

## **Appendix 3A Agriculture and Property**



# N5 Strategic Corridor



**ROUTE CORRIDOR SELECTION REPORT**

**Agriculture and Property**



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### APPENDIX 1 PLANNING APPLICATIONS

# 1 EXECUTIVE SUMMARY

## 1.1 Introduction

Roscommon National Roads Design Office was commissioned by Roscommon County Council, in collaboration with the National Roads Authority, to advance the development of the N5 Strategic Corridor Study in accordance with the National Roads Project Management Guidelines.<sup>1</sup>

This report outlines the process followed in the assessment and evaluation of the seven route corridor options in relation to agriculture and property.

## 1.2 The Assessment and Conclusions

The assessment was carried out for the seven route corridor options based on five principal indicators:

- The size and distribution of farm holdings,
- The number of farm plots within specific bands for each corridor,
- The likely suitability and productivity of the land based on land cover characteristics, and
- The number of properties potentially affected by each corridor,
- Planning Applications.

These criteria were used to give an indication of differences in farming practice, differences in suitability/ productivity of farming and an indication of the number of properties and businesses that may be affected in the case of each corridor. The combination of the five principal factors was used in the assessment that led to the identification of the following route corridor preference from an agricultural and property perspective:

Corridor Number	Ranking
1A	1
1	2
2	3
2A	4
2B	5
4	6
3	7

**Table 1.1 Corridor Preference (Agriculture and Property)**

It should be noted that each of the corridors is a minimum of 500m wide (except corridor 3 which is 150m wide) and therefore presents significant opportunity for further mitigation particularly through the avoidance of property. In addition, severance will be maintained to a minimum possible through the iterative design process and where severance does occur it will be mitigated through a range of measures agreed with each affected landowner individually.

<sup>1</sup> National Roads Project Management Guidelines, 2000 – National Road Authority. Forms part of the NRA Design Manual for Roads and Bridges, Section 5.1.2.

## 2 INTRODUCTION

### 2.1 Introduction

Roscommon National Roads Design Office was commissioned by Roscommon County Council, in collaboration with the National Roads Authority (NRA<sup>2</sup>), to advance the development of the N5 Strategic Corridor Study in accordance with the National Roads Project Management Guidelines.<sup>3</sup>

The proposed scheme stretches from Teevnacreeva (east of Ballaghaderreen) to Scramoge (East of Strokestown) and involves the upgrading of the existing N5 National Primary Road between these locations. Seven route corridor options have been identified. The exact length of the scheme will depend on the route finally chosen but the length of the existing road is approx. 35.7km and any new route is likely to be of a similar length.

### 2.2 Objective for the Agriculture and Property Report

The overall objectives of the Route Selection Report are:

- To carry out an assessment of the feasible route corridor options in order to evaluate and compare them based on engineering, environmental and economic grounds.
- Based on the assessment outlined above, to determine the overall preferred Route Corridor.

This Agriculture and Property Report forms part of the environmental factors used to determine the emerging preferred route. The principal objectives of this report include:

- To ensure detailed consideration of agricultural and property considerations in the preferred route corridor and subsequent design stages.
- To carry out an assessment of the feasible route corridor options in order to evaluate and compare them based on agricultural and property criteria taking account of interaction with other environmental, engineering and economic parameters.
- Based on the above assessment, to determine the preferred route corridor having regard to agricultural and property parameters.

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<sup>2</sup> National Roads Authority

<sup>3</sup> NRA National Roads Project Management Guidelines, March 2003 (NRA DMRB 5.1.2). National Roads Authority



## 3 METHODOLOGY

### 3.1 Data Sources

The Agriculture and Property assessment and evaluation of the route corridor options has been undertaken with reference to a range of information sources. The assessment involved a desk study and a fieldwork component complimented by input from a range of sources:

- Roscommon National Roads Design Office
  - Feasible Route Corridors overlaid on Ordnance Survey (OSi) background mapping,
  - Digital Ground Model Contours overlaid on OSi background mapping,
  - The Constraints Study Report<sup>4</sup>,
- Ordnance Survey/ An Post
  - GeoDirectory – all postal addresses mapped as points onto OSi background mapping,
  - Discovery Series Mapping (1:50,000),
  - Six Inch Raster Maps (1:10,560),
  - 5000 Mapping (Raster and Vector 1:5000)
  - 2500 Mapping (Raster and Vector 1:2500) (Partial Coverage),
  - 1000 Mapping (Vector 1:1000 – Towns only – Partial Coverage),
- Department of Agriculture and Food
  - Electronic mapping showing all farm parcels in County Roscommon,
- Other Sources
  - Corrine Land Cover Mapping (2000) provided by the Environmental Protection Agency,
  - Central Statistics Office Information – Census 2006, Preliminary Report and Census of Agriculture Main Results, June 2006,
  - Other Environmental Reports, e.g. Landscape and Visual, Noise and Vibration
  - Site inspections by members of the design team,
  - Roscommon County Council Planning Department.

