

grangegorman

an urban quarter with an open future

masterplan and masterplan design guidelines









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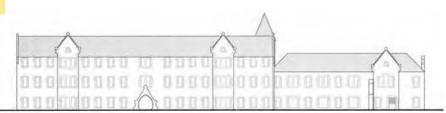
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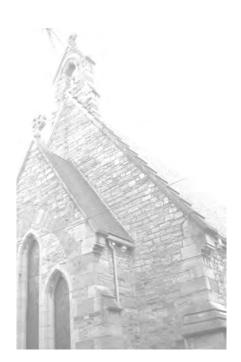
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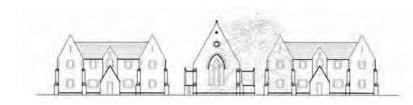


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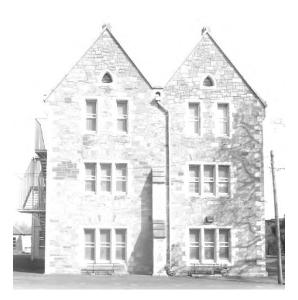
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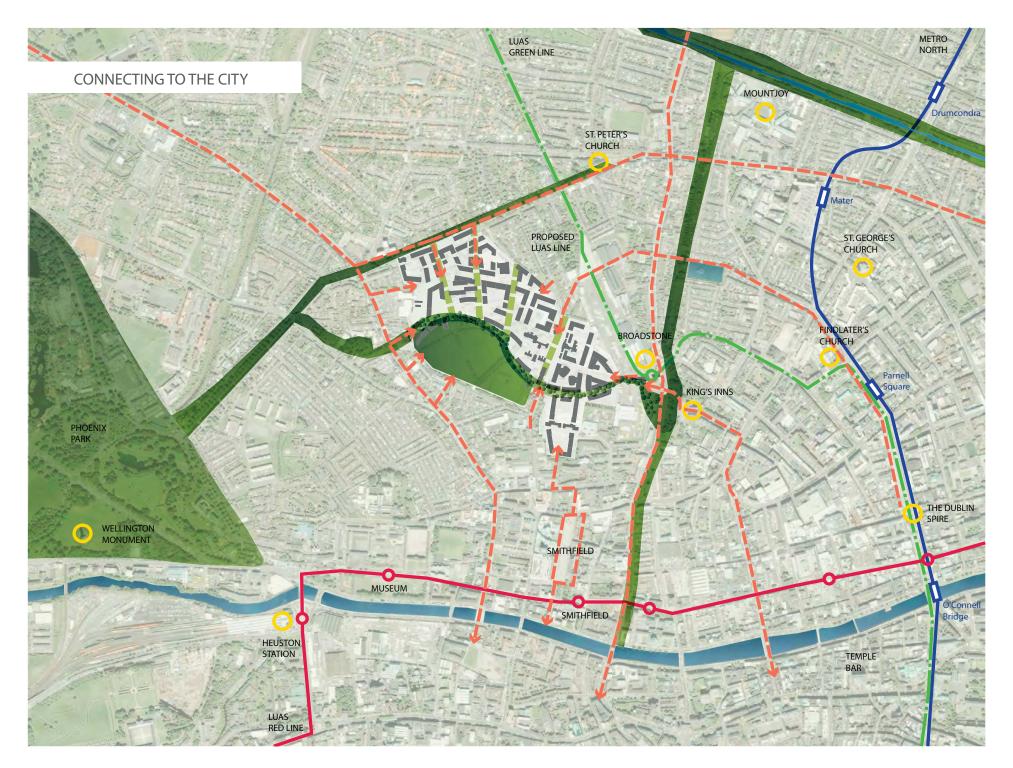
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An Urban Quarter with an Open Future

The information that follows comprises the Masterplan and Masterplan Design Guidelines for the Grangegorman Site. It is the culmination of the Design Team's work with consultation from user groups, governmental agencies and members of the community as well as review and approval from the Grangegorman Development Agency, (GDA). It was produced and reviewed during the design process from January 2008 until September 2008.

The Grangegorman Masterplan addresses the adjacent Broadstone site and neighbourhoods and in the process establishes a new city quarter framing a mix of public and institutional uses with a lively repertoire of urban places. The core property itself offers a flexible matrix of buildings and landscape, while preserving and enhancing the unique open spaces and historic resources of the site to benefit the Dublin Institute of Technology (DIT), the Health Services Executive (HSE), and the greater City community.

A memorable network of pedestrian paths weaves the new Quarter together with the City around it, creating a vital nexus of community within a "walkable" district. This weaving occurs in social and academic realms, in space and time, in historic and contemporary forms, and in the balance between buildings and landscape.

The Quarter as a whole enjoys a remarkable quality of geographic position and orientation within Dublin City. This masterplan for the Grangegorman site enhances this larger sense of place, taking advantage of the topographic character of the site to frame southerly views to the City skyline and to the Dublin Mountains.

