MASTERPLAN

OPERA SITE, LIMERICK CITY DECEMBER 2018

LIMERICK TWENTY THIRTY



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Limerick City & County Council







Contents

- 1.0 Introduction
- 2.0 Project Brief and Design Drivers
- 3.0 Site Characteristics and Urban Context
- 4.0 Conservation + Built Heritage
- 5.0 Site Constraints and Opportunities
- 6.0 Development Strategy
- 7.0 Urban Design + Open Space
- 8.0 Site Layout and Land Use
- 9.0 Building Height and Massing
- 10.0 Summary of Accommodation
- 11.0 The Public Realm and Landscape
- 12.0 Transport, Access + Parking
- 13.0 Phasing Implementation + Delivery



Introduction

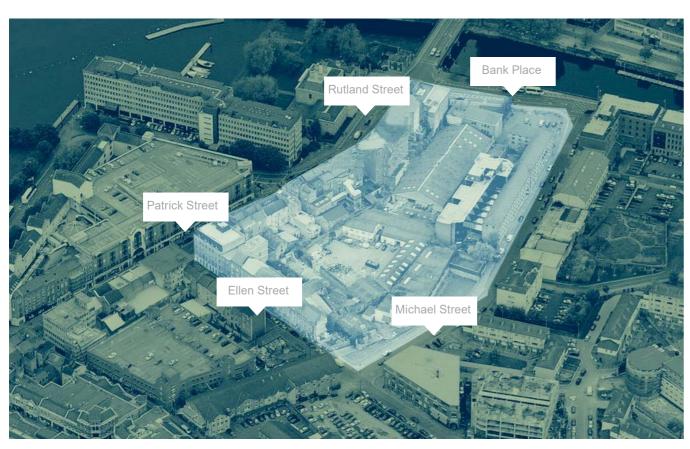


Fig. 1: Aerial view of the Opera Site context

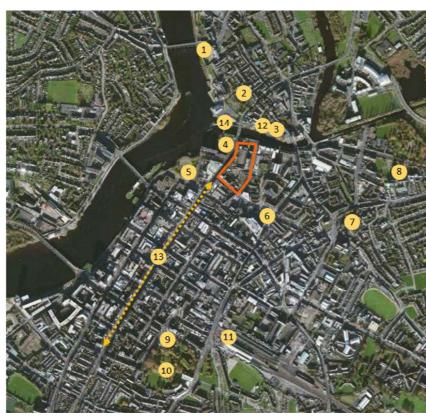


Fig. 2: City landmarks relative to the Opera Site

1.0 Introduction

This masterplan report is prepared in support of and as an integral element of an application to An Bord Pleanala seeking planning permission for the redevelopment of the site known as the Opera Site in Limerick's historic city centre.

The site forms the majority of a prominent and under utilised city block bounded by Patrick Street / Rutland Street, Bank Place, Michael Street, and Ellen St. It is located on the south bank of the Abbey River in close proximity to the Hunt Museum, the Arthur's Quay shopping area and the Milk Market.

- Opera Site
- 1 King John's Castle
- 2 St. Mary's Cathedral
- 3 Barringtons Hospital
- 4 Hunt Museum
- 5 Arthur's Quay Park
- 6 Milk Market
- 7 St. John's Cathedral
- 8 Limerick School of Art + Design
- 9 Limerick City Gallery of Art
- 10 People's Park
- 11 Colbert Station
- Limerick Institute of Technology
 Georges Quay
- O'Connell Street
- Potato Market



Purpose of Masterplan

The purpose of this Masterplan is to distill the vision set out in Limerick 2030 Plan and implement the guidance set out in Limerick City and County Council's Design Brief for the Opera Site, to inform the realisation of that vision over a period of time.

Consideration of the form of future development suitable for the Opera Site is explored in the masterplan to ensure that its development will deliver both key policies of the Development Plan, the vision and strategic intent of the Limerick 2030 Plan, along with the more detailed requirements of the Design Brief.

The development of the Masterplan has been the subject of detailed discussions and agreement with Limerick City and County Council's Planning Department.

The Masterplan provides a high-level strategy for the development of the Opera Site, in relation to urban design, heritage and conservation, building form and uses, public realm and street scape, traffic and transport, and construction/ phasing.

A planning submission for the development of the Opera Site should be informed by the strategies of this Masterplan, which will need to be developed and assessed through detail design and consultation with stakeholders and the Local Authority.

A planning submission will likely need to consider the following issues in more detail:

- Urban Design Statement
- Land, Soil, Geology + Groundwater
- Hydrology and Flood Risk Assessment
- Air Quality
- Noise + Vibration
- Sunlight Daylight + Shadow Analysis
- Landscape + Visual Impact
- Traffic + Transport
- Sustainability Assessment or LEED Assessment
- Energy Efficiency Strategy
- Waste management
- Site Services + Infrastructure
- Biodiversity
- Archaeology
- Architectural and Cultural Heritage Reports



Fig. 3: Ellen Street



Fig. 5: Former Cahill May Roberts Building and the Granary



Fig. 4: Rutland Street with the Town Hall Building in the foreground



Fig. 6: 7-9 Bank Place





Project Brief and Design Drivers

2.0 Project Brief and Design Drivers

Policy Framework

The Limerick City Development Plan 2010-2016 is the statutory development plan currently in place for the development of Limerick City.

Limerick 2030: An Economic and Spatial Plan for Limerick (Nov 2014) was formally adopted as Variation No. 4 of the Limerick City Development Plan 2010-2016 in January 2015. This identifies the Opera Site as having a major opportunity for a new business and innovation centred mixed use redevelopment, and mandates 'the preparation of a detailed master-plan for the development of the Opera Site'.

A Design Brief for the Opera Site was developed in response to the Limerick 2030 Plan to further define development parameters for the site. This was submitted in April 2018 to Limerick City + County Council following a public consultation period, and was approved by the elected members

Design Brief

The Design Brief provides a framework for the future development of the Opera Site, subject to permission for development, to provide a primarily office-based scheme complemented by a range of other uses, including inter alia retail/ commercial, civic/cultural, hotel, restaurant/bars and residential uses.

The Design Brief provides for the following:

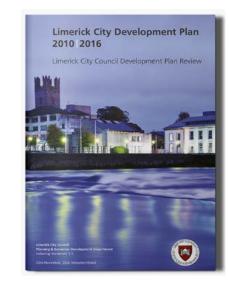
- Fulfil the requirements of the Limerick 2030 Plan and assist in the achievement
 of a comprehensive redevelopment of the Opera Site to serve as a guide to the
 economic, social and physical renaissance of Limerick City Centre.
- Support the appropriate redevelopment of the site including sensitive re-use, restoration and repair of buildings that are of conservation value in line with best conservation practice, whilst enabling and maximising the significant new build opportunity.
- Encourage a variety of supplementary land uses in association with the businessled mixed-use solution for this site and to improve the vibrancy of the city block by creating an attractive urban environment with active street frontages.
- 4. Provide an appropriate quantum of development at the site that achieves, as a minimum, the 45,200 sq m floorspace envisaged in the Limerick 2030 Plan to provide adequate capacity and facilitate rejuvenation of the Opera Site and adjoining areas.
- 5. Provide an appropriate quantum of open spaces within and around the site that achieves, as a minimum, the footprint envisaged in the Limerick 2030 Plan, including inter alia, a 3,700 sq m internal square with a strong visual identity and

permeable linkages, a stronger gateway at Bank Place (1,100 sq m) and high-quality surrounding streets to provide a safe, animated and inviting public realm that optimises the pedestrian experience and linkages with surrounding areas.

- 6. Provide a new landmark development to the north at Bank Place in the range of 12-16 storeys demarcating the important nodal river crossing point to the City core from Kings Island. Other new-build structures in the indicative range of 5-6 storeys, with limited opportunity for additional height subject to detailed assessment, will integrate within the older 4-storey street frontage and achieve appropriate scale and massing for this City Centre site whilst respecting buildings of conservation value and achieving open space requirements.
- Provide a lower Site Coverage standard of approximately 50%-60% at the Opera Site to accommodate appropriate public realm provision whilst development will be subject to a Plot Ratio range of 2.5-3.0 to achieve appropriate scale and massing for this City Centre Site.
- 8. Promote high quality architectural design for all new developments in the Opera Site while respecting the receiving environment as per best practice guidance.
- 9. Promote viable development in accordance with the principle of proper planning and sustainable development of the Opera Site.

The Design Brief for the Opera Site requires a planning application for its development to include a

"Masterplan that appropriately interprets and delivers the development parameters set out in this Design Brief"



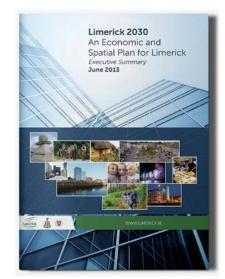




Fig 7: Policy Framework





Site Characteristics and Urban Context

3.0 Site Characteristics and Urban Context

The site is located at the northern end of Limerick's Georgian quarter, its perimeter composed largely of 4 storey Georgian terraces to Ellen St., Patrick St. and Rutland St. There are a number of existing buildings on the site with varying levels of heritage value.

A number of the existing buildings are currently vacant. The late 18th century stone Granary Building occupies much of the perimeter to Michael St., and the early 19th century former Town Hall is situated on Rutland St. Frontage to Bank Place comprises the northern end of the Granary Building, a 1960s building formerly occupied by Cahill May Roberts, and a terrace of three Georgian buildings at 7-9 Bank Place, which are in private ownership.

The Opera Site does not fall within any of the four designated Architectural Conservation Areas (ACA) in Limerick City, but the architectural significance of a number of structures on site is recognised, including four structures listed on the Record of Protected Structures, and eight which are included on the National Inventory of Architectural Heritage (NIAH), along with other structures of potential conservation merit.

The site is also located within the Zone of Archaeological Potential forming the medieval core of the City, but there are no known archaeological features within the site boundary recorded on the Sites and Monuments Register.

Limerick City Library is located in a 3 storey extension to the rear of the Granary Building. There are some existing and unused warehouse buildings at Bogue's Yard and Glover's Lane (also known as Watch House Lane), along with a surface car park at the south east corner of the site which are not appropriate uses for this prominent city centre location.

A restaurant and bar/ nightclub currently occupy the lower ground floor level of the Granary Building. There are several access points to the interior of the site by means of laneways from each of the surrounding streets, though these do not currently provide routes through the site.

The general surrounding environment is characterised by mixed-use development including retail, offices, leisure, institutional and community facilities, and residential uses. A variety of building heights compose the surrounding environment: the predominantly 4 storey Georgian terraced streetscape of the perimeter streets, 4-6 storey office buildings on Michael St and Charlottes Quay, 3-4 storey residential buildings to Michael St., the 7 storey Sarsfield House to the west, the 7 storey 'Euro Carpark' multistorey carpark with residential above to the east of the site, and the 2-3 storey stand-alone historic structure of the Hunt Museum.

