External Road Proposals

The existing at-grade junctions along the N11 especially Leopardstown Road, Clonkeen Road and Johnstown Road will be assessed to identify measures to improve capacity and reduce congestion. It is a long term objective of the County Development Plan 2010-2016 to upgrade Loughlinstown Roundabout to a grade separated junction. In the shorter term the Council will progress the option of conversion of a staggered T-junction.

It is a six-year objective of the County Development Plan 2010-2016 to secure improvements to the Cherrywood to Dún Laoghaire Strategic Route (R118 Wyattville Road to Glenageary Roundabout). Measures to be assessed include the provision of 2 straight through lanes at the junctions of Wyattville Park and Loughlinstown Drive and the provision of an additional left turn stacking lane on the Wyattville Intersection D-Loop.

Specific Objective:

PI 15 The Council will support the NTA in consultation with the NTA in implementing measures to improve the functioning of the M50/ M1/ N11 road corridor.

The ‘National Roads Traffic Management Study’ (NRA February 2011) proposes a range of measures, including traffic management and capacity enhancements, to preserve the strategic capacity of national roads for longer distance travel, particularly by goods and freight.

At present the M11/N11 south of the M50 is congested in the am and pm peak hours. It was estimated in Figure 4.2 that in 2030 36% of trips to employment in Cherrywood would come from areas to the south. The pace of development in Cherrywood will take account of the capacity of the strategic road network to the south of Cherrywood.

The M50 between the M11 and Sandyford has spare capacity, but this is limited for northbound trips in the am peak. Trips to work from Cherrywood will impact on the M50 northbound in the am peak so the pace of residential development at Cherrywood will take account of the capacity of the M50 northbound in the am peak hour.

The phasing of development set out in Chapter 7 provides for an assessment of road network performance at set intervals in conjunction with the NRA / NTA. The draft NTA Transport Strategy proposes that substantial congestion on the M50 south of Dublin City will be alleviated by the delivery of the N4/ M4 Western Perimeter Road whereby any widening shall maintain a planted verge area.

4.2.8 Public Transport Strategy

Specific Objective:

PI 16 It is an objective to support and facilitate the development of an integrated public transport network in the Planning Scheme, in association with relevant transport providers, agencies and stakeholders.

Luas

The Greater Dublin Area - Draft Transport Strategy 2011-2030 (NTA) proposes significant increases in the capacity and interconnectivity of the Luas Green Line including the following:

• Broombridge Luas from St. Stephens Green to Broombridge via Grangegorman providing a direct link from the Cherrywood Planning Scheme area through the City Centre to the north of the City;
• Increased passenger capacity on Green Line through extended trams;
• Extension of the Luas Green Line to North Bray;
• Extension of Metro North tunnel to the Luas Green Line, linking Cherrywood to the City Centre, Dublin Airport and Swords;
• Upgrade of Luas Green Line to Metro.

The Draft Transport Strategy states: "A southbound extension of the Green Line from Brides Glen to the Bray area is proposed to improve public transport accessibility for this Designated Town. This will be subject to timing and scale of new development in this area, and appraisal, including economic assessment. A comparative analysis with a BRT alternative will be undertaken prior to final progression to Railway Order".

Other measures which do not affect the Luas Green Line directly will also have a major impact on connectivity to and from the Planning Scheme area. These would include DART Underground and the two Luas lines from the City Centre to Tallaght and Lucan respectively, all of which will interconnect with the upgraded Luas Green Line.

It was estimated in Figure 4.1 that in 2030 41% of Cherrywood residents will travel to work to centres to the north served by Luas. This indicates that there will be sufficient demand to achieve the target 25% of external trips to work by Luas. Based on a resident population of 20,000 the demand could be serviced by longer trams at more frequent intervals.

It was estimated in Figure 4.2 that in 2030 only 14% of trips to employment in Cherrywood will come from centres to the north served by Luas. A further 13% will come from centres to the south assuming Luas / BRT is extended to Bray. This illustrates the need to extend the catchment served by Luas in order to achieve the target mode share of 25% Luas for work trips to Cherrywood. The phasing of development set out in Chapter 7 will ensure that employment growth in Cherrywood Planning Scheme occurs in tandem with the improvement of public transport connections and services within the wider Metropolitan Area.

