
Chapter 12

Landscape and Visual

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12 LANDSCAPE AND VISUAL

12.1 Introduction

This chapter of the Environmental Impact Assessment Report (EIAR) identifies, describes and presents an assessment of the likely significant effects of the proposed N2 Slane Bypass and Public Realm Enhancement Scheme (hereafter referred to as the 'Proposed Scheme') on Landscape and Visual (LV) resources during both the construction and operational phases of the development. The assessment presented is informed by the following key chapters of the EIAR: **Chapter 4 – Description of the Proposed Scheme** and **Chapter 5 – Description of Construction Phase**.

The purpose of this Landscape and Visual Impact Assessment (LVIA) is to identify and determine the effects on landscape character, landscape features, visual receptors, and visual amenity as a result of the works associated with the construction and operation of the Proposed Scheme. Other aspects relevant to the LVIA are addressed in the following specific chapters of the EIAR, which should be read and considered in conjunction with this chapter, namely:

- **Chapter 8 – Population:** Details of impacts on community and socio-economic aspects;
- **Chapter 11 – Human Health:** Details of impacts relating to human health aspects during construction;
- **Chapter 13 – Archaeological and Cultural Heritage:** Details of impacts related to archaeological and cultural heritage, including the setting of heritage features and their interactions with the landscape and visual aspects. **Appendix 13.1** contains the Heritage Impact Assessment for the UNESCO World Heritage Property; and
- **Chapter 14 – Architectural Heritage:** Details of impacts related to architectural heritage features and settings.

12.2 Methodology

12.2.1 Legislation, Policy and Guidance

12.2.1.1 Legislation

There is no specific legislation relating to Landscape and Visual Impact Assessment however the Planning and Development Acts, 2000 – 2022, as amended, addresses the topic with respect to land use planning, notably in the context of County Development Plans (CDP). The policy context in relation to the Meath CDP in which the Proposed Scheme is located is further addressed in **Section 12.2.1.2**.

It is noted that the EIAR LVIA methodology, described in **Section 12.2.1.4**, follows the process outlined the Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) for Specified Linear Infrastructure Projects: Overarching Technical Document (TII Publication PE-ENV-01101, December 2020), published by Transport Infrastructure Ireland (TII). Whilst the assessment process is primarily concerned with assessing the visual impacts on Protected Views identified in the Meath CDP, the assessment also includes an assessment of predicted visual impacts from a range of viewpoints that have been selected to be representative of a range of views that are experienced by a variety of receptors within the study area.

12.2.1.2 Policy

All portions of the Proposed Scheme and their associated environs are contained within County Meath and as such the Meath County Development Plan (2021 – 2027) ("Meath CDP") forms the relevant Development Plan, which is discussed below to establish landscape aims, policies and objectives relevant to this LVIA.

Meath CDP Cultural and Natural Heritage Strategy Objectives

The overarching aim of the Meath CDP in relation to Cultural and Natural heritage is to *"identify, protect, conserve and manage the cultural and natural heritage of the County and to encourage its sensitive integration into the sustainable development of the County for the benefit of present and future generations"*.

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Following a review of the Meath CDP, the following Policies are considered to be relevant to this LVIA;

- **HER POL 1:** *To protect sites, monuments, places, areas or objects of the following categories:*
 - *Sites and monuments included in the Sites and Monuments Record as maintained by the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht;*
 - *Monuments and places included in the Record of Monuments and Places as established under the National Monuments Acts;*
 - *Historic monuments and archaeological areas included in the Register of Historic Monuments as established under the National Monuments Acts;*
 - *National monuments subject to Preservation Orders under the National Monuments Acts and national monuments which are in the ownership or guardianship of the Minister for Culture, Heritage and the Gaeltacht or a local authority; and*
 - *Archaeological objects within the meaning of the National Monuments Acts; and Wrecks protected under the National Monuments Acts or otherwise included in the Shipwreck Inventory maintained by the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht.*
- **HER POL 6:** *To protect the Outstanding Universal Value of the UNESCO World Heritage Site of Brú na Bóinne in accordance with the relevant guidelines and national legislation, so that its integrity, authenticity and significance are not adversely affected by inappropriate development or change.*
- **HER POL 11:** *To support the Department of Culture, Heritage and the Gaeltacht and all stakeholders in the implementation of the Brú na Bóinne Management Plan, 2017.*
- **HER POL 16:** *To protect the setting of Protected Structures and to refuse permission for development within the curtilage or adjacent to a protected structure which would adversely impact on the character and special interest of the structure, where appropriate.*
- **HER POL 19:** *To protect the character of Architectural Conservation Areas in Meath.*
- **HER POL 20:** *To require that all development proposals within or contiguous to an ACA be sympathetic to the character of the area, that the design is appropriate in terms of height, scale, plot density, layout, materials and finishes and are appropriately sited and designed with regard to the advice given in the Statements of Character for each area, where available.*
- **HER POL 25:** *To protect and enhance the built and natural heritage of the Royal Canal and Boyne Navigation and associated structures and to ensure, in as far as practically possible, that development which may impact on these structures and their setting be sensitively designed with regard to their character and setting. Development of the project will be subject to the outcome of the Appropriate Assessment process.*
- **HER POL 37:** *To encourage the retention of hedgerows and other distinctive boundary treatments in rural areas and prevent loss and fragmentation, where practically possible. Where removal of a hedgerow, stone wall or other distinctive boundary treatment is unavoidable, mitigation by provision of the same type of boundary will be required.*
- **HER POL 38:** *To promote and encourage planting of native hedgerow species in new developments and as part of the Council's own landscaping works.*
- **HER POL 39:** *To recognise the archaeological importance of townland boundaries including hedgerows and promote their protection and retention.*
- **HER POL 40:** *To protect and encourage the effective management of native and semi-natural woodlands, groups of trees and individual trees and to encourage the retention of mature trees and the use of tree surgery rather than felling, where possible, when undertaking, approving or authorising development.*
- **HER POL 41:** *To protect trees the subject of Tree Preservation Orders (see Map 9.3), Champion and Heritage Trees identified on the Tree Register of Ireland and Heritage Tree Database when undertaking, approving, or authorising development.*
- **HER POL 42:** *To promote the preservation of individual trees or groups of trees as identified on the Heritage Maps in Volume 2 and to manage these trees in line with arboricultural best practice.*

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- **HER POL 52:** *To protect and enhance the quality, character, and distinctiveness of the landscape of the County in accordance with national policy and guidelines and the recommendations of the Meath Landscape Character Assessment (2007) in Appendix 5, to ensure that new development meets high standards of siting and design.*
- **HER POL 53:** *To discourage proposals necessitating the removal of extensive amount of trees, hedgerows and historic walls or other distinctive boundary treatments.*
- **HER POL 54:** *To Protect the archaeological heritage, rural character, setting and amenity of the Tara landscape and Loughcrew and Slieve na Calliagh Hills.*

Following a review of the Meath CDP, the following Objectives are considered to be relevant to this LVIA;

- **SLN OBJ 17:** *To preserve the character of the village and its setting by requiring that the height, scale, design and materials of any proposed development within the village and in the surrounding area should complement the character of the village and not diminish its distinctiveness of place. New buildings should respond to the individual site context and take due cognisance of adjoining development.*
- **SLN OBJ 18:** *To introduce consistent village branding/presentation at the village entry points and along main streets in form of high-quality signage, tourism information, public art and consistent village type lighting standards which would strengthen Slane's identity.*
- **SLN OBJ 19:** *To encourage the removal of visually intrusive elements such as overhead cables and inappropriate signage.*
- **SLN OBJ 20:** *Explore the potential of widening footpaths around St. Patricks Primary School and provide screen planting to school carpark, in conjunction with relevant stakeholders.*
- **SLN OBJ 21:** *To implement and ensure compliance with the Public Realm Plan for Slane which provides for a themed strategy for the provision of street furniture, planting, traffic and parking, lighting, building colours, (local and tourist) signage and surface materials etc. within the town.*
- **HER OBJ 2:** *To ensure that development in the vicinity of a Recorded Monument or Zone of Archaeological Potential is sited and designed in a sensitive manner with a view to minimal detracting from the monument or its setting*
- **HER OBJ 3:** *To protect important archaeological landscapes from inappropriate development.*
- **HER OBJ 7:** *To work in partnership with the community and all other relevant stakeholders to promote, understand, conserve and sustainably manage the UNESCO World Heritage Site of Brú na Bóinne.*
- **HER OBJ 8:** *To encourage and facilitate pre-application discussions, in conjunction with the Department of Culture, Heritage and the Gaeltacht, regarding the siting and design of developments affecting the UNESCO World Heritage Site of Brú na Bóinne and the scope of any necessary impact assessments.*
- **HER OBJ 11:** *To protect the ridgelines which frame views within and from the UNESCO World Heritage Site of Brú na Bóinne from inappropriate or visually intrusive development.*
- **HER OBJ 16:** *To identify and retain good examples of historic street furniture, e.g. cast-iron post boxes, water pumps, light fixtures and signage, as appropriate.*
- **HER OBJ 22:** *To avoid the demolition of structures and the removal of features and street furniture which contribute to the character of an ACA. The Council will require that any planning application for demolition or alteration within an ACA be accompanied by a measured and photographic survey, condition report and architectural heritage assessment.*
- **HER OBJ 48:** *To support the aims and objectives of the European Landscape Convention by implementing the relevant objectives and actions of the National Landscape Strategy 2015-2025 and any revisions thereof.*
- **HER OBJ 49:** *To ensure that the management of the development will have regard to the value of the landscape, its character, importance, sensitivity and capacity to absorb change as outlined in Appendix 5 Meath Landscape Character Assessment and its recommendations.*
- **HER OBJ 50:** *To require landscape and visual impact assessments prepared by suitably qualified professionals be submitted with planning applications for development which may have significant impact on landscape character of medium or high sensitivity.*

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- **HER OBJ 51:** *To review and update (if required), in the context of a regional approach to landscape assessment, the County Landscape Character Assessment following publication of statutory guidelines for Planning Authorities on local Landscape Character Assessments, as outlined in the National Landscape Strategy 2015-2025.*
- **HER OBJ 52:** *To support the designation, of a Landscape Conservation Area, pursuant to Section 204 of the Planning and Development Acts, 2000 – 2022, as amended, for the Tara Skeyrne Landscape, in conjunction with the relevant Government Departments and other stakeholders.*
- **HER OBJ 53:** *To explore, over the life of the Plan, the designation of a Landscape Conservation Area, pursuant to Section 204 of the Planning and Development Acts, 2000 – 2022, as amended, in respect of Loughcrew and Slieve na Calliagh Hills.*
- **HER OBJ 56:** *To preserve the views and prospects listed in Appendix 10, in Volume 2 and on Map 8.6 and to protect these views from inappropriate development which would interfere unduly with the character and visual amenity of the landscape.*
- **HER OBJ 57:** *To undertake a review of existing protected views and prospects contained in the County Development Plan and to assess and consider additional views and prospects deemed worthy of inclusion/ protection.*

Meath CDP (2021-2027) Landscape Value, Sensitivity and Capacity

The Landscape Character Areas (LCA) of the County have been assessed within the Meath County Council Landscape Character Assessment (Appendix 5 of the Meath CDP) in terms of Landscape Value (illustrated on Map 02; Appendix 5 of Meath CDP), Landscape Sensitivity (illustrated on Map 03; Appendix 5 of Meath CDP) and Landscape Capacity (illustrated on Map 04 of the CDP).

It is noted from the review of Map 02 that the LCAs in the vicinity of Slane have been classified as either being of Exceptional Value, Very High Value or High Value. The criteria used in defining landscape value is detailed below:

- **Exceptional Value:** *Areas which are of outstanding value by nature of their dramatic scenic quality, unspoilt beauty, conservation interests, historic, cultural or other associations that influence landscape value. These areas may be of national or international importance.*
- **Very High Value:** *Areas which have particularly high value by nature of their dramatic scenic quality, unspoilt beauty, conservation interests, historic, cultural or other associations that influence landscape value. These areas may be of national or regional importance.*
- **High Value:** *Areas which are considered to be of value by virtue of their positive characteristics, sense of place or local associations. These areas may be of regional or local importance.*

It is noted from the review of Map 03 that the LCA in the vicinity of Slane have been classified as either being of High Sensitivity or Moderate Sensitivity (refer to **Figure 12.3** below). The criteria used in defining landscape sensitivity is detailed below:

- **High Sensitivity:** *A vulnerable landscape likely to be fragile and susceptible to change. Frequency and sensitivity of users is likely to be high. The introduction of a change is likely to significantly alter the character to the extent that it would be difficult or impossible to restore.*
- **Moderate Sensitivity:** *A landscape that can accommodate a certain amount of change without affecting the overall character. There are unlikely to be large numbers of people using or viewing this landscape.*

It is noted from the review of Map 04 that the LCA in the vicinity of Slane have been classified as either being of Low Capacity or Medium Capacity, for linear infrastructure such as roads and railways. The criteria used in defining landscape capacity is detailed below:

- **Low Potential Capacity:** *The landscape has high sensitivity to the type of development proposed which could have a detrimental effect on landscape character or value.*
- **Medium Potential Capacity:** *The landscape has medium sensitivity to the type of development proposed. Any change caused by the proposed development would be unlikely to have a significant adverse effect on landscape character or value that could not be mitigated against.*

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12.2.1.3 Guidance

The methodology and approach to the assessment contained within this chapter, and the production of visualisation which accompany this chapter, have been carried out in accordance with the guidance described in the following documents:

- TII Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) for Specified Linear Infrastructure Projects: Overarching Technical Document (TII Publication PE-ENV-01101, December 2020) (TII, 2020a);
- TII Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Proposed National Roads: Standards (TII Publication PE-ENV-01102, December 2020) (TII, 2020b); and
- Technical Guidance Note 06/19 Visual Representation of Development Proposals (The Landscape Institute, 2019).

12.2.1.4 Methodology

The process set out within the TII Publication PE-ENV-01101 (TII, 2020a), is broadly based on a combination of the approach and methodology set out in the EPA Guidelines for preparing Environmental Impact Assessment Reports (EPA, 2017) and in the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3). However, the approach and methodology has been specifically adapted to the delivery of infrastructure projects.

Whilst addressed under a heading of ‘The Landscape’, LVIA involves two related but separate assessments:

- The assessment of effects on landscape (changes to the landscape character and / or landscape resource); and
- The assessment of visual effects (changes in views, visual amenity and effect on viewers).

The former is concerned with the physical landscape and its characteristics, the latter is usually concerned with viewers, viewpoints, or visual receptors.

The effects on the landscape resources and visual receptors (people) have been assessed by considering the proposed change in the baseline conditions (the impact of the Proposed Scheme) against the type of landscape resource or visual receptor (including the importance and sensitivity of that resource or receptor). These factors are determined through a combination of quantitative (objective) and qualitative (subjective) assessment using professional judgement. The assessment methodology is summarised in **Figure 12.1**.

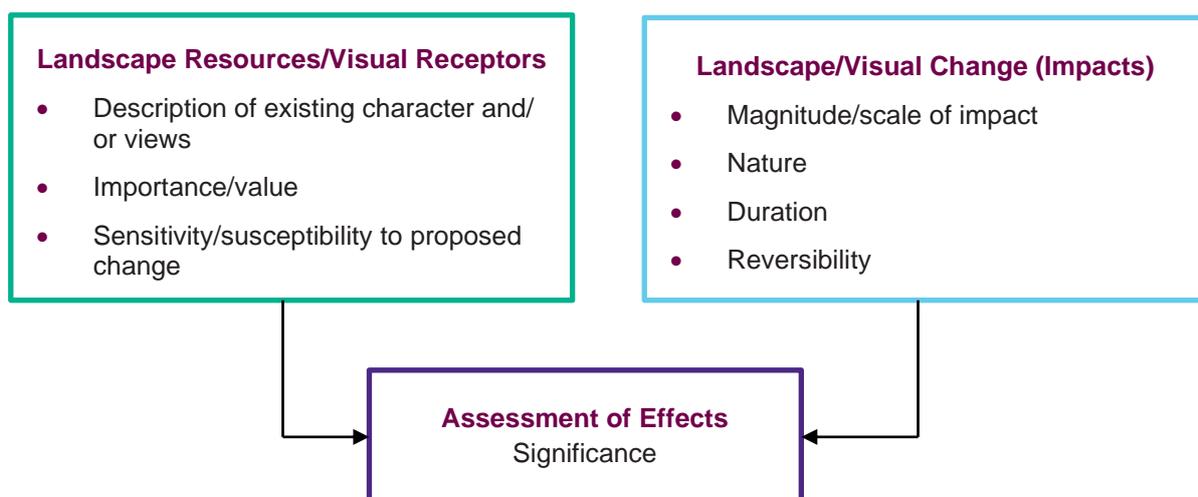


Figure 12.1: Assessment Methodology Summary

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The LVIA has considered the potential effects of the Proposed Scheme upon:

- Individual landscape features and elements;
- Landscape character; and
- Visual amenity and the people who view the landscape.

12.2.2 Zone of Visual Influence

The Zone of Visual Influence (ZVI) associated with the Proposed Scheme is based on analysis of the Viewshed mapping undertaken from a number of Protected Views identified from the Meath CDP (2021 – 2027) including Hill of Slane and Knowth (refer to **Appendix 12.2**). The viewshed mapping illustrated on the accompanying figures within **Appendix 12.2, Figures A12.2(a)-(e)**, indicates those areas where is predicted that views of the Proposed Scheme could be obtained from these individual viewpoints. The viewshed mapping was then analysed further to identify other Protected Views and Prospects and other locally important viewpoints from which the Proposed Scheme maybe visible from, which informed the selection of viewpoints that have informed the visual assessment contained within **Section 12.4.3**.

A zone of influence, equating to 300 m from the centreline of the mainline of the Proposed Scheme has been considered for the purposes of undertaking an assessment of predicted visual impact on residential visual amenity. The 300 m buffer has been utilised for the assessment of predicted visual impact on residential properties as views from properties that are located beyond 300 m are often restricted due to the nature of the surrounding undulating topography combined with existing vegetation.

12.2.3 Sources of Information to inform the Assessment

Baseline conditions have been identified and assessed through analysis of the key sources of information outlined in **Table 12-1**.

Table 12-1: Summary of Key Datasets and Data Sources Used

Title	Source	Year
Discovery Series mapping and detailed vector maps	Ordnance Survey Ireland (OSi)	2022
Aerial / Orthophotography	OSi	2019
Meath County Development Plan 2021-2027: <ul style="list-style-type: none"> • Map 8.6 Views and Prospects and References • Map 8.6.1 Slane & Brú Na Bóinne Views & Prospects References • Map 9.1 Rural Development Types: Development Pressure • Map 9.3 Trees Subject to Statutory Tree Preservation Orders (TPO's) • Appendix A.05 Landscape Character Assessment 	Meath County Council	2021
Online digital mapping – Meath GIS: https://meath.maps.arcgis.com	Meath County Council	2022
GeoDirectory property information	GeoDirectory	Q1 2023
Viewshed analysis showing areas of theoretical visibility, based on a bare earth scenario which does not take into consideration screening by vegetation or built form.	RPS	2018, 2022
Photography taken from key views as well as MCC Protected Views in summer (July 2018 and September 2021) and winter (February 2019 and March 2021)	RPS	July 2018, September 2018, February 2019 and March 2021
Extent of scheme images generated from photography	RPS	As above
Photomontage images generated from photography and model inputs	RPS	May 2022

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In addition, site visits have been undertaken on 12 September 2018 (summer/autumn), 6 February 2019 (winter), 5 March 2021 (winter) and 29 July 2021 (summer) to assess the existing environment, to establish the existing visual resource and to identify sensitive receptors, i.e. residential properties, scenic viewpoints. Site visits were also used to consider the potential effects on landscape character and visual impacts arising as a result of the Proposed Scheme.

12.2.4 Key Parameters for Assessment

The following scenarios have been assessed for the Proposed Scheme:

- **Do-Nothing:** which assumes that the existing road networks will be maintained under current regime; and
- **Do-Something:** an assessment of the Proposed Scheme, as described in **Chapter 4** and **Chapter 5**.

12.2.5 Assessment Criteria

The objective of the assessment process is to identify and evaluate the predicted significant effects arising from the Proposed Scheme. Significance is a function of the:

- Sensitivity of the affected landscape or visual receptors, determined through consideration of the susceptibility of the receptor to the type of change arising from the specific proposals and the value attached to the receptor; and
- Secondly its scale or magnitude, derived from a consideration of the size/ scale, geographical extent, duration, and reversibility of the new development.

These definitions recognise that landscapes vary in their capacity to accommodate different forms of development according to the nature of the receiving landscape and the type of change being proposed.

As with any new development, it is acknowledged that the introduction of a new development into the existing landscape or visual context could cause either a deterioration, improvement (e.g. improvement of townscape/ streetscape character) or neutral impact on the existing landscape or visual resource.

12.2.5.1 Landscape Impact Assessment

The LVIA firstly assesses how a new development would impact directly on any landscape features and resources. This category of effect relates to specific landscape elements and features (e.g. woods, trees, walls, hedgerows, watercourses) that are components of the landscape that may be physically affected by the Proposed Scheme, such as the removal or addition of trees and alteration to ground cover.

The LVIA then considers impacts on landscape character at two levels. Firstly, consideration is given to how the landscape character is affected by the removal or alteration of existing features and the introduction of new features. This is considered to be a direct impact on landscape character.

Secondly, the indirect impacts of a new development on the wider landscape are considered. The assessment of impacts on the wider landscape is discussed using the surrounding character areas identified in the relevant landscape character assessments. It is acknowledged there is an overlap between perception of change to landscape character and visual amenity, but it should be remembered that landscape character in its own right is generally derived from the combination and pattern of landscape elements, such as woodland, hedgerows and field patterns and usage that are present within a view.

The significance of effects on landscape features and character is determined by considering both the sensitivity of the feature or landscape character and the magnitude of impact.

Consideration of the sensitivity of the landscape resource against the magnitude of impact caused by a new development is fundamental to landscape and visual assessment and these two criteria are defined in more detail below.

Consideration of landscape and visual aspects as it relates to archaeological and cultural heritage as also discussed in **Chapter 13**.

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12.2.5.1.1 Landscape Significance

The determination of the sensitivity of the landscape receptor is based upon an evaluation of the elements or characteristics of the landscape likely to be affected. The evaluation reflects such factors as its quality, value, contribution to landscape character and the degree to which the particular element or characteristic can be replaced or substituted.

For the purpose of this assessment, landscape significance is categorised as:

- **Very High:** Areas of landscape and / or townscape protected by an international or national designation, designated ecological landscapes, Landscape Conservation Areas or other landscape based sensitive areas. These are landscapes widely acknowledged for their distinctive features and the quality and value of it elements, and are of significance within the wider region or nationally;
- **High:** Areas that have a very strong positive character with valued and consistent distinctive features that gives the landscape unity, richness and harmony. These are of landscape significance within the district and National designations may apply to such areas;
- **Medium:** Areas that exhibit positive character, and which is locally important but which might contain some regionally important elements. A landscape of some quality but which may have evidence of alteration/degradation or erosion of features resulting in a less distinctive landscape. These may be of some local landscape significance with some positive recognisable structure;
- **Low:** a landscape of local importance but with some degraded elements or condition. Areas that are generally negative in character, degraded and in poor condition. No distinctive positive characteristics and with little or no structure. Scope for positive enhancement; and
- **Very Low / Negligible:** A degraded landscape, a landscape dominated by infrastructure with no cultural antiquity, including transport corridors. A landscape where negative elements dominate the overall character.

As previously discussed, landscape sensitivity is influenced by a number of factors including susceptibility to change, value and condition. In order to assist with bringing these factors together, judgements regarding susceptibility and value have been used which define the landscape resource as being either, very low/negligible, low, medium, high or very high. **Table 12-2** defines the criteria that have guided the judgement as to the overall sensitivity of the Landscape Resource.

Assessments of susceptibility and value of a particular landscape resource may be different and professional judgement will always be used to conclude on the judgement of sensitivity. For example, value may be high and susceptibility may be low, and a professional judgement will be made to determine whether sensitivity is high, low or in between, supported by narrative explanations.

Table 12-2: Landscape Sensitivity

Definition		Sensitivity
Landscape Susceptibility	Landscape Value	
Exceptional landscape quality, no or limited potential for substitution. Key elements/features well known to the wider public. The landscape receptor is of very high susceptibility to the Project and has little or no tolerance to change.	Nationally/internationally designated/valued landscape, or key elements or features of national/internationally designated landscapes. Little or no tolerance to change	Very High
Strong/distinctive landscape character; absence of landscape detractors. The landscape receptor is of high susceptibility to the Project and has low tolerance to change.	Regionally/nationally designated/valued countryside and landscape features or landscapes judged to be of equivalent value using clearly stated and recognised criteria. Low tolerance to change.	High
Some distinctive landscape characteristics; few landscape detractors. The landscape receptor is of medium susceptibility to the Project and has medium tolerance to change.	Locally or regionally designated/valued countryside and landscape features or landscapes judged to be of equivalent value using clearly stated and recognised criteria. Medium tolerance to change.	Medium

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Definition		Sensitivity
Landscape Susceptibility	Landscape Value	
Absence of distinctive landscape characteristics; presence of landscape detractors. The landscape receptor is of low susceptibility to the Project and has high tolerance to change.	Undesignated landscapes and landscape features which have little value to local communities. High tolerance to change	Low
Absence of positive landscape characteristics. Significant presence of landscape detractors. The landscape receptor is of negligible susceptibility to the Project and has very high tolerance to change.	Undesignated landscapes and landscape features which have no particular scenic qualities or are in poor condition or altered by presence of intrusive manmade structures. High tolerance to change.	Very Low / Negligible

12.2.5.1.2 Magnitude of Landscape Effect

The Landscape Professional must use their professional experience and judgment in the identification and description of likely significant landscape effects. However, the *'identification and description of landscape effects can only be made once the characteristics, nature and scale and impact of the proposed project is fully analysed,* (TII PE-ENV-01101) (TII, 2020a).

Direct resource changes on the landscape character in the study area are brought about by the introduction of a new development and its impact on the key landscape characteristics. The changes caused to landscape character as a result of the Proposed Scheme are evaluated in terms of their size or scale, geographical extent and duration and reversibility. For the purposes of this LVIA assessment, duration is considered to be; Temporary (less than 1 year), short term (1 to 7 years), medium (7 to 15 years), long term (15 – 60 years) and permanent (effects lasting over 60 years). The photomontages in support of this chapter (refer to **Appendix 12.1**) have been provided to illustrate a Year 1 and Year 10¹ scenario, with the latter including mitigation planting. Judgements regarding the magnitude of landscape impact are indicated in **Table 12-3**.

Table 12-3: Magnitude of Landscape Impact

Definition	Magnitude of Impact
Major alterations to, or complete loss of, key landscape characteristics or components of the baseline condition, i.e., predevelopment landscape and/ or introduction of dominant, uncharacteristic elements with the attributes of the receiving landscape	Very High
Notable or long-term change to a widespread area or a notable change in continuous or key landscape characteristics or components, i.e., predevelopment landscape and / or introduction of elements that may be prominent but may not necessarily be substantially uncharacteristic with the attributes of the receiving landscape.	High
Moderate or longer-term change over a restricted area or a moderate change in key landscape characteristics or components, i.e., predevelopment landscape and or introduction of elements that may not be uncharacteristic with the surrounding landscape.	Medium
Minor short or medium-term change over a restricted area or a minor change in key landscape characteristics or components	Low
Imperceptible change in key landscape characteristics or components	Very Low / Negligible

12.2.5.2 Visual Impact Assessment

The assessment of effects on views is an assessment of how the introduction of a new development will affect views within the study area. The Assessment of visual effects therefore needs to consider:

- Direct impacts of a new development upon views of the landscape through intrusion or obstruction;

¹ Note – A Year 10 montage was chosen to represent proposed mitigation, as this was considered to be representative of a year when planting is well-established and providing screening effects.

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- The reaction of viewers that may be affected e.g. residents, walkers, road users etc.; and
- The overall impact on visual amenity.

12.2.5.2.1 Sensitivity of Visual Receptors

For visual receptors, judgements on significance and sensitivity are closely interlinked. For example, the most valued views are likely to be those which people go and visit because of the available view.

Other factors affecting visual sensitivity include:

- The location and context of the viewpoint;
- The expectations and occupation or activity of the receptor; and
- The importance of the view.

Judgements on the overall visual sensitivity/ susceptibility are provided in **Table 12-4** and overall sensitivity of the visual resource is based on combining judgements on the sensitivity of the human receptor (for example resident, commuter, tourist, walker, recreationist or worker, and the numbers of viewers affected) and judgements on the visual resource significance (for example views experienced from residential properties, workplace, leisure venue, local beauty spot, scenic viewpoint, commuter route, tourist route or walkers' route).

Table 12-4: Visual Resource Sensitivity

Definition		Sensitivity
Viewer susceptibility	Value of view	
<p>Visitors drawn to a particular view (usually promoted or in a designated landscape), including those who have travelled to experience the views.</p> <p>The viewer is of very high susceptibility and has little or no tolerance to change.</p>	<p>Views from nationally and internationally known viewpoints which are designated and are or are associated with internationally designated landscapes or key features or elements of nationally designated landscapes or are linked to important and popular visitor attractions.</p> <p>The view would have Little or no tolerance to change.</p>	Very High
<p>Residents.</p> <p>People engaged in quiet outdoor recreation where landscape is an important part of the experience.</p> <p>The viewer is of high susceptibility and has little tolerance to change.</p>	<p>Views from residential property. Public rights of way, National Trails, long distance walking routes and nationally designated countryside/landscape features with public access.</p> <p>The view would have low tolerance to change.</p>	High
<p>Observers enjoying the countryside from vehicles on quiet/promoted routes.</p> <p>People engaged in outdoor sport or recreation which may involve appreciation of views (e.g. cyclists, golfers).</p> <p>The viewer is of medium susceptibility and has medium tolerance to change.</p>	<p>Views from local roads and routes crossing designated countryside/landscape features as well as promoted paths.</p> <p>The view would have medium Tolerance to change.</p>	Medium
<p>People engaged in outdoor sport or recreation which does not involve appreciation of views.</p> <p>The viewer is of low susceptibility and has high tolerance to change.</p>	<p>Views from workplaces, main roads and undesignated countryside/landscape features.</p> <p>The view would have high tolerance to change.</p>	Low
<p>People at work where the setting is not important to the quality of working life.</p> <p>Road users (commuters) where the view is incidental to the journey.</p> <p>The viewer is of negligible susceptibility and has high tolerance to change.</p>	<p>Views from within and of undesignated landscapes with significant presence of landscape detractors.</p> <p>The view would have high tolerance to change.</p>	Very Low/ Negligible

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12.2.5.2.2 Magnitude of Visual Effect

The magnitude of impact on the visual resource results from the scale of change in the view, with respect to the loss or addition of features in the view, and changes in the view composition. Important factors to be considered include proportion of the view occupied by a new development, and distance and duration of the view. Other vertical features in the landscape and the backdrop to the Proposed Scheme will all influence resource change. Judgements regarding the magnitude of visual impact are provided in **Table 12-5**.

