



Luas Finglas

Environmental Impact Assessment Report2024

Appendix A4.4:
Park & Ride Option Paper





Luas Finglas
Park & Ride
Options Paper

LFIN-PKW-0001

October 2018



CONTENTS

1	INTF	RODUCTION	1
	1.1	Scope of this Report	2
	1.2	Main Objectives of the P&R and Assessment Criteria	2
	1.3	Main demand for Luas Finglas P&R	3
	1.4	Local Authorities Development Plans	4
	1.5	Conclusion	7
2	LUA	S FINGLAS P&R OPTIONS	7
	2.1	Option 1 – South East Quadrant	8
	2.2	Option 2 – South East Quadrant 1	. 10
	2.3	Option 3 – South West Quadrant 2	. 11
	2.4	Option 4 – North East Quadrant 4	. 12
	2.5	Option 5 – North West Quadrant 3	. 14
3	CON	ICLUSIONS	. 17
1	REC:	OMMENDATIONS	17



FIGURES

Figure 1 Luas Finglas Study Area and P&R indicative location1
Figure 2 Luas Finglas P&R – extracts from 2015 "P&R Report - Draft Transport Strategy for the Greater Dublin Area" by NTA2
Figure 3 Luas Finglas P&R – likelihood of traffic demand flows towards the P&R3
Figure 4 Luas Finglas P&R – four quadrants of M50 junction with the N24
Figure 5 Luas Finglas P&R – Screenshot extract from FCC Development Plan 2017-2023 Viewer5
Figure 6 Luas Finglas P&R – Screenshot extract from Dublin City Development Plan 2016-20226
Figure 7 Luas Finglas P&R – General map of Options 1-2-3-4-57
Figure 8 Luas Finglas P&R – Option 1 and access routes from M50 and N28
Figure 9 Luas Finglas P&R – Option 1 main traffic flows through Charlestown Place junction access routes from M50 and N29
Figure 10 Luas Finglas P&R – Option 2 and access routes from M50 and N210
Figure 11 Luas Finglas P&R – Option 3 and access routes from M50 and N211
Figure 12 Luas Finglas P&R – Option 4 and access routes from M50 and N2 via St.Margaret's Roac
Figure 13 Luas Finglas P&R – Option 4 and access routes from N2 north via junction 212
Figure 14 Luas Finglas P&R – Option 4 and access routes N2 – Google routes and runtimes off-peak
Figure 15 Luas Finglas P&R – Option 5 and access routes from M50 and N214
Figure 16 Luas Finglas P&R – Option 5 and access routes from M50 and N2. Google routes and runtimes off-peak
TABLES
Table 1 Luas Finglas P&R – Option 1 Assessment9
Table 2 Luas Finglas P&R – Option 2 Assessment10
Table 3 Luas Finglas P&R – Option 3 Assessment11
Table 4 Luas Finglas P&R – Option 4 Assessment14
Table 5 Luas Finglas P&R – Option 5 Assessment15



1 INTRODUCTION

Luas Finglas is a proposed extension to the Luas Green Line from the existing terminus at Broombridge to the area north of Finglas, in the vicinity of the N2/M50 interchange.

Various policy documents advocate the need for a Park & Ride (P&R) facility in the vicinity of the N2/M50 junction or the Finglas area. Indeed, the need for a P&R is mentioned specifically in the following documents:

- Project Ireland 2040: National Development Plan 2018-2027 mentions the need for a strategic P&R within an overall P&R Programme at a number of rail, bus and Luas locations including Finglas;
- NTA Transport Strategy for the Greater Dublin Area 2016-2035 indicates a Luas service 'with a strategic park and ride site at the N2/M50 junction' at the northern terminus of the line;
- A supporting study to the NTA Transport Strategy, the Park and Ride Report Draft Transport Strategy for the Greater Dublin Area produced by the NTA and Jacobs Engineering Ireland Ltd. in 2015, also explored the potential for P&R in the area. In this report, "a strategic P&R facility has been identified along the North Road (N2), Charlestown, to complement this future service (i.e. Luas Finglas)".