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<sup>4</sup> N5 Strategic Corridor Constraints Study Report, Roscommon County Council (NRDO), 2006

## 3.2 Methodology

The assessment and evaluation of the seven route corridor options is based on a range of data from a range of sources as outlined above.

CSO information was used to determine the typical farm size and use in the study area. This gives an indication of the likely effect of the proposed routes in a general sense, e.g. small farms might indicate that a large proportion of farmers derive supplementary income off-farm while larger holding might indicate an increased reliance on farm derived income.

The number of farm plots within specific bands of the centreline of each corridor was used as a proxy for both the amount of farms impacted and the relative amount of severance generated by each corridor.

Information from both the Corrine Land Cover maps and the GSI soil type maps was used to give an indication of the likely intensity of farming possible along each route and by association the relative impact on farming for each corridor.

The GeoDirectory of address points was used to indicate, in bands based around the centreline of each corridor, the potential impact on occupied buildings for each corridor. It should be noted that the design would endeavour to minimise the number of properties impacted and this measure is used only as a proxy for the relative impact of each.

Roscommon County Council's Planning Department provided information about Planning Applications within the study area and this information was used as an indicator of future development trends.

These factors were combined to identify the route option with the least overall impact having regard to the above aspects.

## 4 CORRIDOR ASSESSMENT

### 4.1 Description of Corridors

#### 4.1.1 Introduction

Seven feasible route corridors have been identified and are assessed in relation to agriculture and property. Each corridor is nominally 500m wide (with the exception of Option 3 – 150m wide) with local widening to accommodate particular constraints. Each starts and finishes at the same point and varied in length between 33.7km and 38km. Taking the existing N5 as a baseline, there are five northern options, an online option (do minimum) and a southern option.

#### 4.1.2 Route Corridor Option 1

Route Corridor Option 1 stretches from Ratra/ Teevnacreeva at its western extremity to Scramoge/ Treanaceeve at its eastern tie-in, representing a length of approx. 33.7km. It is generally 0.5km (500m) wide, it is located north of the existing N5.

This route follows a relatively flat topography passing north of Frenchpark town crossing Regional Road R361 outside the speed limit zone but, due to the urban sprawl and ribbon development, there are an increased number of premises in the vicinity of the crossing. From here on the route traverses through predominately rural landscape passing approx. 2.5km north of Bellanagare and crossing the N61 National Secondary Road approx. 6km north of Tulsk. The route continues in a predominately easterly direction passing along the northern periphery of Clooncullaan Lough. From here the route veers south and the topology changes to follow the undulations of a number of hills for approx. 4.5km. It then descends to the lowlands immediately east of Strokestown passing approx. 1.2km from the town and rejoining with the existing N5 at Scramoge.

#### 4.1.3 Route Corridor Option 1A

Route Corridor Option 1A stretches from Ratra/ Teevnacreeva at its western extremity to Scramoge/ Treanaceeve at its eastern tie-in, representing a length of approx. 34.2km. It is generally 0.5km (500m) wide. West of Bellanagare it is located generally south of the existing N5 while east of Bellanagare it is generally north of the existing N5..

This route follows a relatively flat topography passing approx. 1km south of Frenchpark town before veering north of Bellanagare (approx. 1km) where it merges with Route Option 1.

#### 4.1.4 Route Corridor Option 2

Route Corridor Option 2 stretches from Ratra/ Teevnacreeva at its western extremity to Scramoge/ Treanaceeve at its eastern tie-in, representing a length of approx. 34.6km. It is generally 0.5km (500m) wide. West of Bellanagare and East of Ardakilin the corridor is located generally south of the existing N5 while in the remaining middle section it is generally north of the existing N5.

Route Option 2 follows a similar path to Option 1A passing approx. 1km south of Frenchpark, approx. 1km north of Bellanagare. From here it diverges from Option 1A and follows a depression approx. 2.5km north of Rathcroghan before undulating along a number of small hillocks and then falling back to cross the N61 road approx. 1.4km north of Tulsk. From here, the route rises slightly again across Ardkeenagh "Hill" before descending to the existing N5 at Corbally and following a relatively flat terrain passing approx. 1km south of Strokestown.

