

JRPP No.	2010SYE015
DA No.	LDA2010/54
Proposed Development:	Upgrading of Existing Services to the Westpac Data Centre
Applicant:	PVH Peckvonhartel
Report By:	Sandra Bailey – RYDE CITY COUNCIL

Assessment Report and Recommendation

1. EXECUTIVE SUMMARY

The following report is an assessment of a development application for the upgrading of existing services to the Westpac data centre at 54-60 Talavera Road, Macquarie Park. As the application has a capital investment value in excess of \$10 million, the development is of regional significance under the provisions of State Environmental Planning Policy (Major Developments 2005). The consent authority for the purposes of determining the subject application is the Sydney East Region Joint Regional Planning Panel.

The development complies with all of the planning requirements and is unlikely to result in a material adverse impact on the amenity of the locality.

During the notification period, one submission was received which raised concerns in respect of loss of character of the area.

The development application is recommended for approval subject to appropriate conditions of consent.

2. SITE DESCRIPTION

The subject site is known as 54-60 Talavera Road, Macquarie Park and the legal description of the land is Lot 1 in Deposited Plan 618224. It has two street frontages to Talavera Road and Khartoum Road and also adjoins the M2 Motorway. The site area is approximately 14573.33 square metres. The location of the site is demonstrated in Figure 1.



Figure 1: Location Map

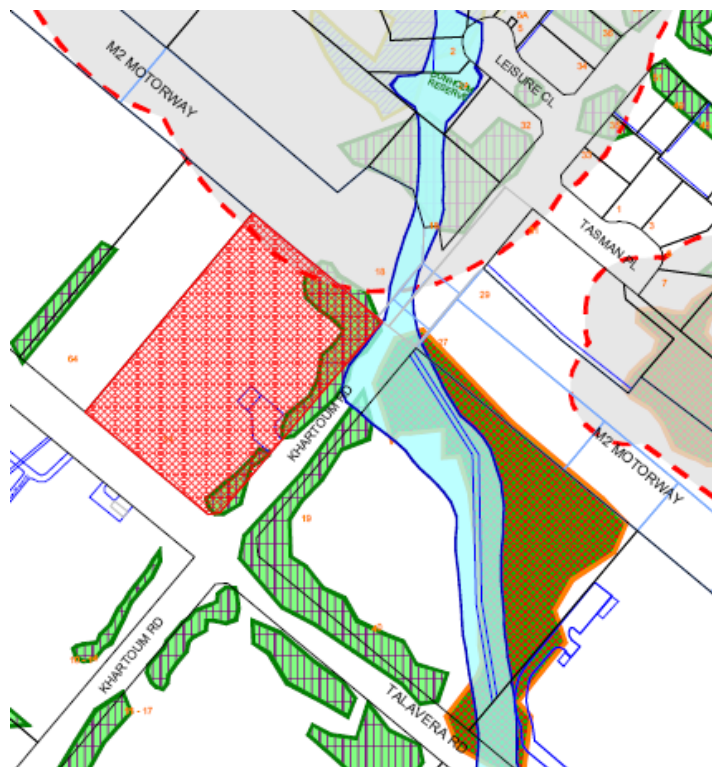


Figure 2: Aerial photograph (March 2006)

A three storey commercial building currently occupies the site and this building is used as a data centre for the Westpac Bank. Off street car parking is accessed from both Khartoum Road and Talavera Road.

Adjoining the site to the west is a part 4 and part 2 storey commercial/industrial building known as 64 Talavera Road.

As demonstrated in figure 3, the site is partly located within a bushfire zone. This constraint affects the rear portion of the site. The eastern boundary and north eastern corner of the site also includes urban bushland (non conservation).



Legend

	Subject site
	Bushfire protection zone
	Overland flow path
	Urban bushland - non-conservation
	Urban bushland - endangered

Figure 3: Constraints affecting the Site

The majority of the site is level. However there is a rise of approximately 8% from Talavera Road to the building. The rear of the site slopes steeply (approximately 30%) from the rear of the car parking area to the adjoining M2 Motorway.

The following photos demonstrate the existing site.



Photo 1: The subject site as viewed from Talavera Road.



Photo 2: This photo demonstrates the north western setback. The substation and water tanks will be erected within this area.

3. PROPOSAL

The development application proposes the services upgrading to the existing data centre. The development intends for the data centre operations to be brought into line with current international banking data storage and retrieval standards as well as creating a more modern and secure facility for its employees. The increase in power needs requires the construction of a new substation, the modernisation and replacement of its current air conditioning system with new cooling towers, a chilled water storage tank facility beside the substation and 4 new service risers located externally at each corner of the building to carry the new power and data lines within a weatherproof and

secure enclosure. Internally new switchrooms and generators will be provided. These aspects are discussed in greater detail below:

Demolition

Minor demolition works are proposed to the existing building to allow for the new internal configuration. It is also proposed to demolish the existing rooftop cooling towers and support structures.

Substation

The substation is proposed to be constructed within the existing north western setback. The front of the substation will be set back in line with the main Talavera Road setback of the existing building. The substation will be a single storey rectangular shaped building with the dimensions of 23.22m x 6.5m. It will consist of a concrete slab floor, block and concrete walls and a concrete slab roof. Access to the substation will be via louvered doors on south eastern elevation.

The substation will be set back 5.1 metres from the adjoining north western boundary.

The following diagrams demonstrate the site plan as well as the floor plan of the substation.

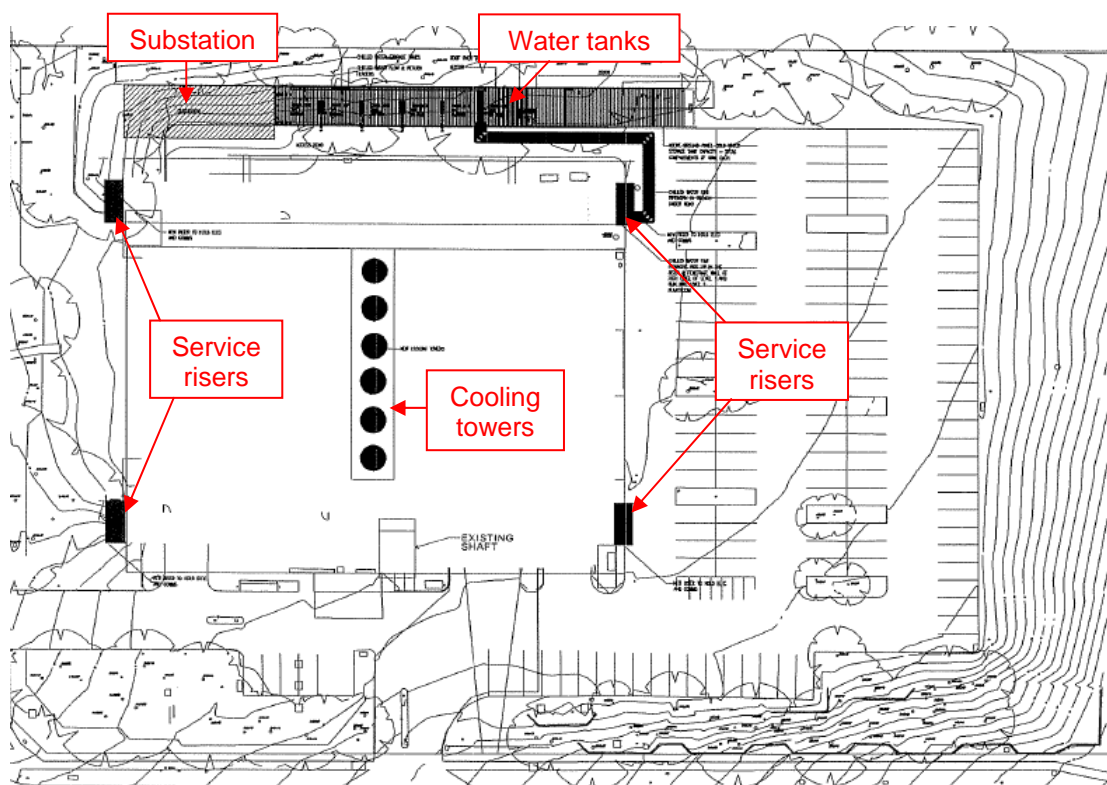


Figure 4: Site Plan

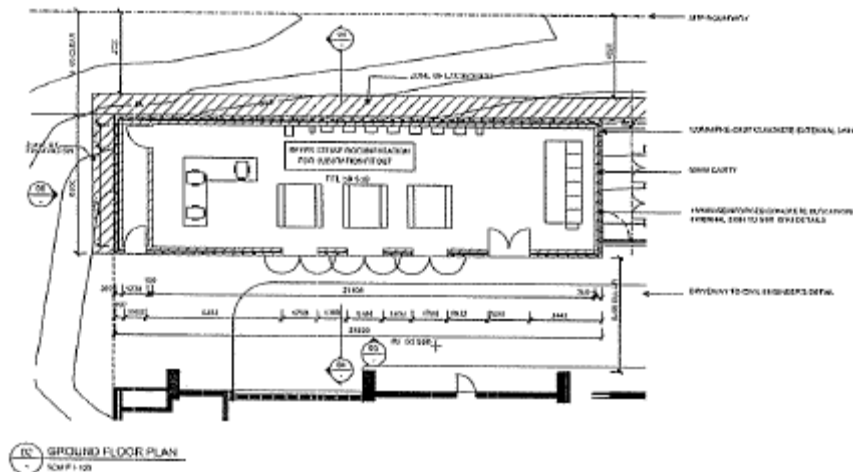


Figure 5: Layout of the Substation

Water Tanks

The building containing the water sheds will be constructed adjacent to the substation. This building will be single storey and will have the dimensions of 64.75m x 6.6m. The building will be setback 5.1m from the adjoining north western boundary. The building will contain 11 cold water storage tanks which are all 5 metres in height.

