

Britomart North Precinct Plan Change- Urban Design Statement.

Uses, Built Form, Land Form, Public Space

The Britomart Precinct is a well documented and understood development of a previously semi-derelict area of the city stretching west to east from Queen Street to Britomart Place and north to south from Quay to Customs Streets. A new transport centre for heavy passenger rail has been developed underground with the old Central Post Office being refurbished to house the rail terminal functions at ground floor with commercial offices above. The Britomart Precinct and the surrounding street network are functioning well as a de facto bus terminal. To the north of the precinct are the wharves serving the tourism and commuter ferry services. Auckland's increasing dependence on and patronage of public transport systems means that the Britomart and lower Queen Street areas will benefit from increased foot traffic and demand for local amenity and commercial activity.

The Britomart development, despite its current partial completion has acted as a catalyst for the development of another dilapidated urban area; that between Quay and Fort Streets. The Britomart development has in effect served to kick start the revitalisation of the entire area from Quay Street through to the highly regarded urban and commercial areas of the High Street retail and Shortland Street commercial districts. It will provide the important extension from these existing vital city areas to Auckland city's waterfront. Plans are already mooted for the development of the waterfront areas bounding this developing area of the city through the rehabilitation of the Queens, Captain Cook and Marsden wharves.

The Britomart precinct comprises the renovation of a significant number of heritage and 19th century buildings which occupy the perimeter of the precinct. The Customs Street frontage is a particularly intact continuum of 19th commercial premises. Most of these ancient structures are currently occupied, prior to or after their renovation, by temporary retail and commercial tenants which deliberately activate the precinct and provides passive security through the area. These buildings are to be converted, or are being converted currently into urban style apartment living and commercial occupancies. An example of this is Westpac Charter House, a commercial development at the corner of Customs Street and Britomart Place which incorporates the heritage Charter House building into new commercial premises.

New buildings are proposed for the central open area of the precinct which previously housed the downtown bus station. The bus station was demolished to allow the excavation for the underground railway station to be constructed. Two buildings are proposed for this area, the 'east' building, a 30,000m² premium commercial, residential and retail development, and the 'Central' building, the uses for which are yet to be clearly defined. The Britomart Precinct plan suggests that this might be a structure of some 25,000m². Care has been taken in the design of the new buildings, Westpac Charter House and the East Building, to ensure that their form integrates with the existing heritage scale and texture through appropriate architectural modulation.

Both the East and Central buildings front, to the east and west, the proposed new open urban space- Takutai Square. This will be a large scale open public space bounded at the north and south by Tyler and Galway streets that will provide a grand public amenity and a necessary open space in the developing city. The developers of the Britomart Precinct have energetically promoted public events that suggest the possibilities for the city of this urban room. The opportunity for development of the edges of the buildings surrounding Takutai Square into active frontage areas is being pursued and plans for the development of these surrounding buildings acknowledge this.



Figure 1: Takutai Square plan showing East Building frontage.

The building bulk defined in the plan change does not 'front' Takutai Square, but is closely located. The building is located off the square with its southern frontage starting approximately 12m from the northeast corner of the square. The development of the Union Steamship building and occupation by the Macs Beer bar on the ground floor has provided some street activity in this area, and it is envisaged that this will be continued with retail tenancies to the ground floor of the yet to be developed Tyler House building, and the soon to be tenanted and developed ground floor of the Union Fish building.

The use of the Seafarers Building site is currently being explored in the design of a truly international standard five star hotel. In the current design studies being undertaken the Tyler Street frontage to the hotel would serve as the principal entry to the Hotel with concierge service activating the street. The Hotel lobby would front Tyler Street and it is envisaged that this international quality space would continue through to Quay Street, providing a de facto internal public space and informal route through to the waterfront.

Entry to the northern part of the commercial East building lobby is opposite the hotel lobby and would likely share a common traffic calmed street space. Loading bays to the East and Hotel buildings are located further east down Tyler Street and an appropriate planted landscape treatment is envisaged to screen these functions. The current design hopes to achieve additional mitigation of the visual effects of these functions by the partial sharing of these facilities between the hotel and commercial/retail building which may minimise the impact that the two large individual loading areas may otherwise have.

