

4.5 Materials and Finishes

The following external materials are proposed for the commercial and hotel buildings. A materials board has been submitted under separate cover.

Commercial Building

- Double glazing
- Perforated mesh shading screen
- Pre-finished metal panels
- Sandstone panels
- Stainless steel
- Timber shopfront
- Granite paving

Hotel Building

- Double glazing
- Terracotta façade panel
- Glazed façade with patterned interlayer
- Granite paving
- Timber bridge

Public Domain

- Granite paving (Denison Plaza, through site link and Spring Street)
- Concrete paving (Little Spring Street and Denison Street north)
- Sandstone paving (Walker Street)

4.6 Laneway Configuration

One of the principle elements of the development is the proposed reconfiguration of the laneway network surrounding the site so as to allow for the creation of a new public plaza in Denison Street. The proposed configuration of the laneway network is shown in **Figure 47**.

A new through site link (road) is proposed which links from Little Spring Street to Denison Street across the Berry Street lot. The link will have a width of 12.2m and will run in a one way direction from east to west and will be open to vehicles 24 hours a day.

Little Spring Street will be reconfigured and widened to a two-way street south of the new through site link allowing part of Denison Street to be partially closed off to traffic. Although part of Denison Street will be closed, access to all the existing MLC Centre loading docks and vehicular driveways on Denison Street will be maintained as per the existing situation albeit the route to those entrances will be slightly varied.

A separate application will be made to Council for the partial closure of Denison Street.

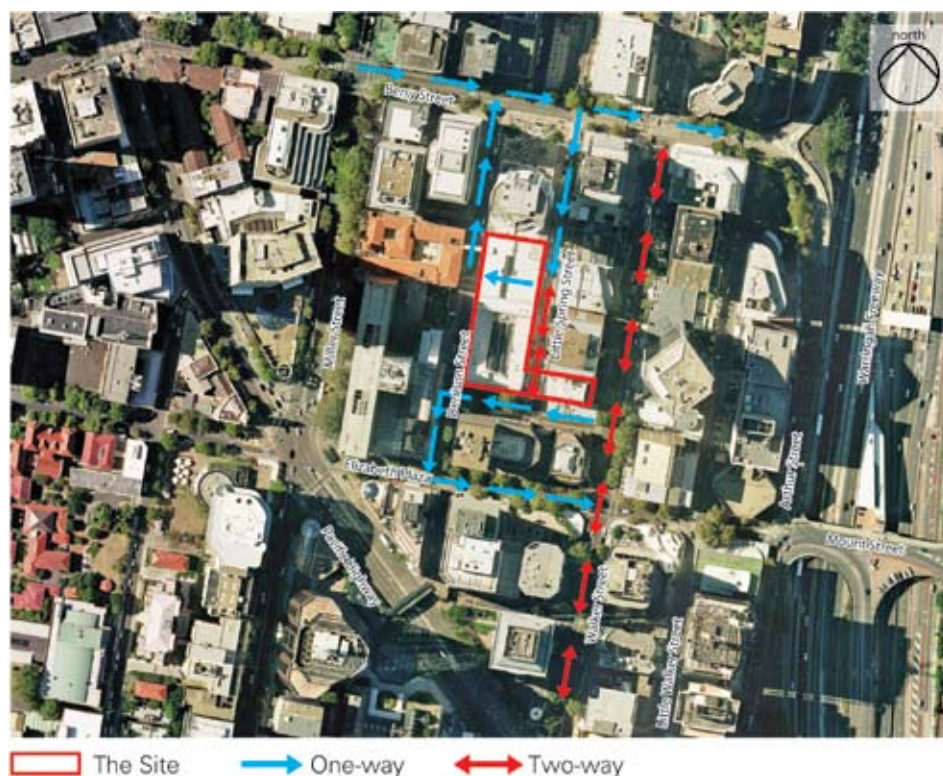


Figure 47 – Proposed laneway configuration

4.7 Pedestrian Circulation and Access

The main pedestrian routes to the site will be from North Sydney station via Mount Street and Denison Street and from Mount Street. Pedestrian access into the building is available at a number of different entrances. **Figure 48** shows the main pedestrian routes to and through the site.

The main pedestrian entry points to the commercial building are:

- main lobby entrance on Spring Street;
- secondary lobby entrance on Denison Plaza;
- Formal building entrance on Walker Street and across the pedestrian bridge to the commercial lobby;
- new entrances at either side of the new through site link (two in total);
- the existing pedestrian link through the ground level of Beau Monde; and
- the entrance to the retail podium.

Pedestrian access to the hotel is proposed from:

- the lobby entrance on Walker Street;
- the main lobby entrance on Little Spring Street; and
- via the commercial pedestrian bridge.

The bridge connecting the hotel and commercial buildings will be accessed via a grand staircase within the lobby of the hotel building. It will be of lightweight construction and encased in glass to form an art feature across Little Spring Street (see **Figure 49**).



Figure 48 – Main pedestrian routes through the surrounding laneway network and site (red line shows pedestrian routes)

Source: Rice Daubney

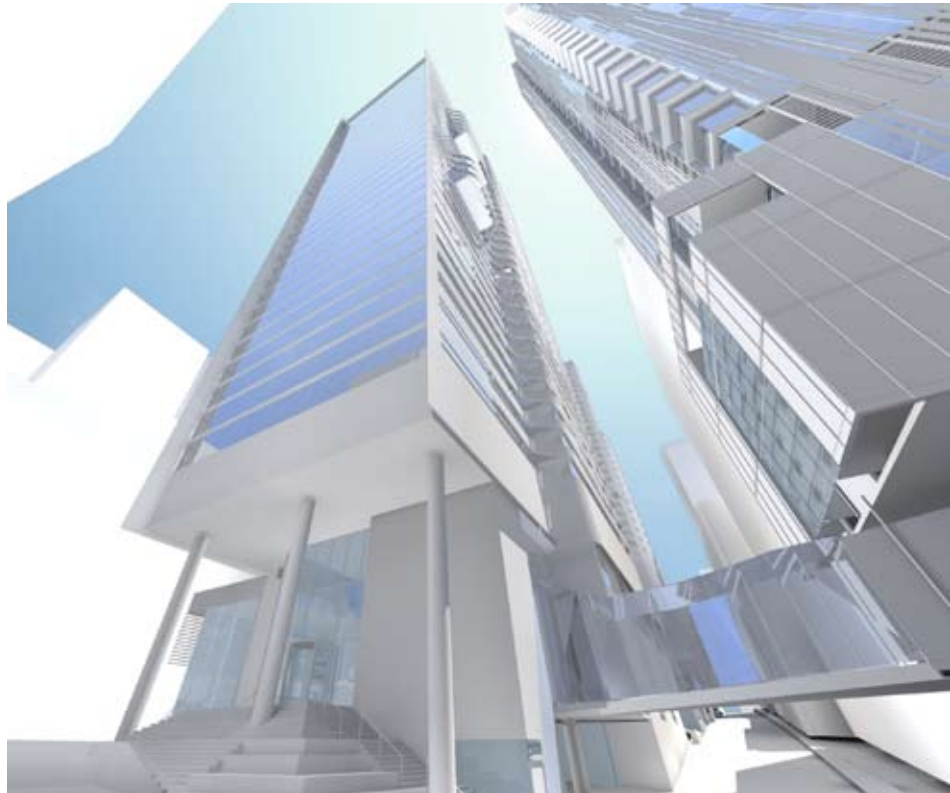


Figure 49 – Proposed pedestrian bridge over Little Spring Street

Source: Rice Daubney

4.8 Vehicular Access, Parking and Loading

Vehicular Access

All vehicular access, including service vehicles and hotel vehicles, to the site will be via the new basement entrance on the western side of Little Spring Street.

A separate drop off zone will be provided for hotel guests on the eastern side of Little Spring Street in front of the hotel. The space will accommodate three vehicles at a time and will be policed by the hotel staff.

Car and Bicycle Parking

Five levels of below ground basement parking and one level of service and loading are proposed underneath the commercial building. This will comprise:

- 226 parking spaces, comprising:
 - 152 commercial/retail tenant parking spaces;
 - 32 hotel parking spaces; and
 - 42 public parking spaces.
- 42 motorcycle spaces

Basement Level 1 will accommodate the public parking spaces, Basement Level 2 will accommodate hotel and commercial tenant parking whilst Basement Levels 3 and 4 will comprise the commercial / retail tenant spaces.

161 bicycle parking spaces (enough for approximately 5% of the building occupants) are provided on Basement Level 2. Showers and storage facilities for occupants of the new buildings are provided on Basement Level 1.

Visitor bicycle parking facilities will also be provided in the public domain on Spring Street.

Six accessible spaces are provided in total with at least one accessible space provided on each level of the basement.

Public Parking

The proposed reconfiguration of the laneway network results in the loss of 13 (2P) metered short stay parking spaces and 2 (5 minute) non-metered parking spaces (drop off).

In order to replace some of these lost spaces and those spaces which will be lost on Miller Street as a result of the Councils proposed road works, the proposal includes the provision of 42 public parking spaces on Basement level 1. This is a net increase of 27 public spaces.

Parking for the hotel will be accommodated on the second level of the basement and will be made available to hotel guests and patrons. It will operated on a valet basis.

It is envisaged that the 42 public parking spaces on Basement Level 1 will be operated by North Sydney Council in accordance with the terms agreed in the Voluntary Planning Agreement (refer **Section 4.16** of this report). It is expected that the spaces will operate on a short stay basis and will be available for use on weekdays and weekends. Council will determine the pricing structure and the hours of operation of the car park. The public spaces will be available to clients and customers of the surrounding commercial business and retail premises and as such will be beneficial to the operation of the North Sydney CBD.

Loading and Servicing

Fourteen loading spaces are provided at the Lower Ground Level of the commercial building, including:

- 2 bays for 10.7m heavy rigid vehicle;
- 4 bays for 8.8m medium rigid vehicle;
- 7 bays for 5.2m car courier; and
- 5 bays for motorcycle couriers.

The lower ground level has been designed to accommodate up to a 10.7m heavy rigid truck and as such collection of garbage will be able to occur within the loading dock. Headroom clearance of 4.5m clear of obstructions has been provided.

Loading spaces will be shared between the commercial building and the hotel and will be co-ordinated by the Building Manager. A service tunnel under Little Spring Street will connect the second basements of the two buildings. The hotel staff will transfer waste and deliveries through the tunnel from the basement of the commercial building across to the basement of the hotel building. Transfer of waste and deliveries from the service tunnel to the loading dock in the commercial building will occur via the goods lift.

4.9 Open Space and Public Domain

Oculus Landscape Architects has designed the public domain and landscaping elements of the proposal. Their report and public domain plans are included at **Appendix G**. A description of the proposed public domain is provided below, an indicative planting schedule and list of materials is provided in the public domain report.

Denison Street Plaza

The section of Denison Street between the new east-west through site link and Spring Street has the greatest potential of any space adjacent to the site for the creation of a highly activated pedestrian space due to its location adjacent to existing and new active frontages and lunchtime / afternoon sun penetration. As such it is intended to close this section off to traffic and to create a pedestrian plaza (**Figure 50**).

The plaza space will extend into the existing shared zone on Denison Street and the MLC Centre outdoor seating area, which in turn connects into the Mount Street Plaza. There will be opportunities for outdoor seating along the eastern side of the space, partly under the new building overhang, as well as along the west side as an extension of the existing MLC Centre outdoor seating.

A consistent, high quality paving treatment is proposed throughout the plaza, using stone in a banded 'bar code' pattern, along with a strong line of street trees which extend into the southern section of Denison Street (see below). These trees will be *Corymbia maculata* (Spotted Gum), an evergreen native tree with light foliage, a straight trunk and clear stem.

The southern part of Denison Street Plaza will have two raised lawn platforms, which will provide green space and informal outdoor seating, particularly at lunchtime when the plaza is in full sun. These raised lawns will step down to the main paved area to the south and would be defined by low seating walls at either end. The lawns will have informal tree planting of eucalypts which with their clear stems and light canopy will provide light shade whilst still allowing for natural surveillance of the area. There is also potential for the gardens to be constructed as 'Rainwater Gardens'.

As access to the existing loading docks of the MLC Centre needs to be maintained the northern section of the plaza will act as a shared zone with no kerbs and service vehicle access defined by bollards. The paving treatment of this area will be consistent with the southern part so that the whole reads as one integrated space.



Figure 50 – Denison Street Plaza

Source: Oculus

Denison Street South

It is proposed to refurbish the existing shared zone on Denison Street between Spring Street and Mount Street to allow for greater pedestrian priority (**Figure 51**). The carriageway will be reduced in width and some of the existing motorbike parking will be removed to provide more space for pedestrians and trees. The paving used in Denison Plaza will be extended into this zone for continuity. Oriental Plane trees will be planted in this section of the public domain to permit solar access whilst providing seasonal colour.

It is also proposed to replace the existing walls and planters with stairs along this section of the street to help unify the pedestrian shared zone with the MLC Centre outdoor seating.



Figure 51 – Proposed works to Denison Street South

Source: Oculus

Through site link

The new east-west through site link running between Little Spring Street and Denison Street will form an important new connection in the wider public domain network. It will provide a new connection which is available 24 hours a day as compared to the existing situation where the link is only available during the opening hours of Berry Square Retail. A cross-section demonstrating the generous width and height of the through site link is provided at **Figure 52**.

It is proposed that the new through site link will become a Shared Zone with generous footpath widths and a paving treatment consistent with that in Denison Plaza which will reinforce it as a major pedestrian link (see **Figure 42**). Raised kerbs will be used to define the vehicle carriageway and a raised wombat style crossing will be constructed to reinforce pedestrian priority in the laneway and to also provide a safe crossing between the retail / lobby areas of the commercial building.

A new pedestrian crossing across Little Spring Street to the east connecting with the pedestrian walkway to Walker Street will be provided to further reinforce the new through site link.



Figure 52 – Proposed through site link

Source: Rice Daubney

Spring Street

Spring Street will be maintained as a shared zone with a raised carriageway paved in stone setts with flush kerbs and defined by bollards. The existing planters on the corner of Denison Street will be retained to address the level changes in this area, with new planter walls constructed where necessary. The existing mature Plane tree on the corner with Denison Street is proposed to be retained (subject to more detailed arboricultural investigations). The other existing Plane tree on the corner with Little Spring Street is proposed to be removed to permit construction access to the site and will be replaced. Additional street trees (Hills Weeping Fig) will be provided in the paved area between the carriageway and the steps up to the commercial building.

Upper Level Terraces / Roof Gardens

Two new roof gardens are proposed, the northern garden will be associated with the food court in the northern part of the podium providing a publicly accessible outdoor seating area (see **Figure 53**). The food court and roof garden will be visually connected by a skylight. The space will be paved and largely open to make space for tables and seating. Planters will be used around the edge of the space to provide enclosure and shelter.

The second garden is associated with the meeting rooms provided in the southern part of the podium. The roof garden will not form a publicly accessible area, rather it will providing a break out or function space for commercial tenants. The space will be paved and aligned with a planter to provide shade and shelter, as well as amenity. The southern area of the roof garden will be more extensively planted as a green roof with no public access.

The proposed planters will be raised so as to provide adequate soil depths for trees and shrubs.



Figure 53 – Proposed above ground terrace gardens

Source: Oculus

88 Walker Street

The public domain frontage to the hotel on 77-81 Walker Street will be treated as part of the overall boulevard street character of Walker Street. One existing Plane tree in front of the hotel will require to be removed to permit construction access, however, this will be replaced as part of the public domain works.

The other street trees along this section of street will not be impacted by the works and are proposed to be retained. The public footpath will be re-paved in sandstone in accordance with Council's public domain guidelines.

Public Art

Rice Daubney has prepared an art strategy statement (**Appendix I**) which outlines potential public art elements that can be incorporated in to the project design. It is proposed that large scale elements and more informal pieces will be installed, including:

- A free standing sculpture in a "glass case" adjacent to the Firehouse Hotel's north façade on Walker Street. This may well work as an abstract interpretive element relating the history of the Firehouse as an adapting series of uses over time and/or describe the urban development of Walker Street in general. This first installation views art as artefact, an object to be approached and related to from a distance.
- The sandstone seat steps to the Spring Street - Little Spring Street junction which will be block sandstone cut from the actual excavation of the buildings basements. This seeks to explore the conceptual foundations or underpinnings of Sydney in Sandstone and its many historical layers. This is art as urban element that is interacted with either as a functional object (seat in this case) or related to at a more subtle layer.
- A pair of integrated glass sculptures / readings on the bridges over Little Spring Street and Denison Street that respond to the collective concept of the people who inhabit North Sydney. These elements will create activity and a community of silent memories of people moving through the urban realm. This is an abstract artwork integrated into the design of the glass on the north of both bridges.
- An artwork integrated into the northern core wall on the new cross street. This abstract element will take as its starting point a charting of the timeline of North Sydney's development from first settlement to today grounding the building at a specific moment in time while also acting as a historic reference point to the past.

A commitment has been made in Section 6 of this report regarding the preparation of a Public Art Strategy and the installation of public art prior to the occupation of the building.

4.10 Ecologically Sustainable Development

ESD principles are a key driver of the project. The Proponent is seeking to achieve a 5 Star Green Star Office Design (v3) rating and a 5 Star NABERS Office Energy Rating for the commercial building.

Although at this stage there is no operable or pilot Green Star rating tool for hotel developments the proposed design for the hotel adopts many of the strategies that are being applied to the commercial building. The Proponent will however seek to achieve a higher than average rating (4 Stars) under the NABERS rating tool for hotels. To date no hotels have been rated under this tool and indications from the Department of Environment and Climate Change (DECC) are that the market average for hotels would be 2.5 stars.

The following is a summary of the ESD features that are proposed for the commercial development.

Energy Conservation

A strong energy reduction strategy above and beyond that of a standard commercial building is proposed. A high energy performance rating is expected due to the following:

- Use of high performance glazing with external shading which will reduce solar heat gains and cut cooling loads considerably;
- Use of an energy efficient air-conditioning system which will be a hybrid system with active chilled beams in the perimeter zones and low temperature VAV in the internal spaces;
- Sub-metering to every floor for light and power;
- Building services and fabric will meet the requirements for the BCA Section J: Energy Efficiency; and
- A combined services strategy is being developed for the commercial and hotel buildings to ensure that the maximum efficiencies can be achieved and the best advantage can be taken of the different load profiles and operating requirements of the two buildings.

Water Management

Blackwater recycling (i.e. toilet, shower and washing machine waste water) is proposed for the whole development to take advantage of the large volumes of water that will be available for re-use on site (including waste water from Beau Monde). Blackwater will be used to serve the following commercial building and hotel water supplies:

- cooling tower;
- toilet flushing;
- landscape irrigation; and
- sub-metering on major water uses will be installed, including Building Management Systems for leak detection purposes.

Other waste management features include the filtering of storm events to improve the quality of stormwater (up to 1 in 20 year events).

Indoor Environmental Quality

The commercial building design has particular emphasis on achieving a high quality working environment, including:

- High air quality fresh outside air will be supplied at rates 50% higher than the Australian Standard. Volatile organic compounds will also be avoided;
- High levels of natural light and external views (60% of the Net Lettable Area will be within 8m of vision glazing);
- Thermal comfort – installation of a double glazed unit will provide an even and comfortable condition; and
- Internal noise levels will be in accordance with the requirements of the Green Star Office Tool.

Management

Commissioning of the building will be an integral part of the project delivery, ensuring optimum comfort control, building services performance and operational efficiency. The following will be implemented for this development:

- Contractual requirement for comprehensive pre-commissioning, commissioning and quality monitoring of building services installations;
- Commitment to a 12 month commissioning / building-tuning period after handover, comprising of quarterly reviews and recommissioning at the end of the 12 months; and
- Appointment of an independent commissioning agent to check commissioning practice.

