

Wicklow County Council

**N11/M11 Junction 4 to Junction 14
Improvement Scheme**

Option Selection Report
Appendix D5 – Landscape and
Visual

265455-ARP-ELS-SWI-RP-ZX-0003

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Ove Arup & Partners Ireland Ltd

Arup
50 Ringsend Road
Dublin 4
D04 T6X0
Ireland
www.arup.com

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		Name	Rory Curtis	Clodagh O'Donovan	Aidan Cleary		
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1 Landscape and visual

1.1 Introduction

This report details the environmental assessment of the Stage 2 Project Appraisal Matrix for the N11/M11 Scheme with respect to the landscape and visual constraints identified in **Section 16** (Landscape and visual) of **Volume B**.

For the corridor assessment, the overall scheme has been split into two sections, i.e. the Northern Section and the Southern Section and the corridor options assessed are those discussed in **Chapter 8** of **Volume A**.

There are two zones associated with each corridor option referred to in the corridor assessment:

- The potential road “footprint” which is the potential landtake required to construct or improve the road; and
- The road “corridor” which is a 200m wide corridor centred around the alignment centre line for all off-line corridors. For the on-line Corridor Options 1 (North), 1 (South) and 5 (South), the width is variable, but is typically narrower than the width of the off-line corridors. The “footprint” sits inside the “corridor” boundary.

A transport assessment forms part of this Stage 2 Project Appraisal Matrix. This assessment is included in **Section 1.5**. The transport scenarios that were assessed are as follows:

- Transport Scenario 5A - Parallel Links + Junction Rationalisation;
- Transport Scenario 5B - N11/M11 Additional Lane(s) + Junction Improvements; and
- Transport Scenario 4 – Bus Service Enhancements.

Section 1.2 outlines the methodology that was used to carry out the assessment, and **Section 1.3** outlines the assessment criteria which were used. The Stage 2 assessment is presented in **Section 1.4** (Corridors) and **Section 1.5** (Transport Scenarios) and references are listed in **Section 1.6**.

1.2 Methodology

Transport Infrastructure Ireland (TII) published the following two new documents in December 2020 relating specifically to landscape and visual assessment;

- Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Specified Infrastructure Projects - Overarching Technical Document PE-ENV-01101¹, and

¹ Transport Infrastructure Ireland Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Specified Infrastructure Projects - Overarching Technical

- Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Proposed National Roads - Standard PE-ENV-01102².

This Stage 2 assessment was undertaken in accordance with these documents and the Stage 1 assessment was undertaken in accordance with the draft versions of the same.

1.2.1 Corridor assessment

The methodology used for this Stage 2 landscape and visual assessment is in accordance with the methodology outlined in **Appendix C5** (Landscape and visual) of **Volume C**.

This Stage 2 assessment focuses specifically on instances where refinements or changes have been made to the corridor options brought forward from Stage 1 which result in an alteration of the number of likely significant impacts on landscape character areas, landscape elements or visual receptors. As the extents of the footprints sit inside the extents of the various corridor options, they have been fully accounted for in this corridor assessment. This Stage 2 assessment also fully assesses the new corridor options for any likely significant impacts.

1.2.2 Transport assessment

The approach to the transport assessment is based on principles from the Guidelines for Landscape and Visual Impact Assessment (UK)³. The transport assessment for landscape and visual involves a comparison of the footprints required for Transport Scenario 5A and Transport Scenario 5B to determine which is preferable.

1.3 Assessment criteria

The assessment criteria used for this Stage 2 Landscape and visual assessment is in accordance with the methodology outlined in **Appendix C5** (Landscape and visual) of **Volume C**.

