ARUP

43 – 61 Turner Road Data Centre

Submissions Report

SSD-68013714

2 July 2025



This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 299816-00

Arup Australia Pty Ltd | ABN 76 625 912 665

Arup Australia Pty Ltd Level 5 151 Clarence Street Sydney NSW, 2000 Australia arup.com

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Executive summary

This Submissions Report has been prepared to address feedback received during the public exhibition of the Environmental Impact Statement (EIS) for the State Significant Development Application (SSD-68013714). The application seeks approval for the construction and operation of a 53-megawatt (MW) data centre at 43–61 Turner Road, Gregory Hills, New South Wales.

The proposed facility is designed to operate continuously (24/7) and will include data halls, mechanical and electrical plant, a substation, lithium-ion battery storage systems, 27 back-up diesel generators, associated support infrastructure, car parking, and internal access roads.

This report responds to submissions made by government agencies, key stakeholders, and members of the community. It demonstrates that the proposal remains aligned with relevant strategic planning objectives and confirms that potential environmental impacts can be effectively managed through design refinements, updated mitigation measures, and robust operational controls.

What are the key details from the submissions?

During the public exhibition period for this EIS (5 March 2025 and 1 April 2025), a total of four public submissions were received. In addition to the submissions received from the public, the following government agencies and organisations provided comment on the EIS:

- Department of Planning, Housing and Infrastructure (DPHI)
- Camden Council
- NSW Environment Protection Authority (NSW EPA)
- Heritage NSW
- Conservation Programs, Heritage, and Regulation (within NSW Department of

Climate Change, Energy, the Environment and Water (DCCEEW))

- Fire and Rescue NSW
- Rural Fire Service
- Transport for NSW
- DCCEEW
- Sydney Water
- Endeavour Energy.

What are the main issues and responses?

The main issues and responses are as follows:

Noise and air quality

Submissions from the public, NSW EPA and DPHI requested further detail on noise and air quality impacts, particularly from the proposed back-up generators and cooling systems. The assessments were undertaken in accordance with the NSW Noise Policy for Industry and relevant air quality guidelines. Additional clarifications have been provided on generator testing regimes, emergency operations, and cumulative impacts, confirming compliance with environmental standards.

Landscaping

Camden Council and the Conservation Programs, Heritage and Regulation Group provided feedback on the proposed landscaping strategy, including requests for additional canopy cover, species selection, and treatment of areas such as the car park. The landscape design has been reviewed, and revisions have been made to align with Council's Development Control Plan and bushfire protection requirements.

Stormwater and flooding

Camden Council and the Conservation Programs, Heritage and Regulation Group raised issues relating to stormwater modelling, flood risk, and consistency with early works approvals. The modelling for the assessment was based on the undeveloped (greenfield) condition of the site to ensure a conservative assessment. Updated modelling and clarifications were provided to Council to demonstrate that post-development flows would not exceed pre-development conditions, and that the proposal would not result in adverse downstream impacts.

Traffic and access

Submissions raised questions regarding vehicle access, swept path analysis, and car parking provision. Updated diagrams and clarifications have been included in this report to justify that the proposed parking supply is based on peak operational demand and how it is considered sufficient for the purposes of the proposed development. Access arrangements have been designed to accommodate emergency and service vehicles, and further detail has been included to explain the separation of access points for the substation and data centre.

Biodiversity

Submissions from the Conservation Programs, Heritage and Regulation Group and Camden Council raised matters relating to biodiversity certification, vegetation clearing, and the potential for indirect impacts on adjacent ecological areas. The site is located within land that is biodiversity certified under the State Environmental Planning Policy (Western Parkland City) 2021, and the proposal area for the SSD excludes areas that are not certified. A flora and fauna assessment has been prepared to support the early works development application, which includes vegetation removal and drainage works. Mitigation measures outlined in the EIS, including protection of the adjacent riparian corridor, will be implemented to manage any indirect impacts.

Planning controls

Submissions from Camden Council and the Department of Planning, Housing and Infrastructure (DPHI) raised concerns regarding the proposed building height exceeding the 15-metre development standard. A Clause 4.6 variation request was submitted as part of the EIS, supported by a detailed planning justification. The variation is considered appropriate given the site's industrial zoning and strategic context, and it was demonstrated that the proposal would not result in unacceptable impacts on surrounding land uses or local amenity.

Sustainability

DPHI and the EPA requested further information on sustainability measures and urban heat mitigation. A range of measures have been incorporated into the design of the proposal, including solar PV, high-

efficiency cooling systems, rainwater reuse, and landscape design which would help to minimise heat island effects.

Bushfire risk and emergency planning

The Rural Fire Service and Fire and Rescue NSW recommended conditions relating to asset protection zones, fire safety studies, and emergency planning. Measures including compliance with Planning for Bush Fire Protection 2019 and preparation of a Fire Safety Study, Emergency Plan, and Emergency Services Information Package will be undertaken. These measures will support safe operation of the facility and ensure effective emergency response protocols are in place.

1. Introduction

The proponent is seeking approval for State Significant Development (SSD-68013714) for the construction and operation of a multi-storey data centre at 43–61 Turner Road, Gregory Hills, refer to Figure 1-1 below. The site is located within the Western Sydney growth area, approximately 45 kilometres southwest of the Sydney central business district area, and about three kilometres north-east from Narellan Town Centre.

The proposed development includes the data centre building, associated infrastructure, landscaping, and site access arrangements, and is intended to support the growing demand for digital infrastructure across Greater Sydney.

On 2 April 2025, following public exhibition of the environmental impact statement (EIS), the NSW Department of Planning, Housing and Infrastructure (DPHI) issued a request for a response to submissions in accordance with clause 85A of the Environmental Planning and Assessment Regulation 2021.

This report has been prepared to address the matters raised in submissions from Government agencies, stakeholders, and members of the public. It has been structured in accordance with <u>Section 3.2 of the SSD</u> <u>Guidelines for Preparing a Submissions Report.</u>

Early Works Development Application (DA/2024/616/1)

A Development Application (DA/2024/616/1) has been lodged with Camden Council for early works to facilitate future industrial development at 43–61 Turner Road, Gregory Hills, including the proposed data centre. The early works include demolition of existing structures, vegetation clearing, dewatering and infilling of farm dams, site remediation, bulk earthworks, installation of retaining walls and in-ground services, construction of new stormwater infrastructure, upgrades to Turner Road, and construction of new internal roads. These works are intended to establish a serviced and level development platform in advance of the separate State Significant Development (SSD) application for the data centre.



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Scale at A4 1:340,437 Project Number Figure No. 1-1 299816-00 A 24/09/24 MD CS CS CS Rev Date By Chkd Authd Appd

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere

2,000 4,000 8,000 Metres

The Site

Airport

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Sydney CBD

ARUP

151 Clarence Street Sydney NSW 2000 Tel +61 2 9320 9320 www.arup.com

Client

Confidential

Project Name 43-61 Turner Road Data Centre

1.1 Structure of this submissions report

This submissions report identifies the issues raised during exhibition of the modification applications and provides responses to those issues. The structure of the submissions report is outlined in Table 1-1.

Chapter	Description
Chapter 1	Introduction and background (this chapter)
Chapter 2	Analysis of submissions
Chapter 3	Actions taken since submission
Chapter 4	Response to submissions
Chapter 5	Updated project justification
Chapter 6	References
Appendix A	Submissions register
Appendix B	Noise monitoring graphs
Appendix C	Updated mitigation measures
Appendix D	Swept path analysis

Table 1-1: Structure of this report

2. Analysis of submissions

This Chapter provides an analysis of submissions received in response to the exhibited EIS.

2.1 Summary

The EIS supporting SSD-68013714 was publicly displayed between <u>Wednesday 5 March 2025 and Tuesday</u> <u>1 April 2025</u>. DPHI received 16 submissions, 10 from Government and regulatory agencies, two utility, and four public submissions This included agency responses that had no comment on the SSD approval.

Table 2-1 below categorises the submissions.

Category	Number	Specifics
Government	2	Department of Planning, Housing, and Infrastructure
agencies		City of Camden Council
Government	8	NSW Environment Protection Authority
authorities		Conservation Programs, Heritage, and Regulation
		Heritage NSW
		Fire and Rescue NSW
		Rural Fire Service
		Transport for NSW
		NSW Department of Climate Change, Energy, the Environment, and Water
Utility authorities	2	Sydney Water
		Endeavour Energy
Public	4	-
Total	16	

Table 2-1 Submission categorisation

Given the small number of submissions, they have been responded to individually in Chapter 4.

2.2 Analysis

This section provides the analysis of all submissions received during the exhibition period as shown in Table 2-2.

Table 2-2 Ker		raiend	during	tho	eubmiesions
Table 2-2 Re	y issues	raiseu	auring	the	SUDINISSIONS

Category	Non-public submissions		Public submissions			
	Number of times raised	Percentage of total issues*	Number of times raised	Percentage of total issues*		
The project	1	1	2	5%		
Procedural matter	6	0	6	15%		
Economic, environmental and social impacts						
Flooding	3	1	4	10%		

Category	Non-public submissions		Public submissions		
	Number of times raised	Percentage of total issues*	Number of times raised	Percentage of total issues*	
Landscape and visual	2	1	3	8%	
Air quality	4	2	6	15%	
Noise and vibration	4	3	7	18%	
Non-Aboriginal heritage	2	0	2	5%	
Traffic & access	3	3	6	15%	
Other	1	1	2	5%	
Justification and evaluation	2	1	3	8%	
Beyond the project scope/irrelevant	1	0	1	3%	

* Percentages are rounded and may not total exactly 100%.

Table 2-3 below breaks down the sub-issues raised.

Table 2-3 Summary of sub-issues for top five key issues raised

Category	Subcategories
Air quality	 Generator emissions (NO₂) during emergency operations Cumulative impacts Compliance with EPA guidelines
Noise and vibration	 Operational noise from generators and cooling systems Emergency testing noise Impacts on sensitive receivers (e.g. childcare centres) Validity of monitoring data
Traffic & access	 Car parking provision Swept path analysis Substation access Construction traffic impacts
Flooding	 Pre- and post-development flow modelling Impact on downstream properties Consistency with early works DA PMF hazard and emergency access
Landscape and visual	 Car park landscaping and canopy cover Urban heat mitigation Compliance with DCP and bushfire APZ requirements

3. Actions taken since submission

This chapter describes the actions taken since lodging the SSD.

3.1 Further engagement

Since the public exhibition of the SSD from 5 March to 1 April 2025, further consultation with key stakeholders and authorities has been undertaken. This has included meetings with Endeavour Energy, Sydney Water, and ongoing discussions with Council regarding the design and operation of the proposed development.

3.2 Refinements or amendments

Minor design refinements have been made to the Proposal as a result of design development and feedback from Council.

3.2.1 Process water tank adjustment

Following further design development, the location and configuration of the process water tank has been revised to improve operational efficiency and site integration. This change ensures better alignment with adjacent infrastructure and optimises spatial use within the plant layout.

3.2.2 Reduction in water tanks

The number of tanks proposed has been reduced from five to four. This amendment reflects updated operational requirements and results in a more compact and efficient plant footprint.

3.2.3 Plant slab level raised

The plant slab level has been raised to RL 96 to align with the adjacent slab. This adjustment facilitates improved connectivity between the two areas and simplifies construction sequencing.

3.2.4 Entry ramp reconfiguration

The entry ramp to the Site off the Eastern Access Road has been reconfigured to enhance vehicular access and circulation. This refinement responds to feedback regarding traffic flow and safety from Camden Council, and ensures compliance with updated design standards.

3.2.5 Loading dock entry

The entry to the loading dock and the adjacent generator fence have been adjusted to improve access and security. These changes respond to operational feedback and ensure compliance with safety and clearance requirements.

3.2.6 Guardhouse relocation

The guardhouse has been relocated adjacent to the outer fence to enhance site security and streamline access control. This new position provides better visibility and operational efficiency.

3.2.7 Enclosed waste management room

An enclosed waste management room has been added adjacent to the Main Switch Room (MV room). This addition addresses the absence of a dedicated waste area and ensures compliance with waste handling requirements.

3.2.8 Tree canopy cover

The tree canopy cover has been reduced from 8.8% to 8%. This change reflects updated landscaping constraints associated with meeting bushfire compliance and site servicing requirements.

3.2.9 Northern security fence removal

The security fence at the northern edge of the site has been removed.

3.2.10 South façade precast panel modification

The dimensions of the precast panels on the southern façade have been modified to ensure structural stability. These changes respond to engineering requirements and enhance the overall integrity of the façade system.

3.3 Additional impact assessment

Additional impact assessment has been undertaken by relevant specialist consultants, where necessary, to respond to submissions, outline changes and provide further assessment which has been included within the responses in Chapter 4.

4. Response to submissions

This Chapter sets out the response to agency submissions to the proposed SSD-68013714 approval.

Government agencies

4.1 Department of Planning, Housing and Infrastructure

4.1.1 Impacts | statutory compliance

Issue description

The Department noted that the EIS and Statutory Compliance Table in Appendix C did not provide adequate consideration of the development standards and provisions of the State Environmental Planning Policy (Precincts - Western Parkland City) 2021 (Western Parkland City SEPP). The Department requested additional information be provided demonstrating compliance and consistency with the development standards and provisions of the Western Parkland City SEPP.

Response

Table 4-1 below provides an addition to Appendix C to showcase compliance and consistency with the Western Parkland City SEPP.