Transport

A Workforce Travel Package will be developed, to inform building occupants of their sustainable transport alternatives, including:

- Shortest and safest pedestrian routes to public transport stops;
- Information on established and proposed bicycle routes serving the North Sydney area, as well as connections to this site;
- Information on on-site bicycle storage options and available shower, change and locker facilities; and
- Information on public transport service frequency and stop locations.

Hotel

In order to achieve these high percentage reductions in comparison to a typical hotel, the following strategies are being investigated for inclusion so as to achieve a higher than average NABERS rating for the hotel:

- Site wide combined services strategy will improve efficiencies in the design;
- High efficiency chillers with variable speed drives;
- High efficiency motors;
- Variable speed drives on all fans and pump motors;
- High efficiency gas fired hot water generators for space heating;
- Separate air conditioning systems for each functional space;
- CO2 demand ventilation for any high occupancy spaces;
- Occupancy controls and interface with point of sales system to ensure maximum operational efficiencies;
- Selection of water efficient fittings; and
- Blackwater recycling for supplementing toilet flushing and cooling towers significantly reduce potable water demand.

4.11 Signage

Signage zones are proposed be at the top of the commercial building (on the eastern and western elevations) and on all 4 elevations of the terracotta core element of the hotel. Signage will also be provided at the ground level for the retail tenancies. Separate applications will be lodged for the installation of signage.

4.12 Structural Design

Taylor Thomson Whitting (NSW) Pty Ltd (**Appendix J**) has outlined the various structural mechanisms adopted in the proposal, including:

- Lateral stability of the hotel building will be achieved by the offset of the core and outrigger beams in both the upper and lower plant rooms;
- Lateral stability of the commercial building will be achieved by using the core. There are no outrigger beams, however anchors required to hold the core down; and
- Two columns will be removed from under the existing substation on the Berry Street lot as part of the partial demolition of the existing building.

As the design develops, further structural reporting will be undertaken to ensure the stability of the proposed buildings and that of adjacent buildings.

4.13 Utilities and Services

A Utility Report has been prepared by Aurecon Pty Ltd and is included at **Appendix K**. The report provides an analysis of the existing network capacity as well as the requirements of the development for the provision of utilities including staging of infrastructure works. It confirms that all utilities can be augmented to serve the proposed development as outlined below.

Sewer Services

To satisfy Sydney Water's requirements, the following sewer pipelines will be constructed:

- 225mm sewer sideline in Little Spring Street (to serve the Beau Monde building);
- 225mm sewer sideline in Spring Street (to serve the commercial building); and
- 225mm sewer sideline in Little Spring Street (to serve the hotel building).

The following changes to the existing sewer connections will also be required:

- The outlet of the boundary trap that traverses horizontally through to the existing loading dock located in Berry Square Retail, prior to exiting Beau Monde and connecting to the Sydney Water sewer in Little Spring Street will require relocation, prior to the commencement of works;
- The Berry Square Retail sewer and grease waste drainage pipes will need to be cut and sealed prior to the commencement of any works and reinstated once the construction works have been completed; and
- The sewer drainage pipes serving 88 Walker Street will need to be cut and sealed prior to the commencement of works, and reinstated once the construction works have been completed.

The new blackwater treatment plant is to be located in the basement of the commercial building.

In order to ensure the continuity of services to Beau Monde, the installation of a temporary sewer pump station and rising main; and/or a new gravity alternative connection to Little Spring Street will be required.

Water Services

To satisfy Sydney Water's requirements, a new 200mm water main will be constructed in Little Spring Street connecting into the existing 200mm water main located in Spring Street and interconnecting into the 150mm water main located in Berry Street. This water main will provide the water main connection for the new commercial building, new hotel building and the existing Beau Monde building. This will serve the domestic water service and combined hydrant and fire sprinkler service. In order to ensure the continuation of services to Beau Monde these works will need to be undertaken as an early works package prior to the main construction process.

The following changes are also proposed:

- The existing Spring Street fire hydrant main connection serving the development will be disconnected and a new connection for the existing Beau Monde Building will be located in Little Spring Street. The existing 88 Walker Street fire hydrant main connection will be disconnected from the water main;
- The existing Spring Street fire sprinkler main connection serving the development will be disconnected and a new connection for the existing Beau Monde Tower will be located in Little Spring Street. The existing 88 Walker Street fire sprinkler main connection will be disconnected from the water main; and
- New water meter rooms, water filtration rooms and cold water booster pump houses will be provided within the back of house areas of the hotel and in the basement of the commercial building.

Gas Service

Gas supply entering the development will need to be disconnected prior to the demolition of the existing shopping centre. The existing 88 Walker Street gas main connection will be disconnected from the gas main. New gas applications will be submitted to Jemena for a gas connection to service the commercial and hotel buildings.

Electrical

It is proposed to relocate the existing chamber substation on the Berry Street lot to Denison Street side of the lot. The kiosk substation on Little Spring Street which serves 88 Walker Street and 100 Mount Street (also the subject of a redevelopment application) will be decommissioned prior to the demolition of the Walker Street building.

In addition to the above, two 3 x 1500kVA chambers will be installed in the Level 4 plant room of the commercial building - one to serve the commercial building and the other to serve the hotel building.

Communications

Diverse telecommunication paths from Little Spring Street will be provided to two separate Main Distribution Frame (MDF) rooms within the basements of the commercial and hotel buildings. Telecommunications services for the retail area will emanate from the two MDF rooms.

Site establishment will include the establishment of site contractor's offices, mess and toilet facilities, vehicle access, vehicle loading and unloading, lay down areas, establishment and maintenance of on-site work areas. Exclusion zones, including fenced exclusion zones to protect the heritage buildings, will be set up. Staff induction will also be carried out at this stage. In order to ensure pedestrian and cyclist safety, hoardings will be erected around the site as shown on schematic at **Appendix L**.

Demolition

A suitably licenced demolition contractor will carry out the demolition of the two existing buildings. The buildings will be demolished in their entirety with the Berry Square Retail building to be demolished prior to the existing commercial building at 88 Walker Street.

Excavation

In order to accommodate the five levels of basement under the commercial building and the two levels of basement under the hotel building excavation will be required. Rock will be saw cut around the perimeter of the excavation using excavators fitted with rock saws. Bulldozers fitted with rippers will rip up the rock to the final level and excavators fitted with hydraulic hammers will break up the rock. Excavators will then load the material onto trucks for transporting off site.

Some rock will be stored on site for re-use in the seating steps at the main entry to the commercial building on Spring Street as part of the interpretive art strategy.

Construction

Once the excavation works is complete, the construction of the basements will commence. It is proposed that the two buildings will be constructed concurrently.

It is envisaged that there will be three (3) tower cranes servicing the project. The tower cranes will be used to handle materials for the installation of the structure, services, façade, roofs. The crane locations are shown in attached Proposed Material Handling Schematic at **Appendix L**.

Once the construction of the floor slabs is past the ground level, temporary perimeter screens and or scaffold will be installed around the perimeter of each of the buildings for safety as the construction progresses.

Trucks delivering goods to the site will access the site via Little Spring Street and Spring Street and will generally exit via Mount Street. It proposed that once the new through site link road is complete that it will be open to traffic so as to allow for the closure of Denison Street and the construction of the new public plaza.

During certain parts of the construction phase it will be necessary to close some of the surrounding laneway network. These closures will be well planned in advance and coordinated with Council and other statutory authorities. Surrounding residents and businesses which may be affected by these closures will be notified and consulted with as to alternative arrangements. It is expected that most of the closures will occur at non peak traffic times and outside of business hours.

Finishing Works

Once the structural elements of the buildings have been constructed, the internal fitout of the buildings will commence. This will involve the installation of bathrooms, ceilings, carpet and the like.

Public Domain

Construction of the public domain will commence once the new through site link is open and Denison Street is able to be closed to traffic.

Construction Zone

The delivery of materials to site is of fundamental importance to the timely completion of the development. A large portion of the materials will be delivered on semi trailers, (because of their weight or size making them impractical to transport on other types of vehicles) and hoisted by tower crane to the respective area on site. These semi trailers can only be unloaded from the Walker Street Construction Zone due to the narrow width of the lanes surrounding the Berry Street lot.

Hours of Construction

With limited access to the construction zone and site via Walker Street due to the clear way restrictions, the following hours (which are the same as those permitted in the Sydney CBD) are requested:

- Monday to Friday: 7am to 7pm;
- Saturday: 7am to 5pm; and
- Sunday and Public Holidays: No work.

Estimated Timeframe for Construction

Table 7 provides an estimate of the timeline for construction, assuming that the above hours of construction are approved. Some of these phases may be overlapped, thereby reducing the total construction period.

Table 7 – Estimated construction timeframes

Works	Estimated Time to Complete
Site Establishment and Enabling Works Install temporary services to Beau Monde Installation of hoardings etc	6 months
Demolition of Existing Buildings	4 months
Excavation of Basements	6 months
Construction Works Basements, building structure and facade	20 months
Finishing Works Internal fit out	10 months
Public Domain Works New plaza, street and footpath refurbishment works	5 months
Total Construction Period	Approximately 31/2 – 4 years

4.16 Voluntary Planning Agreement

In order to provide certainty of the outcomes and costs to both the Council and the Proponent it is proposed that a Voluntary Planning Agreement (VPA) be executed between the Proponent and the Council. The main elements to be addressed in the agreement are outlined below.

North Sydney Rail Station Contribution

The VPA will outline the process for and timing of the payment of the rail station contribution to the State Government.

Section 94 Contribution

The VPA will outline the quantum of Section 94 Contributions for the project. It is intended that Section 94 Contributions will comprise both a cash component and a works-in-kind component. The works-in-kind component will relate to a component of the proposed public domain works around the site. The VPA will include details of the proposed public domain works (plans showing extents, schedules of finishes, standards to be complied with etc).

Land Transfers and Leases

The VPA will outline the details for all proposed land transfers and leases as follows:

- Dedication to Council of above ground stratum lot for the new vehicular and pedestrian laneway connection between Denison and Little Spring Streets;
- Dedication to Council of strip of land (from the corner of Spring Street / Little Spring Street north to proposed laneway) for the purposes of road and footpath widening;
- Long term lease (lease in perpetuity for the life of the development) to Eastmark Holdings and its successor in title of above ground stratum lot over Little Spring Street for the proposed pedestrian sky-bridge; and
- Long term lease (lease in perpetuity for the life of the development) to Eastmark Holdings and its successor in title of below ground stratum lot under Little Spring Street for the proposed service tunnel.

Specifically, the VPA proposes that:

- documentation for land transfers, subject to final survey, is to be in place prior to issue of the relevant CC;
- agreed long term lease documents, subject to final survey, to Eastmark Holdings Pty Ltd be in place prior to the issue of the relevant CC; and
- registration of all transfers of land parcels referred in 1 and 2 above are to be registered at completion. Eastmark or its representative to administer the registration. All costs related to preparation of plans, lodgement and registration to be borne by Eastmark Holdings.

All long term leases referred in 3 and 4 above are to be registered with Land and Property Information NSW (LPI) at completion. All registration costs are to be borne by Eastmark Holdings.

Public Car Park

42 'public' car spaces and 10 motorcycle parking spaces will be provided on-site in Basement Level 1 (refer to Basement level1 plan). The parking will be provided to the benefit of Council and it is intended to operate on the following basis:

- Council will operate the Basement Level 1 car park and will set the hours of operation and its pricing structure;
- Council to enter into a long term lease arrangement with Eastmark Holdings and/or successor in title for Basement Level 1 car park. Council under the lease will be liable to pay the lessor a nominal lease (such as \$1.00) and outgoings to cover costs related to the leased portion of the building. The VPA will act as agreement to lease, and an agreed lease document will be attached to the final VPA for future execution. Both parties agree to register the lease with LPI;
- The ongoing operation of Basement Level 1 car park is to be to a high standard so as not to diminish from the building and is not to impede access to the tenant parking; and
- Council is to acknowledge that entire basement levels may need to be re-configured in the future for various reasons, including but not limited to ESD requirements – can either be prior to and/or subsequent to execution of the lease. The VPA will nominate a compensation regime in favour of North Sydney Council for a number of spaces resumed. The VPA may also nominate a minimum number of car parking that the Council will retain in whatever circumstances.

Land Transfers and Leases

Proposed land transfers include:

1. Dedication to Council of above ground stratum lot for the new vehicular and pedestrian laneway connection between Denison and Little Spring Streets.
2. Dedication to Council of strip of land (from the corner of Spring Street / Little Spring Street north to proposed laneway) for the purposes of road and footpath widening.
3. Long term lease (lease in perpetuity for the life of the development) to Eastmark Holdings and its successor in title of above ground stratum lot over Little Spring Street for the proposed pedestrian sky-bridge.
4. Long term lease (lease in perpetuity for the life of the development) to Eastmark Holdings and its successor in title of below ground stratum lot under Little Spring Street for the proposed service tunnel.

The VPA identifies:

- Documentation for land transfers, subject to final survey, is to be in place prior to issue of the relevant CC.
- Agreed long term lease documents, subject to final survey, to Eastmark Holdings Pty Ltd be in place prior to the issue of the relevant CC.
- Registration of all transfers of land parcels referred in 1 and 2 above are to be registered at completion. Eastmark or its representative to administer the registration. All costs related to preparation of plans, lodgement and registration to be borne by Eastmark Holdings.
- All long term leases referred in 3 and 4 above are to be registered with LPI at completion. All registration costs are to be borne by Eastmark Holdings.

4.17 Future Applications and Approvals

Future applications will be required for the following:

- Fitout of the commercial tenancies;
- Fit out and use of the retail spaces in the commercial podium;
- Fitout of the hotel, including the fitout of the conference facilities, restaurant and bar and potentially the use of the restaurant and/or bar as a place of public entertainment;
- Stratum subdivision of the site; and
- All building signage.

As these will be relatively minor in nature it is requested that the Minister determine that these projects be determined under Part 4 of the EP&A Act and assessed by North Sydney Council.

It is requested that the conditions of consent be worded in such a way as to allow for staged construction certificates to be issued for the different phases of construction and for the two separate buildings.

5.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the proposal. It addresses the matters for consideration set out in the Director-General's Environmental Assessment Requirements (DGRs). The draft Statement of Commitments at **Section 6** of this report complements the findings of this section.

5.1 Director General's Environmental Assessment Requirements

Table 8 provides a detailed summary of the individual matters listed in the DGRs and / or identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Table 8 - Director General's Environmental Assessment Requirements

Director General's requirements	Location in Report/Application
Consistency with SEPP 55 – Remediation of Land	Section 5.20
Consistency with SEPP 65 – Design Quality of Residential Flat Development	Not applicable to this development as no residential development is proposed
Consistency with Draft SEPP 66 – Integration of Land Use and Transport	No longer a planning consideration – see Planning Circular 08-013
Consistency with SEPP (Infrastructure) 2007	Appendix M
Consistency with SEPP (Building Sustainability Index: BASIX) 2004	Not applicable to this development as no residential development is proposed
Consistency with Inner North Subregional Strategy (Draft)	Sections 3.1 and 5.2
Consistency with North Sydney LEP 1989	Section 5.3 and Appendix M
Consistency with North Sydney LEP 2001	Section 5.3 and Appendix M
Consistency with Draft North Sydney LEP 2001 (Amendment No. 28)	Section 5.3 and Appendix M
Consistency with North Sydney DCP 2002	Section 5.3 and Appendix M
Consistency with NSW State Plan, Urban Transport Statement	Section 5.2
Architectural, Building and Urban Design Impacts:	
Visual impact of the proposed development	Sections 5.3, 5.4 & 5.9
Impact of development on adjacent heritage item	Section 5.19
Building mass	Section 5.4
Built Form	
Height, bulk and scale	Sections 5.3 and 5.4
Mitigation of potential residential amenity impacts (sunlight, privacy, views)	Sections 5.8 through to 5.15
Mitigation of potential public domain impacts	Sections 5.12 through to 5.15 and 5.17
Comparable height study	Sections 5.3 and 5.4
View analysis	Section 5.9
Options for building massing	Section 5.4
Public Domain	Sections 4.9, 5.6, 5.21 Appendices G and X
Transport and Accessibility (Construction and Operational)	Sections 5.15 and 5.17 Appendices E and L
Noise and Lighting	Sections 5.11 and 5.12 Appendices P and Q
Construction	Sections 4.16 and 5.17 Appendix L

Director General's requirements	Location in Report/Application
Quantity Surveyors Report	Submitted under separate cover
Ecologically Sustainable Development (ESD)	Sections 4.10 and 5.7 Appendix N
Drainage/Flooding	Sections 2.12, 4.15 and 5.18 Appendix U
Contributions	Section 4.17
Utilities	Section 4.13 and Appendix K
Staging	Section 4.16 and Appendix L
Community Consultation	Section 1.2 and Appendix B
Existing Site Survey Plan	Appendix D
Site Analysis Plan	Section 2 and Appendix C
Locality/Context Plan	Section 2 and Appendix C
Architectural Drawings	Appendix A
Landscape Concept Plan	Appendix G
Shadow Diagrams	Appendix EF
Staging Plan	Appendix L
Photomontages	Appendix A
Massing Model	Submitted under separate cover and on exhibition at North Sydney Council offices

5.2 State and Regional Strategies

As stated in **Section 3**, the relevant strategies are the NSW State Plan, the Sydney Metropolitan Strategy, the Draft Inner North Subregional Strategy and Councils 2020 Vision Strategy. The proposed development is consistent with these strategies as it:

- Provides a net addition 62,500m² GFA (approx) and 3,500 new jobs in the North Sydney CBD;
- Provides new hotel accommodation thereby increasing the number of potential visitor nights in the North Sydney CBD by 200 per day;
- Will increase the number of workers in the North Sydney CBD who use public transport facilities (approximately 95% of employees in the commercial and hotel buildings);
- Will create a new open space area in the North Sydney CBD which will form a new focal point and provide a place for social interaction;
- Will promote sustainable forms of transport such as walking and cycling and improve pedestrian connections in the CBD;
- Will improve the quality of public domain in the CBD;
- Acknowledges the North Sydney CBD's role as a major development centre by providing an A-grade building which may attract international and high end corporate companies;
- Activates the centre of the CBD during the day and night;
- Considers the surrounding natural environment and improves the energy efficiency of the proposed buildings;
- Complements the design and form of the existing buildings in the CBD;
- Considers the amenity of neighbouring residents by way of increased setbacks and no adverse overshadowing; and
- Proposes a partnership with the Council.

Draft Inner North Subregional Strategy

The draft Inner North Subregional Strategy seeks to further reinforce North Sydney's position as the second largest office market in Sydney and the sixth largest office market in Australia.

The proposed commercial and hotel buildings are likely to be the largest place of employment in the North Sydney CBD. By providing 3,500 new jobs on the site, the proposal will provide 6% of the total target of an additional 60,100 new jobs in the Inner North Subregion by 2031.

The provision of A-grade commercial floor space will also reinforce North Sydney's position as the second largest office market in Sydney providing floor space that is suitable for national and / or international business.

The provision of new public open space, improved quality of the public domain and support retail space in the North Sydney CBD is also likely to make the development attractive to new businesses.

Urban Transport Statement – NSW State Plan

Transport actions under the NSW State Plan are aimed at providing high quality transport and to increase the availability and reliability of public transport across the Sydney region. It also seeks to increase the proportion of journeys to work that are undertaken via public transport.

In accordance with the North Sydney LEP 2001 and the objectives of the Urban Transport Statement, the proposal includes a \$6 million contribution towards the upgrade of North Sydney Rail Station. It is expected that 95% (3,780 employees) of the total employees on site (3,980 employees) will utilise public transport or sustainable forms of transport to travel to work. This is a significant proportion of journeys to work and a significant contribution towards the targets outlined in the NSW State Plan (i.e. increase the journeys to work in the Sydney metropolitan region by public transport to 25% by 2016).

