

Registered Office

+ 353 1 400 4000

info@dbfl.ie

www.dbfl.ie

Ormond House Upper Ormond Quay Dublin 7 Ireland D07 W704 Cork Office

14 South Mall Cork Ireland T12 CT91

+ 353 21 202 4538 info@dbfl.ie www.dbfl.ie

Waterford Office

Suite 8b The Atrium Maritana Gate Canada Street Waterford Ireland X91 W028

+ 353 51 309 500 info@dbfl.ie www.dbfl.ie

200060-ltr-001

19th July 2021

Planning Department **Dublin City Council** Wood Quay Dublin 8 D08 RF3F

RE: Proposed Residential Development at Chadwick's, Santry Avenue, Dublin 9. **DMURS Statement of Consistency**

Dear Sir / Madam

DBFL Consulting Engineers have been commissioned to provide a range of engineering support services in regard to a proposed Strategic Housing Development (SHD) at Chadwick's, Santry Avenue, Dublin 9.

Currently the subject brownfield site accommodates a Builder's Merchant. The site has an approximate area of 1.5 hectares and currently benefits from a direct vehicle access point off the R104 Santry Avenue which runs along the entire northern boundary of the development site. The existing structures on the site will be demolished as part of the planning proposals. The proposed development will consist of 350no. apartments across four residential apartment blocks over a single basement facility (accommodating bicycle and car parking, storage areas and plant), 5no. commercial units, amenity facilities and all associated infrastructural works.

Whilst the scale of the scheme proposals will not result in the implementation of any new urban streets, the emerging design has nevertheless sought to incorporate and promote the key design principals of the Design Manual for Urban Roads and Streets (DMURS), as published by Department of Transport, Tourism and Sport and the Department of Environment, Community and Local Government (2013). DMURS provides guidance relating to the design of urban roads and streets outlining a series of principles, approaches and standards that are necessary to achieve balanced, best practice design outcomes with regard to networks and individual streets and urban public realm areas.

DMURS promotes and encourages four Key Design Principles which are:

- Connected networks: 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.
- Multi-functions streets: The promotion of multi-functional, place-based streets that balance the needs of all users . within a self-regulating environment.
- Modal Hierarchy with Pedestrian focus: The quality of the street is measured by the quality of the pedestrian ٠ environment.
- Multidisciplinary approach: Greater communication and co-operation between design professionals through the ٠ promotion of a plan-led, multidisciplinary approach to design.

DBFL Consulting Engineers Limited trading as DBFL Consulting Engineers

VAT. No. IE6355828Q Company No. 335828



ENGINEERS **I**RELAND cpd ACCREDITED EMPLOYER Directors Bill Bates BEng MSc PhD CEng MIEI MICE

Colm Doyle BE CEng MIEI Fergal English BE CEng MIEL Paul Forde (Chairman) BE CEng Eurlng FIStructE FIEI FConsEl John Hayes BScEng CEng MIEI FConsEl Thomas Jennings BEng MSc MIHT CMILT John Keane BScEng CEng MICE MIEI FConsEI Tracy Kearney BA BAI MSc CEng MIEI Robert Kelly BAI MA PGradDip CEng MIEI Jim Lawler (Managing) BE DipComp CEng MIEI FConsEl John Meaney AMIStructE IEng Dan Reilly BEng CEng MIEL MCIWEM MIHT FConsEL Kevin Sturgeon BEng MSc CEng PGradDip MIEI

Associate Directors

Martin Bennett BE PGradDip CEng MIEI Liam Brehon BScEng CEng MIStructE DipH&S(Const) MIEI Aiden Burke BE MMangtSc CEng Int PE (Iri) MIEI Sarah Curran BA BAI CEng MIEI Brendan Keogh BA BAI PGradDip CEng MIEI Shane McGovern BE CEng MIStructE MIEI Mike Neylon BE CEng MIEI Colm Quirke BE CEng PMP MIEI Andrew Robertson BEng CEng MCIHT MSoRSA FIEI David Sheehan BScEng CEng MIEI

Associates

Conor Brady BEng CEng MIStructE MIEI John Carr BE MEng CEng MIEI Michael Connelly BEng CEng MIEI Chris Curley IT/BIM Manager Nick Fenner MEng CEng MIEI Chash Gajanayaka BEng CEng MIStructE Noel Gorman BE CEng MII Ross Griffin BE PGradDip CEng MIEI Brendan Manning BEng CEng MIEI Niall O'Hare BEng MSc CEng MICE MIEI Deirdre Walsh BA BAI MSc CEng MIEI Neil Wilson BA BAI CEng MIEI

Paddy G Darling BE BA CENG MIEL



Registered Office

Ormond House Upper Ormond Quay Dublin 7 Ireland D07 W704

+ 353 1 400 4000 info@dbfl.ie www.dbfl.ie Cork Office 14 South Mall Cork Ireland T12 CT91