Document PE-ENV-01101, 2020. Available from: <https://www.tiipublications.ie/library/PE-ENV-01101-01.pdf>

² Transport Infrastructure Ireland Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Proposed National Roads - Standard PE-ENV-01102, 2020. Available from: <https://www.tiipublications.ie/library/PE-ENV-01102-01.pdf> [Accessed 04 January 2021]

³ Landscape Institute and the Institute of Environmental Management and Assessment (eds.) (2013) Guidelines for Landscape and Visual Impact Assessment. Routledge, Oxon. Available from: <http://bailey.persona-pi.com/Public-Inquiries/A465-English/10%20-%20Landscape%20and%20Visual%20Impact/10.2.8%20-%20IEMA%202013%200Guidelines%20for%20Landscape%20and%20Visual%20Impact%20Assessment.pdf>

1.4 Stage 2 Project Appraisal Matrix – corridor assessment

1.4.1 Northern Section

Corridor Option 1 (North) was assessed in the Stage 1 assessment in which it was considered unlikely for significant landscape impacts to occur and likely for one significant visual impact of local importance to occur. For these reasons, the combination of the landscape score / impact level and the visual score / impact level, resulted in an overall combined score / impact level of 3 – *‘Minor or slightly negative’*.

Corridor Option 1 (North) was brought through to the Stage 2 assessment, but with modifications which produced two variations, Corridor Option 1A (North) and Corridor Option 1B (North). Both of these options have undergone refinements to the extents of the corridor and the consequences of these refinements were evaluated for this Stage 2 assessment.

1.4.1.1 Visual

During the Stage 1 assessment, it was predicted that Corridor Option 1 (North) was likely to result in a significant visual impact of local importance on the *‘Bray Municipal District scenic View / Prospect’* which relates to views of the River Dargle. It was determined to have a ‘high’ sensitivity and it was anticipated the removal of woodland on the eastern banks of the River Dargle would have notable physical impact leading to a ‘medium’ magnitude of visual impact. Refinements were made to the corridor close to where the N11/M11 Scheme crosses the River Dargle which apply equally to both Corridor Option 1A (North) and Corridor Option 1B (North). As a result of these refinements, the area of mature woodland with the potential to be impacted by the refined corridors is greatly reduced and consequently, the magnitude of impact will reduce from ‘medium’ to ‘low’. For this reason, the visual impact on the *‘Bray Municipal District scenic View / Prospect’* is not likely to be significant for either of the refined Stage 2 corridor variations; Corridor Option 1A (North) or Corridor Option 1B (North).

The score for visual impact for Corridor Option 1 (North) in Stage 1 was 3 – *‘Minor or slightly negative’*, but due to the reduced visual impact as a result of the refinements, the score for Corridor Option 1A (North) and Corridor Option 1B (North) in this Stage 2 assessment reduces to 4 – *‘Not significant or neutral’*.

1.4.1.2 Landscape

During the Stage 1 assessment, it was predicted that Corridor Option 1 (North) was not likely to result in significant impacts on the landscape and consequently was given a landscape score of 4 – *‘Not significant or neutral’*. In terms of the landscape in this Stage 2 assessment, the key difference between Corridor Option 1 (North) and the revised corridor options, Corridor Option 1A (North) and Corridor Option 1B (North), occurs near Junction 7 (Bray South).

In the vicinity of Junction 7 (Bray South), Corridor Option 1A (North) passes within the Landscape Character Area (LCA) identified in the Wicklow County Development Plan (WCDP) as the *'Mountain and Lakeshore Area of Outstanding Natural Beauty: The Northern Hills (4 ML - AONB)'*, whereas, similar to Corridor Option 1 (North) from the Stage 1 assessment, Corridor Option 1B (North) does not pass through this LCA. During the Stage 1 assessment it was established that the WCDP – *'Mountain and Lakeshore Area of Outstanding Natural Beauty: The Northern Hills (4 ML - AONB)'* LCA is of 'high' sensitivity.

Relative to the overall expanse of the extents of the WCDP *'Mountain and Lakeshore Area of Outstanding Natural Beauty: The Northern Hills (4 ML - AONB)'* LCA as a whole, the area occupied by Corridor Option 1A (North) is relatively small and occurs in a low lying area at the periphery of the LCA, while the qualifying interest of this LCA relates to the more elevated regions within the central portion of the LCA (at the Little Sugarloaf mountain). Due to the limited extent and relative scale of the impact, the judgement is that a significant impact on this LCA is unlikely.

