Appendix E

DCP compliance table

Macquarie Park Data Centre SSDA

The Trust Company Limited ACN 004 027 749 as custodian for Stockland Trust Management Limited ACN 001 900 741 as trustee for Advance Property Fund

18-Oct-2020

Development Control Plan Compliance Assessment

Macquarie Park Data Centre SSDA

Development Control Plan Compliance Assessment

Macquarie Park Data Centre SSDA

Client: The Trust Company Limited ACN 004 027 749 as custodian for Stockland Trust Management Limited ACN 001 900 741 as trustee for Advance Property Fund

ABN: 24 976 581 817

Prepared by

AECOM Australia Pty Ltd
Level 21, 420 George Street, Sydney NSW 2000, PO Box Q410, QVB Post Office NSW 1230, Australia
T +61 2 8934 0000 F +61 2 8934 0001 www.aecom.com
ABN 20 093 846 925

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1.0 Introduction

Section 4.15(1)(a)(iii) of the *Environmental Planning and Assessment Act 1979* requires the consent authority to consider any development control plan (DCP) that is relevant to the development. As noted in **Chapter 4** of the EIS, given that the Proposal constitutes State Significant Development the DCP does not need to be considered as part of this development application.

Notwithstanding this exemption, the relevant sections of the DCP have been considered to ensure that the development is consistent with the City of Ryde's expectations for the area. The relevant sections of the DCP are:

- Section 4.5 – Macquarie Park Corridor
- Section 7.1 – Energy smart, water wise
- Section 7.2 – Waste minimisation and management
- Section 8.1 – Construction activities
- Section 8.2 – Stormwater and flood plan management
- Section 8.3 – Driveways
- Section 9.2 - Access for people with disabilities
- Section 9.3 – Parking controls

A compliance assessment of each relevant chapter of the DCP is provided in the presiding sections.

2.0 Development Control Plan Compliance Assessment

Table 1 DCP Compliance Assessment

Section	Control	Assessment	Compliance
Part 4.5 – Macquarie Park Corridor			
2.0	**Vision** Macquarie Park will mature into a premium location for globally competitive businesses with strong links to the university and research institutions and an enhanced sense of identity. The corridor will be characterised by a high quality, well-designed, safe and liveable environment that reflects the natural setting, with three accessible and vibrant railway station areas providing focal points. Residential and business areas will be better integrated, and an improved lifestyle will be forged for all those who live, work and study in the area.	The Proposal is considered consistent with the vision of the Macquarie Park Business as it would: • Support the growth of data storage and hosting in NSW • Provide critical infrastructure for the growth for the digital economy within NSW and more broadly • Directly contribute to the important role that Macquarie Park plays as an innovation district within the broader Eastern Economic Corridor, as identified by the Greater Sydney Commission • Provide up to 350 – 400 jobs during construction and approximately 50 jobs during operation, all within Sydney's 'global economic corridor' • Be located within an area of low susceptibility to potential amenity impacts arising during construction and operation • Be located within close proximity of key customers and utility and transport infrastructure • Present the most rational method of developing a new data storage facility according to the operator's specific requirements • Provide for the advantageous, orderly and economic use of land in an area subject ongoing commercial regeneration.	Compliant
3.0	**Structure Plan**	The site is mapped under the DCP to support business and commercial activities pursuant to the structure plan. The Proposal being a data centre is considered	Compliant

Section	Control	Assessment	Compliance
	The Structure Plan sets out the broad framework for development within the Macquarie Park Corridor. It underpins the development controls within this Plan and is supported by Ryde LEP 2014.	permissible within the relevant zone under the LEP and is a consistent land use in accordance with the structure plan. As such, the proposal is considered compliant against this control.	
4.0	**Access Network** The Access Network Structure Plan provides a clear hierarchy of street types, including the extension of existing streets and a network of new streets (20m and 14.5m) and pedestrian ways (8m). The Access Network maximises cross connections within the corridor and to surrounding areas.	The Proposal includes the construction of Road 22 along the south-eastern boundary of the site. Pursuant to Control 4.1 of the DCP, Road 22 has been designed 14.5m wide to ensure compliance with the DCP Access Network.	Compliant
4.1	**Streets** a. Provide new public streets and pedestrian connections in accordance with Figure 4.1.1 Access Network b. New streets are to be dedicated to the Council. New streets are to be maintained by the landowner until dedicated to Council. c. Buildings are not permitted to be located on any proposed street and are required to be setback from proposed streets identified in Figure 4.1.1 Access Network. d. Each site is to provide for coordination of proposed streets with neighbouring sites, including level adjustments and detailed plans. This detail is to be provided together with the development application. e. Lighting, paving and street furniture, landscaped setbacks and tree planting are to be provided as required in the MPARK Corridor Public Domain Technical Manual f. Provide new Streets as following: 1. 20m wide (typical) streets in accordance with Figure 4.1.2 2. 14.5 wife (typical) streets in accordance with Figure 4.1.3 g. Where required by Council an additional 0.5m footpath is to be provided to augment the 14.5m streets to achieve a minimum 2.5m footpath.		Compliant
4.2	**Pedestrian Connections** a. Provide pedestrian bridges in accordance with the Access Structure Plan, Figure 3.4.1	The site would not be open to the public, however, the site planning of the greater M_Park development has integrated the proposed development within the existing	Compliant

Section	Control	Assessment	Compliance
	b. Provide pedestrian connections in accordance with Figure 4.1.1 Access Network. c. Pedestrian connections are to: 1. Be a minimum of 6m wide comprising 4m wide paving and 2m wide soft landscaping as shown in Figure 4.2.1 (or as determined by Council). 2. Be designed with a 2m setback to any building 3. Be publicly accessible at all times. 4. Provide a clear sightline from one end to the other for surveillance and accessibility 5. Maximise active frontages pedestrian connections. 6. Be designed to consider pedestrian safety and the security of adjacent businesses, particularly at night. 7. Extend and enhance the public domain and have a public domain character. 8. Be in accordance with Part 9.2 of this DCP Access for People with Disabilities and design to provide barrier-free access in accordance with AS1428 and the Disability Discrimination Act 1992. 9. Paving shall be in accordance with the MPARK Public Domain Technical Manual. 10. Remain in private ownership and be created as rights-of-way in favour of Council or similar mechanism. 11. Each site is to provide for coordination of pedestrian connections with neighbouring sites, including level adjustments and details plans.	road and footpath network and increased the permeability of the site to pedestrian and vehicular traffic. The proposed Road 22 would contribute to this integration, joining up with the future Road 01 which would pass to the west of M_Park. A new pedestrian pathway running to the north of the Project assists in pedestrian permeability of the greater development site.	
4.3	**Bicycle Network** a. Provide detailed cycle access in accordance with Ryde Bicycle Strategy 2014, refer to Figure 4.3.1 Indicative Cycleways. b. The Regional Bicycle network is to be implemented as off-street shared cycleways in accordance with the MPARK public domain technical manual. c. The Local Bicycle network is to be implemented as on-street shared ways in accordance with the MPARK Public Domain Technical Manual.	The introduction of Road 22 would result in a gap in the continuous shared-use path along Talavera Road. Pedestrians and cyclists would be required to come to a stop before safely crossing Road 22 to the other side of Talavera Road. Kerb ramps would be available on both sides of the shared path to facilitate safe and inclusive access across Road 22.	Compliant

Section	Control	Assessment	Compliance
		The Proposal would include bicycle racks and end of trip facilities. The availability of bicycle storage and end of trip facilities would ultimately encourage the use of active transport methods to travel to and from the Proposal during its operational phase. Ultimately, the Proposal is considered consistent the Regional and Local Bicycle Network and is therefore compliant with the DCP.	
4.4	**Public Transport** a. Upgrade the bus integrate in Herring Road in accordance with the Access Structure Plan b. Any DA that includes residential development on the Macquarie Park Shopping Centre site is to provide a master plan that demonstrates how the bus interchange upgrade may be achieved. **Travel Plans** c. A Framework Travel Plan is required to be submitted to Council for approval together with a DA for all development that exceeds 10,000m^2 new floor space. **Parking Rates** d. Bicycle parking and end of trip facilities are to be provided in accordance with Ryde DCP Part 9.3 Parking. e. Parking is to be provided in accordance with DCP Part 9.3 Parking Controls. **Car Share Parking** f. All parking spaces for car share schemes are to be: 1. Publicly accessible 24 hours a day, seven days per week. 2. Located together in the most convenient locations 3. Located near and with access from a public road and integrated with the streetscape through appropriate landscaping where the space is external. 4. Parking spaces for car share schemes located on private land are to be retained as common property by the Owners Corporation of the site.	A Framework Travel Plan (FTP) will be prepared and implemented as part of the Proposal. The FTP will include: • Strategies and procedures and an Action Plan to meet a 40 percent public transport/ 60 percent private transport target for the Proposal for journey-to-work trips • Information about infrastructure connections to the nearby footpath, bicycle and public transport networks	Compliant

