



An
Bord
Pleanála

Inspector's Report

ABP-303945-19/

ABP-304174-19

Development	Glenamuck District Roads Scheme which will connect the existing R117 Enniskerry Road with the Glenamuck Road and new link distributor road which will connect to the Ballycorus Road and the R117 Enniskerry Road (alternative north-south route).
Location	Lands in vicinity of Glenamuck Road, Ballycorus Road and R117 (Enniskerry Road) in the townlands of Carrickmines Great, Glenamuck South, Glenamuck North, Jamestown, Kingstown and Kiltiernan.
Applicant(s)	Dún Laoghaire Rathdown County Council
Type of Application	Section 51(2) of the Roads Act, 1993 and associated CPO
Prescribed Bodies	<ol style="list-style-type: none">1. National Transport Authority2. Department of Culture, Heritage and the Gaeltacht

3. Geological Survey of Ireland
4. Transport Infrastructure Ireland
5. Inland Fisheries Ireland
6. Irish Water

Observers

1. James and Sonja Buckley
2. Mark Buckley
3. Iain & Shirley Finnegan
4. Droim Sí Developments Ltd.
5. Goodrock Project Management Ltd.
6. Donough & Clare O'Keeffe,
Dromard, Ballycorus Road
7. Ken Fennell, Receiver of Certain
Assets of Carrickmines Partnership
8. Kiltiernan & Glenamuck Residents
Association
9. Finn & Anita O'Connell
10. Declan Taite & Anne O'Dwyer,
Receivers to Michael and Martin
Doran

11. David Cahill & Karen O'Keefe

12. Eilish & Neil Tohill

13. David & Katie Chapman

14. John Byrne & Rosemary Owens

Objectors to CPO

1. James Gerard Grimes and children
2. John & Jantine Findlater
3. Cairn Homes Properties Ltd.

4. De La Salle Palmerston F.C.
5. Ken Fennell (Receiver of certain assets of the Carrickmines Partnership)
6. James and Sonja Buckley
7. Iain & Shirley Finnegan
8. Droim Sí Developments Ltd.
9. Goodrock Project Management Ltd.
10. Brendan Cowley
11. The Glanvilles, occupants of property known as Derryclare

Date of Site Inspection

4th September 2019

Inspector

Donal Donnelly

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1.0 Introduction

- 1.1. Approval is sought from the Board by Dún Laoghaire Rathdown County Council for two applications relating to the development of the Glenamuck District Roads Scheme (GDRS).
- 1.2. Firstly, an order has been made by Dún Laoghaire Rathdown County Council that, if confirmed by the Board, will authorise the local authority to acquire compulsorily lands for the proposed development and to extinguish private rights of way. The temporary acquisition of lands is also required for the purpose of construction works. The net area of land permanently required is 13.4116 hectares (excluding road plots).
- 1.3. The second application made pursuant to Section 51(2) of the Roads Act, 1993 (as amended) seeks approval for the same roads scheme for which an Environmental Impact Assessment Report has been submitted along with documentation in support of the application.
- 1.4. A total of 11 objections to the CPO were lodged with the Board and observations on the Section 51(2) application were received from six prescribed bodies and 14 observers.
- 1.5. An oral hearing was held between the 10th and 13th September 2019 and attended by Dún Laoghaire Rathdown County Council and its representatives.

2.0 Legal Requirements

- 2.1. Under Section 51(2) of the Roads Act, 1993 (as amended by Section 9(1)(e)(i) of the Roads Act, 2007), a local authority shall apply to the Board for the approval of a proposed road development and shall submit to the Board an Environmental Impact Statement (Environmental Impact Assessment Report) in respect of the development. The proposed road development shall not be carried out unless the Board has approved it or approved it with modifications.
- 2.2. Before approval of the proposed road development, consideration must be given to the EIAR, any additional information, any submissions made in relation to the likely

effects on the environment of the proposed road development, and the report of the person conducting an oral hearing.

- 2.3. The Board shall also consider the report and subsequent recommendation of the Inspector conducting an oral hearing in relation to the compulsory purchase of land, which relates wholly or partly to the proposed development.
- 2.4. Under Section 213(2)(a) of the Planning and Development Act, 2000 (as amended), a local authority may, for the purposes of performing any of its functions (whether conferred by or under this Act, or any other enactment passed before or after the passing of this Act), including giving effect to or facilitating the implementation of its development plan, acquire land, permanently or temporarily, by agreement or compulsorily.
- 2.5. Compulsory Purchase Orders are made pursuant to the powers conferred on the local authority by section 76 of the Housing Act, 1966, and the Third Schedule thereto, as extended by section 10 of the Local Government (No. 2) Act, 1960, (as substituted by section 86 of the Housing Act 1966), as amended by section 6 and the Second Schedule to the Roads Act, 1993, and as amended by the Planning and Development Act, 2000-2014. Orders are served on owners, lessees and occupiers in accordance with Article 4(b) of the Third Schedule to the Housing Act, 1966.
- 2.6. The Housing Act of 1966 provides if an objection has been made to a compulsory purchase order, the Board will facilitate the person making the objection to state their case at an Oral Hearing.

3.0 Site Location and Description

- 3.1. The Glenamuck District Road Scheme is located in the townlands of Jamestown, Glenamuck North, Carrickmines Great, Glenamuck South, Kiltiernan, Kingston (E.D. Ballybrack) and Kingston (E.D. Glencullen) in southern Co. Dublin within the Dún Laoghaire Rathdown County Council administrative area. The site lies approximately 12km south of Dublin City Centre and 6km south-west of Dún Laoghaire.
- 3.2. The alignment of the proposed road scheme forms a “T” shape roughly between Enniskerry Road (R117) and the M50, and crossing Glenamuck Road (R842),

Ballcorus Road (R116) and Barnaslingan Lane to the south. The alignment also crosses the Carrickmines Stream to the north and the Loughlinstown River to the south. Separate 220kV and 110kV powerlines continue parallel to the west and east of the road alignment respectively.

- 3.3. The northern arm of the scheme continues from west to east past existing sport grounds and agricultural pasture lands, and to the south of The Park retail complex. Residential development is located along the north-eastern end of Glenamuck Road. The southern arm of the alignment also passes through agricultural lands and sports grounds, between road fronting residences on Ballycorus Road and to the east of residences on Enniskerry Road. The southern tip of the alignment is located to the south of 50 kph zone of Kiltiernan village.
- 3.4. Lands adjoining the alignment are mostly zoned for residential development on both sides to the north-west and to the south of the eastern arm. On the northern side of the eastern arm, The Park and lands to the south-west thereof are zoned for economic development and employment uses. There are residential, open space and rural amenity zonings either side of the southern arm.
- 3.5. Levels generally fall across the road alignment from south to north; the highest elevations are at the southern tie-in to Enniskerry Road (138m OD) and the lowest elevations are at the tie-in to the Glenamuck Road South Roundabout (85m OD).

4.0 Proposed Development

4.1. The Scheme

- 4.1.1. The Glenamuck District Roads Scheme includes the following main elements:
 - a) The **Glenamuck District Distributor Road** (GDDR) consisting of approx. 660 metres of two-lane single carriageway from the Enniskerry Road North tie-in (see (C) below) to the Glenamuck District Road junction (see (D) below) and approx. 890 metres of four-lane dual carriageway from this junction to the Golf Lane Roundabout.
 - b) The **Glenamuck Link Distributor Road** (GLDR) consisting of approximately 1.8 km of predominantly two-lane single carriageway road, from its junction

with the Glenamuck District Distributor Road to a junction with the Enniskerry Road approximately 100 metres south of Barnaslingan Lane.

- c) Junction of Glenamuck District Distributor Road and R117 (Enniskerry Road North) - Enniskerry Road to be diverted onto the Glenamuck District Distributor Road adjacent to De La Salle Palmerston Rugby Club, with a new three-arm junction to provide access from the Glenamuck District Distributor Road onto the Enniskerry Road.
- d) Junction of Glenamuck District Distributor Road and Glenamuck Link Distributor Road – New three-arm Junction with turning lanes. All turning movements will be accommodated.
- e) Junction of Glenamuck District Distributor Road and Glenamuck Road at Golf Lane Roundabout. Additional arm to be added to existing roundabout.
- f) Junction of Glenamuck Link Distributor Road and Glenamuck Road, a new four-arm junction with turning lanes. Vehicle movements between Glenamuck Link Distributor Road and Glenamuck Road to the east of the Glenamuck Link Distributor Road to be bus-gated. A small roundabout has been provided to accommodate turning movements for vehicles reaching the end of the bus-gated section of the Glenamuck Road.
- g) Junction of Glenamuck Link Distributor Road and R116 (Ballycorus Road) – New four-arm Junction with turning lanes, all turning movements will be accommodated.
- h) Junction of Glenamuck Link Distributor Road & Barnaslingan Lane – Barnaslingan Lane to terminate at Glenamuck Link District Road at the new three-arm junction, all turning movements will be accommodated.
- i) A short section of Barnaslingan Lane to become a ‘cul-de-sac’ between Glenamuck Link Distributor Road and the Enniskerry Road.
- j) Junction of Glenamuck Link District Road & R117 (Enniskerry Road South) – Enniskerry Road to be diverted onto the Glenamuck Link District Road at this location with bus-gated connection and pedestrian/cycle connections to the existing road route to Kiltiernan village.

k) The proposed Roads Scheme will also include surface water drainage, including six significant attenuation ponds; public lighting; traffic signals; road marking and signage; diversion of existing utilities and provision of new utilities; accommodation works to existing properties; walls, retaining walls, fencing and other boundary treatments; associated landscaping works; and miscellaneous ancillary works.

4.1.2. Within the Design Manual for Urban Roads and Streets road hierarchy of arterial, link and local streets, the proposed development is considered a link street. The design speed of the proposed roads is 50km/hr and carriageway widths will be between 3m and 3.25m. Footpaths and segregated cycle tracks will be provided along the majority of the route. In total, approximately 8km of footpaths and cycle tracks are proposed. The proposed scheme includes bus gates at the GLDR/ Enniskerry Road junction to the south and on the eastern arm of Glenamuck Road at its junction with the GLDR.

4.2. **Main Objectives**

4.2.1. The main objectives of the Glenamuck District Roads Scheme as set out in the CPO are to:

- Design the new road layout to meet the needs of all road users using best practice standards complementing the surrounding environment;
- Facilitate the diversion of through-traffic away from Kiltiernan village core;
- Improve safety on the existing roads and junctions;
- Provide high quality pedestrian and cycling infrastructure along the proposed route;
- Facilitate local public transport infrastructure; and
- Facilitate the development of the zoned lands within the Local Area Plan by providing suitable transport infrastructure.

4.3. The Need for the Proposed Development

- 4.3.1. It has been a long-term objective to improve the road network within the Kiltiernan-Glenamuck area on the basis that current road infrastructure is unsatisfactory for existing and predicted traffic volumes. This was reflected in a “six-year road objective” within the 2004 County Development Plan that has been carried through into the current Development Plan and Local Area Plan.
- 4.3.2. Traffic modelling was initially undertaken to inform the inclusion of the scheme within the 2006 Glenamuck Local Area Plan and a traffic modelling review and reassessment accompanied the Kiltiernan/ Glenamuck Local Area Plan, 2013. This report outlines the minimum essential provision of a new distributor road system for surrounding lands to be developed in a rational and sustainable manner.

4.4. Route Selection

- 4.4.1. Following the preparation of constraints study in 2005, a route selection report was prepared and three primary route options were identified for the Glenamuck District Distributor Road (GDDR) from Carrickmines Interchange Southern Roundabout to Enniskerry Road.
- 4.4.2. Subsequently, further detailed traffic modelling was undertaken which established that a link road to Enniskerry Road (Glenamuck Link Distributor Road - GLDR) would be necessary to prevent traffic congestion within Kiltiernan. A link road with three options was assessed. Route Option 1 for the GDDR and Link Option C for the GLDR were chosen as the preferred routes.
- 4.4.3. The alignment was incorporated into the Kiltiernan/ Glenamuck Local Area Plan 2007 apart from a southern portion of the GLDR (Barnaslingan link). The GLDR was therefore shown to terminate at Ballycorus Road. However, the Barnaslingan link was reintroduced to the adopted 2010 County Development Plan.
- 4.4.4. Following the preparation of the traffic report accompanying the 2013 LAP, a number of amendments to the preliminary 2007 design were carried out. This included the introduction of 2 no. bus gates and the removal of the proposed link between the GDDR and Glenamuck Road.

- 4.4.5. The Design Manual for Urban Roads and Streets (DMURS) was published in 2013. An urban design report was prepared for the GDRS which attempts to highlight how the current design has been informed by DMURS.

5.0 Policy Context

5.1. National Planning Framework, 2018

- 5.1.1. The National Planning Framework provides policies, actions and investment to deliver 10 National Strategic Outcomes and priorities of the National Development Plan. These include compact growth, enhanced regional accessibility, sustainable mobility and transition to a low carbon and climate resilient society. Compact growth can be delivered by improving 'liveability' and quality of life, enabling greater densities and ensuring transition to more sustainable modes of travel.
- 5.1.2. Enhanced regional accessibility will be achieved by enhancing connectivity between centres of population of scale. In particular, more effective traffic management within and around cities and re-allocation of inner-city road space in favour of bus based public transport and walking/ cycling facilities should be enabled.
- 5.1.3. It is recognised with respect to sustainable mobility that Dublin and other cities and major urban areas are too heavily dependent on road and private, mainly car-based transport, with the result that our roads are becoming more and more congested. The NPF will therefore encourage the expansion of attractive public transport alternatives to car transport to reduce congestion and emissions and enable the transport sector to cater for the demands associated with longer term population and employment growth in a sustainable manner. The development of a comprehensive network of safe cycling routes in metropolitan areas will be sought to address travel needs.
- 5.1.4. The following national policy objectives are also of relevance to the proposed GDRS:

National Policy Objective 4:

Ensure the creation of attractive, liveable, well designed, high quality urban places that are home to diverse and integrated communities that enjoy a high quality of life and well-being.

National Policy Objective 27:

Ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments and integrating physical activity facilities for all ages.

National Planning Objective 54:

Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions.

National Policy Objective 64:

Improve air quality and help prevent people being exposed to unacceptable levels of pollution in our urban and rural areas through integrated land use and spatial planning that supports public transport, walking and cycling as more favourable modes of transport to the private car, the promotion of energy efficient buildings and homes, heating systems with zero local emissions, green infrastructure planning and innovative design solutions.

5.2. Eastern & Midlands Regional Spatial & Economic Strategy, 2019-2031

- 5.2.1. The RSES provides a spatial strategy, economic strategy, metropolitan plan, investment framework and climate action strategy to support the implementation of Project Ireland 2040 and the economic policies and objectives of the Government by providing a long-term strategic planning and economic framework for the development of the Region.
- 5.2.2. This strategy sets out 16 Regional Strategic Outcomes aligned to the three key principles of healthy placemaking, economic opportunity and climate action.

5.3. Transport Strategy for the Greater Dublin Area 2016-2035

- 5.3.1. The following is stated in this strategy:

“To provide for growth in vehicular trip demand and improve road safety, the N11 and M50 between Newtownmountkennedy and Sandyford (including the M11/M50 junction) will be upgraded. Additionally, Loughlinstown roundabout will be improved, while a distributor road network will be developed to service development lands at Kiltiernan / Glenamuck. Other road schemes and upgrades will also be implemented, in line with the principles for road development set out in Chapter 5.”

5.3.2. The following principles of road development are set out in Section 5.8.3:

- That there will be no significant increase in road capacity for private vehicles on radial roads inside the M50 motorway;
- That each proposed road scheme is consistent with this Strategy and with Government policies related to transport;
- That the travel demand or the development needs giving rise to the road proposal are in accordance with regional and national policies related to land use and development planning;
- That the development of the road scheme does not diminish in any significant way the expected beneficial outcomes of the Strategy;
- That the road scheme, other than a motorway or an express road proposal, will be designed to provide safe and appropriate arrangements to facilitate walking, cycling and public transport provision; and
- That alternative solutions, such as public transport provision, traffic management or demand management measures, cannot effectively and satisfactorily address the particular circumstances prompting the road proposal or are not applicable or appropriate.

5.4. Design Manual for Urban Roads and Streets

5.4.1. It is recognised in these guidelines that the highly segregated design of distributor roads presents a major barrier that creates severance between adjoining communities, enforced by continuous walls and fences put in place to prevent pedestrian access and fast moving/ free flowing traffic.

5.5. Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns & Villages) (2009)

5.5.1. These Guidelines note that design principles relating to connectivity and permeability, sustainability, safety, legibility and a sense of place should influence the design of streets in residential areas. The design of street layouts must therefore start by considering people movement rather than vehicle movement. It is stated that frontage-free streets (such as distributor roads) are not recommended, as they can be unsafe for pedestrians (especially after dark) and can result in a hostile environment.

5.6. National Cycle Manual

5.6.1. This manual seeks to embrace the principles of sustainable safety by offering guidance on integrating the bicycle in the design of urban areas. The five needs of cyclists are identified as being road safety, coherence, directness, attractiveness and comfort.

5.7. Dún Laoghaire Rathdown Development Plan, 2016-2022

5.7.1. Kiltiernan has been designated as one of four 'Future Development Areas' in the Core Strategy set out in the Development Plan. The core strategy also includes the Kiltiernan-Glenamuck Local Area Plan as one of a number of primary growth nodes from which a significant proportion of the supply of residential units will derive up to the 2022 horizon.

5.7.2. Section 1.3.4.2 specifically refers to Kiltiernan-Glenamuck where it is stated that the plan area will ultimately accommodate c. 2,500-3,000 residential units, a neighbourhood centre, two tranches of public open space and a large employment node. It is also noted that a key element of the overall planning framework is the provision of a bypass road of Kiltiernan.

5.7.3. The Glenamuck District Roads Scheme is included as a 6-year road objective in the Development Plan along with Enniskerry Road (Stepaside to GDDR) and Glenamuck Road South. Ballycorus Road is included as a long-term road objective. It is noted that a Section 49 Supplementary Contribution Scheme is in place for the

“Glenamuck District Distributor Road” linking the Kiltiernan/ Glenamuck area to the M50 motorway network”.

5.7.4. Map T2 of the Development Plan illustrates proposed bus priority routes and includes a route along Glenamuck Road and to the south of Kiltiernan village.

5.7.5. There is a specific local objective (131) *“to provide for the development of a Neighbourhood Centre in the north-east ‘quadrant’ of the Park, Carrickmines, with a net retail floorspace cap of 6000 sq.m. and a leisure facility, which will help meet the existing and future retail and leisure needs of the growth areas of Carrickmines, Stepside- Ballyogan and Kiltiernan-Glenamuck.”*

5.8. **Kiltiernan/ Glenamuck Local Area Plan, 2013 (extended to Sept. 2023)**

5.8.1. A key element of the LAP is the provision of a bypass road of Kiltiernan, the implementation of a Neighbourhood Framework Plan, the graduation of residential densities and the implementation of a centrally-located major public open space/school site.

5.8.2. In preparation for the 2013 Local Area Plan, an updated transport modelling exercise was carried out which resulted in a number of amendments to the GDRS to include the following:

- A reduction in the width of the GDDR/GLDR to single carriageway in each direction (with cycle lanes).
- A revised junction layout at the Glenamuck Road and the GLDR.
- The removal of the proposed ‘Link Road’ between the GDDR and Glenamuck Road.
- Changes to the layout of proposed junctions, to provide bus priority.
- The extension of the Link Distributor Road from Ballycorus Road to link to Enniskerry Road.
- The introduction of ‘bus-gates’ on the Enniskerry Road and Glenamuck Road.
- The inclusion of ‘surface water attenuation ponds’.

- 5.8.3. Chapter 5 relates to movement and includes Objective MT01 which seeks to reduce the need for travel by private car within the LAP through a range of measures. Objectives MT02 and MT03 seek to promote accessibility through walking, cycling and public transport. Transportation Objectives MT04-MT07 relate to the establishment of the future function, shape and usage of the strategic road network within the LAP and of Glenamuck Road and Enniskerry Road.
- 5.8.4. It is a primary objective of the LAP (VO2) *“to establish an obvious identity/ sense of place for Kiltiernan”* and (VO3) *“to establish a focal point/ civic node for Kiltiernan.”*
- 5.8.5. Chapter 4 of the LAP relates to residential development. With respect to density and building height, it is noted that land parcels to the north of the GDDR shall be considered for 5 storeys fronting the main distributor road subject to qualitative criteria. Heights of 2-4 storeys are indicated to the west of the GLDR. Parcels to the south and south-east of the GLDR are shown as 2/3 storeys. Planning guidelines for the development land parcels are set out in Chapter 11. In general, buildings at the upper level of the proposed height threshold are to be located along the GDDR and GLDR.
- 5.8.6. Section 10.5 of the LAP addresses the issue of phasing and the permission of development in advance of the GDDR. This is followed by Section 10.6 which provides an interim proposal to accommodate the development of up to 700 dwelling units. It is noted that the possibility exists that the GDDR scheme could be further phased with the Main Distributor Road being constructed first to be followed by the construction of the Link Distributor Road. A phasing map is included at the end of Chapter 10.

5.9. Natural Heritage Designations

- 5.9.1. The closest European sites to the proposed GDRS site are the Knocksink Wood SAC and the Ballyman Glen SAC (2.5km and 2.9km respectively).
- 5.9.2. Dingle Glen pNHA is situated east of the proposed GLDR at a distance of approximately 540m. The Ballybetagh Bog pNHA is approximately 1.3km south-west of the GLDR alignment.

6.0 Planning History

The Park, Carrickmines

Dún Laoghaire Rathdown County Council Reg. Ref: D18A/0257 (ABP-304396-19)

- 6.1. Permission granted in September 2019 for a neighbourhood centre (including retail, retail services and restaurant/café uses), retail warehouses, cinema and other leisure space, residential units, crèche, office space, car showroom, medical centre, linear park and associated infrastructural works at a 105 hectare site at lands known as Quadrant 3, The Park, Brookfield, Glenamuck Link Road (also known as Glenamuck Road) and Ballyogan Road, Carrickmines.
- 6.2. The Board had previously refused permission in April 2013 for a mixed-use district centre of approximately 60,000 sq.m. (Reg. Ref: D12A/0163/ PL06D.240869) for reasons relating to retail hierarchy and car dependency.

Cherrywood

An Bord Pleanála Ref: ZD06D.ZD2010

- 6.3. The Board approved the making of the Cherrywood planning scheme in April 2014 covering an area of 255 hectares located mostly on the eastern side of the M50 in the proximity to Carrickmines and Glenamuck.
- 6.4. Amendments to the SDZ planning scheme to update sequencing and phasing of development and to take account of the front-loading of enabling infrastructure already delivered and planned on site were approved by the Board in December 2018.

Glenamuck Road (south-eastern side)

Dún Laoghaire Rathdown County Council Reg. Ref: D17A/0793

- 6.5. Permission granted on a 2.2 hectare site at Rockville House, Glenamuck Road South for renovation of protected structures on site and construction of 49 no. dwellings, as well as upgrades to Glenamuck Road adjacent to the lands to include new footpath, resurfacing of the carriageway and public lighting.
- 6.6. Permission had previously been refused on site by the Board (Ref: PL06D.247300) for 49 no. dwellings for reasons relating to prematurity due to deficiencies in the road

network at Glenamuck Road in terms of capacity, width, alignment and structural condition.

- 6.7. Permission was granted under Reg. Ref: D18A/1191 (ABP-303871-19) for change of 5 no. previously approved dwellings under Reg. Ref: D18A/0566 on a site to the south-east of the above.
- 6.8. The Board then refused permission under ABP-303324-18 (D18A/0940) on a site further to the south-east for a Phase 2B development for 57 no. residential units. It was considered in the reason for refusal that the proposal would be premature pending the determination by the planning authority of the Glenamuck Link Distributor Road.

An Bord Pleanála Ref: ABP-302409-18 & ABP-304820-19

- 6.9. A request to enter pre-application consultations was received by the Board for residential and neighbourhood centre developments at the former Wayside Celtic sports grounds.

Glenamuck Road (north-western side)

Dún Laoghaire Rathdown County Council Reg. Ref: D10A/0026 (PL06D.236475)

- 6.10. The Board overturned the Council's decision and granted permission at Ashwood Farm for a residential development consisting of 139 units (29 houses and 110 apartments) and a crèche. This permission was extended under Ref: D10A/0026/E to September 2020.

Dún Laoghaire Rathdown County Council Reg. Ref: D18A/0623 (ABP-302572-18)

- 6.11. Permission refused at The Leys, Glenamuck Road South for 52 no. dwelling units. It was not considered under the first reason for refusal that the proposal would facilitate the orderly development of adjoining properties/ landholdings and has not been planned in the context of a coherent overall outline masterplan. The second reason refers to the uniformity of design of proposed duplex blocks, which was considered a substandard form of development.

An Bord Pleanála Ref: ABP-303978-19

- 6.12. Permission granted on a 4.28 hectare site for 30 no. houses, 173 no. apartments, a creche, retail unit, social/ amenity facility and 2 no. ESB sub-stations, together with new access from Glenamuck Road.

An Bord Pleanála Ref: ABP-300731-18

- 6.13. Permission refused on Glenamuck Road South in April 2018 for 141 no. residential units and provision of a creche, together with the construction of the link access road between Enniskerry Road and Glenamuck Road required under the Kiltiernan/Glenamuck Local Area Plan 2013; and the construction of the Enniskerry Road / Glenamuck Road Junction Upgrade Scheme approved by Dún Laoghaire-Rathdown County Council under Part 8 of the Planning and Development Regulations 2001, as amended.
- 6.14. Reasons for refusal related to residential density, storm water proposals, pedestrian/ cycle connections and impact on adjoining residential amenity.

An Bord Pleanála Ref: ABP-303131-18

- 6.15. A request was received to enter pre-application consultations in relation to a proposal for 130 no. residential units on lands at Shaldon Grange.

Golf Lane Roundabout

An Bord Pleanála Ref: ABP-302336-18

- 6.16. A SHD application for 250 no. apartments, crèche, gym, residents' amenity space and associated site works at a 2.6 ha. site to the east of Golf Lane Roundabout was refused permission.
- 6.17. It was considered under the reason for refusal that the proposed design strategy does not provide for a landmark building and that the overall design is monolithic and repetitive.

Ballycorus Road

Dún Laoghaire Rathdown County Council Reg. Ref: D16A/0582 (PL06D.247754)

- 6.18. Permission granted for a house and associated site works at Derryclare, Ballycorus Road, Kiltiernan.

7.0 Submissions from Prescribed Bodies on the Proposed Development

National Transport Authority

- 7.1. The NTA is broadly supportive of the GDRS on the basis that it is in accordance with the principles of road development set out in the Transport Strategy for the Greater Dublin Area, 2016-2035 (section 5.3 above).
- 7.2. However, it is considered that the design of cycle infrastructure at certain junctions, where cyclists would be to the left of left-turning traffic, does not comply with guidance contained in the NTA's National Cycle Manual.
- 7.3. It is therefore recommended that design of cycle infrastructure should be amended accordingly. It is also recommended that the Wayside Celtic junction be amended in accordance with the design for 'Side Road Joining Street with Cycle Track' in Section 4.9 of the NCM.