However, Corridor Option 1A (North) will involve the removal of approximately 3.5ha of mature broadleaved woodland within the WCDP *'Mountain and Lakeshore Area of Outstanding Natural Beauty: The Northern Hills (4 ML - AONB)'* LCA. As this mature broadleaved woodland occurs within a 'high' sensitivity landscape, it is considered to have 'high' sensitivity as a landscape element. Corridor Option 1A (North) will involve a notable physical impact upon this landscape element and therefore is considered likely to result in a significant impact of regional importance.

Compared to Corridor Option 1 (North) from Stage 1 (which had a landscape score of 4 – *'Not Significant or neutral'*), for this Stage 2 variation, Corridor Option 1A (North), the landscape score has decreased to 3 – *'Minor or slightly negative'* because of the likely impact on the broadleaved woodland in a landscape character area with a 'high' sensitivity. The score for the other Stage 2 variation, Corridor Option 1B (North), will remain unchanged from Stage 1, at 4 – *'Not Significant or neutral'*.

1.4.1.3 Combined landscape and visual

Compared to the overall combined landscape and visual score of 3 – *'Minor or slightly negative'* for Corridor Option 1 (North) from the Stage 1 assessment, the overall combined score for Corridor Option 1B (North) will be 4 – *'Not significant'* because of a reduced potential for impacts at *'Bray Municipal District scenic View / Prospect'* at the River Dargle. Although Corridor Option 1A (North) will also benefit from reduced visual impacts at *'Bray Municipal District scenic View / Prospect'*, the score will remain unchanged at 3 – *'Minor or slightly negative'* as the refinements to this corridor option near Junction 7 (Bray South) will result in a new significant landscape impact on a landscape element (broadleaved woodland) within the WCDP *'Mountain and Lakeshore Area of Outstanding Natural Beauty: The Northern Hills (4 ML - AONB)'* LCA.

Table 1.1: Corridor assessment – Northern Section

Assessment Criteria	Corridor Option 1A (North)	Corridor Option 1B (North)
Likely significant impact on a <u>Landscape Character Area (LCA)</u>	0	0
Likely number of significant impacts on a landscape element	1 (regional importance)	0
Likely number of significant impacts on a visual receptor	0	0
Qualitative Assessment	Minor or slightly negative	Not significant or neutral
Score / Impact Level	3	4
Preference	Intermediate	Preferred

1.4.2 Southern Section

This Stage 2 assessment includes four corridor options for the Southern Section. Corridor Option 1 (South), Corridor Option 2 (South) and Corridor Option 5 (South) were brought forward from Stage 1, albeit with some modifications, while Corridor Option 6 (South) is a new corridor option for consideration.

Corridor Option 6 (South) is identical to Corridor Option 1 (South) except that it deviates off-line to the west to avoid impacts on the ‘*Glen of the Downs Nature Reserve*’ via an underground tunnel. As Corridor Option 6 (South) is a new corridor option it was assessed fully for potential significant landscape or visual impacts and is described in detail in this Stage 2 assessment.

1.4.2.1 Landscape

During the Stage 1 assessment, Corridor Option 1 (South) was deemed to have a significant impact on a landscape element of national importance. This was a result of vegetation loss within the ‘*Glen of the Downs Nature Reserve*’ as a result of the footprint of this corridor option through the base of the valley, particularly in the vicinity of Junction 10 (Delgany/ Drummin). However, more detailed design information became available during this Stage 2 assessment which highlighted that a sizable area of woodland in this area will not be removed as a result of this corridor option therefore, the magnitude of effect will reduce from Medium to Low. A Low magnitude of effect on this landscape element (which has a Very High sensitivity) will still result in a significant effect.

Corridor Option 6 (South) involves a tunnel that would mean there would be no notable loss of vegetation within the ‘*Glen of the Downs Nature Reserve*’.

Although the N11 would be diverted through an underground tunnel, the existing road infrastructure will remain in-situ within the '*Glen of the Downs Nature Reserve*', albeit in the form of a downgraded road with a reduced volume of vehicular movement passing through.