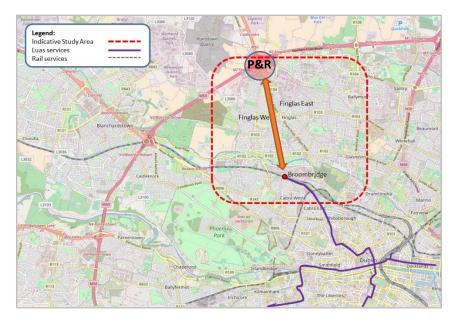


Figure 1 Luas Finglas Study Area and P&R indicative location



Within the same Park and Ride Report, some additional indicative details are also given in relation to the potential P&R facility at Charlestown, as shown in the following report extracts:

Figure 2 Luas Finglas P&R – extracts from 2015 "P&R Report - Draft Transport Strategy for the Greater Dublin Area" by NTA

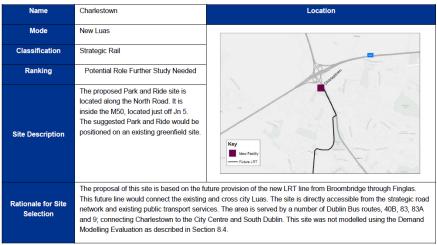


Table 8.13 : Charlestown

- 1						4	ı
	Strategic	Charlestown	N3	New	New Luas	150	

The report indicates a potential location for a P&R facility located south of the M50 in the vicinity of the Charlestown area; and that despite its strategic ranking will only provide 150 car park spaces.

In more recent discussions with the NTA (September 2018), the ultimate P&R capacity has been raised up to over 1,000 spaces.

As a reference, existing Luas P&Rs provide the following capacity:

- Red Cow 730
- Cheeverstown 310
- Tallaght 450
- Balally 420
- Stillorgan 340
- Sandyford 50
- Carrickmines 352

1.1 Scope of this Report

The scope of this report is to determine the optimum location/s for the Luas Finglas P&R, in terms of addressing the objectives outlined below.

1.2 Main Objectives of the P&R and Assessment Criteria

The main objectives of the Luas Finglas P&R will be:



- 1. To provide a minimum of 500 parking spaces,
- 2. Allow the potential for expansion in the future, to accommodate up to over 1,000 spaces,
- 3. Ease of access from the primary road network particularly from the N2 to the north of the M50,
- 4. Ease of connectivity with Luas Finglas,
- 5. Compliance/compatibility with planning/zoning,
- 6. Potential future serviceable catchment (for example potential for residential development).

These will also be adopted as assessment criteria against which to score the P&R options.

1.3 Main demand for Luas Finglas P&R

At this early stage, and pending a more detailed assessment of the demand, it is reasonable to assume that the Luas Finglas P&R will most likely be serving the demand coming from the N2 north of the M50, with some limited demand coming from the M50 Northbound. Demand from the M50 Southbound and the R135 (south of the M50) are both expected to have a negligible contribution.



Figure 3 Luas Finglas P&R – likelihood of traffic demand flows towards the P&R

Therefore, it is important that the location of the P&R is optimised in terms of connectivity with the strategic road network, with priority given to the connection from/to the N2 outside the M50.



1.4 Local Authorities Development Plans

This report looks at the 4 quadrants centred on the N2/M50 Junction 5. The general character of this area can be described as large scale industrial uses north of the M50; and to the south a mix of existing residential and employment land uses, with the emerging town centre of Charlestown/Meakstown and existing communities of Finglas to the west.



Figure 4 Luas Finglas P&R – four quadrants of M50 junction with the N2

The study area falls within two different Local Authorities' boundaries; Dublin City Council and Fingal County Council. Quadrants 1, 3 and 4 are located in Fingal County Council's jurisdiction; while Quadrant 2 is mainly located within Dublin City Council's functional area.

