An Bord Pleanála

Inspector's Report

ABP-316828/ ABP-317070-23

Development	Tallaght/ Clondalkin to City Centre Core Bus Corridor Scheme which has an overall length of approximately 15.5km.
Location	The Square Shopping Centre, Tallaght at its south-western end and Nangor Road, Clondalkin at its western end to Nicholas Street in the city centre all in the County of Dublin
Applicant(s)	National Transport Authority
Planning Authorities	South Dublin County Council and Dublin City Council
Type of Application	Section 51(2) of the Roads Act, 1993 and associated CPO
Prescribed Bodies	1. Department of Housing, Local Government and Heritage 2. Inland Fisheries Ireland 3. Land Development Agency 4. South Dublin County Council 5. Dublin City Council
Observers	1. Cllr. Kieran Mahon 29. Killeen Motor Group 30. Kylie Burke

2. Glenda & Stephen Smullen
3. AA Tyre Master Limited & Others
4. Aiden & Claire Griffin & Others
5. Aoife Hanley & Others
6. Bernard Sweeny & Susan Byrne
7. Blackwin Limited
8. Brendan Heneghan
9. Calmount Holding Limited
10. Cathy Mooney & Others
11. Ciarán Cuffe, MEP
12. Cllr. Liam Sinclair
13. Cllr. Charlie O'Connor
14. Cllr. Mick Duff & Cllr. Charlie O'Connor
15. Cllr. Mick Duff
16. Cllr. Pat Collins & Joan Collins TD
17. Cllr. Teresa Costello
18. Collette Hardiman
19. Concrete Pumping Ltd.
20. Darren Mohan & Wendy Lyons
31. Leila & Stephen Early
32. Lidl Ireland GmbH
33. Linda Patton
34. Lynn Broderick
35. Marian & William Healy
36. Maxol Ltd.
37. Michelle & John-Paul Lyons
38. Niamh Walker
39. Nicola Kennedy
40. Paul Browne
41. Recorder's Residents' Association
42. Ravensburg Unlimited Company
43. Seán Crowe TD
44. Senator Mary Seery Kearney
45. Shay L'Estrange
46. Siobhan McBride
47. St. James Gaels An Caisleán
48. St. Mary's National School Board of Management
49. Stephen O'Connor

	21. David & Pamela Smullen 22. Debbie Gray 23. Dublin Commuter Coalition 24. Dublin Cycling Campaign 25. Fairfield Inns Ltd. 26. Hannah Fitzpatrick 27. Jacinta Kenny 28. John & Miriam McDonagh	50. Tallaght Community Council 51. Teresa McCann 52. Tesco Ireland Ltd. 53. Walkinstown Residents Association 54. Woodies DIY & EZ Living 55. James & Charlotte Acton
Objectors to CPO	1. Air Products Ltd. 2. Calmount Holding Ltd. 3. Fairfield Inns Ltd. 4. Gerard Smith 5. Goldsmith Lot Ltd. 6. Herbert Holdings 7. JJ Smith Builders Ltd. 8. Jacinta Kenny 9. John Nolan 10. Killeen Motor Group 11. Maxol Ltd.	12. Musgrave Operating Partners Ltd. 13. MXF Properties Ireland Ltd. 14. Patrick Comerford 15. Permanent TSB 16. Regent Palace Management Ltd. 17. SBS Holdings 18. Stephen Tracey 19. Woodies DIY
Dates of Site Inspection	22nd December 2023, 6th January 2024 & 9th April 2024	
Inspector	Donal Donnelly	

Contents

1.0 **Introduction**

1.1. Approval is sought from the Board by the National Transport Authority (NTA) for two applications relating to the development of Tallaght Clondalkin to City Centre Core Bus Corridor (CBC) scheme. This scheme is one of 12 CBC schemes forming part of the BusConnects programme, which seeks to redesign the bus network in Dublin by building new bus corridors and cycle tracks.

1.2. Firstly, an order has been made by the NTA that, if confirmed by the Board, will authorise the authority to acquire compulsorily lands for the proposed development and to extinguish/ restrict private/ public rights of way. The temporary acquisition of lands is also required for the purpose of construction works. The lands to be acquired are along the alignment of the CBC.

1.3. The second application made pursuant to Section 51(2) of the Roads Act, 1993 (as amended) seeks approval for the same CBC scheme for which an Environmental Impact Assessment Report has been submitted along with documentation in support of the application.

1.4. A total of 31 objections to the CPO from 19 different parties were lodged with the Board and observations on the Section 51(2) application were received from four prescribed bodies and 55 observers.

1.5. The applicant entered into pre-application discussions with the Board under Section 51A of the Roads Act, 1993 (as amended) on 21st April 2021, 20th May 2021, 10th June 2021 and the 29th June 2021. Following a request from the applicant, pre-application consultations were formally closed by the Board on 12th August 2021.

2.0 **Legal Requirements**

2.1. Under Section 51(2) of the Roads Act, 1993 (as amended by Section 9(1)(e)(i) of the Roads Act, 2007), a road authority shall apply to the Board for the approval of a proposed road development and shall submit to the Board an Environmental Impact Assessment Report (EIAR) in respect of the development. The proposed road development shall not be carried out unless the Board has approved it or approved it

with modifications. The Board shall ensure that it has, or have access as necessary to, sufficient expertise to examine the EIAR.

2.2. Before approval of the proposed road development, consideration must be given to the EIAR, any additional information, any submissions made in relation to the likely effects on the environment of the proposed road development, and the report and any recommendation of the person conducting any inquiry. Taking into account the preceding, the Board shall reach a reasoned conclusion on the significant effects of the proposed road development on the environment.

2.3. Where any application for approval under this section relates to a proposed road development and a compulsory purchase order submitted for confirmation, a decision on such approval and confirmation of such compulsory purchase order shall be made at the same time.

2.4. Under Section 44(1)(c) of the Dublin Transport Authority Act, 2000 (as amended), the National Transport Authority (NTA) may acquire and facilitate the development of land adjacent to any public transport infrastructure where such acquisition and development contribute to the economic viability of the said infrastructure whether by agreement or by means of a compulsory purchase order made by the Authority in accordance with Part XIV of the Act of 2000.

2.5. Under Section 213(2)(a) of Part XIV of the Planning and Development Act, 2000 (as amended), a local authority may, for the purposes of performing any of its functions (whether conferred by or under this Act, or any other enactment passed before or after the passing of this Act), including giving effect to or facilitating the implementation of its development plan, acquire land, permanently or temporarily, by agreement or compulsorily.

2.6. Compulsory Purchase Orders are made pursuant to the powers conferred on the local authority by section 76 of the Housing Act, 1966, and the Third Schedule thereto, as extended by section 10 of the Local Government (No. 2) Act, 1960, (as substituted by section 86 of the Housing Act 1966), as amended by section 6 and the Second Schedule to the Roads Act, 1993, and as amended by the Planning and Development Act, 2000 (as amended). Orders are served on owners, lessees and

occupiers in accordance with Article 4(b) of the Third Schedule to the Housing Act, 1966.

3.0 Site Location and Description

3.1.1. The proposed Tallaght Clondalkin to City Centre Core Bus Corridor (proposed scheme) is located through the Clondalkin-Ballymount; Clondalkin-Monastery; Tallaght-Glenview; Tallaght-Kilnamanagh; Tallaght-Kingswood; Tallaght-Springfield; Tallaght-Tymon; Templeogue-Limekiln; Terenure-Cherryfield; and Terenure-St. James Electoral Divisions in South Dublin County Council and Crumlin B, C, D, E & F; Inchicore B; Kimmage A, B & C; Merchants Quay A, B, C & F; Ushers C, D & E; Walkinstown A, B & C; and Wood Quay A Electoral Divisions in Dublin City Council.

3.1.2. The proposed scheme extends over a distance of 15.5km from The Square Shopping Centre, Tallaght at its south-western end and Nangor Road, Clondalkin at its western end to Nicholas Street in the city centre. The Tallaght to City Centre route forms the main section of the proposed scheme and there are branches from Clondalkin to Drimnagh and from Drimnagh to the Grand Canal.

3.1.3. The Tallaght to City Centre section commences at the junction of Blessington Road/ Cookstown Way before continuing north along Belgard Square West, east onto Belgard Square North, south along Belgard Square East, and east onto Blessington Road. The CBC then proceeds through Tallaght Village to the south of the Technological University Dublin (TUD) Tallaght campus and St. Mary's Catholic Church and Priory grounds, then north through Old Greenhills Road cul de sac to meet the Greenhills Road (R819) at the junction with Bancroft Park.

3.1.4. The CBC follows Greenhills Road between Hibernian Industrial Estate and Airton Corporate Park towards the Kilnamanagh residential area at Birchview/ Treepark/ Parkview. At this location, the CBC splits to form a new alignment along the green strip to the west of Parkview, which will carry new bus lanes and cycle tracks. New pedestrian/ cycle bridges will also be constructed either side of the existing bridge over the M50. The CBC splits again to the north of the M50 and a new connection will be provided to Ballymount Avenue. The main bus and cycle infrastructure will continue along Ballymount Avenue and Calmount Road and another link will be

created back onto Greenhills Road to the north of Greenhills Industrial Estate. The section of Greenhills Road to the north of the new junction with Ballymount Avenue will be downgraded to a local road and a cul de dac will be formed at its northern end. A link road will be created to Calmount Road along Calmount Avenue. At Walkinstown Roundabout, the CBC proceeds in two directions along Walkinstown Road for buses and Bunting Road for bicycles, before the bus corridor joins Long Mile Road/ Drimnagh Road (R110).

3.1.5. Eastbound, the Clondalkin branch of the CBC commences on Nangor Road (R134) at its junction with Woodford Walk and to the south of a link onto the Grand Canal Greenway. The CBC continues under the M50 and between business and industrial parks and through the major intersection at Fox-and-Geese Common where Nangor Road and Long Mile Road meet the Naas Road. The CBC then follows Naas Road alongside the Luas tracks before turning south onto Kylemore Road and east onto Long Mile Road where is joins the main CBC at the Walkinstown/ Long Mile Road/ Drimnagh Road junction.

3.1.6. The Drimnagh to Grand Canal branch commences at the junction to the south of Our Lady's Childrens Hospital, Crumlin and continues along Kildare Road and onto Clogher Road. These roads are predominately residential in character. At the north-eastern end of Clogher Road, the proposed scheme ties in with the Grand Canal Safety Improvement Scheme.

3.1.7. From Drimnagh to the City Centre, the CBC continues along Crumlin Road and over the Grand Canal at Dolphins Barn and past The Coombe Hospital. The route approaches the city centre along Cork Street and St. Luke's Avenue, then onto Dean Street. The final section is along Patrick Street and Nicholas Street (R137), where the proposed scheme meets High Street and the termination point of the Liffey Valley to City Centre CBC.

3.1.8. Overall, the proposed scheme is located in a highly urbanised environment with a mix of uses along either side consisting of town centre, enterprise/ residential-led regeneration, village centre, residential, open space, enterprise and employment, local centre, neighbourhood centre, sustainable residential neighbourhoods, key urban villages / urban villages, community and social infrastructure, amenity / open

space lands / green network, residential neighbourhoods (conservation areas), inner suburban and inner city sustainable mixed-uses, Georgian conservation areas, and city centre. The proposed scheme also passes strategic development and regeneration areas at Liberties and Newmarket Square (SDRA 15), St. Teresa's Gardens and Environs (SDRA 11); Dolphin House (SDRA 12) and Naas Road (SDRA 5), conservation areas and protected structures, Records of Monuments and Places, and the Tallaght Village Architectural Conservation Area (ACA), Crumlin Village ACA and Thomas Street & Environs ACA. Lands within the site boundary comprise of road and street surfaces, footpaths, cycleways, public amenity areas, grassy verges and green spaces and public spaces.

4.0 Proposed Development

4.1. The Scheme

4.1.1. The Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme seeks to provide better infrastructure for walking, cycling and public transport to encourage these modes as attractive alternatives to car-based journeys. Roadway space is designed to facilitate improvements to the efficiency of the transport network with a focus on the movement of people rather than vehicles.

4.1.2. The Tallaght / Clondalkin to City Centre CBC scheme has an overall length of approximately 15.5km with an additional offline cycling facility of 3.9km. The proposed scheme will include an increase in the proportion of the route with bus priority measures from 34% at present to 94% of the route. The number of pedestrian signal crossings will increase from 135 to 181 and cycle facilities will increase from the current provision of 12.5% segregated to 90% outbound and 85% inbound mostly segregated (offline cycling facility length included). Landscaping and public realm enhancements are provided along the CBC at key nodes with a focus on upgrading paving materials, extension of planting, decluttering, SuDS and general placemaking.

4.1.3. The proposed scheme is described in six sections as follows:

a) **Section 1 – Tallaght to Ballymount:** A bus interchange facility is proposed at the south-western end of the proposed scheme with dedicated bus lanes in both directions from the north and south. The interchange will serve as a terminus for several buses and will allow for interchange with the Luas red line. It will also act as a new focal point for the community, while integrating with the adjacent shopping centre and public realm development. Roundabouts will be changed to fully signalised junctions at Belgard Square South, Belgard Square East and at Belgard Square North at the entrance to Tallaght Hospital. Segregated cycle facilities will be provided to and from the hospital and along Belgard Square North and East. It is proposed that buses will use Old Greenhills Road and stone paving and planting will be implemented to retain the character of the cul de sac to the north of this road. Bus lanes and cycle tracks, along with raised table side entry treatments and protected junctions will be provided along Greenhills Road to Mayberry Road. A bus gate is proposed along this section to minimise impacts on trees and a stone wall at the entrance to TUD. Turn bans are also proposed to improve junction operation. Between Mayberry Road and Tymon Lane, it is proposed to realign the road network in accordance with the principles of the Part 8 scheme to provide a c. 620m long sustainable link road, with general traffic remaining on Greenhills Road. New two-way cycling and pedestrian links will be incorporated to improve access to Tymon Park and surrounding amenities.

b) **Section 2- Ballymount to Crumlin:** Two new single span pedestrian / cycle bridges are proposed to be located adjacent to the existing M50 bridge crossing. Three new sustainable link roads are also proposed to connect to Greenhills Road to Ballymount Avenue and Calmount Avenue, and Calmount Road back onto Greenhills Road. Dedicated bus lanes and cycle tracks are proposed along Ballymount Avenue and Calmount Avenue. Greenhills Road will be retained for local access and cycling facilities, and a new cul de sac treatment will be installed towards its northern end. Accessible ramps and stairs will be provided to address the steep gradient on Calmount Avenue where it joins to Greenhills Road. A two-way segregated cycle track is proposed around Walkinstown Roundabout and parallel pedestrian / cyclist

raised table crossings will be implemented on all roundabout arms. A roundabout lane has been removed and landscaping and revised parking arrangements will enhance the area. City bound cyclists will be directed from the roundabout to the offline cycle route along Bunting Road and St. Mary's Road.

c) **Section 3 – Crumlin to Grand Canal:** Bus lanes and general traffic lanes in each direction are proposed along Walkinstown Road with associated land take maintaining setback lengths for car parking. A south-bound right turn ban is proposed into Kilnamanagh Road and a north-bound right turn ban is proposed into the southern entrance of the SuperValu car park. The junction of Drimnagh Road and Walkinstown Road will be enhanced for active modes by reducing the left turn slip lane and providing urban realm improvements. Drimnagh Road will have bus lanes and cycle tracks and the junction of Kildare Road, St. Mary's Road and Drimnagh Road will be improved for pedestrians and cyclists. Signal controlled bus priority is proposed on Crumlin Road and this requires the closure of Bangor Drive and Clonard Road for direct access onto Crumlin Road. The alternative cycle route along Kildare Road and Clogher Road will include segregated cycle tracks and a bus / cycle gate at the junction of Clogher Road / Sundrive Road. The Crumlin Road / Herberton Road / Sundrive Road junction will have improved crossing facilities. Between Cooley Road and Dolphin Road, the speed limit will reduce to 30 kph.

d) **Section 4: Grand Canal to Christchurch:** Bus lanes, traffic lanes and cycle tracks will be provided to Ardee Street and bus priority will be maintained through signal controlled priority from St. Luke's Avenue on Dean Street. The Dean Street/ Patrick Street junction will be ungraded to provide enhanced pedestrian and cycle facilities where the proposed Kimmage to City Centre CBC will join the route. Bus lanes, traffic lanes and cycle tracks are proposed along Patrick Street and Nicholas Street and the proposed scheme will tie in with the Liffey Valley to City Centre CBC at High Street.

e) **Section 5: Woodford Walk (R113) / New Nangor Road (R134) to Long Mile Road (R110) / Naas Road (R810) / New Nangor Road (R134)**

junction: The junction at Woodford Walk / New Nangor Road will be upgraded and there will be improved connectivity to Grand Canal Greenway. Bus lanes, general traffic lanes and cycle tracks are proposed along New Nangor Road and bus priority on the outbound bus lane will be facilitated by a bus priority signal on the approach to the M50 overbridge. A pedestrian/ cycle link to the Grand Canal Greenway is proposed to the east of the M50 overbridge. Existing roundabouts and junctions along New Nangor Road will be upgraded to cycle protected signalised junctions and raised table crossings are proposed over existing HGV entrances. A proposed inbound right turn ban from New Nangor Road (R134) towards Killeen Road will be implemented to facilitate bus priority in this section through lane reallocation. A new pedestrian and cycling bridge with accessible ramps and stairs is proposed over the New Nangor Road/ Naas Road/ Long Mile Road junction. New bus lanes are also proposed at this junction.

f) **Section 6: Long Mile Road (R110) / Naas Road (R810) / New Nangor Road (R134) junction to Drimnagh:** The proposed scheme continues along the Naas Road to the junction with Walkinstown Avenue, generally maintaining bus lanes and general traffic lanes and providing new segregated cycle tracks. The existing left turn slip lane towards the Kylemore Road is to be removed and the inbound left turn movement will be banned to allow for improved bus facilities and passenger interchange with the Kylemore Luas Stop. The Naas Road / Walkinstown Avenue junction will be reconfigured to provide enhanced pedestrian and cyclist facilities, and bus lanes, general traffic lanes and cycle tracks will continue along Walkinstown Avenue. The junction of Walkinstown Avenue / Long Mile Road is being reconfigured to provide enhanced pedestrian and cyclist facilities. Existing bus and traffic lane provision is generally maintained along the Long Mile Road until the junction with Slievebloom Park, at which point the proposed scheme joins the Tallaght section.

4.1.4. Traffic lane widths will follow guidance outlined in DMURS with the preferred width being 3m. The desirable minimum width for cycle tracks is 2m and the minimum width is 1.5m. For footpaths, the desirable minimum width is 2m, with an absolute

minimum of 1.2m at pinch points. A reduction of the general traffic lane width to 2.75m would be permitted where there are constraints.

4.1.5. Pedestrian crossings throughout the proposed scheme vary in width from 2.4m and 4m. Larger crossing widths have been allocated in areas that are expected to accommodate a high number of non-motorised users. The footpath will be ramped down or raised tables will be provided at minor junctions and tactile paving will be installed at traffic signal push buttons. Junctions have been designed to maximise the number of people moving through each junction and to prioritise sustainable modes.

4.1.6. The proposed scheme includes 35.8km of new segregated cycle tracks and 2.7km of unsegregated cycle lanes. Cycle tracks will be separated by a kerb 60mm high on the near side and 120mm high on the carriageway/ bus lane side. The use of cycle lanes (mandatory and advisory) will be limited mainly to side roads, at grade junction crossings, for side road crossings, and where segregated cycle tracks cannot be provided due to constraints. An alternative cycle route is proposed along Bunting Road, St. Mary's Road, Kildare Road and Clogher Road and this will include a quiet street element for a section of Clogher Road. There are a number of locations where standard width of cycleways cannot be achieved and localised narrowing will be required. Cycle tracks narrow to minimum 1.5m to slow the flow of cyclists when approaching mini-bus stop islands and 1m at the bus stop island. Bike racks will generally be provided at island bus stops and key locations, including the new park north-east of the proposed bus interchange at Tallaght, Walkinstown Roundabout and in the vicinity of Kylemore Luas Stop.

4.1.7. Bus priority infrastructure will include bus lanes; signal-controlled priority (New Nangor Road outbound, Long Mile Road outbound, Greenhills Road outbound, and Crumlin Road); and bus gates (Belgard Square West, Belgard Square East, Blessington Road, Old Greenhills Road, Greenhills Road either end of sustainable transport link, and Clogher Road). A bus stop assessment has been carried out and stops are typically spaced at distances of 400m apart in suburban areas and 250m apart in urban centres. Island bus stops, shared landing area bus stops, inline bus stops and layby bus stops are proposed along the CBC.

4.1.8. The construction period will last approximately 36 months. The main construction activities will involve site preparation and clearance works, road and street upgrades, and construction site decommissioning, including the removal of all construction facilities and equipment. Thirteen construction compounds are proposed along the length of the proposed scheme.

4.1.9. The construction of the proposed scheme will require the permanent acquisition of approximately 56.3 hectares of land, of which 52.9 hectares is publicly owned. An additional 6.4 hectares will be temporarily acquired to allow for construction of boundary treatments, planting, construction compounds and surface tie in work. Approximately 2.5 hectares of this land is publicly owned.

4.2. Main Objectives

4.2.1. The main objectives of the Tallaght / Clondalkin to City Centre CBC as set out in the planning report accompanying the planning application and CPO are to:

- Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movements over general traffic movements;
- Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;
- Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;
- Enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks;
- Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services; and

- Ensure that the public realm is carefully considered in the design and development of transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

4.3. The Need for the Proposed Development

4.3.1. At present, the reliability and effectiveness of existing bus and cycle infrastructure on key radial traffic routes into and out of Dublin city centre is compromised by a lack of bus lanes and segregated cycle tracks. Furthermore, existing bus lanes are not always operational on a 24 hour basis and are often shared with parking and cyclists. Along the proposed scheme, 34% of the route currently has bus priority and 12.5% has segregated cycle tracks. There are also several uncontrolled crossings along the proposed route and the walking experience is generally sub-optimal, with narrow footpaths, poor pedestrian desire lines and long waiting times at crossings.

4.3.2. As far as possible, continuous bus priority along core bus corridors is required to address these deficiencies and to support an effective and reliable bus service with lower journey times that will increase its attractiveness and result in a modal shift from private car use. A high-quality pedestrian environment along the route of the proposed scheme is also necessary to improve accessibility to jobs and education, and to create other social and economic opportunities. An increase in the provision of segregated cycle tracks and improved arrangements for cyclists at junctions will help to improve the safety and attractiveness of this mode of transport and the overall promotion of active travel.

4.3.3. BusConnects is identified as a component of a Strategic Investment Priority which has been determined as central to the delivery of the National Planning Framework. The proposed scheme is also consistent will all levels national, regional and local policy relating to climate action and sustainable transport provision.

4.4. Route Selection

4.4.1. The proposed scheme forms part of the Core Bus Network identified within the GDA Transport Strategy, which is characterised by high passenger volumes, frequent services, and significant trip attractors. The NTA carried out future travel forecasts

and assessments of existing and future land use and traffic patterns along eight transport corridors. Other strategic alternatives considered were BRT, light rail, metro, heavy rail, demand management and technological alternatives.

4.4.2. Route alternatives were considered during the design development of the proposed scheme that were informed by public consultation and survey data. Route options were evaluated under economy, safety, integration, accessibility, social inclusion and environment. Initial route options were set out and the emerging preferred route was identified. A draft preferred route option was developed, and this was updated following public consultation. The preferred route option was then finalised. Alternative cycle route options were also considered as part of the process.

4.4.3. Design alternatives included various amendments to address issues raised by residents, community groups, businesses, elected representatives, and stakeholders. For example, route alteration through Tallaght village rather than TUD Tallaght; a segregated 2-way cycle track around Walkinstown Roundabout; closure of Clonard Road and Bangor Drive junctions; alternative cycle route on Kildare Road and Clogher Road; and provision of an overbridge at Naas Road / Long Mile Road junction. The design was also refined, which resulted in the improvement of pedestrian and cyclist facilities at junctions; removal of Kildare Road bus gate; alteration of Clonard Road and Bangor Drive to allow traffic to enter from Crumlin Road; and incorporation of previously permitted scheme for South Circular Road / Dolphin's Barn.

4.4.4. The conclusion is reached that enhanced bus priority and cycle facilities, complemented by improved capacity of the Luas Red Line through the provision of extra rolling stock, are best placed to serve the corridor having regard economic and environmental factors and passenger numbers that each mode would carry.

4.5. Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors

4.5.1. This booklet provides guidance for various design teams involved in the CBC project to ensure a consistent design approach, focusing on engineering geometry and CBC operation. The booklet complements existing guidance relating to design of urban

streets, bus facilities, cycle facilities and public realm and provides typical corridor scenarios and layouts.

4.5.2. The booklet includes cross sectional information and geometry for traffic lanes, headroom, cycle tracks, cycle facility segregation, cycle track material, pedestrian crossing distances, refuge islands and parking/ loading bays. A hierarchy of signalised junction layout options are set out, with the preferred layout being the protected junction for cyclists, which helps to reduce conflicts between cyclists and left-turning motorists. This provides physical kerb build-outs to protect the cyclist through the junction. Right turning cyclists will manoeuvre around the junction in two stages and any uncontrolled conflict between pedestrians and cyclists is removed. Alternative on-road cycle lane junctions may be considered where space is constrained. Details are also included on staging and phasing, priority junction layouts and signal controlled bus priority measures. A key feature of the design of any bus corridor is traffic signalling and the priority afforded to buses.

4.5.3. A hierarchy for bus stop options starts with the island bus stop, followed by the shared bus stop landing zone, and then layby bus stops. The preferred island bus stop features the deflection of cyclists behind the stop and the inclusion of a pedestrian priority crossing onto the bus stop area. Visually impaired pedestrians may call on part time signals within this arrangement, where necessary. Intelligent transport systems (ITS) may include real time passenger information (RTPI) at bus stops, variable message signage and CCTV.

4.5.4. Signage throughout the proposed scheme will be in accordance with the Traffic Signs Manual. Additional signage will be required including the use of a mini-yield with a flashing amber left turn arrow to warn turning motorists to yield to cyclists. New bespoke signage is also proposed for where a ban on left turns from the bus lane is proposed. Taxis, other buses and coaches using the bus lane will be required to make a left turn with the general traffic lane in this scenario. Finally, advice is contained in the booklet on lighting, utilities, drainage, pavement and landscape/ public realm design.

5.0 Policy Context

5.1. Sustainable and Smart Mobility Strategy 2020 (EU Commission 2020)

5.1.1. The Smart and Mobility Strategy is part of the EU Green Deal which aims to reduce transport emissions by 90% until 2050. The Commission intends to adopt a comprehensive strategy to meet this target, and to ensure that the EU transport sector is fit for a clean, digital and modern economy. Objectives include:

- Increasing the uptake of zero-emission vehicles.
- Making sustainable alternative solutions available to the public & businesses.
- Supporting digitalisation & automation.
- Improving connectivity & access.

5.2. Climate Action Plan 2024

5.2.1. The Climate Action Plan (CAP24)[1] sets out a roadmap to halve emissions by 2030 and reach net zero by no later than 2050. CAP24 builds upon CAP23 by refining and updating the measures and actions required to deliver carbon budgets and sectoral emissions ceilings that were introduced under the Climate Action and Low Carbon Development (Amendment) Act, 2021. Sector emission ceilings were approved by Government in July 2022 for the electricity, transport, built environment – residential, built environment – commercial, industry, agricultural and other (F-gases, waste & petroleum refining) sectors. Reflecting the continuing volatility for Land Use, Land Use Change and Forestry (LULUCF) baseline emissions to 2030 and beyond, CAP24 puts in place ambitious activity targets for the sector reflecting an EU-type approach.

5.2.2. Citizen engagement and a strengthened social contract between the Government and the Irish people will be required around climate action. It is also recognised that policies on spatial planning, taxation, sustainable finance, and non-financial reporting

[1] At time of reporting, the Climate Action Plan 2023 (CAP23) remains in place, although the Board should note that the Climate Action Plan 2024 (CAP24) has been published and that the public consultation phase recently closed (April 5th, 2024).

have a key role to play in supporting and enabling the delivery of emissions reductions across multiple sectors and in mobilising climate finance, facilitating a just transition to a carbon neutral society. A just transition framework structures how we will integrate just transition considerations into our climate action policies, as highlighted by sectoral examples provided throughout this Plan.

5.2.3. The electricity sector will help to decarbonise the transport, heating and industry sectors and will face a huge challenge to meet requirements under its own sectoral emissions ceiling. For transport, CAP23 reframed the previous pathway outlined in CAP21 under the Avoid-Shift-Improve Framework to achieve a net zero decarbonisation pathway. This hierarchical framework has been applied again in CAP24 to prioritises actions to reduce or **avoid** the need to travel; **shift** to more environmentally friendly modes; and **improve** the energy efficiency of vehicle technology.

5.2.4. Road space reallocation is a measure outlined under both 'avoid' and 'shift' to promote active travel and modal shift to public transport. Road space reallocation and a sustainable approach to parking policy are considered to form key measures to both reduce unsustainable private car demand and enhance placemaking, supporting improvements in the accessibility and air quality of our urban spaces. A National Demand Management Strategy will consider measures for addressing car parking provision and management. The Design Manual for Urban Roads and Streets is the principal design standard for all urban roads and further work is underway in relation to guidance and advice notices for local authorities with regard to the reallocation of street-space and landscaping. This includes the issuing of Statutory Guidelines in accordance with Section 38 of the Road Traffic Act 1994, as amended, on traffic calming measures in respect of public roads under the charge of Local Authorities. The provision of safe and accessible walking and cycling infrastructure is also recognised as being key to encouraging modal 'shift' away from the private car.

5.2.5. Significant investment in new public transport infrastructure is required to deliver on our carbon emissions reduction targets, and to provide people with the sustainable alternatives to private car usage. BusConnects in each of the five cities in the State, the DART+ Programme and Metrolink have been progressing through major

milestones. The BusConnects Dublin programme has significantly advanced with significant uplift in passenger numbers and the lodgement of Core Bus Corridor infrastructure planning applications to the Board.

5.3. National Planning Framework, 2018

5.3.1. The National Planning Framework provides policies, actions and investment to deliver 10 National Strategic Outcomes and priorities of the National Development Plan. These include compact growth, enhanced regional accessibility, sustainable mobility and transition to a low carbon and climate resilient society. Compact growth can be delivered by improving 'liveability' and quality of life, enabling greater densities and ensuring transition to more sustainable modes of travel.

5.3.2. It is recognised with respect to sustainable mobility that Dublin and major urban areas are too heavily dependent on road and private, mainly car-based transport, with the result that our roads are becoming more and more congested. The NPF will therefore encourage the expansion of attractive public transport alternatives to car transport to reduce congestion and emissions and enable the transport sector to cater for the demands associated with longer term population and employment growth in a sustainable manner. The development of a comprehensive network of safe cycling routes in metropolitan areas will also be sought to address travel needs.

5.4. National Development Plan, 2021-2030

5.4.1. The NDP Review contains a range of investments and measures which will be implemented over the coming years to facilitate the transition to sustainable mobility. These measures include significant expansions to public transport options, including capacity enhancements on current assets and the creation of new public transport links through programmes such as MetroLink.

5.4.2. Over the next 10 years, approximately €360 million per annum will be invested in walking and cycling infrastructure in cities, towns and villages across the country. The NDP recognises BusConnects as one of the Major Regional Investments for the Eastern and Midland Region and this scheme is identified as a Strategic Investment Priority within Dublin, Cork, Limerick, Galway and Waterford cities.

5.4.3. Transformed active travel and bus infrastructure and services in major cities is fundamental to achieving the overarching target of 500,000 additional active travel and public transport journeys by 2030. BusConnects will overhaul the current bus system by implementing a network of 'next generation' bus corridors with segregated cycling facilities on the busiest routes to make journeys faster, predictable and reliable.

5.4.4. Over the lifetime of this NDP, there will be significant progress made on delivering BusConnects with the construction of Core Bus Corridors expected to be substantially complete in major cities by 2030.

5.5. National Investment Framework for Transport in Ireland

5.5.1. This is the strategic framework for future investment decision making in land transport to enable the National Planning Framework and to support climate change. The four investment priorities under the NIFTI are decarbonisation, protection and renewal, mobility of people and goods in urban areas, and enhanced regional and rural connectivity. These investment priorities are supplemented by modal and intervention hierarchies which encourage the use of active travel and public transport ahead of solutions reliant on private transport. Maintenance/ optimisation of existing assets, e.g., demand management, is preferred to extensive enhancements or outright new infrastructure.

5.5.2. The Framework refers to the enhancement of urban mobility through BusConnects and the challenges facing the network at present compounded by rising passenger numbers and congestion in recent years. It is stated that BusConnects will alleviate these issues over a ten-year period through a number of deliverables.

5.6. National Sustainable Mobility Policy

5.6.1. This Policy sets out a strategic framework to 2030 for active travel and public transport journeys to help Ireland meet its climate obligations. An Action Plan for sustainable mobility to 2025 is included, which aims to provide safe, green, accessible and efficient alternatives to car journeys. Action 23 is the commencement of delivery of BusConnects Core Bus Corridor infrastructure works.

5.6.2. Safe and green mobility is supported in the Policy by:

- Continuing to protect and maintain the safety of existing walking, cycling and public transport networks and ensuring that new sustainable mobility infrastructure meets the highest safety standards.
- Developing pedestrian enhancement plans and cycle network plans to guide investment in new active travel infrastructure and retrofitting of existing infrastructure.
- Expanding bus capacity and services through the BusConnects Programmes in the five cities of Cork, Dublin, Galway, Limerick and Waterford; improved town bus services; and the Connecting Ireland programme in rural areas.
- Rebalancing transport movement in metropolitan areas and other urban centres away from the private car and towards active travel and public transport.

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

5.7.1. The RSES provides a spatial strategy, economic strategy, metropolitan plan, investment framework and climate action strategy to support the implementation of Project Ireland 2040 and the economic policies and objectives of the Government by providing a long-term strategic planning and economic framework for the development of the Region.

5.7.2. This strategy sets out 16 Regional Strategic Outcomes aligned to the three key principles of healthy placemaking, economic opportunity and climate action. These RSOs include sustainable settlement patterns, creative places, integrated transport and land use, building climate resilience, a global city region and enhanced regional connectivity.

5.7.3. The Strategy includes the Dublin Metropolitan Area Strategic Plan (MASP), which is an integrated land use and transportation strategy that sets out guiding principles for the sustainable development of the Dublin Metropolitan Area. In terms of Integrated Transport and Land use, the aim is to focus growth along existing and proposed high quality public transport corridors and nodes on the expanding public transport network and to support the delivery and integration of ‘BusConnects’, DART

expansion and LUAS extension programmes, and Metro Link, while maintaining the capacity and safety of strategic transport networks. The following Regional Policy Objectives are relevant to the proposed scheme:

- MASP Sustainable Transport RPO 5.2: Support the delivery of key sustainable transport projects including Metrolink, DART and LUAS expansion programmes, BusConnects and the Greater Dublin Metropolitan Cycle Network and ensure that future development maximises the efficiency and protects the strategic capacity of the metropolitan area transport network, existing and planned.
- RPO 5.3: Future development in the Dublin Metropolitan Area shall be planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling) and public transport use, and creating a safe attractive street environment for pedestrians and cyclists.

5.7.4. Connectivity is addressed in Chapter 8 of the Strategy where it is recognised that there is a need to ensure alternatives to the car in the design of streets and public spaces, with prioritisation of cycling and walking as active transport modes. Furthermore, it is stated that the success of transport planning in meeting society's needs requires close integration of transport investment and land use planning, to guide the direction of future development within the Region.

5.7.5. Transport investment priorities are set out in Section 8.4. Within the Dublin Metropolitan Area, investment in bus infrastructure and services will be delivered through BusConnects.

5.8. Transport Strategy for the Greater Dublin Area 2022-2042

5.8.1. The 2022-2042 Strategy replaces the previous 2016-2035 Strategy by setting out a framework for investment in transport infrastructure and services for the GDA up to 2042. The Transport Strategy recognises a wide range of challenges for transport underpinned by climate change; the Covid 19 pandemic; servicing the legacy development patterns; revitalising city and town centres; transforming the urban environment; ensuring universal access; serving rural development; improving health and equality; fostering economic development; and delivering transport schemes.

5.8.2. The overall aim of the Transport Strategy is *"to provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the region's climate change requirements, serves the needs of urban and rural communities, and supports the regional economy."* The four objectives to deliver this aim are an enhanced natural and built environment; connected communities and better quality of life; a strong sustainable economy; and an inclusive transport system.

5.8.3. Chapters 10, 11 and 12 of the Transport Strategy address walking, accessibility and the public realm; cycling and personal mobility vehicles; and public transport respectively, and these sections relate both directly and indirectly to the proposed BusConnects programme.

5.8.4. Chapter 12 sets out the strategy for an overall public transport system for the region, central to which is the delivery of a comprehensive bus network, based on enhanced level of service and much greater on-street priority. BusConnects Dublin was launched in 2017 comprising proposals for Core Bus Corridors, a new bus service network, next generation ticketing, new bus livery, new bus stops and shelters, low/ zero emissions bus fleet, new park & ride interchanges, and a revised fare structure. The proposed Tallaght / Clondalkin to City Centre CBC scheme is one of 12 radial schemes being brought forward under this programme to facilitate faster and more reliable bus journeys on the busiest bus corridors in the Dublin region. Key elements of the Cycle Network Plan will also be delivered along these corridors. The following measures in the Transport Strategy relate to the roll out of BusConnects:

- Measure BUS1 – Core Bus Corridor Programme: Subject to receipt of statutory consents, it is the intention of the NTA to implement the 12 Core Bus Corridors as set out in the BusConnects Dublin programme.
- Measure BUS2 – Additional Radial Core Bus Corridors: It is the intention of the NTA to evaluate the need for, and deliver, additional priority on radial corridors.
- Measure BUS3 – Orbital and Local Bus Routes: It is the intention of the NTA to provide significant improvements to orbital and local bus services in the following ways:

    1. Increase frequencies on the BusConnects orbital and local bus services; and

2. Providing bus priority measures at locations on the routes where delays to services are identified.

5.8.5. A new Dublin area bus service network will be arranged on the basis on spines radiating from the city centre, orbitals around the city, other city bound routes, local routes, peak only services and express routes. Periodic review will take place to implement appropriate additions or adjustments to the overall bus system.

5.8.6. With respect to walking, accessibility and the public realm, it is recognised in the Transport Strategy that better urban design and placemaking will encourage more people to walk, cycle or use public transport. Specific measures are outlined to incorporate a high standard of urban design and placemaking into major public transport infrastructure schemes and walking and cycling projects, taking account of architectural heritage (PLAN14 and PLAN15). In addition, Measure PLAN16 seeks the reallocation of road space to prioritise walking, cycling and public transport use and the placemaking functions of the urban street network. Other specific measures relating to walking, accessibility and public realm include Measure WALK2 – Improved Footpaths; Measure WALK4 – Improved Junctions; Measure WALK6 – Crossing Points; Measure WALK8 – Traffic-Free Streets and Pedestrianisation; and Measure WALK9 – Disabled People.

5.8.7. In terms of cycling and personalised mobility vehicles, it is the intention of the NTA and the local authorities to deliver a safe, comprehensive, attractive and legible cycle network in accordance with the updated Greater Dublin Area Cycle Network, which is published alongside the Transport Strategy (Measure CYC1 – GDA Cycle Network). It is noted that some of the cycle provision included in BusConnects schemes examines the appropriateness of emerging international approaches to design standards. As the number of cyclists grows, the requirement to ensure that cyclists can travel unimpeded along their entire journey becomes critical and this needs to be reflected in how cycle infrastructure is managed and in the associated management of traffic, loading and parking. This is reflected in the Transport Strategy through Measure CYC2 – Cycle Infrastructure Design; Measure CYC3 – Extended Hours of Operation of Cycle Infrastructure; and Measure CYC4 – Maintenance of Cycle Infrastructure. Other measures are set out in the Transport Strategy relating to bike sharing; bikes on public transport; and emerging personal

mobility modes. Additional measures are included in support of cycling and other personal mobility modes such as cycle bus schemes for school children, public charging and parking for e-bikes and e-scooters.

5.8.8. Chapter 17 provides the outcomes and how the Strategy contributes to an enhanced natural and built environment (consolidated development, public realm and placemaking, reduced impacts of traffic, improved air quality and noise levels); how the Strategy leads to more connected communities and better quality of life (enhanced community interaction, high quality public transport coverage); how the Strategy contributes to a strong and sustainable economy; and how the Strategy fosters an inclusive transport system (equality, health and access to jobs).

5.9. GDA Transport Strategy – Integrated Implementation Plan 2019-2024

5.9.1. Section 13(1) of the Dublin Transport Authority Act, 2008 requires the NTA to prepare an integrated implementation plan covering a 6 year period to include an infrastructure investment programme and actions to ensure the effective integration of public transport infrastructure over the period of the plan. It is intended as part of this plan to progress the development of Core Bus Corridors to achieve continuous priority for bus movement. Approximately 230km of one-way bus lanes will be delivered on radial corridors, with half this amount to be delivered over the period of the plan. It is also an objective of this plan to put in place a programme to improve the quality of roadside facilities for bus services to include a full roll-out of new bus stop poles, flags and information panels.

5.10. Greater Dublin Area Cycle Network Plan, 2013

5.10.1. This plan consists of the urban network, inter-urban network and green route network for each of the seven local authority areas comprising the Greater Dublin Area (GDA). The key goal of the Cycle Network Plan was to ensure that a cycling culture is developed to an extent that by 2020, 10% of all journeys will be by bike via a high quality and extensive cycle route network. A higher cycling modal share in urban areas is required to compensate for rural areas.

5.10.2. The updated Greater Dublin Area Cycle Network is published along with the Greater Dublin Area Transport Strategy, 2022-2042. It is stated in the Strategy that *"while the 2013 Plan has provided a robust framework for such investment to date, evolutions in cycle policy, design guidance and urban form since its publication have prompted an update of the network. This review has ensured that the network proposed is fit for purpose, and takes account of the needs of the full spectrum of users and trip types. The revised GDA Cycle Network forms part of the Transport Strategy and is published in full alongside this report."*

5.11. Cycle Design Manual, September 2023

5.11.1. The 2011 National Cycle Manual is now replaced by this new Cycle Design Manual, which draws on the experience of cycle infrastructure development over the past decade and international best practice to help deliver safe cycle facilities for people of all ages and abilities. The Manual is intended as a live document that will be updated to reflect emerging best practice.

5.11.2. Chapter 2 of the Manual sets out the five main requirements (safety, coherence, directness, comfort and attractiveness), that designs should fulfil to cater for existing cyclists and to attract new cyclists to the network. Key design principles include a network approach, segregation and inclusive mobility. It is advised that promoters of cycle facilities should cycle. Information is also provided on the types of cycle vehicles, cycle links, appropriate facilities and width calculations.

5.11.3. Chapter 3 of the Manual addresses cycle network planning, as well as the planning of cycling in private developments and public infrastructure projects. Designing for cycling is covered in Chapter 4, with guidance provided on the following:

- Geometric requirements (design speed, sight distance, visibility splays, horizontal and vertical alignments, surface crossfall, clearance and headroom),
- Cycle links (segregated cycle facilities, standard and stepped cycle tracks, protected cycle lanes, two-way cycle tracks, greenways and shared active travel facilities, cycle lanes, cycling in mixed traffic, contraflow cycling, parking and loading on links, bus stops, transitions, pedestrian crossings at cycle tracks),
- Priority junctions,

- Signal-controlled junctions (including protected junctions),
- Crossings,
- Roundabouts.

5.11.4. Details relating to implementation and maintenance, including public lighting and signage/ wayfinding, are provided in Chapter 5, and Chapter 6 sets out the various design principles on cycle parking. Finally, typical layouts for cycle infrastructure are included in the appendix.

5.11.5. The Manual makes a single reference to BusConnects under protected junctions, where it is noted that a small number of these junctions have been implemented in Ireland and many more are currently being planned under active travel schemes around the country and on BusConnects corridors in Dublin and regional cities. The Manual anticipates that the continued rollout of protected junctions will improve junction consistency and coherence on the cycle network.

5.12. Design Manual for Urban Roads and Streets, 2019

5.12.1. This Manual provides guidance on how to approach the design of urban streets in a more balanced way. To encourage more sustainable travel patterns and safer streets, the Manual states that designers must place the pedestrian at the top of the user hierarchy, followed by cyclists and public transport, with the private car at the bottom of the hierarchy. The following key design principles are set out to guide a more place-based/ integrated approach to road and street design:

- To support the creation of integrated street networks which promote higher levels of permeability and legibility for all users, and in particular more sustainable forms of transport.
- The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment.
- The quality of the street is measured by the quality of the pedestrian environment.
- Greater communication and co-operation between design professionals through the promotion of a plan-led, multidisciplinary approach to design.

5.12.2. The Manual recommends that bus services should primarily be directed along arterial and link streets and that selective bus detection technology should be considered that prioritises buses. It is noted that under-used or unnecessary lanes can serve only to increase the width of carriageways (encouraging greater vehicle speeds) and can consume space that could otherwise be dedicated to placemaking/traffic-calming measures.

5.13. South Dublin County Development Plan, 2022-2028

5.13.1. This plan includes a vision for the County's growing communities, places, housing, jobs, sustainable transport and the delivery of services in a manner which promotes climate action and efficient patterns of land use. Sustainable movement is covered under Chapter 7 of this plan where the aim is to increase the number of people walking, cycling and using public transport and to reduce the need for car journeys, resulting in a more active and healthy community, a more attractive public realm, safer streets, less congestion, reduced carbon emissions, better air quality, quieter neighbourhoods and a positive climate impact.

5.13.2. It is an overarching transport and movement policy (SM1) to *"…promote ease of movement within, and access to South Dublin County, by integrating sustainable land-use planning with a high-quality sustainable transport and movement network for people and goods."* The following objectives are also listed under this policy:

> *SM1 Objective 1: To achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the County Development Plan, in line with the County mode share targets of 15% Walk; 10% Cycle; 20% Bus; 5% Rail; and 50% Private (Car / Van / HGV / Motorcycle).*
>
> *SM1 Objective 3: To support the delivery of key sustainable transport projects including DART and Luas expansion programmes, BusConnects and the Greater Dublin Metropolitan Cycle Network in accordance with RPO 5.2 of the RSES / MASP.*
>
> *SM1 Objective 4: To ensure that future development is planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus*

on increasing the share of active modes (walking and cycling) and public transport use and creating a safe and attractive street environment for pedestrians and cyclists, in accordance with RPO 5.3 of the RSES / MASP.

5.13.3. *Cycle South Dublin* is also a programme of works aimed at providing a well-connected, well designed and safe walking and cycling network. A further separate phase of works to facilitate cycling will be delivered by the NTA associated with the BusConnects project.

5.13.4. South Dublin County Council's policy on walking and cycling (SM2) seeks to… *"re-balance movement priorities towards sustainable modes of travel by prioritising the development of walking and cycling facilities and encouraging a shift to active travel for people of all ages and abilities, in line with the County targets."* The following relevant objectives are also listed under this policy:

SM2 Objective 4: To ensure that connectivity for pedestrians and cyclists is maximised and walking and cycling distances are reduced in existing built-up areas, by removing barriers to movement and providing active travel facilities in order to increase access to local shops, schools, public transport services and other amenities through filtered permeability, while also taking account of existing patterns of anti-social behaviour in the removal of such barriers with due consideration of consultation with local residents where need is evident or expressed.

SM2 Objective 5: To ensure that all streets and street networks are designed in accordance with the principles, approaches and standards contained in the Design Manual for Urban Roads and Streets (2013; updated 2019) so that the movement of pedestrians and cyclists is prioritised within a safe and comfortable environment for a wide range of ages, abilities and journey types.

SM2 Objective 9: To work with the NTA to review the feasibility of implementing additional cycling facilities within the major urban and recreational areas of the County.

SM2 Objective 16: To ensure that all streets and street networks are designed in accordance with the principles, approaches and standards contained in the National Disability Inclusion Strategy (NDIS) 2017-2022.

SM2 Objective 17: To support bike parking provision at villages, centres, parks and any other areas of interest, as well as near public transport nodes to support multi-modal transport options.

5.13.5. Approximately 17% of trips originating in South Dublin County are by public transport and the target is to increase this to 20% over the lifetime of the plan. It is recognised that transition to public transport will be aided by BusConnects.

5.13.6. South Dublin County Council's policy (SM3) on public transport – generally seeks to *"…promote a significant shift from car-based travel to public transport in line with County targets and facilitate the sustainable development of the County by supporting and guiding national agencies in delivering major improvements to the public transport network."* The following relevant objectives are also listed under this policy:

SM3 Objective 2: To facilitate and secure the implementation of major public transport projects as identified within the NTA's Transport Strategy for the Greater Dublin Area (2016-2035) as updated to 2042, or any superseding document, including BusConnects, the DART expansion programme along the Kildare route, the opening of the new rail station at Kishogue and the Luas to Lucan.

SM3 Objective 3: To ensure that future development is planned in such a manner as to facilitate a significant shift to public transport use through pursuing compact growth policies, consolidating development around existing and planned public transport routes and interchanges, and maximising access to existing and planned public transport services throughout the network.

SM3 Objective 4: To optimise accessibility to public transport, increase catchment and maximise permeability through the creation of new and upgrading of existing walking and cycling routes linking to public transport stops.

SM3 Objective 5: To facilitate an interlinked network that maximises the efficiency of existing services, reduces overall journey times and facilitates easy exchanges between modes and routes.

SM3 Objective 9: To ensure that all new public transport corridors are designed to enhance the County's green infrastructure network by ensuring adequate replacement and additional planting of native species and pollinators and to ensure that SuDS approaches are used to deal with surface water run-off.

SM3 Objective 10: To work with the relevant transport agencies to ensure that all public transport proposals have regard to pertaining environmental conditions and sensitivities including biodiversity, protected species and designated sites and incorporate appropriate avoidance and mitigation measures as part of any environmental assessments.

SM3 Objective 11: To facilitate the delivery of the BusConnects Core Bus Corridors and seek additional bus corridor and orbital routes to serve the County by securing and maintaining any required route reservations and to ensure the BusConnects Corridors do not adversely affect the village life and livelihoods of any of our County Villages.

SM3 Objective 18: To liaise with bus service providers where new bus stop infrastructure is proposed in order to ensure facilities such as shelters and bins are included, where appropriate.

SM3 Objective 24: To support and facilitate the development of multi-modal transport interchanges at Tallaght Town Centre and Liffey Valley.

5.13.7. There is an appreciation in the plan that the design of streets has a major influence on quality of life and that streets should not just be corridors for traffic, but rather should be places in which people want to live and spend time.

5.13.8. Policy SM5: Street and Road Design seeks to *"…ensure that streets and roads within the County are designed to balance the needs of all road users and promote placemaking, sustainable movement and road safety providing a street environment that prioritises active travel and public transport."* The following objectives under this policy are of relevance:

SM5 Objective 1: To ensure that all streets and street networks are designed to passively calm traffic through the creation of a self-regulating street environment that promotes active travel modes and public transport.

SM5 Objective 2: To design new streets and roads within urban areas in accordance with the principles, approaches and standards contained within the Design Manual for Urban Roads and Streets (2013; updated 2019).

SM5 Objective 5: To design new roads and streets to incorporate green infrastructure elements such as planting of native trees, hedgerows and pollinator species in medians and on roadside verges, as appropriate to the location.

5.13.9. The Council's proposals for the short-term development of the regional road network are set out under the six year road programme. This includes the Greenhills Road Upgrade and Links, i.e. the upgrade of Greenhills Road from Airton Road to Walkinstown Roundabout with new links to Ballymount Avenue, Limekiln Road and Calmount Road for BusConnects provisions and long-term residential communities. The stated function is *"to provide improved access to / between employment lands within Tallaght, Ballymount and Robinhood and to provide improved access to and from the Greenpark, Limekiln and Greenhills area and provide for BusConnects provisions."*

5.14. Dublin City Development Plan, 2022-2028

5.14.1. The main strategic approach of this plan is to develop a city that is low carbon, sustainable and climate resilient. Under Chapter 8: Sustainable Movement and Transport, it is highlighted that the sustainable and efficient movement of people and goods is crucial for the success and vitality of the city, along with the need to move away from private car and fossil-fuel-based mobility to reduce the negative impacts of transport and climate change.

5.14.2. It is an objective (SMTO1 – Transition to More Sustainable Travel Modes) *"to achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the development plan, in line with the*

city mode share targets of 26% walking/cycling/micro mobility; 57% public transport (bus/rail/Luas); and 17% private (car/van/HGV/motorcycle)."

5.14.3. Table 8.1 sets out current and target mode share, with cycling expected to increase by 7% and bus by 3% by 2028. It is stated that the impact of public transport infrastructure projects on mode share is more likely to come into fruition during the lifespan of the following plan. Key strategic transport projects have the potential for a transformative impact on travel modes over the coming years and Dublin City Council actively supports all measures being implemented or proposed by other transport agencies to enhance capacity on existing lines/services and provide new infrastructure.

5.14.4. In this regard, Policy SMT22 – Key Sustainable Transport Projects seeks *"to support the expeditious delivery of key sustainable transport projects so as to provide an integrated public transport network with efficient interchange between transport modes, serving the existing and future needs of the city and region and to support the integration of existing public transport infrastructure with other transport modes. In particular the following projects subject to environmental requirements and appropriate planning consents being obtained:*

- DART +
- Metrolink from Charlemount to Swords
- BusConnects Core Bus Corridor projects
- Delivery of Luas to Finglas
- Progress and delivery of Luas to Poolbeg and Lucan."

5.14.5. Dublin City Council notes the importance of reducing car dominance and that encouraging walking, cycling and use of public transport as a sustainable travel mode requires improving the attractiveness of the environment and public realm within the city and urban villages. It is recognised that there are opportunities for developing public realm around the city and in the urban villages where new public transport proposals are being developed. The following policies are relevant in this regard:

Policy SMT12 – Pedestrians and Public Realm: To enhance the attractiveness and liveability of the city through the continued reallocation of space to pedestrians and public realm to provide a safe and comfortable street environment for pedestrians of all ages and abilities.

Policy SMT13 – Urban Villages and the 15-Minute City: To support the role of the urban villages in contributing to the 15-minute city through improvement of connectivity in particular for active travel and facilitating the delivery of public transport infrastructure and services, and public realm enhancement.

Policy SMT14 City Centre Road Space: To manage city centre road-space to best address the needs of pedestrians and cyclists, public transport, shared modes and the private car, in particular, where there are intersections between DART, Luas and Metrolink and with the existing and proposed bus network.

5.14.6. The Development Plan acknowledges that kerbside space is being continually reduced in favour of transport infrastructure and public realm improvements, and as such, there is very limited capacity on street to meet the servicing requirements of developments. Policy SMT15 – 'Last-Mile' Delivery seeks to *"…achieve a significant reduction in the number of motorised delivery vehicles in the City through supporting and promoting the use of the 'last-mile' delivery through the development of micro hubs and distribution centres."*

5.14.7. Figure 8-2 - Strategic Pedestrian and Related Connections illustrates Crumlin Road, Dolphin's Barn, Cork Street and Patrick Street as historic approaches leading to the civic spine of the city. St. Luke's Avenue is a linking route. In terms of walking, cycling and active travel, it is a policy of Dublin City Council (SMT16) *"to prioritise the development of safe and connected walking and cycling facilities and prioritise a shift to active travel for people of all ages and abilities, in line with the city's mode share targets."* With respect to integration of active travel with public transport, Policy SMT19 seeks *"to work with the relevant transport providers, agencies and stakeholders to facilitate the integration of active travel (walking/cycling etc.) with public transport, ensuring ease of access for all."*

5.14.8. Other transport policies of relevance to the proposed scheme include the following:

SMT25 – On-Street Parking: To manage on-street car parking to serve the needs of the city alongside the needs of residents, visitors, businesses, kerbside activity and accessible parking requirements, and to facilitate the re-organisation and loss of spaces to serve sustainable development targets such as in relation to, sustainable transport provision, greening initiatives, sustainable urban drainage, access to new developments, or public realm improvements.

SMT33 – Design Manual for Urban Roads and Streets: To design new streets and roads within urban areas in accordance with the principles, approaches and standards contained within the Design Manual for Urban Roads and Streets (DMURS) and to carry out upgrade works to existing road and street networks in accordance with these standards where feasible.

SMT34 – Street and Road Design: To ensure that streets and roads within the city are designed to balance the needs and protect the safety of all road users and promote place making, sustainable movement and road safety providing a street environment that prioritises active travel and public transport whilst ensuring the needs of commercial servicing is accommodated.

5.14.9. The proposed scheme passes within or alongside a number of Strategic Development and Regeneration Areas: SDRA5: Naas Road, SDRA12: Dolphin House and SDRA15: Liberties and Newmarket Square.

5.14.10. The proposed scheme traverses the Zone of Archaeological Constraint for Recorded Monument DU018-020 (Historic City) from Dolphin's Barn Street to Winetavern Street and Christchurch Place.

5.14.11. It is an objective of Dublin City Council (SMTO5) *"to review the City Centre Transport Study 2016 in collaboration with the NTA in the lifetime of the plan, setting out a clear strategy to prioritise active travel modes and public transport use, whilst ensuring the integration of high quality public realm."* Dublin City Council, in partnership with the NTA, published the Draft Dublin City Centre Transport Study, 2023. Key potential benefits of the City Centre Plan include a reduction in car traffic of up to 60%; improved air quality and reduced traffic noise; more active and healthier population; protection of architectural heritage from car traffic; improved

cycling facilities and pedestrian environment; significant public realm benefits; and a City Centre transport system that is capable of accommodating a significant growth in population, economic activity, social vibrancy, cultural attraction, tourism, and all the other elements of a modern, progressive European capital city.

5.14.12. The Draft Plan acknowledges that the roll out of BusConnects and other public transportation projects over its lifetime will provide a major increase in public transport capacity as well as enabling buses to reach the city centre without undue delay. A critical element of the Draft Plan is to ensure that BusConnects can operate an efficient, reliable, and punctual service within the City Centre.

5.15. City Edge Project

5.15.1. This initiative seeks to create a new urban quarter within the Naas Road, Ballymount and Park West areas with the potential for 40,000 new homes and 75,000 jobs. The quarter is bound to the north by the Kildare railway line, which is a short distance to the south of the proposed CBC. Kylemore Road will act as one of the main links to the quarter and to the proposed Kylemore rail station and interchange.

5.16. Natural Heritage Designations

5.16.1. The closest European sites to the proposed core bus corridor are the Glenasmole Valley SAC (2.9km) and the South Dublin Bay and River Tolka Estuary SPA (3.3km).

5.16.2. The Grand Canal pNHA adjoins the CBC at two locations.

5.16.3. The table below sets out all the designated sites within 10km of the proposed core bus corridor:

Site Name	Site Code	Distance (nearest point to proposed development)
Liffey Valley pNHA	000128	3km north
Santry Demesne pNHA	000178	6.3km north
Dolphins, Dublin Docks pNHA	000201	5km east

North Dublin Bay pNHA	000206	3km north-east
South Dublin Bay pNHA	000210	4km east
Dodder Valley pNHA	000991	1km south-east
Booterstown Marsh pNHA	001205	5.8km south-east
Glenasmole Valley pNHA	001209	2.9km south
Lugmore Glen pNHA	001212	2.3km south-west
Fitzsimon's Wood pNHA	001753	8.5km south-east
Royal Canal pNHA	002103	2.2km north
Grand Canal pNHA	002104	0km
Slade Of Saggart And Crooksling Glen pNHA	000211	4.8km south-west
Rye Water Valley / Carton SAC	001398	7.9km west
Wicklow Mountains SAC	002122	5.3km south
North Dublin Bay SAC	000206	6.2km east
South Dublin Bay SAC	000210	3.9km east
Glenasmole Valley SAC	001209	2.9km south
North Bull Island SPA	004006	6.2km north-east
South Dublin Bay and River Tolka Estuary SPA	004024	3.3km east
North-West Irish Sea cSPA	004236	8.1km east
Wicklow Mountains SPA	004040	6.7km south

6.0 **Planning History**

6.1. Figures 1C-1M of the Planning Report accompanying the application lists the following eight applications of note located adjacent the proposed scheme:

An Bord Pleanála Ref: ABP-313590-22

6.2. Strategic Housing Development for 197 apartments on Greenhills Road (south of Hibernian Industrial Estate).

An Bord Pleanála Ref: ABP-313129-22

6.3. Strategic Housing Development to include demolition of former Chadwick's Builders Merchants and construction of office, residential and commercial development.

South Dublin County Council Reg. Ref: SD208/0005

6.4. Part 8 application for public realm works at Belgard Square North.

An Bord Pleanála Ref: ABP-313606-22

6.5. Strategic Housing Development for 334 residential units on Belgard Road, Tallaght.

An Bord Pleanála Ref: ABP-313760-22

6.6. Strategic Housing Development to include 310 residential units, creche and 2,289 sq.m. of commercial units on Belgard Road, Tallaght.

South Dublin County Council Ref: SD058/0013

6.7. Part 8 application for the realignment of Greenhills Road, including construction of a 13m wide and 660m long carriageway, including bus lanes in each direction.

South Dublin County Council Ref: SD058/0012

6.8. Part 8 application for further reconfiguration of 570 metres of 13m wide carriageway, to include bus lanes in both directions between the Greenhills Road bridge over the M50 eastwards to Ballymount Avenue.

South Dublin County Council Ref: SD058/0014

6.9. Part 8 application for an extension to Greenhills Road, involving the construction of approximately 330m of 9m wide carriageway between Greenhills Road and Limekiln Road.

Other Significant Applications/ Appeals to ABP in proximity to CBC (c. 100m)

6.10. Significant applications/ appeals to the Board along the alignment of the CBC and extending a distance of 100m back on both sides were extracted from the Board's

mapviewer. The following is a non-exhaustive list of cases that can be used by the Board for the purposes of gauging the nature and extent of development proposed along the CBC. It should have noted that some of these decision may have been quashed following judicial review, e.g. ABP-304792-19.

Reference	Location	Development Description	Development Type	Decision
ABP-300184-17	The Donnelly Centre, Cork St.	399 student accommodation bed spaces with associated ancillary services and a retail/café unit.	Residential	Grant
ABP-302149-18	43-50 Dolphin's Barn St.	1 retail unit and 70 apartments (related Ref: ABP-312295-21).	Mixed development	Grant
ABP-303306-18	Belgard House, Belgard Sq. North.	438 apartments	Residential	Grant
ABP-304686-19	Long Mile Road, Walkinstown	153 residential units and associated site works.	Residential	Grant
ABP-304792-19	Dolphin Park, TSS GAA Club, Crumlin Road	2-storey clubhouse and 161 houses.	Mixed development	Grant
ABP-305061-19	317 student bed spaces	355 South Circular Road	Residential	Grant
ABP-305324-19	368 no. student bed spaces	St. Luke's Avenue and Ardee Street	Residential	Grant
ABP-306030-19 (SD19A/0287)	19 apartments	The Cuckoo's Nest, Greenhills Road	Residential	Grant
ABP-306705-20	502 apartments	Former Gallagher cigarette factory, Airton Road & Greenhills Road	Residential	Grant

ABP-307062-20 (3752/19)	6-storey enterprise building 316189	Off New Street South (amendment application ABP-316189-23)	General offices	Grant
ABP-307067-20	413 build to rent apartments	New Market Place, St. Luke's Avenue & Newmarket St.	Grant	Residential
ABP-307804-20	1,102 residential units, offices, restaurants, etc.	Royal Liver Assurance Retail Park	Grant	Mixed development
ABP-307186-21	70 residential units and mixed use block, (ABP-310035 – amendment application).	Balfe Road & Walkinstown Road	Grant	Mixed development
ABP-310112-21	282 no. apartments, creche and associated site works.	Brickfield Drive	Grant	Residential
ABP-312218-21	545 no. Build to Rent apartments, creche and associated site works	Lands at Concorde Industrial Estate, Naas Road	Grant	Residential
ABP-311065-21	52 apartments and public house	Kestrel House, 157 Walkinstown Road	Refuse	Mixed development
ABP-312504-22 (SD21A/0139)	40 apartments	St. Basil's Training Centre, Greenhills Road & Old Greenhills Road	Refuse	Mixed development
ABP-312268-21	134 build to rent apartments	Ardee St. & Newmarket	Grant	Residential

ABP-314056-22	Liffey Valley to City Centre	BusConnects CBC	Road transport	Granted
ABP-313278-22	335 residential units, creche & associated works	White Heather Industrial Estate, South Circular Road	Decision pending	Residential
ABP-314171-22	345 residential units, creche & associated works	Former Bailey Gibson site, South Circular Road	Decision pending	Residential
ABP-318661-23	21 apartments, gym & coffee bar	Hannover Lane	Decision pending	Residential
ABP-316828-23	Kimmage to City Centre	BusConnect CBC	Road transport	Decision pending

Other Significant Planning Application to Local Authorities

6.11. The following significant planning applications along the route of the CBC were granted by the local authority or have yet to be decided:

Dublin City Council Reg. Ref: 3228/20

6.12. Permission granted for mixed use development on the Nissan site at the junction of Walkinstown Avenue and Naas Road for a mixed use development including 1,137 residential units.

Dublin City Council Reg. Ref: 2326/17

6.13. Permission granted for a 4-storey mixed use building include 1 no. retail unit and 14 no. residential units at no. 119 Drimnagh Road, Dublin 12.

Dublin City Council Reg. Ref: 3086/17

6.14. Permission granted at 75-78 Cork Street for 39 apartments and offices.

Dublin City Council Reg. Ref: 4334/18

6.15. Permission granted for 2 no. ground floor retail units and 19 apartments at 110-111 Cork Street.

Dublin City Council Reg. Ref: 2587/21

6.16. Permission refused for demolition works and construction of 24 apartments and commercial space at 72-74 Francis Street.

South Dublin County Council Reg. Ref: SD22A/0035

6.17. Permission granted for a 4-storey nursing home and 60 no. 1-bed independent living units on lands within St. Mary's Priory, Old Greenhills Road.

South Dublin County Council Reg. Ref: SD22A/0099

6.18. Permission granted at Calmount Road / Ballymount Avenue for 5 warehouse / logistics units, including ancillary office use with combined floor area of 20,158 sq.m.

Mobility Hub Pocket Park, Tallaght

6.19. South Dublin County Council intend to construct a public realm pocket park between the proposed Tallaght bus interchange and The Square Shopping Centre car park. The proposed scheme will provide a design to interface to maintain pedestrian access across the this pocket park and vehicular access to The Square Shopping Centre car park.

Dolphin's Barn Public Realm Improvement Scheme

6.20. Project by Dublin City Council to create an enhanced public realm for Dolphin's Barn Village.

Winetavern Street Contra-Flow Bus Lane

6.21. Dublin City Council have recently constructed an inbound contra-flow bus lane on Winetavern Street / St. Michael's Hill.

7.0 Submissions from Prescribed/ Public Bodies on the Proposed Scheme

7.1. Department of Housing, Local Government and Heritage

7.1.1. The Department submitted the following comments on the proposed Core Bus Corridor scheme:

- Main concern from a nature conservation perspective is the potential adverse effects which may result to calcicole plant communities present on the R819 Greenhills Road north of the M50 (between Greenhills Road and Ballymount Avenue with Ballymount Industrial Estate and construction compound TC7).
- Calcicole plant communities have developed on glacial gravels and sands exposed in the downslope of the esker mainly within the fence of the Johnson Brothers depot and also elsewhere.
- Calcicole plant communities and species have known to be present along the relevant stretches of Greenhills Road for more than 30 years but haven't been identified in habitats surveys carried out for the EIAR.
- Such plant communities are rare in Dublin and they could be destroyed if within the footprints of the new connecting roads from Greenhills Road to Ballymount Avenue and Calmount Road to allow for diversion of busway from Greenhills Road, or on the sites of construction compounds.
- Slippage of soil onto north-west facing esker slope within Johnson Brothers depot fence could result in smothering of calcicole plant species. On the other hand, formation of new supporting embankments should provide ideal conditions for calcicole species to colonise.
- Scrub vegetation on footprint of connection roads to be constructed off Greenhills Road and on the site of construction compound TC7 and elsewhere along the proposed CBC scheme are likely to support numbers of breeding birds in season. Clearance should be carried out outside of main breeding season.
- Any planning application granted should be subject to conditions requiring submission of a Calcicole Plant Communities Conservation Plan and preventing removal of scrubs, trees or other vegetation during the main bird breeding season.
- Condition also recommended on archaeological mitigation, CEMP including location of any archaeological or cultural heritage constraints, appointment of project archaeologist, and submission of a final archaeological report.

7.2. South Dublin County Council

7.2.1. The following observations have been received from SDCC:

Development Management Section:

- Generally in favour of the principle of the proposed scheme and sets out related policy.
- Proposed scheme will support more efficient and intensive use of brownfield serviced urban sites, sustainable and vibrant communities, as well as housing delivery.
- Proposed scheme will provide a good balance between servicing existing communities while not seriously and adversely affecting residential amenities, given its proposed routing.
- Proposed scheme is delivering on wider remit of smarter travel and outweighs issues such as loss of trees and carriageway width dedicated to cars.

Traffic & Transportation Section:

- Important for the NTA to liaise with SDCC on ties ins to ensure bus interchange and adjoining plaza are coordinated by condition.
- Concerns regarding location of the proposed compound in Bancroft Park being too close to residential properties.
- NTA should provide enhanced public realm along Old Greenhills Road up to Tallaght Village to mitigate loss of high-quality public realm at junction of Old Greenhills Road and Greenhills Road by way of condition.
- Wherever possible, cycle lanes should be extended to connect into existing cycle lanes, e.g. Airton Road.
- Scheme should set out clearly how NTA will re-provide high-quality open space at Mayberry Road and Birchview Avenue. Design of green space between Calmount Road and Greenhills Road needs more consideration to include landscaping plan.

- Welcomes pedestrian and cycle linkages from Treepark Road across green open space to Castletymon Road.
- Need clarity on what land will become public realm after the scheme is completed and the maintenance implications of such lands.
- Level of detail set out for Construction Management Plans to include Construction Traffic Management Plan and Project Construction Waste and Demolition Management Plan.

Roads Maintenance Section:

- Precast kerbing not permitted except by express permission of Roads Maintenance Department.
- Road structure of bus bay is to be 300mm thick reinforced concrete slab with geogrid overlapping the joints.
- Drainage system to be designed using SuDS and signage to be kept to a minimum. Universal design principles should be employed.

Economic Development Section:

- Clarity on taking in charge should be borne in mind to avoid creating any ransom strips along the route.

Public Realm Section:

- Sets out relevant policy for protection of trees and hedgerow, green infrastructure, community infrastructure and open space, SuDS, etc.

Parks and Landscape Section:

- Concerned about the loss of trees and hedgerow – proposed removal of trees from SDCC lands is not matched by replacement trees.
- Green Infrastructure Strategy requires developments to examine the green infrastructure within the development and develop and enhance green infrastructure.
- Important to retain trees where possible and to create tree-lined streets to ensure the urban heat effect is reduced where walking and cycling occurs. Landscaping

strategy should be prepared by condition demonstrating reprovision of 125% of trees and 150% of hedgerow.

- Concerned that some swales may not be sufficiently deep, which would impact on their viability.
- SDCC Public Realm Section unconvinced of the necessity of CPO of public land to carry out public works.
- Condition required in relation to boundary replacement and access at Bancroft Park and compensatory measures for loss of access to open space and amenity.
- Land proposed for temporary and permanent CPO at Tymon Park is excessive and not welcomed. Extent of road sweep on Greenhills Road could be reduced away from the park.
- Applicant asked to confirm that sufficient transects were taken to establish the level of Brent Geese in Tymon Park. SDCC has made significant progress recently in ensuring that Tymon Park is as supportive as possible for the species.
- Requests condition that boundaries of Tymon Park are replaced with low stone walls with railing but every effort should be made not to encroach on the park.
- Opportunity exists to identify and enhance the interconnection of parks, green spaces and river corridors situated along the M50. Site is within Strategic Corridor 2: M50 Corridor and Strategic Corridor 3: Grand Canal Corridor. BusConnects should seek to improve ecological links within these corridor areas – Green Infrastructure Plan should be agreed by condition.
- Public lighting condition should demonstrate how public lighting will balance the needs of environment, wildlife and the public using the streets.
- Concerned at lack of bat survey transects for a significant portion of the proposed scheme at Bancroft Park and Tymon Park – further bat surveys requested. Surveys also requested at the location of the new link road connecting Greenhills Road to Ballymount Avenue and adjacent to the Grand Canal pNHA. Otter and Kingfisher surveys should also have been carried out along the Grand Canal.

Proposals should be submitted to enhance and connect the ecological habitats along this section of the route.

- Belgard Square West proposal for reinstatement of footpaths should include the same stone paving on both sides of the road to ensure consistency.

Active Travel Section:

- SDCC Active Travel team has considered the boundary issues with the Tallaght Public Realm schemes and the level of abortive work has been minimised.

Architectural Conservation Section:

- Indirect physical construction phase impacts are anticipated in three locations where protected structures of national importance and high sensitivity share boundaries with the proposed scheme, which include St. Maelruain's Church – safety statement should be completed detailing how boundaries will be safeguarded with approval of Council Architectural Conservation Officer.
- Indirect physical construction phase impacts also anticipated at 28 locations where protected structures of regional importance and medium sensitivity share a boundary with the proposed scheme.
- Tallaght ACA is of regional importance and medium sensitivity – proposed works in ACA should also include a safety statement, including a method statement.
- In the event of a grant of permission, the Local Authority Architectural Conservation Officer should be contacted to discuss specifications by condition.

Water Services Section:

- All structures should have a setback distance to the outside diameter of surface water sewers as advised by SDCC. Setback distance for foul and watermain should be as per Irish Water Standards.

City Edge Section:

- Tallaght Clondalkin to City Centre CBC proposals have arrived at a crucial time in terms of ensuring that City Edge and BusConnects are aligned.

- Proposed scheme ties in with the strategic objectives of City Edge to focus on compact growth, active travel, transport orientated development and 15-minute city principles.
- Proposed scheme presents opportunity to future-proof the corridors with high-quality green infrastructure for adaptation to climate change, biodiversity and visual amenity.
- Proposed scheme is routed through a transport interchange/ district centre and this is welcomed by SDCC.
- Requests a revisit of the design of the proposed cycle bridge at the intersection of Naas Road, New Nangor Road and Long Mile Road – missed opportunity to create a landmark structure and requests further consideration of the design and visual appearance of the bridge through condition with finishes, lighting and design to be agreed.
- Design of New Nangor Road/ Oak Road/ Park West Avenue junction/ route will require to be capable of taking more extensive traffic in future.
- Killeen Road/ New Nangor Road junction is hard in appearance and more greening is encouraged.
- Proposal to route CBC along Calmount Road is welcomed in the context of this being identified as a future local high street; however, more greening and SuDS is encouraged.
- Protection of extensive swathe of trees along Greenhills Road and minimising of tree removal is encouraged. There is scope for reduction in land-take into Tymon Park by re-examining the sweep and width of the carriageway.
- Opportunity for greening should be explored along the eastern side of Ballymount Road.
- Welcomes connecting up of Calmount Avenue to create a through-road linking to the future Calmount local high street. Tree removal should be minimised and proposals should result in a net greening.

- Operation of construction compounds on SDCC lands should take place by agreement rather than by temporary CPO – SDCC hereby offers its consent for the temporary use of its lands for delivery of these proposals by agreement.

