

14 MATERIAL ASSETS (TRANSPORTATION)

14.1 Introduction

This chapter has been prepared by Waterman Moylan Consulting Engineers on behalf of Castlethorn Developments Luttrellstown Unlimited, written by Fernando J. De Maio Traffic & Transportation Engineer at Waterman Moylan, with over 10 years' civil engineering experience, and reviewed by Joe Gibbons CEng MICE and Director of Waterman Moylan, with over 30 years' civil engineering experience in the industry.

This chapter assesses the potential impacts of two proposed residential developments within the Kellystown Local Area Plan: Plot 1 (Luttrellstown Gate Phase 2) and Plot 2 (St. Mochta's LRD). In addition, a cumulative impact assessment is carried out as part of the present chapter. The assessment covers current and forecast vehicular behaviour, the public transport network and pedestrian and cycle access, both during the construction phase and over the lifetime of the development.

The chapter outlines the methodology employed, the receiving environment at the application site and its surroundings, the characteristics of the proposal in terms of physical infrastructure, the potential impact that proposals of this kind would be likely to produce, the predicted impact of the proposal on the local road network, and the mitigation measures required to prevent, reduce or offset any significant adverse effects.

The chapter has been prepared in accordance with best practice and in accordance with the requirements of both Section 14.17.4 (Objective DMSO113) of the Fingal Development Plan 2023 – 2029 and the Traffic and Transport Assessment Guidelines published by Transport for Ireland (TII) / National Roads Authority (NRA) in May 2014.

14.1.1 Proposed Development – Plot 1 (Luttrellstown Gate Phase 2)

The proposed development comprises 99no. residential units in a mix of houses and duplex units consisting of 71no. 2 storey houses (66no. 3-bedroom and 5no. 4-bedroom), 16no. 3 storey houses (16no. 4-bedroom), 4no. 1-bedroom duplex units and 8no. 2-bedroom duplex units and all associated and ancillary site development and infrastructural works, hard and soft landscaping and boundary treatment works, including public open space; public lighting; surface car parking spaces; bicycle parking spaces/stores for mid-terrace units; bin stores. The proposed development includes a minor amendment to development permitted under Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3, with minor adjustment proposed to the permitted surface water attenuation pond. Vehicular access to the proposed development is provided by the road network permitted under Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3.

14.1.2 Proposed Development - Plot 2 (St. Mochta's LRD).

The proposed development comprises 302no. residential units in a mix of houses, duplex and apartment units consisting of 62no. 2 storey, 3-bedroom houses and 35no. 3 storey, 4no.-bedroom houses; 205no. Duplex / Apartment Units (98no. 1-bed, 88no. 2-bed and 19no. 3-bed) across 4no. blocks comprising: Block D ranging in height from 5-7 storeys accommodating 57no. apartment units; Block E ranging in height from 5-7 storeys accommodating 77no. apartment units; Block F ranging in height from 4-5 storeys accommodating 39no. apartment and duplex units; Duplex Blocks G1, G2, G3 & G4 3 storeys in height accommodating 32no. apartment units; and all associated and ancillary site development and infrastructural works, hard and soft landscaping and boundary treatment works, including public open space; public lighting; surface car parking spaces; bicycle parking spaces/stores for mid-terrace units; bin stores. Vehicular access to the proposed development is provided by the road network permitted under Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3.

14.1.3 Cumulative

The application sites for Luttrellstown Gate Phase 2 (Plot 1) and St Mochta's LRD (Large Scale Residential Development) (Plot 2) form part of a larger landholding in the townlands of Kellystown, Porterstown and Diswellstown, Clonsilla, Dublin 15, which has been subject to a number of recent planning permissions, summarised below.

The consented Kellystown SHD scheme **ABP-312318-21** was granted (with 27no. conditions) on 2 March 2023, under section 9(4) of the Planning and Development (Housing) and Residential Tenancies Act 2016 for a Strategic Housing Development. The consented scheme includes 346no. dwellings (123no. houses and 3no. apartment buildings accommodating 223no. apartment units)¹, 1no. childcare facility (c. 528 sq m) and 1no. retail unit (c. 236 sq m), in buildings ranging from 2 to 8-storeys, and associated site works and 2.1ha public park amenity. The overall gross site area of the entire consented scheme amounts to c. 9.73 ha, at land zoned 'RS' residential, in Eastern Development Area 1 and land zoned 'OS' open space to the south of permitted Kellystown Link Road. The site is otherwise generally bounded by the existing Kellystown Link Road and schools to the south; the Old Porterstown Road and existing St Mochta's FC grounds to the east; Dr Troy Bridge/L3036 Porterstown Link Road also to the east; the Dublin Maynooth rail line and Grand Canal to the north and undeveloped (Luttrellstown Gate) lands to the west.

Amendments to the consented SHD scheme **ABP-312318-21** was granted on 21 August 2024 under Reg. Ref. **LRD0034-S3** for development comprising of the reconfiguration of Block A, located in the eastern corner of the site, to accommodate 193no. dwellings in total (an increase of 28no. dwellings) in buildings ranging between 2 and 8 storeys in height, with the following residential unit mix: 82no. 1-bed apartment units, 108no. 2-bed apartment units, and 3no. 2-bed duplex units. Associated reconfiguration of internal floor plans to accommodate an increase from 31no. to 34no. apartment units per floor. Reduced floor area of the internal residential amenity area (from c.405.7 sq m to c.120.9 sqm). Reduced floor area of the retail unit (from c.236 sq m to c.200.6 sq m). And all associated and ancillary site development, infrastructural, hard and soft landscaping and boundary treatment works.

A live planning application, currently at Further Information Stage under **FW25A/0033E** seeks the relocation of St. Mochta's Football Club grounds, to 'OS' zoned lands to the south of Kellystown Link Road and north of the Cemetery lands and Luttrellstown Road, within the new emergent residential neighbourhood of Kellystown, Dublin 15. This is in accordance with Key Objective DA 1.1 for the Eastern Development Area of the Kellystown Local Area Plan.

In November 2020, Fingal County Council published proposals for the development of a link road through the Kellystown lands for public consultation, under the **Part 8 development process**. Note that the consented Kellystown SHD scheme **ABP-312318-21** includes the extension of the 'Kellystown Link Road' west from its existing section serving the school campus and cemetery lands. A single new vehicular access point to residential development in the Kellystown Eastern Development Area extends north from the 'Kellystown Link Road', under SHD ABP-312318-21. Upgrade works to the existing segment of the 'Kellystown Link Road' and its junctions with Porterstown Road and Diswellstown Road/Overbridge are also included in the Kellystown SHD permission.

In the wider surrounding area, the following developments are subject of live planning permissions:

- **ABP Reg. Ref. 320886-24 (FCC Reg. Ref. LRD0021/S3E)** (north of the Dublin-Maynooth Railway Line) issued with a Grant of Permission on 21 January 2025 for the construction of 170 residential units, a café, and a childcare facility, and all associated development works including the demolition of structures, site clearance, and ground levelling.
- **ABP Reg. Ref. 315707-23 (FCC Reg. Ref. FW22A/0152)** (north of the Dublin-Maynooth Railway Line) issued with a Grant of Permission on 19 December 2023 comprises the

¹ Note that this takes account of **Condition 2(a) of ABP-312318-21** requiring omission of 3no. 1-bed units and the absorption of their floor area into the adjoining 2-bed units in Block A

construction of a mixed use retail and residential development comprising 1no. food store (2,500sqm GFA), 3 no. retail units (611.8sqm GFA) and 67 no. residential units².

14.2 Assessment Methodology

The study area for the Traffic and Transport Assessment EIAR chapter is the transport network and junctions immediately surrounding the site which could be impacted as part of the proposed development. The junctions chosen for assessment are outlined in **Figure 14.4** below and were chosen based on both experience and consultation with the Roads Department of Fingal County Council.

In line with best practice, the following methodology has been adopted for this assessment:

- Review of relevant available information, detailed in **Section 14.11** below, which include Fingal Development Plan 2023-2029 and Kellystown Local Area Plan (January 2021), existing traffic information and other relevant studies.
- Site visit to gain an understanding of the site access and observe the existing traffic situation.
- Consultations with Fingal County Council through the pre-application meetings, to agree on the site access arrangements and to determine the scope of the traffic analysis required to accompany the planning application.
- Preparation of the “Traffic Transport Assessment” (TTA) with the following detail:
 - Obtain data on existing traffic flow conditions.
 - Determine trips to be generated by the subject site and the committed and potential future developments in the surrounding area.
 - Determine trip distribution for each development.
 - Assess the percentage impact of traffic generated by the site in relation to existing traffic flows at local junctions. Determine if this exceeds 5% at congested junctions or 10% at non-congested junctions.
 - Modelling the junctions with a high impact, based on the threshold indicated above.
 - Model the junctions with a high impact, based on the thresholds indicated above.
 - Identify, if necessary, mitigation measures.

14.3 Receiving Environment

14.3.1 Proposed Development – Plot 1 (Luttrellstown Gate Phase 2)

The site is situated in Kellystown, Clonsilla, south of the Royal Canal and the Dublin-Maynooth railway line and west of Diswellstown Road.

Land use

According to the Fingal Development Plan 2023 – 2029 (FDP), the subject development site is in an area designated with Zoning Objective “RA – Residential Area: Provide for new residential communities subject to the provision of the necessary social and physical infrastructure”. **Figure 14.1** below shown the land use taken from Blanchardstown South Map - Sheet No. 13 of the Fingal Development Plan 2023 - 2029.

² Note that this takes account of **Condition 2(a) of ABP-315707-23** requiring omission of apartment block and three adjoining house type units at the south-east corner of the site.

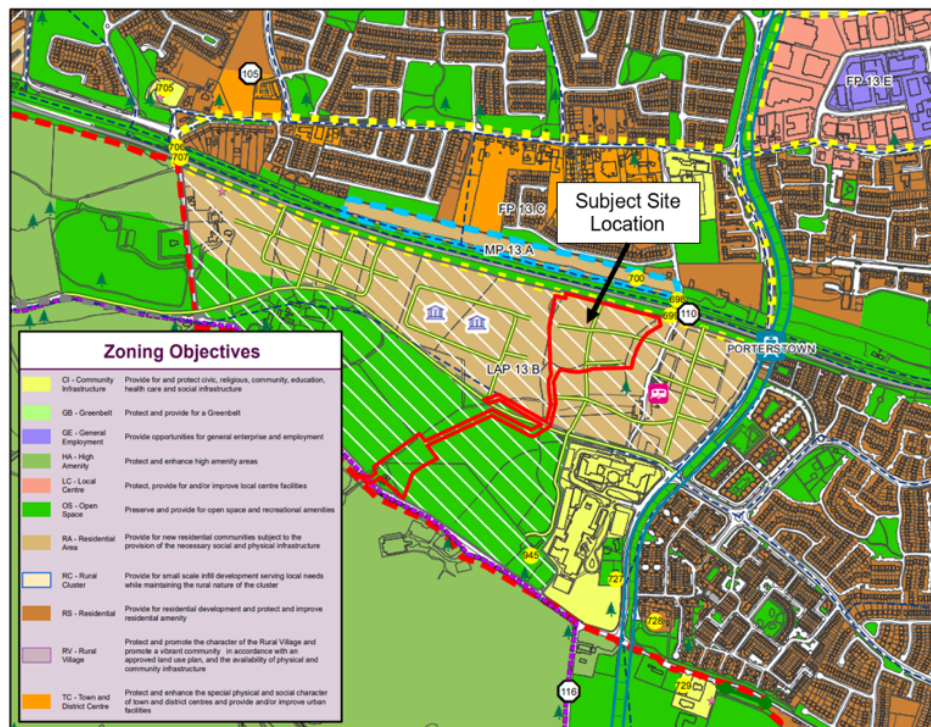


Figure 14.1: Site Location – Land Use (Source: Sheet No. 13 of the Fingal Development Plan 2023-2029)

Site Location and Description

The subject site, located in Kellystown, Clonsilla, Dublin 15, forms part of the Kellystown Development Masterplan which includes an important residential area with some 1,900 no. residential units, a primary school for c. 600 no. pupils, a secondary school for c. 1,000 no. pupils and a local centre of 2,500sqm. All developed on approx. 65 hectares the lands located in Kellystown lands.

Kellystown is located approximately 1.5 km south-west of Blanchardstown Town Centre, 1.8 km south-west of Blanchardstown Main Street and 9.8 km north-west from O'Connell Street, Dublin.

The subject site is bounded to the east and south by the under construction Kellystown development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3), to the west by the potential future Central Development Area of the Kellystown Local Area Plan, and to the north by railway infrastructure.

Figure 14.2 below shows the subject site, located within the Kellystown Development Masterplan, and its access roads through the under construction Kellystown development -Phase 1-.

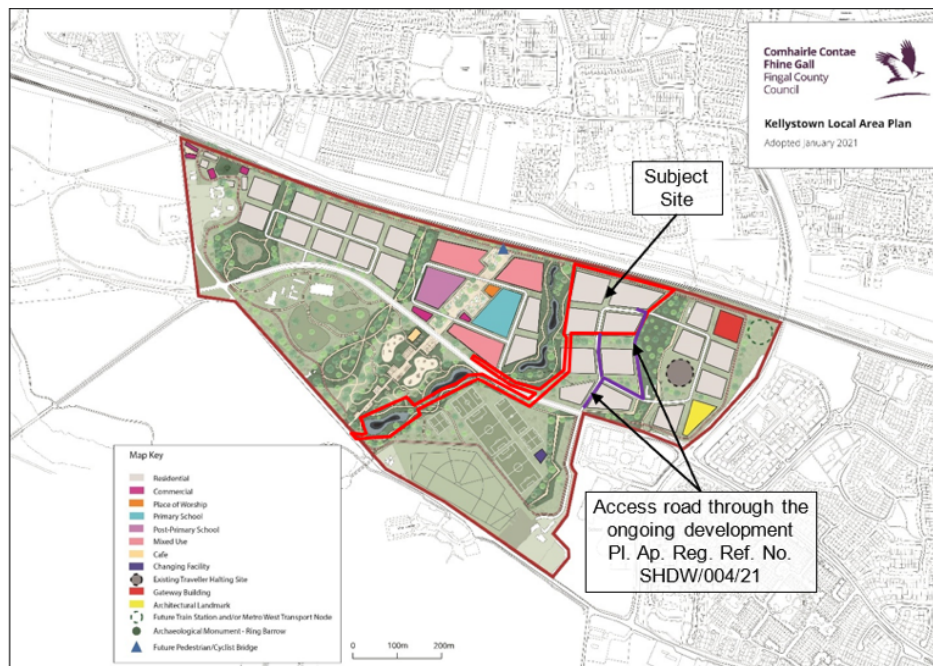


Figure 14.2: Site Access Roads through Kellystown Development Masterplan (Source: Kellystown Development Masterplan)

Local Road Network

Roads

Vehicular access to the subject site is proposed off the western extension of Kellystown Link Road via the internal road of the under construction Kellystown Development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3).

The Kellystown Link Road is currently a single carriageway 10 metres wide that extends for approximately 280 metres from the signalised crossroads with Diswellstown Road & Porterstown Link Road. As outlined in the Kellystown Local Area Plan, the Kellystown Link Road will be extended westwards to the junction of the Clonsilla Road (R121) and Luttrellstown Road.

This 280m section of Kellystown Link Road currently provides access to the northern entrance of Scoil Choilm Community National School and links to the road serving the new burial ground site, further west.

Figure 14.3 below shows the main roads around the subject development.

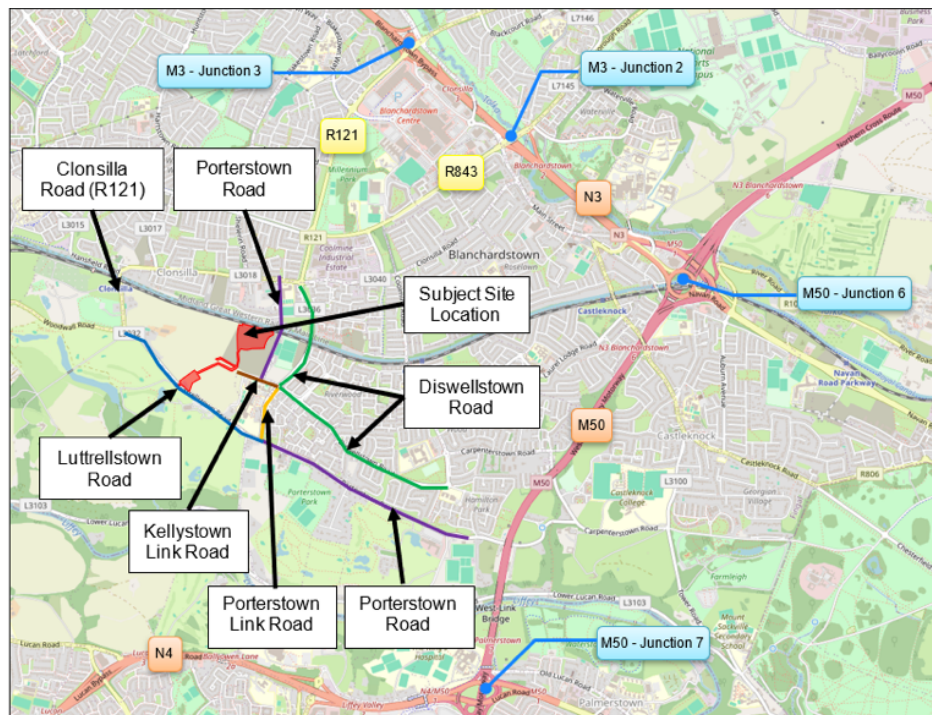


Figure 14.3: Site Location – Surrounding Road (Source: Open Street Maps)

Approximately 100m west of the signalised crossroads at the intersection of Kellystown Link Road and Diswellstown Road (Junction 4 in Figure below), is a priority-controlled junction between Kellystown Link Road & Porterstown Road. The width of Kellystown Link Road on this section is 10.0 metres wide, with footpaths and dedicated cycle lanes extending along both sides.