Statutory reference	Statutory requirement/ condition	Relevance	Section of the EIS
Chapter 3: Sydney This chapter govern	 Regional Growth Centres s development in the Greater Macarthur Growth Area, 	which includes Gregory Hills.	
3.1: Aims of the Chapter	Alignment with the planning aims for coordinated development, employment generation, environmental protection, and infrastructure delivery.	The proposed development aligns with the aims of the growth centres as it would support the orderly and economic provision of data centre infrastructure.	Appendix C of the EIS
3.6: Relationship to other planning instruments	Resolving any inconsistency with the Camden LEP 2010, noting that the SEPP overrides other EPIs in the extent of inconsistency.	The proposed development is located within the Turner Road Precinct. Consideration of other relevant and applicable planning instruments is included in Appendix C of the EIS.	Appendix C of the EIS
3.10: Controls applying to precincts after finalisation of precinct planning	Controls associated with the Oran Park and Turner Road Precincts, which are governed by Appendix 2 of the SEPP.	The proposed development is located within the Turner Road Precinct. Controls associated with this precinct is included in Appendix C of the EIS.	Appendix C of the EIS
Part 3.6 - Section 3.28 to 3.31: Development controls – vegetation	Manage vegetation clearing and biodiversity impacts	A Biodiversity Certification applies to the site, meaning it has been strategically assessed under the Biodiversity Conservation Act 2016 for its ecological values. As a result, vegetation clearing and associated impacts have already been addressed, and no further biodiversity assessment or offsets are required. As such, impacts of vegetation removal and associated offsets have been considered and do not require further assessment.	Section 6.4 and Appendix K of the EIS

Table 4-1: Compliance with the relevant sections of the Western Parkland City SEPP

Statutory reference	Statutory requirement/ condition	Relevance	Section of the EIS
Appendix 2: Oran Park and Turner Road Precinct Plan			
Part 1: preliminaries			
1.2: aims of Precinct Plan	The Precinct Plan aims to ensure quality development and design in Oran Park and Turner Road Precincts while protecting natural and cultural heritage, promoting sustainability, housing affordability, recreational opportunities, connectivity, and minimising natural hazard risks.	The proposal provides a high-quality development and design outcome.	Section 3.2 of the EIS
Part 3: land use table			
Zone IN1	The IN1 General Industrial zone aims to support a broad range of industrial and warehouse uses, promote employment and economic viability.	The site is located within the Camden Government Area (LGA) and is zoned IN1 General Industrial, pursuant to State Environmental Planning Policy (Western Parkland City) 2021 (WPC SEPP 2021). The proposal is classified as a data centre, which is a type of high technology industry. A high technology industry is a type of light industry, which is permitted with consent in the IN1 General Industrial zone of the WPC SEPP.	Section 4.3 and Appendix AA of the EIS
Part 4: principal development standards			
4.3: Height of buildings	The objectives of the building height controls are to protect the amenity of surrounding areas, support diverse and high-quality urban forms, and allow for increased density in appropriate locations while minimising negative impacts. Specific provisions also allow for exceptions to height limits under certain conditions, particularly in residential and industrial zones, where context and site characteristics justify greater height.	The proposal is generally consistent with the objectives and provisions of WPC SEPP, with the exception of Clause 4.3 (5)(b). Specifically, the site is subject to a 15m height of buildings development standard prescribed by Clause 4.3(5)(b) of the WPC SEPP. The proposal seeks a maximum building height of 23m, which exceeds the 15m development standard by 8m or 53%. Overall, it is considered that the proposed variation to the maximum building height control is entirely appropriate and can be clearly justified having regard to the matters listed within Clause 4.6 of the WPC SEPP as discussed in Section 4.3 and Appendix AA of the EIS.	Section 4.3 and Appendix AA of the EIS
Part 5: miscellaneous provisions			
5.10: heritage conservation	Protect Aboriginal and non-Aboriginal heritage	Heritage impacts have been assessed and managed through the EIS	Section 6.11 and Appendix G of the EIS
5.11: bushfire hazard reduction	Ensure development is compatible with bushfire risk	Bushfire Assessment was prepared as part of the EIS in accordance with PBP 2019	Section 6.9 and Appendix Q of the EIS
5.12: applicable infrastructure delivery and urban design	Ensure infrastructure is delivered efficiently and urban design is high quality	Infrastructure and access have been designed in consultation with relevant authorities	Section 3.2, 3.4 and Appendix H of the EIS

4.1.2 Impacts | date centre operations

Issue description 1

DPHI requested that an options analysis be provided to demonstrate that the development's proposed cooling system utilises best-available technology, particularly regarding its performance in minimising energy consumption and noise emissions.

Response 1

Additional documentation to address this has been provided to DPHI separately given the commercial sensitivity of this information.

Issue description 2

DPHI noted that section 6.5.4 of the EIS suggested that the proposed data centre is designed with a high level of cooling redundancy, however, the applicant provided limited information on the reason/s for this requirement. Additional details on the following items were therefore requested:

- Issue 2a: The redundancy configuration for the cooling system (e.g. N, N+1, 2N+1)
- Issue 2b: The number of units and their capacity, including any back-up units
- **Issue 2c:** The failover process and the duration for maintaining cooling during system failures or maintenance
- **Issue 2d:** The testing and maintenance procedures for the cooling system to ensure ongoing reliability.

Response 2

Additional documentation to address this has been provided to DPHI separately given the commercial sensitivity of this information.

4.1.3 Impacts | back-up generator

Issue description 1

DPHI noted that the EIS did not appear to have provided a comprehensive options analysis/justification for the proposed back-up generator system. Additional information was requested to:

- **Issue 1a:** Justify the proposed scale and capacity of the proposed back-up generator system, regarding its associated redundancy and available/upcoming alternative energy storage technologies
- **Issue 1b:** Confirm that the indicative back-up generator model used to inform the accompanying technical reports represents best available technology/practice, with regard to its associated noise/air quality impacts and the commercial availability of higher tier solutions.

Response 1a

The proposed development will have one 720 kilowatt (kW) generator and twenty-six 2,800 kW generators located across the site. The scale of these generators has been identified to support the facility's full essential load in the event of a power outage. This level of resilience supports operational continuity for critical infrastructure and aligns with best practice in resilient system design.

Diesel/Hydrotreated Vegetable Oil (HVO) generators have been selected due to their proven ability to deliver sustained power over extended outage durations. Current battery energy storage systems are not yet commercially or technically suited to fulfil the scale of requirements for the proposed development. A battery system capable of supplying 2,800 kW for even a few hours would require substantial space,

significant capital expenditure, and additional support infrastructure, making it impractical and costprohibitive for the intended application.

Emerging alternative storage technologies are currently more appropriate for short-term bridging applications rather than serving as a primary source of standby power. The proposed generator solution therefore represents the most reliable and commercially viable option for ensuring long-duration backup capacity at the required scale.

Response 1b

At this stage, the generator vendor has not yet been selected. The indicative generator model was selected based on its compliance with key environmental regulations, including the NSW Environment Protection Authority (EPA) guidelines, the NSW Protection of the Environment Operations (POEO) Act, and relevant air quality standards, particularly in relation to NOx emissions.

Issue description 2

Please provide further information regarding the proposed testing regime, including:

- Issue 2a: Confirmation regarding whether ramp up/cool down times have been factored into the proposed test durations
- **Issue 2b:** Confirmation whether commissioning tests would be undertaken for each back-up generator. *Note: Where necessary, information relating to data centre operations may be supplied under separate cover as 'commercial in confidence'.*

Response 2a

The generator testing regime accounted for ramp up and cool down periods within total test durations. These phases are factored in to ensure accurate simulation of operational conditions. The testing regime has been developed to minimise the use of generators while also meeting the operational needs of the proposal, and this would not require the generators to operate for more than 200 hours per year. It is worth noting that this 200hr limit excludes ramp up and cooldown periods as per Part 5, Subdivision 3 of the POEO (Clean Air) Regulation.

Response 2b

Commissioning tests will be conducted for each back-up generator individually upon full installation, in accordance with standard commissioning procedures.

4.1.4 Procedural matter | noise impacts

Issue description 1

The Department notes that unattended and attended noise monitoring undertaken within the Noise and Vibration Impact Assessment (NVIA) to establish the existing acoustic environment was undertaken in mid-2023. The Department requests additional justification to demonstrate the validity of the monitoring data or additional attended monitoring to verify the existing monitoring data utilised.

Response 1

The unattended and attended noise monitoring activities were undertaken to inform the NVIA in July and August 2023. This is considered to be a reasonable timeframe for a project of this scale. Subsequent development that has occurred in the area would increase the background noise levels, in which case the acoustic criteria in the NVIA would be conservative. The data is therefore suitable for the purposes of establishing compliance in accordance with the Noise Policy for Industry.

Issue description 2

The Department requests further information to confirm that background noise monitoring for NCA2 has been adequately undertaken in accordance with Fact Sheets A and B of the EPA's Noise Policy for Industry (NPfI). In this regard, please provide additional details on the following:

- **Issue 2a:** A statement justifying the selection of each background noise monitoring site, including the procedures and criteria used to inform the selection of each location with reference to the definition of the "reasonably most-affected location(s)
- **Issue 2b:** Description of the dominant and background noise sources observed, along with the procedure used to identify noise sources (e.g. audio capture or operator-attended measurements conducted during unattended data logging), as well as the range of measured sound pressure levels for each identified source
- Issue 2c: A statement confirming that short-term noise monitoring was conducted during periods when maximum noise impact would likely occur, having regard to the variability observed across the long-term noise monitoring site(s)
- **Issue 2d:** A record of any periods with affected data (due to adverse weather and extraneous noise), methods used to exclude invalid data, and a statement regarding the need for any re-monitoring.

Response 2a

The NVIA defines two noise catchment areas (NCAs). These include:

- NCA 1 to the northwest
- NCA 2 to the east.

Unattended monitoring for NCA 1 was undertaken at 7 Whitten Parade (L2), as this receiver is less exposed to traffic noise from Camden Valley Way and therefore this location is more representative of the majority of receivers within NCA 1. Attended measurements at A03 and A04 confirm that the receivers along Camden Valley Way experience higher background noise levels due to traffic noise. The receivers adjacent to Camden Valley Way are closest to the subject site and are the "reasonably most-affected locations" within NCA 1. Monitoring location L2 therefore represents a conservative background noise monitoring location for the "reasonably most-affected location" in NCA 1.

The noise monitoring for NCA 2 was undertaken at 79 Barrett Street (L1) near the subject site, within the same general area as the most-affected receivers. The noise logger was positioned slightly offset from Crescent Street, somewhat shielded from Turner Road, and located away from the industrial cluster to the

north. Attended measurements were also conducted at this location (A01), as well as at A02 (19 Booth Street), located to the northeast of L1.

The attended measurements indicated that A02 experienced slightly higher ambient noise levels during the day due to its closer proximity to the industrial noise cluster north of the subject site. Night-time background noise levels were also slightly higher at A02 compared to L1.

Therefore, L1 is considered representative of the receivers within Noise Catchment Area 2 (NCA 2), while providing a conservative basis for establishing background noise levels.

Response 2b

Dominant and background sources are identified in Table 23 of the NVIA in Appendix B.2.2. Sources were identified through operator attended measurements, and audio capture was also conducted during the attended measurements for cross-checking as required. The noise monitoring graphs (which show the range of measured sound pressure levels across the monitoring period) were included in Appendix B1 of the NVIA. These have also been provided for reference in Appendix B.

Response 2c

Attended measurements were conducted during both the daytime and night-time periods to qualify and quantify the existing noise environment. These measurements were used to verify whether the results of the long-term unattended monitoring were representative of typical conditions and to identify any contributions from industrial noise that may need to be considered in the derivation of site-specific criteria.

Response 2d

As noted in Appendix B.1.2 of the NVIA, measurement samples affected by extraneous noise, wind (greater than 5m/s) or rain were excluded from the recorded data in accordance with the procedures outlined in Fact Sheet A of the NSW Noise Policy for Industry (NPfI). The long-term noise monitoring results were processed to exclude weather affected data following consultation of weather reports from the Bureau of Meteorology (BOM) Camden Weather Station. Sufficient valid noise data was collected in accordance with the NPfI and consequently re-monitoring was not required. Excluded data is shaded grey in the noise monitoring graphs, which have also been provided in Appendix B of this report.

Issue description 3

The Department notes the NVIA does not provide the operational noise modelling results for the evening period. The NVIA should be updated to include operational noise modelling results for day, evening and night-time periods.

Response 3

Noise emissions due to "standard operation" of the subject site are anticipated to remain consistent during both the evening and night periods. Maintenance operations are anticipated to occur during the daytime period only. Operational scenarios are summarised in Section 6.1 of the NVIA.

Operational noise predictions for evening/night period are provided in Table 16 of the NVIA and are assessed against the night criteria, which is more sensitive than the evening criteria. Separate modelling results for the evening period are therefore not warranted.

4.1.5 Procedural matter | air quality

Issue description 1

The Department notes that within Air Quality Technical Report (AQTR) in Appendix L multiple generators testing combinations were modelled under the realistic operations modelling scenario (Scenario 2). The Department requests the AQTR be updated to include additional or updated figures that clearly label and identify the location of different generator testing combinations modelled.

Response 1

Figure 20 and Table 30 in Appendix C of the Air Quality Technical Report (Appendix L) provide the stack location information that can be cross-referenced with the stack IDs referenced in Section 7.2 of the Air Quality Technical Report. Figure 20 allows the reader to visualise that the routine maintenance/testing scenario modelled aims to provide separation between the stacks that are tested concurrently rather than testing adjacent stacks at the same time.

Issue description 2

It is unclear whether the AQTR has adequately considered cumulative pollutant concentrations from surrounding industrial developments within Gregory Hills, Smeaton Grange or utilised similar emissions profiles such as the data centre development in Bluett Drive. The Department requests the AQTR to be updated to consider all potential cumulative impacts of surrounding developments and industrial operations.

Response 2

As noted in section 4.2.3 of the Air Quality Technical Report (Appendix L), nearby industrial sources that are likely to impact the local airshed have been reviewed and the contribution of these sources to existing air quality concentrations was determined to be captured in the background monitoring data used from the Campbelltown Air Quality Monitoring Station, which is approximately 5 km to the south-east of the Proposal Site. The closest industrial source that reports to the National Pollutant Inventory is almost five kilometres away from the proposal site, and therefore is unlikely to generate significant cumulative effects in addition to the proposal site.

The data centre development at Bluett Drive is approximately 500m south-east of the proposal site. As with the above industrial sources, the data centre's contribution to local background concentrations is expected to be captured in the background monitoring data from Campbelltown. However, it is acknowledged that the data centre development is much closer to the proposal site than the available monitoring station.