The floor of the building will be excavated between 0.5m and 3m below the existing ground level. A block and concrete retaining wall will be erected along the north western side boundary. Perforated metal screens will be erected above the retaining wall and along the south eastern boundary. The roof will consist of a metal deck roof angled into the site.

The following diagram demonstrates the floor plan of the water tanks.

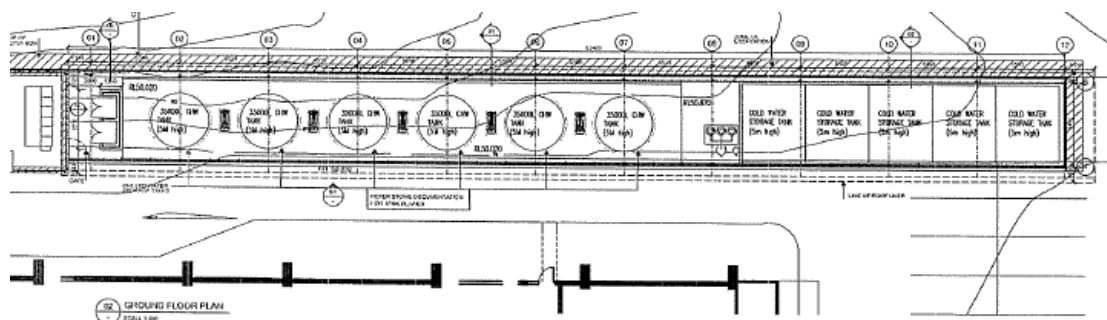


Figure 6: Layout of the Water Tanks

Service Risers

Four new service risers are to be constructed, one on each corner of the building. These service risers will be three storeys in height. They will be constructed of concrete slab floor, walls of concrete and block, angled concrete slab roof and individual copper panelled detail to the external walls.

Figure 3 demonstrates the location of these service risers.

Air intake louvers

Air intake louver screens are proposed to be constructed on the eastern and western façade of the building. New ventilation grills are also proposed on the southern and northern façade of the 2nd and 3rd floor of the building.

Generators

The development proposes to include a new diesel generator system on the ground floor. This will include 3 diesel rotary systems, switch rooms, mechanical plant rooms and other ancillary rooms.

Cooling Towers

It is proposed to construct 6 new cooling towers on the roof of the building. These will be located approximately in the middle of the building. The location of the cooling towers is demonstrated in Figure 3.

4. BACKGROUND

Development consent was granted by Council on 12 November 1980 for the erection of a new building to commence a computer processing industry.

5. APPLICABLE PLANNING CONTROLS

The following planning policies and controls are of relevance to the development:

- Section 5A of the Environmental Planning and Assessment Act, 1979;
- State Environmental Planning Policy (Major Developments) 2005;
- State Environmental Planning Policy No. 55 – Remediation of Land;
- Deemed SEPP – Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
- Ryde Planning Scheme Ordinance;
- Ryde Development Control Plan 2006;
- Draft Ryde Local Environmental Plan 2008.

6. PLANNING ASSESSMENT

6.1 Section 5A of the Environmental Planning and Assessment Act 1979

There are 19 trees which are proposed to be removed as a consequence of this development. These trees consist of 8 Narrow-leaved Ironbarks, 5 Sydney Blue Gums, 1 Blackbutt and 5 Forest She-oaks. These trees are all located in the south western corner of the site and along the south western side boundary. Figure 6 demonstrates the location of these trees. Some of the trees proposed to be removed are also demonstrated in photo 2.

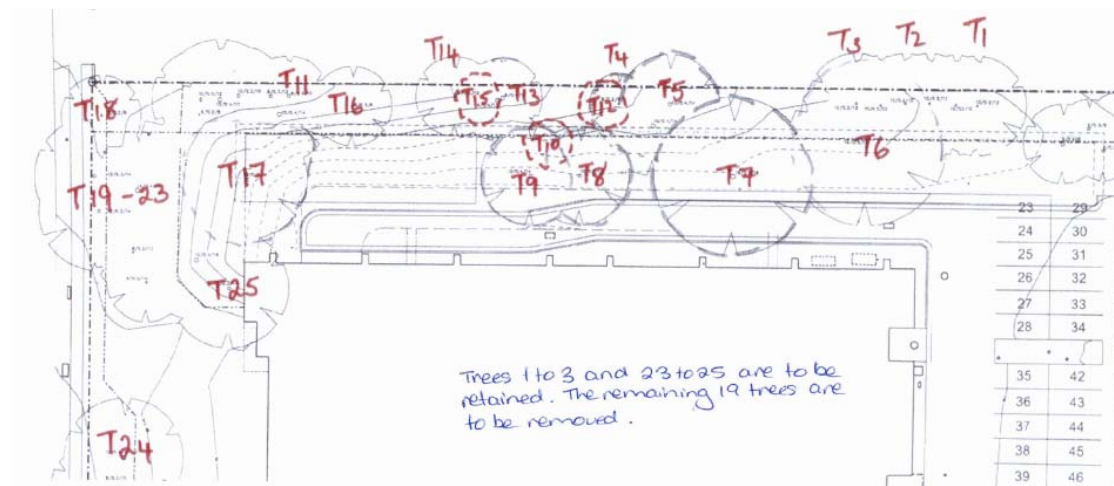


Figure 7: Location of trees to be removed.

The Narrow-leaved Ironbark, Sydney Blue Gum and Forest She-oak are characteristic species of Sydney Turpentine – Ironbark Forest (STIF). STIF is currently listed as a Critically Endangered Ecological Community under the Commonwealth *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act) and as an Endangered Ecological Community under the NSW *Threatened Species Conservation Act, 1995* (TSC Act).

Given the incorporation of an endangered ecological community on the site, the applicant commissioned an Assessment of Significance ‘Seven Part Test’ under Section 5A of the *Environmental Planning and Assessment Act, 1979* by Ambrose Ecological Services Pty Ltd.

The above report has proposed that 9 Narrow-leaved Ironbarks, 8 Sydney Blue Gums, 5 Forest She-oaks and 2 Sweet Pittosporums will be planted elsewhere on the site as compensation for the removal of the vegetation. The location of the proposed planting is in the vicinity of the rear boundary as demonstrated by figure 7. A condition of consent is proposed to require a landscape plan to be submitted with the Construction Certificate to demonstrate details of the proposed plantings. (See condition number 23).

The following conclusion has been provided in the above report:

“The proposed development of the subject site will not significantly impact on the status of STIF or its habitat. Therefore, a Species Impact Statement is NOT required for STIF in relation to the proposed development.”

Council's Consultant Landscape Architect supports the findings of this report.