Porterstown Road is a single carriageway road running south-north. This road is approximately 730m in length from the priority-controlled junction with Kellystown Link Road through to a priority-controlled junction with Clonsilla Road (R121). This road crosses the railway line via an automatic level crossing. To the south of the railway line, Porterstown Road comprises a carriageway of approximately 6.5m wide with footpaths running along the western side of the carriageway for the majority of its length and along the eastern side for some meters. No cycle lane is provided.

Diswellstown Road (S-N) is a single carriageway road running south-north for approximately 800m from the signalised crossroads with Kellystown Link Road through to a four-armed roundabout with R121 Clonsilla Road to the north of the railway line. This road, which crosses the railway line via an elevated bridge, currently comprises a carriageway of 7.0m wide with footpaths and cycle lanes provided along both sides.

Diswellstown Road, to the south of the signalised crossroads with Kellystown Link Road, extends approximately 400m towards the signalised T-junction with Luttrellstown Road. This section of the Diswellstown Road comprises the same configuration as the northern section, with a 7.0 m wide carriageway with footpaths and cycle lanes along both sides. Currently, this southern section provides a dedicated right turning pocket lane and signalised pedestrian crossing which facilitate access to Luttrellstown Community College and Scoil Choilm Community National School located to the west.

The M50 Motorway is an important orbital motorway around Dublin which is subject to a speed limit of 100kph. It is a 40km, C-shaped ring around Dublin that connects all the National Primary Roads and carries more than 115,000 vehicles per day.

The N3 road is a national primary road in the Republic of Ireland, running between Dublin, Cavan and the border with County Fermanagh. The A509 and A46 roads in Northern Ireland form part of an overall route connecting to Enniskillen, and northwest to the border again where the N3 reappears to serve Ballyshannon in County Donegal. The route, known as the Navan Road, as it leaves Dublin,

starts at its junction with the M50 motorway (junction 6). The N3/M3 cross the following counties: Fingal, Meath, and Cavan Donegal in Ireland, and Enniskillen in Northern Ireland.

The N4 road is a national primary road in Ireland, running from Dublin to the northwest of Ireland and Sligo town. The M6 to Galway diverges from this route after Kinnegad, while the N5 to Westport diverges at Longford town. This national road originates at an intersection with the M50 motorway at Junction 7. This is also Junction 1 of the N4/M4. The road has three lanes and a bus lane in each direction between the M50 and Junction 5 which is also the start of the M4 motorway at Leixlip. The N4/M4 cross the following Counties: Kildare, Meath, Westmeath, Longford, Leitrim, and Roscommon.

Junctions

The primary junctions which currently provide access to the subject development site are:

- **Junction 1** is a priority T-junction located at the intersection of R121 Clonsilla Road & Porterstown Road to the north of the subject site.
- **Junction 2** is a four-armed Roundabout located at the intersection of Clonsilla Road (R121) / Diswellstown Road to the north-east of the subject site.
- **Junction 3** is a priority T-junction located at the intersection of Kellystown Link Road & Porterstown Road to the south of the subject site.
- **Junction 4** is a signalised crossroads located at the intersection of Kellystown Link Road & Diswellstown Road to the west of the subject site.
- **Junction 5** is a four-armed roundabout at the intersection of Diswellstown Road, Riverwood Road & Fernleigh Drive to the east of the site.
- **Junction 6** is a signalised T-junction located at the intersection of Diswellstown Road & Luttrellstown Road to the south of the site.

As part of the Planning Application Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3, a new layout for Junction 4 is proposed, which was designed to serve all potential traffic flows to/from the Eastern Development Area (EA1). Further information regarding the Development Areas contained within the confines of the Kellystown Local Area Plan is presented in **Section 14.3.3** below.

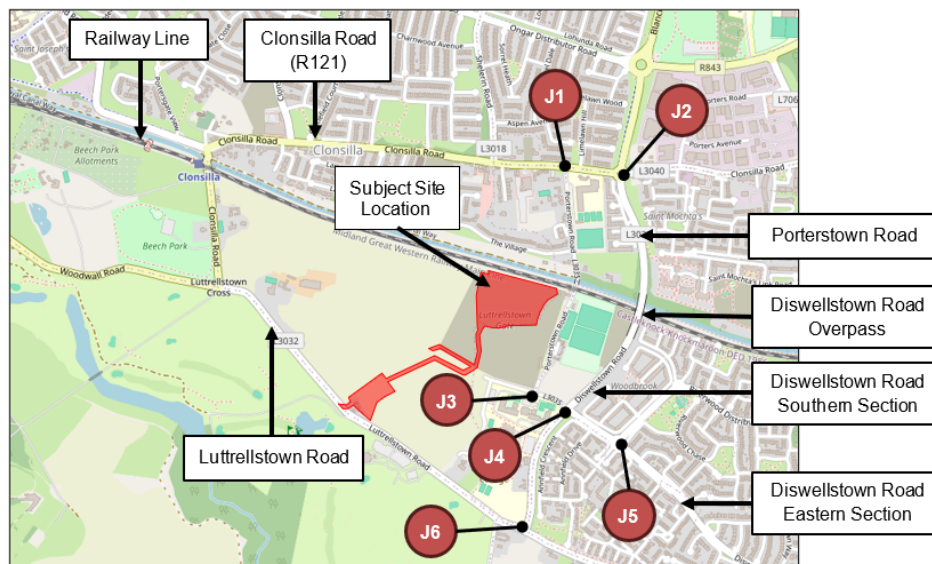


Figure 14.4: Primary Local Junctions (Source: Open Street Map)

Existing Traffic Condition

To quantify the volumes of traffic movements at the above key junctions, a traffic survey was commissioned by the applicant and carried out by TRACSIS on Tuesday 14th January 2025 for a period of 24 hours.

The surveys were carried out on the above date to ensure that the flows were representative of a normal term and therefore not affected by school holidays or other public holidays or events. As such, they provide a reasonable representation of a neutral month during a period of normal school and work activity. The surveys are designed to provide representative values covering morning and evening periods during normal traffic conditions.

The results of the survey indicate that the peak traffic levels through the junctions occurred between the 08:00 and 09:15 during the morning and between the 16:45 and 18:00 during the evening with the following detail:

- Junction 1: AM peak hour from 08:00 to 09:00 and PM peak hour from 16:45 to 17:45
- Junction 2: AM peak hour from 08:00 to 09:00 and PM peak hour from 17:15 to 18:15
- Junction 3: AM peak hour from 08:00 to 09:00 and PM peak hour from 16:45 to 17:45
- Junction 4: AM peak hour from 08:00 to 09:00 and PM peak hour from 16:45 to 17:45
- Junction 5: AM peak hour from 08:15 to 09:15 and PM peak hour from 17:15 to 18:15
- Junction 6: AM peak hour from 08:15 to 09:15 and PM peak hour from 17:00 to 18:00

For the purposes of this report, it has been assumed that the peak hours among the junctions are the same and occur between 08:00 and 09:00 in the morning and between 16:45 and 17:45 in the evening.

The peak hour flows through each junction are shown in **Figure 14.5** below.

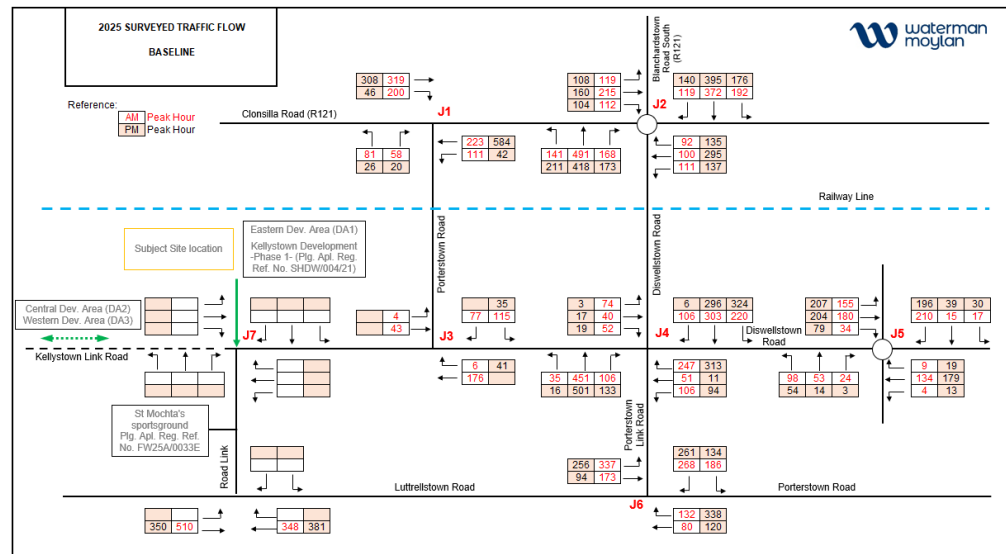


Figure 14.5: 2025 Surveyed Traffic Flows.

Multi-modal access to the site

Pedestrian Infrastructure and Walking Accessibility

The key to pedestrian accessibility is the provision of short, convenient, and safe routes. Walking is the most common mode of transport. Almost all journeys involve some walking, so improvements to pedestrian facilities can have a wide impact.

The *“Guidelines for Providing for Journeys on Foot”* published by the *Institution of Highways & Transportation* in 2000, indicates that the acceptable walking distances vary between individuals and

circumstances. These include an individual's fitness, physical ability, and personal motivation; the size of the city itself and the quality of the surrounding footpath network. Furthermore, the document proposes walking distances and times based on an average walking speed of 1.4 metres per second (approximately 400 metres in five minutes). Table below provides a summary of these suggestions.

	Town Centre	Commuting / School / Site Seeing	Elsewhere
Desirable	200m (2.5-minutes)	500m (6-minutes)	400m (5-minutes)
Acceptable	400m (5-minutes)	1,000m (12-minutes)	800m (12-minutes)
Preferred Maximum	800m (10-minutes)	2,000m (24-minutes)	1,200 (15-minutes)

Table 14.1: Ideal Walking Distances (Source: Guidelines for Providing for Journeys on Foot - Institute of Highways and Transportation)

The existing pedestrian facilities in the surrounding area comprise an inter-connected network of footways linking the various neighbourhoods to each other, to several schools, grocery stores, public transport network and to the Coolmine industrial park.

Figure 14.6 below illustrates the considerable extent of the pedestrian catchment areas accessible from the subject development, for different walking times: 10 minutes, 15 minutes, and 24 minutes.

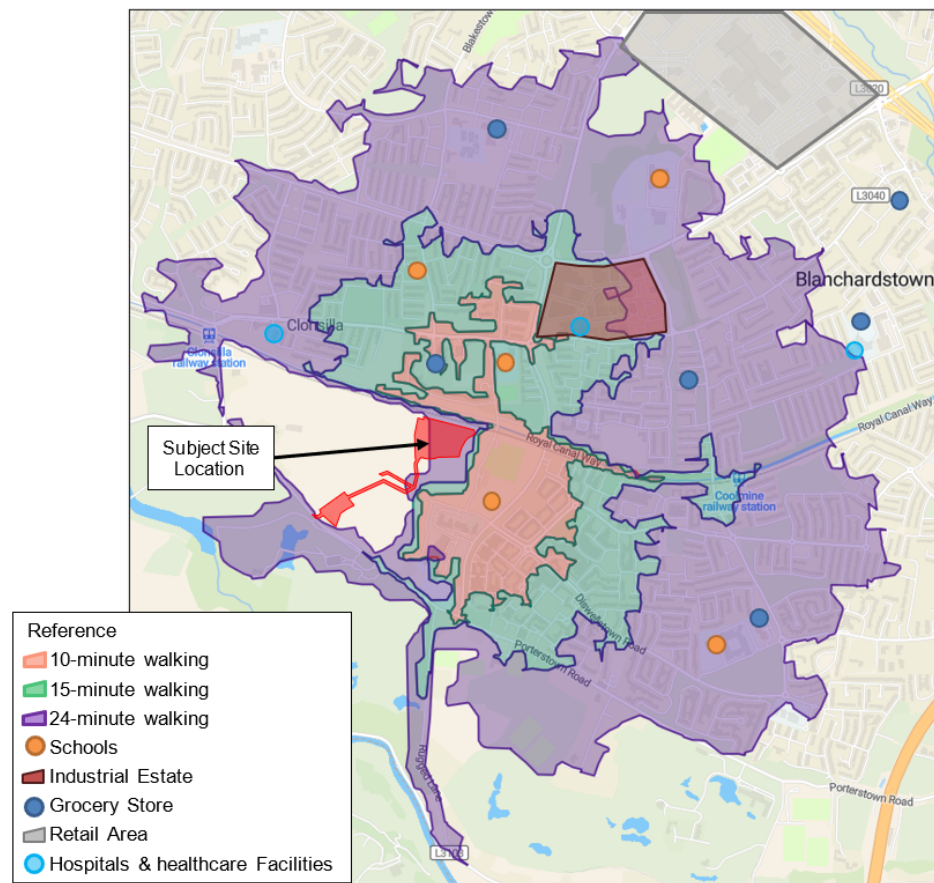


Figure 14.6: Site Accessibility – Isochrone map indicating walking accessibility (Source: Smappen & Google Maps)

Cycle Infrastructure and Cycling Accessibility

The vicinity of the subject development is equipped with a variety of cycling infrastructure, as shown in **Figure 14.7** below.

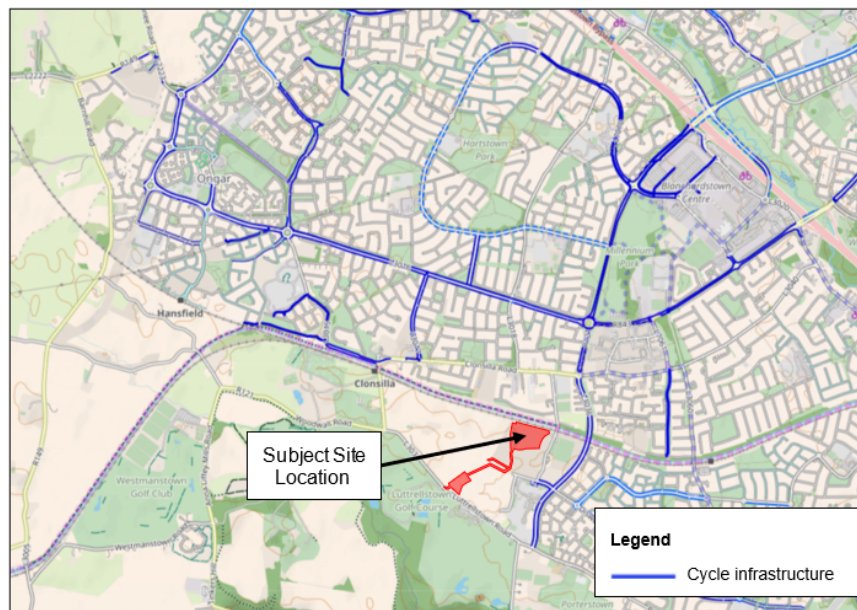


Figure 14.7: Existing Cycle facilities (Source: Open Street Map)

A similar catchment exercise has been conducted for the cycling mode of transport, in accordance with the methodology previously employed for walking. A 10-minute cycle equates to a 24-minute walking and provides access to the Coolmine and Clonsilla train stations and to the surrounding public network.