The proposal also includes 161 bicycle parking spaces which is enough for approximately 5% of the total building occupants. In order to encourage use of the cycle spaces showers and storage facilities are also provided on Basement Level 1.

The proposal therefore provides substantial encouragement for the use of public and sustainable forms of transport and also provides a substantial financial contribution towards the upgrade of rail facilities in the North Sydney CBD.

5.3 Relevant Planning Instruments

A detailed assessment of the proposal's compliance with the relevant planning instruments is provided in the Tables of Compliance at **Appendix M**. Generally the proposal complies with the relevant provisions, including:

- Land use zoning (LEP 1989 and LEP 2001);
- Public domain design;
- ESD, including water recycling and waste minimisation;
- Tenant parking provision;
- Building separation distances;
- Accessibility;
- Crime Prevention Through Environmental Design;
- Protection of public views;
- Overshadowing;

- Utilities;
- Construction Management;
- Waste Management;
- Acoustic amenity;
- Reflectivity; and
- Community Involvement.

Variations are proposed to the following controls:

- Maximum FSR control contained in NS LEP 1989 for the Berry Street lot;
- Maximum height controls for both buildings contained with the Draft NS LEP 2001 Amendment 28;
- Maximum parking controls for commercial use contained in North Sydney DCP 2002; and
- Ground level and above podium setbacks North Sydney DCP 2002.

These variations are discussed further in the sections below.

5.3.1 Maximum FSR Control NS LEP 1989

The NS LEP 1989 prescribes a maximum FSR of 3.28:1 on the Berry Street lot. The 1997 Council development consent for the Beau Monde approved (via SEPP 1) a FSR of 7.33:1 on the lot.

Through the preparation and multiple public exhibitions of the draft NS LEP 2001 (Amendment 28), which seeks to rezone the Berry Street lot, Council has made it clear since 2006 their intention to increase the floor space permitted on the Berry Street lot to 23:1. In accordance with the intentions of Council and the State Government's strategy to increase commercial floor space in the North Sydney CBD, the proposal has been designed to comply with the draft controls within NS LEP 2001 Amendment No. 28 as shown in **Table 9**.

Table 9 – GFA Compliance

Site	Site Area (m ²)	MaxGFA permissible*	Proposed GFA	Permissible FSR*	Proposed FSR
Berry Street	3,142	72,266	60,630	23:1	19:1
Walker Street	607	15,175	12,995	25:1	21:1
Total	3,749	87,441	73,625		

* Draft LEP NS LEP 2001 Amendment 28

In assessments made under Part 4 of the Environmental Planning and Assessment Act, a draft instrument which has been exhibited must be given proper regard by the consent authority (Section 79C(1)(a)(ii)). Although not strictly applying to this application, we believe that the same principle should be applied in terms of giving determinative weight when considering the draft provisions of the proposed amendments to North Sydney CBD controls. As such, no determinative weight should be given to the maximum FSR control contained in NS LEP 1989.

In this case Draft North Sydney LEP 2001 Amendment 28 has been placed on exhibition three times. The document has been re-exhibited primarily for the purposes of fixing administrative errors which were challenged in the Land and Environment Court. The Council has not changed their intentions for the future of the North Sydney CBD i.e. to increase the development potential of the CBD in terms of height and GFA.

5.3.2 Maximum Height Control (Clause 28D Draft NS LEP 2001- Amendment No. 28)

Draft NS LEP 2001 Amendment No. 28 proposes the following maximum heights for the site:

- 77 Berry Street – 111m on southern part of the lot and 94m on the northern part of the lot; and
- 88 Walker Street – 112m.

The proposed heights of the two buildings are:

- 77 Berry Street – 143.7m on the southern part of the lot (variation of +32.7m) and 105m on the northern part of the lot (variation of +11m); and
- 88 Walker Street – 117.6m (variation of +5.6m).

Pursuant to Clause 28D(4) of Draft NS LEP 2001 Amendment 28, a building may exceed the maximum height limits only if the consent authority is satisfied that the proposed development:

- Is justified by the merits of the development;
- Includes a significant public benefit; and
- Does not result in any increase in overshadowing between the hours of 9am and 3pm, Eastern Standard Time, will not reduce the amenity of any dwelling that is outside the North Sydney Centre.

The proposed development:

- is justified on the following merits:
 - the building provides a suitable transition of building heights in the North Sydney CBD, creating an arc effect (see **Figure 55**),
 - the proposed height and massing has no adverse impact on land in the public recreation zone or land identified as a special area on Sheet 9 of the map marked “North Sydney Local Environmental Plan 2001 (Amendment 28)” or on heritage items,
 - the proposed height and massing has no adverse impact on residential land that adjoins the North Sydney Centre,
 - the proposal minimises overshadowing of, and loss of solar access to, land in the residential zone or the public recreation zone or identified as a special area on Sheet 9 of the map marked “North Sydney Local Environmental Plan 2001 (Amendment 28)”,
 - it provides a 24m setback from the Beau Monde building thereby protecting the privacy of residents within that building
 - it is of a scale and massing that provides for pedestrian comfort, in terms of weather protection, solar access, and includes elements which relate to the human scale
 - it consolidates 77 Berry Street and 88 Walker Street and results in the provision of high grade commercial space, a new hotel and provision of public benefits.
- will generate significant public benefits that will benefit not only the residents of Beau Monde but also the wider North Sydney community (refer to Section 5.5); and
- complies with the overshadowing controls of Clause 28D as discussed in Section 5.8.



Figure 55 – CBD skyline (with proposal) viewed from Neutral Bay

5.3.3 Setbacks

Ground level

Rather than building to the existing street alignment, ground level setbacks have been provided to the three street frontages of the commercial building and also the rear elevation of the hotel building. On these elevations of the buildings, these setbacks will form undercroft spaces.

This element of the design has been proposed so as to significantly improve the surrounding public domain in the laneway network. In particular the increased setbacks are expected to have the following benefits:

- Widened pedestrian footpaths on Denison, Little Spring and Spring Streets;
- Weather protection for pedestrians where an undercroft element is proposed; and
- An enlarged sense of open space at the Denison Street plaza.

Above Podium

A variation is proposed to the podium height and above podium setback controls which apply to the rear elevation of the hotel. The height control for the podium on Little Spring Street is 7 – 10 metres. The proposed height is approximately 21 metres.

This variation is proposed in response to the additional setbacks which are provided on the front of the building. The height of the podium on Walker Street is permitted to rise to a height of 5 storeys. However in order to provide a better design response to the adjacent heritage item, the podium has been reduced to a height of 2 storeys. The 3 levels that are affected by the additional setback at the front of the building have therefore been built to the boundary alignment at the rear elevation in order to provide a sufficient floorplate for the proposed facilities on those levels (i.e. conference, restaurant and bar) and as such do not comply with the 4m setback control which applies to those levels.

This variation is not expected to have any adverse impacts on the amenity of Little Spring Street as:

- A separation distance of 15m is maintained between the hotel and commercial buildings; and
- The section of the commercial building on the opposite side of the laneway is slightly setback so as to accommodate the proposed pedestrian bridge.

5.4 Scale, Form and Massing

5.4.1 Scale

The proposed envelope is consistent with the scale of existing buildings in the North Sydney CBD. It is centrally located between 101 Miller Street (former Optus tower), North Point (100 Miller Street) and Beau Monde, all of which are nominated as the tallest buildings in the North Sydney CBD. It is also adjacent to 100 Mount Street which under draft LEP 2001 Amendment 28 has a height of RL 195m similar to North Point. **Figure 56** shows the central location of the proposed development within the existing tall buildings in the North Sydney CBD.

A long standing urban design principle for the North Sydney CBD is the setting of heights so that an arc is formed across the CBD skyline which clearly delineates where the 'heart' of the CBD is located. Specifically, the North Sydney Character Statement seeks: *"Buildings are stepped down from Northpoint (100 Miller Street) and Berry Square Retail (77 – 81 Berry Street) towards the boundaries of the centre."* The site is strategically located within the centre of the CBD. **Figure 56** below highlights the nominated height limits (above 100m) under the draft LEP amendment for sites within the centre of the CBD. The figure shows that the site is within the height of the city centre and that it would be appropriate to increase the height of the building to RL 170/ 195.

The scale of the proposed hotel building will also sit comfortably in the context of the North Sydney CBD. The narrow dimensions of the site will ensure that the building is tall and slender.

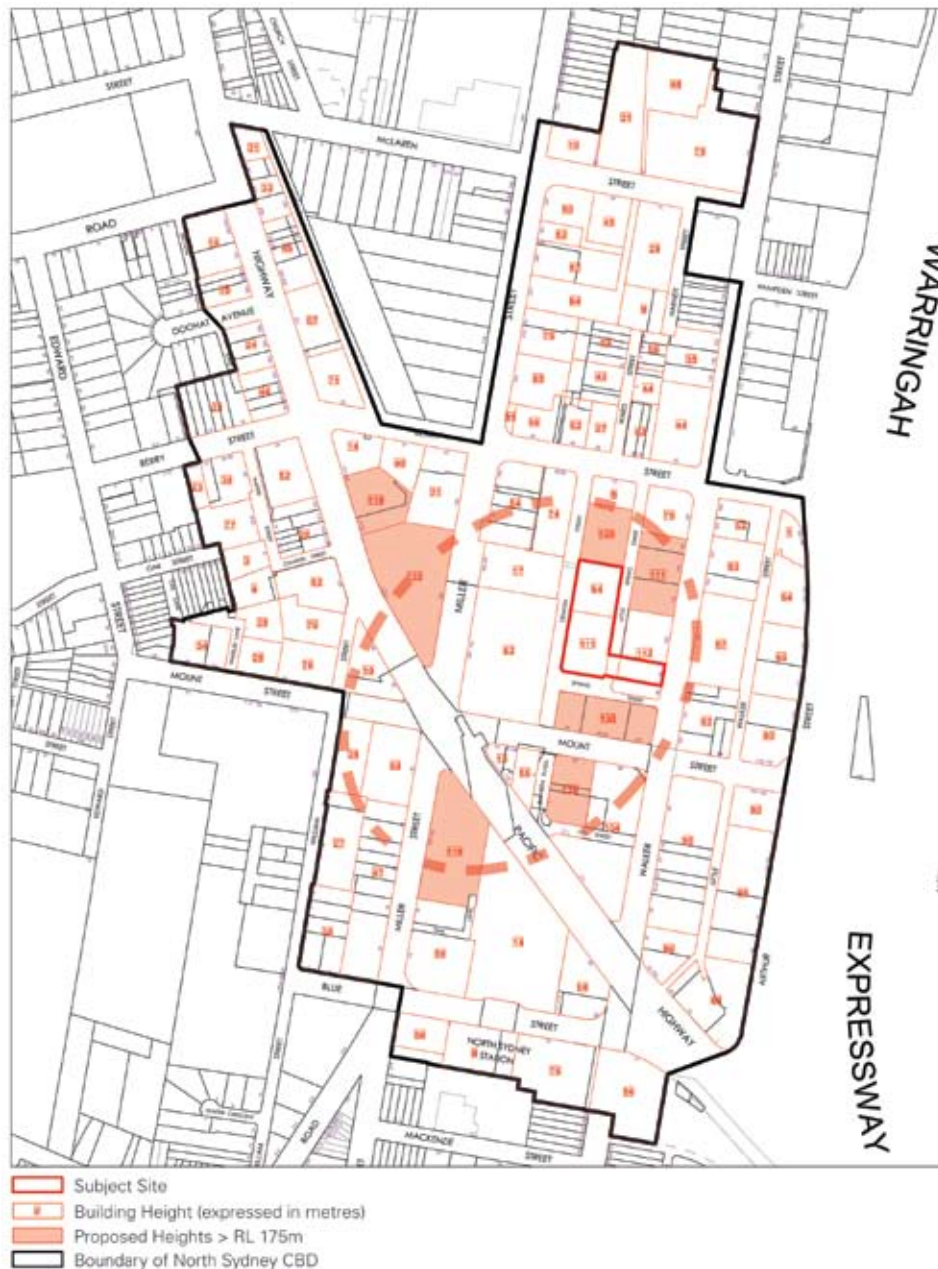


Figure 56 – Central location of site between the existing and proposed tall buildings in the North Sydney CBD

5.4.2 Form

The central position of the commercial building within the street block of Walker, Mount, Miller and Berry Streets means that the building is not readily perceived in its entirety (see **Figures 57** and **58**). The lower elements of the building will be seen from the ground plane, while from a distance, in a CBD context, only the top of the building will be visible because of the curtain of buildings surrounding the site.

The hotel building will have more prominence on the southern approach from Walker Street because of the low scale nature of the Firehouse Hotel. However due to its taller and slender form and lightweight podium it will not appear as overbearing in the streetscape.



Figure 57 – View towards CBD from Neutral Bay (east)



Figure 58 – View towards CBD from Falcon Street overpass

5.4.3 Massing

The commercial building has been designed such that the building appears as two separate buildings adjacent to one another rather than one long and bulky continuous building. This is achieved through the positioning of the shading devices on the façade, projections in the envelope and a variation of heights.

The screens on the commercial building twist and turn and are positioned at different intervals as they surround the building which creates variation in the façade giving an appearance of two separate building facades. The northern part of the tower is also shorter and appears narrower also suggesting that there are two buildings adjacent to one another, rather than the reality of one continuous building. **Figure 59** shows the eastern façade of the building which demonstrates this point.

The new through site link and void above further serve to perpetrate a separation in the built form as they provide a break in the podium aligning with the differing facade treatments above.

A similar design approach has been taken on the hotel building. The east and west facades of the building have been broken down through the use of differing materials and treatments and also the installation of central blades which further define the different façade elements.

In order to ensure the development is not overbearing on existing surrounding development or at the ground plane additional setbacks have been proposed. An analysis of the non-complying element of the scheme has been undertaken. **Figure 60** below shows a comparison of a complying building envelope and the proposed commercial building envelope which demonstrates the extent of non-compliance of the proposed commercial building. What can be seen is that the proposed building provides greater setbacks at the base of the building and from the northern boundary than that of a complying envelope, thereby improving the ground plane of the development for workers, residents and visitors to the North Sydney CBD. A greater setback is also proposed on the northern elevation so as to provide some amenity relief

In order to redistribute some of the floor space that could otherwise be placed in those greater setback areas, it is proposed to increase the height of the proposed building by an additional 7 storeys or 32.7m in the case of the southern part of the tower and 3 storeys or 11 metres in the case of the northern part of the tower.

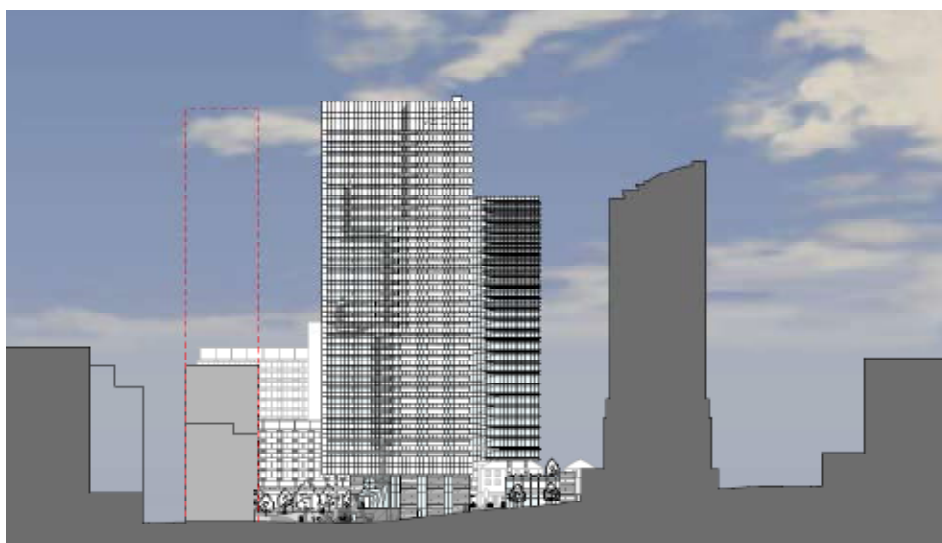


Figure 59 – Eastern elevation of the commercial building



Figure 60 – Complying envelope and proposed envelope comparison

5.4.4 Massing Options

Different massing options were considered during the design development of the proposal. Of the options considered the proposed building envelope is considered to provide the best urban design outcome for the following reasons:

- the building provides a separation distance of 24m between the proposed building envelope and the residential dwellings in Beau Monde thereby reducing any privacy impacts;
- the ground level setbacks are increased thereby significantly improving the amenity of the public domain within the existing laneway network;
- a through site link is provided thereby resolving pedestrian / vehicular conflicts and enabling the provision of a new plaza in Dennison Street;
- the dimensions of the new through site link are increased allowing for the creation of an expansive space which is filled with natural daylight and has a sense of openness;
- floor space which would have otherwise been located within the lower levels of the building and on the northern edge of the proposed floor plate is repositioned to a higher level where it has the lesser environmental impact;
- external shading is easily applied thereby allowing for clearer external glazing to be installed as opposed to dark tinted glazing that would otherwise be required;
- efficient and large floorplates are created; and
- the envelope is broken down vertically along the eastern and western facades thereby presenting an articulated façade.

The reasons that the alternative options were not proceeded with are discussed below.

Option 1

Option 1 (**Figure 61**) follows a similar form to that of the proposed building envelope. It includes the creation of a new through site link and uses the point above the link to break the building into 2 forms in order to increase the verticality of the tower, particularly on the long east and west facades.

The northern form starts at 18m away from the Beau Monde residential building and then angles away thus increasing the distance between the two buildings as the proposed building rises higher.

The northern form finishes at a similar height as the Beau Monde building allowing the southern form to rise to the maximum height as defined by the overshadowing information provided by the surveyor with its maximum height at RL208m on the western face of the building.

The split core arrangement allowed the taller southern volume to reach this height by placing all core elements that pass through the roof on the western facade.

The southern tower form was undercut to stand above the podium building below allowing the street to be “open” on this face and as such avoid the tunnel connotation.

The stepped form of the building acknowledges the stepping of built form within the North Sydney CBD in a “domed form” the centre of which would be just south of the site. It also aims to step the form away from the Beau Monde building.

This option has evolved largely into the current scheme however the following design elements have changed

- The core has moved to the east as the building has come down in height, this has allowed the Denison Plaza to become activated with retail along this frontage and the views to the west to be optimised acknowledging that the views to the east will ultimately get built out in the increasing density of North Sydney foreshadowed in the DLEP;
- The height of the building has been reduced to RL 198;
- The sloping north face of the building has been flattened and moved to 24m away from Beau Monde so as to provide a better sense of privacy; and
- The large screen containing the exterior balconies that sit just inside the boundary on the east and west faces of the southern form have been replaced by the wintergarden pop outs.