DIT's principal academic and support services activities and HSE's main areas of service enjoy identity of place as well as beneficial adjacencies within the district Plan. New buildings are free to express the diversity of uses within a harmonious urban fabric.

The Primary School is located at a site boundary point that provides easy access to the residential street network. The Community Library is co-located with the DIT Library to produce a synergistic link between community library services and a specialist third level library, while promoting access and participation to higher education.

Student residences and social life are gathered along a major east-west urban procession, linking academic centres, recreation/sports facilities, and the public realm, and making the entire Quarter a place of vibrant activity.

Buildings support a clear definition of the street-quad-court structure of the Quarter, producing a legible pattern that enriches formal and informal sequences of movement. Buildings enclose a variety of internal gardens and sky-lit atria, giving the district a collection of distinct, discoverable places.

Two major activity centres—Upper Terrace at the Library and the Arts Centre / Student Hub—anchor a broad spectrum of social gathering places. Opportunities for social interaction occur at multiple scales: from grand places of arrival and movement, to streets and gardens, to cafés and amenities, to shared lounges and balconies within residential communities.

The urban transformation of the Grangegorman site extends into and through adjacent neighbourhoods, creating potential Gateway entrances at the North Circular Road, Prussia Street, Grangegorman Road Upper and Lower, and across the new Broadstone Development to Constitution Hill and Phibsborough Road. Stations for Dublin bus services and the future LUAS Green Line are incorporated, connecting the Quarter to Dublin's metropolitan transit systems.

introduction





University of Cincinnati Student Life Center, Moore Ruble Yudell Architects and Planners



Reopening Grangegorman: a New Urban Quarter

The transformation of Grangegorman's closed compound into an integral part of the life of the City is one of Grangegorman Development Agency's highest goals. The proposed Masterplan envisions this new district—including any future Broadstone Development—as a primarily pedestrian precinct that is carefully served by public transit, surrounding streets, and an internal vehicular service network. Key features of the plan are access and options: many ways in and many ways through.

Mixed use also provides continuity, as activities that serve both student life and the public are layered through the academic core of the district. To the east, alongside Broadstone, the cultural offerings of the Arts Centre draw public participation. At the centre and west side of the campus, and closer to HSE's public services, recreational facilities and open space encourage community as well as student use. At major gateways, such as The North Circular Gate and Broadstone Gate, commercial and academic uses are overlaid.

Reaching Out: Linking the Urban Context

The project is a major opportunity to enhance Dublin's north inner city urban quality. The Masterplan connects existing urban landscape and introduces new resources north of the Liffey.

The Masterplan proposes an urban plaza and park at the Broadstone entry to the Quarter, extending the green space adjacent to Kings' Inns to form a symbolic and civic marker. The site, being raised up, acts as a natural viewing area of Dublin's urban fabric. The experience of driving or walking along Constitution Hill, from or to the City Centre, is now marked by a prominent open space that echoes Dubliners' experience of the Phoenix Park and of the green squares which dot the City.

To the north, this new urban park reinforces the existing greenbelt pathway along Royal Canal Bank, past Blessington Street Basin, to connect with the Royal Canal at Mountjoy. To the east, across Constitution Hill, the plaza is aligned with the pedestrian entry to the King's Inns to reinforce the urban connection to Henrietta Street and to the Liffey beyond. To the west, this link continues from the urban park through the site to connect with the North Circular Road via a potential access point at Prussia Street, and extends through to the Phoenix Park. To the south, the Lower Grangegorman Gate opens pedestrian access to and from Smithfield extending the existing City Arts' activities northward.

The entry plaza at the Broadstone Development's proposed LUAS station is configured to reinforce the pedestrian sequence into the urban spaces of the

Connecting the District: the Pedestrian Experience

To enhance the pedestrian realm, the Masterplan reasserts the continuity of the Grangegorman district. The east/west division of the site by the Grangegorman Upper and Lower Road is mediated by carrying a principal pedestrian sequence—St. Brendan's Way—across the existing roadway. This broad crossing also serves to closely unite existing buildings on the Record of Protected Structures into a central village of academic and student life. Access to limited areas of car parking is provided below the new terrace from Upper Grangegorman Road and from North Circular Road and Constitution Hill.

St. Brendan's Way crosses the entire Quarter, giving public and student access to a series of academic and cultural centres, and is continuously activated by student residence halls, amenities and social spaces. As a pedestrian street, St. Brendan's Way features a rich sequence of distinct spaces, opening and closing, with paved and landscaped surfaces, activated day/night uses, and a variety of building edges and profiles.

The urban quality of St. Brendan's Way is complemented by a second lateral procession—Serpentine Walk—a meandering walk that traverses the site in two grand arcs, giving a south-facing green edge to student residence halls. This "green procession" continues a linear landscape sequence that begins to the east with Royal Canal Bank and culminates in the district's main sports and recreation park—The Fields.