#### **4.1.5 Route Corridor Option 2A**

Route Corridor Option 2A stretches from Ratra/ Teevnacreeva at its western extremity to Scramoge/ Treanaceeve at its eastern tie-in, representing a length of approx. 35.0km.

Route Corridor Option 2A is substantially similar to Route Option 2, with a minor variation near the western tie-in, west of the N5 crossing at Corbally. From here the option begins to take a more southern route passing approx. 2.2km south of Strokestown before veering northeastwards towards the eastern tie-in.

#### **4.1.6 Route Corridor Option 2B**

Route Corridor Option 2B stretches from Ratra/ Teevnacreeva at its western extremity to Scramoge/ Treanaceeve at its eastern tie-in, representing a length of approx. 34.5km.

This option is substantially similar to Route Option 2 between the western tie-in and the N61 crossing. From here, it follows a more northerly path following the undulations of Derryquirk and Correagh hillocks before crossing the existing N5 west of Strokestown and following the path of Option 2A to the eastern tie-in.

#### **4.1.7 Route Corridor Option 3**

Route Corridor Option 3 stretches from Ratra/ Teevnacreeva at its western extremity to Scramoge/ Treanaceeve at its eastern tie-in, representing a length of approx. 35.7km. It is generally 0.15km (150m) wide. This corridor is centred along the existing N5 National Primary Route and passes through the towns/ villages of Frenchpark, Bellanagare, Tulsk and Strokestown.

#### **4.1.8 Route Corridor Option 4**

Route Corridor Option 4 stretches from Ratra/ Teevnacreeva at its western extremity to Scramoge/ Treanaceeve at its eastern tie-in, representing a length of approx. 38.0km. It is generally 0.5km (500m) wide and is located generally south of the existing N5.

This corridor passes approx. 1km south of Frenchpark and 0.7km south of Bellanagare where it climbs to cross the periphery of Bellanagare Bog before descending down to the Owennaforeesha river. From here the route rises gently and continuously along the side of Ballyglass/ Rathkineely Hill and on to a peak at Rathmoyle Hill before falling down towards the N61 approx. 3.5km south of Tulsk and on down to the N5 at Ardakillin. From Ardakillin to the R368 road crossing this option follows Option 2A. From her it diverges a little north but south of Option 2 passing approx. 1.9km south of Strokestown.

## 4.2 Farm Size

Roscommon is a rural county with a population of 58,700 persons<sup>5</sup> and approx. 80% of which live in rural areas. Approx. 11,360 people carry out some work on farms throughout the county.

The Central Statistics Office provides information on the number of farms and the size of each holding based on District Electoral Division (DED). This data can be used to give an overall picture of the study area in terms of farm holding size. Table 4.1 below lists the DEDs within or substantially within the study area and gives a breakdown of the number and size of farm in each and Figure 4.1 shows the DEDs.

DED	<10ha	10-<20ha	20-<30ha	30-<50ha	50-<100ha	<=100ha	Tot Farms
Mantua	0	10	10	10	0	0	27
Bellanagare	30	40	20	20	10	0	120
Frenchpark	20	40	20	10	0	0	102
Annaghmore	20	20	10	10	10	0	66
Cloonyquin	10	20	10	20	10	0	66
Cregga	10	10	10	10	0	0	31
Elphin	10	10	10	20	10	0	56
Ogulla	0	10	10	10	10	0	39
Rossmore	0	10	10	10	10	0	40
Strokestown	10	10	10	10	10	0	43
Tulsk	10	10	10	10	10	0	48
Baslick	10	10	10	0	0	0	42
Buckill	20	20	20	10	10	0	76
Castleplunkett	10	30	20	20	10	0	87
Fairymount	10	30	20	10	0	0	72
Killukin	10	10	10	10	10	0	50
<b>TOTAL</b>	<b>180</b>	<b>290</b>	<b>210</b>	<b>190</b>	<b>110</b>	<b>0</b>	<b>965</b>