The block to which the plan change is proposed to apply is that bounded by Britomart Place to the east, Quay Street to the north, Gore Street to the west and Tyler to the south. The block is mostly populated with older buildings, some Heritage listed, some already refurbished, and one dating from the 1950s; the Seafarers Hostel and Mission. There is one additional site yet to be developed in this block as part of the Britomart works. This is that currently occupied by the Tyler Building. The existing buildings range in height from the single storey Wharf Police building, which is not included in the plan change, to the four storey Quay Building.

At the larger city scale, the existing pattern of development along Quay Street from Gore Street westwards to Lower Hobson Street is defined by a broken pattern of lower 19th and taller 20th century buildings. The scale of the older heritage buildings is legible at the street edge, while the larger buildings form a strongly identifiable line, at a city wide scale from the Harbour Bridge, North Shore and harbour approaches, thereby defining the northern extent of the CBD.

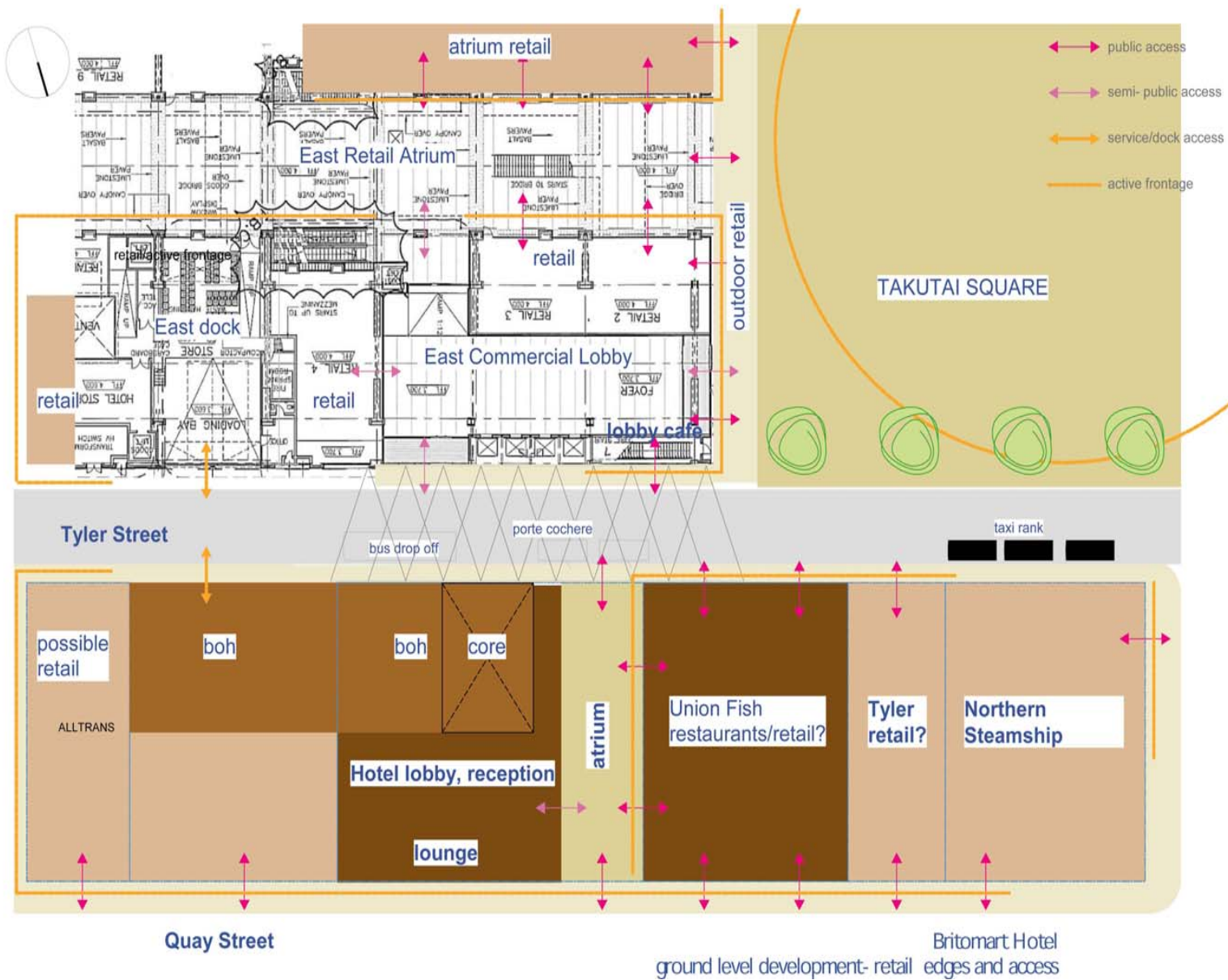


Figure 2: Diagram of the active edge and loading areas of the suggested hotel and East Building development.

(note north is down page)



Figure 3: Concept perspective of Tyler Street public edge.

Review of Development Constraints

The current Britomart Precinct Plan preserves building heights (using Precinct Plan A) for the existing 19th century unscheduled buildings on the site and allows a new building on the Seafarers site of 24m in height and on the Tyler Building site of 22m.

The Harbour Edge Height Control Plane, shown in diagrams 6.1 and 6.2 of the Central Area Plan, extends from Lower Hobson Street to Britomart Place over those blocks bounded by Customs and Quay Streets to the south and north respectively. In accordance with normal planning practice the more onerous controls, in this case those of the Britomart Precinct Plan, apply.

The proposed plan change enables the Harbour Edge Height Control Plane to determine the height of any development on the Seafarers site only, superseding the Britomart Precinct Plan controls. This is accompanied by other modifications which allow an increase of GFA that would necessarily accompany a building of the scale envisaged. This potentially results in the development of a medium height building, using the 45 degree recession plane 60m above the centre of Quay Street (as a Restricted Discretionary Activity at the Quay Street frontage) to be constructed on the site of the current Sailors Mission building. In effect, this form will continue the existing rhythm along Quay Street, preserving the pedestrian scale provided by the heritage buildings, while extending eastwards the larger scale of building which characterises the northern limits of the CBD at the Quay Street edge.

