

City of Sydney

ABN 22 636 550 790

GPO Box 1591 Sydney NSW 2001 Australia

Town Hall House 456 Kent Street Sydney NSW 2000 Australia

Phone +61 2 9265 9333 Fax +61 2 9265 9222

council@cityofsydney.nsw.gov.au www.cityofsydney.nsw.gov.au



30 June 2011

Our Ref : 2011/162591
File No : R/2009/113.001
Your Ref: MP 09_0153

Director – Metropolitan and Regional Projects North
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Attention: Sumathi Navaratnam
By email: sumathi.navaratnam@planning.nsw.gov.au
cameron.sargent@planning.nsw.gov.au

Dear Sumathi,

**Re: Dr Chau Chak Wing Building, UTS Sydney – Project Application
(MP09_0153)**

I refer to your letter of 19 May 2011 about the abovementioned application.

The City supports the overall proposal by Gehry Partners for the Chau Chak Wing Building, proposed to be located on the former Dairy Farmers Co-operative building site at 14-28 Ultimo Road.

The City generally supports the proposal and agrees that the building will create an iconic feature for the inner city that will contribute to and complement other key developments in the surrounding area including the UTS Broadway building and the Frasers' 'Central Park' development. The City also agrees that the proposal will create a new state of the art facility for the UTS school of Business that will enhance learning and development opportunities for students.

The City is proposing a number of comments and recommendations for the overall development, which will be structured under the following areas:

- Bulk, Scale and Massing;
- Heritage and Urban Design;
- Transport, Access and Traffic;
- Public Domain;
- Health, Infrastructure and Contamination;
- Development Contributions;
- ESD.

Council is currently assessing a concurrent Part 4 application for demolition of the existing car park, and the excavation, remediation, shoring and piling of the basement level of the Chau Chak Wing Building (D/2011/882). The application is integrated development requiring approval of the Office of Water and is on public exhibition until 22 July 2011.

1. BULK, SCALE AND MASSING

Height and Floor Space Ratio

The applicant is proposing a height and floor space ratio that utilises the provisions of Clause 10 of the Sydney Local Environmental Plan (2005) in proposing a 10% variation to the controls. The proposed height is 46.2m (4.2m variation from the control) and the proposed floor space ratio is 5.5:1, which is a 0.5:1 variation from the control. The applicant has provided a detailed assessment against the requirements of Clause 10 (waiver of certain development standards), which the City does not object to in principle.

However, under Clause 10, any development that is proposing a variation to the planning controls must contribute positively to the public domain. This does not simply involve upgrades to the development site, but must improve the public domain of the surrounding area. This is particularly important as the City has a number of concerns with the current public domain proposal (see Section 4 – Public Domain). Accordingly, a Voluntary Planning Agreement should be entered in to with the City for the provision of appropriate public domain benefits.

Solar Access and Views

The applicant has provided a detailed solar access analysis. The Urban Development Plan of Ultimo Pyrmont (1999) requires that “No more than 50% of major open space areas and communal private open space should be overshadowed between 10am and 2pm between 21st April and 21st August in principle.

The adjacent residential building at 646 Harris Street Ultimo will be subject to additional overshadowing in the morning, particularly along its Eastern elevation. However, the proposal will not result in additional overshadowing of communal open space and is in line with the City’s controls and considered acceptable.

The proposal will have some impact on the existing views of the surrounding buildings. However, the potential view loss is considered to be acceptable when assessed against the Land and Environment Court’s Planning Principle on view loss (*Tenacity Consulting vs. Warringah Council 2004*).

Reflectivity

The applicant’s reflectivity study indicates that the proposed development should meet the limits of acceptability and that the 20% limit on glazing reflectivity should address any potential reflectivity issues for occupants of surrounding buildings. However, the City recommends that its standard reflectivity condition be imposed to ensure protection for surrounding buildings.

Privacy and Setbacks

The applicant acknowledges that the development currently proposes a number of non-compliances with the Urban Development Plan of Ultimo Pyrmont (1999) in regards to building separation. The applicant has designed the windows, including their angles, to minimise privacy impacts and overlooking, in line with the principles outlined in the Land and Environment Planning Principle (*Meriton v Sydney City Council 2004 – NSWLEC 313*). The City does not object in principle to the proposed building setbacks; however, minor design amendments may be required to window positioning and outlook should there be significant concern from surrounding residents and businesses.

2. HERITAGE AND URBAN DESIGN

Urban Design

The new building has a basement, a 6 storey podium and 6 storey tower and presents in an unusual modular form. Most of the building sets back from the site boundaries but there are some architectural elements (slant blades) on the western facade that project from the site boundary.

Overall, the City commends the building's design, which will create an innovative and iconic feature for Ultimo.

From the third floor to the roof level, the building overhangs the road reserve (footpath and carriageway) in three locations. The overhang appears to increase from floor to floor, with the elements dimensioned on the roof plan as extending beyond the site boundary 1002mm, 1406mm and 1500mm.

The City's controls allow minor projections beyond the site boundary in the order of 450mm, for articulation elements such as awnings, balconies and roof forms. The proposed building projections exceed this figure but are considered acceptable in this instance as the projections are a key feature of the building's unique design. The City does not object to the projections from an urban design perspective.

The projection on to Omnibus Lane will require Owners Consent from the City of Sydney. The applicant should contact Trent Sinclair, Senior Portfolio Manager, on 9265 9866 or at tsinclair@cityofsydney.nsw.gov.au.

Heritage

The building has acceptable impact on the neighbouring 4-5 storey former NCR Building due to the separation by Omnibus Lane and the new building's podium is at a similar or compatible height to the former NCR Building.

The proposed excavation is above the bedrock under the concrete and later infill. It appears that no recyclable sandstone will be produced by the excavation.

The archaeological report suggests the site may contain potential archaeological remains of local significance, such as early creekline, terrace housing by 1870s and later industrial use.

Council requests that a copy of the final archaeological excavation report by the commissioned archaeologist be submitted to Council Archives. It is important that the finding of the archaeological work become part of Council's collection, which helps understanding of local history. A condition to this effect should be applied.

Signage

The applicant has submitted a Signage Strategy for the following signs:

- East elevation: 1x entry/naming hamper sign above entry, 2x hamper signs above the café doors;
- West elevation: 2x building entry/location signs above northern and southern entries, 3x window signs to café windows;
- South elevation: 1x entry/naming hamper sign above entry, 1x garage entry sign, 1x active graphic tickertape display;
- North elevation: 1x entry/naming hamper sign above entry; 2x window signs to café windows, 1x active graphic tickertape display.

The Strategy was assessed against Council's Signage and Advertising Structures Development Control Plan (2005) and the signage is found to be non-compliant with the following requirements:

- Clause 2.5.8 – Animated signs are discouraged in the City of Sydney, including mechanical moving signs and moving LED signs. The applicant is proposing two 'tickertape' displays on the South and North elevations. The City does not support such signage.
- Clause 2.5.11 – The City recommends that any illuminated signs have a consent period of three years.
- Clause 3.7.2 - states that "other signs at ground level are generally not permitted including signs on window glass, whether internal or external." The applicant is currently proposing three window signs to café windows on the West elevation and two window signs to café windows on the North elevation. These signs are not supported by the City. If the signage is supported by the consent authority, the applicant should be required to reduce the number of proposed signs, set the signs back behind the window glass and construct the signs with high quality materials.

