

5.0 URBAN DESIGN GUIDELINES FOR THE SITE

5.1 THE URBAN DESIGN PROCESS

The urban design process in any city follows the same basic steps, as diagrammatically shown below. This structures decision making processes for all the professionals involved in any design team, and ensures that all persons are working towards the same end. It also allows for rational decision making in selecting a preferred scheme, both on the part of the client and the various approval bodies.

- STEP 1. ANALYSE THE SITE AND ITS CONTEXT
ANALYSE THE APPROVED PLANNING POLICY CONTENT
SYNTHESIZE THE INFORMATION

- STEP 2. DEVELOP OBJECTIVES AND URBAN DESIGN GUIDELINES
SEEK CONCURRENCE OF THESE GUIDELINES WITH
APPROVAL BODIES

- STEP 3. DESIGN THE BUILDING AND ASSOCIATED URBAN SPACES
IN RESPONSE TO THE URBAN DESIGN GUIDELINES
AND THE CLIENT AND PUBLIC NEEDS

5.2 BASIC PLANNING OBJECTIVES OF THE APPLICANT

Substantially increase the passenger capacity of Tara Street DART Station by improving all station operating facilities and amenities.

To greatly improve pedestrian arrival and circulation spaces associated with the station at both concourse level and in moving between station concourse and platforms, and also externally to improve pedestrian facilities and station access arrangements from adjacent streets.

To contribute to pedestrian permeability within the site and with the city beyond in line with DCC's stated aim of increasing pedestrian movement in streets behind the Liffey Quay and facilitating proposed link to College Green via orientating the main station entrance towards the planned axis in diagonal pedestrian street within the Hawkins Street site as outlined in DCC's Draft George's Quay Plan.

To create a distinctive landmark building which will identify the new station and add to the modern cityscape of Dublin.

To facilitate a greater use of public transportation in the City Centre Core by integrating office development directly with the commuter rail station.

To facilitate greater transport interchange opportunities, between DART and bus (direct) and in future between DART and LUAS / Metro close by.

5.3 URBAN DESIGN GUIDELINES

THE STATION

DESIGN all pedestrian circulation areas for a peak capacity volume of 14,500 passengers per hour. This is twice the present volume of 6000, and is a very heavy volume which far exceeds many London Tube stations. This is required to cater for increased passenger flows generated by the increase in train lengths to 8 cars (already implemented), and the increase in numbers of train paths from 12 to 16 through the station (proposed).

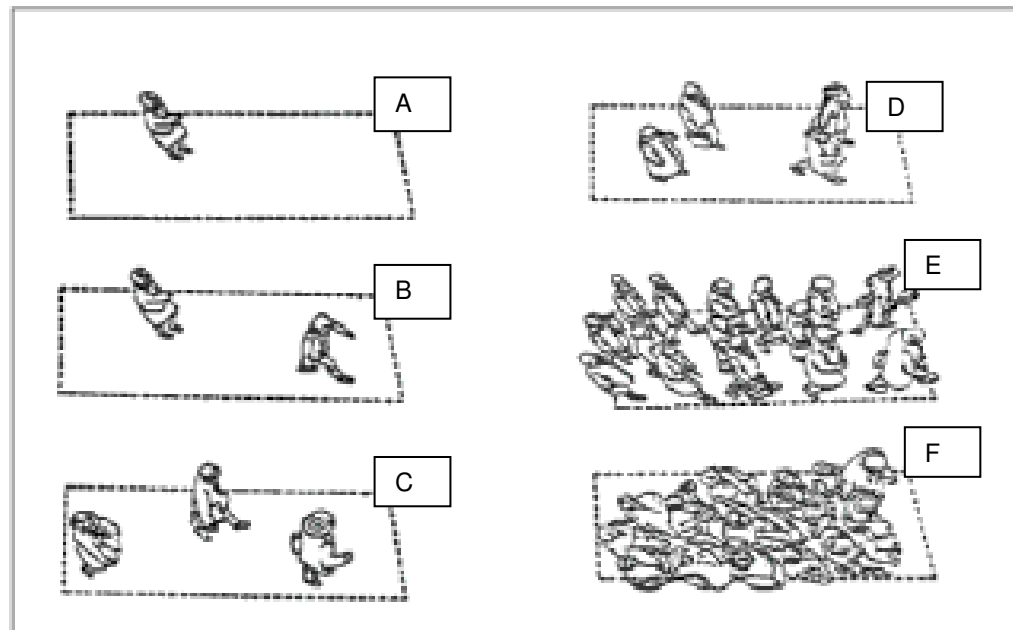
DESIGN for a comfortable level of pedestrian movement, avoiding conflicting streams of pedestrians and congestion bottlenecks throughout the station and its new concourse. The internationally acceptable level for high volume pedestrian areas is Level of Service C. See diagram below. That is a space allocation of approximately 0.8 m² per person.

