

1 INTRODUCTION

1.1 Introduction to Study Area

The A6 between Randalstown and Castledawson is part of the North Western Key Transport Corridor connecting Belfast to Londonderry via Toome, Maghera and Dungiven. With traffic levels continuing to grow and anticipated expansion of local industry, traffic congestion will increase and road safety will deteriorate. The proposed dual carriageway will deliver improved road safety for both strategic and local road users and will facilitate further expansion of local industry in the area.

Part of the route has been improved to dual carriageway at Toome. The existing single carriageway west of Toome to Castledawson roundabout is 5.4 kilometres long whilst the existing single carriageway east of Toome to the M22 at Randalstown is 6.7 kilometres long. To the west of the Castledawson roundabout the road is single carriageway and to the east of Randalstown the road is dual two-lane motorway. Traffic on the route increases from 12,000 vehicles per day east of Castledawson roundabout to 14,500 vehicles per day west of Toome to 17,500 vehicles per day between Toome and the M22 at Randalstown.

The study area is shown in Figure 1.1

1.2 Strategic Need for Route Improvements

The Department for Regional Development (DRD) has developed a 10-year Regional Transportation Strategy (RTS) for Northern Ireland. Northern Ireland's dispersed population is served by an extensive road network of almost 25,000 kilometres, of which some 1,200 kilometres are trunk roads, or Key Strategic Transport Corridors and Link Corridors, connecting the major towns. Within this strategic trunk road network, high capacity roads such as dual carriageways and motorways carry the heaviest traffic volumes. There are a number of "bottlenecks" on the road network where the capacity of a particular stretch of road is insufficient. Traffic congestion and delays occur during these peak periods on every weekday and even at other times throughout the week. The RTS, amongst other things, identified parts of the Key Strategic Transport Corridors and Link Corridors where improvements were required.

Based on the guidance set out in the RTS, the DRD developed a Regional Strategic Transport Network Transport Plan 2015 (RSTN TP) for the maintenance, management and development of the transport network up to the end of 2015. The plan includes a programme for the implementation of Strategic Road Improvements (SRIs) to remove bottlenecks on the key network where lack of capacity is causing serious congestion, and to improve the environment by providing bypasses to towns situated on the RSTN, thus relieving the effects of heavy through traffic.

Roads Service manages the delivery of SRI's through the following programmes:

- Construction Programme: Schemes already under construction;
- Preparation Pool: High priority schemes that Roads Service is committed to progressing through the statutory procedures of Environmental Appraisal, Direction Order (equivalent to planning approval) and Land Vesting. Preparation Pool schemes are expected to be implemented within the next 5 years or so (subject to clearing the statutory procedures, having a satisfactory economic appraisal and the availability of funds at the time);
- Forward Planning Schedule: Schemes that perform well when assessed at feasibility stage using the 5 national criteria and which are expected to be implemented within the next 10 years or so (subject to clearing the statutory procedures, having a satisfactory economic appraisal and the availability of funds at the time);
- Long Term Planning Schedule: The Long Term Planning Schedule is a list of SRIs, which are not expected to be started within the next 10 years or so but have a strategic benefit.

Scott Wilson and Ferguson McIlveen were commissioned by Roads Service to examine the following Key Strategic Improvements on the North Western Key Transport Corridor, especially to:

- progress proposals for improvements between Randalstown and Castledawson (a Preparation Pool scheme) through the statutory procedures of Environmental Appraisal, Direction Order and Land Vesting; and
- develop proposals for a bypass of Dungiven (a Forward Planning Schedule scheme) through to Stage 2 Environmental Appraisal, which establishes a "preferred option alignment" for the bypass. This alignment will be included in the forthcoming Northern Area Plan (NAP). Inclusion in the NAP will ensure that planning permission will not be granted for development that would prejudice the availability of land for the construction of Dungiven Bypass.

1.3 Consultant's Brief

Roads Service commissioned Scott Wilson and Ferguson McIlveen to progress proposals for improvements to the North West Key Transport Corridor between Randalstown and Castledawson. This would involve developing a preferred alignment and progressing this through the statutory procedures of Environmental Appraisal, Direction Order and Land Vesting.

The Brief for carrying out this work identified 6 Phases through which the scheme would progress. These were as follows:

- Review information;
- Analyse existing route;
- Preferred route corridor;

- Preferred route option;
- Stage 3 Environmental Assessment; and
- Statutory Orders.