3. TRANSPORT, ACCESS AND TRAFFIC

The Transport Impact Assessment has been considered under the *Sydney LEP 2005*. Consideration should be given as to the impact of the draft *Sydney LEP 2010* on this development and any variation.

The Transport Impact Assessment does not take into account the *Chinatown Public Domain Plan* (adopted by Council on 16 August 2010) and the changes to the public domain that this would bring including improved pedestrian and cyclist provision, connectivity to public transport. These should be considered as they have a direct impact on the site, even though that impact is positive.

Traffic generation and parking

Parking provision has been assessed in accordance with the *Urban Development Plan for Ultimo/Pymont Precinct 1999 Update*. This will be superseded by the *Sydney LEP 2010* and *Sydney DCP 2010*.

The development provides basement parking with 28 spaces, one of these being an accessible parking space; two loading spaces and 53 bike parking spaces. There are 6 bike racks proposed at street level (for 12 bikes).

The Transport Impact Assessment states there are three courier parking spaces, but these appear to be absent in the architectural drawings. If these are included in the 28 spaces then they need to be clearly marked to designate their use. Whenever possible, loading in the underground loading dock should take place in off-peak hours to reduce impact on the surrounding road network.

The development provides fewer parking spaces than the maximum allowed, which the City supports given the use of the building and good access to public transport.

The City does not object to the proposed Ultimo Road driveway being a left in left out arrangement. More details need to be submitted to show how this is proposed to be controlled.

Bicycle parking

The development allows for 454 staff/doctoral students and (at any one time) 1256 students on the site. The site will provide 53 basement and 12 at-grade bike parking spaces. The draft *Sydney DCP 2010* requires that bicycle parking be provided in the following ratios:

1 per 10 staff = 45; and

1 per 10 students = 125

The spaces required by the draft DCP (at 170 spaces) are significantly higher than that being provided (at 77 spaces) on the drawings. Given that 17% of students at UTS are living in the City of Sydney LGA, the development should be required to comply with the draft DCP bicycle rates. The City of Sydney Cycle Strategy and Action Plan 2007 – 2017 also lists Tertiary Education facilities as one of the 6 key locations for bicycle parking.

The applicant has also looked at the NSW Government Planning Guidelines for Walking and Cycling. These guidelines calculate that for Tertiary education establishments a rate of 3-5% of staff, 5 – 10% of students should be given to long term parking, and a rate of 5 – 10% of staff for short term parking. Given there are 454 staff and a maximum of 1256 students on site at any time this gives values of:

Long term bicycle parking

Staff: 14 – 23

Students: 63 – 126

Short term bicycle parking

Staff: 23 – 46

This is a region of between 100 and 195 using the state government rates suggesting that the City's draft DCP rates of 170 also are in line with the State Government rates. The applicant's traffic report has calculated using these rates, but has not included the requirements for shorter term parking.

Even without using the full rates from the guidelines the site is relying on potential future spaces within the UPN to meet the minimum requirement, which is not acceptable. The new site should be providing all the required spaces. An increase in bicycle parking spaces both for long and short term use is required. Also as this site

is providing parking at a reduced rate, the level of parking should also be on the upper side of the range. A rate of 170 bicycle parking spaces is considered to be appropriate for this development, with around 130 being provided on site.

The Ultimo Pyrmont UDP was last updated in 1999, since this time the City has undertaken a significant program to increase cycle usage, both with the provision of cycle ways, but also in encouraging developers to provide greater rates of cycle parking. The applicant's current proposal for bicycle parking is not adequate and should be increased in line with the requirements of the draft Sydney DCP 2010.

Bicycle facilities

The number and type of shower facilities provided adjacent to the bike parking are in accordance with the draft *Sydney DCP*. There are 10 male lockers and 12 female lockers provided in the male and female shower areas respectively.

The draft *Sydney DCP* requires CCTV to monitor bike parking areas and one personal Class 2 locker to be provided for each parking space. It is not indicated that has been achieved.

Construction traffic management

Whilst the Transport Impact Assessment states that a full traffic management plan will need to be developed by the construction contractor, this aspect of the development has not been properly considered in this report. This is a large scale development with few options for construction traffic to enter and exit the site without compromising Harris Street or Ultimo Road.

The Construction Traffic Management Plan will need to be submitted to the City for our approval prior to the Construction Certificate being issued. The City's Construction Regulations and Area Traffic Engineers are already in discussions with the construction company who won the tender about how to construct the site in this challenging location.

Improved consideration needs to be given for likely entry and exit points to the site, location of a Works Zone (including operating constraints) construction traffic route and a system of traffic control to monitor the queuing capacity of trucks (particularly during excavation/foundation stages) and movement into the site. Trucks should not be queuing on the street at any time and all works should take place within the boundary of the site, or in the Works Zone.

The Mary Ann Street/Harris Street intersection was not modelled, however, if construction traffic enters/exits at Mary Ann Street, this may have an impact on the capacity and function of Harris Street which is a state road.

Whenever works are to be carried out on the footway or road, there must safe and accessible provisions made for pedestrians, cyclists and vehicles to navigate around the site without unnecessary detour.

Ultimo Pedestrian Network (UPN)

The UPN is an essential component to this development. This will create a direct link from Central Station and Railway Square to the site. It will also give a direct and accessible path of travel for people who may require mobility assistance. The current route from Eddy Avenue requires a person to negotiate multiple grades and intersections.

Access to public transport from this location is good, but would be greatly improved by a direct connection of the UPN to the site. Way-finding signage should be installed to direct pedestrians and cyclists to the UPN, public transport and other relevant locations (e.g. library, tower building).

If the UPN is not connected to this site prior to opening, then a pedestrian crossing will need to be installed on the western arm of the Ultimo Road/Darling Drive pedestrian crossing. There is a strong pedestrian desire line upon exit of the existing UPN, and at present crossing compliance is low and potentially dangerous. Pedestrian fencing is not an option to resolve this.

Given the good level of service for traffic at the Ultimo Road/Darling Drive intersection, and the expected growth in pedestrian traffic (especially if the UPN is not completed), the signal phasing should be set to give pedestrians priority.

Accessibility

The Access Review by Morris-Goding Accessibility Consulting should be updated to ensure compliance with the Access to Premises Standards which took effect on 1 May 2011 where required.

Accessible paths of travel from Central railway Station and Paddy's Markets light rail station for mobility, vision and hearing impaired people need to be considered, particularly if the UPN is not connected.

The City notes that the steps and ramps as currently shown are not acceptable in terms of access requirements; however the City acknowledges that they are not finally resolved at the current time.

The applicant needs to ensure the following access requirements are met:

- footway cross falls are to meet City standards;
- where steps are proposed along the property boundary, provision of tactile paving needs to be located within the property boundary;
- the flight of stairs shown adjacent to the driveway entrance and along Ultimo Road needs to be compliant with Australian Standards and include handrails if required. Handrails should not encroach on the public domain beyond the site boundary;
- The bicycle racks shown on Ultimo Road at the top of the steps are considered to be in an unsafe location.

4. PUBLIC DOMAIN

An assessment of applicant's documentation indicates that the public domain treatment proposed is to be a number of existing and proposed street trees set into an area of paving.