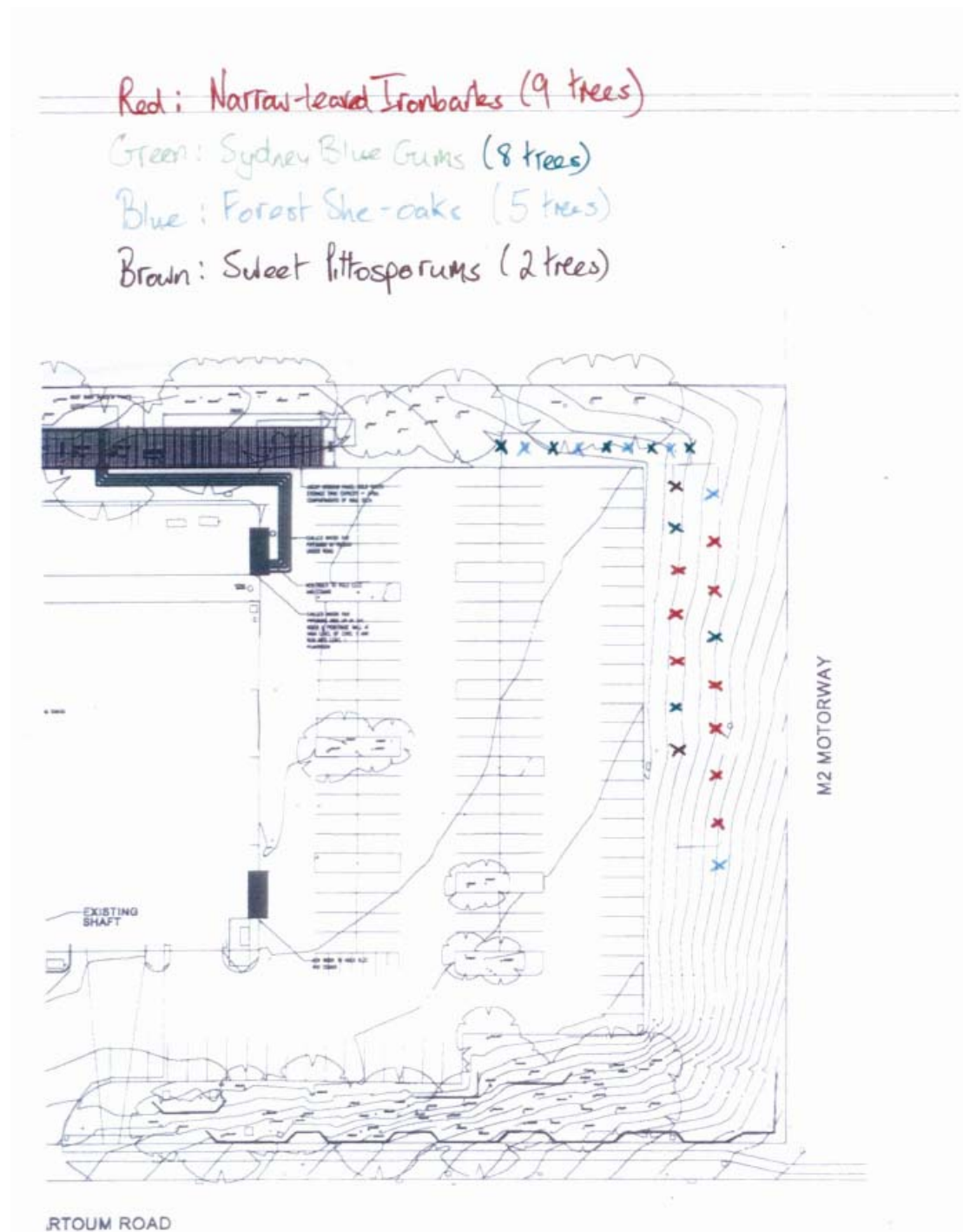


Figure 8: Location of Replacement Planting

6.2 State Environmental Planning Policy (Major Developments) 2005

The provisions of State Environmental Planning Policy (Major Developments) 2005 apply to the proposed development as the capital investment value is in excess of \$10 million. In accordance with the requirements of Section 13B(1)(a) of the SEPP, the application is defined as 'regional development'. In this case the determining authority is the Joint Regional Planning Panel (Region East).

6.3 State Environmental Planning Policy No. 55 – Remediation of Land

The requirements of State Planning Policy No. 55 – Remediation of Land apply to the subject site. In accordance with Clause 7 of SEPP 55, Council must consider if the land is contaminated, if it is contaminated, is it suitable for the proposed use and if it is not suitable, can it be remediated to a standard such that it will be made suitable for the proposed use.

The site has been used as a data centre since 1980 and ancillary car parking. As there is no change of use on the site and the development involves minimal excavation, the site is considered to be appropriate for the development.

6.4 Deemed SEPP Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

Deemed SEPP Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 applies to the subject site and has been considered in this assessment.

The site is located within the designated hydrological catchment of Sydney Harbour and therefore is subject to the provisions of the above planning instrument. However, the site is not located on the foreshore or adjacent to the waterway and it is not a heritage item and therefore, with the exception of the objective of improved water quality, the objectives of the planning instrument are not applicable to the proposed development. The objective of improved water quality is satisfied through compliance with the provisions of Part 8.2 of DCP 2006. The proposed development raises no other issues and otherwise satisfies the aims and objectives of the planning instrument.

6.5 Ryde Planning Scheme Ordinance

The following is an assessment of the proposed development against the applicable provisions from the Ryde Planning Scheme Ordinance.

Zoning

The site is zoned Business Special Research and Development 3(f) under the provisions of the RPSO. The development proposes the upgrading of existing services to the building by constructing a building to contain an electrical substation and water storage tanks. Generators are proposed on the ground floor of the building. It is also proposed to construct 4 new service risers, one on each corner of the building and the replacement of 6 cooling towers on the roof. This work is ancillary to the existing data centre and therefore is permissible in the zone.

Clause 93 – How will development be controlled?

This clause of the Ordinance requires Council to consider the following matters:

1. The planning principles and objectives for the corridor set out in Schedule 18 and clause 94.
2. The objectives and the development standards for floor space ratios set out in Clause 96.
3. The objectives and the development standards for building height set out in Clause 97.
4. The objectives and the development standards for off-street parking set out in Clause 98.

These issues are considered in the table below:

Planning Principles	Comment
To strongly define the public domain and active street frontages in the areas surrounding the proposed railway stations, by close alignment of buildings to the street edge and selection of appropriate street-front uses,	This planning principle is not applicable to the development as the site is not located in close proximity to the railway station and is not required to provide active street frontages.
To ensure a transition between the Corridor development and surrounding areas.	The development will not exceed the height of the existing building or the maximum height permitted in Clause 97. This will ensure that the development maintains a transition between the corridor development and the surrounding areas.
To ensure higher use of public transport (both rail and bus) by providing safe direct pedestrian and cycle links to bus stops and proposed station entries.	The development will not impact on any existing pedestrian or cycle links to any bus stops or station entries.
To provide landscape and street details to unify areas within the Corridor and, where appropriate, integrate with the surrounding natural and built environments.	The Public Domain Plan for Macquarie Park provides details for the construction of the public domain works including paving, street lighting, street trees and street furniture. Given that the development results in a minimal increase in floor space, it is not proposed to include any of the public domain requirements.

Planning Principles	Comment
To develop innovative, ecologically sustainable, flexible buildings and open spaces.	As the development is for the upgrading of existing services to the building, this planning principle is not considered applicable.
To pay special attention to the important interface between new buildings and open spaces, particularly the National Park and existing creek areas.	The site is separated from the Lane Cove National Park by the M2 Motorway. This roadway prevents any interface between the building and the National Park. The site does not adjoin any other open space.
To establish a permeable street pattern that provides several links to the surrounding street system and provides an internal grid system.	The development will not impact on the proposed street pattern to be established in Macquarie Park.
To provide efficient layout of parking and loading facilities, screened from view of streets.	The development will not impact on the majority of the existing car park layout or loading areas provided on the site. Two of the risers will be located partly within the aisle area of the car parking at the rear of the building. These risers will result in the aisle width being reduced from 7 metres to 6 metres for at least 5 car parking spaces. This aisle width will still comply with the requirements of AS2890.1 2004 and allow a vehicle to adequately enter and exit these car parking spaces.
To take advantage of northerly aspect to create pleasant outdoor public and semi-public spaces.	The existing building currently does not take advantage of the northerly aspect and does not provide any pleasant outdoor public or semi-public spaces. This development however would not prevent this occurring in a future development application.
To minimise overshadowing of open spaces.	The site is not adjacent to any open space areas.
To provide a central public space that contributes to the vitality and sustainability of the Corridor.	Not applicable in this instance as this principle refers to the Civic Heart to be located near the intersection of Waterloo Road and Lane Cove Road.

