

# N52 TULLAMORE TO KILBEGGAN LINK

## Option Selection Report

### Volume F – Environmental Appendices Appendix F6 – Noise

MDT0891-RPS-00-XX-RP-Z-0023  
Option Selection Report  
Volume F Appendix F6  
Noise  
S3.P02  
5<sup>th</sup> August 2021

**Document status**

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
S3.P01	Draft Issue	PH	SB	PC	31 <sup>st</sup> May 2021
S3.P02	Final Draft Issue	PH/SB	SB	PC	5 <sup>th</sup> August 2021

**Approval for issue**

PC	5 August 2021
----	---------------

© Copyright RPS Group Limited. All rights reserved.

The report has been prepared for the exclusive use of our client and unless otherwise agreed in writing by RPS Group Limited no other party may use, make use of or rely on the contents of this report.

The report has been compiled using the resources agreed with the client and in accordance with the scope of work agreed with the client. No liability is accepted by RPS Group Limited for any use of this report, other than the purpose for which it was prepared.

RPS Group Limited accepts no responsibility for any documents or information supplied to RPS Group Limited by others and no legal liability arising from the use by others of opinions or data contained in this report. It is expressly stated that no independent verification of any documents or information supplied by others has been made.

RPS Group Limited has used reasonable skill, care and diligence in compiling this report and no warranty is provided as to the report’s accuracy.

No part of this report may be copied or reproduced, by any means, without the written permission of RPS Group Limited.

Prepared by:

Prepared for:

**RPS**

**Offaly County Council**

Dublin | Cork | Galway | Sligo  
rpsgroup.com

RPS Group Limited, registered in Ireland No. 91911  
RPS Consulting Engineers Limited, registered in Ireland No. 161581  
RPS Planning & Environment Limited, registered in Ireland No. 160191  
RPS Engineering Services Limited, registered in Ireland No. 99795  
The Registered office of each of the above companies is West Pier Business Campus, Dun Laoghaire, Co. Dublin, A96 N6T7



## Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>3</b>
1.1	Guidance .....	3
1.2	Project Appraisal Guidelines Requirements .....	3
1.3	Assessment Criteria .....	3
<b>2</b>	<b>EXISTING ENVIRONMENT .....</b>	<b>5</b>
2.1	Baseline.....	5
2.2	Noise Buffering Zones.....	5
2.3	Data Output .....	5
<b>3</b>	<b>OPTION SELECTION .....</b>	<b>7</b>
3.1	Description of Options.....	7
3.2	Quantitative Assessment of Potential Impact .....	8
3.3	Qualitative Assessment of Potential Impact and Mitigation .....	11
<b>4</b>	<b>OPTION SUMMARY .....</b>	<b>12</b>

## Tables

Table 1-1: Project Appraisal Guidelines Scoring .....	4
Table 1-2: Qualitative Scoring .....	4
Table 3-1 Property Counts & Banding.....	9
Table 3-2 Potential Impact Rating (PIR).....	10
Table 4-1: Noise Impact Score Matrix .....	12

# 1 INTRODUCTION

This report outlines the comparative assessment of options in relation to noise for the seven options for the N52 Tullamore to Kilbeggan Link Scheme. Specifically, the route options are compared to evaluate potential noise impacts to the extent feasible as part of the overall option selection process.

This assessment will form part of a Phase 2 – Option Selection Report which is a deliverable under Phase 2 – Options Selection of the TII PMG 2019. The purpose of the Option Selection Report is to present the project constraints and the assessments that were undertaken in order to identify the Preferred Option for the project.

## 1.1 Guidance

This analysis was undertaken by means of a desktop assessment based on the following guidance and information sources:

- TII “*Guidelines for the Treatment of Noise and Vibration in National Road Schemes*”, 2004; and
- TII “*Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes*”, 2014.

The methodology for the option assessment comprised of a desk study and the material sources consulted as part of the desk study consisted of the following;

- Review of spatial data;
- Geodirectory data; and
- A review of Ordnance Survey Ireland mapping and orthophotography.

In order to facilitate the use of the TII project appraisal matrix, spatial data selection was carried out using GIS software.