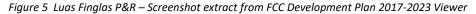
1.4.1 Fingal County Council Development Plan 2017-2023

The location of the study is generally included in the Fingal South area of the Fingal County Council Development Plan.

Within the area south of the M50, it should be noted that, the Strategic Policy of Fingal County Council aims to "Develop a strategy to promote and deliver an enhanced identity and link with Fingal for the wider communities of Meakstown/Charlestown, Finglas and Lanesborough." The details of policy objectives for the urban area are included in the appendix.



The Fingal County Council Development Plan 2017-2023 zoning map is shown below:





Two zonings objectives are predominant "GE- General Employment and TC-Town and District Centre." The zoning objectives are described as follows:

"GE- General Employment" - purple

Objective: Provide opportunities for general enterprise and employment.

Vision: Facilitate opportunities for compatible industry and general employment uses, logistics and Warehousing activity in a good quality physical environment. General Employment areas should be Highly accessible, well designed, permeable and legible.

"TC-Town and District Centre – red/orange stripes

Objective: Protect and enhance the special physical and social character of town and district centres and provide and/or improve urban facilities.

Vision: Maintain and build on the accessibility, vitality and viability of the existing Urban Centres in the County. Develop and consolidate these Centres with an appropriate mix of commercial, recreational, cultural, leisure and residential uses, and to enhance and develop the urban fabric of these Centres in accordance with the principles of urban design, conservation and sustainable development. Retail provision will be in accordance with the County Retail Strategy, enhance and develop the existing urban fabric, emphasise urban conservation, and ensure priority for public transport, pedestrians and cyclists while minimising the impact of private car based traffic. In order to deliver this vision and to provide a framework for sustainable development, Urban Centre Strategies will be prepared for centres in accordance with the Urban Fingal Chapter objectives.

The TC zoning objective includes for uses such as; "Public Transport Station" and "Carpark - Non-Ancillary" to be permitted in principle.

In both zonings however, the explicit provision of a park and ride facility is not listed, as either 'Permitted in Principle' nor 'Not Permitted'. The development plan indicates that uses which are neither listed as 'Permitted in Principle' nor 'Not Permitted'; will be assessed in terms of their contribution towards the



achievement of the Zoning Objective and Vision and their compliance and consistency with the policies and objectives of the Development Plan.

The Fingal Development Plan does however indicate a policy objective on Park and Ride facilities under Objective MT35 to "Promote and support the provision of Park and Ride facilities at suitable locations near high capacity public transport stations/stops."

1.4.2 Dublin City Development Plan 2016-2022

Dublin City Development Plan 2016-2022 map of the area (inside the M50 only) is shown below:



Figure 6 Luas Finglas P&R – Screenshot extract from Dublin City Development Plan 2016-2022

The predominant zoning objective (green) for this area within Dublin City's jurisdiction is Land-Use Zoning Objective Z9 Amenity/Open Space Lands/Green: *To preserve, provide and improve recreational amenity and open space and green networks.*

Public service installation which would not be detrimental to the amenity of Z9 zoned lands are a Permissible Use. Public service installation in the development plan is defined as follows:

"A building, or part thereof, a roadway or land used for the provision of public services. Public services include all service installations necessary for electricity, gas, telephone, radio, telecommunications, television, data transmission, drainage, including wastewater treatment plants and other statutory undertakers: bring centres, green waste composting centres, public libraries, public lavatories, public telephone boxes, bus shelters, etc. but does not include incinerators/waste to energy plants. The offices of such undertakers and companies involved in service installations are not included in this definition."

It is unclear, if a public transport station and/or a park or ride would be covered by this definition.

Parts of the land are covered by zoning objective Z6 Employment/enterprise zoned lands (purple) 'To provide for the creation and protection of enterprise and facilitate opportunities for employment creation.'