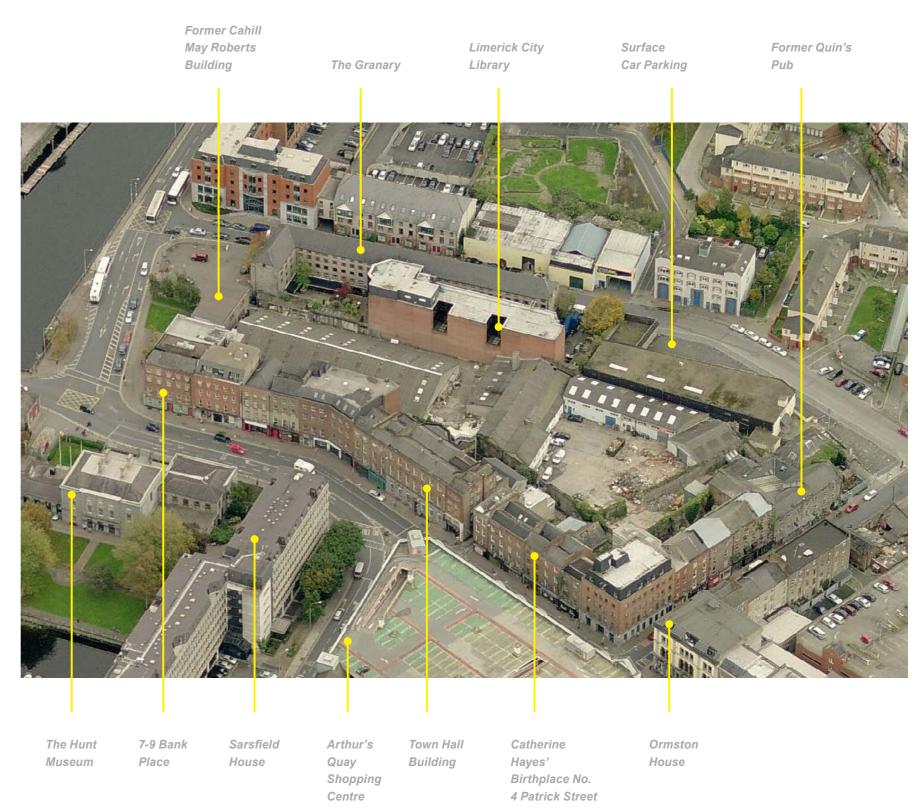


Fig. 8: Site Context





Conservation + Built Heritage

4.0 Conservation and Built Heritage

The location of the Opera Site is an area of particular importance in the historic development of Limerick city centre. After Limerick was declared in 1760 to be no longer a fortress, it underwent a period of rapid expansion southwards of the city centre. George's Quay was constructed and lined with fine townhouses, and a new bridge on the site of the present Matthew Bridge was commenced. From the mid 18th century the Georgian quarter of Newtown Pery was developed, and during the 1760s the Custom House (now the Hunt Museum), Lock Quay and Charlotte's Quay were completed. Rutland Street played an important role in this period of rapid development, linking the new bridge from King's Island and the Quays to either side of the Abbey River to Patrick Street. It was lined with an impressive sweep of redbrick terraces with the fine civic buildings of the Custom House and the Town Hall at either end.

The streets of Georgian Limerick represent a unique example of 18th and 19th century town planning in Ireland that remains to a large extent intact. The hierarchy of streets and buildings with fixed proportions and ordered symmetry forms a notable townscape heritage that gives Georgian Limerick a special sense of place.

Buildings at the corners of the terraced blocks typically held the block corners, were sometimes double fronted and had windows to both streets, while civic buildings were occasionally introduced at mid terrace locations. Warehouses were distinct from the residential terraces but were often incorporated within the overall structure of the block.

Access to mews and stable areas to the rear of the terraces were connected via narrow lanes or 'bow-ways' extended through the blocks and connecting with side streets. Many of these laneways were characterised by arched entrances with accommodation above forming an integral part of the terraced elevations.

Bank Place formed part of a once grand development of Georgian terraces along Charlotte's Quay facing the Abbey River of which the terrace of three buildings at Nos. 7-9 Bank Place survive. Maps from the 19th Century show a strong building line to the south of Bank Place formed by this terrace. The urban space was shorter than it is today in its east west dimension as it was fronted to its east side by a terrace of houses in a no longer existing block located to the north of the Granary Building.

The Hunt Museum, originally the Custom House, is described by the NIAH as probably the most important mid eighteenth century classical building in Limerick city. Its principal frontispiece with arcaded wings faces the River Shannon to the west. The NIAH Appraisal notes that "The building retains a significant historic setting over the River Shannon, adjacent to Matthew Bridge and its toll house, and the fine provincial Georgian architecture of Bank Place", but also that Sarsfield House on Francis St. dominates the urban setting of the Hunt Museum. The 7 bay limestone ashlar façade to the east side of the building faces both the terraced buildings on the other side of Rutland St. and the urban space at Bank Place. The setting of the Hunt Museum also relates to Bank Place visually on approach from west along the river and from across the bridge to the north.



Fig. 9: 1888-1913 25 inch Ordnance Survey Map
Historic Block Form, Access Points and Aspect of Key Buildings

The block form of the Opera Site remains largely intact to its west and south perimeter and to the original extent of Michael St. along the length of the Granary Building. A narrow alleyway punctuates the terrace between the former Town Hall and No. 1 Patrick St., and the carriage arch at No. 7 Ellen St. also gives access to the rear of the terraces at a mid-block location off the street. Both are apparent in the 1837-1842 6 inch OS map, as is the arched entranceproviding access to the rear of the Granary from the north.

To the east of Rutland St. beyond Michael St., much of the medieval pattern of Irishtown remained in place as the Georgian city developed, and today retains a more informal arrangement of narrow streets and smaller buildings. The current alignment of the southern end of Michael St. dates from the second half of the 20th century.

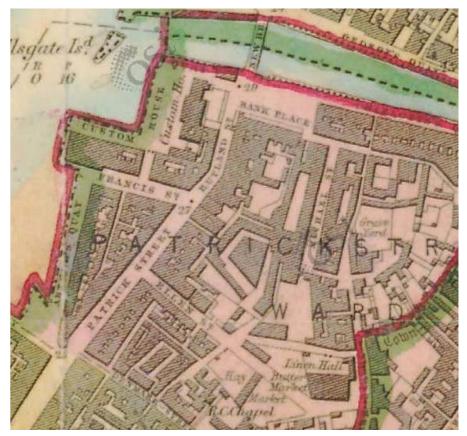


Fig. 10: 1837-1842 6 inch Ordnance Survey Map



4.0 Conservation and Built Heritage

The Design Brief recommends that a full assessment of the existing buildings on the site is undertaken to determine their levels of importance in terms of architectural, historical, and cultural value, to inform their appropriate use and treatment. Detailed inspections and evaluations of all existing buildings have been carried out. The resultant conservation design approach is summarised below.

- The Opera Site was developed in the mid-late 18th Century and is the entrance to the Georgian city from the north
- Each building has been inspected and assessed in terms of its condition and the extent of remaining significant fabric.
- Buildings have been categorised (4 categories) in terms of their significance to guide
 the architectural design approach for the development and to ensure the protection
 of the special character of each building
- The site includes a number of protected structures and buildings listed on the National Inventory of Architectural Heritage, including: the Town Hall Building, the Granary Building, the birthplace of Catherine Hayes at No. 4 Patrick St., Nos. 7-9 Bank Place, an original doorway at No. 6 Rutland St. and a number of other Georgian buildings of high significance
- Other buildings are in poor condition or do not retain original or important interiors.
 These buildings have scope for higher levels of intervention
- The appropriate approach is to retain the Georgian character of the streetscape
- Significant interiors will be retained while other buildings will be fully refurbished internally
- Strong conservation approach with suitable new uses proposed for the historic buildings
- Provide a focus on the Town Hall, one of the most significant historic structures on the site
- A suitable relocation for the doorway and surround currently located at No. 6 Rutland
 St. should be found and incorporated into publically accessible building on the site
- Various public uses at ground floor levels ensuring the viability of the street
- Continuation of the original use of residential to the upper floors of Georgian houses
 follows best conservation practice and ensures round the clock occupation on the
 site, and should aspire to serve as an exemplar project for the treatment of other
 Georgian structures in the city.

A summary of the conservation categories is included in *Fig.* 15. The full evaluation and a heritage impact assessment should be completed and included in the planning submission for the development.



Fig. 11: Ellen Street



Fig. 13: Rutand Street



Fig. 12: The Granary Building



Fig. 14: Entry off Patrick's Street to the block core



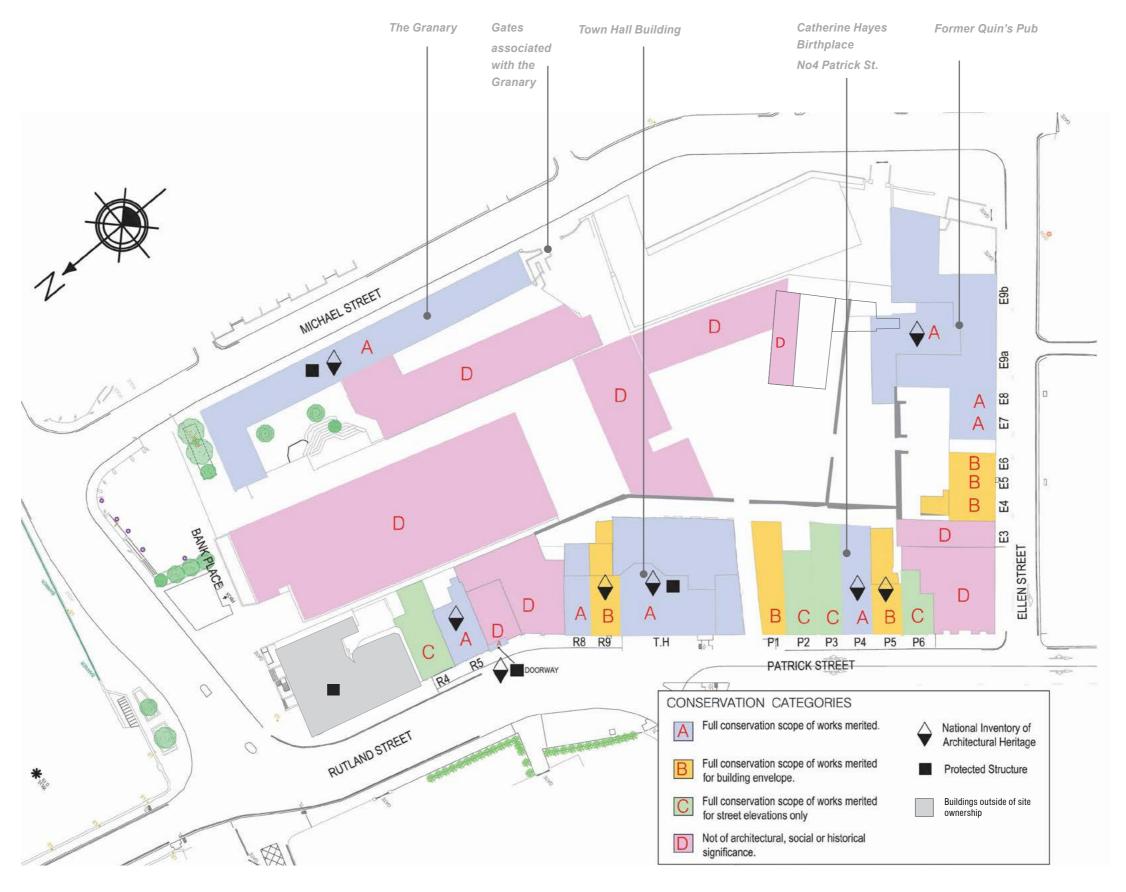


Fig. 15: Conservation Evaluation



Site Constraints and Opportunities

5.0 Site Constraints and Opportunities

The Design Brief identifies the following constraints and opportunities for the development of the site.