**Table 4.1 Farm Sizes within the Study Area by DED**

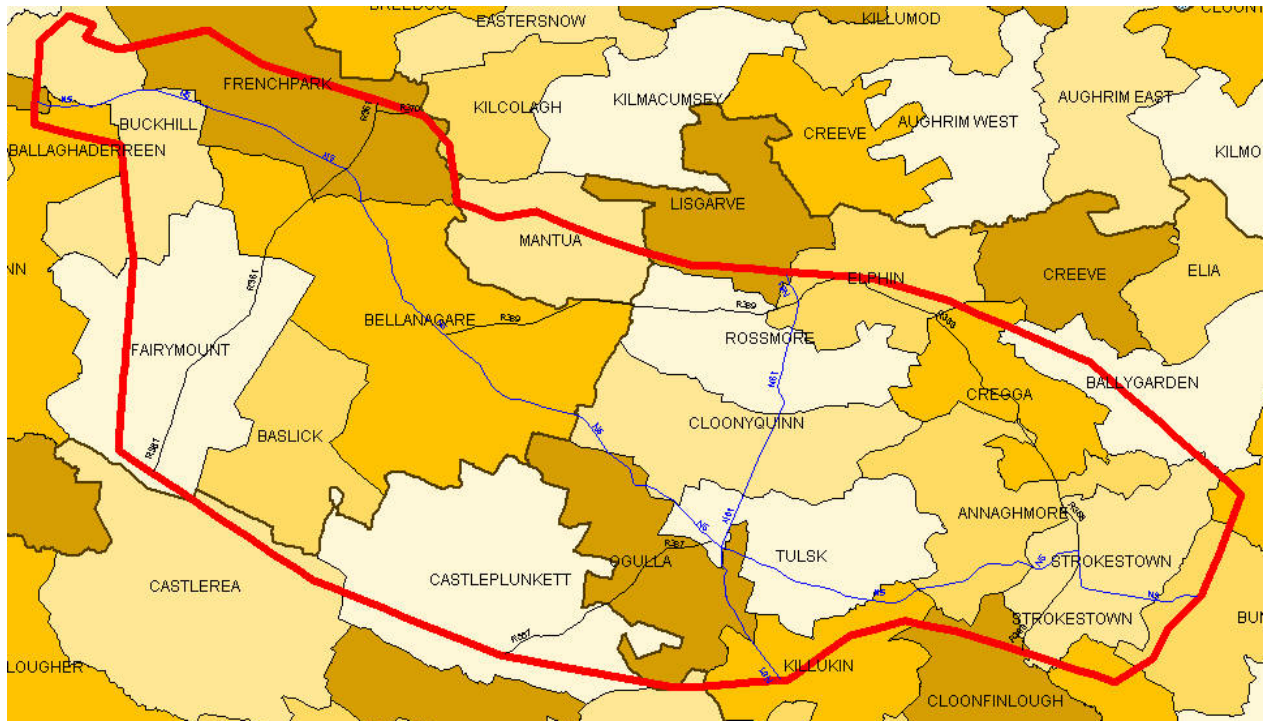
The above table shows that there are no farm units greater than 100 hectares (247 acres) within the study area and that the majority of farms are less than 30 hectares (74.1 acres) (see Figure 4.2 below). The average size of farm in the area of interest is approx. 26.9 hectares. This is slightly above average for Connacht (23.8ha) but below the national average of 31.4 ha. Since approx. 50% of the farms are less than 20 ha (50 acres) it is likely that part-time farming is prevalent in the study area and that most of the land will be used for dry-stock farming. In addition, the Census of Agriculture, 2002<sup>6</sup>, indicates that on average there is a work input per farm 1.1 annual work units<sup>7</sup>, however, only 70% of this is provided by the holder. This further indicates that the farm holder may be supplementing income from off-farm activities.

From the above table there would appear to be more farm holdings in the west of the study area than in the east, this is consistent with greater concentration of large lakes in the eastern half of the area. There does not appear to be any pattern to the distribution of farm sizes either between DEDs or on an east-west basis. This suggests that the agricultural constraint is consistent throughout the study area.

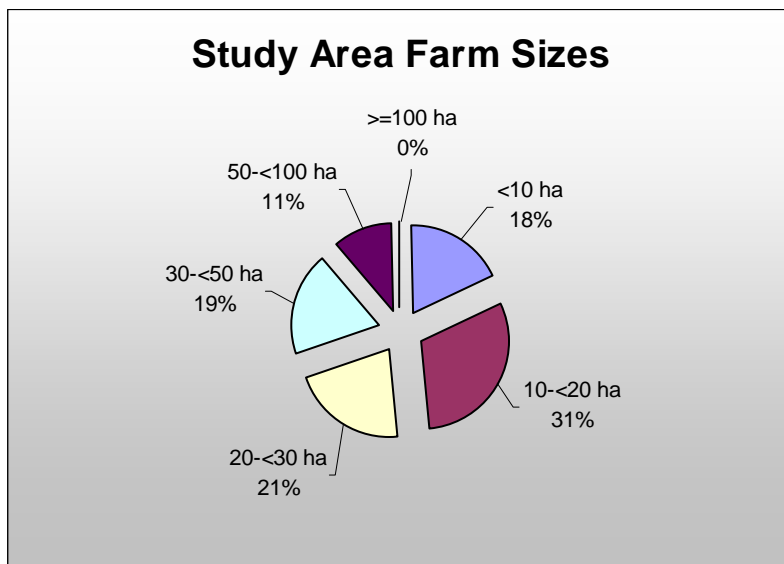
<sup>5</sup> Census 2006, Preliminary Report. Central Statistics Office (CSO), 2006