7.3. Dublin City Council

7.3.1. The following observations have been received from DCC:

Planning Policy:

- In terms of regional policy, the proposed scheme is supported by the RSES and will contribute and support continued improved integration of transport with land use planning. Delivery of improved high-capacity Core Bus Corridors will enable and support residential and economic development opportunities.
- Proposed scheme has been considered with regard to Core Strategy and the policies and objectives of the current Dublin City Development Plan and in particular the dual aspirations of delivering necessary transport infrastructure to facilitate compact growth while also protecting Natura designated sites.
- Content of EIAR points generally to the development having negligible impact on the existing environment.
- Dublin City Council considers that the submitted NIS is generally satisfactory in terms of identifying the relevant European sites and potential adverse impacts on the integrity of these sites in view of their conservation objectives.
- Overall, it is considered that the proposals would be compatible and consistent with the zoning objectives for the area.
- Dublin City Council satisfied that elements of the proposed development falling within the Council boundary would not have any excessive or undue impact on the amenities of the area. There will be a degree of disruption in terms of traffic management during construction but thereafter there is unlikely to be adverse impacts on existing amenities. Sharing of kerbside space will need to be managed so that there is no undue adverse impact on the ability of residents and visitors to access local services on foot or on the ability to achieve the ’15-minute city’.

Forward Planning Section:

- Proposed scheme is supported by the high level policies in the current Development Plan. Requests that those city-wide and area specific policies and objectives are taken into account when the proposed works along the Tallaght/ Clondalkin route are being formally considered.

City Archaeologist

- Refers to policy BHA26 to protect and preserve monuments and policy BHA16 to have regard to the city's industrial heritage.
- Summarises the findings of Chapter 15 of the EIAR – Proposed scheme has the potential to impact on 3 National Monuments, 31 archaeological heritage features on the Records of Monuments and Places/ Sites and Monuments Record, 3 non-designated archaeological sites and 2 cultural heritage sites (not otherwise designated).
- Main potential impacts listed in the EIAR are from pavement construction, repairs and reconstruction works; road surfacing works; and any excavations and ground disturbance works.
- Notes that Section 15.5 of the EIAR addresses mitigation for archaeology. Monitoring will take place under licence where any ground-breaking or ground reduction measures are required at all sites of archaeological and cultural heritage along the route.
- Conditions on archaeology recommended in appendix to the report.

City Architect's Division

- Design of public realm will be fundamental to the success of the proposed scheme. Recommends condition that detailed design and taking in charge arrangements be agreed with the Planning Authority.
- Design needs to be supported by pedestrian traffic counts to ensure that footpaths are of sufficient width and can safely accommodate public realm infrastructure. Cycle paths should be located at the edge of the footpath rather than running through it (Sheet 24 – junction of Drimnagh Road & Kildare Road,

Sheet 33 junction of Patrick Street & Dean Street, Sheet 34 junction of High Street, Christchurch Place & Nicholas Street).

- All historic fabric and features should be retained and protected and the setting of protected structures and ACA's should be respected. Proposed works must comply with guidelines under S.52(1).
- General arrangement drawings do not include an overlay of existing survey drawings – would have facilitated a better assessment of the proposal on existing public realm.
- Condition recommended that full details of the design and type of each bus shelter be agreed with the Planning Authority, in particular in conservation areas, e.g. along Nicholas Street. Advertisements should not be permitted in bus shelters in ACA's, etc.
- Utility cabinets, poles and other above ground utility infrastructure may have a significant impact on public realm – agreement condition recommended.
- Electric vehicle charging points should be agreed by condition.
- Replacement of all existing hard surfaces with new may not be required, nor may it be financially feasible or sustainable – agreement condition recommended. All materials need to be agreed with Roads Maintenance Division and historic fabric recorded and retained.
- Full palette of street furniture (lighting, bins, benches, bollards, cycle stands, wayfinding poles, digi-panels, etc) should be agreed by condition.
- Boundary treatments – fabric of all boundaries to be relocated to facilitate land acquisition should be assessed for architectural conservation value and for potential repair/ re-use.
- Section of artworks along the route shall be agreed with the local authority arts office by condition.
- Suitable locations for water drinking fountains shall be agreed by condition.
- Trees should only be indicated on drawings where there is sufficient remaining width in the footpath – agree by condition.

- Traffic signage should be designed to reduce the number of traffic signal poles to a minimum – agree by condition.
- Gantry traffic signage should not be included in conservation areas, ACA's and Residential Conservation Areas – alternatives should be agreed by condition. Existing welcome to village signage should be retained and a scheme of city wide village signage should be agreed by condition.

Conservation Section

- Relevant Development Plan policies and provisions should be taken into account in the consideration of all proposed routes and their impacts on the architectural and built heritage of the city.
- Recommends that all mature and historic trees across the BusConnects proposal and in particular those in close proximity to Protected Structures and within ACAs, Conservation Areas and areas zoned Z2 and Z8 are retained and protected as far as practically possible – where there is unavoidable loss, these trees shall be replaced with new semi mature trees.
- Comprehensive assessment on architectural heritage, streetscape and the urban environment submitted as part of the EIAR and the proposed mitigation measures across the scheme is generally welcomed.
- Inventory of Architectural Heritage Sites provides a written and photographic, importance rating and sensitivity rating for all heritage features, which is comprehensive and accurate – very thorough study of the receiving environment has been carried out.
- Once mitigation has been applied, there will be no significant adverse residual impacts on the architectural heritage resource as a result of the construction and operational phases.
- Key impacts in relation to architectural heritage include those relating to protected structures and their setting during construction works; impact on former Ardscoil Éanna necessitating removal of boundary wall; the proposed bus shelter at St. Patrick's Park in proximity to the cathedral; the new location for the bus shelter at St. Mary's Church of Ireland Church; impact on Crumlin Health Centre

necessitating removal of front boundary wall; protection of NIAH structures in close proximity to construction works; impacts on Thomas Street ACA and Crumlin Village ACA, conservation areas, Z2 and Z8 zonings, and industrial heritage sites; potential impact on paving, lamp posts, other street furniture/ finishes; proposed tree removal and provision of new trees; boundary treatments; cycle lanes (high quality surface in lieu of red tarmac near heritage features); rationalisation of signage across the CBC to reduce visual clutter; and mitigating of the visual impact of bus stops/ shelters/ and information posts near heritage features and associated treatment of kerbing and paving.

Environment & Transportation Department

- Recognises that bus is the most important mode of public transport in Dublin and commitment by NTA to increase the level of priority to buses is very much welcomed.
- Separated and segregated cycleways will provide better and safer cycling environment for all ages and abilities and will allow buses to proceed without delay.
- CBC must be managed such that DCC traffic control system is constantly managing requests for priority and has the necessary information to determine what level of priority is appropriate in order to maintain an even headway on the corridor.
- Digital infrastructure along with the proposed civil infrastructure are both required for the corridor to meet its objectives. For BusConnects, the DCC system is being upgraded to link with next generation Automatic Vehicle Location system which will allow finer grain information to be transmitted to the DCC system for dynamic management of the corridor.
- Corridor needs to be considered as a whole and various measures to prioritise public transport, walking and cycling need to be implemented in as full a manner as possible to avoid ‘watering down’ the benefits of the scheme by making localised changes to the design.

- Deployment of camera based enforcement will be needed on the corridor before the full benefit of the scheme in terms of bus reliability can be achieved.
- Welcomes the proposed improvements for walking and cycling at Walkinstown Roundabout. Specific synchronisation of the various traffic signal arms may be required to ensure bus priority and detailed design can be agreed by condition.
- Replacement of roundabout with fully signalised junction should be explored during detailed design in the interests of pedestrian and cyclist safety and to enable better bus priority.
- Patrick St./ Dean St. junction overlaps two different schemes and should be viewed as one junction for safe and efficient movement of all modes.
- Roads Department generally supportive of the proposed scheme but highlights some matters which could further improve the scheme:
- Proposed schemes, including the Tallaght Clondalkin scheme, could be improved by making greater provision for pedestrians by ensuring sufficient and appropriate footpath widths based on pedestrian flows (min. 2m) and by ensuring pedestrian priority.
- Grade or physical separation between cycling facilities and footpaths is recommended and cycle tracks through footpaths and pedestrianised zones should be avoided. Condition recommended to ensure priority for pedestrians through signage and other appropriate measures.
- Impact of reallocation of kerbside to buses and cyclists and loss of parking and loading bays is not clearly quantified in the schemes, nor is the adequacy of alternative provision demonstrated – condition regarding loading and parking attached.
- Appears to be inadequate buffer space between parking/ loading and cycle lanes and trees and heritage features on footpaths appear to cause obstruction.
- Not clear why 2-way cycle track is proposed around Walkinstown Roundabout – drivers will be looking right and won't be expecting cyclists travelling from the left and it is unclear who has priority.

- Proposed scheme would interfere with the recently completed high quality Francis Street public realm scheme – consideration should be given to limiting the works to run along the outer edge of the footpath rather than extend up Francis Street as shown. Right turn ban could be implemented through signage alone.
- Rationale for running the cycle track through the north-western corner of the Patrick Street/ Dean Street corner is unclear – cycle route would traverse pedestrian desire lines and waiting areas.
- Proposed development must comply with the Greater Dublin Regional Code of Practice for Drainage Work Version 6.0 and shall incorporate Sustainable Drainage Systems in the management of surface water. The detailed drainage design shall be agreed in writing with DCC Drainage Planning, Policy and Development prior to commencement of development and the NTA shall confirm that development has been designed to minimise flood risk, with the three stages of the SFRA Justification Test being passed, particularly for tidal and fluvial flooding.
- Detailed comments are included on matters relating to SuDS, attenuation, manholes, trees, bio-retention, nature based solutions, etc. on various drawings throughout the proposed scheme.
- All surface water that discharges from the curtilages of the Tallaght Clondalkin to City Centre CBC proposal into existing or proposed waterbodies should be intercepted and treated, using nature-based solutions wherever possible.
- EU Water Framework Directive overrides NRA and UK documentation with respect to sensitivity of receptors. Proposed scheme needs to support and be consistent with the delivery of the 3rd Cycle River Basin Management Plan. Urban run-off is a significant urban pressure and BusConnects are the biggest planned intervention to key, heavily trafficked commuter route. Developer shall provide evidence based assessment of the impact of the proposed scheme on the water quality status of both rivers within the curtilage of the proposed scheme, including ecological and chemical status.

- Further details on flood prevention required at detailed design stage.

Parks Department:

- Concerned that the compound at Bunting Park will impact on the safety of the run-off zone around the GAA pitch – recommended that a sum of €50,000 be provided for investment into recreational facilities in the park.

Conclusion:

- Proposed scheme will provide an upgraded and expanded bus network and quality of service together with better quality cycling and pedestrian facilities, which will promote a modal shift and ultimately contribute to the creation of a greener and more sustainable city.
- Planning Authority requests that the scheme be approved subject to conditions relating to the handing over of the corridor to the NTA and its contractors and handing back to the Council; consultation with Council departments; archaeology; details of landscaping, public realm, bus shelter design, utility cabinets and electrical charging points; design, materials and boundary treatments; public art and water drinking fountains; landscape maintenance and tree protection; signage; conservation supervision and details relating to specific items; traffic management equipment; photographic record; final design details; road safety audits; universal design principles; agreement of alteration of kerbside spaces; reinstatement; construction period; public lighting; drainage, flooding and water protection; noise and air quality control; and development contributions.

7.4. Transport Infrastructure Ireland

7.4.1. The follow comments were received from TII:

- Acknowledges and supports the BusConnects project in playing a key part of the Government's policy to improve public transport and address climate change.
- Proposed scheme interacts with the national road network and Luas at four locations:
    - Crossing under M50 along Nangor Road.

    - Crossing over M50 utilising two new pedestrian and cycle bridges alongside Greenhills Road.
    - Crossing the Luas east of Tallaght Luas tram stop.
    - Along Naas Road over which the Luas travels.
- 4 no. construction compounds are in the vicinity of the national road network (TC1, TC5 & TC6) or light rail (TC13) and this may give rise to impacts.
- Does not appear that any mitigation is proposed in relation to the maintenance and protection of the national road network in the CEMP.
- All works proposed under and in the vicinity of the R134 Nangor Road bridge be captured, undergo detailed design and execution in accordance with TII Publications standards. Prior consultation with TII also required, along with PPP contractors.
- Interactions with the M50 at Greenhills Road Bridge should include commitment to liaison with TII and captured in the CEMP.
- Part of M50 at this location, including lands either side of the motorway, is subject to MMaRC Network A Scheme – will require prior consultation with TII and compliance with all relevant standards. Temporary compounds also appear to be within or adjacent to MMaRC maintained area.
- Necessary requirement for protection of national road function required – works to undergo detailed design and execution in accordance with TII standards and any access to national road must follow maintenance contractor's 3rd party access protocol in advance of carrying out works.
- There is a requirement for mitigation of potential construction and operational stage impacts through coordinated and managed in consultation with the Network Management section of TII.
- BusConnects must be able to proceed complementary to the protection of the safe and efficient operation of the national road network in the interests of effective integration of sustainable and active travel modality.

- TII advises that liability and maintenance responsibilities of new pedestrian and cycle bridges alongside Greenhills Road Bridge should be resolved prior to decision being made.
- Works to structures and associated services in proximity to the national road network must be subject to coordination with and the prior approval of TII in accordance with TII publications.
- In the event of resolution of matters, conditions recommended on compliance with TII publications; long term maintenance; submission of design reports; submission of CEMP to include mitigation and monitoring for the national road network; and submission of a construction traffic management plan.
- Guidance and physical interfaces, including electromagnetic interference, with Luas during construction and operation or overbridge on Naas Road does not appear to have been evaluated in the EIAR. Any reduction of signal priority, as appear proposed at this location, would significantly impact on Luas services.
- Potential road closures and under and overground works for the proposed scheme have the potential to impact Luas infrastructure including trackbed, rails, Luas Overhead Conductor System and associated under and overground services and signalisation infrastructure.
- Proposed works and construction compound have the potential to impact on Luas passenger services and passenger access to Luas during construction and operational phases.
- EIAR and CEMP do not appear to fully identify specific methods or techniques for mitigation of potential impacts on Luas infrastructure and services.
- Any alteration to tramway and associated services and signalisation, including installing of overhead bridge, will require pre-development assessment and modelling at interfaces with the proposed scheme.
- In the event of a grant of permission, conditions are recommended on details of overhead conductor poles; Luas signalisation infrastructure; detailed design for the Naas Road pedestrian and cycle bridge; submission of CEMP and CTMP; Luas access and maintenance agreement; and application for works permit.

8.0 Submissions/ Observations on the Proposed Development

8.1. A total of 55 submissions on the proposal were received from third parties. The main points raised in each submission are summarised as follows:

8.1.1. Cllr. Kieran Mahon, Bolbrook Grove, Tallaght

- *Proposed bus corridor through Birchview, Parkview and Elmcastle, Kilnamanagh, Tallaght* - Proposed 2-way bus corridor is set to accommodate just a single bus route, Rt. 27, that already operates as a high frequency route on an existing main road less than 0.05km from the proposed road. Proposal is unnecessary, overly intrusive on residents, detrimental to public greenspaces and will have a minimal positive impact on public transport or active travel. There will be three parallel roads with 200m width of each other and Parkview will essentially become a traffic island. Proposal will see significant loss of green space, while failing to utilise existing road infrastructure fully.
- *Proposed bus corridor at Old Greenhills Road, Tallaght Village* – proposal seeks to dramatically realter the widely used public plaza in favour of a bus corridor. Area currently provides safe access to existing cycle paths and footpaths between Tallaght Village and the Greenhills Road, as well as pedestrian and car access to historical Dominican Priory church buildings. Consideration should be given to utilising the road through Technological University Dublin (TUD), Tallaght Campus and unused site at Main Road/ Greenhills Road junction should be examined as an alternative to disruption caused to existing public space.
- *Proposed CPO of lands at Bancroft, Tallaght for site compound* – significant vacant sites exist in nearby industrial areas in Airton Road and Ballymount or TUD lands and vacant site in Tallaght Village recently used as a storage compound by Lidl.
- *Lack of clarity regarding bus stops and future routes of Greenhills Road* – proposed bus corridor at Parkview and Birchview is not connected to Castletymon Road meaning existing bus stops on Greenhills Road would need to be retained or replaced and upgraded to accommodate the direct route D5.

8.1.2. **Glenda & Stephen Smullen, Tamarisk Avenue, Kilnamanagh, Dublin 24**

- Objects to proposed bus corridor at the green spot across from Cuckoo's Nest Pub on Greenhills Road – bottleneck is caused by a narrowing of the road at traffic lights on Greenhills Road nowhere near proposed plan for change.
- School children will have to cross two dangerous roads and proposed route will destroy a walkway from Kilnamanagh to Greenhills Road/ Tymon Park, as well as green area and the ring road.
- Bus route will interfere with the privacy of Kilnamanagh.

8.1.3. **AA Tyremaster Limited & Others**

- Warehouse, wholesale and retail tyre sales and fitting, and car sales, servicing and repair on Site 1 and the concrete pump facility and depot on Site 2 are long established and historic.
- Objects to the proposed closing of Greenhills Road at c. 0.44km from Walkinstown Roundabout and to the proposed CPO if a portion of Folio DN 5314F.
- Site 1 has high profile with brand visibility and relies on passing trade. and daily access to Walkinstown Roundabout is important for Site 2 – turning Greenhills Road into a cul de sac will impact on viability of businesses and create loss of amenity and disadvantages for upgrading/ extending premises/ changing the use.
- Suggests allowing Greenhills Road to continue two-way with a slip road access travelling from Walkinstown Roundabout and a stop sign on the Greenhills Road travelling towards Walkinstown Roundabout. This would ease the traffic burden on Calmount Road.

8.1.4. **Aiden & Claire Griffin and Others, 24 Parkview, Kilnamanagh**

- Proposal would create a safety issue for those using recently upgraded green space to play.
- Approval of application would be in direct violation of South Dublin County Council's Pollinator Action Plan 2021-2025.

- There will be a lot of noise pollution from daily traffic on top of the noise pollution residents already endure from Greenhills Road on opposite side. If walls were built higher, natural light would be lost.
- Rear gardens and upstairs windows would be visible from upstairs bus windows, creating privacy and security issues.
- Traffic will disrupt residents and plan is not suitable for present day traffic volumes.

8.1.5. **Aoife Hanley & Others, 15 Birchview Avenue, Kilnamanagh**

- Green space is very important to residents and the proposal will give rise to safety concerns for children and privacy and noise issues for residents from passing buses.

8.1.6. **Bernard Sweeny & Susan Byrne, 62 Saul Road, Crumlin**

- Drawings are contradictory with ‘quiet road’ being accessible to only cyclists and local access vehicles yet proposed changes to Clogher Road/ Sundrive Road junction shows access for buses and bicycles to this ‘quiet street cycle route’.
- Proposed modification of vehicular access to Clogher Road in the direction of Clogher Road/ Sundrive Road junction will force already significant amounts of traffic currently using this road onto Saul Road.
- Unclear in planning drawings how ‘shared with local access’ is defined and how it will be implemented and enforced.
- Unclear as to what form modification of junction of Saul Road and Kildare Road/ Clogher Road will take and if Saul Road residents will still be able to use this junction to access their properties.
- Transport experience of residents of around Clogher Road will be affected from removal of bus stops.

8.1.7. **Blackwin Limited, c/o DBFL Consulting Engineers, Upper Ormond Quay**

- Have recently received planning permission to develop lands at Calmount Road and Ballymount Avenue (Reg. Ref: SD22A/0099) – supports emerging Core Bus Corridor which will deliver significant accessibility and road safety benefits.
- Concerns regarding the impact on the operational performance of the Calmount Road/ Ballymount Avenue junction considering the land uses (warehouse & logistics) and associated HGVs, and the diversion of traffic from closure of Greenhills Road.
- Priority to southern and eastern junction arms for BusConnects has the potential to delay vehicle movements on the northern and western arms, creating vehicle queues and blocking the two site accesses to Blackwin Ltd. permitted lands. 2028 Do-Something opening year scenarios shows the junction operating over capacity in AM & PM peaks.
- Suggests amendment to Calmount Road/ Ballymount Avenue junction to achieve a better balance in terms of junction capacity by using verge areas on the northern and western arms and offering the opportunity to reassign green time to enhance capacity as follows:
    - Increase number of approach lanes and flare lengths on Ballymount Avenue arm.
    - Increase number of approach lanes and flare lengths on Calmount Road arm.
    - Amendments reduce the degree of saturation and vehicle queues, and the junction can operate within capacity on all arms in both AM & PM peaks

8.1.8. **Brendan Heneghan, 88 Parkmore Drive, Terenure**

- Board should have regard to key background factors including no extra buses provided; removal of services from estates either side of the corridor; failure to deliver timetabled bus services; difficulty getting on buses; reliability of real time information; and the relatively minimal time savings.

- Consultation has been inadequate, particularly in Drimnagh and Crumlin. Aarhus Convention applies to the BusConnects project and consultation falls short of meeting the standard required.
- A number of roads in Drimnagh are forecast to be affected by extra traffic and bus services will be changed substantially. Questions if local people have had the chance to express their view.
- It is evident that there will be an enormous amount of displacement of traffic into local roads. Board should insist on proper projections that are fully advised by circular to all local roads where material changes are projected, with an opportunity to input.
- Proper traffic projections would require map large enough to identify affected roads; off peak traffic on local roads (Cashel Road); better identification of increases and explanation; and impacts of where Satnav will direct traffic.
- There are lots of examples where lines denoting extra traffic seem to disappear – data should be provided for every through road.
- Consideration of alternatives should include a Metro South West option to Tallaght or nearby. The capacity of the Luas Red Line and the City Edge project should also be examined.
- There seems to be significant issues with the vast overconvergence of buses on the city quays – buses really slow down when they reach the city centre, often because other buses are blocking the bus stop.
- Proper off road cycle track has been identified from Walkinstown Roundabout to the canal - work on Bunting Road section should be expedited.
- Parkview – no precedent in Dublin or elsewhere for a small residential street on a traffic island.
- There is no bus related reason for left turn ban ex Clonard Road as bus lane outbound starts there, so traffic will have to join the traffic lane. If Clonard Road and Bangor Drive are to be blocked, it will put pressure on the unsuitable Old Country Road.

- Slip road from Drimnagh Road into Walkinstown Road should not be removed.
- Supports proposal for an inbound bus priority signal covering c. 350m at 319 Crumlin Road and a matching outbound 300m at Health Centre – deals with restricted section of road without completely blocking off traffic.
- Board should take into account the lack of any clear statement of works to be carried out; moving of bus stops without notice; and unintelligible traffic data.

8.1.9. **Calmount Holdings Ltd., 31-32 Greenmount Office Park, Dublin 6W**

- Part owner and operator of Calmount Business Park.
- Generally supports vision to upgrade bus services in the Tallaght, Clondalkin and Ballymount areas.
- Alternative in relation to widening of Greenhills Road is not fully considered.
- Proposed development does not appear to have properly engaged with the City Edge Project and may be premature.
- Land use does not appear to have been considered in the EIAR.
- Proposal will have a potential significant impact on operation and management of business park and will result in significant disturbance during construction and potentially during operation.
- Calmount Business Park has two remaining development sites – impact of proposal on these sites has not been fully considered.
- Requests oral hearing.

8.1.10. **Cathy Mooney & Others, 73 Stannaway Road, Dublin 12**

- Concerned with the natural redirection of traffic as a result of reconfiguration along Kildare Road and Clogher Road to neighbouring roads, mainly Stannaway Road.
- Stannaway Road not designed to handle heavy traffic as it is narrow, has high-density 2-up-2-down housing, and on-street residential parking.

- Increased noise pollution, air pollutants and compromised road safety will affect overall well-being and quality of life by local community.
- No public engagement took place with local residents.
- Stannaway Road will bear heavy consequences of the combined effect of both the Kimmage to City Centre and Tallaght Clondalkin to City Centre schemes.

8.1.11. **Ciarán Cuffe, MEP for Dublin**

- Supports the proposed CBC scheme and the inclusion of traffic calming measures, continuous cycle lanes and the focus on improving pedestrians' and cyclists' experiences of interchanges and roundabouts, e.g. simplification of junction at Christchurch. The following minor alterations are proposed:
- National Cycle Design Manual should be adhere to with respect to method of separation between road, cycle lane and footpath.
- Adequate cycle parking should be provided near the bus interchange at Belgard Square and elsewhere along the route, especially inside the Grand Canal without narrowing of footpaths.
- Existing zipway on Blessington Road could be adorned in greenery.
- Cycle lane on Main Street, Tallaght should feed back into the road rather than place cyclists in the position of sharing space on the footpath.
- Signage prohibiting cars on Old Greenhills Road should be clear.
- Floating bus stops throughout the scheme should be deep enough to accommodate wheelchair boarding.
- Dividers along Dolphin's Barn and Patrick Street should be removed in favour of expanding the active travel infrastructure.
- Bus stops on Clogher Road should be altered so that passengers don't have to disembark directly into the cycle lane.

8.1.12. **Cllr. Liam Sinclair, County Hall, in support of Lynn Broderick, 7 Bancroft Close**

- Strongly objects to acquisition of green area on Bancroft Park for construction compound as it will negatively impact on residents; creates a significant public safety issue; ignores availability of alternative sites (Esso and Elephant Storage sites); reduces the amount of public space; and will have a detrimental social impact.
- Proposed compound location for works vehicles and workers will pose a significant danger and will cause anxiety over safety issues, particularly vulnerable residents.
- Proposal to locate access to compound on one of the narrowest sections of Greenhills Road will have serious impact upon traffic management.
- Changing of recreation space on Bancroft Park, even temporarily, to an industrial site would cause damage to the current complement and diversity of wildlife and trees.
- Bus corridor is intended to pass through a zone of archaeological potential associated with the historic village of Tallaght – alternative route through TUD should be considered.

8.1.13. **Cllr. Charlie O'Connor, 52 Maplewood Drive, Tallaght**

- Proposed bus lane at Kilnamanagh will mean that pedestrians will have to journey across three roads and seven lanes to school, Tymon Park or Castletymon Library.
- Proposal will bring buses and bikes to the immediate fronts and sides of properties on Birchview Avenue.
- Removal of three bus stops on Greenhills Road will impact on students of Coláiste De Hide and Scoil Iosa and those with mobility difficulties.
- Alternative option needs further consideration (realignment of R819 between Parkview and Tymon Lane).

8.1.14. **Cllr. Mick Duff & Cllr. Charlie O'Connor, County Hall, Tallaght**

- Objects to construction compound at Bancroft Park – alternative sites could be leased without the need for CPO at St. Mary's Priory or TUD.

8.1.15. **Cllr. Mick Duff, 26 St. Aongus Crescent, Tallaght**

- Objects to impact on green space and amenity at Birchview, Kilnamanagh (as above).

8.1.16. **Cllr. Pat Dunne & Joan Collins TD, 10A Old Country Road, Crumlin**

- Observation made on behalf of 396 undersigned residents of Crumlin.
- Supports the improvements in public transport and for safer cycle and pedestrian movement.
- Concerns regarding the proposed cycleway on Kildare Road – road is narrow at top end for parking, cycle tracks and buses.
- Not acceptable to cut down 22 mostly mature trees and replace them with semi mature trees.
- There is no mention of on-street parking along the mid section of Kildare Road – will cause problems for residents who must park at the side of the road. Clogher Road has similar on-street parking issues.
- 200m quiet street proposal along Clogher Road will have major consequences for surrounding roads – asks for this proposal to be removed from the plan or major traffic calming proposals implemented on surrounding roads, in consultation with residents.
- Makes no sense to have Bangor Drive and Clonard Road one way – Windmill Road and Old County Road will become more congested than they currently are.

8.1.17. **Cllr. Teresa Costello, 92 Castlepark, Tallaght**

- Supports objection by Tallaght Community Council and concerned local residents.

- Tallaght Village is not the best route as it involves a dramatic alteration in village layout, opening the cul de sac, and sacrificing public plaza and over 20 parking spaces to create a very short bus lane.
- Cul de sac and plaza are used for community festivals. Public spaces are very limited in Tallaght.
- Use of alternative route through TUD could enhance vitality of university campus.
- Loss of mature trees is not in line with SDCC Living with Trees policy.
- Priory walls are protected and this has not been included in the analysis.
- Vacant site on Main Street at junction with Greenhills Road could be used as a bus only plaza.
- Includes submission relating to Bancroft Park (as above).

8.1.18. **Colette Hardiman, 34 Bancroft Avenue**

- Submission relating to Bancroft Park (as above).

8.1.19. **Concrete Pumping Ltd. Greenhills Road**

- Proposed road scheme at the location of objector's business is essentially the same as the one designed by SDCC in an earlier proposal. Objector was not given the opportunity to input to current design on Lower Greenhills Road.
- Proposed plan puts premises at the end of a cul de sac and objector is concerned about security of valuable equipment parked at night and weekends.
- Objects to turning point at Walkinstown side of premises and sees it as a potential area for dumping/ unauthorised encampments.
- Walkinstown Roundabout would be a 2.5km detour on the extended Calmount Road and there would be traffic chaos on this road, which would become a direct link to the M50 to Walkinstown Roundabout.

8.1.20. **Darren Mohan & Wendy Lyons, 2 Tamarisk Close, Kilnamanagh**

- Object to bus corridor through green space at Kilnamanagh on grounds of security/ amenity, safety, privacy/ quality of life, noise and air pollution.
- Proposed route would add no real gains to the travel times of buses and would have a disproportionately negative impact on quality of life for residents.

8.1.21. **David & Pamela Smullen, 8 Birchview Rise, Kilnamanagh**

- Objects to plans for BusConnects scheme link between Birchview Avenue, Treepark Road and Parkview, Greenhills Road.

8.1.22. **Debbie Gray, 36 Bancroft Avenue**

- Submission relating to Bancroft Park (as above).

8.1.23. **Dublin Commuter Coalition, Abbeyfield, Killester**

- Established in 2018 as a voluntary advocacy group for public transport users, cyclists and pedestrians in Dublin and surrounding counties.
- Support the BusConnects Core Bus Corridors project – has potential to be catalyst for greater usage of public transport and active travel along the route but requires significant changes for this to happen.
- Success of bus and cycle lanes, bus gate, bus priority lights and turn bans relies on legal usage of road by drivers – there is no provision for enforcement cameras.
- Bus lanes should be 24 hours as it will bring more achievable and reliable bus journey times; easier enforcement; higher adoption; and safer conditions for cyclists in the absence of segregated cycle lanes.
- Proposed junctions do not follow international best practice. NTA should use Dutch-style junctions or Cyclops junctions throughout the project.
- There are examples of 2-stage pedestrian crossings, which drastically increase the time required for pedestrians to navigate junctions and crossings. DMURS

states that designers should omit staggered crossings in favour of direct/ single phase crossings that allow pedestrians to cross in a single direct movement.

- Many 3 and 4-way junctions are missing pedestrian crossings entirely on one or more arms, meaning that pedestrians may have to wait for 3 lights or more. DMURS states that designers should provide crossings on all arms of a junction.
- Compromise to retain space for car traffic is prioritised over segregated or safe integration of active travel modes. There are many proposed junctions with shared space pavements, which has the potential to injure the vitality and usability of the public realm.
- Bike parking does not appear on drawings – bike parking should be provided at bus stops and public transport interchange facilities.
- Proposed scheme lacks segregation of cyclists from motor traffic along Greenhills Road, at the Greenhills Road/ Calmount Road roundabout and several junctions.
- Inexplicable why carriageway widens from one to two general traffic lanes as Nicholas Street approaches High Street – cycle lane and footpath narrowed to facilitate this (Section AH). Closer to High Street, bus priority disappears when needed most to facilitate a third traffic lane.
- Junction of Naas Road and Long Mile Road is simply terrible for pedestrians and cyclists and needs to be completely redesigned.

8.1.24. **Dublin Cycling Campaign, Tailor's Hall**

- Supportive of the proposed scheme but there are still some major improvements required.
- Requests a condition to ensure noise levels are maintained at an appropriate level for comfort in the use of cycle tracks and pedestrian facilities.
- Recommends a minimum 600mm bio-diverse wildflower & tree buffer between motorised traffic and cycling and pedestrian areas, where possible.

- In many cases along the proposed corridors, the width of the cycle track has been compromised at the expense of standard 3m carriageway widths for private vehicles – this compromise should be reversed.
- Plans show gaps in cycle tracks (Crumlin Road) in order to provide short sections of bus lane. Scheme would be improved by providing continuous sections of cycle track (which prioritises safety) over short sections of bus lane (which merely improves journey times).
- Increased levels of filtered permeability should be used throughout the proposed scheme in accordance with DMURS – will negate the possibility of 'rat-running'.
- Not clear what engineering elements are being deployed to harness the 'quiet street' environment – Crumlin and Drimnagh areas are heavily trafficked. Width and speed of carriageway should be designed to denote priority for cyclists. Quiet streets should be given a distinct uniform surfacing and parking should be limited.
- Welcome 30kph speed limit; however, 50kph speed limit is being maintained along some major residential roads such as Crumlin Road, Walkinstown Road and Kildare Road. DMURS states that 'the speed at which drivers travel is principally influenced by the characteristics of the street environment.'
- More inspired design solution needed for active travel across Naas Road/ Long Mile Road junction, e.g. Hovenring, Eindhoven.
- Proposed design routing for cyclists through Walkinstown Roundabout remains difficult and convoluted – does not allow direct transit by bike. Deeper design reviews must be carried out, e.g. Houten Roundabout.
- Disappointing that a number of bus stops bypasses are not included, particularly where there appears to be adequate space.
- Minimal to no safe separation and no clear right turn is provided for cyclists at junction on Crumlin Road, South Circular Road, Dolphins Barn, Cork Street, Patrick Street and Christchurch.

- Raised table junctions at side roads should be extended to accommodate the cycle lane.
- Secure cycle parking recommended throughout the proposed scheme at detailed design stage, particularly at bus stops and commercial and community facilities.

8.1.25. **Fairfield Inns Ltd., c/o Corr Property Consultants, Monasterevin**

- Representing owner of Cherry Tree Public House and objects to CPO, EIAR and NIS on the following grounds:
- Objects to acquisition of lands which appear surplus for the scheme requirements.
- Concerned that drainage implications may negatively impact their retained property and parking areas.
- Inadequate information on noise mitigation.
- There will be an extreme impact if the pub is forced to close during the construction of the proposed scheme. Temporary CPO takes up the entire area up to the pub frontage and should be reduced.
- Lack of detail on how traffic will be managed during construction, on boundary treatments, footpaths and cycle paths, and the total environmental impact of the proposed scheme.
- Owner reserves the right to raise and deal with other matters at an oral hearing.

8.1.26. **Hannah Fitzpatrick, 71 Bancroft Park**

- Concerned about construction compound impacts on neighbourhood green space and noise pollution during construction. Household is a retreat centre hosting retreats, yoga classes and meditation sessions. There are suitable brownfield sites nearby.

8.1.27. **Jacinta Kenny, 29 Walkinstown Road**

- Observer has installed electric steel and cedar gates at front of property – replacement should be to an acceptable standard and aesthetic.
- Ease of access and safety for children is essential were works are ongoing.
- Noise pollution will occur from passing buses. Sound reducing surfacing should be used, trees should be planted to dampen sound, and electric buses should be prioritised. Dust will also be a problem during construction.
- Work hours should not affect sleep patterns.
- Cables should be placed underground during construction works.
- Access to laneway is needed for vehicles because part of driveway will be lost.

8.1.28. **John & Miriam McDonagh, 29 Elmcastle Close**

- Annoyed that green space beside their home is subject to CPO to build the bus corridor between Treepark Road and Parkview. Proposal will subject residents to increased noise, pollution and loss of privacy, and result in health problems.

8.1.29. **Killeen Motor Group, c/o Virtus, Smithfield, Dublin 7**

- Owns land bound to the south by Nangor Road and east by Killeen Road – changes (and CPO) along the southern boundary of Killeen Motor Group lands are proposed.
- Broadly welcomes the proposed BusConnects proposals subject to the following observations:
    - Important that the observer's site is not left exposed during construction – applicant should provide on-site security and secure temporary fencing or hoarding amplified by precast concrete blocks to ensure vehicles cannot be driven off site. Condition recommended.
    - Proposed London Plane trees along the boundary will attract birds and cause sap, leaves and bird droppings to fall on new vehicles stored on site. These

trees will render a portion of the site unusable and it is requested that trees are omitted.

- Proposed beech hedge to north of security fence appears to be on observer's lands and should be removed from the proposals.
- Central gate on New Nangor Road (1142(3).2c) is operational and access is required at all times. Condition recommended.

8.1.30. **Kylie Burke, 3 Bancroft Avenue**

- Submission relating to Bancroft Park (as above).

8.1.31. **Leila & Stephan Early, 347 Crumlin Road**

- Object to the CPO of the green space at Rafters Road as it would remove a local amenity and will not be reinstated to its former appearance. Tree removal will compound the already poor air quality.
- Not obvious that BusConnects will bring any meaningful positive change to the Crumlin area as proposed plan significantly widens the road but does not help to reduce traffic volumes.
- Rafter Road green area would be better utilised as a Dublin Bike depot.

8.1.32. **Lidl Ireland GmbH, c/o BMA Planning, Dundrum**

- Lidl store on Greenhills Road will be severely impacted by the proposed scheme – profile and access will be diminished and the information submitted with the application does not indicate that these impacts have been adequately assessed or mitigated.
- All passing traffic on Greenhills Road will be redirected along Calmount Road and Ballymount Avenue and creation of local access only on Greenhills Road will significantly reduce access to the Lidl supermarket.
- Proposal will completely remove public transport access to the Lidl supermarket, disadvantaging employees and customers who do not have car access.

- Alternative proposal submitted which retains westbound Greenhills Road on existing alignment from opposite DPD Group as a diverging slip, with local eastbound traffic from Lidl junction to the last business only before the new fork in the road. Westbound bus lane would be introduced after the Kilakee Drive junction and continue towards the overbridge at the M50. Eastbound BusConnects corridor would be a full bus lane following Greenhills Road (opposite Lidl) via the Calmount Road extension. Ballymount Avenue extension would not be required and there would be no need to widen Calmount Road or Ballymount Avenue.
- Existing developments on Ballymount Avenue and Calmount Road have little direct frontage/ access point and most of the traffic using Ballymount Avenue is HGVs. Alternative proposal would remove conflict between HGVs and buses and would be more cost effective.
- If alternative proposals cannot be accommodated, mitigation should include wayfinding signage to Lidl; phasing of works to have minimum disruption to customers and deliveries, and occurring in sequence and in a timely manner; and temporary traffic management during works should have minimum impact on Lidl customer and delivery access.

8.1.33. **Linda Patton, 6 Rathdown Court, Terenure**

- Proposed scheme when considered in combination with the Templeogue/ Rathfarnham scheme and the Kimmage scheme, would pose a significant impact on local village communities and businesses – combination impacts have not been properly assessed.
- No attempt made to research the routes used by locals in Terenure towards Walkinstown/ Kilnamanagh/ Greenhills Road.
- Whole idea of BusConnects seems to be aimed at dealing with rush hour traffic and takes no account of many residents whose lives continue throughout the day and at weekends.
- If primary purpose of BusConnects is commuters, then restrictions on local roads and bus gates should be at peak times only.

- Unrealistic to think that people will be able to carry out their weekly shopping or medical trips on bicycle or bus.
- Due to proposed restrictions, more time will be spent driving around circuitous routes, which is not environmentally friendly. Should local businesses become unviable, residents will have to travel further.
- Apart from cycle lanes, there appears to be no proposals to address school traffic, such as the provision of more school buses.
- New traffic modelling needs to be carried out and BusConnects should be paused until future demand for public transport and the full impact of traffic of all the proposed routes is clearer.
- Unlikely that the consultation fulfilled the obligations of the Aarhus Convention.
- The Board should assess the impacts of all the BusConnects routes and the proposed park and rides a one project, including the cumulative impacts on local communities and businesses and on biodiversity.
- Board should consider holding an oral hearing on the complete scheme.

8.1.34. **Lynn Broderick, 7 Bancroft Close**

- Submission relating to Bancroft Park (as above).

8.1.35. **Marian and William Healy & Others, 20 Parkview, Greenhills Road**

- Object to the CBC for the following reasons:
- Loss of 80% of green space where children play.
- Loss of privacy.
- Increased traffic, noise and pollution.
- Foundations of homes will be compromised.
- Parkview would become an island surrounded by three major roads.
- Residential estate would become more visually industrial.
- Residents would become more cut off from local amenities and the community.

8.1.36. **Maxol Ltd., c/o RW Nolan & Associates, Fitzwilliam Square North**

- Petrol station located on eastern side of Naas Road, Long Mile Road junction – proposed curved pedestrian/ cycle ramp is proposed to be constructed on grassed area forming part of the petrol station site.
- Continuous connection will be facilitated by the proposed overbridge but at a significant additional travel distance and effort – unlikely that cyclists would follow this route and will instead follow existing route along the road using crossing points at different locations.
- Proposed curved ramp structure would reduce the visibility of the petrol station and detract from the visual amenity of the area. Petrol station in an important traditional landmark.
- There are health and safety implications due to the proximity of the proposed curved ramp structure to the petrol station infrastructure, including hazard zone.
- Existing vent stack must be 4.5m above ground level and there are concerns regarding the proposed level of the curved ramp and the vent stack.
- Clarification required whether any lands are required from the existing petrol station site to facilitate the proposed scheme along the Naas Road frontage.

8.1.37. **Michelle & John-Paul Lyons, 7 Birchview Avenue**

- Concerned about loss of greenspace at this location and access to Tymon Park and schools.
- Bus will cause noise pollution and could potentially bring anti-social behaviour.

8.1.38. **Niamh Walker, 46 Bancroft Park**

- Proposed works compound at this location would be an eyesore and danger.
- Submission relating to Bancroft Park (as above).

8.1.39. **Nicola Kennedy & Others, 24 Old Country Road**

- Concerned about increased traffic congestion on Old County Road with plans to make Bangor Road and Clonard Road one way.
- Plans to use green area beside HSE building as a compound will add more pollution to the area. Road was not built to carry huge volumes of materials or extra parking.
- Generally supportive of the concept of improving public transport and cycle lanes.

8.1.40. **Paul Browne, 84 Bancroft Park**

- Submission relating to Bancroft Park (as above).

8.1.41. **Recorder's Resident's Association, c/o Pauline Foster, Terenure**

- Many people do not have sufficient IT skills to participate in public consultation. Questions if consultation process is in compliance with the Aarhus Convention.
- There is no reference to how the D corridor completes the journey to the city centre or northside.
- Displaced traffic from closure of Lwr. Kimmage Road on 'F' route will have to be accommodated on the parallel road – Stannaway Road. There will also be displacement from the closure of Templeogue Road and Rathmines Road.
- Car/ van journeys are essential for a myriad of reasons and need to be taken into account.
- People move in many different directions and not just in and out of the city.
- Access by bus to Lidl on Greenhills Road is somewhat compromised due to the long walk to the bus stop on Calmount Road.
- Reduction from 3 lanes to 2 lanes on Walkinstown Roundabout is likely to cause much queuing of traffic on all approach roads.
- Bus stops have been moved much further apart – appears that the speed of progress of the bus is the priority, not the needs of passengers.

- More fuel/ electricity will need to be purchased to over extra milage that will result from all the road closures and diversions. This is contrary to the Carbon Emissions Reduction Policy of the Government.
- Current proposals would need to at least double bus usage to make a real difference – would end up with public transport congestion.
- There is no need for bus gates throughout the day and night, or throughout school holiday time.
- Feasibility study on the particular area should be carried out and evaluated before the corridor destruction happens.

8.1.42. **Revensburg Unlimited Company, c/o James Dowd, Greenhills Road**

- Own site on Greenhills Road occupied by Concrete Pumping Ltd.
- Similar to submission by Concrete Pumping Ltd.
- Appeals to Board to reject the proposed scheme and instruct promoters to consult with affected parties – not acceptable to have a level of ambiguity for years with companies and residents uncertain of the future layout and use of the area.

8.1.43. **Seán Crowe TD, 2 Greenhills Road**

- Supportive of bus corridors but location of works compound will impact on Bancroft Estate, necessitating removal of trees and greenspace and increasing traffic dramatically in the area.
- Old Greenhills Road is currently a cul de sac and residents will lose access to their traditional parking outside their homes. Priory Youth Reach building will lose access to their premises and access to Priory grounds will be impacted.
- Residents of Parkview Estate will be adversely impacted through increased noise, light pollution, and access and amenity issues.

8.1.44. **Senator Mary Seery Kearney, Seanan Éireann, Leinster House**

- No enhanced public transport service and cycling infrastructure arising from the plans as present – Crumlin community are having their connectivity and access to public transport curtained under the plans.
- Cycling infrastructure appears to be greatly enhanced and this is necessary and welcome.
- Plan cannot be viewed in isolation from the Templeogue/ Rathfarnham nor Kimmage CBC – impact of three corridors must be looked at in unison. Impact of bus gates on Templeogue Road and Lower Kimmage Road in particular needs careful consideration.
- Traffic modelling only caters for peak hours and not the entirety of usage. Modelling demonstrates a concentration of displaced traffic into local roads in between this corridor and the Kimmage corridor. Dromore Road, Balfe Road and Harty Avenue will experience traffic increase.
- Most of the shopping centres in the area of Perrystown/ Templeogue/ Rathfarnham necessitate car journeys, yet access is now inhibited. Changes on the whole are going to result in more car journeys, not less.
- No consideration given to individuals who are reliant on cars due to mobility issues. Buses have very limited capacity for wheelchair users.
- Does not believe that modal change will result from the proposed plans.

8.1.45. **Shay L'Estrange, 139 Old County Road**

- Proposed change will restrict access to Crumlin Road from Clonard Road and this will create an unacceptable level of additional traffic at junction of Old County Road and Crumlin Road at one end and Old County Road and Windmill Road at the other.
- Will also result in rat running on Downpatrick Road, Saul Road and Slane Road.

8.1.46. **Siobhán McBride, Kilnamanagh Residents, 21 Tamarisk Lawn**

- Noise and air quality issues from bus traffic running up close to residents' homes.
- CBC will encourage other vehicles such as taxis and other bus/ coach traffic to use the route.
- Loss of mature trees and hedging and recently built footpath and street lamps.
- CBC will impede valuable piece of public open space.
- 3 road crossings and 7 lanes of traffic to cross over a distance of 50m.
- Narrowest point of Greenhills Road is between Castletymon and Mayberry junctions – careful realignment of the road at this point and bringing cycle lanes marginally off road would allow ample space for bus corridor without loss of open space at Birchview.

8.1.47. **St James's Gaels An Caisleán**

- Supportive of the improvement in transport infrastructure in the area but were not informed of any plans.
- Club has been using Bunting Park since 2017 and laid out a full sized GAA pitch in 2021.
- Object to the location of construction compound TC8 in Bunting Park for reasons of public safety, club safety, club operations and drainage:
- DCC Parks insisted on a 5m minimum safety run off to be maintained around the pitch.
- Visibility with the solid pathway will be impaired and its location will create a laneway between the railing and pathway, increasing anti-social behaviour.
- Proposed compound will come up to pitch end line, which contravenes the safety run off, meaning that the pitch could not be used during the compound's lifespan.
- Proposed location of construction compound will prevent ball stop nets from being installed properly at this end of the park. Balls would have to be retrieved from the construction compound.

- Proposed compound is location in an area where 4-7 year olds train and directly in front of the clubs equipment compound. Ball stop nets would enable younger teams to train behind it.
- Construction compound will hinder the clubs development and growth in the community.
- Section of pitch floods easily with heavy rainfall and where the proposed compound in placed does not.
- Proposal does not adequately assess the impact on the drainage system in the park and the surrounding area with the introduction of a new impermeable area. Nearby roads also prone to flooding.
- There is a massive shortage of green space in Dublin 12 and local sports clubs are at capacity causing children and parents to drive to clubs outside of the area. St. James's Gaels/ An Caisleán has grown from 140 members in 2016 to 307 at the start of 2023.
- Proposed location of the compound would mean that the club could no longer operate here and the club's ability to offer sport and recreation to all would be severely affected.
- Alternative location could be found for the compound that would not have the consequences of effectively stopping the club's capacity to use the Bunting Park pitch.

8.1.48. **St. Mary's National School Board of Management**

- Objects to the acquisition of the green area, currently zoned recreational amenity space, on Bancroft Park for construction compound.
- Green spaces is a valuable resource for the study of flora and fauna and plays crucial role in the safety and wellbeing of students.
- Removal of green space would compromise the safety of students and guardians, exposing them to risks from traffic and heavy machinery.

- Acquisition would lead to an increase in traffic congestion in the/ immediate vicinity of the school.
- Increased noise levels would impact on students' ability to focus and concentrate during school hours.
- Green space offers a unique outdoor classroom experience.
- Requests that alternative options for compound are explored.

8.1.49. **Stephen O'Connor, Bancroft Residents Association**

- Submission relating to Bancroft Park (as above).

8.1.50. **Tallaght Community Council, c/o Gerard Stockil, 52 Bancroft Park**

- Supports Bancroft Residents Association objection to the use of Bancroft Green as a compound.
- Objects to Tallaght to Ballymount route through Tallaght village and supported by listed village residents.
- Wider community losses of public amenity space, resident's on street parking and cul de sac status is not justified by the outlined gains for bus travel.
- Removal of Greenhills plaza will reduce the plaza amenity space for the village by 39% and will damage the visual amenity of the area. Plaza plays a pivotal role in public village festivals. Will also result in the direct loss of 9 trees, which contravenes GI5 Objective 3.
- Proposal will remove the intimate scale and character of the village and will impact on the ACA and cul de sac, which allows visual amenity and community activity. Proposal also contravenes GI6 Objective 1 and GI Objective 2 of the County Development Plan.
- Proposal undermines residents' and businesses' access to reliable, cost effective parking.
- Facilitating bus lane through TU Dublin Tallaght campus to connect Belgard Road to Greenhills Road below Bancroft would not involve massive change to

campus opening times. This performs well in Draft Preferred Route Options Report scoring system.

- Bus solution through university campus is the most sustainable in terms of reduced CO2 emission, protecting historical heritage, and most importantly, getting people from A to B more reliably and quickly.
- Tidy Towns Group wish to develop the plaza on Old Greenhills Road to enable more communal uses as it benefits from day long sunshine.
- Proposed scheme will impact on the Priory walls and ACA.
- Bus corridor will cause massive congestion at large funerals at St. Mary's Priory.
- Strategic vacant site on Main Street at junction with Greenhills Road should have been included in route analysis.

8.1.51. **Teresa McCann, 43 Bancroft Park**

- In favour of BusConnects and compound at Bancroft Park – green is only being used for dog walking and fouling.
- Trees were planted to stop people in apartments from looking towards houses.

8.1.52. **Tesco Ireland Limited, c/o RMLA Planning Consultants**

- Retail sector makes a major contribution to the city and suburbs by increasing vitality and viability of its urban settlements and acting as an economic anchor, creating significant employment and indirect economic and social activity.
- Observer welcomes the proposed investment in public transport, active travel and the urban environment. BusConnects will greatly improve the way in which Dublin functions from an economic, social and environmental perspective.
- Tesco currently operate a store at Dolphins Barn which does not have any dedicated loading facilities. Early morning deliveries take place kerbside from the advisory cycle lane.
- Deliveries will no longer be able to take place in this manner due to proposed mandatory cycle lane adjacent the store entrance.

- Requests inclusion of a loading bay to south to serve the retail and commercial premises along the street at Dolphins Barn.

8.1.53. **Walkinstown Residents Association, 45 Balfe Road**

- Proposal for CPO of lands at Bunting Park is unacceptable as per St. James's Gaels An Caisleán submission.
- Footpath on park side of Bunting Road is undersized – footpath needs to be increased to 1.8m but cannot be do so with hedge in place.
- Banned right turn at junction of Balfe Road and Drimnagh Road is unacceptable and will force more traffic onto Bunting / St. Mary's.
- Temporary CPO of gardens along Walkinstown Road need to be reviewed and further information required.
- Relocation of mile marker or Walkinstown Road (1780) is unacceptable – it should be preserved.
- Reduction to two lanes at Walkinstown Roundabout is unacceptable and roundabout is currently stacked at peak times.
- Introduction of left turn from Drimnagh Road to St. Mary's is a health and safety risk and creates a problem from a visibility perspective.
- Proposed scheme should facilitate SuDS and compliance with GDSDS.

8.1.54. **Woodies DIY & EZ Living, c/o Whelan O'Connor**

- Proposed pedestrian bridge and ramp will impinge on the EZ Living to manage its current delivery arrangements.
- Proposed footbridge will impinge on the visibility of the end of the building for both Woodies and EZ Living, affecting the profile of both stores.
- Concerns regarding vandalism/ damage of large glazing panels and the stores in general from the elevated position of the proposed footbridge. There is also a litter and anti-social risk.

- Proposed NTA temporary take makes insufficient provision for site access, offload and storage of materials or traffic management during the course of the works. Also concerns regarding lack of timescale for proposed works.
- No justification for the scale of the bridge or benefits to the public at large.
- Pedestrian bridge being replaced with at Swords Road and Seatown Road with street level access. Pedestrian bridge across N11 at RTE is being removed due to lack of use.

8.1.55. **James & Charlotte Acton, 11 Birchview Avenue**

- Includes note on meeting of Tallaght Area Committee of 26th June 2023 in relation to SDCC submission on Tallaght Clondalkin to City Centre CBC and motion regarding effects on communities in Bancroft, Kilnamanagh and Springfield.

8.2. NTA Responses to Submissions/ Observations

8.2.1. The National Transport Authority responded separately to common issues raised in submissions at different locations along the proposed scheme, and to each individual submission. The NTA's response to CPO objections is summarised in Section 9.5. The responses to submissions on the application for approval under Section 51 of the Roads Act 1993, as amended, are summarised as follows:

8.2.2. **Response to issues relating to Bancroft Park**

- Proposed to use Old Greenhills Road for buses to avoid congestion on Greenhills Road/ Main Street junction. Stone paving and localised planting will help to retain the character of the existing cul de sac treatment.
- Construction compounds chosen due to available space, locations near to proposed scheme and access to national and regional road network. Compound at Bancroft Park is positioned to avoid impacting on trees and to minimise land take.

- Compound TC2 anticipated to be in use from Q1 in 1st year to Q3 in 3rd year. Once removed, there will be enhanced landscaping proposals for the green area, to including restoring of grasslands, new trees and hedgerow and new gravel paths.
- Compound will be fenced off and will occupy the south-western portion of the wider green area, with the eastern portion remaining available to the community at all times.
- All compounds will be located on sites which currently have no development and the proposed development will not prevent any long-term zoning objective for land from being achieved.
- Issues relating to impact on the character and biodiversity of Bancroft Park are addressed in the EIAR. Proposed scheme does not result in the removal of trees in the area.
- Risk of mortality to badgers from site clearance/ excavation is unlikely to affect the species' conservation status.
- It is stated in the EIAR that none of the habitat areas to be lost are unique to the locality and, either individually or collectively, are not likely to support a significant proportion, or the only population, of any given breeding bird species locally.
- Safe routes past construction areas will be provided for pedestrians and cyclists. Access to local amenities may be temporarily altered but access will be maintained. Proposed access to site compound TC2 will be via Greenhills Road and there will be no access to the compound from Bancroft Park for construction vehicles or construction works.
- Construction Traffic Management Plan (CTMP) demonstrates that transport related activities during construction are carried out as safely as possible with minimum disruption to other road users. CTMP will also outline minimum road safety measures; respond to all road user needs; ensure disruption is minimised; adhere to relevant guidance; and manage the construction works insofar as they affect the environment, local residents and the public. Construction Stage Mobility Management Plan (CSMMP) will be developed prior to construction.

- Typical peak haulage activity is a total of 11 two-way lorry movements in a typical hour during peak haulage – these impacts are minimal and comfortably below thresholds set out in TII's Guidelines for Transport Assessments.
- Close communication with the relevant local authorities and the emergency services shall be maintained throughout the construction phase.
- EIAR provides a list of 27 of the most impacted dust receptor locations, none of which includes receptor locations in the vicinity of Bancroft Park. Locations in the vicinity of Bancroft Park and Tallaght Village are assessed as experiencing a negligible impact in terms of the annual mean NO2 concentration and PM10 and PM2.5 concentrations.
- The total predicted cumulative construction noise levels for TC2 at the closest residential NSLs to south of compound at Greenhills Court (10m) are 78 dB LAeq, 1hr in the absence of noise mitigation associated with day to day material handling activities. Noise abatement measures will be implemented to comply with the recommendations of BS 5228– 1 (BSI 2014a) and S.I. No. 241/2006 - European Communities (Noise Emissions by Equipment for Use Outdoors) (Amendment) Regulations 2006.
- Construction of proposed scheme is not expected to give rise to vibration that is either significantly intrusive or capable of giving rise to structural or cosmetic damage to buildings. Monitoring will be undertaken at identified sensitive buildings and other measure will be implemented such as clear communication, daytime hours and appropriate vibration isolation.
- Majority of proposed scheme is already artificially lit. Temporary lighting during construction will meet the standard of the existing carriageway and will be appropriate to the speed and volume of traffic during construction. Mitigation measures will reduce light spill.
- Public realm improvements planned by the NTA may lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors.

- Esso site at junction of Old Greenhills Road and Main Road is in private ownership and would require acceptance from the current owner for use as a construction compound. Permission recently refused on site and it is unknown if owner will apply for a revised proposal and in cannot be assumed that it would be available. Elephant Storage site on Greenhills Road is subject to a strategic housing planning application. Site at Tallaght Astro Park was considered and deemed to be inappropriate.
- NTA help consultations with SDCC when identifying the Bancroft Park site. SDCC indicated that this area had been previously used as a temporary construction area.
- All surface water runoff from construction compounds will be intercepted and directed to appropriate treatment systems / settlement facilities. Enhanced landscaping proposals at Bancroft Park will return the vast majority of the green permeable green to pre-construction drainage catchment area with the exception of proposed pathway through the park.
- Proposed scheme is largely on existing roads and will result in minimal additional paved areas and will not increase the risk of flood events reoccurring compared to the current scenario. Mitigation measures for construction and operational phases will ensure that the use of the site as a construction compound will not create any risk of fluvial or pluvial flooding. New drainage will be an improvement on the existing historical drainage network and will include SuDS measures.

8.2.3. **Response to issues relating to Tallaght Village**

- No national monuments will be impacted by Tallaght to Ballymount section of the proposed scheme.
- Proposed works within the ZAP associated with the historic village of Tallaght (RMP DU021-037 / DU022-018) will be limited to some minor utility diversions and / or protections. Archaeological monitoring under licence will take place where any preparatory ground-breaking or ground reduction works are required.
- The ecclesiastical enclosure (RMP DU021-037002) associated with St. Maelruain's Church and a mill race possibly associated with mill site (RMP

DU021-037007) will be directly impacted by the proposed scheme. Again, the proposed works will be limited to some minor utility diversions and / or protections.

- Memorial statue in Tallaght village centre will require protection from any adverse impacts for the duration of the works and if necessary, it can be temporarily removed to ensure its protection.
- Archaeological mitigation measures can avoid, prevent, reduce or offset negative effects and these are achieved by preservation in situ, by design and / or by record. Features of a cultural heritage interest that are required to be removed on a temporary basis or for a short-term period, will be removed under archaeological supervision and in accordance with a method statement.
- There is potential for damage within the ACA during the construction phase. Mitigation will include the recording, overseeing and protective measures and monitoring of sensitive fabric by an appropriate architectural heritage specialist.
- Analysis of traffic data indicates a reduction in overall AADT traffic flows along the core bus corridor.
- Boundary wall of the Priory will not be affected by the proposed scheme. Fingerpost bus stops are proposed in front of St. Mary's Dominican Priory (RMP DU021-037010, RMP DU021- 037020, SDCC RPS 273) and in front of St. Basil's Training Centre (SDCC RPS 268) on the Greenhills Road Tallaght, both of which lie within the Tallaght Architectural Conservation Area.
- Removal of the cul-de-sac at the junction of Old Greenhills Road and R819 Greenhills Road will provide a raised table junction comprising of high-quality paving surfacing and public realm improvements are proposed directly opposite within the Bancroft Park. The proposed paving finishes will allow retention of character of the existing cul-de-sac treatment to cater for occasional community events which could be accommodated. To mitigate the loss of 9 trees at the Old Greenhills Road Plaza cul-de-sac, there will be appropriate replacement paving scheme and tree planting at new bus-only junction at Old Greenhills Road / Greenhills Road junction, as well as 15 new trees opposite in Bancroft Park.

- There will be substantial replacement and additional tree planting at Blessington Road, at Belgard Square West, industrial sections of Greenhills Road, and at open spaces at Birchview / Parkview / Treepark, which will aid in reducing some of the negative effects, and in some cases will result in localised positive effects over the long-term as the trees mature.
- Improved paving schemes are proposed to sections of footpaths within Tallaght Town Centre and at the southwest entrance to Tymon Park which will provide localised improvements to streetscape amenity.
- Trees located within the footprint of the proposed scheme were assessed for their potential to support roosting bats and there were no confirmed roosts. Bulk of the corridor is characterised by streetscape planting which offers limited roosting potential. Notwithstanding this, mitigation has been proposed as part of the bat mitigation strategy and may be implemented dependent on the outcome of survey and / or licenced conditions.
- Route option through TUD Tallaght was proposed as part of the Emerging Preferred Route. However, it was concluded that the extensive work that would be required within the campus, which had not been considered previously, and the requirement to have 24 hour/365 day access would make this route option difficult to deliver. Preferred Route Option arose following public consultation feedback, review of more detailed topographical information, and the required agreements for permanent access through the campus.
- Multi-Criteria Analysis, taking into consideration economy, integration, accessibility and social inclusion, safety and environment, was conducted for route options. It was concluded that BG5 (Tallaght Village) has sufficient advantages over the other route options, particularly in the context that BG2 (TUD) is challenging to deliver. Other options serve relatively low-density employment areas and as a result have a lower effective catchment areas.
- Buses using Old Greenhills Road would avoid traffic congestion at the Main Street/ Greenhills Road junction. Journey reliability is forecast to be improved, by largely removing interaction between bus traffic and general traffic, and this will help to realise the objective of the proposed scheme.

- NTA satisfied that the impact on parking has been appropriately assessed and that the overall impact at Old Greenhills Road is considered to be slight.
- Proposed scheme will lead to an overall reduction in general traffic along the Greenhills Road at the Main Street junction. Junction design iterations have been undertaken to optimise pedestrian, cyclist and bus priority infrastructure on the scheme.

8.2.4. **Response to issues relating to Parkview**

- SDCC had previously identified this section of Greenhills Road for upgrade through the provision of new roads under the Development Plan and received Part 8 approval in 2007. Proposed scheme seeks to align with the principles of the Part 8 scheme with a significantly reduced cross section that caters for sustainable modes only.
- Beneficial impacts on walking and cycling infrastructure and improved bus network indicators are expected to lead to improvements in access to community facilities along the proposed scheme.
- Proposed bus route at Parkview consists of a two-way 6m wide road carriageway and a 3.25m wide off-road cycle track with an intermittent 2m wide footway linking to Birchview Avenue, Treepark Road and Greenhills Road. Approved SDCC Part 8 scheme at Parkview consists of a two-way 13m wide carriageway, catering for general traffic and bus lanes in both directions and a 3.2m wide cycletrack/footpath on either side of the carriageway. Reduced carriageway cross section of 6m width for the proposed scheme compared to the 13m wide carriageway will minimise impacts on adjacent properties and the surrounding environment.
- There will be a reduction of 33% in the number of people travelling via car along the proposed scheme towards the city centre at AM peak hour and a 38% reduction in PM peak hour.
- Proposed scheme will generally reduce traffic levels along the corridor, with increases in traffic flow only predicted on four links, three of which relate to the closing off of a section of Greenhills Road, and redirection of traffic along

Calmount Road via a new link along Ballymount Avenue. Most of this traffic will be transferred from the existing Greenhill Road.

- Proposed Scheme will be overall neutral in terms of annual mean PM10 and PM2.5 concentrations, with all receptors experiencing a negligible impact during construction and operational phases. Fugitive emissions of dust from the site during construction will be insignificant and pose no nuisance at nearby receptors following mitigation.
- EIAR demonstrates that there will be no significant impact on air quality as a result of the operation of the proposed scheme.
- Noise abatement measures will be taken to the extent required and comply with the recommendations of BS 5228–1 (BSI 2014a) and S.I. No. 241/2006 - European Communities (Noise Emissions by Equipment for Use Outdoors) (Amendment) Regulations 2006. Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties.
- During operational phase, the total number of buses travelling along the new road north of Mayberry Road is up to 245 over a 24 hour period in 2028 with a design speed of 50 kph. Calculated noise at most affected properties is determined to be slight due to the low traffic volumes along the new link road, the screening provided by existing property boundaries and the existing traffic noise levels from the surrounding road network.
- Electric/ hybrid buses eliminate noise from buses accelerating, decelerating and idling at bus stops which is the dominant noise source. Closest dwellings to new bus stops are close to the existing road edge and are already exposed to road traffic noise levels. Vibration levels from passing bus will be negligible in terms of human perception and building response.
- Any construction activities undertaken on the site will be required to operate below the recommended vibration criteria and no vibration sensitive processes have been identified along the proposed scheme.

- Habitats along the proposed scheme are fragmented and highly disturbed and are therefore deemed unsuitable for significant populations of red-listed invertebrates.
- To mitigate the loss of habitat, the proposed scheme will include the planting of 1055 trees; 590m of hedgerow; 20,560 sq.m. of species rich grassland; 3,450 sq.m. of ornamental planting; 5,525 sq.m. of native planting; and 43,140 sq.m. of amenity grassland planting.
- Following implementation of mitigation, the proposed scheme will not result in any significant residual effects on key ecological receptors during construction and operational phases.
- Higher walls are not proposed as part of the proposed scheme. Interface between the proposed bus route between Treepark Road and Parkview is green verge with new tree planting.
- Proposed provisions for the safety and comfort of pedestrians at Parkview include toucan crossings, segregated cycle tracks and overall reduced traffic flows. No concerns were raised in Road Safety Audit relating to additional bus route between Birchview Avenue / Treepark Road and Greenhills Road.
- With respect to concerns that passing buses would result in loss of privacy at Parkview, substantial tree planting is proposed for this area. Route is identified as a Road Objective in the South Dublin County Council County Development Plan and has a previously approved alignment. Proposed CBC is no closer to residential properties that the SDCC Part 8 Scheme.
- CBC will provide better, safer and more visible bus stops whilst also improving the wider public realm infrastructure through investments such as improved street lighting. This will act as a direct deterrent to criminal activity and result in a reduction in crime.
- There will be considerable loss of amenity in the short term at Birchview/ Parkview/ Treepark but the overall townscape character of the section will not be noticeably affected.

- Access to amenities - new two-way cycling and pedestrian links will improve access to Tymon Park and surrounding amenities. Significant new landscaping and Sustainable Drainage Systems enhancements will also be provided in these areas.
- The final layout of the proposed scheme at Parkview was arrived at following ongoing design reviews and consideration of proposals by local residents. This included examination of an option proposed by local residents and a modified version of this was development as Option PV4. This was deemed unfeasible to accommodate bus and general traffic along the full section of the route.
- Gains to bus travel times - proposed scheme will facilitate almost 100% bus priority and will complement the rollout of the Dublin Area Bus Network Redesign to deliver improved bus services on the route. This will improve journey times for bus, enhance its reliability and provide resilience to congestion.
- Proposed Scheme will facilitate almost 100% bus priority and will complement the rollout of the Dublin Area Bus Network Redesign to deliver improved bus services on the route. This will improve journey times for bus, enhance its reliability and provide resilience to congestion.
- Proposed scheme will deliver average inbound journey time savings, in the peak direction of travel, for D2 service bus passengers of up to 7.0 minutes (13%) in 2028 (AM) and 2.4 minutes (5%) in 2043 (AM). Outbound journey time savings, in the peak direction of travel, for D2 service bus passengers will be up to 9.3 minutes (16%) in 2028 (PM) and 11.1 minutes (24%) in 2043 (PM). The bus priority measures are required to accommodate growth in travel demand and to facilitate the revised bus network (D-Spine) by providing journey time and reliability savings.
- Bus stop relocation - aim to achieve a bus stop spacing of 400m in suburban locations, and 250m in urban centres. Bus stop analysis was carried out to review existing bus stops and, where appropriate, to rationalise these stops in line with best practice criteria.

- Inbound D5 spine services and X47 services from Castletymon Road will also be provided with a priority bus only link that joins the new link road.
- Bus priority signalling will be used to prioritise bus movements in the outbound direction via the new sustainable link road and bus priority signalling will also be used when the outbound bus re-joins Greenhills Road.
- All new lighting will aim to minimise the effects of obtrusive light at night and reduce visual impact during daylight.

8.2.5. **Response to issues relating to Greenhills Road**

- Passing trade/ additional travel distance - Greenhills Road could not meet the objectives to enhance the capacity and potential of the public transport system and the provision of safe infrastructure for cycling, segregated from general traffic. Would also require a large amount of road widening along Greenhills Road. Chosen option allows Greenhills Road to be downgraded to a local road which is more suitable for its current alignment and geometry. Access by car and other traffic is not precluded and there is a reasonable alternative journey time via Calmount Avenue link road.
- Loss of public transport link – existing bus stops proposed to be removed as they are not of the proposed scheme bus route and new stops are proposed near Calmount Road / Calmount Avenue junction and Ballymount Avenue / Greenhills Road junction.
- Traffic – proposed scheme will generally reduce traffic levels along the corridor, with increases in traffic flow only predicted on four links, three of which relate to the closing off of a section of Greenhills Road, and redirection of traffic along Calmount Road via a new link along Ballymount Avenue.
- Junction design iterations have been undertaken to optimise pedestrian, cyclist and bus priority infrastructure on the scheme. Ballymount Avenue/ Calmount Road junction will operate at capacity in AM peak but will be safer for pedestrians and cyclists and ensure that buses have priority through the junction. Signalisation of junction allows for busiest arms to be prioritised during peak periods.

- New cul-de-sac and turning head are required to provide access to the various existing commercial properties and this will continue to provide active daily use of this section of Greenhills Road, helping to dissuade illegal dumping and unauthorised encampments. Proposed scheme will also provide an improved public realm and connections to new bus stop.
- There has been a total of three rounds of non-statutory public consultation.
- Public realm improvements create nicer places that are more desirable for people and business to locate in, thereby increasing the value of properties in the area.
- Alternative proposals for using Greenhills Road would require large amount of road widening. Chosen route through Ballymount area in terms of reliability and cost for bus journey times and the provision of high quality cycle facilities. It also delivers new road links and directly serves Ballymount Industrial Estate, which is a major trip attractor. Chapter 3 of the EIAR considers all reasonable alternatives in relation to the Greenhills Road including the option of widening Greenhills Road.
- Wayfinding signage to supermarkets are not required to achieve the proposed scheme objectives. Proposed scheme would not preclude the future introduction of such a measure at a future date should the local authority wish to give consideration to this.
- Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. Details regarding temporary access provisions will be discussed with homes and businesses prior to construction starting in the area. Access will be maintained for emergency vehicles along the proposed scheme, throughout the construction phase.

8.2.6. **Response to Issues relating to the Proposed Scheme at Bunting Road/ Kildare Road/ Old County Road/ Clonard Road/ Bangor Drive/ Saul Road**

- Traffic congestion and associated noise and air pollution - The majority of junctions continue to operate well within capacity with the proposed scheme in place in AM peak. Of the 7 junctions with capacity issues, 6 operate with a

maximum V/C ratio of above 100% in both Do Minimum and Do Something scenarios (AM). Of the 9 junctions with capacity issues, 6 operate with a maximum V/C ratio of above 100% in both Do Minimum and Do Something scenarios (PM).

- Potential impact of the reduction in general traffic flows will be moderate and positive along the proposed scheme, and the potential impact of redistributed general traffic on surrounding road network will be slight and negative.
- Section 5.4.2 of DMURS (2019) recognises that a certain level of traffic congestion is an inevitable feature within urban networks and that junctions may have to operate at saturation levels for short periods of time during the peak hours of the day.
- Safety concerns - Proposed scheme will deliver strong benefits from a sustainable transport point of view, allowing for greater capacity along the corridor to facilitate the movement of people, and will not result in a significant deterioration to the existing traffic conditions on the local road network during the operational phase.
- Loss of parking - To mitigate loss of informal parking, 67 parking spaces have been provided in the current design on Kildare Road. No other mitigation measure could be identified on Kildare Road and Clogher Road without compromising safety of cyclists using the proposed segregated cycle tracks
- Tree replacement - 37 trees are proposed to replace 22 trees that will be lost as a result of the installation of the proposed cycle track on Kildare Road.
- Junction of Long Mile Road / Walkinstown Road / Drimnagh Road, and the western section of Kildare Road will experience the most notable improvement in streetscape amenity while Walkinstown Road will experience a notable degradation of streetscape amenity from trees removed during construction with limited proposed replacement. Overall change across this section is negative in the short-term becoming positive over the long-term.
- Bus time saving - alternative cycle routing via the quiet street treatment and proposed cycle tracks along Kildare Road and Clogher Road will achieve both of

the objectives of improving bus speeds and providing safe infrastructure for cycling.

- Total bus journey times on all modelled bus services will improve by between 8% and 12% during the AM and PM Peak hours of the 2028 Opening Year and 2043 Design Year. Total bus journey times will reduce along the proposed scheme by up to 12% in 2028 and 12% in 2043.
- Quiet street signage - bus gate signage prohibits general traffic eastbound or westbound using the eastern section of Clogher Road at junction with Sundrive Road. Local traffic can use Clogher Road to access Saul Road and Slane Road from Kildare Road junction. Enforcement a matter for road traffic laws.
- Bus stop removal – position and number of stops have been reviewed as part of the bus stop assessment. Stops proposed for removal on Clogher Road are in close proximity to previous and next stops.
- Construction traffic – shift patterns between 0700 and 2300 hours help to minimise travel by personnel during peak hours. Fewer than 10 trips by private vehicle are envisaged to and from the site during peak hours.
- Maximum number of HGVs expected to be in operation across the proposed scheme during peak haulage activities is 28. Impact is comfortably below the thresholds set out in the TII's Guidelines for Transport Assessments.
- Community engagement - Since the commencement of the non-statutory period of the CBC Infrastructure Works, there has been a total of three rounds of non-statutory public consultation.
- Impact on community - proposed scheme will deliver positive impacts in terms of accessibility to community facilities and commercial businesses for pedestrians, cyclists and bus users during the operational phase. Negative impacts on private vehicles as a result of bus gates are not expected to be significant.
- Cumulative impact of adjacent CBC schemes – assessment of cumulative effects has been undertaken based on a scenario where all the other 11 Core Bus Corridor schemes are also operational. Proposed scheme has direct and indirect interface with the proposed Kimmage, Liffey Valley and Templeogue /

Rathfarnham to City Centre Core Bus Corridor Schemes. Implementation of physical works for respective schemes can be coordinated or delivered in sequence. When all CBC schemes are operational, this will have the effect of constraining the opportunity for traffic to displace when compared to the effect when only one CBC is operational.

- Mitigation – proposed scheme would not preclude the future introduction of traffic calming in surrounding roads should the local authority wish to give consideration to this. Redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, and no mitigation measures have been considered to alleviate the impact outside of the direct study area.
- Bunting Road cycle route - along Bunting Road and St. Mary's Road the tree lined street will be preserved by using no dig methods to lay the cycle track under the tree canopies.
- St Marys Road / Kildare Road / Drimnagh Road junction to be upgraded as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure – includes removal of left slip lanes and amendment of traffic signalling arrangements, and Road Safety Audit does not identify any issues with visibility.
- Construction compound at Bunting Park – extents of construction compound are approximately 10m from the edge of the playing area (5m recommended). GAA pitch will remain usable at all times while the temporary construction compound is in place and the park will be reinstated after construction works are completed.
- Anti-social behaviour – temporary lighting will be installed at construction compounds and there will be CCTV to ensure safe storage of all material, plant and equipment.
- Drainage - site fencing at compounds will include a silt fence for the perimeter of the site to prevent over land flows and surface water drains at access points will be covered. Not anticipated that the temporary construction compound will give rise to any drainage issues within the park.