Constraints:

- Retention of existing heritage buildings
- Fabric condition of buildings to be retained
- New building height and setback limitations to protect amenity of and impact on retained buildings and surrounding buildings
- · Overlooking of adjacent residential properties
- · Archaeological zone
- Phasing requirements
- Traffic flow through Bank Place and Rutland Street
- 7-9 Bank Place and 2-3 Rutland St. are not in the control of Limerick City & County Council
- Flood risk issues
- Varied site levels and integration of basements, and varied floor levels of existing buildings

Opportunities:

- Reinstatement of full perimeter street edge
- Protection, renovation and reuse of existing historic buildings
- Removal of poor quality and derelict structures and elimination of vacancy
- Activation of ground floor uses and provision of a desirable destination
- · Enhancement of public realm to perimeter streets
- Formation of a new public square within the city block
- Permeability through the city block to provide strengthened connections to Arthur's Quay and the waterfront to the west, and to the Milk Market and Colbert Station to the east
- Improved public space at Bank Place
- Opportunity for a tall building on the site addressing the Abbey River at Bank Place
- · Increased activity on the site with significant new buildings
- Removal of poor quality structures

SITE APPRAISAL: OPPORTUNITIES

- Protection of existing buildings of heritage value
- Strengthened street edges and block form
- Increased permeability
- New public square
- Infill opportunity
- Tall building opportunity
- Improved public realm

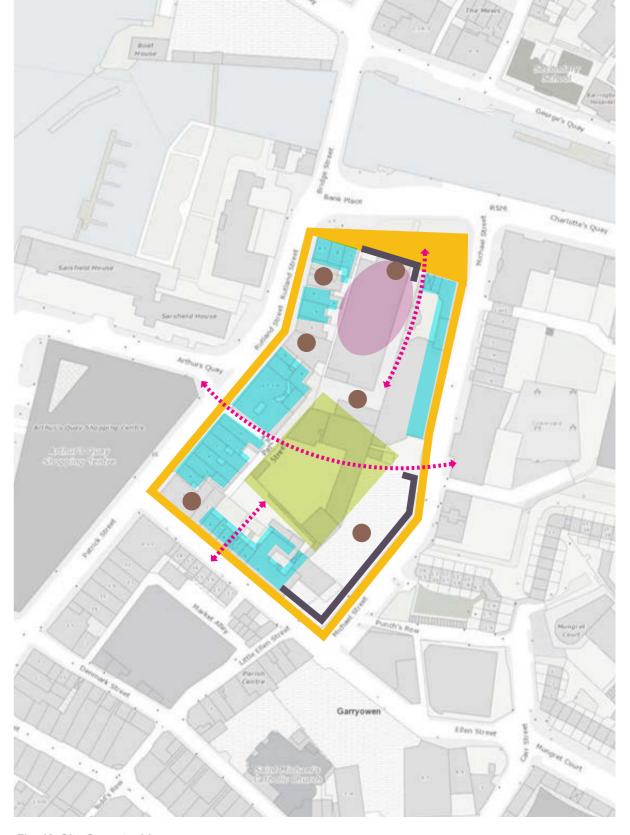


Fig. 16: Site Opportunities





Development Strategy

6.0 Development Strategy

The Receiving Environment

The existing buildings to be retained require varying levels of refurbishment and intevention for building services, structural, fire safety, accessibility, acoustic, and thermal improvements to ensure their sustained survival into the future. The level of intervention and refurbishment will depend on their condition, layout and proposed reuse. This will need to be considered in greater detail at design stage, and guided by best practice conservation principles to ensure a conservation led approach is adopted.

The development of new buildings and public open spaces within the core of the Opera Site will change the setting of the rear of the existing buildings. Prominent rear elevations, such as the rear of the Town Hall and Granary Buildings, can appropriately address open spaces due to their scale and composition. Less prominent rear elevations are more suitable to be enclosed with sufficient back to back separation distances to protect their amenity.

The ground level relationship of the rear of the existing buildings to new buildings and public spaces is likely to require the removal of small outbuildings and/or returns which would, if retained, limit their successful integration.



Fig. 17: Buildings of heritage value are identified for retention.



Existing historic structures and ancillary structures which are in poor condition and unsuitable for reuse are identified for removal

Existing modern structures which are unsuitable in their purpose for this prominent urban location are identified for removal



Fig. 18: The buildings to be retained will require varying levels of refurbishment depending on their condition, layout and proposed use

The removal of small outbuildings and returns is necessary in order to realise the successful reuse and integration of the retained buildings into the broader proposal



Urban Design Development Strategy

The development objectives for the site are to:

- reinstate/ strengthen the street edge with attractive building forms
- · provide urban spaces to allow interaction and active use
- ensure legibility by appropriate landmarking of spaces, corners, and nodal points

These objectives establish the development strategy for the site, including:

- reinstatement of the street edge with new buildings at Bank Place, Michael St., and Ellen St., and the realisation of infill opportunities at the corner of Ellen and Patrick St., and at Rutland St.
- building edge at Bank Place should align with the adjacent Georgian buildings, which is the historic building line to Bank Place
- creation of new and utilisation of existing site access points to improve permeability into the city block
- provision of a strong east-west axis in response to the Design Brief and exploitation of possible secondary north-south routes
- create a new public square at the confluence of these natural desire lines
- allowance for prominent facades of existing buildings, where suitable, to address and give identity to new public spaces
- enclosure of new public spaces with new buildings
- provision of new buildings to secure the rear of existing buildings, with appropriate separation, and to provide passive overlooking of public realm
- provision of access to basement level parking and services from a secondary street
- · articulation of prominent corners to provide identity and legibility
- tall building to serve as a landmark at the prominent city nodal point at the confluence of the Shannon and Abbey Rivers, and its setting on Bank Place

Access points midway along each respective street utilise the existing access opportunities and continue the established grain of the historic Georgian streetscape where buildings hold street corners as bookends to continuous terraces of buildings, and access lanes and archways are positioned at mid-terrace locations. This approach also has the benefit of bringing footfall and activity to the perimeter streets with active frontage at the street corners.

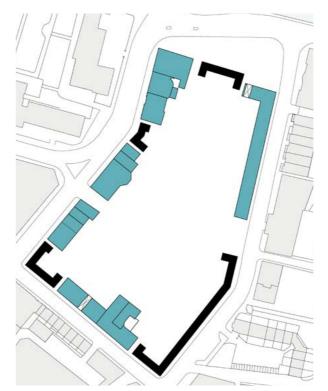


Fig. 19: Re-establishment of street edge with infill opportunities

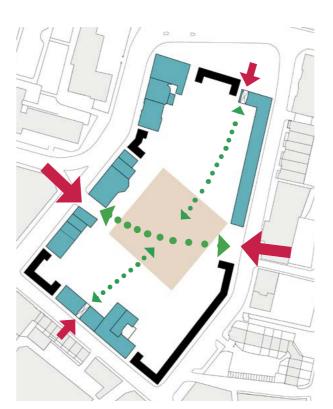


Fig. 21: A pubic square is formed at the nodal point of the East-West axis and the North and South pedestrian routes.

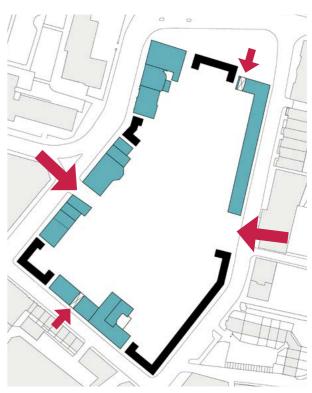


Fig. 20: Access points are strengthened to improve block permeability and context links.

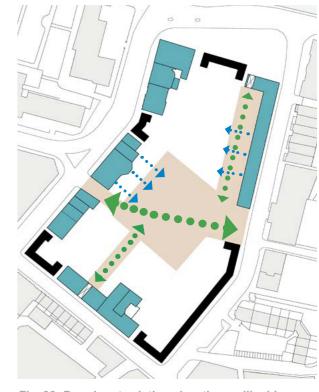


Fig. 22: Prominent existing elevations will address and characterise the new public space.



Building Form and Urban Spaces

The new public square is the centre piece in this development, providing a suitable setting for the former Town Hall. This provides a prominence to the Town Hall Building appropriate to its history and potential future role in the Opera Site.

The redevelopment of Bank Place provides a wonderful opportunity to give a strong identity to this nodal point in the city and re-establish its importance in providing a setting for the Hunt Museum.

The linking of these two spaces, through an interconnecting space within the site, ensures a relationship and connectivity, which will encourage pedestrian permeability into and through the site. This is complemented by the strong linkage of the new public space to the surrounding streets.

The resultant building forms provide a variety of scale of floor plates, with good perimeter frontage, ensuring attractive and functional building opportunity within the depth and the perimeter of the site.

Service access and basement parking access is best positioned on Michael St. which is easily accessible, lightly trafficked and has sufficient site frontage to best accommodate it.

Development Compliance

The proposed building form and layout is in compliance with the Design Brief's development standard requirements, as outlined in the schedule of accommodation included at Section 10 of this report.

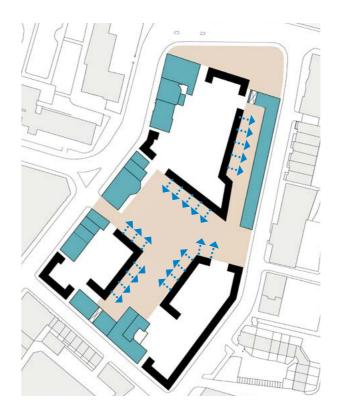


Fig. 23: New buildings will provide overlooking to the new public square whilst establishing a new interior edge.

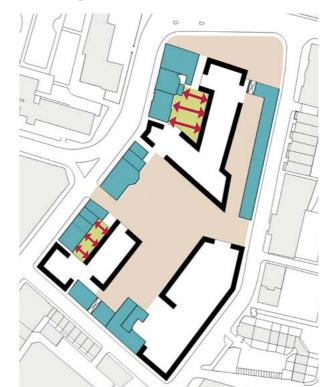


Fig. 25: Appropriate separation is given between the new infill and the less prominent rear facades of existing buildings.

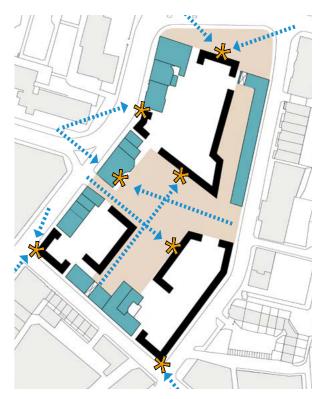


Fig. 24: Prominent corners and well-articulated facades will provide way finding legibility and identity to the block.



Fig. 26: Complete proposed building footprint for the site development.



Proposed Basement Access





Urban Design + Open Space

7.0 Urban Design and Open Space

The Opera Site has great potential to connect to the riverside route along the Shannon, from the former docks, to Arthur's Quay, and crossing the Abbey River, to Merchant's Quay and St. John's Castle. The new square within the site needs to have a strong identity, with ease of access, to exploit natural desire lines from this route.

The new internal space, with the rejuvenated Bank Place, should have a strong relationship and allow easy connectivity to surrounding urban spaces and nodes: Merchant's Quay, Arthur's Quay, the new city square proposed for O'Connell St. in the Limerick 2030 vision, and the Milk Market.

These spaces can provide nodal points connecting pedestrian routes and surrounding city lanes, to enrich the pedestrian experience and attractiveness of the city centre.

Bank Place is a gateway space to the Georgian city at the confluence of the Abbey and Shannon Rivers. Its importance is currently diminished by its position at a heavily trafficked junction, and by the poor quality of its public realm. This space needs to be reimagined to present itself as a well used and pedestrian focused urban space and the setting for the Hunt Museum.

The proposed internal square is an entirely new space and provides the opportunity to be an urban room that can safely and securely host public and city events such as markets, displays, concerts, installations, exhibitions, and music events. This square should become a new space of distinct and memorable character. The new square should be accessible from each of the surrounding streets to ensure a high level of permeability through the block, and to attract incidental access.

These two spaces, one external and the other internal with respect to the urban block, should be strongly connected through the site.