Cumulative impacts would only occur at sensitive receivers that are directly downwind of both the existing data centre development as well as the proposal site. For the proposal site, this could include residential receivers at Currans Hill Park under very specific North-Westerly wind vector condition and conversely receivers to the west of Camden Valley Way under very specific South-Easterly wind vector conditions. The existing meteorological conditions for the area are shown in Section 4.1 of the Air Quality Technical Report (Appendix L). The wind roses show that the prevailing wind direction for the area is south-westerly, under these conditions there would be no opportunity for cumulative impacts on receivers from both the proposal site and existing data centre development on Bluett Drive. Based on wind rose information, there is a very low likelihood of north-westerly wind conditions, with only a slightly higher chance of south-westerly wind conditions occurring that may have the potential to generate cumulative impacts from the data centre

developments at downwind receivers. In addition to the low likelihood of specific wind conditions, the distance between the proposal site and the existing data centre development also allows for dispersion of the pollutants within the atmosphere which reduce the likelihood of cumulative impacts at nearby receivers. Given the above, it was determined that inclusion of the existing data centre development with the air dispersion modelling assessment was not required as the risk of cumulative impacts was low.

4.1.6 Procedural matter | ecological sustainable development

Issue description 1

The Ecologically Sustainable Development (ESD) Report in Appendix J1 of the EIS should be updated to provide specific information on the development's urban heat effects. Further analysis is needed to substantiate the effectiveness of the proposed measures. The analysis must also address potential localised heat rejection impacts from rooftop cooling plant and equipment, and back-up generators on surrounding receivers.

Response 1

The Urban Forest Strategy prepared by Camden Council found Gregory Hills highly vulnerable to the Urban Heat Island (UHI) effect, with a heat vulnerability index of 2 and an average heat island deviation of 8°C. This vulnerability is attributed to several factors, including high-density residential development (from adjacent residential areas in Gregory Hills), limited green spaces, and extensive use of materials that absorb and retain heat, such as concrete and asphalt. No formal UHI effect modelling has been conducted for this project, primarily due to the local and regional factors that contribute to UHI and given its location within an industrial zone, buffers to receivers and the building height at which rooftop plant, equipment and exhausts from back-up generators are located. Any heat generated would also be ejected upwards, with the heat from generators being diluted before reaching any neighbouring property.

Analysis indicates that rooftop exhaust temperatures would typically be lower than peak ambient conditions within Gregory Hills. Therefore, the heat rejection from rooftop plant and equipment is not expected to contribute significantly to UHI. Diesel generators are installed within acoustic enclosures that offer some degree of thermal insulation and are used infrequently, either for testing or emergency back-up power. Considering these factors and the broader context of local UHI vulnerability, the impact as a result of the proposed development is deemed negligible.

The development has included a number of mitigations relevant for UHI effect, such as:

- Native vegetation utilised in landscaping
- Light-coloured roofing and lightly insulated façades to reflect solar heat
- Utilising evaporative and free-air cooling systems to reduce reliance on mechanical cooling.

Given the scale and context of the development, the embedded mitigation measures are considered adequate rendering further analysis unnecessary.

Issue description 2

The Department requests additional information be provided to detail and demonstrate the effectiveness of the proposed ESD measures to be implemented including the predicted energy and water savings of the development.

Response 2

The proposed development demonstrates a wide range of energy and water saving design measures, many of which are incorporated to drive efficiency in the operation of the facility.

These measures have been outlined in Section 4.1, Table 3 of the Ecologically Sustainable Development (ESD) Report, but for reference have been included in the response below.

Energy Efficiency:

- Roof-mounted Solar PV
- Power Utilisation Effectiveness (PUE) that exceeds NABERS 5-Star
- Building-wide metering strategy
- Optimised hot aisle containment configuration
- Free-air and evaporative cooling system
- Distributed UPS power architectural design
- Optimised building orientation
- LED efficient lighting specification.

Water Efficiency:

- Rainwater capture and reuse
- 4-Star Minimum Water Efficient WELS appliances
- Building-wide metering strategy
- Water Sensitive Urban Design (WSUD)
- DAHU water cycle optimisation
- Direct outside air cooling for data halls with evaporative cooling utilised during peak summer months.

The effectiveness of these measures has not been quantified at this stage of the project. However, smart metering of the data centre building has been incorporated into the design and meeting the NABERs rating will require ongoing auditing and monitoring of the offices water and energy efficiency.

4.1.7 Procedural matter | traffic and access *Issue description 1*

Additional swept path analysis should be provided to demonstrate all site access points, including vehicle access off Turner Road and the substation access point, can provide for entry and exist of all types of vehicles, including the emergency vehicle.

Response 1

Swept paths for all access points is shown in Figure 4-1 below and provided in Appendix D. The swept path analysis demonstrates that all access points to the site can provide entry and exit for all vehicles up to and including heavy rigid vehicles.





The Department notes that no direct access is provided between the substation and the main data centre building and internal road. The Department requests clarification and justification for the separation of access to the substation from the rest of the site.

Response 2

As outlined in Section 5.1.2 of the Infrastructure and Services Report, the high voltage (HV) substation includes two components:

• A control room and switching station to be owned and operated by Endeavour Energy

• A 132/22kV transformer and substation to be owned and operated by the Proponent.

Endeavour Energy requires 24/7 unrestricted access to its infrastructure, which is why the substation is accessed via White Cliffs Avenue due to the security requirements associated with access to data centre facilities. In addition, there are significant level differences across the site. The development has been configured over two distinct platforms. The HV substation is located on a higher bench at approximately RL 100mAHD, while the data centre building is located on a lower bench at approximately RL 96mAHD, with its primary access from the Eastern Access Road at approximately RL 91.5mAHD as agreed with Council. A major retaining wall separates the upper and lower benches, preventing direct vehicular access between the substation and the data centre internal road network.

4.1.8 Procedural matter | remediation

Issue description

The Department requests a copy of the Remedial Action Plan (RAP) for the Department to be satisfied the site will be made suitable for the proposed development.

Response

A RAP has been prepared as part of the early works DA and outlines the remediation required to make the site suitable for the proposed industrial use. The RAP identified areas where contaminants, including asbestos, exceed the relevant criteria and require remediation prior to construction. A subsequent Data Gap Assessment has also been prepared to address uncertainties identified in the RAP and confirm the revised extent of remediation required. Both documents will be provided to the Department to support assessment.

4.1.9 Procedural matter | update mitigation measures

Issue description

In light of the comments provided above, the Department requests that the list of management and mitigation measures in Appendix F of the EIS be updated to reflect any corresponding amendments to the technical reports, including any revised operational mitigation measures for noise emissions.

Response

An updated version of the mitigation measures prepared for the EIS, has been provided in Appendix C of this report.

4.2 Camden Council

4.2.1 Impacts | building Height

Issue description

It is noted that the proposed development has a maximum building height of "approximately 23m" and thereby contravenes the maximum prescribed building height development standard of 15m. It is considered that the Clause 4.6 written request should accurately identify, and not approximate, the maximum height of the proposed development.

Response

The building height varies across the development, with the highest point reaching 23 metres. The term 'approximately' has been used throughout the Environmental Impact Statement (EIS) to reflect this variation for assessment purposes.

4.2.2 Impacts | Stormwater drainage and water quality

Council's Engineering Certification Team have considered the relevant material accompanying the SSD application and provided the following comments:

Issue description 1

It is noted that a DA for the early works on the subject site is currently under assessment by Council which requires compliance with pre-development and post-development stormwater on site detention (OSD) and water quality requirements.

The SSD for the proposed data centre is required to match the post-development state of the early works DA (as completed). The two development applications are required to be considered and assessed separately.

Water quality targets have not been clearly demonstrated. The pre-development state for the SSD application inaccurately represents the pre-development state for the early works DA. The water quality targets should be calculated on the basis that the early works on site have been constructed.

Response

Both the early works DA and the SSD adopt the site's existing, undeveloped condition as the baseline for assessing stormwater and flood-related impacts.

The early works configuration, specifically the construction of a graded earthworks platform and implementation of erosion and sediment control (ESC) measures, represents a temporary condition with an expected duration of approximately 10 months. As this interim state was not considered to appropriately represent the true pre-development condition of the site, the undeveloped baseline was adopted as the most conservative and robust assumption for impact assessment purposes.

The EIS presents the final site configuration, with the proposed works designed to achieve compliance with Camden Council's Engineering Design Specifications and the Turner Road Development Control Plan (DCP).

Section 6.4 of Appendix O to the EIS outlines the MUSIC modelling undertaken for the project. Table 6-5 confirms that the pollution reduction targets specified in Council's Engineering Design Specification have been met.

Issue description 3

Amended DRAINS and MUSIC models are required to be to confirm accuracy and compliance with Council's Engineering Design Specifications.

Response

See above responses to items 1 and 2. It is considered that the assessments provided use the appropriate baseline condition and demonstrate compliance with Council's Engineering Design Specifications and Turner Road DCP. Accordingly, it is not considered necessary to update the MUSIC or DRAINS models.

4.2.3 Impacts | flooding

Council's Flooding Team have considered the relevant material accompanying the SSD application and provided the following comments:

Issue description 1

The Stormwater Management Report and Flood Impact Assessment Report inaccurately identify the postdevelopment stormwater flows. As highlighted in the above section of this letter, a DA for the early works on the subject site is currently under assessment by Council. The post-development flows of the early works DA would be considered as pre-development flows for the purpose of this SSD application. The reports are required to be amended to provide the correct assessment of pre and post stormwater requirements.

Response 1

As noted in Section 4.2.2, both the Early Works DA and the EIS use the existing (un-developed) condition of the site as the baseline condition for stormwater and flood related conditions. The undeveloped baseline was adopted as the most conservative and robust assumption for impact assessment purposes.

Issue description 2

In Table 6.1 and 6.2 of the Stormwater Management Report and Flood Impact Assessment Report, main catchment 2 and external catchments 1 and 2 have not been included. The catchment discharge calculated for various flood events does not represent the correct scenario. The existing condition has been shown as predevelopment which is incorrect.

Response 2

Table 6.1 and Table 6.2 of Appendix O to the EIS present the pre-development and post-development conditions for the site footprint. Detention of flows from external upstream catchments, some of which may already be subject to detention, is not required in the context of sizing detention requirements for the subject site under the SSD. The existing undeveloped condition of the site is considered the appropriate pre-development scenario for the purposes of stormwater modelling and design.

Issue description 3

Figure 6.4 - DRAINS model does not correspond to Figure 6.2 – Stormwater Catchment Plan within the Stormwater Management Report and Flood Impact Assessment.

Response 3

We acknowledge that Figure 6.4 - DRAINS model does not correspond to Figure 6.2 – Stormwater Catchment Plan within the Stormwater Management Report and Flood Impact Assessment. This discrepancy is an error in the version of the figure included within the report.

Issue description 4

Electronic versions of DRAINS and MUSIC models have not been provided to allow a proper and thorough assessment.

Response 4

These models were provided to DPHI; however, it is understood they may not have been forwarded to Council. To ensure full transparency and facilitate Council's review, electronic copies of the models will be provided to Council.

Issue description 5

The proposal should clearly demonstrate that post-development stormwater discharge does not exceed predevelopment stormwater discharge.

Response 5

Table 6.2 of Appendix O to the EIS details pre- and post-flow assessment, demonstrating that postdevelopment flows do not exceed pre-development conditions for a range of storm events.

Issue description 6

It is noted that there should be no impact on the creek flowing to the east if post-development discharge is restricted to pre-development levels.

Response 6

The flood impact assessment compares the pre-development condition of the site (present day arrangement) with the post-development configuration. There are localised areas of increases and decreases of flood depths and afflux levels within the creek to the east of the site. This is due to two reasons:

- 1. The position of the proposed stormwater outfalls differs (by as much as 20 m in plan) from the existing overland flow paths that discharge from the eastern boundary of the site.
- 2. There is a minor re-distribution of flow from the diversion of the upstream catchment overland flow path through the northern portion of the site area, compared to existing condition where the upstream catchment flows through the site and discharges to the riparian further south.

It is however highlighted that flood depth and flood velocity afflux mapping for the 1% AEP event, show no change in flood behaviour at the southern end of the riparian corridor to the east of the site.

Issue response 7

Due to the conceptual issues raised, the flood maps cannot be accurately assessed as they require amendment.

Response 7

The flood model prepared appropriately considers both the pre-development and post-development configurations of the proposal. It is important to distinguish between the two separate models used in the assessment:

DRAINS Model:

The DRAINS model was used to assess pre- and post-development flows from the subject site and to size key on-site stormwater infrastructure, such as the on-site detention (OSD) tanks.

TUFLOW Model:

The TUFLOW model was independently developed to assess flood behaviour across the broader catchment. It incorporates upstream catchments that flow through the site, on-site stormwater infrastructure, and the topography of the site and surrounding areas, including the riparian corridor. A rainfall-on-grid approach was used to inform flow characteristics from the site and to compare pre- and post-development flows within the unnamed creek to the east of the site.

The TUFLOW model is not reliant upon or contingent on the DRAINS model. The proposed stormwater network serving the site was modelled in 12D and incorporated directly into the TUFLOW model. Both models produce consistent outcomes:

- Peak flood levels within the creek, as shown on the flood maps, are lower in all events post-development compared to existing conditions.
- This is consistent with the pre- and post-development flow analysis in Table 6-2 of Appendix O to the EIS, which shows that post-development flows are marginally lower than pre-development flows in all modelled storm events.
- Both models apply consistent input assumptions.

Accordingly, the modelling demonstrates that the proposal will not adversely affect flood behaviour and that the flood assessment is robust and appropriately detailed.

4.2.4 Impacts | building certification

Issue description

Council's Building Certification Team have considered the relevant material accompanying the SSD application. It is noted that the Building Code of Australia (BCA) report details the compliance status of the proposal and concludes that NCC Volume 1 BCA 2022 compliance is readily available. The development is considered acceptable based on the supporting documents, BCA & Access Consultants Report. However, while limited details are provided with the SSD application, Council advises that a detailed review at the Construction Certificate stage will be required to be undertaken to confirm the entirety of the BCA compliance issues. It is anticipated that Deemed to Satisfy or Performance Solution input will be required from the authorities, project engineer, BCA and Access Consultant during detailed design stages. The development and construction will be subject to the regulatory reviews, progressively undertaken as the design develops to ensure compliance is achieved.

Response

The SSD application is supported by a BCA and Access Compliance Report confirming that compliance with NCC Volume 1 BCA 2022 can be achieved. It is recognised that further detailed assessment will be required at the Construction Certificate stage.

4.2.5 Impacts | traffic

Council's Traffic Team have considered the relevant material accompanying the SSD application and provided the following comments:

Issue description 1

The traffic report identifies that 93 car parking spaces are required, and 70 car parking spaces are provided. The proposal presents a shortfall of 23 car parking spaces and Council staff submit that the development should achieve full compliance with the minimum car parking rate.

