ESB International
ESBI Energy Innovation

North Kerry Project

Stage Two: Evaluate Options

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Stage Two Report

EIRGRID

ESBI Engineering

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NOTE TO READER: THIS IS THE NORTH KERRY STAGE 2 REPORT WHICH FOLLOWS THE STAGE 1 REPORT. IT SHOULD THEREFORE BE READ WITH REFERENCE BACK TO THE STAGE 1 REPORT.

Chapter 1. Introduction

1.1 Overview of the North Kerry Project

EirGrid is proposing a new electricity transmission reinforcement scheme in North Kerry, known as the North Kerry Project (NKP). This comprises an important element of the EirGrid Grid25 strategy for network reinforcement in the south-west region of Ireland. The strategic need and justification for the NKP has been separately detailed in the Stage 1 Lead Consultant's Report in respect of the project; this Stage 2 Report should be read in conjunction with that separate Stage 1 Report, available on the EirGrid projects webpage:

http://www.eirgridprojects.com/projects/northkerryproject/

In summary, the overall North Kerry Project comprises 2 no. elements:

- Construction of a new 220/110kV electricity substation to remedy transmission network problems in this region. The new station will be sited at a location to the east of the town of Listowel, adjacent to the existing regional Tarbert (Co. Kerry) to Clashavoon (Co. Cork) 220kV line. It will also connect with the existing local 110kV transmission lines which run from Tarbert to Trien in Co. Kerry, and from Trien to Dromada in Co. Limerick. As such, the project includes the associated looping of these existing 220kV and 110kV lines into the new station;

- Construction of a new 110kV circuit, connecting a planned windfarm cluster at Cloghboola, Co. Kerry (via a planned 110kV electricity substation), to the existing Trien 110kV substation, approximately 10km to the north. The existing Trien 110kV substation is located approximately 3km south-east of Listowel.

The area of the proposed NKP is identified at Figure 1.1

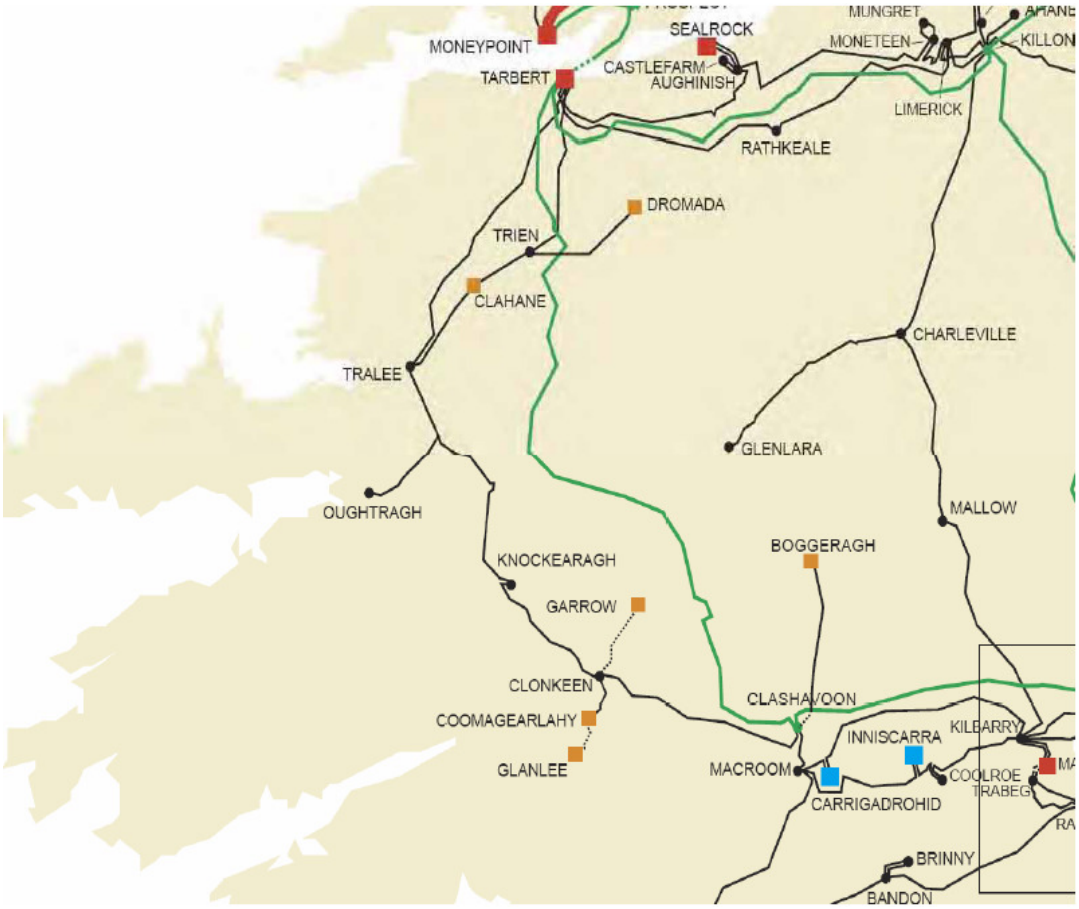

Figure 1.1 Map shows the existing regional transmission network of the Kerry, Cork, South Clare and West Limerick area.

1.2 The Purpose of this Report

The objectives of the project must be achieved having regard to the proper planning and sustainable development of the area where the project is located. To best ensure this outcome is achieved, and to ensure consistency across all its transmission projects, EirGrid has developed a Project Roadmap as shown in Figure 1.2 below:

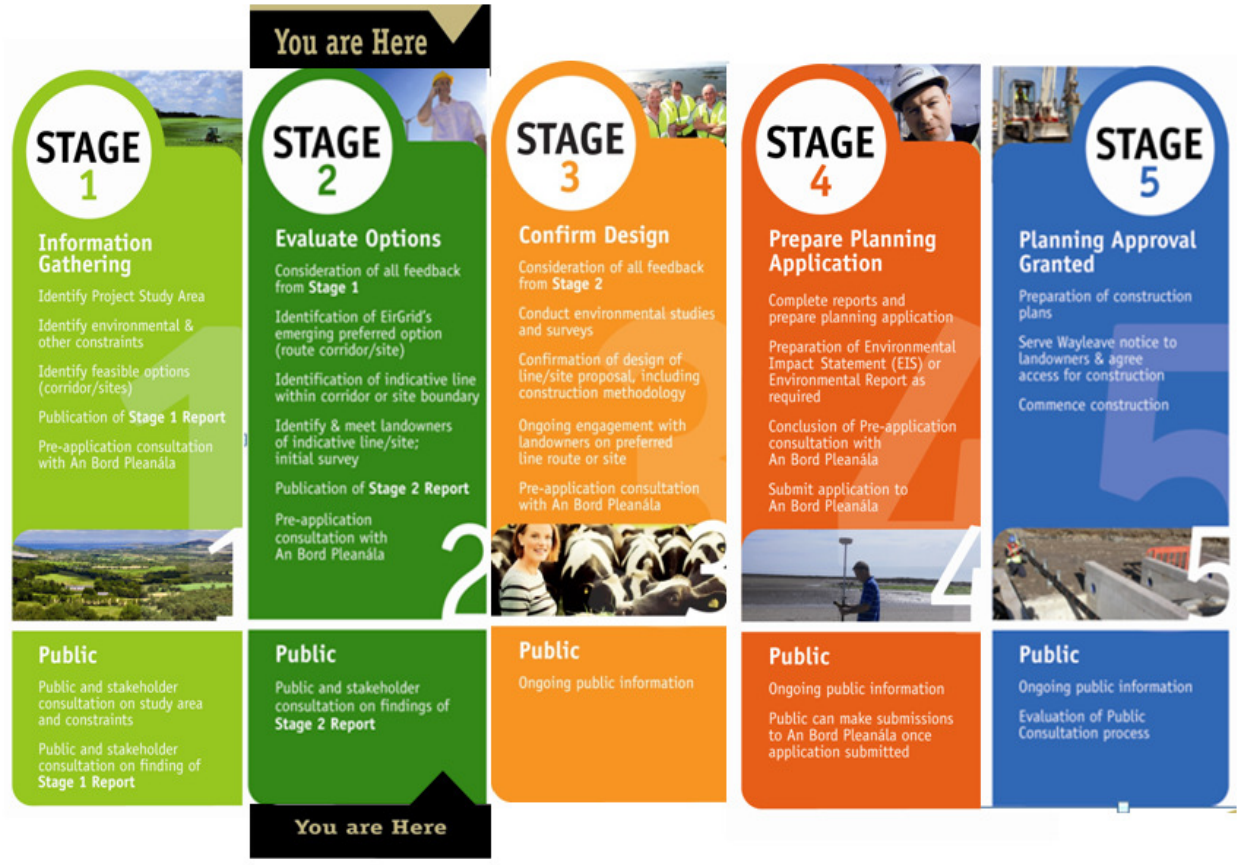

Figure 1.2 – EirGrid Project Roadmap

The roadmap divides projects into five distinct planning stages, with each phase having its own principal objective. (Information Gathering, Evaluate Options, Confirm Design, Prepare Planning Application and Planning Approval Granted). The purpose of this Stage 2 Report is to outline the processes and decisions arising from and occurring since the publication of the Stage 1 Consultant's Constraints Report.

In accordance with the Project Development Roadmap, this Stage 2 Report gives consideration to all feedback arising from Stage 1. Following this, the Report endorses a preferred substation site and associated loop-in of the existing circuits, as well as a preferred corridor for the planned new circuit between Cloghboola and Trien substations. It also identifies an indicative preferred route for that new circuit. This will form the basis for further consulation, prior to Stage 3 confirmation of the proposed NKP, and progression towards an application for development consent.

This Stage 2 Report details the process that has been undertaken in order to confirm the emerging preferred station site, and associated emerging preferred overhead line (OHL) loop-in corridors, and identified indicative routes within those preferred corridors.

The Stage 2 Report also details the process undertaken to confirm the identified emerging preferred corridor in which the new circuit between Cloghboola and Trien substations might best be located, as well as to identify an indicative preferred route for this circuit.

