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The Need for Vision: Tall Buildings in Dublin

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Biography

Brian Duffy qualified from Queens University Belfast, Northern Ireland, before moving to Hong Kong in 1993 where he joined Liang Wong Kou & Partners. Working on large scale developments, including several major master plans and high rise developments, he developed an avid interest in tall buildings. In 1995 he moved to Japan where he joined the Itsuko Hasegawa Atelier in Tokyo. Later he studied in The Bartlett in London where he specialised in Responsive Environments (i.e. “smart buildings”). In 1997 he joined Wilkinson Eyre Architects in London where he worked on transportation projects, innovative bridge designs and museum projects.

Returning to Ireland in 2000, Brian joined Traynor O'Toole Architects where he led the design of Beacon Court, a major mixed use project in Dublin. He was seconded to Nicholas Grimshaw & Ptns London in a joint venture to complete a 90 acre Business Park. Since 2005 he has been leading the Sandyford Gateway project, a major mixed use scheme comprising a series of tall buildings on the fringe of Dublin City. Currently, Brian is Associate in charge of a series of major banking headquarters in Dublin City centre which includes proposals for a landmark tower on the city's riverfront.

The Need for Vision: Tall Buildings in Dublin

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Abstract

The Celtic Tiger economy in Ireland has dramatically changed the substance of life in Ireland within a very short space of time. Whilst the infrastructure has struggled to keep up, the urban realm has begun the process of rapidly transforming Dublin from a low rise city of urban sprawl, to a densely woven contemporary modern environment. The appetite to build tall is tempered by an apprehensive planning policy, that reflects the cautious mood of the general public. Such apprehension restricts the possibility of creating an of-its-time City that meets its demands sustainably, whilst fulfilling its high aspirations.

The paper examines planning policies and how Dublin architects have pursued tall buildings, most typically in the city centre. This is then contrasted with an alternative approach on the edge of the city, where one major landowner and design team have proposed an entire masterplanning vision, premised on the inclusion of tall buildings. This untypical approach yields notable success and, in doing so, highlights the need for a more proactive and interactive approach to tall building strategic planning on behalf of architects, developers and planners alike.

Keywords: Tall buildings, Urbanism, Landmarks, Clusters, Masterplan

Ireland's Growth: The Celtic Tiger

Until the 20th century, Ireland had existed as an island on the fringe of Europe. Essentially an agricultural community, the impoverished country was bereft with emigration since a devastating famine in 1847. Ireland's dynamic rise, from agricultural society and third world economy, to first world economic status has occurred recently in a very short space of time.

Over the last 25 years, shrewd manoeuvres by governments included optimising EU funding and offering one of Europe's lowest corporation taxes. This attracted foreign investment provided much needed new jobs and upgraded employment from cheap labour to highly skilled innovation.

Toward the end of the 90's, long term problems with unemployment were overcome and Ireland began to enjoy a reverse in migration. The return of Irish people from across the world enriched a country acquiring the taste for modern culture, telecommunications, individual expression, and success on the world stage.

Prosperity arrived. Ireland emerged as a dynamic and fresh economy, the fastest growing in Europe. The success of the so called Celtic Tiger (economy) was often represented by the media using the culturally symbolic iconography of rock heroes U2 and impressive dance troupe that took the world by storm, Riverdance. They captured the mood: Confident, dynamic and expressive.

Artistically this was captured in the highly engineered Spire (Fig.1) by Ian Ritchie Architects. Located on O'Connell Street, the civic heart of Dublin,

this 120m symbol clearly expressed the upward aspiration.



Figure 1. The Spire: Symbol of Aspiration in heart of Dublin (Googleimages)

The Urban Context

The economic boom saw dramatic changes in the built environment. The need to meet the demands of the commercial office market resulted in construction of numerous new office buildings until 2002.

The existing residential stock was unable to address the needs of a predominantly young population.

Furthermore, unemployment was at an all time low and foreign workers from all over Europe began to arrive in Ireland in large numbers. Such increased demands on the residential supply resulted in need for a major shift from low rise housing to multi-floor apartment living. Another property boom ensued.