## 1.2 Project Appraisal Guidelines Requirements

The TII “*Project Appraisal Guidelines for National Roads Unit 7.0 - Multi Criteria Analysis*” (PAG) states that the assessment of noise during the Stage 2 the following three elements should be considered:

- Assessment of Potential Impact based on receptor counts (Quantitative) through the determination of the Potential Impact Rating (PIR) of each route option;
- Assessment of changes in traffic flow (Quantitative) through an estimation of the number of receptors in the vicinity of roads where traffic flows are likely to increase or decrease by 25% or more; and
- Assessment of the likely need for mitigation measures (Qualitative) considering what opportunities exist for the provision of noise mitigation measures, should they be deemed necessary.

Each of the above elements is addressed within this report. Note that vibration is not addressed within this report and is not a requirement of the PAG Guidelines. Vibration impacts associated with the scheme typically related to piling or blasting during construction and these factors will be addressed in detail, if relevant, during the EIA stage of the project.

## 1.3 Assessment Criteria

The Stage 2 Appraisal Process was carried out using the full range of sub criteria recommended in PAG unit 7.0, and with regard to the objectives of the scheme, so as to take account of all the predicted impacts of each option or alternative. In many cases there is a strong overlap between the objectives of the scheme and one or more of the PAG sub criteria.

All appraisal criteria use a standard scale. Each impact is scored on a scale of 1 (major or highly negative impact) to 7 (major or highly positive impact). A score of 4 represents a neutral or not significant impact. Each impact is scored as per the system presented in **Table 1-1**.

All scores refer to impacts measured relative to the Do-Minimum. The Do-Minimum consists of doing nothing further to improve the N52 route. The Do- Minimum would therefore by definition be scored as Neutral (relative to itself) under all sub criteria.

PAG 7.0 notes that simply adding up the scores of the different sub-criteria gives an indication of the overall performance of each option under a given criterion, but this is not to be used in a mechanistic way as a decision process. The performance of each option in meeting the scheme objectives was then considered to be one of the criteria presented in Table 1-2.

**Table 1-1: Project Appraisal Guidelines Scoring**

Score	PAG Score
7	Major or highly positive
6	Moderately positive
5	Minor or slightly positive
4	Not significant or neutral
3	Minor or slightly negative
2	Moderately negative
1	Major or highly negative

**Table 1-2: Qualitative Scoring**

Score	PAG Score
Preferred	The choice which most fully meets the project objectives.
Good	Where project objectives are met notably better than with the intermediate choices but notably not as well as with the best choice.
Intermediate	Where project objectives are met considerably less well than with the best choice but considerably better than with the worst choice.
Poor	Where project objectives are met notably less well than with the intermediate choices but notably not as well as with the best option.
Least Preferred	The choice which does least to achieve the project objectives.

Having regard to the full range of impacts assessed in each case. This is a high level of ranking of the options or alternatives. The scoring process allows for options or alternatives to be identified as being “Good”, falling between “Intermediate” and “Preferred”, or as “Poor”, falling between “Least Preferred” and “Intermediate”.

For some options there will be very little between their impact scores and some may even have the same impact scores. In such circumstances, the author has applied expert judgement and evaluated each option comparatively against the other options, taking into account the quantitative and qualitative assessments. This has allowed the author to determine a preference for each option. In some instances, similar options may have the same preference.

## 2 EXISTING ENVIRONMENT

### 2.1 Baseline

A receptor is defined as any dwelling house, hotel, hostel, health building, educational establishment, place of worship, entertainment venue or any other facility or area of high amenity which benefits from, or requires the absence of, high noise levels.

The options considered in Stage 2 of Phase 2 Option Selection are all east of the existing road. The N52 Tullamore to Kilbeggan link is located in a rural region and there are no significant noise constraints on those options being considered. There is a school and a church identified in the constraints study (Durrow National School and Saint Colmcille Church Durrow) located within Durrow village.

Other noise sensitive locations are primarily dwellings along the route. Residential development along the existing infrastructure is in an irregular fashion with no major clusters. There are some clusters of houses along the Durrow road. The south side of the alignment scheme is located on the outskirts of Tullamore while the north of the scheme ends on the edge of the town of Kilbeggan.

The vast majority of developments within the Phase 2 proposed routes are detached residential properties. There are also a small number of commercial properties within the study area.

