



An  
Bord  
Pleanála

## Inspector's Report ABP 309409-21

### Development

Reconstruction of the Miller's Lane/ Shenick Road/Golf Links Road junction to provide for a four armed mini roundabout; Upgrading and extension of the two-lane flared approach to the junction on both the northern (Dublin Road) and south-eastern (Miller's Lane) arms of the existing three-arm roundabout junction; The provision of Zebra Crossing facilities on all arms of both junctions.

### Location

Junctions of Townparks & Holmpatrick, Skerries, Co. Dublin.

### Planning Authority

Fingal County Council

### Planning Authority Reg. Ref.

F20A/0324

### Applicant

Land Development Agency

### Type of Application

Permission

### Planning Authority Decision

Grant Permission

### Type of Appeal

Third Party

<b>Appellant(s)</b>	Niall O'Reilly.
<b>Observer(s)</b>	None.
<b>Date of Site Inspection</b>	4 <sup>th</sup> July 2021
<b>Inspector</b>	Brendan Coyne

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## 1.0 Site Location and Description

1.1. The appeal site comprises two existing road junctions and a section of road in Townparks and Holmpatrick, c. 1.6km south of Skerries town centre in Co. Dublin. These are referred to by the applicant as follows;

- Junction 1 – Miller's Lane / Golf Links Rd / Shenick Rd Junction.
- Junction 2 – R127 Skerries Rd / R127 Dublin Rd / Miller's Lane.
- Golf Links Road

### Junction 1 – Miller's Lane (aka Sherlock Terrace) / Golf Links Rd / Shenick Rd Junction

The Golf Links Road runs in a north – south alignment, with a lightly staggered east-west crossroad junction with Miller's Lane – Sherlock Terrace (western arm) and Shenick Rd (eastern arm), both of which are the minor arms of the junction configuration. With the exception of the Golf Links Road southern arm, the other three arms have pedestrian footpaths on both sides of the road. The Golf Links Road southern arm has a pedestrian footpath on its eastern side only. There is no formal 'controlled' pedestrian crossing serving the footpaths at the junction. The southern arm of Junction 1, as outlined, extends for a length of c. 210m to include a junction with the residential access road serving Downside Heights, on its eastern side. An pedestrian/cycle access serving the residential estate Ballygossan Park is located at the end of the southern arm, on its western side. The junction has an uphill gradient in a southerly direction on its southern arm. The south-western corner of the junction is defined with a wall and high hedge serving house No. 1 Sherlock Terrace. The junction is located within a 50 km/hr speed limit zone.

### Junction 2 – R127 Skerries Rd / R127 Dublin Rd / Miller's Lane

This junction comprises a three arm roundabout incorporating the R127 at both its north-western and south-western arms and Miller's Lane at its south-eastern arm. The north-western arm is known as the R127 Dublin Road and the south-western arm is known as the R127 Skerries Road. The approach lanes of all three arms benefit from the provision of a flared approach with a stone topped triangular island located in the centre of the carriageway adjoining the yield line of each arm. A landscaped island is located in the centre of the junction. The main Dublin-Belfast rail corridor is located a short distance (c.20m) to the west of the junction on an elevated stone arched bridge

over the south-western arm. This bridge is a Protected Structure (RPS. No. 231 in the Fingal County Development Plan). The south-western arm is served with a footpath on its northern side only, while the other two arms are served with pedestrian footpaths on both side of the road. A shared pedestrian-bicycle lane connects the roundabout junction at its south-western corner to Hillside Gardens, located further to the south. The road junction does not provide any formal / controlled pedestrian crossing at any of its arm junctions. Mature trees are planted on grass strips around the roundabout. Skerries railway station is located c. 200m to the north-west of the junction. The junction is located within a 50 km/hr speed limit zone.

### Golf Links Road Section

The Golf Links Road section, as outlined, is located c. 270m to the south of Junction 1. This section has a length of c. 65 metres. Ballygossan Park residential estate adjoins its western side and an agricultural field adjoins its eastern side with an allotment located further to the south. The roadside boundary is defined with a low rise wall and steel rail over along its western side and a low rise stone wall along its eastern side. There are no footpaths on either side of the road. A thin concrete strip is provided on both sides of the carriageway. A pedestrian footpath and bicycle lane runs along the western boundary within Ballygossan Park estate. These link with the footpath on the eastern side of the Golf Links Road near its junction with Downside Heights. The road is located within a 50 km/hr speed limit zone.

## **2.0 Proposed Development**

### **2.1. Permission sought for the following (as originally proposed);**

- Junction 1 - Reconstruction of the Miller's Lane/Shenick Road/Golf Links Road junction to provide for a four armed mini roundabout.
- Junction 2 - Upgrading and extension of the two-lane flared approach to the junction on both the north-western (Dublin Road) and south-eastern (Miller's Lane) arms of the existing three-arm roundabout junction;
- The provision of Zebra Crossing facilities on all arms of both junctions;
- The implementation of flat top calming ramps on all arms of both junctions (approximately 5m back from the roundabouts circulating carriageway);

- New street lighting system covering both junctions;

The proposed development also includes;

- Upgrades to the junction of Downside Heights/Golf Links Road.
- New cycle path along the Golf Links Road, along its eastern side.
- New footpaths, cycle and pedestrian facilities, road gully's, road marking, signal and carriageway surfacing works.
- All ancillary site development works, landscaping and signage to support the development.

2.1.1. Documentation submitted includes;

- Traffic Analysis Report
- Construction and Environmental Management Plan
- Appropriate Assessment Screening Report

## **3.0 Planning Authority Decision**

### **3.1. Decision**

3.1.1. Fingal County Council GRANTED permission for the proposed development subject to 4 no. Conditions. Noted Conditions are as follows:

2. The following shall be complied with in full:

a) The pedestrian crossing on the Dublin Road shall be as shown on drawing 190170-DBFL-RD-SP-SK-C-9101 Revision P01 submitted to the Planning Authority on 13th October 2020.

b) Road safety Audits shall be carried out in accordance with the relevant stages as outlined in current edition of Transportation Infrastructure Ireland guidelines GE-STY-1027 on both proposed junction upgrades at the Dublin Road Roundabout and at Miller's Lane/Old Golf links road and shall be agreed in writing with the Planning Authority prior to commencement of development and implemented accordingly to the satisfaction of the Transportation Planning Section.

c) The locations for the pedestrian crossings on the Dublin Road and Miller's Lane shall be subject to Road Safety Audits carried out in accordance with the relevant stages as outlined in current edition of Transportation Infrastructure Ireland guidelines GE-STY-1027, and shall be agreed in writing with the Planning Authority prior to commencement of development and implemented accordingly to the satisfaction of the Transportation Planning Section.

d) Prior to commencement of the development the applicant shall pay a special contribution of €30,000, under Section 48(2)(c) of the Planning and Development Act (2000) towards the realignment of the existing pedestrian path linking Hillside & Ballygossan to the Dublin Road Roundabout and associated ancillary works.

e) The proposed road upgrade works should be completed to the satisfaction of the Planning Authority prior to the completion of the construction (50% occupation) of the remaining Hacketstown LAP lands.

f) Prior to the commencement of development a Construction Traffic Management Plan shall be submitted for the written agreement of the Planning Authority.

3. The following requirements shall be met in full:

(a) Prior to the commencement of development, the applicant shall consult with Iarnród Éireann to ascertain their requirements.

(b) The applicant shall ensure that the works are carried out in accordance with the Railway Safety Act 2005 so that there is no increased risk to the railway as a result of the proposal.

(c) No works are to take place under the railway bridge UBB50 and the works shall not undermine the integrity of the wing walls of the railway bridge.

(d) No additional liquid, either surface water or effluent shall discharge to, or allow to seep onto, the railway property or into the railway drains/ditches.

(e) Any excavations which infringe upon the Track Support Zone will require permission and approval from the Senior Track & Structures Engineer.

(f) Any proposed services that are required to cross under UBB50 shall be the subject of a wayleave agreement with Iarnród Éireann/C.I.E. (g) Bridge UBB50 is a height restricted bridge and during the construction phase a traffic management

plan shall be prepared to prevent construction traffic from traversing under this bridge.

4. Requirements regarding hours of construction, noise and vibration, dust and airborne pollutants etc.

### **3.2. Planning Authority Reports**

#### **3.2.1. First Report (31<sup>st</sup> August 2020)**

- The proposed development would facilitate the development of Hacketstown Local Area Plan lands.
- The lands of the proposed development are in the ownership of Fingal County Council. Letter of consent submitted.
- Further Information required by the Transportation Planning Section – detailed below.
- A Stage 2 Appropriate Assessment of the proposed development is not required, having regard to the screening report submitted.
- The proposal falls within the category of sub-threshold development requiring an Environmental Impact Assessment Report. Further to screening, an Environmental Impact Assessment is not required.