Bus

Specific Objectives:

PI 17 It is an objective to facilitate and promote the enhancement of bus services through the implementation of QBCs and bus priority measures, and by ensuring that the design and layout of neighbourhoods facilitates the expansion of bus services.

PI 18 It is an objective to pump prime the extension of bus services and the provision of new bus services during the early stages of development in the Planning Scheme area.

It was estimated in Figures 4.1 and 4.2 that in 2030 49% of Cherrywood residents will travel to work in external centres not served by Luas and 64% of trips to employment in Cherrywood will come from external centres not served by Luas.

Bus services will play an important role in providing public transport to the Cherrywood Planning Scheme from these areas, principally:

• Bray and environs (in advance of the Luas Green Line / BRT extension to Bray);
• Dún Laoghaire/Blackrock;
• Ballsbridge/Stillorgan/ Cornelscourt;
• Kilternan (subject to development);
• North Wicklow (outside of Bray);
• Dublin city not served by Luas.

As the Cherrywood Planning Scheme area develops, the bus links from these areas to the Planning Scheme will need to improve over time. This would likely involve new routes, increased frequencies on existing services and higher capacity bus services.

In order to achieve the target of 12% external trips by bus, an approximate estimate is that the capacity equivalent of 8 extra buses would be required to serve demand for trips to work from Cherrywood in the am and peak and the equivalent of 13 extra buses for inward demand.

As the NTA licences bus routes and enters into contracts for the provision of public transport services, it is within the function of the Authority to provide for improved bus services to the Cherrywood Planning Scheme area as it develops. The Planning Scheme will ensure that essential bus infrastructure is in place to serve the Planning Scheme area so that improved services can be introduced over time. The phasing of development set out in Chapter 7 provides for bus services to be reviewed at set intervals in conjunction with the NTA.

It is an objective of the Dún Laoghaire-Rathdown County Development Plan 2010-2016 to implement a QBC / Bus Priority Measures from Dún Laoghaire to Cherrywood via Mountown, Upper Glenageary Road, Saggill Glen Road, Church Road and Wyattville dual carriageway, with a link to the Rock Road QBC via Rochestown Avenue, Abbey Road, Stradbroke Road and Frascati Road. It is envisaged that the bus service from Dún Laoghaire / City Centre will enter Cherrywood from Wyattville Road and turn onto Tully Vale Road to interchange with Luas at the Cherrywood stop. It will continue along Bishop Street and then along Castle Street passing through Tully Village and Priorland to enter the proposed transport interchange at Carrickmines Luas stop. This will require the following infrastructure:

• Dedicated bus lanes on Bishop Street and on Tully Vale Road linking to the N11 and the proposed Wyattville Road QBCs;
• Bus gate along Castle Street to restrict through car traffic;
• Bus infrastructure along the route eg. bus stops, shelters, RTPI information signs etc;
• Bus priority measures at junctions;
• Turn back bus facility;
• A signalling strategy.

Wide verges on the Grand Parade, Barrington’s Road and Beckett Road will facilitate additional bus lanes if required in the future. Provision will also be made for the possible introduction of bus priority measures on the N11 Link Road whereby any widening shall maintain a planted verge area.

The N11 QBC is critical to serving existing and future passenger demand to/from Bray/North Wicklow and to/from areas between Cherrywood and the City Centre not served by the Luas Green Line (e.g. Ballsbridge). The draft NTA Strategic Transport Plan for the Greater Dublin Area (2030 Vision) proposes infrastructural measures that will substantially reduce journey delays and improve service reliability on the N11 QBC. The potential for an upgrade to Bus Rapid Transit will also be explored.
4.2.12 Area Wide Travel Plans [formerly Area Wide Mobility Management Plans]

**Specific Objective:**

PI 23 The Council will prepare an Area Wide Travel Plan for the Planning Scheme in conjunction with the National Transport Authority and stakeholders in the area. Developers, employers and organisations in the area will be required through the planning process to work positively with others to achieve the objectives of the Plan.