<sup>6</sup> Census of Agriculture Main Results, June 2000, Central Statistics Office, Dublin

<sup>7</sup> Annual Work Units (AWU) is a statistical measure equivalent to one person year of work = 1800 hours work. Defined in Census of Agriculture Main Results, June 2002.



**Figure 4.1 District Electoral Divisions**



**Figure 4.2 Study Area Farm Sizes**

### 4.3 Farms

The Department of Agriculture has mapped all land parcels in the country. Roscommon NRDO obtained an AutoCAD drawing showing each farm parcel in the study area and overlaid this with the seven route corridor options (See Drawing No. RN04250-12-\*\*\*\*). While it is recognised that each farm holding may consist of more than one farm parcel (according to CSO there are on average 3.5 parcels of land per Farm in County Roscommon<sup>8</sup>), the number of farm parcels within each corridor is taken as a proxy for the number of farm holdings affected and by association the relative level of farm severance. The number of farm units within bands of the centre of each corridor was considered and the results indicated in Table 4.3 below:

<sup>8</sup> Census of Agriculture Main Results, June 2000, Central Statistics Office, Dublin

	Opt 1	Opt 1A	Opt 2	Opt 2A	Opt 2B	Opt 3	Opt 4
Band	No Farm Units	No Farm Units	No Farm Units	No Farm Units	No Farm Units	No Farm Units	No Farm Units
0m – 50m	233	214	259	251	231	487	270
50m – 100m	267	292	364	323	290	507	334
100m – 200m	348	368	452	415	368	527	447
200m – 300m	372	411	537	482	444	530	498
300m – 450m	411	450	578	524	493	578	559
<b>Total</b>	<b>1631</b>	<b>1735</b>	<b>2190</b>	<b>1995</b>	<b>1844</b>	<b>2629</b>	<b>2108</b>

**Table 4.2 Farm Units Within Each Corridor – Potential Farm Impact (PFI)**

Route Corridor Option 1 has the lowest potential farm impact followed by Options 1A, 2B, 2A, 4, 2 and 3. Option 3 has the highest potential farm impact and is 61% higher than Option 1. It should be noted that there is little difference between Option 1, 1A, and 2B and that the width of corridors in all cases, except for Option 3, allows substantial scope for reducing the impacts to a minimum.

#### 4.4 Landcover

Corrine 2000 land cover mapping has been used to identify the main types of land cover along each route (See Drawing RN04250-12-\*\*\*\*). This is used to make a determination of the likely farming utility of the land and therefore make broad comparisons between corridors. Tables 4.4 and 4.5 below give a breakdown of the principal land cover categories traversed by each corridor.

Corridor	Length (km)	Non-irrigated Arable Land	Pasture	Peat Bogs	Transitional Woodland Scrub	Water Body	Principally Agri. Land with areas of Natural Veg	Natural Grasslands	Discontinuous Urban Fabric	Coniferous Forest	Inland March
1	33.7	2840	22363	2382	2613	294	1632	1041	136	399	0
1A	34.2	1869	23610	0	5355	294	1632	1041	0	399	0
2	34.6	2797	22888	0	5529	0	2489	0	0	0	897
2A	35.0	2758	23053	0	5968	0	2324	0	0	0	897
2B	34.7	2988	23373	0	5649	0	1593	0	0	0	1097
3	35.7	4407	28359	0	743	0	0	0	2191	0	0
4	38.0	2211	26470	202	6153	112	1745	0	0	0	1107