#### **3.2.2. Further Information sought requiring the following:**

1. The Transportation Planning Section required the following further information to fully assess the application:
  - (a) A drawing detailing the forward visibility/SSD for the R127 underbridge arm of the roundabout of the proposed zebra crossing should be provided and discussed with the Transportation and Planning Section prior to submission of the additional information. If the visibility/SSD is not to the satisfaction of the Transportation and Planning Section a design should be explored where the crossing on this arm is removed and a safe pedestrian route is provided along the other two arms of the roundabout. This should also include measures to deter pedestrians from crossing on the arm near the bridge. It is a clear preference that a crossing be provided at



this location. Omission of the crossing should only be considered as a very last resort. All design solutions shall have regard to the proximity of the site to the railway overbridge, a Protected Structure.

(b) Further swept path analysis of the Miller's Lane/Shenick Road/Golf Links Road junction should be carried out to ensure that the zebra crossing points are located so that there is no vehicle overhang in the vicinity of the crossing.

(c) Further details in relation to the existing gradient of Golf links road and Downside Heights and the provision of traffic calming ramps on inclines should be provided to determine if the proposed traffic calming ramps can be provided in accordance with the current guidelines and if any additional works would be necessary.

### 3.2.3. **Second Report** (9<sup>th</sup> November 2020)

- The Further Information submitted does not fully address the issues raised by the Transportation Planning Section. Clarification of Further Information required.

### 3.2.4. **Clarification of Further Information sought requiring the following:**

1. (a) The proposed new kerb line and new island location to facilitate the proposed pedestrian crossing adjacent to the rail bridge, shall be marked out on site to enable a site inspection by the Transport Planning team, in order to support an assessment of the safety of the proposed new pedestrian crossing.
2. (b) Further clarification is required on the most suitable crossing type on the southbound approach to the Dublin Road Roundabout.

### 3.2.5. **Third Report** (15<sup>th</sup> January 2021)

The Transportation Planning Section report forms the basis of the third report and is summarised as follows:

#### Re. Items 1(a) and 1(b) of Clarification of Further Information

- The Transportation Planning Section met with the Applicant's Consulting Engineers on site on the 11<sup>th</sup> November 2020 to review the proposed marked up pedestrian crossing on the south-western arm of the Dublin roundabout (Junction

2), and to review the proposed pedestrian crossing locations on the northern /Dublin Rd arm and eastern / Miller's Lane arm of the roundabout.

- The drawing submitted reflects what was deemed the safest location for the proposed pedestrian crossings, following site inspection and review of relevant standards.
- The pedestrian crossing on the south-western arm of the junction cannot be delivered at this time safely, due to a lack of visibility of the pedestrian crossing on approach from under the railway bridge from the west.
- The proposed location of the pedestrian crossings on Miller's Lane and the Dublin Rd are located to prioritise pedestrian safety whilst maintaining throughput capacity.
- The proposed pedestrian crossing on the Dublin Rd arm of the junction is not completely within the red line boundary of the application.
- The proposed crossing will need to be sited closer to the roundabout as per drawing 190170-DBFL-RD-SP-C-1103 Rev P03, submitted at additional information stage.
- However, both of the proposed locations for the pedestrian crossings on the Dublin Rd and Miller's Lane shall be subject to Road Safety Audits carried out in accordance with the relevant stages as outlined in the current edition of Transportation Infrastructure Ireland (TII) guidelines GE-STY-1027 and shall be agreed and implemented accordingly to the satisfaction of the Transportation Planning Section.
- The location of the Miller's Lane crossing necessitates the realignment of the existing pedestrian footpath which runs parallel to the railway in a north-south direction, linking Hillside Estate and Ballygossan Estate, to the Dublin Rd and onto Skerries.
- The path which currently runs through the open space south of the roundabout, shall be realigned and moved to the east within the open space to meet the proposed new pedestrian crossing.

- This element of the works will be carried out by Fingal County Council and a contribution sought from the applicant for the works.
- The proposed new realigned path and junction upgrade will realise a safe, secure and direct pedestrian and cycling link from Hillside Estate and Ballygossan Park to the train station.

#### Miller's Lane / Golf Links Road Junction upgrade (Junction 1)

- The proposed upgrade of Miller's Lane / Golf Links Road is acceptable to the Transportation Planning Section.
- Following a significant amount of consultation with the applicant's Consulting Engineers, the proposed upgrade shall consist of a cycle friendly roundabout with raised zebra crossings on all approaches to the roundabout.
- The proposed junction upgrade would reduce the existing junction radii providing a safer crossing for pedestrians and vehicles in accordance with the Design Manual for Urban Roads and Streets.
- In addition, traffic calming ramps shall be constructed on the Golf Links Road on approach from the south to the roundabout.
- The proposed new junction would be a significant improvement on the current arrangement creating a slower speed environment which in turn shall facilitate a more pedestrian and cycling friendly environment.
- The new arrangement will improve on existing sightlines to a large degree and encourage a slow speed environment.

#### Road Safety Audit

- Road safety audits shall be carried out as part of the proposed development at the relevant stages as outlined in the current edition of Transport Infrastructure Ireland Guidelines GE-STY-1027.

#### Traffic and Transport Assessment

- The trip generation rates are assessed using the 'Flats' category from the TRICS database. These trip rates are lower than and tend to underestimate the trips generated by apartment development.

- This category is best suited to development in the UK where this type of development is more prominent and where the survey information used to generate the trip rates was determined.
- The applicant has increased the 'flats' trip raised by 50% for a robust assessment.
- The methodology set out in the Traffic Impact Assessment would be generally acceptable to the Transportation Planning Department.
- The traffic generation potential of the remaining Hackettstown development was assessed using the TRICS database and included committed development in the area.
- A selection of sites of type development were assessed to estimate the number of trips the development would generate.
- The assumptions and trip generation and distribution is considered reasonable and robust.
- Junctions 1 and 2 were fully assessed
- The analysis determined that the proposed junction enhancements would enable both junctions to operate well within capacity and cater for the increased traffic generated by the remaining development of the master plan lands for the adopted 2036 future design year.

#### Phasing of the works

- The proposed road upgrade works should be completed to the satisfaction of the Planning Authority prior to the completion of the construction (50% occupation) of the remaining Hackettstown LAP lands.

#### Construction Management Plan

- The applicant has submitted a Preliminary Construction Management Plan. The construction phase traffic management plan should be agreed with the Planning Authority once a contractor has been awarded the contract.
- All details regarding safety issues including the appropriate signage and traffic management as required shall form part of the plan.
- This document shall be agreed with the Council and all relevant road opening licenses setting out construction working hours, lane closures, road closures etc.

shall be obtained within the appropriate time periods, prior to the commencement of construction works for the proposed development.

- All measures to mitigate the impact of the proposed works and the public road network shall be agreed as part of the Construction Stage Traffic Management Plan, in conjunction with the Council.
- Restricted working hours will be applied through the road opening license process, where deemed necessary.
- The additional traffic generated during construction would not be considered to have any significant impact on the road network and construction traffic should be managed to minimise the impact during peak hours.
- In conclusion the Transportation Planning Section state that the clarification of further information response is acceptable and have no objections to the proposed development subject to conditions.

## **4.0 Other Technical Reports**

### **4.1.1. Internal Reports**

**Transportation Section:** As detailed above - No objection subject to Conditions.

**Water Services Section:** No objections.

**Conservation Officer:** No objections.

**Environmental Health Officer:** No objection subject to Conditions.

### **4.1.2. Prescribed Bodies**

Iarnrod Eireann: Conditions recommended with regards works in proximity to the adjacent railway line and bridge.

Railway Safety Commission: Conditions recommended with regards the safety of the adjacent railway line.

Transport Infrastructure Ireland: No observations to make.

Irish Water: No objection subject to Conditions.