+ 353 21 202 4538 info@dbfl.ie www.dbfl.ie

Waterford Office

Suite 8b The Atrium Maritana Gate Canada Street Waterford Ireland X91 W028

+ 353 51 309 500 info@dbfl.ie www.dbfl.ie

CONNECTED AND SECURE STREETS

The internal public realm / street network is connected to the external network along its entire northern and eastern boundary which ensures ease of access, connectivity, continuity, and integration with all external transport networks, including pedestrians, cyclists and public transport and motorised vehicles. This is enhanced with the help of various design elements adopted such as

- the provision of a vehicle access (leading to/from the basement) at close proximity to the road junction with Swords Road which will prevent large numbers of traffic within the development.
- The provision of appropriate visibility splays at the site access points in response to DMURS requirements for the adopted design speed at this section of the R104 Santry Avenue and Swords Road corridor.
- Maximising the benefits afforded by the proximity of neighbouring bus interchanges (on both side of the Swords Rd and Santry Avenue) and focusing the main pedestrian entrance to/from the residential development around the existing pedestrian crossing faciality along Swords Rd and subsequently delivering convenient and safe routes along key travel desire lines between the proposed development and both (i) local interchange opportunities, and (ii) external walk and cycle networks.
- The delivery of secure environments with excellent passive surveillance being accommodated for internally into the central open space areas and externally also all boundaries including notably along the entire frontage on Swords Rd.

MULTI-FUNCTIONS STREETS

The internal public realm / street, the developments interface with the Swords Rd corridor and Santry Avenue and the vehicle access points have been designed to ensure safe and comfortable co-existence of different street users. Where necessary priorities have been established and assigned with respective design solutions such as wide footpaths, various high quality surface treatments, connectivity to / from pedestrian and cyclist crossings, appropriate kerbed radii, visibility, road markings, shared access routes and segregated pedestrian orientated internal / frontage courtyard / plaza spaces.

MODAL HIERARCHY WITH PEDESTRIAN FOCUS

The internal public realm / street areas have been designed to ensure convenient, safe, secure, comfortable and accessible movements for pedestrians as a priority. This was enhanced and ensured with the help of such integrated design features as continuous and integrated network of clutter free dedicated high quality pedestrian areas of appropriate width and gradients integrated with the external networks.

CONNECTED AND SECURE STREETS

- Internal Streets The schemes internal streets have been designed to respect the intended function as a LOCAL access link.
- Internal Street Carriageway Widths the 6m widths of the internal East-West street (which already benefits from planning permission) and the short North-South street conforms with DMURS recommendations of 5.0m-5.5m.
- The utilisation of kerb radius at the internal junctions of 6m conforms with DMURS recommendations of 4.5m-6m for local streets with occasional larger vehicles.

DBFL Consulting Engineers Limited trading as DBFL Consulting Engineers

VAT. No. IE6355828Q Company No. 335828



Directors Bill Bates Beng MSC PhD Ceng MIEI MICE Colm Doyle BE CEng MIEI Parul Fordle (Chairman) BE Ceng Ending HSIructE FIEI FConsEl John Hayes Baschay Ceng MIEI FConsEl Thomas Jennings Beng MSC MIHT CMILT John Kearne BSCeng Ceng MICE MEI FConsEl Tracy Kearney Ba Bal MSC CEng MIEI Robert Kelly Bal MA PGradbip Ceng MIEI John Meaney Babal MSC CEng MIEI John Meaney AMSIructE IEng Dan Reilly Beng Ceng MIE MCWEM MIHT FConsEl Kevin Sturgeon Beng MSC Ceng PGradbip MIEI Consultant Paddy G Darling Be Ba Ceng MIEI

Associate Directors

Martin Bennett BE PGradbip Ceng MIEI Liam Brehon BS-Eng Ceng MiBrace DipHsS(Const) MIEI Aiden Burke BE MMangtSc Ceng Int PE (Ini) MIEI Sarah Curran Ba Bai Ceng MIEI Brendan Keogh Ba Bai PGradbip Ceng MIEI Shane McGovern BE Ceng MiBrace MIEI Mike Neylon BE Ceng MIEI Colm Quirke BE Ceng PMP MIEI Andrew Robertson Beng Ceng MIEIT MSaRSA FIEI David Sheehan BS-Eng Ceng MIEI

Associates

Conor Brady Beng Ceng MiStructe MIEI John Carr Be Meng Ceng MIEI Michael Connelly Beng Ceng MIEI Chris Curley (r/JIM Manager Nick Fenner Meng Ceng MIEI Chash Gajanayaka Beng Ceng MIEI Noel Gorman Be Ceng MIEI Ross Griffin Be Paradojo Ceng MIEI Brendan Manning Beng Ceng MIEI Niall O'Hare Beng Mis Ceng MIEI Niall O'Hare Beng Mis Ceng MIEI Neil Wilson Ba Bai Ceng MIEI