1.4 Preferred Route Corridor

The Stage 1 Preferred Route Corridor Report, issued to Roads Service in October 2004, describes the work carried out during Phases 1 to 3 of the Commission. Separate reports were prepared for the proposed strategic road improvements east and west of Toome. The ‘Stage 1 Report - Preferred Route Corridor – Randalstown to Toome Dualling’ summarised the assessment carried out on 8 route options between Randalstown and Toome. The on-line and off-line options were developed within 3 distinct corridors: the North corridor lying largely to the north of the existing road, the Central corridor largely straddling the existing road and the South corridor lying largely to the south of the existing road.

The Stage 1 Report summarised the assessment of the routes and corridors using the criteria defined in the Design Manual for Roads and Bridges (DMRB) and the Government’s over-arching objectives for transport. A scheme specific ‘comparative route appraisal’ was also formulated to complement these procedures. Appraisal of the route options, under Engineering, Economic and Environmental criteria, concluded that route options 6, 7 and 8 were superior in most respects. Appraisal of the route corridors concluded that the South corridor was superior in most respects.

The Stage 1 Report recommended that the South corridor (encompassing route options 6, 7 & 8) was taken forward to Stage 2 assessment where more detailed investigation as to their merit would be carried out.

For the purpose of the public consultation exercise Route Options 6, 7, and 8 were renamed Red, Blue and Brown respectively, as shown in figure 1.2.

1.5 Stage 1 Public Exhibition

A 2-day exhibition of the Preferred Route Corridor was held in Toome House on 15th & 16th February 2005. Landowners likely to be affected by the proposals, local and national politicians from the area and others considered likely to have an interest in the proposal were made aware of the exhibition by letter. The exhibition was also widely publicised through advertisements in the local press. Brochures outlining the scheme proposals were also deposited in local retail outlets.

The well-attended 2-day exhibition yielded an abundance of constructive comment. Visitors were encouraged to discuss the proposals with the Roads Service and Consultant staff manning the exhibition and to comment in writing via the brochure questionnaire, letter or email.

A number of comments received objecting to the Preferred Route Corridor related to the area covered by the North corridor, and that by extending it further north, alternative more suitable routes could be developed.

Comment was received regarding the Central corridor, which suggested that further route options could be developed which used more of the existing roads. Similarly, some off the offline Central corridor options could be brought closer to the existing A6 to minimise property take.

1.6 Stage 1 Addendum Report

Comments received during the Stage 1 Public Exhibition were discussed in detail with Roads Service and it was agreed that additional alignments be developed within the North and Central corridors. A number of options were developed within an extended North Corridor, and the existing Central corridor. Two route options were selected to undergo Stage 1 assessment, namely Route Option 9 within the extended North corridor, and Route Option 10 within the Central corridor. Route Options 9 and 10 underwent Stage 1 Assessment along with the original eight route options. The route options and route corridors were assessed under the ‘comparative route appraisal’ developed for the Stage 1 Assessment.

The Stage 1 Addendum Report, issued to Roads Service in June 2005, recommended that the South Corridor (encompassing route options 6, 7 & 8) and a narrow corridor around Route Option 9 is taken forward to Stage 2 assessment where more detailed investigation as to their merit would be carried out.

For the purpose of the public consultation exercise Route Option 9 was renamed the Purple Route, as shown in figure 1.2.

1.7 Stage 1 Addendum Public Exhibition

A further 2-day exhibition of the Stage 1 Addendum Report recommendations was held in Toome House on 15th & 16th June 2005. As before, landowners likely to be affected by the proposals, local and national politicians from the area and others considered likely to have an interest in the proposal were made aware of the exhibition by letter. The exhibition was also widely publicised through advertisements in the local press. Brochures which outlined the proposals, were also deposited in local retail outlets.

The well-attended 2-day exhibition again yielded an abundance of constructive comment. Visitors were encouraged to discuss the proposals with the Roads Service and Consultant staff manning the exhibition and to comment in writing via the brochure questionnaire, letter or email.

Following the second Public Consultation exercise, some further refinements were made, finalising the four alignments.

1.8 Preferred Route Option

Separate reports have been prepared for the proposed strategic road improvements for Randalstown to Toome and Toome to Castledawson. This report examines the ‘Approved Route Options’ for the Randalstown to Toome improvements. The format for this Stage 2 Approved Options Report follows the Stage 2 Route Option Assessment methodology defined in DMRB and the Government’s overarching objectives for transport. The Approved Options stage builds upon the Preferred Route Corridor assessment, and concludes with a recommendation of a preferred route to be taken forward through Statutory Procedures.

The body of the Approved Options Report is divided into the following principal sections:

- Public Consultation;
- Engineering Assessment;
- Environmental Assessment;
- Traffic and Economic Assessment; and
- Appraisal Framework.