Essential to this evaluation is the Stage 1 Information Gathering and associated consultation process in which all interested parties (statutory and non statutory agencies/bodies and the general public) were given the opportunity to provide feedback and comment on the project process, procedures and conclusions, primarily as set out in the Stage 1 Lead Consultant's Report. The findings of the Stage 1 process were outlined at an open day in Duagh in May 2011, with the final Stage 1 Report subsequently published by EirGrid in October 2011. The consultation process also included some early landowner engagement. The feedback arising from this process is summarised in this report, including identification of modification to the project as originally identified in the Stage 1 Consultant's Constraints Report.

1.3 Overview of the Stage 1 Process

The Stage 1 process of information gathering as recorded in the Stage 1 Consultant's Constraints Report is as follows:

- Presented the need for the North Kerry Project;
- Established a study area for the project ;
- Identified the environmental and other constraints within the study area;
- Identified initial and additional NK substation site options for the project within the defined study area;
- Identified that the existing ESB substation at Trien was the most suitable location for the Cloghboola Windfarm connection;

- Identified potential route corridor options for the new Cloghboola - Trien 110kV circuit, within the defined study area;
- Evaluated the various corridor options, having regard to environmental and engineering constraints;
- Identified an emerging preferred 220/110kV station site and corridor options for the project.

1.4 Conclusions of the Stage 1 Report

In summary, the emerging preferred NKP solution as detailed in the Stage 1 Consultant's Constraints Report is as follows:

- The emerging preferred North Kerry 220/110kV station site is located near Kilmeany/Kilmorna, in the townland of Trien. The necessary network connectivity is provided by looping in the existing Clashavoon – Tarbert 220kV OHL, the Dromada (Athea) – Trien OHL, and the Tarbert - Trien 110kV OHL – these will be achieved with a minimal addition of new OHL in this area;

- The emerging preferred connection from the planned Cloghboola 110kV substation is to the existing Trien 110kV substation in the townland of Trienearagh via an identified western corridor option. The existing Trien substation will require works to facilitate this new circuit. Due to existing Natura designations in this area (Special Protection Area – SPA), the connection from the planned windfarm and associated station will be part underground cable (UGC) and part OHL. From the planned windfarm cluster, the UGC follows existing roads out of the designated SPA via cable to the townland of Patch; from here it will be routed by OHL within the identified western corridor to Trien substation.

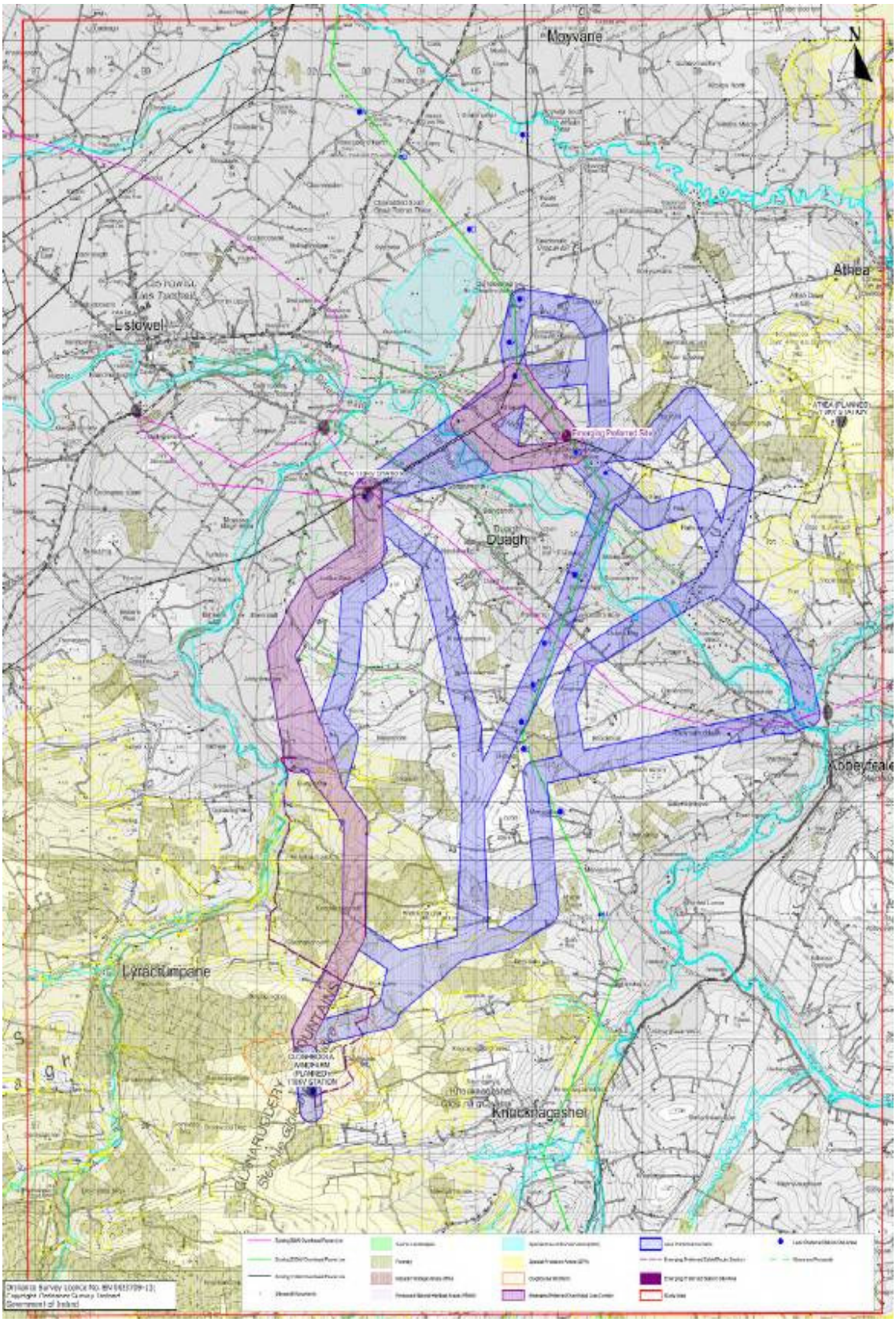

Figure 1.4 Map with emerging preferred solutions as outlined in the Stage 1 report.

Chapter 2. Consultation on the Stage 1 Report

2.1 Overview of the Consultation Process

Public consultation during Stage 1 of the project facilitated meaningful engagement with, and input from all concerned groups and individuals on the content of the Stage 1 report.

Consultation can be broadly separated between that with statutory agencies/bodies, that with non statutory agencies/bodies and that with the general public (which might also include landowners). The principles behind consultation are to engage in open, honest and meaningful discussion, and evaluating, and incorporating where possible or appropriate, all comments and suggestions arising.

2.1.1 Consultation with Statutory Agencies/Bodies (Prescribed Bodies)

The project team endeavoured to consult with those relevant bodies identified in Article 213 of the Planning and Development Regulations 2001-2011 (referred to as Prescribed Bodies). An Bord Pleánala and Kerry County Council are included in this group of consultees.

Consultation letters, a project briefing document and a copy of the Stage 1 Report were issued in October 2011. These letters were followed up with phone calls, e-mails and meetings as requested.

2.1.2 Consultation with Non Statutory Consultees

Consultation was undertaken with other non-statutory consultees. Consultation letters were issued in October 2011, notifying consultees of the publication of the Stage 1 Consultant's Constraints Report, and its location for online download, or otherwise how to request a hard copy from EirGrid. These letters were followed up with phone calls, e-mails and meetings as requested.

2.1.3 Consultation with the General Public

The local knowledge of both landowners and communities is invaluable to the project team and therefore their input is essential. The Stage 1 public consultation strategy took the form of:

Briefing Document: The production of a project specific briefing document (see Appendix 2 (Pg. 1 - 8)) which provided contact details of the project team;

Website: The updating of the project specific Web Page (www.eirgridprojects.com/projects/northkerryproject) facilitated widespread accessibility to project data and both the giving and receiving of information specific to the project. (see Appendix 3) A dedicated email account was set up for the project and a telephone number was provided for people to contact EirGrid and the project team directly.

Since the publication of the Stage 1 Report the project team has received queries from contact details given on the EirGrid website. This suggests a reasonable accessibility to project information via this media and written material issued as part of the ongoing project communications.

Open Day: A Public information day was held in the Community and Family Centre in Duagh on Friday May 27th 2011 between 12.00pm and 8.00pm. The public information day was previously advertised in local newspapers. (See Appendix 1) Notices were posted in local shops. Briefing documents and Maps were available at this open day, and remain available on request.

Some 60 no. people attended the Open Day. To coordinate interaction with the general public throughout the project the project team implemented a process ensuring that general and individual concerns are directly addressed by members of the North Kerry project team.

This primarily occurs through:

- Contact made through e-mail, by letter or phone.

- All information received is made available to all members of the project team for review.
- The lead consultants liaise with the EirGrid project managers to decide on the appropriate course of action.
- The Lead Consultant (an ESBI representative) contacts the individual concerned and becomes their point of contact for the duration of the project.
- The project team are always available to meet on request.

2.2 Feedback Received

A period of one month from the time of the public open day in May 2011 was given for the public to make submissions to the project team, and within which the project team would seek to accumulate information from statutory and non-statutory consultees. However, whilst an end date for public submissions was identified, it is the case that public and other feedback in respect of the project will always be accepted, considered and evaluated by EirGrid and the project team.

Important for the project team is the review and analysis of all feedback received throughout the consultation period. The project team assess if any of the feedback results in:

- Withdrawal of project or elements within.
- Evaluation of planned network i.e. minor deviations or the use of alternative routes submitted.
- Selection of alternative or modification of the project.

2.2.1 Statutory Agencies/Bodies

An Bord Pleanála

At the request of EirGrid, a second pre-application consultation meeting was held with An Bord Pleanála on July 28th 2011. This meeting discussed the progress of the project to date, and sought confirmation on the scope of the environmental reports and key parameters for the project.