These main east-west passages are crossed and extended by frequent fingers of north-south oriented green streets and sequences of courts, forming a loose, continuous grid of communication in the Quarter. Smaller meandering paths move at mid-block/mid-court intervals to trace intimate connections between outdoor rooms and gardens.

Gateway and Identity

Main gateway entrances offer front doors to the Quarter from surrounding streets. The North Circular Gate lies adjacent to a bus stop and provides an address for DIT and HSE. West Gate, a potential access point from Prussia Street, is coupled with a proposed commercial court and visually linked to the Church of The Holy Family. Broadstone Gate to the east offers entry from Phibsborough Road, Broadstone, the future Broadstone Station of the LUAS Line, and the re-established open park of Broadstone Green, across from the King's Inns. In addition, Upper and Lower Grangegorman Gates, which bookend Grangegorman Upper and Lower Road, provide gateways close to the centre. The design of these pedestrian and vehicular thresholds makes use of the existing stone walls, historic iron gates and contemporary markers where appropriate.

The Academic/Health Heart: Upper Terrace

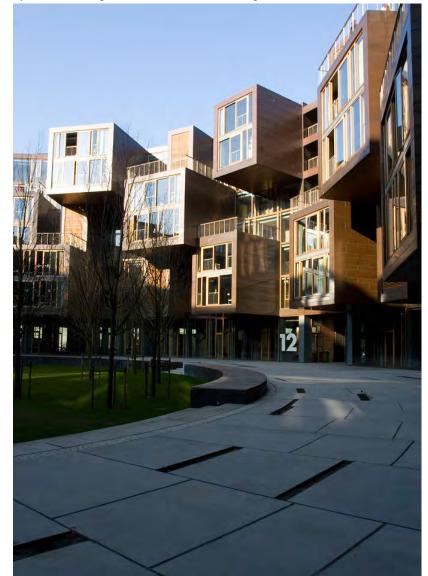
At the academic core of the DIT Campus, Upper Terrace poses a dramatic belvedere looking south across The Fields. The Library's information/study/ resource centre incorporates the historic Top House in a careful three-part composition of atria, courtyards, and new spaces, poised above the open green. The Upper Terrace provides a natural viewing platform for games and daily student life with the grand backdrop of the Dublin skyline and Mountains.

From the Upper Terrace down to The Fields, a tiered stairway/ amphitheatre offers a venue for a variety of large-scale events, as well as a social 'suncatcher' in fair weather.

Symbolically, the Upper Terrace and The Fields juxtapose the values of Knowledge and Action—the mutual benefits of scholarship, fellowship, and competitive achievement—which shine through DIT's brief as central aspirations for this new Campus. Important campus buildings and uses are assembled in and around Upper Terrace, including the main library, lecture halls, faculty club, student centres, and administrative offices. This academic centre for DIT in turn has a strong connection via a major green pedestrian path to the health plaza immediately to the north at Library Square—the two linked centres thereby creating an overall "Academic/Health Heart" for the entire Grangegorman Quarter.



University of California San Diego Cellular and Molecular Medicine building, Moore Ruble Yudell Architects and Pla



Titgen Student Housing, Denmark, Lundgaard & Tranberg Architects

The Arts Centre: Inviting Campus and Community

At the eastern edge of the Quarter, Broadstone Gate leads quickly from Broadstone Place to a second focal point for the Quarter—the "Social/ Cultural Heart"—where district and community life come together: the vibrant Arts Centre. Here a small piazza is framed by a pair of semi-enclosed wintergarden spaces—a café and restaurant with sheltered, indoor/outdoor dining to the north and a grand, weather-protected court of performance and exhibition halls to the south. The Arts Centre combines these popular venues with spaces for the Applied Arts and the Built Environment, allowing a broad range of public and pedagogical uses.

New Centres for Interactive Learning and Research

This Masterplan seeks to create modern, innovative facilities for both DIT and HSE, with a flexible, sustainable fabric of modular buildings. In a contemporary interpretation of traditional collegiate "quads," the configuration of the buildings on the site frames a pattern of enclosed courtyards, open spaces and plazas, creating distinct forms with strong individual identities.

From a common address along the North Circular Road, clear zones are distinguished for DIT and HSE. For HSE, three "Quads" gather related facilities: a northwest grouping is devoted to administrative functions and mental health facilities; a central quad for primary community health services; and a cluster to the northeast of supported housing apartments and a nursing home gathered around the old Laundry, re-cast as a dining/activity pavilion. This arrangement reflects our team's recommendation to distribute HSE's various programmes in order to enhance beneficial adjacencies for staff, residents, users and clients, rather than aggregating all functions in a single complex.