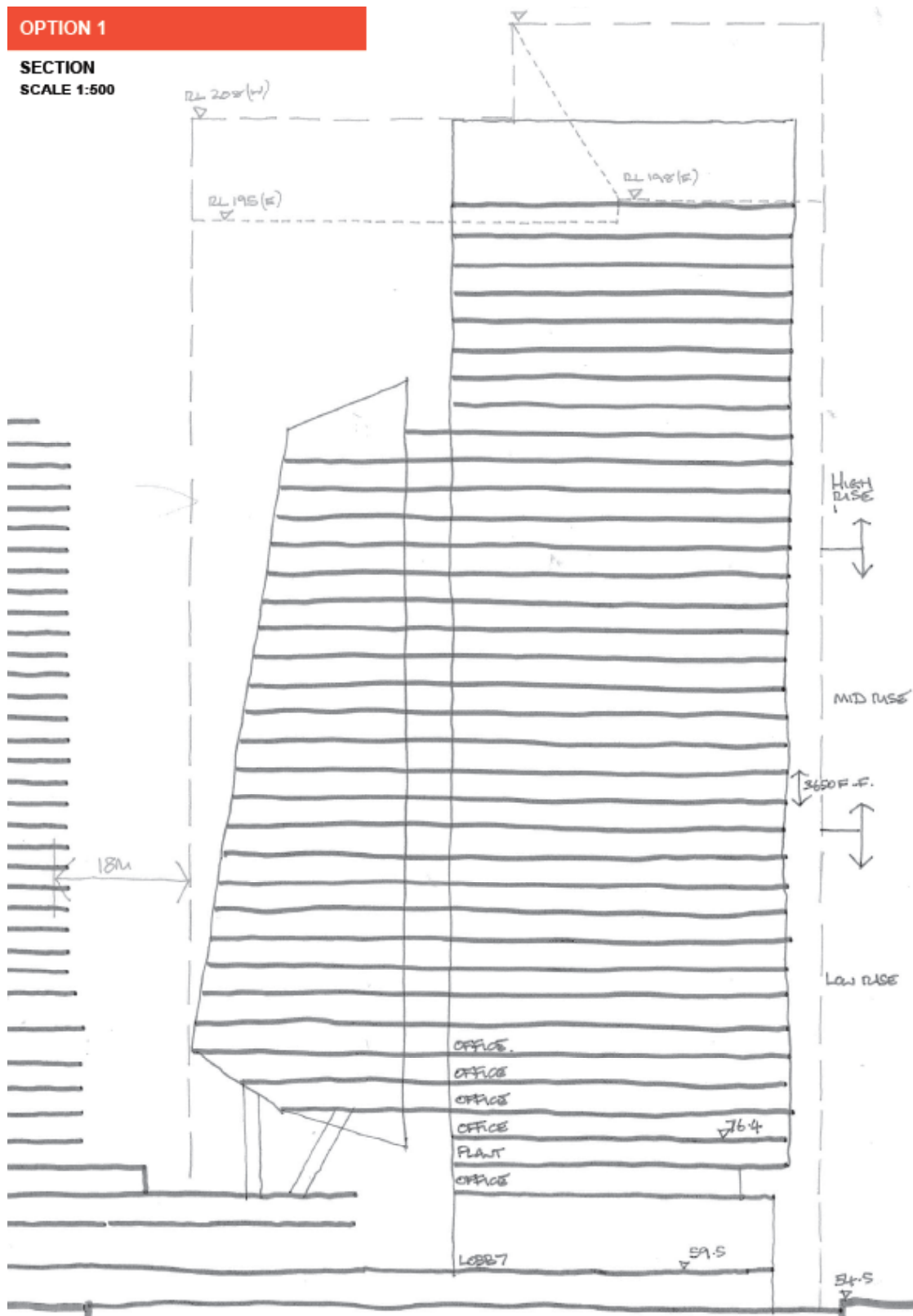


Figure 61 - Alternative option 1

Option 2

Option 2 (**Figure 62** and **Figure 63**) involved the concept of a curved building that shifted form about its middle allowing for a large undercut to the southern end of the building to form a large entry court.

The proposed building envelope was considered unsuitable for the following reasons:

- The proposed through site link would have generated a space which was dark and uninviting and suffering from a 'tunnel effect';
- A minimal separation distance of 18m between the proposed commercial building envelope and Beau Monde results;
- The form of the building meant that elevationally the building read as one long plane that was shifting as it grew. This long floor plate was felt to be overly horizontal and not an elegant or suitable outcome;
- The proposed floor plates were not regular and as such were not as efficient as the proposed envelope; and
- The building would have been difficult to shade externally as such the proposed building would have required a dark / heavy tint to achieve the same ESD rating. A key design objective was to use external shading so as to allow for as clear glazing as possible.

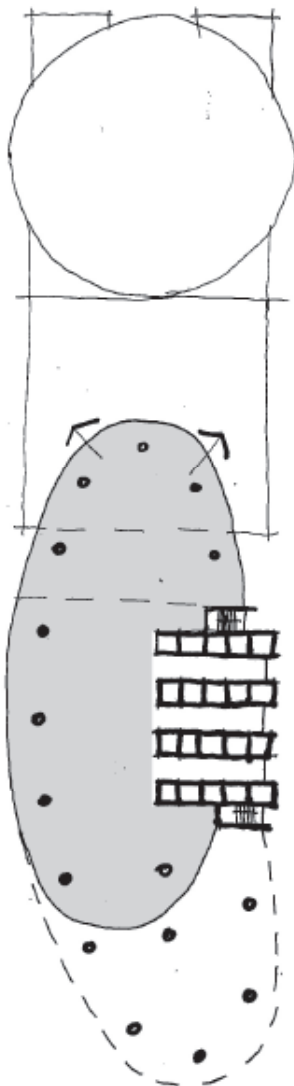


Figure 62 – Floor plate of alternative option 2

OPTION 2

SECTION
SCALE 1:500

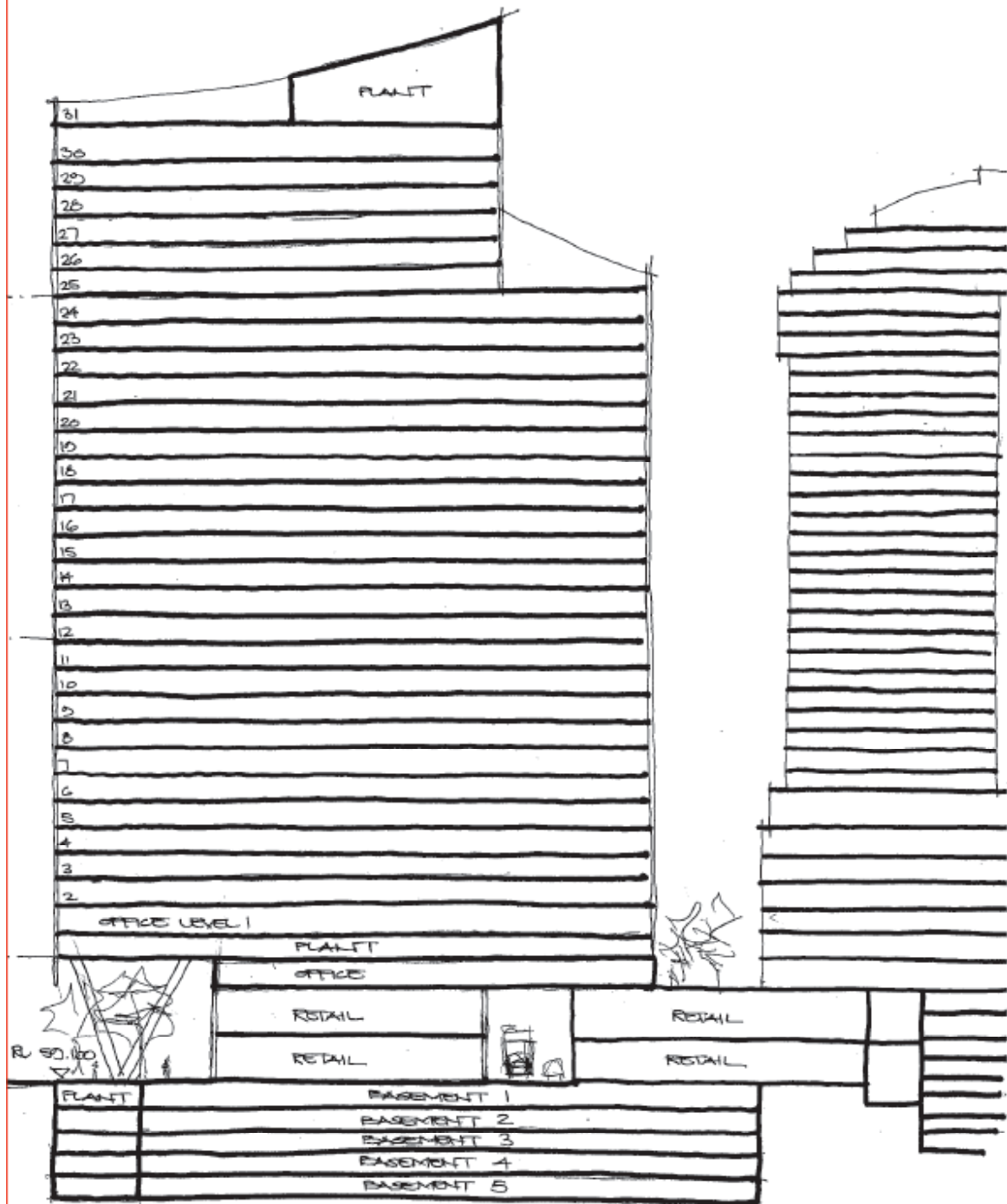


Figure 63 – Elevation of alternative option 2

5.5 Public Benefits

The proposed development involves the delivery of many public benefits. The most influential of these is the provision of a new through site link (road). Without the provision of the new link it would not be possible to partially close Denison Street and therefore would not be possible to create a new public plaza which has a high level of solar access and amenity. The additional benefits of the plaza, which include the provision of safer pedestrian access throughout the centre of the North Sydney CBD, would also not be realised.

An additional design feature which is beneficial to the pedestrians of North Sydney is the increased setbacks at the ground level of the podium. These setbacks allow for the widening of the footpaths in the surrounding laneway network which are at present very narrow and unpleasant to walk along. In particular the footpath on the eastern side of Little Spring Street will increase in width by up to 50%.

The proposal also includes the provision of a basement level which will be leased to the Council for the provision of public parking. Public parking is in great demand in the North Sydney CBD and as such the Council is seeking to improve the number of spaces available. This will have a benefit to surrounding businesses as their clients will be able to park in close proximity to their premises/shops.

Another public benefit of the proposal is the increased separation distance that is proposed between the commercial building and Beau Monde. Under the Residential Flat Design Code (RFDC) the recommended distance between habitable and non-habitable rooms is 18m. As such the building envelope of the commercial building could theoretically be setback a minimum of 18m from the edge of the Beau Monde building. However in order to provide greater privacy and amenity to the residents of Beau Monde, a separation distance of 24m is proposed. This distance is consistent with the separation distance that the RFDC stipulates between habitable rooms.

5.6 Public Domain and Streetscape Improvements

Public Domain

The proposal will see the creation of a new public plaza that will have a high level of amenity due to the amount of sunlight received during lunch time hours and also the separation distance from vehicular traffic.

The existing pedestrian connections through the laneway network will be strengthened and improved by the proposal, thereby creating greater permeability of the North Sydney CBD. In particular the east-west link from Walker Street, across 77 Berry Street and through to the Tower Square development will be improved as it will become accessible 24 hours a day rather than the current situation where the link is only available during the opening hours of Berry Square Retail. This particular link will also become safer as a new pedestrian crossing will be constructed on Little Spring Street, the path across 77 Berry Street will be separated from vehicular traffic and a shared zone will be installed across Denison Street. As such a greater priority to pedestrians will be given.

The link from Greenwood Plaza, across Mount Street Plaza and up Denison Street will also be improved by the removal of a significant point of pedestrian / vehicular conflict. By closing off Denison Street, pedestrians will now be able to walk from North Sydney Station up to Berry Street without having to cross a road or come into conflict with a car.

The provision of the new Denison Plaza will also result in the linking of significant public open spaces in the centre of the North Sydney CBD. The introduction of the plaza will create a continuous public open space area from Elizabeth Plaza, across to Mount Street Plaza, then Denison Plaza and eventually Berry Street Plaza. In addition to this the Miller Street open space area in front of MLC Centre will also link into the network.

Streetscape

The proposal will also result in significant improvements to the streetscape, particularly in terms of activation. Currently the side elevations of the Berry Square Retail building are blank without any significant activation. Similarly, the rear elevation of the Walker Street commercial building does not activate Little Spring Street.

The proposed development, with the provision of new retail space along the edge of Denison Plaza, the creation of a grand lobby entrance along the Spring Street elevation of the new commercial building and the provision of a new hotel lobby entrance on Little Spring Street will significantly open up the building facades and provide reasons for pedestrian movement around the site and in the plaza.

The proposal also provides the opportunity for the MLC Centre to provide more street level activation at the ground level on Denison Plaza in the future.

5.7 Ecologically Sustainable Development

Cundall has prepared an Environmentally Sustainable Development (ESD) Report that is included at **Appendix N**. The report outlines the key ESD initiatives to be adopted to achieve a high level of environmental performance, which include:

- A blackwater treatment plant;
- Use of high performance glazing with external shading;
- Use of an energy efficient air-conditioning system
- Energy and water sub-metering
- And a high proportion of employees (95%) utilising public transport or walking or cycling to work)

It is also expected that there will be many ESD benefits obtained through the sharing of services between the hotel and the commercial building due to their complementary peak demand times (i.e. commercial peak demands occur during the day and hotel demands occur largely in the evening).

The proposed commercial building is targeting a high level of environmental performance, specifically a 5-Star Green Star Rating, and a 5-Star NABERS Office Energy Rating (formerly ABGR). As there is no official Green Star tool applicable to a hotel building, the development will not be officially rated under Green Star rating tool. However many of the strategies which are being applied to the commercial building will be carried across and implemented where possible in the hotel development. A 4-Star rating under the NABERS Energy scheme is proposed for the hotel.

The ESD report recommends a number of ESD initiatives including the maximisation of natural ventilation and daylight, and use of energy and water efficient systems where possible. The project also places emphasis on sustainable transport use. These recommendations have or will be incorporated into the design so as to meet the ESD targets set for the project.

5.8 Overshadowing

In order to comply with the draft NS LEP 2001 Amendment No. 28 controls an application must demonstrate that:

- the development will not generate any additional overshadowing of any special area within the North Sydney CBD between the hours of 12 noon and 2pm, Eastern Standard Time; and
- that any increase in overshadowing between the hours of 9am and 3pm, Eastern Standard Time, will not reduce the amenity of any dwelling that is outside the North Sydney Centre.

Although not strictly applying to this development, for the purposes of defining residential amenity in terms of solar access we have used the environmental criteria stipulated for residential development in Section 7.2(e) of the North Sydney DCP which states:

"Design and site development so as to allow solar access to any solar panels, the main internal living areas and principal private open space areas of the subject property and adjoining properties, for a minimum of 3 hours between the hours of 9.00am and 3.00pm during the winter solstice"

PSN Matter was commissioned to undertake a solar study of the proposed development. The shadow diagrams at **Appendix F** demonstrate that:

- the proposed development will not generate any additional shadows on the Mount Street or Elizabeth Plaza Special Areas during the hours of 12 midday and 2pm at any time of the year; and
- the proposed development will generate some overshadowing of the western most properties on Alfred Street and Whaling Street, however this is not until approximately 2.50pm on June 21 in the afternoon and as such these properties will still receive well in excess of 3 hours of sunlight on June 21 between the hours of 9am and 3pm.

A statement regarding the guaranteed accuracy of the solar study is provided at **Appendix F**.

5.9 View Impacts

Public Views

Clause 28D(5) of NS LEP 2001 requires the consent authority to consider whether a proposed development preserves important view lines and vistas. The North Sydney CBD DCP 2002 Character Statement identifies a series of important views and vistas. These are:

- Views from Ward Street Plaza, where appropriate, of the Harbour and Neutral Bay district;
- Views to sky between buildings on east side of Miller Street, between Berry and McClaren Streets;
- Views towards the Harbour Bridge from the plaza outside Zurich Building (5 Blue Street); and
- Views to the harbour and Neutral Bay district from Doris Fitton Park.

The proposed development is not positioned within any of the above view corridors and as such will not have any impacts on public views.

Private Views

With respect to the private views available to neighbouring residents, Council's planning controls do not appear to contain any provision relating to the principle of view sharing and as such this issue does not appear to be a determinative consideration in the assessment of applications within the North Sydney CBD. Notwithstanding this Simurban Pty Ltd and Rice Daubney have undertaken a view analysis which assesses the impact of the proposed development on the southerly views of apartments within the Beau Monde building (see **Appendix O**).

An appropriate point of reference to consult when considering the reasonableness of view impacts to residents is the planning principle enunciated by the decision of Senior Commissioner Roseth in *Tenacity Consulting Pty Ltd v Warringah Council* [2004] NSWLEC 140. Commissioner Roseth provides a four step test for assessment to determine whether an impact on views is significant.

Step 1

The **first step** is the **assessment of views to be affected**. Senior Commissioner Roseth cites that water views are valued more highly than land views. Iconic views (eg Opera House, Harbour Bridge and North head) are valued more highly than views without icons. Whole views are valued more highly than partial views, e.g. a water view in which the interface between land and water is visible is more valuable than one in which it is obscured.

Step 1 Assessment

There are 241 residential units in the Beau Monde building, of these 83 units (34% of the total number of apartments) have a south, south-east or south-west aspect. However, only 29 (12%) of those 83 units have a single aspect directly south. Of the 29 single aspect south facing units those on Levels 9 to 14 inclusive (6 units) do not currently have any views due to the location of existing commercial buildings on Mount Street and Walker Street.

The single aspect south facing units from Levels 15 – 21 (7 units) achieve view corridors of the Harbour Bridge and across the harbour to the Sydney CBD. From Levels 22 – 31 these views towards the harbour and CBD are generally uninterrupted. The best views are available from the top 5 levels of the building which comprise penthouse style apartments that generally occupy a quarter to half a floor plate. The existing views from these levels are therefore more expansive. The existing view to the south-east and south-west from the top most penthouse apartment (Level 36) are shown in **Figures 72 and 76** respectively. The existing view corridors that these units obtain are shown in green in **Figure 64**.

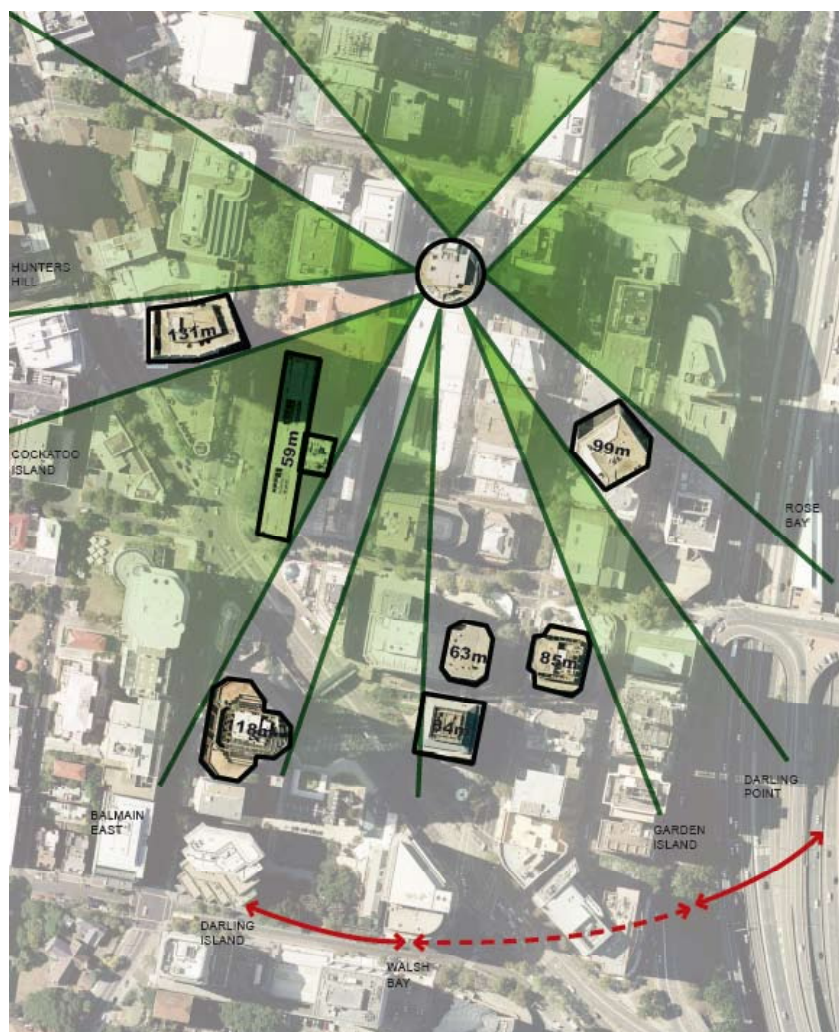


Figure 64 – Existing view corridors from Beau Monde

Step 2

The **second step** is to consider **from what part of the property the views are obtained**. For example the protection of views across side boundaries is often more difficult than the protection of views from front and rear boundaries. In addition, whether the view is enjoyed from a standing or sitting position may also be relevant. Sitting views are more difficult to protect than standing views. The expectation to retain side views and sitting views is often unrealistic.