### 2.2 Noise Buffering Zones

A buffering tool in GIS was used to facilitate the comparison of proposed options in the context of noise emissions. Each proposed option was assessed individually by applying a series of concentric ring buffers to the option centrelines. A total of four buffers were applied to each of the proposed options centrelines. The first/ innermost ring buffer captured an area of 0 – 50m from the centreline and working outwards. The second captured 50 – 100m, the third 100 – 200m and the fourth/outermost captured 200 – 300m. This methodology allowed GeoDirectory data to be captured in each ring buffer and analysed separately. These buffers are shown as an example for Option 5 in **Figure 2-1**.

Properties/ buildings in the innermost buffers are likely to be affected by noise emissions in a more acute way, with noise levels decreasing in the buffer zones furthest from the centreline of each option. This approach allows for the visual comparison of acutely affected properties within the scope of each option, and ultimately, provided the basis for more detailed analysis using the TII project appraisal matrix.

### 2.3 Data Output

GIS (Geographic Information Systems) also facilitates the exportation of spatial data to other applications for further analysis. In this instance, SQL (Structured Query Language) queries were carried out on GeoDirectory addresses which fell within buffer zones for each of the proposed options. The resultant output provided detailed GeoDirectory information for individual properties and essentially, the number of properties which could be affected in noise sensitive zones. The SQL queries for each option were exported as comma delimited (.csv) files for data filtering and analysis using Microsoft Excel. The data were subsequently arranged according to buffer zone (smallest to highest) and property/building use (commercial, residential, both or unknown). Finally, each address was then counted in each buffer zone. The same process was carried out for each option, culminating in a table which accounts for each property according to building use and proximity to the centrelines for each of the proposed options. This table was used as the data source when applying the TII Potential Impact Rating (PIR) matrix.

The total number of properties in each band is then multiplied by a rating factor. The rating factor is as follows:

- 4 for Band 1;
- 3 for Band 2;
- 2 for Band 3; and
- 1 for Band 4.

The resultant values are summed for each option to give a single number for each option, termed the PIR. The PIR values are used to assess the potential impact of each option; the larger the PIR the greater the potential impact.