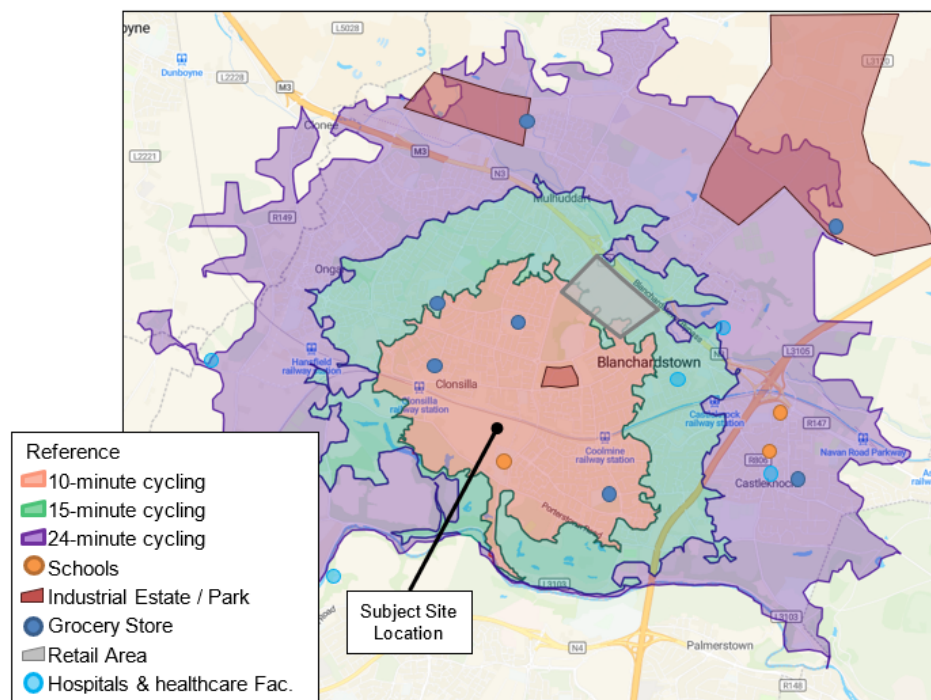


Figure 14.8: Site Accessibility – Isochrone map indicating cycling accessibility (Source: Smappen & Google Maps)

Bus Network

The nearest bus stops in relation to the subject development is situated along Diswellstown Road (Eastern Section). These are Bus Stop No. 7031 (eastbound) and No. 4895 (westbound). The bus Stops

are served by the routes 37 and 70n. The distance from the subject development is approximately 800 metres (or 11-minute walking).

Figure 14.9 below shows the locations of the Bus Stops and walking distances from the development.

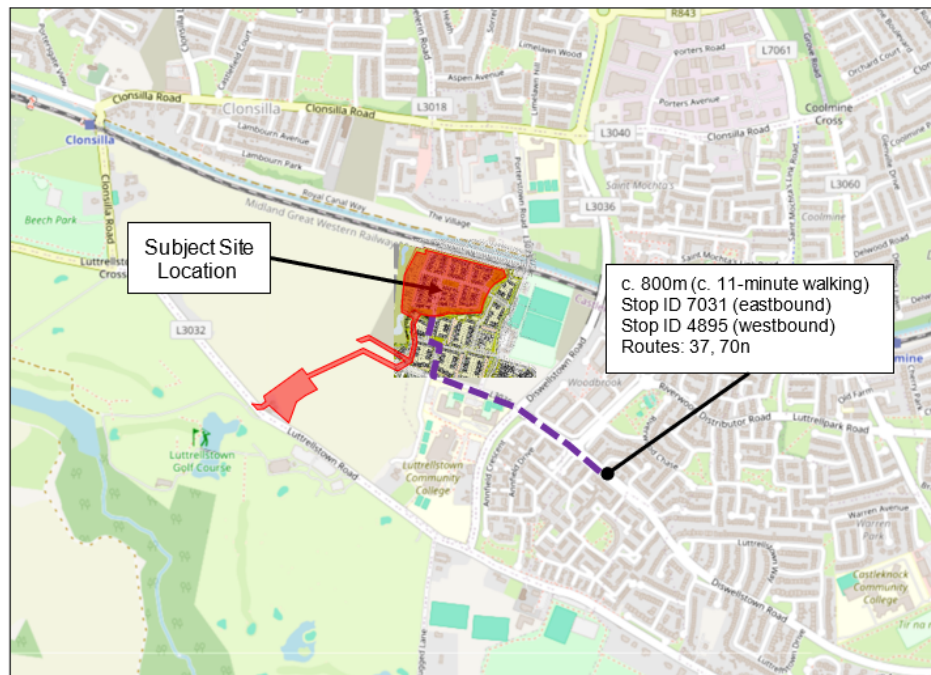


Figure 14.9: Location of the nearest Bus Stops (Source: Google Maps and Transport for Ireland)

The table below shows the Bus Frequencies for each Bus route in the area.

Bus Route	Description	frequency
70n	Westmoreland Street Towards Tyrrelstown	Monday to Thursday: No service Friday to Saturday: 00:00, 02:00, 04:00 Sunday: No service
37	Blanchardstown Centre Towards Baggot St. / Wilton Terrace	AM Weekday Frequency Every 5 to 10 minutes PM Weekday Frequency Every 20 minutes Weekend Every 30 minutes
	Baggot St. / Wilton Terrace Towards Blanchardstown Centre	AM Weekday Frequency Every 20 to 35 minutes PM Weekday Frequency Every 5 to 10 minutes Weekend Every 30 minutes

Table 14.2: Local Bus Routes Frequencies (Source: Transport for Ireland)

Rail Network

There are two rail stations in the vicinity of the subject development site, Clonsilla Rail Station and Coolmine Rail Station. The location of both stations and their relative distance from the subject development site are shown on the in **Figure 14.10** below.

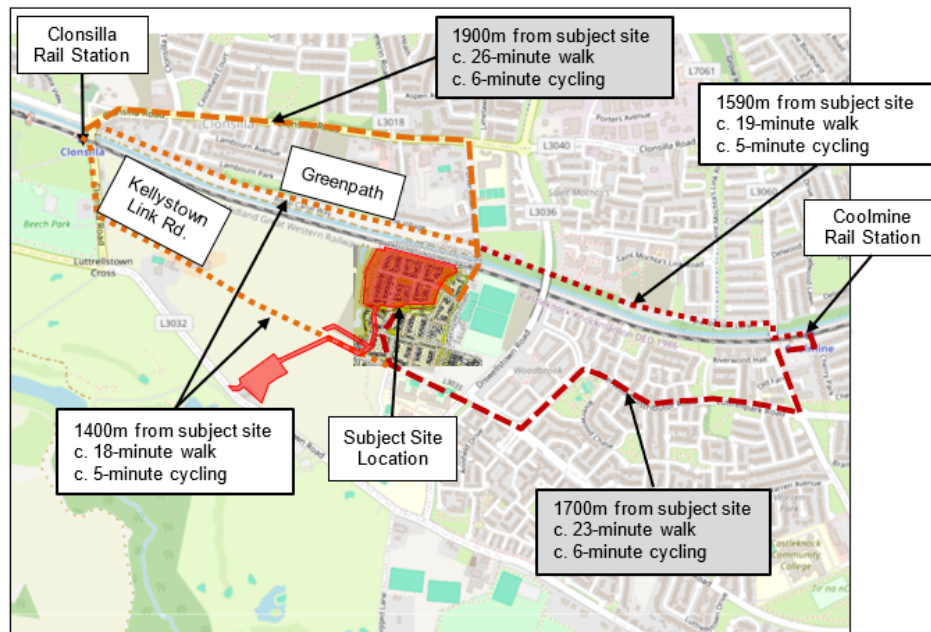


Figure 14.10: Location of Clonsilla and Coolmine Train Station and their routes from the Site (Source: Google maps and Transport for Ireland)

As can be seen in **Figure 14.10** above, there are several ways to arrive to both stations.

Clonsilla Railway Station is located circa 1900m to the north-west of the site and Coolmine Railway Station is located some 1700m to the north-east of the site. These distances can be reached in approx. 26-minute walking or c. 6-minute cycling, and in c. 23-minute walking or some 5-minute cycling, respectively.

Furthermore, there is a greenpath along the north bank of the canal which may reduce the distance and walking time, currently closed. Moreover, when the future Kellystown Link Road is completed, it will be possible to access Clonsilla Railway Station through the Kellystown developments.

The rail route serving Clonsilla and Coolmine Rail Station is the Dublin - M3 Parkway – Longford. The first train leaves Clonsilla Rail Station at 5:52 AM and it has a frequency of 3 to 20 minutes on weekdays. On Saturday, the first train leaves the station at 6:24 AM and has a frequency of 3 to 20 minutes. On Sunday the first train leaves the station at 9:12 AM and has a frequency of 3 to 20 minutes.

Nearest Car Sharing Facilities (GoCar)

Figure 14.11 below shows that the location of the closest GoCar station is located 1.5km (20-minute walk) from the subject development site at Coolmine Industrial Estate.

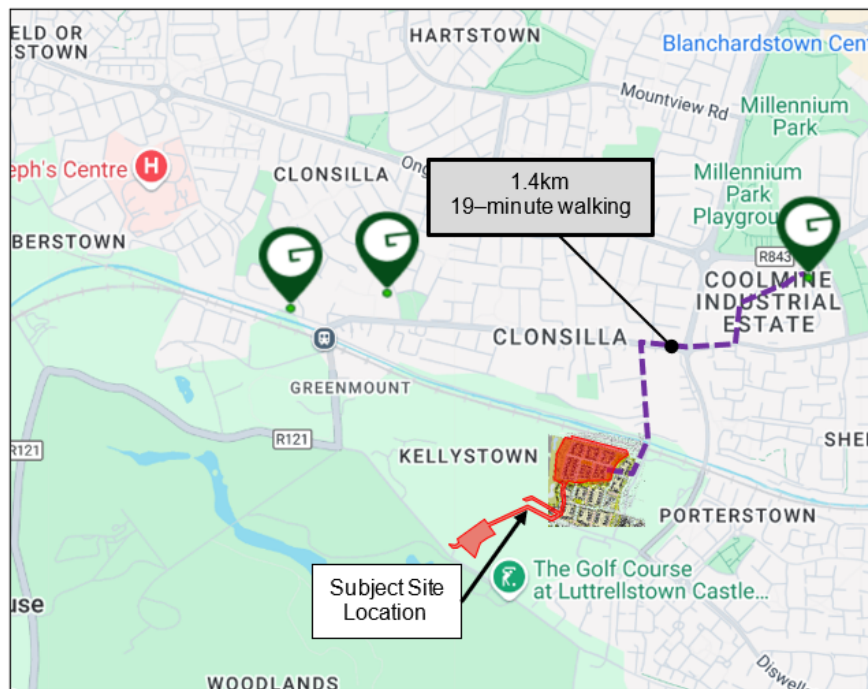


Figure 14.11: Location of the Nearest GoCar Stations (Source: Go Car website)

It should be noted that, as part of the Kellystown Development –Phase 1– (Planning Ref. ABP-312318-21, as amended by Ref. LRD0034-S3), which is currently under construction, it is anticipated that GoCar will provide between four and six shared car club vehicles. A letter confirming GoCar’s intention to supply these vehicles is included in Appendix A of the Traffic and Transport Assessment (TTA), which was prepared by Waterman Moylan Consulting Engineers and submitted as part of the planning application (Ref. ABP-312318-21). The proposed GoCar facilities within Kellystown Development – Phase 1– will offer convenient and sustainable transport options, enhancing accessibility for future residents of the subject site.

Planned Future Receiving Environment

BusConnects

Bus Connects project currently being promoted by the National Transport Authority aims to deliver a much-enhanced bus service to the Greater Dublin Area (GDA). Some of the route improvements identified in the BusConnects plan are already in place. According to BusConnects the above route types can be defined as follows:

- Spines routes: are very frequent routes made up of individual bus services that are timetabled to work together over their common sections.
- Radials routes: are other services that operate into Dublin city centre. These services are not part of any Spine and operate to their own timetable.
- Orbitals routes: provide connections between suburbs, without having to travel into the city centre.
- Local routes: provide connections to Local centres and link to onward transport connections.
- Peak routes operate during peak travel periods, providing additional capacity along key bus corridors. Express routes are direct services from outer suburbs to the city centre during peak hours, serving limited stops to get passengers to their destination faster.

The routes proposed to serve the subject development area are the Radial Route 34 and Peak-Only Route P65 (see **Figure 14.12** below). A summary of the frequency of these proposed routes is presented in table below.

Route No.	From	To	AM Weekday Frequency (07:00 to 09:00)	PM Weekday Frequency (17:00 to 19:00)
34	Blanchardstown Centre	Burlington Road	Every 8 to 15 minutes	Every 15 to 20 minutes
P65	Diswellstown Road	City Centre	2 trips from 7 to 8 AM	2 trips from 17 to 18 PM

Table 14.3: Bus Connects Frequencies (Source: Bus Connects website)

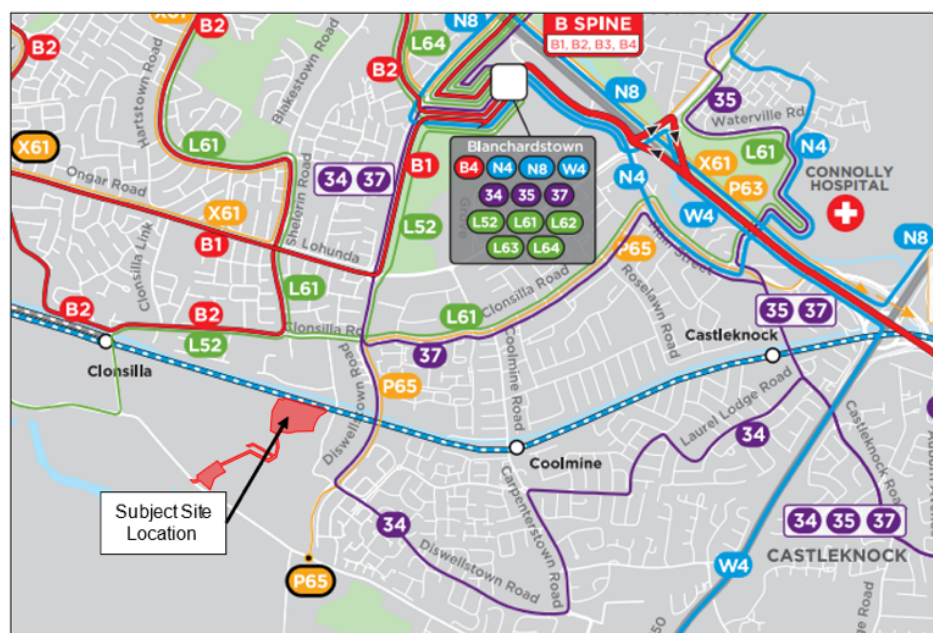


Figure 14.12: Bus Connects Routes Map (Source: Bus Connects website)

DART+ West route

The DART+ West programme is included within the 10-year horizon for the National Development Plan 2021 – 2030. It includes for provision of fast, high-frequency electrified service to the Maynooth Line.

The programme's ambitions are to increase train frequency to a 5-minute all day frequency and to lengthen all trains to eight carriages. This will deliver a more efficient transport system, which will encourage people to shift away from private car usage and consequently alleviate road congestions. In addition, it is also part of the programme to eliminate existing level crossings on the Maynooth Line and to provide appropriate road relief infrastructure when necessary. The closure of the Porterstown Road level crossing is included in the Kellystown Development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3), which comprises a Pedestrian and Cycle Bridge with nested ramps is the emerging preferred option for this location.

According to the DART+ website, construction of the project was scheduled to begin in 2024, with the service expected to be fully operational by 2029. However, the project has not yet stated, and therefore it is expected to be delayed by one or two years. It is therefore anticipated that the DART+ West route will be constructed and fully operational by 2031.

The latest information regarding the DART+ West Rail is dated on 31 July 2024, which indicated that An Bord Pleanála has approved the plan to extend the DART network to Maynooth in County Kildare, marking a significant milestone for the DART+ West project. This approval comes more than two years after Irish Rail first sought permission. Irish Rail has expressed strong approval of this decision, emphasizing the benefits of providing a sustainable, electrified, and more frequent rail service to customers, which will enhance capacity on the Maynooth and M3 Parkway to city centre rail corridors.

In addition, it is anticipated that a new application for the DART+ Depot will be submitted in the future. While the depot was originally proposed as part of the DART+ West project, it was excluded from the Railway Order approval by An Bord Pleanála. A new project has since commenced and is currently at an early stage. Technicians from the DART+ Programme are presently assessing a number of potential sites as part of the process to identify a preferred location. The options assessment has taken into account the full extent of the DART network, including the three DART+ Programme projects: DART+ Coastal, DART+ Southwest, and DART+ West. Furthermore, the study area for the DART+ Depot site selection has been extended to include locations within a 10 km radius of the outermost boundaries of the previous DART+ projects.

Walking and cycling

Objective DA 1.3 of the Kellystown Local Area Plan aims to “promote and encourage increased levels of pedestrian and cycle connectivity between the subject lands and the surrounding areas through the provision of new pedestrian and cycle links.”

“Figure 7.11: LAP Walking & Cycling Network” in the Kellystown Local Area Plan, reproduced in **Figure 14.13** below, outlines a comprehensive walking and cycling network proposed within Kellystown lands and its external connection points to the existing wider network.