The Department of Communications, Energy and Natural Resources

The Department welcomed the proposal to develop the electricity infrastructure as set out in the project, in order to deliver Government energy policy priorities, which correlate with the project objectives of improving quality and security of electricity supply to customers.

Kerry County Council

The Council broadly supports the project aims. At a meeting in June 2010, and subsequently, the Council made particular reference to road access to the new NK substation, stating a preference for site access from the L1023-21 Listowel-Abbeyfeale road, near Kilmeany/Kilmorna. (Fig 3.3.1) The Council agreed in principle that road safety measures would generally improve the situation here regarding local sight lines, roadside vegetation etc**.** The Council will also facilitate temporary road works during the construction period, and additional road signage once the new substation is operational.

Department of Arts, Heritage and Gaeltacht

The National Monuments Service (NMS)

A consultation letter was sent to the Development Applications Unit of the department. Additionally, in order to avail of local historical knowledge, letters were sent to local contacts in Limerick and Kerry County Councils.

- Heritage Officers at Kerry and Limerick County Councils;
- Conservation Architect/Officer at Kerry and Limerick County Councils;
- County Archaeologists at Kerry and Limerick County Councils.

Normal CH protection measures will apply, no comments received back.

National Parks and Wildlife Service (NPWS)

NPWS advised that there is an expansive Special Protection Area for Birds within the study area, and that project should avoid creating adverse impacts on this SPA. This advice is particularly important to the proposed new circuit from the

permitted windfarm cluster to the existing Trien 110kV substation, and guidance in this regard has resulted in a part UGC and part OHL solution.

An Taisce

A Stage 1 report was received by An Taisce. No specific comments were received at this time.

2.2.2 Non Statutory Agencies/Bodies

Coillte

There is no foreseeable issue with the proposed emerging preferred route corridor from an environmental, ecological and archaeological perspective. Compensation for loss of forestry land and its timber resource will be calculated based on agreements that exists between ESB and Coillte. No comments received from Coillte have caused the project to be modified.

2.2.3 The General Public

Consultation has been ongoing since the initial open day in Tarbert, in September 2010. The response during the two open days to date, and subsequent meetings with the general public and landowners has been broadly positive. As noted above, the formal consultation period for Stage 1 of the project ended in July 2011, landowners and the public have continued to contact EirGrid and the project team on various matters of interest since then.

Many local residents and other persons have indicated that wherever possible, local contractors should be engaged during the construction phase and later maintenance of the project. EirGrid will consider this feedback and discuss this with ESB should the project proceed. Most contact is made through telephone calls and then follow-on site visits and meetings as required.

Many of those that have been in contact regarding the project are directly affected by either the NK station sites (NK and also Trien) or the emerging 110kV overhead line corridors.

2.3 Modifications to Stage 1 Emerging Preferred Corridor

In the context of the Stage 1 consultation process, and ongoing design review which seeks to rationalise the design of the OHL aspect of the overall project, a modification has been considered in respect of the identified emerging preferred (western) corridor between Cloghboola and Trien substations.

The identified modification was assessed by the environmental consultants of the project team, in order that the potential impacts on the environment arising from these modifications could be determined. It is important to ensure that no route corridor modification occurs if this would have a signficantly greater negative effect on the environment i.e. the modification should demonstrate a positive and beneficial contribution to the overall project.

In the area of the emerging preferred corridor near Lacka West and Trienearagh, the corridor was marginally widened to the west in order to facilitate the overhead line design rationalisation, thereby signficantly simplifying the subsequent OHL route design. This modification is depicted in Figures 2.3 and 2.3.1

Other than this, it is considered that the identified emerging preferred (western) corridor between Cloghboola and Trien substations is the optimum corridor in which to route the planned circuit. The identification of the route of this new circuit is addressed in the later portion of this Stage 2 Report.

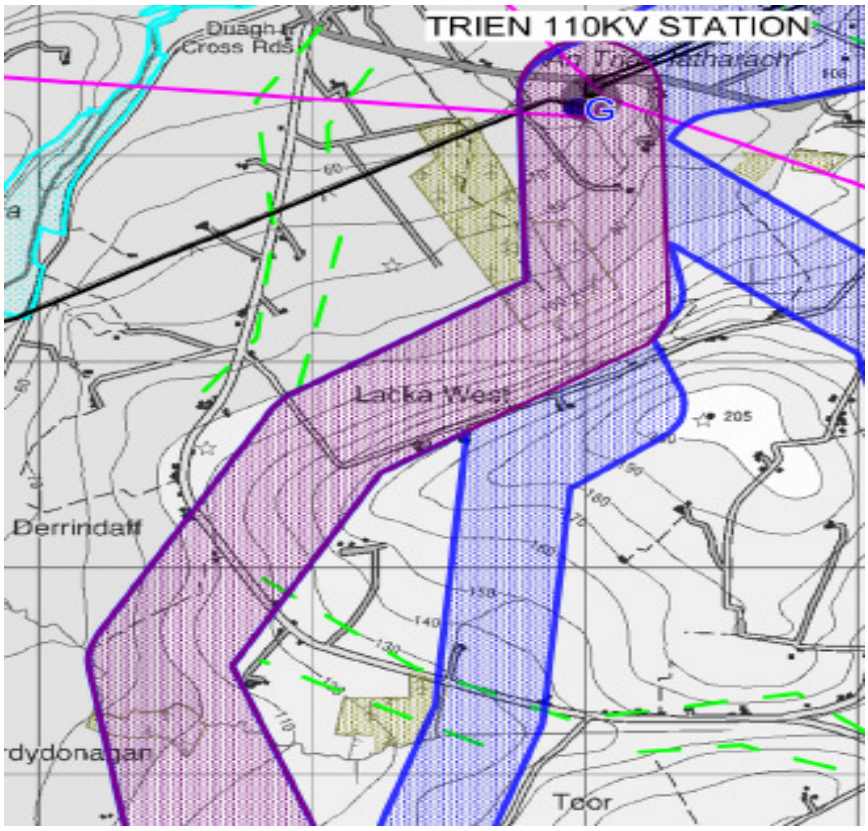

Figure 2.3 Stage 1 Emerging Preferred Corridor (May 2011)

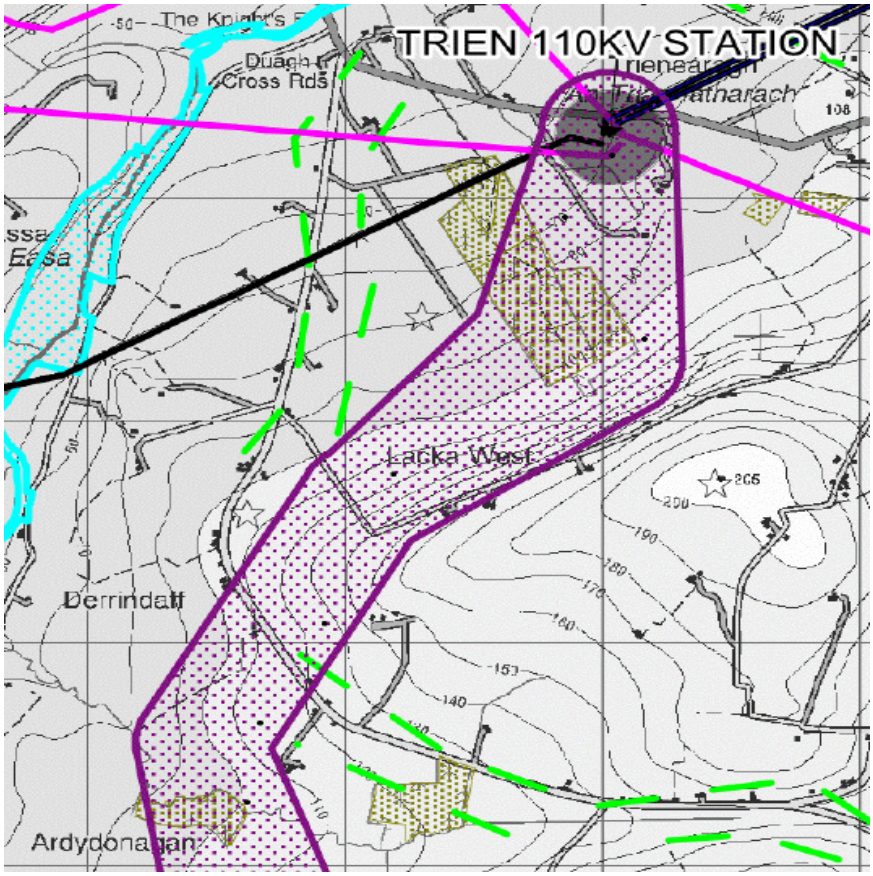

Figure 2.3.1 Modified Corridor Stage 2 (October 2011)

Chapter 3. Station Site and Route Corridor Evaluation

3.1 Introduction

This Stage 2 Report captures the continuation of the ongoing Project Development process subsequent to Stage 1, as per the Roadmap. This includes the identification of the specific siting of the new North Kerry substation, the indicative routing of loop-ins to the new substation from the existing OHL infrastructure in this area, and the indicative routing of the planned new circuit between the planned Cloghboola windfarm substation and the existing Trien substation.

At the outset of this Chapter, Figure 3.1 identifies the emerging preferred substation location and OHL corrirors in the context of existing environmental and other constraints within this area.

