscape character would be altered due to the proposed scheme being raised on embankment, approximately 8.5m high around the proposed Cradlehall Railway Bridge (PS03), views to the new transport corridor from the northern edge of Cradlehall and Smithton and core footpaths would be obtained and noise and movement of traffic would be introduced into a previously relatively undisturbed, quiet environment. This would affect the tranquillity of the LLCA.

9.6.5 These impacts would be partially mitigated by the proposed hedgerow, mixed woodland and riparian woodland planting, which would help integrate the proposed scheme into the landscape and screen views of traffic and earthworks once mature. The proposed tree avenues would relate to important features within the LLCA, such as the mature beech avenue that runs along the southern boundary of Stratton Lodge Road, the double beech avenue leading to Castlehill House and the line of mature oak, ash and beech trees along U1058 Caulfield Road North at Cradlehall Business Park on the fringe of the LLCA. In addition, mixed woodland planting and scrub planting between the considerable embankments associated with the proposed scheme and Cradlehall Meadows would help mitigate the impact of earthworks.

9.6.6 The significance of residual impact upon the LLCA would be Moderate/Substantial. This would reduce to Moderate by the summer 15 years after opening, when the mitigation planting would have integrated the earthworks into the surrounding landscape. However, it should be noted that the majority of this LLCA is allocated for development in the adopted local development plan which, if implemented, would substantially alter the existing character.

Inverness Campus (Mixed-Use) LLCA

9.6.7 The Inverness Campus (Mixed-Use) LLCA comprises a newly constructed high-quality designed landscape incorporating formal planting whilst maintaining a variate of open views to the surrounding areas. The proposed scheme would pass along the western and southern parts of this LLCA affecting the newly planted woodland which screen views of the A9 from the LLCA (ch0 to ch850 of the A9 southbound lane gain / lane drop) and interrupting open views of agricultural fields to the south and east from the LLCA primarily as a result of the main alignment. Lighting associated with the proposed scheme would also interfere with the carefully designed lighting within the LLCA.

9.6.8 Proposed mixed woodland, hedgerow and individual tree (in order to create the avenues), mitigation planting would help to integrate the proposed scheme into the landscape whilst strengthening the positive attributes of the LLCA by reinforcing the formal planting structure.

9.6.9 The significance of residual impact upon the LLCA would be Moderate in the winter of the year of opening. This would reduce to Slight by the summer 15 years after opening, when the mitigation planting would have become established and assisted in screening the views of traffic and embankments.

Inverness Urban Fringe and Culloden LLCA

9.6.10 The proposed scheme would pass along the eastern and northern edges of this LLCA. The landscape impacts would result from the introduction of proposed Inshes Overbridge (PS02), the A9 southbound lane gain/lane drop and the improvements to U5096 Castlehill Road by Cradlehall Business Park. There would also be impacts on the LLCA due to the interruption of open views to the north and east from the LLCA by the new roads, two roundabouts, earthworks and the elevated structure at Cradlehall Railway Bridge (PS03) as well as lighting along the entire proposed scheme.

9.6.11 The impacts associated with the implementation of these aspects of the proposed scheme would be partially mitigated by the proposed scrub and individual feathered tree planting on proposed Inshes Overbridge (PS02) embankment and mixed woodland planting along the A9 southbound lane gain/drop. The impacts would also be mitigated by tree avenues and mixed woodland planting to screen the traffic, earthworks, structures and lighting in views from residential areas to the south and west of the proposed scheme.

9.6.12 The significance of residual impact upon the LLCA would be Slight/Moderate in the winter of the year of opening. This would reduce to Slight by the summer 15 years after opening, when the mitigation planting would have established.

Inverness - Nairn Transport Corridor LLCA

9.6.13 The proposed scheme would pass to the south of the Inverness – Nairn Transport Corridor LLCA and would tie in with the A96 Dualling Inverness to Nairn (including Nairn Bypass) scheme at the proposed A96 Smithton Junction. The main landscape impact would be the temporary loss of the newly planted woodland along the main alignment between ch950 and the end of the scheme. The significance of residual impact upon this LLCA would be Slight in the winter of the year of opening, reducing to Negligible by the summer 15 years after opening, when the mitigation replacement planting would have established.