Section	Control	Assessment	Compliance
7.1	**Site Planning and Staging** Sites are to be planned to allow for the future provision of new streets and open spaces in accordance with Figure 4.1.1 Access Network and Figure 5.1.1 Proposed Open Space Network.	The site has been designed in accordance with both the Access Network and Proposed Open Space Network Plans through the provision of Road 22.	Compliant
7.4	**Setbacks and Build-to Lines** a. Minimum setbacks and build-to lines must be provided as shown Figure 7.3.2 Active Frontage and Setback Control Drawing – summarised as follows: 1. Zero setbacks / build-to lines to Primary Active Frontage; 2. 5m setback to all existing and new streets unless otherwise specified; 3. 10m setback to Waterloo Road and Talavera Road; 4. 10m green setbacks to the M2 tollway and Epping Road; and 5. 5m built form setback to all parks (existing and proposed – subject to providing a Riparian Corridor in accordance with the NSW Office of Water's Guidelines for Riparian Corridors on Waterfront Land). b. Subject to negotiation with Council single storey structures which include active uses may be located within the Secondary Active Frontage. These structures must address the public domain, be transparent as far as practicable and will be subject to the ECRL Guidelines. c. Provide 2m setbacks to pedestrian pathways (unless within a building). d. Despite clause 7.2.a development may be set back further from the street or public domain where it can be demonstrated to Council that the impacts of development on underground rail infrastructure are not in accordance with the ECRL Underground Infrastructure Protection Guidelines Report No. 20007300/ PO-4532 obtainable from Transport for NSW. e. Council encourages development that complies with Figure 7.3.2 Active Frontage and Setback Control Drawing and meets the requirements of the ECRL Second Reserve Support Zone.	A setback of 10 m is provided to Talavera Road. All setbacks to other streets and site boundaries are greater than 5 m; being compliant with the DCP. No underground carparking is proposed that would impact or encroach on the front setback. A landscape plan has been prepared for the Project (Appendix C of the EIS for more detail). Landscaping on the ground floor of the site comprises retained trees with proposed underplanting on the eastern boundary (frontage), some planting near the proposed entry on the proposed Road 22, some planting on the western boundary along the future Road 01, as well as an elevated landscape extension structure over the hard stand area between Building B and the proposed adjacent structure to the north of the site with inclusion of additional canopy trees. Landscaping along Talavera Road and the proposed Road 22 would be outside the site boundary of the Project but would help soften the development when viewed from the streets with the use of retained and proposed native trees, shrubs and groundcovers. Further detail regarding the Landscaping and Visual Impacts of the Proposal are provided in **Chapter 6 (Landscape and Visual)** of the EIS.	Compliant

Section	Control	Assessment	Compliance
	The following are permitted in the Second Reserve support zone: 1. Excavations less than 3m in depth are not required to be assessed. Excavations 3m or more in depth are required to be assessed for their impact on the underground infrastructure, including impacts during construction. 2. Shallow footings with relatively light loadings (allowable bearing pressure of less than 150kPa on small pad or strip footings) are not required to be assessed. Other shallow footings and deep foundations are required to be assessed. f. Underground parking is not permitted to encroach into the front setback areas unless it can be demonstrated that the basement is designed to support significant mature trees and deep root planting. Refer to Figure 7.4.1. g. Awnings, canopies, balconies, sun shading and screening elements can project forward of the street setback line. h. 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.	Retention of existing mature vegetation along Talavera Road and the introduction of additional contributory landscaping is considered compliant with the requirement under the DCP.	
7.6	**Rear and Side Setbacks** a. Buildings are to be set back 10m from the rear boundary and 5m from a side boundary unless a proposed new road is shown on the site. b. Buildings are not to be constructed on the locations for proposed new roads. An allowance for a 5m setback from a proposed road should also be made. c. Awnings, canopies, balconies, sun shading and screening elements may project into the rear setback zones. d. Basement car park structures should not encroach into the minimum required rear or side setback zone unless the structure can be designed to support mature trees and deep root planting. e. Above ground portions of basement car-parking structures are discouraged and deep soil planting is promoted.	The Proposal has a rear setback greater than 10 m pursuant to the requirement under the DCP. In addition, both side setbacks are greater than 5 m.	Compliant

Section	Control	Assessment	Compliance
	f. Natural ground level is to be retained throughout side and rear setbacks, wherever possible. Refer to Section 8.4 Topography and Building Interface for controls.		
7.7	**Building Separation** a. Provide minimum 20 m separation between buildings facing each other within a site. Refer to Figure 7.7.1 Commercial Building Separation Controls. b. Provide minimum 10 m separation between buildings perpendicular to each other within a site. This reduced building separation control only applies where the width of the facing facades does not exceed 20 m. Refer to Figure 7.7.1 Commercial Building Separation Controls.	The Proposal is separated from adjoining development by greater than 20 m in accordance with the DCP. The Proposal forms part of a concept plan. Importantly, the Proposal is sited to ensure separation of all other buildings by greater than 10 m.	Compliant
7.8	**Building Bulk and Design** a. The floorplate of buildings above 8 storeys is not to exceed 2,000m², unless it can be demonstrated that slender building forms are achieved through courtyards, atria, articulation or architectural devices. b. Buildings are to address the street and are to have a street address. c. Facade design is to 1. Reflect and respond to the orientation of the site using elements such as sun shading and other passive environmental controls where appropriate. 2. Provide building articulation such as well design roof forms, expressed vertical circulation etc. 3. Express corner street locations by giving visual prominence to parts of the façade (eg a change in building articulation, material or colour, or roof expression). 4. Integrate and co-ordinate building services such as roof plant, parking and mechanical ventilation with the overall façade and building design and be screened from view. 5. Roof forms, building services and screening elements are to occur within the overall height controls. Refer to Ryde LEP 2014 for height controls.	Although the Proposal has a GFA of greater than 2,000 m², the building is 5 storeys. As such, the first control is not applicable. The proposed façade design comprises aluminium panelling and shading elements, brick cladding and aluminium weatherproof louvres. The materiality is designed to be warm, inviting, ecofriendly and provide weather resistance, thermal, acoustic and fire resisting properties. Detailed discussion regarding façade design in provided in **Appendix H (Visual Impact Assessment)** of the EIS. All habitable rooms within the Proposal are within 12 m of a natural source of light; as illustrated in the Architectural Plans contained in **Appendix B** of the EIS.	Compliant

Section	Control	Assessment	Compliance
	6. Ventilation louvres and car park entry doors are to be coordinated with the overall façade design. d. The distance of any point on a habited floor from a source of natural daylight should not exceed 12m (such as from the core to an external window). 1. Atria and courtyards are to be used to promote access to natural light, pedestrian links and slender building forms. 2. Arrange courtyards and atria to respond to street lot & solar orientation. 3. The preferred height to width ratio of atria is 3:1. e. Buildings are to be designed to be flexible – car parking above the ground level is to have a floor to ceiling height of not less than 2.7m.		
8.1	**Site Planning and Staging** a. Sites are to be planned to allow for the future provision of new streets, pedestrian connections and open spaces in accordance with Figure 4.1.1, Figure 5.1.1. b. All sites 15,000m^2 or more in area should lodge a site-specific Master Plan and/ or Stage 1 development application for approval.	The Proposal forms part of a broader concept plan. Importantly, the concept plan has been designed with buildings sited to allow for the provision of the following: • Central open space • New key pedestrian through site link • Road 22. The Project site is less than 15,000 m^2 and therefore does not require the preparation and lodgement of a site-specific master plan.	Compliant
8.2	**Site Coverage, Deep Soil Areas and Private Open Space** a. A minimum 20% of a site must be provided as deep soil area. b. Deep soil areas must be at least 2 m deep. c. For the purpose of calculating deep soil areas, only areas with a minimum dimension of 20 m x 10 m may be included. d. A minimum 20% of the site area is to be provided as Landscaped Area. Landscaped Area is defined as: Area on the site not occupied by any buildings, except for swimming pools or open air recreation facilities, which is landscaped by way of gardens, lawns, shrubs or trees and is available for use and enjoyment by the occupants of the building, excluding areas used for driveways, parking areas or drying yards.	Landscaping would be provided, as outlined in the landscape plans included at **Appendix C (Landscape Plan)**. A selection of the existing trees along Talavera Road would be retained. An elevated landscaped level running the length of the building on the northern side of the site would be positioned at the level of the pedestrian pathway within M_Park to the north. This level provides a planted zone level with the adjacent M_Park pedestrian pathway, softening views to the Project from within M_Park to the north. Planting mixes comprising native plants of differing	Partially compliant

