

## CS CONSULTING GROUP

HEAD OFFICE: 19-22 Dame Street, Dublin 2, D02 E267, Ireland T | +353 1 5480863 | E | info@csconsulting.ie | www.csconsulting.ie

Strategic Housing Unit An Bord Pleanála 64 Marlborough St Rotunda Dublin 1

Sent By: Email Job Ref: H081 A-NB Date: 29-Jun-21

# RE: <u>Strategic Housing Development (SHD) at Frankfort Castle, Old Frankfort, Dundrum, Dublin 14</u> <u>DMURS Statement of Consistency to An Bord Pleanála.</u>

Cronin & Sutton Consulting Engineers (CS Consulting), as part of a multi-disciplinary design team, have been commissioned by Pembroke Partnership Limited to develop a DMURS Statement of Consistency to accompany a planning application for a proposed Strategic Housing Development at Frankfort Castle, Old Frankfort, Dundrum, Dublin 14.

The proposed development comprises 115no. residential units (45no. 1-bedroom apartments and 70no. 2-bedroom apartments) and a crèche facility to accommodate a maximum of 26no. preschool children, as well as all associated ancillary works.

## Applicable Standards and Guidance Documents

The proposed scheme has been designed in compliance with the following:

- Design Manual for Urban Roads and Streets (2019)
- TII Design Standards (formerly the Design Manual for Roads and Bridges)
- The Institution of Structural Engineers (IStructE) Design Recommendations for Multi-Storey and Underground Car Parks (2011)
- Dún Laoghaire-Rathdown Development Plan 2016–2022
- National Cycle Manual (2011)

KP & Associates Consulting Engineers Ltd. T/A Cronin & Sutton Consulting Company No. 505303 | Registered Office: 19-22 Dame Street, Dublin 2, Ireland Directors: N. Barrett, K. Cronin, R. Fitzmaurice, M. McEntee, L. McNamee, D. Rehill, O. Sullivan, C. Sutton-Smith, E. Sutton, P. Sutton

Associate Directors: C. Barry, C. Twomey | Associates: D. Byrne, G. Lindsay

#### LONDON OFFICE:

Centralpoint, 45 Beech St, London, EC2Y 8AD, UK

T | +44 207 070 3660

E | info@csconsultinguk.com

#### LIMERICK OFFICE:

45 O'Connell Street, Limerick, V94 XE18, Ireland T | +353 61 594 988 E | info@csconsulting.ie

 $\odot$ ENERGY SAI Certified NSAI Certifi





**Figure 1 – Development layout and access provisions** (sources: NTA, OSM Contributors, Dermot Foley Landscape Architects, Google)

## Vehicular Access Arrangements

Vehicular access to the proposed development shall be via Old Frankfort and its existing junction with Dundrum Road (R117). A new priority-controlled access junction for the development site shall be provided on Old Frankfort, at the eastern boundary of the development site (see Figure 1). The minor arm of the new development access junction shall have a carriageway width of 5.5m, allowing two-way traffic flows into and out of the development.

An unobstructed sight distance of 23m in either direction along Old Frankfort is achieved for vehicles exiting the development, as measured from a set-back of 2.4m from the public road edge, in accordance with DMURS requirements. An uncontrolled pedestrian crossing shall be provided across the development access, with buff-coloured tactile paving and dropped kerbs to either side. STOP road markings shall be placed at the exit from the development, and kerb radii at the development access junction are restricted to a maximum of 4.5m, to discourage high vehicle speeds on entrance or exit to/from the development.



#### **Pedestrian and Cyclist Facilities**

Pedestrian and cyclist access to the development shall be possible via its principal access junction on Old Frankfort, at the site's eastern boundary, as well as via a further 2no. dedicated pedestrian and cyclist access points:

- on Frankfort Court, at the site's southern boundary; and
- on Old Frankfort, at the site's eastern boundary.

Provision is also made for an additional future pedestrian/cyclist access onto the existing laneway connecting to Highfield Park, at the north-west corner of the site.

A total of 176no. bicycle parking spaces are to be provided within the development: 136no. bicycle parking spaces for residents of the development shall be provided in dedicated cycle stores at ground floor level within Blocks A, B, and C, and a further 40no. publicly accessible short-stay bicycle parking spaces, primarily for visitor use, shall be provided externally at surface level.

#### **Internal Road Layout**

At surface level, the internal road layout of the development comprises a short two-way service road extending approx. 65m westward from the development's vehicular access on Old Frankfort, connecting to a one-way internal service road loop around Block D via a minimum 4.2m-wide one-way shuttle.

The two-way section of service road shall give direct access to the basement access ramp and to the main surface-level car parking area. This shall have a carriageway width of 5.7m and be flanked by a raised 1.8m-wide footpath along its eastern side. Marked pedestrian crossing shall be provided across the accesses from the two-way service road to the basement access ramp and to the main surface-level car parking area.

The one-way service road loop shall allow for passenger collection and set-down in proximity to building entrances, and shall also give access to the 4no. disabled-accessible parking spaces at surface level. This shall be configured as a 4.8m-wide shared surface, comprising a 3.0m-wide carriageway and a 1.8m-wide pedestrian walkway at grade.

The internal road layout has been designed with reference to the Design Manual for Urban Roads and Streets. The ethos of the design manual refers to:

"Better street design in urban areas will facilitate the implementation of policy on sustainable living by achieving a better balance between all modes of transport and road users. It will encourage more people to choose to walk, cycle or use public transport by making the experience safer and more pleasant."



"A holistic approach to the design of urban streets in cities, towns, suburbs and villages in Ireland for the first time and promotes a collaborative and consultative design process."

The use of narrow road profiles, paving stones, plantings, etc. call for low vehicle speeds, benefiting the vulnerable user (i.e. roads should be there to serve a community - not to dominate it). The provision of good permeability for pedestrians, cyclists & public transport are all key objectives of the proposed site layout.

The objectives of the site layout design are:

- To minimise the intrusion of vehicle traffic
- To ensure ease of access for emergency services
- To encourage walking and cycling
- To create short walking routes to shops, public transport etc.
- To create a safe, secure and pleasant environment for people particularly children.

Traffic calming measures incorporated in the design include:

- smaller corner radii
- arrangement of on-street parking
- horizontal alignment constraints to restrict speed
- Landscaping
- Design for maximum of 30kmph

The internal layout of the proposed development shall incorporate numerous design features such as distinctive surface materials and colours, strong landscaping proposals and modern furniture structures, in order to establish a sense of place within an urban neighbourhood environment.

### **Basement Car Park**

The proposed development includes a basement car park comprising a total of 67no. car parking spaces across three split levels (spanning two storeys). The basement car park configuration and access arrangements comply with the IStructE Design Recommendations for Multi-Storey and Underground Car Parks.



### Summary

Given the location, shape of the site, topography and scale / type of residential development proposed, we submit that the proposed development and its proposed layout are well suited to this site location.

Niall Barrett Director Chartered Civil & Traffic Engineer B.Eng (Hons), CEng, M.I.E.I, Cert Health & Safety, Cert RSA for Cronin & Sutton Consulting