The landscape plans provided indicate that the proposed paving material of light brown concrete, saw cut with 3/4 offset and slanted at 45° to the street frontage is to continue to the kerb. The City does not support the proposed material. Materials to be used within the footway controlled by the City of Sydney are to make use of the City's standard material palette detailed in the Sydney Street Design Code.

The City is regularly required to undertake maintenance to repair and replace footpath materials when utilities such as Sydney Water or Energy Australia complete service works under the footpath. If non-standard materials are used, the City often cannot replace the materials as they are not held in stock. Non-standard materials can also be prohibitively expensive to replace and are not considered to meet the City's high public domain design standards.

The City is concerned that the current proposal does not provide sufficient improvement to the public domain. Vegetation is limited to street tree provision with no understorey planting proposed. No fixed seating is suggested despite the likelihood that visitors may want to enjoy the architecture from the outside and the area is likely to serve as a meeting or gathering place. The City recommends that additional measures are taken to break up the expanse of paving around the building. The City also suggests that the applicant provide further detail to the façade treatment at the ground plane to support the current proposal or is requested to resubmit Landscape Plans that detail an improved landscape including furnishings and lighting.

No furnishings other than bicycle racks are mentioned. Lighting details also have not been provided in the EAR or architectural drawings submission. The City has recommended a number of conditions outlining requirements for any proposed furnishings and street lighting in Attachment A.

Tree retention and protection

The proposed application affects three (3) semi-mature, Council owned Plane trees (2 x *Platanus orientalis* and 1 x *Platanus hybrida*) located within the bitumen footpath on the Ultimo Road frontage of the site. The trees are in good health and condition and form part of an establishing avenue of Plane trees along Ultimo Road.

The submitted Arboricultural report has assessed the three trees as being in fair to very good health and condition. However, the report proposes to remove two (2) trees to facilitate the development; the details are as follows:

- **Tree 1** requires removal to '*facilitate amenable tree plantings that harmonise with the proposed formal entry*'. The City notes that replacement tree planting is proposed within the same location with the same tree species.
- **Tree 2** requires removal to '*accommodate vehicle entry to the building basement*'.

The City does not support street tree removal for aesthetics. The City's street trees are a vital component in providing a healthy city and as such, tree removal is considered as a last option. In relation to Tree 1, no design amendment is required to retain the tree. Existing established trees should be considered a design constraint and therefore Tree 1 should be retained and protected throughout all stages of development.

The City accepts, however, that the removal of Tree 2 is required in order to facilitate the development of the site, as the driveway is essential to the development.

In conclusion, the City opposes any removal of Tree 1 for aesthetic reasons that are not essential to the redevelopment of the site, but accepts that Tree 2 may need to be removed in order to accommodate vehicle entry to the basement.

Tree protection measures are provided in the recommendations in Attachment A.

Landscape plan

The applicant's submitted Ground Level Landscape Plan Soft Landscaping and the EAR (Section 3.4 Landscape and Public Domain) states that eleven (11) new trees are proposed within the Council footway of the three street frontages to the site; being Ultimo Road, Mary Ann Street and Omnibus Lane. The Landscape Plan indicates two tree types to be used: Plane Tree and Crepe Myrtle.

The City supports the proposed tree planting however a species change is required in relation to Crepe Myrtle. In accordance with the City's Street Tree Master Plan (STMP), the tree species along Mary Ann Street is *Lophostemon confertus* (Brush Box), not Crepe Myrtle.

The STMP does not have a species nominated for Omnibus Lane. The Plane trees (*Platanus hybrida*) proposed at the southern end are supported as this is in keeping with the species located along Ultimo Road however Crepe Myrtle is not appropriate at the northern end of the Lane.

The following tree species are used elsewhere in the Ultimo Precinct and surrounds, and are considered appropriate to Omnibus Lane. The City recommends the Plans be amended and a species selected from the following:

- *Brachychiton discolor* (Queensland Lacebark)
- *Lophostemon confertus* (Brush Box)
- *Koelreutaria paniculata* (Golden Rain Tree)
- *Populus simonii* (Simons Poplar)

Due to the differences in the above species (mature size etc), the exact positioning and number of trees will need to be finalised as part of the Public Domain Plan, and following the applicant's selection of their preferred species in Omnibus Lane.

All new street tree planting and site preparation must be carried out in accordance with the STMP and the approved Public Domain Plan.

Lighting

The City has assessed the proposal against our street lighting policy, and considers the following public domain lighting as essential to the proposal:

- Ultimo Road: The development must provide Smartpole street lighting complying with AS1158 Category V3 on the roadway and Category P1 on the footpath;
- Mary Ann Street: The development must provide Smartpole street lighting complying with AS1158 Category V3 on the roadway and Category P1 on the footpath;
- Omnibus Lane: The development must provide pedestrian lighting complying with AS1158 Category P1. Building facade mounted lighting installations complying with City specifications may also be considered for approval.

5. HEALTH, INFRASTRUCTURE AND CONTAMINATION

Noise

Construction works are planned to take place over 20 months, with 1 month for site preparation. Highly Intrusive plant is to be employed during site preparation works including hydraulic rock breaking and piling. The predictions completed by Marshall Day Acoustics indicate exceedances of up to 31dBA above the management level

and exceedance above the 75dB Highly Noise Affected criteria from the DECCW Interim Guideline on Construction Noise.

The acoustic report includes recommendations to control noise and it is indicated that community consultation will be undertaken. However the specific details are not included in the report of complaints handling and the strategy for community consultation.

The proposed working hours during the project have been incorrectly stated in the CMP as the site is not within the CBD. It is strongly recommended that the City of Sydney's standard conditions relating to hours of work outside the CBD (7.30am - 5.30pm Monday to Friday, 7.30am – 3.30pm Saturday) are applied.

However, where highly intrusive appliance are to be employed and complaints are likely due to close proximity of residences, it is recommended that the hours of operation of such appliances be restricted to 9am to 3pm including regular 1 hour respite periods.

It is recommended that the information outlined above including the community consultation strategy is updated in the existing Noise Impact Assessment prior to consent being granted.

The Marshall Day Acoustics report has also reviewed the potential operational noise impacts from car parking, the loading dock, building services, function activities and traffic noise against relevant criteria including INP and sleep disturbance criteria. The report presents recommendations to control noise from plant to be located at high level, including the proposed tri-generation plant and cooling towers.

The assessment indicates that the use of outdoor areas for events/functions is predicted to exceed the sleep disturbance criteria and indicates that to address this management plan will need to be developed. It is recommended that any operational management plan developed considers implementing hours of use restrictions for this area, say to 10pm and that no speakers are provided to such outdoor areas hence minimising the potential for complaint.

Council's recommended noise conditions have been provided at Attachment A.

Contamination

The City notes that it is currently assessing a concurrent Part 4 application for demolition of the existing car park, and the excavation, remediation, shoring and piling of the basement level of the Chau Chak Wing Building (D/2011/882). The application is integrated development requiring approval of the Office of Water and is on public exhibition until 22 July 2011. As such, any overall consent for MP09_0153 should reflect any consent issued by Council for the demolition, excavation and remediation works.