Outside of the northern boundary of the '*Glen of the Downs Nature Reserve*' landform will be reprofiled to form an engineered 'cutting' and a 'cut-and-cover' tunnel is proposed in the flat terrain to the north of the proposed tunnel portal. As a result of the 'cutting', vegetation on the sloping landform to the east of Glenview hotel will be removed. Upgrade works in this area also include a new roundabout to provide a link between the old and new roads. To the south of the '*Glen of the Downs Nature Reserve*', a smaller degree of 'cutting' will be needed as the proposed tunnel portal is located in steeply sloping terrain. Ground investigations (GI) would be required for the construction of the tunnel segment of Corridor Option 6 (South). These GI can either be achieved through inclined boreholes that start outside of the '*Glen of the Downs Nature Reserve*' and drill beneath the reserve, thus avoiding any impacts on the reserve, or it may be necessary to undertake vertical boreholes which would require the removal of some trees immediately adjacent to the boreholes within the '*Glen of the Downs Nature Reserve*' but this would likely be a small quantity of trees and thus the magnitude of change would not be large enough to significantly affect this landscape element.

There will be notable physical impacts on the terrain outside of the proposed tunnel portals, but it will be relatively localised and will occur within an area already characterised by the existing transport corridor thus it is considered to result in a 'medium-low' magnitude of effect. As the sensitivity of the WCDP '*Eastern Corridor*' LCA in which the proposed tunnel portals occur is deemed to be 'medium', it is considered that they will not significantly impact on this LCA. Nor will the proposed tunnel portals impact on any of the identified landscape elements (critically the '*Glen of the Downs Nature Reserve*') during the operational phase.

However, it is noted that the low-lying area immediately to the north of the '*Glen of the Downs Nature Reserve*' is the proposed launch site of the tunnel boring machine, so it is anticipated there will be construction activity at this location until the tunnel beneath the '*Glen of the Downs Nature Reserve*' is completed, which is expected to take approximately 2.5 to 3 years. The local landscape character in this particular location has a strong sense of enclosure as it is surrounded by hills. The construction activity will have a significant adverse effect on the local landscape character, but it will be contained within this discrete area. The construction impact on this local landscape will be a 'Short-term Effect' ('effects lasting one to seven years' as defined in Environmental Protection Agency (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports⁴).

⁴ Environmental Protection Agency (EPA), Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, Draft 2017. Available from: <https://www.epa.ie/pubs/advice/ea/EPA%20EIAR%20Guidelines.pdf>

During the operational phase, there will be a residual permanent change to the physical terrain in this area as a consequence of the sizeable cutting, but it will remain highly localised.

For these reasons, Corridor Option 6 (South) was scored 3 – ‘*Minor or slightly negative*’ as a result of construction phase effects but this should reduce during the operational phase.

As identified in the Stage 1 assessment, Corridor Option 1 (South) and Corridor Option 5 (South), are likely to result in significant impacts on the ‘*Glen of the Downs Nature Reserve*’, a landscape element of national importance. However, this Stage 2 assessment identified that Corridor Option 1 (South) will result in a lesser magnitude of the effect, and it is for this reason the Landscape Score / Impact Level for Corridor Option 1 (South) will reduce to 3 – ‘*Minor negative*’, while Corridor Option 5 (South) will retain a Score of 2 – ‘*Moderately negative*’.

Table 1.2: Corridor assessment – Southern Section (landscape)

Assessment Criteria	Corridor Option 1 (South)	Corridor Option 2 (South)	Corridor Option 5 (South)	Corridor Option 6 (South)
Likely significant impact on <u>Landscape Character Areas (LCA)</u>	0	2	0	0
Likely number of significant impacts on landscape element of national importance	1 (Magnitude of effect reduced to Low)	0	1 (Magnitude of effect remains Medium)	0
Likely number of significant impacts on landscape element of regional importance	0	0	0	0
Likely number of significant impacts on landscape element of local importance	0	0	0	1
<u>Landscape</u> Qualitative Assessment	Minor or slightly negative	Major or highly negative	Moderately negative	Minor or slightly negative
<u>Landscape</u> Score / Impact Level	3	1	2	3
<u>Landscape</u> Preference	Preferred	Least preferred	Intermediate	Preferred