Table 12-5: Magnitude of Visual Impact

Definition	Magnitude
Major alterations to, or completed loss of, key visual characteristics or components of the visual baseline condition. Effects are likely to be experienced at a very large scale, considered permanent and irreversible.	Very High
Notable or longer-term change to a widespread area or view or a notable change in key visual characteristics or components. Composition of the view would alter. View character may be partially changed through the introduction of features which, though uncharacteristic, may not necessarily be visually discordant.	High
Moderate or longer-term change over a restricted area or view or a moderate change in key visual characteristics or components	Medium
Minor short or medium-term change over a restricted area or view or a minor change in the key visual components. Composition and character of view substantially unaltered.	Low
imperceptible change to the key visual characteristics or components of the view.	Negligible / Very Low

12.2.5.3 Significance of Landscape and Visual Effects

The purpose of this LVIA is to determine, in a transparent way, the likely significant landscape and visual effects of a new development. It is accepted that, due to the nature and scale of the development proposed, the development could potentially give rise to some notable landscape and visual effects.

Significance can only be defined in relation to each particular development and its specific location. The relationship between receptors and effects is not typically a linear one. It is for each LVIA to determine how judgements about receptors and effects should be combined to derive significance and to explain how this conclusion has been arrived at.

The identification of significant effects would not necessarily mean that the effect is unacceptable in planning terms. What is important is that the likely effects on the landscape and visibility are transparently assessed and understood in order that the determining authority can bring a balanced, well-informed judgement to bear when making the planning decision.

The significance of effects on landscape, views and visual amenity have been judged according to a seven-point scale: Profound, Very Significant, Significant, Moderate, Slight, Not Significant and Imperceptible as presented in **Table 12-6**, which contains a description of the significance of effect criteria.

Table 12-6: Significance of Effect Criteria

Landscape Resource	Visual Resource	Significance of Effect
Where the project would not alter the landscape character of the area.	Where the project would retain existing views.	Imperceptible
Where proposed changes would have an indiscernible effect on the character of an area.	Where proposed changes would have a barely noticeable effect on views/visual amenity.	Not Significant
Where proposed changes would be at slight variance with the character of an area.	Where proposed changes to views, although discernible, would only be at slight variance with the existing view.	Slight
Where proposed changes would be noticeably out of scale or at odds with the character of an area.	Where proposed changes to views would be noticeably out of scale or at odds with the existing view.	Moderate

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Landscape Resource	Visual Resource	Significance of Effect
Where proposed changes would be uncharacteristic and/or would significantly alter a valued aspect of (or a high quality) landscape.	Where proposed changes would be uncharacteristic and/or would significantly alter a valued view or a view of high scenic quality.	Significant
Where proposed changes would be uncharacteristic and/or would significantly alter a landscape of exceptional landscape quality (e.g., internationally designated landscapes), or key elements known to the wider public of nationally designated landscapes (where there is no or limited potential for substitution nationally).	Where proposed changes would be uncharacteristic and/or would significantly alter a view of remarkable scenic quality, within internationally designated landscapes or key features or elements of nationally designated landscapes that are well known to the wider public.	Profound

For the purposes of this assessment those effects indicated, in **Figure 12.2** below, as being ‘Profound’ or ‘Very Significant’ are regarded as being significant. Effects of ‘Moderate’ and lesser significance have been identified within the assessment, though are not considered significant. For those effects indicated as being of ‘Significant’ professional judgement has been exercised in determining if the effect is considered to be significant, taking account of site specific or location specific variables which are given different weighting in each instance according to location.

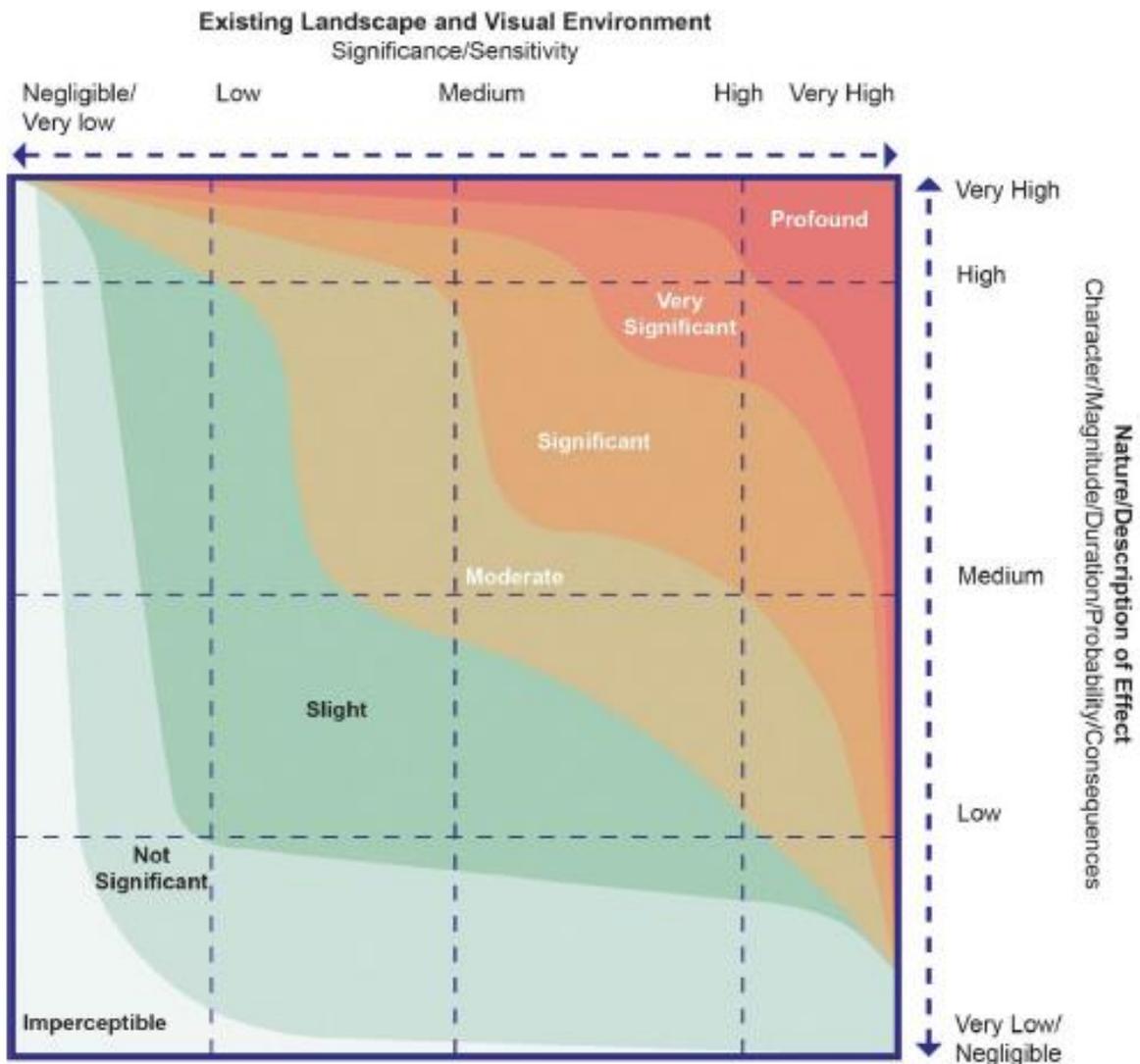


Figure 12.2: Significance of Effects Matrix

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A conclusion that an effect is 'significant' should not be taken to imply that a new development is unacceptable. Significance of effect needs to be considered with regard to the scale over which it is experienced and whether it is beneficial or adverse, e.g. Public Realm improvements within towns are often viewed as a positive, beneficial effect.

12.2.6 Data Limitations

The landscape and visual impact assessment, and site photography utilised in the production of the accompanying photomontages has been conducted from publicly accessible locations along with controlled access to National Monuments such as Dowth.

These combined fieldwork exercises have helped inform the visual impact assessment, especially from within built up areas, such as Slane, where existing views currently available to residents of dwellings could not be directly accessed. Assessment of such views would require entering private dwellings which is outside the scope of the assessment.

Effects on protected structures and structures of architectural merit are excluded from the landscape and visual impact assessment. These are documented in **Chapter 13 – Archaeological and Cultural Heritage** and **Chapter 14 – Architectural Heritage** of this EIAR.

12.3 Description of Existing Environment (Baseline Scenario)

12.3.1 Current Baseline Environment

12.3.1.1 Mainline Bypass

The existing environment, associated with the Mainline Bypass section of the Proposed Scheme includes lands lying between Littlewood Forest to the north of the Mainline Bypass roundabout and McGruder's crossroads, which lies to the south of the southern connection roundabout associated with the Proposed Scheme to the south. The landscape associated with the mainline bypass and its wider environs is comprised of the village of Slane, the Hill of Slane and associated rolling hills, and the steep river valley associated with the River Boyne. The visual amenity of this area is extremely valuable both socially and economically and is potentially the most significant and highly valued landscape in County Meath as it contains the Brú na Bóinne World Heritage Property (WHP). The western edge of the buffer zone associated with the WHP is located approximately 2 km east of Slane village and the proposed mainline bypass is located approximately 950 m to the west of the western edge of the buffer zone of the WHP.

Land cover associated with the mainline bypass is largely comprised of pastoral and arable agricultural land use, with a diverse variety of field sizes and patterns. Field patterns to the north-east of Slane are predominantly large scale, associated with larger scale farms, with field boundaries generally well defined by mixed species hedgerows of varying quality. In many places these hedgerows have become degraded, have developed gaps, become overgrown or over-mature, so that only lines of trees remain without hedgerow species to connect them. In other instances, gorse has been allowed to form hedgerows, changing the appearance of the generally well managed estate farmland.

Tree cover forms a strong element of the landscape, particularly to the north of Slane and generally consists of lines of hedgerow trees dividing large fields. Scattered copses of Beech and mixed-species woodland are often located on the tops or elevated slopes and were planted during the 18th century as hunting woodlands. They provide a strong sense of enclosure and provide a textural contrast to the otherwise open landscape. The Hill of Slane is prominent by virtue of a ruined abbey which also acts as a prominent local landmark to the north of Slane village.

The River Boyne and associated valley runs from the south-west corner of Meath through Trim, Navan, Slane and Drogheda. It is enclosed and well wooded along much of its length, particularly to the south and west of Slane. Views of the river are afforded from around Slane where the river can be seen cutting through a large flat-bottomed valley, the river corridor near the Brú na Bóinne area forms part of the WHP.

To the south of the River Boyne the landscape is comprised of a series of rolling drumlins. Thick hedgerows, with scattered coniferous plantations and shelterbelts of deciduous trees separate medium to large scale fields. Deep roadside drainage ditches and banked hedgerows are a common feature of the landscape in the enclosed rural road corridors.

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The most noteworthy views towards Slane from the Boyne valley are from the southern bank of the river and from the existing N2, which forms an important approach to the town. Elements contained within available views include Slane Bridge, the Boyne Navigation Canal, the southern demesne entrance to Slane Castle (Gothic Gate), Mill Hill with stone terrace houses, the elevations of the houses fronting the Square (forming the southern entrance to the village), the plantations of Slane Castle demesne, and the church tower to the west end of the village. The view of the rear elevation of the south-eastern house on the Square forms a distinct architectural element as it is the first glimpse perceived of the historical fabric of the village from the uphill southern approach from the existing N2. The existing traffic gantries on Mill Hill are a visual distraction on available views when approaching Slane from the south.

Other visual detractors include the overhead pylon line which crosses east to west across the central portion of the study area, and the Roadstone Quarry at Carrickdexter to the west of Slane adjacent to the N51. The quarry, however, is located on the west side of a hill and is not generally visible from the N51 to the south.

12.3.1.2 N51 Route Improvements

The route improvements to sections of the N51 as part of the Proposed Scheme traverses generally in an east-west orientation to the immediate north of the River Boyne Valley. The proposed N51 Route Improvements extend west from the proposed roundabout junction with the Mainline Bypass section to the eastern edge of Slane village. Land cover adjacent to the N51 route improvements is largely comprised of pastoral and arable agricultural land use, with a variety of field sizes and patterns apparent. Roadside hedgerows associated with field and residential property boundaries adjacent to the N51 restrict views of the wider environs. Localised glimpsed views to the south, across the Boyne Valley, are often experienced for a short duration. Residential properties are a feature within the landscape, fronting onto the existing N51 alignment, with a variety of boundary treatments apparent, which adds variety and interest on the approach to Slane village.

It is noted that there is a Dark Sky monitoring station located within the Brú na Bóinne World Heritage Property, which is used to monitor lighting impacts on the WHP. Proposed lighting along this section of the Proposed Scheme will utilise LED lanterns and the number of lighting columns proposed will be minimised in extent in order to avoid potential adverse impacts on the Dark Sky area associated with the WHP.

12.3.1.3 Slane Village Public Realm Enhancement

Slane village is a medium sized historic town, which was originally a demesne village, and is located immediately north of the River Boyne, an area which is also designated as a Special Area of Conservation and a Special Protection Area. The overall historic built fabric of Slane remains intact, and the town is centred around four large three-storey detached houses facing a central crossroads. The local vernacular style dates from the 18th Century, with simple square cut stone buildings, with less brick detailing than is common elsewhere in the county. Residential development in the town centre is limited apart from some 1950's – 70's housing on the western approach. However, there is a concentration of new development to the north of the town on higher ground.

The town is a popular tourist attraction due to its location and heritage, with tourist attractions near the village including the Hill of Slane, Slane Castle, Slane Distillery and Francis Ledwidge Museum. The Slane Castle grounds to the south-east is a well-known venue for large music concerts. It is noted however, that limited numbers of visitors stop in the village, unless it is to attend an event and that the existing vehicular and pedestrian arrangements within the village are an issue for residents and school children.

12.3.1.4 Historical Context

It is noted that lands within the study area associated with the Proposed Scheme are largely of modern character, with large scale field patterns defined by hedgerows prevalent between Slane village and the WHP to the east. This landscape is reflective of an evolving landscape, echoing changes in agricultural practices and the expansion of Slane village, with boundaries to fields and townland areas being removed and altered throughout particularly during the 18th Century. During this period the Demesne associated with Slane Castle was enlarged with parkland, woodland and agricultural field sizes being modified throughout.

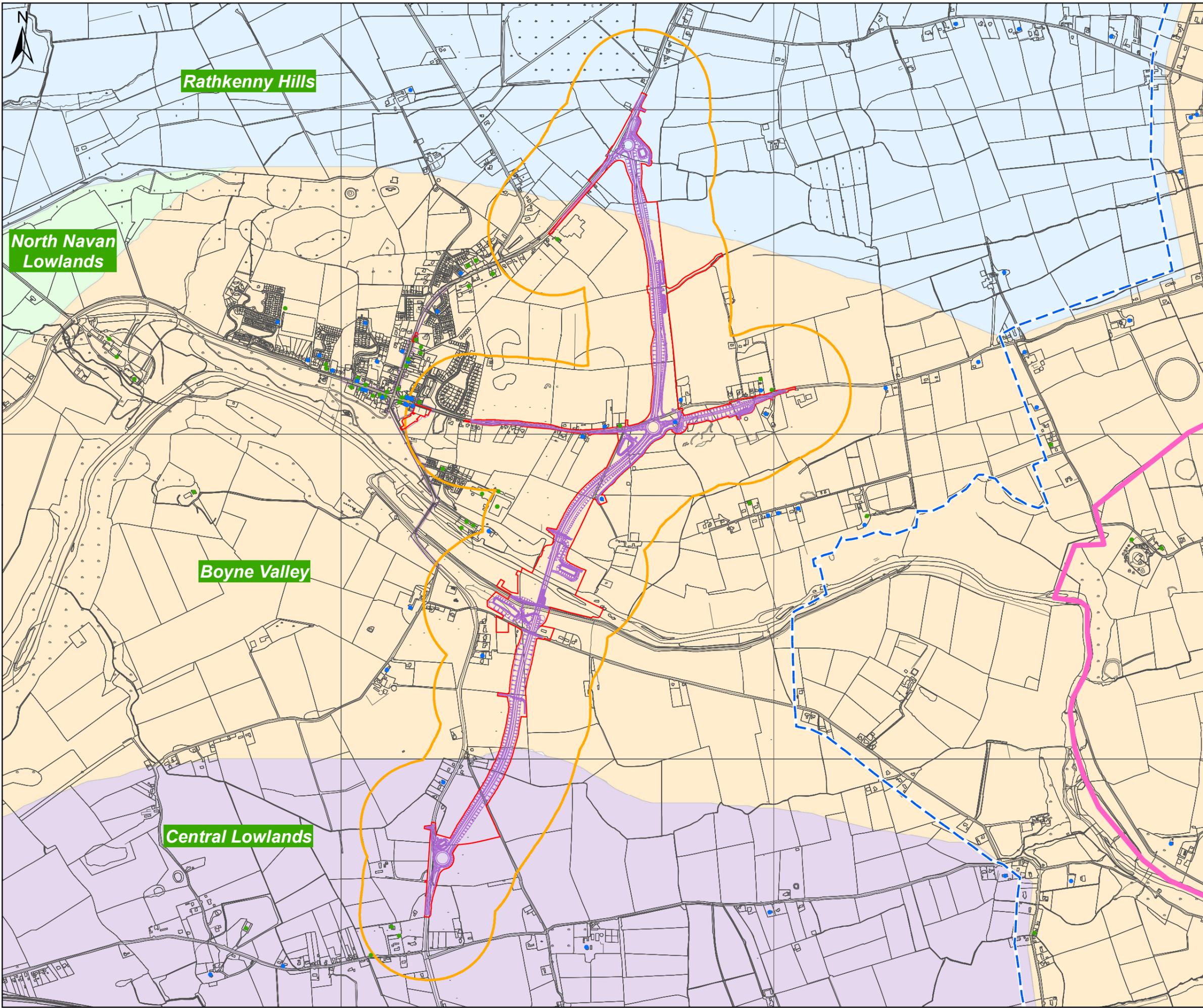
Other changes to the landscape character, brought about in the 20th century, include the connection of Slane village to the national grid, which saw electricity poles and large-scale pylons being introduced through the fields east and south-east of Slane village. The water reservoir close to the car park at the Hill of Slane, the

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large fertiliser plant north of Slane village, and the addition of modern housing along the eastern edge of Slane village are all examples of the ongoing changes to the landscape around Slane village.

12.3.2 Landscape Character Assessment of County Meath

A review of the Landscape Character Assessment accompanying the Meath CDP has identified that the Proposed Scheme traverses three LCAs: LCA 4 – Rathkenny Hills, LCA 5 – Boyne Valley, and LCA 6 – Central Lowlands (refer to **Figure 12.3**).



Legend

- Proposed Scheme
- Proposed Scheme Boundary
- 300m Zone of Influence

Landscape Character Area

- Boyne Valley
- Rathkenny Hills
- Central Lowlands
- North Navan Lowlands

Brú na Bóinne World Heritage Property

- Core Zone
- Buffer Zone

GeoDirectory (Q1 2023)

- Residential
- Commercial
- Business

Data Source: OSI, Meath County Development Plan 2021-2027, An Post GeoDirectory (Q1 2023) provided by Meath County Council

0 0.25 0.5 1
Kilometres



Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.3

Landscape Character Areas

rps West Pier
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Issue Details

File Identifier:
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Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
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Drawn: NR	Date: 14/06/2023
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Checked: SA	Scale: 1:16,500 (A3)
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Approved: NO'N	Projection: ITM
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12.3.2.1 Rathkenny Hills LCA

The Meath CDP Landscape Character Assessment describes the Rathkenny Hills LCA as a small area of rolling hills, which wrap around the north of Slane. It is predominantly a smooth textured agricultural landscape with large fields attached to estate farms. Fields are mostly pastoral but there are some arable fields. Built development consists of loose groups of detached dwellings along road corridors and large estate houses set within walled grounds or at the ends of avenues.

Fields are generally divided by ash hedgerows of varying quality. In many places these hedgerows have become degraded, gappy, overgrown or over mature so that only the lines of ivy-covered hedgerow trees remain without the hedgerow to connect them. In other instances, gorse has been allowed to grow in hedgerows, changing the appearance of managed estate farmland. Tree cover is a strong element of landscape character in this area and consists of lines of ivy-covered hedgerow trees dividing large fields and copses of beech and mixed species woodland on the tops or side slopes of hills, planted during the 18th Century as hunting woodlands. They provide a sense of enclosure and texture to the otherwise fairly smooth open landscape.

There are some small coniferous plantations and an area of scrubby woodland along the western boundary, which separate this landscape character area from the adjacent one (LCA 3) and which is a slight variation in the overall landscape character of this area. There are two main transport routes – the N2 connecting Slane and Ardee and the R163 connecting Slane and Kells. All other roads are tertiary ‘yellow’ roads. There are several designated picnic and parking areas along the N2 and a group of self-catering cottages and hostel accommodation near Slane but no other designated tourist attractions in this area. The only significant visual detractors in this area are a large overhead pylon line which crosses the centre of the area from east to west and a quarry to the west of Slane adjacent to the main road. However, the quarry is located on the side of a hill and contributes more to the adjoining Landscape Character Areas.

Key characteristics identified in the Landscape Character Assessment, under a variety of headings, are as follows:

- *“Large agricultural fields*
- *Areas of broadleaf and mixed species woodland – remnants of 18th Century hunting landscapes*
- *Mature woodland habitat*
- *Valuable mature parkland associated with estate houses*
- *No settlements*
- *Individual dwellings arranged in loose groups along road corridors*
- *Estate houses within walled grounds and at ends of avenues.”*

It is noted that the landscape assessment accompanying the Meath CDP provides categorisation of the Rathkenny Hills LCA with regards to Landscape Value, Landscape Sensitivity and Landscape Importance which are identified as:

- Landscape Value – Very High
- Landscape Sensitivity – High
- Landscape Importance – Regional

The Meath CDP Landscape Character Assessment also identifies that the Rathkenny Hills LCA is *“reasonably tranquil with limited built development and high intervisibility with landscapes to the south. It’s potential capacity to accommodate new transport routes would be medium provided the new transport corridors were designed to accommodate and strengthen existing landscape boundaries.”*

12.3.2.2 Boyne Valley LCA

The Meath CDP Landscape Character Assessment describes the Boyne Valley LCA as being characterised by a steep river valley with areas of rolling lowland adjacent to the River Boyne. It runs from Cadbury, Co. Kildare, north-eastwards, winding its way through the landscape to the sea at Drogheda. It is arguably the most significant and highly valued landscapes in the county because it contains the Brú na Bóinne World Heritage Property. This LCA also includes the heritage town of Slane.

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Slane village is a medium sized historic town, which was originally a demesne village. The overall historic built fabric of Slane remains intact. The town is centred around four large three-storey detached houses facing a central crossroads. The local vernacular style dates from the 18th Century, with simple square cut stone buildings, with less brick detailing than is common elsewhere in the county. Residential development in the town centre is limited apart from some 1950's – 70's housing on the western approach. However, there is a concentration of new development to the north of the town on higher ground. Further development of this type should be avoided due to its size, within the context of the town and its prominence in the landscape. Slane is a popular tourist attraction due to its location and heritage. Slane Castle is situated to the west of the town with Brú na Bóinne WHP to the east and there are two main transport routes – the N2 connecting Slane and Ardee and the N51 connecting Slane to Navan, to the west and to wider transport routes to the east.

The lowlands have an undulating landform with areas of wetland associated with the River Boyne, particularly surrounding the flat river plain in the narrow valley adjacent to Slane. The valley is steeply sided with large rolling hills providing good vantage points and views across the valley. Pasture farmland is predominant in the rolling lowland with areas of poorly drained marshland adjacent to the River Boyne.

There is a quarry to the southwest of Slane, which is reasonably well hidden from Slane but further mineral extraction in the area needs to be carefully sited due to extensive views of the uplands that are available on higher ground and within the Boyne Valley. The other visual detractors in the area are large housing developments situated above Slane village. Their scale is totally out of character with the local vernacular and due to its siting, it is clearly visible for some distance to the south.

Key characteristics identified in the Landscape Character Assessment, under a variety of headings, are as follows:

- *“Complex drumlin landform created by glacial movement.*
- *Mix of medium - large pasture/arable fields.*
- *Mix of Sycamore, Yew, Alder and Beech associated with estate landscape.*
- *Gorse in places on upland slopes and ornamental conifers related to ribbon development.*
- *Large quarry to southwest of Slane.*
- *Boyne Valley has a diverse range of attractive and important habitats associated with the River Boyne. It is a well – wooded river corridor.*
- *Strong network of hedgerows in most parts.*
- *Long established mixed scale farmland.*
- *Wealth of tourist attractions related to the heritage of Meath.*
- *Newgrange is an ancient passage tomb and designated as a World Heritage Property.*
- *Brú na Bóinne Visitor Centre.*
- *Hill of Slane where St. Patrick lit his Paschal Fire.*
- *Slane Castle is a popular location for outdoor concerts.”*

It is noted that the landscape assessment accompanying the Meath CDP provides categorisation of the Boyne Valley LCA with regards to Landscape Value, Landscape Sensitivity and Landscape Importance which are identified as:

- Landscape Value – Exceptional
- Landscape Sensitivity – High
- Landscape Importance – International

The Landscape Character Assessment also identifies that the Boyne Valley LCA has *“a low potential capacity to accommodate new transport routes due to the exceptional landscape value and high sensitivity of this LCA. The future upgrading of existing roads would also need to be carefully planned to avoid the loss of landscape features that screen existing road and rail corridors.”*

12.3.2.3 Central Lowlands LCA

The Meath CDP Landscape Character Assessment describes the Central Lowlands LCA as being a large lowland landscape area composed of rolling drumlins interspersed with numerous large estates and associated parkland. Thick wooded hedgerows, with some conifer plantations, and shelterbelts of ash and larch, separate medium to large fields. Deep roadside drainage ditches and banked hedgerows are a common feature of the landscape in the enclosed rural road corridors. The main transport routes are those radiating from Trim including the R154 to Athboy – Dunboyne, R156 Ballivor - Dunboyne and the R160 to Longwood.

This area of western lowland is less populated, and the built fabric consists of scattered dwellings, with concentrations of residential dwellings present adjacent to arterial routes within the vicinity of larger villages such as Longwood and Ballivor, which have expanded significantly and inappropriately due to development pressure. The landscape character around settlements tends to be a well-managed patchwork of small pastoral fields, dense hedgerows and small areas of broadleaved woodland particularly in the Kildalkey environs where there are estate landscapes with large mature parkland trees. The landscape is predominantly rolling pastureland, although the landscape surrounding Castlerickard has greater diversity than elsewhere in the lowlands with estate landscape, large conifer plantations, and birch woodland around the Boyne River corridor.

In more remote areas, away from settlements, single-track roads wind through less well-managed farmland with rough pasture, overgrown hedgerows and less woodland. Farmland is a variety of scales with square – rectangular fields divided by hedgerows, which are usually clipped to eye-level adjacent to road corridors but are less well managed away from roads. The agricultural landscape comprises a series of small farms rather than few large ones. Views within this area are generally limited by the complex topography and mature vegetation except at the tops of drumlins where panoramic views are available particularly of the Hill of Tara uplands and Skryne Church. Donore village is critical to the setting of Brú na Bóinne World Heritage Property and as such any development in Donore would need to be considered carefully. There is a small cement works outside Kildalkey but the rolling topography limits its visual impact. Short-range views are channelled along narrow valleys between drumlins and often along road or river corridors.

Key characteristics identified in the Meath CDP Landscape Character Assessment, under a variety of headings, are as follows:

- *“Complex drumlin landform created by glacial movement*
- *Mix of small - medium rough pasture fields.*
- *Beech stands and rows of beech and pine.*
- *Sand & gravel quarries southwest of Hill of Down and near Kilmessan.*
- *Strong network of well-wooded hedgerows in most parts.*
- *Range of mature broadleaf copses and rows of pines. Some wetland habitat and wet pasture adjacent to Royal Canal.*
- *Boyne River Corridor and Stoneyford River are important due to the variety of habitats associated with the rivers*
- *Long established mix scale farmland*
- *Estate landscapes”*

It is noted that the landscape assessment accompanying the Meath CDP provides categorisation of the Central Lowlands LCA with regards to Landscape Value, Landscape Sensitivity and Landscape Importance which are identified as:

- Landscape Value – High
- Landscape Sensitivity – Medium
- Landscape Importance – Regional

The Landscape Character Assessment also identifies that the Central Lowlands LCA has *“a medium potential capacity to accommodate road infrastructure and upgrades to existing roads as the small-scale*

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wooded nature of the landscape has the potential to screen such developments and there are few archaeological features present.”