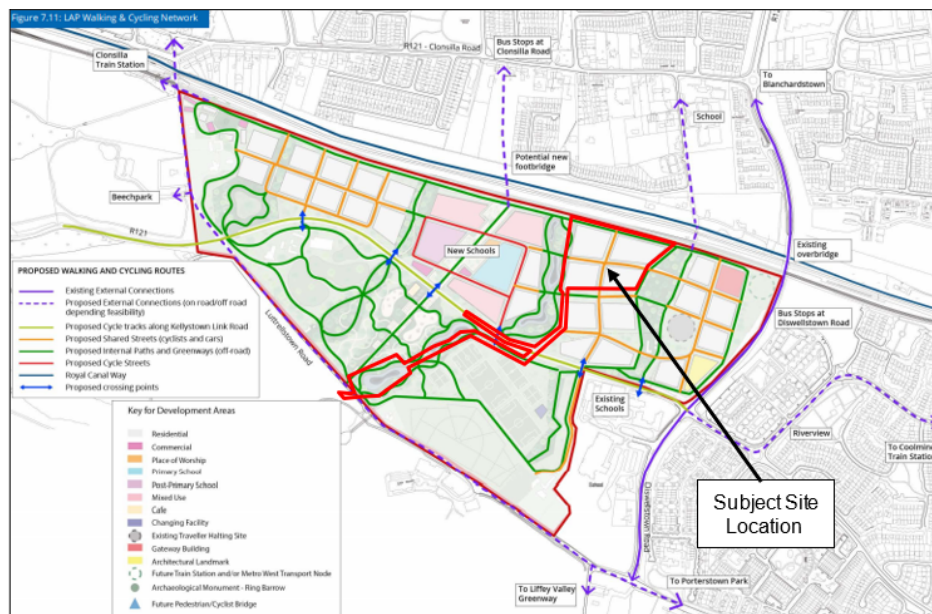


Figure 14.13: Walking and Cycling Proposed within the Kellystown Local Area Plan (Source: Reproduction of ‘Figure 7.11 - Kellystown Local Area Plan’)

Road Hierarchy

Objective 7.4 of the Kellystown LAP is to “Ensure delivery of the appropriate road infrastructure in line with the LAP road hierarchy of streets to develop the lands to their full potential. The design should be in accordance with the principles outlined in the Design Manual for Roads and Streets (DMURS) and the NTA’s National Cycle Manual.”

Figure 14.13 below reproduces “Figure 7.10: LAP Road Hierarchy” of the Kellystown LAP which shows the internal road hierarchy for the overall Kellystown area, and the main roads connected to it. As illustrated, the proposed roads are predominately Local with the Kellystown Link Road being a Regional Road.

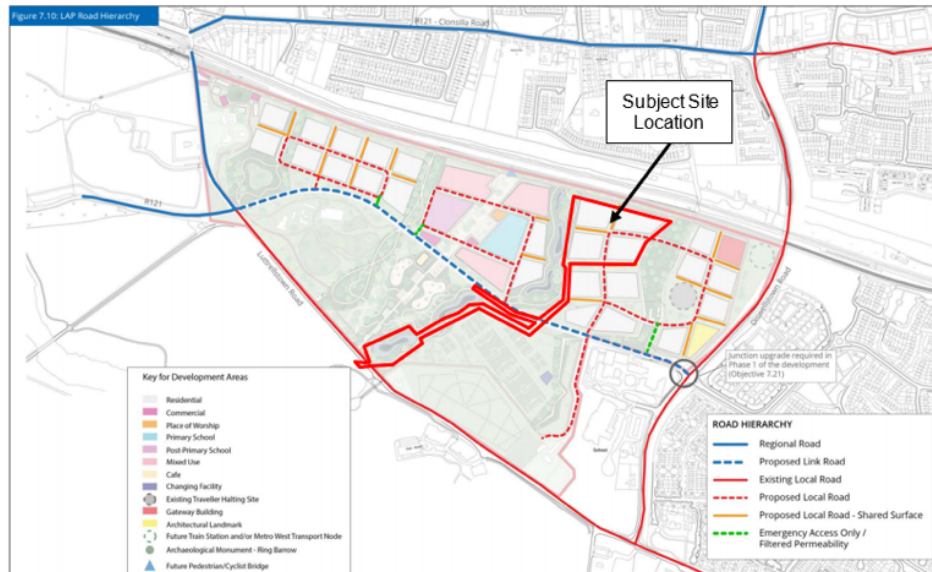


Figure 14.14: Road Hierarchy Proposed within the Kellystown Local Area Plan (Source: Figure 7.10 Kellystown Local Area Plan)

Junction Upgrade – Diswellstown Road / Kellystown Link Road

As part of the Kellystown Development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3), the upgrade of junction Diswellstown Road / Kellystown Link Road (Junction 4 in **Figure 14.4** above) was proposed.

According to the Traffic and Transport Assessment prepared for the planning application, the new layout has been developed in accordance with comments received from Fingal County Council and the An Bord Pleanála Inspector's reports.

The proposed upgraded junction layout is illustrated in figure **14.15** below.



Figure 14.15: Proposed Junction Layout – Diswellstown Road / Kellystown Link Road (Source: Kellystown Development -Phase 1-, Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3)

Part 8 – Kellystown Link Road

As part of the Fingal Development Plan 2017 - 2023, the main road improvement proposed in the Kellystown area is the extension of the Kellystown Link Road further west, providing a link from Diswellstown Road to the Clonsilla Road (R121). This will enhance road safety, improve cycle and pedestrian connectivity and enable the development of a new urban neighbourhood in the Kellystown LAP area.

The first phase of the Kellystown Link Road has been previously completed to serve the Porterstown Schools and the future burial ground site and currently extends for 280 metres to the west of the signalised junction with Diswellstown Road.

As part of the 'Part 8 - Kellystown Link Road', the road improvements proposed along the subject development site frontage include:

- Construction of a single carriageway road with footpaths and pedestrian crossings points at convenient locations.
- Construction of dedicated cycle lanes along both sides of the Kellystown Link Road.
- Widening the existing portion of the road from the signalised junction with Diswellstown Road up until the proposed main site entrance to accommodate an additional lane for eastbound traffic, which will operate as a left turning lane approaching the signalised junction with Diswellstown Road.
- Provision of an additional left turning lane on the north-eastern approach of Kellystown Link Road / Diswellstown Road signalised junction.

The road improvements proposed along the site frontage under the 'Part 8 Kellystown Link Road' is illustrated in **Figure 14.16** below – extracted from 'Public Engagement – Emerging Route Sheet 5 of 5 drawing' prepared by Clifton Scannell Emerson Associates (CSEA) in August 2020 on behalf of Fingal County Council.

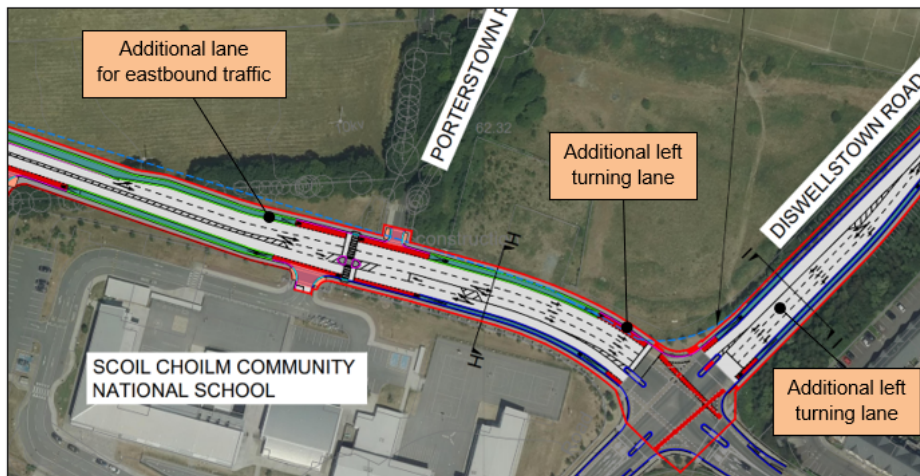


Figure 14.16: Kellystown Link Road (Source: Public Engagement – Emerging Route Sheet 5 of 5 drawing')

Porterstown Road Level Crossing

Kellystown Local Area Plan sets out the closure of the Old Porterstown Road level crossing and the creation of a walking and cycling bridge over the rail. Vehicular access to the existing properties along the Old Porterstown Road will be provided along the proposed Kellystown Link Road and the proposed access road to Development Area 1. **Figure 14.17** below shows the location of the Porterstown Road Level Crossing with the surrounding area considering the subject site.

A key Movement and Transport Objectives included in the Kellystown Local Area plan is **“Objective 7.6: Provide appropriate pedestrian/cyclist facilities at Porterstown level crossing.”**

The Kellystown Development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3) has considered this chance in the road hierarchy and had proposed an emergency road use with priority for pedestrians and cyclists. The proposed junction Porterstown Road and Kellystown Link Road is shown in **Figure 14.18** below.

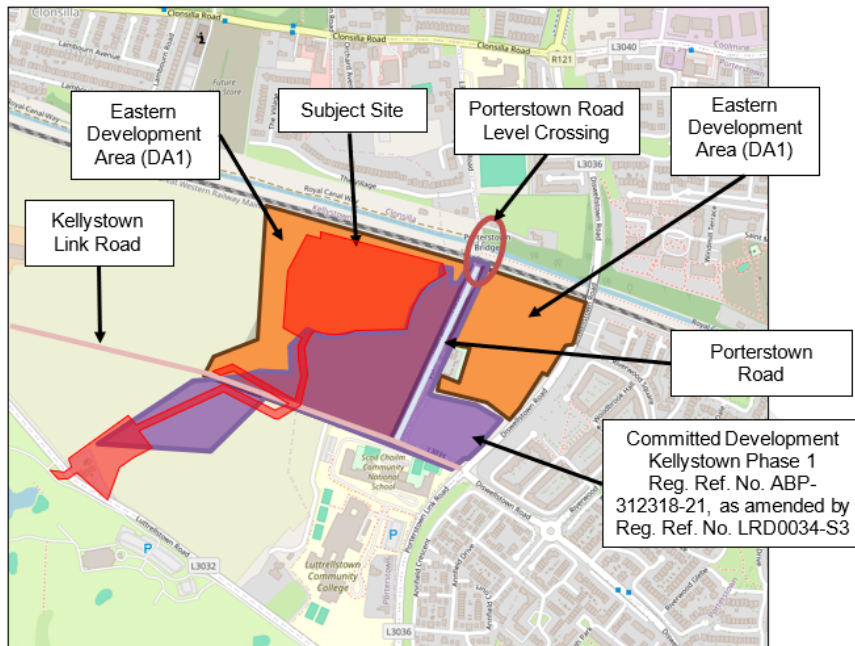


Figure 14.17: Porterstown Road Level Crossing (Source: Open Street Map)

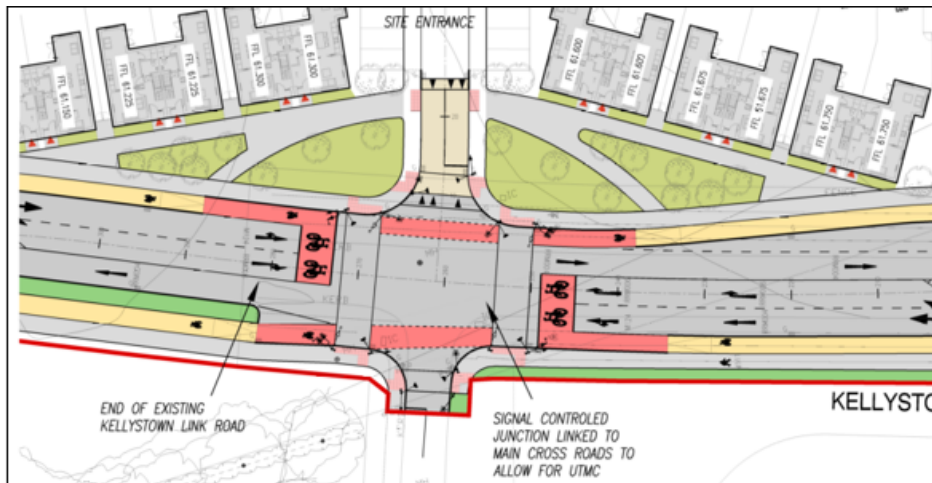


Figure 14.18: Proposed junction of Porterstown Road and Kellystown Link Road (Source: Kellystown Development -Phase 1-, Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3)

14.3.2 Proposed Development - Plot 2 (St. Mochta's LRD).

The site is situated in Kellystown, Clonsilla, south of the Royal Canal and the Dublin-Maynooth railway line and west of Diswellstown Road.

Land use

According to the Fingal Development Plan 2023 – 2029 (FDP), the subject development site is in an area designated with Zoning Objective “RA – Residential Area: Provide for new residential communities subject to the provision of the necessary social and physical infrastructure”. **Figure 14.19** below presented the land use taken from Blanchardstown South Map - Sheet No. 13 of the Fingal Development Plan 2023 - 2029.

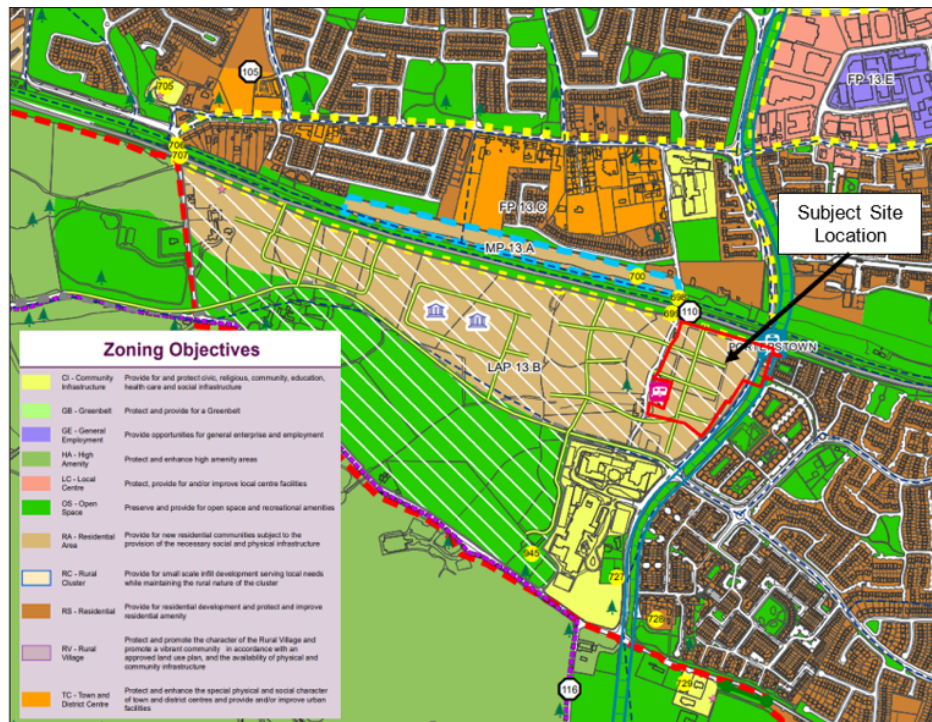


Figure 14.19: Site Location – Land Use (Source: Sheet No. 13 of the Fingal Development Plan 2023-2029)

Site Location and Description

The subject site, located in Kellystown, Clonsilla, Dublin 15, forms part of the Kellystown Development Masterplan which includes an important residential area with some 1,900 no. residential units, a primary school for c. 600 no. pupils, a secondary school for c. 1,000 no. pupils and a local centre of 2,500sqm. All developed on approx. 65 hectares the lands located in Kellystown.

The subject site is bounded to the west and south by the under construction Kellystown development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3), to the east by the elevated Diswellstown Road and to the north by railway infrastructure. The subject development is proposed to be built on land currently occupied by St Mochta's football club. As part of a separate planning application, a new St Mochta's sportsground is proposed to the south of the site.

Figure 14.20 below shows the subject site, located within the Kellystown Development Masterplan, and its access roads through the under construction Kellystown development -Phase 1-.

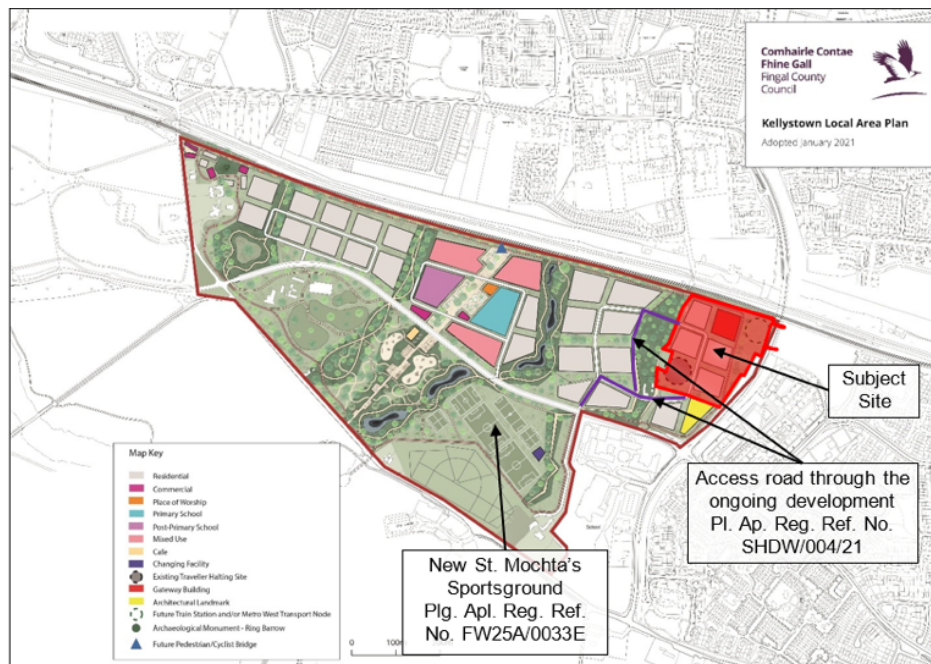


Figure 14.20: Site Access Roads through Kellystown Development Masterplan (Source: Kellystown Development Masterplan)

Local Road Network

Roads

Vehicular access to the subject site is proposed off the western extension of Kellystown Link Road via the internal road of the under construction Kellystown Development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3).