While any proposed building would be subject to normal Urban Design Panel processes, the finite design of any building for the Seafarers site is not the topic of this report. It is acknowledged, however, that during the design process for a taller building on the site, appropriate architectural modulation will be required to reconcile the scale of the proposed new form of the larger structure with the heritage buildings.

It is suggested that the Britomart's critical task is to link the well developed commercial and cultural areas east of Queen Street with the waterfront. The large building proposed for the Sailors Mission site would mark, at a city scale, this eastern extension of the CBD edge along Quay Street.

Any building of the scale proposed would, when viewed from the harbour or North Shore, fit well with the existing pattern of high rise towers that generate the silhouette of the city. The insertion of this building may in fact be out-scaled in the context of the existing and proposed development for the area, particularly by the existing commercial development up Shortland Street, which enjoys the benefit of the shoulder of the Princes Street ridge.

It is important to emphasise that the development of the above ground Britomart works is only now significantly commencing. The refurbishment of some of the heritage buildings has been completed, and the construction of the eight storey Westpac Charter building is underway. The East Building, which occupies the area of the precinct East of Gore Street through to Britomart Place will commence later this year. This a 30,000 m² commercial and residential building 12 storeys in height. The scale of this building is significant, almost 90m long and 55m wide. This 'groundscraper' would, at street level, significantly out scale the heritage buildings in the Britomart precinct without the façade modulation and zoning gestures which have been employed. Viewed from a more elevated position however, the East building comes 'into scale' when the form proposed in the Plan Change for the Sailors Mission site is modelled. This makes even more scale sense when the form for between Gore Street and the CPO (the 'Central Building') shown in the Britomart Precinct Plan is modelled.

Analysis of Wind Effects Studies

The wind effects generated by the proposed form have been tested in the wind tunnel by Auckland Uniservices Ltd and a copy of this report is included in the attached appendix 1. The detailed conclusions of the report are in the appended document, however the critical conclusions are that the development meets the criteria laid down in the Auckland City Council District Plan. This requires that carriageways should be no worse than wind category D (suitable for walking faster), in the proposed development this is the case in a small area of Gore Street at the north-west corner of Takutai Square. The report notes also that the idea of extending pedestrian finishes across Gore Street is being considered to extend the square visually to the buildings at its perimeter, but that cars may still travel across this extended square in the area that is now Gore Street. In this case the wind environment in this pedestrianised carriageway should be further considered during design of the square.