Section	Control	Assessment	Compliance
	e. Solar access to communal open spaces is to be maximised. Communal courtyards must receive a minimum of 3 hours direct sunlight between 9 am and 3 pm on the 21st of June. f. Appropriate shading is to be provided so that communal spaces are useable during summer. g. Communal open spaces are to incorporate the primary deep soil area where possible. h. Landscaping is to contribute to water efficiency and effective stormwater management. Landowners are to consult with Council for requirements to address stormwater quality	forms and heights would provide interest and native habitat within the site. Further detail regarding contributory planting is provided in **Appendix C (Landscape Plan)** and **Appendix J (Visual Impact Assessment)**, as well as being discussed in **Chapter 6 (Landscape and Visual)** of the EIS.	
8.3	**Planting on Structures** a. Provide optimum conditions for plant growth by providing appropriate irrigation and drainage methods. b. Design planters to provide the largest possible volume of soil, in accordance with the standards contained in this DCP.		Compliant
8.4	**Topography and Building Interface** a. Level changes across sites are to be resolved within the building footprint. 1. Where buildings are built to the street boundary (i.e. zero setbacks, refer to Section 7.4. Setbacks and Build-to Lines), a level transition must be provided between the building and the adjacent footpath. This level must be maintained for a minimum depth of 10 m into the building. 2. Where buildings are set back from the street boundary, entries are to be provided at street level wherever possible. b. An accessible path of travel is to be provided from the street through the main entry door of all buildings. 1. Where necessary, stairs and ramps are to be integrated with the landscape design of front setbacks. c. Natural ground level is to be retained for a zone of 4 m from the side and rear property boundaries. Retaining walls, cut and fill are not permitted within this zone. d. The maximum height of retaining walls within the front, side and rear setbacks is not to exceed 1.2 m.	Enabling works for the Proposal would be carried out to prepare the site for construction and to provide protection to the surrounding public. The site will be mostly in cut with perimeter retaining walls around the west, south and eastern boundaries. The volume between the existing surface and the proposed surface has been estimated to inform an earthworks strategy for the site. Further design development is required to inform the bulk earthworks volumes and the estimate provided for the concept design stage is indicative only. Details regarding the site preparation activities and final levels is illustrated in **Appendix B (Architectural Plans)**. Following completion of the proposed earthworks, the site will be graded to ensure an accessible path of travel; from the street through the main entry of the Proposal.	Non-compliant

Section	Control	Assessment	Compliance
	e. Publicly accessible open spaces under private ownership (courtyards, forecourts) must be provided at footpath level. Where level changes cannot be avoided due to topography, the finished level of the open space must not exceed 1.2 m above footpath level.		
8.5	**Site Facilities** a. Vehicular access to loading facilities is to be provided from secondary and tertiary streets where possible. b. Rubbish and recycling areas must be provided in accordance with Section 6.3 Waste Management. These areas must: 1. be integrated with the development; 2. minimise the visibility of these facilities from the street; and 3. be located away from openable windows to habitable rooms. c. Barrier free access is to be provided to all shared facilities	Vehicular access to loading facilities is proposed off Road 22; being a secondary street. This is compliant with the DCP.	Complaint
8.6	**Vehicular Access** a. Where practicable, vehicle access is to be from secondary streets. b. Potential pedestrian/vehicle conflict is to be minimised by: c. Limiting the width and number of vehicle access points 1. Ensuring clear site lines at pedestrian and vehicle crossings 2. Utilising traffic calming devices 3. Separating and clearly distinguishing between pedestrian and vehicular accessways d. The appearance of car parking and service vehicle entries is to be improved by 1. Locating or screening garbage collection, loading and servicing areas visually away from the street 2. Setting back or recessing car park entries from the main façade line 3. Avoiding black holes in the façade by providing security doors to car park entries 4. Where doors are not provided, it is to be ensured that the visible interior of the car park is incorporated into the façade	Vehicular access is not proposed from Talavera Road. Instead, access to the Proposal is intended off Road 22, being a secondary road. This road is considered a shared zone and will be appropriately paved to minimise pedestrian conflict. The width of the access crossing is designed in order to facilitate compliant access for heavy rigid vehicles that intend to access the site during construction and operation. Further detail regarding access arrangements is discussed in **Chapter 3 (Project Description)** and **Chapter 8 (Traffic and Transport)** of the EIS.	Compliant

Section	Control	Assessment	Compliance
	design and material selection and that building services pipes and ducts are concealed, and 5. Returning the façade material into the car park entry recess for the extent visible from the street as a minimum. e. The width of driveways is to be determined in accordance with the requirements of Ryde DCP 2014 and the relevant Australian Standards.		
8.7	**On-site Parking** a. Safe and secure 24-hour access to car parking areas is to be provided for building users. b. Parking areas are to be screened from view from the street, public domain and communal open spaces areas. c. Provide safe and direct access from parking areas to building entry points d. Provide appropriate mature vegetation between parking bays to provide shade and enhance visual impact.	A total of 48 operational car parking spaces would be provided, being a combination of 90-degree angle parking and parallel parking. Three of these spaces would be designated as “small car” spaces and are located along the northern face of the building. One accessible parking space is provided at the southeast corner of the building. Details regarding on-site parking provision is provided in **Chapter 8 (Traffic and Transport)** of the EIS. All parking is screened from public view, through the retention of mature vegetation along Talavera Road and additional contributory landscaping. Details regarding visual screening are discussed in **Chapter 6 (Landscape and Visual)** of the EIS.	Compliant.
8.8	**Fencing** a. Fencing is not permitted on the perimeter boundary of sites. Security should be provided within buildings.	Given the security requirements for the Proposal the site boundary is fenced with a black 2.4 m tall security fence. This fencing type has been used by other properties within the surrounding area, such as the property on the opposite corner at the intersection with Khartoum Road and Talavera Road.	Non-compliant
9.1	**Wind Impact** a. Buildings shall not create uncomfortable or unsafe wind conditions in the public domain which exceeds the Acceptable Criteria for Environmental Wind Conditions. Carefully locate or	It is not anticipated that the Proposal will create uncomfortable or unsafe wind conditions. Extensive assessment of existing meteorological conditions and the subsequent impact of the Proposal has been conducted as part of an Air Quality Impact Assessment. Details	Compliant

Section	Control	Assessment	Compliance
	design outdoor areas to ensure places with high wind level are avoided. b. All applications for buildings over 5 storeys' in height shall be accompanied with a wind environment statement. For buildings over 9 storeys' and for any other building which may be considered an exposed building shall be accompanied by a wind tunnel study report. Refer to Council for documentation and report requirements. c. Calculation rules 1. Natural wind conditions are intensified by certain types of buildings by the way they relate to the surrounding area. In this section, those buildings are called exposed buildings. 2. A building may be considered exposed if half or more of its height rises above surrounding buildings and/or the building lies on the perimeter of a built-up area. 3. Exposed buildings are likely to create unpleasant and even dangerous high winds, mainly in three locations: at the base, around corners or through arcades or other openings at the base of the building. 4. In addition, the areas within the exposed buildings that could potentially experience adverse wind effects are the areas on the podium, terraces on the roof or on setbacks in the tower as well as projecting or corner balconies.	regarding the outcomes of this assessment is provided in **Appendix I (AQIA),** as well as discussed in **Chapter 10 (Air Quality**) of the EIS. For completeness, the Proposal does not exceed 5 storeys in height. As such, the development application is not required to be supported by a wind environment statement.	
9.2	**Noise and Vibration** a. An Acoustic Impact Assessment report prepared by a suitably qualified acoustics consultant is required to be submitted with all development applications for commercial, industrial, retail and community buildings. b. Development is to comply with all relevant statutory regulations. c. Where light industrial and commercial development adjoins residential development, the use of mechanical plant equipment and building services will be restricted and must have appropriate acoustic insultation. d. Loading and unloading facilities must not be located immediately adjacent to residential development.	A NVIA has been prepared as part of the EIS (**Appendix J**). The purpose of the NVIA is to identify potential impacts of the Proposal and to outline mitigation measures relating to noise and vibration during and construction and operation of the Proposal.	Compliant

Section	Control	Assessment	Compliance
	e. Air conditioning ducts shall not be situated immediately adjacent to residential development.		
9.4	**Soil Management** a. Development is to comply with the City of Ryde DCP 2014. b. 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. c. Effective site management and maintenance practices are to be followed to prevent soil loss. d. Ensure that suspended Solid concentrations in stormwater leaving the site do not exceed more than 50 mg/litre. e. An Erosion and Sediment Control Plan (ESCP), prepared by a suitably qualified environmental engineer, is required to be submitted in support of all development proposals requiring development consent under the Ryde Local Environmental Plan, (other than for minor building modifications) including: Demolition; Excavation; Trenching and Building. f. The ESCP must make reference to the entire construction and post construction period, and all devices must be installed prior to commencement of any demolition or construction works on-site. g. The ESCP is to be prepared in conjunction with the Site Stormwater Management Plan and as a minimum contain the following information: 1. Property details; 2. Site analysis (contours, access points, location of existing vegetation/creeks or other features); 3. Extent and degree of clearing works and any excavations; 4. Conservation/protection of sensitive areas and trees either on site or adjoining development; 5. Truck movements and access arrangements/routes (load limits); 6. Sediment and Erosion Control Measures (location and type of all control measures); 7. Excavation pit protection;	The Proposal requires a flat building envelope in order to accommodate the operation of the data centre. As such, the Proposal includes extensive earthwork requirements, given the existing grade of the site. A detailed discussion around the impacts of the site excavation activities is provided in **Chapter 7 (Geology, Soils and Contamination).** A site-specific Erosion and Sediment Control Plan would be prepared and implemented in accordance with the (*Managing Urban Stormwater: Soils and Construction – Landcom, 2004*) (Blue Book). The Erosion and Sediment Control Plan would be established prior to the commencement of construction and be updated and managed according to the activities occurring during construction. Erosion and sediment control measures would be established prior to site establishment activities and would be maintained and regularly inspected during construction (particularly following rainfall events) to ensure their ongoing functionality. Erosion and sediment control measures would be maintained and left in place until construction is complete and areas are stabilised	Partially compliant