The Kellystown Link Road is currently single carriageway 10 metres wide that extends for approximately 280 metres from the signalised crossroads with Diswellstown Road & Porterstown Link Road. As outlined in the Kellystown Local Area Plan, the Kellystown Link Road will be extended westwards to the junction of the Clonsilla Road (R121) and Lutrellstown Road.

This 280m section of Kellystown Link Road currently provides access to the northern entrance of Scoil Choilm Community National School and links to the road serving the new burial ground site, further west.

Figure 14.21 below shows the main roads around the subject development.

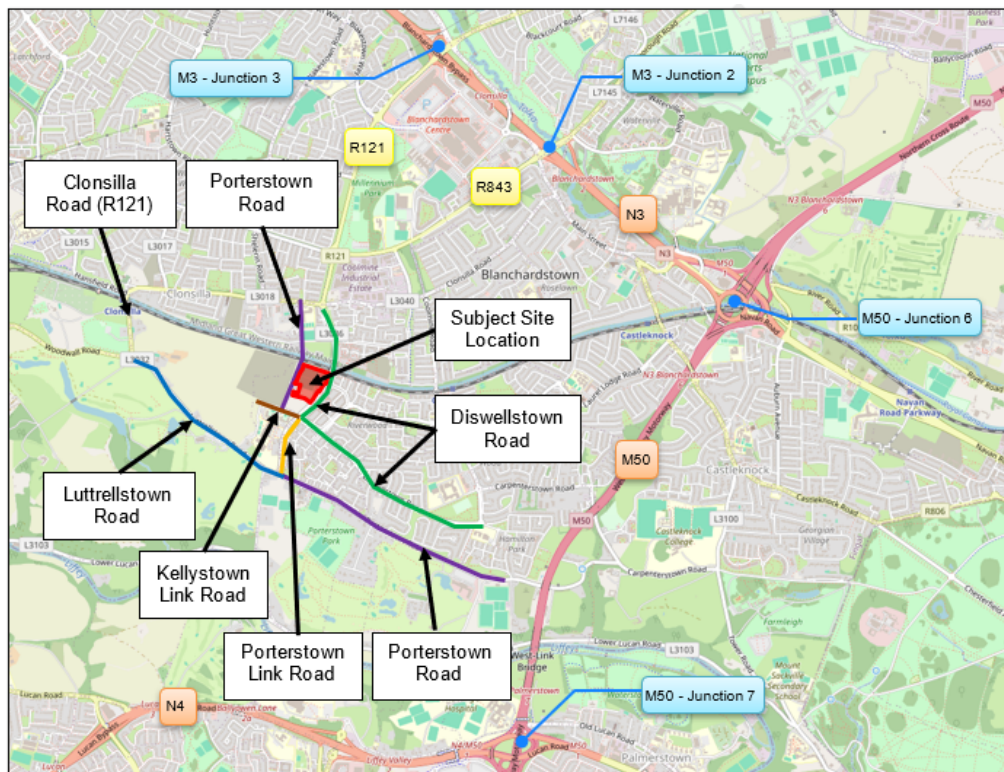


Figure 14.21: Site Location – Surrounding Road (Source: Open Street Maps)

Approximately 100m west of the signalised crossroads at the intersection of Kellystown Link Road and Diswellstown Road (Junction 4), is a priority-controlled junction between Kellystown Link Road & Porterstown Road. The width of Kellystown Link Road on this section is 10.0 metres wide, with footpaths and dedicated cycle lanes extending along both sides.

Porterstown Road is a single carriageway road running south-north. This road is approximately 730m in length from the priority-controlled junction with Kellystown Link Road through to a priority-controlled junction with Clonsilla Road (R121). This road crosses the railway line via an automatic level crossing. To the south of the railway line, Porterstown Road comprises a carriageway of approximately 6.5m wide with footpaths running along the western side of the carriageway for most of its length and along the eastern side for some meters. No cycle lane is provided.

Diswellstown Road (S-N) is a single carriageway road running south-north for approximately 800m from the signalised crossroads with Kellystown Link Road through to a four-armed roundabout with R121 Clonsilla Road to the north of the railway line. This road, which crosses the railway line via an elevated bridge, currently comprises a carriageway of 7.0m wide with footpaths and cycle lanes provided along both sides.

Diswellstown Road, to the south of the signalised crossroads with Kellystown Link Road, extends approximately 400m towards the signalised T-junction with Luttrellstown Road. This section of the Diswellstown Road comprises the same configuration as the northern section, with a 7.0 m wide carriageway with footpaths and cycle lanes along both sides. Currently, this southern section provides a dedicated right turning pocket lane and signalised pedestrian crossing which facilitate access to Luttrellstown Community College and Scoil Choilm Community National School located to the west.

The M50 Motorway is an important orbital motorway around Dublin which is subject to a speed limit of 100kph. It is a 40km, C-shaped ring around Dublin that connects all the National Primary Roads and carries more than 115,000 vehicles per day.

The N3 road is a national primary road in the Republic of Ireland, running between Dublin, Cavan and the border with County Fermanagh. The A509 and A46 roads in Northern Ireland form part of an overall route connecting to Enniskillen, and northwest to the border again where the N3 reappears

to serve Ballyshannon in County Donegal. The route, known as the Navan Road, as it leaves Dublin, starts at its junction with the M50 motorway (junction 6). The N3/M3 cross the following counties: Fingal, Meath, and Cavan Donegal in Ireland, and Enniskillen in Northern Ireland.

The N4 road is a national primary road in Ireland, running from Dublin to the northwest of Ireland and Sligo town. The M6 to Galway diverges from this route after Kinnegad, while the N5 to Westport diverges at Longford town. This national road originates at an intersection with the M50 motorway at Junction 7. This is also Junction 1 of the N4/M4. The road has three lanes and a bus lane in each direction between the M50 and Junction 5 which is also the start of the M4 motorway at Leixlip. The N4/M4 cross the following Counties: Kildare, Meath, Westmeath, Longford, Leitrim, and Roscommon

Junctions

The primary junctions which currently provide access to the subject development site are:

- **Junction 1** is a priority T-junction located at the intersection of R121 Clonsilla Road & Porterstown Road to the north of the subject site.
- **Junction 2** is a four-armed Roundabout located at the intersection of Clonsilla Road (R121) / Diswellstown Road to the north-east of the subject site.
- **Junction 3** is a priority T-junction located at the intersection of Kellystown Link Road & Porterstown Road to the south of the subject site.
- **Junction 4** is a signalised crossroads located at the intersection of Kellystown Link Road & Diswellstown Road to the west of the subject site.
- **Junction 5** is a four-armed roundabout at the intersection of Diswellstown Road, Riverwood Road & Fernleigh Drive to the east of the site.
- **Junction 6** is a signalised T-junction located at the intersection of Diswellstown Road & Luttrellstown Road to the south of the site.

As part of the Planning Application Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3, a new layout for Junction 4 is proposed, which was designed to serve all potential traffic flows to/from the Eastern Development Area (EA1). Further information regarding the Development Areas contained within the confines of the Kellystown Local Area Plan is presented in **Section 14.3.3** below.

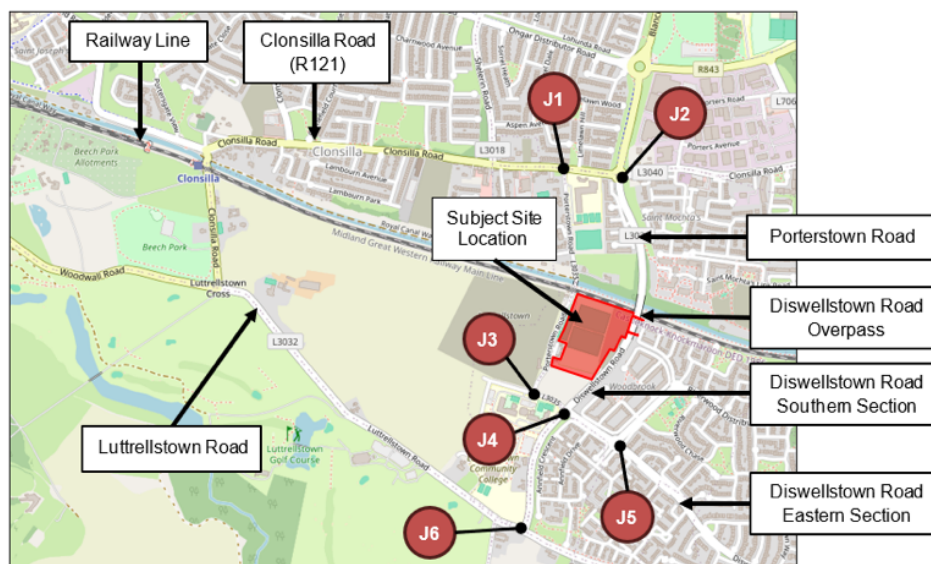


Figure 14.22: Primary Local Junctions (Source: Open Street Map)

Existing Traffic Condition

To quantify the volumes of traffic movements at the above key junctions, a traffic survey was commissioned by the applicant and carried out by TRACSIS on Tuesday 14th January 2025 for a period of 24 hours.

The surveys were carried out on the above date to ensure that the flows were representative of a normal term and therefore not affected by school holidays or other public holidays or events. As such, they provide a reasonable representation of a neutral month during a period of normal school and work activity. The surveys are designed to provide representative values covering morning and evening periods during normal traffic conditions.

The results of the survey indicate that the peak traffic levels through the junctions occurred between the 08:00 and 09:15 during the morning and between the 16:45 and 18:00 during the evening with the following detail:

- Junction 1: AM peak hour from 08:00 to 09:00 and PM peak hour from 16:45 to 17:45
- Junction 2: AM peak hour from 08:00 to 09:00 and PM peak hour from 17:15 to 18:15
- Junction 3: AM peak hour from 08:00 to 09:00 and PM peak hour from 16:45 to 17:45
- Junction 4: AM peak hour from 08:00 to 09:00 and PM peak hour from 16:45 to 17:45
- Junction 5: AM peak hour from 08:15 to 09:15 and PM peak hour from 17:15 to 18:15
- Junction 6: AM peak hour from 08:15 to 09:15 and PM peak hour from 17:00 to 18:00

For the purposes of this report, it has been assumed that the peak hours among the junctions are the same and occur between 08:00 and 09:00 in the morning and between 16:45 and 17:45 in the evening.

The peak hour volumes through each junction are shown in **Figure 14.23** below.

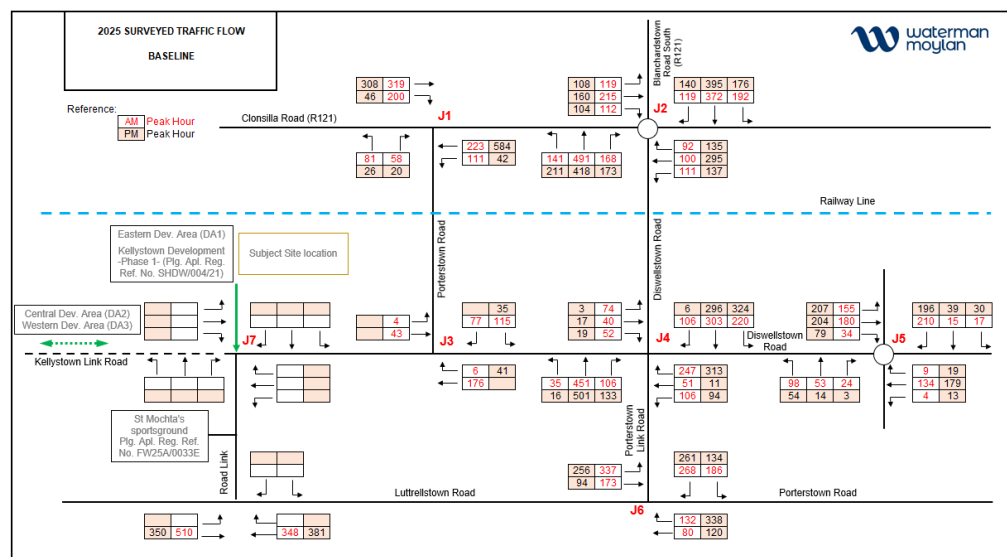


Figure 14.23: 2025 Surveyed Traffic Flows

Multi-modal access to the site

Pedestrian Infrastructure and Walking Accessibility

The key to pedestrian accessibility is the provision of short, convenient, and safe routes. Walking is the most common mode of transport. Almost all journeys involve some walking, so improvements to pedestrian facilities can have a wide impact.

The “*Guidelines for Providing for Journeys on Foot*” published by the *Institution of Highways & Transportation* in 2000, indicates that the acceptable walking distances vary between individuals and

circumstances. These include an individual's fitness, physical ability, and personal motivation; the size of the city itself and the quality of the surrounding footpath network. Furthermore, the document proposes walking distances and times based on an average walking speed of 1.4 metres per second (approximately 400 metres in five minutes). Table below provides a summary of these suggestions.

	Town Centre	Commuting / School / Site Seeing	Elsewhere
Desirable	200m (2.5-minutes)	500m (6-minutes)	400m (5-minutes)
Acceptable	400m (5-minutes)	1,000m (12-minutes)	800m (12-minutes)
Preferred Maximum	800m (10-minutes)	2,000m (24-minutes)	1,200 (15-minutes)

Table 14.4: Ideal Walking Distances (Source: Guidelines for Providing for Journeys on Foot - Institute of Highways and Transportation)

The existing pedestrian facilities in the surrounding area comprise an inter-connected network of footways linking the various neighbourhoods to each other, to several schools, grocery stores, public transport network and to the Coolmine industrial park.

Figure 14.24 below illustrates the considerable extent of the pedestrian catchment areas accessible from the subject development, for different walking times: 10 minutes, 15 minutes, and 24 minutes.

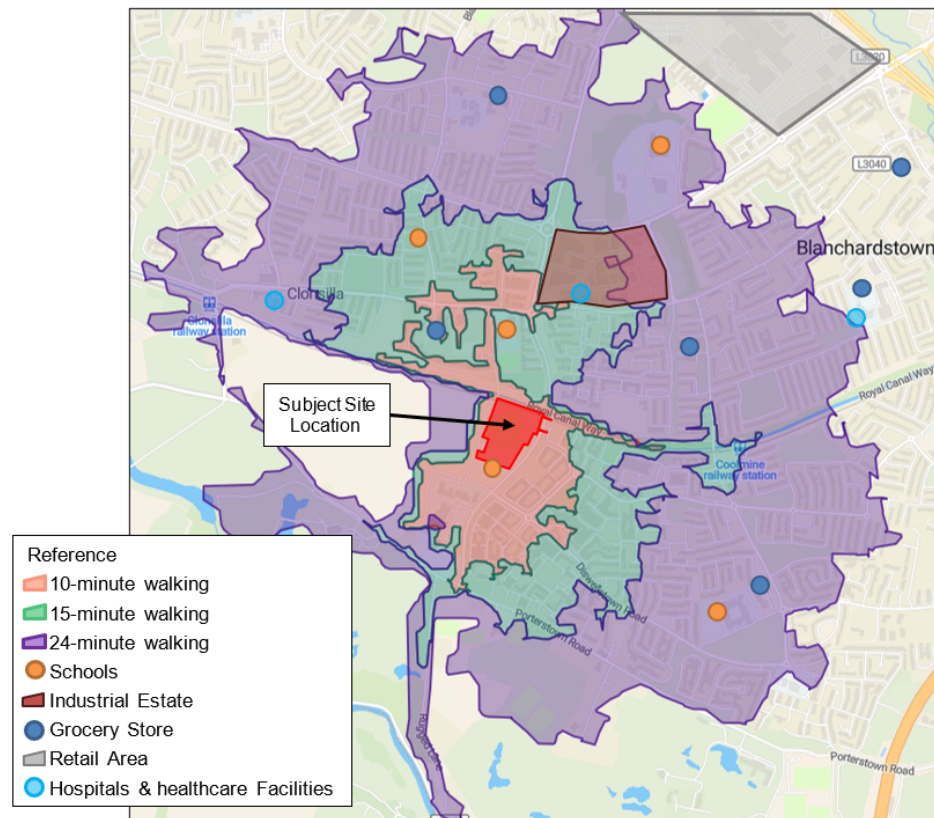


Figure 14.24: Site Accessibility – Isochrone map indicating walking accessibility (Source: Smappen & Google Maps)

Cycle Infrastructure and Cycling Accessibility

The vicinity of the subject development is equipped with a variety of cycling infrastructure, as shown in **Figure 14.25** below.