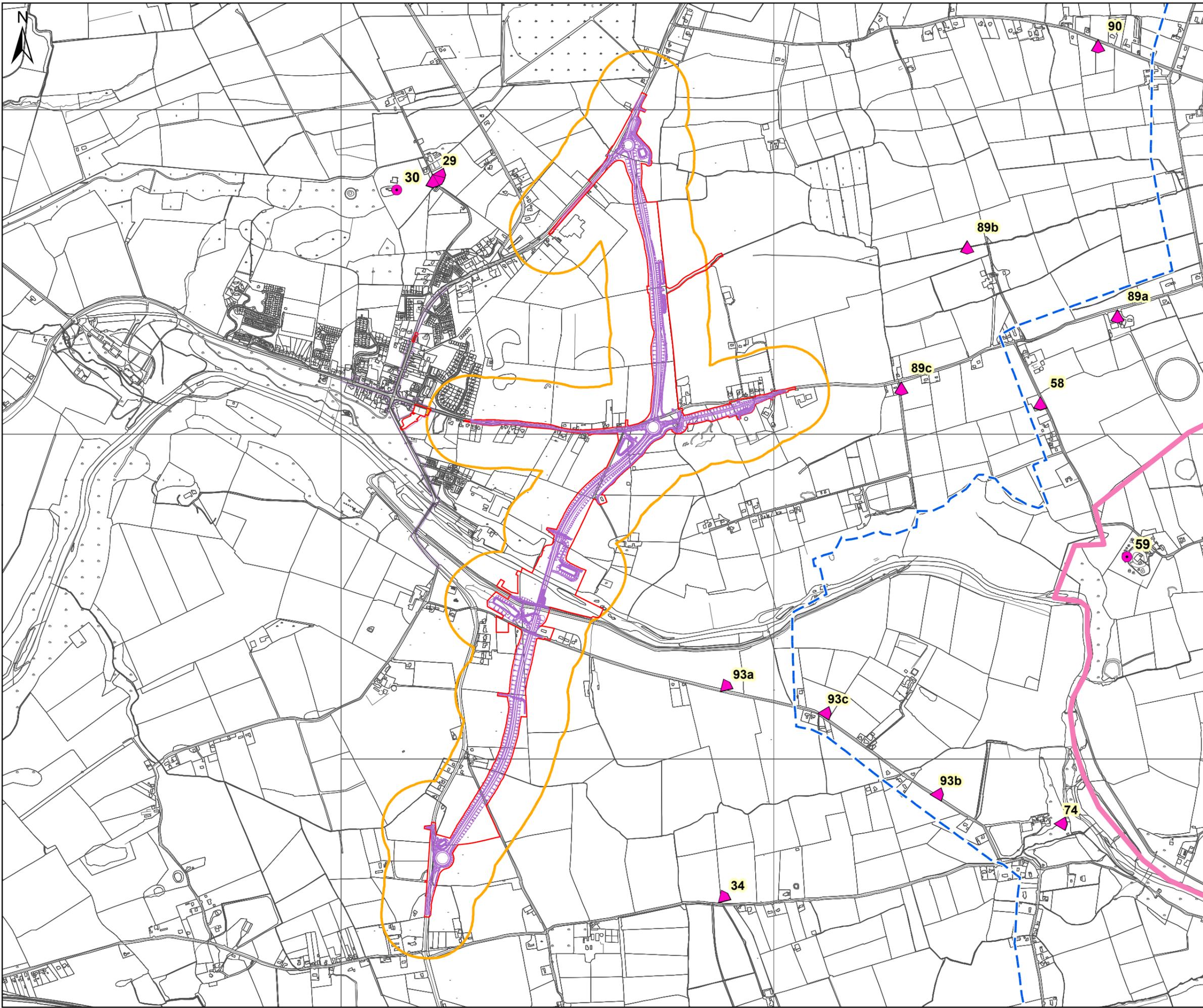
12.3.3 Protected Views and Prospects

Following a review of Map 8.6.1 that accompanies the Meath CDP and available information in relation to Protected Views and Prospects, it has been established that there are several Protected Views and Prospects within proximity to the Proposed Scheme (refer to **Figure 12.4**).

Relevant information in relation to Protected View ID, Location, Direction of View and Significance is provided in **Table 12-7** below.

Table 12-7: Relevant Protected Views and Prospects

View ID	Direction of View	Location	Description	Significance
29	East, South-east and South	Car Park at Hill of Slane	Extensive view from east to southeast across open working and settled landscape. Modern housing and agricultural development visible.	National
30	Panorama	Hill of Slane	Extensive panorama across open working and settled landscape. Modern housing and agricultural development visible	National
34	North-east	On local road L1600-28 between McGruder's Cross and Newtown/Rossnaree	View of Boyne Valley with open view of Knowth and Newgrange. Mixed composition of working landscape. Slane is visible on left (west). Roads, power lines and housing visible.	International
58	South	County road between N51 and Knowth	First view of tumulus looking south	Regional
59	Panorama	Knowth Tumulus	Panoramic views in all directions from top of Knowth tumulus. Extensive views across a working countryside.	International
63	North	County road between Donore and Redmountain	Extensive view to north across woodland, pasture and tillage. Middle distance views of Newgrange and Knowth in centre of view and very little development visible.	International
74	East	Boyne valley from Rossnaree House	Boyne valley from Rossnaree House.	National
89a	South	Views towards Brú na Bóinne from N51	Views along the N51 looking south into the Core Area of the World Heritage Property.	National
89b	South	Views towards Brú na Bóinne from N51	Views along the N51 looking south into the Core Area of the World Heritage Property.	National
89c	South	Views towards Brú na Bóinne from N51	Views along the N51 looking south into the Core Area of the World Heritage Property.	National
90	South	West of crossroads at Monknewtown	Views at Monknewtown towards the Core Area of the World Heritage Property.	Regional
93a	North-east	Local Road L16002, 1.2 km east of Fenner Crossroads	View towards the Core Area of the World Heritage Property.	Regional
93b	East	Local Road L16002, 0.7 km west of Rossnaree	View towards the Core Area of the World Heritage Property.	Regional
93c	East	Local Road L16002, 1.65 km east of Fenner Crossroads	View towards the Core Area of the World Heritage Property	Regional



Legend

- Proposed Scheme
- Proposed Scheme Boundary
- 200m Zone of Influence

Protected Views and Prospects

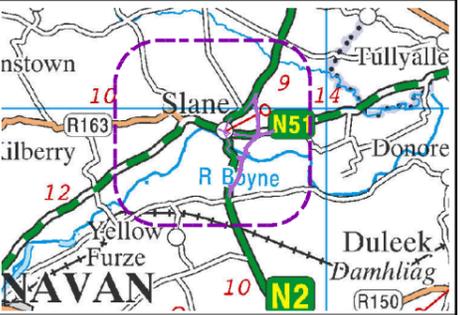
- Panoramic View
- Direction of View

Brú na Bóinne World Heritage Property

- Core Zone
- Buffer Zone

Data Source: OSI, Meath CDP 2021-2027

0 0.25 0.5 1
Kilometres



Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.4

Protected Views

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Issue Details

File Identifier:
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Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
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Drawn: NR	Date: 14/06/2023
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Checked: SA	Scale: 1:16,500 (A3)
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Approved: NO'N	Projection: ITM
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12.3.4 Evolution of the Environment in the Absence of the Proposed Scheme

It is considered that a Do-Nothing scenario would result in no material alteration to the existing road corridors (N2 and N51) or the surrounding local road networks and associated junctions, other than operations required to maintain the current condition of the transport corridors.

In the absence of the proposed bypass, opportunities to improve the public realm in the village will be limited as the public realm enhancement proposals as part of the Proposed Scheme can only be undertaken once the proposed N2 bypass is operational.

As such a Do-Nothing scenario is predicted to have a localised, negligible magnitude of impact resulting in localised indirect effects that are considered to be not significant on both landscape and visual receptors.

12.4 Description of Likely Significant Effects

Sections 12.4.1 to 12.4.4 provide a description of the likely significant effects of the Proposed Scheme on landscape and visual in cumulation with other existing development in the area. A description of the likely significant effects in cumulation with approved development i.e., development not yet built, is presented in **Section 12.4.5** with a detailed description of the methodology included in **Chapter 25**.

The impact interactions between landscape and visual and other environmental factors are identified and described in **Chapter 26** and assessed throughout **Sections 12.4.1 to 12.4.5**.

12.4.1 Construction Stage Landscape Character Impacts

Chapter 5 – Description of the Construction Phase describes the construction methods proposed in detail, with construction works anticipated to be approximately 36 months in duration. Construction phase works will be visible to a varied extent depending upon the individual construction activities being undertaken at any given time.

Construction phase impacts relate generally to the following activities that are considered to be common across the Proposed Scheme:

- Site clearance activities including removal of existing vegetation along the Proposed Scheme generally;
- Temporary construction compounds for site offices, welfare facilities and storage areas for materials;
- Temporary working areas; and
- Construction machinery and plant movements along the Proposed Scheme corridor and the surrounding road networks.

In addition to the construction phase activities identified above, the particular aspects of the Proposed Scheme that are most relevant to this LVIA include:

- Construction of new roundabout junction connecting Proposed Scheme to existing N2 road network, including proposed link connections (Ch. 0) which will involve the remodelling of existing topography to form new embankments and cuttings resulting in the loss of localised sections of hedgerows and established roadside vegetation.
- Construction of new roundabout junction connecting Proposed Scheme to existing N51 road network, including proposed link connections (Ch. 2220) which will involve the remodelling of existing topography to form new cuttings resulting in the localised loss of hedgerows and established roadside vegetation.
- Construction of new roundabout junction connecting Proposed Scheme to existing N2 road network, including proposed link connections (Ch. 3495) which will involve the remodelling of existing topography to form new embankments resulting in the loss of hedgerows and established roadside vegetation.
- Construction of new road connections between the proposed road corridor and surrounding road networks (N51 realignment) which will involve the remodelling of existing topography to form new embankments and cuttings resulting in the loss of hedgerows and established roadside vegetation.
- Construction of new bridge crossing across the River Boyne and associated modifications to local road network, which will involve the remodelling of the existing topography to form new cuttings and

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embankments resulting in the loss of established roadside vegetation and riparian vegetation adjacent to the River Boyne.

- Construction of new accommodation overbridges (three number in total) to carry farm accommodation tracks and Local Road access (L16002 – Rossnaree Road) over the proposed mainline corridor, which will involve localised remodelling of the existing topography to form new embankments and cuttings resulting in localised removal of hedgerows and roadside vegetation.
- Construction of new SUDS drainage ponds throughout the Proposed Scheme, which will involve the localise remodelling of the existing topography to form new cuttings and slopes resulting in localised removal of existing field vegetation, hedgerows and established sections of roadside vegetation.
- Construction of large cuttings on the northern and southern approaches to the River Boyne bridge crossing (Ch. 800 to 1050 and Ch. 1600 to 1800), which will involve remodelling of the existing topography to form new slopes of 1:2, resulting in localised removal of existing field vegetation, hedgerows and established sections of roadside vegetation.
- Public realm enhancement works within Slane village which will involve enhancement to the existing public realm provision resulting in new natural stone surfaced footpaths, enhancement to existing carriageways, new cycleway provision, new planting (trees and shrubs) throughout, resulting in localised loss of existing street trees.

An assessment of the significance of the impact of the Proposed Scheme during the construction phase on the landscape character is provided in the following assessment tables (**Table 12-8 to Table 12-10**).

Table 12-8: Rathkenny Hills LCA – Construction Phase Impact Assessment

LCA 4 – Rathkenny Hills	
Sensitivity	<p>The northern roundabout junction (Ch. 3495) and a section of the Proposed Scheme mainline are located within this LCA.</p> <p>Key characteristics which, together with field works, have informed an understanding of the susceptibility of this landscape to the development proposed are described in the CDP; refer to Section 12.3.2.1.</p> <p>The Rathkenny Hills LCA is a small area of rolling hills, which wrap around the north of Slane. It is predominantly a smooth textured agricultural landscape with large fields attached to estate farms. Fields are mostly pastoral agricultural in usage but there are localised areas of arable fields. Built development consists of loose groups of detached dwellings along road corridors and large estate houses set within walled grounds or at the ends of avenues. The large field pattern associated with the LCA is generally well defined by ash hedgerows of varying quality. In many places these hedgerows have become degraded, gappy, overgrown or over mature so that only the lines of ivy-covered hedgerow trees remain without the hedgerow to connect them. In other instances, gorse has been allowed to grow in hedgerows, changing the appearance of managed estate farmland. Tree cover is a strong element of in this area and consists of lines of ivy-covered hedgerow trees dividing large fields and copses of beech and mixed species woodland on the tops or side slopes of hills, planted during the 18th Century as hunting woodlands. They provide a sense of enclosure and texture to the otherwise smooth open landscape. There are some small coniferous plantations and an area of scrubby woodland along the western boundary, which separate this landscape character area from the adjacent one (LCA 3) and which is a slight variation in the overall landscape character of this area.</p> <p>There are two main transport routes – the N2 connecting Slane and Ardee and the R163 connecting Slane and Kells. The only significant visual detractors in this area are a large overhead pylon line which crosses the centre of the area from east to west and a quarry to the west of Slane adjacent to the main road. Taking account of the above characteristics and influence of existing road corridors within the study areas, the susceptibility of the LCA to the type of development proposed is judged to be medium.</p> <p>Whilst the LCA within the study area is not a designated landscape, it has been categorised as being of High Sensitivity, Very High Landscape Value and of Regional Importance within the CDP and of medium sensitivity to Road development. Given the localised influences of the urban form at Slane and existing built form along the existing N2 road corridor the overall value of the LCA contained within the study area is judged to be high.</p> <p>Based on the susceptibility and value attached to this LCA, the overall sensitivity of this LCA is judged to be high.</p>
Magnitude of Change	Direct impacts on this LCA will arise from the physical construction of new elements associated with the proposed road corridor, construction of new link roads, formation of new roundabout

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LCA 4 – Rathkenny Hills	
	junction to the northern extent of the proposed corridor, new embankments, new cuttings, and the resulting loss of vegetation required to form these new elements.
Significance of Landscape Effect during Construction Phase	<p>Localised Significant to Profound, short duration, assessed as significant effects are predicted to be experienced during the construction of the new roundabout junction to the north of the Mainline Bypass.</p> <p>Moderate to significant, short duration, assessed as locally significant effects are predicted to be experienced during the construction of remaining portions of the Proposed Scheme.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme land take boundary are predicted to experience no significant effects.</p>

Table 12-9: Boyne Valley LCA – Construction Phase Impact Assessment

LCA 5 – Boyne Valley	
Sensitivity	<p>Large proportion of the Proposed Scheme, comprised of the mainline alignment, overbridges, River Boyne bridge crossing, N51 roundabout link, N51 link road re-alignment, Slane village public realm enhancement and local road re-alignment works associated with tie-ins with new roundabout junctions and the formation of SUDs ponds are located within this LCA.</p> <p>Key characteristics which, together with field works, have informed an understanding of the susceptibility of this landscape to the development proposed are described in the CDP; refer to Section 12.3.2.2.</p> <p>The landscape in the Boyne Valley is characterised by a steep river valley with areas of rolling lowland adjacent to the River Boyne and also contains Slane village and associated urbanised area which form an important historical element within the LCA. The LCA is a highly valued landscape as it contains the Brú na Bóinne World Heritage Property. The lowlands have an undulating landform with areas of wetland associated with the River Boyne, particularly surrounding the flat river plain in the narrow valley adjacent to Slane. The valley is steeply sided with large rolling hills providing good vantage points and views across the valley. Pasture farmland is predominant in the rolling lowland with areas of poorly drained marshland adjacent to the River Boyne. The LCA is crossed by the existing N2 and N51 transport corridors, with local road networks generally well screened within the landscape by roadside vegetation, though traffic movement is perceived and experienced. Large scale housing development located above Slane village is a visual detractor as the scale and location is out of character with the village and is visible for some distance to the south.</p> <p>Whilst the LCA within the study area is not a designated landscape, it has been categorised as being of High Sensitivity, Exceptional Landscape Value and of International Importance with a low capacity for the type of development proposed, within the Landscape Character Assessment that accompanies the CDP. However, given the localised influences of the urban form of Slane village and the existing N51 and N2 road corridors, along with other existing road networks and scattered build form the overall value of the LCA contained within the study area is judged to be High.</p> <p>Based on the susceptibility and value attached to this LCA, the overall sensitivity of this LCA is judged to be high.</p>
Magnitude of Change	<p>Direct impacts on this LCA will arise from the physical construction of new elements associated with the proposed road corridor, construction of new link roads, formation of new roundabout junction connecting the N51 corridor alignment, new embankments, new cuttings and associated infrastructure such as new overbridges on local link road connections and the new bridge crossing across the River Boyne and the resulting loss of vegetation required to form these new elements. The proposed works associated with the Slane village public realm works are also contained within this LCA, all be it within the existing built form associated with Slane.</p>
Significance of Landscape Effect during Construction Phase	<p>Localised Significant to Profound, short duration, assessed as significant effects are predicted to be experienced during the construction of the new road junctions to the north and south of the proposed mainline corridor, proposed River Boyne crossing, the new junction and associated link roads to the south of the River Boyne crossing and the new junction and link road between proposed road corridor and new link road with N51.</p> <p>Moderate to major, short duration, assessed as locally significant effects are predicted to be experienced during the construction of remaining portions of the Proposed Scheme.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme landtake, including the landtake and public realm works area proposed within Slane, are predicted to experience no significant effects.</p>

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Table 12-10: Central Lowlands LCA – Construction Phase Impact Assessment

LCA 6 – Central Lowlands	
Sensitivity	<p>The southern roundabout junction (Ch. 0) and a section of the Proposed Scheme mainline up to approx. Ch. 560 are located within this LCA.</p> <p>Key characteristics which, together with field works, have informed an understanding of the susceptibility of this landscape to the development proposed are described in the CDP; refer to Section 12.3.2.3.</p> <p>Overall, the character of the LCA within the study area is strongly influenced by the medium to large field pattern, which is well defined by strong hedgerow networks. Taking account of the above characteristics and influence of existing road corridor within the study area, the susceptibility of the LCA to the type of development proposed is judged to be medium.</p> <p>Whilst the LCA within the study area is not a designated landscape, it has been categorised as being of Medium Sensitivity, High Landscape Value, of Regional Importance and of medium capacity to the type of development proposed within the CDP, however given the localised influences of the scattered development and the existing road corridors such as the N2, the overall value of the LCA contained within the study area is judged to be medium.</p> <p>Based on the susceptibility and value attached to this LCA, the overall sensitivity of this LCA is judged to be high.</p>
Magnitude of Change	<p>Direct impacts on this LCA will arise from the physical construction of new elements associated with the proposed road corridor, construction of new link roads, formation of new roundabout junction to the southern extent of the proposed corridor, new embankments, new cuttings, and the resulting loss of vegetation required to form these new elements.</p>
Significance of Landscape Effect during Construction Phase	<p>Localised Significant, short duration, assessed as significant effects are predicted to be experienced during the construction of the new road junction and associated link roads forming the link between the existing N2 and the of the proposed corridor to the south of the mainline section of the Proposed Scheme.</p> <p>Moderate to Significant, short duration, assessed as locally significant effects are predicted to be experienced during the construction of remaining portions of the Proposed Scheme.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme boundary are predicted to experience no significant effects.</p>

12.4.2 Operational Stage Landscape Character Impacts

Most elements of the Proposed Scheme will result in the formation of new built elements and structures within the landscape as a result of the mainline bypass. The proposed N51 re-alignment works will result in fewer new-build elements and structures as the proposed N51 works are primarily a realignment / improvement to the existing N51 corridor. The Public Realm proposals which aim to enhance the existing urban fabric of the village are focused on the urban centre of Slane village. The principal sources of impact during the operational phase of the Proposed Scheme include:

- Implementation of new features within the landscape; and
- Traffic movements on the road corridor.

The following features have been considered for the prediction of impacts associated with the operational phase of the Proposed Scheme: embankments; creation of a new road corridor (bypass) and associated cuttings and embankments; realignment of local road junctions; lighting; signage; creation of new farm overbridges and a local road overbridge; creation of a new bridge crossing of the River Boyne; formation of new roundabout junctions; and the formation of new road linkages to the surrounding road network; and the retention of the existing road network.

An assessment of the significance of the impact of the Proposed Scheme during the operational phase on the landscape character is provided in the following assessment tables (**Table 12-11** to **Table 12-13**).

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Table 12-11: Rathkenny Hills LCA – Operational Phase Impact Assessment

LCA 4 – Rathkenny Hills	
Sensitivity	As previously described in Table 12-8 the overall sensitivity of this LCA is judged to be high.
Magnitude of Change	<p>As previously discussed, in Table 12-8 the northern roundabout junction (Ch. 3495) and a short section of the Proposed Scheme mainline is contained within this LCA. It is considered that potential impacts will be localised and direct in nature. While the LCA contains the existing N2 road corridor it is considered that elements of the Proposed Scheme, comprising new embankments, cuttings, junction arrangements and associated link roads will alter this landscape permanently, at a local level, as elements of the Proposed Scheme will be perceived as new features in the landscape prior to successful establishment of the mitigation measures identified as SLM 23 and SLM 24 within Table 12-37.</p> <p>The existing N2 road corridor forms a prominent, but not dominant local feature in the wider landscape due to the undulating nature of the surrounding topography and the enclosure provided by existing vegetation cover, however where the existing N2 corridor is experienced at a local level, the road corridor forms a locally prominent feature in the landscape. It is predicted that the Proposed Scheme will not be widely prominent across this LCA as surrounding, enclosing vegetation and localised changes in topography have the potential to quickly absorb the proposed changes.</p> <p>There are localised sections of the Proposed Scheme which will be more prominent in the landscape, for example, the new northern roundabout junction arrangement with link road connection with existing N2. The combined affect will be to increase the scale and prominence of road corridors within the LCA, particularly at a local level, however it is considered that the wider landscape has the capacity to accommodate these proposed changes.</p> <p>The predicted magnitude of change associated with the elements identified previously, namely the new junction arrangement with the N2 to the north, section of mainline alignment, along with new earthworks modifications, is localised and medium.</p> <p>New earthworks and associated loss of vegetation will have a localised direct effect upon the character of the LCA. The Proposed Scheme would be largely assimilated into the wider landscape due to localised changes in topography and screening provided by intervening vegetation but embankments and cuttings, would be perceived as detracting elements in the short term, prior to establishment of mitigation measures, though would not significantly affect the overall landscape character. The predicted magnitude of change associated with these elements during the operational phase is localised and small.</p>
Significance of Landscape Effect during Operational Phase	<p>Localised, moderate to significant direct medium-term effects, assessed as significant, are predicted to be experienced during the operational phase of the new N2 roundabout junction and associated link roads as at the time of scheme opening proposed areas of planting will not be fully established.</p> <p>Localised Slight to Moderate, direct medium-term effects, assessed as not significant, are predicted to be experienced during the operational phase of the remaining sections of the Proposed Scheme contained within the LCA as at the time of scheme opening proposed areas of planting will not be fully established.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme landtake boundary are predicted to experience no significant effects during the operational phase of the Proposed Scheme.</p>

Table 12-12: Boyne Valley LCA – Operational Phase Impact Assessment

LCA 5 – Boyne Valley	
Sensitivity	As previously described in Table 12-9 the overall sensitivity of this LCA is judged to be high.
Magnitude of Change	<p>As previously discussed, in Table 12-9 the majority of the Proposed Scheme is contained within this LCA.</p> <p>Whilst the LCA is locally influenced by the existing built form of Slane and associated local and national transport corridors it is considered that the Proposed Scheme, comprising new embankments, cuttings, N51 roundabout junction, link road elements, over bridges and new Boyne River bridge crossing will alter this landscape permanently, at a local level, as the Proposed Scheme will form new features within the landscape.</p> <p>The existing N51 and N2 road corridors, form distinct feature in the local landscape, though are a minor element within the wider landscape when viewed from wider portions of the LCA due to enclosure provided by existing vegetation cover and localised changes in topography. It is predicted that the new River Boyne bridge crossing will be prominent from more elevated</p>

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LCA 5 – Boyne Valley	
	<p>localised portions of the LCA immediately north and south due to the more open nature of the valley landscape adjacent. Southern portions of the Proposed Scheme, within large cuttings are considered not to be prominent from wider locations within the LCA as retained, intervening vegetation and localised changes in topography have the potential to quickly absorb the proposed changes.</p> <p>There are localised sections of the Proposed Scheme which will be more prominent in the landscape, for example, the new roundabout junction arrangements with the N51 and N51 realignment works to the east of Slane which require the removal of hedgerows, hedgerows with trees, localised sections of mixed species planting and established roadside vegetation. The combined affect will be to increase the scale and prominence of road corridors within the LCA, particularly at a local level, however it is considered that the wider landscape has some capacity to accommodate these proposed changes.</p> <p>Proposed alterations to the public realm within the built form of Slane will only be read at a localised level, as intervening build form will screen such changes from within the wider LCA and will not generally be read in combination with other elements of the Proposed Scheme.</p> <p>The predicted magnitude of change associated with the elements identified previously; namely the new junction arrangement with the N51, the new link road connection between Slane and the N51 roundabout junction, embankments and new overbridges associated with local farm access requirements during the operational phase are considered to be localised and medium.</p> <p>The predicted magnitude of change associated with the new bridge crossing over the River Boyne during the operational phase is considered to be localised and large.</p> <p>The predicted magnitude of change associated with the public realm enhancement within Slane village is considered to be localised and small and viewed as a positive contribution to the aesthetics of Slane village.</p> <p>New embankments, cuttings and loss of vegetation relating to remaining portions of the Proposed Scheme will also have a localised direct effect upon the character of the LCA. Such elements of the Proposed Scheme would be largely assimilated into the wider landscape due to localised changes in topography and screening provided by intervening vegetation but embankments and cuttings, where visible would be perceived as detracting elements in the short term, though not significantly affect the overall landscape character. The predicted magnitude of change associated with these elements during the operational phase is considered to be localised and small.</p>
Significance of Landscape Effect during Operational Phase	<p>Localised Moderate to Significant, direct medium-term effects, assessed as significant, are predicted to be experienced during the initial operational phase of the new junction arrangement with the N51, the new link road connection between Slane and the N51 roundabout junction, embankments and new overbridges associated with local farm access as at the time of scheme opening proposed areas of mitigation planting identified in Table 12-38 will not be fully established.</p> <p>Localised Significant, direct medium-term, assessed as significant effects are predicted to be experienced during the initial operational phase of the new River Boyne crossing as at the time of opening proposed areas of mitigation planting identified in Table 12-37 will not be fully established.</p> <p>Localised Moderate, direct, assessed as not significant effects are predicted to be experienced during the initial operational phase of the Slane village enhancement, though these will be viewed as a positive contribution to the aesthetics and setting of the village and associated urban form.</p> <p>Localised Moderate, direct and medium-term, assessed as not significant effects, are predicted to be experienced during the initial operational phase of the remaining sections of the Proposed Scheme identified previously as at the time of scheme opening proposed areas of mitigation planting identified in Table 12-38 will not be fully established.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme boundary are predicted to experience no significant effects during the operational phase of the Proposed Scheme.</p>

Table 12-13: Central Lowlands LCA – Operational Phase Impacts Assessment

LCA 6 – Central Lowlands	
Sensitivity	As previously described in Table 12-10 the overall sensitivity of this LCA is judged to be high.
Magnitude of Change	As previously discussed, in Table 12-10 the southern roundabout junction (Ch. 0) and a section of the Proposed Scheme is mainline are located within this LCA. It is considered that potential impacts will be localised and direct in nature. Whilst the LCA contains the existing N2

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LCA 6 – Central Lowlands	
	<p>road corridor it is considered that elements of the Proposed Scheme, comprising new embankments, cuttings, junction arrangements and associated link roads will alter this landscape permanently, at a local level, as elements of the Proposed Scheme will be perceived as new features in the landscape prior to successful establishment of mitigation measures.</p> <p>The existing N2 road corridor forms a local feature in the landscape, though is not prominent in the wider LCA due to the undulating nature of the surrounding topography and the enclosure provided by existing vegetation cover, however where experienced at a local level the road corridor does form a prominent feature in the landscape. It is predicted that the Proposed Scheme will not be widely prominent across this LCA as surrounding, enclosing vegetation and localised changes in topography have the potential to quickly absorb the proposed changes.</p> <p>There are localised sections of the Proposed Scheme which will be more prominent in the landscape, for example, new junction arrangement with link road connection with existing N2 corridor. The combined affect will be to increase the scale and prominence of road corridors within the LCA, particularly at a local level, however it is considered that the wider landscape has the capacity to accommodate these proposed changes.</p> <p>The predicted magnitude of change associated with the elements identified previously; namely the new junction arrangement with the N2, the southern portions of the mainline alignment along with new earthworks modifications is localised and medium.</p> <p>New earthworks and associated loss of vegetation will have a localised direct effect upon the character of the LCA. The Proposed Scheme would be largely assimilated into the wider landscape due to localised changes in topography and screening provided by intervening vegetation but embankments and cuttings, would be perceived as detracting elements in the short term, prior to establishment of mitigation measures, though would not significantly affect the overall landscape character. The predicted magnitude of change associated with these elements during the operational phase is localised and small.</p>
Significance of Landscape Effect during Operational Phase	<p>Localised Significant direct medium-term effects, assessed as significant, are predicted to be experienced during the operational phase of the new N2 roundabout junction and associated link roads as at the time of scheme opening proposed areas of planting will not be fully established.</p> <p>Localised Moderate, direct Medium-term effects, assessed as not significant, are predicted to be experienced during the operational phase of the remaining sections of the Proposed Scheme contained within the LCA as at the time of scheme opening proposed areas of planting will not be fully established.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme boundary are predicted to experience no significant effects during the operational phase of the Proposed Scheme.</p>

A summary of the predicted impacts associated with both the construction and operational phases of the Proposed Scheme is provided in **Table 12-14**.