8.2.7. **Response to Issues Relating to Naas Road/ Long Mile Road Junction**

- This section of the corridor aligns with routes that form part of the GDA Cycle Network Plan.
- *Maxol* - overbridge for pedestrians and cyclists at this location which would greatly reduce conflicts with traffic.
- At present, it can take 4-5 minutes to cross the R110 Long Mile Road using traffic signals.
- Regeneration of lands around the intersection will take place in the years to come and this will change the pedestrian and cyclist flows at this location.
- Proposed arrangement will be more reliable and direct (compared to multiple toucan crossings), and will make for a more pleasant journey for pedestrians and cyclists, whilst improving junction performance for general traffic.
- Surrounding lands are zoned “to facilitate enterprise and/or residential led regeneration”, and the junction passes through an area designated a Key District Centre in the Naas Road Lands Local Area Plan.
- Visibility of petrol filling station - area is heavily trafficked and the streetscape includes significant visual clutter and is of low sensitivity.
- Proximity of ramp to petrol filling station - vent stacks and vapour recovery pipe are within the temporary land acquisition and the offset fuel delivery points are outside the proposed temporary land take. Vent stack will be extended vertically to maintain the necessary height above the ramp and a solid boundary wall will be provided below the section of the ramp at this location.
- All bridge spans will be fully enclosed superstructure reducing the risk of anti-social behaviour, objects being dropped onto vehicles passing beneath the bridge and users falling or jumping from the bridge deck. Steel mesh will be appropriately sized to guard against a lighted flame or cigarette.
- Segregated cycle track proposed along the Naas Road frontage of the petrol station – there will be a minor impact to the existing forecourt area, which does not affect the line of 4 parallel car parking spaces at this location.

- *Woodies DIY* – deliveries during operation will be via a proposed delivery route (6m access road for vehicle reversing and 2m footway around building). Proposed delivery platform and ramp to existing doors. Applicant sought to confirm these arrangements on 3 occasions with Woodies DIY.
- Deliveries during construction – new retaining wall proposed along Naas Road and amendments to the existing car park, the delivery platform and the delivery ramps will be undertaken prior to works commencing on retaining wall to ensure that access/egress for deliveries will be maintained.
- Reduction of visibility of Woodies due to new bridge - streetscape character is composed of a large dual carriageway junction with low sensitivity. EIAR Figure 17.2 shows that the proposed bridge and associated ramps are visually prominent but the Woodies building remains visible.
- Alternative ramp layout and temporary land acquisition to avoid any direct impact on the glazed panels have been incorporated into the proposed scheme and bridge spans will be fully enclosed superstructure.
- EIAR includes details of lane closures/ modifications, road closures and diversions for the construction of the pedestrian overbridge. Anticipated traffic management provision are also set out.
- Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable.
- Justification for bridges – would greatly reduce conflicts with traffic (as above).

8.2.8. **Response to issues relating to Individual Properties**

- ***Response to Fairfield Inn Ltd (Cherry Tree Pub, Walkinstown Roundabout):*** Permanent land acquisition required from the two car parking areas to provide the two-way segregated cycle track around Walkinstown Roundabout. Revised car parking arrangement designed within the remaining space.
- Existing levels of the retained property will be maintained and retained areas will continue to drain towards the public road.

- Fairfield Inns Limited property will not be subject to any perceptible increased noise levels during the operational stage of the scheme and no noise mitigation measures are required.
- Temporary land acquisition is required to allow construction of the revised parking arrangements on the land to be retained by Fairfield Inns Limited. Extent of acquisition is necessary and there will not be a need for the Cherry Tree public house to close during construction.
- EIAR provides extensive details of traffic management during construction and how the access / egress to businesses will be maintained at all times.
- Walkinstown Roundabout is one of the key locations for an improved urban realm with provision of new landscape areas including tree planting and wildflower meadow, reduced dominance of parking and hard surfacing, and a new consistent paving scheme throughout, including to areas of land acquisition from commercial frontages.
- Boundary treatments will be carried out on a section-by-section basis, and in line with the traffic management stages.
- EIAR Chapter 8 describes the construction phase carbon calculations and quantifies the construction phase embedded carbon using the TII Carbon Tool (TII 2020). Projects which have a carbon footprint are not necessarily significant provided that the projects are compatible with net zero by 2050 – proposed scheme will lead to operational stage GHG emission reductions and the potential to reduce CO2e emissions equivalent to the removal of approximately 18,420 and 44,230 car trips per weekday from the road network in 2028 and 2043 respectively.
- Segregated two-way cycle track around the Walkinstown Roundabout reduces conflicts with pedestrians and allow the cyclists to take the shortest route around the junction, with parallel signal-controlled pedestrian / cycle crossings on all arms of the roundabout also provided. Significance of the effects for pedestrians at Walkinstown Roundabout are assessed as having a positive profound effect.

- ***Response to Jacinta Kenny & Martin Gregory, 29 Walkinstown Road:*** There will be minimum land take impacting on properties along Walkinstown Road maintaining sufficient front delivery boundary setback lengths for a car to be parked.
- Reinstatement of property frontage at this location will be on a like for like basis and detailed accommodation works plans will be prepared in consultation with the landowner.
- Combination of improved connectivity as well as public realm improvements, will not have a negative impact on values of residential properties on Walkinstown Road.
- Notice to Treat will be served and the landowner will be required to submit a claim for compensation and as part of this process - NTA will pay the reasonable costs for the landowner to engage its agent / valuer in preparing, negotiating and advising on compensation.
- Selection of appropriate pavement materials will take in to account the most appropriate materials for noise. The bus fleet will be 100% electric by 2043 and general traffic on Walkinstown Road will not be any closer to the property as a result of the proposed scheme.
- Noise abatement measures are set out in the EIAR and construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties.
- All new cabling associated with replacement lighting columns will be placed underground wherever practicable.
- A planting strategy has been developed for the proposed scheme, which includes new tree planting and street trees.
- Access/ egress to the laneway adjacent to no. 9 Walkinstown Road will be maintained as part of the proposed scheme.
- ***Response to Killeen Motor Group, New Nangor Road:*** Permanent and temporary land acquisition proposed over a length of c. 110m and width of 1.1m

resulting in removal of hedge and stub wall/ railings. 2.4m high wall with security measures proposed for the new boundary, as well as 8 semi-mature trees.

- Local arrangements will be made on a case-by-case basis to maintain continued access to businesses affected by the works, at all times, where practicable, and liaison with impacted landowners will be carried out in advance of commencement of boundary works to properties.
- Where properties are subject to permanent and / or temporary acquisition, appropriate measures will be put in place for protection of features, trees and vegetation to be retained, for continued access during construction and for adequate security and screening of construction works.
- Drawings show the 8 no. proposed semi-mature trees as located in the temporary land acquisition behind the new boundary wall, whereas the design intent at this location is for the trees to be planted within the public road corridor between the proposed cycle track and footpath. Proposed hedge will also be located within the existing road corridor.
- ***Response to Tesco Ireland, Dolphin's Barn:*** Loading bay is not required to achieve the proposed scheme objectives at this location. However, proposed scheme does not preclude the future introduction of such a measure at a future date should the local authority wish to give consideration to this.
- Dolphin's Barn Part 8 Public Realm Improvement Plan does not allow for loading bays at this location.
- ***Response to Leila & Stephen Early, Rafter's Road:*** Construction compound TC9 reinstatement after construction will restore grassland and plant 14 no. semi mature trees.
- Public realm improvements may lead to an increase in property values and residents along the corridor may see a measurable increase in their quality of life.
- Provision of additional bike storage facilities is outside the scope if the proposed scheme. Cycle stands will generally be provided, where practicable, at island bus stops.

- Existing trees will be removed to provide the necessary carriageway and footpath width, although they will be replaced with 14 new semi-mature trees. EIAR demonstrates that there will be no significant impact on air quality as a result of the operation of the proposed scheme.
- ***Response to Blackwin Ltd., Calmount Road/ Ballymount Avenue:*** Conversion of the Ballymount Avenue / Calmount Road junction from a roundabout to a signalised junction allows for more control of movements through the junction enabling the busiest arms during peak periods to be prioritised.
- Extensive traffic modelling exercise has not identified the need for any additional traffic lanes at this junction. Junction will operate at capacity in AM peak; it will be congested for traffic but will be safer for pedestrians and cyclists and buses will have priority through the junction.
- Proposed scheme does not preclude additional lanes at a future date should the local authority wish to give consideration to this.
- If permitted development is constructed before the CBC, the Proposed Scheme will tie in to the permitted arrangement.
- ***Response to Calmount Holding Ltd., (Calmount Business Park):*** Greenhills Road was considered for the proposed scheme but this option would require a large amount of road widening. Chosen option strikes the right balance between cost and delivering reliable journey times.
- NTA has engaged with SDCC and DCC in respect of the City Edge Strategic Framework, which is non-statutory and in the relatively earlier stages of the planning process. Proposed scheme not considered premature as it implementation will help achieve the visions and objectives of the CESF.
- Land use and accommodation works, community land use and accessibility, commercial land use and accessibility, and impacts of land take on population health are all assessed in the EIAR.
- Potential impacts on the business park relating the construction and operation of the proposed scheme are comprehensively considered in the EIAR. Road

network in the vicinity of Calmount Business Park will be improved through the creation of three new links.

- Potential impacts on the business park, including two remaining development sites, is comprehensively considered in the EIAR.
- ***Response to Walkinstown Area – Walkinstown Residents Association:*** Along Walkinstown, boundary walls will be replaced on a like for like basis - temporary land acquisition is required to facilitate construction of new wall, reinstatement behind it, and to tie in the levels of the accesses with the levels of the new footpath.
- Milestone will be temporarily removed to ensure its protection, before being reinstated within the vicinity of the existing.
- Reductions in general traffic flow are predicted on all arms of Walkinstown Roundabout in AM and PM peak hours for 2028.
- 2 lane width at roundabout will facilitate shorter crossing distances for pedestrians and cyclists and proposed scheme at this location provides the optimum layout that balances competing demands.
- Drainage design based on best practice general principles, which are set out in the document 'BusConnects Core Bus Corridor Drainage Design Basis'. SuDS drainage design developed as a first preference and this provides the dual benefits of controlling flow and treating water quality.

8.2.9. **Response to Submissions Relating to the Whole Scheme**

- ***Response to Linda Patton:*** Impact on local road addressed above. There is forecasted to be a reduction of 33% in the number of people travelling via car along the scheme corridor towards the city centre in AM peak (38% PM peak).
- Proposed scheme discourages the use of side streets by through traffic, while also ensuring that access by car to local streets, schools and businesses is maintained.
- A small number of junctions are predicted to operate over capacity in the Do Something scenario – in most cases, the performance of these junctions are

similar with or without the proposed scheme. DMURS (2019) recognises that a certain level of traffic congestion is an inevitable feature within urban networks and that junctions may have to operate at saturation levels for short periods of time during the peak hours of the day.

- Proposed scheme will deliver strong benefits from a sustainable transport point of view, allowing for greater capacity along the corridor to facilitate the movement of people, and will not result in a significant deterioration to the existing traffic conditions on the local road network during the operational phase.
- Interpeak period represents a lower traffic volume on the road networks hence have less impact of noise, air quality and traffic.
- No evidence to suggest that there is an increase in business insolvency or a departure of business from the area during construction works. Increased people movement will bring more people to the CBC – between 37% and 27% in the number of people travelling along the corridor during 2028 AM and PM peaks respectively, (49% and 38% in 2043).
- Proposed scheme provides a balance between providing bus priority while also ensuring that access by car to local streets and businesses, shops etc. is maintained.
- A full set of consistent up to date traffic counts for a neutral period e.g. November / February when schools, colleges were in session was completed for the proposed scheme. Overall predicted reduction in car journeys resulting from implementation of the proposed scheme will reduce traffic congestion.
- Traffic assessment contained in the EIAR, and the traffic data upon which it is based (collected pre-covid pandemic), represents a reasonable basis for the assessment.
- Statutory process requires the making available for public review of all the applicable information set out in the legislation and permitting the making of submissions in relation to the proposals to the Board. Various non-statutory public consultation processes have also been undertaken. These processes are in excess of the requirements of the Aarhus Convention.

- Potential for cumulative impacts in combination with other projects has been considered in Chapter 21 of the EIAR, including the 11 other BusConnects CBC schemes. The cumulative effect of all CBCs in operation and in tandem with the roll out of the wider Greater Dublin Area Transport Strategy measures, is that future growth in overall travel demand is catered for by sustainable modes.
- ***Response to Ciarán Cuffe, MEP:*** Separation between road, cycle and footpath - segregated cycle tracks have been provided where practicable, with the exception of quiet street. At grade cycle tracks may be used where a no-dig technique is required at tree's root protection area.
- Cycle stands will generally be provided, where practicable, at island bus stops and key additional locations. Bus interchange at Tallaght includes bicycle parking provision.
- Existing cycling zipway will remain in place on Blessington Road and it is not proposed to alter the existing off-road cycle track on Blessington Road / Main Street, Tallaght.
- Accessibility arrangements at bus stops have evolved as a result of direct consultation between the NTA and representative mobility groups, accessibility audits and road safety audits.
- At both Dolphin's Barn and Patrick Street, the carriageway central median provides opportunity for green planting in an urban environment.
- Layout of bus stops on Clogher Road is based on the National Cycle Manual In-Line Bus Stop Option 2 adapted for segregated cycle track width of 1.5m.
- ***Response to Dublin Commuter Coalition:*** NTA welcomes the support from the advocacy group for the proposed scheme.
- NTA is exploring proposals for bus lane enforcement as set out under Measure INT20 – Enforcement of Road Traffic Laws of the Draft Greater Dublin Area Transport Strategy 2022-2042. Advanced bus detection systems will activate green signals for authorised vehicles only.

- All bus lanes will operate 24 hours a day 7 days a week. Hours of operation of bus gate will be subject to ongoing review.
- Ambition of the Preliminary Design Guidance Booklet was to take the benefits of the traditional junction layout from the National Cycle Manual and supplement this with a range of measures aimed at increasing protection for cyclists and reducing uncontrolled conflict with pedestrians.
- Protected junction is proposed to be retrofitted into all existing junctions, taking into consideration the best practice from international settings including the Netherlands – 'Dutch-style' junction allows for a potential un-signalised conflict between pedestrians and cyclists and this was a concern for disability groups. Dutch style junctions can result in a reduced level of service for pedestrians with at least 3 crossing movements (2 no. cycle tracks and 1 no. carriageway) to cross a side road. Landing area for pedestrians needs to be suitably sized.
- Concept of allowing both cyclists and general traffic to proceed together in the same direction is not uncommon and the same traffic signals arrangement also caters for left-turning traffic. Introduction of separate signal phases will increase delay for cyclists at junctions.
- Proposed arrangement will promote the sustainable mode hierarchy for cyclists at junctions over vehicles turning left – left-turning vehicle traffic volumes are estimated to be less than the 150PCU threshold and similarly low HGV volumes are estimated. Signage and a three to five second early start for cyclists is typically provided.
- Proposed scheme will increase the number of controlled pedestrian crossings from 135 in the existing to 181 and there will be an increase in the number of raised table crossings on side roads from 29 in the existing to 159.
- Existing pedestrian infrastructure at Long Mile Road/ Walkinstown Road junction is proposed to be upgraded to include upgrade to toucan crossings and reduction of pedestrian crossing distances.
- Island bus stops are the preferred option on the CBC project where space constraints allow. Where space constraints don't allow, a shared bus stop

landing zone may be considered whereby cyclists ramp up to footpath level and continue through the stop. Cycle track will be narrowed on approach to bus stop and yellow bar markings and tactile paving will be provided.

- Pedestrians and cyclists are segregated wherever practicable and shared spaces are only used in specifically constrained locations, typically at junctions where there is insufficient space to provide a protected junction thereby requiring cyclists to make turning movements via toucan crossings.
- Proposed scheme routing for improved cycling infrastructure will be diverted from Greenhills Road via a new link road connecting Greenhills Road to Ballymount Avenue and on to Calmount Road which will be extended to meet Greenhills Road to the east. Advisory cycle lanes will be retained on Greenhills Road.
- Tree-lined median on Patrick Street is to be retained following feedback from public consultations, environmental assessment and design development. Junction of Nicholas Street and High Street to be remodelled to provide improved facilities for buses, cyclists and pedestrians.
- Localised narrowing of the cycle track below 1.5m may be necessary over very short distances to cater for local constraints (e.g. mature trees).
- Naas Road/ Long Mile Road junction - new pedestrian and cycling bridge with accessible ramps and stairs on all approaches to the junction has been proposed to provide increased pedestrian and cycling safety, permeability and accessibility at this junction (as above).
- ***Response to Recorder's Residents Association:***
- Aarhus Convention compliance – as above.
- Incomplete planning application – proposed scheme finishes at Christchurch from where bus services will join the prevailing traffic management regime in the city centre. Core Bus Network Report (NTA 2015) identified those routes where there needed to be a focus on high capacity, high frequency and reliable bus services, and where investment in bus infrastructure should be prioritised and concentrated.

- Cumulative effect of displaced traffic – as above.
- Common good - aim is to reduce journey times for modes of transport with higher person carrying capacity (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment. The focus is on the movement of people rather than vehicles.
- Cumulative traffic predictions – as above. On average across all proposed schemes, there is a predicted reduction of 32% in the number of people travelling via car, an increase of 57% in the number of people travelling via bus and an increase of 52% in people walking or cycling along the Proposed Schemes during the AM Peak Hour, (30%, 50% and 38% respectively in PM peak).
- Bus usage - projected to be an increase of 145% in the number of people travelling by bus, an increase of 45% in the number of people walking or cycling, and a reduction of 33% in the number of people travelling by car along the route of the proposed scheme.
- To improve the efficiency of the bus service, the positions and number of bus stops have been reviewed as part of a bus stop assessment. Some estimates suggest that stopping at bus stops makes up in excess of 20% of the journey times. Bus stop review considered the capacity of each proposed bus stop to cater for the projected bus numbers. NTA GIS data used to generate 400m and 800m walking bands from bus stops and existing bus stops were rationalised.
- Access to Lidl – as above.
- Walkinstown Roundabout traffic – as above.
- Carbon emissions – as above.
- ***Response to Dublin Cycling Campaign:*** NTA welcomes support for the proposed scheme and looks forward to the continuation of collaboration with the Dublin Cycling Campaign in achieving the proposed scheme objectives.
- Provision of planted buffer zones would involve major works that would not be justified in the context of the objectives of the proposed scheme.

- Delivery of a 2.0m+ wide cycle track not always practicable and widths have been reduced to typically 1.8m or 1.5m in these cases. Cargo, handcycle, bike trailers, etc. are typically less than 1m.
- Continuous cycle tracks - Where segregated cycle tracks could not be achieved, between Walkinstown Roundabout and Parnell Road (Grand Canal), a parallel alternative cycle route is provided along Bunting Road, Kildare Road and Clogher Road to link into the Grand Canal cycle route at Parnell Road.
- Increased levels of filtered permeability – specific measures will help to deter inappropriate and unlawful use of bus lanes and cycle tracks including advanced bus signal detection systems which will activate green signals at traffic lights for authorised vehicles only.
- CROW guidelines for quite street – low volume of general traffic as a result of the proposed bus gate deems Clogher Road suitable for cyclists sharing the roadway with the general traffic without the need to construct segregated cycle tracks or painted cycle lanes. There will be appropriate quiet street signage.
- 50kph on Crumlin Road / Walkinstown Road / Kildare Road – enforcement of road traffic laws is a matter for An Garda Síochána. A number of traffic calming measures will be implemented and additional landscaping and enhanced pedestrian/ cyclist priority measures will lend themselves to the principles of self-regulating streets.
- Naas Road junction – as above.
- Walkinstown Roundabout – 6 options assessed using Multi Criteria Analysis. Chosen option allows good bus lane provision and throughput; is a considerably cheaper option; provides improved facilities for cyclists and pedestrians; requires no land take and will create additional public space; and all existing traffic movements are catered for.
- Bus stop bypasses - not possible to provide island bus stop arrangement on Kildare Road and Clogher Road and therefore in-line design is proposed.

- Crumlin Road / Sundrive Road junction – proposed scheme provides cycle lanes through the junction and toucan crossings on Crumlin Road to allow cyclists to turn right onto Herberton Road and onto Sundrive Road
- Crumlin Road / Parnell Road junction - proposed scheme provides cycle lanes through the junction and toucan crossings on Crumlin Road / Dolphin's Barn to allow cyclists to turn right onto Dolphin Road and onto Parnell Road.
- South Circular Road / Dolphin's Barn – takes into account Dolphin's Barn Public Realm Improvement Plan being implemented by DCC. It is proposed to introduce advanced stop line road markings on the side roads to assist cyclists entering the junction.
- Patrick Street/ Dean Street – proposed to omit existing advanced cycle stop lines and cater for cycle tracks on all arms with dedicated crossings and physical build outs.
- Christchurch junction – cycle tracks on all arms entering/ exiting junction, dedicated crossing facilities, cyclist desire lines and physical build outs where feasible.
- Design of raised table treatments undertaken in accordance with Preliminary Design Guidance Booklet for BusConnects.
- Bike parking – as above.
- ***Response to Senator Mary Seery Kearney:*** Period allowed for submissions – as above.
- Provision of extra buses – refers to Core Bus Network Report (NTA 2015).
- Bus priority measures forming part of the proposed scheme are required to accommodate growth in travel demand and to facilitate the revised bus network (D-Spine) by providing journey time and reliability savings for passengers. Improvements in bus priority infrastructure with the proposed scheme in place will give rise to a substantial increase in bus patronage during the peak hours.

- Crumlin community access to public transport - layout of new bus stops is considered to better serve the existing and future catchment and be closer to existing and new pedestrian crossing facilities for improved convenience.
- Gain in journey time - total bus journey times on all modelled bus services will improve by between 8% and 12% during the AM and PM Peak hours of the 2028 Opening Year and 2043 Design Year (12% & 12% respectively along proposed scheme).
- Enhancement of public transport system – as above. In addition, the proposed scheme delivers a reliable alternative to car-based travel that can support future sustainable growth and provide a positive contribution towards reducing carbon emissions.
- Traffic modelling – multi-tiered modelling approach adopted including the NTA's East Regional Model (ERM), a Local Area Model (LAM), a micro-simulation model (corridor level), and junction models.
- Cumulative corridor assessment – as above.
- Adherence to Aarhus – as above.
- Suitability of local roads for traffic – as above.
- Environmental impact – as above and EIAR re: air quality, noise and vibration and carbon emission.
- Cross-community bus service - BusConnects Dublin will introduce a redesigned, higher capacity bus network which is more coherently planned and more understandable, delivering a better overall bus system for Dublin and the surrounding areas. D-Spine (D1, D2, D3, D4, D5) runs from the city centre to the south-west, serving areas along the Greenhills Corridor (Tallaght to City Centre Section). Other orbital routes, radial routes and local routes will interact with the proposed scheme (S2, S4, S6, S8, W2, W4, W6, 71, 72, 73, 74, 80, 82, 85, L44, X47 and P43).
- Those reliant on car - providing accessibility for mobility impaired users is a core element of the proposed scheme and the potential impact on people with

disabilities has been appropriately considered in both the scheme design and the impact assessment. Proposed design measures will make the urban environment easier and safer for a wider variety of pedestrians including visually impaired, wheelchair users and people with mobility difficulties, parents with young children and pushchair users.

- Response to Transport Infrastructure Ireland: NTA's welcomes TII's support for the scheme.
- Proposed scheme has been progressed taking account of environmental constraints and considerations that have been identified in assessments including interactions with national and light rail networks. CEMP addresses traffic construction-phase management provisions for the light rail network. EIAR describes the envisaged dedicated construction vehicle routes on the national and regional road network where practicable, to minimise use of the local road network.
- R134 New Nangor Road – proposed to be widened under the M50 bridge but there will be no alterations to the bridge and clearances will remain the same.
- R819 Greenhills Road M50 bridge - land acquisition on both sides of the M50 required to facilitate the construction of the pedestrian / cycle bridges. Design of bridges developed in accordance with TII publication DN-STR-03001 and has included consultation with TII. Detailed design will continue to follow TII technical approvals and third party access protocols.
- Each bridge structure will be lifted into place over one night – 10pm-6am represents approximately 5-6% of total 24hr demand.
- Construction traffic – CTMP will satisfactorily manage any impact on the safe and efficient operation of the national road network.
- Mitigation for roads - EIAR describes the envisaged dedicated construction vehicle routes and CTMP will control vehicular movement along the construction route, including restrictions on the number of HGVs accessing and egressing the construction works throughout the day to mitigate the impacts to general traffic on the surrounding road network.

- NTA satisfied that matters relating to compliance with TII publications, maintenance, CEMP and construction traffic management can be addressed between the NTA, SDCC and TII in the absence of any approval condition. NTA will support the provision of the necessary funding by the relevant parties to ensure that the benefits of the proposed scheme are not inappropriately eroded.
- Luas alongside Old Blessington Road - no amendments to the existing kerblines are proposed on the northern side of Old Blessington Road adjacent to the Red Luas line and no alterations to the Luas infrastructure and associated services are proposed at this location. There will be no impact on Luas services and access to the tram stop will be maintained at all times.
- Luas along Naas Road – proposed arrangement allows for improved bus facilities and passenger interchange with the Kylemore Luas Stop. No alterations to Luas infrastructure and associated services are proposed along this section of the route.
- Luas signal priority - removal of all at-grade pedestrian and cyclist crossing points will allow the signal cycle time to be optimised to maximise the benefits to both bus and Luas services.
- Physical interfaces of all major infrastructure and utilities have been assessed, including the Luas Red Line, and the design of the proposed scheme at this location has taken TII's 'Code of practice of engineering practice for works on, near, or adjacent the Luas light rail system' in to consideration.
- Proposed arrangement at Kylemore tram stop allows for improved bus facilities and passenger interchange and the proposed scheme will not negatively impact on pedestrian movement and behaviour at this location.
- Construction Compounds TC13 is located adjacent to the Luas - CTMP will effectively manage traffic and transport during the construction phase.
- Mitigation for Luas – EIAR describes the envisaged dedicated construction vehicle routes and the CTMP will control vehicular movement along the construction route, including restrictions on the number of HGVs accessing and egressing the construction works throughout the day to mitigate the impacts to

general traffic on the surrounding road network. General traffic impacts will be slight and short-term on the road network, and hence the Luas as services traverse the various road junctions.

- NTA satisfied that matters relating to overhead conductor system poles, automatic vehicle location systems, detailed design, CEMP, Luas operational hours, construction traffic management, access and maintenance agreement, and works permit application can be successfully addressed between TII and the NTA, in the absence of any approval condition.
- ***Response to Department of Housing, Local Government and Heritage:*** No habitats matching the description of the DAU submission in terms of calcicole plant community flora species were identified during surveys for the proposed scheme. NTA will positively engage with SDCC for the preparation of a Calcicole Plant Communities Conservation Plan should calcicole species be present.
- Where possible, vegetation will not be removed between 1st March and 31st August to avoid direct impacts on nesting birds. Vast majority of vegetation within proposed scheme boundary comprises isolated street trees where the identification of nests by an ecologist will be feasible within the breeding bird season.
- All archaeological mitigation measures will be implemented in full.
- ***Response to Brendan Heneghan:*** No additional buses - Core Bus network study included a recommended route from Tallaght and Clondalkin to the City Centre to serve significant demand and address service deficits for a high level of scheduled bus services already operating along this corridor. Bus priority measures are required to accommodate this growth in travel demand and to facilitate the revised bus network (D-Spine). Increase of 145% in the number of people travelling by bus in 2028 AM peak.
- Removal of existing bus services - BusConnects will introduce a redesigned, higher capacity bus network which is more coherently planned and more understandable, delivery a better overall bus system for Dublin and the surrounding areas.

- Existing difficulties with bus services – to address deficiencies with bus services priority infrastructure will be developed to minimise delays and improve reliability so that modal shift from private car is more attractive.
- Inadequate time to review CBC proposal - period of public consultation of 8 weeks was provided from 9 May 2023 to 4 July 2023 in accordance with the Roads Act 1993 (as amended). Various non-statutory public consultation processes are in excess of the requirements of the Aarhus Convention.
- Inadequate traffic modelling – as above.
- Cumulative traffic impact – as above.
- Traffic displacement – as above.
- Metro alternative should be considered – Metro system generally designed for peak hour passenger numbers exceeding about 7,000 passengers per hour per direction. Metro solution would not be economically justified within the area covered by this corridor and would not obviate the need for the proposed infrastructure.
- Proposed City Edge development should be considered - NTA has engaged with South Dublin County Council and Dublin City Council in respect of the City Edge Strategic Framework.
- Effects on city centre - proposed scheme forms part of the wider Core Bus network which aligns with the Greater Dublin Area Transport Strategy to form an integral part of the improved public transport infrastructure measures for the Dublin Metropolitan Area.
- Expedite Bunting Road proposals – not part of the scope of the proposed scheme.
- Impact on Parkview – as above.
- Clonard Road and Bangor Drive - closure of these roads for direct access onto Crumlin Road so that bus priority can be maintained.
- Left slip at Drimagh Road/ Walkinstown Road – will enhance pedestrian and cyclist facilities and reduce vehicle speeds.

- ***Response to South Dublin County Council:***

  Traffic and Transport Section:

- Support for proposed scheme noted and welcomed.
- *Bus interchange at Belgard Square* - NTA will continue the very positive and constructive liaison with SDCC.
- Site compound at Bancroft Park (TC2) – as above.
- Traffic management – as above.
- Air quality – as above. Residual effects are neutral and short term.
- Noise and vibration – as above. Chapter 9 of the EIAR provides a summary of the predicted construction phase impacts following implementation of mitigation.
- Visual impact – as above. Negative during construction and positive during operation.
- Landscape proposals and reinstatement – as above. Enhance landscaping proposed for Bancroft Park.
- *Old Greenhills Road Plaza* – as above. Other urban realm and landscaping opportunities will arise from the proposed scheme. Stone paving will be used in the area and localised planting will be implemented to retain the character of the existing cul-de-sac treatment.
- Cycle lanes - cycle connections have been proposed at all side roads. Airton Road does not have cycle track / lane provision and cycle lanes are proposed for 30m on Airton Road.
- *Mayberry Road & Birchview Avenue* - extensive tree planting scheme, SuDS interventions and public realm links are proposed. There will be considerable loss of amenity in the short term at Birchview / Parkview / Treepark.
- Construction Compounds TC3 and TC4 – hours of operation, construction traffic and noise as per TC2 above.

- Visual impact - green space has been subject to a long-standing future road objective in the current and previous South Dublin Development Plan. Tree planting will improve amenity and screening potential.
- NTA satisfied that the matters raised relating to hours of operation, construction traffic and noise can be successfully addressed between SDCC and the NTA, in the absence of any approval condition.
- *Treepark Road/ Castletymon Road* – Support for pedestrian and cycle linkages from Treepark Road to Castletymon Road is welcomed by NTA.
- Land negotiations - if CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner.
- *Green space between Calmount Road and existing Greenhills Road:* Landscape and urban realm proposals derived from analysis of the existing urban realm. Landscaping proposals at this location are in accordance with the scheme's planting strategy.
- *CPO of public land, hand on & maintenance* - Upon completion of construction, the NTA automatically ceases to be the road authority and the status of DCC as the relevant road authority is automatically restored. Lands acquired will be transferred to the relevant local authority.
- Construction [Traffic] Management Plan – as above.

Road Maintenance Section:

- *Construction* - Rigid pavement proposed at bus interchange on Belgard Square West. However, specific materials will be selected for specific loading areas.
- Design observations – SuDS (as above).
- *Signage* - above-ground utility infrastructure/ signage minimised where practicable.
- *Maintenance costs* – NTA retains responsibility for bus fleet, bus stops and bus shelters, and maintenance of these elements falls within its remit.

- *Universal design principles* – mobility impaired access is a core element of the proposed scheme, e.g. 60mm set down kerb between the footway and the cycle track is of particular importance for guide dogs.

Economic Development Section:

- Matters raised in relation to taking in charge (as above).

Public Realm Section:

- Trees & hedgerows/ arboricultural impact: There will be a 145% reprovision of trees.
- *Belgard Square West and Belgard Square North:* Tallaght Bus Interchange will become an important new connecting space within the local urban realm. SDCC Public Realm Section comments were the subject of extensive liaison throughout the design development process.
- *Depth of swales* - SuDS are proposed across the scheme wherever practicable and sized appropriately.
- *CPO of land at Bancroft Park* - NTA satisfied that matters raised can be successfully addressed between SDCC and the NTA, in the absence of any approval condition.
- *CPO of part of Tymon Park* – 3 options examined and chosen option has less impact on the environment. Chosen option was refined to reduce the impact on Tymon Park as much as practicable and will have significantly less of an impact than the approved SDCC Greenhills Ballymount Reconfiguration scheme.
- *Wintering bird surveys* - Survey effort was proportional to the proposed scheme requirement, in that multiple surveys across multiple years were undertaken.
- *Tymon Park boundaries and entrances* - proposed boundary treatment is a stub wall and railings, with a new hedgerow running on the road side of the boundary for the full length of the new wall.
- *Proposed compound locations* – reinstatement proposals provided and landscaping enhanced following completion of the construction contract.

- *Green infrastructure corridors* - enhancement of connectivity between parks, open spaces and ecological areas along Strategic Green Infrastructure corridors is outside the scope and objectives of the proposed scheme.
- *Lighting and protection of habitats and species* - absence of transect data for the sections referred to by SDCC does not impose any limitation on the validity of the impact assessment or mitigation strategy with respect to bats presented within the EIAR.
- *Aquatic and riparian survey sites* – works will not entail instream works and will not impact on the Grand Canal ecological corridor. Surveys recorded habitats, plant rarities and search for evidence of otter usage and kingfisher nesting suitability long the Grand Canal. Mitigation strategy included for otter includes for a pre-construction survey.

Active Travel Section:

- NTA welcomes the acknowledgement by SDCC Active Travel Section that early and effective engagement has taken place minimising abortive work.

Architectural Conservation Section:

- *Protection of architectural features* - NTA satisfied that the matters raised can be successfully addressed between SDCC and the NTA, in the absence of any approval condition.

Water Services Section:

- Preliminary consultations have been undertaken with utility asset owners, including Irish Water, so that conflict can be resolved by relocating or diverting services where necessary and protecting in-situ where appropriate.

City Edge Section:

- *Naas Road Bridge* - bridge design has been developed to take account of the basic principles of aesthetics and to respect the surrounding urban environment. Form will be as simple as possible to ensure the bridge does not detract from the overriding function. Although this will form a new detracting element, the

streetscape character is composed of a large dual carriageway junction with low sensitivity.

- *New Nangor Road/ Oak Road/ Park West Avenue junction* – designed on the basis of the future transport demand for the 2028 and 2043 assessment years, population growth of 11% up to 2028 and 25% by 2043, and employment growth by 22% by 2028 and 49% by 2043. Proposal is the optimum layout that balances the competing demands by enhancing bus priority, improving pedestrian and cyclist infrastructure whilst still retaining appropriate capacity for the forecast level of general traffic.
- *Killeen Road/ New Nangor Road* – includes the provision of additional trees and proposed species rich grassland.
- *Calmount Road/ Greenhills Road* – as above. Landscaping and drainage proposals at this location are in accordance with the proposed scheme's planting strategy and SuDS drainage strategy.
- *Greenhills Road/ Ballymount Avenue:* As above regarding trees and land-take at Tymon Park.
- *Ballymount Avenue/ Calmount Road:* Proposals at this location in accordance with the planting strategy developed in response to the objectives set out in both development plans and the landscape and urban realm opportunities arising from the proposed scheme.
- *Calmount Avenue/ Greenhills Road:* Landscaping proposals at this location are in accordance with the proposed scheme's planting strategy.
- ***Response to Dublin City Council:***
- *Planning history* – no significant residual cumulative impacts are considered likely from the developments identified by DCC. Interface liaison will take place if any of the developments begin construction prior to or during the construction phase of the proposed scheme.
- *Natura 2000* – majority of special conservation interest species for the North-West Irish Sea candidate Special Protection Area (cSPA) are coastal but some

can venture inland. This does not change the outcome of the NIS as the SCIs and potential impacts from within the vicinity of the Proposed Scheme have effectively been captured.

- *Archaeology* – Departmental recommendations addressed in EIAR. The NTA will liaise with DCC in regard to archival processes.
- *City Architect* - Introduction of appropriate public realm improvements has been considered fully in the scheme design and in the EIAR.
- Potential for impacts on architectural heritage have been considered in the EIAR and mitigation measures outlined.
- Architectural heritage assessment is guided by the provisions of the relevant statutory instruments and relevant guidelines for the protection of the architectural heritage.
- Cycle track arrangement at junctions reduces conflict between cyclists and vehicles and the setback crossing point from the junction provides a landing buffer area. Left turn cycle slip lane at Patrick Street/ Dean Street provides efficiencies for left turning cyclists and build out allows for shorter pedestrian crossing distances.
- Information including visuals to assess the proposed scheme is presented throughout the EIAR in Chapter 2, 4 and 17. Photomontages are included in Volume 3.
- Land acquisition and taking in change – as above.
- Bus shelter design – examples included of preferred standard 3 Bay Reliance Mark Shelter with full width advertising panel. 3-Bay Reliance Cantilever Shelter with full width roof and half end panels; and 3-Bay Reliance Cantilever shelter with a narrow roof configuration with and without half end.
- Provision of bus shelters in proximity to buildings of architectural significance, has been assessed in EIAR Volume 2, Chapter 16: Architectural Heritage.
- Significant effort has been made during the design process to minimise above-ground utility infrastructure, where practicable.

- Provision of vehicle charging points is not in the remit of the NTA. 94% of city bus fleet to be EV of HEV by 2028 and 100% EV by 2043.
- Preliminary Design Report contains supplementary information on detailed pavement design and minimisation of waste.
- NTA satisfied that the proposed scheme has been planned and assessed taking on board the DCC City Architects Department comments as these matters were the subject of extensive liaison throughout the design development process.
- Heritage features to be retained are noted on the General Arrangement Drawings and the Inventory of Architectural Heritage Sites in Volume 4 of the EIAR. Methodology for Works Affecting Sensitive and Historic Fabric in contained in Volume 4 of the EIAR.
- NTA will liaise with DCC throughout the procurement and construction process including in relation to consideration of new street furniture, art, provision of drinking fountains, etc.
- Approach to undertaking new boundary treatment works is replacement on a 'like for like' basis in terms of material selection and general aesthetics.
- General landscape and townscape measures are included within the proposed scheme for new planting and pavement replacements, boundaries, urban realm, biodiversity, SuDS, maintenance, etc.
- Traffic signal equipment is designed in accordance with the Traffic Signs Manual, clearly defines the requirements and positioning of traffic signal heads, detection equipment, and associated traffic signal poles.
- NTA recognises the importance of the rationalisation of street furniture to reduce visual clutter and the siting of utilities and traffic management signage in the vicinity of protected structures and conservation areas, historic paving and historic street furniture.
- *Conservation section* - not considered that the works proposed as part of the scheme will give rise to non-compliance with conservation policy.

- Arboricultural Impact Assessment identifies the likely direct and indirect impacts to trees along with suitable mitigation measures, as appropriate to allow for the successful retention of significant trees, or to compensate for trees to be removed.
- Chapter 16 – Archaeological and Cultural Heritage of the EIAR considers the impact on the protected structures listed by the Conservation Section, i.e. Ardscoil Éanna; bus shelter at St. Patrick's Park (none proposed); bus stop at St. Mary's Church of Ireland (existing shelter retained); bus stop at Volkswagen building; Crumlin Health Centre.
- Mitigation will be implemented which will typically be the recording, protection and monitoring of the adjoining structures or boundaries prior to, and for the duration of the construction phase. Mitigation also set out for paving, lamp posts/ post boxes, other street furniture/ finishes (mile stone), trees, boundary treatments, cycle lane surfacing, and signage. The use of red coloured asphalt, or red coloured epoxy resin has been specified for all cycle tracks across the BusConnects Infrastructure Works to ensure legibility and conspicuity of the proposed cycle tracks and to ensure safety for vulnerable road users.
- Conservation departmental recommendations addressed in EIAR (Chapter 16) and planning application documentation.
- *Environment and Transportation:* The adaptive traffic control system SCATS will be used to undertake the required traffic management on the corridor to enable the public transport corridor to perform as per the requirements. Digital infrastructure along with the proposed civil infrastructure, combine for the proposed scheme to meet its objectives.
- Implementation of scheme – NTA concurs that the corridor needs to be considered as a whole and that the various different measures to prioritise public transport walking and cycling, need to be implemented in as full a manner as possible.
- Walkinstown Roundabout - a number of traffic management and junction arrangement options for Walkinstown Roundabout were assessed, including a

signalised junction. Dual lane roundabout was the preferred option. 2-way cycle lane around the junction reduces conflicts with pedestrians and allows cyclists to take the shortest route around. Cycle detection loops have also been implemented on the two-way segments on approach to the crossings to help promote cycling journey time efficiencies.

- Patrick Street/ Dean Street - Junction Design Report shows that consideration of the full junction has been included in the design of the proposed scheme, including analysis of the Kevin Street Upper parallel side road left turn onto New Street South.
- Project delivery mechanism - NTA is aware of, and acknowledges, the important role of the relevant DCC maintenance contractor, and their continued role on both the existing and new traffic signals.
- Pedestrian and cyclist provision – as above.
- Pedestrian priority at bus stops – measures proposed to reduce conflict including deflection, narrowing, markings, ramps, warning studs and signals (visually impaired or partially sighted pedestrians may call for a fixed green signal when necessary – otherwise, a flashing amber for cyclists).
- Reallocation of kerbside space - NTA has balanced the need to provide parking / loading at local shops / services with the need to achieve the objectives of the proposed scheme.
- Buffer space between parking/loading and cycle lanes – deviation from standards due to spaces constraints at five locations.
- Footpath obstruction – Accessibility Audit included in Preliminary Design Report.
- Impact of temporary land acquisition on access and parking - local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works.
- Francis St./ Dean St./ Patrick St. junction – bus priority from St. Luke's Avenue will be maintained with through signal controlled priority as there is insufficient

road corridor width on Dean Street to provide continuous bus lanes. NTA will continue the close liaison with DCC.

- *Environmental Protection:* NTA has followed the principles of integrating SuDS with all other environmental aspects of the proposed scheme.
- NTA is satisfied that the proposed scheme has been planned and assessed taking on board DCC Drainage comments as these matters were the subject of extensive liaison throughout the design development process.
- Flood risk associated is dealt with within the Flood Risk Assessment included in Appendix A13.2 in EIAR Volume 4. Development satisfies the requirements of the Justification Test. Proposed scheme largely on existing roads and will result in minimal increase in paved surfaces, therefore will not increase the existing floods levels and risks.
- NTA responds to 34 detailed queries, primarily in relation to the development of final construction stage drainage proposals.
- Water Framework Directive - Proposed scheme is designed to ensure no deterioration of the status of any waterbody to which it is contiguous with downstream and will not jeopardise the attainment of good ecological and good surface water chemical status.
- Proposed scheme does not include any new discharge points and will not impact the flow or volume of current surface water drainage.
- Evidence-based assessment comprises an appropriately-scoped and comprehensive evaluation of the proposed scheme and it concludes that it is consistent with the objectives of the WFD.
- EIAR demonstrates that the proposed scheme will have no direct impact on the Rivers Poddle and Camac.
- *Parks Department:* The extents of the compound are approximately 10m from the edge of the playing area at Bunting Park and as such there is no impact on safety in respect of the run-off zone at this location. Following completion of the

construction works, the construction compound areas will be cleared and reinstated to match pre-existing conditions.

- *Recommended conditions:* Given the legislative framework that is in place, matters relating to taking in charge, maintenance and consultation, will be successfully addressed between DCC and the NTA, in the absence of any approval condition.

8.3. Responses from those who made Submissions/ Observations

8.3.1. Following the Board's decision not to hold an oral hearing on this case, the NTA's responses were circulated and comments were invited. A total of 13 responses were received, which can be summarised as follows:

8.3.2. **Response from Bernard Sweeny and Susan Byrne**

- Concerned that traffic using Kildare Road will use the Saul Road/ Kildare Road junction as a shortcut to Crumlin Road/ Sundrive Road junction at Sundrive Road Garda Station through Saul Road on to Downpatrick Road causing increased traffic flow on to Saul Road during peak hours.
- Saul Road and Downpatrick Road designated residential areas and are not designed for the volume of traffic. Traffic using Slane Road/ Saul Road as a cut through and because of the lack of speed ramps on either road there is a danger to all residents, especially children who play outside.
- Uncertain if the Saul Road/ Clogher Road junction is to be one-way and if Downpatrick Road is also to be a one-way road. If so, only entrance to home of third party would be at the Bangor Road/ Downpatrick Road junction.
- Policing of junction will be unrealistic.
- Clogher Road closure and no right turn at the Clogher Road/ Sundrive Road junction at St. Bernadette's Church denies residents of Saul Road and the greater Crumlin area vehicular access to the city centre through Clogher Road via the junction of Clogher Road, Sundrive Road, Sally's Bridge and South Circular Road. Alternative routes will have a high volume of traffic.

- A more robust and transparent public consultation should be conducted with all groups involved – public consultation conducted may not have had sufficient input from residents of the affected areas.

8.3.3. **Response from Brendan Heneghan**

- Downpatrick Road and Slane Road are narrow residential roads and they will become key exits from a significant area of Crumlin. NTA model picks up that Downpatrick Road would be an issue. City bound traffic will also divert to Slane Road and Saul Road.
- There is a pressing need in the south Dublin area for a major transition from car to bus; however, the buses are not being delivered.
- Disputes that with all CBC schemes operational, there will be a higher modal shift from private car trips to sustainable modes compared to the single scheme scenario. Traffic will problematic on Stannaway Road.
- Modelling for this area did not provide any information for morning and afternoon interpeak periods and these are the hours that smaller roads will receive a lot of extra traffic.
- Suggests that NTA are concerned about the capacity of Kildare Road and Sundrive Road, not the loss of amenity for residents.
- There are clear deficiencies in the notification process where others more heavily affected were not put in a position to comment.
- Metro alternative should have been considered – GDA Transport Study relied on a flawed study entitled Metrolink to Knocklyon that was conducted without any public consultation.
- City Edge project to provide 40,000 new homes and 75,000 jobs has been inadequately considered in the planning documents. It is dubious that 16 buses per hour can possibly cope with the demand from this source.
- Work timetable should be amended so that Bunting Road cycle works happen earlier.

- Board should modify the proposed scheme to have main road with cars, buses and bikes on one side of Parkview only.
- Public needs to be given more than 5 weeks to assess a 540 page report.

8.3.4. **Calmount Holdings Ltd.**

- As per response at Section 9.7.2.

8.3.5. **Cathy Mooney & Others – Stannaway Road Residents**

- Primary concern lies in the natural redirection of traffic from the main arterial roads of Kildare Road and Clogher Road, mainly to Stannaway Road, which will provide an alternative route for commuter and commercial traffic. Stannaway Road will also be impacted during construction works.
- Stannaway Road is residential and is not designed to handle heavy traffic as it is narrow, has 2-up 2-down housing and on-street parking. There will be exacerbation of existing unresolved issues of rat-running, speeding, non-compliance of HGV restrictions and disregard of time limited 'no turn' onto Ferns Road.
- No community engagement with local residents took place in relation to the Tallaght / Clondalkin to City Centre CBC. Stannaway Road will experience the consequences of the combined effects of the Tallaght / Clondalkin and Kimmage to City Centre CBCs. Mitigation measures such as making Stannaway Road a bus corridor with local access only, speed restrictions, enforced existing traffic restrictions, increased number of pedestrian crossroads/ traffic lights, and raised intersections have not been proposed.

8.3.6. **James & Charlotte Acton, Birchview Avenue**

- Green area in the vicinity of Birchview Avenue is used for pet walking and by children and the elderly, who feel safe in the area as an intersection into the estate.

- People have bought homes for the peacefulness of the avenue, not the potential traffic and noise.

8.3.7. **Killeen Motor Group, c/o John Spain Associates**

- As per response at Section 9.7.3.

8.3.8. **Maxol Limited, c/o RW Nowlan & Associates**

- As per response at Section 9.7.4.

8.3.9. **Michelle and John-Paul Lyons, Birchview Avenue**

- This is the only green space this side of Kilnamanagh where children can play safely.
- Recently upgraded footpaths and LED lighting in the green space will be undone.
- Access to Tymon Park and local schools will be cut off.
- Proposed works at this location will not benefit buses in any way as they will return to a single lane of traffic.
- Reiterates concerns regarding noise pollution and anti-social behaviour associated with proposed bus stops.

8.3.10. **Recorder's Residents' Association, c/o Pauline Foster**

- Main focus is the traffic displacement generated by 3 corridors in such close proximity to each other.
- Oral hearing was needed given the unique nature of the cumulative effect of displaced general traffic from the 3 corridors into a significantly small area.
- Population in area framed by Luas red and green lines is 355,000 – south-west Dublin has less than a quarter of the public transport capacity as south-east Dublin.
- There is extremely limited ambition for BusConnects for south-west Dublin with the number of buses increasing by only 7, i.e. from 73 to 70, and the number of

passengers increasing by 560. Increased demand for public transport would not be met by BusConnects and deficit will mean that car dependency will remain.

- Cumulative impact of displaced traffic from Templeogue Road, Lr. Kimmage Road, Rathmines Road and Clogher Road all will be added to, virtually the same level of private car usage already on these roads.
- Question what the effect on bus journey times saving would be when many of the roads affected by displaced traffic will also carry buses heading to the three corridors A, F and D.
- There will be bus congestion on Terenure Road East in peak hour and car will remain the highest mode of commuting transport in south-west Dublin.
- It was testified at the oral hearing into Metrolink that the extension of the metro line to Tallaght was feasible and would have a benefit to cost ratio of between 1.6 and 2.2.
- Longer walks for elderly people will have a serious mental and physical effect on our growing elderly population.
- City Edge has not been factored into the scenario and a considerable number of multi storey buildings have already taken place and will continue to do so before this BusConnects scheme is up and running.

8.3.11. **Shay L'Estrange**

- Signed observation by local residents in relation to the impact the restricted access to Crumlin Road and Clogher Road is set to have on Saul Road, Clogher Road, Slane Road, Downpatrick Road, Old County Road, Sundrive Road and Bangor Road.
- Asks that additional consideration be given to the congestion, pollution and danger to children that will be caused on these roads due to the creation of rat runs. Also requested that the NTA be instructed to mitigate for these problems.

8.3.12. **St. James Gaels / An Chaisleán**

- Applicant's response ignores the point that the area for the temporary site compound is where juvenile teams train – proper discussion on the matter would be welcome.
- To simply say that CCTV will be installed and it is anticipated this will deter anti-social behaviour is very weak.
- To place a 1,100 sq.m. compound on well drained soil will make pitch unplayable more often than not. A proper drainage assessment of the park should be carried out.
- Operations of the club and its passive surveillance of the park on weekends and nights have greatly enhanced the community.

8.3.13. **Tesco Ireland, c/o RMLA Planning Consultants**

- Access to private laneway adjacent to the store is not permitted for deliveries.
- Proposed scheme will mean that the store will become inaccessible for deliveries.
- Loading could still take place within the Part 8 scheme referred to by the NTA from kerbside – requests the inclusion of a 24 hour loading bay to serve retail and commercial premises along the street at Dolphin's Barn (indicative location shown).

8.3.14. **Transport Infrastructure Ireland**

- Interaction identified by TII with national road assessment and managed areas and with Luas, especially along Naas Road, have not been adequately addressed – appropriate design and management of the construction and operation of these interactions are required.
- Conditions recommended on engagement with TII to agree plans and details of works, construction traffic and the management of assets in the vicinity of national roads and associated managed areas; submission of a method statement for resolution of interactions with Luas interfaces; and identification of

mitigation measures to protect operational Luas infrastructure including signalisation and the AVLS.

- Board is reminded that a developer or contractor will be required to apply for a works permit from the Luas operator.

8.3.15. **Woodies DIY**

- As per the submission at Section 9.7.5.

9.0 Compulsory Purchase Order

9.1. Documentation Submitted

9.2. The road authority (National Transport Authority) is seeking confirmation of the Tallaght / Clondalkin to City Centre Core Bus Corridor Compulsory Purchase Order 2023, which was signed and sealed on 2nd May 2023.

9.2.1. The following documentation was submitted to the Board:

- The "Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Compulsory Purchase Order 2023" including the following schedules:
    - Schedule Part I: Lands being permanently acquired.
    - Schedule Part II: Lands being temporarily acquired.
    - Schedule Part III (Section A): Description of public rights of way to be extinguished.
    - Schedule Part III (Section B): Description of public rights of way to be restricted or otherwise interfered with.
    - Schedule Part IV (Section A): Description of private rights to be acquired.
    - Schedule Part IV (Section B): Description of private rights to be restricted or otherwise interfered with.
    - Schedule Part IV (Section C): Description of private rights to be temporarily restricted or otherwise interfered with.

- Official Seal
- Deposit maps – Lands to be Compulsorily Acquired
- Newspaper notices pursuant to Article 4(a) of the Third Schedule to Housing Act 1966 (as amended).
- Copy of the type and form of notice sent to all Owners, Lessees and Occupiers of land referred to in the CPO and a list of all those to whom notices have been sent by registered post.
- Copy of site notices erected at specific locations along the CBC as shown on an enclosed map.

9.2.2. The first part of the schedule to the CPO lists 158 plots of land permanently affected for the CPO and the second part lists 158 plots that will be temporarily affected during construction works. Public rights of way will be extinguished on Greenhills Road between Ballymount Road Upper and Kilakee Drive, and on Greenhills Road opposite Greenhills Industrial Estate.

9.2.3. Public rights of way will be restricted or otherwise interfered with from Greenhills Road to Ballymount Road Upper; from Clonard Road to Crumlin Road; from Bangor Drive to Crumlin Road; from Cashel Road to Kildare Road; from Kildare Road to Clogher Road; and from Old Naas Road to Naas Road. Private rights are to be acquired at 29 locations. There are no private rights to be restricted or otherwise interfered with. Private rights are to be temporarily restricted or otherwise interfered with at 25 locations.

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

9.3. Objections to CPO

9.4. A total of 31 submissions were received by the Board from 19 different parties in relation to the Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Compulsory Purchase Order 2023. Summaries of these submissions are included hereunder.

9.4.1. **Air Products Ireland Limited, Western Industrial Estate – Guy Jones, Realest, Southampton {Plots 1144(1).1c, 1144(2).2c}**

- Act of behalf of Air Products Ireland Limited.
- Formally objects to the CPO in so far that it impacts Air Products Irelands Limited's landholding at Nangor Road.
- Whilst located on the periphery of Air Products' site, the land in question is nonetheless invaluable to Air Products' operation and includes an emergency egress and below ground electricity cables for EV charging.

9.4.2. **Calmount Holding Limited, c/o Tom Phillips & Associates {Plots 1031(1).1a, 1031(2).2a, 1030(1).1c, 1030(2).2c, 1059(1)1aA, 1059(1)1aB, 1029(1).1i, 1029(2.2(i), 1028(1)2iA, 1028(1)2lB, 1031(3).1c and 1031(4)2c}**

- Part owner and operator of Calmount Business Park.
- Generally supports the NTA's vision to upgrade bus services in the area.
- Concerned that the development as proposed, as it relates to the landholding has not been properly considered for the following reasons:
- EIAR does not fully consider all alternatives for the Greenhills Road, including widening.
- Proposed development does not appear to have engaged with the City Edge Project and may be premature.
- Land use does not appear to have been considered in the EIAR.
- Potential impact on operation and management of business park during construction and operation of the proposed business park have not been fully considered.
- Impact of proposed scheme on two remaining future potential development sites in Calmount Business Park has not been fully considered for construction or operational phases.

- Specifically in relation to CPO, proposal is premature and does not properly consider all other alternatives, particularly having regard to the Strategic Framework Summary for the City Edge Project.
- Requests an oral hearing.

9.4.3. **Fairfield Inns Ltd., c/o Corr Property Consultants {1052(1).1c, 1052(2).2c(T), 1051(f).1c, and 1051(2).2c(T)}**

- As per submission in Section 8.1.25 above.

9.4.4. **Gerard Smith, Kilmacanogue, {1146(1)2c, 1146(3)2c, 1146(2)1c}**

- There is a heavy infestation of Japanese Knotweed and the site is not suitable – owner has obligation not to allow or cause to disperse this invasive plant. Treatment will continue for several years and owner then intends to develop the site is accordance with the City Edge Project.
- Inclusion of the site for temporary/ permanent CPO appears surplus to scheme requirements.
- Proposed bus corridor along the R134 will likely result in the denial of permission for vehicular access onto that road from subject site, which is a key component of both residential and commercial feasibility plans conducted to date.
- Challenges the 'owners or reputed owners' listed on the Order for this site – it is imperative that the correct parties are notified and engaged with.

9.4.5. **Goldsmith Lot Ltd., 174 Walkinstown Road {1123(1).1e, 1127(1).1e}**

- Own Spar shop and have a tenant at Apache Pizza – both retail units need customer parking.
- Office upstairs depends on 3 parking spaces to the side of the building – no access to these spaces on map.
- Businesses could cease to survive if there is no parking for them at the roundabout.

9.4.6. **Herbert Holdings, c/o Edward Fitzgerald Selby {1040(2)2c}**

- Owners of Smiths Building Supplies and disused filling station on Greenhills Road.
- Do not object in principle to permanent acquisition of 1040(1)1c.
- Vehicular access to Premium Café Deli will be extinguished by the provision of the cordon to the proposed area 1040(2)2c which it is proposed to temporarily acquire. Car wash and car valeting service also operate from the site.
- Proposed temporary acquisition will occupy all 5 car parking spaces abutting the footpath.
- No vehicular access or parking will force the closure of the businesses and render the premises unlettable.

9.4.7. **JJ Smith Builders Ltd., c/o Greg Ryan Solicitors {1146(2).1c, 1146(3).2c}**

- Objector not furnished with sufficient information and has not had appropriate engagement with the acquiring authority.
- Documents do not set out in sufficient detail the impact of the works on the lands proposed to be acquired/ retained.
- Proposed acquisition has a disproportionate effect on the objector's landholding and has not be sufficiently justified or the public need identified.
- Alternatives have not been considered in accordance with the proportionality principle and acquisition is not the minimum required to meet the identified public need.
- No attempt has been made to seek agreement with the objector in respect of the acquisition. Applicant invited to further engage with the objector.

9.4.8. **Jacinta Kenny, 29 Walkinstown Road {1088(1).1d, 1088(2).2d}**

- As per submission at Section 8.1.27 above.

9.4.9. **John Nolan, 27 Walkinstown Road {1089(1).1d, 1089(2).2d, 1099(2).2a)}**

- Will have to go through the expense of getting a driveway as they will no longer be able to stop or park outside their home.
- On completion of the CBC, traffic and footfall will be closer to objector's home and this will bring increased noise and disturbance. Front windows and doors will have to be upgraded and there are security concerns.
- Concerns regarding reduction of market value of property.
- Concerns for safety of guests visiting during construction works.
- Concerns regarding the removal of access to the laneway adjoining 9 Walkinstown Road, which provides access to the rear of objector's home and garage and is in use every day for driving school car.

9.4.10. **Killeen Motor Group, c/o Virtus {1142(1).1c, 1142(2).2c, 1142(3).2c}** ***(3 no. separate submissions for each plot)***

- All objections as per submission at Section 8.1.29.

9.4.11. **Maxol Limited, c/o RW Nolan & Associates {XXXX**

- As per submission at Section 8.1.36.

9.4.12. **Musgrave Operating Partners Limited, c/o Bannon Property Consultants & Chartered Valuation Surveyors {1078(1).1c, 1078(2).2c, 1099(1).1a, 1099(2).2a}** ***(4 no. separate submissions for each plot)***

- Plots to be temporarily and permanently acquired will result in the permanent loss of 42 surface car parking spaces.
- Not known at this stage how long the period of temporary acquisition will be and how long the construction works are likely to take.
- Works of this scale to a busy car park will cause major disruption, even if quantity of car parking was to remain unaltered.

- Supermarket is reliant on car borne journeys and public transport users will also be inconvenienced by relocation of bus stop some 250m north.
- Loss of 25% of parking spaces will have lasting effect of trading as car park often operates at capacity – could result in in a loss of trade up to 40%, which would have a knock-on impact on overall operational profitability/ financial viability.
- Board asked to consider conditioning an amendment to avoid acquisition of customer car park and to reverse the proposal to relocate bus stop from outside subject property.

9.4.13. **MXF Properties Ireland Limited, c/o CBRE {1013(1).1c, 1013(2).2c}** ***(2 no. separate submissions for each plot)***

- MXF is the owner of the primary care centre and adjacent land at Junction House, Airton Road.
- Objector will be following plans closely, mindful of the importance of the medical and related services delivered from the property for the local community.
- Important that property remains freely accessible, including to those with mobility challenges, both through the work and going forward.

9.4.14. **Patrick Comerford, 140 Walkinstown Road {1110(1).1d, 1110(2).2d}**

- Objects to proposed CPO of front garden for the following reasons:
- Concerned that proximity of traffic will affect foundations of 100 year old house.
- Parking required for at least 6 cars and space to enable driver to turn in driveway. There is no on-street parking.
- Property could decrease in value if proposed work is carried out.
- Unfair that CPO only applies to one side of the road.
- There are two alternative routes at Walkinstown Avenue and Calmount Road.
- Objector would have no parking when the works are being carried out.

9.4.15. **Permanent TSB, c/o Ciarán Sudway & Associates {1127(1).1e}**

- Not clear whether or not any application for a CPO has in fact been submitted to the Board and if it has, it remains unclear as to when this occurred.
- Any such application is premature for the following reasons:
- The scheme does not have planning permission.
- There are no detailed drawings for the scheme.
- There are no draft drawings to an appropriate scale to facilitate an understanding of the impact of the proposed acquisition on objector's retained properties.
- Funding has not been approved for either the detailed design of the scheme, the land acquisition or construction of the scheme.
- Reserves right to expand on these matters at an oral hearing.

9.4.16. **Regent Palace Management, c/o Kam Shing Tee {1077(1).1c, 1077(2).2c}** ***(2 no. separate submissions for each plot)***

- Proposed scheme will have a huge impact on objector's business as it obstructs access and will lead to financial loss. Service charge is paid for upkeep of area to be acquired.
- There is a concern for the safety of the footpath and for road users accessing the land to be acquired.
- Various utility diversions could lead to obstruction of supply of essential water, gas, electricity and broadband supply, which the business relies upon.
- Construction period of 6 months for Section 3a Walkinstown Road is double the time for Section 3b which is shorter in length.

9.4.17. **SBS Holdings, c/o Sean Tracey, 2 Bath Place {1040(2).2c, 1041(2).2c, 1043(1).2c, 1057(2), 1058(1).1c, 1058(2).2c & 1061(1)}** ***(6 no. separate submissions for each plot)***

- Leaseholders will need access to property at all times and have vehicle barriers accessing their site. Artic trucks will access from Greenhills Road side.

- Property will need full time security and temporary gates and fencing may need to be installed.
- Applicant should liaise with property owner when works are being carried out.
- Land to be temporarily acquired {1061(1).2c} is in use by tenants at all times and objector would need to meet on site to discuss.
- Plot 1043(1).2c is not in SBS Folio on site records.

9.4.18. **Stephen Tracey, 2 Seabury Wood, Malahide {BC1 & BC2 – public right of way to be restricted or otherwise interfered with}**

- Owner of property at 179 Crumlin Road which runs alongside Bangor Drive.
- There are four commercial units working from this property (florist, solicitor's office, hairdresser and phone repair shop). Plan to block/ restrict access to this site will be detrimental to these businesses.
- There will be no available parking at the site for staff and customers and it will be restrictive for deliveries.
- Owner has not been contacted to discuss removal of right of way to access the front garden/ driveway on their property.

9.4.19. **Woodies DIY, c/o Whelan O'Connor {1148(1).1c, 1148(2).2c}**

- As per submission at Section 8.1.54.

9.5. NTA Response to CPO Submissions

9.5.1. The NTA submitted the following responses to issues raised in CPO submissions:

9.5.2. **Response to Objection from Air Products Ireland Limited, New Nangor Road**

- Existing security fence and access will be replaced on a like for like basis along the line of the permanent land acquisition – temporary land acquisition is for this purpose.

- Any underground electrical services can be accommodated during the construction phase.

9.5.3. **Response to Objection from JJ Smith (Builders) Ltd., New Nangor Road**

- Insufficient scheme information – standard landowner pack provided to property owner. Baseline condition is that the site is vacant.
- Disproportionate - TC12 is the most suitable site due to the amount of space in this area, its relative location near to the majority of the proposed major works and its ease of access to the national and regional road network.
- Alternatives - proposed compound site is the least developed site in this area and impact would be less compared to more developed/ utilised site.
- Engagement – Evidence suggested that the subject site may be in the ownership of J.J. Smith (Builders) Limited and CPO correspondence was issued to them.
- If the CPO is confirmed, a Notice to Treat will be served on the landowner, who will be required to submit a claim for compensation.

9.5.4. **Response to Objection from Fairfield Inns Limited, Walkinstown Roundabout**

- Surplus to requirements - route of the cycle tracks past the two car park areas has been aligned to allow a revised car parking arrangement within the remaining space while providing a cyclist route that is as safe and direct as practicable.
- Drainage – existing levels will be maintained and retained areas will continue to drain towards the public road.
- Operational noise – determined in EIAR that this property will not be subject to any perceptible increased noise levels during the operational stage. Operation of electric and hybrid buses will eliminate ICE noise.
- Extent of acquisition and impact on pub – proposed scheme will be constructed in a manner which will minimise, as much as practicable, any disturbance to residents, businesses, and road users. Extent of the temporary land is necessary to complete the construction works at this location and it is considered that the Cherry Tree public house will not need to close during the construction.

- Traffic management during construction – EIAR details anticipated lane closures/ modifications, road closures and diversions. CEMP and CTMP will also demonstrate the interface between the public and construction-related traffic and local access arrangements will be made on a case by case basis.
- Boundary treatment – extensive information provided in EIAR. Walkinstown Roundabout will experience substantial improvement with the provision of new landscape areas and an attractive public realm scheme. Boundary works will be commenced where both permanent and temporary land acquisition is required to ensure that sufficient space is available to construct the proposed scheme.
- Total environmental impact – assessed in EIAR.
- Upfront carbon footprint – EIAR describes construction phase carbon calculations and quantifies the construction phase embedded carbon using the TII Carbon Tool (TII 2020). Construction CO2e emissions are equivalent to the construction of approximately 555 three-bedroom houses using traditional construction methods.
- Design and route chosen – EIAR sets out consideration of reasonable alternatives. Draft Preferred Route Option proposed that Walkinstown Roundabout be altered to include a segregated two-way cycle track around the junction.
- Impact on footpaths and cycle paths – effects for pedestrians at Walkinstown Roundabout will be positive profound and for cyclists between Calmount Road and Walkinstown Roundabout will be positive moderate.

9.5.5. **Response to Objection from Patrick Comerford, 140 Walkinstown Road**

- Proximity of traffic – EIAR assesses operational noise and there will be a reduction in AADT along the CBC. Vibration levels are negligible.
- Loss of parking – new boundary will be at least 10m from the front of the houses and this should not hinder parking.
- Loss of property value - public realm improvements may in fact lead to an increase in value of both residential and retail property prices.

- CPO on one side of Walkinstown Road only – in general, properties on west side of this section of Walkinstown Road have longer existing front gardens/driveways than those on the east side.
- Alternative routes – as above.
- Temporary land - required to ensure that sufficient space is available to construct the proposed scheme.

9.5.6. **Response to Objections from John & Loretta Nolan, 27 Walkinstown Road**

- Loss of on-street parking – there is rear access to secure garage from laneway beside No. 9. Laneway and adjoining area are also used for parking.
- Proximity of traffic and footfall – as above. Considered that there will not be any change to the security of property as a result of the proposed scheme as boundaries will be reconstructed on a like for like basis.
- Loss of property value – as above.
- Access/ egress during construction – as above.
- Removal of access to laneway – access will be maintained as part of the proposed scheme during construction and operational phases.

9.5.7. **Response to Objections from Jacinta Kenny & Martin Gregory, 29 Walkinstown Road**

- Existing boundary gates - reinstatement of property frontage on a like for like basis.
- Safety of access/ egress during construction – as above.
- Loss of property value – as above. Combination of improved connectivity and public realm improvements.
- Proximity to traffic (as above).
- Working hours for construction - EIAR contains a comprehensive set of mitigation measures to minimise construction phase impacts, including noise impacts. Contractor will have to take account of sensitive receptors.

- Undergrounding of overhead cables - all new cabling associated with replacement lighting columns will be placed underground wherever practicable.
- New trees – EIAR sets out planting strategy. Reinforcement of green infrastructure along the route will improve the overall amenity, character and appeal of the corridor and localities, as well as enhancing biodiversity.
- Access to laneway – as above. To be maintained during construction and operational phases.

9.5.8. **Response to Objections from Maxol Limited**

- Cyclist usage of overbridge – (as above) Preferred Route Option provides a more reliable and direct crossing facility for pedestrians and cyclists compared to the multiple toucan crossings in the EPR Option, each with a delay for users while they wait at each crossing. Route passes through area designated a Key District Centre in the Naas Road Lands Local Area Plan and offers an improvement in encouraging/supporting planned development and in providing for economic opportunities, as well as improved junction performance.
- Response to other matters raised - See Section 8.2.7 above. Not envisaged that the proposed scheme will impact on business operations.

9.5.9. **Response to Objections from Stephen Tracey, 179 Crumlin Road**

- Impact on businesses – an existing loading bay will be retained on Bangor Drive.
- Proposed closure of direct access onto Crumlin Road at this location will have a medium positive impact on pedestrians.
- While the existing informal on-street parking directly outside the property will be lost, there is other informal on-street parking available along the rest of Bangor Drive.
- Existing access to the driveway to the front will be unaffected.

9.5.10. **Response to Objections from Woodies DIY**

- See Section 8.2.7.

9.5.11. **Response to Objections from Calmount Holding Limited (Calmount Business Park)**

- 3 viable route options were considered in the EIAR for Greenhills Road, including option of road widening.
- NTA has engaged with South Dublin County Council and Dublin City Council in respect of the City Edge Strategic Framework. The proposed scheme is not in considered premature as its implementation will help to achieve the visions and objectives of the CESF.
- Land use is addressed and assessed where appropriate in the EIAR under land use and accommodation works. Community and commercial land use and accessibility at construction stage is also assessed, together with the impacts of land take on population health.
- EIAR considers the impact on the business park during construction and operational phases in terms of access and noise. Proposed scheme will improve the road network in the vicinity of Calmount Business Park.
- Potential impacts on the business park, which includes the two remaining development sites, during the construction and operation of the proposed scheme are assessed above.

9.5.12. **Response to Objections from Goldsmith Lot Limited, 174 Walkinstown Road**

- There is no on-street parking in the existing situation, and the proposed scheme maintains this arrangement. Two new loading bays are proposed in close proximity. Proposed scheme will maintain access to the existing 3 no. parking spaces to the side of the building across the footpath and cycle track.

9.5.13. **Response to Objections from Herbert Holdings, Greenhills Road**

- Proposed permanent land acquisition at this area is relatively small (c. 19 sq.m). Existing bollards and chain that mark the boundary will be replaced on a like for like basis along the line of the permanent land acquisition and land to be temporarily acquired is to facilitate the replacement of these and also to allow a

modified car parking arrangement on the retained site. Parking and vehicular access to the Premium Deli and car wash is not being extinguished and will be maintained at all times during the works. Works at this location are not anticipated to take more than 4 weeks to complete.

9.5.14. **Response to Objections from Regent Palace Management, Walkinstown Mall**

- The two accesses to Walkinstown Mall will be maintained during construction and operation and boundary wall will be replaced like for like, with temporary land acquisition required for this purpose.
- Safety of the footpath and road users - temporary traffic management provisions have been developed for the safety for all road users and to facilitate the safe and efficient construction of the proposed scheme.
- Utility diversions and impact on services – EIAR provides details of the anticipated various impacts on utilities. There may be temporary local interruptions to the electricity, gas and telecommunications provision during works on that infrastructure.
- Duration of construction period - expected construction duration for Section 3a (800m of Walkinstown Road) will be approximately six months based on the extent and nature of the works at this location.

9.5.15. **Response to Objections from Musgrave Operating Partners Ireland Ltd., Supervalu Shopping Centre, Walkinstown Road**

- Duration of works – expected construction period of 6 months covers the full 800m of Walkinstown Road but significantly less for works within the temporary land acquisition at this location.
- Disruption to car park – there are currently 174 spaces and 27 spaces would be removed to widen Walkinstown Road. Approximately 14 parallel spaces could be provided in the remaining area.
- Impact on operations and vitality from loss of car parking – proposal represents a 15% reduction in car parking.

- Bus stop relocation – existing outbound bus stops at this location are 150m apart and proposed outbound bus stops are 330m apart. Layout of new bus stops is considered to better serve the existing and future catchment and be closer to existing and new pedestrian crossing facilities for improved convenience.

9.5.16. **Response to Objections from MXF Properties Ireland Ltd., Primary Care Centre, Airton Road**

- Existing pedestrian access ramp will be relocated – measures will be implemented to ensure the safety of all road users, in particular pedestrians (including able-bodied pedestrians, wheel-chair users, mobility impaired pedestrians, pushchair users) and cyclists.

9.5.17. **Response to Objections from Permanent TSB, Walkinstown Roundabout**

- CPO prematurity - NTA is entirely satisfied that, pursuant to section 44(6) of the Dublin Transport Authority Act 2008 (as amended), it has the necessary power to make the CPO for this Proposed Scheme.
- Detailed design drawings – correspondence issued to Permanent TSB provides links to the EIAR, which provides extensive information on the proposed scheme.
- EIAR provides an overview of the proposed construction works at Walkinstown and a comprehensive assessment of the potential operational impacts.
- Funding - pending planning approval, the progression of the proposed scheme to construction stage will be subject to formal business case approvals.

9.5.18. **Response to Objections from Killeen Motor Group, New Nangor Road**

- Arrangements will be made on a case-by-case basis to maintain continued access to businesses affected by the works, at all times, where practicable, and measures will be put in place to provide for adequate security of construction works.
- Drawings show the 8 no. proposed semi-mature trees located in the temporary land acquisition behind the new boundary wall, whereas the design intent at this

location is for these trees to be planted within the public road corridor between the proposed cycle track and footpath.

- New hedge will be planted between the proposed back of footway and the existing boundary wall / railings to the Killeen Motor Group lands which will be retained – proposed hedge is located within the existing road corridor.

9.5.19. **Response to Objection from SBS Holdings Ltd., Greenhills Road**

- Arrangements will be made on a case-by-case basis to maintain continued access to businesses affected by the works and measures will be put in place to provide for adequate security of construction works.
- Details outlined on retaining wall proposed along the eastbound carriageway of the proposed alignment connecting the existing Calmount Road with the Greenhills Road - new boundary wall will be faced with concrete panels.
- Access for articulated vehicles – Preliminary Design Report describes how the corner radius in urban settings is often determined by swept path analysis, which may overestimate the amount of space needed and / or the speed at which the corner is taken. Design balances the size of the corner radii with user needs, pedestrian and cyclist safety and the promotion of lower operating speeds.
- Extent of temporary acquisition - where properties are subject to permanent / temporary acquisition, appropriate measures will be put in place to provide for protection of features, trees and vegetation, for continued access during construction and for adequate security and screening of construction works.
- There is no existing security hut or access gate at this location cited by the objector.
- Ownership of one plot - SBS Holdings are listed as an occupier, with two other parties noted as owners of reputed owners.