RPS reports that there are three areas of the site that contain material likely to be classified as Restricted Solid Waste. Following validation of the removal of fill material classified as such the remainder would be disposed of as General Solid Waste.

The underlying natural soils that would be excavated are classed as Potential Acid Sulphate Soils and would need to be assigned a classification following treatment with lime.

Although it is not considered to be a significant risk to the proposed development, potential groundwater contaminants would need to be treated during dewatering to enable discharge to the stormwater system.

The proposed remediation is based on point source data that has been spatially interpreted between previous sampling points, the precise extent of the remediation works will not be defined until a successful validation report has been obtained.

The proposed comprises the following stages:

- Stage 1 Groundwater Sampling
- Stage 2 Removal of underground storage tanks, arrestor pit and Restricted Solid Waste
- Stage 3 Excavate the remaining fill material from the site
- Stage 4 Excavate and dispose of the potential acid sulphate soil
- Stage 5 Groundwater treatment
- Stage 6 Removal of ramps and batters
- Stage 7 Capping of the contaminated backfill around the sewer
- Stage 8 Implementation of the Environmental Management Plan

Council supports the applicant's recommendation that a Remediation Action Plan is to be submitted to the consent authority and prepared in accordance with the NSW EPA "Guidelines for Consultants reporting on Contaminated Sites" and Planning NSW Guidelines "Managing Land Contamination Planning Guidelines" and Councils Development Control Plan "Contaminated Land".

The RAP should be reviewed by a NSW EPA accredited Site Auditor and include a statement issued by that auditor certifying that the RAP is practical and the site will be suitable after remediation for the proposed use before any consent is granted.

Upon finalisation of the project a Site Audit Statement is provided to the certifying authority and Council by the accredited Site Auditor containing a statement that the site is suitable for the proposed use and any conditions attached to the SAS are discussed with Council prior to the issue of the SAS.

6. DEVELOPMENT CONTRIBUTIONS

The City does not support any exemption from Section 94 contributions, which includes all education buildings at this or any other University.

At Section 6.10 (page 70), the applicant has not accurately interpreted the Ultimo Pyrmont Section 94 Contributions Plan 1994. The Summary of Contributions by Land Use (Schedule 4) provides that if the development does not match up with one of the specified uses, then it is calculated on the basis of "Other Uses (Not Specified)" at a current cost of \$3,354.54 per additional worker.

The Ultimo Pyrmont Contributions Plan does not provide any exemptions to contributions, except in the case of alterations and additions to an existing dwelling house which does not involve the creation or erection of a new or separate dwelling on the same allotment (at clause 14.4 of the U-P Plan). The argument that UTS is a not-for-profit organisation and, therefore, should be exempt from the contributions is not a matter entertained in the Ultimo-Pyrmont Plan.

The basis for imposing contributions is set out at clause 14.1 of the Ultimo-Pyrmont Plan and states that the contribution is calculated on the total number of persons accommodated and/or employed in the proposed development after construction

less any pre-existing population on the site at the date of gazettal of SREP 26 (14 October 1992).

The applicant has stated that the building will accommodate 326 staff and 25-30 support staff. This would underpin the S.94 liability. The site is currently used as a car park and, unless the applicant can demonstrate otherwise, there is no basis for an offset against the additional demand generated by the proposed development.

In the event that the applications are approved and the proposed exemption from S.94 contributions is not supported by the Department, please contact the City to determine the relevant S.94 payment before determination.

7. ESD

The applicant has stated that the building has been designed to achieve a 5 Star Green Star Educational rating. Any consent should require the applicant to achieve the agreed 5 Star rating.

The tri-generation plants that form part of the proposal are to be located some 50m above ground level at level 11. There are 3 plant proposed of 65kw output (total 195kw). Currently all plant over 1MW capacity is required to be licensed under Section 55 of the Protection of the Environment and Operations Act (1997) due to the potential impact on air quality (regionally and locally). There is no requirement in this instance for a licence from the Office of Environment and Heritage (O.E.H.), however any local air quality impacts still need to be considered by the consenting authority.

Review of the Air Quality Impact Assessment that has included predictions from modelling using AUSPLUME has highlighted that the cumulative impacts from other proposed tri and co-generation projects which have already been granted approval have not been considered in determining air quality impact. These include, and are not limited to, the Global Switch Project, Star City Casio and 61-68 Quay Street Haymarket.

There is a Children's Day Care Centre opposite the site and there has been no comment regarding whether it is likely that offensive odours/fumes will result.

The City of Sydney has developed standard conditions of consent in consultation with Brisbane City Council that are currently being reviewed. It is important that consideration is given to inclusion of these conditions in any consent issued to ensure the tri-generation plants do not cause any detrimental amenity impacts once operational. The suggested conditions have been provided in Attachment A.

In the event that the application is approved, the City requests that the conditions enclosed as **Attachment A** be imposed in the consent for the project application. If you would like to speak to an officer, please contact Kate Bartlett on 9265 9200 or kbartlett@cityofsydney.nsw.gov.au.

Yours sincerely,



Graham Jahn LFRAIA Hon AIA Hon FPIA Hon FNZIA
Director City Planning and Regulatory Services

ATTACHMENT A RECOMMENDED CONDITIONS

CONDITIONS RELEVANT TO PROJECT APPLICATION

TRAFFIC AND TRANSPORT

ALLOCATION FOR VISITOR PARKING

Visitor parking spaces must not at any time be allocated, sold or leased to an individual owner/occupier and must be strictly retained as common property by the Owners Corporation for use by building visitors.

ASSOCIATED ROADWAY COSTS

All costs associated with the construction of any new road works including kerb and gutter, road pavement, drainage system and footway shall be borne by the developer. The new road works must be designed and constructed in accordance with the City's "Development Specification for Civil Works Design and Construction".

BICYCLE PARKING

The layout, design and security of bicycle facilities either on-street or off-street must comply with the minimum requirements of Australian Standard AS 2890.3 – 1993 Parking Facilities Part 3: Bicycle Parking Facilities except that:

- all bicycle parking for occupants of residential buildings must be Class 1 bicycle lockers, and
- all bicycle parking for staff / employees of any land uses must be Class 2 bicycle facilities, and
- all bicycle parking for visitors of any land uses must be Class 3 bicycle rails.

CAR PARKING SPACES AND DIMENSIONS

A maximum of 28 off-street car parking spaces must be provided. The design, layout, signage, line marking, lighting and physical controls of all off-street parking facilities must comply with the minimum requirements of Australian Standard AS/NZS 2890.1 - 2004 Parking facilities Part 1: Off-street car parking and Council's Development Control Plan. The details must be submitted to and approved by the Principal Certifying Authority prior to a Construction Certificate being issued.

COST OF SIGNPOSTING

All costs associated with signposting for any kerbside parking restrictions and traffic management measures associated with the development shall be borne by the developer.

INTERCOM FOR VISITORS

Where a boomgate or barrier control is in place the visitor spaces must be accessible to visitors by the location of an intercom (or card controller system) at the car park entry and at least 6m clear of the property boundary, wired to all units (prior

to an Occupation Certificate being issued or the use commencing, whichever is earlier).

The intercom must comply with 'Australian Standard AS 1428.2- 1992: Design for access and mobility – Enhance and additional requirements – Building and facilities Sections 22 and 23.