Dublin, being the capital city, singly consumed most of the commercial and residential demands. Land prices soared with the value of development sites often surpassing those in London and New York. Suddenly, building higher was, financially, a very viable option. Ireland is predominantly a low rise country. Towns tend to exist at 4 storeys whilst a modest part of central Dublin has 6–8 storeys height. Apartment living is a new phenomena. Unlike its European counterparts, Dublin does not have a history of apartment living. Simply not having a garden would be challenging to many who had grown up in houses. The popular consciousness is only learning about the concept.

With current predictions indicating that Dublin's population (approximately 1.5 million) will double in the next 20 years, building taller is relevant for sustainability.

Effects of Growth on Urbanism

Within the last 10 years it has often been said that Ireland is a first world economy with a third world transport system. Within Dublin, there are few train networks and no underground / metro. The aged road network in the city centre, together with the arterial bus routes, frequently get clogged and movement is slow.

The absence of sufficient infrastructure results in too many people having to commute to work by car. Growth has happened so quickly that the long term nature of infrastructural development lags behind.

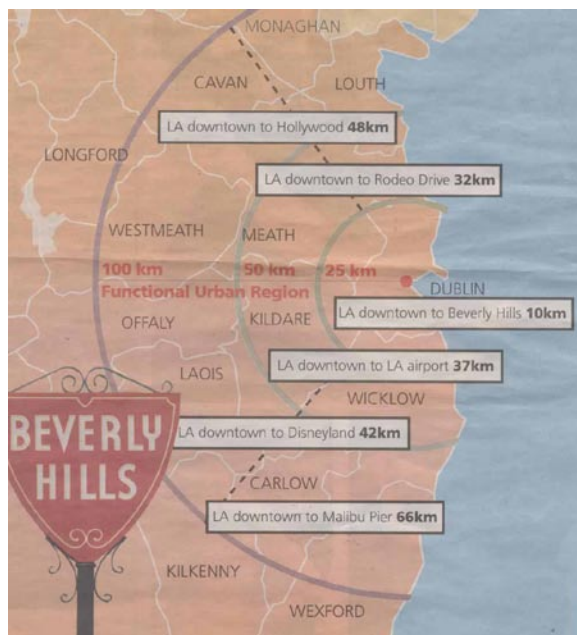


Figure 2. Growth of Dublin's urban region compared with Los Angeles (Irish Independent 14 Feb 2007, p4)

The proliferation of 2 storey housing and low rise developments over the last 30 years has seen Dublin's urban and suburban land sprawl for miles. The Dublin commuter belt has increased from 25km to 100km in recent years. (Fig 2)

Not only is commuting a lifestyle obstacle but it is a major undesirable in the light of current sustainability issues. CO2 emissions and the carbon footprint of Dubliners are impacted directly by the proximity of locations (for work, living and leisure) and their associated densities.

In 2004 the first route of new LUAS tram network opened, signalling the beginning of the city's infrastructural modernisation.

Aspirations

Despite the teething pains of such unprecedented economic growth, the new found wealth in Ireland has caused people to fundamentally raise their aspirations. It was as if, for the first time in history, Irish people could dream.

A desire existed for a new urban lifestyle. Places to live and work would need to be of quality and be meaningful too.

Profits that had been gained by developers in the late 90's were to be reinvested in new projects in the early years of the new millennium. The potential for developers hunger to be fulfilled now existed. A thriving economy with a young population requiring new residential accommodation, new workplaces, new retail / commercial provision set the stage for a new urban realm.

Dublin's Tall Building & Intensification Strategy

Intensification within the city and building tall was a natural consequence. Planners were faced with the challenge of addressing the urban realm issues with some urgency. In 2000 a tall buildings study for Dublin was completed by DEGW and its results publicised within:

"A Strategy for Dublin Building Height: Managing Intensification and Change"

Broadly speaking the report strove to:

- Select areas of the city for change
- Set appropriate control frameworks within those areas
- Stimulate usage patterns by:
 - Intensifying use in existing activity clusters
 - Creating new activity clusters around proposed transport nodes
- Support design quality and promote innovation
- Investigate the city wide and local impacts of landmark and tall buildings on their surroundings
- Within existing character areas allow for carefully considered higher buildings to create diversity, provide identity and improve legibility
- Evaluate skyline impact and urban form

Perceptions & Preconceptions

Generally there has been a negative public response to the suggestion of tall buildings for these key reasons:

- Dublin should remain as a low rise city
- Building heights and massing should be controlled to keep traditional character
- Ireland's key high rise precedent, Ballymun towers built during 1960s, are generally viewed as a failure
- Any tall buildings should be located away from the city centre
- Insufficient integrated public transport relevant to scale
- Microclimate issues (overshadowing, wind)
- Little tangible contribution to the community
- Demand appears to be developer inspired
- Expectation that developers will not pay for high quality
- Association with unwanted corporate globalisation
- Tall building objectives such as image, intense land use & sustainability can be met by mid rise groundscrapers
- Claims that tall buildings are not environmentally sustainable

In addressing concerns, reasons supporting tall buildings include:

- Dublin's urban sprawl has been ineffective and there is a need for intensification of land use
- Integration with transportation can result in high efficiency and consolidation of services
- Dublin has not had an architecturally rich history when compared with its European capital counterparts. Its building stock worthy of retention is modest.
- The failure of Ballymun rests with government / planning policy that resulted in a concentration of a single socio-economic group without necessary community support facilities
- Tall buildings can create citywide landmarks and create clear urban legibility
- Tall buildings can present a modern city image and enable businesses to compete globally by providing high quality commercial environments
- Confidence and uniqueness of the Irish economy should be reflected in its buildings (Barcelona and Manchester are often cited as comparable cities that have positively embraced the introduction of tall buildings)
- Potential for mixed uses accessible to both public and semi-public at ground and sky level (and other levels) offer a unique experience of versatility within the city
- Provision of residential environments within the city to meet demands of the younger population
- Economic demands within the commercial marketplace can be met

Identification of appropriate locations in Dublin

The study identified zones within Dublin as potential locations for tall buildings. (Fig 3)

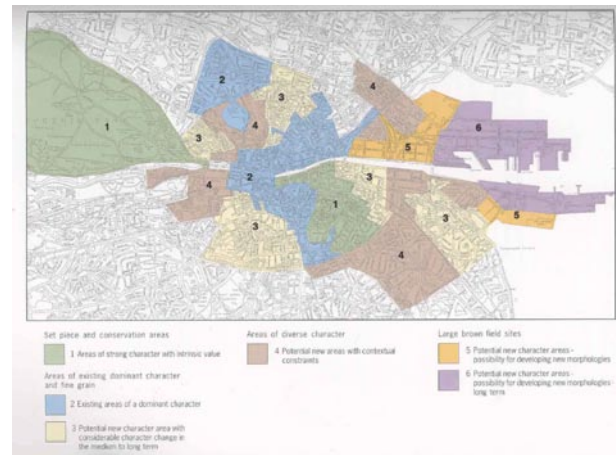


Figure 3. Zoning in Dublin for potential Tall Buildings/ Intensification (DEGW : A Strategy for Dublin Building Height, p35)

Areas of existing character (Areas 1, 2 & 3):

Areas effectively restricted in potential for change in the interests of preserving character and historic value.

Areas of Diverse character open to considerable change (Area 4)

Buildings of 40–50m can be considered in context if carefully designed

- Diversity in heights important
- Regulations to be determined on a site by site basis
- Employment of density and skyline guidelines

Large brownfield sites (Areas 5 & 6)

Areas with most potential for tall buildings and associated new typologies. Predominantly located in the Docklands and to further east of city

Future development to be dictated by:

- Timescale
- Size of sites
- Proximity to public transport
- Intensification related to infrastructure
- Mixed use
- Range of base heights with potential for high clusters

However, restrictive and prescriptive points included:

- North docklands 4-9 storeys (plot ratio 2.5 to 3.5: 1)
- South Docklands 2-15 storeys (40 – 50m heights)
- Height controls to be based on a site by site basis to ensure critical city views maintained
- Regulation of skyline of any high cluster by:
 - grading from high point to edges
 - achieving a distinguishable character (visually)
 - acceptable microclimatic conditions

Aesthetic adjudication is based on:

- Location
- Visual impact to context
- Sightlines & key views
- Building form & proportion

Definition of “tall”:

- Low rise 15m (4 storeys)
- Mid rise 50m 12 storeys)
- High rise 150m
- Super high rise above 150m

The areas most capable of locating tall buildings were generally restricted by a low plot ratio and low building height, effectively prohibiting tall buildings.