Response 1

Parking provided is based on the peak number of staff and visitors on site at one time, not GFA or daily totals. Workforce and visitor assumptions included:

- 50 full-time staff, 10 contractors, and 10 visitors over a full day.
- Staff work two 12-hour shifts (changeover at 6am and 6pm), meaning fewer staff on site at once.
- Visitors attend during office hours.
 - Maximum demand anticipated: 42 vehicles expected on site at peak, as detailed in the SSD application (Table 10 of Appendix H).

Issue description 2

A swept path assessment has only been provided from the Eastern Access Road (as proposed for heavy vehicles). A swept path assessment is required which details access from the cul-de-sac and western end of Turner Road.

Response 2

Refer to response provided in Section 4.1.7 and Appendix D which shows the swept path analysis of all of the access points to the site including the substation.

4.2.6 Impacts | landscaping considerations

Council's Landscape Team have considered the relevant material accompanying the SSD application and provided the following comments:

Issue description 1

The car park design is required to be amended in accordance with the requirements of Camden Council's Development Control Plan 2019, Section 2.18.3 – Car Parking Design Criteria. As the car park is highly visible from the public domain, Council recommends that the proposal must comply with the following requirements:

- a. Provide a 2.5m wide landscape bay between every 6-8 car parking spaces
- b. Provide a minimum 1m landscaping strip at the end of parking aisles
- c. Be landscaped generally in accordance with Figure 2-12 of the DCP

Response 1

The car parking design incorporates landscaping treatments at the ends of parking aisles, as shown in the landscaping plans. While the car park will have limited visibility from the public domain given the levels on the site, landscaping has been provided in accordance with the principles outlined in Figure 2-12 of the Camden DCP. It is noted that the car park layout differs from Figure 2-12, as the proposed design features perpendicular and parallel parking spaces that connect directly to a circulatory roadway. As a result, there are no defined "ends" of parking aisles in the traditional sense. Nevertheless, intermediate landscaping bays have been incorporated approximately every 10 spaces, and additional planting has been provided behind footpaths at the rear of parking spaces to increase landscaping and contribute to overall amenity.

Issue description 2

The proposed car park landscape species of *Cupaniopsis Anacardioides* should be substituted to a larger canopy tree species (10-20m) selected from Camden Council's tree species list. This would assist in providing further shade of hard surfaced areas, combat urban heat from extensive hard surface areas and soften the built form of the building by creating extra screening.

Response 2

A landscape management plan will be prepared before construction. The feasibility of including larger canopy tree species will be investigated.

Issue description 3

A substitution of the *Elaeocarpus Reticulatus* species is required as this species has had low success of growth and under performs when used in new developments within the Camden Local Government Area.

Response 3

A landscape management will be prepared prior to construction. A review of alternative species will be undertaken, and a suitable substitution for *Elaeocarpus reticulatus* will be identified from Camden Council's preferred species list.

4.2.7 Impacts | biodiversity

Issue description

It is noted that the land consists of *Eucalyptus terreticornis* with an extensive cover of native grasses (*Microeleana stipoides and Aristida sp*) which is classified as native vegetation, and the land is noncertified. This correlates to PCT 3320 Cumberland Shale Plains Woodland. A perimeter road on the eastern boundary of the site and stormwater outlets on the adjoining Council reserve are proposed to be constructed under the early works DA. A Biodiversity Development Assessment Report (BDAR) has been requested by Council staff to be submitted for the early works DA (DA/2024/616/1). The report is currently outstanding and will require further assessment.

Response

While a Biodiversity Development Assessment Report (BDAR) was requested as part of the early works DA, a 5-part test of significance was submitted instead, supported by a Flora and Fauna Assessment, which concluded that the early works would not result in significant impacts on the threatened species or communities. Secondly, as the land is biodiversity certified and a BDAR was not appropriate for the scale of the works. For the purposes of the SSD, the subject land will have already been cleared under the early works. The EIS Proposal Area also excludes both the perimeter road and the associated drainage area. Accordingly, this matter is not relevant to the SSD.

4.2.8 Impacts | noise

Council noted that contamination and salinity have been assessed under the early works DA (DA/2024/616/1) and the site is deemed suitable for the intended use of the land for a data centre. However, it is considered that further information is required to be provided as part of a revised acoustic report which addresses the following:

Issue description 1

A nearby approved childcare centre at 36 Turner Road has not been identified in the submitted acoustic report. It is also noted that Council has provided Pre-DA advice on a proposed childcare centre at 2 White Cliff Avenue.

Response 1

The noise contours provided in Appendix H2 of the EIS (representing Standard Operations with Trucks under enhanced weather conditions) indicates that the predicted noise levels are 35-40 dBLAeq north of the lot boundary, and <=35 dBLAeq at other lot boundaries. These levels are below the Project Specific Noise Level criteria for Childcare Centres and is deemed an acceptable level of impact for the approved childcare centre at 36 Turner Road. However, the noise contours in Appendix H3 indicate that noise levels of 45-50 dBLAeq may be experienced during "Position 2 maintenance operations".

The proposed childcare centre at 2 White Cliff Avenue was not considered specifically in the report as it was not approved at the time of assessment. However, noise mapping included in the NVIA identifies likely noise contours in surrounding areas, which can assist in informing the design of that future facility. The site is also located in an industrial precinct where some level of operational noise is expected for adjacent land uses.

Issue description 2

Further consideration is required regarding the mitigation measures proposed for construction and operational noise impacts, with a revised report to be submitted prior to commencement of works

Response 2

The current construction noise assessment is considered conservative, with assumptions based on the use of multiple items of equipment operating concurrently and continuously. Prior to the commencement of construction works, the contractor will develop a detailed Construction Noise and Vibration Management Plan (CNVMP), informed by refined methodologies, staging, and equipment selection. This requirement is outlined in the NVIA (refer to Section 5.6).

The mitigation measures included in the NVIA are considered sufficient to manage operational impacts on surrounding receivers, including existing and approved future receivers (including the childcare centre at 36 Turner Road).

4.2.9 Impacts | water services

Council has requested clarification and updates to waste-related matters. Specifically:

Issue description 1

The bin storage area and bin locations are required to be demonstrated on the architectural plans. It should also include the collection point for waste trucks and the bin path of travel from the storage area to the collection point.

Response 1

A bin storage area has been added adjacent to the MEP room. The collection point for waste trucks and the path of travel from the storage area to the collection point will be provided to Council.

Issue description 2

The demolition and construction waste management plan are required to specify the name and location of the waste drop off/ recycling facility.

Response 2

A more detailed Construction Waste Management Plan (CWMP) will be prepared during the later design stages, once a contractor is engaged, to confirm which waste facilities will be used.

Issue description 3

An ongoing waste management plan is required to be provided.

Response 3

An Operational Waste Management Plan (OWMP) will be a requirement of the conditions of approval of the project and would be developed prior to operation of the facility.

Issue description 4

Waste generation rates are required to be calculated in accordance with Council's Waste Management Guidelines – Appendix 1 -Table 4. Based on the updated calculation, bin sizes and number of bins need to be determined.

Response 4

Preliminary waste generation rates for operational waste, including weekly volumes for general waste, mixed recyclables, paper/cardboard, and food and garden organics, are provided in Section 3.3.2 of the Waste Management Plan (Appendix R of the EIS). Based on these rates, bin storage and collection requirements are summarised in Section 3.3.4. The proposed bin storage area is also shown in the architectural plans provided in Appendix D of the EIS. These provisions meet the requirements of Camden Council's Waste Management

Guidelines 2019 and provide a basis for the finalised Operational Waste Management Plan to be developed during detailed design.

Issue description 5

Please note Council does not currently offer a Food and Garden Organics Waste service and a private contractor will need to be engaged for this.

Response 5

Council's advice regarding the absence of a Food and Garden Organics (FOGO) service is acknowledged. A private contractor will be engaged, where reasonable and feasible, until a Council service is introduced.

Government authorities

4.3 Environment Protection Authority

4.3.1 Procedural matter | air quality

Issue description 1

The information provided in the EIS and Air Quality Impact Assessment (AQIA) indicates the proposal will exceed air quality impact assessment criteria at future proposed receivers (R1 to R4) for hourly NO₂ during emergency operations (Scenario 1).

Response 1

As is typical for data centre operations with back up generators, exceedances of the NO₂ impact assessment criteria are common at nearby receivers during a worst-case scenario of a power outage where all generators will need to operate at full capacity. As noted in Section 7 of the AQIA, predicted concentrations also represent the highest possible concentrations, assuming any power outage coincides with worst-case meteorological conditions for each receiver, providing conservatism within the model. Noting this and that the likelihood of a power outage occurring is expected to be extremely rare, as per Section 3.2.2 of the AQIA, the air quality impact risk is very low.

Issue description 2

EPA noted that there is no assessment regarding cumulative air impacts for nearby data centres or other industrial activities. The EPA suggests DPHI considers the need to assess cumulative air quality impacts that may result from the operation of this proposal.

Response 2

This request has been provided as part of DPHI's submission and responded to in section 4.1.5.

Issue description

The EIS estimates the proposal will generate GHG emissions greater than 25,000t CO2-e pa during its operational life. The proposal is not subject to the requirements in the NSW Large Emitters Guide, as it does not require an Environment Protection Licence. The proponent should be reminded of their potential obligation to report under the NGER Act given their estimated scope 1 and scope 2 emissions.

The EPA recommends that high energy users reduce their Scope 2 emissions as much as practicable and consider measures such as those listed below.

- Energy efficiency practices
- Purchasing renewable energy certificates

Response

The proposed development demonstrates a wide range of energy saving design measures – many of these incorporated to drive efficiency in operation of the facility. These measures have been outlined in Section 4.1, Table 3 of the Ecologically Sustainable Development (ESD) Report, but for reference have been included in the response below.

Energy efficiency measures adopted:

- Roof-mounted Solar PV
- Power Utilisation Effectiveness (PUE) that exceeds NABERS 5-Star
- Building-wide metering strategy
- Optimised hot aisle containment configuration
- Free-air and evaporative cooling system
- Distributed UPS power architectural design
- Optimised building orientation
- LED efficient lighting specification.

The proponent also has a Green Power Purchase Agreement in place for the site which mitigates Scope 2 impacts on the project.

4.3.3 Procedural matter | waste management

Issue description

The proposal includes a Battery Energy Storage System. The proponent should be made aware that an Environment Protection Licence is required to transport higher risk wastes (classification of waste batteries should be applied in accordance with EPA's waste classification guidelines) and waste tracking requirements also apply.

Compliance with relevant dangerous goods transport legislation is required when transporting batteries considered as dangerous goods (as per the Dangerous Goods (Road and Rail Transport) Act 2008).

The requirement for an Environment Protection Licence to transport higher risk wastes and waste tracking requirements have been noted. The transportation of batteries will also be undertaken in compliance with relevant dangerous goods transport legislation.

4.3.4 Procedural matter | noise

Issue description

The proposal includes an operational noise assessment that references the NSW Noise Policy for Industry (NPfI). It is noted the Noise and Vibration Impact Assessment does not assess emergency operations.

Response

The noise mitigation measures included in the EIS acknowledges that any noise impacts arising from emergency operations will be managed in accordance with the feasible and reasonable framework outlined in the NPfI, where applicable.

4.3.5 Procedural matter | operational limits

Issue description

Based on the information provided, the proposal does not appear to exceed the thresholds in Schedule 1 of the *Protection of the Environment Operations (POEO) Act 1997*, particularly relating to Clause 9 Chemical Storage (diesel storage) and 17 Electricity Generation (operation of back up plant). The EPA suggests DPHI consider implementing operational limits as part of any approval of the project to ensure the proposal does not exceed the thresholds in the POEO Act without obtaining an Environment Protection Licence. It is the responsibility of the proponent to apply for an environment protection licence (EPL) if they determine that the total testing time of the generators is expected to exceed 200 hours or storage of diesel fuel exceeds 2,000 tonnes.

Response

As noted, the proposal is not expected to exceed the thresholds under Schedule 1 of the POEO Act, including those relating to diesel storage and generator testing. It is acknowledged that an EPL would need to be obtained should thresholds be exceeded.

4.4 Heritage NSW

4.4.1 Compliance

Issue description

Heritage NSW sought further information regarding the Aboriginal site AHIMS 52-2-3557, which has been reported as destroyed following its collection by a previous landowner. Specifically, they requested:

- Clarification on the investigation and evidence supporting the conclusion that the artefacts were collected by the previous landowner, particularly as this was referenced by Austral Archaeology using Artefact Heritage's 2021 report
- Confirmation of whether the current location of the collected artefacts is known

• Confirmation of whether Artefact Heritage reported the collection to the Enviroline as a potential breach of the *National Parks and Wildlife Act 1974*.

Response

Artefact Heritage had been informed that Heritage NSW previously investigated the matter, and the collected artefacts are no longer on-site. Heritage NSW provided us with Case Number 202204043, which pertains to the artefacts from AHIMS 52-2-3557 and concludes Heritage NSW's inquiries regarding this site (DOC22-862268).

Following SSD approval, consultation with RAPs and other relevant parties will be conducted to determine the long-term management of the collected artefacts.

4.4.2 Procedural matter | registration of untested archaeological deposit

Issue description

Heritage NSW notes that the finalised Aboriginal Archaeological Survey Report (January 2022) included revisions to the location and extent of TR PAD 01, resulting in the area not being subject to test excavations by Austral. Although the revised PAD lies outside the current project area, Heritage NSW requested that the updated location of the untested PAD be formally lodged with AHIMS to ensure the area is appropriately identified and assessed should future works be proposed there.

Response

This request is beyond the scope of the SSD as TR PAD 01 lies outside of the project area. Section 89 of the NPW Act requires notification of the location of Aboriginal objects, however there are no identified Aboriginal objects at TR PAD 01. Notwithstanding this, the location of TR PAD 01 will be uploaded to AHIMS by Artefact Heritage.

4.4.3 Procedural matter | consultation and document access

Issue description

Heritage NSW requests that a copy of the consultation log and all consultation documents be provided for their records and review. They note that the links in Appendix B of the ACHAR are not functional, preventing them from accessing or downloading the relevant materials.

Response

The applicant will provide an unredacted version of this information to Heritage NSW for reference.