Analysis of Shading Studies

Shading studies have been undertaken by Peddle Thorp Architects using Sketchup software. The process includes locating the site at its correct latitude and longitude and north orientation. The bulk of the buildings within the Britomart Precinct are modelled in 3D and two study buildings are then inserted, the shading is generated in the computer software and the graphic results of this process are then inserted into a 2D site survey drawing. The model includes designed buildings within the Britomart development, for example Westpac Charter House and the East Building, both of which have received Resource Consents. Buildings that have not yet been designed, for example the Tyler Building and the Central Building are modelled at the maximum allowable envelope allowed in the Britomart Precinct rules of the District Plan. Two models for the Seafarers site are tested. The first is the bulk allowed under the current Britomart Precinct rules which is 24m high. This serves as a base line for comparison of the larger structure, which is that which could be constructed under the proposed plan change, the height of which is controlled by the recession planes of the Harbour Edge Height Control Plane of the current Central Area Plan.

The shading studies are undertaken at the winter and summer solstice as well as the equinox and at 10am, 11am, 12pm, 2pm and 4pm for each of these times of year. The results of these studies are shown in Appendix 2.

The critical observations are as follows:

- 1) The substantial majority of new shading to Takutai Square is generated by the new East Building.
- 2) The proposed development increases the shading of Takutai Square above that generated by a 24m structure.
- 3) With the larger structure in place sunlight penetrates the southern side (the northern side of the buildings fronting Customs Street) of Takutai Square in summer soon after midday.
- 4) With the larger structure in place sunlight penetrates the southern side (the northern side of the buildings fronting Customs Street) of Takutai Square in winter soon after 10am (due to the fact that the sun rises further 'north' in winter).

Shading study Conclusions:

- 1) The new structure adds some additional shading to Takutai Square but this is relatively minor in comparison to that generated by the East Building. Shading from the proposed new form has left the square after midday in summer and 10am in winter. It is suggested that shade from sunshine is desirable in summer time, a time when the cancer Foundation is advising people to not be exposed after 10am.
- 2) Winter sun provides welcome warmth. The southern side of Takutai Square should be a comfortable environment at all times of the year as this receives generous amounts of sunshine, and will be sheltered by the buildings fronting Customs Street from prevailing southerly winds. Sunshine generally penetrates the Square during the hours normally defined as desirable for sunshine penetration in the District Plan, and often extends them.

Analysis of Visual Catchment

At a pedestrian scale, when viewed from the East the most likely position to view the form from an elevated position would be on the western side of the Parnell ridge at the northern edge of Dove Meyer Robinson Park. From this location the building form, at around 100m high, is partially obscured by The Docks development, and melds into the overall city silhouette, where it is dwarfed by other high rise buildings.

It will be viewed against the taller PWC tower on Quay Street beyond, and also against the significantly taller Oaks Residences on Gore Street. It will also be dwarfed by the much taller development on the Shortland Street ridge above.



Figure 4: View to west towards Britomart Precinct from Dove Meyer Park, Parnell.

Views approaching the site from the east would mostly be from Quay Street as potential views from Beach Road are obscured by the Scene Apartments development and the building would be further concealed behind the East Building to be constructed soon on the eastern end of the Britomart precinct.



Figure 5: Views towards Britomart along Beach Road, showing Scene Apartments

Pedestrians moving towards the city from the East do not heavily use Quay Street at present. It is however well used by commuters who we suggest have a similar experience as pedestrians due to commuter traffic speeds. Once onto the straight part of Quay Street, from Tangihua Street westwards, the site is visible and we suggest the form of the building should serve to reinforce the linear dynamic of Quay Street as it rushes westwards. When viewed from this position the building would fit the urban pattern of smaller, sometimes heritage, buildings interspersed with large-scale buildings. The large scale buildings serve at pedestrian and commuter scale as markers to the northern extent of the CBD and the Quay Street lateral.