Clusters or Landmarks

In Dublin a key strategic conversation is whether or not to complete single tall buildings as landmarks, or clusters. (Fig.4)



Figure 4. Dublin with series of Landmarks or a single central Cluster (DEGW: A Strategy for Dublin Building Height, p54)

Landmarks

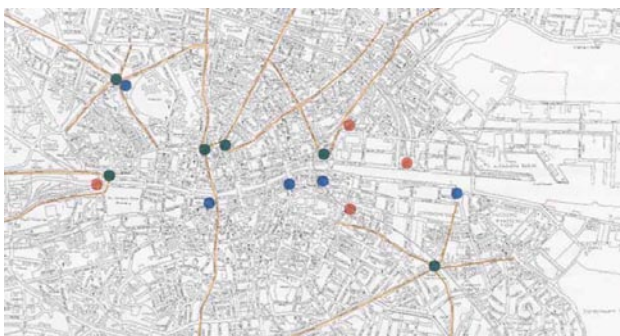


Figure 5. Proposed Landmarks building locations in Central Dublin (DEGW : A Strategy for Dublin Building Height, p58)

A single landmark building can have lesser impact with regard to integration. Therefore the need for landmark buildings is identified with city branding and strategic marketing.

The number of landmark buildings is considered crucial in relation to maintaining their city function and integrity of the skyline. Landmark location to be founded on:

- City wide viewing corridors or panoramas
- Key city road structure focal points
- Primary transport nodes

Several specific locations were identified (Fig. 5):

Clusters

A cluster has the advantage of increasing density, whereas the landmark towers have negligible effect on density.

Furthermore, clusters tend to generate their own environment and sense of place which requires careful integration with any surrounding environment.

High clusters need robust infrastructural access. The requirement for clusters is driven by the market economy. Cluster location is founded upon:

- Public transport within very close proximity
- Available development plots of sufficiently large scale
- Any new high activity area must not compromise performance of existing activity zone

The extent of the cluster is mainly premised on market potential /demand for large development quanta. The ability to sustain the development must adhere to good urban design principles regarding public open space, accessibility, ground floor usage, scale, legibility, and microclimatic factors

A balance between public, semi public and private realms should be met. Private (developers) gain might be somewhat offset against public amenity in interests of the wider community

There can be all round benefits in landowners and investors joining together to prepare development strategies.

3 key clusters were identified (Fig. 6):

- Heuston Station
- Spencer Dock
- Grand Canal Dock

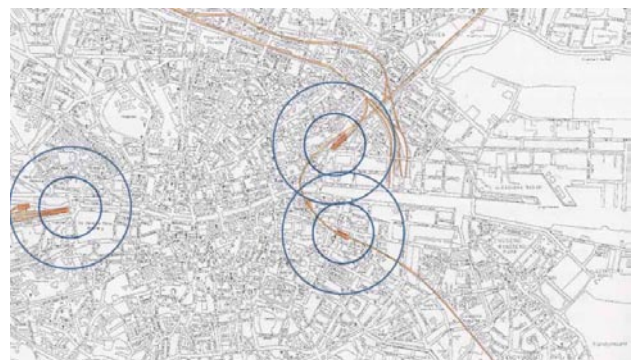


Figure 6. Proposed 3 no. Cluster locations in Central Dublin (DEGW : A Strategy for Dublin Building Height, p58)

Recent Developments

Having publicised the Strategy for Dublin Building Height report, how and, to what extent, have the planning authority implemented their thinking?

Until recently the tallest building in Dublin was Liberty Hall (Fig. 7). Standing at 17 storeys and 58m high, this 1960s-constructed building is Dublin's only claim to a "tall building" ("tall" being relative to context).



Figure 7. Liberty Hall: Central Dublin's first "tower" in 1970s (Googleimages)

Few tall building proposals have been completed beyond Dublin. Developers are very keen to invest in building tall but are generally on the receiving end of adverse reaction from a parochial public often unaccustomed to buildings no higher than 8 storeys. (Fig. 8) Apart from occasional press articles, there has been very little critical analysis of tall buildings in Ireland. Very little written documentation is available about a topic worthy of much more discussion and exploration.