4.5 Conservation Programs, Heritage and Regulation Group

4.5.1 Procedural matter | flooding

CPHR acknowledges the proponent's submission of a separate development application (DA/2024/616/1) to Camden Council for early works, including vegetation clearing, earthworks, and construction of roads and stormwater infrastructure, which must be approved before the main SSD can proceed. CHPR also noted that the flood impact assessment prepared to support the EIS (Appendix O) adequately addresses the Secretary's environmental assessment requirements (SEARs).
Issue description 1

CPHR noted that post-development flood modelling indicates that during a Probable Maximum Flood (PMF, namely the largest flood that could conceivably occur at a particular location), the flood hazard reaches a high level (H5, namely deep/fast moving water) in critical areas of the site, including the swale, internal access road, and main entry from Turner Road. To address this risk, the NSW SES recommends that businesses in flood-prone areas develop a site-specific Business Emergency Continuity Plan. This plan should incorporate appropriate emergency management measures, such as safety signage and access controls, and address risks to both on-site users and those travelling to the development.

Response 1

The applicant acknowledges the SES Guidance and will consider preparing a Business Emergency Continuity Plan to address residual flood risk during a PMF event. However, we note that the Section 7.7 and Section 7.8 of the flood impact assessment prepared to support the SSD application (Appendix O) confirms that the site is not affected by mainline riverine flooding, and all habitable buildings have been designed to comply with applicable flood planning level criteria, including PMF levels with appropriate freeboard.

Except for the river corroder, which is outside of the project's development footprint and contains no habitable structures, the modelling demonstrates no adverse PMF-related impacts to downstream properties. This corridor is owned by Council, who have been consulted as part of the application process.

Accordingly, while that there is no need to prepare a Business Emergency Continuity Plan, the mitigation measures have been adopted to support its preparation as a precautionary measure, to account for the compromise of any site access routes during the PMF, even if the buildings remain dry. The Plan will define safety evacuation, emergency service access, and business continuity measures.

Issue description 2

CPHR noted that, as the flood hazard level on the adjacent downstream property increases from low-tomoderate (H2) to high (H4) under PMF conditions, the applicant should consult with the affected property owner to address potential impacts.

Response 2

The applicant acknowledges this request as aligning with best practice as outlined in the NSW Floodplain Development Manual 2005. Consistent with the engagement carried out to support and inform the EIS, the applicant will continue its consultation with the affected downstream property owner(s) to advise of the PMF modelling outcomes and confirm that no increased risk arises under design flood conditions. This has been documented as part of the final mitigation strategy.

4.5.2 Procedural matter | biodiversity

Issue description

CPHR highlighted that part of the subject site is within biodiversity certified land under the State Environmental Planning Policy (Western Parkland City) 2021 and the need to assess the impacts in accordance with the NSW *Biodiversity Conservation Act 2016*. The submission also notes the adequacy of the assessment of indirect impacts on the adjacent river corridor and the need for the corresponding mitigation measures outlined in the biodiversity assessment (Appendix K of the EIS) are included as consent conditions.

Response

At the time of lodging this submissions report, the Biodiversity Certification remains in effect, and accordingly, the assessment provided in support of the SSD and EIS (Appendix K) remains valid.

On 3 April 2025, DCCEEW corrected a biodiversity values mapping error along the site's eastern boundary, identifying a small area, which was previously identified as non-certified land. Notwithstanding this, the SSD applies to a site that has already been subject to early works under DA (DA/2024/616/1), during which any statutorily protected ecological values would have been managed through approved vegetation clearance and mitigation measures. A Flora and Fauna Assessment was prepared to support the early works application and addressed the relevant requirements of the NSW *Biodiversity Conservation Act 2016*.

4.5.3 Procedural matter | landscape

Issue description

CPHR noted that the submitted landscape plans only include proposed plantings for part of the site, with no landscaping shown for the northern section. It therefore requested further information to clarify why the northern portion has been excluded and to ensure the landscape plan meets the full SEARs requirement.

Response

The northern section of the site is proposed to be landscaped under the separate early works development application (DA/2024/616/1), which has been submitted to Camden Council. It therefore does not form part of the SSD.

4.6 Fire and Rescue NSW

4.6.1 Procedural matter | fire safety and emergency planning

Issue description

The first recommended condition is that a Fire Safety Study (FSS) must be prepared before construction starts in line with Hazardous Industry Planning Advisory Paper (HIPAP) No. 2 and submitted to FRNSW for review. The advisory paper provides the framework and technical guidance for assessing fire risks, prevention measures, and emergency response strategies for hazardous or complex developments.

In practice, this means the FSS must adopt the format, content, and risk assessment approach specified in HIPAP No. 2 – Fire Safety Guidelines. It should cover key aspects such as identifying fire hazards, outlining prevention and mitigation strategies, detailing emergency response procedures, and specifying firefighting requirements relevant to the development.

The submission of the Study to FRNSW is compulsory, and their review and endorsement is required before any subsequent fire safety documentation (e.g., Initial Fire Safety Report or Fire Engineering Brief) can be submitted.

Issue description

The second recommended condition requires the applicant to prepare an emergency plan before the facility is occupied or commissioned. The plan must be developed in accordance with Hazardous Industry Planning Advisory Paper (HIPAP) No. 1 – Emergency Planning, which provides a structured framework for managing onsite emergencies. For a data centre, where there is a high concentration of electrical equipment and critical systems, the plan must clearly outline procedures for fire detection, evacuation, emergency service coordination, and system protection. It must also define firefighting access, response roles, and communication protocols to support an effective response by Fire and Rescue NSW in the event of a fire.

Issue description

The final recommended condition is for the applicant to prepare an Emergency Services Information Package (ESIP) in line with Fire and Rescue NSW's fire safety guideline on emergency services information packages and tactical fire plans. The guideline outlines the format, content, and purpose of the ESIP. The guideline ensures that the ESIP provides essential, site-specific information to assist Fire and Rescue NSW in responding effectively during an emergency. This includes details such as site layout, access points, fire protection systems, hazards, and tactical considerations—particularly important for complex facilities like data centres. The ESIP must be developed in line with this guideline to ensure it meets operational requirements and supports timely and informed firefighting efforts.

Response

The applicant notes the above and will adopt these conditions. For clarity they have been included in the updated mitigation measures in Appendix C.

4.7 Rural Fire Service

4.7.1 Procedural matter | bushfire asset protection zones

Issue description

The RFS noted that to reduce bushfire risk and safeguard residents, emergency personnel, and firefighting efforts, an Inner Protection Area must be established and maintained from the start of construction and for the project's duration. The zone must extend 16 metres to the northeast of the dwelling and to the property boundary in all other directions, following Planning for Bush Fire Protection 2019. It then notes that there are several key requirements that must be adopted to align with the above guidelines, include limiting tree canopy cover to under 15 percent, ensuring trees don't overhang or touch the building, removing lower limbs up to two metres, spacing tree canopies two to five metres apart, choosing smooth-barked evergreens, creating gaps in shrub layers, keeping shrubs away from trees and openings, limiting shrub cover to 10 percent, mowing grass to under 100 mm, and clearing leaf litter and debris regularly.

Response

The Bushfire Assessment Report prepared to support the EIS (Appendix Q) was prepared in accordance Planning for Bush Fire Protection 2019 accounting for the above requirements. These measures have been adopted in the Landscape Plans (Appendix E), design, and mitigation measures to comply with the above provisions.

4.7.2 Procedural matter | bushfire protection design and construction

Issue description

The RFS noted that to reduce bushfire risk and protect people and critical infrastructure, all new buildings must use non-combustible materials and be fitted with ember protection. This includes enclosing or screening all external openings (except roof tile gaps) with non-corrosive metal mesh, with a maximum of 2 mm openings, covering areas such as vents, windows, weep holes, eaves, and subfloors. External doors must also have draft excluders installed.

Response

While the applicant has sought to incorporate RFS recommendations where practicable, certain measures, such as installing mesh over windows and vents, are not feasible due to their operational impact on the data centre's performance and ventilation requirements. To appropriately mitigate bushfire risk, the project has instead been designed in accordance with AS 3959:2018 – Construction of Buildings in Bushfire-Prone Areas, meeting the requirements for Bushfire Attack Level 29 (BAL–29), which represents a moderate risk and provides robust protection using non-combustible materials and ember resistance.

Importantly, the National Construction Code (NCC) does not prescribe bushfire construction standards for this building class (i.e., non-residential, infrastructure-based facilities such as data centres), as it does for residential buildings. In addition, the accompanying Bush Fire Assessment Report confirms that no direct flame contact is anticipated, in accordance with Part 8 of Planning for Bush Fire Protection 2019. This supports the design response adopted in the SSD and EIS, which is considered both appropriate and compliant with applicable risk-based planning provisions.

4.7.3 Procedural matter | access and property access

Issue description

In terms of property access the RFS noted that to support firefighting efforts and reduce bushfire risk, property access roads must meet the standards in *Planning for Bush Fire Protection 2019*. Requirements include all-weather, two-wheel drive access roads able to support 23-tonne fire trucks, clear bridge load ratings, four-metre--wide carriageways, four-metre vertical clearance, passing bays every 200 metres in bushland areas, and suitable turning areas. Roads must also provide fire truck access to water supplies, allow safe entry/exit via gentle curves and slopes (max 15° sealed, 10° unsealed), and include dedicated public roads (not rights of way) for developments with more than three dwellings.

Response

The project has been designed to comply with the above requirements.

4.7.4 Procedural matter | water and utility services

Issue description

The RFS noted that the provision of water, electricity, and gas must comply with the requirements of *Planning for Bush Fire Protection 2019*. This includes using reticulated water where available, ensuring all above-ground external water and gas pipes are metal, and maintaining a 10-metre clearance of flammable materials around fixed gas cylinders, which must also be shielded on the hazard side. The RFS also

highlighted the preference for underground electricity supply, and where overhead lines are proposed, they must use short pole spacing and maintain vegetation clearances in line with ISSC3 guidelines. Gas installations must comply with AS/NZS 1596:2014 and use only metal piping and connections, with no polymer-sheathed flexible gas lines permitted.

Response

The proposed servicing strategy has been designed to comply with the utility requirements outlined above. Specifically:

- Water supply to the site will be provided via a below-ground reticulated system, with a connection point located on Turner Road, in accordance with the above requirement for reticulated water where available.
- Electrical supply will be delivered entirely underground from Turner Road to the onsite high-voltage substation, aligning with the above preference for underground transmission and eliminating the need for vegetation clearance or pole spacing controls associated with overhead lines.
- Gas infrastructure is not proposed as part of the development, removing the need for compliance with gas cylinder setbacks, shielding, or materials standards as set out in AS/NZS 1596:2014.

These servicing arrangements have been selected to minimise bushfire risk and ensure consistency with the above, providing a compliant and low-risk utility layout for the data centre facility.

4.7.5 Procedural matter | landscaping assessment within asset protection zone *Issue description*

The RFS noted that landscaping within the required Asset Protection Zone must comply with Appendix 4 of Planning for Bush Fire Protection 2019, with measures aimed at reducing fire spread and enhancing safety. This includes maintaining a one-metre-wide pedestrian access zone around the building, limiting and separating vegetation near the structure, and ensuring canopy cover remains below 15% (IPA) or 30% (OPA) at maturity. The RFS emphasised selecting low-flammability, smooth-barked species, avoiding rough or shedding bark, and keeping trees from overhanging the building. Combustible materials and structures, such as mulch, sheds, or timber furniture, should be kept away from buildings, and climbing plants or dense ground litter should be avoided.

Response

A landscape management plan will be prepared prior to construction to ensure compliance with Appendix 4 of Planning for Bush Fire Protection 2019. This plan will include measures aimed at reducing fire spread and enhancing safety, such as maintaining a one-metre-wide pedestrian access zone around the building, limiting and separating vegetation near the structure, and ensuring canopy cover remains below 15% (IPA) or 30% (OPA) at maturity. The plan will emphasize selecting low-flammability, smooth-barked species, avoiding rough or shedding bark, and keeping trees from overhanging the building. Additionally, combustible materials and structures, such as mulch, sheds, or timber furniture, will be kept away from buildings, and climbing plants or dense ground litter will be avoided.

Issue description

The RFS advised that while the establishment of asset protection zones may involve vegetation clearing, this determination does not authorise such clearing or assess its ecological impacts. Any necessary approvals for vegetation removal must be obtained separately before zones are established.

Response

There is no required vegetation removal under the SSD as this would take place under the early works development application (DA/2024/616/1) as described in Section 1.4 of the EIS.

4.8 Transport for NSW

Transport for NSW noted that it has no administrative responsibility for the local roads impacted by the project, noting Camden Council to be the Relevant Authority. Section 4.1.7 above, provides a response to the Council's comments on the traffic implications relating to the design, layout and proposed access arrangement including swept path movement for the largest vehicle. Transport for NSW was also satisfied that the predicted traffic generation would have no detrimental impact on the surrounding classified road network.

4.9 Department of Climate Change, Energy, the Environment, and Water

The Department simply reported that they have no comment on the EIS.

Utility authorities

4.10 Sydney Water

4.10.1 Procedural matter | servicing strategy

Issue description

Sydney Water raised a series of points in relation to the application:

Water servicing: noting that the applicant should engage a hydraulic consultant to undertake an options assessment to identify an ultimate servicing strategy, staging requirements, and network amplification requirements needed to service the development. This is due to the existing water network not having sufficient capacity to service the development.

Wastewater servicing: noting, that based on a preliminary assessment, while there is sufficient capacity in the catchment to service the development, the capacity of the downstream pumping station will need assessing when applying for a Compliance Certificate from Sydney Water to confirm that essential water, wastewater and stormwater services are available or will be provided to support the proposed development.

Response

Water servicing: The applicant has assessed potable water servicing in consultation with Sydney Water under Case CN218688, which identified that network augmentation is likely to be required. The servicing strategy is being refined, with EGIS appointed as the Water Servicing Coordinator

Wastewater servicing: Sydney Water has issued a Notice of Anticipated Requirements (NoAR) under Case CN222061, outlining preliminary wastewater servicing requirements and developer contributions. A formal Section 73 Compliance Certificate will be obtained following development consent. Sydney Water has indicated there is capacity in the catchment; further infrastructure assessment will occur at the certification stage.