Table 12-14: Summary of Predicted Landscape Impact

Landscape Character / Designation	Predicted Construction Phase Impacts	Predicted Operational Impacts
LCA 4 – Rathkenny Hills	<p>Localised Significant to Profound, short duration, assessed as significant effects are predicted to be experienced during the construction of the new roundabout junction to the north of the Mainline Bypass.</p> <p>Moderate to Significant, short duration, assessed as locally significant effects are predicted to be experienced during the construction of remaining portions of the Proposed Scheme.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme land take boundary are predicted to experience no significant effects.</p>	<p>Localised Moderate to Significant direct medium-term effects, assessed as significant, are predicted to be experienced during the operational phase of the new N2 roundabout junction and associated link roads as at the time of scheme opening proposed areas of planting will not be fully established.</p> <p>Localised Slight to Moderate, direct medium-term effects, assessed as not significant, are predicted to be experienced during the operational phase of the remaining sections of the Proposed Scheme contained within the LCA as at the time of scheme opening proposed areas of planting will not be fully established.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme landtake boundary are</p>

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Landscape Character / Designation	Predicted Construction Phase Impacts	Predicted Operational Impacts
		predicted to experience no significant effects during the operational phase of the Proposed Scheme.
LCA 5 – Boyne Valley	<p>Localised Significant to Profound, short duration, assessed as significant effects are predicted to be experienced during the construction of the new road junctions to the north and south of the proposed mainline corridor, proposed River Boyne crossing, the new junction and associated link roads to the south of the River Boyne crossing and the new junction and link road between proposed road corridor and new link road with N51.</p> <p>Moderate to major, short duration, assessed as locally significant effects are predicted to be experienced during the construction of remaining portions of the Proposed Scheme.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme landtake, including the landtake and public realm works area proposed within Slane, are predicted to experience no significant effects.</p>	<p>Localised Moderate to Significant, direct medium-term effects, assessed as significant, are predicted to be experienced during the initial operational phase of the new junction arrangement with the N51, the new link road connection between Slane and the N51 roundabout junction, embankments and new overbridges associated with local farm access as at the time of scheme opening proposed areas of mitigation planting identified in Table 12-38 will not be fully established.</p> <p>Localised Significant, direct medium-term, assessed as significant effects are predicted to be experienced during the initial operational phase of the new River Boyne crossing as at the time of opening proposed areas of mitigation planting identified in Table 12-37 will not be fully established.</p> <p>Localised Moderate, direct, assessed as not significant effects are predicted to be experienced during the initial operational phase of the Slane village enhancement, though these will be viewed as a positive contribution to the aesthetics and setting of the village and associated urban form.</p> <p>Localised Moderate, direct and medium-term, assessed as not significant effects, are predicted to be experienced during the initial operational phase of the remaining sections of the Proposed Scheme identified previously as at the time of scheme opening proposed areas of mitigation planting identified in Table 12-38 will not be fully established.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme boundary are predicted to experience no significant effects during the operational phase of the Proposed Scheme.</p>
LCA 6 – Central Lowlands	<p>Localised Significant, short duration, assessed as significant effects are predicted to be experienced during the construction of the new road junction and associated link roads forming the link between the existing N2 and the of the proposed corridor to the south of the mainline section of the Proposed Scheme.</p> <p>Moderate to Significant, short duration, assessed as locally significant effects are predicted to be experienced during the construction of remaining portions of the Proposed Scheme.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme boundary are predicted to experience no significant effects.</p>	<p>Localised Significant direct medium-term effects, assessed as significant, are predicted to be experienced during the operational phase of the new N2 roundabout junction and associated link roads as at the time of scheme opening proposed areas of planting will not be fully established.</p> <p>Localised Moderate, direct Medium-term effects, assessed as not significant, are predicted to be experienced during the operational phase of the remaining sections of the Proposed Scheme contained within the LCA as at the time of scheme opening proposed areas of planting will not be fully established.</p> <p>Remaining portions of the LCA outside of the Proposed Scheme boundary are predicted to experience no significant effects during the operational phase of the Proposed Scheme.</p>

12.4.3 Construction and Operational Phase Predicted Visual Impacts

A series of 19 representative viewpoints, including a number of the Protected Views and Prospects identified from the CDP, have been selected to illustrate the existing visual context of the Proposed Scheme and as an aid to the visual impact assessment. All the viewpoints selected have been located on publicly accessible roads, footways, and verges.

The locations of these viewpoints are shown on **Figure 12.5** below. Representative baseline views and, where relevant, predicted views prior to mitigation and with mitigation (photomontages) are provided in **Volume 4 – Technical Appendices, Appendix 12.1**.

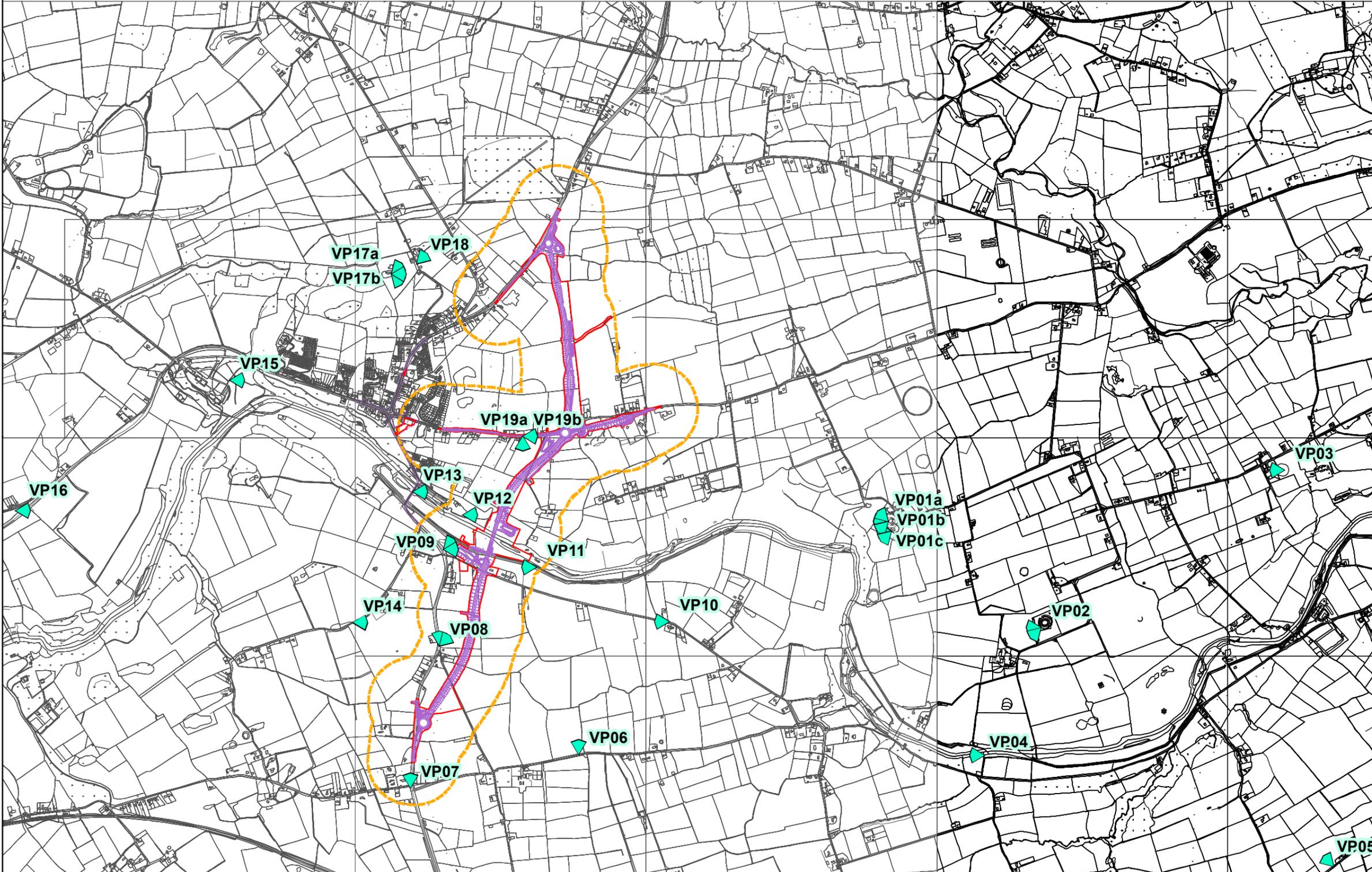
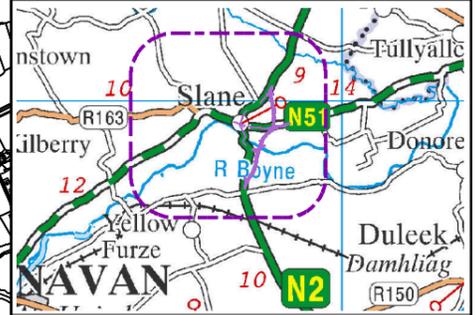
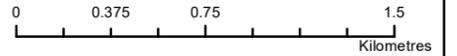
An assessment of the significance of the predicted visual impact of the Proposed Scheme during the construction and operational phases on these views is provided in the following assessment tables (**Table 12-15** to **Table 12-33**).



Legend

-  Proposed Scheme
-  Proposed Scheme Boundary
-  300m Zone of Influence
-  LVIA Selected Views

Data Source: Meath County Development Plan 2021-2027



Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.5

Viewpoint Locations

RPS West Pier
 Business Campus, T +353 (0) 1 4882900
 Dun Laoghaire, E ireland@rpsgroup.com
 Co Dublin, Ireland. W rpsgroup.com/ireland

Issue Details

File Identifier:
MDT0806-RPS-00-N2-DR-Z-AG-3020

Status:	Rev:	Model File Identifier:
A1	C01	MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000

Drawn:	NR	Date:	14/06/2023
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Checked:	SA	Scale:	1:28,000 (A3)
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Approved:	NO'N	Projection:	ITM
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NOTE:

1. This drawing is the property of RPS Group Ltd. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent.
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Table 12-15: Viewpoint 1a and 1b – Knowth

Viewpoint 1a and 1b – Knowth			
Grid Ref	699596, 773443	Existing View Figure Number	A12.1a
Direction of View	South-west North-west	Approx. Distance to Proposed Scheme	2.6 km
Description of existing view and potential receptors	<p>This viewpoint is located on the boardwalk forming the viewing platform on the summit of Knowth monument, approximately 2.6 km east of the Proposed Scheme. The view is considered to be representative of views experienced by tourist and recreational receptors visiting the nationally important monument. It is noted that the overall panoramic view available from this location has been divided into western portion (Volume 4; Appendix 12.1; Figure A12.1c to Figure A12.1e) and north-western portion (Volume 4; Appendix 12.1; Figure A12.1f to Figure A12.1h).</p> <p>Wider views west from this localised elevated location, as represented in Appendix 12.1; Figure A12.1a are expansive and panoramic in nature, with elevated land associated with the Hill of Slane forming a distinct visual draw on the horizon. Distant horizons to the southwest are punctuated and elevated by instances of existing woodland. The foreground of the view represented in Appendix 12.1; Figure A12.1a and Appendix 12.1; Figure A12.1f is comprised of mixed arable pastoral lands, with field boundaries well defined by a variety of field boundary treatments which includes hedgerows and hedgerows with trees. Mixed species broadleaved woodland associated with the northern slopes of the Boyne River valley are visible at mid distance, with further mixed species woodland and conifer plantations visible throughout the view. The River Boyne forms a minor, distinct element within lower elevation portions of the view and is often screened by associated riverside vegetation.</p> <p>Scattered residential properties and large-scale farm buildings are perceived throughout the view, creating localised points of interest within the expansive view. The built form associated with Slane village is largely screened by intervening vegetation and topographical changes, though is perceived at distance below horizons within western portions of the view. Existing road networks, such as the N51 and N2 are not readily perceived within the view, due to screening effects of vegetation, however vehicle movement is perceived and does form localised points of interest within the wider view. Large scale pylons carrying overhead lines are visible across the view, though seen against a well vegetated backdrop which aids integration.</p>		
Sensitivity	<p>Receptors at this location are judged to be of a very high susceptibility to change in their views.</p> <p>The viewpoint is representative of western views available from the identified protected view 59, located on the top of Knowth Tumulus, within the World Heritage Property and the value of the view is judged to be very high.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be very high.</p>		
Magnitude of Change	<p>During the construction phase the main source of effect on this viewpoint will be the visibility of machinery and activities associated with the formation of the new roundabout junction linking the N2 to the Proposed Scheme within the north-western portion of the view, construction phase activities associated with the formation of the northern section of the mainline alignment. Activities and machinery will be visible across the southwestern portion of the view, associated with the construction of the mainline alignment cuttings and new River Boyne bridge crossing. Visible construction phase operations will be viewed against a backdrop of existing, retained, vegetation that lies beyond the site boundary and will be perceived well below existing horizons (refer Volume 4; Appendix 12.1; Figure A12.1d and A12.1g) which will aid integration. The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be localised and High as construction phase operations will be visible across the whole of the view, though generally at distance.</p> <p>During the operational phase new embankments and vehicle movements associated with the northern roundabout junction will be perceived at distance in north-western portions of the view, though such movements will be difficult to discern at this distance and will be read in combination with existing traffic movements on retained sections of the N2. Lighting proposed to the northern roundabout junction and as infill towards Slane village will be perceived, at distance, as a minor addition to the night view. A small portion of the proposed River Boyne bridge crossing, associated with the</p>		

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Viewpoint 1a and 1b – Knowth	
	southern edge of the crossing will be visible as a minor element within the south-western portion of the view, with intervening vegetation and topographical changes largely screening the proposed structure and associated vehicle movements. Visible portions of the Boyne Bridge crossing are set well below existing horizons and are largely screened by intervening woodland vegetation on the northern side of the River Boyne Valley and further screening will be provided by mitigation planting referenced in Table 12-38 . Proposed noise barriers, at locations R696, R762, R942a and R942b (refer Figure 9.6) will be difficult to perceive in southern views available from this location due to intervening vegetation and attenuation by distance. Southern portions of the Proposed Scheme will not be perceived in southern views as the road is set into a deep cutting. Visible portions of the Proposed Scheme will be seen within minor portions of the overall view, perceived at distance, set against a backdrop of existing vegetation and viewed as a minor alteration to the overall view. Lighting proposed to the southern roundabout junction, will be difficult to perceive within the night view due to screening by intervening topography and vegetation cover. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Low as visible portions of the Proposed Scheme, whilst perceived will not significantly alter the character and composition of the view.
Significance of Visual Effect during Construction Phase	Localised Significant adverse, short-term duration, significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography will remain as the Proposed Scheme becomes operational.
Significance of Visual Effect during Operational Phase	Slight, assessed as not significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Visible portions of the Proposed Scheme, including a small southern section of the Boyne Crossing, will be seen at distance, below distant horizon lines, and viewed in separate portions of the overall expansive panoramic view available from this elevated location. Visible portions will be seen as a minor addition or alteration to the existing character and composition of the view at the time of scheme opening as proposed areas of mitigation planting will not be fully established. Operational phase effects will occur short-term, gradually decreasing to Not Significant as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.

Table 12-16: Viewpoint 2 – Newgrange

Viewpoint 2 – Newgrange			
Grid Ref	700645, 772713	Existing View Figure Number	A12.2a
Direction of View	West / southwest	Approx. Distance to Proposed Scheme	3.7 km
Description of existing view and potential receptors	<p>This viewpoint is located on the grassed verge adjacent to the footpath forming the western edge of the Newgrange monument, approximately 3.7 km east of the Proposed Scheme. The view is considered to be representative of localised views experienced by tourist and recreational receptors visiting the nationally important monument, from where the Proposed Scheme could be perceived due to the viewpoint's elevated location.²</p> <p>Views west from this location, towards the Proposed Scheme, as represented in Volume 4; Appendix 12.1; Figure A12.2a are partially restricted by intervening built form and hedgerows associated with Newgrange. Southwestern portions of the view become more expansive and panoramic in nature as landform and topography allow for more open views. The foreground of the view is comprised of arable pastoral lands that are bounded by a variety of field boundary treatments which includes remnant hedgerows. Mixed species broadleaved trees and copses of coniferous trees screens</p>		

² It should be noted that the Newgrange monument carries a 'Do not climb' sign on the embankment adjacent to the monument. The viewpoint has been located on an elevated position to represent a worst-case scenario.

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Viewpoint 2 – Newgrange	
	<p>more distant lands to the left of the view, whilst adding variety and interest to the view. Distant horizons are punctuated and locally elevated by woodland planting.</p> <p>A residential property is partially visible at mid-distance to the left of the view, whilst further residential properties and agricultural outbuildings are discernible in the view at mid-distance, set amongst the well wooded landscape. Timber poles carrying overhead lines are visible within the view at a variety of distances.</p>
Sensitivity	<p>Receptors at this location are judged to be of a very high susceptibility to change in their views.</p> <p>The viewpoint does not represent a view available from a protected view, however the viewpoint is located within a High Sensitivity Landscape and within the Core Zone associated with the World Heritage Property. The overall value of the view available is judged to be high.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>
Magnitude of Change	<p>During the construction phase the main source of effect on this viewpoint will be the visibility of machinery and activities associated with the modifications to the landform associated with the southern portion of the Proposed Scheme (formation of large-scale cuttings and roundabout junction). Activities and machinery will be perceived within a minor portion of the overall view, though set below existing horizon lines at distance. Visible construction phase operations will be viewed against a backdrop of existing, retained, vegetation that lies beyond the site boundary (refer Volume 4; Appendix 12.1; Figure A12.b) which will aid integration. The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be localised and Medium as such operations will be perceived within a minor portion of the view, at distance and well below horizons.</p> <p>During the operational phase new earthworks and vehicle movements will be the main source of visual effect from this viewpoint. Visible portions of the Proposed Scheme will be perceived at distance, set below a backdrop of existing vegetation and landform and perceived as minor alteration to the overall view. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Low as visible portions of the Proposed Scheme will be perceived as an indistinguishable change to the character and composition of the baseline conditions.</p>
Significance of Visual Effect during Construction Phase	<p>Slight to Moderate adverse, short-term duration, assessed as not significant effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography, visible as a minor change to the view will remain as the Proposed Scheme becomes operational and are assessed as not significant.</p>
Significance of Visual Effect during Operational Phase	<p>Slight, assessed as not significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst portions of the Proposed Scheme will be perceived at distance, below distant horizon lines, they will be seen as a minor alteration to the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established.</p> <p>Operational phase effects will occur short-term, gradually decreasing to Not Significant as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.</p>

Table 12-17: Viewpoint 3 – Dowth

Viewpoint 3 – Dowth			
Grid Ref	702320, 773794	Existing View Figure Number	A12.3a
Direction of View	West	Approx. Distance to Proposed Scheme	5.4 km
Description of existing view and potential receptors	<p>This viewpoint is located on the grassed summit of Dowth, approximately 5.4km east of the Proposed Scheme. The view is considered to be representative of views experienced by tourist and recreational receptors visiting the nationally important monument.</p>		

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Viewpoint 3 – Dowth	
	<p>Views west from this localised elevated location, as represented in Volume 4; Appendix 12.1; Figure A12.3a are expansive and panoramic in nature, with elevated land associated with the Hill of Slane forming a distinct visual draw on the horizon. The foreground of the view is comprised of vegetation associated with the western boundary of the monument, with residential and farm buildings visible at close distance. Field boundaries are generally well defined by a variety of field boundary treatments which includes hedgerows and hedgerows with trees. Mixed species broadleaved woodland associated with the Boyne River valley are visible at distance, with further mixed species woodland and conifer plantations visible throughout the view.</p> <p>Scattered residential properties and large-scale farm buildings are perceived as minor elements, creating localised points of interest within the expansive view. The built form associated with Slane village is perceived at distance below horizons within the view. Existing road networks, such as the N51 and N2, are perceived within the view (for instance the N51 is visible in Littlegrange townland to the north of Dowth), though partially screened by intervening vegetation.</p>
Sensitivity	<p>Receptors at this location are judged to be of a high susceptibility to change in their views.</p> <p>The viewpoint is representative of western views available from the identified protected view 88, located on the top of Dowth, and the value of the view is judged to be very high.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>
Magnitude of Change	<p>During the construction phase visibility of machinery and activities associated with the formation of the Proposed Scheme will not be perceived in western views due to attenuation by distance, screening effects of intervening topographical changes and vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.3b). The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be Negligible / Very Low.</p> <p>During the operational phase the Proposed Scheme will not be readily perceived in western views due to screening effects of intervening topographical changes and vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.3b). The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be Negligible/ Very Low.</p>
Significance of Visual Effect during Construction Phase	Imperceptible as construction phase operations will be screened in western views by intervening topography and vegetation.
Significance of Visual Effect during Operational Phase	Imperceptible as construction phase operations will be screened in western views by intervening topography and vegetation.

Table 12-18: Viewpoint 4 – Stalleen Road (River Boyne Bank)

Viewpoint 4 – Stalleen Road (River Boyne Bank)			
Grid Ref	700258, 771836	Existing View Figure Number	A12.4a
Direction of View	West	Approx. Distance to Proposed Scheme	3.6 km
Description of existing view and potential receptors	<p>This viewpoint is located on the grassed bank immediately adjacent to the River Boyne, north of the parking area adjacent to the Stalleen Road, approximately 3.6 km west of the Proposed Scheme. The view is considered to be representative of views experienced by recreational receptors on the Rossnaree Walk adjacent to the River Boyne at this location.</p> <p>Views west from this location, as represented in Volume 4; Appendix 12.1; Figure A12.4a, are enclosed and restricted in nature by the combination of intervening topography and vegetation cover associated with this portion of the River Boyne Valley. A single residential property is partially visible to the right of the view, at mid-distance partially screened by intervening vegetation.</p>		

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Viewpoint 4 – Stalleen Road (River Boyne Bank)	
Sensitivity	Residential receptors at this location are judged to be of a high susceptibility to change in their views, whilst recreational receptors are judged to be of a high susceptibility to change. The overall value of the view available is judged to be high. Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.
Magnitude of Change	During the construction phase visibility of machinery and activities associated with the formation of the Proposed Scheme will not be visible in western views due to screening effects of intervening topographical changes and vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.4b). The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be Negligible / Very Low. During the operational phase the Proposed Scheme will not be visible in western views due to screening effects of intervening topographical changes and vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.4b). The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be Negligible / Very Low.
Significance of Visual Effect during Construction Phase	Imperceptible as construction phase operations will be screened in western views by intervening topography and vegetation.
Significance of Visual Effect during Operational Phase	Imperceptible as construction phase operations will be screened in western views by intervening topography and vegetation.

Table 12-19: Viewpoint 5 – Redmountain

Viewpoint 5 – Redmountain			
Grid Ref	702659, 771074	Existing View Figure Number	A12.5a
Direction of View	North-west	Approx. Distance to Proposed Scheme	6.2 km
Description of existing view and potential receptors	<p>This viewpoint is located on the grassed verge adjacent to the county road, approximately 6.2 km southeast of the Proposed Scheme and in close proximity to a residential property in the vicinity. The view is considered to be representative of north-western views experienced by residential receptors, recreational receptors on the local road and road users traveling east west on the county road.</p> <p>Views northwest from this location, as represented in Volume 4; Appendix 12.1; Figure A12.5a are expansive and panoramic in nature, with elevated land at Slane Hill forming a visual feature of the distant horizon. The immediate foreground of the view is comprised of mixed arable pastoral lands which are well defined by a variety of field boundary treatments which includes hedgerows, hedgerows with trees and scattered instances of mixed species woodland copses.</p> <p>A residential property is partially visible at mid-distance within the central portion of the view, partially screened by intervening vegetation whilst the distinctive outline and stone colouration associated with Newgrange forms a strong visual draw within the central portion of the view, though seen at distance. Residential development and built form associated with Slane village is not discernible in the view.</p>		
Sensitivity	<p>Residential and recreational receptors at this location are judged to be of a high susceptibility to change in their views, whilst transient receptors on the local roads are judged to be of a low susceptibility to change.</p> <p>The viewpoint does represent views available from an internationally significant Protected View.</p> <p>The overall value of the view available is judged to be very high, due to the influence of Newgrange and the perceived lack of visible development and built form present within the view.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>		

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Viewpoint 5 – Redmountain	
Magnitude of Change	<p>During the construction phase visibility of machinery and activities associated with the formation of the new roundabout junctions, road connections, new road corridor and modifications to local topography to form new embankments and cuttings will be difficult to discern due to attenuation by distance, screening by intervening vegetation and topographical changes. Activities and machinery whilst predicted to be visible across the whole of the view, set below existing horizon lines at distance will not be read within the view (refer Volume 4; Appendix 12.1; Figure A12.5c). The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be Low as operations will not be readily discernible within the view.</p> <p>During the operational phase new embankments, bridge crossings, noise barriers and junction arrangements will not be easily discernible in north-western views from this location. Whilst elements of the Proposed Scheme are predicted to be seen across a large proportion of the view, they will be difficult to perceive at distance, set against a well vegetated backdrop well below distant horizons. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Low as visible portions of the Proposed Scheme will be difficult to perceive and do not alter the character and composition of the baseline conditions.</p>
Significance of Visual Effect during Construction Phase	Slight, short-term duration assessed as not significant visual effects are predicted to occur during the construction phase of the Proposed Scheme.
Significance of Visual Effect during Operational Phase	<p>Slight, assessed as not significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst portions of the Proposed Scheme are predicted to be visible at distance, below distant horizon lines, they will not alter the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established.</p> <p>Operational phase effects will occur short-term, decreasing to Not Significant as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.</p>

Table 12-20: Viewpoint 6 – Local Road (L1600) (nr Cullen House)

Viewpoint 6 – Local Road (L1600)			
Grid Ref	697467, 771843	Existing View Figure Number	A12.6a
Direction of View	North	Approx. Distance to Proposed Scheme	1.6 km
Description of existing view and potential receptors	<p>This viewpoint is located on the grassed verge adjacent to the local road (L1600) approximately 1.6 km south of the Proposed Scheme. The view is considered to be representative of views primarily experienced by transient receptors on the local road network.</p> <p>Views north from this location, as represented in Volume 4; Appendix 12.1; Figure A12.6a are partially restricted and enclosed by localised topographical changes and field boundary vegetation. Central portions of the view become more open and panoramic in nature, with elevated land at Slane Hill forming the horizon to the central portion of the view. The immediate foreground of the view is comprised of arable lands that are bounded by remnant field boundary hedgerows and ivy-covered trees. Mixed species woodland and coniferous plantation add variety and interest to lands visible at distance, whilst the build form associated with Slane village is discernible within the central portion of the view. Jebb's Mill building is partially visible at lower elevation, set amongst existing vegetation cover, whilst the River Boyne is screened by intervening topographical changes.</p>		
Sensitivity	<p>Transient receptors on the local roads at this location are judged to be of a low susceptibility to change.</p> <p>The views from this location are representative of available views from a Protected View, however they are generally not appreciated from a static location and available for a short duration to transient road users. However, the overall value of views experienced are judged to be high, due to the perceived lack of built form influencing the view.</p>		

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Viewpoint 6 – Local Road (L1600)	
	Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be medium.
Magnitude of Change	<p>During the construction phase the main source of effect on this viewpoint will be the visibility of machinery and activities associated with the formation of the new roundabout junction connection to the north of the Proposed Scheme, local road connections, northern portions of the new road corridor and modifications to local topography to form new embankments and cuttings. Activities and machinery will be visible as a narrow corridor of works within the central portion of the view, diminishing with distance. Construction phase activities will be viewed well below existing horizon lines and often against a backdrop of existing, retained, vegetation that lies beyond the site boundary (refer Volume 4; Appendix 12.1; Figure A12.6d) which will aid integration. The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be localised and High to Very High as such operations will be visible across the centre of the view, at a variety of distances.</p> <p>During the operational phase new embankments, noise barriers, overbridges and junction arrangements will be the main source of visual effect from this viewpoint. Visible portions of the Proposed Scheme will be seen across the whole of the view, set against a backdrop of existing vegetation and perceived as a notable alteration to the view. Proposed lighting on the N51 will be viewed as a minor addition to the overall night-time view available from this location, though viewed within the context of lighting associated with Slane village. Visible lighting will be seen well below horizons and set against a strong backdrop and is not considered to give rise to a significant effect. Proposed noise barriers, R1066a, R914b, R942a and R942b would be difficult to perceive within these expansive views and will be partially screened by intervening vegetation and are not considered to give rise to a significant effect. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and High as visible portions of the Proposed Scheme will be viewed as a partial alteration to the character and composition of the baseline conditions.</p>
Significance of Visual Effect during Construction Phase	Moderate to Significant adverse, short-term duration, assessed as significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography will remain as the Proposed Scheme becomes operational.
Significance of Visual Effect during Operational Phase	Moderate, assessed as locally significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst visible portions of the Proposed Scheme will be viewed at mid-distance, well below distant horizon lines, they will be seen as a moderate alteration to the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established. Operational phase effects will occur long-term, gradually decreasing to Slight as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.

Table 12-21: Viewpoint 7 – Junction of N2 and Local Road (L1600)

Viewpoint 7 – Junction of N2 and Local Road (L1600)			
Grid Ref	696310, 771612	Existing View Figure Number	A12.7a
Direction of View	North	Approx. Distance to Proposed Scheme	1.8 km
Description of existing view and potential receptors	<p>This viewpoint is located on the southern side of the carriageway forming the junction between the local road (L1600) and the N2, locally referred to a McGruder's Crossroads. The viewpoint is located approximately 1.8 km south of the Proposed Scheme and views are considered to be representative of views experienced by road receptors and residential receptors in the local vicinity.</p> <p>Views west from this location, as represented in Volume 4; Appendix 12.1; Figure A12.7a are enclosed and restricted in nature by the combination of intervening topography and vegetation cover associated with the N2 road corridor and in curtilage/ garden boundary treatments associated with adjacent residential properties. A single residential property is partially visible to the right of the view, at close distance partially</p>		

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Viewpoint 7 – Junction of N2 and Local Road (L1600)	
	screened by intervening vegetation, with the roof of a residential property also visible to the left of the view above intervening garden boundary vegetation. Elevated lands, partially visible in the centre of the view are associated with the Hill of Slane. Built form associated with Slane village is partially visible beyond intervening vegetation as a minor element of the view
Sensitivity	Residential receptors at this location are judged to be of a high susceptibility to change in their views, whilst transient road receptors are judged to be of a low susceptibility to change. The overall value of the view available is judged to be medium. Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be medium.
Magnitude of Change	During the construction phase visibility of machinery and activities associated with the formation of the southern link road between the existing N2 and the Proposed Scheme will be visible in a small, central portion of the view. Remaining construction phase activities will be screened within this view due to screening effects of intervening topographical changes and vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.7d). The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be Moderate. During the operational phase the Proposed Scheme will not generally be visible in northern views due to screening effects of intervening topographical changes and vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.4e). The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Medium as visible portions of the Proposed Scheme will be perceived as a partial change to the character and composition of the baseline conditions associated with the existing N2 corridor in the central portion of the view.
Significance of Visual Effect during Construction Phase	Moderate adverse, short-term duration assessed as significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing road corridor visible in the view will remain as the Proposed Scheme becomes operational.
Significance of Visual Effect during Operational Phase	Slight, assessed as not significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst visible portions of the Proposed Scheme will be seen at mid-distance, below distant horizon lines, they will be seen as a minor alteration to the existing character of the view at the time of scheme opening as proposed areas of planting will not be fully established. Operational phase effects will occur short-term, gradually decreasing to Not Significant as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.