**Table 4.3 Land Cover Types (Length) Source: Corrine 2000 (EPA)**

Corridor	Length (km)	Non-irrigated Arable Land	Pasture	Peat Bogs	Transitional Woodland Scrub	Water Body	Principally Agri. Land with areas of Natural Veg	Natural Grasslands	Discontinuous Urban Fabric	Coniferous Forest	Inland March
1	33.7	8.4%	66.4%	7.1%	7.8%	0.9%	4.8%	3.1%	0.4%	1.2%	0.0%
1A	34.2	5.5%	69.0%	0.0%	15.7%	0.9%	4.8%	3.0%	0.0%	1.2%	0.0%
2	34.6	8.1%	66.2%	0.0%	16.0%	0.0%	7.2%	0.0%	0.0%	0.0%	2.6%
2A	35.0	7.9%	65.9%	0.0%	17.1%	0.0%	6.6%	0.0%	0.0%	0.0%	2.6%
2B	34.7	8.6%	67.4%	0.0%	16.3%	0.0%	4.6%	0.0%	0.0%	0.0%	3.2%
3	35.7	12.3%	79.4%	0.0%	2.1%	0.0%	0.0%	0.0%	6.1%	0.0%	0.0%
4	38.0	5.8%	69.7%	0.5%	16.2%	0.3%	4.6%	0.0%	0.0%	0.0%	2.9%

**Table 4.4 Land Cover Types (Percentage) Source: Corrine 2000 (EPA)**

Analysis of the above tables reveals the following principal considerations:

- Options 1 and 3 pass through areas described as urban fabric (built up areas) and in particular option 3 passes through the existing towns/ villages of Frenchpark, Bellanagare, Tulsk and Strokestown. Corridor 3 is likely to have a much higher impact on a greater number of properties than the other options. Option 1 may also have a slightly higher impact on properties because it passes close to Frenchpark on the northern side where development has tended to sprawl out from the town,
- Option 1 passes through a substantial area of bog, 7.1 % of its length, immediately east/ north east of Frenchpark. This is likely to have a slightly lower impact on farming, however, since some of this bog area is used to harvest turf by the farming community there may be an increased impact in this regard. In addition, some of this area is designated as a Natura 2000 site,
- Having regard to the land cover categories that might indicate that the land is conducive to agricultural practices (Non-irrigated Arable Land, Pasture, Principally Agricultural land with areas of natural vegetation, and Natural Grass Lands), with the exception of option 3, all other options cross a similar percentage of land in these categories (80.1 to 82.7%). This indicates that there is little difference between the options as regards suitability of land for farming. In addition, Option 3 is only a little higher with 91.8% regarded as suitable.
- Option 4 is significantly longer (38.0km) than the other options (average 34.6km) and with a similar percentage of suitable agricultural land must be considered to be more intrusive than the others.

On balance, option 3 is the least favoured because it would impact on the greatest number of properties. Options 1 and 4 are the next least favoured because option 1 passes close to Frenchpark and may affect a greater number of properties. Option 4 is significantly longer than the average (34km) and is therefore more likely to affect a greater number of properties and agricultural holdings. Therefore, based on land cover and its likely correlation with farming activities and property locations, options 1A, 2, 2A and 2B are preferable on an equal basis.



## 4.5 Property Counts

The GeoDirectory is the result of a collaboration between An Post and the Ordnance Survey of Ireland. It provides a database of addresses in Ireland each located with a unique national grid coordinate (easting and northing). This information was overlaid with the seven route corridor options and used as a proxy for properties. All properties within 300m of the centreline of each corridor has been identified and put into one of five “band”. These bands have been arbitrarily rated in reverse order to give a single number Potential Properties Affected (PPA) for each route. The larger the PPA the greater the potential impact, however, this has to be moderated against likely future development trends, particularly in or in proximity to towns and villages. The following Tables 4.6 to 4.12 show the un-moderated PPA for each route corridor option:

<b>Route Corridor Option 1</b>			
<b>Band</b>	<b>No of Properties</b>	<b>Rating</b>	<b>Result</b>
<b>0m – 50m</b>	<b>27</b>	<b>4</b>	<b>108</b>
<b>50m – 100m</b>	<b>30</b>	<b>3</b>	<b>90</b>
<b>100m – 200m</b>	<b>87</b>	<b>2</b>	<b>174</b>
<b>200m – 300m</b>	<b>111</b>	<b>1</b>	<b>111</b>
<b>Total</b>	<b>255</b>		
<b>Potential Properties Affected (PPA)</b>			<b>483</b>

Table 4.5 PPA (Un-moderated) Route Corridor Option 1

<b>Route Corridor Option 1A</b>			
<b>Band</b>	<b>No of Properties</b>	<b>Rating</b>	<b>Result</b>
<b>0m – 50m</b>	<b>30</b>	<b>4</b>	<b>120</b>
<b>50m – 100m</b>	<b>33</b>	<b>3</b>	<b>99</b>
<b>100m – 200m</b>	<b>77</b>	<b>2</b>	<b>154</b>
<b>200m – 300m</b>	<b>74</b>	<b>1</b>	<b>74</b>
<b>Total</b>	<b>214</b>		
<b>Potential Properties Affected (PPA)</b>			<b>447</b>