Corridor Option 6 (South) is likely to result in significant construction phase effects at a local level, however, it was rated Preferred in the landscape assessment as it does not significantly impact on the ‘*Glen of the Downs Nature Reserve*’ landscape element. Corridor Option 1 (South) and Corridor Option 5 (South) were both assigned a Score of 2 – ‘*Moderately negative*’ in the Stage 1 assessment as they are likely to have significant impacts on the ‘*Glen of the Downs Nature Reserve*’ landscape element and this score remains unchanged for Corridor Option 5 (South) in this Stage 2 assessment. Due to refinements since the Stage 1 assessment, Corridor Option 1 (South) will involve a lower quantity of vegetation removal within the boundary of the ‘*Glen of the Downs Nature Reserve*’ landscape element which is considered preferable.

As identified in Stage 1, Corridor Option 2 (South) is likely to result in impacts on two LCAs and was categorised with a landscape preference of intermediate. The anticipated impacts on the LCAs remains unchanged from Stage 1, but in the new comparative context in this Stage 2 assessment, with the newly introduced Corridor Option 6 (South), the preference rating has changed to least preferred. This is primarily because greater weighting is given to the likely significant impacts on LCAs than likely significant impacts on the more discrete landscape elements.

1.4.2.2 Visual

Corridor Option 6 (South) is a new corridor option which was assessed for the first time in this Stage 2 assessment. It bypasses the ‘*Glen of the Downs Nature Reserve*’ by means of an underground tunnel through the western side of the valley and for this reason, the underground portion of this corridor will not have any visual impacts on the landscape and will not be visible from the surrounding areas.

‘*Prospects of Special Amenity Value no. 13*’ is a scenic designation identified in the WCDP as following the alignment of the existing N11 dual carriageway from just south of Junction 9 (Glenview) through the base of the valley within the ‘*Glen of the Downs Nature Reserve*’ to Junction 10 (Delgany/Drummin). It is described in the WCDP as a ‘*Feature: Prospect of both sides of Glen of the Downs*’. Most of the length of this designation occurs within the perimeter of ‘*Glen of the Downs Nature Reserve*’ but a short section extends further north. For the majority of the length of this designation there will be no notable visible change as a result of Corridor Option 6 (South) as the route will largely be underground. However, there will be some changes to the views afforded at the northern end of this designation, just outside the ‘*Glen of the Downs Nature Reserve*’ to the south of Junction 9 (Glenview). In this area, excavations will be required to construct a notable cutting which will be required to reduce the elevation of the new road so it can connect with the proposed tunnel portal. The portion of the cutting immediately outside of the proposed tunnel portal will be ‘cut and cover’ and may offer the potential for some landscape and visual mitigation measures.

There will be a visual change as a result of the new infrastructure and the reprofiled terrain in the views from the ‘*Prospects of Special Amenity Value no. 13*’, resulting in a degree of visual intrusion but there will be no visual obstruction of views of the wooded slopes within the ‘*Glen of the Downs Nature Reserve*’ which is the key focus of the scenic designation. Nevertheless, the visual change is of a scale that it is deemed to result in a Medium magnitude of visual effect. However it is noted that, rather than being a static viewpoint ‘*Prospect of Special Amenity Value no. 13*’ offers sequential views while travelling along the entire length of the scenic designation, as it passes through the Glen of the Downs valley, so the opportunity to observe the visual change to the north of the ‘*Glen of the Downs Nature Reserve*’ will only be from a very short section at the northern end of the ‘*Prospect of Special Amenity Value no. 13*’.

The tunnel segment for Corridor Option 6 (South) will mean there will be a reduced number of vehicle movements passing through the Glen of the Downs and consequently there would be a reduction in the complexity and movement in the views afforded from the ‘*Prospects of Special Amenity Value no. 13*’ hence there would be some improvement to the overall visual setting for the majority of the length of the designation that occurs within the ‘*Glen of the Downs Nature Reserve*’.

Currently the northernmost section of the ‘*Prospect of Special Amenity Value no. 13*’ is lit by roadside lighting. It is assumed that any new lighting design in this area will aim to avoid the introduction of additional light within the ‘*Glen of the Downs Nature Reserve*’ at night.