4.11 Endeavour Energy

4.11.1 Procedural matter | standard advice

Issue description

Endeavour Energy noted that its previous advice remains relevant to this SSD application. The first advice (10 June 2022) related to a subdivision of the site, and the second (12 December 2024) to support the data centre. Endeavour Energy also emphasised the need for ongoing engagement with its Customer Network Solutions Branch regarding electricity supply and substation design.

Response

Ongoing engagement with Endeavour Energy has been undertaken to determine the energy requirements for the data centre. This has included working with Endeavour Energy's Customer Network Solutions Branch to address conditions of supply relating to the substation design.

4.12 Public

4.12.1 Impacts | Submission 1

Submitter ID

S-80880740

Issue description

A local resident raised concerns about the proposed development relating to increased traffic and road safety risks, noise and air quality impacts from generators and equipment, visual impacts due to the scale and bulk of the development, fire safety risks associated with diesel and battery storage, the environmental footprint of the facility, and a perceived lack of community consultation. The resident requested that mitigation measures be implemented and that more direct engagement with nearby residents be undertaken.

Response

A detailed Traffic Impact Assessment confirms that the surrounding road network can accommodate the proposed development, with mitigation measures including designated access points and swept path analysis. Construction traffic will be managed through a Construction Traffic Management Plan.

With respect to noise and air quality, technical assessments have considered emissions from the proposed back-up generators and cooling systems. These are expected to comply with applicable noise and air quality criteria during standard operations.

Visual impacts have been minimised through the refinement of the building design and suitable landscaping measures to provide further screening from key viewpoints.

The inclusion of lithium-ion battery storage and diesel fuel systems is subject to strict safety and environmental controls. A Fire Safety Study and Emergency Plan will be prepared in consultation with Fire and Rescue NSW. The project also incorporates sustainability measures such as high efficiency building systems and flexibility to integrate renewable energy solutions in the future, as noted in the ESD Report in Appendix J1 of the EIS.

While the SSD process has included public exhibition and formal consultation during the preparation of the EIS, the request for further community engagement is acknowledged and opportunities for future updates and communication during the delivery and operational stages of the project will be provided as part of ongoing engagement activities.

4.12.2 Impacts | Submission 2

Submitter ID

S-80841963

Issue description

The submitter objected to the proposal, raising concerns about continuous noise from a 24/7 industrial facility, including from generators, cooling systems, and increased traffic volumes. The submission identifies potential traffic and safety risks, especially for children in the surrounding residential area. It also expresses concern about potential devaluation of nearby properties due to the industrial character of the development and asserts that residents were previously advised the site was to be used for recreational purposes. Further concerns were raised regarding the strain the data centre may place on electricity and water infrastructure, and the potential for increased utility costs. The submission includes reference to earlier correspondence from Camden Council stating the land adjacent to Pioneer Street was intended for use as a riparian corridor or public reserve, suggesting the current proposal conflicts with earlier planning advice. The submitter requests a comprehensive review and further community consultation.

Response

Noise emissions from the data centre, including from back-up generators and cooling systems, have been assessed in accordance with the NSW Noise Policy for Industry (NPfI). The assessment demonstrates compliance with relevant noise criteria at nearby sensitive receivers. The facility's operational noise associated with back-up generators is intermittent and primarily attributed to emergency testing, which is limited in frequency and duration.

Traffic impacts were assessed in the Traffic Impact Assessment, which concluded that the road network can accommodate the expected volumes, and a Construction Traffic Management Plan will be implemented to minimise disruption. Emergency vehicle access, delivery routes, and swept path analysis have been incorporated into the design to ensure safe circulation.

43 – 61 Turner Road Data Centre Submissions Report | SSD-68013714 The site is zoned for industrial uses and has been identified in strategic planning documents as suitable for development. While there may have been community expectations for recreational use in parts of the broader precinct, the current proposal aligns with the industrial uses presented in the Turner Road Precinct Plan and broader employment land use strategies. It does not encroach on designated open space or public reserves. It should be noted that the riparian corridor (RE1 zoned land) to the east of the site associated with Kenny Creek and located adjacent to Pioneer Street does not form part of the development footprint for the project.

In terms of infrastructure, the proposal includes upgrades to support energy and water demands associated with the proposed development. Developer contributions and utility assessments have been undertaken with the relevant authorities to ensure there are sufficient energy and water infrastructure provisions to support the development. The proponent acknowledges the importance of community engagement and will continue to provide updates throughout the delivery phase of the project.

4.12.3 Impacts | Submission 3

Submitter ID

S-80825709

Issue description

The submitter objected to the proposal, raising concerns around noise impacts.

Response

The matter raised in this submission has been acknowledged and as stated in the response above, have been addressed through the technical documentation included in the EIS and associated appendices. Noise emissions from the data centre have been assessed in accordance with the NSW NPfI and demonstrate compliance with relevant noise criteria at nearby sensitive receivers during standard operations.

4.12.4 Impacts | Submission 4

Submitter ID

S-80795970

Issue description

The submitter objected to the proposal, raising concerns for impacts to the residential housing area located less than 500m from the site.

Response

Potential impacts to the nearby residential community have been considered through the EIS. This includes a social impact assessment (SIA) which is provided in Appendix T of the EIS that considers potential impacts to the local and broader community (both negative and positive).

Mitigation measures to address potential social impacts have also been identified in Appendix F of the EIS and Appendix C of this report.

5. Updated project justification

The Proposal is justified on environmental, social, and economic grounds and is compatible with the locality in which it is proposed. This Submissions Report seeks to provide an updated justification and evaluation, as required, for the Proposal as a whole.

The Proponent is seeking consent to build a data centre in Gregory Hills. The Proposal responds to the heightened demand for data and cloud storage in Sydney. They underpin society's move towards a digital economy as they allow access to enormous quantities of information anytime-anywhere, and they keep people connected to vital services. Their growing demand is also recognised by the NSW Government.

Various components of the biophysical, social, and economic environments, as well as the Proposal's alignment with the objects of the EP&A Act and other statutory instruments applicable to the Site have been examined in the original EIS for the Proposal and are summarised below.

5.1 Ecologically sustainable development

The four principles of ESD as outlined in Clause 193 of the EP&A Regulation have been carefully considered in the formulation of the Proposal. An analysis of these principles is provided in Section 7.1.5 of the EIS.

5.2 Strategic context

The Proposal helps support a transition to a digital economy by meeting the growing demand for digital storage capacity. It is strategically supported through the following policies:

- The Greater Sydney Region Plan promotes the growth of critical infrastructure across the city to support the growing demand for data storage.
- The Western City District Plan aims to attract innovation into industrial lands. Its Planning Priorities promote the need for digital technology to support jobs in "knowledge-intensive industries to diversify the economy and attract a skilled workforce".
- The Camden LSPS recognises the need for knowledge-intensive industries and more diverse job opportunities in the area. The LSPS also supports wider initiatives to promote employment diversity and economic development. These are initiatives that the Proposal would help deliver.

5.3 Statutory context

The Proposal classifies as SSD by virtue of its power consumption at approximately 53 MW, which is above the Planning Systems SEPP threshold of 15 MW. In addition to the primary consent, the Proposal is unlikely to need any supporting permits or licences, outside of general certifications that apply to all development in NSW. The activities taking place onsite do not present a significant pollution risk or involve complex waste management issues. This is because they do not trigger the threshold criteria that require an environmental protection licence under the *Protection of the Environment Operations Act 1997*. Also, while there are inherent dangers with the materials used onsite, they are below levels that would classify the Site as a potentially hazardous industry under the Resilience and Hazards SEPP. The Minister and Independent Planning Committee must review a series of core mandatory considerations under section 4.15 of the EP&A

Act, particularly section 4.15, when determining the development application. Table 7-2 in the EIS summarises how the Proposal complies with these.

5.4 Likely impacts of the development

5.4.1 Environmental

The construction phase involves standard onsite activities that carry inherent environmental risks. However, these risks can be effectively mitigated using established and proven control measures. If implemented correctly, these measures will protect water, ground, and air quality, and manage erosion and sedimentation. The Site is not flood-prone, and stormwater, wastewater, waste, and small quantities of hazardous materials can be managed without pollution risks.

Operational impacts such as noise and air emissions are manageable and not expected to pose pollution risks. Stormwater will be treated using gross pollutant traps and a regional detention basin to meet local water quality targets. Battery and diesel storage risks are mitigated through containment and proper handling with licensed contractors who will manage waste and refuelling. A robust maintenance schedule will reduce equipment failure risks, exceeding typical industrial standards and minimising environmental hazards.

5.4.2 Social

Construction will temporarily affect local amenity through noise, dust, and emissions over an 18-month period, but not to a degree that impacts health or lifestyle. The project will create around 100 jobs, with opportunities for local businesses to supply materials and services.

The facility will enhance data security and reliability for Sydney, indirectly supporting essential services. Locally, it will offer diverse employment and include sufficient onsite parking, bicycle facilities, and incentives for sustainable commuting.

5.4.3 Economic

The Proposal supports Western Sydney's growth by promoting innovation, attracting investment, and boosting productivity. Strategically located in an industrial zone, the Site enhances data resilience for nearby urban areas and delivers broad economic and employment benefits.

5.4.4 Cumulative Impacts

Some overlap with other projects may occur during construction, but mitigation measures are expected to prevent significant cumulative impacts. Once operational, the Proposal will align with the area's industrial development plans. While cumulative amenity impacts may arise, including construction fatigue, these have been assessed and can be managed. Infrastructure and utilities are designed to handle combined demands, and the visual design aligns with the precinct's character.

5.5 Suitability of the site

The Site's consistency with applicable regional and local strategies is demonstrated in the comprehensive environmental assessment, provided in the EIS, which includes an analysis of all potential impacts, which has been informed by the relevant consultant reports. Accordingly, the environmental assessment prescribes recommendations and mitigation measures (where necessary), to account for all identified potential impacts,

by the proposed development. Having regard to the characteristics of the Site and its location, the Proposal is suitable for the Site for the reasons below:

- The Site is zoned IN1 General Industrial which permits development for the purpose of data centres with consent. The Proposal is consistent with the objectives for the IN1 General Industrial zone.
- The Site remains capable of being appropriately serviced to accommodate the proposed development.
- The Site is well located in close proximity to arterial and major collector roads and will not have any adverse traffic impact on the area due to the low-traffic generation of the Proposal.
- The Site is suitably located within an established industrial precinct.
- The Site can appropriately accommodate the proposed development while balancing environmental and design consideration and preserving the amenity of neighbouring properties.
- The architectural design will deliver a high quality and modern data centre development.
- The Site will provide important infrastructure to service the local and regional area.

5.6 Public interest

The Proposal is in the public interest as it:

- Provides a significant employment-generating use within an established industrial precinct and provides an important part of cloud infrastructure.
- Is consistent with the ESD principles as defined by Section 193 of the EP&A Regulations.
- Provides significant investment in the industrial sector within the Camden LGA that will contribute to increased livelihood outcomes associated with the construction and operation phases. This has the potential to positively support livelihoods, not just directly through job creation but also by extending to local businesses and the overall improvement of the precinct.

6. References

Camden Council, 2023. Urban Forest Strategy.

Camden Council, 2025. Submission on SSD-68013714.

Conservation Programs, Heritage and Regulation, 2025. Biodiversity and landscaping feedback on SSD-68013714. NSW Department of Climate Change, Energy, the Environment and Water.

Department of Planning, Housing and Infrastructure, 2025. Response to submissions on SSD-68013714. NSW Government.

Endeavour Energy, 2025. Electricity supply and substation design feedback for SSD-68013714. NSW Government.

Fire and Rescue NSW, 2025. Fire safety and emergency planning recommendations for SSD-68013714. NSW Government.

Heritage NSW, 2025. Submission regarding Aboriginal heritage and cultural values for SSD-68013714. NSW Government.

Landcom, 2004. Managing Urban Stormwater - Soils and Construction ('The Blue Book')

NSW Department of Planning and Environment (2022). Urban heat and canopy data.

NSW Environment Protection Authority, 2025. Comments on air quality and sustainability for SSD-68013714. NSW EPA.

Rural Fire Service, 2025. Bushfire risk and asset protection zone requirements for SSD-68013714. NSW Government.

Sydney Water, 2025. Water and wastewater servicing advice for SSD-68013714. NSW Government.

Transport for NSW, 2025. Traffic impact assessment comments for SSD-68013714. NSW Government.