## 5.0 Planning History

### 5.1.1. Adjacent lands to the north-west of Junction 2 (western side of the railway line)

**P.A. Ref. F20A/0218** Permission REFUSED in July 2020 to Sneem Properties Limited for the construction of the following:

- a) A petrol filling station incorporating canopy over pump islands (12 no. fuel dispenser bays) and a single storey building accommodating retail unit with part off-licence, cafe, restaurant, customer and staff facilities, outdoor seating, back-of-house areas and outdoor yard.
- b) Phase 1 of a business park comprising 6 no. 2-storey blocks accommodating up to 33 no. light industry units to provide for a mix of production, research & development, warehouse & distribution and start-up/incubator units, including ancillary sales from the premises.
- c) Internal site road accessed via proposed new roundabout junction on the R127, with tie-ins to adjacent roads;
- d) 193 no. car parking spaces, 150 no. bicycle parking spaces, totem sign at entrance to development, landscaping and boundary treatments:
- e) Surface water flood relief and attenuation for the lands,
- f) Foul sewerage pumping station located within the site and connection of foul water sewer to the existing public sewer in the Dublin Road east of the railway underpass.
- g) All associated signage, site works and services.

### 5.1.2. The reasons for refusal are summarised as follows;

- 1. The subject site is located within Flood Zone A and within the 1 in 10-year zone.
- 2. Inadequate of sightlines at the proposed roundabout junction.
- 3. In the absence of a Masterplan, as required under the Development Plan, the proposal represent an ad-hoc, piecemeal approach to the development of the area.
- 4. Appropriate Assessment issues.
- 5. The design of the proposed petrol filling station, comprising a utilitarian structure, lacking architectural expression at an important entry point to Skerries would

represent a visually incongruous form of development and would seriously injure the visual amenities of the area.

## 6.0 Policy and Context

### 6.1. Development Plan

**Fingal County Development Plan 2017-2023** is the statutory plan for the area. The following provisions are considered relevant:

#### **Zoning:**

Junction 1 – Miller’s Lane / Golf Links Rd / Shenick Rd Junction: Adjoining lands are zoned ‘RS – Residential’ with the objective to ‘Provide for residential development and protect and improve residential amenity’.

Junction 2 – R127 Skerries Rd / R127 Dublin Rd / Miller’s Lane: Adjoining lands are zoned ‘OS - Open Space’ with the objective to ‘Preserve and provide for open space and recreational amenities’.

The Golf Links Road Section: Adjoining lands to the west are zoned ‘RA’ with the objective to ‘provide for new residential communities subject to the provision of the necessary social and physical infrastructure’. Adjoining lands to the east are zoned ‘GB - Green Belt’ which seeks to ‘Protect and provide for a Greenbelt’ and ‘OS - Open Space’.

#### **Specific Map Based Objectives:**

Junction 1 – Miller’s Lane / Golf Links Rd / Shenick Rd Junction is designated with a Specific Objective, described as an ‘Indicative Cycle / Pedestrian Route’.

Junction 2 – R127 Skerries Rd / R127 Dublin Rd / Miller’s Lane – adjoining lands to the east are designated as a Master Plan Area MP 5.C. Adjoining lands to the west of the railway bridge are designated as Master Plan Area MP 5.D.

Golf Links Road section - Adjoining lands to the west of the Golf Links Road are designated Master Plan Area MP 5.D.

## **Development Plan Objectives:**

**Objective Skerries 14** seeks to 'Prepare and/or implement the following Local Area Plans and Masterplans during the lifetime of this Plan'

- Hacketstown Local Area Plan (see Map Sheet 5, LAP 5.A)
- Skerries Town Park Masterplan (see Map Sheet 5, MP 5.C)
- Milverton Masterplan (see Map Sheet 5, MP 5.D)

**Objective DMS129:** Promote road safety measures in conjunction with the relevant stakeholders and avoid the creation of traffic hazards.

**Objective MT13:** Promote walking and cycling as efficient, healthy, and environmentally-friendly modes of transport by securing the development of a network of direct, comfortable, convenient and safe cycle routes and footpaths, particularly in urban areas.

### **6.2. Other Relevant Government Guidelines**

Design Manual for Urban Roads and Streets (2019)

Traffic Management Guidelines. September (2019). Department of Transport

Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions) DN-GEO-03060 (2017). TII publication.

### **6.3. Natural Heritage Designations**

The site is located 0.8km to the west of the Skerries Island SPA (Site Code: 004122) and NHA (Site Code: 001218).

### **6.4. EIA Screening**

Having regard to the limited nature and scale of the proposed development and the absence of any significant environmental sensitivity in the vicinity, there is no real likelihood of significant effects on the environment arising from the proposed development. The need for environmental impact assessment can, therefore, be excluded at preliminary examination and a screening determination is not required.



## 7.0 The Appeal

### 7.1. Grounds of Appeal

A third-party appeal was received from Niall O'Reilly, who resides at No. 33 Selskar Avenue, Skerries which is located c. 500m to the north of Junction 2 of the appeal site. The main grounds of appeal are summarised under the headings below;

#### 7.1.1. Junction 1 - Failure to address the 'blind spot' at the junction of Miller's Lane / Sherlock Terrace and the southern arm of the Golf Links Road.

- Traffic approaching from a westerly direction along Miller's Lane - Sherlock Terrace does not have adequate visibility to the right along the southern arm of the Golf Links Road, due to (i) a curvature in the Golf Links Road and (ii) the adjacent wall and high hedge at the south-western corner of the junction which creates a blind spot. This can lead to traffic coming along Miller's Lane - Sherlock Terrace not being aware of traffic coming from a southerly direction along the Golf Links Road.
- There is a blind spot for a distance of 10m to 70m from the junction where vehicles are hidden for several seconds. This may be longer with the introduction of the proposed ramps at the junction.
- Likewise, traffic on approach from the south along the Golf Links Roads (southern arm) experience a blind spot at the junction with Miller's Lane - Sherlock Terrace, where road users cannot see traffic stopped at the Miller's Lane - Sherlock Terrace arm and pedestrians at the proposed zebra crossing along Miller's Lane - Sherlock Terrace waiting to cross the road.
- Pedestrians waiting at the proposed zebra crossing will further inhibit visibility.
- Photographs and map images submitted showing the blind spot at the junction of Miller's Lane - Sherlock Terrace and the southern arm of the Golf Links Road.
- The correct solution would be either;
  - (i) Realign the approach roads to the new roundabout to remove the 'blind spot', or
  - (ii) Remove the wall at the south-western corner of Junction 1, serving House No. 1 Sherlock Terrace.

7.1.2. Junction 1 - Danger posed by the road alignment at the junction of Miller's Lane and the southern arm of the Golf Links Road.

- The road layout at the junction of Miller's Lane and the southern arm of the Golf Links Road will force large vehicles to cross over onto the opposite lane of Miller's Lane, to get around the corner.
- The applicant's consulting engineers note that there are at least two SHD developments planned along this road which will attract commercial vehicles and HGV's during their construction which is likely to be extend for several years to come.
- Map image submitted showing the 'run over' by large vehicles at the junction of Miller's Lane - Sherlock Terrace and the southern arm of the Golf Links Road.

7.2. **Applicant Response**

7.2.1. The response received from DBFL Consulting Engineers (hereafter referred as DBFL), on behalf of the Applicant addresses the two issues raised by the Appellant and presents a design solution approved by the Roads Authority and stated as being in compliance with the Design Manual for Urban Roads & Streets (DMURS) recommendations. These are addressed under the headings below. Before doing this, the DBFL Report gives a brief description of the existing Golfs Links Road / Miller's Lane / Shenick Rd junction arrangement and an outline of how the concept of the proposed junction was identified, as follows;

7.2.2. Existing Golf Links Rd Junction Arrangement

- The junction currently operates as a priority-controlled crossroads with the main 'straight through' unopposed alignment being north-south along the Golf Links Road. Accordingly, the two slightly off-set minor arms to the west (Miller's Lane – Sherlock Terrace) and east (Shenick Rd) are required to give way with priority being afforded to all vehicles travelling along the Golf Links Road.
- A further feature which influences driver behaviour travelling northbound towards and through the junction is the presence of a downhill gradient on the southern arm with the road carriageway falling northwards towards the crossroad junction along a horizontal curved alignment.

- Traffic data collected (0700 to 1900 hrs) by a specialist independent survey at the junction on Tuesday 24th September 2019 (on a neutral weekday as per TII recommendations) reveals that the vast majority of vehicle movements (both during peak hour and inter-peak periods) travel east-west through the junction between Shenick Rd and Miller's Lane - Sherlock Terrace (e.g. to / from the junction's minor arms) and not along the main alignment of the Golf Links Road.
- The above characteristics in part influence vehicle driver behaviour when travelling through the junction with both the alignment and gradient of Golf Links Rd in addition to the generous radius's leading to/from Miller's Lane - Sherlock Terrace (i.e. junction's western arm) contributing to (i) inappropriate vehicle speeds on the northbound approach to the junction along the Golf Links Rd, and (ii) excessive crossing distances for pedestrians along travel desire lines.
- As pointed out by the appellant, the presence of private boundary wall treatments also influence vehicle driver behaviour particularly for vehicle drivers exiting and entering Miller's Lane - Sherlock Terrace.