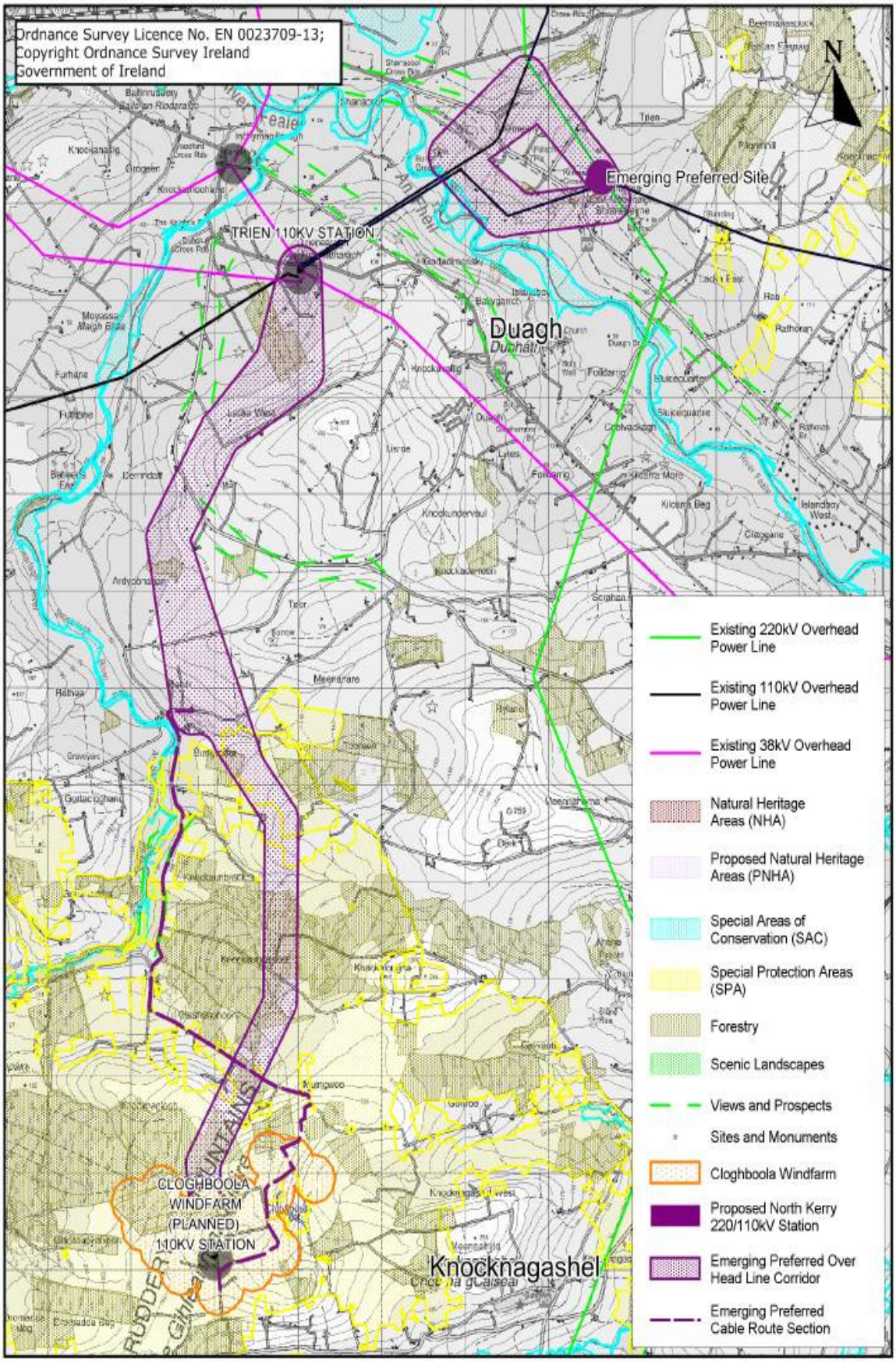

Figure 3.1 Emerging Preferred North Kerry Project Solutions (Stage 1)

3.2 Environmental Criteria

The OHL of both the indicative loop-ins and the indicative Cloghboola-Trien circuit are evaluated under criteria related to proper planning and sustainable development. This includes analysis of the area and local feedback received throughout the consultation process. For convenience, there is a single evaluation with the OHL loop-in referred to as Part A, and the OHL circuit referred to as Part B.

Human Beings

Safety

This criterion of assessment will be the same for the indicative routes in Parts A and B. Thorough design risk assessment and implementation of control measures will make this risk negligible.

Electric and Magnetic Fields

This criterion of assessment will be the same for the indicative routes in Parts A and B. (see Appendix B section c)

Localised Impact

The majority of the alignments for parts A and B absorb the OHL very succesfully into the landscape, and facilitate current landuse. The identified Stage 1 emerging preferred corridor, and initial engagement regarding the identified indicative routes, have been well received by the majority of landowners.

At one location along Part A (on the southern loop-in) a landowner raised concerns regarding the impact on local mature trees. Landowner engagement has been ongoing in relation to this, and a solution that is acceptable to all parties is achievable.

At a location along Part B, a landowner expressed the view that the current indicative OHL route is less preferable due to considered localised visual impact concerning a short section near Derrindaff. This route is possibly less preferable in this locality, due to the relatively open landscape and local topography. However, it must also be considered that this is a mostly man altered agricultural landscape with a combination of rising ground and few established trees or hedgerows remaining along this area. This therefore increases the potential local visual impact of the indicative OHL route in this area; however the impact is localised and any alternatives whilst feasible may not necessarily be not desireable for other

environmental reasons. The area to the east and west, adjacent to the corridor is also designated as a scenic amenity route by Kerry Couty Council.

Figure 3.2 The Derrindaff Area within which the Indicative OHL Element of the planned Cloghboola-Trien circuit may traverse.

Locally, this section of the indicative OHL route may be less preferable as it unavoidably crosses an area of high ground. However alternatives here may have a more significant visual impact, as the ground rises significantly to the east towards Lacka West. Alternatively, if the line were to continue north it would have a much greater impact on the parallel scenic route, while it would require to traverse the area between a local cluster of houses and the River Smearla valley.

All local alternatives and options will be further considered and evaluated as part of the Stage 3 Route Confirmation detailed OHL design assesment. in conjunction with local landowners.

Proximity to dwellings

One of the OHL design criteria is that wherever possible, and solely for amenity purposes, an OHL should be routed a minimum from habitable dwellings. The indicative OHL route currently fulfils this criteria. Proposed construction of dwellings

and other structures within 23m of an OHL are obliged to contact the ESB to determine local design and electrical safety clearances.

Noise

This criterion will be the same for identified indicative routes within both Parts A and B.

Interference with Farming Practice

This criterion will be the same for identified indicative routes within both Parts A and B.

Cultural Heritage

The Part A line passes near the no longer existant Kilmeany House which appears on the First Edition Ordnance Survey maps with associated landscaped gardens. Although the grounds have changed significantly and returned long since to farmland, no associated demesne features were noted during fieldwork. The significance and historic value of the house site is largely unknown and an earlier structure, predating the house may have been present. Given this, it is likely that archaeological monitoring would be recommended during construction in the vicinity of the house, and addressed in the heritage report. (Fig. 3.2.1)

It is noted that any impacts on the setting of the structure would be considered in reference to the extent of existing overhead lines in the area, and in light of the changes that have already taken place to the former demesne landscape.

Figure 3.2.1 Proposed (indicative) line in the vicinity of former Kilmeany House

Further to the east it is noted that the line passes within close proximity to two previously recorded ringfort-raths; an existing OHL is also located in close proximity. According to the First Edition Ordnance Survey Map, the line passes directly over both of these sites. Local OHL constraints limit design routing options here; however a detailed site visit by the project archaeologist and OHL designers will take place to feed into the environmental reports. Given this, it is likely no structure will be within 30m of the ringforts and that further archaeological monitoring may be recommended in the vicinity of these during the construction works. (Fig. 3.2.2)

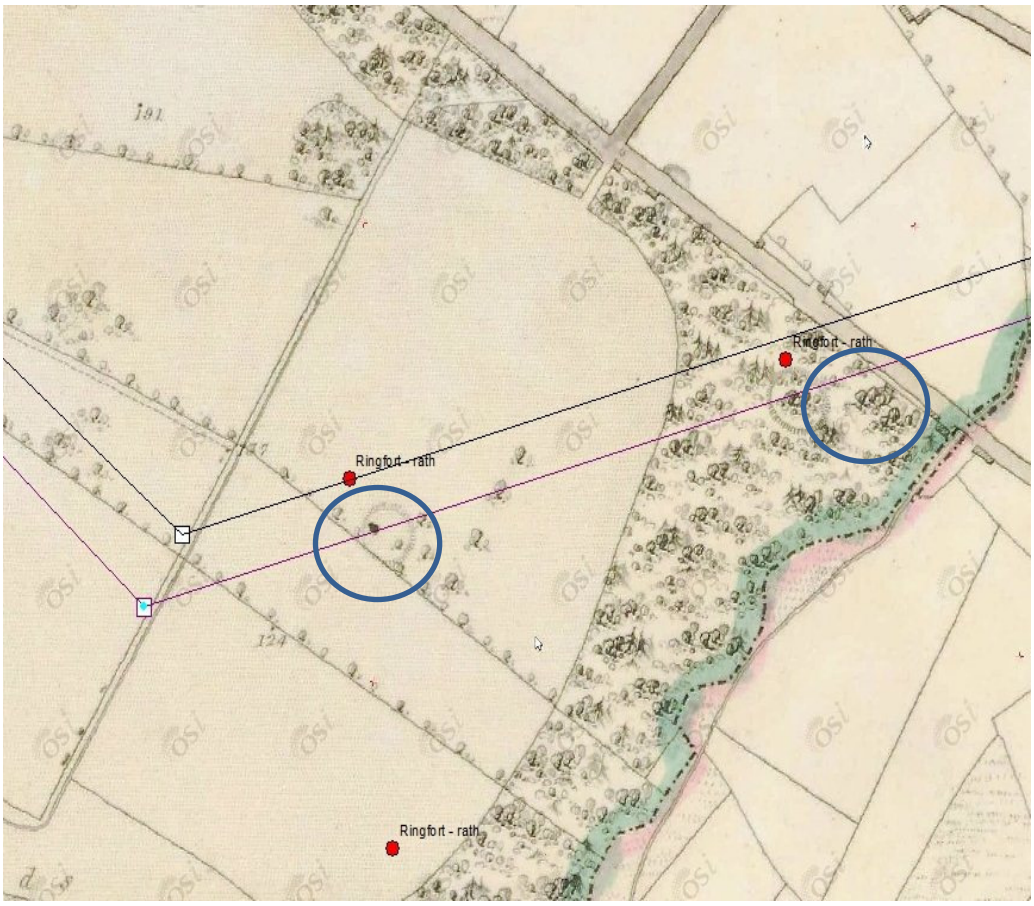

Figure 3.2.2 Indicative Route in the vicinity of two Ringforts (circled in blue)

In summary, at this stage it is considered that the identified indicative OHL routes can be accommodated; there appears to be no significant potential impacts on cultural heritage sites.

