



Appendix A – SEARs Compliance Table



Secretary's Environmental Assessment Requirements

Issue and Assessment Requirements	Documentation
Key Issues and Documentation	
Statutory and Strategic Context – including: • a detailed description of the history of the site, including the relationship between the proposed development and all development consents and approved plans previously and/or currently applicable to the site • demonstration that the proposal is consistent with all relevant planning strategies, environmental planning instruments, adopted precinct plans, draft district plan(s) and adopted management plans and justification for any inconsistencies. This includes, but is not limited to: State Environmental Planning Policy (Biodiversity and Conservation) 2021 ○ State Environmental Planning Policy (Industry and Employment) 2021 ○ State Environmental Planning Policy (Planning Systems) 2021 ○ State Environmental Planning Policy (Resilience and Hazards) 2021 ○ State Environmental Planning Policy (Sustainable Buildings) 2022 ○ State Environmental Planning Policy (Transport and Infrastructure) 2021 ○ State Environmental Planning Policy (Western Parkland City) 2021 ○ Greater Sydney Region Plan: A Metropolis of Three Cities ○ Our Greater Sydney 2056: Western City District Plan ○ Future Transport Strategy 2056.	Section 4 – Statutory Context Appendix B – Statutory Compliance Table
Suitability of the Site – including: • detailed justification for the proposal and that the site can accommodate the proposed development having regard to its potential environmental impacts, effect on neighbouring sites, strategic context and existing site constraints • detailed justification that the proposal is permissible with consent, including a robust demonstration of its strategic merit and alignment of each component of the development with the statutory objectives of each land use zone.	Section 7.5 – Site Suitability Section 4 – Statutory Context
Community and Stakeholder Engagement – a community and stakeholder engagement strategy consistent with the Department's <i>Undertaking Engagement Guidelines for State Significant Projects</i> for all stages of the development, including (but not limited to): • evidence of direct, ongoing consultation undertaken with nearby sensitive receivers • details of how issues raised, and feedback provided during engagement activities have been considered and responded to in the development	Section 5 – Community Engagement Appendix C – Engagement Report



- details of the proposed approach to future community and stakeholder engagement based on the results of consultation.

Plant and Equipment Systems – including:

- detailed justification for the chosen primary power supply, any on-site energy generation, storage and back-up power systems, including:
 - a comprehensive assessment of alternative commercially available technologies (e.g. solar power, large-scale batteries, hydrogen cells, etc.)
 - a detailed description of how the proposed configuration will minimise emissions, avoid unnecessary over-provisioning, and reduce network constraints through demand management
 - demonstration of a commitment to continual improvement with respect to the design of the back-up power system and its associated emissions
- a detailed overview of the proposed back-up power system (if chosen), including:
 - number and individual capacity of each power unit (in terms of megawatts and megajoules per second)
 - maximum operating time during a power outage event
 - details of the proposed testing regime for back-up power units, including:
 - all testing types (e.g. monthly, annual) and details of scheduled and unscheduled works that would require use of back-up power units (e.g. electrical infrastructure works),
 - number of tests for each power unit per year,
 - number of power units to be tested at any one time,
 - testing duration for each power unit (including cool down),
 - load during testing,
 - time of the day testing will occur,
 - maximum number of tests per day,
 - total number of cumulative hours power units will be tested and operated per annum.
 - testing procedure (including whether testing will be carried out individually or in clusters), frequency and duration (including confirmation and, if necessary, justification of the need to test during sensitive time periods)
- a detailed justification for the chosen data hall cooling system, including:
 - a comprehensive assessment of alternative commercially available technologies (e.g. evaporative cooling, immersion cooling, direct-to-chip cooling, etc.)
 - demonstration of a commitment to continual improvement and consideration of retrofitting with respect to new and efficient data hall cooling systems

Section 3.6 - Back up System Power

Section 3.7 – Cooling Systems

Appendix H – Plant and Equipment Systems



- a detailed overview of the proposed data hall cooling system, including: the number and details of associated plant and equipment (cooling towers, evaporative chillers, etc.)
 - the energy and water demands of the proposed data hall cooling system
 - demonstration the placement of mechanical plant and equipment has considered the impact of heat rejection on habitable rooms and communal open spaces, including those of nearby properties.