#### 7.2.3. Junction Identification

- During initial pre-planning discussions with the Planning Authority, DBFL were requested by Fingal County Council to undertake a feasibility study to investigate, in response to both the quantified / predicted junction specific traffic characteristics and the design recommendations of DMURS, the most appropriate type of junction configuration for the subject Golf Links Road / Miller's Lane - Sherlock Terrace / Shenick Rd junction. This study assessed three different potential junction configurations including (i) enhanced crossroad layout, (ii) compact roundabout, and (iii) the introduction of traffic signal controls.
- The appraisal, as submitted to Fingal County Council in April 2020, revealed that the implementation of a compact 'blister' type roundabout represented the optimum junction arrangement.
- Reference made to DMURS (pg. 105) which states that 'The use of more compact roundabouts (*i.e. those with a radii of 7.5m or less*) may address many of the issues highlighted above and may also be useful as a traffic-calming measure. These may be considered where vehicle flows are not sufficient to warrant full signalisation, such as on Links, and pedestrian activity is more moderate, such as in Suburbs

*and Neighbourhoods, provided they are appropriately fitted with the appropriate pedestrian crossings.'*

- Following a review of DBFL feasibility exercise, and in acknowledgement of the advantages that a compact 'blister' type of roundabout offers for the subject Golf Links Road junction, Fingal County Council agreed that the design of the proposed roundabout solution could be advanced in consultation with the officers of the Transport Planning department.

7.2.4. DBFL detail that the key features of the resulting infrastructure proposals at the subject Golf Links Road (Junction 1) include;

- (i) The introduction of a raised (+50mm as per NTA recommendations for run-over features) centrally located physical island within the compact 'blister' roundabout which provides appropriate deflection for private motor vehicles thereby offering a significant traffic calming benefit particularly for vehicle flows traveling north-south along the Golf Links Road.
- (ii) A balanced redistribution of junction capacity with the principal east-west flows benefiting from reduced travel times when travelling through the junction.
- (iii) Removal of the existing priority crossroad layout for which collision data compiled by the Road Safety Authority demonstrates is statistically the most dangerous type of junction arrangement.
- (iv) The realignment of the Golf Links Road southern arm of the junction eastwards (between 0.7m and 1.1m) in order to safeguard visibility splays.
- (v) The introduction of 9 number traffic calming ramps the size and spacing of which (in reference to Table 6.8 of the Traffic Management Guidelines) enabled the adoption of a 30kph design speed as per DMURS guidance.
- (vi) The provision of a formal controlled (zebra crossing) pedestrian crossing facilities on all four arms of the proposed junction layout to enhance accessibility, priority and safety levels for vulnerable road users as per Design Manual for Urban Streets and Roads (2013) recommendations.
- (vii) The narrowing of the Golf Links Road southern arm to a consistent 6.0m wide offering further traffic calming benefits.

- (viii) The introduction of enhanced pedestrian and new cycle infrastructure along the eastern side of Golf Links Road between the subject junction and the pedestrian access to Ballygossan Park.
- The accumulative benefit of the above infrastructure improvements at the at the subject Golfs Links Road / Miller's Lane /Shenick Rd junction is considered to be transformative and fully in accordance with both DMURS philosophy and design guidance in addition to supplementary best practice design guidance.

#### 7.2.5. Re. Appellant's Concern No. 1 – 'Bind Spot' / Visibility Splays at Junction 1

- The appellant points out the current difficulties encountered by vehicle drivers waiting at the Miller's Lane STOP line when looking to the right southwards along (and uphill) the Golf Links Rd whilst waiting for an opportunity (gap in opposing vehicle movements) to pull out into the junction from Miller's Lane - Sherlock Terrace, particularly considering the speed of opposing vehicle movements arriving into the junction from the south along the Golf Links Road.
- With the objective of improving vehicle driver's visibility splay the appellant suggests the "removal of the wall at the eastern side of the house adjoining the corner (No. 1 Sherlock terrace)" is the "correct solution".
- DBFL note that this proposed initiative is one of a number of different design approaches that can potentially be considered. Nevertheless, the appellants proposed "correct solution" if delivered in isolation (even if the opportunity was available to utilise private third-party lands) and there was a desire to retain the problematic priority crossroad solution would;
  - not address all the deficiencies of the existing priority-based crossroad junction arrangement,
  - would not respond to all the different and conflicting demands being placed upon this junction,
  - would not provide an equitable and sustainable distribution of the junction's capacity, and
  - would not respond to the junction's quantified principal east-west vehicle demands.

- As outlined in Section 4.4.3 of Design Manual for Urban Streets and Roads (2013) designers are now required to *“take a more balanced approach to junction design in order to meet the objectives of Smarter ravel (2009) and this Manual.”* DMURS also requires that designers *“should also have regard to Context and Function when selecting junction types. Junction design will also need to be considered in conjunction with crossing types and ratio of flow to capacities”* in response to the various conflicting demands placed upon the subject junction by all road users and different modes of transport.
- DBFL Engineers note that the method for measuring visibility splays at a compact roundabout type junction differs significantly to that of a priority type junction (e.g. a three arm T-junction or a four arm crossroad). Whilst the method illustrated in Figure 4.63 of DMURS is appropriate for a priority junction (and is the method indirectly suggested by the appellant), Diagram 11 from the Traffic Management Guidelines and Fig. 6.22 from the TII publication DN-GEO-03060 details the appropriate method for measuring visibility splays at a roundabout type junction.
- In reference to this design guidance, it can be established that the recommended approach to the measurement / provision of visibility splays at roundabouts is to provide the appropriate clear unobstructed sightline back along the roundabouts circulating carriageway (to the right of a vehicle drivers waiting at one of the junctions YEILD lines).
- Neither of these best practice guidance documents detail the requirement to measure sightlines back along the nearest located (to the right) junction arm (and its corresponding approach lane).
- One of the key attributes influencing this arrangement (method for providing sufficient and measurement of visibility splays at roundabouts) is the fact that vehicle drivers traveling inbound towards the roundabouts circulating carriageway (on all roundabout junction arms) are required to come to a full stop or a slow moving ‘crawl’ before entering the circulating carriageway once no opposing vehicles are already traveling along the circulating carriageway.
- Notwithstanding this key difference in how visibility splays are measured (between priority and roundabout types of junctions) in the accompanying drawing 190170-DBFL-RD-SP-DRC-1130, DBFL have detailed the specific level of visibility splay

that is being retained to the right of a vehicle driver waiting at the roundabouts YEILD line on Miller's Lane - Sherlock Terrace.

- A visibility splay of 23.6m is available to the nearside kerb line (or 28m to approaching southbound vehicle). This level of visibility splay is found to be suitable for the adopted design speed of 30kph in reference to Table 4.2 of DMURS. Figure 3 in the appeal response report details same.
- The redesign established that, contrary to the appellants suggestion, the incorporation of a portion of the front / side garden of house No. 1 Sherlock Terrace is not a requirement.
- The proposed roundabout layout illustrated in drawing 190170-DBFL-RD-SP-DR-C-1130 is found to provide the appropriate level of visibility splays as both (i) a compact roundabout junction, and (ii) even as priority junction should a splay be extended back along Golf Links Road South arm (when viewed from a driver's perspective at the Miller's Lane YEILD line).
- The removal of the existing problematic priority crossroad arrangement and its conversion to a compact 'blister' roundabout layout has been shown to provide a number of significant benefits for all road users and deliver a self-regulating low speed environment in addition to offering a more balanced design solution in accordance with the guidance detailed within DMURS.

7.2.6. Appellant's Concern No. 2 – Left turn manoeuvre for HGV's turning left into Miller's Lane

- The appellant raises a concern with regard to the requirement for a large HGV turning left from the junction's southern arm of the Golf Links Rd into the junction's western arm Miller's Lane - Sherlock Terrace, is required to partially encroach into the opposing traffic lane (eastbound lane on Miller's Lane - Sherlock Terrace).
- DBFL confirm that, as detailed in the vehicle swept path analysis submitted, the design does require a large HGV to encroach slightly into the opposing lane as highlighted by the appellant.
- The design has sought to reach a balance between accommodating all vehicle requirements in addition pedestrian safety particularly with regard to the need to

safeguard appropriate visibility splays on the approach to all zebra crossings including the one located on Miller's Lane which needs to maintain slow vehicle speeds on the approach to the crossing.