Flora and Fauna

The key issue relates to water quality controls during construction. Inland Fisheries Ireland (IFI) are currently carrying out baseline surveys on fish, and will revert when these surveys are complete with recommendations for inclusion in future reports. The planned approach minimises risks to water quality. Additional mitigation regarding timing of works as per IFI guidelines will be detailed in the planning application alongside any other recommendations.

Potential sites near bridges for bat roosts (protected) are being avoided; however, no evidence of bat roosts were determined during visual checks in summer 2011.

The potential impact to hen harriers has been broadly dealt with by the decision to cable out of the designated SPA. Precautionary monitoring of Hen Harrier and other

faunal activity will be detailed in planning application reports and the associated Environmental Report.

Some general recommendations for minimising impacts to ecology are as follows:

- Locate towers/ polesets in improved farmland if possible;
- If towers are to be located on boundaries locate on edge of hedgerows rather than in them;
- Maintain a tower buffer zone from streams and riparian areas of at least 10m where possible. Streams/ rivers in this area are particularly important (high water quality Q4-5) and they tend to have good quality riparian areas (including woodland fringe) and are important for salmonids;
- Standard pollution controls during construction especially in vicinity of streams.

An adult female hen harrier was noted in late summer 2011 to the east in the sky near the townland of Ardydonagan (Part B). The forestry, degraded bog and wet grassland in this specific area and for approximately 500m west and east of here, provide suitable nest cover and forage habitat for Hen Harrier. While this location may be a hen harrier foraging/nest area in 2011 (at least within 500m), it is outside of the designated SPA. The area where the circuit is located needs to be monitored further in spring/summer 2012 to determine hen harrier breeding status. It is difficult to avoid this area; however, the current design of the line seeks to minimise potential impacts. This is considered a potentially significant issue, therefore further monitoring will be undertaken in Stage 3 of the Roadmap. Mitigation in the form of timing restrictions for construction and possible line marking could address concerns by NPWS if a nest area is confirmed locally.

Landscape/Visual

Careful and sensitive overhead design and structure spotting will be used to minimise landscape impacts.

Soils and Geology

Slope stability will be considered in detail during the design of the NK station site and OHL routes during the detailed design and for the planning application reports.

Hydrology and Hydrogeology

No issues arise in respect of the identified OHL routes.

3.3 Emerging Preferred North Kerry Substation Site & Associated Loop-ins

There is no change to the location of the emerging preferred North Kerry substation site from that identified in the Stage 1 Report, which remains in the townland off Trien, near Kilmeany/Kilmorna. The site is identified on Figure 3.3 below.

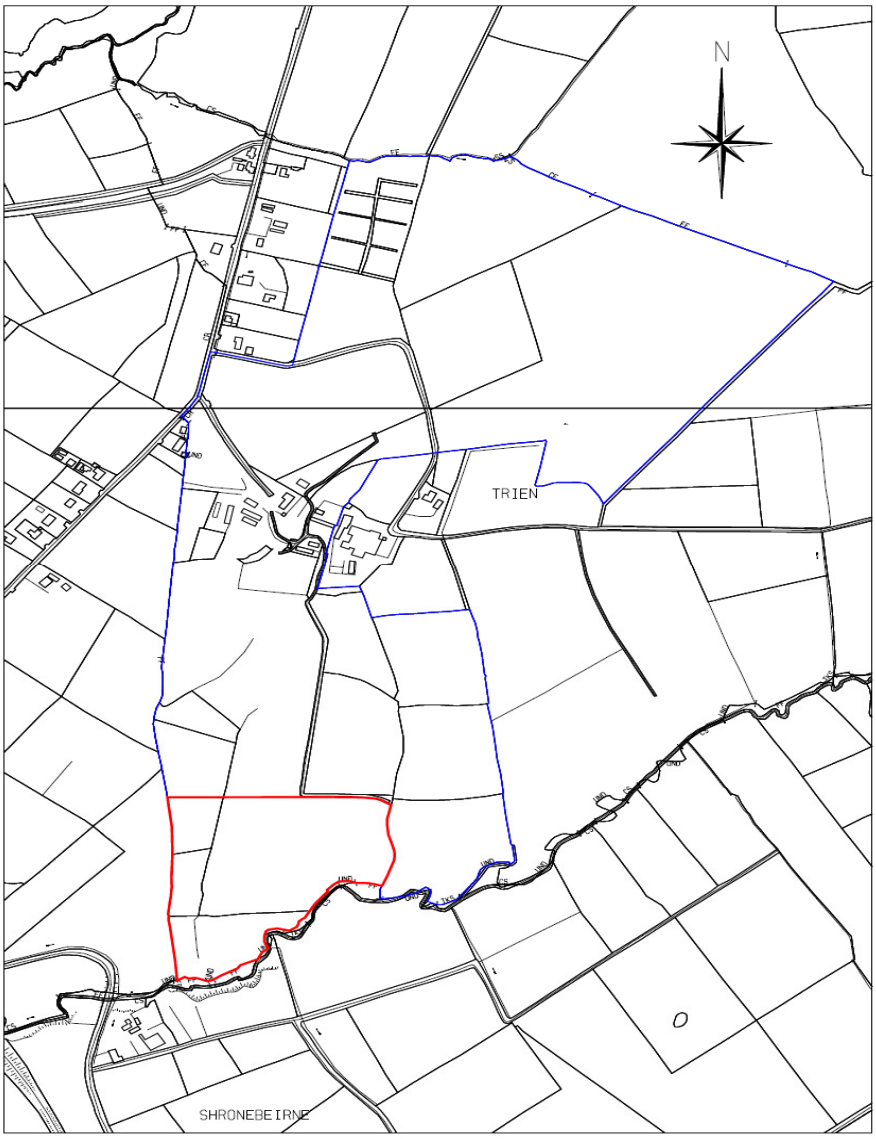

Figure 3.3 New North Kerry 220/110kV Substation Boundary

Access to the substation site will be from the main road (ref. L-1023-21). A number of potential access options occur in this regard, as detailed in Figure 3.3.1. The identified southern access option is considered to be optimum, as it is closer to the

substation site, the road width and sub-surface is more suitable, and it will minimise interference with local dwellings during the construction phase.

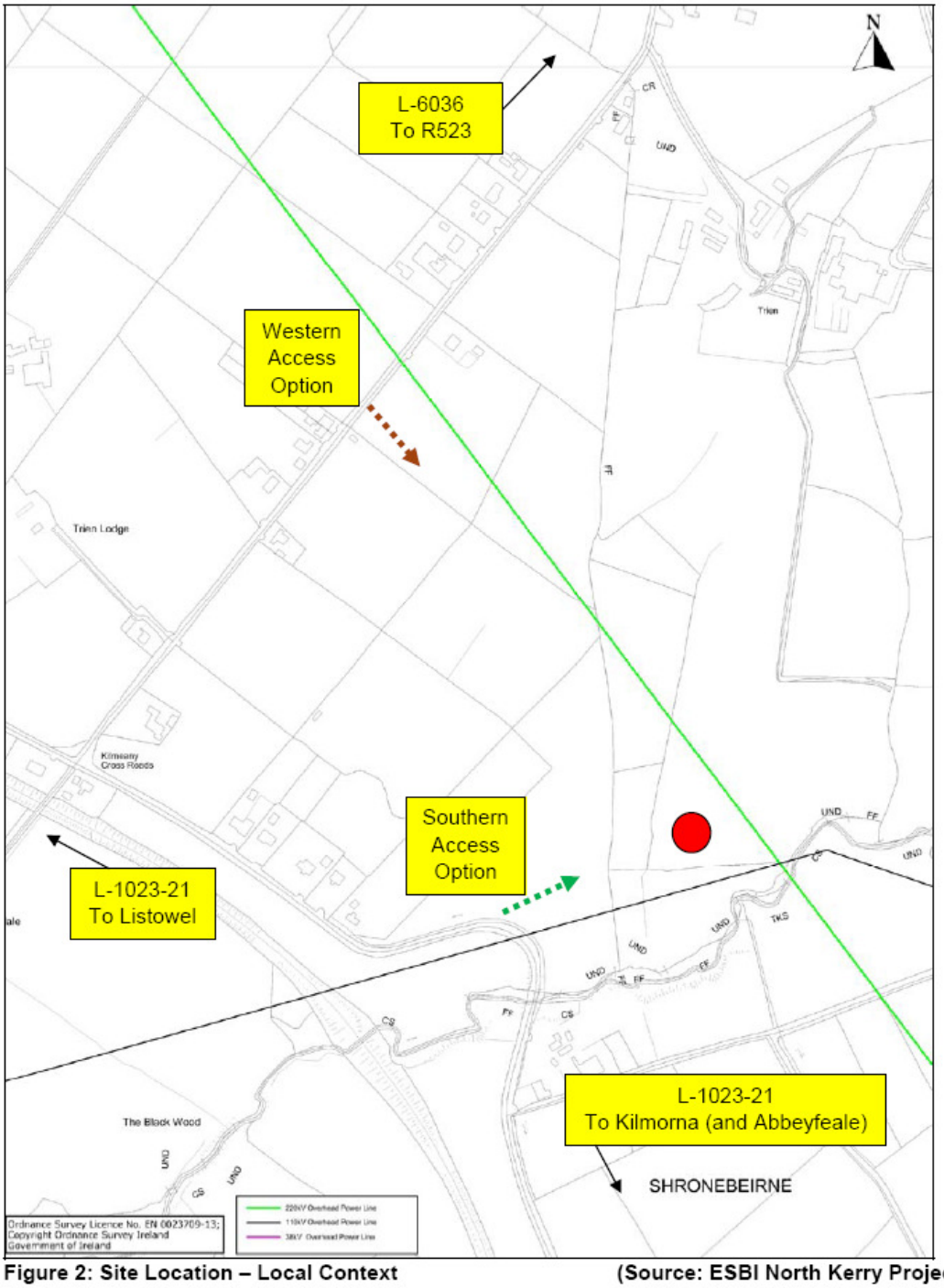

Figure 2: Site Location – Local Context **(Source: ESBI North Kerry Project)**

Figure 3.3.1 Emerging Preferred Substation Site Access

At present geo-technical works are being carried out on the NK site and the detailed design will be progressed in Stage 3 of project development, as per the Roadmap.