Step 2 Assessment

Where a unit has a view it is obtained from the private balconies and living areas of each unit in both seated and standing positions. The iconic views are only obtained from the southern elevation of the building.

Step 3

The **third step** is to assess the **extent of the impact**. This should be done for the whole of the property, not just for the view that is affected. The impact on views from living areas is more significant than from bedrooms or service areas. The impact may be assessed quantitatively. However, it is usually more useful to assess the view loss qualitatively as negligible, minor, moderate, severe or devastating.

Step 3 Assessment

The view impacts on the topmost penthouse apartment (Level 36) resulting from the proposed development are shown in **Figure 73** and **Figure 77**. The images show that the iconic views of the Harbour Bridge, Opera House and Sydney CBD skyline will be lost in their entirety as a result of the proposed development. The same view loss will occur for all of the 61 south facing units below (i.e. from Level 15 to 35), i.e. all of the south facing apartments will lose their iconic views.

However, as demonstrated in the view corridor analysis prepared by Rice Daubney (included at **Appendix O** and shown in **Figure 65**), the proposal will not result in the loss of all views currently obtained by the units of Beau Monde.

Views to the east and south east of Neutral Bay, the harbour headlands and Garden Island will generally remain uninterrupted and as per the existing situation.

Views to the west and south west across the harbour to Cockatoo Island are also predominantly retained and preserved.

The view analysis also shows that as a result of providing a greater setback from Beau Monde, wider view corridors are preserved for the residents of Beau Monde than a development providing the minimum setback required. **Figure 66** through to **Figure 68** provide a comparison of the view corridors that are provided under draft LEP No 28 and that which are proposed as part this application. The corridors which are coloured yellow show the additional views that are obtained as a result of the additional setback proposed from Beau Monde.



Figure 65 – View corridors available from Beau Monde following the construction of the proposed development

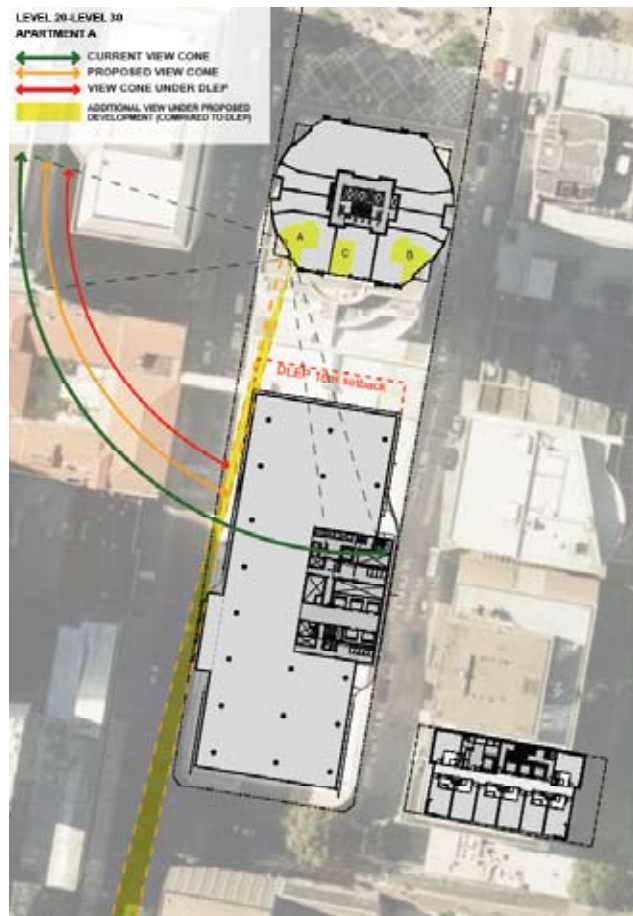


Figure 66 – Additional view corridors preserved by proposed building envelope to south west



Figure 67 – Additional view corridors preserved by proposed building envelope to the east

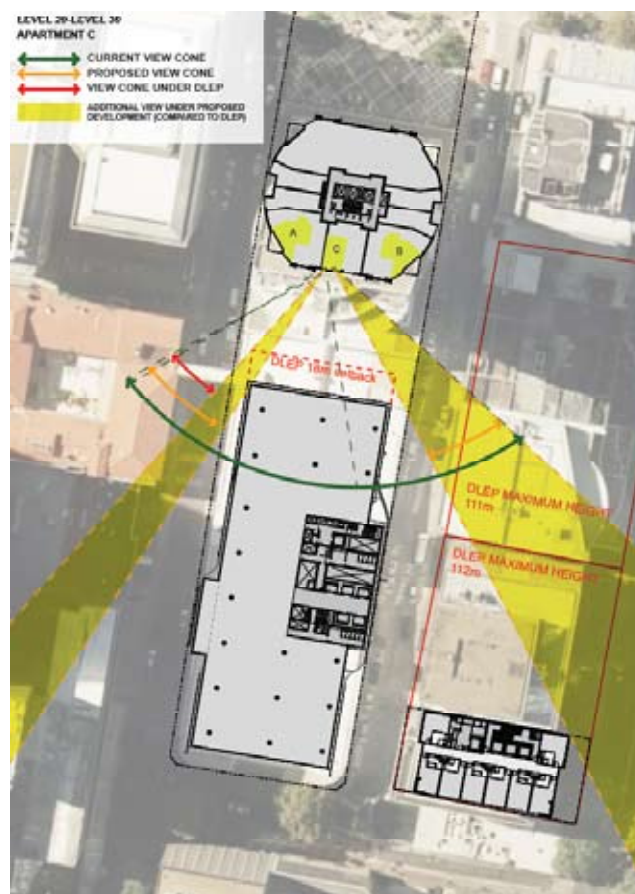


Figure 68 - Additional view corridors preserved by proposed building envelope to the south

Step 4

The **fourth step** is to assess the **reasonableness of the proposal that is causing the impact**. Commissioner Roseth states:

“development that complies with all planning controls would be considered more reasonable than one that breaches them. Where an impact on views arises as a result of non-compliance with one or more planning controls, even a moderate impact may be considered unreasonable.”

Step 4 Assessment

With regard to assessing the reasonableness of the proposal, the impacts of a complying scheme must first be understood. The impact of the complying building envelopes as prescribed under draft North Sydney LEP Amendment No. 28 are shown in **Figure 74** and **Figure 78**. The images show that the views acknowledged in Step 1 above, including those from the topmost penthouse level of Beau Monde will be severely impacted and obscured in their entirety as a result of complying building envelopes being developed on the sites on the northern side of Mount Street and the sites on the western side of Walker Street, north of Mount Street.

All of the units with a southerly outlook will lose their iconic views of the Sydney Harbour Bridge, Sydney Opera House and the Sydney CBD as a result of the draft NS LEP 2001 (Amendment No. 28) envelopes.

These impacts would result even if nothing was built on the 77-81 Berry Street lot due to the increased height of the building envelope on the site at 100 Mount Street and the increased height of the buildings on Walker Street. The likelihood of 100 Mount Street being developed is high given that a recent

Part 3A application has been lodged with the Department of Planning for the construction of a new commercial building on the site.

The view impact acknowledged above has been considered by North Sydney Council in the preparation of Draft NS LEP 2001 (Amendment No. 28) and have been found to be acceptable given the directions that have been issued by the State Government for the future role of North Sydney as a Global City which is a focus for international business and the need to accommodate additional floor space in the North Sydney CBD.

It would be unreasonable to prohibit the redevelopment of the North Sydney commercial core on the basis of preservation of a view corridor of a small proportion of units in one building within the CBD. If preservation of such corridors were to be upheld it would effectively sterilise much of the North Sydney CBD from being developed and would compromise North Sydney's position as the second largest commercial centre within the Sydney Metropolitan Region and a part of "Global Sydney".

The impact of the variation to the height control is shown in the images at **Figure 75** and **Figure 79**. As can be seen there is no additional loss of any iconic views or harbour views as compared to a complying scheme. There is however some loss of outlook towards the sky from the upper levels of the Beau Monde building. **Figure 69** shows that there is no difference in terms of outlook towards the sky for the units on levels 9 to 21 as both the proposed envelope and complying envelope obscure views towards the sky, however the amenity of these units is significantly improved as a result of the increased setback proposed which will result in more natural daylight and a greater sense of openness for these units.

The units located on levels 22 to 30 will lose a small amount of outlook towards the sky as a result of the increased height of the proposed building (**Figure 70**). These units however also significantly benefit from the increased setback of the proposed building from the northern boundary of the site and as such the minor loss of outlook is considered to be outweighed by the benefits that the additional setback provides including a greater sense of privacy and openness between the two buildings.

Finally, the loss of sky outlook will be most prevalent to the units which are located on levels 31 and above (**Figure 71**). However, this impact is not considered to be detrimental for the following reasons:

- The part of the building which impacts on the outlook of these units is 48m away from the affected units in Beau Monde; and
- These units have 90 – 180 degree views and as such will retain significant outlook to the east and west.

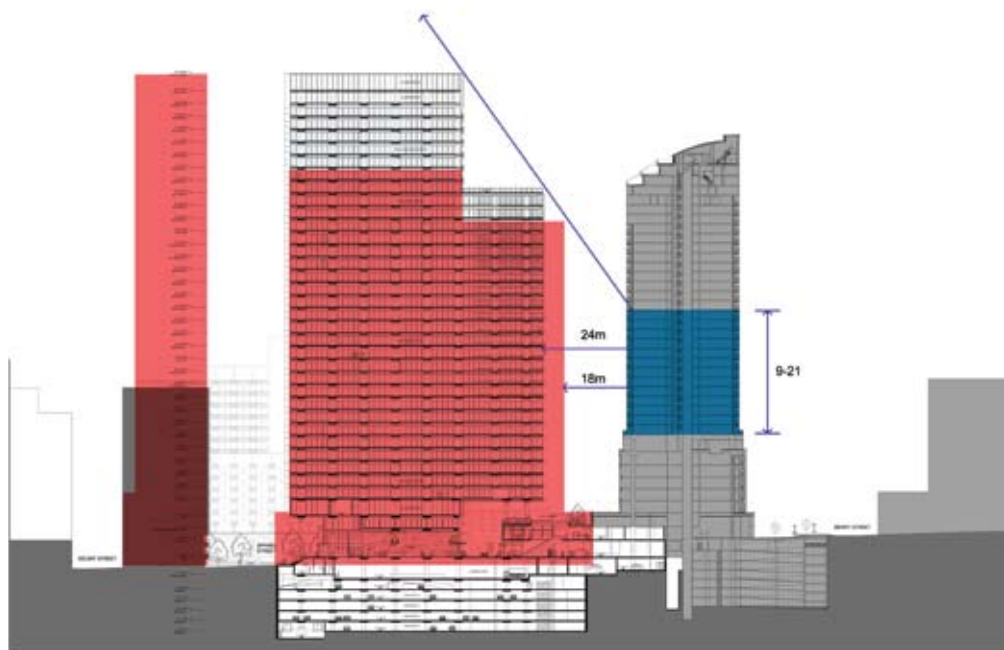


Figure 69 – Assessment of impact on outlook of levels 9 – 21 of Beau Monde

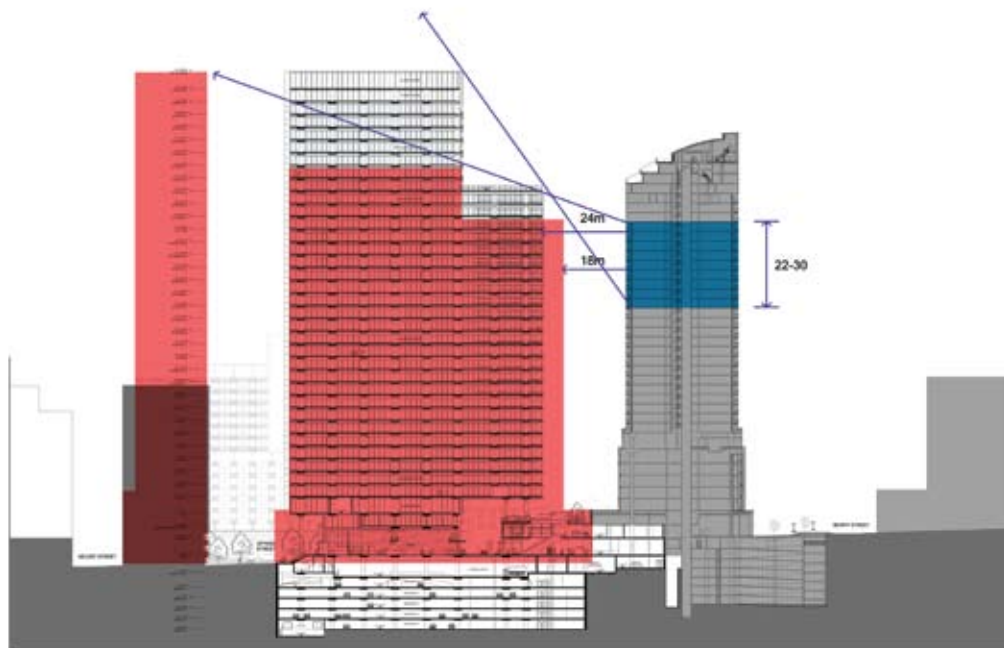


Figure 70 – Assessment of impact on outlook of levels 22 – 30 of Beau Monde

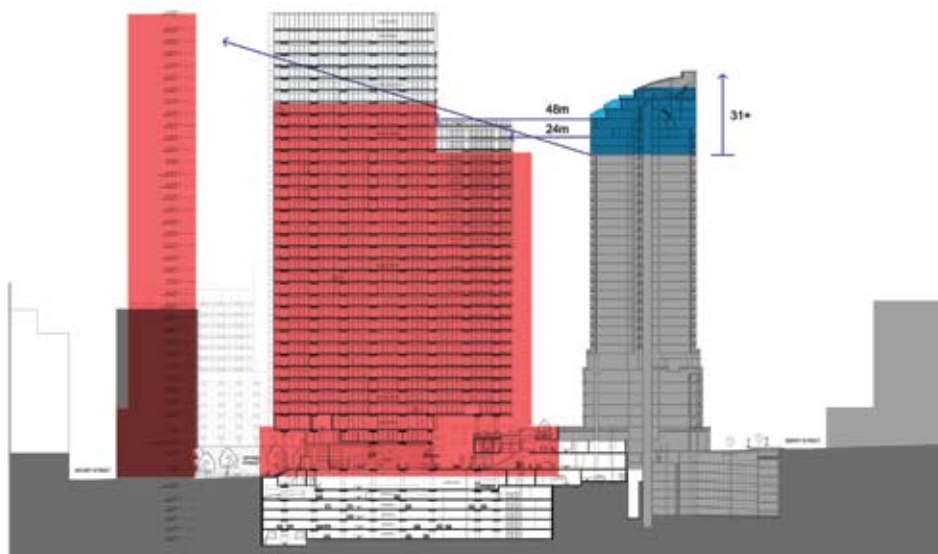


Figure 71 – Assessment of impact on outlook of levels 31 and above of Beau Monde

Summary of View Analysis

- In terms of the reasonableness of the proposal that is causing the impact, it is noted that whilst the proposed development breaches the draft building height control for the site, the additional height above the draft NS LEP 2001 (Amendment No. 28) envelope:
- does not result in any additional loss of iconic views compared to that which would result from a complying development;
- allows for greater setbacks to be achieved at the ground level, thereby significantly improving the public domain for the residents, workers and visitors to the North Sydney CBD;
- allows for greater setbacks from the Beau Monde building (an increase from 18m to 24m) which increases the amenity of all the residents with a southerly outlook (73 units) rather than protecting the outlook of the topmost units in the building; and
- is consistent with the future high rise character of the North Sydney CBD which is a major commercial core in Sydney.

If the preservation of the view corridor was to be upheld it would effectively sterilise much of the North Sydney CBD from being developed and would compromise North Sydney's position as the second largest commercial centre within the Sydney Metropolitan Region.

In light of this, the impact on view loss to the adjoining property is considered acceptable when assessed in accordance with the Land and Environment Court Planning Principle for View Loss.