Park and ride facility uses are permitted in this zone.



1.5 Conclusion

Quadrants 1, 3 and 4 zonings in Fingal do not preclude the provision of a park and ride. The development plan indicates that uses which are neither 'Permitted in Principle' nor 'Not Permitted' will be assessed in terms of their contribution towards the achievement of the Zoning Objective and Vision and their compliance and consistency with the policies and objectives of the Development Plan.

However, the TC zoning objective includes for uses "Public Transport Station" and "Carpark - Non-Ancillary" to be permitted in principle.

The majority of Dublin City's lands in Quadrant 2, are covered by Land-Use Zoning Objective Z9 Amenity/Open Space Lands/Green. From examination of the zoning objective, it would appear that a variation to the City Development Plan would be required for a park and ride facility (if deemed a suitable site). However, clarification should be sought for the interpretation of the objective by the City Council with regard to the definition of public service installation.

Park and ride facility uses are permitted in the zoning objective Z6 Employment/enterprise zoned lands.

2 LUAS FINGLAS P&R OPTIONS

The P&R for Luas Finglas shall be located in close proximity to the Luas terminus or one of its stops, while also being within reasonable proximity to the strategic road network to ensure easy and direct access from both the N2 and M50.

By looking at the four quadrants formed by the N2-M50 interchange and the available areas within those lands, five options have been developed, as shown in the following map:

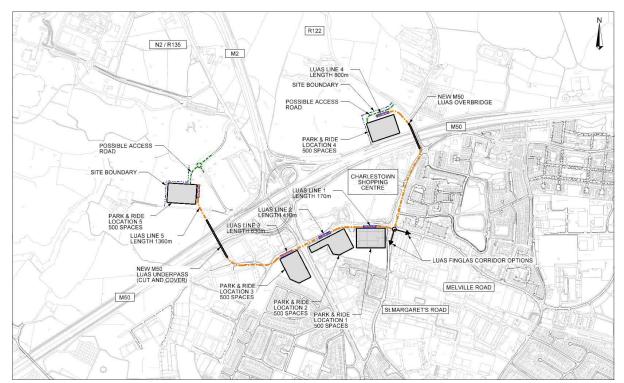
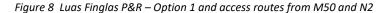


Figure 7 Luas Finglas P&R – General map of Options 1-2-3-4-5



2.1 Option 1 – South East Quadrant





This option is located within the boundaries of the current Charlestown Shopping Centre overflow surface carpark and its adjacent areas. The existing facility is a surface car park with 567 spaces and has a good access from both M50 and N2 via the M50 Junction 5 interchange, the R135 North Road and Charlestown Place. It could be developed into a larger surface carpark occupying the surrounding lands (no more than 1,000 spaces indicatively), or into a multi-storey, providing up to 2,000 spaces in possibly 5 storeys, subject to a more detailed analysis.

The current surface carpark is a temporary facility, the permission for which has been recently extended to 2021, after which date it is expected that the new Phase 2B of the Charlestown residential/retail development will be completed and enough car spaces will be provided in its basements.

It is also noted that the area south of this surface carpark is currently occupied by sporting fields and planning permission has been recently granted (2017) for its upgrade to Multi-Use All Weather Surface Games area.



Table 1 Luas Finglas P&R – Option 1 Assessment

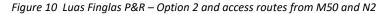
Objective	Comments	Scoring
Minimum 500 parking spaces	Yes, this option delivers between 500 and 1,000 spaces on surface.	
Expansion in the future, to accommodate up to 2,000	Easily expandable to 1,000, challenging to expand over 1,000 (multi-storey required with significant cost).	
Road access (particularly from/to N2 outside the M50)	Directly off the North Road just inside the M50, but it would increase peak time turning traffic to the Charlestown Place junction, which is just 250m from the M50 junction.	
Luas connectivity	High quality Luas connectivity and shortest Luas route.	
Compatibility with planning/zoning	Land is zoned as TC-Town and District Centre.	
Potential future serviceable catchment	There is significant potential for further catchment in the future. An additional 220 apartments are currently being built and several others may come in the future.	