For DIT, the urban structure of the masterplan provides for its academic and research needs while maintaining and promoting identities through physical identity and landscaped courts and squares. These academic facilities are arranged across the site in a continuous array—Business, Tourism and Food, Science, Engineering, Built Environment and Applied Arts—and are complemented by the "Academic Heart" and "Social Hub" along with training centres, research centres, incubation space and science park activities.

The creation of a single campus with a major Academic Hub, central lecture spaces, a Social Hub, Student Hub and shared laboratories and catering facilities all promote and encourage interaction amongs staff and students of

The format of buildings, and the layout of district spaces they frame, emphasizes a modular flexibility of uses. Buildings have varying heights and stories—their massing determined by the goals of optimising views, daylight exposure, and relationship to the surrounding urban fabric and community. The most public/shared educational spaces—lecture halls, classrooms, workshops and studios—at the lower floors, and faculty suites, seminar and conference facilities, and departmental administration on upper floors. Throughout the plan, covered walks, courts, and glass-roofed galleries enhance internal communication and interaction. Multi-floor atriums present attractive public areas for social interaction and promote inter-floor communication. Relatively narrow building sections enhance daylight and views for all activities, in a format that can accommodate both laboratory and classroom patterns.

The GDA's requirement for 30% expansion space for DIT is proposed to be distributed throughout the plan. This would enhance the opportunities for all departments to grow and evolve, while also allowing hybrid/interdisciplinary uses to grow up alongside existing ones.

Residence and Recreation: Student Life Along the Serpentine Walk

Two of the great benefits of DIT's relocation to Grangegorman—housing on campus and high quality recreation and athletics—are exuberantly celebrated in the Masterplan. Student residences form two great arcs—called Serpentine Walk, which begin at Broadstone Gate to the east and sweep across the campus to the potential Prussia Street West Gate to the west as a continuous ribbon of 24-hour habitation convenient to every department and academic

Having a varied, dynamic movement in heights, the student residence halls offer a range of housing formats from 6-bed and 3-bed apartments to private studio/family units. Ground level spaces for dining, social and study lounges, and related shops serve to activate the Serpentine Walk on the south side, and St. Brendan's Way on the north side. A moving skyline and frequent vertical openings and breaks allow views and sunlight to penetrate.

Recreational spaces—indoor ball courts, swimming pool, fitness rooms and Gymnasiums—are laid out alongside the north edge of The Fields, one level below the Serpentine Walk. These exercise and sports rooms relate visually to external spaces and are south-lit by the Ha-Ha—a sectional dip at the upper edge of The Fields. The Fields provide for a range of playing fields and pitches for various sporting activities. Together with social and retail amenities located immediately above, this continuous spine of activity invites daily use by residents, commuting students and the public.

Enhancing Community Infrastructure and Facilities

The Masterplan strives to strengthen connections to the surrounding community. To this end, the Grangegorman Urban Quarter provides a rich, comprehensive range of community-related amenities while optimising community access to DIT and HSE facilities. HSE services will be convenient and accessible, while residents will have shared access to the sports facilities on the DIT campus.

In addition to the new Dublin Council Branch Library and Primary School, the Quarter proposes an array of lively social gathering places at multiple scales for the community, from smaller gardens and play spaces to landscaped walks and large public plazas at the two "hearts" of the district.

Adaptive Re-use: Celebrating Cultural and Historical Resources

The plan proposes the creation of important places adjacent to and around the buildings listed on the Record of Protected Structures. The Top House retains its prominent presence as a focus of the Library at Upper Terrace. Near the southeast entry the "Cultural Garden," an axial space that looks toward the Clock Tower, flanks a central village that includes the Female House, the Male and Female Infirmaries, the Catholic Church, and the Former Penitentiary—all adapted to social activities such as the Student Union, Faculty Common, Faculty Club, and Bookstore. The Laundry Building is reused as the new Day Service Facility for HSE. The unused Church of Ireland Chapel—re-used as a Recreational Club—presides over its own significant open space with an existing grove of trees. In the southeastern portion of the site, the Former Richmond Asylum building becomes an organising element for two DIT guads bordering two generous landscaped open spaces north and south of the building. We propose moving the historical gates to the Lower Grangegorman Gate to mark the new entry to the Quarter at this location.







Urban Partnerships: Broadstone, H.A.R.P., Smithfield, and Prussia Street

For Broadstone, the Masterplan addresses the long-term possibility of an urban texture of mixed-use buildings along a grand north-south boulevard—the route of the future LUAS Green Line. The historic railway station and sheds are maintained as a central market hall and place of community, directly adjacent to the proposed LUAS station. To the south of Broadstone Place, an office complex edges Broadstone Green, possibly accommodating technology-oriented businesses in an extension of the mixed-use component of the Grangegorman Quarter.