Department of Culture, Heritage and the Gaeltacht

- 7.4. It is noted that the Department made observations/ recommendations on the EIAR Scoping Report, which recommended that an otter survey be carried out to evaluate the likely impact on otter populations known to inhabit the Carrickmines/ Loughlinstown River catchment. However, such surveys were only carried out at the locations of the proposed river crossings. It is considered that the impact on otter usage along the Glenamuck Stream is likely to be particularly marked and if otter usage can be fully defined then suitable mitigation measures may be possible.
- 7.5. The Department's submission also refers to the location of a main badger sett within 100m of the proposed GLDR and a population of Sika Deer along the Glenamuck-Tiknick ridge. It is recommended that badger and deer proof fencing should be installed along the GLDR where it is bounded by undeveloped land.

Geological Survey of Ireland

- 7.6. It is noted that there are no County Geological Sites located within the vicinity of the proposed development and there is no envisaged impact with current plans. It is recommended that any significant bedrock cuttings are designed to remain visible as rock exposure, or alternatively, are digitally photographed and recorded.

Transport Infrastructure Ireland

7.7. The NTA's Transport Strategy for the Greater Dublin Area, 2016-2035 identifies that the trend for increasing traffic on the M50 is unsustainable and that a coherent approach to the management of travel demand on the M50 corridor is required. The M50/M11/N11 Corridor Study (January 2012) sought to devise a strategy to manage the strategic function of the M50/M11/N11 in the context of planned development on adjoining lands without the compromising the roads' strategic role. TII has the following observations in this regard:

- Detailed assessment of nearby M50 junctions would provide clarity in relation to potential impact of proposed road scheme.
- More clarity required on the quantum of additional trips that may use M50 Junctions 14 & 15 and the dispersal of trips across the network in peaks.
- Assessment includes for build out of LAP but not other committed/ planned developments, e.g. The Park, Carrickmines and Cherrywood SDZ.
- Assessment of impact in terms of peak hour volumes within modelling report and also potential demand responses and trip reassignment related to the provision of significantly improved road infrastructure.
- Applicant appears to have used the Do Transport Strategy Eastern Regional Model to assess future impacts on the M50, which reduces flows on the motorway – do nothing scenario is needed to undertake a robust assessment.

Inland Fisheries Ireland

7.8. The following observations have been received from IFI:

- Loughlinstown/ Shanaganagh River System is exceptional among most urban river systems in supporting migratory sea trout and resident brown trout – highlights sensitivity of local watercourses and catchment in general.
- Comprehensive surface water management measures must be implemented at the construction and operational stage to prevent pollution of local surface waters.
- Top soil material to be stored on site must have measures to prevent deleterious material entering the surface water network.

- Culverts and bridge crossing plans, temporary crossings and surface water outfalls must be submitted to IFI for approval – clear span bridges and bottomless culverts preferred.
- BAT measures regarding road/ storm-water run-off management must be implemented – installation of petrol/ oil interception and silt trapping on road drains essential and annual maintenance contract required.

Irish Water

7.9. Irish Water has no objection in principle to the proposal; however, infrastructure capacity requirements and proposed connections will be subject to the constraints of the Irish Water Capital Investment Programme.

7.10. It is also stated that the Construction Management Plan should include for liaison with Irish Water in relation to the protection of its infrastructure.

7.11. Response to prescribed bodies

7.11.1. Dún Laoghaire Rathdown County Council responded to the submissions made by prescribed bodies with the following comments:

Traffic/ transport

- GDDR/ GLDR junction and Wayside Celtic access/ and GLDR junction have been modified to incorporate observations made by the NTA.
- 2012 M50/M11/N11 corridor study undertaken by NRA cited that GDRS would have a positive impact on M50 junction interchanges by alleviating demand on the motorway and providing an alternative route.
- GDRS would be fully in accordance with the stated objectives of the RSES – new and emerging residential communities at Kiltiernan-Glenamuck.
- Significant component of traffic movements at Junction 14 & 15 wishes to cross the M50 (analysis undertaken as part of Ballyogan and Environs LAP). GDRS would facilitate future construction of proposed Cherrywood-Kiltiernan Link Road. Leopardstown Link Road Phases 2 & 3 would also provide for segregated crossing of the M50 at Junction 14.

- County's development area is at a location where M50 runs parallel to Luas Green Line – increasing intensity of land use in this corridor, while also according with appropriate integration of land use and transportation from a public transport perspective, presents challenges in terms of preserving the capacity of the M50 and its junctions.
- GDRS is an essential and integral part of comprehensive development strategy to develop these areas and conflicting objectives are successfully reconciled within local areas plans through provision for sustainable modes, improved permeability, and segregated crossings of the M50.
- Traffic modelling technical note provided in Appendix A of Council's response includes the following commentary:
 - Transport Modelling Report prepared for GDRS included assessment of proposed junctions to demonstrate that they were designed appropriately to serve future transport demand – did not include assessment of junctions external to GDRS.
 - Appendix A of Council's response includes a breakdown of the 3,800 trip productions and attractions in terms of origin trips from LAP lands travelling outside the lands; destination trips to the LAP lands; and trips generated within the lands and travelling within the boundary of the lands (intrazonal). There are 918 am and 916 pm intrazonal trips.
 - Cherrywood and The Park have been incorporated in all the future modelling assessments – schematics In Appendix A illustrate how trips travel outside these committed developments and distribute to LAP lands and other external zones for strategic road corridors entering/ exiting the model.
 - Peak hour flow schematics along M50 from Junction 13 to 16 provided in Appendix A of Council's response and includes the Do-nothing scenario. 2035 do-nothing vs. do-something plots also provided.
 - New do-nothing scenario without the GDA Transport Strategy provision indicate higher AADT numbers compared to 2017 base and 2020 scenario.

In comparison with other AADT numbers in 2035 scenarios, there are significant differences in AADT numbers.

Biodiversity

- Otter survey carried out at all proposed watercourse crossing points which represent total length of stream corridors affected by the proposed scheme.
- Proposed watercourse crossing on Loughlinstown River retains existing bed and banks and facilitates mammal passage. Glenamuck Stream crossing incorporates mammal ledges. January 2019 otter survey of selected rivers in Dún Laoghaire Rathdown has been made available to the project team and is consistent with the findings of the EIAR.
- Mammal underpasses specified in EIAR to maintain existing badger habitat connectivity – mammal resistant fencing will direct mammals to the crossing point.
- Speed limits (50 kph) will be effective in minimising collision risk with deer – zoned land would tend to displace deer once constructed.

Prescribed Bodies

- Applicant will forward a copy of site investigation to GSI – it is not anticipated that any significant rock exposures will be created.

Water and Hydrology

- It is intended to consult with fisheries body for approval regarding details and methodology of all in-stream works.
- Petrol interceptors not proposed but can be accommodated in the design within the existing footprint.
- Proposed development is not anticipated to generate any significant water/wastewater load affecting capacity. Consultation with Irish Water regarding interfaces and incorporation of new assets in the road scheme will continue.

8.0 Submissions/ Observations on the Proposed Development

8.1. A total of 14 submissions on the proposal were received from third parties. The main points raised in each submission are summarised as follows:

James and Sonja Buckley, Glendale, Enniskerry Road

- Proposal will result in significant reduction in land's development potential.
- Proposed road and attenuation pond will result in loss of agricultural land – lands are currently rented for agricultural purposes.
- Lands will become inaccessible as a result of the proposed development – requests that subject lands are directly accessed off the GLDR.
- Road safety – increase of traffic along Ballycorus Road and no road safety audit carried out.
- There will be adverse impacts on residential amenity from traffic noise, visual impact, light pollution, emissions, construction works, etc.
- Environmental concerns with regards to the impacts of the proposed development on the Loughlinstown River and whether a Stage 2 Appropriate Assessment is required.
- Questions whether ecological assessment takes appropriate account of woodpecker and badger populations.
- Arboricultural impact with regards to hedgerow and tree removal - as many trees as possible should be retained.
- There will be devaluation of property and landholding.
- There will be negative impacts on protected views along Ballycorus Road.
- There are potential impacts on the area's archaeological importance including national monument Ref: DU026-021 on objector's landholding.
- Construction phase impacts are a concern.

Mark Buckley, Bellevue, Ballycorus Road

- Same landholding and points raised as above.

Iain & Shirley Finnegan

- Same landholding and points raised as above.

Droim Sí Developments Ltd.

- Subject lands have significant development potential being strategically located close to existing and proposed amenities and facilities.
- Lands are highly accessible and enjoy a frontage of c.260m onto the R117 – all access points to the lands should be maintained and development potential of the lands should not be negatively affected as a result of the Glenamuck District Roads Scheme.
- Proposed development as currently designed is contrary to statutory planning policy and in turn contrary to the proper planning and sustainable development of the area.

Goodrock Project Management Ltd.

- Objector has secured planning permission under D17A/0793 and D18A/0566 for 54 no. dwellings. Phase 2B for 57 no. apartments recently refused by the Board (ABP-303324-18) being “...*premature pending the determination by the planning authority of the road layout for the area.*”
- Provision of strategic infrastructure in proximity to objector’s land is welcomed.
- GDRS fronts the proposed Phase 2B site and Parcels 20A and 23B (LAP) – vertical alignment of GDRS at these locations is at a 6% gradient and this exceeds the maximum of 5% set out in DMURS.
- Own door units would require excessive steps between each residential unit which would impact on viable residential typologies – maximum gradient should be 5%.
- Indicative location of access junction to Parcel 23B – Scheme should facilitate the relocation of this junction to preferred location (indicated on Figure 3.1 of submission) to meet landowner’s short-term agricultural requirements.
- 7m bellmouth access should be provided along land parcel 27B off proposed roundabout on Glenamuck Road to serve primary school site.

- 6m wide agricultural access should be included off the GDRS to provide access to land parcel 26A.
- Underground ducting for 110kV line should be extended across the full extent of lands within the boundary of the LAP, including land parcel 27B to facilitate development of school site and adjacent lands.
- GDRS severs objector's landholding from services and road network access – vehicular access points and installation of foul, surface water, ESB, telecom services, road crossings, etc. should be maintained to objector's lands once road is complete.
- Clarification required to confirm that surface water drainage has been designed to facilitate the surface water discharge from residential zoning in land parcel 23B and net area zoned residential in land parcel 20A.
- Proposed works should include installation of services crossing at chainage 690 to enable development of observer's Phase 3 lands and connection to Phase 1 services.
- Clarification is required that network extension project incorporates the provision of water supply to residential zoning Phase 3 lands in Parcel 23B and including parcels 25 & 27B.
- Clarification is required that provision of all services within the road corridor will facilitate supply and discharge capabilities for residential zoning – observer has already serviced their lands and GDRS is severing much of those lands.

Donough & Clare O'Keeffe, Dromard, Ballycorus Road

- Effect of compulsory purchase of neighbouring lands should not be permitted to adversely affect the environmental integrity of the observer's holding.
- Proposed scheme will severely impact on the enjoyment of the property and its peaceful rural surroundings.
- Insufficient detail in the EIAR in respect of mitigation measures to protect the property (specifically noise and vibration). Observer's dwelling is less than

30m from the proposed road boundary and wasn't selected for inclusion in baseline noise monitoring.

- Noise mitigation is proposed at the property in the absence of location specific data to support its design.
- Insufficient information regarding drainage and treatment of excess surface water as a result of construction works – EIAR is incomplete, deficient and invalid.

Ken Fennell, Receiver of Certain Assets of Carrickmines Partnership

- Observer controls a c. 13.5 hectare landholding on both sides of GLDR (parcels 20A, 22 and 23A in LAP) – represents most important landholding that can deliver the LAP neighbourhood centre, village green, new Enniskerry Road 'street', new road connections from Glenamuck Road and Enniskerry Road, significant public spaces and several hundred dwellings.
- Lands subject to Neighbourhood Framework Plan and new greenway link is identified from Enniskerry Road via village green and neighbourhood centre to the GLDR and further east to Dingle Glen.
- Observer intends to lodge a SHD application to the Board to develop these lands.
- Observer supports GDRS which is considered essential to the completion of the LAP area and delivery of full quantum of development envisaged.
- Location of proposed crossing of GLDR is too far south of the existing line of trees and hedgerow where the Dingle Way linear park is to be located.
- Relocation of crossing will allow a separate dedicated road junction south of same to facilitate a new street through observer's development to new neighbourhood centre/ village green.

Kiltiernan & Glenamuck Residents Association

- Proposal will split the Kiltiernan Glenamuck community in two as a result of the plan to have pedestrian/ cycling access only to Kiltiernan from Glenamuck – will result in people driving further to get to services.

- Road should remain available in its current form for local vehicular access and bus route.
- Road plan serves to unnecessarily eliminate green space – no public green space envisaged apart from attenuation pond and near pylons.
- There will be a loss of mature trees, hedgerow and important habitat.
- Continuation of link road to Barnaslingan is particularly questionable to its purpose.
- Much congestion in the area is caused by inefficient merging of M50 & N11 and Kiltiernan/ Glenamuck is used as bypass route.
- Observer supports TII's recommendation that further assessment of the "do nothing" approach is warranted in order to make better enquiries into the impact of the proposal on the strategic capacity of the existing motorway network.
- Scale and underlying intent of proposal serves to negate development plan and LAP aspirations to achieve development (including roads) to enhance community fabric.
- Seems totally environmentally unfriendly to construct a roundabout at Glenamuck in case people forget there is a bus gate.
- Traffic and Transport Assessment in Chapter 7 fails to consider the effect of the proposal on the existing Glenamuck Road/ Golf Lane roundabout.
- Bus gate at junction of Glenamuck Road East and GLDR effectively extinguishes the vehicular right of way and will require all existing 1,500 residents to pass through Glenamuck Road/ Golf Lane roundabout.
- EIAR does not assess an alternative location for the bus gate to the south of the roundabout, as provided for in the 2007 LAP.
- Severance mitigation does not provide vehicular access for the elderly and school drop off and collection, etc.
- EIAR fails to assess the impact of loss of the only zoned public open space in the LAP (Plot 27A) as an attenuation pond.

- There are questions about the impact of the proposal on biodiversity and the climate change emergency.
- Lighting plan is aspirational and unacceptable to residents.
- Toxic herbicide impact on the wider area and run off into the sea has not been assessed.
- Two tranches of public open space and the centrally located major public open space must be identified and committed to before distributor road scheme can be considered.

Finn & Anita O'Connell, 8 Struan Glen, Enniskerry Road

- Traffic movements are significantly below current road capacity to and from the Scalp, along Enniskerry Road and at the Enniskerry Road/ Ballucorus Road junction.
- Longer route heading north and then west onto Ballycorus Road to access Kiltiernan will increase carbon footprint.
- No safety or accident reports to justify claims that Enniskerry Road is unsafe.
- No changes in traffic volumes under do nothing scenario between 2020 and 2035 is inconsistent with rest of EIAR.
- New plan with elevated road will cause light pollution and privacy issues to residents along the GLDR.
- EIAR does not include a carbon footprint study of the proposed road.
- Proposed GLDR will create additional noise pollution for local residents.
- Lands impacted by CPO were not surveyed prior to issuance of the EIAR.
- There is a badger sett within c. 100m of the GLDR and there is also a vibrant river habitat.
- Specific GLDR costs and benefits must be compared/ considered against other alternatives.
- GLDR should be considered after the GDDR – there is no current or future requirement for the proposed GLDR.

Declan Taite & Anne O'Dwyer, Receivers to Michael and Martin Doran

- Development of observer's site is not directly connected or contingent upon the proposed road scheme.
- Proposal on observer's land has been designed and laid out to have regard to the alignment of the proposed road scheme and the Enniskerry Road/ Glenamuck Road Upgrade Scheme approved under Part 8 in Sept. 2017.
- Requests that the access point to observer's site, as shown within submission, is included on application drawings for the GDRS.
- Requests that proposed alignment of the road along the northern side of Glenamuck Road is maintained in the position shown on the drawings submitted with the application for approval – any further encroachment into subject site would require significant amendment to development and junction layout.
- Proposed push button pedestrian crossing on Glenamuck Road should be repositioned marginally to the north-east to align with the centre line of the proposed landscaped pedestrian and cycle route.

David Cahill & Karen O'Keefe, 6 Struan Glen, Enniskerry Road

- Many maps and assessments within EIAR do not make reference to the existence of Struan Glen.
- Proposed route cuts Barnaslingan Lane in two and removes observers' access to lane and its amenities.
- Not explicitly clear that there will be pedestrian access to link up both planned cul de sacs that will make up Barnaslingan Lane.
- Proposals place many houses, including those on Struan Glen, between a narrowing wedge of two roads and resulting in a loss of green space – consideration should be given to the provision of a suitable play area for Struan Glen.
- Bus corridor for a bus service that operates at intervals of an hour seems inappropriate.

Eilish & Neil Tohill, Dunans, Kiltiernan

- Proposal directly affects the access to observers' property.
- Proposed changes to access would result in a total blind spot turning right where sight lines are non-existent.
- There will be a large area of vacant land outside existing gate when road works are completed – unauthorised use of this land could take place if it is not properly secured.
- Observer awaits final confirmation in relation to completion of front wall boundary treatment and new bell entrance to property.

David & Katie Chapman, 7 Struan Glen

- Construction of section of GLDR will destroy the natural vista and surrounding countryside aesthetic.
- GLDR will create an unwelcome negative noise impact for residents.
- Proposed section of GLDR offers no additional traffic volume capacity to that of the existing Enniskerry Road.
- GLDR should be rejected in its current form.

John Byrne & Rosemary Owens, Braniwell, Barnaslingan Lane

- Objector's ingress and access will be hindered – Council must ensure that all vehicles have access during the build.
- Proper screening of building works during construction and proper planting and screening when road is completed are required.
- There must be no trespassing onto observer's property during construction.
- Dust, noise and litter must be kept to a minimum during construction.

8.2. Responses to Submissions/ Observations

- 8.2.1. Dún Laoghaire Rathdown County Council responded to third party submissions/ observations with the comments set out below. Some issues raised in submissions/

observations have also been included within objections to the CPO and are summarised under Section 8.4.

Alternatives

- Appendix D – Route Appraisal of the scheme lists the main constraints as being the 220kV pylon; landholdings (Buckley and Byrne bisected by GLDR); archaeology (route passes through DU026-021); rivers; and Struan Glen housing estate.
- Appendix D sets out the three routes considered (Route 1 – preferred route; Route 2 – Amended GLDR alignment commencing closer to Ballycorus junction; and Route 3 – GLDR terminating at Ballycorus Road.
- Route 1 was considered to have significant advantages over alternatives with regard to key scheme objectives, including traffic flow capacity, sustainable transport provision and safety.
- Cost benefit analysis compared the GDRS with and without the southern link – both proposals would have a high return for value for money; however, benefit to cost ratio of proposal with southern link is 2.94 and without is 2.82.

Planning & Policy

- Struan Glen was not on all maps but forms a vital part of the proposed road development and remained an area of focus throughout the study.
- Main planning applications in the locality at the time of submission (including SHD) are noted in EIAR. Planning developments on landholdings have been considered as part of the EIAR by virtue of land zonings and via consultations.

Traffic and Transport

- Road Safety Audit and designer's response included in Appendix B of the Council's submission – recommendations incorporated into minor amendments to the scheme.
- Tohill property - proposed works to entrance are a significant improvement to existing sight lines and vehicles will be approaching at lower speed.

- Accident data provides robust support that there is an issue of road safety in the immediate road network, particularly along Enniskerry Road.
- Glenamuck Road/ Golf Lane roundabout proposed signalised junction was considered in a separate Future Year Do-Something scenario to analyse cumulative effects.
- GDRS gives precedence to pedestrians, cyclists and public transport over private vehicles, improves connectivity and could improve bus reliability.
- Provision of underpass/ overpass on Glenamuck Road considered entirely unnecessary and unfeasible, resulting in huge cost and visual impact and affecting local topography and pedestrian movement.
- Junction provided at GLDR/ Ballycorus Road provides benefits in terms of alignment, turning lanes and vehicle stacking which is not possible to provide along the existing road network.
- Taite & O'Dwyer – future access points are notional only and would require planning permission. Development intention on site and previous planning applications have been considered in the assessment. No intention to widen road beyond proposed scheme drawings and there is flexibility to adjust pedestrian crossing points at detailed design stage.
- The following recommendations were included in the Stage 1 Road Safety Audit:
 - Facilities for vulnerable users to be upgraded on all arms of Golf Roundabout.
 - Risk assessment for safety barriers and clear zone to attenuation pond to north-east of Golf Roundabout.
 - Left in-left out only access or additional arm provided to junction at Chainage 660 to provide access to Bective.
 - Single lane southbound only onto GLDR from GDDR.
 - Provision of advanced cycle stop line for cyclists travelling north on Enniskerry Road and wishing to turn right onto GDDR.

- Increase length of right turning lane to Enniskerry Road South and relocation of access to De La Salle ground further west.
- Swept path analysis for right turning HGV's from Enniskerry Road South onto GDDR.
- Swept path analysis for buses into/ out of Glenamuck Road and the GLDR.
- Bus straight on lane on Glenamuck Road to right of right turning lane – bus lane should be raised in advance of the pedestrian crossing point or be coloured a different colour to the general traffic lanes and that the stop lane for buses be set back from the stop lane of general traffic.
- Enniskerry Road junction with GLDR – U turn facility at the end of Enniskerry Road for general traffic prior to connection with the GLDR.
- Lowering of vertical alignment of GLDR on approach to Glenamuck Road junction to avoid steep gradients.
- Assumed that suitable pavement surfacing will be chosen to ensure skid resistance on the decline towards junction at Ch 660 on Road 100.

Air quality and climate

- Climate modelling assessment focuses on the change in traffic flows from the existing road network to the proposed GDRS – proposed scheme will result in an increase of 701 tonnes CO₂ and 2,560 tonnes CO₂ in 2020 and 2035 respectively when compared with the do nothing scenario – increase is not considered significant.

Noise and Vibration

- Mark Buckley – modelled traffic noise level at this property did not indicate the requirement for noise mitigation and the overall noise level is below the traffic noise design goal of 60dB L_{den}. Road traffic noise will continue to be dominated by the existing Ballycorus Road at this location and proposed noise barrier at property to the east would tend to reduce noise impact.
- Struan Glen – noise barrier will be incorporated into the scheme mitigation design to the north and south of Loughlinstown River Bridge crossing –

residual noise levels at the most exposed façade within Struan Glen are suitably reduced to below the noise threshold of 60dB L_{den}.

- O’Keefe – road traffic not a significant source of vibration in the environment. Vibration limits during construction are set to avoid any form of structural or cosmetic damage to light weight buildings. Residual noise level at this property is within the traffic noise design goal for the proposed road development.

Biodiversity

- No badger sett is to be directly affected by construction works. Connectivity will be maintained for the wider badger population via mammal routes and underpasses.
- AA screening report was submitted, and it was found that there are no pathways from the development to Natura 2000 sites.

Landscape, townscape and visual

- Chapman – Road is only one part of a significant change from rural to urban due to happen in the area – can be mitigated through good urban and streetscape design. Landscape design of new road seeks to create avenues and planted boundaries.
- Proposal avoids wholesale destruction of the character of existing roads and places new roads in areas where there is scope through planting, etc. to minimise visual impacts on adjacent properties.
- Robust construction stage fencing will be provided to ensure a suitable buffer from surrounding residential areas. Extensive boundary planting and new street tree planting will be carried out.
- Proposed pond only occupies a small portion of the lands which are zoned as open space – suitably designed SUDS features are considered entirely appropriate within open space.

Water and Hydrology

- Goodrock – it is confirmed that drainage system is designed to receive attenuated discharge from the subject landholding within parcels 23B and

20A. Any existing agricultural drainage on Parcel 27B affected by the scheme would be intercepted and conveyed to existing discharge point downstream of flow controls associated with GDRS.

- Only herbicide relates to potential use in control of invasive species.

Resource and waste management

- Specific measures relating to dust and noise are discussed in the relevant sections of the EIAR and Council's response.

Material assets

- Goodrock – desired access points appear reasonable and could be delivered as accommodation works.
- Droim Sí – existing accesses for the landholding are unaffected by the proposed works. Service crossing can be accommodated at Chainage 690 and applicant is happy to provide stubbed services. Emerging feasibility designs from Irish Water include provision of strategic watermain and foul sewer within the road through the area in question. Changing road gradient to 5% would result in greater visual impact. Ductwork will be laid to facilitate undergrounding of 110kV line.

Byrne and Owens

- Access will be maintained throughout construction stage and permanent boundaries will be provided. Staff will not be permitted to enter private lands during construction and mitigation measures will be further developed as part of construction stage documentation.
- Tohill - Photomontage of intended boundary treatment included in response. Land parcel at corner is more appropriate in public ownership.

9.0 Compulsory Purchase Order

9.1. Documentation Submitted

- 9.1.1. The Local Authority is seeking confirmation of the Dún Laoghaire Rathdown County Council Compulsory Purchase (Glenamuck District Road Scheme) Order, 2019,

which was signed and sealed on 29th March 2019. The following documentation was submitted to the Board:

- Newspaper advertisement
- (Glenamuck District Road Scheme) Order, 2019 Schedule
- Executive Order No. (PROP/47/19)
- Notice of Making
- 2 x Signed Certificates
- Scheme Maps

9.1.2. The first part of the schedule to the CPO lists 86 plots of land permanently affected by the CPO and the second part lists 59 plots that will be temporarily affected during construction works. Deposit maps no's. DP001, DP002, DP003 and DP004 illustrate lands to be permanently and temporarily acquired. These maps also show sections of private right of way, which are described in the third part of the schedule to the CPO.

9.1.3. The lands described in the schedule are lands other than land consisting of a house or houses unfit for human habitation and not capable of being rendered fit for human habitation at reasonable expense.

9.2. **Objections to CPO**

9.3. A total of 17 submissions were received by the Board in relation to the Dún Laoghaire Rathdown County Council Compulsory Purchase (Glenamuck District Roads Scheme) Order 2019, six of which were withdrawn. The main points raised in each of these submissions are summarised as follows:

James Gerard Grimes and children

- Notices served do not appear to make provision for any entrances to lands held by objectors on both sides of the proposed roadway.
- Construction of roadway as planned effectively leaves a considerable amount of property landlocked and unusable/ unviable. There is a stream to the north of the objector's land parcel.

- There should be three separate entrances to objector's land to the north of the proposed roadway and a minimum of one entrance to land to the south.
- Plot of ground set out as Plot 12.1T is excessive and greater than what would reasonably be required by a contractor for the purposes of access to the site – open to local authority to seek temporary access to a much narrower piece of ground.
- Extent of Plots 12.2T and 12.1T could have a deleterious and damaging effect on the future development potential of objector's lands – plots should be restricted and reduced in terms of extent and time so that construction works will not result in continuous interference with property rights and enjoyment and conduct of business.
- Proposed attenuation pond alters natural drainage and does not appear to provide adequate drainage for the objector's property to the south of the proposed roadway – proposed attenuation pond effectively an existing watercourse across the land.
- Drainage of land should be maintained during and after construction to allow the land to be used.
- Side slope on either side of the roadway could not effectively be used by the objector.
- Plot 12 does not appear to take proper account of the provision for foul water and water pipes as are laid in the area.
- Proposal does not appear to comply with the NRA 2010 Project Management Guidelines under A4.1 for land acquisition.
- Proposed acquisition should include a strip of land to the north of the proposed road including the stream – stream should be realigned parallel to the road and taken in ownership by the Council.
- Proposal constitutes unwarranted interference with the flora and fauna of the area.