Preparing an Area Wide Travel Plan to cover a particular set of developments has been found to increase the effectiveness of individual Travel Plans as it encourages the pooling of resources and thus increases the potential for effective initiatives to be identified for the area relating to sustainable travel. This can further be enhanced through the setting up of a Local Travel Plan Network. This is a group of organisations working together to manage travel in the area. It brings together individuals and organisations involved in preparing Travel Plans with the aim of facilitating the process.

4.2.13 Travel Plans [formerly Mobility Management Plans]

**Specific Objective:**

PI 24 A Travel Plan will be required for developments in the Planning Scheme that exceed the thresholds for Mobility Management Plans set out in the current County Development Plan.

For developments that do not meet the thresholds, a Travel Statement will be required focusing on specific measures within the development to encourage and promote sustainable travel.

A Travel Plan is a long-term management strategy employed by an organisation that seeks to promote and deliver sustainable transport objectives through positive action and is articulated in a document that is regularly reviewed. A Travel Plan can bring a number of benefits to a new development for the developer, the users of the development and the Local Authority and can help instill a culture of sustainable travel at an early stage in the development.

4.2.14 Helipad

The Planning Authority will facilitate the provision of a helipad facility to serve the employment areas. The preferred option is for a collective facility to serve multiple users in order to avoid the proliferation of such facilities. There can be detrimental impacts from helipad facilities on adjacent residential areas and amenity uses and biodiversity, in terms of noise nuisance and any such proposals will have to be carefully assessed in this regard. The onus would be on any applicant to demonstrate that residential amenities and biodiversity will not be significantly negatively impacted upon and if necessary a temporary permission would be granted in the first instance. Any such facility would also have to adhere to best practice in safety regulation as laid down by the Irish Aviation Authority (IAA).

4.3 Utilities and Telecoms

4.3.1 Electricity

ESB have completed the construction of a HV substation, adjacent to Tully Bridge, which will provide for the initial electrical demand of the development. The high voltage connection to this substation will, at the outset, be overhead from existing lines. However it is intended that this ultimately will be replaced by an underground connection when the proposed roadways have been constructed through the development.

From the HV sub-station, connections will be provided to the individual developments at Cherrywood by medium and low voltage underground cables, which will be installed in the planned road networks on the site. See Map 4.7.

In order to cater for the total electrical demand of the Cherrywood Planning Scheme, a second HV substation site within the area is required. This substation would be optimally located close to or adjacent to the road between the northern or eastern boundary of the Town Centre and Bride’s Glen Development Areas.

Given the safety issues relating to the provision of electrical supply, space restrictions will have to be accommodated with other services in the available road space.

In terms of priority, the MV underground network can be developed in a manner that will accommodate the phasing of the development i.e. clockwise or anti-clockwise to suit “development area” timing and requirements.
Chapter 4: Physical Infrastructure

On-site car parking will be permitted in accordance with the County Development Plan 2010-2016 maximum car parking standard for offices along public transport corridors, i.e. 1 space to 100sq m gfla of new office space. In addition, within the area of the Cherrywood Planning Scheme, off-site car parking consisting of temporary surface car parking and permanent multi-storey car parking will be permitted in accordance with Table 4.5. The temporary car parking will allow for the ratio of parking spaces to employees to be managed downwards over time in line with improvements to public transport. The permanent multi-storey car park will enable a turnover of spaces more in keeping with the mixed use nature of the area.

Table 4.5: Parking Standards for High Intensity Employment

<table>
<thead>
<tr>
<th></th>
<th>Existing</th>
<th>Proposed Development m²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Floorspace</td>
<td></td>
</tr>
<tr>
<td></td>
<td>65,000</td>
<td>65,000 to 100,000</td>
</tr>
<tr>
<td></td>
<td>Employees(est.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,250</td>
<td>3,250 to 5,000</td>
</tr>
<tr>
<td></td>
<td>On-site parking (Cumulative)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,100</td>
<td>1,100 to 1,450</td>
</tr>
<tr>
<td></td>
<td>Multistory (Cumulative)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>600</td>
<td>600 to 1,200</td>
</tr>
<tr>
<td></td>
<td>Temporary Surface parking (Cumulative) - Flexible</td>
<td></td>
</tr>
<tr>
<td></td>
<td>700</td>
<td>700 to 1,050</td>
</tr>
<tr>
<td></td>
<td>Parking space ratio incl. temp. spaces excl. temp. spaces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>55% - 36%</td>
<td>50% - 29% 50% - 34% 43% - 31% 38% - 33% 35% - 31% 33%</td>
</tr>
</tbody>
</table>