Figure 72 – Existing views from penthouse (Level 36) of Beau Monde looking south east

Source: Simurban Pty Ltd



Figure 73 - View impact of the proposed development from penthouse (level 36) looking south east

Source: Simurban Pty Ltd

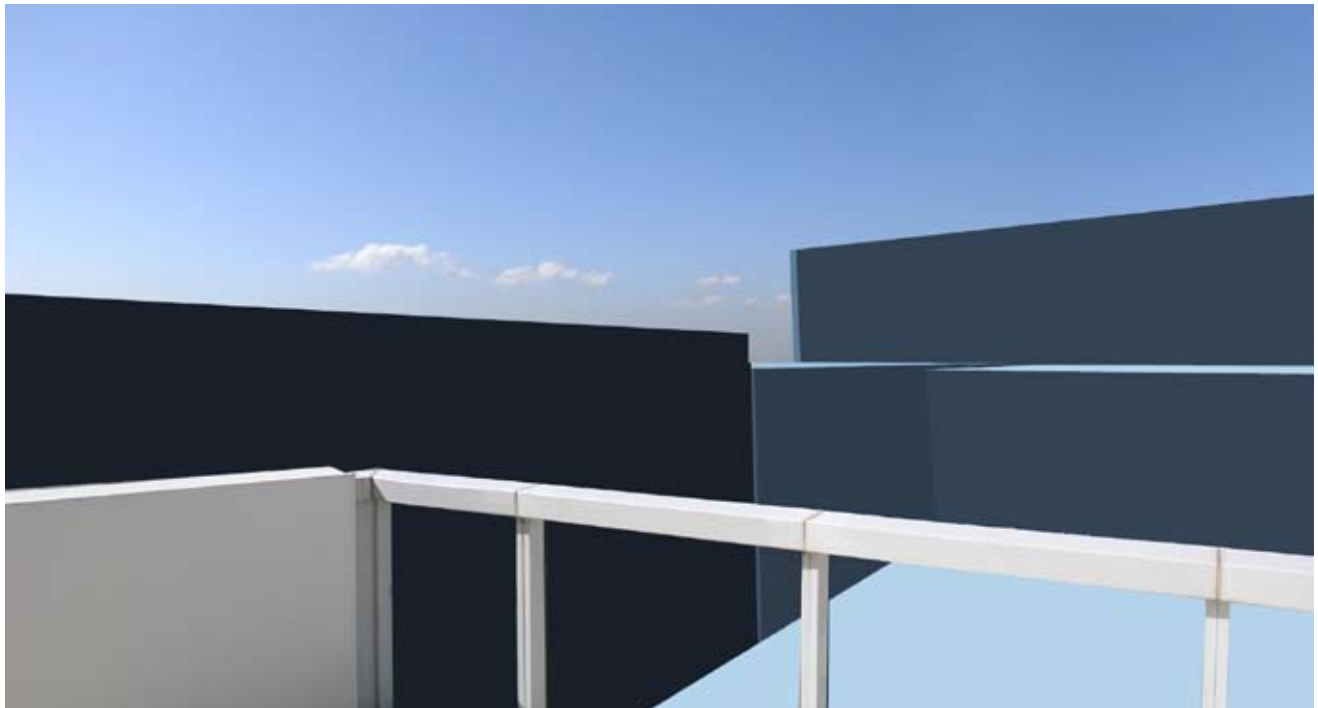


Figure 74 – Impact of Draft North Sydney LEP 2001 (Amendment No. 28) complying building envelopes

Source: Simurban Pty Ltd

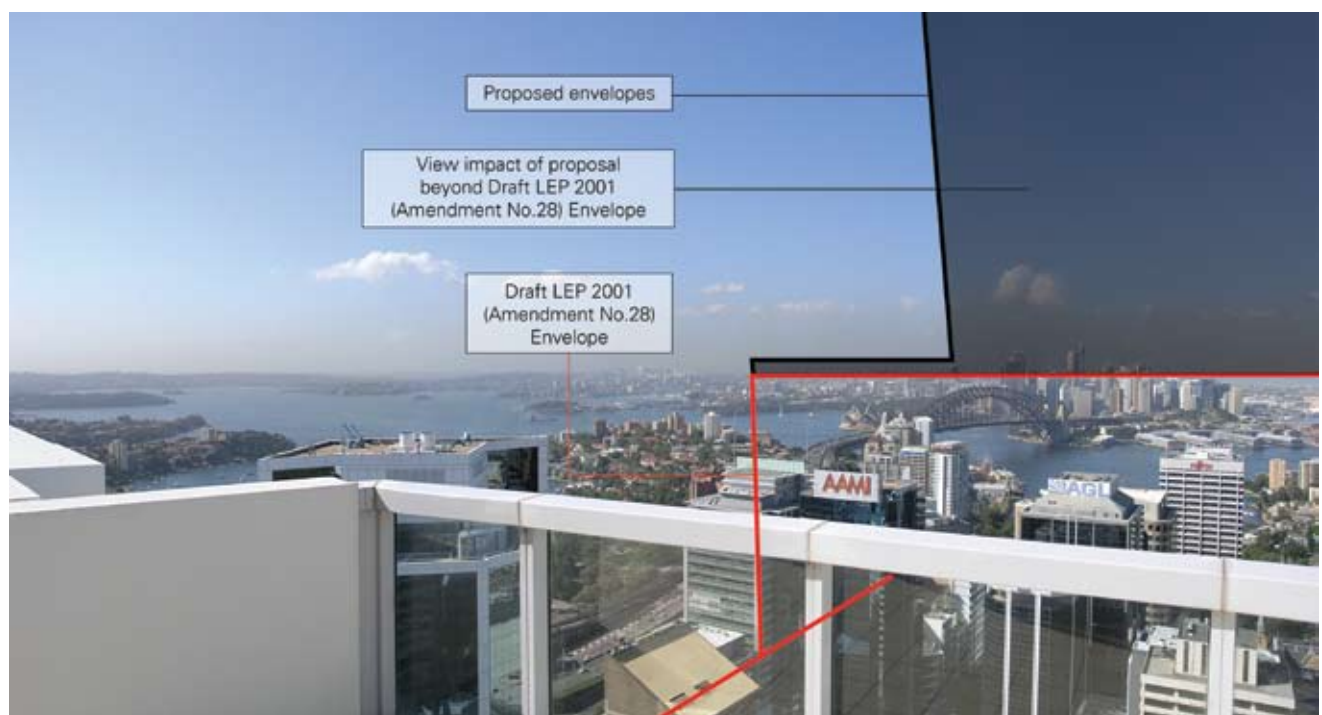


Figure 75 – View analysis of proposed commercial and hotel building envelopes with draft North Sydney LEP 2001 (Amendment No. 28) building envelopes looking south east

Source: Simurban Pty Ltd and JBA Urban Planning Consultants



Figure 76 – Existing views from penthouse (Level 36) of Beau Monde looking south west

Source: Simurban Pty Ltd



Figure 77 - View impact of the proposed development from penthouse (level 36) looking south west

Source: Simurban Pty Ltd

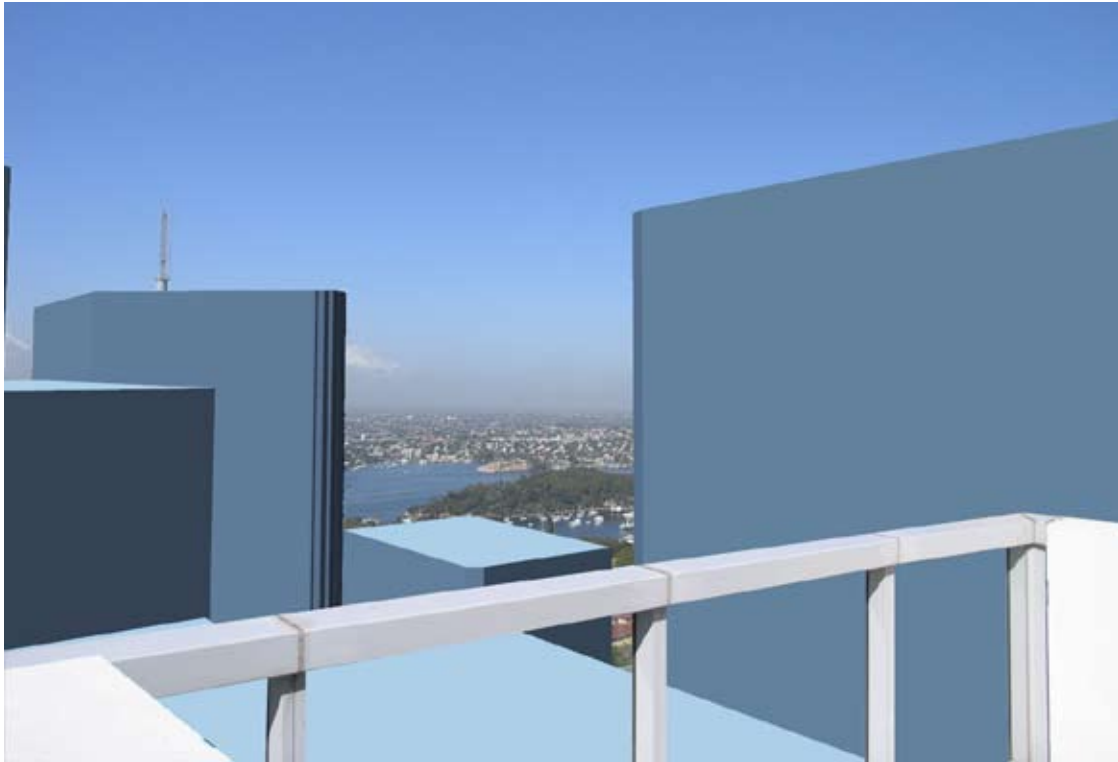


Figure 78 – Impact of Draft North Sydney LEP 2001 (Amendment No. 28) complying building envelopes
Source: Simurban Pty Ltd



Figure 79 – View analysis of proposed commercial and hotel building envelopes with draft North Sydney LEP 2001 (Amendment No. 28) building envelopes looking south west
Source: Simurban Pty Ltd and JBA Urban Planning Consultants

5.10 Residential Amenity

The nearest residential dwellings which have the potential to be impacted by the proposed development are north of the site in the Beau Monde building and across the Warringah Freeway in Alfred Street and Whaling Street.

View Impact

As demonstrated in the View Analysis at **Section 5.9**, the proposed development will have an impact on views from the residential dwellings in Beau Monde. However, the same impacts would be generated by a complying development on the site. Higher level units will also retain their easterly and westerly aspect views to the harbour and surrounding suburbs.

Loss of Sunlight

As demonstrated in the shadow diagrams at **Appendix F** and discussed in **Section 5.8**, the proposed development will not result in any adverse impacts on the solar amenity of residential dwellings located on the eastern side of the Warringah Freeway.

Beau Monde is located to the north of the proposed development and as such will not be subject to any overshadowing or loss of sunlight.

Privacy Impacts

The provision of a 24m separation distance between the northern façade of the proposed commercial building and the southern façade of the Beau Monde building will ensure that the privacy of the residents in Beau Monde is maintained in accordance with SEPP 65 (although this instrument does not apply to this development).

5.11 Acoustic Assessment

An Acoustic Report has been prepared by Aurecon Pty Ltd and is included at **Appendix P**.

Existing Background Noise

A noise survey was conducted on the site between Thursday 19 February and Monday 22 February 2009 to determine the existing noise levels on the site. The noise survey consisted of a long term noise logger being setup on the roof of 88 Walker Street, with additional spot measurements being taken at various street level locations listed below and shown in **Figure 80**.

- Site 1 – Roof level 88 Walker Street;
- Site 2 – Roof level 88 Walker Street;
- Site 3 – Street level Walker Street;
- Site 4 – Street level Spring Street;
- Site 5 – Street level Denison Street; and
- Site 6 – Street level Little Spring Street.

Aurecon noted that noise logging results near Sites 1 and 2 was dominated by rooftop plant equipment. Measurements at Site 2 were lower due to the greater separation distance from plants rooms while Sites 3, 4 and 5 were dominated by traffic noise. Site 6 was dominated by a return outlet from an adjacent carpark.

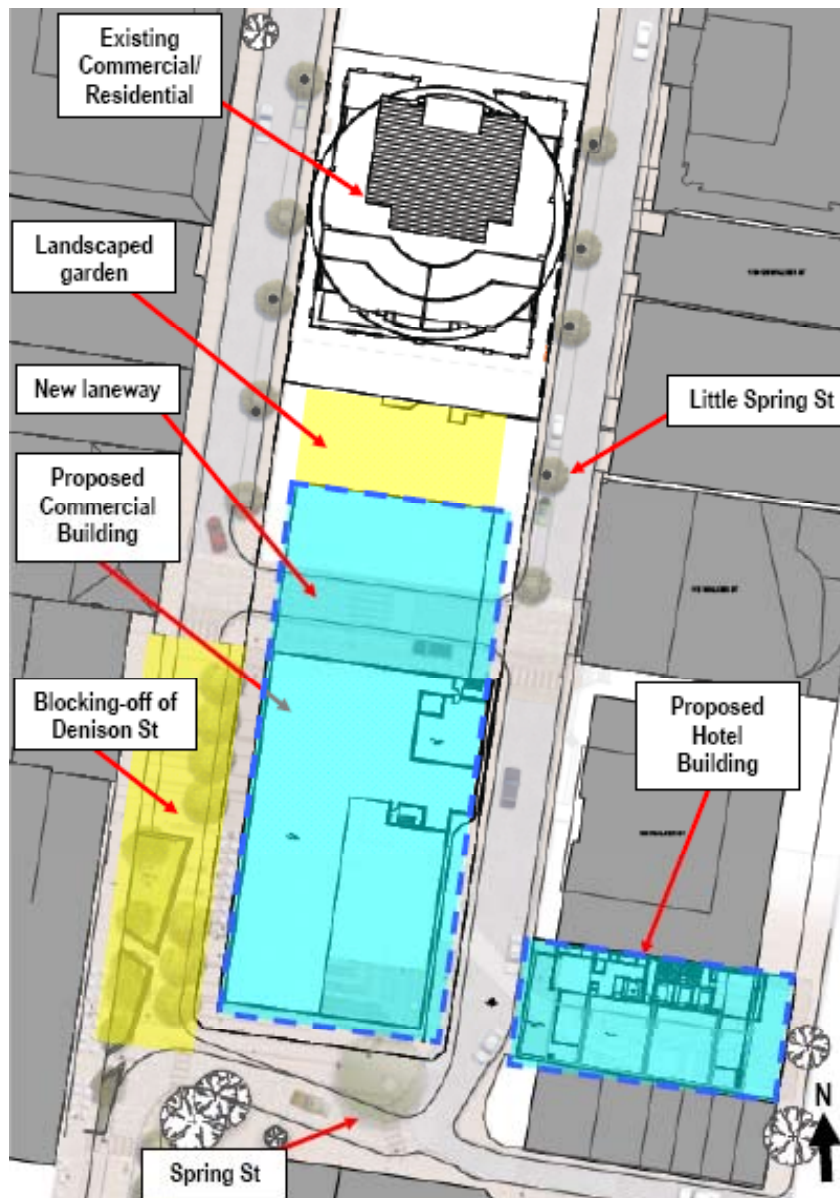


Figure 80 – Noise survey locations

Source: Aurecon

Noise Emissions

Given that the above background noise levels already significantly exceed the North Sydney DCP 2002 noise emission criteria, Aurecon consider it unrealistic and impractical to design a commercial building to comply with the criteria. As such the assessment criteria set for the project are based on the NSW Industrial Noise Policy amenity criteria as these provided the lowest criteria when based on the noise survey results.

In order to ensure that the proposed development complies with the noise emission criteria set for the project (**Table 10**), Aurecon recommend the following noise attenuation measures be incorporated:

- Equipment specification;
- Equipment arrangement, discharge and intake locations;
- Acoustic enclosures and barriers;
- Dust specification, plenums and in-duct sound attenuators; and
- Acoustic louvres.

Aurecon also recommend that specification of the attenuation measures should be carried out by an acoustic engineer in conjunction with the building services engineers during the design development stage of the project. A commitment reflecting this is included at Section 6 of this report.

The outdoor landscaped area is to be predominately used during weekday business hours with limited usage expected on Saturday. The noise generated in this space is likely to be in the vicinity of LAeq 70 dBA at 1 m during peak periods (assumed to be weekday lunch time). The closest residential receivers are located approximately seven levels (approximately 20 m) above the outdoor area. The propagated noise level at the residences will be significantly below the allowable daytime emission criteria of LAeq 56 dBA. Given that the generated noise will be in the speech frequencies with minimal low frequency noise therefore noise intrusion can be assumed as negligible into the residential spaces.

Table 10 - Assessment noise emission criteria

Type of receiver	Indicative Noise Amenity Area	Time of Day	Recommended L _{Aeq} Noise Level (dBA)	Criteria
Residence	Urban	Day	56	Amenity
		Evening	53	Amenity
		Night	51	Amenity
Commercial Premises (when in use)	All	Day	57	Amenity
		Evening	61	Amenity
		Night	63	Amenity

Source: Aurecon

Internal Noise Criteria

Aurecon has also established the internal noise criteria for the various types of spaces expected within the development. The criteria are based on AS2107:2000 *"Acoustics – Recommended design sound levels and reverberation for building interiors"*.

In order to achieve the internal noise criteria, Aurecon have provided indicative glazing recommendations. The glazing selected will meet these criteria unless an alternative option is approved by the Acoustic Engineer. A commitment reflecting this is given at **Section 6**.

Traffic Noise

The traffic noise criteria for the project is shown in **Table 11**.

Table 11 – Traffic noise criteria

Period	Allowable noise L _{Aeq, 1 hour} (dBA)
Day	68
Evening	65
Night	63

It is expected that traffic noise levels will increase in Little Spring Street and that traffic noise which originally occurred in the closed off section of Denison Street will now occur in the through site link. Despite the fact that future noise levels are likely to slightly exceed the traffic noise criteria. This noise level will predominantly be experienced by commercial receivers who will not be severely impacted (if at all). Existing residential receivers are located further away, and the incident traffic noise level experienced by these properties will be below the existing background noise level during the AM peak time.

Existing residential properties will be shielded from the traffic noise generated by the proposed laneway. Any audible noise levels from this Laneway will be below the existing background noise.

Overall Aurecon considers that the increases in traffic noise due to the proposed development are deemed to be minor and comply with the required criteria generating minimal additional impacts.

5.12 Lighting

A Lighting Impact Statement has been prepared by Aurecon and is included at **Appendix Q**. The statement confirms that the lighting design will be in accordance with AS4282: 1997 *Control of the Obstructive Effects of Outdoor Lighting*. This standard nominates limitations on luminance in areas adjacent to the development as well as implementation of direct up lighting.

5.13 Wind

In order to determine the wind impacts of the proposed development Windtech Consultants Pty Ltd undertook a Pedestrian Wind Environment Study (see **Appendix R**). The wind comfort criteria used for the study are as follows:

- wind conditions for all pedestrian accessible ground level areas within and around the proposed development should not exceed the existing wind conditions, or if they do they should not exceed 13m/s for the annual maximum peak wind speeds (as specified in the North Sydney DCP); and
- wind conditions for private balconies and terraces of the proposed development should satisfy the safety limit of 23m/s for the annual maximum peak wind speeds. If a terrace is used frequently as a communal area for all occupants of the development, the comfortable walking criterion of 7.5m/s for the weekly maximum Gust Equivalent Mean (GEM) wind speeds should also be satisfied.

A total of 36 locations were chosen for detailed analysis, including 26 ground level locations and 10 locations on the podium terrace areas of the development.

Initial tests for existing site conditions were undertaken which showed that only one of the test locations, test point 35, would satisfy the short exposure wind comfort criterion without the need for amelioration treatments. As such, Windtech has recommended the following treatments so that the ground and upper level outdoor areas are suitable for their proposed purpose:

- A strategic layout of densely foliating trees for the ground level and Restaurant Level areas within and around the development site (see **Figure 81**);
- The addition of wind deflectors/awnings 1 level high above the street level at the northern and southern aspects of the driveway within the podium of development (see **Figure 81**); and
- 1.2m high impermeable balustrades along the perimeter of the two terrace areas on the top of the commercial podium (see **Figure 82**).

The proposed design incorporates the above recommended treatments and as such it is considered that a suitable environment will be provided at the ground level for pedestrians and also for patrons of the terrace level areas of the proposed development.