- Proper provision should be made for the connection of services on objector's land from one side of the proposed road to the other. A tunnel should also be provided.
- Proper secure fencing should be provided around the attenuation pond.
- Properly constructed and finished granite wall should be provided along the road.
- Proper security and access should be made available to the objector's land during construction.
- Proper provision should be made for the relevant ducting and wayleaves for the undergrounding of the 110 kV line.
- Local authority should confirm that there is no requirement for the landowners to make any Section 50 application for access across any stream on the land retained by and owned the objector.

John & Jantine Findlater

- Based on flows measured by local residents, 2020 do nothing AADT is overstated by 31%.
- Based on resident surveys of 2011 and 2019, there is no change over 1.5 hour am peak of vehicles travelling north into Kiltiernan – EIA report assumes a high rate of increase.
- DBFL model (2020 do nothing) guesses traffic coming from Enniskerry will increase by 100% when GLDR opens – this is unrealistic as there are no plans to rezone agricultural lands south of Kiltiernan.
- Increase of traffic on Ballycorus Road between 2020 and 2035 of c. 50% is more realistic than the 500% assumed in EIA report.
- Traffic flows are exaggerated on account of consultant's assumption of LAP lands being fully developed – more realistic that 50% of targeted LAP densities will be achieved by 2035.

- New road is not required based on low traffic volumes south of Kiltiernan - one reason for low levels is that school traffic is at 08:45 and commuters heading for Dublin are gone by 08:30.
- If nothing done, junctions to south of Kiltiernan will continue to operate within capacity.
- Such a traffic management system as proposed to reduce traffic through Kiltiernan are notoriously difficult to implement.
- Commuter driving from Scalp to Dundrum will not be able to go on the Enniskerry Road through Stepside and will have to use the GLDR half way to the M50 and back to GDDR to rejoin Enniskerry Road.
- Final tables of the traffic modelling report (Figures 1c and 3c) show absolutely no change in flows in traffic from 2017 to 2035 – Board should delay decision until errors have been corrected and scenarios re-run for 2035.
- Massive cost saving can be made by not constructing the link road (GLDR) – Board should question assumptions in EIA Report regarding future growth and the immediate need for GLDR.
- Near saturated junction at Golden Ball at am and pm peak could be resolved cheaply by road widening approaching this junction from each direction.
- There are national cost implications if the Board endorses policy of adding a 2nd road to bypass tiny villages throughout the country.
- GDRS should be carried out in two phases – first the GDDR and if justified the GLDR.
- Objector's dwelling should be included on the list of houses requiring acoustic mitigation, e.g. noise reducing surface and angling of walls at junction to reduce noise at objector's dwelling.

Cairn Homes Properties Ltd.

- Objector intends to progress a high-density residential planning application on their site through the SHD process in the coming months. Permission for 139

dwellings (D10A/0026 as extended by P/0917/15) on the site accessed directly from the existing Glenamuck Road expires Sept. 2020.

- Objector has no objection in principle to the proposed GDRS scheme and to the CPO of part of their land subject to acceptable compensation and appropriate boundary treatments, access to services and accommodation works.
- Imperative that new road does not negatively affect objector's ability to access their land from the existing southern access onto Glenamuck Road – provision of second access should be included to the north.
- Objector questions the location of the attenuation tank on residentially zoned land with agricultural land being located immediately south.
- Objector concerned that proposed development may negatively impact on their ability to implement Reg. Ref: D10A/0026, in particular with regards to achieving requisite sight lines to the west.
- Proposed northern entrance to the east of Cairn Homes site is welcomed but should be relocated westwards to serve both land ownerships to the south of the street at this location.
- Introduction of access points along this stretch would be consistent with DMURS as it will slow traffic and improve permeability – multiple accesses will counteract severance and legibility and a sense of place would be lost if there are carriageways with continuous walls and fences.
- Access to existing and proposed services (drainage, water supply, gas and telecommunications) should be maintained and improved to enable the sustainable development of objector's site.
- Insufficient boundary treatment information is lodged in relation to the interface between the objector's site – stone wall and railing should be constructed for consistency with the adjoining residential development to the south-east and opposite.
- Northern boundary should be suitably designed to ensure safe and adequate access to the Cairn Homes land in the future.

De La Salle Palmerston F.C.

- Proposal is in contravention of LAP and Development Plan, particularly in relation to the objectives for the enhancement and preservation of amenity, including community and sporting and leisure facilities.
- Proposed design is by reference to narrow road engineering principles only and does not take proper account of the wider planning context and needs of the community.
- Club has maintained a presence at Kirwan Park since 1981 and members have concerns regarding the environmental impact of road realignment and construction.
- Specifically, the proposed road would compromise the safe access for several hundred mini and youth players on a Sunday morning; substantially reduce the amount of car parking and playing space; impact on the visual amenity of the clubhouse and pitches; cause disruption during construction; result in loss of mature trees abounding Enniskerry Road; isolate a parcel of land from the main body of the club grounds; cut through an area used for temporary lettings for community uses; and damage the entrance to the club.
- Effect of the CPO may well be to extinguish entirely the viability and sustainability of this vital community facility.

Ken Fennell (Receiver of certain assets of the Carrickmines Partnership)

- Overall property is severely affected and the proposed GDRS fails to supply adequate information regarding the impacts on landowner due to the design and construction nature of the project.
- True assessment of impact of scheme as it affects observer's property is challenged without accurate final design drawings.
- Should CPO be confirmed by the Board without detailed factual final design drawings being at the objector's disposal, such an order is flawed.
- EIAR is incomplete due to lack of proper information regarding the design and construction methods to be employed.

- On previous design and build type contracts, the design and location of certain structures, elevations, horizontal and vertical sections do not conform to the final structures constructed. These alterations occur without consultation with the affected landowner.
- Area of temporary acquisition is excessive and open to trespass during construction.
- Proposed scheme will severely impact on development potential.
- Acquiring authority is requested to provide along the entire length a suitable sound barrier and screening, an agreed landscaping schedule, and conformation that boundaries will remain the responsibility of acquiring authority.
- Proposed pedestrian crossing at Ch. 960.00 is at a location where use of same is limited – should be relocated northwards to coincide with “Dingle Way”.
- Access should be provided to Folio DN213717F - no access to eastern part of these lands renders them landlocked.
- No provision has been made to install ducting/ piping along the proposed district road and opportunity to place ESB line underground is not included in the proposal.
- Objector is otherwise fully supportive of the proposal.

James and Sonja Buckley

- Same points raised in observation above.

Iain & Shirley Finnegan

- As above (James and Sonja Buckley)

Droim Sí Developments Ltd

- Asked to be kept informed of all arrangements made in respect of oral hearing.

Goodrock Project Management Ltd.

- Objector has secured planning permission under D17A/0793 and D18A/0566 for 54 no. dwellings. Phase 2B for 57 no. apartments recently refused by the Board (ABP-303324-18) as being “...premature pending the determination by the planning authority of the road layout for the area.”
- Provision of strategic infrastructure in proximity to objector’s land is welcomed.
- Residential development is confined to a wedge-shaped area between the 220kV line wayleave and the alignment of the proposed district road – CPO land-take would prejudice the development of these lands until they are ceded back to the landowner.
- Granite rubble wall proposed under D18A/0940 at the back of the GDRS footpath would allow for the development to be permitted and constructed in advance of the GDRS being constructed – temporary CPO would not therefore be required.
- Temporary use of this land would delay the construction of much needed residential development on a site that is fully serviced, accessible from an existing road network and shovel ready.
- Under consideration of D18A/0940, Planning Authority stated that it would welcome some own door to ground floor apartments to provide greater active frontages to the new planned road in the creation of a street as per DMURS.
- GDRS severs objector’s landholding from services and road network access – vehicular access points and installation of foul, surface water, ESB, telecom services, road crossings, etc. should be maintained to objector’s lands once road is complete.
- Condition should be attached to protect objector’s agricultural business in relation to fencing, gates, access, reinstatement, maintenance and repair.

Brendan Cowley

- CPO makes no reference and has no regard to the fact that it will involve the acquisition and destruction of entrance to vendor’s property and works required to rebuild/ reinstate the entrance.

- Vendor will require the CPO to be amended so that the purchaser is bound by obligations in respect of works to be carried out to the entrance as listed.

The Glanvilles, occupants of property known as Derryclare

- True assessment of the impact of the scheme as it affects objectors' property is limited without accurate final drawings.
- Temporary acquisition is unsustainable and renders property open to trespass and being inaccessible and uninhabitable during construction.
- Proposed scheme will severely impact on the enjoyment of the property and peaceful rural surroundings.
- Insufficient details proposed with respect to mitigation measures, drainage and the intersection with the Ballycorus Road and the proposed road as it affects the objector's property.
- Plot 29T is excessive and not required.
- Acquiring authority requested to provide along the eastern boundary of the scheme a suitable sound barrier and screening; an agreed landscaping schedule; details of accommodation works to reinstate access; and details of property boundary to Ballycorus Road.
- Proposed junction at Ballycorus Road will mean traffic queuing in front of objector's property with associated noise from braking and accelerating.
- A full vibration assessment is merited.
- No undertaking has been issued on the methods by which services will be maintained during or post construction.

9.4. **Response to CPO Submissions**

- 9.4.1. Dún Laoghaire Rathdown County Council submitted the following responses to issues raised in CPO submissions:

Alternatives

- Attenuation pond on Cairn lands is located at topographical low point adjacent to existing drainage infrastructure – alternative location on other side of road would require works adjacent to 110kV pylon.
- Attenuation pond on Buckley/ Finnegan lands located at topographical low point adjacent to surface water discharge point to Loughlinstown River. Proposed pond will be securely fenced off.
- Route and cost justification – high cost benefit ratio for proposed scheme that is higher than an alternative scenario without the southern link.
- More appropriate to construct scheme in single phase - GDRS consists of integrated scheme of new roads and traffic management measures and construction of scheme in parts would add cost, lengthen construction period and delay development of zoned lands.

Planning

- GDRS has been policy for over 10 years and will create a better, safer community for all residents.

Traffic and transport

- Traffic surveys are conducted at neutral times (Mon – Thurs) and at certain times throughout the year. November is most representative and reflective. Methodology for observer's traffic surveys are not fully outlined - January traffic conditions not fully reflective and only AM peak was surveyed. Considered that results and measurements in residents' surveys and calculations are flawed and not in accordance with best practice.
- Nature of GDRS requires both a large variable demand model and a local area assignment model – ERM allows for demand and projections from areas and developments outside the study area.
- Traffic growth projections from ERM take into account increased traffic demand from increased population and development and the attraction of the scheme from large settlements to the south. Ballycorus Road is also affected

by large scale strategic and planned development areas at Cherrywood, Rathmichael, Old Conna, etc.

- Proposed Enniskerry Road bus gate and southern portion of the GLDR are considered a key part of the scheme and are required to facilitate the overall development of the LAP lands and diversion of traffic from Kiltiernan village core.
- Correct 2035 extracted flows from the traffic models were used in the traffic and transport analysis.

Relocation of proposed pedestrian crossing at CH960 to CH920 – aligned with future access junction and there is flexibility to move the crossing at detailed design/ construction stage.

Air Quality and Climate Factors

- Closest receptor will experience slight negative impact in terms of NO₂ but the increase is not of the scale to cause a significant impact to the residential amenity of the area. This receptor is 12m from proposed road centreline and objectors (Finnegan/ Buckley) are within 78m of proposed GLDR.

Noise & Vibration

- EIAR provides a schedule of recommended noise mitigation measures – final provision and type of barrier at affected properties will be determined in conjunction with the relevant landowners, taking into account visual intrusion, noise reduction and other considerations. Where calculated road traffic noise levels are below the traffic noise design goal, mitigation screening is not proposed along property boundaries.
- Road traffic is not a significant source of vibration in the environment – measurement of vibration not required as part of baseline study. Choice of plant during construction phase will be selected and controlled to ensure limit values are not exceeded at closest sensitive buildings.
- Mitigation benefits of increasing noise barrier height to 2.5m is disproportionate to the potential visual intrusion.

- Engine related noise will be reduced with planned changes to electric fleet into the horizon year – this will be particular evident along Ballycorus Road where speed limit will be reduced to 30km/hr.

Biodiversity

- 800 replacement trees will be planted and 4.5 hectares of land has been identified for attenuation, which may take the form of wetland/ pond areas.
- Breeding bird survey did not pick up Woodpecker – Woodpecker is increasing and development is not likely to impact upon this trend.

Archaeology, Architectural and Cultural Heritage

- Recorded monument DU026-021 – evidence for this monument is tenuous and geophysical survey of the site in 2006 did not detect any significant anomalies of archaeological potential.

Landscape/ Townscape and Visual

- Proposed road will remain approximately 17m from De La Salle clubhouse – new stone retaining and boundary wall will be constructed and internal tree planting proposed. Further tree planting could take place within the club grounds.
- Visual presence of the road will further change as houses and built environment obscure views further and changes the character from rural to urban – can only be mitigated by achieving good urban and streetscape design.
- Planting and screening will mitigate light impact and use of LED lighting will reduce overspill.
- Details of boundary treatments and additional accommodation works will be agreed with landowners as part of the CPO process.

Water and Hydrology

- Proposed attenuation ponds will replace drainage function of existing agricultural drainage ditches.
- Shallow earthworks will not have any impact on bedrock aquifers.

- Upslope interception drainage will collect any surface flows which may be blocked by the presence of the road and convey them underneath the road to a suitable discharge point.

Material Assets

- Accesses will be provided to all land parcels which are segregated by the road and will be agreed with affected landowners as accommodation works.
- Buckley/ Finnegan proposed agricultural access points appear to be feasible and could be delivered as accommodation works. It is also feasible to replace field gates affected by the proposed attenuation pond.
- Parties affected by the scheme will have compensation provided in accordance with the statutory compulsory purchase process. High quality infrastructure is anticipated to increase land values in the area.
- Cairn – existing access will be maintained, and future access points are notional only. Additional services will be installed along the GLDR and applicant is happy to provide stubbed serves or service crossings. Preliminary northern boundary treatments do not preclude future access provision.
- De La Salle – Entrance and egress arrangements not compromised by proposed development and introduction of signalised junction will reduce vehicle speeds in the area. Existing 163 parking spaces (approx.) could be replaced with 140 no. fully marked out spaces with improved circulation routes. Severed portion of club grounds can be provided with its own access and temporary structures exist on temporary planning permissions.
- Goodrock – Boundary treatment proposed appears to be generally suitable but not appropriate to remove portion of temporary CPO proposed.
- Grimes – Existing access from The Park development is not affected by the proposed development. Access will be provided to the portion of land to the north and south and some minor grading sloped areas are intended to be ceded back to the landowner to better incorporate frontage developments or landscape treatments into the streetscape. No requirement to divert section

of stream. There are concerns regarding the provision of a granite wall for reasons relating to services, urban design and inconsistency.

- Ken Fennell – Construction of scheme will be tendered under a “Public Works Contract for Civil Engineering Works Designed by the Employer” contract. Contractor will be responsible for any illegal trespass.
- Glanville – Not intended to be a design and build scheme. Revised hoarding line maintained and required access and wall/ noise barrier is proposed along the western boundary of the subject property.
- Cowley – Understood that entrance was not required to be maintained due to ongoing development applications – solution now identified where access is maintained.

10.0 Oral Hearing

- 10.1. An Oral Hearing in respect of the submission/ objections to the Glenamuck District Road Scheme and CPO was held in the offices of An Bord Pleanála over three days between the 10th and 13th September 2019.
- 10.2. The following is a brief summary of the order of proceedings of the hearing, including the parties who presented and some of the key matters arising. A digital recording of the hearing is appended to this report, along with the written statements of witnesses.
- 10.3. An agenda was circulated in advance of the hearing and this was subject to some minor modifications over the course of proceedings. Module 1 of the hearing related to the application for approval of the GDRS and Module 2 covered the CPO. However, certain issues pertinent to the CPO were covered in Module 1 of the hearing.
- 10.4. The applicant was asked to specifically respond to issues relating to compliance with national policy, statutory guidelines and development plan; need and justification for the proposal; provision for different transport modes and appropriateness of road design; provision for accessing surrounding zoned lands; impact on Kiltiernan village; traffic modelling and impact on surrounding road network, e.g. M50; and biodiversity and ecological surveying.

10.5. Submissions were held in the following order:

Day 1

10.6. **The applicant**, Dún Laoghaire Rathdown County Council, presented a summary of the proposed development, responses to specific issues raised by the Board and responses to the main issues raised by parties. Presentations were heard in the following order:

- Carol O'Farrell, BL
- Kevin Sturgeon, DBFL Consulting Engineers Ltd.
- Ger Ryan, Senior Planner, DLRD
- Richard Hamilton, Future Analytics Consulting
- Robert Kelly, DBFL Consulting Engineers Ltd.
- Padraic Fogarty, Openfield Ecological Services
- Jennifer Harmon, AWN Consulting Ltd.
- Ciara Nolan, AWN Consulting Ltd.
- Martin Byrne, Byrne Mullins Associates
- Declan O'Leary, Cunnane Stratton Reynolds

10.7. **Mr. Sturgeon** commenced with a summary of the proposed development including the GDDR, GLDR, over 8km of cycle paths and 8km of footpaths, traffic management and bus priority measures, links and access. It was submitted that the GDRS will facilitate the diversion of through-traffic from Kiltiernan village; address existing traffic issues, e.g. on Glenamuck Road and Golden Ball junction; improve safety along existing roads and junctions; address pedestrian and cycle shortcomings; facilitate local public transport infrastructure; facilitate the development of zoned lands; and provide properly planned, consistent and considered multi-modal transport for the LAP lands, leading to orderly development across various landholdings.

10.8. Responses were also provided on the appropriateness of road design; urban design/ DMURS considerations; provision for accessing surrounding lands; scheme road and drainage design considerations; and provision for different transport modes. It

was submitted that the GDRS will provide a more efficient route for vehicles travelling to or from the M50 or The Park retail centre. In addition, the proposed GDDR and GLDR linked together will allow the expected high volumes of traffic to pass through the LAP lands.

10.9. Four main character areas were identified along the GDRS in terms of urban design (eastern, western, central and southern gateways). The eastern gateway will have a boulevard type layout with urban feel and will accommodate the highest traffic flows. The western gateway will be characterised by medium density residential development and the central gateway, comprising large lengths of open space and agricultural lands, is planned for anticipated pedestrian and cycle movement through the area. The southern gateway will be more rural in character but with a clear street structure. Overall, the proposed urban roads are categorised as “link streets” for the purposes of DMURS design.

10.10. Proposals for accessing surrounding lands were submitted to the oral hearing to comprise of node points between the main GDRS junctions to help split the street into smaller sections. It was noted, however, that indicative future access points to development lands shown on scheme drawings are secondary in nature and will be subject to planning and detailed design by those developments which they will serve.

10.11. With respect to scheme road design considerations, it was submitted that street cross sections, pavement build-up, junction layout, traffic signals, etc. were selected on the basis of predicted traffic flows from traffic modelling, which established the various traffic flows along different junction arms. Provision is made for pedestrians and cyclists at all key junctions and these have been subject to a road safety audit and compliance with National Cycle Manual standards.

10.12. **Mr. Ryan** then set out the land use planning context for the GDRS and how it complies with national policy, statutory guidelines and the development plan. Reference is made to the recently adopted Regional Spatial and Economic Strategy for the East and Midlands Region, 2019, which includes the Dublin Metropolitan Area Strategic Plan. Kiltiernan-Glenamuck is identified as one of the key residential districts along the Metrolink-Luas Corridor.

10.13. Kiltiernan is also identified as one of four Future Development Areas in the Dún Laoghaire Rathdown County Development Plan Core Strategy. In terms of

transport, the GDRS is considered to be the most significant stretch of new build roadway within the suite of proposals outside the Cherrywood SDZ.

- 10.14. With respect to the Kiltiernan/ Glenamuck Local Area Plan 2013-2019 (extended to 2023), it is noted that the residential yield from the LAP lands is 2,500 to 3,000 homes and that 1,050 homes can be built in advance of the provision of the GDRS (recent permissions for 500 units in place). Thus, the capacity that would be released by the GDRS is 1,450-1,950 homes.
- 10.15. **Mr. Hamilton's** evidence to the hearing included a demonstration of the need and justification for the proposal in terms of strategic alternatives, current planning policy, EIAR screening and scoping and public consultation. With respect to the impact of the proposal on Kiltiernan, it was submitted that the proposed GDRS effectively provides a bypass of the village, thereby leading to a safer environment for pedestrians and cyclists and a reduction in severance in Kiltiernan village and along Glenamuck Road. It is also noted that there will be a reduction in traffic noise and exhaust emissions in Kiltiernan. Reference is made to the primary objectives of the Local Area Plan which seek *"to establish an obvious identity/ sense of place for Kiltiernan"* (VO2); *"to establish a focal point/ civic node for Kiltiernan"* (VO3); and *"to guide sustainable development in order to establish the character of the two component areas that comprise the LAP namely, Glenamuck and Kiltiernan"* (VO4).
- 10.16. The presentation to the hearing from **Mr. Robert Kelly** sets out a summary of traffic modelling methodology and findings, as well as an assessment of the impact on the surrounding road network, including the M50. The main finding is that existing road infrastructure is not fit for purpose to accommodate future traffic volumes from increased development. It was submitted that implementation of the proposed scheme is likely to reduce congestion and delay and increase average vehicle speeds but will attract additional traffic from further origin points.
- 10.17. In terms of public transport, it was highlighted that the proposed bus gates will improve bus journey times and the reliability of the existing 44 and 63 routes, as well as potential future bus services. The assessment shows that average bus speeds are increased, and average bus journey times are reduced. The GDRS also increases bus, pedestrian and cycle accessibility to the Carrickmines Luas stop.

- 10.18. Reference is made to discussions with TII regarding the impact of the proposal on M50 junctions. Junction 15 was of most concern and the consultants found that it is within capacity in all 2017 and 2020 scenarios but that certain arms do approach capacity in short peak periods. Strong travel and mobility management policy and enforcement for new developments in nearby LAP lands, and implementation of other road infrastructure through The Park connecting to Ballyogan Road are suggested as contingency measures in the short/ medium term. Longer term measures include demand management and infrastructural measures along the M50 corridor; long term roads objectives such as the Leopardstown Link Road, Murphystown Link Road and Ballycorus Road improvement scheme; and provision of the Cherrywood-Kiltiernan Golf Lane Link Road to bypass Junction 15.
- 10.19. The benefit of the proposed bus gates to traffic conditions in Kiltiernan village in terms of “Level of Service” criteria was illustrated to show existing conditions and future “do nothing” and “do something” scenarios. The impact of the proposed bus gates shows free flow conditions in 2020 and 2035 along the majority of roads.
- 10.20. **Mr Padraic Fogarty** presented a summary of study methodology and findings on biodiversity. It was noted that a total of 1,280m of higher value field boundary will be removed and crossings of the Glenamuck Stream and Shanganagh Stream are proposed. However, it is considered that no effects to protected areas are expected during the construction phase and no impacts to Natura 2000 areas are likely to occur following mitigation. Mitigation during the operational phase will include replanting of trees and creation of new wildlife areas; lighting installation to minimise impacts on bats; fish and otter passable water crossings; incorporation of badger underpasses; and sustainable attenuation methods.
- 10.21. **Ms. Jennifer Harmon’s** summary of study methodology and findings with respect to noise and vibration highlighted that there are 16 residential properties within 50m of the proposed road development working areas that will require mitigation measures. During the operational phase, there is a reduction in traffic in many cases along existing roads but an increase in noise will be experienced at rear facades and noise mitigation will be incorporated through screening. At 8 no. receivers, mitigation is sufficient to reduce the variation in noise levels between the design goal of 60dB L_{den} and the mitigated do something scenarios by equal or less than 1dB. At 2 no.

properties on Ballycorus Road, residual noise levels will remain above the noise design goal. It is noted that TII guidance states that caution should be exercised where substantial screening only gives rise to small benefits in terms of noise reduction.

- 10.22. The summary of study methodology and findings on air quality and climate presented by **Ms. Ciara Nolan** notes that worst-case impacts are predicted at a receptor within 12m of the GDRS on Ballycorus Road. However, the results of the assessment show that predicted pollutant concentrations are in compliance with air quality standards at all receptors. The annual impact of the proposed development on national emission ceiling levels is imperceptible. Vehicle emissions will be lower per kilometre than built up areas due to the smoother flow and steady speed of traffic. It is also stated that the proposal will redirect traffic away from more populated areas to areas where fewer people are exposed to traffic emissions.
- 10.23. The submission to the hearing from **Mr. Martin Byrne** on archaeology, architectural and cultural heritage noted that there are four previously identified individual sites of archaeological interest/ potential located in the study area. Pre-construction mitigation measures are set out based on standard TII procedures.
- 10.24. The submission to the hearing on landscape from **Mr. Declan O’Leary** stated that the landscape character and receiving environment was categorised as medium sensitivity. The proposed road will be modest in scale but is designed to facilitate change that is not unexpected or inappropriate. A total of 15 views were assessed with seven experiencing moderate to very significant adverse effects. Protected views are orientated towards the uplands to the south and will not be affected by the proposed road. The view from Three Rock mountain will experience a minor intrusion.
- 10.25. Dún Laoghaire Rathdown County Council then responded to the main issues raised by observers in relation to the scheme as follows:
- Southern gateway delivers optimum performance in terms of reducing delay on the road network, diverting through traffic from Kiltiernan and providing high quality infrastructure for pedestrians and cyclists.

- Chosen route has advantages over other routes in terms of traffic flow capacity, sustainable transport provision, safety and no dwellings demolished.
- It is not proposed to sever an existing village or place as Kiltiernan and Glenamuck are distinctive places already. Scheme does not give rise to severance or create a barrier effect.
- Proposed scheme will positively address severance along Glenamuck Road.
- Proposed bus gate will reduce traffic on Glenamuck Road by 79.8%. Northbound motorists into Kiltiernan village will have their journeys increased by approx. 50 seconds. Westbound motorists from Glenamuck Cottages to Kiltiernan would have 2 minutes added to their journey time.
- Deer fencing seen as impractical due to the level of maintenance required – speed limit and warning signs more appropriate.
- Not necessary to undertake noise monitoring at each potentially affected location within the study area.
- Noise assessment takes into account traffic flow and speeds, road alignment and surface, boundary treatment and distance attenuation. Total of 114 modelled locations have been considered.
- DU026-021 is not a National Monument – it is a recorded monument listed in the Record of Monuments and Places and evidence for this monument is tenuous.
- Proposal avoids wholesale destruction of the character of existing roads and places new roads in locations where there is scope through planting, etc. to minimise visual impacts on adjacent properties.

10.26. During the afternoon of Day 1, presentations were heard from the following:

- Mr. Callum Bain representing Ken Fennell and Warren Peter Glanville and others (advising of withdrawal from the “oral hearing process”¹).
- Mr. Tom Phillips representing:
 - De La Salle Palmerston F.C.