Noise and Vibration – a quantitative noise and vibration impact assessment (construction and operation) undertaken by a suitably qualified acoustic consultant in accordance with the relevant Environment Protection Authority guidelines and Australian Standards which includes:

- details of noise monitoring surveys and background noise levels at the most-affected residential aged care receivers
- establishment of suitable project noise trigger levels at all nearby sensitive receivers
- identification of realistic assessment scenarios for both construction and operation of the development (including potential impacts associated with traffic generation)
- details of manufacturer specifications for plant and equipment and an associated noise source inventory for each scenario (demonstrating worst- case modelling of plant and equipment)
- evidence, including data-derived justification from direct measurements of comparable operational data centres or analysis of equipment noise-cycling, demonstrating that the +3dB correction factor used to convert LAeq,period to LAeq,15min is applicable and appropriately accounts for continuous noise from the development
- an assessment of all ‘worst case’ noise emission scenarios (including testing of any back-up power system and a critical power failure scenario), supported by:
 - noise contour maps and a detailed sleep disturbance assessment
 - a cumulative impact assessment inclusive of impacts from other proposed and approved developments in adjoining areas (including, but not limited to, other data centre developments in the vicinity of the site)
 - if operation of the development is staged, an assessment of each stage in isolation to accurately represent the predicted noise impacts of each stage
- consideration of annoying characteristics of noise (including, but not limited to, low frequency noise) and prevailing meteorological conditions in the study area
- details and analysis of the effectiveness of proposed ‘feasible and reasonable’ management and mitigation measures to adequately manage identified impacts, including a clear identification of residual noise and vibration impacts following application of these mitigation measures and details of any proposed compliance monitoring programs

Section 6.8 – Noise

Appendix I – Noise and Vibration Impact Assessment



• if required, a road noise assessment in accordance with the NSW Road Noise Policy.	
Air Quality – a quantitative assessment of the potential air quality, dust and odour impacts of the development (construction and operation) on surrounding sensitive receptors, in accordance with relevant Environment Protection Authority guidelines, which includes: • modelling of emissions and air pollutants from predicted operations, including consideration of power unit testing, routine maintenance works that require use of power units and emergency scenario/s • a cumulative assessment that considers all proposed and approved developments in proximity to the site for both construction and operation (including, but not limited to, other data centre developments in the vicinity of the site) • if operation of the development is staged, an assessment of each stage in isolation to accurately represent the predicted air quality impacts of each stage • a description of best practice air quality impact mitigation, management and monitoring measures that would be implemented.	Section 6.9 – Air Quality Appendix A Air Quality Impact Assessment
Biodiversity – including: • an assessment of the proposal's biodiversity impacts in accordance with the Biodiversity Conservation Act 2016, including the preparation of a Biodiversity Development Assessment Report (BDAR) where required under the Act, except where a waiver for preparation of a BDAR has been granted • an assessment of the off-site enabling infrastructure options and the measures adopted to avoid impacts on any Critically Endangered Ecological Communities.	Section 6.5 – Biodiversity Appendix K – Biodiversity Development Assessment Report
Infrastructure Requirements – an infrastructure delivery, management and staging plan that includes: • an assessment of impacts of the development on existing utility infrastructure and service provider assets surrounding the site • a detailed written and/or graphical description of infrastructure required on the site, including the electrical substation/s and on-site switch yard/s • details of the existing capacity of the site to service the proposed development and any extension or augmentation, property tenure or staging requirements for the provision of utilities, including arrangements for electrical network requirements, drinking water, wastewater and recycled water (where required) • the following information relating to potable water / wastewater consumption and energy use: ○ staging of the development, showing the yearly demand, average daily demand, maximum hourly demand and high demand days (e.g. 95th percentile) ○ the expected daily usage over a year and/or the expected monthly average daily usage over a year, including seasonal variation	Section 6.19 – Infrastructure and Utilities Appendix L – Infrastructure Delivery, Management and Staging Plan