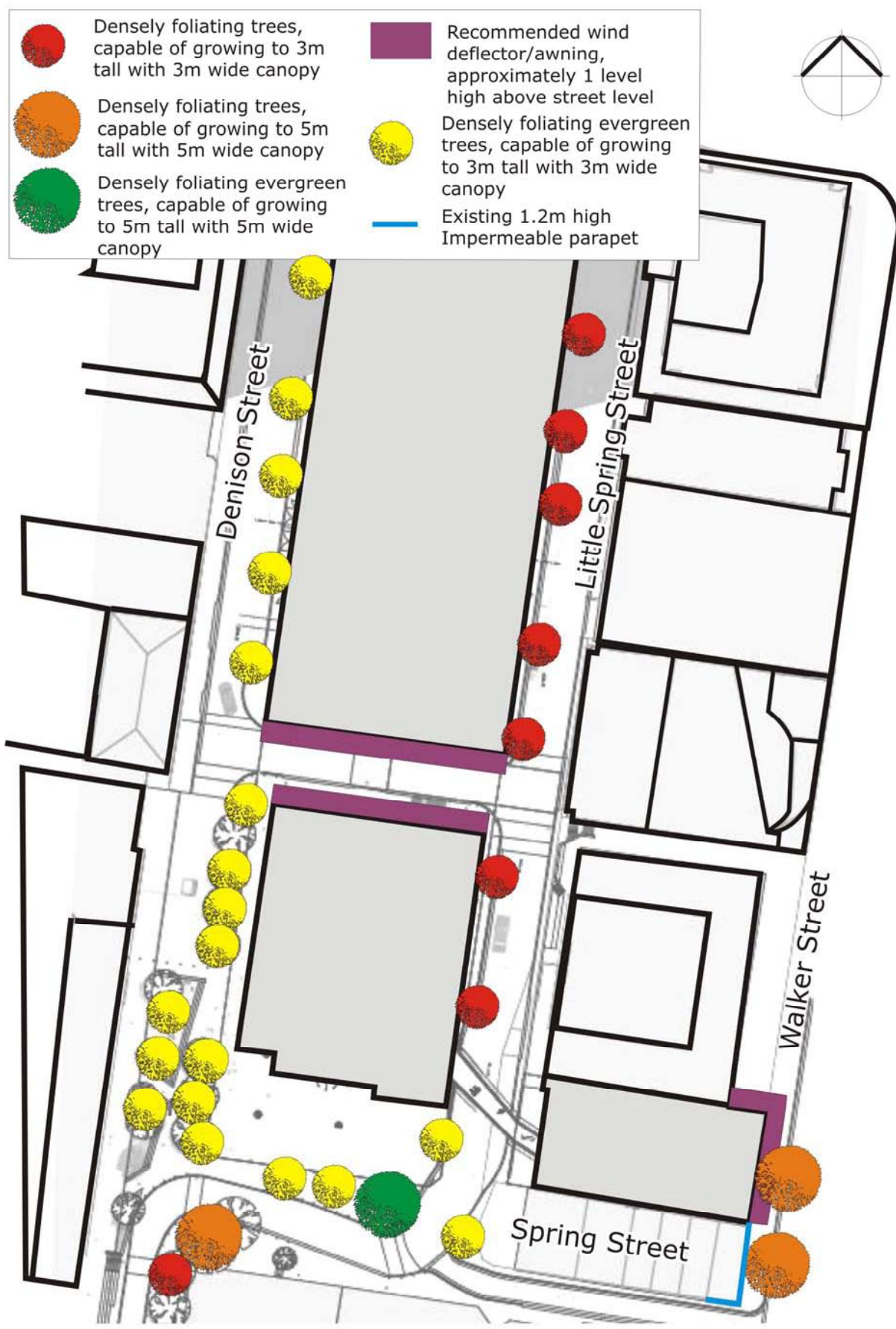


Figure 81 – Wind amelioration treatments at the ground level

Source: Windtech Pty Ltd

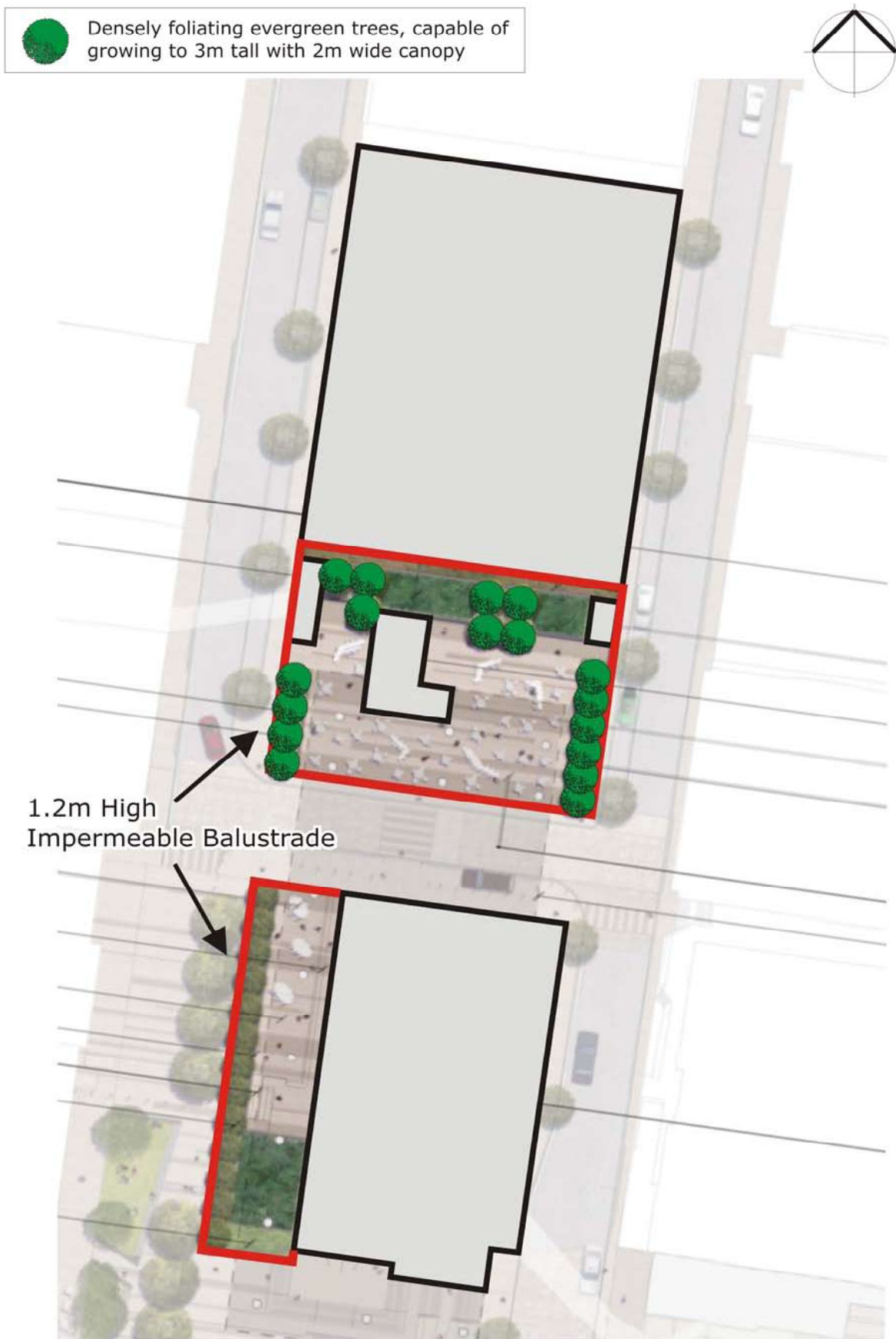


Figure 82 – Wind amelioration treatments for the roof terraces

Source: Windtech Pty Ltd

5.14 Reflectivity

Windtech Consultants Pty Ltd were commissioned to investigate the potential impact of solar glare from the proposed development. Their analysis takes into consideration of glare at the street level in terms of potential impacts on drivers and pedestrians and also the potential glare to the occupants of surrounding buildings. Their report is located at **Appendix S**.

As the North Sydney DCP does not stipulate a maximum normal specular reflectivity of visible light of building façade materials, Windtech has adopted the requirement of a maximum 20% normal specular reflectivity of visible light for all building facades as this has been adopted by many Councils in NSW. Windtech have also adopted the limiting veiling luminance of 500 candelas per square metre for the comfort of vehicle drivers.

The following six points were assessed for adverse glare to pedestrians and drivers:

- Point 1 – Pacific Highway heading north;
- Point 2 – Walker Street south of the development near the intersection of the Pacific Highway;
- Point 3 – Walker Street at the intersection with Mount Street;
- Point 4 – Denison Street heading north;
- Point 5 – Little Sprint Street heading south; and
- Walker Street – at intersection of Berry Street.

Windtech's assessment found that the proposed development will not generate any adverse glare from the six points which vehicles and pedestrians will have view of the proposed development.

In order to ensure that the development does not generate any glare that would cause nuisance to occupants of surrounding buildings, Windtech recommends that all glazing on the facades of the development have a normal specular reflectivity of visible light of 20% or less. A commitment to this effect is given at **Section 6** of this report so as to ensure that the proposed development will not have any adverse impacts on the surrounding building occupants, including the residents of Beau Monde.

5.15 Transport and Accessibility

Halcrow MWT has prepared a Traffic Impact Assessment for the project which is included at **Appendix E**. The main aspects of the report are summarised below.

Existing Traffic Generation

A count of vehicles entering and exiting the driveways of the two existing buildings was undertaken by Halcrow MWT during the morning and afternoon peak periods. Analysis of the survey results revealed that the existing traffic generation of the site is 39 two-way traffic trips occur during the morning peak and 34 two-way trips occur in the evening peak.

In addition to the above traffic count, traffic surveys of the surrounding street network were also undertaken to determine existing traffic volumes and intersection performance. The results showed the following level of performance at the surrounding intersections:

Table 12 – Existing peak hour intersection operation

Intersection	Control	AM Peak Hour		PM Peak Hour	
		Average Delay	Level of Service	Average Delay	Level of Service
Walker Street / Mount Street	Signals	30.3	C	32.3	C
Walker Street / Berry Street	Signs	43.5	D	48.7	D
Berry Street / Miller Street	Signs	18.6	B	15.6	B
Berry Street / Denison Street	Priority	Not modelled, due to software limitations modelling the effects of queues extending across the minor arm. Estimated Levels of Service are B in the AM peak. See observations below.			
Little Spring Street / Spring Street	Stop	8.9	A	5.7	A

Observations made by Halcrow indicate that the AM peak hour operation is generally satisfactory (LoS B estimated). However, the PM peak hour performance is characterised by significant queues (in excess of 20 vehicles) and delays on the Denison Street approach. This is due to traffic extending back across the intersection from the Berry Street / Walker Street intersection and not providing sufficient gaps for traffic to exit from Denison Street. Once the traffic queue along Berry Street dissipates the traffic signals are coordinated such that a platoon of traffic from the Miller Street / Walker Street intersection then proceeds across the mouth of Denison Street further restricting the ability of exiting traffic to find suitable gaps in oncoming traffic to turn.

Future Traffic Generation

For the purposes of estimating the future traffic generation of the development, the following trip rates were adopted:

- 0.4 two-way trip per space for commercial development (152 proposed)
- 1 two-way trip per 10 hotels rooms
- 1 inbound peak hour trip per space during the PM peak hour
- 1 two-way trip per space

Using the above trip generation rates, the proposed development is expected to generate an increase of 45 trips in the AM peak and an increase of 50 trips in the PM peak.

An analysis of the impact of the additional trips might have on the operation of the surrounding intersection operation showed that all intersections would maintain the same level of service as existing. As such all of the study area intersections assessed will be able to accommodate the forecast traffic flows as a result of the development with no change in the level of service operation.

Basement Design

Halcrow MWT consider that the proposed basement design is capable of complying with the relevant Australian Standards and as such will facilitate safe vehicular access into the building.

Car parking geometry for the public and retail parking spaces has been designed to accord with the user class 2 (town centre parking) of AS2890.1. The commercial spaces have been designed to comply with user class 1A geometry.

Some of the commercial spaces will be tandem spaces. These will be allocated to the same tenancy.

Parking

Halcrow MWT has undertaken an assessment of the proposals compliance with the North Sydney DCP's maximum parking controls which shows that the development requires the provision of a maximum of 201 parking spaces.

The proposed development provides 152 spaces for the commercial and retail tenants which results in a provision rate of 1 space per 400m² which is compliant with the maximum parking rate.

5.16 Equitable Access

Philip Chun Accessibility has reviewed the proposed design for compliance with AS1428 and the Disability Discrimination Act (DDA) (see **Appendix T**). Philip Chun is of the opinion that the proposal is capable of being accessible by the public and staff, excluding maintenance and storage facilities, which will enable safe, equitable and independent travel. In particular the following will be provided:

- not less than 2% of the total car parking proposed will satisfy the accessibility criteria in terms of dimensions, location, distribution and head height;
- access via a lift or ramp will be provided at the main building entrance, equitable access will also be provided at each allotment boundary;
- widths and inclines of pathways internal and external to the building will be designed so as to provide an accessible path of travel where possible within the constraints of existing surrounding street levels;
- external finishes and materials will be chosen so as to comply with the requirements of AS1428;
- all common internal areas of the hotel and all areas of the commercial development, including conference facilities and excluding service and maintenance areas, will be accessible by means of a lift and corridors with a width of not less than 1800mm;
- appropriate sanitary facilities will be provided to the above areas;
- all lifts will be of appropriate dimensions and will be installed with enhanced features for people with disabilities. Philip Chun has also recommended that the goods lift be designed for use as a safe and efficient evacuation option for people with disabilities;
- customer service areas will be designed to comply with the spirit of the DDA;
- a range of hotel rooms at different levels will be designed to be accessible; and
- an evacuation strategy for the mobility impaired will be prepared.

A commitment regarding the provision of equitable access to all public areas of the development is given in **Section 6** of this report.

5.17 Construction Management and Staging

A Preliminary Construction Environmental Management Plan (CEMP) has been prepared by Brookfield Multiplex Pty Ltd and is included at **Appendix L**. The plan provides the construction methodology and management of the development during demolition, bulk excavation and construction works. A more detailed CEMP will be prepared by the building contractor once appointed and prior to a Construction Certificate being issued.

A Project Manager will be nominated for the project who will be responsible for the implementation the final CEMP and will be responsible for reporting to the Proponent of the project.

The CEMP outlines the main OHS and environmental management measures that will be implemented on the site. These are summarised below.

Occupational Health and Safety

A detailed Health and Safety Management Plan (HASP) providing a health and safety risk assessment for the planned construction works shall be prepared by the Contractor prior works commencing. The HASP will:

- Nominate key personnel responsible for site safety;
- Outline emergency contact details and procedures;
- Describe the risks associated with each operation conducted;
- Describe actions to be taken to mitigate risks and hazards;
- Confirm that on-site personnel are adequately trained to perform their job responsibilities; and
- Describe personal protective clothing and equipment that will be worn by personnel.

All personnel will be required to undertake a site induction process before undertaking any work.

5.17.1 Environmental Management Plans

The following Environmental Management Plans will be prepared, incorporated into the overall CEMP and implemented once a contractor is appointed and prior to works commencing.

Heritage and Archaeology Plan

In order to ensure that the surrounding heritage items remain unaffected by the proposed development the following is proposed:

- Barriers/fencing will be placed around and over heritage items to create protection and/or exclusion zones as required;
- Site induction and tool box talks will be held by the contractor to inform site personnel and visitors of the location and requirements for the protection of the heritage structures; and
- Work Method Statements will be developed by the contractor for works in close proximity to the heritage structures. The Work Method Statements will be reviewed and approved by a qualified heritage consultant.

Hazardous Materials Management Plan

A Hazardous Materials Management Plan identifying the arrangements for the removal and disposal of potentially hazardous materials from the site will be prepared. Specifically, the following potential hazardous materials have been identified:

- Asbestos Containing Materials;
- Light Capacitors Containing PCBs;
- Lead Paint Systems; and
- SMF Insulation.

Following the removal of hazardous materials the buildings will be inspected by a qualified occupational hygienist. The occupational hygienist will issue a Clearance Certificate for each building once satisfied that all hazardous materials have been removed and appropriately disposed in accordance with relevant legislation. Demolition and recycling of a building will not commence until a Clearance Certificate has been issued.

Noise and Vibration Management Plan

The Noise and Vibration Management Plan will ensure that the works will be undertaken in accordance with the Environmental Protection Authority guidelines for noise emissions from construction/demolition works and the provisions of the Protection of Environmental Operations Act 1997. In particular the following noise management measures will be implemented during construction:

- Noise monitors will be set up around the site at locations identified by the Acoustic consultants as sensitive and high risk areas;
- Works on site to only be carried out during approved construction hours;
- The contractor will be responsible for scheduling activities that generate high noise to short term duration wherever possible and practical;
- Establishment of site practices and strategic positioning of processes on site; and
- Establishment of direct communication with affected Parties.

Air Quality Management Plan

A detailed Air Quality Management Plan will be prepared by the Contractor which will include the following measures to be adopted during construction works:

- Control of dust emissions by the use of water spraying and covering of materials when required;
- Cleaning of concrete decks to reduce dust emissions;
- Covering of loads on trucks transporting materials;
- Selection of all motorised equipment to be used on the site on the basis of its noise performance. All equipment will comply with regulatory standards for noise generation;
- High efficiency mufflers will be installed for major plant items to reduce construction noise;
- Equipment will be operated in a proper, efficient and correct manner which includes proper maintenance in order to control noise and associated exhaust emissions;
- Odour emissions from the site will be monitored; and
- No materials will be burnt on site.

Stormwater and Sediment Control Plan

A Stormwater and Sediment Control Plan (SSC) will be prepared by the Contractor prior to the commencement of the works and will include measures to ensure compliance with the Protection of the Environment Operations Act (2000), as amended, and other relevant legislation. The SSC shall include a plan showing the location of the sediment controls to be implemented by the Contractor with the following measures to be adopted:

- Provision of temporary drainage channels and detention pondage to appropriately manage stormwater;
- Stormwater drain grates to be wrapped in filtration medium. The filtration medium will be periodically cleaned and changed as and when required;
- Diversion drains to be constructed to minimise runoff from rainfall flowing into the works area. Stormwater diversion drains are to be constructed in the vicinity of areas to be excavated to minimize water flow into excavations; and
- Regular visual inspection of the site drainage system will be undertaken by the Contractor, particularly after storm events.

Waste Management Plan

The Waste Management Plan will require the Contractor to retain waste records and submit quarterly reports to the Project Manager. A minimum target of reuse or recycling of 80% (by mass) of the construction waste has been set in order to achieve the targeted Green Star Rating. **Table 12** outlines the quantities of demolition and recycling material that Brookfield Multiplex estimate will be generated by the development during the demolition phase.

Waste will be sorted on site prior to loading and removal from the site. During excavation works all trucks will be required to exit the site via a dedicated gate. The gate will have facilities such that loads are covered and wheels are free of sediment.

Table 13 – Demolition and construction waste estimates

Waste Type	Quantity
Concrete / Brick	3,600 tonnes
Rubbish	1,000 tonnes
Steel	200 tonnes
Total	4,800 tonnes

Source: Brookfield Multiplex

Traffic Management Plan

A Traffic Management Plan will be prepared prior to the commencement of works. Traffic will generally be managed at the site in the following way:

- Designated transport routes will be communicated to all personnel;
- Strict scheduling of vehicle movements is to occur to minimise vehicles waiting off the site and
- Site workers are to utilise local public transport and car sharing wherever possible.

Brookfield Multiplex predict the following truck arrivals:

- Excavation: 25 – 40 per day
- Demolition: 5 – 10 per day
- Concrete Pour: 10 – 40 per day (on pour days only)
- Fitout: 5 – 15 per day.

The proposed works will involve the provision of an access driveway within the Spring Street frontage of the site and Works Zone along part of the Walker Street frontage and in Little Spring Street. The site access and Works Zone will require the use of accredited traffic controllers to monitor and control vehicle movements. Details of the access, Works Zone and crane location are illustrated on the Proposed Materials Handling Schematic at **Appendix L**. Vehicles will be queued alongside the Warringah Freeway or somewhere similar and will be called one at a time to load within the site or on the designated loading zone so as to not disturb the flow of surrounding traffic.

5.18 Drainage, Flooding and Climate Change

A Drainage and Flooding Assessment has been prepared by Aurecon Pty Ltd (Refer **Appendix U**). The findings are summarised below.

Drainage and Flooding

The existing Sydney Water culvert that traverses through the site appears to have ample capacity for the 100 year ARI flow from the contributing catchment based on calculated peak flows entering the system. Aurecon has assessed several options for its relocation and the favoured option is diversion through Spring Street.

Aurecon has considered the impact this would have on flow behaviour in the wider catchment and have advised that the street areas surrounding the development are to remain the same or be improved so that any potential flooding would be no worse than the existing situation. Aurecon advise that there is scope to improve drainage by way of:

- Adjusting the pavement / footpath levels and drainage at the intersection of Denison and Spring Streets by removing the current traffic calming device; and
- Installation of additional drainage pits in the road network to reduce the risk of blockage occurring.

These options will be investigated during the detailed design of the services and Denison Plaza.

Aurecon note that the relocation/adjustment of the SWC culvert (see **Figure 54** for proposed relocation position) could slightly reduce impacts downstream if the new drainage system is designed to attenuate the existing flows. This will require further investigation during the detailed design stage of the development. The collection of rainwater as proposed (130,000 litres of storage) will also potentially have a positive benefit on the downstream drainage.

The proposed buildings will require ground floor flood protection for any entrances and sensitive infrastructure facing Little Spring Street and Denison Street. The current floor levels shown for the proposal are adequate providing a traffic calming device is removed and additional pits are provided at low point locations. Options for achieving this will be further investigated during the detailed design of the public domain.