¹ The Board did not consider this wording to be sufficient to constitute a withdrawal of the objections.

- Iain & Shirley Finnegan
- Mark Buckley
- James and Sonja Buckley
- Droim Sí Developments

10.27. The main points presented by Mr. Phillips on behalf of **De La Salle Palmerston F.C.** are summarised as follows:

- Club location abuts but is largely outwith the LAP.
- Proposed scheme materially and detrimentally affects the club grounds through loss of lands used as parking, training facilities and built structures.
- The effect is greater than the 0.2 hectare land take (grounds measure approximately 6.69 hectares) – large site but road land take would create major operational difficulties.
- The clubhouse restricts the reconfiguration of uses and defines a line.
- De La Salle Palmerston F.C. has had a presence in the local community since 1980 and its major role is not recognised in the applicant’s documentation, (approximately 600 members with sporting function from Leinster League down to underage, social and community function and one of a number of sporting facilities in the locality). Also educational function – temporary permissions compromised by impending road works.
- LAP recognises its role: “current sports, leisure and recreational facilities located within, or adjacent to, the LAP... include De La Salle Palmerston RFC.”
- Frontal car parking area is essential to the club and lands suggested for car parking improvements by local authority already facilitate overflow car parking.
- Trees and the splayed entrance to the site are to be removed.
- Planning history demonstrates road restriction is limiting club’s revenue streams – prefab units have served a major role for other uses and for funding the club.
- Questions if funding for the proposed road scheme is in place or will developers face further punitive contributions.

- Other concerns include contravention of the Development Plan; the focus on narrow road engineering principles; the environmental impact on the club's amenity; safety of access and egress for members; effect on the visual amenity of the clubhouse; construction phase issues; and parcelling of club lands.
- Scheme represents project splitting. GDRS excludes grounds from study area for the purposes of "population and human health". EIAR is incomplete.
- Club's likelihood of securing 'replacement' planning permission is neither addressed nor guaranteed. Road scheme does not deliver replacement parking. Reference to Development Plan car parking standards for sports grounds.
- Questions how the R117 will be structurally supported as it abuts the club grounds at a greater height – new height relationship would be more pronounced.
- EIAR fails to consider the environmental impact on the club's water and foul drainage.
- Revised arrangements do not form part of the application nor have environmental impacts been considered adequately.
- Mitigation measures do not form part of the scheme and are conceptual at best.

10.28. The main points presented by Mr. Phillips on behalf of **Droim Sí Developments Ltd.** are summarised as follows:

- Road design compromises the operations and future development potential of the lands.
- Residential amenity is severely compromised by scheme.
- Application documentation including EIAR relies on assumptions and concepts.
- Droim Sí abuts the LAP but lies outwith the study area.
- Several established residential and equestrian facilities are affected by the proposals.
- Questions where the line between commitment and aspiration with respect to future accesses and boundary treatments is.

- Questions where the proposals are to demonstrate mitigation for the removal of mature trees and rubble stone walls.
- Future rezoning of the Firmount to Jamestown House strip must not be compromised by inadequate provision for access onto the new road alignment and questions how would higher density development on the Droim Sí to Firmount strip be facilitated.
- Questions if landowner can rely upon drawing annotations with respect to access.

10.29. The main points presented by Mr. Phillips on behalf of **Buckley-Finnegan-Buckley** are summarised as follows:

- Questions if the competent authority can satisfy itself that there is a compelling justification for acquisition and that the EIAR adequately considered alternatives before opting for a LAP alignment?
- Residential amenity is severely compromised by scheme.
- Questions if alternative community needs that are demonstrably preferable (taking into account environmental effects, where appropriate) have been identified.
- No new residentially-zoned lands are opened by the southern spur.
- Question if attenuation tank be removed.
- Agricultural lands are severed with limited accessibility – proposed attenuation area further restricts east-west movement.
- Questions if thorough cost-benefit analysis has been undertaken on the viability of the southern spur road. Questions if the projected amelioration in traffic reduction on Enniskerry Road justifies the €33,530 per unit punitive cost for the developer in the first instance, and ultimately the purchaser.
- No attempt to address overhead 220kV powerline contrary to the LAP's Objective EI13. EIAR (Description of the Proposed Scheme) references a major issue not addressed in the Examination of Alternatives.
- EIAR is unclear on the construction compound locations.

- Works must not be in contravention of the prohibitions of the statutory Development Plan with respect to designation protected views, loss of hedgerow and high-quality trees and noise and light pollution.
- Questions if a Stage 2 Appropriate Assessment is required and the effect of attenuation areas on Loughlinstown River?

Day 2

10.30. Submissions of the GDRS were concluded on Day 2 of the Oral Hearing with presentations from the Kiltiernan Glenamuck Residents Association and by Ms. Katie Chapman.

10.31. The main points presented by Mr. Hugh O'Sullivan and Elizabeth Twomey representing the **Kiltiernan Glenamuck Residents Association** are summarised as follows:

- No evidence of congestion and delay on Glenamuck Road, particularly at Golden Ball junction, is provided in the EIAR – no presentation of queue lengths (Table 3.1 of Appendix 7-1).
- As EIAR does not consider the junction performance of the Glenamuck Road/ Golf Lane roundabout, it is not possible to assess the impact of the proposed development on local traffic movements of approximately 1,500 residents on Glenamuck Road – not possible for residents to understand impacts of the new junctions on their journey times.
- Bus gate on Glenamuck Road will result in community severance by lengthened journey times or the physical barrier of the road. DMURS defines severance as occurring *“where the provision of road infrastructure (e.g. a distributor style road) bisects an area, making people movement within the area more difficult”*.
- Section 17.5 puts forward a signalised crossing as mitigation for community severance – this does not adequately cater for those reliant on the car, such as young children, elderly or mobility impaired people.
- It is not possible to assess the impact of the proposed bus gate on journey times for residents of the LAP lands and journey times or junction queue lengths along alternative routes are not identified. All traffic on Glenamuck Road east

will have no choice but to use Golf Lane roundabout and no details on the performance of this junction are provided in the EIAR.

- Similar traffic calming effect can be achieved on Glenamuck Road east by introducing the bus gate to the south of Glenamuck Road/ Golf Lane roundabout where a cul de sac had been proposed in the original 2007 LAP.
- EIAR fails to assess the loss of the only zoned public open space in the Kiltiernan-Glenamuck LAP as an attenuation pond (Section 6.4.2 – “implementation of a centrally located major public open space/ school site”).
- Do not accept that power lines cannot be undergrounded – no public space apart from attenuation ponds and along pylons, which are an established health hazard.
- Private clubs are not available as green space for public use.
- Wholesale elimination of trees and hedgerow without any detailed remediation is not acceptable.
- EIAR makes light of potential impact on biodiversity but concedes that there will irreparable damage to biodiversity.

10.32. The main points presented by **Katie Chapman** are summarised as follows:

- EIAR fails to address gap in noise barrier due to overpass of the river – no mention how gap will affect Struan Glen.
- Consideration should be given to noise barrier height at N006 and N008– higher than 2m and 2.5m.
- Consultation should take place with observer regarding the design and choice of noise barriers.

10.33. The main points presented by **John Findlater** are summarised as follows:

- Traffic surveys were not carried out for years previous to the baseline year.
- There are low traffic flows to south of Kiltiernan and AM peak is very spread out - 2020 forecast will not be realised by next year. Road to south may not be needed.

- Board should question what traffic flows are going to be in 2035. Assumption for traffic model is 100% of LAP developed by 2035 - observer cannot see full build out at current rate, which will result in a road that is oversized and people losing land.
- Questions if any study has been carried out as to why people use their cars and where they are going, and were any pedestrian surveys of Kiltiernan carried out.

10.34. Cross questioning of parties commenced on the morning of Day 2 of the oral hearing. Questions were put to Dún Laoghaire Rathdown County Council on behalf of Declan Taite & Anne O'Dwyer, Receivers to Michael and Martin Doran; Kieran Boyle, Atkins on behalf of Declan Taite and Anne O'Dwyer; Mr. Tom Phillips for various observers; and Mr. John Findlater

10.35. Finally, the Inspector questioned the applicant, Dún Laoghaire Rathdown County Council on the following matters:

M50

- The objective of the proposed scheme regarding access to the M50;
- Reasons for including the dual carriageway element of the GDDR and the potential impact on the M50 of a single carriageway at this location.

Junction layout

- Reasons for chosen junction design and the need to provide stacking lanes, left turn lanes, right turn filters, straight ahead lanes, etc.
- Whether the main purpose of chosen junction design is to accommodate ease of traffic flow and to maximise traffic capacity.
- Consideration of minor junctions compared to major intersections in terms of their impact of pedestrian and cyclist safety and priority.

Traffic speed

- Proposals for reasonably straight roads with good forward visibility, lane widths up to 3.25m and long lengths of road – can this type of road layout ensure that speed limit of 50 kph can be complied with?

- Measures to control speed and manage driver behaviour and possible retrofitting.
- DMURS – lower speed limit of 30-40kph where pedestrians and cyclists are present in large numbers. Usage of GDRS by pedestrians and cyclists and appropriateness of lower speed limit.

Urban Design

- Proposed distributor roads and potential for hostile pedestrian environment (DMURS and Sustainable Residential Development in Urban Areas: Guidelines for Planning Authorities).
- Any further consideration of road frontage relationship, boundary treatment, access and crossing points, desire lines, etc.
- Pedestrian crossings and reasons for their placement.
- Indicative access nodes and their character and possible requirement for retrofitting into design or developed road.
- Consideration of new DMURS Advice Note 4: Quality Audits including recommendations for Street Design Audits.
- Consideration of new DMURS Advice Note 1: Transition Zones and Gateways with respect to approaches to character areas.

Buses

- Consideration of Bus Connects routes within traffic modelling.
- Impact of HGVs on Glenamuck Road and appropriateness of this road as a bus corridor.

Day 3

10.36. Module 2 of the hearing commenced with Dún Laoghaire Rathdown County Council putting forwards its case for the CPO. A statement of evidence was presented by Mr. Michael Mangan and CPO alternatives were heard from Mr. Kevin Sturgeon.

Material assets – land and property were presented by Mr. John Carr and traffic and transportation issues were addressed by Mr. Robert Kelly. Finally, the issue of noise and vibration was covered by Ms. Jennifer Harmon.

10.37. Objections to the CPO were heard from Mr. Kieran Lawlor on behalf of Gerard James Grimes, Mr. John Findlater and Mr. Tom Phillips on behalf of various parties. The submission from Mr. Lawlor requested a number of modifications relating to access to his client's lands, provision for facilitating the undergrounding of over-ground electric cables, and installation of suitable foul sewer and watermains connections under the road between lands retained by the client.

10.38. Mr. Findlater's submission expanded upon his submission in Module 1 to highlight that there is no public benefit from acquiring compulsorily his land. It was also submitted that lower speed limits and certain road surfaces could reduce traffic noise.

10.39. The submission to Module 2 from Mr. Tom Phillips on behalf of **Buckley Finnegan Buckley** reiterated the opposition to the southern element of the GLDR. It is noted that the alternative submission (Option 3) avoids a salmonid river and that the drawings and information submitted with the application are inadequate with respect to the proposed river crossing at this location. Reference is made to the Kilkenny case (Holohan & Ors v An Bord Pleanála) where it is stated that an original design for a bridge was discounted on the basis of cost. It is also reiterated that the noise assessment has not been carried out from a visual and landscape perspective and that there is inadequate provision for accessing his client's lands.

10.40. The submission by Mr. Phillips on behalf of **De La Salle, Palmerston FC** notes again that loss of lands to the front of the property will affect the running of the club, as well as the reduction of on site car parking. However, the objectors agree with the principle of the proposed development.

10.41. Finally, Mr Phillips submits that any existing entrances to the **Droim Sí** lands should be maintained and sufficient detail should be provided on sightlines, trees, noise mitigation, etc.

10.42. The submission by Mr. Kieran Lawlor on behalf of **James Gerard Grimes** and children requested the Board to make a number of modifications/ conditions

pursuant to Section 217(C) of the Planning and Development Act, 2000 (as amended) in relation to the provision of services and infrastructure to the lands.

11.0 Planning Assessment

11.1. In my opinion, the main issues to be addressed under this assessment are as follows:

- Policy considerations;
- Need and justification for the proposal;
- Effects of traffic modelling;
- Appropriateness of road design;
- Potential impact on surrounding zoned lands;
- Environmental Impact Assessment;
- Appropriate Assessment;
- Compulsory Purchase Order;
- Conclusion.

11.2. Policy considerations

National Policy

11.2.1. **The National Planning Framework** outlines a set of goals expressed as ten National Strategic Outcomes to deliver shared benefits for communities across the country. Of relevance to the proposed Glenamuck District Road Scheme are three National Strategic Outcomes relating to compact growth, sustainable mobility and transition to a low carbon and climate resilient society.

11.2.2. One of the main objectives of the GDRS is to facilitate the development of zoned lands within the Kiltiernan-Glenamuck Local Area Plan by providing suitable transport infrastructure to access these lands. The other main purpose of the scheme is to divert through-traffic away from Kiltiernan to allow for the development of a village core that is free from the worst effects of traffic. The GDRS should,

therefore, be viewed primarily as a local scheme that will allow for the compact growth of Kiltiernan village and LAP lands.

- 11.2.3. Compact growth should achieve greater density of development and improved liveability and quality of life. A transition to more sustainable modes of travel should also be facilitated through reduced dependency on road and private, mainly car based, transport, the expansion of attractive public transport alternatives and the development of safe cycle and walking routes. The net effect of compact growth and sustainable mobility will contribute towards the third relevant goal of the National Planning Framework, which is lower carbon and climate resilience.
- 11.2.4. Having regard to the above, I would be of the opinion that the proposal cannot be viewed in isolation as a road scheme and must be assessed more as a wider integrated land use and transportation plan that sets out to fulfil the National Strategic Outcomes and National Policy Objectives of the NFP. Of particular relevance are, National Policy Objective 4, which seeks to *“ensure the creation of attractive, liveable, well designed, high quality urban places that are home to diverse and integrated communities that enjoy a high quality of life and well-being”*; National Policy Objective 27 which aims to *“ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments, and integrating physical activity facilities for all ages”*; and National Planning Objective 54, which targets a *“reduction in carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions.”*

Regional Policy

- 11.2.5. The **Eastern and Midland Regional Spatial & Economic Strategy (RSES)** sets out 16 Regional Strategic Outcomes aligned to the three key principles of healthy placemaking, economic opportunity and climate action. As part of the RSES, the Metropolitan Area Strategic Plan (MASP) provides an integrated land use and transportation strategy for the metropolitan area. Kiltiernan-Glenamuck is identified as a new and emerging mixed use district along the Metrolink/ Luas Greenline Corridor. It is a regional policy objective for the MASP (RPO 5.3) that *“future development in the Dublin Metropolitan Area shall be planned and designed in a*

manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling) and public transport use and creating a safe attractive street environment for pedestrians and cyclists.”

- 11.2.6. Chapter 8: Connectivity also includes a number of guiding principles on the integration of land use and transportation. It is recognised that *“the management of space in town and village centres should deliver a high level of priority and permeability for walking, cycling and public transport modes to create accessible, attractive, vibrant and safe, places to work, live, shop and engage in community life. Accessibility by car does need to be provided for, but in a manner, which complements the alternative available modes. Local traffic management and the location / management of destination car parking should be carefully provided.”*
- 11.2.7. The RSES promotes a shift in emphasis from providing road infrastructure in advance of development to a more integrated approach whereby street environments are designed as places that allow for priority and permeability for active and sustainable transport modes. It is also noteworthy that the RSES is the most recently published policy document applicable to the proposed development and it is recognised that a reduction in car dependency and electrification of the national car fleet are both required to lower energy consumption, CO₂ levels and pollutant emissions.
- 11.2.8. Any proposal to provide road infrastructure to serve the emerging Kiltiernan-Glenamuck district must be designed with the principle aim of reducing car dependency from the traditional suburban approach. Sustainable place-making and the creation of safe and vibrant streets can only be achieved by reducing car dominance and by providing an environment where local journeys are appealing by sustainable modes.

County Wide Policy

- 11.2.9. Kiltiernan is designated as one of four “future growth areas” within the current **Dún Laoghaire Rathdown County Development Plan** that will ultimately accommodate 2,500-3,000 residential units, a neighbourhood centre, public open space and a large

employment node. A key element of the overall planning framework is the provision of a bypass of Kiltiernan. In this regard, the Development Plan contains a 6-year road objective to provide the Glenamuck District Road Scheme.

- 11.2.10. The vision contained in the Sustainable Communities Strategy of the Development Plan seeks the promotion of new, compact mixed-use urban villages optimally located in greenfield areas, well served by existing or planned public transport networks and where residents will be within walking distance of supporting social and community infrastructure. Common features of exemplar sustainable communities include prioritisation of cycling, walking and public transport so as to minimise the need to use cars; presentation of a distinct sense of place and a quality public realm; and promotion of the efficient use of land and of energy and minimising greenhouse gas emissions.
- 11.2.11. The proposed development will deliver the 6 year road objective to provide the GDRS to serve the Kiltiernan-Glenamuck development lands and to bypass Kiltiernan village. However, I also consider that the re-distribution of traffic away from Kiltiernan village should not jeopardise the development of sustainable communities alongside the GDRS. The GDRS itself must comprise of quality public realm with clear priority for pedestrians and cyclists along links and at nodes. In this regard, nodes within sustainable communities should develop as active places rather than major junctions for the purposes of funnelling traffic.
- 11.2.12. It should be noted that the development lands being accessed by the GDRS will be positioned between Kiltiernan village and the new neighbourhood centre at The Park, Carrickmines, which is designed to meet the future retail and leisure needs of the growth areas of Carrickmines, Stepside- Ballyogan and Kiltiernan-Glenamuck, (specific local objective 131). It is essential that an environment is put in place that allows for a large proportion of short journeys to these two centres from the development lands to be carried out via sustainable modes, (the distance between the Golden Ball junction and The Park Shopping Centre is approximately 2km). The design and ultimate usage of the GDRS has a critical role to play in this regard.

Local Policy

- 11.2.13. As well as the provision of a bypass of Kiltiernan, the overall strategy of the **Kiltiernan Glenamuck Local Area Plan, 2013 (extended to 2023) (LAP)** seeks to

implement a Neighbourhood Framework Plan to consolidate the village core, facilitate a graduation of residential densities from the Luas line and implement a centrally located major public open space/ school site.

- 11.2.14. The LAP seeks to provide a sustainable and compact urban form that aims to minimise the use of the private car by encouraging public transport, cycling and walking. It is noted that heights of 3 to 4 storeys would generally be encouraged within the medium-higher residential density zone, stepping up to five storeys fronting the main distributor road. Heights of 2-3 storeys would be encouraged within the medium density zone, with four storey elements concentrated along the proposed main and link distributor roads, and/ or at key entrances to sites.
- 11.2.15. The proposed Glenamuck District Distributor Road/ Glenamuck Link Distributor Road remains an integral and pivotal part of the LAP; however, a number of amendments to the GDRS were made from previous iterations of the LAP. The LAP was informed by a Traffic Modelling Review in 2012, which sought to identify the necessary road infrastructure required for the sustainable development of the whole area. Amendments to the preliminary design arising from this report included bus priority measures, extension of the GLDR to Enniskerry Road to the south and the reduction in cross-section to single-carriageway.
- 11.2.16. Notwithstanding the above, the proposed GDDR element of the GDRS to the east of the GDDR/ GLDR junction and a northbound section of the GLDR comprises dual carriageway standard roadway. In my opinion, any proposal for roadway capacity in excess of the necessary function of such roads should be carefully considered. This includes additional lanes to/ from junctions. Additional traffic lanes and wider roadways will have potential implications in terms of future residential amenity and the establishment of sustainable communities arising from the entirely reasonable policy set out in the LAP to locate higher residential densities along the GDRS and at corner elements at road junctions.

11.3. **Need and justification for the proposal**

- 11.3.1. As noted above, the proposed development is mainly justified on the basis of providing access to zoned lands and a bypass of Kiltiernan village. The other main objectives of the proposed scheme, as set out in the EIAR, are to improve safety on

existing roads and junctions; provide high quality pedestrian and cycling infrastructure along the proposed route; and to facilitate local public transport infrastructure.

- 11.3.2. The EIAR also provides an assessment of the “do nothing” scenario whereby the expansion of the zoned lands would take place without the GDRS. It is considered that the existing Glenamuck and Enniskerry Roads would not be able to meet capacity and traffic demands and this would impede future developments in the area. Zoned lands would be delivered on a piecemeal basis and an integrated approach to movement within the LAP would be restricted. Dún Laoghaire Rathdown County Council submitted at the oral hearing that the provision of the GDRS would release an approximate 1,450-1,950 dwellings for delivery.
- 11.3.3. It is obvious that a system of new roads is required for the build out of LAP lands. The existing roads are rural in character and of insufficient width and alignment to accommodate safe walking and cycling. Furthermore, the provision of a bypass of Kiltiernan will allow for the development of a people-friendly village structure, thereby achieving the objectives of LAP in terms of establishing an obvious identity/ sense of place and focal point/ civic node for Kiltiernan (Objectives VO3 & VO3). The proposed bus gates will have the dual benefit of improving public transport by permitting bus access to the developing Kiltiernan village, whilst improving the village environment by restricting regular traffic access from Enniskerry Road to the south and Glenamuck Road to the north-east.
- 11.3.4. Overall, I consider that there is a demonstrable need and justification for a road scheme on the chosen alignment to provide access to zoned lands, a bypass of Kiltiernan, improved public transport, and the provision of linear footpaths and cyclepaths. I would be less convinced, however, that the design and capacity of the proposed GDRS is appropriate to serve emerging sustainable communities.
- 11.3.5. It is noteworthy that the scheme objectives outlined in the EIAR do not refer to the provision of access to the M50, despite references elsewhere and in earlier scheme documents. The feasibility report from the route selection analysis notes that the chosen route would provide quality road infrastructure to link with the M50, as well as facilitating traffic reduction in Kiltiernan and the development of local lands. It is apparent from documentation associated with the road scheme evolution that the

emphasis for the scheme has shifted somewhat away from highlighting the need for enhancement of access to/ from the M50. However, the c. 900m dual carriageway element of the GDDR remains in place notwithstanding the advice from the 2012 Traffic Modelling Review that the GDRS be reduced to single carriageway as a minimum. Furthermore, a northbound dual carriageway continuing for a distance of 350m is proposed on the GLDR from its junction with Glenamuck Road.

- 11.3.6. At the oral hearing the applicant responded to the issue of access to the M50 by confirming that the significant traffic volumes forecasted have dictated the need for dual carriageway. It was also confirmed that a single carriageway along the GDDR was not specifically assessed but that impacts back onto Junction 15 of the M50 may occur having regard to the significant left turning movement onto the GLDR from the GDDR.
- 11.3.7. The applicant was also asked at the hearing to explain the layout of junctions and the need for stacking lanes, left turn lanes, right turn filters and straight-ahead lanes. In response, it was confirmed that future traffic flows for forecast years were derived from the Local Area Model and this provided the basis for the demand for the various approach lanes to key junctions and their design, refinement and future operational performance. The TRANSYT model then informed the required lengths of approach lanes with the view to future traffic demand.
- 11.3.8. My main concern with respect to the proposed development is that the roads and junctions have been primarily designed for ease of traffic flow and to maximise traffic capacity. In my opinion, it is no longer acceptable to justify such a proposal on the basis of traffic modelling. The impact on emerging sustainable communities of dual carriageway sections to the east of the GDDR and on the northern approach to the GDDR/ GLDR junction, together with the presence of major junctions comprising multiple approach lanes should be explored in detail. Designing for heavy traffic cannot be viewed as a progressive approach to sustainable movement and the building of sustainable communities.

11.4. **Effects of traffic modelling**

- 11.4.1. Traffic modelling and assessment was undertaken at three levels comprising strategic macro-modelling, local area simulations and local junction models. The

NTA's East Regional Model (ERM) was used to provide multi-modal forecasting encompassing mode share, trip origin/ destination analysis and assessment of the impact of the proposal on strategic road and public transport infrastructure. A local area model (LAM) is an assignment model that was used to build up zonal detail from the ERM inside the study area and to replicate demand responses, such as changes in trip rates and choice of destination and travel mode as a result of the proposed scheme. Finally, the derived traffic flows from the LAM have been applied to TRANSYT junction models to optimise junction design and geometry, refinement and junction operation.

- 11.4.2. Traffic modelling is used to ensure that there will be adequate traffic capacity and a free flow of traffic at base years and forecast years. Trips are estimated primarily on the basis of car usage and the road network is designed accordingly. As noted in DMURS, the various computer programs used to analyse junction design have the calculation and minimisation of vehicular queuing and delay as their primary outputs and designers will often seek to provide junctions that operate below 90% capacity as measured by the ratio of flow to capacity.
- 11.4.3. Traffic modelling therefore has had a significant input on the layout and experiences of our built environment. Capacity is provided for traffic growth and the eventuality is more traffic congestion. There will be the issue of traffic dominance and unduly wide roads in the initial years after the opening of a scheme, and this will manifest itself into traffic congestion as the forecast horizon year approaches. Roads are designed for free-flow and ease of movement for motorised vehicles and traffic modelling is the main tool used to determine the number of lanes and their widths, road geometries, traffic speeds, traffic signalling and general free flow.
- 11.4.4. Essentially, a living street that could be in active use all day by people is being designed to accommodate traffic movement during two peak hours at a horizon year (2035). Roads are engineered to ensure the free-flow of peak traffic during these short periods of time at the expense of pedestrian comfort and the creation of liveable, green and active streets at all times. In the case of the proposed GDRS, I have concerns that this approach will seriously impact on the quality of streets serving sustainable communities. Higher residential densities are proposed along the GDRS and therefore people-friendly street design is even more essential. The

location of higher densities along movement corridors increases accessibility and connectivity for a greater number of residents. Movement corridors in residential areas should therefore be viewed for their amenity rather than the adverse impacts associated with heavy traffic.

11.4.5. Traffic modelling may have a purpose and can be a useful tool when assisting with the design of new places; however, its primary aim should be about minimising the impact of traffic, not maximising it. Locally modelled comparisons could be carried out between the proposed road scheme against an alternative transport corridor and amenity scheme that offers greater priority and comfort to pedestrians and cyclists and where a high proportion of local trips are carried out on foot or bicycle. It is likely that the GDRS developed as amenity corridors with ease of cross movement and traffic subordination would greatly encourage sustainable transport modes and negate the need for stacking lanes, filter lanes, dual carriageway and possibly even traffic signals. Traffic modelling could be used to assess the local effects of certain street conditions, including the proposal as a “do maximum” traffic condition compared to the “do minimum” traffic condition comprising narrow single carriageways in both directions with signal free pedestrian/ cyclist priority junctions and regular crossing opportunities. The CO₂ output of these types of scenario could also be assessed.