Section	Control	Assessment	Compliance
	8. Material stockpile location and control method, waste management; 9. Pump out method (if required); 10. Dust control measures to reduce surface or airborne movement of sediment from exposed areas of the site; 11. Hours of operation 12. Ongoing maintenance methods 13. Risks, safeguards and safety precautions; and 14. Contingencies.		
Part 7.1 – Energy Smart, Water Wise			
2.4	**New Shops, Industrial and Commercial Premises** a. The total anticipated energy consumption for the base building is no greater than 450 Mega Joules/annum/metre square [MJ/am^2] (commercial) and 900 Mega Joules/annum/metre square [MJ/am2] (retail). b. Any hot water system/s installed as part of a development or as a replacement must consider the most efficient option available to minimise greenhouse gas emissions (see diagram below as a guide). c. Any products installed as part of a development or as a replacement that are regulated for energy efficiency under the Australian Standards for Products and/or Minimum Energy Performance Standards (MEPS) must achieve a Minimum energy rating of 4.5 stars. d. Shower heads shall be at least 3 star rated water efficient 4 star dual flush toilets, 4 star taps (for all taps other than bath outlets and garden taps) and 3 star urinals, bathroom and kitchen taps shall be fitted with aerators; and water closets shall have a dual flush cistern. e. The installation of energy efficient lighting, motion detectors and dimmers where appropriate are encouraged. f. Any products installed as part of a development or as a replacement that are regulated for water efficiency under Water Efficiency Labelling and Standards (WELS) Scheme must obtain	A Section J Report has been prepared in support of the Proposal. The report provides advice to the design team on the building fabric requirement for the Proposal in order to comply with the requirements of Part J1 of the National Construction Code (NCC) 2019; published by the Australian Building Code Board. The findings of this report is provided in **Appendix B (Architectural Plans)** of the EIS.	Compliant

Section	Control	Assessment	Compliance
	a Minimum WELS rating of 4.5 stars. Products that carry a star water label and are regulated under WELS include clothes washing machines and dishwashers. The water star rating as well as date of purchase of the product should be visible on the product at all times. The Federal Governments WELS website has a comprehensive list of efficient appliances based on star ratings.		
Part 7.2 – Waste Minimisation and Management			
2.3	**All Developments** a. Developments must provide space on-site for the sorting and storage of waste in containers suitable for collection. b. The size of storage areas and number of storage containers required must be sufficient to handle and store the waste likely to be generated and stored on the premises between collections. The space is to be calculated using information in Schedule 1 Indicative Bins Sizes, Schedule 2 Standard Waste and Recycling Bins for Residential Developments and Schedule 3 Commercial Waste/ Recycling Generation Rates attached to this Part. The type and requirements of storage spaces may differ depending on development or land use type (refer Sections 2.4, 2.5, 2.6, 2.7, 2.8 and 2.9 in this Part.) c. Additional space must be provided for the storage of bulky wastes where appropriate. d. Allowance must be made for the storage of green waste where relevant. e. All waste containers must be stored within the boundaries of the site unless otherwise approved by Council under Section 68 of the Local Government Act 1993. f. All applications for development, including demolition, construction and the ongoing use of a site/premises, must be accompanied by: 1. A Site Waste Minimisation and Management Plan (SWMMP);	A Waste Management Plan is provided as **Appendix F** of the EIS. All waste would be stored entirely within the boundary of the site. The waste storage area is located in the loading dock area with access via stairs or from ground level via the loading area. The bins are located in positions that do not disturb the amenity of the site or interrupt parking. The waste area is readily accessible for collection vehicles. The waste storage area is not visible from the street. All waste generated by the development will be stored within the boundaries of the site. All waste storage and recycling areas have been indicated on the Architectural Plans provided in **Appendix B**. The path for wheeling bins between the waste and recycling storage room/area and the vehicle collection point is free of steps and kerbs Vehicular access to all waste areas has been designed accordance with Australian Standard AS 2890.2-2002 Parking Facilities – Part 2: Off-street commercial vehicle facilities.	Compliant

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	2. location and design details of waste storage facilities on the site. Relevant details of waste storage, waste facility design and access thereto proposed as part of the development must be clearly illustrated on the plans of the proposed development accompanying the development application. Details of waste storage rooms/areas should include floor plan, elevations and cross section drawings of the room, and details on materials and finishes. Drawings are to be submitted to scale clearly indicating the location of and provision for the storage and collection of waste and recyclables during: - Demolition - Construction - Ongoing operation. g. In all development, waste and recycling storage areas and facilities should be provided and be located in positions that: 1. Provide easy, direct and convenient access for the users of the facility; 2. Permit easy transfer of bins to the collection point if relocation of bins is required; 3. Permit easy, direct and convenient access for collection service providers; 4. Do not intrude on car parking, landscaping, access and turning areas required for the type and scale of development; 5. Do not reduce amenity (minimises the potential for noise, odour and other amenity and environmental Impacts on residents and other occupants); 6. Maximize protection of trees and significant vegetation. h. No incineration devices are permitted. i. A collection point for waste collection is to be identified on the plans submitted with the development application. The collection point must be conveniently located for users and services		

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	purposes and sited so that waste collection vehicles do not impede the access to the site or car parking facilities when servicing the bins so that waste can be safely and easily collected. j. The path for wheeling bins between the waste and recycling storage room/area and the vehicle collection point must be free of steps and kerbs and, in the case of residential development, of a gradient of less that 14:1, and for all other development types, of a grade to the satisfaction of Council. The waste storage area must be as close as practicable to the collection point. k. Access driveways and service areas for waste collection vehicles must be designed in accordance with Australian Standard AS 2890.2-2002 Parking Facilities – Part 2: Off-street commercial vehicle facilities. l. All waste facilities must comply with the Building Code of Australia (BCA) and all relevant Australian Standards (AS). m. Heritage conservation considerations may alter requirements of this Part in the refurbishment of existing buildings. Designs should be discussed with Council's Heritage Advisor. n. Any equipment, such as volume reducing equipment, will be required to be installed in accordance with the manufacturer's instructions.		
2.10	**Industrial** a. All industrial developments must include a designated general waste and recycling storage area (either an external area, or an internal room or a combination of both) which has adequate storage space to meet the needs of the activity in terms of expected nature of the waste (type of waste stream) and expected volumes. b. Waste and recycling storage rooms and areas are to be capable of providing space sufficient for the opportunity for waste to be separated into at least 4 streams: paper/cardboard, recyclables, general waste, industrial process type waste.	A designated waste storage area of 32 m^2 is provided adjacent to the loading dock area at the ground floor level. This area is considered to have adequate space for all waste streams anticipated to be generated by the Proposal. The proposed 32 m^2 waste storage area contains room for the provision of bins for four separate waste streams. All hazardous and special waste would be stored in accordance with relevant occupational health and safety and environmental protection legislation (refer **Appendix F** of the EIS).	Compliant

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	c. Hazardous and special waste is to be stored in accordance with relevant occupational, health and safety and environmental protection legislation. d. In premises where more than 50 litres of seafood, poultry or meat waste per day is generated, the waste must be stored in a refrigerated waste room until collected or have that waste collected daily. e. Waste and recycling storage rooms are to be designed and constructed in accordance with Schedule 4: S4.2 Waste and Recycling Storage Rooms. f. External waste and recycling storage areas must be designed and constructed in accordance with Schedule 4: S4.5. External Waste and Recycling Storage Areas. g. For multi-use industrial premises and industrial unit complexes, a waste storage and recycling area is to be provided per unit or in a communal space, which is designed to allow a range of uses. Space must be also provided in each occupancy for the temporary storage of wastes and recyclables generated in that area. h. Space is to be provided for compactors and for any other equipment necessary to manage the waste and recycling likely to be generated on the premises. Sufficient space is also required for storage of the waste (such as cardboard boxes) prior to processing. i. Space must be provided for the installation of grease traps or other wastewater pre-treatment equipment if required by Sydney Water Corporation. Grease traps must be installed outside the building or in a dedicated grease trap room. Grease traps must not be accessed through food handling and storage areas. j. Sufficient space in the development must be allocated to store bulky items such as used pallets and crates to prevent illegal dumping in the public domain. k. Separate space must be allocated for the storage of liquid wastes and oils etc. The liquid waste storage areas must be undercover and bunded to prevent the escape of spills or leaks.	The Proposal would contain sufficient space for the temporary storage of bulky items including pallets and/or crates as necessary. Despite this, the Proposal is not considered to be a use that would consistently produce bulky waste items Liquid waste would be temporarily stored separately and in appropriate containers (refer **Appendix F** of the EIS) There would be provision within the loading dock area of the Proposal for waste collection vehicles to stand in a forward direction when collecting waste Vehicle circulation within the Proposal Site is suitable for the movement of waste collection vehicles – refer to **Appendix P** of the EIS. The driveway has been designed to be suitable for collection vehicles in terms of pavement strength, spatial design, access width and height clearances	