Rice Daubney advise that, if required, the floor levels of the hotel lobby and car park level can be raised slightly to accommodate the required flood protection level without affecting the overall heights of the building if the works to Little Spring Street and Spring Street are not possible. As discussed this will be further investigated during the design development stage when final ground levels in the public domain have been determined.

Climate Change

Due to the elevation and proximity of the proposed development from tidal influence Aurecon consider it unlikely that increased seawater levels would have an impact on the development drainage system.

5.19 Heritage Assessment

NBRS + Partners has prepared a Statement of Heritage Impact for the proposal (**Appendix V**). The findings of their assessment are summarised below.

Firehouse Hotel (former North Sydney Fire Station)

The following design features have been proposed to address the relationship of the new glass lobby of the hotel with the Firehouse Hotel:

- 10m glazed lobby is aligned to the height of the Firehouse Hotel;
- the height of the glass volume is equal to the height of the top parapet of the Firehouse Hotel;
- the hotel tower is setback 5m allowing the façade of the Firehouse Hotel to maintain the integrity of the Walker Street façade; and
- the ability of the public to appreciate the heritage listed building from Walker Street is retained as the scale and current context at street level is consistent with the scale of the existing adjoining building.

NBRS + Partners consider that subject to further detail of the street frontage of the hotel building, including the vertical junction between the heritage item and the proposed glass lobby, the new development will not adversely affect the appreciation of the heritage significance of the former Firehouse Hotel from Walker Street. The condition of the northern Firehouse Hotel wall will be investigated in the course of careful demolition of the existing building.

MLC Centre

In 1988 Jackson Teece Chesterman and Willis prepared a Conservation Plan for the MLC Centre. It provides a specific policy for the townscape setting of the building and nominates a 'lot boundary curtilage'. The relevant policy is set out below:

"Policy 3.2

The original configuration of the setback with its landscaped garden and paved concourse/ colonnade, along Miller Street should be preserved by the adoption of a Lot Boundary Curtilage. The design of any new landscaping should be expressive of the philosophy which informed the original design of these spaces.

Explanation

The adoption of a lot Boundary Curtilage is a formal mechanism by which:

- *The historical setting of the building may be protected*
- *Existing visual and physical links into and out of the site may be protected*
- *The site may be protected from inappropriate development."*

NBRS + Partners has undertaken a view analysis from the principal view to the MLC Centre which is from the south-western corner of Miller Street and Mount Street. This is shown in **Figure 83**. In making the assessment, NBRS + Partners noted:

"the proposed building will be marginally visible at the eastern edge of the MLC Centre when the heritage item is viewed in its immediate and more significant context. When farther away, the proposed building will be visible rising above the roof of the MLC Centre but in this view other tall buildings are also included as part of a townscape context. The Beau Monde development already visually interrupts the roof edge of the MLC Centre in this further removed view but it is an interruption which is not dominant to the casual observer."

NBRS + Partners also note that the construction of taller nearby buildings is consistent with the significance of the MLC Centre as it was the first highrise office block in North Sydney and was seminal in the current and future nature of the CBD of North Sydney. As such they consider the height and visibility of the proposed commercial building in relation to the MLC Centre will not adversely impact upon the significance of the heritage item.



Figure 83 –View towards the MLC Centre (from the corner of Miller and Mount Streets) with proposal in the background

5.20 Contamination

Hyder Consulting Pty Ltd undertook a Phase 1 Environmental Site Assessment to accompany the Project Application. The results of their investigations are provided in the reports at **Appendix W** and are summarised below.

5.20.1 Historical Use

Hyder undertook a search of historical aerial photographs (of subject site and surrounding blocks) and land titles held by the NSW Department of Lands which revealed the following historical use of the site:

- 1950 – predominantly residential use;
- 1961 – residential use to the north of the site with some warehouses and industrial buildings present;
- 1972 – residential / commercial / warehouse uses;
- 1980 – large scale construction underway for commercial buildings;
- 1994 – the majority of sites in the locality had been redeveloped and are occupied by multi-storey office and commercial buildings; and
- 2004 – little change between 1994 and 2004.

A search of council's records show that neither site is affected by Acid Sulphate Soils, however there is the potential for contaminated soil to be present due to the nature of the previous uses on the site.

77 Berry Street

In 2002 Hyder undertook a Phase 1 and 2 assessment for the redevelopment of the northern part of the Berry Street lot. A number of soil samples were collected across the site and tested for a broad range of contaminants. The samples revealed that the ground largely comprised of crushed sandstone material between depths of 0.2m and 1.2m. Low level metal contaminants were identified however it was concluded that this was likely related to the nature of the imported fill material and did not pose a significant issue for development.

When reviewing the planning history of the lot, Hyder noted that any contamination of the soil resulting from previous warehouse / industrial activities were likely to have been removed from the site during the 1982 redevelopment of Berry Square Retail.

During a site inspection for the Phase 1 Assessment of 2009, Hyder noted the following in respect of Berry Square Retail:

- Three grease traps are located in the car park. One, to the north of the car park has been decommissioned and is no longer in use. The second consists of two pits, located at the southern end of the car park. The third is located at the south-eastern corner of the site. Both grease traps appear to be adequately maintained;
- There are a number of small air conditioning units for the retail outlets to the east of the site. These appear dated and may well contain ozone depleting substances. No further information was available for the purposes of this report;
- The car park has been cut into bedrock towards the northern end of the car park; and
- A Dry Cleaner is located to the southern end of the site. Discussions with the property manager suggested that no chemicals are used on site. The shop is simply a front and all dry cleaning was conducted off site. No access was available to the dry cleaners for this investigation.

Taking the above into account and the fact that the site is not listed on the Contaminated Land Register, Hyder conclude that it is unlikely that significant soil or ground water contamination would be present on the site. They further conclude that a Phase 2 environmental assessment is not required. However, as soil will be exported off the site, some soil testing may be required to confirm the soil quality prior to off-site disposal.

In addition to the above investigations, Hyder also reviewed an Asbestos Containing Materials Survey which was carried out by P Clifton & Associates in 2008. The survey notes that a number of asbestos containing materials were found throughout Berry Square, however these materials were in good condition and would not pose a health risk is left un-disturbed.

As the proposed demolition works will now disturb these materials, Hyder recommend that these materials should be removed prior to or in conjunction with the proposed works. The preliminary CEMP is consistent with this.

88 Walker Street

When undertaking a site inspection of the existing building, Hyder noted the following:

- Within the Sprinkler Pump Room, there is a very noticeable 'dank' (potent damp and humid) odour which appears to be related to the water tank serving the sprinkler system. Also noted was the potential asbestos containing rope around the pipes;
- A fuel storage drum, estimated to contain approximately 100L is located in the Diesel Alternator Room. Adequate bunding was not observed;
- Various oils and chemicals were also stored in the plant room with the cooling towers. Adequate bunding was not observed;
- Vent lines, typically associated with Underground Storage Tanks (USTs), were observed on Little Spring Street, on the property directly adjacent on the northern side of the site. Possible fill points may be located within the loading bay area of the adjacent property; and
- The property to the south of the site was formerly used as the North Sydney Fire Station, and may have contained USTs prior to the recent refurbishment as the Firehouse Hotel. No evidence of former or existing USTs was noted in this area during the site inspection.

Given the historical use of the site for residential and commercial purposes it is unlikely that the site would be a source of contamination and Hyder conclude that a Phase 2 assessment is not required. However the presence of USTs on adjacent sites provides the potential for contaminated materials to have migrated beneath the site. As such some soil testing may be required during site excavation works to confirm the quality prior to off-site disposal. Hyder also recommend that further investigation be undertaken to determine the location, age, history and if any leaks are present of the adjacent USTs.

In 2005 Hyder prepared a Hazardous Material Report for the Walker Street lot. Asbestos containing materials and synthetic mineral fibres were found in the building but were identified as low or negligible risk if left undisturbed. As the proposed works will now disturb these materials, Hyder recommend that these materials should be removed prior to or in conjunction with the proposed works. The preliminary CEMP is consistent with this.

5.21 Crime Prevention through Environmental Design

Aurecon Pty Ltd has prepared a Crime Prevention Review Report that is included at **Appendix X**. The report provides an analysis of the architectural and design elements of the proposal against the key principles of Crime Prevention Through Environmental Design i.e. natural surveillance, territoriality, ownership and management.

In order to understand the nature of crime occurring in North Sydney, Aurecon reviewed the local crime statistics. These showed that the most commonly occurring crimes in the area are:

- stealing from motor vehicles;
- malicious damage to property;
- fraud; and
- assault – non-domestic violence.

The proposed development was then assessed with these types of crime in mind. Aurecon then made specific comments and recommendations in relation to ensuring the safety of the proposed development. These are summarised below.

Natural Surveillance

The proposed development shows significant amounts of glass façade which will open up sightlines into and out of the proposed buildings. The activation of the street edges with uses such as cafes and retail outlets will also encourage people to activate the space further providing surveillance.

The built environment has been designed to promote natural surveillance and an unimpeded view from all angles. During the detailed design consideration should guide choices of material, façade construction, barriers, plants, foliage and similar design elements throughout the complex.

Lighting design within the complex should provide a bright, inviting atmosphere which does not create harsh shadows or areas of high contrast. The lighting should be bright enough to illuminate all public spaces and especially thoroughfares, so that pedestrians feel safe in travelling through the complex. A commitment has been made to ensure that lighting will meet the relevant Australian lighting codes and standards. This will ensure that adequate lighting and surveillance is achieved.

Territoriality

Territoriality and a delineation of public and private space has been achieved through real and symbolic barriers which aim to promote use of public space while deterring would-be criminals from conducting unfavourable acts in the private space. The use of different materials also further delineates between private and public space.

Efficient mechanisms will need to be thought of for reporting and rectifying maintenance, cleanliness and property damage issues, particularly the prompt removal of graffiti and similar vandalism.

Bollards have been designed into building security considerations at suitable locations to delineate pedestrian and vehicular traffic. Such hardware may be suitable at ground level at roadsides and along vehicles or pedestrian routes.

Ownership

Effective ownership of the space aids in promoting to the public, a well used and maintained facility, which in turn encourages legitimate activity. The enforcement of ownership aims to deter criminals and vandals from opportunistic crime and vandalism when the space is clean, well lit, and filled with people. Ownership also seeks to provide collaborative decision making and shared responsibility for maintenance and cleanliness. The activation of alleyways and streets through the inclusion of shopfronts and outdoor eating areas will serve this purpose well.

Management

Management of the 88 Walker Street and 77-81 Berry Street complex is an important element which should, for instance, guide the choice of low maintenance materials, plants and graffiti resistant surfaces.

5.22 Waste Management

A Waste Management Report has been prepared by Aurecon Pty Ltd in reference to North Sydney Development Control Plan (DCP), City of Sydney Policy for Waste Minimisation in new developments and relevant Australian Codes and Standards. The report is included at **Appendix Y**.

The proposed waste management system is summarised below:

- A Construction Phase Waste Management Plan (CWMP) is to be developed prior to the demolition of the remaining buildings for both sites and will outline the opportunities for reuse and recycling of these materials. The CWMP will also identify the extent of materials to be sorted and diverted from landfill for all construction wastes;
- Collection of ongoing waste is to be twice a week for recycled wastes and five days a week for general wastes and food scraps, in accordance with North Sydney Council DCP Section 19 recommendations;
- Central garbage rooms will be located within the basement for both buildings with the main garbage store room located on the Lower Ground of the commercial tower. Temporary storage facilities will be provided within each of the proposed buildings;
- Access to the garbage room located within the Commercial building will be provided via Little Spring Street. All access has been designed to accommodate North Sydney Council and Waste Contractor collection vehicles;
- No specialised storage units are required to be installed on site as there will be provision for daily collection of food scraps generated via the hotel and restaurant; and
- All waste generated from the development during operation will be managed by the building owner or appointed Building Management group. The commercial building is committed to developing a Building Users' Guide to monitor waste generation for the building.

5.23 Building Code of Australia

A comprehensive Building Code of Australia Compliance Report has been prepared by Philip Chun Building Code Consulting and is included at **Appendix Z**. The report provides a review of the proposed development and its compliance and non-compliance with the deemed-to-satisfy provisions of the BCA and the relevant major Australian Standards referenced by the code. Where compliance with the deemed to satisfy provisions may not be possible, a schedule of alternative solutions has been provided.

The only exception where an alternative solution is not possible is the positioning of the windows of the hotel rooms on the southern boundary of the building. In order to resolve this issue of securing natural light and ventilation for those hotel rooms, Eastmark Holdings will negotiate with the adjoining landowner seeking a covenant for light and ventilation.

A commitment has been made that will ensure that the building will be designed to comply with the BCA and relevant Australian Standards.

6.0 Draft Statement of Commitments

No.	Subject	Commitments	Timing
1.	Construction Management	The detailed Construction and Environmental Management Plan (CEMP) will be prepared by the relevant contract for each stage of the development. The CEMP will include the following: ■ Noise and Vibration Management Plan ■ Soil and Water Management Plan ■ Air Quality Management Plan ■ Waste Management Plan ■ Traffic Management Plan ■ Occupational Health and Safety Management Plan	Prior to each stage of the works commencing
2.	Construction Management	A project manager will be appointed for the project who will be responsible for the implementation of the CEMP.	Ongoing
3.	Construction Management	A sign will be erected on the boundary of the development site which will contain the following information: ■ Project Managers name and contact details ■ Developers name and contact details: ■ A 24 hour emergency contact phone number ■ Approved hours of construction work	Ongoing
4.	Dilapidation Reports	Prior to works commencing, dilapidation reports will be prepared for the following buildings which adjoin the site: ■ 77 Berry Street (Beau Monde); ■ 100 Walker Street (Christie Building); and ■ 86 Walker Street (Firehouse Hotel).	Prior to works commencing
5.	VPA	It is intended that a VPA will be executed between North Sydney Council and Eastmark Holdings Pty Ltd to outline agreements and responsibilities in terms of contributions, land transfer, etc.	Prior to the issue of a Construction Certificate (CC).
6.	Sustainability	The proposed development will target the following ESD ratings: Commercial: ■ 5 Star Green Star Rating– Office Design V3 ■ 5 Star NABERS (Commercial) Rating Hotel: ■ 4 Star NABERS (Hotel) Rating	Ongoing
7.	Lighting	The lighting design for the development will be in accordance with Australian Standard - AS4282:1997 Control of the Obstructive Effects of Outdoors Lighting. Design details for the public domain are to be submitted to and approved by North Sydney Council.	Prior to a CC being issued for the public domain refurbishment works

No.	Subject	Commitments	Timing
8.	Reflectivity	Glazing used on the façade of each building will have a normal specular reflectivity of visible light of 20% or less.	Materials to be confirmed prior to issue of a CC being issued for the relevant stage of the project
9.	Acoustic Amenity	An acoustic engineer will inform the attenuation measures to be installed in the building and will ensure that the design complies with the external noise criteria established for the project.	Prior to an OC being issued
10.	Acoustic Amenity	The glazing for the commercial and hotel buildings will comply with the internal noise criteria established for the project.	Prior to a CC being issued for the relevant stage of the development
11.	Equitable Access	The proposal will provide equitable access to all public spaces within the development in accordance with AS1428.	Ongoing
12.	BCA	The proposed buildings will comply with the relevant provisions of the Building Code of Australia and Relevant Australian Standards.	Prior to a Construction Certificate being issued for each stage of the development
13.	Public Art	A contribution will be made for the placement of public art in the new public domain areas. A Public Art Strategy will be submitted to and approved by North Sydney Council prior to the installation of the art.	Prior to the issue of an Occupation Certificate
14.	Hazardous Materials	A hazardous materials management plan will be prepared and implemented prior to the removal of hazardous materials from the site. Once the hazardous materials have been removed a Clearance Certificate will be issued by a suitably qualified Occupation Hygienist.	Prior to demolition works commencing
15.	Contamination	Soil testing will be undertaken to confirm the soil quality.	Prior to the exportation of soils off the site

7.0 Conclusion

This Project Application seeks approval for the:

- Demolition of all existing buildings and structures on the site, including the pedestrian bridge which links to the adjacent Tower Square;
- Excavation of a 4 level basement at 77-81 Berry Street (accommodating 226 cars both tenant use and public parking) and a 2 level basement at 88 Walker Street and a connective service tunnel under Little Spring Street;
- Construction of a 37 storey retail / commercial building comprising 60,630m² GFA on 77 – 81 Berry Street and a 33 storey, 200 bedroom hotel (12,995m² GFA) with conference, restaurant and bar facilities on 88 Walker Street;
- Construction of a pedestrian bridge linking between 88 Walker Street and 77 – 81 Berry Street over Little Spring Street;
- Construction of a new road through 77 – 81 Berry Street, partial closure of Denison Street and reconfiguration of the southern end of Little Spring Street;
- Construction of the surrounding public domain, including a new pedestrian plaza area in Denison Street; and
- All site service and utility upgrades and augmentation.

The environmental assessment report and supporting technical documents have demonstrated that the proposed development is generally compliant with the relevant North Sydney CBD planning controls and will not generate any acceptable environmental impacts on the North Sydney CBD or residential properties outside of the CBD. In particular the proposal complies with the following controls:

- Land use zoning (LEP 1989 and LEP 2001)
- Public domain design
- ESD, including water recycling and waste minimisation
- Tenant parking provision
- Building separation distances
- Accessibility
- Crime Prevention Through Environmental Design
- Protection of public views
- Overshadowing
- Utilities
- Construction Management
- Waste Management
- Acoustic amenity
- Reflectivity
- Community Involvement

The proposal does propose a variation to the maximum height controls proposed by the Council in draft North Sydney LEP 2001 Amendment No. 28, however this variation is considered to be acceptable for the following reasons:

- is justified on the following merits:
 - the building provides a suitable transition of building heights in the North Sydney CBD, creating an arc effect,
 - the proposed height and massing has no adverse impact on land in the public recreation zone or land identified as a special area on Sheet 9 of the map marked "North Sydney Local Environmental Plan 2001 (Amendment 28)" or on heritage items,
 - it provides a 24m setback from the Beau Monde building thereby protecting the privacy of residents within that building
 - it is of a scale and massing that provides for pedestrian comfort, in terms of weather protection, solar access, and includes elements which relate to the human scale
 - it consolidates 77 Berry Street and 88 Walker Street and results in the provision of high grade commercial space, a new hotel and provision of public benefits.
- will generate significant public benefits that will benefit not only the residents of Beau Monde but also the wider North Sydney community (refer to Section 5.5); and
- complies with the overshadowing controls of Clause 28D as discussed in Section 5.8.

In summary the proposed development is expected to generate the following public benefits:

- Provision of a new plaza in Denison Street which will be of a high level of amenity due to the significant amount of solar access it will receive and the uses which will activate the edge of the space;
- A new through site link which will be accessible to the public 24 hours a day, as opposed to the existing situation where the link is only available during the Berry Square Retail opening hours;
- A nicer pedestrian environment in the surrounding laneway network through the activation of the ground level and widening of existing footpaths;
- Rejuvenation of two existing buildings in the heart of the North Sydney CBD which will be of high architectural merit and a positive contribution to the regional views of the CBD;
- Provision of net increase of approximately 62,500m² of commercial GFA in the North Sydney CBD, providing 3,500 new jobs and reinforcing the North Sydney CBD as a significant commercial core in the Sydney Metropolitan area;
- Provision of 200 new hotel rooms in the North Sydney CBD aimed primarily to support the operation of businesses in the CBD;
- Increased passenger base for public transport in North Sydney, approximately 95% of new employees are expected to use the facilities;
- Introduction of significant ESD initiatives, including a blackwater treatment plant, which will significantly reduce the amount of energy and potable water that new buildings of this size would otherwise use.

In light of the above benefits, we have no hesitation in recommending that the proposed development be recommended for approval.