11.4.6. I acknowledge that the ERM assumes a considerable uptake in the use of public transport, cycling and walking and that the suite of measures proposed within the NTA’s Transport Strategy for the Greater Dublin Area are considered to be in place at the horizon year (2035). A conservative approach can therefore be assumed in terms of traffic growth at a regional level. However, it is of concern that more in-depth analysis was not carried out of the actual type of road proposed on movement patterns and modal share at a local level. The applicant anticipates that a diversion of traffic from the south away from the N11 corridor to the GDRS will occur, and this would suggest to me that the road scheme will have a regional function and has therefore been designed accordingly. In my opinion, this undermines the local purpose of the proposed road scheme to facilitate access to LAP lands and a bypass of Kiltiernan village. As noted above, and within the scheme objectives in the EIAR, the road scheme is principally for the purposes of serving the local area.

11.4.7. Overall, I am of view that traffic modelling should not be used as the main determinant of residential place structure where people must live and go about their daily business. A local resident on foot will experience greater difficulty and less comfort when engaging with a roadway that is modelled for a future traffic growth scenario. Traffic at all speeds is hostile to pedestrian comfort, whether it is slow moving congested traffic or free-flowing fast moving traffic. It is critical therefore, that the road scheme serving the LAP lands prioritises pedestrians, cyclists, public transport and motorists in that order. In my opinion, the input of traffic modelling retains the motorist at the top of the movement hierarchy in this case.

11.5. **Appropriateness of road design**

11.5.1. The Glenamuck District Road Scheme includes the Glenamuck District Distributor Road and the Glenamuck Link Distributor Road. These are distributor style roads that will serve to move traffic from local streets to arterial roads. It is submitted that the proposed roads fall under the Design Manual for Urban Road and Streets (DMURS) definition of “link streets”. The following section sets out the relevant considerations from DMURS with respect to the appropriateness of the proposed GDRS in its LAP context.

Movement Hierarchy

11.5.2. Under DMURS, the creation of walkable, cycleable and public transport orientated communities will require designers to re-examine the way streets are designed in order to meet the needs of all users. Pedestrians must be placed the top of the street user hierarchy, followed by cyclists and public transport. The car is placed at the bottom of the hierarchy, but it is recognised that this may be the only option for many users for medium to longer distance journeys. It is highlighted again that the key issue is one of balance, and the needs of the car should no longer take priority over the needs of other users or the value of place. The balanced approach is to be achieved through the four key principles of integrated and connected networks, multi-functional place-based streets, a pedestrian focus and a multi-disciplinary approach.

Place context

11.5.3. The movement function of a street is generally classified into arterial streets, link streets and local streets. However, place context can change along an entire route and this requires different design solutions where densities and land use intensity increases, along with higher pedestrian activity levels. The emerging place context surrounding the GDRS could be most accurately defined as a “neighbourhood”, where new and existing areas are intensively developed with medium to higher density housing and/or a broad mix of uses.

Street design and traffic speed

11.5.4. Chapter 4 of DMURS refers specifically to street design where it is recognised that a more integrated approach can create a ‘win-win’ scenario through enhancement of place value whilst calming traffic and improving pedestrian/ cyclist comfort. The issue of traffic speed is seen as a key consideration for pedestrian and cyclist safety, comfort and convenience. It is noted that motorists’ tolerance of low-speed is likely to increase in more intensively developed areas and therefore designers must balance speed management, the values of place and reasonable expectations of appropriate speed according to context and function.

11.5.5. Table 4.1 of DMURS provides a design speed calculation matrix indicating the links between place, movement and speed. For a ‘neighbourhood’ context the recommended speed of link streets is 30-50 km/hr. The design speed of the proposed roads are at the upper end of this range at 50 km/hr. This speed limit is to apply to the entire GDRS and no reductions are proposed to reflect place context or transitional areas.

11.5.6. At the oral hearing, the applicant was asked if the type of road layout will ensure that the speed limit will be complied with. It was noted that the proposed roads are reasonably long and straight, there will be good forward visibility, and lane widths will be up to 3.25m. In response, the applicant referred to the Urban Design Report accompanying the application which considers gateways, nodes and pedestrian crossing points to help break up long sections of road. When asked if devices for controlling speed, such as junction tables, traffic calming, etc. will have to be retrofitted into the design or the developed road, it was confirmed that any measures to control and manage driver behaviour, including works on the road, would form part of the planning process for adjoining applications. It is the intention that road edges

would be urban streets with active frontages and regularity of access and that the character of nodes along the GDRS and the form of junctions will be based on the quantum of development they serve.

Up-designing

11.5.7. Notwithstanding the desire of the applicant that the proposed distributor roads will be characterised as streets, I consider the proposed scheme before me suffers from 'up-designing' and an absence of 'self-regulation'. I acknowledge that as the area develops and activity increases, there may be an opportunity for vibrant street environments to emerge. However, I consider that the proposed roads have been designed to standards in excess of their context and movement function. As noted in DMURS, this can be caused by "*...enabling greater capacity and vehicle flow based on excessive demand forecasts and/or the assumption that private vehicle usage will increase unabated.*" It is highlighted in Section 11.4 above that traffic modelling ensures that capacity is provided for traffic growth and the eventuality is more traffic congestion. It is also stated in DMURS that the continued assumption of growth in private vehicle usage is unsustainable and that a simpler, more integrated approach to road design can achieve advantages in terms of sustainability, place making and traffic movement.

11.5.8. In my opinion, another evident effect of up-designing apparent with the GDRS is the overly prescriptive layout of junctions, which becomes necessary due to their size and capacity. The proposed junctions are of particular concern for cyclists. Most collisions involving cyclists occur at junctions and it is advised within the National Cycle Manual that cycling routes approaching, going through and exiting junctions should be obvious. It would appear that cyclists approaching major junctions on the GDRS have the option of using on-road facilities or moving off-road to use "toucan" crossing facilities. In my opinion, this may lead to some confusion for cyclists, motorists and pedestrians. Of more concern, however, is that right turning facilities at junctions, entrances and private properties along multi-lane roads approaches are not generally recommended in the National Cycle Manual. Furthermore, it is stated that dedicated right-turning cycle lanes are possible at certain junctions but only where traffic speeds are less than 50km/hr.

Self-regulation

- 11.5.9. DMURS also refers to self-regulation where the idea is that speed is controlled by place. A number of psychological and physical measures are set out that influence driver speed, enhance place and manage movement. These include a close proximity of buildings and a continuous street wall; active ground floor uses and pedestrian activity; frequent crossing points and junctions and horizontal and vertical deflections; narrow carriageways and minimisation of signage and road markings; reduced visibility splays and on-street parking; and tighter corner radii and shared surfacing.
- 11.5.10. In general, the proposal contains little in the way of on-street self-regulation, such as frequent crossing points and junctions and horizontal and vertical deflections, despite the intensions eluded to at the hearing. The roads are up-designed in a manner that will encourage traffic speed, and as detailed further below, an effect of traffic speed is community severance and a danger to pedestrians and cyclists. The proposed development takes the form of a highly segregated cell and distributor network that channels traffic to large junctions designed to minimise vehicular queuing and delay. Notwithstanding the provision for pedestrians and cyclists at these junctions, they remain hostile and unsafe locations for these modes. Junctions are designed as major intersections, and this increases the risk of conflicts between pedestrians/ cyclists and motorised traffic. Traffic can approach these major intersections with certainty and authority. This model of development in a neighbourhood context is outdated and unreflective of sustainable movement and place-making.
- 11.5.11. An appropriate road design serving a sustainable community would require extensive re-design and retrofitting of speed reducing features and crossing opportunities, together with a minimisation of junction capacity and the creation of more access points to and from the GDRS. In my opinion, this would require wholesale amendment to the scheme that could not be accomplished unless the Board refuses permission or seeks substantive additional information in the form of an integrated land use and transportation masterplan setting out the basis for cross-movement throughout the scheme and LAP lands, with a clear prioritisation of sustainable modes under the DMURS movement hierarchy.

Street design audit

11.5.12. I would also refer the Board to new Advice Note 4: Quality Audits accompanying DMURS, which provides designers with guidance in relation to quality audits, including street design audits. A street design audit is an auditing tool that ensures that the relevant issues contained in DMURS have been duly considered, i.e. connectivity, self-regulating street environment, pedestrian and cycling environment, and visual quality. Should the Board be minded to seek further information, I consider that any amended scheme should be street audited accordingly.

11.6. **Potential impact on surrounding zoned lands**

- 11.6.1. The overall vision for residential development in the Kiltiernan-Glenamuck Local Area Plan is to ensure the development of a proper community through imaginative and sympathetic design, the successful integration of future residential developments with existing built fabric, and the provision of a sustainable and compact urban form that aims to minimise the use of the private car by encouraging public transport, cycling and walking.
- 11.6.2. The proposed GDRS is aligned on both sides by residential, economic development/ employment, open space (with ancillary active recreational amenities), rural amenity/ agriculture, and high amenity zonings. I estimate that approximately 3,500m of the GDRS (excluding Glenamuck Road and Ballycorus Road), is aligned with residential zoning. There is an approximate 750m frontage of economic development/ employment zoning on the GDDR and a total of c. 550m of active open space zoning at the north-west end of the GDDR and either side at the centre of the GLDR. Approximately 650m of frontage along the GLDR is zoned rural amenity/ agricultural and c. 245m is zoned high amenity. Overall, this equates to over 60% of the entire GDRS frontage being aligned with residential zoning. It is also worth noting that the majority of residential frontage (c. 2,050m of the total 3,500m), also has residential frontage opposite.
- 11.6.3. The upshot of the GDRS being mostly alignment by residential zoning but also a mix of zonings is the requirement for cross movement by residents to avail of services and facilities on the opposite side. A recently granted planning application in the area (ABP-303978-19) for 203 no. dwellings also included a creche, retail units and social/ amenity facility, as well as open space, play areas and public realm. These

facilities will be available to all LAP residents and will therefore attract pedestrian desire lines. The centrally located major public open space, as well as The Park Shopping Centre and Kiltiernan village will also be significant attractors of local walkable trips.

Severance

- 11.6.4. The applicant acknowledged at the oral hearing that community severance occurs when transport infrastructure or motorised traffic creates a physical or psychological barrier separating one built-up area from another built up area or open space, and which is particularly pertinent where infrastructure proposals may potentially impact on street or neighbourhood amenity. However, it was considered that the GDRS does not sever an existing village or place, as Kiltiernan and Glenamuck are distinctive places already, and as such, the scheme does not give rise to severance or create a barrier effect.
- 11.6.5. Notwithstanding this, it is acknowledged in Section 5.2.3 of the EIAR relating to urban design that the road is being designed and delivered in isolation as an infrastructural project and the designers have no control over the phasing, layout, frontage or future boundary treatments of surrounding private developments. I would be particularly concerned with the design of the proposed road as a segregated network in the absence of a masterplan to show the relationship between the proposed GDRS and surrounding development, and as noted above, without any detail on the type and location of junctions and crossing points.
- 11.6.6. Having regard to adjoining zonings and the proposed distributor road design, I consider that the proposed scheme will give rise to severance between communities alongside the roadway. As noted within DMURS, *“if the design of a street creates the perception that it is safe to travel at higher speeds drivers will do so, even if this conflicts with the posted speed limit.”* Furthermore, it is stated in DMURS that *“traffic signals with long forward visibility such as those proposed tend to encourage acceleration to and from the junction, hard braking, red light breaches and generally hostile conditions for pedestrians.”* In my opinion, these issues are evident in the proposed GDRS and the net effect is a hostile environment for people movement and the creation of a barrier effect due traffic dominance. This will adversely impact on the usability of adjoining zoned by the local community; walking distances will

increase, potential connections are lost, communities become isolated, car usage increases and the facilities and amenities built to serve the local community become underutilised. Moreover, the potential for a direct link to the Ballyogan Luas Stop via The Park over a distance of approximately 830m will be impeded by the GDDR.

Urban Design

- 11.6.7. The planning application is accompanied by an Urban Design Report which attempts to show how the concept and design development of the GDRS have been informed by DMURS and national planning guidance. An overall design vision for the scheme is set out, together with design concepts and characterisation of gateways or arrival points throughout the LAP area. The urban design framework consists of four basic spatial concepts comprising a green infrastructure concept, an urban form concept, a movement concept and a place concept.
- 11.6.8. The urban design strategy set out in the report comprises a description and sketches for a number of character “gateways” throughout the scheme. The eastern gateway located on the GDDR presents an urban form where varying uses are planned, including employment and residential. The western gateway on the GDDR is characterised by residential land uses and therefore presents a different character. The central gateway will have an open space and landscape setting and the southern gateway will be more rural in character.
- 11.6.9. Notwithstanding the positive intentions set out in the urban design report for pedestrian and cyclist comfort, it is also acknowledged that the GDRS is required to accommodate traffic flows through the LAP lands. The GDRS is still being designed as distributor roads and such roads are not conducive to sustainable place-making. I note that the proposed character areas illustrate that the roadway, and indeed footways and cycleways, are linear features devoid of cross movement opportunities. Linear features create a barrier effect and reduce permeability. One of the key principles for neighbourhoods in the Urban Design Manual: A Best Practice Guide, is how well a new neighbourhood is connected. In the current case, I consider that key movement routes through the LAP lands have not been fully considered and the GDRS remains a wide linear barrier that severs future residential quadrants.

North-western quadrant

- 11.6.10. By way of example, a masterplan was prepared for a residential quadrant to the south of the GDDR, west of the GLDR and north-west of Glenamuck Road. This masterplan accompanied planning application ABP-303978-19 granted by the Board in June 2019 and included an indicative layout for adjoining lands in the quadrant. It is noteworthy that the masterplan shows only a single vehicular access from this quadrant onto the GDDR and GLDR. Furthermore, a number of pedestrian/ cyclist routes are indicated onto the GDRS. However, there are no matching crossing points on GDRS drawings at the locations of these indicative accesses.
- 11.6.11. The open space hierarchy accompanying the masterplan would suggest a desire for significant cross movement over the GDRS. Again, this is not reflected within the road design. The GDRS does not properly consider future pedestrian and cyclist desire lines and indicative locations and designs for crossings and junctions are not confirmed. These measures would help to counteract the adverse effects of community severance, whilst also providing a degree of traffic calming. As noted in DMURS *“more frequent minor junctions with fewer vehicle movements calm traffic and are easier for pedestrians and cyclists to navigate.”*
- 11.6.12. Overall, I consider that a wider masterplan and urban design framework is required for the entire LAP lands that sets out the locations, design and intended character of nodes along the GDRS that can facilitate cross movement, encourage activity, address community severance and ensure that the roads develop as amenity corridors serving adjoining higher residential densities. Nodes are required to add interest and this in turn will encourage people to walk and cycle to Kiltieran village and The Park, Carrickmines. Long, straight continuous roadways make journeys on foot in particular seem longer and less safe. It may also be appropriate for the speed limit to drop to 30 km/hr at such nodes. New Advice note 1 appended to DMURS relating to “Transition Zones” may be considered in this regard. This note explains the function of gateways and transition zones in relation to speed reduction/ passive traffic calming, wayfinding and placemaking. As presented, the GDRS forms a linear and barrier like feature through LAP lands that will detrimentally impact on surrounding zoned lands by preventing cross connections and creating severance. The proposed development is not, therefore, conducive to integrated land use and transportation planning.

12.0 Environmental Impact Assessment

12.1. Introduction

12.1.1. It was determined within an EIAR Screening Report that the proposed road scheme is over the threshold for which EIAR is required, i.e. *“the construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area.”* Pursuant to Section 50 of the Roads Act, 1993 and Section 172 of the Planning and Development Act, 2000 (as amended), an Environmental Impact Assessment Report (EIAR) has been prepared on behalf of Dún Laoghaire Rathdown County Council for the proposed Glenamuck District Roads Scheme. Directive 2014/52/EU amending the 2011 EIA Directive was transposed into Irish legislation on 1st September 2018 under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations, 2018. This application for approval was received by the Board on 19th March 2019 and is assessed under the provisions of the new Directive.

12.1.2. An examination has been carried out of the information presented by the applicant, including the EIAR, and the submissions made during the course of the application for approval. A summary of the results of the submissions by the Planning Authority, prescribed bodies and other observers, including submissions made at the oral hearing, has been set out in other sections of this report. The main issues raised specific to EIA can be summarised as follows:

- Positive impacts on population and human health through facilitation of improved access and provision of enabling infrastructure.
- Adverse impacts on material assets and on population and human health through loss of land and severance of landholdings and severance of communities.
- Adverse impacts on population and human health and on climate associated with improved car journey times and increased car dependency discouraging more sustainable transport modes.

- Adverse impacts on population and human health during the construction phase from increase noise, dust, vibration, inconvenience, etc.

12.1.3. These issues are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation including conditions.

12.1.4. Other than my concerns outlined hereunder with respect to climate, population and human health and cumulative impacts, I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the applicant, adequately identifies and describes the direct and indirect effects of the proposed development on the environment, and therefore complies with article 94 of the Planning and Development Regulations 2000, as amended.

12.2. Reasonable alternatives

12.2.1. The EIAR must include a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, as well as an indication of the main reasons for the options chosen, taking into account the effects of the project on the environment.

12.2.2. An overview of the strategic alternatives considered, including route alignment options and the design alternatives for the chosen route, are provided in Chapter 3 of the EIAR. This chapter also sets out the process for incorporating the chosen alignment into the statutory local area plan. Reference is also made to a 'do-nothing' scenario.

12.2.3. In 2007 Dún Laoghaire Rathdown County Council commissioned an environmental study, a preliminary design report, a feasibility study & route selection report and a constraints study for the Glenamuck District Distributor Road. Three primary route options were identified in the Route Selection Report taking account of engineering, economic and environmental considerations and having regard to the constraints study. All route options commenced at the Carrickmines Interchange Southern Roundabout and extended to meet Enniskerry Road at the location of the existing Glenamuck Road and at separate locations to the north-west and south-east. The feasibility report from the route selection analysis concluded that Route Option 1

(route to north-west of Glenamuck Road), was the preferred route on the basis that it would reduce traffic in Kiltiernan village and Glenamuck Road and provide quality infrastructure to link to the M50.

- 12.2.4. Further detailed traffic modelling was undertaken to establish that a link road (Glenamuck Link Distributor Road) would be necessary and three link options were examined to tie in with the preferred GDDR. Link Option C from Barnaslingan Lane to roughly the centre of the GDDR was chosen as the preferred link for its ability to provide a high quality bypass of Kiltiernan and a reduction in congestion and delay on the road network.
- 12.2.5. The alignment of the GDDR/ GLDR was incorporated into the Kiltiernan/ Glenamuck Local Area Plan, 2007 apart from a section to the south connecting Ballycorus Road to Enniskerry Road further south at Barnaslingan. However, this section was reintroduced as part of the preparation of the Draft County Development Plan (2009) and adopted in 2010. During the preparation of the 2013-2019 Local Area Plan, amendments to the preliminary design included a bus gate at the junction of Enniskerry Road, a bus gate at the junction of the Glenamuck Road East and the GLDR and the removal of the link road between the GDDR and the existing Glenamuck Road.
- 12.2.6. The 'do nothing' alternative examined in the EIAR states that the expansion of the surrounding area generally and the development of zoned lands would generate huge volumes of traffic and associated nuisance and the existing road network would be unable to meet the required capacity and future traffic demands. It is also considered that a 'do nothing' scenario would restrict the opportunity to deliver an integrated approach to movement including the provision of cycle and pedestrian infrastructure.
- 12.2.7. With respect to design alternatives, the EIAR notes that the 2007 GDDR scheme has evolved to include a design approach for the GDRS that is informed by the Design Manual for Urban Roads and Streets. It is stated that the GDRS has been guided by the principles of connected networks, multi-functional streets, pedestrian focus and a multi-disciplinary approach. In particular, the design seeks to provide for a street-based character with more permeable boundaries rather than traditional distributor road design.

12.2.8. In general, all reasonable alternatives that are relevant to the project and its specific characteristics are clearly presented in the EIAR. The main reasons for the chosen options and the development of the design process are set out, together with the background to the statutory planning process. I would therefore be satisfied that this section of the EIAR is sufficient to comply with the provisions of Article 94 and Paragraph 1(d) of Schedule 6 of the Planning and Development Regulations, 2001 (as amended).

12.3. Likely significant effects on the environment

12.3.1. This section of the EIA **identifies, describes and assesses** the potential direct and indirect effects of the project under each of the individual factors of the environment (population and human health; biodiversity; land, soil, water, air and climate; material assets, cultural heritage and the landscape; and the interactions between these factors). In addition to these individual factors, the interrelationship between the factors are identified, described and assessed to reach a stated conclusion in respect of the significant effects.

12.3.2. Population and human health

12.3.2.1. Chapter 16 of the EIAR describes the general characteristics of human activity and health status in the study area. The potential impacts of the proposal on population and human health arising from other environmental factors are also addressed under the relevant chapters.

12.3.2.2. The assessment describes the baseline environment and predicted impacts for a number of themes determined at scoping stage, including population demographic; settlement patterns; economic activity and employment; amenity; roads and traffic; property; access to public transport; and health demographics.

12.3.2.3. The 2016 Census of Population has been used to determine the population characteristics of the study area² compared to Dún Laoghaire Rathdown as a whole. This includes an assessment of population by size and nationality, age profile, household type and size, economic activity and employment, means of travel to work/ school, and general health.

² 10 Census Small Areas that intersect with the proposed GDRS area.

12.3.2.4. The population of the study area increased by 10.8% to 2,944 from the 2011 Census. A total of 85% of this population are Irish, which is slightly above the county average. The overall population in the study area is slightly younger than the county average and the predominant household size in the study area is two persons (31.3%). Household accommodation type comprises of 62.1% in family houses and 36% in apartments. There are 22.4% of persons within the 0-14 age category compared to 18.4% at county level. In terms of employment, 61.4% in the study area are employed compared to the county figure of 53.9%. Travel by car is the most popular means for travel to work/ school at 65% of the population (driver and passenger). The equivalent county figure is 49%. Bus transport is used by 10.6% of the population of the county and just 5.5% of the study area population. Figures for general health within the study area were similar to the county wide percentage.

Characteristics of the proposed development

12.3.2.5. The proposal involves the construction of the Glenamuck District Road Scheme in Dún Laoghaire Rathdown County Council from Jamestown to Carrickmines and Kingston to Kiltiernan. The extent of works will be in close proximity to a number of residential/ commercial receptors and recreational uses.

12.3.2.6. The construction period is expected to take approximately 18-24 months and normal working times will be between 07:00 and 1900 hours Monday to Saturday.

Predicted impact of the proposed development

12.3.2.7. There is potential for adverse impacts on a short-term basis on population and human health during the construction phase arising from increased noise, odours and dust, traffic disruption and congestion. These factors are addressed in further detail under the relevant environmental topics.

12.3.2.8. During the operational phase, the proposal is expected to have a positive moderate effect through enhanced connectivity and access opportunities to facilities, amenities and employment for the local population. It is also highlighted that the improved access to the M50 will widen the area of employment opportunity for the local population, thereby expanding affluence in the surrounding area.

12.3.2.9. The EIAR notes that car travel is by far the most popular form of transport in the study area, influenced by the relatively poor provision of public transport. It is

considered that the proposed GDRS will improve drive times to the M50 and reduce traffic congestion, with associated improvements in air quality, noise and quality of life through reduced commute times. It is stated in the EIAR that the proposed road is not expected to intensify the number of car journeys. The provision of bus gates/ priority through two junctions may influence commuter patterns in the area.

- 12.3.2.10. It is expected that improved access to facilities and amenities will have a direct influence on quality of life and health. The proposal will help to remove through-traffic and congestion in Kiltiernan village, thus facilitating a more pedestrian friendly and calmed street environment with less exhaust emissions. Overall, it is not expected that the proposal will alter the “good health” status of over 90% of people in the study area as reported in the 2016 Census.

Mitigation measures

- 12.3.2.11. It is stated that mitigation measures relating to population and human health are addressed elsewhere in the EIAR under traffic and transportation, air quality and climate, noise and vibration, townscape and visual and material assets: utilities.

Residual impacts

- 12.3.2.12. The residual impact on population and human health from the proposed development following implementation of mitigation measures is considered to be of positive moderate effect.

Conclusions on population and human health

- 12.3.2.13. The overall impact of the proposal is considered to be adverse and short term on population and human health during the construction phase and generally of moderate positive effect during the operational phase of the proposed development. The main benefits are associated with improved access, reduced traffic congestion and lower drive times. The proposal will also provide pedestrian and cycle infrastructure alongside the roadways, which may help to encourage sustainable travel patterns.

- 12.3.2.14. The proposal requires the permanent acquisition of land for the operation of the road scheme and temporary acquisition for construction. The amount of land to be permanently acquired is 14.6 hectares and a total of 7.4 hectares will be temporarily acquired. The proposal will therefore impact on the affected landowners. In addition, the newly constructed road will impact on existing access arrangements along the alignment.
- 12.3.2.15. The EIAR makes the assumption that the proposed road infrastructure will not intensify the number of car journeys in the area in itself but will relieve congestion associated with the existing road network. This assumption may be accurate in the short-medium term; however, in the longer-term improved road infrastructure tends to result in traffic growth. Improved car journey times also has the effect of encouraging car usage, whilst discouraging more healthy, active and sustainable transport options. Thus, there may be adverse health effects associated with the approach of building more roads to address traffic congestion.
- 12.3.2.16. The issue of community severance from a typical distributor road can have an adverse effect on the local population by creating barriers to cross movement and the development of separate communities. The health and well-being of a population is enhanced by increased activity and personal encounters on a regular basis and the ability to move freely on foot. Finally, there is also the potential for distributor roads to encourage traffic speed, thereby giving rise to traffic hazard and safety concerns for the local population.

12.3.3. Biodiversity

- 12.3.3.1. An indicative study area of 2km radius from the site was identified as the zone of influence of the proposed development. A desk study found that the Dingle Glen pNHA, Ballybetagh Bog pNHA and Loughlinstown Wood pNHA fall within this area, and the Dalkey Coastal Zone and Killiney Hill pNHA is connected via a hydrological link.

12.3.3.2. Site visits were conducted on 22nd and 26th January and on the 22nd and 26th June 2018 and a separate bat survey was carried out. Consultations were also carried out with the Department of Culture, Heritage and the Gaeltacht, Inland Fisheries Ireland, the Biodiversity Officer of Dún Laoghaire Rathdown County Council and An Taisce.

Characteristics of the proposed development

12.3.3.3. The proposed development will involve the construction of roadway through areas of improved agricultural grassland, arable cropland, dry meadow, and disturbed or artificial surfaces. The road alignment will also cut across eroding river, and treeline and hedgerow of both higher and lower significance.

12.3.3.4. The proposal will involve the creation of working space for construction, clearance of vegetation, earthworks, channel diversions, surface water attenuation, landscaping and boundary treatments and the provision of road lighting along the proposed route.

Predicted impact of the proposed development

12.3.3.5. During the construction phase, the proposed development will result in the removal of habitat including agricultural fields, scrub, field boundaries, artificial surfaces, drainage ditches and eroding rivers. The permanent loss of 960m of treeline (including 280m of townland boundary) and 320m of hedgerow is considered to be of significant effect. The permanent loss of other hedgerow, scrub and habitat along lengths of the Glenamuck Stream and Shanganagh Stream are considered to be of slight effect.