IMAGE

Improve the image and appeal of the station for both would be commuters and visitors to Dublin. Create a transparent façade which allows vistas out to the surrounding city as well as views into the station Concourse and the platforms beyond. Integrating the concourse into a city and reinforcing the DCC policy of indentifying Tara Street Station as a focal point within the George's Quay area as referred to in the George's Quay Draft plan.

SENSE OF PLACE

Create a memorable sense of place for this high profile transportation location, through architectural design and the incorporation of a new urban meeting space within the development.



Level of Service (LOS) is a quantitative measure used to define the Quality of Service (QOS) from the user's perspective. Qualitative criteria include the freedom to choose desired speeds, the freedom to pass slower pedestrians, the ability to cross a stream of pedestrians or walk in the reverse direction to a stream of pedestrians and the ability to manoeuvre without conflicts. The relationship between LOS and QOS is usually assumed to be that LOS A represents the highest QOS whereas LOS F represents the lowest QOS.

Level of Service (LOS) Criteria

LOS	Space (m ² /ped)	Interperson Spacing (m)
A	≥ 1.21	1.2
B	0.93-1.21	0.9-1.2
C	0.65-0.93	0.7-0.9
D	0.27-0.65	0.3-0.7
E	0.19-0.27	<0.3
F	<0.19	Negligible

Source: TRB, 1994; from Fruin, 1971.

Figure 14: International Pedestrian Planning & Design Standards: Queuing Areas and Stairways. Source: TRB 1994 based on JJ Fruin Pedestrian Planning and Design 1971 New York Metropolitan Association of Urban Designers

STREET LEVEL

Widen the pedestrian pavement on Tara Street to relieve present and future congestion.

Improve pedestrian access to the station concourse by providing access from as many sides as possible, in order to better manage pedestrian congestion and allow access/egress from a variety of directions.

Establish the main pedestrian access point to the station concourse on Tara Street, where the increased pavement width will offer better conditions to accommodate the current and future increases in passenger numbers, as well as presenting an opportunity to provide an enhanced gateway to the station.

As stated in the Draft George's Quay Plan Page 63 on Tara Street Station

"The primary use of the ground floor level should be that of a concourse, well connected with the surrounding public realm. A dynamic relationship should be fostered with Tara Street and George's Quay through the establishment of active street facades. In particular, it is encouraged that:

- Design of primary entrances conveys openness
- Design and placement of secondary entrances contribute to the vibrant nature of the public realm at street level
- Appropriate design and use of materials (e.g. glass) be implemented, such that visibility between street level and uses within the station site is facilitated."

Allow no vehicular ramps to cross Tara Street or George's Quay pavements, so as not to obstruct heavy pedestrian flows entering or leaving the station.

BUILDING SCALE

Avoid a building image and scale which overwhelms or alienates the pedestrian. Ensure building design elements create a human scale at street level.

Avoid a building shape and design which creates a disturbing wind vortex effect on the heavily-used pedestrian areas and entrances to the station, particularly on Tara Street and George's Quay.

International wind testing and evaluation processes refer to the Beaufort Scale of acceptable wind conditions and comfort levels.

Beaufort Scale force 5 is acceptable for pavement areas (fresh breeze conditions).

Beaufort Scale force 4 is acceptable for entrance areas (moderate breeze conditions).