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	l. Where possible, access must be provided for waste collection vehicles to stand on the premises when collecting wastes and leave the site in a forward direction. m. On industrial properties in close proximity to residential development, care must be taken in design and siting of the waste and recycling storage rooms/areas to ensure that amenity (such as odour from storage, noise impacts from collection activities) are kept to a minimum. n. Adequate access must be provided for the users, waste collection staff and collection vehicles. Where collection vehicles are required to drive into a property to collect waste and recycling 1. The site must be designed to allow collection vehicles to enter and exit the property in a forward direction with minimal need for reversing and to be operated with adequate clearances; and 2. The driveway and any basement space needed are to be suitable for collection vehicles in terms of pavement strength, spatial design, access width and height clearances. Appendix C Collection Vehicles and Appendix D Vehicle access/Turning Circles under the Better Practice Guide for Waste Management in Multi-Unit Dwellings, DECC 2008 are to be used as a guide.		
Part 8.1 – Construction Activities			
2.1.1	**General** a. Appropriate site works practices are to be adopted during the construction phase of a development in order to: 1. Counter the effects of soil erosion and sedimentation. 2. Generally, apply the principles of ecologically sustainable development (ESD) 3. Employ best management practices (BMP) based on the best available technology in order to mitigate soil erosion and trap pollutants at the source.	Appropriate site work practices will be adopted during the construction phase of the development. This will be managed through the preparation and implementation of a CEMP. Details around management and mitigation measures to be included in the CEMP is provided in **Chapter 7 (Geology, Soils and Contamination)** of the EIS.	Compliant

Section	Control	Assessment	Compliance
2.1.2	**Erosion and Sediment Control Plan** a. For construction sites between 250m^2 and 2,500m^2 an ESCP must be prepared and approved prior to any Construction Certificate being issued to undertake development on a property involving the disturbance or placement of soil on the land. b. ESCP submitted are to be concept plans of sufficient detail to determine whether the sites can be developed in the manner suggested whilst incorporating adequate erosion control. c. For those works not requiring the consent of Council, it remains the owners/ builder's responsibility to ensure that adequate erosion and sedimentation controls are provided on the site. d. Erosion and sediment control measures once installed are to be maintained so as to ensure their continued proper operation until such time as development activities have been completed.	A site-specific Erosion and Sediment Control Plan would be prepared and implemented in accordance with the (*Managing Urban Stormwater: Soils and Construction – Landcom, 2004*) (Blue Book). The Erosion and Sediment Control Plan would be established prior to the commencement of construction and be updated and managed according to the activities occurring during construction.	Compliant
2.1.4	**Soil and Water Management Plans** a. For construction sites larger than 2,500m^2 or identified as being either in an extra sensitive location and or an activity with a high level of risk of pollution of the receiving waters, a SWMP must be prepared.	A Soil and Water Management Plan (SWMP) will be prepared and implemented as part of the Construction Environmental Management Plan (CEMP). The Plan will identify all reasonably foreseeable risks relating to soil erosion and water pollution associated with undertaking the Proposal and describe how these risks will be managed and minimised during construction. This will include arrangements for managing pollution risks associated with: • management of fuels, chemicals used in the Proposal • management and handling of waste and litter generated during construction • identification and management of contaminated soils • identification and management and monitoring during and post-construction • response to spillage or contamination on the site and adjoining areas.	Compliant

Section	Control	Assessment	Compliance
		The preparation of the SWMP ensures compliance against this DCP control.	
Part 8.2 – Stormwater and Floodplain Management			
2.2	**Property Drainage** a. Stormwater runoff draining from impervious/ hardstand areas must be collected and conveyed via pipe or an engineered open channel to a discharge point in accordance with this Part and the Stormwater and Floodplain Management Technical Manual b. Stormwater runoff from soft landscaping or turfed areas should be conveyed to a discharge point in accordance with this Part and the Councils Stormwater and Floodplain Management Technical Manual or otherwise dealt with in a manner to mimic state of nature conditions and avoid long-term ponding. c. The property drainage network must be designed with sufficient capacity to safely convey stormwater run-off generated from design storm events listed in the Stormwater and Floodplain Management Technical Manual. d. Stormwater runoff, including overland flows entering the site from upstream properties, must be managed to provide fail-safe protection to buildings, properties and persons either on private property or in the public domain. e. Where a multi dwelling housing development is proposed on a site that consolidates two or more lots and any adjoining upslope properties do not have the benefit of a drainage easement, the development must be designed to potentially accommodate a new drainage easement benefitting upstream properties. f. The design and location of all drainage components must be visually unobtrusive and integrated with site landscaping to ensure they do not detract from the streetscape appearance of the development.	Following the completion of construction of the Proposal, all disturbed areas would be reinstated and 'made-good'. No substantial ground disturbance during operation is anticipated. Any ground disturbance during operation is likely to be limited to maintenance and gardening activities. As such, for water that would be collected by the proposed stormwater drainage network or the Proposal, most pollutants are likely to originate from the following: • The roof areas of the Proposal • Landscaped areas (sediment and possible nutrients) • Outdoor parking areas • Road/vehicle circulation areas. To limit the potential for water collected from these areas to result in downstream water quality impacts, a treatment device train will be to be incorporated into the design of the stormwater network for the Proposal. Details regarding the specific stormwater management controls is provided in **Chapter 19 (Groundwater, surface water and flooding)** of the EIS.	Compliant
2.3.1	**Preferred Discharge Point** a. Stormwater runoff from property must be directed to either public drainage infrastructure, a natural watercourse or public reserve under gravity feed wherever possible, with the point of	All collected stormwater will be disposed of into the existing Sydney Water network.	Compliant

Section	Control	Assessment	Compliance
	connection designed in accordance with Section 1.4.1 of the Stormwater Technical Manual. b. Stormwater discharge from multi-residential dwellings, commercial, retail and industrial development on sites greater than 1000m^2 and within 30 metres of inground public drainage infrastructure, must extend this drainage infrastructure to the site, so as to enable a direct connection be made to this infrastructure. c. For sites that fall to a public reserve and are within 30m. of public drainage infrastructure, a direct connection to this must be made and will require the extension of the infrastructure to the site, unless an exemption is granted by Council after consideration of the scope of development relative to the cost of the exercise as well as construction logistics and affectation to the reserve		
2.3.2	**Private Drainage Easements** a. Where development is to utilise an existing private drainage easement to drain, proof of the right to drain through the easement and clarification of the infrastructure in the easement (or works required to accomplish this) must be presented prior to consent to ensure the means of drainage is viable. b. Where a new private drainage easement must be established to legally convey stormwater runoff through a downstream property to a preferred discharge point, a private drainage easement must be obtained. Refer to Section 1.6 of the Stormwater Technical Manual in relation to this process.	No discharge easement is proposed as part of the Proposal.	Not applicable
3.3.1	**Stormwater Quality** a. All development applicable under this section must prepare a Water Sensitive Urban Design Strategy Plan (WSUD Strategy Plan) which is to contain, but is not limited to, the following items plus be in accordance with Council's document, "Water Sensitive Urban Design Guidelines". 1. Stormwater Management plan of the site and proposed development marked with constraints and opportunities.	A Construction Soil and Water Management Plan (CSWMP) would be developed to manage the soil and water issues relevant to the construction of the Proposal. To achieve the required pollutant reductions, a water quality treatment train is proposed to be delivered as part of the Proposal. This would involve:	Compliant