12.3.3.6. No bat roosts were identified in the construction zone; however, eight species of bat were found foraging across the landscape. No evidence of otter holts were found along sections of the stream but new holts may develop in time. Badger sett tunnels can stretch for substantial distances underground and construction works may occur within 50m of sett entrances. The potential for direct mortality/ disturbance of species during land clearance is considered to be potentially significant.

12.3.3.7. The temporary impact on aquatic life from installation of culverts along watercourses is considered to be significant. Migration paths upstream can be blocked and pollutants (sediment) can be released downstream.

12.3.3.8. The operational phase of the road scheme will potentially give rise to impacts on species through the disruption of ecological corridors; pollution of water from surface

water run-off; and disturbance to species from increased human activity. Impacts on ecological corridors include foraging routes for bats being interrupted; installation of box culverts at river crossings; and the road traversing lands preventing the movement of badger populations and other species. It is considered that given the built up nature of the surroundings, the increase in ambient noise or human activity will not impact in biodiversity in general. Noise may, however, affect the ability of certain species of bat to use audible sound for hunting.

Mitigation measures

12.3.3.9. The following mitigation measures are outlined in the EIAR:

- Identification of new areas of land where semi-natural habitat can develop – compensation habitat shown at attenuation ponds.
- No clearing of vegetation in the breeding season (1st March to 31st July).
- Extreme caution required to prevent the spread of alien invasive species.
- Culverts will be fish and mammal passible and designed in accordance with IFI guidelines. Culvert over Loughlinstown River will be passible for Daubenton Bats.
- Inland Fisheries Ireland confine instream works to between July and August.
- Incorporation of underpasses at two points for badger and other species.
- Avoidance of fences/ barriers that may prevent the movement of deer.
- Design of lighting to minimise impacts on bats.
- Erection of 14 new bat roosting boxes availing of existing semi-natural corridors and new habitat compensation areas.
- Surveying of Shanganagh Stream prior to commencement of works for otter.
- Checking of mature trees for bats before felling.
- Preparation of construction management plan to include measures for pollution prevention.

Residual impacts

12.3.3.10. It is recognised in the EIAR that it will not be possible to compensate for the loss of highly significant field boundaries; however, it is stated that the estimated area of new wetland/ attenuation areas at approximately 4.5 hectare will be well in excess of the area of lost habitat (c.1.3 hectares). The loss of treelines and hedgerow, the disruption of ecological corridors and the unlikelihood of complete elimination of pollution from entering water will result in residual impacts to biodiversity.

Conclusions on Biodiversity

12.3.3.11. The overall impact of the proposal on certain aspects of biodiversity, such as the removal of habitat, is unavoidable. However, the site is not with any designated area and with proper implementation of mitigation measures, the impact of the proposal can be minimised.

12.3.3.12. Notwithstanding, a submission on the application by the Department of Culture, Heritage and the Gaeltacht noted that otter surveys were only carried out at proposed river crossings and that the impact of otter usage along the Glenamuck Stream is likely to be particularly marked. It was stated that if otter usage can be fully defined then suitable mitigation measures may be possible.

12.3.3.13. On foot of this, additional otter surveys carried out in January 2019 were made available to the project team. These surveys include the river reaches affected by the proposed scheme and were determined to be consistent with the findings of the EIAR.

12.3.3.14. I would be satisfied that the biodiversity assessment is based on the assumption that otter is active along the watercourses affected by the proposed development and that appropriate mitigation measures will be in place during construction and operational phases to address the presence of otter.

12.3.3.15. The Department's submission also refers to the location of a main badger sett within 100m of the proposed GLDR and a population of Sika Deer along the Glenamuck-Tiknick ridge. I would also be satisfied with the recommendation that badger and deer proof fencing should be installed along the GLDR where it is bounded by undeveloped land.

12.3.4. Land, soil, water, air and climate, noise and vibration

- 12.3.4.1. This assessment deals separately with the above environmental factors as they appear in the EIAR.
- 12.3.4.2. The baseline assessment for land and soils indicates that soils/ subsoils and bedrock have the potential to demonstrate sensitivity to the proposed development at the site. The bedrock is classified as a poor aquifer and groundwater vulnerability is classified as high. The GDRS is underlain entirely by granite bedrock and soils comprising mainly of sandy gravelly clay.
- 12.3.4.3. The GDRS lies entirely within the catchment of the Loughlinstown River. The southern portion of the scheme affects the Shanganagh sub-catchment and the northern portions are within the Carrickmines Stream sub-catchment. There are several minor tributaries of Loughlinstown River in the direct vicinity of the GDRS. The proposal will require a new crossing on the Loughlinstown River, two crossings on Glenamuck Stream and a crossing of an unnamed watercourse. The Carrickmines Stream waterbody has been assigned a moderate status under WFD classifications and the Shanganagh sub-catchment is classified as good. A previous Environmental Study (RPS, 2007) recorded the Glenamuck Stream as being slightly polluted and with good Salmonid habitat and the Shanganagh River as being unpolluted and with very good Salmonid habitat.
- 12.3.4.4. The baseline environment for meteorological data measured at Dublin Airport includes a predominant wind direction from the west south-west, with generally moderate wind speeds. The EIAR also reviews air quality trends and available background air quality data. This includes trends in Nitrogen Dioxide (NO₂), PM₁₀, PM_{2.5}, benzene and CO. Background concentrations are calculated for the opening (2020) and design (2035) year of the proposed development.
- 12.3.4.5. Noise monitoring was carried out at 5 no. attended locations and 2 no. unattended locations along the proposed route.

Characteristics of the proposed development

- 12.3.4.6. The proposed construction of the Glenamuck District Road Scheme will involve the clearance of vegetation, earthworks, channel diversions, surface water attenuation, landscaping and boundary treatments.

12.3.4.7. The road scheme has been designed to minimise earthworks by matching design elevations to existing levels where possible. Four watercourse crossings are required and a total of six attenuation ponds are proposed. Verges, slopes and ponds will be landscaped upon completion of works. A construction management plan will be prepared in advance of construction works commencing and the integration of environmental issues into road scheme planning, construction and operation will be carried out through an environmental operating plan.

Predicted impact of the proposed development on Land and Soils

12.3.4.8. The EIAR states that the predicted impacts on soils and geology during the construction phase of the proposed development are associated with excavations, soil movement, aggregate import and construction plant usage. This may include chemical pollution of geological receptors resulting in contamination of soils and the creation of pathways for contaminants to affect other environmental receptors. Construction activities also have the potential to result in loss of soil value that may also affect air and water receptors. Material generation and poor soil handling may prevent the reuse of materials within the scheme.

12.3.4.9. During the operational phase, loss of soil value may occur where any exposed soils remain unplanted, or where soil slippage or settlement occurs. Effects unmitigated during the construction phase have the potential to extend into the operational phase.

Mitigation measures for land and soils

12.3.4.10. The following mitigation measures through design and procedure are outlined in the EIAR for land and soils:

- Vertical and horizontal alignment has been optimised to minimise and balance cut and fill.
- Provision of sufficient space within the works area for segregated spoil storage.
- Preconstruction soil testing to determine any contamination.
- Environmental Operating Plan shall be produced, implemented and maintained by the contractor.

12.3.4.11. Specific mitigation measures are also detailed for chemical pollution, loss of soil value and material generation. It is considered that the post mitigation impact on land and soils is not significant.

Residual impacts for land and soils

12.3.4.12. The EIAR states that there will not be a significant residual impact on the identified land and soil receptors as a consequence of compliance with the construction and operation mitigation measures.

Predicted impact of the proposed development on water and hydrology

12.3.4.13. It is acknowledged in the EIAR that construction activities can pose a significant risk to watercourses through significant excavations, soil movement, aggregate import and construction plant usage.

12.3.4.14. The predicted impacts during construction, as set out in Table 14.14 of the EIAR, include the chemical pollution of the water environment through accidental spillage, etc. which has the potential to adversely affect water quality, fish and aquatic ecology. Pollution by silt/ suspended solids can potentially modify stream morphologies, smother habitat, harm aquatic flora and fauna and increase the risk of blockage. Changes in stream channels through unsuitable culvert/ channel sizing or installation may affect flood risk, the movement of fish or mammals and habitat. Changes to run-off and flow patterns may increase the potential for flooding and erosion, as well as affecting dependent habitat and groundwater. The overall unmitigated significance of the construction phase is considered to be moderate-high for the river receptors.

12.3.4.15. The predicted impacts during the operational phase, as set out in Table 14.16 of the EIAR, are those associated with final road surface treatments, traffic flows and all operation and maintenance activities, including road drainage. Similar impacts and consequences are possible, including chemical pollution, suspended solids, changes to stream channels, and changes to run off and flow patterns. The sources of these impacts may include road run-off containing contaminants, erosion associated with the drainage network, construction stage deficiencies, construction within a flood plain and increased run-off. The overall unmitigated significance of the operational phase is also considered to be moderate-high for the river receptors.

Mitigation measures for water and hydrology

12.3.4.16. The following mitigation measures through design and procedure are outlined in the EIAR for water and hydrology:

- Project layout has evolved in order that the design avoids conflict with the water environment.
- Road alignment at watercourse crossings facilitates the shortest possible crossing lengths and facilitates crossing structures outside of the stream channel.
- Scheme avoids Flood Zones A & B.
- Drainage system allows recharge to groundwater at all attenuation and open channel locations.
- Scheme design facilitates the retention of vegetated buffer strips at all locations other than crossing points and isolated pinch points.
- Environmental Operating Plan shall be designed to assist the main contractor in preventing, managing and/ or minimising significant environmental impact during the construction phase.

12.3.4.17. Specific mitigation measures are also set out for pollution control, channel/ culvert works, and run-off and flow patterns. Following mitigation, the impact on water and hydrology from the proposed GDRS is considered to be not significant.

Residual impacts for water and hydrology

12.3.4.18. The EIAR states that there will not be a significant residual impact on the identified hydrological/ hydrogeological receptors as a consequence of compliance with the construction and operation mitigation measures.

Predicted impact of the proposed development on air and climate

12.3.4.19. It is stated in the EIAR that the main source of air quality impacts during the construction stage is from fugitive dust emissions. The majority of construction dust

deposition tends to be within the first 50m of the site. Sensitive receptors within this area are predominately residential properties.

12.3.4.20. There is potential for greenhouse gas emissions during the construction phase from construction vehicles, generators, etc. However, this is considered to be imperceptible.

12.3.4.21. During the operational phase, traffic related air emissions may generate quantities of air pollutants. Emissions from traffic generated from the scheme have been modelled at sensitive receptors. It is concluded in the EIAR that the levels of traffic-derived air pollutants will not exceed the ambient air quality standards either with or without the proposed development in place. The impact of the proposed development in terms of NO₂ is slight negative at the majority of receptors along the route and slight positive in bypassed areas such as the R842. The impact of other pollutants (PM₁₀, PM_{2.5}, CO and benzene) is considered to be imperceptible and long term.

12.3.4.22. In terms of impact on regional air quality, it is stated in the EIAR that the likely impact of the proposed scheme on Ireland's obligations under Directive EU 2016/2284 are imperceptible and long term. The impact of the proposed scheme on national greenhouse gas emissions is considered in the EIAR to be insignificant in terms of Ireland's obligations under the EU 2020 target (EU, 2017).

Mitigation measures for air and climate

12.3.4.23. The following mitigation measures are outlined in the EIAR for air quality and climate:

- Main contractor responsible for coordination, implementation and ongoing monitoring of a dust management plan.
- In the event of dust nuisance occurring outside the site boundary, movement of materials likely to raise dust would be curtailed and procedures implemented to rectify the problem.
- Prevention of on-site or delivery vehicles from leaving engines idle to reduce emissions.

- Minimisation of waste materials due to poor timing or over ordering to reduce emissions.
- Various initiatives will reduce vehicle emissions in the future.
- Emissions of pollutants from road traffic can be controlled by diverting traffic away from heavily congested areas or ensuring free-flowing traffic.
- Additional measures included in the National Climate Change Strategy to reduce emissions, e.g. VRT and motor tax rebalancing, efficient driving awareness, etc.

Residual impacts for air and climate

12.3.4.24. The EIAR states that fugitive emissions of dust will be insignificant when dust minimisation measures are implemented. In addition, CO₂ and NO₂ emissions will have an imperceptible impact on climate during construction. The operational phase will give rise to a slight adverse residual impact on air quality and climate.

Predicted impact of the proposed development on noise and vibration

12.3.4.25. The EIAR states that the predicted impacts from the noise assessment indicate that two thirds of the assessment locations will experience a reduction in road traffic noise or there will be no change. In many cases, the front facades of properties will experience a reduction in traffic noise and the rear facades will experience an increase. Three receivers satisfy the requirements for noise mitigation during the operational phase at opening year and 10 receivers satisfy these requirements at the horizon year.

12.3.4.26. Where exceedances of recommended construction noise criteria are expected, noise mitigation measures will be used as part of the construction works.

12.3.4.27. It is stated in the EIAR that the potential for vibrations at neighbouring sensitive locations is limited to excavation works and lorry movements on uneven road surfaces.

Mitigation measures for noise and vibration

12.3.4.28. The following mitigation measures are outlined in the EIAR for noise and vibration:

- Acoustic barriers for eight identified areas.

- Contractor obliged to take specific noise abatement measures and comply with best practice standards in relation to operation of construction plant.
- Normal working hours to be between 07:00 and 19:00 Monday to Saturday.

Residual impacts for noise and vibration

12.3.4.29. The EIAR states that the probability of effects from construction noise will be negative, moderate/ major and short-term.

12.3.4.30. Residual noise will be reduced for two thirds of the modelled locations within the vicinity of the site. The description of operational phase effects at 9 no. locations is stated to be negative, negligible and long-term. At a single location on Ballycorus Road the significance will be moderate.

Conclusions on land, soil, water, air and climate, noise and vibration

12.3.4.31. It is likely that the most apparent impacts of the proposed Glenamuck District Road Scheme on land, soil, water and air will occur during the construction phase when vegetation is cleared, earthworks take place and channels are diverted. A range of mitigation measures are required, particularly during construction stage, that will be implemented through the construction management plan and environmental operating plan. This includes measures for dust suppression, surface water protection and maintenance of soil value through planting.

12.3.4.32. Long term but imperceptible impacts on climate may occur through increased traffic that may be off-set by an increased prevalence of low emission vehicles into the future. In the medium to longer term, however, I would be of the opinion that the proposed development will give rise to increase traffic and associated emissions that may have a nationally imperceptible but nonetheless cumulative impact on climate change. It was submitted on behalf of the applicant at the hearing that the proposed scheme will result in 4,855 tonnes of CO₂ in the opening year of 2020 and 9,239 tonnes of CO₂ in the design year of 2035. This represents a change of 701 tonnes and 2,560 tonnes of CO₂ in 2020 and 2035 respectively compared with the “do nothing” scenario with the existing road network.

12.3.4.33. The overall impact of the proposal is considered to be slight or insignificant on land, soil, water and air with successful implementation of mitigation measures. An impact of moderate significance is expected in terms of noise on one receiver on Ballycorus

Road. However, I would have concerns that the proposal will result in additional CO₂ emissions that have not been measured against a scenario whereby the GDRS is designed more as an amenity corridor with greater emphasis on softer transport modes.

12.3.5. **Material assets, cultural heritage and the landscape**

12.3.5.1. This assessment also addresses the above environmental factors separately as they appear in the EIAR. In addition, this section also includes a separate assessment on traffic and transport, an assessment covering resource and waste management and the EIAR chapters on land use and property and utilities.

Material Assets (Traffic & Transport)

12.3.5.2. Baseline ADDT flows along key road corridors were established through a package of traffic surveys from November 2017. Traffic modelling was carried out at a strategic macro-modelling level and through local area micro-simulations and modelling of local junctions. The model years are 2017 (baseline), 2020 (opening year) and 2035 (horizon year). The 2035 scenario assumes the development of main infrastructure such as Luas Green line enhancements, Bus Connects, N11 widening, new Metrolink, Dart expansion and M50 widening and demand management. Do nothing scenarios were tested with and without the development of Local Area Plan lands, as well as do something scenarios including the GDRS and bus gates with and without LAP committed development and with and without complementary road infrastructure. The sensitivity of the proposed bus gates was also assessed.

Characteristics of the proposed development

12.3.5.3. The proposal involves the construction of the Glenamuck District Road Scheme (GDRS) comprising the Glenamuck District Distributor Road (GDDR) and the Glenamuck Link Distributor Road (GLDR). The GDDR consists of c. 660m of two-lane single carriageway and c. 890 metres of four-lane dual carriageway. The GLDR will be approximately 1.8 km in length. A 350m northbound section will be dual

carriageway and the remainder will be predominantly two-lane single carriageway road.

Predicted impact of the proposed development on Traffic and Transport

- 12.3.5.4. The EIAR sets out an overview of predicted impacts during the construction phase, as well as existing conditions, trip generation, trip distribution and assignment, and an assessment of construction impact.
- 12.3.5.5. It is assumed that there will be 25-42 two-way trips for construction staff (light vehicles); 60 trips (30 arrivals/ 30 departures) for importation of material (heavy vehicles) and 80 trips (40 arrivals/ 40 departures) for exportation of material (heavy vehicles). The impact of material importation and exportation on the local road network is considered negligible. The impact of construction traffic on haul routes generates a percentage increase on 2017 base AADT flows at locations around the site of between 0% and 2.3%.
- 12.3.5.6. Predicted impact during the operational phase of the proposed development is assessed in the EIAR for opening year and horizon year. Scheme impact is also assessed in terms of delays and queuing, vehicle speeds, strategic impacts on the M50, public transport impact, benefits of bus gates, and lastly impacts on pedestrians and cyclists.
- 12.3.5.7. The GDRS is forecasted to carry between 7,250 and 14,000 AADT in 2020. The percentage difference between 2020 do nothing and 2020 do something is greatest at the R117 Enniskerry Road to the south of Kiltiernan where a decrease in traffic of 86.7% is forecasted. There will also be significant reductions on Glenamuck Road and further north on Enniskerry Road as traffic gets diverted from Kiltiernan. Traffic is forecasted to increase on Ballycorus Road due to the build out of new development zones. An increase of 32.8% is also forecasted on Enniskerry Road north of the GDDR junction and traffic at Junction 15 of the M50 is forecasted to increase by 2%.
- 12.3.5.8. The GDRS will carry between 14,250 and 31,750 AADT in 2035, with the highest levels of traffic being on the eastern section of the GDDR. It is stated in the EIAR that by 2035 the proposed scheme will divert road traffic away from less suitable and unsafe roads and will act as an arterial traffic corridor attracting trips from existing,

committed developments and the fully developed LAP lands. Large percentage reductions in traffic are forecasted for Kiltiernan village; in numerical terms the decrease is much greater when compared to 2020 forecasts. Increases of 55% on Ballycorus Road are forecasted and there is a long term objective in the Development Plan to improve this road to cater for strategic demand on this corridor after implementation of the GDRS. It is also noted that the GDRS will attract trips from surrounding areas for the purposes of time savings.

12.3.5.9. With respect to delays and queuing, it is stated in the EIAR that the GDRS generally improves traffic conditions by reducing delay during peak periods compared to the do nothing scenario. It is concluded that the existing road network is unsuitable for traffic in the horizon year, where committed development will see an additional 3,000 dwellings in the area.

12.3.5.10. Average vehicle speed for general traffic increases in AM peak in the do something scenarios; however there is a noticeable decrease in average speeds across the network during PM peak from the 2017 baseline compared to 2035 do something (27.6kph down to 20.5kph). This improves with the introduction of complementary measures. The do something scenario also has significant benefit for average bus speeds and the exclusion of the bus gates decreases overall bus speeds significantly. It is highlighted in the EIAR that the proposed scheme will improve access and connectivity to the Luas stop at Carrickmines.

12.3.5.11. In terms of impact on the M50, it should be noted that the NTA ERM model for 2035 includes a full suite of transport measures to reflect the GDA Transport Strategy. AADT showed a 9.15% decrease at junction 16 and 17 in the 2035 comparison between do nothing and do something. When complementary measures are included, Junctions 15 and 16 show a 6.75% decrease.

12.3.5.12. The impact on pedestrians and cyclists is stated in the EIAR to be generally positive through the provision of new amenity walking and cycling routes and the reduction of traffic in Kiltiernan and along Glenamuck Road.

Mitigation measures

12.3.5.13. During the construction phase, construction traffic impacts will be minimised through enforcement of a construction management plan.

12.3.5.14. The EIAR refers to a number of specific mitigation measures that have been incorporated into the scheme to ensure adequate traffic capacity and to avoid traffic congestion. The diversion of traffic away from existing roads also presents the opportunity to carry out environmental improvements in these areas. Finally, it is noted that traffic signal staging can be reallocated at the GDDR/ Enniskerry Road and Ballycorus Road/ GLDR to meet demand on affected arms of these junctions.

Residual impacts

12.3.5.15. Residual impacts for traffic and transport as set out in the EIAR are stated to be an overall traffic, public transport and pedestrian/ cyclist benefit associated with the proposed scheme.

12.3.5.16. Other residual impacts arise from dust, noise and vibration from the construction phase.

Conclusions on traffic and transport

12.3.5.17. The overall impact of the proposal is considered within the EIAR to be mostly positive in terms of the provision of traffic, bus, cyclist and pedestrian infrastructure. This type of infrastructure is necessary to facilitate the development of surrounding zoned lands. There is also the potential benefit associated with the diversion of traffic from Kiltiernan and Glenamuck Road onto the new road infrastructure and this can be realised through the proposed bus gates.

12.3.5.18. Notwithstanding this, I consider that the EIAR is focused primarily on accommodating traffic growth and this in turn has informed the design of the proposed development. It is acknowledged elsewhere in the EIAR that the road is being delivered in isolation as an infrastructural project and that the designers have no control over the phasing, layout, frontage or future boundary treatments of surrounding private developments. I would be an opinion that such an approach cannot successfully deliver movement corridors that are fully integrated with the adjoining communities and designed primarily for local use and for the amenity of local residents. As noted in DMURS, frontage-free streets (such as distributor roads) can be unsafe for pedestrians (especially after dark) and can result in a hostile environment.

12.3.5.19. The submission received by TII stated that more clarity is required on the quantum of additional trips that may use M50 Junctions 14 & 15 and the dispersal of trips across the network in peaks. It is also noted that the assessment includes for build out of the LAP but no other committed/ planned developments, e.g. The Park, Carrickmines and Cherrywood SDZ. In response, the applicant submitted that a significant proportion of traffic emanating from the vicinity of the subject site wishes to cross the M50 rather than access it and that the constriction of the GDRS would facilitate the construction of the proposed Cherrywood-Kiltiernan Link Road and associated cross-movement.

12.3.5.20. My concerns relate to the construction of a heavily trafficked road to serve the development of a new neighbourhood. Such a road system will have a regional function and therefore may give rise to regional impacts. In my opinion, a local system of roads serving the local area devoid of heavy traffic may have the dual benefit of encouraging local trips by sustainable modes whilst minimising traffic flows to nearby strategic roads. The EIAR does not assess the impact of such an alternative scenario.

Material Assets (land use and property, utilities, resource and waste management)

12.3.5.21. The baseline for land use and property sets out an overview of land uses in the study area, land use zonings and planning permissions. In terms of residential land use, it has been calculated that there are 409 dwellings within the LAP area. There is a relatively small number of businesses in the area (17 commercial premises in the LAP area), most of which area concentrated at The Park, Carrickmines.

12.3.5.22. There are high voltage transmission lines and local distribution lines in the area of the proposed development. This includes the Arklow – Carrickmines 220kV Double Circuit Route and the Carrickmines to Fassaroe 110kV line. Undergrounding of the 220kV line is technically unfeasible and the 110kV line will not be undergrounded at the present time. The EIAR also provides details on existing watermains, storm water drainage, foul sewers, gas and telecommunications infrastructure.

12.3.5.23. Table 15.1 of the EIAR includes an estimation of the construction and demolition wastes generated by the proposed development.

Characteristics of the proposed development

12.3.5.24. The proposed Glenamuck District Road Scheme in Dún Laoghaire Rathdown County Council will take place alongside various zonings and land uses. Land currently in agricultural, residential and proposed residential use will be required for the proposed route amounting to a permanent land take of 14.6 hectares. The road will be in proximity to significant utilities including a 220kV powerline. The construction phase of the proposed development will require significant earthworks that will be minimised where possible by matching elevations to existing levels.

Predicted impact of the proposed development on land use and property

12.3.5.25. Predicted impacts on land use and property during construction and operational phases are included in the EIAR for journey characteristics, severance and economic impacts.

12.3.5.26. Short term inconvenience to east-west traffic movements is likely during the construction phase. This is likely to include temporary traffic controls. Severance of land parcels will also occur during construction and the overall use of lands within the scheme footprint will be permanently and profoundly affected. A summary of all properties affected is included in Table 17.3 of the EIAR.

12.3.5.27. During the operational phase, the implementation of proposed bus gates will divert other traffic onto the GLDR. The bus gate will facilitate bus, pedestrian and cycle movements and may result in slightly increased times for certain private journeys but the overall impact on journey characteristics is considered to be positive. Severance of land parcels will occur and relief from severance will take place along Glenamuck Road and the bypassed section of Enniskerry Road. It is also stated that in the absence of mitigation, the GLDR in particular may introduce some community severance due to the road forming a barrier to pedestrian movement. It is noted that the scheme does not require the demolition of any existing permanent buildings. An overview of directly affected properties is illustrated on Figure 17.8 of the EIAR. Affected properties are in agricultural, recreational or residential use. The scheme will also facilitate the development of surrounding lands and therefore contribute to increased housing supply and employment. There will also be cumulative economic impacts that are considered positive and long term.

Mitigation measures for land use and property

12.3.5.28. The following measures are set out in the EIAR to mitigate against the adverse impacts on land use and property:

- CPO of land parcels with very limited land use potential subject to agreement of land owners.
- Site management measures will be carried out during construction.
- Management of construction traffic to mitigate disturbance.
- Access maintained to all affected properties.
- Boundary treatment with agreement of property owners.
- Property condition surveys to all building/ structures in the direct vicinity of proposed works.
- Provision of signal controlled pedestrian and cyclist crossings at regular intervals.

Residual impacts for land use and property

12.3.5.29. No significant negative residual impacts are envisaged from the construction phase. The EIAR states that the proposed scheme is expected to have an overall significant positive effect for the area in the long term.

Predicted impact of the proposed development on utilities

12.3.5.30. The proposed road can be delivered while maintaining the 220kV pylons in place and a preliminary design is considered acceptable. Some local diversion of power supplies will be required during construction and power will be required both in the construction and operational phases for public lighting, traffic signals, etc. Utility providers will be facilitated along the scheme corridor for installation of new and upgraded infrastructure.

12.3.5.31. Local diversion and local works may be required to water supply, drainage, gas and telecoms systems during construction works. New and upgraded water, drainage, gas and telecoms infrastructure will be installed along the scheme corridor, thus providing a moderate positive impact.

Mitigation measures for utilities

12.3.5.32. The following mitigation measures are outlined for utilities:

- Measures to ensure there are no interruptions to existing services unless otherwise agreed in advance.
- All works carried out with the ongoing consultation of relevant utility and/ or local authority.
- Utility providers will be offered the opportunity to incorporate new strategic infrastructure into new road construction.