To the south of the Arts and Built Environment Quads, a secondary entry gate links through to H.A.R.P./Smithfield and the north bank of the Liffey. The northward extension of Smithfield's urban arts district is thus carried through to the new Arts Centre, enhancing Dublin's inner city cultural resources. To the east, a series of potential, hypothetical links to Prussia Street are proposed, each creating an opportunity for new development, with pedestrian and/or vehicular breaks in Grangegorman's historic wall.

Environmental Sustainability: Flexible Fabric and Visible Systems

Sustainability for HSE and DIT involves three levels of interest: planning, design, and construction; operations and life-style; and educational outreach. The planning process development itself can begin to serve educationally by inviting discussion with users and community. The best of contemporary green building practice would be seen as a base-line for development of the Quarter. The Masterplan design can also serve to educate and encourage sustainable living by, for example, making infrastructure and natural systems visible and including experimental studies of systems within the Built Environment programme at DIT.

Beyond energy efficiency and climate responsiveness, buildings serve sustainability goals by offering lasting use—they age well. We imagine a contemporary fabric of modular, durable structures, with great attention to the quality of exterior and interior systems. The Masterplan encourages a diversity of architecture and guidelines will call for inventive use of a set of related systems and materials, giving the Quarter both visual harmony and long-term serviceability.

Grangegorman Landscape: Urban Choreography and Natural Systems

The natural heart of the Grangegorman landscape is The Fields, comprising a generous portion of the entire site. This gathering of parkland sports pitches with park-like groves of new and existing trees is framed by the Serpentine of student residence halls, and the protected wall to the south. Running and cycling paths entwine around the edges, linking the complementary qualities of sports fields, sheltering groves of trees, and distant views.

The district network of green boulevards and courtyard gardens forms a continuation of the main landscape elements of its greater North Dublin neighbourhood, such as Blessington Street park, linking the new Quarter development with its context. The primary sequences of St.Brendan's Way and Serpentine Walk feature discrete places, terraces, and gardens, each with its own individual character. These are connected to smaller "landscape fingers" characterised by sequences of dense groups of trees, which appear to be situated randomly.

Site drainage is made visible as a living ecological system, using controlled watercourses and ponds. Quads and courtyards are also seen as discrete compositions: the courtyard of Applied Arts, for example, is fed by the hydrology system, and is thus a set of pavilions in a water garden. Landscape materials are based on retaining existing significant plantings where possible, augmented by the use of native species.

Transportation and Access

The Masterplan's transportation strategy emphasizes sustainable modes of transport such as walking, cycling and public transport. The Quarter can be easily traversed in a 15-minute walk. Green Boulevards dominate the internal Quarter circulation and are designed to allow articulated paths for both pedestrians and cyclists, which will provide quality circulation environments in all seasons.

The Masterplan capitalises on the planned Luas Line D, which will connect the City Centre with the Maynooth rail line, and is likely to include a stop opposite Broadstone and another closer to North Circular Road, both of which will serve Grangegorman. The new Luas line will enable a connection to most of the Dublin-wide transport networks, including other Luas lines, suburban rail and QBC networks.

The Masterplan, via the Broadstone/Constitution Hill link, allows the projects to benefit from the proposed Metro North stops at Parnell Square and the Mater Hospital. These stops, within walking distance and also located at bus connection areas, will provide important links to the whole public transport network serving the greater Dublin area.

The provision of a bus access area as part of the Masterplan will greatly enhance the capacity and flexibility of the existing bus network, which already serves the periphery of the site with considerable levels of service. The conjunction of existing and future bus provision with the new Luas line, will create the conditions for the eastern access (via Broadstone) to become the main Gateway to the district.

Car access will be limited to encourage the use of sustainable transport modes, with car parking being provided at two main locations, accessed via North Circular Road and Constitution Hill/Grangegorman Road. The majority of car parking will be underground, but small numbers of surface car parking at key locations may be provided throughout.

Vehicular circulation within the site will be enabled in a manner that does not conflict with the general priority given to pedestrians and cyclists. A system of traffic cells is being designed with the flexibility of allowing through-routes at key locations that can be in place out-of-hours. Service vehicle circulation will generally be shared with pedestrians and cyclists, albeit subject to restrictions.

an urban quarter with an open future grangegorman



six themes for the city of dublin

The Dublin City Council has identified six themes which are considered important to the sustainable growth and development of the city. The Masterplan sets out a new vision for the Grangegorman site based on these six themes.

Economic Vision

The Masterplan develops Grangegorman as a vital economic resource and engine with a network of thriving spatial and sectoral clusters, a focus for educational talent and creative assets. Facilities for the Dublin Institute of Technology will be supplemented by a strong component of retail spaces, training centres, research centres, incubation spaces and science park facilities that will directly benefit the economic development of the community and greater Dublin region. This development will underpin Ireland as a knowledge economy. A strong relationship with shared facilities is envisioned between the DIT and the Health Service Executive, which will further provide and reinforce convenient and needed educational, healthcare services and related enterprise development spaces for the Grangegorman Urban Quarter and the surrounding community. Furthermore, the full development and implementation of the Masterplan will produce a thriving impact for the community, providing tremendous long-term economic opportunities in regards to employment and management of the construction and operations of the future facilities in the Urban Quarter.