Table 9.8: Local Landscape Character Areas (LLCAs) with Direct Residual Impacts

Chainage	Sensitivity	Description of Impacts	Winter of the Year of Opening		Summary of Mitigation Proposals (Refer to Figure 9.5)	Summer 15 Years after Opening		
			Magnitude of Impact	Significance of Impact		Description of Residual Impacts	Magnitude of Impact	Significance Impact
Enclosed Farmed Landscapes LLCA								
Link 2 ch0 to end, Link 3 ch0 to end, Link 4 ch0 to end, Link 5 ch0 to end	Low / Medium	Direct adverse impacts due to: Loss of farmland, severance of fields and loss of hedgerows. Introduction of the new road, two roundabouts, Cradlehall Railway Bridge (PS03) and associated earthworks, lighting and signage. Introduction of the SuDS and associated access tracks and fencing. Disruption to the existing landscape pattern. Loss of tranquillity due to introduction of persistent traffic noise and movement.	Medium / High	Moderate / Substantial	Roadside, heavy standard avenue tree planting with bulb under planting to tie in with the existing landscape pattern and enhance the approach to Inverness/Inshes. Mixed woodland planting with individual trees and scrub planting between the proposed embankments and Cradlehall Meadows to screen the traffic and earthworks to the north of Cradlehall Meadows and integrate the scheme into the landscape. Riparian woodland and hedgerow planting to integrate and screen the SuDS, and link with existing woodland and wetland habitats. Roadside and path-side hedgerow planting in the more rural, eastern part of the LLCA to repair severed boundaries, reinforce landscape character, soften and assist screening whilst retaining open views. Retention and management of existing vegetation where possible including **r**etention of the line of mature trees along U1058 Caulfield Road North. Mixed woodland, scrub and individual tree planting along Cradlehall Meadows to integrate with the surrounding landscape pattern and provide visual separation.	Direct adverse impact on farmland and settlements - *large scale, long-term, permanent.* Direct adverse impact from introduction of the road including associated structures, earthworks, lighting, CCTV, signage - *large scale, long-term, permanent.* Direct adverse local impact due to the introduction of the SuDS - *medium scale, long-term, decreasing over time.*	Medium	Moderate
Inverness Campus (Mixed-Use) LLCA								
A9 lane gain/lane drop ch0 to end	Medium	Direct adverse impact due to: Loss of newly planted woodland screening the A9 in views from the Campus shared use path. Improvements to the existing roads in the southern part of the LLCA.	Medium	Moderate	Proposed tree avenue, tree group, hedgerow and mixed woodland planting to integrate the proposed scheme into the landscape whilst strengthening the positive attributes of the LLCA by reinforcing the formal planting. Structure. Lighting mitigation**.**	Direct adverse local impact due to the widening of the A9 slip road – *small scale to medium scale, long-term, decreasing over time.*	Low / Medium	Slight

Chainage	Sensitivity	Description of Impacts	Winter of the Year of Opening		Summary of Mitigation Proposals (Refer to Figure 9.5)	Summer 15 Years after Opening		
			Magnitude of Impact	Significance of Impact		Description of Residual Impacts	Magnitude of Impact	Significance Impact
		Widening of the A9 slip road in the western part of the LLCA.						
Inverness Urban Fringe and Culloden LLCA								
A9 southbound lane gain/lane drop ch850 to end, existing Inshes Overbridge (PS01) ch0 to end	Low	Direct adverse impact due to: Changes to landscape features due to the proposed Inshes Overbridge (PS02); Widening of the A9 slip road. Improvements to the U5096 Castlehill Road at Cradlehall Business Park	Medium	Slight / Moderate	Proposed scrub and individual feathered tree planting on proposed Inshes Overbridge (PS02) embankment. Mixed woodland and tree avenues mitigation to screen the traffic, earthworks and structures in views from residential areas to the south of the proposed scheme.	Direct adverse local impact due to the introduction of proposed Inshes Overbridge (PS02) – *small scale to medium scale, long-term.*	Low / Medium	Slight
Inverness – Nairn Transport Corridor LLCA								
Link 4 ch950 to end	Low	Direct adverse impact due to: Loss of newly planted woodland to the south of proposed A96 Smithton Junction.	Low	Slight	Proposed replacement woodland planting.	Indirect: alteration of filtered views to the south – *small scale, long-term.*	Low	Negligible

9.7 Statement of Significance

9.7.1 The assessment found that significant direct residual impacts would occur within the Enclosed Farmed Landscapes LLCA where the proposed scheme would affect the positive qualities of tranquillity and disrupt the landscape pattern by the introduction of a major development into a landscape that is, at present, relatively undeveloped in character. Impact resulting from the proposed scheme would be Moderate/Substantial in the winter of the year of opening reducing to Moderate in the summer after 15 years.

9.7.2 It is important to acknowledge that an extensive area of land within this LLCA is allocated to the development land category within the adopted local development plan. Should the land be developed as planned, its character would be altered considerably thus the baseline landscape and the impacts of the proposed scheme within this area would be likely to change. Given that the development of the area would effectively urbanise the landscape, it is considered unlikely that it would become more sensitive to the proposed scheme than the existing rural landscape and the magnitude of landscape impact is also considered unlikely to increase, given that new road would be integral to and therefore in character with the development proposals.

9.7.3 Impact on Inverness Campus (Mixed-Use) LLCA resulting from the proposed scheme would be Moderate in the winter of the year of opening due to the introduction of the roads, earthworks, structures and lighting on the edges of the LLCA and would reduce to Slight in the summer after 15 years.

9.7.4 There would be no other significant direct or indirect impacts on any other LLCAs.

9.7.5 There would be no significant direct or indirect impacts on designated landscapes.

9.8 References

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