It should be noted that the Comparative Route Appraisal methodology, adopted as a means of assessment at the Preferred Route Corridor stage, was deemed unsuitable for the Approved Options stage, as this is a more detailed assessment of only four route options.

The four Approved Route Options recommended to be taken forward to this Stage 2 assessment are described below:

- Route Option 6 comprises of online widening from Drumderg Roundabout through to Drumaslough Hill. West of Drumaslough Hill, option 6 would continue off-line to the south of the existing A6 through Drumcullen, across Ballynafey Road, south of Moneynick to tie into the M22 at Randalstown.
- Route Option 7 was similar to option 6 but is offline throughout. From the Drumderg roundabout to Drumaslough Hill, option 7 runs parallel and to the south of the existing A6. West of Drumaslough Hill it follows a similar route to option 6 south of the existing A6 tying into the M22 at Randalstown.
- Route Option 8 is offline throughout to the south of the existing A6. Option 8 is further south of option 7 from Drumderg roundabout to Drumaslough Hill. West of Drumaslough Hill it follows a similar route to options 6 and 7, tying into the M22 at Randalstown.
- Route Option 9 is offline to the north of the existing A6. From Drumderg roundabout, option 9 crosses Lismacloskey Road, passing north of Drumaslough Hill and Drumcullen. It crosses Gloverstown Road passing north of Moneynick, crossing Artlone Road and Derryhollagh Road before crossing the existing A6 west of Derryhollagh Cottages. It then crosses Aghaloughan Road before tying into the M22 at Randalstown.

As reported in the Preferred Route Corridor Report, the ‘Moving Forward’ document published by the Department of the Environment for Northern Ireland requires that all new road building proposals developed in Northern Ireland be assessed on the basis of five ‘Central Government Objectives for Transport’, namely Environmental Impact, Safety, Economy, Accessibility, and Integration. The Appraisal Framework section of this report presents each route option in the Assessment Summary Tables (ASTs) to enable these criteria to be considered. This is presented as tabular summary of the main economic, environmental and social impacts of any transport option and was developed by the SETR and Highways Agency in England and the Scottish Executive in Scotland.

The Appraisal Framework section of this report presents the route option assessments in Assessment Summary Tables (ASTs). The Appraisal Summary Table format has been developed to summarise the main economic, environmental and social consequences of a transport investment proposal. Presenting the information in this way provides decision takers with a clear and reliable basis for their decisions, without giving prominence to any one type of impact or to benefits expressed in monetary terms compared with those that cannot be monetised. The Appraisal Summary Table provides a formal and comprehensive assessment according to the principles:

- All significant impacts are measures;
- Wherever possible, the assessments reflect the numbers affected (drivers, residents, sites and so on) as well as the impact on each;
- Ensure transparency: assessments are carried out in a structured way, using specified information;
- Simple judgements of overall impact are avoided; and
- Assessment of any specific subsidiary objective is, as far as possible, comparable between proposals.

Putting these principles into practice is difficult to achieve. It is not possible to specify quantitative measures for all objectives, and summary assessments take three different forms:

- Where current appraisal practice is to estimate monetary values, these are used, presented as present values – this applies to safety, journey times and vehicle operating costs, and scheme cost objectives;
- Where reliable quantified assessments can be made, these are used – this applies to noise and local air quality objectives; and
- Where quantified assessments cannot be made, or where they are very broad brush, a textual scale is used – this applies to all other objectives.

It is important to note that summary assessments are not generally comparable between objectives. The summary assessments enable those making the decisions to compare the impacts of one option with those same impacts, which would result from other options. But because the various impacts measured in the Appraisal Summary Tables are very different from each other, they cannot be combined into a single measure of an options overall performance.