9.5.20. **Response to Objection from Gerard Smith**

- Construction compound TC12 proposed on vacant land between New Nangor Road and Killeen Road and temporary land acquisition is required. A small 12.5 sq.m. triangle is also proposed to be permanently acquired.
- Construction compounds have been selected due to space available, their locations relative to the proposed works, and their access to the regional and national road networks. Area of construction compound TC12 will be c. 1,960 sq.m.
- Mitigation and monitoring measures for non-native invasive plant species are set out in the EIAR. Invasive Species Management Plan will provide a detailed description of infestations with regard to guidance on The Management of Invasive Alien Plant Species on National Roads (Technical Guidance) (TII 2020a; 2020b) and other species specific guidance. NTA will ensure all control measures are implemented by a suitably qualified specialist to control the spread of non-native invasive species. Any regrowth will subsequently be treated at detailed in the ISMP. Proposed mitigation measures will ensure that the site is suitable for use as a temporary construction compound.
- There is a clear need for construction compound TC12 for Sections 5 & 6 of the proposed scheme and the site is the most suitable space in the area, and its location is in proximity to the proposed CBC and national and regional road network. Range of activities will take place within the compound and the site is also the least developed in the area.
- There is an existing bus lane adjacent to the site and the proposed scheme retains this. There is no existing vehicular access to the site onto New Nangor Road. Proposed scheme will help to achieve the visions and objectives of the City Edge Strategic Framework and the issue of future vehicular access as part of any future redevelopment will need to be addressed as part of any associated planning application.
- During design development, all reasonable efforts were made to establish the landowner's identity – no such ownership information was forthcoming. NTA is

now aware of Gerard Smith's property interest and will include him in all future dealings in relation to the CPO.

9.6. Response to NTA Submission from Objectors

9.7. Following the Board's decision not to hold an oral hearing on this case, the NTA's responses were circulated, and comments were invited from objectors to the CPO. A total of seven responses were received, summarised as follows:

9.7.1. **Response from Fairfield Inns Ltd., c/o Corr Property Consultants**

- Family is concerned about the impact of BusConnects on their business, which is the premier go-to-spot for food/ drinks/ family functions/ coffee in the Walkinstown area.
- Car parking now under CPO is a critical and central part aspect of marketing both locally and further afield and are central to objector's daily business.
- Loss of parking may mean that the viability of the business will come to an end, with consequent loss of employment and local amenity.

9.7.2. **Calmount Holdings Ltd. c/o Tom Philips & Associates**

- Disappointed that no oral hearing will take place.
- Continues to argue that the proposed scheme and CPO are premature pending the adoption of the City Edge Project and this creates uncertainty for the objector.
- New link 3 is located adjacent to Block H 'community park' designation in the City Edge Strategic Framework. NTA state that this link will be vehicular to give access to local business and CESF implies that "inner roads to be car free with the exception of emergency access and servicing." Impact on envisaged greenway and associated community park has not been taken into consideration.
- Future development potential of two undeveloped sites remains unaddressed – only factors considered are noise and new links improving the road network in the vicinity.

- Potential significant impact will arise on both the operation and management of the existing business park and will result in significant disturbance during construction and potentially operation of the new bus corridor route.
- Would welcome the opportunity for further engagement with the NTA.

9.7.3. **Killeen Motor Group UC, c/o John Spain Associates**

- Concerns remain in relation to the impact of the proposals on site security during construction and the impact of 8 London Plane trees on the use of the site as a storage facility for new cars.
- Requests the attachment of a condition to any grant of permission to ensure that objector's site lands are secure at all times.
- Requests that trees proposed to the south of the objector's lands are omitted from the proposed scheme by condition.
- Recent BusConnects decisions have used conditions to address site specific concerns (e.g. Conditions 6 & 9 of 314056; Conditions 6 & 7 of 313182; and Conditions 4 & 5 of 314610).

9.7.4. **Maxol Ltd., c/o RW Nowlan & Associates**

- At grade crossing at junction of Naas Road/ Long Mile Road and Nangor Road should not be ruled out as an alternative to the proposed footbridge.
- Proposed curved ramp structure would result in a significant scale structure that would be right in front of objector's property.
- Land acquisition will result in the loss of the only area of landscaping for the petrol filling station and this loss may create difficulties in realising Maxol's planning proposals for developing the site.

9.7.5. **Woodies DIY, c/o RW Nowlan & Associates**

- The proposed alternative delivery platform and ramp leaves a narrow access lane (6m access road for vehicles reversing), which is not enough to allow vehicles to

turn. Turning in customer car parking will result in loss of spaces and unsafe practice.

- Visual impact of proposed pedestrian bridge is illustrated on photomontage from the south-east of the junction. Naas Road is characterised by large scale buildings with feature elements that help to mark the landscape and define the corridor of commercial premises along one of the main entrance road to Dublin City. This will be severely impacted in a negative way by the proposed footbridge.
- Footbridge and ramp will be close to the large area of laminated shop front façade on the Naas Road frontage - - not clear if ramp ramps will be enclosed to prevent vandalism.
- Concerns remain that the proposed temporary land acquisition area may not be adequate for safe access & egress, plus site operations, without further encroachment on land surrounding the Woodies building.
- There is significant risk that the footbridge will become a 'white elephant' and elsewhere in the city, well intentioned footbridges tend to be removed in favour of traffic light arrangements.

9.7.6. **Patrick Comerford, 140 Walkinstown Road**

- Objector requests written guarantee that vibration findings will not affect his house.
- Two people would be required to guide cars onto the road and possibly try to stop traffic to do so safely.
- There would be a large drop in property value due to the bus corridor.
- Walkinstown Road was meant to be a residential road and there are utility services under the footpath that will have to be altered. Walkinstown Avenue and Ballymount route may be more suitable.

9.7.7. **SBS Holdings, c/o Peter Gillett & Associates**

- Bus corridor scheme and detailed access provisions to objector's site will improve accessibility and traffic safety and efficiency.
- Requests that existing vehicular access on the eastern boundary of the overall site is retailed to service Unit 3 of this landholding is retained. Objector is close to negotiating a new lease for use of this unit as a gym – retention of this entrance would provide good accessibility and desirable connectivity with the potential catchment population.
- Use of existing entrance could be limited to Unit 3 only – low wall can be provided at the selected location to segregate and prevent vehicular traffic access from Units 1&2. DPD would be serviced off new proposed access arrangements. With limited parking on site, Unit 3 is likely to be accessed mainly on foot, bike or bus.

10.0 **Assessment**

10.1. Having regard to the requirements of the Planning and Development Act, 2000 (as amended), this assessment is divided into three main parts, the planning assessment, environmental impact assessment and appropriate assessment. In each assessment, where necessary, reference is made to issues raised by all parties. There is an inevitable overlap between the assessments, for example, with matters raised falling within both the planning assessment and the environmental impact assessment. In the interest of brevity, matters are not repeated but such overlaps are indicated in subsequent sections of the report.

11.0 **Planning Assessment**

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

- Policy considerations
- Need and justification for the proposal

- Addressing Population Growth and On-Street Congestion
- Land Use and Transport Integration
- Improved Connections
- Consideration of alternatives
- Impacts on street environment:
    - Pedestrians and public realm
    - Provision for cyclists
    - Bus priority and infrastructure
    - Access to commercial premises
    - Private cars
- Impact on residential amenity
- Ecological impacts
- Impacts on built heritage
- Consultation
- Other issues raised in submissions
- Environmental Impact Assessment
- Appropriate Assessment
- Compulsory Purchase Order
- Overall Conclusion

11.2. Policy Considerations

National Level

11.2.1. The **Climate Action Plan, 2024** (CAP24), refines and updates measures and actions to deliver carbon budgets and sectoral emissions ceilings for different sectors. The Avoid-Shift-Improve Framework is outlined to achieve a net zero decarbonisation pathway for the transport sector, whereby actions are prioritised to

avoid the need to travel; *shift* to more environmentally friendly modes; and to *improve* the energy efficiency of vehicle technology.

11.2.2. The proposed BusConnects programme includes road space reallocation, which is a measure outlined under both 'avoid' and 'shift' to promote active travel and modal shift to public transport. Road space reallocation can discourage car use, with valuable street space being redirected from on-street parking and public urban roadways to bus lanes, segregated cycle tracks, more spacious footpaths, and public realm improvements. BusConnects is also seen as a key action to deliver abatement in transport emissions, as outlined in CAP24 for the period 2024-2025.

11.2.3. It should be noted, however, that BusConnects was designed under a previous Climate Action Plan and the Avoid-Shift-Improve Framework is new to CAP23. Whilst road space reallocation forms one of the main components of the proposed scheme, the assessment hereunder will, amongst other aspects of the assessment, seek to establish if such reallocation goes far enough to achieve a proper balance in the use of road space, in compliance with all levels of policy.

11.2.4. **The National Planning Framework** outlines a set of goals expressed as ten National Strategic Outcomes (NSO) to deliver shared benefits for communities across the country. Of most relevance to the proposed Tallaght / Clondalkin to City Centre Core Bus Corridor is National Strategic Outcome - Sustainable Mobility, which recognises the need to move away from combustion engine driven transport systems. This will be achieved through the expansion of public transport alternatives to car transport, thereby reducing congestion and emissions, and catering for the demands associated with longer term population and employment growth.

11.2.5. The proposed scheme will also help to deliver other NSO's relating to compact growth and transition to a low carbon and climate resilient society. The proposed scheme can therefore be viewed as a wider integrated land use and transportation plan that sets out to fulfil the National Strategic Outcomes and National Policy Objectives of the NFP. Of particular relevance are, National Policy Objective 27, which aims to *"ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments, and integrating physical activity facilities*

for all ages"; and National Planning Objective 54, which targets a *"reduction in carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions."*

11.2.6. National Policy Objective 35 seeks to *"increase residential density in settlements, through a range of measures including reductions in vacancy, re-use of existing buildings, infill development schemes, area or site-based regeneration and increased building heights."* As can be seen in the following section, this objective is being implemented along the core bus corridor through the large volume of higher density development. High density development and high quality public transport accords with NPO64 through integrated land use and spatial planning that supports public transport, walking and cycling.

11.2.7. The **National Development Plan** makes provision for investment in public transport and sustainable mobility solutions, with BusConnects being recognised as one of the Major Regional Investments for the Eastern and Midlands Region. It is stated that BusConnects will overhaul the current bus system in Dublin, Cork, Limerick and Waterford by implementing 'next generation' bus corridors including segregated cycle routes. This will be enabled through **The National Investment Framework for Transport in Ireland.**

Regional Level

11.2.8. The **Eastern & Midlands Regional Spatial & Economic Strategy** (RSES) provides an investment framework and climate action strategy to support the implementation of Project Ireland 2040 (National Planning Framework and National Development Plan) at a regional level. The Strategy includes the Dublin Metropolitan Area Strategic Plan (MASP), which is an integrated land use and transportation strategy that sets out guiding principles for the sustainable development of the Dublin Metropolitan Area. This plan seeks to focus growth along existing and proposed high quality public transport corridors in the interests of transport and land use integration and to support the delivery of BusConnects and other major transport programmes.

11.2.9. RSES also states that the future development in the Dublin Metropolitan Area shall be planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling), in addition to public transport use, and the creation of a safe attractive street environment for pedestrians and cyclists. This is reflected in the BusConnects programme whereby streets and public spaces are being redesigned to prioritise active transport modes and bus transport as alternatives to the car.

11.2.10. BusConnects forms a key part of the overall aim of the **Transport Strategy for the Greater Dublin Area, 2022-2042** to provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the region's climate change requirements, serves the needs of urban and rural communities, and supports the regional economy. The proposed Tallaght / Clondalkin to City Centre CBC scheme is one of 12 radial schemes being brought forward under this programme to facilitate faster and more reliable bus journeys on the busiest bus corridors in the Dublin region.

11.2.11. BusConnects accords with the specific measures outlined in the Strategy to incorporate a high standard of urban design and placemaking into major public transport infrastructure schemes and walking and cycling projects, taking account of architectural heritage (PLAN14 and PLAN15). The reallocation of road space to prioritise walking, cycling and public transport use and the placemaking functions of the urban street network (PLAN16) also form key considerations within the BusConnects network design.

11.2.12. The updated **Greater Dublin Area Cycle Network Plan** is published alongside the Transport Strategy. Cycle facilities proposed under BusConnects will contribute towards the intention of the NTA and local authorities to deliver a safe, comprehensive, attractive and legible cycle network in accordance with the updated Greater Dublin Area Cycle Network.

11.2.13. The 2022 Greater Dublin Area Cycle Network Plan illustrates the south-western section of the proposed scheme along Greenhills Road, Ballymount Avenue, Calmount Road, Bunting Road, Kildare Road and Clogher Road as a "Primary Radial" route. The other sections of the CBC are "secondary" routes. Patrick Street

and Nicholas Street is also a “primary radial” route. The CBC interacts with “greenway” designations at Parnell Road, Nangor Road, Calmount Road and Greenhills Road.

11.2.14. The proposed scheme will help to deliver the Cycle Network through installation of cycle tracks and safer junctions, many of which are located at intersections with other routes in the network, e.g. Walkinstown Roundabout works at the intersection of a primary radial and primary orbital route.

County Wide Policy

11.2.15. The proposed CBC extends through South Dublin County Council and Dublin City Council. The current operative plans for these local authorities are the South Dublin County Development Plan 2022-2028 and the Dublin City Development Plan, 2022-2028.

11.2.16. The **South Dublin County Development Plan, 2022-2028** provides a vision for the County’s growing communities, places, housing, jobs and sustainable transport, and for the delivery of services in a manner which promotes climate action and efficient patterns of land use. The main strategic approach of the Dublin City Development Plan is to develop a city that is low carbon, sustainable and climate resilient. At a high level, the BusConnects programme is fundamental to the achievement of Development Plan core aims relating to climate resilience, land use change and sustainable movement.

11.2.17. Under the Sustainable Movement chapter of the South Dublin Development Plan, the aim is to increase the number of people walking, cycling and using public transport, and to reduce the need for car journeys, resulting in a more active and healthy community, a more attractive public realm, safer streets, less congestion, reduced carbon emissions, better air quality, quieter neighbourhoods and a positive climate impact. The overarching policy (SM1) is to *“…promote ease of movement within, and access to South Dublin County, by integrating sustainable land-use planning with a high-quality sustainable transport and movement network for people and goods.”* This policy will be supported through the delivery of BusConnects and the Greater Dublin Area Cycle Network, and as noted above, the recent amount of high density development proposals along the CBC (see Section 6). It is apparent

that the BusConnects proposal is encouraging development in proximity to the route through integrated land use planning and public transport provision.

11.2.18. South Dublin County Council's policy (SM3) on public transport generally seeks to *"…promote a significant shift from car-based travel to public transport in line with County targets and facilitate the sustainable development of the County by supporting and guiding national agencies in delivering major improvements to the public transport network."* BusConnects is one of the major public transport projects that will fulfil this policy. Objective 3 under this policy seeks to ensure that future development in the County will be planned to facilitate a significant shift to public transport through compact growth policies and the consolidation of development around existing and planned public transport routes and interchanges. As highlighted, compact growth proposals are being fulfilled along the route of CBC. These proposals would have been partly justified on the basis of being located on a CBC and therefore the proposed scheme is essential to serve such proposals.

11.2.19. There is also an emphasis in the South Dublin Development Plan on the promotion of attractive street environments and active travel by creating places where people want to live and spend time and by removing barriers to movement. Policy SM5: Street and Road Design seeks to *"…ensure that streets and roads within the County are designed to balance the needs of all road users and promote placemaking, sustainable movement and road safety providing a street environment that prioritises active travel and public transport."* This policy will also be supported by the increased volumes of people that will be living or visiting, shopping, etc. along the CBC.

11.2.20. The movement of people along the CBC by active travel modes (walking and cycling) is promoted in the South Dublin County Development Plan and facilitated through the BusConnects programme, in particular through the provision of safer junctions for pedestrians and cyclists to cross. There will also be improved footpaths and an increased provision of cycle tracks. South Dublin County Council's policy on walking and cycling (SM2) seeks to… *"re-balance movement priorities towards sustainable modes of travel by prioritising the development of walking and cycling facilities and encouraging a shift to active travel for people of all ages and abilities, in line with the County targets."*

11.2.21. Finally, BusConnects, if designed properly and in accordance with DMURS can facilitate objective (SM5 Objective 1) *"to ensure that all streets and street networks are designed to passively calm traffic through the creation of a self-regulating street environment that promotes active travel modes and public transport."*

11.2.22. The Sustainable Movement and Transport chapter of **Dublin City Development Plan, 2022-2028** highlights that the sustainable and efficient movement of people and goods is crucial for the success and vitality of the city, along with the need to move away from private car and fossil-fuel-based mobility to reduce the negative impacts of transport and climate change.

11.2.23. It is acknowledged that the impact of public transport infrastructure projects, such as BusConnects, on mode share is more likely to come into fruition during the lifespan of the following Development Plan. Notwithstanding this, Dublin City Council under Policy SMT22 – Key Sustainable Transport Projects supports the delivery of an integrated public transport network serving existing and future needs of the city.

11.2.24. Improvements to the environment and public realm will be necessary to encourage walking, cycling and public transport use and the opportunities are recognised for developing public realm when new public transport proposals are being developed. This will be implemented through the BusConnects programme facilitating active travel and public transport improvements and associated public realm improvements. Placemaking will occur as a result of the Tallaght / Clondalkin to City Centre CBC, most notably at Walkinstown Roundabout, and through the provision of a more pedestrian friendly environment. These measures will comply with Policy SMT12 – Pedestrians and Public Realm, which aims *"to enhance the attractiveness and liveability of the city through the continued reallocation of space to pedestrians and public realm to provide a safe and comfortable street environment for pedestrians of all ages and abilities."*

11.2.25. The integration of active travel with public transport will comply with Policy SMT19 which seeks *"to work with the relevant transport providers, agencies and stakeholders to facilitate the integration of active travel (walking/cycling etc.) with public transport, ensuring ease of access for all."* Dublin City Council has actively engaged with the NTA during the consultation process. Furthermore, the Board has

received submissions from both local authorities and the points raised will be considered in this assessment. Other issues are raised within submissions relating to on-street parking and deliveries and these are addressed in the BusConnects programme in accordance with Policy SMT25.

11.2.26. The overall aim of Dublin City Council with respect to transport and sustainable movement is a key objective of the BusConnects programme and this can be summarised under Policy SMT34 – Street and Road Design, which seeks *"to ensure that streets and roads within the city are designed to balance the needs and protect the safety of all road users and promote place making, sustainable movement and road safety providing a street environment that prioritises active travel and public transport whilst ensuring the needs of commercial servicing is accommodated."*

Local context

11.2.27. The **City Edge Project** includes the area currently dominated by "shedscape" on the city side of the M50 between Greenhills Road and the Kildare rail line to the north. The Naas Road/ Long Mile Road/ Nangor Road junction is located centrally within the City Edge lands. This new urban quarter has the potential for 40,000 new homes and 75,000 jobs, making it one of the largest regeneration schemes in Europe. With respect to transport and movement, it is recognised that with the right level and type of public transport, City Edge could provide a huge opportunity for creating a Liveable City based on the principles of walking, cycling and public transport. The City Edge area is currently well served by public transport but there is scope to significantly improve active and public transport infrastructure including new rail and Luas stations, new bus routes and cycle lanes to support the existing and future population.

11.2.28. In line with the commitments outlined above to facilitate transport and land use, the proposed CBC passes a number of Strategic Development and Regeneration Areas at Liberties and Newmarket Square (SDRA 15), St. Teresa's Gardens and Environs (SDRA 11); Dolphin House (SDRA 12) and Naas Road (SDRA 5). Park West/ Cherry Orchard (SDRA 4) is also nearby.

11.2.29. Overall, the proposed BusConnects programme remains an integral and pivotal part of the requirement to tackle climate change and to enable a meaningful shift within

the transport sector to active and sustainable transport modes. I would be satisfied that the proposed development is acceptable in principle and follows the consistent message within all levels of policy that there must be a transition to a low carbon and climate resilient society. This requires a reduction in car dependency to contribute towards lower energy consumption, CO_2 levels and pollutant emissions. Sustainable mobility, compact growth and land use and transportation integration are essential for the creation of sustainable communities that minimise private car use, prioritise cycling, walking and public transport and promote the efficient use of land. I am therefore satisfied that the proposed development is in accordance with the policy objectives set out in various plans and documentation referred to above.

11.3. Need and Justification for the Proposal

11.3.1. It has been demonstrated above that the proposed Tallaght / Clondalkin to City Centre CBC scheme is needed and justified in terms of overarching policy considerations on climate change and a necessary shift to sustainable transport modes to reduce greenhouse gas emissions in the transport sector. Section 4.3 also outlines the need for the proposed scheme in terms of existing deficiencies in the bus, cycle and pedestrian network. The section hereunder addresses more specific ways that the proposed scheme is needed and justified to tackle on-street congestion; encourage land use and transport integration; and improve connections, particularly for disadvantaged groups.

11.3.1. Addressing Population Growth and On-Street Congestion

11.3.1.1. Significant on-street traffic congestion occurs throughout the Greater Dublin Area from private car dependence. Road network congestion causes delay, with associated economic impacts and frustration for motorists. Other quality of life issues caused by traffic congestion include pollution, noise, adverse impacts on the street environment, road dominance, community severance and pedestrian/ cyclist safety and comfort issues.

11.3.1.2. Congestion also has direct impacts on bus service reliability. Bottlenecks are formed along sections that do not have bus priority and this affects journey times, particularly at peak hours. At present, Automatic Vehicle Location (AVL) data

indicates that bus services suffer variations in travel time of up to 12 minutes along the route of proposed scheme. A less reliable bus service requires operators to roll out extra buses to maintain headways and this can lead to a clustering of buses and imbalanced bus operations on the network.

11.3.1.3. According to the National Planning Framework, 2018, the population of the Greater Dublin Area is forecast to increase by 25% by 2040 and this growth will have associated travel demands, placing added pressure on the transport system. The EIAR compares the effects of do-nothing, do-minimum and do-something scenarios in future years. The do-nothing scenario represents the current traffic and transport conditions without the proposed scheme and other GDA Strategy projects in place. The do-minimum scenario for opening year (2028) and design year (2043) represents the likely conditions without the proposed scheme in place but allowing for all other GDA Strategy schemes to be implemented (other BusConnects elements, Dart+, Luas green line capacity enhancement, GDA Cycle Network Plan for 2028, and for 2043 assumes full implementation of GDA Strategy including MetroLink, Dart+ Tunnel, and Luas extensions to Lucan, Finglas, Poolbeg and Bray). Finally, the do-something scenario represents the conditions with everything in place.

11.3.1.4. A people movement assessment was undertaken for the EIAR using outputs from the NTA Eastern Regional Model (ERM) and Local Area Model (LAM) and comparing the 'do minimum' and 'do something' peak hours for 2028 and 2043. Population growth has been derived by linear interpolation between 2016 Census data and the NPF 2040 population growth forecast. It is envisaged that the population will grow by 11% up to 2028 and by 25% by 2043. Employment growth is also forecasted to grow by 22% by 2028 and 49% by 2043, with an assumed growth in goods vehicle of 45% and 77% respectively up to the same years.

11.3.1.5. As noted above, the overriding motivation for BusConnects is to reduce CO_2 emissions and this is critical from a global climatic perspective. At the local and shorter-term level, the issue of congestion is more obvious, and both congestion and CO_2 emissions are continuing to rise. Any further increases in traffic levels will see an exacerbation of congestion, CO_2 emissions and all the associated issues highlighted above. Private car dependence will worsen unless there is intervention

to optimise road space and prioritise the movement of people over the movement of vehicles.

11.3.1.6. It is estimated that approximately 80% of road/ street space is dedicated to the car. A car travelling at 50kph requires 70 times more space than a pedestrian or cyclist. A double-decker bus takes up the equivalent spatial area of three cars but typically carries 50-100 times the number of passengers. The prioritisation of buses over cars and the creation of more space for pedestrians and cyclists will allow for increased people movement capacity along the core bus corridor. This is vital given the existing congestion and the forecasted growth in population, jobs and goods vehicle numbers by 2040.

11.3.1.7. As a result of the proposed scheme in opening year (2028), there will be an increase of 37% and 27% in AM and PM peaks respectively in the number people travelling by sustainable transport modes along this core bus corridor. In design year (2043), there is forecasted to be an increase of 49% and 38% in the number of people travelling along the proposed scheme corridor by sustainable modes during the AM and PM peak hours respectively. In the 2028 AM peak, there will be an increase of 145% in the number of people travelling by bus, an increase of 45% in the number of people walking or cycling, and a reduction of 33% in the number of people travelling by car along the core bus corridor.

11.3.1.8. Having regard to the above, the proposed scheme is of critical importance to the transport network in Dublin to facilitate the actual movement of people and this can only be achieved through a realistic modal shift from the private car to sustainable modes. The proposed scheme allows for increased people moving capacity and the best chance to avoid gridlock in future years as the population grows and the demand for travel increases. The proposed scheme also has the potential to reduce Ireland's greenhouse gas emissions, equivalent to the removal of approximately 105,500 and 209,100 car trips per weekday from the road network in 2028 and 2043 respectively. The proposed scheme will therefore make a significant contribution to carbon reduction, the easing of congestion and the creation of more sustainable travel patterns for the growing population.

11.3.2. **Land Use and Transport Integration**

11.3.2.1. One of the main objectives of the proposed scheme is to enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks. The ability to move greater numbers of people along the core bus corridor also presents the opportunity to increase the volumes of people living, working and staying along the corridor.

11.3.2.2. A number of significant projects are proposed, have been permitted or are under construction along the CBC. Those that were permitted/ under construction include strategic housing developments for 197 apartments on Greenhills Road (south of Hibernian Industrial Estate); demolition of former Chadwick's Builders Merchants and construction of office, residential and commercial development; 334 residential units on Belgard Road, Tallaght; 310 residential units, creche and 2,289 sq.m. of commercial units on Belgard Road, Tallaght; 399 student accommodation bed spaces on Cork Street; 438 apartments at Belgard Square North; 317 student bed spaces on South Circular Road; 368 student bed spaces on St. Luke's Avenue; 502 apartments at the former Gallagher cigarette factory, Airton Road; 1,102 residential units, office, restaurants, etc. at Royal Liver Assurance Retail Park; and 545 apartments at Concorde Industrial Estate. There are other significant proposals at the Nissan site, Walkinstown Avenue, and at the site at the junction of Calmount Avenue and Ballymount Avenue.

11.3.2.3. It is crucial that BusConnects is implemented to serve the compact growth that is occurring along the length of the corridor so that walking, cycling and public transport emerge as the preferred modes of travel in the interests of sustainable city living, efficient use of road-space, and environmental impacts. Sustainable travel patterns should be easier to achieve if the new population along the corridor has high quality active travel and public transport infrastructure in place. New residents or users of the CBC may be less habituated to the private car and can utilise active modes and public transport without having to perform a modal shift. It should also be re-emphasised that many of the larger scale developments along the corridor would have been planned and permitted on the basis of the proposed core bus corridor scheme.

11.3.2.4. Public transport works better on higher density corridors because there is critical mass to maintain services throughout night and day. The concern would be that buses might become overloaded. However, service frequency was assessed in the micro-simulation model with a 10 bus per hour increase along the busiest section of the CBC. The model showed that there will be a high level of journey time reliability in the Do Something scenario. This shows that bus journey time reliability and consistency will be maintained as passenger demand continues to grow. There will also be added advantages of increased patronage on the core bus corridor helping to reduce crime and negative social impacts.

11.3.2.5. In addition to greater demand for travel along the CBC, compact growth and higher densities will also require improved public realm both in terms of quality and quantity. There is an opportunity for the proposed CBC and associated compact growth to actually discourage travel, by providing for critical mass as noted, and leading to the provision of better services and facilities for everyday living and the creation of local jobs within walking distance. This could also have the effect of decreasing travel distances as a greater number of destinations along the CBC begin to emerge and the need to travel further east into the city centre or further west to The Square Shopping Centre diminishes.

11.3.2.6. For this pattern of land use and transport integration to be successful, good public realm is necessary. This is addressed further in Section 11.5.3 below. Well-designed public spaces with a high presence of people and services can help to change the way we view streets/ roads as corridors for transporting people, towards places where people interact with each other, and with the natural and built environment.

11.3.2.7. Overall, good land use and transport integration complies with the Avoid/ Shift/ Improve hierarchy promoted within CAP23/ CAP24. The need to travel is minimised; modal shift to public transport and active travel is encouraged due to better services and infrastructure that will be widely used; and bus electrification becomes more practical as the fleet expands. In general, the Tallaght / Clondalkin to City Centre CBC and the associated compact growth along the corridor is an excellent example of land use and transport integration taking place in a planned and retrofitted manner

that will be hugely beneficial to existing and future residents and users of the corridor.

11.3.3. Improved Connections

11.3.3.1. It is a key objective of the proposed scheme to improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services.

11.3.3.2. Improved connections as a result of the proposed scheme can disproportionately benefit those who are most disadvantaged or socially excluded. There are several areas along the length of the CBC that are categorised as extremely disadvantaged or very disadvantaged as indicated by the Pobal HP Index 2016. There are areas of disadvantage to the west of Tallaght and along the eastern side of Greenhills Road. Areas of extreme disadvantage are located either side of the Coombe Woman's Hospital. It is also noteworthy that access to a car is proportionately lower for people with disabilities in Dublin compared to the general population.

11.3.3.3. The proposed scheme will allow for the provision of high quality bus transport along the CBC, thereby providing better connections to those on low incomes or those with disabilities and without access to car transport. Households along the route will also benefit from improved access to a wider range of job opportunities, which can result in wealth increase and improved mental and physical wellbeing. The proposed scheme will improve access to services across the city and encourage activity and footfall to support new businesses and services.

11.3.3.4. The CBC provides access to a large number of healthcare facilities, including Tallaght Hospital, Crumlin Children's Hospital, The Coombe Women's Hospital and the primary care centre of Airton Road, the health centre on Belgard Square West, and the health centre on Crumlin Road. Improvements to bus journey times and reliability would make public transport access to health facilities more feasible, particularly where there is limited parking. Bus lanes and bus priority can also be used by ambulances and other emergency services.

11.3.3.5. The Building for Everyone – A Universal Design Approach (Centre for Excellence in Universal Design 2020 guidelines have been followed in the design of the proposed scheme. This will make the urban environment easier and safer for people with visual impairment and mobility difficulties, as well as parents with pushchairs. Tactile paving and dropped kerbing will be installed throughout and buses will be wheelchair accessible.

11.3.3.6. It is likely that young and elderly people will benefit from more reliable bus services and a safer pedestrian and cycling environment. Independent mobility for children can grow as road safety improves and this can increase social interaction and exercise. It should be noted that there are a number of schools and colleges along the CBC. The most vulnerable road users are pedestrians and cyclists who are five to 10 times at risk of injury per kilometre than a motorist in a car-dominated environment (Elvik 2009). One of the main advantages of the proposed scheme will be the actual reduction of general traffic, thus making the corridor safer, more accessible and usable for vulnerable road users and those with no access to a car.

11.3.3.7. The other main benefit of the proposed scheme in terms of improved connections is better integration between transport services and facilities. Multi modal journeys will be facilitated through provision of cycle parking at bus stops and a general increase in cycle parking will encourage walking along with cycling. The proposed scheme will integrate with the new interchange at Tallaght. The interchange will be a new hub for bus services connecting the surrounding area and the city centre. The proposed scheme will also integrate with Luas at Tallaght and Kylemore and with the Kimmage to City Centre and Liffey Valley to City Centre CBCs. Exchange between transport services will be made easier by next generation ticketing and integrated fare structure proposals. There may also be opportunities for park and ride along the CBC.

11.3.4. On the whole, the proposed scheme will promote a better-connected street environment particularly for the most disadvantage and vulnerable road users. Perhaps the most obvious benefit in terms of improved connections will relate directly to the pedestrian environment, which is addressed further in Section 11.5.3 below.

11.3.5. In overall conclusion for this section, the obvious need and justification for the proposed scheme has been clearly demonstrated from a population growth and congestion perspective, and in the interests of land use and transport integration. The proposed scheme is also essential to bring about improved connections, particularly for non-car users, the disadvantaged and vulnerable road users. As noted above, there is also a clear justification for the proposed scheme throughout all levels of Government policy.

11.4. Consideration of alternatives

11.4.1. In my opinion, the consideration of alternatives is critical to future proof the proposed scheme. As outlined above, congestion occurs at present throughout the road network and the proposed scheme will reallocate road space to increase capacity for people movement. Car dominance will be reduced but access by private car will be retained for the most part.

11.4.2. The consideration of alternatives within the EIAR submitted with the application and the EIA in Section 12.3 looks at a range of alternatives at three levels comprising strategic alternatives, route alternatives and design alternatives. The strategic alternatives considered are Bus Rapid Transit (BRT), light rail, metro, heavy rail, demand management and technological alternatives. The reasonable conclusion is reached that enhanced bus priority and cycle facilities, together with the enhancement of capacity on the Luas Red Line, are best placed to serve the corridor having regard economic and environmental factors and passenger numbers that each mode would carry. The route selection stage examined the road network along the corridor using a “spiders web” approach to select the most desirable roads for the corridor. Design alternatives were examined during the different phases of public consultation where certain details, such as pedestrian and cyclist facilities at junctions, access and bus gate operation were refined.

11.4.3. My concern with respect to the consideration of alternatives in particular is that the proposed scheme fails to provide continuous segregated cycle tracks serving both sides of the road throughout. Cyclists take up little room, yet there are large sections of the CBC where cyclists will share bus lanes and with general traffic, e.g. Belgard Square West, Blessington Road, Main Road, Old Greenhills Road, Walkinstown

Road and Crumlin Road, notwithstanding the promotion of alternative quieter streets for cycling.

11.4.4. It appears to me that the proposed scheme maintains existing general traffic flows as much as possible. It is noteworthy that the proposed scheme was designed a number of years ago and events relating to climate change have become more prominent and urgent. CAP23 introduced sectoral emissions ceilings and the Avoid-Shift-Improve framework to achieve a net zero decarbonisation pathway for transport and this is supported in CAP24. Road space reallocation is a measure under both 'avoid' and 'shift' to promote active travel and modal shift to public transport. CAP24 recognises that road space reallocation reduces unsustainable private car demand and enhances placemaking, supporting improvements in the accessibility and air quality of our urban spaces.

11.4.5. In my opinion, more effort could possibly have been afforded to continuous segregated cycle infrastructure and wider footpaths along the CBC at the expense of car parking and 2-way traffic lanes. For example, Old Greenhills Road and Greenhills Road could be made one way for buses and the section of Greenhills Road to the south of Calmount Avenue could also have been made one way for general traffic. There may also be opportunities for carriageway narrowing. The reallocated space from general traffic lanes could then be used for a higher standard of cycle track, wider footpaths, shorter pedestrian crossing distances and improved public realm.

11.4.6. A number of alternatives were also put forward in submissions for Walkinstown Roundabout and the pedestrian/ cyclist bridge at the Naas Road/ Long Mile Road/ Nangor Road junction. In addition, many submissions focus on the impact of the new sustainable transport link along Treepark and Birchview and the alternative of maintaining the status quo. It has also been suggested that alternative designs for certain junctions should be implemented. These issues, along with the proposed quiet street treatment and cyclists sharing bus lanes, are addressed in further detail below.

11.4.7. Overall, I consider that the proposed scheme was designed at a point in time and attitudes have since changed and will continue change rapidly as climate change

awareness increases. Road space reallocation now seems to be a more prominent measure within CAP24 for tackling transport sector emissions ceilings compared to when the proposed scheme was designed before the adoption of CAP23. However, I am limited to assessing the scheme that is before me and in this regard, I consider it to be acceptable throughout when compared to the existing layout. The Level of Service assessment confirms that services and facilities for active and public transport will improve to an extent that significant modal shift become achievable. As noted above, any further delay due to any comprehensive redesign will reinforce existing travel habits and could be counterproductive. I am satisfied that the primary goal of significant reduction in transport related emissions will be achieved and therefore the proposed scheme should be implemented as planned as a matter of urgency.

11.5. Impacts on street environment:

11.5.1. The proposed scheme will give rise to significant changes in the way that the street environment is experienced along the route of the CBC. However, the actual works are not of a substantial nature. Most construction activity will affect the surface of the street only; few up-standing structures are proposed with the exception of bridge structures, bus shelters and signage. The proposed scheme will nonetheless radically alter the way the street is used on an everyday basis.

11.5.2. This section examines the impacts of the proposed scheme on the street environment by reference to each of the main affected users, i.e., pedestrians, cyclists, bus users, commercial premises (deliveries) and private motor vehicles.

11.5.3. **Pedestrians and public realm**

11.5.3.1. As noted above, some of the main objectives of the scheme are to relieve congestion, reallocate road space and improve conditions for the increasing amounts of people that will be using street space as continued compact growth emerges along the CBC. It is widely held that 80% of road space is allocated to the private car, with public transport, cyclists and pedestrians sharing the other 20% of space. The proposed scheme, therefore, needs to be designed to address the conflicts between the road/ street users competing for space. It is an aim of the proposed

scheme to ensure that the urban realm is carefully considered in the design and development of the transport infrastructure and to seek the enhancement of key urban focal points where appropriate and feasible.

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

11.5.3.3. A transport project of this nature focuses purely on the efficient movement of people along the corridor by public transport and bicycle. By extension, the CBC becomes more of a movement corridor at the expense of developing good quality places for people to stop along the street. The proposed scheme does include some public realm improvements at Tallaght bus interchange and Walkinstown Roundabout and these improvements should encourage people to stop and linger in these areas. Certain streets will experience substantial reductions in traffic levels and this will improve conditions for pedestrians. I would nonetheless recommend an audit of traffic calming measures along the CBC, particularly those sections that do not have segregated cycle facilities (see below), with the aim of further improving the pedestrian environment at these locations as necessary. A further assessment of the proposed public realm improvements on local townscape is included in the Cultural Heritage and the Landscape section of the EIA below.

11.5.3.4. The pedestrian environment along the route of the proposed scheme will also be significantly improved through the provision of additional crossing locations, increased pedestrian directness, provision of traffic calming measures, improved accessibility facilities and increased footpath and crossing widths. There will be a 34% increase in controlled pedestrian crossings and a 448% increase in in raised

table crossings on side roads. Minimum footpaths widths of 2m will be provided along the proposed scheme.

11.5.3.5. A Level of Service assessment concludes that there will be a positive long-term impact on the quality of pedestrian infrastructure, with most junctions improving to an A or B rating. Along the busiest section from Grand Canal to the city centre, 11 of the 16 impacted junctions currently have low C/D ratings and this will improve to an A/ B rating at all impacted junctions (A at 9 of 16 impacted junctions). The LoS rating is applied to each junction for both 'do minimum' and 'do something' scenarios based on indicators such as footpath and crossing widths, accessibility, promotion of lower vehicular speeds, directness and signalisation.

11.5.3.6. One of the greatest improvements in Dublin City in recent years has been the amendment of the pedestrian phase at junctions so that pedestrians can cross all arms of the junction in one movement, including diagonally. This is referred to as a wrap-around pedestrian stage within the Preliminary Design Guidance Booklet accompanying the planning application. This is the preferred arrangement at junctions within the proposed scheme whereby the wrap-around pedestrian signal stage will take place at the start of the signal cycle. This represents a significant improvement in terms of pedestrian convenience and directness.

11.5.3.7. A number of specific issues have been raised in submissions relating to the pedestrian environment and these are addressed hereunder. The most common issue concerns the loss of public green space and impacts on the safety of vulnerable pedestrians at the Bancroft Park construction compound; loss of a community plaza in Tallaght; loss of green space at Parkview; impact of diverted traffic onto other roads and associated safety concerns; and loss of green space at Rafter's Road. Another submission notes that there are examples of 2-stage pedestrian crossings and many three and four arm junctions are missing pedestrian crossings. It is also pointed out that there will be shared pavements which could potentially injure the vitality and usability of the public realm. Dublin City Council consider that the proposed scheme will interfere with the recently completed high quality Francis Street public realm scheme and requests that works be limited to the outer edge of the footpath rather than extending up Francis Street as shown. South Dublin County Council consider that the design of green space between Calmount

Road and Greenhills Road needs more consideration and the Killeen Road/ New Nangor Road junction is hard in appearance and more greening is encouraged.

11.5.3.8. In my opinion, many of the issues outlined above are addressed in the Landscaping General Arrangement drawings. These drawings illustrate proposals for enhancement of Bancroft Park following construction, as well as landscaping along the sustainable transport road at Kilnamanagh and along the new road links off Greenhills Road. Proposals at Kilnamanagh will also help to improve pedestrian and cycle linkages from Treepark Road across green open space to Castletymon Road. Existing trees within the green space at Rafter's Road will be removed to provide the necessary carriageway and footpath width; however, they will be replaced with 14 new semi-mature trees. Throughout the proposed scheme, there will be an overall net increase of 328 additional mature trees.

11.5.3.9. I agree that the proposed scheme will adversely impact on this area of public amenity space to the north of Old Greenhills Road. The impact may be lessened if, as suggested above, a one-way arrangement was proposed for buses along Old Greenhills Road and Greenhills Road at this location. On balance, however, the existing plaza to the north of Greenhills Road will contain new stone paving, a raised junction table and planting, and I note that activity levels at this location are normally quite low.

11.5.3.10. In my opinion, the recently completed 'as built' layout on Francis Street at its junction with Dean Street would not be adversely affected by the proposed scheme. It would appear, however, that the carriageway will be relocated a short distance to the east and this may reduce the available footpath space on the eastern side of the street where there is presently outdoor seating associated with a café. The NTA note, however, that they will continue to liaise with Dublin City Council during the design and construction stage of the proposed scheme. The proposed left turn only at this end of Francis Street may have the advantage of reducing traffic queues and their associated noise and air pollution impacts in this locality. The NTA can also liaise with South Dublin County Council on tie ins to ensure the new public realm at the northern end of Old Greenhills Road and the proposed bus interchange and adjoining plaza are coordinated.

11.5.3.11. In the adjoining area, the rationale for the proposed cycle lane through the pedestrian space at the Dean Street/ Patrick Street corner is questioned. Dublin City Council note that this is a busy pedestrian area, and the proposed cycle lane will run through a number of pedestrian desire lines and waiting areas. I would be in agreement that there is an element of duplication of cycle lanes/ tracks at this location and the cycle bypass track interferes with a south-facing public space that would be widened and enhanced through the removal of the left turn slip lane. The Board may wish to consider attaching a condition requiring the applicant to consolidate the cycle lane and cycle track at this location. I note, however, that the proposal is an improvement for pedestrians compared to the current situation which requires two crossing movement due to the left-turn slip lane.

11.5.3.12. Other issues relating to greening and the hard appearance of certain streets would be addressed through landscaping proposals. I consider that an audit of traffic calming measures should be carried out, particularly those sections of the CBC with no segregated bicycle facilities and these measures should aim to benefit pedestrians and the public realm. Such measures may be required for the purposes of achieving proper multi-functional place-based streets. This could be accomplished through a Street Design Audit under DMURS.

11.5.3.13. It is highlighted in Section 4.1.1 of DMURS that the issue of speed is key to the successful implementation of responsive design solutions, particularly with regard to pedestrian and cyclist safety, comfort and convenience. A 30 kph speed limit is proposed on Crumlin Road to the east of the junction with Cooley Road. The design speed is the maximum speed at which it is envisaged/ intended that most vehicles will travel under normal conditions and the intended speed limit should be aligned with the design speed. I consider that sections of the CBC may fail to achieve the design speed due to lack of traffic calming.

11.5.3.14. Self-regulating streets can successfully balance the functional needs of different users, enhance the sense of place and manage speed in a manner that does not rely on extensive regulatory controls and physically intrusive measures for enforcement. Measures that could be applied to regulate streets include frequent crossing points, horizontal and vertical deflections, narrow carriageways, minimisation of signage and road markings, reduced visibility splays, on-street parking, tighter corner radii and

shared surfacing. A greater sense of enclosure can also have a traffic calming effect. The planting of street trees could therefore be used as a retrospective traffic calming measure.

11.5.3.15. As noted above, I recommend that the applicant undertakes a Street Design Audit for the pedestrian and cycling environment, particularly along sections of the proposed scheme where there are no segregated cycle facilities. This audit could assess measures for self-regulation and the promotion of public realm and place value. The Street Design Audit would be carried out in accordance with DMURS Advice Note 4 and agreed with the planning authorities as a condition of any grant of planning permission.

11.5.3.16. In my opinion, this audit will help to address the outstanding concerns raised in submissions relating to public realm, greening proposals and materials. Corner radii should be re-examined at all minor junctions to ensure compliance within DMURS. Other measures should be included so that road space allocation is strictly in accordance with the design speed.

11.5.3.17. Finally, it is worth highlighting that the benefits of the proposed scheme vastly outweigh any inconvenience and it should be noted that facilities for people with disabilities, such as tactile paving, increased kerb height at bus stops and improved public realm and footpaths will be of benefit. The Building for Everyone – A Universal Design Approach (Centre for Excellence in Universal Design 2020) guidelines have been followed in the design of the proposed scheme.

11.5.4. **Provision for cyclists**

Lack of facilities

11.5.4.1. As noted above, it is my considered opinion that a shortcoming of the proposed scheme is the expectation that cyclists will share bus lanes with buses, coaches and taxis along certain sections. As a solution to this, it is proposed to provide an alternative cycle route from Walkinstown Roundabout along Bunting Road, St. Mary's Road, Kildare Road and Clogher Road to the Grand Canal. Bunting Road and St. Mary's Road will have segregated cycle tracks on both sides and these will continue onto Kildare Road. Along the western section of Clogher Road a 'quiet

street' treatment is proposed where cyclists will share the road with local traffic due to the width of the carriageway. This will occur over a distance of approximately 220m. Bus stops will be relocated off this section and bus gate and no entry signage will limit access for general traffic.

11.5.4.2. It is stated in the Preliminary Design Guidance that alternative cycle routes may be explored for short distances away from the CBC and may include offline options where cyclists are directed along streets with minimal general traffic other than car users who live on the street. The quiet street treatment would involve appropriate advisory signage for both the general road user and cyclist.

11.5.4.3. The proposed offline section would extend a distance of 3.9km, which would not be considered a short distance within the context of the overall scheme. Furthermore, the offline route appears to have been considered on the basis that all cyclists originate from the outer end of the CBC and their destination is the city centre. It is also submitted that the offline route provides a more direct route to the city centre.

11.5.4.4. The offline route terminates at the Grand Canal where it will tie in with the proposed Grand Canal Safety Improvement Scheme. City bound cyclists would then travel east on the Grand Canal route which at present only comprises cycle lanes. Higher standard cycle tracks are proposed on the CBC from the Grand Canal inbound along Dolphin's Barn and Cork Street. The effect of this may be cyclists choosing to stay on the CBC and sharing bus lanes along Crumlin Road. Opportunities for traffic calming along Crumlin Road may be more limited due to the potential impact on bus services. However, there will be sections along Crumlin Road where cyclists choosing to remain 'online' will share with general traffic. Having regard to the horizontal and vertical alignment of this road with long straight stretches, and in view of the proposed 30kph speed limit, I consider that a Street Design Audit focusing on traffic calming is appropriate for the general traffic lane.

11.5.4.5. On the whole, the main sections of the CBC that contain segregated facilities are consistent with the 'primary radial' route designation in the 2022 Greater Dublin Cycle Network Plan, i.e. along Greenhills Road (southern end), Ballymount Avenue, Calmount Road, Greenhills Road (approaching Walkinstown Roundabout), Bunting Road, Kildare Road, Clogher Road and Patrick Street. A section of Walkinstown

Avenue proposed with segregated cycle tracks is also designated as a 'primary orbital' route. There are sections of the main CBC that are designated as 'secondary' routes in the Cycle Network Plan that will be served by a higher standard of segregated cycle track, e.g. Nangor Road, Naas Road, Long Mile Road, Drimnagh Road, Dolphin's Barn, Cork Street and St. Luke's Avenue.

11.5.4.6. Overall, I consider that the proposed segregated cycle facilities contribute to the network building promoted within the Cycle Network Plan. The sections of the CBC lacking segregated cycle facilities are mitigated to a certain degree by the alternative offline sections. Some traffic calming measures either implemented under this permission as recommended, or by local authorities in accordance with the NTA document "Rapid Build Active Travel Facilities" (February 2023), would help to improve cycle safety in a more consistent manner, allowing cyclist to take more direct routes in a safer speed reduced environment. Conditions for cyclists can be improved through traffic calming measures and sections of the proposed scheme can be revisited at a later date in order to enhance cycling infrastructure along sections of the route.

11.5.4.7. Having regard to the above, I would be satisfied that the proposed provision of segregated cycle tracks is adequate for the purposes of providing a good level of service for cyclists and for attracting a reasonable modal shift onto active modes, subject to appropriate traffic calming measures along the stretches of road without dedicated cycle infrastructure. The safety of vulnerable road users should be greatly improved through traffic reduction. However, traffic reduction on roads can have the effect of increasing traffic speeds and this could be addressed through the appropriate calming measures. There is also the potential in future for general traffic lanes, if properly traffic calmed to their intended design speed, to be utilised by faster moving personal mobility bikes and scooters, thereby freeing up space on cycle tracks for slower moving cyclists.

Junctions

11.5.4.8. Perhaps the most significant impact for cyclists is at junctions. Most accidents involving cyclists occur at junctions and the proposed scheme will include the replacement of roundabouts with new signalised junctions. There are existing

roundabouts at Belgard Square South/ West, Belgard Square West/ North, Belgard Square North/ East and Nangor Road that will be replaced with standard BusConnects signalised junctions. Walkinstown Roundabout will be replaced with a safer arrangement that will be easier for pedestrians and cyclists.

11.5.4.9. There are a number of different junction types proposed throughout the CBC. The protected junction for cyclists is the preferred option, which provides kerb build-outs to protect cyclists travelling through the junction. Kerbed corner islands force left-turning motorists into a wider turn and the cycle lane is set slightly to the left so that the cyclist and motorist see each other at more of a right angle. The corner islands create a protected ring for cyclists navigating the junction, including those turning right. Essentially, the cyclist can make a right turn at the junction without leaving a cycle lane. The traffic signal arrangement removes any uncontrolled conflict between cyclists and pedestrians and also between a cyclist crossing the arm and an approaching right turning motorist. The cycle tracks approaching the junction are ramped down and protected by a buffer and the cycle stop line sits in front of the bus lane stop line.

11.5.4.10. In general, I consider this arrangement represents a significant improvement in safety terms for cyclists at all junctions. I acknowledge that every junction is different and certain flexibly will be necessary in cases. However, the protected junction provides a relatively consistent approach throughout the BusConnects programme and a degree of certainty for the most vulnerable users. Flashing left turn arrows, coloured surface treatment, tighter kerb radii and narrower lanes will encourage motorists to proceed through junctions with greater caution and less confidence. This is critical from a cyclist safety viewpoint.

11.5.4.11. Observers on the proposed scheme refer to the potential for the provision of ‘Dutch Style’ or 'Cyclops' junctions. There is also the argument that the proposed arrangement puts left-turning motorists in conflict with straight ahead cyclists. The Preliminary Design Guidance Booklet for the proposed scheme categorises junctions into four broad types that have been developed for a local Irish context. I note that the preferred protected junction as outlined above is already operating at a number of locations in the Dublin. The first protected junction was installed at Balbutcher Lane in Ballymun and Dublin City Council intend to roll out a number of these

junctions around the city. A protected junction of similar design but of more of a 'Dutch' style approach has opened recently at the junction of Drummartin Link Road and Lower Kilmacud Road.

11.5.4.12. Essentially, the main difference between the preferred protected junctions and 'Dutch' style junctions is the crossing distances for pedestrians. Owing to the setting back of the cycle lane to provide greater horizontal segregation, a waiting space is provided at the edge of the road at the junction for pedestrians within the 'Dutch' design. Pedestrians therefore cross the cycle lane first in a priority arrangement before waiting on the pedestrian light. In the proposed preferred design, the cycle lane is segregated by a narrower raised kerb. This means that pedestrians must cross the cycle lane and carriageway in one movement over a longer distance as there is no waiting space at the edge of the road. The proposed scheme also requires a cyclist stop line before the pedestrian crossing when the 'Dutch' design allows the cyclist to continue through the pedestrian priority crossing over the cycle lane up to a stop line for straight-ahead and right-turning cyclists. The 'Dutch' design therefore permits unsignalised left-turning movements. Straight ahead cycle movements within the proposed scheme will take place concurrently or slightly in advance of left-turning motor vehicle manoeuvres whereas straight ahead cyclist/ left-turning motorist movements are in separate phases within the 'Dutch' design.

11.5.4.13. There are similarities between the preferred proposed scheme junction design and the 'Dutch' style design. Most notably, both junction designs separate pedestrian, cyclist and motor traffic. Furthermore, both types have protective corner islands, which force the motorist to make wider and therefore slower left turns around a tighter radius. It is noteworthy, however, that the 'Dutch' style design has larger corner islands, and this gives more space for cyclists waiting at the stop line. The other main similarity, as noted above, is that cyclists can proceed through the junction without leaving a cycle lane. I consider this to be one of the most important safety features over the often-seen arrangement whereby right turning cyclists are expected to utilise an advanced cycle stop line to make the right turn manoeuvre at a junction.

11.5.4.14. In weighing up the proposed scheme preferred junction layout against the 'Dutch' style layout, I consider that there are pros and cons with each. The 'Dutch' style

design has shorter pedestrian crossing distances and there is no straight-ahead cyclist/ left-turning motorist conflict. The degree of separation for cyclists and motorists on the approach to the junction is greater and more space is available for straight ahead and right turning cyclists waiting at the stop line. Left-turning cyclists will not encounter signals. In my opinion, the 'Dutch' style layout is superior to the proposed scheme preferred junction layout from a cycle safety and comfort perspective.

11.5.4.15. Notwithstanding this, I note that the aim of the NTA's Preliminary Design Guidance Booklet is to take the benefits of the traditional junction layout from the National Cycle Manual and supplement this with a range of measures aimed at increasing protection for cyclists and reducing uncontrolled conflict with pedestrians. In this regard, it is noted that 'Dutch-style' junctions allow for potential un-signalised conflict between pedestrians and cyclists, and this was a concern for disability groups. The NTA also point out that Dutch-style junctions can result in a reduced level of service for pedestrians with at least 3 crossing movements (2 no. cycle tracks and 1 no. carriageway) to cross a side road.

11.5.4.16. Along with the potential for cyclist and motorised vehicle conflict, the potential for pedestrian and cyclist conflict should be a pertinent consideration in the assessment of the proposed scheme, particularly with the emergence of faster moving personal mobility vehicles. For this reason, there may be some advantages with the proposed scheme preferred junction layout which signalises pedestrian and cyclist conflict. There is little in the way of an established culture of cyclist and pedestrian interaction in this country. BusConnects is essentially a retrofitting project which seeks to reallocate road space for bus priority and active modes. Care must therefore be taken to address conflicts between active modes within the reallocated space. It may be the case that, even with road space reallocation, space for active modes will still be limited and therefore kerb separation and the preferred protected junction may only be feasible. Added to this is the need for a consistent design approach for all modes when introducing radically altered junction layouts.

11.5.4.17. I would therefore be reluctant to recommend different designs such as the 'Dutch' style or 'Cyclops' for different junctions depending on geometry. As with the lack of cycle tracks/ lanes along sections of the route, a redesign of all junctions at this

stage may be impractical and would unduly delay the scheme. Furthermore, I am limited to assessing the merits of the scheme before me and I consider that it represents a substantial improvement in terms of safety and comfort for cyclists.

11.5.4.18. With respect to the potential for conflict between straight ahead cyclists and left-turning motor vehicles, measures will be put in place to increase the visibility and awareness of cyclists to motorists. Cyclists will be given an advanced green light after which motorists can turn left during a flashing amber phase. Signage will be installed to instruct motorists to yield to cyclists continuing straight ahead. The junction layout will also encourage motorists and cyclists to meet at more of a right angle to one another. I consider that these measures are satisfactory and will help to alleviate the risk of left turn collisions. There is also the possibility of installing flashing LED strips or elephant's feet markings along the cycle lane to further warn motorists of straight-ahead cyclists. This measure can by facilitated by way of condition should the Board consider it appropriate.

11.5.4.19. The proposed junction design was welcomed in a number of submissions. The focus on improving pedestrians' and cyclists' experiences of interchanges and roundabouts was highlighted in one submission, e.g. simplification of junction at Christchurch. It is also recognised that separated and segregated cycleways and junction protection will provide a better and safer cycling experience for all ages and abilities and will allow buses to proceed without delay.

11.5.4.20. The potential for further improvements at junctions was suggested in submissions through avoidance of shared space pavements, and better segregation of cyclists from motor traffic at the Greenhills/ Calmount Roundabout and several other junctions. It is considered in one submission that the proposed routing for cyclists around Walkinstown Roundabout is difficult and convoluted, and a more inspired solution is needed for active travel across the Naas Road/ Long Mile Road/ Nangor Road junction. It is submitted that there are no right-turning facilities for cyclists at the South Circular Road junction.

11.5.4.21. The response by the NTA refers to the National Cycle Manual, which recognises that in some cases, shared facilities are appropriate. Shared spaces are also provided for in the new Cycle Design Manual, which now supersedes the National Cycle

Manual. Shared surfacing has only been used in specifically constrained locations within the proposed scheme, typically at junctions where there is insufficient space to provide a protected junction, thereby requiring cyclists to make turning movements via toucan crossings. It is submitted by the NTA that the provision of signage and road markings will encourage cyclists to carefully negotiate these areas such that safety of pedestrians is not compromised. I would be satisfied that shared surfacing is acceptable in limited circumstances provided other measures such as carriageway narrowing hasn't been explored first.

11.5.4.22. I agree that the proposed roundabout at the proposed Greenhills/ Calmount Roundabout may not an optimum solution for cyclists in terms of segregation and safety. The new Cycle Design Manual contains detailed design principles for good roundabout design. I propose that a condition is attached to any grant of permission stating that all junctions shall be designed in accordance with the detailed standards set out in the NTA's Cycle Design Manual, 2023 and DMURS. This should address concerns outlined in submissions that minimal to no safe separation and no clear right turn is provided for cyclists at junctions on Crumlin Road, South Circular Road, Dolphins Barn, Cork Street, Patrick Street and Christchurch.

11.5.4.23. As noted above, the proposed scheme was designed when the National Cycle Manual was operational and the new manual in now in place. This condition would also apply to Walkinstown Roundabout. However, it would appear that this roundabout has been designed in accordance with the recommended 'protected roundabout without cycle priority' in the Manual. In my opinion, Walkinstown Roundabout represents one of the greatest improvements within the proposed scheme for active travel. Dublin City Council welcomes the proposed improvements for walking and cycling at Walkinstown Roundabout and advises that specific synchronisation of the various traffic signal arms may be required to ensure bus priority and detailed design in this regard can be agreed by condition. I consider that the proposal for Walkinstown Roundabout is acceptable in the manner in which improvements to pedestrian and cyclist safety have been achieved through retrofitting rather than larger scale infrastructural works.

11.5.4.24. The other main junction where significant works are proposed is at Long Mile Road/ Naas Road/ Nangor Road. An overbridge for pedestrians and cyclists is proposed at

this junction. The gradients for approach ramps at this overbridge will require significant additional cycling or wheeling distances. For example, the journey length from the western side of New Nangor Road to Long Mile Road will be approximately 500m (approximately 150m as the crow flies). It should be noted, however, that this is a major intersection and overbridging is the best solution of pedestrian and cyclist safety and comfort. The extra distance should be measured against the likely waiting times at crossings if pedestrians/ cyclist were to cross at grade. The aesthetics of the proposed bridge was also an issue of concern; however, the NTA responded by pointing out that this is a streetscape of low sensitivity.

11.5.4.25. The potential usage of the bridge was also questioned. In response, it is pointed out that this intersection is located centrally within the City Edge lands, which will be a new urban quarter with the potential for 40,000 new homes and 75,000 jobs.

Conflict at bus stops

11.5.4.26. The proposed scheme will significantly improve the safety of cyclists passing bus stops by deflecting the cycle track behind the stop. This will negate the need for cyclists to either wait behind the bus at the stop or to continue around the outside of the stopped bus. This inevitably means that conflict at the bus stop will occur between pedestrians and cyclists.

11.5.4.27. A hierarchy of bus stops is proposed, with island stops being the preferred design, followed by a shared bus stop landing zone and then laybys. Most bus stops where there are cycle tracks along the proposed scheme appear to be the island or landing zone design. An inbound inline bus stop is proposed on Dolphin's Barn at a location where narrowing of general traffic lanes may facilitate an island bus stop arrangement. There may also be scope on the opposite side of road for a cycle track to be located behind the proposed loading bay. Similarly, parking protected cycle tracks could be installed on Cork Street opposite Brickfield Lane and Ormond Street. There are also loading bays on Patrick Street located on the inside of the cycle lane and I consider that this arrangement should be amended by condition.

11.5.4.28. There is concern within submissions that the narrow island/ landing zone bus stops place cyclists in conflict with boarding and alighting bus passengers. In response, the NTA note that island bus stops are preferred and the shared bus stop landing

zone will be installed where there are space constraints. The NTA confirm that the layout of bus stops on Clogher Road is based on the National Cycle Manual In-Line Bus Stop Option 2 adapted for segregated cycle track width of 1.5m.

11.5.4.29. The Preliminary Design Guidance Booklet illustrates the bus stop options including measures to mitigate potential cyclist and pedestrian conflicts. This includes the narrowing of the cycle track as it approaches the bus stop, yellow bar markings, ramps, tactile paving and LED warning studs. A cycle signal with pedestrian push button unit is proposed for the preferred island bus stop arrangement.

11.5.4.30. In my opinion, the signalised crossing of a 1.5m wide cycle track seems excessive. Signal poles will lead to clutter at the bus stop and there is the risk that signals will not be adhered to by both cyclists and pedestrians. I consider that zebra crossing road markings would suffice at bus stops. Notwithstanding this, it appears that signalised crossings at bus stops are preferred by disability groups. I have seen island bus stops without signalised crossings over the cycle lane in other parts of Dublin, e.g. along the Stillorgan dual carriageway. I have also seen new island bus stops with sockets installed in the event that signals need to be fitted. I recommend that a condition is attached to any grant of permission stating that the applicant shall consider the installation of signals at bus stops on a case by case basis.

11.5.4.31. I would otherwise be satisfied with the design of proposed bus stops from a cyclist and pedestrian safety perspective. The deflected cycle lane will have the effect of slowing cyclists down, and as noted above, this is becoming a more important consideration with increased faster moving personal mobility vehicles.

Cycle Lane Width and Kerb Height

11.5.4.32. The desirable minimum width for cycle tracks along the CBC is 2m and the minimum width is 1.5m. It is stated in submissions that in many cases, the width of the cycle track has been compromised at the expense of standard 3m carriageway widths There are two locations where the cycle track will reduce to 1.2m and 1.25m on Patrick Street. It is highlighted in submissions that the central median in Patrick Street could be removed in favour of expanding active travel infrastructure. In response, the NTA submit that the tree-lined median on Patrick Street is to be retained following feedback from public consultations, environmental assessment

and design development. It is also noted that localised narrowing of the cycle track below 1.5m may be necessary over very short distances to cater for local constraints (e.g. mature trees).

11.5.4.33. The treatment at pinch points should be in line with the road user hierarchy as designated within DMURS, i.e., the width of the general traffic lanes should reduce first, then the width of the cycle track should be reduced before the width of the pedestrian footpath is reduced. I have recommended above that a condition should be attached to any grant of permission stating that junctions shall be designed in compliance with the detailed standards set out in the Cycle Design Manual and DMURS. This condition can be expanded to include the wider scheme.

11.5.4.34. In my opinion kerb heights along cycle tracks are an important factor for eliminating illegal parking, particularly where a general traffic lane adjoins the cycle track. A low kerb height makes illegal parking or pulling up onto the cycle lane more tempting to motorists. The Preliminary Design Guidance Booklet proposes a kerb height of 60mm between the footpath and cycle track and 120mm between the cycle track and bus lane.

Traffic Calming

11.5.4.35. I have indicated above that the lack of segregated cycle facilities along certain sections of the CBC could be mitigated by both offline cycle tracks and online traffic calming. It will be helpful that the speed limit reduces to 30kph along Crumlin Road. It is important, however, that the design speed is also 30 kph.

11.5.4.36. As noted above, DMURS refers to self-regulation where the idea is that speed is controlled by place. A number of psychological and physical measures are set out that influence driver speed, enhance place and manage movement. Some of these measures are already in place and others could be introduced to control speed. There are sections of Crumlin Road that are relatively long and straight with good forward visibility that can encourage speeding, and this will compromise the safety and comfort of cyclists who will be sharing the road.

11.5.4.37. As stated, I consider that if the Board be minded to grant permission for the proposed development, a condition should be attached requiring the applicant to carry out a Steet Design Audit of traffic calming measures commensurate with the

intended speed limits along the sections of the proposed scheme, particularly where there are no dedicated cycle facilities. I refer to the recently released NTA document "Rapid Build Active Travel Facilities" (February 2023), which I consider the applicant should have regard to in order to consider any increase in traffic calming along these sections of the proposed scheme. This may include build-outs, chicanes, ramps, raised tables, etc. to reduce traffic speeds and volumes and to accommodate pedestrians and mixed cycling and traffic environments. In the event that the Board do not attach such a condition, traffic calming works may be completed by the Local Authority under the Roads Acts. I consider it appropriate to record my professional opinion herein that such works are preferable.

11.5.4.38. It is stated in a submission that no traffic calming is proposed along the 'quiet street' treatment on Clogher Road. I would be satisfied that traffic calming along this street may be unnecessary if the road is shared with local traffic only. It is also requested within a submission that traffic calming should occur on roads adjacent to the CBC. In my opinion, this is a matter that could be considered by the relevant local authority. The roads in question are outside the site boundary and do not therefore fall under the scope of the current planning application.

Cycle Parking

11.5.4.39. The landscaping general arrangement drawings shows the locations of proposed bike racks along the proposed scheme corridor at the junction of Main Road and Old Greenhills Road, Greenhills Road at Airton Road (two locations), Greenhills Road opposite Mayberry Road, Treepark Road (two locations), junction of Ballymount Avenue and Greenhills Road (two locations), Calmount Road (two locations), Walkinstown Roundabout (four locations), Drimnagh Road (two locations), Crumlin Road (five locations), Dean Street, Partick Street, Nicholas Street, Bunting Road (two locations), Nangor Road (11 locations), Naas Road (four locations), Walkinstown Avenue, and Long Mile Road (three locations).

11.5.4.40. In general, I would be satisfied that the proposed scheme will provide for a good level of cycle parking at appropriate locations. It should also be noted that many of the large-scale developments proposed along the CBC will contain substantial cycle parking provision. In my opinion, it is reasonable for the applicant to outline cycle

parking provision in detail as a condition of any grant of planning permission to ensure that areas of most activity are properly provided for.

11.5.5. Bus priority and infrastructure

11.5.5.1. BusConnects is first and foremost a comprehensive programme of bus priority installation and associated infrastructure along the Core Bus Corridors of Dublin City. The main purpose of the programme is to improve public transport in the main urban areas by redesigning the bus network; building new bus corridors and cycle lanes; implementing new simpler fare structure, ticketing and cashless payment systems; introducing new bus livery, bus stops, shelters and park & ride sites; and transitioning to a new zero emissions bus fleet. This section of the assessment addresses the elements of BusConnects bus programme which fall under the proposed scheme, i.e., building of the new bus corridors, bus stops and shelters.

Bus Priority

11.5.5.2. It is an aim of the proposed scheme to enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements.

11.5.5.3. From the outset, it should be noted that the proposed scheme will see the proportion of its 15.5km route increase from the present 34% with bus priority measures to 94% of the route. Bus priority in the case of the proposed scheme falls under three categories, i.e., bus lanes, bus gates and traffic signalling. Continuous bus lanes are the preferred means of achieving bus priority and most of the proposed scheme will have bus lanes on both sides of the road. However, there will be sections that will rely on signalled controlled priority and the use of bus gates. Buses will also be afforded priority at regular junctions.

11.5.5.4. Dedicated bus lanes will, for the most part, be located along the inner lane between junctions. These lanes will be used by the BusConnects services along the CBC but will also be available to taxis, coaches and bicycles. The bus lane will operate on a 24 hour basis.

11.5.5.5. Singal controlled priority will allow buses to get ahead of general traffic on single lane road sections. This typically happens where space restraints do not allow for a separate bus lane and the carriageway has to be shared with general traffic over short distances. Buses will receive a green light and general traffic will stay stopped at the signal, and when the bus passes, general traffic will be allowed to proceed. Such an arrangement is proposed at New Nangor Road (outbound), Long Mile Road (outbound), Greenhills Road (outbound), Crumlin Road (eastbound and westbound).

11.5.5.6. A bus gate is a short length of road that is exclusive to buses, taxis, cyclists and emergency vehicles. General traffic is directed by signage to divert in other directions. Bus gates are proposed on Belgard Square West between Belgard Square South and Old Blessington Road (inbound and outbound); Belgard Square West between Old Blessington Road and access to Broadfield Hall (inbound and outbound); Belgard Square East between Belgard Square North and access to ABB Belgard Road (inbound and outbound); existing bus gate retained on Blessington Road at TUD access (inbound and outbound); Old Greenhills Road at junction with R819 Greenhills Road / Bancroft Park (inbound and outbound); and Clogher Road at junction with Sundrive Road (inbound and outbound).

11.5.5.7. I would be satisfied that the proposed bus gates do not place any undue burden on existing residents and businesses along the corridor. Any minor inconvenience occurring from traffic diversion will be outweighed by the benefits of the proposed scheme with respect to improved access by active and sustainable modes. In addition, inconvenience for general traffic is an expected and necessary consequence of the requirement to promote modal shift and sustainable movement.

11.5.5.8. In general, I consider that the overall level of priority afforded to buses along the route is appropriate. Ideally, bus lanes in both directions are preferred but there are on-street limitations where this cannot occur. Adequate means of bus priority should be achieved on these sections so that bus services do not experience undue delay. The figures presented in the EIAR show that the proposed scheme will have beneficial impacts in terms of time savings and reliability for bus services. It has also been shown that there is the scope to increase the number of bus services on the route without compromising reliability. There is concern in submissions that there will not be the capacity in buses to serve the corridor, particularly with the roll out of

the City Edge project. I would highlight, however, that buses and active travel have greater movement potential along the corridor than single occupancy private cars.

11.5.5.9. Bus journey times can be affected in situations where slower moving cyclists are sharing the bus lane. I have recommended above that traffic calming measures should be included along these sections. Traffic calming should be designed so that the movement of buses is not adversely affected. It is stated in DMURS that when carrying out traffic calming works on existing streets, the first priority should be to narrow carriageways where they exceed the standards listed (3 - 3.25m for bus lanes). This will calm traffic and free up space to widen footpaths, insert cycle lanes/ tracks, provide bus lanes, street trees and on-street parking (all of which will contribute to traffic calming).

Bus stops

11.5.5.10. The main bus infrastructure to be installed along proposed scheme comprises the bus lanes, bus signals and bus gates, as described above, i.e., infrastructure to enable bus movement. The other main infrastructural provision relates to bus stops. Bus stops are typically spaced at distances of 400m apart in suburban areas and 250m apart in urban centres. Island bus stops, shared landing area bus stops, inline and layby bus stops are proposed along the CBC. Island bus stops are the preferred layout and these contain an island with shelter for bus passengers with a deflected cycle track continuing behind. In the shared landing zone arrangement, cyclists are ramped up to the footpath level where they continue through the bus stop. In urban areas, it is generally acceptable for general traffic to wait behind buses that are stopped at in-line bus stops.

11.5.5.11. The island bus stop is the preferred layout, and where space is more limited in urban areas, a shared bus stop landing zone is proposed. In particularly constrained locations, a cantilever bus shelter can be provided adjacent to the carriageway to maintain access to frontages at the back of the footpath. All bus stops will have a shelter where possible and there will be CCTV and Real Time Passenger Information (RTPI). All stops will have 160mm kerbs for ease of access for wheelchairs and buggies. Appropriate tactile kerbing will be provided to ensure that

visually impaired users are aware of crossing and access points. Push button signals to cross cycle lanes are also proposed.

11.5.5.12. There is concern with the narrow width of landing space for boarding and alighting passengers at certain bus stops and the potential for conflicts with passing cyclists. Measures will be included to slow cyclists down on the approaches to bus stops. Narrow landing areas will be used where space is limited, and pedestrians and cyclists are likely to be more conscious of each other in these situations. I consider that the benefits of all of the proposed bus stops types outweigh existing arrangements from an overall safety perspective.

11.5.5.13. In general, I consider that bus stop design, together with increased frequency of service and improved journey times, will represent the main improvements to the bus user experience under the BusConnects programme. The new bus stop infrastructure will be superior to existing infrastructure in terms of comfort, visibility, access, safety and information. Seating and shelters will provide added comfort for waiting passengers and wait times can be minimised through RTPI on screen at the stop and from mobile phone applications. Stops will generally be more visible and shelters can contain additional information such as bus timetables and route maps. Increased numbers of people using bus services and waiting at bus stops will provide “eyes on the street” type surveillance and this will have the effect of reducing anti-social behaviour.

11.5.5.14. On the whole, it can be concluded that while the proposed bus infrastructure may not be perfect, and that due to the nature of the existing limited corridor width and pinch points within the built environment, there are still locations where delay or conflicts may occur. However, this is not a BRT system, which requires continuous unbroken physical lane infrastructure. Core Bus Corridors are proposed to a consistent standard that will provide an integrated bus system.

11.5.5.15. Finally, the issue of bus lane enforcement cameras was raised in submissions. This is outside the scope of the proposed scheme, being and enforcement measure under which the Board has no jurisdiction. However, I note that NTA is exploring proposals for bus lane enforcement as set out under Measure INT20 – Enforcement of Road Traffic Laws of the Draft Greater Dublin Area Transport Strategy 2022-2042.

11.5.5.16. A number of submissions suggest the relocation of certain bus stops; however, bus stops are located in areas of activity/ access and are more or less evenly spaced in accordance with recommended standards. Relocation of a bus stop may also have knock-on impacts on the location of other stops. Having assessed their location and siting along the overall route, I am satisfied that the placing of bus stops is appropriate and acceptable.

11.5.6. **Access to commercial premises**

11.5.6.1. Access to commercial premises is a recurring issue within submissions from businesses and other organisations located along the CBC. The compulsory acquisition of land will also affect the operation of certain businesses along the route, and this is addressed in further detail in Section 14 below. This section addresses the issues raised regarding access arrangements during the construction and operational phases of the proposed scheme for deliveries, customers and staff members.

Construction Phase

11.5.6.2. Clearly, a scheme of this nature will cause disruption and inconvenience for adjoining businesses during the construction phase. The street is the main point of access and the construction phase is likely to last approximately 36 months. The main construction activities will involve site preparation and clearance works, road and street upgrades, and construction site decommissioning, including the removal of all construction facilities and equipment. Impacts will include temporary traffic diversions or lane restrictions and disruption to footways, cycleways and other areas.

11.5.6.3. Access will be maintained to adjacent businesses, residences and community facilities during the construction period. In addition, the proposed scheme will be constructed in sections and therefore businesses within each section will not be directly impacted for the full 36 months of the construction phase. A Construction Environmental Management Plan (CEMP) will be prepared for the proposed scheme, and this will contain mitigation measures to ensure that disruption and nuisance are kept to a minimum.

11.5.6.4. A Construction Traffic Management Plan (CTMP) forming part of the CEMP will identify opportunities for the maximum movement of people during the construction phase with access being maintained for emergency vehicles. Temporary traffic management measures will be included to minimise the impacts during peak periods and safe routes past works areas will be provided for pedestrians and cyclists. The NTA will liaise with local authority, An Garda Síochána and residents and businesses prior to all road closures and diversions.