Figure 6: Aerial View towards Britomart looking west along Quay Street

Like the view west, when viewed from Quay Street in the vicinity of the 1980s Harbour Board structure Quay Street rushes away as a broad avenue without termination and it is the straight dynamic of the roading and the 'soldier course' of the taller buildings that reinforce this.



Figure 7: View towards Britomart looking west along Quay Street.

Approaching the building from the south side the form would be viewed from the corner of Galway and Gore Streets diagonally across Takutai Square. From this intersection the base of the building where it touches Tyler Street would not be visible, but as a pedestrian moves north along Gore Street this would become visible, albeit increasingly obliquely. The height of the building is substantial in comparison to the adjacent small-scale buildings but this contrast may diminish when the building is viewed adjacent the massive East Building.



Figure 8: View from south-west corner of Takutai Square

Analysis of Urban Structure

The seminal colonial development gesture is the road running from the shore into the hinterland. In Auckland, where Queen Street provided this first gesture, once the reclamation of land proceeded north of Fort Street the second classical development element followed - the grid. The strongest of these laterals developed is Quay Street which terminated reclamation in a great East-West boundary to the water's edge. This has been reinforced through the development of Quay Park, and germs of this thinking inhabit gestures such as Te Ara Tahu through Britomart.

More recently the east-west drift has been further reinforced by the rehabilitation of the Viaduct Harbour, but the expression of the 'lateral' is receiving its strongest reinforcement via the proposed plan change relating to the Wynyard Quarter. The urban design principle to be incorporated into this plan change is that Jellicoe Street connects to the major east-west lateral running west across the bottom of the city. The line is: Quay Street, across the Eastern Viaduct, over Te Wero island via the proposed new bridge, connecting then to Jellicoe Street. This lateral is marked in the third dimension by the Wynyard Quarter Plan which allows 3 new building sites containing 52m high buildings (approx 15-16 levels) to give three dimensional expression to and 'reinforce' what has been conceived as 'the waterfront axis'.

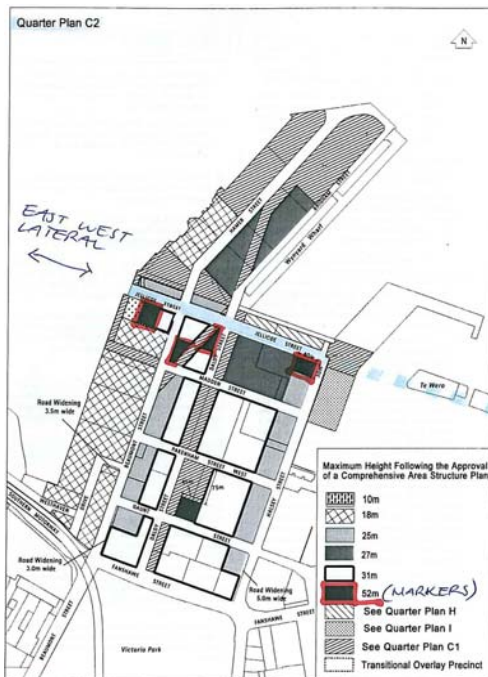


Figure 9: Extract from ACC Wynyard Quarter Plan Change.

Development Option Analysis

The client's vision since early 2007 has been to develop an 5 star hotel managed by a recognised international operator on the Seafarers site. The initial design commenced in mid 2007 with Johnson Pilton Walker Architects exploring the nature of a hotel to be located on the site. This early design accommodated approximately 150 rooms and generated a building of some 14 storeys.

Notably, this early design recognised that a linkage between Tyler Street and Quay Street, effectively linking the northeast corner of Takutai Square with Quay Street, was desirable; a feature still being explored in the current design. This was expressed as a drive-through porte cochere at street level running through the western side of the site.

Significant also is the preservation of the Alltrans and Quay buildings in some form and the preservation of the 'Heritage frontage' accordingly. Featuring also in this scheme is a massing/modulation gesture, which establishes a scale and textural relationship with the heritage frontage buildings.



Figure 10: Rendering of early JPW scheme. (Oaks Residences behind not shown)

The client's need to secure a suitable operator drove the decision to engage HKS Architects from Palo Alto California as hotel consultant/designers. HKS are responsible for the design of many of the 5 star international hotels currently being operated globally.