Social Vision

The Masterplan design reaches out to link the site with the immediate community, as well as Dublin's greater urban context, to create an Urban Quarter that is inviting and connected to the local and larger community. The overall "Green Fingers Landscape Concept" represents an open "hand" that reaches out to draw the community into the development. The Masterplan develops Grangegorman as a compact district with a network of sustainable "quadrangles" for the Dublin Institute of Technology and the Health Services Executive, providing a range of facilities that promote social inclusion. Student residences and social life are gathered along a major east-west urban procession linking academic centres, recreation/sports facilities, and the public realm, making the entire Quarter a place of vibrant activity. The natural heart of the Grangegorman landscape is The Fields, comprising a generous portion of the entire site and providing a welcome, diverse range of sports pitches and other recreational activities. A Dublin City Council Branch Library and Primary School are included in the Masterplan in locations that easily serve the surrounding residential areas.

Cultural vision

A rich and diverse provision for cultural facilities is offered in the Grangegorman Urban Quarter, including performing art centres, exhibition spaces and theatres, to encourage activities throughout the day and evening, and promote awareness of our cultural heritage. At the eastern edge of the Quarter, the Broadstone Gate leads quickly from Broadstone Place to the Arts Centre, where district and community life come together. This is one of two "hearts" envisioned for the Urban Quarter and will accommodate arts and culture/performance spaces for the larger public community to promote lively, evening uses. The northward extension of Smithfield's urban arts district is thus carried through to the Grangegorman Quarter, enhancing Dublin's inner city cultural resources. The Performing Arts Centre includes a Concert Hall, museum and art galleries.

Urban Form and Spatial Vision

The Masterplan creates a connected and legible urban quarter based on vibrant public spaces and active streets that provide a strong sense of identity and place. An urban plaza and park is envisioned at the Broadstone entry to the Quarter, extending the green space adjacent to Kings' Inns to form a symbolic and civic marker for the entire city. To the west, this link continues through the site via the new pedestrian path, St. Brendan's Way, potentially extending through to the Phoenix Park and connecting with the North Circular Road. To the south, the Lower Grangegorman Gate opens pedestrian access to and from the Smithfield area, extending the existing City Arts' activities northward.

Movement Vision

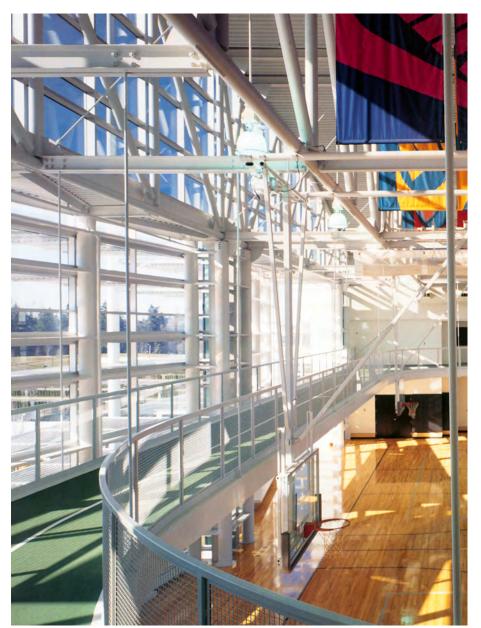
The Masterplan takes full advantage of its proximity to Dublin City Centre, where transport networks already provide high levels of service. Rather than focusing on new transport links to serve the new population on site, the main aim of the Masterplan is to enable the seamless connection to the existing and future transportation networks. The emphasis is therefore put into the design of quality linkages from the site to the established city grid. The Masterplan also contributes directly to the increase of the quality and capacity of the bus network by providing a bus access area within its boundary. Perhaps the most important improvement with regards to Grangegorman will be the extension of the LUAS network from the City Centre to the Maynooth Line, which will include stations in close vicinity of the site.

Sustainable Vision

The Masterplan for the Grangegorman Urban Quarter seeks to create an environmentally sustainable Community within its neighbourhood and Dublin, as well as a sustainable demonstration project for the world. Sustainable strategies focus on three components that underpin the success of the regeneration of Grangegorman: social well being, economic viability, and environmental benefit. Building massing and form have been developed to respond appropriately to wind and solar paths, in order to ensure maximum sunlight exposure, reduce energy consumption, and incorporate generous green spaces to provide healthy views. The project includes provision to facilitate wind sheltering/protection and solar gain, as well as passive and active measures to harvest wind and cool breezes. Sustainable drainage systems are proposed to reduce water consumption and flooding. The development strengthens the site's existing ecology and biodiversity, and incorporates sustainable urban drainage throughout the District. Rainwater will be collected as a source of grey water. The Masterplan maximises the use of recycled water while minimising the use of potable water by proposing appropriate landscape materials, and utilising sustainable urban drainage to increase ground water absorption.