11.5.6.5. In general, I consider that the construction works can be adequately managed so that significant effects on the street environment are minimised. Impacts on businesses are an inevitable consequence during construction and it is incumbent on the applicant to minimise these impacts to the greatest extent possible. I note that all temporary traffic measures to facilitate the works will be undertaken in accordance with Department of Transport's 'Traffic Signs Manual, Chapter 8 Temporary Traffic Measures and Signs for Roadworks' (DTTAS 2019a) and associated guidance. Furthermore, general traffic redistribution is not expected to be a significant issue during construction, and emergency access will be maintained for emergency vehicles along the proposed scheme throughout the construction phase. This is particularly important given the presence of substantial health facilities along the CBC.

11.5.6.6. Any impact during construction will therefore only be temporary, affecting commercial premises along the route for a relatively short period of time.

Operational Phase

11.5.6.7. The main objections from businesses along the proposed scheme relates to impacts during the operation phase. Tesco Ireland is concerned that delivery arrangements to its store on Dolphin's Barn will be unduly affected owing the proposed removal of a loading bay from outside the shop. In response, the NTA submit that the loading bay is not required to achieve the proposed objectives of the proposed scheme, and furthermore, the Dolphin's Barn Part 8 Public Realm Improvement Plan does not allow for loading bays at this location. I would be in agreement that retention of the loading bay on Dolphins Barn outside Tesco could adversely impact on the quality of service and safety of cyclists along this location. Tesco have submitted an

alternative loading bay proposal to the south-west showing the cycle track diverted behind. I recommend that this proposal is adopted by way of condition.

11.5.6.8. Dublin City Council emphasise that the removal of kerbside space for loading and servicing is crucial for the operation of the city and achievement of the 15 minute city where people can walk and cycle to shops and services. A condition is recommended that any alteration to kerbside spaces such as pay and display scheme/ loading/ line markings/ signage pole shall be agreed in writing with the Planning Authority to ensure adequate loading and set down is provided. I consider that these issues can be addressed between the applicant and local authority at detailed design stage. I have nonetheless recommended the attachment of a condition relating specifically to loading bays on Patrick Street and Dolphin's Barn.

11.5.6.9. A number of businesses object to the new road proposals that would result in a section of Greenhills Road being downgraded to local road status. In my opinion, business along this section of Greenhills Road would have been well aware of the proposals granted under the Part 8 scheme, which would have diverted traffic in a similar manner. The proposed scheme will align with the principles of the Part 8 scheme and will have no material difference in terms of access. Indeed, it is likely that the proposed scheme will result in an overall improvement in access for businesses and their staff and customers along this section of Greenhills Road through general traffic reduction and an improved choice of travel modes.

11.5.6.10. Other businesses/ facilities that object to the potential impacts of the proposed scheme on their operation include Fairfield Inn Ltd (Cherry Tree Pub), Killeen Motor Group, Blackwin Ltd, Calmount Holding Ltd., Air Products Ireland Limited, Goldsmith Lot Ltd. (Spar), Herbert Holdings, JJ Smith Builders, Maxol Ltd., Musgrave Operating Partners Ltd., MXF Properties Ireland Ltd. (primary care centre), Permanent TSB, Regent Palace Management, SBS Holdings, Woodies DIY, AA Tyremaster Ltd., St. James's Gaels An Caisleann, and St. Mary's National School.

11.5.6.11. Issues raised in many of these submissions are addressed in Section 14 below in response to CPO submissions. A number of submissions on the planning application were also submitted under the concurrent CPO application.

11.5.6.12. A submission was received by Blackwin Ltd. in relation to a planning application to develop lands at Calmount Road and Ballymount Avenue (Reg. Ref: SD22A/0099). There is concern regarding the impact on the operational performance of the Calmount Road/ Ballymount Avenue junction considering the land uses (warehouse & logistics) and associated HGVs, together with the diversion of traffic from closure of Greenhills Road. An amended proposal is put forward within the submission which includes an increase in the number of approach lanes and flare lengths on the Ballymount Avenue and Calmount Road arms of the junction.

11.5.6.13. The NTA submitted in response that the conversion of the Ballymount Avenue / Calmount Road junction from a roundabout to a signalised junction allows for more control of movements through the junction, enabling the busiest arms during peak periods to be prioritised. It is also highlighted that the extensive traffic modelling exercise has not identified the need for any additional traffic lanes at this junction, which will operate at capacity in AM peak; it will be congested for traffic but will be safer for pedestrians and cyclists and buses will have priority through the junction. In my opinion, the proposed junction layout satisfies a number of the main objectives of the proposed scheme to prioritise bus movements and provide safe cycle infrastructure. The proposal in the submission introduces extra road width and a shift in priority towards general traffic. I consider to be inappropriate at a junction accessing the “primary radial” cycle route, when traffic modelling has demonstrated that the junction operates effectively for sustainable modes.

11.5.6.14. A number of other business are concerned at the loss of parking outside their businesses. I would hold the view that this is a Core Bus Corridor and main thoroughfare, and car parking should be placed at the bottom of the hierarchy as far as street space allocation is concerned.

11.5.6.15. Other issues have been raised along the CBC concerning vehicular access. I consider that these are issues that can be addressed between the applicant and the parties on an ongoing basis. The NTA has indicated that it will continue to liaise with relevant bodies and will work with developers subject to the conclusion of their planning process.

11.5.6.16. On the whole, I recognise that the streetscape is being radically altered and businesses along CBC are amongst those who are likely to the most affected by the proposals. Businesses are critical to street life and must be facilitated as best as possible through construction and operational stages. Notwithstanding this, businesses can't assume ownership of public space to the front and there is no right to on-street parking. Furthermore, delivery arrangements should be facilitated without impacting on the operation of bus services. In my opinion, adequate loading bays are mostly proposed to serve the CBC and businesses should be expected more often to load from nearby side streets to avoid disruption on the main thoroughfare. On balance, whilst businesses and other facilities along the CBC will experience a general reduction of vehicular access for parking and deliveries, this will be outweighed by the benefits to these businesses and facilities from an improved public realm and better footpaths, as well as improved public transport access.

11.5.7. **Private cars**

11.5.7.1. DMURS sets out street/ road user priorities for designers to consider. Pedestrians should be afforded the higher priority, followed by cyclists and then public transport. Private motor vehicles should be placed at the bottom of the user hierarchy. However, this should not be interpreted as an anti-car stance. It is recognised that people will always be attracted to cars where they are a convenient and flexible option and for many users, and may be the only viable option for medium to longer distance journeys.

11.5.7.2. I have indicated above that it is my considered opinion that the proposed scheme may have gone further in reducing the role of the private car in the overall transport hierarchy. I consider that road space reallocation could have been increased but given the urgency of climate change, I have concluded that the proposed scheme as presented will go a long way towards the promotion of compact growth and sustainable movement. I have put forward the recommendation that a Street Design Audit of traffic calming measures along certain sections should instead be considered to slow traffic and improve pedestrian and cyclist safety.

11.5.7.3. In my opinion, traffic calming is all the more important in this case given that the level of access for private motor vehicles has been largely retained along the CBC. My concern is that the attraction of the car will remain because the proposed scheme may not inconvenience drivers to an extent that modal shift becomes a realistic option. I acknowledge that the private car may be the only viable option for some for medium to longer distance journeys. However, CSO figures show that more than half of travellers use the car for journeys under 2km. If drivers are limited to a realistic speed limit of 30 kph and 50 kph they may begin to realise that alternative modes, particular with the emergence of personal mobility vehicles, are just as attractive.

11.5.7.4. I have highlighted above that the issue of parking and servicing along the CBC can be addressed by way of condition. Control and limitation of car parking is a measure that can be successful in encouraging modal shift to sustainable modes. An overall reduction in car parking provision of approximately 534 spaces is proposed, which is not substantial when compared to the remaining car parking provision along the CBC and on adjacent streets. Therefore, those wishing for car parking levels to be maintained will not therefore be greatly inconvenienced. In addition, the significant improvements to walking, cycling and bus facilities encouraging use of sustainable modes will reduce demand for private parking.

11.5.7.5. Other specific issues have been raised in submissions relating to private car use. A number of residents are concerned at the impact of diverted traffic on other roads arising from general traffic restrictions on the CBC itself and from the 'quiet street' treatment on Clogher Road. In response, the NTA point out that the majority of junctions will continue to operate well within capacity in AM peak with the proposed scheme in place. Many junctions with capacity issues would operate with a V/C ratio of above 100% in both the Do Something and Do Nothing scenarios. The conclusion is reached in the EIAR that the potential impact of redistributed traffic on the surrounding road network will be slight and negative. Reference is made to Section 5.4.2 of DMURS (2019), which recognises that a certain level of traffic congestion is an inevitable feature within urban networks and junctions may have to operate at saturation levels for short periods of time during the peak hours of the day. It is pointed out in submissions that many smaller alternative roads are unsuitable for

increased traffic. This in itself, together with 30 kph speed limits and on-street parking, will act as deterrents for 'rat-running'. Traffic calming on these streets would be outside the remit of the proposed scheme.

11.5.7.6. Questions are raised within submissions regarding the traffic modelling carried out for the proposed scheme. The Transport Impact Assessment appended to the EIAR focuses on the movement of people rather than the movement of vehicles and I have concluded in the EIA that the assessment approach is robust and appropriate for modelling the future impacts of the proposed scheme. I consider that the information presented in the EIAR and associated appendices gives a good representation of existing and future people movement scenarios along the corridor for the opening year and into the future.

11.5.7.7. South Dublin County Council submit that the design of New Nangor Road/ Oak Road/ Park West Avenue junction/ route will require more extensive traffic in future. The NTA stated in response that this junction has been designed on the basis of the future transport demand for the 2028 and 2043 assessment years, population growth of 11% up to 2028 and 25% by 2043, and employment growth by 22% by 2028 and 49% by 2043. It is submitted that the proposal is the optimum layout that balances competing demands by enhancing bus priority, improving pedestrian and cyclist infrastructure whilst still retaining appropriate capacity for the forecast level of general traffic. I would be in agreement that the proposed layout is primarily a sustainable transport solution and is appropriate in this regard.

11.5.7.8. In general, I consider that the impacts on private car users have been kept to a minimum and this is perhaps indicative of the time when the proposed scheme was designed. Notwithstanding, I do not consider that the lack of curtailment of the private car represents grounds for refusing the proposed scheme. The proposed bus, cycle and pedestrian infrastructure supplemented by traffic calming, should be of a quality to encourage a modal shift away from the private car and this should satisfy what is essentially the main of objective of the BusConnects programme.

11.6. Impact on residential amenity

11.6.1. A scheme of this nature has the potential to impact on residential amenity, most notably through its construction phase. The effects of noise, air quality and construction traffic are assessed in the EIA and appropriate mitigation measures are put forward to minimise impacts on population and human health. It is concluded that the overall impact of the proposed scheme will be adverse and short term during the construction phase and generally positive during the operational phase. Benefits to residential amenity will occur from improved air quality and noise standards, and from a reduction in community severance from less busy roads.

11.6.2. Clearly, the most significant impact on residential amenity will be the permanent acquisition of residential land for the operation of the proposed scheme and temporary acquisition of residential land during construction. The proposal will therefore impact on the affected landowners. In addition, the proposed scheme will impact on existing access arrangements along the CBC.

11.6.3. In total, approximately 56.3 hectares of land will be permanently acquired, of which 52.9 hectares is publicly owned. An additional 6.4 hectares will be temporarily acquired to allow for construction of boundary treatments, planting, construction compounds and surface tie in work. Approximately 2.5 hectares of this land is currently in public ownership.

11.6.4. One of the main issues outlined in submissions concerning residential amenity relates to the impact on the existing public green space from the proposed sustainable transport link along Birchview Avenue, Treepark Road and Parkview. A total of 14 submissions were received, with the main issues relating to the loss of public green space, loss of privacy, access to amenities, visual impacts and anti-social impacts from bus stop relocation.

11.6.5. The proposed sustainable road link is a Road Objective in the South Dublin County Development Plan and is the previously approved alignment of the Part 8 proposal for the construction of a 13m wide and 660m long carriageway, including bus lanes in each direction. The proposed scheme will have a reduced carriageway cross section of 6m compared to the 13m carriageway width under the Part 8 approval. This will increase offset distances to adjacent residential properties. In addition, the

proposed scheme will generally reduce traffic levels along the CBC, with associated benefits of reduced noise and air quality and improved pedestrian and cyclist safety. The proposed scheme at this location will also include signalised toucan crossings and segregated cycle tracks. Traffic noise levels associated with the reconfigured sustainable link road were determined in the EIAR to be not significant to slight at the closest noise sensitive locations.

11.6.6. The number of passing buses along the CBC is likely to increase but I do not consider this to be a privacy issue and there will only be short and fleeting glimpses from passengers in the upper floors of buses towards properties along the new sustainable transport route. Bus stops will provide more "eyes on the street" and ultimately, the proposed scheme is unlikely to result in any increase in crime and anti-social behaviour. The aim to achieve a bus stop spacing of 400m in suburban locations, and 250m in urban centres.

11.6.7. Other areas of green space will be acquired temporarily at Bancroft Park, Bunting Park, at the junction of Crumlin Road/ St. Mary's Road, at the junction of Rafter's Road and Crumlin Road . The boundary of Tymon Park will be impacted from road widening. These areas will be reinstated/ enhanced following completion of the works. The NTA has demonstrated that the proposed construction compound at Bunting Park will not impact on the usability of the GAA pitch, as the compound will be approximately 10m from the playing area. There is sufficient area in Bunting Park for match playing and training purposes.

11.6.8. Road widening along Walkinstown Road will impact on 34 residential properties along the western side and 20 residential properties on the eastern side. A number of residents along this road have concerns relating to access and boundary treatment. In response, the NTA submits that there will be minimal land take and sufficient space will be maintained for a car to be parked to the front of the affected properties. Property frontages will be reinstated on a like for like basis.

11.6.9. I consider that the proposed road widening along Walkinstown Road will not give rise to significant impacts on adjoining residential amenity during the operational phase of the proposed scheme. The impacts on residential amenity that will occur, will be offset by a reduction in traffic and boundary reinstatement works. The loss of land

and the setting back of the boundary is addressed further in the CPO section of this report. Objections to the CPO element of the proposed scheme have been submitted on the basis of residential amenity impacts. For the most part, the land to be permanently acquired consists of narrow strips and temporary acquisitions are required behind these areas. The issue of property devaluation is a matter for the arbitration process.

11.6.10. I would also be of the opinion that the proposed works during the construction phase will not affect the amenity of local residents to a significant degree. As noted in the EIA and AA sections below, mitigation measures will be implemented during the construction phase of the proposed scheme. The NTA confirm that local arrangements will be made on a case by case basis to maintain continued access to homes and businesses affected by works.

11.6.11. There are residential amenity related objections to the CPO for reasons concerning access, boundary destruction and removal of trees. The NTA confirm that road closures and diversions, that will need to be carried out during the construction phase, will take into consideration the impact on road users, residents, businesses, etc., and will be in consultation with the local authority and An Garda Siochana. Access will be maintained for emergency vehicles along the proposed scheme throughout the construction phase. Boundaries will be reinstated on a like for like basis and once established, will afford local residents a similar protection from the noise, privacy and security impacts from the main road.

11.6.12. As noted, the Compulsory Purchase Order is assessed further under Section 14 below under the four criteria of Development Plan compliance; community need; suitability of land to meet that need; and alternatives. From a residential amenity perspective, however, I consider that the lands to be temporarily and permanently acquired will have no significant impact on the residents of the properties in question.

11.6.13. On balance, I consider that the proposed scheme will have positive impacts on residential amenity through the general improvement to the street environment. Residential areas along the CBC will then become healthier and better places to live. This substantially outweighs the negative impacts of the proposed scheme which will mostly be short term and concentrated in the construction phase. Over time, as

landscaping matures, any adverse impacts during the operational phase will become less perceptible.

11.7. Ecological impacts

11.7.1. The ecological impacts of the proposed scheme are addressed in the Biodiversity section of the EIA in Section 12.4.4 below. In addition, the Appropriate Assessment in Section 13 addresses the effects of the proposal on European sites. Potential impacts on biodiversity could occur from vegetation and tree removal; construction and earthworks; drainage and additional silt/ pollutant release into drainage network; lighting during construction and operation; noise and vibration; and invasive species.

11.7.2. However, it is concluded in the EIA that, subject to conditions, no significant direct, indirect or cumulative adverse effects on water quality, habitats and species are likely to arise. Mitigation measures will be put in place to protect the ecological integrity of the site during the construction phase. It has also been ascertained in the Appropriate Assessment that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of any European site in the zone of influence, in view of these sites' Conservation Objectives. I would be satisfied that the overall ecological surveying effort has properly informed the environmental assessment of the proposed scheme.

11.7.3. The main issues raised in submissions relating to biodiversity concerns the loss of trees and vegetation. However, this will be compensated through the planting of 1,055 trees, 590m of hedgerow, 20,560 sq.m. of species rich grasslands, 3,450 sq.m. of ornamental planting, 5,525 sq.m. of native planting and 43,140 sq.m. of amenity grassland planting. These are illustrated on the landscaping drawings accompanying the application. As required by the Department of Housing, Local Government and Heritage, any clearance of trees and shrubs during the main bird breeding season from March to August inclusive should be avoided. It is also recommended by the Department that a finalised CEMP should be submitted, along with a Calcicole Plant Communities Conservation Plan. This should be confirmed by way of condition.

11.7.4. Overall, the impact of the proposed scheme on certain aspects of biodiversity is unavoidable. However, the proposed works will mostly occur within the existing built-up area and therefore any species would be habituated to human disturbance. Additional planting will compensate for vegetation removal, which will take place outside the bird nesting season. Measures will also be put in place to avoid mobilisation of sedimentary material during construction and to prevent the spread of invasive species. There will be beneficial impacts on surface water quality due to the inclusion of SuDS measures.

11.8. Impacts on Built Heritage

11.8.1. Impacts on built heritage are addressed in detail under Section 12.4.7 of the EIA covering cultural heritage and the landscape. The proposed scheme continues through the Historic City of Dublin and there is significant architectural heritage, particularly at its north-eastern end through the Thomas Street Architectural Conservation Area and along Patrick Street and Nicholas Street.

11.8.2. Notwithstanding this, and as noted above, the proposed scheme does not contain many up-standing structures as such, apart from proposed bridges, signage and bus shelters, and therefore most construction activity will affect the surface of the street only. Surface works, and in particular improvements to the public realm and traffic calming, will allow for greater appreciation of the surrounding built heritage, particularly where the CBC passes Architectural Conservation Areas at Tallaght Village, Crumlin Village and Thomas Street & Environs.

11.8.3. Dublin City Council Conservation Section highlight that the key impacts in relation to architectural heritage include those relating to protected structures and their setting during construction works; impact on former Ardscoil Éanna necessitating removal of boundary wall; the proposed bus shelter at St. Patrick's Park in proximity to the cathedral; the new location for the bus shelter at St. Mary's Church of Ireland Church; impact on Crumlin Health Centre necessitating removal of front boundary wall; protection of NIAH structures in close proximity to construction works; impacts on Thomas Street ACA and Crumlin Village ACA, conservation areas, Z2 and Z8 zonings, and industrial heritage sites; potential impact on paving, lamp posts, other street furniture/ finishes; proposed tree removal and provision of new trees;

boundary treatments; cycle lanes (high quality surface in lieu of red tarmac near heritage features); rationalisation of signage across the CBC to reduce visual clutter; and mitigating of the visual impact of bus stops/ shelters/ and information posts near heritage features and associated treatment of kerbing and paving.

11.8.4. It is recognised by Dublin City Council that a comprehensive assessment on architectural heritage, streetscape and the urban environment has been submitted as part of the EIAR and the proposed mitigation measures across the scheme is generally welcomed. In addition, the Inventory of Architectural Heritage Sites provides a written and photographic, importance rating and sensitivity rating for all heritage features, which is considered to be comprehensive and accurate.

11.8.5. South Dublin County Council submit that indirect physical construction phase impacts are anticipated in three locations where protected structures of national importance and high sensitivity share boundaries with the proposed scheme, including St. Maelruain's Church. It is requested that a safety statement should be completed detailing how boundaries will be safeguarded with approval of Council Architectural Conservation Officer.

11.8.6. Dublin City Council also recommends that the proposed works should take into account any areas that contain historic stone setts and paving/ kerbing and all practicable measures should be taken to avoid loss of or damage to historic materials and features. Mitigation for surfaces will include retention of the various kerb stones and their integration into the proposed new paving design. Reinstatement/ recording will be undertaken under the supervision of appropriate architectural heritage specialist. I consider these measures to be satisfactory for the protection of heritage features. Mitigation measures will be also implemented to protect adjoining heritage features and works will be carried out in accordance with "Methodology for Works Affecting Sensitive and Historic Fabric" set out in Volume 4 of this EIAR.

11.8.7. I consider that a condition should be attached to any grant of permission requiring all works at or near protected structures, and other structures of cultural, historic or architectural heritage interest to be monitored and recorded by an Architectural Heritage Specialist during the course of construction works. Furthermore, Re-

instatement Method Statements and the final design of bus stops within Architectural Conservation Areas should be submitted to the planning authorities for written agreement.

11.8.8. In general, I consider that the proposed scheme can be developed without incurring significant impacts on individual heritage structures along the CBC. In a wider sense, the proposed scheme will also present the opportunity to enhance the setting of the significant architectural heritage along the route. A better overall appreciation of the heritage value of the entire corridor will be gained through increased active travel, public transport usage and public realm improvements. High traffic volumes have the effect of dominating the streetscape to the detriment of the people on the street and their appreciation of heritage features. Reduced traffic volumes will allow people to view the streetscape in quieter and safer surroundings. It should also be noted that motorists on a street are focused primarily on the road in front of them. Fewer people in cars will also mean fewer people passing through unable to view their surroundings.

11.8.9. I am therefore satisfied that the proposed CBC will have a limited and acceptable impact on the built heritage of the corridor and immediate area.

11.9. Consultation

11.9.1. A submission on the proposed scheme contends that the consultation process has been inadequate for a project of this complexity and is not consistent with the many provisions of the Aarhus Convention. It is submitted that further consultation is warranted along with the holding of an oral hearing.

11.9.2. Following my recommendation, the Board decided that the holding of an oral hearing was not required in this case. It was decided that there is sufficient written evidence on file to enable an assessment of issues raised. The Board also decided to invite further submissions on the NTA's response to submissions received pursuant to Section 217B of the Planning and Development Act 2000, (as amended). It should be noted that the holding of hearings is a discretionary function of the Board.

11.9.3. A total of 20 submissions were received on the NTA's responses to the issues raised by objectors and within submissions. From a consultation perspective, there were

objections to the time given for responses, as well as the decision itself not to hold an oral hearing. It is considered by certain parties that no detailed design is available and there will be no opportunity to engage with the NTA.

11.9.4. From the outset, it should be noted that three rounds of non-statutory consultation were held, and a number of consultation tools were used, including a dedicated website, public information events, digital channels, traditional published material, press and radio, outdoor advertising, presentations, infographics and virtual formats. Design alternatives were examined during the different phases of public consultation and route alternatives were considered during the design development of the proposed scheme and informed by public consultation and survey data. The NTA intend to continue collaboration in advance of, and during, the subsequent construction stage. Construction works will therefore be carried in consultation with local residents.

11.9.5. The statutory process has made available for public review all application information as set out in legislation, as well as allowing for submissions in relation to the proposals to the Board. All owners as per Land Registry are set out in the CPO schedule, and site notices were erected and newspaper notices published. Information packs were also sent out to all recorded interested parties.

11.9.6. Overall, I am satisfied that extensive public consultation and stakeholder engagement was undertaken. The applicant has clearly engaged with all third parties, residents, businesses, community groups and other organisations and has amended the scheme accordingly where it has been feasible to do so and in response to concerns raised. I am also satisfied with the level of clarity provided within application and statutory consultation documentation and consider that the applicant has complied with the requirements of the Aarhus Convention in its relevance to the statutory process and note that such requirements are not relative to any non-statutory consultation which is carried out at the discretion of the applicant.

11.10. Other issues raised in Submissions

11.10.1. This final section of the planning assessment addresses any other specific issues that were raised in submissions or that remain outstanding.

11.10.2. It is recommended that, wherever possible, cycle lanes should be extended to connect with other cycle lanes. It is also submitted that BusConnects type protected junctions have not be used at locations throughout. Overall, junctions will generally improve their Level of Service rating for pedestrians and cyclists and I consider this to be satisfactory. Reference is made in submissions to certain locations that do not fall within the scope of the proposed scheme.

11.10.3. It is submitted that many 3 and 4-way junctions are missing pedestrian crossings entirely on one or more arms, meaning that pedestrians may have to wait for three lights or more. I recommend that a condition is attached to any grant of permission stating that all junctions along the CBC shall be in compliance with the requirement of DMURS and the Cycle Design Manual, 2023.

11.10.4. Issues raised relating to the tying in with existing development, timing of construction works, drainage arrangements, taking in charge, materials and surfacing, public lighting, green infrastructure, boundary replacement, etc. can be agreed by way of condition or at detailed design stage between relevant parties.

12.0 Environmental Impact Assessment

12.1. Introduction

12.1.1. Section 50(1)(a) of the Roads Act,1993 sets out the forms of road development that require the preparation of an EIAR. This includes the construction of a motorway, busway or service area and any prescribed type of proposed road development consisting of the construction of a proposed public road or the improvement of an existing public road.

12.1.2. Article 8 of the Roads Regulations, 1994 sets out the prescribed types of proposed road for the above purposes and includes the construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four

or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area, or the construction of a new bridge or tunnel which would be 100 metres or more in length.

12.1.3. The proposed scheme meets the threshold set out in Article 8 in that it includes such a realignment and / or widening of an existing road of four or more lanes, and more than 500 metres in length in an urban area. An Environmental Impact Assessment Report (EIAR) has therefore been prepared on behalf of National Transport Authority for the proposed Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme dated April 2023.

12.1.4. Directive 2014/52/EU amending the 2011 EIA Directive was transposed into Irish legislation on 1st September 2018 under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations, 2018. This application for approval was received by the Board after this date and is assessed under the provisions of the new Directive.

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

- Positive long term impacts on population and human health through facilitation of improved pedestrian and cyclist safety, faster and more reliable bus services, reduced traffic congestion, improved air quality and noise reduction, improved road/ street safety, more social interaction and positive accessibility and amenity impacts for community areas.
- Adverse long-term impacts on population and human health from the temporary and permanent acquisition of land.
- Adverse impacts on biodiversity from unavoidable removal of habitat.

- Positive long term impacts on climate through removal of approximately 18,420 and 44,230 car trips per weekday from the road network in 2028 and 2043 respectively and associated reduction in CO_2 emissions.
- Positive impacts on traffic and transport by maximising the capacity of the proposed scheme to move more people by sustainable modes, whilst also providing for necessary general traffic.

12.1.6. These issues are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation including conditions. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the applicant, adequately identifies and describes the direct and indirect effects of the proposed development on the environment, and therefore complies with article 94 of the Planning and Development Regulations 2000, as amended. I am also satisfied that all the information is up to date for the purposes of EIA.

12.2. EIAR Content and Structure

12.2.1. The EIAR is presented in four volumes comprising Volume 1: The Non-Technical Summary; Volume 2: The Main Environmental Impact Assessment Report; Volume 3: Figures and Volume 4: Appendices. In general, I consider that the content and scope of the EIAR is acceptable and in compliance with the EIAR Directive and the Planning and Development Regulations, 2001 (as amended).

12.2.2. The non-technical summary gives a concise synopsis of the EIAR and is written in language that can be easily understood. I am satisfied that the EIAR adequately describes the proposed development to include information on the site, its design and its size. The applicant has also carried out an assessment of reasonable alternatives relevant to the proposed development and its specific characteristics. A baseline scenario with and without the proposed development is assessed and a description of the factors likely to be significantly affected by the proposed development are set out, together with any direct, indirect, secondary, cumulative, transboundary, and short-long term effects of the proposed development. A

description of forecasting methods including any difficulties encountered and the main uncertainties, as well as measures envisaged to avoid, prevent, reduce or off-set significant adverse effects and any monitoring arrangements are included for both construction and operational phases. The vulnerability to risk of major accidents is also described, along with any measures to prevent or mitigate the significant adverse effects on the environment. Details of consultations are included and there is an adequate list of experts who contributed to the EIAR.

12.2.3. Overall, I am satisfied that the information provided is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment.

12.3. Reasonable alternatives

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

12.3.2. Chapter 3 of the EIAR considers a range of alternatives at three levels comprising strategic alternatives, particularly with regard to the GDA Transport Strategy, route alternatives and then design alternatives, incorporating detailed local level design development.

12.3.3. At a strategic level, the EIAR considers the BRT, light rail, metro, heavy rail, demand management and technological alternatives. All the Core Bus Corridor infrastructure works will be developed to provide a BRT level of service. BRT corridors were investigated within a feasibility study in 2012; however, the level of differentiation between BRT corridors and Core Bus Corridors would be limited and it was decided that all corridors should be developed to a consistent standard in the interests of coherency and the provision of a unified integrated bus system. In addition, BRT requires continuous unbroken physical lane infrastructure, and this would involve significantly more land take and demolition. Bus priority can instead be achieved on Core Bus Corridors through signal-controlled priority at pinch points.

12.3.4. The light rail alternative would generally be appropriate to cater for demand of 3,000 to 7,000 passengers per hour in each direction and bus-based transport would cater for up to 4,000 passengers per hour in each direction. It was concluded that a bus based system would be complemented by enhancing the capacity of the Luas Red Line through the provision of extra rolling stock. There would be insufficient demand to justify the provision of an additional light rail alternative given the low to medium density of development along the corridor. Any light rail alternative would also be more impactful in environmental terms.

12.3.5. Metro systems are generally designed for peak hour passenger numbers exceeding 7,000 passengers per hour in each direction. This solution would not be economically or environmentally justified along this corridor based on likely passenger use and construction impacts. Furthermore, it is considered that metro would require residual bus and cycle infrastructure along the route of the proposed scheme. Heavy rail was discounted as it is usually designed to carry in excess of 10,000 passengers per hour per direction and would also require significant property acquisition and building demolition. A high quality bus-based transport system would also supplement the fast, high frequency services to Hazelhatch on the proposed Dart Kildare Line under the Dart+ programme, thus forming part of the proposed public transport solution along the corridor of the proposed scheme.

12.3.6. A demand management alternative which discourages travel by car can take many forms such as restriction of car movement, parking restrictions or fiscal measures to an extent that alternative modes become more attractive. However, it is noted in the EIAR that the existing public transport system in Dublin does not have sufficient capacity to cater for large volumes of additional users. The BusConnects programme, together with other programmes (Dart+, Luas & Metro), will significantly increase capacity and allow for the introduction of major demand management measures. The provision of greatly enhanced cycle infrastructure will also cater for greater cycling numbers which can also assist with demand management measures; however, demand management measures would not obviate the need to develop such infrastructure along the proposed scheme, nor the need to develop additional bus infrastructure.

12.3.7. In terms of technological alternatives, it is highlighted that congestion is not reducing despite the advancements in road-user technology. The shift to electric buses will reduce noise and air-quality impacts and longer distance cycling is increasing in attractiveness due to electric bikes. This alternative will only be limited to a few if cycling infrastructure is not improved. The need to improve the overall bus system will also remain and there is no evidence that technological advancements will replace the need for mass transit.

12.3.8. Route alternatives were examined during the iterative design of the proposed scheme that was informed by feedback from public consultation. Environmental aspects were also considered during the development of the preferred route option. The Feasibility and Options Report identified an Emerging Preferred Route which went out to public consultation. A “spider’s web” of potential route options for the four main sections of the Greenhills to City Centre route and three main sections of the Clondalkin to Drimnagh route were compared against one another using a detailed multi-criteria analysis in accordance with “Common Appraisal Framework for Transport Projects and Programmes” (Department of Transport). This stage of the assessment also considered engineering constraints, high-level environmental constraints and an analysis of population and employment catchments.

12.3.9. A more detailed qualitative and quantitative second stage assessment took place under assessment criteria that included economy, integration, accessibility and social inclusion, safety and environment. Different options were assessed for each of the sections along the route. Each of the four Greenhills to City Centre CBC main sections was divided into sub-sections.

12.3.10. The first main section is between Tallaght and the M50. Only one option was considered for the first sub-section of this section between Cookstown Way and Belgard Road (R113). Four options for the second subsection were considered along Main Street and onto Old Greenhills Road cul de sac (BG1); through TUD Tallaght (BG2); along Airton Road (BG3); and along Mayberry Road. Route Option BG2 was brought forward into the Emerging Preferred Route for the Tallaght area due to its comparatively low capital cost, coupled with the opportunity for journey time reliability and bus service efficiency, and the large residential and student catchment. Two viable options were taken forward for the third subsection along the

existing Greenhills Road (PV1) and along the green area between Treepark Road and Parkview. Option PV2 was brought into the Emerging Preferred Route as it delivers high quality bus and cycle facilities on road links included as objectives in the Development Plan. The fourth subsection is a fixed route between Parkview and Ballymount Road Upper where only a single option is identified. This includes a 3m shared pedestrian / cycle facility on each side of the M50 overpass.

12.3.11. The second main section is between the city side of the M50 and Drimnagh Road. Three options for the first subsection were examined along the Greenhills Road to Walkinstown Roundabout (BW1); to Ballymount Avenue via a new link and Calmount Road, with Greenhills Road closed to through traffic (BW1); and to Ballymount Avenue via a new link and Calmount Road, with a bus gate provided at the Greenhills Road/ Calmount Road junction (BW3). Route option BW2 is preferred because it delivers high quality cycle facilities and new road links which are included in the Development Plan, as well as the downgrading of Greenhills Road, which is more suited to its alignment and geometry. The second subsection comprises Walkinstown Roundabout where six options were assessed (3 no. maintaining the roundabout and 3 no. signalised junctions). The chosen option (WRB1, dual lane roundabout), allows good bus lane provision, provides good facilities for pedestrians and cyclists, requires no land take and provides additional public space, and is considerably cheaper than as signalised junction option. Three options were examined for the third subsection to include Walkinstown Road (WC1), Bunting Road (WC2) and a combination (WC3). The chosen option (WC1b) delivers end-to-end bus lanes and high quality cycle facilities along Drimnagh Road and impacts less on properties compared to other options.

12.3.12. The third main section is from Crumlin to the Grand Canal. Three options were considered for the first subsection along Crumlin Road (CG1), via Kildare Road and Sundrive Road (CG2), and inbound Crumlin Road / outbound Kildare Road and Sundrive Road (CG3). The chosen Option CG1b offers bus lanes in each direction on Crumlin Road and adjacent cycle lanes along Kildare Road/ Clogher Road, which will delivers end to end bus lanes, and high quality cycle facilities along a parallel route. The second subsection comprises a fixed section on Crumlin Road between

the junction with Sundrive Road and Dolphin Road, which remains largely as per the existing arrangement.

12.3.13. The fourth main section is between the Grand Canal and Patrick Street/ Nicholas Street. Most of the route is a fixed section between the Grand Canal and Patrick Street running along Dolphin's Barn Street, Cork Street and Dean Street. Two route options were considered for Patrick Street/ Nicholas Street (GC1) and Patrick Street/ Nicholas Street inbound and Werburgh Street, Bride Street and Kevin Street Upper outbound. Route option GC1 was chosen for the city centre area as it provides better facilities for cyclists; serves good residential and employment catchments; provides good legibility for both north and southbound bus users; and serves a large number of key trip attractors.

12.3.14. The route options assessment for the Clondalkin to City Centre corridor considers four options for the western section of the proposed scheme. Option S2-1 is via Old Nangor Road, Main Street, Monastery Road and Naas Road; Option S2-2 is via Fonthill Road South and Naas Road; Option S2-3 is via the R134 New Nangor Road; and Option S2-4 is via Ninth Lock Road, Orchard Road, Watery Lane and the R134 New Nangor Road. Option 2-3 was the chosen preferred route as it delivers end to end bus lanes, serves a high level of residential and employment catchments, provides a variety of cycle facilities and public transport integration opportunities, and would improve road safety.

12.3.15. Four options were considered for the next section to include Option S3-1 via R110 Long Mile Road – R110 Crumlin Road – Dolphins Barn – R110 St. Luke's Avenue – Dean Street – Patrick Street; Option S3-2:1 via R810 Naas Road – Tyrconnell Road – Inchicore Road – R811 South Circular Road - Old Kilmainham – James's Street – Thomas Street; Option S3-2:2 via R810 Naas R Road – Tyrconnell Road – Inchicore Road /Emmet Road - R811 South Circular Road - Old Kilmainham – James's Street – Thomas Street; and Option S3-2:3 via R810 Naas Road – Tyrconnell Road – Emmet Road - Old Kilmainham – James's Street – Thomas Street. The first route (Option 3-1) was chosen as the Emerging Preferred Route due to its cost effectiveness, higher levels of bus priority, catchments, integration and variety of cycle facilities.

12.3.16. The Emerging Preferred Route was based on the Greenhills to City Centre CBC and the Clondalkin to Drimnagh CBC. Public consultation on the Emerging Preferred Route took place and feedback was considered in the further development of the scheme to inform a draft Preferred Route Option. The draft PRO proposed a number of amendments to include a bus interchange on Belgard Square North; route alteration through Tallaght village rather than TUD Tallaght; a segregated 2-way cycle track around Walkinstown Roundabout; closure of Clonard Road and Bangor Drive junctions; alternative cycle route on Kildare Road and Clogher Road; and provision of an overbridge at Naas Road / Long Mile Road junction. The draft PRO was published and following another round of public consultation, changes were relatively small and included rationalisation of bus stops and junction adjustment.

12.3.17. A third round of non-statutory public consultation on the draft PRO took place and a number of design amendments were incorporated. This included improvement of pedestrian and cyclist facilities at junctions; removal of Kildare Road bus gate; alteration of Clonard Road and Bangor Drive to allow traffic to enter from Crumlin Road; and incorporation of previously permitted scheme for South Circular Road / Dolphin's Barn.

12.3.18. Specific design alternative were considered following the draft PRO consultation focusing on the route alignment at Greenhills Road/ Parkview, Greenhills Road, Greenhills Road avoidance of building demolition, and New Nangor Road avoidance of watercourse. These alternative were taken forward into the final PRO.

12.3.19. The 'do nothing' alternative examined in the EIAR concludes that there would be a likely exacerbation of the problems arising from discontinuity of bus lanes such as delayed buses and unreliable journey times. At present, the Tallaght / Clondalkin to City Centre route has bus lanes on approximately 29% and 35% outbound and inbound respectively, and there is significant sharing with cyclists and parking lanes. It is considered that poor journey time reliability would severely impact on the attractiveness of public transport as an alternative to private car use. The 'do nothing' alternative would also do little to encourage active travel, with insufficient provision of safe and segregated cycle tracks and limited improvements to the pedestrian environment, particularly affecting those with mobility and visual impairment.

12.3.20. The consideration of alternatives focuses firstly on the different types of public transport that could potentially serve the Tallaght Clondalkin to City Centre corridor. The reasonable conclusion is reached that enhanced bus priority and cycle facilities, complemented by enhancing the capacity of the Luas Red Line through the provision of extra rolling stock, are best placed to serve the corridor having regard economic and environmental factors and passenger numbers that each mode would carry. The route selection stage examined the road network along the corridor using a "spiders web" approach to select the most desirable roads for the corridor. Finally, the scheme was refined following a number of rounds of public consultation.

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

12.4. Likely significant effects on the environment

12.4.1. This section of the EIA **identifies, describes and assesses** the potential direct and indirect effects of the project under each of the individual factors of the environment (population and human health; biodiversity; land, soil, water, air and climate; material assets, cultural heritage and the landscape; and the interactions between these factors).

12.4.2. The EIAR uses a different ordering of chapter headings (Traffic & Transport; Air Quality; Climate; Noise & Vibration; Population; Human Health; Biodiversity; Water; Land, Soils, Geology & Hydrogeology; Archaeology & Cultural Heritage; Architectural Heritage; Landscape (Townscape) & Visual; Waste & Resources; Material Assets; and cumulative impacts and interactions between these factors). These are used to inform the EIA. Baseline characteristics, cumulative information and an evaluation of impacts on each sensitive aspect are set out, together with mitigation measures and residual impacts.

12.4.3. **Population and Human Health**

12.4.3.1. Chapters 10 and 11 of the EIAR consider the potential community and economic impacts on the human population and the potential human health impacts (physical, mental and social) associated with the construction and operational phases of the proposed core bus corridor scheme. The potential impacts of the proposal on population and human health arising from other environmental factors are also addressed under the relevant chapters.

12.4.3.2. The methodology presents the study area and appraisal method for the assessment of impacts on local population, communities and businesses. The community assessment addresses community amenity and community land use and accessibility within the Killinarden, Tallaght Oldbawn, Springfield, Tallaght Dodder, Tallaght Village, Tallaght Tymon, Kilnamanagh, Greenhills, Walkinstown, Crumlin, Mourne Road, Clogher Road, Dolphins Barn, Rialto, Donore Avenue, Francis Street, Meath Street and Merchants Quay, Clondalkin, Deansrath, Sruleen, Bawnogue and Bluebell areas. An economic assessment of the impact on individual commercial businesses along the proposed scheme through these areas in also considered.

12.4.3.3. The aim of the human health assessment is to identify the wider determinants of health that would likely be affected by the proposed scheme and how these impacts are associated with health outcomes. The risk to human health from environmental hazards (e.g. noise, air pollution, water, etc.) is also addressed. The study area for health covers an area of approximately 500m on each side of the proposed scheme. Review of relevant guidelines, policy and legislation and data collection and collation also form part of the assessment methodology for population and human health. Baseline data was obtained from other EIAR chapters (population, air quality, noise and vibration and traffic and transport).

12.4.3.4. The appraisal method for the assessment of impacts on population in terms of community amenity considers how people perceive their communities or how they use community facilities and recreational resources as a result of the proposed scheme. The community amenity assessment also considers indirect impacts from air quality, visual, traffic and transport and noise and vibration impacts. Community land use arising from the proposed scheme includes land and assets such as public

rights-of-way and residential land (gardens, paths and driveways). Community accessibility relates to the ability of users to access community facilities, recreational resources and residences.

12.4.3.5. The appraisal method for the economic assessment (commercial amenity) is informed by a schedule of commercial businesses along the core bus corridor. Air quality, noise and vibration and traffic can affect businesses, and their sensitivity can be impacted if they support vulnerable people or if they rely on the visual landscape to attract trade. Land take from commercial properties/ land and designated parking is also considered, as well as the ability of users and customers to access commercial businesses during construction and operational phases.

12.4.3.6. The appraisal method for the assessment of impacts on human health includes an understanding of population health profiles and determinants of health; identification of potential impacts, literature review; and assessment of impacts. The assessment takes into account the health status of the population; social inequalities; likely level of exposure to a health risk; likely size of population affected; level of evidence in scientific literature for an association between an environmental impact and health outcomes; and existing health policy and priorities. Potential adverse impacts on mental health are also considered, e.g. anxiety, annoyance and phycological impacts.

12.4.3.7. The baseline assessment notes that the community areas along the proposed scheme have an approximate population of 165,000. The main community receptors include Tallaght Hospital, Tallaght village, Technological University Dublin – Tallaght Campus, Children's Health Ireland at Crumlin, Loreto College and the Coombe Women's Hospital, Dolphin's Barn.

12.4.3.8. Of the 70,000 commuters across the study area, approximately 19% travel by public transport and 51% travel by car/ van. Walking/ cycling accounts for 21% of travel across the study area and this ranges from 8% in Kilnamanagh, Deanrath and Sruleen to 52% in Francis Street. The higher percentage of public transport access points are at Clondalkin, Tallaght, Walkinstown, Bluebell and Meath Street and Merchants Quay.

12.4.3.9. The economic baseline lists over 526 businesses along the proposed scheme and a total of 8,269 within the study area. The largest number of commercial receptors are within the Meath Street and Merchants Quay area. Additional baseline data on footfall, modes of transport to commercial hubs and expenditure by mode of transport are also appended to the EIAR. Approximately 72,500 (44%) of the study area are in employment and 14% of the working age are unemployed. Key employment centres are The Square Shopping Centre, Ballymount Industrial Estate, Crumlin Shopping Centre, Broomhill Industrial Estate, Clondalkin Industrial Estate, Western Business Park/ Western Industrial Estate and John F. Kennedy Industrial Estate.

12.4.3.10. In terms of key baseline health issues, it is noted that Dublin has a better health profile and lower mortality rates than the average for the State. Levels of air pollution are within EU limits for NO_2 and PM but there is a higher exposure to excessive traffic noise along the proposed scheme, particularly at night-time. Overall, there is widespread exposure to noise levels that exceed levels set out in the Environmental Noise Guidelines for the European Region (WHO 2018).

12.4.3.11. Walking and cycling rates in the study area are relatively high within 3km of the city centre and car dependency increases beyond 5km. More active modes have associated health benefits. Areas of higher deprivation in the study area, which suffer worse health outcomes may be disproportionately affected by impacts from the proposed scheme (either adversely or beneficially). It is noted that fewer people with a disability in Dublin have access to a car compared to the general population.

Characteristics of the Proposed Development

12.4.3.12. The proposed Tallaght Clondalkin Core Bus Corridor scheme extends over 15.5km from Cookstown Way and The Square Shopping Centre, Tallaght at its south-western end and Nangor Road, Clondalkin at its western end to Nicholas Street in the city centre. The purpose of the proposed scheme is to provide enhanced infrastructure to prioritise bus transport and provision for bicycles.

12.4.3.13. Characteristics of the proposed scheme that are of relevance to population and human heath during the construction phase include temporary traffic diversions or lane restrictions; noise and vibration and dust and air quality impacts; temporary land

acquisition; disruption to footways, cycleways and other areas; and occasional interruption of services such as water and power. There will be 250 to 270 rising to 300 workers on the scheme at peak construction.

12.4.3.14. Operational characteristics of the proposed development affecting population and human health may include improved bus journey times; traffic diversions; enhanced cycle and pedestrian facilities; urban realm improvements; reduced on-street parking; and small areas of land acquisition.

Potential Impact of the Proposed Development

12.4.3.15. The potential impacts of the proposed development on population and human health are summarised as follows:

- *Do nothing scenario* – Scheme would not be implemented and therefore no changes to pedestrian, cycling and bus amenity and access and no change to land use. Streetscape would continue to be based around the private car and traffic would potentially worsen as population and travel demand grows leading to increased sedentary lifestyles and associated health effects.

Construction Phase:

- *Community amenity* - impacts arise from a combination of traffic, air quality, noise and visual impacts.
- Schools and hospitals, amongst other community facilities, along the CBC are likely to experience negative, moderate and short term impact on amenity.
- *Community land use and accessibility* - temporary and permanent land acquisition from residential properties, community facilities and commercial businesses including reduction of front gardens, driveways, private landings and private parking spaces.
- 55 residential properties and 22 community facilities impacted by temporary land take. No properties are impacted to a significant degree.
- Changes in accessibility for walkers, cyclists, bus users and private vehicles along the proposed scheme and in the surrounding road network as a result of

construction traffic, diversions and traffic management measures during the construction phase.

- *Economic assessment* - proportion of commercial businesses located along the proposed scheme is low compared to the businesses across the entire community areas.
- 51 commercial businesses will be impacted by temporary land take, none to a significant degree.
- *Temporary impacts on access to healthcare services* – access maintained at all times to CHI Hospital Crumlin, Tallaght University Hospital and The Coombe Women's Hospital. Occasional delay, stress and anxiety.
- Temporary impacts on access to education – will not be noticeably interrupted.
- *Health impacts from temporary traffic diversions* – risks for collisions, especially for pedestrians and cyclists.
- *Construction related air pollution* – not significant so no human health impact attributable to proposed scheme. Short term impacts from dust. No change in health status from temporary and occasional construction noise impacts.

Operational Phase:

- *Community assessment:* Positive impacts on community facilities from a reduction in general traffic along the proposed scheme and negative impact on surrounding areas from redistributed traffic. Associated impacts in terms of air quality, noise and vibration and landscape (townscape) and visual.
- Positive impact from traffic noise along the proposed scheme.
- Impacts on townscape expected to improve over time.
- Positive impacts on walkers, cyclists and bus users in the community areas of Tallaght Village, Walkinstown, Crumlin and Dolphins Barn
- *Community Land Use and accessibility:* 55 residential properties and 18 community facilities requires permanent land take. No properties are impacted to a significant degree. All residential properties are moderately affected.

- Changes in accessibility for walkers, cyclists, bus users and private vehicles along the proposed scheme and in the surrounding road network as a result of redistributed general traffic.
- Positive long term impacts expected on walkers, cyclists and bus users in the community areas of Tallaght Village, Walkinstown, Crumlin and Dolphins Barn by providing an attractive alternative to the use of private vehicles and promoting a modal shift to walking, cycling and public transport, allowing for greater capacity along the corridor to access residential, community and commercial receptors.
- Negative impacts of increased congestion from redistributed traffic in the surrounding road network and on parking and loading.
- *Economic Assessment:* Commercial amenity impacts arise from a combination of traffic, air quality, noise and visual impacts.
- 47 commercial receptors requires permanent land take. None are affected to a significant degree.
- People movement will significantly increase across the CBC and therefore businesses will, to some extent, benefit from the increase in passing trade.
- Impacts on private vehicles the same as those identified in the community accessibility assessment.
- Businesses located on stretches of roads impacted by bus gates are not expected to see a significant negative reduction in customers in private vehicles as there is currently no parking available outside these businesses at present, and as such they do not rely on passing trade by vehicle. In certain areas, access to commercial businesses will be available via a short diversion.
- Positive health impacts from increased physical activity from the introduction of improved pedestrian and cycling facilities, and bus reliability.
- Slight improvement in air quality and reduced noise along the CBC and no discernible impact from diverted traffic.

- Impacts on social use of space and community severance - sum of improved opportunities for social interaction would on balance be greater than those routes that would experience an increase in general traffic.
- Improved journey times from new public transport, resulting in improved mental health outcomes and access to health, employment, education, and leisure services.
- Inclusion of bus priority measures and improvements to pedestrian and cyclist infrastructure will support safer and more equitable access for those who do not or cannot use a car. Reduced health inequalities relating to independent mobility for children. Urban environment would be improved and easier to use for the visually impaired, wheelchair users and the persons with mobility impairment.
- Reduced health inequalities relating to road traffic injuries and deaths of pedestrians and cyclists.

Mitigation Measures

12.4.3.16. The following mitigation measures are outlined for impacts to population and human health:

- Design minimises negative population impacts by improving safety for cyclists with additional road closures; minimising cycle track widths to reduce land take from residential properties; modifying junction layouts to protect cyclists and altering layout and signal timings of major junctions to minimise traffic redistribution into side roads.
- Measures in Construction Traffic Management Plan to provide safe access for pedestrians and to help protect cyclists against an increased risk of collision with vehicles in areas of works and traffic management.
- Appointed contractor will ensure that access is provided to all hospitals and emergency vehicles along all routes and accesses.
- The appointed contractor will put in place a Communications Plan in accordance with NTA requirements to include timely communication to the local community on the planned work activities.

- Potential impacts on population and human health are mitigated by the measures outlined below under air quality & climate, noise & vibration and traffic & transportation.

Residual impacts

12.4.3.17. No significant residual impacts on human health are predicted during the construction phase. During the operational phase, residual impacts of a positive nature are assessed as likely, i.e. increased physical activity, improved pedestrian and cyclist safety, and better public transport journey times and reliability and overall providing a more equitable transport experience. The residual impacts on population are the same as the potential effects.

Conclusions on population and human health

12.4.3.18. The population along the proposed scheme is approximately 165,000 and the main community receptors include Tallaght Hospital, Tallaght village, Technological University Dublin – Tallaght Campus, Children's Health Ireland at Crumlin, Loreto College and the Coombe Women's Hospital, Dolphin's Barn. The economic baseline lists 526 businesses along the proposed scheme and a total of 8,269 within the study area. Approximately 72,500 (44%) of the study area are in employment and 14% of the working age are unemployed. Key employment centres are The Square Shopping Centre, Ballymount Industrial Estate, Crumlin Shopping Centre, Broomhill Industrial Estate, Clondalkin Industrial Estate, Western Business Park/ Western Industrial Estate and John F. Kennedy Industrial Estate.

12.4.3.19. The overall impact of the proposal is considered to be adverse and short term on population and human health during the construction phase and generally of positive effect during the operational phase. The main benefits to the local population will be improved pedestrian and cyclist safety, faster and more reliable bus services, reduced traffic congestion and positive accessibility and amenity impacts for community areas. The proposal will give rise to health benefits through increased activity, improved air quality and noise reduction, more social interaction, reduced community severance and car dominance, and improved road/ street safety.

12.4.3.20. The proposal requires the permanent acquisition of land for the operation of the proposed core bus corridor and temporary acquisition for construction. A total of 55

residential, 22 community facilities and 51 commercial receptors will be affected by temporary land take to accommodate construction activity. There will be 55 residential properties, 18 community facilities and 47 commercial properties affected by permanent acquisition. In most cases, the same receptors are those experiencing both temporary and permanent land take. There will also be impacts associated with access during construction for residents and users. Operational phase access, both positive and negative, will occur due to improved sustainable transport access for residential, customers and works and negatively through reduction/ relocation/ redistribution in parking, general traffic access and loading arrangements.

12.4.3.21. Mitigation works along the affected locations will include the reconstruction of boundary walls and fences on a like for like basis and access will be maintained during construction and operational phases. If the CPO is confirmed by the Board, Notice to Treat will be served and each landowner will be required to submit a claim for compensation. A Construction Traffic Management Plan will contain measures to maintain safe access for pedestrians and cyclists and access to all hospitals will be maintained. A communications plan will also be put in place to inform the local community of planned work activities. Impacts on population and human health are also mitigated by the measures outlined under the air quality & climate, noise & vibration and traffic & transportation sections.

12.4.3.22. Under a 'do nothing' scenario, the streetscape would continue to be based around the private car and traffic would potentially worsen as population and travel demand grows, leading to increased sedentary lifestyles and associated health effects. In the longer term, increased car usage and ownership will contribute towards increased, CO_2 emissions. High quality public transport and pedestrian/ cyclist facilities can encourage the use of sustainable movement, thereby negating the CO_2 impacts of car production and usage. The proposal will also increase overall transport capacity along the core bus corridor to accommodate an increasing population.

12.4.3.23. Overall, and notwithstanding the various items raised by third parties in respect of issues relating to population and human health, it is considered that there will be no significant adverse impacts of population and human health during the construction or operational phases of the proposed development. I am satisfied that the impacts

identified would be avoided, managed or mitigated by measures forming part of the proposed development, proposed mitigation measures and measures within suitable conditions, and that no significant direct, indirect or cumulative adverse effects on population and human health are likely to arise. The longer-term benefits of the proposed development will substantially outweigh any adverse impact which are likely to occur in the short term.

12.4.4. **Biodiversity**

12.4.4.1. Chapter 12 of the EIAR presents the output of the biodiversity assessment of the proposed scheme during construction and operational phases on key ecological receptors (KERs). Ecological receptors for which surveys were carried out include habitats; rare and/ or protected flora; fauna species (badger, otter, other protected mammal species, amphibians and reptiles); bats; wintering birds; nesting Kingfisher suitability; and aquatic ecology. Habitat, mammal reptile and amphibian surveys were conducted from June to August 2018 and in August 2020, with an additional mammal surveys taking place in October 2020, December 2022 and January 2023. Wintering bird surveys occurred from February to March 2020, October 2020 to March 2021, October 2021 to March 2022 and December 2022 and January 2023. There were bat surveys in 2018, 2019, 2020, 2022 and 2023 and a nesting Kingfisher suitability survey in October 2020. Fisheries/ aquatic surveys took place in July 2022.

12.4.4.2. A desk study was undertaken which included a review of existing information on the ecological environment and consultation with relevant statutory bodies. The desk study also identified suitable bat foraging/ commuting routes; potential suitable inland feeding and/or roosting sites for wintering birds; and all hydrological crossing points.

12.4.4.3. All designated areas within the zone of influence of the proposed scheme are considered to be KERs. The Appropriate Assessment Screening Report identified that the proposed scheme has the potential to adversely affect the integrity of 17 European sites. The nearest European site, South Dublin Bay and River Tolka Estuary SPA, is located approximately 3.3km from the proposed scheme. Eight European sites are hydrologically connected to the proposed scheme.

12.4.4.4. A total of 17 pNHA are also included as KERs. Habitats and species of local importance (higher value) or higher are considered to be KERs. The closest pNHA to the proposed scheme is the Grand Canal pNHA which adjoins the proposed scheme at Nangor Road and Dolphin's Barn. There are also RAMSAR sites in proximity to the proposed scheme, as well as UNESCO Dublin Bay Biosphere.

12.4.4.5. Habitats along the CBC are dominated by buildings and artificial surfaces, mixed broadleaf woodland, hedgerows, treelines, scrub, flower beds and borders, grasslands and water features, in particular the Camac River and the Grand Canal. Lower biodiversity value habitats associated with residential, commercial or industrial development, roads and highly managed amenity areas and are not considered as KERs. No protected plants listed on the Flora (Protection) Order, 2015 were identified in close proximity to the proposed scheme. Japanese knotweed was observed at six locations in close proximity to the proposed scheme.

12.4.4.6. Three species of bat were recorded throughout the corridor. Four trees with potential to support roosting bats were identified. No evidence of badger, amphibians or reptiles was discovered during the multi-disciplinary surveys. A potential otter slide was noted on the northern side of the Grand Canal. The otter population in the vicinity of the Tallaght to City Centre section may be associated with the Wicklow Mountains SAC population.

12.4.4.7. No dedicated breeding bird surveys were carried out. The desk study returned a total of 84 breeding bird species across the study area, which included 28 Special Conservation Interest species, 24 species listed under Annex I of the Birds Directive, and an additional 16 Red Listed and 16 Amber Listed species. However, most of the records along the proposed scheme comprise bird species common to suburban habitat and these species are likely to use lands within the footprint of the proposed scheme for breeding and foraging. Red listed breeding birds of conservation concern adjacent to the proposed scheme include kestrel, redshank, snipe, grey wagtail, meadow pipit, northern lapwing and yellowhammer.

12.4.4.8. Wintering bird surveys were carried out for the proposed scheme at five locations. Herring gull, black-headed gull and common gull were among the species of conservation concern recorded and there are six known inland wintering bird feeding

sites within approximately 300m of the proposed scheme {Tymon Park (major importance); Beechfield Road Sports Grounds Walkinstown (high importance); Pearse Memorial Park Crumlin (high importance); Clonmacnoise Roundabout / Crumlin (major importance); Synge St. GAA Pitches / Crumlin (major importance); and Brickfields Park / Crumlin (high importance)}. A total of 44 regularly occurring wintering bird species were returned from the desk study, which included 32 SCI species, 9 species listed under Annex I of the Birds Directive, and an additional 2 Red Listed and 1 Amber Listed species. Red listed wintering birds of conservation concern adjacent to the proposed scheme include pochard, redshank and northern lapwing.

12.4.4.9. The proposed scheme is hydrologically connected to the Liffey Estuary Lower via the River Camac and River Poddle. Aquatic surveys describe some moderate value for salmonids at the River Camac adjacent to Yellowmeadows, and very good value for brown trout at Oak Road. The desk study returned records of Atlantic salmon on the Lower Liffey Estuary. The River Camac is reported to contain juvenile lamprey, European Eel and White Clawed Crayfish. The desktop study returned records for other invertebrate species, including red listed butterflies, damselflies, dragonflies and bees. Records for common frog were also returned within 1km of the proposed scheme.

Characteristics of the proposed development

12.4.4.10. The main characteristic of the proposed scheme pertaining to biodiversity impacts are site preparation and clearance; construction compound development; removal of boundaries and other demolition works; protection/ diversion of buried services; excavations and drainage adjustments; road widening, pavement reconstruction and kerbing; installation of new bus stops and junction modification; reinstatement works; and landscaping and tree planting.

12.4.4.11. The proposed scheme will discharge to the Camac_040, Poddle_010 and Dodder_040 during construction, as well as combined sewers reaching the Liffey Estuary Lower via Ringsend WwTP. There will be a net increase of 59,368 sq.m. in the impermeable area ultimately discharging to Dublin Bay. Runoff will be

attenuated and there will be no net increase in the surface water flow discharged to these receptors.

12.4.4.12. The main characteristics of the operational phase of the proposed scheme from a biodiversity perspective are the presence of traffic and the operation of the road, additional lighting and routine maintenance.

Potential Impact of the Proposed Development

12.3.2.1. The potential impacts of the proposed development on biodiversity are summarised as follows:

- *Do nothing scenario* – Scheme would not be implemented and therefore no changes to flora and fauna of the area.
- Current biodiversity trends would continue in areas zoned for development, adding to pressures on waterbodies and habitat fragmentation.

Construction phase:

- *European sites:* Potential for impacts associated with habitat loss and fragmentation; habitat degradation / effects on QI / SCI species as a result of hydrological impacts; habitat degradation as a result of introducing / spreading non-native invasive species; and disturbance and displacement impacts.
- Habitat loss may occur indirectly as a consequence of severe habitat degradation arising from a reduction in water quality and / or a change to the hydrological regime. Construction Compounds TC3, TC4 and TC8 will result in the short-term (36 months) loss of suitable wintering bird habitat - none of these sites are deemed to be significant inland foraging resources for wintering birds.
- River Camac will not be subject to any instream works or alteration to the territory currently occupied by otter.
- Habitat degradation / effects on QI / SCI species as a consequence of hydrological impacts during construction and operational phases from release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features. Otter associated with the Wicklow Mountains SAC could move downstream along the Dodder and come within the

ZoI of the proposed scheme. Associated effects of a reduction of surface water quality could also potentially extend for a considerable distance downstream and could undermine the conservation objectives of the European sites in Dublin Bay, including SCI bird species and QI marine mammal species that commute, forage and loaf in Dublin Bay and their sensitive habitat.

- There is potential for invasive species to spread or be introduced, during construction, to terrestrial habitat areas in European sites downstream in Dublin Bay, thus undermining the conservation objectives of these site.
- Potential for the proposed scheme to result in disturbance / displacement impacts on SCI populations associated with European sites, (disturbance effects would not be expected to extend beyond 150m for offer and 300m for wintering birds).
- *NHA & pNHAs:* Potential for direct impacts on the Grand Canal pNHA and indirectly on the Dodder Valley pNHA (via potential drainage discharges) include habitat degradation as a result of surface water quality effects, and the spread of non-native invasive species.
- Potential for contaminated surface water runoff and / or an accidental spillage or pollution event directly into the Grand Canal pNHA or indirectly to the Dodder Valley pNHA via the drainage network or any surface water feature.
- *Habitats:* Loss/ fragmentation of habitats of Local Importance (Higher Value) as a result of the proposed scheme - includes depositing / lowland rivers (FW2), canals (FW3), *Habitats:* Loss/ fragmentation of habitats of Local Importance (Higher Value) as a result of the proposed scheme - includes depositing / lowland rivers (FW2), canals (FW3), mixed broadleaf / conifer woodland (WD2), scattered trees and parklands (WD5), hedgerow (WL1) and treeline (WL2) habitats, areas of dry meadows and grassy verges (GS2), mixed broadleaved woodland (WD1), immature woodland (WS2) and reed and large sedge swamp (FS1).
- Habitat degradation – potential for significant negative effects on water quality at a local geographic scale and consequently affecting aquatic and wetland habitats e.g., FS1, FW2 and FW3 in the receiving environment. In a worst-case scenario,

transitional and coastal habitats downstream in Dublin Bay could also be affected.

- Hydrological regime – potential for local flow and flooding regime from dewatering activities, local drainage disruption and temporary increase in hardstanding areas.
- Non-native invasive plant species - accidental spread as a result of construction works has the potential to impact on terrestrial as well as riparian / aquatic habitats, potentially affecting plant community composition, species diversity and abundance over the long-term.
- *Rare and protected plant species:* Impacts on the quality of surface water within the Grand Canal could affect the possible establishment of populations of opposite-leaved pondweed or green figwort present in the vicinity of the proposed scheme.
- *Mammals:* Proposed scheme will not result in the loss of breeding/ resting sites for bats.
- Proposed scheme will result in loss of habitats used for foraging by all bat species – not considered significant considering the extent of loss and the location adjacent to artificially lit roads. Limited potential for proposed scheme to act as a barrier to flight paths for bat species considering the type of works proposed.
- Loss / fragmentation of small areas / strips of woodland, scattered trees and parkland, treelines and hedgerows which could all be used by local bats, will result in a reduction of foraging/ commuting habitat for local bats. Habitat removal is within a highly disturbed urban environment with low numbers of species records.
- Installation of temporary working and site compound lighting may cause indirect disturbance to bat flight patterns - bats in the area are not deemed to be present in high numbers and would be habituated to some level of artificial lighting.
- Lighting associated with the construction phase could result in a negative effect on badgers, albeit temporary in nature and significant at the local level

- Habitat degradation as a result of effects on surface water quality during construction phase has the potential to affect the conservation status of otter.
- Construction works have the potential to (at least temporarily) displace commuting or foraging otter.
- Disturbance and displacement to otter can occur as a result of construction works and artificial lighting – majority of scheme corridor is already artificially lit and construction compounds are removed from any watercourses. Otter can also tolerate high levels of human presence.
- Construction phase of the proposed development could result in contamination of receiving water bodies, which could result in negative impacts on marine mammals either directly or indirectly.
- *Birds:* It is concluded in the NIS that the proposed scheme would not affect the breeding colonies or have any long-term effects on local breeding bird populations.
- Proposed scheme will result in the loss of breeding bird nesting and foraging habitat within the development footprint; however, habitats suitable to support breeding birds are limited and treelines and hedgerows are highly disturbed. There are also larger expanses of similar habitat to that which will be lost and none of the habitat areas are unique to the locality.
- If site clearance works were to be undertaken during the bird breeding season, it is possible that nest sites holding eggs or chicks will be destroyed and birds killed. Disturbance/ displacement of breeding birds is also likely during construction.
- Any contamination of receiving water bodies could have consequent effects on breeding birds either directly or indirectly. Any such pollution event is considered unlikely.
- It is concluded in the NIS that the proposed scheme would not affect the wintering bird colonies or have any long-term effects on local wintering populations.

- Short-term loss of suitable habitat at the proposed Construction Compounds TC3, TC4 and TC8 is not deemed to have a significant impact on the wintering bird population at any geographical scale due to the relatively low frequency of occurrence of SCI bird species; relatively low peak flocks recorded on the lands; and the availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality.
- Temporary increase in noise, vibration and human activity levels during construction and operational phases of the proposed scheme could result in the disturbance to and/or displacement of wintering bird species present within the footprint and/or the vicinity.
- Disturbance effects for general construction activities would not be expected to extend beyond a distance of approximately 300m. None of the construction activities would be expected to result in any more than a moderate level of disturbance effect on wintering birds at distances beyond 150m.
- In the unlikely event that wintering birds are displaced during construction, they will likely be displaced to suitable sites in the surrounding environment - disturbance or displacement effects will not affect the conservation status of any wintering bird species.
- Habitat degradation as a result of effects on surface water quality during construction has the potential to affect the amphibian species' conservation status and result in a likely significant negative effect, at a local geographic scale.
- *Fish:* Barrier effect from proposed instream works on River Camac has the potential to result in a likely significant effect at the County level on salmonid species (brown trout).
- Construction phase could potentially result in contamination of receiving water bodies, with a consequent effect on fish species either directly or indirectly.
- Habitat degradation as a result of effects on surface water quality during construction has the potential to affect the conservation status of affected fish species.

- *Aquatic invertebrates and Freshwater Mulloscs:* Potential for mortality risk and barrier effects, and contamination of receiving waters during construction, impacting on white clawed crayfish as a result of instream works on the River Camac.

  Operational phase:

- *Designated Sites:* Reduction in water quality could result in the downstream environment including sensitive habitat within European sites which in turn could negatively affect the QI habitat and/ or species and SCI bird species that rely upon these habitats. It could also affect QI mammal species and the quantity and quality of prey available to SCI and QI populations.
- There is potential for invasive species to spread or be introduced, during routine maintenance / management works.
- Proposed scheme has the potential to affect biodiversity in a broader sense than the QIs / SCIs of European sites – there are pNHAs and NHAs located within the boundaries of European sites and are designated for similar reasons.
- *Habitats:* Proposed scheme will result in a beneficial imperceptible impact on surface water quality in receiving water bodies due to the inclusion of SuDS measures which will reduce the volume of surface water runoff and concentrations of harmful compounds.
- Effects of displacement as a result of increased artificial lighting along existing road networks are not considered to be significant.
- Proposed scheme will not increase the habitat severance/ barrier effect or mortality risk for otter, badger and other mammals – proposed scheme is already focused on existing infrastructure and species would already be habituated to disturbance. Habitat degradation as a consequence of operational effects on surface water is not likely.
- There is potential for routine maintenance works to inadvertently spread contaminated vegetation cuttings from non-native invasive plant species both within the proposed scheme boundary, and within the immediate vicinity.

- *Rare & Protected Plant Species:* Surface water runoff containing harmful compounds from the proposed scheme could affect the water quality of the Grand Canal and affect populations of opposite-leaved pondweed which are present in the vicinity of the proposed scheme.
- *Mammals:* Operational phase could potentially result in contamination of receiving water bodies and this could have significant effects on otter and marine mammals either directly or indirectly. However, drainage design incorporates pollution control measures.
- Increase in noise levels from improved bus frequency as well as increased human presence, may have a negative effect on bird abundance and occurrence. However, breeding birds are likely to be already habituated to noise disturbance.
- *Birds:* Operational phase could result in contamination of water bodies, resulting in negative effects on breeding birds either directly (toxicity) or indirectly (affecting food supply or supporting habitat); however, drainage design incorporates pollution control measures,
- Proposed scheme has the potential to disturb/ displace wintering bird species through increased noise, human activity and visual disturbance; however, most wintering bird species are likely to habituate to the increased traffic flows and human presence.
- A number of wintering bird sites occur in the vicinity of the proposed scheme, with one immediately adjacent - overall they were used by a small number of SCI or wintering bird species.
- Operational phase could potentially result in contamination of receiving water bodies resulting in significant effects on wintering birds and amphibians both directly and indirectly; however, proposed scheme incorporates appropriate drainage control measures.
- *Fish:* Operational phase could potentially result in contamination of receiving water bodies resulting in significant effects on fish and invertebrates both directly and indirectly; however, proposed scheme incorporates appropriate drainage control measures.

Mitigation measures

12.4.4.13. The following mitigation measures are outlined for biodiversity:

- Where deemed necessary a suitably experienced and qualified ecologist will be employed during construction.
- Measures outlined in the NIS to protect surface water quality during construction and to prevent the spread of invasive species to downstream European sites would also apply to NHAs/ pNHAs with coinciding boundaries. CEMP also includes a full suite of mitigation measures to protect surface water during construction and to prevent the spread of invasive species.
- Vegetation including habitats of Local Importance (Higher Value) will be retained where practicable.
- Proposed planting will include 1,055 trees, 590m of hedgerow, 20,560 sq.m. of species rich grasslands, 3,450 sq.m. of ornamental planting, 5,525 sq.m. of native planting and 43,140 sq.m. of amenity grassland planting.
- Surface Water Management Plan has been prepared, which details control and management measures for avoiding, preventing, or reducing any significant adverse impacts on the surface water during construction. This will include measures relating to the storage of fuels/ materials, control of sediment, use of concrete, management of vehicles and plant and monitoring. CEMP includes an Environmental Incident Response Plan, which will apply for the management of any incidents that may occur.
- Scheme specific measures will be implemented in relation to surface water quality at the construction compounds; the widening of the R134 (and diversion of ESB oil filled cables, undertaken separately, as necessary by ESB Networks); and modifications to the Camac headwall under the R134 / Oak Road roundabout.
- Construction management of the site will take account of the recommendations of the CIRIA guidance Control of Water Pollution from Construction Sites – Guidance for consultants and contractors (Masters-Williams et al. 2001).

Measures will also be implemented to minimise the risk of spills and contamination of soils and water.

- Implementation of an Invasive Species Management Plan for newly established non-native invasive species.
- Mitigation measures will be implemented for four trees that contain possible roost features for bats, e.g. fencing off or wrapping with hessian sacking; no parking/ storage within root protection area; implementation of mitigation within Arboricultural Impact Assessment; and no additional lighting within 5m of possible roost feature. Habitats of importance to bats will be retained where possible and extra planting may provide additional foraging habitat.
- Seven trees will be removed with possible roosting features and an application for a derogation licence will be made and bats may then be removed. It is proposed to install bat boxes for each potential roosting feature to be removed.
- Where practicable, habitats of importance to bats such as scattered trees and parkland, treeline and hedgerow habitat types, which lie within the footprint, or along the boundary of the proposed scheme, that are not directly impacted by the proposed scheme will be retained.
- Lighting at the construction compound and active work areas in proximity to known bat activity will be designed to minimise light spill. Measures will be incorporated to reduce light spill.
- Confirmatory pre-construction checks of all suitable badger habitat and deep excavations will be covered at night.
- SWMP will avoid, prevent or reduce impacts to surface water impacting on otter, other marine mammals and breeding and wintering birds. Pre-construction checks will also be carried out for otter and mammal resistant fencing will be used to keep otter away from works areas.
- Where practicable, vegetation will not be removed between 1st March and 31st August to avoid direct impact on nesting birds. Where nests are found, vegetation clearance will not commence until birds have fledged. Noise mitigation measures will be implemented to reduce noise disturbance and

habitats of importance will be retained where possible. New planting is likely to provide additional foraging habitat.

- Construction compounds TC3, TC4 and TC8 will be established outside of the wintering bird season, where possible. Lighting will be directed away from open ground and will not be excessively tall so as not to act as obstacles to birds.
- Pre-construction survey will be carried out for amphibians, if necessary, and mitigation will be undertaken before works recommence.
- Works associated with the construction of the Headwall at the Camac River will be undertaken outside the closed (fisheries) season (October to June) unless approved with Inland Fisheries Ireland.
- Electrofishing of watercourse in advance of bunding and dewatering by appropriately licenced ecologists and implementation of strict biosecurity measures.
- Specific mitigation measures to ensure that crayfish are not lost during removal of sediments to facilitate the construction of headwall and culvert extension on the River Camac.
- Translocation of trout from the proposed works area, as it is being dewatered, will be undertaken at the same time as the crayfish translocation.
- Mitigation for the operational phase has been built into the design of the proposed scheme – this will include SuDS measures improving the environmental quality of discharges.
- Local Authority will implement maintenance and management regime for drainage, non-native invasive plants, etc.
- Annual post construction monitoring will take place over a two-year period to ensure the successful re-establishment of vegetation within the proposed scheme. Monitoring of bat boxes will also take place annually for two years.
- Reinstatement of grassland habitats within the footprint of the construction compounds TC3, TC4 and TC8 will be carried out by the appointed contractor, at the earliest possible moment.

Residual impacts

12.4.4.14. Following implementation of mitigation measures, the proposed scheme will not result in any significant residual effects on the majority of key ecological receptors during construction or operational phases. Any likely significant residual impact will be at a local geographic area, e.g., unavoidable tree/ vegetation removal.

Conclusions on Biodiversity

12.4.4.15. The main habitats along the Core Bus Corridor are mixed broadleaf woodland, hedgerows, treelines, scrub, flower beds and borders, grassland, and buildings and artificial surfaces and water features, including the Camac River and Grand Canal. No protected plants listed on the Flora (Protection) Order, 2015 were identified along the route and there was no evidence of badgers and amphibians/ reptiles. A potential otter slide was noted on the northern side of the Grand Canal. Japanese knotweed was observed at six locations in close proximity to the proposed scheme. Three bat species and a total of 84 breeding bird species and 44 wintering bird species were also noted.