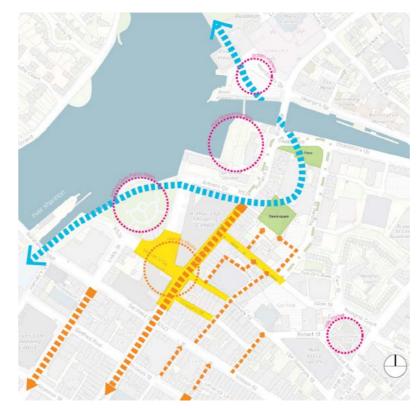


Fig. 27: River and city connections



Fig. 29: Historical and Cultural links

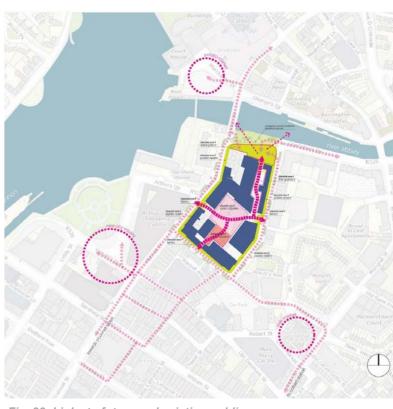


Fig. 28: Links to future and existing public spaces

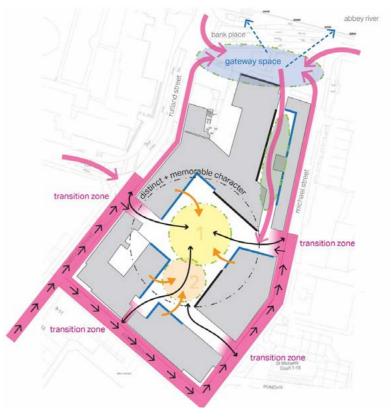


Fig. 30: Improved public realm





Site Layout and Land Use

8.0 Site Layout and Land Use

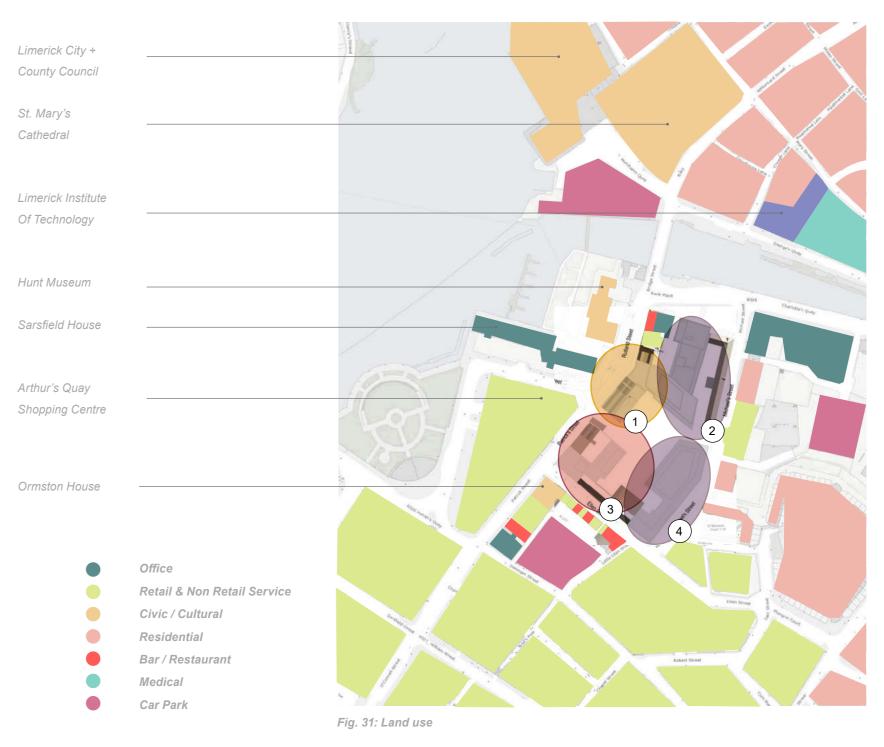
The Design Brief established a mix of uses for the development of this site, with an emphasis on commercial use to the north, and the possibility of residential uses to the south of the site.

The mix of uses proposed for the site has been further examined and refined to complement surrounding uses. The existing buildings to be retained have been assessed in terms of their size, layout, history, condition, and location, to ensure that the most appropriate use is assigned to each building.

This along with the urban design of the city block and the creation of a new central square with access points in each direction has established four quadrants:

- 1. Civic and cultural quarter to the north west
- 2. Commercial quarter to the north east
- 3. Residential quarter to the south west.
- 4. Commercial quarter to the south east

Retail and bar/ restaurant uses are to be dispersed throughout the site at ground floor level to ensure active street frontage and a vibrant public realm.





NW Civic + Cultural Quarter

NE Commercial Quarter

SW Residential Quarter

SE Commercial Quarter



8.0 Site Layout and Land Use

The following is a summary of the proposed uses for the existing buildings retained and the new buildings proposed, to ensure their appropriate use and suitability within this land use framework.

- A cultural use is proposed for the former Town Hall to provide it with greater presence in the city street scape and to be a vibrant civic and cultural facility at the centre of the Opera Site
- Residential use is an appropriate use of the upper floors of the existing Georgian buildings to the south west quarter of the site as well as Nos 4-5 Rutland St, restoring them to their original purpose and providing retail units at street level
- An element of short term residential use is also considered appropriate for this city centre location, which would support the bars and restaurants to ensure a vibrant evening use
- Retail uses to a high proportion of the ground floor throughout the site with an
 emphasis on the provision of active street frontage to the perimeter and interior of
 the site with night time activity to the public square.
- Commercial office use is proposed to the north western quarter of the site with a significant new office building proposed addressing Bank Place, and office use is proposed to be maintained to the upper levels of the Granary building above the ground floor level food/ beverage use.
- Commercial office use is also easily accommodated in the vacant south east corner
 of the site and to a building facing the north side of the public square

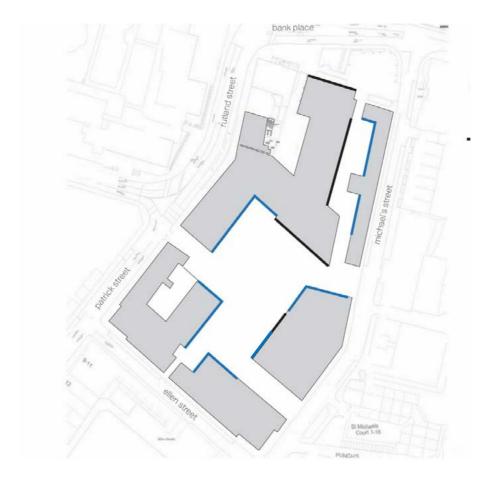


Fig. 33: Edge condition and ground floor uses to pedestrian public space

daytime and nightime activity mon-sun city wide interest attractor for activation of the space

black Office Use to Ground Floor
daytime activity mon-sun
local interest to office staff and visitors only





Building Height and Massing

9.0 Building Height and Massing

Building Heights

The Design Brief established a general height range of 5-6 storeys as appropriate for new buildings on the site and a height range of 12-16 storeys for a landmark tall building to the northern side of the site at Bank Place.

A number of building heights for each new building element have been modelled and assessed for appropriateness, and for their impact on adjoining and historic structures. A visual assessment for each block from key viewpoints is included in the following pages to illustrate the options considered and the building height concluded to be the most appropriate. In all cases rooftop plant was included in the massing of the buildings, generally as set back elements or, in the case of the tall building expressed as an additional storey forming part of the building envelope.

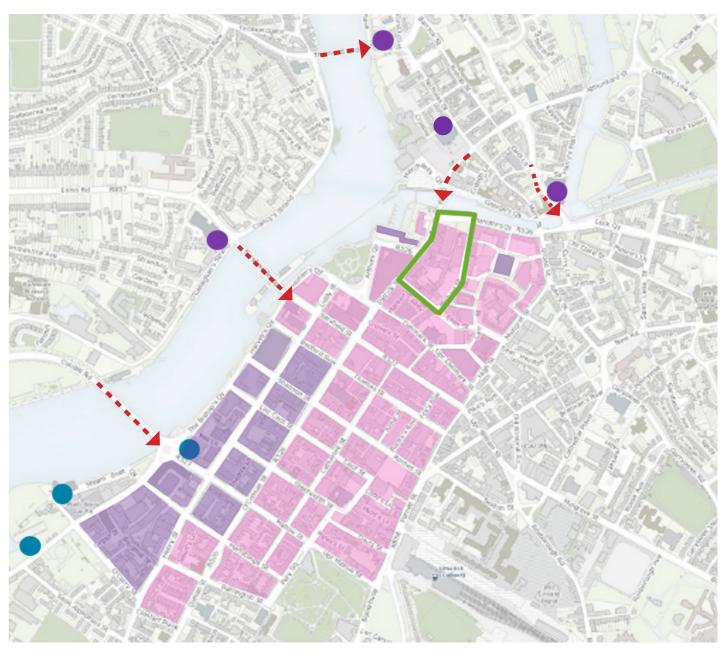
The building forms and heights have also been assessed for their overshadowing impact and sunlight penetration into the urban spaces.

Study Areas

The visual assessment included is generally grouped around the four quarters of the city block, as follows:

- south east commercial quarter
- south west residential quarter
- north west cultural quarter
- north east commercial quarter (tall building)

Overshadowing and overlooking of the residential properties to the west of the site were also assessed for the heights tested.



- Opera Site
- ... Key River Crossings
- 10 to 18 storey landmarks
- 8 storey Landmarks
- Mixed Height Range with 7 to 10 storey buildings
- Mixed Height Range typically 4 to 6 storeys

Fig. 34: City building heights

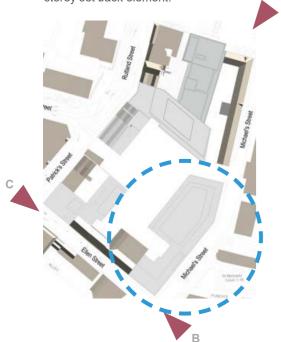


South East Commercial Quarter

Massing studies were carried out of the proposed new building at this corner using heights of 4, 5, and 6 storeys including set back upper storeys. Visual impact on the immediately adjacent 3 storey former Quin's public house at No. 9 Ellen St. and on the Granary Building were considered to be of particular importance, as well as on the overall streetscape. Overshadowing and overlooking of the residential properties to the east of the site was also assessed for the heights tested and the proposed new building was found to have limited impact on overshadowing of the existing properties (refer also to *Figs 76 to 78*). *Fig 35* demonstrates that a 6 storey building, including a set back top floor and roof level plant, results in a minor increase in height above the roof line and form of the Granary Building when viewed from the north, which is acceptable in the urban context.

A range of heights and massing arrangements was also tested for visual impact to Ellen St. which is predominantly 4 storeys in height. A four storey element is shown forming the corner in *Figs 37 and 38*. A two storey form above this element is set back sufficiently from the street line to ensure that the 4 storey element forms part of the Ellen St. streetscape, with an appropriate step up to 5 storeys to Michael St where there is a set back 6th storey.

In conclusion, the appropriate height of the building is 6 storeys at it highest point with plant areas at roof level set back from the building form. This is composed of a primary 4 storey volume to the corner of Ellen St and Michael St. rising to a 5 storey volume along Michael St. A 2 storey volume is set back from the corner of Ellen St. and Michael St. above the primary volume, appearing above the parapet to Michael St. as a single storey set back element.