○ a 24/7 water and energy consumption profile based on a typical 'high demand' day ○ allocation of supply sources, specifying water sources (e.g. potable and recycled) and their respective volumes, and energy sources (e.g. grid electricity, on-site generation and renewable power purchase agreement) and their respective contributions ○ a description of the measures which would be implemented to ensure water and energy supply resilience and operational continuity during network constraint periods, including any additional on-site water and energy storage or contingency arrangements • a description of how any upgrades will be coordinated, funded and delivered on time and be maintained to facilitate the development • identification of any existing infrastructure or easements on or off the site which may be impacted by construction or operation of the development and details of measures to be implemented to address any impacts • details and demonstration that adequate provision of water tanks	
Climate Change – including: • the preparation of a Greenhouse Gas Assessment in accordance with the NSW Guide for Large Emitters (EPA, 2025) • identification of emission reduction measures, which may include: ○ implementing energy efficiency practices ○ installing on-site renewable power generation systems ○ purchasing renewable energy certificates ○ entering into green power purchase agreements	Section 6.21 – Climate Change Appendix N – Greenhouse Gas Assessment
Ecologically Sustainable Development – including: • identification of how ESD principles (as defined in section 193 of the EP&A Regulation) are incorporated in the design, construction and ongoing operation of the development • demonstration of how the development will meet or exceed the relevant industry recognised building sustainability and environmental performance standards, including a maximum Power Usage Effectiveness (PUE) of 1.3 and a minimum NABERS rating of five stars • identification of the projected Water Usage Effectiveness (WUE) for the development, compared against recognised 'best practice' benchmarks • details of any proposed sustainability initiatives that will reduce electricity and water consumption • demonstration of how the development minimises greenhouse gas emissions (reflecting the Government's goal of net zero emissions by 2050) and consumption of energy, water (including water sensitive urban design) and material resources • if Chapter 3 of State Environmental Planning Policy (Sustainable Buildings) 2022 applies, include: ○ demonstration as to how the development has been designed to address the provisions set out in in Chapter 3.2(1)	Section 6.20 – Ecologically Sustainable Development Appendix O – Ecologically Sustainable Development



○ a NABERS Embodied Emissions Material Form to disclose the amount of embodied emissions attributable to the development in accordance with section 35BA of the EP&A Regulation.	
Traffic and Transport – a quantitative transport impact assessment prepared in accordance with relevant Transport for NSW (TfNSW) and Austroads guidelines (including the Guide to Transport Impact Assessment (TfNSW, 2024)), which includes: • details of the likely construction trip generation, construction vehicle routes, access and parking arrangements during construction works • measures to mitigate any construction traffic and parking impacts such as through coordination with other construction occurring in the area, and details of how impacts on existing traffic, pedestrian and bicycle networks would be managed and mitigated, included in a draft Construction Traffic Management Plan • details of all traffic types and volumes likely to be generated during construction and operation, including a description of key access and haul routes • an assessment of the predicted impacts of this traffic on road safety and the capacity of the road network, including consideration of cumulative traffic impacts on existing performance levels of nearby intersections (using industry standard modelling) • plans demonstrating how all vehicles likely to be generated during construction and operation and awaiting loading, unloading or servicing can be accommodated on the site to avoid queuing in the street network • details and plans of any proposed internal road network, loading dock provision and servicing, on-site parking provisions, and sufficient pedestrian and cyclist facilities, in accordance with the relevant Australian Standards. • swept path analysis for the largest vehicle requiring access to the development • details of road upgrades, infrastructure works, or new roads or access points required for the development if necessary.	Section 6.4 – Transport, Traffic, Parking and Access Appendix P – Transport and Accessibility Impact Assessment
Built Form and Urban Design – a design report that: • identifies design options considered during the iterative design process and demonstrates the proposed development has been optimised to provide an integrated landscape design and minimises amenity impacts by having regard to the relevant evaluation criteria in Better Placed (GANSW, 2017) • demonstrates how the building design will deliver a high-quality development, including consideration of façade design, articulation, materials, finishes, colours, any signage and integration of services • assesses how the development complies with relevant accessibility requirements.	Section 6.1 – Built form and Design Appendix E – Architectural Plans Appendix F – Architectural Design Report
Visual Impact – a visual impact assessment, including: • photomontages and perspectives of the development layout and design (buildings, plant and substation areas)	Section 6.2 – Visual Impact Appendix R – Visual Impact Assessment