Figure 8. Media coverage of 12 storey building 30 miles from Dublin (Drogheda Leader 26 September 2007, p1)

However, the market demand for taller buildings does exist. For many years Traynor O'Toole Architects have been pursuing tall buildings in Ireland. (Fig. 9)



Figure 9. Traynor O'Toole proposal for 20 storey tower in Limerick (Traynor O'Toole Architects)

In 2004 Traynor O'Toole received planning permission for a 14 storey hotel that would be perceived as a "tower" at Clonsillaugh, on the edge of Dublin (Fig. 10).



Figure 10. Traynor O'Toole proposal for 14 storey tower at city fringe (Traynor O'Toole Architects)

It is reasonable to expect the majority of tall building efforts in Ireland to be Dublin centric. With Dublin's cosmopolitan culture, the mental shift from low rise to high is more likely to be achieved in the nation's capital.

Efforts to introduce tall buildings have been focused on several key city sites:

The Point

Regeneration to the aged Docklands on the site of the Point Theatre, north of the river, will introduce the Point Tower. (Fig. 11) This 32 storey high mixed use tower, with apartments, offices and roof-top bar, designed by Scott Tallon Walker Architects, will provide a pinnacle at the at the mouth of the Dublin's River Liffey.



Figure 11. The Point Tower at eastern end of North Docklands (Googleimages)

U2 Tower

A corresponding site for another tower was identified in Docklands on the South Quay. The intention was to use the Point Tower on the north and a new tower on the south to establish a “Gateway” at mouth of the estuary.

The building is associated with U2 due to their private investment in the development, which will house their studios. There is much political and cultural significance due to the world fame associated with the band.

A design competition for the project yielded a very notable twisting tower design at 130m by Burdon Craig Dunne Henry Architects. (Fig. 12) This design has since been superseded by a proposal by Foster & Partners.



Figure 12. Proposed U2 Tower in Dublin's South Docklands (Googleimages)

The positive association with U2's worldwide success, as Ireland's greatest export, will hopefully draw a positive public response towards this tall building.

Sir John Roberson's Quay – South Docklands

Directly adjacent to the site of the proposed U2 Tower, planning permission exists for a 100m tower amid a mixed use scheme consisting of offices, retail and 230 apartments by O'Muire Smyth Architects. (Fig. 13)



Figure 13. Proposed mixed use development at South Docklands (Googleimages)

Although permission exists for this development, the planning authority appears to favour the U2 Tower as being the singular landmark in this area. A planning strategy that attempts to preserve the iconic nature of the U2 tower by discouraging development of adjacent tall buildings must be called into question.

The South Quays is one of the few key opportunity districts suited to tall buildings development, and was identified as such in DEG's tall building report ¹. In holding such a narrow view, both economic and sustainable development are inhibited. One could argue that the planners are not prepared to take on the real challenge of 'getting their teeth into' the design of tall building environments. The response appears to be one of blinkered inactivity instead of opportunistic creativity.

Heuston Gateway

To the west of the city at Heuston, Dublin's key infrastructural route to the west of Ireland, a 134m office building has been granted planning approval. The highly legible design of Heuston Gateway (Fig 14), by Paul Keogh Architects, is conceived as a Gateway to Dublin from the West. Like the Point Tower, Heuston Gateway exists at the fringe of the city, suggesting that the planners are initially testing the proverbial public water by introducing tall buildings at the city's fringe; A safer option than taking on the design challenge of addressing the city centre.



Figure 14. Heuston Gateway on Dublin's western edge at 134m (Googleimages)

Digital Hub

Located in the heart of Dublin's Liberties, a contextually sensitive city centre area and renowned home of Guinness brewery, the Digital Hub Tower was unsuccessful in gaining planning permission in 2006. The 49 storey office tower (Fig. 15), by de Blacam & Meagher Architects, rises to its capping helipad at 171m within a mixed commercial, residential and leisure development. It demonstrates the appetite of Irish developers to construct tall buildings and exemplifies their willingness to offer high quality design to the civic realm. The media dubbed it "Mini Manhattan". The massing and proportioning of the tower was elegant and refined. However, such height in such a location appears to have been too much for the planners to swallow.