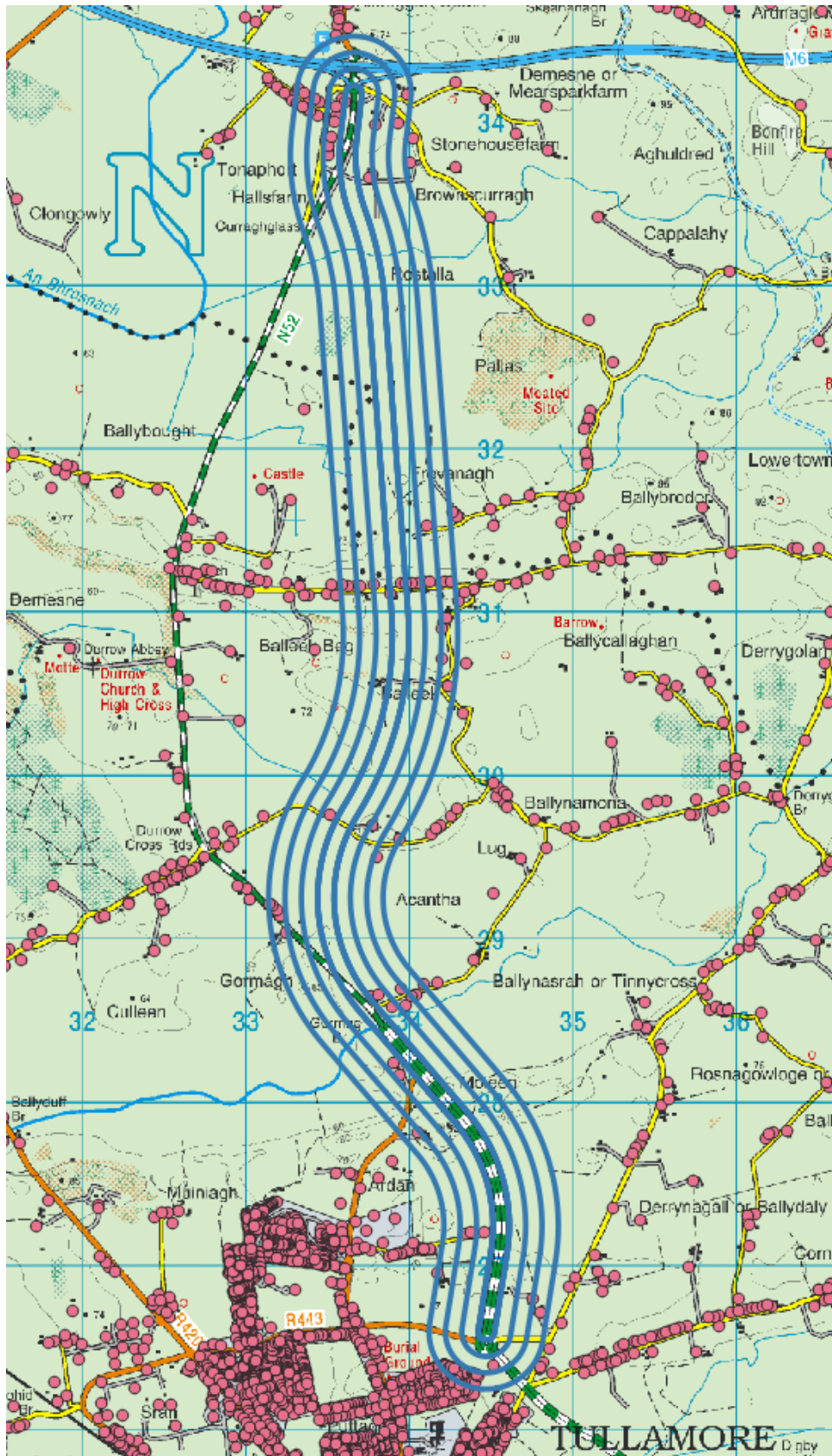


Figure 2-1 Sample Buffer Zones for Proposed Option 5 along the N52 Route



## 3 OPTION SELECTION

### 3.1 Description of Options

#### 3.1.1 “Do-Something” Options

The analysis considered the following route options:

- Option 1 follows existing N52 closely in horizontal and vertical alignment. The proposed cross section is Type 2 Dual Carriageway. Proposed cross section is significantly wider than the existing carriageway and will involve land take along the edges of the road. There is close proximity to existing dwellings as it follows the existing N52 throughout.
- Option 2 follows the existing N52 closely in horizontal and vertical alignment. The new offline road allows for elimination of substandard junctions at Four Roads and Durrow Village. The route will cross Derrygolan Esker at chainage 5050 to 5200. Option 2 skirts to the left of the national monument of MeeneGLISH avoiding direct impact on the monument.
- Option 3 diverges east from the existing N52. It crosses Molloy’s Quarry at chainage 1250-1600 and the SI protection area at chainage 1000-2100. Three crossing of waterbodies will be required on the Option 3. The route joins the existing N52 alignment at chainage 7000 following to the M6 junction.
- Option 4 is the furthest east option. It crosses Molloy’s Quarry at chainage 1750-1950 and the SI protection area at chainage 1000-2400. It avoids crossing Derrygolan Esker passing it on the East at chainage 4900. It then goes north west passing west of Pallas forest at chainage 6000. Two crossings of waterbodies will be required on Option 4.
- Proposed Option 5 diverges east from the existing N52 at chainage 2300 making use of an already upgraded alignment of N52 up to this point. The proposed alignment east of the existing N52 replaces two substandard junctions at Four roads and Durrow Village. Two crossings of waterbodies will be required on Option 5 at chainages: 2150 and 7050.
- The combination Option 2+3 has been proposed as a hybrid of options 2 and 3. This route follows the same alignment as the proposed Option 2 travelling north from Tullamore, to where it traverses the L2006 at Balleek Beg, where it then diverges north-east for 550m before joining the proposed option 3 alignment, continuing towards Kilbeggan.