Figure 9 Luas Finglas P&R – Option 1 main traffic flows through Charlestown Place junction access routes from M50 and N2





2.2 Option 2 – South East Quadrant 1





A potential site located adjacent to Option 1 and to the existing Charlestown Shopping Centre overflow carpark. This site also has reasonable access from both M50 and N2 via the interchange, North Road and Charlestown Place. As said in Option 1 this land could be combined with the existing overflow carpark to deliver approx. 1,000 spaces surface carpark.

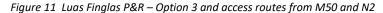
This land is currently unoccupied and there does not appear to be any planning application pending, subject to a more detailed search.

Table 2 Luas Finglas P&R - Option 2 Assessment

Objective	Comments	Scoring
Minimum 500 parking spaces	Yes, this option delivers between 500 and 600 spaces on surface, and more if combined with the adjacent Option 1.	
Expansion in the future, to accommodate up to 2,000	Challenging to expand over 600 (multi-storey required with significant cost)	
Road access (particularly from/to N2 outside the M50)	Directly off the North Road just inside the M50, but it would increase peak time turning traffic to the Charlestown Place junction, which is just 250m from the M50 junction	
Luas connectivity	High quality Luas connectivity but slightly longer Luas route than Option 1	
Compatibility with planning/zoning	Lands zoned as GE-General Employment and TC-Town and District Centre	
Potential future serviceable catchment	There is significant potential for further catchment in the future. Additional 220 apartments are currently being built and several others may come in the future.	



2.3 Option 3 – South West Quadrant 2





Located in the green area at the northern end of Finglas west, adjacent to the R135 North Road. This location has less potential for surface expansion and being adjacent to residential areas, could prove challenging to develop as a multi-storey. Also, it would require a longer Luas alignment from Charlestown Shopping centre and would require the Luas to cross the North Road a second time if coming from Finglas East (as the vast majority of the Luas alignment options do). The preferred connectivity to the road network would be similar to Options 1 and 2, through the Charlestown Place junction. However direct access to this site from the N2 is via a privately operated road. Current public access to the open space is via Northway Housing estate.

Table 3 Luas Finglas P&R - Option 3 Assessment

Objective	Comments	Scoring
Minimum 500 parking spaces	Yes, this option delivers between 500 and 600 spaces on	
	surface, more if combined with the adjacent Option 1.	
Expansion in the future, to	Challenging to expand over 600 (multi-storey required	
accommodate up to 2,000	with significant cost)	
Road access (particularly from/to	Directly off the North Road just inside the M50, but it	
N2 outside the M50)	would increase peak time turning traffic to the	
	Charlestown Place junction, which is just 250m from the	
	M50 junction. This is currently a private road.	
Luas connectivity	Longer Luas route than Option 1, it also requires a	
	second crossing of the North Road for the vast majority	
	of the Luas Finglas alignment options.	
Compatibility with planning/zoning	Lands zoned as "Recreational amenity and open space	
	and green networks". It would require a variation of the	
	City Development Plan. Challenging.	
Potential future serviceable	Limited potential for further catchment in the future.	
catchment		



2.4 Option 4 - North East Quadrant 4

Connections to/from the strategic road network to Option 4 would be less direct.

One potential route to the strategic road network is indicated below in the map, making use of the existing St. Margaret's Road and bridge over the M50. This route appears to be very convoluted and indirect, particularly from the N2 north of the M50 and is considered to be disadvantageous.

Figure 12 Luas Finglas P&R - Option 4 and access routes from M50 and N2 via St. Margaret's Road



From the N2 north, other access routes would be possible from N2 Junction 2, located some 4km north of the M50, via the R135 and St. Margaret's Road. This is also a very convoluted route, with approximately 5.7km off the primary road network and several local junctions.