In concert with JPW, HKS developed the required brief and schedule of accommodation. The base requirements for a truly 5 star international hotel were for a minimum of 170 rooms of approximately 45m² each, 20% of which would be larger suites. This accommodation is backed up by front and back of house facilities and, combined, these facilities total some 19,000m². JPW and HKS sought then to develop a built form to accommodate this floor space. Critically the 23-storey form, at 80m high approximately, exceeded the 24m height control substantially, as did the earlier 48m high JPW scheme (Figure 10). It was clear at these early design stages that adjustment to the District Plan rules would be required to accommodate the project.

This scheme was developed with the view to accommodating the operator's likely requirement for 15 rooms per floor. This together with the on-floor back of house areas, lifts, service risers and fire stairs, resulted in the building having to cantilever substantially over the boundaries on the east and west sides. The result of is that the building loomed significantly over the heritage Union Fish Building and the Quay Building. At this stage it was also decided to occupy the available floor area within the Alltrans and Quay buildings with hotel areas. At the same time, the decision to conserve the Alltrans and Quay buildings was reinforced, together with the gesture to index the massing/modulation of the new building to the Quay Street frontages of the heritage buildings.



Figure 11: Rendering of early JPW scheme, with floor 'overhangs' added. (Oaks Residences behind not shown)

Towards the end of 2007, in reaction to some client disquiet at the bulky look of the cantilevers, JPW undertook some more simple massing studies.

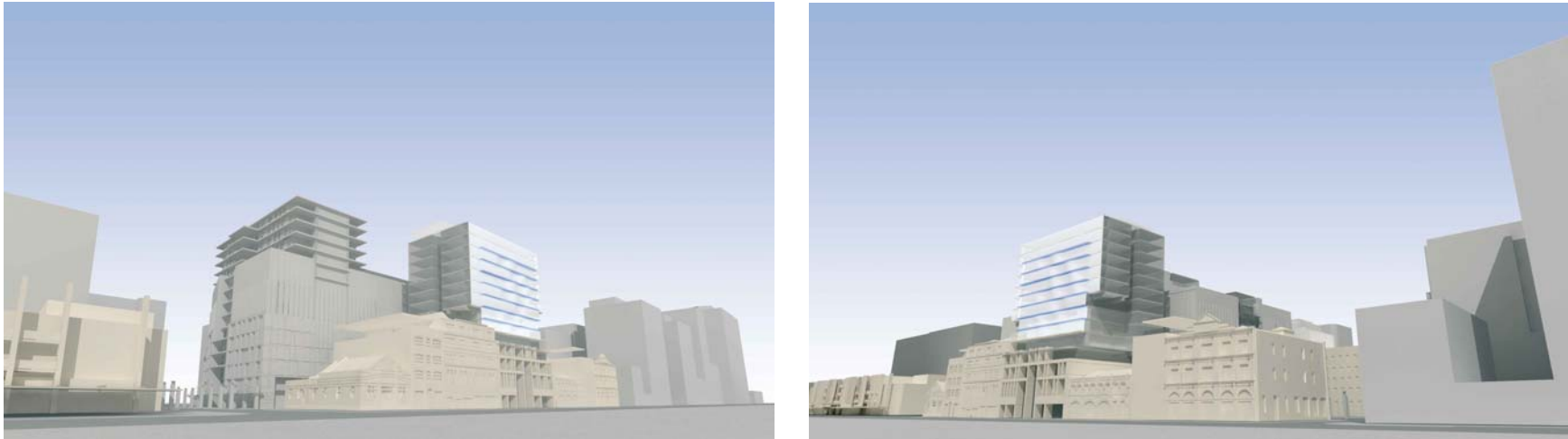


Figure 12: Additional JPW Studies.

In the client's mind these studies did not allay the fears regarding the bulk generated by the large overhanging floors. Peddle Thorp Architects (PTA) have worked in partnership with JPW on both the Westpac Charter and East Buildings within the Britomart project and were brought into the scheme to shadow its development. When asked for an opinion regarding the overhangs the client's view that they generated an unwieldy composition was reinforced. The opinion of HKS was sought at this time also, and they agreed with the client's view.

The client then determined that further analysis be done and PTA undertook a series of studies analysing the current design and suggesting variations to the modulation.