Section	Control	Assessment	Compliance
	2. Details of the treatment methodology for achieving the stormwater quality targets specified in control (b) with due consideration for the constraints and opportunities of the site noted above. All measures must be located on the property. 3. Describe how the treatment methodology will integrate with the urban design. 4. An analysis of non-potable water demand for the proposed development. b. WSUD measures incorporated into the development must satisfy the following pollutant target controls. c. All treatments are to be located inside the confines of the property.	• Primary treatment would occur within a 10 kilolitre rainwater tank and an Ocean Guard 200 filter (or similar) would be applied to the stormwater pits • Secondary treatment would be provided by a filtration system, which may comprise a Storm Filter System that includes a Storm Filter Chamber and Psorb devices (or similar). Water quality modelling of the proposed development has been undertaken using MUSIC Version 6.3.0, developed by eWater CRC. MUSIC enables the user to conceptualise the transfer of pollutants through a stormwater drainage system and it provides an aid in quantifying the effectiveness of the proposed stormwater quality treatment train. Details of the water quality modelling is provided in **Chapter 19 (Groundwater, surface water and flooding)** of the EIS.	
3.3.2	**Water Harvesting and Reuse** a. All development applicable under this section that does not require a BASIX certificate, must provide a rainwater tank to meet greater than the 50% of non-potable water demand. b. Water use within open space areas of the development (for uses such as irrigation, ponds and water features, etc) must be supplied from sources other than potable water. This may include rainwater storage tanks or treated grey water, to meet 80% of the water use demand.		Compliant
Part 8.3 - Driveways			
2.0	**Design Standards** Layout and design of the driveway and/or parking facility shall take into account the following: a. Frontage access, including sight distance and minimum disturbance to through traffic and pedestrian safety; b. Ensure minimum conflicts within the car park area and the provision for circulating capacity during peak periods; c. Ensure pedestrian and road user safety at points of conflict; d. Ensure no scraping of vehicles will occur;	A swept path analysis (refer **Appendix P** of the EIS) was undertaken to determine the feasibility of the site for vehicle manoeuvrability in terms of access and circulation. Modelling was undertaken for: • Entry and exit of vehicles up to 19 metres in length where the vehicle has accessed the site via a right turn into access point 1 but has been denied entry, and consequently exits via access point 2	Compliant

Section	Control	Assessment	Compliance
	e. A maximum of two crossings will be permitted to any public road and the crossing widths of crossings shall be in accordance with details in the technical section; f. The footway crossing should be located so as not to be influenced by any existing obstruction that may adversely affect sight lines ingress and aggress and vehicular and pedestrian safety; g. The required width of any footway crossing across the public footway shall be sized based on the location of the crossing, the traffic volume using the crossing and the type of road. Full details of these are set out in the technical section; h. All traffic management measures deemed necessary by Council's traffic engineer and/or the traffic committee are to be provided by the developer to Council's satisfaction; and i. Vehicle Turning Templates according to AS290.1:2004 and AS2890.2-2002.	• Entry and exit of vehicles up to 19 metres in length where the vehicle has accessed the site via a right turn into access point 1, access has been granted, and consequently the vehicle circulates the building in an anti-clockwise direction and exits the site via access point 1 (vehicles up to 12.5 metres long) or access point 2 (vehicles between 12.5 metres and 19 metres long) • Entry and exit of a typical light vehicle into/out of access point 1 • A 12.5 metre long heavy rigid vehicle travelling in an anti-clockwise direction around the building and reversing into the loading dock • A 300 tonne mobile crane entering the site from access point 3, circulating the building in an anti-clockwise direction and exiting the site via access point 2. This swept path analysis shows that for each of the above scenarios, the Proposal Site has adequate space to accommodate each of the above movements. In addition, the Proposal, through its traffic movements, would not impact on private property access near the site during the operational stage.	
4.1	**General** Where the development must provide on-site parking facilities, the design of all parking spaces, circulation roads and manoeuvring areas on the property must conform to the minimum requirements outlined below and the design criteria in AS 2890.1-2004 Parking Facilities, Part1 Off-street Parking and AS 2890.2 –2002, Part 2, Commercial Vehicle Facilities Part 3 Bicycle parking Facilities and City of Ryde Car Parking and Driveways Technical Material (refer Schedule attached to this Part). In so far as any inconsistency exists between criteria outlined below and the Australian Standards, the criteria in this document shall apply.		Compliant
4.2	**Design of Parking Spaces** a. Parking spaces and driveway widths for all vehicles shall comply with A.S.2890 except where modified by the City of Ryde Car Parking and Driveways Technical Material (refer Schedule attached to this Part). b. Provision must be available within the property to enable vehicles (85th percentile vehicle) to enter and leave the	A total of 48 car parking spaces would be provided within the site, being a combination of 90 degree angle parking and parallel parking. Three of these spaces would be designated as "small car" spaces and are located along the northern face of the building. One accessible parking space is provided at the southeast corner of the building. All vehicles are able to enter and leave the designated	Compliant

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	designated parking space in a single 3-point turn manoeuvre. A 99th percentile vehicle shall be used for disabled vehicles. c. All vehicles must be able to enter and leave in a forward direction. This provision may be waived where the garage is located at the front of a dwelling and there is insufficient space within the front setback to provide a turning area. Turning templates are supplied in the appendix. A clearance of 300 mm should be added to both sides of the turning path. d. Concrete wheel strips may be used along straight sections of the driveway. However, a transition pavement must be constructed at both the ends of the strips to facilitate access into the parking area and onto the strips. Wheel strips are inappropriate for use in areas where vehicles are turning. Wheel strips dimensions are to suit the largest type of vehicles using the access way and shall be in accordance with details specify in the technical section. e. Where the access road circulates, the dimensions shall comply with Section 2.5 of AS2890.1:2004, Design of Circulating Roadways and Ramps	space in a single 3-point turn and leave in a forward direction.	
4.3	**Gradients for Cars and Small Rigid Trucks** a. The access driveway from the centreline of the public road to the parking space is to be designed to minimise entry hazards from the road, account for pedestrian safety and prevent scraping of vehicles using the access. b. Driveway profiles for maximum rise and fall are shown in City of Ryde Car Parking and Driveways Technical Material (refer Schedule attached to this Part). Council is to be consulted and a vehicular crossing application made to obtain driveway levels.	The grade of the access driveway and internal circulation path has been designed in accordance with the City of Ryde Car Parking and Driveways Technical Manual.	Compliant
Part 9.2 – Access for People with Disabilities			
4.1.6	**Class of Building – Class 5** a. The ground floor must comply with all applicable provisions of this Part and in developments with two or more storeys, where the aggregate floor area of all storeys above the ground storey is 400 m^2 or more, all storeys must comply with all applicable	The Proposal would be 5 storeys high with a gross floor level of 12,069.70 m^2. The Proposal includes two passenger lifts, with both lifts providing access from the ground floor to level 5 and one continuing to provide access to the roof.	Partially compliant

Section	Control	Assessment	Compliance
	provisions of this Part. In particular, lift access is to be provided to the upper storey or storeys.		
5.3	**Continuous Accessible Path of Travel** a. Continuous accessible path of travel throughout the building or other area is required. It is expected that all parts of buildings will be accessible to people with disabilities. b. Australian Standard, AS1428.2 provides technical details regarding continuous accessible paths.	All parts of the building would be accessible to people with disabilities and the Site would be graded to ensure an accessible path of travel; from the street through the main entry of the Proposal.	Compliant
5.4	**Width of Path** a. A wheelchair user needs a minimum of 1200 mm except at doors where more space is required. In addition, passing spaces need to be provided every 6 metres to allow two wheelchair users to pass.	Corridor widths are detailed on the architectural plans in **Appendix B** of the EIS and would generally be wider than 1200 mm.	Compliant
5.5	**Changes in Level** a. Even small steps or lips can prevent some wheelchairs from movement and may also be a hazard to ambulant people with disabilities. Any change in level that exceeds 3 mm must be ramped or an alternative access means provided (e.g. a lift).	The Proposal includes 25 mm step ramps, where required. Further the building would be serviced by two passenger lifts which would provide access to all levels of the building.	Compliant
5.6	**Vertical Clearance** a. People who have visual impairment or who are blind need to be sure that the path of travel is free from obstacles that might strike them on the head or upper body. There must be clearance above the path of at least 2000 mm.	All levels including mezzanines are over 2000 mm in height from floor to floor height.	Compliant
5.7	**Ramps and Landings** a. Generally, ramps must not have a gradient greater than 1:14. b. Ramps must have landings every 6 metres c. Ramps are to have dual handrails on both sides of the ramp. The top rail is to be 865 to 900mm from and parallel to the ground or floor and the lower rail is to be 665 to 700mm from and parallel to the ground or floor. Railings are to be a minimum of 30 and a maximum of 50mm diameter.	Ramps which have been incorporated into the Proposal include 4-degree sloped ramps, step ramps, and an external ramp which has been design in accordance with the *Disability Discrimination Act 1992* (DDA Act). There is also a ramp provided for the passenger lift on the roof level.	Compliant
5.8	**Ground and Floor Surfaces**	Material used for floor surfaces would be selected throughout detailed design / construction. Access for	Compliant