LOADING WITHIN SITE

All loading and unloading operations associated with servicing the site must be carried out within the confines of the site, at all times and must not obstruct other properties/units or the public way.

LOADING/PARKING KEPT CLEAR

At all times the service vehicle docks, car parking spaces and access driveways must be kept clear of goods and must not be used for storage purposes, including garbage storage.

LOCATION OF ACCESSIBLE CAR PARKING SPACES

Where a car park is serviced by lifts, accessible spaces for people with mobility impairment are to be located to be close to lifts. Where a car park is not serviced by lifts, accessible spaces for people with mobility impairment are to be located at ground level, or accessible to ground level by a continually accessible path of travel, preferably under cover.

LOCATION OF VISITOR PARKING

All visitor parking spaces must be grouped together, and located at the most convenient location to the car parking entrance. All spaces must be clearly marked 'visitor' prior to the issue of an occupation certificate or the use commencing, whichever is earlier. All signs must be maintained in good order at all times.

SECURITY GATES

Where a car park is accessed by a security gate, that gate must be located at least 6 metres within the site from the street front property boundary.

SERVICE VEHICLE SIZE LIMIT

The size of vehicles servicing the property must be a maximum length of 8.8m.

SERVICE VEHICLES

The design, layout, signage, line marking, lighting and physical controls for all service vehicles must comply with the minimum requirements of Australian Standard AS 2890.2 – 2002 Off-Street Parking Part 2: Commercial vehicle facilities. Details must be submitted to and approved by the Certifying Authority prior to a Construction Certificate being issued.

SIGNS AT EGRESS

The following signs must be provided and maintained within the site at the point(s) of vehicular egress:

Compelling drivers to stop before proceeding onto the public way

Compelling drivers to “Give Way to Pedestrians” before crossing the footway; or compelling drivers to “Give Way to Pedestrians and Bicycles” before crossing a footway on an existing or identified shared path route.

TRAFFIC WORKS

Any proposals for alterations to the public road, involving traffic and parking arrangements, must be designed in accordance with RTA Technical Directives and must be referred to and agreed to by the Sydney Traffic Committee prior to any work commencing on site.

VEHICLE FOOTWAY CROSSING

A separate application is to be made to, and approved by, Council for the construction of any proposed vehicle footway crossing or for the removal of any existing crossing and replacement of the footpath formation where any such crossings are no longer required.

All disused or redundant vehicle crossings and laybacks must be removed and footway and kerb reinstated in accordance with Council’s standards, to suit the adjacent finished footway and edge treatment materials, levels and details, or as otherwise directed by Council officers. All construction and replacement works are to be completed in accordance with the approved plans prior to the issue of an Occupation Certificate.

Note: In all cases the construction materials should reinforce the priority of pedestrian movement over that of the crossing vehicle.

GREEN TRAVEL PLAN

A Green Travel Plan must be submitted to and approved by Council prior to the Occupation Certificate for the site/use being granted.

Note: It is recommended the applicant contact a member of the City Transport and Access, to discuss the Green Travel Plan with Council, prior to its submission

VEHICLES ACCESS

The site must be configured to allow all vehicles to be driven onto and off the site in a forward direction.

ACCESSIBLE PARKING SPACE

The design, layout, signage, line marking, lighting and physical controls of all off-street accessible parking facilities must comply with the minimum requirements of Australian Standard AS/NZS 2890.6 - 2009 Parking facilities Part 6: Off-street parking for people with disabilities. The details must be submitted to and approved by the Principal Certifying Authority prior to a Construction Certificate being issued.

CONSTRUCTION TRAFFIC MANAGEMENT PLAN

The Construction Traffic Management Plan accompanying this Development Application has not been approved by this consent. A Construction Traffic Management Plan must be submitted to and approved by Council prior to a Construction Certificate being issued.

ACCESS DRIVEWAYS TO BE CONSTRUCTED

Approved driveways are to be constructed for all vehicular access to the construction site in accordance with the requirements of Council's "Driveway Specifications" to the satisfaction of Council.

LOADING AND UNLOADING DURING CONSTRUCTION

The following requirements apply:

All loading and unloading associated with construction activity must be accommodated on site.

If, during excavation, it is not feasible for loading and unloading to take place on site, a Works Zone on the street may be considered by Council.

A Works Zone may be required if loading and unloading is not possible on site. If a Works Zone is warranted an application must be made to Council at least 8 weeks prior to commencement of work on the site. An approval for a Works Zone may be given for a specific period and certain hours of the days to meet the particular need for the site for such facilities at various stages of construction. The approval will be reviewed periodically for any adjustment necessitated by the progress of the construction activities.

In addition to any approved construction zone, provision must be made for loading and unloading to be accommodated on site once the development has reached ground level.

The structural design of the building must allow the basement and/or the ground floor to be used as a loading and unloading area for the construction of the remainder of the development.

NO OBSTRUCTION OF PUBLIC WAY

The public way must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances. Non-compliance with this requirement will result in the issue of a notice by Council to stop all work on site.

USE OF MOBILE CRANES

The following requirements apply:

Mobile cranes operating from the road must not be used as a method of demolishing or constructing a building.

For special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of on site tower cranes which warrant the on-street use of mobile cranes, permits must be obtained from Council for the use of a mobile crane. The permits must be obtained 48 hours beforehand for partial road closures which, in the opinion of Council will create minimal traffic disruptions and 4 weeks beforehand in the case of full road closures and partial road closures which, in the opinion of Council, will create significant traffic disruptions.

Special operations and the use of mobile cranes must comply with the approved hours of construction. Mobile cranes must not be delivered to the site prior to 7.30am without the prior approval of Council.

TRI-GENERATION AND ESD

HOURS OF OPERATION- GAS FIRED POWER PLANT

The hours of operation of the [INSERT NUMBER] gas fired power generation plant shall be limited to between [INSERT] and [INSERT] hours daily.

COMMISSIONING EMISSION MONITORING-GAS FIRED POWER PLANT

- a) Within 1 month of commissioning the engine and emission control equipment, air emission monitoring and recording by an appropriately qualified consultant shall be conducted on the exhaust stack. The monitoring must include emission velocity, flow, rate, temperature, water vapour concentration and NOX .
- b) An initial commissioning report prepared by an appropriately qualified consultant shall be provided to Health Compliance showing the results of the above emission monitoring testing.

QUARTERLY EMISSION MONITORING

- a) Following the commissioning emission monitoring report, quarterly emission monitoring and recording by an appropriately qualified consultant shall be conducted of the exhaust stack. The quarterly monitoring and recording must include emission velocity, flow, rate, temperature, water vapour concentration and NOX .
- b) Upon written request from the Health Compliance Section the results of the quarterly monitoring shall be made available to Council within 7 days.
- c) An annual report containing all details of the quarterly emission monitoring results shall be provided to Health Compliance Section.
- d) The annual report shall be provided to Council for 5 consecutive years after the date of the initial commissioning report.

ENGINE AND GENERATOR- GAS FIRED POWER PLANT

The power generation system must comply with the following:-

- a) Lean burn Low NOx Engine

The generator engine shall incorporate lean burn, low NOx design technology to generate NOx emissions not exceeding 250ugm-3 prior to other emission control equipment.

The generator shall comply with the requirements of Australian Standard for Industrial and Commercial Gas-fired appliances AS3814.2005.