Beaufort Scale force 2 is acceptable for outdoor eating areas (light breeze conditions).

STREET PATTERN

Orientate and relate any building to the existing street grid in this part of the City, in order to retain the traditional street morphology of Dublin.

The Draft George's Quay Plan noted that recent developments have resulted in impermeable blocks. Tara Street through the concourse design responds to DCC's stated aims of introducing permeability and linking Tara Street to the areas to the south at the Liffey Quays and College areas.

HISTORIC ELEMENTS

Incorporate Kennedy's pub, a protected structure, into the George's Quay façade in order to protect the building, add visual interest, and reinforce traditional activity at street level.

LAND USES - RETAIL

Do not compete with the high fashion retail district in the Dublin core area centred around Grafton Street and Henry Street, to the west of the site, in accordance with Dublin City Council policy. If retail is included on site, provide for station and office related retail uses only (news-stands, cafes, florists, copy shops etc) to serve the on-site activities. Open cafes and kiosks will enhance security and safety for passengers during evening hours. Although a small element of retail is included in the proposal, in accordance with above, a link to College Green will link Tara Street to prime Grafton Street retail areas of the city to the south via the proposed improvements in pedestrian enhancements included in the Draft George's Quay Plan.

CAR PARKING

No car parking is provided for commuters, and parking for the occupants of the office building is kept to a minimum level (10 No.) and to be accessibility spaces only. This is to encourage maximum usage of the available public transport services and to keep to an absolute minimum the effects on the local road network of implementing the new office development.

PEDESTRIAN ROUTINGS

The station generates very high volumes of pedestrian traffic, which is expected to increase. The station serves the Docklands development, IFSC office area, adjacent offices, the retail, entertainment, office and tourist area focused on the Temple Bar area and the wider shopping districts in Dublin's historic core. To a lesser extent it will serve residential areas to the south of Townsend Street. The greatest pedestrian flows to and from the station currently will be in a northerly westerly and southern direction.

Although not the Applicant's direct responsibility, The Station design has been mindful of the need of creating more attractive pedestrian routes from the Station to particularly the core area, as indicated in the Dublin City Development Plan.

As shown in figure 4.21 of DCC's Draft Georges Quay Plan –Hawkins House Sector Urban Design Guidance. A Enhanced entrance to the Station will facilitate greater pedestrian connections to the college Green area and the city beyond.

BUILDING HEIGHT

It must be remembered that a specific objective of the applicant (Iarnród Éireann) is to create a striking landmark building which will serve to positively identify Tara Street Station within the city and in a context of the River Liffey, in so doing creating a public transportation presence in the centre of Dublin. With regard to an appropriate building height, the following guidelines must prevail:

A building height which complements the 59.4m Liberty Hall tower building, which lies across the Liffey from the application site.

The Tara Street Station building and Liberty Hall would serve as twin urban landmarks, a 'gateway' which marks the transition between the traditional city core and the vibrant Docklands area to the east. This concept is particularly well illustrated when in front of the IFSC complex, looking back into the city or from the O'Connell Street bridge looking to the east. The Station is also located on a pivotal point on the River Liffey on a curve by the loopline bridge within view of O'Connell Bridge

A building height which can be clearly seen from various heavily pedestrianised key vantage points such as the bottom of O'Connell Street and O'Connell Street Bridge. An urban navigation point – a positive landmark image, but one which must NOT adversely affect any historic spaces and buildings.

There are proposals in the Draft George's Quay Plan to set an axis to Tara Street from College Green via Hawkins Street and the general George's Quay Area.

A building height which does not compromise the roof line of Trinity College when viewed from grade within the various quadrangles and open spaces of the College.

A building height which relates to the dome of the Custom House, but does not overwhelm or juxtapose with the dome when the two buildings are viewed from the rear of the Custom House at street level.

A building height which enhances and pulls together the array of new and older taller buildings which presently exist adjacent to the site. The new station building serves to unify the new developments to the east of the station (having a similar height to the adjacent George's Quay Building) and the collection of older medium rise office developments to the west of the Railway as well as Liberty Hall to the north to create an ordered cluster of higher density buildings around this most important transport access into the city centre.