#### 3.1.2 Management Option

As a result of the TII review process (July 2021), an additional “Management Option” has been put forward for consideration/assessment within the Stage 2 Options Assessment Phase. The proposed “Management Option” follows the existing N52 Tullamore to Kilbeggan alignment (8.54km) and would involve upgrading a number of sections, mainly along the centre of the existing scheme. This would result in a single carriageway in each direction with roundabouts at junctions, including the following elements:

- Three roundabout junctions proposed; at R42-N52 junction, at Four Roads Cross / L2005, and Durrow Village / Balleek Beg;
- Priority junctions at L2003-N52 Junction north of existing Silver River Bridge and at the L2006-N52 junction north of Durrow Village / Balleek Beg;
- Carriageway to be upgraded to Type 1 Single Carriageway Cross Section (circa chainage 2500);
- Proposed *cul de sac* at L2005-N52 Junction; and
- Carriageway to be upgraded to Type 1 Single Carriageway Cross Section with localised green verge narrowing between proposed cul de sac at L2005-N52 Junction and Durrow Village / Balleek Beg.

Regarding the context of this additional option, this is a Management Option as opposed to a Do-Minimum option. This option sits between a Do-Minimum and the Do-Something options proposed. This Management Option considers a short to medium term solution that may be able to achieve some of the objectives of the scheme.



In comparison to Option 1 (Brown), while the Management Option will follow the same centre line (i.e. the existing N52 Tullamore to Kilbeggan alignment), it is proposed as a single carriageway (Type 1 single) rather than a dual-carriageway as per the other Do-Something options. This option provides at-grade roundabouts at the key junctions, rather than grade separated junctions. However, this Management Option does not address the significant private accesses onto the N52 while Option 1 (Brown) requires a significant number of parallel roads to accommodate private accesses.

The southern and northern sections will require only minimal intervention as these have been recently upgraded, and it is essentially the middle section of the route that requires the most intervention (from the R421 junction to a point approx. halfway between the L2006 High Road and the M6 interchange). Across this section there is still likely to be hedge line loss to accommodate the wider carriageway (on both sides), although the extent of this loss will be considerably lower than Option 1.

In terms of impacts on Durrow Demesne, while Option 1 will potentially directly impact on the boundary at Durrow Demesne with tree and hedge line loss and the design can try to reduce the impacts on the wall, there is potential that there would be direct impact to the boundary wall with Option 1. This tree and hedge line loss impact would be more limited for the Management Option with less road widening and no impact on the boundary walls.

### 3.2 Quantitative Assessment of Potential Impact

The property counts for the banding for each route option are summarised in **Table 3-1**. Based on the numbers of properties in each banding, a calculation of the PIR was undertaken as detailed in **Table 3-2**. This PIR number represents the quantitative assessment of each option in terms of noise impact.

Option 1 shows the highest PIR score (334) illustrating that this option has the greatest potential for adverse noise impact on properties in the area. This is a direct result of the number of properties within the bands for this route, in particular the number of properties within 50 metres of the road which would experience the highest impact.

The proposed Management Option shows the second highest PIR score (270) illustrating that this option has the potential for adverse noise impact in the area. Like Option 1, this is a direct result of the number of properties within the bands for this route, in particular the number of properties within 50 metres of the N52 road alignment, which would experience the highest impact.

Options 3, 4, 5 and 2-3 generally have the lowest PIR scores (less than 200) and contrary to Option 1, this is as a result of the lower number of properties located within the property bands. This is as expected given the offline nature of these options relative to the largely online Option 1.

Option 2 has a PIR score (224), within the 200-300 PIR range like the Management Option (270), however this option's PIR overall is low relative to both the Management Option and Option 1 (334) and higher than the remaining options (under 200) largely as a result of the significant online sections (47% online) relative to the other offline options.