- The proposed design incorporated a small inside kerb radius (with a 50mm raised run over area in the southwest corner of the roundabout junction) with the objective of slowing all private motor vehicles travelling through the junction.
- The extent of the proposed runover area in the southwest corner accommodated the swept path analysis of long extended vans (LGV's), mini-buses, and small lorries thereby ensuring that these vehicles would not encroach into the opposing traffic lane on Miller's Lane.
- The traffic surveys undertaken at the Golf Links Rd / Miller's Lane junction established that HGV movements through the junction account for only 1.46% of all motorised vehicles travelling through the junction.
- The surveys established that the vast majority of these HGV movements travel east-west through the junction (between the R128 coast road corridor and the R127 Dublin Rd corridor) and not to/from the south via Golf Links Road southern arm.
- Over the 12-hour period (0700 – 1900) of the surveys a total of 6 HGV's (including 5 small lorries / OGV1 and 1 large lorry / OGV2) were recorded turning left through the subject junction from Golf Links Rd South to Miller's Lane arm. On average this amounted to 1 HGV (including both small and large vehicles) undertaking this left turn manoeuvre every 2 hours.
- In the context that the emerging SHD development on the Hackettstown lands to the south would not give rise to an increase to the recorded baseline HGV movements along Golf Links Road (e.g. existing waste collection service operators currently serving Ballygossan Park / Downside Heights are likely to also service the SHD development) DBFL make reference to Section 4.3.3 of DMURS which states;

*“Reducing corner radii will significantly improve pedestrian and cyclist safety at junctions by lowering the speed at which vehicles can turn corners and by increasing inter-visibility between users (see Figure 4.42). Reduced corner radii also assist in the creation of more compact junctions that also align crossing points with desire lines and reduce crossing distances.*



*Corner radius is often determined by swept path analysis. Whilst swept path analysis should be taken into account, designers need to be cautious as the analysis may over estimate the amount of space needed and/ or the speed at which the corner is taken. Furthermore, such analysis also tends to cater for the large vehicles which may only account for relatively few movements.*

*Designers must balance the size of corner radii with user needs, pedestrian safety and the promotion of lower operating speeds. In this regard designers must consider the frequency with which larger vehicles are to be facilitated...”*

- In reference to the above DMURS guidance and Figure 4.43 of DMURS and in the context of the recorded two-way traffic flows along Miller’s Lane, DBFL Engineers are of the view that the need for on average only 5 HGV’s per day (or one every 2 hours) turning left into Miller’s Lane and encroaching into the opposing eastbound traffic lane would not give rise to a material issue particularly considering the low speed environment being delivered by the proposed infrastructure works.
- In response to the planning conditions (2b) applied by Fingal County Council as part grant of planning permission for the proposed junction enhancement works, an independent Road Safety Audit (RSA) was commissioned by the applicant including the subject Golf Links Road / Miller’s Lane / Shenick Rd junction.
- In reference to the Road Safety Audit (RSA) report by Bruton Consulting Engineers, which accompanies the appeal response, that auditors have raised the same issue as the appellant but in the context of the additional HGV movements that are likely to be generated over the period of the construction of the emerging SHD development.
- In reference to planning condition 2(e) it is a requirement that the “proposed upgrade works should be completed to the satisfaction of the Planning authority prior to the completion of the construction (50% occupation) of the remaining Hacketstown LAP lands.” Accordingly, there remains the potential that an element of construction activity will still be on-going on the LAP lands (and associated HGV construction trips being generated) following the implementation of the proposed junction upgrade works, including that identified for the subject Golfs Links Rd / Miller’s Lane / Shenick Rd junction.

- The RSA has acknowledged this future scenario and identified that the southern arm of the Golf Links Road / Miller's Lane - Sherlock Terrace / Shenick Rd junction will be one of the principal construction haul routes to/from the SHD lands. As a result, the number of HGV movements through the Golf Links Road / Miller's Lane / Shenick Rd junction during the remaining construction works on the LAP lands including left turning manoeuvres into Miller's Lane are likely to be above the existing 6 baseline weekday HGV trips (0700-1900).
- In the context of this increased frequency in HGV movements, albeit only for a temporary period over the remaining duration of the SHD construction works; the auditors have identified the requirement of large HGVs to encroach into the opposing traffic lane as noteworthy and subsequently has been included as an issue with the RSA report.
- With the object of addressing this RSA issue, DBFL Engineers have proposed to pull back the position of the curved raised inside kerb line between the footpath and the corner run-over area.
- As illustrated in the accompanying drawing 190170-DBFL-RD-SPDR-C-1130 and in Figure 5 of the DBFL report the new position of the kerb line allows for an enlarged run-over area whilst still retaining an appropriate width of pedestrian footpath.
- A swept path analysis has subsequently been undertaken for;
  - (i) a large waste collection vehicle,
  - (ii) a ridge tipper construction lorry, and
  - (iii) a ready-mix concrete lorry the results of which are illustrated in Dwg No. 190170-DBFL-RD-SP-DR-C-1129.
- The analysis reveals that all three of these HGV design vehicles can now turn left from the junction's southern arm and into the junction's western arm (Miller's Lane) without needing to encroach into the opposing eastbound traffic lane on Miller's Lane thereby fully addressing both the auditors and appellants concerns.

7.2.7. The DBFL report concludes the following:

- The accumulative benefits being delivered by the proposed junction infrastructure improvement works including those at the Golfs Links Road / Miller's Lane / Shenick Rd junction is considered to be transformative and designed fully in accordance with both DMURS philosophy and design guidance in addition to supplementary best practice design guidance.
- DBFL have demonstrated that the appropriate level of visibility splays are being provided / safeguarded at the proposed roundabout junction on the Golf Links Road, thereby addressing the appellants concerns in that regard.
- In parallel the proposed modification to extend of the raised runover area in the southwestern corner of the roundabout ensures that the appellants and auditors concerns during the SHD construction period have been addressed in an appropriate and comprehensive manner.
- With the scheme being subject to an independent RSA process and with all RSA issues acknowledged and addressed it is concluded that the junction enhancements works offer an appropriately considered and designed solution that will deliver improved safety levels for all road users.

7.2.8. Supporting documentation / drawings lodged with the applicant's response to the appeal include the following;

- Combined Stage 1 and 2 Road Safety Audit, prepared by Bruton Consulting Engineers.
- Visibility / Sightline and Swept Path Analysis Drawings.

### **7.3. Planning Authority Response**

The Planning Authority's response is as follows;

- The proposed pedestrian friendly roundabout junction on the Golf Links Rd / Shenick Road and Miller's Lane - Sherlock Terrace will replace the existing crossroads.
- The proposed junction will have the effect of reducing the corner radii of the junction and will significantly improve pedestrian and cyclist safety at the junction, lowering

the speed at which vehicles can turn corners and increasing intervisibility between all users.

- Reduced corner radii can also align crossing points with desire lines and reduce crossing distances for pedestrians.
- In a built-up area where there is a priority to keep vehicle speeds low and improve pedestrian and cycle facilities, maneuvers where larger vehicles crossing the center line or central island over run area of a roundabout, is acceptable for local streets. This is in accordance with DMURS.
- The raised ramped zebra crossing on all 4 arms of the roundabout and the proposed 4 no. ramps on the Golf Links Road will also have the effect of slowing down traffic.
- Lower traffic speeds require less stopping distances.
- The four proposed traffic calming ramps on the Golf Links Rd southern arm are positioned at 60m apart.
- In reference to Table 6.8 (page 102) of the Traffic Management Guidelines, this spacing is used to reduce the ambient speed to 19mph (or 30kph), a significant reduction on the posted speed limit of 50 kph.
- The proposed works to the Golf Links Road would provide sightlines in accordance with DMURS.
- In the event that the Planning Authority's decision is upheld, the Planning Authority requests that Condition No. 2(d) is included in An Bord Pleanála's determination.

#### **7.4. Observations**

None

#### **7.5. Further Responses**

- 7.5.1. Further to the applicant's response to the appeal and the Planning Authority's submission, the appellant has submitted a response, elaborating on the issues raised in the grounds of appeal. The following is a summary of the comments raised.