Section	Control	Assessment	Compliance
	a. Floor surfaces must be slip resistant so as not to be a hazard to people with disabilities. Where carpet is used it must provide a firm surface and be attached so that there are no changes in level greater than 3 mm between the carpet and any other surface.	people with disabilities would be taken in consideration when selecting materials.	
5.9	**Approaches and Entrances** a. All public entrances and employee entrances are to be accessible to people with disabilities. b. Thresholds are to be avoided but where they are essential, they must be no higher than 56 mm and be ramped using a threshold ramp with a gradient of no more than 1:8.	The Site would not be open to the public, however, all employee entrances would be accessible to people with disabilities. Where required, 25 mm step ramps are proposed to be installed.	Compliant
5.10	**Doors and Doorways** a. Must be at least 960mm wide. b. Needs to be sufficient circulation space at doors c. Where available, automatic sliding doors are preferred. d. If there is a revolving door an alternate entrance must be provided.	Most doors and doorways in the Proposal are wider than 960 mm and circulation space at doors has been incorporated in the design. Details are provided on the floor plan of the Proposal, within Appendix B of the EIS.	Partially compliant
5.11	**Lifts** a. Lifts should be provided in easily accessible locations in all buildings of more than two levels, excluding carparking levels b. Lifts must be able to be operated independently by people with disabilities. There must be sufficient room for a wheelchair user to turn around in the lift car and control buttons are to be within reach of a wheelchair user. Handrails are to be provided. c. Information in lifts must be provided in tactile, aural and visual formats. Visual information must be able to be read by a person with visual impairment.	Two lifts are proposed for the building, located on the north-east side and north-west corners of the building. Both elevators are designed to fit approximately 11 passengers. Information in lifts would be provide in tactile, aural and visual formats.	Compliant
5.12	**Tactile Ground Surface Indicators** a. People who are visually impaired or blind need to be warned of hazards in or adjacent to the path of travel. This can be done by including tactile indicators in the path of travel ahead of hazards such as ramps, steps, roadways or before overhead obstacles that are close to the path of travel.	Tactile indicators would be installed ahead of hazards such as ramps, steps, roadways or overhead obstacles.	Compliant

Section	Control	Assessment	Compliance
	b. In addition, directional information can be provided by appropriate tactile indicators at points in the path of travel where there are changes of direction.		
5.13	**Stairways, Escalators and Moving Pathways** a. Any stairs, escalators or moving pathways used must be provided in addition to the continuous accessible path of travel and not as part of it. b. Stairs may have a rise of 150 to 165 mm and a tread of 275 to 300 mm. However, where possible, the rise should be 95 to 105 mm with a tread of 575 to 600 mm which suits people using assistive devices such as walking frames. c. Stairways are to have dual handrails on both sides of the stairway. The top rail is to be 865 to 900 mm from the top of a step and the lower rail is to be 665 to 700 mm from the top of a step. Railings are to be a minimum of 30 and a maximum of 50 mm diameter	The main stairways are located adjacent to the lifts giving employees the option of using either. The Proposal would not include escalators or other moving pathways. Stairways would have dual handrails or both sides of the stair ways and be designed in accordance with Australian Standards.	Compliant
5.14	**Lighting** a. Lighting should not glare nor reflect unduly off surfaces as this can cause confusion and disorientation. b. In general, the minimum lighting level that complies is 150 lx. Some areas, such as toilets, counter tops and general displays, require more light – up to 300 lx.	Lighting for the Proposal would be installed in accordance with Australian Standards.	Compliant
5.16.1	**Off Street Parking** a. Parking spaces for people with disabilities are to be located close to exits of the parking area or close to entrances to premises (including close to lifts, ramps or walkways). b. There must be a continuous accessible path of travel from all parking spaces for people with disabilities to entrances to the premises. c. In undercover parking areas, lifts are to provide access to all levels. d. The ground surface of parking bays is to be smooth, but non-slip and have a slope in any direction not exceeding 1:40. (There are	One accessible parking space would be provided at the southeast corner of the building. This parking space would be located adjacent to the external walkway which wraps around the entire building. There is a continuous accessible path from the parking space to the main entrance of the building. There are no undercover parking areas proposed. The parking areas would be installed in accordance with Australian Standards.	Partially compliant

Section	Control	Assessment	Compliance
	special provisions for outdoor car parks – see AS2890.1 Clause 2.4.5 (a)). e. Parking spaces are to be a minimum of 3660 mm wide to allow a wheelchair user to fully open the car door and then transfer from the car to the wheelchair. f. Wheelchairs are often carried on the roof of the car using a wheelchair hoist. A vertical clearance of at least 2500 mm is required to allow the hoist to operate. This clearance must extend from the entrance to the parking bays for people with disabilities. g. Parking spaces are to be identified by the international access symbol. h. Where boom-gates are used at either the entrance or the exit, any ticket machine is to be within reach of a driver seated in the car and, for drivers who cannot operate the ticket machine, an intercom system provided that can be operated from the driver's seat of the car i. Sufficient parking is to be provided for people with disabilities.	The accessible parking space would a 3200 mm parking space within a 1150 mm access way, therefore would not be restricted in width. The parking bay is located outside, with no vertical obstruction proposed as part of the design. Parking spaces would be identified by the international access symbol. The amount of parking supplied for the Proposal is consistent with the generally low operational staffing needs of a data centre facility.	
5.16.2	**On Street Parking** a. Parking bays for people with disabilities are to be a minimum of 3200 mm wide and 5500 mm long if the bay is at the end of the parking area and 6700 mm long in other circumstances. b. Kerb ramps are to be provided at each end of the parking bay. c. Where possible the footpath is to be cut away to provide a clear 3200 mm width. d. The number of parking bays for people with disabilities will also comply with the numbers above.	Road 22.would feature a 2.5-metre-wide parking bay on one side of the road. Features of Road 22 will be further refined through consultation with City of Ryde Council. Kerb ramps would be available on both sides of the shared path to facilitate safe and inclusive access across the new road. Road 22 will comply with the City fo Ryde Car Parking and Driveways Technical Manual.	Partially compliant
5.17	**Sanitary Facilities** a. Accessible sanitary facilities are to be provided in every location where other sanitary facilities are provided. b. Accessible facilities should be located so they can be accessed without the need to enter a male only or female only area. c. Generally, one unisex accessible facility is required to be provided near each block of male and female facilities.	The Proposal includes two washrooms and a shower / toilet room designed in accordance with the DDA Act. These facilities are all located on the ground floor level and are proposed to be 8 m^2.	Compliant

Section	Control	Assessment	Compliance
	d. Accessible sanitary facilities will be a minimum of 2300 mm by 1900 mm, unless a wash basin or other facility is also provided in the same area, in which case extra space is required. e. As some wheelchair users are able to transfer to one side only, where more than one accessible sanitary facility is provided there will equal numbers of facilities that allow transfer from wheelchair to toilet from the left and from the right-hand side of the wheelchair. f. At least one emergency call button will be provided in each facility. g. Grabrails will be provided which comply with AS1428.2 Clause 10.2. h. In each single sex facility, there will be a cubicle that people with ambulant disabilities can use. It will comply with AS1428.2	The two washrooms would provide transfer from the left hand side and right hand side, respectively. Grab rails would be provided in each of the facilities and at least one emergency call button would be provided in each facility. The three facilities would be unisex.	
5.18	**Washbasins** a. Washbasins will allow a wheelchair user to sit front-on to the basin with room under it for clearance over the person's knees. Provision should also be made for an area which allows for the easy placement of such things as hairbrushes. b. Taps will be either lever type, capstan type or sensor plate controlled or the like. c. Hot water will be provided through a mixer valve.	As mentioned above and detailed in **Appendix B (Architectural Plans)**, the facilities would be designed in accordance with the DDA Act.	Compliant
5.19	**Shower Facilities** Where shower facilities are provided, they will also be provided for people with disabilities. The accessible shower facility may be incorporated into the accessible sanitary facility provided sufficient circulation space is provided. The minimum circulation space required for an accessible shower is 1600 by 2350 mm. A fold-away seat and grabrails will be provided. A shower hose will be provided. An adjustable temperature control valve will be installed to prevent scalding. There shall be two levers on which to hang the shower hose.	There is one DDA shower / toilet room proposed, which would be 8 m^2 in size. All necessary features would be provided within this facility (refer to **Appendix B (Architectural Plans)**). .	Compliant

