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## TECHNICAL NOTE 210026-DBFL-XX-XX-RP-C-0005

**Subject:** DMURS Design Statement

**Produced by:** JJM

**Project:** Newcastle South

**Checked by:** NCG

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### 1.0 INTRODUCTION

- 1.1.1 It is DBFL's opinion that the proposed residential development is consistent with both the principles and guidance outlined within the *Design Manual for Urban Roads and Streets* (DMURS) 2019. The scheme proposals are the outcome of an integrated design approach that seeks to implement a sustainable community connected by well-designed streets which deliver safe, convenient, and attractive networks in addition to promoting a real and viable alternative to car-based journeys.
- 1.1.2 The following section outlines the specific design features that have been incorporated within the proposed residential scheme with the objective of delivering a design that is in full compliance with DMURS.

### 2.0 DESIGN ATTRIBUTES

#### 2.1 Development Strategy

- 2.1.1 The development strategy maximises connectivity between key local destinations and constructed development through the provision of a high degree of permeability and legibility for all network users particularly for sustainable forms of travel. Accordingly, the proposed residential scheme delivers greater mode and route choices along direct, attractive and safe linkages to a range of amenities and local service destinations.
- 2.1.2 **Arterial** links adjacent to the subject site, include the Athgoe Road to the west and Newcastle Main Street to the north. A **Link** street will provide access between the Athgoe Road and the Graydon Development. These **Arterial links** provide important

connections with local centres and community infrastructure such as Newcastle Village, schools, public transport connections, retail and sports clubs.

- 2.1.3 The internal road network within the site has been designed to deliver a hierarchy of **Local** streets and **Homezones** that provide appropriate access within / across the proposed new residential communities and the road network external to the site. The movement function of each internal street network has sought to respect the different levels of motorised traffic and catering for higher number of pedestrians and cyclists. In parallel the adopted design philosophy has sought to consider the context / place status of each residential **Local** and **Homezone** street in terms of level of connectivity provided, quality of the proposed design, level of pedestrian / cyclist activity and vulnerable users requirements whilst identifying appropriate 'transition' solutions between different street types.

## 2.2 Linkages

- 2.2.1 The street layout was derived from several factors which include, Local Area Plan, boundary conditions, existing road network, future and existing development and topography. This has led to the creation of a street network that is predominantly a grid pattern with some curvilinear sections in specific areas. As part of the design and development of the street network, cycle and pedestrian linkages were through the development to link the existing **Link** street provided from Graydon development (Newcastle Boulevard) to the Athgoe Road **Arterial** route. Below is a figure of the proposed and potential external linkages which are proposed to be facilitated by the subject development.