- Further to consultation with an experienced roads engineer with specific expertise in roundabout design, the appellant has a greater appreciation of the limitations the designers are working under, including the following;
  - The location is awkward with the east and west approach roads being offset.
  - The need for traffic calming measures to achieve the target approach speed of 30 km/hr.
  - The visibility issues affecting the placement of the pedestrian crossings.
  - The diameter of the roundabouts being constrained by the distance between the curbs on the northwest and southeast corners.
  - Various other 'good practice' design factors with regards cyclists and pedestrians.
- On this basis, the appellant proposes the following ideas, under the headings below, for improving the design of the proposal.

#### Overrun Area

- The appellant notes the recommendations in the RSA of reducing the overrun area in the southwest corner to address the risk of larger vehicles crossing into the opposite lane on the western approach along Miller's Lane - Sherlock Terrace which the appellant raised in the appeal.
- The resultant overrun will now be quite steep and may be mis-used by motorists and be a danger for cyclists.

#### Increased Diameter.

- The overrun area could be eliminated, and visibility could be better addressed by increasing the diameter of the roundabout.
- There is space within the current constraints to increase the diameter of the roundabout by approx. 2 metres. A map image is submitted demonstrating this.

#### Improved Pedestrian Crossing

- The proposed pedestrian crossing on the northern approach road (the Golf Links Road) has dangers.

- The proposed pedestrian crossing is set too far back from the desire line on what is perhaps the busiest pedestrian crossing. Its location will simply not be used.
- The pedestrian crossing needs to be brought closer to the roundabout, the same as the pedestrian crossings on the other arms of the roundabout.

#### Option for Further Improvement

- The issues with the roundabout diameter and the northern arm pedestrian crossing can be addressed by taking in some of the front garden of the dwelling at the northwestern corner of the roundabout, as illustrated in a map image submitted.
- The appellant has spoken with the owners of the property concerned, No. 46 Sherlock Park, who are a long-established family in the area and familiar with the traffic hazard there. They are open to discussing ceding some of their garden for the scheme, assuming that their boundary wall/ fence is restored and there is some compensation.

#### Observation re. Junction 2

- The appellant notes the RSA's concerns about the dangers to pedestrians from traffic coming in under the bridge.
- Eliminating the 'desire line' crossing will be challenging. In any event, it is surprising that there are no traffic calming measures on the western arm to the bridge
- The roadway through the tunnel is too narrow for modern day vehicles, having been designed in the mid 1880's for horses and carts.
- There are frequent blockages while vehicles passed one another in the tunnel, which leads to traffic being backed up until the roundabout itself.

7.5.2. The appellant concludes that the roundabout is the best solution for Junction 1 but there is a need for improvements to the design and there are opportunities to do so. The bridge aspect of Junction 2 also needs to be reconsidered.

## **8.0 Assessment**

8.1.1. Having examined the application details and all other documentation on file, and having regard to relevant local/regional/national policies and guidance, I consider that the main issues in this appeal are as follows;

- Sightlines / Visibility at Junction 1
- Traffic Overrun at Junction 1
- Pedestrian Safety at Junction 2
- Appropriate Assessment

I am satisfied that all other issues were fully addressed by the Planning Authority and that no other substantive issues arise. The issues for consideration are addressed below.

## **8.2. Sightlines / Visibility at Junction 1**

- 8.2.1. The appellant objects to the proposed development on the grounds that traffic approaching from a westerly direction along Miller's Lane – Sherlock Terrace at Junction 1 does not have adequate visibility to the right / south along the southern arm of the Golf Links Road, due to (i) the curvature of the Golf Links Road and (ii) the adjacent wall and high hedge at the south-western corner of the junction (serving house No. 1 Sherlock Terrace) which creates a blind spot. Likewise, the appellant expresses concern that traffic on approach from the southern arm of the Golf Links Road at Junction 1 experiences a blind spot at the junction with Miller's Lane – Sherlock Terrace, where road users cannot see traffic stopped at the yield sign of the Miller's Lane - Sherlock Terrace arm and pedestrians crossing the proposed zebra crossing along Miller's Lane - Sherlock Terrace. The appellant suggests that the correct solution would be to either (i) realign the approach roads to the new roundabout to remove the 'blind spot', or (ii) remove the wall at the south-western corner of Junction 1, serving House No. 1 Sherlock Terrace.
- 8.2.2. In response to the grounds of appeal (as detailed above), the applicant's consulting engineers DBFL state that the the appellants proposed "correct solution" if delivered in isolation would,
- not address all the deficiencies of the existing priority-based crossroad junction arrangement,
  - would not respond to all the different and conflicting demands being placed upon this junction,

- would not provide an equitable and sustainable distribution of the junction's capacity, and
- would not respond to the junction's quantified principal east-west vehicle demands.

8.2.3. The DBFL report note that the appellant has not stated (i) the method for measuring the vehicle driver's visibility splay, or (ii) the key attributes (e.g. X-distance or Y-distance) that would constitute the appropriate level of visibility splay in reference to the adopted vehicle design speed at the subject Golf Link Road, both of which would indicate an understanding of the appropriate design standards applicable to either the existing crossroad arrangement or the proposed roundabout junction configuration.

8.2.4. The DBFL report notes that the method for measuring visibility splays at a compact roundabout type junction differs significantly to that of a priority type junction (e.g. three arm T-junction or a four arm crossroad). Whilst the method illustrated in Figure 4.63 of DMURS is appropriate for a priority junction (and is the method indirectly suggested by the appellant), Diagram 11 from the Traffic Management Guidelines and Fig. 6.22 from the TII publication DN-GEO-03060 details the appropriate method for measuring visibility splays at a roundabout type junction. DBFL put forward that in reference to this design guidance, it can be established that the recommended approach to the measurement / provision of visibility splays at roundabouts is to provide the appropriate clear unobstructed sightline back along the roundabouts circulating carriageway (to the right of a vehicle drivers waiting at one of the junctions YEILD lines). DBFL note that neither of these best practice guidance documents detail the requirement to measure sightlines back along the nearest located (to the right) junction arm (and its corresponding approach lane).

8.2.5. DBFL put forward that one of the key attributes influencing this arrangement (method for providing sufficient and measurement of visibility splays at roundabouts) is the fact that vehicle drivers traveling inbound towards a roundabout's circulating carriageway (on all roundabout junction arms) are required to come to a full stop or a slow moving 'crawl' before entering the circulating carriageway once no opposing vehicles are already traveling along the circulating carriageway. Notwithstanding the difference in how visibility splays are measured (between priority and roundabout types of junctions), DBFL state that the drawing 190170-DBFL-RD-SP-DRC-1130 submitted, details the specific level of visibility splay that is being provided to the right of a vehicle



driver waiting at the roundabouts YIELD line on Miller's Lane - Sherlock Terrace. On this drawing, DBFL detail a visibility splay of 23.6m to the nearside kerb line (or 28m to approaching southbound vehicle). DBFL put forward that this level of visibility splay is found to be suitable for the adopted design speed of 30kph in reference to Table 4.2 of DMURS. Figure 3 in the appeal response report details same. On this basis, DBFL consider the incorporation of a portion of the front / side garden of house No.1 Sherlock Terrace is not a requirement.

- 8.2.6. DBFL contend that the proposed roundabout layout illustrated in Drawing 190170-DBFL-RD-SP-DR-C-1130 provides the appropriate level of visibility splays as both (i) a compact roundabout junction, and (ii) as a priority junction, should a splay be extended back along the Golf Links Road southern arm (when viewed from a driver's perspective at the Miller's Lane YIELD line).
- 8.2.7. In response to the clarification of further information submitted by the applicant, the Fingal Transportation Planning Section report conclude that the proposed new junction layout at Junction 1 would be a significant improvement on the current arrangement, improve existing sightlines to a large degree and create a slower speed environment which in turn would facilitate a more pedestrian and cycling friendly environment.
- 8.2.8. The roads at Junction 1 are located within a 50km per hour speed limit zone. The Sightlines Analysis submitted in response to the grounds of appeal, DWG. No. 190170-DBFL-RD-SP-DRC-1130, details the provision of a sightline of 23.6 metres to the right / south at the yield sign of Miller's Lane to the nearside kerb line of the Golf Links Rd, from a 2.4m setback from the edge of the road at the junction. The Fingal County Development Plan 2017-2023 requires that road design standards in urban areas be applied in accordance with the Design Manual for Urban Roads and Streets (DMURS). Section 4.4.3 of DMURS refers to junction design and describes the road design characteristics of roundabouts and priority (stop and yield) junctions thereunder. Priority junctions are described as generally having low capacity, appropriate for low to medium flows and should generally be applied where Local streets meet Arterial or Link streets. DWG. No. 190170-DBFL-RD-SP-DRC-1130 indicates the provision of a stop sign at the arm junctions of Miller's Lane and Shenick Road. As such it is my view that the road design layout of Junction 1 would fall within the category of a 'priority junction'. Section 4.4.5 and Table 4.2 of DMURS refer to 'visibility splays at junctions' and 'stopping sight distances' respectively and requires

a setback 'X' distance of 2.4 metres from the road edge and a 'Y' sightline distances of 45 metres to the left and right at junctions in 50km/hr urban zones.