Section	Control	Assessment	Compliance
5.22	**Symbols and Signs** a. Access will be identified by use of the international symbol for access. The figure will be white on a blue background. b. In general, a sign using the international symbol for access will face in the direction of the travel and may also include an arrow and a sign or word indicating a facility. c. Where hearing augmentation is provided it will be notified by use of the international symbol for deafness. d. Signs need to be clear and easily understood. The height of lettering and the colour contrast between lettering and the background needs to be sufficient to ensure signs can be read from a distance. For example, for a sign to be read from 2 metres the lettering must be at least 6 mm high, to be read from 12 metres, 40 mm high and from 50 metres, 150 mm high. e. Signs are to be illuminated without glare or reflection f. Signs are to be located so they can be read from both a standing and a seated position. In general, signs are to be placed not more than 1600 and not less than 1400 mm from the floor.	All signage and symbols used would be in accordance with Australian Standards to ensure they are able to be read from a standing and seated position for anyone entering or exiting the building or Site.	Compliant
5.28	**Emergency Warning Alarms** a. Emergency warning systems need to include both visual and audible alarms so that as many people as possible can be alerted to any emergency. b. Signs that warn of danger are to be placed sufficiently ahead of the hazard to allow avoidance.	Emergency warning systems would include both visual and audible alarms, and signs that warn of danger would be placed sufficiently ahead of the hazard.	Compliant
Part 9.3 – Parking Controls			
2.1	**General Controls** a. Where the calculation of the parking required results in a fraction, the parking requirement will be rounded up to the nearest whole number. b. Where it is proposed to provide more parking than required, the additional parking floor space will be included in the calculation	A total of 48 car parking spaces would be provided within the site, being a combination of 90-degree angle parking and parallel parking. Three of these spaces would be designated as “small car” spaces and are located along the northern face of the building.	Compliant

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	of floor space for the purposes of Floor Space Ratio calculations in accordance with Ryde Local Environmental Plan 2014. c. Where a change of use which, under this Part, would require the provision of a greater number of on-site parking spaces than the previous use, the amount of parking required will be the difference between the existing parking for the previous use and the amount of parking required for the proposed use. d. All car parking must be provided on-site. e. Tandem or stack parking may be carried out for a development if it is considered appropriate to the proposed development or land use/s. Tandem or stack parking will only be permitted where: 1. each tandem or stacked parking arrangement is limited to a maximum of two spaces; 2. in residential buildings and commercial/retail developments, the spaces are attached to the same strata title; 3. in commercial or retail development, they are used for staff parking only; 4. they are not used for service vehicle parking; and 5. the manoeuvring of stacked vehicles is able to occur wholly within the premises. f. The minimum length of a tandem or stacked space is to be 10.8 m. g. Up to 10% of the required car spaces may be nominated as "small" car spaces within any development. Small car spaces shall comply with AS 2890.1 2004 (at least 2.3 m wide and 5.0 m long) h. A Traffic and Parking Impact Assessment Report will be required by Council, where: 1. development is likely to generate significant traffic and / or parking; 2. an activity or land use is not included in Section 2.0 Parking Required in Respect of Specific Uses.	One accessible parking space is provided at the southeast corner of the building. Given the proximity of the Proposal to public transport, and the staggered working times of employees, this amount of parking is considered to be sufficient to accommodate all staff who use private vehicles to commute to and from the site.	
2.3	**Non-residential Land Uses** a. A maximum of 1 space / 60 m^2 or 1 space / 100 m^2 GFA	The Proposal has a maximum GFA of 12,069.70 m^2, which would equate to a requirement of 120 car spaces, approximately. Given the nature of the Proposal and the	Non-compliant

Section	Control	Assessment	Compliance
		expected FTE to operate the facility (being 50) it is not considered feasible to provide this amount of spaces. Instead, the Proposal will provide 48 spaces as well as rely on the existing public transport network to service the Proposal.	
2.5	**Large Development** a. To vary the provisions of this Part (particularly required parking) for large scaled development; comparisons should be drawn with similar development and outlined in Traffic and Parking Impact Assessment Report submitted together with the Development Application. Such comparisons should include a minimum of two case studies drawn from the Ryde Local Government Area or adjoining Local Government Areas. b. All large retail and commercial development shall be required to provide parking facilities and secure storage of electric scooters used by people with disabilities. Facilities should be generally in accordance with AS 2890.6.	A Traffic Impact Assessment Report was undertaken by Ason Group as part of the concept development application for the development of 11 Khartoum Road, Macquarie Park (Ason Group, 2018) (LDA2017/0547). In addition, a Traffic Impact Assessment was also carried out for the amended concept development application for that property (Colston Budd Rogers & Kafes Pty Ltd, 2020) (LDA2020/0229). Those assessments were used to inform the assessment of traffic and transport impacts of the Proposal. Discussion around the traffic impacts associated with the Proposal is provided in **Chapter 8 (Traffic and Transport)** of the EIS.	Partially compliant
2.6	**Parking Contribution** Council may accept or require the payment of a parking contribution in lieu of the provision of off-street parking.	It is anticipated that sufficient parking space would be available within the Proposal Site during construction and operation. As such, it is not anticipated that a contribution will be required.	Compliant
2.7	**Bicycle Parking** a. In every new building, where the floor space exceeds 600 m2 GFA (except for dwelling houses and multi-unit housing) provide bicycle parking equivalent to 10% of the required car spaces or part thereof. b. Bicycle Parking should be designed in accordance with AS 2890.3 Parking facilities - Bicycle Parking Facilities. c. Bicycle parking and access should ensure that potential conflicts with vehicles are minimised. d. Bicycle parking is to be secure and located undercover with easy access from the street and building entries.	The Proposal would include bicycle racks and end of trip facilities. The availability of bicycle storage and end of trip facilities would ultimately encourage the use of active transport methods to travel to and from the Proposal during its operational phase.	Compliant

Section	Control	Assessment	Compliance
	e. Bicycle parking is to be located in accordance with Safer by Design principles. f. End of trip facilities accessible to staff (including at least 1 shower and change room) are to be provided in all commercial, industrial and retail developments. g. Provide secure bicycle storage in all residential developments where the floor space exceeds 600 m2 GFA except for dwelling houses and multi-unit housing. h. Provide signage to Council's satisfaction indicating the location of bicycle parking and bicycle facilities, where provided, in all new buildings.		
3.2	**Design of Parking Areas** a. All parking areas shall be designed in accordance with Australian Standards AS2890.1, AS2890.2 and AS2890.6 b. The appearance of car parking and service vehicle entries and areas is to be improved by: 1. Locating or screening visually from the street 2. Setting back or recessing car park entries from the main façade line 3. Avoiding black holes in the façade by providing security doors to car park entries 4. Where doors are not provided, it is to be ensured that the visible interior of the car park is incorporated into the façade design and material selection and that building services pipes and ducts are concealed. c. Provide safe (well-lit and free of concealment opportunities) and direct 24-hour access between car parking areas and building entries. d. Where practicable car parking and loading access is to avoid areas where active frontage is required (refer Part 4 of this DCP for Active frontage requirements). **Basement Parking** e. Basement parking areas are to be located directly under building footprints to maximize opportunities for deep soil areas unless	The site is rectangular, which allows for the flow of vehicles around the building in a one-way, anti-clockwise direction. This allows for movements to be clear and direct, reducing the extent of unnecessary time spent in a vehicle within the operational site and improving safety as vehicle movements are obvious, low speed and predictable. A swept path analysis (refer **Appendix P** of the EIS) was undertaken to determine the feasibility of the site for vehicle manoeuvrability in terms of access and circulation. Modelling was undertaken for: • Entry and exit of vehicles up to 19 metres in length where the vehicle has accessed the site via a right turn into access point 1, but has been denied entry, and consequently exits via access point 2 • Entry and exit of vehicles up to 19 metres in length where the vehicle has accessed the site via a right turn into access point 1, access has been granted, and consequently the vehicle circulates the building in an anti-clockwise direction and exits the site via access point 1 (vehicles up to 12.5 metres long) or	Compliant

Section	Control	Assessment	Compliance
	the structure can be designed to support mature plants and deep root plants. f. Along active frontages, basement parking must be located fully below the level of the footpath. Refer to Part 4 for locations of active frontage within Urban Centres. g. Basement parking should be contained wholly beneath the ground level along public streets. Where this cannot be achieved due to topography, the parking level must protrude no more than 1.2 m above ground level. h. Ventilation grills or screening devices of car park openings are to be integrated into the overall façade and landscape design of the development. **At-grade Parking** i. Parking areas must not be located within the front building setbacks including for sites located along Victoria Road, Epping Road and Lane Cove Road. Refer also Part 4 Urban Centres for setbacks. j. Parking areas are to be screened from view from the street, public domain and communal open space areas, using site planning and appropriate screen planting or structures.	access point 2 (vehicles between 12.5 metres and 19 metres long) • Entry and exit of a typical light vehicle into/out of access point 1 • A 12.5 metre long heavy rigid vehicle travelling in an anti-clockwise direction around the building and reversing into the loading dock • A 300 tonne mobile crane entering the site from access point 3, circulating the building in an anti-clockwise direction and exiting the site via access point 2. This swept path analysis shows that for each of the above scenarios, the Proposal Site has adequate space to accommodate each of the above movements. In addition, the Proposal, through its traffic movements, would not impact on private property access near the site during the operational stage.	
3.3	**Macquarie Park Corridor** Applications within the Macquarie Park Corridor should also refer to Part 4.5 Macquarie Park Corridor and in particular Sections 4.4 Sustainable Transport and 8.7 On-site Parking.	Addressed above	Compliant