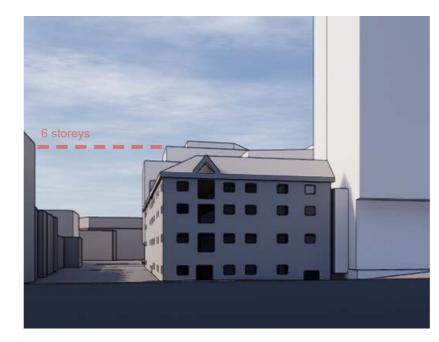


Fig. 35: View A. Granary Building from Bank Place with 6 storey building to SE Quarter

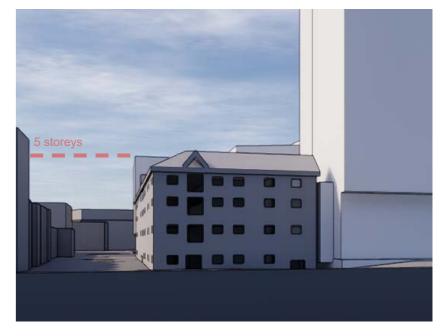


Fig. 36: View A. Granary Builling from Bank Place with 5 storey building to SE Quarter

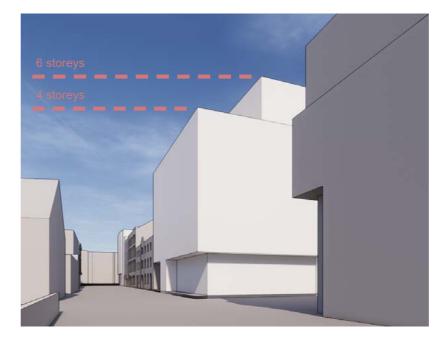


Fig. 37: View B Ellen St + Michael St junction viewed from south east

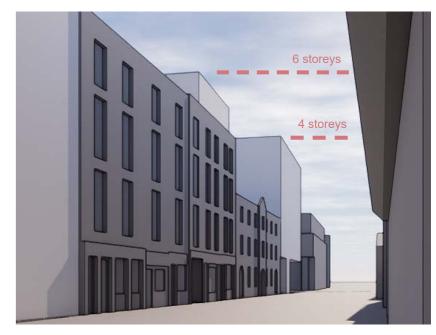


Fig. 38: View C. Ellen St viewed from O'Connell St



South West Residential Quarter

Visual and physical impacts on the existing adjacent terraces to Ellen St. and Patrick St. were of particular importance at this location as well as on Ormston House, the protected structure to the adjacent street corner. The proposed new build element was also examined in terms of its presence and impact on the public square, including daytime overshadowing.

Five and six storey heights were assessed for this building in line with the height range identified in the Design Brief. A 5 storey element at the corner of Patrick St. and Ellen St., as shown in *Figs 39 and 41*, sits appropriately within the 4-5 storey variation of the streetscape, whilst providing sufficient prominence at this corner of the site, which marks the start of the urban block on approach from the south along the primary artery of Patrick St. and O'Connell St. A 6 storey element resulted in a 2 storey step to the adjoining Georgian terrace which represents an increased impact as illustrated in *Figs 40 and 42*.

To the internal square, the proposed building is located behind the existing four storey terraces to Patrick St and Ellen St. It was considered important that the new building should stitch in to this assembly of existing buildings to the interior of the site in terms of scale and height, and that it should not detract from the prominence of the more public and civic buildings in the square. *Fig 43* shows a four storey new building at this location running parallel to and behind the terrace of Nos. 1-5 Patrick St. Plant areas were considered and modelled as roof top elements set back from the main building forms.

In conclusion, the appropriate height for this infill building is 5 storeys at the external corner of Patrick St. and Ellen St., stepping down to 4 storeys within the depth of the block to the rear of the existing Georgian buildings.

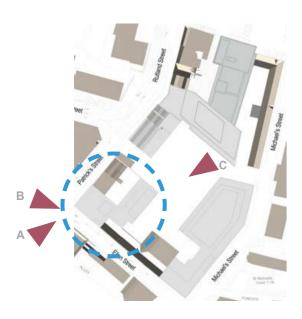




Fig. 39: View A. Patrick St from South with 5 Storey building to the corner of Patrick St. and Ellen St. 5 storey height fits with scale of existing street

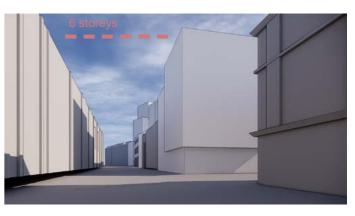


Fig. 40: View A. Patrick St from South with 6 Storey building to the corner of Patrick St. and Ellen St.
6 storey height is more prominent relative to existing environment



Fig. 41: View B. Ellen St from West with 5 Storey building to the corner of Patrick St. and Ellen St. 5 storey height fits with scale of existing street

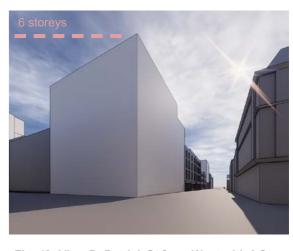


Fig. 42: View B. Patrick St from West with 6 Storey building to the corner of Patrick St. and Ellen St. 6 storey height is more prominent relative to existing environment



Fig. 43: View C. Central square from North with new 4 storey building to the SW Quarter. 4 storey height is of comparable scale existing terraces to Patrick St and Ellen St.



Fig. 44: View C. Central square from North with new 5 storey building to the SW Quarter. 5 storey element more prominent



North West Civic and Cultural Quarter - Central Block

The central block to the north side of the new square is envisaged as partially housing a civic function alongside a commercial office element. Spatially this building fulfils a number of important roles including infill to Rutland St. with potential for an entrance to the proposed new cultural facility; connectivity to the Town Hall and Nos. 8 and 9 Rutland St.; formation of the northern face of the public square; and a backdrop to the Granary from the east.

Visual impact on the Town Hall and the Granary were analysed from a variety of viewpoints. It was considered important that the building height to Rutland St. should follow the predominant parapet height with a four storey infill element, to read as an integral part of the existing streetscape. Five and six storey heights were tested in each view, with the upper storeys set back from Rutland St. and with plant areas set back above roof level.

In *Figs 45* and *47*, the 5th storey set back is not visible above the existing roof line of Rutland St., whilst in *Figs 46* and *48*, the 6th storey is very visible in these important views of the Town Hall. In the views from the north at Bank Place, *Fig 50* shows that the 6th storey is more visually evident above the ridge line of the Granary Building than the 5th storey shown in *Fig 49*.

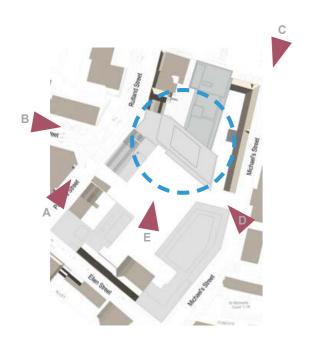




Fig. 45: View A. Patrick St. to North with 5 storeys to new civic/commercial building within square and 4 storey infill to Rutland St. 5 storey building to square is not visible in this view

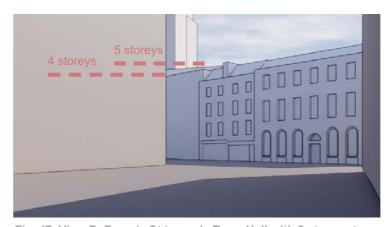


Fig. 47: View B. Francis St towards Town Hall with 5 storeys to new civic/commercial building within square. 5 storey set back element not evident

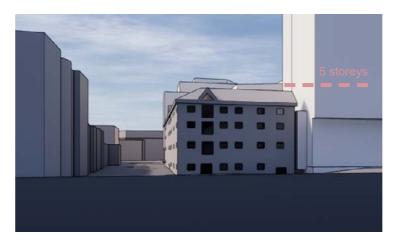


Fig.49: View C. Granary from North with 5 storeys to new civic/commercial building within square. 5 storey element is not visually prominent over ridge line of the Granary Building

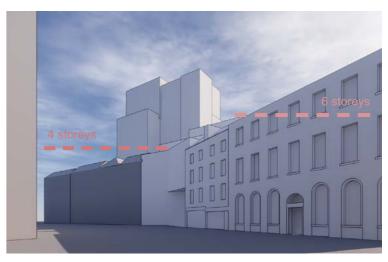


Fig . 46: View A. Patrick St. to North with 6 storeys to new civic/commercial building within square and 4 storey infill to Rutland St. 6 storey building to square is apparent above roof line Nos 8+9 Rutland St.

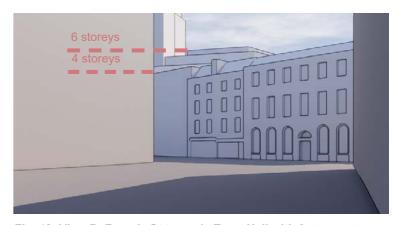


Fig. 48: View B. Francis St towards Town Hall with 6 storeys to new civic/commercial building within square. 6 storey building to square is apparent above roof line Nos 8+9 Rutland St. and Town Hall

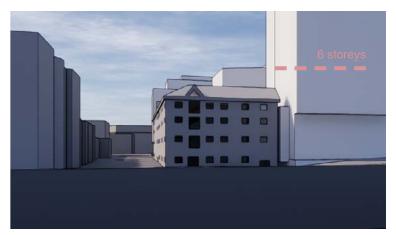


Fig. 50: View C. Granary from North with 6 storeys to new civic/commercial building within square. 6 storey element is visually evident above ridge line of the Granary Building



North West Civic and Cultural Quarter - Central Block

Internally in the proposed new square, it was considered important that the Town Hall is visually prominent to reflect its history and importance. To achieve this, a 4 storey building with set back fifth storey as shown in *Fig 51* was considered appropriate for the central block, which links physically and functionally to the Town Hall ensemble.

On approach from Michael St., *Figs 53* and *54* illustrate that the ridge line of the Granary Building is uninterrupted by a 5 storey building, whereas a 6 storey option would be more evident.

In conclusion, a 5 storey building is appropriate with the top floor set back from Rutland St. and the internal square, to complement the existing parapet lines.

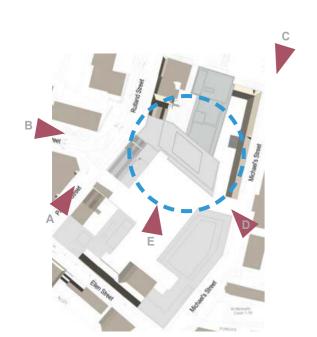




Fig. 51: View E from new square to rear of Town Hall with 5 storeys to new civic/ commercial building. 5 storey form is similar in scale to the Town Hall Building

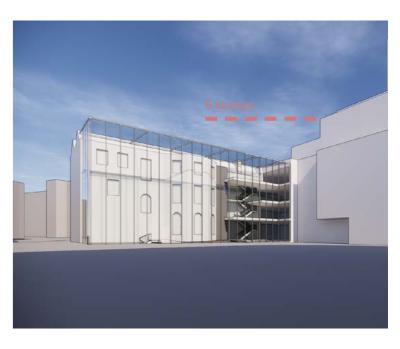


Fig. 52: View E from new square to rear of Town Hall with 6 storeys to new civic/commercial building. 6 storey building is more prominent relative to the Town Hall Building

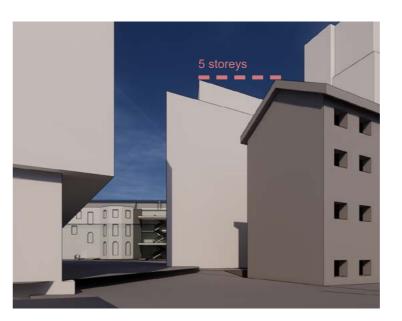


Fig. 53: View D from Michael St. to new square adjacent to Granary, with 5 storeys to new civic/commercial building within square. 5 storey form sits below roof line of the Granary Building



Fig. 54: View D from Michael St. to new square adjacent to Granary, with 6 storeys to new civic/ commercial building within square . 6 storey form more prominent relative to the Granary Building



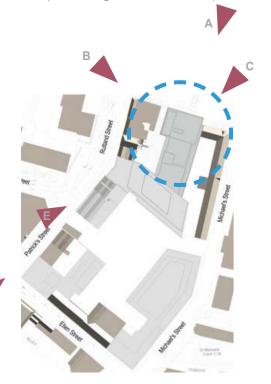
North East Commercial Quarter-Tall Building to Bank Place

The Design Brief established the objective for a tall building at Bank Place to serve as a landmark to the river and wider cityscape, and identified a height range from 12-16 storeys. A variety of heights within this range were modelled and a number of views assessed.