Table 12-22: Viewpoint 8 – N2 (at Cullen)

Viewpoint 8 – N2			
Grid Ref	696509, 772588	Existing View Figure Number	A12.8a
Direction of View	Northeast	Approx. Distance to Proposed Scheme	800 m
Description of existing view and potential receptors	This viewpoint is located on the grassed verge adjacent to the existing N2 approximately 75 m south-west of the proposed mainline alignment and in close proximity to residential properties adjacent to the existing N2 corridor. The view is considered to be representative of views experienced by residential receptors and road users traveling north on the N2. Views north from this location, as represented in Volume 4; Appendix 12.1; Figure A12.8a are generally restricted in nature by field boundary hedgerows and garden boundary vegetation associated with residential properties in the vicinity. Central portion of the view becomes more panoramic in nature, with elevated lands associated with the Hill of Slane forming a distinct visual draw. The immediate foreground of the view is comprised of the existing N2 transport corridor, and associated boundary vegetation, whilst at mid-distance mixed arable pastoral lands are bounded by a variety of field		

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Viewpoint 8 – N2	
	<p>boundary treatments which includes hedgerows, hedgerows with tree and scattered instances of mixed species copses which add variety and interest within the view.</p> <p>Roof lines associated with residential properties at Feenor are partially visible above intervening topography within the central portion of the view, at mid-distance whilst residential development associated with the southern edge of Slane forms a distinct feature at distance. Development is generally viewed below existing horizons, aiding integration, though is a distinct element of the view. Timber poles carrying an overhead line is visible within the view at a variety of distances, whilst road signage associated with the N2 is a visual detractor to the view. The N51 road corridor is not discernible at distance within the centre of the view, however traffic movement is perceived where gaps in roadside vegetation permit visibility of such movements.</p>
Sensitivity	<p>Residential receptors at this location are judged to be of a medium susceptibility to change in their views, whilst transient receptors on the local roads are judged to be of a low susceptibility to change.</p> <p>The viewpoint does not represent a recognised stopping place and does not form a Protected Viewpoint. However, the views experienced are available to residential receptors in the vicinity, and the overall value of the view available is judged to be medium, due to the influence of the existing N2 road corridor.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be medium.</p>
Magnitude of Change	<p>During the construction phase the main source of effect on this viewpoint will be the visibility of machinery and activities associated with the formation of the new road corridor and approach to the River Boyne bridge crossing, which will be visible to the right of the view available from this location. Activities and machinery will be visible within a small portion of the available view, though set below existing horizon lines at distance (refer Volume 4; Appendix 12.1; Figure A12.8a) which will aid integration. Construction phase activities and machinery movements associated with the N51 re-alignment works will be visible across a central portion of the view, well below horizon lines and perceived at distance.</p> <p>The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be localised and High as such operations will be visible across a small portion of the view, at distance.</p> <p>During the operational phase new embankments, cuttings, overbridge, mainline alignment and junction arrangements with the N51 will be the main source of visual effect from this viewpoint. Visible portions of the Proposed Scheme will be seen with a small portion of the view at distance, set below existing horizon lines and perceived as a notable alteration to the overall view. Operational phase impacts associated with the N51 realignment will be visible across a central portion of the view, at distance and well below existing horizon lines. Proposed lighting on the N51 will be viewed as a minor addition to the overall night-time view available from this location, though viewed within the context of lighting associated with Slane village and retained portions of the N2. Visible lighting will be seen well below horizons and set against a strong backdrop and is not considered to give rise to a significant effect. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Medium as visible portions of the Proposed Scheme will be perceived as a partial change to the character and composition of the baseline conditions.</p>
Significance of Visual Effect during Construction Phase	<p>Moderate adverse, short-term duration assessed as significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography will remain as the Proposed Scheme becomes operational.</p>
Significance of Visual Effect during Operational Phase	<p>Moderate, assessed as locally significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst visible portions of the Proposed Scheme will be seen at distance, below horizon lines, they will be seen as a distinct alteration to the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established.</p> <p>Operational phase effects will occur medium-term, gradually decreasing to Slight as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.</p>

Table 12-23: Viewpoint 9 – N2 (at Fennor Junction)

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Viewpoint 9 – N2			
Grid Ref	696538, 773251	Existing View Figure Number	A12.9a
Direction of View	North-east	Approx. Distance to Proposed Scheme	400 m
Description of existing view and potential receptors	<p>This viewpoint is located on the grassed verge adjacent to the existing N2 / Fennor road junction approximately 400 m from the Proposed Scheme and in close proximity to residential properties and local facilities (parking) in the vicinity of the existing junction. The view is considered to be representative of views primarily experienced by road users on the N2 and residential receptors.</p> <p>Views east from this location, as represented in Volume 4; Appendix 12.1; Figure A12.9a are generally panoramic, though partially restricted in nature by localised topographical changes associated with the River Boyne valley, such that views are primarily focused along the valley. The immediate foreground of the view is comprised of pastoral lands that lie adjacent to the N2 on more elevated land above the Boyne River. Mixed species woodland and scrub vegetation is visible, to the left of the view, along the northern edge of the river valley, which partially screen more elevated lands beyond. Mixed species woodland forms variety and interest within central, more distant portions of the view.</p> <p>A residential property is visible at mid-distance to the left of the view on more elevated lands, whilst a further residential property is screened by existing vegetation and intervening topographical changes to the right of the view. Timber poles carrying overhead lines are visible within the view at a variety of distances within the view. Large scale pylons carrying overhead lines are perceived, at distance, above existing horizon lines, though form a minor element within the view.</p>		
Sensitivity	<p>Residential receptors at this location are judged to be of a high susceptibility to change in their views, whilst transient receptors on the N2 are judged to be of a low susceptibility to change.</p> <p>The viewpoint is not representative of a recognised stopping place and is not representative of a Protected View, though is located within an area of High Landscape Sensitivity. However, the views experienced are available to residential receptors in the vicinity, and the overall value of the view available is judged to be medium, due to the influence of the existing N2 road corridor.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>		
Magnitude of Change	<p>During the construction phase the main sources of effect on this viewpoint will be the visibility of machinery and activities associated with the formation of the Boyne River bridge crossing, new local road connections, northern and southern road alignment approaches to the bridge crossing and modifications to local topography to form new embankments, cuttings and SUDs ponds at lower elevation within the view. Activities and machinery will be visible across the whole of the view, though set below existing horizon lines and partially screened by existing retained vegetation. Visible construction phase operations will be viewed against a backdrop of existing, retained, vegetation that lies beyond the site boundary (refer Volume 4; Appendix 12.1; Figure A12.9d) and below existing horizon lines which will aid integration. Cranes and construction phase activities associated with the formation of the new Boyne Bridge crossing and the local overbridge, on more elevated land to the left of the view, will be visible above horizons, for a short duration, forming localised visual interest within the view. The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be localised and High to Very High as such operations will be visible across the whole of the view at a close distance.</p> <p>During the operational phase the new Boyne Bridge river crossing, local road alignments, noise barrier, over bridge on more elevated lands and cuttings and embankments will be the main source of visual effect from this viewpoint. Visible portions of the Proposed Scheme will be seen across the whole of the view, though set against a backdrop of existing vegetation and below existing horizons. Visible elements and traffic movement will be viewed as a notable alteration to the overall view. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and High as visible portions of the Proposed Scheme will be prominent, though do not substantially alter the scale and character of the wider landscape or elements within the view.</p>		

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Viewpoint 9 – N2	
Significance of Visual Effect during Construction Phase	Significant to Profound, adverse, short-term duration, assessed as locally significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography and introduction of new features will remain as the Proposed Scheme becomes operational.
Significance of Visual Effect during Operational Phase	<p>Moderate to Significant, assessed as locally significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst visible portions of the Proposed Scheme will be visible, below distant horizon lines, they will be seen as a distinct alteration and additional feature within the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established.</p> <p>Operational phase effects will occur medium-term, gradually decreasing to Slight as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.</p>

Table 12-24: Viewpoint 10 – Fennor (Fennor Road field gateway)

Viewpoint 10 – Feenor			
Grid Ref	698091, 772756	Existing View Figure Number	A12.10a
Direction of View	West	Approx Distance to Proposed Scheme	1.3 km
Description of existing view and potential receptors	<p>This viewpoint is located at a gated field entrance adjacent to the County Road network at Fennor, approximately 1.3 km southeast of the Proposed Scheme and in close proximity to residential properties in the vicinity. The view is considered to be representative of views experienced by residential receptors and road users traveling west on the county road network.</p> <p>Views northwest from this location, as represented in Volume 4; Appendix 12.1; Figure A12.10a are generally expansive and panoramic in nature, particularly to the north towards the Brú na Bóinne World Heritage Property. Elevated land on the northern side of the Boyne Valley forms the mid-distance horizon across the central portion of the view which is often punctuated and elevated by broadleaved trees and scattered copses of broadleaved trees. The Hill of Slane is partially visible to the left of the view, beyond intervening vegetation and above the roof line associated with a single residential property at lower elevation. Additional screening is provided by coniferous trees associated with garden boundaries of this property, which block views of elevated lands beyond. The immediate foreground of the view is comprised of an arable field and associated field boundary hedgerow, which, in combination with intervening topographical changes screen views of the River Boyne, such that it is not visible in the view. Mixed pastoral fields visible on the northern side of the Boyne Valley are well defined by a mixture of hedgerows and hedgerows with trees, whilst portions of land are occupied by scrubby gorse growth.</p> <p>Scattered residential properties and large scale farm buildings, adjacent to the N51 are visible across the whole of the view, forming localised visual points of interest due to form, colouration and location on or just below perceived horizons at mid-distance. Large scale pylons carrying overhead lines are visible at a variety of distances within the view, though not easily perceived due to their perforated form.</p>		
Sensitivity	<p>Residential receptors at this location are judged to be of a high susceptibility to change in their views, whilst transient receptors on the local county road are judged to be of a medium susceptibility to change.</p> <p>The represented view is not representative of the Protected View available from this location, though does form a portion of the overall view available from a location within an area designated as a high sensitivity landscape. Views experienced are available to residential receptors in the vicinity, and the overall value of the view available is judged to be high.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>		

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Viewpoint 10 – Feenor	
Magnitude of Change	<p>During the construction phase the main source of effect on this viewpoint will be the visibility of machinery and activities associated with the formation of the new roundabout junction linking the existing N51 and proposed mainline and associated modifications to topography to form new embankments and cuttings. Activities and machinery will be visible to the left of the view, within a restricted portion of the view, perceived between and beyond existing vegetation associated with the residential property seen at close distance. Visible construction phase operations will be viewed against a backdrop of existing, retained, vegetation that lies beyond the site boundary (refer Volume 4; Appendix 12.1; Figure A12.10b) and well below existing horizon lines formed by elevated land associated with the Hill of Slane, which will aid integration. The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be localised and Medium as such operations will be visible across a small portion of the overall view.</p> <p>During the operational phase new embankments, and junction arrangements will be the main source of visual effect from this viewpoint. Visible portions of the Proposed Scheme will be seen within a narrow portion of the view at mid-distance, set against a backdrop of existing vegetation and perceived as a minor alteration to the overall view. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Low as visible portions of the Proposed Scheme will be perceived as a minor alteration to the character and composition of the baseline conditions.</p>
Significance of Visual Effect during Construction Phase	Moderate to Significant adverse, short-term duration, assessed as not significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography will remain as the Proposed Scheme becomes operational.
Significance of Visual Effect during Operational Phase	<p>Slight to Moderate, assessed as not significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst visible portions of the Proposed Scheme will be seen at mid-distance, below distant horizon lines, they will be seen as a minor alteration to the existing character and composition within a small portion of the overall available view, which does not affect the Protected View to the north.</p> <p>Operational Phase effects will occur short-term, gradually decreasing to Slight / Not Significant as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.</p>

Table 12-25: Viewpoint 11 – Canal Towpath (Ramparts Path)

Viewpoint 11 – Canal Towpath			
Grid Ref	697177, 773131	Existing View Figure Number	A12.11a
Direction of View	West	Approx Distance to Proposed Scheme	300 m
Description of existing view and potential receptors	<p>This viewpoint is located on the track, forming part of the Ramparts Walk, directly adjacent to the River Boyne, approximately 300 m east of the proposed Boyne Bridge crossing associated with the Proposed Scheme. The view, represented in Volume 4; Appendix 12.1; Figure A12.11a, is considered to be representative of the worst-case view experienced by recreational receptors walking west</p> <p>Views west from this location, as represented in Volume 4; Appendix 12.1; Figure A12.11a are restricted in nature by a combination of topographical changes associated with the River Boyne Valley and areas of mixed species riverside vegetation and mixed broadleaved woodland on more elevated land to the right of the view. The immediate foreground of the view is comprised of the existing riverside vegetation and the River Boyne, whilst at mid-distance mixed arable and pastoral lands are glimpsed amongst existing vegetation cover. The outline of Fennor Castle is visible to the left of the view, beyond existing vegetation, whilst the chimney stack associated with Jebb's Mill forms a visual draw to the centre right of the view, visible above existing vegetation, whilst Jebb's Mill itself is perceived beyond intervening vegetation.</p> <p>Residential properties and built form associated with Slane village are not visible within the view, due to screening by intervening topographical changes and vegetation cover.</p>		

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Viewpoint 11 – Canal Towpath	
	A single timber pole carrying an overhead line is visible within the centre right of the view, perceived on lower elevation land adjacent to the River Boyne.
Sensitivity	<p>Recreational receptors at this location are judged to be of a high susceptibility to change in their views.</p> <p>The viewpoint is not representative of a view available from a Protected View, the views experienced are available from within a landscape designated as a high sensitivity landscape, and the overall value of the view available is judged to be high.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>
Magnitude of Change	<p>During the construction phase the main source of effect on this viewpoint will be the visibility of machinery and activities associated with the formation of the Boyne River bridge crossing, new over bridge on Fennor Road, local road connections, new road corridor approaches to the north and south of the new bridge crossing and associated modifications to local topography to form new embankments and cuttings. Activities and machinery will be visible across the whole of the view, though set below perceived horizons formed by the extensive vegetation cover. Visible construction phase operations will be partially viewed against a backdrop of existing, retained, vegetation that lies beyond the site boundary (refer Volume 4; Appendix 12.1; Figure A12.11a) which will aid integration. Construction phase operations will partially and temporarily affect visibility of Slane Castle ruins and Jebb's Mill chimney, which form minor visual draws within the view. The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be localised and Very High, as such construction phase operations will be visible across the whole of the view, at mid-distance.</p> <p>During the operational phase new embankments, overbridge, Boyne River bridge crossing, noise barrier and traffic movements will be the main source of visual effect from this viewpoint. Visible elements and traffic movement will be viewed as a notable alteration to the overall view. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and High as visible portions of the Proposed Scheme will be prominent, though do not substantially alter the scale and character of the wider landscape or elements within the view.</p>
Significance of Visual Effect during Construction Phase	Significant to Profound, adverse, short-term duration, assessed as locally significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography and new structures will remain as the Proposed Scheme becomes operational.
Significance of Visual Effect during Operational Phase	<p>Moderate to Significant, assessed as locally significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst portions of the Proposed Scheme will be visible, below perceived horizon lines, they will be viewed as a distinct alteration and additional feature within the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established.</p> <p>Operational phase effects will occur medium-term, gradually decreasing as the Proposed Scheme becomes an established feature within the within the overall view and mitigation planting establishes, though elements such as cyclepath network connections and bridge piers will occur for a longer duration.</p>

Table 12-26: Viewpoint 12 – Jebb's Mill Carpark

Viewpoint 12 – Jebb's Mill Car Park			
Grid Ref	696670, 773490	Existing View Figure Number	A12.12a
Direction of View	East	Approx Distance to Proposed Scheme	300 m
Description of existing view and potential receptors	<p>This viewpoint is located on the edge of the carpark to the rear of Jebb's Mill, adjacent to the existing fenced boundary line, below existing tree planting, approximately 300 m from the proposed Boyne Bridge crossing associated with the Proposed Scheme. Whilst the view represented in Volume 4; Appendix 12.1; Figure A12.12a is considered to be representative of the worst-case views towards the Proposed Scheme,</p>		

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Viewpoint 12 – Jebb’s Mill Car Park	
	<p>other views available from the rear of Jebb’s Mill are screened by existing boundary vegetation.</p> <p>The view represented is considered to be representative of localised views experienced by recreational and tourist receptors visiting facilities at Jebb’s Mill.</p> <p>Views east from this location, as represented in Volume 4; Appendix 12.1; Figure A12.12a are partially restricted by a combination of vegetation and localised topographical changes that screen views of more elevated land. Horizons are generally perceived at mid-distance and associated with the ridge of land forming the southern boundary of the Boyne River valley. Perceived horizons are punctuated and elevated by existing tree cover and field boundary hedgerows with trees, forming field boundaries. The immediate foreground of the view is comprised of the riverside vegetation and the River Boyne. Lower elevation lands to beyond the Boyne River include scattered instances of scrub and mixed broadleaved trees, with mature trees forming a visible boundary between flood plain and more elevated land utilised for arable pastoral land. A residential property is visible at mid-distance within the centre of the view, set against a backdrop of strong vegetation. The property is partially screened by intervening vegetation whilst timber poles carrying overhead lines are visible within the view at various distances and elevations.</p>
Sensitivity	<p>Recreational and tourist receptors at this location are judged to be of a high susceptibility to change in their views.</p> <p>The viewpoint does represent a recognised stopping place but does not form part of a Protected View. However, the views are generally experienced locally by high susceptibility receptors and the overall value of the view available is judged to be high. Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>
Magnitude of Change	<p>During the construction phase the main source of effect on this viewpoint will be the visibility of machinery and activities associated with the formation of the Boyne River bridge crossing, new over bridge on county road, local road connections, new road corridor approaches to the south of the new bridge crossing and associated modifications to local topography to form new embankments and cuttings. Activities and machinery will be visible across the whole of the view, though generally viewed below perceived horizons formed by the existing vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.12d). The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be localised and High to Very High as such operations will be visible across the whole of the view, at mid-distance.</p> <p>During the operational phase new embankments, overbridge, Boyne River bridge crossing, noise barrier and traffic movements associated with the Proposed Scheme will be the main source of visual effect from this viewpoint. Visible elements and traffic movement will be viewed as a substantial alteration to the overall view. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Very High as visible portions of the Proposed Scheme will be prominent, substantially altering elements within the view.</p>
Significance of Visual Effect during Construction Phase	<p>Significant, adverse, short-term duration, assessed as locally significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography and new structures will remain as the Proposed Scheme becomes operational.</p>
Significance of Visual Effect during Operational Phase	<p>Significant, assessed as locally significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Visible portions and elements of the Proposed Scheme will be viewed as a distinct alteration and addition to the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established.</p> <p>Operational phase effects will occur Medium-term, gradually decreasing as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.</p>

Table 12-27: Viewpoint 13 – Slane Bridge

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Viewpoint 13 – Slane Old Bridge			
Grid Ref	696326, 773647	Existing View Figure Number	A12.13a
Direction of View	East	Approx Distance to Proposed Scheme	700 m
Description of existing view and potential receptors	<p>This viewpoint is located on the footpath, located on the eastern side of the existing Slane Bridge, approximately 700 m west of the proposed Boyne River bridge crossing. The view is considered to be representative of views experienced by recreational, tourists walking across the bridge and peripheral views available to transient receptors on the N2.</p> <p>Views east from this location, as represented in Volume 4; Appendix 12.1; Figure A12.13a are partially restricted in nature by the wooded slopes to the north of the River Boyne, which lie beyond Jebb's Mill to the left of the view, river bank vegetation and well defined hedgerows with trees forming field boundaries and edge of local road network to the right of the view. Views are generally focused along the route of the River Boyne as a consequence of more elevated land that forms the extent of the River Boyne valley. The immediate foreground of the view is comprised of the River Boyne, adjacent pastoral lands and grounds associated with Jebb's Mill. Horizons are formed by elevated land associated with the River Boyne Valley and are often elevated by existing tree cover, both at distance and at mid-distance to the right of the view. Jebb's Mill and associated outbuildings are partially screened to the left of the view, with lower portions of the chimney stack screened by riverside vegetation.</p> <p>A small cluster of residential properties are visible at mid-distance to the right of the view, forming a visual draw, located adjacent to the N2 corridor, with street lighting columns perceived above this localised built form. A further cluster of residential properties is also visible at lower elevation to the right of the view, set against a strong backdrop of vegetation. Timber poles carrying overhead lines are visible within the view at a variety of distances, often associated with existing local road networks.</p>		
Sensitivity	<p>Recreational and tourist receptors at this location are judged to be of a high susceptibility to change in their views, whilst transient receptors on the road are judged to be of a low susceptibility to change.</p> <p>The viewpoint is representative of a recognised stopping place, associated with the Boyne Bridge, is representative of views from within a highly sensitive landscape and the overall value of the view is considered to be high.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>		
Magnitude of Change	<p>During the construction phase the main source of effect on this viewpoint will be the visibility of machinery and activities associated with the formation of the Boyne River bridge crossing, new over bridge on county road to the southern side of the Boyne Valley, local road connections, new road corridor approaches to the south of the new bridge crossing and associated modifications to local topography to form new embankments and cuttings associated with the southern edge of the bridge crossing. Activities and machinery will be partially visible across a small central portion of the overall view, visible below perceived horizons formed by the existing vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.13d). The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be localised and High as operations will be partially visible within the view, at mid-distance.</p> <p>During the operational phase new embankments, noise barrier, Boyne River bridge crossing and traffic movements associated with the Proposed Scheme will be the main source of visual effect from this viewpoint. Visible elements and traffic movement will be viewed as a minor alteration to the overall view. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Medium as visible portions of the Proposed Scheme whilst prominent, do not substantially alter elements or character of the available view.</p>		
Significance of Visual Effect during Construction Phase	<p>Significant adverse, short-term duration, assessed as significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography will remain as the Proposed Scheme becomes operational.</p>		

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Viewpoint 13 – Slane Old Bridge	
Significance of Visual Effect during Operational Phase	Moderate, assessed as not significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst visible portions of the Proposed Scheme will be seen at mid-distance, they are seen below horizon lines against a well vegetated backdrop which aids integration. Visible elements of the scheme will be seen as a minor alteration to the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established. Operational phase effects will occur short-term, gradually decreasing as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.

Table 12-28: Viewpoint 14 – Fennor (Minor Road at Fennor)

Viewpoint 14 – Fennor			
Grid Ref	695913, 772749	Existing View Figure Number	A12.14a
Direction of View	East	Approx Distance to Proposed Scheme	1.2 km
Description of existing view and potential receptors	This viewpoint is located on the local road network, approximately 1.2 km west of the Proposed Scheme. The view is considered to be representative of views experienced by recreational receptors on the local road network and road receptors traveling east at this location. Views east from this location, as represented in Volume 4; Appendix 12.1; Figure A12.14a are enclosed and restricted in nature by roadside hedgerows.		
Sensitivity	Recreational receptors at this location are judged to be of a high susceptibility to change in their views, whilst transient road receptors are judged to be of a medium susceptibility to change. The overall value of the view available is judged to be high. Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be medium.		
Magnitude of Change	During the construction phase visibility of machinery and activities associated with the formation of the Proposed Scheme will not be visible in eastern views due to screening effects of intervening topographical changes and vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.14b). The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be Negligible / Very Low. During the operational phase the Proposed Scheme will not be visible in eastern views due to screening effects of intervening topographical changes and vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.14b). The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be Negligible / Very Low		
Significance of Visual Effect during Construction Phase	Imperceptible as construction phase operations will be screened in western views by intervening topographical changes and extensive vegetation cover.		
Significance of Visual Effect during Operational Phase	Imperceptible, as operational phase traffic movements and elements of the Proposed Scheme will be screened in western views by a combination of intervening topographical changes and vegetation cover.		

Table 12-29: Viewpoint 15 – Slane Castle Grounds

Viewpoint 15 – Slane Castle Grounds			
Grid Ref	695066, 774413	Existing View Figure Number	A12.15a
Direction of View	East	Approx Distance to Proposed Scheme	2.2 km

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Viewpoint 15 – Slane Castle Grounds	
Description of existing view and potential receptors	<p>This viewpoint is located on the grassed slopes associated with Slane Castle, approximately 2.2 km west of the proposed Boyne River bridge crossing. The view is considered to be representative of views experienced by recreational receptors, tourist receptors and those working within Slane Castle.</p> <p>Views east from this location, as represented in Volume 4; Appendix 12.1; Figure A12.15a are focused along the River Boyne Valley, through a combination of topographical changes and woodland cover on elevated southern and northern embankments associated with the river valley. The immediate foreground of the view is comprised of sloping, pastoral land associated with Slane Castle grounds forming a visual draw towards the River Boyne seen at lower elevation across the central portion of the view. Mixed species woodland and coniferous plantation, visible to the left and right of the view, elevate the perceived horizons locally whilst adding variation and textural interest within the view. Mixed quality pastoral arable fields are glimpsed throughout the view, with field boundaries well defined by a mix of hedgerows, hedgerows with trees and scattered copses of woodland planting.</p> <p>The built form of Jebb's Mill is perceived within a small central portion of the view, though is difficult to discern due to intervening vegetation cover and attenuation by distance, with the chimney stack visible as a small element punctuating the horizon. Jebb's Mill is currently framed by existing vegetation associated with the demesne's planting.</p> <p>No residential properties are perceived within the view, whilst timber poles carrying overhead lines are not easily discernible.</p>
Sensitivity	<p>Recreational and tourist receptors at this location are judged to be of a high susceptibility to change in their views, whilst those receptors working at Slane Castle are judged to be of a low susceptibility to change.</p> <p>The overall value of the view available is judged to be high.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>
Magnitude of Change	<p>During the construction phase visibility of machinery and activities associated with the formation of the Proposed Scheme will not be visible in eastern views due to screening effects of intervening topographical changes and vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.15b). The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be Negligible / Very Low.</p> <p>During the operational phase the Proposed Scheme will not be visible in eastern views due to screening effects of intervening topographical changes and vegetation cover (refer Volume 4; Appendix 12.1; Figure A12.15b). The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be Negligible / Very Low</p>
Significance of Visual Effect during Construction Phase	Imperceptible, as construction phase operations and vehicle movements will be screened in western views by a combination of intervening topographical changes and vegetation cover.
Significance of Visual Effect during Operational Phase	Imperceptible, as operational phase traffic movements and elements of the Proposed Scheme will be screened in western views by a combination of intervening topographical changes and vegetation cover.