As the visual impacts at the northernmost portion of the ‘*Prospects of Special Amenity Value no. 13*’ are deemed to be Medium, and given that during the Stage 1 assessment, the sensitivity of this visual receptor was determined to be Very High, therefore Corridor Option 6 (South) is considered to result in a significant visual impact on this scenic designation.

The nearby Glenview Hotel is perched on locally elevated terrain to the north of the proposed tunnel portal and is orientated towards the *Glen of the Downs Nature Reserve*. Mature trees and vegetation in the gardens immediately to the fore of the Glenview Hotel substantially screen the lower portions of the *Glen of the Downs Nature Reserve*, although views of the upper portions of the wooded slopes and long distance views towards the sea through the *Glen of the Downs Nature Reserve* are afforded over this vegetation. The proposed cutting and the proposed ‘cut and cover’ tunnel required for Corridor Option 6 (South) is low-lying thus will be substantially screened from the hotel itself. However, there are gardens associated with the hotel that terrace down in the direction of the proposed tunnel portal. These gardens are not open to the public and are not designated for landscape and visual amenity, but they do represent a sensitive visual receptor in the localised context, and for a commercial enterprise that is strongly associated with its landscape setting. It is likely there will be notable change to the landscape context and views from these gardens as a result of Corridor Option 6 (South), especially at construction stage, resulting in significant effects.

As no significant visual impacts have been identified in this Stage 2 assessment of Corridor Option 6 (South) it was scored as 4 ‘*Not Significant or neutral*’.

The score given to both Corridor Option 1 (South) and Corridor Option 5 (South) in the Stage 1 assessment was also 4 ‘*Not Significant or neutral*’ and remains unchanged in Stage 2.

Table 1.3: Corridor assessment – Southern Section (visual)

Assessment Criteria	Corridor Option 1 (South)	Corridor Option 2 (South)	Corridor Option 5 (South)	Corridor Option 6 (South)
Likely number of significant impacts on visual receptor of national importance	0	0	0	0
Likely number of significant impacts on visual receptor of regional importance	0	1	0	1
Likely number of significant impacts on visual receptor of local importance	0	0	0	1
<u>Visual</u> Qualitative Assessment	Not Significant or neutral	Minor or slightly negative	Not Significant or neutral	Minor or slightly negative
<u>Visual</u> Score / Impact Level	4	3	4	3
<u>Visual</u> Preference	Preferred	Least preferred	Preferred	Intermediate

Corridor Option 1 (South) and Corridor Option 5 (South) were both rated Preferred, as neither are anticipated to result in significant visual impacts on the ‘*Prospect of Special Amenity Value no. 13*’.

There is a further nuance to be noted. Although neither Corridor Option 1 (South) or Corridor Option 5 (South) surpass the threshold of being considered a significant visual impact, it is anticipated that Corridor Option 1 (South) is likely to result in the lower proportion of vegetation removal within the ‘*Glen of the Downs Nature Reserve*’ than Corridor Option 5 (South), thus Corridor Option 1 (South) will result in a lower degree of visual change as viewed from ‘*Prospects of Special Amenity Value no. 13*’ and for this reason, it is deemed the Preferred of these two options.

Corridor Option 6 (South) avoids significant visual impacts within the ‘*Glen of the Downs Nature Reserve*’ however is likely to have significant visual impacts within the enclosed area immediately to the north thus has a visual score of 3 – ‘*Minor or slightly negative*’.

As noted in the Stage 1 assessment, the likely significant visual impact of Corridor Option 2 (South) as viewed from the WCC designated view of ‘*Special Amenity Value or Special Interest (Number 35)*’, which is of regional importance, resulted in a visual impact score of 3 – ‘*Minor or slightly negative*’ and a visual preference of intermediate. However, in the context of the reduced number of corridor options and the introduction of the new Corridor Option 6 (South), Corridor Option 2 (South) has been moved from intermediate to least preferred as the visual impacts will be noticeable over a wider area than Corridor Option 6 (South).