Note: This table estimates the current car parking provision (2012)

4.2.11 Bicycle / Motorcycle Parking Standards

Specific Objective: PF 22 Development in the Planning Scheme shall adhere to the guidance and standards for cycle parking and associated cycling facilities for new developments set out in the current ‘Dún Laoghaire-Rathdown County Cycling Policy’ (June 2010 or as updated).

The Cycling Policy sets out the minimum cycle parking requirements for short (e.g. visitor cycle parking) and long term use for various types of development (including residential). It also sets out the appropriate quantum of showers and lockers, and incentives required to promote cycling in workplaces.

Dedicated Motorcycle parking spaces shall be provided at a minimum of four or more spaces per 100 car parking spaces. The general principles, indicative layouts and requirements for welfare facilities set out for Cycling parking in the Dún Laoghaire-Rathdown County Council Cycling Policy shall also apply to motor cycle parking.

Table 4.6: Maximum retail car parking standards

<table>
<thead>
<tr>
<th></th>
<th>1 space per 20sqm gross floor area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail - Food</td>
<td></td>
</tr>
<tr>
<td>Retail - Comparison</td>
<td>1 space per 50sqm gross floor area</td>
</tr>
<tr>
<td>Retail - Shopping Centres &amp; Stores</td>
<td>1 space per 50sqm gross leasable area</td>
</tr>
</tbody>
</table>
It is envisaged that strategic bus services between Bray and the City Centre would divert off the N11 QBC into Cherrywood. In the early phases of development, most of the employment/residential areas will be located within walking distance of the N11. Improvements to pedestrian routes between the N11 bus stops and Cherrywood will be required at an early stage. Ultimately the extension of the Luas Green Line from Bride’s Glen to the Bray area will serve the public transport demand between Bray/North Wicklow and Cherrywood.

There may be demand for new services/route variances on the N11 QBC between the Cherrywood Planning Scheme area and the City Centre to serve areas that are not served by the Luas Green Line. The Planning Scheme provides for this public transport issue to be revisited as development occurs in the area.

The Greater Dublin Area – Draft Transport Strategy 2011-2030 (NTAI) proposes a South Orbital QBC, linking Dún Laoghaire / Blackrock area to Sandyford / Dundrum and the Tallaght area. To access Cherrywood from areas around the orbital route such as Tallaght, it is envisaged that public transport trips would operate via orbital bus/Luas interchange at Sandyford/Dundrum.

Provision of services between Killternan/Glenamuck and the Cherrywood Planning Scheme area would depend on demand emanating from the Killternan/Glenamuck area. Therefore, the provision of a dedicated bus lane on the Killternan Link Road would be subject to future review depending on the progress of development in Killternan/Glenamuck.

### Transport Interchange / Taxis

**Specific Objective:**

**PI 19** It is an objective to construct a Transport Interchange in the vicinity of the Cherrywood Luas stop (see Map 4.6).

The Planning Scheme identifies a location for a Transport Interchange near Cherrywood Luas stop. Provision will be made for conveniently accessible bus and taxi waiting areas, car drop off / pick up, cycle parking, public lighting and soft landscaping. Small scale retail, in accordance with section 2.3.2 may be acceptable subject to the overall requirements of Table 6.2.1. Similar facilities are planned at Carrickmines stop. In the short term a temporary bus / Luas interchange will be constructed at Bride’s Glen stop with shelters, RTPI signs etc.

Provision will be made for taxi ranks at convenient locations in Town and Village Centres including:

- Cherrywood Town Centre Transport Interchange,
- Carrickmines Luas stop Transport Interchange,
- Lehaunstown Village,
- Tully Village.

Taxi ranks shall be designed in accordance with NTA guidelines to be wheelchair accessible with shelters where appropriate.