12.4.4.16. The overall impact of the proposal on certain aspects of biodiversity, such as the removal of habitat, is unavoidable. The proposed works, for the most part, will take place within the existing built-up area and largely along existing roads and streets. Any species in the surroundings would, therefore, be habituated to a certain level of human disturbance. Vegetation removal will in part be compensated by additional planting.

12.4.4.17. There are no designated sites is proximity to the site and no potential for measurable effects on any downstream designated sites. Notwithstanding this, a comprehensive range of measures will be implemented through the CEMP to avoid mobilisation of sedimentary material during the construction, e.g. silt fencing, storage and refuelling in bunded areas and careful use and management of cement. There will be an net increase of 59,368 sq.m. in the impermeable area ultimately discharging to Dublin Bay. However, beneficial impacts on surface water quality will occur due to the inclusion of SuDS measures which will reduce the volume of surface water runoff and concentrations of harmful compounds. Contamination of receiving waters during construction could impact on white clawed crayfish as a result of instream works on

the River Camac. Specific mitigation measures will be implemented to ensure that crayfish are not lost during removal of sediments to facilitate the construction of headwall and culvert extension on the River Camac.

12.4.4.18. There are six inland wintering bird feeding sites within 300m of the proposed scheme, three of which are of major importance (Tymon Park, Clonmacnoise Roundabout and Synge St. GAA Pitches / Crumlin). Tymon Park is immediately adjacent to the proposed scheme, where a flock of 45 light-bellied Brent geese were observed foraging; however, there is an availability of large areas of suitable foraging and / or roosting habitat in the wider locality. The nature of the disturbance will be short-term during construction and there is a relatively low frequency of occurrence of wintering bird species on these lands. Construction compounds TC3, TC4 and TC8 will be established outside of the wintering bird season, where practicable, and hoarding will be in place prior to arrival of wintering birds. In addition, lighting at the compound shall not be excessively tall.

12.4.4.19. Mitigation measures will be implemented for four trees that contain possible roost features for bats, e.g. fencing off and no additional lighting within 5m of the possible roost features. Habitats of importance to bats will be retained where possible and the additional planting may also provide foraging habitat for bats.

12.4.4.20. There is potential for invasive species to spread or be introduced during construction. Measures will be put in place to prevent the spread of invasive species to downstream national or internationally designated sites. Where pre-construction invasive species re-survey confirms the presence of previously identified non-native invasive species, or those newly established, an Invasive Species Management Plan will ensure that control measures are properly implemented.

12.4.4.21. The main concern of the Department of Housing, Local Government and Heritage is the potential adverse effects which may result to calcicole plant communities present on the R819 Greenhills Road north of the M50 (between Greenhills Road and Ballymount Avenue with Ballymount Industrial Estate and construction compound TC7). These plant communities have not been identified in habitat surveys and are rare in Dublin. The NTA stated in response to the Department's submission that it will positively engage with SDCC for the preparation of a Calcicole Plant

Communities Conservation Plan should calcicole species be present. Furthermore, it is submitted that vegetation will not be removed between 1st March and 31st August to avoid direct impacts on nesting birds, where possible.

12.4.4.22. Overall, and notwithstanding any items raised by third parties in respect of issues relating to ecology and biodiversity, I consider that the EIAR has adequately assessed the impact of the proposed development on biodiversity both individually and cumulatively. I am satisfied that with proper implementation of mitigation and best practice measures, together with implementation of environmental commitments under the Construction and Environmental Management Plan, no significant direct, indirect or cumulative adverse effects on water quality, habitats and species are likely to arise. The Department recommends that planning permission should be granted subject to conditions relating to the clearance of woody vegetation outside the main bird breeding season and the submission of a Calcicole Plant Communities Conservation Plan. I consider that a condition should be attached to any grant of permission reflecting same.

12.4.5. **Land, Soil, Water, Air and Climate**

12.4.5.1. This assessment deals separately with the above environmental factors as they appear in the EIAR. Chapter 14 of the EIAR addresses land, soils, geology and hydrogeology and Chapter 13 deals with water. Air quality and climate are covered in Chapters 7 and 8 respectively and noise and vibration are included within Chapter 9.

12.4.5.2. Data collection and collation for land, soils, geology and hydrogeology was compiled from publicly available datasets (OSi, Teagasc, GSi, EPA, NPWS, National Monuments Service, etc.), ground investigations, design information and walkover surveys (21st January 2020, 7th July 2021 and 16th January 2023). A conceptual site model was developed to describe ground conditions throughout the study area of the proposed scheme.

12.4.5.3. The baseline assessment includes a regional overview of topography and geomorphology, soils (Teagasc Classification), subsoils (GSI Quaternary Classification), bedrock geology, aquifer type and classification, aquifer vulnerability,

recharge, groundwater abstractions, groundwater quality and levels, hydro-ecology designated sites and geological heritage. A site specific overview is also carried out of current and historic land use, geomorphology and topography, soils, subsoil deposits, bedrock geology, ground conditions, karst, soft and/ or unstable ground, contaminated land, mineral/ aggregate resources, geological heritage areas, aquifer type and classification, groundwater vulnerability and recharge and hydro-ecology.

12.4.5.4. The land, soils, geology and hydrogeology features with high importance includes topsoil at the River Camac, Greenhills Esker, Sundrive Road and Rutland Avenue; crushed rock aggregate potential at South Circular Road, Dublin Castle and Winetavern Street; granular aggregate potential at the junction with Patrick's Street and Winetavern Street, and the River Dodder; and Greenhills Esker, Dublin City Walls and the River Poddle (County Geological Sites). Other features of medium importance include potential sources of contamination (petrol stations, graveyard, historic landfill, etc); licenced facilities; and locally important aquifers.

12.4.5.5. The Conceptual Site Model shows that the proposed scheme is mostly underlain by made ground over glacial till over limestone bedrock. The environment across the study area is classified as one which corresponds to a passive geological / hydrogeological environment – examples include areas of thick low permeability subsoils, areas underlain by poor aquifers, recharge areas, and historically stable geological environments.

12.4.5.6. Field surveys were conducted in March 2020 and March 2022 and observations were made from bridges and from the top of river banks. A desk study and field survey for water identified the waterbodies relevant to the proposed scheme as being the Dodder_040, Camac_040, Poddle_010, Grand Canal Main Line (Liffey and Dublin Bay) and Liffey Estuary Upper. These waterbodies are at risk of not achieving their WFD objectives. There is a total of 24 point source discharges from EPA licenced activities within the study area. Pressures common to all water bodies in the study area are discharges from urban wastewater systems (via Storm Water Overflows (SWOs) and urban surface runoff.

12.4.5.7. The surface water drainage system along the proposed scheme discharges into the Camac_040, Poddle_010, Dodder_040 and combined sewers which are directed to

Ringsend WwTP. A Flood Risk Assessment determined that parts of the proposed scheme are located in Flood Zone A, where the risk of flooding is high. Climate change will result in an increased risk of flooding.

12.4.5.8. The air quality assessment includes a baseline air monitoring study, together with a review of applicable standards and guidelines. Site-specific baseline monitoring was undertaken at monthly intervals from November 2019 to June 2020. Predictive calculations were carried out on likely construction phase air quality impacts and potential impacts associated with traffic alterations during the operational phase. Highly sensitive air quality receptors include residential properties, hospitals, schools and other community receptors. Commercial and workplace properties are generally viewed as being of medium sensitivity. The assessment in the EIAR considers both compliance with the EU limits and meeting the WHO Air Quality Guidelines value for different pollutants. Potential changes in regional air emissions due to traffic impacts of the proposed scheme have been assessed using the National Transport Authority (NTA) Environmental Appraisal Tool (2015).

12.4.5.9. Baseline surveys have determined that the main source of noise in the study area is road traffic, including that from the M50 in proximity. These surveys align closely with the desk study of published noise data. Predictive calculations and impacts assessments were carried out on likely construction noise at noise sensitive receptors, as well as noise impacts associated with traffic alterations from the operational phase of the proposed scheme. Examples of noise sensitive locations include residential dwellings, schools and other educational establishments, hospitals, buildings of religious sensitivity, recreational and noise sensitive amenity areas and offices/ business premises. The appraisal method for assessment of impacts during construction addresses potential significance based on both noise change and fixed noise limits. The operational phase appraisal of impact focuses on the changes in traffic noise. Vibration levels associated with a heavily trafficked urban – suburban road with a mix of fleet, inclusive of a dedicated bus lane, results in negligible vibration levels at the edge of the road both in terms of human perception and building response.

12.4.5.10. Potential construction stage activities that are assessed in relation to climate include utility diversions, road resurfacing and road realignments and construction access

routes. During the operational phase, factors that are taken into account for the climate assessment are predicted changes in traffic flows, reallocation of road space, and vulnerability to climate change. Alternative scenarios are analysed in order to consider the potential for further carbon reduction from higher bus frequencies and offline traffic signal optimisation. The TII Carbon Assessment Tool was used to assess construction phase embodied carbon emissions. Land use change, including felling and planting of trees, is also quantified, as well as traffic related emissions. The baseline assessment noted that private cars are the largest source of GHG emissions in the transport sector accounting for 54% of total transport emissions in Ireland in 2020, with heavy duty vehicle and buses accounting for 28%. Transport accounted for 17.8% of GHG emission in 2020.

Characteristics of the Proposed Development

12.4.5.11. The proposed Tallaght / Clondalkin Core Bus Corridor will include site preparation and clearance works and road and street upgrades, followed by removal of all construction facilities and equipment upon completion of works.

12.4.5.12. Activities during site preparation and clearance works that may impact on land, soil, water, air and climate include temporary or permanent land acquisition, archaeological and ground investigations and demolition works. During the road and street upgrade works, topsoil and subsoil excavation will take place, as well as general construction works and associated noise and dust impacts from demolition, earthworks, construction and track out. The proposal will also entail adjustment and upgrades to drainage, landscaping and boundary treatments.

12.4.5.13. BusConnects is a key part of the Government's policy to improve public transport and to address climate change by moving people from cars to sustainable transport. It will also be a measure of BusConnects to transition to a fleet of low and zero emissions buses, which will contribute to cleaner air and noise reduction. Once operational, there will be a likely reduction in traffic on the core bus corridor and an increase on alternative routes, with associated impacts on noise, air quality and drainage.

12.4.5.14. The SuDS hierarchy is employed for the drainage design of the proposed scheme whereby the preference is run-off using source control solutions (e.g. pervious

surfacing), followed by site controls (e.g. bioretention/ infiltration basins) and finally regional controls (e.g. attenuation ponds or tanks). In a number of areas along the proposed scheme, there will be either no increase or a reduction in impermeable areas. Where an increase in impermeable area is proposed, proposed interventions include sealed drainage, swales, bio-retention areas, soakaways, tree pits and attenuation tanks.

Potential impact of the proposed development on Land, Soils, Geology & Hydrogeology

12.3.2.2. The potential impacts of the proposed development on land, soils, geology and hydrogeology are summarised as follows:

- *Do nothing scenario* – Scheme would not be implemented and there would be no resulting impacts on land, soils, geology and hydrogeology.

  Construction Phase:

- Loss or damage of topsoil through pollution, incorrect stockpiling, waterlogging and disposal instead of reuse.
- Excavation of potentially contaminated ground, including historic quarries, service stations, a glue manufactory, a graveyard, brick works, Rutlands Mills, an old harbour and several potentially contaminating industries on Greenhills Road.
- Loss of future quarry or pit reserves.
- Loss or damage of proportion of Geological Heritage Area, e.g. Greenhills Esker.
- Loss or damage / contamination of parts of an aquifer from run-off during construction or mobilisation of pollution from the disturbance of contaminated ground.
- Change to groundwater regime.

  Operational phase:

- Potential for occasional accidental leakage of oil, petrol or diesel, allowing contamination to surrounding environment. Magnitude of any increase in comparison to the do nothing scenario is negligible.

Mitigation Measures for Land, Soils, Geology and Hydrogeology:

- Topsoils will be appropriately stockpiled and assessed for re-use.
- Ground suspected of contamination will be tested and any dewatering shall minimise mobilisation of contaminants.
- NTA will facilitate site visits by GSI personnel during the construction phase at M50 overbridge (Greenhills Esker) and / or provide relevant information gathered during the construction phase to supplement the GSI's existing County Geological Site Report.
- Good construction management practices to minimise the risk of transmission of hazardous materials as well as pollution of adjacent watercourses and groundwater.
- No additional mitigation for land, soil, geology and hydrogeology considered necessary for the operational phase.

Residual Impacts on Land, Soils, Geology and Hydrogeology:

- No significant residual impacts on land, soils, geology and hydrogeology as a result of the proposed scheme.

Potential impact of the proposed development on Water:

12.3.2.3. The potential impacts of the proposed development on Water are summarised as follows:

- *Do nothing:* It is absence of the proposed scheme, the surface water environment in the area should improve, particularly in relation to water quality due to investment under the Draft River Basin Management Plan.

  Construction Phase:

- *Hydrology* – Potential for change in the natural hydrological regime due to an increase in discharge as a result of dewatering activities (if required); disruption to local drainage systems due to diversions; and temporary increase in hard standings/ soil compaction increasing run off.

- *Water quality* – Potential for silty water runoff, contamination from spillages/ leaks and re-exposure of historically settled contaminants.
- *Hydromorphology* – Potential for sediment loading smothering the bed substrate and modifying morphological characteristics.
- Water quality in three waterbodies could potentially be impacted by surface water run-off containing sediments/ spillages.
- Site preparation and activities at construction compound TC1 and construction of Tallaght Bus Interchange has the potential to impact on water quality (increased sediment runoff; anthropogenic sources) in the Dodder_040.
- Construction compounds TC2, TC3, TC4, TC5, TC6, TC7 and TC8 have the potential to impact on water quality (increased sediment runoff; anthropogenic sources) in the Poddle_010. Taken together, the risk of impacts on the Poddle_010 from an incident at a construction compound is considered to be high.
- Potential impacts from an existing 220kV oil-filled underground electricity cable in Crumlin Road – surface water drains to Poddle_010.
- Potential impacts on the Camac_040 (increased sediment in runoff; anthrophonic sources) from proposed modifications to headwall under the R134 / Oak Road junction; widening of R134 at M50 bridge; road resurfacing; and at construction compounds TC12 & TC13.

Operational Phase:

- There will be an increase in impermeable area draining to the Dodder_040, Poddle_010 and Camac_040 waterbodies; however, increased treatment of water quality through use of SuDS will have beneficial impact.
- Potential for displaced traffic on side roads which discharge to a different water body, leading to a change in pollutant loadings; however, sections of road where increase AADT is more than 10,000 drain to the same catchment as the existing.

- No increase in the risk of pluvial flooding due to SuDS measures. Justification Test concluded that the proposed scheme is compatible with the existing level of flood risk.

Mitigation Measures for Water:

- Surface Water Management Plan provided within CEMP, which details control and mitigation measures for avoiding, preventing or reducing and significant adverse impacts on surface water environment.
- Site specific measures are proposed to avoid or reduce negative impacts related to the construction compounds, works close to ESB oil-filled cables, widening of R134, and modifications to the headwall of the Camac_040.
- During the operational phase, sustainable drainage systems will be maintained by local authorities and will be subject to management procedures.

Residual Impacts for Water:

- Following mitigation, there will be imperceptible residual impacts on water as a result of the construction phase of the proposed scheme. Slight residual effects may remain short term for the headwall/ widening works and combination of construction compound effects.
- Operational phase will see imperceptible beneficial residual impacts from increased treatment of water quality through the use of SuDS.
- Proposed development will not cause a deterioration in status in any waterbody and will not prevent them from achieving Good Ecological Status or cause a deterioration of Good Ecological Potential.

Potential impact of the proposed development on Air Quality

12.3.2.4. The potential impacts of the proposed development on Air Quality are summarised as follows:

Construction Phase:

- Site clearance and preparation, landscaping, road and junction construction works have the potential to generate dust and gaseous air emissions on site.

- *Construction dust* - There will be a larger magnitude of dust emissions during earthworks as the proposed construction compounds plus the proposed scheme construction site will have a total site area greater than 10,000 sq.m. and there is also likely to be potentially dusty material type such as clay. Medium magnitude during construction from installation of the pedestrian/cyclist bridges, paving materials, retaining walls and boundary walls. Dust magnitude for trackout (transport of dust/ dirt) is classified as medium.
- *Construction traffic* – comparison between ambient air concentrations for 2024 do minimum and 2024 Do Something was carried out. Assessment of modelled receptors show that impacts associated with construction phase traffic emissions are neutral and short-term.
- Key ecological receptor is the Grand Canal pNHA – there will be slight ecological impacts associated with construction phase traffic emissions.
- *Regional air quality* – proposed scheme will result in increases in emissions of all pollutants modelled, mostly from redistribution of vehicles onto other longer routes during construction. Changes are neutral during construction and within the traffic model tool margin of variability.

Operational Phase:

- Slightly beneficial impacts in terms of NO_2 emissions at 44 receptors, moderate at 26 receptors and substantial beneficial impact at 12 receptors due to diversion of traffic during the operational phase. There is a slight adverse impact expected at three receptors. Neutral overall impacts associated with operational phase traffic emissions pre-mitigation (predictions are conservative and do not take account of larger proportion of electric vehicles planning for opening year).
- Overall beneficial impact during operational phase in term of regional air quality, with reductions in emissions of all pollutants modelled.

<u>Mitigation Measures for Air Quality:</u>

- Dust mitigation measures such as cleaning of roads, care with handling of materials, covering of trucks, and erection of hoarding.

- No specific construction phase mitigation or monitoring measures required for construction traffic.
- Generally neutral impact on air quality during operational phase and therefore no mitigation required.

Residual Impacts on Air Quality:

- With implementation of construction dust mitigation measures, there will be no significant residual impacts.
- No substantial or moderate adverse effects and therefore no significant residual impacts.

Potential impact of the Proposed Development on Noise & Vibration

12.3.2.5. The potential impacts of the proposed development on noise and vibration are summarised as follows:

Construction Phase:

- Construction phase noise and vibration impacts from general road works (reconfiguration, resurfacing, widening, utility diversions).
- Nature of proposed works are transient, e.g. use of breakers, excavators and planers where noise limits are exceeded will occur for intermittent periods at any one time as works progress along the route.
- Noise impact from other ancillary works including urban realm improvements, landscaping, boundary treatments, retaining walls, emergency work, bored piling, quiet street treatment works, construction compounds, etc. Potential to be significant in evenings and on Saturdays.
- There will be slight traffic noise impacts due to the negligible to low volume of additional traffic along the road network during the construction phase. No significant impacts as a result of traffic redistribution during construction.

Operational Phase:

- Operational phase impacts from changes to traffic noise levels along the proposed scheme (from traffic flow data). There will be increased bus fleet and an associated reduction in private traffic.
- Overall reduction in exposure to traffic noise across the city through increased bus and bicycle journeys and journeys on foot.
- Addition or relocation of bus stops – noise source relating to engines idling, accelerating/ decelerating, air brakes, etc. Prevailing road environment is already dominated by road traffic and HEVs will eliminate ICE noise.
- Long term changes in traffic noise will be slight positive along the proposed scheme and there will be very small changes in traffic noise as a result on traffic distribution during daytime periods only.
- Potential changes to road traffic noise associated with traffic redistribution onto local roads – moderate short term change along Balfe Road and Kildare Road in 2028.
- There will be a small increase in traffic noise along the new sustainable transport road due to the screening provided by existing property boundaries (Treepark Road, Parkview, and Birchview Avenue), and the existing traffic noise levels from the surrounding road network.
- No vibration sensitive processes have been identified along the proposed scheme.
- Vibration levels of passing bus are below the normal range of perceptible human response to vibration and would not pose any significant impact.
- Calculated traffic noise levels are for ICEs for all fleet – potential to be lower as a result of conversion from ICEs to EVs and HEVs.

<u>Mitigation Measures for Noise & Vibration:</u>

- Appropriate use of acoustic enclosures, screens and hoarding.
- Monitoring of vibration at identified sensitive buildings.

- Construction activities will be required to operate below recommended vibration criteria.
- Contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas.
- Other noise mitigation measures will include selection of quiet plant, noise control at source, screening, hours of work restrictions, liaison with public and monitoring.

Residual Impacts for Noise & Vibration

- Implementation of appropriate noise control measures will ensure that noise impact is controlled within acceptable limit values. Vibration impacts will also be mitigated to acceptable levels during construction. Durations of noise and vibration will be scheduled to reduce overall significance.
- Once operational, there will be a reduction in traffic volumes in opening years and design year (2043) – a reduction in traffic noise will be experienced where the highest traffic noise levels are. There are no significant operational phase vibration impacts.

Potential impact of the proposed development on Climate

12.3.2.6. The potential impacts of the proposed development on Climate are summarised as follows:

- Construction phase GHG emissions of approximately 27,763 tonnes embedded CO2eq for materials over the approximate 36-month construction period.
- Proposed scheme will enable further reductions in car mode share with corresponding transfer to public transport, walking and cycling, which in turn will lead to further reduction in GHG emissions.
- Proposed scheme can accommodate higher levels of bus frequency whilst maintaining journey time reductions and reliability – this can facilitate further significant transfer from private car. There will also be future growth in cycling and demand management measures could be applied to meet climate emissions targets.

- Proposal has the potential to remove 18,420 and 44,230 car trips weekday from the road network in 2028 and 2043 respectively – represents significant contribution to reduction in carbon emissions.
- LGVs and HGVs are estimated to contribute the majority of CO2 emissions in 2043, reflecting the technical challenges in converting particularly the HGV fleet to electric vehicles. However, goods emissions are not an area that the proposed scheme can address.
- Proposed development will enable connectivity and integration with other public transport services leading to more people availing of public transport, helping to further reduce CO2eq emissions.
- Potential for changes to long-term seasonal averages for flood risk and extreme weather events as a result of climate change is not considered to be as significant by construction year.
- Embodied carbon emissions associated with the maintenance phase will be negligible, following mitigation.
- Likelihood of flooding and increased temperatures during operation is assessed to be of high likelihood and with a negligible effect.
- Further reductions in transport CO_2eq. emissions where traffic signal re-optimise in response to changes in traffic flow.
- Overall, the proposed scheme will make a significant contribution to reduction in carbon emissions.

Mitigation & Monitoring Measures for Climate

- Replacement, where feasible, of concrete containing Portland cement with concrete containing ground granulated blast furnace slag.
- Where practicable, materials will be reused within the extent of the proposed scheme or sourced locally.
- Bitumen containing material will be reused within new carriageway construction, in as far as practicable, reducing the amount of waste which will be disposed of to landfill.

Residual Impacts for Climate

- Embodied carbon emissions associated with the Construction Phase of the Proposed Scheme will be short-term and temporary in nature and mitigation measures will have the effect of reducing carbon emissions.
- Proposed scheme supports the delivery of an efficient, low carbon and climate resilient public transport service, and the achievement of Ireland's emission reduction targets.

Conclusions on Land, Soil, Geology and Hydrogeology; Water; Air and Climate; and Noise and Vibration

12.3.2.7. The land, soils, geology and hydrogeology features with high importance includes topsoil at the River Camac, Greenhills Esker, Sundrive Road and Rutland Avenue; crushed rock aggregate potential at South Circular Road, Dublin Castle and Winetavern Street; granular aggregate potential at the junction with Patrick's Street and Winetavern Street, and the River Dodder; and Greenhills Esker, Dublin City Walls and the River Poddle (County Geological Sites). Waterbodies relevant to the proposed scheme include the Dodder_040, Camac_040, Poddle_010, Grand Canal Main Line (Liffey and Dublin Bay) and Liffey Estuary Upper.

12.3.2.8. Highly sensitive air quality and noise receptors include residential properties, hospitals, schools and other community receptors. Factors taken into account for the climate assessment are predicted changes in traffic flows, reallocation of road space, and vulnerability to climate change. Private cars are the largest source of GHG emissions in the transport sector and this sector accounted for 17.8% of total GHG emissions in 2020.

12.3.2.9. The proposed development will include temporary or permanent land acquisition, site preparation and clearance works, excavations, and general construction works with associated noise and dust impacts. The proposal will also entail adjustment and upgrades to drainage, landscaping and boundary treatments.

12.3.2.10. The main impacts of the proposed scheme on land, soils, geology and hydrogeology are likely to occur during the construction phase from loss or damage of topsoil, excavation of potentially contaminated ground and contamination of parts of an

aquifer. A range of mitigation measures are required, particularly during construction stage, that will be implemented through the CEMP. This includes measures for dust suppression, noise, surface water protection and handling of soil. During the operational phase, the SuDS hierarchy is employed for the drainage design of the proposed scheme. Drainage infrastructure will be maintained by the local authorities and subject to their management procedures.

12.3.2.11. There is potential for water quality impacts at three waterbodies from surface water runoff containing fine sediments and accidental spillages/ leakages. There is also the potential to disrupt local drainage networks if diversion is required to allow construction works to take place. The main receptor that could potentially be significantly impacted is the Poddle_010 from combined risk of an incident at construction compounds. Mitigation measures for surface water management contained within the CEMP include an environmental incident response plan; control of runoff of fine sediments; management of materials / fuels; management of concrete; and the management of vehicles and plant. Site specific measures are proposed at the construction compounds. During the operational phase, the design of the proposed scheme will ensure that there will be no net increase in surface water runoff rates to any of the connected waterbodies. Sustainable drainage systems in the form of filter drains and bioretention systems will also reduce the potential risks to water quality from routine road contaminants.

12.3.2.12. The construction phase of the proposed scheme will give rise to dust emission and noise impacts. Construction dust emissions will be minimised with implementation of appropriate mitigation measures. There is potential for air quality and noise impacts during the operational phase from changes to traffic flows. However, these will be minimal and outweighed by car traffic reductions along the CBC and associated noise and pollution reductions.

12.3.2.13. The proposed scheme is estimated to result in total construction phase greenhouse gas emissions of approximately 27,763 tonnes embedded CO2eq for materials over the approximate 36-month construction period. During the operational phase, the proposed scheme has the potential to remove approximately 18,420 and 44,230 car trips per weekday from the road network in 2028 and 2043 respectively.

12.3.2.14. The overall impact of the proposed scheme, and one of its main purposes, is to bring about a reduction in CO_2 emissions and therefore contribute positively to climate change. Private cars were responsible for 54% of road transport emissions in 2020. Notwithstanding the various items raised by third parties in respect of issues concerning land, soil, geology, hydrogeology, noise, vibration water and climate, I consider that the proposed scheme will provide a realistic alternative to the private car, thereby encouraging more people to travel by sustainable modes. This is adequately addressed and demonstrated in the EIAR submitted with the application.

12.4.6. **Material Assets**

12.4.6.1. Material assets can be taken to mean built services and infrastructure, including traffic, which in effect consumes transport infrastructure. This assessment addresses these environmental factors separately as they appear in the EIAR, i.e., Traffic and Transport, Waste and Resources and Material Assets (general).

Material Assets (Traffic & Transport)

12.4.6.2. The traffic and transport assessment of the proposed development is set out in Chapter 6 of the EIAR. This chapter assesses the proposed physical changes to transport networks (pedestrian, cycling and bus infrastructure, and parking & loading), as well as the carrying out of a modelling-based assessment for people movement, bus performance indicators and general traffic. The Transport Impact Assessment appended to the EIAR focuses on the movement of people rather than the movement of vehicles, with the emphasis on maximising the capacity of the proposed scheme to move more people by sustainable modes whilst providing for the necessary movement of general traffic.

12.4.6.3. The design for the proposed scheme went through an iterative approach with mitigation embedded into the design process. This included physical changes and adjustments to traffic signals. The iterative design of the proposed scheme is supported by a multi-tiered modelling framework. Tier 1 consists of the NTA's East Regional Model at the strategic level, and Tier 2 is a Local Area Model at a more refined level, which provides information such as road network speed data, traffic redistribution impacts and traffic flow information. Tier 3 is a micro-simulation model

at corridor level to support the ongoing development of junction designs and traffic signal control strategies and to provide bus journey time information. At Tier 4 level, local models have been developed for each junction, informed by the above modelling tiers, and based on people movement prioritisation.

12.4.6.4. Scenarios are presented for 'do nothing' (baseline without proposed scheme and other GDA Strategy projects), 'do minimum' (2028 & 2043 without proposed scheme and with other transport schemes) and 'do something' (2024, 2028 & 2043 with proposed scheme and other transport schemes). A Level of Service (LoS) impact assessment compares the 'do minimum' and 'do something' scenarios.

12.4.6.5. The area within the boundary of the proposed scheme is the direct study area and the indirect study area consists of the area of influence that the proposed scheme has on changing traffic volumes above a defined threshold with reference to Transport Infrastructure Ireland's (TII) Traffic and Transport Assessment Guidelines (May 2014). Two sets of sensitivity rating have been applied to direct and indirect study areas. High sensitivities within the direct study area might include sections that are in the vicinity of community facilities and are currently experiencing congestion for pedestrians, cyclists, buses or general traffic. Within the indirect study area, high sensitivities include local and minor roads, with higher capacity roads becoming less sensitive.

12.4.6.6. Data collection included site surveys to determine the provision for the movement of pedestrians, cyclists and vehicles; the location of, and facilities at, bus stops; and existing parking and loading facilities. Mapping data also clarified the functional class of each road and points of interest. Quantitative assessment data was collected from the NTA Traffic Count Database, TII counters and bus canal and M50 cordon counts. Traffic surveys comprising junction turning counts and automatic traffic counts, were also undertaken in November 2019 and February 2020 (Pre-COVID). Bus journey time data was provided by the NTA, and 'TomTom' road journey time data was used to validate the LAM and micro-simulation models.

12.4.6.7. The EIAR describes the baseline traffic and transport conditions for each of the six sections of the proposed scheme (Section 1: Tallaght to Ballymount; Section 2: Ballymount to Crumlin; Section 3: Crumlin to Grand Canal; Section 4: Grand Canal

to Christchurch; Section 5: Woodford Walk (R113) / New Nangor Road (R134) to Long Mile Road (R110) / Naas Road (R810) / New Nangor Road (R134) junction; and Section 6: Long Mile Road (R110) / Naas Road (R810) / New Nangor Road (R134) junction to Drimnagh). It is stated that across the corridor at present, 11% (outbound) and 13% (inbound) of the route contains segregated cycle tracks and a further 59% / 57% respectively of the route has non-segregated cycle lanes. There is bus priority along 37% on the route inbound and 31% outbound. According to Automatic Vehicle Location data, the current standard of deviation for bus journey times along the corridor is 12 minutes. Unprioritised sections of the route can result in bunching of buses.

12.4.6.8. The detailed baseline assessment of each section includes a description of each junction and whether or not pedestrian crossing facilities are available. Cycle lanes and tracks are detailed and if bus lanes are shared by cyclists and their hours of operation. Cycle parking stand locations are also set out along with cycle hire facilities. The survey of bus priority measures includes the locations and lengths of bus lanes, bus stops with/ without Real Time Passenger Information (RTPI), shelters and seating. Bus service frequency is also provided. General traffic arrangements are outlined along the corridor, and this includes details on speed limits, number of lanes and widths, junction details, traffic calming measures, turn prohibitions, one-way streets, parking/ loading provision, etc.

Characteristics of the proposed development

12.4.6.9. The proposed Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme is one of 12 schemes to be delivered under the BusConnects infrastructure works programme, which seeks to greatly improve bus services in Dublin. The proposed scheme comprises the Tallaght to City Centre section and the Clondalkin to Drimnagh section, which continues onto the shared spine of the Tallaght to City Centre section. The proposed scheme terminates at the junction of High Street/ Nicholas Street/ Christchurch Place. There is an offline cycling section along Bunting Road, Kildare Road and Clogher Road.

12.4.6.10. Bus priority measures such as bus lanes, bus gates and signalled controlled priority, are proposed along the route. Bus stops will be enhanced to include islands, shared

landing areas, shelters, CCTV and information displays. The proposed scheme will also involve significant amendments to pedestrian and cycle facilities and traffic management. Safe cycle infrastructure will be provided that is segregated from general traffic wherever possible. Junctions will be upgraded to ensure a high level of comfort and priority for sustainable modes and to maximise the number of people moving through. Urban realm improvements, including widened footpaths, high quality hard and soft landscaping and street furniture will be provided in areas of high activity to improve the environment for pedestrians.

12.4.6.11. Over the 15.5km extent of the proposed scheme, bus priority measures will be implemented over 94% of the route compared to the existing 34%; the proportion of segregated cycle facilities will increase from approximately 1.3km inbound and 0.7km outbound to 14km inbound and 13.3km outbound; and the number of signalised pedestrian crossings will increase from 135 at present to 181 under the proposed scheme.

12.4.6.12. The main characteristics of the proposed development affecting general traffic will be the replacement of roundabouts with signalised junctions, ban turns, diversions and an overall reduction in car parking provision of approximately 534 spaces and 7 HGV spaces. There will also be a reduction in loading spaces. The section of Belgard Square West from Belgard South to Old Blessington Road and immediately north of Old Blessington Road is proposed to be a bus only route and will no longer be a through route for general traffic. The number of general traffic entry lanes / flares, circulation lanes and angle of entry at Walkinstown Roundabout have been reconfigured to promote safer vehicle movements. A number of turn bans for general traffic are proposed along the corridor, e.g. from Walkinstown Road onto Kilnamanagh Road southbound, and from Crumlin Road into Bangor Drive and Clonard Road. Overall, general traffic will still be able to use most of the corridor.

12.4.6.13. The primary objective of the Proposed Scheme is to facilitate a modal shift from car dependency through the provision of walking, cycle, and bus infrastructure enhancements thereby contributing to an efficient, integrated transport system and facilitating a shift to a low carbon and climate resilient city.

Potential impact of the proposed development on Traffic and Transport

12.4.6.14. The potential impacts of the proposed development on traffic and transport during construction and operational phases are summarised as follows:

- *Do nothing scenario* – Streetscape would continue to be based around private cars instead of people. Congestion would increase in line with travel demand growth.
- *Do minimum scenario* – Includes other BusConnects elements, Dart+, Luas green line capacity enhancement, GDA Cycle Network Plan for 2028, and for 2043 assumes full implementation of GDA Strategy including MetroLink, Dart+ Tunnel, and Luas extensions to Lucan, Finglas, Poolbeg and Bray.
- Do minimum transport demand forecasting accounts for 11% population growth to 2028 and 25% by 2043; 22% employment growth to 2028 and 49% to 2043; and 45% and 77% increase in goods traffic for 2028 and 2043 respectively.
- GDA Strategy has the effect of limiting growth in car demand into the future and proposed scheme will play a key role in this. Total trip demand will increase in the future, but a greater share of the demand will be by sustainable modes.
- *Do something scenario* ***(construction)*** – Proposed scheme estimated to take 36 months to complete.
- 13 construction compounds identified - CTMP shall include measures for managing traffic accessing and egressing the compounds.
- Haulage of material on site expected to be minimal - exporting and delivery of materials will use dedicated construction access routes. Use of the local road network will be minimised and N7, M50 and N81 will be utilised, along with regional roads.
- Temporary diversions and road closures may be required where a safe distance cannot be maintained to undertake works necessary to complete the proposed scheme.

- Pedestrian diversions and temporary surface footpaths will be used to facilitate pedestrian movements around work areas and access to local amenities may be temporarily altered.
- Cyclists may be temporarily impacted by construction activities along the proposed scheme corridor.
- Existing public transport routes will be maintained throughout the duration of the construction phase and bus services will be prioritised over general traffic. Temporary closure of sections of existing dedicated bus lanes may be required to facilitate the construction of new bus priority infrastructure and some existing bus stop locations may need to be temporarily relocated.
- Parking and loading locations may be temporarily impacted by construction activities.
- Significant impacts due to general traffic redistribution away from the direct study area are not anticipated during the construction phase.
- Full night-time closure of the M50 mainline in both directions is required to install a pedestrian and cycle bridge between New Nangor Road, Naas Road, and the Long Mile Road.
- Total of 11 no. 2-way truck movements are expected in a typical hour during peak haulage activity of the proposed scheme. Total 2-way traffic flows (PCUs) during AM and PM peaks is 62. These limits are comfortably below thresholds.
- *Do something scenario* ***(operational)*** – qualitative (walking, cycling, bus infrastructure and parking / loading) and quantitative (bus journey times / reliability, general traffic and people movement).

  Qualitative:
- Key infrastructural changes to pedestrian facilities include minimum footpath widths of 2m; upgrade of roundabouts to protected junctions; upgrading of pelican crossings to toucan crossings; new raised table crossings; reduction of pedestrian/ vehicle interaction; traffic calming and speed limit reduction; removal of left-turn slip lanes; pedestrianisation; new connections; and provision of

pedestrian/ cyclist bridges. Proposed scheme will increase the number of controlled pedestrian crossings from 135 in the Do Minimum to 181 in the Do Something scenario, representing a 34% increase.

- Key infrastructural changes to cycling infrastructure includes provision of cycle tracks, cycle lane width of 2m; upgrade of roundabouts to protected junctions; changes to signalised junctions to feature continuous cycle lanes across all arms of the junction or green signal priority for cyclists; upgrading of pelican crossings to toucan crossings; new toucan crossings; routing of cycle tracks behind on-street parking; provision of cycle bypasses at bus stops; quiet streets; shared bus lanes; and shared pedestrian/ cyclist bridges. Overall, cycle facilities in the proposed scheme will increase to approximately 85% outbound and 79% inbound, with the majority being segregated.
- Key infrastructural changes to bus infrastructure includes new bus stop layouts to better serve catchments and be closer to pedestrian crossing facilities; provision of RTPI, timetables, shelters, seating and accessible kerbs at all bus stops; and bus priority (bus lanes / bus gates / signal-controlled priority) provided along most of the corridor. Overall, the proposed scheme will provide bus priority measures along 80% of the corridor.
- Changes to parking and loading will take place to include reduction in residential parking spaces, pay and display and commercial spaces; removal of taxi spaces, relocation of disabled parking, reduction in loading bays, and formalisation of parking arrangements to improve the environment. Majority of this reduction is removal of off-street private parking - many properties have driveways, and residents should be encouraged to utilise their available off-road space for parking.
- Proposed scheme will have a positive long-term impact on the quality of pedestrian infrastructure between Tallaght and Ballymount (Section 1). LoS during the Do Minimum scenario ranges between F and C, with two of the 16 impacted junctions along this section given low E/ F ratings – this will improve to an A/B rating at 15 of the impacted junctions in the Do Something scenario.

- Proposed scheme will have a positive long-term impact on the cycling environment between Tallaght and Ballymount. LoS improves to A and B along most of Section 1, as a result of improved segregation for cyclists and cycle lanes traversing priority junctions and continuing through signalised junctions with protected treatments.
- Proposed scheme improves the quality of existing bus infrastructure along Section 1, which will have a highly positive impact for bus users. Layout of new bus stops better serves existing and future catchment and new bus interchange will be created at The Square.
- Proposed scheme will result in the loss of 95 parking spaces along Section 1; however, 7,213 spaces will be retained. Three additional loading bays will be provided.
- Proposed scheme will have a similar positive long-term impact on the quality of pedestrian infrastructure between Ballymount and Crumlin (Section 2). LoS during the Do Minimum scenario ranges between C and F, with 5 of the 6 existing impacted junctions along this section given low D/ E/ F ratings – this will improve to an A/B rating at all impacted junctions in the Do Something scenario.
- Proposed scheme will have a positive long-term impact on the cycling environment along Section 2. LoS improves from C/D in 4 out of 5 junctions to A at all 5 junctions, as a result of improved segregation for cyclists and junction treatments in the form of cycle lanes traversing priority junctions and continuing through signalised junctions with protected treatment.
- Proposed scheme improves the quality of existing bus infrastructure along Section 2, which will have a highly positive impact for bus users.
- Proposed scheme will result in the loss of 136 parking spaces (96 private) along Section 2; however, 496 spaces will be retained, and two new loading spaces will be provided.
- Proposed scheme will have a positive long-term impact on the quality of pedestrian infrastructure between Crumlin and the Grand Canal (Section 3). LoS during the Do Minimum scenario ranges between B and E, with 18 of the 38

impacted junctions along this section given low D/ E ratings – this will improve to an A/ B rating at all impacted junctions in the Do Something scenario.

- Proposed scheme will have a positive long-term impact on the cycling environment along Section 3 between Walkinstown Roundabout and Dolphin Road. LoS improves from an overall C to an overall A. Bunting Road to Clogher Road route is proposed as a quiet cycle route in terms of traffic flows, with cycle tracks provided on both sides of the road and priority of junctions.
- Proposed scheme improves the quality of existing bus infrastructure along Section 3, which will have a highly positive impact for bus users. The number of bus stops will be rationalised from 46 down to 36, striking a balance between coverage and journey times.
- Proposed scheme will result in the loss of 137 parking spaces (including 7 taxi spaces) along Section 3; however, 1,370 spaces will be retained. Proposed scheme will formalise parking arrangements and there is alternative parking available surrounding the corridor.
- Proposed scheme will have a positive long-term impact on the quality of pedestrian infrastructure between the Grand Canal and Christchurch (Section 4). LoS during the Do Minimum scenario ranges between B and D – this will improve to an A/ B rating at all impacted junctions in the Do Something scenario.
- Proposed scheme will have a positive long-term impact on the cycling environment along Section 4 between Grand Canal and Christchurch. LoS improves from an overall B to an overall A. 60mm set down kerb segregation between the footway and the cycle track is important for pedestrians with visual impairments and cycle track kerbs will also be raised 120mm from the carriageway to provide segregation from vehicles.
- Proposed scheme improves the quality of existing bus infrastructure along Section 4, which will have a highly positive impact for bus users.
- Proposed scheme will result in the loss of 20 parking spaces (including 1 loading bay) along Section 4; however, 358 spaces will be retained. Proposed scheme

will formalise parking arrangements and there is alternative parking available surrounding the corridor.

- Proposed scheme will have a positive long-term impact on the quality of pedestrian infrastructure at Section 5 (Woodford Walk (R113) / New Nangor Road (R134) to Long Mile Road (R110) / Naas Road (R810) / New Nangor Road (R134) junction). LoS during the Do Minimum scenario ranges between C and E – this will improve to an A/ B rating at all impacted junctions in the Do Something scenario.
- Proposed scheme will have a positive long-term impact on the cycling environment from Woodford Walk to Naas Road (Section 5). LoS improves from a C to an A.
- Proposed scheme improves the quality of existing bus infrastructure along Section 5, which will have a highly positive impact for bus users. Bus lanes will be provided along the entirety of the corridor.
- Proposed scheme will result in the loss of 129 parking spaces and 7 HGV spaces along Section 5; however, 1,566 parking spaces and 185 HGV spaces will be retained.
- Proposed scheme will have a positive long-term impact on the quality of pedestrian infrastructure at Section 6 (Long Mile Road (R110) / Naas Road (R810) / New Nangor Road (R134) junction to Drimnagh). LoS during the Do Minimum scenario ranges between B and F – this will improve to an A - C rating (overall E to B).
- Proposed scheme will have a positive long-term impact on the cycling environment along Section 6. Overall LoS improves from a C to an A.
- Proposed scheme improves the quality of existing bus infrastructure along Section 6, which will have a positive impact for bus users. Bus lanes will be provided along the entirety of the corridor.
- Proposed scheme will result in the loss of 17 parking spaces along Section 6; however, 9 parking spaces will be retained. Nine of the spaces being removed

are associated with private commercial premises and there is an availability of equivalent types of parking along adjacent streets.

Quantitative:

- Models show the difference between Do Minimum and Do Something in 2028 AM inbound peak along corridor of -33% general traffic (modal split 25%), and an increase of 145% public transport (modal split 58%), 45% combined cycling/ walking (modal split 17%).
- For PM peak outbound the modal split for general traffic changes from 53% to 26%; for public transport from 33% to 59%; and for walking/ cycling from 14% to 16% in 2028 (Do Minimum/ Do Something).
- For AM peak inbound the modal split for general traffic changes from 36% to 19%; for public transport from 42% to 48%; and for walking/ cycling from 22% to 33% in 2043 (Do Minimum/ Do Something).
- For PM peak outbound the modal split for general traffic changes from 39% to 19%; for public transport from 46% to 51%; and for walking/ cycling from 15% to 30% in 2043 (Do Minimum/ Do Something).
- *Assessment of people movement* by bus shows an approximate 200 to 500 additional users along the Clondalkin to Drimnagh section of the corridor and 500 to 1,000 additional users along the Tallaght to City Centre section of the corridor in the 2028 AM peak when comparing do minimum to do something.
- In the Do Something 2043 AM peak scenario, the Clondalkin to Drimnagh section will experience an increase in bus passengers of approximately 200 to 400 additional users and the Tallaght to City Centre section will experience an increase in bus passengers of approximately 600 to 1,200 additional users compared to the Do Minimum scenario.
- In the Do Something 2028 PM peak scenario, the Clondalkin to Drimnagh section will experience an increase in bus passengers of approximately 300 to 400 additional users and the Tallaght to City Centre section will experience an increase in bus passengers of approximately 500 to 900 additional users compared to the Do Minimum scenario.

- In the Do Something 2043 PM peak scenario, the Clondalkin to Drimnagh section will experience an increase in bus passengers of approximately 200 to 300 additional users and the Tallaght to City Centre section will experience an increase in bus passengers of approximately 600 to 1,000 additional users compared to the Do Minimum scenario.
- In 2028, when comparing Do Minimum to Do Something, there will be an 11.3% increase in people boarding bus routes which may use any part of the proposed scheme during AM peak and also an 11.3% increase during PM peak. The equivalent figures for 2043 are 6.4%% in the AM (1,409 passengers) and 38.4% in the PM peak (6,360 passengers).
- Proposed scheme will deliver significant improvements in people movement by sustainable modes along the proposed scheme corridor, particularly by bus, with a reduction in car mode share.
- *Clondalkin to Drimnagh Section:* Average inbound bus journey times for the D1 service reduces from 15.6 for do minimum to 10.9 for do something (-30%) during 2028 AM peak and from 15.4 to 10.7 minutes for PM peak (-31%). For 2043, average bus journey times reduce from 14.4 to 10.8 minutes (AM) and from 16 to 10.8 minutes (PM).
- Average outbound bus journey times for the D1 service reduces from 15 minutes for do minimum to 12.9 minutes for do something (-14%) during 2028 AM peak and also from 15 to 12.9 minutes for PM peak (-14%). For 2043, average bus journey times reduce from 14.7 to 13.2 minutes (AM) and from 14.5 to 12.9 minutes (PM).
- *Tallaght to City Centre Section:* Average inbound bus journey times for the D2 service reduces from 52.7 for do minimum to 45.7 for do something (-13%) during 2028 AM peak and from 48.7 to 44.7 minutes for PM peak (-8%). For 2043, average bus journey times reduce from 47.4 to 45 minutes (AM) and from 48.3 to 44.9 minutes (PM).
- Average outbound bus journey times for the D2 service reduces from 47.9 minutes for do minimum to 45.3 minutes for do something (-6%) during 2028 AM

peak and from 56.4 to 47.1 minutes for PM peak (-16%). For 2043, average bus journey times reduce from 45.5 to 45 minutes (AM) and from 56.8 to 45.7 minutes (PM).

- There is a larger range of journey times for the do minimum scenarios in both 2028 and 2043 compared to do something – indicates a lower level of reliability with do minimum scenario. Proposed scheme is expected to deliver bus journey time savings on a number of critical sections.
- Modelling shows that the proposed scheme will reduce total bus journey times by up to 13% in 2028 and 2043. On an annual basis this equates to approximately 6,150 hours of bus vehicle savings in 2028 and 4,500 hours in 2043, when considering weekday peak periods only.
- Service frequency assessed in micro-simulation model with 10 buses per hour increase (total 43) along the busiest section along Drimnagh Road – high level of journey time reliability is maintained in do something scenarios but less so in do minimum scenario. Highlights benefit that the proposed scheme can provide in protecting bus journey time reliability and consistency, as passenger demand continues to grow.
- *General traffic* - there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. Will result in trip redistribution.
- Local Area Model indicates that during the 2028 scenario, the general traffic flow reductions along the direct study area vary between -116 and -1,516 during the AM Peak Hour. The roads that will experience the greatest increase between the Do Minimum and Do Something along the direct study area scenarios are the new links at Ballymount Avenue, Calmount Road and Greenhills Road, and Nangor Road.
- There are also reductions in traffic flow along certain road links within the indirect study area during the AM peak (2028), varying between -102 (School Street) and -1,069 (Kylemore Road).

- Additional traffic on the key road links within the indirect study area varies between 102 & 631 and 101 & 1,563 combined flows during the AM and PM peaks respectively (2028). Further junction capacity assessment undertaken along these road links to determine whether there is reserve capacity to facilitate the uplift in traffic. Redistributed traffic will have less than the National Roads 5% threshold impact on turning flows in the AM and PM peaks (2018).
- Local Area Model indicates that during the 2028 scenario, the general traffic flow reductions along the direct study area vary between -141 and -1,508 during the 2028 PM Peak Hour. There are increases in general traffic flows along the direct study area on the new links at Ballymount Avenue, Calmount Road and Greenhills Road, as well as on Nangor Road and Long Mile Road.
- There are reductions in traffic flow along certain road links within the indirect study area during the PM peak (2028), varying between -102 (Cookstown Road) and -1,334 (Kylemore Road). Reduction in general traffic averages -290 2-way flows.
- Junction analysis demonstrates that the majority of junctions are operating with a maximum Volume / Capacity ratio of below 85% during the AM and PM peaks (2028) - proposed scheme will have a negligible impact on the majority of assessed local / regional road links within the indirect study area.
- 2028 AM capacity issues noted at Ninth Lock Road / Station Road, Killeen Road / Park Road West, Chapelizod Bypass / Kennelsfort Road Lower, Spawell Roundabout, Templeogue Road / Cypress Grove Road, Citywest Road / Garter Avenue and Tallaght Bypass / Whitestown Way / Cookstown Way in the do something scenario. However, 6 of the 7 junctions operate with a maximum V/C ratio of above 100% in both Do Minimum and Do Something scenarios. No junctions are predicted to have a significant or higher effect and no further assessment of AM peak hour in 2028 is required.
- 2028 PM capacity issues noted at Chapelizod Bypass / Kennelsfort Road Lower, Chapelizod Bypass / The Oval, Memorial Road / Con Colbert Road, Ballymount Road Lower / Ballymount Retail Centre, Walkinstown Avenue / Long Mile Road, Naas Road / Turnpike Road, M50 Northbound / J9 off-slip, M50 J10 NB off-slip to

Naas Road, and Glenview Roundabout / Tallaght Bypass. However, 6 of the 9 junctions operate with a maximum V/C ratio of above 100% in both Do Minimum and Do Something scenarios. No junctions are predicted to have a significant or higher effect and no further assessment of PM peak hour in 2028 is required.

- 2043 AM capacity issues noted at Station Road / Ninth Lock Road, Killeen Road / Park West Road, Chapelizod Bypass / The Oval, Spawell Roundabout, Templeogue Road / Cypress Grove Road, Belgard Road/ Cookstown Road, Citywest Road / Garter Avenue, and Tallaght Bypass / Whitestown Way / Cookstown Way. However, 5 of the 8 junctions operate with a maximum V/C ratio of above 100% in both Do Minimum and Do Something scenarios and sensitivity of other three junctions is low. No junctions are predicted to have a significant or higher effect and no further assessment of AM peak hour in 2043 is required.
- 2043 PM capacity issues noted at Chapelizod Bypass / Kennelsfort Road Lower, Chapelizod Bypass / The Oval, Memorial Road / Con Colbert Road, Ballymount Road Lower / Ballymount Road Lower / Ballymount Retail Centre, Walkinstown Avenue / Walkinstown Avenue / Long Mile Road / Long Mile Road, Naas Road / Turnpike Road, N7 J3 On-slip / Naas Road Northbound, and Tallaght Bypass / Whitestown Way / Cookstown Way. However, 7 of the 8 junctions operate with a maximum V/C ratio of above 100% in both Do Minimum and Do Something scenarios and sensitivity of the other junction is negligible. No junctions are predicted to have a significant or higher effect and no further assessment of PM peak hour in 2043 is required.
- Junction analysis demonstrates that the majority of junctions are operating with a maximum Volume / Capacity ratio of below 85% during the AM and PM peaks (2043). AM and PM capacity issues also noted at some junctions for the 2043 scenario some of which would occur in both do minimum and do something scenarios.
- DMURS recognises that a certain level of traffic congestion is an inevitable feature within urban networks and that junctions may have to operate at saturation levels for short periods of time during the peak hours of the day.

- Night-time traffic redistribution analysis shows that junctions do not experience flows in excess of capacity.

Mitigation Measures

- Construction Environmental Management Plan (CEMP) contains mitigation measures that will ensure that disruption and nuisance are kept to a minimum during the construction phase. Construction Traffic Management Plan (CTMP) will subsequently be prepared and will include measures to minimise the impacts associated with the construction phase upon the peak periods of the day. A Construction Stage Mobility Management Plan will also be prepared to actively encourage its personnel to travel to site by sustainable modes.
- During the operational phase, the proposed scheme will result in a positive impact for walking, cycle, bus and people movement and therefore mitigation is not required for these modes.
- Mitigation for impacts to general traffic, parking and loading have been incorporated into the proposed scheme.

Residual impacts

12.4.6.15. With implementation of mitigation measures, the residual impacts associated with the impacts of the proposed scheme remain the same.

Conclusions on Traffic and Transport

12.4.6.16. The Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme seeks to provide walking, cycling and bus infrastructure along a 15.5km route between The Square Shopping Centre, Tallaght and Nangor Road, Clondalkin and Nicholas Street in the city centre, passing through Greenhills Road, Walkinstown Roundabout, Drimnagh, Naas Road/ Long Mile Road junction, Crumlin, Dolphins Barn, Cork Street, Dean Street and Patrick's Street. The primary objective of the proposed scheme is to facilitate a modal shift from car dependency through the enhancement of infrastructure for sustainable modes, thereby contributing to an efficient, integrated transport system within a low carbon and climate resilient city.

12.4.6.17. At present, 13% of the inbound route contains segregated cycle tracks and a further 57% of the route has non-segregated cycle lanes. Outbound, the equivalent figures

are 11% and 59% respectively. There are bus lanes along 34% of the route. According to Automatic Vehicle Location data, the current standard of deviation for bus journey times along the corridor is 12 minutes.

12.4.6.18. Bus priority measures in the form of bus lanes, bus gates, and signal-controlled priority, will be implemented over 94% of the route. Bus stops will be enhanced to include islands, shared landing areas, shelters, CCTV and information displays. Safe cycle infrastructure will be provided that is segregated from general traffic wherever possible and junctions will be upgraded to ensure a high level of comfort, priority and capacity for sustainable modes. The proportion of segregated (including quiet street treatment) cycle facilities will increase from the existing 9.7% to 74%, and the number of signalised pedestrian crossings will increase from 135 to 181 under the proposed scheme. Urban realm improvements, including widened footpaths, high quality hard and soft landscaping and street furniture will be provided in areas of high activity. The main characteristics of the proposed development affecting general traffic will be the replacement of roundabouts with signalised junctions; reduced car parking provision; removal of traffic lanes/ access; and priority rearrangement.

12.4.6.19. The assessment of traffic and transport in the EIAR comprises an assessment of the proposed physical changes (qualitative) and a modelling-based assessment (quantitative). The design of the proposed scheme and its impact is assessed using a multi-tiered modelling approach comprising of strategic macro-modelling, local area simulation and local junction modelling. The focus is on maximising the capacity of the proposed scheme to move more people by sustainable modes, whilst also providing for necessary general traffic. Scenarios are presented for ‘do nothing’ (baseline without proposed scheme and other GDA Strategy projects), ‘do minimum’ (2028 & 2043 without proposed scheme and with other transport schemes) and ‘do something’ (2024, 2028 & 2043 with proposed scheme and other transport schemes). A Level of Service (LoS) impact assessment compares the ‘do minimum’ and ‘do something’ scenarios. Bus performance indicators illustrate the changes to projected journey times and reliability for buses.

12.4.6.20. Notwithstanding the various items raised by third parties in respect of issues relating to traffic, I consider the assessment approach to be robust and appropriate for

modelling the future impacts of the proposed scheme. The information presented in the EIAR and associated appendices gives a good representation of existing and future people movement scenarios along the corridor for the opening year and into the future. Provision is made for realistic modal shifts that are commensurate with the overall aims and objectives of the BusConnects programme. The direct and indirect impacts on general traffic are presented in terms of the corridor itself and the degree of traffic redistribution. Physical changes to the quality of pedestrian, cycling, bus infrastructure and parking/ loading are also assessed.

12.4.6.21. A certain amount of disruption on all movement modes can be expected during the construction phase of the proposed scheme. Measures will be included in the CEMP to mitigate these impacts. Temporary traffic arrangements will be implemented through a Construction Traffic Management Plan (CTMP), and a Construction Stage Mobility Management Plan (CSMMP) will also be prepared to actively encourage personnel to travel to the site by sustainable means. It is expected that the construction phase will last c. 36 months and during this period, access will be maintained to adjacent businesses, residences and community facilities.

12.4.6.22. The operational phase of the proposed scheme will see an overall increase in the total number of people travelling along the corridor. This is significant and demonstrates that modal shift is essential to avoid further saturation and congestion from the existing private vehicle modal share projected into the future. It is envisaged that the population will grow by 11% up to 2028 and 25% by 2043 (above 2016 census data levels) and employment levels will also increase 22% by 2028 and 49% by 2043, (NTA Reference Case Planning Sheets 2028, 2043).

12.4.6.23. The operational phase will also see indirect impacts from traffic using alternatives routes and volume to capacity rates of 100% at certain junctions. It is recognised in DMURS, however, that a certain level of traffic congestion is an inevitable feature within urban networks and that junctions may have to operate at saturation levels for short periods of time during the peak hours of the day. The proposed scheme will see the loss of approximately 534 parking spaces along the corridor and this is not considered to be significant given the availability of alternative spaces in the indirect study area.

12.4.6.24. The number of commuters by car in 2042 is forecast in the recently released 2022-2024 GDA Transport Strategy to be 252,500 (50.4%) by sustainable modes and 248,500 by car (49.6%). Clearly, the main adverse effects pertaining to transport associated with the proposed scheme relate to those using the private car and this has been assessed in the EIAR as being not significant. In my opinion, the extent of modal shift depends on the quality of sustainable infrastructure provided. People will assess the time it takes to undertake a journey and will most often take the quickest method. It is easier to compare journey modes now with various mobile phone mapping applications giving reasonably accurate predictions on journey times for different modes. In short, people will continue to use private vehicle unless they experience inconvenience and delay through congestion, indirect journeys or lack of parking.

12.4.6.25. As noted, the success of modal shift from private car to sustainable modes depends on the quality of pedestrian, cycling and bus infrastructure. The qualitative assessment looks at Level of Service comparisons for 'do minimum' and 'do something' scenarios for pedestrians, cyclists and bus users. There will be significant improvements in terms of Level of Service for pedestrians and cyclists. This will include improved crossing facilities, safer junctions, traffic calming and better segregation. Bus infrastructural improvements will include RTPI, timetable information, shelters, seating and accessible kerbs at all stops. Bus priority will be in place along 94% of the route and these measures will improve the user experience. Overall, sustainable transport modes will be better placed to attract modal shift from the private car.

12.4.6.26. The figures outlined for the 'do minimum' and 'do something' scenarios for 2028 and 2043 demonstrate that there will be an increase in the number of people travelling along the corridor by sustainable modes of 37% and 27% during the 2028 AM and PM Peak respectively, and by 49% and 38% in AM and PM Peak hours respectively during the 2043 scenario. Total bus journey times on all modelled bus services will improve by 12% during the AM and PM peak hours in 2028 and 2043. Bus reliability will also improve with lower ranges of journey times and resilience testing showing that 10 additional bus per direction per hour can be added without jeopardising journey time reliability.

12.4.6.27. In general, the proposed scheme will give rise to largely positive benefits in terms of traffic and transport. As the population grows, it is critical that walking, cycling and public transport usage are brought forward as the efficient modes of travel in terms of use of road-space and environmental impacts. Some essential travel will continue to be made by cars and goods vehicles and the proposed scheme maintains access throughout the route to hospitals, businesses, local services and dwellings.

Material Assets (Waste and Resources)

12.4.6.28. Chapter 18 of the EIAR considers the potential waste and resources generated by the construction and operational phases of the proposed scheme. Surplus wastes will arise from demolition, site clearance, excavation and construction activities and there will be wastes from ongoing road maintenance during the operational phase.

12.4.6.29. The potential impacts of the proposed scheme are described in the EIAR in terms of the generated waste and by-products and comparing this to the current waste and by-product management baseline in Ireland. A desk study of current practices was carried out and data was gathered on types and quantities of waste and by-product generation from the proposed scheme. The proposed scheme was reviewed in the context of the waste hierarchy, the quantity of waste requiring disposal, surplus materials and waste infrastructure capacity. The available C&D waste and by-product capacity in EMWR for 2020 is approximately 11.7 million tonnes.

Characteristics of the proposed development

12.4.6.30. Key characteristics of the proposed Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme relevant to waste and resources during the construction phase will include the construction of cycleways, footpaths, bridges, road widening and urban realm improvements; removal of trees, kerbs, walls, fences, gates and retaining walls; modification of roundabouts to signalised junctions; installation of new street furniture; minor utility diversions/ protections; and excavation works.

12.4.6.31. During the operational phase, surplus waste materials will result from maintenance activities. This is qualified as the area requiring maintenance above the baseline, i.e. the existing road would continue to require maintenance.

Potential impact of the proposed development on Waste & Resources

12.4.6.32. The potential impacts of the proposed development on waste and resources are summarised as follows:

- *Do nothing scenario* – ongoing maintenance of existing roads would continue to result in waste generation.
- *Construction phase* – demolition including waste generated from the removal of features above-ground, such as kerbs, traffic signs and bus stops and excavation including waste generated from the excavation of below-ground material, such as soil and stones and bituminous containing material, etc. All material will be considered for reuse within the proposed scheme or other construction projects.
- Organic waste generated from shrub, tree or garden clearance – recovery and recycling of such wastes will be maximised.
- Small quantities of general municipal waste will be generated by construction workers – recovery and recycling of such wastes will be maximised.
- Approximate demolition waste generated by the proposed development will be 4,200 tonnes of concrete, bricks, tiles and similar; 1,170 tonnes of metals; and 110 tonnes of segregated wood, glass and plastic – equivalent to 0.05% of the C&D waste management baseline in the EMWR.
- Approximate excavation wastes generated by the proposed scheme will be 174,000 tonnes of soil and stone; 22,000 tonnes of concrete, bricks, tiles and similar; and 57,000 tonnes of bituminous mixtures - equivalent to 2.16% of the C&D waste management baseline for the EMWR.
- The estimated quantities of major construction materials required by the proposed scheme are 83,100 tonnes of fill material, 93,700 tonnes of asphalt, 3,300 tonnes of concrete, 8,800 tonnes of precast concrete, 7,300 tonnes of structural steel and 1,700 tonnes of brickwork and blockwork.
- Most likely type and quantity of general construction waste will be surplus concrete and unusable or damaged pipe segments - Quantities of these materials are estimated to be small (5% to 15% of construction material delivered).

- *Operational phase* - quantity of bituminous mixtures generated over the assumed lifetime of the proposed scheme (60 years) will increase compared to the do-nothing scenario by approximately 14,500 tonnes due to an overall widening of the carriageway. There will be an increase of maintenance needs during operation, which will not be significant.

Mitigation Measures for Waste and Resources

12.4.6.33. A Construction and Demolition Resource and Waste Management Plan (CDRWMP) has been prepared and this will be implemented, and this document will outline how waste arising during the Construction and Demolition Phase of the proposed scheme will be managed in a way that ensures compliance with the provisions of the Waste Management Act 1996, as amended. Best practice measures and efficient use of material resources will be carried out to minimise the amount of waste produced (or otherwise increase its value as a resource) and to reduce, as far as possible, the amount of waste that is disposed to landfill.

12.4.6.34. The appointed contractor will have regard to the principles of the waste hierarchy, in line with the Waste Framework Directive (prevention, reuse; recycling, recovery and disposal). Demolition wastes, such as metals, electronics, etc. will be reused, recycled disposed of in the appropriate manner.

12.4.6.35. Specific measures to be implemented during construction will include the temporary stockpiling for reuse, and specification of recycled aggregates and reclaimed bituminous mixtures where practicable. It is estimated that 12,300 tonnes of bituminous materials will be recycled on the proposed scheme; 23,500 tonnes of sub-base material will be reused; and 24,700 tonnes of capping material will be reused on the proposed scheme.

12.4.6.36. During the operational phase, maintenance operations will be undertaken under the jurisdiction of the local authority and in accordance with their waste management plans.

Residual Impacts

12.4.6.37. No significant residual impacts for the construction or operational phases of the proposed scheme.

Material Assets (General)

12.4.6.38. Chapter 19 of the EIAR considers material assets in terms of built services and infrastructure. Other material assets are addressed under the roads and traffic and waste management sections above. This section focuses on major infrastructure and utilities and imported material, excluding materials covered under Waste & Resources above. Major infrastructure includes canals, railway lines and Luas lines interacting with the proposed development. The impact on utilities is assessed in terms of diversion and changes. With respect to imported construction materials, this section considers concrete granular fill / aggregate, asphalt, and structural steel.

12.4.6.39. The proposed scheme will interact with the M50 and two locations along the Tallaght and Clondalkin sections. The Luas Red Line is in close proximity to the CBC at the Tallaght and Kylemore Luas stops and at the Long Mile Road Nass Road junction. The Grand Canal lies adjacent to a section of the corridor at Nangor Road and where it crosses the canal via Camac Bridge at Dolphin's Barn. Major utilities within the study area, along or crossing the proposed scheme include low to high voltage electricity lines; low to high pressure gas network infrastructure; Irish Water mains water and sewer lines; surface water sewer network; traffic signals ducting; and underground telecommunications cables.

Characteristics of the Proposed Development

12.4.6.40. The proposed development will require excavation works that may impact on underground infrastructure and utilities. Realignment, upgrade or replacement of utilities infrastructure will be carried where protection is not an option.

12.4.6.41. Some utilities may be required for the operational phase of the proposed scheme mainly in the form of electricity connection for new street lighting, junction signalling and RTPI. Surface water drainage will also require some amendment.

Potential impact of the proposed development on Material Assets

12.4.6.42. The potential impacts of the proposed development on material assets are summarised as follows:

- *Do nothing scenario* – there would be a neutral impact on infrastructure and utilities and no requirement to import material for the construction of the proposed scheme.
- *Construction phase:* Main impacts will arise from the requirement to divert utilities.
- No impact on the operation of the Luas, and access to both Tallaght and Kylemore Luas Stops will be maintained.
- No works to existing bridge or underpass that would affect the operation of the M50.
- Proposed scheme will not require any significant construction works which will impact on the usability of the Grand Canal at Nangor Road or Camac Bridge.
- Power for construction compounds will be supplied through connections into the electricity network, or via generators.
- There may be temporary local interruptions arising from the diversion of electricity infrastructure for a set number of hours per day.
- Construction compounds will be connected to local mains water supply or water tankers and local foul/ combined sewers or on-site tanks. Temporary welfare facilities will be used, where required.
- Temporary local interruptions to water supply may occur generally for a set number of hours per day.
- Sustainable Drainage System (SuDS) measures will be installed where there is an increase in impermeable area (swales, attenuation ponds, filter drains / perforated pipes, underground attenuation, tree pits and sealed drainage systems to control the flow of surface water).
- Some interfaces between the existing gas infrastructure and telecommunications and the proposed scheme will require diversion – any interruptions will generally only occur on a set number of hours per day.
- Estimate of materials to be imported – 83,100 tonnes of fill material, 93,700 tonnes of asphalt; 3,300 tonnes of concrete; 8,800 tonnes of precast concrete;

7,300 tonnes of structural steel; and 1,700 tonnes of brickwork and blockwork. These quantities represent a very small proportion of the Irish quantities manufactured per year. All materials required for the construction phase are generally readily available.

- *Operational phase:* Upon completion of the proposed scheme, there will be no interaction with the M50 or Grand Canal. Luas crossings will be controlled to maintain operation of both the proposed scheme and the Luas.
- Electricity required to power street lighting, junction signalling and RTPI displays. Telecommunications will be required for traffic signal controllers and RTPI.
- Larger surface area arising from new/ widened carriageways, cycle infrastructure and footpaths will result in additional surface water runoff.
- Most of the imported material required for maintenance of the proposed scheme would have already been required for existing roadways.

Mitigation measures for Material Assets

12.4.6.43. The appointed contractor will ensure that protection is in place for diversions to prevent long term interruption of services. Confirmatory surveys will be undertaken and protection measures during construction will include warning signs and markings indicating the location of utility infrastructure, safe digging techniques, and isolation of sections of infrastructure during works in the immediate vicinity. Consultation with utility providers will be ongoing and prior notification of any disruption will be given to affected properties.

12.4.6.44. Where possible, materials will be sourced locally, and the quantities of such materials will be minimised. Materials will be managed using 'just in time' principles to prevent over-ordering and waste. No specific mitigation measures are required during the operational phase of the proposed scheme.

Residual impacts for material assets

12.4.6.45. No significant negative residual impacts are envisaged from the construction or operational phases.

Conclusions on material assets

12.4.6.46. It is likely that the main impacts of the proposed Tallaght / Clondalkin Core Bus Corridor on the above material assets relating to waste and resources, utilities and infrastructure will occur during the construction phase. This will require full preparation and implementation of relevant construction phase plans to minimise construction related impacts and disturbance to properties and utility providers. Sustainable waste and resource management principles will be applied under the Circular Economy Model, and this will ensure that waste is minimised. Overall, it is likely that the proposal will not have a significant impact on these material assets following implementation of mitigation measures.

12.4.7. **Cultural Heritage and the Landscape**

12.4.7.1. These environmental factors are addressed in Chapter 15 – "Archaeological and Cultural Heritage", Chapter 16 – Architectural Heritage, and Chapter 17 – Landscape (Townscape) and Visual.

12.4.7.2. Archaeological, cultural heritage and architectural heritage assessments included desk-based reviews and field surveys. The proposed scheme passes through the Zone of Archaeological Potential associated with the historic village of Tallaght. The centre of the old village is within an Architectural Conservation Area. Towards the city centre, the proposed scheme continues through the Historic City of Dublin, which is also designated as a Zone of Archaeological Potential.

12.4.7.3. There are 14 individual RMP sites recorded within the historic village of Tallaght and previous archaeological investigations have uncovered evidence for the early medieval ecclesiastical settlement. The proposed scheme will also traverse the ZAP of the ecclesiastical enclosure at Kilnamanagh. The only site of cultural heritage interest identified along the Tallaght to Ballymount section of the proposed scheme is a memorial to local literary figure Katharine Tynan.

12.4.7.4. Along Greenhills Road on its approach to the Walkinstown Roundabout, the proposed scheme will pass c. 13m north-west of the ZAP for a flat cemetery (RMP DU022-002). Recorded monuments within the Crumlin to Grand Canal section of the proposed scheme include a water mill and watercourse on Clogher Road and a

small cluster of sites along Bunting Road and Mary's Road at the ZAP for an ecclesiastical site centred on the medieval St Mary's Church. There are a number of industrial heritage sites along this stretch, including the sites of a mill, quarry and market garden.

12.4.7.5. Drimnagh Castle (RMP DU018- 036) is within 50m of the proposed scheme on Long Mile Road and is the only castle in the country that retains its flooded moat. Crumlin is mainly characterised by mid-20th century housing developments when the area was developed as a garden suburb. St. Agnes Road Architectural Conservation Area is located at the junction of St. Agnes Road and Bunting Road.

12.4.7.6. The section of the CBC from the Grand Canal to Christchurch passes both cathedrals, which are considered of national importance. The locations of St. Nicholas' Gate and St. Patrick's Gate, which do not have any above ground trace, are located on the CBC. The section of the CBC with the ZAP for Dublin Historic City (RMP DU018-020), contains 22 RMP/ SMR sites. Previous archaeological investigations revealed evidence for Hiberno-Norse settlement on The Coombe / Dean Street, at the site of the present Hyatt Hotel. As noted in the EIAR, the historic character of this section is most evident at its northern end, where a number of sites of archaeological, historical and cultural heritage interest are clustered, most notably the former St Luke's Church, St Patrick's Cathedral and Christ Church Cathedral. Dean Street lies on the edge of the Thomas Street ACA. The streets in this area are of medieval origin.

12.4.7.7. The townscape along the outer parts of the route is made up of a range of modern urban development and business park, transitioning to traditional village streets interspersed with residential, community and institutional lands. The outer residential suburbs continue from Walkinstown and Crumlin to the Grand Canal, and from the canal to Christchurch the townscape character comprises the historic city access leading to core urban streetscapes and the historic city centre. There are protected views located along R137 Patrick Street towards Christchurch.

12.4.7.8. It is also recognised in the EIAR that historic street furniture, paving and surface treatments contribute significantly to the character of the streetscapes in the study

area. This includes post boxes, lamp posts, statuary and street furniture such as miles stones and city wall markers, and paving and surface treatments.

12.4.7.9. Designated landscapes along the route include St. Mary's Dominican Priory, Tymon Park, St. Patrick's Park and Drimnagh Castle and Demesne.

Characteristics of the proposed development

12.4.7.10. The proposed development requires ground-breaking works that will include excavations and ground disturbance; pavement construction, repairs and reconstruction works; and piling and resurfacing works. The overall amendment and adaptation of the existing road network and junctions will take place, together with verges, tree planting and boundaries. Temporary and permanent land acquisition will be required, and construction compounds will be established. The key characteristics of the proposed scheme during the operational phase are changes to traffic movements and streetscape elements including improvements to urban realm.

Potential impact of the proposed development on Archaeological & Cultural Heritage

12.4.7.11. The main potential impacts of the proposed development on archaeological and cultural heritage during construction and operational phases are summarised as follows:

- *Do nothing scenario* – no adverse impacts to any of the known or as yet undiscovered subsurface archaeology.
- Ground-breaking works along Blessington Road where the mill race has been culverted, and where it curves around the churchyard will impact on any surviving remains of the ecclesiastical enclosure or other associated features that may be present below ground. However, the proposed works within the ZAP of the historic village of Tallaght will be limited to some minor utility diversions and / or protections.
- The results of the investigations to date within the ZAP of the ecclesiastical enclosure (RMP DU022- 005005) associated with the early medieval foundation at Kilnamanagh and the evidence for previous disturbance across the area indicate that there is only a slight potential that archaeological features or deposits survive sub-surface.

- Ground breaking works on Greenhills Road will impact on any additional burials associated with the ZAP for a flat cemetery (RMP DU022-002).
- Ground-breaking works along Bunting Road and St. Mary's Road in the vicinity of St. Mary's Church will impact on part of the ecclesiastical enclosure or any associated features (including burials) where they may survive below ground.
- Ground-breaking works at two recorded archaeological sites at Clogher Road: the sites of a water mill (unclassified, RMP DU018-044) and part of a watercourse (the City Water, RMP DU018- 043002) will impact on the recorded sites.
- There will be a temporary impact on the two cathedrals during construction works and both have high sensitivity.
- Ground-breaking works on Patrick Street and Nicholas Street in the vicinity of the recorded location of the two gates will impact on any surviving below-ground sections of the City Defences (national monument), with high sensitivity.
- Ground-breaking works within the Historic City of Dublin ZAP will impact on any previously unknown archaeological sites or features that survive below ground. There are also 19 individual RMP / SMR sites located within the proposed scheme and 12 of these may be affected by ground-breaking works.
- There are 58 RMP sites located within c. 50m of the proposed scheme and the possibility that associated features may survive below ground at six of these sites. In the case of DU018-020503, Graveyard, there is potential for discovery of human remains.
- Ground-breaking works in the vicinity of Hiberno-Norse and later medieval plots and houses, as well as a section of an early medieval roadway (CBC0809AH003) along Dean Street will impact on any associated features which may survive below ground.
- There is a potential that ground-breaking works will uncover previously unknown archaeological features or deposits at construction compound locations.