**FERGUSON
McILVEEN**



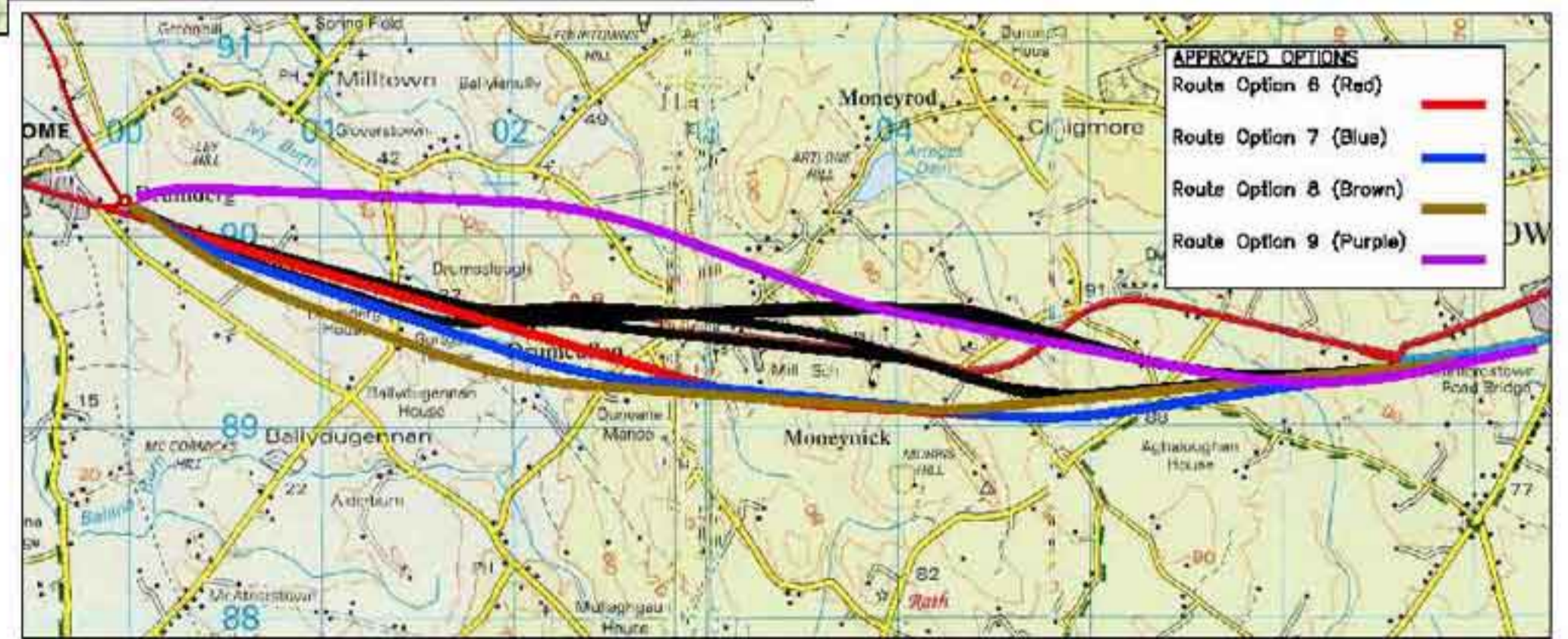
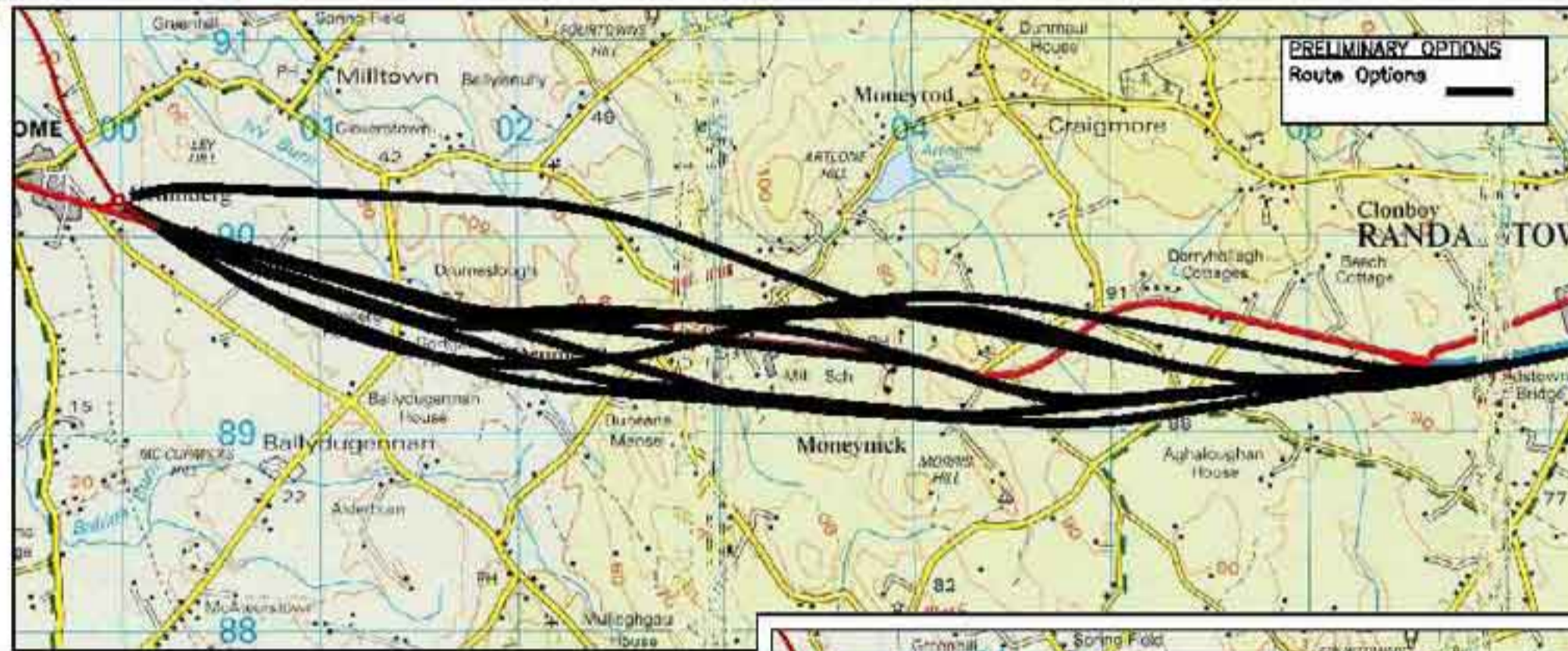
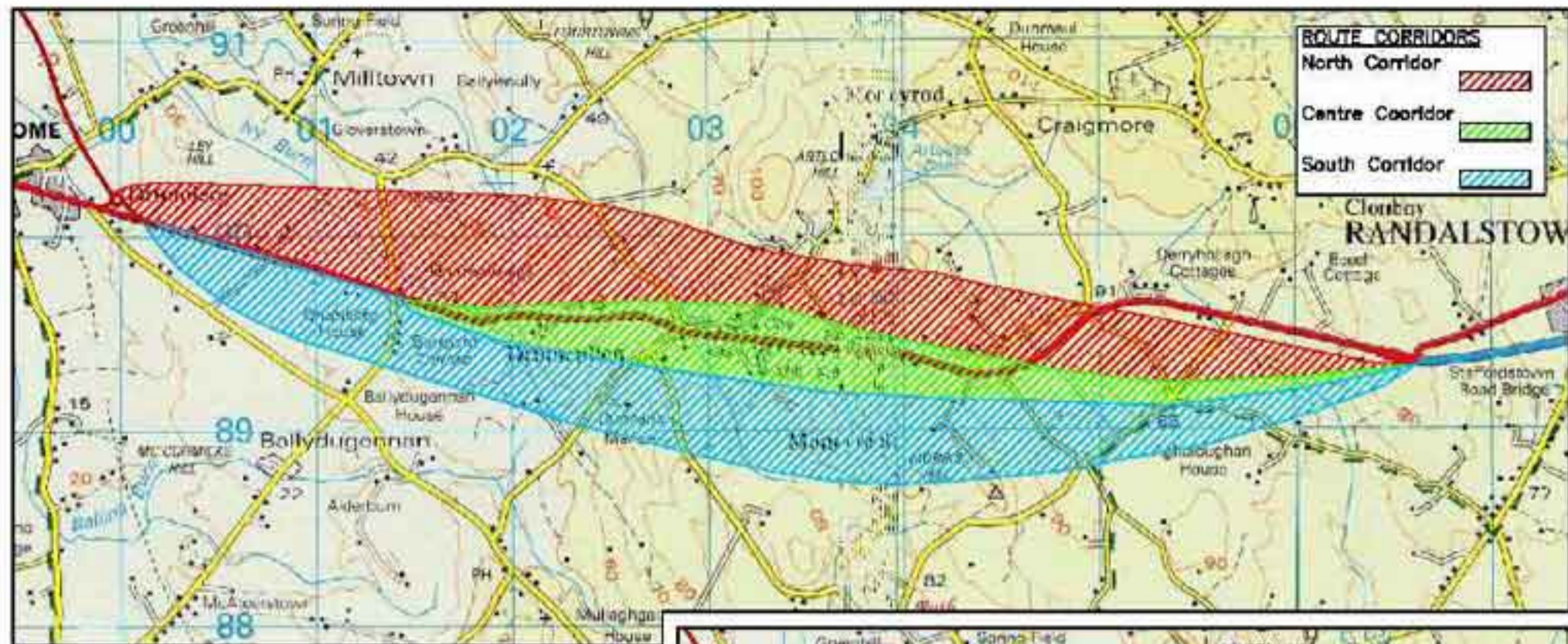
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Toome Kin, B9
Hargrave, Millbrook
Beechill House
Droghda Road
Peltaw
UL # 7902



A6 Randalstown to Toome Dualing
Location Plan

Figure 1.1



**FERGUSON
MCILVEEN**



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A6 Randalstown to Toome Dualing

**Development of Preliminary To
Approved Route Options**

Figure 1.2