Table 4.6 PPA (Un-moderated) Route Corridor Option 1A

<b>Route Corridor Option 2</b>			
<b>Band</b>	<b>No of Properties</b>	<b>Rating</b>	<b>Result</b>
<b>0m – 50m</b>	<b>39</b>	<b>4</b>	<b>156</b>
<b>50m – 100m</b>	<b>42</b>	<b>3</b>	<b>126</b>
<b>100m – 200m</b>	<b>79</b>	<b>2</b>	<b>158</b>
<b>200m – 300m</b>	<b>72</b>	<b>1</b>	<b>72</b>
<b>Total</b>	<b>332</b>		
<b>Potential Properties Affected (PPA)</b>			<b>512</b>

Table 4.7 PPA (Un-moderated) Route Corridor Option 2

<b>Route Corridor Option 2A</b>			
<b>Band</b>	<b>No of Properties</b>	<b>Rating</b>	<b>Result</b>
<b>0m – 50m</b>	<b>34</b>	<b>4</b>	<b>132</b>
<b>50m – 100m</b>	<b>40</b>	<b>3</b>	<b>120</b>
<b>100m – 200m</b>	<b>78</b>	<b>2</b>	<b>156</b>
<b>200m – 300m</b>	<b>76</b>	<b>1</b>	<b>76</b>
<b>Total</b>	<b>228</b>		
<b>Potential Properties Affected (PPA)</b>			<b>484</b>

Table 4.8 PPA (Un-moderated) Route Corridor Option 2A

<b>Route Corridor Option 2B</b>			
<b>Band</b>	<b>No of Properties</b>	<b>Rating</b>	<b>Result</b>
<b>0m – 50m</b>	<b>34</b>	<b>4</b>	<b>132</b>
<b>50m – 100m</b>	<b>38</b>	<b>3</b>	<b>114</b>
<b>100m – 200m</b>	<b>78</b>	<b>2</b>	<b>176</b>
<b>200m – 300m</b>	<b>78</b>	<b>1</b>	<b>78</b>
<b>Total</b>	<b>228</b>		
<b>Potential Properties Affected (PPA)</b>			<b>500</b>

Table 4.9 PPA (Un-moderated) Route Corridor Option 2B

<b>Route Corridor Option 3</b>			
<b>Band</b>	<b>No of Properties</b>	<b>Rating</b>	<b>Result</b>
<b>0m – 50m</b>	<b>488</b>	<b>4</b>	<b>1952</b>
<b>50m – 100m</b>	<b>179</b>	<b>3</b>	<b>537</b>
<b>100m – 200m</b>	<b>245</b>	<b>2</b>	<b>490</b>
<b>200m – 300m</b>	<b>152</b>	<b>1</b>	<b>152</b>
<b>Total</b>	<b>1064</b>		
<b>Potential Properties Affected (PPA)</b>			<b>3131</b>

Table 4.10 PPA (Un-moderated) Route Corridor Option 3

<b>Route Corridor Option 4</b>			
<b>Band</b>	<b>No of Properties</b>	<b>Rating</b>	<b>Result</b>
<b>0m – 50m</b>	<b>48</b>	<b>4</b>	<b>192</b>
<b>50m – 100m</b>	<b>42</b>	<b>3</b>	<b>126</b>
<b>100m – 200m</b>	<b>65</b>	<b>2</b>	<b>130</b>
<b>200m – 300m</b>	<b>87</b>	<b>1</b>	<b>87</b>
<b>Total</b>	<b>242</b>		
<b>Potential Properties Affected (PPA)</b>			<b>570</b>

**Table 4.11 PPA (Un-moderated) Route Corridor Option 4**

With the exception of option 3, each of the route corridor options provides substantial scope to avoid direct impact on properties through avoidance. Option 3 is mainly online and therefore passes through the towns and villages with little scope for reduction in the number of properties encountered. Considering the Potential Properties Affected, Option 1A is the most favourable since the number of properties within the various bands is lower and, after the application of ranking based on distance from the centre of the corridor, the potential properties affected is also the lowest. Based on the PPA, option 1A is followed by 1, 2A, 2B, 2, 4, 3.