Figure 13: Selected PTA building mass design studies

As is typical of any design process there is often a 'leap' in design approach that reflects insight gained through such a design interrogation. This resulted in PTA forming the opinion that the building would be better taller. This would lend the building a taller, more elegant profile, in keeping with a building of quality and stature located on a site virtually on the edge of the downtown Auckland waterfront. This more slender scheme asked for no more than 12 rooms per floor, a significant reduction from the original 15 required.



Figure 14: PTA design study.

At the same time the client invited Cheshire Architects and HKS to undertake explorations of the design. These were tabled at a meeting at HKS offices attended by the client team, HKS and PTA. All three architectural firms independently generated taller buildings, and both the client and the architects unanimously agreed that this was the best way forward.

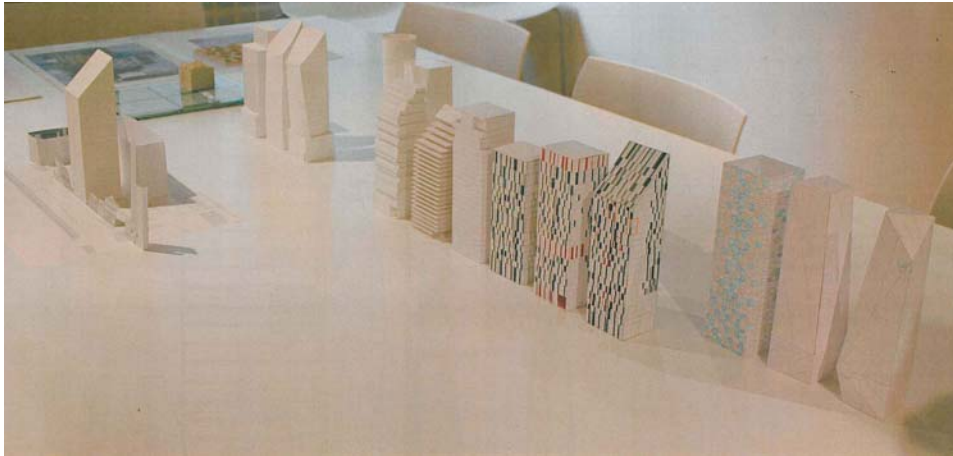


Figure 15: Cheshire design study.



Figure 16: HKS design study.

Summary Conclusions.

Analysis of the pattern of development in the city shows that Quay Street development consists of a mix of small scale buildings up to six storeys high interspersed with high rise buildings. At the scale of Auckland's larger urban pattern it is these taller buildings which mark the northern edge of the city as it spreads laterally across the waterfront. Tall buildings 'marking' this lateral have been adopted in the development of the Wynyard Quarter Plan Change.

The heritage and smaller buildings present on the waterfront provide critical human scale and texture to the pedestrian experience. The design of a building for the Seafarers site could achieve this effect through architectural scale devices and street level facade articulation.

The active edge of Takutai Square is likely to be further developed in the design of new and refurbishment of older buildings. Current design for the site suggests this active edge will be extended down Tyler Street past the edges of the Square with the likely location of entry and concierge and valet parking facilities for the hotel contemplated. A shared porte cochere between the hotel and the east building north lobby is being considered.

Wind and shading effects have been considered and testing undertaken. The most significant change in wind effects due to the larger form occurs in Gore Street adjacent the north west corner of Takutai Square. Although this is largely due to the 30 degree wind (north-east storm), mitigation of this effect should be considered in the design of both Takutai Square and the central building.

Shading into Takutai Square, the most significant outdoor public space in the precinct is marginally increased over that generated by the East Building by the proposed form. Sunlight penetration into the deepest southern side of the square starts occurs around midday during summer and around 10am in winter.

The potential building form considered in this report is that allowed by the following the controls of the Harbour Edge Height Control Plane, and it is noted that a building designed for the site may not fully occupy this bulk.

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17/3/2008

Appendix 1: Wind tunnel investigation of the pedestrian level wind environment around the proposed hotel development on Quay Street in the Britomart Precinct, Auckland.

Appendix 2: shading studies undertaken for a high rise building proposed for the Seafarers Mission site, Quay Street, Auckland.