Planning Principles	Comment
To incorporate ecological sustainable development measures into the design of new developments in the areas of energy conservation, waste management, water conservation, and ecological enhancement.	As the development is for the upgrading of existing services to the building, this planning principle is not considered relevant.
To minimise the impact of traffic noise on the occupants of future developments.	The development will not result in any additional traffic noise being generated.
2. Social Principles	
To incorporate the principles of 'Safer by Design' into the design of all new buildings and open space areas.	The proposed development has been assessed against the CPTED principles and will not raise any issues.
To provide easy pedestrian and cycle access for both able-bodied and mobility impaired people, throughout the Corridor in the public domain and within private developments.	The public domain is not proposed to be upgraded as part of the development. This development however, will not impact on the existing pedestrian and cycle access within the corridor or within the development site.
To improve pedestrian and cycle connections between the Corridor and surrounding residential areas and minimise environmental impacts on the locality generally.	The development will not incorporate any new roads and therefore there will be no changes to the pedestrian and cycle connections between the corridor and the surrounding residential areas.
To provide buildings that are designed to accommodate the needs of people with disabilities.	The development will not affect any of the existing access requirements or amenity requirements for people with disabilities.
To encourage the creation of common spaces within private developments that promotes social interaction.	The development does not incorporate any common spaces that would promote social interactions. However this development will not prevent this planning principle being satisfied at a later time.
To ensure that all buildings have easy, safe vehicular access and street address.	The development does not propose any changes to the existing vehicular access or street access.
To provide open space, located in a manner appropriate to interface with adjacent areas and provide recreation opportunities for workers.	As the development is for the upgrading of existing services to the building, this planning principle is not considered relevant.

Planning Principles	Comment
To promote the notion of a viable and vibrant employment area with a central civic space in the vicinity of Macquarie Park Station, that provides a focus for community and government activities.	This planning principle is not applicable to the development as the site is not located within the central civic space.
To provide 24-hour access for authorised emergency vehicles in accordance with the relevant Australian Standards.	The development will not affect the existing access requirements.
To provide buildings that are designed with well-defined and accessible entrances.	The existing building entry will not be altered as a result of this development. This use is likely to continue on this site for the short to medium time frame.
3. Economic Principles	
To provide flexible buildings that are adaptable to the changing floor plate and layout needs of commercial and high-tech industries over time and also to suit a range of businesses.	The development has been designed to cater for the service needs of the existing data centre on the site.
To promote a central location for civic and government activities.	Not applicable to this site as it is not earmarked for such uses.
To facilitate the continuance of “non conforming” uses in the short term.	Not applicable as the new building and uses therein will be subject to the current statutory controls.
To permit limited residential uses in appropriate identified areas provided they do not undermine the economic viability.	Not applicable to this site.

Clause 94 – Objectives for the Macquarie Park Corridor

This clause of the Ordinance provides a list of objectives applying to the Macquarie Park Corridor. The objectives are:

- (a) *To promote Macquarie Park Corridor as a premium location for globally competitive businesses with strong links to the university and research institutions and an enhanced sense of identity, and*
- (b) *To implement the State Government’s strategic objectives of integrating land use and transport, reducing car dependency and creating opportunities for employment in areas supported by public transport, and*
- (c) *To guide the quality of future development in the Corridor, and*
- (d) *To ensure that the Corridor is characterised by a high-quality, well designed and safe environment that reflects the natural setting, with three accessible and vibrant railway station areas providing focal points, and*

- (e) *To ensure that residential and business areas are better integrated and an improved lifestyle is created for all those who live, work and study in the area.*

Many of these objectives are not applicable to the proposed development. The development will provide an upgrading of the services to the existing data centre which will ensure the continuing function of the data centre.

The proposed development is not inconsistent with the objectives of the Macquarie Park Corridor.

Clause 96 – Floor Space Ratio (FSR)

The objectives of the floor space ratio control are as follows:

- To provide effective control over the scale and bulk of future development;
- To achieve a consolidation of development around the stations, with the highest floor space ratios at the station nodes;
- To allow feasible development of the sites around the stations and facilitate focal points at the station areas;
- To ensure that the peripheral locations of the Corridor reflect the landscape needs and building setting requirements of the Corporate building;
- To reinforce the importance and function of the central spine (Waterloo Road and Riverside Main Street) with suitable built form;
- To encourage the provision of a new street network;
- To provide incentive for redevelopment in return for the provision of the proposed access network as a public benefit.

The subject site has a floor space ratio of 1:1 as indicated on the “Ryde Local Environmental Plan No 137 – Macquarie Park Corridor - Floor Space Ratio Restrictions” Map (FSR Map) that accompanies the LEP.

The definition of floor space in the RPSO includes all wall thicknesses, ducts, vents, staircases and lift wells, but does not include:-

- (a) any car parking space in the building provided to meet the standards required by the responsible authority (but not car parking space provided in excess of those standards) or any internal access to the car parking space;
- (b) space used for the loading or unloading of goods; and
- (c) lift towers, cooling towers, machinery and plant rooms and any storage space related thereto;

Based on the above definition, the building containing the substation and tanks have been excluded from the floor space. The development results in an increase of 266.88m² of floor space. Combining this with the floor space of the existing building will result in a floor space ratio of 0.76:1. The development complies with the numeric requirements.

As the development complies with the numeric requirements and the building scale and bulk will not be significantly altered, it is considered that the development complies with the objectives of the floor space ratio.

Clause 97 – Height of Buildings

The objectives of the height control are as follows:

- To provide effective control over the scale and bulk of future development;
- To concentrate building heights around the stations;
- To provide focal nodes that clearly highlight the role of the stations;
- To reinforce the important road frontages of Waterloo Road and Lane Cove Road.

This clause of the Ordinance states the height of a building on land within the Macquarie Park Corridor must not exceed the height shown for the land on the map marked “Ryde Local Environmental Plan No 137 – Macquarie Park Corridor – Height Restrictions” deposited in the office of the Council.

The LEP height map allows for a maximum height of 6 storeys.

The definition of storey in the RPSO means the space within a building situated between one floor level and the floor level next above or, if there is no floor above, the ceiling or roof above, but does not include a part of a building (such as basement) that does not extend more than 1.2 metres above natural ground level.

The development involves the construction of a single storey building and a three storey building in respect to the risers at each corner of the building. The development complies with the numeric height requirements as well as the objectives of the clause.

Clause 98 – Off-street Parking Restrictions

The objectives of the off street parking controls are as follows:

- To acknowledge accessibility by foot, bicycle and public transport;
- To support the management and supply of parking as the primary means to influence travel behaviour of employees; and
- To provide greater reliance on public transport; and
- To assist in the management of increased car usage and traffic congestion in the Corridor; and
- To ensure a greater mode shift to public transport.

This clause of the Ordinance states the off-street parking requirements for commercial and industrial development on land within Macquarie Park Corridor must not exceed the rate shown within Macquarie Park Corridor – Parking Restrictions” deposited in the office of the Council.

The LEP map indicates that the maximum rate of car parking applicable to this site is 1 space per 46sqm of Nett Useable Floor Area (NUFA).

The definition of nett useable floor area in the RPSO means floor space excluding the following:

- (a) walls,
- (b) stairs, lobbies, corridors and other space permanently set aside for circulation,
- (c) lift wells and service ducts,
- (d) toilets and space permanently set aside for common storage,
- (e) plant, machinery and service areas, including service corridors and garbage areas,
- (f) car park ticketing booths, trolley return areas and associated storage space,
- (g) kiosks, but only if temporary and designed to be readily relocated, and placed within public circulation areas,
- (h) terraces, balconies or like spaces with walls less than 1.5 metres high.

Based on the above definition, there will be no increase in the nett useable floor area of the building. As such, the development is not required to provide any additional on site car parking. Given that no additional car parking is required, it is considered that the development complies with the objectives of the car parking requirement.

6.6 City of Ryde DCP 2006

Council adopted City of Ryde DCP 2006 on 4 July 2006 and its provisions became effective on 26 July 2006. The following sections of DCP 2006 are relevant to the proposed development:

Part 4.5 of DCP 2006 – Macquarie Park Corridor

This part of the DCP provides a framework to guide future development in the Macquarie Park Corridor, North Ryde. The DCP specifies built form controls for all development within the Corridor and sets in place urban design guidelines to achieve the vision for Macquarie Park as a vibrant community, as a place to live, work and visit.

The DCP is divided into four sections. The first section is the structure plan and this sets out the broad framework for development within the Macquarie Park Corridor. The second section deals with special precincts and provides character statements, objectives and development controls for the areas. This section is not relevant to the current development as it is not located within a special precinct. The third section of the DCP deals with controls applicable for the public domain. The final section contains controls in respect to the siting and planning design. The following table demonstrates the proposals compliance with these requirements.