**Table 3-1 Property Counts & Banding**

<b>Banding</b>	<b>Mgmt Option</b>	<b>Option 1 (Brown)</b>	<b>Option 2 (Purple)</b>	<b>Option 3 (Orange)</b>	<b>Option 4 (Blue)</b>	<b>Option 5 (Green)</b>	<b>Combination 2-3</b>
<b>0-50m</b>	<b>31</b>	<b>44</b>	<b>19</b>	<b>19</b>	<b>16</b>	<b>15</b>	<b>14</b>
Residential	25	39	17	17	14	13	12
Commercial	4	4	2	1	1	1	1
Both	1	1	0	1	1	1	1
Unknown	1	0	0	0	0	0	0
<b>50-100m</b>	<b>21</b>	<b>17</b>	<b>15</b>	<b>13</b>	<b>12</b>	<b>12</b>	<b>16</b>
Residential	18	16	14	12	12	12	14
Commercial	3	1	1	0	0	0	1
Both	0	0	0	1	0	0	1
Unknown	0	0	0	0	0	0	0
<b>100-200m</b>	<b>21</b>	<b>36</b>	<b>27</b>	<b>14</b>	<b>21</b>	<b>22</b>	<b>21</b>
Residential	16	29	23	10	16	19	18
Commercial	2	4	1	0	1	0	1
Both	2	2	2	3	3	2	1
Unknown	1	1	1	1	1	1	1
<b>200-300m</b>	<b>41</b>	<b>35</b>	<b>49</b>	<b>38</b>	<b>43</b>	<b>40</b>	<b>48</b>
Residential	37	31	42	33	38	36	42
Commercial	0	0	2	0	1	1	0
Both	3	3	4	4	3	2	5
Unknown	1	1	1	1	1	1	1
<b>Total</b>	<b>114</b>	<b>132</b>	<b>110</b>	<b>84</b>	<b>92</b>	<b>89</b>	<b>99</b>

**Table 3-2 Potential Impact Rating (PIR)**

Option	Band	Multiplier	No. of Receptors	Sub-Total	Total PIR (Quantitative Score)
Management Option	0-50m	4	31	124	270
	50-100m	3	21	63	
	100-200m	2	21	42	
	200-300m	1	41	41	
Option 1 (Brown)	0-50m	4	44	176	334
	50-100m	3	17	51	
	100-200m	2	36	72	
	200-300m	1	35	35	
Option 2 (Purple)	0-50m	4	19	76	224
	50-100m	3	15	45	
	100-200m	2	27	54	
	200-300m	1	49	49	
Option 3 (Orange)	0-50m	4	19	76	181
	50-100m	3	13	39	
	100-200m	2	14	28	
	200-300m	1	38	38	
Option 4 (Blue)	0-50m	4	16	64	185
	50-100m	3	12	36	
	100-200m	2	21	42	
	200-300m	1	43	43	
Option 5 (Green)	0-50m	4	15	60	180
	50-100m	3	12	36	
	100-200m	2	22	44	
	200-300m	1	40	40	
Combination 2-3	0-50m	4	14	56	194
	50-100m	3	16	48	
	100-200m	2	21	42	
	200-300m	1	48	48	

### 3.3 Qualitative Assessment of Potential Impact and Mitigation

Indicative traffic flow data has been provided in the Traffic Modelling Report. The critical traffic changes predicted for these route options are to the north of Tullamore south of the junction with the R421. The design year (2040) Do-Minimum traffic on this section of road is 12,300 AADT and this increases with each of the route options from 12,950 (Option 1 – a 5% increase) to 16,330 for (Option 3 – a 33% increase). The larger increases are for Options 3 and 4 which will result in significant additional traffic volumes on this section of the proposed alignment in the design year. However, it is noted that the number of properties in close proximity to these routes in this section is very low and hence the requirement for any measures to mitigate this increase noise level may be limited.

For the section of the N52 south of Kilbeggan the design year (2040) Do-Minimum traffic on this section of road is 17,570 AADT and each of the options under consideration only result in a modest change (in some cases a decrease) from this Do-Minimum value. As such, any requirement for mitigation would be largely driven by the increase speed (and associated noise) from this traffic as the anticipated volume changes are minimal.

The most densely populated section of the existing alignment is the village of Durrow. The most important factor in the subjective assessment is the potential for reduction in traffic volumes through this section of the road. A reduction in traffic noise along this section will have a beneficial effect to the greatest number of residents and other noise sensitive receptors (such as the primary school and church).

The reduction in traffic volumes along the existing N52 associated with each of the offline options (excludes the Management Option and Option 1) would give a very significant reduction in the noise levels for the village of Durrow as well as the sensitive receptors in the village such as the primary school and church. Reducing the traffic flow through an area such as Durrow will have a positive benefit for a number of properties in that area balanced against a negative impact for a smaller number of properties for the proposed options and compared to the do-minimum option.

There are no significant barriers to providing mitigation that would distinguish between the options at this point.

## 4 OPTION SUMMARY

**Table 4-1** summarises the noise impact score matrix for all options proposed for the scheme. This overall impact has been determined based on the quantitative and qualitative assessments of each option and the receptors likely to be affected.