Slenderness and simplicity of form should be emphasised in the expression of all facades, and in particular to Bank Place. The building should present a strong frontage to address the urban space of Bank Place and the Abbey River, and the original building line aligned with the Georgian terrace of Nos. 7-9 Bank Place should be reinstated. To emphasise a slender appearance within the identified height range, a split form consisting of a tall volume alongside a lower 'shoulder' element was modelled to modulate the visual impact from both north and eastwest vantage points.

3 principal options for the height of the building within the 12-16 storey range established by the Design Brief are illustrated in the following images:

- A 13 storey volume (12 storey + plant storey) with 10 storey shoulder element (refer to *Figs 55, 58, 61, 64, 67*)
- A 15 storey volume (14 storey + plant storey) with 11 storey shoulder element (refer to *Figs 56, 59, 62, 65, 68*)
- A 16 storey volume (15 storey + plant storey) with 12 storey shoulder element (refer to *Figs 57, 60, 63, 66, 69*)



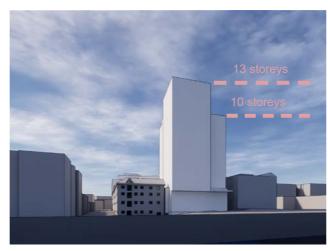


Fig. 55: View A from North side of river towards 13 storey building to Bank Place

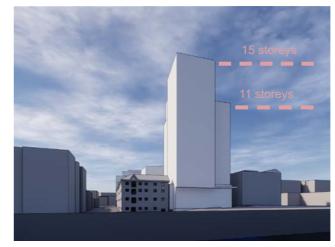


Fig. 56: View A from North side of river towards 15 storey building to Bank Place

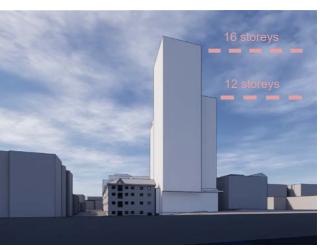


Fig. 57:View A from North side of river towards 16 storey building to Bank Place

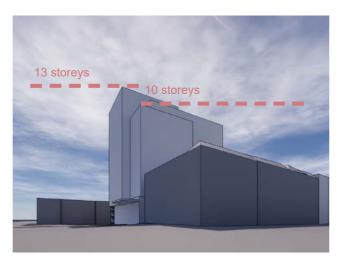


Fig. 58: View B from Hunt Museum towards 13 storey building to Bank Place

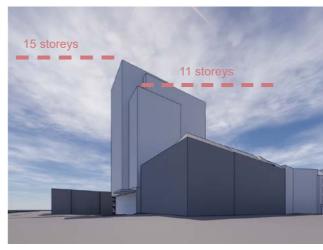


Fig. 59: View B from Hunt Museum towards 15 storey building to Bank Place

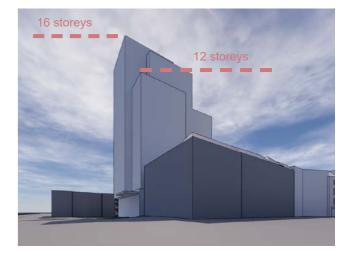


Fig. 60: View B from Hunt Museum towards 16 storey building to Bank Place



Fig. 61: View C from Bank Place towards Hunt Museum showing 13 storey building to Bank Place with 10 storey shoulder

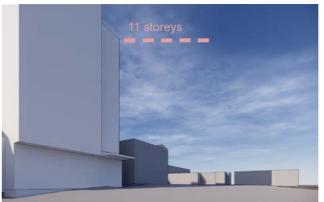


Fig. 62: View C from Bank Place towards Hunt Museum showing 15 storey building to Bank Place with 11 storey shoulder



Fig. 63: View C from Bank Place towards Hunt Museum showing 16 storey building to Bank Place with 12 storey shoulder



North East Commercial Quarter – Tall Building to Bank Place

The 13 storey (12 storey + plant) building was considered to be insufficiently tall and slender for the building to be perceived as a landmark in contrast to its lower level surroundings, especially when viewed from the west as shown in *Figs 64 and 67*, and from the north in *Fig 55*.

The contrast between a 16 storey (15 storey + plant) building and its receiving environment was seen as overly great by comparison with the Granary, the streetscape of Rutland St and the nearby Hunt Museum.

Views of a 15 storey (14 storey + plant) building with a lower 11 storey element were successful in clearly defining a visual landmark to the north of the site with a strong city presence. Articulated massing to the east and west of the building resulted in a harmonious form rising above the city terraces.

In conclusion, a stepped form of 11 and 15 storeys (incl. plant storey) provides the most successful balance of prominence as a city landmark with elegance of form, for a tall building within a historic urban context.

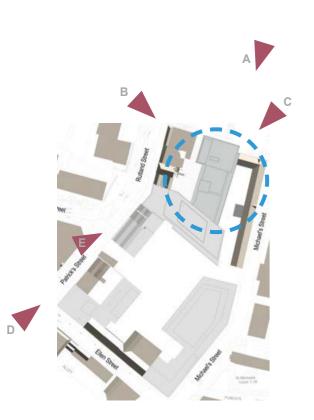




Fig. 64: View D from O'Connell St. to north east with 13 storey building to Bank Place. Lack of visual prominence as landmark building



Fig. 65: View D from O'Connell St. to north east with 15 storey building to Bank Place. Clear distinction to general building height, vertical emphasis appropriate as city landmark



Fig. 66:View D from O'Connell St. to north east with 16 storey building to Bank Place. Provides additional visual prominence and landmarking

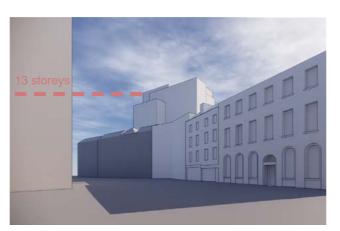


Fig. 67: View E from Patrick St. towards Rutland St. and Town Hall with 13 storey building to Bank Place. Closer view lacks prominence and vertical emphasis as a tall building



Fig. 68:View E from Patrick St. towards Rutland St. and Town Hall with 15 storey building to Bank Place. Provides visual clarity as a distinct tall building

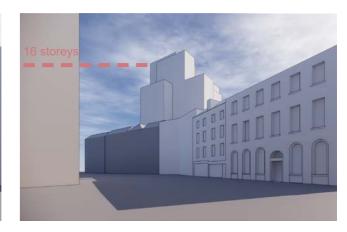


Fig. 69: View E from Patrick St. towards Rutland St. and Town Hall with 16 storey building to Bank Place. Provides additional height and landmarking





Fig. 70: Suggested Height Range in local context

Conclusion of Height Study

In conclusion, the visual assessment of the building heights recommends the following:

- South East Commercial Quarter: Overall recommended height is 6 storeys + plant, with 4 storeys to the corner of Ellen St and Michael St rising to 5 towards Granary with a set back 6 storey element.
- South West Residential Quarter: A 5 storey building to the corner of Ellen St. and Patrick St with a 4 storey (+ plant) rear block within site behind the existing terraced houses on Patrick St.
- North West Civic and Cultural Quarter: 4 storey infill is recommended to Rutland St with a set back fifth storey as the building extends to the north side of the internal square.
- North East Commercial Quarter: A height of 15 storey (14 storey + plant) with a 'shoulder' of an 11 storey element is recommended for the tall building to Bank Place, in a simple form with consideration of slenderness in its external expression.

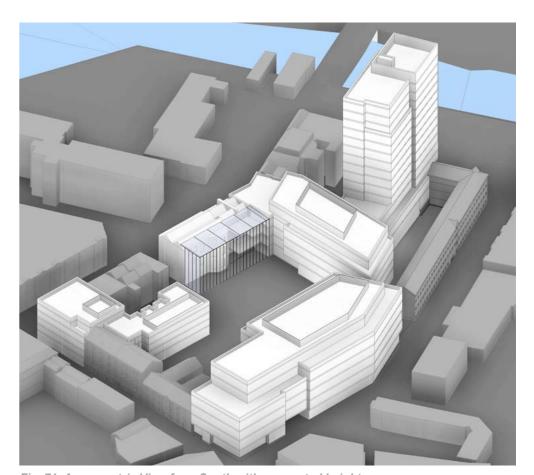


Fig. 71: Axonometric View from South with suggested heights



Fig. 72: Axonometric View from East with suggested heights



Shadow Studies

The Design Brief notes that massing of the proposed development should be cognisant of daylight penetration, sunlight penetration, and shadow projection to existing buildings and spaces within and outside of the site, and that sufficient light levels for amenity use of the site and its planting should be allowed. The BRE Guidance document 'Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice' recommends that at least half of the area of amenity spaces should receive at least 2 hours of sunlight on the 21st of March.

New Square

Figs 76 to 78 illustrate the shadows generated by the development at specific times of the day on 21st March. They demonstrate that different areas of the central square will receive sunlight/ daylight at all times of the day with the highest level in the afternoon. More than 50% of the square receives greater than 2 hours of sunlight, which is in compliance with the BRE guidance document.

Bank Place

Due to its northern orientation and shallow depth, Bank Place is currently significantly overshadowed for most of the day on 21st March, with the exception of the area to the front of the Granary Building. With the proposal as shown, this is largely unchanged until after 1:00 pm, when the shadow of the tall building is cast over the Granary Building.

Granary Courtyard

The Granary courtyard is a linear space on a north-south axis, allowing sunlight to penetrate the majority of the space for approx. 2 hours between 11:00 am and 1:00 pm on the 21st March, which is in compliance with the BRE guidance document.

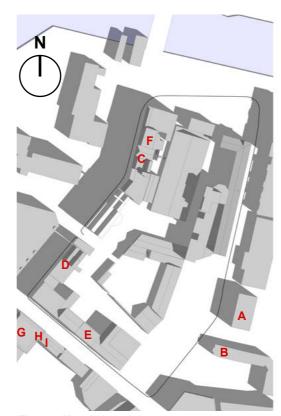


Fig. 73: March 21st 9:00 am Existing

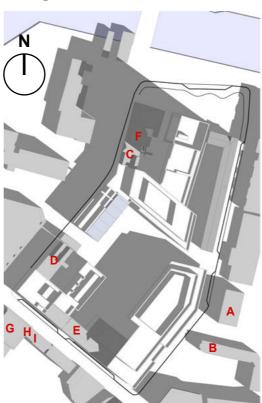


Fig. 76: March 21st 9:00 am Proposed

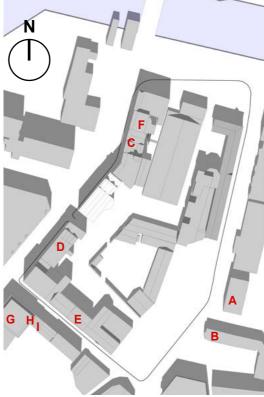


Fig. 74:12:00 March 21st midday Existing

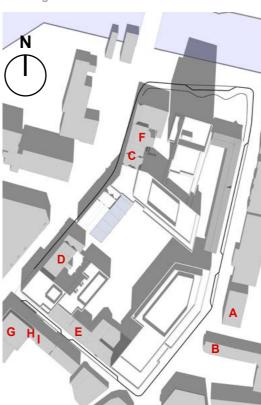


Fig. 77: March 21st 12:00 midday Proposed

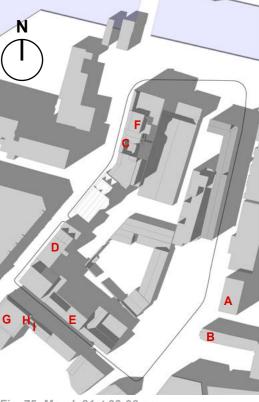


Fig. 75: March 21st 03:00 pm Existing

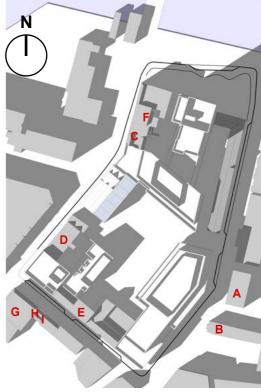


Fig. 78: March 21st 03:00 pm Proposed



Shadow Studies

Adjacent Residential Properties, Michael St.