Control	Comments
s3.0 – Structure Plan	
Street Network 1. Provide new public streets as shown in the Street Network Structure Plan.	No new streets are required on the site. This clause is not applicable to the development.
Open Space Network 1. Provide public open space as shown in Figure 4.5.06 Open Space Network.	No new public open space is required on the site. This clause is not applicable to the development.
Built Form Network 1. Buildings are to be designed in accordance with s6.0.	As demonstrated in this report, the development will comply with the requirements of Section 6 of the DCP.
s5.0 – Public Domain	
5.3 – General Public Domain Controls	
Cycle Strategy 1. Provide dedicated cycle access in accordance with Ryde Bicycle Strategy & Master Plan 2007. 2. Provide cycle/pedestrian paths as shown in Figure 4.5.78 of the Plan. 3. Provide lockable bicycle storage and end-of-trip facilities at train stations and within development.	This plan identifies Talavera Road as a local bike route and Khartoum Road as a regional bike route. These bike routes will not be affected by the development. The development will not generate the need to provide any cycle access or lockable bicycle storage and end of trip facilities.
Street Furniture 1. Design and build streets in accordance with the details provided in the Macquarie Park Public Domain Technical Manual. 2. Utilise paving materials, furniture and lighting standards as identified in the Macquarie Park Public Domain Technical Manual.	The development will result in a minimal increase in floor space and will not result in additional demand for the upgrading of the public domain. For this reason it is not proposed to include any conditions of consent to require the upgrading of the public domain.
Street Tree & Front Setback Tree Planting 1. Street trees and front setback must be provided in accordance with the Street Tree Key Plan in the Macquarie Park Public Domain Technical Manual, and their health guaranteed for a minimum of 5 years.	The front setback already incorporates tree planting. It is not proposed to include any conditions on the consent to require street trees as the development does not generate any additional demand on the public domain.
Community Facilities 1. Community facilities are to be provided as required by the Ryde City Council's Section 94 Plan.	The issue of Section 94 has been discussed further in the report. The development will not generate the need for any increase in community facilities.

Control	Comments
Public Art 1. Public art must be included in all new development on sites over 15,000sqm.	The development is not a new development for the site and does not exceed a site area greater than 15000sqm. This clause is not applicable to the development.
s6.0 – Site & Building Design	
6.1 – General Built Form Controls	
Height Controls 1. Building heights are to comply with the RPSO and Ryde LEP 2008, Amendment 1.	The development complies with the height requirements in the RPSO.
Floor Space Ratio Controls 1. Floor space ratios are to comply with the RPSO and Ryde LEP 2008, Amendment 1.	The development complies with the floor space ratio requirements in the RPSO.
Site Planning & Staging 1. Buildings are to be sited to address existing and new frontages in the following order of precedence: a) Primary frontages: These are located along existing streets (typically Type 1 or 2 streets). b) Secondary frontages: these are generally existing, or new Type 2 or 3 streets.	The DCP identifies Talavera Road as a primary frontage and Khartoum Road as a secondary frontage. The existing building addresses Khartoum Road and this will not be altered as a result of this development.

Control	Comments
<p>Street Setbacks & Built-To Lines</p> <ol style="list-style-type: none"> 1. Minimum setbacks and build-to lines must be provided as shown in Figure 4.5.83 of the DCP. <ol style="list-style-type: none"> c) Where minimum setbacks are shown, buildings maybe set back further from the street according to specific site conditions. 2. <u>10m Green setbacks</u> 80% of the street setback area is to be soft landscaping. Existing mature trees are to be retained where possible, and additional trees planted. At grade car parking must not be located within this setback. 3. <u>5m setbacks</u> 60% of the street setback area is to be soft landscaping. Existing mature trees are to be retained where possible. Paved areas are to relate to the materials and finishes of the adjacent streetscape. At grade car parking must not be located within this setback. 	<p>The DCP identifies the setback to Talavera Road as being a minimum of 10 metres and this setback is to be a green setback. Development along Khartoum Road is required to be set back a minimum of 5 metres.</p> <p>The development will be set back 12.8 metres and 15.3 metres from Talavera Road. The existing landscaping in this setback area will be retained. The development will comply with the requirements for the 10 metre green setback.</p> <p>The service risers will be set back 28.5 metres from Khartoum Road and will not impact on any of the soft landscaping within the existing setback.</p>
<p>Side & Rear Setbacks</p> <ol style="list-style-type: none"> 1. Buildings are to be set back 10m from a rear and 5m from a side site boundary. 	<p>The building which will contain the electrical substation and water storage tanks will be set back 5.034 metres from the side boundary. The development will be set back 58 metres from the rear boundary. The development complies with this control.</p>
<p>Building Separation</p> <ol style="list-style-type: none"> 1. Provide a minimum 20m separation between buildings facing each other within a site. 	<p>This requirement is only applicable where buildings face each other within the same site and its objective is to ensure adequate separation to allow for visual privacy and solar access to buildings. The building containing the electrical substation and water storage tanks will be set back between 2.8m and 4m from the existing building. As this building is single storey it will not affect solar access to the existing building. The nature of the building will ensure visual privacy is acceptable. In these circumstances, the 20 metre separation distance is not required.</p>

Control	Comments
Building Bulk 1. All buildings must comply with Section 6.1.15 of the DCP (Environmental Performance).	The controls for building bulk are aimed at either tall buildings or buildings with a large footprint. The development does not fall into either of these categories so that controls are not considered to be applicable.
Site Coverage & Deep Soil Areas 1. A minimum 20% of a site must be provided as deep soil area.	Approximately 27% of the site is deep soil area. The development complies with this requirement.
Building Articulation 1. Facades are to be composed with an appropriate scale, rhythm and proportion, which respond to the building use and the desired character.	The development will not significantly alter the facades of the building.
Ceiling Heights 1. Maximum ceiling heights are to be provided as follows: Minimum dimensions are measured from finished floor level to finished ceiling level: <ul style="list-style-type: none"> • Ground level – 3.6m • Upper levels – 2.7m 	As the development proposes the upgrading of the existing services, the ceiling height requirements are not relevant to the development.
Active Frontages 1. Continuous ground level active uses must be provided where primary active frontages are shown in figure 4.5.94 of the DCP. 2. Active ground level uses are encouraged where secondary active frontages are shown in figure 4.5.94.	The DCP does not identify Talavera Road or Khartoum Road as being either a primary or secondary active frontage. These controls are not applicable to the development.
Awnings & Canopies 1. Continuous awnings must be provided where primary active frontages are shown in Figure 4.5.94 of the DCP. Entry canopies and discontinuous awnings and entry canopies are permitted elsewhere in the corridor.	As the site has not been identified as having a primary active frontage, there is no requirement for an awning or canopy. This control is not applicable to the development.

Control	Comments
Topography & Building Interface 1. Natural ground level is to be retained for a zone of 4m from the side and rear property boundaries. Retaining walls, cut and fill are not permitted within this zone.	The development will involve excavation to accommodate the substation and water tank building. The zone of excavation will be set back 4.02 metres from the side boundary. The development complies with the requirements of this clause.
Advertising Signage 1. Signage shall comply with Part 9.1 of the DCP.	No signage is proposed.
Environmental Performance 1. Additional floor space may be permitted within a development where the building can demonstrate design excellence and environmental sustainability. For consideration of the additional floor space a minimum 5 Green Star – Green Building Council of Australia (GBCA) should be provided.	The development does not propose any additional floor space within the building. For this reason, the provisions of this control is not applicable.
Wind Impact 1. Buildings shall not create uncomfortable or unsafe wind conditions in the public domain which exceeds the Acceptable Criteria for Environmental Wind conditions.	The development consists of 4 x 3 storey service risers and a single storey building which is well set back from the public domain. For these reasons, the development is unlikely to create any uncomfortable or unsafe wind conditions in the public domain.
Noise & Vibration 1. An Acoustic Impact Assessment report prepared by a suitably qualified acoustic consultant is required to be submitted with all development applications for commercial, industrial, retail and community buildings, with the exception of applications minor building alterations. 2. Development is to comply with all relevant statutory regulations.	The applicant has submitted an acoustic report prepared by an appropriately qualified acoustic consultant. This report addressed the impact on the nearest residential properties and commercial properties. The nearest residential properties are located on the northern side of the M2 as demonstrated in the aerial photograph. This report demonstrates that there will be minimal impact on these residential properties. The noise levels for the nearest commercial property will achieve the upper limits on the permitted range in the NSW Industrial Noise Policy. It is proposed to include a condition on the consent to ensure that the development will meet the acceptable levels as contained in this policy. This will ensure that the amenity of the locality will be maintained. (See condition number 17).