### 4.2.9 Pedestrian and Cycle Movement Strategy

**Specific Objective:**

**PI 20** It is an objective to prioritise walking and cycling in the internal route hierarchy, to create a network of walking and cycling routes within the Planning Scheme and to improve circulation and permeability. All proposed access points, routes, mews and streets must connect logically with the existing street network to aid legibility, permeability and walkability and also must complement local user desire lines.

The proposed network of walking and cycling routes are shown on Map 2.5. Cherrywood has been designed with a hierarchy of streets where the main vehicular traffic will be directed onto the major routes. Below this level the routes are to be progressively more pedestrian/cycle friendly with a low speed limit of 30 kph.

The overall plan strategy is based on five and ten minute walking distances (400 and 800 metres) from public transport and district / neighbourhood centres. Accordingly, it should be possible to walk or cycle between all the principal nodes in Cherrywood (i.e. Luas stops, bus stops, Town and Village Centres, schools and public open spaces) via a number of pleasant, safe and direct routes.

Pedestrians and cyclists will be facilitated internally by:

- The design of new roads and junctions will provide for the safety of pedestrians and cyclists in particular taking account of the guidance provided by the National Cycle Manual;
- Segregated pedestrian / cycle routes will give safe and direct access to public transport, local facilities and services;
- Pedestrian / cyclist links through parks and along green routes;
- Signalised Toucan crossing facilities on main roads;
- Grade separated links across the Wyatville Link Road;
- Direct links to the pedestrian / cycle routes from residential areas;
- A high standard of surfacing and continuity of routes;
- Cycle parking at transport interchanges, Luas stops, employment and retail locations;
- A 30 km/h speed limit for internal routes to slow traffic to the benefit of pedestrians and cyclists.

Links to the wider pedestrian / cycle network will include:

- Druid’s Glen Road to the N11 at Cabinteely and onward connection with the Kilbogget Park greenway, which extends northwards to Deansgrange and is proposed to be extended to Blackrock;
- Greenway along the linear park from Cabinteely to Cherrywood and continuing towards Shankill;
- Lehaunstown Lane maintained as a green route connecting across the Carrickmines river to Broomanstrow in the north and across the M50 to Rathmichael in the south;
- Through Priorsland to Glenamuck Road;
- Proposed greenway along Carrickmines river and Ballyogan stream to Stepaside area;
- Proposed greenway along Carrickmines river and through Leopardstown Racecourse to Sandyford Business Estates;
- Footpaths and cycle lanes to Killternan / Glenamuck via the proposed bridge across the M50, bypassing the roundabouts of Carrickmines interchange;
- Pedestrian / cyclist links to Cherrywood Road and Brides Glen Road;
- A proposed walking route through the Carrickmines Valley from Carrickmines through to the linear park. This new wooded route will be developed in conjunction with park and open space development.

The Planning Scheme includes an interlinked cycle and pedestrian network providing for safe and convenient access within the Plan Area and also connecting it with the wider locality. The Planning Scheme recognises the importance of providing a network of safe and overlooked cycle / walking routes for amenity / recreational and commuting purposes that follow particular desire lines, especially when linking with public transport and services.

The significant investment in both walking and cycling infrastructure within the Cherrywood SDZ area will ensure that the potential for internal walking and cycling trips is maximised. The hierarchy of road types and the inclusion of a coherent network for cyclists and pedestrians will ensure that cycling and walking are promoted as the mode of choice for internal trips.

The potential for external walking and cycling is limited by severance from the surrounding settlement centres, competition from public transport and the lack of significant employment adjacent to Cherrywood.

Special emphasis will be given to the assessment of pedestrian and cycle facilities at Planning application level. They will be assessed according to the following criteria:

1. Is the route conveniently located?
2. Is the route safe and secure?
3. Is the route continuous and does it link with adjacent established or proposed routes?
4. Does the application adequately address the introduction of interim measures to provide continuous routes if necessary?
5. Does the route provide controlled crossing provision at roads?
6. Is sufficient width available to accommodate pedestrian flow?

### 4.2.10 Car Parking Standards

**Specific Objective:**

**PI 21** It is an objective that car parking within the Planning Scheme be controlled as to determine car use and promote sustainable travel modes.