Figure 13 Luas Finglas P&R – Option 4 and access routes from N2 north via junction 2

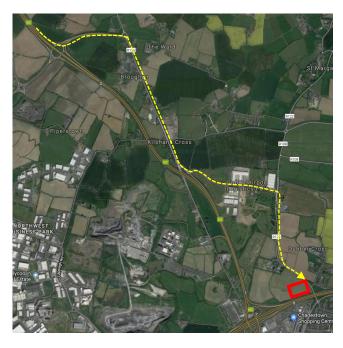






Figure 14 Luas Finglas P&R – Option 4 and access routes N2 – Google routes and runtimes off-peak

Option 4 would possibly require the construction of a new N2 junction or derivative access arrangement, located in close proximity to the M50, which would provide direct access to the P&R. The construction of a new junction in close proximity to the M50 junction could prove challenging and its technical feasibility would remain to be demonstrated.

Within this quadrant, there is a significant portion of currently unoccupied lands, generally zoned for industrial and employment creation.

An increase in activity, in terms of industrial/ logistics land uses are anticipated in this area, with Dublin Port currently preparing a planning application for an Inland Port to the north of the site. The proposed Greater Dublin Drainage Project transitions in close proximity to this area (https://www.water.ie/planning-sites/greater-dublin-drainage/docs/planning-documents/planning-reports/SID-Planning-Report.pdf). The rural cluster of Dubber Cross is also located directly to the east. Therefore, there is limited potential for providing future Luas catchment.

The option indicated below has been selected for its proximity to St. Margaret's Road which would give access from the existing bridge over the M50, but other areas closer to the N2 could also be considered in the same quadrant. This location has large potential for surface expansion but it would also require a longer Luas alignment from Charlestown Shopping centre and the Luas to cross the M50 on a new bridge.



Assessment of the objectives:

Table 4 Luas Finglas P&R – Option 4 Assessment

Objective	Comments	Scoring
Minimum 500 parking spaces	Yes, this option can easily deliver in excess of 500 spaces.	
Expansion in the future, to accommodate up to 2,000	Yes, this option can easily deliver up to 2,000 spaces, either surface or multi-storey.	
Road access (particularly from/to N2 outside the M50)	Existing connections are very poor, possible future direct connection would require construction of new junction off N2.	
Luas connectivity	Longer Luas route than Option 1 and 2, it also requires a new bridge over the M50.	
Compatibility with planning/zoning	Lands zoned as "GE-General Employment - Facilitate opportunities for compatible industry and general employment uses, logistics and warehousing". P&R would be compatible with this.	
Potential future serviceable catchment	Limited potential for further catchment in the future, given the absence of residential or office development plans.	

2.5 Option 5 – North West Quadrant 3

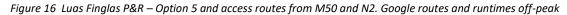
Figure 15 Luas Finglas P&R – Option 5 and access routes from M50 and N2

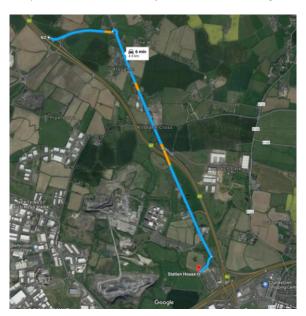




The option indicated has been selected for its proximity to the M50, in order to reduce the Luas corridor length. This location has significant potential for surface extension but it would require a significantly longer Luas alignment from Charlestown Shopping centre (approx. 1.1km delta length compared to Options 1-2) and would require the Luas to cross the North Road a second time and to underpass the M50 with a 110m long cut and cover structure (subject to a more detailed design). Connection to the strategic road network would also be very convoluted from the N2, although more direct than Option 4.

Option 5 could possibly require the construction of a new N2 junction, located in close proximity to the M50, as mentioned previously.