Figure 14.25: Existing Cycle facilities (Source: Open Street Map)

A similar catchment exercise has been conducted for the cycling mode of transport, in accordance with the methodology previously employed for walking. A 10-minute cycle equates to a 24-minute walk and provides access to the Coolmine and Clonsilla train stations and to the surrounding public network.

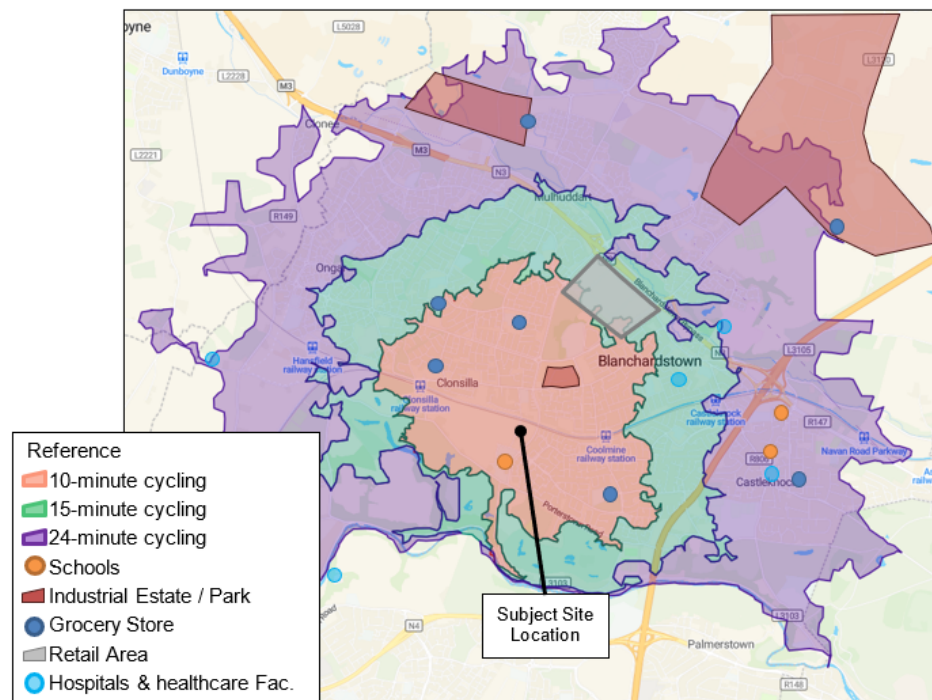


Figure 14.26: Site Accessibility – Isochrone map indicating cycling accessibility (Source: Smappen & Google Maps)

Bus Network

The nearest bus stops in relation to the subject development is situated along Diswellstown Road (Eastern Section). These are Bus Stop No. 7031 (eastbound) and No. 4895 (westbound). The bus Stops

are served by the routes 37 and 70n. The distance from the subject development is approximately 450 metres (or 5-minute walking).

Figure 14.27 below shows the locations of the Bus Stops and walking distances from the development.

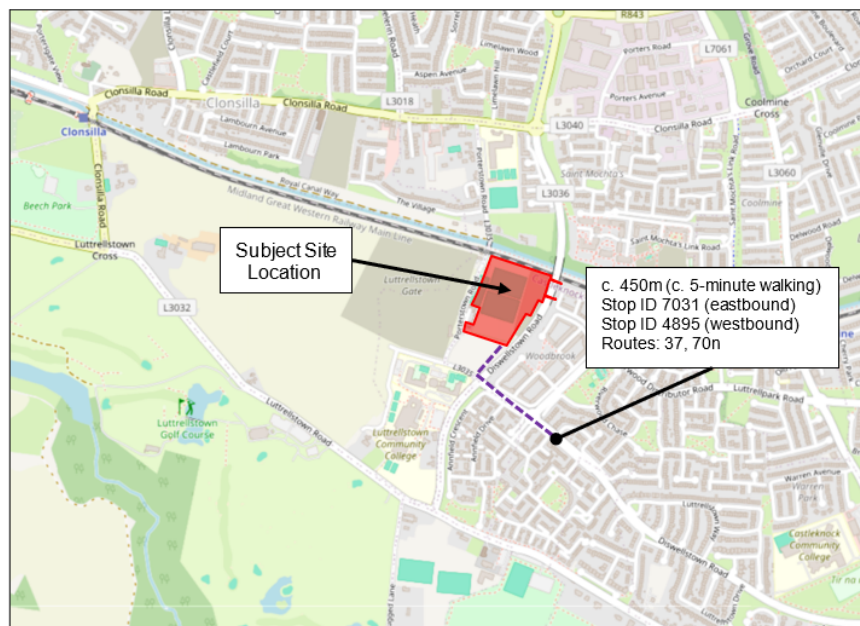


Figure 14.27: Location of the nearest Bus Stops (Source: Google Maps and Transport for Ireland)

Table below shows the Bus Frequencies for each Bus route in the area.

Bus Route	Description	frequency
70n	Westmoreland Street Towards Tyrrelstown	Monday to Thursday: No service Friday to Saturday: 00:00, 02:00, 04:00 Sunday: No service
37	Blanchardstown Centre Towards Baggot St. / Wilton Terrace	AM Weekday Frequency Every 5 to 10 minutes PM Weekday Frequency Every 20 minutes Weekend Every 30 minutes
	Baggot St. / Wilton Terrace Towards Blanchardstown Centre	AM Weekday Frequency Every 20 to 35 minutes PM Weekday Frequency Every 5 to 10 minutes Weekend Every 30 minutes

Table 14.5: Local Bus Routes Frequencies (Source: Transport for Ireland)

Rail Network

There are two rail stations in the vicinity of the subject development site, Clonsilla Rail Station and Coolmine Rail Station. The location of both stations and their relative distance from the subject development site are shown on the in **Figure 14.28** below.

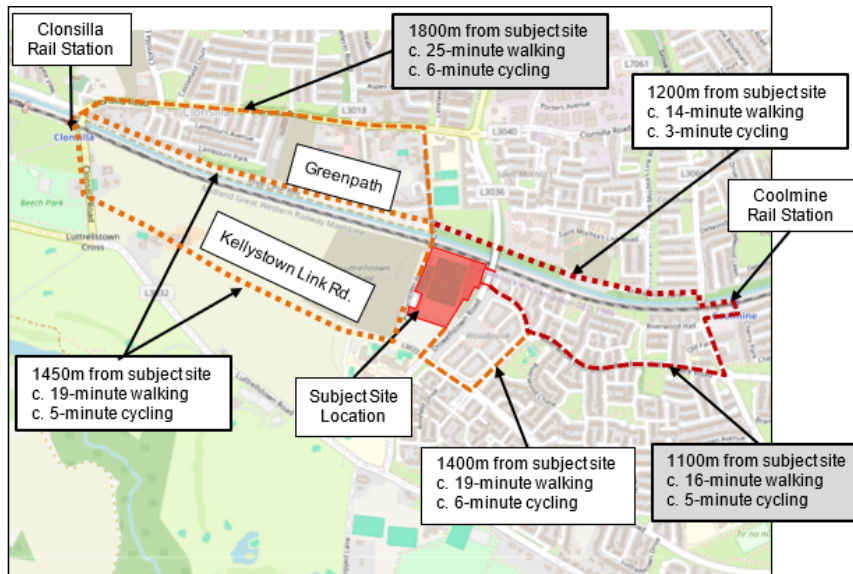


Figure 14.28: Location of Clonsilla and Coolmine Train Station and their routes from the Site (Source: Google maps and Transport for Ireland)

As can be seen in figure above, there are several ways to arrive to both stations.

Clonsilla Railway Station is located approximately 1800m to the north-west of the site and Coolmine Railway Station is located approx. 1100m to the north-east of the site. These distances can be reached in approx. 25-minute walking or c. 6-minute cycling, and in c. 14-minute walking or some 3-minute cycling, respectively.

Furthermore, when the future Kellystown Link Road is completed, it will be possible to access Clonsilla Railway Station through the Kellystown developments.

The rail route serving Clonsilla and Coolmine Rail Station is the Dublin - M3 Parkway – Longford. The first train leaves Clonsilla Rail Station at 5:52 AM and it has a frequency of 3 to 20 minutes on weekdays. On Saturday, the first train leaves the station at 6:24 AM and has a frequency of 3 to 20 minutes. On Sunday the first train leaves the station at 9:12 AM and has a frequency of 3 to 20 minutes.

Nearest Car Sharing Facilities (GoCar)

Figure 14.29 below shows that the location of the closest GoCar station is located 1.6km (23-minute walk) from the subject development site at Coolmine Industrial Estate.

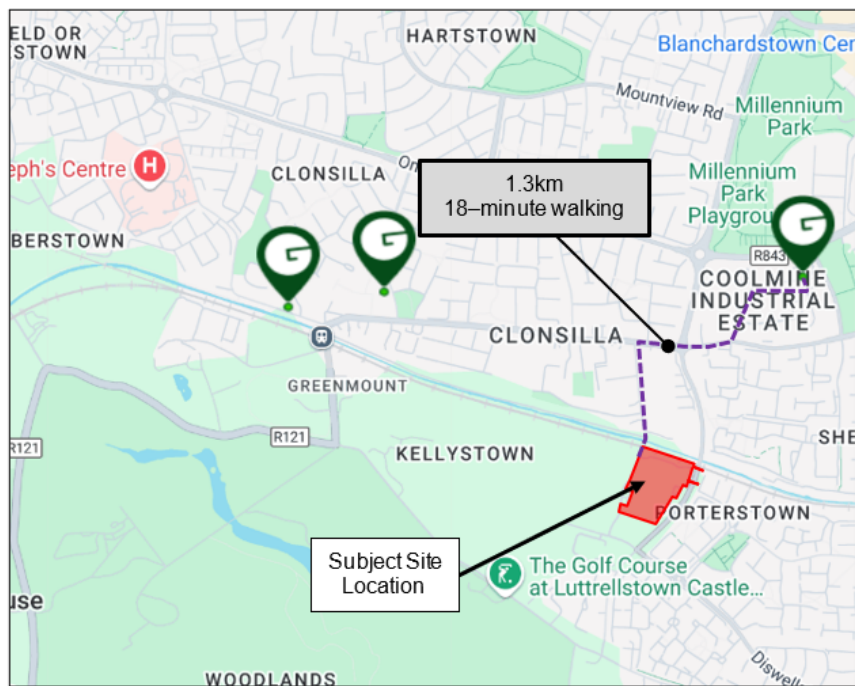


Figure 14.29: Location of the Nearest GoCar Stations (Source: Go Car website)

It should be noted that, as part of the Kellystown Development –Phase 1– (Planning Ref. ABP-312318-21, as amended by Ref. LRD0034-S3), which is currently under construction, it is anticipated that GoCar will provide between four and six shared car club vehicles. A letter confirming GoCar’s intention to supply these vehicles is included in Appendix A of the Traffic and Transport Assessment (TTA), which was prepared by Waterman Moylan Consulting Engineers and submitted as part of the planning application (Ref. ABP-312318-21). The proposed GoCar facilities within Kellystown Development – Phase 1– will offer convenient and sustainable transport options, enhancing accessibility for future residents of the subject site.

Planned Future Receiving Environment

BusConnects

Bus Connects project currently being promoted by the National Transport Authority aims to deliver a much-enhanced bus service to the Greater Dublin Area (GDA). Some of the route improvements identified in the BusConnects plan are already in place. According to BusConnects the above route types can be defined as follows:

- Spines routes: are very frequent routes made up of individual bus services that are timetabled to work together over their common sections.
- Radials routes: are other services that operate into Dublin city centre. These services are not part of any Spine and operate to their own timetable.
- Orbitals routes: provide connections between suburbs, without having to travel into the city centre.
- Local routes: provide connections to Local centres and link to onward transport connections.
- Peak routes operate during peak travel periods, providing additional capacity along key bus corridors. Express routes are direct services from outer suburbs to the city centre during peak hours, serving limited stops to get passengers to their destination faster.

The routes proposed to serve the subject development area are the Radial Route 34 and Peak-Only Route P65 (See **Figure 14.30** below). A summary of the frequency of these proposed routes is presented below.

Route No.	From	To	AM Weekday Frequency (07:00 to 09:00)	PM Weekday Frequency (17:00 to 19:00)
34	Blanchardstown Centre	Burlington Road	Every 8 to 15 minutes	Every 15 to 20 minutes
P65	Diswellstown Road	City Centre	2 trips from 7 to 8 AM	2 trips from 17 to 18 PM

Table 14.6: Bus Connects Frequencies (Source: Bus Connects website)

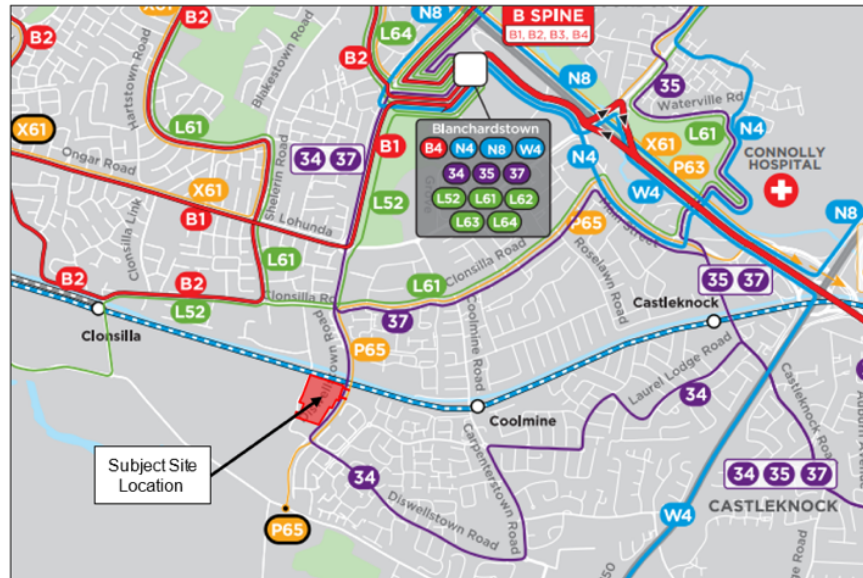


Figure 14.30: Bus Connects Routes Map (Source: Bus Connects website)

DART+ West route

The DART+ West programme is included within the 10-year horizon for the National Development Plan 2021 – 2030. It includes for provision of fast, high-frequency electrified service to the Maynooth Line.

The programme's ambitions are to increase train frequency to a 5-minute all day frequency and to lengthen all trains to eight carriages. This will deliver a more efficient transport system, which will encourage people to shift away from private car usage and consequently alleviate road congestions. In addition, it is also part of the programme to eliminate existing level crossings on the Maynooth Line and to provide appropriate road relief infrastructure when necessary. The closure of the Porterstown Road level crossing is included in the Kellystown Development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3), which comprises a Pedestrian and Cycle Bridge with nested ramps is the emerging preferred option for this location.

A portion of the subject site is designated for DART+ West infrastructure in its northwest corner (See **Figure 14.31** below). This area aligns with the proposed level crossing design for the Porterstown pedestrian crossing station (See **Figure 14.32** below).



Figure 14.31: Subject Site – Area assigned to Dart+West Infrastructure

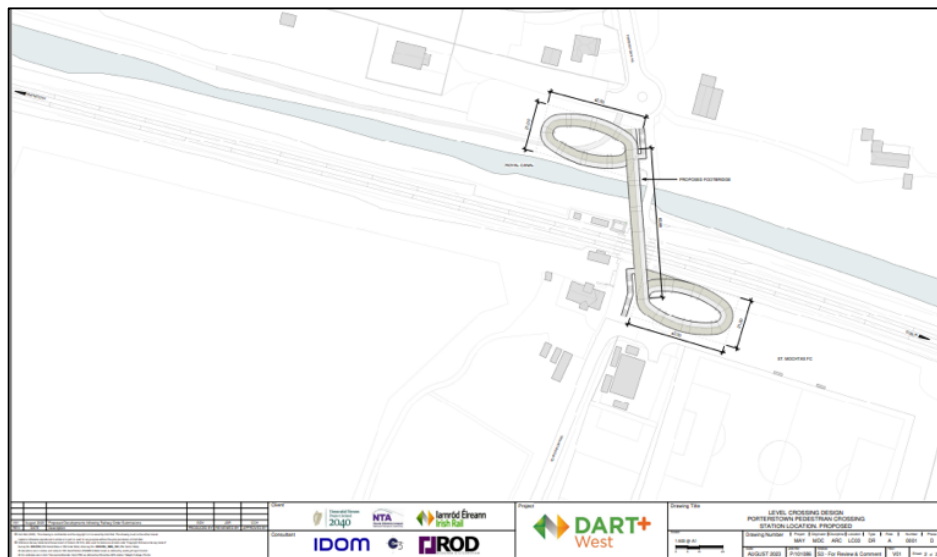


Figure 14.32: Proposed level crossing design Porterstown pedestrian crossing station location (Source: Dart+West, Drawing number: MAY-MDC-ARC-LC03-DR-A-0001-D)

The latest information regarding the DART+ West Rail is dated on 31 July 2024, which indicated that An Bord Pleanála has approved the plan to extend the DART network to Maynooth in County Kildare, marking a significant milestone for the DART+ West project. This approval comes more than two years after Irish Rail first sought permission. Irish Rail has expressed strong approval of this decision, emphasizing the benefits of providing a sustainable, electrified, and more frequent rail service to customers, which will enhance capacity on the Maynooth and M3 Parkway to city centre rail corridors.