Mitigation Measures for Archaeological and Cultural Heritage

- Archaeological monitoring will be carried out under licence.
- Survey and recording will be carried out in advance of any construction works on any cellar, coal cellar and/or basement.
- Appointed contractor will make provision to allow for archaeological monitoring, inspection and excavation works that may arise on the site during construction.
- Once the presence of archaeologically significant material is established, full archaeological recording of such material is recommended in accordance with the licensing requirements. If it is not possible for the construction works to avoid the material, full excavation of the archaeologically significant material will be recommended.
- Adequate funds to cover excavation, post-excavation analysis, and any testing or conservation work required will be made available.
- All construction traffic and the management of materials will be restricted to ensure no damage to a site of archaeological interest.
- Archaeological consent required from the Minister of HLGH for ground-breaking works at national monuments.
- Archaeological monitoring under licence will take place, where any preparatory ground-breaking or ground reduction works are required in the ZAP, at RMP/ SMR sites and at non-designated archaeological sites.
- Proposed public realm works in the immediate vicinity of the upstanding national monuments (St Patrick's Cathedral and Christ Church Cathedral) will have a positive impact through their enhancement of the setting of the monuments.

Residual impacts for archaeological and cultural heritage

12.4.7.12. It is considered that no significant residual impact with respect to archaeological and cultural heritage will occur with the adoption and implementation of the mitigation strategy. There will be positive impacts on upstanding national monuments following improvements to the public realm.

Potential impact of the proposed development on Architectural Heritage

12.4.7.13. The main potential impacts of the proposed development on architectural heritage during construction and operational phases are summarised as follows:

- *Do nothing scenario* – no adverse effects on architectural heritage structures, buildings, boundary walls, street furniture and surfaces.
- *Construction phase* – Direct impacts boundaries (plinth, railings etc.) and entrance gates of protected structures and other architectural heritage features where road widening is required.
- Direct impacts to street furniture due to land acquisition, construction works to pavements, changes to footpath layout and landscaping works.
- Indirect impacts from potential damage to sensitive structures and protected structures.
- Visual impacts on the setting of protected structures or buildings or structures of architectural heritage interest, historic streetscapes and views, which will temporarily impact on their setting during the construction phase.
- Potential for indirect impacts on St. Maelruain's Church, Tallaght ACA and the Victor's and Dancer's sculptures.
- Potential for direct impacts on the milestone (NIAH 50080455) on Walkinstown Road, Ardscoil Éanna on Crumlin Road, the post box at 330b Crumlin Road, the bollard at 140 Kildare Road, Granite kerb stones Dolphins Barn Street, lamp post on New Street (CBC0809LP030), lamp posts on Patrick Street (CBC0809LP032, CBC0809LP036, CBC0809LP038), lamp posts at Church of Saint Nicholas Within (CBC0809LP057), granite flagstones at the Chapel of St. Michael and at Christchurch, the Grand Canal on New Nangor Road and under the M50 bridge, Grand Canal Conservation Area, and a vent pipe on New Nangor Road (CBC0809BTH003).
- Potential for indirect impacts on St. Agnes Road ACA, the high cross at Crumlin Road (CBC0809BTH067), Crumlin Health Centre, Grand Canal Conservation Area: Paving and urban realm works, Thomas Street ACA, Patrick Street

Conservation Area, the cobbled surface on St. Patrick's Close, St. Patrick's Cathedral, sentinel sculpture on Patrick Street, city wall markers (CBC0809BTH157, CBC0809BTH158, CBC0809BTH154, CBC0809BTH159), Christchurch Cathedral, High Street and Christchurch Place Conservation Area, the Millennium Child sculpture, Grand Canal Conservation Area, protected structures (28 locations), NIAH structures (21 locations), other structures (139 locations), post boxes (7 locations), and lamp posts 65 locations.

- *Operational Phase* - potential impacts associated with visual changes on architectural heritage resources (including from the proposed locations of bus shelters), as well as impacts on the setting of these resources due to traffic changes. New paving, new tree planting and landscaping will generally have a positive impact on the historic environment and character of streets along the proposed scheme.
- Potential impacts where the proposed scheme requires physical changes to, or the repositioning of, heritage features.
- Relocated lamp posts - recording of the lamp posts in position prior to the works, the labelling of the affected fabric prior to its careful removal to safe storage, and their reinstatement in new positions in close proximity (within 2m) of their existing positions.
- Retained lamp posts - recording, overseeing and protective measures and monitoring of adjoining structures and boundaries, prior to construction.
- Milestone (NIAH 50080455), bollard (CBC0809BTH151) and vent pipe (CBC0809BTH003) - recording of the milestone in position prior to the works, labelling the affected fabric prior to its careful dismantling and removal to safe storage, and reinstatement.
- Statuary and street furniture - recording, overseeing and protective measures and monitoring by an appropriate architectural heritage specialist prior to construction.
- Paving and surface treatments - record the kerbs or flagstones in position prior to the works, labelling the affected fabric prior to their removal to safe storage, and the reinstatement of the kerbs or flagstones on the new line.

Residual architectural heritage impacts

12.4.7.14. Following implementation of mitigation measures, there will be no significant residual impacts on architectural heritage as a result of the construction or operational phases.

Potential impact of the proposed development on Landscape (Townscape) & Visual

12.4.7.15. The main potential impacts of the proposed development on landscape (townscape) and visual during construction and operational phases are summarised as follows:

- *Do nothing scenario* – Road corridor would continue to experience pressure for reallocation of carriageway space and associated traffic movements.
- *Construction Phase:* Site mobilisation and establishment, fencing and hoarding of construction compounds and works areas, including within private areas/ gardens.
- Site demolition, including removal of boundaries, kerbs, verges, surfaces, landscape areas, trees and plantings within private areas/ gardens.
- Site activity and visual disturbance from general construction works and the operation of construction machinery.
- Construction works involving diversion of existing underground / overground services and utilities, provision of new services and utilities, drainage features and connections etc.
- Construction of new carriageways, kerbings, footpaths and cycleways, bus stops and signage, reinstatement of boundaries / provision of new boundaries and landscape reinstatement.
- Decommissioning of works areas and construction compounds.
- Construction works will have a substantial effect on the existing streetscape / townscape character at the Blessington Road compound, at Bancroft Park and Birchview / Parkview where there will be a considerable temporary / short-term loss of amenity. Works will cause a notable temporary disruption of streetscape amenity in other parts of this section.

- The construction works will have a notable effect on the existing streetscape around the M50 overbridge, at Ballymount Avenue, Calmount Avenue and Calmount Road. There will be substantial works at Walkinstown Roundabout with changes to the layout and areas of surrounding commercial properties.
- There will be loss of boundaries, planting and trees along Walkinstown Road and Crumlin Road – land acquisition is required at 54 properties. There will be substantial loss of street trees on Drimnagh Road and the western part of Kildare Road.
- Generally modest townscape changes are proposed along the Grand Canal to Christchurch – there will be an impact on the amenity of the streetscape.
- Substantial works are required at the junction of New Nangor Road / Naas Road / Long Mile Road, including temporary land acquisition from adjacent commercial properties for construction of a large pedestrian / cycle bridge - construction works will not alter the overall townscape character along this section of the proposed scheme.
- Works required along the road corridor in the vicinity of protected structures are modest and do not detract from the designations but do effect views to and from the properties. Works will impact on the boundary railing and planting at the MDL building on the corner of Naas Road / Walkinstown Avenue, and on the road entrance to Drimnagh Castle.
- The impact on the small tree-lined open space fronted by residential properties at Rafter's Road junction is particularly notable, resulting in the loss of three mature trees.
- Works along Patrick Street and Nicholas Street will be visible within the protected view, but they will not detract from the overall view.
- Construction of the proposed scheme will require acquisition from 55 residential properties, along Walkinstown Road and on Greenhills Road, including removal of boundary walls, driveways, gardens and planting, with access to properties maintained as far as practicable. Construction will require acquisition from a range of non-residential properties (commercial and industrial properties – most

notably along Greenhills Road, and from Cherrytree Public House, Walkinstown Mall, Walkinstown Shopping Centre and Old County Road Health Centre).

- Construction phase will result in visual impacts for other residential and non-residential properties located along, fronting and viewing the proposed scheme.
- Proposed scheme will involve the removal of young tree plantings at the west carpark in Tallaght Town Centre, remnant sections of tree-lined hedgerow along Greenhills Road at Birchview, young street trees along Ballymount Avenue and Calmount Road, along sections of Drimnagh Road, Long Mile Road and Crumlin Road and in properties acquired for the works.
- *Operational phase:* Impacts will include alterations to the corridor of the existing road/ street; changes in traffic, pedestrian and cyclist movement; modifications of areas of private property/ gardens/ boundaries; and adjustments to other areas/ boundaries.
- Changes in townscape character along the Tallaght to Ballymount section with the introduction of new bus interchange; new sections of bus-only road and loss of public open space; and introduction of new paving and maturing tree planting.
- Changes along the Ballymount to Crumlin section at the pedestrian/ cyclist overbridges at the M50; the new extended sections of Ballymount Avenue, Calmount Avenue and Calmount Road; and new landscape areas and an attractive public realm scheme at Walkinstown Roundabout.
- Substantial improvement at the Long Mile Road / Walkinstown Road / Drimnagh Road junction with the reduction in hard surfacing, an improved paving scheme, increased pedestrian and cycle accessibility, introduction of new trees and planted areas, and raised tables and other traffic calming measures. There will be tree removal along Walkinstown Road, which will degrade the streetscape.
- Operational phase will not appreciably alter the overall townscape character of Grand Canal to Christchurch section, but there will be a substantial improvement to streetscape amenity along Cork Street and South Circular Road / Dolphin's Barn.

- New pedestrian/ cyclist overbridges spanning the Nangor Road / Naas Road / Long Mile Road junction will be in a streetscape of low sensitivity.
- There will be an improvement to the streetscape at the junction of Long Mile Road and Walkinstown Avenue with provision of an appropriate paving scheme and new tree planting.
- There will be positive impacts on townscape heritage and amenities with new paving and tree planting, crossing points, cycle routes, street furniture, SuDS, etc. Negative effects associated with the removal of trees along many sections of the scheme will reduce with the growth of replacement and additional planting.

Mitigation Measures for Landscape (Townscape) and Visual

- Trees and vegetation to be retained within and adjoining the works area will be protected and works within the root protection area will follow project specific arboricultural methodology.
- Trees will be removed in accordance with best arboricultural practices.
- New planting and paving will be provided where it is removed from temporary land take areas. New street trees will be planted to improve the streetscape environment.
- All impacted property boundaries will be reinstated to their original condition in accordance with a prepared inventory.
- Appropriate measures will be put in place for the protection of trees and features and for continued access where properties are subject to permanent and / or temporary acquisition.
- No mitigation or monitoring measures are proposed for the operational phase - proposed scheme will become established and increasingly integrated within its landscape (townscape) setting and potential negative operational effects will be reduced.

Residual Impacts for Landscape (Townscape) and Visual

- Mitigation measures will ensure adequate protection of features not identified for permanent removal during construction.

- Not possible to mitigate against impacts resulting from the removal of mature trees and therefore construction phase effects remain unchanged in the post mitigation and monitoring scenario.
- Residual landscape / townscape and visual effects during the operational phase are further influenced by the on-going development, establishment and maturing of landscape / townscape and visual measures.
- Residual impacts will remain during the operational phase where there is acquisition of property and loss of trees, particularly for the open spaces at Birchview / Parkview / Treepark, and for the loss of trees along the proposed scheme.
- There will be positive long-term effects for all townscape and visual character along the proposed scheme.

Conclusions on Cultural Heritage and the Landscape

12.3.2.15. Cultural heritage and the landscape are addressed separately in the EIAR under archaeological and cultural heritage, architectural heritage, and landscape (townscape) and visual.

12.4.7.16. The main issues pertaining to these environmental factors are the potential impact on archaeology having regard to the route of the proposed scheme through the medieval core of Dublin city; the potential impact on architectural heritage, particularly where is passes Architectural Conservation Areas; the visual impact on townscape during the construction phase; and the removal of trees and the acquisition of local residential and commercial property to facilitate the proposed scheme.

12.4.7.17. Concerns were raised in submissions regarding loss of public green space and impacts on amenity arising from the proposed construction compound at Bancroft Park. The loss of green space at Parkview was also raised in a number of submissions. The proposed change in the character of Old Greenhills Road from a cul de sac to a through-road for buses is a source of concern for residents of this road, and this will also have an impact on the area to the north of the road, which acts as a plaza for community events. There are general concerns throughout on

the loss of trees and parking, increased congestion from redistributed traffic, impacts on businesses and community facilities, and boundary replacement. The visual impact of the proposed pedestrian/ cycle overpass at the Long Mile Road/ Naas Road/ Nangor Road junction was also highlighted in submissions.

12.4.7.18. The applicant responded by confirming that the proposal to use Old Greenhills Road for buses is to avoid congestion on the Greenhills Road/ Main Street junction and that stone paving and localised planting will help to retain the character of the existing cul de sac treatment. It is submitted that the construction compound on Bancroft Park is positioned to avoid impacts on trees and to minimise land take. With respect to the removal of green space at Parkview, the applicant reiterates that the proposed scheme aligns with the principles of the previously approved Part 8 scheme for new roads at this location. It is acknowledged that there will be a considerable loss of amenity in the short term at Birchview/ Parkview/ Treepark but the overall townscape character of this sections will not be noticeably affected. Redistributed traffic will not be of a significant degree and in many areas proposed changes are taking place in areas of low sensitivity, including the Long Mile Road/ Naas Road/ Nangor Road junction.

12.4.7.19. Improvement to the pedestrian environment can be measured in terms of Level of Service for pedestrians. Improvements to the pedestrian Level of Service will also have positive outcomes for the quality of townscape, as the degree of comfort for pedestrians increases with enhancements to the public realm. One of the main objectives of the proposed scheme is to increase active transport and this will result in wider footpaths, new surfaces, planting, reduced car parking, narrower carriageways and lower vehicle speeds and an overall reduction of traffic dominance. All these factors give rise to townscape upgrades and a greater appreciation of the surrounding built heritage, particularly to the north-east of the proposed scheme in the historic city.

12.4.7.20. In terms of bus stops and shelters in historic streetscapes, there is an option of a shelter with a narrow roof configuration with and without half end panels, which may be more appropriate at these locations. Dublin City Council recommends that advertisements should generally not be submitted on bus shelters within ACAs. I

would be of the opinion that the final design of bus stops should be agreed between the applicant and Council's prior to commencement of development.

12.4.7.21. There is the potential for surface works to impact on underlying archaeology and appropriate mitigation will be required having regard to the sensitivities of the route and its location within a Zone of Archaeological Potential (ZAP). Provision will be made for archaeological monitoring and the NTA will liaise with DCC in regard to archival processes. Archaeological monitoring under licence will take place, where any preparatory ground-breaking or ground reduction works are required in the ZAP, at RMP/ SMR sites and at non-designated archaeological sites.

12.4.7.22. Land acquisition is a necessary consequence of the proposed Core Bus Corridor. It would appear that this land is necessary for the construction and operational phases of the proposed development. The affected land is mostly in commercial, recreational or residential use and in many cases is incidental in nature. The impact of land take will be mitigated through provision of new accesses, replacement boundaries and monetary compensation. Final details of boundary walls, gates, driveways and grassed areas where affected, will be agreed between the directly impacted landowners and the NTA. As noted by Dublin City Council, the loss of gardens/ boundaries must be balanced against the overall benefits of the proposed development. Public realm and landscaping improvements also create nicer places that are more desirable for people and business to locate in, thereby increasing the value of properties in the area.

12.4.7.23. Notwithstanding that the proposed scheme is designed primarily as a movement corridor, and that improvements to public realm may be a secondary consideration in the achieving the scheme's goals, from a landscape (townscape) perspective, the proposed scheme will give rise to significant improvements that will impact positively on architectural heritage. Mitigation measures will be put in place to protect adjoining heritage features. Works will be carried out in accordance with "Methodology for Works Affecting Sensitive and Historic Fabric" in Volume 4 of this EIAR. To mitigate the loss of habitat throughout the proposed scheme, there will be planting of 1055 trees; 590m of hedgerow; 20,560 sq.m. of species rich grassland; 3,450 sq.m. of ornamental planting; 5,525 sq.m. of native planting; and 43,140 sq.m. of amenity grassland.

12.4.7.24. In conclusion, I am satisfied that with proper implementation of mitigation measures and best practice measures, together with implementation of environmental commitments under the Construction Environmental Management Plan, no significant direct, indirect or cumulative adverse effects on cultural heritage and the landscape/ townscape are likely to arise.

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

12.5.1. Chapter 20 of the EIAR assesses the vulnerability of the proposed scheme to risks of major accidents and/ or disasters. A risk assessment was carried out to identify any major accidents and / or disasters that the proposed scheme is vulnerable to, and to assess the likely impacts of such incidents in relation to environmental, social and economic receptors.

12.5.2. Medium level risks identified for the construction phase included the risk of gas explosion from striking underground gas mains; structural damage/ collapse, the risk of pollution from the release of fine sediments to a watercourse or groundwater; and the risk of spread of non-native invasive species. The nearest Seveso sites to the proposed scheme are BOC Gases Ireland Ltd, Bluebell Industrial Site; Irish Distillers Ltd, Robinhood Road, Clondalkin; and Kayfoam Woolfson, Bluebell Industrial Site. The proposed scheme falls within the consultation zone for these sites; however, given the limited scale and nature of the proposed scheme, no risk to the operation of the Seveso sites are predicted.

12.5.3. Appropriate mitigation measures will be implemented during the construction phase that will reduce the level of risk for impacts or environmental effects to non-significant levels. The proposed scheme has been designed to reduce the likelihood of risk events occurring and plans and procedures will be developed to effectively manage and minimise risk. In this regard, the CEMP will address Construction and Demolition Resource and Waste Management, Construction Traffic Management, Non-Native Invasive Species Management, Surface Water Management and Environmental Incident Response.

12.5.4. I am satisfied that given the nature of the proposed development, and the mitigation measures proposed, together with the low probability of a major accident/ natural

disaster, it is not likely that significant effects on the environment would arise in this regard.

12.6. Environmental Interactions & Cumulative Impacts

12.6.1. Chapter 21 of the EIAR addresses the likely significant interactions between environmental factors and the cumulative effects that may arise from these interactions and from other approved projects in the area.

Cumulative Impacts

12.6.2. From the outset, it should be noted that a number of cases outlined as planning history in Section 6 above are not listed in Appendix A21.1 of the EIAR, which sets out the record of Stages 1 & 2 of the Cumulative Effects Assessment. Notwithstanding this, I have considered all the cases listed in the planning history section above for the purposes of cumulative assessment in the EIA.

12.6.3. Cumulative effects are classed as traffic related and non-traffic related. Types of projects that were considered for cumulative effects included local planning applications, strategic housing developments, strategic infrastructure developments, Greater Dublin Area Park & Ride Projects, Irish Water projects, other major projects, and the 11 other Core Bus Corridor Schemes. This list was narrowed down having regard to the status of planning applications, the likelihood of temporal overlap between the proposed scheme and the other projects, and whether the nature and scale of the other projects are likely to significantly contribute to the effects of the proposed scheme.

12.6.4. It is assumed that other projects, including other CBC schemes, would be under construction at the same time or sequentially to present a worst-case scenario. For the operational phase, it is assumed that all 12 CBCs are in place and all projects shortlisted for assessment have been completed.

12.6.5. A combined worst-case scenario whereby all 12 CBCs schemes and other major scheme would be constructed at the same time was modelled within the Local Area Model. The model determined that there would be significant traffic displacement across Dublin. Significant adverse impacts would be experienced where there is large cumulative increase on local roads. A revised construction scenario was

developed whereby CBC schemes will not be constructed concurrently with adjacent CBC schemes due to modelled impacts of traffic congestion and associated air quality and noise impacts.

12.6.6. The operational phase 'do minimum' scenarios are modelled for 2028 and 2043 and are compared to the 'do something' scenarios with all CBCs in place. The 2043 Do Minimum scenario assumes the full implementation of the GDA Strategy schemes, including MetroLink, DART+ Tunnel, and Luas line extensions to Lucan, Finglas, Poolbeg and Bray. These schemes were applied, along with the forecasted increased travel demand from general development, within the model to capture projected traffic growth from reasonably foreseeable development in both 2028 and 2043. It is proposed to coordinate other major infrastructure projects along the route with the proposed scheme works and therefore not likely significant cumulative traffic and transport effects are predicted.

12.6.7. Following mitigation, no significant cumulative construction dust impacts and local air quality impacts are likely from the concurrent construction of other CBC schemes, other projects and the proposed scheme. Construction dust mitigation is standard practice for all projects of this nature and scale. There will also be no significant ecological impacts or regional air quality impacts associated with cumulative construction traffic emissions.

12.6.8. In terms of construction embodied carbon, the proposed scheme, cumulatively with other CBC schemes, is estimated to result in the equivalent of an annualised total of 0.05% of Ireland's non-ETS 2020 target. Emissions increases from construction traffic will occur mostly from redistribution of vehicles onto other longer routes. Mitigation measures for the construction phase will include the use of concrete containing ground granulated blast furnace slag, minimisation of wastage, reuse of materials and local sourcing.

12.6.9. Mitigation measures and the separation distance from other schemes will mean that there are no significant cumulative impacts for construction noise and vibration. A small number of roads will experience an increase in noise greater than 3dB from redistributed traffic during construction. However, this will be temporary in nature. There is potential for cumulative impact on land take, amenity and human health with

a number of adjacent projects. However, this is unlikely to cause significant cumulative effects.

12.6.10. Any cumulative losses of habitat, bats, birds, terrestrial mammals in combination with other projects are not likely to increase the impact significance above the residual local geographic scale. Other projects requiring the preparation of EIAR and AA Screening/ NIS will be bound by the environmental commitments therein, if granted planning approval. Overarching land use plans also have environmental protective policies for existing surface water and groundwater network.

12.6.11. Disturbance or displacement impacts on birds during construction will be temporary or short-term and are not likely to have long-term population level effects, even cumulatively with any future projects that might be proposed. Potential cumulative impacts will be controlled by the assessment of individual planning applications which must consider the effects on protected species such as birds as part of their appraisal by the competent authority.

12.6.12. Impacts from the proposed scheme will be negligible on the water environment following implementation of the Surface Water Management Plan (SWMP) measures. It can be assumed that other projects will implement good practice measures in construction and so cumulative impacts are assessed to be of imperceptible significance. There are also no likely significant impacts in combination with other proposed projects on land, soils, geology and hydrogeology.

12.6.13. Cumulative effects for waste have been considered on a regional basis. The proposed scheme, together with the 11 other CBC schemes and other regional projects such as Metrolink, DART Underground, Slane Bypass, the Greater Dublin Drainage Project and O'Devaney Gardens Regeneration Programme, will require off-site capacity for recovery, recycling, treatment and disposal of waste to landfill. The Dublin region, however, is well served by licensed capacity.

12.6.14. Finally for the construction phase, no significant cumulative impacts will occur on archaeology and cultural heritage, architectural heritage, landscape (townscape) and visual or material assets.

12.6.15. Operational phase cumulative impacts are also assessed for each of the environmental factors contained in the EIAR. Total transport demand will continue to

increase in line with population and employment growth. With the 12 CBC schemes in place, a greater share of transport will be conducted by sustainable modes and there will be constraints to increased private car traffic. In 2043, it is estimated that there will be an 6% increase in public transport trips, a 6% decrease in general traffic trips and a 10% increase in cycling trips in the morning peak hour and a 7% increase in public transport, 7% decrease in general traffic and a 11% increase in cycling trips each day (7am-7pm). General traffic will reduce further due to Metrolink, Luas extensions and DART+ in tandem with the road capacity reduction measures as part of the proposed scheme. When all schemes are operational, it will have the effect of constraining the opportunity for traffic to displace to adjoining roads.

12.6.16. An air quality impact assessment was carried out for cumulative road traffic emissions with the 12 CBC schemes in operation. Little change in air quality is generated by the proposed scheme cumulatively with all CBCs in operation. Any increase in emissions is likely to reverse over time with the roll out of more electric vehicles. There will be no significant air pollution cumulative impacts on key ecological receptors during the operational phase.

12.6.17. A 'do minimum' and cumulative 'do something' GHG emissions comparison for total car and bus in 2028 predicts a decrease of 27% CO2eq. In the design year (2043), there is a predicted 1.9% decrease in carbon emissions from all vehicles. A cumulative increase of 4.8% in the opening year and a cumulative decrease in the design year of 6.6% is predicted for redistributed traffic. Other factors considered in terms of climate impact are the potential for increased bus frequency, future growth in cycling and demand management. It should be noted that the planning consent is for the infrastructural improvements associated with providing bus priority and the Core Bus Corridor schemes have been designed to cater for much higher levels of cycling uptake. The overall CBC programme has the potential to reduce GHG emissions equivalent to the removal of approximately 105,500 and 209,100 car trips per weekday from the road network in 2028 and 2043 respectively, which represents a significant contribution towards the 20% reduction in total vehicle kms travelled by 2030 as set out in CAP24.

12.6.18. Higher noise levels will be experienced at certain roads outside the proposed scheme due to traffic redistribution during the opening year when assessed

cumulatively. Noise impacts will be lower in the design year (2043) due to lower traffic volumes across the network and the roll out of electric fleet.

12.6.19. Twenty-three projects were assessed along the CBC for cumulative impacts on population (land take and amenity). No impacts of a significant nature were identified. The human health assessment identified 27 projects, including one major project (Greater Dublin Area Cycle Network Plan) with the potential for cumulative impacts. This major project, in combination with the CBC network, would have significant positive impacts by providing better connection for the population, particularly those with limited access to cars. Overall, human health will also be improved through wider active travel options, and greater journey time reliability would have beneficial impacts in terms of improved mental health.

12.6.20. The potential for impacts on biodiversity during the operational phase of the proposed scheme is limited. There will also be no cumulative operational impacts on the water environment owing to the implementation of SuDS measures. In addition, no cumulative impacts with other projects are likely on land, soils, geology and hydrogeology. No cumulative impacts on archaeological and cultural heritage and architectural heritage would occur as a result of the operational phase of the proposed scheme. Any effects on landscape (townscape) and visual, such as tree and planting removal, would be short-term and localised, becoming positive with replacement planting.

12.6.21. Cumulative operational waste may arise from carriageway maintenance but not to a significant degree. There will be imperceptible operational phase impacts on electricity and telecommunications.

Interactions

12.6.22. Table 21.29 of the EIAR provides a matrix of interactions between environmental factors during the construction and operational phases of the proposed development. Significant interactions occur between population, human health, air quality, noise and vibration and traffic and transport. The interaction between traffic and transport and climate is one of the main motivations for the proposed scheme. The reduction in operational phase traffic and the shift from private motorised transport to active

modes and public transport will help to reduce GHG emissions and associated impacts on climate.

12.6.23. Traffic and health interaction will occur during construction where access may be disrupted leading to stress. Short diversions may therefore be required. Exposure to pollution and environmental hazards from construction works through contamination of water, soil or air may pose risks to human health. Disruption to local drainage may present an increase of flood risk with associated impacts on human health. These impacts are likely to be imperceptible and therefore no significant interaction will occur. Other potential health interactions could occur from disruptions to utilities and traffic emissions of air pollution and noise in both construction and operational phases.

12.6.24. The operational phase will give rise to positive interactions by way of health improvements through safer provision for active travel. Improvements to the public realm can influence the wellbeing of people when they are spending time in these places and engaging in more social interaction, with associated beneficial health outcomes. Overall, the main beneficial interactions of the proposed scheme on human health will outweigh the adverse effects. Many of the adverse interactions will take place during the construction phase of the proposed scheme and will therefore be short term. Mitigation measures are set out in each of the relevant chapters and can also be applicable to other environmental factors.

12.6.25. Other interactions of a more minor nature could occur between biodiversity and traffic and transport from mortality risk; land, soils, geology and hydrogeology and water; material assets (imported materials) and waste and resources; climate and material assets (imported materials and waste generated); climate and traffic and transport; landscape (townscape) and visual; and townscape and architectural heritage.

12.6.26. In general, I would be satisfied with the methodology provided within the EIAR for interactions and cumulative assessment. Construction stage interactions will mostly be short term and mitigation for one environmental factor can be applicable to other environmental factors. The subject development is assessed with all the other BusConnect CBC schemes in the Greater Dublin Area, together with other major

transport proposals and any other relevant projects along the CBC. Overall, this provides for a robust and complete assessment of the proposed scheme by itself and any cumulative interactions with projects and activities in the area. I am therefore satisfied that sufficient information has been acquired to fully inform the cumulative assessment of the proposed development and other relevant projects and activities.

12.7. Reasoned Conclusion

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

- Positive long term impacts on **population and human health** through facilitation of improved pedestrian and cyclist safety, faster and more reliable bus services, reduced traffic congestion, improved air quality and noise reduction, improved road/ street safety, more social interaction and positive accessibility and amenity impacts for community areas.
- Adverse short-term impacts on **population and human health** from the construction phase in terms of access restrictions, noise, vibration, dust, contaminated material, traffic and visual impact. This will be adequately mitigated through compliance with the CEMP and measures outlined in the Land, Soils, Water, Air and Climate and Material Assets sections of the EIAR.
- Adverse long-term impacts on **population and human health** from the temporary and permanent acquisition of land. This will be adequately mitigated through provision of new accesses, replacement boundaries and monetary compensation.
- Adverse impacts on **biodiversity** from unavoidable removal of habitat. Vegetation removal will be compensated by additional new planting, which will provide new nesting habitat for birds. Mitigation measures will be implemented

for seven trees that contain possible roost features for bats by installing bat boxes for each potential roosting feature to be removed.

- Potential adverse impacts on **biodiversity** from the spread of invasive species during construction. This will be adequately mitigated through implementation of an Invasive Species Management Plan.
- Potential adverse impacts on **land, soils, geology and hydrogeology** from loss or damage of topsoil, excavation of potentially contaminated ground and contamination of parts of an aquifer during the construction phase. These impacts will be adequately mitigated through compliance with the CEMP.
- Potential for **water** quality impacts from surface water runoff during construction containing fine sediments, accidental spillages/ leakages and disruption of local drainage networks. Adequate mitigation measures for surface water management are contained within the CEMP.
- Potential for impacts to **air quality** from dust and noise emissions from construction works. These will be minimised with implementation of appropriate mitigation measures.
- Potential for positive long term impacts on **climate** through removal of approximately 18,420 and 44,230 car trips per weekday from the road network in 2028 and 2043 respectively and associated reduction in CO_2 emissions.
- Positive impacts on **traffic and transport** by maximising the capacity of the proposed scheme to move more people by sustainable modes, whilst also providing for necessary general traffic.
- Potential adverse impacts on **cultural heritage** due to construction works impacting on underlying archaeology and on Architectural Conservation Areas. Mitigation measures will be put in place to protect/ record/ monitor underlying archaeology and adjoining heritage features.
- Positive impacts on **landscape (townscape)** from the creation of high-quality pedestrianised areas with wider footpaths, new surfaces, planting, reduced car parking, narrower carriageways, lower vehicle speeds and an overall reduction of traffic dominance.

13.0 Appropriate Assessment

13.1. The areas addressed in this section are as follows:

- Compliance with Articles 6(3) of the EU Habitats Directive
- Geographical Scope and Main Characteristics
- Screening the need for Appropriate Assessment
- The Natura Impact Statement and associated documents
- Appropriate Assessment of implications of the proposed development on each European site

13.2. Compliance with Articles 6(3) of the EU Habitats Directive: The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

13.2.1. The proposed development comprising the development of the BusConnects Tallaght / Clondalkin to City Centre Core Bus Corridor is not directly connected with or necessary to the management of any European site and is therefore subject to the provisions of Article 6(3).

13.3. Geographical Scope and Main Characteristics

13.3.1. The Tallaght / Clondalkin to City Centre Core Bus Corridor (proposed scheme) extends over a distance of 15.5km from west of The Square Shopping Centre, Tallaght and Nangor Road, Clondalkin to the junction of Nicholas Street and Christchurch Place in the city centre.

13.3.2. To the south-west, the first section of the proposed scheme commences at Belgard Square and continues through Tallaght village and along Old Greenhills Road and

Greenhills Road and past Bancroft Park. The proposed scheme is routed to Walkinstown Roundabout via new transport link roads through a green area past Birchview Avenue/ Treepark Road and along new links at Ballymount Avenue and Calmount Road. The main bus corridor is routed along Walkinstown Road to the Long Mile Road/ Drimnagh Road and an offline cycle route is proposed along Bunting Road, Kildare Road and Clogher Road.

13.3.3. To the west, the Clondalkin section of the proposed scheme begins at the junction of New Nangor Road and Woodford Walk and continues along New Nangor Road through the major intersection with Naas Road and along Long Mile Road where it meets with the Tallaght section. The shared section to the city centre is routed along Drimnagh Road, Crumlin Road, Dolphins Barn, Cork Street, St. Luke's Avenue, Dean Street, Patrick Street and Nicholas Street to its termination and meeting point with the Liffey Valley to City Centre CBC scheme.

13.3.4. The proposed scheme is located in a highly urbanised environment. Habitats present along the core bus corridor include flower beds and borders (BC4); stone walls and other stonework (BL1); buildings and artificial surfaces (BL3); tidal rivers (CW2); exposed sand, gravel or till (ED1); spoil and bare ground (ED2); recolonising bare ground (ED3); reed and large sedge swamps (FS1); depositing / lowland rivers (FW2); canals (FW3); drainage ditches (FW4); amenity grassland (improved) (GA2); dry meadows and grassy verges (GS2); residential; (mixed) broadleaved woodland (WD1); (mixed) broadleaf / conifer woodland (WD2); scattered trees and parkland (WD5); hedgerows (WL1); treelines (WL2); scrub (WS1); immature woodland (WS2); and ornamental / non-native shrub (WS3).

13.3.5. Three surface water catchments are present along the proposed scheme, where surface water drains to the Camac_040, Poddle_010, Dodder_040 as well as existing combined sewers which ultimately discharge to the Liffey Estuary Lower via Ringsend WwTP. During construction, overland flows may discharge to the Liffey Estuary Upper and Grand Canal. The Liffey Estuary Upper corresponds with the Annex I habitat Estuaries [1130]. The proposed scheme traverses the Dublin groundwater body.

13.3.6. The nearest European site to the proposed scheme is the South Dublin Bay and River Tolka Estuary SPA, which is approximately 3.3km from the proposed scheme. Both the River Tolka Estuary SPA and the South Dublin Bay SAC are approximately 6.5km downstream. Eight European sites are hydrologically connected to the proposed scheme.

13.3.7. The main characteristics of the construction phase of the proposed scheme are site preparation and clearance; construction compound development; removal of boundaries, pavements, lighting columns, bus stops, and signage; protection and/ or diversion of underground services; road construction for new link roads and dedicated bus route; road widening, pavement reconstruction and kerb realignments; reconfiguration of traffic lanes; reconfiguration of connections to existing drainage infrastructure and connection of new drainage to the existing network; installation of new bus stops; junction / roundabout modification; provision of new structures (bridges, retaining walls etc.); temporary and permanent land take; boundary reinstatement and signage replacement; relocation of and/or installation of lighting columns; and landscaping and tree planting.

13.3.8. The proposed scheme will discharge drainage to the Camac_040, Poddle_010, Dodder_040 and Ringsend WwTP. There will be a net increase of 59,368 sq.m. in impermeable area ultimately discharging to Dublin Bay. All runoff from these increases will be attenuated and there will be no net increase in surface water flow to receptors. SuDS measures will also allow a level of treatment and attenuation of additional runoff.

13.3.9. Thirteen construction compounds are proposed along the length of the proposed scheme, and these will be established with appropriate services. The compounds will be used to store materials, plant and equipment, to manage the activities from, and to provide welfare facilities for construction personnel. The duration of construction works is expected to be 36 months.

13.3.10. The main characteristics of the proposed scheme during the operational phase will be changes to movement patterns and modes of transport along the corridor, enhancement and increased usage of public realm, the presence of additional lighting, and routine maintenance.

13.4. Screening the need for Appropriate Assessment

13.4.1. The first test of Article 6(3) is to establish if the proposed development could result in likely significant effects to a European site. This is considered stage 1 of the appropriate assessment process i.e., *screening.* The screening stage is intended to be a preliminary examination. If the possibility of significant effects cannot be excluded on the basis of objective information, without extensive investigation or the application of mitigation, a plan or project should be considered to have a likely significant effect and Appropriate Assessment carried out.

13.4.2. Having regard to the information and submissions available, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, the European sites set out in Table 1 below are considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects. A 15km study area from all elements of the proposed core bus corridor is initially applied for this purpose. Additional sites within Dublin Bay that are hydrologically connected to the proposed scheme site also included for initial screening. A total of 29 European sites are included (15 SACs & 14 SPAs) for initial screening.

13.4.3. European sites considered for Stage 1 screening:

European site (SAC/SPA)	Site code	Distance to Proposed Development	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
Wicklow Mountains SAC	002122	5.3km	Possible connections	Y
Rye Water Valley/ Carton SAC	001398	7.9km	No potential connections	N
Malahide Estuary SAC	000205	13.8km	No potential connections	N
Rockabill to Dalkey Islands SAC	003000	12.1km	Possible connections	Y
North Dublin Bay SAC	000206	6.2km	Possible connections	Y
South Dublin Bay SAC	000210	3.9km	Possible connections	Y

European site (SAC/SPA)	Site code	Distance to Proposed Development	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
Glenasmole Valley SAC	001209	2.9km	No potential connections	N
Baldoyle Bay SAC	000199	11.1km	No potential connections	N
Howth Head SAC	000202	11.9km	No potential connections	N
Knocksink Wood SAC	000725	12.7km	No potential connections	N
Ireland's Eye SAC	002193	15.1km	No potential connections	N
Rogerstown Estuary SAC	000208	18km	No potential connections	N
Lambay Island SAC	000204	22.5km	Possible connections	Y
Ballyman Glen SAC	000713	15.5km	No potential connections	N
Bray Head SAC	002193	19.7km	No potential connections	N
South Dublin Bay and River Tolka Estuary SPA	004024	3.3km	Possible connections	Y
North Bull Island SPA	004006	6.2km	Possible connections	Y
Baldoyle Bay SPA	004016	11.4km	Possible connections	Y
Malahide Estuary SPA	004025	13.8km	Possible connections	Y
Wicklow Mountains SPA	004040	6.7km	No potential connections	N
Howth Head Coast SPA	004113	14.6km	Possible connections	Y
Ireland's Eye SPA	004117	14.9km	Possible connections	Y
Dalkey Islands SPA	004172	13.6km	Possible connections	Y
Rogerstown Estuary SPA	004015	18.3km	Possible connections	Y
The Murrough SPA	004186	29.2km	Possible connections	Y

European site (SAC/SPA)	Site code	Distance to Proposed Development	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
Lambay Island SPA	004069	22.4km	Possible connections	Y
Rockabill SPA	004014	28.5km	Possible connections	Y
Skerries Islands SPA	004122	27.8km	Possible connections	Y
North-West Irish Sea cSPA	004236	8.1km	Possible connections	Y

Table 1 – Summary Table of European sites considered in Screening for

Appropriate Assessment

13.4.4. The applicants AA Screening Report concluded that there is potential for effects on the qualifying interests of the North Dublin Bay SAC, South Dublin Bay SAC, Rockabill to Dalkey Island SAC, Lambay Island SAC, Wicklow Mountains SAC, Howth Head Coast SPA, Dalkey Islands SPA, Rockabill SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Ireland's Eye SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Lambay Island SPA and The Murrough SPA. The North-West Irish Sea cSPA has been designated since the preparation of the NIS.

13.4.5. There are eight European sites located in Dublin Bay that are hydrologically connected to the proposed scheme and 13 SPAs designated for species known to forage and/ or roost at inland sites across Dublin city and/ or utilise Dublin Bay. Rockabill to Dalkey Island SAC and Lambay Island SAC are also designated for mobile QI species known to utilise the Dublin Bay and the Liffey Estuary Lower. The significance of the effects on these European sites is therefore uncertain.

13.4.6. Ex-situ habitat loss, hydrological, non-native invasive species and disturbance and displacement impacts associated with the proposed scheme have the potential to have significant effects on European sites. There is also the potential for other plans or projects to act in-combination with the proposed scheme to give rise to significant effects on European sites such as habitat fragmentation (ex-situ habitat losses); habitat degradation (reduction in water quality or introduction of non-native invasive species); and disturbance/ displacement impacts (ex-situ inland feeding sites).

Watercourses in proximity to the proposed scheme may also be potentially associated with the QI otter populations associated with the Wicklow Mountains SAC. Therefore, it is considered that the proposed development should progress to the second stage of the appropriate assessment process and the preparation of an NIS.

13.4.7. Having reviewed the documents, submissions and correspondence from the NPWS, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites. Based on my examination of the AA Screening Report and other supporting information, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, separation distances and functional relationships between the proposed scheme and the European sites, their conservation objectives, and taken in conjunction with my assessment of the subject site and the surrounding area, I conclude that a Stage 2 Appropriate Assessment is required for the following European sites in view of the conservation objectives of these sites:

- North Dublin Bay SAC,
- South Dublin Bay SAC,
- Rockabill to Dalkey Island SAC,
- Lambay Island SAC,
- Wicklow Mountains SAC,
- Howth Head Coast SPA,
- Dalkey Islands SPA,
- Rockabill SPA,
- North Bull Island SPA,
- South Dublin Bay and River Tolka Estuary SPA,
- Ireland's Eye SPA,
- Malahide Estuary SPA,

- Baldoyle Bay SPA,
- Rogerstown Estuary SPA,
- Skerries Islands SPA,
- Lambay Island SPA,
- The Murrough SPA.
- North-West Irish Sea cSPA

13.4.8. Table 2 below provides a screening summary matrix where there is a possibility of significant effects from the proposed core bus corridor scheme, or where the possibility of significant effects cannot be excluded without further detailed assessment.

Site name **Qualifying Interest feature**	**Is there a possibility of significant effects in view of the conservation objectives of the site?** **General impact categories presented**		
	Habitat loss/ modification	Water quality and water dependent habitats (pollution)	Disturbance/ displacement barrier effects
North Dublin Bay SAC *Qualifying Interests:* Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190]		Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge. Risk associated with the proposed scheme to downstream European site from spread/ introduction of non-native invasive species.	

Petalophyllum ralfsii (Petalwort) [1395]			
South Dublin Bay SAC *Qualifying Interests:* Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]		Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge. Risk associated with the proposed scheme to downstream European site from spread/ introduction of non-native invasive species.	
Rockabill to Dalkey Island SAC *Qualifying Interests:* Reefs [1170] Phocoena phocoena (Harbour Porpoise) [1351]		Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	
Lambay Island SAC *Qualifying Interests:* Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Phocoena phocoena (Harbour Porpoise) [1351] Halichoerus grypus (Grey Seal) [1364]		Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	

Phoca vitulina (Harbour Seal) [1365]			
Wicklow Mountains SAC *Qualifying Interests:* Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Calaminarian grasslands of the Violetalia calaminariae [6130] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Blanket bogs (* if active bog) [7130] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220]		Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	Otter in the vicinity of the Tallaght section of the proposed scheme may be associated with the QI population.

Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Lutra lutra (Otter) [1355]			
Howth Head Coast SPA *Qualifying Interests:* Kittiwake (Rissa tridactyla) [A188]		Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	
Dalkey Islands SPA *Qualifying Interests:* Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194]		Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	
Rockabill SPA *Qualifying Interests:* Purple Sandpiper (Calidris maritima) [A148] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194]		Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	
North Bull Island SPA *Qualifying Interests:*	Potential for loss of ex situ inland feeding sites used by SCI wintering bird species for	Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	Potential disturbance of SCI wintering bird species utilising ex situ inland feeding sites.

Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Teal (Anas crecca) [A052] Pintail (Anas acuta) [A054] Shoveler (Anas clypeata) [A056] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Turnstone (Arenaria interpres) [A169] Black-headed Gull (Chroicocephalus ridibundus) [A179] Wetland and Waterbirds [A999]	the duration of the construction works.	Risk associated with the proposed scheme to downstream European site from spread/ introduction of non-native invasive species.	

South Dublin Bay and River Tolka Estuary SPA *Qualifying Interests:* Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Wetland and Waterbirds [A999]	Potential for loss of ex situ inland feeding sites used by SCI wintering bird species for the duration of the construction works.	Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge. Risk associated with the proposed scheme to downstream European site from spread/ introduction of non-native invasive species.	Potential disturbance of SCI wintering bird species utilising ex situ inland feeding sites.
Ireland's Eye SPA *Qualifying Interests:*	Potential for loss of ex situ inland feeding sites used by SCI wintering bird species for	Downstream habitats and species at risk of hydrological effects from	Potential disturbance of SCI wintering bird species utilising ex situ inland feeding sites.

Cormorant (Phalacrocorax carbo) [A017] Herring Gull (Larus argentatus) [A184] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200]	the duration of the construction works.	proposed scheme and associated surface water drainage discharge.	
Malahide Estuary SPA *Qualifying Interests:* Great Crested Grebe (Podiceps cristatus) [A005] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Pintail (Anas acuta) [A054] Goldeneye (Bucephala clangula) [A067] Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149]	Potential for loss of ex situ inland feeding sites used by SCI wintering bird species for the duration of the construction works.	Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	Potential disturbance of SCI wintering bird species utilising ex situ inland feeding sites.

Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]			
Baldoyle Bay SPA *Qualifying Interests:* Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Bar-tailed Godwit (Limosa lapponica) [A157] Wetland and Waterbirds [A999]	Potential for loss of ex situ inland feeding sites used by SCI wintering bird species for the duration of the construction works.	Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	Potential disturbance of SCI wintering bird species utilising ex situ inland feeding sites.
Rogerstown Estuary SPA *Qualifying Interests:* Greylag Goose (Anser anser) [A043] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Shoveler (Anas clypeata) [A056]	Potential for loss of ex situ inland feeding sites used by SCI wintering bird species for the duration of the construction works.	Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	Potential disturbance of SCI wintering bird species utilising ex situ inland feeding sites.

Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]			
Skerries Islands SPA *Qualifying Interests:* Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Purple Sandpiper (Calidris maritima) [A148] Turnstone (Arenaria interpres) [A169] Herring Gull (Larus argentatus) [A184]	Potential for loss of ex situ inland feeding sites used by SCI wintering bird species for the duration of the construction works.	Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	Potential disturbance of SCI wintering bird species utilising ex situ inland feeding sites.
Lambay Island SPA *Qualifying Interests:* Fulmar (Fulmarus glacialis) [A009]	Potential for loss of ex situ inland feeding sites used by SCI wintering bird species for the duration of the construction works.	Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	Potential disturbance of SCI wintering bird species utilising ex situ inland feeding sites.

Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Greylag Goose (Anser anser) [A043] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204]			
The Murrough SPA *Qualifying Interests:* Red-throated Diver (Gavia stellata) [A001] Greylag Goose (Anser anser) [A043] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Black-headed Gull (Chroicocephalus ridibundus) [A179] Herring Gull (Larus argentatus) [A184] Little Tern (Sterna albifrons) [A195]	Potential for loss of ex situ inland feeding sites used by SCI wintering bird species for the duration of the construction works.	Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	Potential disturbance of SCI wintering bird species utilising ex situ inland feeding sites.

Wetland and Waterbirds [A999]			
North-West Irish Sea cSPA Common Scoter (Melanitta nigra) [A065] Red-throated Diver (Gavia stellata) [A001] Great Northern Diver (Gavia immer) [A003] Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Shag (Phalacrocorax aristotelis) [A018] Cormorant (Phalacrocorax carbo) [A017] Little Gull (Larus minutus) [A177] Kittiwake (Rissa tridactyla) [A188] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184] Great Black-backed Gull (Larus marinus) [A187] Little Tern (Sterna albifrons) [A195] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193]	Potential for loss of ex situ inland feeding sites used by SCI wintering bird species for the duration of the construction works.	Downstream habitats and species at risk of hydrological effects from proposed scheme and associated surface water drainage discharge.	Potential disturbance of SCI wintering bird species utilising ex situ inland feeding sites.

Arctic Tern (Sterna paradisaea) [A194] Puffin (Fratercula arctica) [A204] Razorbill (Alca torda) [A200] Guillemot (Uria aalge) [A199]			

Table 2 Screening summary matrix: European sites for which there is a possibility of significant effects (or where the possibility of significant effects cannot be excluded without further detailed assessment)

13.4.9. The remaining sites can be screened out from further assessment because of the scale of the proposed works, the nature of the Conservation Objectives, Qualifying and Special Conservation Interests, the separation distances and the lack of a substantive ecological linkage, hydrologically or otherwise, between the proposed works and the European sites.

13.4.10. The proposed core bus corridor scheme does not overlap with any European site and there is no potential to cause direct habitat loss, fragmentation or disturbance in any of the Special Areas of Conservation screened out within the study area due to the location of the works outside of any such European sites. Indirect terrestrial or aquatic habitat loss or degradation will not occur in all sites screened out due to the absence of hydrological connectivity and/ or the separation distance between construction works, or any operational stage work.

13.4.11. There is also no potential for indirect/ ex-situ disturbance or displacement of animal species as the qualifying interests in certain SACs (Glenasmole Valley SAC, Knocksink Wood SAC, Baldoyle Bay SAC, Malahide Estuary SAC, Ireland's Eye SAC and Rogerstown Estuary SAC) relate to habitats/ plant species only. The proposed scheme has the potential to result in habitat degradation of the qualifying /special conservation interest species of any European site as the result of hydrogeological impacts. However, there is substantial distance to these sites, and they are located outside of Dublin Bay, which is hydrologically connected to the proposed scheme site. There is potential for hydrological impacts on European sites within Dublin Bay leading to degradation of sensitive habitat, which in turn would negatively affect the SCI bird species that rely upon these habitats as foraging and / or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. These European site have therefore been screened in.

13.4.12. Other European sites that have been screened out include the Rye Water Valley/ Carton SAC and Knocksink Wood SAC. The Rye Water Valley/ Carton SAC is located upstream of the proposed scheme site Knocksink Wood is a substantial distance away. There is no hydrological or mobile species connection with the proposed scheme site, and it does not extend to any groundwater dependent terrestrial ecosystems linked to European sites.

13.4.13. Significant effects on the Wicklow Mountains SAC are possible due to the potential connections for otter for which this site is designated. With respect to the Wicklow Mountains SPA, there is no possibility of effects due to the significant distance between the proposed development site and the SPA. The QI species are Merlin and peregrine and they are associated with the upland habitats of the Wicklow Mountains SPA.

13.4.14. It is not considered likely that invasive species could spread to European sites which are located a significant distance from the outfall locations and separated by a large marine waterbody. Furthermore, it is noted that impacts on marine mammals are unlikely as the proposed site lies 6.7km upstream of Dublin Bay, in a highly urbanised environment and where water levels can drop diurnally reducing the likelihood of marine mammals venturing this far up-river.

13.4.15. It is therefore reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on Glasamole Valley SAC (001209), Baldoyle Bay SAC (000199), Rye Water Valley/ Carton SAC (001398), Malahide Estuary SAC (000205), Howth Head SAC (000202), Ireland's Eye SAC (002193), Rogerstown Estuary SAC (000208) Knocksink Wood SAC (000725), Ballyman Glen SAC (000713), Bray Head SAC (002193) and Wicklow Mountains SPA (004040) in view of the sites' conservation objectives and a Stage 2 Appropriate Assessment for these sites is not therefore required. I am therefore satisfied that no additional sites other than those assessed in the NIS need to be brought forward for Appropriate Assessment.

13.4.16. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually, or in combination with other plans or projects, could have a significant effect on European site No's.002122, 003000, 000206, 000210, 000204, 004024, 004006, 004016, 004025, 004113, 004117, 004172, 004015, 004186, 004069, 004014, 004122 and 004236 in view of the sites' Conservation Objectives, and Appropriate Assessment is therefore required.

13.5. The Natura Impact Statement and Associated Documents

13.5.1. The application was accompanied by an Appropriate Assessment Screening Report and Natura Impact Statement dated April 2023 and submitted to the Board on 28th April 2023. The NIS examines the effects of the proposed Tallaght / Clondalkin to City Centre Core Bus Corridor scheme alone, and in-combination with other projects and activities, on the integrity of European sites in respect of their conservation objectives and their structure and function. The NIS Appendices include (I) the general arrangement drawings for the scheme, (II) Proposed Surface Water Drainage Works, CEMP (III), desk study (IV), Water Framework Directive Compliance Assessment (V), and an Aquatic Baseline Report (VI).

13.5.2. In general, I am satisfied that the Appropriate Assessment Screening Report and Natura Impact Statement submitted with the planning application adequately describes the proposed scheme, the project site and the surrounding area. The Stage 1 Screening Assessment concluded that a Stage 2 Appropriate Assessment (NIS) was required. The Appropriate Assessment Screening Report and NIS outlined the methodology used for assessing potential impacts on the habitats and species within the European sites that have the potential to be affected by the proposed development. It predicted the potential impacts for the site and its conservation objectives, suggested mitigation measures, assessed in-combination effects and identified any residual effects on the European site and its conservation objectives.

13.5.3. The Appropriate Assessment Screening Report and NIS were informed by the following studies, surveys and consultations:

- Desk Study:
    - Online data from NPWS on European sites include conservation objectives documents.
    - Online data records from National Biodiversity Data Centre.
    - OSi orthophotography.
    - BusConnects drone imagery, survey November 2020.

- Records of rare and / or protected species held by NPWS.
- Habitat and species GIS datasets provided by the NPWS, including Article 12 and Article 17 data.
- Records from the Botanical Society of Britain and Ireland.
- Information contained within the *Flora of County Dublin.*
- Environmental information from the EPA.
- Information on the status of EU protected habitats and species in Ireland.
- NIS for proposed residential development at St. Paul's College.
- Ecological surveys for EIAR.
- Information on the location, nature and design of the proposed scheme.

- Consultations:
  - Department of Housing, Local Government and Heritage (30th July 2019)
  - Inland Fisheries Ireland (3rd November 2020)
- Baseline surveys:
  - Habitats and flora surveys undertaken between June and August 2018 and confirmatory and additional surveys in August 2020 and mapped in accordance with Best Practice Guidance for Habitat Survey and Mapping. Confirmatory surveys and additional habitat surveys of any new sections added to the route on December 2022 and January 2023.
  - Desk study to identify all hydrological crossing points. Survey of aquatic environs in July 2022. The suitability of water features and associated foraging, roosting, and nesting habitats, located within or directly adjacent to the Proposed Scheme, were assessed for kingfisher potential in October 2020.

- Fauna surveys including surveys for the presence or signs of terrestrial, mobile Annex II species and surveys for Special Conservation Interest bird species.
- Otter surveys undertaken between June and August 2018, and in August 2020, October 2020, March 2022 and July 2022.
- Desk study to identify suitable inland feeding and/ or roosting sites for winter birds and habitat suitability assessment carried out in October 2020. Field survey of suitable sites twice a month, between the months of November 2020 to March 2021, and October 2021 to March 2022.
- Identification of birds with reference to Collins Bird Guide (Svensson, 2010) and record using the British Trust for Ornithology (BTO) species codes.

13.5.4. The NIS concluded that, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the proposed scheme and the effective implementation of the mitigation measures proposed, that the proposed scheme will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion.

13.5.5. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided, and they are summarised in the NIS. I am satisfied that the information allows for a complete assessment of any adverse effects of the development, on the conservation objectives of the following European sites alone, or in combination with other plans and projects:

- North Dublin Bay SAC,
- South Dublin Bay SAC,
- Rockabill to Dalkey Island SAC,

- Wicklow Mountains SAC,
- Lambay Island SAC,
- North Bull Island SPA,
- South Dublin Bay and River Tolka Estuary SPA,
- Howth Head Coast SPA,
- Dalkey Islands SPA,
- Malahide Estuary SPA,
- Baldoyle Bay SPA,
- Rogerstown Estuary SPA,
- Skerries Islands SPA,
- Lambay Island SPA,
- Ireland's Eye SPA,
- Rockabill SPA
- The Murrough SPA

13.5.6. Since the submission of the application and NIS, a new candidate SPA (the North-West Irish Sea cSPA) has been designated in July 2023. The NIS could not take account of this as it had not been identified at the time of submission. Given the nature of potential impacts that could arise from the construction and operational phase of the proposed scheme, together with the nature of SCIs identified in this cSPA and publication of the sites Conservation Objectives (September 2023), as well as the survey work completed to inform the submitted NIS, I consider that there is sufficient detail on file to allow full consideration of potential impacts on the North-West Irish Sea cSPA.

13.5.7. The applicant was asked by South Dublin County Council to confirm that sufficient transects were taken to establish the level of Brent Geese usage in Tymon Park. SDCC submitted that it has made significant progress recently in ensuring that Tymon Park is as supportive as possible for the species. In response, the NTA

confirm that the survey effort was proportional to the proposed scheme requirement, in that multiple surveys across multiple years were undertaken.

13.6. Appropriate Assessment of implications of the proposed development on each European site

13.6.1. The following is an assessment of the implications of the project on the relevant conservation objectives of the European sites using the best available scientific knowledge in the field. All aspects of the project which could result in significant effects are identified and mitigation measures designed to avoid or reduce any adverse effects are examined and assessed.

13.6.2. I have relied on the following guidance:

- DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service.
- EC (2002) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC
- EC (2011) Guidelines on the implementation of the Birds and Habitats Directives in Estuaries and coastal zones

13.6.3. **Relevant European sites:** The following sites are subject to appropriate assessment.

- North Dublin Bay SAC,
- South Dublin Bay SAC,
- Rockabill to Dalkey Island SAC,
- Wicklow Mountains SAC,
- Lambay Island SAC,

- North Bull Island SPA,
- South Dublin Bay and River Tolka Estuary SPA,
- Howth Head Coast SPA,
- Dalkey Islands SPA,
- Malahide Estuary SPA,
- Baldoyle Bay SPA,
- Rogerstown Estuary SPA,
- Skerries Islands SPA,
- Lambay Island SPA,
- Ireland's Eye SPA,
- Rockabill SPA
- The Murrough SPA
- North-West Irish Sea cSPA

13.6.4. A description of these site and their Conservation Objectives and Qualifying Interests, including any relevant attributes and targets for the site, is set out in the NIS and outlined in Table 3 below. I have also examined the Natura 2000 data forms as relevant and the Conservation Objectives supporting documents for this site available through the NPWS website (www.npws.ie).

13.6.5. **Aspects of the proposed development:** The main aspects of the proposed development that could adversely affect the conservation objectives of European sites include:

- Indirect habitat loss and fragmentation as a consequence of habitat damage degradation from a reduction in water quality and/ or change to hydrological regime.
- Reduction in water quality resulting in degradation of sensitive habitat present within European sites, which in turn could negatively affect SCI bird species relying on these habitats for foraging/ roosting.

- Habitat degradation as a result of introduction/ spreading of non-native invasive species to downstream European sites.
- Habitat degradation as a result of air quality impacts.
- Disturbance and displacement impacts on SCI bird species known to forage and/ or roost at inland sites, such as playing pitches.

13.6.6. **Tables 3 to 21** summarise the appropriate assessment and site integrity test. The conservation objectives, targets and attributes as relevant to the identified potential significant effects are examined and assessed in relation to the aspects of the proposal (alone and in combination with other plans and projects). Mitigation measures are examined, and clear, precise and definitive conclusions reached in terms of adverse effects on the integrity of European sites.

13.6.7. Supplemental to the summary tables, key issues that arose through consultation and through my examination and assessment of the NIS and further information request are expanded upon in the text below.

Table 3

South Dublin Bay SAC (Site code: 000210)

Key Issues:

- Habitat degradation as a result of hydrological impacts
- Habitat degradation as a result of introducing / spreading non-native invasive species.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000210.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**	- Habitat degradation / effects on QI / SCI species as a result of hydrological impacts through release of contaminated surface water run-off and/or accidental spillage or pollution event into any surface water features during construction and operation. Effects	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed development along the route, will be subject to	Yes - Due to mitigation measures, best practice measures and implementation of monitoring scheme, no adverse effects water quality or the designated conservation interests of the
Mudflats and sandflats not covered by seawater at low tide [1140]	Stable or increasing habitat area; maintenance of extent/ conservation of high quality of *Zostera*-dominated community and conserve its high quality; and conserve the community type in a natural condition of fine				

	sands with *Angulus tenuis* community complex.	of reduction in water quality could extend a significant distance downstream. - Habitat degradation as a result of introducing / spreading non-native invasive species. There are areas of Japanese Knotweed in close proximity to the proposed scheme and this species could spread during construction/ maintenance or be introduced to terrestrial habitat in downstream European sites via surface water features. - Terrestrial habitats above the high tide line not at risk of effects from water pollution.	Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs,	planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	European sites will occur. - Water Framework Directive Assessment for proposed scheme confirmed that it will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and that the proposed scheme complies with all requirements of the WFD.
To restore the favourable conservation condition of the following:					
Annual vegetation of drift lines [1210]	Increasing habitat area; no decline in habitat distribution; maintain appropriate physical structure (functionality and sediment supply/ presence/ absence of physical barriers/ maintain natural circulation or sediment and organic matter); maintain range of coastal habitat; maintain presence of species-poor communities with typical species; and appropriate levels of negative indicator species.				
Salicornia and other annuals colonising mud and sand [1310]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain creek and pan structure and natural tidal regime; maintain range of coastal habitat and structural variation within sward; maintain >90% of areas outside creeks vegetated; maintain presence of listed species poor communities;				

	and no significant expansion of common cordgrass.		filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network. - Measures to prevent the spread of non-native invasive species to downstream European sites, including pre-construction survey, implementation of management plan and monitoring in subsequent years following treatment.		
Embryonic shifting dunes [2110]	Stable/ increasing habitat area; no decline in habitat distribution; maintain appropriate physical structure (functionality and sediment supply); maintain range of coastal habitat; maintain healthy sand couch grass and/ or lyme-grass; maintain presence of species-poor communities with typical species; and appropriate levels of negative indicator species.				

Overall Conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for South Dublin Bay SAC. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.
The spread of invasive species can also be controlled via mitigation measures, including pre-construction surveys, implementation of management plan and monitoring in subsequent years following treatment will be carried out in accordance with the Invasive Species Management Plan appended to the NIS.
Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the South Dublin Bay SAC.

Table 4

North Dublin Bay SAC (Site code: 000206)

Key Issues:

- Habitat degradation as a result of hydrological impacts
- Habitat degradation as a result of introducing / spreading non-native invasive species.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000206.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**	- Habitat degradation / effects on QI / SCI species as a result of hydrological impacts through release of contaminated surface water run-off and/or accidental spillage or pollution event into any surface water features during construction and operation. Effects	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed development along the route, will be subject to	Yes - Due to mitigation measures, best practice measures and implementation of monitoring scheme, no adverse effects water quality or the designated conservation interests of the
Mudflats and sandflats not covered by seawater at low tide [1140]	Stable or increasing habitat area; maintenance of extent/ conservation of high quality of *Mytilus edulis*-dominated community and conserve its high quality; and conserve the community type in a natural				

	condition of fine sand to sandy mud with *Pygospio elegans, Crangon crangon* and *Spio martinensis* community complex.	of reduction in water quality could extend a significant distance downstream. - Habitat degradation as a result of introducing / spreading non-native invasive species. There are areas of Japanese Knotweed in close proximity to the proposed scheme and this species could spread during construction/ maintenance or be introduced to terrestrial habitat in downstream European sites via surface water features. - Terrestrial habitats above the high tide line not at risk of effects from water pollution.	Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed	planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	European sites will occur. - Water Framework Directive Assessment for proposed scheme confirmed that it will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and that the proposed scheme complies with all requirements of the WFD.
Atlantic Salt Meadows (Glauco-Puccinellietalia maritimae) [1330]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain creek and pan structure and natural tidal regime; maintain range of coastal habitat and structural variation within sward; maintain >90% of areas outside creeks vegetated; maintain range of sub-communities with typical species; and no significant expansion of common cordgrass.				
Mediterranean salt meadows (Juncetalia maritime) [1410]	Stable/ increasing habitat area; no decline in habitat distribution; maintain appropriate physical structure (sediment supply); maintain creek and pan structure; maintain natural tidal regime; maintain range of coastal habitat; maintain structural variation in sward; maintain more than 90% of the area outside of creeks vegetated; maintain range of sub-communities with typical species; and no expansion of common cordgrass.				

Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	Stable/ increasing habitat area; no decline in habitat distribution; maintain appropriate physical structure (functionality and sediment supply); maintain range of coastal habitat; appropriate bare ground; maintain range of sub-communities with typical species; maintain structural variation in sward; appropriate levels of negative indicator species; and appropriate levels of scrub/ trees.		during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network. - Measures to prevent the spread of non-native invasive species to downstream European sites, including pre-construction survey, implementation of management plan and monitoring in subsequent years following treatment.		
Petalwort *Petalophyllum ralfsii [1395]*	No decline in population distribution, spread and size; no decline in suitable habitat; maintain hydrological conditions; and maintain low vegetation structure with high percentage of bryophytes and bare ground.				
To restore the favourable conservation condition of the following:					
Annual vegetation of drift lines [1210]	Stable/ increasing habitat area; no decline in habitat distribution; maintain appropriate physical structure (functionality and sediment supply); maintain range of coastal habitat; maintain presence of species-poor communities with typical				

	species; and appropriate levels of negative indicator species.				
Salicornia and other annuals colonising mud and sand [1310]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain creek and pan structure and natural tidal regime; maintain range of coastal habitat and structural variation within sward; maintain >90% of areas outside creeks vegetated; maintain presence of listed species poor communities; and no significant expansion of common cordgrass.				
Embryonic shifting dunes [2110]	Stable/ increasing habitat area; no decline in habitat distribution; maintain appropriate physical structure (functionality and sediment supply); maintain range of coastal habitat; maintain healthy sand couch grass and/ or lyme-grass; maintain presence of species-poor communities with typical species; and appropriate levels of negative indicator species.				
Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]	Stable/ increasing habitat area; no decline in habitat distribution; maintain appropriate physical structure (functionality and sediment supply); maintain range of coastal habitat;				

	maintain healthy marram grass and/ or lyme-grass; maintain presence of species-poor communities dominated by marram grass; and appropriate levels of negative indicator species.				
Fixed Coastal Dunes with herbaceous vegetation (grey dunes) [2130]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain range of coastal habitat; bare ground should not exceed 10% of fixed dune habitat; maintain structural variation within sward; maintain range of sub-communities with typical species; negative indicator species to represent less than 5% cover; and no more than 5% shrub/ tree cover or under control.				
Humid dune slacks [2190]	Increasing habitat area; no decline in habitat distribution; maintain appropriate physical structure (functionality and sediment supply); maintain hydrological regime; maintain range of coastal habitat; appropriate bare ground; maintain range of sub-communities with typical species; maintain structural variation in sward; appropriate levels of creeping willow and				

	negative indicator species; and appropriate levels of scrub/ trees.				

Overall Conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for North Dublin Bay SAC. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.
The spread of invasive species can also be controlled via mitigation measures, including pre-construction surveys, implementation of management plan and monitoring in subsequent years following treatment will be carried out in accordance with the Invasive Species Management Plan appended to the NIS.
Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the North Dublin Bay SAC.

Table 5

Wicklow Mountains SAC (Site code: 002122)

Key Issues:

- Habitat degradation / effects on QI / SCI species as a result of hydrological impacts.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002122.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				

[1355] Lutra lutra (Otter)	No significant decline in distribution, extent of terrestrial and freshwater habitat, couching sites and holts and available fish biomass. No significant increase in barrier to connectivity.	- Accidental pollution event during construction or operation could affect surface water downstream. Such an event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the otter population through direct contact with pollutants, or a decline in fish prey. - Construction disturbance in the vicinity of the Dodder River and Grand Canal could result in disturbance to and potentially displacement of otter, particularly if works are undertaken at night-time.	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and will not therefore affect its integrity.

			construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network.	integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	
[3110] Oligotrophic waters containing very few minerals of sandy plains	Habitat area stable/ increasing; no decline in habitat distribution; typical species present; appropriate vegetation composition & distribution characteristics; appropriate hydrological regime and lake	As the SAC is located upstream of the proposed scheme and at a substantial hydrological distance, there is no potential for a pollution event of	N/A	N/A	N/A

	substratum quality; appropriate water quality, acidification status and colour; appropriate dissolved organic carbon and turbidity; and appropriate fringing habitat.	any magnitude to affect any QI habitats or associated plant species for which the site is designated.			
[3160] Natural dystrophic lakes and ponds	As above				
[6130] Calaminarian grasslands of the Violetalia calaminariae	No decline in habitat area or distribution; maintain adequate open ground and high copper levels in soils; maintain low and open vegetation and diversity and populations of metallophyte bryophytes.				
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
[4010] Northern Atlantic wet heaths with Erica tetralix	Stable/ increasing habitat area; no decline in habitat distribution; maintain soil nutrient status; maintain variety of vegetation communities; appropriate vegetation composition for cross-leaved heath, positive indicator species, lichens and bryophytes, ericoid species and crowberry, dwarf shrub species, negative indicator species and non-native species, native trees				

	and shrubs, bracken and soft rush; appropriate vegetation structure in terms of sphagnum condition, signs of browsing and burning; appropriate physical structure in terms of disturbed bare ground and drainage; and no decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat.				
[4030] European dry heaths	Stable/ increasing habitat area; no decline in habitat distribution; maintain soil nutrient status; maintain variety of vegetation communities; appropriate vegetation composition for lichens & biophytes, positive indicator species, dwarf shrub species, negative indicator species and non-native species, native trees and shrubs, bracken, and soft rush; appropriate vegetation structure in terms of ling, signs of browsing and burning; appropriate physical structure in terms of disturbed bare ground; and no decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat.				

[4060] Alpine and Boreal heaths	Stable/ increasing habitat area; no decline in habitat distribution; maintain soil nutrient status; maintain variety of vegetation communities; appropriate vegetation composition for lichens & biophytes, positive indicator species, dwarf shrub species, negative indicator species and non-native species; appropriate vegetation structure in terms of signs of grazing, browsing, burning and disturbed bare ground; and no decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat.				
[6230] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)	Stable/ increasing habitat area; no decline in habitat distribution; maintain soil nutrient status; maintain variety of vegetation communities; appropriate vegetation composition for positive and high quality indicator species, species richness, non-native and negative indicator species, sphagnum and polytrichum cover and shrubs, bracken and heath cover; appropriate vegetation structure in terms of forb to graminoid ratio, sward height, litter cover, disturbed bare ground and grazing or disturbance; and no decline in				

	distribution or population sizes of rare, threatened or scarce species associated with the habitat.				
[7130] Blanket bogs (* if active bog)	Stable/ increasing habitat area; no decline in habitat distribution; maintain soil nutrient status; at least 99% of the total Annex I blanket bog area active; natural hydrology unaffected by drains and erosion; maintain variety of vegetation communities; appropriate vegetation composition for positive indicator species, lichens and bryophytes, potential dominant species, negative indicator species and non-native species and native trees and shrubs; appropriate vegetation structure in terms of sphagnum condition, signs of browsing and burning; appropriate physical structure in terms of disturbed bare ground, drainage and erosion; and no decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat.				

[8110] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	Stable/ increasing habitat area; no decline in habitat distribution; maintain soil nutrient status; appropriate vegetation composition for lichens and bryophytes, negative indicator species, non-native species, positive indicator species, grass species and dwarf scrubs and bracken, native trees and scrubs; appropriate vegetation structure in terms of grazing and browsing; appropriate physical structure in terms of disturbance; and no decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat.				
[8210] Calcareous rocky slopes with chasmophytic vegetation	Stable/ increasing habitat area; no decline in habitat distribution; maintain soil nutrient status; appropriate vegetation composition for positive indicator species, non-native species, and bracken, native trees and scrubs; appropriate vegetation structure in terms of grazing and browsing; and no decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat.				
[8220] Siliceous rocky slopes with	Stable/ increasing habitat area; no decline in habitat distribution; maintain soil nutrient status;				

chasmophytic vegetation	appropriate vegetation composition for positive indicator species, non-native species, and bracken, native trees and scrubs; appropriate vegetation structure in terms of grazing and browsing; and no decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat.				
[91A0] Old sessile oak woods with Ilex and Blechnum in the British Isles	Stable/ increasing habitat area; no decline in habitat distribution; woodland area stable/ increasing; appropriate woodland structure for cover and height, community diversity & extent, natural regeneration, dead wood, veteran trees, indicators of local distinctiveness; and appropriate vegetation composition for native tree cover and negative indicator species.				

Overall Conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for Wicklow Mountains SAC. No habitat loss will occur, and there is no potential for effects to arise on the designated habitats of the SAC from the proposed scheme. While the potential for any adverse effects on otter is low considering the separation distances between the SAC and ranges involved, the link is there and this gives rise to the potential for effects. Adverse effects from water

contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the receiving waters. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors. Specific mitigation measures have also been incorporated in order to ensure the protection of otters.

Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Wicklow Mountains SAC.

Table 6

Rockabill to Dalkey Island SAC (Site code: 003000)

Key Issues:

- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO003000.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation	**The favourable conservation status of a species is achieved when:**	- Habitat degradation as a result of hydrological impacts	- CEMP sets out the mechanism by which environmental protection	No in combination effect:	Yes

condition of the following:		through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream and could affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats. - Pollution event could potentially affect the quality of the intertidal /marine habitats which support harbour porpoise and fish prey species.	is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.).	- Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will not therefore affect its integrity.
Reefs [1170]	Stable or increasing habitat area and habitat distribution; and conserve intertidal reef community complex and subtidal reef community complex in natural condition.				
Harbour porpoise *Phocoena phocoena* [1351]	No restriction of species range by artificial barriers to site use; and human activities should occur at levels that do not adversely affect the species at the site.				

			- Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network.		

Overall Conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for Rockabill to Dalkey Island SAC. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Rockabill to Dalkey Island SAC.

Table 7

Lambay Island SAC (Site code: 000204) Key Issues: • Habitat degradation / effects on IQ/ SCI species as a result of hydrological impacts **Conservation Objectives:** https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000204.pdf					
		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**	- No pathway for impacts to occur on any habitats associated with this SAC as it is located a significant distance from the proposed scheme on the far side of the Howth peninsula and separated by a large marine waterbody. - Pollution event could potentially affect the quality of the intertidal /marine habitats which	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan;	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will not therefore affect its integrity.
Reefs [1170]	Stable or increasing habitat area and habitat distribution; and conserve intertidal reef community complex and subtidal reef community complex in natural condition.				
Vegetated sea cliffs of the Atlantic and Baltic coast [1230]	Stable habitat length; no decline in habitat distribution; no alteration to natural functioning of geomorphological and hydrological processes; maintain				

	range of sea cliff habitat zonations; maintain structural variation within sward; maintain range of Irish Sea Cliff Survey species; negative indicator species less than 5%; and cover of bracken and woody species on grassland/heath less than 10% and 20% respectively.	support grey seal and harbour seal.	and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters	necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	
Phocoena phocoena (Harbour Porpoise) [1351]	Maintain favourable conservation condition in relation to access to suitable habitat and prevention of disturbance by human activity. (Adopted from Rockabill to Dalkey above as site specific measures not available at time of writing).				
Halichoerus grypus (Grey Seal) [1364]	No restriction of species range by artificial barriers to site use; breeding and moult and resting haul-out sites maintained in natural condition; and human activities should occur at levels that do not adversely affect the species at the site.				
Phoca vitulina (Harbour Seal) [1365]	No restriction of species range by artificial barriers to site use; breeding and moult and resting haul-out sites maintained in natural condition; and human activities should occur at levels				

	that do not adversely affect the species at the site.		discharging to existing surface water network.		

Overall Conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for Lambay Island SAC. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Lambay Island SAC.