- b) Certification

Certification shall be provided by a suitably qualified consultant certifying the engine and generator has been installed in accordance with the above requirements.

c) Maintenance and Servicing

The generator engine shall be serviced and maintained in accordance with the above requirements.

d) Records

Records of all servicing and maintenance to be carried out on the generator engine are to be kept and made available on request by Council.

EMISSION MONITORING SYSTEM-GAS FIRED POWER GENERATION PLANT

A continuous emission monitoring system (CEMS) shall be installed to enable system monitoring and adjustment for optimal emission reduction.

The continuous emission monitoring system (CEMS) shall be monitored and maintained in accordance with the manufacturer's requirements and specifications.

ENGINE SPECIFICATION-GAS FIRED POWER GENERATION PLANT

This approval for power generation is restricted to [INSERT NUMBER AND kW] gas engine generator set located [INSERT LOCATION] of the approved building as indicated on the approved drawings.

ATMOSPHERIC DISCHARGE & EMISSION POINTS

Atmospheric discharges and emission points for the gas fired power generation plant must comply with the following:-

Min. Exhaust temperature: [INSERT]

Stack diameter: [INSERT]

Min exit velocity: [INSERT]

Stack height: [INSERT]

FUEL BURNING

Fuel burnt in the gas fired power generator engine must only be reticulated natural gas.

SPILLAGE-MATERIALS AND EQUIPMENT TO CONTAIN & CLEAN UP

Appropriate materials and equipment are to be available on site at all times to contain and clean up spills of potentially polluting materials. An inventory of all clean up and containments materials and equipment, and documented emergency response and clean up procedures must be kept on site.

WASTE LIQUIDS

All storage areas where spillages may reasonably occur shall be bunded. The capacity of the bunded area shall be calculated as being equal to 110% of the largest vessel or container in the area or 10% of the total volume of vessels/containers accommodated in the area, whichever is greater. All bunded

areas shall be graded to a blind sump to facilitate testing of collected wastewater and provide a low point for pump out. Bunded areas shall be suitably treated to prevent the ingress of water.

SUBMISSION OF OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN (OEMP)

Prior to operation of the gas-fired plant an Operational Environmental Management Plan (OEMP) shall be submitted to Health Compliance for review and approval. The operational measures should include but not be limited to the following:-

- a) A maintenance inspection log shall be kept on site at all times documenting the maintenance works and procedures carried out on the gas-fired plant.
- b) A log shall be kept on site to document any complaints received in relation to emissions, noise and of any other nature. The logs should also outline the actions undertaken to resolve the complaints.
- c) Details of regular maintenance procedures including leak detection from the plant and its equipment to be undertaken and actions to deal with breakdowns should be documented.

COMPLAINTS

Should complaints regarding the operation of the gas-fired power generation plant be received by Council from a place of different occupancy including commercial premises) and the complaint being substantiated by a Council Officer, the use of the plant concerned must cease operation until "works" are carried out so as that the premises complies with the relevant conditions of the approval..

RAINWATER TANKS

1. Use

Rainwater is only to be collected from roof catchments and its use is restricted to toilet flushing, washing cars, garden use and for washing machines only.

2. Installation requirements

All plumbing work is to be carried out by a licensed plumber and must be carried out in accordance with AS/NZS 3500:2003. A permit in accordance with the NSW Code of Practice - Plumbing and Drainage 2006 (as amended) is to be obtained from Sydney Water for the work to be carried out.

Rainwater tanks shall be designed to include, but not be limited to the following:-

- a) Rainwater tanks shall be fixed to structurally adequate bases or walls in accordance with manufactures specifications or engineers details.
- b) Shall not be fixed to, or otherwise supported by a bounding common fence, wall or the like, without prior approval be adjacent land owners.
- c) All roof gutter downpipes must be fitted with a first flush device in accordance with the manufacturer's recommendations.

- d) Openings being suitably sealed to prevent access by children and being fitted with a fine mesh screens in order to prevent penetration of contaminants and insects such as mosquitoes.
- e) All gutters, downpipes and associated supply pipe work must be free draining to prevent ponding of rainwater and made of suitable non corrosible materials.
- f) Shall have an overflow device being fitted to the rainwater tank which directs water into an existing stormwater drainage system, and shall have a suitable drainage plug/tap fitted and positioned in a manner that facilitates flushing and cleaning.
- g) The water supply system from a rainwater tank shall be clearly marked at intervals not exceeding 500 mm with the word 'RAINWATER' in contrasting colour, in accordance with AS 1345. Water outlets shall be identified as 'RAINWATER', or with a rainwater tap identified by a green coloured indicator with the letters 'RW'.
- h) A suitable back up water supply using potable water must be provided to ensure that essential services such as toilet flushing are not contradicted where there is inadequate rainfall to meet demand or the rainwater harvesting system fails.
- i) Rainwater tanks that are not directly connected with the potable supply, the indirect connection shall be by means of a visible "air gap" external to the rainwater tank, in accordance with the provisions of the National Plumbing Code AS /NZS 3500 - Minimum air gap requirements.
- j) Where a rainwater tank is to be directly cross connected with the Sydney Water supply, an appropriate testable device shall be provided at the meter location on the potable water supply to prevent backflow of rainwater.. This device must meet the requirements of Sydney Water.
- k) Water pumps are to be located so as not causing an "offensive noise" as defined by the *Protection of the Environment Operations Act 1997* to any affected receiver.

3. Proximity to other services

- a) That all rainwater pipes must be separated from any parallel drinking water service. Above ground pipes must be 100mm away and below ground 300mm away from any drinking water pipe

4. Marking and labelling

- a) Above ground distribution pipes shall be continuously marked 'RAINWATER' in accordance with AS1345. Alternatively, adhesive pipe markers clearly labelled 'RAINWATER' made in accordance with AS 1345 can be used.
- b) Below ground distribution pipes shall be continuously marked 'RAINWATER' at intervals not exceeding 500mm in accordance with AS1345. Alternatively, identification tape/pipe sleeve continuously marked 'RAINWATER' made in accordance with AS 2648 can be used.
- c) All rainwater tank outlets, taps, valves and tank apertures shall be identified as 'RAINWATER' with a sign complying with AS1319 or a green coloured indicator with the letters 'RW'. Alternatively a permanent sign at the front of the premises and visible to all visitors may be displayed advertising rainwater use.

5. Maintenance

- a) All rainwater tanks installed are to be maintained by the owner in accordance with these provisions, the NSW Health Department Circular no 2002/1 "Use of rainwater tanks where a reticulated potable supply is available" and any other local water utility requirements.
- b) The rainwater collection system shall be constantly maintained in accordance to the manufacturer's instructions and in line with any approved maintenance plan so as to prevent risk of pathogenic microbial contamination including legionella and organisms from wildlife including birds.

MICROBIAL CONTROL

- a) All cooling towers and cooling and warm water systems must be operated and maintained in accordance with AS 3666.2:1995, (or AS 3666.3:2000 subject to prior notification to Council) the *Public Health Act 1991*, and *Public Health (Microbial Control) Regulation 2000*.
- b) A true copy of the annual certificate as stipulated in clause 9(2) of the *Public Health (Microbial) Regulation 2000* which certifies the effectiveness of the process of disinfection used for the water cooling system, must be submitted to Council prior to the period ending 30 June each year.
- c) Prior to commencement of the use the owner or occupier of the premises must apply to Council for the registration of water cooling systems warm water systems installed on the premises in accordance with the *Public Health (Microbial Control) Regulation 2000*.