The existing protected structures on the Grangegorman site will be re-used according to viable, adaptive re-use strategies that carefully consider each building's structural condition, plan configuration, and architectural character. Regarding transport systems, the Masterplan promotes travel plans and a transport policy that encourage the use of public transport and promote walking and cycling. A rich sequence of pedestrian and bicycle paths is woven into the landscaped areas, providing access to all the spaces and buildings in the District. The whole Masterplan for the Grangegorman Urban Quarter has been designed for change and flexibility so that it may be easily adapted to meeting changing needs and requirements in the future.

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Nike Corporate Campus Fitness Center, Beaverton Oregon, TVA Architects, photo: Richard Barnes; Strode Photographic LLC





architecture

Wild Basin Fitness, Peel Paulson Design Studio, photo: Paul Bardagiv

community infrastructure benefits

The following elements of the Masterplan will contribute to the benefit of the surrounding community.

Education

The proposed consolidation of the currently disparate spaces of the Dublin Institute of Technology within one campus on the Grangegorman site will bring a tremendous educational benefit to the community. DIT's goal is to create a world-class higher education campus that serves society by supporting the economic, social and cultural life of citizens and reflecting the evolving character of education. The campus will be student-centred and resourced to meet the multiple needs of the Institute's current student population of 20,500 students with the potential to accommodate a further 2,000 full time students when completed, and a further potential increase of 30% in the decade ahead. These students range from undergraduate to postgraduate, research students, full-time, part-time, apprentice students, traditional school leavers, mature students, economically disadvantaged students, students with disabilities, international students and students studying junior music.

DIT provides a comprehensive range of outreach / access programmes to the community, and many local residents will be able to have convenient access to these strong educational opportunities, as well as the recreational and sports facilities offered on the campus.

Sports and Recreation

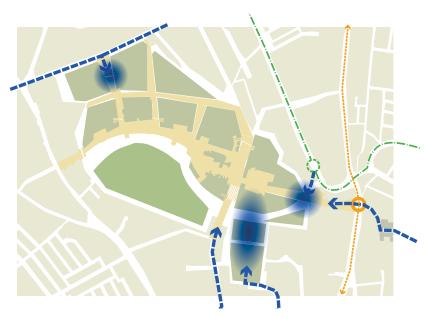
The community will have shared access to the sporting facilities being provided for DIT, including the sports fields, tennis and basketball courts, and other recreation areas in and around the open space of the Fields. This major public amenity accommodates three pitches for different sports—soccer, rugby, gaelic football, hockey, hurling—as well as informal gathering spaces. The location of the Fields on a slight rise in topography provides excellent southern sun exposure, while optimising panoramic views of the city skyline and the Dublin Mountains beyond. Jogging and walking paths weave around the sports fields.

Along the north edge of the Fields, the "Ha-Ha" landscape concept is proposed to take advantage of the natural higher slope of the site to accommodate large recreation and sports facilities underneath the plinth for the public promenade above. These sports facilities will relate visually to external spaces and include swimming pools and basketball courts. The Masterplan also provides a series of public gardens along the "green landscape fingers" of the Grangegorman Urban Quarter, including the proposed Cultural Garden facing the protected Clock Tower building.

Healthcare

A large part of the Grangegorman Urban Quarter will accommodate facilities for the HSE. These new buildings will provide convenient and needed healthcare services for the Grangegorman Urban Quarter and the surrounding community, including preventative health programmes and primary care services. Entry for the HSE will be from North Circular Road, Prussia Street and Grangegorman Road, reinforcing the interface with the community.

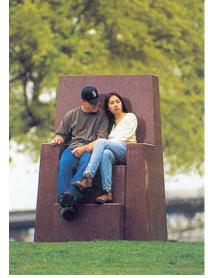














Scott Outdoor Amphitheater at Swarthmore College, Pennsylvania, Thomas Sears

Public Access and Landscaping

The Masterplan design provides strong links with the immediate community as well as Dublin's greater urban context. The "green fingers" landscape concept offers a rich sequence of pedestrian paths for the community to access the development. St. Brendan's Way and the Serpentine Walk traverse through the site to connect it with the Grand Canal north to Mountjoy, and west toward Phoenix Park. A weaving network of north-south landscaped fingers provide access from North Circular Road through the development to the large sports amenities at the Fields.