This quadrant is partly occupied by the following: Finglas electrical 220kV substation; Roadstone Huntstown production plant and quarry; and Huntstown power station. While there is a significant quantity of currently unoccupied lands, generally zoned for industrial and employment creation, the National Planning Framework encourages the removal of industrial land extensive uses to locations outside the M50. In this area a number of proposals are emerging to meet this objective. Therefore, the likelihood of ever achieving a serviceable light rail residential catchment in this area is very limited.

Table 5 Luas Finglas P&R – Option 5 Assessment

Objective	Comments	Scoring
Minimum 500 parking spaces	Yes, this option can easily deliver in excess of 500 spaces.	
Expansion in the future, to accommodate up to 2,000	Yes, this option can easily deliver up to 2,000 spaces, either surface or multi-storey.	
Road access (particularly from/to N2 outside the M50)	Existing connections are very poor, possible future direct connection would require construction of new junction off N2.	



Luas connectivity	The longest Luas route, it also requires a new long underpass of the M50.	
Compatibility with planning/zoning	Lands zoned as "GE-General Employment - Facilitate opportunities for compatible industry and general employment uses, logistics and warehousing". P&R would be compatible with this.	
Potential future serviceable catchment	Very limited potential for further catchment in the future, given the absence of residential or office development plans and the heavy industrial vocation of the area.	



3 CONCLUSIONS

Objective	Option 1	Option 2	Option 3	Option 4	Option 5
500 parking spaces					
Future expansion 2,000					
Road access					
Luas connectivity					
Planning/zoning					
Future catchment					

Options 1 and 2 provide a very good connection with the Luas to the south of the M50 (shortest Luas route) but may prove challenging: from a planning viewpoint within a "Town and district centre" zoning; and are landlocked with a maximum surface capacity of approximately 1,000 spaces (combined, subject to further detailed analysis). Their connectivity with the strategic road network is good, but the location will potentially add turning traffic movements at the Charlestown Place junction whose impacts remain to be assessed.

Both Options 1 and 2 are considered optimum options with a few drawbacks, to be investigated further, provided that an early engagement with FCC and the relevant land owners prove successful in delivering a coordinated development. Ideally, the coordinated mixed development should consist of a combined Luas terminus, P&R and retail/office/residential developments. A scenario where the Luas terminus is embedded in the development, with the P&R built within the basements of the mixed development (Balally type) could be very positive for all stakeholders involved. As an example, the current development of the Cherrywood Town Centre, with integrated permanent P&R just off the M50 should be considered.

Option 3 provides a relatively poor connection with the Luas, while also impacting on lands zoned for recreational amenity and green networks. It is also a landlocked area, with little capacity to expand over 500 spaces as a surface carpark and would have a similar traffic impact on the Charlestown Place junction. It is not considered a favourable option and should not be progressed further.

Option 4 provides a possible alternative should Options 1 and 2 prove difficult, although it would possibly require the construction of a new N2 junction in close proximity to M50 Junction 5, which may prove very problematic. It is expected that the cost of Option 4 could be higher than Options 1-2, particularly if the new junction is factored in. In fact, it involves a significantly longer Luas route (approx. 600m delta length), and a new bridge over the M50, with an indicative span of 65m (unless the existing road bridge is shared).

Option 5 is not considered a viable option on account of the very poor connectivity with the Luas (requiring 1.1km longer route than Options 1-2 including a new M50 underpass of about 110m (cut and cover), and a challenging road network connection. It also scores low in relation to the permeability of the area south of the M50 (currently industrial/retail/leisure use), and unlikely to have a future residential catchment, given the presence of high voltage electrical facilities, quarries and processing plants. Option 5 should not be progressed further.

4 RECOMMENDATIONS

It is recommended that Options 1-2 (separately or combined) and Option 4 are brought forward for more detailed analysis, with Options 1-2 being preferred from Luas and strategic road connections viewpoint, and Option 4 being more suitable in terms of land use and unconstrained development. Options 3 and 5 should not be progressed further.