Residual Impacts on utilities

12.3.5.33. Residual impact on utility services is considered to be imperceptible in the EIAR.

Predicted impact of the proposed development on resource and waste management

12.3.5.34. It is estimated that 57,500 m³ and 51,600m³ of material will be excavated for roads and ponds respectively. A total of 39,500 m³ will be reused for roads and the surplus soil volume will be 69,600 m³. There will be imported road gravels (30,100 m³) and imported concrete and asphalt surfacing (11,000 m³).

12.3.5.35. Construction waste is also likely to be generated from construction works, site offices and temporary works facilities. The most likely type of construction waste will be surplus concrete and unusable or damaged construction materials.

12.3.5.36. A negligible generation of waste is expected during the operational phase of the proposed development.

Mitigation measures for resource and waste management

12.3.5.37. The following measures are set out in the EIAR to mitigate against the adverse impacts on resource and waste management:

- Preparation of a Construction and Demolition Waste Management Plan.
- Preparation of demolition audit in accordance with the ICE Demolition Protocol.
- Consideration of reuse of non-hazardous excavation material on-site for landscaping works.
- Source segregation.

- Material management to minimise wastage.
- Supply chain partners.
- Waste auditing.

Residual impacts for resource and waste management

12.3.5.38. The resulting residual impacts are considered in the EIAR to be neutral, slight and short term.

Conclusions on land use and property, utilities and resource and waste management

12.3.5.39. It is likely that the main impacts of the proposed Glenamuck District Road Scheme on the above material assets will occur during the construction phase. This will require full preparation and implementation of relevant construction phase plans to minimise construction related impacts and disturbance to properties and utility providers. The proposal has the potential to generate large amount of waste and this also requires proper management. Overall, it is likely that the proposal will not have a significant impact on these material assets following implementation of mitigation measures.

Cultural heritage and the landscape

12.3.5.40. These environmental factors are addressed in Chapter 11 – “Archaeology, Architectural and Cultural Heritage” and Chapter 12 – “Landscape/ Townscape and Visual” of the EIAR.

12.3.5.41. It is stated in the EIAR that the only features of historical/ cultural heritage that have the ability to be impacted upon are townland boundaries. The proposed road corridor crosses four townland boundaries at Carrickmines Great and Glenamuck North, Glenamuck North and Jamestown, Glenamuck North and South, and Glenamuck South and Jamestown.

12.3.5.42. Four sites of archaeological potential are located in the study area, two of which are located within the environmental assessment corridor. Two artefacts listed in the Topographical Registers of the National Museum of Ireland have been discovered in the study area (bronze Palstave cast and polished stone axe).

12.3.5.43. The EIAR outlines details of previous archaeological investigations at Carrickmines Great, Glenamuck Road, Glenamuck North and South and Enniskerry Road. A

geophysical survey was also undertaken in 2006 in respect of the previous Glenamuck Road proposals and several small and isolated geophysical responses were recorded.

12.3.5.44. With respect to landscape, townscape and visual impacts, the EIAR highlights that the views and prospects relevant to the study include Carrickgollogan from Enniskerry Road (south of Kiltiernan Village) and Three Rock Mountain and Two Rock Mountain from Enniskerry Road (Sandyford-Kiltiernan area) and Sandyford Village. The scenic route of Ballyedmunduff Road and Three Rock Mountain itself are also noted. The site lies with the Kiltiernan Plain Landscape Character Area.

12.3.5.45. The receiving environment is described as being generally rural and agricultural with ribbon development along the R117 and R116. A significant portion of the lands are also dedicated to sports facilities, and modern apartment blocks and the large format retail centre at Carrickmines are situated to the north-west. The view from the Dublin foothills shows the LAP area comprising field patterns, mature trees, wooded areas and settlement.

Characteristics of the proposed development

12.3.5.46. The proposed development requires substantial earthworks along its extent that may reveal sub-surface archaeological features. As noted in the EIAR, the proposed road is part of an extensive landscape change as new residential development transforms the local landscape character from rural to urban. Whilst the road itself is not considered to significantly change the character of the area, the surrounding area will experience significant cumulative change.

Predicted impact of the proposed development on cultural heritage

12.3.5.47. Predicted impacts on historical heritage during the construction stage include the removal of short lengths of townland boundaries.

12.3.5.48. The proposed development may impact on two monuments at Glenamuck South/ Kingston (enclosure) and Carrickmines Great (burnt spread/ fulacht fia). A section of the road, along with a bridge and two attenuation ponds will be within a Zone of Archaeological Potential/ Notification. In the absence of mitigation, the potential effect/ impact on this possible monument is likely to be negative, very significant and

permanent. Groundworks in general also have the ability to uncover subsurface features of archaeological potential and interest and there is potential for recovery of artefacts from the Loughlinstown River and, to a lesser extent, the Glenamuck Stream.

12.3.5.49. There are six protected structures and two structures of industrial heritage recorded within the study area, none of which are within the immediate environs of the road or associated construction areas. The road is not routed through the nearest ACA on the west side of Enniskerry Road, Kiltiernan.

Mitigation measures for cultural heritage

12.3.5.50. The following mitigation measures are outlined in the EIAR for archaeological, architectural and cultural heritage:

- Recording of construction details for lengths of townland boundary to be removed.
- Give consideration to the erection of stone marker, detailing names of associated townlands.
- Further programme of archaeological geophysical surveying should be undertaken for all suitable greenfield areas and attenuation within the development corridor.
- Archaeological testing should take place within the extent of the construction corridor.
- Preparation of report following survey and testing including impact assessment and mitigation strategy.
- Undertaking of a wade survey/ metal detecting survey of Loughlinstown River and Glenamuck Stream by an archaeologist.

Residual impacts for cultural heritage

12.3.5.51. It is considered that no residual impact with respect to cultural heritage will occur with the adoption and implementation of the mitigation strategy.

Predicted impact of the proposed development on landscape

12.3.5.52. The receiving environment is classified in the EIAR as being of medium sensitivity and potentially sensitive to change in general. The magnitude of change is classified as medium and not substantially uncharacteristic in the surrounding context. It is considered that the scheme complements the scale, landform and pattern of landscape/ view.

12.3.5.53. A total of 13 viewpoints were chosen for assessment of visual amenity impact. In general, it is concluded that the visibility of the new road will decline as LAP urban development is constructed. The most significant views are at Ballycorus Road looking south (PM04), Wayside Celtic Football Club view west (VP02) and Barnaslingan Lane view north-west (VP03).

Mitigation Measures for Landscape

12.3.5.54. The following landscape mitigation measures are outlined in the EIAR:

- Replacement of rural landscape with urban landscape should reflect the materials, character and natural and cultural heritage of the area where feasible.
- Trees, hedgerows and built cultural features of merit should be retained where possible.
- Provision of temporary boundary treatments pending adjacent design development and accommodation of long term urban streetscape proposals.
- Adjacent open spaces, attenuation areas and verges landscaped to integrate into landscape pattern.

Residual landscape impacts

12.3.5.55. It is stated in the EIAR that the visual impacts of the proposed development with mitigation planting, can generally, over time, be integrated into its receiving environment with a mainly neutral effect. The visibility of the new road will decline behind new buildings and further landscape elements.

Conclusions on cultural heritage and the landscape

12.3.5.56. It is likely that the proposed road scheme will give rise to no significant impact on cultural heritage with the successful implementation of mitigation measures. The visual impact of the road should be viewed in its context as a physical surface presence and integrating with the existing road network. Overtime, the road will become less visually apparent in the landscape as the area urbanises.

12.4. Land

12.4.1. The proposed development will involve the permanent acquisition of 14.6 hectares of land along the road corridor. A total of 7.4 hectares will also be temporarily acquired for construction works. It would appear that this land is necessary for the construction and operational phases of the proposed development. The affected land is mostly in agricultural, recreational and residential use. It is stated in the EIAR that the impact of land take will be mitigated through provision of new accesses, replacement boundaries and monetary compensation.

12.5. Vulnerability of the project to major accident and/ or natural disasters

12.5.1. The EIAR confirms that the proposed project does not pose a major hazardous accident risk. The nearest SEVESO facility (Synergen Power Ltd.) is located approximately 15km from the site at Pigeon House Road.

12.5.2. I am satisfied that given the nature of the proposed development, and the mitigation measures proposed, together with the low probability of a major accident/ natural disaster, it is not likely that significant effects on the environment would arise in this regard.

12.6. Environmental Interactions & Cumulative Impacts

12.6.1. Chapter 19 of the EIAR addresses the likely significant interactions between environmental factors and the cumulative effects that may arise from these interactions and from other approved projects in the area.

12.6.2. Table 19.1 of the EIAR provides a matrix of interactions between environmental factors during the construction and operational phases of the proposed development. The EIAR lists interactions between traffic and transport and most other

environmental factors. The change in traffic levels will cause a change in ambient air pollution levels, noise, biodiversity and population and human health through increased/ decreased congestion and community severance. Construction stage traffic may also impact on soils, water and waste management.

- 12.6.3. The EIAR lists other interactions between various environmental factors. Most significantly, a total of five other environmental factors interact with population and human health and land and soils. There are four interacting factors with water and hydrology and three with air quality and climate, noise and vibration, biodiversity, landscape/ townscape and visual and material assets. Many of the interactions will take place during the construction phase of the proposed development and will therefore be short term. Mitigation measures are set out in each of the relevant chapters and can also be applicable to other environmental factors.
- 12.6.4. In terms of cumulative impacts, the EIAR sets out the other relevant roads identified in the Development Plan as a six-year road objective. This includes Glenamuck Road South and Enniskerry Road (Stepaside to GDDR). Other proposals outside Dún Laoghaire Rathdown include the N11/ M11 Junction 4 to Junction 14 Improvement Scheme and Bus Connects. However, the main cumulative impacts will be the proposed GDRS and the development of adjoining LAP lands.
- 12.6.5. Overall, I consider that the EIAR document has satisfactorily addressed interactions. I consider that the most significant adverse impacts in terms of the interaction of individual environmental factors will be between traffic and transport and population and human health. I am not satisfied, however, that the EIAR has fully assessed the cumulative impact of the proposal with adjoining LAP lands.

12.7. Reasoned Conclusion

- 12.7.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the developer, and the submissions from prescribed bodies in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Positive long term impacts on **population and human health** through facilitation of improved access and provision of enabling infrastructure for development of new residential communities.
- Adverse impacts on **material assets** through loss of land and severance experienced by affected landowners along the alignment of the proposed road. This will be adequately mitigated through provision of new accesses, replacement boundaries and monetary compensation.
- Adverse impact on **population and human health** associated with improved car journey times and increased car dependency discouraging the use of more sustainable transport modes and impacting on the health and well-being of the local population.
- Adverse impact on **climate** associated with improved car journey times and increased car dependency discouraging the use of more sustainable transport modes and facilitating increased CO₂ emissions.
- Adverse impact on **population and human health** by way of community severance associated with distributor road design and the creation of barriers to cross movement, the development of separate communities and traffic speeds creating safety concerns for local community.
- Adverse impacts on **population and human health** in terms of adjoining residential amenity during the construction phase from noise, vibration, dust, contaminated material, traffic and visual impact. This will be adequately mitigated through compliance with the Construction Management & Waste Management Plan and measures outlined with the waste management section of the EIAR.
- Adverse impacts on climate and population and human health cannot be ruled out when the **cumulative effects** arising from the proposed development and the development of adjoining local area plan lands are considered.

13.0 **Appropriate Assessment**

- 13.1. Article 6(3) of the EU Habitats Directive (92/43/EEC) as transposed through Part XAB of the Planning and Development Act (as amended) requires competent authorities to assess the possible nature conservation implications of planning applications on European designated sites, i.e. Special Protection Areas (SPA's) and Special Areas of Conservation (SAC's) through the process of Appropriate Assessment before any planning decision is made. To assist this process, the applicant has provided Screening Report for Appropriate Assessment.
- 13.2. The first stage of the Appropriate Assessment (AA) process is the screening stage where it must be determined, based on objective scientific information, if the project alone or in combination with other plans and projects is likely to have significant effects on a European site in view of its conservation objectives and requires AA. The precautionary principle applies and where significant effects cannot be excluded, or where there is uncertainty as to likelihood of an effect occurring, the project should be 'screened in' for AA.

Geographical Scope and Main Characteristics

- 13.3. The first step of this stage is to identify the geographical scope of the project and its main characteristics. The proposed road development is located in Kiltiernan/ Glenamuck within the Dún Laoghaire Rathdown County Council area. No part of the proposed development is within or immediately adjacent to a European site designated SAC or SPA. The proposed road alignment forms a "T" shape with the top section roughly 1.4km and the bottom section 1.65km in length. The surrounding landscape has an undulating semi-rural character, which is reflective of the site's location between the coastline and Dublin Mountains at a point where levels begin to rise to the south-west. The highest elevations on site are at the southern tie in to Enniskerry Road (138m OD) and the lowest elevations are at the tie in to the Glenamuck Road South Roundabout (85m OD). A stream flows from south-west to north east along the northern section of the alignment and the Loughlinstown River crosses the alignment to the south. These watercourses eventually discharge into Killiney Bay at Loughlinstown.

13.4. The proposed development will require crossings of the watercourses and a number of surface water attenuation ponds will be constructed. The proposal will also include site clearance and preparation, the construction phase, the operational phase and the landscaping phase. There will be a number of surface water outfalls from the proposed road drainage network to the Loughlinstown River and its tributaries. A hydrobrake will limit discharge and attenuation storage generally in the form of open ponds will be provided upstream of each hydrobrake. There will be some dust and noise during the construction phase and exposed soil may result in the escape of pollutants to watercourses. Noise, lighting and human disturbance associated with the use of the road will occur during the operational phase. A full description of the project is contained in Section 4 above.

European Sites Potentially Affected

13.5. The next step of the screening process is to identify all European sites which could potentially be affected using the Source-Pathway-Receptor model. The proposed development is not within or adjacent to any European site. According to the Screening Report submitted with the application, there are six European Sites within 7km of the subject site that are within a potential zone of influence. I would be in agreement with this approach to determining the potential zone of influence having regard to the locations and discharge points of nearby watercourses. These European sites are listed below.

European site (SAC/SPA)	Site Code	Distance (km)	Summary of Qualifying Interests	Potential Pathway
Knocksink Wood SAC	000725	2.5	Petrifying springs (7220) Alluvial forests (21E0)	None – separate river catchment
Ballyman Glen SAC	000713	2.9	Petrifying springs (7220) Alkaline fen (7230)	None – separate river catchment
Wicklow Mountains SAC	002122	4.1	Active blanket bog (priority habitat) (7130) Atlantic wet heath (4010) European dry heath (4030)	None – Otter uses river

European site (SAC/SPA)	Site Code	Distance (km)	Summary of Qualifying Interests	Potential Pathway
			Old oak woodland (90A0) Siliceous rocky slopes (8220) Calcareous rocky slopes (8210) Siliceous scree (8110) Alpine and boreal heath (4060) Natural dystrophic lakes (3110) Oligotrophic lakes (3110) Species rich nardus grassland (priority habitat) (6230) Otter <i>Lutra lutra</i> (1355)	courses within vicinity of site but these are not connected to this SAC
Rockabill to Dalkey Island SAC	003000	6.0	Reefs (1170) Harbour porpoise (1351)	None – no hydrological connection
Dalkey Island SPA	004172	6.4	Roseate Tern (A192) Common Tern (A193) Arctic Tern (A194)	None – no hydrological connection
Wicklow Mountains SPA	004040	4.1	Merlin (A098) Peregrine (A103)	None

13.6. Having regard to the nature and scale of the proposed development, impact pathways are restricted to hydrological pathways and linkages for mobile species. Using the source-pathway-receptor risk assessment principle, the European sites that could potentially be affected by the proposed development are those listed above in close proximity to the site. Due to lack of ecological connections and distance, European sites in a wider zone do not require examination. It can be reasonably concluded that the proposed development would not have a significant effect individually or in combination with other plans or projects on other European sites having regard to the conservation objectives for those European Sites, the nature of discharge from the development site, and the source-pathway-receptor risk assessment principle.

The next step of the screening process is to identify the qualifying interests and conservation objectives of the European Sites that might be affected. A description and the conservation objectives and qualifying interests of above European Sites are

set out in the Screening Report and summarised in the table above. The assessment of the potential for significant effects on each European site taking account of the source-pathway-receptor principle is also set out.

Likely Significant Effects

- 13.7. The nearest European Site is the Knocksink Wood SAC located approximately 2.5km to the south of the site along the Glencullen River valley. The next nearest European Site is the Ballyman Glen SAC situated approximately 2.9km to the south-west along a tributary of the River Dargle. However, the proposed road scheme lies entirely within the catchment of the Loughlinstown River catchment and thus there are no pathways to these European Sites and no potential for effects on the conservation objectives of those sites.
- 13.8. It is stated that site surveys have shown that the habitats in the study area of the proposed road development are not associated with or linked to any of those listed as qualifying interests of nearby SACs. Otter, a highly mobile species, may use the watercourses in the study area. However, any local otter population is unlikely to be associated with the nearest SAC designated for this species (Wicklow Mountains SAC) due to the lack of ecological connections and distance of at over 4km. Overall, the proposed development is not located within or adjacent to any European Site and there are no European Sites within the hydrological catchment which could be affected by unmitigated impacts of the various stages of the proposed development.
- 13.9. It is concluded that no European sites are deemed to be at risk of likely significant effects from the construction or operational phases of the proposed development. The local surface water drainage network does not drain to any European Site and there are no other pathways to any SAC or SPA in the wider area. It can therefore be concluded that there can be no negative effects to any European Site arising from this project.

In-Combination Effects

- 13.10. In terms of in-combination effects, the proposed road scheme will allow for the development of surrounding Local Area Plan lands. The LAP itself was subjected to

an appropriate assessment screening and it was concluded that there will be no significant effect on European sites /Natura 2000 network. Given the lack of connections to European sites in this general area as demonstrated in this screening exercise, I am be satisfied that there will be no likelihood of significant effects on any European sites alone or in combination with other plans or projects.

Conclusion

13.11. It is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No's. 000725 (Knocksink Wood SAC), 000713 (Ballyman Glen SAC), 002122 (Wicklow Mountains SAC), 003000 (Rockabill to Dalkey Island SAC), 004172 (Dalkey Island SPA) & 004040 (Wicklow Mountains SPA) or any other European site, in view of the sites' Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

13.12. In reaching this conclusion, I took no account of mitigation measures intended to avoid or reduce the potentially harmful effects on the projects on any European Sites.

14.0 Compulsory Purchase Order

14.1. Four criteria are normally applied where it is proposed to use powers of compulsory purchase to acquire land or property namely:

- Development Plan compliance;
- Community need;
- Suitability of land to meet the community need;
- Alternatives.

14.2. The Board should note that a number of these issues have been raised in preceding sections of this assessment which should therefore be read in conjunction with the CPO assessment.

14.3. **Development Plan compliance**

14.3.1. As detailed in Section 11.2, the Dún Laoghaire Rathdown County Development Plan, 2016-2022 contains a 6-year road objective to provide the Glenamuck District Road Scheme. Kiltiernan has been designated as one of four 'Future Development Areas' in the Core Strategy set out in the County Development Plan and the Kiltiernan-Glenamuck Local Area Plan 2013 (extended to Sept. 2023) provides for the orderly development of this area. The proposal for a road scheme to serve the Local Area Plan lands, and to facilitate a bypass of Kiltiernan, is fully in compliance with the Development Plan and Local Area Plan pertaining to the area.

14.4. **Community Need**

- 14.4.1. It is a stated objective of the Glenamuck District Roads Scheme and associated CPO to design the new road layout to meet the needs of all road users using best practice standards complementing the surrounding environment. More specifically, the proposed road will divert traffic from Kiltiernan village; provide pedestrian and cycle facilities along the road corridor; facilitate local public transport; and provide access for the development of zoned lands.
- 14.4.2. The assessment under Section 11 above addresses the appropriateness of the proposed road design and its potential impact on surrounding zoned lands. It is concluded that the widths of sections of the proposed roadway will present difficulties in terms of pedestrian/ cycle safety and comfort and that the overall scheme has been designed to encourage traffic speed and community severance. The road is considered to be premature pending a clear understanding of the layout of adjoining development.
- 14.4.3. It is also considered under Section 11.3 that there is a demonstrable need and justification for a road scheme on the chosen alignment to achieve the stated aims of the scheme but that the design and capacity of the proposed GDRS is not appropriate to serve emerging sustainable communities.
- 14.4.4. I am not therefore convinced that the community need for the proposed GDRS has been fully established, mainly on the basis that the road is designed in a manner that will sever communities on either side.

14.5. **Suitability of land to meet community need**

- 14.5.1. It is proposed to permanently acquire 14.6 hectares of land along the road corridor and an additional 7.4 hectares will be temporarily acquired for construction works. At present the land is mostly in agricultural, recreational and residential use. No habitable dwellings will be permanently acquired.
- 14.5.2. The extent of the land that would be acquired under the order is determined by the specifications of the proposed road layout and associated construction works. I would be in agreement that the land-take for the proposed CPO along the road corridor is necessary and proportional to ensure the delivery of the proposed development to appropriate standards as designed.
- 14.5.3. However, it is concluded in Section 11 above that the GDRS has been “up-designed” to an extent that the road will have a regional as well as local function. It is advised that the proposed road should be downscaled and redesigned with clear priority for pedestrians and cyclists. This would result in more compact junctions and narrower carriageways with the probability that narrower strips of land would need to be acquired. It is also advised that a wider masterplan is required to illustrate the GDRS in the context of the necessary cross-movement and connections throughout the entire LAP lands. Additional land may be necessary to facilitate crossing points and approaches thereto along the road alignment.
- 14.5.4. Having regard to the above, I consider that the quantity of land required to provide a fully integrated system of roadways and pathways does not necessarily equate to the actual land to be acquired. A redesigned scheme may therefore alter the land take.

14.6. **Alternatives**

- 14.6.1. There are two issues to be considered when assessing the alternative methods for meeting community need in this case. Firstly, route alignment and secondly, an alternative road design as recommended.
- 14.6.2. With respect to the consideration of reasonable alternative route alignments, reference is made to Section 12.2 above. A route selection report was prepared to assess three route options between Carrickmines Interchange Southern Roundabout to Enniskerry Road (GDDR). The route to the north-west of Glenamuck Road was

chosen on the basis that it would reduce traffic in Kiltiernan and Glenamuck Road and provide quality infrastructure to the M50.

14.6.3. Three link options were also examined to establish a link from the GDDR to the south (GLDR). A link was chosen from Barnaslingan Lane to roughly the centre of the GDDR for its ability to provide a high quality bypass of Kiltiernan and a reduction in congestion and delay on the road network. This GDDR/ GLDR alignment was included in the Kiltiernan/ Glenamuck Local Area Plan, 2007 with a section of the GLDR omitted at Barnaslingan Lane. However, this was reintroduced in the subsequent County Development Plan and Local Area Plan.

14.6.4. I would be satisfied that alternative alignments for the road scheme as designed have been examined and the chosen route would appear to be the most reasonable solution to satisfy the main objectives of bypassing Kiltiernan and providing access to zoned lands. As noted above, however, I consider that an alternative design that allows for more pedestrian/ cyclist priority and ease of cross movement would be more appropriate in this case.

14.7. **Site specific CPO issues**

14.7.1. A total 17 written objections to the CPO were received by the Board. Following the oral hearing, six of these objections were withdrawn. An assessment of the main issues contained in the remaining 11 objections is set out hereunder.

- James Gerard Grimes and children (conditions set out at hearing)
- John & Jantine Findlater
- Cairn Homes Properties Ltd.
- De La Salle Palmerston F.C
- Ken Fennell (Receiver of certain assets of the Carrickmines Partnership)
- James and Sonja Buckley
- Iain & Shirley Finnegan
- Droim Sí Developments Ltd.
- Goodrock Project Management Ltd.

- Brendan Cowley
- The Glanvilles, occupants of property known as Derryclare

14.7.2. A submission was also heard from the representatives of Declan Taite & Anne O'Dwyer, Receivers to Michael and Martin Doran.

James Gerard Grimes and children

14.7.3. The Grimes property is located on both sides of the GDDR alignment and behind properties aligning the northern side of Glenamuck Road. Plot number 12 (2.6129 hectares) is proposed for permanent acquisition and Plots 12.1T and 12.2T (0.4880 & 0.2919 hectares respectively) are to be temporarily acquired. The proposed GDDR will sever the property into two parcels.

14.7.4. The agent on behalf of the landowner requested that the Board make a number of modifications/ conditions pursuant to Section 217(C) of the Planning and Development Act, 2000 (as amended) in relation to the provision of services and infrastructure to the lands.

14.7.5. Firstly, it is requested that the portion of land retained by the Mr. Grimes to the north of the proposed road be serviced by two entrances, one to the west as set out in the response to CPO submissions, and the other to the east to allow access to the lower field bounded by the road to the south and the stream to the north.

14.7.6. Secondly, it is requested that the Council provide a trench or channel along the side, and under the road/ footpath adjoining the property to be retained by Mr. Grimes, free of services, to facilitate the movement of electric cables from their current over-ground position to an underground position in the future, and to provide a wayleave allowing Mr. Grimes to come onto and carry out works accessing the trench/ channel for that propose.

14.7.7. Thirdly, the Council is requested to install suitable foul sewer and water mains connections under the road between lands retained by Mr. Grimes to the north and the lands retained by Mr. Grimes to the south, and shall locate same to facilitate ease of connection to the infrastructure already present on the retained lands to the north, and shall make best endeavours to arrange with Irish Water for such connection to be installed during works.

- 14.7.8. The applicant noted in the EIAR and in the response to CPO submissions that accesses will be provided to all land parcels that are segregated by the road and will be agreed with affected landowners as accommodation works.
- 14.7.9. It is confirmed in the applicant's response that ducting to facilitate the future undergrounding of the 110kV lines will be incorporated into the scheme.
- 14.7.10. With respect to Irish Water infrastructure, it is noted that the scheme design takes cognisance of these assets but that they are third party assets entirely separate to the proposed scheme.
- 14.7.11. As noted in Section 11 above, I consider that the proposed GDRS should be downscaled with improved opportunities for cross-movement. This would have impacts for land parcels to be acquired in terms of actual land take and provision of access, particularly at the locations of proposed dual carriageway sections. However, if the Board is minded to grant permission for the scheme as proposed, I consider that the applicant has provided sufficient detail to justify the need and extent of the CPO and access arrangements in the vicinity of the objector's landholding. The issue of how the landholding may be affected by severance is a matter for arbitration.

John and Jantine Findlater

- 14.7.12. The Findlater property is situated at "Terra Nova" on the northern side of Ballycorus Road. It is proposed to permanently acquire a 0.0153 hectare strip to the front of the property to allow for the provision of the eastern arm of the junction of the GLDR and Ballycorus Road.
- 14.7.13. The objector raised a number of issues at the oral hearing and within a submission to the Board relating to matters of traffic flow and the requirement for the GLDR element of the scheme. It is considered that there will be massive cost savings by not constructing this link and the Board should question the applicant's assumptions regarding future traffic growth. It is also considered that the objector's dwelling should be included on the list of houses requiring acoustic mitigation and that reduced speed limits would assist with traffic noise. A noise limit of 60 dB is considered to be too high and a limit of 55 dB would be more appropriate.