Figure 15. Digital Hub Tower at 171m. Refused planning permission (Irish Times: 20 July 2006, p9)

Case Study 1: North Wall Quay – North Docklands

The North Docklands had been selected as a location for "Potential New Character Area", with the inference that tall buildings might possibly be located

there. A very stringent planning policy for the Docklands has restricted building heights to no more than 8 storeys. The resultant effect is a mundane and monotonous skyline.

However, it is envisaged that the next development plan for the area will lift this blanket policy and allow a variation in buildings heights, in the interests of visual diversification along the very linear waterfront.

Recent market demands however, have attracted major commercial companies to the waterfront with requirements for up to 0.5million sqft within individual buildings. These users expect state of the art commercial office space that will expound their corporate identity, not only along a Dublin waterfront but on a world stage.

Traynor O'Toole Architects in collaboration with Wilkinson Eyre Architects completed a design proposal for a 400,000 sqft office tower (Fig. 16) on a very tight site in the heart of the Docklands, close to the city centre.



Figure 16. North Wall Quay 30 proposed storey tower at 120 metres (Traynor O'Toole Architects & Wilkinson Eyre Architects)

The crystalline form, 115m tall, utilises angular expression to subtly reflect light and anchor an iconic corporate headquarters in the heart of the city. A twisting



Figure 17. Tower has lower central atrium creating internal drama (Traynor O'Toole Architects & Wilkinson Eyre Architects)

atrium (Fig. 17), between the 2 blocks, draws light and drama into the ground floor foyer. The site plan enables a key movement pattern from the Luas. The northern half of the building relates to this key access, whilst its taller adjoining southern half addresses the river and the City.

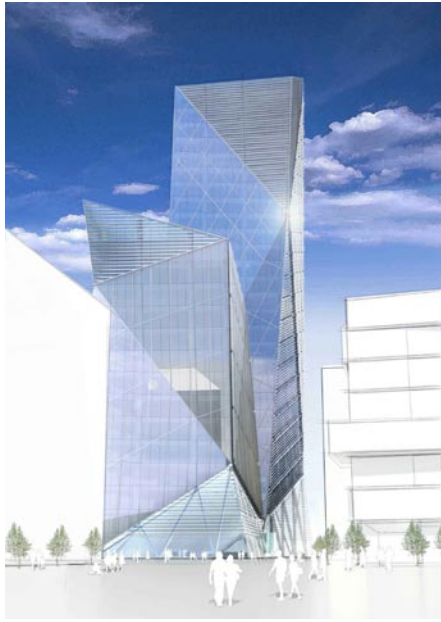


Figure 18. North & South tower elements relate to city context (Traynor O'Toole Architects & Wilkinson Eyre Architects)

The scheme is significant in that it positively suggests the potential for a cluster in the North Quays (Fig. 18).

However, the apparent planning view that the "Gateway" created by the Point Tower and U2 Tower must be singularly preserved, could be argued as being overly contrived. Its visual effect could prejudice the need to meet the demands of market forces in an area highly suitable for new typologies. (Fig. 19) The Docklands is the most developable city centre area, particularly well served by public transport. Environmentally, it is an ideal location for a long term sustainable tall building initiative. Such an important opportunity should not be missed for the sake of singular architectural statements. City masterplans, in relation to tall buildings, should be robust and versatile, not forced inhibitive urban gestures.



Figure 19. Journalistic conjecture of Dublin's Docklands cluster (Irish Times: 24 September 2005, p9)

Case Study 2: Beacon at Sandyford

Whereas strategies for tall buildings and associated intensification had undergone much consideration by

government planning departments within Dublin City centre, parallel strategies were being lead by private developers with designers in the suburban location of Sandyford in South Dublin.

Situated on the fringe of the City, at the foot of the Dublin mountains, Sandyford Industrial Estate was a sprawling 2 storey industrial area that had evolved with little to no masterplanning guidance in the 1970s.

As a result of radical intervention, Sandyford today, located on the edge of the city, embodies the spirit of enterprise in Ireland.

Sandyford Gateway at Beacon Court

In 2000 Landmark Developments set about developing their first landholding in the area. Traynor O'Toole Architects designed Beacon Court as a mixed use scheme consisting of own door offices along a glazed mall, together with clinic, hotel and a private hospital (first one in Ireland in 20years). The 5-8 storey development quickly distinguished itself with unique public realm and high quality environment.