- 8.2.9. Having regard to the proposed ramps, zebra crossings and yield signs on the four arms on approach to Junction 1 and the stop signs at the arm junctions of Miller's Lane – Sherlock Terrace and Shenick Road, I consider it reasonable to conclude that these measures will reduce the speed of vehicles to a crawl of 10-20km/hr or a complete stop. On this basis, the sightlines provided at the junction of Miller's Lane – Sherlock Terrace and the southern arm of the Golf Links Rd comply with the requirements of Section 4.4.5 and Table 4.2 of DMURS which requires a setback 'X' distance of 2.4 metres from the road edge and a 'Y' sightline distances of 23 metres to the left and right along the major arm at junctions, measured from the nearside kerb, in 30km/hr urban zones. I am satisfied that the visibility and sightlines provided at the road arm intersections at this would ensure the satisfactory and safe operation of the junction for all users, including cyclists and pedestrians. On this basis, I recommend that the appeal should not be upheld in relation to this issue.

### **8.3. Traffic Overrun at Junction 1**

- 8.3.1. The appellant objects to the proposed development on the grounds that the road layout would require large HGV's turning left from the junction's southern arm of the Golf Links Rd into the junction's western arm Miller's Lane – Sherlock Terrace to partially encroach into the opposing traffic / eastbound lane on Miller's Lane - Sherlock Terrace. The applicant contests this, as detailed in Section 7.2.5 above. In summary, the DBFL report submitted details the following:

- The original design, as submitted, does require a large HGV turning from the southern arm of the Golf Links Roads on to Miller's Lane to encroach slightly into the opposing lane.
- The traffic surveys undertaken at the Golf Links Rd / Miller's Lane junction (in the Traffic Analysis Report submitted) established that HGV movements through the junction account for only 1.46% of all motorised vehicles travelling through the junction.

- The surveys established that the vast majority of these HGV movements travel east-west through the junction, between the R128 coast road corridor and the R127 Dublin Rd corridor, and not to/from the south via Golf Links Road southern arm.
- Over the 12-hour period (0700 – 1900) of the surveys a total of 6 HGV's (including 5 small lorries / OGV1 and 1 large lorry / OGV2) were recorded turning left through the subject junction from Golf Links Rd South to Miller's Lane arm. On average this amounted to 1 HGV (including both small and large vehicles) undertaking this left turn manoeuvre every 2 hours.
- In response to the Condition 2 (b) imposed by Fingal County Council as part of the grant of planning permission, an independent Road Safety Audit (RSA) was commissioned by the applicant.
- The Road Safety Audit report by Bruton Consulting Engineers, which accompanies the applicant's response to the appeal, raised the same issue as the appellant but in the context of the additional HGV movements that are likely to be generated over the period of the construction of emerging SHD development in the area.
- Condition No. 2 (e) imposed by the Planning Authority requires that the "proposed upgrade works should be completed to the satisfaction of the Planning Authority prior to the completion of the construction (50% occupation) of the remaining Hacketstown Local Area Plan lands." Accordingly, there remains the potential that an element of construction activity will still be on-going on the LAP lands (and associated HGV construction trips being generated) following the implementation of the proposed junction upgrade works, including that identified for the subject Golfs Links Rd / Miller's Lane / Shenick Rd junction.
- The Road Safety Audit acknowledges this future scenario and identifies that the southern arm of the Golf Links Road / Miller's Lane – Sherlock Terrace / Shenick Rd junction will be one of the principal construction haul routes to/from the Hacketstown Local Area Plan / SHD lands. As a result, the number of HGV movements through the Golf Links Road / Miller's Lane / Shenick Rd junction during the remaining construction works on the LAP lands including left turning manoeuvres into Miller's Lane are likely to be above the existing 6 baseline weekday HGV trips (0700-1900).
- In the context of this increased frequency in HGV movements, albeit only for a temporary period over the remaining duration of the SHD construction works; the

auditors have identified the requirement of large HGVs to encroach into the opposing traffic lane as noteworthy and subsequently has been included as an issue with the RSA report.

- With the object of addressing this Road Safety Audit issue, DBFL Engineers have proposed to pull back the position of the curved raised inside kerb line between the footpath and the corner run-over area at the corner junction of Miller's Land and the southern arm of the Golf Links Road.
- Drawing 190170-DBFL-RD-SPDR-C-1130 and Figure 5 of the DBFL report submitted in response to the appeal shows the new position of the kerb line allows for an enlarged run-over area whilst still retaining an appropriate width of pedestrian footpath.
- On foot of this, DBFL have submitted a swept path analysis, Dwg No. 190170-DBFL-RD-SP-DR-C-1129, providing for the following;
  - (i) a large waste collection vehicle (9.5m long),
  - (ii) a ridge tipper construction lorry (8m long), and
  - (iii) a ready-mix concrete lorry (8.3m long).
- DBFL put forward that the swept path analysis reveals that all three of these HGV design vehicles can now turn left from the southern arm of the Golf Links Road onto Miller's Lane without needing to encroach into the opposing eastbound traffic lane on Miller's Lane, thereby fully addressing both the auditors and appellants concerns.

8.3.2. Having reviewed the redesign proposal submitted in response to the grounds of appeal, which also addresses the requirements of Condition No. 2 imposed by the Planning Authority, I am satisfied that the swept path analysis and revisions to the corner run-over area at the south-western corner of Junction 1 would enable a 9.5m long refuse vehicles and other similar sized HGV's turn left from the southern arm of the Golf Links Road onto Miller's Lane without having to cross the centre line of Miller's Lane. The width of the remaining footpath at this location is acceptable. It is my view that the road design employed balances the needs of road safety, pedestrian safety, lowering the speed of vehicles at this corner junction and safely enabling the left turning movement of HGV's from the southern arm of the Golf Links Road onto Miller's Lane, in accordance with the requirements of Section 4.3.3 of Design Manual for

Urban Streets and Roads (2013). On this basis, I recommend that the appeal should not be upheld in relation to this issue.

#### **8.4. Pedestrian safety and traffic congestion at Junction 2**

- 8.4.1. While not raised in the grounds of appeal, the appellant raises an issue in response to the Applicant's submission and the Planning Authority's response to the grounds of appeal. The appellant notes the Road Safety Audit's concerns about the dangers to pedestrians from traffic coming in under the railway bridge at Junction 2. The appellant identifies that eliminating the 'desire line' crossing at the south-western arm (R127 Skerries Road) will be challenging and expresses surprise that there are no traffic calming measures on the south-western arm to the bridge. The appellant notes that the roadway through the tunnel is too narrow for modern day vehicles, having been designed in the mid 1880's for horses and carts and identifies how there are frequent blockages while vehicles pass one another in the tunnel, which leads to traffic being backed up until the roundabout itself.
- 8.4.2. As this was not raised in the grounds of appeal, the applicant has not been given the opportunity to address this issue. The Board may be of the opinion that it is appropriate to request the applicant to make a submission in relation to this matter, under Section 131 of the Planning and Development Act 2000 (as amended). However, I do not consider this issue significant to warrant such submission.
- 8.4.3. The main Dublin-Belfast rail corridor is located a short distance (c.20m) to the west of the roundabout at Junction 2 on an elevated embankment. The southwestern arm passes by way of a road under-bridge beneath the rail line. This bridge is a protected structure (RPS. No. 231 in then Development Plan). The south-western arm is served with a footpath on its northern side only, while the other two arms are served with pedestrian footpaths on both sides of the road. A shared pedestrian-bicycle lane connects the roundabout junction at its south-western corner to Hillside Gardens, located further to the south. The road junction does not provide any formal / controlled pedestrian crossing at any of its arm junctions.
- 8.4.4. The proposed development provides for an upgrading and extension of the two-lane flared approach to the junction on both the north-western (Dublin Road) and south-eastern (Miller's Lane) arms of the existing three-arm roundabout junction. The original

proposal provided zebra crossing facilities and flat top calming ramps on all arms of the junction, approx. 5m back from the roundabouts circulating carriageway. Further to clarification of further information requested by the Planning Authority, and meeting on-site thereafter with the Fingal Transport Planning Section, the applicant submitted a revised proposal showing the following:

- The omission of the originally proposed formal zebra pedestrian crossing and associated flat top ramp on the south-western arm of the junction.
- To the south of the junction, the provision of a new shared pedestrian / cycle path which directs pedestrians and cyclists away from the junction's south-western arm and provides a connection leading the existing greenway facility to/from the position of the proposed new zebra crossing facility on the junctions eastern / Miller's Lane arm.
- The removal of the existing footpath and section of the Greenway to the south of the junction leading to/from the junction's south-western arm and replaced with soft landscaping / grassed area.