Loop-in to NK substation

The identified preferred substation site is located in relatively close proximity of the existing OHL infrastructure in this area, meaning that a loop-in of these existing lines into the new substation can be easily facilitated. The indicative southern loop-in route, of approximately 1.8km, follows the River Feale valley. Improved field boundaries in this area have large numbers of mature standard trees. The design of the indicative route aims to minimise impacts to these trees, although it is likely that a few will require pollarding. The last section will cross some mature deciduous woodland/scrub beside the road - this will require more detailed survey in Stage 3 - *Route Confirmation*. Overall, however, the design of the indicative southern loop-in route appears to have effectively minimised tree/vegetation disturbance.

The indicative northern loop-in route, of approximately 1.4km, broadly passes through improved farmland. The first 100m crosses over a stream valley with semi natural deciduous woodland which will require survey as some tree trimming/general construction disturbance may be required. Mitigation will be detailed for this specific area if required. Some larger tree trimming may be required on field edges where the indicative route approaches the substation.

Approximately 1.5km of existing 110kV OHL between the identified indicative southern and northern loop-in points, will become obsolete, and will be removed. This will be broadly positive in respect of ecology in the medium and longer terms as hedgerows and woodlands crossed will no longer require to be trimmed. Some general mitigation will be detailed for the planned line removal works.

The alignment of the indicative loop-in routes relative to the existing OHL transmission infrastructure in this area, and the planned substation site, are set out in Figure 3.3.2

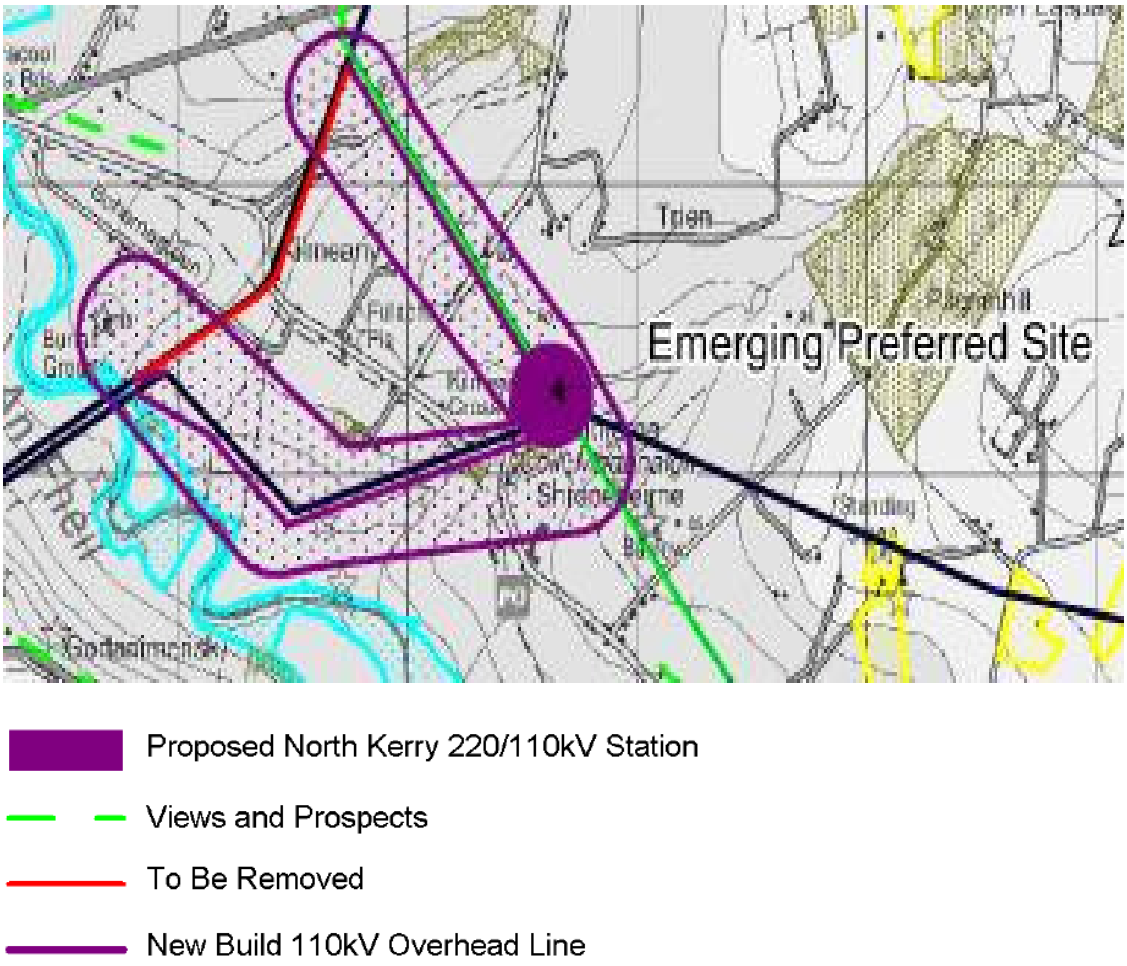

Figure 3.3.2 Indicative alignments of planned NK substation Loop-Ins

3.4 Emerging Preferred OHL Route between Cloghboola and Trien

As outlined above, it is considered that the identified western corridor, as modified, constitutes the optimum location for the new OHL element of the planned Cloghboola-Trien circuit; also as noted above, that portion of the overall circuit extending northwards from the planned Cloghboola 110kV substation to a location in the townland of Patch, will comprise UGC, following existing tracks and access routes in this area, as well as the alignment of planned windfarm access roads. For the purposes of this Report therefore, the remainder of this evaluation is concerned with the OHL element of that planned circuit, extending northwards from the townland of Patch to the existing Trien 110kV substation.

General Environmental Description of the OHL corridor

Cultural Heritage

From the south, the route extends in a northerly direction; the only cultural heritage sites in the vicinity of the proposed route are a Barrow (SMR KE017-015) approximately 1km to the east and an Enclosure (SMR KE017-010) approximately 0.5km to the west. The significance of any impacts on these sites is deemed to be slight.

In the townland of Derrindaff (where the route options diverge), there are few cultural heritage sites in the vicinity of the identified indicative OHL route. A Ringfort/Rath (SMR KE017-002) is located in forestry some 350m to 600m to the north of the route, and will not be impacted on by either route. A Ringfort - Cashel and Enclosure (SMR KE017-011 and KE017-028 respectively) are located on private land at the top of a hill to the south east. The sites were not noticeable from local public routes in the area. Whilst the sites may experience some impact on their setting from the OHL route, impacts are deemed to be slight.

There are no cultural heritage sites in the vicinity of the connection to Trien 110kV substation.

Ecology

The southern section of the indicative OHL route passes through improved farmland until the last 200m or so where it crosses wet grasslands and a distinct section of bog. The line is routed at the edge of this bog along forestry edge. An adult female hen harrier was noted in late summer here. The area where the line is located needs to be monitored further in spring/summer 2012 to determine hen harrier breeding status. It is difficult to avoid this area, and although the current line design seeks to minimise potential impacts, this is considered a potentially significant issue, therefore further monitoring is recommended. Mitigation in the form of timing restrictions for construction and possible line marking could occur if a nest area is confirmed in this vicinity.

Located largely in improved farmland and hedgerow boundaries, the northern section of the indicative route (approx. 1km) runs along the edge of forestry with some unimproved farmland/scrub. Based on visual checks from local roads this area

does not appear to have any issues of ecological significance. Subsequent more detailed site surveys in Stage 3 of the Roadmap will provide more detail.

Landscape/Visual Impact

The appearance of overhead lines and subsequent visual impacts is a significant feature of any OHL project. The indicative OHL route traverses the townland of Derrindaff and Lacka West in a straight north-eastern direction. The line crosses a ridge before continuing straight through an existing coniferous plantation in the townland of Lacka West. The resulting corridor within the plantation would be up to 61m wide. The entire length of this route within this plantation could be constructed with timber pole sets, thereby avoiding the introduction of steel angle towers, which would result in a reduction of visual impact when viewed from southern elevated areas, from properties located along Scenic Road No. 1 and in views from Scenic Road No. 5. Measures which would allow for maximum mitigation of potential landscape and visual impacts along this indicative route include:

- Minimising the removal of existing trees within the field boundary when crossing the western flank of the hill at Derrindaff.
- Minimising the width of the corridor through the coniferous plantation.
- Careful siting of tower and pole-set structures along existing field boundaries in order to retain the visual appearance of existing field patterns.

Potential Route Options

Within the modified corridor, two potential indicative line routes have been identified at the northern end of the overall circuit, combining as a single indicative line route along the middle and southern portions of this circuit. For ease of reference, the two potential indicative routes are referred to as Line Option A and Line Option B, as detailed on Figure 3.4.