1.4.2.3 Combined landscape and visual

The combined qualitative assessment scores for both Corridor Option 2 (South) and Corridor Option 5 (South) remain unchanged from the Stage 1 assessment. For Corridor Option 1 (South), the combined score reduced from 2 – ‘*Moderately negative*’ to 3 – ‘*Minor or slightly negative*’ as a result of the landscape score reducing from 2 to 3 in this Stage 2 assessment. For Corridor Option 6 (South), neither the landscape nor visual scores exceed 3 – ‘*Moderately negative*’ therefore the combined Score is also 3 – ‘*Moderately negative*’.

Table 1.4: Corridor assessment – Southern Section (landscape and visual)

Assessment Criteria	Corridor Option 1 (South)	Corridor Option 2 (South)	Corridor Option 5 (South)	Corridor Option 6 (South)
Landscape Score / Impact Level	3	1	2	3
Visual Score / Impact Level	4	3	4	3
Combined Qualitative Assessment	Minor or slightly negative	Major or highly negative	Moderately Negative	Minor or slightly negative
Combined Score / Impact Level	3	1	2	3
Combined Preference	Preferred	Least Preferred	Intermediate	Preferred

Of the four corridor options in the Southern Section of this Stage 2 assessment, Corridor Option 1 (South) and Corridor Option 6 (South) both scored a combined impact score of 3 – ‘*Minor or slightly negative*’ therefore they both have a combined preference of preferred.

A combined score of 2 – ‘*Moderately negative*’ was assessed for Corridor Option 5 (South) thus it has a combined preference of intermediate.

Corridor Option 2 (South) has a combined score of 1 – ‘*Major or highly negative*’, hence is least preferred.

1.5 Stage 2 Project Appraisal Matrix – transport assessment

Transport Scenario 5A and Transport Scenario 5B are not divided into the northern and southern sections and are considered over the full scheme length, however the majority of road infrastructure required for the transport scenarios is located in the Northern Section. The footprints required for both transport scenarios are the same. There are however nuances between the two transport scenarios and different road designs that result in different preference ratings.

The road design of Transport Scenario 5A will involve additional separate roads and two additional roundabouts offset to the west of the existing N11/M11. The road design for Transport Scenario 5B comprises additional lanes immediately adjoining the existing N11/M11, where it is likely to have a lesser magnitude of impact on landscape character than Transport Scenario 5A. Transport Scenario 5A also has a greater potential to impact on the following areas identified in the Dún Laoghaire-Rathdown County Development Plan (DLRCDP);

- Area under Objective F: ‘*To preserve and provide for open space with ancillary active recreational amenities*’ at sports pitches west of M11 motorway to the south of Old Connaught Avenue; and
- Area under Objective No. 5: ‘*To protect and preserve Trees and Woodlands*’ to the west of the M11 motorway, north of Junction 6 (Bray / Fassaroe).

For these reasons combined, Transport Scenario 5B is selected as Preferred.

Table 1.5: Transport assessment

Assessment Criteria	Transport Scenario 5A	Transport Scenario 5B
Anticipated proportion of new road surface to be adjacent rather than adjoining the M11 mainline	Higher	Lower
Anticipated relative impact at sports pitches west of M11 motorway that are under DLRCDP Objective F: ‘ <i>To preserve and provide for open space with ancillary active recreational amenities</i> ’	Higher	Lower
Anticipated relative impact on woodland west of the M11 motorway, north of Junction 6 (Bray / Fassaroe) that is under DLRP Objective No. 5: ‘ <i>To protect and preserve Trees and Woodlands</i> ’	Higher	Lower
Preference	Intermediate	Preferred

1.5.1 Transport Scenario 4 assessment

Transport Scenario 4 involves utilising the proposed physical infrastructure in different ways.

While the frequency and number of vehicles using this infrastructure is considered relevant to landscape and visual concerns, in this instance the variations involved are not anticipated to result in a notable differentiation and therefore it is considered to be beyond the scope of the landscape and visual assessment at this stage.

1.6 References

Design Manual for Roads and Bridges Volume 11, Section 3 for Stage Two Assessment (UK DMRB, 1994) Available from:
<https://www.standardsforhighways.co.uk/ha/standards/DMRB/vol11/section3.htm>

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