Registered Office Ormond House Upper Ormond Quay Dublin 7 Ireland D07 W704

+ 353 1 400 4000

info@dbfl.ie

www.dbfl.ie

Cork Office 14 South Mall Cork Ireland T12 CT91

+ 353 21 202 4538 info@dbfl.ie www.dbfl.ie Waterford Office

Suite 8b The Atrium Maritana Gate Canada Street Waterford Ireland X91 W028

+ 353 51 309 500 info@dbfl.ie www.dbfl.ie

- All car parking bays incorporating 5.0m*2.5m perpendicular bays and 6.0m*2.5m parallel bays conforms with DMURS recommendations.
- The width of carriageway at perpendicular bays conforms with DMURS 6.0m recommendations for 2.5m wide bays.
- The design of on-street car parking has been broken with landscape buffers to ensure that parking does not dominate the street scape and the opportunities are provided for street trees to provide a valuable level of street enclosure.
- All internal junctions benefit from the provision of clear unobstructed sightly lines in respect if the adopted internal 30kph design speed.
- The external junctions benefit from the provision of clear unobstructed sightly lines in respect if the adopted internal 50kph design speed.

MULTIDISCIPLINARY APPROACH

In accordance with design philosophy of DMURS, the proposed SHD development has been prepared by an integrated multidisciplinary design team including the following key partners and coordinated by Armstrong Fenton Associates (Planning Consultants and Project Managers);

- Davy & Smith Architects,
- DBFL Consulting Engineers (Consulting Civil, Structural and Transportation Engineers),
- Dermot Foley (Landscaped Architects)

It is the design team's opinion that the proposed development is consistent with both the principles and guidance outlined within the Design Manual for Urban Roads and Streets (DMURS), as amended May 2019. The scheme proposals are the outcome of an integrated approach that incorporate street / public realm design, urban design and landscaping to create safer, more attractive environment for vulnerable road users, maximise connectivity to public transport and successfully achieves the appropriate balance between the functional requirements of different network users whilst enhancing the sense of place.

If you have any queries regarding the above, please do not hesitate to contact me to discuss further.

Yours sincerely

Momes Acuning/

Thomas Jennings Director - Transportation DBFL CONSULTING ENGINEERS

DBFL Consulting Engineers Limited trading as DBFL Consulting Engineers

VAT. No. IE6355828Q Company No. 335828





Directors

Bill Bates Beng MSC PhD Ceng MIEI MICE Colm Doyle BE Ceng MIEI Fergal English BE Ceng MIEI Paul Forde (Chairman) BE Céng Luring Fisiructé FIEI FConsEl John Hayes BSCeng Ceng MIEI FConsEl Thomas Jennings Beng MSC MIEI CONSEl Tracy Kearney BA BA MSC Ceng MIEI Robert Kelly Ba MA Poradilo Ceng MIEI Dahn Keane BSCeng Ceng MIEI MCMER MIEI Jim Lawler (Managing) BE DipComp Ceng MIEI FConsEl John Meaney AMSinucti Eng Dan Reilly Beng Ceng MIEI MCIWEM MIHT FConsEl Kevin Sturgeon Beng MSC Ceng Poradilo MIEI Consultant Paddy G Darling BE BA Ceng MIEI

Associate Directors

Martin Bennett BE PGradDip Ceng MIEI Liam Brehon BScäng Ceng MiBracie DipHS8(Const) MIEI Aiden Burke BE MManglSc Ceng Int PE (In) MIEI Sarah Curran BA BAI Ceng MIEI Brendan Keogh BA BAI PGradDip Ceng MIEI Shane McGovern BE Ceng MIEI Mike Neylon BE Ceng MIEI Colm Quirke BE Ceng PMP MIEI Andrew Robertson BEng Ceng MIEI MSoRSA FIEI David Sheehan BSchag Ceng MIEI

Associates

Conor Brady Beng Ceng MiStructe MIEI John Carr Be Meng Ceng MIEI Michael Connelly Beng Ceng MIEI Chris Curley II/JIIM Managar Nick Fenner Meng Ceng MIEI Chash Gajanayaka Beng Ceng MISI Noel Gorman Be Ceng MIEI Ross Griffin Be Paradioj Ceng MIEI Brendan Manning Beng Ceng MIEI Niall O'Hare Beng Misc Ceng MIEI Niall O'Hare Beng Misc Ceng MIEI Neird Walsh Bak Bal Misc Ceng MIEI Neil Wilson Bakal Keng MIEI