Table 8

North Bull Island SPA (Site code: 004006)

Key Issues:

- Loss of ex situ feeding sites.
- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Habitat degradation as a result of introducing/ spreading non-native invasive species.

• Disturbance and displacement impacts. **Conservation Objectives:** https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004006.pdf					
		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Light-bellied Brent Goose *Branta bernicla hrota* [A046]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area.	- Habitat degradation as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream and could affect the quality of intertidal/ coastal	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan;	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Shelduck *Tadorna tadorna* [A048]	As above				
Teal *Anas crecca* [A052]	As above				
Pintail *Anas acuta* [A054]	As above				
Shoveler *Anas clypeata* [A056]	As above				
Oystercatcher *Haematopus ostralegus* [A130]	As above				
Golden Plover *Pluvialis apricaria* [A140]	As above				

Grey Plover *Pluvialis squatarol* [A141]	As above	habitat that support SCI bird species. - Habitat degradation as a result of introducing / spreading non-native invasive species. There are areas of Japanese Knotweed in close proximity to the proposed scheme and this species could spread during construction/ maintenance and result in degradation of existing habitat, in particular coastal habitat not permanently or regularly inundated by seawater. - Temporary and permanent loss of suitable GA2 habitat.	and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters	necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	
Knot *Calidris canutus* [A143]	As above				
Sanderling *Calidris alba* [A144]	As above				
Dunlin *Calidris alpina* alpin [A149]	As above				
Black-tailed Godwit *Limosa limosa* [A157]	As above				
Curlew *Numenius arquata* [A160]	As above				
Redshank *Tringa tetanus* [A162]	As above				
Turnstone *Arenaria interpres* [A169]	As above				
Black-headed Gull *Chroicocephalus ridibundus* [A179]	As above				
Wetlands [A999]	Permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,713 hectare.	- As above.			

			discharging to existing surface water network. - Measures to prevent the spread of non-native invasive species to downstream European sites, including pre-construction survey, implementation of management plan and monitoring in subsequent years following treatment. - Restore habitat after temporary loss.		

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.
No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

The spread of invasive species can also be controlled via mitigation measures, including pre-construction surveys, implementation of management plan and monitoring in subsequent years following treatment will be carried out in accordance with the Invasive Species Management Plan appended to the NIS.

Ex-situ foraging/ roosting habitat for SCI species within the footprint of proposed scheme at construction compounds and foraging/ roosting within disturbance ZoI. No potential impacts as a result of disturbance/ displacement due to the very small numbers of SCI species recorded and the likelihood that other suitable sites are used on a similar or more regular basis; noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds; the availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA; and the likelihood that disturbance levels will

return to baseline conditions as a result of the lands becoming available again following construction. Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site in Dublin Bay and beyond.

Table 9

South Dublin Bay and River Tolka Estuary SPA (Site code: 004024)

Key Issues:

- Loss of ex situ feeding sites.
- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Habitat degradation as a result of introducing/ spreading non-native invasive species.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004024.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans &	Can adverse effects on site

				Programmes/ Major Projects	integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Light-bellied Brent Goose *Branta bernicla hrota* [A046]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area.	- Habitat degradation as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream and could affect the quality of intertidal/ coastal habitat that support SCI bird species. - Habitat degradation as a result of introducing / spreading non-native invasive species. There are areas of Japanese Knotweed in close	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites.	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Oystercatcher *Haematopus ostralegus* [A130]	As above				
Ringed Plover *Charadrius hiaticula* [A137]	As above				
Grey Plover *Pluvialis squatarol* [A141]	Proposed for removal				
Knot *Calidris canutus* [A143]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area.				
Sanderling *Calidris alba* [A144]	As above				
Dunlin *Calidris alpina* alpin [A149]	As above				
Bar-tailed Godwit *Limosa limosa* [A157]	As above				
Redshank *Tringa tetanus* [A162]	As above				

Black-headed Gull *Chroicocephalus ridibundus* [A179]	As above	proximity to the proposed scheme and this species could spread during construction/ maintenance and result in degradation of existing habitat, in particular coastal habitat not permanently or regularly inundated by seawater. - Temporary and permanent loss of suitable GA2 habitat.	- Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network. - Measures to prevent the spread of non-native invasive species to downstream European sites, including pre-construction survey, implementation of	- Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	
Roseate Tern *Sterna dougallii* [A192]	No significant decline of breeding population, productivity rate, passage population, breeding colonies, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely breeding and numbers among the post-breeding aggregation.				
Common Tern *Sterna hirundo* [A193]	No significant decline of breeding population, productivity rate, passage population, breeding colonies, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely breeding and numbers among the post-breeding aggregation.				
Arctic Tern *Sterna paradisaea* [A194]	No significant decline of passage population, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely affect numbers among the post-breeding aggregation.				
Wetlands and Waterbirds [A999]	Permanent area occupied by the wetland habitat should be stable				

	and not significantly less than the area of 2,192 hectare.		management plan and monitoring in subsequent years following treatment. - Restore habitat after temporary loss.		

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.
No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

The spread of invasive species can also be controlled via mitigation measures, including pre-construction surveys, implementation of management plan and monitoring in subsequent years following treatment will be carried out in accordance with the Invasive Species Management Plan appended to the NIS.

Ex-situ foraging/ roosting habitat for SCI species within the footprint of proposed scheme at construction compounds and foraging/ roosting within disturbance ZoI. No potential impacts as a result of disturbance/ displacement due to the very small numbers of SCI species recorded and the likelihood that other suitable sites are used on a similar or more regular basis; noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds; the availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA; and the likelihood that disturbance levels will return to baseline conditions as a result of the lands becoming available again following construction. Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site in Dublin Bay and beyond.

Table 11

Howth Head Coast SPA (Site code: 004113)

Key Issues:

- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004113.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain or restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**	- Habitat degradation/ effects on QI/ SCI species as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Kittiwake *Rissa tridactyla* [A188]	No significant decline in breeding population abundance, productivity rate, distribution and available prey biomass; no significant increase in barriers to connectivity and disturbance at breeding sites.				

		quality could extend a significant distance downstream and could result in degradation of sensitive habitat, which in turn would negatively affect SCI bird species utilising these habitat and the quantity and quality of their prey.	Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will	subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	

			reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network.		

Overall Conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for the Howth Head Coast SPA. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Howth Head Coast SPA.

Table 12

Dalkey Islands SPA (Site code: 004172)

Key Issues:

- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004172.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain or restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**	- Habitat degradation/ effects on QI/ SCI species as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream and could affect the quantity and quality of prey fish species and the quality and suitability of roosting sites.	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Roseate Tern *Sterna dougallii* [A192]	No significant decline of passage population, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely affect numbers among the post-breeding aggregation.				
Common Tern *Sterna hirundo* [A193]	No significant decline of breeding population, productivity rate, passage population, breeding colonies, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely breeding and numbers among the post-breeding aggregation.				

Arctic Tern *Sterna paradisaea* [A194]	No significant decline of passage population, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely affect numbers among the post-breeding aggregation.		downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network.	- Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	
Overall Conclusion: Integrity test					

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for the Dalkey Islands SPA. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Dalkey Islands SPA.

Table 13

Malahide Estuary SPA (Site code: 004025)

Key Issues:

- Loss of ex situ feeding sites.
- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004025.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
[A005] Great Crested Grebe *Podiceps cristatus* [A046] Brent Goose *Branta bernicla hrota* [A048] Shelduck *Tadorna tadorna* [A054] Pintail *Anas acuta* [A067] Goldeneye *Bucephala clangula* [A069] Red-breasted *Merganser Mergus serrator* [A130] Oystercatcher *Haematopus ostralegus*	Long term population trend stable or increasing; and no significant decrease in the range, timing or intensity of use of areas by all listed species other than occurring from natural patterns of variation.	- Habitat degradation/ effects on SCI species as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream to Dublin Bay, which SCI species may utilise outside of their core area. The quantity and quality of prey fish species and the quality	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.

[A140] Golden Plover *Pluvialis apricaria* [A141] Grey Plover *Pluvialis squatarola* [A143] Knot *Calidris canutus* [A149] Dunlin *Calidris alpina alpina* [A156] Black-tailed Godwit *Limosa limosa* [A157] Bar-tailed Godwit *Limosa lapponica* [A162] Redshank *Tringa totanus*		of intertidal/ coastal habitat that support the SCI species could be affected. - Temporary and permanent loss of suitable GA2 habitat.	operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network. - Restore habitat atter temporary loss.	- Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	

Wetlands and Waterbirds [A999]	Permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 765 hectare.	No potential impacts as proposed scheme is not hydrologically connected.	-	-	Yes

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.
No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Ex-situ foraging/ roosting habitat for SCI species within the footprint of proposed scheme at construction compounds and foraging/ roosting within disturbance ZoI. No potential impacts as a result of disturbance/ displacement due to the very small numbers of SCI species recorded and the likelihood that other suitable sites are used on a similar or more regular basis; noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds; the availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA; and the likelihood that disturbance levels will return to baseline conditions as a result of the lands becoming available again following construction. Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

Table 14

Baldoyle Bay SPA (Site code: 004016)

Key Issues:

- Habitat loss and fragmentation.
- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004016.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				

Light-bellied Brent Goose *Branta bernicla hrota* [A046]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area.	- Habitat degradation/ effects on SCI species as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream to Dublin Bay, which SCI species may utilise outside of their core area. The quantity and quality of prey fish species and the quality of intertidal/ coastal habitat that support the SCI species could be affected. - Temporary and permanent loss of suitable GA2 habitat.	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage,	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Shelduck *Tadorna tadorna* [A048]	As above				
Ringed Plover *Charadrius hiaticula* [A137]	As above				
Golden Plover *Pluvialis apricaria* [A140]	As above				
[A141] Grey Plover *Pluvialis squatarola*	As above				
[A157] Bar-tailed Godwit *Limosa lapponica*	As above				

			procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network. Restore habitat after temporary loss.		
Wetlands and Waterbirds [A999]	Permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 263 hectare.	No potential impacts as proposed scheme is not hydrologically connected.	-	-	Yes
Overall Conclusion: Integrity test The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives. Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.					

No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Ex-situ foraging/ roosting habitat for SCI species within the footprint of proposed scheme at construction compounds and foraging/ roosting within disturbance ZoI. No potential impacts as a result of disturbance/ displacement due to the very small numbers of SCI species recorded and the likelihood that other suitable sites are used on a similar or more regular basis; noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds; the availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA; and the likelihood that disturbance levels will return to baseline conditions as a result of the lands becoming available again following construction. Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

Table 15

Rogerstown Estuary SPA (Site code: 004015)

Key Issues:

- Habitat loss and fragmentation.
- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004015.pdf					
		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Greylag Goose (Anser anser) [A043]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area.	- Habitat degradation/ effects on SCI species as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Light-bellied Brent Goose *Branta bernicla hrota* [A046]	As above				
Shelduck *Tadorna tadorna* [A048]	As above				
Shoveler *Anas clypeata* [A056]	As above				

Oystercatcher *Haematopus ostralegus* [A130]	As above	downstream to Dublin Bay, which SCI species may utilise outside of their core area. The quantity and quality of prey fish species and the quality of intertidal/ coastal habitat that support the SCI species could be affected. - Temporary and permanent loss of suitable GA2 habitat.	Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the	screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	
Ringed Plover *Charadrius hiaticula* [A137]	As above				
Grey Plover *Pluvialis squatarol* [A141]	As above				
Knot *Calidris canutus* [A143]	As above				
Dunlin *Calidris alpina* alpin [A149]	As above				
Black-tailed Godwit *Limosa limosa* [A157]	As above				
Redshank *Tringa tetanus* [A162]	As above				

			environmental quality of surface waters discharging to existing surface water network. - Restore habitat after temporary loss.		
Wetlands and Waterbirds [A999]	Permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 646 hectare.	No potential impacts as proposed scheme is not hydrologically connected.	-	-	Yes

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.
No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Ex-situ foraging/ roosting habitat for SCI species within the footprint of proposed scheme at construction compounds and foraging/ roosting within disturbance ZoI. No potential impacts as a result of disturbance/ displacement due to the very small numbers of SCI species recorded and the likelihood that other suitable sites are used on a similar or more regular basis; noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds; the availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA; and the likelihood that disturbance levels will return to baseline conditions as a result of the lands becoming available again following construction. Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

Table 16

Skerries Islands SPA (Site code: 004122)

Key Issues:

- Habitat loss and fragmentation.
- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004122.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain or restore the favourable conservation	**The favourable conservation status of a species is achieved when:**				

condition of the following:					
Cormorant *Phalacrocorax carbo* [A017] Shag *Phalacrocorax aristotelis* [A018] Light-bellied Brent Goose *Branta bernicla hrota* [A046] Purple Sandpiper (Calidris maritima) [A148] Turnstone (Arenaria interpres) [A169] Herring Gull (Larus argentatus) [A184]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area, (no-site specific conservations objectives document – based on Rogerstown Estuary SPA).	- Habitat degradation/ effects on SCI species as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream to Dublin Bay, which SCI species may utilise outside of their core area. The quantity and quality of prey fish species and the quality of intertidal/ coastal habitat that support the SCI species could be affected. - Temporary and permanent loss of suitable GA2 habitat.	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.

			monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network. - Restore habitat after temporary loss.		

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.
No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Ex-situ foraging/ roosting habitat for SCI species within the footprint of proposed scheme at construction compounds and foraging/ roosting within disturbance ZoI. No potential impacts as a result of disturbance/ displacement due to the very small numbers of SCI species recorded and the likelihood that other suitable sites are used on a similar or more regular basis; noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds; the availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA; and the likelihood that disturbance levels will return to baseline conditions as a result of the lands becoming available again following construction. Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

Table 17

Lambay Island SPA (Site code: 004069)

Key Issues:

- Habitat loss and fragmentation.
- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004069.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain or restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Fulmar *Fulmarus glacialis* [A009] Cormorant *Phalacrocorax carbo* [A017] Shag *Phalacrocorax aristotelis* [A018] Greylag Goose *Anser anser* [A043] Lesser Black-backed Gull *Larus fuscus* [A183] Herring Gull *Larus argentatus* [A184] Kittiwake *Rissa tridactyla* [A188]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area, (no-site specific conservations objectives document – based on Rogerstown Estuary SPA).	- Habitat degradation/ effects on SCI species as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream to Dublin Bay, which SCI species may utilise outside of their core area. The quantity and quality of prey fish	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.

Guillemot *Uria aalge* [A199] Razorbill *Alca torda* [A200] Puffin *Fratercula arctica* [A204]		species and the quality of intertidal/ coastal habitat that support the SCI species could be affected. - Temporary and permanent loss of suitable GA2 habitat.	during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network.	in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	

			- Restore habitat after temporary loss.		

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.
No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Ex-situ foraging/ roosting habitat for SCI species within the footprint of proposed scheme at construction compounds and foraging/ roosting within disturbance ZoI. No potential impacts as a result of disturbance/ displacement due to the very small numbers of SCI species recorded and the likelihood that other suitable sites are used on a similar or more regular basis; noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds; the availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA; and the likelihood that disturbance levels will return to baseline conditions as a result of the lands becoming available again following construction. Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

Table 18

Ireland's Eye SPA (Site code: 004117)

Key Issues:

- Habitat loss and fragmentation.
- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004117.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain or restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Cormorant *Phalacrocorax carbo* [A017] Herring Gull *Larus argentatus* [A184]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area, (no-site specific conservations objectives	- Habitat degradation/ effects on SCI species as a result of hydrological impacts through release of sediment into receiving	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure	Yes With the effective implementation of mitigation measures, the proposed

Kittiwake *Rissa tridactyla* [A188] Guillemot *Uria aalge* [A199] Razorbill *Alca torda* [A200]	document – based on Rogerstown Estuary SPA).	waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream to Dublin Bay, which SCI species may utilise outside of their core area. The quantity and quality of prey fish species and the quality of intertidal/ coastal habitat that support the SCI species could be affected. - Temporary and permanent loss of suitable GA2 habitat.	development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of	protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.

			oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network. - Restore habitat after temporary loss.		

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.
No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Ex-situ foraging/ roosting habitat for SCI species within the footprint of proposed scheme at construction compounds and foraging/ roosting within disturbance ZoI. No potential impacts as a result of disturbance/ displacement due to the very small numbers of SCI species recorded and the likelihood that other suitable sites are used on a similar or more regular basis; noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds; the availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA; and the likelihood that disturbance levels will return to baseline conditions as a result of the lands becoming available again following construction. Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

Table 19

Rockabill SPA (Site code: 004014)

Key Issues:

- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004014.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain or restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				

Purple Sandpiper *Calidris maritima* [A148]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area.	No pathway for impact as this species is located on the far side of Howth Peninsula, separated by a large marine waterbody.			Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Roseate Tern *Sterna dougallii* [A192]	No significant decline of passage population, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely affect numbers among the post-breeding aggregation.	- Habitat degradation/ effects on QI/ SCI species as a result of hydrological impacts through accidental pollution event during construction/ operation that affect SCI species through direct contact with pollutants and/ or decline in quantity or quality of prey fish species.	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons,	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in	
Common Tern *Sterna hirundo* [A193]	No significant decline of breeding population, productivity rate, passage population, breeding colonies, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely breeding and numbers among the post-breeding aggregation.				
Arctic Tern *Sterna paradisaea* [A194]	No significant decline of breeding population, productivity rate, passage population, breeding colonies, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely breeding and numbers among the post-breeding aggregation.				

			polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network.	combination any other major project to have an adverse effect on the integrity of any European sites.	

Overall Conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for Rockabill SPA. No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Rockabill SPA.

Table 20

The Murrough SPA (Site code: 004186)

Key Issues:

- Habitat loss and fragmentation.
- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004186.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?

To maintain or restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Red-throated Diver *Gavia stellata* [A001] Greylag Goose (Anser anser) [A043] Light-bellied Brent Goose *Branta bernicla hrota* [A046] Wigeon *Anas Penelope* [A050] Teal *Anas crecca* [A052] Black-headed Gull *Chroicocephalus ridibundus* [A179] Herring Gull (Larus argentatus) [A184] Little Tern *Sterna albifrons* [A195]	Long-term population stable or increasing; and no significant decrease in the numbers or range of areas used by waterbird species, (no site-specific conservation objectives for this SPA – attributes, measures and targets based on The Raven SPA).	- Habitat degradation/ effects on SCI species as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream to Dublin Bay, which SCI species may utilise outside of their core area. The quantity and quality of prey fish species and the quality of intertidal/ coastal habitat that support the SCI species could be affected. - Temporary and permanent loss of suitable GA2 habitat.	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.

			contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network. - Restore habitat after temporary loss.	an adverse effect on the integrity of any European sites.	
Overall Conclusion: Integrity test The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives. Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.					

No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Ex-situ foraging/ roosting habitat for SCI species within the footprint of proposed scheme at construction compounds and foraging/ roosting within disturbance ZoI. No potential impacts as a result of disturbance/ displacement due to the very small numbers of SCI species recorded and the likelihood that other suitable sites are used on a similar or more regular basis; noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds; the availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA; and the likelihood that disturbance levels will return to baseline conditions as a result of the lands becoming available again following construction. Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

Table 21

North-West Irish Sea cSPA (Site code: 004236)

Key Issues:

- Habitat loss and fragmentation.
- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Disturbance and displacement impacts.

		Summary of Appropriate Assessment	

Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain or restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Common Scoter (Melanitta nigra) [A065] Red-throated Diver (Gavia stellata) [A001] Great Northern Diver (Gavia immer) [A003] Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Shag (Phalacrocorax aristotelis) [A018] Cormorant (Phalacrocorax carbo) [A017]	No significant decline, stable or increasing population trends, sufficient number of locations, area and availability of suitable habitat to support the population, sufficient number of locations, area of suitable habitat and available forage biomass to support population target, intensity, frequency, timing and duration of disturbance, barriers not significantly impacting populations access to the SPA or other ecologically important sites outside the SPA.	- Habitat degradation as a result of hydrological impacts through release of sediment into receiving waters, accidental spillage and/ or leaks of contaminants during construction and operation. Effects of reduction in water quality could extend a significant distance downstream and could affect the quality of intertidal/ coastal habitat that support SCI bird species.	- CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development - includes Construction Traffic Management Plan; Invasive Species Management Plan; Surface Water Management Plan; Construction and Demolition Resource and Waste Management Plan; and Environmental Incident Response Plan. - Measures to protect surface water quality during construction and	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the cSPA and will not therefore affect its integrity.

Little Gull (Larus minutus) [A177]		- Temporary and permanent loss of suitable GA2 habitat.	operational phases to avoid potential impacts on downstream European sites. - Measures to protect surface water during construction and to mitigate against the release of hydrocarbons, polluting chemicals, sediment/ silt and contaminated waters (e.g. silt fences, exclusion zones, weather monitoring, fuels/ chemical storage, procedures for contaminated materials, etc.). - Increase in impermeable area will be managed through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. SuDS measures installed during construction will reduce both the volume and rate, and improve the environmental quality of surface waters discharging to existing surface water network.	- Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	
Kittiwake (Rissa tridactyla) [A188]					
Black-headed Gull *Chroicocephalus ridibundus* [A179]					
Common Gull (Larus canus) [A182]					
Lesser Black-backed Gull (Larus fuscus) [A183]					
Herring Gull (Larus argentatus) [A184]					
Great Black-backed Gull (Larus marinus) [A187]					
Little Tern *Sterna albifrons* [A195]					
Roseate Tern (Sterna dougallii) [A192]					
Common Tern (Sterna hirundo) [A193]					
Arctic Tern (Sterna paradisaea) [A194]					
Puffin (Fratercula arctica) [A204]					

Razorbill (Alca torda) [A200]			- Restore habitat after temporary loss.		
Guillemot (Uria aalge) [A199]					

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for cSPA sites that are remote from the proposed development site and that no effects of any significance will occur.
No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Camac_040, Poddle_010, Dodder_040, Liffey Estuary Upper, Liffey Estuary Lower and the Ringsend WWTP all of which drain to Dublin Bay. Increased runoff will be attenuated rates and there will be no net increase in surface water flow discharged to these receptors.

Ex-situ foraging/ roosting habitat for SCI species within the footprint of proposed scheme at construction compounds and foraging/ roosting within disturbance ZoI. No potential impacts as a result of disturbance/ displacement due to the very small numbers of SCI species recorded and the likelihood that other suitable sites are used on a similar or more regular basis; noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds; the availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA; and the likelihood that disturbance levels will return to baseline conditions as a result of the lands becoming available again following construction. Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site in Dublin Bay and beyond.

13.7. Potential for Adverse Effects

13.7.1. As noted in the tables above, there is potential for adverse effects from indirect habitat loss and fragmentation as a consequence of habitat damage degradation from a reduction in water quality and/ or change to hydrological regime; reduction in water quality resulting in degradation of sensitive habitat present within European sites, which in turn could negatively affect SCI bird species relying on these habitats for foraging/ roosting; habitat degradation as a result of introduction/ spreading of non-native invasive species to downstream European sites; and disturbance and displacement impacts on SCI bird species known to forage and/ or roost at inland sites, such as playing pitches.

Habitat Loss and Fragmentation

13.7.2. There is potential for loss of *ex-situ* inland feeding sites used by SCI wintering species associated with Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA, The Murrough SPA and North West Irish Sea cSPA. These species include light bellied brent goose, golden plover, oystercatcher, curlew, black-headed gull, and black-tailed godwit. Five areas of suitable foraging, and/or roosting habitat for these species composing grassland habitats, have been identified within the footprint of the proposed scheme. Approximately 0.54 hectares in total will be lost during the construction phase for construction compounds.

13.7.3. However, none of the sites to be lost are a significant inland foraging resource for wintering bird species. The temporary loss of these sites will not therefore result in any likely significant effect on the conservation status of these species or undermine the conservation objectives of any SPAs in the vicinity, which are designated for these species. In addition, land take at the proposed construction compound is temporary in nature and will be returned to GA2 habitat during the operational phase of the proposed scheme.

Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

13.7.4. The surface water drainage system along the proposed scheme discharges into the Camac_040, Poddle_010, Dodder_040 and combined sewers which are directed to Ringsend WwTP. The potential for degradation effects on QI/ SCI species as a result of hydrological impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Wicklow Mountains SAC, North Dublin Bay SAC, South Dublin Bay SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough SPA and North West Irish Sea cSPA.

13.7.5. The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids and the accidental spillage and/or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. Any reduction in water quality could therefore result in degradation of sensitive habitat downstream and affect mobile SCI bird species that commute, forage and loaf in Dublin Bay, as well as their prey.

13.7.6. In addition, a reduction of surface water quality which could in turn negatively affect the otter population associated with the Wicklow Mountains SAC through direct contact with pollutants or a decline in fish prey. These potential impacts could occur to such a degree that the conservation objectives of the Wicklow Mountains SAC QI species are undermined.

13.7.7. Notwithstanding the above, the proposed mitigation measures will ensure that the proposed scheme will not significantly impact on the maintenance of hydrological conditions. Measures to protect surface/ groundwater during construction and

operation of the proposed scheme will include the use of on-site treatment for surface water runoff, bunded areas, SuDS and good construction practices throughout. Full details of mitigation are provided in the NIS, Construction Management Plan and Invasive Species Management Plan.

Habitat degradation as a result of introducing/ spreading non-native invasive species

13.7.8. Non-native invasive species are present within or adjacent to the proposed scheme and in the surrounding area. This species could potentially spread or be introduced to downstream terrestrial habitats within European sites via surface water during construction or routine maintenance. This could potentially result in degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. Non-native invasive species may outcompete other native species, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat, which could undermine the conservation objectives of the European sites.

13.7.9. As noted above, the proposed scheme is hydrologically connected to the Camac_040, Poddle_010, Dodder_040, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay. There is potential for the proposed scheme to result in significant effects which could have implications for the conservation objectives of South Dublin Bay and River Tolka Estuary SPA, South Dublin Bay SAC, North Dublin Bay SAC, and North Bull Island SPA as a result of invasive species spread.

13.7.10. Measures to prevent the spread of non-native invasive species to downstream European sites will consist of a confirmatory pre-construction invasive species survey to confirm the absence/ extent of invasive species within the proposed scheme footprint. A Non-Native Invasive Species Management Plan (ISMP) will be implemented where an infestation is identified within the proposed scheme footprint. The ISMP will describe in detail the infestations and, where possible, calculate the volume of infested soil to be excavated. The ISMP will be implemented in accordance with relevant guidance and by a suitably qualified and licenced specialist. Monitoring after control measures have been implemented and again in the subsequent years following treatment will take place, and any re-growth will be

treated as required. During the operational phase, the local authorities will implement a management regime to cover non-native invasive species.

Disturbance and displacement Impacts

13.7.11. The proposed scheme could give rise to disturbance and displacement impacts on SCI bird species known to forage and/ or roost at inland sites. This could occur from a temporary/ permanent increase in noise, vibration and/ or human activity levels during the construction and/ or operation phase. It should be noted, however, that noise levels associated with general construction activities would attenuate to close to background levels at a distance of 300m and beyond.

13.7.12. There are five ex-situ inland feeding site which are utilised by SCI wintering bird species within the potential disturbance Zone of Influence of the proposed scheme. It is possible that SCI bird species associated with the Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, The Murrough SPA and North West Irish Sea cSPA utilise these and other suitable lands in the wider area.

13.7.13. Construction phase noise disturbance may be in or above the levels that could provoke a response from birds. However, surveys have shown very small numbers of SCI species have been recorded and there is availability of large areas of suitable foraging/ roosting habitat in the wider locality, including closer to the SPA. None of these sites reached the national 1% population threshold and therefore the integrity of the conservation objectives for SCI species are not considered to be adversely affected by the proposed scheme.

13.7.14. Noise produced as a result of construction activities would not provoke more than a moderate effect/ level of response from birds at the proposed construction compounds and increased disturbance resulting in the temporary displacement will likely return to baseline conditions when the lands become available again. It is therefore reasonable to conclude that SCI bird species will not be subject to any substantial and long-term change and would be considered habituated to existing activities in the urban / suburban transport corridor.

13.7.15. Construction works in the vicinity of the River Dodder and Grand Canal could result in disturbance to and potentially displacement of otter, particularly if works are undertaken at night-time. Measures will be put in place to reduce the loss of breeding/ resting sites and prevent injury/ mortality impacts during construction. Night working within / directly adjacent to the River Camac at this location will not be undertaken and works will be carried out between July and September at the commuting corridor along the Nangor Road / Oak Road intersection of the River Camac. With the inclusion of these and other appropriate mitigation measures identified in this NIS, the proposed scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the Qualifying Interest species of Wicklow Mountains SAC, including otter.

13.8. In-Combination Effects

13.8.1. The NIS considers the proposed works in combination with all plans and/or projects with the potential to impact upon the European sites above. This includes any national, regional and local land use plans and existing or proposed projects in place at the time of lodgement of the proposed scheme that could potentially affect the ecological environment within the ZoI of the proposed scheme. The plans/ projects that are considered are listed in Table 35 of the NIS. Each plan/ project is individually considered for any potential in-combination effects in Table 36 of the NIS. The other BusConnects schemes in Dublin are also considered for this purpose.

13.8.2. A number of other individual projects/ developments in the immediate vicinity of the proposed scheme are also planned. These are listed under planning history in Section 6 above and I have considered these for the purposes of in-combination assessment.

13.8.3. Considering the environmental protection policies included within the relevant land use plans and projects, the range of mitigation measures included for the proposed scheme to avoid significant impacts, and that alone the proposed scheme will not adversely affect the integrity of any European sites, I am satisfied that all other plans

and projects will not act in combination with the proposed scheme to have an adverse effect on the integrity of any European sites.

13.8.4. The NIS concludes that effects on the integrity of all European sites within the ZoI of the proposed scheme are not expected to occur as a result of the project and, as such, there are no pathways for the proposed scheme to act in-combination with other plans and projects. This analysis was complete and robust in terms of plans and projects and no likely significant impacts arose taking into account of any residual impacts from the proposed development. Based on my analysis of the NIS, the NPWS data and scientific evidence provided, adverse effects to the integrity of the European sites within the ZoI of the proposed scheme will not arise.

13.8.5. The potential for adverse effects due to in-combination effects with other projects and activities was excluded based on the following:

- The potential for adverse effects can be effectively ameliorated by both design-based and applied mitigation measures related to surface water quality and spread of invasive species.
- The proposed scheme itself will not lead to adverse impacts on the Qualifying Interests/ Special Conservation Interest species of the European sites within the ZoI of the proposed scheme and therefore in-combination impacts will not arise.
- All other plans/ projects, including those in the immediate vicinity of the proposed scheme, have been considered in the context of in combination effects and must comply with all applicable planning and environmental approval requirements and be in accordance with the environmental protection objectives and policies of the relevant land use plans. There are no planned or ongoing projects that could act in combination with the proposed development to have adverse effects on the integrity of a European site.

13.9. Appropriate Assessment Conclusions

13.9.1. Having carried out screening for appropriate assessment of the proposed Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme, it was concluded that it may

result in significant effects on North Dublin Bay SAC, South Dublin Bay SAC, Wicklow Mountains SAC, Rockabill to Dalkey Islands SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Howth Head Coast SPA, Dalkey Islands SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA, Rockabill SPA, The Murrough SPA, and North West Irish Sea cSPA. Consequently, an appropriate assessment was required of the implications of the project on the qualifying features of these sites in light of their conservation objectives.

13.9.2. Following an appropriate assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of these European sites, or any other European site, in view of the sites' Conservation Objectives. No reasonable scientific doubt remains as to the absence of such effects.

13.9.3. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of North Dublin Bay SAC, South Dublin Bay SAC, Wicklow Mountains SAC, Rockabill to Dalkey Islands SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Howth Head Coast SPA, Dalkey Islands SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA, Rockabill SPA, The Murrough SPA, and North West Irish Sea cSPA.
- Detailed assessment of all aspects of the proposed development that could result in significant effects on European sites within a zone of influence of the proposed scheme.
- Application of mitigation measures designed to avoid adverse effects on site integrity and likely effectiveness of same.

- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of North Dublin Bay SAC, South Dublin Bay SAC, Wicklow Mountains SAC, Rockabill to Dalkey Islands SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Howth Head Coast SPA, Dalkey Islands SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA, Rockabill SPA, The Murrough SPA, and North West Irish Sea cSPA.

14.0 **Compulsory Purchase Order**

14.1. For the Board to confirm the subject CPO, it must be satisfied that the NTA has demonstrated that the CPO is clearly justified by the "common good". Case law[2] has determined that, in order to satisfy the common good, the following minimum criteria are required.

- The works to be carried out should accord or at least not be in material contravention of the policy and objectives contained in the statutory development plan relating to the area.
- There is a community need that is to be met by the acquisition of the lands in question.
- The project proposed and the associated acquisition of lands is suitable to meet the community need.
- Any alternative method of meeting the community need have been considered but are not demonstrably preferable.
- The extent of land-take should have due regard to the issue of proportionality.

[2] See also Mc Dermott and Woulfe 'Compulsory Purchase and Compensation in Ireland: Law and Practice' (1992).

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

14.3. Development Plan Compliance

14.3.1. The proposed Tallaght / Clondalkin to City Centre Core Bus Corridor continues through areas administered by South Dublin County Council and Dublin City Council. The policy context for the South Dublin County Development Plan 2022-2028 and the Dublin City Development Plan 2022-2028 is set out in Sections 5.13 and 5.14 of this report respectively.

14.3.2. Section 5 above details the consistent message within all levels of policy at EU, national and regional level, and reflected at local level within the South Dublin County Development Plan 2022-2028 and the Dublin City Development Plan 2022-2028, that there must be a transition to a low carbon and climate resilient society, and that active and sustainable mobility must be encouraged to reduce congestion and emissions.

14.3.3. The main objectives of the proposed scheme include the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets, as well as the enhancement of the potential for cycling by providing safe cycling infrastructure, segregated from general traffic, wherever practicable.

14.3.4. These scheme objectives fully accord with the aims of the current South Dublin County Development to increase the number of people walking, cycling and using public transport and to reduce the need for car journeys, resulting in a more active and healthy community, a more attractive public realm, safer streets, less congestion, reduced carbon emissions, better air quality, quieter neighbourhoods and a positive climate impact. Furthermore, it is highlighted in the current Dublin City Development Plan that the sustainable and efficient movement of people and goods is crucial for the success and vitality of the city, along with the need to move away from private car and fossil-fuel-based mobility to reduce the negative impacts of transport and climate change.

14.3.5. Having regard to the above, I am satisfied that the proposed scheme is justified and in overwhelmingly in accordance with the overriding development plan policy position as set out within the policy section of this report above.

14.4. Community Need

14.4.1. The proposed scheme is being developed in response to the need for a sustainable, reliable form of public transport, and a safe and comfortable active transport network along the main radial routes of Dublin city. Sustainable transport infrastructure is known to assist in creating better communities and places to live and work, while also stimulating economic development and enhanced health and well-being when delivered effectively. In this context, it can be reasonably argued that a community need is being fulfilled with the implementation of this project.

14.4.2. Critically, there needs to be improved scope to avoid travel altogether or to shift away from private car use to more sustainable means. The existing means of travel must also be improved in terms of emissions. Improvement could mean a reduction in vehicle size, e.g., a personal electric vehicle instead of an electric car. The effect of these avoid-shift-improve measures will be less on-street congestion and the ability of the transport corridor to move more people safely, comfortably and reliably.

14.4.3. An essential requirement of the avoid-shift-improve framework is road space reallocation. As noted above, a car travelling at 50kph requires 70 times more space than a pedestrian or cyclist. A double-deck bus takes up the equivalent spatial area of three cars but typically carries 50-100 times the number of passengers. What we have at present on our streets is approximately 80% of surface space being dedicated to the car, and essentially privatised. Road space reallocation will result in a greater sharing with other modes and increased public use of the streets. The more public space usage of our roads and streets, the more community benefits this will have through increased comfort and interaction between people. Other benefits to the community include reduced severance from traffic dominated streets; better accessibility to community facilities; passive surveillance making places safer; people meeting each other and creating a sense of community; better air quality and reduced noise; and improved public realm.

14.4.4. The community benefits of the proposed scheme are set out above. However, the issue of community need becomes more apparent when population growth forecasts are factored in. According to the National Planning Framework, 2018, the population of the Greater Dublin Area is forecast to increase by 25% by 2040. Significant congestion already occurs throughout the GDA from private car dependence and intervention is therefore required to optimise road space and prioritise the movement of people over the movement of vehicles. The proposed scheme allows for increased people moving capacity and the best chance to avoid gridlock in future years as the population grows and the demand for travel increases. Section 11.3.1 of this report addresses population growth and on-street congestion and what it means for the future use of the street. The importance of the street as a place rather than a movement corridor is also emphasised in Section 11.5.

14.4.5. Overall, the proposed scheme will deliver essential physical infrastructure necessary to sustain the projected population growth along the area of the core bus corridor. It will also provide more accessible and reliable public transport to the most disadvantaged and vulnerable in society and will facilitate safer and more comfortable active travel. It is clear that there is an obvious community need and justification for the proposed scheme from a population growth and congestion perspective; through the provision of the necessary connections and opportunities for all sections of the local community; and in terms of the wider community benefits that the proposed scheme will bring.

14.5. Suitability of Land to Meet Community Need

14.5.1. It is proposed to permanently acquire land along the road corridor and additional land will be temporarily acquired for construction works. At present the land is mostly in private amenity, recreational, commercial and community use. No habitable dwellings will be permanently acquired. The Board should note that the scheme for the most part will comprise lands within the existing public road and pedestrian areas where there is no specific zoning objective.

14.5.2. The extent of the land that would be acquired under the order is determined by the specifications of the proposed core bus corridor layout and associated construction

works. I would be in agreement that the land-take for the proposed CPO along the corridor is necessary and proportional to ensure the delivery of the proposed scheme to appropriate standards as designed.

14.5.3. The proposed scheme passes by or through the Tallaght Village ACA, Crumlin Village ACA and Thomas Street & Environs ACA; however, it is considered that the proposed works are compatible with the objectives of these designations and will not prevent or negatively impact the achievement of same. Zonings pertaining to the lands include the following:

- Town Centre (SDCC)
- Enterprise/ Residential-led Regeneration
- Village Centre
- Residential
- Open Space
- Enterprise and Employment
- Local Centre
- Neighbourhood Centre (DCC)
- Sustainable Residential Neighbourhoods
- Key Urban Villages / Urban Villages
- Community and Social Infrastructure
- Amenity / Open Space Lands / Green Network
- Residential Neighbourhoods (Conservation Areas)
- Inner Suburban and Inner City Sustainable Mixed-Uses
- Georgian Conservation Areas
- City Centre

14.5.4. I note that the secondary elements of the proposed scheme, such as bus shelters and RTPI poles fall within the definition of Public Service Installations as defined

within Appendix 21 of the Dublin City Development Plan, or possibly as Public Service as defined within the South Dublin County Development Plan. I am satisfied that these elements of the proposed works, along with the proposed reallocation of road space and the provision of active travel infrastructure, are compatible with the zoning objectives of both Development Plans.

14.5.5. Due to the restricted width of the existing carriageway along certain sections, the proposed scheme encroaches minimally onto third party lands to allow for provision of the proposed CBC infrastructure. Areas of land will be temporarily acquired mainly alongside and on the third-party side of the lands to be permanently acquired. Land acquisition typically comprises of narrow roadside strips. Areas of land will be temporality acquired to accommodate construction compounds and will be landscaped and returned to their original use once construction is complete.

14.5.6. The CPO and Schedule and corresponding deposit map booklet clearly identify all lands that are being acquired on both a permanent and temporary basis, as well as locations where public and private rights of ways are being extinguished, acquired, restricted or otherwise interfered with.

14.5.7. Overall, given the current use of lands and the minimal additional lands to be acquired, which lie directly adjacent to the existing carriageway and footpath, I am satisfied that the lands to be acquired are suitable and appropriate for such use and for the community need.

14.6. Alternatives

14.6.1. An assessment of reasonable alternatives set out in Section 12.3 of the EIA considers a range of alternatives at three levels comprising strategic alternatives, route alternatives and design alternatives. It is concluded that all reasonable alternatives that are relevant to the design of the project and its specific characteristics as presented are clearly set out in the EIAR. The main reasons for the chosen options and the development of the design process are included, together with the background to the statutory planning process.

14.6.2. Route alternatives were considered against environmental considerations such as soils and geology, flora and fauna, potential archaeological, architectural and cultural

heritage impacts and impacts to roadside amenity such as existing trees. Other constraints relating to these routes such as land availability and the extent of third-party lands to be acquired were also considered and the route selections modified accordingly. The route options assessment considered the potential of the CBC infrastructure to impact on land use character through land-take, severance or reduction of viability which prevents or reduces it from being used for its intended use.

14.6.3. Having regard to the information submitted, it is clear that the applicant has considered a significant number of options for the proposed scheme and has been responsive to consultations held and concerns raised by the public. This includes alternatives for Greenhills Road, including widening, for Walkinstown Roundabout and for the Nass Road/ Long Mile Road/ Nangor Road junction. The process undertaken by the applicant has been a robust assessment of alternative options having regard to environmental considerations and the stated project objectives, which are considered to be reasonable. The consideration of alternatives also considers the surrounding catchments.

14.7. Proportionality of Land Take

14.7.1. I consider that the land to be acquired permanently for the operation of the proposed scheme, and temporarily for the construction phase, is modest and proportionate, and is required in the context of meeting an identified community need. The land take ensures that as far as practically possible, geometric design standards to facilitate bus lanes, cycle paths, pedestrian movement and general traffic movement are adhered to, and that such land take is commensurate with the requirements to implement the project to a sufficient design standard.

14.8. CPO Issues Common to Multiple Objectors

14.8.1. Concerns were raised in relation to a number of common issues which are examined hereunder. The Board should note that concerns relating to planning matters such as noise, air and visual and residential amenity impacts are dealt with in the EIA under Section 12 and the planning assessment under Section 11 of this report.

Property Values

14.8.2. Residents and businesses are concerned that the proposed scheme will devalue their properties. In general, I note the NTA's response that in overall terms the public realm improvements may lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors, with evidence that investing in public realm creates places that are more desirable for people and business to locate in. This may have the effect of increasing the value of properties in the area rather than devaluing it, as suggested in some of the submissions.

Impact on Parking and Access

14.8.3. The NTA have confirmed that access to properties will be maintained during the construction phase of the proposed scheme and the manner in which residents and businesses access their properties at present will remain largely unchanged once the scheme is operational.

14.8.4. Access during the operational phase of the proposed scheme will be impacted in certain circumstances. However, reasonable alternative provisions are proposed by the applicant. The NTA also confirm that arrangements will be made on a case-by-case basis to maintain continued access to businesses affected by the works, at all times, where practicable, and measures will be put in place to provide for adequate security.

Boundary Replacement

14.8.5. A number of objectors are concerned that the proposed scheme will impact on their boundaries during construction and operational phases. Issues are raised regarding impact on underground services and security arrangements.

14.8.6. As noted above, the NTA confirm that existing security fencing, boundaries and access will be replaced on a like for like basis along the line of the permanent land acquisition, and in many cases, the temporary land acquisition is for the purposes of carrying out this work. It is also noted that any underground electrical services can be accommodated during the construction phase and construction works will be

carried out in a manner that minimises disturbance to residents, businesses and road users.

14.8.7. I am satisfied that the proposed permanent and temporary land acquisitions are necessary and proportionate to construct the proposed scheme and to reinstate property boundaries where necessary. If the CPO is confirmed, a Notice to Treat will be served on the landowner, who will be required to submit a claim for compensation. The issue of compensation for loss of land and other issues such as the devaluation of property are matters for arbitration.

Noise and Vibration

14.8.8. There is concern among residential objectors that the proposed scheme will bring traffic and footfall closer to their homes and this will result in increased noise, vibration and disturbance.

14.8.9. In response, the NTA highlight that the continuing roll out of electric and hybrid buses will eliminate ICE noise in future years. The EIAR assesses operational noise and it is highlighted that there will be a reduction in AADT along the CBC and indirect changes to traffic flows will be minimal and outweighed by overall reductions in traffic noise. It is concluded in the EIAR that vibration levels associated with the proposed scheme will be negligible.

Engagement with City Edge Strategy

14.8.10. A number of submissions refer to the City Edge Strategy and consider that the proposed scheme has not fully engaged with this project and may be premature. I concur with the NTA that the proposed scheme will help to achieve the visions and objectives of the City Edge Strategic Framework. The NTA has confirmed that engagement in this regard has taken place with both Dublin City Council and South Dublin County Council. South Dublin County Council recognise that the proposed scheme ties in with the strategic objectives of City Edge to focus on compact growth, active travel, transport orientated development and 15-minute city principles.

14.8.11. It was also highlighted in a submission that there may be contradictions between BusConnects and the City Edge Strategic Framework in terms of certain road usages. I note, however, that the Strategic Framework for this project is at a high

level and includes an overarching vision and strategic objectives. Plan making will follow this stage.

Engagement in the process

14.8.12. Third parties raised concerns and expressed dissatisfaction in relation to the level of engagement by the NTA with the process. I have reviewed the file in relation to engagement with landowners and note that the NTA has complied with its statutory obligations in this regard. Landowners have been property notified and the process advertised accordingly. I am therefore fully satisfied in relation to the NTA's compliance with the relevant legislation in this regard.

14.8.13. I note that the appointed contractor will ensure dialogue between property owners and the NTA with respect to any accommodation works to be carried out. In response to concerns raised on the detailed design of replacement boundaries, the Board should note that such matters are appropriately dealt with as part of the detailed accommodation works plans in consultation with impacted landowners upon confirmation of CPO.

14.8.14. A number of objectors question the existing ownership of the lands to be acquired. This issue is noted by the NTA and it is confirmed that the information was gathered as part of the Title Research, which is set out in the CPO schedule.

14.9. Other CPO Issues from Individual Submissions

Calmount Holdings Limited

14.9.1. In addition to matters addressed above, concerns have been raised in this submission that the proposed scheme will impact on the operation and management of the business park during construction and operational phases. Furthermore, it is considered that the proposal may impact on the two remaining development sites within Calmount Business Park.

14.9.2. The NTA submit in response that the EIAR addresses land use and the impact on the business park in terms of access and noise. It is noted that the proposed scheme will improve the road network in the vicinity of the business park.

14.9.3. I would be satisfied that these matters will be appropriately dealt with as part of the detailed accommodation works plans in consultation with impacted landowners upon confirmation of CPO. I am also satisfied that the quantum of lands to be acquired is proportionate and not excessive and will not impact the functionality of land when developed. The objector would welcome the opportunity for further engagement with the NTA and this can occur in advance of commencement of construction.

Fairfield Inns Ltd.

14.9.4. The impact of the proposed scheme on the operation of the Cherry Tree pub in terms of access, drainage, operational noise, extent of acquisition, traffic management during construction, boundaries and total environmental impact have been fully addressed in the EIAR. The proposed scheme will result in the loss of some car parking but any adverse impacts are by far outweighed by the safer conditions for pedestrians and cyclists and the public realm improvements in and around Walkinstown Roundabout.

14.9.5. With respect to the amount of land to be acquired at this location and boundary treatments, it is confirmed by the NTA that this is necessary to facilitate urban realm enhancements and safer conditions for active travel. I consider that the applicant has provided sufficient detail to justify the need and extent of the CPO and access arrangements at this location.

Gerard Smith

14.9.6. The objector considers that the site in question is not suitable for a construction compound due to a heavy infestation of Japanese Knotweed. In its response the NTA refers to the Invasive Species Management Plan which will be used to ensure that all control measures are implemented. I agree that suitable mitigation measures are available so that this site can used as a temporary construction compound.

14.9.7. Other issues contained in this submission are addressed above.

Herbert Holdings

14.9.8. The NTA confirm that the permanent land acquisition at this area is relatively small. Parking and vehicular access to the site are not being extinguished and will be

maintained during construction works. Construction works are anticipated to take no more than 4 weeks.

14.9.9. I consider that the applicant has provided sufficient detail to justify the extent of the CPO and access arrangements in the vicinity of the objector's property in the event that the Board decides to approve the scheme as proposed.

Killeen Motor Group

14.9.10. This submission recommends the attachment of conditions to any grant of permission relating to site security and access. As noted by the NTA in response, arrangements will be made on a case-by-case basis to maintain continued access to businesses affected by the works, at all times, where practicable. Measures will also be put in place to provide for adequate security of construction works. I consider that these matters will be addressed without recourse to specific conditions in the event that the CPO is approved. The NTA has clarified other issues raised in this objection relating to boundary planting within its response. I do recommend the attachment of a condition to any approval requiring the applicant to liaise with relevant landowners with regard to replacement vegetation.

Maxol Ltd.

14.9.11. The objector is concerned that the proposed curved pedestrian/ cycle ramp would reduce the visibility of the service station. The proximity of an existing vent stack to the curved ramp is also highlighted.

14.9.12. The NTA's response points out that the surrounding area is heavily trafficked, and the streetscape includes significant visual clutter and is of low sensitivity. The vent stack will be extended vertically to maintain the necessary height above the ramp and a solid boundary wall will be provided below the section of the ramp at this location. There will be a minor impact to the forecourt area from the proposed acquisition, but this will not affect the line of four parallel car parking spaces.

14.9.13. The proposed bridge over the intersection for pedestrian/ cyclists is considered to be the best solution for serving the future development of surrounding lands and for more reliable and direct crossings. The proposed bridge will also help to improve the performance of the junction for other modes.

14.9.14. Overall, I consider that the applicant has provided sufficient detail to justify the extent of the CPO and access arrangements in the vicinity of the objector's property in the event that the Board decides to approve the scheme as proposed.

Musgrave Operating Partners Ltd. (SuperValu)

14.9.15. The proposal will result in the temporary removal of 42 surface car parking spaces and also the permanent loss of some parking. The objector submits that the supermarket is reliant on car borne journeys and public transport users will also be inconvenienced by the relocation of a bus stop some 250m to the north.

14.9.16. The NTA confirms that there are currently 174 spaces and 27 spaces would be removed to widen Walkinstown Road. Approximately 14 parallel spaces could be provided in the remaining area, which would result in a 15% reduction in parking. The proposed bus stop relocation is to allow for more regular spacing between stops and to serve future catchments and pedestrian crossing facilities.

14.9.17. The removal of car parking within the SuperValu car park enables the creation of space for bus lanes in both directions. There is ample remaining parking at this location, and on balance, I agree that the retention of the existing layout would unduly undermine the overall scheme objectives. Bus stop relocations are also part of the wider plan to create more consistent spacing and improved service.

Properties at 179 Crumlin Road

14.9.18. There are four commercial properties at this location that will be affect by the plan to restrict access to Bangor Drive. It is submitted that there will be no available parking at the site for staff and customers and the proposals will be restrictive for deliveries.

14.9.19. The NTA point out that a loading bay will be retained on Bangor Drive and there is other informal on-street parking available along the rest of Bangor Drive. In addition, existing access to the driveway to the front will be unaffected by the proposals.

14.9.20. I agree that there is ample alternative parking at this location, and as noted above, access will be maintained during construction. The proposed restriction/ interference of a public rights of way on Bangor Drive and Clonard Road is justified to maintain bus priority on Crumlin Road.

Woodies

14.9.21. Objections were also received on the impact of the proposed pedestrian/ cycle bridge on business visibility, profile and operations. There is also concern regarding vandalism / damage of large glazing panels and the stores in general from the elevated position of the proposed footbridge. Impacts on deliveries from the proposed temporary acquisition is also raised by the objector.

14.9.22. In response, the NTA confirms that deliveries during operation will take place via a proposed delivery route (6m access road for vehicle reversing and 2m footway around building). During construction, a delivery platform and delivery ramps will be provided prior to works commencing works on a retaining wall to ensure that access/egress for deliveries will be maintained.

14.9.23. As noted above, the streetscape character in this area is composed of a large dual carriageway junction with low sensitivity. Figure 17.2 in the EIAR shows that the proposed bridge and associated ramps are visually prominent but the Woodies building remains visible. It is also stated that the bridge spans will be a fully enclosed superstructure which would prevent any objects from being thrown from the bridge. It is not clear if the ramps to the footbridge will be similarly enclosed.

14.9.24. In this case, and in general, I am satisfied that the proposed permanent and temporary land acquisitions are necessary and proportionate. Furthermore, the issue of compensation for loss of land and other issues such as the devaluation of property is a matter for arbitration. As confirmed by the NTA, local arrangements will be made on a case by case basis to maintain continued access to businesses affected by works.

14.10. CPO Conclusions

14.10.1. I am satisfied that the process and procedures undertaken by the NTA in seeking confirmation of the CPO have been fair and reasonable, that the NTA has demonstrated the need for the lands and that all the lands being acquired are both necessary and suitable to facilitate the provision of the Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme.

14.10.2. Having regard to the constitutional and Convention protection afforded to property rights, I consider that the acquisition of lands and restriction/ interference with public rights of way, and the acquisition/ restriction of private rights of way as set out in the compulsory purchase order and on the deposited maps pursues, and is rationally connected to, a legitimate objective in the public interest, namely the development of the Tallaght / Clondalkin to City Centre Core Bus Corridor scheme.

14.10.3. I am also satisfied that the acquiring authority has demonstrated that the means chosen to achieve that objective impair the property rights of affected landowners as little as possible; in this respect, I have considered alternative means of achieving the objective referred to in submissions to the Board, and am satisfied that the acquiring authority has established that none of the alternatives are such as to render the means chosen and the CPO made by the acquiring authority unreasonable or disproportionate.

14.10.4. The effects of the CPO on the rights of affected landowners are proportionate to the objective being pursued. I am further satisfied that the proposed acquisition of lands and restriction/ interference with public rights of way, and the acquisition/ restriction of private rights of way would be consistent with the policies and objectives of the South Dublin County Development Plan 2022-2028 and the Dublin City Development Plan 2022-2028. Accordingly, I am satisfied that that the confirmation of the CPO is clearly justified by the exigencies of the common good.

15.0 **Overall Conclusion**

15.1.1. There is a consistent message throughout all levels of policy that there must be a transition to a low carbon and climate resilient society. This requires a reduction in car dependency to contribute towards lower energy consumption, CO_2 levels and pollutant emissions. Sustainable mobility, compact growth and land use and transportation integration are essential for the creation of sustainable communities that minimise private car use, prioritise cycling, walking and public transport and promote the efficient use of land.

15.1.2. This message is reflected in the Climate Action Plan 2023/ 2024, which sets out a hierarchical framework to achieve a net zero decarbonisation pathway for transport by prioritising actions to reduce or **avoid** the need to travel; **shift** to more environmentally friendly modes; and **improve** the energy efficiency of vehicle technology. Road space reallocation is a measure outlined under both 'avoid' and 'shift' which seeks to promote active travel and modal shift to public transport.

15.1.3. BusConnects is essentially a programme of road space reallocation, which seeks to rebalance the way our streets are used to provide better infrastructure for walking, cycling and public transport and to encourage these modes as attractive alternatives to car-based journeys. Roadway space is designed to facilitate improvements to the efficiency of the sustainable transport network with a focus on the movement of people rather than vehicles.

15.1.4. The Tallaght / Clondalkin to City Centre Core Bus Corridor extends approximately 15.5km through the west and south-west of Dublin city from a new bus interchange facility at The Square Shopping Centre, Tallaght, and from Nangor Road in Clondalkin to Patrick Street and Nicolas Street. The proposed scheme will provide 94% bus priority inbound and outbound, as well as segregated cycle facilities along 74% of the route. Footpaths and pedestrian crossing facilities will be improved throughout, and public realm enhancements will be provided along the CBC at key nodes with a focus on upgrading paving materials, extension of planting, decluttering, SuDS and general placemaking.

15.1.5. One of the most significant features to be introduced throughout the BusConnects network is the protected junction. This junction type provides kerb build-outs to protect cyclists travelling through the junction and the signal arrangement removes any uncontrolled conflict between pedestrians and cyclists. Cyclists can traverse the junction in any direction without leaving the cycle lane and left-turning motorists are forced into a wider turn so that the cyclist and motorist see each other at more of a right angle. Protected junctions will replace roundabouts at a number of locations, most notably at Belgard Square and New Nangor Road. Segregated two-way cycle tracks will also be installed around Walkinstown Roundabout.

15.1.6. Notwithstanding the significant improvements that will be brought about by the proposed scheme, I reiterate that there are some shortcomings in conditions along Belgard Square West, Blessington Road, Main Road, Old Greenhills Road, Walkinstown Road and Crumlin Road, where cyclists are expected to share road space with buses and general traffic. There may have been opportunities for increased road space reallocation in parts of the proposed scheme though one-way systems for general traffic and carriageway narrowing that would have resulted in additional space for segregated cycle infrastructure and further public realm improvements. Road space reallocation now seems to be a more prominent measure within CAP23/ CAP24 for tackling transport sector emissions ceilings compared to when the proposed scheme was designed before the adoption of CAP23.

15.1.7. Having regard to these factors, the Board may wish to consider seeking further information from the applicant to increase road space reallocation and to limit general traffic further. The fact that two-way general traffic has been retained throughout most of this core bus corridor, indicates to me that the proposed scheme may have gone further to accentuate modal shift from the private car to bus transport/ active travel. Had the proposed scheme been designed at the present time, when climate change is becoming increasingly apparent, rather than a number of years ago, it may have been more radical in tackling car dominance.

15.1.8. However, on balance, I have concluded that the overall benefits of the proposed scheme considerably outweigh the negatives. I am limited to assessing the designed scheme that is before me and I consider it acceptable from a sustainable transport perspective. Given the urgency of climate change, I have concluded that the proposed scheme as presented, together with the permitted higher density development along this corridor, will go a long way towards the promotion of compact growth and sustainable movement. There is also the argument that an improved sustainable transport corridor and public realm should be in place before the significant quantum of proposed/ permitted compact growth occurs along the core bus corridor. I have put forward the recommendation that a Street Design Audit of the pedestrian and cycling environment should be carried out ensure that traffic

design speeds are realistic so as to improve pedestrian and cyclist safety, particularly along the sections where there are no dedicated cycle facilities.

15.1.9. My overall conclusion is that the application for the proposed scheme should be approved, and the CPO should be confirmed. I have assessed the impacts of the proposed scheme on properties aligning the route that will be most affected and my conclusion is that there is a community need that is to be met by the acquisition of the parcels of land in question; the parcels of land to be acquired are suitable and proportionate to meet that community need; alternative methods of meeting community need have been considered but are not demonstrably preferable; and works to be carried out accord with or at least are not in material contravention of the provisions of the statutory Development Plans.

16.0 Recommendation

16.1. I recommend that the application under Section 51(2) of the Roads Act, 1993 (as amended) for the Tallaght / Clondalkin to City Centre Core Bus Corridor should be **approved** for the reasons and considerations as set out in Schedule 1 and consequently that the CPO is **confirmed** (Schedule 2).

Schedule 1

Reasons and Considerations

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

a) EU legislation including in particular:

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

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

- **Sustainable and Smart Mobility Strategy 2020 (EU Commission 2020)**

b) National Policy and Guidance including in particular:

- **Project Ireland 2040 encompassing the National Planning Framework and the National Development Plan.**
- **Climate Action Plan, 2023 / 2024**
- **The Design Manual for Urban Roads and Streets, 2019**
- **The Cycle Design Manual, 2023**

c) Regional Policy including in particular:

- **The Transport Strategy for the Greater Dublin Area 2022-2042.**
- **Eastern & Midlands Regional Spatial & Economic Strategy, 2019-2031.**

d) Local Planning Policy including in particular:

- **The Dublin City Development Plan 2022-2028**
- **The South Dublin County Development Plan 2022-2028**

e) Other relevant guidance documents

f) The following matters:

- the nature, scale and design of the proposed road development as set out in the application for approval and the pattern of development along the route,
- the documentation and submissions of the National Transport Authority (applicant), including the environmental impact assessment report and associated documentation submitted with the application, and the range of mitigation and monitoring measures proposed,

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

It is considered that the proposed development would accord with European, national, regional and local planning and that it is acceptable in respect of its likely effects on the environment and its likely consequences for the proper planning and sustainable development of the area.

Appropriate Assessment

The Board agreed with and adopted the screening assessment and conclusion carried out in the inspector's report that the North Dublin Bay SAC, South Dublin Bay SAC, Wicklow Mountains SAC, Rockabill to Dalkey Islands SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Howth Head Coast SPA, Dalkey Islands SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA, Rockabill SPA, The Murrough SPA, and North West Irish Sea cSPA are the European sites for which there is a likelihood of significant effects.

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposal for the North Dublin Bay SAC, South Dublin Bay SAC, Wicklow Mountains SAC, Rockabill to Dalkey Islands SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Howth Head Coast SPA, Dalkey Islands SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA, Rockabill SPA, The Murrough SPA, and North

West Irish Sea cSPA, in view of the Sites' Conservation Objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment.

In completing the assessment, the Board considered, in particular, the likely direct and indirect impacts arising from the proposal both individually or in combination with other plans or projects, specifically upon the European sites,

i. Mitigation measures which are included as part of the current proposal,
ii. Conservation Objectives for these European sites, and
iii. Views of prescribed bodies in this regard.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the integrity of the aforementioned European sites, having regard to the Sites' conservation objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European sites, in view of the sites' conservation objectives.

Environment Impact Assessment

Reasoned Conclusion

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, provided information which is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment. The Board is satisfied that the information contained in the Environmental Impact Assessment Report is up to date and complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU. The Board considered that the main significant direct and indirect effects of the proposed development, during construction and operation, on the environment are those arising from the impacts listed below.

The main significant effects, both positive and negative, are:

- Positive long term impacts on **population and human health** through facilitation of improved pedestrian and cyclist safety, faster and more reliable bus services, reduced traffic congestion, improved air quality and noise reduction, improved road/ street safety, more social interaction and positive accessibility and amenity impacts for community areas.
- Adverse short-term impacts on **population and human health** from the construction phase in terms of access restrictions, noise, vibration, dust, contaminated material, traffic and visual impact. This will be adequately mitigated through compliance with the CEMP and measures outlined in the Land, Soils, Water, Air and Climate and Material Assets sections of the EIAR.
- Adverse long-term impacts on **population and human health** from the temporary and permanent acquisition of land. This will be adequately mitigated through provision of new accesses, replacement boundaries and monetary compensation.
- Adverse impacts on **biodiversity** from unavoidable removal of habitat. Vegetation removal will be compensated by additional new planting, which will provide new nesting habitat for birds. Mitigation measures will be implemented for seven trees that contain possible roost features for bats by installing bat boxes for each potential roosting feature to be removed.
- Potential adverse impacts on **biodiversity** from the spread of invasive species during construction. This will be adequately mitigated through implementation of an Invasive Species Management Plan.
- Potential adverse impacts on **land, soils, geology and hydrogeology** from loss or damage of topsoil, excavation of potentially contaminated ground and contamination of parts of an aquifer during the construction phase. These impacts will be adequately mitigated through compliance with the CEMP.
- Potential for **water** quality impacts from surface water runoff during construction containing fine sediments, accidental spillages/ leakages and disruption of local drainage networks. Adequate mitigation measures for surface water management are contained within the CEMP.

- Potential for impacts to **air quality** from dust and noise emissions from construction works. These will be minimised with implementation of appropriate mitigation measures.
- Potential for positive long-term impacts on **climate** through removal of approximately 18,420 and 44,230 car trips per weekday from the road network in 2028 and 2043 respectively and associated reduction in CO_2 emissions.
- Positive impacts on **traffic and transport** by maximising the capacity of the proposed scheme to move more people by sustainable modes, whilst also providing for necessary general traffic.
- Potential adverse impacts on **cultural heritage** due to construction works impacting on underlying archaeology and on Architectural Conservation Areas. Mitigation measures will be put in place to protect/ record/ monitor underlying archaeology and adjoining heritage features.
- Positive impacts on **landscape (townscape)** from the creation of high-quality pedestrianised areas with wider footpaths, new surfaces, planting, reduced car parking, narrower carriageways, lower vehicle speeds and an overall reduction of traffic dominance.

Having regard to the above, the Board is satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment. The Board is satisfied that the reasoned conclusion is up to date at the time of making the decision and that the information contained in the EIAR complies with the provisions of Article 3, 5 and Annex (IV) of EU Directive 2014/52/EU.

Proper Planning and Sustainable Development

The proposed road development would deliver a key component of the National Transport Authority's BusConnects programme with the stated aim to improve bus services across the country. It would also provide safer infrastructure for pedestrians and cyclists and would deliver sustainable connectivity and integration with other transport services. The public realm along the bus corridor would also be improved.

The Board considered that the proposed road development, subject to compliance with the conditions set out below, would be in accordance with national, regional and local planning policies, including multiple policies and objectives set out in the Dublin City Development Plan 2022-2028 and the South Dublin County Development Plan 2022-2028 and having regard to all relevant provisions, including zoning objectives, at or adjoining the overall scheme area. It is further considered that the need, justification and purpose of the proposed road development has been adequately demonstrated, that it is acceptable in terms of its likely effects on the environment and that an approval for the proposed road development would be consistent with national climate ambitions and with the relevant provisions of the Climate Action Plan 2023 / 2024 through the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets. The proposed road development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Conditions

1. The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the proposed development shall be carried out in accordance with the agreed particulars.

   Reason: In the interest of clarity and the proper planning and sustainable development of the area and to ensure the protection of the environment.

2. (a) All mitigation, environmental commitments and monitoring measures identified in the Environmental Impact Assessment Report shall be implemented in full as part of the proposed development.

(b) All mitigation and environmental commitments identified in the Natura Impact Statement shall be implemented in full as part of the proposed development.

Reason: In the interest of development control, public information, and clarity.

3. The proposed development shall be amended as follows:

(a) A Street Design Audit shall be carried out of pedestrian and cycling environment with conclusions and recommendations on traffic calming and public realm improvement works in accordance with DMURS Advice Note 4.

(b) Traffic calming and public realm improvement works shall be carried out, as necessary, in accordance with the NTA document "Rapid Build Active Travel Facilities" (February 2023).

(c) All junctions shall be designed in accordance with the detailed standards set out in DMURS and the Cycle Design Manual, 2023.

(d) Pinch points shall be in line with the road user hierarchy as designated within DMURS, i.e., the width of the general traffic lanes should reduce first, then the width of the cycle track should be reduced before the width of the pedestrian footpath is reduced. Footpaths and cycle lanes shall not be reduced below 2m where there is scope to reduce the adjoining general traffic lane to 2.75m.

(e) Flashing LED strips and/ or "elephant's feet" road markings shall be installed at all protected junctions as additional warning for left turning motorists.

Revised drawings showing compliance with these requirements shall be submitted to the planning authorities for written agreement before commencement of development.

Reason: In the interests of bus priority and pedestrian and cyclist safety and convenience.

4. Finalised cycle parking racks/ stands throughout the proposed scheme shall be agreed in writing with the Planning Authorities prior to commencement of development.

   Reason: In the interests of cyclist safety and convenience.

5. Subject to written agreement of the Planning Authority, a new loading bay shall be provided in Dolphin's Barn to serve the north-western side of the street. Cycle tracks at this location and on Patrick Street shall continue on the inside of loading bays. Cycle tracks on Cork Street shall also continue behind on-street parking. The final design, layout, location and hours of operational use of the loading and parking bays at these locations shall be agreed in writing with the planning authority.

   Reason: In the interest of local servicing amenity.

6. Prior to commencement of development, the applicant shall agree in writing with the planning authorities the design and layout of pedestrian crossing facilities over cycle tracks at island bus stops on a on a case-by-case basis in accordance with the new Cycle Design Manual, (September 2023).

   Reason: In the interests of pedestrian and cyclist safety and convenience.

7. The developer shall monitor queuing time / delays at each works location and record traffic flows on the local road network at locations to be agreed with the planning authority. Such monitoring information shall be provided in a report to the planning authority on a weekly basis.

   Reason: In the interests of orderly development.

8. Prior to the commencement of development, the developer, and/or any agent acting on its behalf, shall prepare in consultation with the relevant statutory agencies, a Construction Environmental Management Plan (CEMP), incorporating all mitigation measures indicated in the Natura Impact Statement and Environmental Impact Assessment Report and a demonstration of proposals to adhere to best practice and protocols.

   The updated CEMP shall also include details of intended construction practice for the development, including hours of working, compound/works

area lighting, noise management measures, surface water management proposals and interactions with Luas interfaces. The construction of the development shall be constructed in accordance with the updated CEMP.

Reason: In the interest of protecting the environment, the landscape, European sites, and sensitive receptors and in the interest of public health.

9. Prior to the commencement of any works associated with the development hereby permitted, the developer shall submit a Construction Traffic Management Plan and a Construction Stage Mobility Management Plan for the construction phase of the development for the written agreement of the planning authority. The Construction Stage Mobility Management Plan shall promote the use of public transport, cycling and walking by personnel accessing and working on the construction site. The Construction Traffic Management Plan shall include identification of mitigation measures to protect operational Luas infrastructure. The agreed Construction Traffic Management Plan and Construction Stage Mobility Management Plan shall be implemented in full during the course of construction of the development.

   Reason: In the interest of traffic safety and promoting sustainable travel during the construction period.

10. Prior to commencement of development, the developer shall engage with Transport Infrastructure Ireland to agree plans and details of works, construction traffic, and management of assets thereafter, on, or in the vicinity of the national road network and associated managed areas. All detailed designs and works which interact with TII assets shall be undertaken in accordance with the requirements of TII publications.

    Reason: In the interests of protecting the capacity, safety and efficiency of the national roads network and ensuring coordinated delivery of the proposed scheme.

11. Prior to the commencement of development, details of measures to protect fisheries and water quality of the river systems shall be outlined and placed

on file. Full regard shall be had to Inland Fisheries Ireland's published guidelines for construction works near waterways (Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters, 2016). A programme of water quality monitoring shall be prepared in consultation with the contractor, the local authority and relevant statutory agencies and the programme shall be implemented thereafter.

Reason: In the interest of the protecting of receiving water quality, fisheries and aquatic habitats.

12. Noise monitoring shall be carried out during the construction phase of the proposed road development by the developer to ensure that construction noise threshold levels (L_{Aeq}, period) shall not exceed the levels set out in Table 9.11 (Construction Noise Threshold (CNT) levels for the proposed scheme) of Chapter 9 (Noise and Vibration) of the Environmental Impact Assessment Report. During the construction phase, noise monitoring shall be carried out at representative noise sensitive locations as the work progresses along the scheme to evaluate and inform the requirement and/or implementation of noise management measures. Noise monitoring shall be conducted in accordance with ISO 1996–1 (ISO 2016) and ISO 1996–2 (ISO 2017).

    Reason: In the interests of management of construction noise and protection of adjoining amenities.

13. Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works in respect of both the construction and operation phases of the proposed development.

    Reason: In the interest of environmental protection and public health.

14. In accordance with the Environmental Impact Assessment Report, a suitably experienced and qualified ecologist will be appointed by the contractor. The ecologist will advise the contractor on ecological matters during construction, communicate all matters in a timely manner to the

developer (National Transport Authority) and statutory authorities as appropriate, acquire any licences/consents required to conduct the work, and supervise and direct the ecological measures associated with the permitted scheme. Where appropriate, monitoring shall be undertaken by specialists. Monitoring schedules shall be included in Site Specific Habitats Protection and Re-instatement Method Statements.

Reason: In the interests of environmental protection.

15. Prior to the commencement of development at each section of the proposed works, pre-construction surveys shall be carried out to determine the presence of protected mammal, bird or bat species.

Reason: In the interest of environmental protection.

16. (a) Trees to be felled shall be examined prior to felling and demolition to determine the presence of bat roosts. Any clearance works shall be in accordance with the TII Guidelines for the Treatment of Bats during the construction of National Road Schemes.

(b) No ground clearance shall be undertaken and no vegetation shall be cleared during the bird breeding season, unless otherwise agreed with the planning authorities.

(c) A Calcicole Plant Communities Conservation Plan shall be submitted to the planning authority for written agreement prior to commencement of development.

Reason: In the interest of wildlife protection.

17. Prior to the replacement of trees, hedging and planting which is to be removed, the National Transport Authority shall liaise with the relevant landowner with regard to the species, size and location of all replacement vegetation. Tree protection measures for all existing trees shall be put in place prior to commencement of development or phases of development and all details of soft landscaping shall be submitted to the planning authority for agreement prior to implementation. The National Transport Authority shall also employ the services of an appropriately qualitied

arboriculturist and Landscape Architect for the full duration of the proposed works to ensure landscaping and tree works are implemented appropriately.

Reason: In the interests of visual and residential amenity.

18. Comprehensive details of the proposed public lighting system to serve the proposed scheme shall be submitted to and agreed in writing with the planning authority, prior to commencement of development.

    Reason: In the interests of public safety and visual amenity.

19. Prior to the commencement of development, the development and/or any agent acting on its behalf shall submit an Invasive Species Management Plan to the local authority, which includes details of a pre- construction survey to be carried out. The plan shall include full details of the eradication of such invasive species from the development site prior to construction or if discovered during construction as soon as is practicably possible.

    Reason: In the interest of nature conservation and mitigating ecological damage associated with the development.

20. In accordance with the Environmental Impact Assessment Report, all works to Protected Structures, and Structures of Cultural heritage interest shall be monitored and recorded by an Architectural Conservation Specialist, Re-instatement Method Statements shall be submitted to the planning authority to be held on file. The Architectural Conservation Specialist shall ensure adequate protection of the retained and historic fabric during the proposed works and across all preparatory and construction phases. Any features of new architectural heritage shall be made known to the Conservation Sections of Local Authorities as soon as is practicably possible.

    Reason: In order to protect the architectural heritage of the corridor and immediate surroundings.

21. The developer and/or any agent acting on its behalf shall facilitate the preservation, recording, protection or removal of archaeological materials or features that may exist within the site. A suitably qualified archaeologist

shall be appointed by the local authority to oversee the site set-up and construction of the proposed development and the archaeologist shall be present on site during construction works. Should archaeological material be found, the archaeologist may have work stopped and the developer shall carry out the necessary mitigation/ recording. The Planning Authority and Department shall be furnished with a report describing results of monitoring.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

22. Prior to commencement of development, a comprehensive agreement shall be put in place and agreed in writing between the NTA and the local authorities on the procedures for the handing over and handing back of the core bus corridor and taking in charge arrangements.

Reason: In the interests of orderly development.

Schedule 2

Decision

Confirm the Compulsory Purchase Order without modification, based on the reasons and considerations set out below:

Reasons and Consideration

Having considered the objections made to the Compulsory Purchase Order, the report and recommendation of the Inspector, the purpose of the Compulsory Purchase Order to facilitate the delivery of BusConnects, sustainable transport and active travel, and also having regard to the following:

(a) The constitutional and convention protection afforded to property rights,

(b) The substandard infrastructure for bus users and active transport provided for along the existing route,

(c) The strategic nature of the scheme in the context of reducing carbon emissions and climate change,

(d) The community need, and public interest served and overall benefits, including benefits to a range of road users to be achieved from use of the acquired lands,

(e) The proportionate design response to the identified need,

(f) The suitability of the lands and the necessity of their acquisition to facilitate the provision of the BusConnects sustainable public transport and active travel scheme,

(g) The policies and objectives of the Dublin City Development Plan 2022-2028 and the South Dublin County Development Plan 2022-2028,

(h) The submissions made to the Board, and

(i) The report and recommendation of the Inspector

The Board considered that the acquisition of the lands in question on a permanent and temporary basis; the restriction, acquisition and interference with public rights of

way; the acquisition/ restriction of private rights of way, on a temporary and permeant basis by the NTA as set out in the compulsory purchase order and on the deposited maps, are necessary for the purpose stated, which is a legitimate objective being pursued in the public interest, and that the CPO and its effects on the property rights of affected landowners are proportionate to that objective and justified by the exigencies of the common good.

In reaching this conclusion, the Board agrees with and adopts the analysis contained in the report of the Inspector who conducted the assessment of the objections.

Donal Donnelly
Senior Planning Inspector

17th April 2024