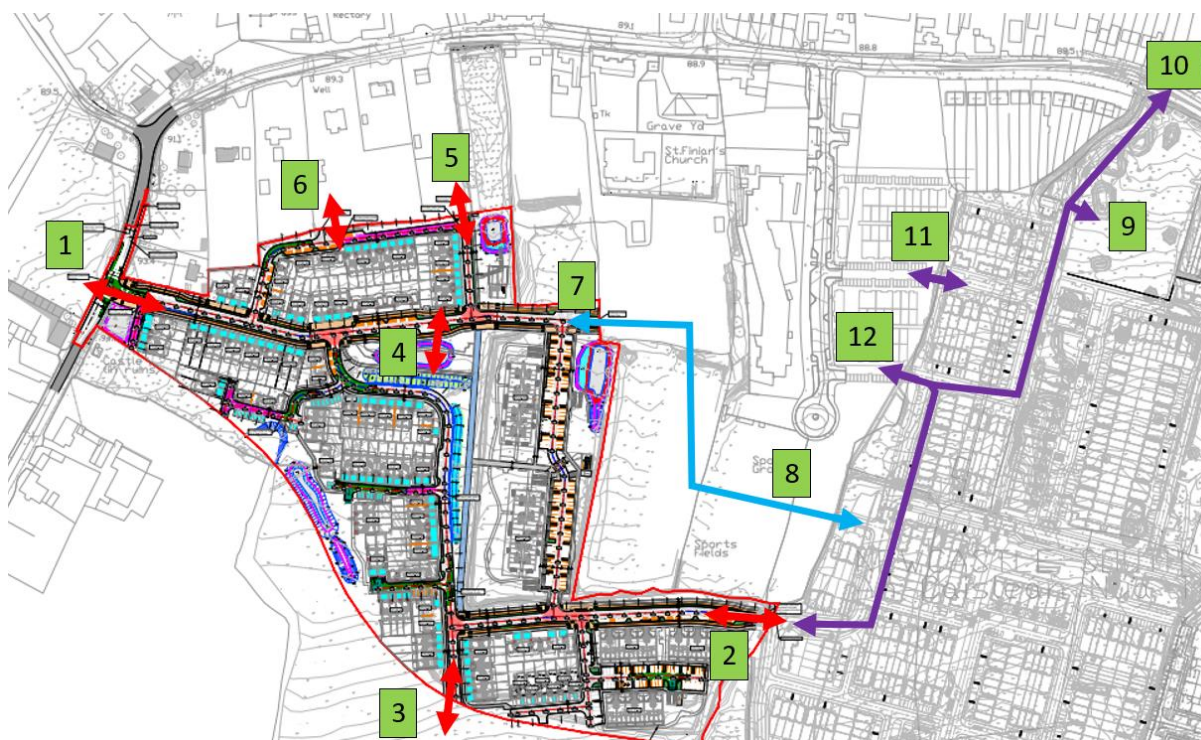


Figure 2.1 - Linkages

- 2.2.2 Link 1 will provide an important vehicular, pedestrian and cycle link between the development and the Athgoe Road which links to Main Street.
- 2.2.3 Link 2 provide an important vehicular, pedestrian and cycle link between the development and the Phase 1 Graydon development providing a continuation of Newcastle Boulevard.
- 2.2.4 Link 3 and 4 will provide cyclist and pedestrian links from the north to the south of the development by way of a 4m wide shared surface "Green link".
- 2.2.5 Link 5 and 6 will provide vehicular, cyclist and pedestrian links to the adjoining residential development.
- 2.2.6 Link 7 and 8 may provide future vehicular, pedestrian and cyclist access to the Phase 1 Graydon Development which is compatible with the Newcastle LAP roads objective for the Link Street.
- 2.2.7 Link 9 will provide a link to the proposed supermarket which is currently under construction.



2.2.8 Link 10 will provide access back to Main Street.

2.2.9 Link 11 and 12 may provide future access to St Finian’s Primary School.

2.2.10 The key principal is that the proposed development layout can facilitate enhanced linkages over and above the considerable improvement in permeability through the site arising from the scheme.

2.2.11 The linkages detailed above demonstrate that permeability has been considered from a very early stage in the design and all links that can be provided by the applicant, have been accommodated.

## 2.3 Design Parameters

2.3.1 The adopted design approach successfully achieves the appropriate balance between the functional requirements of different network users whilst enhancing the sense of place. The implementation of self-regulating streets actively manages movement by offering real modal and route choices in a low speed high quality residential environment. Specific attributes of the schemes design which contribute to achieving this DMURS objective include;

- a) The potential dominance of on-street car parking for the apartments is actively managed through the provision of enhanced paving material, landscaped buffers and the provision of large street trees in addition to individual bays of perpendicular parking spaces being restricted to no more than 6 no. parking spaces as per DMURS.
- b) On-street activity is promoted internally along the residential streets through the adoption of ‘own-door’ dwellings.
- c) The proposed design has sought to specify minimal signage and line markings along the internal *Local* streets and *Homezones* with such treatments used sensitively throughout.
- d) Footpaths of generally 2.0m width and are provided throughout the scheme with connections / tie-in to existing external pedestrian networks.
- e) Appropriate clear unobstructed visibility splays, as per DMURS requirements; are provided / safeguarded at all internal nodes and at the site access junctions to the external road network.



- f) Well designed and frequently provided pedestrian crossing facilities are provided along key travel desire lines throughout the scheme in addition to those located at street nodes. All courtesy crossings are provided with dropped kerbs or a raised flat top treatment thereby allowing pedestrians to informally assert a degree of priority.
- g) All informal pedestrian crossing facilities are at least 2.0m wide.
- h) With the objective of encouraging low vehicle speeds and maximising pedestrian safety and convenience, corner radii at **Local** / **Homezone** / **Link** nodes have been specified as 4.5m as per DMURS guidance.
- i) Contrasting materials are specified in the '**Homezones**' to distinguish a change in street hierarchy.
- j) Internally within the development carriageway kerb heights have been specified as 100mm in accordance with the objectives of DMURS.
- k) Along the lightly trafficked internal **Local** streets, cyclists will share the carriageway with other street users as per the NCM guidance for such low speed environments.
- l) The proposed residential developments internal hierarchy of Primary **Homezone** streets comprise up to 4.8m wide with 1.5m wide vulnerable user strips.
- m) The proposed residential developments internal hierarchy of Primary **Local** streets comprise of carriageways 5.5m to 6.0m wide with 2m wide footpaths.
- n) The proposed residential developments internal hierarchy of Primary Link streets comprise of carriageways up to 6.5m wide with 2m wide footpaths and 2m wide cycle paths.
- o) The main access routes (e.g. leading to/from the site access nodes with **Link** streets) of internal street network of **Local** streets will be formed using standard macadam / asphalt finishes, however for **Homezone** streets, a colour contrast is to be achieved by way of a buff macadam finish in order to lower design speed in these areas.
- p) Horizontal deflections in the form of meandering bends have been strategically placed across the internal street network to promote lower design speeds.



- q) In accordance with DMURS perpendicular parking spaces are a minimum of 5m long x 2.4 m wide and parallel parking spaces are a minimum of 6m long x 2.4 m wide.
- r) A 4m wide shared path is provided from the Link Road to the south to the north of the site to provide pedestrian and cyclist connectivity. The 4m wide shared facility is designed in accordance with the NCM.