## 4.6 Planning Applications

A search for Planning Applications in the Study Area was undertaken in cooperation with Roscommon County Council's Planning Department during the Constraints Study Phase. The search covered the years from January 2000 to March 2007 and was restricted to areas outside urban conurbations. The data records Planning Applications and the decisions made on them by Roscommon County Council. This was updated on a continual basis with the final update to March 2007 (See Appendix 1 and Drawing RN04250-12-362). There were 1047 applications for planning permission within the study area over the period. This information is a useful aid in the identification of development trends and showed that remote from the settlement areas, development has taken place in a characteristic rural pattern - along roadsides and in particular along the existing N5. The spread of planning applications is generally indicative of the existing farm and residential type settlement pattern within the study area with notable "clear areas" in peat land areas such as Bellanagare Bog and Cloonshanville Bog. Generally, there is an even distribution of planning applications throughout the study area with no determinable conglomerations outside the existing settlement areas.

Table 4.13 below summarises the number of applications granted within each corridor over the period Jan. 2000 to March 2007. As expected, the highest number of applications granted is associated with Option 3. Option 1 and Option 2A have slightly higher numbers of permissions granted. This is related to proximity of Option 1 to Frenchpark and the length of Option 2A along the existing N5.

Route Option	Planning Applications
1	68
1A	59
2	60
2A	73
2B	62
3	98
4	60

**Table 4.12 Planning Applications**

## 5 EMERGING PREFERRED ROUTE CORRIDOR

### 5.1 Emerging Preferred Route

Five principal factors were considered as part of the Agriculture and Property assessment of the route corridor options:

1. The average farm size and the distribution of farm sizes throughout the study area. This gives a broad indication of any differences in farming intensity within the study area and also, by considering the farm size, the likelihood of farm incomes being supplemented by off-farm activities, e.g. part-time work. Central Statistics Office data was used. The results indicate:
  - The distribution of farm size is relatively uniform and therefore there is likely to be an equal constraint for each corridor option,
  - Farm size is relatively small and it is therefore likely that in some cases farm income will be supplement from other sources,
  - There is little or no difference between the route options in relation to this criteria,
2. The number of farm units intersected by each of the corridors. This gives an indication of the number of individual farms that may be impacted and the level of farm severance along each corridor. This criteria gives preference for option 1 with options 1A and 2B close followers. Due to the width of the corridors and the potential to mitigate by avoidance there is little difference between any of these options. Since Option 3 is along the existing route it is likely to have the least overall impact in relation to additional severance,
3. The land cover pattern traversed by each of the route corridor options was considered in order to give an indication of the relative farming suitability/ productivity of the land in each case. This showed that there was little difference in the land cover pattern along all option with the exception of Option 3. However, Option 4 is the longest option and therefore likely to have a greater potential impact. In addition, option 1 passes close to the built-up area around Frenchpark and may have a slightly increased impact potential. There is very little difference between the remaining options but the preference is, in descending order, 1A, 2, 2A and 2B.
4. The Potential Properties Affected (PPA) for each corridor was based on the number of properties located within various bandwidths of the corridor centreline. This is a straightforward counting exercise but must be moderated by the likely future development trends, particularly in or in proximity to towns and villages. Bearing in mind that, with the exception of corridor 3, each option provides significant scope to avoid direct impact during the subsequent design stage, the preferred options are 1A, 1, 2B, 2A, 2, 4, 3.
5. The number of Planning Applications within Each Corridor Option was used to identify any new development trends in the study area and to give an indication of the relative affect of each corridor option on current planning development. There are no new noticeable trends or concentrations in planning applications. In addition, with the exception of corridor 3, there is little difference between the other options.

Having regard to the factors outlined above and the assessment carried, the emerging preferred route corridor, from an agriculture and property perspective, is Option 1A (see Table 4.12 below). However, there is little difference overall between Options 1, 1A, 2, 2A and 2B. Option 4 is

slightly less favoured because of its greater overall length. Option 3 is least favoured because of its impact on property in particular.

Route Option	Ranking
1A	1
1	2
2	3
2A	4
2B	5
4	6
3	7

**Table 5.1 Route Options Preference (Agriculture and Property)**

## 5.2 Conclusions

Having considered various parameters that would indicate the relative impacts of each corridor on agriculture and property for each corridor, Route Option 1A emerged as the preferred route corridor. However, with the exception of Options 3 and 4, there is little difference between Corridor 1A and the remaining corridor options. This is primarily because the constraint posed by agriculture and property is largely uniform throughout the study area. In addition, the width of each of the corridors provides substantial scope to avoid impacts through the subsequent design process.

## Appendix 1 Planning Applications

Route Corridor	Planning Application Granted	Planning Applications Pending
1	68	5
1A	59	8
2	60	7
2A	73	8
2B	62	7
3	98	6
4	60	5

**Planning Application per Route Corridor Option (Jan 2000 to Mar. 2007)**