- an assessment of the potential visual impacts of each stage of the development on the amenity of the surrounding area, including: - nearby public and private receivers - significant vantage points in the broader public domain - details of design elements and mitigation measures to minimise the visual impacts of the development	
Hazards and Risk – including: - details regarding the location and number of any proposed back-up power units, back-up fuel storage tanks and lithium-ion or other battery chemistries (with details of peak discharge rate in MW) to be installed to service the development - a preliminary risk screening completed in accordance with State Environmental Planning Policy (Resilience and Hazards) 2021 and the - Department's <i>Applying SEPP 33</i>, that includes a clear indication of class, storage and handling quantities and location of all dangerous goods and hazardous materials associated with the development - a Preliminary Hazard Analysis (PHA) prepared in accordance with the Department's <i>Hazardous Industry Planning Advisory Paper No. 6 – 'Hazard Analysis' and Multi-Level Risk Assessment</i>, should the preliminary risk screening indicate that the project is "potentially hazardous" - demonstration that the relevant aspects of the <i>FM Global Property Loss Prevention Data Sheet 5-32 – Data Centres and Related Facilities</i> have been considered and could be implemented as part of the development - demonstration that the development would comply with the relevant aspects of the following standards: - Australian Standard 4681 – The storage and handling of Class 9 (miscellaneous) dangerous goods and articles - Australian Standard 62619 – Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for secondary lithium cells and batteries, for use in industrial applications - Australian Standard 1940 – The storage and handling of flammable and combustible liquids.	Section 6.3 – Hazards and Risks Appendix B – Hazard and Risk Report
Soils – an assessment of potential impacts on soil resources and riparian land on and near the site, including: - impacts on soil erosion, salinity and acid sulfate soils - details of earthworks, including cut and fill volumes - description of the proposed erosion and sediment controls during construction.	Section 6.12 – Geotechnical, Soil and Groundwater Appendix T – Geotechnical Assessment Appendix U – Technical Advice Letter – Ground Water Conditions Appendix V – Salinity Management Plan
Water Management – provide an integrated Water Management Plan for the development that includes:	Section 6.10.2 – Stormwater Management



• a detailed site water balance including a description of the water demands and breakdown of water supplies, measures to minimise water use and any water licensing requirements • a description of groundwater and surface water conditions and all works/activities that may intercept, extract, use, divert or receive surface water and/or groundwater (both temporary and permanent) • an assessment of potential surface and groundwater impacts (both quality and quantity) associated with the development, including potential impacts on watercourses, riparian areas, groundwater, and groundwater-dependent communities nearby in accordance with relevant water quality guidelines and the Department of Climate Change, Energy, the Environment and Water - Water Group (DCCEE-Water) Groundwater Toolkit • details of the proposed stormwater/wastewater drainage design including the capacity of onsite detention system(s), onsite sewage management and measures to treat, reuse or dispose of water • where water and drainage infrastructure works are required that would be handed over to the local council, or other drainage or water authority, provide full hydraulic details and detailed plans and specification of proposed works that have been prepared in consultation with, and comply with the relevant standards, the local council or other drainage or water authority • a surface water discharge assessment in accordance with relevant EPA guidelines, including an assessment of potential impacts on watercourses and riparian areas, and characterisation of water quality at the point of discharge against the relevant water quality criteria using a MUSIC water quality model • details of any surface or groundwater mitigation, management and monitoring activities and methodologies.	Appendix W – Water Management Report
Contamination – a site contamination assessment in accordance with the Managing Land Contamination Planning Guidelines: SEPP 55 – Remediation of Land (DUAP, 1998), including: • characterisation of the nature and extent of any contamination on the site and surrounding area • a Detailed Site Investigation (DSI) and a Remedial Action Plan, if the Preliminary Site Investigation indicates contamination is present and a DSI is required.	Section 6.7 – Contamination, Remediation and Hazardous Appendix X – Preliminary Site Investigation Appendix Y – Detailed Site Investigation
Landscaping – a detailed site-wide landscape plan, including: • an arborist report, tree protection plan and vegetation management plan • detailed plans showing suitable landscaping which incorporates endemic species, heights of trees at maturity and proposed canopy coverage and location of trees to be removed and retained	Section 6.6 – Trees and Landscaping Appendix Z – Landscape Report Appendix AA – Landscape Plans Appendix CC – Arboricultural Impact Assessment
Aboriginal Cultural Heritage – unless otherwise agreed in writing by Heritage NSW, include an Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared in accordance with the Code of Practice for Archaeological	Section 6.15 – Aboriginal Cultural Heritage



Investigation in NSW (DECCW, 2010), and the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH, 2011). The ACHAR must: • identify, describe and assess impacts on the Aboriginal cultural heritage values that exist across the development site • provide evidence and details of adequate and continuous consultation with Aboriginal people in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010) • include results of an archaeological survey and test excavations (where required), undertaken in accordance with the relevant guidelines.	Appendix DD – Aboriginal Cultural Heritage Assessment Report
Social – including a social impact assessment in accordance with the Department's <i>Social Impact Assessment Guideline</i> that is targeted and proportionate to the development's context and likely impacts.	Section 6.22 – Social Impacts Appendix EE – Social Impact Assessment
Planning Agreement/Development Contributions – including consideration of any applicable State and local development contributions, such as the Housing and Productivity Contribution, draft contributions plan(s), and/or details of any Planning Agreement required should a contributions plan not be in place.	Section 6.24 – Contributions and Public Benefits