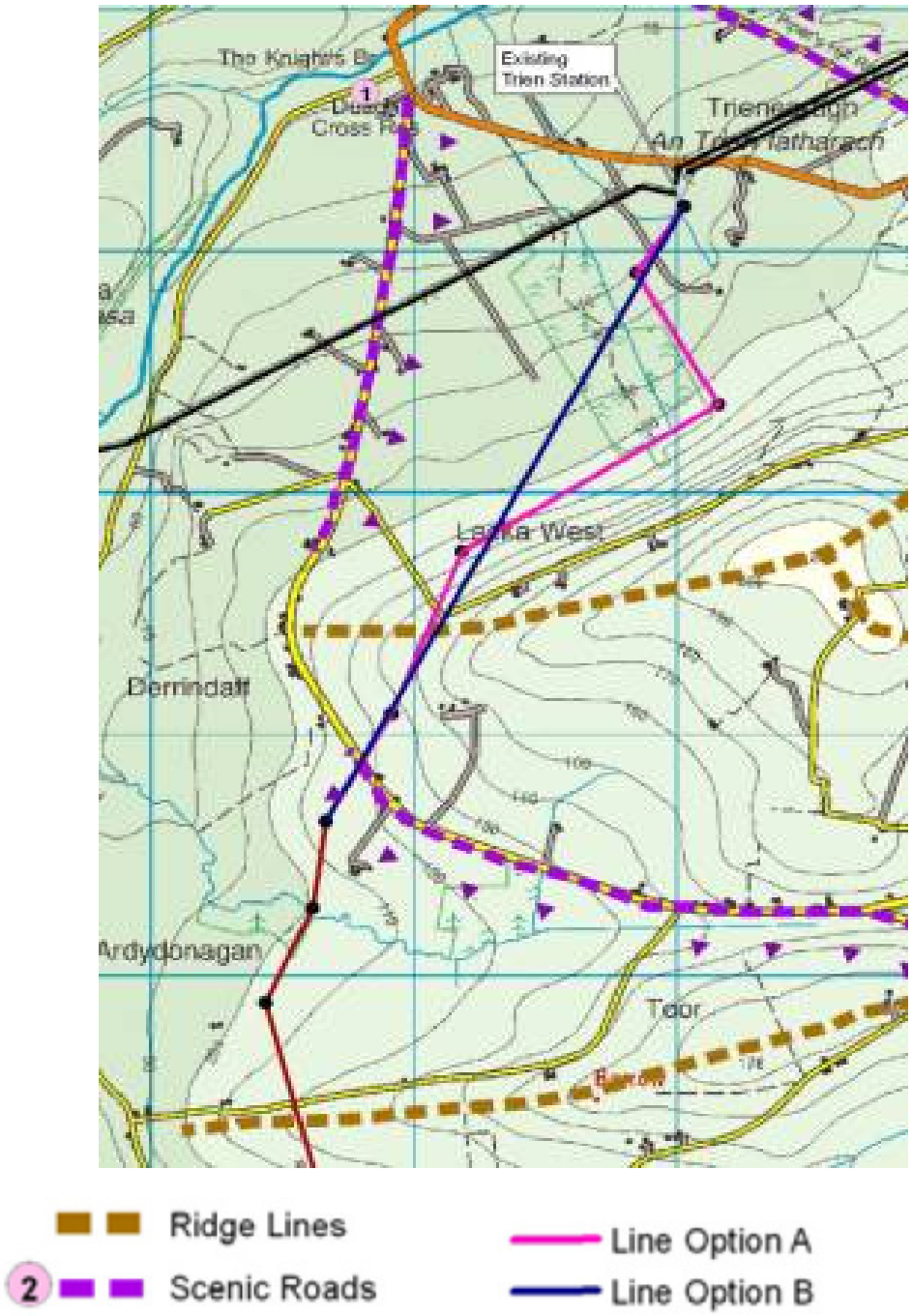

Figure 3.4 Indicative OHL Route Options on Cloghboola-Trien Circuit

In considering the two options and having regard to the enviornmental criteria set out above, the design team concluded that the presence of designated scenic routes along the main road in this area (known locally as the “Cork Line”) and near Trienearagh warranted that intermediate pole structures should be used within this corridor where possible, rather than multiple steel masts. This would be facilitated by

a maximum straight line alignment, rather than numerous angles along the alignment, thereby requiring steel angle towers.

Line Option B has a lower potential landscape and visual impact on the general landscape than Line Option A for the following reasons:

- The forestry plantation is a temporary element in the landscape;
- Line Option B will require less angle towers than Line Option A;
- Line Option A would require removal of existing deciduous vegetation along the southern boundary of the coniferous plantation;

Generally views of Line Option B through the plantation would be limited due to the effects of distance and the orientation of built structures and roads towards the cleared corridor. There may be oblique views from some residential properties.

Overall, Line Option B is preferred, and is identified as the indicative OHL route element of the overall Cloghboola-Trien 110kV circuit. Line Option B – the current indicative preferred OHL element of the overall Cloghboola -Trien 110kV circuit, is outlined at Figure 3.4.2 below.

At Trien 110kV station: given the orientation/ direction of the indicative overhead line route above to Cloghboola, this exits in a south-westerly direction, it is appropriate to develop the rear of this site to accommodate the new line bay. This in turn avoids having the extension adjacent to the existing road. (R555) Figure (3.4.1)

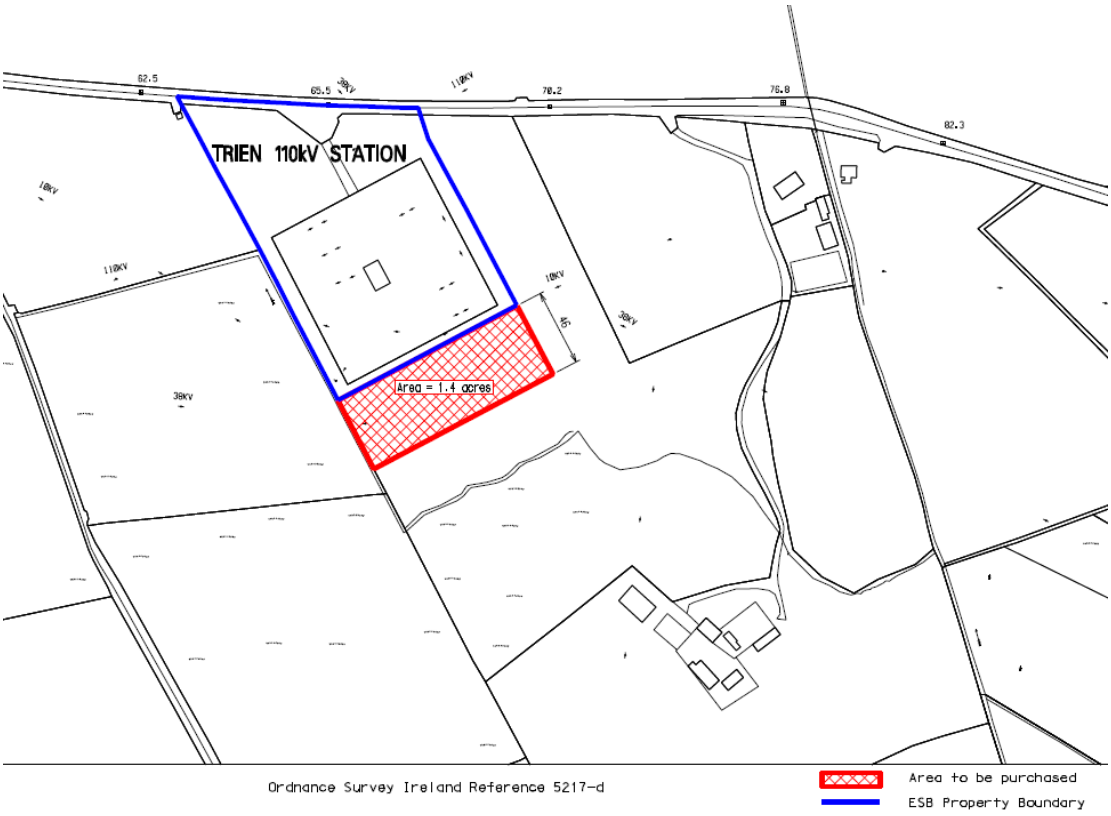

Figure 3.4.1 Existing Trien 110kV substation (at Trienearagh) [Planned extension to south]