Figs 76 to 81 illustrate that the development as shown has no impact on sunlight to the residential properties on Michael St. (buildings marked 'A' and 'B') until 3:00pm on the 21st March, where the impact is limited to a small proportion of the building marked 'A' (*Fig 78*).

Adjacent Residential Properties, Rutland St.

Figs 82 to 89 illustrate that the development as shown will have an impact on the rear of the residential property marked 'F' at Nos 2-3 Rutland St. from 9:00am on the 21st March, but that there is no loss of light to this property from 11:00am onwards.

Adjacent Residential Properties, Ellen St.

Figs 76 to 78 demonstrate that the development as shown has no impact on sunlight to the residential properties marked 'G', 'H' and 'I' on Patrick St. and Ellen St.

Proposed Residential Properties to Existing Buildings within the Opera Site

Figs 86 to 88 illustrate that the development as shown will have some impact to the rear of proposed residential property from first floor level upwards of the buildings marked 'C' between 9:00am and 11:00pm on 21st March. By 12:00pm there will be minimal impact to the facade above first floor level, Fig 89.

Figs 93 to 95 show that the sunlight received by the lower residential levels of the buildings marked 'D' will be marginally reduced by the proposed development from 9:00am up to 01:00pm, however from approximately 2:00pm there will be no increased impact resulting from the development with the majority of the rear elevation to the residential properties above first floor level in shadow.

The development results in no increased impact on sunlight to the rear elevation of the building marked 'E'.

In conclusion, these shadow studies illustrate that the recommendation of the BRE Guidance document is generously met in the proposed masterplan, and that impacts on the adjacent residences are minimal. The impact on proposed new residences to the existing buildings is not considered to be excessive in an inner city location, and the existing buildings lend themselves to re-use as dual aspect apartments. The impact of the tall building overshadowing on Bank Place is not significantly increased from the existing condition, and is considered acceptable to meet the objective for a tall building at this location.

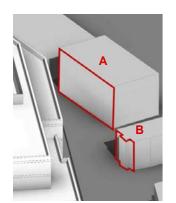


Fig. 79: March 21st 01:00pm Proposed

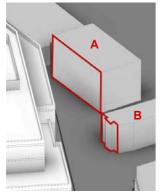


Fig. 80: March 21st 02:00pm Proposed

Fig. 81: March 21st 03:00pm

Proposed

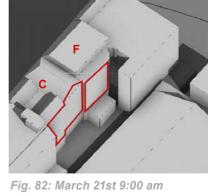


Fig. 82: March 21st 9:00 am Existing

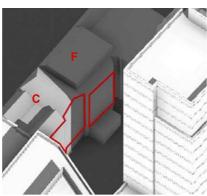


Fig. 86: March 21st 09:00 am Proposed

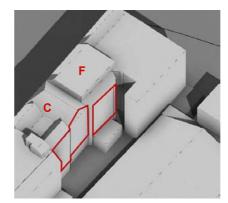


Fig. 83: March 21st 10:00 am Existing

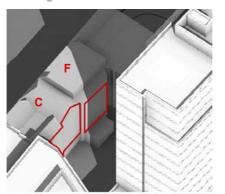


Fig. 87: March 21st 10:00 am Proposed

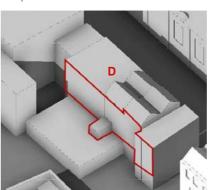


Fig. 90: March 21st 09:00 am Existing

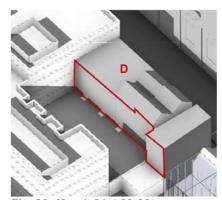


Fig. 93: March 21st 09:00 am Proposed

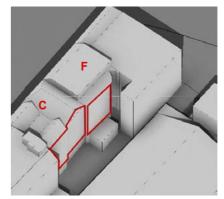


Fig. 84: March 21st 11:00 am Existing

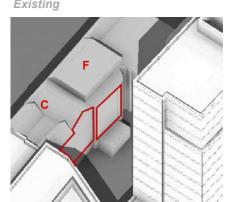


Fig. 88: March 21st 11:00 am Proposed

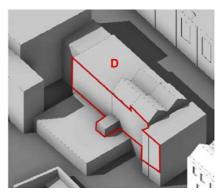


Fig. 91: March 21st 11:00 am Existing

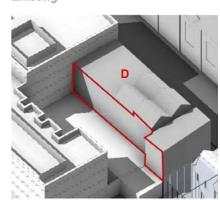


Fig. 94: March 21st 11:00 am Proposed

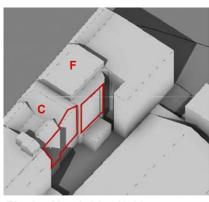


Fig. 85: March 21st 12:00 pm Existing

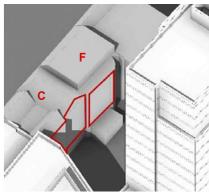


Fig. 89: March 21st 12:00 pm Proposed

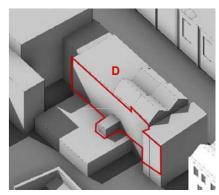


Fig. 92: March 21st 01:00 pm Existing

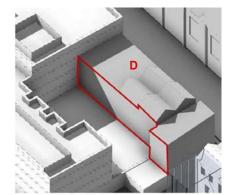


Fig. 95: March 21st 01:00 pm Proposed





Summary of Accommodation

10.0 Summary of Accommodation

Schedule of Accommodation

The table illustrated here lists the quantum of accommodation of existing and new building area proposed in this masterplan with the mix of uses and external spaces provided. The table highlights compliance with the Design Brief requirements.

Plot Ratio

The Design Brief outlines an indicative plot ratio of 2.5 - 3.0 for the overall Opera Site (including Bank Place, Nos. 7-9 Bank Place and Nos. 2-3 Rutland St.). The masterplan proposed represents a plot ratio of approximately 2.6.

Site Coverage

This development proposal, including Bank Place, represents approximately 56% site coverage, which falls within the range of 50 - 60% established in the Design Brief.

Mix of Uses

The mix of uses envisaged in this masterplan is in compliance with the Design Brief as a business led mixed use development. The masterplan provides 66% office use, 15% residential use, 9% civic/ cultural use, and 10% public retail/ food/ beverage use.

DEVELOPMENT AREA						
	DESIGN BRIEF	PROVIDED				
Total Development Area (existing+new build)	45,200m ²	46,000m ²				
Total Area Existing Buildings identified to be retained from survey and appraisal (excl. 7-9 Bank Place and 2-3 Rutland St.)	-	7,125m ²				
Total Area New Buildings	-	38,875m ²				
Central Square	3,700m²	3,760m ²				
Bank Place	1,100m²	1,400m ²				

Note: Areas listed do not include basements

SITE COVERAGE AND PLOT RATIO					
	DESIGN BRIEF	PROVIDED			
Site Area (incl. Bank Place)	-	17,800m ²			
Indicative Total Ground Floor Footprint (incl. 7-9 Bank Place, and 2-3 Rutland St.)	-	9,868m²			
Indicative Total Development Area	45,200m ²	46,000m ²			
Site Coverage	50 - 60%	55.5%			
Plot Ratio	2.5 - 3.0	Ca. 2.6			

Table 1: Development Areas, Site Coverage and Plot Ratio

USE	OFFICE	RESIDENTIAL	CIVIC /	NON RETAIL SERVICE		TOTAL
		(APARTMENTS / SHORT TERM)	CULTURAL		RESTAURANT/ CAFE/BAR	
%	66%	15%	9%	5%	5%	100%
	66%	15%	9%	10%		100%

Table 2: Percentage Use Mix





The Public Realm and Landscape

11.0 The Public Realm and Landscape

The following is a description of the design rationale for the principal public spaces allowed for in this Masterplan.

Central Plaza

Public Space

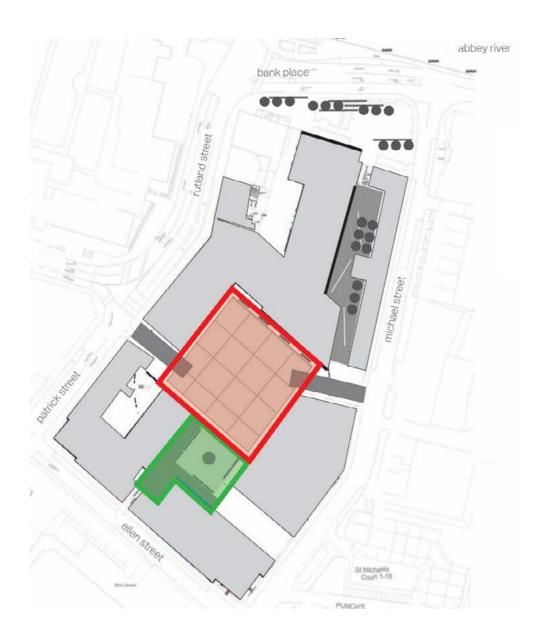
Pivotal to the development's success is a central plaza: a public arena that provides a multi-functional platform for social congregation and public interaction, while allowing also for ease of movement into and through it.

Void

A hierarchy of two adjacent plazas allows for the definition of two individually legible spaces, each defined by character, material, programme and size, and each complementary to one another. Collectively, this Central Plaza is defined as a void within the form.

Active Edges

Through an analysis of proposed built form and the resulting active edges that are produced around the Central Plaza, it is proposed that the urban form and the urban void act in parallel with one another: a reciprocal dynamic between the plaza spaces - where public interactions and activities take place - and the architectural form, which define the robust edge to the core central space.





character area 1

area: 2,448m2



character area 2

area: 906m2

- Void form to set the stage
- · Subspace to south portion
- Managed Public Space
- Strong Connectivity
- A key hub between Irish Town and Arthur's Quay
- Activated uses to draw pedestrians up from O'Connell Street
- A new pedestrian connection from Michael Street to Patrick Street crossing a new 'internal' public space that offers a quieter, interior courtyard space for occupiers and visitors

Ground floor / exterior uses





Mobile Food



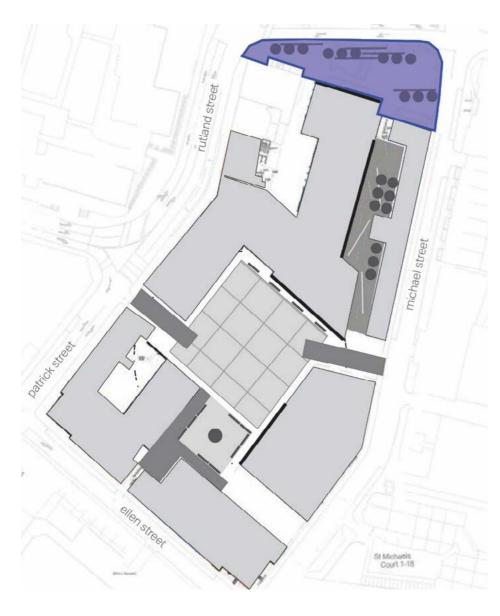
Restaurant



Cafe

Fig. 96: Central Plaza Character Areas





Bank Place

Gateway

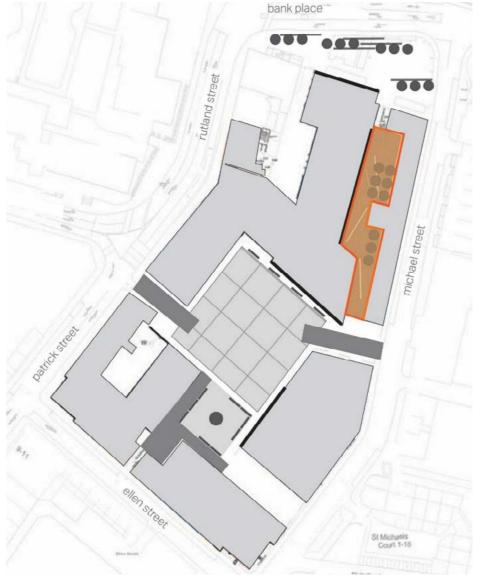
In an urban context, Bank Place plays a central role in the success of public realm development for Limerick City. Generously set back from the surrounding streets, the plaza space retains waterfront views to the north and therefore poses an opportunity to create a nodal gateway from the north of the city.