Table 12-30: Viewpoint 16 – Carrickdexter (Baronstown Cross)

Viewpoint 16 – Carrickdexter			
Grid Ref	693596, 773517	Existing View Figure Number	A12.16a
Direction of View	East	Approx Distance to Proposed Scheme	3.3 km
Description of existing view and potential receptors	<p>This viewpoint is located on the grassed area adjacent to Baronstown Cross, Carrickdexter, approximately 3.4 km southwest of the proposed Boyne River bridge crossing and in close proximity to residential properties in the vicinity. The view is considered to be representative of views experienced by residential receptors, tourist</p>		

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Viewpoint 16 – Carrickdexter	
	<p>receptors and views available to transient receptors on the local road network in the immediate vicinity.</p> <p>Views east from this location, as represented in Volume 4; Appendix 12.1; Figure A12.16a are expansive and panoramic in nature, with elevated land associated with The Hill of Slane visible to the left of the view. The foreground of the view is comprised of the existing N51 transport corridor and associated roadside vegetation which limits views of the roadway, and associated traffic movements. Mid-distance portions of the view contain visibility of mixed arable and pastoral agricultural lands, with fields well defined by hedgerows and hedgerows with trees. Extensive woodland cover, associated with the River Boyne, is visible at mid-distance across the central portion of the view, whilst further scattered woodland and coniferous plantation punctuate and elevate perceived horizons throughout.</p> <p>Scattered residential properties are generally not perceived within the view, however residential development associated with the southern edge of Slane is visible on more elevated land to the left of the view and forms a discernible visual draw. Timber poles carrying overhead lines are visible at a variety of distances within the view.</p>
Sensitivity	<p>Residential and recreational receptors at this location are judged to be of a high susceptibility to change in their views, whilst transient receptors on roads at lower elevation are judged to be of a low susceptibility to change.</p> <p>The viewpoint does represent views available from a Protected View, and the overall value of the view available is judged to be high, due to the perceived lack of built form present within the view.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>
Magnitude of Change	<p>During the construction phase visibility of machinery and activities associated with the formation of the new road corridor, new over bridges, N51 roundabout junction and modifications to local topography to form new embankments and cuttings will be difficult to discern due to attenuation by distance, screening by intervening vegetation and topographical changes. Activities and machinery whilst predicted to be visible across a minor portion of the view, set below existing horizon lines at distance will not be easily perceived within the view (refer Volume 4; Appendix 12.1; Figure A12.16b). The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be Low as operations will not be readily discernible within the view.</p> <p>During the operational phase new embankments, bridge crossings and junction arrangements will not be easily discernible in north-western views from this location. Whilst elements of the Proposed Scheme are predicted to be visible within a small portion of the view, they will be difficult to perceive at distance, set against a well vegetated backdrop well below horizons. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Low as visible portions of the Proposed Scheme will be difficult to perceive and do not alter the character and composition of the baseline conditions.</p>
Significance of Visual Effect during Construction Phase	<p>Slight, short-term duration, assessed as not significant visual effects are predicted to occur during the construction phase of the Proposed Scheme.</p>
Significance of Visual Effect during Operational Phase	<p>Slight, assessed as not significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst portions of the Proposed Scheme are predicted to be visible at distance, below distant horizon lines, they will not alter the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established.</p> <p>Operational phase effects will occur short-term, decreasing as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.</p>

Table 12-31: Viewpoint 17.1 and 17.2 – Hill of Slane (Graveyard)

Viewpoint 17.1 and 17.2 – Hill of Slane (Graveyard)			
Grid Ref	696179, 775143	Existing View Figure Number	A12.17.1a & A12.17.2a

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Viewpoint 17.1 and 17.2 – Hill of Slane (Graveyard)			
Direction of View	South-east and North-east	Irish Distance to Proposed Scheme	1.9 km
Description of existing view and potential receptors	<p>This viewpoint is located within the graveyard associated with the historical abbey ruins, on the western slope of The Hill of Slane, approximately 1.9 km west of the Proposed Scheme. The view is considered to be representative of views experienced by tourist and recreational receptors visiting the nationally important monument. It is noted that the overall panoramic view available from this location has been divided into the north-eastern portion (Volume 4; Appendix 12.1; Figure A12.17.1a) and southern portion (Volume 4; Appendix 12.1; Figure A12.17.2a).</p> <p>Views to the northeast are panoramic and expansive in nature, with distant horizons formed by elevated land to the east and north of Drogheda, the witrish Irish Cement works forming a distinctive feature and visual draw to the centre right of the view presented in Volume 4; Appendix 12.1; Figure A12.17.1a. The foreground of the view, beyond the stone wall associated with the graveyard is comprised of existing pastoral field, with boundary well defined by hedgerows with a small group of coniferous trees visible within the centre of the view. Mixed species broadleaved and coniferous trees associated with Littlewood Forest are visible at lower elevation to the right of the north-western portion of the view. The existing N2 transport corridor is perceived to the left of the view, due to associated vehicle movements increases the visual presence of the road network within the view. Mixed arable and pastoral fields, of varying scale, are visible throughout the view with boundaries well defined by hedgerows, remnant ivy covered hedgerow elements and hedgerows with trees. Scattered mixed species broadleaved woodland, copses and coniferous plantation are visible throughout the view, adding textural and visual interest throughout. Scattered residential properties and farm building complexes are perceived at varying distances within the view, forming minor points of interest. Timber poles carrying overhead lines are visible at varying distances within the view, though not easily perceived due to the well vegetated landscape.</p> <p>Southwestern portions of the view (refer Volume 4; Appendix 12.1; Figure A12.17.2a) are expansive and panoramic in nature, with elevated land forming the northern edge of the Boyne River valley forming distinctive mid-distance horizons to the left of the view. New residential development is visible at mid-distance, forming a strong, localised visual draw within the overall expansive and panoramic view. Remaining lands visible within the southwestern portion of the view are comprised of mixed arable pastoral lands, with medium to large field patterns defined by hedgerows, hedgerows with trees and scattered woodland planting of mixed species. Mixed species woodland is also perceived on more elevated land within the view, at varying distances, which add visual and textural interest within the view. The existing N2 transport corridor is visible as a distinct visual element within the view, primarily as a result of the road colouration and vehicle movements within the landscape. Residential properties and large farm building complexes are more visually apparent within the southern portion of the view, due to colouration and form of buildings.</p> <p>Timber poles carrying overhead lines are visible throughout the view at varying distances, though not often readily discernible due to attenuation by distance, or location against a well vegetated landscape.</p>		
Sensitivity	<p>Recreational and tourist receptors at this location are judged to be of a high susceptibility to change in their views.</p> <p>The viewpoint does represent views available from a Protected View, and the overall value of the view available is judged to be high due to its elevated location and the expansive, panoramic view available from this side of the Hill of Slane.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>		
Magnitude of Change	<p>During the construction phase the main source of effect on north-western portions of the view will be the visibility of machinery and activities associated with the formation of the new northern roundabout junction, local road connections, new road corridor and modifications to topography to form new embankments and cuttings. Activities and machinery will be visible across two separated, portions of the overall expansive view, seen well below existing distant horizon lines and generally viewed at mid-distance.</p> <p>Visible construction phase operations associated with the new road corridor will be more visible in this portion of the view, due to the more open nature of this section of the view. Visible construction operations will be visible well below existing horizons, set against a</p>		

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Viewpoint 17.1 and 17.2 – Hill of Slane (Graveyard)	
	<p>backdrop of existing mixed arable and pastoral lands (refer Volume 4; Appendix 12.1; Figure A12.17.1a and A12.17.2a) which will aid integration. The magnitude of visual impact during the construction phase of the Proposed Scheme, within the north-western portion of the view is judged to be localised and medium as such operations will be visible across a large central portion of the view, visible at increasing distances from the viewpoint.</p> <p>During the construction phase the main source of effect on south-western portions of the view will be the visibility of machinery and activities associated with the formation of the new southern roundabout junction, local road connections, new road corridor and modifications to topography to form new embankments and cuttings. Activities and machinery will be visible across a small, central portion of the overall expansive view, seen well below existing distant horizon lines and generally viewed at mid-distance. Visible construction phase operations associated with the new Boyne Bridge crossing will be screened within the view by intervening topographical changes and build form, though upper portions of cranes and lifting machinery would be visible for a short duration, visible against a backdrop of existing mixed arable and pastoral lands to the south of the River Boyne (refer Volume 4; Appendix 12.1; Figure A12.17.1a and A12.17.2a) which will aid integration. The magnitude of visual impact during the construction phase of the Proposed Scheme, within the southwestern portion of the view is judged to be localised and High as such operations will be visible across a small central portion of the view, visible at increasing distances from the viewpoint.</p> <p>During the operational phase new embankments and cuttings, and junction arrangements, including new lighting provision associated with the northern portion of the scheme and new road corridor will be the main source of visual effect from this viewpoint. Visible portions of the Proposed Scheme within the northern portion of the view will be seen as new elements of the view, separated by intervening vegetation cover, built form or localised topographical changes, such that new elements will be seen as a minor addition to the overall expansive view available. Whilst visible elements are considered to be notable, they do not significantly alter the character or composition of the view available. Proposed lighting on the new roundabout junction and along the existing N2 corridor will be viewed as a minor addition to the night-time view available from this location. Lighting will be visible within the context of existing lighting associated with surrounding built form and N2 road corridor at closer distance and viewed well below horizons and is not considered to give rise to a significant effect</p> <p>Visible elements of the Proposed Scheme to the south-west are seen well below distant horizons, which remain as the main visual draw, and would be viewed generally at distance as a minor alteration and addition to the view.</p> <p>The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Medium as visible portions of the Proposed Scheme will be perceived as a minor change to the character and composition of the baseline conditions.</p>
Significance of Visual Effect during Construction Phase	Significant adverse, short-term duration, assessed as significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography will remain as the Proposed Scheme becomes operational.
Significance of Visual Effect during Operational Phase	Moderate to Significant, assessed as locally significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst visible portions of the Proposed Scheme will be seen at mid-distance, below distant horizon lines, they will be seen as a minor alteration to the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established. Operational Phase effects will occur medium-term, gradually decreasing to Moderate to Slight as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.

Table 12-32: Viewpoint 18.1 and 18.2 – Hill of Slane (Carpark)

Viewpoint 18 – Hill of Slane (Carpark)			
Grid Ref	696353, 775212	Existing View Figure Number	A12.18a

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Viewpoint 18 – Hill of Slane (Carpark)			
Direction of View	North-east	Approx Distance to Proposed Scheme	2 km
Description of existing view and potential receptors	<p>This viewpoint is on the northern edge of the car park associated with The Hill of Slane, approximately 2 km from the Proposed Scheme. The view is considered to be representative of views experienced by residential receptors in the immediate vicinity, recreational and tourist receptors and visitors to the Hill of Slane.</p> <p>Views northeast from this location, as represented in Volume 4; Appendix 12.1; Figure A12.18.a are expansive and panoramic in nature, with elevated land to the west of Drogheda forming the distant horizons, with the Irish Cement works forming a distinctive feature and visual draw within the central portion of the view.</p> <p>The immediate foreground of the view is comprised of existing pastoral fields, with mixed residential and commercial development visible at lower elevation at mid-distance. The existing N2 transport corridor is perceived in the view, due to associated vehicle movements which create movement and increase the visual presence of the road network within the view. Mixed arable and pastoral fields, of varying scale, are visible throughout the view with boundaries well defined by hedgerows, remnant ivy covered hedgerow elements and hedgerows with trees. Scattered mixed species broadleaved woodland, copses and coniferous plantation are visible throughout the view, adding textural and visual interest throughout.</p> <p>Scattered residential development and farm buildings are visible throughout the expansive view, forming minor points of visual interest. Timber poles carrying overhead lines are visible at a variety of distances within the view and form a strong visual element at close distance. Large scale pylons are perceived, at lower elevation, across the central portion of the view.</p>		
Sensitivity	<p>Residential, recreational and tourist receptors at this location are judged to be of a high susceptibility to change in their views.</p> <p>The viewpoint does represent views available from a Protected View, and the overall value of the view available is judged to be high.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>		
Magnitude of Change	<p>During the construction phase the main source of effect on this viewpoint will be the visibility of machinery and activities associated with the formation of the new roundabout junction connecting the Proposed Scheme with the existing N2 corridor, local road connections, new road corridor and modifications to local topography to form new embankments and cuttings. Construction phase activities and machinery will be visible within two separated portions of the overall view, on lower elevation land at mid-distance, with existing built form and retained vegetation screening within the central portion of the view available. Visible operations are set well below distant horizon lines and on lower elevation land which will aid visual integration within the expansive and panoramic view available. Visible construction phase operations will be viewed against a backdrop of existing, retained, vegetation that lies beyond the site boundary (refer Volume 4; Appendix 12.1; Figure A12.18.a) which will aid integration. The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be localised and High as construction phase operations will be visible across a medium portion of the overall available view, at mid-distance.</p> <p>During the operational phase new embankments, cuttings, and junction arrangements together with vehicle movements will be the main source of visual effect on this viewpoint. Visible portions of the Proposed Scheme will be seen within two distinct portions of the of the overall expansive view, at lower elevation at mid-distance, set against a backdrop of existing vegetation and perceived as an alteration to the overall view well below distant horizons. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Medium as visible portions of the Proposed Scheme will be perceived as a partial, localised change to the character and composition of the baseline conditions.</p>		
Significance of Visual Effect during Construction Phase	<p>Significant adverse, short-term duration, assessed as significant visual effects are predicted to occur during the construction phase of the Proposed Scheme. Although construction effects will be of a short-term duration, alterations made to the existing topography will remain as the Proposed Scheme becomes operational.</p>		

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Viewpoint 18 – Hill of Slane (Carpark)	
Significance of Visual Effect during Operational Phase	<p>Moderate to Significant, assessed as not significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst visible portions of the Proposed Scheme will be seen at mid-distance, well below distant horizon lines, they will be seen as a minor alteration to the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established.</p> <p>Operational phase effects will occur medium-term, gradually decreasing to Moderate to Slight as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.</p>

Table 12-33: Viewpoint 19 – N51 (nr Janeville east)

Viewpoint 19a and 19b – N51			
Grid Ref	697083, 774030	Existing View Figure Number	A12.19a
Direction of View	South and East	Approx Distance to Proposed Scheme	700 m
Description of existing view and potential receptors	<p>This viewpoint is located on the grassed verge adjacent to the N51, approximately 700 m west of the proposed N51 roundabout junction proposed as part of the Proposed Scheme. The view is considered to be representative of views experienced by residential receptors in close vicinity and views available to transient receptors on the N51 (Volume 4; Appendix 12.1; A12.19a).</p> <p>Views from this location, as represented in Volume 4; Appendix 12.1; A12.19a are restricted and focused along the route of the N51 by established roadside vegetation, including hedgerows. Immediate foreground of the view is formed by the N51 and adjacent grassed verges. Distant horizons are screened by intervening woodland to the left of the view and further field boundary hedgerow trees within central portions and to the right of the view. Arable pastoral agricultural lands are glimpsed beyond intervening field boundary hedgerows and field boundary trees. Railings associated with the Ledwidge Cottage Museum are visible within the central portion of the view, glimpsed adjacent to the N51 corridor. Further residential properties immediately adjacent to the N51 are also visible above and beyond intervening hedgerows. Road signs associated with the N51 are also seen within the central portion of the view at various distances, whilst timber poles carrying overhead lines are visible adjacent to the N51.</p>		
Sensitivity	<p>Residential receptors at this location are judged to be of a high susceptibility to change in their views, whilst transient receptors on the adjacent road network are judged to be of a low susceptibility to change.</p> <p>The viewpoint does not represent a recognised stopping place though does represent views available from within a high sensitivity landscape. However, the views experienced are available to residential receptors in the vicinity, and the overall value of the view available is judged to be medium, due to the influence of the existing N51 road corridor.</p> <p>Overall, taking into account the receptor susceptibility and the value of the view the sensitivity is judged to be high.</p>		
Magnitude of Change	<p>During the construction phase the main source of effect on this viewpoint will be the visibility of machinery and activities associated with the formation of the new roundabout junction, local road connections, new road corridor and modifications to local topography to form new embankments and cuttings. Activities and machinery will be visible across the whole of the eastern and southern portions of the view. Operations and machinery movements will be viewed well below and in front of a well vegetated backdrop, within eastern portions of the view, but will be seen at close and mid-distance points within the view (refer Volume 4; Appendix 12.1; Appendix 12.1; A12.19a). The magnitude of visual impact during the construction phase of the Proposed Scheme is judged to be Very High.</p> <p>During the operational phase new embankments, new road connections, N51 corridor improvements, roundabout junction works, associated lighting and new road corridor arrangements will be the main source of visual effect on this viewpoint. Visible portions of the Proposed Scheme will be seen across the whole of the view at close and mid-</p>		

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Viewpoint 19a and 19b – N51	
	distance, set against a backdrop of existing vegetation and viewed as a notable alteration to the overall view. The magnitude of visual impact during the operational phase of the Proposed Scheme is judged to be localised and Very High as visible portions of the Proposed Scheme will be perceived as a change to the character and composition of the baseline conditions locally.
Significance of Visual Effect during Construction Phase	Very Significant adverse, short-term duration, assessed as significant visual effects are predicted to occur during the construction phase of the Proposed Scheme for both eastern and southern portions of the view. Although construction effects will be of a short-term duration, alterations made to the existing topography and N51 corridor will remain as the Proposed Scheme becomes operational.
Significance of Visual Effect during Operational Phase	Significant adverse, assessed as locally significant visual effects are predicted to occur during the operational phase of the Proposed Scheme. Whilst visible portions of the Proposed Scheme will be seen at close and mid-distance they will be seen below and in front of retained vegetation beyond the scheme boundary and viewed as a moderate alteration to the existing character and composition of the view at the time of scheme opening as proposed areas of planting will not be fully established. Operational phase effects will occur medium-term, gradually decreasing to Moderate as the Proposed Scheme becomes an established feature within the overall view and mitigation planting establishes.

A summary of the predicted visual impacts associated with the construction and operational phases for the Proposed Scheme, assessed previously are provided in **Table 12-34** below.

Table 12-34: Summary of Predicted Visual Impacts

No.	Viewpoint Name	Predicted Construction Phase Impacts	Predicted Operational Impacts
1	Knowth	Localised Significant adverse, short-term duration, significant visual effects	Slight, assessed as not significant, permanent effects
2	Newgrange	Slight to Moderate adverse, short-term duration, assessed as not significant effects	Slight, assessed as not significant Long term effects
3	Dowth	<i>Imperceptible</i>	<i>Imperceptible</i>
4	Stalleen Road (River Boyne Bank)	<i>Imperceptible</i>	<i>Imperceptible</i>
5	Redmountain	Slight, short-term duration, assessed as not significant	Slight, assessed as not significant, long-term effects
6	Local Road (L1600)	Moderate to Significant adverse, short-term duration, assessed as significant	Moderate, assessed as locally significant, long-term effects
7	Junction of N2 and Local Road (L1600)	Moderate adverse, short-term duration, assessed as significant	Slight, assessed as not significant short-term effects
8	N2	Moderate adverse, short-term duration, assessed as significant	Moderate, assessed as locally significant, medium-term effects
9	N2	Significant to profound, adverse, short-term duration, assessed as locally significant	Moderate to significant, assessed as locally significant, medium-term effects
10	Feenor	Moderate to Significant adverse, short-term duration, assessed as not significant	Slight to moderate, assessed as not significant
11	Canal Towpath	Significant to profound, adverse, short-term duration, assessed as locally significant	Moderate to significant, assessed as locally significant, Medium-term effects
12	Jebb's Mill Car Park	Significant, adverse, short-term duration, assessed as locally significant	Significant, assessed as locally significant, medium-term effects
13	Slane Old Bridge	Significant adverse, short-term duration, assessed as significant	Moderate, assessed as not significant, medium-term effects
14	Feenor	<i>Imperceptible</i>	<i>Imperceptible</i>
15	Slane Castle Grounds	<i>Imperceptible</i>	<i>Imperceptible</i>

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No.	Viewpoint Name	Predicted Construction Phase Impacts	Predicted Operational Impacts
16	Carrickdexter	Slight, short-term duration, assessed as not significant	Slight, assessed as not significant, short-term effects
17	Hill of Slane (Graveyard)	Significant adverse, short-term duration, assessed as significant visual	Moderate to Significant, assessed as locally significant, medium-term effects
18	Hill of Slane (Carpark)	Significant adverse, short-term duration, assessed as significant	Moderate to significant, assessed as not significant, medium-term effects
19	N51	Very Significant adverse, short-term duration effects	Significant adverse, assessed as locally significant, medium-term effects

12.4.4 Residential Visual Amenity Assessment

As part of the of visual effects assessment associated with the Proposed Scheme, an assessment of the predicted visual impacts on residents of residential properties that occur within the study area associated with the Proposed Scheme has also been undertaken.

Within this section of the LVIA, for each of the identified residential properties or groups of properties, an assessment of the likely visual effects has been undertaken by evaluating and assessing the predicted changes in the visual resource as a result of the Proposed Scheme; refer to **Figure 12.6(a)** to **Figure 12.6(e)**. This assessment of impacts on residential properties follows the methodology described previously in this LVIA.

Views from properties which are located beyond 300 m are restricted due to the nature of the surrounding undulating topography combined with existing vegetation and no significant impacts are predicted to occur on these properties due to the low visibility of the Proposed Scheme in available views.

12.4.4.1 Residential Visual Impact Assessment

Of the 40 individual properties and clusters of properties (totalling 115 residential properties), identified and assessed, for the mainline portion of the Proposed Scheme, as part of this assessment (refer to **Figures Figure 12.6(a)** to **Figure 12.6(e)**), four properties/ clusters of properties are predicted to experience Major to Substantial effects and 11 clusters of properties are predicted to experience Moderate to Major effects as a result of the Proposed Scheme, prior to establishment of mitigation planting, all of which have been assessed as being significant. Views from properties which are located beyond 300 m are restricted due to the nature of the surrounding undulating topography combined with existing vegetation and no significant impacts are predicted to occur on these properties due to the low visibility of the Proposed Scheme in available views. **Table 12-35** below summarises the numbers of residential properties and clusters of residential properties that are predicted to experience visual impacts as a result of the Proposed Scheme, pre mitigation establishment.

Table 12-35: Summary of Predicted Residential Effects – Pre Establishment

Viewer Sensitivity	Magnitude of Change	Significance of Effect (Pre-Establishment)	Number of Properties
High	No Change	None	5
High	Negligible	Minor	8
High	Small	Minor to Moderate	12
High	Medium	Moderate to Major	11
High	Large	Major to Substantial	4

Of the 40 individual properties and clusters of properties assessed as part of this assessment three properties/ clusters of properties are predicted to experience Moderate to Major effects as a result of the Proposed Scheme, following establishment of mitigation planting (refer **Table 12-36** below). All of these identified properties lie within close proximity to the Proposed Scheme or are directly impacted upon by elements of the Proposed Scheme.

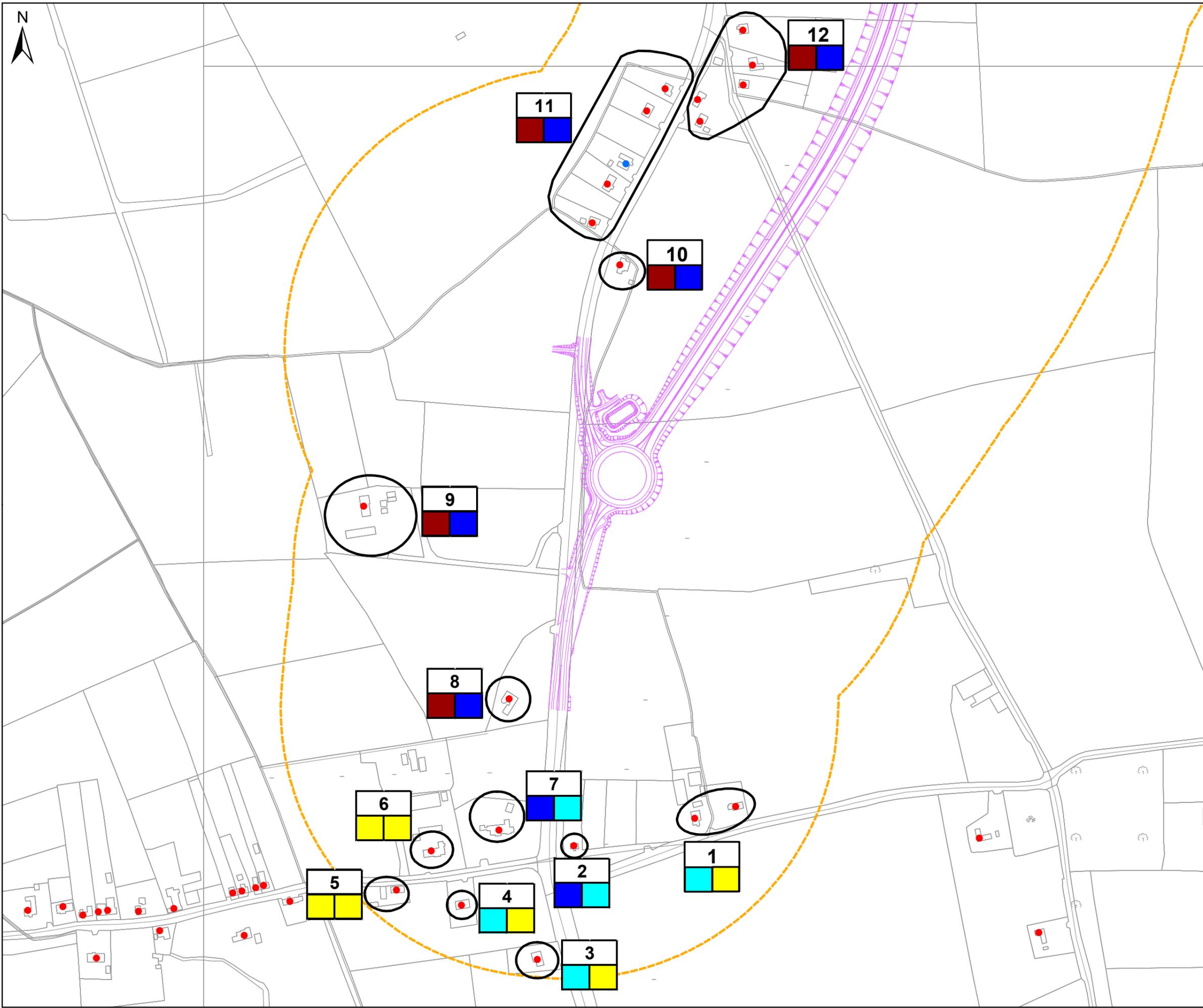
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Table 12-36: Summary of Predicted Residential Effects – Post Establishment

Viewer Sensitivity	Magnitude of Change	Significance of Effect (Pre-Establishment)	Number of Properties
High	No Change	None	13
High	Negligible	Minor	12
High	Small	Minor to Moderate	12
High	Medium	Moderate to Major	3
High	Large	Major to Substantial	0

It is noted that the existing properties (identified as Property Reference No. 25 and No. 27), which are proposed to be acquired and demolished as part of the Proposed Scheme, have been assessed as if there is no residential receptor retained at this location.

In relation to the Public Realm works associated with the Proposed Scheme, an assessment of impacts on residential properties was undertaken for those properties that lie directly adjacent to this portion of the Proposed Scheme. For all properties directly bordering the public realm works, it has been assessed that properties are predicted to experience Moderate to Major, temporary construction phase impacts as a consequence of the Proposed Scheme. This is expected to reduce to Minor, long-term and beneficial during the operational phase of the Proposed Scheme as the public realm works will improve the existing streetscape experiences within Slane.



Legend

- Proposed Scheme
- 300m Zone of Influence

GeoDirectory Properties

- Residential
- Business & Residential

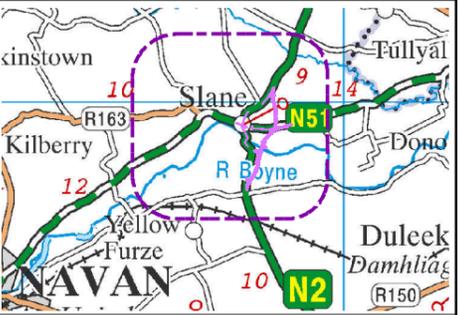
Property Reference

Pre-establishment Impact / Post-establishment Impact

- None
- Minor
- Minor to Moderate
- Moderate to Major
- Major to Substantial

Data Source: OSI, An Post GeoDirectory (Q1 2023) provided by Meath County Council

0 0.05 0.1 0.2 Kilometres



Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.6(a)

Residential Impact

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Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
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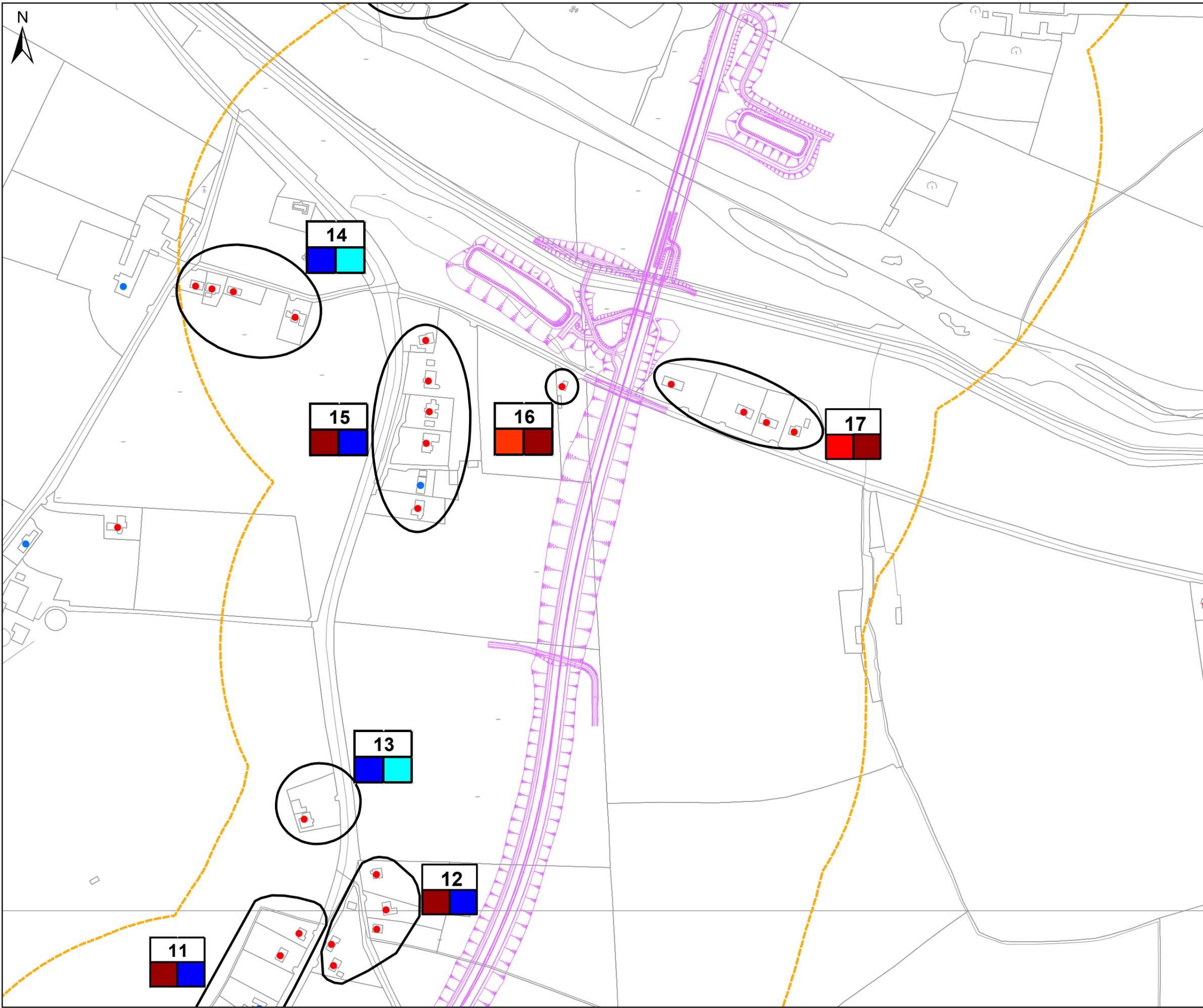
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Legend

- Proposed Scheme
- 300m Zone of Influence

GeoDirectory Properties

- Residential
- Business & Residential

Property Reference

Pre-establishment Impact | Post-establishment Impact

- None
- Minor
- Minor to Moderate
- Moderate to Major
- Major to Substantial

Data Source: OSI, An Post GeoDirectory (Q1 2023) provided by Meath County Council