Control	Comments
6.2 – Private & Communal Open Space	
Landscaping & Communal Courtyards 1. A minimum 30% of the developable area of the site is to be provided as Landscaped Area.	As a result of the development, the site will provide 27% of the site area as landscaped area. Given that the development will not be readily visible from the streets or surrounding properties, no objection is raised to the reduced extent of landscaped area. It is however proposed to include a condition on the consent to require planting that achieves a height of approximately 2 metres along the north western boundary adjacent to the substation and water tank building. This will act as screen planting and improve the amenity of the adjoining property. (See condition number 23).
Pedestrian Through-Site Links 1. Pedestrian through site links must be provided: a) Where Pedestrian Access Corridors are shown in the Ryde LEP 2008 Amendment 1 – Access Plan.	The site is not required to provide any pedestrian through site links.
6.3 – Services & Site Management	
Stormwater Drainage 1. Development shall comply with the requirements outlined in the Stormwater Drainage Section of the DCP and is to provide a stormwater drainage system in accordance with the “major/minor” system concept set out in Australian Rainfall and Runoff.	Council’s Development Engineer has assessed the development application and has raised no objections subject to appropriate conditions of consent.
Waste Management 1. All applications for demolition and development must be accompanied by a Waste Management Plan that specifies the type of waste to be produced and the proposed arrangements for ongoing waste management, collection and disposal.	A waste management plan was submitted with the development application. This has been reviewed by Council’s Senior Environmental Health Officer and no objections have been raised.

Control	Comments
Soil Management 1. Development is to be designed and constructed to integrate with the natural topography of the site to minimise the need for excessive sediment disturbance and prevent soil loss. 2. Effective soil management and maintenance practices are to be followed to prevent soil loss.	Appropriate conditions of consent will be imposed to require the submission of an erosion and sediment control plan that meets the Council's requirements.
Site Contamination 1. Prior to the submission of subdivision and development applications, a suitably qualified environmental engineer on behalf of the applicant is to assess whether the subject land is contaminated.	Council's Environmental Health Officer has considered the issue of site contamination. As there is no change of use and limited excavation, the site is considered appropriate for the development.
Site Facilities 1. Vehicular access to loading facilities is to be provided from secondary and tertiary streets where possible. 2. Rubbish and recycling areas must be provided in accordance with the DCP.	The development does not propose any changes to the loading areas or rubbish and recycling areas.
Vehicular Access 1. Vehicular access is not permitted along streets identified as 'Active Frontages'.	The development does not propose any changes to the existing vehicular access requirements.
On-Site Parking 1. Safe and secure 24 hour access to car parking areas is to be provided for building users.	The development will not result in the loss of any existing on site car parking spaces or will it generate the need to provide any additional on site car parking.
Work Place Travel Plan (WTP) 1. A WTP is required for all developments that exceed 15,000sqm floor space or 300 employees.	This clause is not applicable to the development.

Part 9.2 Access for People with Disabilities

The DCP requires where there is a minor refurbishment to an existing building that accessibility for people with disabilities shall not be made worse. The development complies with this requirement as the development will not affect the access to the building from either the street or car parking areas. Also access between the levels of the building will not be changed.

6.7 Draft Ryde Local Environmental Plan 2008

Draft Local Environmental Plan 2008 was adopted by Council on 5 May 2009. Under this Draft LEP, the zoning of the property is Business Park B7. The proposed development is permissible with consent within this zoning under the Draft LEP, and it is considered that the proposal is not contrary to the objectives of the Draft LEP or those of the proposed zoning.

6.8 Section 94 Development Contributions Plan 2007

In accordance with the above plan the Section 94 contributions are levied according to the estimated increase in demand and are based on an occupancy rate of 1 employee per 20m² of gross floor area. The gross floor area of the proposed development is 266.88m². This figure includes the service risers as the substation and water tanks are excluded from the floor space definition in the Ryde Planning Scheme Ordinance.

Although the service risers are defined as floor space, they will not accommodate any persons or contribute to the increase in demand for any public facility. Accordingly, a condition requiring a Section 94 contribution is not required.

7 LIKELY IMPACTS OF THE DEVELOPMENT

One impact of the proposed development that has not already been addressed in this report includes the impacts of any electromagnetic field emissions from the development. The applicant has provided an Electro Magnetic Field Emission Assessment prepared by Magshield Products (Aust) International Pty Ltd. The following conclusion was provided in this report:

“The main conclusion resulted from the EMF calculations is that the design of the substation building and its position within the property boundary line in respect to the adjacent private property to the west was carried out with a provision for the minimum EMF impact.

The EMF emitted from the proposed substation in the direction of the closest adjacent private property to the west of the Westpac ground is well below the recommended limits for safe human exposure to the low frequency magnetic fields.

The EMF emitted from the proposed substation is below the level at which it can interfere with the operation of sensitive electronic equipment located in the adjacent private property across the western boundary line of the Westpac ground.

The main recommendations are:

- 1. Inside the substation room:*
 - a. To install all single-core 11kV cable in trefoil formation*
 - b. To bundle the transformer LV cables in cable trenches for low EMF emission.*

2. *To install and group the single-core cables of the two LV mains that are linking the substation LV switchboard with the customer main switchboard for low EMF emission.*

A condition of consent is recommended to ensure compliance with the recommendations of this report. (See condition number 8).

8 COMMENTS FROM COUNCIL DEPARTMENTS

Engineering

The following comment was provided by the Development Engineer:

“The proposed development will result in about 450m² of additional impervious areas and normally under Council’s policy OSD would be required for such a proposal. However as the proposed development is located close to the downstream part of the catchment provision of rainwater tanks connected for internal reuse would be more appropriate in relation to managing downstream flooding. Accordingly, OSD is not required, however it will need to be compensated by having an equivalent volume being provided for rainwater collection and redirected for internal reuse via toilet flushing, landscape irrigation etc. This matter will be conditioned for compliance prior to the issue of a Construction Certificate.

No objections subject to appropriate conditions of consent.”

These conditions have been included. (See condition number 25).

Building Surveyor

No objections were raised to the development subject to appropriate conditions of consent in respect to BCA, fire safety certificates and Occupation Certificates. (See condition numbers 2, 3, 26, 45 and 46).

Bushfire

The following comments were provided by Council’s Bushfire Consultant:

“This development complies with the requirements of Planning for Bushfire Protection 2006.

Consent to be conditioned for bushfire protection as follows:

- All grounds within the subject property not built upon are to be maintained as an asset protection zone be maintained in accordance with Appendix 5 – Landscape and Property Maintenance of Planning for Bushfire Protection 2006.”

This condition has been included. (See condition number 7).

Environmental Health Officer

The following comments were received by Council's Senior Environmental Health Officer:

"Acoustic report, 60140781.RPT0202, prepared by AECOM Pty Ltd, dated 8 April, 2010, accompanied the application. It assessed the transformers, cooling towers, generators, substation and UPS against the DECCW Industrial Noise Policy (INP). Background noise measurements were undertaken in Tasman Place, considered to be the nearest affected residence.

Sound levels of the various pieces of equipment were based on previous measurements of such equipment and provide the assumptions used for the predicted noise levels at the nearest affected commercial and residential receivers. There was no information available to the authors of the report in regards to the chillers.

The report concludes that the only equipment that will require any attenuation are the generators.

The night-time 'urban' amenity criteria of the INP has been used as a target it's assumed that the equipment could be used at anytime of the day. This is considered appropriate. There are however 2 noise levels given in the amenity criteria of the INP. The 'acceptable' level and the 'maximum' level. Based on the assumed noise levels of the equipment, and the preliminary attenuation levels for the generators, the report predicts that the 'maximum' levels will be met (50dBA-residential; 70dBA-commercial) during emergency operation. Normal operations will not impact on the current noise amenity.

Despite the emergency operation is only expected to occur very infrequently, given this is new development the aim should be to not degrade noise amenity but to maintain it. As such it is recommended in the conditions that the 'acceptable' levels be met (45dBA-residential; 65dBA-commercial)

The work will involve a relative small amount of excavation for the floor of the substation and the new chillers. There is no change of use on the site and as such site contamination is not expected to be of any concern."

Appropriate conditions of consent have been included. (See condition numbers 9 to 17, 27, 28, 47 to 55).

9 PUBLIC NOTIFICATION AND SUBMISSIONS

The application was advertised and notified between 2 March 2010 and 18 March 2010. One submission was received from the owner of 20 Donald Street, North Ryde. The following issue was raised in the submission:

- *Do not agree with the proposal due to loss of amenity and trees to be removed which forms part of the character of the area.*

Comment: The development will result in the loss of 19 trees. The works are required to improve the operations of the data centre and ensure business

continuity. This outweighs the loss of the original trees. It should also be noted that the development intends to replace the trees to be removed with 26 trees of the same species elsewhere on the site. These replacement trees will contribute to the character of the area.

10 CONCLUSION

The development involves the upgrading of the existing services to be Westpac Data Centre. The application is considered to be satisfactory in terms of the planning controls and impacts of the development.

11 APPLICATION DETAILS

The applicant is Pvh Peckvonhartel.

The owner is Westpac Funds Management Limited.

The estimated value of works is \$30,556,000.00.

No disclosures with respect to the Local Government and Planning Legislation Amendment (Political Donations) Act 2008 have been made.