NOISE

NOISE IMPACT ASSESSMENT

A Noise Impact Assessment by Marshall Day Acoustics advises the following in relation to proposed activities at the site:

The management of work practices should include:

- Community notification and consultation
- Operation of plant in a quiet and efficient manner through programming, maintenance and
- using all feasible and reasonable mitigation measures
- Involve workers in minimising noise and vibration
- Handle complaints in a prompt and responsive manner and keep responsible staff informed.

HOURS OF WORK AND NOISE – OUTSIDE CBD

The hours of construction and work on the development must be as follows:

- a) All work, including building/demolition and excavation work, and activities in the vicinity of the site generating noise associated with preparation for the commencement of work (eg. loading and unloading of goods, transferring of tools etc) in connection with the proposed development must only be carried out between the hours of 7.30am and 5.30pm on Mondays to Fridays, inclusive, and 7.30am and 3.30pm on Saturdays, with safety inspections being permitted at

7.00am on work days, and no work must be carried out on Sundays or public holidays.

- b) All work, including demolition, excavation and building work must comply with the *City of Sydney Building Sites Noise Code* and Australian Standard 2436 - 1981 "Guide to Noise Control on Construction, Maintenance and Demolition Sites".

NO SPEAKERS/MUSIC OUTSIDE

Speakers must not be installed and music must not be played in any of the outdoor areas associated with the premises including the public domain.

VENTILATION

MECHANICAL VENTILATION

In relation to the proposed café Council require that in accordance with AS1668.2 1991 section 3.7.3 air discharge shall be situated at least 1m above the roof ridge of a pitched roof or 3m above a flat roof.

CAR PARK VENTILATION

The car park must be ventilated in accordance with the *Building Code of Australia* and, where necessary, Australian Standard AS1668, Parts 1 and 2. Ventilation must be controlled by carbon monoxide monitoring sensors to ensure compliance with occupant health requirements.

TREE PROTECTION AND LANDSCAPE PLAN

TREES TO BE RETAINED

Table 1 - Existing trees which must be retained

Approval is NOT granted for the removal of the following trees, which Council has determined to be prominent landscape elements.

Tree No:	1. Botanical Name	Dimension (metres)	Setback Required
1	<i>Platanus orientalis</i> (Plane Tree)	11 x 6	3 metres
3	<i>Platanus hybrida</i> (Plane Tree)	16 x 12	5.7 metres

TREE PROTECTION ZONE

Before the commencement of works, a Tree Protection Zone (TPZ) must be established around all tree/s to be retained not less than the distance indicated in the TPZ schedule below. Tree protection must be installed and maintained in accordance with the Australian Standard 4970 Protection of Trees on Development Sites.

TPZ Schedule

Tree No	Species Name	Location	Radius from Trunk
1	<i>Platanus orientalis</i> (Plane Tree)	Ultimo Rd	3 metres
3	<i>Platanus hybrida</i> (Plane Tree)		5.7 metres

STREET TREE PROTECTION

For all trees retained the following protection measures are to be conditioned into the development consent conditions to protect the trees during the construction period:

- a) Street trees must be protected in accordance with the Australian Standard 4970 Protection of Trees on Development Sites.
- b) Details of the methods of protection must be submitted to and be approved by Council prior to the issue of the Construction Certificate and such approval should be forwarded to the Principal Certifying Authority.
- c) All approved protection measures must be maintained for the duration of construction and development works. Any tree on the footpath which is damaged or removed during construction must be replaced.

All street trees must be protected during the construction works as follows:

- a) Tree trunk and major limb protection shall be undertaken prior to or during the installation of any approved hoardings or scaffoldings. The protection shall be installed by a qualified Arborist (AQF 2 or 3) and must include;
 - (i) An adequate clearance, minimum 250mm, must be provided between the structure and tree branches, limbs and trunk at all times,
 - (ii) Tree trunk/s and/or major branches, located within 500mm of any hoarding or scaffolding structure, must be protected by wrapped hessian or similar material to limit damage, and
 - (iii) Timber planks (50mm x 100mm or similar) shall be placed around tree trunk/s. The timber planks shall be spaced at 100mm intervals, and must be fixed against the trunk with tie wire, or strapping. The hessian and timber planks must not be fixed to the tree in any instance, or in any fashion.
 - (iv) Tree trunk and major branch protection is to remain in place for the duration of construction and development works, and shall be removed at the completion of the project.
- b) All hoarding support columns are to be placed a minimum of 300mm from the edge of the existing tree pits/setts, so that no sinking or damage occurs to the existing tree setts. Supporting columns must not be placed on any tree roots that are exposed.

- c) Materials or goods, including site sheds, must not be stored or placed:
 - (i) Around or under the tree canopy; or
 - (ii) Within two (2) metres of the trunks or branches of any street trees.
- d) Protective fencing (1.8 metre chain wire mesh fencing) must be erected on top of the hoarding to protect branches during the construction works.
- e) Any damage sustained to street tree/s as a result of the erection of hoardings, scaffolding, or due to the loading/unloading of vehicles adjacent the site, must be immediately reported to the Council's Street Tree Contract Coordinator on 9265 9673, in order to determine the appropriate action for maintaining the health and structural integrity of any damaged street tree.

SERVICES

- a) Any trenching works for services / hydraulics / drainage etc must not be undertaken within a Tree Protection Zone (TPZ), and be referred to Council's Street Tree Contract Coordinator on 9265 9673, with regard to tree protection, prior to commencement of any works.
- b) Alternative installation methods for services, such as directional boring/drilling, or redirection of services shall be employed where large woody roots greater than 40mm diameter are encountered during the installation of any services adjacent to the specified TPZ.

LANDSCAPE PLAN AND PUBLIC DOMAIN

Changes are required to the Landscape Plan regarding tree species. The amended Landscape Plan must be submitted, in conjunction with a Public Domain Plan.

The required changes to the Landscape Plan are as follows:

- a) Mary Ann Street – nominated street tree species to be changed from *Lagerstroemia indica* (Crepe Myrtle) to *Lophostemon confertus* (Brush Box).
- b) Omnibus Lane – the applicant proposes *Lagerstroemia indica* (Crepe Myrtle) for the northern end of the Lane – this is NOT supported.
- c) The following list of tree species is used elsewhere in the Ultimo Precinct and surrounds, and is considered appropriate to Omnibus Lane. The applicant must select an alternative species from the following list:

Brachychiton discolor (Queensland Lacebark)

Lophostemon confertus (Brush Box)

Koelreutaria paniculata (Golden Rain Tree)

Populus simonii (Simons Poplar)

- d) Omnibus Lane – the applicant proposes *Platanus hybrida* (Plane Tree) for the southern end of the Lane – this is supported.
- e) Due to the differences in the above species (mature size etc), the exact positioning and number of trees will need to be finalised as part of the Public Domain Plan, and following the applicants selection of their preferred species in Omnibus Lane.

STREET TREE PLANTING & MAINTENANCE

All site preparation and new street tree planting must be carried out in accordance with the City's Street Tree Master Plan and the approved Landscape and Public Domain Plans.