0 0.05 0.1 0.2 Kilometres

Client: **Meath County Council**

N2 Slane Bypass and Public Realm Enhancement Scheme

Title: **Figure 12.6(b)**

Residential Impact

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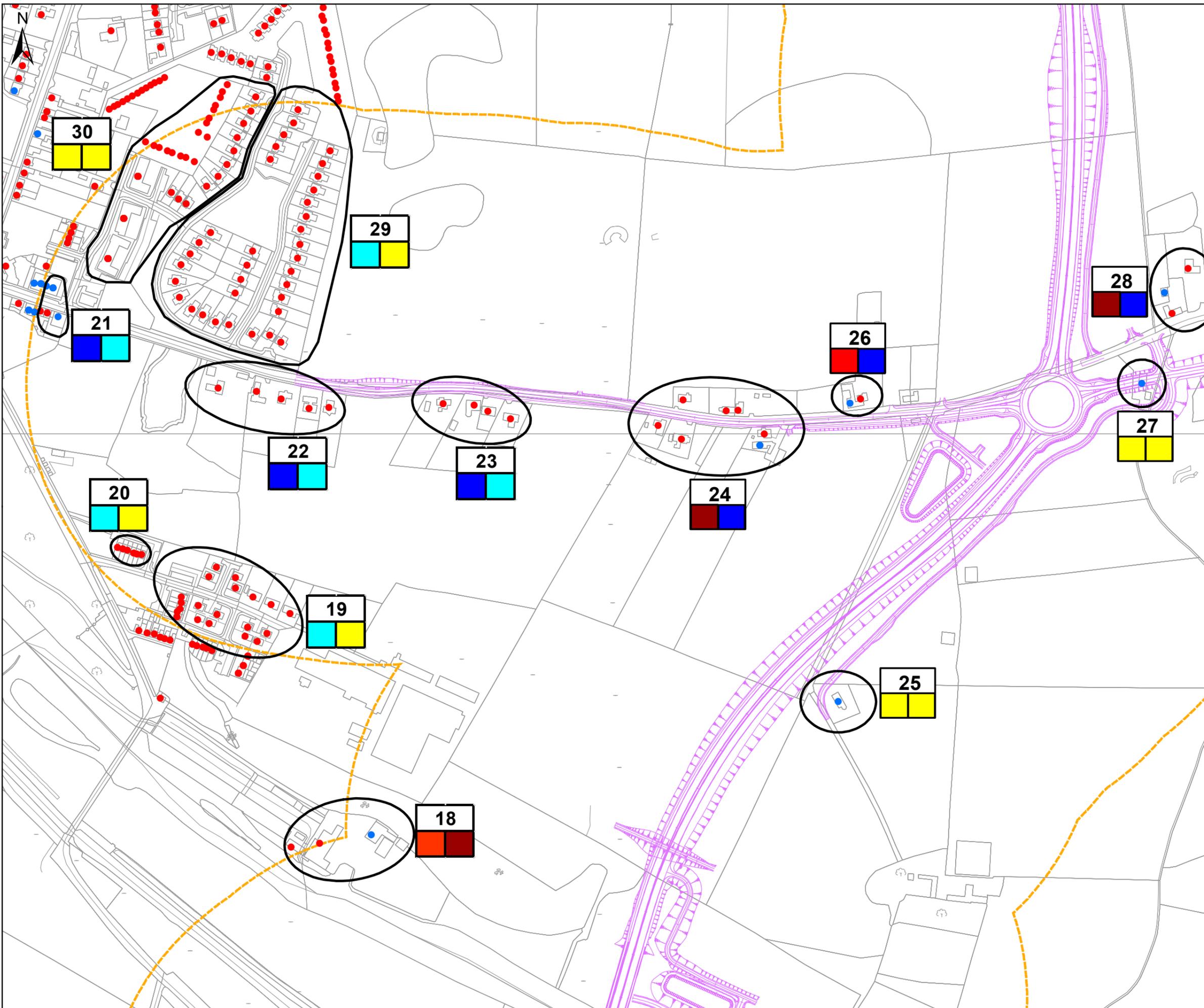
Issue Details

File Identifier:
MDT0806-RPS-00-N2-DR-Z-AG-3013

Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
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Legend

- Proposed Scheme
- 300m Zone of Influence

GeoDirectory Properties

- Residential
- Business & Residential

Property Reference

Pre-establishment Impact / Post-establishment Impact

- None
- Minor
- Minor to Moderate
- Moderate to Major
- Major to Substantial

Data Source: OSI, An Post GeoDirectory (Q1 2023) provided by Meath County Council

0 0.05 0.1 0.2 Kilometres

Client: **Meath County Council**

N2 Slane Bypass and Public Realm Enhancement Scheme

Title: **Figure 12.6(c)**

Residential Impact

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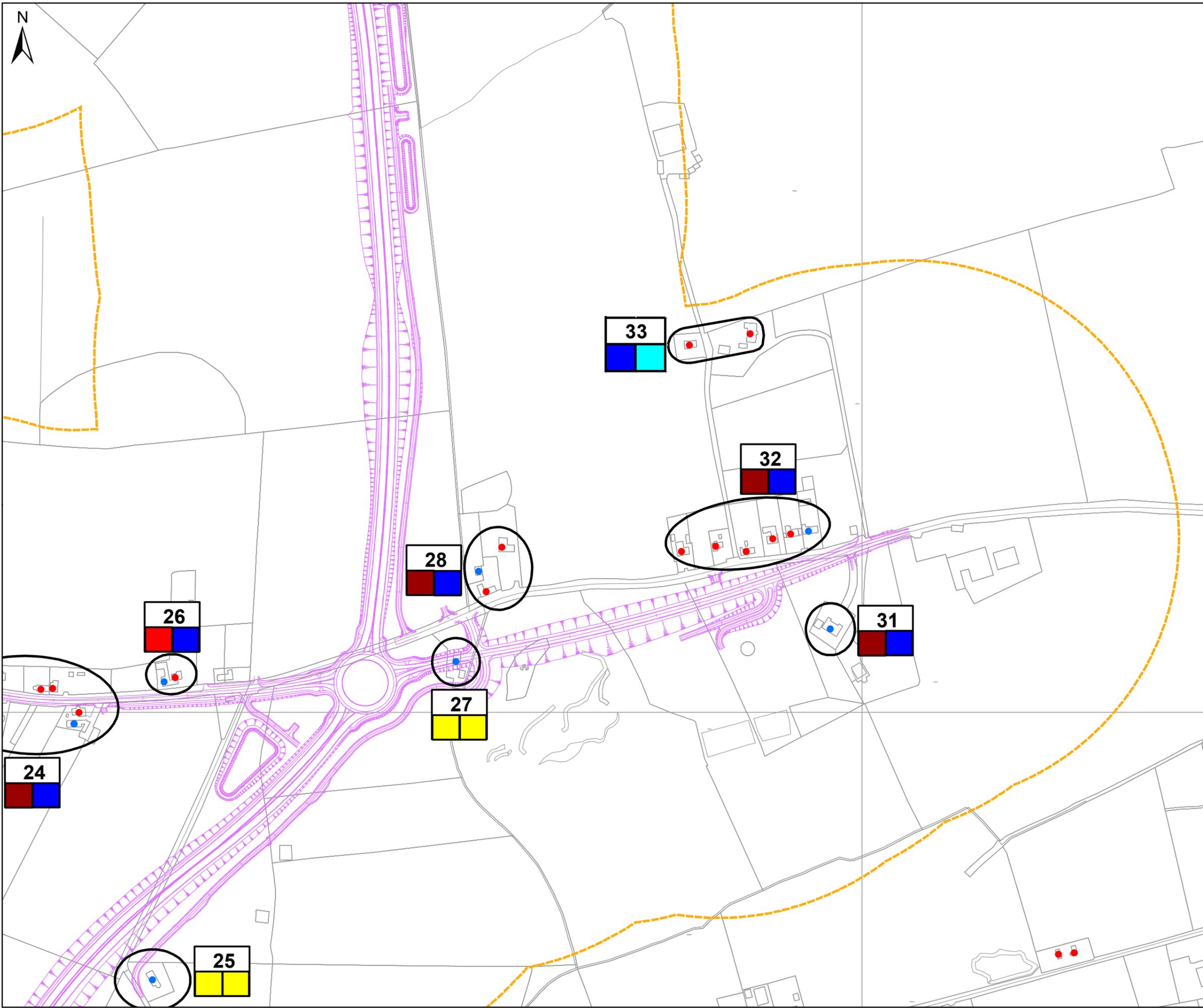
Issue Details

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Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
Drawn: NR	Date: 14/06/2023	
Checked: SA	Scale: 1:4,000 (A3)	
Approved: NO'N	Projection: ITM	

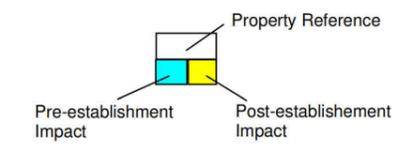
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Legend

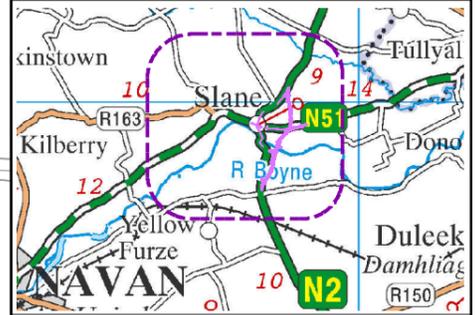
- Proposed Scheme
- 300m Zone of Influence
- GeoDirectory Properties**
- Residential
- Business & Residential



- None
- Minor
- Minor to Moderate
- Moderate to Major
- Major to Substantial

Data Source: OSI, An Post GeoDirectory (Q1 2023) provided by Meath County Council

0 0.05 0.1 0.2
Kilometres



Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.6(d)

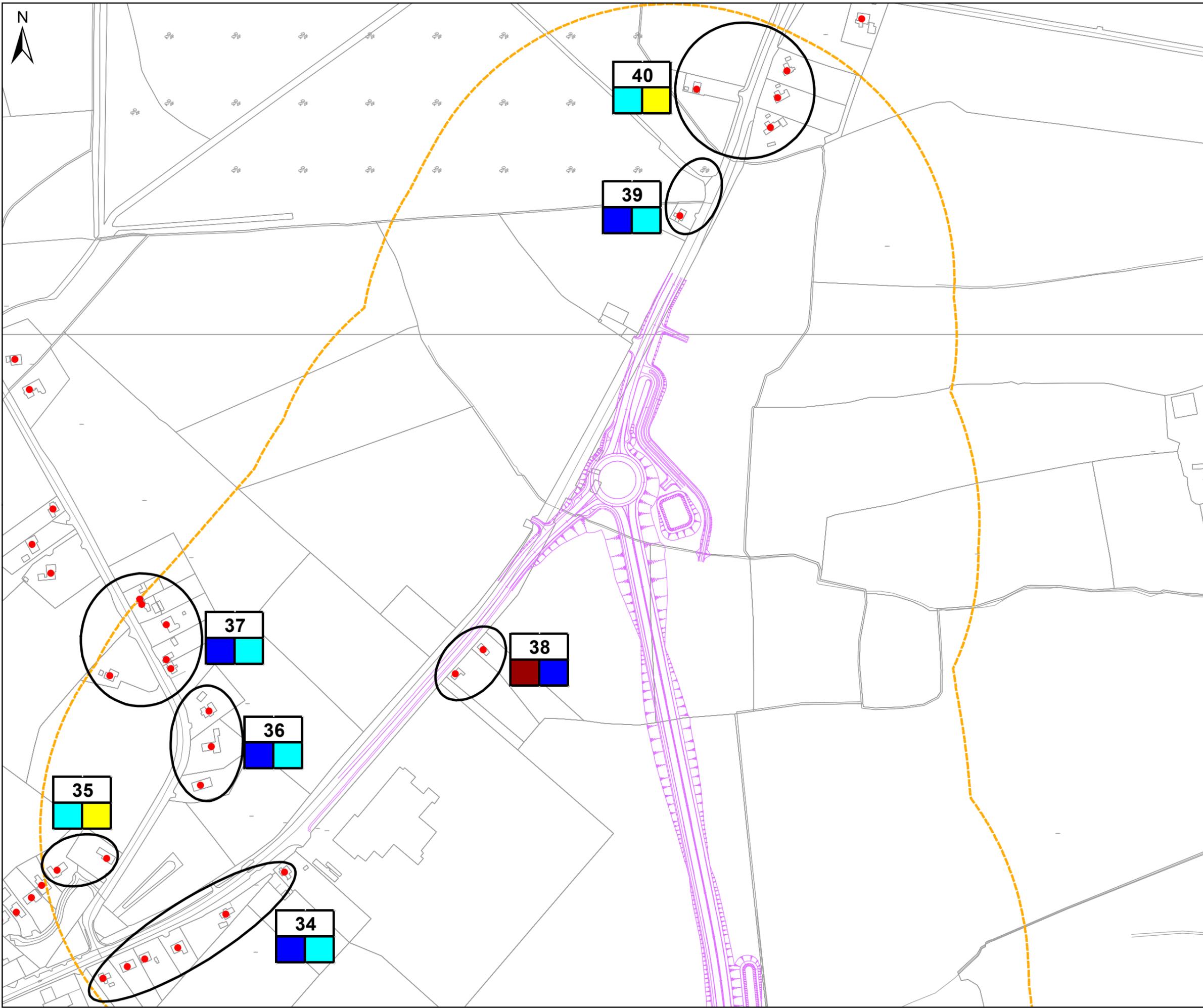
Residential Impact

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Legend

- Proposed Scheme
- 300m Zone of Influence

GeoDirectory Properties

- Residential
- Business & Residential

Property Reference

Pre-establishment Impact Post-establishment Impact

- None
- Minor
- Minor to Moderate
- Moderate to Major
- Major to Substantial

Data Source: OSI, An Post GeoDirectory (Q1 2023) provided by Meath County Council

0 0.05 0.1 0.2
Kilometres

Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.6(e)

Residential Impact

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Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
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12.4.5 Cumulative Impact

A cumulative impact assessment (CIA) has been undertaken to consider potential for cumulative impact of the Proposed Scheme with other approved development. The detailed methodology for the CIA is described in **Chapter 25 – Cumulative Effects**. The assessment has considered cumulative sources and impact pathways which could impact on landscape and visual.

The projects listed in **Appendix 25.2** have been assessed. Each project has been considered on a case-by-case basis for screening in or out of this chapter's assessment based upon data confidence, effect-receptor pathways and the spatial/temporal scales involved. Projects were screened-in to the CIA where located within the zone of influence (Zol) of the Proposed Scheme or where projects have the scope to potentially cumulatively alter landscape or visual aspects. The projects that were screened-in to the Landscape and Visual CIA are listed in **Table 12-37**.

Table 12-37: Projects Screened-in for Potential Cumulative Effects on Landscape and Visual

Project Code	Project Location	Project Type	Potential for Cumulative Effect
PR 3	Ledwidge Hall, Drogheda Road, Slane, Co. Meath (<i>now constructed</i>)	Residential Development	Potential for cumulative landscape and visual impact
PR 4	Ledwidge Hall Green, Drogheda Road, Slane, Co. Meath (<i>now constructed</i>)	Residential Development	Potential for cumulative landscape and visual impact

Regarding other projects located within the study area associated with Proposed Scheme, the screening exercise identified a range of commercial, water infrastructure, residential developments, and solar farm projects that may have the potential to give rise to cumulative interaction. However, following a desktop analysis these types of projects were screened out of the CIA as they either form part of the existing baseline (having already been constructed) or there is negligible to no potential for cumulative landscape and visual interaction between the listed projects and the Proposed Scheme. This is due to screening provided by topographical changes, or screening provided by vegetation, which prevents or limits the area within which the Proposed Scheme could potentially be read in combination with the identified projects within the Zol.

In relation to other road schemes, the identified Part 8 application associated with the proposed N52 Ardee bypass in County Louth is considered unlikely to give rise to significant cumulative landscape or visual impacts due to the distance of this road scheme (approx. 15 km to the north of Slane) and the intervening topography and vegetation screening provided.

Both PR 3 and PR 4 have the potential for cumulative landscape and visual impacts due to an increase in the extent of further built-up residential development which would appear in the foreground of views from the Hill of Slane (a Meath County Development Plan Protected View); construction has since been completed on these developments. However, given that this has resulted in a relatively small quantum of residential development in addition to the existing residential estates which are already visible in the views from the Hill of Slane, and given that the mitigation proposed for the Proposed Scheme will significantly screen the views of the proposed N2 bypass, PR 3 and PR 4 are not considered to result in a significant cumulative landscape/ visual impact with the Proposed Scheme.

12.5 Mitigation Measures

12.5.1 General Aims and Objectives of Landscape Mitigation Strategy

Mitigation shall be in keeping with the existing landscape character. Therefore, mixed broadleaved woodland, mixed species hedgerows and mixed species hedgerows with scattered trees formed using plant species present in the local landscape shall be used.

It is noted that some of the mitigation planting proposed on slopes associated with formation of new embankments and cuttings are proposed to be implemented on slopes of 1:2 gradient, and such planting shall be implemented carefully and monitored for successful establishment.

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In instances where existing hedgerows are disrupted adjacent boundaries shall be replanted with hedgerows of similar species composition. Plant mixes of native trees and shrubs and wild meadow grass mix will be implemented where appropriate.

The implementation of the landscape mitigation measures will be in accordance with the NRA Guide to Landscape Treatments of National Road Schemes in Ireland.

Native plants and seed from indigenous sources shall be used.

The aims of the landscape and visual mitigation measures are:

- To provide mitigation measures to help avoid, reduce, or remedy any significant landscape and visual impacts arising from any elements within the Proposed Scheme;
- To ensure that the Proposed Scheme and its associated features (bridges) are physically and visually integrated into the surrounding landscape;
- To provide replacement planting for woodland and hedgerows, whether they are visually significant or not, which are to be removed because of the Proposed Scheme and to ensure green corridor connectivity is maintained;
- As far as possible, avoid, or reduce effects on, landscape features, retain and make best use of existing vegetation and re-use site-won materials wherever possible;
- To provide appropriate levels of visual screening to avoid, reduce or remedy visual intrusion at residential properties to address any negative aspects regarding the visual impact of the Proposed Scheme; and
- Mitigation planting on 1:2 slopes will require the appointed landscaping contractor to apply site-specific safety protocols.

12.5.2 Construction Phase

- The construction contractor will, during the construction phase of the Proposed Scheme, adhere to the NRA's Guidelines on the Implementation of Landscape Treatments on National Road Schemes in Ireland;
- Topsoil, subsoil and other materials for re-use within the Proposed Scheme will be located in areas (refer to **Chapter 5**) to avoid impacting on existing residential properties;
- Retained trees, retained woodland and retained hedgerows will be strengthened with new planting to strengthen these existing landscape features;
- Construction compounds and storage areas used during the construction phase will be fully de-compacted and re-instated to former usage (e.g. re-instated to agricultural usage) prior to the end of the construction phase;
- The removal of important landscape features, such as hedgerows, will be limited as far as practically possible to reduce both direct and indirect impacts on landscape character. Any losses will be replaced with locally native and characteristic plant species and species mixes;
- Existing trees will be retained wherever possible, with protective measures implemented in accordance with current guidance e.g. BS 5837(2012) – Trees in Relation to Design, Demolition and Construction. All existing tree losses will be mitigated by replacement planting; and
- Topsoil, stripped as part of the construction operations, will be stored in low mounds and reused in accordance with best practice guidance.

12.5.3 Operational Phase

12.5.3.1 Specific Landscape Measures (SLM)

The location and details of where SLMs will be implemented are set out in **Table 12-38**; indicative locations of the SLMs are illustrated in **Figure 12.7(a)-(e)**. Where cuttings and embankments are not present, the SLM will require the implementation of a new mixed species hedgerow to define the boundary together with locally appropriate, native species mixed woodland planting.

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Table 12-38: Specific Landscape Measures (SLM)

Location	Description of SLM
Sitewide	During construction operations, the site compounds and road diversions will be located where the least environmental impacts will be experienced and will avoid the excessive removal of existing vegetation. Where vegetation is to be removed, it will be replaced with similar species following completion of the Proposed Scheme.
Sitewide	The land take will be minimised as far as practically possible to reduce both direct and indirect landscape impacts. Re-profiled slopes are to be maintained to allow for planting (cuttings and embankments).
Sitewide	Cuttings and embankments will be as natural as possible and graded and shaped to integrate with the adjacent landform. Slopes will be graded to minimise land take in so far as reasonably practical.
Sitewide	Areas requiring re-profiling will be stripped of their existing soils and will be stockpiled for re-use. Existing soils will be re-used on new embankments to retain the seedbank of localised vegetation communities.
Sitewide	Where access road closures occur or where the old N2 / N51 corridors becomes surplus to requirements, such areas of former road makeup will be fully excavated, removed and re-profiled to allow for planting or seeding with appropriate native species mixtures to continue the existing vegetation adjacent to the former roadside. This will help screen views of the Proposed Scheme and further integrate the new road corridor into the surrounding landscape.
Sitewide	The removal of mature trees, mature hedgerows with trees and mixed species woodland will be avoided as far as possible to reduce both direct and indirect impacts. New woodland planting will be provided to compensate for losses of woodland, hedgerows, and trees adjacent to the Proposed Scheme during construction operations and to accommodate the improvements. Different woodland types will be established to reflect the existing woodland composition and promote integration with the existing character.
Sitewide	A species-rich, low maintenance grassland mix will be used within all planting areas on embankments and slopes to enhance the overall biodiversity value associated with the Proposed Scheme.
Sitewide	Drainage elements, such as SuDs ponds, swales, ditches and the like, where they occur, will be naturalistic and sensitively integrated into the wider landscape setting.
Sitewide	Materials for the construction of the accommodation tracks will be selected to integrate with the existing material in the area. In addition, locally sourced materials will aid integration into the landscape and promote sustainability.
Sitewide	The ongoing maintenance and management of the landscape planting and seeding will be an integral part of the Proposed Scheme. MCC will ensure that all mitigation and monitoring committed to in the EIAR and NIS and planning conditions, will be enforced on the appointed contractor through express terms of the contract, and will be overseen by an official engaged by the Council.
SLM 01: Ch. 0 – 200 both sides, south of southern roundabout	New hedgerow with scattered hedgerow tree planting to replace existing hedgerows along roadside, to provide integration with existing woodland and vegetation cover outside of the lands made available (LMA).
SLM 02: Ch. 0 – Ch. 130 western side (Access link from Southern roundabout to retained section N2)	New mixed species woodland, with a high percentage of evergreen species to areas between new property access, west of new roundabout and on top of existing N2 corridor to provide visual screen.
SLM 02a: Southern roundabout	Provide new woodland planting on slopes, new hedgerow with scattered hedgerow trees to provide visual integration and reforming of field boundaries along the eastern LMA boundary.
SLM 03: Pond 1	Mixed species broadleaved woodland to areas around Pond 1 to aid integration of pond and associated access / maintenance track. Mixed species woodland with high percentage of evergreen species along northern boundary to provide visual screening of new road from residential properties in close proximity.
SLM 04: Ch. 0 – Ch. 700 eastern side	New mixed species hedgerow with scattered hedgerow tree planting to LMA boundary to reform field boundaries and provide integration. Provide new native species woodland planting on slopes, of varying widths. Width of planting to be 5 m minimum and up to 9 m maximum with minimum 1.5 m stand-off /

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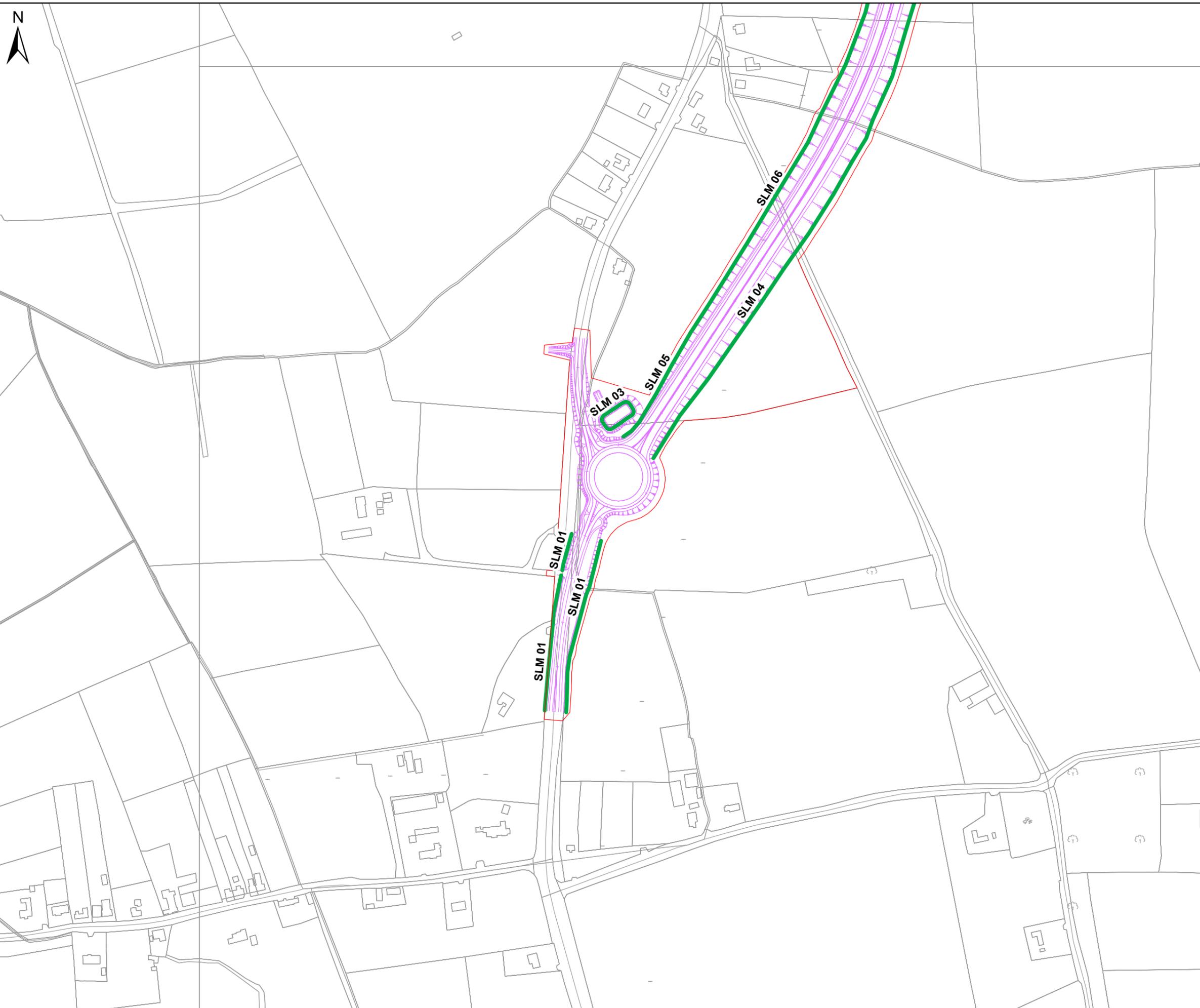
Location	Description of SLM
	clear zone provided adjacent to drainage ditch for maintenance access requirements. Proposed planting on slopes to provide visual relief to road users and integration of the scheme into the surrounding landscape context.
SLM 05: Ch. 0 – Ch. 150 western side	New mixed species hedgerow with scattered hedgerow tree planting to edge of LMA boundary to reform field boundary and provide integration. Provide new native species woodland planting on slopes to provide visual relief to road users and integration of the scheme into the surrounding landscape context.
SLM 06: Ch. 150 – Ch. 750 western side	New mixed species hedgerow with scattered hedgerow tree planting to be provided along LMA boundary. New woodland planting to be provided to top of slope and level area between top of slope and LMA boundary to provide visual screening to properties to the west. Proposed planting to contain evergreen species, to level areas at top of slope, to provide visual screening of Proposed Scheme.
SLM 07: Overbridge 1	Provide new hedgerows with hedgerow tree planting to provide integration and screening. Provide mixed species woodland to provide screening to abutments of the overbridge.
SLM 08: Ch. 800 – Ch. 1100 both sides	Provide new mixed species hedgerow with hedgerow tree planting to LMA boundary to reform field boundaries. Provide a minimum 4 m depth of mixed species woodland planting, with evergreen species, to top of cutting. Woodland planting to be extended down slopes to provide screening of deep cuttings from Hill of Slane and provide visual integration with the wider landscape. Proposed planting to extend down cutting slopes to provide visual relief to road users and to provide integration with wider landscape.
SLM 09: Rossnaree Road Overbridge	Provide new mixed species hedgerows to replace removed sections of roadside hedgerow. Provide replacement hedgerow planting to northern edge of proposed satellite compound to replace removed planting. Fully re-instate satellite compound on Rossnaree Road with appropriate mixed species grassland.
SLM 10: Pond 2 and associated access tracks	Provide new mixed species hedgerow with scattered trees along southern boundary of the pond land adjacent to Rossnaree Road. Provide new wet woodland planting on southern edge of pond land - infill between pond edge and new hedgerow planting on southern edge of pond and on northern embankments associated with re-aligned towpath. Provide mixed species woodland planting with woodland edge planting on slopes and land lying between re-aligned towpath and access track 8 and pedestrian and cycle lane access routes. Provide native aquatic species planting to areas of Pond 2. Proposals shall include for marginal, semi-submerged and submerged native species. Provide wet-meadow seed mix to pond edges.
SLM 11: River Boyne Bridge	Provide mixed species native woodland planting on eastern embankment slopes lying between residential property and River Boyne Bridge (approx. Ch. 1100 – Ch. 1200) to provide visual integration and screening. Woodland planting to incorporate high percentage of evergreen species for visual screening together with larger specification (semi-mature and extra heavy standard trees). Provide wet meadow seeding to all riverbank lands disturbed as part of the Proposed Scheme. Where possible, and subject to confirmation by the Project Ecologist, existing soil and materials associated with the SAC woodland, which will be removed as part of the northern bridge abutment works, are to be retained and re-used. Riparian margins shall be planted with native species, with the species mix comprising Alder-Oak-Ash (DAFM, 2018): Small groups of alder (50%), grey willow (10%) and downy birch (10%). Groups interspersed alternately and set back 10m minimum from the bank to provide dappled shade and avoid tunnelling. Pedunculate oak (10%) on drier areas. Hawthorn (5%) scattered throughout. Minor species (15%) will be between the above groups: holly, hazel, guelder rose.
SLM 12: Access Track 9 and 9A	Provide wet woodland shrub planting re-instate vegetation cover along towpath. Provide wet meadow seeding to all land disturbed as part of the Proposed Scheme.