8.4.5. It is my view that the above proposed amendments would successfully remove the desire line across the south-western arm at Junction 2, as raised by the appellant. As pointed out by the appellant, the roadway through the tunnel is narrow for modern day vehicles, having been designed in the mid 1880's for horses and carts resulting in frequent blockages while vehicles pass one another in the tunnel, which on occasion leads to traffic being backed up until the roundabout itself. It is not within the remit of this planning application to address this issue.

## **8.5. Screening for Appropriate Assessment**

Having regard to nature and scale of the proposed development in a fully serviced and zoned residential area and the nature of the receiving environment and the distance and lack of connections to the nearest European sites: Skerries Island SPA (Site Code: 004122) and NHA (Site Code: 001218), no Appropriate Assessment issues arise and it is not considered that the proposed development would be likely to have a significant effect individually or in combination with other plans or projects on a European site.

## 9.0 Recommendation

- 9.1. I recommend that permission be granted subject to conditions, for the reasons and considerations below.

## 10.0 Reasons and Considerations

- 10.1. Having regard to the provisions of the Fingal County Development Plan 2017-2023, the pattern of existing and permitted development in the area, the possible future development of the Hacketstown Local Area Plan lands, the condition, layout and design of the existing road network and the layout and design of the proposed development, it is considered that, subject to compliance with the Conditions set out below, the proposed development would not seriously injure the residential amenity of the area or of property in the vicinity, would be acceptable in terms of traffic, pedestrian safety and convenience and would constitute an appropriate form of development at this location. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

## 11.0 Conditions

1.	The development shall be carried out and completed in accordance with the plans and particulars lodged with the application , as amended by the further plans and particulars submitted on the 13 <sup>th</sup> day of October 2020 and clarification of further plans and particulars submitted on the 10 <sup>th</sup> day of December 2020 and by the further plans and particulars received by An Bord Pleanála on the 15 <sup>th</sup> day of March, 2021, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.
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	<p><b>Reason:</b> In the interest of clarity.</p>
2.	<p>The following requirements shall be met in full:</p> <p>(a) Prior to commencement of the development the applicant shall pay a special contribution of €30,000, under Section 48(2)(c) of the Planning and Development Act (2000) towards the realignment of the existing pedestrian path linking Hillside &amp; Ballygossan to the Dublin Road Roundabout and associated ancillary works.</p> <p>(b) The proposed road upgrade works should be completed to the satisfaction of the Planning Authority prior to the completion of the construction (50% occupation) of the remaining Hacketstown LAP lands.</p> <p>(c) Prior to the commencement of development a Construction Traffic Management Plan shall be submitted for the written agreement of the Planning Authority.</p> <p><b>Reason:</b> In the interest of proper planning and sustainable development.</p>
3.	<p>The following requirements shall be met in full:</p> <p>(a) Prior to the commencement of development, the applicant shall consult with Iarnrod Eireann to ascertain their requirements.</p> <p>(b) The applicant shall ensure that the works are carried out in accordance with the Railway Safety Act 2005 so that there is no increased risk to the railway as a result of the proposal.</p> <p>(c) No works are to take place under the railway bridge UBB50 and the works shall not undermine the integrity of the wing walls of the railway bridge.</p> <p>(d) No additional liquid, either surface water or effluent shall discharge to, or allow to seep onto, the railway property or into the railway drains/ditches.</p> <p>(e) Any excavations which infringe upon the Track Support Zone will require permission and approval from the Senior Track &amp; Structures Engineer.</p>



	<p>(f) Any proposed services that are required to cross under UBB50 shall be the subject of a wayleave agreement with Iarnrod Eireann/C.I.E.</p> <p>(g) Bridge UBB50 is a height restricted bridge and during the construction phase a traffic management plan shall be prepared to prevent construction traffic from traversing under this bridge.</p> <p><b>Reason:</b> In the interest of the proper planning and sustainable development of the area.</p>
4.	<p>The following requirements shall be met in full:</p> <p>(a) During the construction phase, works required shall incorporate the following;</p> <ul style="list-style-type: none"> <li>(i) No heavy construction equipment/machinery (to include pneumatic drills, construction vehicles, generators, etc) shall be operated on or adjacent to the construction site before 8.00a.m. or after 7.00p.m., Monday to Friday, and before 8.00 a.m. and after 1.00p.m. on Saturdays.</li> <li>(ii) No activities shall take place on site on Sundays or Bank Holidays.</li> <li>(iii) No activity, which would reasonably be expected to cause annoyance to residents in the vicinity, shall take place on site between the hours of 7.00p.m. and 8.00a.m.</li> <li>(iv) If there is any occasion when work must be carried on outside daytime hours, the Local Authority, local residents and businesses in areas which are likely to be affected by noise from the proposed works shall be notified in advance e.g. in letter or leaflet or advertisement form, of: - Name, address and telephone number of company carrying out works - Nature of and reason for works - Likely duration and times of works</li> </ul> <p>(b) All construction work carried out shall have regard to B.S.5228: 2009+A1:2014 'Noise and Vibration control on construction and open sites' to minimize noise from construction operations. All mechanical equipment</p>

	<p>shall be fitted with effective silencers and/ or sealed acoustic covers. Should noise levels exceed the threshold, steps will be taken by the contractor to review the works and implement additional mitigation measures where practicable.</p> <p>(c) During the construction phase all necessary steps shall be taken to contain dust and airborne pollutants arising from the site and to prevent nuisance to persons in the locality. This shall include i) covering skips, ii) covering slack heaps, iii) netting of scaffolding, iv) regular road and pavement damping and sweeping, v) use of water spray to suppress dust, vi) proper paved or hard stand access for trucks and vehicles to and from the site to prevent dirt and dust from the site being carried from the site on to public roads etc.</p> <p>(d) A dust management plan shall be implemented during both the construction phase and the operational phase. The generation of airborne dust shall be kept to a minimum. During dry periods, dust emissions from heavily trafficked locations on/off site shall be controlled by the spraying of surfaces with water and wetting agents. Windblown dust emissions on site surfaces shall be sprayed by a mobile tanker bowser. A programme of dust monitoring shall be carried out by the developer at locations adjacent to the site boundaries and shall be made available to the local authority on an agreed basis and/or on request.</p> <p>(e) Set up monitory points at the proposed locations to measure total dust deposition rates. The amount of dust deposited anywhere outside the proposed development, when averaged over a 30-day period, should not exceed: - 130mg/m<sup>2</sup> per day when measured according to the BS method which takes account of insoluble components only, or - 350mg/m<sup>2</sup> per day when measured according to TA Luft, which includes both soluble and insoluble matter. (EPA compliance monitoring is based on the TA Luft method)</p> <p>(f) Due to the adverse effect of noisy construction work such as excavation and rock breaking, such activities shall take place between the hours of 9am-12.30pm and 2pm -5pm. Monday – Friday only. These works are extremely</p>
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	<p>noisy and disruptive to local residents and businesses. Additional attenuation measures may be required to reduce the noise levels i.e. shrouding of machinery.</p> <p>(g) The development shall be so operated to ensure that there will be no emissions of malodours, gas, dust, fumes or other deleterious materials from activities on the site that would give reasonable cause for annoyance to any person in any residence, adjoining unit or public place in the vicinity. (h) The development shall be so operated to ensure that there will be no noise emissions from the site that would give reasonable cause for annoyance to any person in any residence, adjoining unit or public place in the vicinity.</p> <p>(i) The use of plant equipment such as pumps and generators shall be enclosed within acoustic enclosures.</p> <p>(j) Construction noise levels shall be monitored continuously at noise sensitive locations in the vicinity of the development. The results of this monitoring shall be made available to the Environmental Health Officers Air &amp; Noise Unit on request.</p> <p><b>Reason:</b> In the interest of public health.</p>
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Brendan Coyne  
Planning Inspector

07<sup>th</sup> July 2021