Appendix A Submissions register

Submissions Register

Table A-1: Submissions register

Group	Submitter ID	Name	Section where issues are addressed in this submissions report
Organisation	S-80728224	Endeavour Energy	4.11
Public	S-80795970	Name withheld	4.12.4
Public	S-80825709	Brian Shortt	4.12.3
Public	S-80841963	Ali Mazraei Jourshary	4.12.2
Public	S-80880740	Name withheld	4.12.1
Public Authority	S-83976456	Camden Council	4.2
Public Authority	N/A	DPHI	4.1
Public Authority	N/A	EPA	4.3
Public Authority	N/A	Heritage NSW	4.4
Public Authority	N/A	Conservation Programs, Heritage and Regulation Group	4.5
Public Authority	N/A	Fire and Rescue NSW	4.6
Public Authority	N/A	Rural Fire Service	4.7
Public Authority	N/A	Transport for NSW	4.8
Public Authority	N/A	Sydney Water	4.10

Appendix B Noise monitoring graphs

ARUP

Monitoring Location - L1 7 Whitten Parade, Harrington Park, NSW (Free Field)

Logger Location and Photo



Background and ambient noise monitoring results - NSW 'Industrial Noise Policy', 2000

	L _{A90} Background noise levels ⁴			L _{Aeq} Amb	L _{Aeq} Ambient noise levels		
Date	Day ¹	Evening ²	Night ³	Day ¹	Evening ²	Night ³	
Thursday-20-July-2023		44	34		57	52	
Friday-21-July-2023	42	42	33	58	57	51	
Saturday-22-July-2023	36	41	33	58	56	51	
Sunday-23-July-2023	37	41	31	57	55	51	
Monday-24-July-2023	34	40	34	58	55	52	
Tuesday-25-July-2023	34	40	35	59	57	51	
Wednesday-26-July-2023	33	41	34	58	57	52	
Thursday-27-July-2023	34	42	34	59	56	52	
Friday-28-July-2023	37	42	33	58	57	48	
Saturday-29-July-2023	34	42	34	58	57	52	
Sunday-30-July-2023	35	39	30	59	57	50	
Monday-31-July-2023	37	38	28	59	55	54	
Tuesday-01-August-2023	35	41	33	58	56	51	
Wednesday-02-August-2023	36	37		59	57		
Representative Weekday ⁵	35	41	34	58	56	52	
Representative Weekend ⁵	36	41	32	58	56	51	
Representative Week ⁵	35	41	33	58	56	51	

Notes:

1. Day is 8:00am to 6:00pm on Sunday and 7:00am to 6:00pm at other times

2. Evening is 6:00pm to 10:00pm

3. Night is the remaining periods

4. Assessment Background Level (ABL) for individual days

5. Rating Background Level (RBL) for L_{A90} and logarithmic average for L_{Aeq}









Unattended monitoring: 7 Whitten Parade, Harrington Park, NSW (Free Field)

ARUP



Unattended monitoring: 7 Whitten Parade, Harrington Park, NSW (Free Field)

ARUP





ARUP

ARUP

Monitoring Location - L2 79 Barrett Street, Gregory Hills, NSW (Free Field)

Logger Location and Photo



Background and ambient noise monitoring results - NSW 'Industrial Noise Policy', 2000

	L _{A90} Background noise levels ⁴ L _{Aeq} Ambient noise levels					
Date	Day ¹	Evening ²	Night ³	Day ¹	Evening ²	Night ³
Thursday-20-July-2023		43	36		55	48
Friday-21-July-2023	44	38	36	55	52	49
Saturday-22-July-2023	38	41	37	56	58	48
Sunday-23-July-2023	39	40	37	52	48	48
Monday-24-July-2023	40	42	39	55	50	48
Tuesday-25-July-2023	39	43	38	56	54	49
Wednesday-26-July-2023	39	42	39	56	54	59
Thursday-27-July-2023	39	43	37	56	55	49
Friday-28-July-2023	42	42	37	57	52	48
Saturday-29-July-2023	39	44	39	54	52	51
Sunday-30-July-2023	39	40	38	52	49	48
Monday-31-July-2023						
Representative Weekday⁵	40	42	37	56	54	53
Representative Weekend⁵	39	40	38	54	54	49
Representative Week ⁵	39	42	37	55	54	52

Notes:

1. Day is 8:00am to 6:00pm on Sunday and 7:00am to 6:00pm at other times

2. Evening is 6:00pm to 10:00pm

3. Night is the remaining periods

4. Assessment Background Level (ABL) for individual days

5. Rating Background Level (RBL) for $\rm L_{A90}$ and logarithmic average for $\rm L_{Aeq}$

Unattended monitoring: 79 Barrett Street, Gregory Hills, NSW (Free Field)

ARUP





Unattended monitoring: 79 Barrett Street, Gregory Hills, NSW (Free Field)

ARUP



Unattended monitoring: 79 Barrett Street, Gregory Hills, NSW (Free Field)

ARUP

Appendix C Updated mitigation measures

The EIS for the Proposal identified a range of mitigation measures that would be required to avoid or reduce the potential environmental impacts (see Appendix F of the EIS). After consideration of the issues raised in the submissions, the mitigation measures for the Proposal have been updated.

Should the Proposal be approved, the updated mitigation measures would apply. **Bold** text in blue highlight has been used to identify additional and/or revised text within measures included within the EIS. Strikethrough text has been used to identify measures, or parts of measures, that are no longer required.

Ref	Impact	Environmental management measure	Responsibility	Timing
General				
GEN01	Risks to the environment during construction	A Construction Environmental Management Plan (CEMP) will be prepared prior to the commencement of construction. As a minimum, the CEMP will address the following matters:	Proponent	Pre-construction
		• Any requirements associated with statutory approvals needed for the activity to be carried out		
		• Details of how the project will implement the identified environmental mitigation measures outlined in the EIS		
		• Development and implementation of issue-specific environmental management plans, and their inclusion within the CEMP		
		• Roles and responsibilities, including those of sub-contractors		
		• Communication requirements, including liaison with stakeholders and the community		
		Induction and training requirements		
		• Procedures for monitoring and evaluation of environmental performance, and for carrying out remedial actions		
		Reporting requirements and record-keeping arrangements		
		Procedures for emergency and incident management		
		Procedures for audit and review.		
Visual				
V01	Lighting	Lighting would be designed in accordance with AS 4282-1997 Control of the Obtrusive Effects of Outdoor Lighting (Standards Australia, 1997).	Proponent	Detailed design
V02	Presence of construction elements	All areas and activities in the construction footprint will be managed to ensure the appropriate storage of equipment, parking, stockpile screening and arrangements for the storage and removal or waste and materials.	Contractor	Construction
V03	Disruptions to the landscape and visual amenity	Landscaping on the site will be provided in accordance with the Landscape Plan in Appendix E.	Proponent	Operation
Traffic, ti	ransport and accessibility			
TTA01	Overall traffic, transport and access impact	The outline Construction Traffic Management Plan (CTMP) will be updated and finalised, before being implemented and monitored onsite. The CTMP will finalise construction vehicle movements, routes, and access and parking arrangements. It will account for the other construction occurring in	Contractor	Detailed design

Table C-1: Updated mitigation measures

43-61 Turner Road Data Centre

Ref	Impact	Environmental management measure	Responsibility	Timing			
		the area to show how impacts on existing traffic, pedestrian, and bicycle networks will be managed and mitigated. The CTMP will form part of the CEMP. It must be:					
		Prepared by a suitably qualified and experienced person					
		Prepared in consultation with Council and Transport for NSW					
		• Detail the measures to be implemented to ensure road safety and network efficiency during construction					
		• Detail HV routes, access, and parking arrangements					
		• Include a Driver Code of Conduct to:					
		 Minimise the impact of construction traffic on the local and regional road network 					
		 Minimise conflicts with other road users. 					
TTA02	Safe access	The CTMP will include safety plans to guide pedestrians and cyclists through or past the Site will be prepared and implemented. Any alternative routes will be clearly identified with signage.	Contractor	Pre-construction / Construction			
		This plan will include appropriate signage, line marking and crossing facilities provided in accordance with AS 1742.2:2009 – Management of Uniform Traffic Control Devices (Standards Australia, 2009).					
TTA03	Active and sustainable transport options	The outline Green Travel Plan (GTP) will be updated and finalised, before being implemented and monitored onsite. It will present site-specific options and policies to encourage sustainable travel to and from the Site. These objectives include:	Proponent	Pre-operation/ Operation			
		• Collectively agree upon sustainable strategies by relevant stakeholders that are suitable for the Site					
		• Setting future mode share targets to encourage staff to utilise existing public or active transport options					
		• Promote healthy living by providing end of trip facilities for cycling and walking to work journeys					
		• Facilitate safe and sustainable travel with adequate onsite facilities for staff and visitors					
		Reduce the number of unnecessary private or servicing vehicle journeys					
		• Raise awareness of sustainable transport choices amongst staff.					
Ecologica	Ecologically sustainable development						
ESD01	ESD targets including, waste, water and carbon targets, are not met	The final ESD initiatives will be confirmed during the detailed design and their performance and benefit will be measured. The Proponent will report on their implementation in its operational and corporate key performance indicator reporting. The initiatives will be revised or revisited if:	Proponent	Detailed design / construction / operation			
		• They are not aligned with, or achieving, the NSW Government's net zero emission goals as they relate to the use of natural capital provisions (i.e., energy, water, natural resources)					
		• The Proposal falls below the Proponent's corporate standards.					
Biodivers	ity						

Ref	Impact	Environmental management measure	Responsibility	Timing
B01	Migration of non-indigenous species into the riparian area	During detailed design, revegetation adjacent to the RE1 zoned land should investigate appropriate ground cover species that are characteristic of PCT 3320.	Proponent	Detailed design
B02	Introduction of weeds	A Weed Management Plan will be prepared as part of the CEMP to prevent and control weeds on Site.	Proponent / contractor	Pre-construction / construction
B03	Damage to vegetation in the riparian areas as a result of construction activities	The installation of clear demarcating tape or fencing will be used to delineate the Site boundary and RE1 zoned land during construction and will be identified on plans as a 'no go zone'.	Contractor	Construction
B04	Weeds	Weed suppression within the Site should be best practice and minimise any chance of herbicide drift into the RE1 zoned land.	Proponent	Operation
Air quali	ty			
AQ01	Risks to air quality during construction from fugitive dust	A Dust and Air Quality Management Plan will be prepared and implemented as part of the Proposal's CEMP. The Plan will:	Contractor	Pre-construction / Construction
		• Identify potential sources of air pollution during construction, such as dust, vehicles, odour transporting waste, plant and equipment.		
		• Include mitigation and suppression measures, such as, but not limited to:		
		 Spraying or covering exposed surfaces 		
		 Provision of vehicle clean down areas 		
		 Covering of loads 		
		 Street cleaning 		
		– Use of dust screens		
		Maintenance of plant in accordance with manufacturer's instructions and specifications		
		 Pre-start vehicle and equipment checklists to make sure they are maintained and in good working order. 		
		• Methods to manage works during strong winds or other adverse weather conditions		
		A progressive rehabilitation strategy for exposed surfaces		
		• When the air quality, suppression and management measures need to be applied, who is responsible, and how effectives will be assessed.		
		Community notification and complaint handling procedures, as required.		
		• Air quality management objectives will be consistent with any relevant published EPA Guidelines.		
AQ02	Risks to air quality during maintenance of standby	Operation of standby generators during testing and maintenance should be minimised as far as practicable.	Operator	Operation
	generators	The back-up generators and other equipment will be routinely serviced to manufacturer specifications to maintain their operational efficiency.		

Ref	Impact	Environmental management measure	Responsibility	Timing
AQ03	Risks to air quality during operation of standby generators in the event of a loss of mains power	A Back-up Generator Incident Report will be prepared within 30 days of the system being used in an emergency. The Report will detail:	Operator	Operation
		• The date and time of the power outage		
		• The total number of back-up generators used to power the site		
		• The total number of hours the back-up generators were operated		
		• The total quantity of diesel used to feed the back-up generators		
		• The total amount of electricity produced by the generators		
		• Evidence to prove the air quality goals were not exceeded.		
Noise and	l vibration			
NV01	Overall noise and vibration impact	A Construction Noise and Vibration Management Plan will be prepared and implemented as part of the CEMP. This plan will include but not be limited to the following:	Proponent / contractor	Pre-construction / Construction
		Roles and responsibilities		
		Noise sensitive receiver locations		
		Areas of potential impact		
		Mitigation strategy		
		Monitoring methodology		
		Community engagement strategy.		
NV02	Noise generated during construction	Temporary noise barriers will be installed along the Site boundary, particularly on the eastern side, to shield the nearby sensitive receivers from construction noise.	Contractor	Construction
NV03	Noise generated by construction	The following noise mitigation practices will be adopted on Site:	Contractor	Construction
	staff	• Regularly train workers and contractors (such as at toolbox talks) to use equipment in ways to minimise noise.		
		• Site managers to periodically check the Site and nearby residences for noise problems so that solutions can be quickly applied.		
		• Avoid the use of radios or stereos outdoors.		
		• Avoid the overuse of public address systems.		
		• Avoid dropping items from height.		
		• Avoid shouting, and minimise talking loudly and slamming vehicle doors.		
		• Turn off all plant and equipment when not in use.		
NV04	Vibration impact during construction	All vibration intensive equipment will adopt at least the minimum safe-working distances set under guidance. By precaution, should equipment be located within these distances, additional mitigation measures, such as reselection of low vibration generating equipment and/or vibration monitoring, will be used.	Contractor	Construction

Ref	Impact	Environmental management measure	Responsibility	Timing
NV05	Noise generated from operational equipment	Generators, load banks, and exhaust fan units will be contained within an acoustic enclosure.	Contractor	Operation
NV06	Noise generated from operational equipment	Attenuators will be included at the air handling unit (AHU) room intake.	Contractor	Operation
Ground a	nd water conditions			
GW01	Soils and water quality impacts	 A Soil and Water Management Plan will be prepared and implemented as part of the CEMP. The Plan will identify all reasonably foreseeable risks relating to ground and water condition impacts and describe how these risks will be addressed during construction. It will require all erosion and sediment control measures to be provided onsite before construction starts. It will be prepared using the various volumes of Urban Stormwater Soils and Construction (Landcom, 2004). It will set out erosion and sediment control measures for various construction activities, including the clearing, excavation, and stockpiling to mitigate impacts. The Plan will include strategies to manage: Appropriate locations of stockpiles, construction materials, fuels, and chemicals, including 	Proponent / Contractor	Pre-construction / Construction
		 bunding where required Divert or capture the overland flow water for filtration prior to discharge Saline soils Contaminated soils The import of (virgin) excavated natural material for use onsite Testing under the Resource Recovery Exemptions (EPA, 2022b) to reuse material Discharge limits in accordance with section 120 of the POEO Act Records of the volume and type of fill Installation of stabilised Site entry/exit points and wheel wash bays to minimise the transportation of construction materials onto adjoining roads Sediment fencing to contain and manage runoff within the Site Reuse of the temporary sediment basin to collect the runoff on the construction Site Reuse of the stormwater collected in the temporary sediment basin for dust suppression Use of mesh and gravel and geotextile inlet filters Implementation of a maintenance plan for the Site and wider private stormwater network. 		
GW02	Risk of impacts to water and soil quality from unexpected spills	A Site-specific Emergency Spill Plan will be developed and implemented as part of the CEMP. It will include management measures and relevant EPA guidelines. The Plan will address measures to be implemented in the event of a spill, including initial response and containment and the notification of emergency services and relevant authorities, including the EPA.	Proponent / Contractor	Pre-construction / Construction
GW03	Risk of erosion and sediment movement during construction	Suitable erosion and sediment controls will be installed before construction starts in accordance with the Erosion and Sediment Control Plan and Urban Stormwater Soils and Construction Volume 1 (Landcom, 2004). Further environmental assessment will be carried out if they need locating outside of the Site.	Contractor	Pre-construction / Construction