Option 1 retains the existing noise source from the 132 properties within 300 meters this route (including the church and primary school). In this regard, the impact level for this route is neutral relative to baseline.

Like Option 1, the Management Option follows the existing alignment of the N52 between Tullamore and Kilbeggan, and retains the existing noise source from the 114 properties identified within 300m of this route (including the church and primary school). In this regard, the impact level for this route is neutral.

All other options are somewhat offline and therefore divert the traffic noise away from the higher population density areas along the existing N52 and at Durrow. As such, each of these options presents a general improvement in community noise exposure and these options are considered to pose a minor or slightly positive impact relative to the Do-Minimum scenario.

Each of the route options can be delivered to meet the project objectives from a noise potential. Where adverse impacts are identified these may be suitably mitigated through barriers, road surfacing and other engineering. As such, none of the options fails to meet the project objectives and there is no “least preferred” option identified for noise. Also, there is no single clear preference between the options as the five offline options shown a similar level of positive impact for community noise.

With that in mind and based on and intercomparison of the noise assessments, Option 5 is predicted to have the lowest noise impact both by impacting on the lowest number of properties (89 within 300m) as well as avoiding the higher density areas such as Durrow village. In this regard, Option 5 is slightly preferred over the other offline options and is classed as “preferred”.

Conversely, as Option 1 impacts on the highest number of properties (132 within 300m) and maintains the traffic through Durrow village, the preference rating for this option is classed as “poor”. The Management Option, like Option 1, will retain the existing noise source along the N52, including Durrow Village, and impacting 114 properties, as such the preference rating for this option is also classed as “poor”.

All other options show a similar scale of noise impact and are classed as “good”.

**Table 4-1: Noise Impact Score Matrix**

Option	Potential for Impact	Impact Level	Impact Score	Preference
Management Option	<ul style="list-style-type: none"> <li>Second highest PIR score and potential impact on 114 residential, commercial, and other properties within 300m of the route option.</li> <li>Follows existing N52 route.</li> <li>Retention of existing noise source through Durrow village.</li> <li>High noise impact to the primary school and church.</li> </ul>	Neutral	4	Poor
Option 1	<ul style="list-style-type: none"> <li>Highest PIR score and potential impact on 132 residential, commercial, and other properties within 300m of the route option.</li> <li>Follows existing N52 route.</li> <li>Retention of existing noise source through Durrow village.</li> <li>Highest noise impact to the primary school and church.</li> </ul>	Neutral	4	Poor
Option 2	<ul style="list-style-type: none"> <li>Moderate PIR score and potential impact on 110 residential, commercial, and other properties within 300m of the route option.</li> <li>Circa half of this route is online affecting the receptors currently impacted by the existing alignment.</li> <li>Closest of the offline options to Durrow village passing the village to the east.</li> </ul>	Minor or slightly positive	5	Good

Option	Potential for Impact	Impact Level	Impact Score	Preference
Option 3	<ul style="list-style-type: none"> <li>Moderate PIR score and potential impact on 84 residential, commercial, and other properties within 300m of the route option.</li> <li>Passes Durrow village to the east and largely offline (circa 81%) impacting on a low number of properties.</li> </ul>	Minor or slightly positive	5	Good
Option 4	<ul style="list-style-type: none"> <li>Moderate PIR score and potential impact on 92 residential, commercial, and other properties within 300m of the route option.</li> <li>Largely offline (93%) and the furthest route from Durrow village and the school and church.</li> </ul>	Minor or slightly positive	5	Good
Option 5	<ul style="list-style-type: none"> <li>Lowest PIR score (less than half of Option 1) and potential impact on 89 residential, commercial, and other properties within 300m of the route option.</li> <li>Bypasses Durrow village to the east avoiding the impacts on the school and church.</li> </ul>	Minor or slightly positive	5	Preferred
Option 2-3	<ul style="list-style-type: none"> <li>Moderate PIR score and potential impact on 99 residential, commercial, and other properties within 300m of the route option.</li> <li>Like Option 2, this option is circa 41% online affecting the receptors currently impacted by the existing alignment but bypasses Durrow village to the east.</li> </ul>	Minor or slightly positive	5	Good