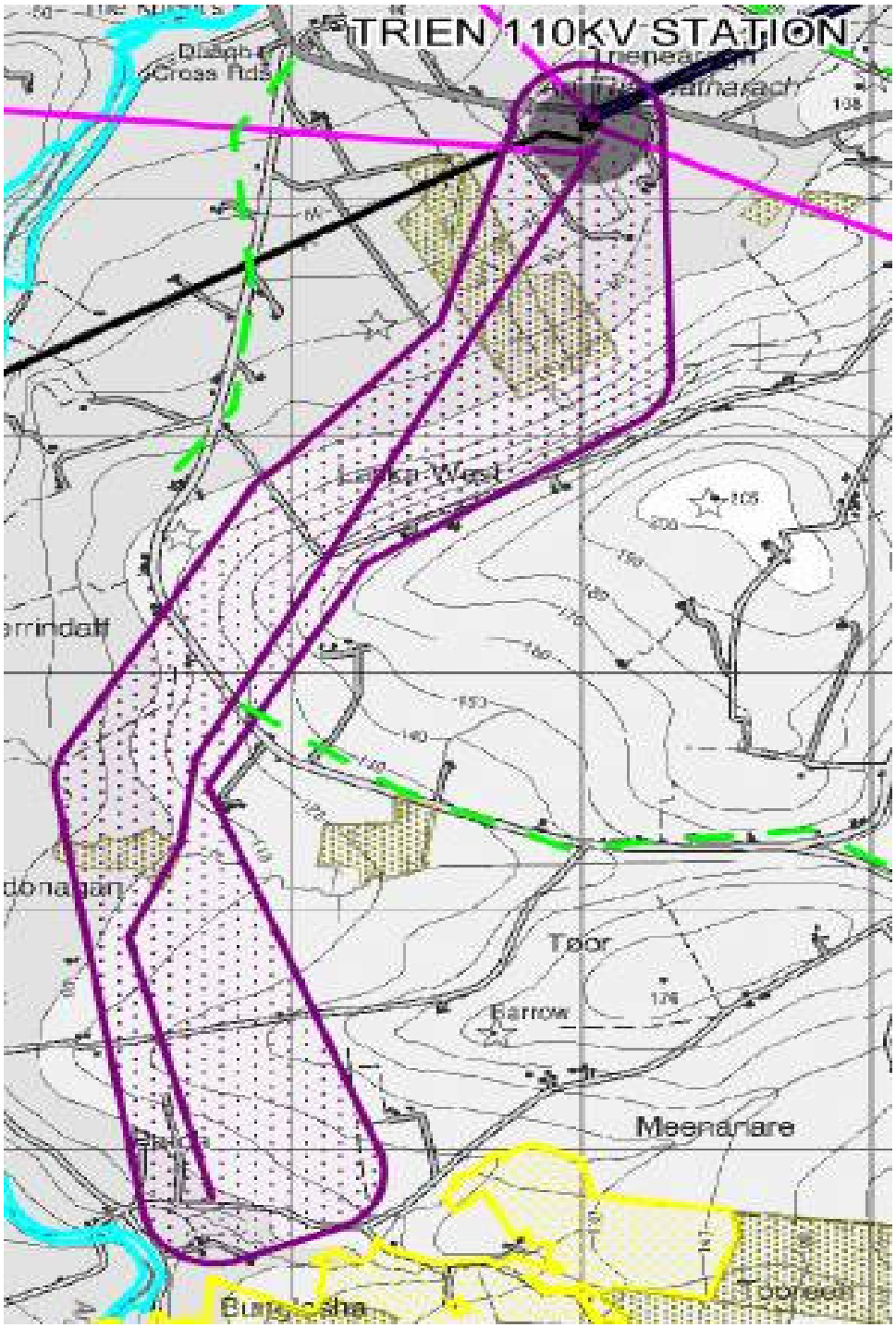

Figure 3.4.2 Emerging Indicative OHL Cloghboola-Trien 110kV Circuit

The overall proposed North Kerry Project, comprising the new North Kerry substation and associated loop-ins with the existing OHL transmission infrastructure, and the planned part-OHL and part-UGC circuit between the planned Cloghboola 110kV substation and the existing Trien 110kV substation, is detailed in Figure 3.4.3 below.

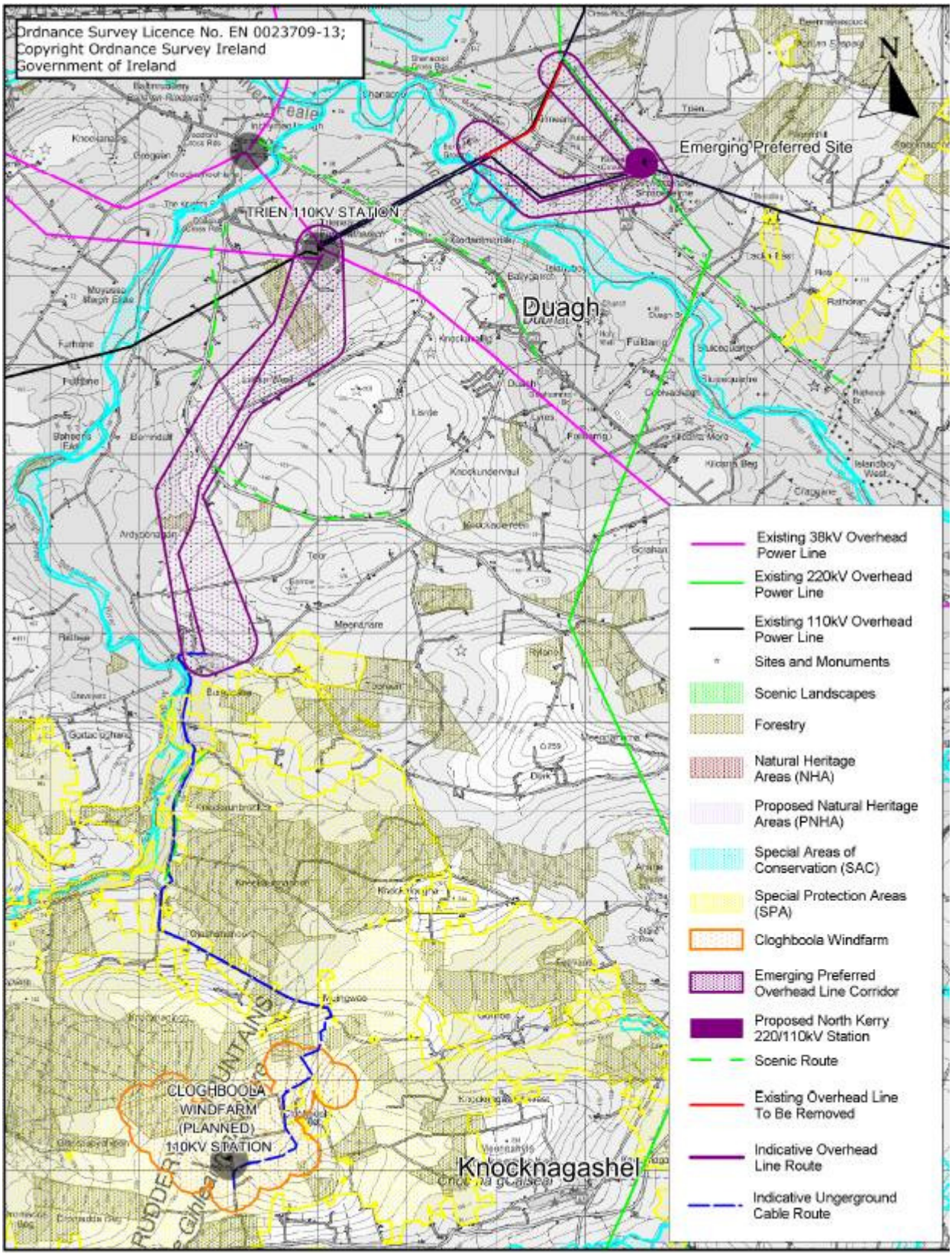

Figure 3.4.3 Indicative Preferred North Kerry Project Solutions

3.5 Initial Landowner Engagement

Having identified the preferred indicative project solutions, primarily from a strategic technical and environmental perspective, initial landowner engagement occurred to confirm conclusions. This took the form of an interview. A Survey Interview Document pack was provided to each landowner.

Survey Interview Documentation

A sample of the documentation pack issued to landowners can all be seen in Appendix A no. 6. All landowners received the following:

- *A Cover Letter* - This letter introduces the project, invites landowners to engage in the consultation process, makes reference to the survey letter including all attachments and introduces the project consultant. Contact details for the project team are also included on this letter. This gives every landowner a personal point of contact for the duration of the project. (See Appendix 6 then from pg. 1 to 7)
- *EirGrid Survey Letter* - This letter again outlines the proposed project, the Townland, Barony and County across which the initial indicative line route crosses and a general outline of the survey interview process. Importantly attached to the letter is information regarding EirGrid's policy towards landowners for access and survey of land along with details of EirGrid's legal rights to gain entry to land (pursuant to Section 20(4) of the Electricity (Supply) Act 1927, as amended by regulation 8 S.I. 445/2000).
- *Landowner Survey Map* - This map accompanies each survey letter and shows the initial indicative line route (in red) as it crosses the landowner's property. The individual property boundary of each landowner is highlighted in blue.
- *Project Briefing Document* - A further project briefing document (2nd in series) outlining the project need, benefits and timelines is included for information. This briefing document also includes contact details of the project team. (Appendix 2 Page 1 to 8)
- *Terms of Reference for Landowner Engagement* – EirGrid is committed to providing an accessible, meaningful and accountable consultation process. The engagement process will have two phases: (See Appendix 6 pg.5)

1. Phase One Indicative Route
2. Phase Two Final Proposal

- *North Kerry Project – Emerging Preferred Corridor Map* - This map gives information to the landowners about the broader project and represents the overall project development within the context of the study area.

Survey Interview Process

For this project it was decided that all documentation should be hand delivered to those directly affected by the planned development. During the interview process the project aims were discussed with each landowner. This ensured that all landowners had the opportunity to raise any concerns directly with a member of the project team or give suggestions they may have regarding the initial indicative route. Importantly this established a direct line of communication between the landowners and the project team.

All landowners at the time of contact were offered the opportunity to discuss the project and complete the pre survey interview form. (A sample survey interview form is attached in Appendix 6 pg.7) If this time was not convenient to the landowner a more suitable date and time was arranged.

This form is filled out by the EirGrid representative with the landowner present. The purpose of this interview is to gather any additional local information or record the landowners contact and confirm the land ownership details.

Chapter 4. Stage 2 Report Conclusion

Having regard to the preceding Chapters, it can be seen that the broad choices set down in the Stage 1 Information Gathering report as dictated by the various identified constraints, have become more focussed in this Stage 2 report. The process of selecting the OHL and the site of the North Kerry Station has been informed through feedback from consultees and stakeholders who have supplied information and views regarding potential routes and locations. Due regard has been had to the various statutory designations in respect of environmental designations as well as to practicalities in terms of the technical requirements of the project to fulfil its role of reinforcing the local electricity network through infrastructural improvements.

The main findings of this report are as follows:

- That the location of the North Kerry 220/110kV Station will be in the Townland of Trien in the vicinity of Kilmeany/Kilmorna.
- That the loop-in lines to the new station from the existing OHL infrastructure will be done with a minimal amount of new OHL infrastructure.
- That the OHL route connecting the existing substation at Trienearagh to the wind farm cluster will occur along the western corridor route option.
- That this western route option in the vicinity of Lacka West has two potential variants of which Option A is considered the optimum route.
- That the connection from the windfarm cluster to the townland of Patch will most likely be by UGC.

The next step in the project will be for it to enter into Stage 3. In Stage 3 EirGrid will incorporate feedback from the consultation process in respect of this current Stage 2 report. Stage 3 will seek to further investigate the findings of Stage 2 as outlined above and will seek to confirm the OHL route, the North Kerry Station

location and the extension of Trien station in more detail than at present. EirGrid will confirm the final details of these in Stage 3. The process is geared towards the submission of a planning application in early 2012 to An Bord Pleanála but only after all inputs from stakeholders and the public have been fully considered and acted upon.

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