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Location	Description of SLM
SLM 13: Pond 3 and associated access tracks	<p>Provide mix species wet woodland planting adjacent to River Boyne (5 m depth), outwith flooding extents to aid integration and screening of bridge crossing and pond on upper elevation slopes.</p> <p>Provide mixed species native woodland on southern and western embankments of Pond 3 to aid visual integration.</p> <p>Provide mixed species woodland planting between wet woodland and lower access track to Pond 3.</p>
SLM 14: Ch. 1400 – Ch. 1550 western side	<p>Provide mixed species woodland screen planting to replace removed vegetation, aid visual integration and provide connectivity with adjacent woodland to the west of the Proposed Scheme.</p>
SLM 15: Overbridge 3	<p>Provide mixed species woodland planting to embankments to aid visual integration of overbridge in views.</p>
SLM 16: Ch. 1600 – Ch. 1800 both sides	<p>Provide new mixed species hedgerow planting to LMA boundary.</p> <p>Provide new mixed species woodland planting of 4 m minimum width, on slopes and level areas between top of slope and LMA boundary, to aid integration and screening of Proposed Scheme in southern views from N51.</p>
SLM 17: Ch. 1800 – Ch. 2200 eastern side	<p>Provide new mixed species woodland planting between access road to residential property and new N2 corridor. Planting to include high percentage of evergreen species to provide screening.</p> <p>Provide new hedgerow planting to LMA boundary to aid integration of access road to residential property.</p>
SLM 17: Ch. 1800 – Ch. 2000 western side	<p>Provide new mixed species hedgerow planting to LMA boundary.</p> <p>Provide new mixed species woodland planting, minimum 5 m depth, to aid integration and screening of Proposed Scheme in southern views from N51 and residential properties to the north.</p>
SLM 18: Pond 4 and access track	<p>Provide mixed species woodland planting between pond edge and south-western portion of new roundabout.</p> <p>Provide new hedgerow planting to western boundaries to aid integration.</p> <p>Provide wet meadow seeding to pond slopes.</p> <p>Provide locally appropriate native species aquatic planting to permanent water areas.</p>
SLM 19: Ch. 2200 – Ch. 3000 eastern side	<p>Provide new mixed species hedgerow planting to LMA boundary.</p> <p>Provide new mixed species woodland planting, minimum 3 m depth between access track and new corridor to aid integration and screening of cuttings and embankments in southern views available from Hill of Slane.</p> <p>Provide new woodland planting, mixed species hedgerow planting to reform boundaries at access points to lands to be used for stockpile storage.</p> <p>Provide agricultural seed mix for grazing to land used as storage area – return lands to agricultural use following completion of the Proposed Scheme.</p>
SLM 20: Ch. 2200 – Ch. 3000 western side	<p>Provide new mixed species hedgerow planting to LMA boundary.</p> <p>Provide new mixed species woodland planting, minimum 4 m depth, to aid integration and screening of cuttings and embankments in southern views available from Hill of Slane.</p>
SLM 21: Pond 5A and Pond 5B	<p>Provide new mixed species hedgerow planting to LMA boundary.</p> <p>Provide new mixed species woodland planting, around ponds to aid visual integration.</p> <p>Provide aquatic planting, native, locally appropriate species to permanent water areas.</p>
SLM 22: Ch. 3000 – Ch. 3450 – both sides	<p>Provide new mixed species hedgerow planting to LMA boundary.</p> <p>Provide new mixed species woodland planting, minimum 5m depth on slopes, to aid integration and screening of cuttings and embankments in southern views available from Hill of Slane and to provide visual relief to road users. Planting to extend horizontally along full length of identified chainages.</p>
SLM 23: Northern roundabout	<p>Provide new mixed species hedgerow planting to LMA boundary.</p> <p>Provide new mixed species hedgerow planting with scattered trees to replace removed sections of roadside hedgerow vegetation.</p> <p>Provide new mixed species woodland planting, to northern side of roundabout, between existing hedgerow, on top of removed portion of existing N2 corridor and on</p>

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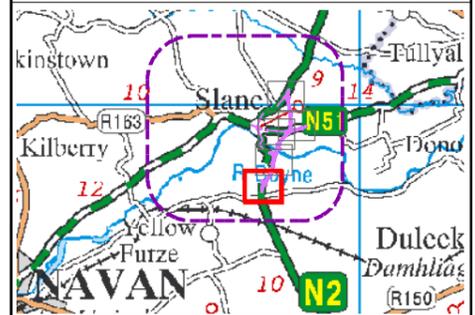
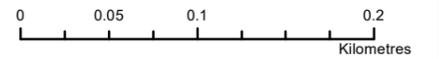
Location	Description of SLM
	embankments to north of proposed roundabout to aid visual integration and screening in north-western views from Hill of Slane.
SLM 24: Pond 6 and access track	Provide new mixed species hedgerow planting to LMA boundary and adjacent to access track. Provide new mixed species woodland planting, on embankments and areas to south of pond to aid integration in views from Hill of Slane car park.
SLM 25: N51 Corridor Alignment	Retention of existing garden boundary treatments where possible. Provide new mixed species native hedgerow along sections of the corridor where existing hedgerows are to be removed as part of the Proposed Scheme. Provide Semi-mature tree planting to create avenue within soft verge areas between roadside and proposed pedestrian footway with tree density increasing towards Slane. Provide Semi-mature tree planting to create avenue along northern side of the N51 corridor realignment with tree density increasing towards Slane. Provide low level shrub planting on all embankments associated with N51 corridor, not contained within residential curtilage. Provide appropriate screen planting (hedgerow with trees, amenity shrub planting) around proposed parking facility adjacent to N15 corridor). Refer also to the general arrangement drawing in Volume 3, Technical Drawing MDT0806-RPS-01-N2-DR-C-GA2201 (General Arrangement - N51 West Realignment).
SLM Public Realm	There are number of embedded soft landscape design proposals for the Public Realm; refer to Chapter 4, Section 4.4.13 . In addition, soft landscape proposals to the pedestrian/cyclist link between the proposed carpark and the existing N2 will contain a high percentage of amenity perennial and shrub species to provide a softening of proposed earthworks associated with the link route, whilst providing year-round interest.



Legend

- Proposed Scheme
- Proposed Scheme Boundary
- Indicative Locations of Specific Landscape Mitigation Measures

Data Source: OSI



Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.7(a)

Indicative Locations of Specific Landscape Mitigation Measures

rps West Pier
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Issue Details

File Identifier:
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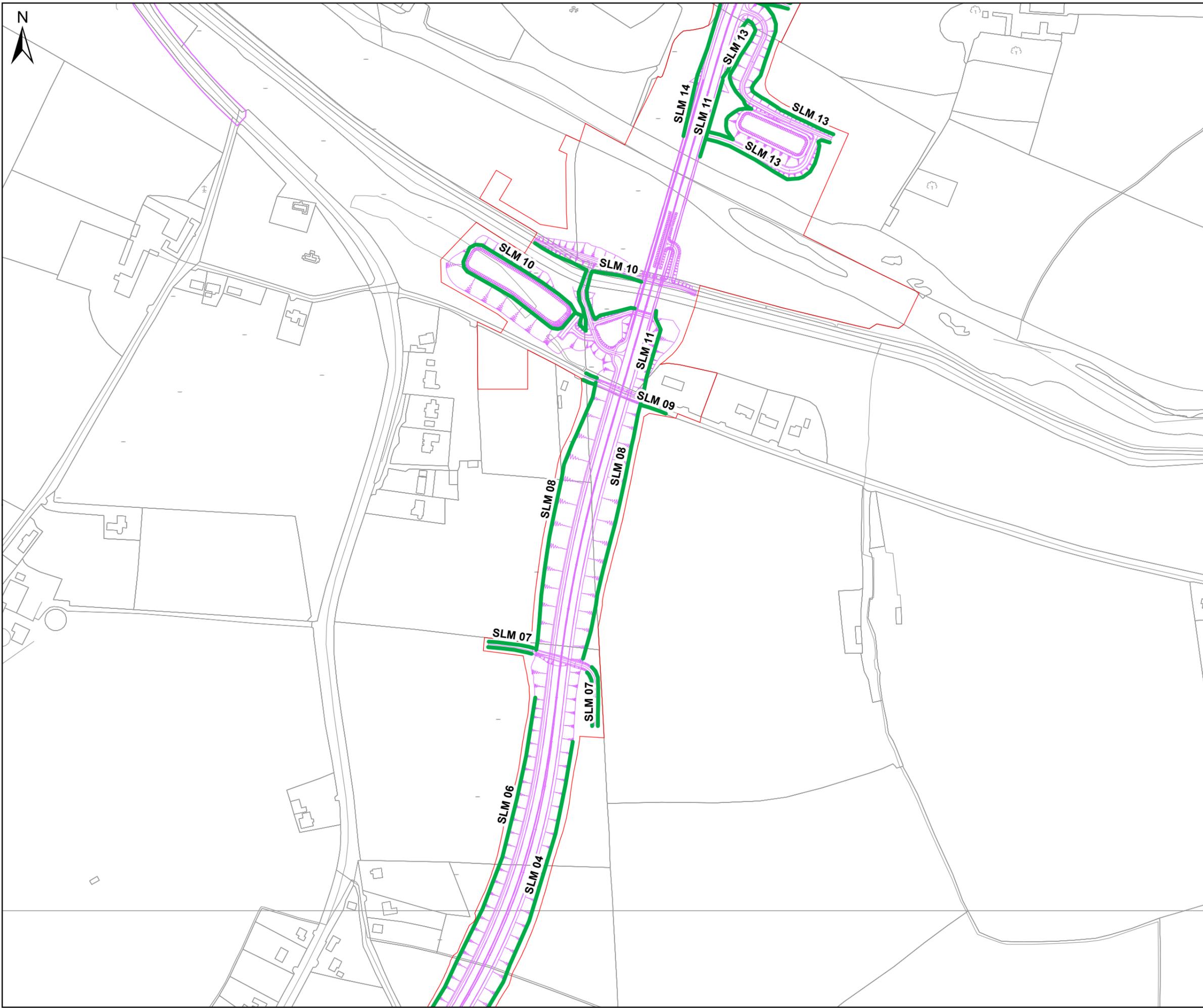
Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
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Legend

-  Proposed Scheme
-  Proposed Scheme Boundary
-  Indicative Locations of Specific Landscape Mitigation Measures



Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.7(b)

Indicative Locations of Specific Landscape Mitigation Measures

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Issue Details

File Identifier:
MDT0806-RPS-00-N2-DR-Z-AG-3084

Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
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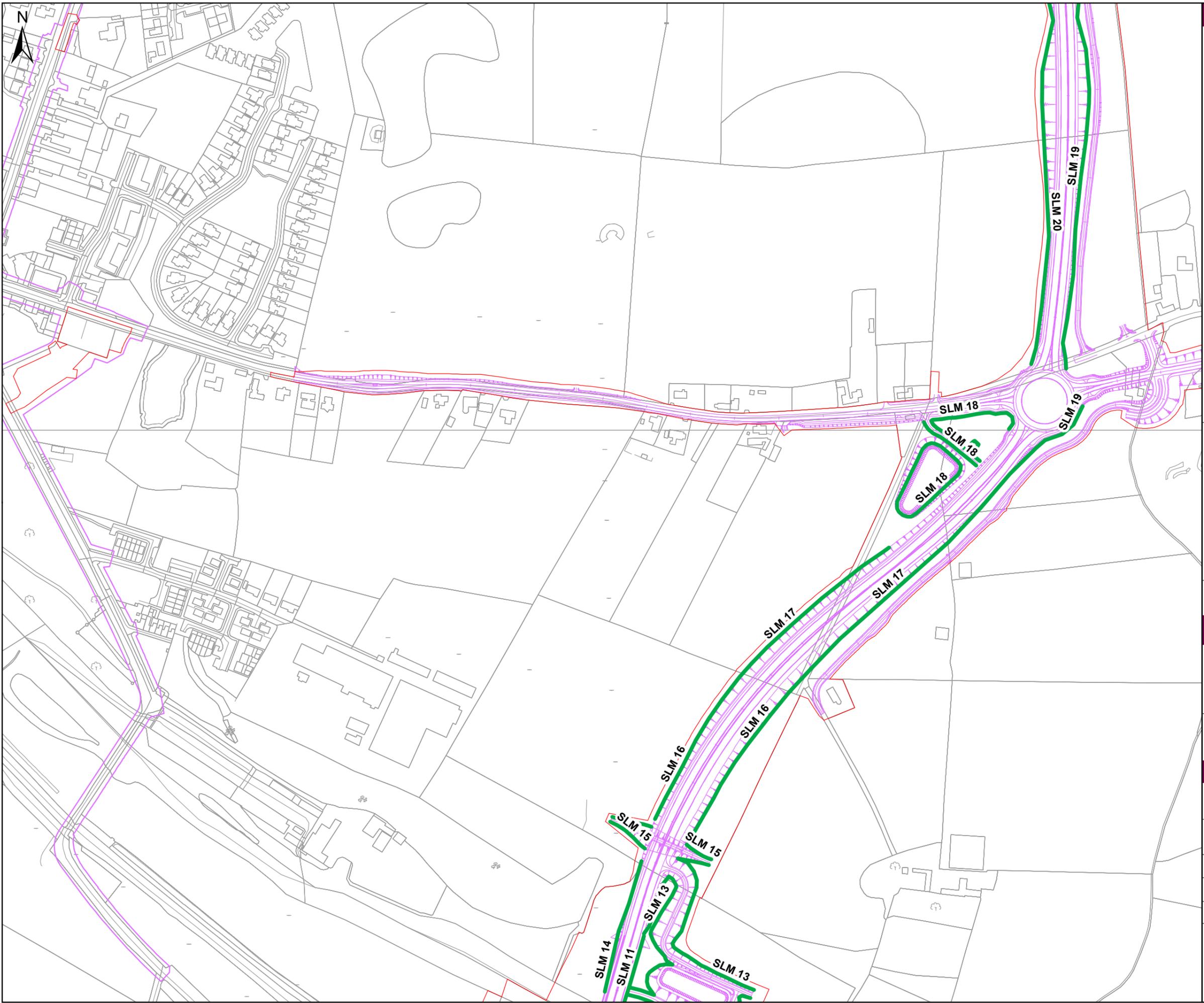
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Legend

- Proposed Scheme
- Proposed Scheme Boundary
- Indicative Locations of Specific Landscape Mitigation Measures

Data Source: OSI

0 0.05 0.1 0.2
Kilometres

Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.7(c)

Indicative Locations of Specific Landscape Mitigation Measures

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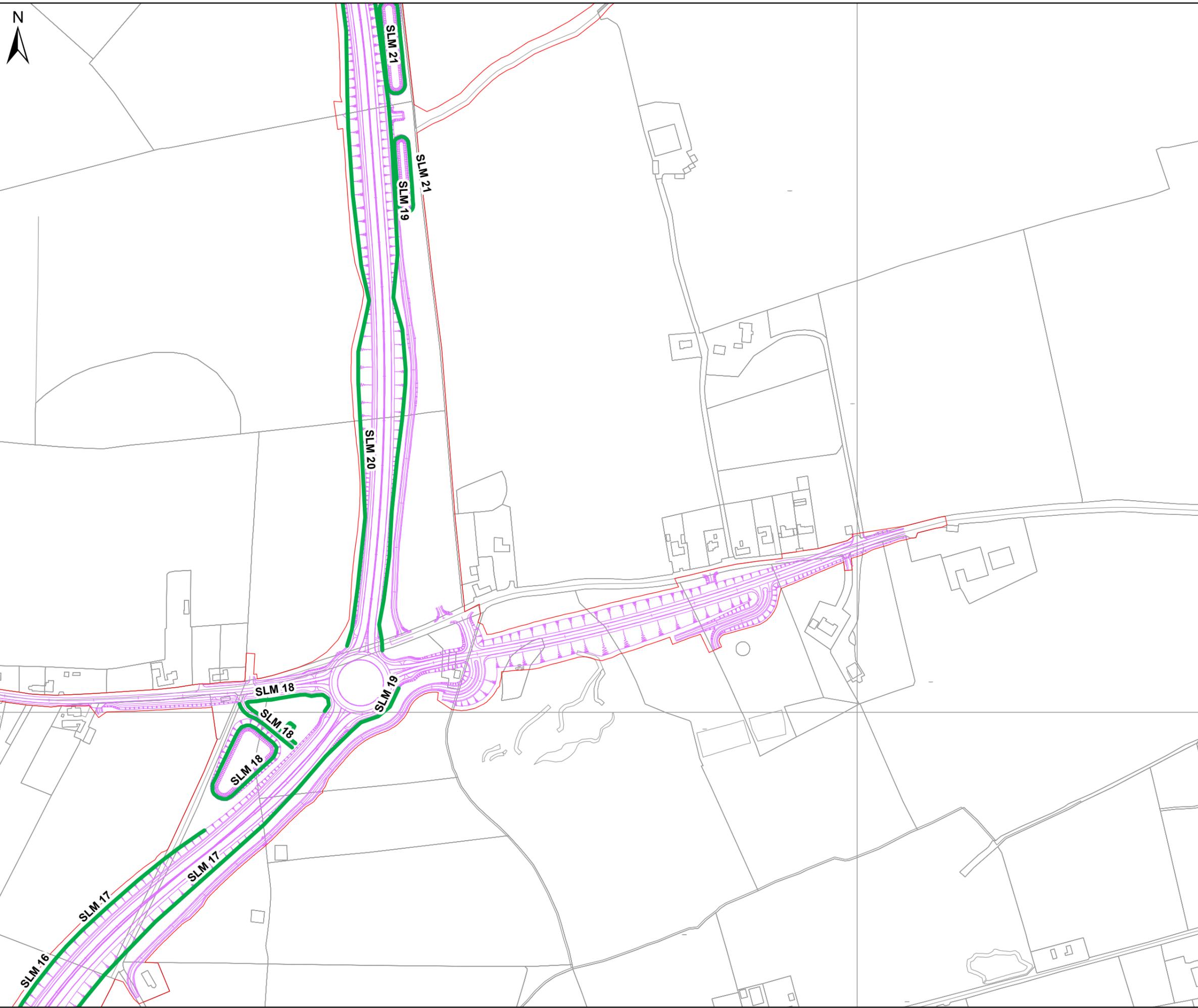
Issue Details

File Identifier:
MDT0806-RPS-00-N2-DR-Z-AG-3084

Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
Drawn: NR	Date: 26/06/2023	
Checked: SA	Scale: 1:4,000 (A3)	
Approved: NO'N	Projection: ITM	

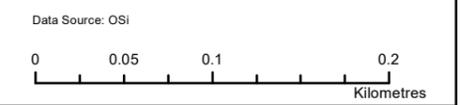
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Legend

-  Proposed Scheme
-  Proposed Scheme Boundary
-  Indicative Locations of Specific Landscape Mitigation Measures



Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.7(d)

Indicative Locations of Specific Landscape Mitigation Measures

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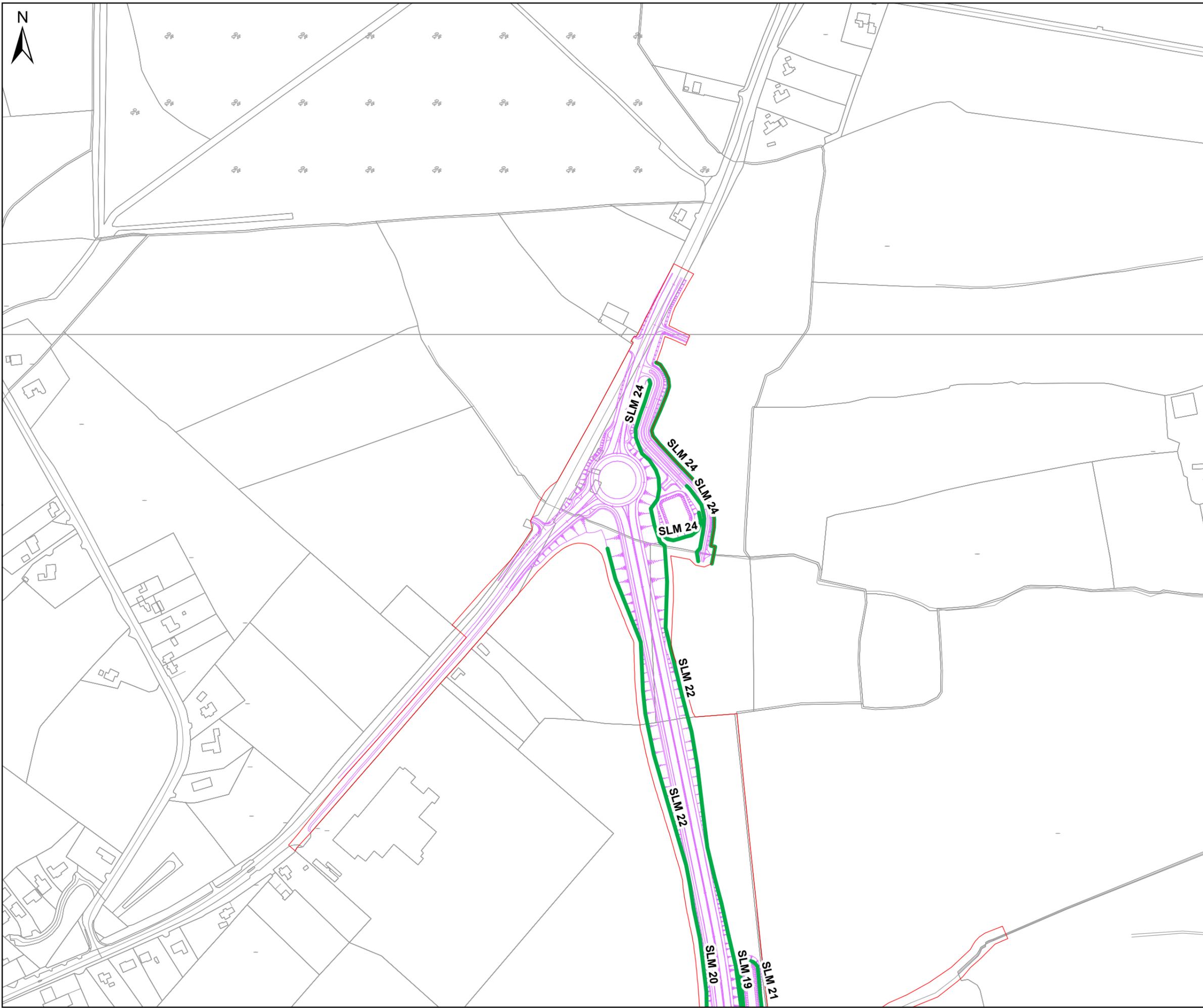
Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
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Drawn: NR	Date: 26/06/2023
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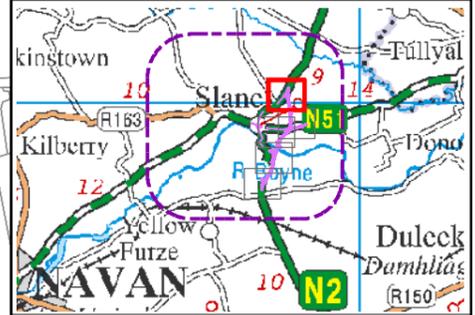
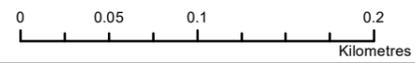
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Legend

- Proposed Scheme
- Proposed Scheme Boundary
- Indicative Locations of Specific Landscape Mitigation Measures

Data Source: OSI



Client
Meath County Council

N2 Slane Bypass and Public Realm Enhancement Scheme

Title
Figure 12.7(e)

Indicative Locations of Specific Landscape Mitigation Measures

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Status: A1	Rev: C01	Model File Identifier: MDT0806-RPS-01-N2-M2-C-XM1001 MDT0806-RPS-01-PR-M2-C-XR9000
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12.5.3.2 Mitigation Specifications

12.5.3.2.1 Trees, Hedgerows and Shrub Planting

All trees, shrubs, transplants/whips, hedging material and ground cover planting shall conform fully to the specification, prepared by the appointed and suitably qualified landscape architect, in respect of species, size and quality, which shall be designed to deliver on the mitigation as set out in this EIAR.

All plants shall be well grown, sturdy and bushy according to species type, use and shall be free from all diseases and defects.

The plants shall be made available for inspection prior to planting works commencing.

Any plant material that does not conform to the specification will be automatically rejected and will be removed from site.

All trees, shrubs and other plant material shall comply with the standards set out in National Plant Specification (NPS) prepared by the Committee on Plant Supply and Establishment and published with the backing of the Joint Council of Landscape Industries (JCLI, 1989).

12.5.3.2.2 Defective Plant Material

All trees, shrubs, transplants, hedging material and ground cover planting shall be maintained and guaranteed for a period of five years against death, deformation, die-back, or disease other than that caused by malicious damage, to ensure successful establishment of hedgerows, screen planting and development of habitats.

12.5.3.2.3 Plant Mixes

Essentially road verge or bank planting will consist of 'bare root transplants', 'whips' and 'feathered trees' which, due to their smaller stock size at time of planting, will adapt more easily to the disturbed ground and exposed site conditions. All plants are to be positioned in the locations and in the required numbers and centres indicated on the agreed planting plan.

12.5.3.2.4 Woodland Mix

Landscape mitigation planting of road verges and slopes and as compensation for loss of existing woodland, individual trees, scrub shrub and hedgerows along the Proposed Scheme will exclusively use Irish native species that reflect the existing vegetation of the area. Core species will include oak, hawthorn, hazel, holly, yew, blackthorn, goat willow, alder, rowan, beech, and birch.

Woodland Mix areas will be planted as whips and feathered transplants at a standard size of 60-90 cm or 90-120 cm augmented by larger, Semi-mature, extra heavy standard and standard individual tree planting, appropriate to final locations.

Species shall be planted randomly in groups to mirror local woodlands. Most species used will be quickly maturing species and will have formed dense woodland within ten years. The canopy will reach at least 7 to 10 m, in places where groups of trees are planted. In addition to whip and feathered transplants individual semi-mature trees shall be used to provide screening at SLM locations where limited roadside space is available or where early effect is required as set out in **Table 12-38**.

12.5.3.2.5 Individual Tree Planting

Individual tree planting using semi-mature, extra heavy standard, and standard trees shall be included in the locations identified in **Table 12-38**.

12.5.3.2.6 Native Shrub Planting

Shrub planting shall consist of native species from the core and additional species listed above to provide a woodland understorey and/or woodland edge. Shrub planting mixes shall complement areas of woodland and be used at locations consistent with the surrounding landscape.

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All existing hedgerows shall be reinstated at interrupted field boundaries or where new boundaries with fields and adjacent residential properties are created using native hawthorn, blackthorn and holly that shall be the predominant species used.

12.5.3.2.7 Grass and Wildflower Mixes

The road verges will be seeded with a robust, low-maintenance grass seed mix.

Areas away from designated sight lines where mowing regimes are not required to be of a regular nature will be seeded with a low maintenance semi-natural species rich seed mix appropriate to final location.

Areas lying adjacent to the River Boyne and surrounding ponds will be seeded with a low maintenance, species rich, wet meadow seed mixture, using seed from Irish native sources as appropriate to final location.

Grass and wildflower mixes using seed from Irish native sources shall be employed to provide quality areas of low maintenance, rapid establishment, and visual appearance.

12.6 Residual Impacts

This section assesses the residual impact on the landscape character and visual receptors previously identified, after the mitigation (described above) has attained ten years of growth.

After ten years of growth the proposed planting will help to integrate the Proposed Scheme into the existing landscape. The proposed mitigation planting will limit the extent of influence associated with the Proposed Scheme on the adjacent Landscape Character Areas with a resultant reduction in landscape impact.

With regards to visual impact on sensitive receptors in general the visual impacts are slightly reduced by the establishment of replacement or new screening woodland mix that will offset views towards the Proposed Scheme and its infrastructure and traffic on the road from properties. The predicted residual visual impacts are provided in detail in **Figure 12.6(a)-(e)** and are summarised in the table below.

Table 12-39: Summary of Predicted Residual Effects on Residences (with Mitigation)

Viewer Sensitivity	Magnitude of Change	Significance of Effect (Post-Establishment)	Number of Properties
High	No Change	None	12
High	Negligible	Minor	12
High	Small	Minor to Moderate	12
High	Medium	Moderate to Major	4
High	Large	Major to Substantial	0

12.7 Monitoring

Monitoring of implemented specific landscape mitigation measures shall be carried out in accordance with DMRB Volume 10; Environmental Design and Management; Section 3; Landscape Management and the relevant sections of Volume 1; Specification for Highway Works; Series 3000 Landscape and Ecology to ensure that the proposed mitigation measures become well-established and aid the integration of new elements associated with the Proposed Scheme into the surrounding landscape and mitigate visual effects at residential properties (**Table 12-40**).

Table 12-40: Project Monitoring Commitments

Environmental Effect	Monitoring Commitment
Significant landscape and visual effects	Establishment and maintenance of specific landscape mitigation in Table 12-38 for a period of five years.
Slope/planting stability	Additional monitoring of mitigation planting on slopes of 1:2 during the maintenance period will also be required for a period of five years to ensure successful establishment of proposed planting areas and to monitor the underlying ground stability in such areas.

12.8 Chapter References

British Standards (2012) BS 5837(2012) – Trees in Relation to Design, Demolition and Construction.

DAFM (2018) Woodland for Water: Creating new native woodlands to protect and enhance Ireland's waters, Department of Agriculture, Food and the Marine.

Highways England (2020) LA 107 Landscape and visual effects (Design Manual for Roads and Bridges (DMRB) (formerly DMRB Volume 11, Section 3; Part 5). Revision 2. UK Highways Agency, February 2020.

Joint Council of Landscape Industries (1989) National Plant Specification (NPS) prepared by the Committee on Plant Supply and Establishment and published with the backing of the Joint Council of Landscape Industries.

The Landscape Institute (2019) Technical Guidance Note 06/19. Visual Representation of Development Proposals.

The Landscape Institute and Institute of Environmental Management & Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3).

NRA (2012) Guidelines on the Implementation of Landscape Treatments on National Road Schemes in Ireland, GE-ENV-01103, July 2012.

TII (2020a) Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) for Specified Linear Infrastructure Projects: Overarching Technical Document. TII Publication PE-ENV-01101, December 2020.

TII (2020b) Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Proposed National Roads: Standards. TII Publication PE-ENV-01102, December 2020.