12 RECOMMENDATION

Pursuant to Section 80(1) of the Environmental Planning and Assessment Act, 1979:

- (a) That the Sydney East Region Joint Regional Planning panel grant consent to development application LDA2010/54 for the upgrading of services at 54-60 Talavera Road, Macquarie Park for a period of five years from the date on the Notice of Determination subject to the conditions of consent in Attachment 1 of this report.
- (b) That the objector be notified of this decision.

ATTACHMENT 1 PROPOSED CONDITIONS OF CONSENT

GENERAL

1. Development is to be carried out in accordance with the following plans and support information submitted to Council.

Plan Number	Title	Drawn by
TP000 Rev A	Survey	Peckvonhartel pvh
TP100 Rev A	Ground floor demolition plan	Peckvonhartel pvh
TP200 Rev A	Proposed ground floor plan	Peckvonhartel pvh
TP201 Rev A	Level one wall plan	Peckvonhartel pvh
TP202 Rev A	Wall plan level 2	Peckvonhartel pvh
TP600 Rev B	New substation lock in drawing	Peckvonhartel pvh
TP601 Rev A	New chilled water storage drawing	Peckvonhartel pvh
TP610 Rev B	New risers plan	Peckvonhartel pvh
TP611 Rev A	New risers sections	Peckvonhartel pvh
TP620 Rev A	New cooling tower details	Peckvonhartel pvh
TP801 Rev A	Elevations	Peckvonhartel pvh
TP802 Rev A	Elevations	Peckvonhartel pvh
	Electro Magnetic Field Emission Assessment	Magshield Products (Aust) International Pty Ltd
	Acoustic Assessment	AECOM Australia Pty Ltd
Rev A	External Finishes	Peckvonhartel pvh
	Proposed replacement planting locations	Peckvonhartel pvh

2. All building works are required to be carried out in accordance with the provisions of the Building Code of Australia.
3. Prior to commencing any construction works, the following provisions of the Environmental Planning and Assessment Amendment Act, 1997 are to be complied with:
 - a) A **Construction Certificate** is to be obtained in accordance with Section 81A (2)(a) of the Act.
 - b) A Principal Certifying Authority is to be appointed and Council is to be notified of the appointment in accordance with Section 81A (2)(b) of the Act and Form 7 of Schedule 1 to the Regulations.
 - c) Council is to be notified at least two (2) days prior to the intention to commence building works, in accordance with Section 81A (2)(c) of the Act and Form 7 of Schedule 1 to the Regulations.
4. The applicant may apply to the Council or an accredited certifier for the issuing of a Construction Certificate and to Council or an accredited

certifier to monitor compliance with the approval and issue any relevant documentary evidence or certificate/s.

Council Officers can provide these services and further information can be obtained from Council by telephoning 9952 8222 (Customer Service).

5. Excavations and backfilling

- a) All excavations and backfill associated with the erection or demolition of a building must be executed safely and in accordance with appropriate professional standards.
- b) All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.

6. Retaining walls and drainage

If the soil conditions require it:

- a) retaining walls associated with the erection or demolition of a building or other approved methods of preventing movement of the soil must be provided.
- b) adequate provision must be made for drainage.

7. All grounds within the subject property not built upon be maintained in accordance with Appendix 5 – Landscape and Property Maintenance of Planning for Bushfire Protection 2006.

8. The development is to be constructed in accordance with the recommendations contained in the Electro Magnetic Field Emission Assessment dated 5/3/10 prepared by Magshield Products (Aust.) International Pty Ltd.

9. **Storage of dangerous goods** - The storage of any dangerous goods must comply with the requirements of the *Occupational Health and Safety Act 2000* and *Occupational Health and Safety Regulation 2001*.

10. **Ventilation of rooms** - Every habitable room, sanitary compartment or other room occupied by a person for any purpose must be provided with adequate natural ventilation or an approved system of mechanical ventilation.

11. **Fresh air intake vents** - All fresh air intake vents must be located in a position that is free from contamination and at least 6 metres from any exhaust air discharge vent or cooling tower discharge.

12. **Exhaust air discharge vents** - All exhaust air discharge vents must be designed and located so that no nuisance or danger to health will be created.

13. **Regulated systems** - All air-handling and water systems regulated under the *Public Health Act 1991* must be installed, operated and

maintained in accordance with the requirements of the *Public Health (Microbial Control) Regulation 2000*.

14. **Access for maintenance purposes** - Safe easy access must be provided for the inspection and maintenance of all plant, equipment and components covered by Australian/New Zealand Standard AS/NZS 3666.2: 2002 *Air-handling and water systems of buildings - Microbial control - Operation and maintenance*.
15. **Registration of water-cooling and warm water systems** - All water-cooling and warm water systems (including thermostatic mixing valves) regulated under the *Public Health Act 1991* must be registered with Council's Environmental Health Unit within one (1) month of installation.
Registration forms may be obtained from Council's Customer Service Centre on Tel. 9952 8222.
16. **Plumbing and drainage work** - All plumbing and drainage work must be carried out in accordance with the requirements of Sydney Water Corporation.
17. **Noise and vibration from plant and equipment** - Unless otherwise provided in this consent, the operation of any plant or equipment installed on the premises must not cause:
 - (a) The emission of noise that exceeds the acceptable urban noise criteria set out in the New South Wales Industrial Noise Policy (EPA, 2000) when measured at, or computed for, the most affected point, on or within the boundary of the most affected receivers. Modifying factor corrections must be applied for tonal, impulsive, low frequency or intermittent noise in accordance with the New South Wales Industrial Noise Policy (EPA, 2000).
 - (b) An internal noise level in any adjoining occupancy that exceeds the recommended design sound levels specified in Australian/New Zealand Standard AS/NZS 2107:2000 *Acoustics – Recommended design sound levels and reverberation times for building interiors*.
 - (c) The transmission of vibration to any place of different occupancy.

PRIOR TO CONSTRUCTION CERTIFICATE

18. A **security deposit** (category: other buildings with delivery of bricks or concrete or machine excavation) is to be paid to Council (Public Works and Services Group) as well as the Infrastructure Restoration and Administration Fee. Please refer to Council's Management Plan for the current fee amounts.
19. An **Enforcement levy** is to be paid to Council on lodgement of the Construction Certificate application in accordance with the requirements of Council's Management Plan (scheduled fees).

20. Documentary evidence of payment of the **Long Service Levy** under Section 34 of the Building and Construction Industry Long Service Payments Act 1986 is to be received prior to the issuing of the Construction Certificate.
21. Documentary evidence of compliance with Conditions 18, 19 and 20 to the satisfaction of Council or an accredited certifier is to be submitted to the Council prior to the issuing of the Construction Certificate.
22. A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation.

Application must be made through an authorised Water Servicing Coordinator. Please refer to the Building, Development and Plumbing section of the website at www.sydneywater.com.au then refer to "Water Servicing Coordinator" under "Developing Your Land" or telephone 13 20 92 for assistance.

Following application a "Notice of Requirements" will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Coordinator, as it may take some time to build water/sewer pipes and this may impact on other services and building, driveway or landscape design.

A copy of Sydney Water's Notice of Requirements must be submitted to the Principal Certifying Authority prior to the **Construction Certificate** being issued.

The Section 73 Certificate must be submitted to the Principal Certifying Authority prior to occupation of the development / release of the plan of subdivision.

23. A **landscape plan** is to be submitted with the Construction Certificate. This landscape plan is to include details of the proposed new plantings to be provided on the site. This planting is to include 9 Narrow-leafed Ironbarks, 8 Sydney Blue Gums, 5 Forest She-oaks and 2 Sweet Pittosporums. The location of the plantings is to be consistent with the plan provided by the architect and detailed in condition 1. At the time of planting, all of the trees are to be in a 35 litre sized pot. The health of these trees is to be guaranteed for a minimum of 2 years.

The landscape plan is also to provide planting along the north western boundary of the site adjacent to the substation and water tanks building. This planting is to achieve a height of approximately 2 metres and is to act as a screen.

24. Trees that are to remain on site are to be protected against damage during construction. All mature trees to remain shall be clearly marked and a fence erected around their drip line. A qualified arborist shall inspect the tree protection measures and documentary evidence of tree protection measures is to be submitted to Council prior to the issuing of the Construction Certificate.
25. Stormwater runoff from the proposed new impervious areas shall be collected and piped via an existing or new underground stormwater system connected to the public road via a minimum 15000 litres rainwater tank in accordance with the Part 8.2 of Council's Stormwater Management Manual. The majority of the water collected from the rainwater tank(s) is to be redirected for internal reuse via toilet flushing etc with the remainder connected for landscape irrigation. If the entire runoff from the new roof cannot be redirected to the rainwater tank(s), equivalent roof areas from other areas of the site shall be redirected to ensure the same collection area is achieved.