Meeting Place

Adjacent to city attractions such as The Hunt Museum, the waterfront promenade and various popular food and drink establishments means that Bank Place is ideally located as a place of congregation and public activity.

City Heritage

Responding to the space's historic fabric as well as its future functions creates a design for Bank Place that is both sensitive to the city's rich heritage as well as ambitious and forward-thinking in its development. Public amenity and comfort are priority alongside the space's response to the existing form and context.



The Granary Courtyard

Character

Differing from the Central Plaza through materiality, form and scale, The Granary is a place of unique character and form. Dramatic length and varying edge conditions create a break-out space ideal for dining and chilling out.

Cool and unique

The Granary space is inherently unique, pedestrian and cool: it is navigated and discovered as a surprise enclave that offers unique dining experiences and a very high quality public realm.

City life

In its context, The Granary space is key to the mixed-use successes of the Opera Development - contributing towards the vibrant, urban atmosphere that is aspired towards in this ambitious and important city centre location. It is a place for al fresco dining and contemplative coffee lovers, adding a mature and sophisticated edge to the bustling centre of the development.

Ground floor / exterior uses





Seating



Feature Trees





Ground floor / exterior uses







Fig. 98: The Granary Courtyard

Fig. 97: Bank Place



Transport, Access + Parking

12.0 Transport, Access, and Parking

This inner city development site is located within walking distance of numerous transport amenities. As a result the site benefits from high levels of accessibility by public transport.

A bus stop for City and Metropolitan bus services provided by Bus Éireann and Eurobus Limerick is located at Arthur's Quay which also provides an interchange facility with a number of regional and intercity services. A new bus stop is also proposed to serve the development at Bank Place. Limerick (Colbert) station is located on Parnell Street less than 1km from the Opera Site. Train services from here provide connectivity with Dublin, Ennis, Galway, Nenagh and Limerick Junction.

The site also benefits from proximity to a number of stations for both the Limerick Bikes bike sharing service and Go-Car car sharing service. In addition to widespread on and off-street car parking, there is a significant number of multi-storey parks in close proximity to the site.

The site is bounded to the north and west by the R445 orbital road route. Both Rutland St. and Patrick St. are classified as the Regional Road (R445) and provide a distributor function for traffic in the city centre. Rutland St. consists of a four lane carriageway while Patrick St. consists of two lanes with car parking provided on one side.

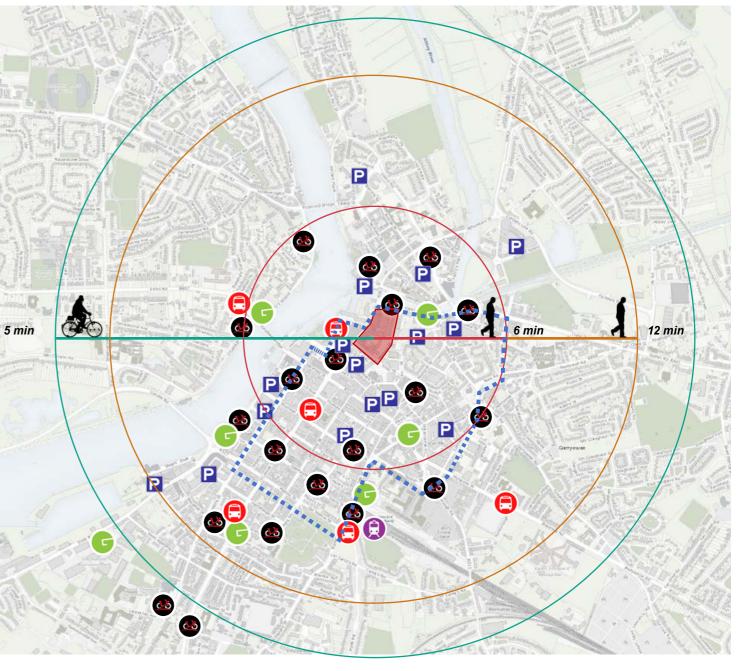
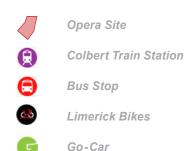


Fig. 99: City Transport Amenities, Walking and Cycling Disttances



Car Park

Orbital Traffic Route

Car and Bicycle Parking

The Design Brief highlights the existing transport amenities close to the site and outlines that the development should seek to minimise the number of parking spaces to promote alternative means of transport, in accordance with the principles of the Limerick 'Smarter Travel' initiative.

A shared basement car park is proposed to serve the entire site with vehicular access from Michael St. A limited number of vehicle set down areas serving ground level retail and food/beverage uses will also be provided to Michael St. and Patrick St.

Secure bicycle parking facilities shall be provided at basement level for building occupants, with visitor cycle parking at grade located at access points to the public square and at Bank Place. The quantum of car parking to be provided should be calculated to reflect the 'Smarter Travel' principles as outlined below.

An estimated daily occupancy of ca. 2100 is anticipated, based on the Employee Density Guide and the proposed quantum of development and use mix.

The Limerick Smarter Travel Initiative sets out targets for the percentage split of different modes of transport (37% by car, 35% walking, 14% cycling, 12% public transport, 2%other). When applied to the development this results in a requirement for 640 car parking spaces. Of this total, 16 spaces will be required to serve the residential apartment element of the proposal, to satisfy the LCCC Development Plan requirement of 1 parking space per apartment.

Based on the Smarter Travel targets, a total of 624 parking spaces is therefore required to serve the non-residential element of the development. From data provided by LCCC, the average weekday occupancy in October 2018 indicates the car parks in the city centre are only ever 70% full. This indicates that they are significantly under-utilised with at least 1,650 spaces available on an average weekday. On Saturdays at least 2,200 spaces are available. Considering this, it is proposed that the local multi storey car park capacity of 451 spaces can be offset against part of the parking requirement of the development and that the remaining 170 spaces are provided in the basement level car park.

Applying the Limerick Smarter Travel modal split targets to cycle parking requirements it is estimated that the commercial element of the proposal will require 300 to 360 cycle parking spaces, along with 37 to 47 spaces to meet the Development Plan requirement for the apartments. An additional 135 to 165 visitor spaces results in a total provision of 480-570 cycle parking spaces. It is noted that secure cycle parking facilities are also now available at a number of car parks in the city including the Denmark St. car park (Ellen St.) The quantum of car and cycle parking to be provided will be determined subject to final areas for the uses and specific occupant requirements.

The masterplan supports the Limerick Smarter Travel Initiative by proposing relatively low levels of car parking on site. The development of the site will contribute to enhanced permeability thereby improving the walkabity of the city centre. Regeneration of the city centre will support investment in public transport. The masterplan supports sustainable transport objectives as it involves the redevelopment of an existing brownfield city centre site that is highly accessible to public transport services.

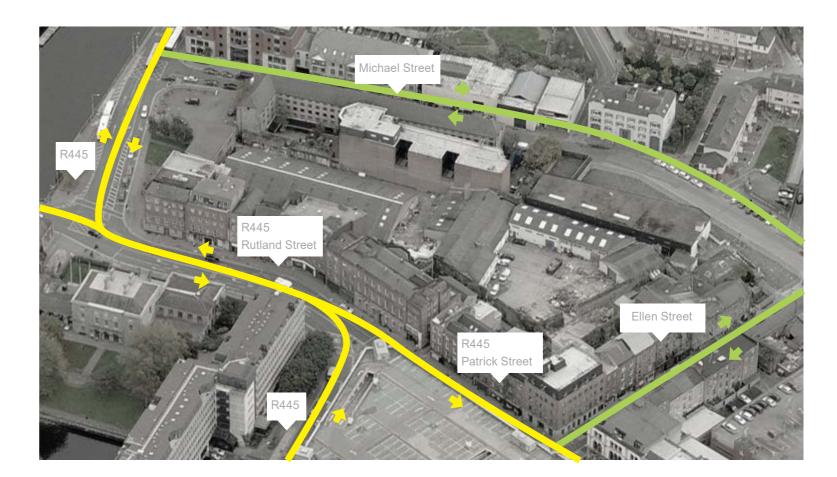


Fig. 100: Surrounding Roads





Phasing, Implementation + Delivery

13.0 Phasing, Implementation and Delivery

The development of the Opera Site will be a substantial construction project in the city of Limerick. It involves significant restoration of heritage buildings, and the construction of substantial new buildings with a varied mix of uses. It is most likely that the development will be progressed in a phased approach due to its size, the variety of building types proposed, vacancy and possible enabling works.

The Masterplan, developed as quadrants around new public spaces, naturally allows for the site development to be phased in a number of ways. It is envisaged that:

- Phase 1 will comprise enabling works including demolitions and the construction of the new basement.
- Phase 2 will consist of construction of the tall building and the new civic/ cultural facility at North West and North East quarters
- Phase 3 is planned to follow with construction of the South East and South West quarters

However, the detailed design of the development proposal and possible decanting requirements of occupied buildings will inform the most appropriate phasing and delivery of the project.

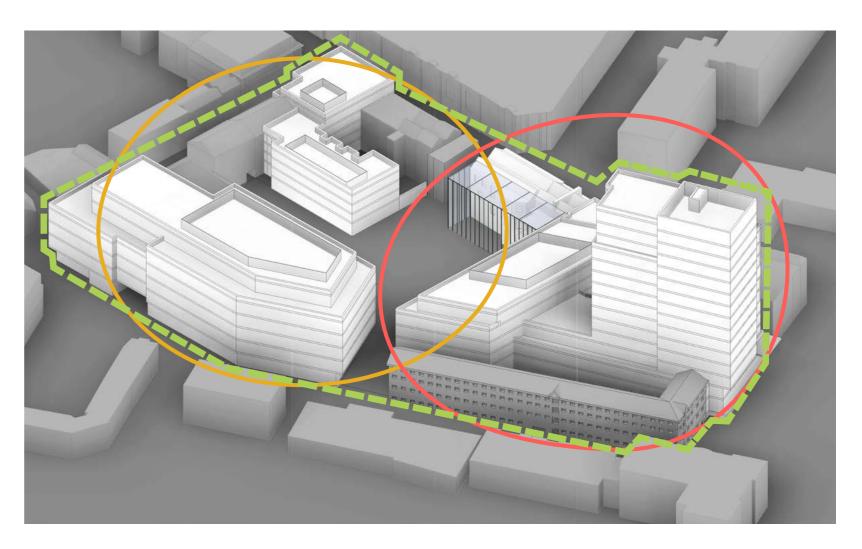


Fig. 101: Phasing of Development

Phase 1: Enabling Works and Basement Construction

Phase 2: Northern Quadrants

Phase 3: Southern Quadrants



LIMERICK TWENTY THIRTY