In addition, it is anticipated that a new application for the DART+ Depot will be submitted in the future. While the depot was originally proposed as part of the DART+ West project, it was excluded from the Railway Order approval by An Bord Pleanála. A new project has since commenced and is currently at an early stage. Technicians from the DART+ Programme are presently assessing a number of potential sites as part of the process to identify a preferred location. The options assessment has taken into account the full extent of the DART network, including the three DART+ Programme projects: DART+ Coastal, DART+ Southwest, and DART+ West. Furthermore, the study area for the

DART+ Depot site selection has been extended to include locations within a 10 km radius of the outermost boundaries of the previous DART+ projects.

Walking and cycling

Objective DA 1.3 of the Kellystown Local Area Plan aims to “promote and encourage increased levels of pedestrian and cycle connectivity between the subject lands and the surrounding areas through the provision of new pedestrian and cycle links.”

“Figure 7.11: LAP Walking & Cycling Network” in the Kellystown Local Area Plan, reproduced in **Figure 14.33** below, outlines a comprehensive walking and cycling network proposed within Kellystown lands and its external connection points to the existing wider network.

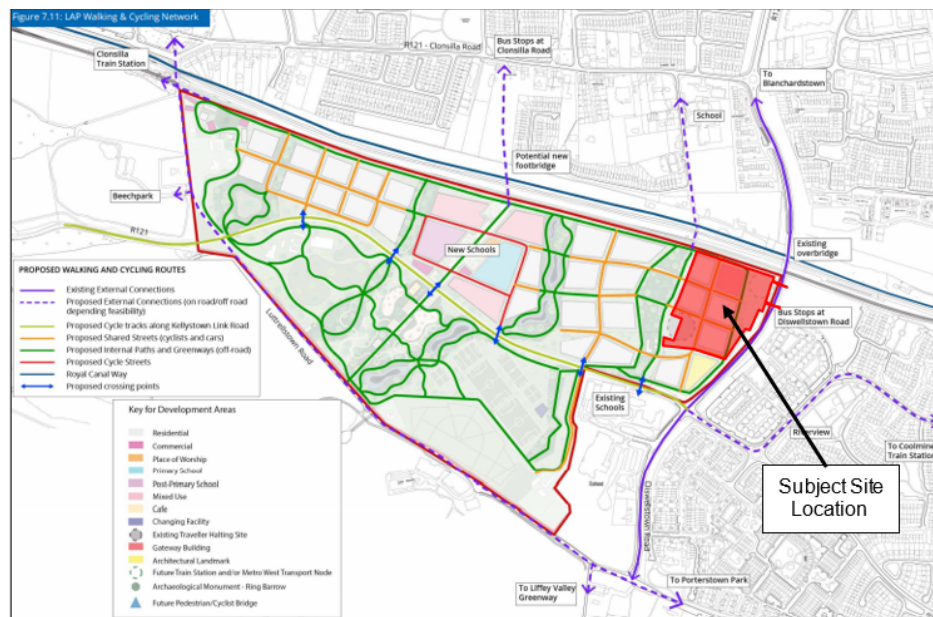


Figure 14.33: Walking and Cycling Proposed within the Kellystown Local Area Plan (Source: Reproduction of ‘Figure 7.11 - Kellystown Local Area Plan’)

Road Hierarchy

Objective 7.4 of the Kellystown LAP is to “Ensure delivery of the appropriate road infrastructure in line with the LAP road hierarchy of streets to develop the lands to their full potential. The design should be in accordance with the principles outlined in the Design Manual for Roads and Streets (DMURS) and the NTA’s National Cycle Manual.”

Figure 14.34 below reproduces “Figure 7.10: LAP Road Hierarchy” of the Kellystown LAP which shows the internal road hierarchy for the overall Kellystown area, and the main roads connected to it. As illustrated, the proposed roads are predominately Local with the Kellystown Link Road being a Regional Road.

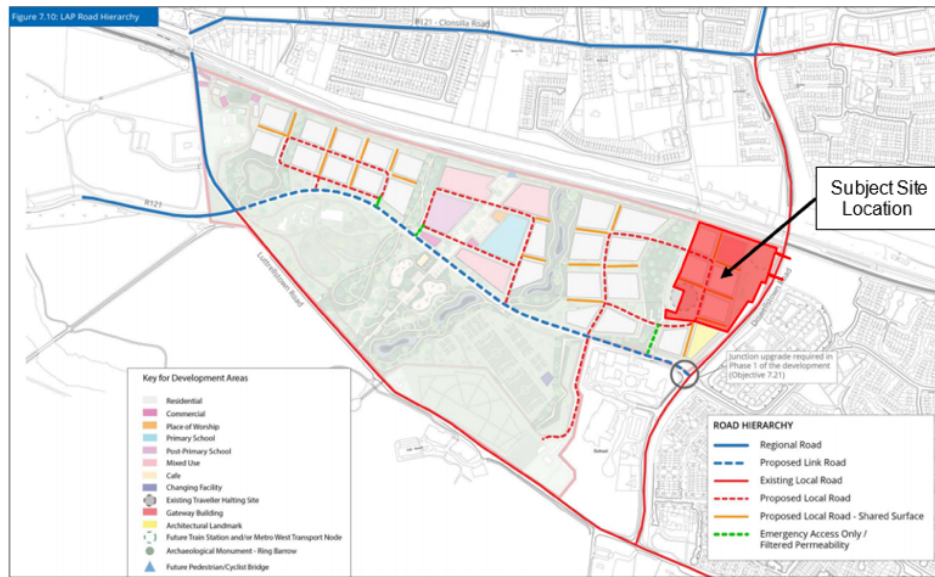


Figure 14.34: Road Hierarchy Proposed within the Kellystown Local Area Plan (Source: Figure 7.10 Kellystown Local Area Plan)

Junction Upgrade – Diswellstown Road / Kellystown Link Road

As part of the Kellystown Development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3), the upgrade of junction Diswellstown Road / Kellystown Link Road (Junction 4 in **Figure 14.22** above) was proposed.

According to the Traffic and Transport Assessment prepared for the planning application, the new layout has been developed in accordance with comments received from Fingal County Council and the An Bord Pleanála Inspector's reports.

The proposed upgraded junction layout is illustrated in **Figure 14.35** below.

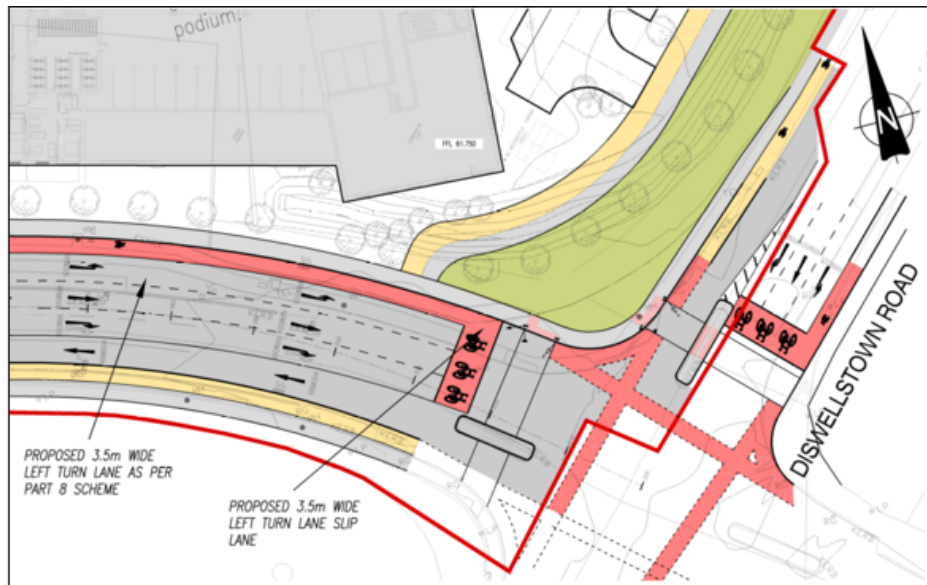


Figure 14.35: Proposed Junction Layout – Diswellstown Road / Kellystown Link Road (Source: Kellystown Development -Phase 1-, Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3)

Part 8 – Kellystown Link Road

As part of the Fingal Development Plan 2017 - 2023, the main road improvement proposed in the Kellystown area is the extension of the Kellystown Link Road further west, providing a link from Diswellstown Road to the Clonsilla Road (R121). This will enhance road safety, improve cycle and pedestrian connectivity and enable the development of a new urban neighbourhood in the Kellystown LAP area.

The first phase of the Kellystown Link Road has been previously completed to serve the Porterstown Schools and the future burial ground site and currently extends for 280 metres to the west of the signalised junction with Diswellstown Road.

As part of the 'Part 8 - Kellystown Link Road', the road improvements proposed along the subject development site frontage include:

- Construction of a single carriageway road with footpaths and pedestrian crossings points at convenient locations.
- Construction of dedicated cycle lanes along both sides of the Kellystown Link Road.
- Widening the existing portion of the road from the signalised junction with Diswellstown Road up until the proposed main site entrance to accommodate an additional lane for eastbound traffic, which will operate as a left turning lane approaching the signalised junction with Diswellstown Road.
- Provision of an additional left turning lane on the north-eastern approach of Kellystown Link Road / Diswellstown Road signalised junction.

The road improvements proposed along the site frontage under the 'Part 8 Kellystown Link Road' is illustrated in **Figure 14.36** below – extracted from 'Public Engagement – Emerging Route Sheet 5 of 5 drawing' prepared by Clifton Scannell Emerson Associates (CSEA) in August 2020 on behalf of Fingal County Council.

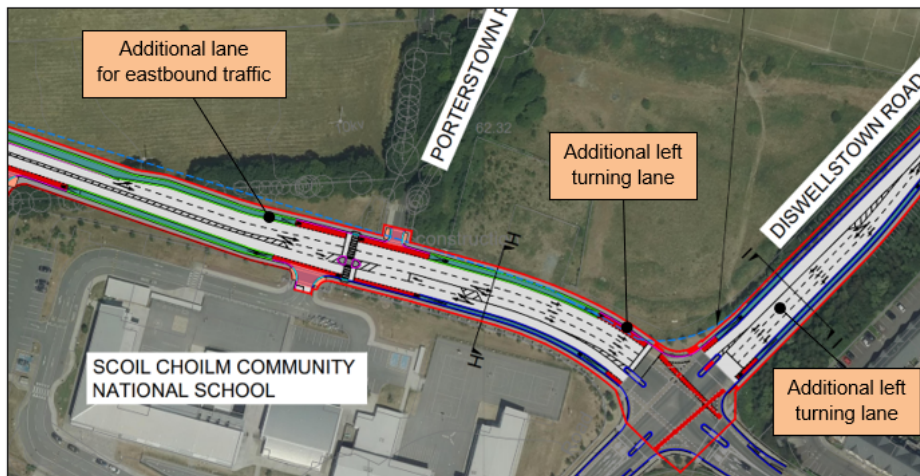


Figure 14.36: Kellystown Link Road (Source: Public Engagement – Emerging Route Sheet 5 of 5 drawing')

Porterstown Road Level Crossing

Kellystown Local Area Plan sets out the closure of the Old Porterstown Road level crossing and the creation of a walking and cycling bridge over the rail. Vehicular access to the existing properties along the Old Porterstown Road will be provided along the proposed Kellystown Link Road and the proposed access road to Development Area 1. **Figure 14.37** below shows the location of the Porterstown Road Level Crossing with the surrounding area considering the subject site.

A key Movement and Transport Objectives included in the Kellystown Local Area plan is ***“Objective 7.6: Provide appropriate pedestrian/cyclist facilities at Porterstown level crossing.”***

The Kellystown Development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3) has considered this chance in the road hierarchy and had proposed and emergency road use with priority for pedestrians and cyclists. The proposed junction Porterstown Road and Kellystown Link Road is shown in **Figure 14.38** below.

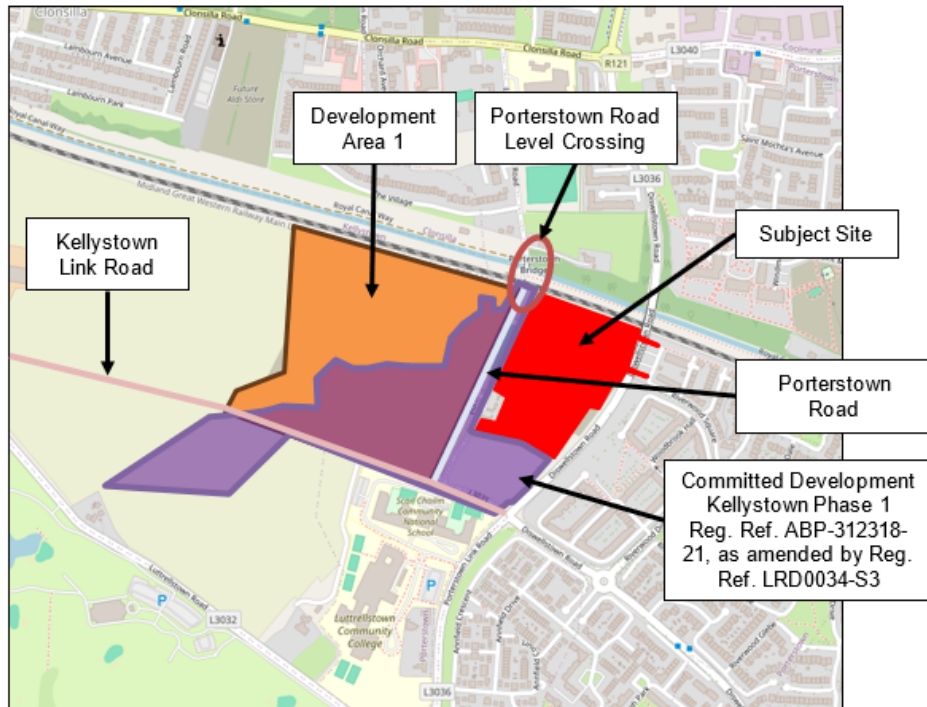


Figure 14.37: Porterstown Road Level Crossing (Source: Open Street Map)

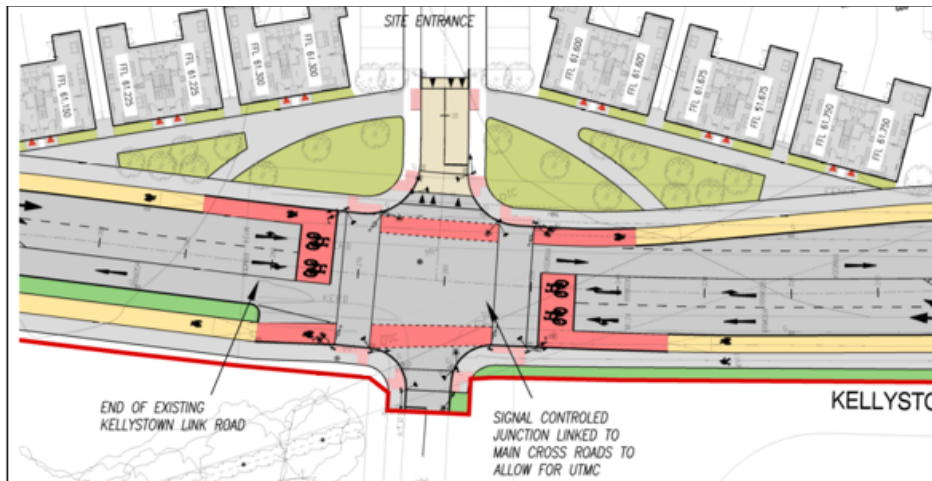


Figure 14.38: Proposed junction of Porterstown Road and Kellystown Link Road (Source: Kellystown Development -Phase 1-, Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3)

14.3.3 Cumulative

The Kellystown Local Area Plan identifies 3 No. development areas with specific objectives for each:

- Eastern Development Area (DA1): is bounded to the north by the Dublin-Maynooth railway line/Royal Canal, to the east by Porterstown Link Road, to the south by Luttrellstown Community College, Choilm Community National School and the alignment of the Kellystown Link Road, and to the west by Central Development Area (DA2).

- Central Development Area (DA2): is bounded to the east by the Eastern Development Area (DA1), to the west by the Western development Area (DA3), to the north by the Dublin-Maynooth railway line/Royal Canal and to the south by the alignment of the Kellystown Link Road.
- Western Development Area (DA3): is bounded to the west by the R121, to the north by the Dublin-Maynooth railway line/Royal Canal, to the east by the Central Development Area (DA2) and to the south by the alignment of the Kellystown Link Road.