Figure 20. Beacon South Quarter with 1.5 acre public concourse (Traynor O'Toole Architects)

By 2003, Beacon South Quarter, the second phase had begun. Traynor O'Toole Architects designed the scheme comprising a large quantum of residential, commercial and retail space, all centred around a major courtyard with Imaginosity, a Childrens Museum, at its heart. The scale of this grand public amenity space (Fig. 20), 1.5 acres in area, anchored the public realm. Together with Beacon Court, Beacon South Quarter lives and breathes like a city centre site.

A dramatically more significant third phase, Beacon Gateway, was then pursued. In many ways this reflects the economic market that had risen in Ireland over recent years. With density of 6.9:1, unprecedented in Ireland, the scheme was initially designed with a quantum of 2.5million sqft, resulting in a tall building development.

Initial design studies included a 65 storey office building together with 25 storey high residential buildings. With only the DEGW height study ¹ for the

City Centre as precedent, the design team capped the heights at 75m.

Over the last 2 years the design evolved through several iterations in conjunction with design reviews with the planning department. The first planning application had proposed the tallest building element, (Fig. 21), offset from the proposed grand Boulevard whilst a lower Gateway building terminated the Boulevard.



Figure 21. Sandyford Gateway: 20 storey Offices with skygarden (Traynor O'Toole Architects)

A revised proposal (Fig. 22) established the Gateway building as a tower, at the pinnacle of the Boulevard. Essentially a residential building, it also accommodates cultural mixed use functions at lower levels with a double height 19th floor Skygarden. The elegant archway dramatically overlooks a 0.75 acre piazza. (Fig. 23)



Figure 22. Proposed Sandyford Gateway at Beacon Court (Traynor O'Toole Architects)

The local planning authority was reluctant to issue permission until a Tall Buildings Study was carried out for the area. The situation highlights the sensitivity that exists in Ireland towards taller buildings.



Figure 23. Beacon Gateway 23 storeys at end of grand Boulevard (Traynor O'Toole Architects)

The developer, Landmark Developments, conceived the Gateway project as being the pinnacle of an entire “urban quarter”, which incorporated all of their land holdings within Sandyford. They embarked on a radical approach by initiating a major masterplan, extending far beyond the confines of their own lands, to incorporate the entire Sandyford district. This “Vision for Sandyford” (Fig. 24) saw a collaboration of Traynor O'Toole Architects with Terry Farrell Architects and ThinkPlace. It established a major urban planning framework to transform Sandyford from industrial estate into a place; A large community based around the themes of public transport, public spaces, amenities, legibility, identity and sense of place.



Figure 24. Model of the Vision for Sandyford (Traynor O'Toole Architects, Terry Farrell Architects, ThinkPlace)

Having proposed a high density district, a Tall Buildings Justification report ² was completed by ThinkPlace (with Traynor O'Toole) arguing for tall buildings in Sandyford:

Sandyford is:

- A place for much needed homes
- Connected by Luas , buses, roads (existing & future)
- Large enough to be developed sensibly
- In need of regeneration
- A great location to live (based on apartment demands)
- An economic success of modern Ireland.
- A changing place with established mixture of uses

Sandyford is NOT:

- An existing community to be spoiled by tall buildings
- Located amid existing homes or sensitive historic sites
- Remote from public transport and main road
- Oversupplied with apartments
- Distinctive: Needs to reflect its economic success
- Precious: Tall buildings will not be detrimental
- Fulfilling its potential as an exemplar of a high density, public transport orientated community

The planners effectively endorsed the Tall Buildings Justification when they published the Building Height Study for Sandyford, completed by Urban Initiatives. The privately developed Vision for Sandyford was then also endorsed by the planning authority in their 2007 Framework Plan. It effectively adopted the masterplan of the Vision and set out locations and parameters for the development of tall buildings in this uniquely dynamic district on the fringe of the City.

Conclusion

It is critical that the designers, developers and planners in Dublin take on the challenges of tall building environments directly, in the interest of sustainability, economic development and future proofing the City. Such a process appears to be most achievable by positive interaction, enabling these parties to collectively explore the possibilities with creative energy, exchanging ideas. Such collective interaction must be coupled with radical thought, to achieve solutions to urban complexities that are now shared worldwide. Within Dublin lies the potential to establish a contemporary cityscape permeated by sustainability, expression and community.

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