Site preparation for new tree planting would include but not be limited to the following:

- Excavation of subgrade for continuous tree trenches,
- Installation of subsoil drainage, imported soil mixes and structural soil,
- Supplied trees grown to NATSPEC Guidelines for Specifying Trees to ensure quality trees and more successful establishment,
- The availability of advanced quality stock is a frequent industry problem. In most instances, a supply order is forwarded for stock to be grown on by supplier. This should be planned now to ensure stock is available.

All new street trees must be planted by a qualified Arborist or Horticulturist (AQF Level 3) and before the issuing of an Occupation Certificate.

- a) The tree pits must be inspected by Council's Contract Coordinator – Street Trees, before and after planting.
- b) All street trees planted in accordance with the approved Landscape Plan and Public Domain Plan must be maintained by a qualified Horticulturist or Arborist (AQF Level 2 or 3) for a minimum period of two (2) years commencing on the planting date. Maintenance includes, without limitation, watering, weeding, removal of rubbish from tree base, pruning, fertilizing, pest and disease control and any other operations to maintain a healthy robust tree.
- c) At the end of the two (2) year maintenance period, written approval must be obtained from Council before hand-over of any street tree to Council.
- d) If a street tree has been replaced due to maintenance deficiencies during the two (2) year maintenance period, the two (2) year maintenance period will start again from the date that the street tree is replaced.

PUBLIC DOMAIN

PUBLIC DOMAIN PLAN

The Public Domain Plan accompanying this Development Application has not been approved by this consent.

Three copies of a detailed Public Domain Plan must be prepared by an architect, urban designer or landscape architect and must be approved by the Director of City Planning and Regulatory Services prior to a Construction Certificate being issued for any new building work (including internal refurbishments) excluding approved preparatory, demolition or shoring work.

The Public Domain Plan must be prepared in accordance with the City of Sydney's Public Domain Manual unless otherwise agreed. The works to the public domain are to be completed in accordance with the approved plan and the Public Domain Manual before any Occupation Certificate is issued in respect of the development or before the use commences, whichever is earlier.

Note: A Public Domain Works Guarantee deposit will be required for the public domain works, in accordance with the City of Sydney's adopted fees and charges and the Public Domain Manual. The Public Domain Works Guarantee must be submitted as an unconditional bank guarantee in favour of Council as security for completion of the obligations under this consent.

Council's Public Domain section must be contacted to determine the guarantee amount prior to lodgement of the guarantee. The guarantee must be lodged with Council prior to a Road Opening Permit for works on the public way being issued.

ALIGNMENT LEVELS

Prior to a Construction Certificate being issued, footpath alignment levels for the building must be submitted to Council for approval. The submission must be prepared by a Registered Surveyor and must be in accordance with the City of Sydney's Public Domain Manual.

These alignment levels, as approved by Council, are then to be incorporated into the plans submitted with the application for a Construction Certificate, excluding a Construction Certificate for approved preparatory, demolition or shoring work.

FOOTPATH DAMAGE BANK GUARANTEE

A Footpath Damage Bank Guarantee calculated on the basis of an area of 326 sqm of asphalt site frontage must be lodged with Council in accordance with the City of Sydney's adopted Schedule of Fees and Charges. The Footpath Damage Bank Guarantee must be submitted as an unconditional bank guarantee in favour of Council as security for repairing any damage to the public domain in the vicinity of the site.

The guarantee must be lodged with Council prior to issue of a Construction Certificate.

STORMWATER AND DRAINAGE - MAJOR DEVELOPMENT

On-site detention, treatment and re-use is encouraged.

- a) Prior to a Construction Certificate being issued, details of the proposed stormwater disposal and drainage from the development including a system of on-site stormwater detention in accordance with Council's standard requirements and details of the provision and maintenance of overland flow paths must be submitted to and approved by Council. All approved details for the disposal of stormwater and drainage are to be implemented in the development.
- b) Any proposed connection to the Council's underground drainage system will require the owner to enter into a Deed of Agreement with the Council and obtain registration on Title of a Positive Covenant prior to Construction Certificate being issued and prior to the commencement of any work within the public way.
- c) The requirements of Sydney Water with regard to the on site detention of stormwater must be ascertained and complied with. Evidence of the approval of Sydney Water to the on-site detention must be submitted prior to a Construction Certificate being issued.

- d) An “Application for Approval of Stormwater Drainage Connections” must be submitted to the Council with the appropriate fee at the time of lodgement of the proposal for connection of stormwater to the Council's drainage system.

PRESERVATION OF SURVEY MARKS

All works in City streets must ensure the preservation of existing permanent survey marks (a brass bolt, or a lead plug holding a brass tack, covered by a cast iron box). At least forty-eight hours prior to the commencement of any works in the public way within 1 metre of a permanent survey mark contact must be made with the City's Project Manager Survey / Design Services to arrange for the recovery of the mark.

A fee will apply for the replacement of any permanent survey mark removed or damaged in accordance with the City's Schedule of Fees and Charges (Reinstatement of Survey Box).

PAVING MATERIALS

The surface of any material used or proposed to be used for the paving of colonnades, thoroughfares, plazas, arcades and the like which are used by the public must comply with AS/NZS 4586:2004 (including amendments) “Slip resistance classification of new pedestrian surface materials”.

PUBLIC DOMAIN WORKS – HOLD POINTS AND HANDOVER

- a) Prior to a Construction Certificate being issued for a new building work, excluding approved preparatory, demolition and shoring work, a set of hold points for approved public domain and civil construction work is to be determined with and approved by the City's Public Domain section in accordance with the City's Public Domain Manual.
- b) Completion and handover of the constructed public domain works is to be undertaken in accordance with the City's Public Domain Manual, including requirements for as-built (Works-as-Executed) documentation, certification and defects liability period.

PHOTOGRAPHIC RECORD / DILAPIDATION REPORT - PUBLIC DOMAIN

Prior to a Construction Certificate being issued, a photographic recording of the public domain site frontages is to be prepared and submitted to Council's satisfaction.

The recording must include clear images of the footpath, nature strip, kerb and gutter, driveway crossovers and laybacks, kerb ramps, road carriageway, street trees and plantings, parking restriction and traffic signs, and all other existing infrastructure along the street.

The form of the recording is to be as follows:-

- a) A PDF format report containing all images at a scale that clearly demonstrates the existing site conditions;
- b) Each image is to be labelled to identify the elements depicted, the direction that the image is viewed towards, and include the name of the relevant street frontage;
- c) Each image is to be numbered and cross referenced to a site location plan;

- d) A summary report, prepared by a suitable qualified professional, must be submitted in conjunction with the images detailing the project description, identifying any apparent existing defects, detailing the date and authorship of the photographic record, the method of documentation and limitations of the photographic record;
- e) Include written confirmation, issued with the authority of both the applicant and the photographer that the City of Sydney is granted a perpetual non-exclusive license to make use of the copyright in all images supplied, including the right to make copies available to third parties as though they were Council images. The signatures of both the applicant and the photographer must be included.

REFLECTIVITY

The Certifying Authority must ensure that the visible light reflectivity from building materials used on the facade of the building does not exceed 20% prior to issue of the Construction Certificate.