The most important public access to the Grangegorman Urban Quarter is envisioned via the proposed future Broadstone Gate, extending directly beyond to Constitution Hill, Phibsborough Road, the King's Inns and Henrietta Street, and south to the city centre. Public access at Broadstone Gate will be reinforced by the new LUAS station in front of Broadstone Terminal, while a second LUAS station at North Circular Road will improve public access at that location. Additional main public access routes are at North Circular Road and along Grangegorman Road and to the immediate south via Smithfield. Secondary, potential access points may be established along Prussia Street on the west side. The major urban path through the site is provided via the east-west St. Brendan's Way, from Broadstone Gate, through the middle of the Grangegorman Quarter.

A series of lively social gathering spaces are planned throughout the site. Major public gathering spaces include the Library Square adjacent to the new DCC library, DIT's Upper Terrace (the Quarter's "academic heart"), the Arts Centre (the "social heart" of the district), and The Fields. Secondary gathering spaces are attached to the main pedestrian path from the north-east along the canal, through Broadstone Gate, and possibly connecting to Prussia Street to the west.

A strong pedestrian circulation network weaves through the site - both major landscape fingers as well as secondary crossing paths through building atria and lobbies.

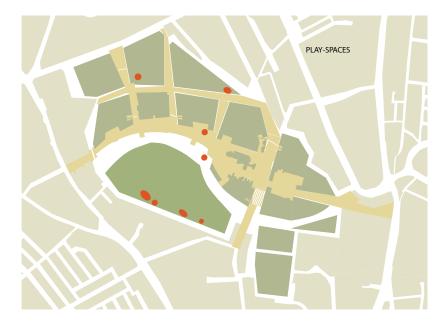
Playgrounds

An array of play facilities will be provided throughout the Grangegorman Urban Quarter. The variety of locations identified as suitable include a school playground accommodated around the primary school at the junction of Grangegorman Upper, Rathdown and Ivy Avenue. Play spaces are provided in the "woodland" areas of the Fields, and an exercise trail/jogging path around the Fields, as well as in pocket parks in the other areas of the district. Play equipment for kids of different ages will vary in character—from natural to more modern in character. In addition, other playspaces are planned near and adjacent to circulation paths, arrayed in various locations around the DIT and HSE areas. Sculpture, landscape furniture landscape design, play equipment, and fountains will be creatively integrated in the playgrounds.

Dublin City Council Branch Library

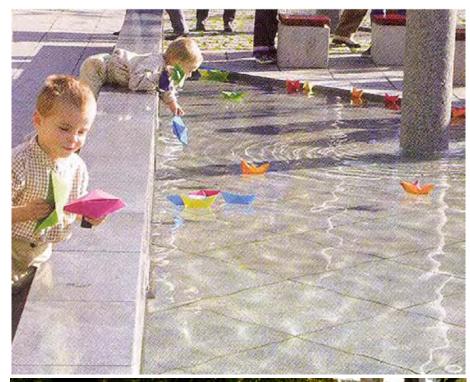
The Masterplan allows for a DCC branch library to be connected to the main DIT library, so that both facilities can retain their administrative independence while sharing certain spaces and optimising efficiencies and services. This central location maximises community access to the branch library. Besides the strong link to DIT, the branch library is situated directly across from the vibrant "Library Square" for the district, along the proposed Ivy Avenue.

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Primary School

A primary school for 400 pupils is located at the intersection of Grangegorman Upper, Rathdown Road and Ivy Avenue. This location at the edge of the development provides a strong connection to the community and optimises easy, convenient access for pupils and their guardians with the main entrance/drop-off area located off Rathdown Road. The configuration of the school ensures a safe and secure site, while enabling access to sports fields and facilities, and green spaces in the Grangegorman district.

Arts and Culture

One of the two "hearts" for the Urban Quarter will accommodate arts and culture/performance spaces for the larger public community to promote lively, evening uses. This zone is located toward the eastern edge, adjacent to Broadstone Gate to provide convenient access for people coming from Smithfield and King's Inns/Henrietta Street. The Performing Arts Centre includes a Concert Hall and museum and as well as art galleries.

Security

The Masterplan optimises the potential for providing passive security measures wherever possible, by incorporating program elements and design features that promote 24/7 use by pedestrians, bus or car users. The proposed Ivy Avenue will accommodate limited service access during the day, with possible public vehicular access in the evening in order to provide potential for surveillance and "eyes" in the district. Certain areas will have gates for controlling access. Limited vehicular and service access is proposed on St. Brendan's Way and Grangegorman Upper with pedestrian and cycle access prioritised.

Public Transportation

The Masterplan capitalises fully on the establishment of the new LUAS Line D on its eastern edge, bordering the Broadstone site. The design envisages two stations—one in front of the existing Broadstone Terminal building, and a second one near North Circular Road. The LUAS line will greatly improve public and community access to and from the site, connecting it to O'Connell Street to the southeast, and outlying parts of the city to the north.

New bus routes will be developed to improve access by public transportation to the Grangegorman Urban Quarter and surrounding areas. Increased public transport to and around the site will provide a positive community gain.