Ref	Impact	Environmental management measure	Responsibility	Timing		
GW04	Environmental impacts from sediment movement	All stockpiles will be designed, established, operated, and decommissioned in accordance with the Stockpile Management Guidelines (EPA, 2021b).	Contractor	Pre-construction / Construction		
GW05	Risk of mixing saline soils and non-saline soils	Testing will verify the Site-specific soil and groundwater aggressivity. Following this, an earthworks management strategy will be developed to avoid mixing of saline soils in areas of lower or non-saline soils.	Contractor	Pre-construction / Construction		
GW06	Risk of spreading contaminated materials throughout the Site and into the environment	Any potentially contaminating materials will be stored onsite in a secure containment area in the compound. This will have sufficient capacity to hold 110 percent of the stored volume, and any spills or discharges will be collected and transported offsite to a licenced facility in accordance with the established waste management procedures.	Contractor	Pre-construction / Construction		
GW07	Risk of fuel and chemical spills during construction	Vehicle and equipment maintenance will take place in the contained area in the Site compound to prevent any loss in the event of an accidental spill. Equipment and machinery will not be refuelled onsite. All equipment will be checked prior to use to ensure there are no oil, fuel and other leaks.	Contractor	Pre-construction / Construction		
GW08	Risk of fuel and chemical spills during operation	An Emergency Spill Plan will continue to be implemented onsite during operation.	Proponent	Operation		
GW09	Risk of ground movement and erosion during operation	A Site reinstatement inspection will be carried out to confirm the area is stabilised and there is no residual erosion or sediment risk.	Proponent	Pre-operation / Operation		
Flooding	Flooding risk					
HF01	Flooding during heavy rainfall	Weather reports will be monitored every day. If there is suspected extreme weather (heavy rainfall and wind) the site will be managed and closed, if required. This will involve covering excavations and checking the stormwater management, erosion, and sediment control provisions.	Contractor	Construction		
HF02	Flooding during heavy rainfall	The stormwater infrastructure and overland flow routes will be routinely inspected and maintained to avoid any blockages and subsequent flooding.	Contractor	Operation		
HF03	Risk of flooding for downstream properties	Ongoing consultation with Camden Council, regarding outcomes of the Probable Maximum Flood (PMF) modelling.	Proponent	Detailed design		
Hazards	and risk		·	·		
HR01	Risks of fire damage to surrounding receivers and	A Fire Safety Study will be prepared one month before construction starts. It will be prepared in consultation with Fire and Rescue NSW. The Study will include details on:	Proponent	Detailed design		
	environments	• The final back-up power system and diesel storage quantities				
		• Aspects of Hazardous Industry Planning Advisory Paper No.2. Fire Safety Study (Department of Planning, 2011b)				
		• Best Practice Guidelines for Contaminated Water Retention and Treatment Systems (NSW Government, 1994).				
HR02	Risk of bushfire	An Asset Protection Zone will be maintained in all directions from the building, in accordance with the PBP 2019 Appendix 4.	Proponent/ contractor	Construction/ operation		
		An Inner Protection Area will also be established and maintained throughout construction and operation in line with the Planning for Bush Fire Protection 2019 guideline.				

Ref	Impact	Environmental management measure	Responsibility	Timing
HR03	Risk of spread of hazardous materials to surrounding areas and environments	Hazardous materials will be removed and disposed of in accordance with the relevant legislation, codes of practice, Australian Standards, and the Work Health and Safety Regulation 2017.	Proponent/ contractor	Construction / operation
HR04	Risk of fire and mishandling hazardous substances	All hazardous substances will be stored and managed in accordance with relevant Australian Standards, and in particular, AS1940:2017 – The Storage and Handling of Flammable and Combustible Liquids (Standards Australia, 2017), the Hazardous and Offensive Development Application Guidelines - Applying SEPP 33 (Department of Planning, 2011a), Storing and Handling Liquids – Environmental Protection – Participant's Manual (DECC, 2007), the Work Health and Safety Regulation 2017, and the <i>Environmentally Hazardous Chemicals Act 1985</i> .	Proponent/ contractor	Construction / operation
HR05	Risk of emergencies	A Hazard Management Plan will be prepared and implemented to manage impacts from hazardous materials during construction and operation. This plan will be developed in accordance with the Hazardous Industry Planning Advisory Paper (HIPAP) No. 1 – Emergency Planning (NSW Department of Planning, 2011).	Proponent/ contractor	Construction / operation
HR06	Risk of bushfire	A Bushfire Emergency Management and Evacuation Plan will be prepared and provided to Fire and Rescue NSW.	Proponent/ contractor	Construction / operation
HR07	Risk of bushfire	An Emergency Services Information Package (ESIP) will be prepared and implemented in line with Fire and Rescue NSW's Fire Safety Guideline - Emergency services information packages and tactical fire plans (Fire and Rescue NSW, 2023).	Proponent/ contractor	Construction / operation
HR07 HR08	Risk of fines due to exceedances	Dangerous good quantities will remain below the thresholds listed in the Hazardous and Offensive Development Application Guidelines – Applying SEPP33 (Department of Planning, 2011)	Proponent/ contractor	Operation
HR08 HR09	Risk of mishandling	 The following measures will be included onsite as per the Work Health and Safety Regulation: Placards will be displayed Outer warning placards regarding quantities of diesel stored will be displayed at all emergency service entrance points Placards will be displayed on or near the diesel belly Proponent/ contractor tanks Placards will be clearly legible and separate from other signs and otherwise compliant with Schedule 13 A manifest of all Schedule 11 chemicals, including diesel storage will be prepared SefeWork NEW will be pretified of diagel storage arounds the manifest quantities 	Proponent/ contractor	Operation
HR09 HR10	Risk of spread of fire to, and from, surrounding areas	Minimum separation distances will be maintained, and landscaping areas will be regularly maintained including trimming encroaching tree branches that pose a fire safety risk. The risk of bushfire has also been considered in the Landscape Plan. For example, no shrubs are proposed under	Proponent/ contractor	Operation
Waster	n og om on t	the tree canopy, per the bushfire requirements.		
waste ma	inagement			
W01	Waste of recyclable resources during construction through unnecessary disposal to landfill.	Waste will be managed in line with the waste hierarchy. A Construction Waste Management Plan (CWMP) will be prepared and meet the requirements outlined in Camden Council's Waste Management Guidelines (Camden Council, 2019a). It will include final provisions for segregation	Contractor	Construction

Ref	Impact	Environmental management measure	Responsibility	Timing			
		and separate collection of recoverable materials, including green waste, excavated natural materials and metals.					
W02	Pollution of land or waterways	The CWMP will include:	Contractor	Construction			
	including groundwater through accidental escape of waste or runoff	• Measures for containment of waste during storage and transport, such as covering, fencing and bunding.					
		• Requirement that all waste be delivered to an appropriately licensed facility for recovery or disposal. Receipts for all disposed materials must be kept and made available for inspection by regulatory authorities.					
W03	Spread of weeds, pests or pathogens within recovered waste materials.	The CWMP will outline appropriate control and disposal options of any high threat weeds identified on the Site.	Contractor	Construction			
W05	Loss of amenity for workers, or neighbours due to odour and vermin. Escape of litter causing:	An Operational Waste Management Plan (OWMP) will be developed during detailed design for the adequate provision for storage and collection of waste. The OWMP will meet the requirements outlined in Camden Council's Waste Management Guidelines (Camden Council, 2019a).	Proponent	Operation			
	Pollution of land and waterways						
	Harm to wildlife						
	Loss of amenity to neighbouring properties.						
W04	Waste of recyclable resources during operation through unnecessary disposal to landfill.	Waste will be managed in line with the waste hierarchy. The OWMP will include provision for source separation systems for recyclable materials, including, paper and card, mixed recyclables, e-waste, and hazardous waste.	Proponent	Operation			
W06	Pollution of land or waterways during operation through disposal of waste to an inappropriate Site.	The OWMP will include a requirement that all waste be delivered to an appropriately licensed facility for recovery or disposal.	Proponent	Operation			
Aborigina	Aboriginal cultural heritage						
AH01	Overall Aboriginal heritage	An Aboriginal Heritage Management Plan will be prepared for the Proposal which will include:	Proponent	Detailed design			
	impact	An Unexpected Finds Procedure					
		Heritage induction					
		Procedures for ongoing consultation.					
Social im	pacts	F					
SIA1	Impact to amenity, access and human health and wellbeing	It is recommended that a Communication Plan (CP) be prepared and implemented as part of the Construction Environment Management Plan (CEMP) to provide timely and accurate information to the community during construction. The CP would need to include (as a minimum):	Proponent / Contractor	Detailed design / Pre- construction			

Ref	Impact	Environmental management measure	Responsibility	Timing
		 Mechanisms to provide details and timing of proposed activities to affected residents, including changed traffic and access conditions 		
		Contact name and number for complaints		
		• Details of public consultation.		
SIA2	Impact to health, wellbeing and safety	It is recommended that opportunities to incorporate Crime Prevention Through Environmental Design (CPTED) principles into the design of the Proposal are investigated to improve overall security of the precinct.	Proponent	Detailed design / operation
		This should include safety and security measures for staff working at night and on weekends are put in place to protect operation workers given the nature of the Proposal as a 24/7 facility.		
		In addition, the preparation of an emergency and disaster response plan that considers community health and impacts relating to environmental risks associated with the site will help to mitigate detrimental impacts during disaster events (e.g. bushfire).		
SIA3	Impact to cultural heritage	It is recommended that consultation and collaboration is carried out with the local Aboriginal stakeholders to incorporate elements of Country into the design (e.g. use of native planting and language names) to help improve sense of place and connection to Country for local Aboriginal peoples.	Proponent	Detailed design
SIA4	Impact to visual amenity	Landscaping on the site will be provided in accordance with the Landscape Plan in Appendix E. Extensive landscaping has been incorporated into the Plan, using indigenous planting to better integrate the development into the surrounding character and existing vegetation of the adjacent RE1 land.	Proponent	Operation
		The Plan proposes a mixture of large and medium evergreen indigenous and native trees, shrubs and groundcovers. Following maturity this will provide softening and screening of the substation, generator halls and main data hall and will increase visual amenity when looking towards the Site.		
SIA5	Impact to local employment and flow-on economic benefits	It is recommended that a social procurement policy is prepared for this Proposal to outline targets and processes for jobs, materials and services to be serviced by the local community (i.e. the ISL and SSL) where possible in the first instance. This would help to boost the local economy and drive economic development of Western Sydney. This plan should also identify training opportunities for new jobs and associated new skills as well as Indigenous engagement part of the procurement process for job opportunities	Proponent	Construction / Operation
Infrastru	cture requirements and utilities	indigenous engagement part of the procurement process for job opportunities.		
IR1	Fuel spills when filling generators.	Fuel tanks will be designed to comply with AS1940. Fuel tanks will be double walled. Each fill point will have all ancillaries to meet requirements of AS1940.	Proponent/Contractor	Design and Operation
IR2	Fire and explosion risks associated with the generators.	Generators will be designed in accordance with AS1940 which defines minimum clearance from building and separation between fuel storage tanks ("belly tanks"). Generators located behind security fencing/gates, meaning only approved personnel can access this area.	Proponent/Contractor	Design and Operation

Ref	Impact	Environmental management measure	Responsibility	Timing
IR3	Fire and explosion risks associated with the switching station.	High voltage switching station will be designed by a certified Level 3 ASP designer in accordance with relevant current version of Australian Standards and Industry Associations Standards and Guidelines.	Proponent/Contractor	Design and Operation
		Switching station located behind security fencing/gates, meaning only approved personnel can access this area.		
IR4	Air pollution when generators are operational	Two separate mains points of supply are proposed, and the probability of mains failure has been investigated for the electrical supply. Failure rates for a supply in this arrangement are extremely low, meaning the generators will rarely be used.	Proponent	Design and Operation
		Generators will include specific emissions control measures and will be Tier 2 certified to Australian EPA requirements. Refer to Appendix L (Air Quality Technical Report) for further details.		
IR5	High demands reducing the capacity of the estate or precinct water and sewer networks.	To minimise the peak water demand on Sydney Water's potable water network, the water balance of the proposed site has been maintained through the use of rainwater re-use tanks and the provision of fire and process water storage tanks on site.	Proponent / Sydney Water	Design / Construction
IR6	Overtopping of rainwater harvesting/water storage tanks.	Water overtopping from the rainwater tanks will discharge to the stormwater system. Discharged water will not contaminate the surrounding environment as it will either be from mains supply or roof collected, which has passed through water quality treatment features.	Proponent	Design / Operation
IR7	Discharge of cooling water.	Cooling water discharge will be discharged to the Site's sewer system.	Proponent	Design
IR8	Failure of transformer resulting in oil spill.	Transformer units are contained within plinth foundations which have sump storage capacity min 30% volume of oil stored.	Proponent	Design/Operation
		A separate stormwater system, serving only the transformer plinths, will drain through a full retention oil and water separator prior to discharge to trunk stormwater system. Oil and water separator sized for 110% the volume of oil contained within 1No transformer unit.		
IR9	Spills/leakages from on-site storage of effluent during early stages of construction.	On-site storage features such as septic tanks will be in accordance with the relevant Australian Standards.	Proponent / Contractor	Design / Construction
		The Contractor shall locate the storage tanks in an appropriate location within the site and shall empty the tanks on a regular basis.		
IR10	Redundant telecoms supply	The administration building is concurrently connected to multiple entry points, providing the operator with the ability to utilise a physically diverse service in the event of failure.	Proponent	Design / Operation
		All telecommunications pathways are physically separated by a minimum of 8m to minimise risk of concurrent damage to multiple pieces of telecommunications infrastructure.		
Non-Aboriginal heritage				
NAH01	Risk of impacting heritage items.	A Non-Aboriginal Heritage Unexpected Finds Protocol will be developed and implemented. The Protocol will include measures to deal with any unanticipated archaeological deposits or skeletal remains found during construction. It will require works within 10 metres of the finds to stop immediately. It will also require the contractor to immediately notify the Proponent so they can assist in coordinating the next steps, which are likely to involve consultation with an archaeologist.	Contractor	Pre-construction
Ref	Impact	Environmental management measure	Responsibility	Timing
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		Where required, further archaeological work and/or approvals will be carried out and obtained before work restarts in this area.		
Cumulative impacts				
CU1	Cumulative impacts	Once operational schedules are finalised, the cumulative impacts will be reviewed and verified. If there is an unexpected change, then additional assessment will be carried out and further measures will be investigated and implemented.	Proponent	Pre-operation/ operation



Swept path analysis



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