Reduced car usage can only be achieved over time with the development of the network of public transport routes and services. Car parking policies have to reflect this evolving / expanding public transport network. This will be achieved by the use of temporary car parks that will be removed as development progresses and the public transport network improves.

Where multi use / public car parks are proposed, the management regime will be subject to the agreement of the local authority.

Managed on-street parking will provide surface animation and passive supervision in off-peak periods. Where on-street parking is provided adjoining a development plot it will count towards the maximum parking requirement. Priority will be given to unloading and service vehicles as well as disabled badge holders.

It is not considered necessary for the purpose of this Planning Scheme to detail requirements for all land use types within Cherrywood. Those not detailed below are considered to be covered by the relevant policies and objectives in the current Dún Laoghaire-Rathdown County Development Plan for areas served by public transport.
4.3.2 Gas

The existing development in the Planning Scheme area is served by gas from the existing gas network along the N11. However this supply will not be adequate to supply future development in the Planning Scheme. There is a high pressure gas main on the south side of the M50 that will be the main supply for the future development in the Planning Scheme. This will involve the construction of an Above Ground Installation (AGI) near Tully Bridge to depressurise the gas crossing the M50, using the existing service ducts below the road near Lehaunstown Interchange. See Map 4.8

Specific Objective:
PI 25 An Above Ground Installation will be required near Tully Bridge to supply gas to the Planning Scheme Area. This will be provided in accordance with the phasing requirements of Table 7.10 in Chapter 7.

From the AGI, Cherrywood can be supplied from a distributor main running in the road network to form a loop in the road network, similar to the electricity supply. From this loop numerous take off points or pressure reducing facilities can be positioned as required for individual development plots.

4.3.3 Telecoms

There are a number of current telecommunications providers within the Plan Area. It is anticipated that the fiber network can be extended with the development of the road network. This should be considered at the detail design stage of the roads.

4.4 Energy

European and national energy policy is built around the three important pillars of security of supply, environmental sustainability, and economic competitiveness. This sustainable energy agenda is one of the principle drivers of innovation and resource management in the smart economy/economic community. The scale of the Cherrywood Planning Scheme affords opportunities in its development that can contribute in a positive way to this agenda.

Research undertaken during the formulation of the Planning Scheme examined policy options, energy source options and an energy assessment of the proposed scheme itself. The Cherrywood Energy Assessment was undertaken in 2011 to assess the Planning Scheme. It assessed the Planning Scheme as divided into the 8 development areas under 2008 Building Regulations as well as two alternative construction scenarios – an improved scenario and a best practice scenario. The results revealed that the greatest energy demands are in Lehaunstown Village(Area 1) and the Town Centre(Area 2). This assessment included recommendations for maximising energy efficiency and reducing the carbon emissions in Cherrywood. Acknowledging the significant time horizon for the delivery of the full Planning Scheme, and the pace of change in the energy arena, it is considered too limiting to strictly define parameters in relation to energy and its provision. Technological innovations and strategic choice in this area will continue to develop in the future and it is not the intention of the Planning Scheme to restrict or hinder their contribution to the overall vision for Cherrywood.

Specific Objective:
PI 27 It is an objective to require applications to include communication networks at the design stage of a scheme and to provide details of the proposed network with planning applications.

PI 26 It is an objective to require applications to include communication networks at the design stage of a scheme and to provide details of the proposed network with planning applications.

4.5 Waste management

Dún Laoghaire-Rathdown has to, in accordance with EU and National legislation, accord with the waste management hierarchy of waste prevention, waste recycling, energy recovery and disposal. Ballyogan Recycling Park is located in close proximity to the Plan Area on Ballyogan Road. The Civic Recycling Facility at the recycling park contains extensive recycling facilities for domestic users and will also serve the new communities of Cherrywood. Therefore additional civic recycling facilities are not required at Cherrywood. Smaller scale bring centres will be required at suitable locations.

Specific Objective:
PI 32 It is an objective that all developments will comply with waste policy as set out in the current County Development Plan. Layouts should be designed to incorporate bring centres, refuse collection points and make provision for recycling and composting when required at suitable locations.