According to proposed residential densities as set out in the Local Area Plan, Kellystown has capacity to accommodate circa 1,055 to 1,583 new residential units in the identified Development Areas, with a range of densities varying from low density at the Central Development Area (DA2) and higher densities at the Eastern and Western Development Areas (DA1 and DA3). A small civic/commercial centre, a new primary school and a new secondary school are also proposed in the Central Development Area (DA2).

Both sites are located within the DA1, and it is bounded by the under construction Kellystown Development -Phase 1- (Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3). **Figure 14.39** below illustrates the Development Areas in Kellystown as part of the Kellystown Local Area Plan.

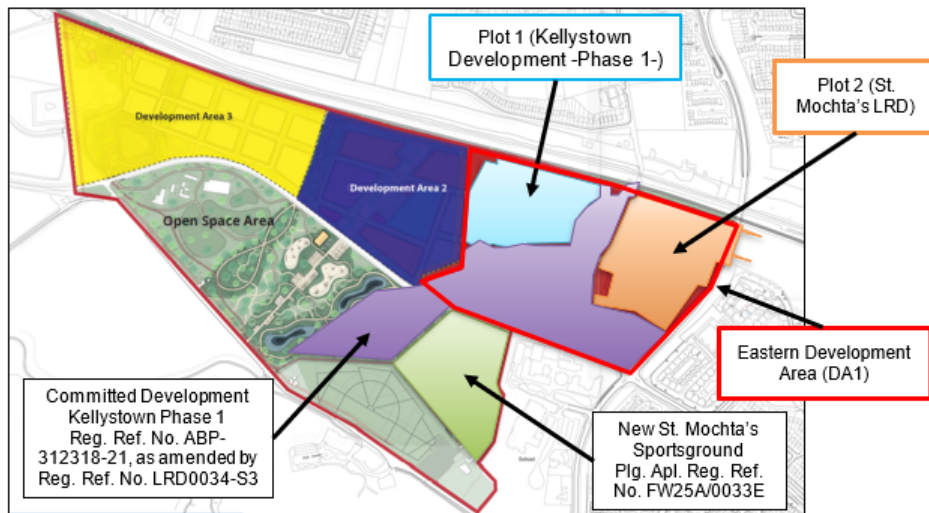


Figure 14.39: Development Areas in Kellystown (Source: Kellystown Local Area Plan)

As can be seen in the above figure, the Eastern Development Area (DA1) encompasses both Kellystown Phase 1 and the subject sites.

Eastern Development Area (DA1)

According to the key objective DA 1.4 for the Eastern Development Area (DA1), this area shall “provide for a mixed typology of high-quality residential units including apartments, duplexes and townhouses”, with an approximate range of units varying from 571 to 857.

The under construction Kellystown Development -Phase 1- (Reg. Ref. No. ABP-312318-21, as amended by Reg. Ref. No. LRD0034-S3) the Subject Plot 1 (Luttrellstown Gate Phase 2) and the Subject Plot 2 (St. Mochta’s LRD) fall within the Eastern Development Area (DA1). Table below provides a detailed breakdown of each development within the Eastern Development Area (DA1).

Eastern Development Area (DA1)	No. Residential Units/Spaces
DA1 - Phase 1 - Under construction	374 units
DA1 - Plot 1 (Luttrellstown Gate Phase 2)	99 units
DA1 - Plot 2 (St. Mochta’s LRD)	302 units
Total	775 units

Table 14.7: Eastern Development Area (DA1) – Proposed developments

As can be seen in table above, the total number of units falls within the established limits for this development area.

The Kellystown Development -Phase 1- (Reg. Ref. No. ABP-312318-21, as amended by Reg. Ref. No. LRD0034-S3) was received Grant Permission by An Bord Pleanála in March 2023 (ABP Reg. Ref. ABP-312318-21). In addition, a Large-Scale Residential Development Amendment (Plg. Apl. Reg. Ref. No. LRD0034/S3) to a consented Strategic Housing Development (ABP-312318-21) was request in May 2024, which was received Gran Permission by Fingal County Council in August 2024. The 374 No. units indicated in **Table 14.7** above has considered both Planning Applications. The Kellystown Development -Phase 1- is currently under construction and is programmed to be fully developed and occupied in 2027.

Construction of the Subject Plot 1 (Luttrellstown Gate Phase 2) development is expected to commence in Q1 2026 and be completed by the end of 2027. As a result, the opening year is expected to be 2028. In addition, construction of the proposed development will commence in Q3 2026 and be completed in Q2 2029. For the purposes of this report, the opening year is assumed to be 2030. It is therefore expected that the Kellystown Development -Phase 1- will be complete and fully occupied for the opening year of the subject sites.

Central Development Area (DA2)

According to the key objectives DA 2.1, DA 2.4, DA 2.8, 10.1 and 10.2 for the Central Development Area (DA2), this area shall provide for a mixed typology of high-quality residential units including apartments, duplexes and townhouses, with an approximate range of units varying from 119 to 179, together with a local centre of c. 2,500sqm, a new primary school to accommodate c. 600 pupils (16-24 classrooms) and a new secondary school capable of catering c.1,000 pupils.

For the purpose of this TTA, and in order to undertake a robust and conservative assessment of the surrounding transport network, it has been assumed that 179 no. residential units will be delivered within the Central Development Area (DA2).

Central Development Area (DA2)	No. Residential Units / GFA / No. Pupils
DA2 – Residential Development	179 units
DA2 – Local Centre	2,500 sqm
DA2 – Primary School	c. 600 pupils (16-24 classrooms)
DA2 – Secondary School	1,000 pupils

Table 14.8: Central Development Area (DA2) – Kellystown Local Area Plan

For this Traffic and Transport Assessment, it has been assumed that DA2 developments will be fully completed and occupied before 2035 -opening year + 5 years- scenario.

Western Development Area (DA3)

According to the key objective DA 3.3 for the Western Development Area (DA3), this area shall provide for a mixed typology of high-quality residential units primarily comprising apartments and duplexes, with an approximate range of units varying from 365 to 547.

For the purpose of this TTA, and in order to undertake a robust and conservative assessment of the surrounding transport network, it was assumed that 547 no. residential units will be delivered at the Western Development Area (DA3).

Development Area	No. Residential Units
DA3 – Residential Development	547 units

Table 14.9: Western Development Area (DA3) – Kellystown Local Area Plan

For this Traffic and Transport Assessment, it has been assumed that DA3 developments will be fully completed and occupied before 2035 -opening year + 5 years- scenario.

Open Space Area

A new St Mochta's sportsground is proposed within the open space area (Planning Application Reg. Ref. No. FW25A/0033E). The Traffic and Transport Assessment has been prepared by Waterman Moylan as part of the planning application documentation for the proposed Sports Facilities for St. Mochta's F.C. & Residential Development at Lands in Kellystown, Clonsilla, Dublin 15.

The development consists of a football club site with a total area of 4.03Ha, comprising a clubhouse of 532.8sqm, two 11-a-side football pitch, a 9-a-side football pitch, a 7-a-side football pitch, and two 5-a-side football pitch. In addition, it is proposed 97 no. car parking spaces (including 5 no. accessible car parking spaces), 5 no. motorcycle parking spaces, and 114 no. cycle parking spaces including 6 larger cycle parking spaces for cargo bikes.

With the construction of the new St Mochta's sportsground is proposed to upgrade the road link between Kellystown Link Road and Luttrellstown Road with a 5-metre-wide carriageway and raised footpath and cyclepath.

It is anticipated that construction of the proposed development will commence in late 2025. Consequently, it has been assumed that the opening year will be before 2028.

Overall Kellystown Development

The developments expected to be completed on Kellystown lands are summarised in **Table 14.10** below.

Kellystown Development	Typology of Use	No. Residential Units / GFA / No. Pupils
Kellystown Development expected to be completed before 2030		
DA1 - Phase 1 - Under construction	Residential	374 units
DA1 - Plot 1 (Luttrellstown Gate Phase 2)	Residential	99 units
DA1 - Plot 2 (St. Mochta's LRD)	Residential	302 units
Open Space Area	St Mochta's sportsground	4.03Ha with a football club
Total Kellystown Developments expected to be completed before 2030		775 residential units 4.03Ha football club
Kellystown Development expected to be completed between 2030 and 2035		
DA2	Residential	179 units
DA2	Local Centre	2,500 sqm
DA2	Primary School	600 pupils
DA2	Secondary School	1,000 pupils
DA3	Residential	547 units
Total Kellystown Developments expected to be completed between 2030 and 2035		726 residential units 2,500 sqm of local centre 600 pupils' primary school 1,000 pupils' secondary school
Overall Kellystown Development	Mixed-use	c. 1,501 residential units 2,500 sqm of local centre 600 pupils' primary school 1,000 pupils' secondary school 4.03Ha with a football club

Table 14.10: Overall Kellystown Development

14.4 Characteristics of the Proposed Development

14.4.1 Proposed Development– Plot 1 (Luttrellstown Gate Phase 2)

Development Description

The proposed development will consist of the construction of 99 no. residential units comprising 87 no. houses and 12 no. duplex units. The breakdown of the units is shown in Table below:

Description	1-bed	2-bed	3-bed	4-bed	Total
House			66	21	87
Duplex	4	8			12
Total	4	8	66	21	99 units

Table 14.11: Schedule of Accommodation

The access to the site is from Kellystown Link Road, via the internal street of the under construction Kellystown Development -Phase 1- (Reg. Ref. No. ABP-312318-21, as amended by Reg. Ref. No. LRD0034-S3).

The development includes associated car, motorcycle and bicycle parking, storage, services and plant areas, and landscaping. The proposed application includes all site landscaping works, boundary treatments, lighting, servicing, signage, and associated and ancillary works, including site development works and services above and below ground.

Internal Layout and Vehicular Access

The internal roads have been designed to comply with DMURS as required by the County Development Plan. The internal roads generally vary between 4.8m and 5.5m in width. All footpaths are 2.0m wide and connect the internal spaces.

The proposed development includes “home-zones” (also called shared surfaces), which have been designed primarily to meet the needs of pedestrians, cyclists, children, and residents. The aim is to reduce the speed and dominance of cars.

Figure 14.40 below shows the shared surfaces, and the segregated roads included in the subject development.

The “home-zones” consist of a shared-surface carriageway with a differentiated rolling surface (in texture and level) to make it easily identifiable by the driver. This was done in accordance with Section 4.3.4 of DMRUS, which indicates:

- Use a variety of materials and finishes that indicate that the carriageway is an extension of the pedestrian domain. A different finish from the rest of the pavement has been chosen to identify these areas.
- Avoid raised kerb lines. Any Kerb line should be fully embedded within the street surface. Small ramps have been used to start and terminate the shared spaces, raising them over the other pavements.
- Minimise the width of the vehicular carriageway and /or corner radii. A reduction in the width of the carriageway has been implemented, from 5.50 m to 4.80 m.

Moreover, the implementation of calming measures through the site has been proposed, including the reduction of the width of carriageways within both home zones and segregated roads. This initiative is designed to encourage drivers to reduce their speed. Additionally, the installation of raised tables has been included on segregated roads to reduce the car speed and to provide a secure environment for pedestrians.



Figure 14.40: Proposed development - Internal roads

All internal roads within the proposed development have been designed with a speed limit of 30km/h. The shared road will have a speed limit of 20km/h. All junctions within the development itself will be priority junctions with raised tables where appropriate.

The low design speeds and traffic calming measures will ensure the safe operation of these junctions and a safe/secure environment for pedestrians and cyclists.

The design and layout of the proposal has been prepared to fully comply with the current relevant design standards and specifications applicable to this form of development.

The development includes sufficient parallel and perpendicular parking spaces, as outlined in local guidelines. The car parking and cycle parking spaces assessments are presented below in this section.

Additionally, all road intersections within the development itself have been designed as priority junctions. The visibility splays of which these junctions have been designed in accordance with the requirements set out in the Design Manual for Urban Roads and Streets (DMURS), which recommends visibility splays of 23m x 2.4m on roads without bus routes. The internal junctions have been designed with low speeds to ensure safe operation.

Vehicular access is provided off Kellystown Link Road via the internal roads of the ongoing Kellystown Development -Phase 1- (Reg. Ref. No. ABP-312318-21, as amended by Reg. Ref. No. LRD0034-S3) as can be seen in **Figure 14.41** below.

The main junction located at Kellystown Link Road has been designed to provide access for residents of the entire Kellystown development, which includes the Phase 1 development, the subject site and the future potential development on Molloy Lands, located to the east of the subject site. The junction was designed as part of the traffic and transport assessment carried out by Waterman Moylan Consulting Engineers as part of the Kellystown Development -Phase 1- (Reg. Ref. No. ABP-312318-21, as amended by Reg. Ref. No. LRD0034-S3). Further information about the potential and committed development in the surrounding area is indicated in **Section 14.3.3** above.



Figure 14.41: Proposed development – Vehicular Access

Pedestrian and Cyclist Infrastructure

The proposed development has been designed with a well-interconnected footpath network providing permeability through the site, to the adjacent Kellystown Development -Phase 1- and to the surrounding area.

All footpaths within the proposed development have been designed as 2.0m wide. This is in accordance with Section 4.3.1 of the DMURS which suggests that a minimum 1.8m footpath should be provided.

There is a cycle path around the subject site connectivity the internal residential units with the main shared pedestrian/cyclist path on Porterstown Road. In addition, the development includes sufficient cycling parking spaces, as outlined in local guidelines. The cycle parking spaces assessments is presented below in this section.

The main pedestrian and cycle paths are shown in the **Figure 14.42** below.



Figure 14.42: Proposed Development – Pedestrian and Cycle Infrastructure

Car Parking

To determine the appropriate amount of car parking spaces for the proposed development, reference have been made to the following guidelines/policies:

- Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024)
- Sustainable Urban Housing: Design Standards for New Apartments (July 2023)
- Greater Dublin Area Transport Strategy (2022 – 2042) Standards (Car Parking only)
- Fingal Development Plan 2023 – 2029 Standards / Kellystown Local Area Plan (January 2021)

Based on the County Development Plan and the national policies indicated above, it is proposed an appropriate level of car parking for this location. Table below shows the car parking spaces breakdown.

Land Use		No. Units	Car Parking Spaces		Land Use	
			Resident	Visitor	Resident	Visitor
3-bed	Houses	66	1.05	1 / 6 units	68	16
4-bed	Houses	21	2		42	
1-bed	Duplex	4	0.5		2	0
2-bed	Duplex	8	0.5		4	0
					116	16
Total car parking spaces					132	

Table 14.12: Car Parking Spaces Proposed

The proposed car parking in the table above reflects that 116 No. spaces are for residential units and 16 No. are for visitors. The proposed parking includes:

- Accessible Car Parking: Of the total number of parking spaces, there are 4 No. accessible parking spaces distributed throughout the development, 2 No. in the house area and 2 No. in the duplex area.

- Electric Vehicle Parking: Of the total number of car parking spaces, 27 No. will be adapted for EVs and distributed throughout the development. This represents 20% of the total number of proposed car parking spaces.

In addition, it is proposed:

- Motorcycle Parking: 12 No. parking spaces are proposed and distributed through the development.

The proposed car parking spaces are within the range set out in the Fingal Development Plan for Zone 1 and the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities for Intermediate Location.

The proposed development is within Zone 1 of the Fingal Development Plan 2023-2029 as the Coolmine Rail Station is approx. 1,590 metres away via the Royal Canal route, which is currently closed. using the existing road network, the Coolmine Rail Station is approx. 1700 metres. In addition, the Clonsilla Rail Station is currently 1,900 metres from the site via the road network of the surrounding developments, but upon completion of the Kellystown Link Road, the distance between the site and Clonsilla Rail Station will be reduce to some 1400 metres.

Furthermore, the proposed development is within intermediate location of the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities due the nearest bus stop is approx. 800m away (c. 11-minute walking) which is served by the routes 37 and 70n. The route 37 has a frequency of 5-10 minutes during both peak hours. With the implementation of BusConnects routes, the route 64 will run every 8-15 minutes during the AM and PM peak hours.

The proposed car parking provision is considered to offer an appropriate balance between the applicable standards, considering the site's location, current and future accessibility for residents, and the range of housing typologies proposed.

Cycle Parking

To determine the appropriate amount of cycle parking spaces for the proposed development, reference have been made to the following guidelines/policies:

- Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024)
- Sustainable Urban Housing: Design Standards for New Apartments (July 2023)
- Greater Dublin Area Transport Strategy (2022 – 2042) Standards (Car Parking only)
- Fingal Development Plan 2023 – 2029 Standards / Kellystown Local Area Plan (January 2021)

Based on the guidelines/policies indicated above, it is considered that the Fingal Development Plan 2023-2029 Standards are the most required standard for the subject development and is the reference for determining the proposed the cycle parking. Compliance with the Fingal Development Plan 2023-2029 Standards will satisfy the requirements of the other standards.

It is considered that the end-terrace house units, which are designed with private side access to rear gardens on one side, will be able to park their bicycles in the rear gardens of the units without having to pass through the interior of the houses. Bicycle parking spaces for the mid-terrace units are proposed with the integration of bicycle lockers at the front of the units.

The proposed Cycle Parking is shown in the **Table 14.13** below.