Detailed engineering plans together with engineering certification from a civil engineer indicating compliance with the above requirements are to be submitted with the construction certificate application.

26. A "**Fire Safety Schedule**" specifying the fire safety measures that are currently implemented in the building premises and the fire safety measures proposed or required to be implemented in the building premises as required by Clause 168 - Environmental Planning & Assessment Regulation 2000 are to be submitted and approved prior to the issue of the Construction Certificate.
27. **Mechanical ventilation details** - Details of all proposed mechanical ventilation systems, and alterations to any existing systems, must be submitted to Council or an accredited private certifier for approval with the application for the Construction Certificate. Such details must include:
 - (a) Certified plans of the proposed work, with any alterations coloured to distinguish between new and existing work;
 - (b) A site survey plan showing the location of all proposed air intakes and exhaust outlets on the site, and any existing cooling towers, air intakes, exhaust outlets and natural ventilation openings in the vicinity;
 - (c) A completed Mechanical Services Design Certificate (Form M1), together with a copy of the certifier's curriculum vitae; and
 - (d) Documentary evidence in support of any departures from the deemed-to-satisfy provisions of the *Building Code of Australia*.

28. **Cooling tower details** - Details of any proposed water-cooling systems, and alterations to any existing systems (including the installation of new cooling towers), must be submitted to Council or an accredited private certifier for approval with the application for the Construction Certificate. Such details must include:
- (a) Certified plans and specifications of the proposed water cooling system;
 - (b) A site survey plan showing the location of the proposed cooling tower and any air intakes, exhaust outlets and natural ventilation openings in the vicinity;
 - (c) Access details for inspection and maintenance purposes;
 - (d) Details of the proposed water treatment system; and
 - (e) A Compliance Certificate from a suitably qualified person certifying that the design of the cooling tower(s) complies with Australian/New Zealand Standard AS/NZS 3666.1:2002 *Air-handling and water systems of buildings – Microbial Control – Design, installation and commissioning*.

PRIOR TO COMMENCEMENT

29. 'Dial 1100 Before You Dig'

Underground pipes and cables may exist in the area. In your own interest and for safety, telephone 1100 before excavating or erecting structures. Information on the location of underground pipes and cables can also be obtained by fax on 1300 652 077 or through the following website www.dialbeforeyoudig.com.au.

If alterations are required to the configuration, size, form or design of the development upon contacting the Dial Before You Dig service, an amendment to the Development Consent (or a new development application) may be necessary. Council's Assessment Officer should be consulted prior to the lodgment of an application for a **Construction Certificate** if this is the case.

30. Sediment control works are to be installed and maintained in accordance with Council's DCP 2006, Part 8.1 – "Construction Activities".
31. Signage is to be provided on the site as follows:
- a) During the demolition process notices lettered in accordance with AS1319 displaying the words "**DANGER - DEMOLITION IN PROGRESS**" or a similar message shall be fixed to the security fencing at appropriate places to warn the public.
 - b) During the entire construction phase signage shall be fixed on site identifying the PCA and principal contractor (the coordinator of the building work), and providing phone numbers.

DURING DEMOLITION AND CONSTRUCTION

32. In relation to demolition, all work is to be carried out in accordance with the requirements of AS 2601 (*The Demolition of Structures*).
33. Security fencing shall be provided around the perimeter of the building/demolition site and precautionary measures taken to prevent unauthorized entries of the site at all times during demolition and construction.
34. All demolition and all construction and associated work is to be restricted to between the hours of 7.00am and 7.00pm Monday to Friday (other than public holidays) and between 8.00am and 4.00pm on Saturday. No work is to be carried out on Sunday or public holidays.
35. Adequate precautions must be taken to control the emission of dust from the site during demolition and construction work. These precautions could include minimizing soil disturbance, use of water sprays, erecting screens and not carrying out dusty work during windy conditions.
36. All work involving asbestos products and materials, including asbestos-cement sheeting (i.e. fibro) must be carried out in accordance with the guidelines for asbestos work published by WorkCover New South Wales.
37. All asbestos wastes including used asbestos-cement sheeting (i.e. fibro), must be disposed of at a landfill facility licensed by the New South Wales Environmental Protection Authority to receive that waste. Copies of the disposal dockets must be kept by the applicant for at least 3 years and be submitted to Council on request.
38. Adequate arrangements must be made for the storage and disposal of demolition and building waste generated on the premises. In this regard the demolishers and builders are encouraged to maximize the re-use and recycling of materials (e.g. Concrete, bricks, roof tiles, timber, doors, windows, fittings, etc.) by separating these materials from other wastes.
39. The occasions on which building work must be inspected are:
 - a) after excavation for, and before the placement of, any footings.
 - b) prior to covering any stormwater drainage connections, and
 - c) after the building work has been completed and prior to any occupation certificate being issued in relation to the building.

Documentary evidence of compliance with Council's approval and relevant standards of construction is to be obtained prior to proceeding to the subsequent stages of construction and copies of the documentary evidence are to be maintained by the Principal Certifying Authority and be made available to Council officers upon request.

Prior to occupation of the building, an occupation certificate must be obtained. Prior to the issue of the occupation certificate, **the critical stage inspections must be carried out.**

40. In addition to the abovestated inspections, the Principal Certifying Authority is required to ensure that adequate provisions are made for the following measures at each stage of construction, to ensure compliance with the approval and City of Ryde's DCP 2006, Part 8.1 - "Construction Activities":
 - a) Sediment control measures.
 - b) Tree Preservation and protection measures.
 - c) Security fencing.
 - d) Materials or waste containers upon the footway or road.
 - e) PCA and principal contractor (the coordinator of the building work) signage and site toilets.
41. The L₁₀ noise level measured for a period of not less than 15 minutes while demolition and construction work is in progress must not exceed the background noise level by more than 20 dB(A) at the nearest affected residential premises.
42. All excavated material must be removed from the site. No fill is to be placed above the natural ground level.
43. No spoil, stockpiles, building or demolition material is to be placed on any public road, footpath, park or Council owned land.
44. Site toilets shall be provided in accordance with the WorkCover Code of Practice entitled "Amenities for Construction Work".

PRIOR TO OCCUPATION CERTIFICATE

45. An **Occupation Certificate** must be obtained from the Principal Certifying Authority (PCA) and a copy furnished to Council in accordance with Clause 151 of the Environmental Planning and Assessment Regulation 2000 prior to commencement of occupation or use of the whole or any part of a new building, an altered portion of, or an extension to an existing building.
46. A **Fire Safety Certificate/s** from a suitably qualified person/s is to be submitted to Council or an accredited certifier (*and Council, if Council is not the PCA or an accredited certifier*) for all the essential services installed in the building in accordance with Clauses 170 and 171 of the Environmental Planning and Assessment Regulation 2000.

47. **Certification of mechanical ventilation work** - A Mechanical Services Completion and Performance Certificate (Form M2) must be submitted to the Principal Certifying Authority on completion and commissioning of all mechanical ventilation work approved under this consent and before the issue of an Occupation Certificate.
48. **Certification of cooling towers** - A Compliance Certificate must be submitted to the Principal Certifying Authority (and Council, if Council is not the PCA) on completion and commissioning of all cooling towers approved under this consent and before the issue of an Occupation Certificate.

The certificate must be from a suitably qualified person and certify that the cooling towers have been installed in accordance with the approved plans and specifications and comply with Australian/New Zealand Standard AS/NZS 3666.1:2002 *Air-handling and water systems of buildings – Microbial control – Design, installation and commissioning*.

OPERATIONAL REQUIREMENTS

49. **Offensive noise** - The use of the premises must not cause the emission of 'offensive noise' as defined in the *Protection of the Environment Operations Act 1997*.
50. **Council may require acoustical consultant's report** - Council may require the submission of a report from an appropriately qualified acoustical consultant demonstrating compliance with the relevant noise and vibration criteria.
51. **Clean water only to stormwater system** - Only clean unpolluted water is permitted to enter Council's stormwater drainage system.
52. **Cleaning wastes and spills** - All cleaning wastes and spills must be collected and disposed of in an environmentally acceptable manner.
53. **Clean-up materials to be kept on premises** - An adequate supply of suitable clean up materials must be kept on the premises for cleaning up accidental spills.
54. **Duty to notify pollution incidents** - Pollution incidents causing or threatening harm to the environment must be reported to Council as soon as practicable on Tel. 9952 8222.
55. **Health inspections** - Council officers may carry out periodic inspections of the premises to ensure compliance with relevant environmental health standards and Council may charge an approved fee for this service in accordance with Section 608 of the *Local Government Act 1993*.

The approved fees are contained in Council's Management Plan and may be viewed or downloaded at www.ryde.nsw.gov.au.