- 14.7.14. I would be satisfied that the chosen alignment of the GDRS allows for the provision of access to zoned lands and the bypassing of Kiltiernan village. I consider this to be necessary for the sustainable development of the village and local area plan lands.
- 14.7.15. I acknowledge the objector's concerns regarding traffic growth assumptions and consider that the proposed scheme and associated development lands would benefit from narrower carriageways, more compact junctions and reduced traffic speed. This would have a beneficial impact on the objector's property in terms of noise reduction, improved access and visual impact.
- 14.7.16. Notwithstanding this, I consider that the applicant has provided sufficient detail to justify the extent of the CPO and access arrangements in the vicinity of the objector's property in the event that the Board decides to grant permission for the scheme as proposed. Noise mitigation will be provided along the eastern boundary of the GLDR which is located approximately 65m from the objector's property. The issue of compensation for loss of land and other issues such as the devaluation of property is a matter for arbitration.

Cairn Homes Properties Ltd.

- 14.7.17. Lands under the ownership of Cairn Homes Properties Ltd. affected by the proposal are located within two separate parcels to the east of the GDDR/ GLDR junction (Plots 10.1 & 10T) and along Glenamuck Road (Plots 10.2 & 10.3). Plot 10.1 measures 0.905 hectare and Plot 10T (temporary acquisition) is 0.1209 hectare. Plots 10.2 and 10.3 measure 0.08 and 0.0258 hectare respectively.
- 14.7.18. The objector made a written submission to the Board stating that they have no objection in principle to the proposed GDRS and to the CPO of part of their lands subject to acceptable compensation and appropriate boundary treatments, access to services and accommodation works.
- 14.7.19. The objector also submitted comments regarding the location of access to lands, noting that such access points will slow traffic and that permeability and a sense of place would be lost if there are carriageways with continuous walls and fences.
- 14.7.20. The applicant responded to the objector's concerns by noting that the existing access from Glenamuck Road will remain unchanged and therefore it is not considered necessary to provide an additional access from the north. It is also

stated that all future access points shown on drawings are notional only and hold no planning significance. The applicant is happy to provide stubbed services or service crossings as part of the proposed works and it is considered that boundary works are appropriate. There would be difficulty in relocating the proposed attenuation tank from the objector's land to the opposite side as this would be adjacent to the 110 kv pylon and there could be associated access issues.

- 14.7.21. Having regard to the above, I consider that the applicant has provided sufficient detail to justify the extent of the CPO and access arrangements in the vicinity of the objector's property in the event that the Board decides to grant permission for the scheme as proposed. The issue of compensation for severance and loss of land is a matter for arbitration.

De La Salle Palmerston F.C.

- 14.7.22. De La Salle Palmerston F.C. grounds are located at the north-western end of the proposed GDDR to the north of Kiltiernan village. Plot No. 2.1 (0.1262 ha.) and Plot 2.2 (0.2696 ha.) are proposed to be permanently acquired and Plots 2.1T and 2.2T (total 0.2834 ha.) are proposed for temporary acquisition.

- 14.7.23. Issues raised by the landowner's consultant within written submissions and at the oral hearing relate to the following:

- Contravention of Development Plan/ LAP objective relating to the enhancement and preservation of the area's amenity, including its sporting and leisure facilities.
- Impact on visual amenity from clubhouse of road construction and loss of mature trees.
- Access, egress and loss of parking.
- Concerns regarding proximity to clubhouse.
- Isolation of a portion of the club lands at other side of road and loss of access to it.
- Loss of temporary structures and associated revenue.

- 14.7.24. The applicant stated in a response submitted to the Board in advance of the oral hearing that the entrance and egress location is maintained and turning pockets are provided. A conceptual layout for car parking was submitted to mitigate against the regrettable loss of parking spaces. It is considered that there still is a considerable distance from the proposed road to the clubhouse, with sufficient space for parking, 2-way vehicular circulation aisle and buffer planting. The severed portion of lands zoned residential can be safely provided with access and it is noted that the temporary structures on site are conditioned to be removed upon commencement of works associated with the GDRS.
- 14.7.25. I would be in agreement that the proposed land take will present operational difficulties for the club, most notably through the loss of car parking. This will be offset to some degree by improved facilities in the surrounding area for sustainable transport modes. I note that whilst the applicant has offered to install a new car parking layout and vehicle circulation system within the grounds, no provision is offered for bicycle parking or ease of cycle/ pedestrian access onto the GDDR.
- 14.7.26. There may be an opportunity to reduce the extent of the junction of Enniskerry Road and the GDDR through removal of right turn and left turn lanes on the three junction arms. The replacement of this junction with a pedestrian friendly node may also present improved access and integration opportunities with the club grounds and the severed portion of residential lands. However, if the Board is minded to grant permission for the scheme as proposed, I consider that the extent of the CPO is reasonable and necessary. The issues relating to property value, issues of severance and additional management and operational procedures are matters for arbitration.

Ken Fennell (Receiver of certain assets of the Carrickmines Partnership)

- 14.7.27. The agent acting on behalf of this objector made submissions at the oral hearing stating that they are satisfied with the responses from the planning authority to issues raised and that it is not the objector's intention to otherwise participate in the oral hearing proceedings.

Buckley-Finnegan lands

14.7.28. These lands are listed in the ownership of Ms. Sonia Buckley and Iain & Shirley Finnegan. The Buckley lands are at the location of the proposed GLDR where it will meet Ballycorus Road on the south side. There are eight plots listed for permanent acquisition (33.1, 33.2, 34.1, 34.2, 35.1, 35.2, 35.3 and 35.4), with a total area of 0.7589 hectare. Seven plots with a total area of 0.2991 hectare are listed for temporary acquisition (33T, 34.1T, 34.2T, 35.1T, 35.2T, 35.3T & 35.4T).

14.7.29. The adjoining Finnegan lands comprise of five plots with a total area of 0.147 hectare to be permanently acquired (36.1, 36.2, 36.3, 36.4 & 36.5), and two plots to be temporarily acquired with combined area of 0.059 hectare (36.1T & 36.2T).

14.7.30. The following main issues were raised within written submissions and at the oral hearing by the consultant acting on behalf of the objectors:

- Reduction in land's development potential.
- Significant loss of agricultural lands.
- Lands will become severed and inaccessible.
- Increase of traffic along Ballycorus Road.
- Adverse impacts on residential amenity.
- Environmental and ecological concerns.
- Impacts on protect views.
- Impacts on archaeology.
- Alternative alignment.
- No attempt to address overhead powerline.

14.7.31. The applicant responded to a number of these issues in advance of the oral hearing. It was submitted that accesses will be provided to all land parcels which are segregated by the road and these will be agreed with affected owners as accommodation works. It is also noted that properties directly affected by the scheme will have compensation provided in accordance with the statutory compulsory purchase process. The applicant highlighted that mitigation measures will be provided and the proposed high-quality infrastructure is anticipated to

increase property values in the area. It is recognised that the proposal will impact on the objectors' residential amenity through slight negative impacts on air quality and minor noise impacts. The loss of trees is acknowledged by the applicant, but it is noted that there will be replacement planting. Overall, this is considered to be one part of a significant change that will occur from rural to urban in the future.

- 14.7.32. A number of other issues were raised on behalf of the objectors during cross-questioning at the oral hearing. The applicant was asked to justify the cost of the proposed road scheme and in particular the Barnaslingan link to the south through the objectors' lands. The feasibility of undergrounding the 220kV powerline was discussed along with the quality of information presenting in the EIAR relating to biodiversity, visual impact and drawing accuracy. Proposals for noise mitigation and their associated visual impact were questioned, as well as the effects of providing access through noise mitigating boundaries. Finally, the applicant was asked to explain in detail why alternative Route Option 3 was discounted. This route would have provided connection via an upgraded junction arrangement between Ballycorus Road and Enniskerry Road thereby avoiding the Barnaslingan link.
- 14.7.33. With respect to Route Option 3, the applicant confirmed the proposed junction would not have the required capacity and would require the acquisition of entire residential properties. It was also noted that this option would be less effective at removing traffic from Kiltiernan village. I would be in agreement, as noted above, that the additional cost for constructing the Barnaslingan link is justifiable and necessary for the positive impacts it will bring to Kiltiernan village alone.
- 14.7.34. With respect to the potential for undergrounding of the 220 kV powerline, the applicant presented correspondence at the hearing received from Eirgrid in response to a Council request regarding same. Eirgrid confirmed that the existing Arklow-Carrickmines 220kV double circuit overhead line must remain as an overhead line to ensure Eirgrid meets its statutory obligations. The reasons for this relate to matters of regulatory background; generation and demand connections; strategic use of existing overhead line assets; challenges in accommodating cable technology; and cost of underground cable. It is stated that Eirgrid will, however, consider diversion of this powerline at a cost to be borne by the requesting party.

- 14.7.35. It is recognised by the applicant that the objectors' lands will be permanently severed, and this may impact on agricultural operations. Accommodation works will be agreed with landowners on a like for like basis and this may include matters relating to alternative locations for access, mitigation measures, noise, security and visual impact.
- 14.7.36. As noted above, I consider that the proposed scheme should be downscaled and better integrated with future development lands. This would have a beneficial impact on the objectors through reduced traffic impact and associated impacts of noise, air quality, visual impact, etc. However, if the Board is minded to grant permission for the GDRS as proposed, I consider that the application contains sufficient information for the Board to assess the scheme.
- 14.7.37. Having regard to the above, I consider that the applicant has provided sufficient detail to justify the extent of the CPO and access arrangements in the vicinity of the objectors' property in the event that the Board decides to grant permission for the scheme as proposed. The issue of compensation for severance and loss of land is a matter for arbitration.

Droim Sí Developments Ltd.

- 14.7.38. Lands under the ownership of Droim Sí Developments Ltd. are situated to the north-west of the proposed GDRS on Enniskerry Road opposite De La Salle Palmerston F.C. Three plots (1.1, 1.2 & 1.3) with a combined area of 0.0694 hectare are proposed for permanent acquisition and single Plot 1.1T (0.0297 ha.) is proposed for temporary acquisition. The plots in question cover the access to the property and narrow strips along the road fronting boundary to the north thereof.
- 14.7.39. Objections to the CPO were heard at the oral hearing and written submissions to the Board were made on behalf of the landowner. The main issue of contention is that the proposed road design might compromise the future development potential of the lands and associated residential amenity. The objector is also concerned that the proposals are aspirational only with respect to access and boundary treatment.
- 14.7.40. As noted above, future accesses are indicative only and all accesses to future developments will be required to secure planning permission. In addition, final

boundary treatments will be determined at detailed design stage with affected landowners.

- 14.7.41. In my opinion, a more compact junction arrangement at Enniskerry Road/ GDDR may allow for improved access arrangements and better integration of future development with the streetscape. However, I consider that the applicant has provided sufficient detail to justify the extent of the CPO and access arrangements in the vicinity of the objector's property in the event that the Board decides to grant permission for the scheme as proposed. The issue of compensation for loss of land is a matter for arbitration.

Goodrock Project Management Ltd.

- 14.7.42. Lands in the ownership of Goodrock Project Management Ltd. that are affected by the proposed road scheme are situated where the GLDR will meet Glenamuck Road. These lands are part of a wider landholding in the ownership of the objector that extends along both sides of the GLDR to the south of Glenamuck Road.
- 14.7.43. A total of eight plots (23.1, 23.2, 23.3, 23.4, 23.5, 23.6, 23.7 & 23.8) with a total area of 1.783 hectares (Áine, Brendan and Damian Jackson) are proposed to be permanently acquired, and four plots (23.1T, 23.2T, 23.3T & 23.4T), with total area of 1.262 hectares will be temporarily acquired. Plot 26 (Frederick Arthur Cyril Jackson) with an area of 0.2509 is proposed to be permanently acquired and Plots 26.1T and 26.2T (0.2839 ha.) are to be temporarily acquired.
- 14.7.44. Issues raised on behalf of the objector within written submissions to the Board relate to matters of development of lands, active frontages to the GLDR, severance from services and protection of agricultural business in relation to fencing, gates, access, reinstatement, maintenance and repair.
- 14.7.45. The applicant stated in a response to the Board that the temporary land take identified is required to safeguard sufficient space to facilitate the construction of the scheme. It is confirmed that the applicant will work with affected landowners to accommodate specific requirements and may be able to modify land take locally. The applicant considers that the protection of agricultural use appears to be reasonable and has generally already been identified as proposed mitigation in the EIAR.

- 14.7.46. The issue of improved access from the proposed road to surrounding lands and the creation of active frontages is covered in Section 11 above. It is considered that the development of surrounding lands would benefit from a more integrated road scheme that does not sever communities on either side. Active streets are considered essential and the design of the proposed is considered to adversely impact on the achievement thereof.
- 14.7.47. Notwithstanding this, I consider that the applicant has provided sufficient detail to justify the extent of the CPO and access arrangements in the vicinity of the objector's property in the event that the Board decides to grant permission for the scheme as proposed. The issue of compensation for severance and loss of land and other issues such as the devaluation of property are matters for arbitration.

Brendan Cowley

- 14.7.48. Lands affected by the proposed road scheme belonging to Mr. Cowley are located along the GDRS to the west and south of the GDDR/ GLDR junction and along Glenamuck Road to the west of the GLDR junction. Plots 7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 8.4 & 8.5 to be permanently acquired amount to a total land take of 2.2274 hectares and Plots 7.1T, 7.2T, 7.3T, 8.1T, 8.2T & 8.4T are proposed to be temporarily acquired (total area 1.793 ha.).
- 14.7.49. The objector stated within written submissions to the Board that the CPO makes no reference and has no regard to the fact that it will involve the acquisition and destruction of the entrance to vendor's property and works would be required to rebuild/ reinstate the entrance. In addition, it is stated that the vendor will require the CPO to be amended so that the purchaser is bound by obligations in respect of works to be carried out to the entrance as listed. In response, the applicant understood that the existing residential entrance was not required to be maintained due to ongoing development applications; however, it is confirmed that a solution has now identified where access is maintained.
- 14.7.50. I consider that the applicant has provided sufficient detail to justify the extent of the CPO and access arrangements in the vicinity of the objector's property in the event that the Board decides to grant permission for the scheme as proposed. The issue

of compensation for severance and loss of land and other issues such as the devaluation of property are matters for arbitration.

Declan Taite & Anne O'Dwyer, Receivers to Michael and Martin Doran

- 14.7.51. Oral submissions were made at the hearing on behalf of the persons in control of lands outlined to the acquired permanently (Plots 21.1, 21.2, 21.3 & 21.4) and amounting to a total area of 0.0812 hectare along the northern side of Glenamuck Road to the west of the GLDR. Temporary acquisition is also sought for Plots 21.1T, 21.2T & 22T (total 0.0509 ha.)
- 14.7.52. The receivers were not clear as to what point the GDRS becomes a scheme to serve the LAP lands. In this regard, reference is made to a previous planning application that was refused permission on the lands on the grounds of prematurity. Clarity was sought at the hearing as to when the issue of prematurity disappears. The local authority responded that development of adjoining lands will not take place without the road scheme.
- 14.7.53. The applicant was also questioned on matters of the location of cycle facilities along Glenamuck Road. In response, it was noted that there would be a low volume of traffic on this road and therefore cycle facilities would not be warranted.
- 14.7.54. In my opinion, the receiver has touched on an issue with respect to the bridging between the delivery of the road and the development of adjoining lands. I have advised in Section 11 above that it is difficult to envisage how the GDRS can fully integrate with surrounding development lands when it is acknowledged that the road is being delivered in isolation as an infrastructural project and the designers have no control over the phasing, layout, frontage or future boundary treatments of surrounding private developments.
- 14.7.55. Notwithstanding, if the Board is minded to grant permission for the scheme as proposed, I consider that the extent of the CPO is reasonable and necessary. The issues relating to property value, issues of severance and additional management and operational procedures are matters for arbitration.

The Glanvilles, occupants of property known as Derryclare

- 14.7.56. The agent acting on behalf of this objector made submissions at the oral hearing stating that they are satisfied with the responses from the planning authority to issues raised and that it is not the objector's intention to otherwise participate in the oral hearing proceedings.

14.8. Overall Conclusion

- 14.8.1. There is a consistent message throughout all levels of policy that there must be a transition to a low carbon and climate resilient society. This requires a reduction in car dependency to contribute towards lower energy consumption, CO₂ levels and pollutant emissions. Sustainable mobility, compact growth and land use and transportation integration are essential for the creation of new sustainable communities that minimise private car use, prioritise cycling, walking and public transport and promote the efficient use of land.
- 14.8.2. The Kiltiernan Glenamuck Local Area Plan, 2013 (extended to 2023) seeks to deliver the GDRS to enable the provision of a bypass of Kiltiernan village and implementation of a Neighbourhood Framework Plan to consolidate the village core. There is a demonstrable need and justification for a system of roads and paths along the chosen GDRS alignment to achieve these aims and to provide access to zoned lands for the development of compact neighbourhoods with ease of access to public transport, pedestrian and cyclist networks.
- 14.8.3. Notwithstanding this, it would appear that the proposed GDRS has been "up-designed" and traffic modelled for ease of traffic flow and to maximise traffic capacity. There are concerns that a traffic modelled design maximises throughput in peak times, encourages speeding off peak and retains the motorist at the top of the movement hierarchy over the needs of sustainable modes and the value of place. This is evident in the design of the road comprising dual carriageway and multiple approach lanes to junctions. There is evidence too that the proposed road scheme will have a regional function by making provision for and attracting future traffic growth from outside LAP lands.

- 14.8.4. The primary objectives for the GDRS are local in nature and this must be reflected in the design of roads as amenity corridors rather than distributor roads. The place context of LAP lands will be most accurately defined as a “neighbourhood” where emerging areas will be intensely developed with medium to higher density housing and/or a broad mix of uses. Indeed, this is reflected in the objective of the LAP to locate higher density residential development along the GDRS. This should allow for the development of “...streets with relatively high numbers of pedestrians (that) are likely to have a significant ‘sense of place’ function”, (Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas, DoEHLG, 2009).
- 14.8.5. I would have serious concerns that the proposed GDRS fails to properly consider the emerging place context and that the proposed road design will give rise to adverse impacts on the amenity of future residents alongside the road corridor and at junctions and corners where higher densities are also proposed. Furthermore, the long straight lengths of the GDRS will facilitate traffic speeding, which together with the excessive width of dual carriageway sections and multiple approach lanes to junctions, will present concerns regarding pedestrian/ cyclist safety and comfort, noise and air pollution.
- 14.8.6. There has been significant interest in recent times in developing lands surrounding the GDRS under strategic housing development provisions. It is also noteworthy that the over 60% of the GDDR and GLDR frontage comprises residentially zoned lands, which together with employment/ economic development and open space zonings, the proximity of Kiltiernan village and The Park Shopping centre and the potential for direct linkage to Ballyogan Luas stop, will require significant cross movement and the creation of new pedestrian desire lines throughout LAP lands. The locations and design of crossing points or nodes along the GDRS that might accommodate these desire lines are not confirmed. Such nodes would increase permeability and convenience for pedestrians, whilst also adding interest along linear routes, counteracting community severance and providing a degree of traffic calming. Streets and roads in urban areas should join rather than separate places and communities.

14.8.7. Having regard to the above, I would be of the view that the proposed road is premature pending a clearer understanding of the layout of adjoining development. My interpretation of the proposal before me is of roadway first that will be followed by development. I am not convinced that this approach can successfully deliver active and vibrant streets that balance their function as both a place and a link. The proposal does not contain sufficient detail to demonstrate that the GDRS will be constructed and will function as anything other than a traditional distributor road system, which I would consider to be highly inappropriate within a neighbourhood context. In my opinion, a wider masterplan is required to illustrate the GDRS in the context of the necessary cross-movement and connections throughout the entire LAP lands. The proposed roads and associated junctions should also be downscaled and redesigned with clear priority for pedestrians and cyclists. Any amended design should be subject to a street design audit under new DMURS Advice Note 4.

15.0 Recommendation

15.1. I recommend that the application under Section 51(2) of the Housing Act, 1993 (as amended) for the Glenamuck District Distributor Road should be **refused** for the reasons and considerations as set out in Schedule 1 and consequently that the CPO is **annulled** (Schedule 2).

Schedule 1

Reasons and Considerations

In coming to its decision, the Board had regard to the following:

- a) EU legislation including in particular:
 - The relevant provisions of **EU Directive 2014/52/EU** amending **Directive 2011/92/EU (EIA Directive)** on the assessment of the effects of certain public and private projects on the environment,
 - **Directive 92/43/EEC (Habitats Directive)** and **Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives)** which set out the

requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.

b) National Legislation including in particular:

- **Section 175 of the Planning and Development Act 2000 (as amended)** which sets out the provisions in relation to local authority projects which are subject to Environmental Impact Assessment (EIA).

c) National Policy and Guidance including in particular:

- **Project Ireland 2040 - The National Planning Framework.**
- **The Design Manual for Urban Roads and Streets, 2013.**
- **Guidelines for Planning Authorities on Sustainable Residential Development in Urban Area (Cities, Towns and Village) (2009).**
- **The National Cycle Manual (NTA, 2011).**

d) Regional Policy including in particular:

- **The Transport Strategy for the Greater Dublin Area 2016-2035.**
- **Eastern & Midlands Regional Spatial & Economic Strategy, 2019-2031.**

e) Local Planning Policy including in particular:

- **The Dún Laoghaire Rathdown County Development Plan 2016-2022.**
- **The Kiltiernan/ Glenamuck Local Area Plan, 2013 (extended to Sept. 2023).**

f) The following matters:

- the nature, scale and design of the proposed works as set out in the application for approval and the pattern of development in the vicinity,
- the documentation and submissions of the Local Authority, including the environmental impact assessment report and associated documentation submitted with the application, and the range of mitigation and monitoring measures proposed,

- other relevant guidance documents,
- the submissions and observations made to An Bord Pleanála in connection with the application,
- the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European sites and
- the report and recommendation of the inspector including the examination, analysis and evaluation undertaken in relation to appropriate assessment screening and environmental impact assessment.

Environment Impact Assessment

The Board completed in compliance with s.172 of the Planning and Development Act 2000 an environmental impact assessment of the proposed development, taking into account:

- the nature, scale, location, and extent of the proposed development;
- the Environmental Impact Assessment Report and associated documentation submitted with the application;
- the submissions from the applicant and the prescribed bodies;
- the Planning Inspector's report;

The Board considered that the environmental impact assessment report, supported by the documentation submitted by the applicant, notwithstanding concerns in relation to Climate and Population & Human Health, provided information which was reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment and complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU and Section 172 of the Planning and Development Act (as amended). The Board is satisfied that the

information and data available and the reasoned conclusion is up to date at the time of taking the decision.

The Board agreed with the summary and examination, set out in the Inspector's report, of the information contained in the environmental impact assessment report and associated documentation submitted by the applicant and submissions made in the course of the application. The Board is satisfied the Inspector's report sets out how these were addressed in the examination and recommendation and are incorporated into the Board's decision.

Reasoned Conclusion of the Significant Effects

Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the developer, and the submissions from prescribed bodies in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Positive long term impacts on **population and human health** through facilitation of improved access and provision of enabling infrastructure for development of new residential communities.
- Adverse impacts on **material assets** through loss of land and severance experienced by affected landowners along the alignment of the proposed road. This will be adequately mitigated through provision of new accesses, replacement boundaries and monetary compensation.
- Adverse impact on **population and human health** associated with improved car journey times and increased car dependency discouraging the use of more sustainable transport modes and impacting on the health and well-being of the local population.
- Adverse impact on **climate** associated with improved car journey times and increased car dependency discouraging the use of more sustainable transport modes and facilitating increased CO₂ emissions.
- Adverse impact on **population and human health** by way of community severance associated with distributor road design and the creation of barriers

to cross movement, the development of separate communities and traffic speeds creating safety concerns for local community.

- Adverse impacts on **population and human health** in terms of adjoining residential amenity during the construction phase from noise, vibration, dust, contaminated material, traffic and visual impact. This will be adequately mitigated through compliance with the Construction Management & Waste Management Plan and measures outlined with the waste management section of the EIAR.
- Adverse impacts on climate and population and human health cannot be ruled out when the **cumulative effects** arising from the proposed development and the development of adjoining local area plan lands are considered.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that the effects on the environment of the proposed development by itself and cumulatively with other development in the vicinity are not acceptable. In doing so, the Board adopted the report and conclusions of the reporting Inspector. Therefore, the Board is not fully satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

Appropriate Assessment

The Board completed an Appropriate Assessment Screening exercise in relation to the potential effects of the proposed development on designated European sites. The Board noted that the proposed development is not directly connected with or necessary to the management of a European Site. The Board considered the nature, scale and location of the proposed development, the appropriate assessment screening report submitted with the application, the submissions on file and the report of the Inspector. In completing the screening exercise, the Board adopted the report of the Inspector and concluded that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European sites, in view of the sites' conservation objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

Proper Planning and Sustainable Development

Kiltiernan is designated as a *'Future Development Area'* in the Core Strategy set out in the Dún Laoghaire Rathdown County Development Plan 2016-2022.

Development Plan Policy RES15 states that *"in new development growth nodes and in major areas in need of renewal/regeneration it is Council policy to implement a strategy for residential development based on a concept of sustainable urban villages"*, whereby daily living requirements are within easy reach, preferably within walking distance, and where the need to travel by private car is reduced.

Furthermore, under Policy ST2, the Council will *"...actively support sustainable modes of transport and ensure that land use and zoning are fully integrated with the provision and development of high public quality transportation systems."*

Notwithstanding the six-year road objective set out in the Development Plan to provide the Glenamuck District Distributor Road and the Glenamuck Local Distributor Road (including Ballycorus Link), the Board considers that the proposed Glenamuck District Road Scheme (GDRS) has been "up-designed" as a system of distributor roads, principally for ease of traffic flow and to maximise traffic capacity, and that such roads will adversely impact on the emerging community and village structure alongside the proposed road scheme by way of severance, traffic speeding and generally hostile conditions for pedestrians and cyclists. The Board also considers, in the absence of an overall masterplan showing a proper system of integrated roads and paths serving the Local Area Plan lands, that the proposed road scheme would be premature and inadequate for the purposes of ensuring appropriate land use and transportation integration and the development of sustainable communities. The proposed development would, therefore, seriously injure the amenities of the area, give rise to increased car dependency and serious traffic congestion, endanger public safety by reason of traffic hazard and be contrary to the proper planning and sustainable development of the area.

Schedule 2

Reasons and Consideration

Having regard to the provisions set out in Schedule 1 above, it is considered that the need for the proposed Glenamuck District Road Scheme is established but having regard to:

- i. The proposed distributor road design and associated traffic impact,
- ii. The likelihood that the proposal will give rise to severance within the emerging communities it is intended to serve.

It is considered that the Local Authority has not demonstrated that the road scheme is suitable to meet the stated need. It is therefore considered that the acquisition by the Local Authority of the lands which are the subject of the Compulsory Purchase Order is not justified and that the compulsory purchase order shall be annulled.

Donal Donnelly
Planning Inspector

30th October 2019